SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

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TEST REPORT

Application No.:	SHEM1804002763IT
Applicant:	Hangzhou Hikvision Digital Technology Co., Ltd.
Address of Applicant:	No. 555 Qianmo Road, Binjiang District, Hangzhou 310052, China
Manufacturer:	Hangzhou Hikvision Digital Technology Co., Ltd.
Address of Manufacturer:	No. 555 Qianmo Road, Binjiang District, Hangzhou 310052, China
Factory:	1. Hangzhou Hikvision Technology Co., Ltd. 2. Hangzhou Hikvision Electronics Co., Ltd.
Address of Factory:	1. No. 700, Dongliu Road, Binjiang District, Hangzhou City, Zhejiang, 310052, China 2. No. 299, Qiushi Road, Tonglu Economic Development Zone, Tonglu County, Hangzhou, Zhejiang, 310052, China.
Equipment Under Test (EUT):	
EUT Name:	Network Camera
Model No.:	DS-2CD2143G0-IS, DS-2CD2123G0-IS, DS-2CD2143G0-I, DS-2CD2123G0-I, DS-2CD2183G0-I, DS-2CD2163G0-I, DS-2CD2183G0-IS, DS-2CD2163G0-IS¤
¤	Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
Trade Mark:	HIKVISION
Standard(s) :	EN 55032:2015, EN 50130-4:2011 +A1:2014 EN 61000-3-2:2014, EN 61000-3-3:2013
Date of Receipt:	2017-12-19&2018-04-17
Date of Test:	2017-12-20 to 2017-12-27&2018-04-17to 2018-04-19
Date of Issue:	2018-05-11
Test Result:	**Pass***

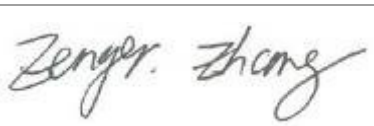
* In the configuration tested, the EUT complied with the standards specified above.

The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EU Declaration of Conformity and compliance with all relevant EU Directives.

Parlam Zhan
E&E Section Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

Revision Record			
Version	**Description**	**Date**	**Remark**
00	Add models and test data	2018-04-26	Based on SHEM171200871601

Authorized for issue by:				
				
		Bruce Tang /Project Engineer		
				
		Zenger Zhang /Reviewer		

2 Test Summary

Emission Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Conducted Emissions at Mains Terminals (150kHz-30MHz)	EN 55032:2015	EN 55032:2015	Class B	Pass
Asymmetric Mode Conducted Emissions (150kHz-30MHz)	EN 55032:2015	EN 55032:2015	Class B	Pass
Radiated Emissions (30MHz-1GHz)	EN 55032:2015	EN 55032:2015	Class B	Pass
Radiated Emissions (above 1GHz)	EN 55032:2015	EN 55032:2015	Class B	Pass
Harmonic Current Emission	EN 61000-3-2:2014	EN 61000-3-2:2014	Class A	N/A
Voltage Fluctuations and Flicker	EN 61000-3-3:2013	EN 61000-3-3:2013	Clause 5 of EN 61000-3-3	Pass

N/A: Please refer to Section 6.5 for details

Immunity Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Electrostatic Discharge	EN 50130-4:2011 +A1:2014	EN 61000-4-2:2009	6kV Contact Discharge2,4,8kV Air Discharge	Pass
Electrical Fast Transients/Burst at Power Port	EN 50130-4:2011 +A1:2014	EN 61000-4-4:2012	2kV5/50ns Tr/Td100kHz Repetition Frequency	Pass
Electrical Fast Transients/Burst at Signal Port	EN 50130-4:2011 +A1:2014	EN 61000-4-4:2012	1kV5/50ns Tr/Td100kHz Repetition Frequency	Pass
Surge at Power Port	EN 50130-4:2011 +A1:2014	EN 61000-4-5:2014	1.2/50μs Tr/Td0.5,1kV Line to Line0.5,1,2kV Line to Ground	Pass
Surge at Signal Port	EN 50130-4:2011 +A1:2014	EN 61000-4-5:2014	1.2/50μs Tr/Td0.5,1kV Line to Ground	Pass
Voltage Dips and Interruptions	EN 50130-4:2011 +A1:2014	EN 61000-4-11:2004	80 % UT for 250per70 % UT for 25per40 % UT for 10per0 % UT for 250perUT is Supply Voltage	Pass
Mains Supply Voltage Variations-Conditioning	EN 50130-4:2011 +A1:2014	EN 50130-4:2011+A1:2014	Unom+10%Unom-15%	Pass
Radiated Immunity(80MHz-2.7GHz)	EN 50130-4:2011 +A1:2014	EN 61000-4-3:2006 +A1:2008+A2:2010	10V/m, 80%, 1kHz sinusoidal Amp. Mod.	Pass
Conducted Immunity at Power Port (150kHz-100MHz)	EN 50130-4:2011 +A1:2014	EN 61000-4-6:2014	10Vrms (emf),80%,1kHz sinusoidal Amp. Mod.	Pass

Immunity Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Conducted Immunity at Signal Port (150kHz-100MHz)	EN 50130-4:2011 +A1:2014	EN 61000-4-6:2014	10Vrms (emf),80%,1kHz sinusoidal Amp. Mod.	Pass

InternalSource	UpperFrequency
Below 108MHz	1GHz
108MHz to 500MHz	2GHz
500MHz to 1GHz	5GHz
Above 1GHz	5 times the highest frequency or 6 GHz, whichever is less

Note1: **Declaration of EUT Family Grouping:**

There are series models mentioned in this report and they are the similar in electrical and electronic characters. Only the model DS-2CD2143G0-IS, DS-2CD2123G0-IS were tested since their differences are the model number and trade name.

Note2 : We add models DS-2CD2183G0-I, DS-2CD2163G0-I, DS-2CD2183G0-IS, DS-2CD2163G0-IS in this report. The new models mentioned in this report are the same as the original models, in Electronic or Electrical characters. Which were already EMC tested in the report SHEM171200871601. So the new models in this report are deemed to fulfil the EMC requirements without testing

3 Contents

4 General Information

4.1 Details of E.U.T.

	Power supply:	DC12V or PoE
	Cable:	Signal cable : 0.43m

4.2 Description of Support Units

The EUT has been tested as an independent unit.

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Conducted Emission at mains port using AMN	3.2dB (9kHz to 150kHz)
		3.0dB (150kHz to 30MHz)
2	Conducted Emission at mains port using VP	1.9 dB(9kHz to 30MHz)
3	Conducted Emission at telecommunication port using AAN	2.4 dB(150kHz to 30MHz)
4	Radiated Power	3.5dB
5	Radiated emission	4.4dB (30MHz-1GHz)
		4.6dB (1GHz-6GHz)

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

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. E&E Lab

588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China

Tel: +86 21 6191 5666 Fax: +86 21 6191 5678

No tests were sub-contracted.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• CNAS (No. CNAS L0599)

CNAS has accredited SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

• NVLAP (Certificate No. 201034-0)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. is accredited by the National Voluntary Laboratory Accreditation Program(NVLAP). Certificate No. 201034-0.

• FCC –Designation Number: CN5033

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been recognized as an accredited testing laboratory.

Designation Number: CN5033. Test Firm Registration Number: 479755.

• Industry Canada (IC) – IC Assigned Code: 8617A

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 8617A-1.

• VCCI (Member No.: 3061)

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-3868,C-4336,T-12221,G-10830 respectively

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

4.8 Monitoring of EUT for All Immunity Test

Visual: work status and video quality

5 Equipment List

For old model

Conducted Emissions at Mains Terminals (150kHz-30MHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI test receiver	Rohde & Schwarz	ESR7	SHEM162-1	2017-12-26	2018-12-25
Line impedance stabilization network	SCHWARZBECK	NSLK8127	SHEM061-1	2017-05-17	2018-05-16
Line impedance stabilization network	EMCO	3816/2	SHEM019-1	2017-12-26	2018-12-25
Pulse limiter	Rohde & Schwarz	ESH3-Z2	SHEM029-1	2017-08-01	2018-07-31
Shielding Room	ZHONGYU	8*4*3M	SHEM079-2	2016-12-29	2019-12-28
CE test Cable	/	/	CE01	2017-12-26	2018-12-25

Asymmetric Mode Conducted Emissions (150kHz-30MHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI test receiver	Rohde & Schwarz	ESR7	SHEM162-1	2017-12-26	2018-12-25
Line impedance stabilization network	SCHWARZBECK	NSLK8127	SHEM061-1	2017-05-17	2018-05-16
8-wire ISN cat 5	SCHWARZBECK	CAT5 8158	SHEM137-1	2017-12-26	2018-12-25
8-wire ISN cat 3	SCHWARZBECK	CAT3 8158	SHEM137-2	2017-12-26	2018-12-25
8-wire ISNcat 6	SCHWARZBECK	NTFM8158	SHEM137-3	2017-12-26	2018-12-25
2-Draht ISN	Schwarzbeck - Mess-Elektronik	NTFM 8131	SHEM139-1	2017-12-26	2018-12-25
CE test Cable	/	/	CE01	2017-12-26	2018-12-25

Radiated Emissions (30MHz-1GHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI test receiver	Rohde & Schwarz	ESU40	SHEM051-1	2017-09-26	2018-09-25
CONTROLLER	INNCO	CO200	SHEM047-1	N/A	N/A
ANTENNA MAST	INNCO	MA400-EP	SHEM047-2	N/A	N/A
TURN DEVICE	INNCO	DE 3600-RH	SHEM047-3	N/A	N/A
Broadband UHF-VHF ANTENNA	SCHWARZBECK	VULB9168	SHEM048-1	2017-02-28	2020-02-27
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2017-07-22	2018-07-21
Low Amplifier	CLAVIIO	BDLNA-0001-412010	SHEM164-1	2017-08-22	2018-08-21

Radiated Emissions (above 1GHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI test receiver	Rohde & Schwarz	ESU40	SHEM051-1	2017-09-26	2018-09-25
CONTROLLER	INNCO	CO200	SHEM047-1	N/A	N/A
ANTENNA MAST	INNCO	MA400-EP	SHEM047-2	N/A	N/A
TURN DEVICE	INNCO	DE 3600-RH	SHEM047-3	N/A	N/A
Double ridged broadband horn ANTENNA	SCHWARZBECK	BBHA9120D	SHEM050-1	2017-01-14	2020-01-13
High-amplifier	SCHWARZBECK	SCU-F0118-G40-BZ4-CS	SHEM050-2	2017-01-14	2020-01-13
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2017-07-22	2018-07-21

Voltage Fluctuations and Flicker					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Harmonic&Flicker analyzer	AMETEK	PACS-1	SHEM024-2	2017-08-22	2018-08-21
AC Power Source 5KVA	AMETEK	5001iX	SHEM025-2	2017-08-22	2018-08-21

Electrostatic Discharge					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Electrostatic Discharge Simulator	TESEQ	NSG 437	SHEM041-1	2017-09-26	2018-09-25

Electrical Fast Transients/Burst at Power Port					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-12-26	2018-12-25

Electrical Fast Transients/Burst at Signal Port					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-12-26	2018-12-25
Capacitive coupling clamp	EM test	HFK	SHEM026-2	2017-08-12	2018-08-11
Data coupling network 4 line	EM test	CNV 504	SHEM026-3	2017-08-12	2018-08-11

Surge at Power Port					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-12-26	2018-12-25

Surge at Signal Port					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-12-26	2018-12-25
Data coupling network 4 line	EM test	CNV 504	SHEM026-3	2017-08-12	2018-08-11

Voltage Dips and Interruptions					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-12-26	2018-12-25

Mains Supply Voltage Variations-Conditioning					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-12-26	2018-12-25

Radiated Immunity(80MHz-2.7GHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Signal generator	Rohde & Schwarz	SMJ100A	SHEM141-1	2017-09-26	2018-09-25
Power Meter	Rohde & Schwarz	NRP	SHEM057-1	2017-12-26	2018-12-25
Power meter sensor	Rohde & Schwarz	NRP-Z91	SHEM057-2	2017-12-26	2018-12-25
Antenna	SCHWARZBECK	STLP9128D	SHEM130-1	N/A	N/A
Antenna	SCHWARZBECK	STLP9149	SHEM131-1	N/A	N/A
Amplifier	MILMEGA	80RF1000-250	SHEM132-1	N/A	N/A
Amplifier	MILMEGA	AS0840-55-55	SHEM133-1	N/A	N/A
Power meter sensor	Rohde & Schwarz	NRP-Z22	SHEM136-1	2017-07-22	2018-07-21
ElectroMagnetic Field Probe	ETS-Lindgren	HI-6113	SHEM134-1	2017-09-07	2018-09-06
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2017-07-22	2018-07-21

Conducted Immunity at Power Port (150kHz-100MHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Signal generator	Rohde & Schwarz	SMJ100A	SHEM141-1	2017-09-26	2018-09-25
PAMP Conducted RF test system	HAEFFLY	PAMP250	SHEM023-1	2017-12-26	2018-12-25
6dB Attenuator	HUAXIANG	TST-150-761	SHEM151-1	N/A	N/A
CDN impedance and K-factor	LUTHI	L-801 M1	SHEM023-5	2017-12-26	2018-12-25
CDN impedance and K-factor	LUTHI	L-801 M2/M3	SHEM023-6	2017-12-26	2018-12-25
Shielding Room	ZHONGYU	5*5*3M	SHEM079-6	2016-12-29	2019-12-28

Conducted Immunity at Signal Port (150kHz-100MHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Signal generator	Rohde & Schwarz	SMJ100A	SHEM141-1	2017-09-26	2018-09-25
PAMP Conducted RF test system	HAEFFLY	PAMP250	SHEM023-1	2017-12-26	2018-12-25
6dB Attenuator	HUAXIANG	TST-150-761	SHEM151-1	N/A	N/A
Coupling clamp	LIITHI	EM 101	SHEM027-1	2015-05-03	2018-05-02
CDN impedance and K-factor	LUTHI	L-801 M1	SHEM023-5	2017-12-26	2018-12-25
CDN impedance and K-factor	LUTHI	L-801 M2/M3	SHEM023-6	2017-12-26	2018-12-25

General used equipment					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Digital pressure meter	YONGZHI	DYM3-01	SHEM082-1	2017-03-03	2018-03-02
Temperature&humidity recorder	ShangHai weather meter work	ZJ 1-2B	SHEM042-1~6	2017-09-13	2018-09-12
Digital Multimeter	FLUKE	17B	SHEM043-5	2017-09-13	2018-09-12
Autoformer regulator	Guangzhou bao de	TDGC2-5KVA	SHEM150-1	N/A	N/A
Multi-purpose tong tester	FLUKE	316	SHEM001-1	2017-01-29	2018-01-28

For new model

Conducted Emissions at Mains Terminals (150kHz-30MHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI test receiver	Rohde & Schwarz	ESR7	SHEM162-1	2017-12-20	2018-12-19
Line impedance stabilization network	SCHWARZBECK	NSLK8127	SHEM061-1	2017-12-20	2018-12-19
Line impedance stabilization network	EMCO	3816/2	SHEM019-1	2017-12-20	2018-12-19
Pulse limiter	Rohde & Schwarz	ESH3-Z2	SHEM029-1	2017-12-20	2018-12-19
Shielding Room	ZHONGYU	8*4*3M	SHEM079-2	2017-12-20	2020-12-19
CE test Cable	/	/	CE01	2017-12-26	2018-12-25

Asymmetric Mode Conducted Emissions (150kHz-30MHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI test receiver	Rohde & Schwarz	ESR7	SHEM162-1	2017-12-20	2018-12-19
Line impedance stabilization network	SCHWARZBECK	NSLK8127	SHEM061-1	2017-12-20	2018-12-19
8-wire ISN cat 5	SCHWARZBECK	CAT5 8158	SHEM137-1	2017-12-20	2018-12-19
8-wire ISN cat 3	SCHWARZBECK	CAT3 8158	SHEM137-2	2017-12-20	2018-12-19
8-wire ISNcat 6	SCHWARZBECK	NTFM8158	SHEM137-3	2017-12-26	2018-12-25
2-Draht ISN	Schwarzbeck - Mess-Elektronik	NTFM 8131	SHEM139-1	2017-12-20	2018-12-19
CE test Cable	/	/	CE01	2017-12-26	2018-12-25

Radiated Emissions (30MHz-1GHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI test receiver	Rohde & Schwarz	ESU40	SHEM051-1	2017-09-26	2018-09-25
CONTROLLER	INNCO	CO200	SHEM047-1	N/A	N/A
ANTENNA MAST	INNCO	MA400-EP	SHEM047-2	N/A	N/A
TURN DEVICE	INNCO	DE 3600-RH	SHEM047-3	N/A	N/A
Broadband UHF-VHF ANTENNA	SCHWARZBECK	VULB9168	SHEM048-1	2017-02-28	2020-02-27
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2017-07-22	2020-07-21
Low Amplifier	CLAVIIO	BDLNA-0001-412010	SHEM164-1	2017-08-22	2018-08-21

Radiated Emissions (above 1GHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI test receiver	Rohde & Schwarz	ESU40	SHEM051-1	2017-09-26	2018-09-25
CONTROLLER	INNCO	CO200	SHEM047-1	N/A	N/A
ANTENNA MAST	INNCO	MA400-EP	SHEM047-2	N/A	N/A
TURN DEVICE	INNCO	DE 3600-RH	SHEM047-3	N/A	N/A
Double ridged broadband horn ANTENNA	SCHWARZBECK	BBHA9120D	SHEM050-1	2017-01-14	2020-01-13
High-amplifier	SCHWARZBECK	SCU-F0118-G40-BZ4-CS	SHEM050-2	2017-12-20	2018-12-19
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2017-07-22	2020-07-21

Harmonic&Voltage Fluctuations and Flicker					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Harmonic&Flicker analyzer	AMETEK	PACS-1	SHEM024-2	2017-08-22	2018-08-21
AC Power Source 5KVA	AMETEK	5001iX	SHEM025-2	2017-08-22	2018-08-21

Electrostatic Discharge					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Electrostatic Discharge Simulator	TESEQ	NSG 437	SHEM041-1	2017-09-26	2018-09-25

Electrical Fast Transients/Burst at Power Port					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-12-20	2018-12-19

Electrical Fast Transients/Burst at Signal Port					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-12-20	2018-12-19
Capacitive coupling clamp	EM test	HFK	SHEM026-2	2017-12-20	2018-12-19
Data coupling network 4 line	EM test	CNV 504	SHEM026-3	2017-12-20	2018-12-19

Surge at Power Port					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-12-20	2018-12-19

Surge at Signal Port					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-12-20	2018-12-19
Data coupling network 4 line	EM test	CNV 504	SHEM026-3	2017-12-20	2018-12-19

Voltage Dips and Interruptions					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-12-20	2018-12-19

Mains Supply Voltage Variations-Conditioning					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Immunity Test System	EMC PARTNER	TRA3000 F-S-D-V	SHEM163-1	2017-12-20	2018-12-19

Radiated Immunity(80MHz-2.7GHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Signal generator	Rohde & Schwarz	SMJ100A	SHEM141-1	2017-09-26	2018-09-25
Power Meter	Rohde & Schwarz	NRP	SHEM057-1	2017-12-20	2018-12-19
Power meter sensor	Rohde & Schwarz	NRP-Z91	SHEM057-2	2017-12-20	2018-12-19
Antenna	SCHWARZBECK	STLP9128D	SHEM130-1	N/A	N/A
Antenna	SCHWARZBECK	STLP9149	SHEM131-1	N/A	N/A
Amplifier	MILMEGA	80RF1000-250	SHEM132-1	N/A	N/A
Amplifier	MILMEGA	AS0840-55-55	SHEM133-1	N/A	N/A
Power meter sensor	Rohde & Schwarz	NRP-Z22	SHEM136-1	2017-12-19	2018-12-18
ElectroMagnetic Field Probe	ETS-Lindgren	HI-6113	SHEM134-1	2017-12-19	2018-12-18
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2017-07-22	2020-07-21

Conducted Immunity at Power Port (150kHz-100MHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Signal generator	Rohde & Schwarz	SMJ100A	SHEM141-1	2017-09-26	2018-09-25
PAMP Conducted RF test system	HAEFFLY	PAMP250	SHEM023-1	2017-12-20	2018-12-19
6dB Attenuator	HUAXIANG	DTS50-6dB-1G-A	SHEM123-2	2017-12-25	2018-12-24
CDN impedance and K-factor	LUTHI	L-801 M1	SHEM023-5	2017-12-20	2018-12-19
CDN impedance and K-factor	LUTHI	L-801 M2/M3	SHEM023-6	2017-12-20	2018-12-19
Shielding Room	ZHONGYU	5*5*3M	SHEM079-6	2016-12-29	2019-12-28

Conducted Immunity at Signal Port (150kHz-100MHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Signal generator	Rohde & Schwarz	SMJ100A	SHEM141-1	2017-09-26	2018-09-25
PAMP Conducted RF test system	HAEFFLY	PAMP250	SHEM023-1	2017-12-20	2018-12-19
6dB Attenuator	HUAXIANG	DTS50-6dB-1G-A	SHEM123-2	2017-12-25	2018-12-24
Coupling clamp	LIITHI	EM 101	SHEM027-1	2017-12-20	2018-12-19
CDN impedance and K-factor	LUTHI	L-801 M1	SHEM023-5	2017-12-20	2018-12-19
CDN impedance and K-factor	LUTHI	L-801 M2/M3	SHEM023-6	2017-12-20	2018-12-19

General used equipment					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Digital pressure meter	YONGZHI	DYM3-01	SHEM082-1	2018-01-25	2019-01-24
Temperature&humidity recorder	ShangHai weather meter work	ZJ 1-2B	SHEM042-1~6	2017-09-13	2018-09-12
Digital Multimeter	FLUKE	17B	SHEM043-3	2017-09-11	2018-09-10
Autoformer regulator	Guangzhou bao de	TDGC2-5KVA	SHEM150-1	N/A	N/A
Multi-purpose tong tester	FLUKE	316	SHEM001-1	2017-12-20	2018-12-19

6 Emission Test Results

6.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)

Test Requirement: EN 55032:2015

Test Method: EN 55032:2015

Frequency Range: 150kHz to 30MHz

Limit:

0.15M-0.5MHz	66dB(μV)-56dB(μV) quasi-peak, 56dB(μV)-46dB(μV) average
0.5M-5MHz	56dB(μV) quasi-peak, 46dB(μV) average
5M-30MHz	60dB(μV) quasi-peak, 50dB(μV) average

Detector: Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz

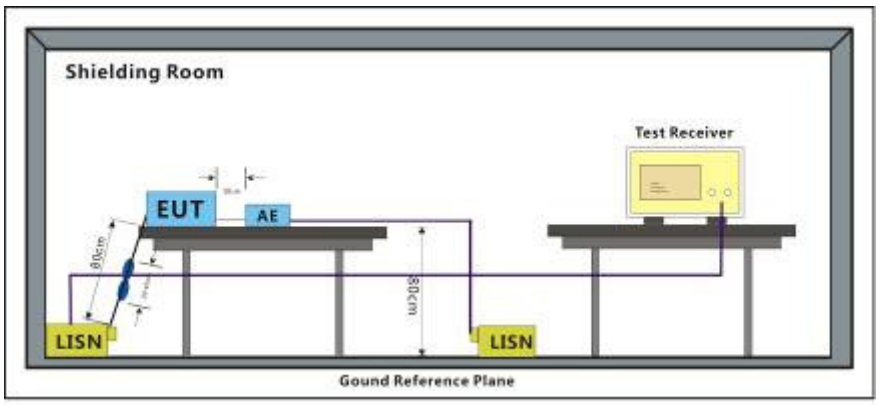
6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar

Test mode: a: DS-2CD2143G0-IS preview by DC12V support .
b: DS-2CD2143G0-IS preview by PoE support .
c: DS-2C2123G0-IS preview by DC12V support .
d: DS-2C2123G0-IS preview by PoE support .
e: DS-2CD2183G0-I preview by DC12V support .
f: DS-2CD2183G0-I preview by PoE support .
g: DS-2CD2163G0-I preview by DC12V support .
h: DS-2CD2163G0-I preview by PoE support .

6.1.2 Test Setup Diagram

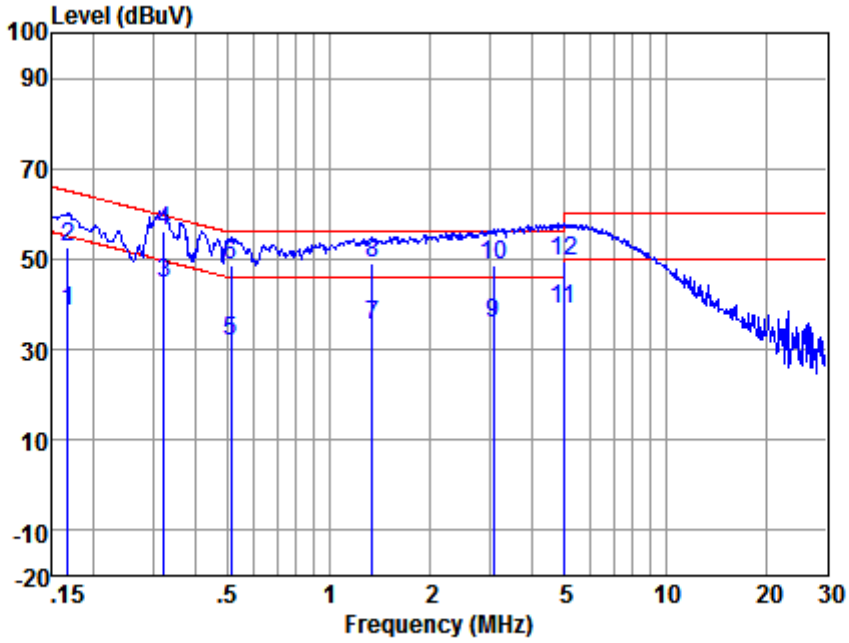


6.1.3 Measurement Data

An initial pre-scan was performed with peak detector.Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.

Notes : Emission Level=Read Level + LISN Factor + Cable Loss

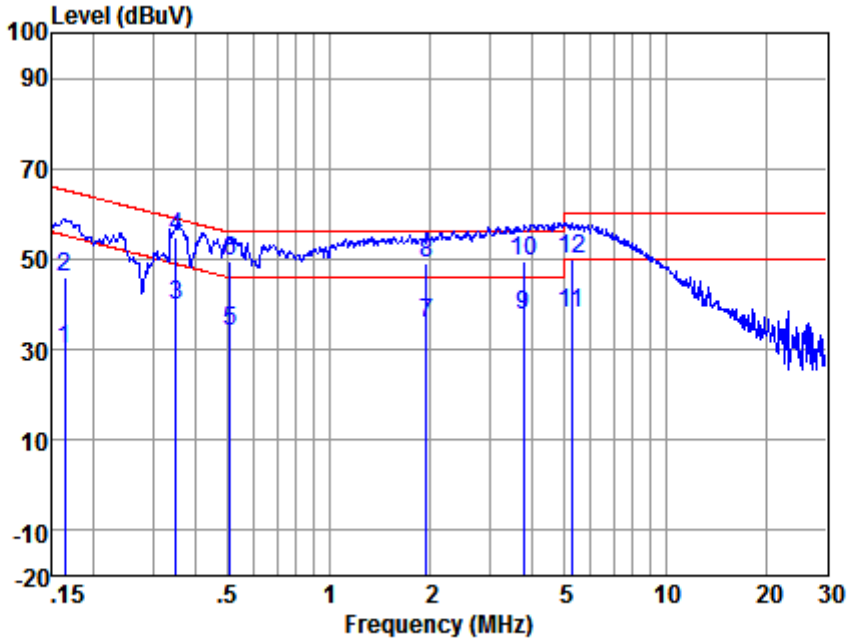
For old model
Mode:a; Line:Live Line



Site : chamber
Condition : LISN-L-2017
EUT/Project No: 8716IT
Test mode : a

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.168	28.38	0.11	9.81	38.30	55.08	-16.78	Average
2	0.168	42.61	0.11	9.81	52.53	65.08	-12.55	QP
3	0.323	34.91	0.11	9.81	44.83	49.62	-4.79	Average
4	0.323	46.11	0.11	9.81	56.03	59.62	-3.59	QP
5	0.510	21.68	0.11	9.82	31.61	46.00	-14.39	Average
6	0.510	38.67	0.11	9.82	48.60	56.00	-7.40	QP
7	1.345	25.37	0.11	9.84	35.32	46.00	-10.68	Average
8	1.345	38.97	0.11	9.84	48.92	56.00	-7.08	QP
9	3.074	25.93	0.12	9.85	35.90	46.00	-10.10	Average
10	3.074	38.61	0.12	9.85	48.58	56.00	-7.42	QP
11	4.978	28.79	0.11	9.86	38.76	46.00	-7.24	Average
12	4.978	39.40	0.11	9.86	49.37	56.00	-6.63	QP

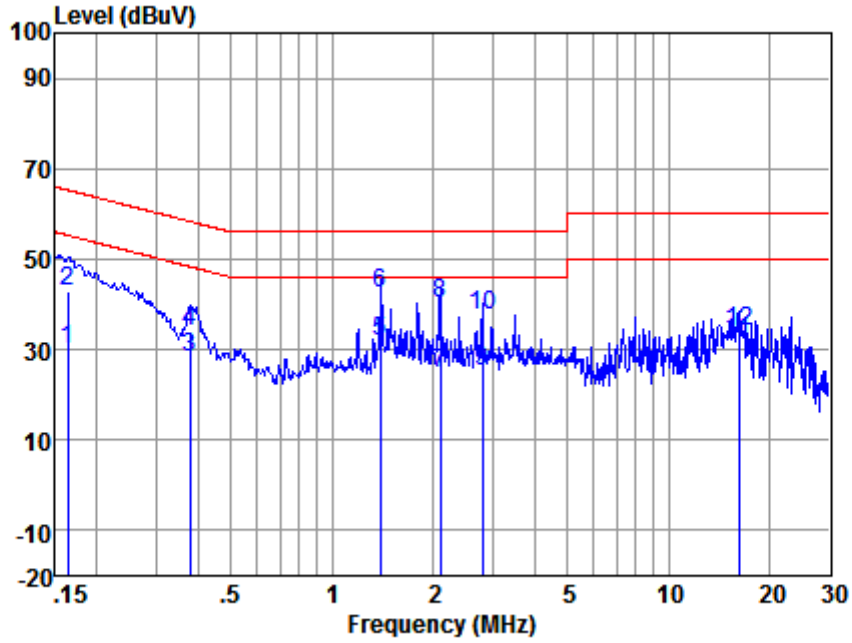
Mode:a; Line:Neutral Line



Site : chamber
Condition : LISN-N-2017
EUT/Project No: 8716IT
Test mode : a

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.163	20.12	0.12	9.81	30.05	55.30	-25.25	Average
2	0.163	35.88	0.12	9.81	45.81	65.30	-19.49	QP
3	0.350	30.00	0.11	9.81	39.92	48.96	-9.04	Average
4	0.350	44.98	0.11	9.81	54.90	58.96	-4.06	QP
5	0.507	23.91	0.11	9.82	33.84	46.00	-12.16	Average
6	0.507	39.38	0.11	9.82	49.31	56.00	-6.69	QP
7	1.949	25.76	0.12	9.85	35.73	46.00	-10.27	Average
8	1.949	38.96	0.12	9.85	48.93	56.00	-7.07	QP
9	3.799	27.58	0.13	9.85	37.56	46.00	-8.44	Average
10	3.799	39.60	0.13	9.85	49.58	56.00	-6.42	QP
11	5.249	27.95	0.13	9.86	37.94	50.00	-12.06	Average
12	5.249	39.85	0.13	9.86	49.84	60.00	-10.16	QP

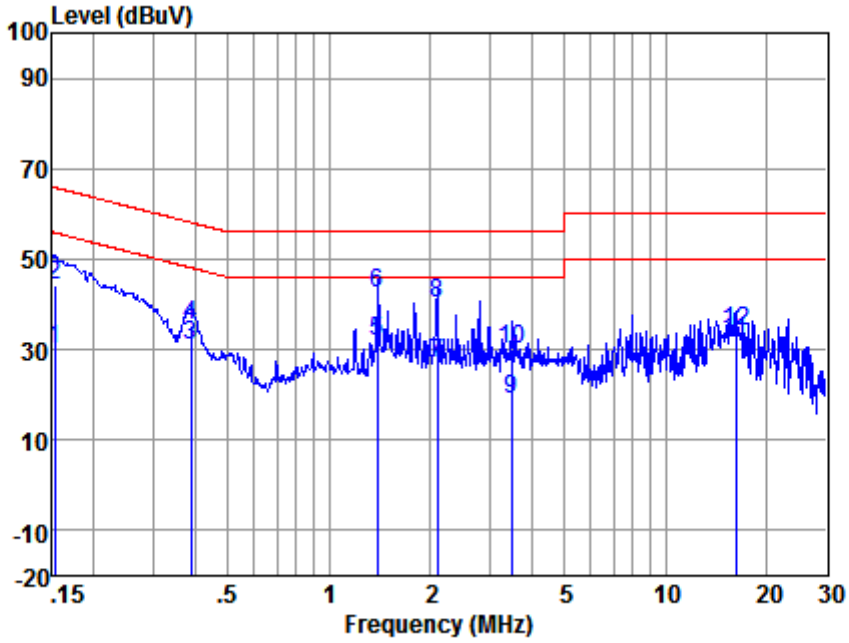
Mode:b; Line:Live Line



Site : chamber
Condition : LISN-L-2017
EUT/Project No: 8716IT
Test mode : b

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.163	19.98	0.11	9.81	29.90	55.30	-25.40	Average
2	0.163	32.93	0.11	9.81	42.85	65.30	-22.45	QP
3	0.379	18.57	0.11	9.81	28.49	48.30	-19.81	Average
4	0.379	24.17	0.11	9.81	34.09	58.30	-24.21	QP
5	1.396	21.77	0.11	9.84	31.72	46.00	-14.28	Average
6	1.396	32.50	0.11	9.84	42.45	56.00	-13.55	QP
7	2.099	14.70	0.12	9.85	24.67	46.00	-21.33	Average
8	2.099	30.04	0.12	9.85	40.01	56.00	-15.99	QP
9	2.794	15.42	0.12	9.85	25.39	46.00	-20.61	Average
10	2.794	27.49	0.12	9.85	37.46	56.00	-18.54	QP
11	16.226	21.45	0.16	10.02	31.63	50.00	-18.37	Average
12	16.226	24.00	0.16	10.02	34.18	60.00	-25.82	QP

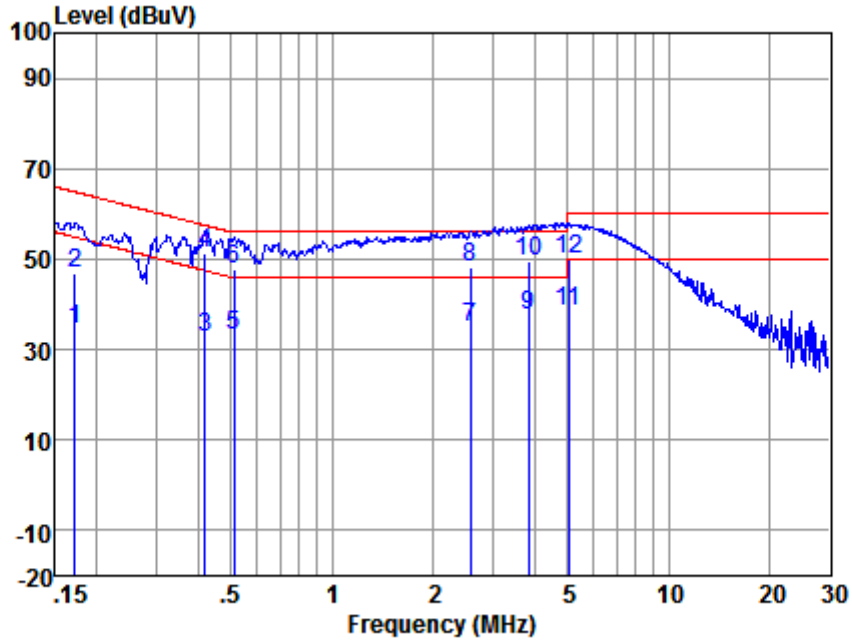
Mode:b; Line:Neutral Line



Site : chamber
Condition : LISN-N-2017
EUT/Project No: 8716IT
Test mode : b

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.152	19.95	0.12	9.81	29.88	55.87	-25.99	Average
2	0.152	34.43	0.12	9.81	44.36	65.87	-21.51	QP
3	0.387	20.80	0.11	9.81	30.72	48.12	-17.40	Average
4	0.387	25.38	0.11	9.81	35.30	58.12	-22.82	QP
5	1.396	21.78	0.12	9.84	31.74	46.00	-14.26	Average
6	1.396	32.57	0.12	9.84	42.53	56.00	-13.47	QP
7	2.099	16.94	0.12	9.85	26.91	46.00	-19.09	Average
8	2.099	30.09	0.12	9.85	40.06	56.00	-15.94	QP
9	3.491	8.92	0.13	9.85	18.90	46.00	-27.10	Average
10	3.491	20.10	0.13	9.85	30.08	56.00	-25.92	QP
11	16.226	21.40	0.18	10.02	31.60	50.00	-18.40	Average
12	16.226	23.96	0.18	10.02	34.16	60.00	-25.84	QP

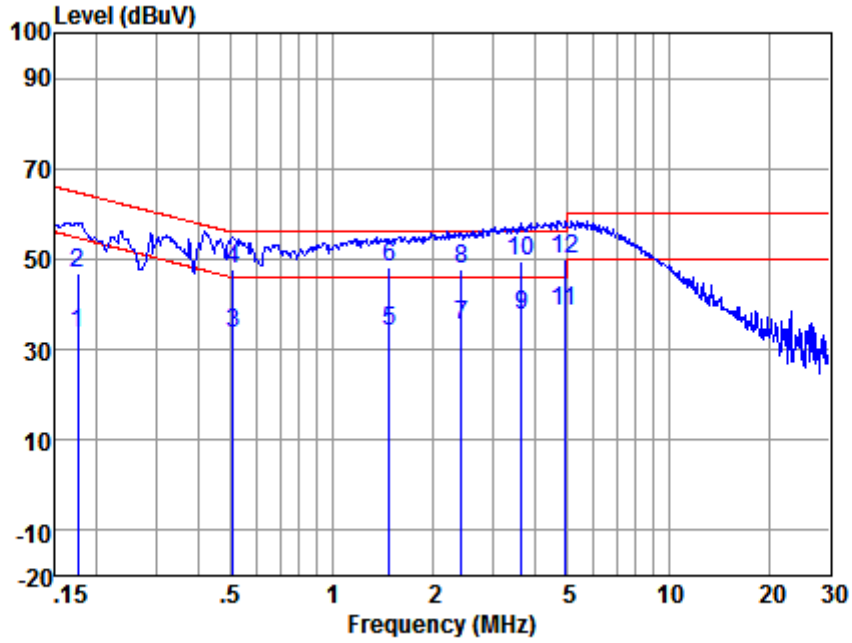
Mode:c; Line:Live Line



Site : chamber
Condition : LISN-L-2017
EUT/Project No: 8716IT
Test mode : c

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.172	24.69	0.11	9.81	34.61	54.86	-20.25	Average
2	0.172	36.93	0.11	9.81	46.85	64.86	-18.01	QP
3	0.419	22.56	0.11	9.82	32.49	47.46	-14.97	Average
4	0.419	41.29	0.11	9.82	51.22	57.46	-6.24	QP
5	0.510	23.37	0.11	9.82	33.30	46.00	-12.70	Average
6	0.510	37.96	0.11	9.82	47.89	56.00	-8.11	QP
7	2.581	24.86	0.12	9.85	34.83	46.00	-11.17	Average
8	2.581	38.09	0.12	9.85	48.06	56.00	-7.94	QP
9	3.840	27.61	0.12	9.85	37.58	46.00	-8.42	Average
10	3.840	39.58	0.12	9.85	49.55	56.00	-6.45	QP
11	5.058	28.36	0.11	9.86	38.33	50.00	-11.67	Average
12	5.058	39.92	0.11	9.86	49.89	60.00	-10.11	QP

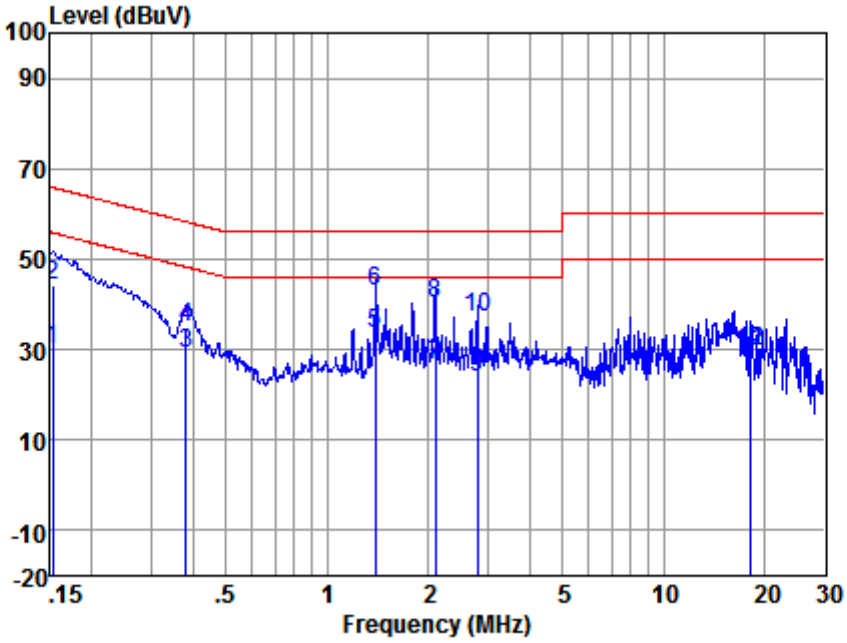
Mode:c; Line:Neutral Line



Site : chamber
Condition : LISN-N-2017
EUT/Project No: 8716IT
Test mode : c

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.175	23.51	0.12	9.81	33.44	54.72	-21.28	Average
2	0.175	36.95	0.12	9.81	46.88	64.72	-17.84	QP
3	0.507	23.76	0.11	9.82	33.69	46.00	-12.31	Average
4	0.507	38.04	0.11	9.82	47.97	56.00	-8.03	QP
5	1.480	24.02	0.12	9.84	33.98	46.00	-12.02	Average
6	1.480	38.17	0.12	9.84	48.13	56.00	-7.87	QP
7	2.422	25.57	0.13	9.85	35.55	46.00	-10.45	Average
8	2.422	37.92	0.13	9.85	47.90	56.00	-8.10	QP
9	3.661	27.51	0.13	9.85	37.49	46.00	-8.51	Average
10	3.661	39.48	0.13	9.85	49.46	56.00	-6.54	QP
11	4.926	28.54	0.13	9.86	38.53	46.00	-7.47	Average
12	4.926	39.97	0.13	9.86	49.96	56.00	-6.04	QP

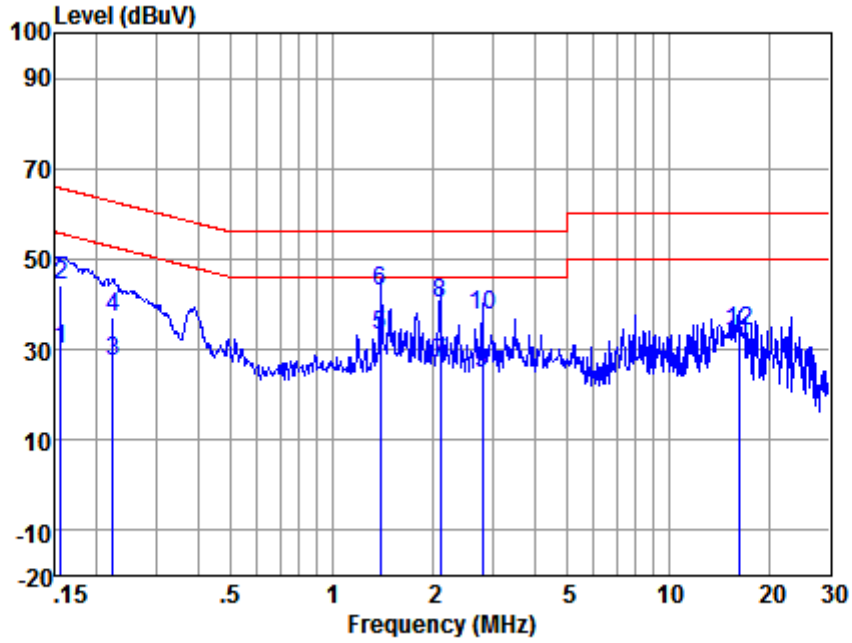
Mode:d; Line:Live Line



Site : chamber
Condition : LISN-L-2017
EUT/Project No: 8716IT
Test mode : d

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.152	20.10	0.11	9.81	30.02	55.87	-25.85	Average
2	0.152	34.37	0.11	9.81	44.29	65.87	-21.58	QP
3	0.381	19.40	0.11	9.81	29.32	48.25	-18.93	Average
4	0.381	24.86	0.11	9.81	34.78	58.25	-23.47	QP
5	1.396	23.54	0.11	9.84	33.49	46.00	-12.51	Average
6	1.396	32.91	0.11	9.84	42.86	56.00	-13.14	QP
7	2.099	16.74	0.12	9.85	26.71	46.00	-19.29	Average
8	2.099	30.21	0.12	9.85	40.18	56.00	-15.82	QP
9	2.794	14.04	0.12	9.85	24.01	46.00	-21.99	Average
10	2.794	27.29	0.12	9.85	37.26	56.00	-18.74	QP
11	18.232	19.36	0.17	10.03	29.56	50.00	-20.44	Average
12	18.232	19.56	0.17	10.03	29.76	60.00	-30.24	QP

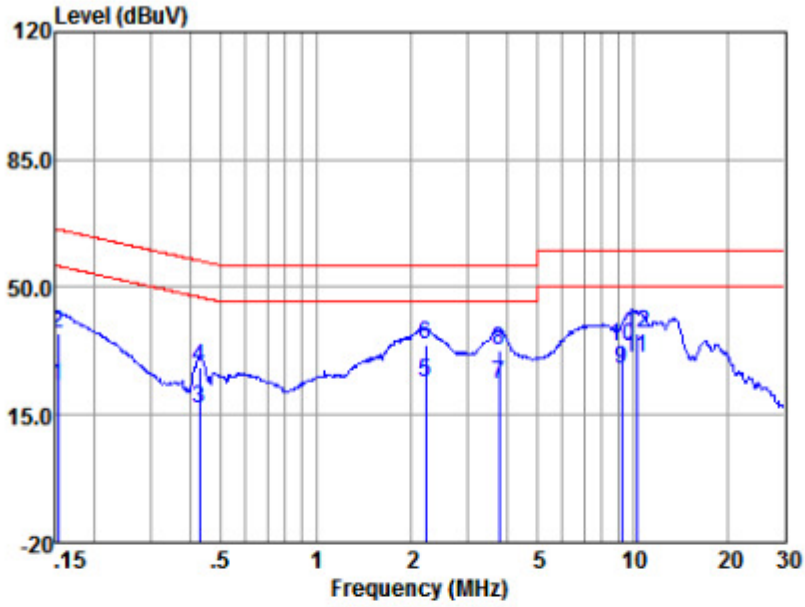
Mode:d; Line:Neutral Line



Site : chamber
Condition : LISN-N-2017
EUT/Project No: 8716IT
Test mode : d

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.156	20.26	0.12	9.81	30.19	55.65	-25.46	Average
2	0.156	34.21	0.12	9.81	44.14	65.65	-21.51	QP
3	0.223	17.35	0.11	9.81	27.27	52.70	-25.43	Average
4	0.223	27.39	0.11	9.81	37.31	62.70	-25.39	QP
5	1.396	23.04	0.12	9.84	33.00	46.00	-13.00	Average
6	1.396	32.70	0.12	9.84	42.66	56.00	-13.34	QP
7	2.099	17.12	0.12	9.85	27.09	46.00	-18.91	Average
8	2.099	30.22	0.12	9.85	40.19	56.00	-15.81	QP
9	2.794	14.80	0.13	9.85	24.78	46.00	-21.22	Average
10	2.794	27.59	0.13	9.85	37.57	56.00	-18.43	QP
11	16.226	21.12	0.18	10.02	31.32	50.00	-18.68	Average
12	16.226	23.82	0.18	10.02	34.02	60.00	-25.98	QP

For new model
Mode:e; Line:Live Line

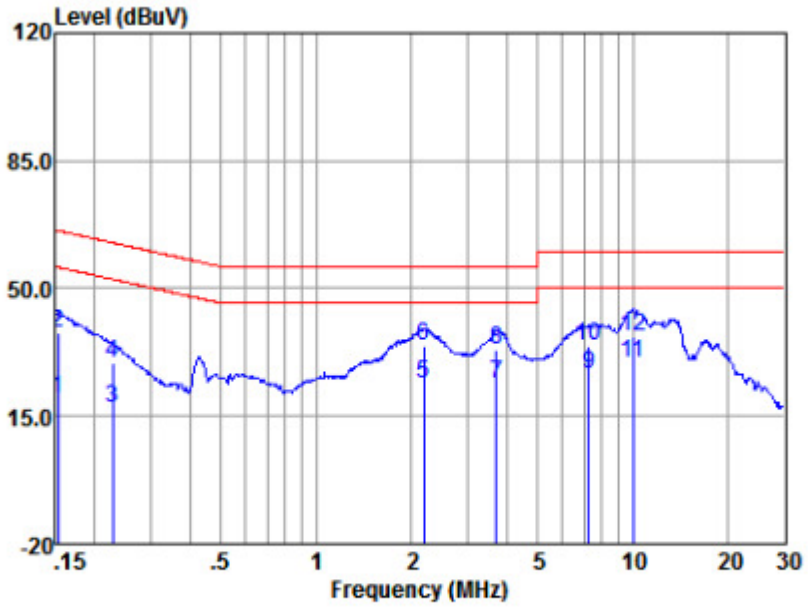


LISN : LINE
EUT/Project No : 2763IT
Test Mode : e

	Freq (MHz)	Read level (dBuV)	LISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.15	12.71	0.11	9.81	22.63	55.87	-33.24	Average
2	0.15	27.40	0.11	9.81	37.32	65.87	-28.55	QP
3	0.43	6.79	0.11	9.82	16.72	47.29	-30.57	Average
4	0.43	18.31	0.11	9.82	28.24	57.29	-29.05	QP
5	2.21	13.71	0.12	9.85	23.68	46.00	-22.32	Average
6	2.21	24.17	0.12	9.85	34.14	56.00	-21.86	QP
7	3.78	13.46	0.12	9.85	23.43	46.00	-22.57	Average
8	3.78	22.72	0.12	9.85	32.69	56.00	-23.31	QP
9	9.25	17.31	0.10	9.87	27.28	50.00	-22.72	Average
10	9.25	23.95	0.10	9.87	33.92	60.00	-26.08	QP
11	10.34	20.46	0.10	9.87	30.43	50.00	-19.57	Average
12	10.34	27.62	0.10	9.87	37.59	60.00	-22.41	QP

Notes: Emission Level = Read Level +LISN Factor + Cable loss

Mode:e; Line:Neutral Line

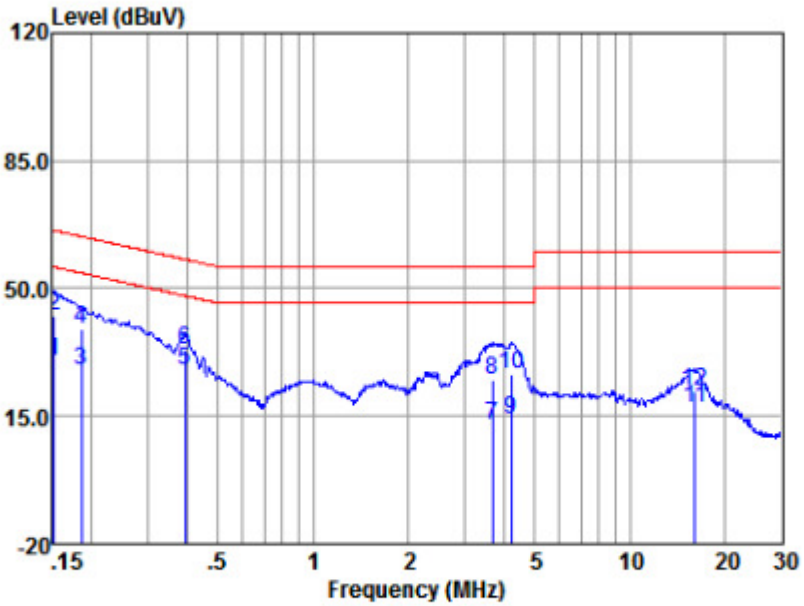


LISN : NEUTRAL
EUT/Project No : 2763IT
Test Mode : e

	Freq (MHz)	Read level (dBuV)	LISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.15	9.61	0.12	9.81	19.54	55.87	-36.33	Average
2	0.15	28.03	0.12	9.81	37.96	65.87	-27.91	QP
3	0.23	7.34	0.11	9.81	17.26	52.57	-35.31	Average
4	0.23	19.48	0.11	9.81	29.40	62.57	-33.17	QP
5	2.19	13.74	0.12	9.85	23.71	46.00	-22.29	Average
6	2.19	24.18	0.12	9.85	34.15	56.00	-21.85	QP
7	3.70	14.06	0.13	9.85	24.04	46.00	-21.96	Average
8	3.70	23.01	0.13	9.85	32.99	56.00	-23.01	QP
9	7.29	16.62	0.13	9.86	26.61	50.00	-23.39	Average
10	7.29	24.09	0.13	9.86	34.08	60.00	-25.92	QP
11	10.02	19.60	0.13	9.87	29.60	50.00	-20.40	Average
12	10.02	27.01	0.13	9.87	37.01	60.00	-22.99	QP

Notes: Emission Level = Read Level +LISN Factor + Cable loss

Mode:f; Line:Live Line

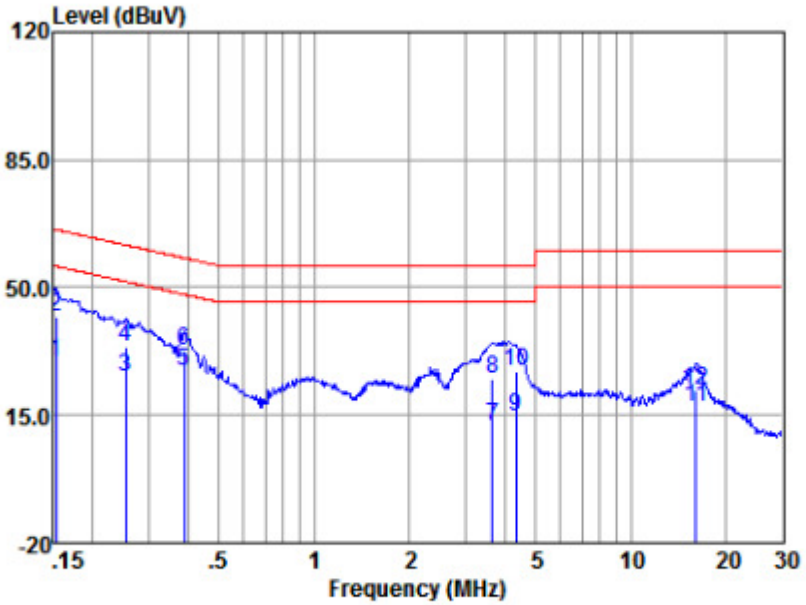


LISN : LINE
EUT/Project No : 2763IT
Test Mode : f

	Freq (MHz)	Read level (dBuV)	LISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.15	20.03	0.11	9.81	29.95	55.91	-25.96	Average
2	0.15	32.58	0.11	9.81	42.50	65.91	-23.41	QP
3	0.19	17.46	0.11	9.81	27.38	54.24	-26.86	Average
4	0.19	28.90	0.11	9.81	38.82	64.24	-25.42	QP
5	0.39	17.70	0.11	9.81	27.62	47.99	-20.37	Average
6	0.39	23.22	0.11	9.81	33.14	57.99	-24.85	QP
7	3.68	2.50	0.12	9.85	12.47	46.00	-33.53	Average
8	3.68	15.10	0.12	9.85	25.07	56.00	-30.93	QP
9	4.22	3.96	0.11	9.85	13.92	46.00	-32.08	Average
10	4.22	16.63	0.11	9.85	26.59	56.00	-29.41	QP
11	16.14	6.76	0.16	10.02	16.94	50.00	-33.06	Average
12	16.14	11.54	0.16	10.02	21.72	60.00	-38.28	QP

Notes: Emission Level = Read Level +LISN Factor + Cable loss

Mode:f; Line:Neutral Line

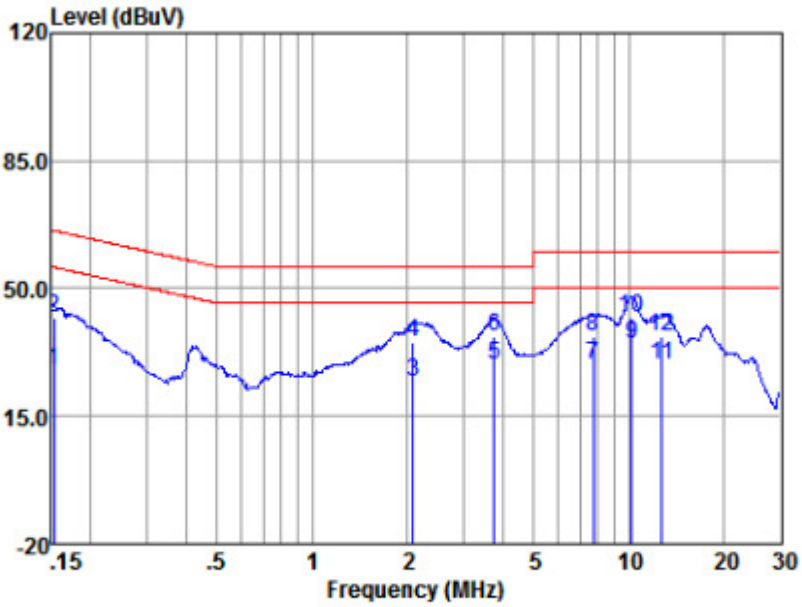


LISN : NEUTRAL
EUT/Project No : 2763IT
Test Mode : f

	Freq (MHz)	Read level (dBuV)	LISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.15	19.65	0.12	9.81	29.58	55.87	-26.29	Average
2	0.15	32.03	0.12	9.81	41.96	65.87	-23.91	QP
3	0.25	15.58	0.11	9.81	25.50	51.64	-26.14	Average
4	0.25	23.83	0.11	9.81	33.75	61.64	-27.89	QP
5	0.39	17.26	0.11	9.81	27.18	48.08	-20.90	Average
6	0.39	23.02	0.11	9.81	32.94	58.08	-25.14	QP
7	3.66	2.06	0.13	9.85	12.04	46.00	-33.96	Average
8	3.66	14.73	0.13	9.85	24.71	56.00	-31.29	QP
9	4.34	4.62	0.13	9.86	14.61	46.00	-31.39	Average
10	4.34	17.11	0.13	9.86	27.10	56.00	-28.90	QP
11	16.14	6.75	0.18	10.02	16.95	50.00	-33.05	Average
12	16.14	11.47	0.18	10.02	21.67	60.00	-38.33	QP

Notes: Emission Level = Read Level +LISN Factor + Cable loss

Mode:g; Line:Live Line

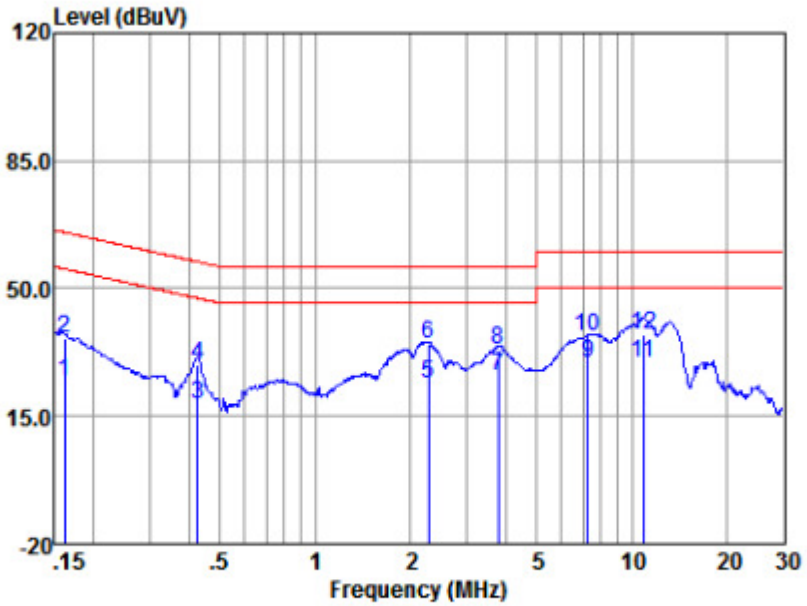


LISN : LINE
EUT/Project No : 2763IT
Test Mode : g

	Freq (MHz)	Read level (dBuV)	LISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.15	17.64	0.11	9.81	27.56	55.82	-28.26	Average
2	0.15	31.94	0.11	9.81	41.86	65.82	-23.96	QP
3	2.09	14.49	0.12	9.85	24.46	46.00	-21.54	Average
4	2.09	25.35	0.12	9.85	35.32	56.00	-20.68	QP
5	3.76	19.26	0.12	9.85	29.23	46.00	-16.77	Average
6	3.76	27.09	0.12	9.85	37.06	56.00	-18.94	QP
7	7.73	19.36	0.10	9.86	29.32	50.00	-20.68	Average
8	7.73	26.83	0.10	9.86	36.79	60.00	-23.21	QP
9	10.23	24.98	0.10	9.87	34.95	50.00	-15.05	Average
10	10.23	32.04	0.10	9.87	42.01	60.00	-17.99	QP
11	12.72	19.19	0.13	9.93	29.25	50.00	-20.75	Average
12	12.72	26.63	0.13	9.93	36.69	60.00	-23.31	QP

Notes: Emission Level = Read Level +LISN Factor + Cable loss

Mode:g; Line:Neutral Line

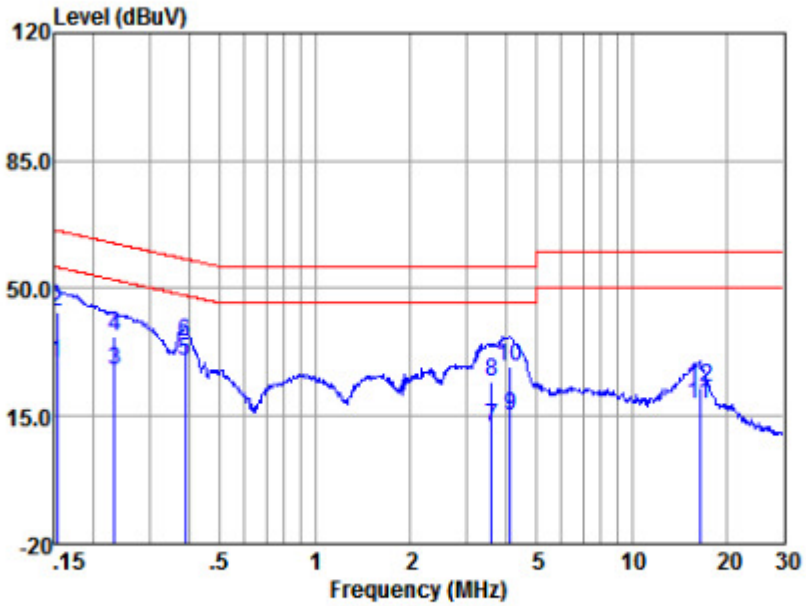


LISN : NEUTRAL
EUT/Project No : 2763IT
Test Mode : g

	Freq (MHz)	Read level (dBuV)	LISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.16	14.41	0.12	9.81	24.34	55.38	-31.04	Average
2	0.16	26.53	0.12	9.81	36.46	65.38	-28.92	QP
3	0.42	8.25	0.11	9.82	18.18	47.37	-29.19	Average
4	0.42	19.21	0.11	9.82	29.14	57.37	-28.23	QP
5	2.28	14.15	0.13	9.85	24.13	46.00	-21.87	Average
6	2.28	24.77	0.13	9.85	34.75	56.00	-21.25	QP
7	3.80	15.88	0.13	9.85	25.86	46.00	-20.14	Average
8	3.80	23.46	0.13	9.85	33.44	56.00	-22.56	QP
9	7.25	19.82	0.13	9.86	29.81	50.00	-20.19	Average
10	7.25	26.59	0.13	9.86	36.58	60.00	-23.42	QP
11	10.90	19.43	0.14	9.88	29.45	50.00	-20.55	Average
12	10.90	27.55	0.14	9.88	37.57	60.00	-22.43	QP

Notes: Emission Level = Read Level +LISN Factor + Cable loss

Mode:h;Line:Live Line

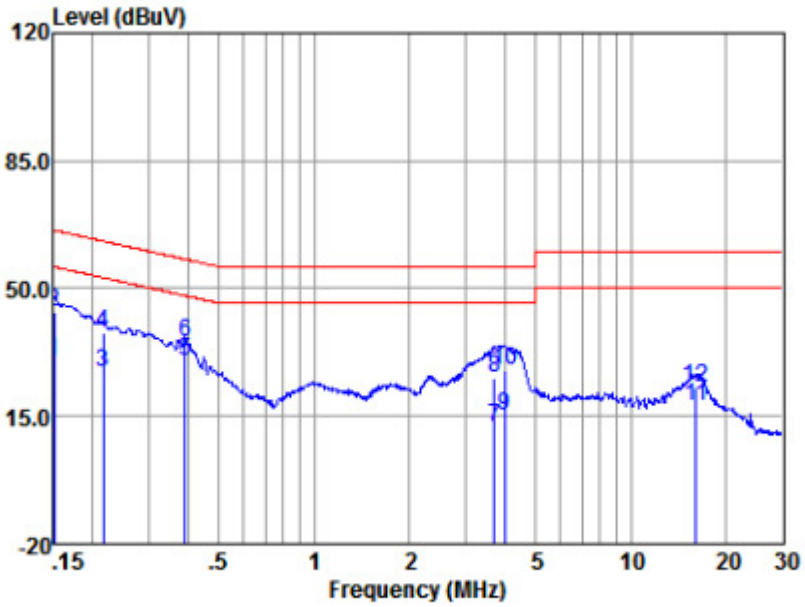


LISN : LINE
EUT/Project No : 2763IT
Test Mode : h

	Freq (MHz)	Read level (dBuV)	LISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.15	19.87	0.11	9.81	29.79	55.87	-26.08	Average
2	0.15	33.45	0.11	9.81	43.37	65.87	-22.50	QP
3	0.23	17.79	0.11	9.81	27.71	52.35	-24.64	Average
4	0.23	26.80	0.11	9.81	36.72	62.35	-25.63	QP
5	0.39	20.39	0.11	9.81	30.31	48.08	-17.77	Average
6	0.39	25.38	0.11	9.81	35.30	58.08	-22.78	QP
7	3.60	2.31	0.12	9.85	12.28	46.00	-33.72	Average
8	3.60	14.65	0.12	9.85	24.62	56.00	-31.38	QP
9	4.14	5.35	0.11	9.85	15.31	46.00	-30.69	Average
10	4.14	18.78	0.11	9.85	28.74	56.00	-27.26	QP
11	16.40	7.85	0.16	10.02	18.03	50.00	-31.97	Average
12	16.40	12.60	0.16	10.02	22.78	60.00	-37.22	QP

Notes: Emission Level = Read Level +LISN Factor + Cable loss

Mode:h;Line:Neutral Line



LISN : NEUTRAL
EUT/Project No : 2763IT
Test Mode : h

	Freq (MHz)	Read level (dBuV)	LISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.15	20.19	0.12	9.81	30.12	55.96	-25.84	Average
2	0.15	33.39	0.12	9.81	43.32	65.96	-22.64	QP
3	0.22	16.89	0.11	9.81	26.81	53.01	-26.20	Average
4	0.22	27.73	0.11	9.81	37.65	63.01	-25.36	QP
5	0.39	20.17	0.11	9.81	30.09	48.03	-17.94	Average
6	0.39	25.20	0.11	9.81	35.12	58.03	-22.91	QP
7	3.70	2.01	0.13	9.85	11.99	46.00	-34.01	Average
8	3.70	15.25	0.13	9.85	25.23	56.00	-30.77	QP
9	4.01	5.09	0.13	9.85	15.07	46.00	-30.93	Average
10	4.01	17.68	0.13	9.85	27.66	56.00	-28.34	QP
11	16.14	7.52	0.18	10.02	17.72	50.00	-32.28	Average
12	16.14	12.64	0.18	10.02	22.84	60.00	-37.16	QP

Notes: Emission Level = Read Level +LISN Factor + Cable loss

6.2 Asymmetric Mode Conducted Emissions (150kHz-30MHz)

Test Requirement: EN 55032:2015
Test Method: EN 55032:2015
Frequency Range: 150kHz to 30MHz
Limit:

0.15M-0.5MHz(Voltage)	84-74(dBμV) quasi-peak; 74-64(dBμV) average
0.5M-30MHz(Voltage)	74(dBμV) quasi-peak; 64(dBμV) average
0.15M-0.5MHz(Current)	40-30(dBμV) quasi-peak; 30-20(dBμV) average
0.5M-30MHz(Current)	30(dBμV) quasi-peak; 20(dBμV) average

Detector: 9kHz resolution bandwidth 0.15M to 30MHz

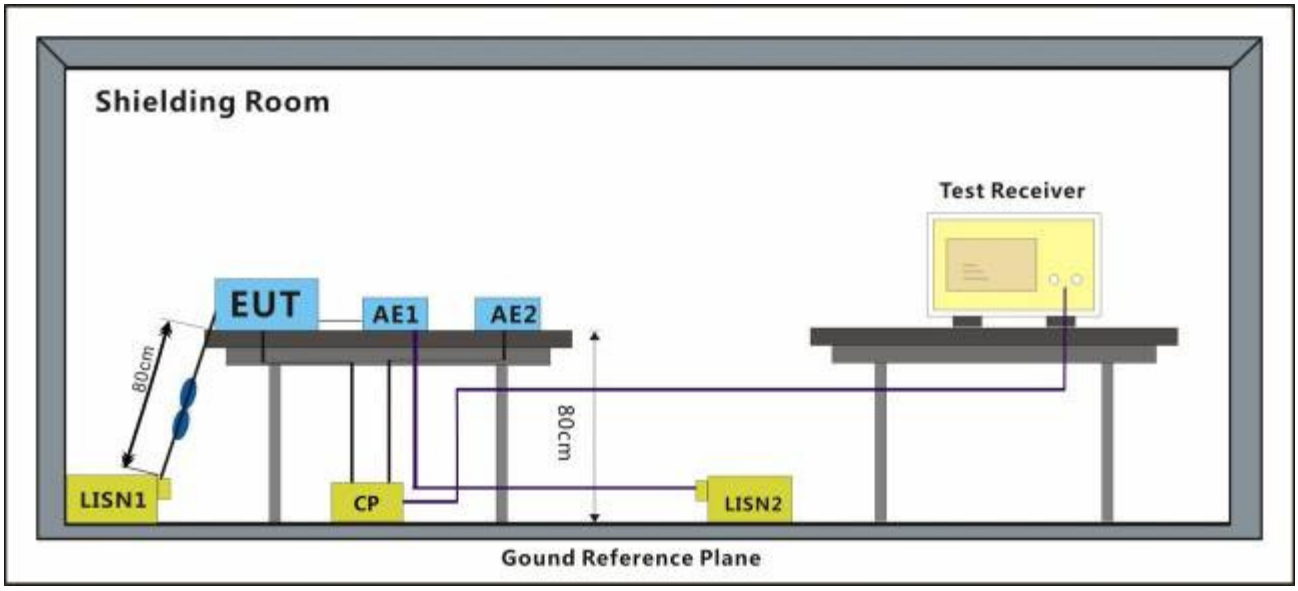
6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar

Test mode: a: DS-2CD2143G0-IS preview by DC12V support .
b: DS-2CD2143G0-IS preview by PoE support .
c: DS-2C2123G0-IS preview by DC12V support .
d: DS-2C2123G0-IS preview by PoE support .
e: DS-2CD2183G0-I preview by DC12V support .
f: DS-2CD2183G0-I preview by PoE support .
g: DS-2CD2163G0-I preview by DC12V support .
h: DS-2CD2163G0-I preview by PoE support .

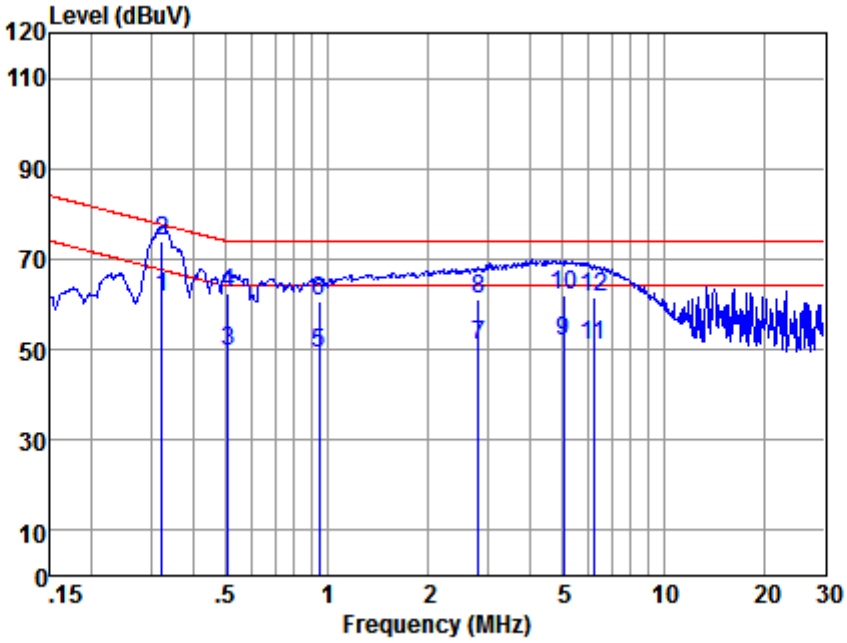
6.2.2 Test Setup Diagram



6.2.3 Measurement Data

Notes : Emission Level=Read Level + LISN Factor + Cable Loss

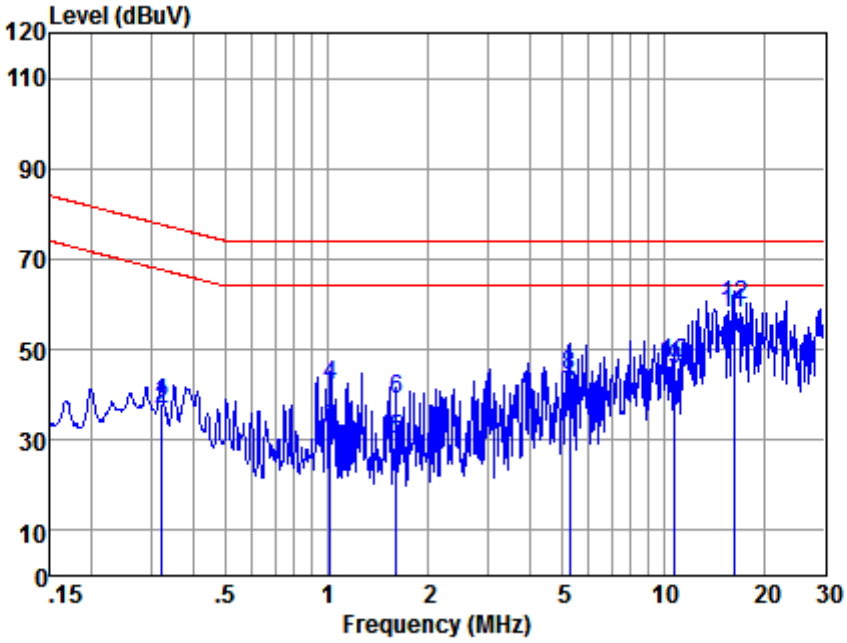
For old model
Mode:a



Site : chamber
Condition : ISN CAT5
EUT/Project No: 8716IT
Test mode : a

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.322	42.31	9.54	9.81	61.66	67.66	-6.00	Average
2	0.322	54.62	9.54	9.81	73.97	77.66	-3.69	QP
3	0.507	30.33	9.45	9.82	49.60	64.00	-14.40	Average
4	0.507	43.20	9.45	9.82	62.47	74.00	-11.53	QP
5	0.948	29.84	9.35	9.84	49.03	64.00	-14.97	Average
6	0.948	41.49	9.35	9.84	60.68	74.00	-13.32	QP
7	2.824	31.78	9.24	9.85	50.87	64.00	-13.13	Average
8	2.824	42.05	9.24	9.85	61.14	74.00	-12.86	QP
9	5.058	32.94	9.21	9.86	52.01	64.00	-11.99	Average
10	5.058	43.06	9.21	9.86	62.13	74.00	-11.87	QP
11	6.219	31.97	9.20	9.86	51.03	64.00	-12.97	Average
12	6.219	42.42	9.20	9.86	61.48	74.00	-12.52	QP

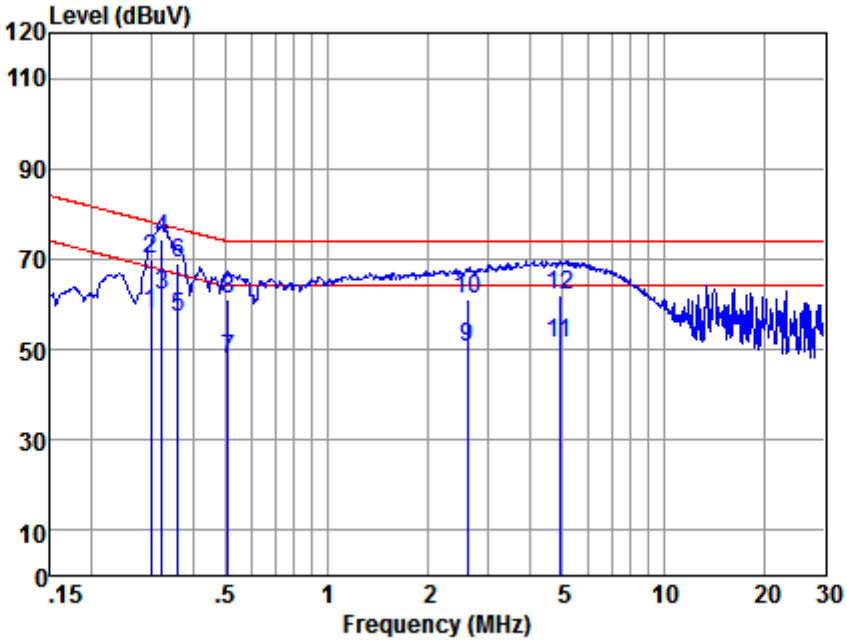
Mode:b



Site : chamber
Condition : ISN CAT5
EUT/Project No: 8716IT
Test mode : b

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.322	18.82	9.54	9.81	38.17	67.66	-29.49	Average
2	0.322	17.41	9.54	9.81	36.76	77.66	-40.90	QP
3	1.021	12.95	9.34	9.84	32.13	64.00	-31.87	Average
4	1.021	22.87	9.34	9.84	42.05	74.00	-31.95	QP
5	1.602	10.89	9.29	9.84	30.02	64.00	-33.98	Average
6	1.602	19.64	9.29	9.84	38.77	74.00	-35.23	QP
7	5.249	21.00	9.20	9.86	40.06	64.00	-23.94	Average
8	5.249	25.32	9.20	9.86	44.38	74.00	-29.62	QP
9	10.790	26.37	9.21	9.88	45.46	64.00	-18.54	Average
10	10.790	27.65	9.21	9.88	46.74	74.00	-27.26	QP
11	16.226	38.68	9.25	10.02	57.95	64.00	-6.05	Average
12	16.226	40.44	9.25	10.02	59.71	74.00	-14.29	QP

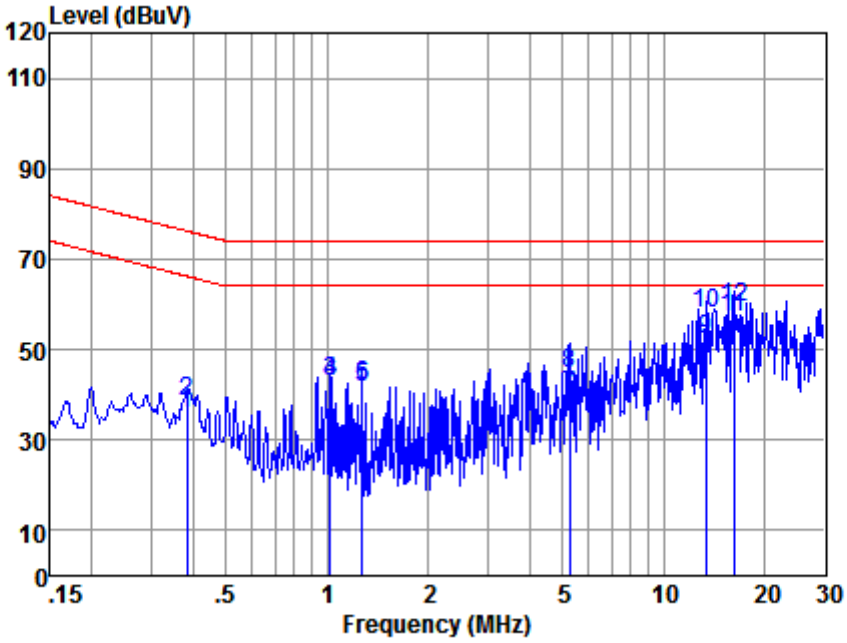
Mode:c



Site : chamber
Condition : ISN CAT5
EUT/Project No: 8716IT
Test mode : c

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.299	38.62	9.55	9.81	57.98	68.28	-10.30	Average
2	0.299	50.76	9.55	9.81	70.12	78.28	-8.16	QP
3	0.322	42.81	9.54	9.81	62.16	67.66	-5.50	Average
4	0.322	54.82	9.54	9.81	74.17	77.66	-3.49	QP
5	0.360	37.83	9.51	9.81	57.15	66.74	-9.59	Average
6	0.360	49.66	9.51	9.81	68.98	76.74	-7.76	QP
7	0.507	28.36	9.45	9.82	47.63	64.00	-16.37	Average
8	0.507	42.02	9.45	9.82	61.29	74.00	-12.71	QP
9	2.608	31.33	9.25	9.85	50.43	64.00	-13.57	Average
10	2.608	42.20	9.25	9.85	61.30	74.00	-12.70	QP
11	4.900	32.25	9.21	9.86	51.32	64.00	-12.68	Average
12	4.900	42.93	9.21	9.86	62.00	74.00	-12.00	QP

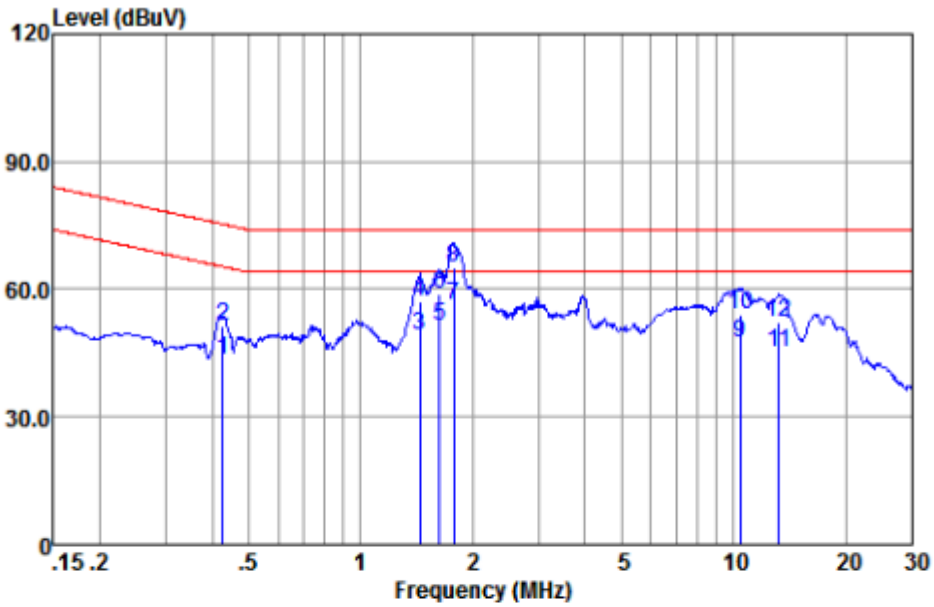
Mode:d



Site : chamber
Condition : ISN CAT5
EUT/Project No: 8716IT
Test mode : d

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.383	16.38	9.50	9.81	35.69	66.21	-30.52	Average
2	0.383	19.12	9.50	9.81	38.43	76.21	-37.78	QP
3	1.021	23.63	9.34	9.84	42.81	64.00	-21.19	Average
4	1.021	23.56	9.34	9.84	42.74	74.00	-31.26	QP
5	1.269	22.28	9.32	9.84	41.44	64.00	-22.56	Average
6	1.269	23.07	9.32	9.84	42.23	74.00	-31.77	QP
7	5.249	20.98	9.20	9.86	40.04	64.00	-23.96	Average
8	5.249	25.61	9.20	9.86	44.67	74.00	-29.33	QP
9	13.408	32.89	9.23	9.97	52.09	64.00	-11.91	Average
10	13.408	38.79	9.23	9.97	57.99	74.00	-16.01	QP
11	16.226	38.07	9.25	10.02	57.34	64.00	-6.66	Average
12	16.226	39.88	9.25	10.02	59.15	74.00	-14.85	QP

For new model
Mode:e;

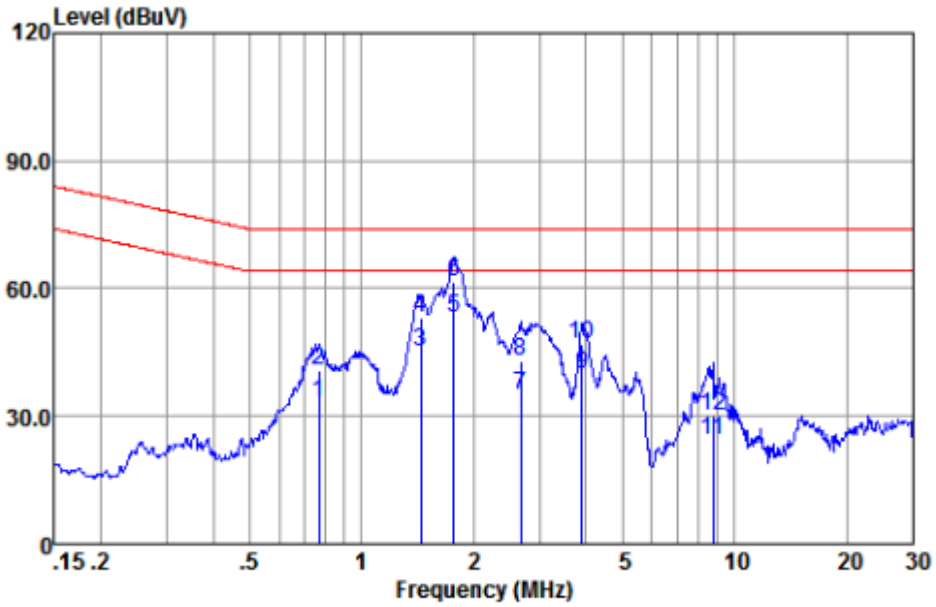


ISN : ISN CAT5
EUT/Project No : 2763IT
Test Mode : e

	Freq (MHz)	Read level (dBuV)	ISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.43	24.13	9.48	9.82	43.43	65.33	-21.90	Average
2	0.43	32.28	9.48	9.82	51.58	75.33	-23.75	QP
3	1.44	30.09	9.31	9.84	49.24	64.00	-14.76	Average
4	1.44	38.17	9.31	9.84	57.32	74.00	-16.68	QP
5	1.63	32.24	9.29	9.84	51.37	64.00	-12.63	Average
6	1.63	39.62	9.29	9.84	58.75	74.00	-15.25	QP
7	1.77	37.19	9.28	9.85	56.32	64.00	-7.68	Average
8	1.77	46.10	9.28	9.85	65.23	74.00	-8.77	QP
9	10.45	28.23	9.21	9.87	47.31	64.00	-16.69	Average
10	10.45	35.16	9.21	9.87	54.24	74.00	-19.76	QP
11	13.20	25.96	9.23	9.96	45.15	64.00	-18.85	Average
12	13.20	33.07	9.23	9.96	52.26	74.00	-21.74	QP

Notes: Emission Level = Read Level +ISN Factor + Cable loss

Mode:f;

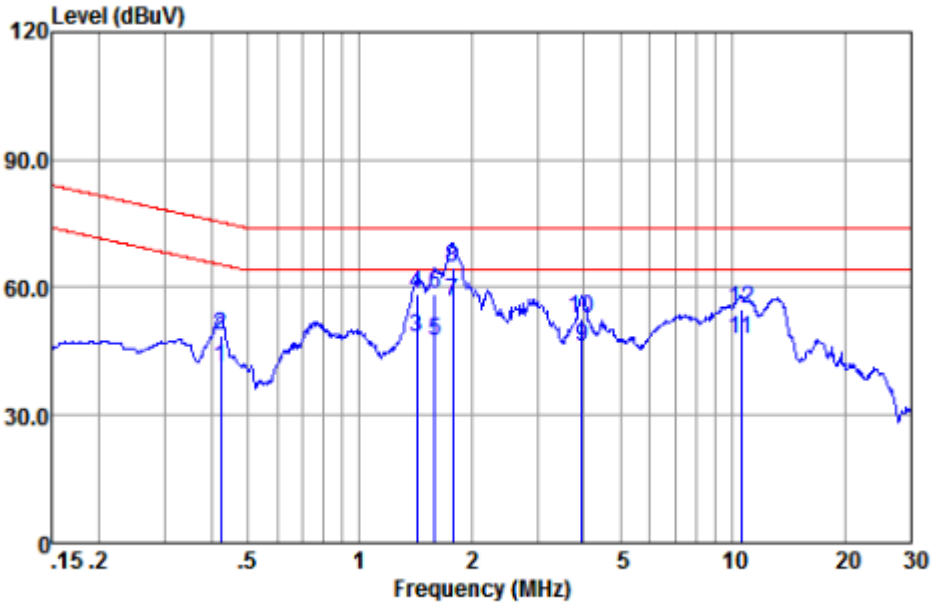


ISN : ISN CAT5
EUT/Project No : 2763IT
Test Mode : f

	Freq (MHz)	Read level (dBuV)	ISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.77	14.14	9.38	9.83	33.35	64.00	-30.65	Average
2	0.77	21.61	9.38	9.83	40.82	74.00	-33.18	QP
3	1.44	25.81	9.31	9.84	44.96	64.00	-19.04	Average
4	1.44	34.05	9.31	9.84	53.20	74.00	-20.80	QP
5	1.76	33.85	9.28	9.85	52.98	64.00	-11.02	Average
6	1.76	42.49	9.28	9.85	61.62	74.00	-12.38	QP
7	2.66	16.03	9.25	9.85	35.13	64.00	-28.87	Average
8	2.66	23.81	9.25	9.85	42.91	74.00	-31.09	QP
9	3.90	20.78	9.22	9.85	39.85	64.00	-24.15	Average
10	3.90	27.79	9.22	9.85	46.86	74.00	-27.14	QP
11	8.73	5.50	9.20	9.87	24.57	64.00	-39.43	Average
12	8.73	11.10	9.20	9.87	30.17	74.00	-43.83	QP

Notes: Emission Level = Read Level +ISN Factor + Cable loss

Mode:g;

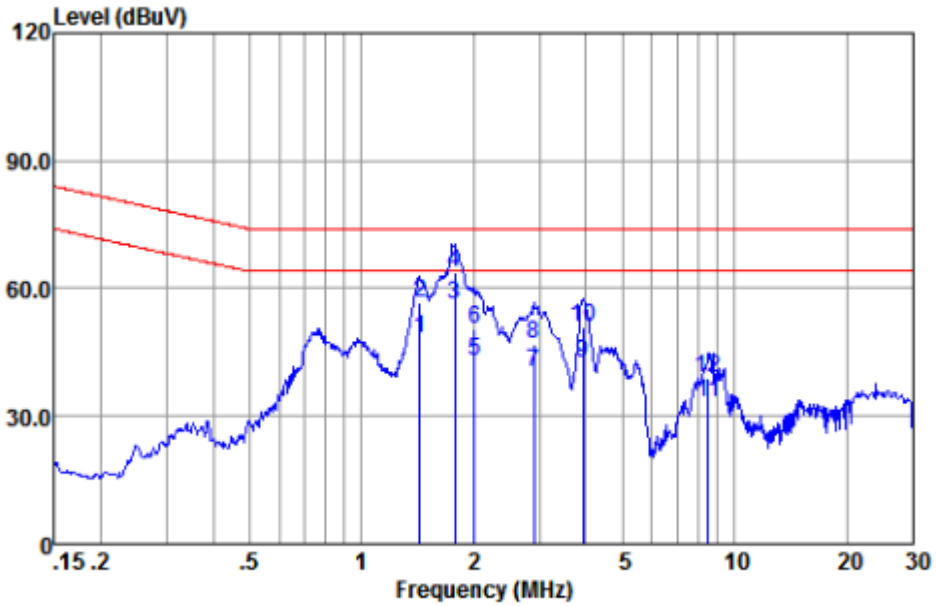


ISN : ISN CAT5
EUT/Project No : 2763IT
Test Mode : g

	Freq (MHz)	Read level (dBuV)	ISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	0.42	21.74	9.48	9.82	41.04	65.37	-24.33	Average
2	0.42	29.20	9.48	9.82	48.50	75.37	-26.87	QP
3	1.43	29.27	9.31	9.84	48.42	64.00	-15.58	Average
4	1.43	39.09	9.31	9.84	58.24	74.00	-15.76	QP
5	1.59	28.17	9.30	9.84	47.31	64.00	-16.69	Average
6	1.59	39.33	9.30	9.84	58.47	74.00	-15.53	QP
7	1.77	37.41	9.28	9.85	56.54	64.00	-7.46	Average
8	1.77	45.53	9.28	9.85	64.66	74.00	-9.34	QP
9	3.94	26.82	9.22	9.85	45.89	64.00	-18.11	Average
10	3.94	33.62	9.22	9.85	52.69	74.00	-21.31	QP
11	10.56	28.61	9.21	9.87	47.69	64.00	-16.31	Average
12	10.56	36.02	9.21	9.87	55.10	74.00	-18.90	QP

Notes: Emission Level = Read Level +ISN Factor + Cable loss

Mode:h;



ISN : ISN CAT5
EUT/Project No : 2763IT
Test Mode : h

	Freq (MHz)	Read level (dBuV)	ISN Factor (dB)	Cable Loss (dB)	Emission Level (dBuV)	Limit (dBuV)	Over Limit (dB)	Remark
1	1.43	29.05	9.31	9.84	48.20	64.00	-15.80	Average
2	1.43	37.50	9.31	9.84	56.65	74.00	-17.35	QP
3	1.77	37.10	9.28	9.85	56.23	64.00	-7.77	Average
4	1.77	44.82	9.28	9.85	63.95	74.00	-10.05	QP
5	2.01	23.98	9.27	9.85	43.10	64.00	-20.90	Average
6	2.01	31.16	9.27	9.85	50.28	74.00	-23.72	QP
7	2.90	21.14	9.24	9.85	40.23	64.00	-23.77	Average
8	2.90	27.71	9.24	9.85	46.80	74.00	-27.20	QP
9	3.92	23.35	9.22	9.85	42.42	64.00	-21.58	Average
10	3.92	31.84	9.22	9.85	50.91	74.00	-23.09	QP
11	8.50	14.27	9.20	9.87	33.34	64.00	-30.66	Average
12	8.50	19.69	9.20	9.87	38.76	74.00	-35.24	QP

Notes: Emission Level = Read Level +ISN Factor + Cable loss

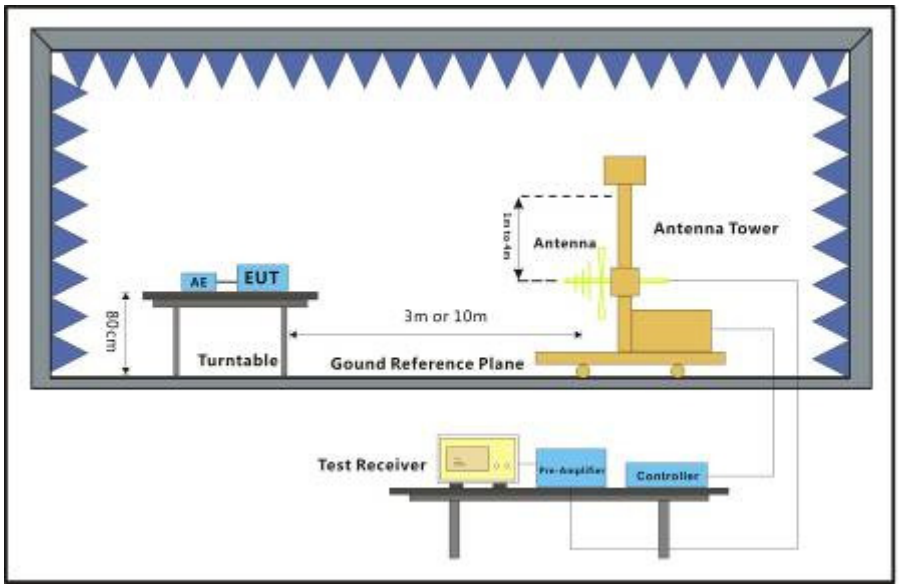
6.3 Radiated Emissions (30MHz-1GHz)

Test Requirement: EN 55032:2015
Test Method: EN 55032:2015
Frequency Range: 30MHz to 1GHz
Measurement Distance: 3m
Limit:
30MHz-230MHz 40 dB(μV/m) quasi-peak
230MHz-1GHz 47 dB(μV/m) quasi-peak
Detector: Peak for pre-scan (120kHz resolution bandwidth) 30M to 1000MHz

6.3.1 E.U.T. Operation

Operating Environment:
Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1002 mbar
Test mode: a: DS-2CD2143G0-IS preview by DC12V support .
b: DS-2CD2143G0-IS preview by PoE support .
c: DS-2C2123G0-IS preview by DC12V support .
d: DS-2C2123G0-IS preview by PoE support .
e: DS-2CD2183G0-I preview by DC12V support .
f: DS-2CD2183G0-I preview by PoE support .
g: DS-2CD2163G0-I preview by DC12V support .
h: DS-2CD2163G0-I preview by PoE support .

6.3.2 Test Setup Diagram

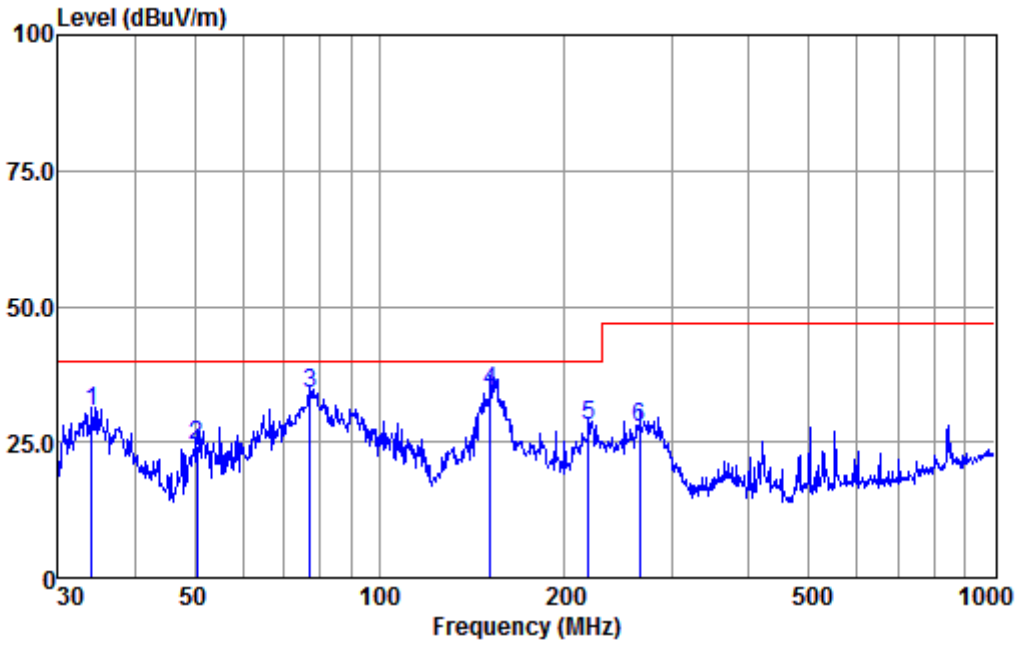


6.3.3 Measurement Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.

Notes : Emission Level=Read Level + Antenna Factor + Cable Loss – Preamp Factor

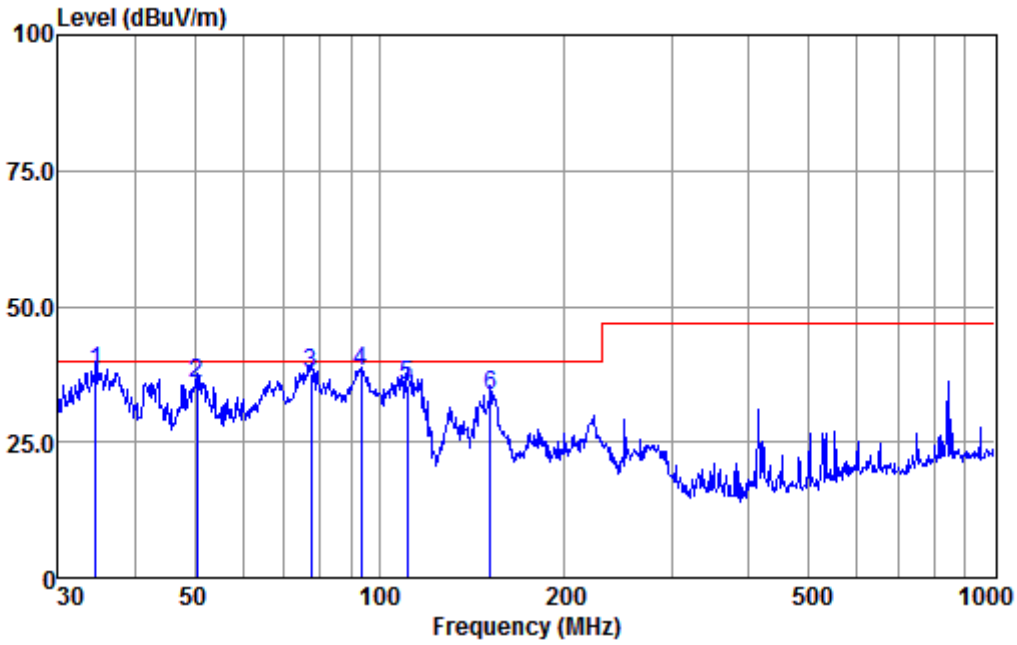
For old model
Mode:a; Polarization:Horizontal



Condition : HORIZONTAL
EUT/Project: 8716IT
Test Mode : a

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	34.04	57.16	15.74	0.20	42.61	30.49	40.00	-9.51	QP
2	50.41	56.04	10.68	0.26	42.64	24.34	40.00	-15.66	QP
3	77.05	67.36	8.98	0.37	42.67	34.04	40.00	-5.96	QP
4 q	151.60	64.26	12.10	0.62	42.61	34.37	40.00	-5.63	QP
5	219.08	59.64	10.25	0.72	42.50	28.11	40.00	-11.89	QP
6	265.68	57.30	12.05	0.79	42.44	27.70	47.00	-19.30	QP

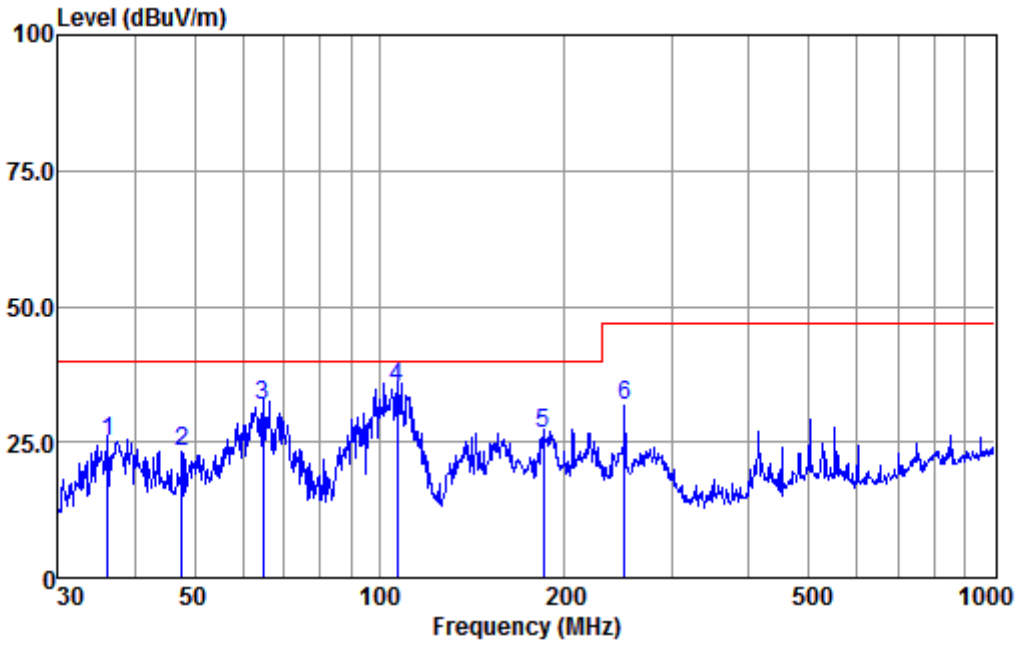
Mode:a; Polarization:Vertical



Condition : VERTICAL
EUT/Project: 8716IT
Test Mode : a

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 q	34.52	64.52	15.79	0.20	42.61	37.90	40.00	-2.10	QP
2	50.41	67.43	10.68	0.26	42.64	35.73	40.00	-4.27	QP
3	77.32	70.96	8.89	0.37	42.67	37.55	40.00	-2.45	QP
4	93.44	71.48	8.61	0.43	42.69	37.83	40.00	-2.17	QP
5	110.96	68.02	9.63	0.50	42.70	35.45	40.00	-4.55	QP
6	151.60	63.31	12.10	0.62	42.61	33.42	40.00	-6.58	QP

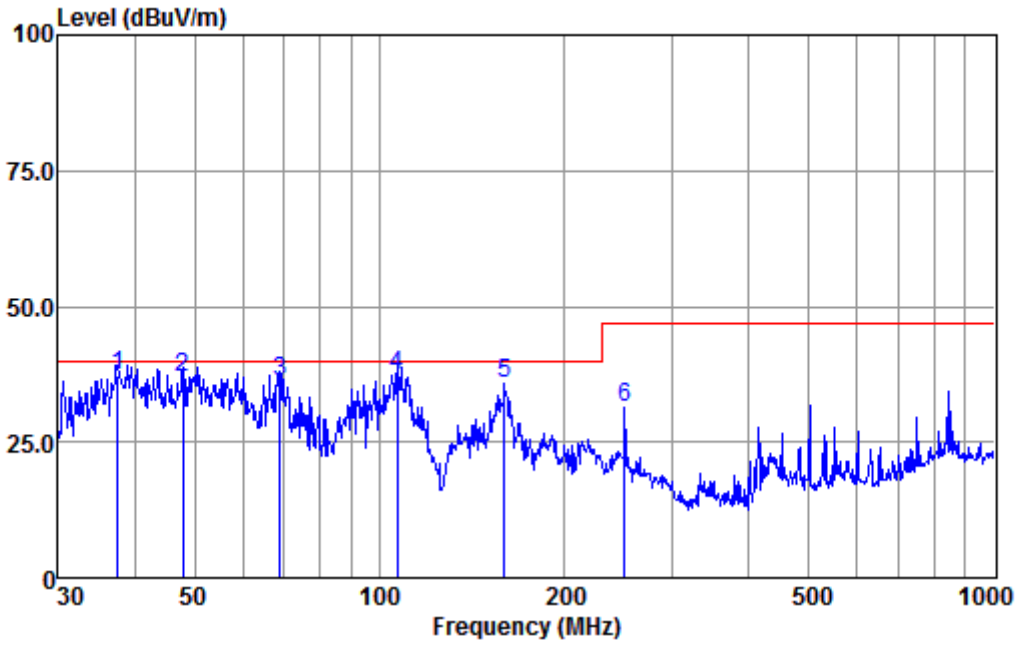
Mode:b; Polarization:Horizontal



Condition : HORIZONTAL
EUT/Project: 8716IT
Test Mode : b

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	36.13	51.58	15.95	0.21	42.61	25.13	40.00	-14.87	QP
2	47.66	53.61	11.85	0.25	42.64	23.07	40.00	-16.93	QP
3	64.66	61.99	12.03	0.32	42.66	31.68	40.00	-8.32	QP
4 q	106.76	67.63	9.57	0.49	42.70	34.99	40.00	-5.01	QP
5	185.14	57.25	11.05	0.67	42.55	26.42	40.00	-13.58	QP
6	250.30	61.93	11.50	0.77	42.46	31.74	47.00	-15.26	QP

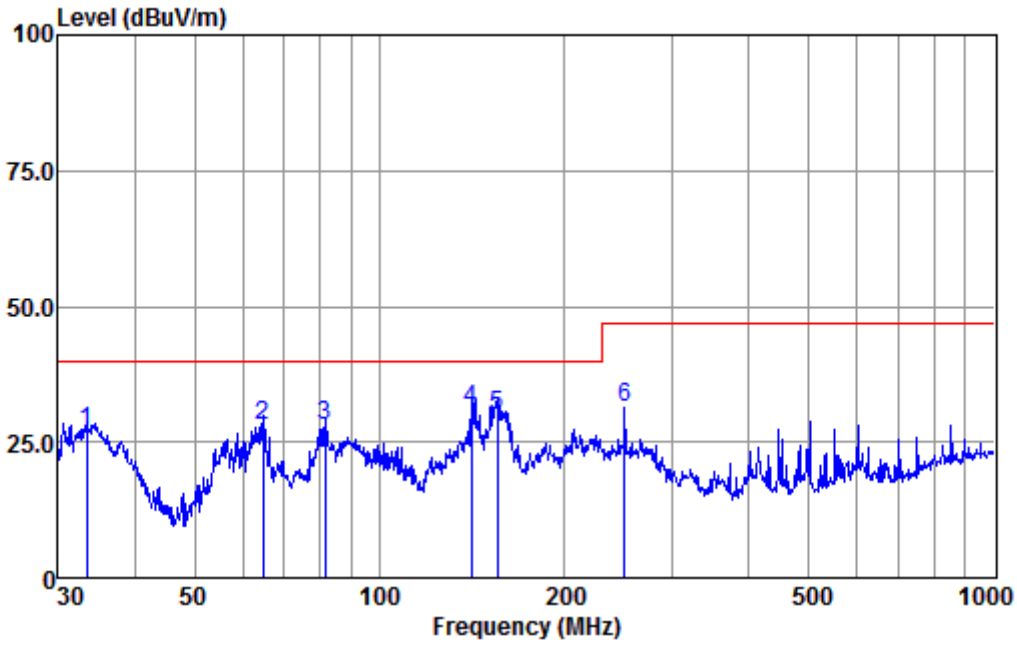
Mode:b; Polarization:Vertical



Condition : VERTICAL
EUT/Project: 8716IT
Test Mode : b

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	37.55	63.61	16.08	0.21	42.62	37.28	40.00	-2.72	QP
2	47.83	67.52	11.76	0.25	42.64	36.89	40.00	-3.11	QP
3	68.87	66.89	11.54	0.33	42.66	36.10	40.00	-3.90	QP
4 q	106.76	70.02	9.57	0.49	42.70	37.38	40.00	-2.62	QP
5	159.78	64.54	13.10	0.63	42.59	35.68	40.00	-4.32	QP
6	250.30	61.43	11.50	0.77	42.46	31.24	47.00	-15.76	QP

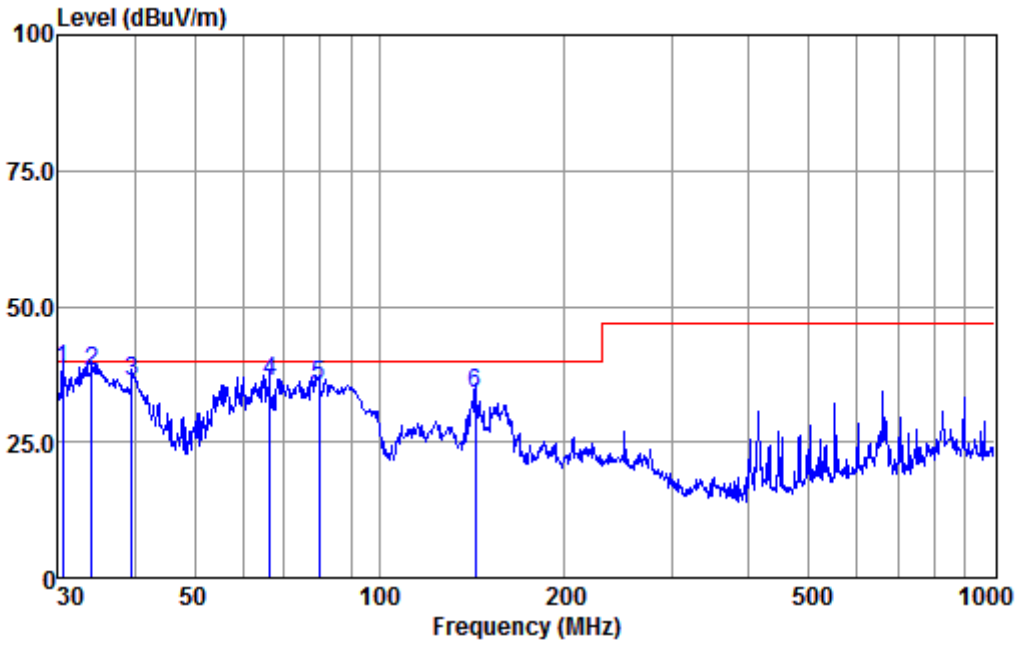
Mode:c; Polarization:Horizontal



Condition : HORIZONTAL
EUT/Project: 8716IT
Test Mode : c

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	33.44	53.61	15.68	0.20	42.61	26.88	40.00	-13.12	QP
2	64.66	58.38	12.03	0.32	42.66	28.07	40.00	-11.93	QP
3	81.50	62.42	8.02	0.38	42.68	28.14	40.00	-11.86	QP
4 q	141.33	61.68	11.39	0.61	42.63	31.05	40.00	-8.95	QP
5	155.36	59.12	12.57	0.63	42.60	29.72	40.00	-10.28	QP
6	250.30	61.38	11.50	0.77	42.46	31.19	47.00	-15.81	QP

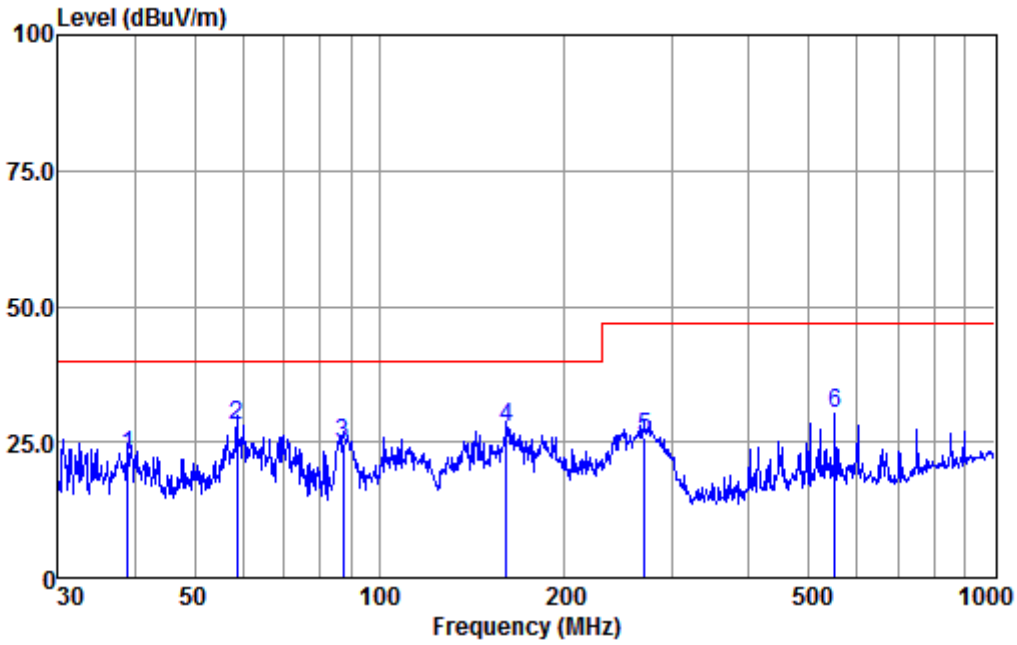
Mode:c; Polarization:Vertical



Condition : VERTICAL
EUT/Project: 8716IT
Test Mode : c

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 q	30.53	65.32	15.36	0.18	42.60	38.26	40.00	-1.74	QP
2	34.04	64.50	15.74	0.20	42.61	37.83	40.00	-2.17	QP
3	39.58	62.37	16.26	0.22	42.62	36.23	40.00	-3.77	QP
4	66.27	66.66	11.84	0.32	42.66	36.16	40.00	-3.84	QP
5	79.80	69.55	8.09	0.38	42.67	35.35	40.00	-4.65	QP
6	143.33	64.30	11.51	0.61	42.63	33.79	40.00	-6.21	QP

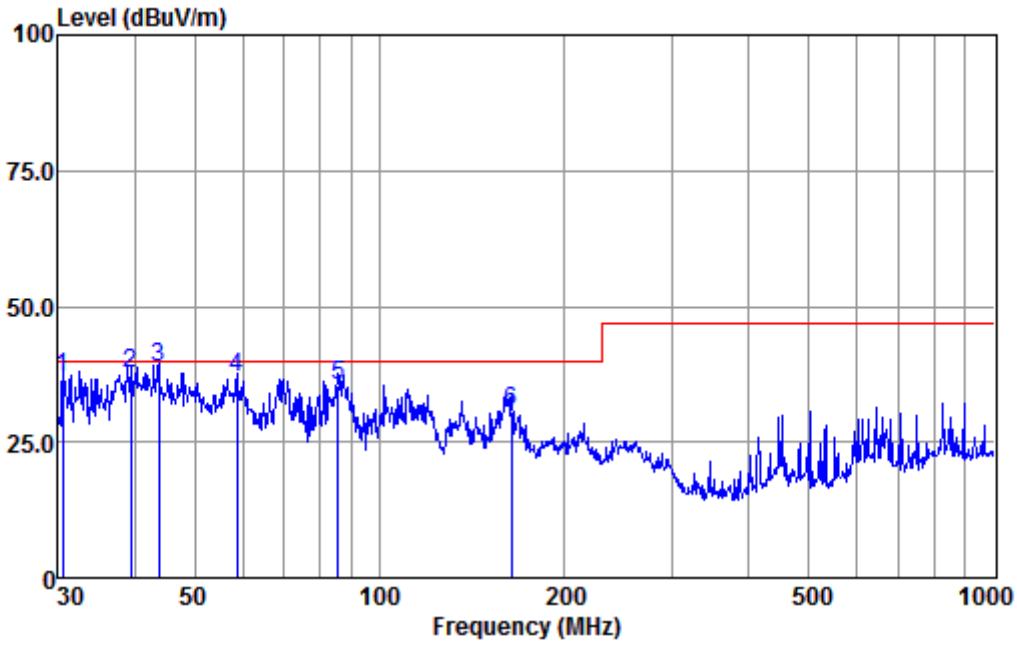
Mode:d; Polarization:Horizontal



Condition : HORIZONTAL
EUT/Project: 8716IT
Test Mode : d

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	38.89	48.86	16.20	0.22	42.62	22.66	40.00	-17.34	QP
2 q	58.61	58.06	12.33	0.29	42.65	28.03	40.00	-11.97	QP
3	87.42	59.09	8.08	0.41	42.68	24.90	40.00	-15.10	QP
4	160.91	56.64	12.93	0.64	42.59	27.62	40.00	-12.38	QP
5	270.37	55.15	12.22	0.80	42.43	25.74	47.00	-21.26	QP
6	550.95	52.65	18.38	1.28	42.17	30.14	47.00	-16.86	QP

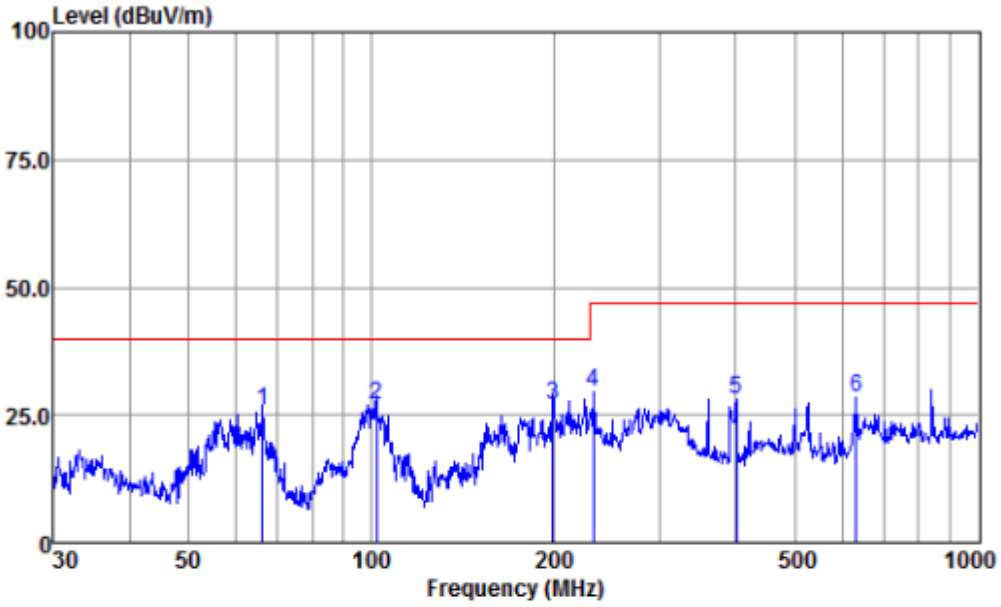
Mode:d; Polarization:Vertical



Condition : VERTICAL
EUT/Project: 8716IT
Test Mode : d

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	30.53	63.97	15.36	0.18	42.60	36.91	40.00	-3.09	QP
2	39.44	63.85	16.25	0.22	42.62	37.70	40.00	-2.30	QP
3 q	43.81	67.04	13.98	0.23	42.63	38.62	40.00	-1.38	QP
4	58.61	66.82	12.33	0.29	42.65	36.79	40.00	-3.21	QP
5	85.60	69.68	8.06	0.40	42.68	35.46	40.00	-4.54	QP
6	163.76	60.08	12.52	0.64	42.58	30.66	40.00	-9.34	QP

For new model
Mode:e; Polarization:Horizontal

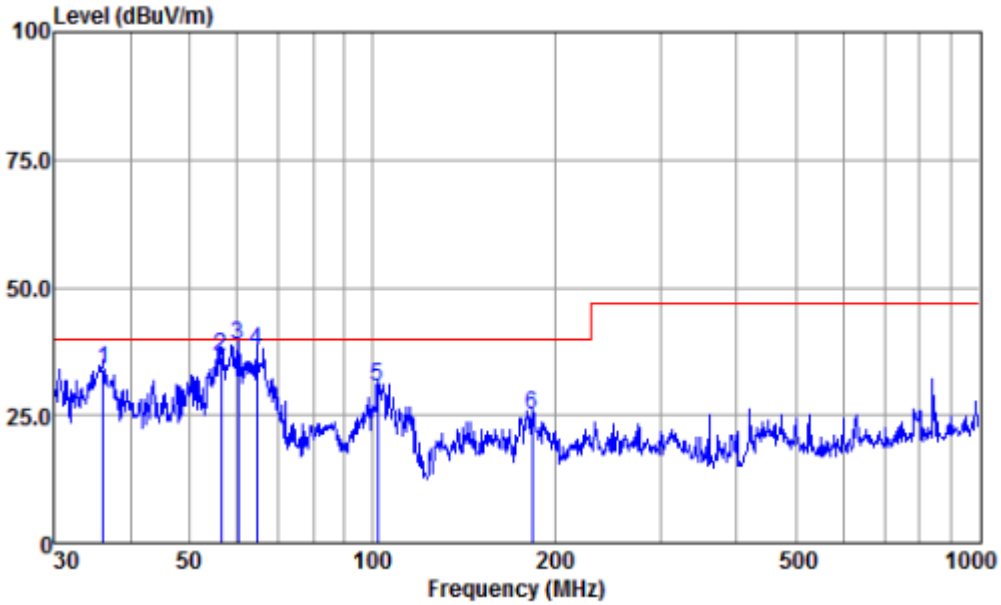


Antenna Polarity :HORIZONTAL
EUT/Project :2763IT
Test mode :e

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	66.27	56.37	11.84	0.32	42.66	25.87	40.00	-14.13	QP
2	102.00	59.48	9.52	0.46	42.69	26.77	40.00	-13.23	QP
3	199.29	59.49	9.46	0.69	42.52	27.12	40.00	-12.88	QP
4	232.53	60.45	10.81	0.74	42.48	29.52	47.00	-17.48	QP
5	400.43	53.90	15.10	1.00	42.10	27.90	47.00	-19.10	QP
6	631.69	49.38	19.67	1.45	42.20	28.30	47.00	-18.70	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:e; Polarization:Vertical

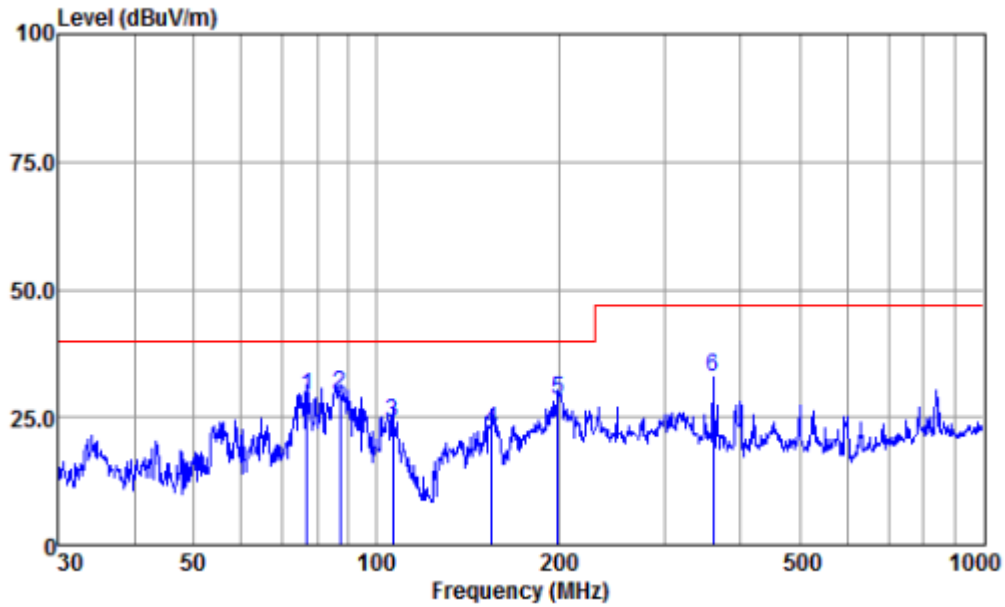


Antenna Polarity :VERTICAL
EUT/Project :2763IT
Test mode :e

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	36.13	60.24	15.95	0.21	42.61	33.79	40.00	-6.21	QP
2	56.39	66.91	11.91	0.29	42.65	36.46	40.00	-3.54	QP
3	60.07	68.35	12.60	0.30	42.65	38.60	40.00	-1.40	QP
4	64.66	67.88	12.03	0.32	42.66	37.57	40.00	-2.43	QP
5	102.00	63.34	9.52	0.46	42.69	30.63	40.00	-9.37	QP
6	183.84	55.89	11.26	0.67	42.55	25.27	40.00	-14.73	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:f; Polarization:Horizontal

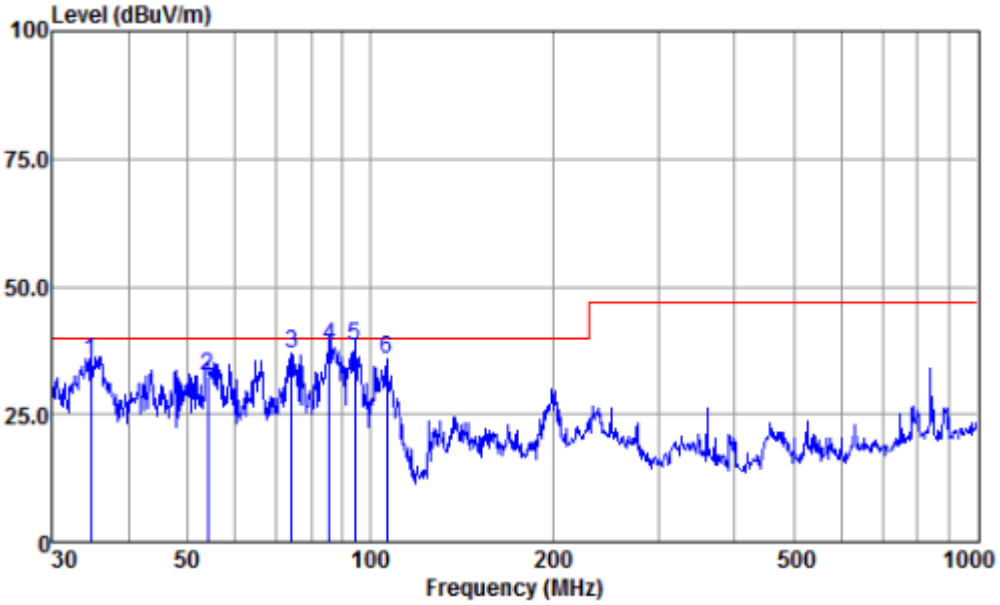


Antenna Polarity :HORIZONTAL
EUT/Project :2763IT
Test mode :f

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	77.05	62.59	8.98	0.37	42.67	29.27	40.00	-10.73	QP
2	87.42	63.71	8.08	0.41	42.68	29.52	40.00	-10.48	QP
3	106.76	56.61	9.57	0.49	42.70	23.97	40.00	-16.03	QP
4	155.36	52.07	12.57	0.63	42.60	22.67	40.00	-17.33	QP
5	199.29	60.79	9.46	0.69	42.52	28.42	40.00	-11.58	QP
6	360.45	59.79	14.40	0.93	42.21	32.91	47.00	-14.09	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:f; Polarization:Vertical

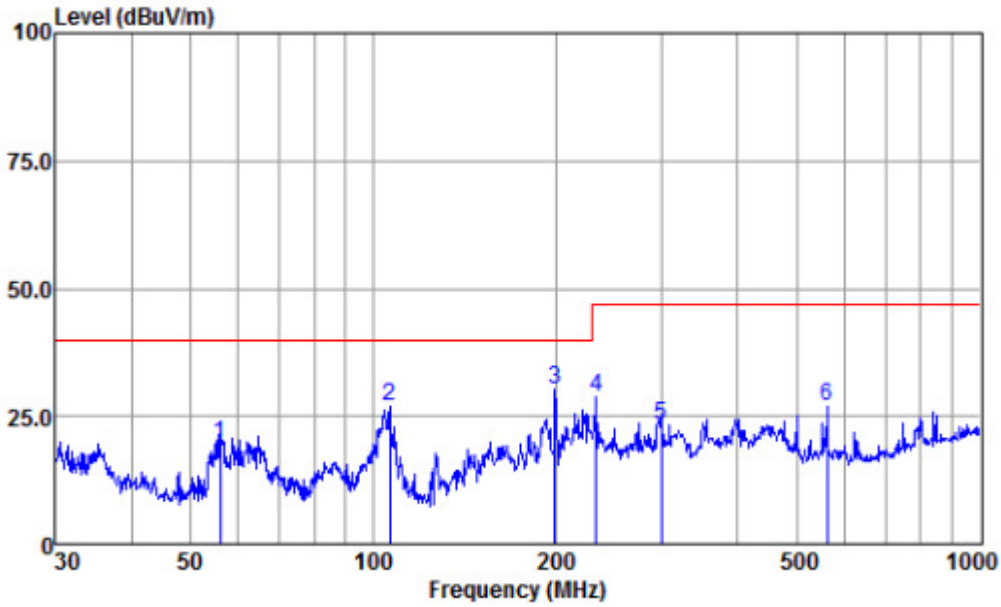


Antenna Polarity :VERTICAL
EUT/Project :2763IT
Test mode :f

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	34.64	62.05	15.80	0.20	42.61	35.44	40.00	-4.56	QP
2	54.07	63.29	11.45	0.28	42.65	32.37	40.00	-7.63	QP
3	74.40	69.48	9.88	0.36	42.67	37.05	40.00	-2.95	QP
4	85.90	72.51	8.06	0.40	42.68	38.29	40.00	-1.71	QP
5	94.43	72.05	8.75	0.43	42.69	38.54	40.00	-1.46	QP
6	106.76	68.30	9.57	0.49	42.70	35.66	40.00	-4.34	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:g; Polarization:Horizontal

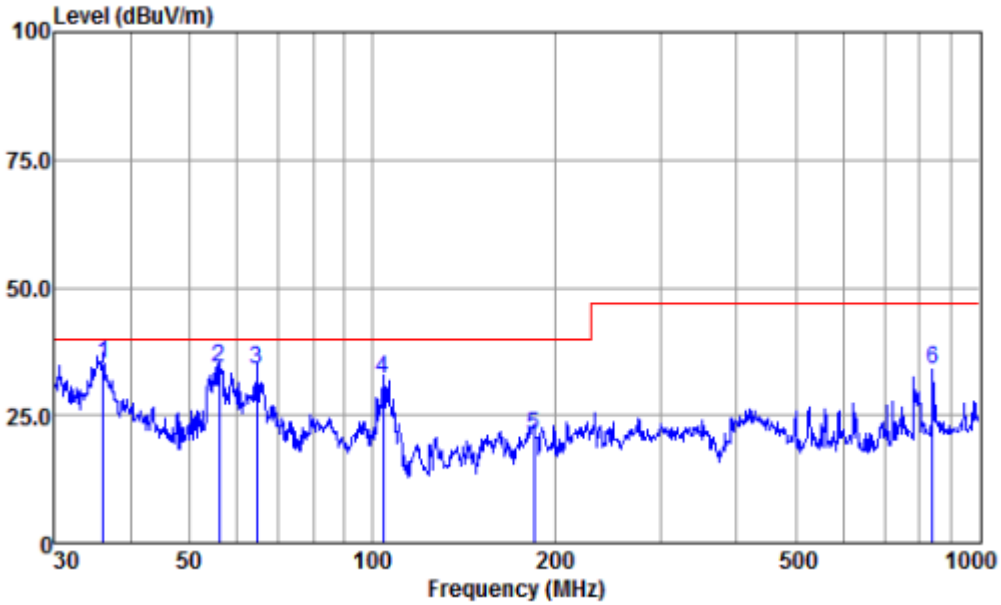


Antenna Polarity :HORIZONTAL
EUT/Project :2763IT
Test mode :g

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	56.00	50.15	11.83	0.28	42.65	19.61	40.00	-20.39	QP
2	106.76	59.54	9.57	0.49	42.70	26.90	40.00	-13.10	QP
3	199.29	62.55	9.46	0.69	42.52	30.18	40.00	-9.82	QP
4	233.35	59.61	10.84	0.74	42.48	28.71	47.00	-18.29	QP
5	299.32	51.81	13.17	0.84	42.40	23.42	47.00	-23.58	QP
6	560.69	49.30	18.60	1.30	42.17	27.03	47.00	-19.97	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:g;Polarization:Vertical

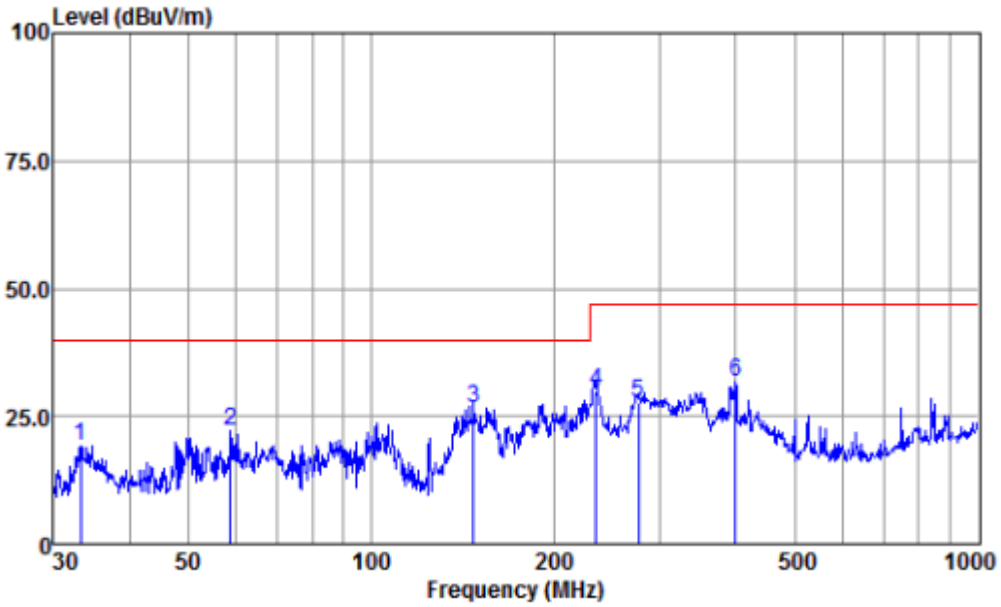


Antenna Polarity :VERTICAL
EUT/Project :2763IT
Test mode :g

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	36.13	61.57	15.95	0.21	42.61	35.12	40.00	-4.88	QP
2	56.00	64.99	11.83	0.28	42.65	34.45	40.00	-5.55	QP
3	64.66	64.23	12.03	0.32	42.66	33.92	40.00	-6.08	QP
4	104.54	64.64	9.55	0.47	42.69	31.97	40.00	-8.03	QP
5	185.14	51.98	11.05	0.67	42.55	21.15	40.00	-18.85	QP
6	842.13	51.62	22.25	2.21	42.28	33.80	47.00	-13.20	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:h;Polarization:Horizontal

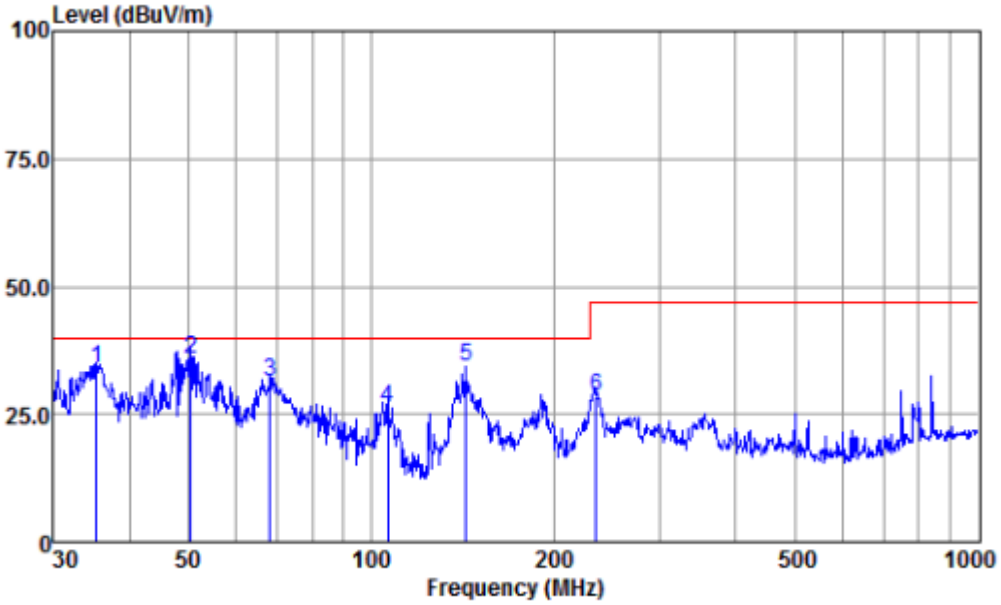


Antenna Polarity :HORIZONTAL
EUT/Project :2763IT
Test mode :h

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	33.21	46.01	15.65	0.20	42.61	19.25	40.00	-20.75	QP
2	58.61	52.12	12.33	0.29	42.65	22.09	40.00	-17.91	QP
3	147.92	56.76	11.78	0.62	42.61	26.55	40.00	-13.45	QP
4	234.99	60.58	10.91	0.75	42.48	29.76	47.00	-17.24	QP
5	276.12	56.85	12.41	0.81	42.43	27.64	47.00	-19.36	QP
6	399.03	57.95	15.08	0.99	42.10	31.92	47.00	-15.08	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:h;Polarization:Vertical



Antenna Polarity :VERTICAL
EUT/Project :2763IT
Test mode :h

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	35.25	60.47	15.86	0.20	42.61	33.92	40.00	-6.08	QP
2	50.41	67.59	10.68	0.26	42.64	35.89	40.00	-4.11	QP
3	68.15	62.07	11.62	0.33	42.66	31.36	40.00	-8.64	QP
4	106.76	58.81	9.57	0.49	42.70	26.17	40.00	-13.83	QP
5	143.33	64.89	11.51	0.61	42.63	34.38	40.00	-5.62	QP
6	234.99	59.14	10.91	0.75	42.48	28.32	47.00	-18.68	QP

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

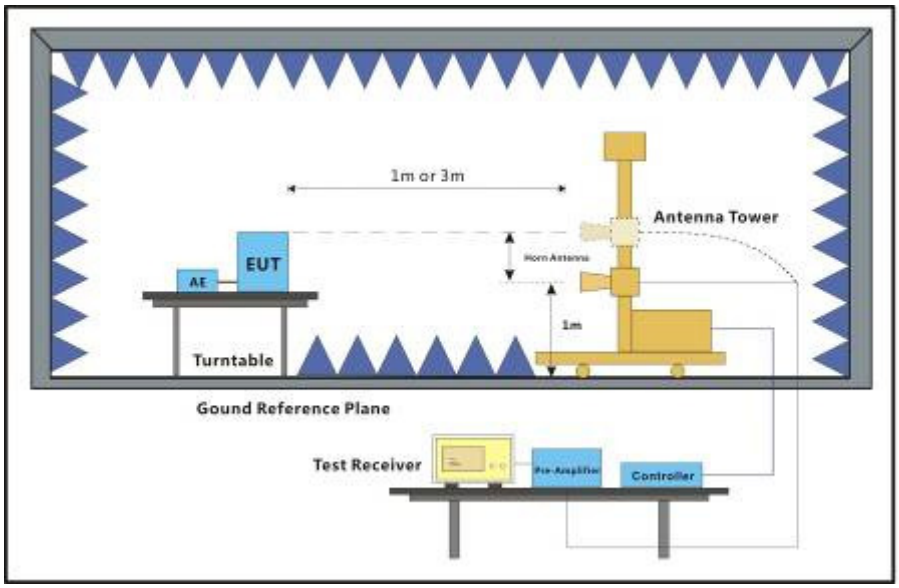
6.4 Radiated Emissions (above 1GHz)

Test Requirement: EN 55032:2015
Test Method: EN 55032:2015
Frequency Range: Above 1GHz
Measurement Distance: 3m
Limit:
1GHz-3GHz 70 dB(μV/m) peak, 50 dB(μV/m) average
3GHz-6GHz 74 dB(μV/m) peak, 54dB(μV/m) average
Detector: Peak for pre-scan (1000kHz resolution bandwidth) 1000M to 6000MHz

6.4.1 E.U.T. Operation

Operating Environment:
Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1002 mbar
Test mode: a: DS-2CD2143G0-IS preview by DC12V support .
b: DS-2CD2143G0-IS preview by PoE support .
c: DS-2C2123G0-IS preview by DC12V support .
d: DS-2C2123G0-IS preview by PoE support .
e: DS-2CD2183G0-I preview by DC12V support .
f: DS-2CD2183G0-I preview by PoE support .
g: DS-2CD2163G0-I preview by DC12V support .
h: DS-2CD2163G0-I preview by PoE support .

6.4.2 Test Setup Diagram

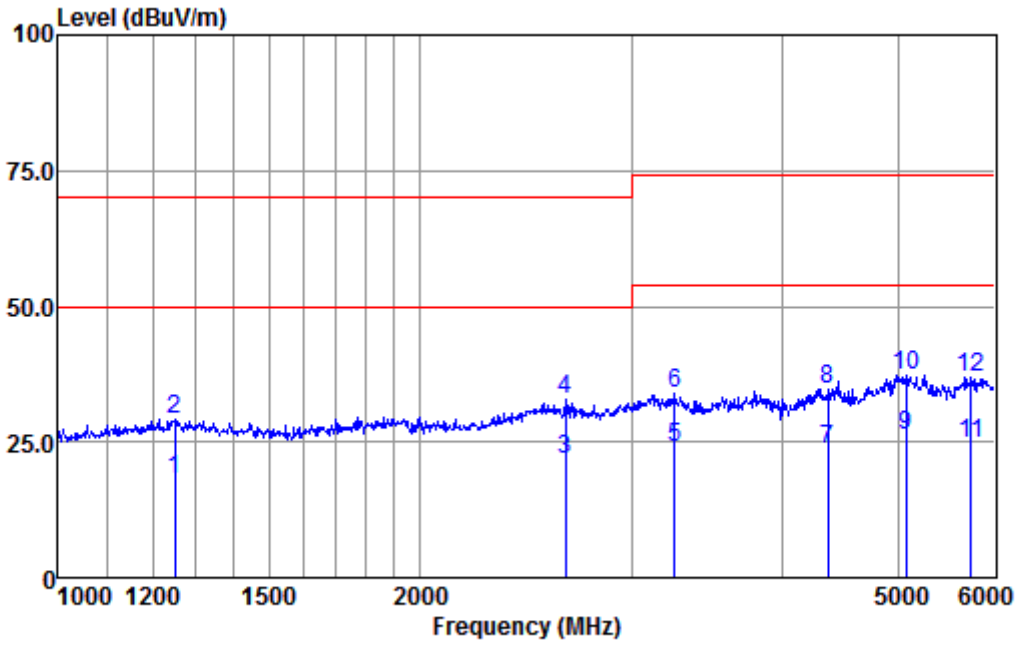


6.4.3 Measurement Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.

Notes : Emission Level=Read Level + Antenna Factor + Cable Loss – Preamp Factor

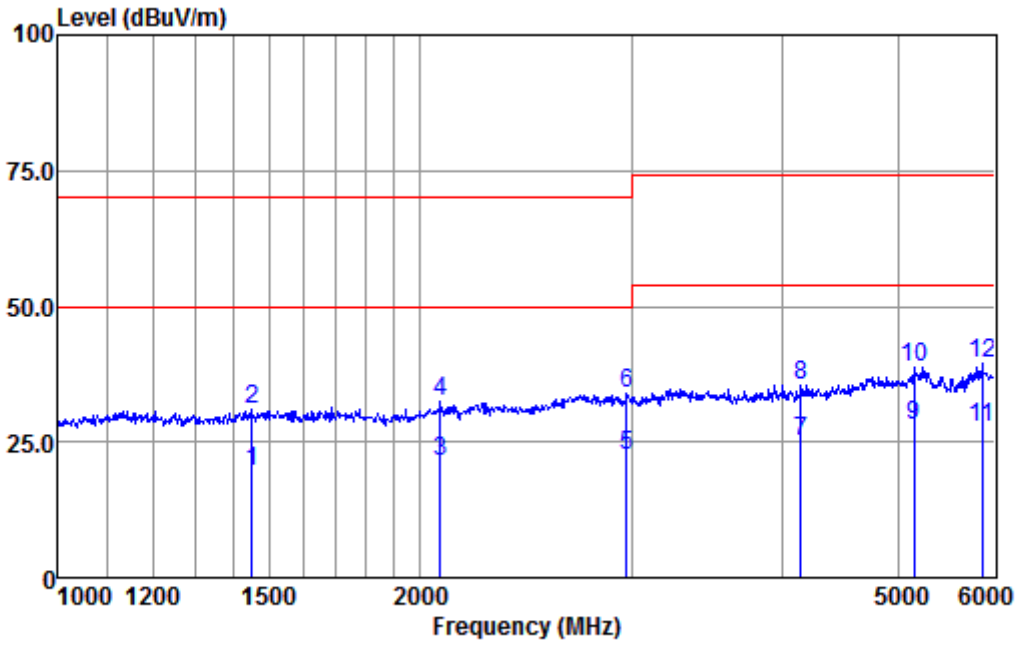
For old model
Mode:a; Polarization:Horizontal



Condition : HORIZONTAL
EUT/Project: 8716IT
Test mode : a

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1251.03	31.75	24.70	3.45	41.84	18.06	50.00	-31.94	Average
2	1251.03	42.74	24.70	3.45	41.84	29.05	70.00	-40.95	Peak
3	2640.94	30.45	27.73	5.52	42.03	21.67	50.00	-28.33	Average
4	2640.94	41.68	27.73	5.52	42.03	32.90	70.00	-37.10	Peak
5	3256.88	30.98	28.66	6.02	41.79	23.87	54.00	-30.13	Average
6	3256.88	41.11	28.66	6.02	41.79	34.00	74.00	-40.00	Peak
7	4369.37	27.48	30.38	7.55	41.74	23.67	54.00	-30.33	Average
8	4369.37	38.55	30.38	7.55	41.74	34.74	74.00	-39.26	Peak
9	5069.97	28.03	31.65	8.21	41.67	26.22	54.00	-27.78	Average
10 p	5069.97	39.15	31.65	8.21	41.67	37.34	74.00	-36.66	Peak
11	5747.46	26.18	32.25	8.36	41.92	24.87	54.00	-29.13	Average
12	5747.46	38.39	32.25	8.36	41.92	37.08	74.00	-36.92	Peak

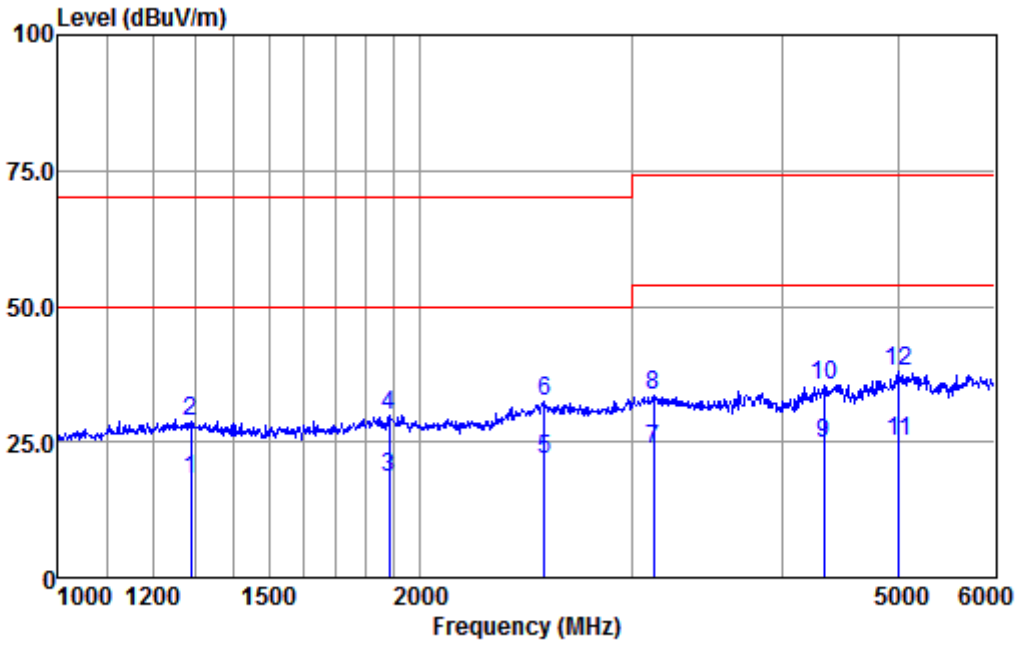
Mode:a; Polarization:Vertical



Condition : VERTICAL
EUT/Project: 8716IT
Test mode : a

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1449.03	32.79	25.11	3.75	41.91	19.74	50.00	-30.26	Average
2	1449.03	43.89	25.11	3.75	41.91	30.84	70.00	-39.16	Peak
3	2080.96	32.83	26.25	4.60	42.21	21.47	50.00	-28.53	Average
4	2080.96	43.77	26.25	4.60	42.21	32.41	70.00	-37.59	Peak
5	2972.46	30.08	28.45	5.79	41.73	22.59	50.00	-27.41	Average
6	2972.46	41.54	28.45	5.79	41.73	34.05	70.00	-35.95	Peak
7	4148.13	29.71	29.97	7.32	41.87	25.13	54.00	-28.87	Average
8	4148.13	40.04	29.97	7.32	41.87	35.46	74.00	-38.54	Peak
9	5152.39	29.75	31.69	8.22	41.73	27.93	54.00	-26.07	Average
10	5152.39	40.72	31.69	8.22	41.73	38.90	74.00	-35.10	Peak
11	5872.37	28.78	32.41	8.40	41.88	27.71	54.00	-26.29	Average
12 p	5872.37	40.67	32.41	8.40	41.88	39.60	74.00	-34.40	Peak

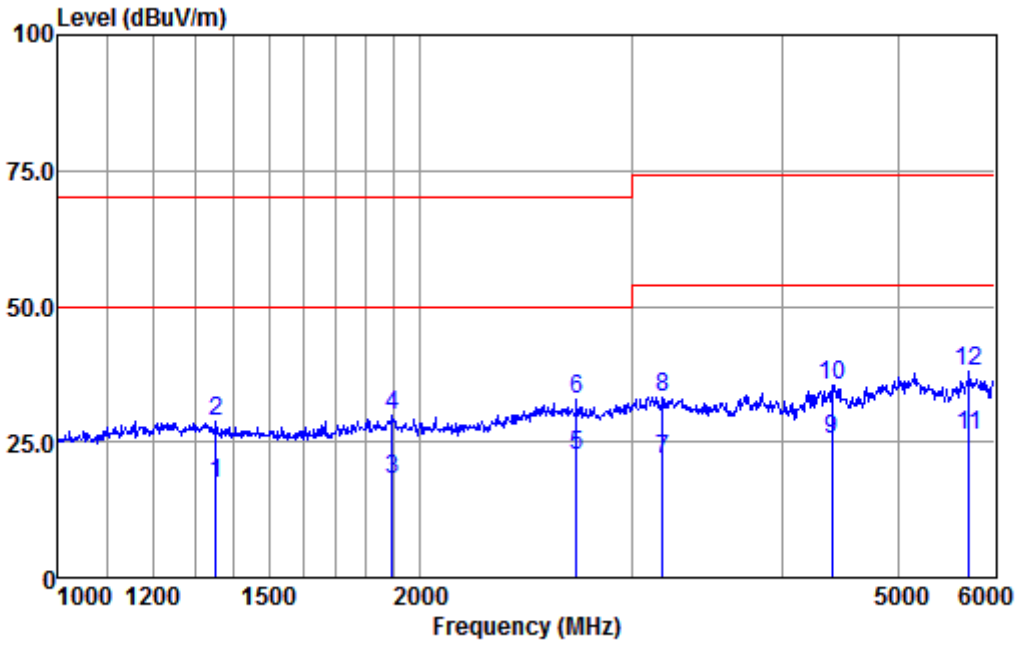
Mode:b; Polarization:Horizontal



Condition : HORIZONTAL
EUT/Project: 8716IT
Test mode : b

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1289.73	31.49	24.79	3.51	41.86	17.93	50.00	-32.07	Average
2	1289.73	42.34	24.79	3.51	41.86	28.78	70.00	-41.22	Peak
3	1885.67	30.29	25.83	4.33	42.16	18.29	50.00	-31.71	Average
4	1885.67	41.74	25.83	4.33	42.16	29.74	70.00	-40.26	Peak
5	2538.86	30.87	27.49	5.37	42.13	21.60	50.00	-28.40	Average
6	2538.86	41.73	27.49	5.37	42.13	32.46	70.00	-37.54	Peak
7	3131.00	30.99	28.58	5.89	41.75	23.71	54.00	-30.29	Average
8	3131.00	41.01	28.58	5.89	41.75	33.73	74.00	-40.27	Peak
9	4330.40	28.52	30.31	7.55	41.76	24.62	54.00	-29.38	Average
10	4330.40	39.19	30.31	7.55	41.76	35.29	74.00	-38.71	Peak
11	5006.77	27.09	31.60	8.19	41.61	25.27	54.00	-28.73	Average
12 p	5006.77	39.84	31.60	8.19	41.61	38.02	74.00	-35.98	Peak

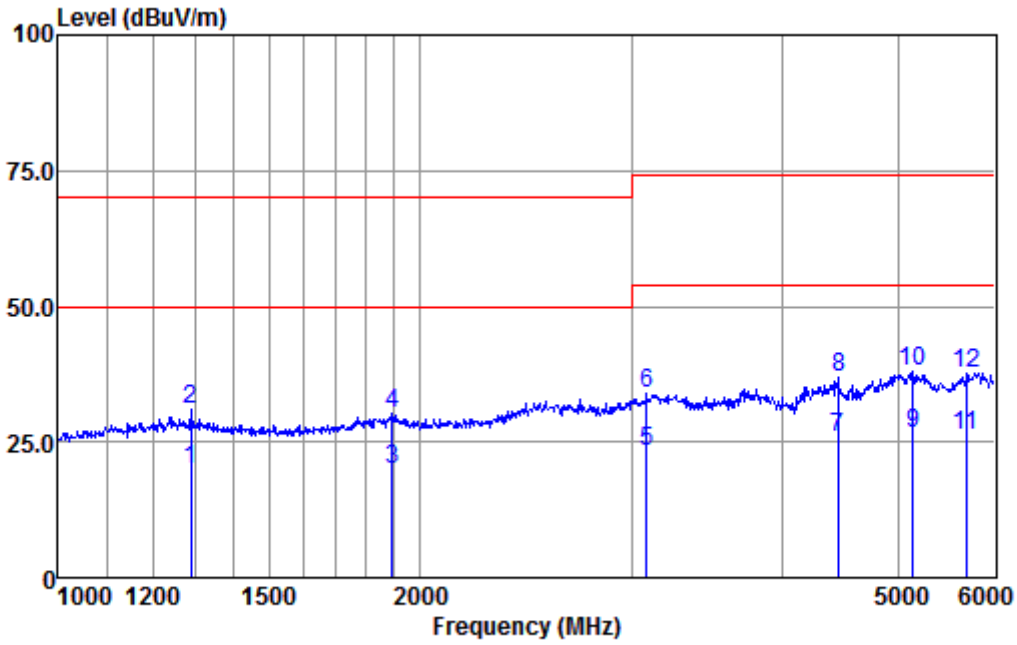
Mode:b; Polarization:Vertical



Condition : VERTICAL
EUT/Project: 8716IT
Test mode : b

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1353.65	30.66	24.93	3.66	41.88	17.37	50.00	-32.63	Average
2	1353.65	41.94	24.93	3.66	41.88	28.65	70.00	-41.35	Peak
3	1895.83	30.21	25.85	4.33	42.16	18.23	50.00	-31.77	Average
4	1895.83	41.76	25.85	4.33	42.16	29.78	70.00	-40.22	Peak
5	2698.33	30.96	27.85	5.57	41.98	22.40	50.00	-27.60	Average
6	2698.33	41.22	27.85	5.57	41.98	32.66	70.00	-37.34	Peak
7	3181.89	29.13	28.61	5.96	41.77	21.93	54.00	-32.07	Average
8	3181.89	40.57	28.61	5.96	41.77	33.37	74.00	-40.63	Peak
9	4400.79	28.99	30.44	7.64	41.71	25.36	54.00	-28.64	Average
10	4400.79	39.12	30.44	7.64	41.71	35.49	74.00	-38.51	Peak
11	5726.90	27.51	32.23	8.36	41.93	26.17	54.00	-27.83	Average
12 p	5726.90	39.32	32.23	8.36	41.93	37.98	74.00	-36.02	Peak

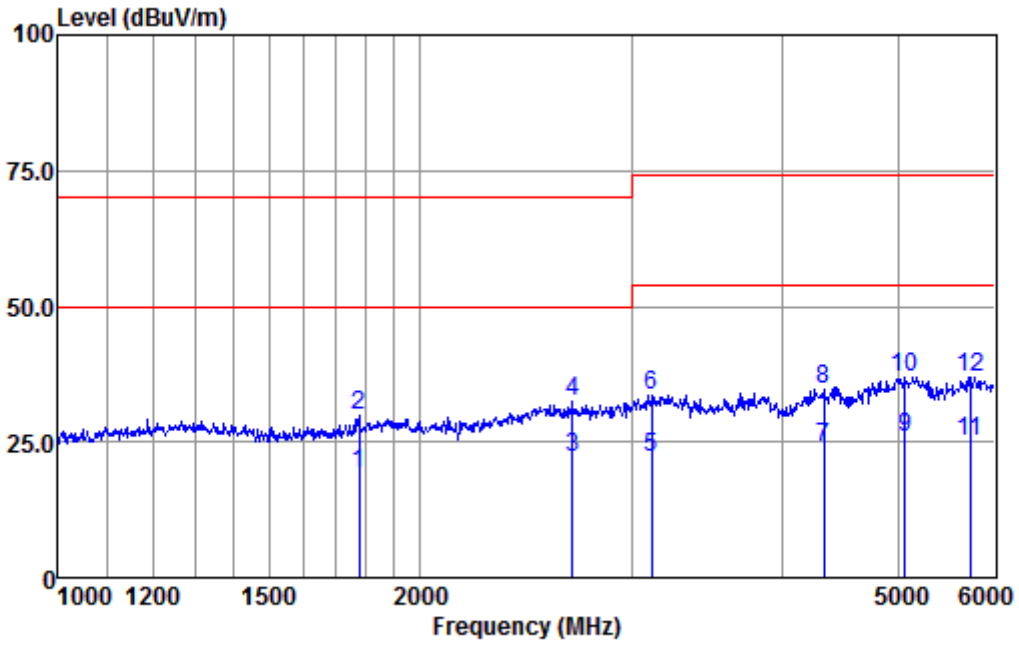
Mode:c; Polarization:Horizontal



Condition : HORIZONTAL
EUT/Project: 8716IT
Test mode : c

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1289.73	33.32	24.79	3.51	41.86	19.76	50.00	-30.24	Average
2	1289.73	44.39	24.79	3.51	41.86	30.83	70.00	-39.17	Peak
3	1895.83	31.97	25.85	4.33	42.16	19.99	50.00	-30.01	Average
4	1895.83	42.29	25.85	4.33	42.16	30.31	70.00	-39.69	Peak
5	3086.44	30.64	28.56	5.85	41.74	23.31	54.00	-30.69	Average
6	3086.44	41.35	28.56	5.85	41.74	34.02	74.00	-39.98	Peak
7	4456.34	29.38	30.53	7.70	41.68	25.93	54.00	-28.07	Average
8	4456.34	40.33	30.53	7.70	41.68	36.88	74.00	-37.12	Peak
9	5143.16	28.32	31.69	8.22	41.73	26.50	54.00	-27.50	Average
10 p	5143.16	39.83	31.69	8.22	41.73	38.01	74.00	-35.99	Peak
11	5696.20	27.62	32.18	8.36	41.94	26.22	54.00	-27.78	Average
12	5696.20	39.15	32.18	8.36	41.94	37.75	74.00	-36.25	Peak

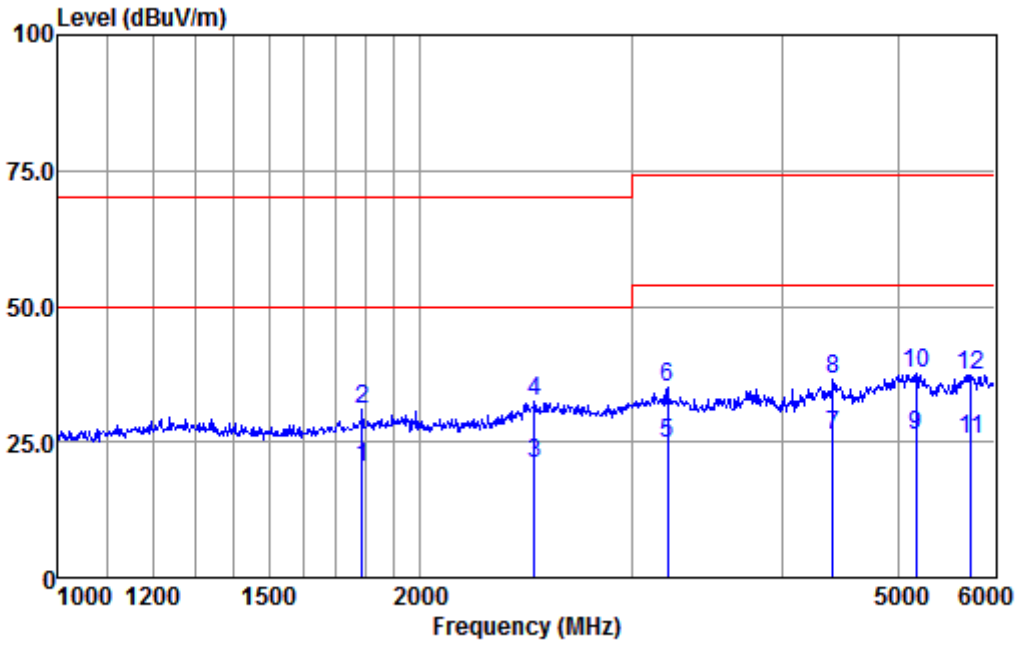
Mode:c; Polarization:Vertical



Condition : VERTICAL
EUT/Project: 8716IT
Test mode : c

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1780.59	31.40	25.68	4.21	42.10	19.19	50.00	-30.81	Average
2	1780.59	42.12	25.68	4.21	42.10	29.91	70.00	-40.09	Peak
3	2679.07	30.69	27.82	5.57	41.99	22.09	50.00	-27.91	Average
4	2679.07	41.02	27.82	5.57	41.99	32.42	70.00	-37.58	Peak
5	3114.21	29.40	28.57	5.89	41.75	22.11	54.00	-31.89	Average
6	3114.21	40.99	28.57	5.89	41.75	33.70	74.00	-40.30	Peak
7	4338.16	27.83	30.33	7.55	41.75	23.96	54.00	-30.04	Average
8	4338.16	38.69	30.33	7.55	41.75	34.82	74.00	-39.18	Peak
9	5060.89	27.75	31.64	8.21	41.66	25.94	54.00	-28.06	Average
10	5060.89	38.85	31.64	8.21	41.66	37.04	74.00	-36.96	Peak
11	5737.17	26.26	32.23	8.36	41.93	24.92	54.00	-29.08	Average
12 p	5737.17	38.40	32.23	8.36	41.93	37.06	74.00	-36.94	Peak

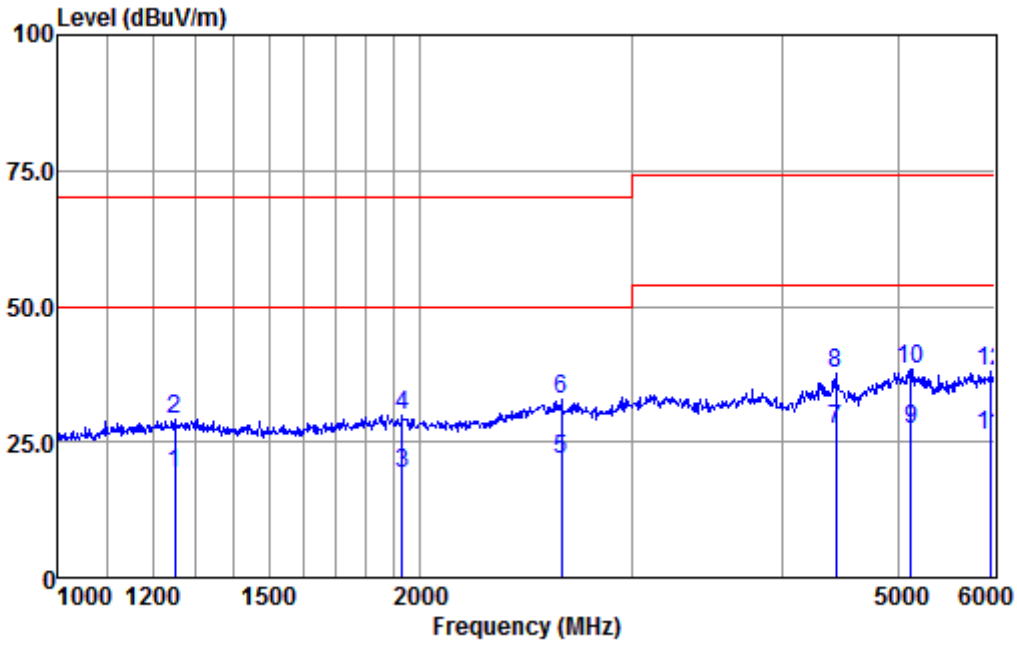
Mode:d; Polarization:Horizontal



Condition : HORIZONTAL
EUT/Project: 8716IT
Test mode : d

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1790.19	32.56	25.69	4.21	42.11	20.35	50.00	-29.65	Average
2	1790.19	43.09	25.69	4.21	42.11	30.88	70.00	-39.12	Peak
3	2489.31	30.41	27.38	5.32	42.17	20.94	50.00	-29.06	Average
4	2489.31	41.86	27.38	5.32	42.17	32.39	70.00	-37.61	Peak
5	3210.53	31.76	28.64	5.96	41.78	24.58	54.00	-29.42	Average
6	3210.53	42.38	28.64	5.96	41.78	35.20	74.00	-38.80	Peak
7	4408.69	29.75	30.44	7.64	41.71	26.12	54.00	-27.88	Average
8	4408.69	40.22	30.44	7.64	41.71	36.59	74.00	-37.41	Peak
9	5170.88	28.05	31.70	8.22	41.74	26.23	54.00	-27.77	Average
10 p	5170.88	39.64	31.70	8.22	41.74	37.82	74.00	-36.18	Peak
11	5747.46	26.66	32.25	8.36	41.92	25.35	54.00	-28.65	Average
12	5747.46	38.60	32.25	8.36	41.92	37.29	74.00	-36.71	Peak

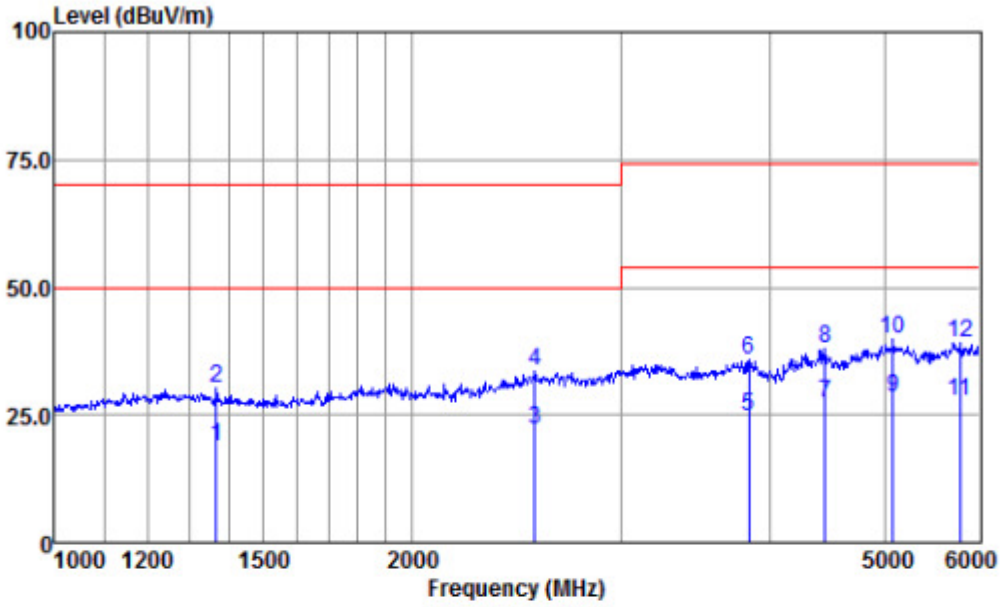
Mode:d; Polarization:Vertical



Condition : VERTICAL
EUT/Project: 8716IT
Test mode : d

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1251.03	32.96	24.70	3.45	41.84	19.27	50.00	-30.73	Average
2	1251.03	43.00	24.70	3.45	41.84	29.31	70.00	-40.69	Peak
3	1933.57	30.96	25.90	4.35	42.19	19.02	50.00	-30.98	Average
4	1933.57	41.76	25.90	4.35	42.19	29.82	70.00	-40.18	Peak
5	2622.08	30.57	27.70	5.47	42.05	21.69	50.00	-28.31	Average
6	2622.08	41.87	27.70	5.47	42.05	32.99	70.00	-37.01	Peak
7	4432.45	30.84	30.49	7.64	41.70	27.27	54.00	-26.73	Average
8	4432.45	41.15	30.49	7.64	41.70	37.58	74.00	-36.42	Peak
9	5124.77	29.08	31.67	8.21	41.71	27.25	54.00	-26.75	Average
10 p	5124.77	40.29	31.67	8.21	41.71	38.46	74.00	-35.54	Peak
11	5957.15	26.94	32.53	8.42	41.85	26.04	54.00	-27.96	Average
12	5957.15	38.80	32.53	8.42	41.85	37.90	74.00	-36.10	Peak

For new model
Mode:e; Polarization:Horizontal

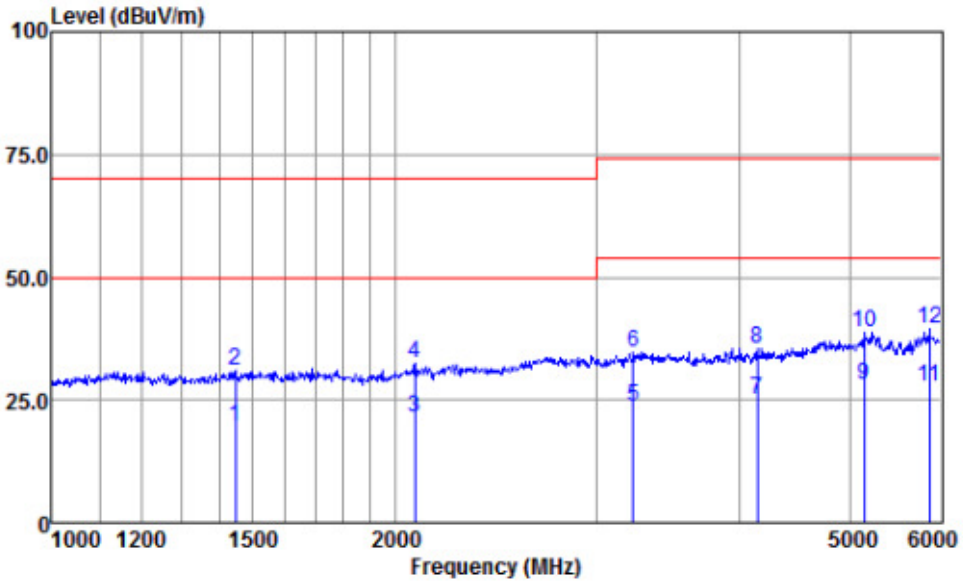


Antenna Polarity :HORIZONTAL
EUT/Project :2763IT
Test mode :e

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	1368.29	32.17	24.95	3.66	41.89	18.89	50.00	-31.11	Average
2	1368.29	43.42	24.95	3.66	41.89	30.14	70.00	-39.86	Peak
3	2538.86	31.45	27.49	5.37	42.13	22.18	50.00	-27.82	Average
4	2538.86	42.68	27.49	5.37	42.13	33.41	70.00	-36.59	Peak
5	3847.42	30.27	29.43	6.80	41.93	24.57	54.00	-29.43	Average
6	3847.42	41.43	29.43	6.80	41.93	35.73	74.00	-38.27	Peak
7	4456.34	30.73	30.53	7.70	41.68	27.28	54.00	-26.72	Average
8	4456.34	41.48	30.53	7.70	41.68	38.03	74.00	-35.97	Peak
9	5088.17	30.06	31.65	8.21	41.68	28.24	54.00	-25.76	Average
10	5088.17	41.63	31.65	8.21	41.68	39.81	74.00	-34.19	Peak
11	5788.80	28.91	32.32	8.38	41.90	27.71	54.00	-26.29	Average
12	5788.80	40.34	32.32	8.38	41.90	39.14	74.00	-34.86	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:e; Polarization:Vertical

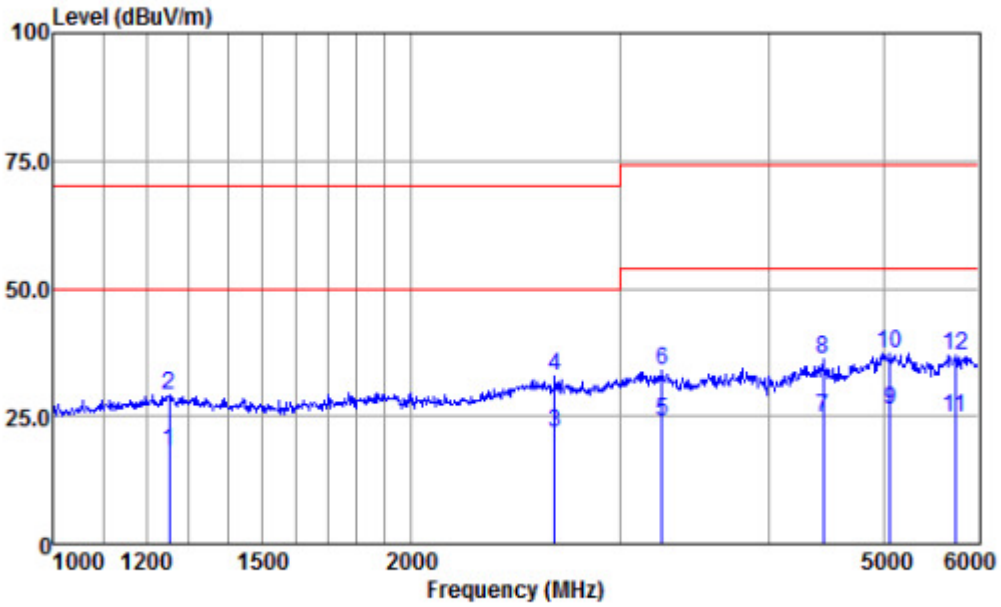


Antenna Polarity :VERTICAL
EUT/Project :2763IT
Test mode :e

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	1449.03	32.79	25.11	3.75	41.91	19.74	50.00	-30.26	Average
2	1449.03	43.89	25.11	3.75	41.91	30.84	70.00	-39.16	Peak
3	2080.96	32.83	26.25	4.60	42.21	21.47	50.00	-28.53	Average
4	2080.96	43.77	26.25	4.60	42.21	32.41	70.00	-37.59	Peak
5	3233.62	30.85	28.65	6.02	41.78	23.74	54.00	-30.26	Average
6	3233.62	41.79	28.65	6.02	41.78	34.68	74.00	-39.32	Peak
7	4148.13	29.71	29.97	7.32	41.87	25.13	54.00	-28.87	Average
8	4148.13	40.04	29.97	7.32	41.87	35.46	74.00	-38.54	Peak
9	5152.39	29.75	31.69	8.22	41.73	27.93	54.00	-26.07	Average
10	5152.39	40.72	31.69	8.22	41.73	38.90	74.00	-35.10	Peak
11	5872.37	28.78	32.41	8.40	41.88	27.71	54.00	-26.29	Average
12	5872.37	40.67	32.41	8.40	41.88	39.60	74.00	-34.40	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:f; Polarization:Horizontal

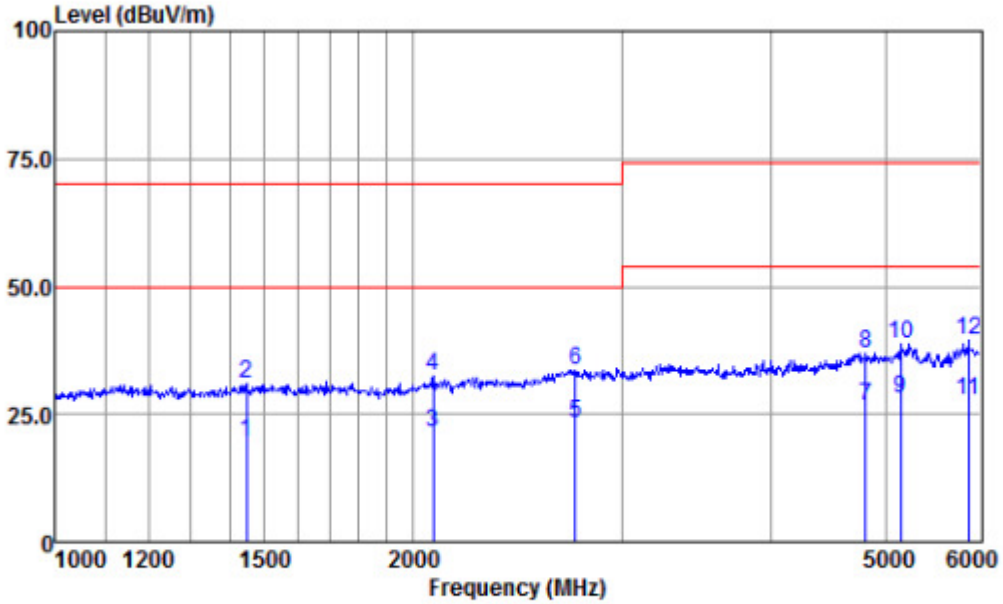


Antenna Polarity :HORIZONTAL
EUT/Project :2763IT
Test mode :f

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	1251.03	31.75	24.70	3.45	41.84	18.06	50.00	-31.94	Average
2	1251.03	42.74	24.70	3.45	41.84	29.05	70.00	-40.95	Peak
3	2640.94	30.45	27.73	5.52	42.03	21.67	50.00	-28.33	Average
4	2640.94	41.68	27.73	5.52	42.03	32.90	70.00	-37.10	Peak
5	3256.88	30.98	28.66	6.02	41.79	23.87	54.00	-30.13	Average
6	3256.88	41.11	28.66	6.02	41.79	34.00	74.00	-40.00	Peak
7	4448.36	28.36	30.51	7.70	41.69	24.88	54.00	-29.12	Average
8	4448.36	39.65	30.51	7.70	41.69	36.17	74.00	-37.83	Peak
9	5069.97	28.03	31.65	8.21	41.67	26.22	54.00	-27.78	Average
10	5069.97	39.15	31.65	8.21	41.67	37.34	74.00	-36.66	Peak
11	5747.46	26.18	32.25	8.36	41.92	24.87	54.00	-29.13	Average
12	5747.46	38.39	32.25	8.36	41.92	37.08	74.00	-36.92	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:f; Polarization:Vertical

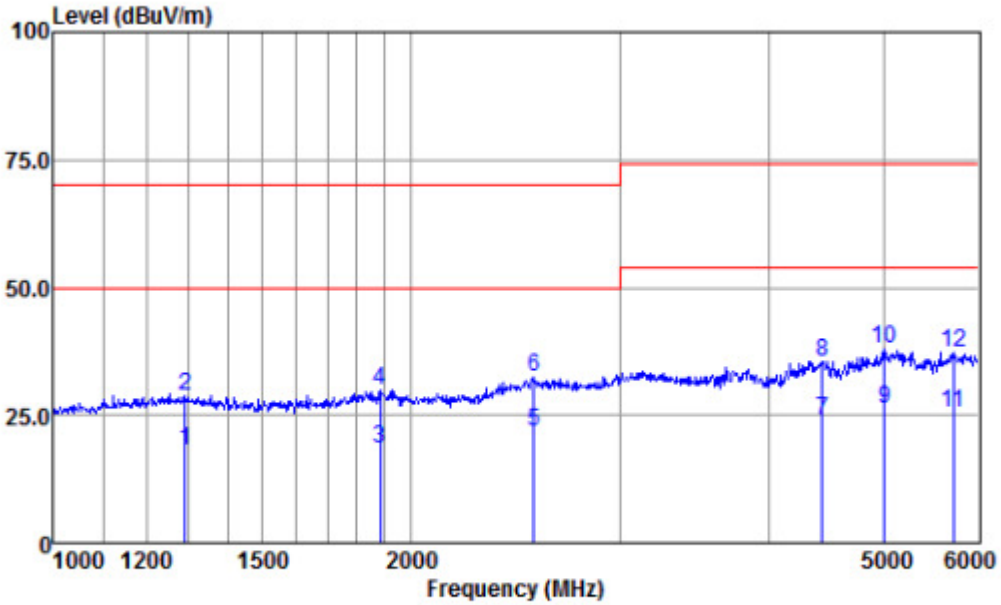


Antenna Polarity :VERTICAL
EUT/Project :2763IT
Test mode :f

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	1449.03	32.79	25.11	3.75	41.91	19.74	50.00	-30.26	Average
2	1449.03	43.89	25.11	3.75	41.91	30.84	70.00	-39.16	Peak
3	2080.96	32.83	26.25	4.60	42.21	21.47	50.00	-28.53	Average
4	2080.96	43.77	26.25	4.60	42.21	32.41	70.00	-37.59	Peak
5	2742.20	31.61	27.96	5.61	41.94	23.24	50.00	-26.76	Average
6	2742.20	42.07	27.96	5.61	41.94	33.70	70.00	-36.30	Peak
7	4813.25	28.75	31.25	8.13	41.63	26.50	54.00	-27.50	Average
8	4813.25	39.27	31.25	8.13	41.63	37.02	74.00	-36.98	Peak
9	5152.39	29.75	31.69	8.22	41.73	27.93	54.00	-26.07	Average
10	5152.39	40.72	31.69	8.22	41.73	38.90	74.00	-35.10	Peak
11	5872.37	28.78	32.41	8.40	41.88	27.71	54.00	-26.29	Average
12	5872.37	40.67	32.41	8.40	41.88	39.60	74.00	-34.40	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:g; Polarization:Horizontal

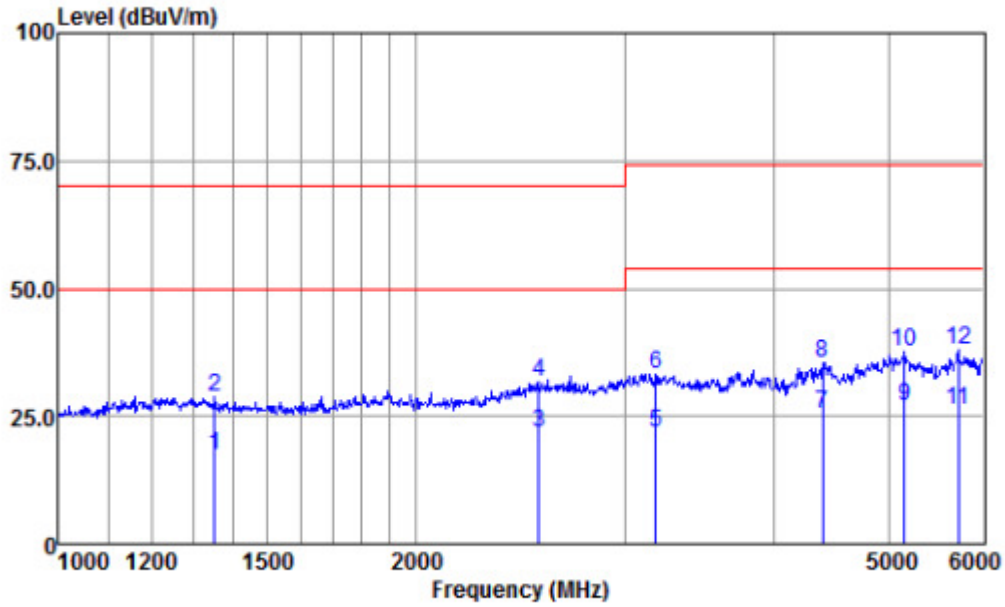


Antenna Polarity :HORIZONTAL
EUT/Project :2763IT
Test mode :g

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	1289.73	31.49	24.79	3.51	41.86	17.93	50.00	-32.07	Average
2	1289.73	42.34	24.79	3.51	41.86	28.78	70.00	-41.22	Peak
3	1885.67	30.29	25.83	4.33	42.16	18.29	50.00	-31.71	Average
4	1885.67	41.74	25.83	4.33	42.16	29.74	70.00	-40.26	Peak
5	2538.86	30.87	27.49	5.37	42.13	21.60	50.00	-28.40	Average
6	2538.86	41.73	27.49	5.37	42.13	32.46	70.00	-37.54	Peak
7	4440.40	27.28	30.51	7.70	41.69	23.80	54.00	-30.20	Average
8	4440.40	38.78	30.51	7.70	41.69	35.30	74.00	-38.70	Peak
9	5006.77	28.09	31.60	8.19	41.61	26.27	54.00	-27.73	Average
10	5006.77	39.84	31.60	8.19	41.61	38.02	74.00	-35.98	Peak
11	5726.90	26.94	32.23	8.36	41.93	25.60	54.00	-28.40	Average
12	5726.90	38.63	32.23	8.36	41.93	37.29	74.00	-36.71	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:g;Polarization:Vertical

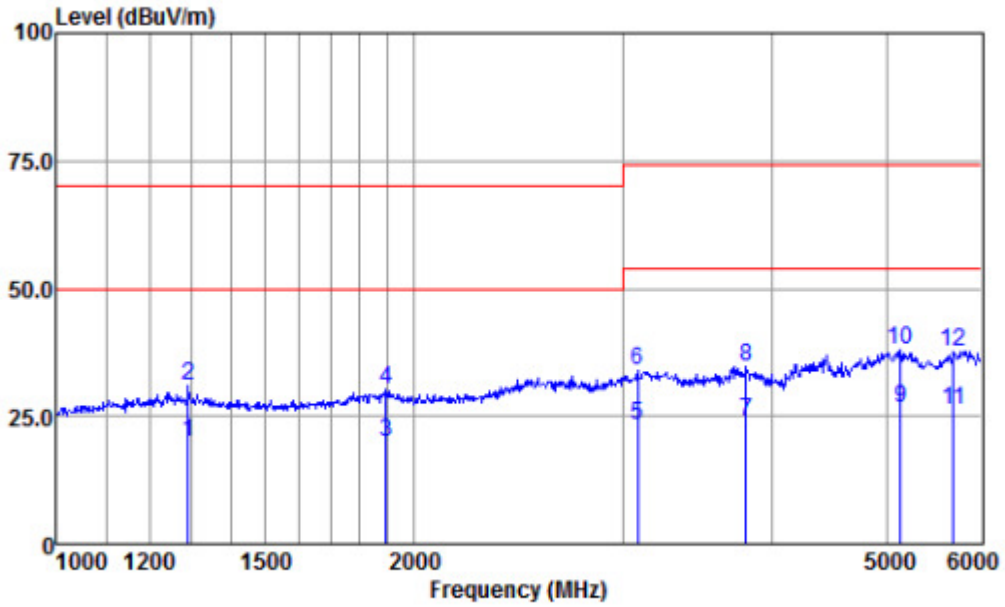


Antenna Polarity :VERTICAL
EUT/Project :2763IT
Test mode :g

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	1353.65	30.66	24.93	3.66	41.88	17.37	50.00	-32.63	Average
2	1353.65	41.94	24.93	3.66	41.88	28.65	70.00	-41.35	Peak
3	2538.86	30.91	27.49	5.37	42.13	21.64	50.00	-28.36	Average
4	2538.86	41.06	27.49	5.37	42.13	31.79	70.00	-38.21	Peak
5	3181.89	29.13	28.61	5.96	41.77	21.93	54.00	-32.07	Average
6	3181.89	40.57	28.61	5.96	41.77	33.37	74.00	-40.63	Peak
7	4400.79	28.99	30.44	7.64	41.71	25.36	54.00	-28.64	Average
8	4400.79	39.12	30.44	7.64	41.71	35.49	74.00	-38.51	Peak
9	5161.63	28.67	31.70	8.22	41.74	26.85	54.00	-27.15	Average
10	5161.63	39.31	31.70	8.22	41.74	37.49	74.00	-36.51	Peak
11	5726.90	27.51	32.23	8.36	41.93	26.17	54.00	-27.83	Average
12	5726.90	39.32	32.23	8.36	41.93	37.98	74.00	-36.02	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:h;Polarization:Horizontal

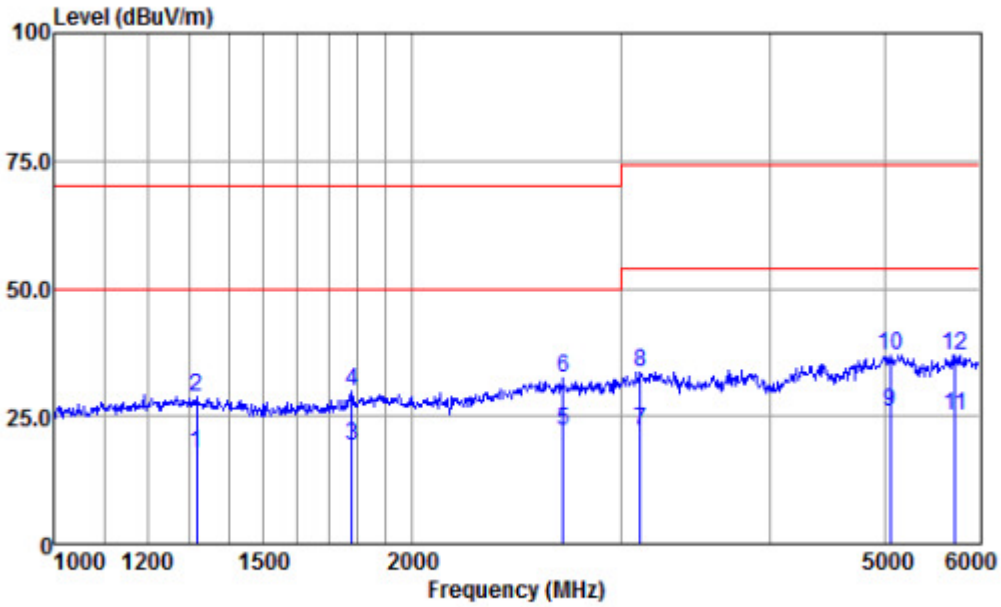


Antenna Polarity :HORIZONTAL
EUT/Project :2763IT
Test mode :h

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	1289.73	33.32	24.79	3.51	41.86	19.76	50.00	-30.24	Average
2	1289.73	44.39	24.79	3.51	41.86	30.83	70.00	-39.17	Peak
3	1895.83	31.97	25.85	4.33	42.16	19.99	50.00	-30.01	Average
4	1895.83	42.29	25.85	4.33	42.16	30.31	70.00	-39.69	Peak
5	3086.44	30.64	28.56	5.85	41.74	23.31	54.00	-30.69	Average
6	3086.44	41.35	28.56	5.85	41.74	34.02	74.00	-39.98	Peak
7	3806.28	29.77	29.36	6.70	41.92	23.91	54.00	-30.09	Average
8	3806.28	40.44	29.36	6.70	41.92	34.58	74.00	-39.42	Peak
9	5143.16	28.32	31.69	8.22	41.73	26.50	54.00	-27.50	Average
10	5143.16	39.83	31.69	8.22	41.73	38.01	74.00	-35.99	Peak
11	5696.20	27.62	32.18	8.36	41.94	26.22	54.00	-27.78	Average
12	5696.20	39.15	32.18	8.36	41.94	37.75	74.00	-36.25	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

Mode:h;Polarization:Vertical



Antenna Polarity :VERTICAL
EUT/Project :2763IT
Test mode :h

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	1317.76	31.12	24.85	3.57	41.87	17.67	50.00	-32.33	Average
2	1317.76	42.39	24.85	3.57	41.87	28.94	70.00	-41.06	Peak
3	1780.59	31.40	25.68	4.21	42.10	19.19	50.00	-30.81	Average
4	1780.59	42.12	25.68	4.21	42.10	29.91	70.00	-40.09	Peak
5	2679.07	30.69	27.82	5.57	41.99	22.09	50.00	-27.91	Average
6	2679.07	41.02	27.82	5.57	41.99	32.42	70.00	-37.58	Peak
7	3114.21	29.40	28.57	5.89	41.75	22.11	54.00	-31.89	Average
8	3114.21	40.99	28.57	5.89	41.75	33.70	74.00	-40.30	Peak
9	5060.89	27.75	31.64	8.21	41.66	25.94	54.00	-28.06	Average
10	5060.89	38.85	31.64	8.21	41.66	37.04	74.00	-36.96	Peak
11	5737.17	26.26	32.23	8.36	41.93	24.92	54.00	-29.08	Average
12	5737.17	38.40	32.23	8.36	41.93	37.06	74.00	-36.94	Peak

Note:Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

6.5 Harmonic Current Emission

Test Requirement: EN 61000-3-2:2014

Test Method: EN 61000-3-2:2014

Frequency Range: 100Hz to 2kHz

There is no need for Harmonics test to be performed on this product (rated power is less than 75W) in accordance with EN 61000-3-2:2014.

For further details, please refer to Clause 7 of EN 61000-3-2 which states:

"For the following categories of equipment, limits are not specified in this standard.- equipment with a rated power of 75W or less, other than lighting equipment."

6.6 Voltage Fluctuations and Flicker

Test Requirement: EN 61000-3-3:2013

Test Method: EN 61000-3-3:2013

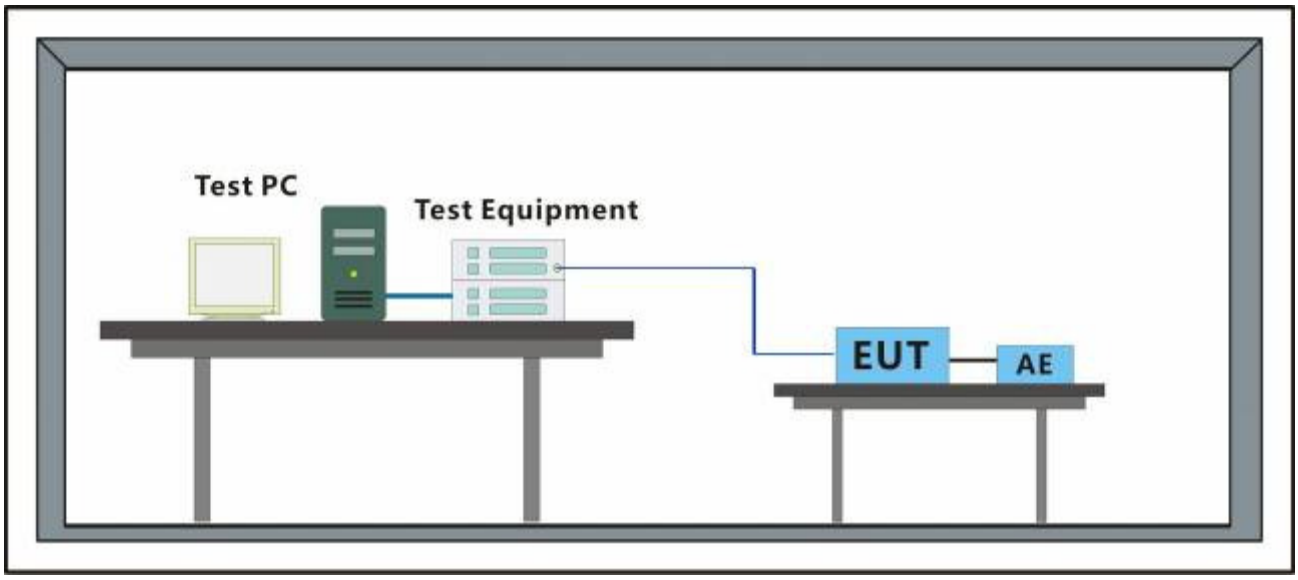
6.6.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 51 % RH Atmospheric Pressure: 1020 mbar

Test mode: a: DS-2CD2143G0-IS preview by DC12V support .
b: DS-2CD2143G0-IS preview by PoE support .
c: DS-2C2123G0-IS preview by DC12V support .
d: DS-2C2123G0-IS preview by PoE support .
e: DS-2CD2183G0-I preview by DC12V support .
f: DS-2CD2183G0-I preview by PoE support .
g: DS-2CD2163G0-I preview by DC12V support .
h: DS-2CD2163G0-I preview by PoE support .

6.6.2 Test Setup Diagram



6.6.3 Measurement Data

For old model

Mode:a

Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.86			
T-max (mS):	0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.21	Test limit (%):	3.30	Pass
Highest dmax (%):	0.35	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.220	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.095	Test limit:	0.650	Pass

Mode:b

Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.86			
T-max (mS):	0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.20	Test limit (%):	3.30	Pass
Highest dmax (%):	0.33	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.220	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.095	Test limit:	0.650	Pass

Mode:c

Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.86			
T-max (mS):	0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.22	Test limit (%):	3.30	Pass
Highest dmax (%):	0.30	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.216	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.098	Test limit:	0.650	Pass

Mode:d

Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.86			
T-max (mS):	0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.26	Test limit (%):	3.30	Pass
Highest dmax (%):	0.32	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.209	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.087	Test limit:	0.650	Pass

For new model

Mode:e

Vrms at the end of test (Volt):	230.01			
T-max (mS):	0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.79	Test limit (%):	3.30	Pass
Highest dmax (%):	0.83	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.345	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.147	Test limit:	0.650	Pass

Mode:f

Vrms at the end of test (Volt):	230.01			
T-max (mS):	0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.85	Test limit (%):	3.30	Pass
Highest dmax (%):	0.81	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.339	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.156	Test limit:	0.650	Pass

Mode:g

Vrms at the end of test (Volt):	230.01			
T-max (mS):	0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.78	Test limit (%):	3.30	Pass
Highest dmax (%):	0.85	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.342	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.148	Test limit:	0.650	Pass

Mode:h

Vrms at the end of test (Volt):	230.01			
T-max (mS):	0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.83	Test limit (%):	3.30	Pass
Highest dmax (%):	0.79	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.348	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.158	Test limit:	0.650	Pass

7 Immunity Test Results

7.1 Performance Criteria Description in EN 50130-4:2011 +A1:2014

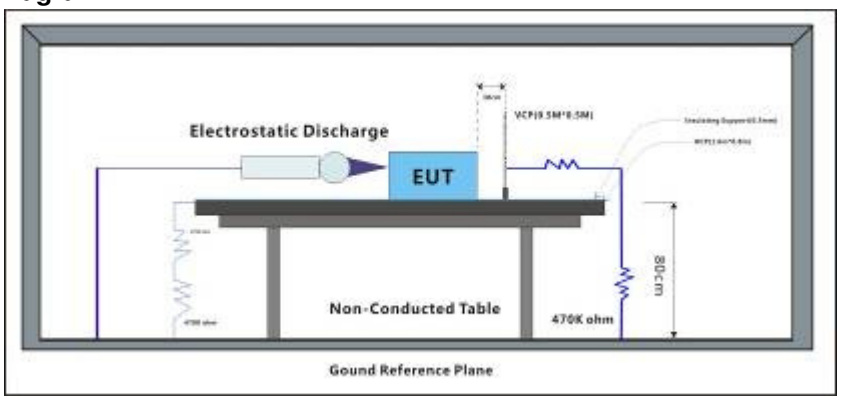
There shall be no damage, malfunction or change of status due to the conditioning. Flickering of an indicator during the application of the discharges is permissible, providing that there is no residual change in the EUT or any change in outputs, which could be interpreted by associated equipment as a change.

For further details, please refer to Clause 7.4, 8.4, 9.4, 10.4, 11.4, 12.4 and 13.4, of EN 50130-4.

7.2 Electrostatic Discharge

Test Requirement: EN 50130-4:2011 +A1:2014
Test Method: EN 61000-4-2:2009
Number of Discharge: Minimum 10 times at each test point for Air Discharge
Minimum 50 times at each test point for Contact or VCP & HCP Discharge
Discharge Mode: Single Discharge
Discharge Period: 1 second minimum

7.2.1 Test Setup Diagram



7.2.2 E.U.T. Operation

Operating Environment:
Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar
Test mode: a: DS-2CD2143G0-IS preview by DC12V support .
b: DS-2CD2143G0-IS preview by PoE support .
c: DS-2C2123G0-IS preview by DC12V support .
d: DS-2C2123G0-IS preview by PoE support .
e: DS-2CD2183G0-I preview by DC12V support .
f: DS-2CD2183G0-I preview by PoE support .
g: DS-2CD2163G0-I preview by DC12V support .
h: DS-2CD2163G0-I preview by PoE support .

7.2.3 Test Results:

Observations: Test Point:
1. All insulated enclosure and seams.
2. All accessible metal parts of the enclosure.
3. All side

Discharge type	Level (kV)	Polarity	Test Point	Result / Observations
Air Discharge	2,4,8	+	1	A
Air Discharge	2,4,8	-	1	A
Contact Discharge	6	+	2	A
Contact Discharge	6	-	2	A
Horizontal Coupling	6	+	3	A
Horizontal Coupling	6	-	3	A
Vertical Coupling	6	+	3	A
Vertical Coupling	6	-	3	A

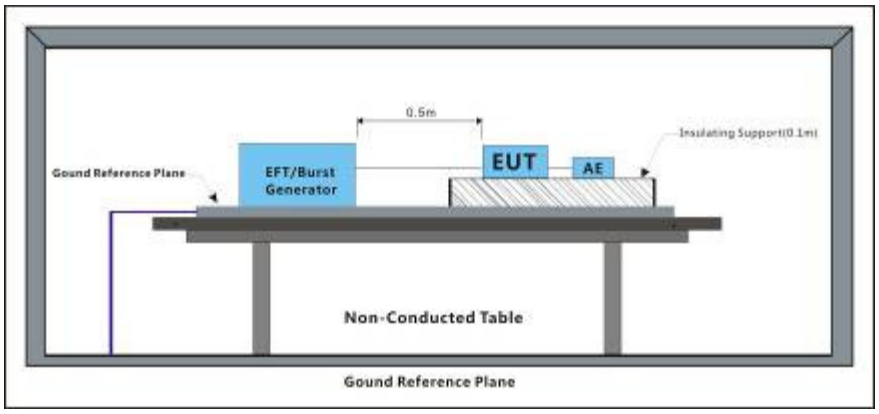
Results:

A: No degradation in the performance of the EUT was observed.

7.3 Electrical Fast Transients/Burst at Power Port

Test Requirement: EN 50130-4:2011 +A1:2014
Test Method: EN 61000-4-4:2012
Repetition Frequency: 100kHz
Burst Period: 300ms
Test Duration: 1 minute per level & polarity

7.3.1 Test Setup Diagram



7.3.2 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar

Test mode: a: DS-2CD2143G0-IS preview by DC12V support .
b: DS-2CD2143G0-IS preview by PoE support .
c: DS-2C2123G0-IS preview by DC12V support .
d: DS-2C2123G0-IS preview by PoE support .
e: DS-2CD2183G0-I preview by DC12V support .
f: DS-2CD2183G0-I preview by PoE support .
g: DS-2CD2163G0-I preview by DC12V support .
h: DS-2CD2163G0-I preview by PoE support .

7.3.3 Test Results:

Test Line	Level (kV)	Polarity	CDN/Clamp	Result / Observations
AC power port	2	+	CDN	A
AC power port	2	-	CDN	A

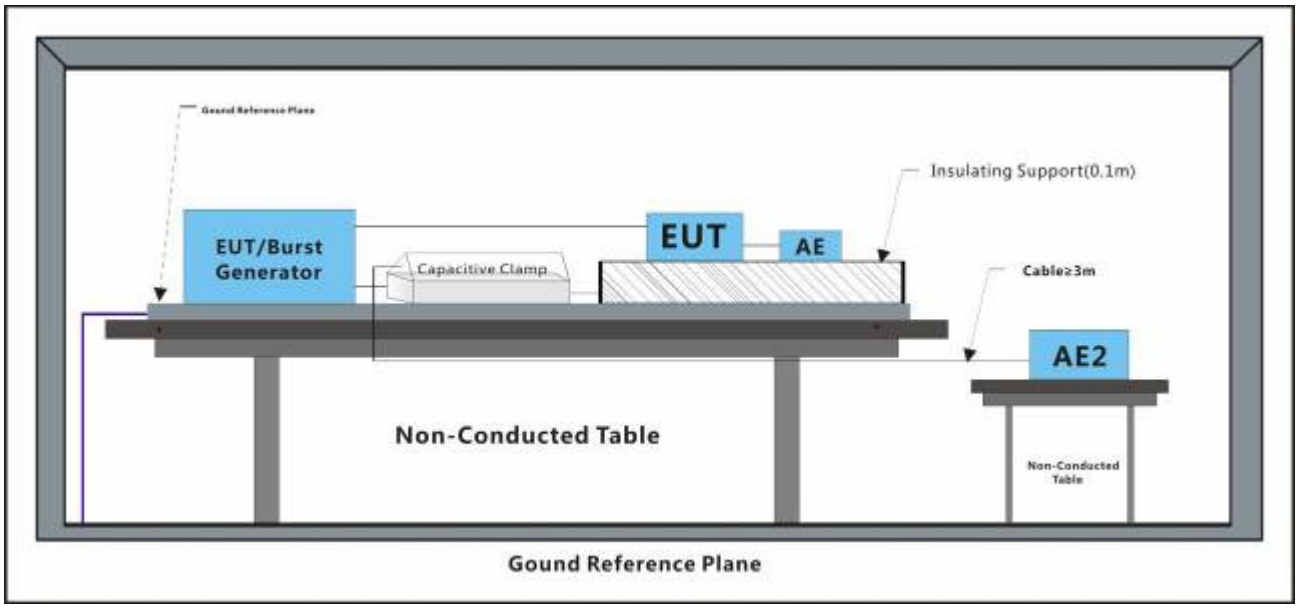
Results:

A: No degradation in the performance of the EUT was observed.

7.4 Electrical Fast Transients/Burst at Signal Port

Test Requirement: EN 50130-4:2011 +A1:2014
Test Method: EN 61000-4-4:2012
Repetition Frequency: 100kHz
Burst Period: 300ms
Test Duration: 1 minute per level & polarity

7.4.1 Test Setup Diagram



7.4.2 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar

Test mode: a: DS-2CD2143G0-IS preview by DC12V support .
b: DS-2CD2143G0-IS preview by PoE support .
c: DS-2C2123G0-IS preview by DC12V support .
d: DS-2C2123G0-IS preview by PoE support .
e: DS-2CD2183G0-I preview by DC12V support .
f: DS-2CD2183G0-I preview by PoE support .
g: DS-2CD2163G0-I preview by DC12V support .
h: DS-2CD2163G0-I preview by PoE support .

7.4.3 Test Results:

Port	Level (kV)	Polarity	CDN/Clamp	Result / Observations
Signal port	1	+	Clamp	A
Signal port	1	-	Clamp	A

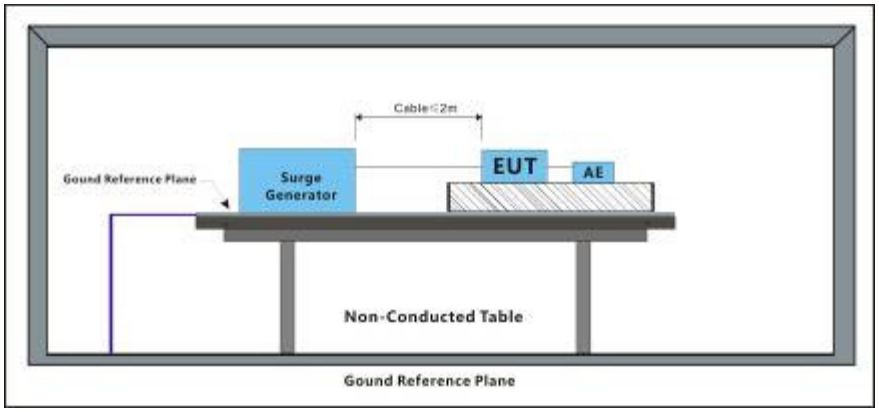
Results:

A: No degradation in the performance of the EUT was observed.

7.5 Surge at Power Port

Test Requirement: EN 50130-4:2011 +A1:2014
Test Method: EN 61000-4-5:2014
Interval: 60s between each surge
No. of surges: 5 positive, 5 negative

7.5.1 Test Setup Diagram



7.5.2 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar

Test mode: a: DS-2CD2143G0-IS preview by DC12V support .
b: DS-2CD2143G0-IS preview by PoE support .
c: DS-2C2123G0-IS preview by DC12V support .
d: DS-2C2123G0-IS preview by PoE support .
e: DS-2CD2183G0-I preview by DC12V support .
f: DS-2CD2183G0-I preview by PoE support .
g: DS-2CD2163G0-I preview by DC12V support .
h: DS-2CD2163G0-I preview by PoE support .

7.5.3 Test Results:

Test Line	Level (kV)	Polarity	Phase (deg)	Result / Observations
L-N	0.5,1	+	0°	A
L-N	0.5,1	-	0°	A
L-N	0.5,1	+	90°	A
L-N	0.5,1	-	90°	A
L-N	0.5,1	+	180°	A
L-N	0.5,1	-	180°	A
L-N	0.5,1	+	270°	A
L-N	0.5,1	-	270°	A
L-PE	0.5,1,2	+	0°	A
L-PE	0.5,1,2	-	0°	A
L-PE	0.5,1,2	+	90°	A
L-PE	0.5,1,2	-	90°	A
L-PE	0.5,1,2	+	180°	A
L-PE	0.5,1,2	-	180°	A

L-PE	0.5,1,2	+	270°	A
L-PE	0.5,1,2	-	270°	A
N-PE	0.5,1,2	+	0°	A
N-PE	0.5,1,2	-	0°	A
N-PE	0.5,1,2	+	90°	A
N-PE	0.5,1,2	-	90°	A
N-PE	0.5,1,2	+	180°	A
N-PE	0.5,1,2	-	180°	A
N-PE	0.5,1,2	+	270°	A
N-PE	0.5,1,2	-	270°	A

Results:

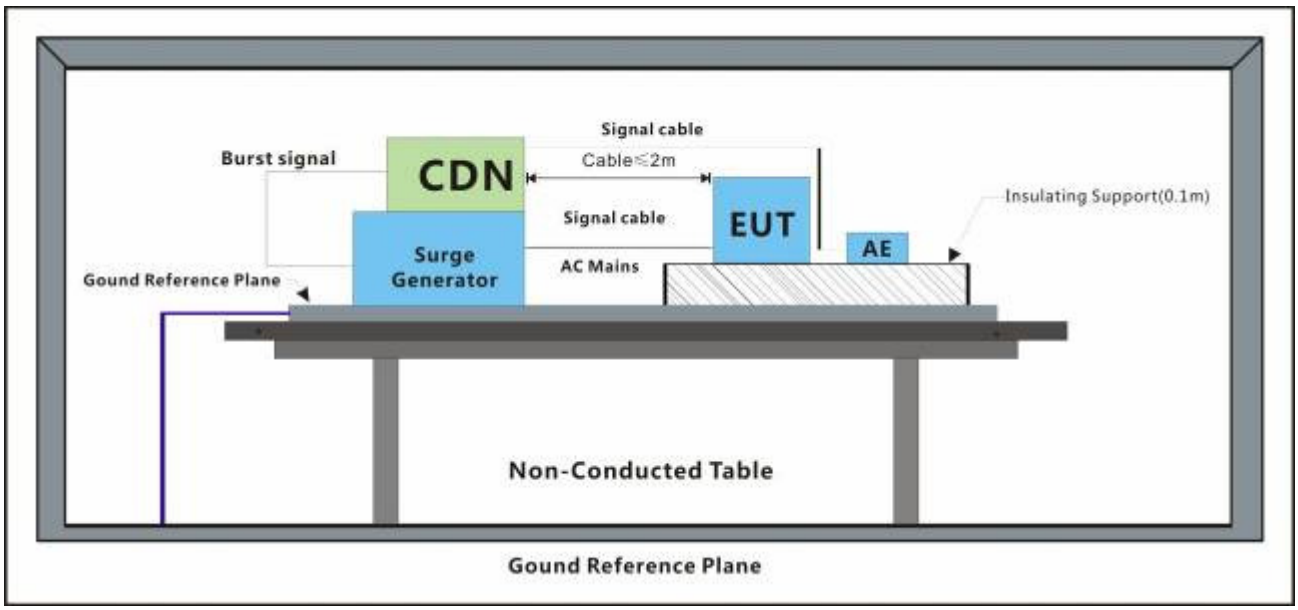
A: No degradation in the performance of the EUT was observed.

7.6 Surge at Signal Port

Test Requirement: EN 50130-4:2011 +A1:2014

Test Method: EN 61000-4-5:2014

7.6.1 Test Setup Diagram



7.6.2 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar

Test mode: a: DS-2CD2143G0-IS preview by DC12V support .
b: DS-2CD2143G0-IS preview by PoE support .
c: DS-2C2123G0-IS preview by DC12V support .
d: DS-2C2123G0-IS preview by PoE support .
e: DS-2CD2183G0-I preview by DC12V support .
f: DS-2CD2183G0-I preview by PoE support .
g: DS-2CD2163G0-I preview by DC12V support .
h: DS-2CD2163G0-I preview by PoE support .

7.6.3 Test Results:

Port	Line	Level (kV)	Polarity	Result / Observations
Signal port	Line-Ground	0.5	+	A
Signal port	Line-Ground	0.5	-	A
Signal port	Line-Ground	1	+	A
Signal port	Line-Ground	1	-	A

Results:

A: No degradation in the performance of the EUT was observed.

7.7 Voltage Dips and Interruptions

Test Requirement: EN 50130-4:2011 +A1:2014

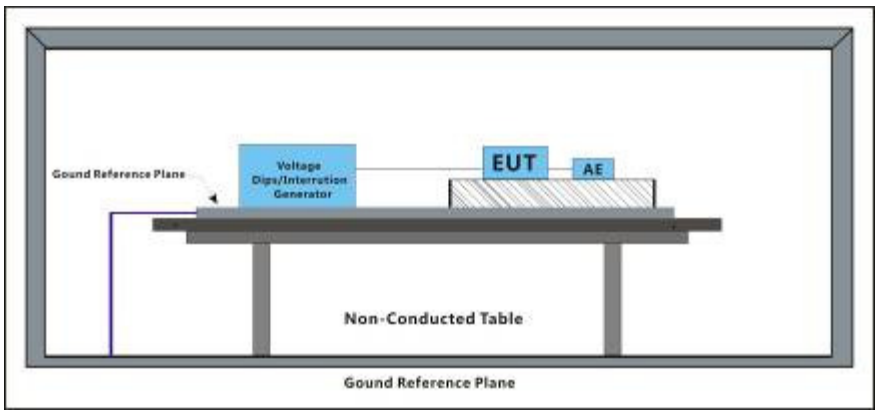
Test Method: EN 61000-4-11:2004

Performance Criterion: 0% of UT (Supply Voltage) for 250 Periods; 40% of UT for 10 Periods; 70% of UT for 25 Periods; 80% of UT for 250 Periods;

No. of Dips / Interruptions: 3 per Level

Time between dropout 10s

7.7.1 Test Setup Diagram



7.7.2 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar

Test mode: a: DS-2CD2143G0-IS preview by DC12V support .
b: DS-2CD2143G0-IS preview by PoE support .
c: DS-2C2123G0-IS preview by DC12V support .
d: DS-2C2123G0-IS preview by PoE support .
e: DS-2CD2183G0-I preview by DC12V support .
f: DS-2CD2183G0-I preview by PoE support .
g: DS-2CD2163G0-I preview by DC12V support .
h: DS-2CD2163G0-I preview by PoE support .

7.7.3 Test Results:

Level % UT	Phase (deg)	Duration	No. of Dips / Interruptions	Result / Observations
80	0°	250 Cycles	3	B
80	180°	250 Cycles	3	B
70	0°	25 Cycles	3	A
70	180°	25 Cycles	3	A
40	0°	10 Cycles	3	A
40	180°	10 Cycles	3	A
0	0°	250 Cycles	3	B
0	180°	250 Cycles	3	B

Results:

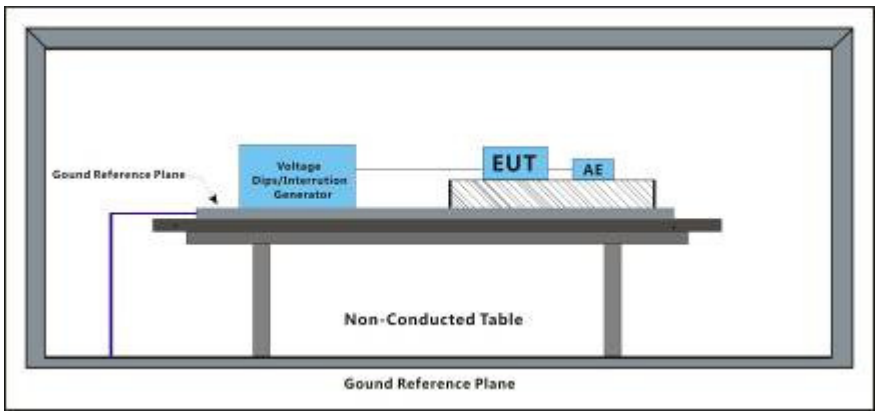
A: No degradation in the performance of the EUT was observed.

B: During test, EUT stop work, After test, which the equipment under test recovers its normal

7.8 Mains Supply Voltage Variations-Conditioning

Test Requirement: EN 50130-4:2011 +A1:2014
Test Method: EN 50130-4:2011+A1:2014
Voltage max.: AC 253V (Umax: Unom + 10%)
Voltage min.: AC 195.55V (Umin: Unom - 15%)
Unom Voltage: AC 230V

7.8.1 Test Setup Diagram



7.8.2 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar

Test mode: a: DS-2CD2143G0-IS preview by DC12V support .
b: DS-2CD2143G0-IS preview by PoE support .
c: DS-2C2123G0-IS preview by DC12V support .
d: DS-2C2123G0-IS preview by PoE support .
e: DS-2CD2183G0-I preview by DC12V support .
f: DS-2CD2183G0-I preview by PoE support .
g: DS-2CD2163G0-I preview by DC12V support .
h: DS-2CD2163G0-I preview by PoE support .

7.8.3 Test Results:

Test phenomenon description for the EUT:

1. The EUT working normal, before the conditioning.

2. Monitor the EUT during the conditioning period and detected no any changes in states, during the conditioning.

3. No degradation in the performance of the EUT was observed, after the conditioning.

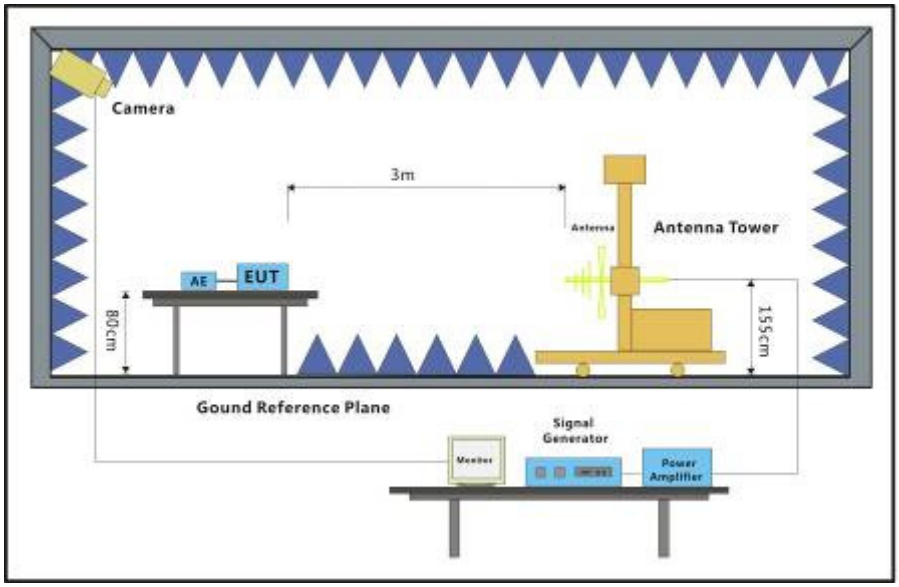
7.9 Radiated Immunity(80MHz-2.7GHz)

Test Requirement: EN 50130-4:2011 +A1:2014

Test Method: EN 61000-4-3:2006 +A1:2008+A2:2010

Modulation: 80%, 1 kHz Amplitude Modulation & 0.5s ON 0.5s OFF Pulse Modulation

7.9.1 Test Setup Diagram



7.9.2 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1002 mbar

Test mode: a: DS-2CD2143G0-IS preview by DC12V support .
b: DS-2CD2143G0-IS preview by PoE support .
c: DS-2C2123G0-IS preview by DC12V support .
d: DS-2C2123G0-IS preview by PoE support .
e: DS-2CD2183G0-I preview by DC12V support .
f: DS-2CD2183G0-I preview by PoE support .
g: DS-2CD2163G0-I preview by DC12V support .
h: DS-2CD2163G0-I preview by PoE support .

7.9.3 Test Results:

Frequency	Level (V/m)	EUT Face	Dwell time	Result / Observations
80MHz-2.7GHz	10	Front	3s	A
80MHz-2.7GHz	10	Back	3s	A
80MHz-2.7GHz	10	Left	3s	A
80MHz-2.7GHz	10	Right	3s	A
80MHz-2.7GHz	10	Top	3s	A
80MHz-2.7GHz	10	Underside	3s	A

Results:

A: No degradation in the performance of the EUT was observed.

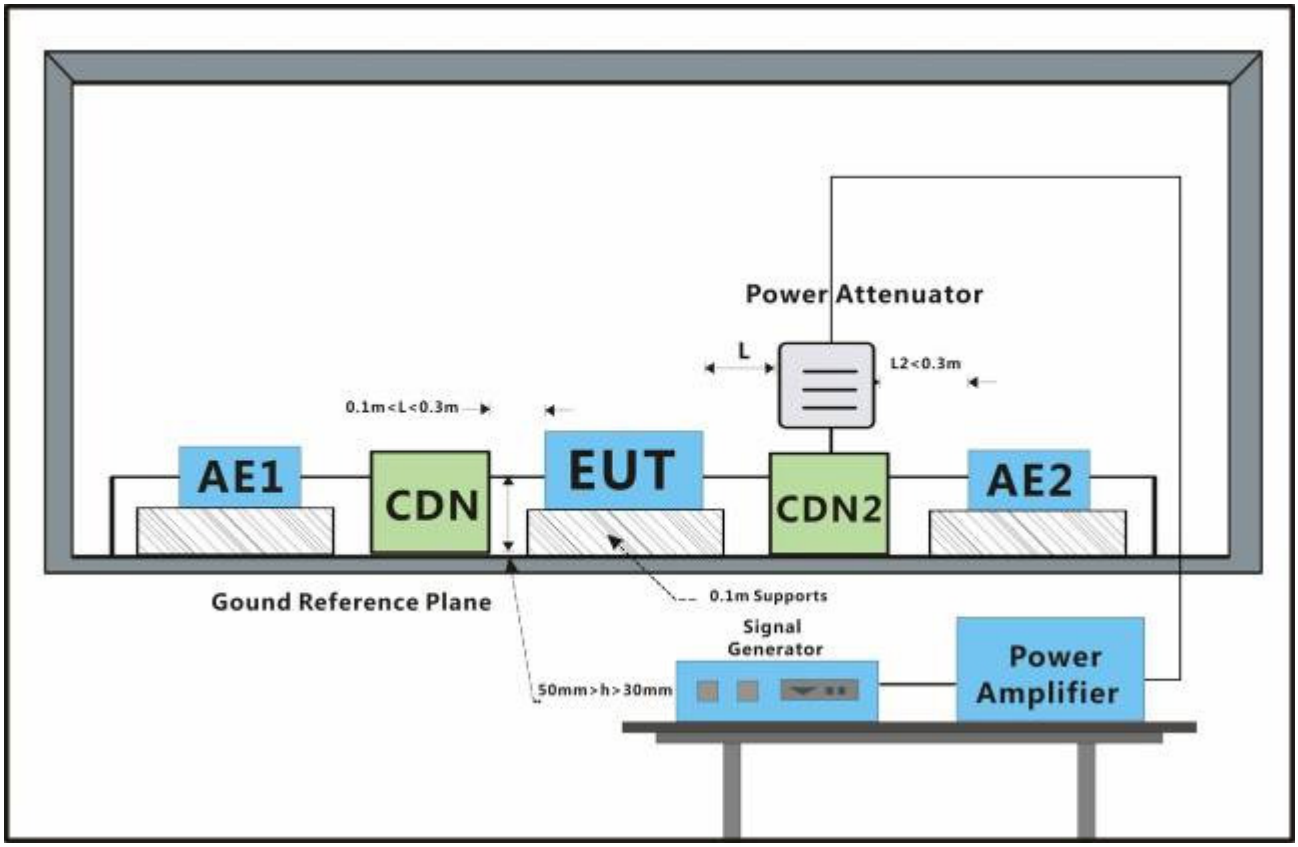
7.10 Conducted Immunity at Power Port (150kHz-100MHz)

Test Requirement: EN 50130-4:2011 +A1:2014

Test Method: EN 61000-4-6:2014

Modulation: 80%, 1 kHz Amplitude Modulation & 0.5s ON 0.5s OFF Pulse Modulation

7.10.1 Test Setup Diagram



7.10.2 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1010 mbar

Test mode: a: DS-2CD2143G0-IS preview by DC12V support .
b: DS-2CD2143G0-IS preview by PoE support .
c: DS-2C2123G0-IS preview by DC12V support .
d: DS-2C2123G0-IS preview by PoE support .
e: DS-2CD2183G0-I preview by DC12V support .
f: DS-2CD2183G0-I preview by PoE support .
g: DS-2CD2163G0-I preview by DC12V support .
h: DS-2CD2163G0-I preview by PoE support .

7.10.3 Test Results:

Cable port	Level (Vrms)	CDN/Clamp	Dwell time	Result / Observations
AC power port	10	CDN	3s	A

Results:

A: No degradation in the performance of the EUT was observed.

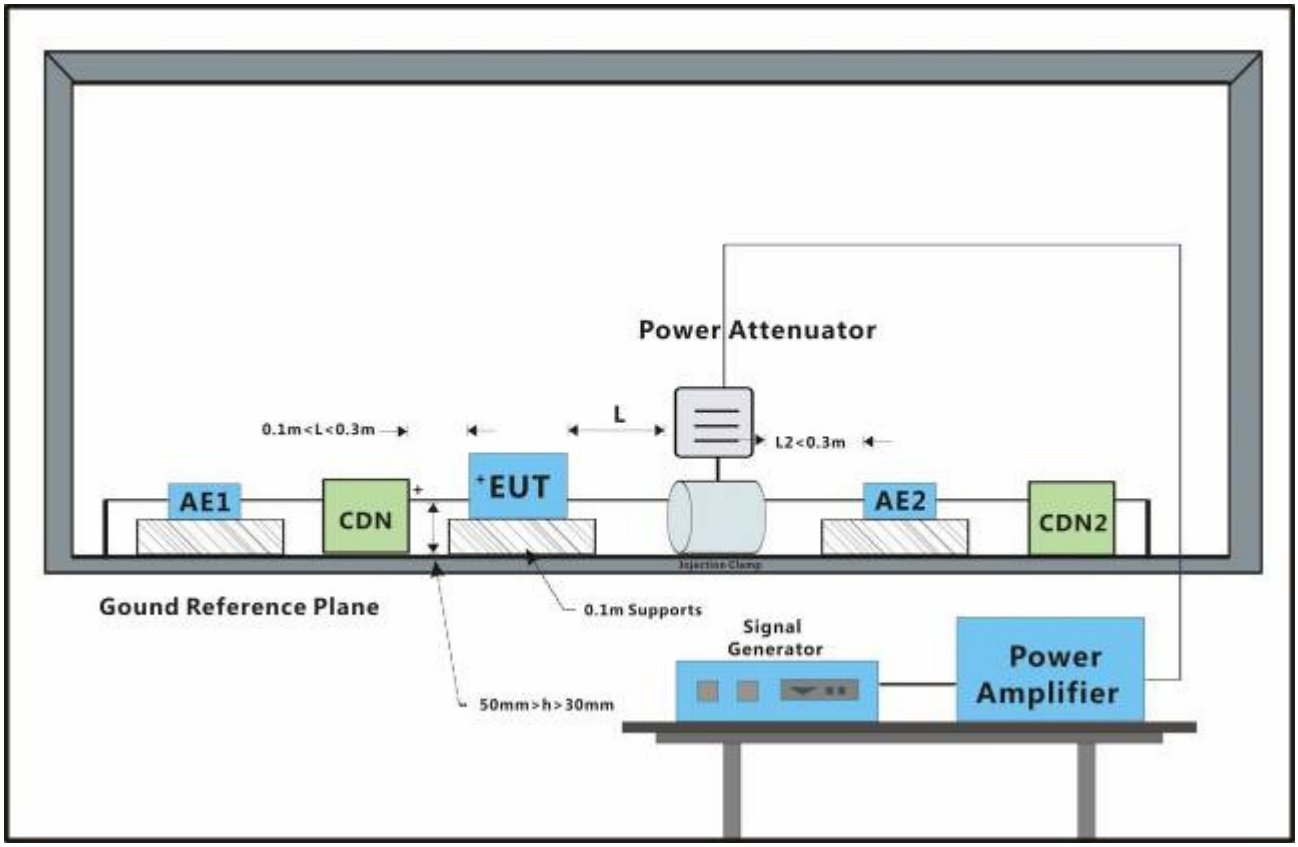
7.11 Conducted Immunity at Signal Port (150kHz-100MHz)

Test Requirement: EN 50130-4:2011 +A1:2014

Test Method: EN 61000-4-6:2014

Modulation: 80%, 1 kHz Amplitude Modulation & 0.5s ON 0.5s OFF Pulse Modulation

7.11.1 Test Setup Diagram



7.11.2 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1010 mbar

Test mode: a: DS-2CD2143G0-IS preview by DC12V support .
b: DS-2CD2143G0-IS preview by PoE support .
c: DS-2C2123G0-IS preview by DC12V support .
d: DS-2C2123G0-IS preview by PoE support .
e: DS-2CD2183G0-I preview by DC12V support .
f: DS-2CD2183G0-I preview by PoE support .
g: DS-2CD2163G0-I preview by DC12V support .
h: DS-2CD2163G0-I preview by PoE support .

7.11.3 Test Results:

Port	Level (Vrms)	CDN/Clamp	Dwell time	Result / Observations
Signal Port	10	Coupling	3s	A

Results:

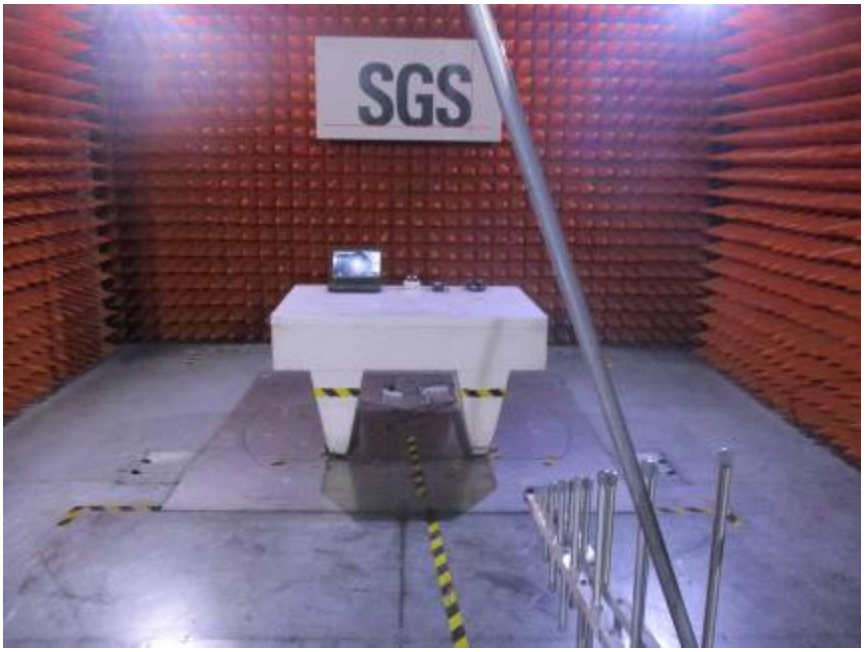
A: No degradation in the performance of the EUT was observed.

8 Photographs

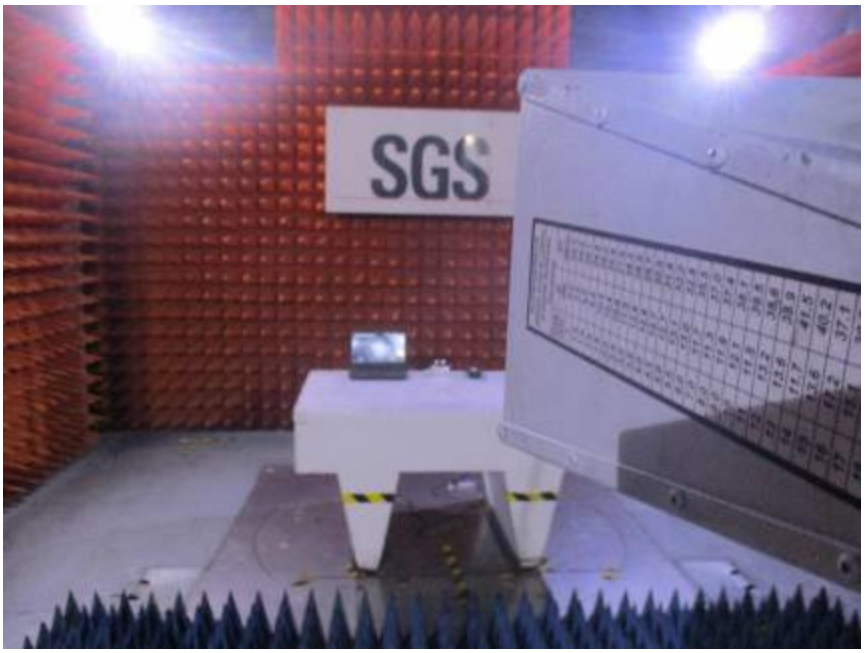
8.1 Conducted Emissions at Mains Terminals (150kHz-30MHz) Test Setup

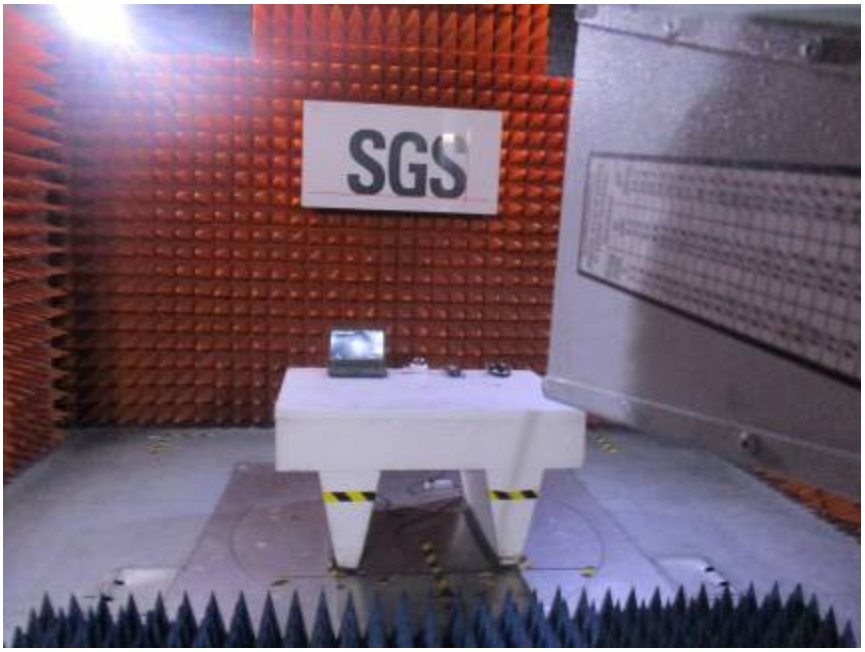
8.2 Asymmetric Mode Conducted Emissions (150kHz-30MHz) Test Setup

8.3 Radiated Emissions (30MHz-1GHz) Test Setup

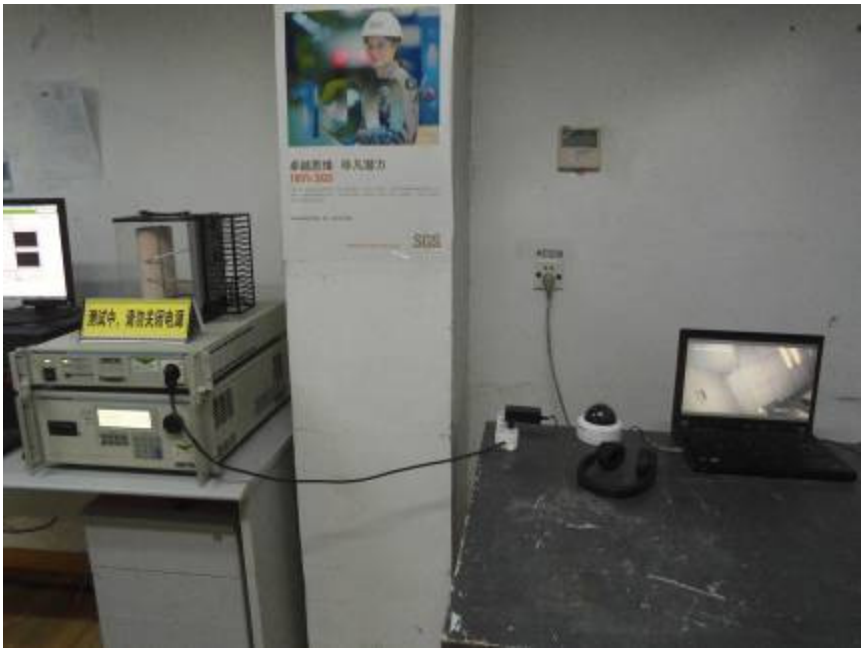


8.4 Radiated Emissions (above 1GHz) Test Setup





8.5 Voltage Fluctuations and Flicker Test Setup



8.6 Electrostatic Discharge Test Setup

8.7 Electrical Fast Transients/Burst at Power Port Test Setup

8.8 Electrical Fast Transients/Burst at Signal Port Test Setup

8.9 Surge at Power Port Test Setup

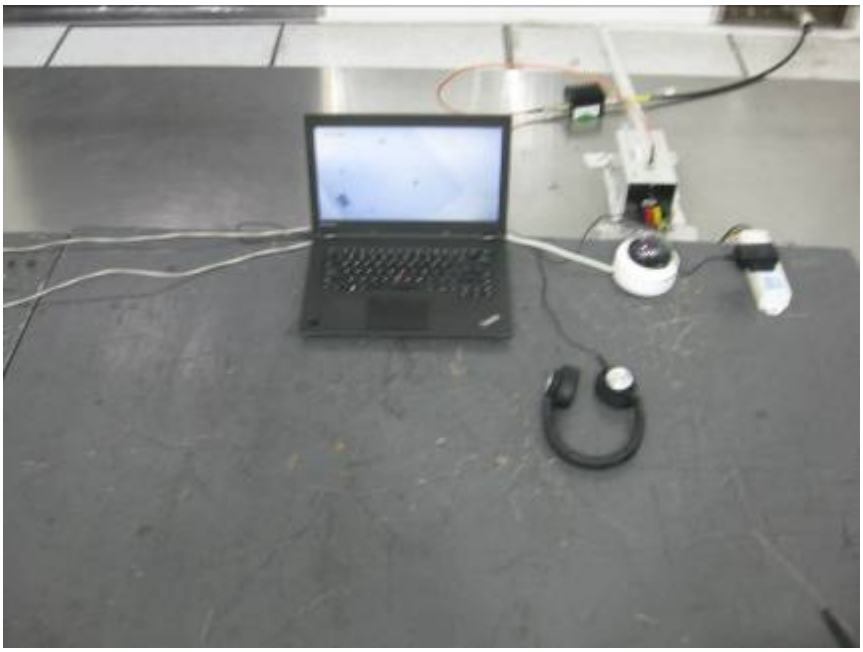
8.10 Surge at Signal Port Test Setup

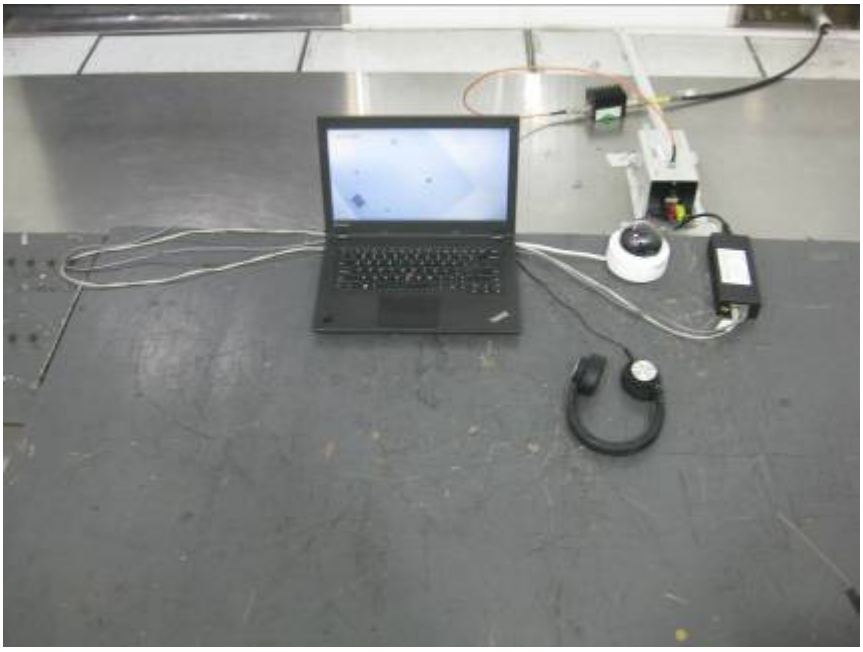
8.11 Voltage Dips and Interruptions Test Setup

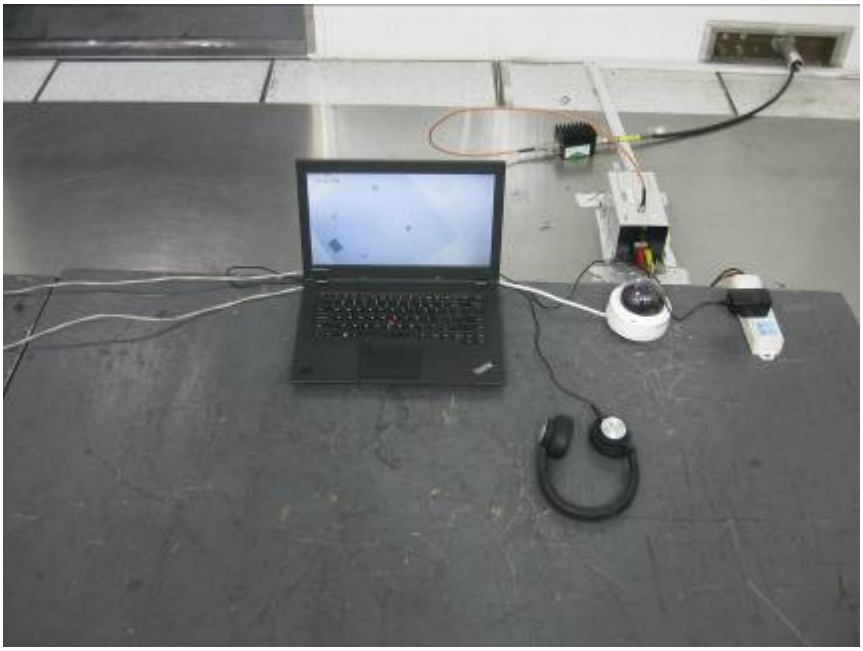
8.12 Mains Supply Voltage Variations-Conditioning Test Setup

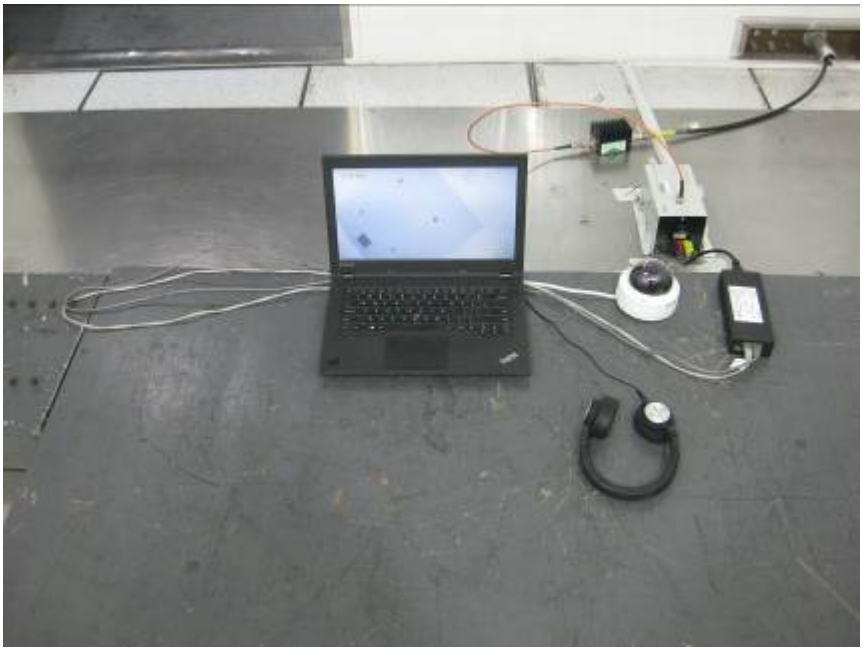
8.13 Radiated Immunity(80MHz-2.7GHz) Test Setup

8.14 Conducted Immunity at Power Port (150kHz-100MHz) Test Setup

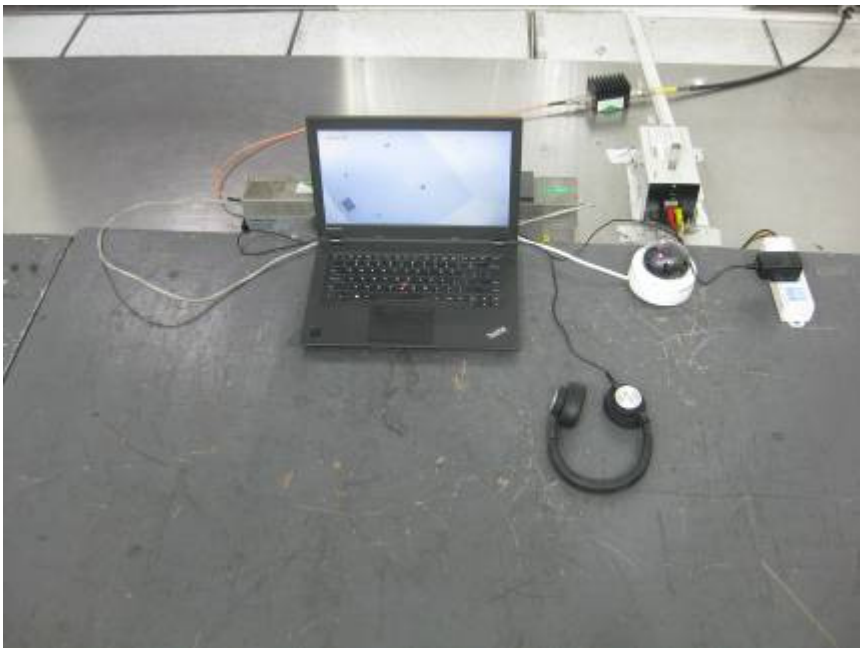


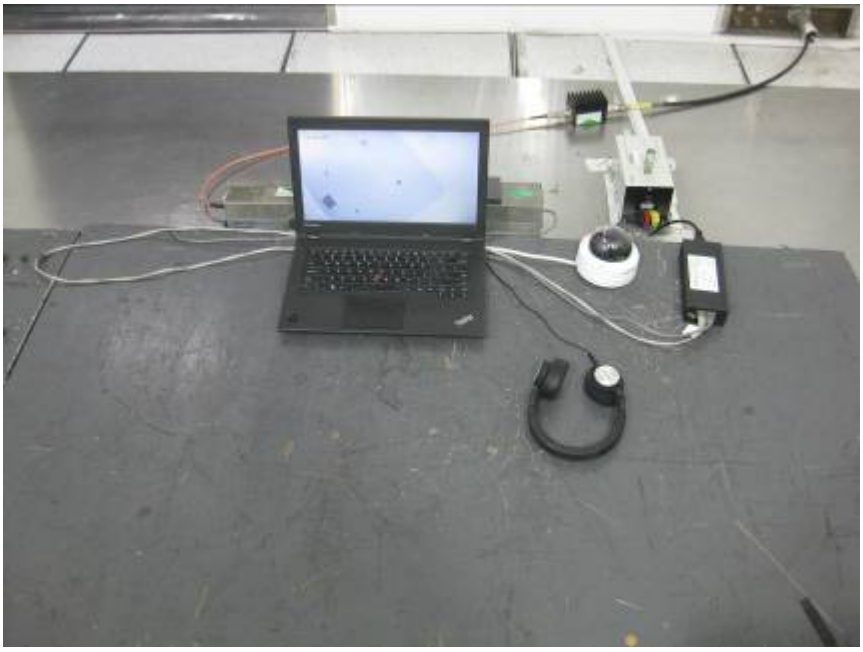


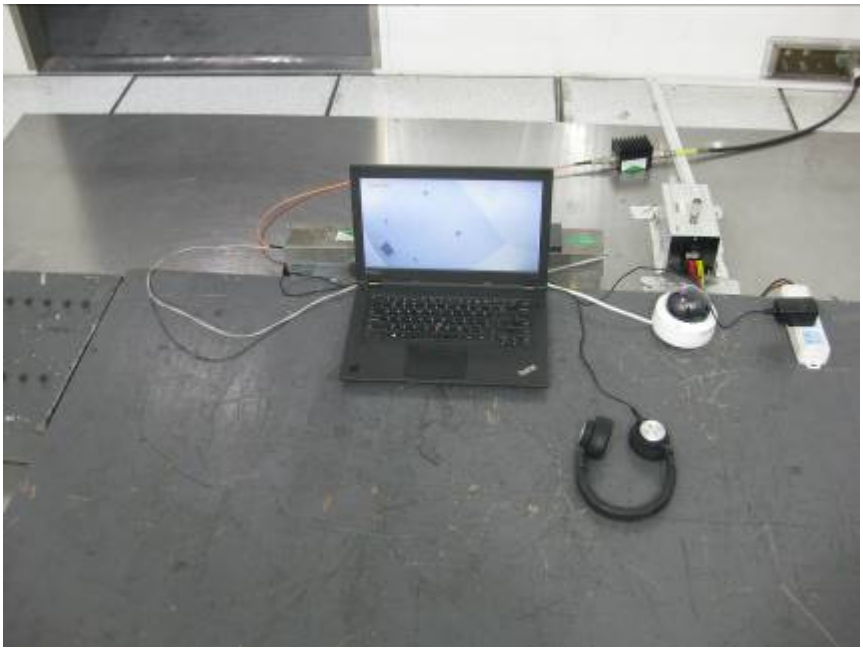


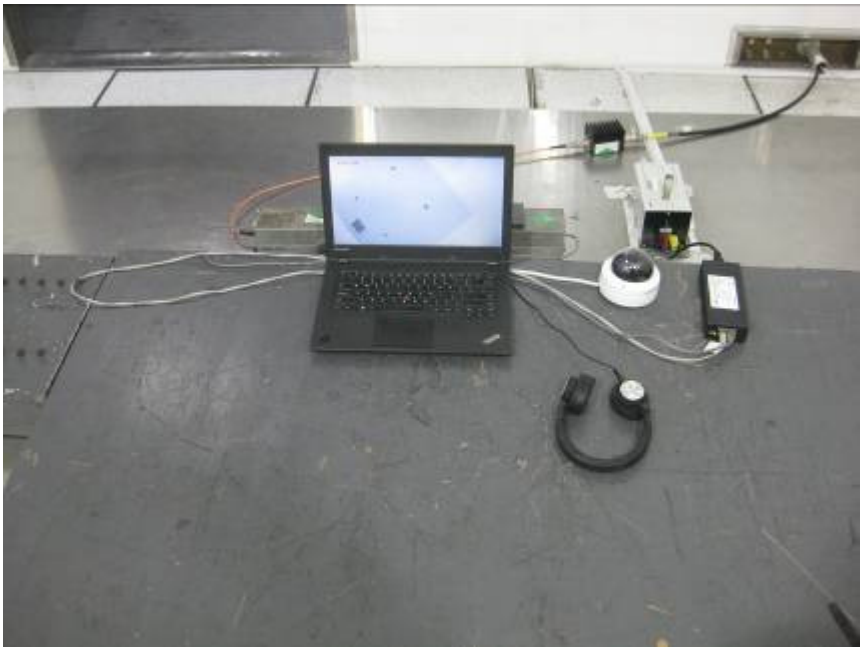


8.15 Conducted Immunity at Signal Port (150kHz-100MHz) Test Setup





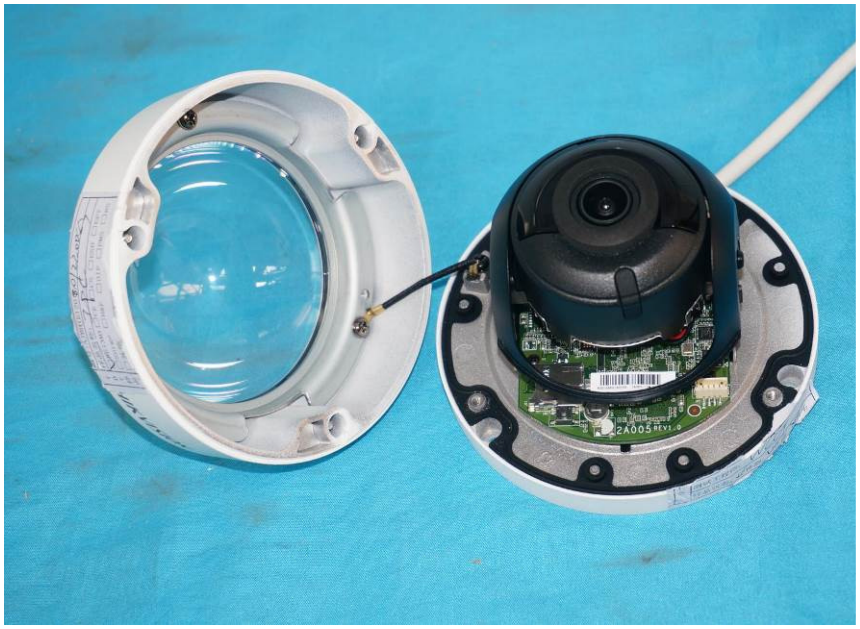


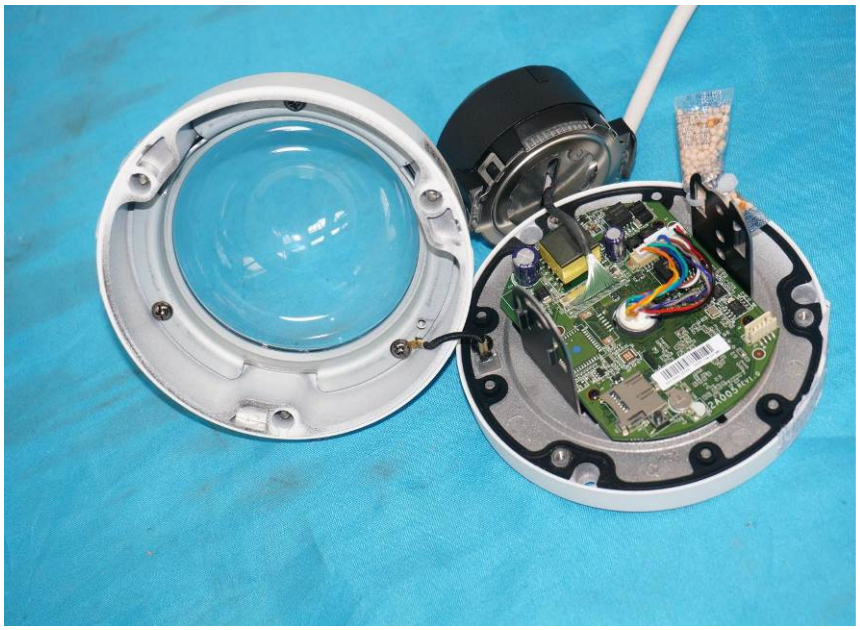


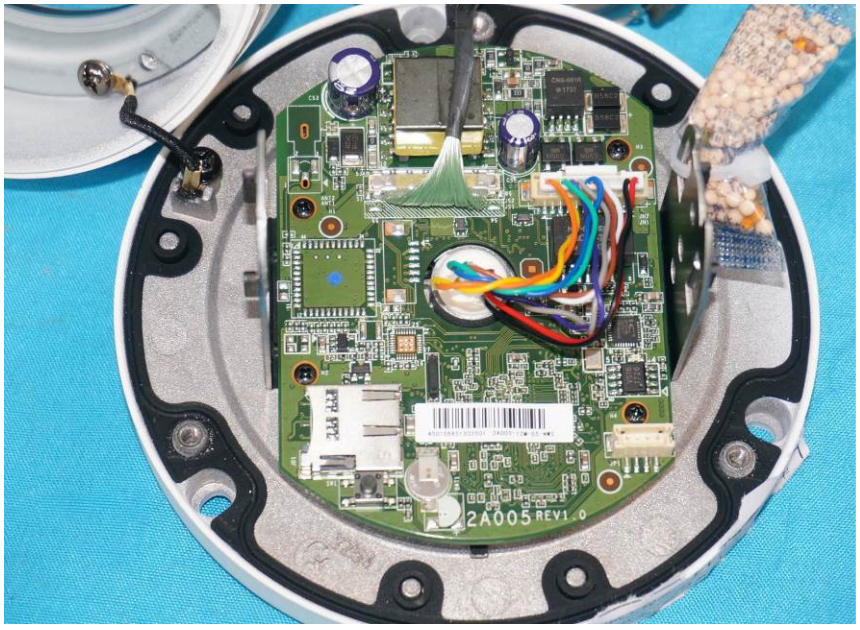
8.16 EUT Constructional Details

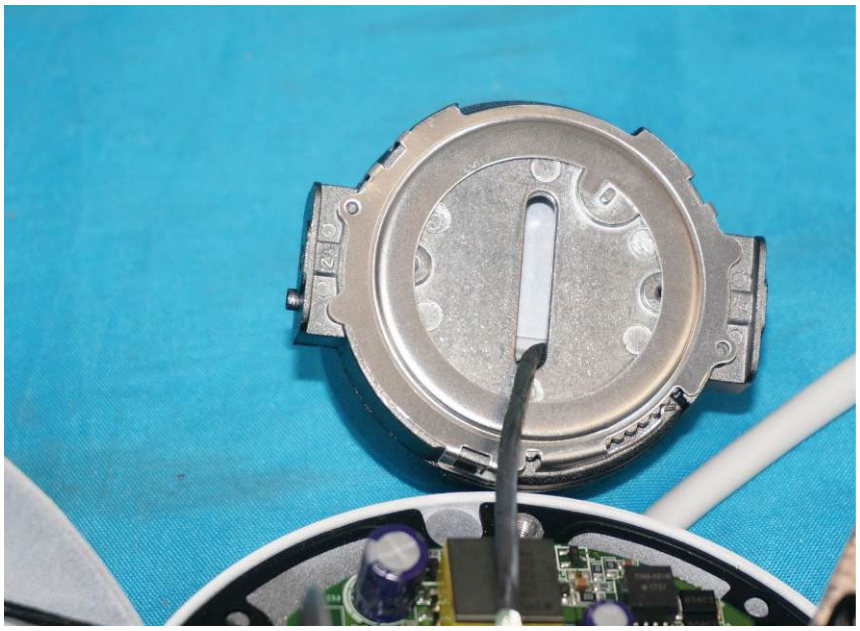
For old model

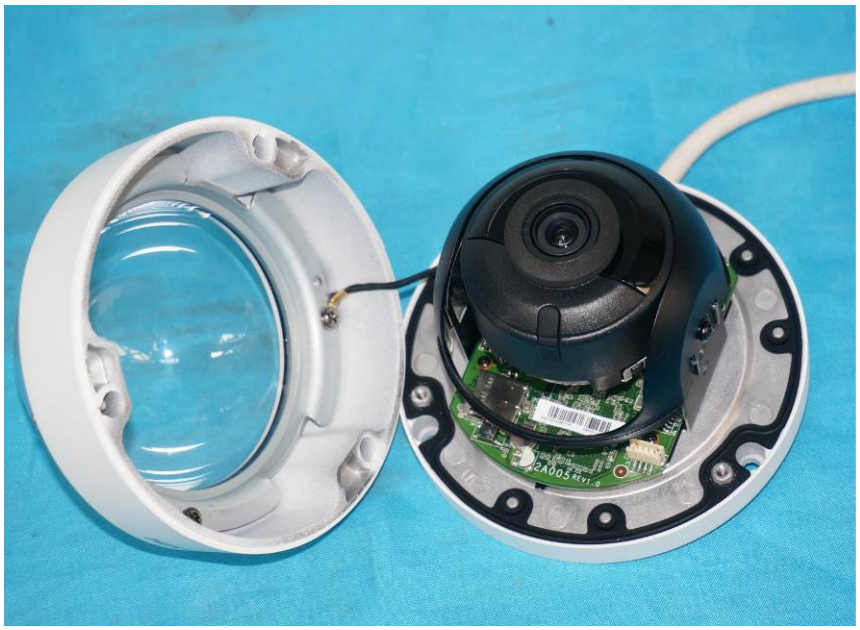
For new model

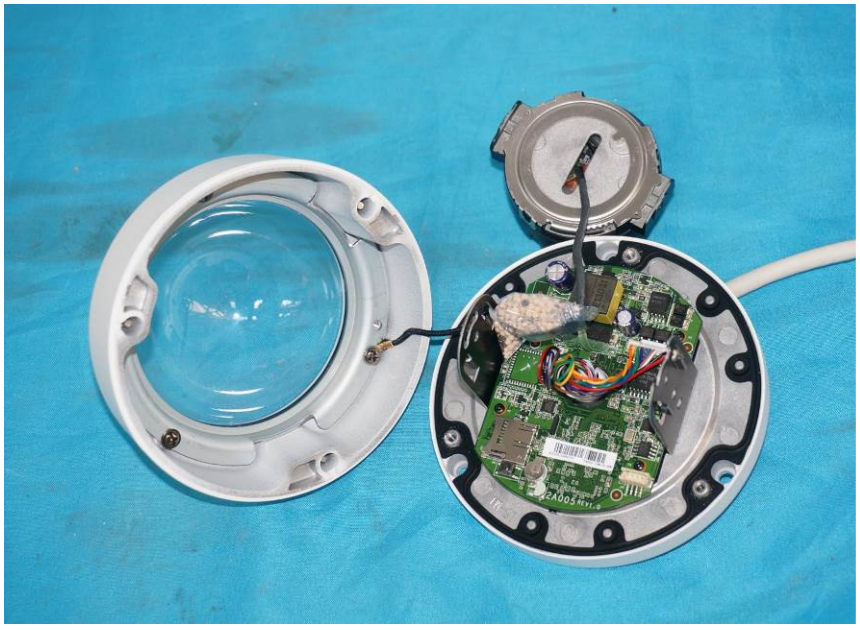


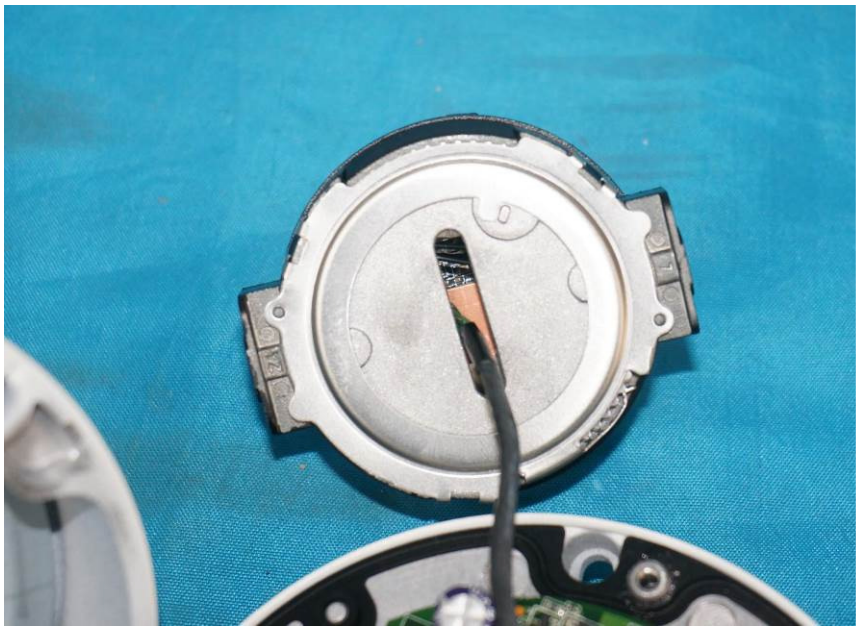












--End of the Report--