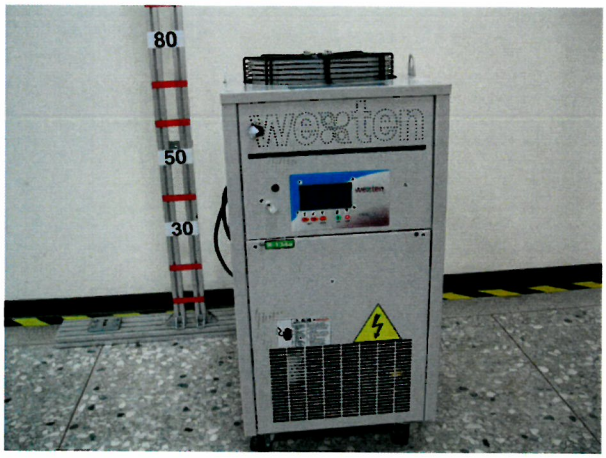
Prüfbericht-Nr.: *Test Report No.:*	11041319 001	**Auftrags-Nr.:** *Order No.:*	114036443	Seite 1 von 28 *Page 1 of 28*
Kunden-Referenz-Nr.: *Client Reference No.:*	12080299	**Auftragsdatum:** *Order date.:*	May 27, 2015	
Auftraggeber: *Client:*	Wexten Precise Industries Co. Ltd. No. 2, Lane 495, Guozhong Road, Dali District, Taichung City 41260, Taiwan, R.O.C.			
Prüfgegenstand: *Test item:*	Cooling Equipment			
Bezeichnung / Typ-Nr.: *Identification / Type No.:*	Y1Y2Y3 Series Y1= CWIDA, COID, CLIDA, CLIDW or CEID Y2 = 04, 08 or 12 Y3 = blank, P, T, S, PT, PS, TS or PTS			
Auftrags-Inhalt: *Order content:*	TUV Rheinland - EMC CoC approval			
Prüfgrundlage: *Test specification:*	EN 61000-6-2:2005 EN 61000-6-4:2007+A1:2011 EN 61000-3-2:2014 EN 61000-3-3:2013			

Wareneingangsdatum: *Date of receipt:*	Aug. 20, 2015
Prüfmuster-Nr.: *Test sample No.:*	A000283620
Prüfzeitraum: *Testing period:*	Aug. 26, - Nov. 03, 2015
Ort der Prüfung: *Place of testing:*	Audix EMC Laboratory
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland Taiwan Ltd. No. 9, Ln. 36, Sec. 3, Minsheng Rd., Daya District, Taichung City 428, Taiwan
Prüfergebnis*: *Test result*:*	Pass



geprüft von / *tested by:*

Nov. 20, 2015	Steven Wang/Sr. Project Manager	
Datum *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*

kontrolliert von / *reviewed by:*

Nov. 20. 2015	Shirley Su/Section Manager	
Datum *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*

Sonstiges / *Other:*

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt
Condition of the test item at delivery: *Test item complete and undamaged*

* Legende:	1 = sehr gut P(ass) = entspricht o.g. Prüfgrundlage(n)	2 = gut	3 = befriedigend F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	4 = ausreichend N/A = nicht anwendbar	5 = mangelhalt N/T = nicht getestet
Legend:	1 = very good P(ass) = passed a.m. test specifications(s)	2 = good	3 = satisfactory F(ail) = failed a.m. test specifications(s)	4 = sufficient N/A = not applicable	5 = poor N/T = not tested

Content

1 Test Site

1.1 Testing Location

Audix Technology Corp. EMC Dept.
No. 53-11, Tin-Fu, Lin-Kou District, New Taipei City, Taiwan, R.O.C.

1.2 Measurement Uncertainty

Testing Item	Frequency Range	Uncertainty
Conducted Emission	150kHz - 30MHz	± 3.5dB
Radiated Emission (OATS)	30MHz~1000MHz	± 5.3dB

Note:
The uncertainty represents an expended uncertainty expressed at approximately the 95% confidence level using a coverage factor of K=2.

2 Description of the Test Samples

2.1 General Description of Equipment

The investigated samples are Cooling Equipment with type designation **Y1Y2Y3 Series** as list below, intended to cooling for industrial product and general use in industrial environment. These models mainly contain LCD display, transformer, inverter board, sensor, SSR, ac fan motor, heater, pump, reactor and EMI filter.
All models are electrical identical but differ in input voltage, rated power, inverter type (only 2 kinds of inverter with 1 HP and 3HP) and cooling type. Therefore, CWIDA04PTS (AC 230V), CWIDA04PTS (AC 400V), CWIDA12PTS (AC 230V) and CWIDA12PTS (AC 400V) were chosen for complete testing as representative.

Definition for product: Y1Y2Y3 Series

Y1= CWIDA, COID, CLIDA, CLIDW or CEID

CWIDA: High precision inverter water chiller

COID: High precision inverter oil cooler

CLIDA: High precision inverter water chiller for laser cutting and engraving machine

CLIDW: High precision inverter water cooler and water chiller for laser cutting and engraving machine

CLIDA: High precision inverter EDM machine cooler

Y2 = 04, 08 or 12

04: 1008 kcal/hr

08: 2016 kcal/hr

12: 3024 kcal/hr

Y3 = blank, P, T, S, PT, PS, TS or PTS

blank, T, S, TS: without pump

P, PT, PS, PTS: with pump

2.2 Rating and Physical Characteristics

No.	Type Designation	Rated Voltage	Frequency	Rated Power	Protection Class
1	CEID04	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.45 kW	I
2	CEID08	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
3	CEID12	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
4	CEID04P	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.95 kW	I
5	CEID08P	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
6	CEID12P	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I

No.	Type Designation	Rated Voltage	Frequency	Rated Power	Protection Class
7	CEID04T	3 phase AC 230V	50/60Hz	2.45 kW	I
		3 phase AC 400V			
8	CEID08T	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			
9	CEID12T	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			
10	CEID04S	3 phase AC 230V	50/60Hz	2.45 kW	I
		3 phase AC 400V			
11	CEID08S	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			
12	CEID12S	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			
13	CEID04PT	3 phase AC 230V	50/60Hz	2.95 kW	I
		3 phase AC 400V			
14	CEID08PT	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
15	CEID12PT	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
16	CEID04PS	3 phase AC 230V	50/60Hz	2.95 kW	I
		3 phase AC 400V			
17	CEID08PS	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
18	CEID12PS	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
19	CEID04TS	3 phase AC 230V	50/60Hz	2.45 kW	I
		3 phase AC 400V			
20	CEID08TS	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			
21	CEID12TS	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			

No.	Type Designation	Rated Voltage	Frequency	Rated Power	Protection Class
22	CEID04PTS	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.95 kW	I
23	CEID08PTS	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
24	CEID12PTS	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
25	CLIDA04	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.45 kW	I
26	CLIDA08	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
27	CLIDA12	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
28	CLIDA04P	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.95 kW	I
29	CLIDA08P	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
30	CLIDA12P	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
31	CLIDA04T	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.45 kW	I
32	CLIDA08T	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
33	CLIDA12T	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
34	CLIDA04S	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.45 kW	I
35	CLIDA08S	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
36	CLIDA12S	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I

No.	Type Designation	Rated Voltage	Frequency	Rated Power	Protection Class
37	CLIDA04PT	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.95 kW	I
38	CLIDA08PT	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
39	CLIDA12PT	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
40	CLIDA04PS	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.95 kW	I
41	CLIDA08PS	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
42	CLIDA12PS	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
43	CLIDA04TS	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.45 kW	I
44	CLIDA08TS	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
45	CLIDA12TS	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
46	CLIDA04PTS	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.95 kW	I
47	CLIDA08PTS	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
48	CLIDA12PTS	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
49	CLIDW04	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.45 kW	I
50	CLIDW08	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
51	CLIDW12	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I

No.	Type Designation	Rated Voltage	Frequency	Rated Power	Protection Class
52	CLIDW04P	3 phase AC 230V	50/60Hz	2.95 kW	I
		3 phase AC 400V			
53	CLIDW08P	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
54	CLIDW12P	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
55	CLIDW04T	3 phase AC 230V	50/60Hz	2.45 kW	I
		3 phase AC 400V			
56	CLIDW08T	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			
57	CLIDW12T	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			
58	CLIDW04S	3 phase AC 230V	50/60Hz	2.45 kW	I
		3 phase AC 400V			
59	CLIDW08S	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			
60	CLIDW12S	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			
61	CLIDW04PT	3 phase AC 230V	50/60Hz	2.95 kW	I
		3 phase AC 400V			
62	CLIDW08PT	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
63	CLIDW12PT	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
64	CLIDW04PS	3 phase AC 230V	50/60Hz	2.95 kW	I
		3 phase AC 400V			
65	CLIDW08PS	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
66	CLIDW12PS	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			

No.	Type Designation	Rated Voltage	Frequency	Rated Power	Protection Class
67	CLIDW04TS	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.45 kW	I
68	CLIDW08TS	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
69	CLIDW12TS	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
70	CLIDW04PTS	3 phase AC 240V 3 phase AC 400V	50/60Hz	2.95 kW	I
71	CLIDW08PTS	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
72	CLIDW12PTS	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
73	COID04	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.45 kW	I
74	COID08	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
75	COID12	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
76	COID04P	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.95 kW	I
77	COID08P	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
78	COID12P	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
79	COID04T	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.45 kW	I
80	COID08T	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
81	COID12T	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I

No.	Type Designation	Rated Voltage	Frequency	Rated Power	Protection Class
82	COID04S	3 phase AC 230V	50/60Hz	2.45 kW	I
		3 phase AC 400V			
83	COID08S	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			
84	COID12S	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			
85	COID04PT	3 phase AC 230V	50/60Hz	2.95 kW	I
		3 phase AC 400V			
86	COID08PT	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
87	COID12PT	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
88	COID04PS	3 phase AC 230V	50/60Hz	2.95 kW	I
		3 phase AC 400V			
89	COID08PS	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
90	COID12PS	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
91	COID04TS	3 phase AC 230V	50/60Hz	2.45 kW	I
		3 phase AC 400V			
92	COID08TS	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			
93	COID12TS	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			
94	COID04PTS	3 phase AC 230V	50/60Hz	2.95 kW	I
		3 phase AC 400V			
95	COID08PTS	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
96	COID12PTS	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			

No.	Type Designation	Rated Voltage	Frequency	Rated Power	Protection Class
97	CWIDA04	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.45 kW	I
98	CWIDA08	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
99	CWIDA12	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
100	CWIDA04P	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.95 kW	I
101	CWIDA08P	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
102	CWIDA12P	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
103	CWIDA04T	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.45 kW	I
104	CWIDA08T	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
105	CWIDA12T	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
106	CWIDA04S	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.45 kW	I
107	CWIDA08S	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
108	CWIDA12S	3 phase AC 230V 3 phase AC 400V	50/60Hz	6.45 kW	I
109	CWIDA04PT	3 phase AC 230V 3 phase AC 400V	50/60Hz	2.95 kW	I
110	CWIDA08PT	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I
111	CWIDA12PT	3 phase AC 230V 3 phase AC 400V	50/60Hz	7.2 kW	I

No.	Type Designation	Rated Voltage	Frequency	Rated Power	Protection Class
112	CWIDA04PS	3 phase AC 230V	50/60Hz	2.95 kW	I
		3 phase AC 400V			
113	CWIDA08PS	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
114	CWIDA12PS	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
115	CWIDA04TS	3 phase AC 230V	50/60Hz	2.45 kW	I
		3 phase AC 400V			
116	CWIDA08TS	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			
117	CWIDA12TS	3 phase AC 230V	50/60Hz	6.45 kW	I
		3 phase AC 400V			
118	CWIDA04PTS	3 phase AC 230V	50/60Hz	2.95 kW	I
		3 phase AC 400V			
119	CWIDA08PTS	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			
120	CWIDA12PTS	3 phase AC 230V	50/60Hz	7.2 kW	I
		3 phase AC 400V			

2.3 Sources of Interference

Inverter board (for Y2=04), type; BCC01018 (CAC-0093), 1 phase 230V, 1HP, manufactured by bigbest Co.,
Inverter board (for Y2=08, 12), type; BCC01011, 1 phase 230V, 3HP, manufactured by bigbest Co.,

2.4 Noise Suppression Parts

EMI filter (for Y2=08, 12): type C2LTW-10AC, AC 380V/10A, manufactured by TRANS Co.,
Ferrite core on grounding side for all: type MA-070 R37/22/15A, 4 turns, manufactured by JFC Co.,
Reactor (choke for Y2=08, 12): part no. 99-022-013, 6mH, manufactured by bigbest Co.,

2.5 Submitted Documents

(1) Rated Label
(2) Circuit diagram bill of material (B.O.M)
(3) PCB Layout
(4) User manual

3 Measurement Conditions

3.1 Modes of Operation

The subject equipment were investigated in 'Continuous ON' with low, medium, high temperature mode for all tests and worst case were recorded hereafter.

3.2 Additional Equipment

The EUTs were tested as an independent unit without any accessory.

3.3 Test Setup

The test setup was realized on a floor-stand of 10-cm height or tabletop of 80cm height during all tests as described herein.

3.4 List of Test and Measurement Instruments

Table 1: List of Test and Measuring Equipment

For EMI/Conduction Measurement

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibration Due date
1	Test Receiver	R & S	ESR3	101772	2016. 01. 28
2	A.M.N.	Kyoritsu	KNW-244C	8-1373-5	2016. 03. 31
3	L.I.S.N.	Kyoritsu	KNW-407	8-1370-9	2016. 02. 25
4	Pulse Limiter	R & S	ESH3-Z2	100041	2016. 01. 17

For EMI/Radiation Measurement (No. 6 OATS)

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibration Due date
1	Spectrum Analyzer	Agilent	N9010A-507	MY49061167	2016. 04. 24.
2	Test Receiver	R & S	ESCS30	100339	2016. 04. 23.
3	Amplifier	HP	8447D	2727A05737	NCR
4	Bilog Antenna	Schaffner	CBL6112B	2818	2016. 02. 27.

For Harmonics & Flicker Measurement

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibration Due date
1	AC Power Source	TESEQ	NSG 1007-45	1248A04038	2016. 01. 17
2	Signal Conditioning Unit	TESEQ	CCN 1000-3	N/A	2016. 01. 17
3	Three Phase Impedance Network	TESEQ	INA 2197	N/A	2016. 01. 17
4	Profline AC Switching Unit	TESEQ	NSG 2200-3	EK22713	2016. 01. 17

For EMS/ESD Testing

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibration Due date
1	ESD Simulator	Thermo	MZ-15/EC	1210245	2016. 05. 05

For EMS/RS Testing(80MHz ~ 1000MHz)

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Due Date
1	Radiated Immunity System	TESEQ	ITS 6006	033009	2016. 09. 24
2	Power Amplifier	TESEQ	CBA 1G-275	T44214	NCR
3	Power Meter	TESEQ	PM 6006	073364	2016. 09. 26
4	Power Antenna	Schwarzbeck	STLP 9128 E	9128E084	NCR
5	Direction Coupler	TESEQ	C5982-10	98618	2016. 08. 12

For EMS/RS Testing(1000MHz ~ 2700MHz)

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Due Date
1	Radiated Immunity System	TESEQ	ITS 6006	033009	2016. 09. 24
2	Power Amplifier	TESEQ	CBA 1G-275	T44214	NCR
3	Power Meter	TESEQ	PM 6006	073364	2016. 09. 26
4	Power Antenna	Schwarzbeck	CBA 3G-050	T44215	NCR
5	Direction Coupler	TESEQ	C5982-10	98618	2016. 08. 12

For EMS/EFT/Surge Testing

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibration Due date
1	EMS Immunity Test System	TESEQ	NSG 3060	1519	2016. 08. 12
2	C.D.N.	TESEQ	CDN 3063	2074	2016. 08. 12

For EMS/CS Testing

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibration Due date
1	RF Generator	TESEQ	NSG 4070B-30	035076	2016. 11. 04
2	Current Sensing Probe (Monitoring Device)	TESEQ	MD4070	33322	2016. 11. 04
3	6dB Attenuator	TESEQ	ATN 6050	33651	2016. 11. 04
4	C.D.N	TESEQ	CDN M016	34607	2016. 11. 04

For EMS/DIP Testing

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibration Due date
1	Programmable Power Source	TESEQ	NSG1007	1248A04038	2016. 01. 16

3.4.1 Calibration of Test and Measurement Instruments

Above listed equipment undergoes a regularly calibration. At the time of testing all the used equipment was within its period of calibration. The calibration documentation and dates are stored in the calibration record folder of the laboratory.

3.5 Abbreviations

PASS	means 'complied with requirement'	**N/A**	means 'not applicable'
FAIL	means 'not complied'	**N.C.R.**	means 'no calibration required'
EUT	means ’equipment under test’		

4 Test Results E M I S S I O N

Result:	**PASS**

4.1 Continuous Interference

4.1.1 Conducted Emission (AC Mains)

Port: AC Mains
Basic Standard: CISPR 16-2-1, CISPR 16-1-2, CISPR 11, EN 55011
Frequency Range: 0.15 - 30 MHz
Limits: Table 1, group 1 class A

Result:	**PASS**

Test Setup

Date of Testing: 2015.08.26 – 2015.08.27
Model: CWIDA04PTS (AC 230V), CWIDA04PTS (AC 400V), CWIDA12PTS (AC 230V), CWIDA12PTS (AC 400V)
Input Voltage: 3 phase, AC 240V or AC 400V, 50Hz
Operational Mode: ON, see 3.1
Earthing: Through power cord

Table 2: Conducted Emission, AC Mains; 0.15 - 30 MHz

Settings

Frequency			**Settings**		
Start	Stop	Step Size	IF Bandwidth	Detector	Meas. Time
150kHz	30MHz	5kHz	9kHz	QP/AV	20ms/1s

Notes: please see Appendix A for detail test result.

4.1.2 Radiated Emission

Port:	Enclosure
Basic Standard:	CISPR 16-2-3, CISPR 11, EN 55011
Frequency Range:	30 - 1000 MHz
Limits:	Table 1, group 1 class A

Result:	**PASS**

Test Setup

Date of Testing:	2015.08.26 – 2015.08.27
Model:	CWIDA04PTS (AC 230V), CWIDA04PTS (AC 400V), CWIDA12PTS (AC 230V), CWIDA12PTS (AC 400V)
Input Voltage:	3 phase, AC 240V or AC 400V, 50Hz
Operational Mode:	ON, see 3.1
Earthing:	Through power cord

Table 3: Radiated Emission, Enclosure; 30 - 1000 MHz

Settings

Frequency			**Settings**		
Start	Stop	Step Size	IF Bandwidth	Detector	Meas. Time
30 MHz	1000 MHz		120kHz	QP	20s

Notes: please see Appendix A for detail test result.

4.2 Disturbances in Supply Systems

4.2.1 Harmonics

Port:	AC Mains
Basic Standard:	EN 61000-3-2
Limits:	EN 61000-3-2, Class A

Result:	**PASS**

Test Setup

Date of Testing:	2015.09.01 – 2015.11.03
Model:	CWIDA04PTS (AC 230V), CWIDA04PTS (AC 400V), CWIDA12PTS (AC 230V), CWIDA12PTS (AC 400V)
Input Voltage:	3 phase, AC 230V or AC 400V, 50Hz
Operational Mode:	ON, see 3.1
Earthing:	Through power cord

Notes: please see Appendix A for detail test result.

4.2.2 Voltage Fluctuations

Port:	AC Mains
Basic Standard:	EN 61000-3-3
Limits:	EN 61000-3-3, clause 5

Result:	**PASS**

Test Setup

Date of Testing:	2015.09.01 – 2015.11.03
Model:	CWIDA04PTS (AC 230V), CWIDA04PTS (AC 400V), CWIDA12PTS (AC 230V), CWIDA12PTS (AC 400V)
Input Voltage:	3 phase, AC 230V or AC 400V, 50Hz
Operational Mode:	ON, see 3.1
Earthing:	Through power cord

Notes: please see Appendix A for detail test result.

5 Test Results I M M U N I T Y

Result:	**PASS**

5.1 Enclosure Port

5.1.1 Electrostatic Discharge

Port:	Enclosure	
Basic Standard:	IEC 61000-4-2, EN 61000-4-2	
Performance Criteria:	B	
Test Specification:	EN 61000-6-2	
	Voltage:	8 kV (Air Discharge) 4 kV (Contact Discharge) V.C.P and H.C.P.
	Test Level:	(= level 3 of EN 61000-4-2)

Result:	**PASS**

Test Setup

Test Date:	2015.09.01 – 2015.11.03
Model:	CWIDA04PTS (AC 230V), CWIDA04PTS (AC 400V), CWIDA12PTS (AC 230V), CWIDA12PTS (AC 400V)
Input Voltage:	3 phase, AC 240V or AC 400V, 50Hz
Operational mode:	ON, see 3.1
Earthing:	Through power cord
Temperature:	25 ºC
Relative Humidity:	52 %
Atmospheric pressure:	1001 mbar

Table 4: Electrostatic Discharge

Testpoint	Polarity	Number of Discharges	Observation	Result
LCD display	+/-8KV Air	20	normal function	**PASS**
Metal part, Screws	+/-4KV Con.	20	normal function	**PASS**
V.C.P.	+/-4KV	20	normal function	**PASS**

No degradation in performance was monitored during and directly after the test.

5.1.2 Radio-Frequency Electromagnetic Field

Port:	Enclosure	
Basic Standard:	IEC 61000-4-3, EN 61000-4-3	
Performance Criteria:	A	
Test Specification:	EN 61000-6-2	
	Frequency Range:	80-1000 MHz
		1.4 GHz-2.0 GHz
		2.0 GHz-2.7 GHz
	Field Strength:	10 V/m; 3 V/m; 1 V/m
		(unmodulated)
	Modulation:	1 kHz, AM, 80%

Result:	**PASS**

Test Setup

Test Date:	2015.09.01 – 2015.11.03
Model:	CWIDA04PTS (AC 230V), CWIDA04PTS (AC 400V), CWIDA12PTS (AC 230V), CWIDA12PTS (AC 400V)
Input Voltage:	3 phase, AC 240V or AC 400V, 50Hz
Operational mode:	ON, see 3.1
Earthing:	Through power cord
Temperature:	25 ºC
Relative Humidity:	52 %
Atmospheric pressure:	1001 mbar

Table 5: Radio-Frequency Electromagnetic Field: 80 - 2700MHz

Settings for vertical & horizontal antenna polarization

Frequency			**Settings**		
Start	Stop	Step Size	Field Strength	Sweep mode	Meas. Time
80 MHz	1000 MHz	1% of preceding frequency	10V/m	auto	3s
1.4 GHz	2.0 GHz	1% of preceding frequency	3V/m	auto	3s
2.0 GHz	2.7 GHz	1% of preceding frequency	1V/m	auto	3s

No abnormalities were observed during and after the test.

5.2 Input and Output AC Power Ports

5.2.1 Conducted Disturbances induced by Current Injection

Port:	AC Power Ports	
Basic Standard:	IEC 61000-4-6, EN 61000-4-6	
Performance Criteria:	A	
Test Specification:	EN 61000-6-2	
	Frequency Range:	0.15 – 80MHz
	Voltage Level:	10Vrms (unmodulated)
		(= level 3 of EN 61000-4-6)
	Modulation:	1KHz, 80% AM

Result:	**PASS**

Test Setup

Test Date:	2015.09.01 – 2015.11.03
Model:	CWIDA04PTS (AC 230V), CWIDA04PTS (AC 400V), CWIDA12PTS (AC 230V), CWIDA12PTS (AC 400V)
Input Voltage:	3 phase, AC 240V or AC 400V, 50Hz
Operational mode:	ON, see 3.1
Earthing:	Through power cord
Temperature:	25 ºC
Relative Humidity:	52 %
Atmospheric pressure:	1001 mbar

Table 6: Conducted Disturbances induced by Injected Current; 0.15 - 80 MHz

Settings

Frequency			**Settings**			
Start	Stop	Step Size	Voltage Level	Sweep mode	Meas. Time	Modulat.
150 kHz	80 MHz	1% of preceding frequency	10 Vrms	auto	3s	1 kHz, 80 % AM

No degradation in performance was monitored during and directly after the test.

5.2.2 Fast Transients Common Mode

Port:	AC Power Ports	
Basic Standard:	IEC 61000-4-4, EN 61000-4-4	
Performance Criteria:	B	
Test Specification:	EN 61000-6-2	
	Peak Voltage:	2 kV (= level 3 of EN 61000-4-4)
	T_r/T_h:	5/50 ns
	Rep. Frequency:	5 kHz

Result:	**PASS**

Test Setup

Test Date:	2015.09.01 – 2015.11.03
Model:	CWIDA04PTS (AC 230V), CWIDA04PTS (AC 400V), CWIDA12PTS (AC 230V), CWIDA12PTS (AC 400V)
Input Voltage:	3 phase, AC 240V or AC 400V, 50Hz
Operational mode:	ON, see 3.1
Earthing:	Through power cord
Temperature:	25 ºC
Relative Humidity:	52 %
Atmospheric pressure:	1001 mbar

Table 7: Fast transients common mode (Input and output AC power ports)

Testpoint	Polarity	Observation	Result
L1, L2, L3, PE	+/-	normal function	**PASS**
L1-L2, L2-L3, L1-L3	+/-	normal function	**PASS**
L1-PE, L2-PE, L3-PE	+/-	normal function	**PASS**
L1-L2-L3-PE	+/-	normal function	**PASS**

No degradation in performance was monitored during and directly after the test.

5.2.3 Surges

Port:	AC Power Ports	
Basic Standard:	IEC 61000-4-5, EN 61000-4-5	
Performance Criteria:	B	
Test Specification:	EN 61000-6-2	
	Peak Voltage:	1.0 kV for Differential mode
		2.0 kV for Common mode
	Test Level:	(= level 3 of EN 61000-4-5)
	T_r/T_h:	1,2/50 µs, (8/20) µs

Result:	**PASS**

Test Setup

Test Date:	2015.09.01 – 2015.11.03
Model:	CWIDA04PTS (AC 230V), CWIDA04PTS (AC 400V), CWIDA12PTS (AC 230V), CWIDA12PTS (AC 400V)
Input Voltage:	3 phase, AC 240V or AC 400V, 50Hz
Operational mode:	ON, see 3.1
Earthing:	Through power cord
Temperature:	25 ºC
Relative Humidity:	52 %
Atmospheric pressure:	1001 mbar

Table 8: Surges Differential Mode (Input AC Power Ports)

Testpoint	Voltage	Polarity	No. of Pulse	Phase	Observation
L1-L2, L2-L3, L1-L3	1KV	+/-	10	0°, 90°, 180°, 270°	Normal function
L1-PE, L2-PE, L3-PE	2KV	+/-	10	0°, 90°, 180°, 270°	Normal function

No degradation in performance was monitored during and directly after the test.

5.2.4 Voltage Dip and Interruptions

Port:	AC mains input	
Basic Standard:	IEC 61000-4-11, EN 61000-4-11	
Performance Criteria:	B & C	
Test Specification:	EN 61000-6-2	
	Test Level:	0 % U_T for Interruptions, 40 % & 70 % U_T for Dips.

Result:	**PASS**

Test Setup

Test Date:	2015.09.01 – 2015.11.03
Model:	CWIDA04PTS (AC 230V), CWIDA04PTS (AC 400V), CWIDA12PTS (AC 230V), CWIDA12PTS (AC 400V)
Input Voltage:	3 phase, AC 240V or AC 400V, 50Hz
Operational mode:	ON, see 3.1
Earthing:	Through power cord
Temperature:	25 ºC
Relative Humidity:	52 %
Atmospheric pressure:	1001 mbar

Table 9: Voltage Dips and Interruptions (Input AC Power Ports)

Voltage Dips	Duration	Observation	Result
0%	250 cys	The subject sample was stopping during testing; but it was self-recoverable after testing.	**PASS**
0%	1 cys	normal function	**PASS**
40%	10 cys	normal function	**PASS**
70%	25 cys	normal function	**PASS**

No abnormalities were observed during and directly after the test.

5.3 Ports for Signal Lines and Control Lines

5.3.1 Conducted Disturbances induced by Current Injection

Port:	Signal and Control Ports	
Basic Standard:	EN 61000-4-6, IEC 61000-4-6	
Performance Criteria:	A	
Test Specification:	EN 61000-6-2	
	Frequency Range:	0.15 – 80 MHz
	Voltage Level:	10 Vrms (unmodulated)
	Modulation:	1KHz, 80% AM

Result:	**N/A**

There is no such port; therefore this test is not applicable.

5.3.2 Electrical Fast Transients

Port:	Signal and Control Ports	
Basic Standard:	EN 61000-4-4, IEC 61000-4-4	
Performance Criteria:	B	
Test Specification:	EN 61000-6-2	
	Peak Voltage:	1.0 kV (= level 2 of EN 61000-4-4)
	T_r/T_h:	5/50 ns
	Rep. Frequency:	5 kHz

Result:	**N/A**

There is no such port; therefore this test is not applicable.

5.3.3 Surges

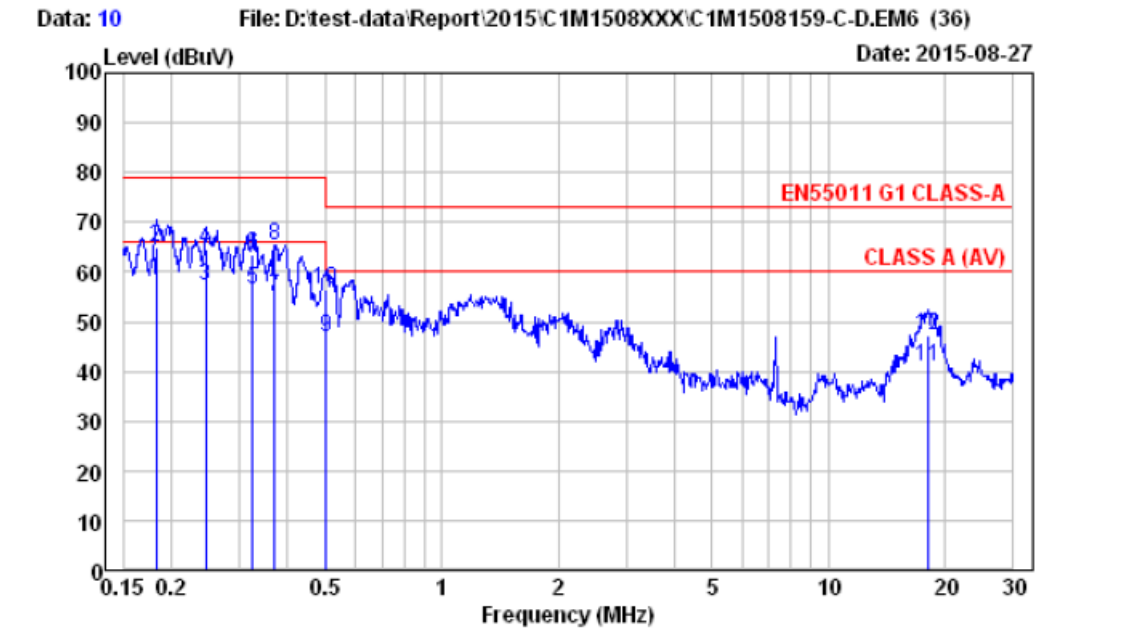
Port:	Signal and Control ports	
Basic Standard:	IEC 61000-4-5, EN 61000-4-5	
Performance Criteria:	B	
Test Specification:	EN 61000-6-2	
	Peak Voltage:	1 kV for Differential mode
		2 kV for Common mode
	Test Level:	(= level 3 of EN 61000-4-5)
	T_r/T_h:	1,2/50 µs, (8/20) µs

Result:	**N/A**

There is no such port; therefore this test is not applicable.

6 List of Tables

Figure 1: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 230V)/Low Temp. (Line 1)

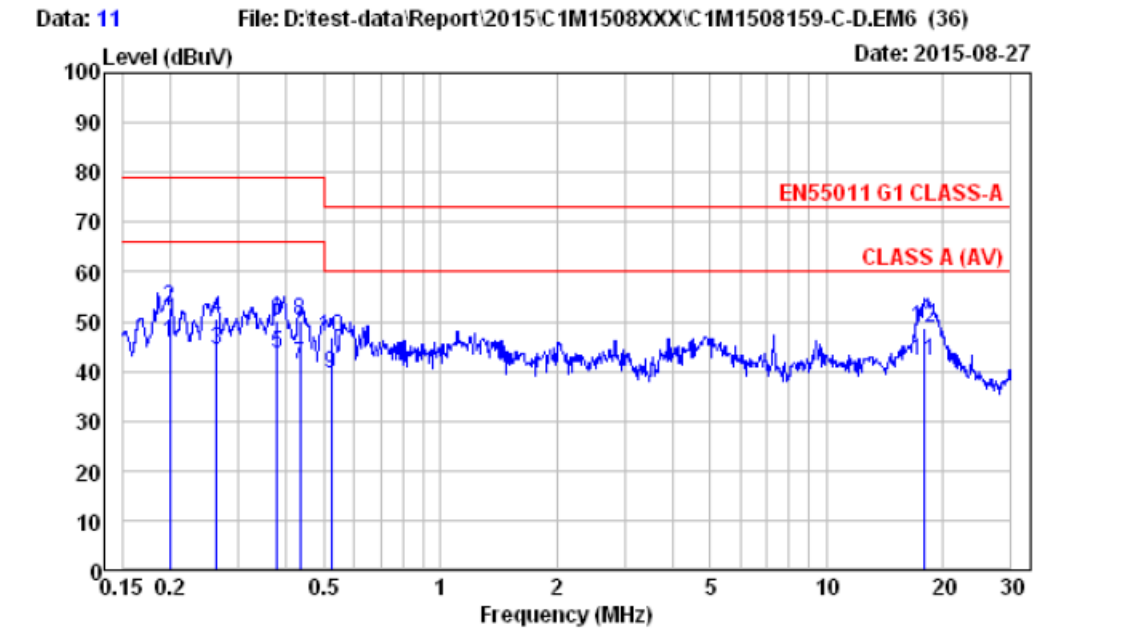


Site no. : No.3 Shielded Room Data no. : 10
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : LOW
R

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.182	0.10	0.02	9.87	48.43	58.42	66.00	7.58	Average
2	0.182	0.10	0.02	9.87	55.07	65.06	79.00	13.94	QP
3	0.246	0.10	0.02	9.86	47.20	57.18	66.00	8.82	Average
4	0.246	0.10	0.02	9.86	54.65	64.63	79.00	14.37	QP
5	0.325	0.09	0.02	9.86	46.35	56.32	66.00	9.68	Average
6	0.325	0.09	0.02	9.86	53.42	63.39	79.00	15.61	QP
7	0.369	0.09	0.02	9.86	45.13	55.10	66.00	10.90	Average
8	0.369	0.09	0.02	9.86	55.44	65.41	79.00	13.59	QP
9	0.502	0.09	0.02	9.85	37.00	46.96	60.00	13.04	Average
10	0.502	0.09	0.02	9.85	46.48	56.44	73.00	16.56	QP
11	18.039	0.54	0.16	9.93	30.42	41.05	60.00	18.95	Average
12	18.039	0.54	0.16	9.93	36.70	47.33	73.00	25.67	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 2: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 230V)/Low Temp. (Line 2)

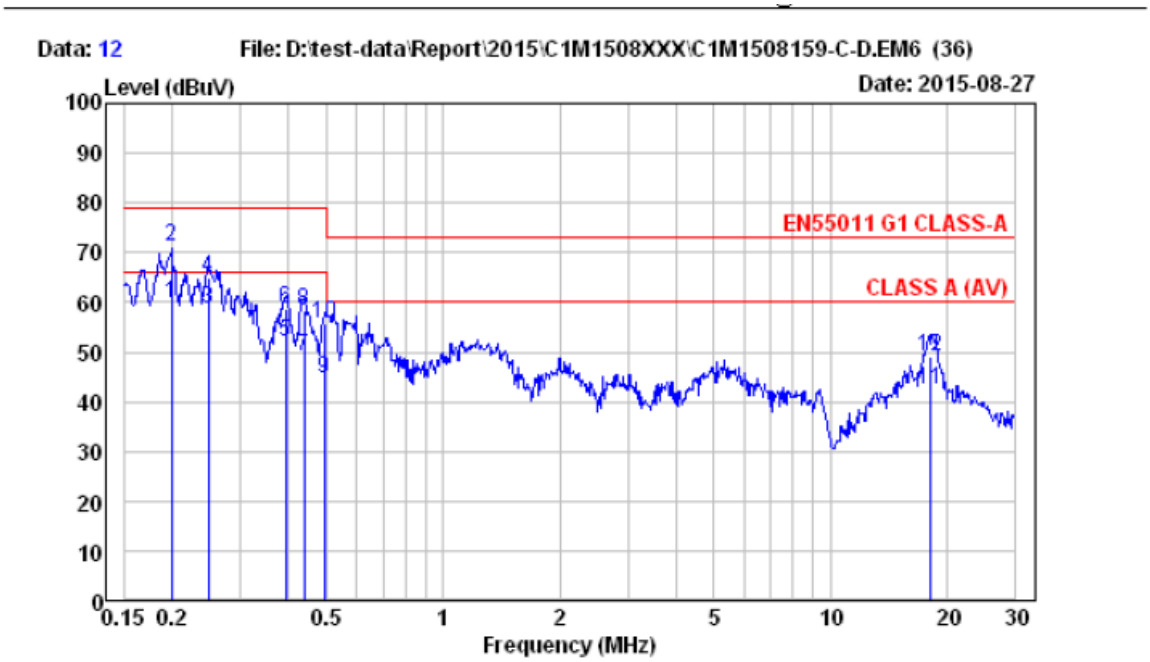


Site no. : No.3 Shielded Room Data no. : 11
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : LOW
S

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.200	0.10	0.02	9.86	35.93	45.91	66.00	20.09	Average
2	0.200	0.10	0.02	9.86	42.74	52.72	79.00	26.28	QP
3	0.263	0.10	0.02	9.86	34.33	44.31	66.00	21.69	Average
4	0.263	0.10	0.02	9.86	40.72	50.70	79.00	28.30	QP
5	0.377	0.09	0.02	9.86	33.41	43.38	66.00	22.62	Average
6	0.377	0.09	0.02	9.86	40.10	50.07	79.00	28.93	QP
7	0.433	0.09	0.02	9.86	31.44	41.41	66.00	24.59	Average
8	0.433	0.09	0.02	9.86	40.19	50.16	79.00	28.84	QP
9	0.521	0.10	0.02	9.85	29.49	39.46	60.00	20.54	Average
10	0.521	0.10	0.02	9.85	36.81	46.78	73.00	26.22	QP
11	17.849	0.54	0.16	9.93	31.32	41.95	60.00	18.05	Average
12	17.849	0.54	0.16	9.93	38.21	48.84	73.00	24.16	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 3: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 230V)/Low Temp. (Line 3)

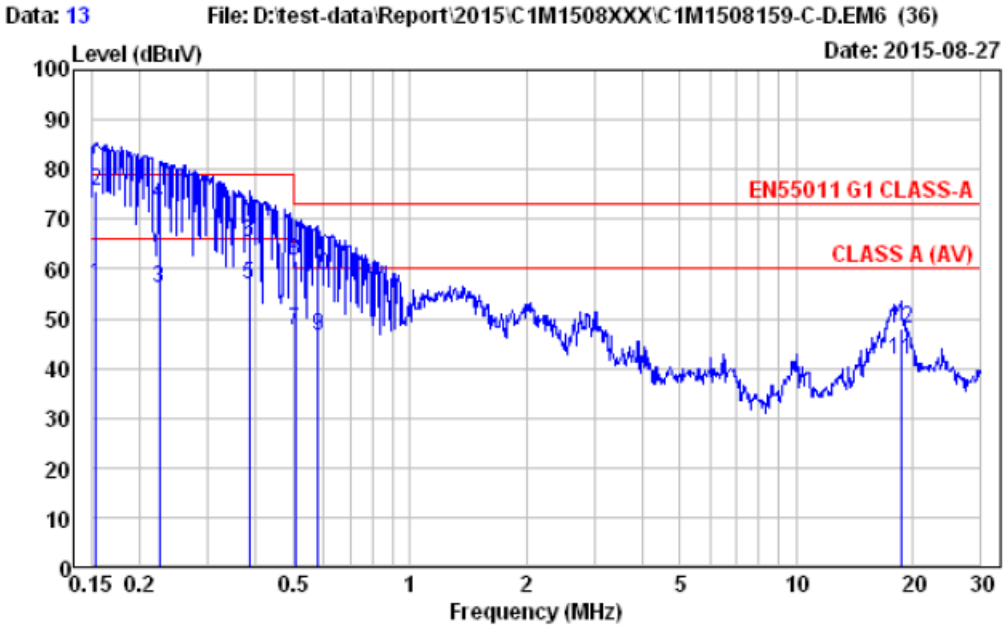


Site no. : No.3 Shielded Room Data no. : 12
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : LOW
T

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.200	0.10	0.02	9.86	49.82	59.80	66.00	6.20	Average
2	0.200	0.10	0.02	9.86	61.33	71.31	79.00	7.69	QP
3	0.248	0.10	0.02	9.86	48.64	58.62	66.00	7.38	Average
4	0.248	0.10	0.02	9.86	55.05	65.03	79.00	13.97	QP
5	0.393	0.09	0.02	9.86	41.95	51.92	66.00	14.08	Average
6	0.393	0.09	0.02	9.86	48.74	58.71	79.00	20.29	QP
7	0.437	0.09	0.02	9.86	39.00	48.97	66.00	17.03	Average
8	0.437	0.09	0.02	9.86	48.44	58.41	79.00	20.59	QP
9	0.494	0.09	0.02	9.85	34.58	44.54	66.00	21.46	Average
10	0.494	0.09	0.02	9.85	45.94	55.90	79.00	23.10	QP
11	18.039	0.54	0.16	9.93	31.64	42.27	60.00	17.73	Average
12	18.039	0.54	0.16	9.93	38.30	48.93	73.00	24.07	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 4: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 230V)/Med. Temp. (Line 1)

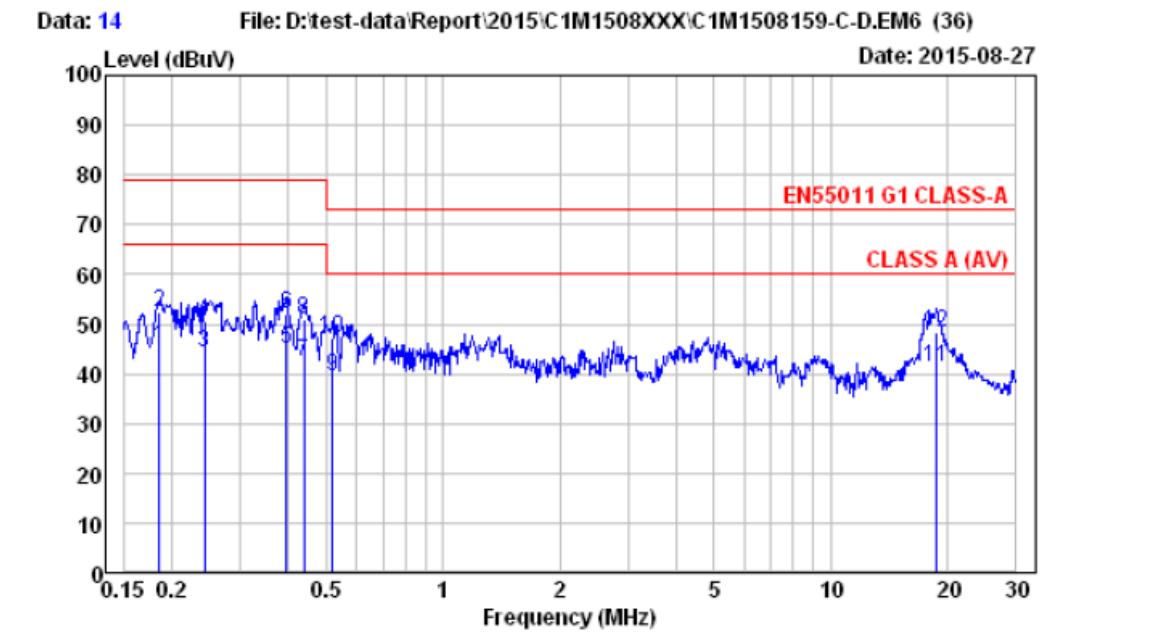


Site no. : No.3 Shielded Room Data no. : 13
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : MIN
R

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.154	0.11	0.03	9.88	46.65	56.67	66.00	9.33	Average
2	0.154	0.11	0.03	9.88	65.74	75.76	79.00	3.24	QP
3	0.224	0.10	0.02	9.86	46.02	56.00	66.00	10.00	Average
4	0.224	0.10	0.02	9.86	62.97	72.95	79.00	6.05	QP
5	0.385	0.09	0.02	9.86	46.77	56.74	66.00	9.26	Average
6	0.385	0.09	0.02	9.86	55.52	65.49	79.00	13.51	QP
7	0.505	0.09	0.02	9.85	37.72	47.68	60.00	12.32	Average
8	0.505	0.09	0.02	9.85	51.48	61.44	73.00	11.56	QP
9	0.579	0.10	0.02	9.85	36.36	46.33	60.00	13.67	Average
10	0.579	0.10	0.02	9.85	48.75	58.72	73.00	14.28	QP
11	18.622	0.54	0.16	9.93	30.96	41.59	60.00	18.41	Average
12	18.622	0.54	0.16	9.93	37.52	48.15	73.00	24.85	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 5: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 230V)/Med. Temp. (Line 2)

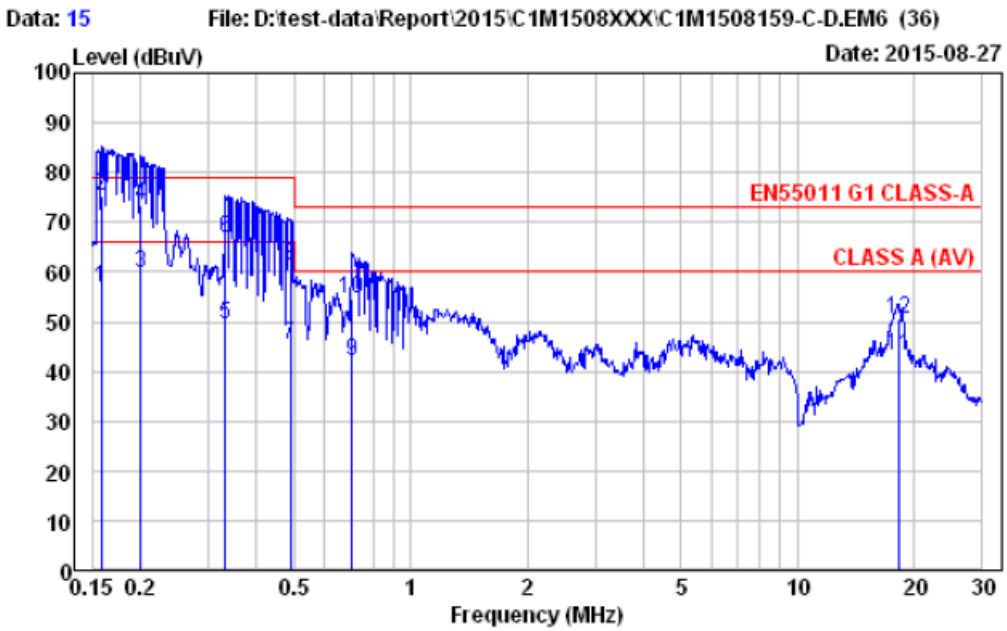


Site no. : No.3 Shielded Room Data no. : 14
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : MIN
S

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.185	0.10	0.02	9.87	35.35	45.34	66.00	20.66	Average
2	0.185	0.10	0.02	9.87	42.41	52.40	79.00	26.60	QP
3	0.243	0.10	0.02	9.86	34.37	44.35	66.00	21.65	Average
4	0.243	0.10	0.02	9.86	40.70	50.68	79.00	28.32	QP
5	0.396	0.09	0.02	9.86	35.07	45.04	66.00	20.96	Average
6	0.396	0.09	0.02	9.86	42.03	52.00	79.00	27.00	QP
7	0.437	0.09	0.02	9.86	32.58	42.55	66.00	23.45	Average
8	0.437	0.09	0.02	9.86	40.85	50.82	79.00	28.18	QP
9	0.518	0.10	0.02	9.85	29.34	39.31	60.00	20.69	Average
10	0.518	0.10	0.02	9.85	37.29	47.26	73.00	25.74	QP
11	18.721	0.55	0.16	9.93	30.79	41.43	60.00	18.57	Average
12	18.721	0.55	0.16	9.93	37.69	48.33	73.00	24.67	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 6: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 230V)/Med. Temp. (Line 3)

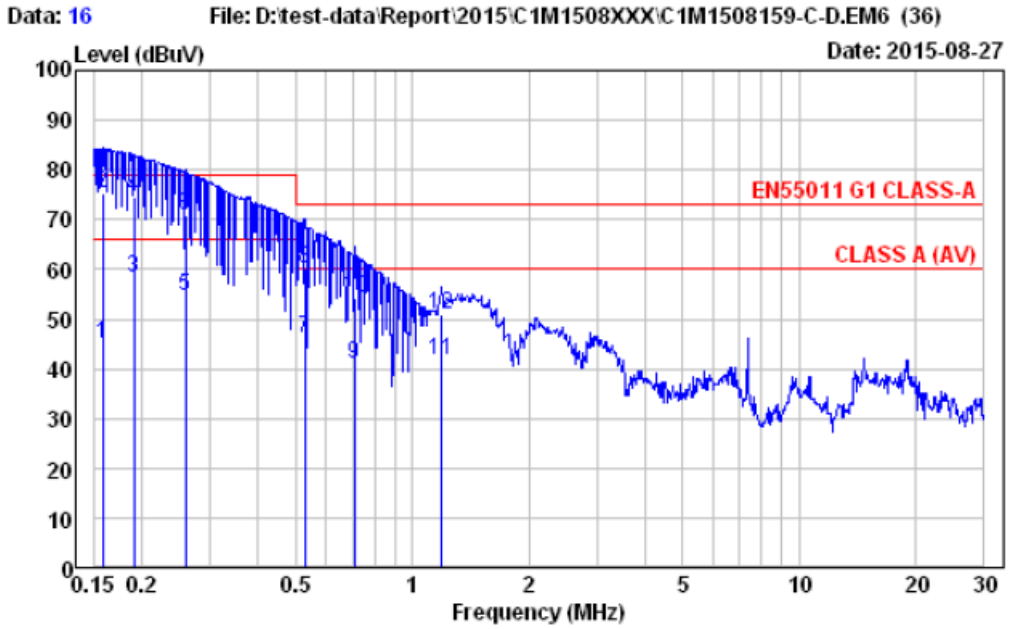


Site no. : No.3 Shielded Room Data no. : 15
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : MIN
T

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.158	0.11	0.03	9.88	46.75	56.77	66.00	9.23	Average
2	0.158	0.11	0.03	9.88	65.08	75.10	79.00	3.90	QP
3	0.201	0.10	0.02	9.86	49.77	59.75	66.00	6.25	Average
4	0.201	0.10	0.02	9.86	63.45	73.43	79.00	5.57	QP
5	0.332	0.09	0.02	9.86	39.30	49.27	66.00	16.73	Average
6	0.332	0.09	0.02	9.86	56.71	66.68	79.00	12.32	QP
7	0.489	0.09	0.02	9.85	35.36	45.32	66.00	20.68	Average
8	0.489	0.09	0.02	9.85	51.38	61.34	79.00	17.66	QP
9	0.705	0.10	0.02	9.86	31.91	41.89	60.00	18.11	Average
10	0.705	0.10	0.02	9.86	44.69	54.67	73.00	18.33	QP
11	18.232	0.54	0.16	9.93	32.40	43.03	60.00	16.97	Average
12	18.232	0.54	0.16	9.93	39.94	50.57	73.00	22.43	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 7: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 230V)/High Temp. (Line 1)

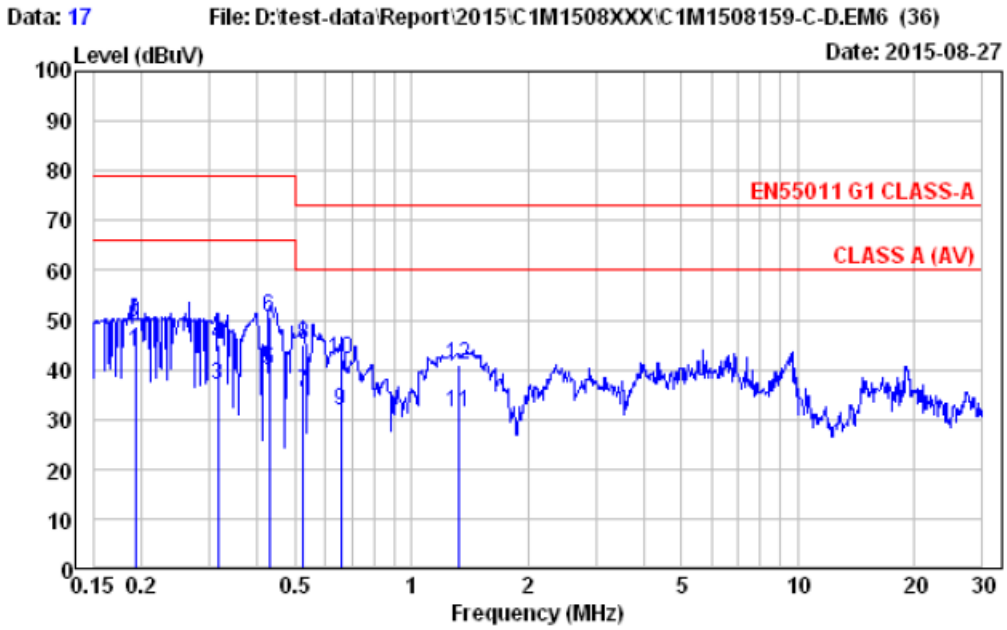


Site no. : No.3 Shielded Room Data no. : 16
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : HIGH
R

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.158	0.11	0.03	9.88	34.90	44.92	66.00	21.08	Average
2	0.158	0.11	0.03	9.88	65.12	75.14	79.00	3.86	QP
3	0.191	0.10	0.02	9.86	48.27	58.25	66.00	7.75	Average
4	0.191	0.10	0.02	9.86	64.53	74.51	79.00	4.49	QP
5	0.259	0.10	0.02	9.86	44.79	54.77	66.00	11.23	Average
6	0.259	0.10	0.02	9.86	60.86	70.84	79.00	8.16	QP
7	0.527	0.10	0.02	9.85	36.18	46.15	60.00	13.85	Average
8	0.527	0.10	0.02	9.85	50.04	60.01	73.00	12.99	QP
9	0.708	0.10	0.02	9.86	30.96	40.94	60.00	19.06	Average
10	0.708	0.10	0.02	9.86	44.28	54.26	73.00	18.74	QP
11	1.191	0.12	0.02	9.85	31.71	41.70	60.00	18.30	Average
12	1.191	0.12	0.02	9.85	40.92	50.91	73.00	22.09	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 8: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 230V)/High Temp. (Line 2)

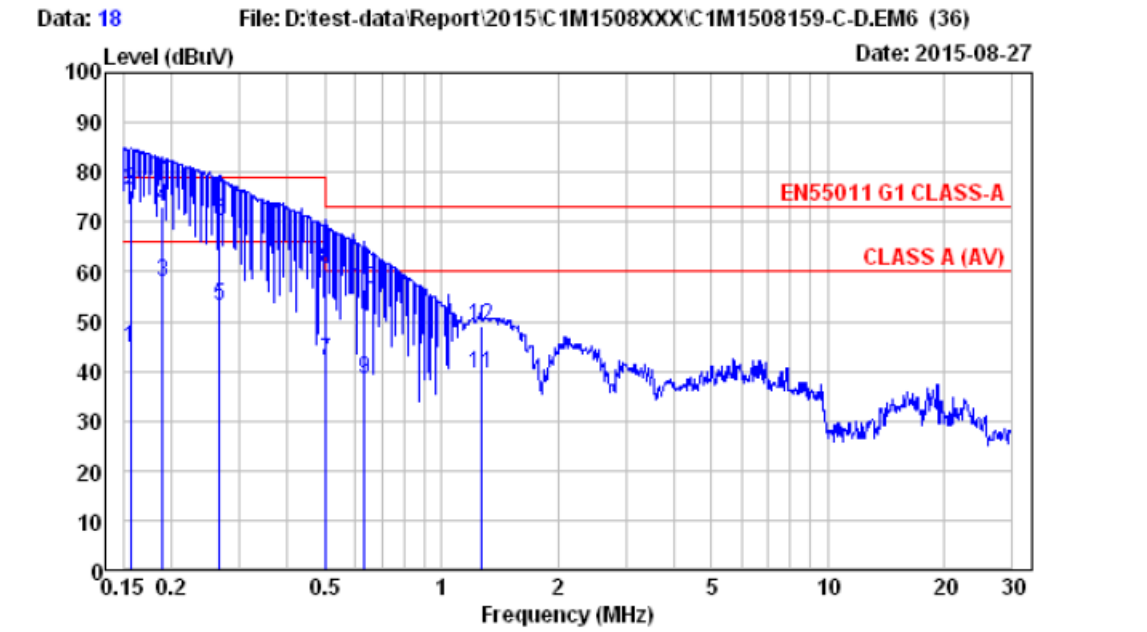


Site no. : No.3 Shielded Room Data no. : 17
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : HIGH
S

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.193	0.10	0.02	9.86	33.67	43.65	66.00	22.35	Average
2	0.193	0.10	0.02	9.86	38.58	48.56	79.00	30.44	QP
3	0.315	0.09	0.02	9.86	26.80	36.77	66.00	29.23	Average
4	0.315	0.09	0.02	9.86	34.87	44.84	79.00	34.16	QP
5	0.428	0.09	0.02	9.86	29.95	39.92	66.00	26.08	Average
6	0.428	0.09	0.02	9.86	40.71	50.68	79.00	28.32	QP
7	0.524	0.10	0.02	9.85	25.63	35.60	60.00	24.40	Average
8	0.524	0.10	0.02	9.85	34.90	44.87	73.00	28.13	QP
9	0.658	0.10	0.02	9.86	21.91	31.89	60.00	28.11	Average
10	0.658	0.10	0.02	9.86	31.91	41.89	73.00	31.11	QP
11	1.324	0.13	0.03	9.86	21.43	31.45	60.00	28.55	Average
12	1.324	0.13	0.03	9.86	31.09	41.11	73.00	31.89	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 9: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 230V)/High Temp. (Line 3)

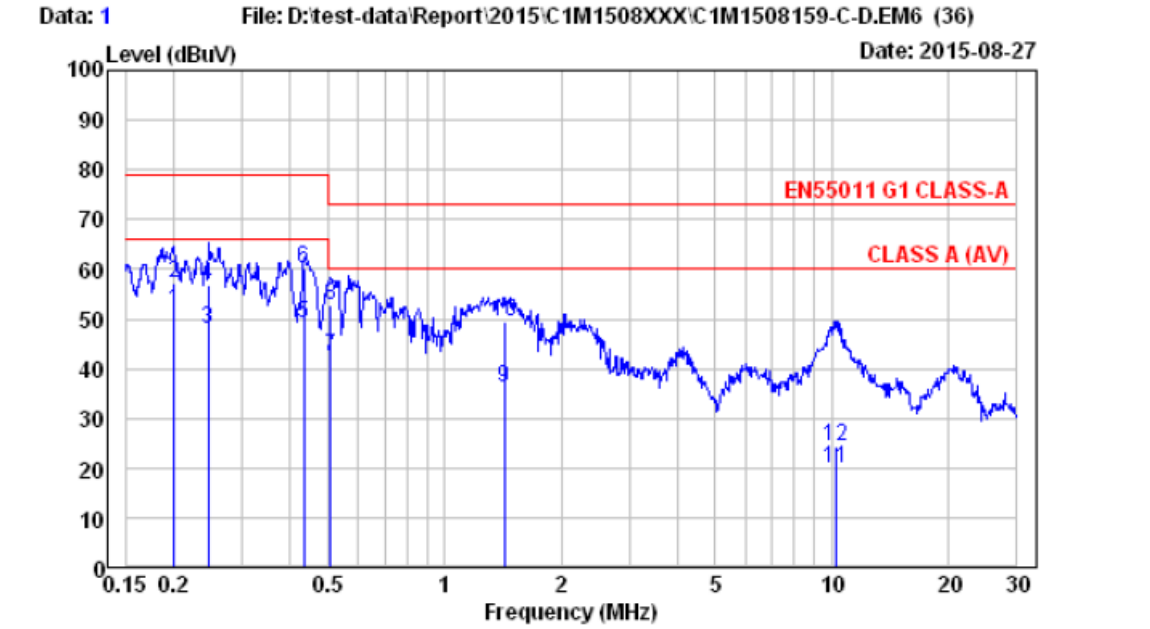


Site no. : No.3 Shielded Room Data no. : 18
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : HIGH
T

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.156	0.11	0.03	9.88	34.80	44.82	66.00	21.18	Average
2	0.156	0.11	0.03	9.88	66.37	76.39	79.00	2.61	QP
3	0.189	0.10	0.02	9.86	47.88	57.86	66.00	8.14	Average
4	0.189	0.10	0.02	9.86	63.13	73.11	79.00	5.89	QP
5	0.266	0.10	0.02	9.86	43.10	53.08	66.00	12.92	Average
6	0.266	0.10	0.02	9.86	60.15	70.13	79.00	8.87	QP
7	0.502	0.09	0.02	9.85	32.13	42.09	60.00	17.91	Average
8	0.502	0.09	0.02	9.85	50.72	60.68	73.00	12.32	QP
9	0.630	0.10	0.02	9.85	28.24	38.21	60.00	21.79	Average
10	0.630	0.10	0.02	9.85	46.62	56.59	73.00	16.41	QP
11	1.262	0.13	0.03	9.86	29.52	39.54	60.00	20.46	Average
12	1.262	0.13	0.03	9.86	38.90	48.92	73.00	24.08	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 10: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 400V)/Low Temp. (Line 1)

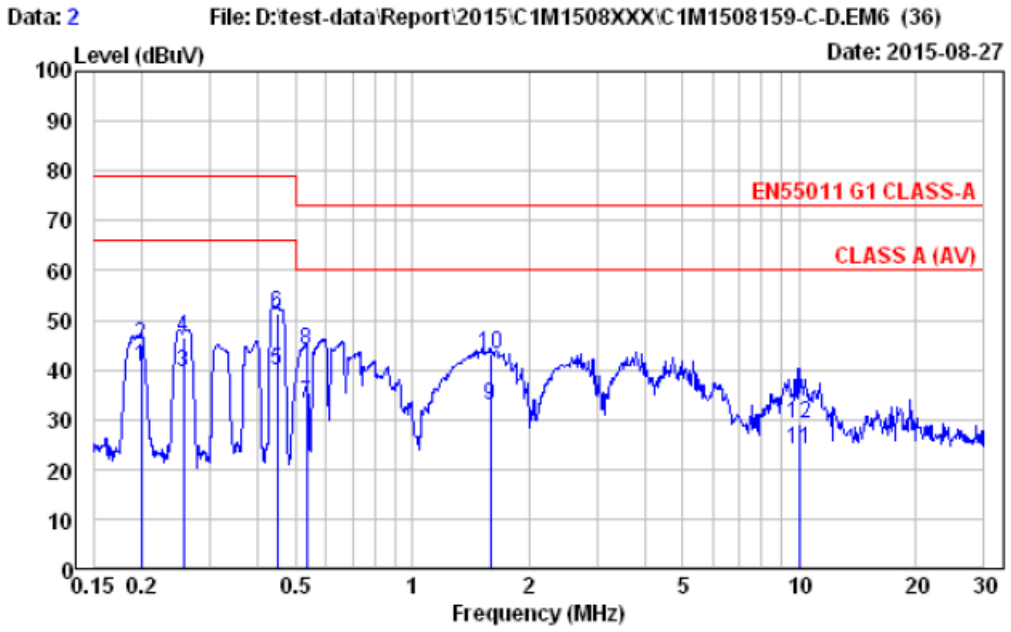



```
Site no.      : No.3 Shielded Room          Data no.   : 1
Condition     : KNW-244C 8-1373-5           LISN Phase : LINE
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 25°C / 57%  ESR3 (101772)   Engineer   : EDWARD
EUT           : CWIDA4PTS-3407B
Power Rating  : 400Vac / 50Hz
Test Mode     : LOW
                R
```

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.201	0.10	0.02	9.86	41.71	51.69	66.00	14.31	Average
2	0.201	0.10	0.02	9.86	47.31	57.29	79.00	21.71	QP
3	0.246	0.10	0.02	9.86	38.14	48.12	66.00	17.88	Average
4	0.246	0.10	0.02	9.86	46.94	56.92	79.00	22.08	QP
5	0.433	0.09	0.02	9.86	39.28	49.25	66.00	16.75	Average
6	0.433	0.09	0.02	9.86	50.04	60.01	79.00	18.99	QP
7	0.507	0.10	0.02	9.85	32.60	42.57	60.00	17.43	Average
8	0.507	0.10	0.02	9.85	42.89	52.86	73.00	20.14	QP
9	1.426	0.14	0.03	9.86	26.29	36.32	60.00	23.68	Average
10	1.426	0.14	0.03	9.86	39.31	49.34	73.00	23.66	QP
11	10.233	0.50	0.11	9.89	9.28	19.78	60.00	40.22	Average
12	10.233	0.50	0.11	9.89	13.73	24.23	73.00	48.77	QP

```
Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
         2. If the average limit is met when useing a quasi-peak detector,
            the EUT shall be deemed to meet both limits and measurement
            with average detector is unnecessary.
```

Figure 11: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 400V)/Low Temp. (Line 2)

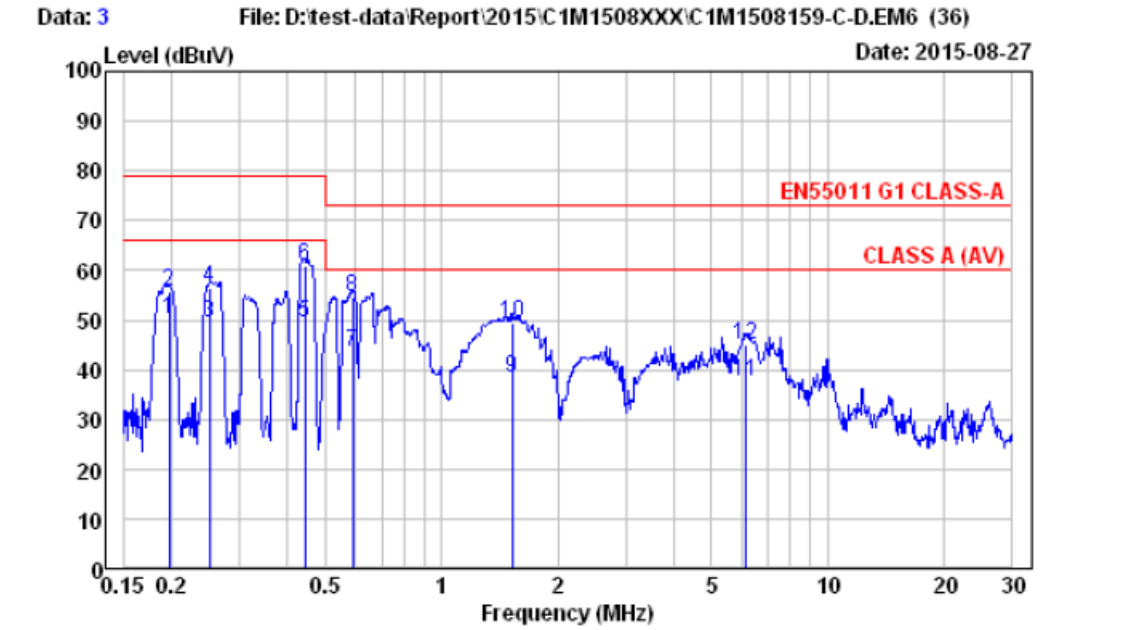


Site no. : No.3 Shielded Room Data no. : 2
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : LOW
S

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.200	0.10	0.02	9.86	30.69	40.67	66.00	25.33	Average
2	0.200	0.10	0.02	9.86	35.15	45.13	79.00	33.87	QP
3	0.256	0.10	0.02	9.86	29.41	39.39	66.00	26.61	Average
4	0.256	0.10	0.02	9.86	36.39	46.37	79.00	32.63	QP
5	0.447	0.09	0.02	9.86	30.01	39.98	66.00	26.02	Average
6	0.447	0.09	0.02	9.86	41.31	51.28	79.00	27.72	QP
7	0.532	0.10	0.02	9.85	23.12	33.09	60.00	26.91	Average
8	0.532	0.10	0.02	9.85	34.10	44.07	73.00	28.93	QP
9	1.593	0.14	0.03	9.86	22.84	32.87	60.00	27.13	Average
10	1.593	0.14	0.03	9.86	32.97	43.00	73.00	30.00	QP
11	9.966	0.50	0.11	9.89	13.50	24.00	60.00	36.00	Average
12	9.966	0.50	0.11	9.89	18.50	29.00	73.00	44.00	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 12: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 400V)/Low Temp. (Line 3)

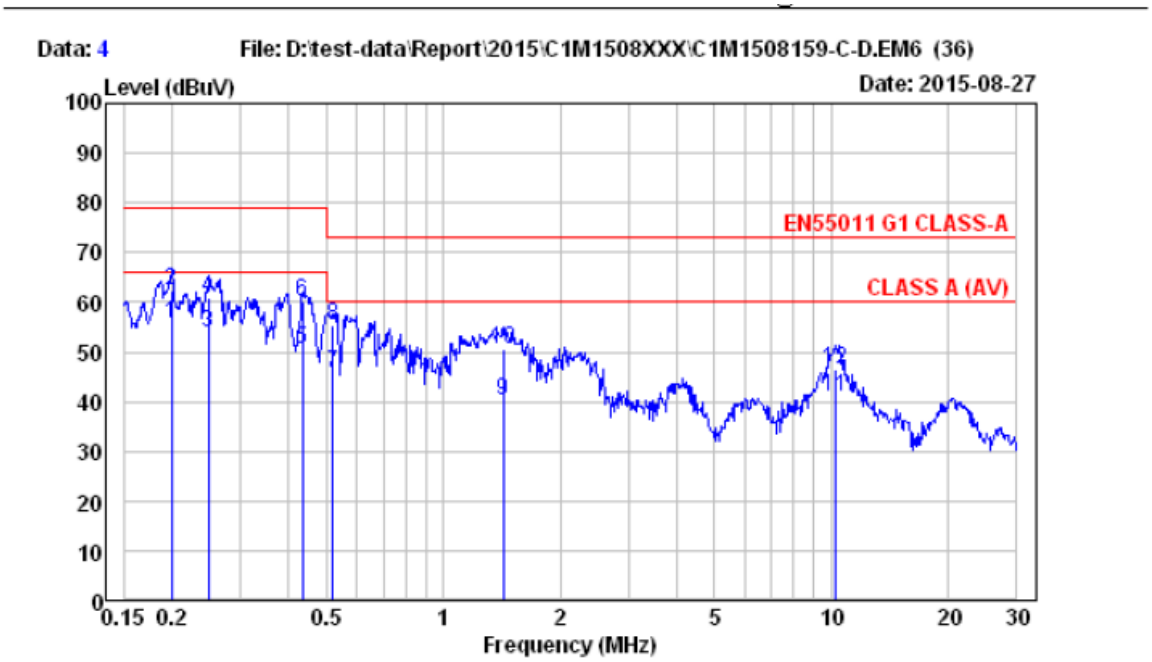


Site no. : No.3 Shielded Room Data no. : 3
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : LOW
T

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.198	0.10	0.02	9.86	40.31	50.29	66.00	15.71	Average
2	0.198	0.10	0.02	9.86	45.90	55.88	79.00	23.12	QP
3	0.251	0.10	0.02	9.86	39.49	49.47	66.00	16.53	Average
4	0.251	0.10	0.02	9.86	46.40	56.38	79.00	22.62	QP
5	0.442	0.09	0.02	9.86	39.60	49.57	66.00	16.43	Average
6	0.442	0.09	0.02	9.86	50.73	60.70	79.00	18.30	QP
7	0.589	0.10	0.02	9.85	33.65	43.62	60.00	16.38	Average
8	0.589	0.10	0.02	9.85	44.69	54.66	73.00	18.34	QP
9	1.527	0.14	0.03	9.86	28.36	38.39	60.00	21.61	Average
10	1.527	0.14	0.03	9.86	39.40	49.43	73.00	23.57	QP
11	6.121	0.36	0.08	9.87	27.39	37.70	60.00	22.30	Average
12	6.121	0.36	0.08	9.87	34.53	44.84	73.00	28.16	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 13: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 400V)/Med. Temp. (Line 1)

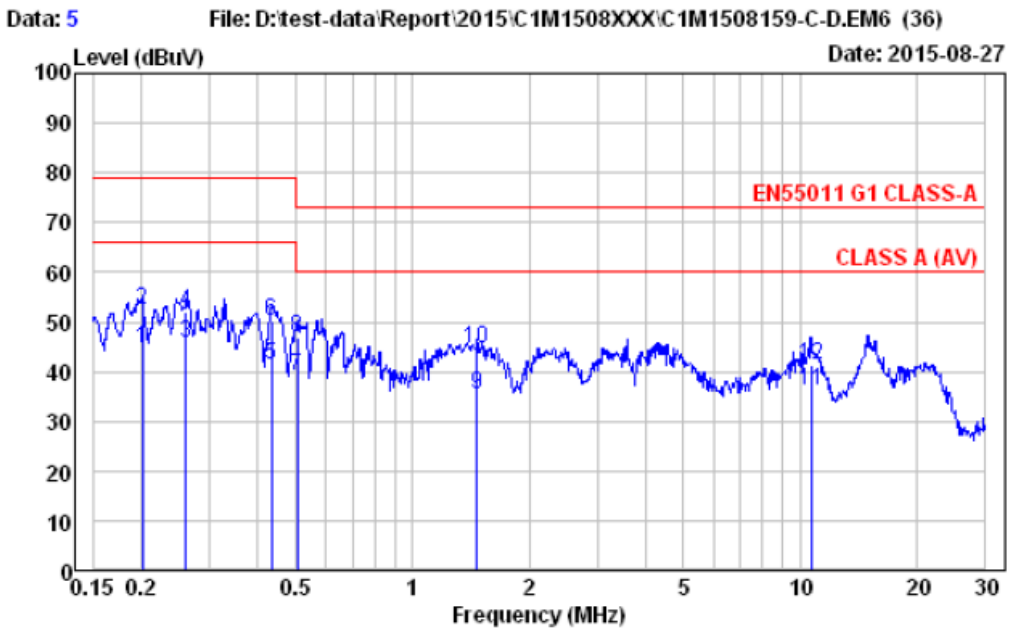


Site no. : No.3 Shielded Room Data no. : 4
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : MIN
R

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.200	0.10	0.02	9.86	45.85	55.83	66.00	10.17	Average
2	0.200	0.10	0.02	9.86	52.40	62.38	79.00	16.62	QP
3	0.248	0.10	0.02	9.86	43.80	53.78	66.00	12.22	Average
4	0.248	0.10	0.02	9.86	50.96	60.94	79.00	18.06	QP
5	0.433	0.09	0.02	9.86	40.74	50.71	66.00	15.29	Average
6	0.433	0.09	0.02	9.86	50.12	60.09	79.00	18.91	QP
7	0.518	0.10	0.02	9.85	35.90	45.87	60.00	14.13	Average
8	0.518	0.10	0.02	9.85	45.56	55.53	73.00	17.47	QP
9	1.426	0.14	0.03	9.86	30.22	40.25	60.00	19.75	Average
10	1.426	0.14	0.03	9.86	40.46	50.49	73.00	22.51	QP
11	10.288	0.50	0.11	9.89	30.44	40.94	60.00	19.06	Average
12	10.288	0.50	0.11	9.89	36.04	46.54	73.00	26.46	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 14: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 400V)/Med. Temp. (Line 2)

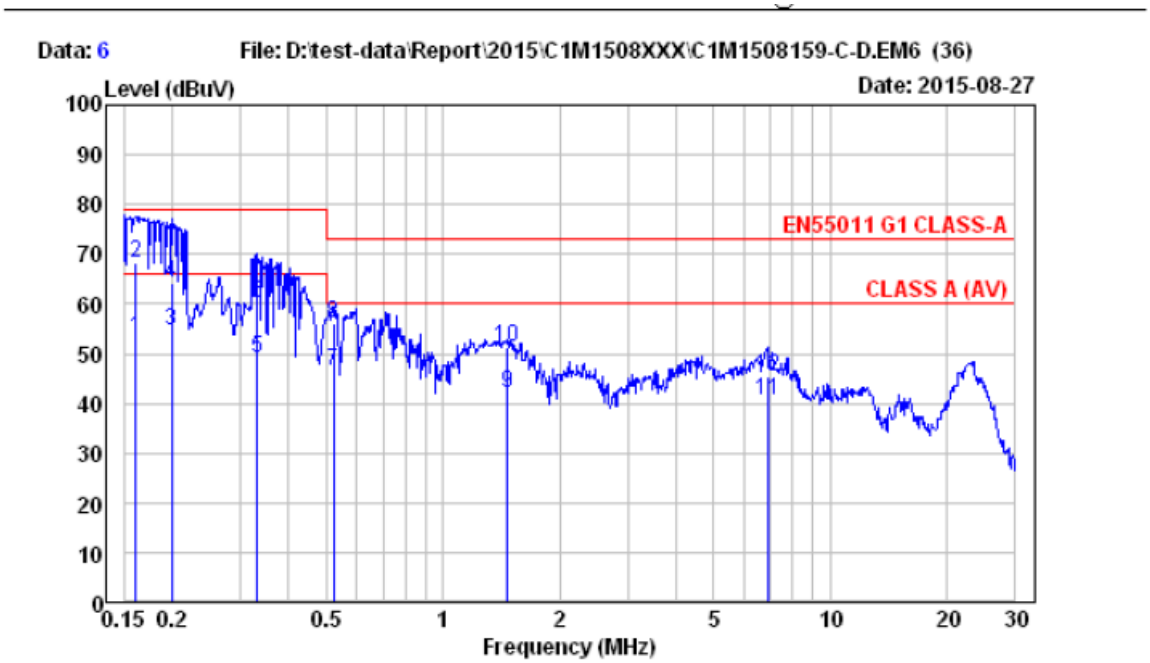


Site no. : No.3 Shielded Room Data no. : 5
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : MIN
S

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.202	0.10	0.02	9.86	34.49	44.47	66.00	21.53	Average
2	0.202	0.10	0.02	9.86	42.25	52.23	79.00	26.77	QP
3	0.260	0.10	0.02	9.86	35.86	45.84	66.00	20.16	Average
4	0.260	0.10	0.02	9.86	42.13	52.11	79.00	26.89	QP
5	0.433	0.09	0.02	9.86	31.51	41.48	66.00	24.52	Average
6	0.433	0.09	0.02	9.86	40.29	50.26	79.00	28.74	QP
7	0.505	0.09	0.02	9.85	29.22	39.18	60.00	20.82	Average
8	0.505	0.09	0.02	9.85	37.03	46.99	73.00	26.01	QP
9	1.464	0.14	0.03	9.86	25.43	35.46	60.00	24.54	Average
10	1.464	0.14	0.03	9.86	34.53	44.56	73.00	28.44	QP
11	10.676	0.50	0.12	9.89	25.56	36.07	60.00	23.93	Average
12	10.676	0.50	0.12	9.89	30.84	41.35	73.00	31.65	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 15: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 400V)/Med. Temp. (Line 3)

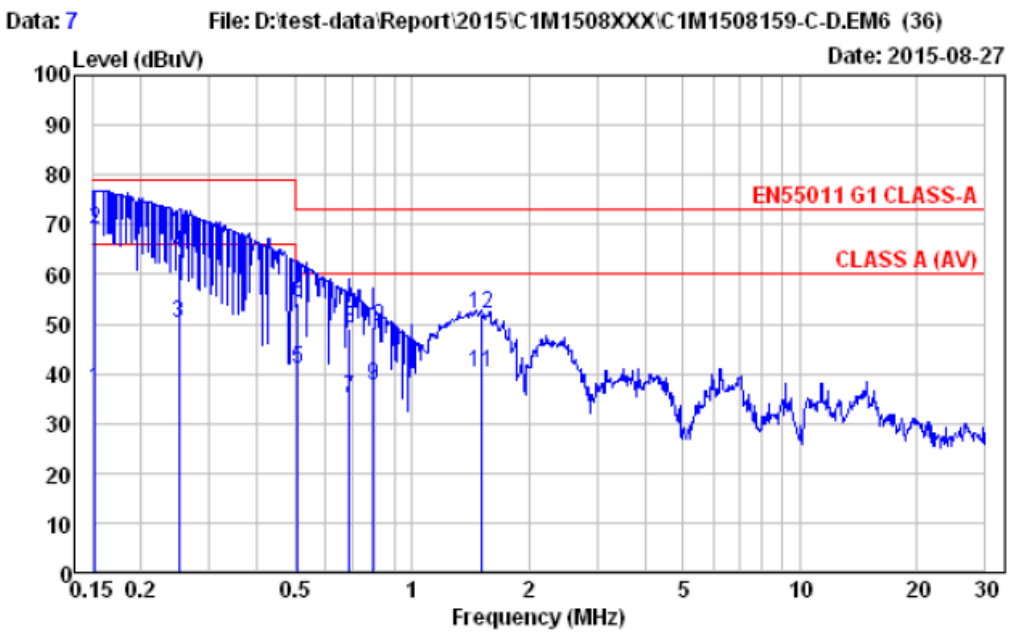


Site no. : No.3 Shielded Room Data no. : 6
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : MIN
T

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.162	0.11	0.03	9.87	42.99	53.00	66.00	13.00	Average
2	0.162	0.11	0.03	9.87	58.35	68.36	79.00	10.64	QP
3	0.200	0.10	0.02	9.86	44.71	54.69	66.00	11.31	Average
4	0.200	0.10	0.02	9.86	54.31	64.29	79.00	14.71	QP
5	0.332	0.09	0.02	9.86	39.23	49.20	66.00	16.80	Average
6	0.332	0.09	0.02	9.86	50.06	60.03	79.00	18.97	QP
7	0.521	0.10	0.02	9.85	36.61	46.58	60.00	13.42	Average
8	0.521	0.10	0.02	9.85	46.12	56.09	73.00	16.91	QP
9	1.464	0.14	0.03	9.86	31.96	41.99	60.00	18.01	Average
10	1.464	0.14	0.03	9.86	41.29	51.32	73.00	21.68	QP
11	6.878	0.39	0.09	9.87	30.34	40.69	60.00	19.31	Average
12	6.878	0.39	0.09	9.87	35.02	45.37	73.00	27.63	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 16: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 400V)/High Temp. (Line 1)

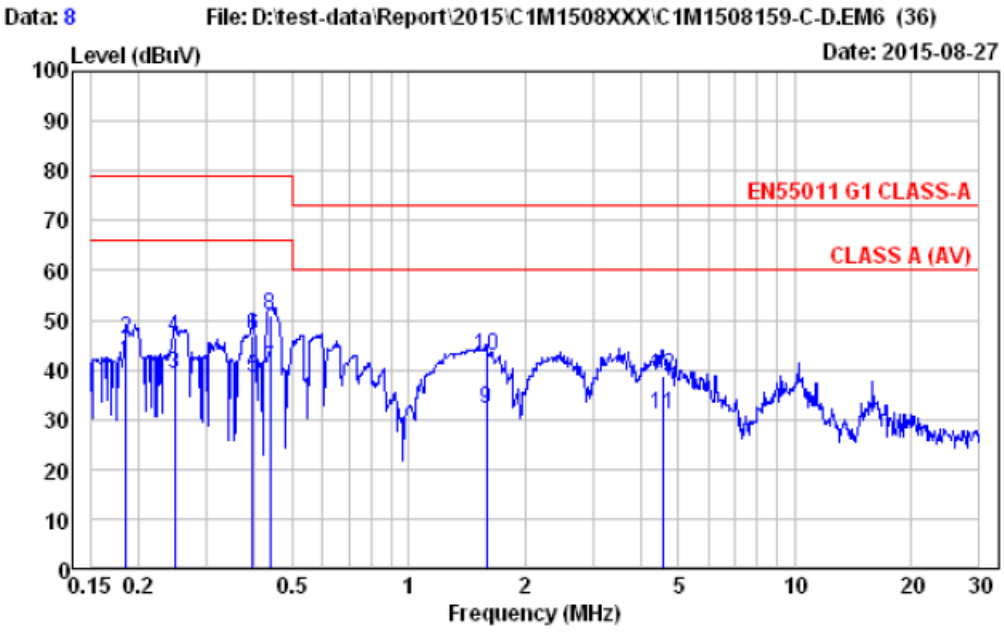


Site no. : No.3 Shielded Room Data no. : 7
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : HIGH
R

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.152	0.11	0.03	9.88	27.00	37.02	66.00	28.98	Average
2	0.152	0.11	0.03	9.88	58.85	68.87	79.00	10.13	QP
3	0.251	0.10	0.02	9.86	40.18	50.16	66.00	15.84	Average
4	0.251	0.10	0.02	9.86	54.09	64.07	79.00	14.93	QP
5	0.507	0.10	0.02	9.85	31.08	41.05	60.00	18.95	Average
6	0.507	0.10	0.02	9.85	44.32	54.29	73.00	18.71	QP
7	0.690	0.10	0.02	9.86	25.21	35.19	60.00	24.81	Average
8	0.690	0.10	0.02	9.86	39.04	49.02	73.00	23.98	QP
9	0.796	0.11	0.02	9.86	27.83	37.82	60.00	22.18	Average
10	0.796	0.11	0.02	9.86	39.44	49.43	73.00	23.57	QP
11	1.519	0.14	0.03	9.86	30.09	40.12	60.00	19.88	Average
12	1.519	0.14	0.03	9.86	41.97	52.00	73.00	21.00	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 17: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 400V)/High Temp. (Line 2)

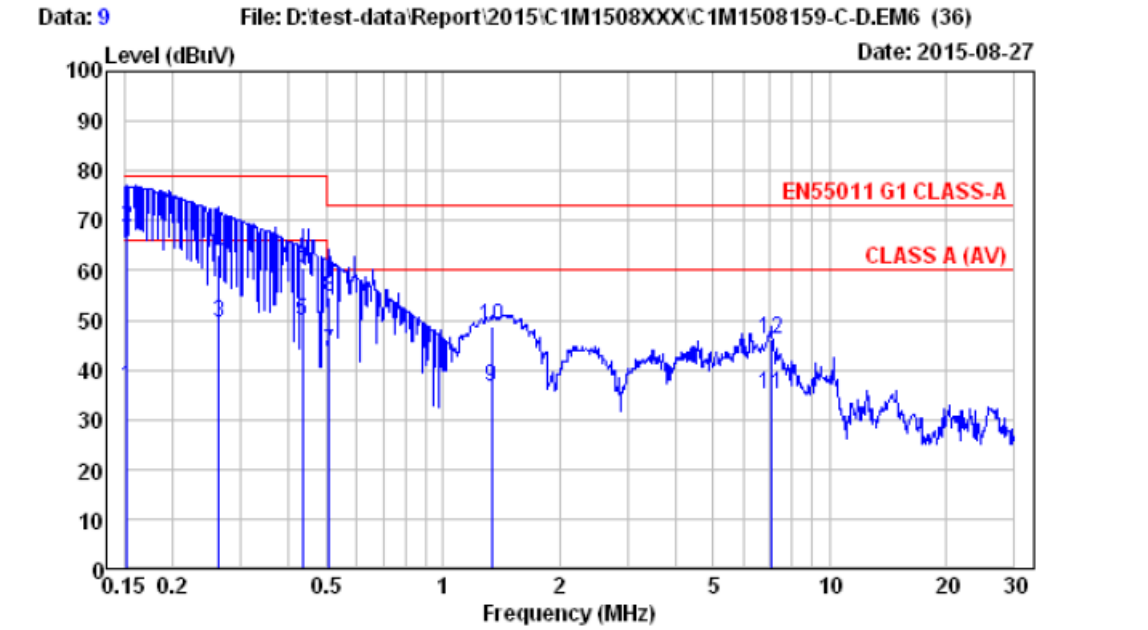


Site no. : No.3 Shielded Room Data no. : 8
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : HIGH
S

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.185	0.10	0.02	9.87	31.63	41.62	66.00	24.38	Average
2	0.185	0.10	0.02	9.87	36.14	46.13	79.00	32.87	QP
3	0.248	0.10	0.02	9.86	29.05	39.03	66.00	26.97	Average
4	0.248	0.10	0.02	9.86	36.44	46.42	79.00	32.58	QP
5	0.396	0.09	0.02	9.86	28.24	38.21	66.00	27.79	Average
6	0.396	0.09	0.02	9.86	37.06	47.03	79.00	31.97	QP
7	0.437	0.09	0.02	9.86	30.41	40.38	66.00	25.62	Average
8	0.437	0.09	0.02	9.86	41.11	51.08	79.00	27.92	QP
9	1.593	0.14	0.03	9.86	21.99	32.02	60.00	27.98	Average
10	1.593	0.14	0.03	9.86	32.72	42.75	73.00	30.25	QP
11	4.574	0.28	0.07	9.87	20.95	31.17	60.00	28.83	Average
12	4.574	0.28	0.07	9.87	28.70	38.92	73.00	34.08	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 18: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA04PTS (AC 400V)/High Temp. (Line 3)

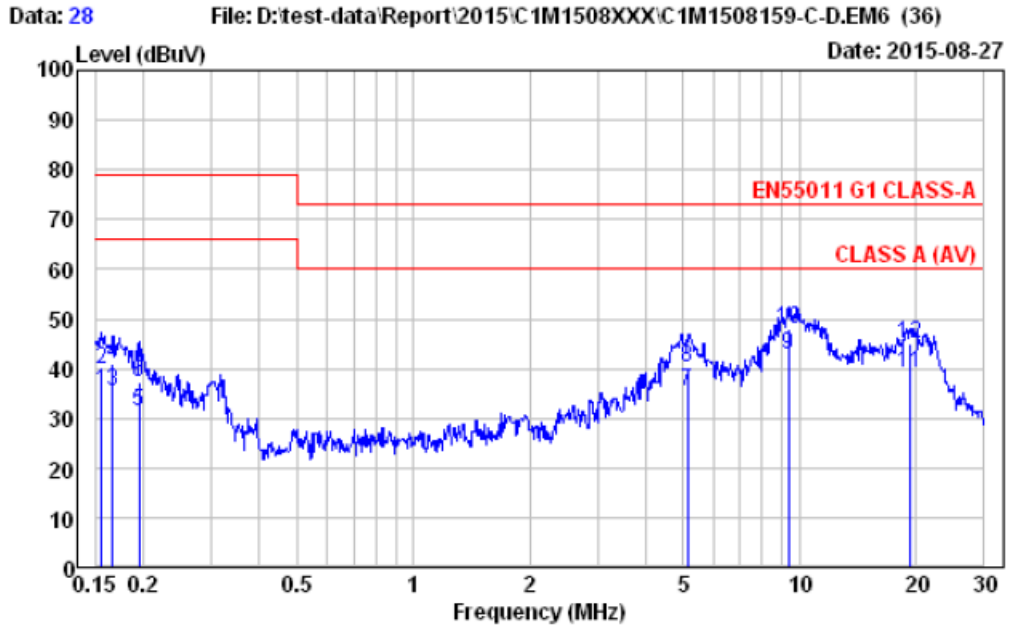


Site no. : No.3 Shielded Room Data no. : 9
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA4PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : HIGH
T

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.152	0.11	0.03	9.88	26.64	36.66	66.00	29.34	Average
2	0.152	0.11	0.03	9.88	58.75	68.77	79.00	10.23	QP
3	0.263	0.10	0.02	9.86	39.57	49.55	66.00	16.45	Average
4	0.263	0.10	0.02	9.86	53.13	63.11	79.00	15.89	QP
5	0.433	0.09	0.02	9.86	39.98	49.95	66.00	16.05	Average
6	0.433	0.09	0.02	9.86	50.57	60.54	79.00	18.46	QP
7	0.507	0.10	0.02	9.85	33.75	43.72	60.00	16.28	Average
8	0.507	0.10	0.02	9.85	44.75	54.72	73.00	18.28	QP
9	1.338	0.13	0.03	9.86	26.55	36.57	60.00	23.43	Average
10	1.338	0.13	0.03	9.86	38.84	48.86	73.00	24.14	QP
11	7.100	0.40	0.09	9.87	24.53	34.89	60.00	25.11	Average
12	7.100	0.40	0.09	9.87	35.67	46.03	73.00	26.97	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 19: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 230V)/Low Temp. (Line 1)

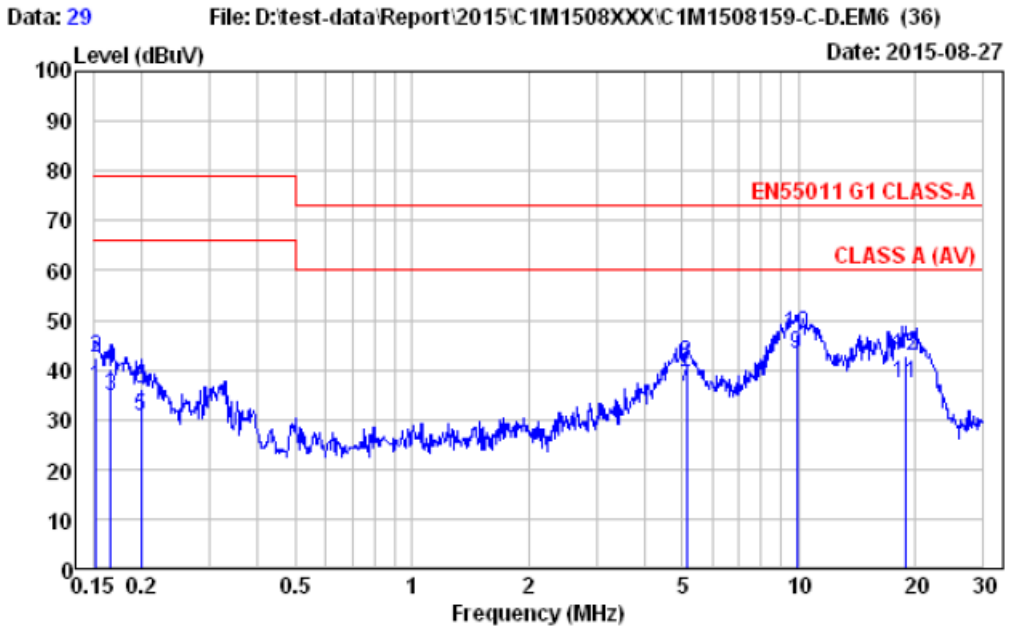


Site no. : No.3 Shielded Room Data no. : 28
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA12PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : LOW
R

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.156	0.11	0.03	9.88	25.34	35.36	66.00	30.64	Average
2	0.156	0.11	0.03	9.88	29.89	39.91	79.00	39.09	QP
3	0.167	0.11	0.03	9.87	25.53	35.54	66.00	30.46	Average
4	0.167	0.11	0.03	9.87	30.86	40.87	79.00	38.13	QP
5	0.195	0.10	0.02	9.86	21.54	31.52	66.00	34.48	Average
6	0.195	0.10	0.02	9.86	27.27	37.25	79.00	41.75	QP
7	5.139	0.31	0.08	9.87	25.04	35.30	60.00	24.70	Average
8	5.139	0.31	0.08	9.87	30.09	40.35	73.00	32.65	QP
9	9.352	0.48	0.11	9.89	32.32	42.80	60.00	17.20	Average
10	9.352	0.48	0.11	9.89	37.54	48.02	73.00	24.98	QP
11	19.326	0.55	0.17	9.94	28.38	39.04	60.00	20.96	Average
12	19.326	0.55	0.17	9.94	34.40	45.06	73.00	27.94	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 20: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 230V)/Low Temp. (Line 2)

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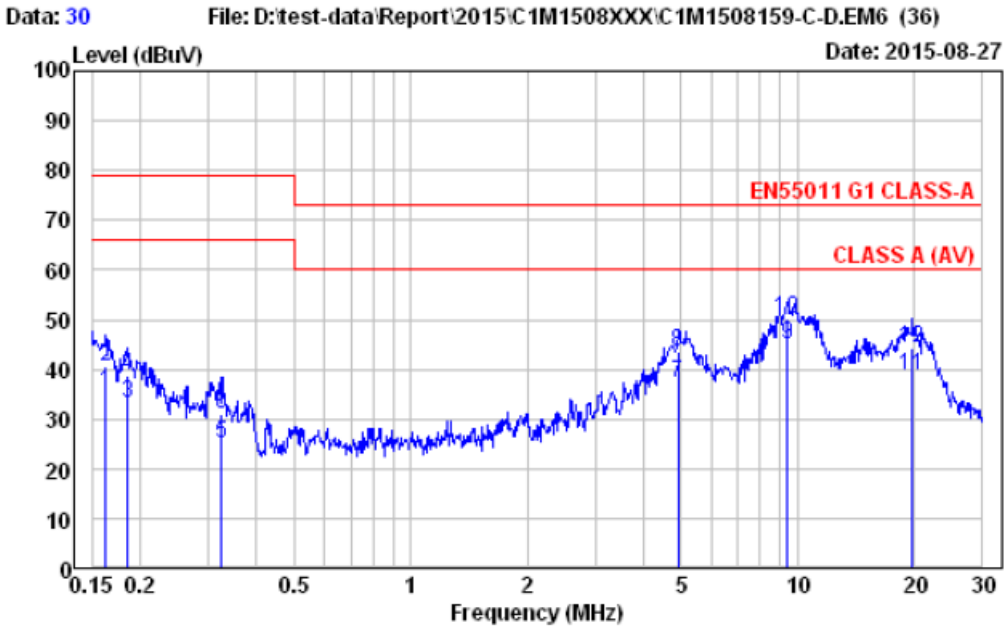
Site no.      : No.3 Shielded Room          Data no.   : 29
Condition     : KNW-244C 8-1373-5          LISN Phase : LINE
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 25°C / 57%  ESR3 (101772)   Engineer   : EDWARD
EUT           : CWIDA12PTS-3247B
Power Rating  : 240Vac / 50Hz
Test Mode     : LOW
                S
```

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.152	0.11	0.03	9.88	26.64	36.66	66.00	29.34	Average
2	0.152	0.11	0.03	9.88	32.33	42.35	79.00	36.65	QP
3	0.167	0.11	0.03	9.87	24.62	34.63	66.00	31.37	Average
4	0.167	0.11	0.03	9.87	30.20	40.21	79.00	38.79	QP
5	0.200	0.10	0.02	9.86	20.72	30.70	66.00	35.30	Average
6	0.200	0.10	0.02	9.86	26.36	36.34	79.00	42.66	QP
7	5.139	0.31	0.08	9.87	26.10	36.36	60.00	23.64	Average
8	5.139	0.31	0.08	9.87	31.15	41.41	73.00	31.59	QP
9	9.861	0.50	0.11	9.89	32.53	43.03	60.00	16.97	Average
10	9.861	0.50	0.11	9.89	36.55	47.05	73.00	25.95	QP
11	18.820	0.55	0.16	9.93	26.62	37.26	60.00	22.74	Average
12	18.820	0.55	0.16	9.93	32.14	42.78	73.00	30.22	QP

```
Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
         2. If the average limit is met when useing a quasi-peak detector,
            the EUT shall be deemed to meet both limits and measurement
            with average detector is unnecessary.
```

Figure 21: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 230V)/Low Temp. (Line 3)

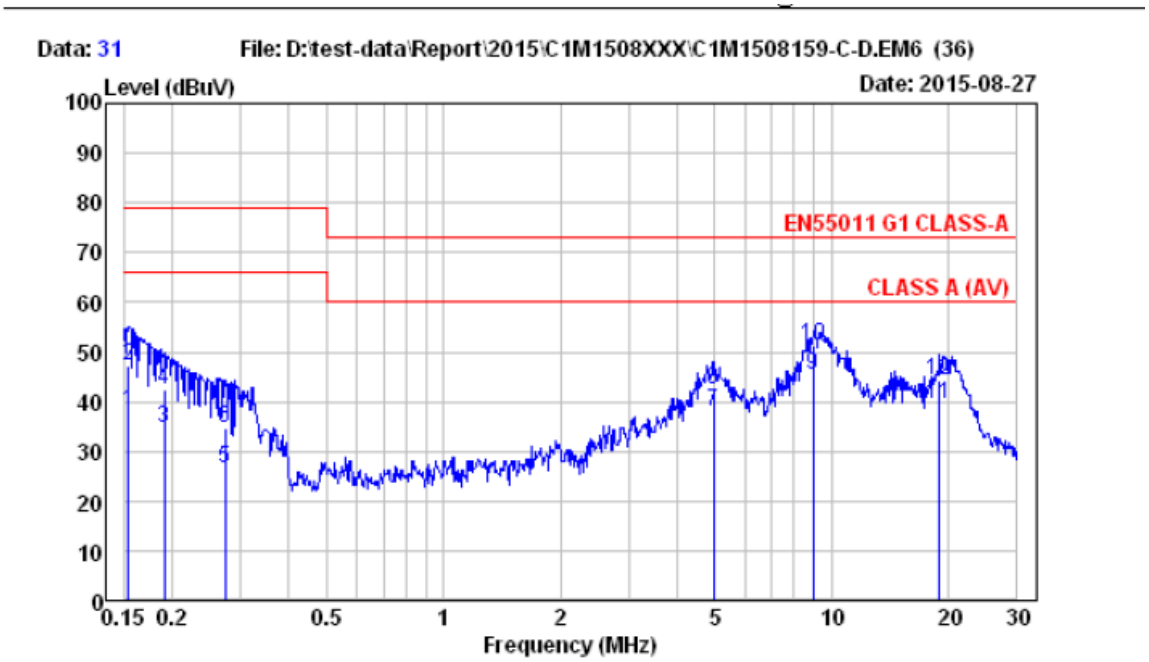


Site no. : No.3 Shielded Room Data no. : 30
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA12PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : LOW
T

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.163	0.11	0.03	9.87	25.41	35.42	66.00	30.58	Average
2	0.163	0.11	0.03	9.87	30.51	40.52	79.00	38.48	QP
3	0.185	0.10	0.02	9.87	23.40	33.39	66.00	32.61	Average
4	0.185	0.10	0.02	9.87	28.59	38.58	79.00	40.42	QP
5	0.325	0.09	0.02	9.86	15.23	25.20	66.00	40.80	Average
6	0.325	0.09	0.02	9.86	21.15	31.12	79.00	47.88	QP
7	4.900	0.30	0.08	9.87	27.06	37.31	60.00	22.69	Average
8	4.900	0.30	0.08	9.87	33.18	43.43	73.00	29.57	QP
9	9.401	0.48	0.11	9.89	34.36	44.84	60.00	15.16	Average
10	9.401	0.48	0.11	9.89	39.87	50.35	73.00	22.65	QP
11	19.740	0.55	0.17	9.94	28.08	38.74	60.00	21.26	Average
12	19.740	0.55	0.17	9.94	33.64	44.30	73.00	28.70	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 22: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 230V)/Med. Temp. (Line 1)

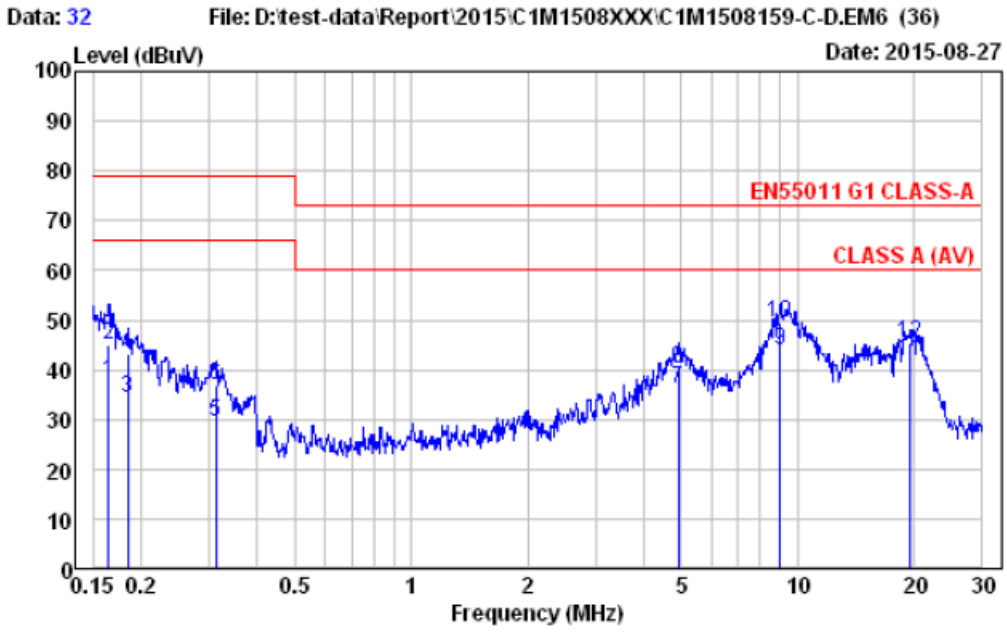


Site no. : No.3 Shielded Room Data no. : 31
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA12PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : MIN
R

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.154	0.11	0.03	9.88	28.13	38.15	66.00	27.85	Average
2	0.154	0.11	0.03	9.88	37.39	47.41	79.00	31.59	QP
3	0.191	0.10	0.02	9.86	24.85	34.83	66.00	31.17	Average
4	0.191	0.10	0.02	9.86	32.50	42.48	79.00	36.52	QP
5	0.274	0.10	0.02	9.86	16.43	26.41	66.00	39.59	Average
6	0.274	0.10	0.02	9.86	24.61	34.59	79.00	44.41	QP
7	4.952	0.30	0.08	9.87	27.89	38.14	60.00	21.86	Average
8	4.952	0.30	0.08	9.87	32.09	42.34	73.00	30.66	QP
9	8.964	0.47	0.11	9.89	34.73	45.20	60.00	14.80	Average
10	8.964	0.47	0.11	9.89	40.81	51.28	73.00	21.72	QP
11	18.920	0.55	0.16	9.93	28.99	39.63	60.00	20.37	Average
12	18.920	0.55	0.16	9.93	33.66	44.30	73.00	28.70	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 23: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 230V)/Med. Temp. (Line 2)

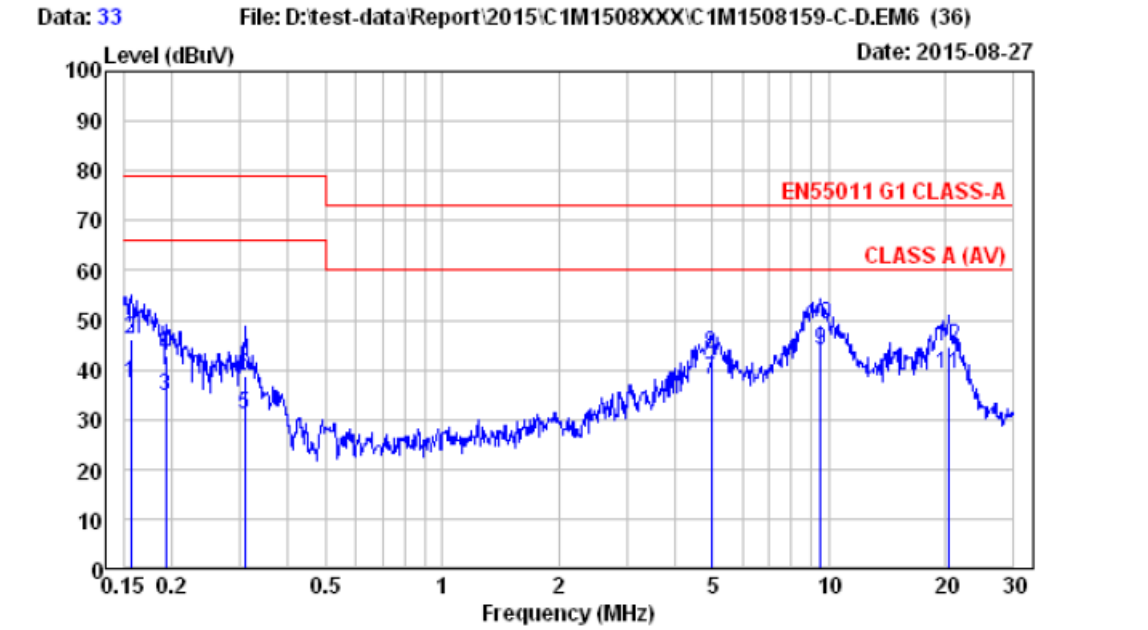


Site no. : No.3 Shielded Room Data no. : 32
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA12PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : MIN
S

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.165	0.11	0.03	9.87	27.61	37.62	66.00	28.38	Average
2	0.165	0.11	0.03	9.87	35.09	45.10	79.00	33.90	QP
3	0.184	0.10	0.02	9.87	24.15	34.14	66.00	31.86	Average
4	0.184	0.10	0.02	9.87	33.06	43.05	79.00	35.95	QP
5	0.312	0.09	0.02	9.86	19.69	29.66	66.00	36.34	Average
6	0.312	0.09	0.02	9.86	26.76	36.73	79.00	42.27	QP
7	4.900	0.30	0.08	9.87	25.86	36.11	60.00	23.89	Average
8	4.900	0.30	0.08	9.87	30.15	40.40	73.00	32.60	QP
9	9.011	0.47	0.11	9.89	33.41	43.88	60.00	16.12	Average
10	9.011	0.47	0.11	9.89	38.80	49.27	73.00	23.73	QP
11	19.532	0.55	0.17	9.94	30.97	41.63	60.00	18.37	Average
12	19.532	0.55	0.17	9.94	34.69	45.35	73.00	27.65	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 24: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 230V)/Med. Temp. (Line 3)

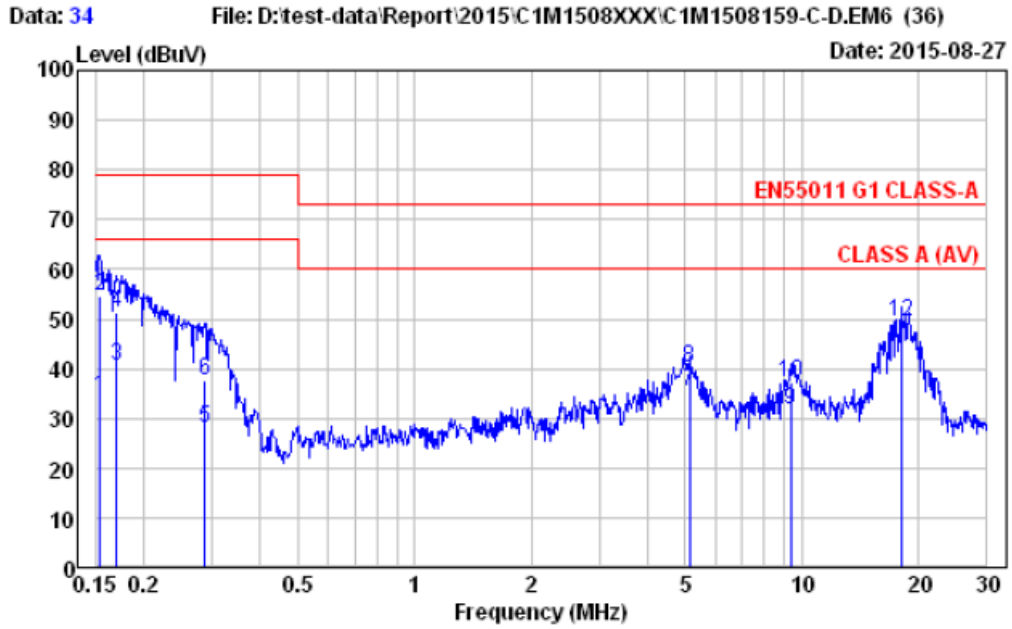


Site no. : No.3 Shielded Room Data no. : 33
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA12PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : MIN
T

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.156	0.11	0.03	9.88	27.40	37.42	66.00	28.58	Average
2	0.156	0.11	0.03	9.88	36.18	46.20	79.00	32.80	QP
3	0.193	0.10	0.02	9.86	24.79	34.77	66.00	31.23	Average
4	0.193	0.10	0.02	9.86	32.74	42.72	79.00	36.28	QP
5	0.308	0.09	0.02	9.86	21.09	31.06	66.00	34.94	Average
6	0.308	0.09	0.02	9.86	28.83	38.80	79.00	40.20	QP
7	4.952	0.30	0.08	9.87	27.75	38.00	60.00	22.00	Average
8	4.952	0.30	0.08	9.87	33.00	43.25	73.00	29.75	QP
9	9.502	0.48	0.11	9.89	33.35	43.83	60.00	16.17	Average
10	9.502	0.48	0.11	9.89	38.60	49.08	73.00	23.92	QP
11	20.486	0.55	0.17	9.94	28.41	39.07	60.00	20.93	Average
12	20.486	0.55	0.17	9.94	33.81	44.47	73.00	28.53	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 25: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 230V)/High Temp. (Line 1)

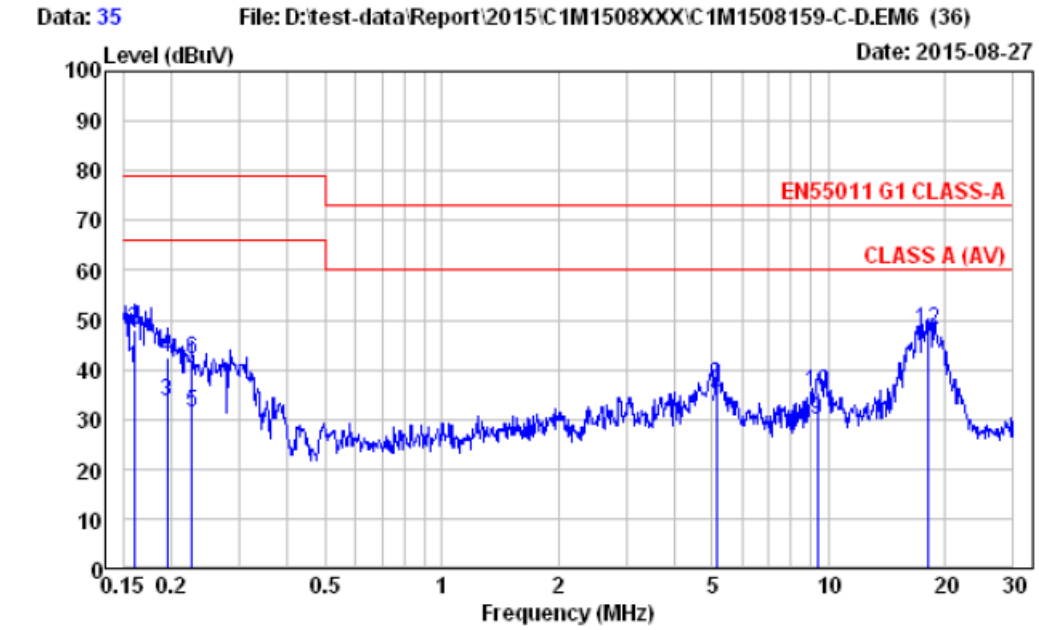


Site no. : No.3 Shielded Room Data no. : 34
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA12PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : HIGH
R

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.154	0.11	0.03	9.88	24.15	34.17	66.00	31.83	Average
2	0.154	0.11	0.03	9.88	44.46	54.48	79.00	24.52	QP
3	0.170	0.11	0.03	9.87	30.43	40.44	66.00	25.56	Average
4	0.170	0.11	0.03	9.87	41.41	51.42	79.00	27.58	QP
5	0.288	0.09	0.02	9.86	17.97	27.94	66.00	38.06	Average
6	0.288	0.09	0.02	9.86	27.58	37.55	79.00	41.45	QP
7	5.139	0.31	0.08	9.87	25.14	35.40	60.00	24.60	Average
8	5.139	0.31	0.08	9.87	29.82	40.08	73.00	32.92	QP
9	9.352	0.48	0.11	9.89	21.15	31.63	60.00	28.37	Average
10	9.352	0.48	0.11	9.89	26.90	37.38	73.00	35.62	QP
11	18.039	0.54	0.16	9.93	34.03	44.66	60.00	15.34	Average
12	18.039	0.54	0.16	9.93	38.96	49.59	73.00	23.41	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 26: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 230V)/High Temp. (Line 2)

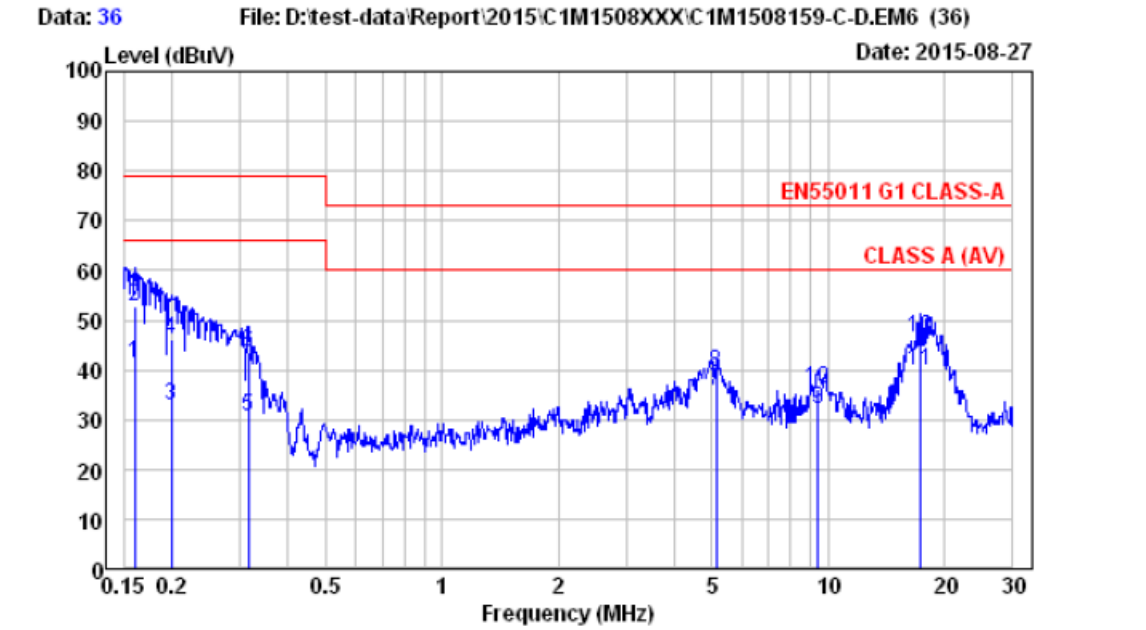



```
Site no.      : No.3 Shielded Room          Data no.   : 35
Condition     : KNW-244C 8-1373-5           LISN Phase : LINE
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 25°C / 57%  ESR3 (101772)   Engineer   : EDWARD
EUT           : CWIDA12PTS-3247B
Power Rating  : 240Vac / 50Hz
Test Mode     : HIGH
                S
```

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.160	0.11	0.03	9.88	30.19	40.21	66.00	25.79	Average
2	0.160	0.11	0.03	9.88	37.80	47.82	79.00	31.18	QP
3	0.195	0.10	0.02	9.86	23.53	33.51	66.00	32.49	Average
4	0.195	0.10	0.02	9.86	32.36	42.34	79.00	36.66	QP
5	0.227	0.10	0.02	9.86	21.53	31.51	66.00	34.49	Average
6	0.227	0.10	0.02	9.86	32.00	41.98	79.00	37.02	QP
7	5.139	0.31	0.08	9.87	22.04	32.30	60.00	27.70	Average
8	5.139	0.31	0.08	9.87	26.62	36.88	73.00	36.12	QP
9	9.352	0.48	0.11	9.89	19.36	29.84	60.00	30.16	Average
10	9.352	0.48	0.11	9.89	25.04	35.52	73.00	37.48	QP
11	18.039	0.54	0.16	9.93	34.12	44.75	60.00	15.25	Average
12	18.039	0.54	0.16	9.93	37.47	48.10	73.00	24.90	QP

```
Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
         2. If the average limit is met when useing a quasi-peak detector,
            the EUT shall be deemed to meet both limits and measurement
            with average detector is unnecessary.
```

Figure 27: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 230V)/High Temp. (Line 3)

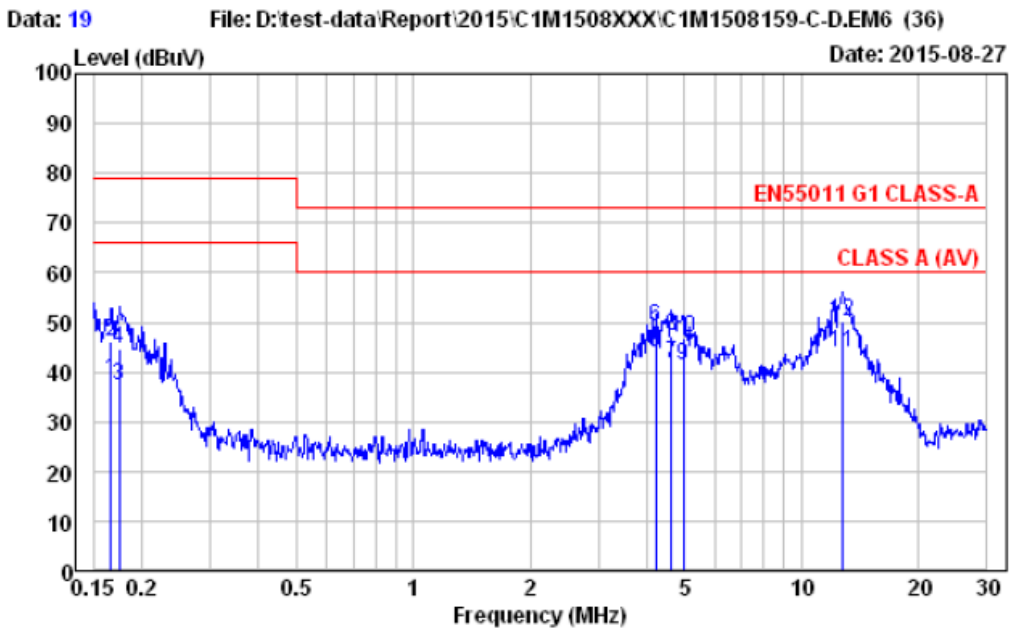


Site no. : No.3 Shielded Room Data no. : 36
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA12PTS-3247B
Power Rating : 240Vac / 50Hz
Test Mode : HIGH
T

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.160	0.11	0.03	9.88	31.19	41.21	66.00	24.79	Average
2	0.160	0.11	0.03	9.88	42.64	52.66	79.00	26.34	QP
3	0.200	0.10	0.02	9.86	23.02	33.00	66.00	33.00	Average
4	0.200	0.10	0.02	9.86	36.33	46.31	79.00	32.69	QP
5	0.315	0.09	0.02	9.86	20.47	30.44	66.00	35.56	Average
6	0.315	0.09	0.02	9.86	33.65	43.62	79.00	35.38	QP
7	5.139	0.31	0.08	9.87	25.40	35.66	60.00	24.34	Average
8	5.139	0.31	0.08	9.87	29.13	39.39	73.00	33.61	QP
9	9.401	0.48	0.11	9.89	21.69	32.17	60.00	27.83	Average
10	9.401	0.48	0.11	9.89	25.51	35.99	73.00	37.01	QP
11	17.291	0.54	0.15	9.92	29.41	40.02	60.00	19.98	Average
12	17.291	0.54	0.15	9.92	35.96	46.57	73.00	26.43	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 28: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 400V)/Low Temp. (Line 1)

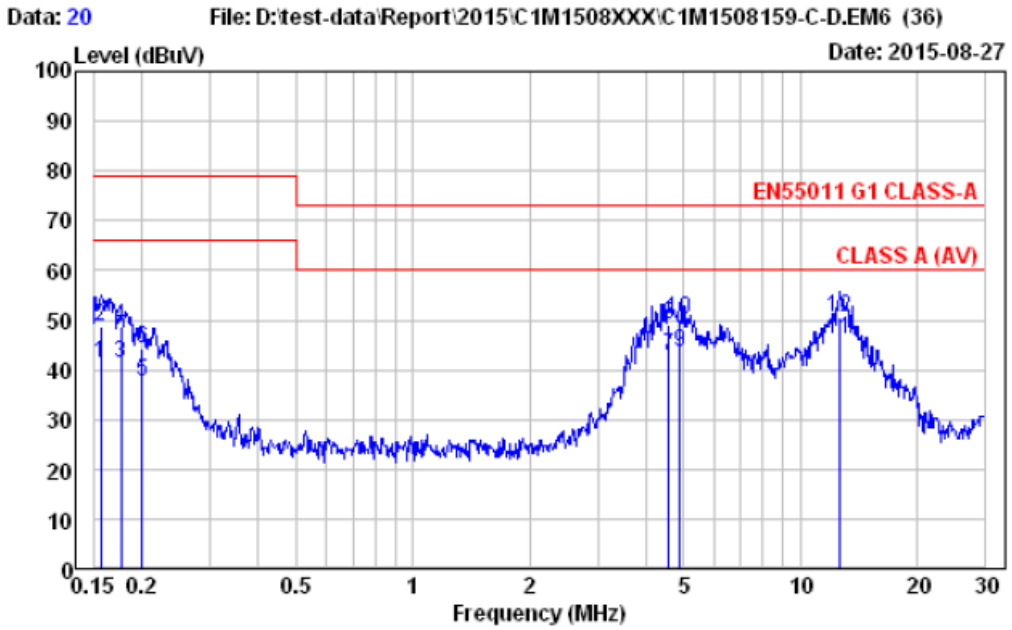



```
Site no.      : No.3 Shielded Room          Data no.   : 19
Condition     : KNW-244C 8-1373-5           LISN Phase : LINE
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 25°C / 57%  ESR3 (101772)   Engineer   : EDWARD
EUT           : CWIDA12PTS-3407B
Power Rating  : 400Vac / 50Hz
Test Mode     : LOW
                R
```

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.167	0.11	0.03	9.87	28.50	38.51	66.00	27.49	Average
2	0.167	0.11	0.03	9.87	36.00	46.01	79.00	32.99	QP
3	0.175	0.10	0.02	9.87	27.35	37.34	66.00	28.66	Average
4	0.175	0.10	0.02	9.87	34.70	44.69	79.00	34.31	QP
5	4.202	0.25	0.07	9.87	33.90	44.09	60.00	15.91	Average
6	4.202	0.25	0.07	9.87	38.94	49.13	73.00	23.87	QP
7	4.622	0.28	0.07	9.87	31.35	41.57	60.00	18.43	Average
8	4.622	0.28	0.07	9.87	36.88	47.10	73.00	25.90	QP
9	4.952	0.30	0.08	9.87	31.09	41.34	60.00	18.66	Average
10	4.952	0.30	0.08	9.87	36.53	46.78	73.00	26.22	QP
11	12.784	0.52	0.13	9.90	33.41	43.96	60.00	16.04	Average
12	12.784	0.52	0.13	9.90	39.57	50.12	73.00	22.88	QP

```
Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
         2. If the average limit is met when useing a quasi-peak detector,
            the EUT shall be deemed to meet both limits and measurement
            with average detector is unnecessary.
```

Figure 29: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 400V)/Low Temp. (Line 2)

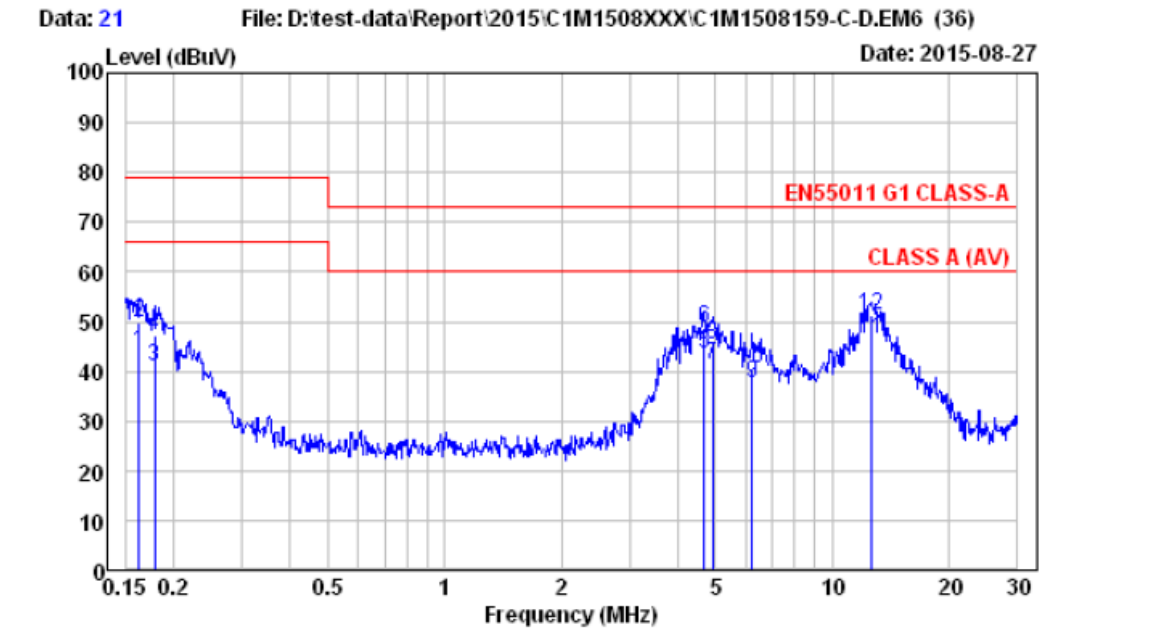


Site no. : No.3 Shielded Room Data no. : 20
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA12PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : LOW
S

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.156	0.11	0.03	9.88	31.18	41.20	66.00	24.80	Average
2	0.156	0.11	0.03	9.88	38.78	48.80	79.00	30.20	QP
3	0.177	0.10	0.02	9.87	31.20	41.19	66.00	24.81	Average
4	0.177	0.10	0.02	9.87	38.76	48.75	79.00	30.25	QP
5	0.201	0.10	0.02	9.86	27.78	37.76	66.00	28.24	Average
6	0.201	0.10	0.02	9.86	34.33	44.31	79.00	34.69	QP
7	4.574	0.28	0.07	9.87	32.64	42.86	60.00	17.14	Average
8	4.574	0.28	0.07	9.87	38.72	48.94	73.00	24.06	QP
9	4.874	0.30	0.07	9.87	33.44	43.68	60.00	16.32	Average
10	4.874	0.30	0.07	9.87	39.88	50.12	73.00	22.88	QP
11	12.649	0.52	0.13	9.90	35.47	46.02	60.00	13.98	Average
12	12.649	0.52	0.13	9.90	40.04	50.59	73.00	22.41	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 30: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 400V)/Low Temp. (Line 3)

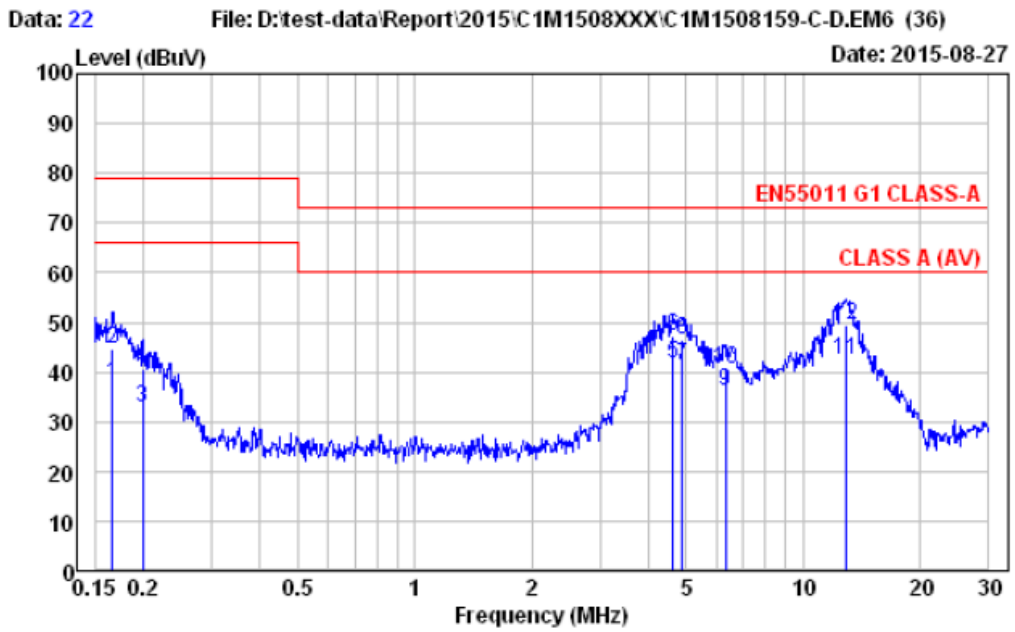


Site no. : No.3 Shielded Room Data no. : 21
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA12PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : LOW
T

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.163	0.11	0.03	9.87	33.97	43.98	66.00	22.02	Average
2	0.163	0.11	0.03	9.87	39.74	49.75	79.00	29.25	QP
3	0.179	0.10	0.02	9.87	31.02	41.01	66.00	24.99	Average
4	0.179	0.10	0.02	9.87	37.17	47.16	79.00	31.84	QP
5	4.672	0.28	0.07	9.87	33.31	43.53	60.00	16.47	Average
6	4.672	0.28	0.07	9.87	38.50	48.72	73.00	24.28	QP
7	4.900	0.30	0.08	9.87	31.02	41.27	60.00	18.73	Average
8	4.900	0.30	0.08	9.87	35.21	45.46	73.00	27.54	QP
9	6.219	0.36	0.08	9.87	27.31	37.62	60.00	22.38	Average
10	6.219	0.36	0.08	9.87	30.13	40.44	73.00	32.56	QP
11	12.649	0.52	0.13	9.90	35.91	46.46	60.00	13.54	Average
12	12.649	0.52	0.13	9.90	40.69	51.24	73.00	21.76	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 31: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 400V)/Med. Temp. (Line 1)

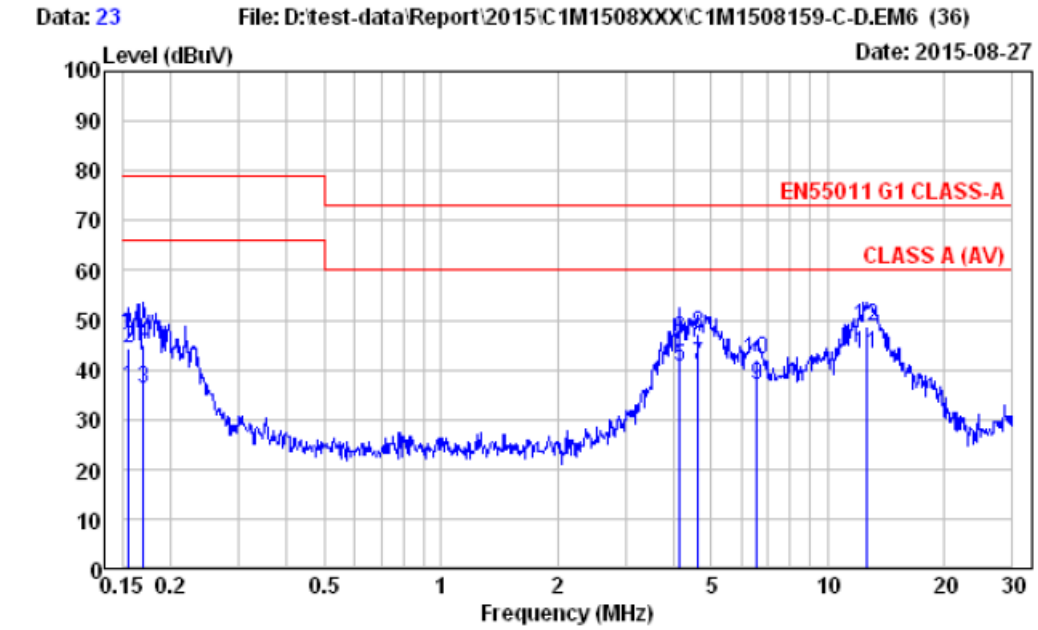


Site no. : No.3 Shielded Room Data no. : 22
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA12PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : MIN
R

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.167	0.11	0.03	9.87	27.65	37.66	66.00	28.34	Average
2	0.167	0.11	0.03	9.87	34.50	44.51	79.00	34.49	QP
3	0.200	0.10	0.02	9.86	23.03	33.01	66.00	32.99	Average
4	0.200	0.10	0.02	9.86	30.47	40.45	79.00	38.55	QP
5	4.622	0.28	0.07	9.87	31.42	41.64	60.00	18.36	Average
6	4.622	0.28	0.07	9.87	36.97	47.19	73.00	25.81	QP
7	4.874	0.30	0.07	9.87	31.05	41.29	60.00	18.71	Average
8	4.874	0.30	0.07	9.87	36.36	46.60	73.00	26.40	QP
9	6.319	0.37	0.08	9.87	25.95	36.27	60.00	23.73	Average
10	6.319	0.37	0.08	9.87	30.20	40.52	73.00	32.48	QP
11	12.920	0.52	0.13	9.90	32.00	42.55	60.00	17.45	Average
12	12.920	0.52	0.13	9.90	38.91	49.46	73.00	23.54	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 32: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 400V)/Med. Temp. (Line 2)

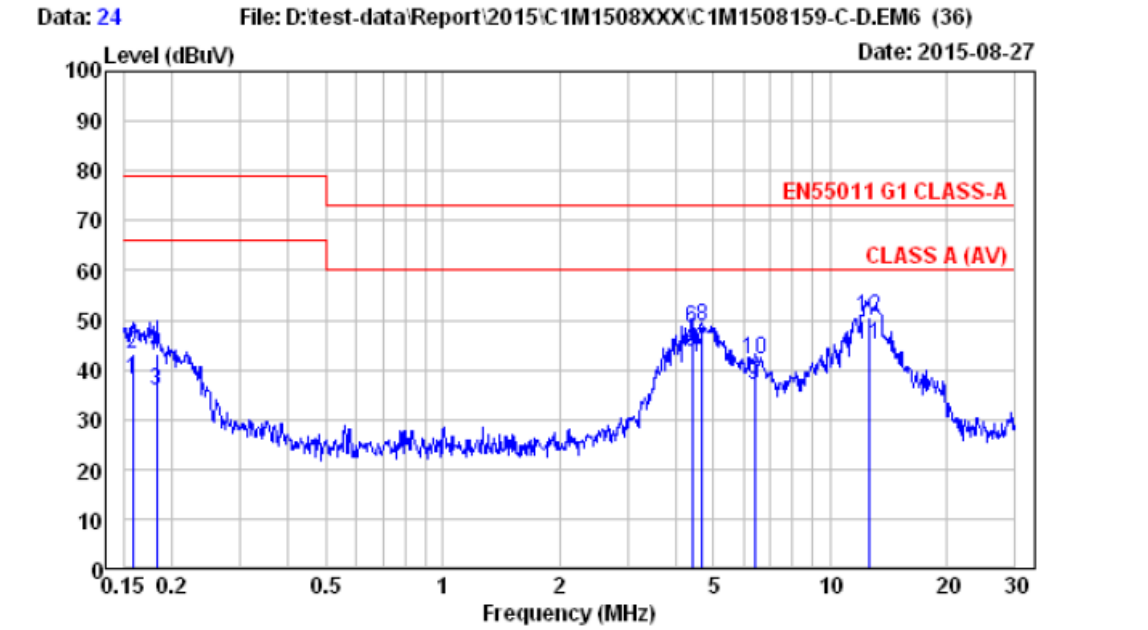


Site no. : No.3 Shielded Room Data no. : 23
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA12PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : MIN
S

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.156	0.11	0.03	9.88	26.45	36.47	66.00	29.53	Average
2	0.156	0.11	0.03	9.88	34.24	44.26	79.00	34.74	QP
3	0.170	0.11	0.03	9.87	26.14	36.15	66.00	29.85	Average
4	0.170	0.11	0.03	9.87	34.85	44.86	79.00	34.14	QP
5	4.136	0.25	0.07	9.87	30.22	40.41	60.00	19.59	Average
6	4.136	0.25	0.07	9.87	35.78	45.97	73.00	27.03	QP
7	4.622	0.28	0.07	9.87	30.92	41.14	60.00	18.86	Average
8	4.622	0.28	0.07	9.87	37.08	47.30	73.00	25.70	QP
9	6.557	0.38	0.09	9.87	26.61	36.95	60.00	23.05	Average
10	6.557	0.38	0.09	9.87	31.83	42.17	73.00	30.83	QP
11	12.582	0.52	0.13	9.90	32.66	43.21	60.00	16.79	Average
12	12.582	0.52	0.13	9.90	38.05	48.60	73.00	24.40	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 33: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 400V)/Med. Temp. (Line 3)

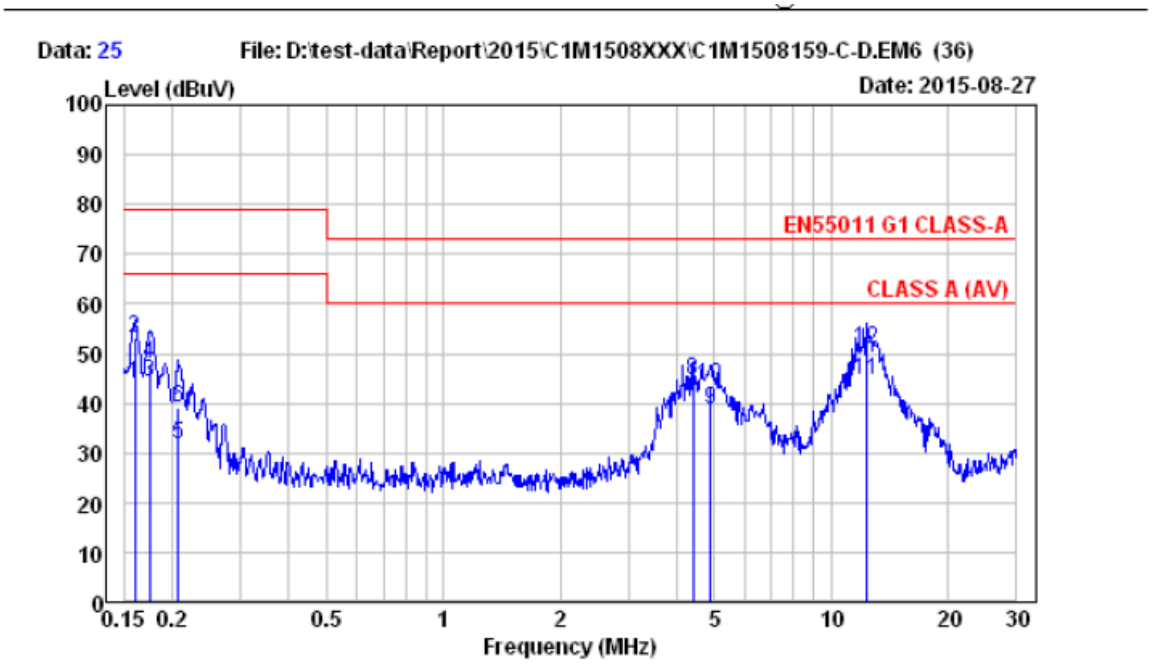


Site no. : No.3 Shielded Room Data no. : 24
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA12PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : MIN
T

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.158	0.11	0.03	9.88	27.93	37.95	66.00	28.05	Average
2	0.158	0.11	0.03	9.88	33.06	43.08	79.00	35.92	QP
3	0.182	0.10	0.02	9.87	25.62	35.61	66.00	30.39	Average
4	0.182	0.10	0.02	9.87	33.11	43.10	79.00	35.90	QP
5	4.407	0.27	0.07	9.87	33.25	43.46	60.00	16.54	Average
6	4.407	0.27	0.07	9.87	38.07	48.28	73.00	24.72	QP
7	4.672	0.28	0.07	9.87	33.67	43.89	60.00	16.11	Average
8	4.672	0.28	0.07	9.87	38.51	48.73	73.00	24.27	QP
9	6.386	0.37	0.08	9.87	26.45	36.77	60.00	23.23	Average
10	6.386	0.37	0.08	9.87	31.70	42.02	73.00	30.98	QP
11	12.649	0.52	0.13	9.90	34.41	44.96	60.00	15.04	Average
12	12.649	0.52	0.13	9.90	40.10	50.65	73.00	22.35	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 34: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 400V)/High Temp. (Line 1)

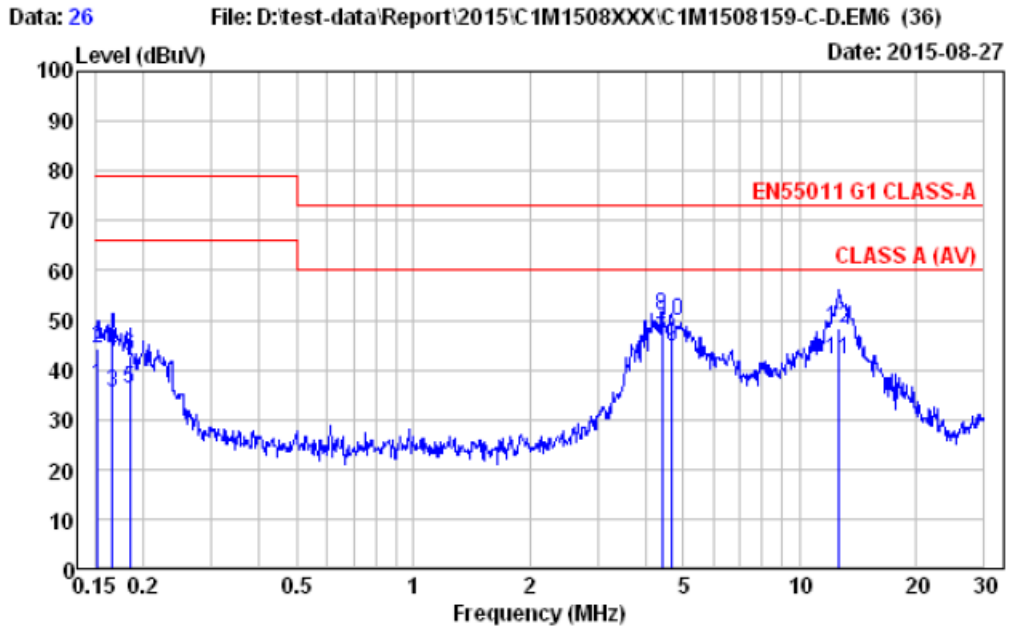


Site no. : No.3 Shielded Room Data no. : 25
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA12PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : HIGH
R

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.160	0.11	0.03	9.88	33.98	44.00	66.00	22.00	Average
2	0.160	0.11	0.03	9.88	43.10	53.12	79.00	25.88	QP
3	0.175	0.10	0.02	9.87	34.44	44.43	66.00	21.57	Average
4	0.175	0.10	0.02	9.87	37.96	47.95	79.00	31.05	QP
5	0.207	0.10	0.02	9.86	21.62	31.60	66.00	34.40	Average
6	0.207	0.10	0.02	9.86	29.21	39.19	79.00	39.81	QP
7	4.407	0.27	0.07	9.87	30.05	40.26	60.00	19.74	Average
8	4.407	0.27	0.07	9.87	34.54	44.75	73.00	28.25	QP
9	4.874	0.30	0.07	9.87	28.40	38.64	60.00	21.36	Average
10	4.874	0.30	0.07	9.87	33.46	43.70	73.00	29.30	QP
11	12.384	0.52	0.13	9.90	34.20	44.75	60.00	15.25	Average
12	12.384	0.52	0.13	9.90	40.31	50.86	73.00	22.14	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 35: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 400V)/High Temp. (Line 2)

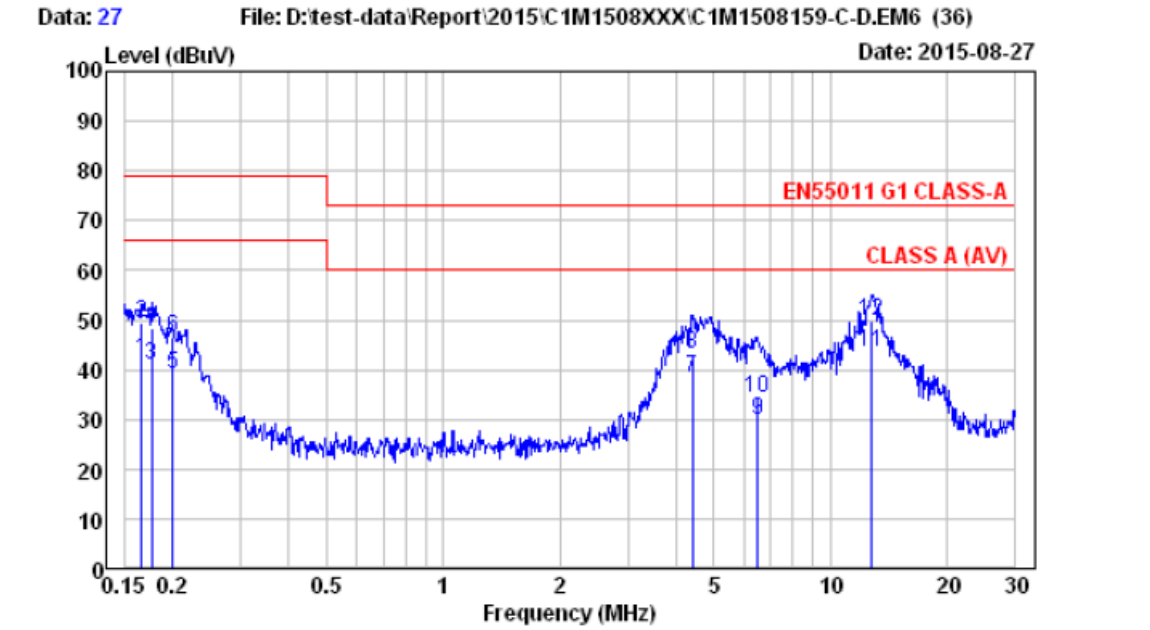


Site no. : No.3 Shielded Room Data no. : 26
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA12PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : HIGH
S

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.152	0.11	0.03	9.88	26.80	36.82	66.00	29.18	Average
2	0.152	0.11	0.03	9.88	34.43	44.45	79.00	34.55	QP
3	0.167	0.11	0.03	9.87	25.48	35.49	66.00	30.51	Average
4	0.167	0.11	0.03	9.87	33.41	43.42	79.00	35.58	QP
5	0.184	0.10	0.02	9.87	26.19	36.18	66.00	29.82	Average
6	0.184	0.10	0.02	9.87	32.86	42.85	79.00	36.15	QP
7	4.407	0.27	0.07	9.87	35.84	46.05	60.00	13.95	Average
8	4.407	0.27	0.07	9.87	40.88	51.09	73.00	21.91	QP
9	4.672	0.28	0.07	9.87	34.56	44.78	60.00	15.22	Average
10	4.672	0.28	0.07	9.87	39.53	49.75	73.00	23.25	QP
11	12.582	0.52	0.13	9.90	31.48	42.03	60.00	17.97	Average
12	12.582	0.52	0.13	9.90	37.82	48.37	73.00	24.63	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 36: Conducted Emission, AC Mains; 0.15 - 30 MHz, CWIDA12PTS (AC 400V)/High Temp. (Line 3)

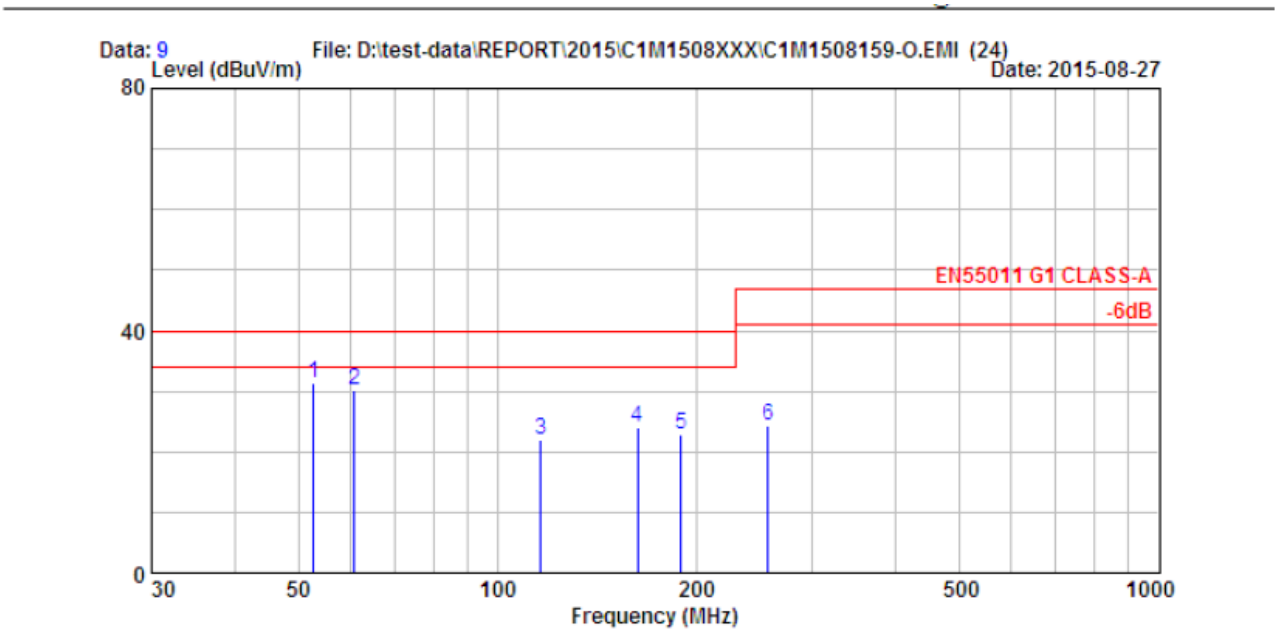


Site no. : No.3 Shielded Room Data no. : 27
Condition : KNW-244C 8-1373-5 LISN Phase : LINE
Limit : EN55011 G1 CLASS-A
Env. / Ins. : 25°C / 57% ESR3 (101772) Engineer : EDWARD
EUT : CWIDA12PTS-3407B
Power Rating : 400Vac / 50Hz
Test Mode : HIGH
T

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.167	0.11	0.03	9.87	31.91	41.92	66.00	24.08	Average
2	0.167	0.11	0.03	9.87	39.31	49.32	79.00	29.68	QP
3	0.177	0.10	0.02	9.87	30.84	40.83	66.00	25.17	Average
4	0.177	0.10	0.02	9.87	38.32	48.31	79.00	30.69	QP
5	0.201	0.10	0.02	9.86	29.01	38.99	66.00	27.01	Average
6	0.201	0.10	0.02	9.86	36.58	46.56	79.00	32.44	QP
7	4.407	0.27	0.07	9.87	28.12	38.33	60.00	21.67	Average
8	4.407	0.27	0.07	9.87	33.05	43.26	73.00	29.74	QP
9	6.488	0.38	0.09	9.87	19.64	29.98	60.00	30.02	Average
10	6.488	0.38	0.09	9.87	24.00	34.34	73.00	38.66	QP
11	12.784	0.52	0.13	9.90	33.03	43.58	60.00	16.42	Average
12	12.784	0.52	0.13	9.90	39.21	49.76	73.00	23.24	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Figure 37: Radiated Emission, 30-1000 MHz, Vertical Polarization, CWIDA04PTS (AC 230V)/Low Temp.

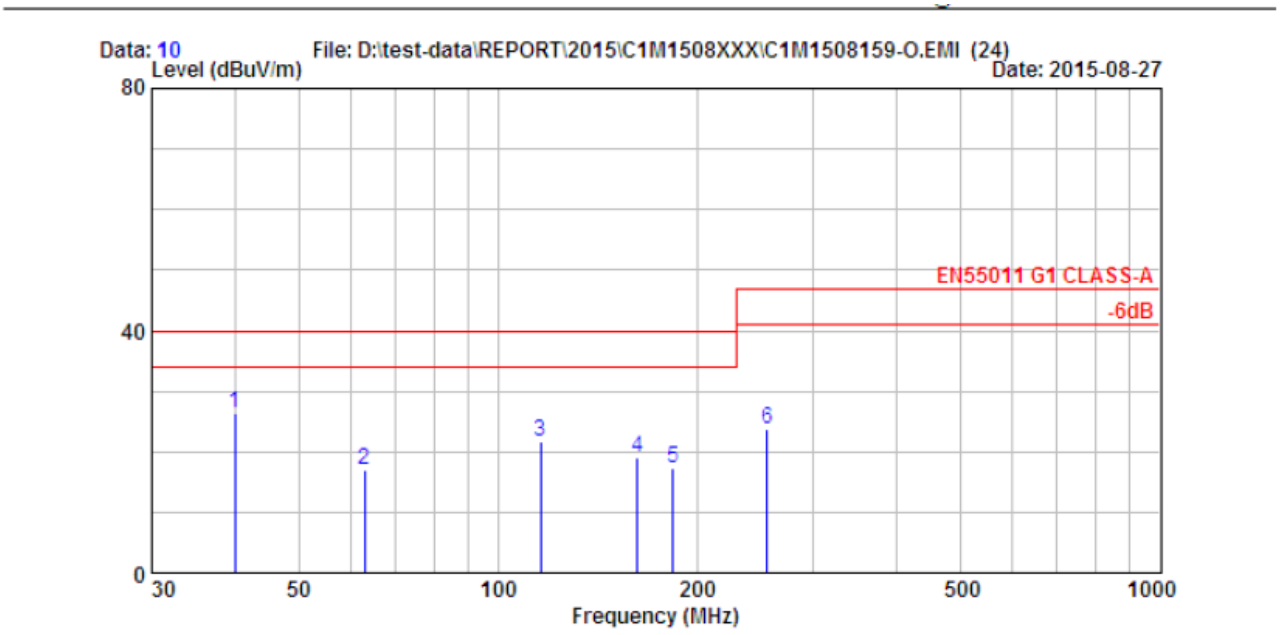



```
Site no.      : OATS NO.6                    Data no.   : 9
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : VERTICAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA4PTS-3247B
Power Rating  : 240Vac / 50Hz
Test Mode     : Low
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	52.700	8.88	0.99	21.48	31.35	40.00	8.65	QP	@
2	60.900	6.48	1.06	22.55	30.09	40.00	9.91	QP	@
3	116.400	12.10	1.55	8.38	22.02	40.00	17.98	QP	
4	163.100	10.79	1.89	11.35	24.04	40.00	15.96	QP	
5	189.600	9.62	2.08	11.04	22.73	40.00	17.27	QP	
6	256.900	12.63	2.46	9.13	24.22	47.00	22.78	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 38: Radiated Emission, 30-1000 MHz, Horizontal Polarization, CWIDA04PTS (AC 230V)/Low Temp.

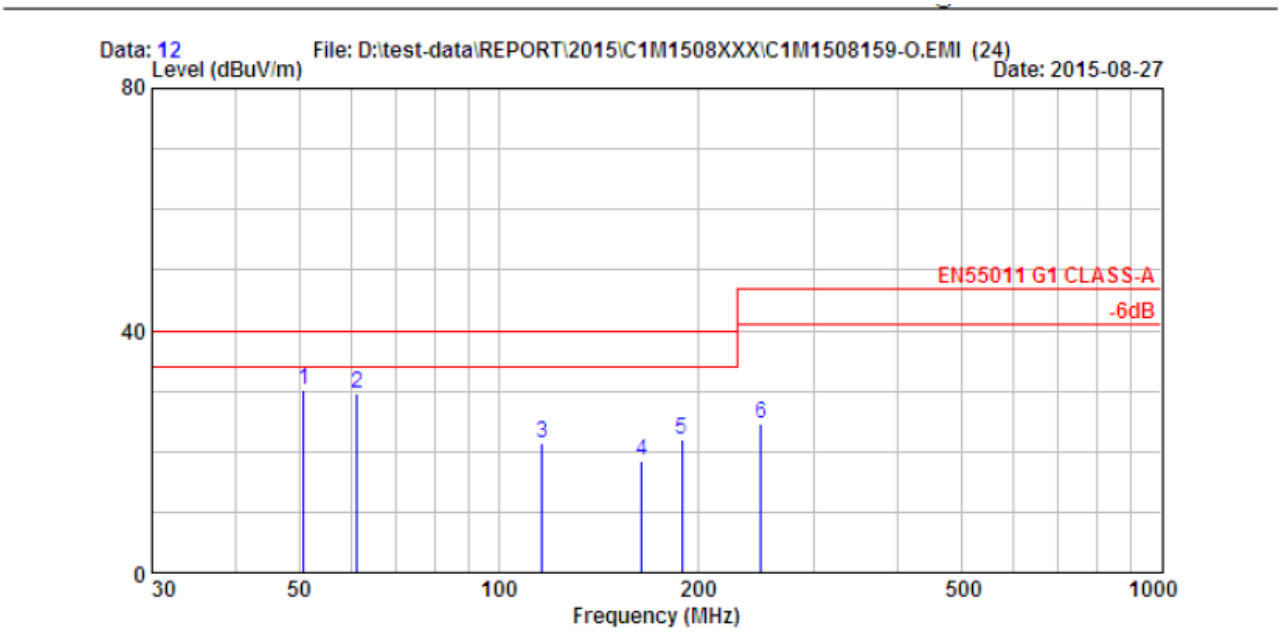



```
Site no.      : OATS NO.6                    Data no.   : 10
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : HORIZONTAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA4PTS-3247B
Power Rating  : 240Vac / 50Hz
Test Mode     : Low
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	40.050	12.49	0.85	12.89	26.23	40.00	13.77	QP	@
2	62.870	6.50	1.08	9.41	16.99	40.00	23.01	QP	
3	116.160	12.07	1.54	7.99	21.60	40.00	18.40	QP	
4	162.350	10.84	1.89	6.19	18.92	40.00	21.08	QP	
5	184.020	9.52	2.04	5.69	17.24	40.00	22.76	QP	
6	255.400	12.62	2.45	8.75	23.82	47.00	23.18	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 39: Radiated Emission, 30-1000 MHz, Vertical Polarization, CWIDA04PTS (AC 230V)/Med. Temp.

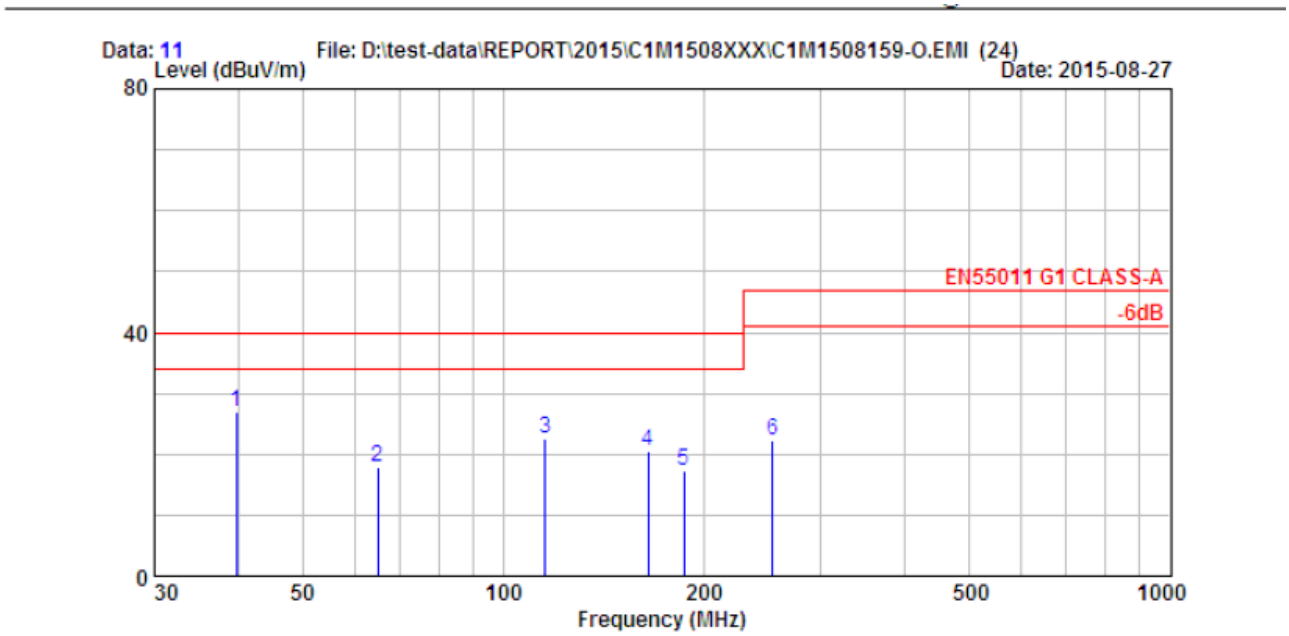



```
Site no.      : OATS NO.6                    Data no.   : 12
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : VERTICAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA4PTS-3247B
Power Rating  : 240Vac / 50Hz
Test Mode     : Min
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	50.800	9.60	0.97	19.53	30.10	40.00	9.90	QP	@
2	61.200	6.48	1.06	22.04	29.58	40.00	10.42	QP	@
3	116.400	12.10	1.55	7.86	21.50	40.00	18.50	QP	
4	164.780	10.65	1.91	5.83	18.39	40.00	21.61	QP	
5	189.260	9.60	2.07	10.26	21.93	40.00	18.07	QP	
6	249.350	12.50	2.42	9.75	24.66	47.00	22.34	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 40: Radiated Emission, 30-1000 MHz, Horizontal Polarization, CWIDA04PTS (AC 230V)/Med. Temp.

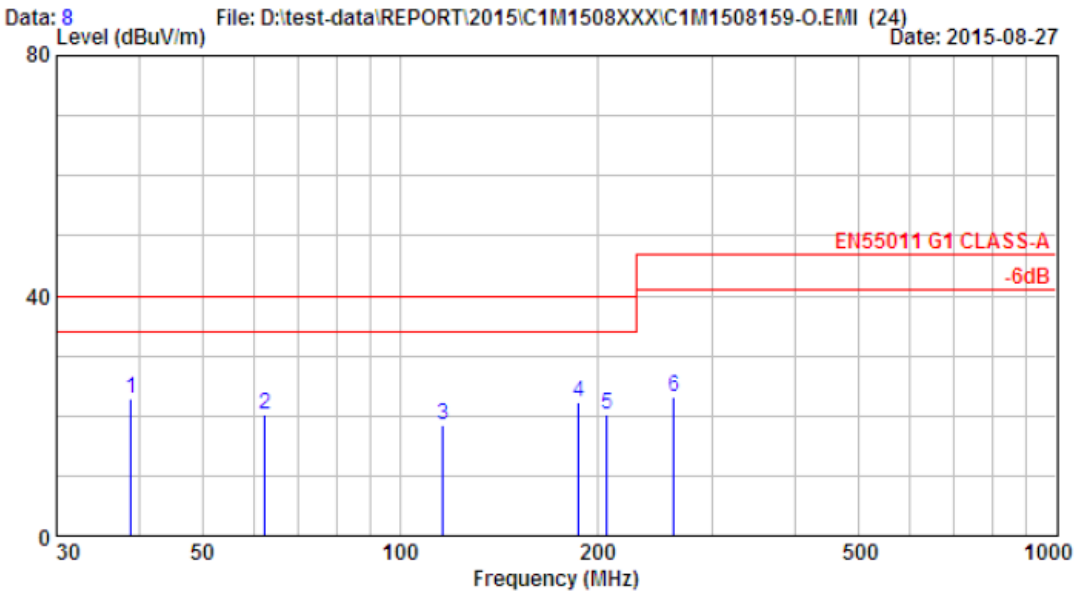



```
Site no.      : OATS NO.6                    Data no.   : 11
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : HORIZONTAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24°C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA4PTS-3247B
Power Rating  : 240Vac / 50Hz
Test Mode     : Min
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	39.800	12.58	0.85	13.53	26.96	40.00	13.04	QP	@
2	64.900	6.52	1.10	10.24	17.86	40.00	22.15	QP	
3	115.870	12.04	1.54	8.96	22.54	40.00	17.46	QP	
4	165.200	10.60	1.91	7.88	20.39	40.00	19.61	QP	
5	186.950	9.57	2.06	5.73	17.36	40.00	22.64	QP	
6	253.760	12.59	2.44	7.32	22.35	47.00	24.65	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 41: Radiated Emission, 30-1000 MHz, Vertical Polarization, CWIDA04PTS (AC 230V)/High Temp.

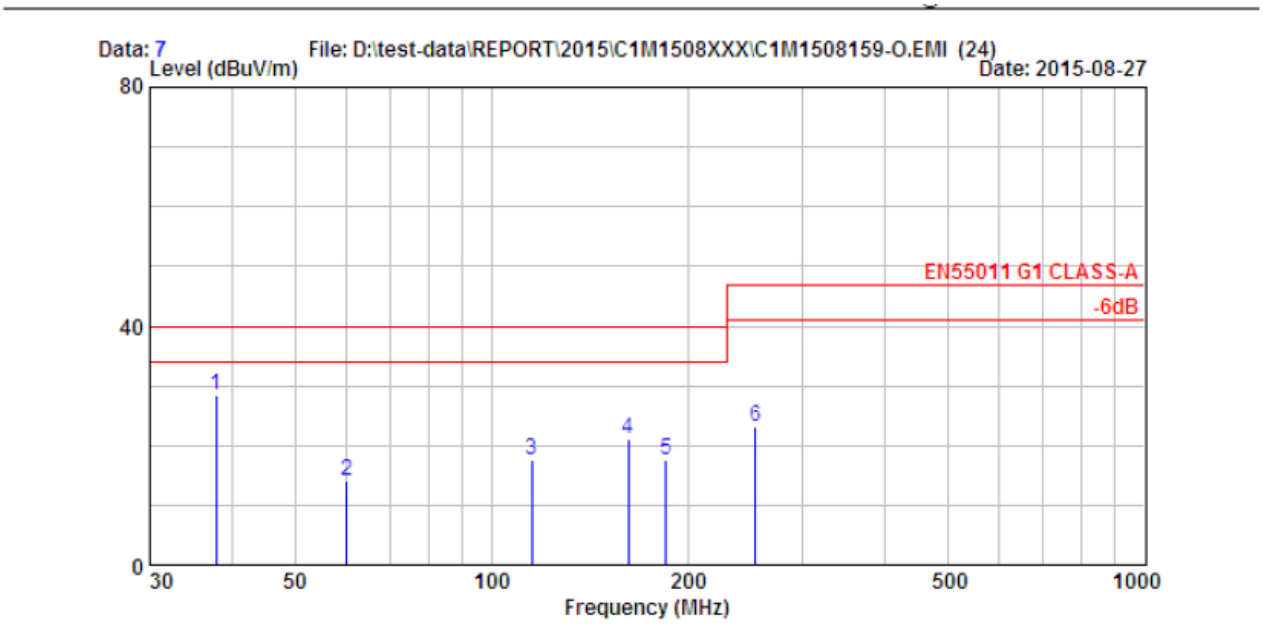



```
Site no.      : OATS NO.6                    Data no.   : 8
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : VERTICAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA4PTS-3247B
Power Rating  : 240Vac / 50Hz
Test Mode     : High
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
1	38.940	13.19	0.84	8.86	22.89	40.00	17.11	QP
2	62.340	6.49	1.08	12.58	20.15	40.00	19.85	QP
3	116.480	12.10	1.55	4.75	18.39	40.00	21.61	QP
4	187.360	9.57	2.06	10.68	22.31	40.00	17.69	QP
5	206.870	10.21	2.18	7.71	20.11	40.00	19.90	QP
6	261.800	12.72	2.49	8.00	23.20	47.00	23.80	QP

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 42: Radiated Emission, 30-1000 MHz, Horizontal Polarization, CWIDA04PTS (AC 230V)/High Temp.

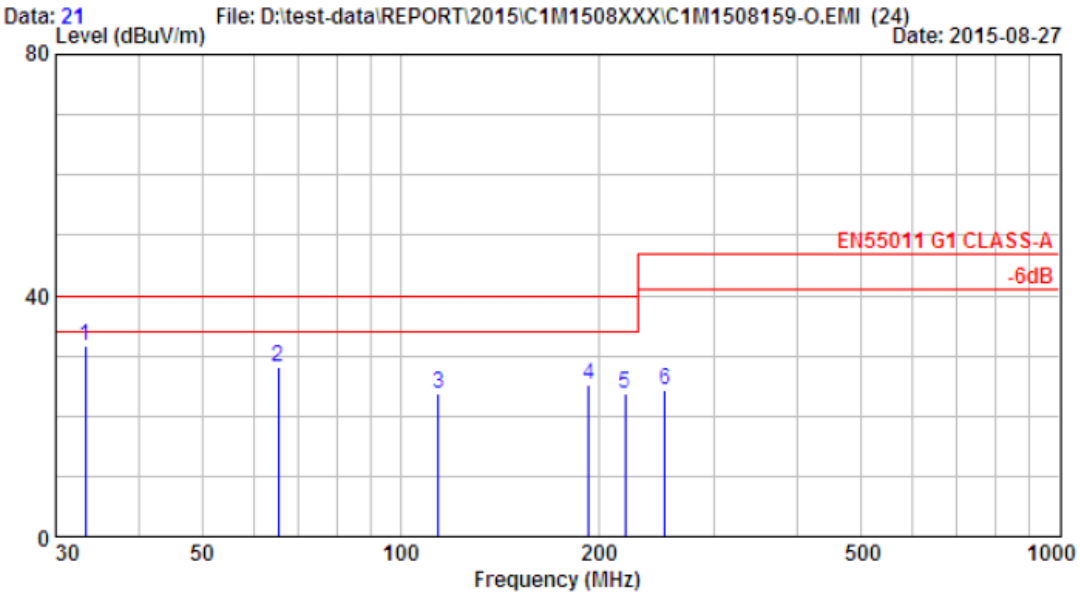



```
Site no.      : OATS NO.6                    Data no.   : 7
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : HORIZONTAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA4PTS-3247B
Power Rating  : 240Vac / 50Hz
Test Mode     : High
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	37.900	13.80	0.83	13.89	28.52	40.00	11.48	QP	@
2	60.030	6.47	1.05	6.59	14.11	40.00	25.89	QP	
3	115.450	12.02	1.54	3.96	17.51	40.00	22.49	QP	
4	162.100	10.89	1.89	8.21	20.98	40.00	19.02	QP	
5	184.960	9.54	2.04	5.94	17.52	40.00	22.48	QP	
6	253.930	12.59	2.44	8.22	23.25	47.00	23.75	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 43: Radiated Emission, 30-1000 MHz, Vertical Polarization, CWIDA04PTS (AC 400V)/Low Temp.

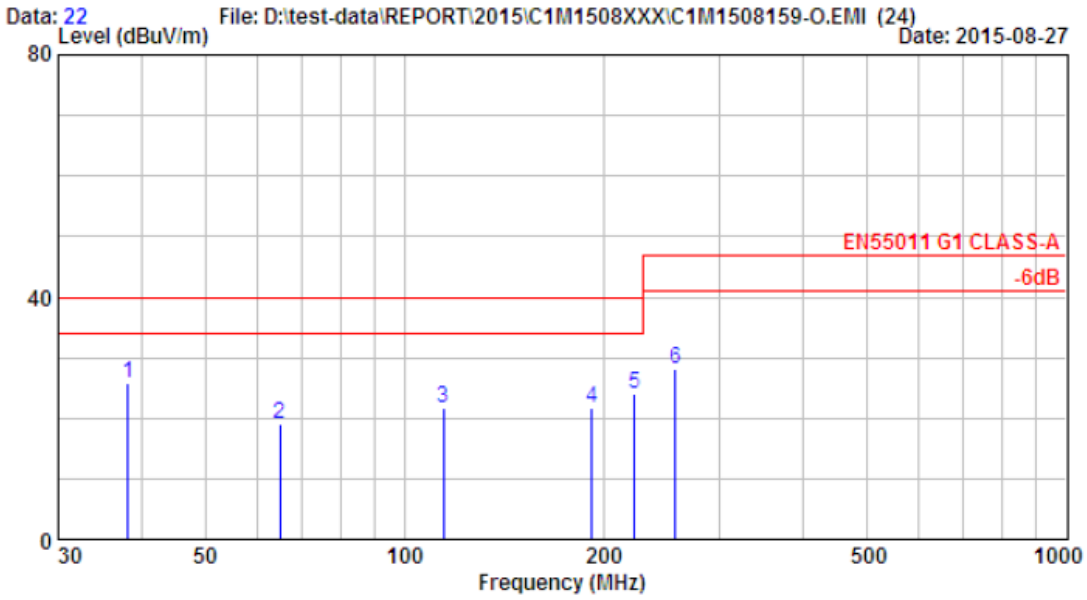



```
Site no.      : OATS NO.6                    Data no.   : 21
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : VERTICAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA4PTS-3407B
Power Rating  : 400Vac / 50Hz
Test Mode     : Low
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	33.300	16.57	0.77	14.28	31.62	40.00	8.38	QP	@
2	65.250	6.52	1.10	20.53	28.15	40.00	11.85	QP	@
3	114.340	11.96	1.53	10.36	23.85	40.00	16.15	QP	
4	193.250	9.67	2.10	13.29	25.06	40.00	14.94	QP	
5	219.600	10.94	2.26	10.44	23.64	40.00	16.36	QP	
6	252.160	12.57	2.43	9.26	24.26	47.00	22.74	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 44: Radiated Emission, 30-1000 MHz, Horizontal Polarization, CWIDA04PTS (AC 400V)/Low Temp.

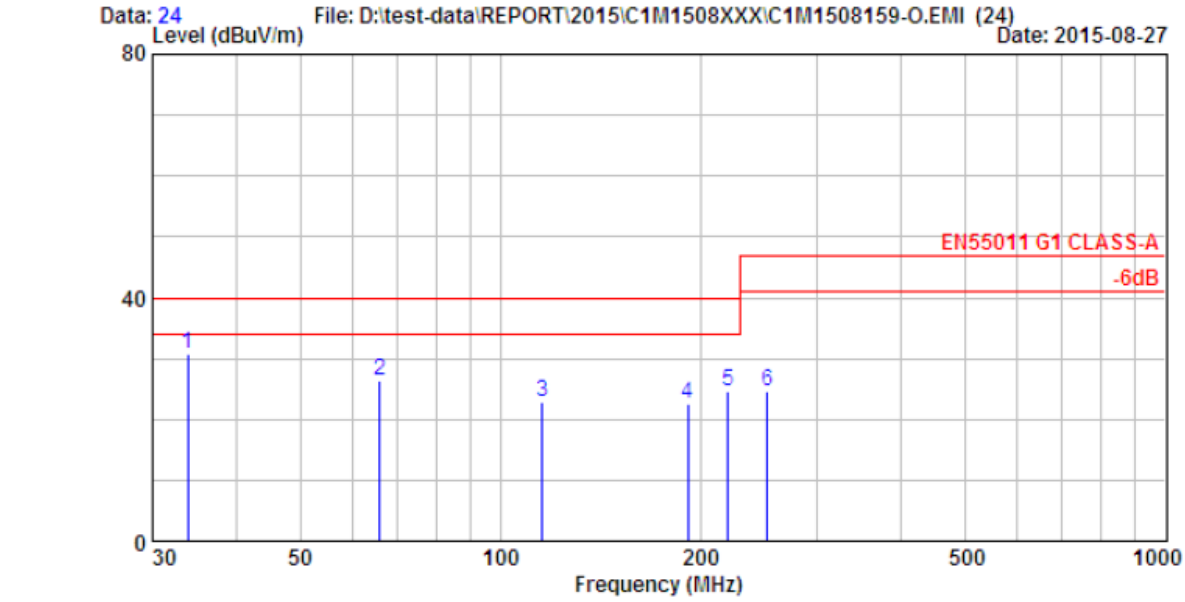



```
Site no.      : OATS NO.6                    Data no.   : 22
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : HORIZONTAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA4PTS-3407B
Power Rating  : 400Vac / 50Hz
Test Mode     : Low
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
1	38.300	13.54	0.83	11.42	25.79	40.00	14.21	QP
2	64.800	6.52	1.10	11.35	18.97	40.00	21.04	QP
3	114.610	11.96	1.53	8.34	21.83	40.00	18.17	QP
4	192.240	9.66	2.09	9.92	21.67	40.00	18.33	QP
5	222.600	11.12	2.28	10.68	24.07	40.00	15.93	QP
6	256.900	12.63	2.46	12.90	27.99	47.00	19.01	QP

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 45: Radiated Emission, 30-1000 MHz, Vertical Polarization, CWIDA04PTS (AC 400V)/Med. Temp.

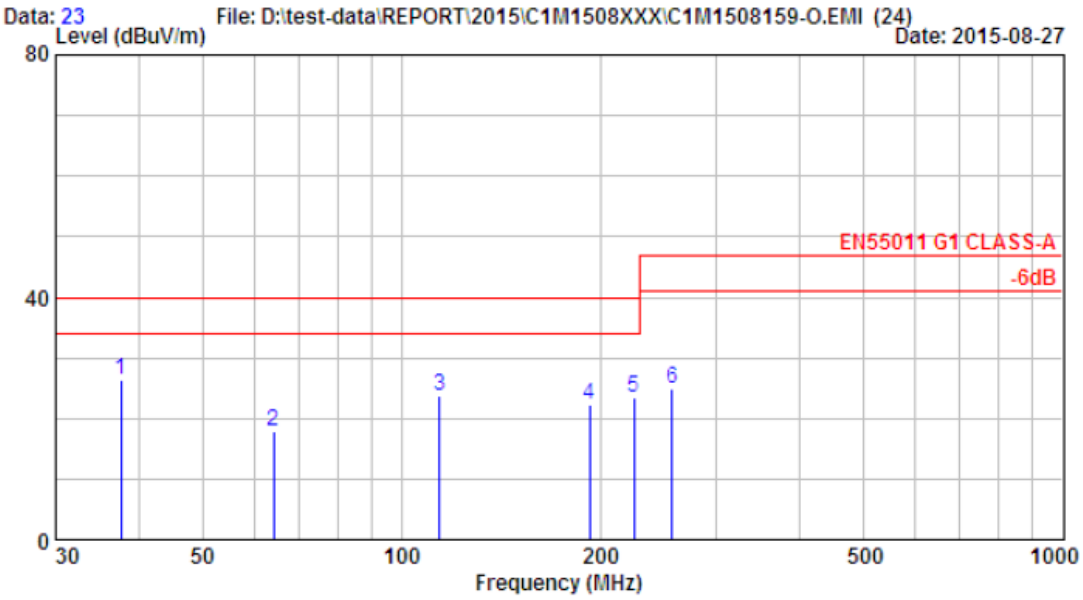



```
Site no.      : OATS NO.6                    Data no.   : 24
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : VERTICAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA4PTS-3407B
Power Rating  : 400Vac / 50Hz
Test Mode     : Min
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	33.850	16.36	0.77	13.66	30.79	40.00	9.21	QP	@
2	65.800	6.52	1.11	18.60	26.23	40.00	13.77	QP	@
3	115.870	12.04	1.54	9.16	22.74	40.00	17.26	QP	
4	191.600	9.65	2.09	10.84	22.58	40.00	17.42	QP	
5	220.200	10.94	2.26	11.52	24.72	40.00	15.28	QP	
6	252.200	12.57	2.43	9.51	24.51	47.00	22.49	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 46: Radiated Emission, 30-1000 MHz, Horizontal Polarization, CWIDA04PTS (AC 400V)/Med. Temp.

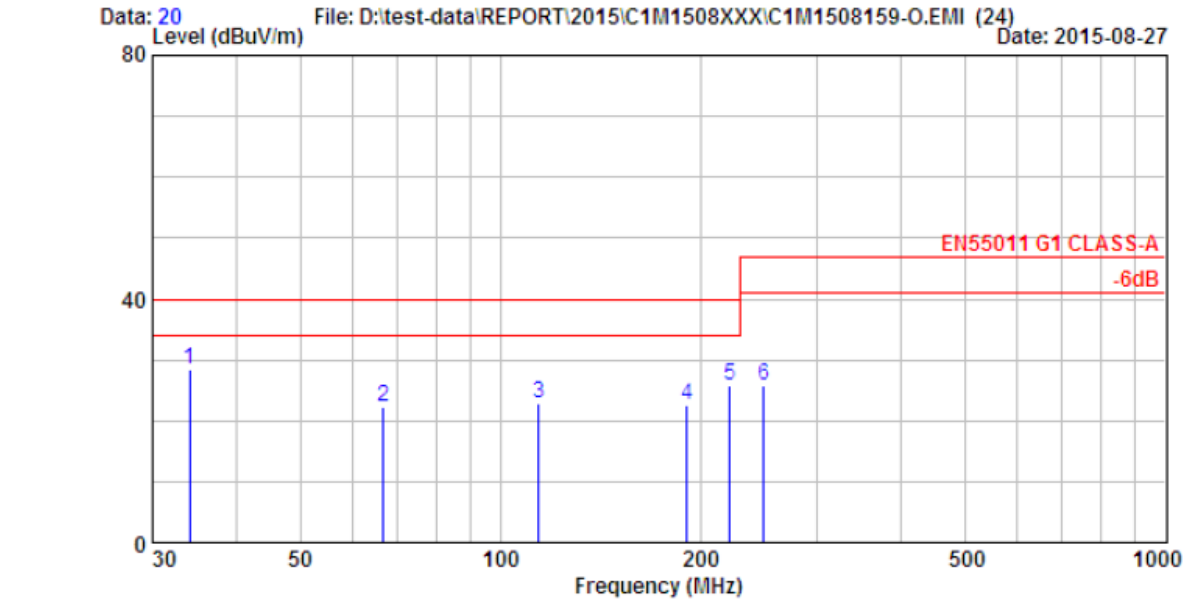



```
Site no.      : OATS NO.6                    Data no.   : 23
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : HORIZONTAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA4PTS-3407B
Power Rating  : 400Vac / 50Hz
Test Mode     : Min
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	37.600	14.07	0.82	11.48	26.37	40.00	13.63	QP	@
2	64.100	6.51	1.09	10.26	17.86	40.00	22.14	QP	
3	114.270	11.93	1.53	10.34	23.80	40.00	16.20	QP	
4	192.480	9.66	2.09	10.46	22.21	40.00	17.79	QP	
5	224.860	11.20	2.28	10.08	23.57	40.00	16.43	QP	
6	256.700	12.63	2.46	9.90	24.99	47.00	22.01	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 47: Radiated Emission, 30-1000 MHz, Vertical Polarization, CWIDA04PTS (AC 400V)/High Temp.

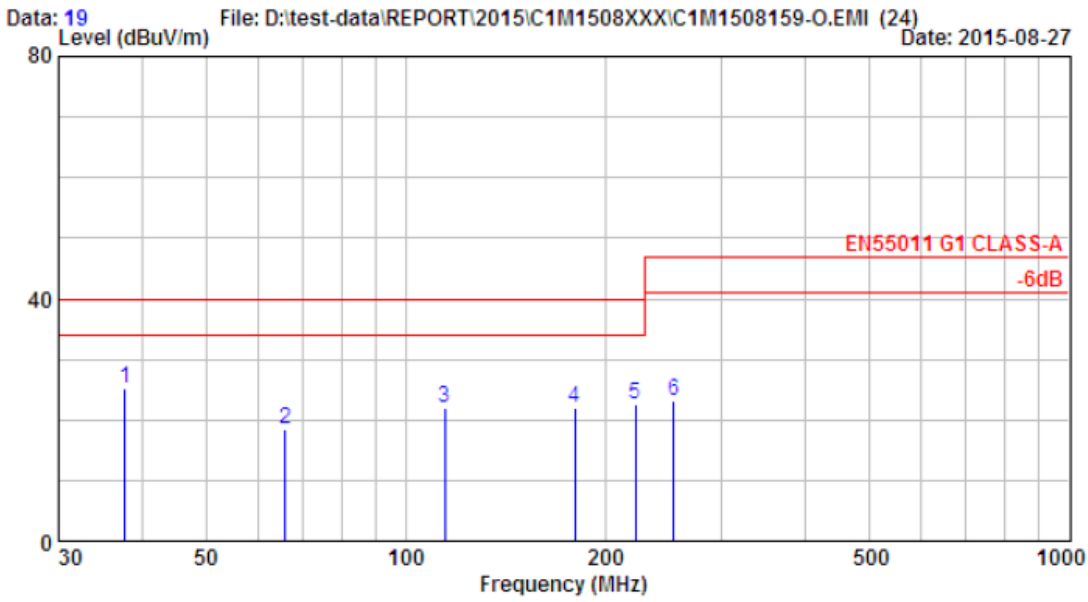



```
Site no.      : OATS NO.6                    Data no.   : 20
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : VERTICAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA4PTS-3407B
Power Rating  : 400Vac / 50Hz
Test Mode     : High
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	34.150	16.20	0.78	11.57	28.55	40.00	11.45	QP	@
2	66.700	6.53	1.12	14.71	22.36	40.00	17.64	QP	
3	114.120	11.93	1.53	9.49	22.95	40.00	17.05	QP	
4	191.000	9.64	2.08	10.91	22.63	40.00	17.37	QP	
5	221.300	11.03	2.27	12.58	25.88	40.00	14.12	QP	
6	249.210	12.50	2.42	10.74	25.65	47.00	21.35	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 48: Radiated Emission, 30-1000 MHz, Horizontal Polarization, CWIDA04PTS (AC 400V)/High Temp.

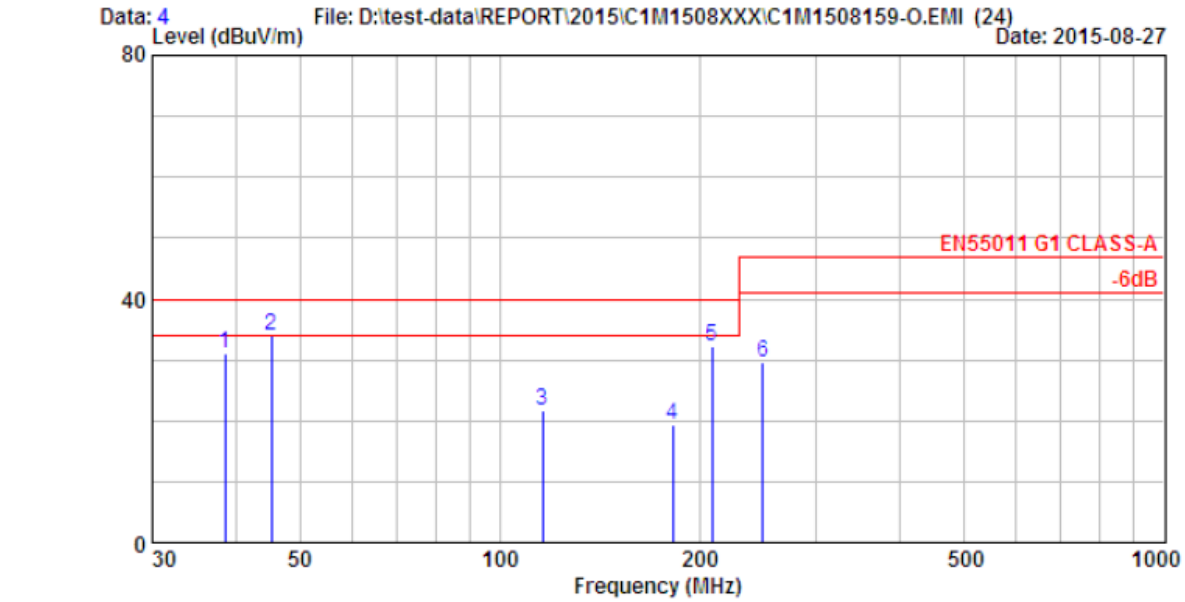



```
Site no.      : OATS NO.6                    Data no.   : 19
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : HORIZONTAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA4PTS-3407B
Power Rating  : 400Vac / 50Hz
Test Mode     : High
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
1	37.770	13.89	0.82	10.53	25.25	40.00	14.75	QP
2	65.900	6.52	1.11	10.78	18.41	40.00	21.59	QP
3	114.600	11.96	1.53	8.62	22.11	40.00	17.89	QP
4	179.900	9.45	2.01	10.62	22.08	40.00	17.92	QP
5	222.300	11.07	2.27	9.33	22.68	40.00	17.33	QP
6	253.900	12.59	2.44	7.98	23.01	47.00	23.99	QP

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 49: Radiated Emission, 30-1000 MHz, Vertical Polarization, CWIDA12PTS (AC 230V)/Low Temp.

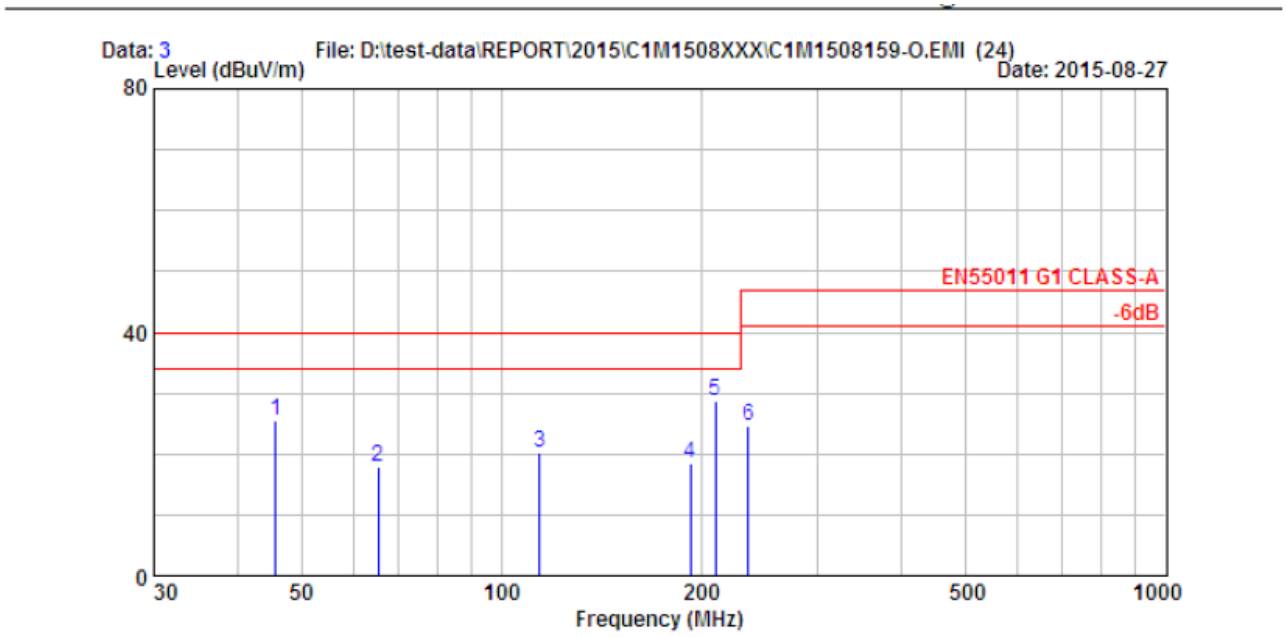



```
Site no.      : OATS NO.6                    Data no.   : 4
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : VERTICAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA12PTS-3247B
Power Rating  : 240Vac / 50Hz
Test Mode     : Low
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	38.550	13.37	0.83	16.97	31.17	40.00	8.83	QP	@
2	45.280	11.26	0.90	21.93	34.09	40.00	5.91	QP	@
3	115.990	12.07	1.54	8.10	21.71	40.00	18.29	QP	
4	182.540	9.49	2.03	7.81	19.33	40.00	20.67	QP	
5	208.530	10.30	2.19	19.70	32.19	40.00	7.81	QP	@
6	248.890	12.45	2.41	14.79	29.66	47.00	17.35	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 50: Radiated Emission, 30-1000 MHz, Horizontal Polarization, CWIDA12PTS (AC 230V)/Low Temp.

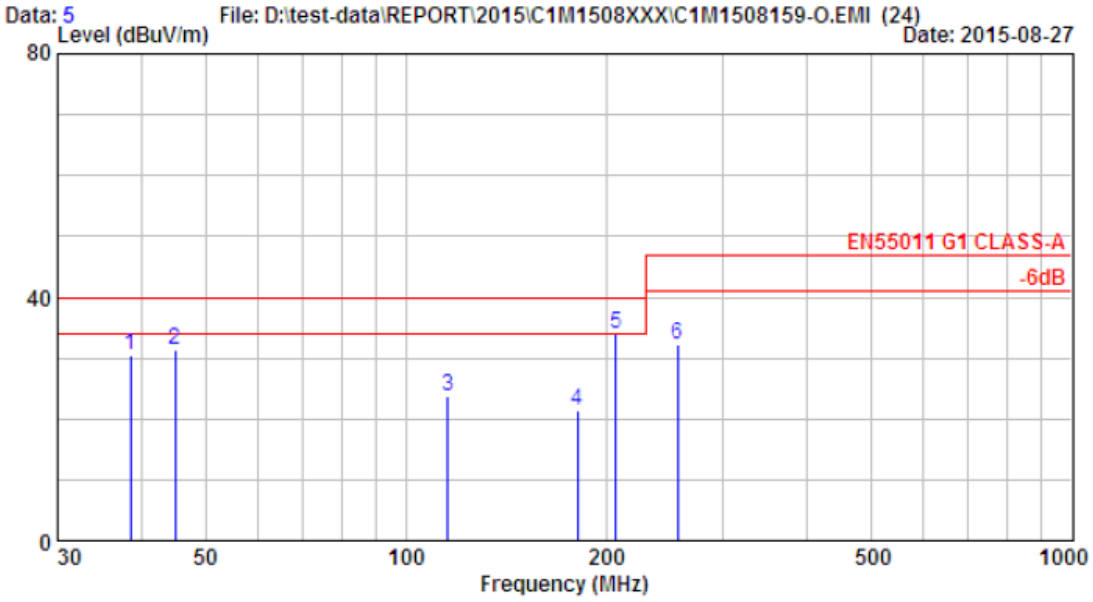



```
Site no.      : OATS NO.6                    Data no.   : 3
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : HORIZONTAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA12PTS-3247B
Power Rating  : 240Vac / 50Hz
Test Mode     : Low
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	45.800	11.07	0.91	13.63	25.61	40.00	14.39	QP	
2	65.200	6.52	1.10	10.17	17.79	40.00	22.21	QP	
3	114.260	11.93	1.53	6.67	20.13	40.00	19.87	QP	
4	192.560	9.66	2.09	6.76	18.51	40.00	21.49	QP	
5	209.900	10.38	2.20	16.16	28.75	40.00	11.26	QP	@
6	235.800	11.81	2.35	10.51	24.66	47.00	22.34	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 51: Radiated Emission, 30-1000 MHz, Vertical Polarization, CWIDA12PTS (AC 230V)/Med. Temp.

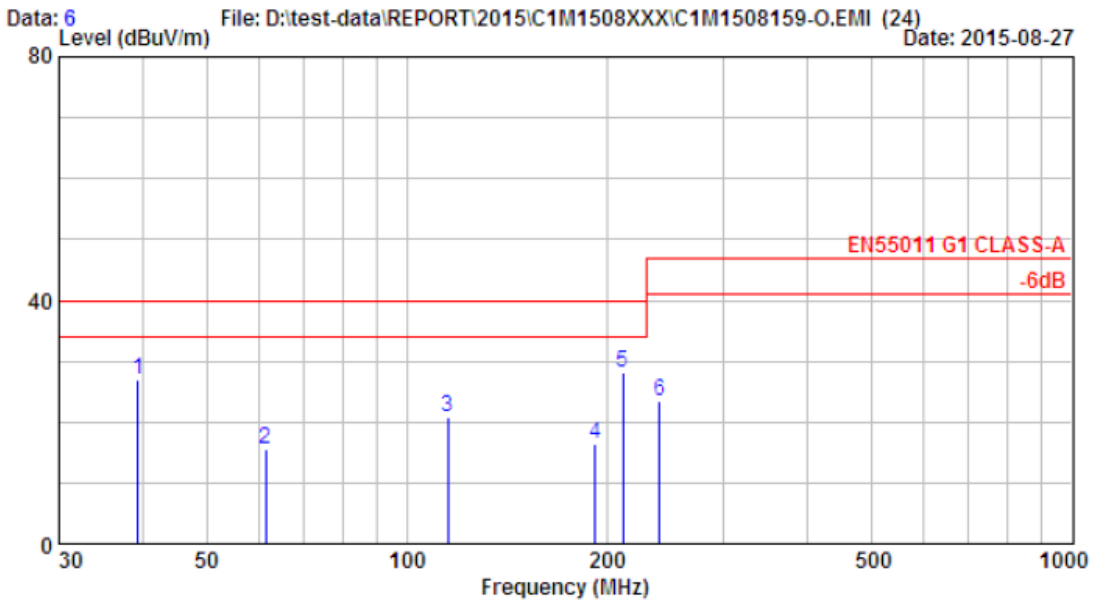



```
Site no.      : OATS NO.6                    Data no.   : 5
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : VERTICAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA12PTS-3247B
Power Rating  : 240Vac / 50Hz
Test Mode     : Min
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	38.590	13.37	0.83	16.13	30.33	40.00	9.67	QP	@
2	45.040	11.31	0.90	19.15	31.36	40.00	8.64	QP	@
3	115.690	12.04	1.54	10.17	23.75	40.00	16.25	QP	
4	181.190	9.47	2.02	9.79	21.28	40.00	18.72	QP	
5	207.090	10.21	2.18	21.47	33.87	40.00	6.14	QP	@
6	256.020	12.62	2.45	17.12	32.19	47.00	14.81	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 52: Radiated Emission, 30-1000 MHz, Horizontal Polarization, CWIDA12PTS (AC 230V)/Med. Temp.

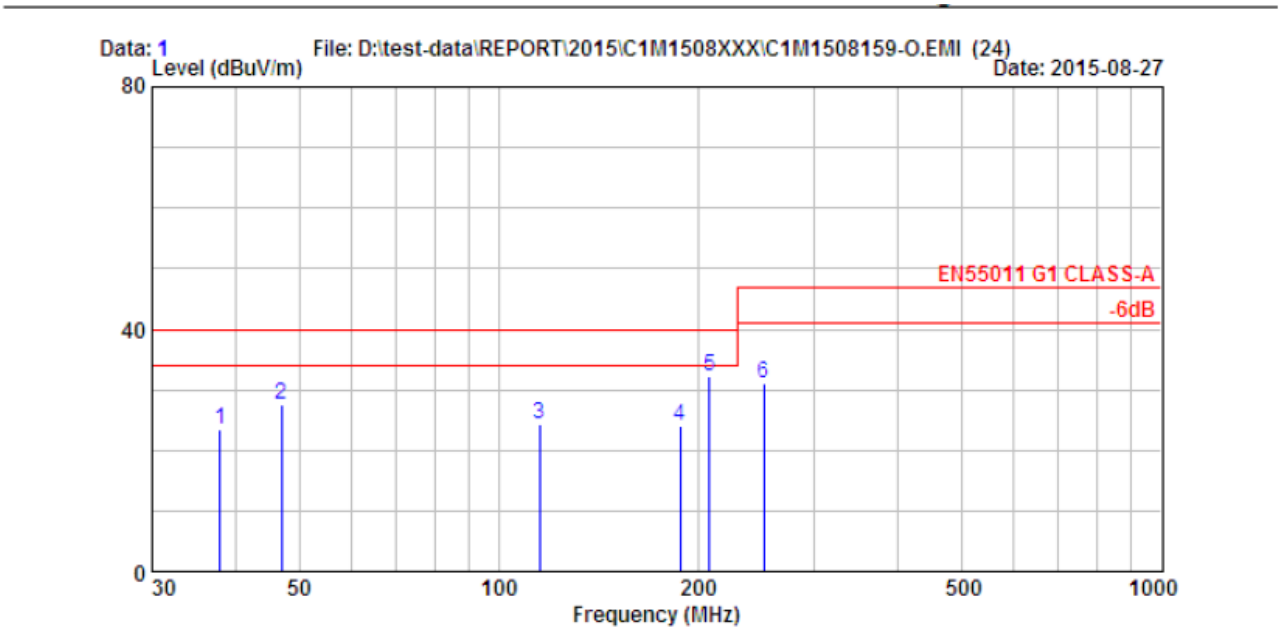



```
Site no.      : OATS NO.6                    Data no.   : 6
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : HORIZONTAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA12PTS-3247B
Power Rating  : 240Vac / 50Hz
Test Mode     : Min
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	39.400	12.84	0.84	13.34	27.02	40.00	12.98	QP	@
2	61.300	6.48	1.06	8.05	15.60	40.00	24.40	QP	
3	115.290	12.02	1.54	7.37	20.92	40.00	19.08	QP	
4	192.200	9.66	2.09	4.55	16.30	40.00	23.70	QP	
5	211.500	10.47	2.21	15.44	28.12	40.00	11.88	QP	@
6	240.250	12.02	2.37	9.06	23.45	47.00	23.55	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 53: Radiated Emission, 30-1000 MHz, Vertical Polarization, CWIDA12PTS (AC 230V)/High Temp.

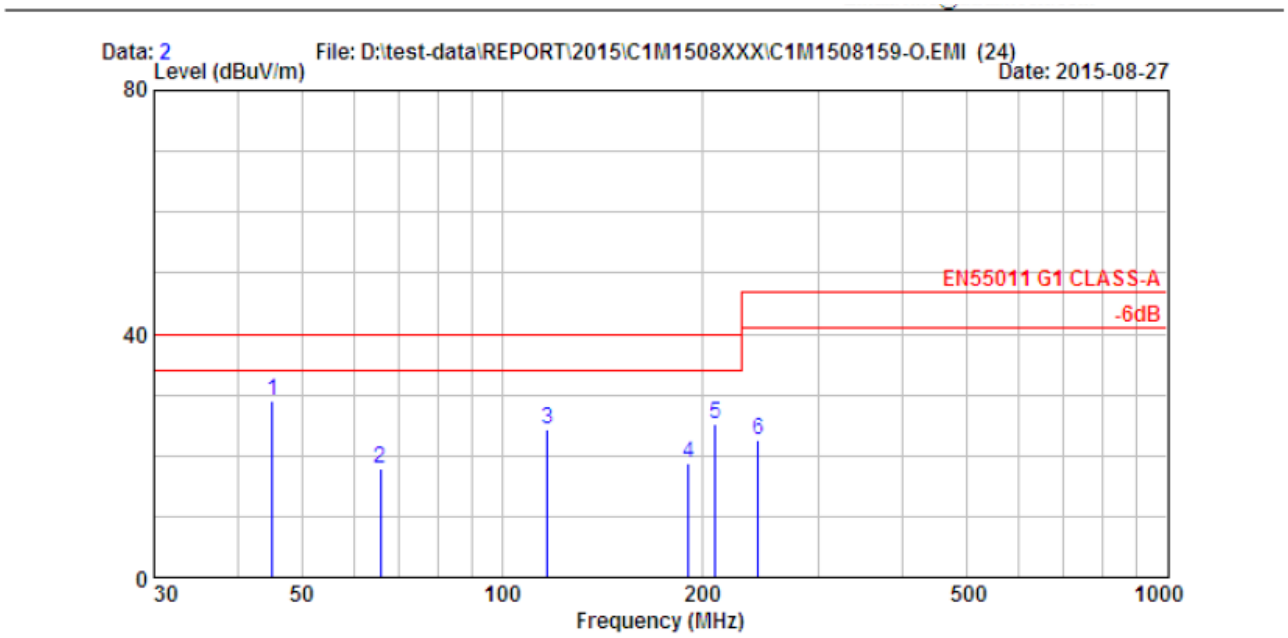



```
Site no.      : OATS NO.6                    Data no.   : 1
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : VERTICAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA12PTS-3247B
Power Rating  : 240Vac / 50Hz
Test Mode     : High
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	38.040	13.72	0.83	9.04	23.58	40.00	16.42	QP	
2	47.060	10.73	0.92	15.75	27.40	40.00	12.60	QP	@
3	115.200	12.02	1.54	10.71	24.26	40.00	15.74	QP	
4	188.250	9.59	2.07	12.38	24.04	40.00	15.96	QP	
5	208.330	10.30	2.19	19.87	32.36	40.00	7.64	QP	@
6	251.450	12.55	2.43	16.16	31.14	47.00	15.86	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 54: Radiated Emission, 30-1000 MHz, Horizontal Polarization, CWIDA12PTS (AC 230V)/High Temp.

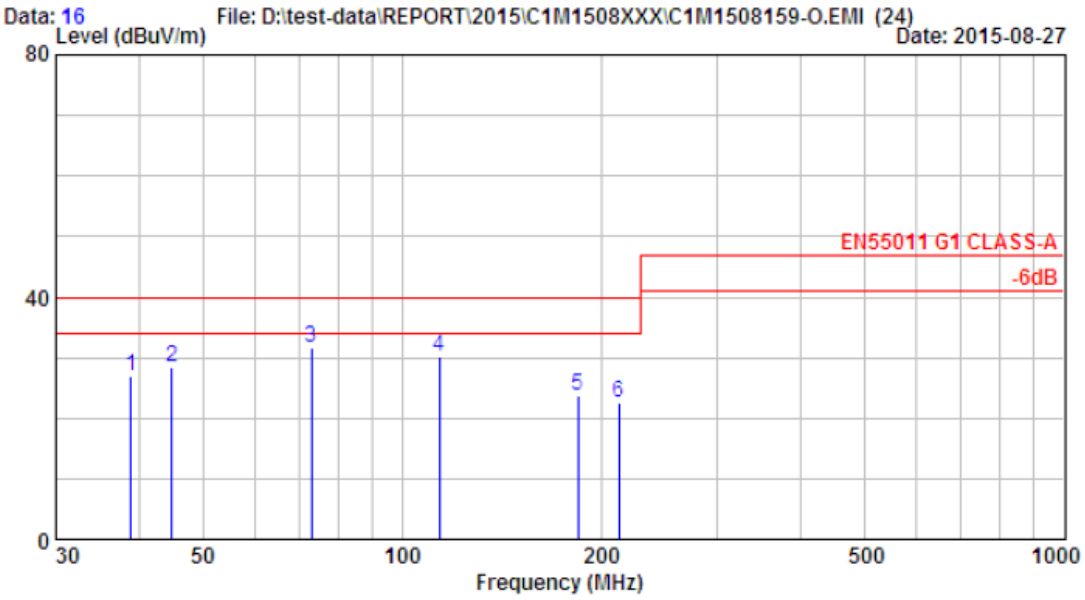



```
Site no.      : OATS NO.6                    Data no.   : 2
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : HORIZONTAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA12PTS-3247B
Power Rating  : 240Vac / 50Hz
Test Mode     : High
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	45.140	11.26	0.90	16.72	28.88	40.00	11.12	QP	@
2	65.700	6.52	1.11	10.16	17.79	40.00	22.21	QP	
3	117.300	12.15	1.55	10.59	24.30	40.00	15.70	QP	
4	191.000	9.64	2.08	7.13	18.85	40.00	21.15	QP	
5	209.760	10.38	2.20	12.65	25.24	40.00	14.77	QP	
6	242.700	12.15	2.38	8.14	22.67	47.00	24.33	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 55: Radiated Emission, 30-1000 MHz, Vertical Polarization, CWIDA12PTS (AC 400V)/Low Temp.

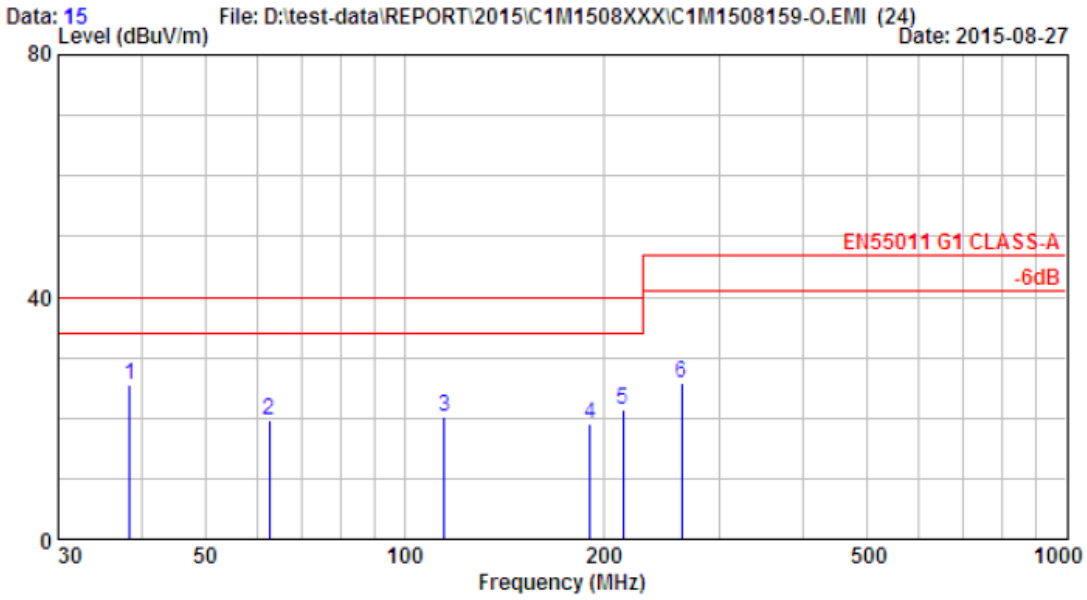



```
Site no.      : OATS NO.6                    Data no.   : 16
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : VERTICAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA12PTS-3407B
Power Rating  : 400Vac / 50Hz
Test Mode     : Low
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	38.900	13.19	0.84	12.94	26.97	40.00	13.03	QP	@
2	44.950	11.34	0.90	16.21	28.45	40.00	11.55	QP	@
3	72.950	6.87	1.18	23.49	31.53	40.00	8.47	QP	@
4	114.000	11.93	1.53	16.72	30.18	40.00	9.82	QP	@
5	184.600	9.53	2.04	12.06	23.63	40.00	16.37	QP	
6	212.700	10.56	2.22	9.85	22.63	40.00	17.38	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 56: Radiated Emission, 30-1000 MHz, Horizontal Polarization, CWIDA12PTS (AC 400V)/Low Temp.

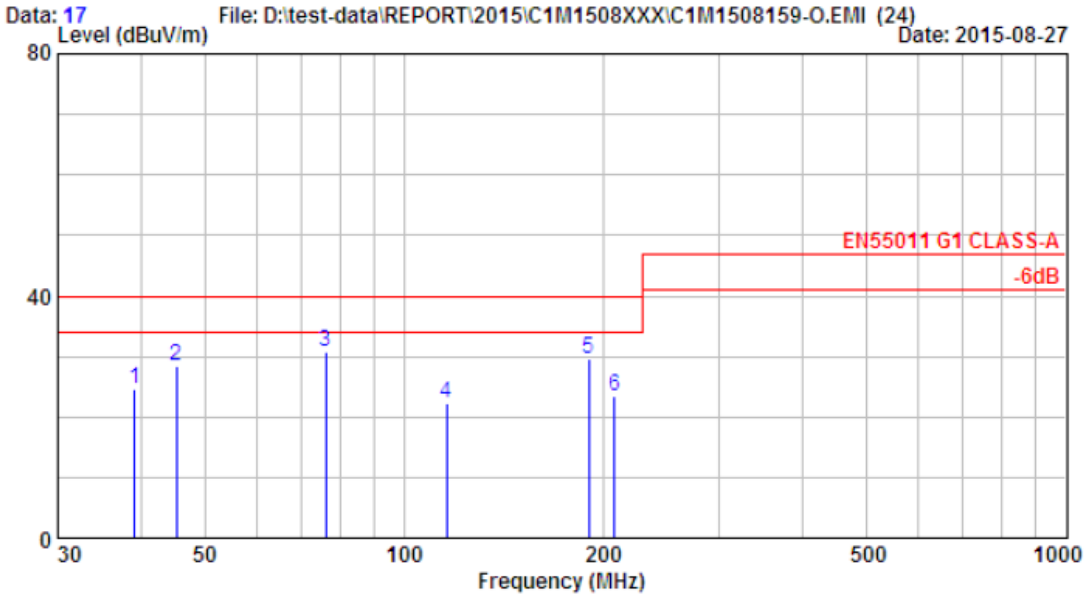



```
Site no.      : OATS NO.6                    Data no.   : 15
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : HORIZONTAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA12PTS-3407B
Power Rating  : 400Vac / 50Hz
Test Mode     : Low
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
1	38.440	13.45	0.83	11.26	25.55	40.00	14.45	QP
2	62.500	6.49	1.08	11.94	19.51	40.00	20.49	QP
3	114.870	11.99	1.53	6.66	20.18	40.00	19.82	QP
4	191.200	9.64	2.08	7.38	19.10	40.00	20.90	QP
5	214.200	10.64	2.23	8.56	21.43	40.00	18.57	QP
6	262.400	12.72	2.49	10.73	25.93	47.00	21.07	QP

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 57: Radiated Emission, 30-1000 MHz, Vertical Polarization, CWIDA12PTS (AC 400V)/Med. Temp.

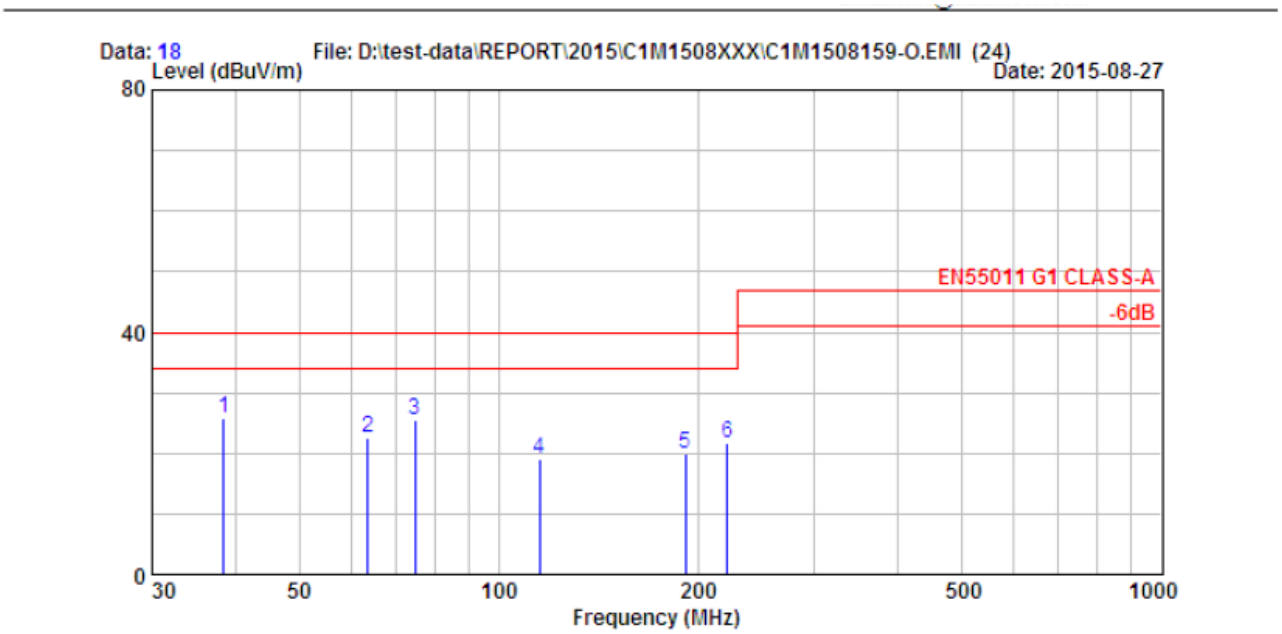



```
Site no.      : OATS NO.6                    Data no.   : 17
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : VERTICAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA12PTS-3407B
Power Rating  : 400Vac / 50Hz
Test Mode     : Min
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	39.200	13.02	0.84	10.69	24.55	40.00	15.45	QP	
2	45.300	11.21	0.90	16.24	28.36	40.00	11.64	QP	@
3	76.100	7.20	1.20	22.30	30.71	40.00	9.29	QP	@
4	115.900	12.04	1.54	8.62	22.20	40.00	17.80	QP	
5	190.120	9.63	2.08	18.03	29.74	40.00	10.26	QP	@
6	208.500	10.30	2.19	11.07	23.56	40.00	16.44	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 58: Radiated Emission, 30-1000 MHz, Horizontal Polarization, CWIDA12PTS (AC 400V)/Med. Temp.

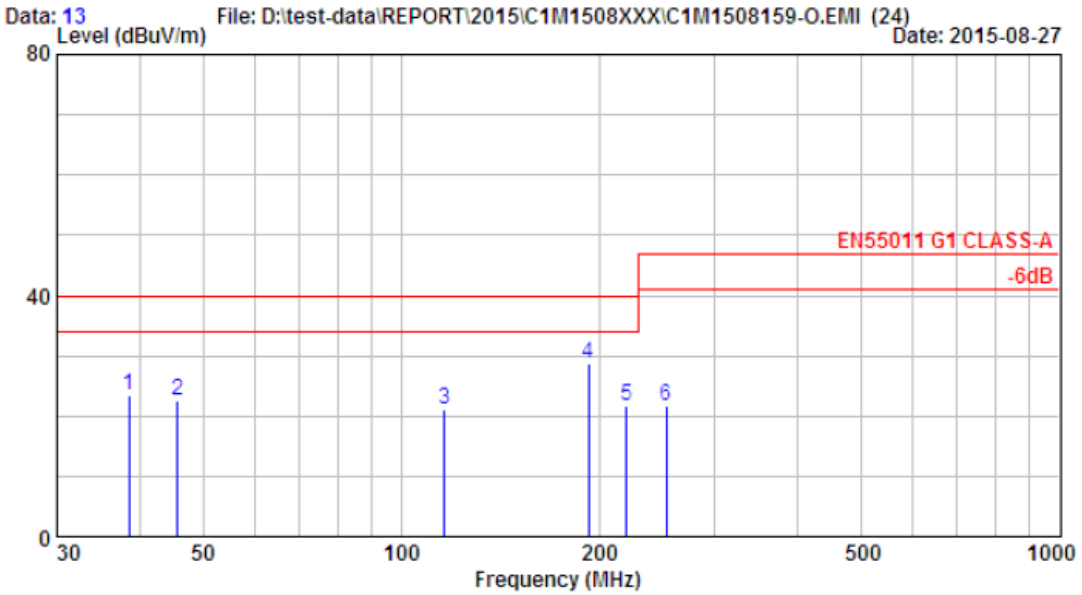



```
Site no.      : OATS NO.6                    Data no.   : 18
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : HORIZONTAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA12PTS-3407B
Power Rating  : 400Vac / 50Hz
Test Mode     : Min
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
1	38.470	13.45	0.83	11.59	25.88	40.00	14.12	QP
2	63.450	6.50	1.09	15.11	22.70	40.00	17.30	QP
3	74.800	7.09	1.20	17.12	25.41	40.00	14.60	QP
4	115.280	12.02	1.54	5.45	19.00	40.00	21.00	QP
5	191.800	9.65	2.09	8.11	19.85	40.00	20.15	QP
6	221.800	11.07	2.27	8.43	21.78	40.00	18.23	QP

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 59: Radiated Emission, 30-1000 MHz, Vertical Polarization, CWIDA12PTS (AC 400V)/High Temp.

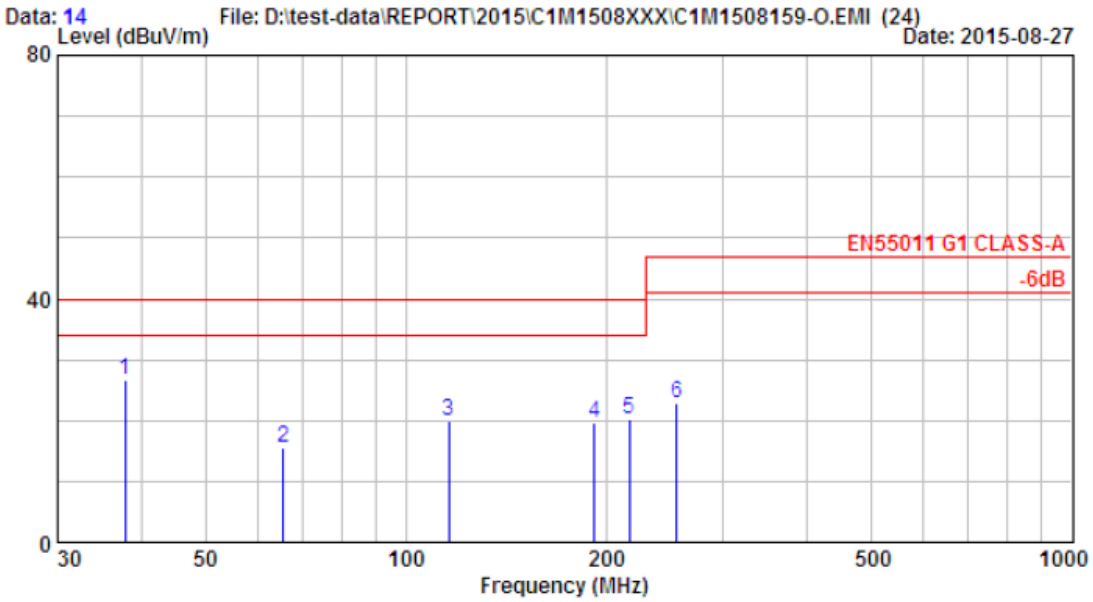



```
Site no.      : OATS NO.6                    Data no.   : 13
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : VERTICAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA12PTS-3407B
Power Rating  : 400Vac / 50Hz
Test Mode     : High
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	38.600	13.37	0.83	9.12	23.32	40.00	16.68	QP	
2	45.800	11.07	0.91	10.60	22.58	40.00	17.42	QP	
3	116.500	12.10	1.55	7.34	20.98	40.00	19.02	QP	
4	192.500	9.66	2.09	17.10	28.85	40.00	11.15	QP	@
5	219.900	10.94	2.26	8.52	21.72	40.00	18.28	QP	
6	252.600	12.58	2.44	6.54	21.56	47.00	25.44	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 60: Radiated Emission, 30-1000 MHz, Horizontal Polarization, CWIDA12PTS (AC 400V)/High Temp.




```
Site no.      : OATS NO.6                    Data no.   : 14
Dis. / Ant.   : 10m  CBL6112B(2818)          Ant. pol.  : HORIZONTAL
Limit         : EN55011 G1 CLASS-A
Env. / Ins.   : 24*C / 66% ESCS 30 (339)     Engineer   : Ghost
EUT           : CWIDA12PTS-3407B
Power Rating  : 400Vac / 50Hz
Test Mode     : High
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark	
1	37.850	13.89	0.82	11.89	26.61	40.00	13.39	QP	@
2	65.400	6.52	1.10	7.85	15.47	40.00	24.53	QP	
3	115.890	12.04	1.54	6.43	20.01	40.00	19.99	QP	
4	192.050	9.65	2.09	7.80	19.54	40.00	20.46	QP	
5	217.050	10.77	2.24	7.34	20.35	40.00	19.65	QP	
6	255.500	12.62	2.45	7.82	22.89	47.00	24.11	QP	

```
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
         2. The emission levels that are 20dB below the official
            limit are not reported.
```

Figure 61: Harmonics, CWIDA04PTS (AC 230V)/Low Temp. (Line 1)

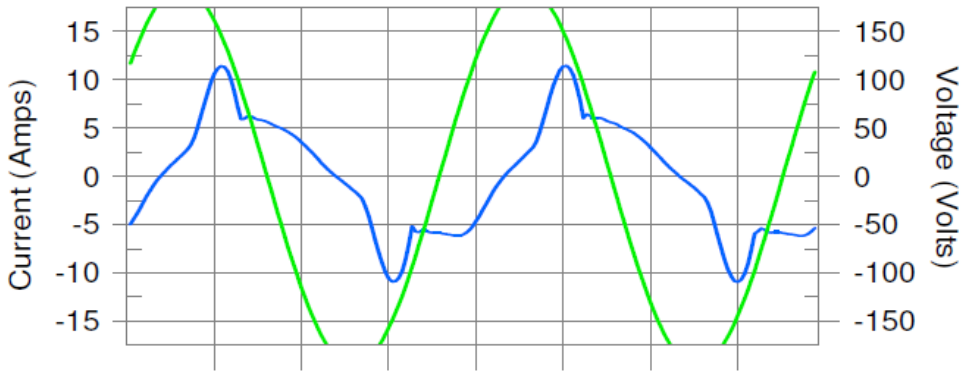
Teseq Profline
4542 Luterbach, Switzerland

Harmonics – Class-A per Ed. 4.0 (2014)(Phase A-Run time)

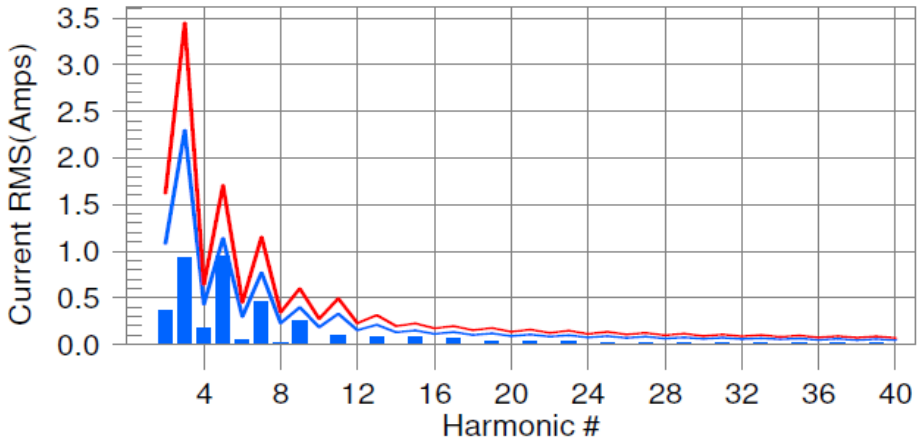
EUT: CWIDA4PTS-3247B **Tested by: Xar Zhuo**
Test category: Class-A per Ed. 4.0 (2014) (European limits) **Test Margin: 100**
Test date: 2015/9/1 **Start time: 上午 11:34:50** **End time: 上午 11:37:42**
Test duration (min): 2.5 **Data file name: H-000234.cts_data**
Comment: 20℃

Test Result: Pass **Source qualification: Normal**

Current & voltage waveforms



Harmonics and Class A limit line **European Limits**



Test result: Pass **Worst harmonic was #5 with 82.5% of the limit.**

Table 1: Harmonics, CWIDA04PTS (AC 230V)/Low Temp. (Line 1)

Teseq Profline
4542 Luterbach, Switzerland

Current Test Result Summary (Phase A-Run time)

EUT: CWIDA4PTS-3247B — Tested by: Xar Zhuo
Test category: Class-A per Ed. 4.0 (2014) (European limits) — Test Margin: 100
Test date: 2015/9/1 — Start time: 上午 11:34:50 — End time: 上午 11:37:42
Test duration (min): 2.5 — Data file name: H-000234.cts_data
Comment: 20℃

Test Result: Pass — Source qualification: Normal
THC(A): 1.494 — I-THD(%): 27.7 — POHC(A): 0.036 — POHC Limit(A): 0.251
Highest parameter values during test:

V_RMS (Volts):	139.06	Frequency(Hz):	50.00
I_Peak (Amps):	11.568	I_RMS (Amps):	5.853
I_Fund (Amps):	5.591	Crest Factor:	1.978
Power (Watts):	358.6	Power Factor:	0.396

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.364	1.080	33.7	0.372	1.620	22.9	Pass
3	0.934	2.300	40.6	1.123	3.450	32.5	Pass
4	0.175	0.430	40.7	0.176	0.645	27.3	Pass
5	0.940	1.140	82.5	1.061	1.710	62.1	Pass
6	0.046	0.300	15.2	0.046	0.450	10.3	Pass
7	0.460	0.770	59.8	0.505	1.155	43.7	Pass
8	0.021	0.230	N/A	0.022	0.345	N/A	Pass
9	0.261	0.400	65.3	0.263	0.600	43.8	Pass
10	0.009	0.184	N/A	0.010	0.276	N/A	Pass
11	0.098	0.330	29.6	0.102	0.495	20.6	Pass
12	0.006	0.153	N/A	0.006	0.230	N/A	Pass
13	0.081	0.210	38.7	0.101	0.315	32.2	Pass
14	0.005	0.131	N/A	0.006	0.197	N/A	Pass
15	0.078	0.150	51.9	0.085	0.225	38.0	Pass
16	0.002	0.115	N/A	0.003	0.173	N/A	Pass
17	0.057	0.132	43.4	0.058	0.198	29.5	Pass
18	0.003	0.102	N/A	0.004	0.153	N/A	Pass
19	0.036	0.118	30.3	0.040	0.178	22.4	Pass
20	0.003	0.092	N/A	0.004	0.138	N/A	Pass
21	0.036	0.107	33.3	0.044	0.161	27.2	Pass
22	0.002	0.084	N/A	0.003	0.125	N/A	Pass
23	0.033	0.098	N/A	0.035	0.147	N/A	Pass
24	0.002	0.077	N/A	0.003	0.115	N/A	Pass
25	0.025	0.090	N/A	0.026	0.135	N/A	Pass
26	0.003	0.071	N/A	0.003	0.107	N/A	Pass
27	0.020	0.083	N/A	0.024	0.125	N/A	Pass
28	0.002	0.066	N/A	0.003	0.099	N/A	Pass
29	0.021	0.078	N/A	0.024	0.116	N/A	Pass
30	0.002	0.061	N/A	0.002	0.092	N/A	Pass
31	0.018	0.073	N/A	0.019	0.109	N/A	Pass
32	0.002	0.058	N/A	0.002	0.086	N/A	Pass
33	0.015	0.068	N/A	0.016	0.102	N/A	Pass
34	0.002	0.054	N/A	0.002	0.081	N/A	Pass
35	0.014	0.064	N/A	0.017	0.096	N/A	Pass
36	0.002	0.051	N/A	0.002	0.077	N/A	Pass
37	0.014	0.061	N/A	0.015	0.091	N/A	Pass
38	0.002	0.048	N/A	0.002	0.073	N/A	Pass
39	0.012	0.058	N/A	0.013	0.087	N/A	Pass
40	0.002	0.046	N/A	0.002	0.069	N/A	Pass

Figure 62: Harmonics, CWIDA04PTS (AC 230V)/Low Temp. (Line 2)

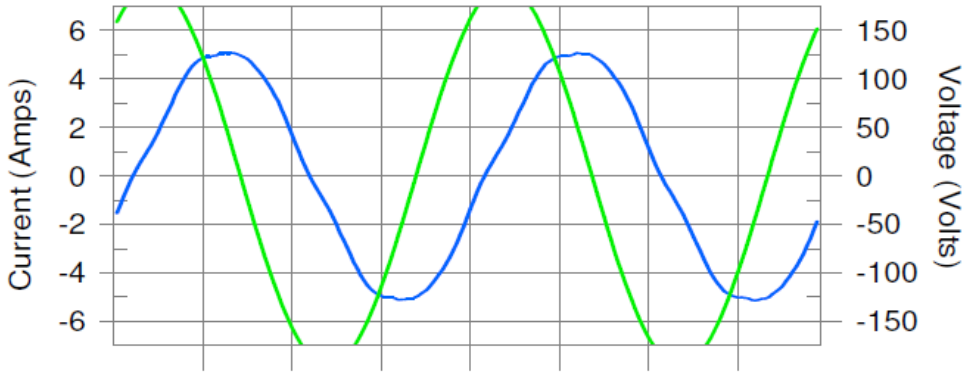
Teseq Profline
4542 Luterbach, Switzerland

Harmonics – Class-A per Ed. 4.0 (2014)(Phase B-Run time)

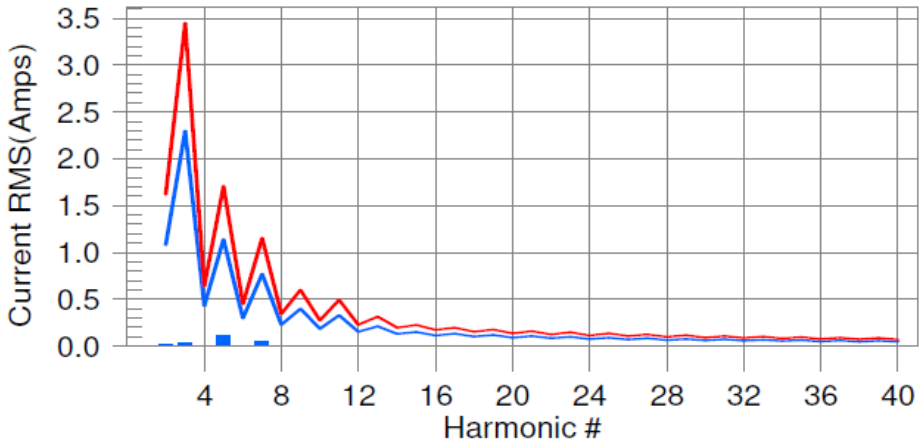
EUT: CWIDA4PTS-3247B — Tested by: Xar Zhuo
Test category: Class-A per Ed. 4.0 (2014) (European limits) — Test Margin: 100
Test date: 2015/9/1 — Start time: 上午 11:34:50 — End time: 上午 11:37:42
Test duration (min): 2.5 — Data file name: H-000234.cts_data
Comment: 20℃

Test Result: Pass — Source qualification: Normal

Current & voltage waveforms



Harmonics and Class A limit line — European Limits



Test result: Pass — Worst harmonic was #5 with 10.2% of the limit.

Table 2: Harmonics, CWIDA04PTS (AC 230V)/Low Temp. (Line 2)

Teseq Profline
4542 Luterbach, Switzerland

Current Test Result Summary (Phase B-Run time)

EUT: CWIDA4PTS-3247B — Tested by: Xar Zhuo
Test category: Class-A per Ed. 4.0 (2014) (European limits) — Test Margin: 100
Test date: 2015/9/1 — Start time: 上午 11:34:50 — End time: 上午 11:37:42
Test duration (min): 2.5 — Data file name: H-000234.cts_data
Comment: 20℃

Test Result: Pass — Source qualification: Normal
THC(A): 0.132 — I-THD(%): 3.6 — POHC(A): 0.000 — POHC Limit(A): 0.251
Highest parameter values during test:

V_RMS (Volts):	139.13	Frequency(Hz):	50.00
I_Peak (Amps):	5.144	I_RMS (Amps):	3.675
I_Fund (Amps):	3.667	Crest Factor:	1.405
Power (Watts):	342.5	Power Factor:	0.289

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.018	1.080	N/A	0.019	1.620	N/A	Pass
3	0.040	2.300	1.7	0.040	3.450	1.2	Pass
4	0.000	0.430	N/A	0.000	0.645	N/A	Pass
5	0.116	1.140	10.2	0.117	1.710	6.9	Pass
6	0.001	0.300	N/A	0.001	0.450	N/A	Pass
7	0.044	0.770	5.7	0.044	1.155	3.8	Pass
8	0.000	0.230	N/A	0.000	0.345	N/A	Pass
9	0.011	0.400	N/A	0.011	0.600	N/A	Pass
10	0.000	0.184	N/A	0.000	0.276	N/A	Pass
11	0.005	0.330	N/A	0.005	0.495	N/A	Pass
12	0.000	0.153	N/A	0.000	0.230	N/A	Pass
13	0.002	0.210	N/A	0.002	0.315	N/A	Pass
14	0.000	0.131	N/A	0.000	0.197	N/A	Pass
15	0.003	0.150	N/A	0.003	0.225	N/A	Pass
16	0.000	0.115	N/A	0.000	0.173	N/A	Pass
17	0.002	0.132	N/A	0.003	0.198	N/A	Pass
18	0.000	0.102	N/A	0.000	0.153	N/A	Pass
19	0.001	0.118	N/A	0.001	0.178	N/A	Pass
20	0.000	0.092	N/A	0.001	0.138	N/A	Pass
21	0.001	0.107	N/A	0.001	0.161	N/A	Pass
22	0.001	0.084	N/A	0.002	0.125	N/A	Pass
23	0.001	0.098	N/A	0.001	0.147	N/A	Pass
24	0.000	0.077	N/A	0.001	0.115	N/A	Pass
25	0.000	0.090	N/A	0.001	0.135	N/A	Pass
26	0.001	0.071	N/A	0.002	0.107	N/A	Pass
27	0.000	0.083	N/A	0.000	0.125	N/A	Pass
28	0.001	0.066	N/A	0.001	0.099	N/A	Pass
29	0.000	0.078	N/A	0.000	0.116	N/A	Pass
30	0.001	0.061	N/A	0.001	0.092	N/A	Pass
31	0.000	0.073	N/A	0.000	0.109	N/A	Pass
32	0.000	0.058	N/A	0.001	0.086	N/A	Pass
33	0.000	0.068	N/A	0.000	0.102	N/A	Pass
34	0.000	0.054	N/A	0.000	0.081	N/A	Pass
35	0.000	0.064	N/A	0.000	0.096	N/A	Pass
36	0.000	0.051	N/A	0.000	0.077	N/A	Pass
37	0.000	0.061	N/A	0.000	0.091	N/A	Pass
38	0.000	0.048	N/A	0.000	0.073	N/A	Pass
39	0.000	0.058	N/A	0.000	0.087	N/A	Pass
40	0.000	0.046	N/A	0.000	0.069	N/A	Pass

Figure 63: Harmonics, CWIDA04PTS (AC 230V)/Low Temp. (Line 3)

Teseq Profline
4542 Luterbach, Switzerland

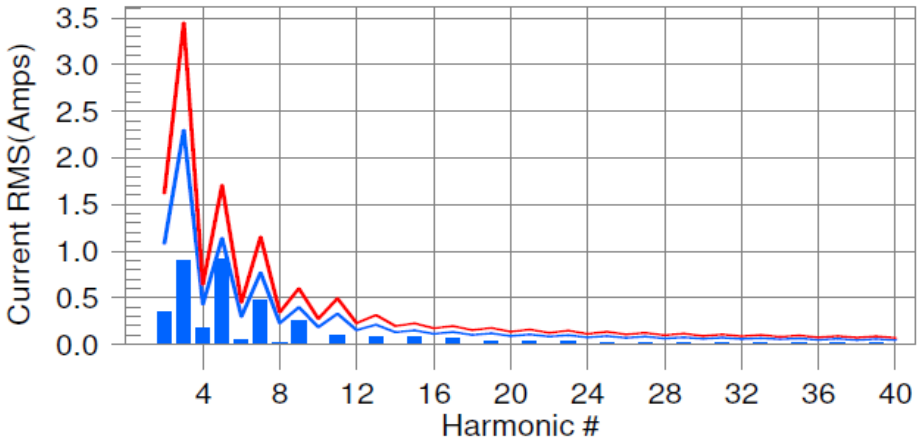
Harmonics – Class-A per Ed. 4.0 (2014)(Phase C-Run time)

EUT: CWIDA4PTS-3247B **Tested by: Xar Zhuo**
Test category: Class-A per Ed. 4.0 (2014) (European limits) **Test Margin: 100**
Test date: 2015/9/1 **Start time: 上午 11:34:50** **End time: 上午 11:37:42**
Test duration (min): 2.5 **Data file name: H-000234.cts_data**
Comment: 20℃

Test Result: Pass **Source qualification: Normal**

Current & voltage waveforms

Harmonics and Class A limit line **European Limits**



Test result: Pass **Worst harmonic was #5 with 79.9% of the limit.**

Table 3: Harmonics, CWIDA04PTS (AC 230V)/Low Temp. (Line 3)

Teseq Profline
4542 Luterbach, Switzerland

Current Test Result Summary (Phase C-Run time)

EUT: CWIDA4PTS-3247B — Tested by: Xar Zhuo
Test category: Class-A per Ed. 4.0 (2014) (European limits) — Test Margin: 100
Test date: 2015/9/1 — Start time: 上午 11:34:50 — End time: 上午 11:37:42
Test duration (min): 2.5 — Data file name: H-000234.cts_data
Comment: 20℃

Test Result: Pass — Source qualification: Normal
THC(A): 1.450 — I-THD(%): 33.3 — POHC(A): 0.049 — POHC Limit(A): 0.251
Highest parameter values during test:

V_RMS (Volts):	139.14	Frequency(Hz):	50.00
I_Peak (Amps):	7.185	I_RMS (Amps):	4.740
I_Fund (Amps):	4.433	Crest Factor:	1.596
Power (Watts):	425.4	Power Factor:	0.647

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.349	1.080	32.3	0.357	1.620	22.0	Pass
3	0.894	2.300	38.9	1.082	3.450	31.4	Pass
4	0.175	0.430	40.6	0.175	0.645	27.2	Pass
5	0.911	1.140	79.9	1.030	1.710	60.2	Pass
6	0.046	0.300	15.4	0.047	0.450	10.5	Pass
7	0.467	0.770	60.7	0.515	1.155	44.6	Pass
8	0.020	0.230	N/A	0.022	0.345	N/A	Pass
9	0.260	0.400	65.0	0.261	0.600	43.6	Pass
10	0.008	0.184	N/A	0.010	0.276	N/A	Pass
11	0.098	0.330	29.7	0.104	0.495	21.0	Pass
12	0.006	0.153	N/A	0.006	0.230	N/A	Pass
13	0.082	0.210	39.2	0.103	0.315	32.6	Pass
14	0.006	0.131	N/A	0.006	0.197	N/A	Pass
15	0.077	0.150	51.3	0.085	0.225	37.9	Pass
16	0.002	0.115	N/A	0.002	0.173	N/A	Pass
17	0.057	0.132	43.4	0.059	0.198	29.7	Pass
18	0.003	0.102	N/A	0.004	0.153	N/A	Pass
19	0.035	0.118	29.9	0.040	0.178	22.2	Pass
20	0.003	0.092	N/A	0.004	0.138	N/A	Pass
21	0.035	0.107	32.9	0.043	0.161	26.7	Pass
22	0.002	0.084	N/A	0.003	0.125	N/A	Pass
23	0.034	0.098	34.7	0.035	0.147	24.0	Pass
24	0.002	0.077	N/A	0.003	0.115	N/A	Pass
25	0.024	0.090	N/A	0.025	0.135	N/A	Pass
26	0.003	0.071	N/A	0.003	0.107	N/A	Pass
27	0.020	0.083	N/A	0.025	0.125	N/A	Pass
28	0.002	0.066	N/A	0.003	0.099	N/A	Pass
29	0.021	0.078	N/A	0.024	0.116	N/A	Pass
30	0.002	0.061	N/A	0.003	0.092	N/A	Pass
31	0.018	0.073	N/A	0.019	0.109	N/A	Pass
32	0.002	0.058	N/A	0.002	0.086	N/A	Pass
33	0.015	0.068	N/A	0.016	0.102	N/A	Pass
34	0.002	0.054	N/A	0.002	0.081	N/A	Pass
35	0.014	0.064	N/A	0.017	0.096	N/A	Pass
36	0.002	0.051	N/A	0.002	0.077	N/A	Pass
37	0.014	0.061	N/A	0.015	0.091	N/A	Pass
38	0.002	0.048	N/A	0.002	0.073	N/A	Pass
39	0.012	0.058	N/A	0.013	0.087	N/A	Pass
40	0.002	0.046	N/A	0.002	0.069	N/A	Pass

Figure 64: Harmonics, CWIDA04PTS (AC 400V)/Low Temp. (Line 1)

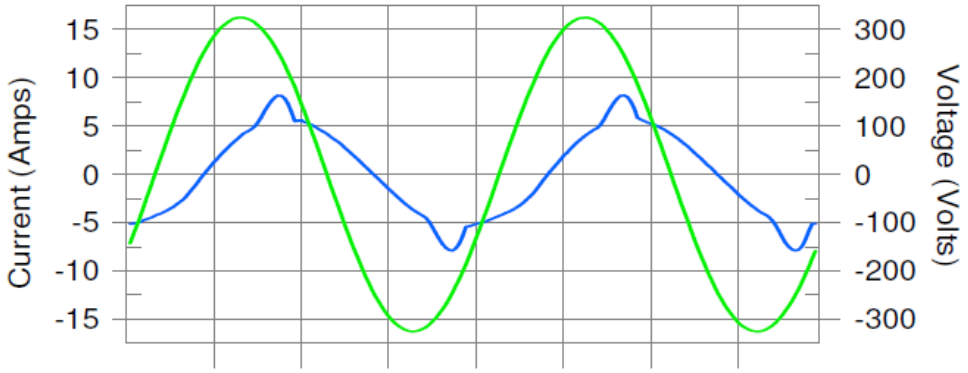
Teseq Profline
4542 Luterbach, Switzerland

Harmonics – Class-A per Ed. 4.0 (2014)(Phase A-Run time)

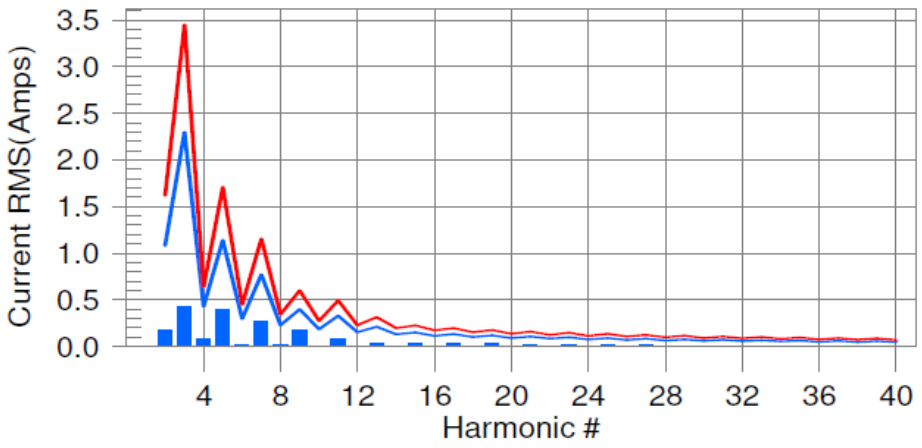
EUT: CWIDA4PTS-3407B
Test category: Class-A per Ed. 4.0 (2014) (European limits)
Test date: 2015/9/1
Start time: 下午 01:27:04
Test duration (min): 2.5
Data file name: H-000237.cts_data
Comment: 20℃
Tested by: Xar Zhuo
Test Margin: 100
End time: 下午 01:29:56

Test Result: Pass
Source qualification: Normal

Current & voltage waveforms



Harmonics and Class A limit line
European Limits



Test result: Pass
Worst harmonic was #9 with 44.8% of the limit.

Teseq AG Win2100 V4.6.0

Table 4: Harmonics, CWIDA04PTS (AC 400V)/Low Temp. (Line 1)

Teseq Profline
4542 Luterbach, Switzerland

Current Test Result Summary (Phase A-Run time)

EUT: CWIDA4PTS-3407B — Tested by: Xar Zhuo
Test category: Class-A per Ed. 4.0 (2014) (European limits) — Test Margin: 100
Test date: 2015/9/1 — Start time: 下午 01:27:04 — End time: 下午 01:29:56
Test duration (min): 2.5 — Data file name: H-000237.cts_data
Comment: 20℃

Test Result: Pass — Source qualification: Normal
THC(A): 0.701 — I-THD(%): 24.8 — POHC(A): 0.000 — POHC Limit(A): 0.251
Highest parameter values during test:

V_RMS (Volts):	230.12	Frequency(Hz):	50.00
I_Peak (Amps):	8.238	I_RMS (Amps):	4.542
I_Fund (Amps):	4.332	Crest Factor:	2.835
Power (Watts):	649.8	Power Factor:	0.653

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.169	1.080	15.6	0.176	1.620	10.9	Pass
3	0.427	2.300	18.6	0.466	3.450	13.5	Pass
4	0.076	0.430	17.8	0.078	0.645	12.1	Pass
5	0.398	1.140	34.9	0.428	1.710	25.0	Pass
6	0.020	0.300	N/A	0.022	0.450	N/A	Pass
7	0.264	0.770	34.3	0.280	1.155	24.3	Pass
8	0.012	0.230	N/A	0.013	0.345	N/A	Pass
9	0.179	0.400	44.8	0.184	0.600	30.7	Pass
10	0.003	0.184	N/A	0.004	0.276	N/A	Pass
11	0.086	0.330	26.1	0.089	0.495	17.9	Pass
12	0.001	0.153	N/A	0.003	0.230	N/A	Pass
13	0.041	0.210	19.4	0.045	0.315	14.4	Pass
14	0.002	0.131	N/A	0.003	0.197	N/A	Pass
15	0.039	0.150	26.1	0.043	0.225	19.3	Pass
16	0.001	0.115	N/A	0.002	0.173	N/A	Pass
17	0.038	0.132	29.2	0.041	0.198	20.6	Pass
18	0.001	0.102	N/A	0.002	0.153	N/A	Pass
19	0.029	0.118	24.3	0.030	0.178	16.8	Pass
20	0.001	0.092	N/A	0.002	0.138	N/A	Pass
21	0.018	0.107	N/A	0.020	0.161	N/A	Pass
22	0.001	0.084	N/A	0.002	0.125	N/A	Pass
23	0.016	0.098	N/A	0.018	0.147	N/A	Pass
24	0.001	0.077	N/A	0.002	0.115	N/A	Pass
25	0.017	0.090	N/A	0.019	0.135	N/A	Pass
26	0.001	0.071	N/A	0.003	0.107	N/A	Pass
27	0.014	0.083	N/A	0.015	0.125	N/A	Pass
28	0.001	0.066	N/A	0.002	0.099	N/A	Pass
29	0.011	0.078	N/A	0.012	0.116	N/A	Pass
30	0.001	0.061	N/A	0.002	0.092	N/A	Pass
31	0.010	0.073	N/A	0.011	0.109	N/A	Pass
32	0.001	0.058	N/A	0.003	0.086	N/A	Pass
33	0.010	0.068	N/A	0.011	0.102	N/A	Pass
34	0.001	0.054	N/A	0.001	0.081	N/A	Pass
35	0.009	0.064	N/A	0.009	0.096	N/A	Pass
36	0.001	0.051	N/A	0.001	0.077	N/A	Pass
37	0.007	0.061	N/A	0.008	0.091	N/A	Pass
38	0.001	0.048	N/A	0.001	0.073	N/A	Pass
39	0.007	0.058	N/A	0.007	0.087	N/A	Pass
40	0.001	0.046	N/A	0.001	0.069	N/A	Pass

Figure 65: Harmonics, CWIDA04PTS (AC 400V)/Low Temp. (Line 2)

Teseq Profline
4542 Luterbach, Switzerland

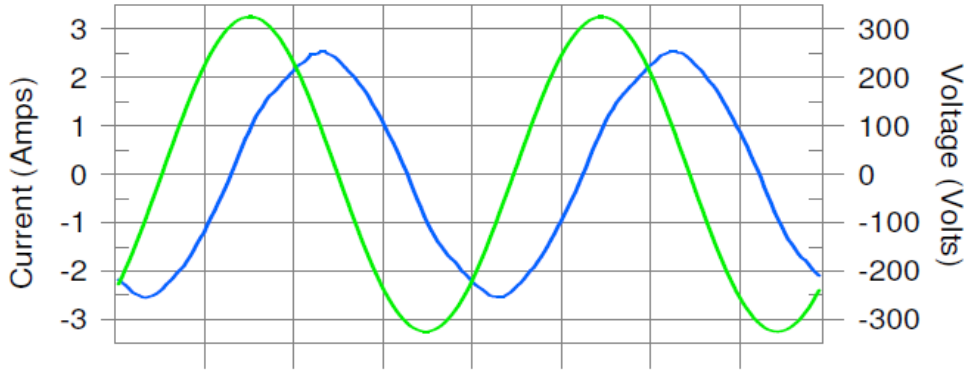
Harmonics – Class-A per Ed. 4.0 (2014)(Phase B-Run time)

EUT: CWIDA4PTS-3407B
Test category: Class-A per Ed. 4.0 (2014) (European limits)
Test date: 2015/9/1
Test duration (min): 2.5
Comment: 20℃

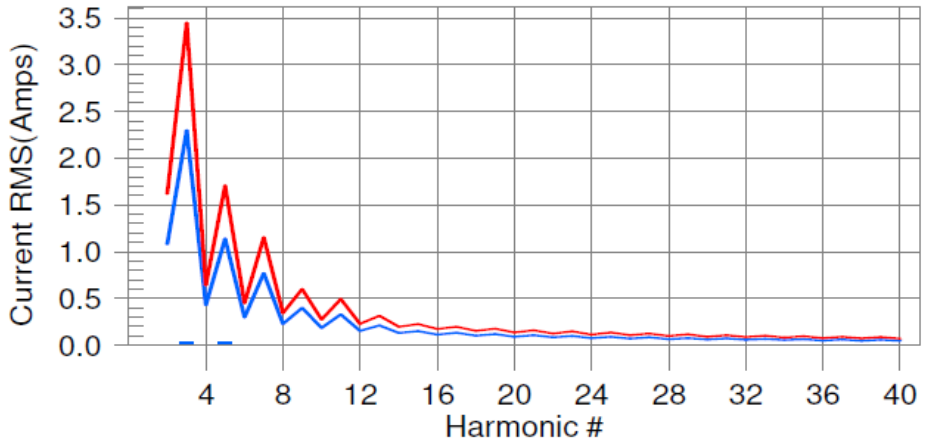
Tested by: Xar Zhuo
Test Margin: 100
Start time: 下午 01:27:04
End time: 下午 01:29:56
Data file name: H-000237.cts_data

Test Result: Pass
Source qualification: Normal

Current & voltage waveforms



Harmonics and Class A limit line
European Limits



Test result: Pass
Worst harmonic was #5 with 3.4% of the limit.

Table 5: Harmonics, CWIDA04PTS (AC 400V)/Low Temp. (Line 2)

Teseq Profline
4542 Luterbach, Switzerland

Current Test Result Summary (Phase B-Run time)

EUT: CWIDA4PTS-3407B
Test category: Class-A per Ed. 4.0 (2014) (European limits)
Test date: 2015/9/1
Test duration (min): 2.5
Comment: 20℃

Tested by: Xar Zhuo
Test Margin: 100
Start time: 下午 01:27:04
End time: 下午 01:29:56
Data file name: H-000237.cts_data

Test Result: Pass
Source qualification: Normal
THC(A): 0.052
I-THD(%): 3.0
POHC(A): 0.000
POHC Limit(A): 0.251
Highest parameter values during test:

V_RMS (Volts):	230.22	Frequency(Hz):	50.00
I_Peak (Amps):	2.599	I_RMS (Amps):	1.774
I_Fund (Amps):	1.771	Crest Factor:	1.468
Power (Watts):	300.9	Power Factor:	0.321

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.004	1.080	N/A	0.005	1.620	N/A	Pass
3	0.032	2.300	1.4	0.032	3.450	0.9	Pass
4	0.001	0.430	N/A	0.001	0.645	N/A	Pass
5	0.039	1.140	3.4	0.039	1.710	2.3	Pass
6	0.001	0.300	N/A	0.001	0.450	N/A	Pass
7	0.011	0.770	1.5	0.011	1.155	1.0	Pass
8	0.000	0.230	N/A	0.000	0.345	N/A	Pass
9	0.007	0.400	N/A	0.007	0.600	N/A	Pass
10	0.000	0.184	N/A	0.000	0.276	N/A	Pass
11	0.001	0.330	N/A	0.001	0.495	N/A	Pass
12	0.000	0.153	N/A	0.000	0.230	N/A	Pass
13	0.002	0.210	N/A	0.002	0.315	N/A	Pass
14	0.000	0.131	N/A	0.000	0.197	N/A	Pass
15	0.002	0.150	N/A	0.002	0.225	N/A	Pass
16	0.000	0.115	N/A	0.000	0.173	N/A	Pass
17	0.001	0.132	N/A	0.001	0.198	N/A	Pass
18	0.000	0.102	N/A	0.000	0.153	N/A	Pass
19	0.001	0.118	N/A	0.001	0.178	N/A	Pass
20	0.000	0.092	N/A	0.000	0.138	N/A	Pass
21	0.000	0.107	N/A	0.000	0.161	N/A	Pass
22	0.000	0.084	N/A	0.000	0.125	N/A	Pass
23	0.001	0.098	N/A	0.001	0.147	N/A	Pass
24	0.000	0.077	N/A	0.002	0.115	N/A	Pass
25	0.001	0.090	N/A	0.002	0.135	N/A	Pass
26	0.001	0.071	N/A	0.004	0.107	N/A	Pass
27	0.000	0.083	N/A	0.001	0.125	N/A	Pass
28	0.000	0.066	N/A	0.002	0.099	N/A	Pass
29	0.000	0.078	N/A	0.001	0.116	N/A	Pass
30	0.000	0.061	N/A	0.002	0.092	N/A	Pass
31	0.001	0.073	N/A	0.002	0.109	N/A	Pass
32	0.001	0.058	N/A	0.004	0.086	N/A	Pass
33	0.000	0.068	N/A	0.001	0.102	N/A	Pass
34	0.000	0.054	N/A	0.002	0.081	N/A	Pass
35	0.000	0.064	N/A	0.000	0.096	N/A	Pass
36	0.000	0.051	N/A	0.000	0.077	N/A	Pass
37	0.000	0.061	N/A	0.000	0.091	N/A	Pass
38	0.000	0.048	N/A	0.000	0.073	N/A	Pass
39	0.000	0.058	N/A	0.000	0.087	N/A	Pass
40	0.000	0.046	N/A	0.000	0.069	N/A	Pass

Figure 66: Harmonics, CWIDA04PTS (AC 400V)/Low Temp. (Line 3)

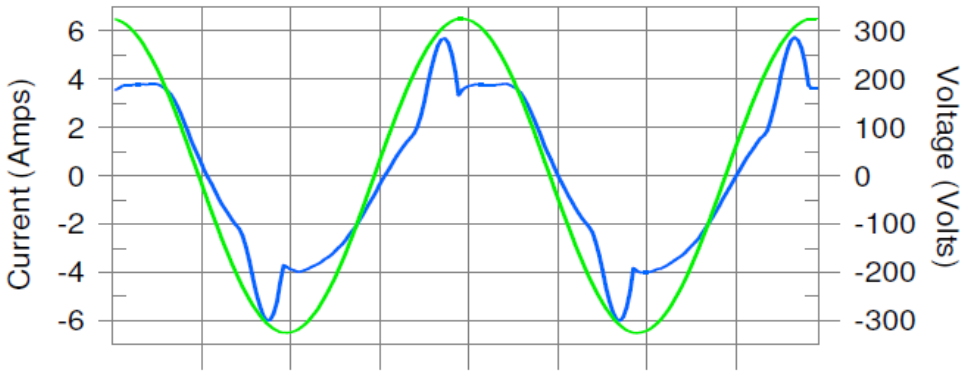
Teseq Profline
4542 Luterbach, Switzerland

Harmonics – Class-A per Ed. 4.0 (2014)(Phase C-Run time)

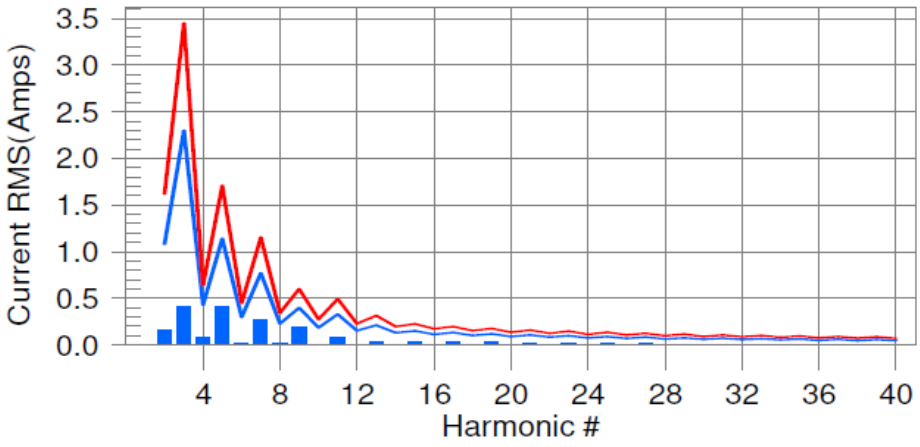
EUT: CWIDA4PTS-3407B — Tested by: Xar Zhuo
Test category: Class-A per Ed. 4.0 (2014) (European limits) — Test Margin: 100
Test date: 2015/9/1 — Start time: 下午 01:27:04 — End time: 下午 01:29:56
Test duration (min): 2.5 — Data file name: H-000237.cts_data
Comment: 20℃

Test Result: Pass — Source qualification: Normal

Current & voltage waveforms



Harmonics and Class A limit line — European Limits



Test result: Pass — Worst harmonic was #9 with 46.5% of the limit.

Table 6: Harmonics, CWIDA04PTS (AC 400V)/Low Temp. (Line 3)

Teseq Profline
4542 Luterbach, Switzerland

Current Test Result Summary (Phase C-Run time)

EUT: CWIDA4PTS-3407B — Tested by: Xar Zhuo
Test category: Class-A per Ed. 4.0 (2014) (European limits) — Test Margin: 100
Test date: 2015/9/1 — Start time: 下午 01:27:04 — End time: 下午 01:29:56
Test duration (min): 2.5 — Data file name: H-000237.cts_data
Comment: 20℃

Test Result: Pass — Source qualification: Normal
THC(A): 0.704 — I-THD(%): 31.8 — POHC(A): 0.000 — POHC Limit(A): 0.251
Highest parameter values during test:

V_RMS (Volts):	230.28	Frequency(Hz):	50.00
I_Peak (Amps):	6.058	I_RMS (Amps):	3.332
I_Fund (Amps):	3.136	Crest Factor:	2.599
Power (Watts):	709.4	Power Factor:	0.973

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.165	1.080	15.3	0.173	1.620	10.7	Pass
3	0.412	2.300	17.9	0.451	3.450	13.1	Pass
4	0.076	0.430	17.8	0.078	0.645	12.1	Pass
5	0.413	1.140	36.3	0.444	1.710	25.9	Pass
6	0.020	0.300	6.7	0.022	0.450	4.8	Pass
7	0.270	0.770	35.0	0.286	1.155	24.8	Pass
8	0.012	0.230	N/A	0.013	0.345	N/A	Pass
9	0.186	0.400	46.5	0.191	0.600	31.8	Pass
10	0.003	0.184	N/A	0.004	0.276	N/A	Pass
11	0.087	0.330	26.4	0.090	0.495	18.1	Pass
12	0.001	0.153	N/A	0.003	0.230	N/A	Pass
13	0.040	0.210	19.0	0.044	0.315	13.9	Pass
14	0.002	0.131	N/A	0.003	0.197	N/A	Pass
15	0.040	0.150	26.6	0.044	0.225	19.5	Pass
16	0.001	0.115	N/A	0.002	0.173	N/A	Pass
17	0.037	0.132	28.4	0.040	0.198	20.1	Pass
18	0.001	0.102	N/A	0.002	0.153	N/A	Pass
19	0.029	0.118	24.1	0.030	0.178	16.6	Pass
20	0.001	0.092	N/A	0.002	0.138	N/A	Pass
21	0.018	0.107	N/A	0.020	0.161	N/A	Pass
22	0.001	0.084	N/A	0.002	0.125	N/A	Pass
23	0.016	0.098	N/A	0.019	0.147	N/A	Pass
24	0.001	0.077	N/A	0.002	0.115	N/A	Pass
25	0.017	0.090	N/A	0.020	0.135	N/A	Pass
26	0.001	0.071	N/A	0.002	0.107	N/A	Pass
27	0.014	0.083	N/A	0.016	0.125	N/A	Pass
28	0.001	0.066	N/A	0.001	0.099	N/A	Pass
29	0.011	0.078	N/A	0.012	0.116	N/A	Pass
30	0.001	0.061	N/A	0.002	0.092	N/A	Pass
31	0.010	0.073	N/A	0.013	0.109	N/A	Pass
32	0.001	0.058	N/A	0.003	0.086	N/A	Pass
33	0.010	0.068	N/A	0.011	0.102	N/A	Pass
34	0.001	0.054	N/A	0.001	0.081	N/A	Pass
35	0.009	0.064	N/A	0.009	0.096	N/A	Pass
36	0.001	0.051	N/A	0.001	0.077	N/A	Pass
37	0.007	0.061	N/A	0.008	0.091	N/A	Pass
38	0.001	0.048	N/A	0.001	0.073	N/A	Pass
39	0.007	0.058	N/A	0.007	0.087	N/A	Pass
40	0.001	0.046	N/A	0.001	0.069	N/A	Pass

Figure 67: Harmonics, CWIDA12PTS (AC 230V)/Low Temp. (Line 1)

California Instruments
San Diego, California

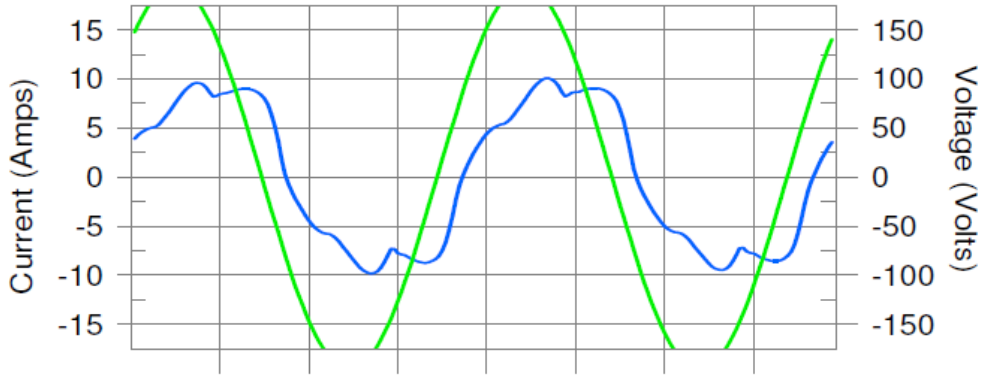
Harmonics – Class-A per Ed. 4.0 (2014)(Phase A-Run time)

EUT: CWIDA12PTS-3247B
Test category: Class-A per Ed. 4.0 (2014) (European limits)
Test date: 2015/11/3
Test duration (min): 2.5
Comment: 20℃

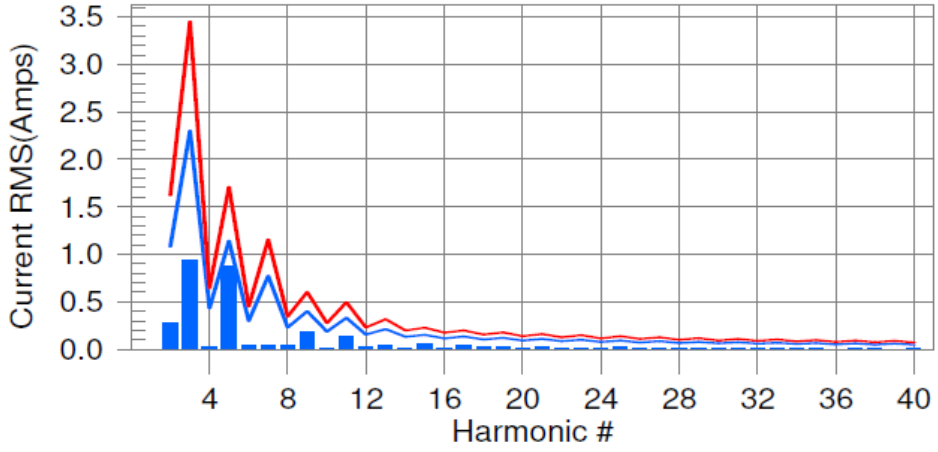
Tested by: jason chou
Test Margin: 100
Start time: 上午 11:12:32
End time: 上午 11:15:24
Data file name: CTSMXL_H-000201.cts_data

Test Result: Pass
Source qualification: Normal

Current & voltage waveforms



Harmonics and Class A limit line
European Limits



Test result: Pass
Worst harmonic was #5 with 54.9% of the limit.

Table 7: Harmonics, CWIDA12PTS (AC 230V)/Low Temp. (Line 1)

California Instruments
San Diego, California

Current Test Result Summary (Phase A-Run time)

EUT: CWIDA12PTS-3247B — Tested by: jason chou
Test category: Class-A per Ed. 4.0 (2014) (European limits) — Test Margin: 100
Test date: 2015/11/3 — Start time: 上午 11:12:32 — End time: 上午 11:15:24
Test duration (min): 2.5 — Data file name: CTSMXL_H-000201.cts_data
Comment: 20℃

Test Result: Pass — Source qualification: Normal
THC(A): 1.332 — I-THD(%): 19.5 — POHC(A): 0.037 — POHC Limit(A): 0.251

Highest parameter values during test:

V_RMS (Volts):	137.979	Frequency(Hz):	50.00
I_Peak (Amps):	10.282	I_RMS (Amps):	7.193
I_Fund (Amps):	7.054	Crest Factor:	1.554
Power (Watts):	809.3	Power Factor:	0.816

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.275	1.080	25.5	0.384	1.620	23.7	Pass
3	0.936	2.300	40.7	0.969	3.450	28.1	Pass
4	0.020	0.430	4.6	0.026	0.645	4.1	Pass
5	0.871	1.140	76.4	0.939	1.710	54.9	Pass
6	0.035	0.300	11.8	0.038	0.450	8.5	Pass
7	0.038	0.770	4.9	0.045	1.155	3.9	Pass
8	0.039	0.230	16.9	0.045	0.345	13.2	Pass
9	0.173	0.400	43.2	0.185	0.600	30.9	Pass
10	0.015	0.184	8.2	0.053	0.276	19.2	Pass
11	0.137	0.330	41.6	0.153	0.495	30.8	Pass
12	0.029	0.153	18.8	0.030	0.230	12.9	Pass
13	0.042	0.210	20.0	0.050	0.315	15.9	Pass
14	0.010	0.131	7.3	0.011	0.197	5.6	Pass
15	0.058	0.150	38.4	0.064	0.225	28.4	Pass
16	0.013	0.115	11.2	0.026	0.173	15.3	Pass
17	0.034	0.132	25.6	0.036	0.198	18.4	Pass
18	0.019	0.102	18.2	0.024	0.153	15.4	Pass
19	0.029	0.118	24.5	0.031	0.178	17.4	Pass
20	0.003	0.092	N/A	0.007	0.138	N/A	Pass
21	0.024	0.107	22.3	0.026	0.161	16.3	Pass
22	0.011	0.084	13.7	0.012	0.125	9.6	Pass
23	0.010	0.098	10.3	0.018	0.147	12.4	Pass
24	0.012	0.077	15.2	0.020	0.115	17.4	Pass
25	0.019	0.090	21.1	0.021	0.135	15.6	Pass
26	0.005	0.071	7.6	0.006	0.107	6.0	Pass
27	0.013	0.083	15.4	0.014	0.125	11.5	Pass
28	0.009	0.066	13.4	0.010	0.099	9.7	Pass
29	0.006	0.078	7.3	0.008	0.116	6.9	Pass
30	0.005	0.061	N/A	0.009	0.092	N/A	Pass
31	0.010	0.073	13.2	0.010	0.109	9.6	Pass
32	0.003	0.058	N/A	0.004	0.086	N/A	Pass
33	0.005	0.068	8.0	0.007	0.102	6.4	Pass
34	0.006	0.054	10.6	0.006	0.081	7.5	Pass
35	0.004	0.064	N/A	0.004	0.096	N/A	Pass
36	0.001	0.051	N/A	0.003	0.077	N/A	Pass
37	0.003	0.061	N/A	0.004	0.091	N/A	Pass
38	0.003	0.048	N/A	0.003	0.073	N/A	Pass
39	0.002	0.058	N/A	0.002	0.087	N/A	Pass
40	0.003	0.046	N/A	0.003	0.069	N/A	Pass

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Figure 68: Harmonics, CWIDA12PTS (AC 230V)/Low Temp. (Line 2)

California Instruments
San Diego, California

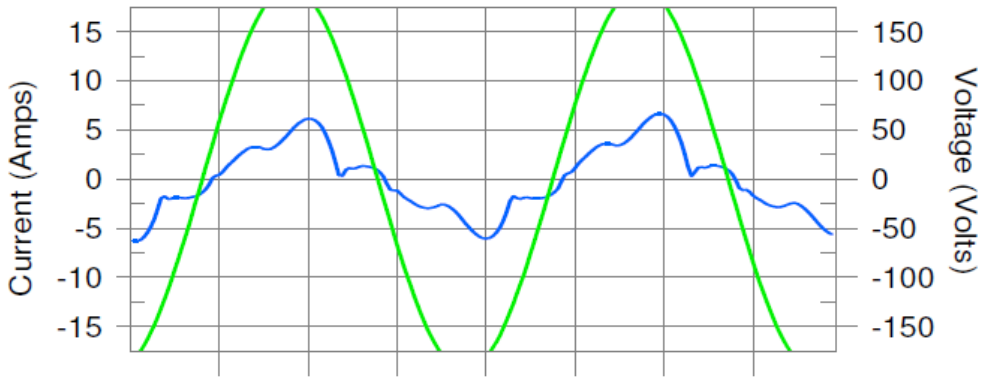
Harmonics – Class-A per Ed. 4.0 (2014)(Phase B-Run time)

EUT: CWIDA12PTS-3247B
Test category: Class-A per Ed. 4.0 (2014) (European limits)
Test date: 2015/11/3
Test duration (min): 2.5
Comment: 20℃

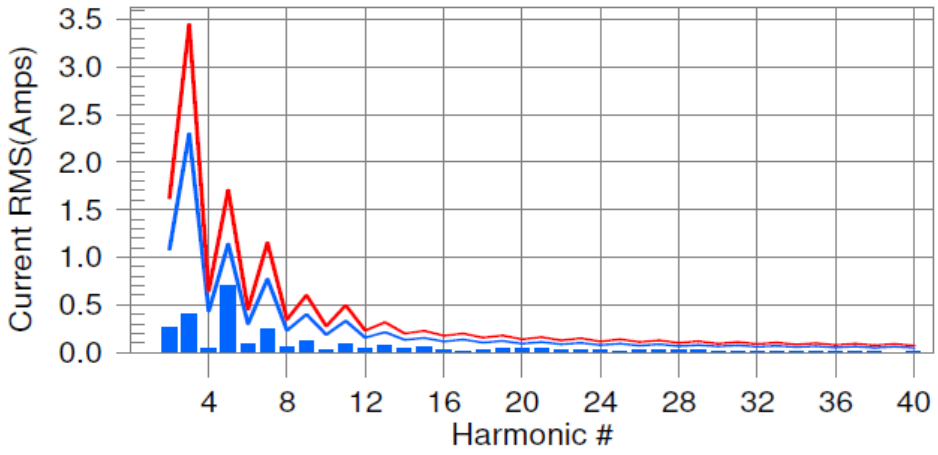
Tested by: jason chou
Test Margin: 100
Start time: 上午 11:12:32
End time: 上午 11:15:24
Data file name: CTSMXL_H-000201.cts_data

Test Result: Pass
Source qualification: Normal

Current & voltage waveforms



Harmonics and Class A limit line
European Limits



Test result: Pass
Worst harmonic was #5 with 44.0% of the limit.

AMETEK Programmable Power CTS MXL V2.9.0

Table 8: Harmonics, CWIDA12PTS (AC 230V)/Low Temp. (Line 2)

California Instruments
San Diego, California

Current Test Result Summary (Phase B-Run time)

EUT: CWIDA12PTS-3247B — Tested by: jason chou
Test category: Class-A per Ed. 4.0 (2014) (European limits) — Test Margin: 100
Test date: 2015/11/3 — Start time: 上午 11:12:32 — End time: 上午 11:15:24
Test duration (min): 2.5 — Data file name: CTSMXL_H-000201.cts_data
Comment: 20℃

Test Result: Pass — Source qualification: Normal
THC(A): 0.918 — I-THD(%): 31.0 — POHC(A): 0.056 — POHC Limit(A): 0.251

Highest parameter values during test:

V_RMS (Volts):	138.107	Frequency(Hz):	50.00
I_Peak (Amps):	6.864	I_RMS (Amps):	3.413
I_Fund (Amps):	3.272	Crest Factor:	2.670
Power (Watts):	448.5	Power Factor:	0.952

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.257	1.080	23.8	0.412	1.620	25.5	Pass
3	0.408	2.300	17.7	0.433	3.450	12.6	Pass
4	0.038	0.430	8.8	0.092	0.645	14.2	Pass
5	0.705	1.140	61.8	0.752	1.710	44.0	Pass
6	0.084	0.300	27.9	0.112	0.450	24.8	Pass
7	0.243	0.770	31.6	0.252	1.155	21.8	Pass
8	0.055	0.230	23.8	0.075	0.345	21.8	Pass
9	0.118	0.400	29.6	0.129	0.600	21.5	Pass
10	0.030	0.184	16.3	0.059	0.276	21.3	Pass
11	0.082	0.330	24.9	0.089	0.495	17.9	Pass
12	0.033	0.153	21.6	0.048	0.230	20.8	Pass
13	0.070	0.210	33.4	0.080	0.315	25.4	Pass
14	0.039	0.131	30.0	0.040	0.197	20.6	Pass
15	0.062	0.150	41.4	0.070	0.225	31.1	Pass
16	0.028	0.115	24.2	0.041	0.173	23.8	Pass
17	0.012	0.132	9.2	0.023	0.198	11.6	Pass
18	0.022	0.102	21.6	0.040	0.153	26.1	Pass
19	0.037	0.118	30.9	0.042	0.178	23.9	Pass
20	0.032	0.092	34.4	0.032	0.138	23.2	Pass
21	0.041	0.107	38.6	0.046	0.161	28.5	Pass
22	0.030	0.084	35.5	0.031	0.125	24.5	Pass
23	0.022	0.098	22.2	0.023	0.147	15.7	Pass
24	0.019	0.077	24.4	0.033	0.115	28.8	Pass
25	0.012	0.090	13.8	0.015	0.135	11.2	Pass
26	0.021	0.071	29.7	0.028	0.107	26.2	Pass
27	0.022	0.083	25.9	0.023	0.125	18.6	Pass
28	0.022	0.066	33.0	0.023	0.099	23.6	Pass
29	0.017	0.078	21.7	0.018	0.116	15.1	Pass
30	0.013	0.061	21.1	0.016	0.092	17.0	Pass
31	0.004	0.073	N/A	0.010	0.109	N/A	Pass
32	0.008	0.058	14.1	0.013	0.086	14.7	Pass
33	0.006	0.068	8.9	0.007	0.102	6.5	Pass
34	0.010	0.054	18.4	0.011	0.081	13.4	Pass
35	0.006	0.064	9.1	0.007	0.096	7.1	Pass
36	0.007	0.051	14.6	0.008	0.077	11.0	Pass
37	0.004	0.061	N/A	0.004	0.091	N/A	Pass
38	0.003	0.048	N/A	0.005	0.073	N/A	Pass
39	0.001	0.058	N/A	0.002	0.087	N/A	Pass
40	0.004	0.046	N/A	0.004	0.069	N/A	Pass

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Figure 69: Harmonics, CWIDA12PTS (AC 230V)/Low Temp. (Line 3)

California Instruments
San Diego, California

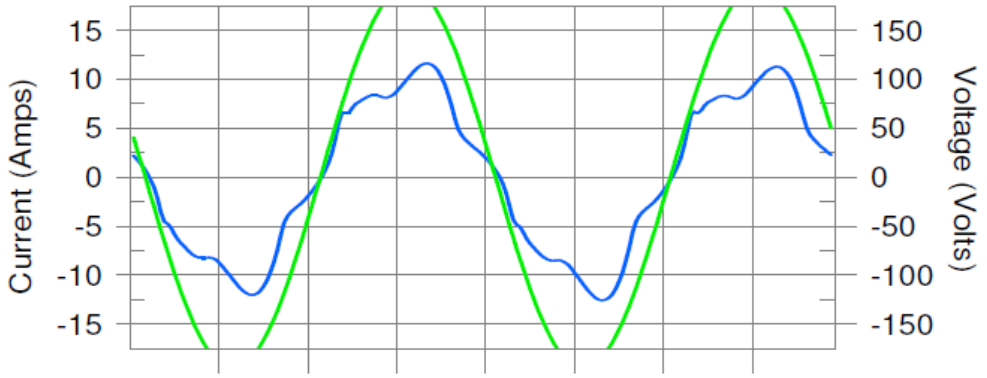
Harmonics – Class-A per Ed. 4.0 (2014)(Phase C-Run time)

EUT: CWIDA12PTS-3247B
Test category: Class-A per Ed. 4.0 (2014) (European limits)
Test date: 2015/11/3
Test duration (min): 2.5
Comment: 20℃

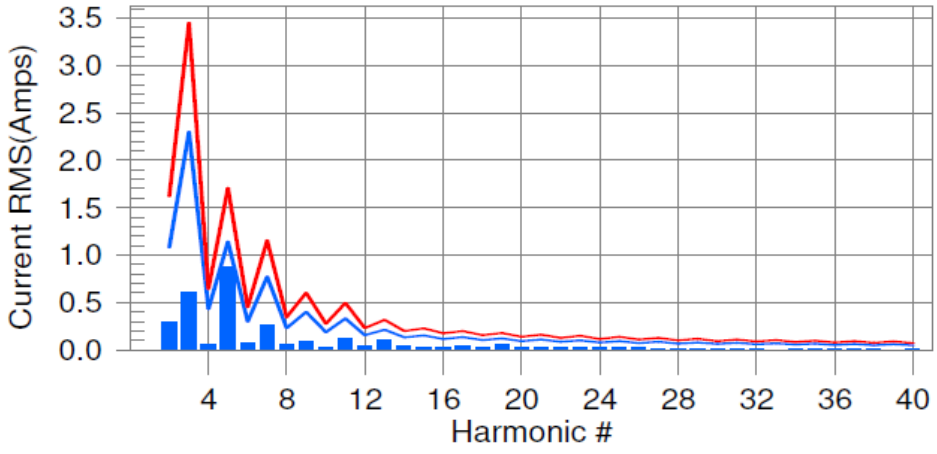
Tested by: jason chou
Test Margin: 100
Start time: 上午 11:12:32
End time: 上午 11:15:24
Data file name: CTSMXL_H-000201.cts_data

Test Result: Pass
Source qualification: Normal

Current & voltage waveforms



Harmonics and Class A limit line
European Limits



Test result: Pass
Worst harmonic was #5 with 54.2% of the limit.

AMETEK Programmable Power CTS MXL V2.9.0

Table 9: Harmonics, CWIDA12PTS (AC 230V)/Low Temp. (Line 3)

California Instruments
San Diego, California

Current Test Result Summary (Phase C-Run time)

EUT: CWIDA12PTS-3247B — Tested by: jason chou
Test category: Class-A per Ed. 4.0 (2014) (European limits) — Test Margin: 100
Test date: 2015/11/3 — Start time: 上午 11:12:32 — End time: 上午 11:15:24
Test duration (min): 2.5 — Data file name: CTSMXL_H-000201.cts_data
Comment: 20℃

Test Result: Pass — Source qualification: Normal
THC(A): 1.157 — I-THD(%): 15.7 — POHC(A): 0.042 — POHC Limit(A): 0.251

Highest parameter values during test:

V_RMS (Volts):	138.069	Frequency(Hz):	50.00
I_Peak (Amps):	12.663	I_RMS (Amps):	7.714
I_Fund (Amps):	7.614	Crest Factor:	1.774
Power (Watts):	1051.6	Power Factor:	0.988

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.293	1.080	27.1	0.338	1.620	20.9	Pass
3	0.604	2.300	26.3	0.620	3.450	18.0	Pass
4	0.049	0.430	11.4	0.087	0.645	13.4	Pass
5	0.873	1.140	76.6	0.926	1.710	54.2	Pass
6	0.074	0.300	24.7	0.091	0.450	20.3	Pass
7	0.259	0.770	33.6	0.267	1.155	23.2	Pass
8	0.054	0.230	23.6	0.069	0.345	19.9	Pass
9	0.086	0.400	21.4	0.089	0.600	14.9	Pass
10	0.017	0.184	9.4	0.022	0.276	8.0	Pass
11	0.124	0.330	37.5	0.136	0.495	27.5	Pass
12	0.042	0.153	27.7	0.044	0.230	19.2	Pass
13	0.099	0.210	47.1	0.108	0.315	34.4	Pass
14	0.038	0.131	28.9	0.042	0.197	21.3	Pass
15	0.030	0.150	20.2	0.033	0.225	14.6	Pass
16	0.019	0.115	16.4	0.021	0.173	12.5	Pass
17	0.040	0.132	30.2	0.044	0.198	22.0	Pass
18	0.030	0.102	29.4	0.032	0.153	20.8	Pass
19	0.054	0.118	45.2	0.058	0.178	32.9	Pass
20	0.031	0.092	33.2	0.033	0.138	24.3	Pass
21	0.020	0.107	18.5	0.023	0.161	14.1	Pass
22	0.020	0.084	23.4	0.021	0.125	16.6	Pass
23	0.022	0.098	23.0	0.023	0.147	15.9	Pass
24	0.026	0.077	33.6	0.027	0.115	23.9	Pass
25	0.024	0.090	26.9	0.026	0.135	19.5	Pass
26	0.022	0.071	31.1	0.024	0.107	22.8	Pass
27	0.009	0.083	11.0	0.010	0.125	7.7	Pass
28	0.013	0.066	19.9	0.015	0.099	14.7	Pass
29	0.012	0.078	15.1	0.014	0.116	11.8	Pass
30	0.016	0.061	25.7	0.017	0.092	18.6	Pass
31	0.008	0.073	11.1	0.009	0.109	8.0	Pass
32	0.011	0.058	18.7	0.012	0.086	13.7	Pass
33	0.002	0.068	N/A	0.003	0.102	N/A	Pass
34	0.006	0.054	10.4	0.006	0.081	7.8	Pass
35	0.004	0.064	N/A	0.005	0.096	N/A	Pass
36	0.008	0.051	15.9	0.009	0.077	11.7	Pass
37	0.004	0.061	N/A	0.004	0.091	N/A	Pass
38	0.005	0.048	10.9	0.006	0.073	7.8	Pass
39	0.001	0.058	N/A	0.001	0.087	N/A	Pass
40	0.003	0.046	N/A	0.003	0.069	N/A	Pass

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Figure 70: Harmonics, CWIDA12PTS (AC 400V)/Low Temp. (Line 1)

California Instruments
San Diego, California

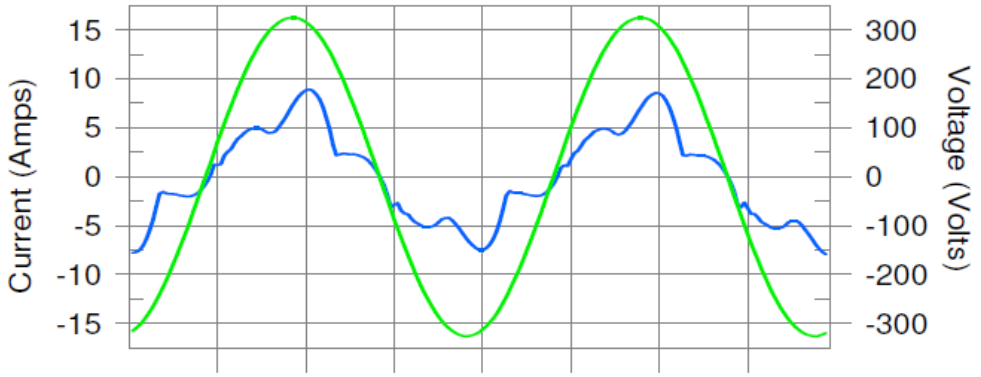
Harmonics – Class-A per Ed. 4.0 (2014)(Phase A-Run time)

EUT: CWIDA12PTS-3407B
Test category: Class-A per Ed. 4.0 (2014) (European limits)
Test date: 2015/11/3
Test duration (min): 2.5
Comment: 20℃

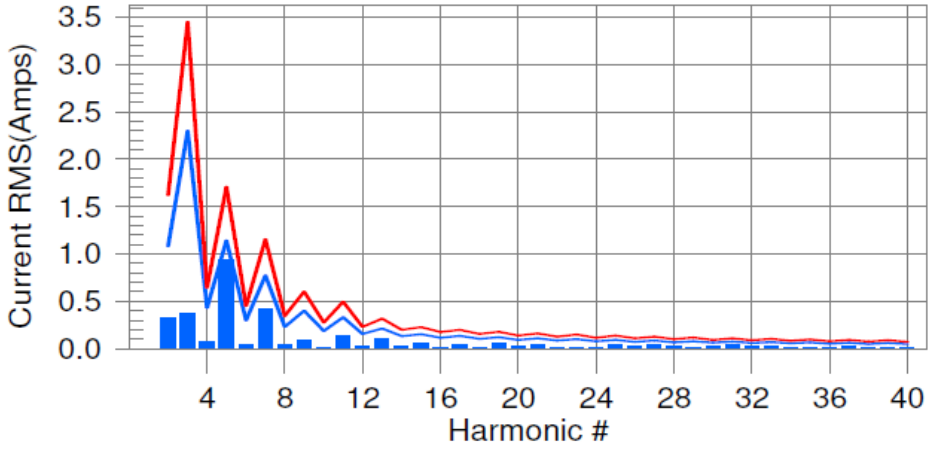
Tested by: jason chou
Test Margin: 100
Start time: 下午 12:07:19
End time: 下午 12:10:12
Data file name: CTSMXL_H-000203.cts_data

Test Result: Pass
Source qualification: Normal

Current & voltage waveforms



Harmonics and Class A limit line
European Limits



Test result: Pass
Worst harmonic was #5 with 56.2% of the limit.

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Table 10: Harmonics, CWIDA12PTS (AC 400V)/Low Temp. (Line 1)

California Instruments
San Diego, California

Current Test Result Summary (Phase A-Run time)

EUT: CWIDA12PTS-3407B — Tested by: jason chou
Test category: Class-A per Ed. 4.0 (2014) (European limits) — Test Margin: 100
Test date: 2015/11/3 — Start time: 下午 12:07:19 — End time: 下午 12:10:12
Test duration (min): 2.5 — Data file name: CTSMXL_H-000203.cts_data
Comment: 20℃

Test Result: Pass — Source qualification: Normal
THC(A): 1.173 — I-THD(%): 26.6 — POHC(A): 0.087 — POHC Limit(A): 0.251

Highest parameter values during test:

V_RMS (Volts):	230.055	Frequency(Hz):	50.00
I_Peak (Amps):	8.988	I_RMS (Amps):	4.638
I_Fund (Amps):	4.480	Crest Factor:	1.942
Power (Watts):	1030.5	Power Factor:	0.966

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.324	1.080	30.0	0.332	1.620	20.5	Pass
3	0.372	2.300	16.2	0.383	3.450	11.1	Pass
4	0.079	0.430	18.4	0.081	0.645	12.6	Pass
5	0.945	1.140	82.9	0.961	1.710	56.2	Pass
6	0.037	0.300	12.2	0.038	0.450	8.3	Pass
7	0.419	0.770	54.4	0.419	1.155	36.3	Pass
8	0.038	0.230	16.7	0.039	0.345	11.4	Pass
9	0.089	0.400	22.2	0.093	0.600	15.5	Pass
10	0.011	0.184	5.9	0.011	0.276	4.0	Pass
11	0.129	0.330	39.1	0.134	0.495	27.1	Pass
12	0.021	0.153	13.5	0.022	0.230	9.4	Pass
13	0.109	0.210	51.9	0.110	0.315	35.0	Pass
14	0.024	0.131	18.7	0.025	0.197	12.8	Pass
15	0.056	0.150	37.4	0.057	0.225	25.4	Pass
16	0.010	0.115	8.9	0.010	0.173	6.0	Pass
17	0.044	0.132	33.5	0.045	0.198	22.9	Pass
18	0.014	0.102	13.7	0.014	0.153	9.4	Pass
19	0.057	0.118	47.8	0.059	0.178	33.1	Pass
20	0.021	0.092	23.1	0.022	0.138	15.7	Pass
21	0.043	0.107	39.7	0.044	0.161	27.2	Pass
22	0.013	0.084	15.4	0.013	0.125	10.5	Pass
23	0.013	0.098	13.6	0.015	0.147	9.9	Pass
24	0.013	0.077	17.6	0.015	0.115	12.8	Pass
25	0.041	0.090	45.2	0.044	0.135	32.3	Pass
26	0.023	0.071	32.6	0.024	0.107	22.4	Pass
27	0.036	0.083	43.4	0.037	0.125	29.7	Pass
28	0.019	0.066	28.3	0.019	0.099	19.2	Pass
29	0.012	0.078	15.4	0.013	0.116	11.4	Pass
30	0.019	0.061	31.5	0.020	0.092	21.7	Pass
31	0.037	0.073	50.3	0.038	0.109	35.0	Pass
32	0.024	0.058	41.7	0.025	0.086	29.2	Pass
33	0.023	0.068	33.8	0.024	0.102	23.7	Pass
34	0.014	0.054	25.6	0.014	0.081	17.5	Pass
35	0.009	0.064	14.6	0.010	0.096	10.0	Pass
36	0.011	0.051	22.0	0.012	0.077	15.1	Pass
37	0.019	0.061	31.8	0.020	0.091	21.8	Pass
38	0.011	0.048	22.1	0.011	0.073	15.6	Pass
39	0.009	0.058	16.2	0.010	0.087	11.1	Pass
40	0.005	0.046	N/A	0.005	0.069	N/A	Pass

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Figure 71: Harmonics, CWIDA12PTS (AC 400V)/Low Temp. (Line 2)

California Instruments
San Diego, California

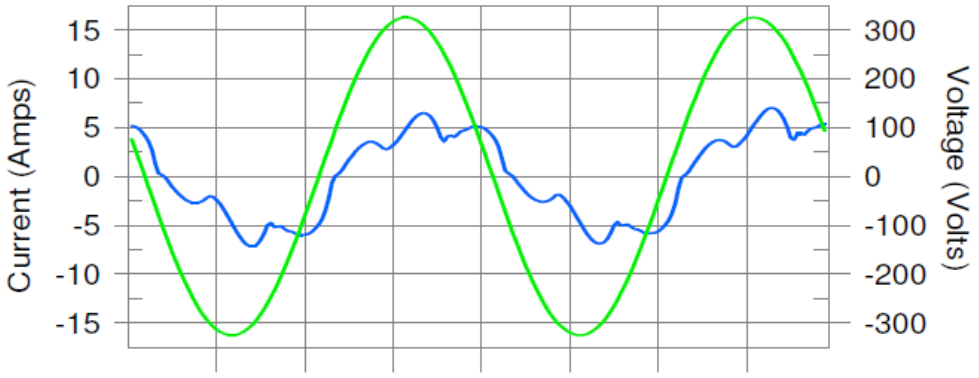
Harmonics – Class-A per Ed. 4.0 (2014)(Phase B-Run time)

EUT: CWIDA12PTS-3407B
Test category: Class-A per Ed. 4.0 (2014) (European limits)
Test date: 2015/11/3
Test duration (min): 2.5
Comment: 20℃

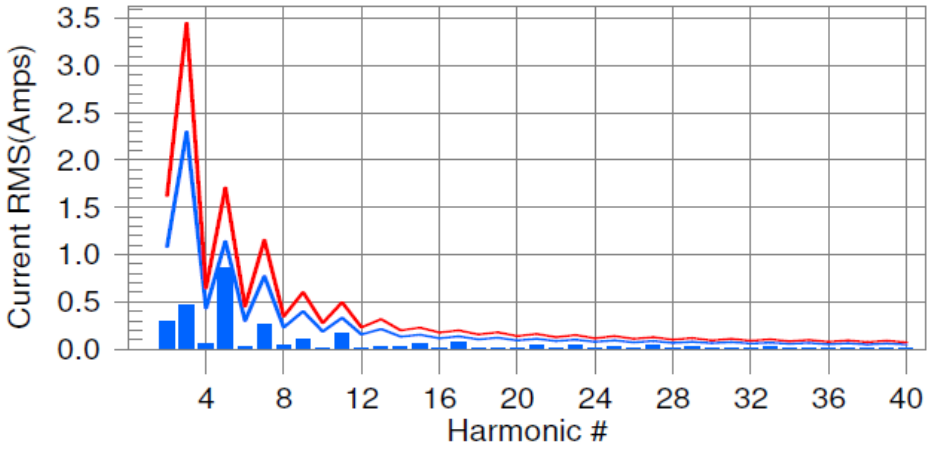
Tested by: jason chou
Test Margin: 100
Start time: 下午 12:07:19
End time: 下午 12:10:12
Data file name: CTSMXL_H-000203.cts_data

Test Result: Pass
Source qualification: Normal

Current & voltage waveforms



Harmonics and Class A limit line
European Limits



Test result: Pass
Worst harmonic was #5 with 51.8% of the limit.

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Table 11: Harmonics, CWIDA12PTS (AC 400V)/Low Temp. (Line 2)

California Instruments
San Diego, California

Current Test Result Summary (Phase B-Run time)

EUT: CWIDA12PTS-3407B
Test category: Class-A per Ed. 4.0 (2014) (European limits)
Test date: 2015/11/3
Test duration (min): 2.5
Comment: 20℃

Tested by: jason chou
Test Margin: 100
Start time: 下午 12:07:19
End time: 下午 12:10:12
Data file name: CTSMXL_H-000203.cts_data

Test Result: Pass
Source qualification: Normal
THC(A): 1.082
I-THD(%): 26.2
POHC(A): 0.089
POHC Limit(A): 0.251

Highest parameter values during test:

V_RMS (Volts):	230.131	Frequency(Hz):	50.00
I_Peak (Amps):	7.172	I_RMS (Amps):	4.348
I_Fund (Amps):	4.203	Crest Factor:	1.653
Power (Watts):	846.8	Power Factor:	0.846

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.292	1.080	27.0	0.301	1.620	18.6	Pass
3	0.456	2.300	19.8	0.471	3.450	13.6	Pass
4	0.053	0.430	12.4	0.055	0.645	8.5	Pass
5	0.864	1.140	75.8	0.886	1.710	51.8	Pass
6	0.026	0.300	8.7	0.027	0.450	6.0	Pass
7	0.264	0.770	34.3	0.265	1.155	22.9	Pass
8	0.034	0.230	14.8	0.035	0.345	10.0	Pass
9	0.101	0.400	25.1	0.106	0.600	17.6	Pass
10	0.008	0.184	4.2	0.008	0.276	3.0	Pass
11	0.158	0.330	47.9	0.163	0.495	33.0	Pass
12	0.013	0.153	8.5	0.014	0.230	6.3	Pass
13	0.021	0.210	10.1	0.022	0.315	6.9	Pass
14	0.017	0.131	13.0	0.017	0.197	8.8	Pass
15	0.064	0.150	42.8	0.066	0.225	29.6	Pass
16	0.004	0.115	N/A	0.004	0.173	N/A	Pass
17	0.076	0.132	57.9	0.078	0.198	39.6	Pass
18	0.011	0.102	10.4	0.012	0.153	7.7	Pass
19	0.013	0.118	10.8	0.013	0.178	7.5	Pass
20	0.011	0.092	11.7	0.011	0.138	7.9	Pass
21	0.047	0.107	44.3	0.049	0.161	30.7	Pass
22	0.006	0.084	7.6	0.007	0.125	5.5	Pass
23	0.043	0.098	44.4	0.045	0.147	30.5	Pass
24	0.011	0.077	15.0	0.014	0.115	12.0	Pass
25	0.022	0.090	24.5	0.023	0.135	16.7	Pass
26	0.008	0.071	11.4	0.010	0.107	9.0	Pass
27	0.037	0.083	44.9	0.039	0.125	31.1	Pass
28	0.009	0.066	13.8	0.011	0.099	10.9	Pass
29	0.031	0.078	39.7	0.032	0.116	27.4	Pass
30	0.013	0.061	21.4	0.015	0.092	15.8	Pass
31	0.016	0.073	22.0	0.016	0.109	15.1	Pass
32	0.008	0.058	14.2	0.009	0.086	10.3	Pass
33	0.020	0.068	29.1	0.021	0.102	20.5	Pass
34	0.004	0.054	N/A	0.005	0.081	N/A	Pass
35	0.016	0.064	25.2	0.016	0.096	16.9	Pass
36	0.007	0.051	13.2	0.007	0.077	9.6	Pass
37	0.006	0.061	10.0	0.006	0.091	6.9	Pass
38	0.004	0.048	N/A	0.004	0.073	N/A	Pass
39	0.008	0.058	14.4	0.009	0.087	10.2	Pass
40	0.003	0.046	N/A	0.003	0.069	N/A	Pass

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Figure 72: Harmonics, CWIDA12PTS (AC 400V)/Low Temp. (Line 3)

California Instruments
San Diego, California

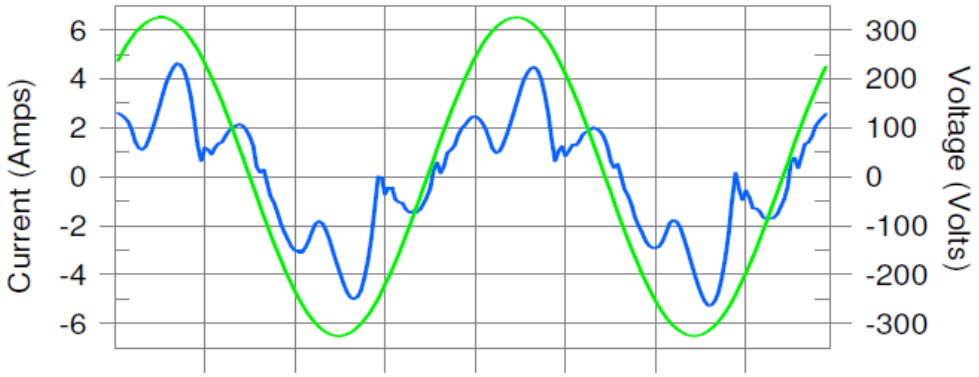
Harmonics – Class-A per Ed. 4.0 (2014)(Phase C-Run time)

EUT: CWIDA12PTS-3407B
Test category: Class-A per Ed. 4.0 (2014) (European limits)
Test date: 2015/11/3
Test duration (min): 2.5
Comment: 20℃

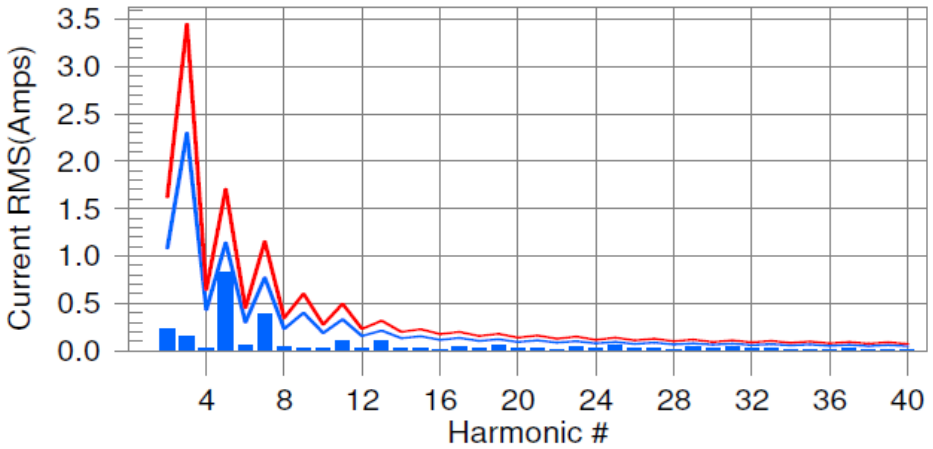
Tested by: jason chou
Test Margin: 100
Start time: 下午 12:07:19
End time: 下午 12:10:12
Data file name: CTSMXL_H-000203.cts_data

Test Result: Pass
Source qualification: Normal

Current & voltage waveforms



Harmonics and Class A limit line
European Limits



Test result: Pass
Worst harmonic was #5 with 49.4% of the limit.

AMETEK Programmable Power CTS MXL V2.9.0

Table 12: Harmonics, CWIDA12PTS (AC 400V)/Low Temp. (Line 3)

California Instruments
San Diego, California

Current Test Result Summary (Phase C-Run time)

EUT: CWIDA12PTS-3407B
Test category: Class-A per Ed. 4.0 (2014) (European limits)
Test date: 2015/11/3 Start time: 下午 12:07:19
Test duration (min): 2.5 Data file name: CTSMXL_H-000203.cts_data
Comment: 20℃

Tested by: jason chou
Test Margin: 100
End time: 下午 12:10:12

Test Result: Pass Source qualification: Normal
THC(A): 0.977 I-THD(%): 46.7 POHC(A): 0.096 POHC Limit(A): 0.251

Highest parameter values during test:

V_RMS (Volts):	230.283	Frequency(Hz):	50.00
I_Peak (Amps):	5.323	I_RMS (Amps):	2.400
I_Fund (Amps):	2.179	Crest Factor:	2.246
Power (Watts):	499.3	Power Factor:	0.903

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.226	1.080	20.9	0.233	1.620	14.4	Pass
3	0.145	2.300	6.3	0.156	3.450	4.5	Pass
4	0.026	0.430	6.0	0.027	0.645	4.2	Pass
5	0.823	1.140	72.2	0.845	1.710	49.4	Pass
6	0.059	0.300	19.6	0.060	0.450	13.2	Pass
7	0.394	0.770	51.2	0.395	1.155	34.2	Pass
8	0.036	0.230	15.5	0.036	0.345	10.5	Pass
9	0.024	0.400	6.0	0.024	0.600	4.1	Pass
10	0.018	0.184	9.5	0.018	0.276	6.5	Pass
11	0.101	0.330	30.7	0.108	0.495	21.8	Pass
12	0.029	0.153	18.8	0.029	0.230	12.7	Pass
13	0.106	0.210	50.4	0.106	0.315	33.7	Pass
14	0.023	0.131	17.8	0.024	0.197	12.0	Pass
15	0.020	0.150	13.2	0.021	0.225	9.3	Pass
16	0.010	0.115	8.6	0.010	0.173	5.9	Pass
17	0.048	0.132	36.2	0.051	0.198	25.7	Pass
18	0.021	0.102	20.4	0.021	0.153	14.0	Pass
19	0.058	0.118	49.4	0.059	0.178	33.1	Pass
20	0.020	0.092	22.0	0.020	0.138	14.8	Pass
21	0.020	0.107	18.3	0.021	0.161	13.3	Pass
22	0.008	0.084	10.0	0.009	0.125	7.1	Pass
23	0.034	0.098	35.2	0.038	0.147	25.6	Pass
24	0.021	0.077	27.9	0.023	0.115	19.6	Pass
25	0.050	0.090	55.0	0.051	0.135	37.9	Pass
26	0.025	0.071	35.5	0.026	0.107	24.3	Pass
27	0.023	0.083	27.7	0.024	0.125	19.0	Pass
28	0.011	0.066	16.0	0.011	0.099	11.4	Pass
29	0.034	0.078	44.1	0.036	0.116	31.1	Pass
30	0.028	0.061	45.6	0.030	0.092	32.9	Pass
31	0.048	0.073	65.5	0.049	0.109	45.1	Pass
32	0.028	0.058	49.4	0.029	0.086	33.4	Pass
33	0.020	0.068	28.7	0.020	0.102	19.7	Pass
34	0.011	0.054	20.7	0.011	0.081	14.1	Pass
35	0.015	0.064	23.3	0.015	0.096	15.8	Pass
36	0.014	0.051	26.8	0.014	0.077	18.8	Pass
37	0.021	0.061	33.8	0.021	0.091	23.4	Pass
38	0.013	0.048	27.4	0.014	0.073	18.6	Pass
39	0.010	0.058	17.4	0.010	0.087	11.8	Pass
40	0.006	0.046	12.1	0.006	0.069	8.2	Pass

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Figure 73: Flicker, CWIDA04PTS (AC 230V) (Line 1)

Teseq Profline
San Diego, California

Flicker Test Summary per EN/IEC61000-3-3 (Phase A-Run time)

EUT: CWIDA4PTS-3247B
Test category: All parameters (European limits)
Test date: 2015/11/3
Test duration (min): 120
Comment: 25℃

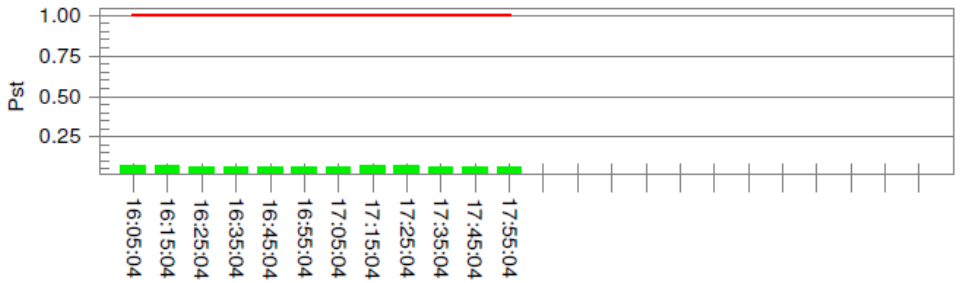
Tested by: Test Operator
Test Margin: 100
Start time: 下午 03:54:42
End time: 下午 05:55:05
Data file name: F-000093.cts_data

Test Result: Pass

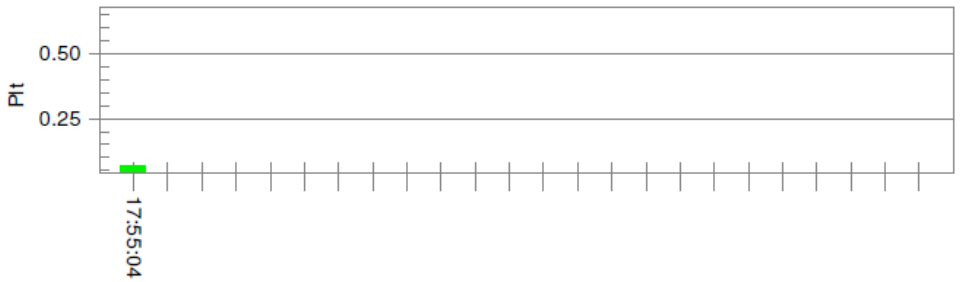
Status: Test Completed

Pst_i and limit line

European Limits



Plt and limit line



Parameter values recorded during the test:

Vrms at the end of test (Volt):	138.01			
Highest dt (%):	0.00	Test limit (%):	3.30	Pass
Time(mS) > dt:	0.0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.00	Test limit (%):	3.30	Pass
Highest dmax (%):	0.00	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.073	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.067	Test limit:	0.650	Pass

Teseq Profline WIN2100 - V3.2.0.35

Figure 74: Flicker, CWIDA04PTS (AC 230V) (Line 2)

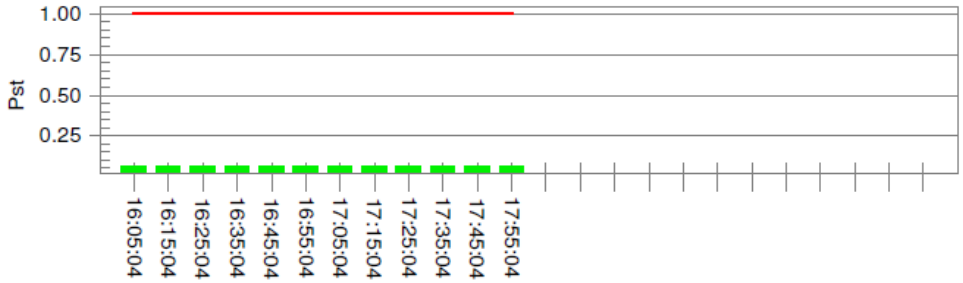
Teseq Profline
San Diego, California

Flicker Test Summary per EN/IEC61000-3-3 (Phase B-Run time)

EUT: CWIDA4PTS-3247B — **Tested by: Test Operator**
Test category: All parameters (European limits) — **Test Margin: 100**
Test date: 2015/11/3 — **Start time: 下午 03:54:42** — **End time: 下午 05:55:05**
Test duration (min): 120 — **Data file name: F-000093.cts_data**
Comment: 25℃

Test Result: Pass — **Status: Test Completed**

Pst_i and limit line — **European Limits**



Plt and limit line

Parameter values recorded during the test:

Vrms at the end of test (Volt):	138.08			
Highest dt (%):	0.00	Test limit (%):	3.30	Pass
Time(mS) > dt:	0.0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.00	Test limit (%):	3.30	Pass
Highest dmax (%):	0.00	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.064	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.064	Test limit:	0.650	Pass

Teseq Profline WIN2100 - V3.2.0.35

Figure 75: Flicker, CWIDA04PTS (AC 230V) (Line 3)

Teseq Profline
San Diego, California

Flicker Test Summary per EN/IEC61000-3-3 (Phase C-Run time)

EUT: CWIDA4PTS-3247B
Test category: All parameters (European limits)
Test date: 2015/11/3
Test duration (min): 120
Comment: 25℃

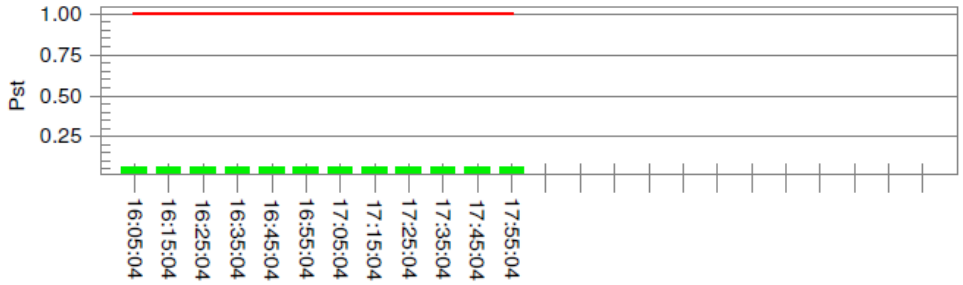
Tested by: Test Operator
Test Margin: 100
Start time: 下午 03:54:42
End time: 下午 05:55:05
Data file name: F-000093.cts_data

Test Result: Pass

Status: Test Completed

Pst_i and limit line

European Limits



Plt and limit line

Parameter values recorded during the test:

Vrms at the end of test (Volt):	138.16			
Highest dt (%):	0.00	Test limit (%):	3.30	Pass
Time(mS) > dt:	0.0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.00	Test limit (%):	3.30	Pass
Highest dmax (%):	0.00	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.064	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.064	Test limit:	0.650	Pass

Teseq Profline WIN2100 - V3.2.0.35

Figure 76: Flicker, CWIDA04PTS (AC 400V) (Line 1)

Teseq Profline
San Diego, California

Flicker Test Summary per EN/IEC61000-3-3 (Phase A-Run time)

EUT: CWIDA4PTS-3407B
Test category: All parameters (European limits)
Test date: 2015/10/27
Test duration (min): 120
Comment: 25℃

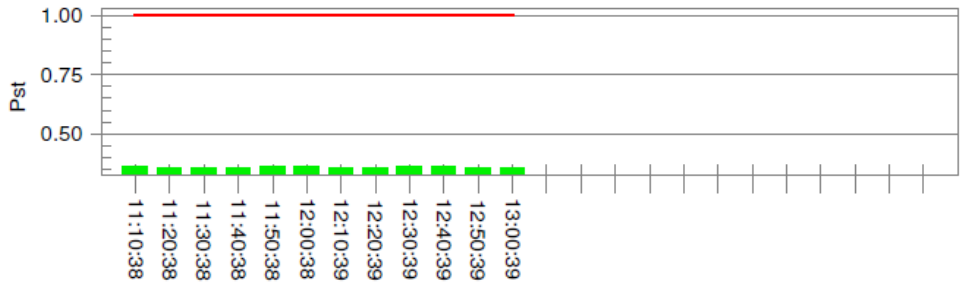
Tested by: Rex Wang
Test Margin: 100
Start time: 上午 11:00:17
End time: 下午 01:00:40
Data file name: F-000087.cts_data

Test Result: Pass

Status: Test Completed

Pst_i and limit line

European Limits



Plt and limit line

Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.04			
Highest dt (%):	0.31	Test limit (%):	3.30	Pass
Time(mS) > dt:	0.0	Test limit (mS):	500.0	Pass
Highest dc (%):	-0.26	Test limit (%):	3.30	Pass
Highest dmax (%):	-0.28	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.364	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.360	Test limit:	0.650	Pass

Teseq Profline WIN2100 - V3.2.0.35

Figure 77: Flicker, CWIDA04PTS (AC 400V) (Line 2)

Teseq Profline
San Diego, California

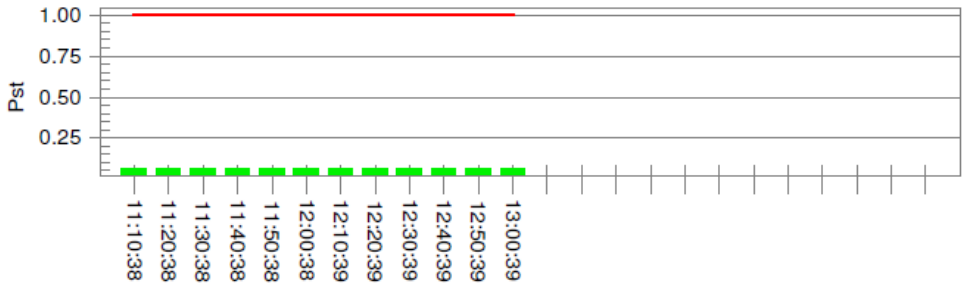
Flicker Test Summary per EN/IEC61000-3-3 (Phase B-Run time)

EUT: CWIDA4PTS-3407B
Test category: All parameters (European limits)
Test date: 2015/10/27
Test duration (min): 120
Comment: 25℃

Tested by: Rex Wang
Test Margin: 100
Start time: 上午 11:00:17
End time: 下午 01:00:40
Data file name: F-000087.cts_data

Test Result: Pass
Status: Test Completed

Pst_i and limit line
European Limits



Plt and limit line

Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.97			
Highest dt (%):	0.00	Test limit (%):	3.30	Pass
Time(mS) > dt:	0.0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.00	Test limit (%):	3.30	Pass
Highest dmax (%):	0.00	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.064	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.064	Test limit:	0.650	Pass

Teseq Profline WIN2100 - V3.2.0.35

Figure 78: Flicker, CWIDA04PTS (AC 400V) (Line 3)

Teseq Profline
San Diego, California

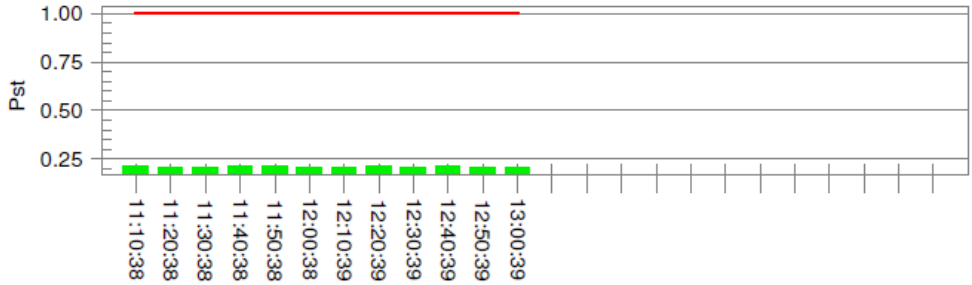
Flicker Test Summary per EN/IEC61000-3-3 (Phase C-Run time)

EUT: CWIDA4PTS-3407B
Test category: All parameters (European limits)
Test date: 2015/10/27
Test duration (min): 120
Comment: 25℃

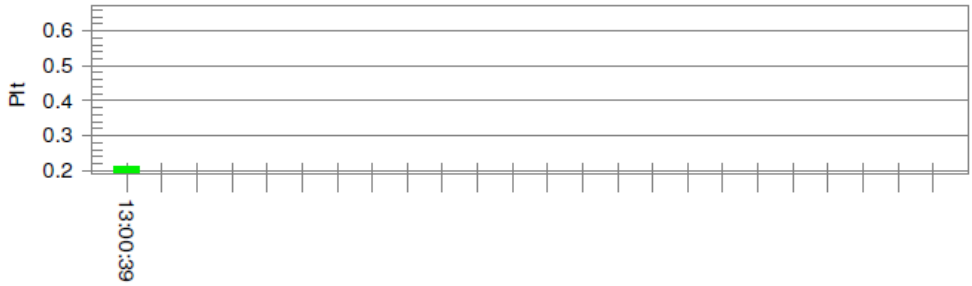
Tested by: Rex Wang
Test Margin: 100
Start time: 上午 11:00:17
End time: 下午 01:00:40
Data file name: F-000087.cts_data

Test Result: Pass
Status: Test Completed

Pst_i and limit line
European Limits



Plt and limit line



Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.57			
Highest dt (%):	0.20	Test limit (%):	3.30	Pass
Time(mS) > dt:	0.0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.00	Test limit (%):	3.30	Pass
Highest dmax (%):	0.16	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.214	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.210	Test limit:	0.650	Pass

Teseq Profline WIN2100 - V3.2.0.35

Figure 79: Flicker, CWIDA12PTS (AC 230V) (Line 1)

California Instruments
San Diego, California

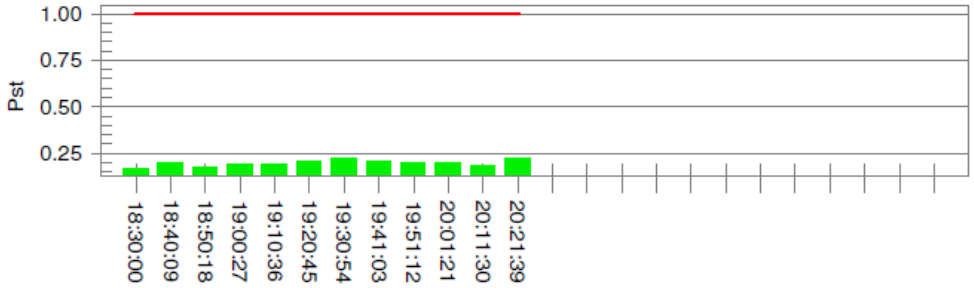
Flicker Test Summary per EN/IEC61000-3-3 Ed. 3.0 (2013) (Phase A-Run time)

EUT: CWIDA12PTS-3247B
Test category: All parameters (European limits)
Test date: 2015/10/30
Test duration (min): 120
Comment: 25℃

Tested by: Rex Wang
Test Margin: 100
Start time: 下午 06:19:28
End time: 下午 08:21:40
Data file name: CTSMXL_F-000158.cts_data

Test Result: Pass
Status: Test Completed

Pst_i and limit line
European Limits



Plt and limit line

Parameter values recorded during the test:

Vrms at the end of test (Volt):	136.12			
Highest dt (%):	-0.91	Test limit (%):	N/A	N/A
T-max (mS):	0.0	Test limit (mS):	500.0	Pass
Highest dc (%):	-0.29	Test limit (%):	3.30	Pass
Highest dmax (%):	-0.87	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.224	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.198	Test limit:	0.650	Pass

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Figure 80: Flicker, CWIDA12PTS (AC 230V) (Line 2)

California Instruments
San Diego, California

Flicker Test Summary per EN/IEC61000-3-3 (Phase B-Run time)Ed. 3.0 (2013)

EUT: CWIDA12PTS-3247B
Test category: All parameters (European limits)
Test date: 2015/10/30
Test duration (min): 120
Comment: 25℃

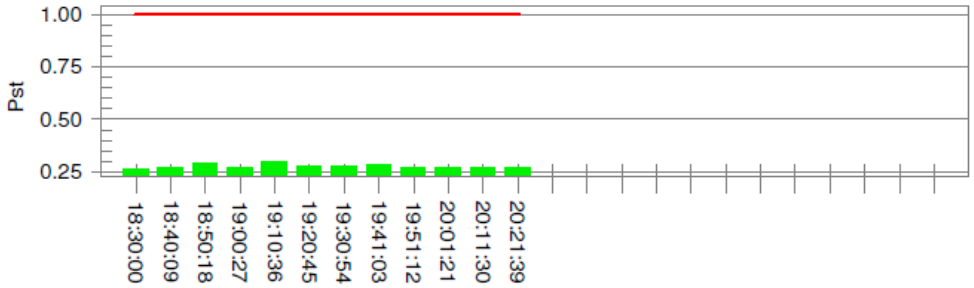
Tested by: Rex Wang
Test Margin: 100
Start time: 下午 06:19:28
End time: 下午 08:21:40
Data file name: CTSMXL_F-000158.cts_data

Test Result: Pass

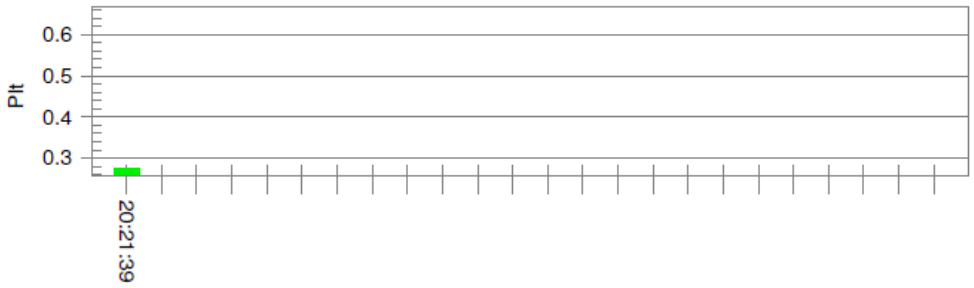
Status: Test Completed

Pst_i and limit line

European Limits



Plt and limit line



Parameter values recorded during the test:

Vrms at the end of test (Volt):	137.27			
Highest dt (%):	-0.37	Test limit (%):	N/A	N/A
Tmax(mS) > dt:	0.0	Test limit (mS):	500.0	Pass
Highest dc (%):	-0.37	Test limit (%):	3.30	Pass
Highest dmax (%):	-0.43	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.296	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.276	Test limit:	0.650	Pass

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Figure 81: Flicker, CWIDA12PTS (AC 230V) (Line 3)

California Instruments
San Diego, California

Flicker Test Summary per EN/IEC61000-3-3 (Phase C-Run time)Ed. 3.0 (2013)

EUT: CWIDA12PTS-3247B
Test category: All parameters (European limits)
Test date: 2015/10/30
Test duration (min): 120
Comment: 25℃

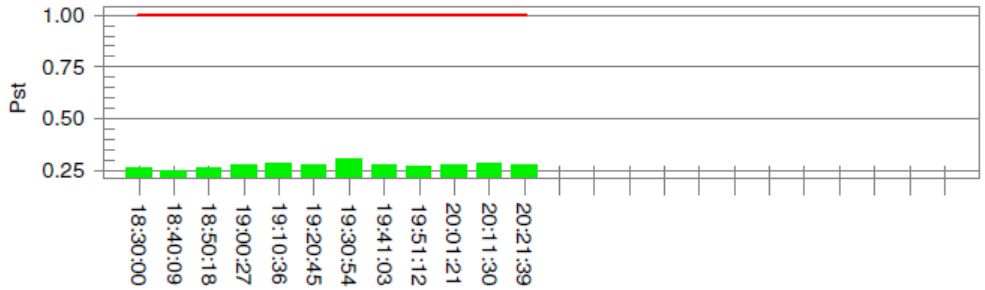
Tested by: Rex Wang
Test Margin: 100
Start time: 下午 06:19:28
End time: 下午 08:21:40
Data file name: CTSMXL_F-000158.cts_data

Test Result: Pass

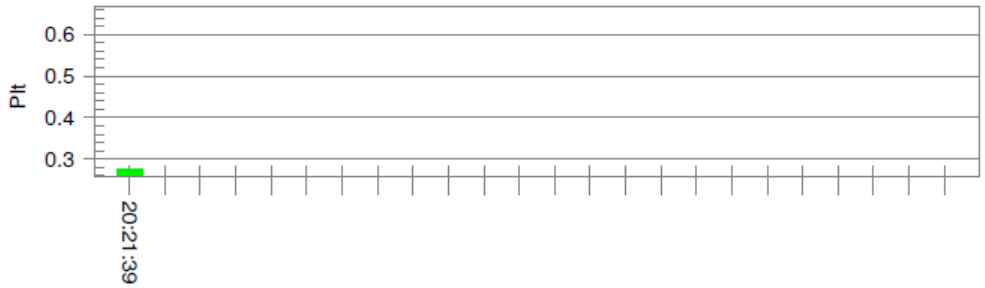
Status: Test Completed

Pst_i and limit line

European Limits



Plt and limit line



Parameter values recorded during the test:

Vrms at the end of test (Volt):	136.35			
Highest dt (%):	-1.00	Test limit (%):	N/A	N/A
Tmax(mS) > dt:	0.0	Test limit (mS):	500.0	Pass
Highest dc (%):	-0.35	Test limit (%):	3.30	Pass
Highest dmax (%):	-0.84	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.306	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.276	Test limit:	0.650	Pass

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Figure 82: Flicker, CWIDA12PTS (AC 400V) (Line 1)

California Instruments
San Diego, California

Flicker Test Summary per EN/IEC61000-3-3 Ed. 3.0 (2013) (Phase A-Run time)

EUT: CWIDA12PTS-3407B
Test category: All parameters (European limits)
Test date: 2015/10/30
Test duration (min): 120
Comment: 25℃

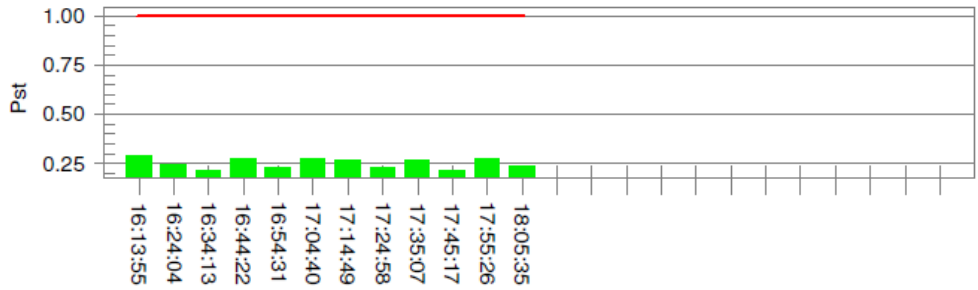
Tested by: Rex Wang
Test Margin: 100
Start time: 下午 04:03:23
End time: 下午 06:05:36
Data file name: CTSMXL_F-000157.cts_data

Test Result: Pass

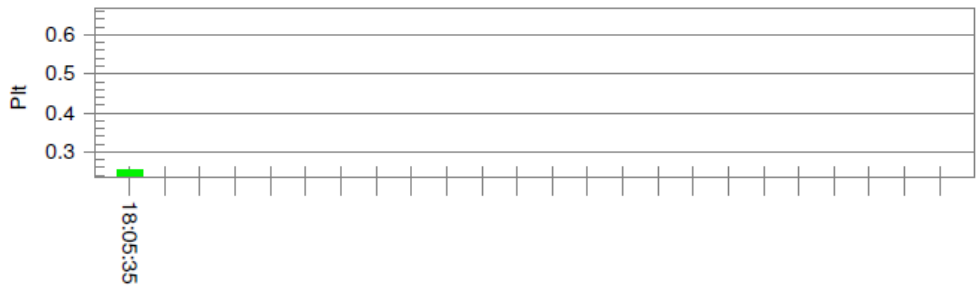
Status: Test Completed

Pst_i and limit line

European Limits



Plt and limit line



Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.41			
Highest dt (%):	0.34	Test limit (%):	N/A	N/A
T-max (mS):	0.0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.20	Test limit (%):	3.30	Pass
Highest dmax (%):	-0.31	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.287	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.255	Test limit:	0.650	Pass

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Figure 83: Flicker, CWIDA12PTS (AC 400V) (Line 2)

California Instruments
San Diego, California

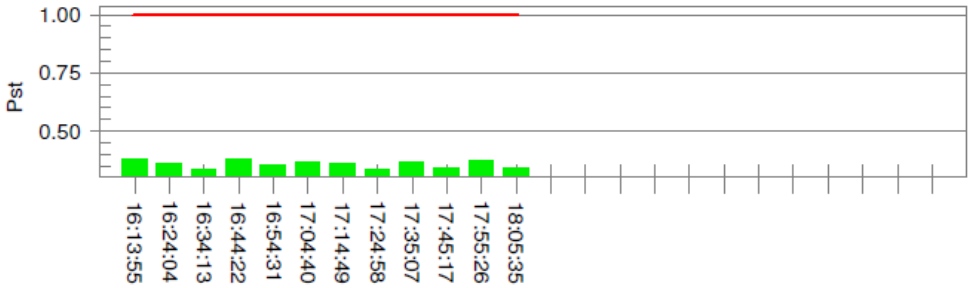
Flicker Test Summary per EN/IEC61000-3-3 (Phase B-Run time)Ed. 3.0 (2013)

EUT: CWIDA12PTS-3407B
Test category: All parameters (European limits)
Test date: 2015/10/30
Test duration (min): 120
Comment: 25℃

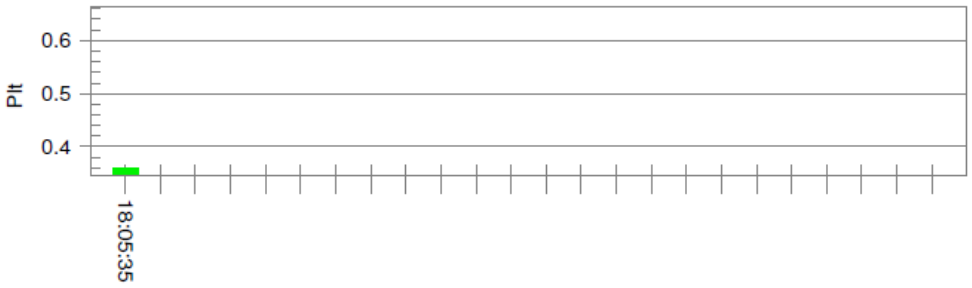
Tested by: Rex Wang
Test Margin: 100
Start time: 下午 04:03:23
End time: 下午 06:05:36
Data file name: CTSMXL_F-000157.cts_data

Test Result: Pass
Status: Test Completed

Pst_i and limit line
European Limits



Plt and limit line



Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.33			
Highest dt (%):	-0.40	Test limit (%):	N/A	N/A
Tmax(mS) > dt:	0.0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.00	Test limit (%):	3.30	Pass
Highest dmax (%):	-0.39	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.382	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.360	Test limit:	0.650	Pass

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Figure 84: Flicker, CWIDA12PTS (AC 400V) (Line 3)

California Instruments
San Diego, California

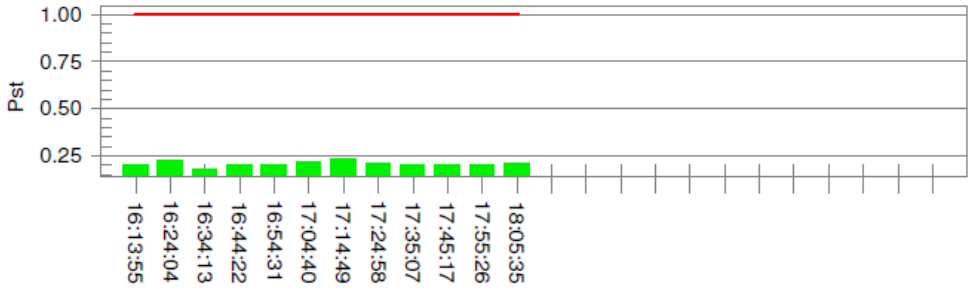
Flicker Test Summary per EN/IEC61000-3-3 (Phase C-Run time)Ed. 3.0 (2013)

EUT: CWIDA12PTS-3407B
Test category: All parameters (European limits)
Test date: 2015/10/30
Test duration (min): 120
Comment: 25℃

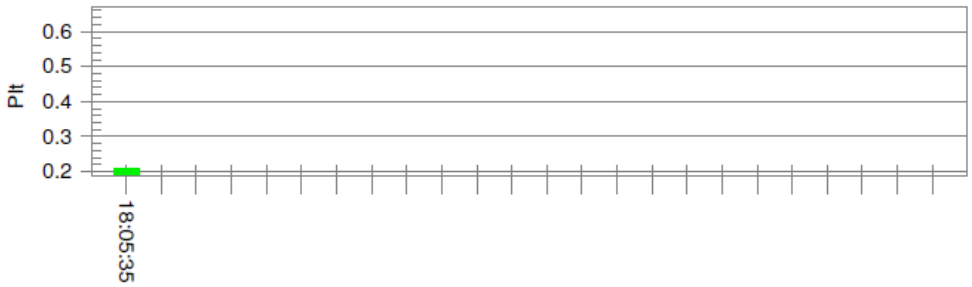
Tested by: Rex Wang
Test Margin: 100
Start time: 下午 04:03:23
End time: 下午 06:05:36
Data file name: CTSMXL_F-000157.cts_data

Test Result: Pass
Status: Test Completed

Pst and limit line
European Limits



Plt and limit line



Parameter values recorded during the test:

Vrms at the end of test (Volt):	230.08			
Highest dt (%):	0.00	Test limit (%):	N/A	N/A
Tmax(mS) > dt:	0.0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.00	Test limit (%):	3.30	Pass
Highest dmax (%):	0.23	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.231	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.209	Test limit:	0.650	Pass

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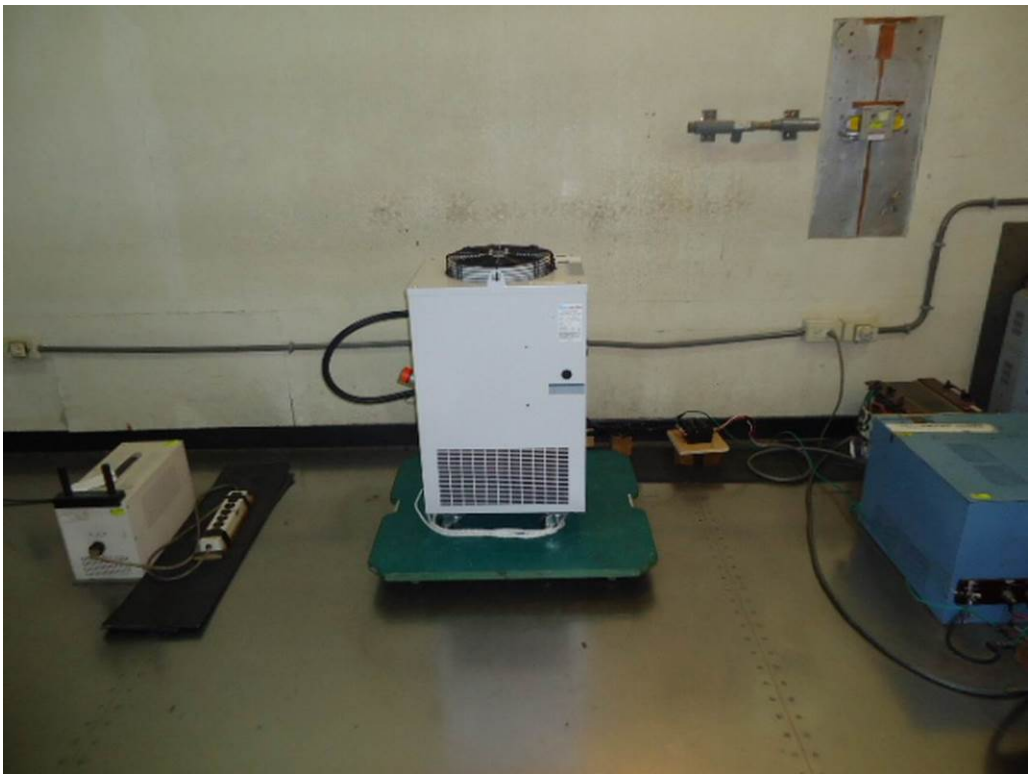
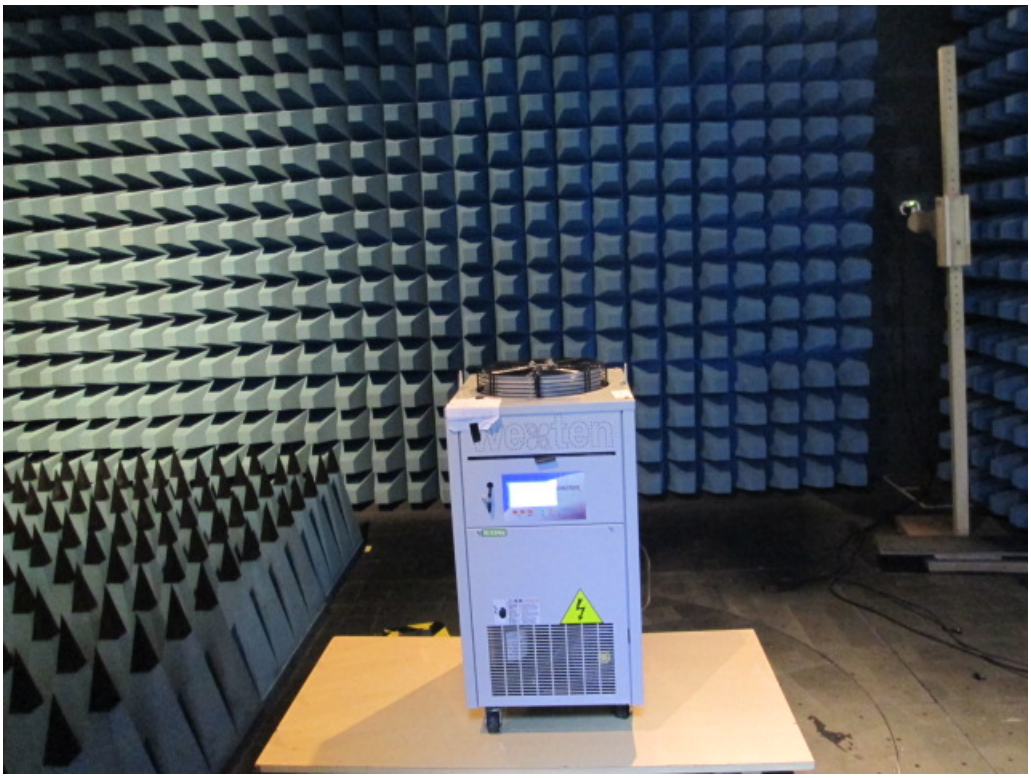


Picture 1: Test setup for Conducted Emission, CWIDA04PTS (AC 230V)

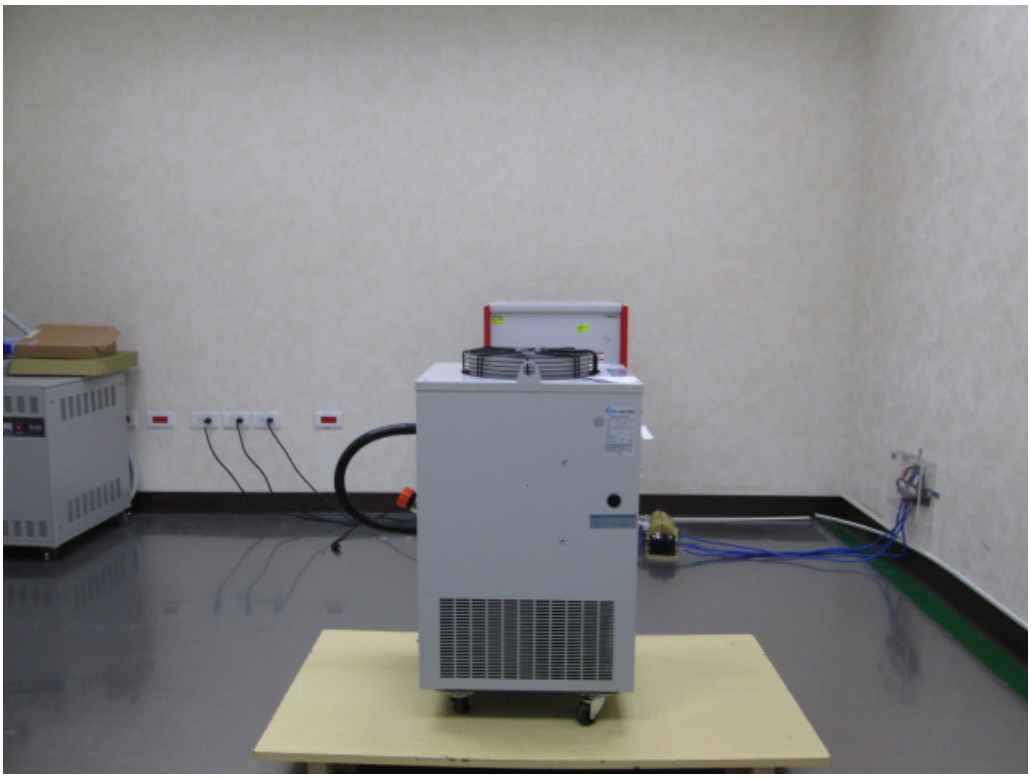
Picture 2: Test setup for Radiated Emission, CWIDA04PTS (AC 230V)

Picture 3: Test setup for Harmonics/Flickers, CWIDA04PTS (AC 230V)

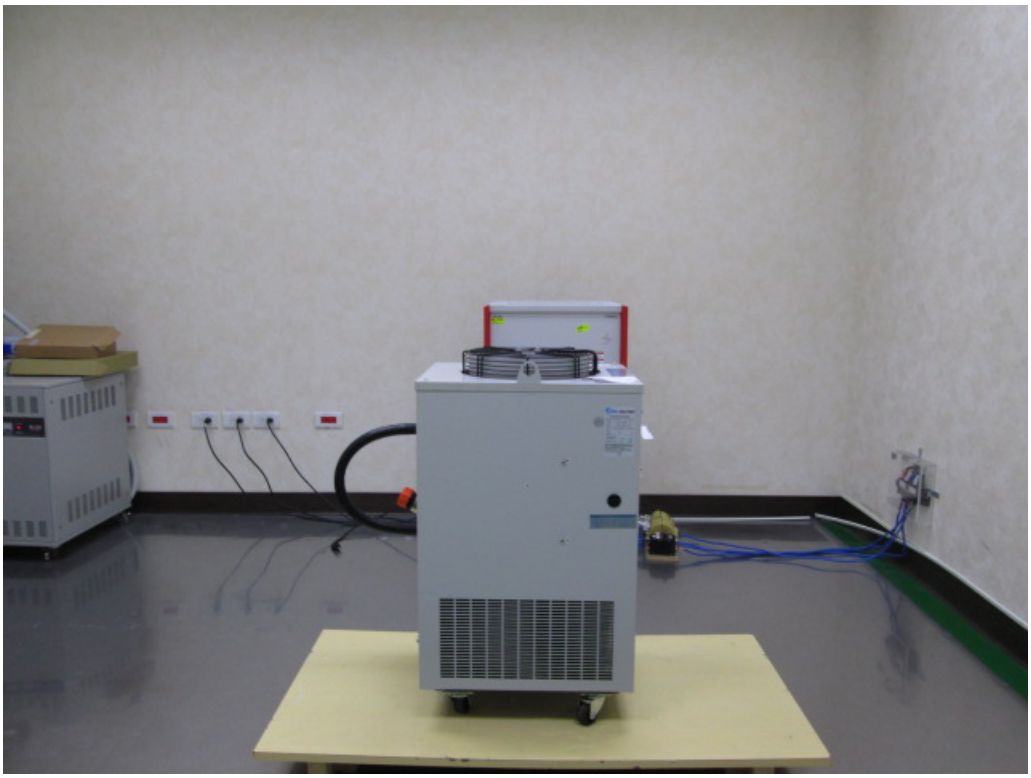
Picture 4: Test setup for Electrostatic Discharge, CWIDA04PTS (AC 230V)



Picture 5: Test setup for Radiated Susceptibility, CWIDA04PTS (AC 230V)



Picture 6: Test setup for Electrical Fast Transients, CWIDA04PTS (AC 230V)

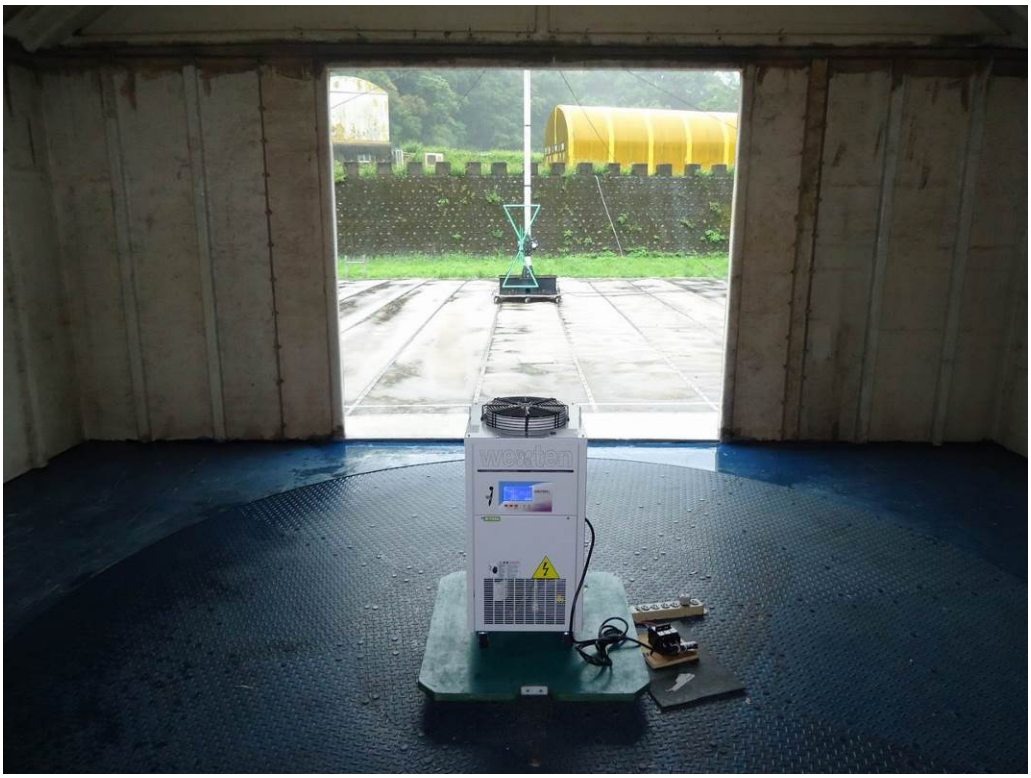


Picture 7: Test setup for Surge, CWIDA04PTS (AC 230V)

Picture 8: Test setup for Conducted Susceptibility, CWIDA04PTS (AC 230V)

Picture 9: Test setup for Voltage Dips and Interruption, CWIDA04PTS (AC 230V)

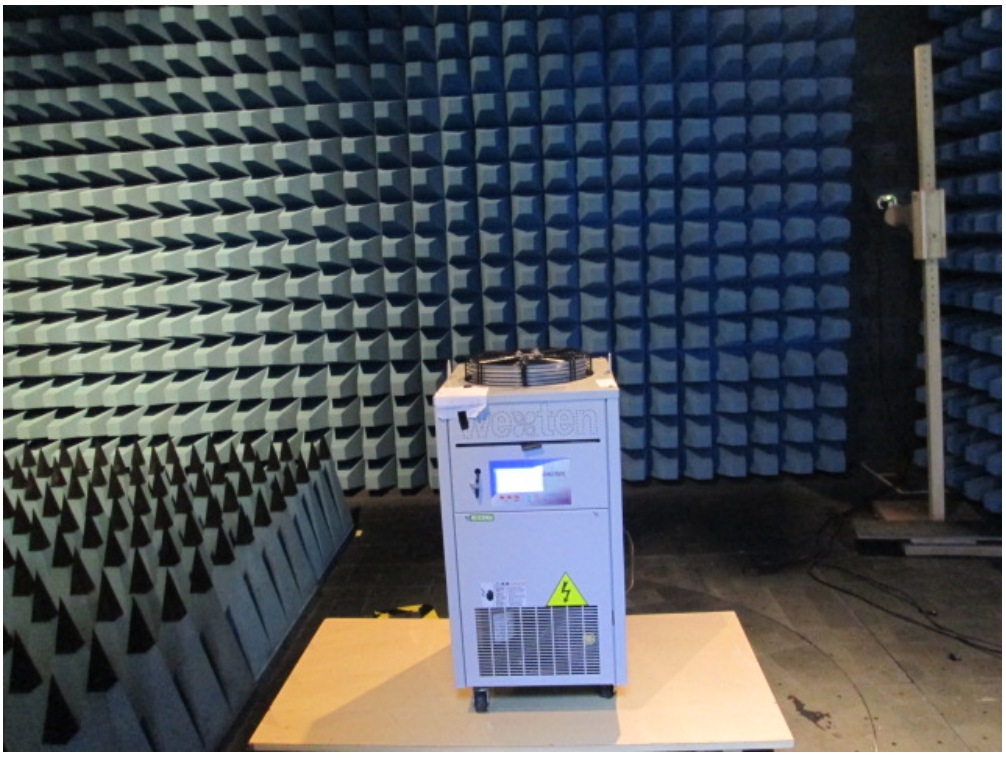
Picture 10: Test setup for Conducted Emission, CWIDA04PTS (AC 400V)



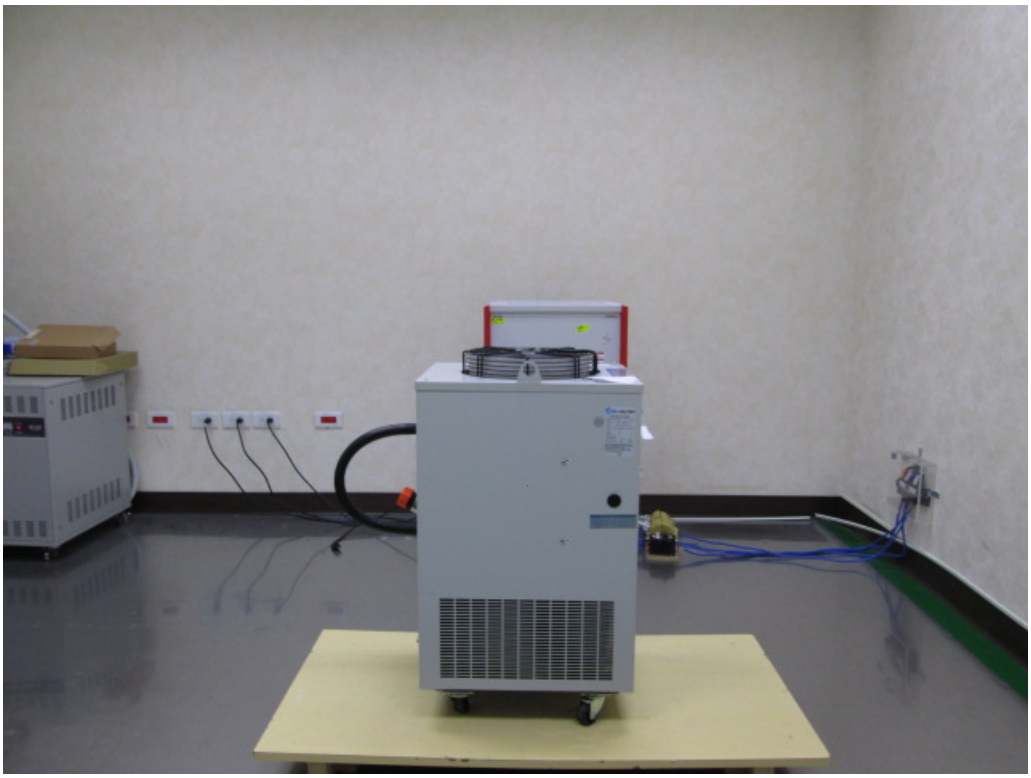
Picture 11: Test setup for Radiated Emission, CWIDA04PTS (AC 400V)

Picture 12: Test setup for Harmonics/Flickers, CWIDA04PTS (AC 400V)

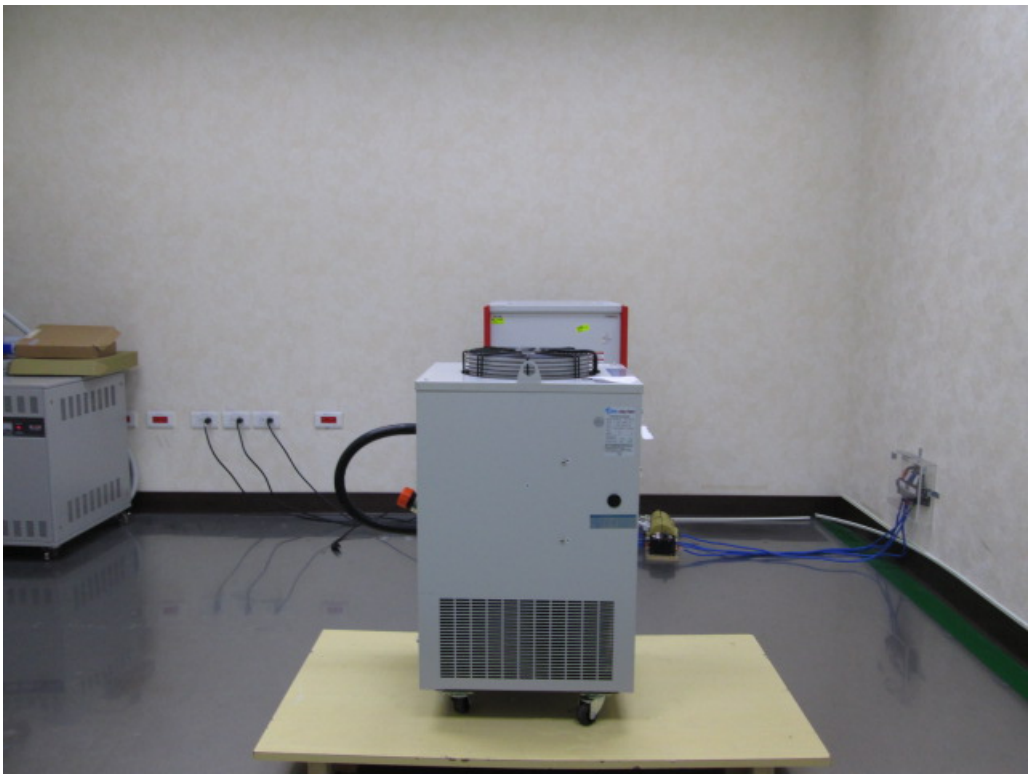
Picture 13: Test setup for Electrostatic Discharge, CWIDA04PTS (AC 400V)



Picture 14: Test setup for Radiated Susceptibility, CWIDA04PTS (AC 400V)



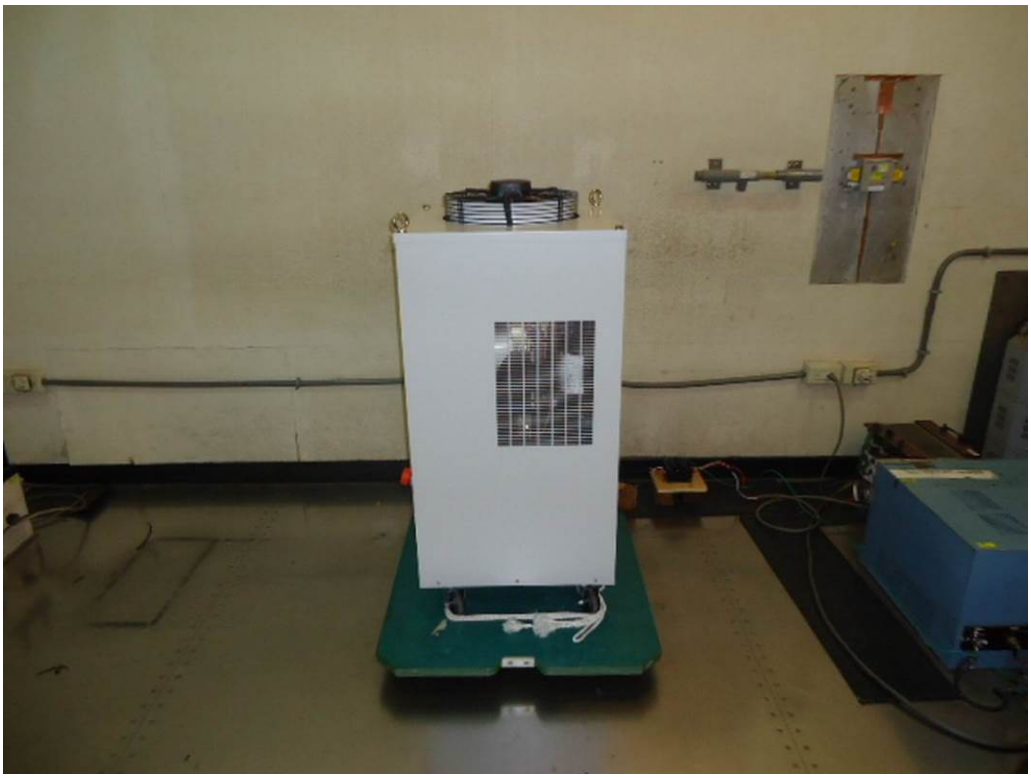
Picture 15: Test setup for Electrical Fast Transients, CWIDA04PTS (AC 400V)



Picture 16: Test setup for Surge, CWIDA04PTS (AC 400V)

Picture 17: Test setup for Conducted Susceptibility, CWIDA04PTS (AC 400V)

Picture 18: Test setup for Voltage Dips and Interruption, CWIDA04PTS (AC 400V)

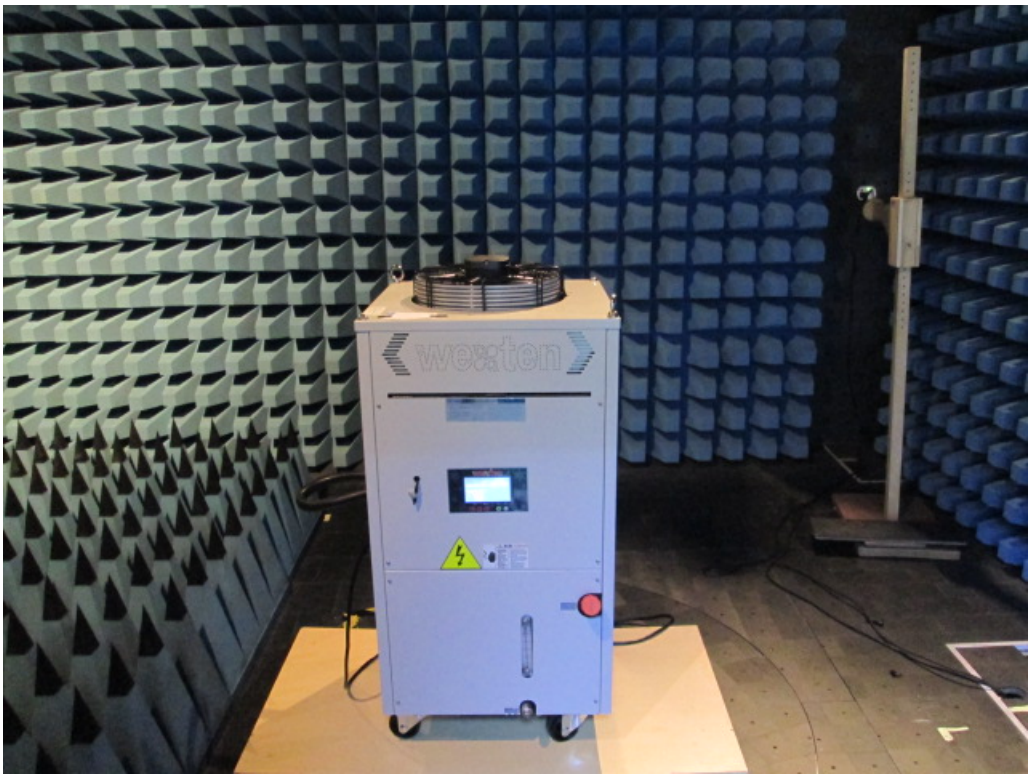


Picture 19: Test setup for Conducted Emission, CWIDA12PTS (AC 230V)

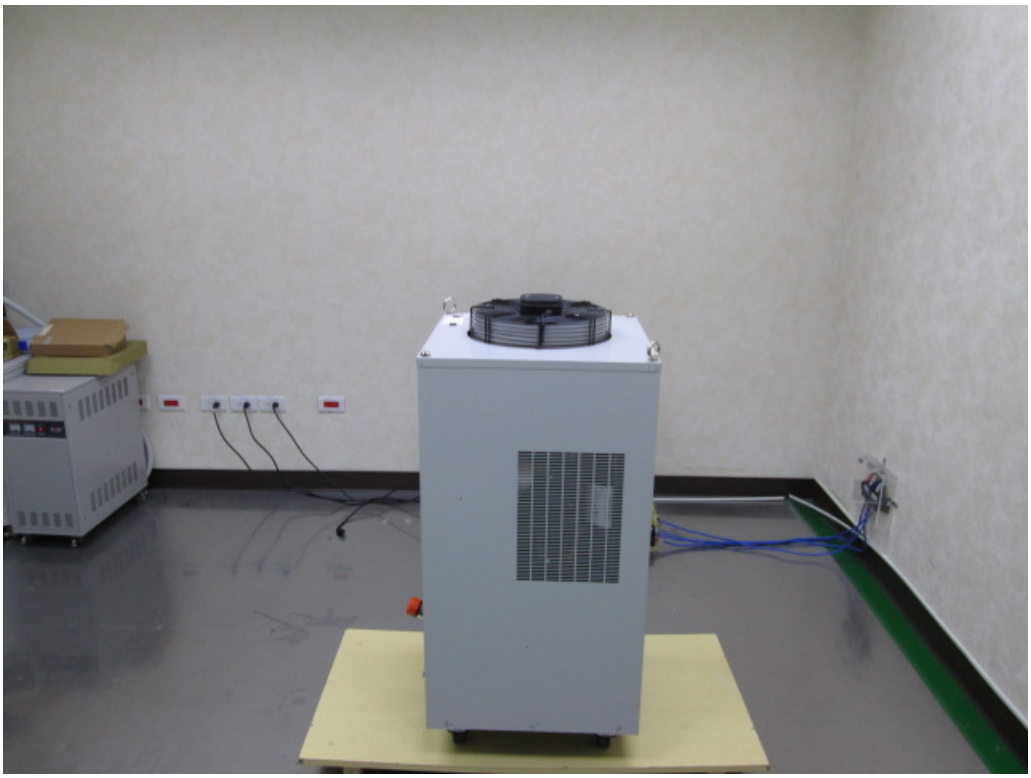
Picture 20: Test setup for Radiated Emission, CWIDA12PTS (AC 230V)

Picture 21: Test setup for Harmonics/Flickers, CWIDA12PTS (AC 230V)

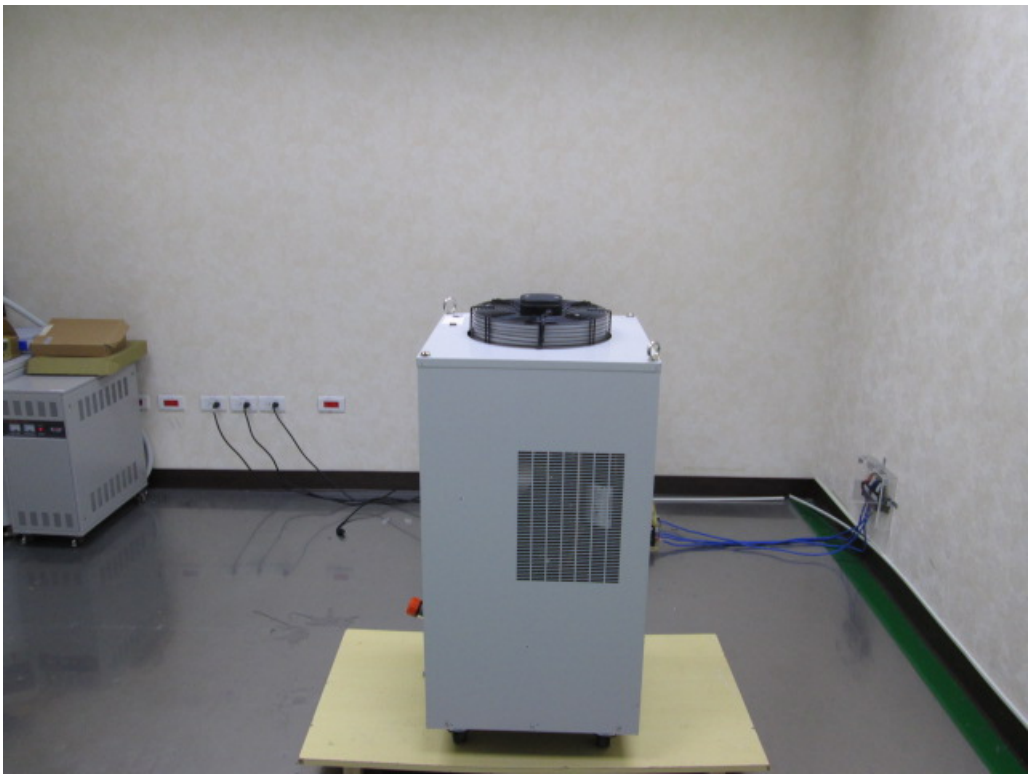
Picture 22: Test setup for Electrostatic Discharge, CWIDA12PTS (AC 230V)



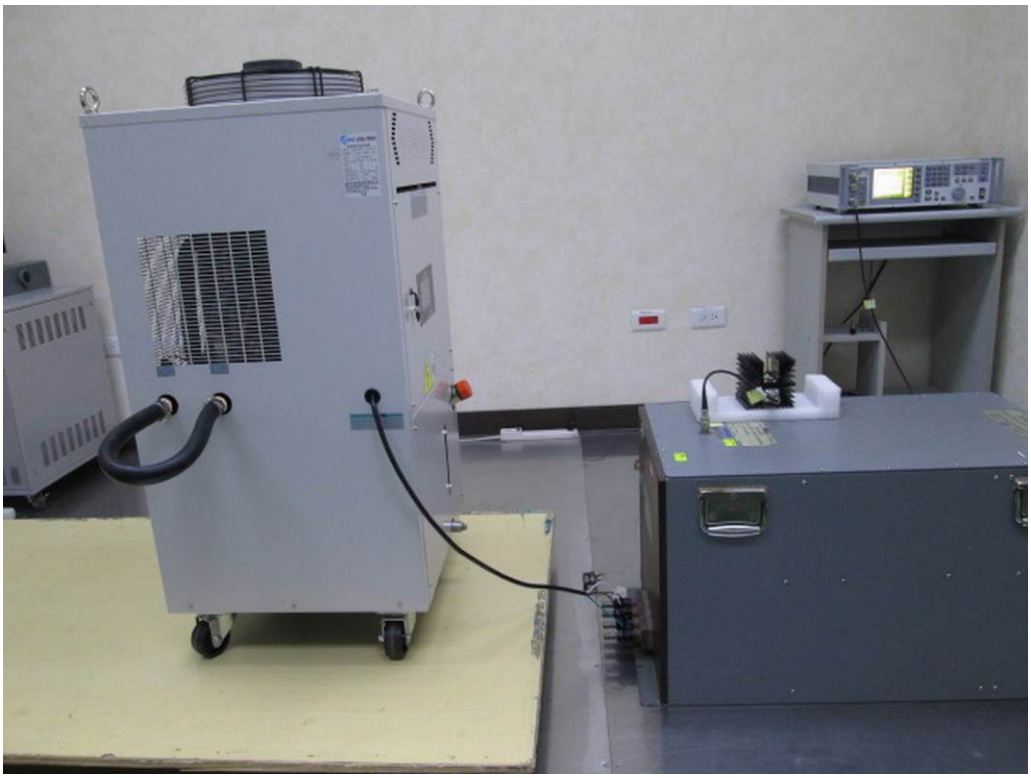
Picture 23: Test setup for Radiated Susceptibility, CWIDA12PTS (AC 230V)



Picture 24: Test setup for Electrical Fast Transients, CWIDA12PTS (AC 230V)



Picture 25: Test setup for Surge, CWIDA12PTS (AC 230V)



Picture 26: Test setup for Conducted Susceptibility, CWIDA12PTS (AC 230V)

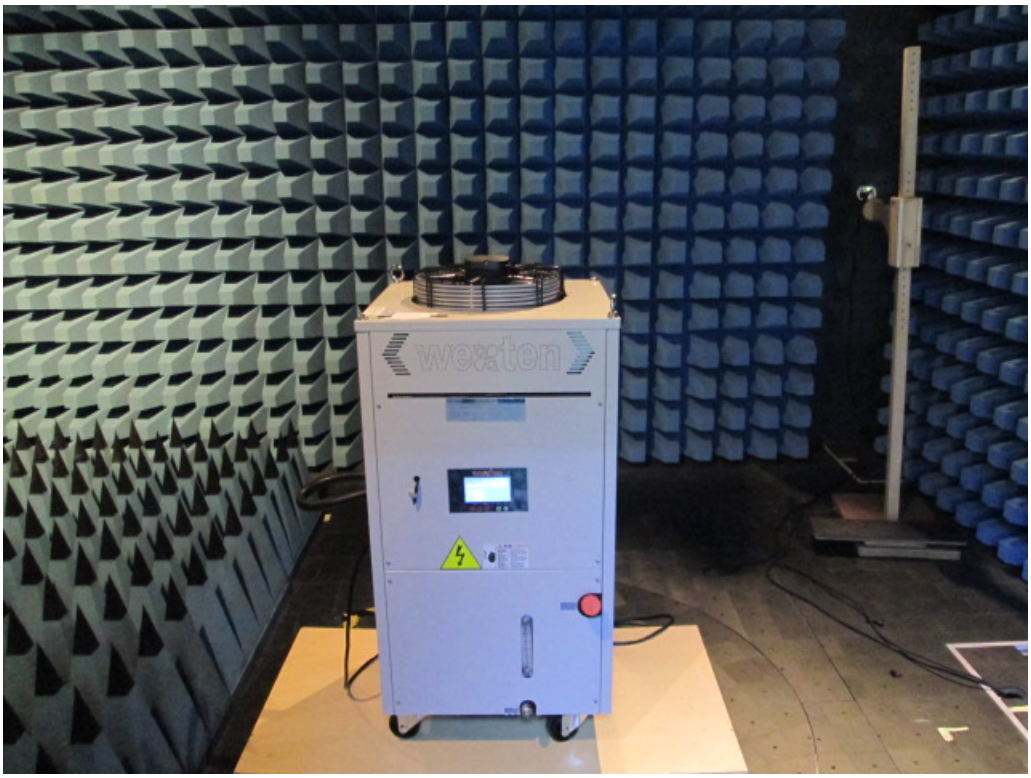
Picture 27: Test setup for Voltage Dips and Interruption, CWIDA12PTS (AC 230V)

Picture 28: Test setup for Conducted Emission, CWIDA12PTS (AC 400V)

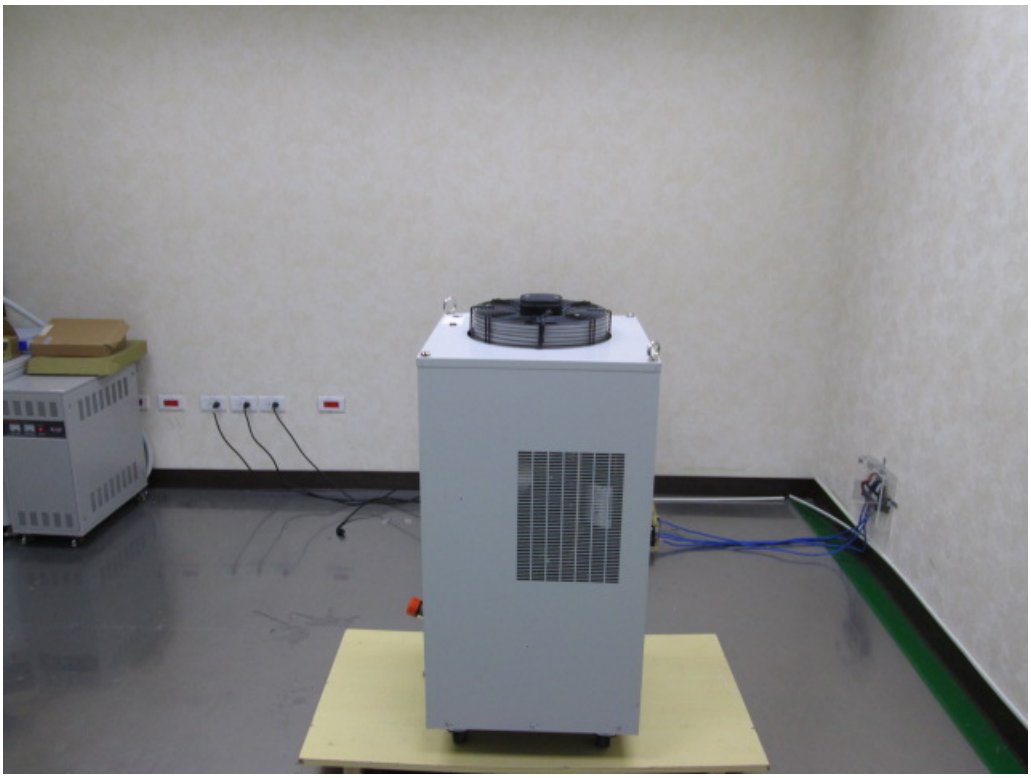
Picture 29: Test setup for Radiated Emission, CWIDA12PTS (AC 400V)

Picture 30: Test setup for Harmonics/Flickers, CWIDA12PTS (AC 400V)

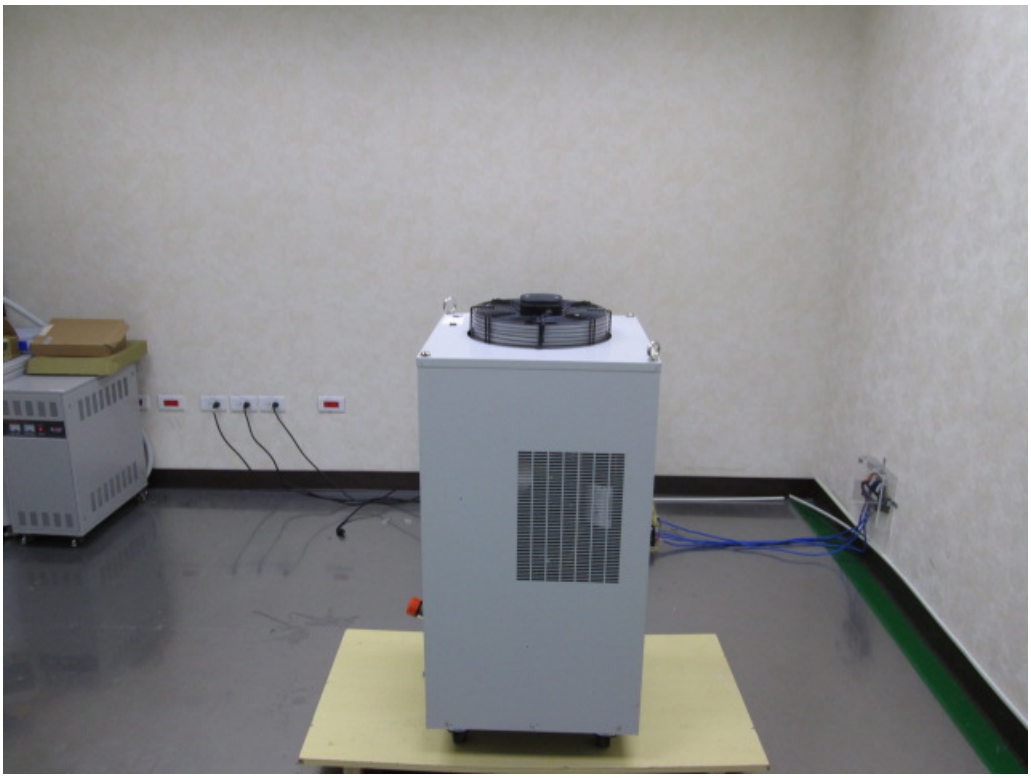
Picture 31: Test setup for Electrostatic Discharge, CWIDA12PTS (AC 400V)



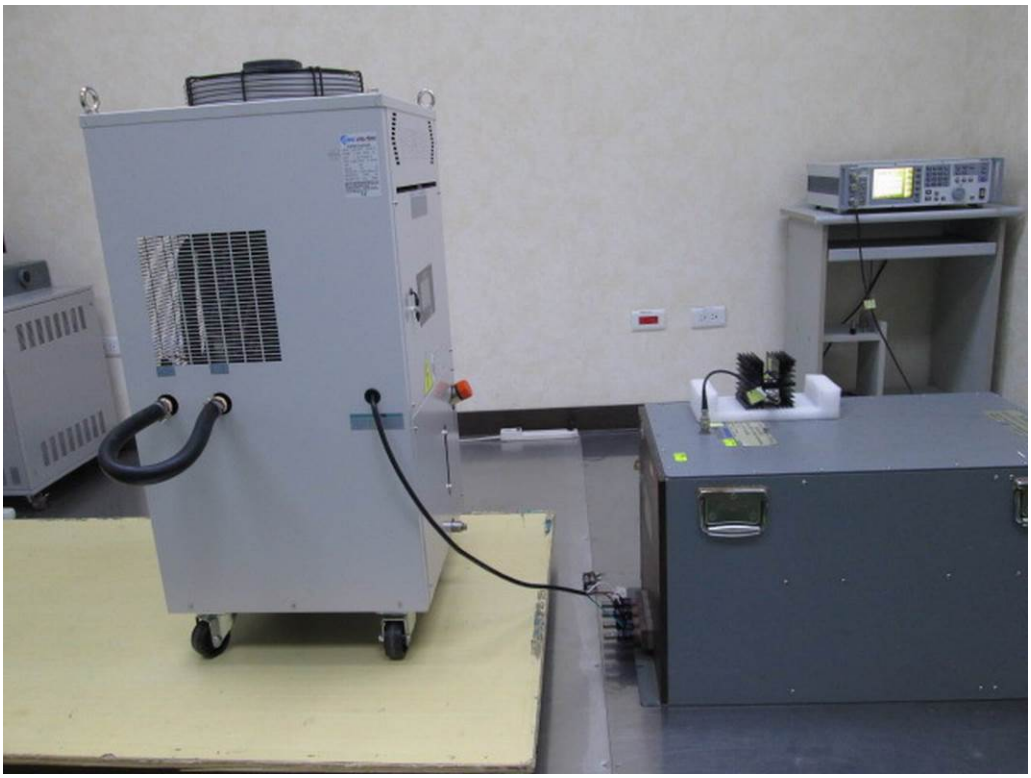
Picture 32: Test setup for Radiated Susceptibility, CWIDA12PTS (AC 400V)



Picture 33: Test setup for Electrical Fast Transients, CWIDA12PTS (AC 400V)



Picture 34: Test setup for Surge, CWIDA12PTS (AC 400V)



Picture 35: Test setup for Conducted Susceptibility, CWIDA12PTS (AC 400V)

Picture 36: Test setup for Voltage Dips and Interruption, CWIDA12PTS (AC 400V)