TEST REPORT

Application No.:	SHEM1906014446AT
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. 3, Chongqing Hikvision technology 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. 3, No. 118, Haikang Road, Area C, Jianqiao Industrial Park, Dadukou District, Chongqing, 401325, China
Equipment Under Test (EUT):	
EUT Name:	NETWORK CAMERA
Model No.:	Refer to Page 2 ¤
¤	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:	2019-06-03
Date of Test:	2019-06-03 to 2019-06-13
Date of Issue:	2019-07-02
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.

CE

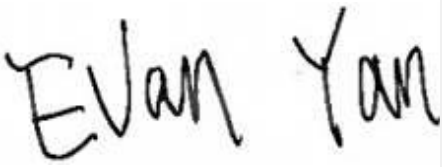
Parlam Zhan
E&E Section Manager

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.

Model No.:

DS-2CD2T86G2-4I, DS-2CD2T86G2-4IUHK, DS-2CD2T86G2-4ICKV, DS-2CD2T86G2-4IUVS, DS-2CD2T86G2-4IKVO, DS-2CD2T86G2-4IHUN, DS-2CD2T86G2-2I, DS-2CD2T86G2-2IUHK, DS-2CD2T86G2-2ICKV, DS-2CD2T86G2-2IUVS, DS-2CD2T86G2-2IKVO, DS-2CD2T86G2-2IHUN

Revision Record			
Version	**Description**	**Date**	**Remark**
00	Original	2019-07-02	/

Authorized for issue by:				
				
		Evan Yan /Project Engineer		
				
		Bruce Tang /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
Immunity Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Electrostatic Discharge	EN 50130-4:2011 +A1:2014	EN 61000-4-2:2009	6kV Contact Discharge 2,4,8kV Air Discharge	Pass
Electrical Fast Transients/Burst at Power Port	EN 50130-4:2011 +A1:2014	EN 61000-4-4:2012	2kV 5/50ns Tr/Td 100kHz Repetition Frequency	Pass
Electrical Fast Transients/Burst at Signal Port	EN 50130-4:2011 +A1:2014	EN 61000-4-4:2012	1kV 5/50ns Tr/Td 100kHz Repetition Frequency	Pass
Surge at Power Port	EN 50130-4:2011 +A1:2014	EN 61000-4-5:2014	1.2/50μs Tr/Td 0.5,1kV Line to Line 0.5,1,2kV Line to Ground	Pass
Surge at Signal Port	EN 50130-4:2011 +A1:2014	EN 61000-4-5:2014	1.2/50μs Tr/Td 0.5,1kV Line to Ground	Pass
Voltage Dips and Interruptions	EN 50130-4:2011 +A1:2014	EN 61000-4-11:2004	80 % UT for 250per 70 % UT for 25per 40 % UT for 10per 0 % UT for 250per UT 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

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

N/A*: Not applicable. Please refer to Section 6.5 of this report for details.

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-2CD2T86G2-4I was tested since their differences are model number and resolving power.

3 Contents

4 General Information

4.1 Details of E.U.T.

Power supply:	DC12V or PoE
Cables:	Interface: Power*1, Lan*1

4.2 Description of Support Units

Description	Manufacturer	Model No.
Notebook	HP	HP ProBook 440 G5
Notebook	Lenovo	ThinkPad L440
Power Adapter	MOSO	MSA-C2000IC12.0-24P-CN AC100-240V 50/60Hz 0.7A max, input DC12V 2A output .（external power supply）
POE Injector	SUPLET	LAS60-57CN-RJ45: AC100~240V 50/60Hz 2Amax, DC56V 60W output. （external power supply）
LAN Cable	Hikvision	EIA/TIA-568B,2 CAT,5E,2m

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Conducted Emission at mains port using AMN	±2.6dB (9kHz to 150kHz)
		±2.3dB (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	±4.1 dB (150kHz to 30MHz)
4	Radiated Power	±3.0dB
5	Radiated emission	±4.4dB (30MHz-1GHz)
		±4.8dB (1GHz-6GHz)
		±5.2dB (6GHz-18GHz)

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

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
sub-contracted
Hangzhou Hikvision Digital Technology Co., Ltd
No.555 Qianmo Road, Binjiang District, Hangzhou 310052, China

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.

• Innovation, Science and Economic Development Canada

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

IC Registration No.: 8617A-1. CAB Identifier: CN0020.

• 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-13868, C-14336, 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

Conducted Emissions at Mains Terminals					
Equipment	Manufacturer	Model NO	Serial NO.	Cal Date	Cal Due Date
EMI test Receiver	R&S	ESR3	101831	2019/5/5	2020/5/4
Line impedance stabilization network	R&S	ENV216	10107	2019/5/5	2020/5/4
Radiated Emission					
Equipment	Manufacturer	Model NO	Serial NO.	Cal Date	Cal Due Date
EMI test Receiver	R&S	ESU26	100499	2018/12/11	2019/12/11
PRE-Amplifier	Connphy	CLN-1G18G-4030-S	517002	2018/8/30	2019/8/30
TRLIOG Broad Band Antenna	Schwarzbeck	VULB 9168	796	2017/7/10	2019/7/10
Horn antenna	Schwarzbeck	BBHA 9120D	7794	2017/8/19	2019/8/19
Voltage Fluctuations and Flicker					
Equipment	Manufacturer	Model NO	Serial NO.	Cal Date	Cal Due Date
Harmonic &Flicker analyzer	TESEQ	NSG1007	1438A04118-1	2019/5/22	2020/5/21
AC power source	TESEQ	CCN1000-1	1438A04118-1	2019/5/22	2020/5/21
Electrostatic Discharge					
Equipment	Manufacturer	Model NO	Serial NO.	Cal Date	Cal Due Date
Electrostatic Discharge Simulator	TESEQ	NSG 437	1254	2018/7/4	2019/7/3
EFT					
Equipment	Manufacturer	Model NO	Serial NO.	Cal Date	Cal Due Date
Immunity Test system	TESEQ	NSG3040	2173	2019/5/5	2020/5/4
Capacitive coupling clamp	TESEQ	CDN 3425	1928	2019/5/5	2020/5/4
Surge					
Immunity Test system	TESEQ	NSG3060	1716	2019/5/5	2020/5/4
Data coupling network	TESEQ	CDN 117M	38777	2019/5/5	2020/5/4
Power coupling network	TESEQ	CDN 3061-S16	1513	2019/5/5	2020/5/4
Immunity Test system	3C test	SG-728G	EC0630906	2018/11/09	2019/11/08
Immunity Test system	3C test	SG-5006G	EC5580932	2018/11/09	2019/11/08
Data coupling network	3C test	SGN-C3	EC5620903	2018/11/09	2019/11/08
Power coupling network	3C test	SGN-5010G	EC5590919	2018/11/09	2019/11/08
Data coupling network	3C test	SGN-C2	EC5620903	2018/11/09	2019/11/08
CS					
Immunity Test system	TESEQ	NSG 4070C-0	47944	2019/4/2	2020/4/1

CDN	TESEQ	CDN M016	50365	2019/4/2	2020/4/1
Coupling clamp	TESEQ	KEMZ 801A	50113	2019/4/2	2020/4/1
RS					
Signal generator	keysight	N5181A	MY50146343	2018/11/09	2019/11/08
Power meter	keysight	N1914A	MY55336002	2018/11/09	2019/11/08
Amplifier	milmege	80RF1000-500	1069892	2018/11/09	2019/11/08
Amplifier	milmege	AS0827-230	1069893	2018/11/09	2019/11/08
Antenna	Schwarzbeck	STLP9128E	9128E7#3009	/	/
Antenna	Schwarzbeck	STLP 9149	9149-349	/	/
DIP & Mains Supply Voltage Variations -conditioning					
Immunity Test system	TESEQ	NSG3040	2173	2019/5/5	2020/5/4
	TESEQ	VAR 3005-D16	2018	2019/5/5	2020/5/4
Other					
Equipment	Manufacturer	Model NO	Serial NO.	Cal Date	Cal Due Date
Temperature&humidity recorder	PINYI	HTC-1	/	2018/7/19	2019/7/18
Pressure meter	YIOU	BY-2003P	E01406062	2018/11/27	2019/11/26

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

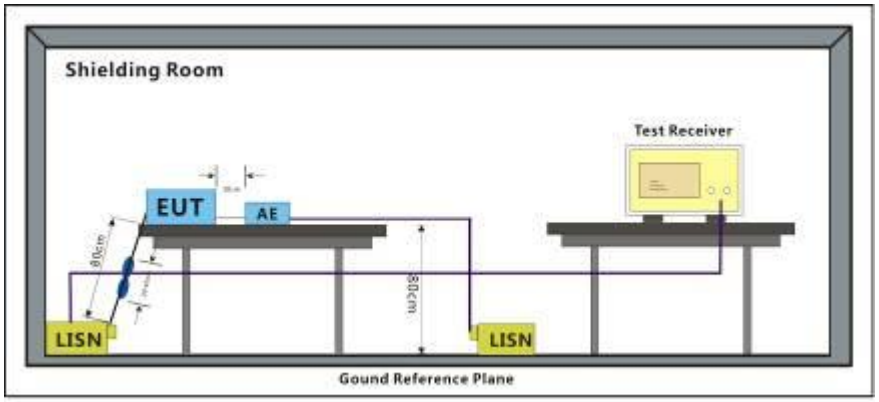
Operating Environment:

Temperature: 26 °C Humidity: 58 % RH Atmospheric Pressure: 1022.2 mbar

Test mode: a: Typical configuration: DC12V Power supply network preview.

b: Typical configuration: POE Power supply network preview.

6.1.2 Test Setup Diagram

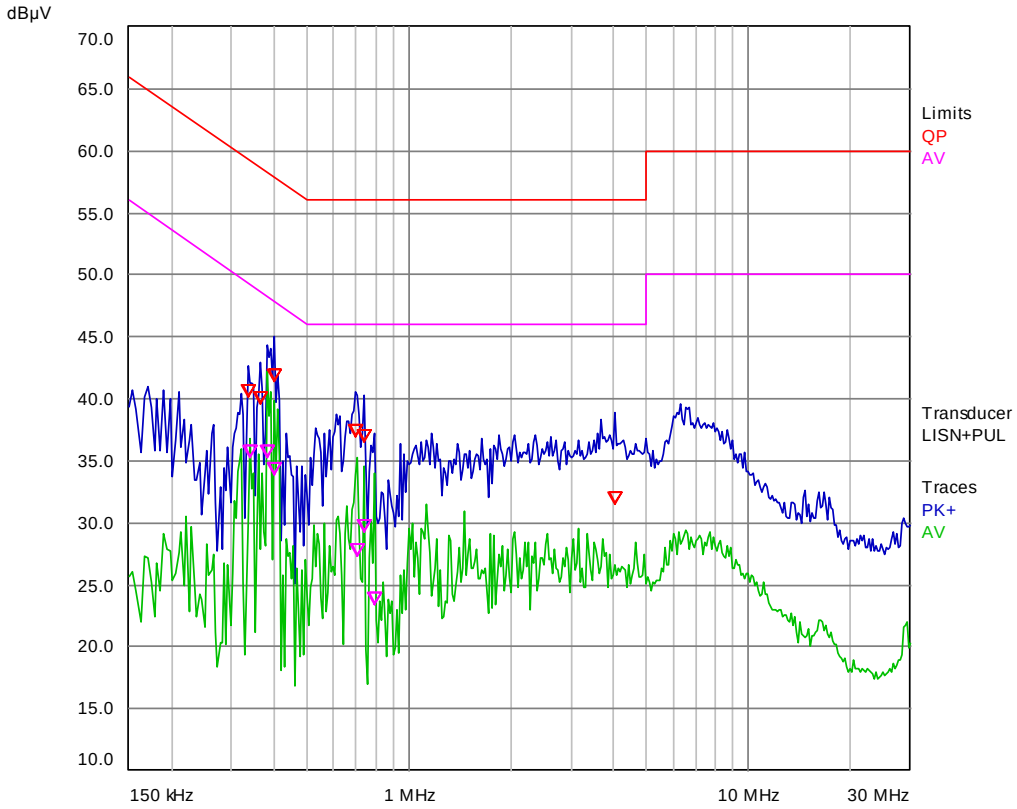


6.1.3 Measurement Data

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

Mode:a; Line:Live Line

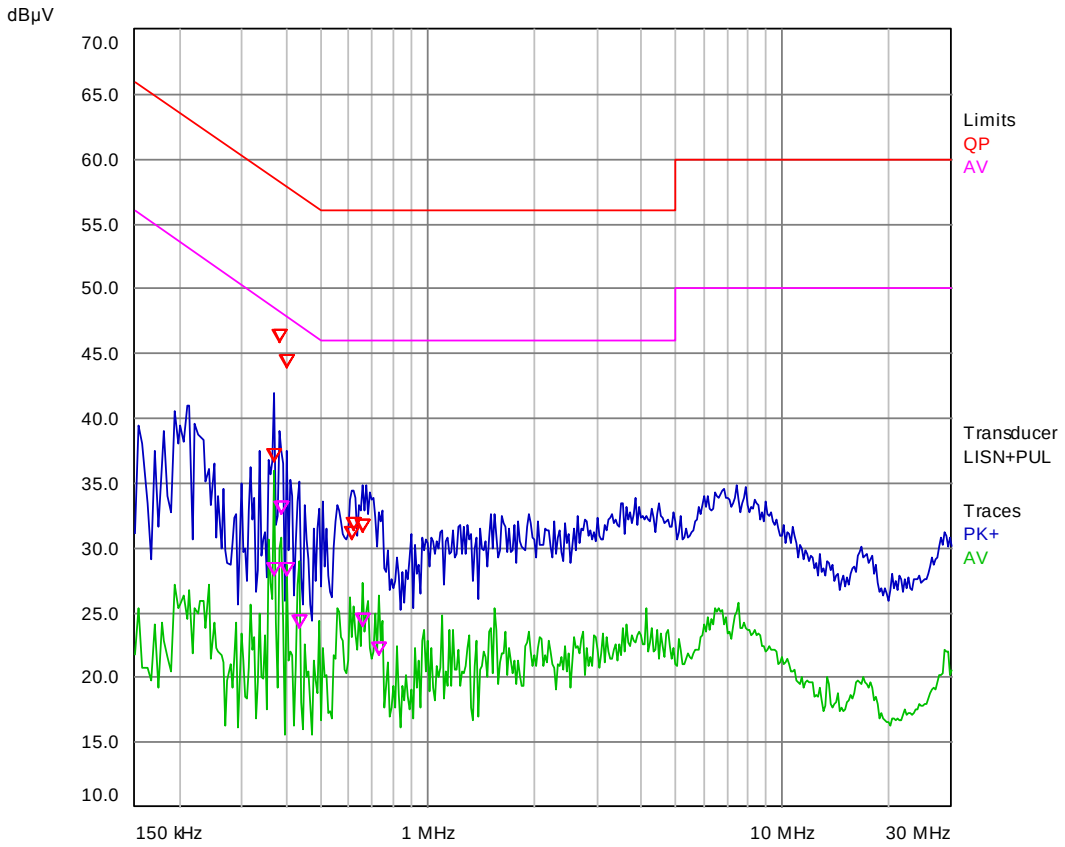


Final Measurement Results

Trace	Frequency (MHz)	Level (dBµV)	Limit (dBµV)	Delta Limit (dB)	Comment
1 QP	0.338	40.12	59.25	-19.13	L1 / on
2 CA	0.342	35.22	49.15	-13.93	L1 / on
1 QP	0.366	39.65	58.59	-18.94	L1 / on
2 CA	0.382	35.30	48.24	-12.94	L1 / on
1 QP	0.402	41.44	57.81	-16.37	L1 / on
2 CA	0.402	33.84	47.81	-13.97	L1 / on
1 QP	0.698	36.88	56.00	-19.12	L1 / on
2 CA	0.702	27.30	46.00	-18.70	L1 / on
1 QP	0.738	36.45	56.00	-19.55	L1 / on
2 CA	0.738	29.32	46.00	-16.68	L1 / on
2 CA	0.79	23.40	46.00	-22.60	L1 / on
1 QP	4.046	31.46	56.00	-24.54	L1 / on

* = limit exceeded

Mode:a; Line:Neutral Line

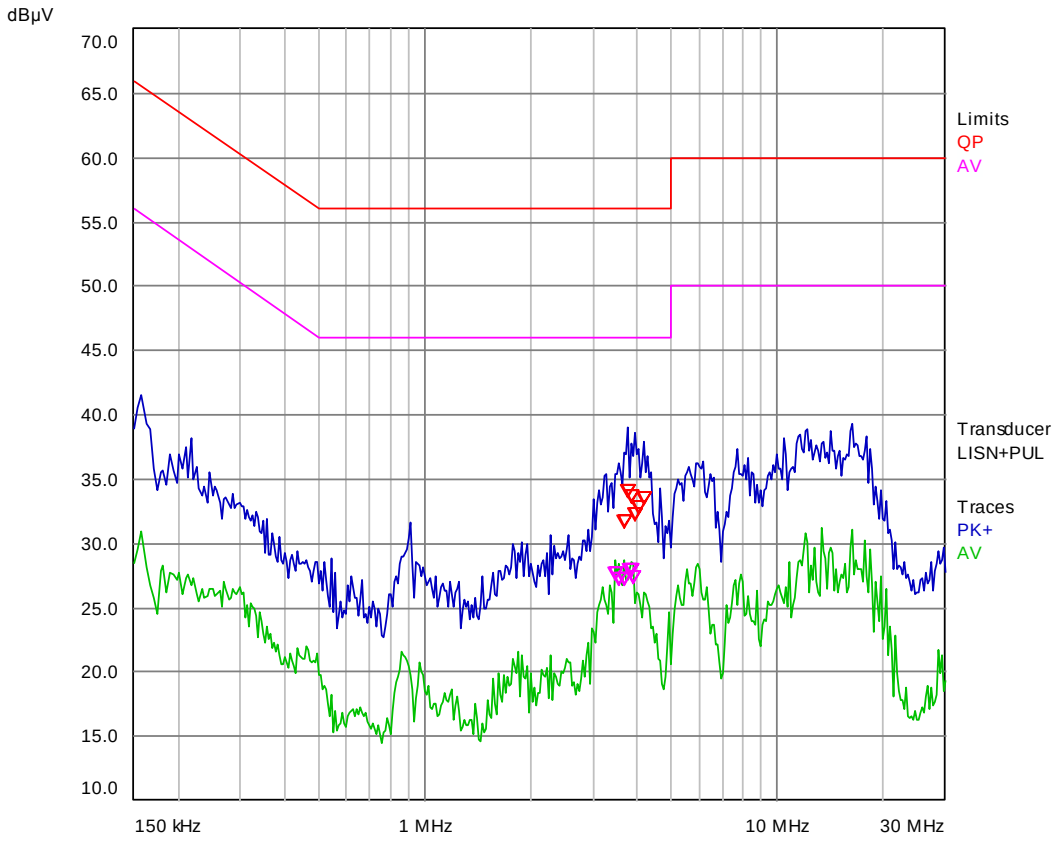


Final Measurement Results

Trace	Frequency (MHz)	Level (dBµV)	Limit (dBµV)	Delta Limit (dB)	Comment
1 QP	0.37	36.61	58.50	-21.89	N / on
2 CA	0.37	27.80	48.50	-20.70	N / on
1 QP	0.382	45.91	58.24	-12.33	N / on
2 CA	0.386	32.61	48.15	-15.54	N / on
1 QP	0.402	43.93	57.81	-13.88	N / on
2 CA	0.402	27.90	47.81	-19.91	N / on
2 CA	0.434	23.75	47.18	-23.43	N / on
1 QP	0.61	30.68	56.00	-25.32	N / on
1 QP	0.622	31.29	56.00	-24.71	N / on
1 QP	0.658	31.16	56.00	-24.84	N / on
2 CA	0.658	23.95	46.00	-22.05	N / on
2 CA	0.73	21.71	46.00	-24.29	N / on

* = limit exceeded

Mode:b; Line:Live Line

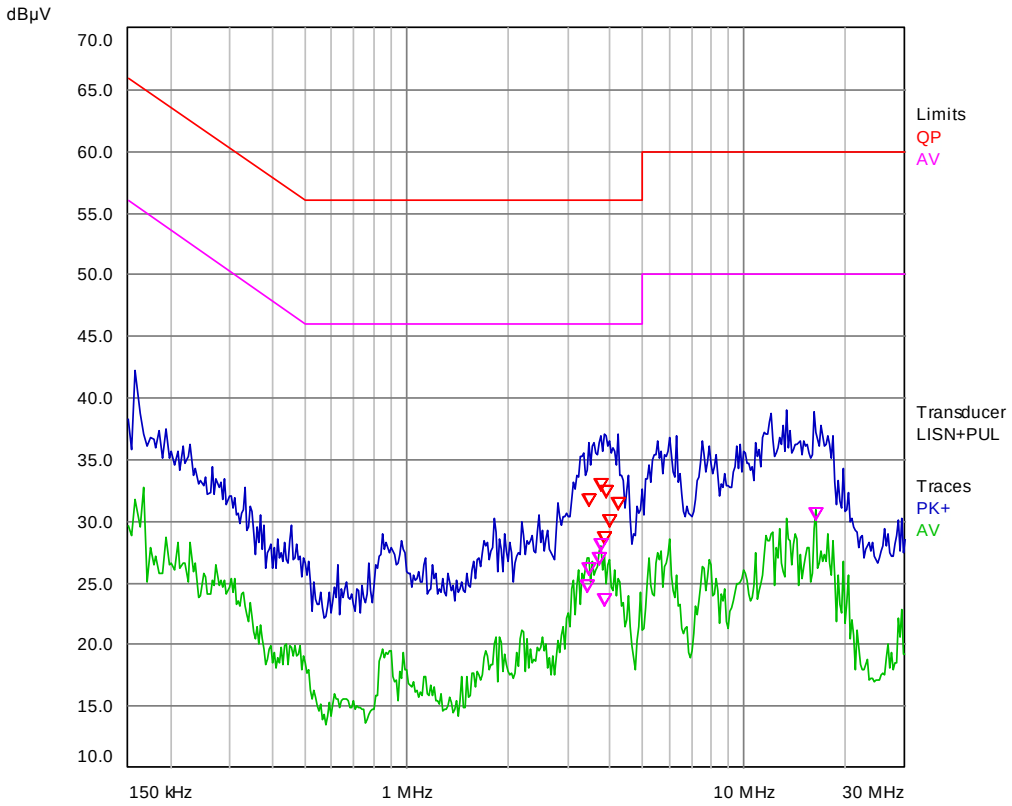


Final Measurement Results

Trace	Frequency (MHz)	Level (dBµV)	Limit (dBµV)	Delta Limit (dB)	Comment
2 CA	3.462	27.18	46.00	-18.82	L1 / on
2 CA	3.57	26.70	46.00	-19.30	L1 / on
1 QP	3.67	31.15	56.00	-24.85	L1 / on
2 CA	3.682	26.70	46.00	-19.30	L1 / on
1 QP	3.786	33.54	56.00	-22.46	L1 / on
2 CA	3.79	27.40	46.00	-18.60	L1 / on
1 QP	3.838	33.16	56.00	-22.84	L1 / on
2 CA	3.842	27.40	46.00	-18.60	L1 / on
2 CA	3.898	26.90	46.00	-19.10	L1 / on
1 QP	3.946	31.84	56.00	-24.16	L1 / on
1 QP	4.05	32.26	56.00	-23.74	L1 / on
1 QP	4.166	33.05	56.00	-22.95	L1 / on

* = limit exceeded

Mode:b; Line:Neutral Line



Final Measurement Results

Trace	Frequency	Level	Limit	Delta Limit	Comment
	(MHz)	(dBµV)	(dBµV)	(dB)	
2 CA	3.414	24.28	46.00	-21.72	N / on
1 QP	3.458	31.25	56.00	-24.75	N / on
2 CA	3.458	25.65	46.00	-20.35	N / on
2 CA	3.734	26.45	46.00	-19.55	N / on
1 QP	3.782	32.41	56.00	-23.59	N / on
2 CA	3.786	27.53	46.00	-18.47	N / on
2 CA	3.854	23.15	46.00	-22.85	N / on
1 QP	3.858	28.10	56.00	-27.90	N / on
1 QP	3.89	31.92	56.00	-24.08	N / on
1 QP	3.994	29.57	56.00	-26.43	N / on
1 QP	4.218	30.94	56.00	-25.06	N / on
2 CA	16.23	30.12	50.00	-19.88	N / on

* = limit exceeded

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
Remark:	The voltage measured shall be corrected at each frequency of interest as follows: if the current margin with respect to the current limit is ⩽ 6 dB, the actual current margin shall be subtracted from the measured voltage; if the current margin with respect to the current limit is > 6 dB, 6 dB shall be subtracted from the measured voltage.

6.2.1 E.U.T. Operation

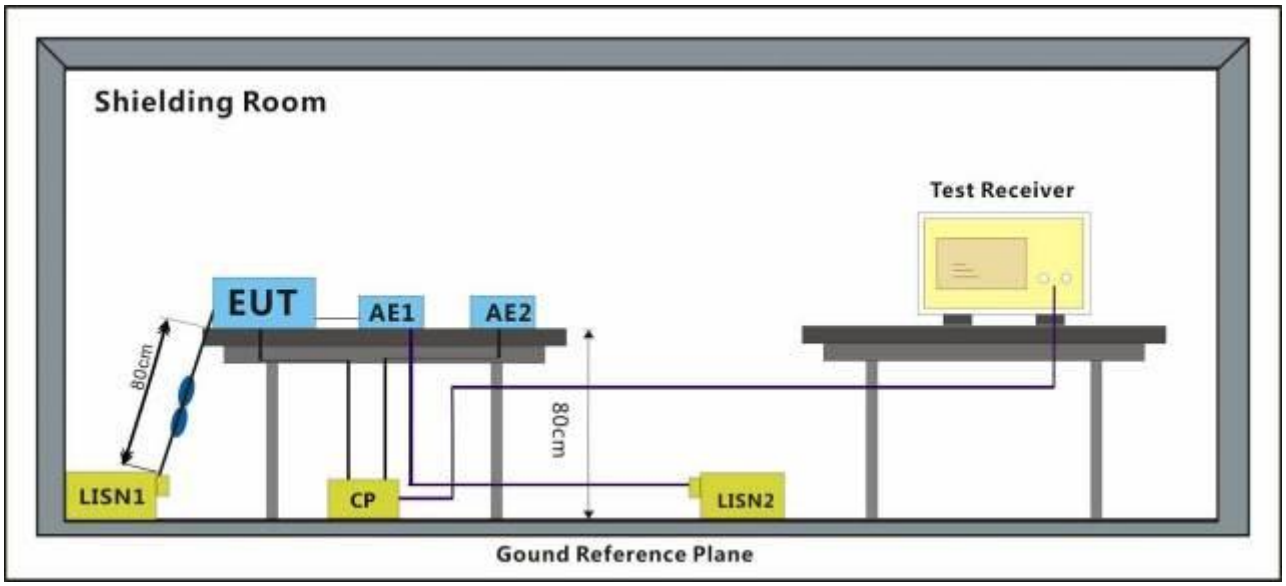
Operating Environment:

Temperature: 26 °C Humidity: 58 % RH Atmospheric Pressure: 1022.2 mbar

Test mode a: Typical configuration: DC12V Power supply network preview.

b: Typical configuration: POE Power supply network preview.

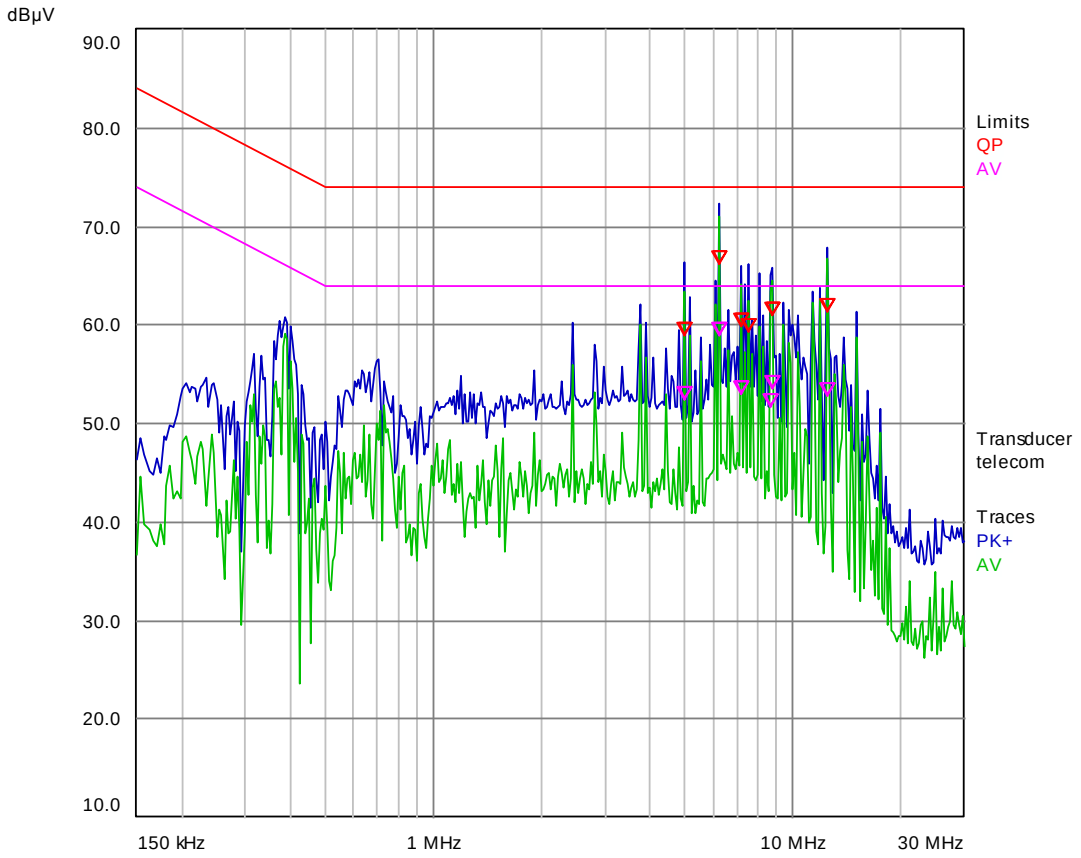
6.2.2 Test Setup Diagram



6.2.3 Measurement Data

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

Mode a :
10Mbps

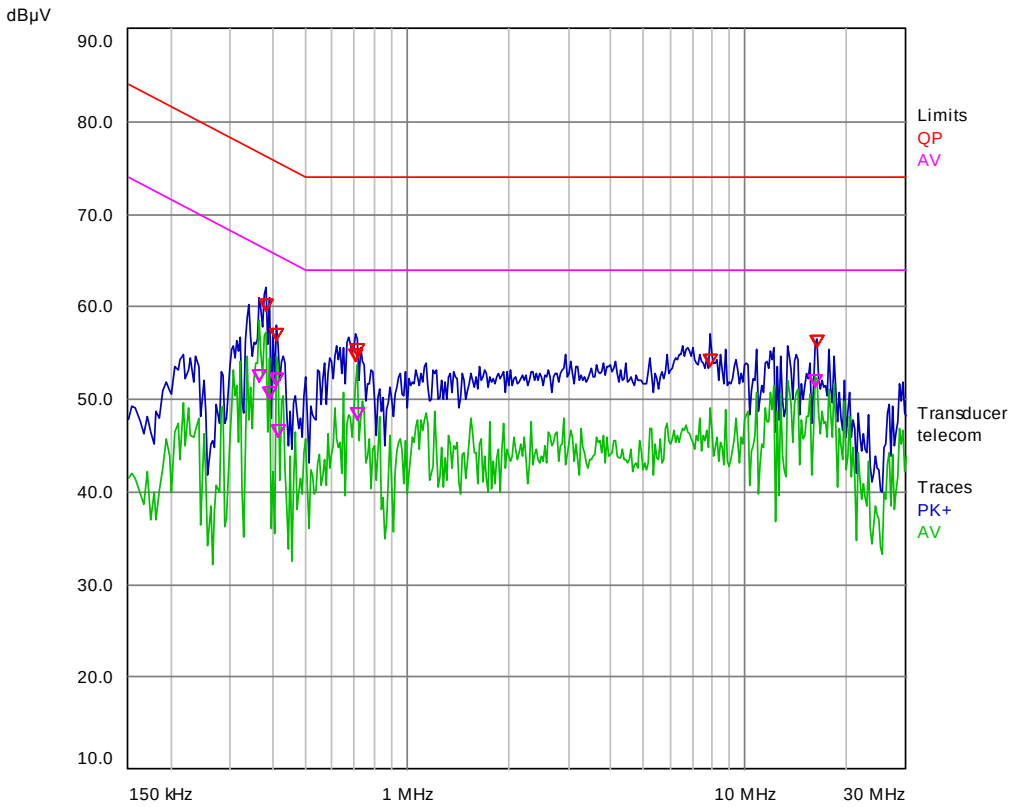


Final Measurement Results

Trace	Frequency (MHz)	Level (dBµV)	Limit (dBµV)	Delta Limit (dB)
1 QP	4.998	58.96	74.00	-15.04
2 CA	5.002	52.35	64.00	-11.65
1 QP	6.25	66.11	74.00	-7.89
2 CA	6.25	58.93	64.00	-5.07
1 QP	7.174	59.80	74.00	-14.20
2 CA	7.174	53.01	64.00	-10.99
1 QP	7.55	59.25	74.00	-14.75
2 CA	8.642	51.58	64.00	-12.42
1 QP	8.806	60.91	74.00	-13.09
2 CA	8.806	53.59	64.00	-10.41
1 QP	12.446	61.38	74.00	-12.62
2 CA	12.446	52.75	64.00	-11.25

* = limit exceeded

100Mbps

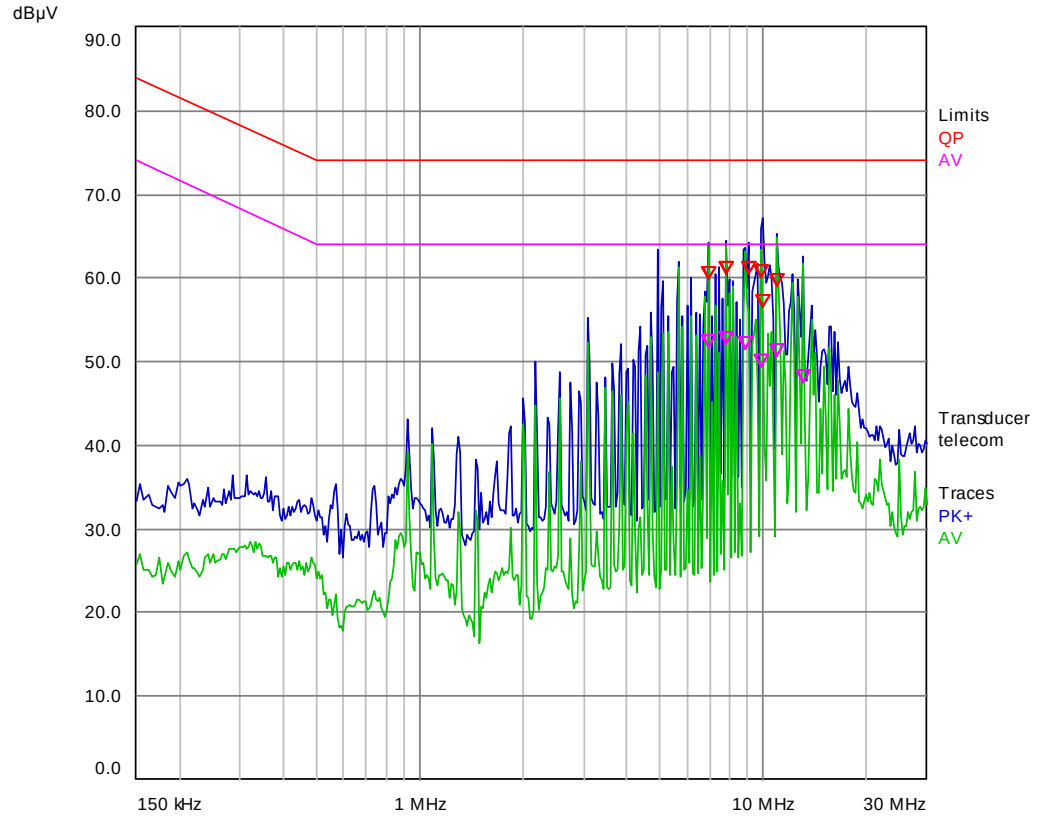


Final Measurement Results

Trace	Frequency (MHz)	Level (dBµV)	Limit (dBµV)	Delta Limit (dB)
2 CA	0.366	51.85	66.59	-14.74
1 QP	0.382	59.55	76.24	-16.69
2 CA	0.394	49.91	65.98	-16.07
1 QP	0.41	56.27	75.65	-19.38
2 CA	0.41	51.58	65.65	-14.07
2 CA	0.418	45.83	65.49	-19.66
1 QP	0.702	54.02	74.00	-19.98
1 QP	0.71	54.63	74.00	-19.37
2 CA	0.71	47.80	64.00	-16.20
1 QP	7.926	53.56	74.00	-20.44
2 CA	16.166	51.33	64.00	-12.67
1 QP	16.23	55.61	74.00	-18.39

* = limit exceeded

Mode b:
10Mbps

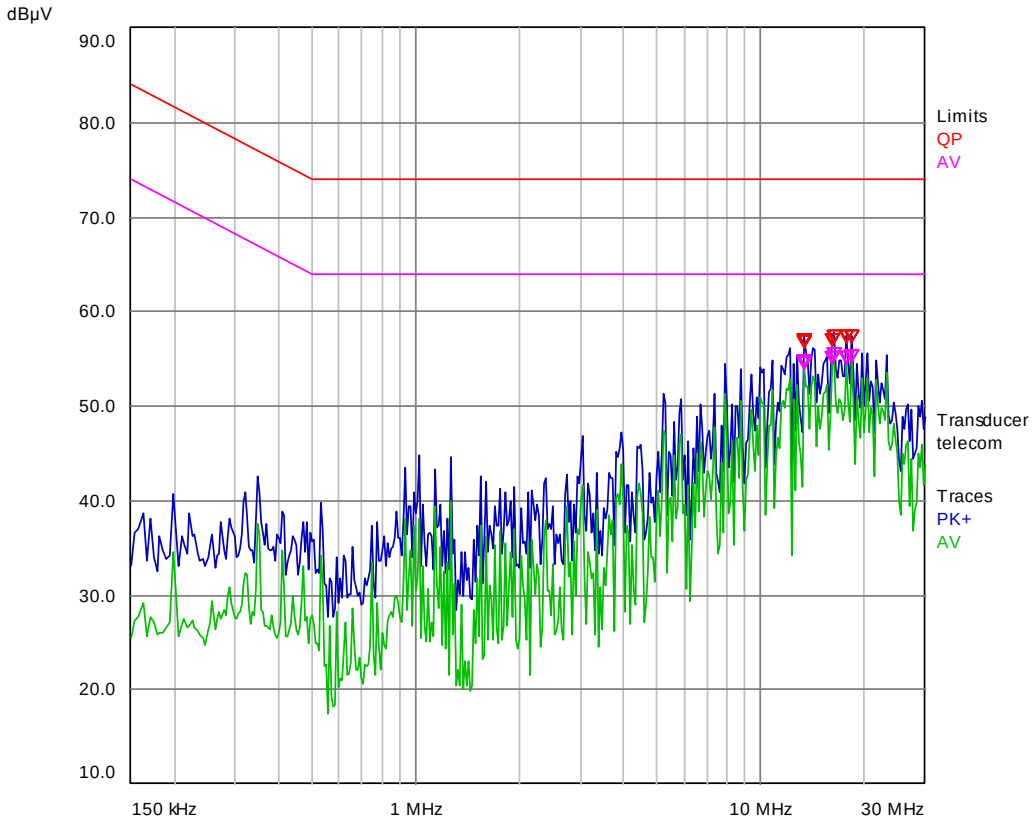


Final Measurement Results

Trace	Frequency (MHz)	Level (dBµV)	Limit (dBµV)	Delta Limit (dB)
1 QP	6.902	59.96	74.00	-14.04
2 CA	6.902	51.66	64.00	-12.34
1 QP	7.826	60.53	74.00	-13.47
2 CA	7.826	52.19	64.00	-11.81
2 CA	8.914	51.51	64.00	-12.49
1 QP	9.078	60.48	74.00	-13.52
2 CA	9.834	49.39	64.00	-14.61
1 QP	9.838	60.15	74.00	-13.85
1 QP	10.018	56.47	74.00	-17.53
1 QP	10.922	59.06	74.00	-14.94
2 CA	10.922	50.60	64.00	-13.40
2 CA	13.098	47.58	64.00	-16.42

* = limit exceeded

100Mbps



Final Measurement Results

Trace	Frequency (MHz)	Level (dBµV)	Limit (dBµV)	Delta Limit (dB)
1 QP	13.358	56.32	74.00	-17.68
2 CA	13.358	54.05	64.00	-9.95
1 QP	13.418	56.13	74.00	-17.87
2 CA	13.418	53.99	64.00	-10.01
1 QP	16.166	56.39	74.00	-17.61
2 CA	16.166	54.38	64.00	-9.62
1 QP	16.226	56.69	74.00	-17.31
2 CA	16.23	54.88	64.00	-9.12
1 QP	17.694	56.65	74.00	-17.35
2 CA	17.694	54.45	64.00	-9.55
1 QP	18.242	56.64	74.00	-17.36
2 CA	18.242	54.65	64.00	-9.35

* = limit exceeded

6.3 Radiated Emissions (30MHz-1GHz)

Test Requirement: EN 55032:2015

Test Method: EN 55032:2015

Frequency Range: 30MHz to 1GHz

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

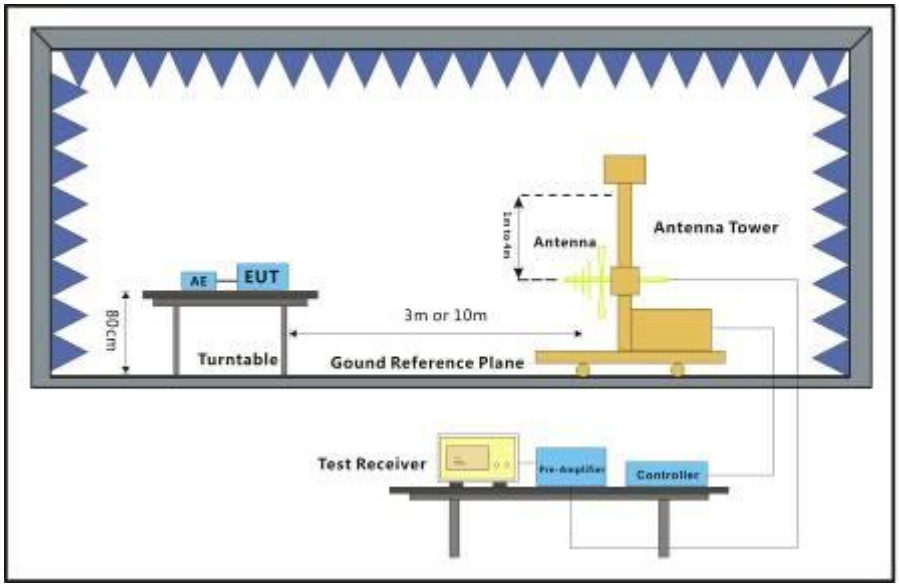
Operating Environment:

Temperature: 23 °C Humidity: 57 % RH Atmospheric Pressure: 1022 mbar

Test mode: a: Typical configuration: DC12V Power supply network preview.

b: Typical configuration: POE Power supply network preview.

6.3.2 Test Setup Diagram

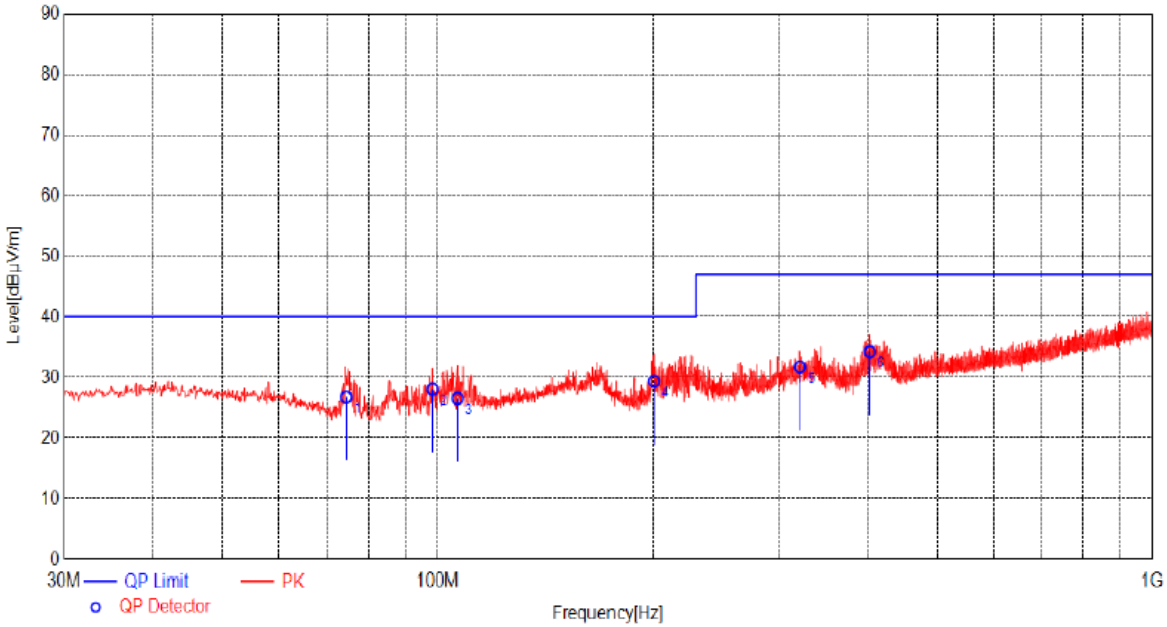


6.3.3 Measurement Data

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

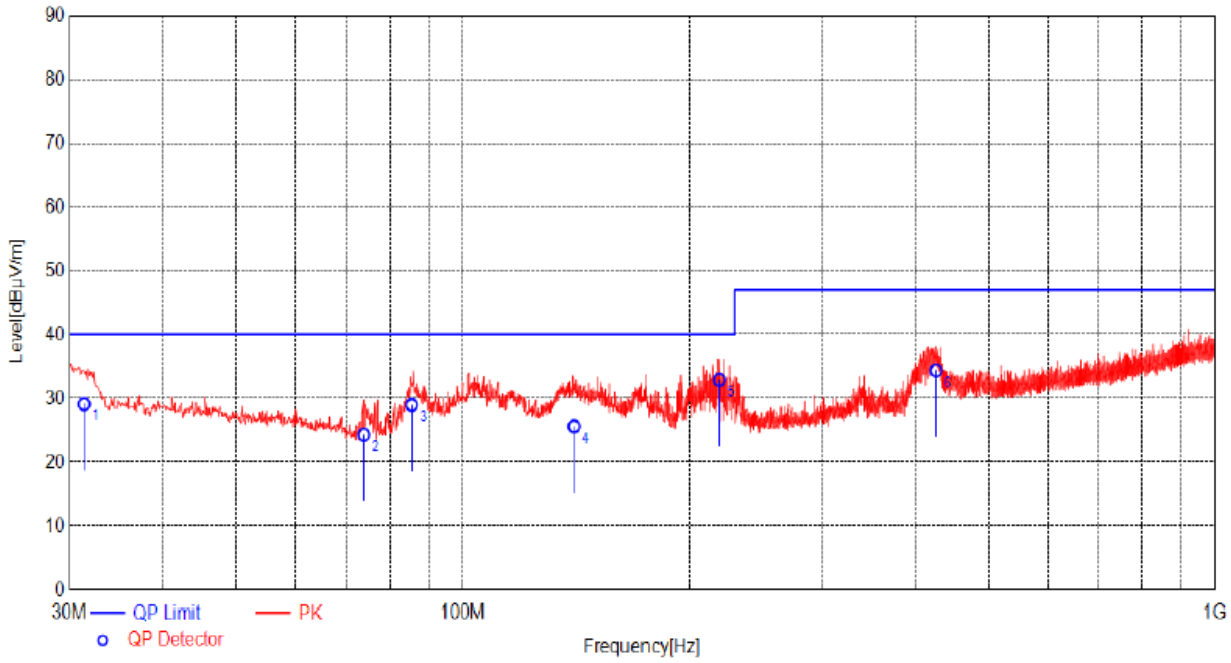
Mode:a, Polarization:Horizontal



Final Data List

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	74.4988	10.55	26.78	40.00	13.22	200	13	Horizo
2	98.3850	10.55	28.07	40.00	11.93	200	41	Horizo
3	106.6300	11.23	26.57	40.00	13.43	200	220	Horizo
4	200.8413	10.93	29.39	40.00	10.61	100	29	Horizo
5	321.2425	14.80	31.72	47.00	15.28	100	57	Horizo
6	402.4800	15.97	34.24	47.00	12.76	100	11	Horizo

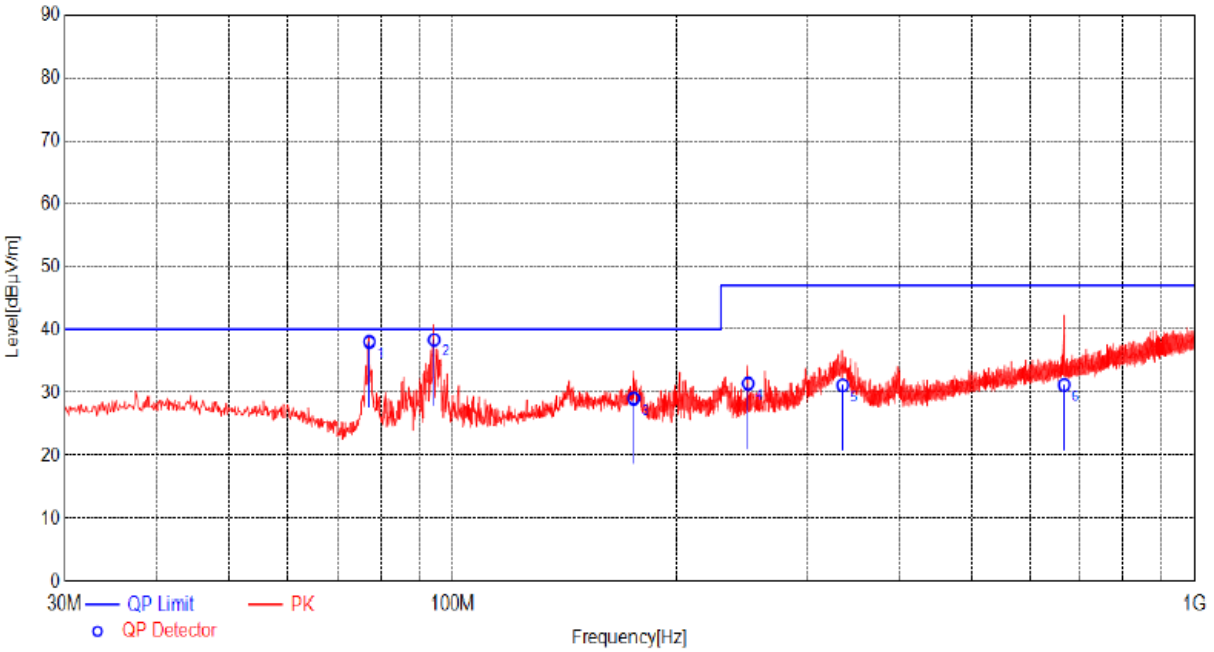
Mode a: Polarization:Vertical



Final Data List

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	31.3957	13.80	29.11	40.00	10.89	110.1	169.4	Vertical
2	73.8941	10.61	24.32	40.00	15.68	105.2	101.8	Vertical
3	85.5608	10.17	28.98	40.00	11.02	121.6	114.3	Vertical
4	140.5678	14.26	25.62	40.00	14.38	106.4	188.1	Vertical
5	219.3829	11.56	32.92	40.00	7.08	104	293	Vertical
6	425.7408	16.59	34.35	47.00	12.65	102.9	180.5	Vertical

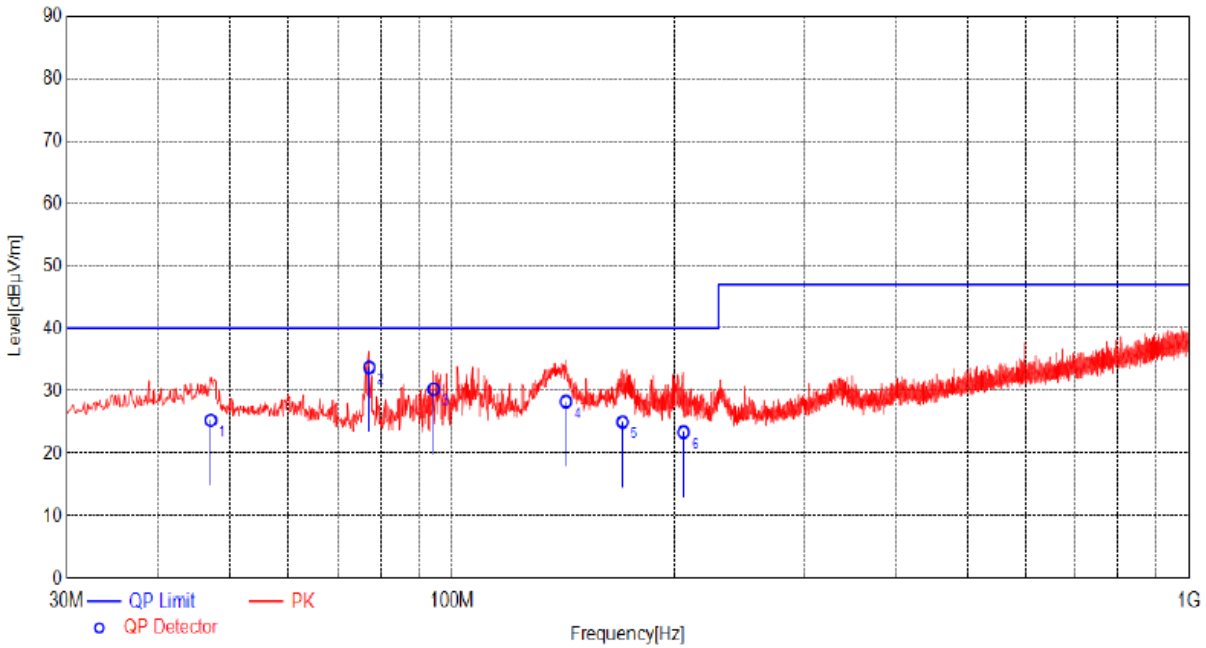
Mode b; Polarization:Horizontal



Final Data List

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	77.2064	10.28	38.05	40.00	1.95	222.1	78.7	Horizo
2	94.3827	10.43	38.36	40.00	1.64	195.4	357.9	Horizo
3	175.4221	13.29	29.04	40.00	10.96	116.4	201.3	Horizo
4	250.0372	12.63	31.43	47.00	15.57	111.6	110.3	Horizo
5	335.3812	15.00	31.15	47.00	15.85	102	5.1	Horizo
6	666.6368	20.62	31.22	47.00	15.78	110.4	201.6	Horizo

Mode b; Polarization:Vertical



Final Data List

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	47.0797	14.32	25.30	40.00	14.70	103.1	283	Vertical
2	77.2032	10.28	33.78	40.00	6.22	102	81.7	Vertical
3	94.3763	10.43	30.26	43.50	13.24	124.9	288.2	Vertical
4	142.7375	14.47	28.29	43.50	15.21	119	89	Vertical
5	170.3397	14.05	25.02	43.50	18.48	112.6	159.9	Vertical
6	206.0582	11.11	23.40	43.50	20.10	106.4	118	Vertical

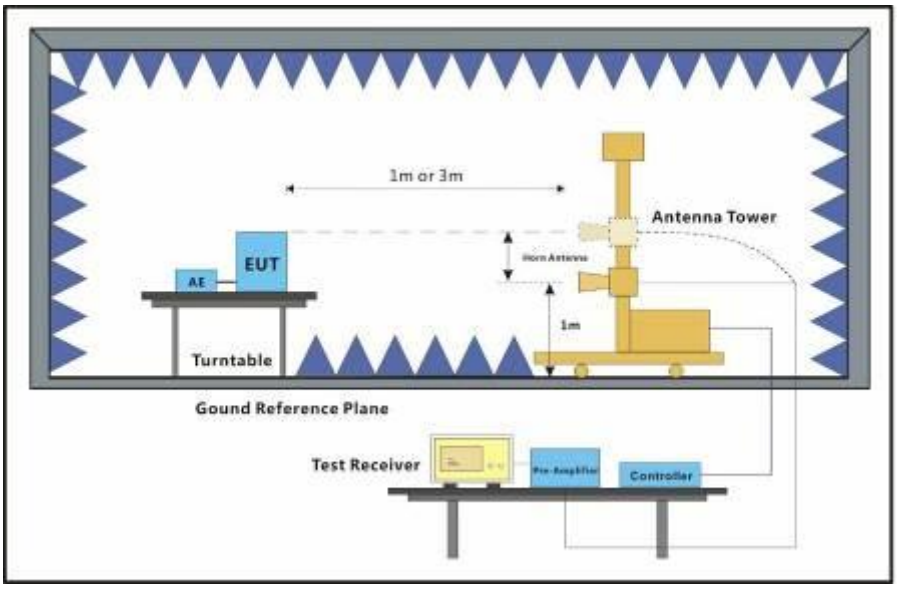
6.4 Radiated Emissions (above 1GHz)

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: 23 °C Humidity: 57 % RH Atmospheric Pressure: 1022 mbar
Test mode a: Typical configuration: DC12V Power supply network preview.
b: Typical configuration: POE Power supply network preview.

6.4.2 Test Setup Diagram

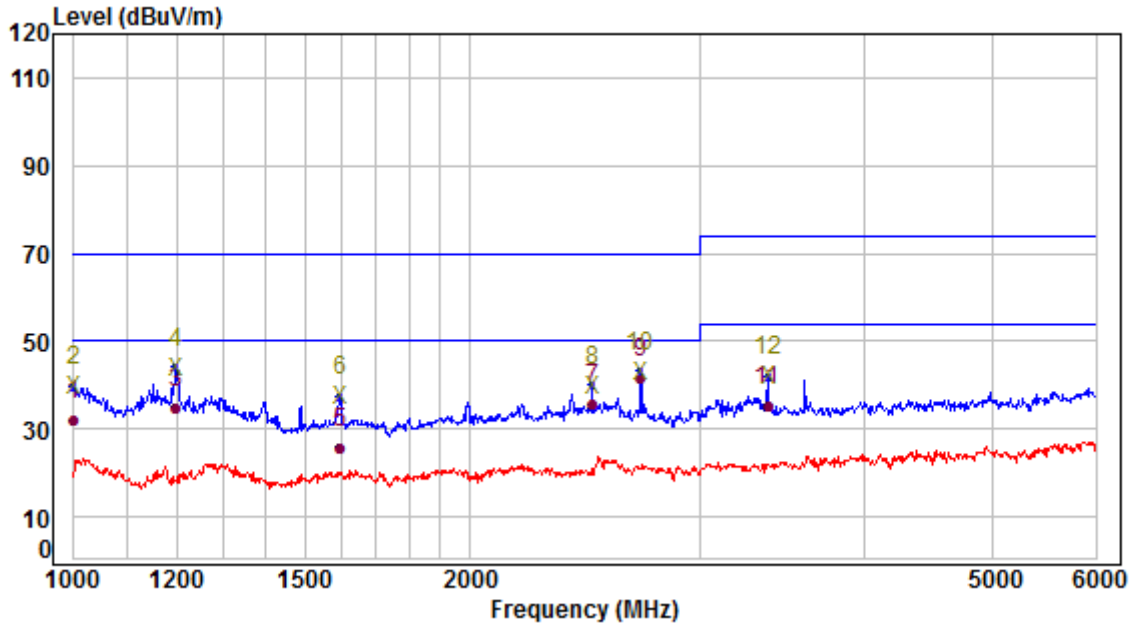


6.4.3 Measurement Data

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.

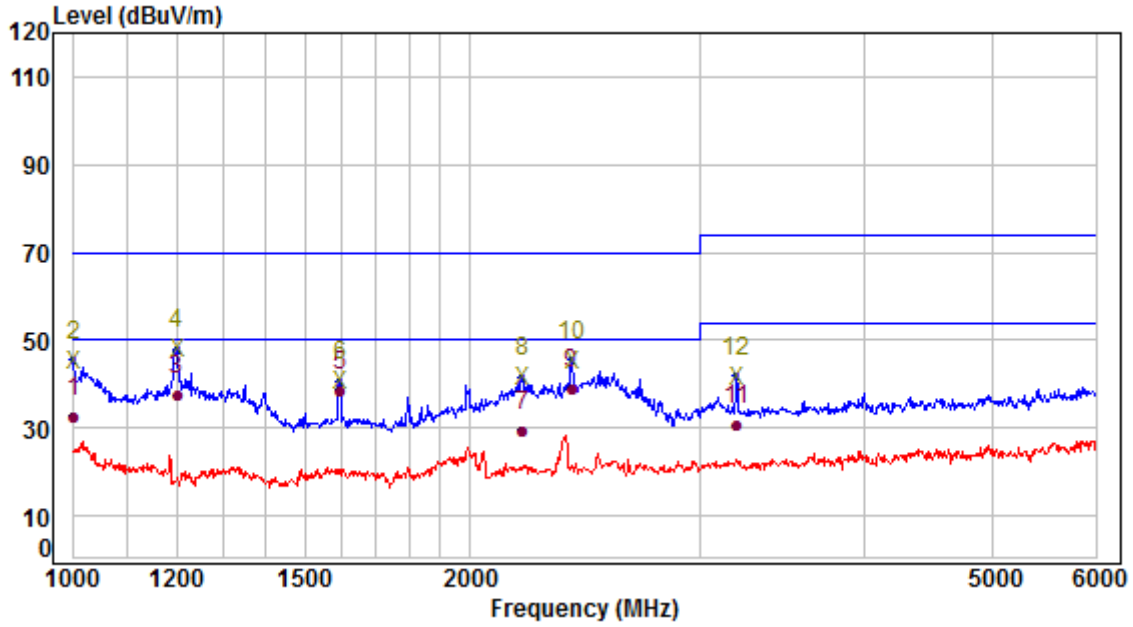
Notes : Emission Level=Read Level + Antenna Factor + Cable Loss – Preamp Factor

Mode:a; Polarization:Horizontal



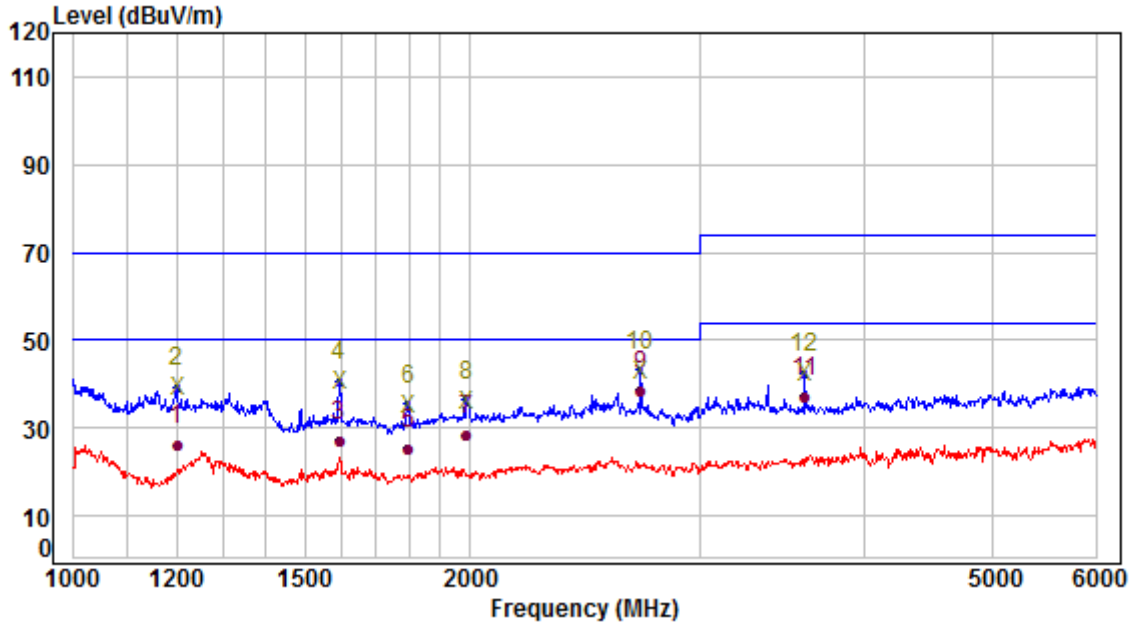
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)
1	1000	-15.85	47.85	32	50	18	Average	102	89
2	1000	-15.85	55.74	39.89	70	30.11	Peak	100	74
3	1196.231	-15.13	50.2	35.07	50	14.93	Average	100	45
4	1196.231	-15.13	59.31	44.18	70	25.82	Peak	100	34
5	1596.237	-13.98	39.81	25.83	50	24.17	Average	120	355
6	1596.237	-13.98	51.4	37.42	70	32.58	Peak	100	348
7	2480.406	-11.72	47.4	35.68	50	14.32	Average	102	164
8	2480.406	-11.72	51.69	39.97	70	30.03	Peak	100	169
9	2698.334	-11.42	53.1	41.68	50	8.32	Average	100	171
10	2698.334	-11.42	54.69	43.27	70	26.73	Peak	100	189
11	3375.707	-10.31	45.8	35.49	54	18.51	Average	103	201
12	3375.707	-10.31	52.31	42	74	32	Peak	100	202

Mode:a; Polarization:Vertical



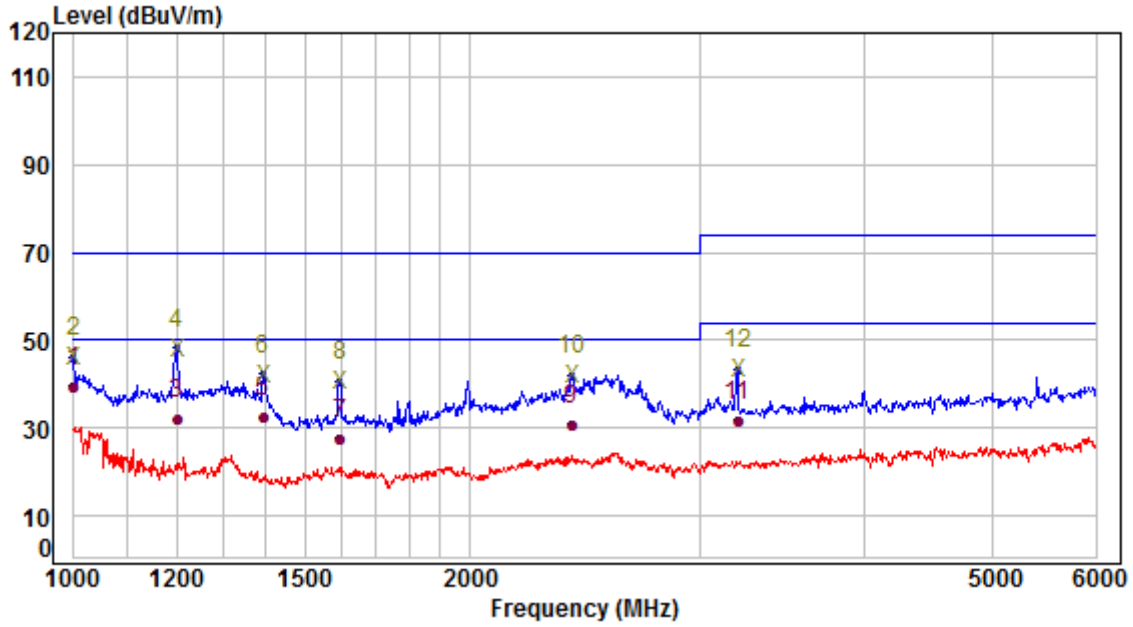
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)
1	1000	-15.85	48.7	32.85	50	17.15	Average	100	90
2	1000	-15.85	61.32	45.47	70	24.53	Peak	100	81
3	1198.376	-15.07	52.59	37.52	50	12.48	Average	103	85
4	1198.376	-15.07	63.03	47.96	70	22.04	Peak	100	81
5	1596.237	-13.98	52.61	38.63	50	11.37	Average	198	175
6	1596.237	-13.98	54.75	40.77	70	29.23	Peak	200	181
7	2195.879	-12.33	41.8	29.47	50	20.53	Average	100	355
8	2195.879	-12.33	54.02	41.69	70	28.31	Peak	100	359
9	2393.094	-12.08	51.2	39.12	50	10.88	Average	100	154
10	2393.094	-12.08	57.48	45.4	70	24.6	Peak	100	163
11	3193.317	-10.79	41.5	30.71	54	23.29	Average	100	149
12	3193.317	-10.79	52.66	41.87	74	32.13	Peak	100	163

Mode b; Polarization:Horizontal



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)
1	1198.376	-15.07	41.19	26.12	50	23.88	Average	101	82
2	1198.376	-15.07	54.47	39.4	70	30.6	Peak	100	79
3	1593.38	-13.95	41.3	27.35	50	22.65	Average	100	359
4	1593.38	-13.95	54.58	40.63	70	29.37	Peak	100	360
5	1796.617	-13.18	38.69	25.51	50	24.49	Average	100	345
6	1796.617	-13.18	48.69	35.51	70	34.49	Peak	100	351
7	1989.803	-13.2	41.6	28.4	50	21.6	Average	102	120
8	1989.803	-13.2	49.66	36.46	70	33.54	Peak	100	121
9	2698.334	-11.42	50.2	38.78	50	11.22	Average	100	185
10	2698.334	-11.42	54.71	43.29	70	26.71	Peak	100	192
11	3600.627	-9.84	47.2	37.36	54	16.64	Average	100	341
12	3600.627	-9.84	52.33	42.49	74	31.51	Peak	100	348

Mode b; Polarization:Vertical



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)
1	1000	-15.85	55.4	39.55	50	10.45	Average	200	101
2	1000	-15.85	62.07	46.22	70	23.78	Peak	200	92
3	1198.376	-15.07	47.09	32.02	50	17.98	Average	110	89
4	1198.376	-15.07	63.34	48.27	70	21.73	Peak	100	73
5	1393.022	-14.34	46.79	32.45	50	17.55	Average	199	160
6	1393.022	-14.34	56.61	42.27	70	27.73	Peak	200	174
7	1596.237	-13.98	41.61	27.63	50	22.37	Average	100	124
8	1596.237	-13.98	54.66	40.68	70	29.32	Peak	100	113
9	2393.094	-12.08	43.1	31.02	50	18.98	Average	100	354
10	2393.094	-12.08	54.26	42.18	70	27.82	Peak	100	360
11	3199.044	-10.78	42.6	31.82	54	22.18	Average	100	157
12	3199.044	-10.78	54.27	43.49	74	30.51	Peak	100	157

6.5 Harmonic Current Emission

Test Requirement: EN 61000-3-2:2014
Test Method: EN 61000-3-2:2014
Frequency Range: 100Hz to 2kHz

6.5.1 Measurement Data

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

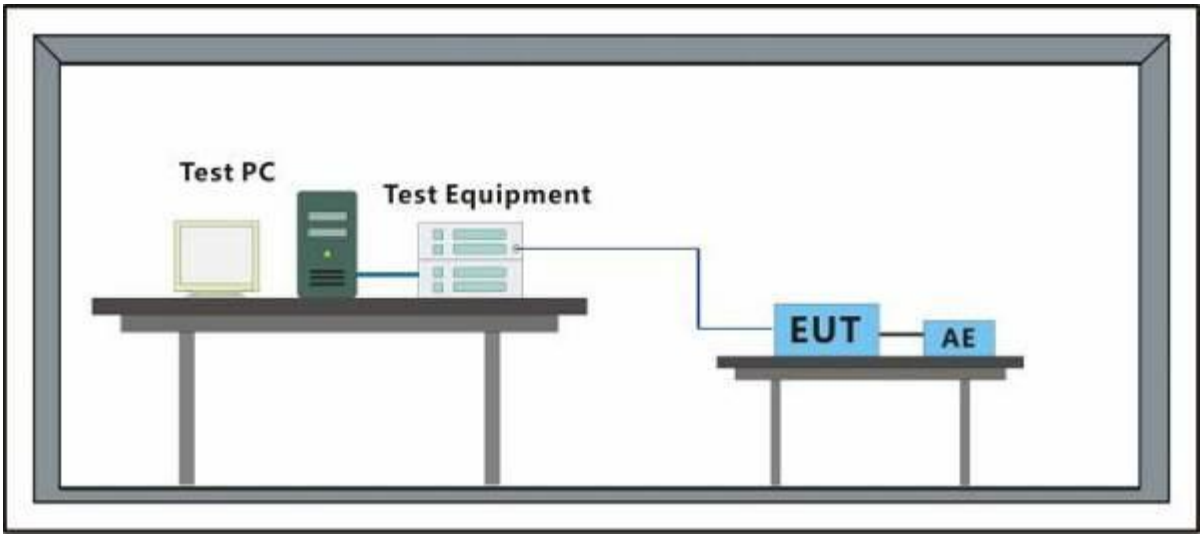
Operating Environment:

Temperature: 23 °C Humidity: 55 % RH Atmospheric Pressure: 1019 mbar

Test mode: a: Typical configuration: DC12V Power supply network preview.

b: Typical configuration: POE Power supply network preview.

6.6.2 Test Setup Diagram



6.6.3 Measurement Data

Mode:a

Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.77			
Highest dt (%):	0.00	Test limit (%):	N/A	N/A
T-max (mS):	0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.00	Test limit (%):	3.30	Pass
Highest dmax (%):	-0.04	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.263	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.115	Test limit:	0.650	Pass

Mode:b

Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.83			
Highest dt (%):	0.00	Test limit (%):	N/A	N/A
T-max (mS):	0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.00	Test limit (%):	3.30	Pass
Highest dmax (%):	0.04	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.250	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.109	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

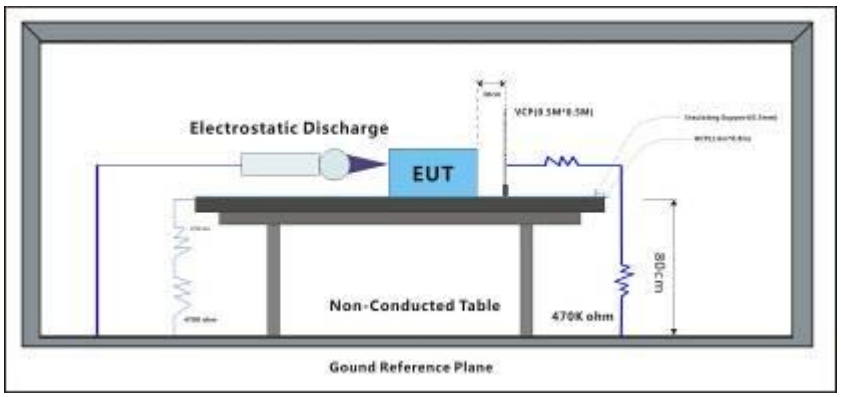
Number of Discharge: Minimum 10 times at each test point for Air Discharge

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: 19.8 °C Humidity: 58 % RH Atmospheric Pressure: 1022.2 mbar

Test mode: a: Typical configuration: DC12V Power supply network preview.

b: Typical configuration: POE Power supply network preview.

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	Pass
Air Discharge	2,4,8	-	1	Pass
Contact Discharge	6	+	2	Pass
Contact Discharge	6	-	2	Pass
Horizontal Coupling	6	+	3	Pass
Horizontal Coupling	6	-	3	Pass
Vertical Coupling	6	+	3	Pass
Vertical Coupling	6	-	3	Pass

Results:

1. The EUT working normal, before the conditioning.

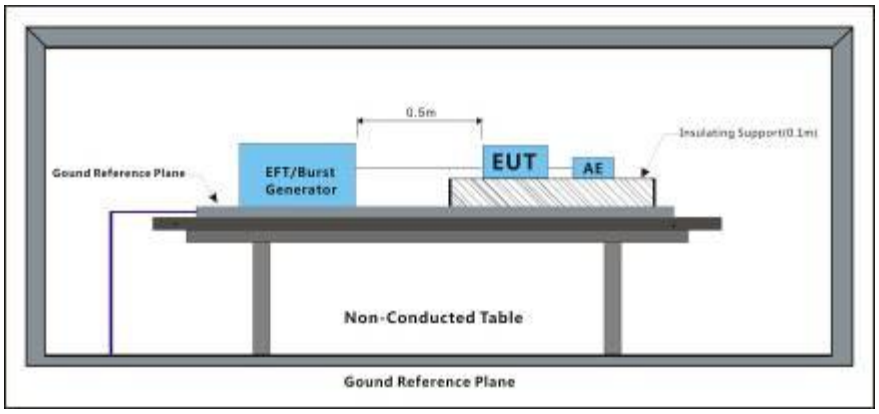
2. Monitor the EUT during the conditioning period there was no status change has occurred, during the conditioning.

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

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: 24 °C Humidity: 58 % RH Atmospheric Pressure: 1022.2 mbar
Test mode: a: Typical configuration: DC12V Power supply network preview.
b: Typical configuration: POE Power supply network preview.

7.3.3 Test Results:

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

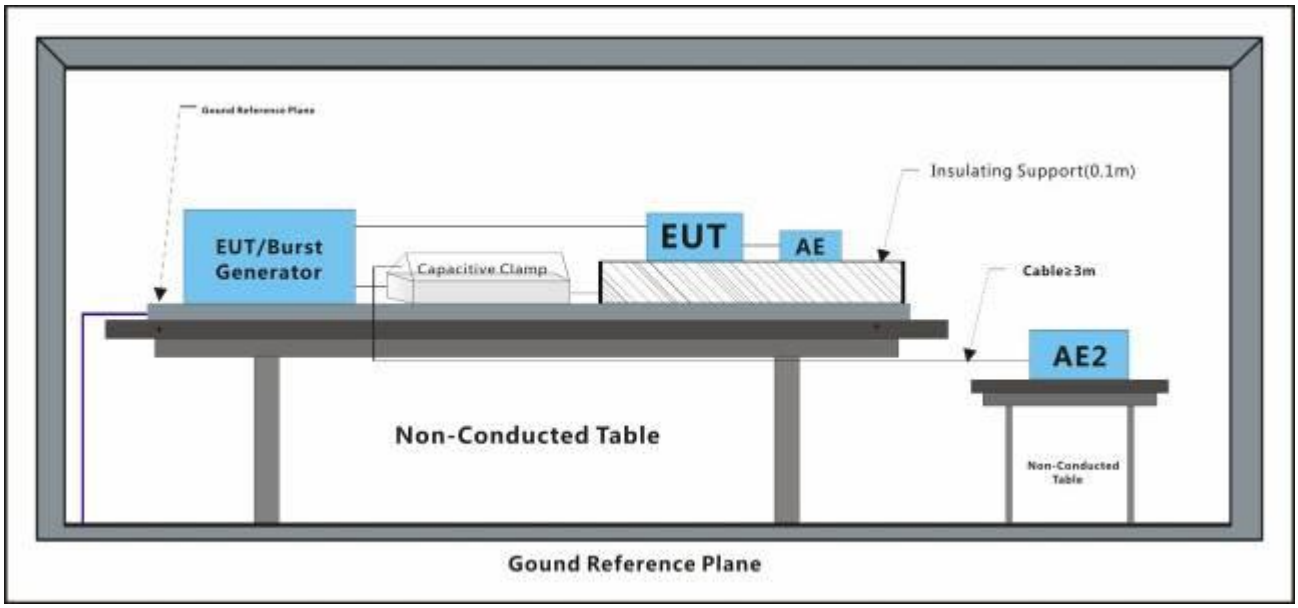
Results:

1. The EUT working normal, before the conditioning.
2. Monitor the EUT during the conditioning period there was no status change has occurred, during the conditioning.
3. No degradation in the performance of the EUT was observed, after the conditioning.

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: 24 °C Humidity: 58 % RH Atmospheric Pressure: 1022.2 mbar

Test mode: a: Typical configuration: DC12V Power supply network preview.
b: Typical configuration: POE Power supply network preview.

7.4.3 Test Results:

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

Results:

1. The EUT working normal, before the conditioning.

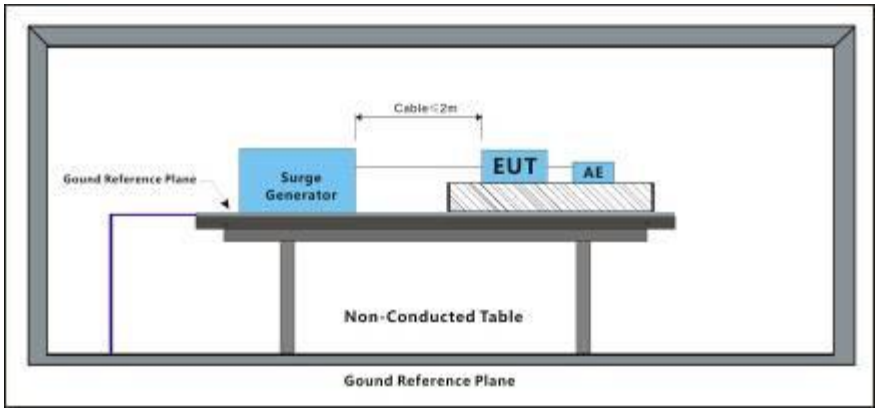
2. Monitor the EUT during the conditioning period there was no status change has occurred, during the conditioning.

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

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: 23 °C Humidity: 56 % RH Atmospheric Pressure: 1022.2 mbar
Test mode: a: Typical configuration: DC12V Power supply network preview.
b: Typical configuration: POE Power supply network preview.

7.5.3 Test Results:

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

N-PE	0.5,1,2	+	270°	Pass
N-PE	0.5,1,2	-	270°	Pass

Results:

1. The EUT working normal, before the conditioning.

2. Monitor the EUT during the conditioning period there was no status change has occurred, during the conditioning.

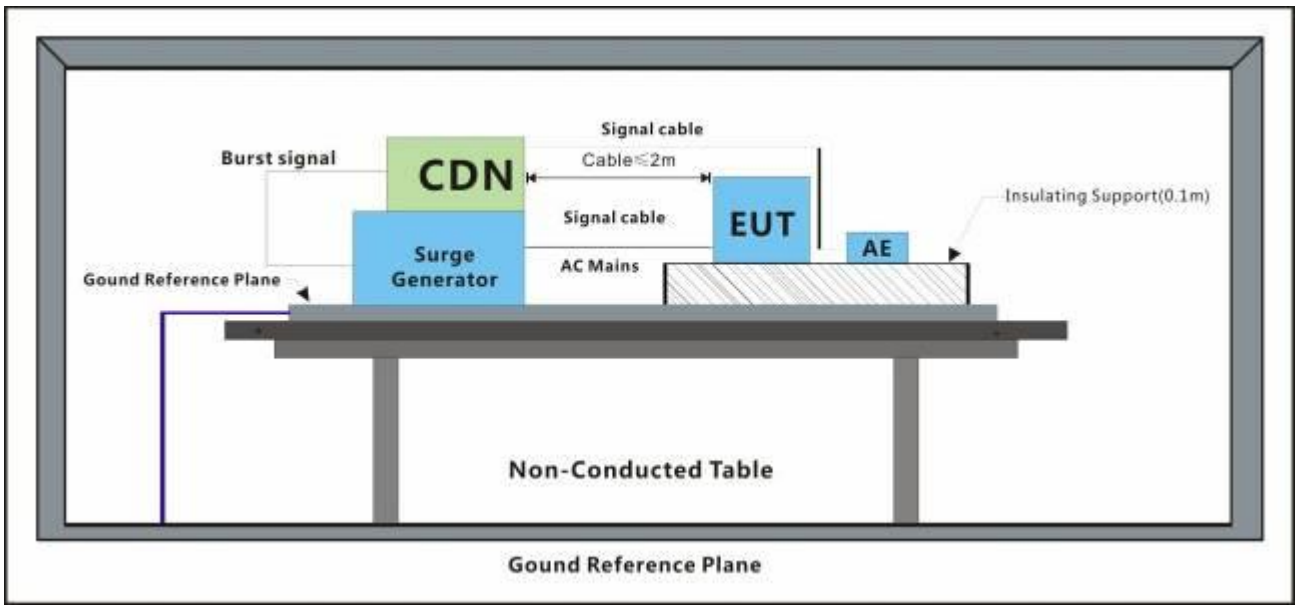
3. No degradation in the performance of the EUT was observed, after the conditioning.

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: 23 °C Humidity: 56 % RH Atmospheric Pressure: 1022.2 mbar

Test mode: a: Typical configuration: DC12V Power supply network preview.

b: Typical configuration: POE Power supply network preview.

7.6.3 Test Results:

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

Results:

1. The EUT working normal, before the conditioning.

2. Monitor the EUT during the conditioning period there was no status change has occurred, during the conditioning.

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

7.7 Voltage Dips and Interruptions

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

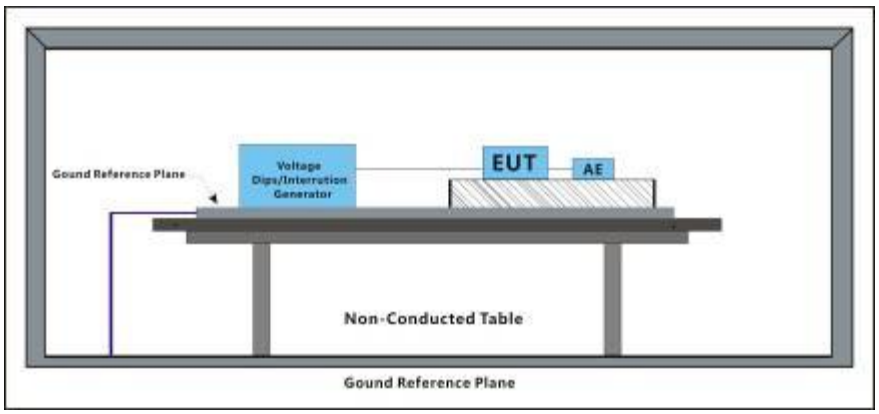
Test Method: EN 61000-4-11:2004

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: 24 °C Humidity: 58 % RH Atmospheric Pressure: 1012.5 mbar

Test mode: a: Typical configuration: DC12V Power supply network preview.

b: Typical configuration: POE Power supply network preview.

7.7.3 Test Results:

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

Results:

1. The EUT working normal, before the conditioning.

2. Monitor the EUT during the conditioning period :

80%UT Lasts for 250 cycles: During the test,No degradation in the performance of the EUT was observed

70%UT Lasts for 25 cycles: During the test,No degradation in the performance of the EUT was observed

40%UT Lasts for 10 cycles: During the test,No degradation in the performance of the EUT was observed

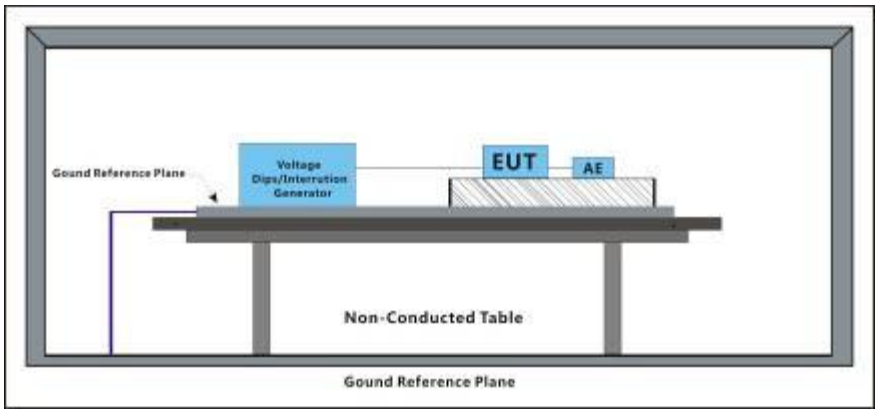
0%UT Lasts for 250 cycles: During the test , the Sample restart, after the test ,all the functions recovery automatically

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

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 264V (Umax: Unom + 10%)
Voltage min.: AC 85V (Umin: Unom - 15%)
Unom Voltage: AC 230V

7.8.1 Test Setup Diagram



7.8.2 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 58 % RH Atmospheric Pressure: 1012.5 mbar

Test mode: a: Typical configuration: DC12V Power supply network preview.
b: Typical configuration: POE Power supply network preview.

7.8.3 Test Results: Pass

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.

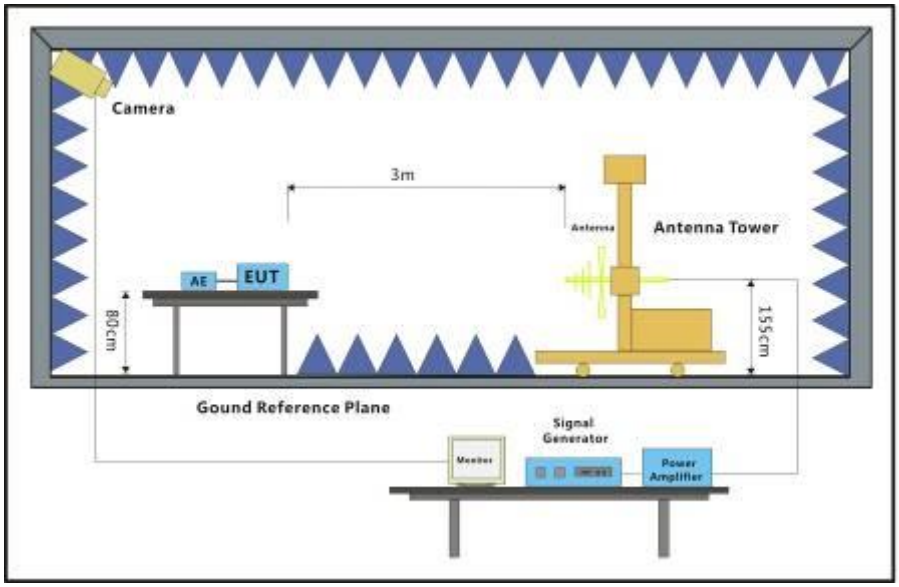
7.9 Radiated Immunity(80MHz-2.7GHz)

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: 21.3 °C Humidity: 49 % RH Atmospheric Pressure: 1020.2 mbar

Test mode: a: Typical configuration: DC12V Power supply network preview.

b: Typical configuration: POE Power supply network preview.

7.9.3 Test Results:

Frequency	Level (V/m)	EUT Face	Dwell time	Result / Observations
80MHz-2.7GHz	10	Front/ Back/ Left/ Right/ Top/ Underside	3s	Pass
80MHz-2.7GHz	3	Front/ Back/ Left/ Right/ Top/ Underside	3s	Pass
80MHz-2.7GHz	1	Front/ Back/ Left/ Right/ Top/ Underside	3s	Pass

Results:

1. The EUT working normal, before the conditioning.

2.Monitor the EUT during the conditioning period:

10V/M: During the test,No degradation in the performance of the EUT was observed

3V/M: During the test,No degradation in the performance of the EUT was observed

1V/M: During the test,No degradation in the performance of the EUT was observed

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

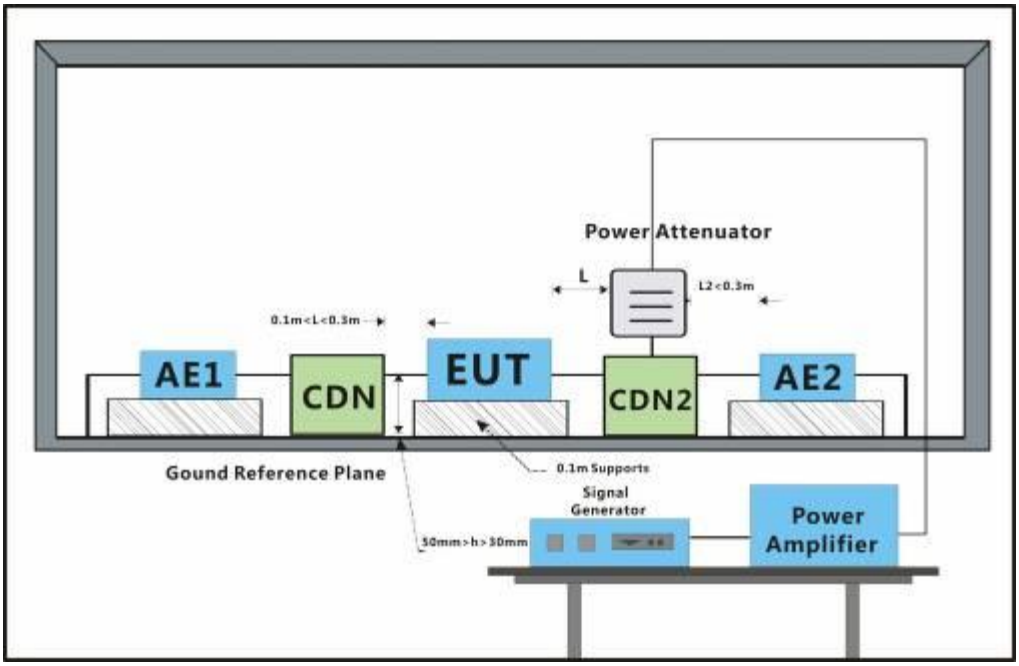
7.10 Conducted Immunity at Power Port (150kHz-100MHz)

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

7.10.1Test Setup Diagram



7.10.2 E.U.T. Operation

Operating Environment:

Temperature: 21.4 °C Humidity: 47 % RH Atmospheric Pressure: 1021.2 mbar

Test mode: a: Typical configuration: DC12V Power supply network preview.

b: Typical configuration: POE Power supply network preview.

7.10.3 Test Results:

Cable port	Level (Vrms)	CDN/Clamp	Dwell time	Result / Observations
AC power port	10	CDN	3s	Pass
AC power port	3	CDN	3s	Pass
AC power port	1	CDN	3s	Pass

Results:

1. The EUT working normal, before the conditioning.

2.Monitor the EUT during the conditioning period:

10V: During the test, no degradation in the performance of the EUT was observed.

3V: During the test, no degradation in the performance of the EUT was observed.

1V: During the test ,no degradation in the performance of the EUT was observed

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

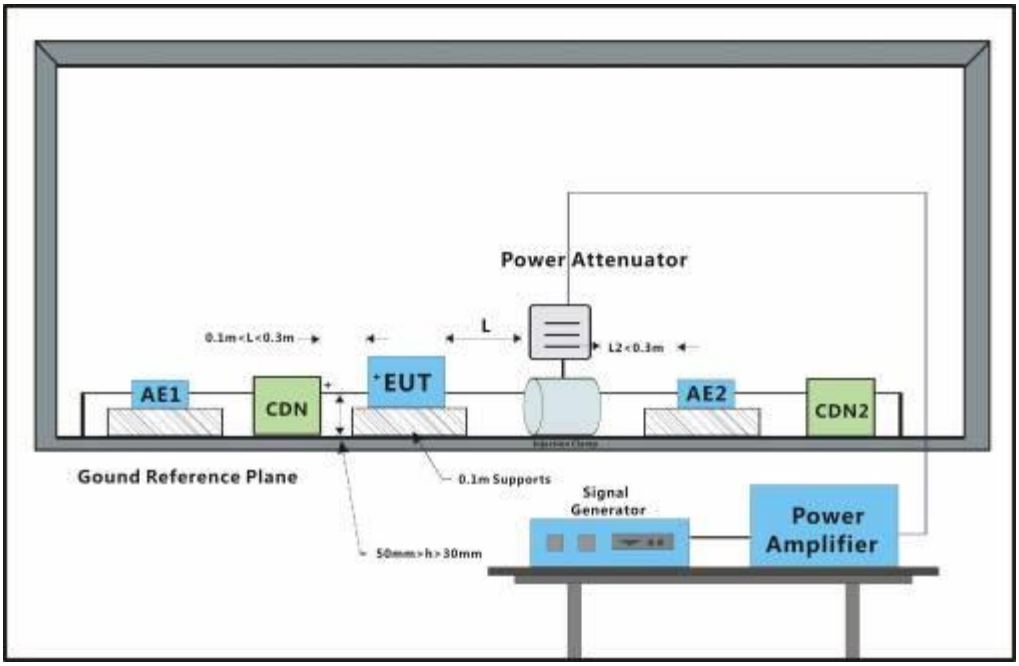
7.11 Conducted Immunity at Signal Port (150kHz-100MHz)

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

7.11.1Test Setup Diagram



7.11.2 E.U.T. Operation

Operating Environment:

Temperature: 21.4 °C Humidity: 47 % RH Atmospheric Pressure: 1021.2 mbar

Test mode: a: Typical configuration: DC12V Power supply network preview.

b: Typical configuration: POE Power supply network preview.

7.11.3 Test Results:

Port	Level (Vrms)	CDN/Clamp	Dwell time	Result / Observations
Signal port	10	Clamp	3s	Pass[1)]
Signal port	3	Clamp	3s	Pass[2)]
Signal port	1	Clamp	3s	Pass*

Results:

1. The EUT working normal, before the conditioning.

2.Monitor the EUT during the conditioning period:

TVI Video out:

10V: During the test, no degradation in the performance of the EUT was observed.

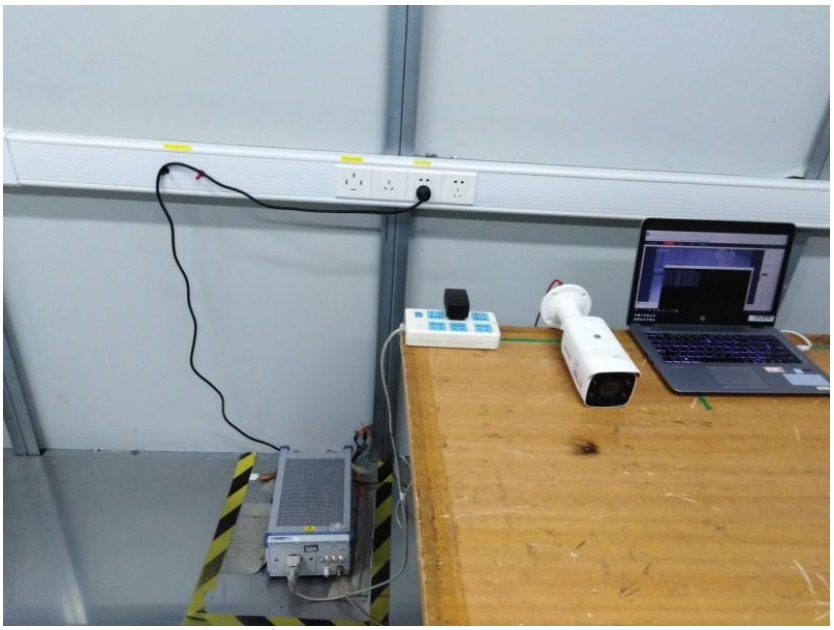
3V: During the test, no degradation in the performance of the EUT was observed

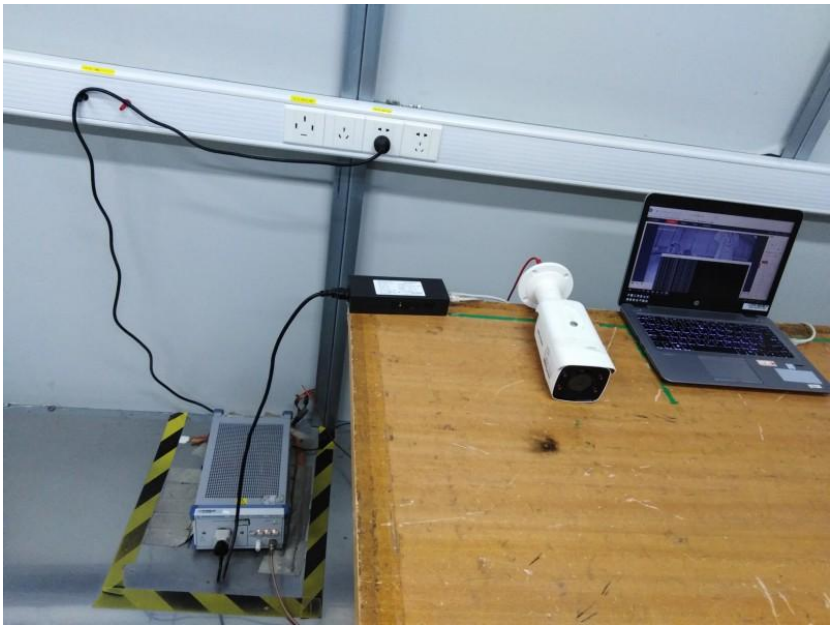
1V: During the test, no degradation in the performance of the EUT was observed

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

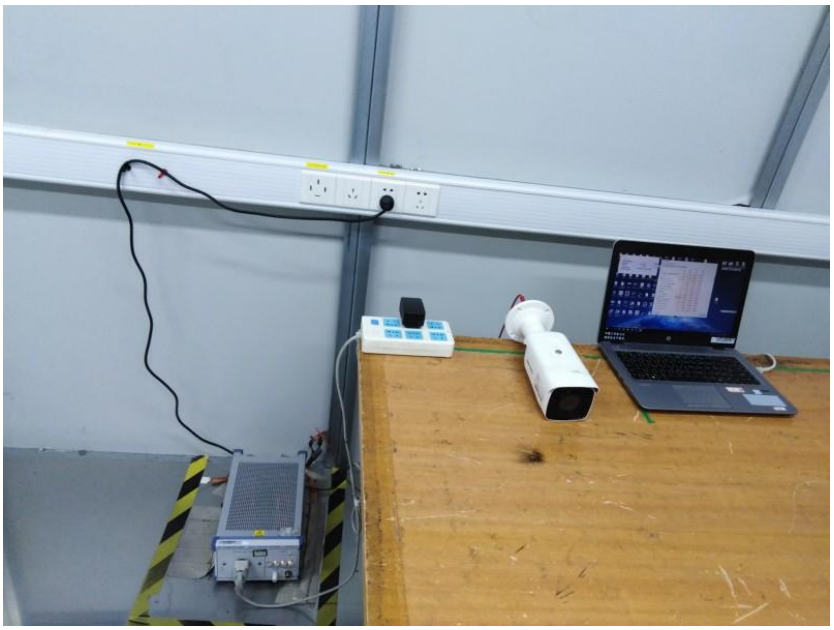
8 Photographs

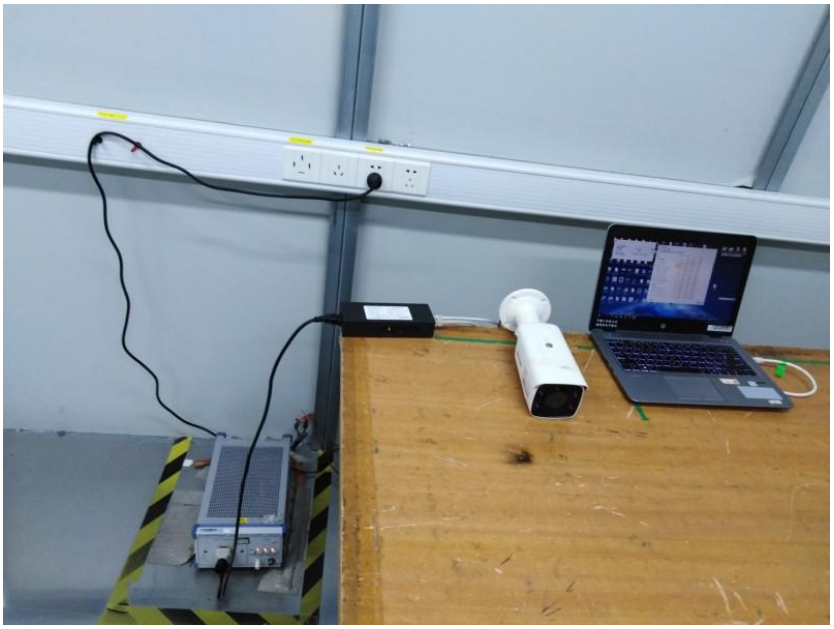
8.1 Conducted Emissions at Mains Terminals (150kHz-30MHz) Test Setup



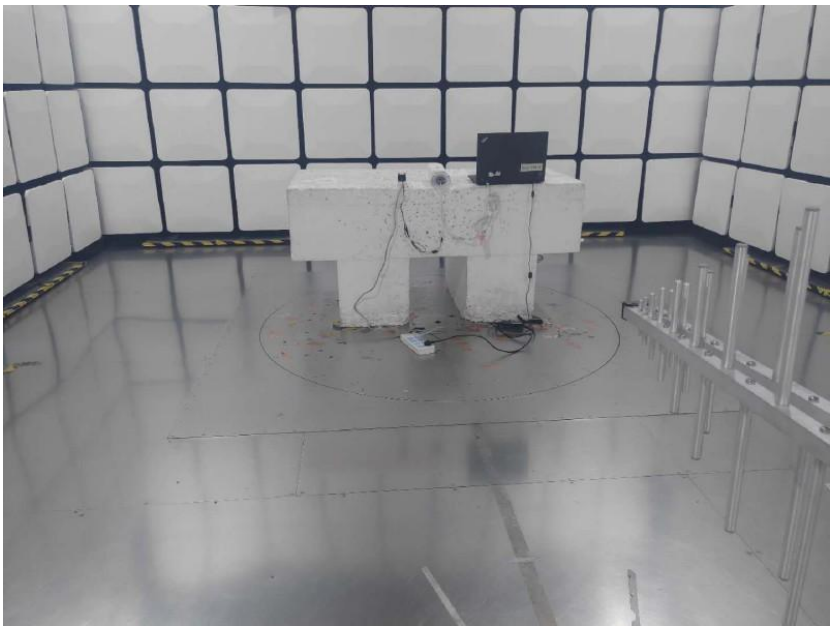


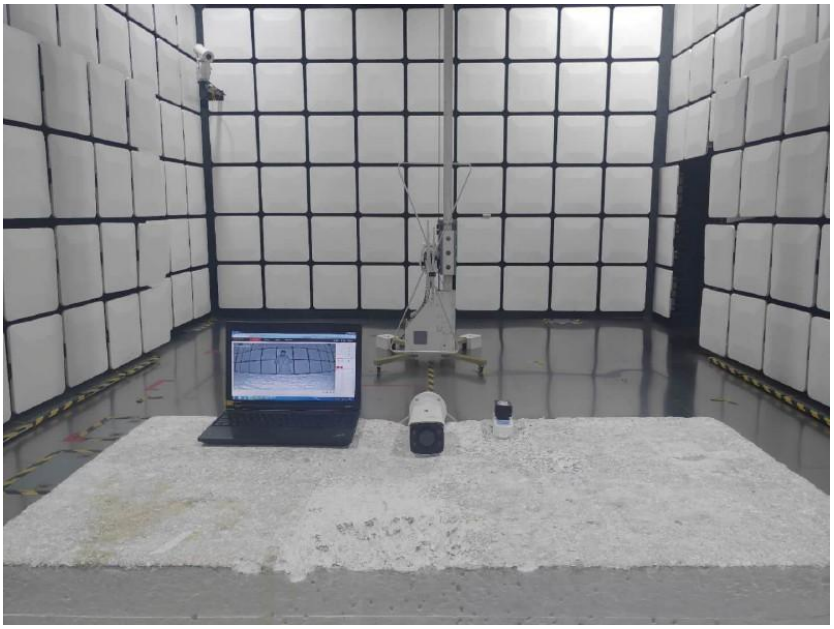
8.2 Asymmetric Mode Conducted Emissions (150kHz-30MHz) Test Setup

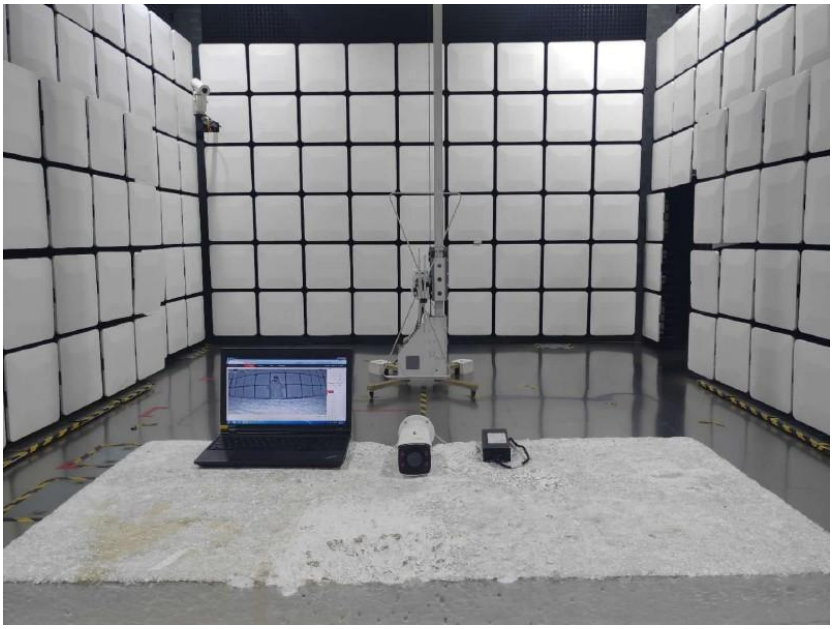


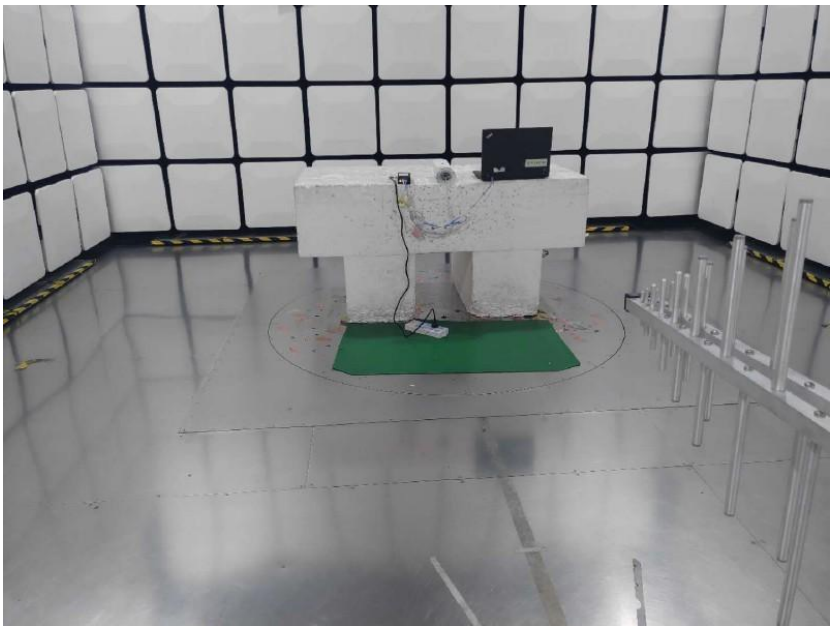


8.3 Radiated Emissions (30MHz-1GHz) Test Setup

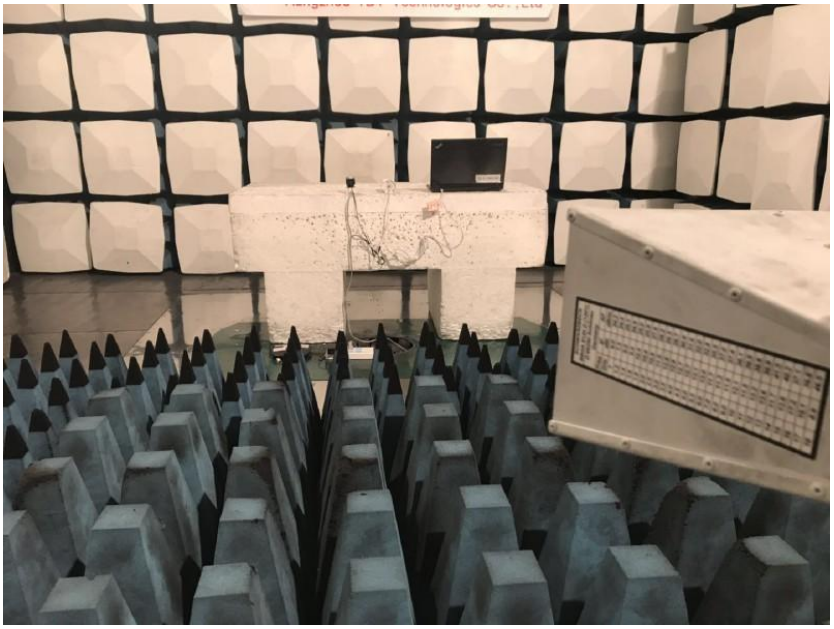


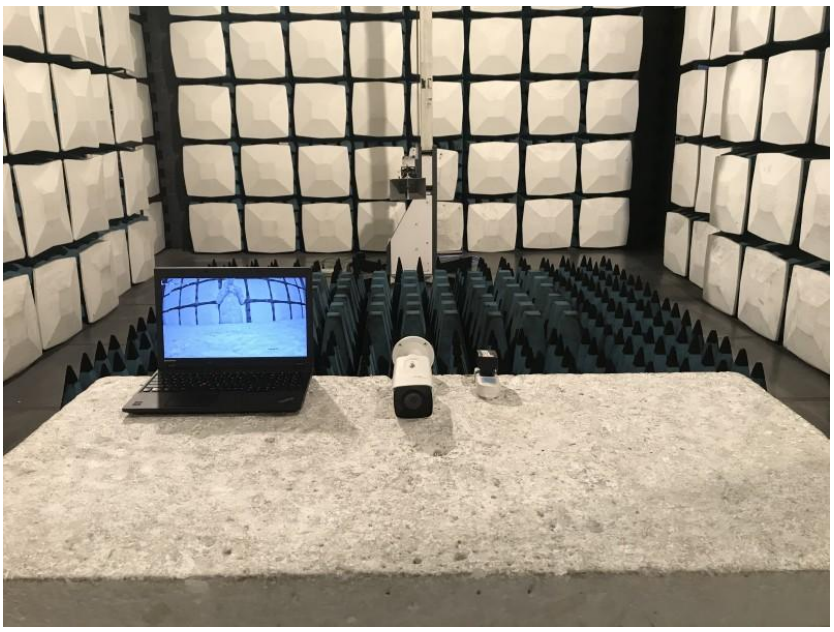


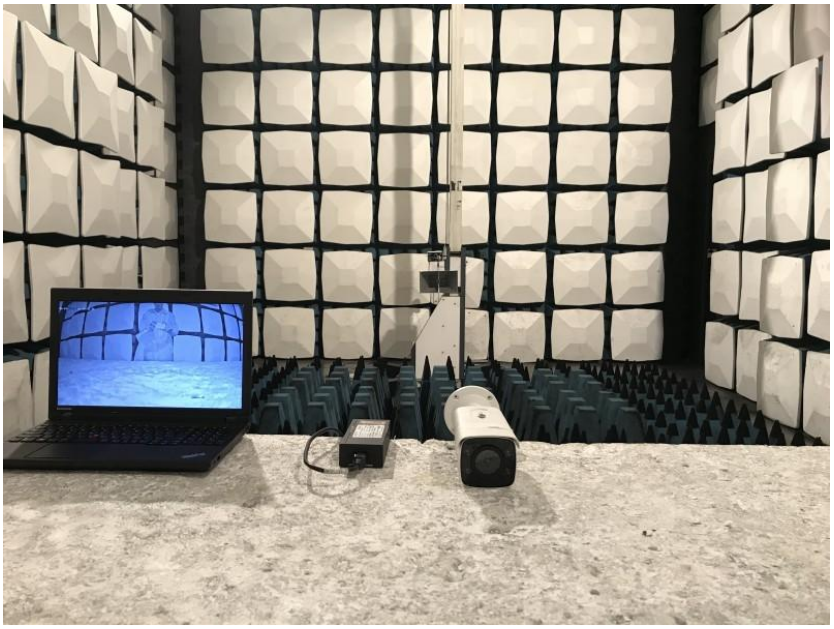


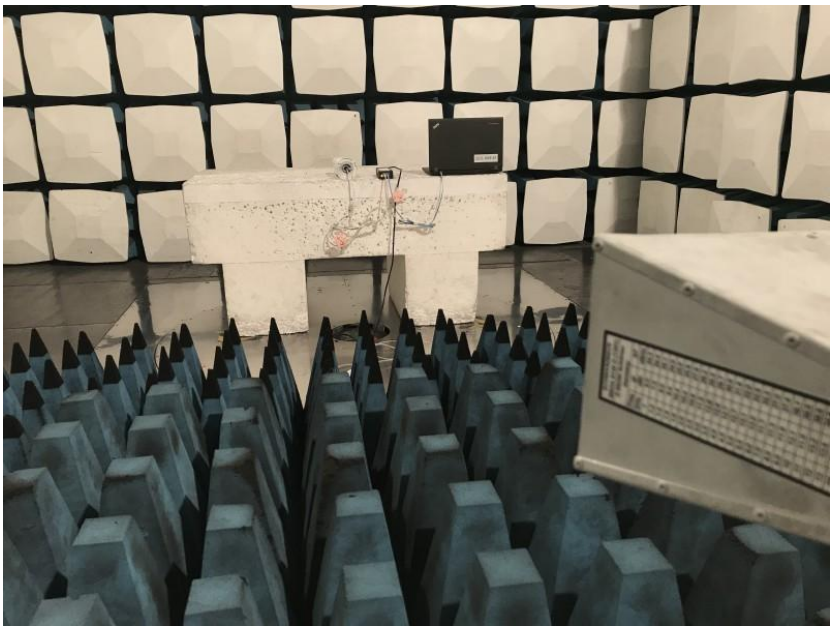


8.4 Radiated Emissions (above 1GHz) Test Setup

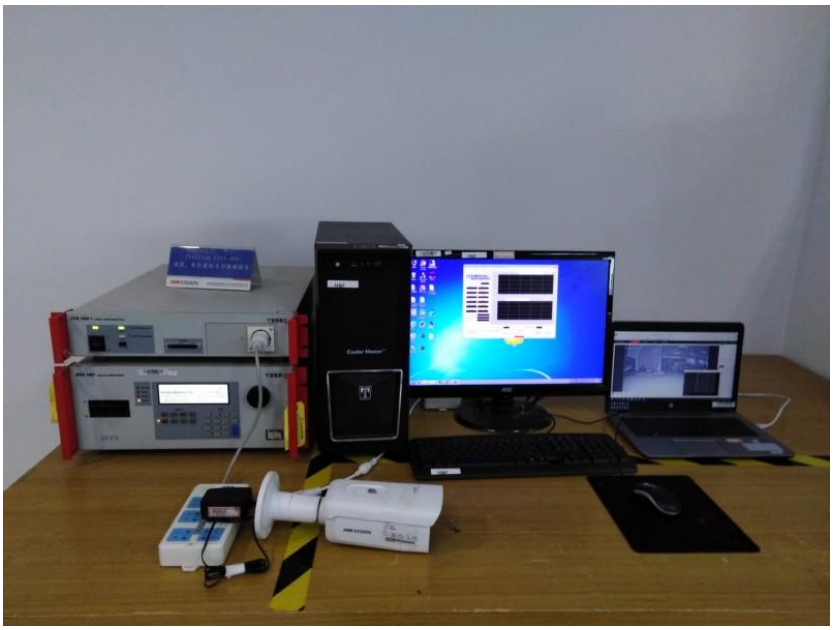


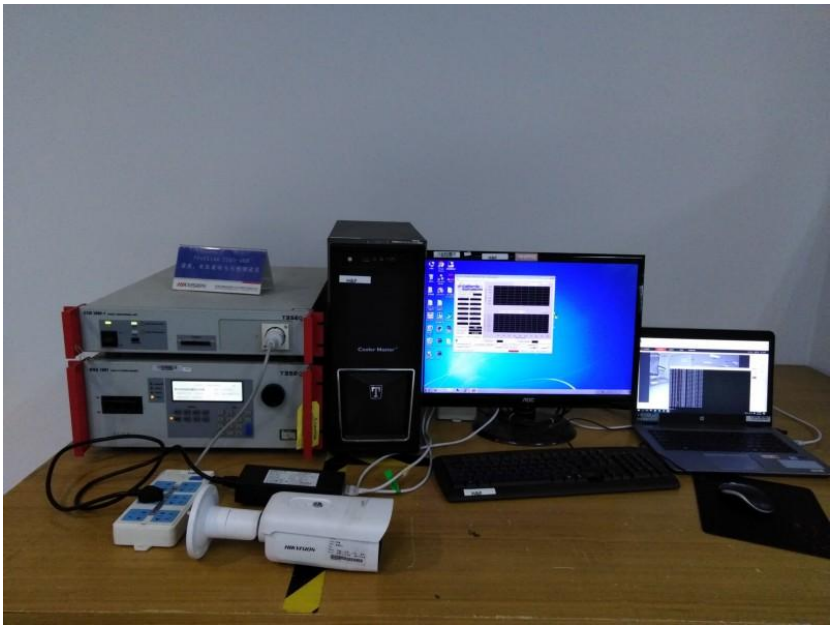




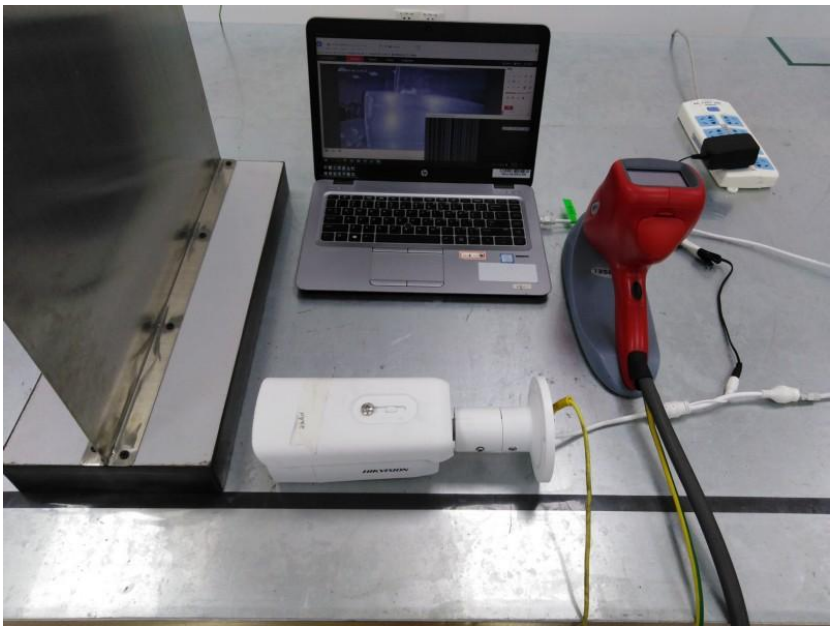


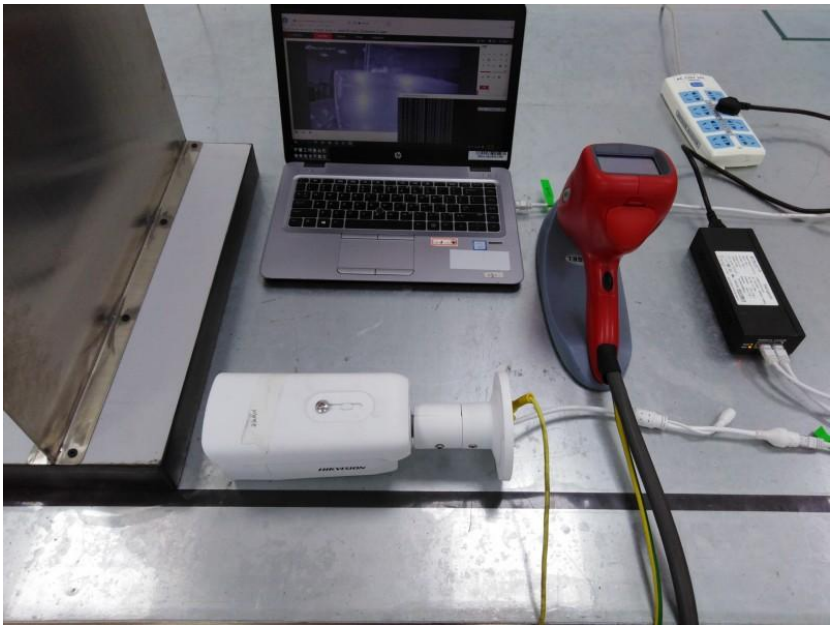
8.5 Voltage Fluctuations and Flicker Test Setup





8.6 Electrostatic Discharge Test Setup





8.7 Radiated Immunity (80MHz-2.7GHz) Test Setup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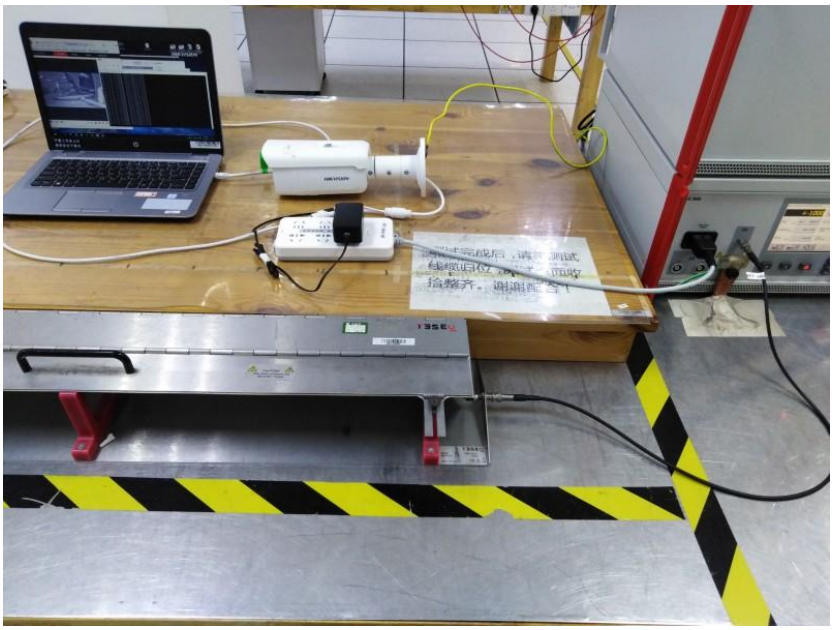
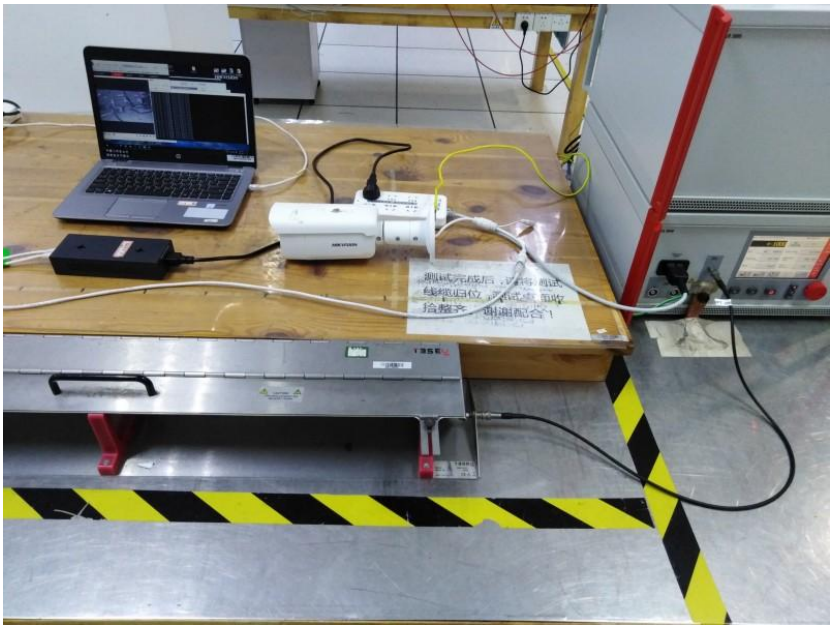
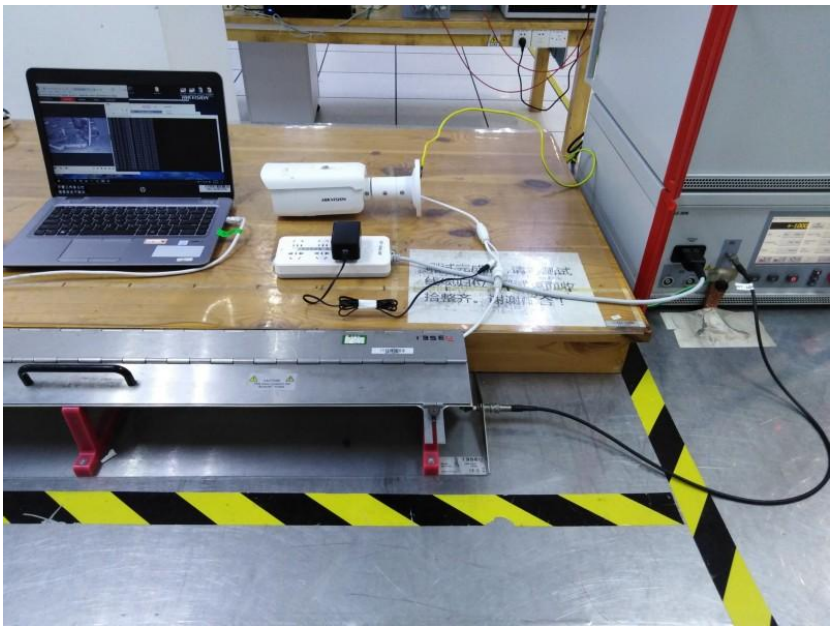
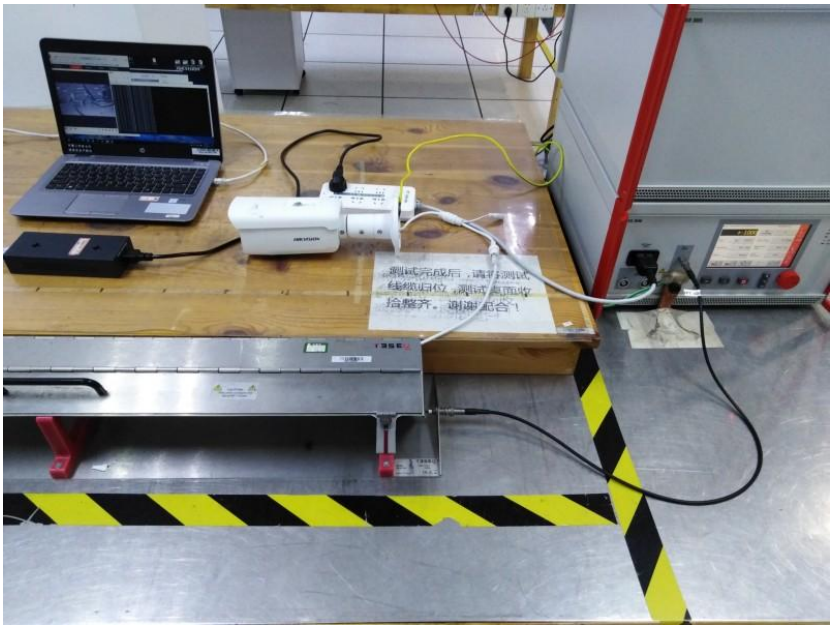
8.8 Electrical Fast Transients/Burst at Power Port Test Setup



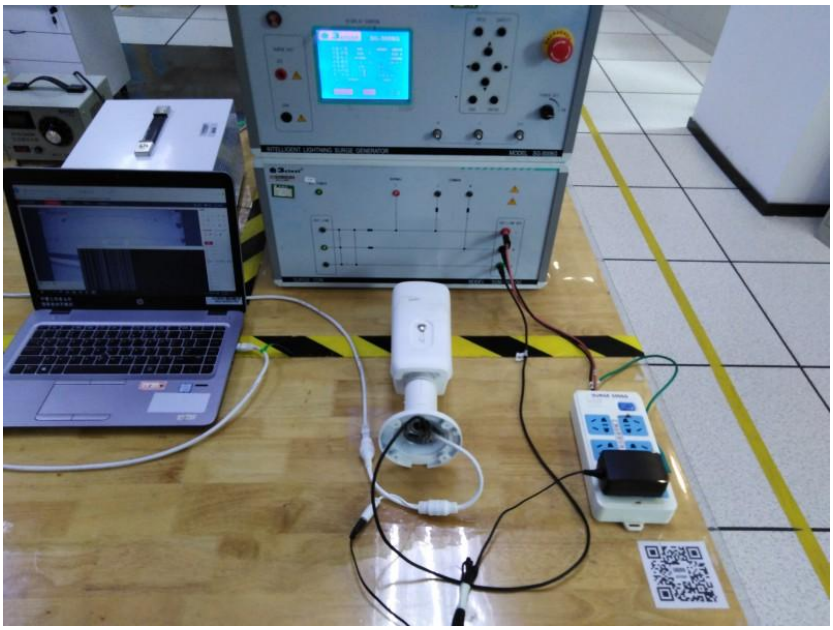


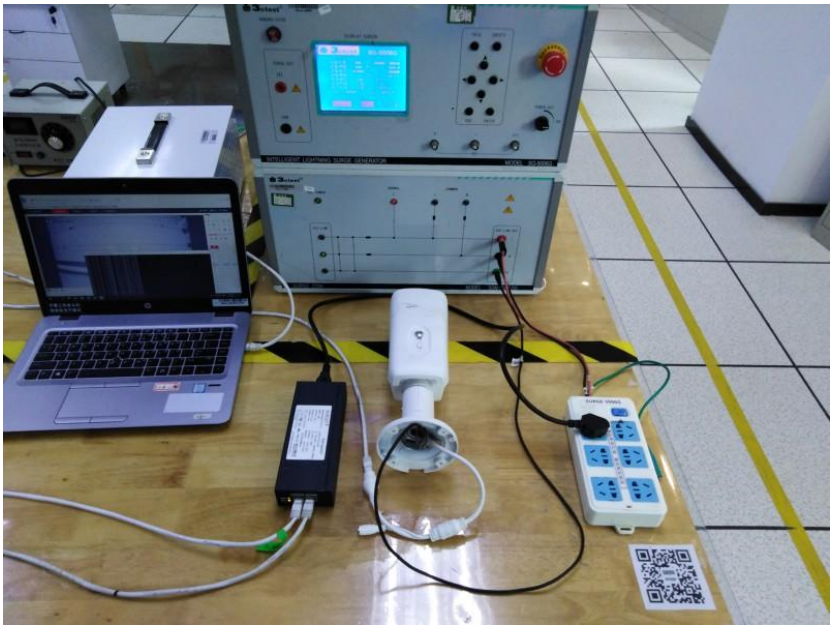
8.9 Electrical Fast Transients/Burst at Signal Port Test Setup



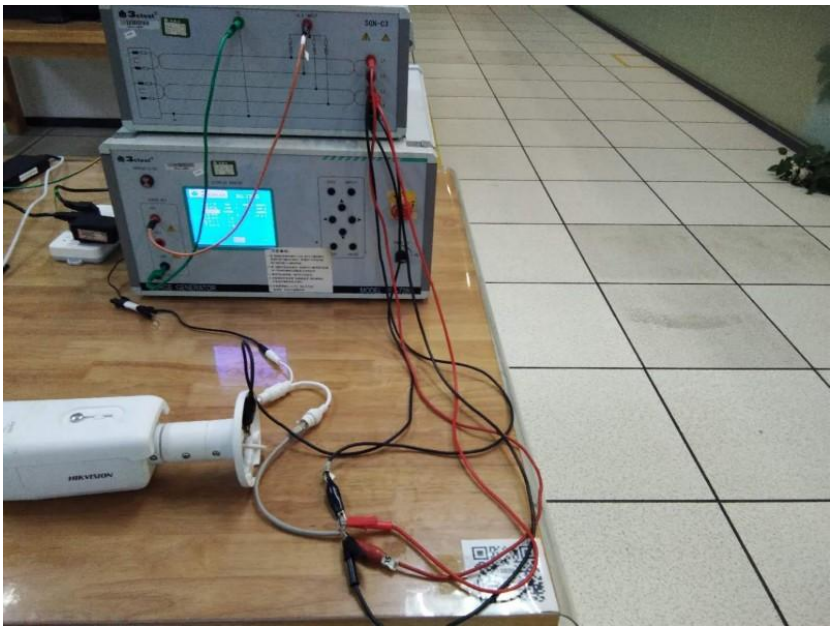


8.10 Surge at Power Port Test Setup

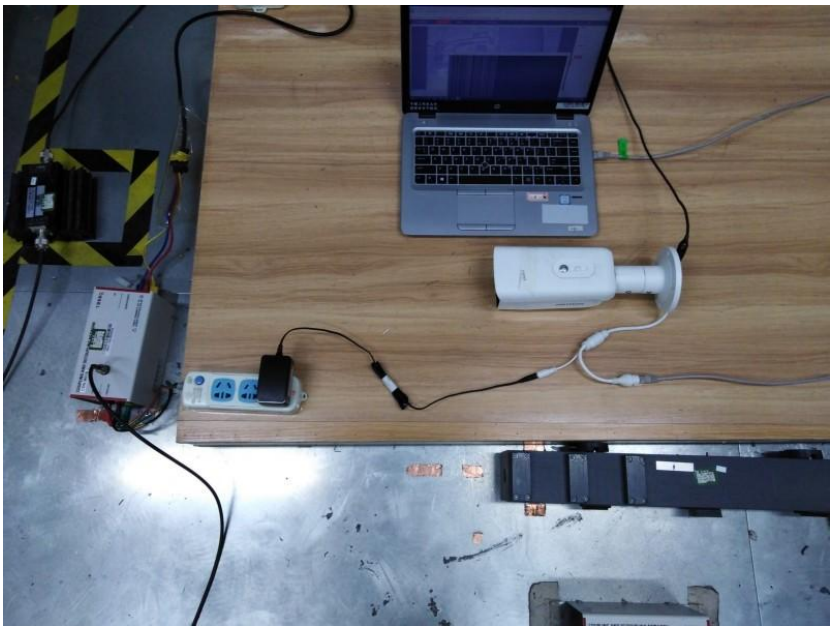


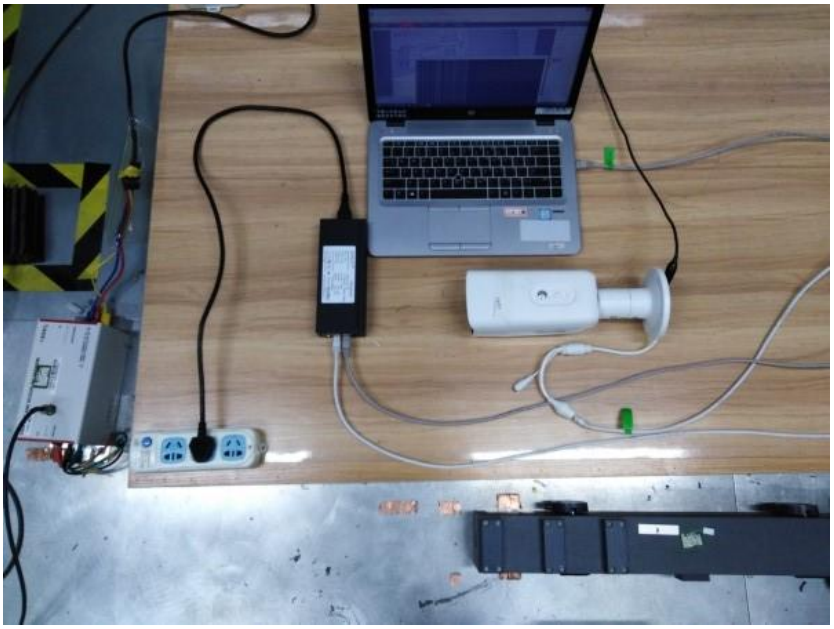


8.11 Surge at Signal Port Test Setup

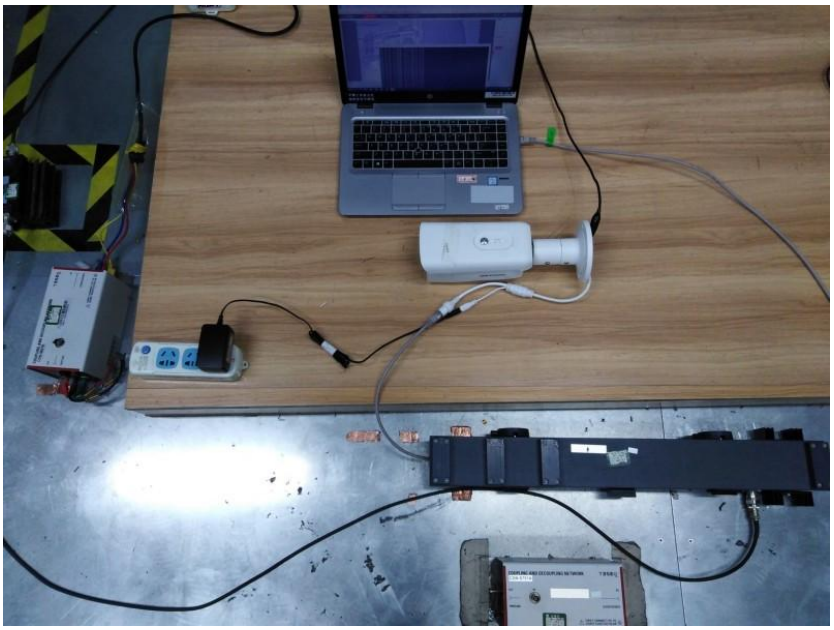


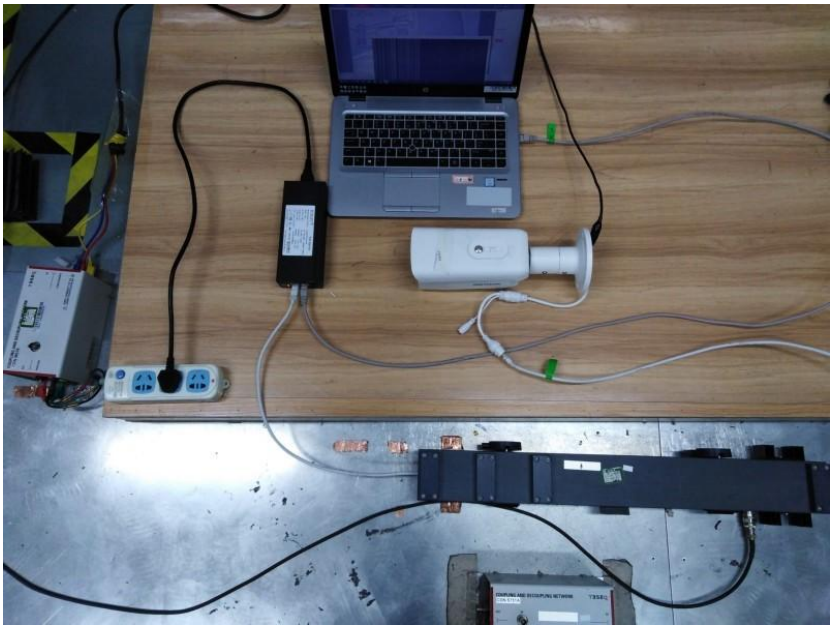
8.12 Conducted Immunity at Power Port (150kHz-100MHz) Test Setup



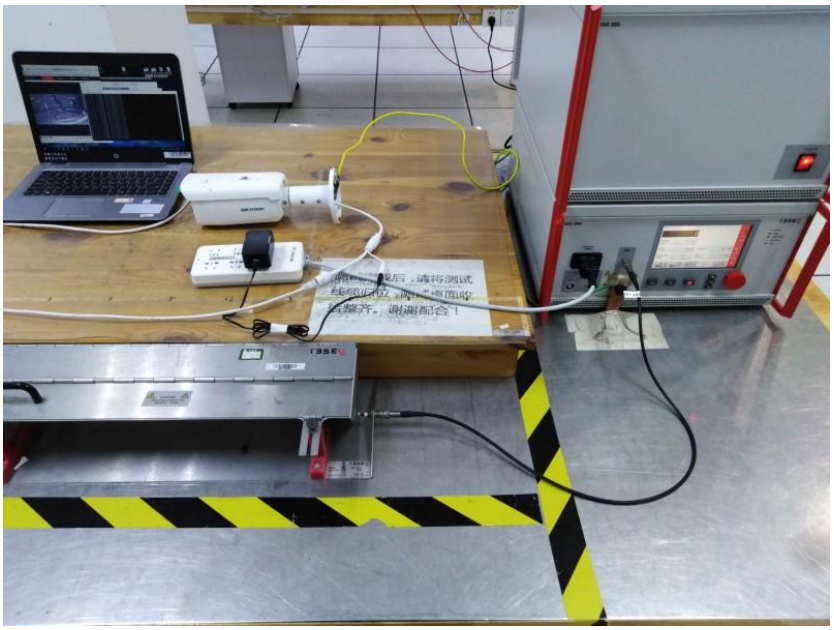


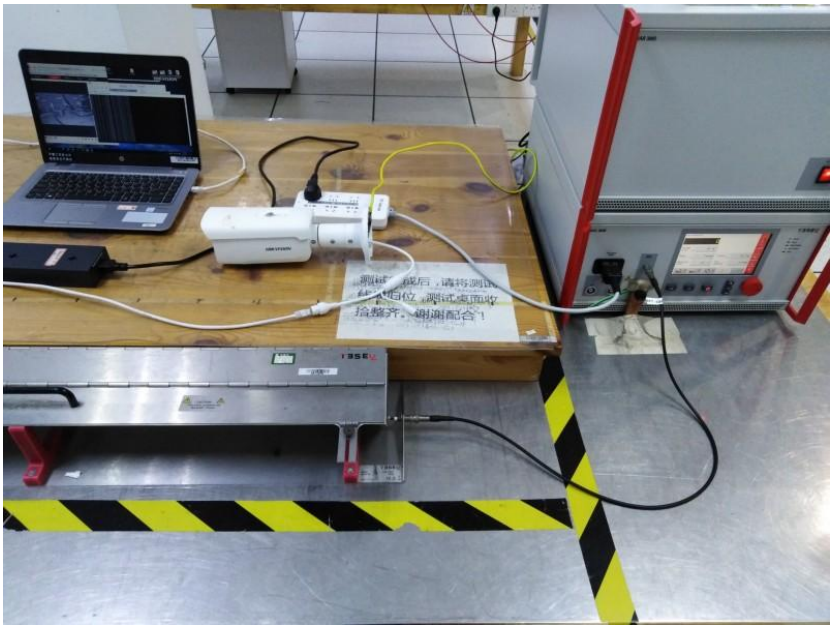
8.13 Conducted Immunity at Signal Port (150kHz-100MHz) Test Setup



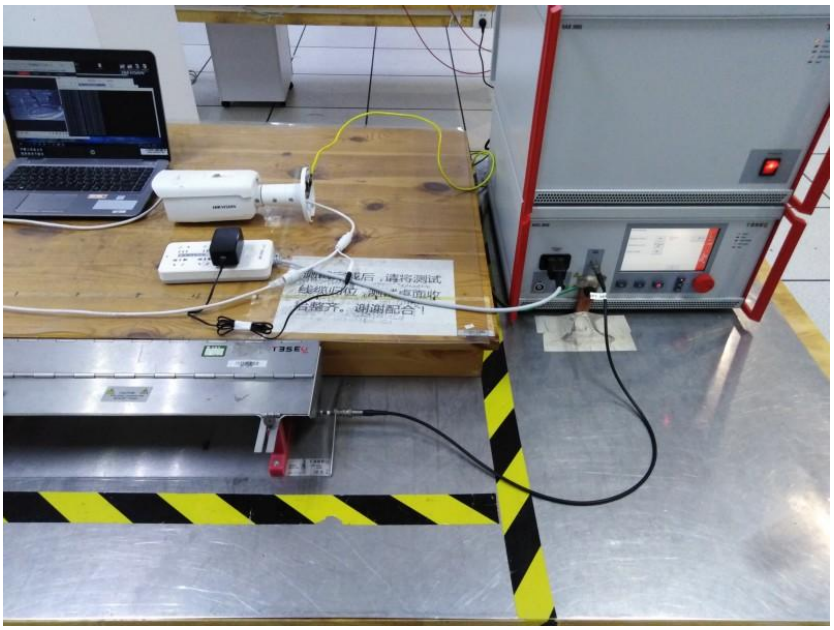


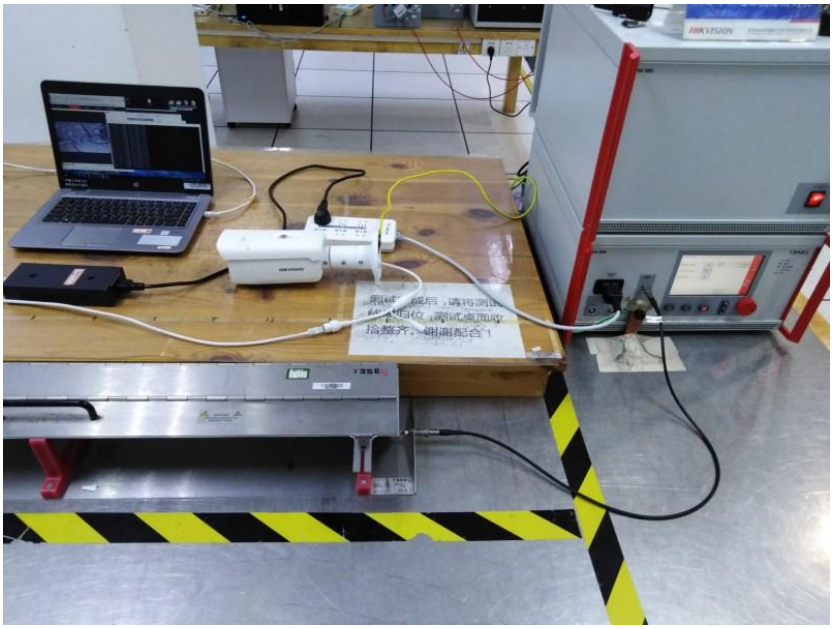
8.14 Voltage Dips and Interruptions Test Setup



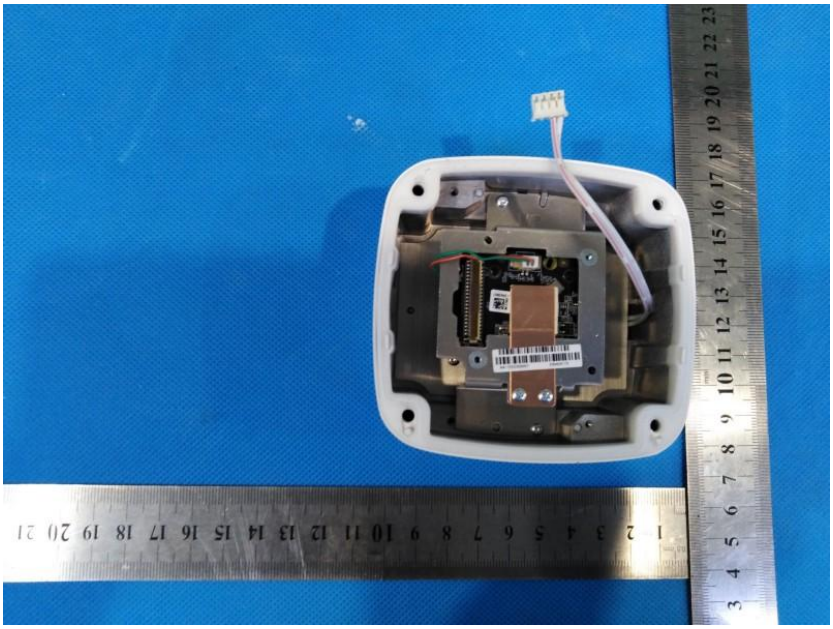


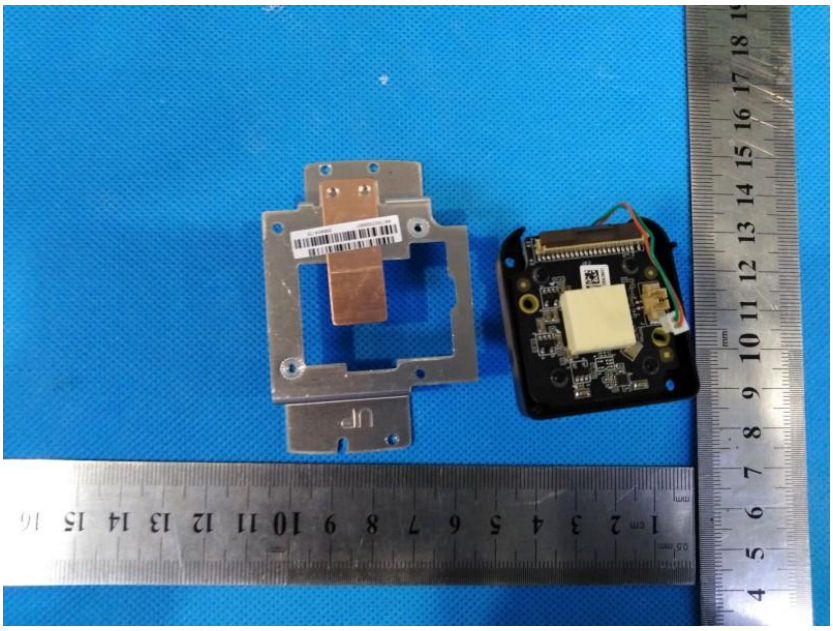
8.15 Mains Supply Voltage Variations-Conditioning Test Setup

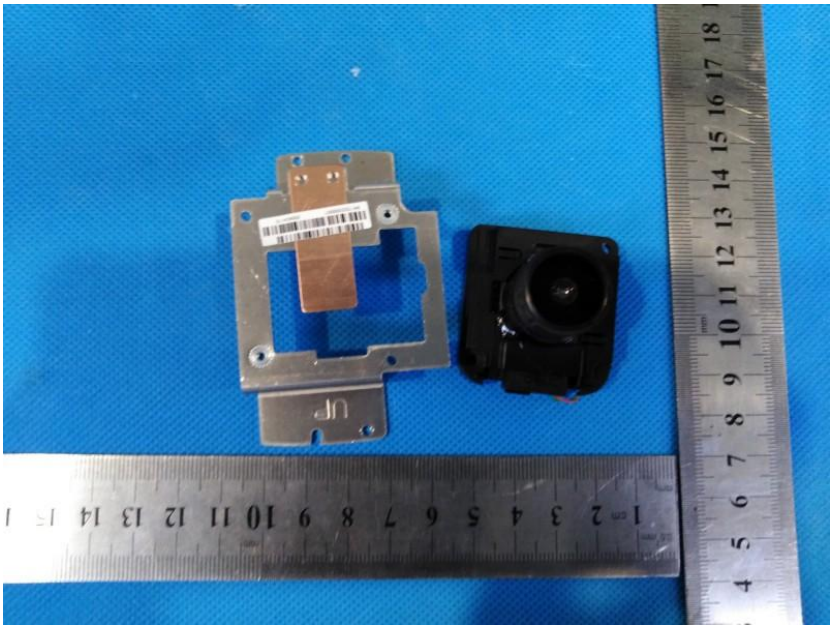


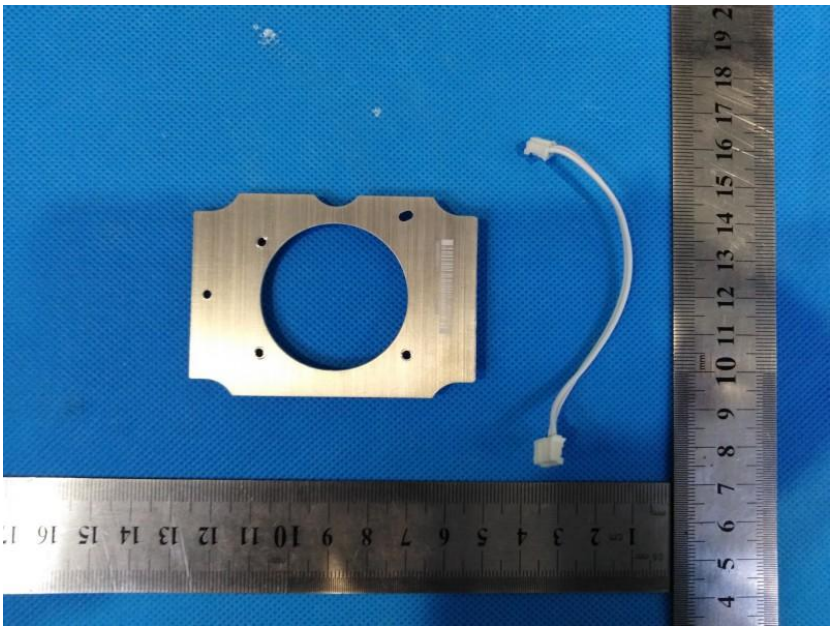


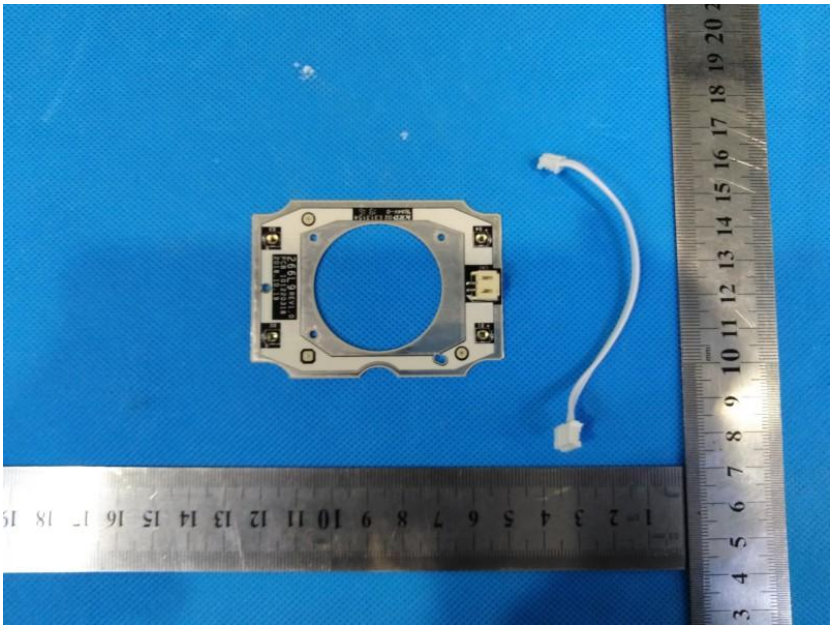
8.16 EUT Constructional Details (EUT Photos)

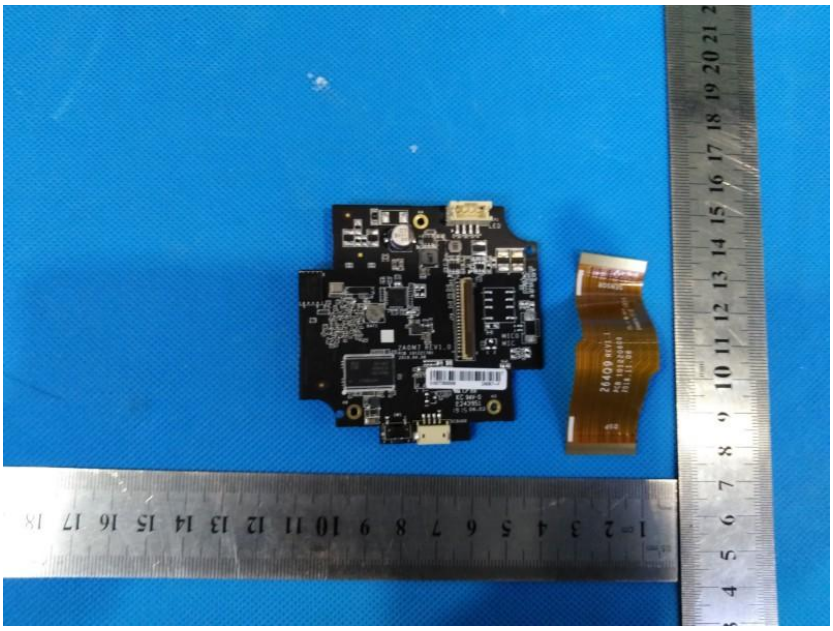


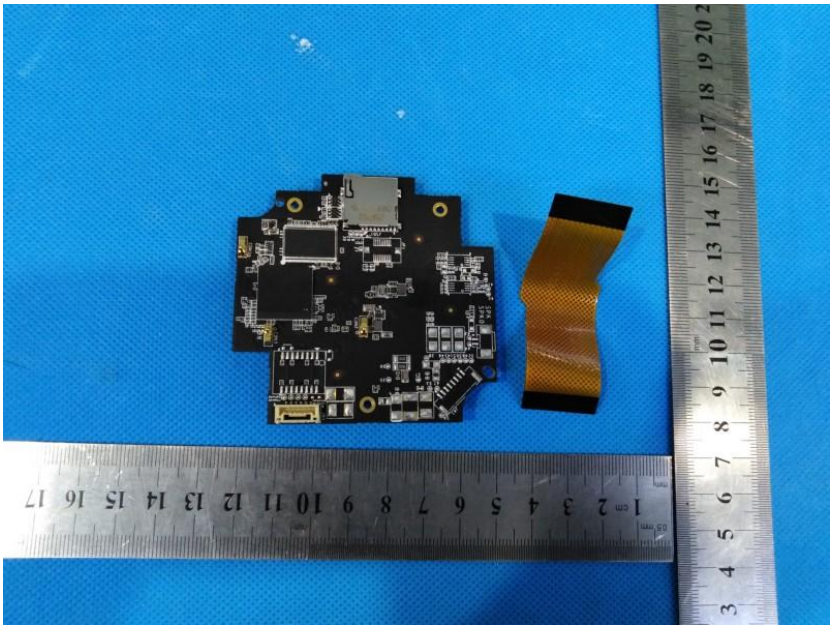


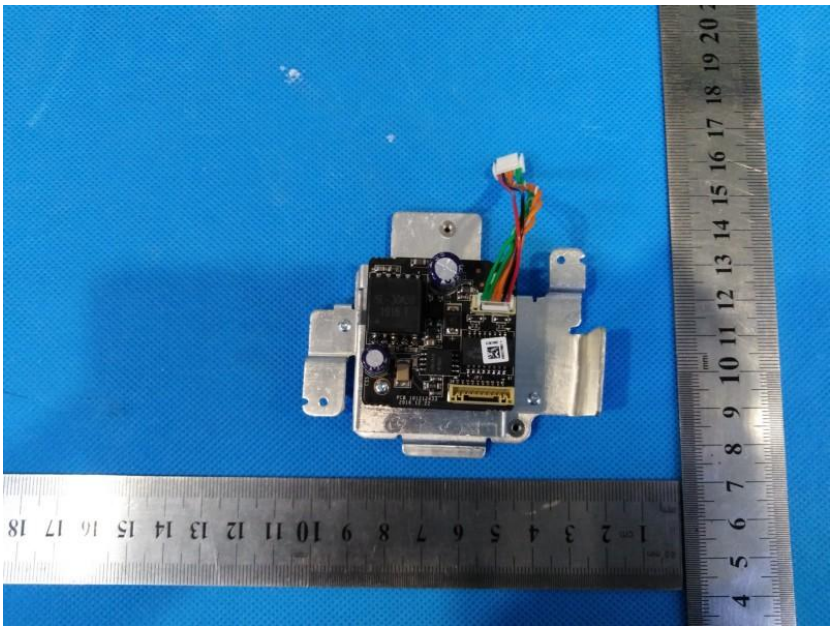


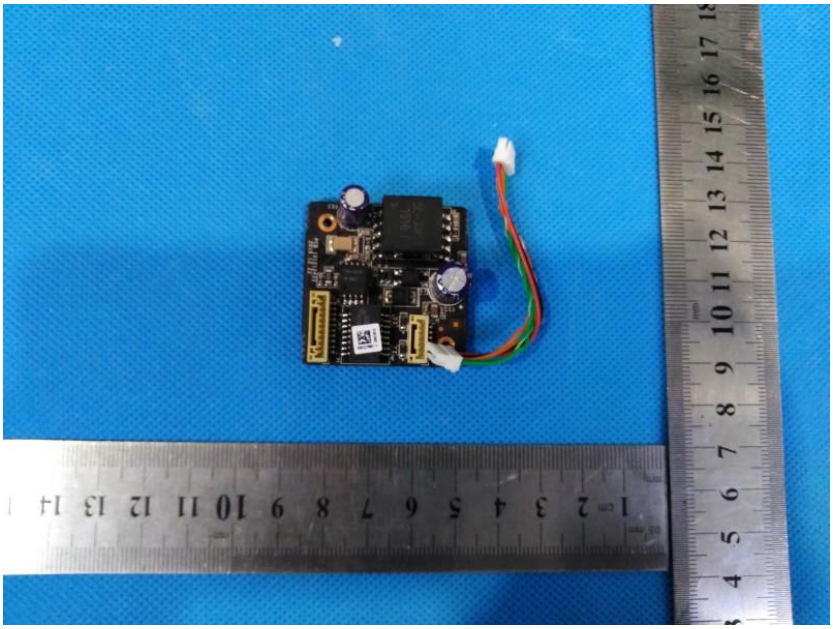


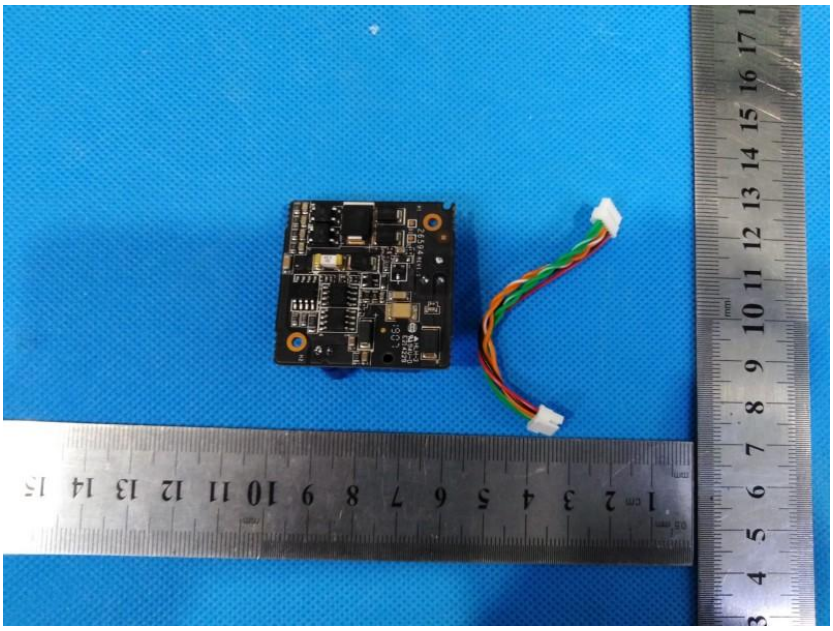


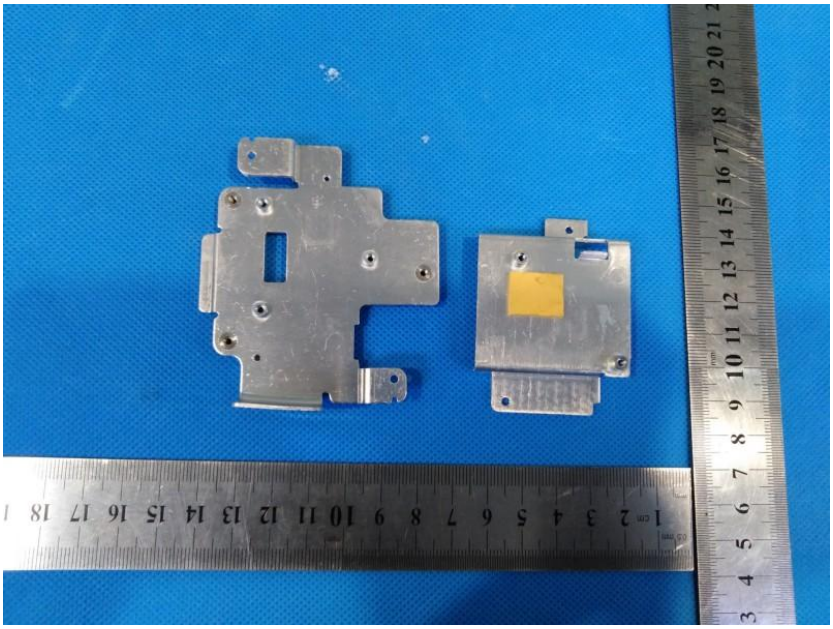












--End of the Report--