CE Test Report

Product Name ： Network Camera

Model No. ： MD9560-DH, MD9560-H

Applicant ： VIVOTEK INC.

Address ： 6F, No.192, Lien-Cheng Rd., Chung-Ho, New Taipei City, Taiwan, R.O.C.

Date of Receipt ： 2019/05/29

Issued Date ： 2019/07/15

Report No. ： 1950436R-ITCEP27V00

Report Version ： V1.0

Test Report

Issued Date : 2019/07/15
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Product Name	:	Network Camera
Applicant	:	VIVOTEK INC.
Address	:	6F, No.192, Lien-Cheng Rd., Chung-Ho, New Taipei City, Taiwan, R.O.C.
Manufacturer	:	VIVOTEK INC.
Model No.	:	MD9560-DH, MD9560-H
EUT Rated Voltage	:	DC 12V , By PoE
EUT Test Voltage	:	AC 230V / 50Hz, By PoE
Trade Name	:	VIVOTEK
Applicable Standard	:	EN 50121-1: 2017 EN 50121-4: 2016 EN 61000-6-4: 2007+A1: 2011
Test Result	:	Complied
Performed Location	:	DEKRA Testing and Certification Co., Ltd. Linkou Laboratory No. 5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan TEL:+866-2-8601-3788 / FAX:+886-2-8601-3789

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Approved By :
(Director / Vincent Lin)

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1. General Information

1.1. EUT Description

Product Name	Network Camera
Trade Name	VIVOTEK
Model No.	MD9560-DH, MD9560-H

Note: The different of the each model is shown as below:

Model Number	Voltage mode
MD9560-DH	DC12V
MD9560-H	POE

1.2. Mode of Operation

DEKRA has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Pre-Test Mode	
Mode 1: MD9560-DH_DC12V Mode 2: MD9560-H_POE	
Final Test Mode	
Emission	Mode 1: MD9560-DH_DC12V Mode 2: MD9560-H_POE
Immunity	Mode 1: MD9560-DH_DC12V Mode 2: MD9560-H_POE
Note: According to pre-test data, we choose the worst case mode 1, 2 as the final and full testing.	

1.3. Tested System Details

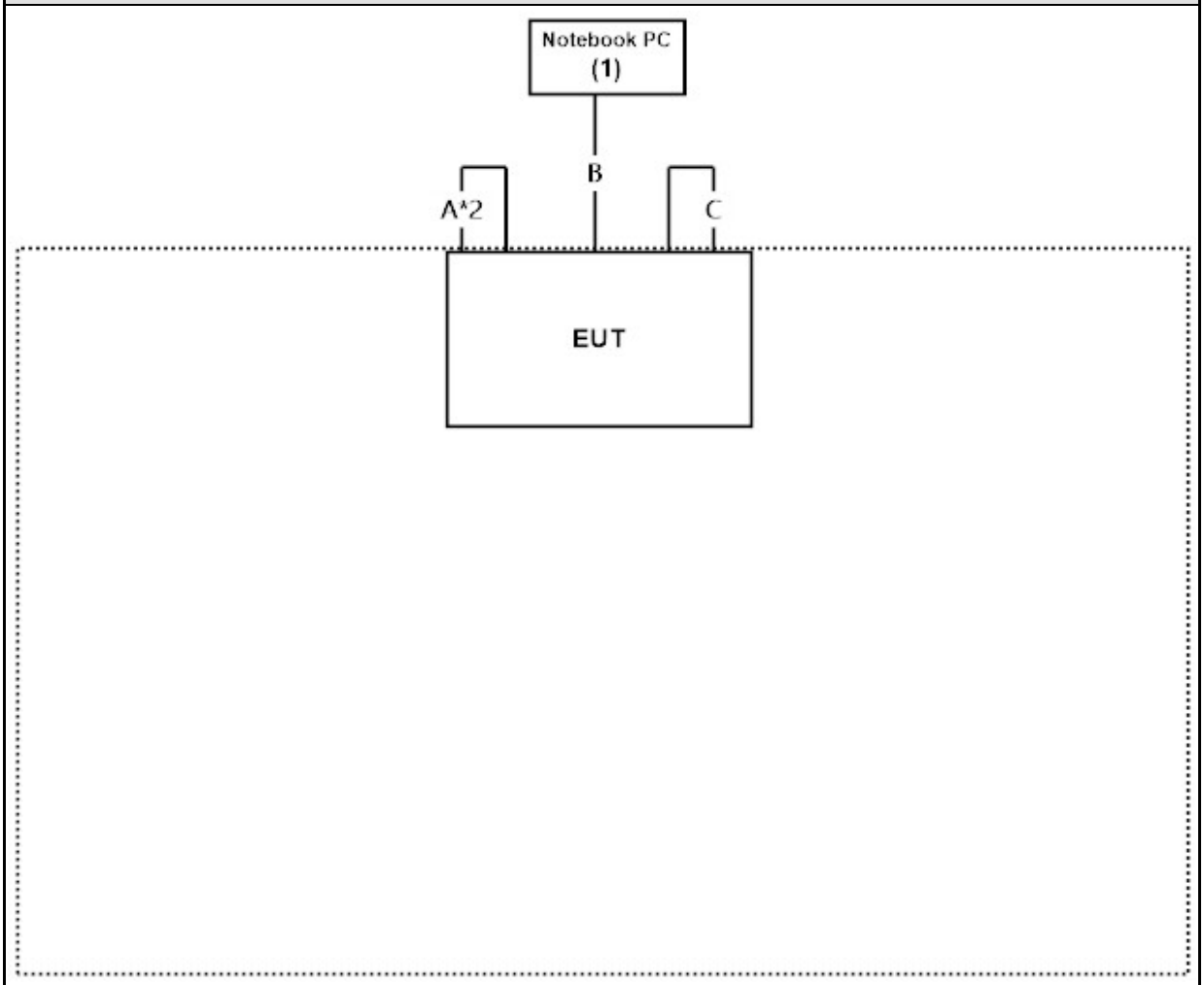
The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Test Mode		Mode 1			
Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	Lenovo	R400	L3AAF9A	Non-Shielded, 1.8m

Test Mode		Mode 2			
Product		Manufacturer	Model No.	Serial No.	Power Cord
1	PoE	N/A	N/A	N/A	Non-Shielded, 1.8m
2	Notebook PC	Lenovo	R400	L3AAF9A	Non-Shielded, 1.8m

1.4. Configuration of Tested System

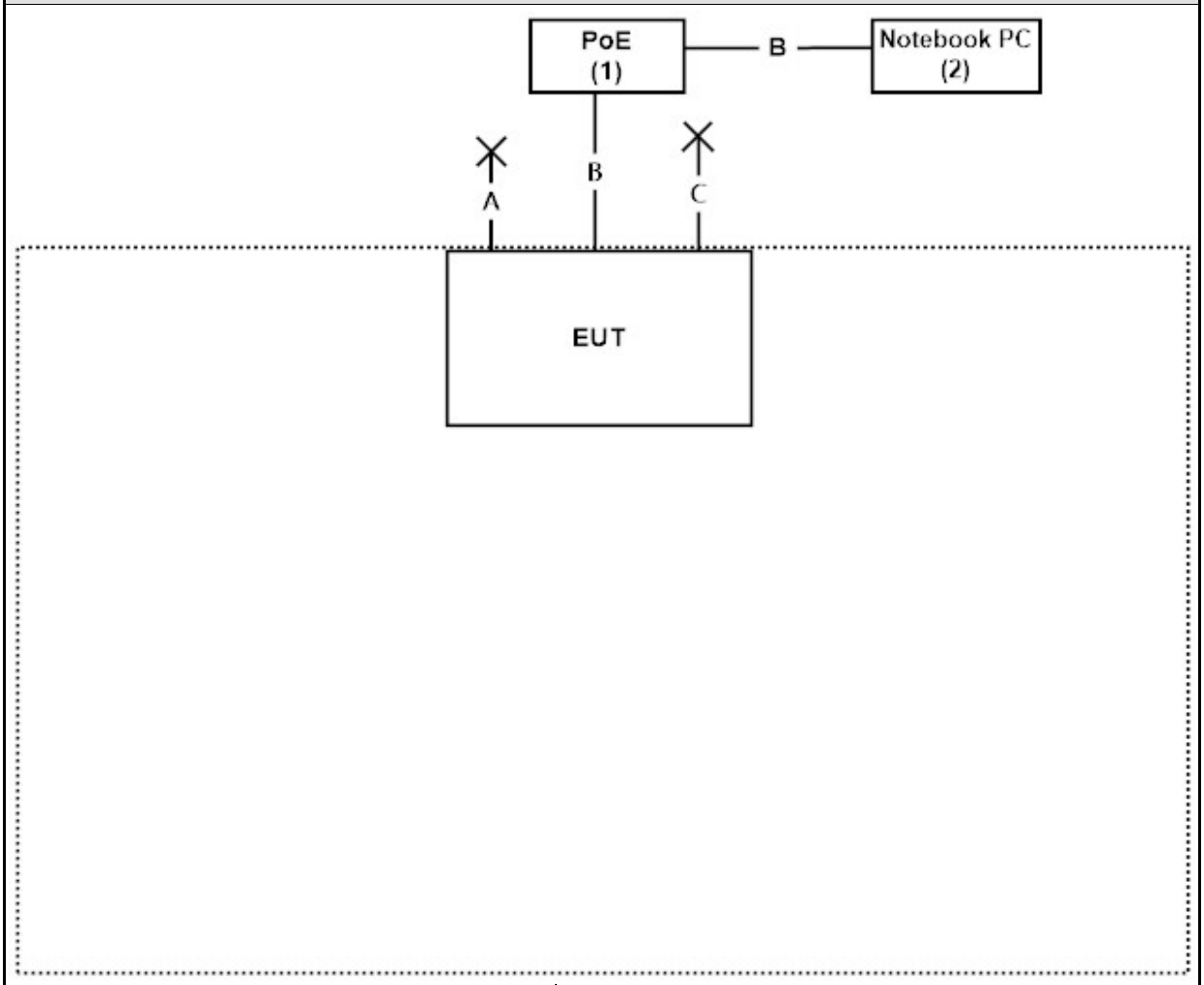
Test Mode	Mode 1
Connection Diagram	



Signal Cable Type		Signal cable Description
A	DiDo Cable	Non-Shielded, 2.0m, 2 PCS
B	LAN Cable	Non-Shielded, 6.0m
C	Signal Cable	Non-Shielded, 2.0m

Test Mode	Mode 2

Connection Diagram



Signal Cable Type		Signal cable Description
A	DiDo Cable	Non-Shielded, 0.5m
B	LAN Cable	Non-Shielded, 6.0m, two PCS
C	Signal Cable	Non-Shielded, 0.5m

1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on 1.4.
2	Turn on the power of all equipment.
3	All the features of the EUT operation normally.

2. Technical Test

2.1. Summary of Test Result

☒ No deviations from the test standards

☐ Deviations from the test standards as below description:

Emission			
Performed Item	Normative References	Test Performed	Deviation
Power Line Conducted Emission	EN 61000-6-4:2007+A1:2011 CISPR 16-2-1:2003+A1:2005 CISPR 16-1-2:2003/A2:2006	Yes	No
Impedance Stabilization Network (ISN)	EN 61000-6-4:2007+A1:2011 CISPR 22	Yes	No
Radiated Emission	EN 61000-6-4:2007+A1:2011 CISPR 16-2-3:2006	Yes	No

Immunity			
Performed Item	Normative References	Test Performed	Deviation
Electrostatic Discharge	IEC 61000-4-2 Ed. 2.0: 2008	Yes	No
Radio-frequency electromagnetic field. (Radiated susceptibility)	IEC 61000-4-3 Ed. 3.2: 2010	Yes	No
Electrical fast transient/burst	IEC 61000-4-4 Ed. 3.0: 2012	Yes	No
Surge	IEC 61000-4-5 Ed. 3.1: 2014 +A1: 2017	Yes	No
Radio-frequency common mode (Conducted susceptibility)	IEC 61000-4-6 Ed. 4.0: 2013	Yes	No
Power frequency magnetic field	IEC 61000-4-8 Ed. 2.0: 2009	Yes	No

2.2. List of Test Equipment

Conducted Emission / SR8

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
EMI Test Receiver	R&S	ESCS 30	100369	2018/11/19
LISN	R&S	ENV216	100097	2019/02/18
LISN	R&S	ESH3-Z5	836679/017	2019/02/18
Coaxial Cable	DEKRA	RG 400	LC018-RG	2019/06/20

Impedance Stabilization Network / SR8

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
EMI Test Receiver	R&S	ESCS 30	100369	2018/11/19
LISN	R&S	ENV216	100097	2019/02/18
LISN	R&S	ESH3-Z5	836679/017	2019/02/18
Coaxial Cable	DEKRA	RG 400	LC018-RG	2019/06/20
Capacitive Voltage Probe	Schaffner	CVP2200A	18331	2018/12/03
RF Current Probe	FCC	F-65	198	2018/12/13
BALANCED TELECOM ISN	FCC	FCC-TLISN-T2-02	20316	2018/09/14
Impedance Stabilization Network	Teseq	ISN T800	42815	2019/07/12

Radiated Emission / Site7

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Broadband Antenna	Schwarzbeck	VULB 9168	0852	2019/06/23
EMI Test Receiver	R&S	ESCI	100649	2018/07/20
Coaxial Cable	DEKRA	RG 214	LC007-RG	2019/06/17
Pre-Amplifier	DEKRA	AP/0100A	CHM/1009094	2019/06/17
Site7 NSA	DEKRA	N/A	N/A	2019/06/17

Radiated Emission / CB7

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
EMI Test Receiver	R&S	ESU26	100433	2018/11/13
Horn Antenna	ETS-Lindgren	3117	00202723	2018/08/08
Horn Antenna	SCHWARZBECK	9120D	576	2018/12/18
Pre-Amplifier	EMCI	EMC051845SE	980359	2018/10/24
CB7 VSWR	DEKRA	N/A	N/A	2019/06/25

Electrostatic Discharge / SR7

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
ESD Simulator System	Noiseken	ESS-B3011	ESS1458221	2018/10/03
ESD GUN	Noiseken	GT-30R	ESS1458241	2018/10/03
Horizontal Coupling Plane(HCP)	QuieTek	HCP AL50	N/A	N/A
Vertical Coupling Plane(VCP)	QuieTek	VCP AL50	N/A	N/A

Radiated susceptibility / CB9

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Signal Generator	Keysight	N5171B	MY53051650	2019/03/05
Power Sensor	Keysight	N1912A	MY55480006	2019/03/06
Stacked double Log.-Per.-Broadband Antenna	SCHWARZBECK	STLP 9129	9129 011	N/A
Power Amplifier	MILMEGA	CBA 1G-1200B	W2346-0918	N/A
Power Amplifier	MILMEGA	AS0860B-50/50	1071482	N/A
uniform field calibration	Dekra	N/A	N/A	2019/3/08

Electrical fast transient/burst / SR3

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
EMS TEST System	TESEQ	NSG 3060	1823	2019/06/13

Surge / SR3

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
EMS TEST System	TESEQ	NSG 3060	1823	2019/06/13

Conducted susceptibility / SR12

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
TESEQ RF-Generator	TESEQ	NSG 4070A-30	032847	2019/05/01

Power frequency magnetic field / SR3

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
45kVA Power Source	TESEQ	NSG 1007-45	1847A00294	2018/12/19
Magnetic Loop Coil	TESEQ	INA 703	2007	2018/08/02

2.3. Measurement Uncertainty

Conducted Emission

The measurement uncertainty is evaluated as ± 3.44 dB.

Impedance Stabilization Network

The measurement uncertainty is evaluated as ± 3.88 dB.

Radiated Emission

The measurement uncertainty is evaluated as ± 4.22 dB.

Radiated Emission Above 1GHz

The measurement uncertainty is evaluated as ± 5.08 dB.

Electrostatic Discharge

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025, the requirements for measurement uncertainty in ESD testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant ESD standards. The immunity test signal from the ESD system meet the required specifications in IEC 61000-4-2 through the calibration report with the calibrated uncertainty for the waveform of voltage, current and timing as being 2.6 %, 2.9% and 11%.

Radiated susceptibility

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025, the requirements for measurement uncertainty in RS testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant RS standards. The immunity test signal from the RS system meet the required specifications in IEC 61000-4-3 through the calibration for the uniform field strength and monitoring for the test level with the uncertainty evaluation report for the electrical filed strength as being 3.57 dB.

Electrical fast transient/burst

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025, the requirements for measurement uncertainty in EFT/Burst testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant EFT/Burst standards. The immunity test signal from the EFT/Burst system meet the required specifications in IEC 61000-4-4 through the calibration report with the calibrated uncertainty for the waveform of voltage, frequency and timing as being 4.3 %,0.9% and 4.3%.

Surge

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025, the requirements for measurement uncertainty in Surge testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant Surge standards. The immunity test signal from the Surge system meet the required specifications in IEC 61000-4-5 through the calibration report with the calibrated uncertainty for the waveform of voltage, current and timing as being 4.2%, 4.2% and 11%.

Conducted susceptibility

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025, the requirements for measurement uncertainty in CS testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant CS standards. The immunity test signal from the CS system meet the required specifications in IEC 61000-4-6 through the calibration for unmodulated signal and monitoring for the test level with the uncertainty evaluation report for the injected modulated signal level through CDN and EM Clamp/Direct Injection as being 2.15 dB and 3.3 dB.

Power frequency magnetic field

As what is concluded in the document from Note2 of clause 5.4.6.2 of ISO/IEC 17025, the requirements for measurement uncertainty in PFM testing are deemed to have been satisfied, and the testing is reported in accordance with the relevant PFM standards. The immunity test signal from the PFM system meet the required specifications in IEC 61000-4-8 through the calibration report with the calibrated uncertainty for the Gauss Meter to verify the output level of magnetic field strength as being 2.0 %.

2.4. Test Environment

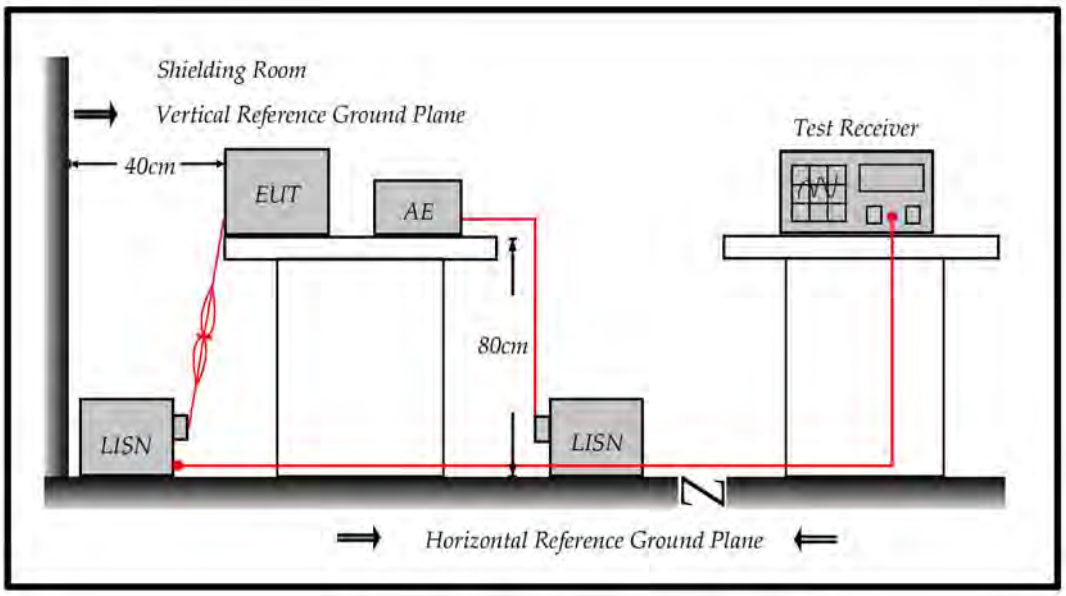
Performed Item	Items	Required	Actual
Conducted Emission	Temperature (°C)	15-35	20
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Impedance Stabilization Network	Temperature (°C)	15-35	20
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Radiated Emission	Temperature (°C)	15-35	28.6
	Humidity (%RH)	25-75	65
	Barometric pressure (mbar)	860-1060	950-1000
Electrostatic Discharge	Temperature (°C)	15-35	28
	Humidity (%RH)	30-60	51
	Barometric pressure (mbar)	860-1060	950-1000
Radiated susceptibility	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	58
	Barometric pressure (mbar)	860-1060	950-1000
Electrical fast transient/burst	Temperature (°C)	15-35	20
	Humidity (%RH)	25-75	60
	Barometric pressure (mbar)	860-1060	950-1000
Surge	Temperature (°C)	15-35	20
	Humidity (%RH)	10-75	60
	Barometric pressure (mbar)	860-1060	950-1000
Conducted susceptibility	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	58
	Barometric pressure (mbar)	860-1060	950-1000
Power frequency magnetic field	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	56
	Barometric pressure (mbar)	860-1060	950-1000

3. Conducted Emission (Main Terminals)

3.1. Test Specification

According to EN 50121-4 clause 5 and EN 61000-6-4 Table 1

3.2. Test Setup



3.3. Limit

Limits		
Frequency MHz	QP dBuV	AV dBiV
0.15 - 0.50	79	66
0.50-5.0	73	60
5.0 - 30	73	60

Remarks: In the above table, the tighter limit applies at the band edges.

3.4. Test Procedure

According to CISPR 16-2-1 clause 7.4.1 and CISPR 16-1-2 clause 4.3：

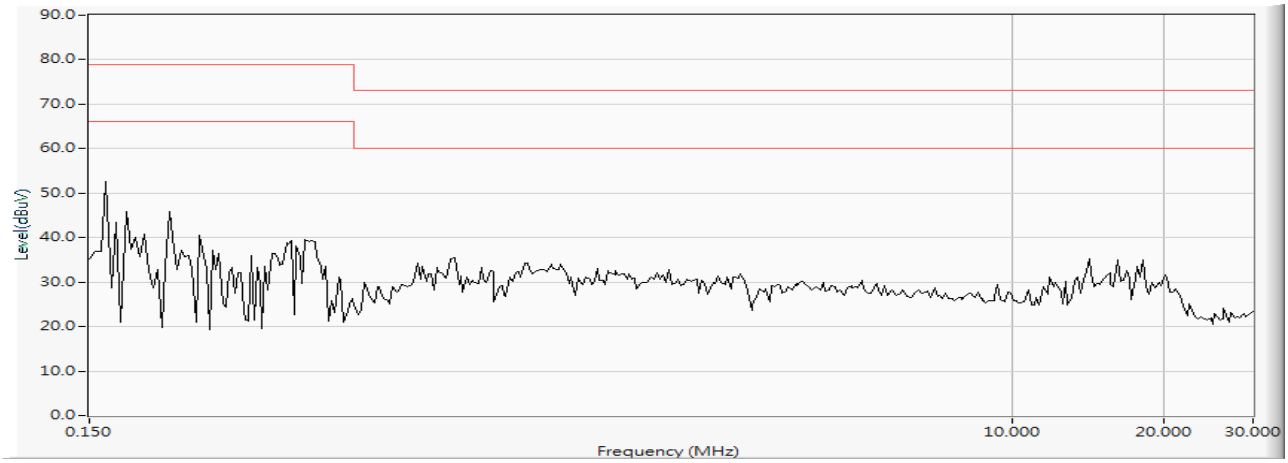
The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination.
(Please refers to the block diagram of the test setup and photographs.)
Both sides of D.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed on conducted measurement.
Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.5. Deviation from Test Standard

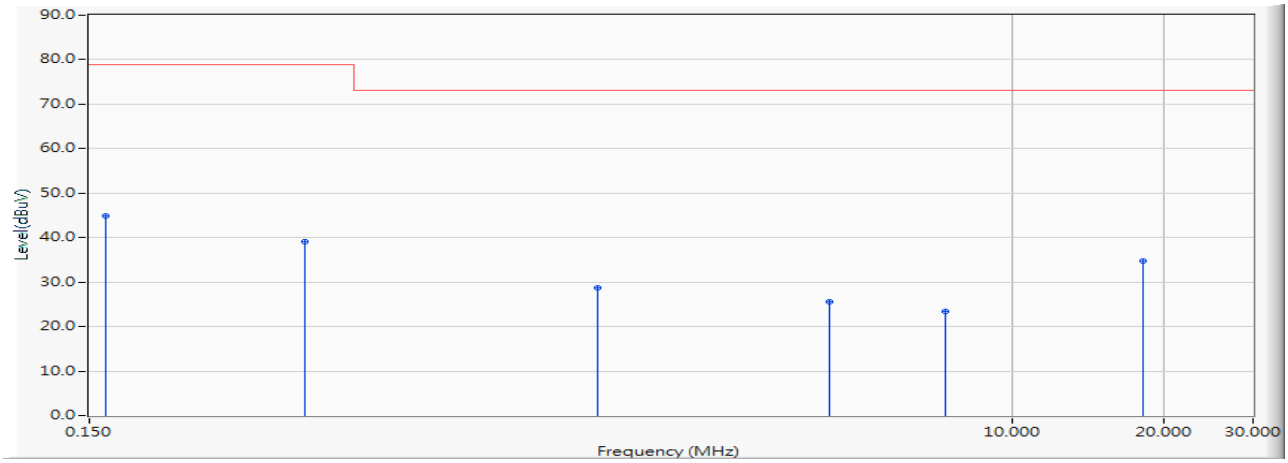
No deviation.

3.6. Test Result

Site : SR8	**Time : 2019/06/11 - 11:48**
Limit : CISPR_A_00M_QP	**Margin : 13**
EUT : Network Camera	**Probe : ENV216_L1_1068 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1**



Site : SR8	**Time : 2019/06/11 - 11:48**
Limit : CISPR_A_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : ENV216_L1_1068 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1**

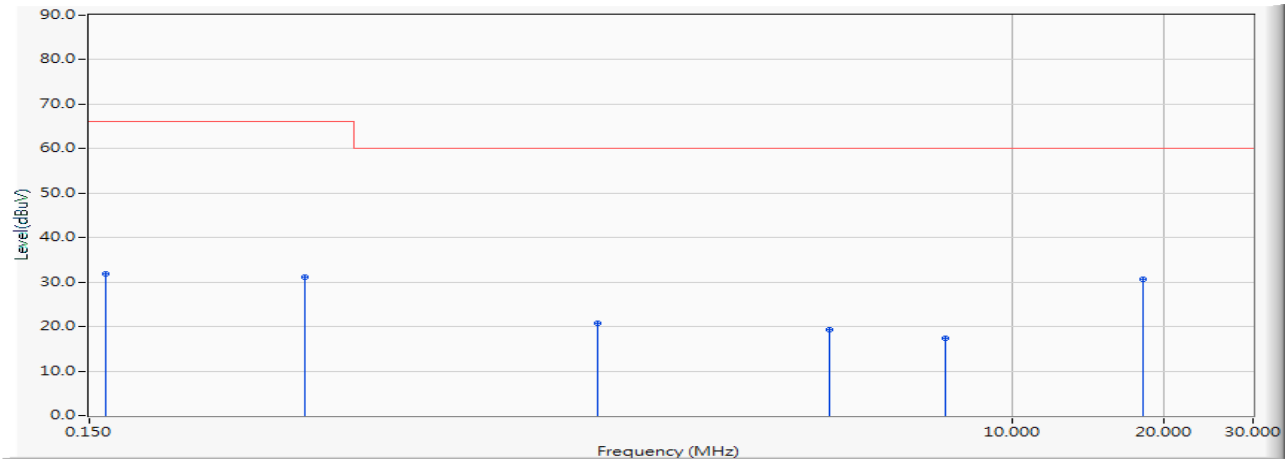


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.162	9.656	35.130	44.786	-34.214	79.000	QUASIPEAK
2	*	0.400	9.666	29.520	39.186	-39.814	79.000	QUASIPEAK
3		1.521	9.722	19.060	28.782	-44.218	73.000	QUASIPEAK
4		4.361	9.809	15.780	25.589	-47.411	73.000	QUASIPEAK
5		7.373	9.907	13.600	23.507	-49.493	73.000	QUASIPEAK
6		18.244	10.129	24.540	34.669	-38.331	73.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

Site : SR8	**Time : 2019/06/11 - 11:48**
Limit : CISPR_A_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : ENV216_L1_1068 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1**

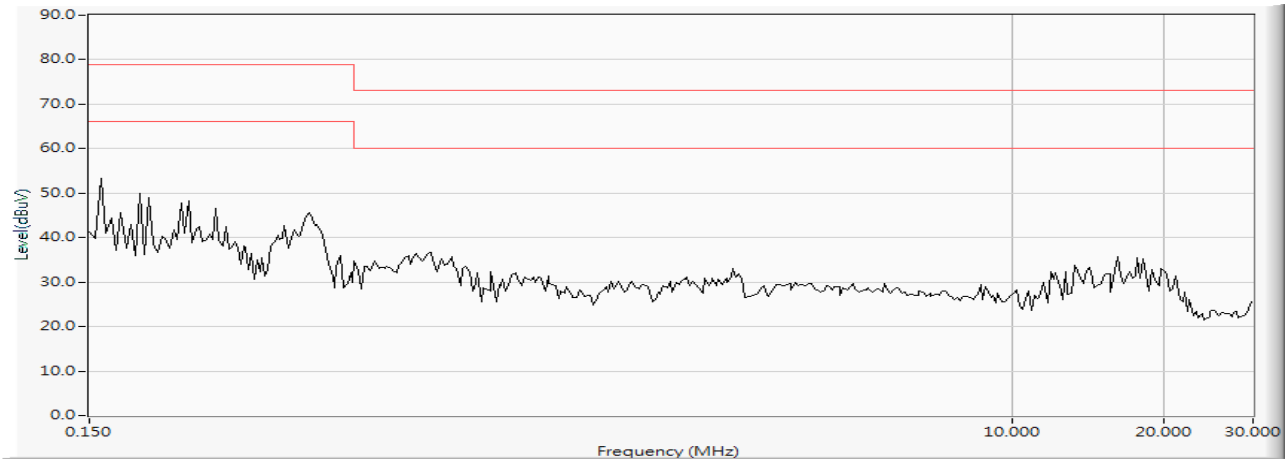


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.162	9.656	22.150	31.806	-34.194	66.000	AVERAGE
2	*	0.400	9.666	21.520	31.186	-34.814	66.000	AVERAGE
3		1.521	9.722	10.940	20.662	-39.338	60.000	AVERAGE
4		4.361	9.809	9.600	19.409	-40.591	60.000	AVERAGE
5		7.373	9.907	7.500	17.407	-42.593	60.000	AVERAGE
6	*	18.244	10.129	20.400	30.529	-29.471	60.000	AVERAGE

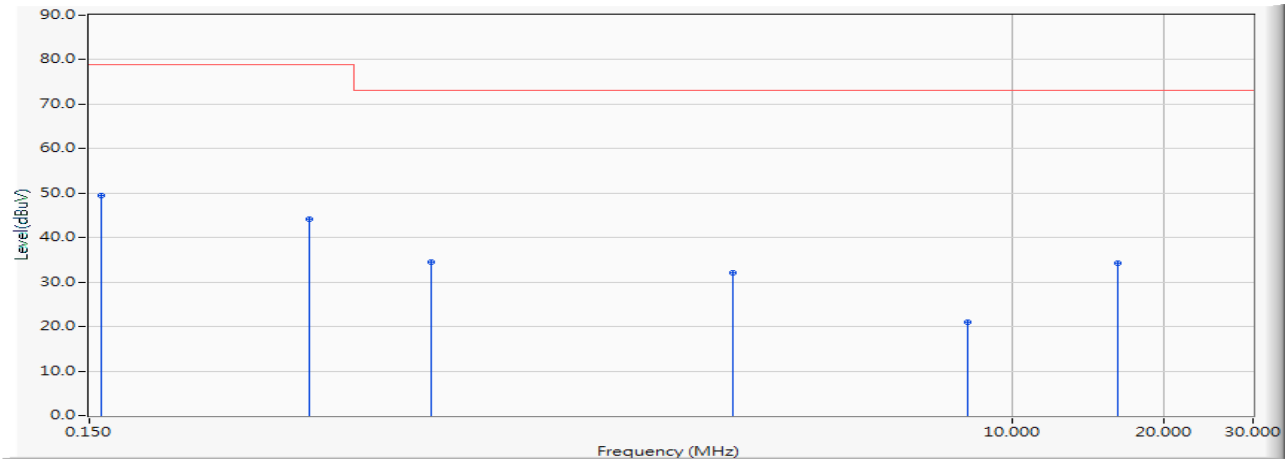
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

Site : SR8	**Time : 2019/06/11 - 11:48**
Limit : CISPR_A_00M_QP	**Margin : 13**
EUT : Network Camera	**Probe : ENV216_N_1068 - Line2**
Power : AC 230V/50Hz	**Note : Mode 1**



Site : SR8	**Time : 2019/06/11 - 11:48**
Limit : CISPR_A_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : ENV216_N_1068 - Line2**
Power : AC 230V/50Hz	**Note : Mode 1**

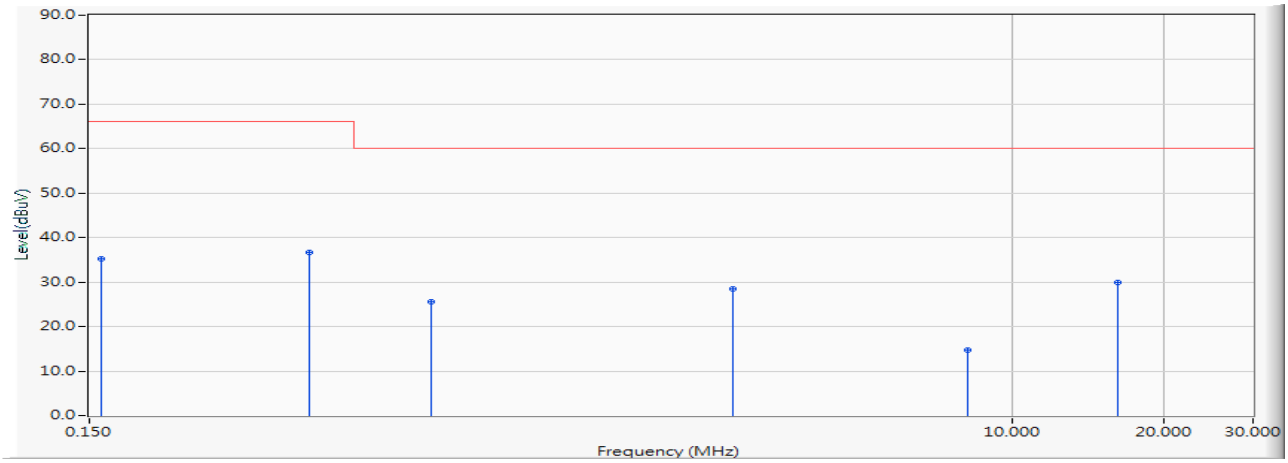


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.158	9.696	39.700	49.396	-29.604	79.000	QUASIPEAK
2	*	0.408	9.696	34.380	44.076	-34.924	79.000	QUASIPEAK
3		0.713	9.714	24.760	34.473	-38.527	73.000	QUASIPEAK
4		2.810	9.804	22.220	32.024	-40.976	73.000	QUASIPEAK
5		8.185	9.996	11.000	20.996	-52.004	73.000	QUASIPEAK
6		16.166	10.230	23.920	34.150	-38.850	73.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

Site : SR8	**Time : 2019/06/11 - 11:48**
Limit : CISPR_A_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : ENV216_N_1068 - Line2**
Power : AC 230V/50Hz	**Note : Mode 1**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	9.696	25.500	35.196	-30.804	66.000	AVERAGE
2	*	0.408	9.696	26.980	36.676	-29.324	66.000	AVERAGE
3		0.713	9.714	15.840	25.553	-34.447	60.000	AVERAGE
4		2.810	9.804	18.560	28.364	-31.636	60.000	AVERAGE
5		8.185	9.996	4.780	14.776	-45.224	60.000	AVERAGE
6		16.166	10.230	19.780	30.010	-29.990	60.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

3.7. Test Photograph

Test Mode : Mode 1: MD9560-DH_DC12V

Description : Front View of Conducted Test

Test Mode : Mode 1: MD9560-DH_DC12V

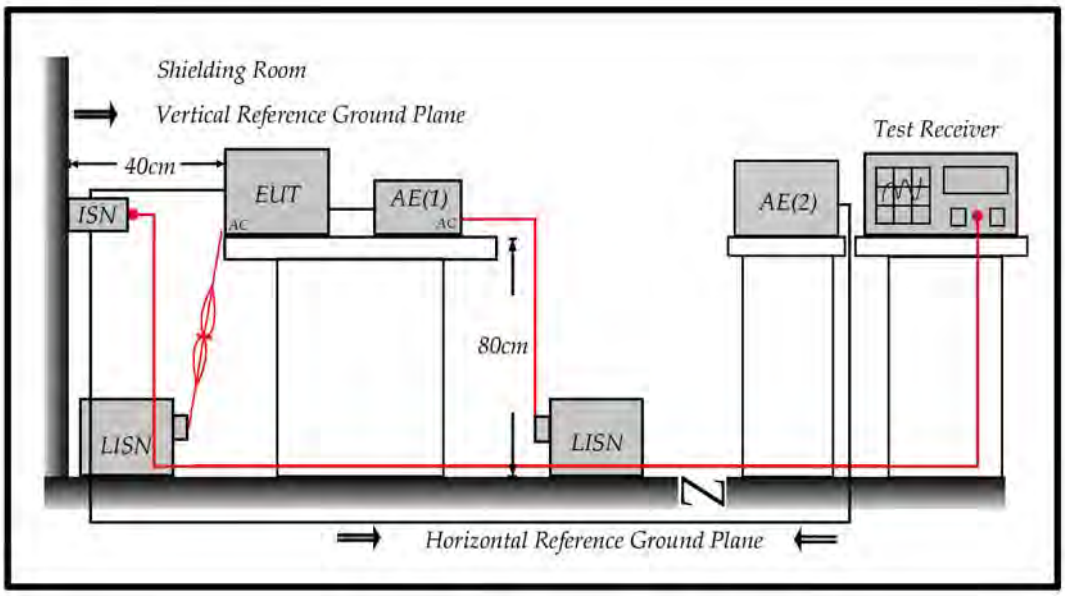
Description : Back View of Conducted Test

4. Conducted Emissions (Telecommunication Ports)

4.1. Test Specification

According to EN 50121-4 clause 5 and EN 61000-6-4 Table 1

4.2. Test Setup



4.3. Limit

Frequency (MHz)	Voltage Limits		Current Limits	
	QP (dBuV)	AV (dBuV)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	97 – 87	84 – 74	53 – 43	40 – 30
0.50 - 30	87	74	43	30

Remarks:

The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz~0.50 MHz.

4.4. Test Procedure

Telecommunication Port:

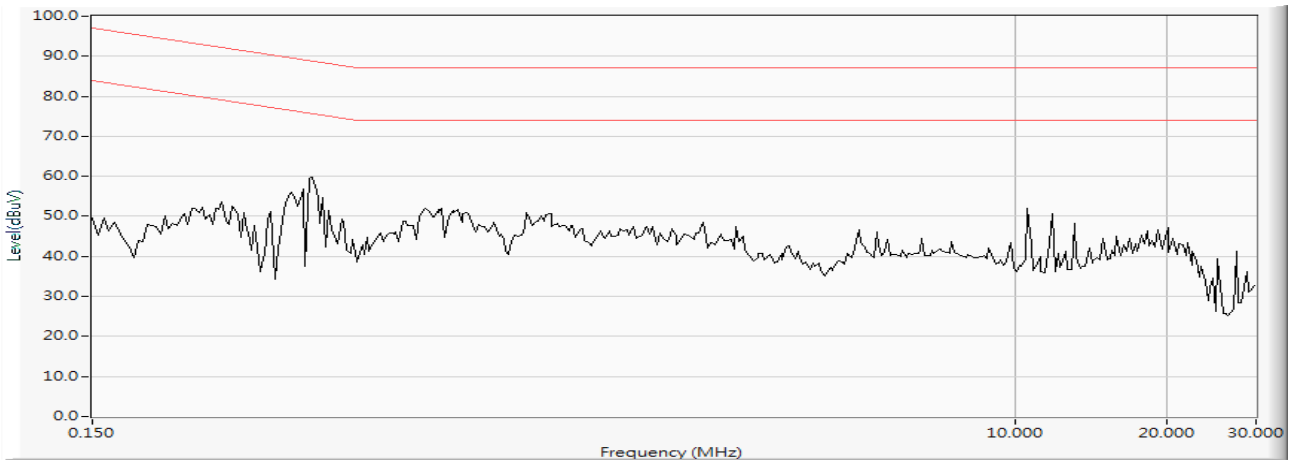
The mains voltage shall be supplied to the EUT via the LISN when the measurement of telecommunication port is performed. The common mode disturbances at the telecommunication port shall be connected to the ISN, which is 150 ohm impedance.
Both alternative cables are tested related to the LCL requested. The measurement range is from 150kHz to 30MHz. The bandwidth of measurement is set to 9kHz.
The 75dB LCL ISN is used for cat. 6 cable, the 65dB LCL ISN is used for cat. 5 cable, 55dB LCL ISN is used for cat. 3.

4.5. Deviation from Test Standard

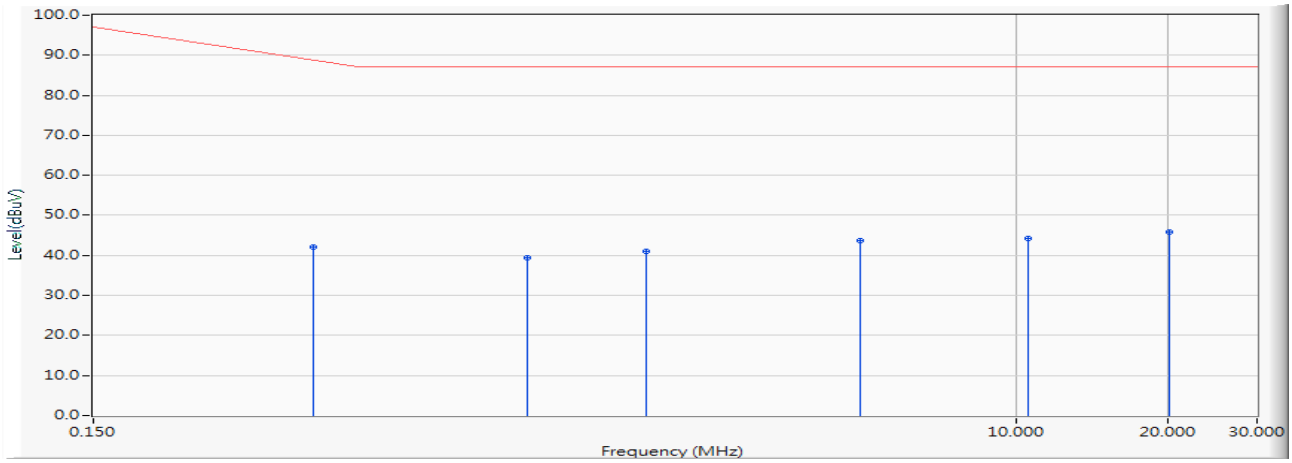
No deviation.

4.6. Test Result

Site : SR8	**Time : 2019/06/11 - 13:21**
Limit : ISN_Voltage_A_00M_QP	**Margin : 13**
EUT : Network Camera	**Probe : TESEQ_T8_42815 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1, ISN 10M**



Site : SR8	**Time : 2019/06/11 - 13:21**
Limit : ISN_Voltage_A_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8_42815 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1, ISN 10M**

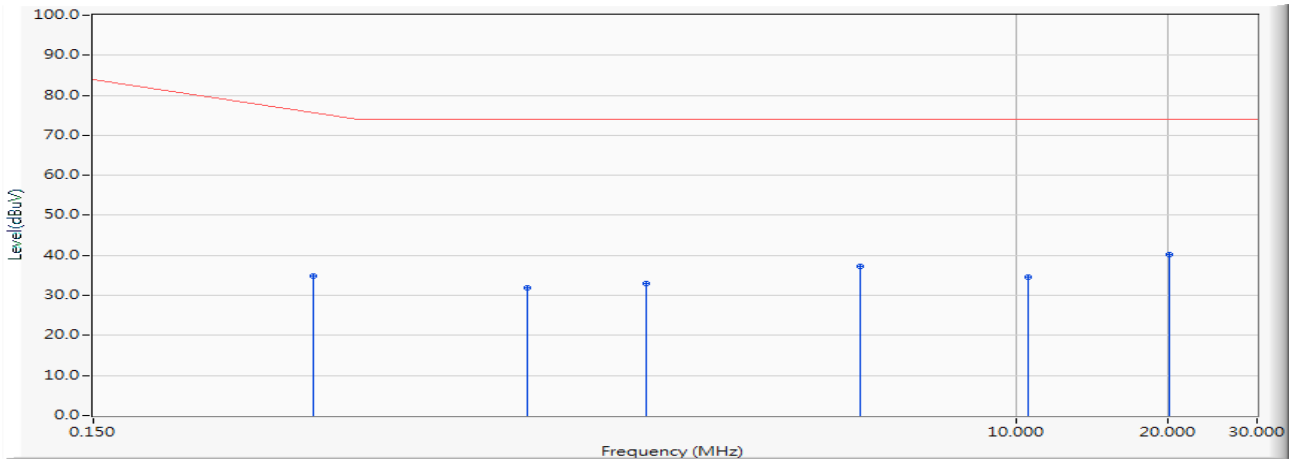


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.408	10.043	31.940	41.984	-47.645	89.629	QUASIPEAK
2		1.084	9.924	29.620	39.544	-47.456	87.000	QUASIPEAK
3		1.857	9.906	31.120	41.026	-45.974	87.000	QUASIPEAK
4		4.923	9.912	33.900	43.812	-43.188	87.000	QUASIPEAK
5		10.599	10.043	34.280	44.323	-42.677	87.000	QUASIPEAK
6	*	20.123	10.283	35.600	45.883	-41.117	87.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

Site : SR8	**Time : 2019/06/11 - 13:21**
Limit : ISN_Voltage_A_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8_42815 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1, ISN 10M**

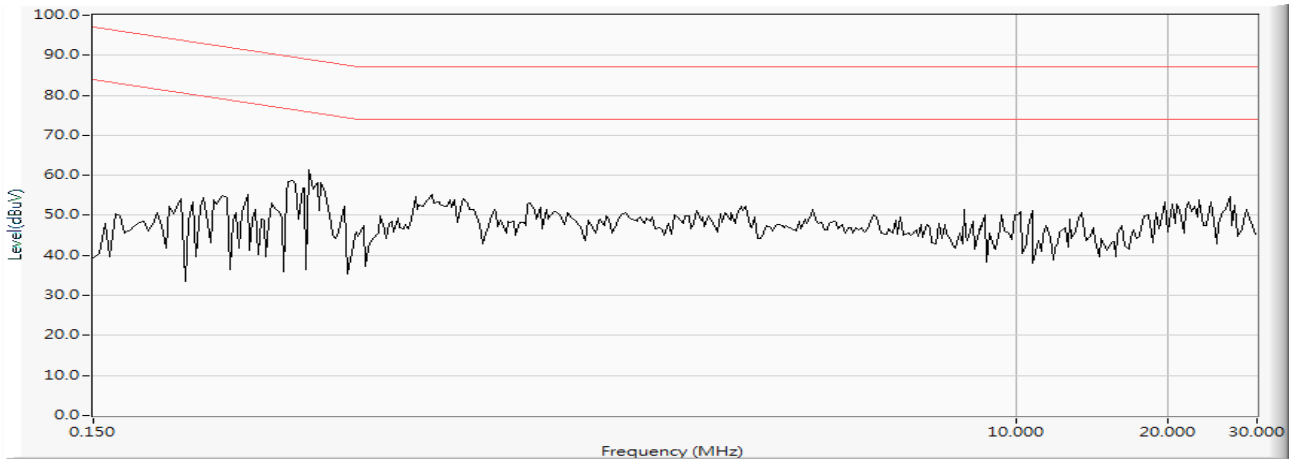


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.408	10.043	24.800	34.844	-41.785	76.629	AVERAGE
2		1.084	9.924	22.100	32.024	-41.976	74.000	AVERAGE
3		1.857	9.906	23.000	32.906	-41.094	74.000	AVERAGE
4		4.923	9.912	27.320	37.232	-36.768	74.000	AVERAGE
5		10.599	10.043	24.620	34.663	-39.337	74.000	AVERAGE
6	*	20.123	10.283	29.920	40.203	-33.797	74.000	AVERAGE

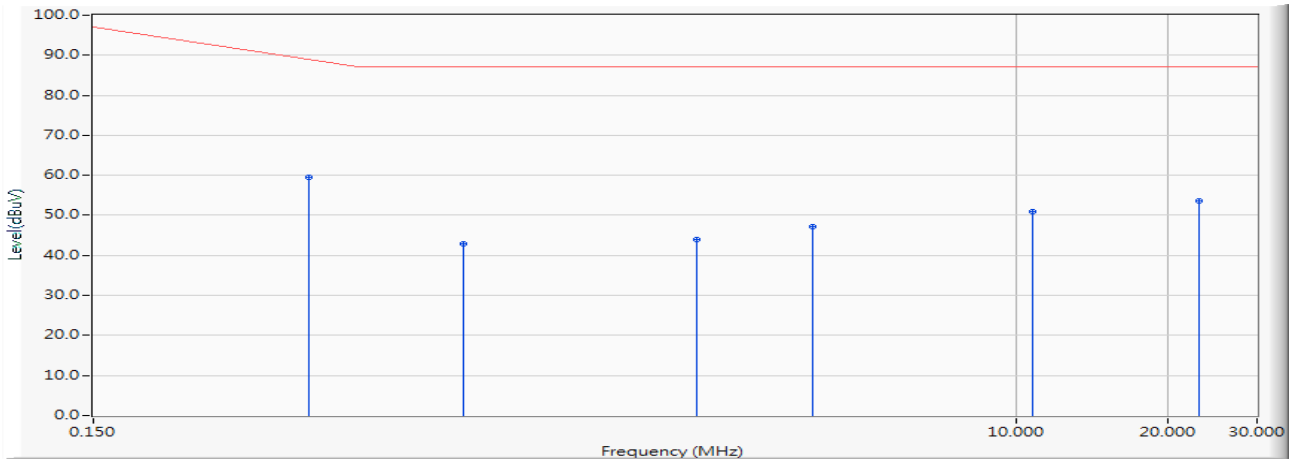
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

Site : SR8	**Time : 2019/06/11 - 13:22**
Limit : ISN_Voltage_A_00M_QP	**Margin : 13**
EUT : Network Camera	**Probe : TESEQ_T8_42815 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1, ISN 100M**



Site : SR8	**Time : 2019/06/11 - 13:22**
Limit : ISN_Voltage_A_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8_42815 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1, ISN 100M**

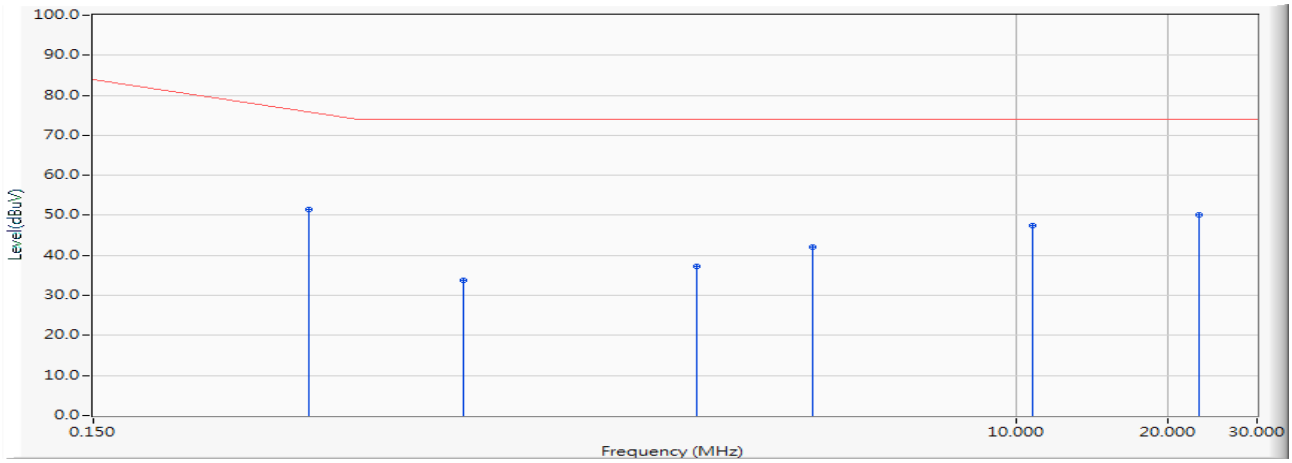


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.400	10.048	49.600	59.648	-30.209	89.857	QUASIPEAK
2		0.810	9.952	32.840	42.792	-44.208	87.000	QUASIPEAK
3		2.341	9.903	34.020	43.923	-43.077	87.000	QUASIPEAK
4		3.955	9.900	37.280	47.180	-39.820	87.000	QUASIPEAK
5		10.795	10.046	40.840	50.886	-36.114	87.000	QUASIPEAK
6		23.068	10.394	43.280	53.674	-33.326	87.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

Site : SR8	**Time : 2019/06/11 - 13:22**
Limit : ISN_Voltage_A_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8_42815 - Line1**
Power : AC 230V/50Hz	**Note : Mode 1, ISN 100M**

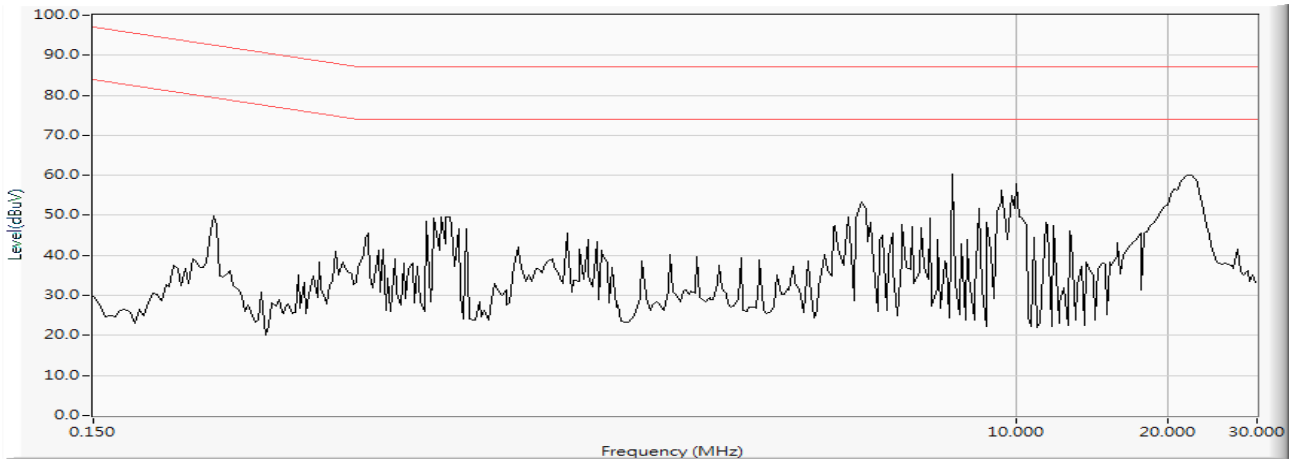


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.400	10.048	41.460	51.508	-25.349	76.857	AVERAGE
2		0.810	9.952	23.720	33.672	-40.328	74.000	AVERAGE
3		2.341	9.903	27.320	37.223	-36.777	74.000	AVERAGE
4		3.955	9.900	32.200	42.100	-31.900	74.000	AVERAGE
5		10.795	10.046	37.320	47.366	-26.634	74.000	AVERAGE
6	*	23.068	10.394	39.780	50.174	-23.826	74.000	AVERAGE

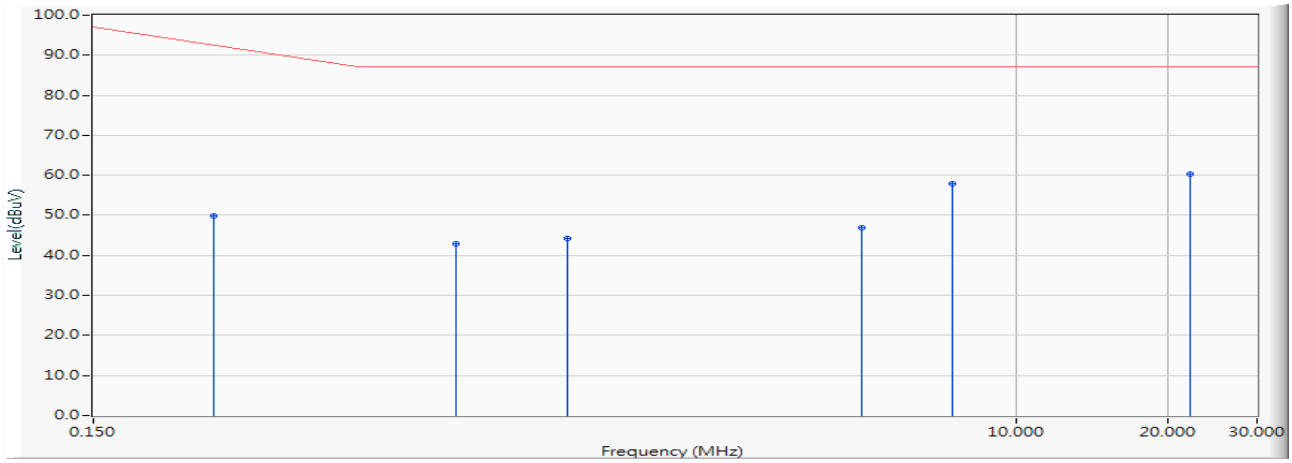
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

Site : SR8	**Time : 2019/06/11 - 11:27**
Limit : ISN_Voltage_A_00M_QP	**Margin : 13**
EUT : Network Camera	**Probe : TESEQ_T8_42815 - Line1**
Power : PoE	**Note : Mode 2, ISN 10M**



Site : SR8	**Time : 2019/06/11 - 11:27**
Limit : ISN_Voltage_A_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8_42815 - Line1**
Power : PoE	**Note : Mode 2, ISN 10M**

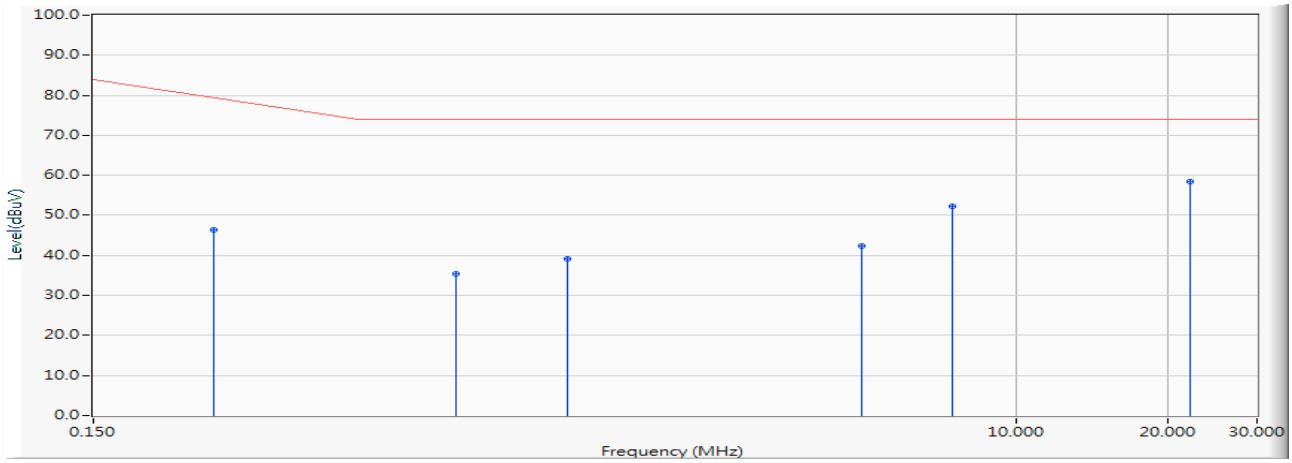


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.259	10.183	39.560	49.744	-44.142	93.886	QUASIPEAK
2		0.780	9.952	32.920	42.872	-44.128	87.000	QUASIPEAK
3		1.298	9.923	34.380	44.303	-42.697	87.000	QUASIPEAK
4		4.946	9.912	37.000	46.912	-40.088	87.000	QUASIPEAK
5		7.500	9.970	47.880	57.850	-29.150	87.000	QUASIPEAK
6	*	22.064	10.351	49.960	60.311	-26.689	87.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

Site : SR8	**Time : 2019/06/11 - 11:27**
Limit : ISN_Voltage_A_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8_42815 - Line1**
Power : PoE	**Note : Mode 2, ISN 10M**

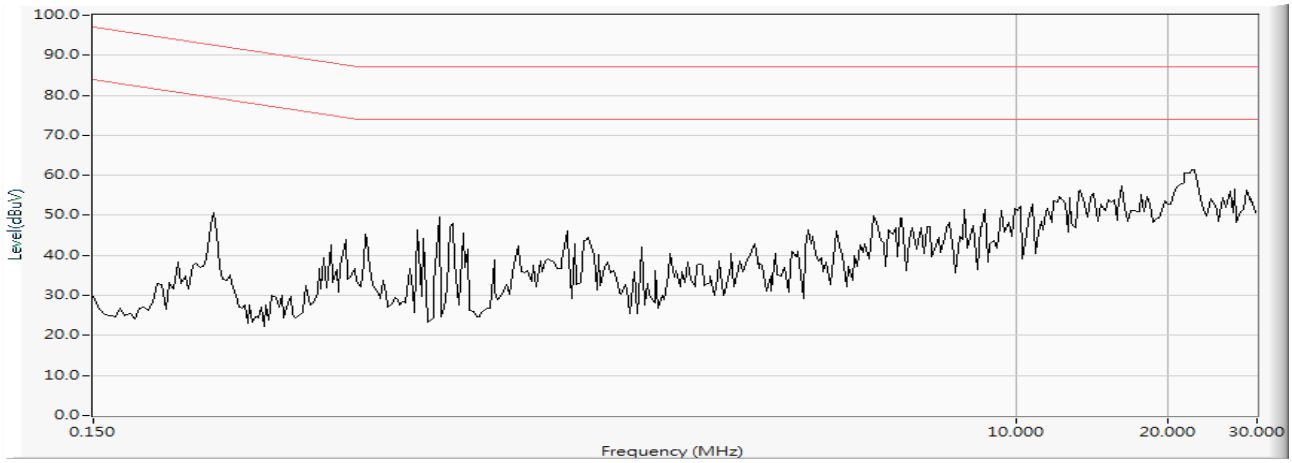


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.259	10.183	36.180	46.364	-34.522	80.886	AVERAGE
2		0.780	9.952	25.480	35.432	-38.568	74.000	AVERAGE
3		1.298	9.923	29.340	39.263	-34.737	74.000	AVERAGE
4		4.946	9.912	32.320	42.232	-31.768	74.000	AVERAGE
5		7.500	9.970	42.340	52.310	-21.690	74.000	AVERAGE
6	*	22.064	10.351	48.000	58.351	-15.649	74.000	AVERAGE

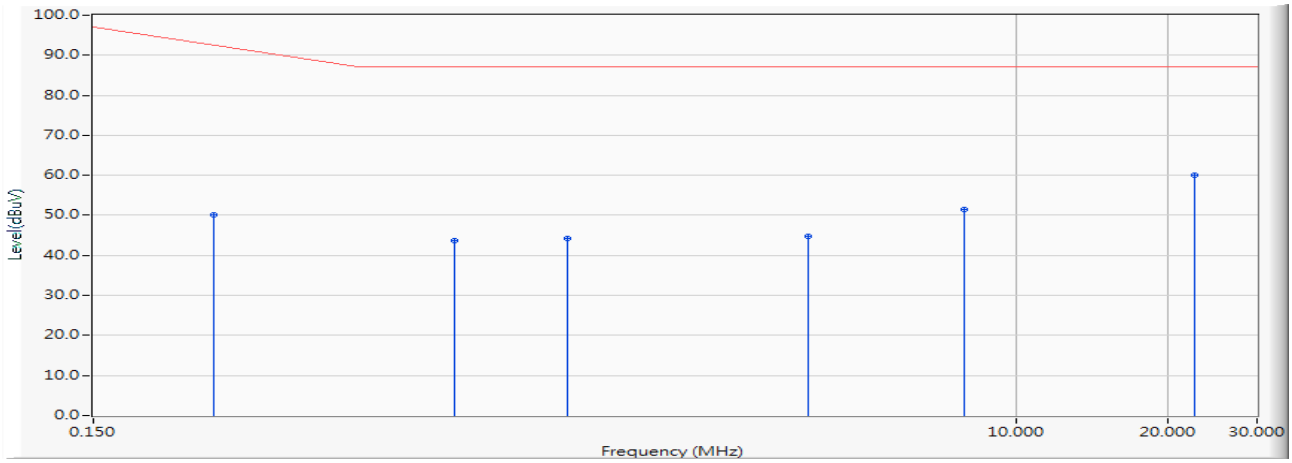
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

Site : SR8	**Time : 2019/06/11 - 11:27**
Limit : ISN_Voltage_A_00M_QP	**Margin : 13**
EUT : Network Camera	**Probe : TESEQ_T8_42815 - Line1**
Power : PoE	**Note : Mode 2, ISN 100M**



Site : SR8	**Time : 2019/06/11 - 11:27**
Limit : ISN_Voltage_A_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8_42815 - Line1**
Power : PoE	**Note : Mode 2, ISN 100M**

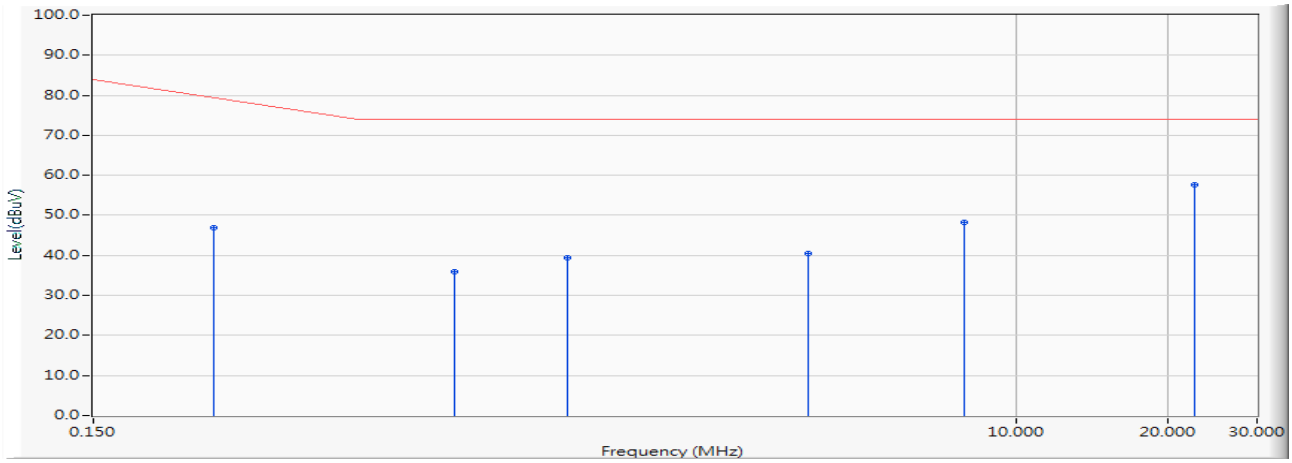


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.259	10.183	39.980	50.164	-43.722	93.886	QUASIPEAK
2		0.779	9.951	33.740	43.691	-43.309	87.000	QUASIPEAK
3		1.298	9.923	34.400	44.323	-42.677	87.000	QUASIPEAK
4		3.892	9.898	34.980	44.878	-42.122	87.000	QUASIPEAK
5		7.923	9.980	41.380	51.360	-35.640	87.000	QUASIPEAK
6	*	22.583	10.368	49.580	59.948	-27.052	87.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

Site : SR8	**Time : 2019/06/11 - 11:27**
Limit : ISN_Voltage_A_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8_42815 - Line1**
Power : PoE	**Note : Mode 2, ISN 100M**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.259	10.183	36.860	47.044	-33.842	80.886	AVERAGE
2		0.779	9.951	26.000	35.951	-38.049	74.000	AVERAGE
3		1.298	9.923	29.500	39.423	-34.577	74.000	AVERAGE
4		3.892	9.898	30.560	40.458	-33.542	74.000	AVERAGE
5		7.923	9.980	38.300	48.280	-25.720	74.000	AVERAGE
6	*	22.583	10.368	47.180	57.548	-16.452	74.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

4.7. Test Photograph

Test Mode : Mode 1: MD9560-DH_DC12V

Description : Front View of ISN Test

Test Mode : Mode 1: MD9560-DH_DC12V

Description : Back View of ISN Test

Test Mode : Mode 2: MD9560-H_POE

Description : Front View of ISN Test

Test Mode : Mode 2: MD9560-H_POE

Description : Back View of ISN Test

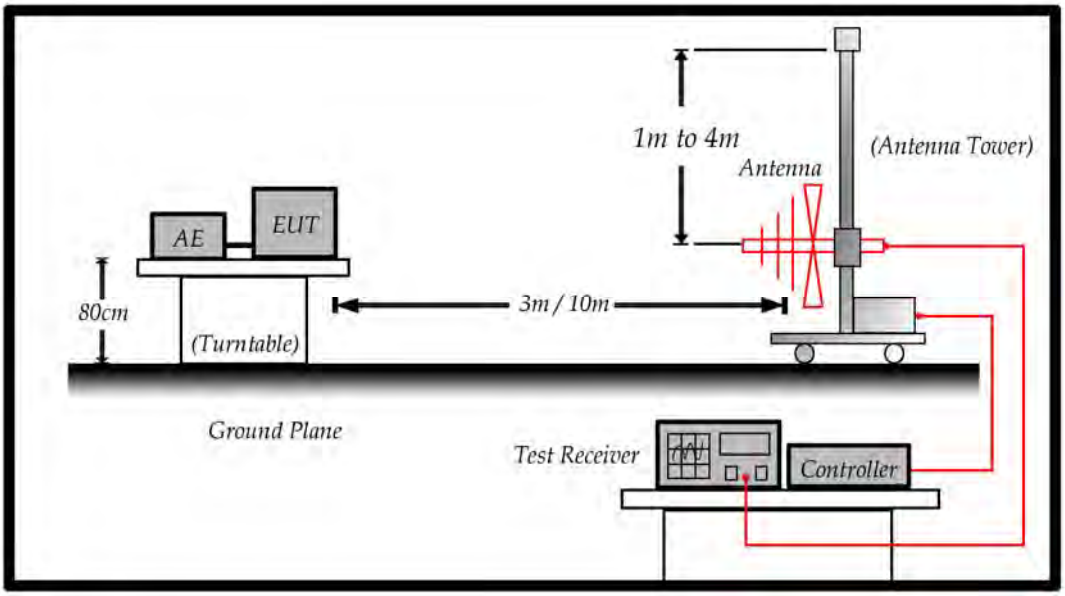
5. Radiated Emission

5.1. Test Specification

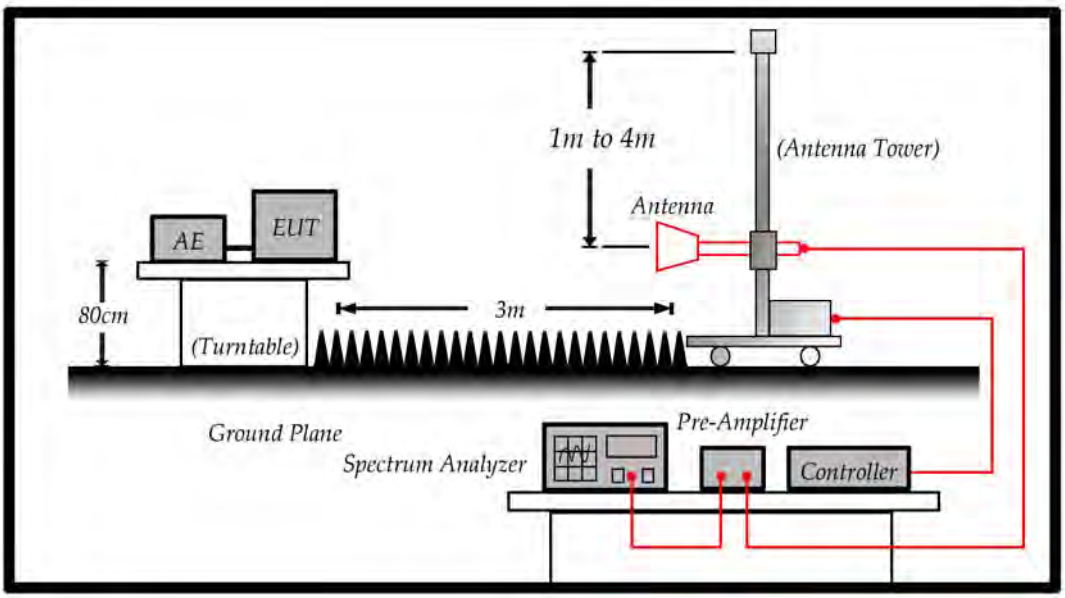
According to EN 50121-4 clause 5 and EN 61000-6-4 Table 1

5.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



5.3. Limit

Limits		
Frequency MHz	Distance (m)	dBuV/m
30 – 230	10	40
230 – 1000	10	47

Limits			
Frequency (GHz)	Distance (m)	Peak (dBuV/m)	Average (dBuV/m)
1 – 3	3	76	56
3 – 6	3	80	60

Remark:

1. The tighter limit shall apply at the edge between two frequency bands.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5^{th} harmonic of the highest frequency or 6 GHz, whichever is lower

5.4. Test Procedure

According to CISPR 16-2-3.

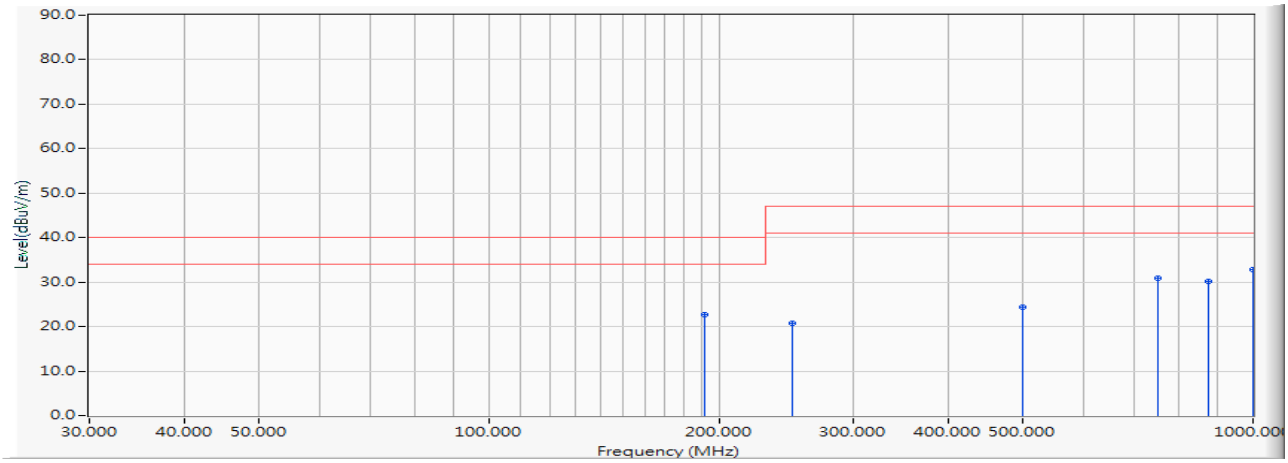
The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 10 meters. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated on radiated measurement.
Radiated emissions were invested over the frequency range from 30MHz to1GHz using a receiver bandwidth of 120kHz. Radiated was performed at an antenna to EUT distance of 10 meters.

5.5. Deviation from Test Standard

No deviation.

5.6. Test Result

Site : SITE7	**Time : 2019/06/10 - 14:43**
Limit : CISPR_A_10M_QP	**Margin : 6**
EUT : Network Camera	**Probe : Site7_VULB9168_10m_1902 - HORIZONTAL**
Power : AC 230V/50Hz	**Note : Mode 1**

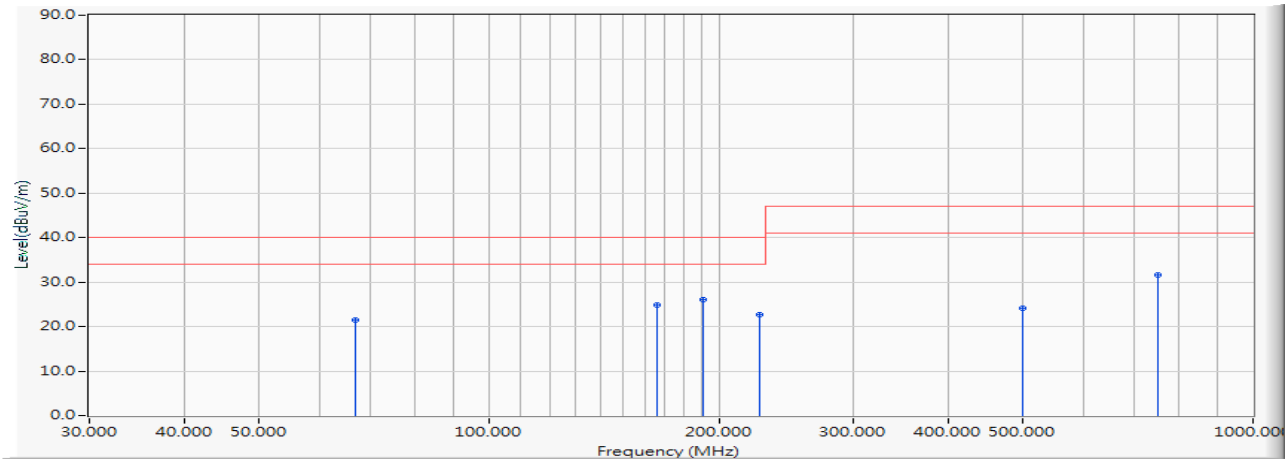


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		191.300	-12.438	35.000	22.561	-17.439	40.000	QUASIPEAK	390.000	54.000
2		250.000	-10.488	31.300	20.812	-26.188	47.000	QUASIPEAK	370.000	139.000
3		500.000	-1.815	26.200	24.385	-22.615	47.000	QUASIPEAK	200.000	36.000
4		750.000	4.566	26.300	30.865	-16.135	47.000	QUASIPEAK	120.000	-84.000
5		875.000	6.141	24.100	30.241	-16.759	47.000	QUASIPEAK	100.000	-48.000
6	*	1000.000	7.830	25.100	32.930	-14.070	47.000	QUASIPEAK	100.000	97.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

Site : SITE7	**Time : 2019/06/10 - 14:43**
Limit : CISPR_A_10M_QP	**Margin : 6**
EUT : Network Camera	**Probe : Site7_VULB9168_10m_1902 - VERTICAL**
Power : AC 230V/50Hz	**Note : Mode 1**

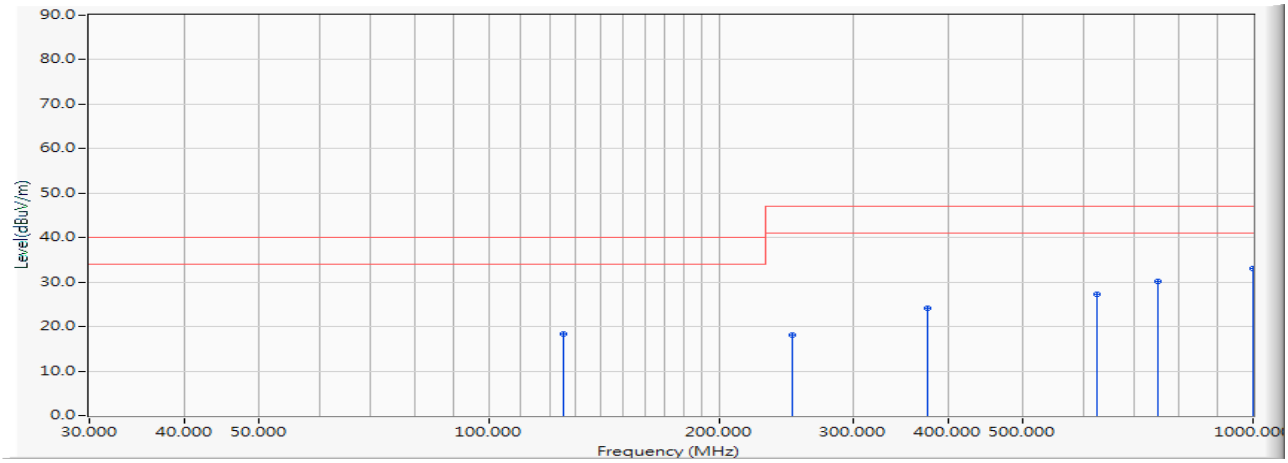


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		67.000	-12.897	34.300	21.403	-18.597	40.000	QUASIPEAK	100.000	-48.000
2		166.200	-10.362	35.100	24.738	-15.262	40.000	QUASIPEAK	100.000	-133.000
3	*	191.000	-12.429	38.600	26.171	-13.829	40.000	QUASIPEAK	100.000	51.000
4		226.200	-12.206	34.900	22.693	-17.307	40.000	QUASIPEAK	100.000	-98.000
5		500.000	-1.815	26.000	24.185	-22.815	47.000	QUASIPEAK	300.000	81.000
6		750.000	4.566	27.000	31.565	-15.435	47.000	QUASIPEAK	235.000	-49.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

Site : SITE7	**Time : 2019/06/10 - 10:22**
Limit : CISPR_A_10M_QP	**Margin : 6**
EUT : Network Camera	**Probe : Site7_VULB9168_10m_1902 - HORIZONTAL**
Power : POE	**Note : Mode 2**

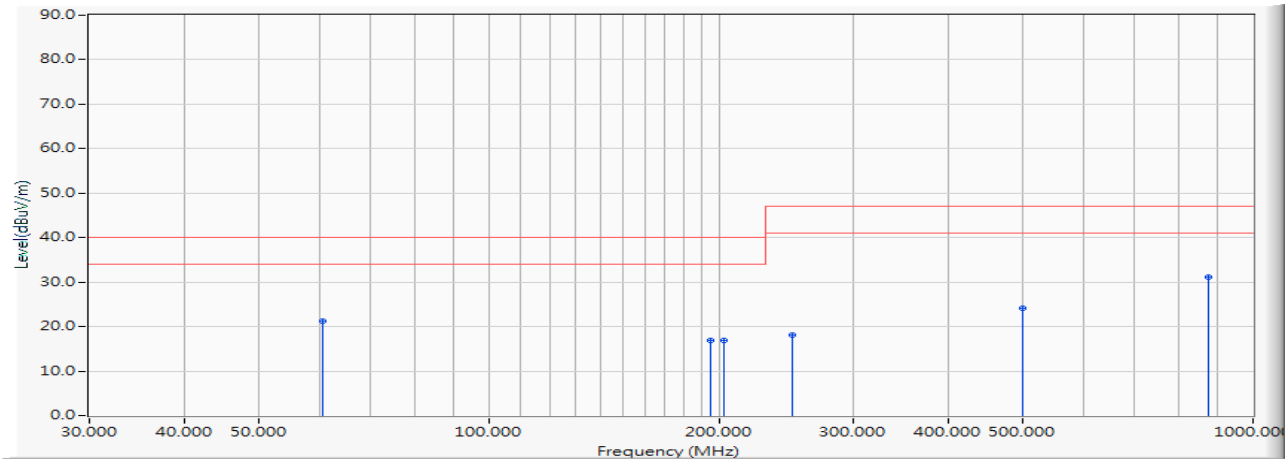


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		125.000	-12.365	30.600	18.235	-21.765	40.000	QUASIPEAK	390.000	51.000
2		250.000	-10.488	28.600	18.112	-28.888	47.000	QUASIPEAK	370.000	44.000
3		375.000	-5.843	30.000	24.157	-22.843	47.000	QUASIPEAK	300.000	-47.000
4		625.000	1.518	25.800	27.318	-19.682	47.000	QUASIPEAK	140.000	33.000
5		750.000	4.566	25.600	30.165	-16.835	47.000	QUASIPEAK	100.000	94.000
6	*	1000.000	7.830	25.300	33.130	-13.870	47.000	QUASIPEAK	100.000	64.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

Site : SITE7	**Time : 2019/06/10 - 10:22**
Limit : CISPR_A_10M_QP	**Margin : 6**
EUT : Network Camera	**Probe : Site7_VULB9168_10m_1902 - VERTICAL**
Power : POE	**Note : Mode 2**

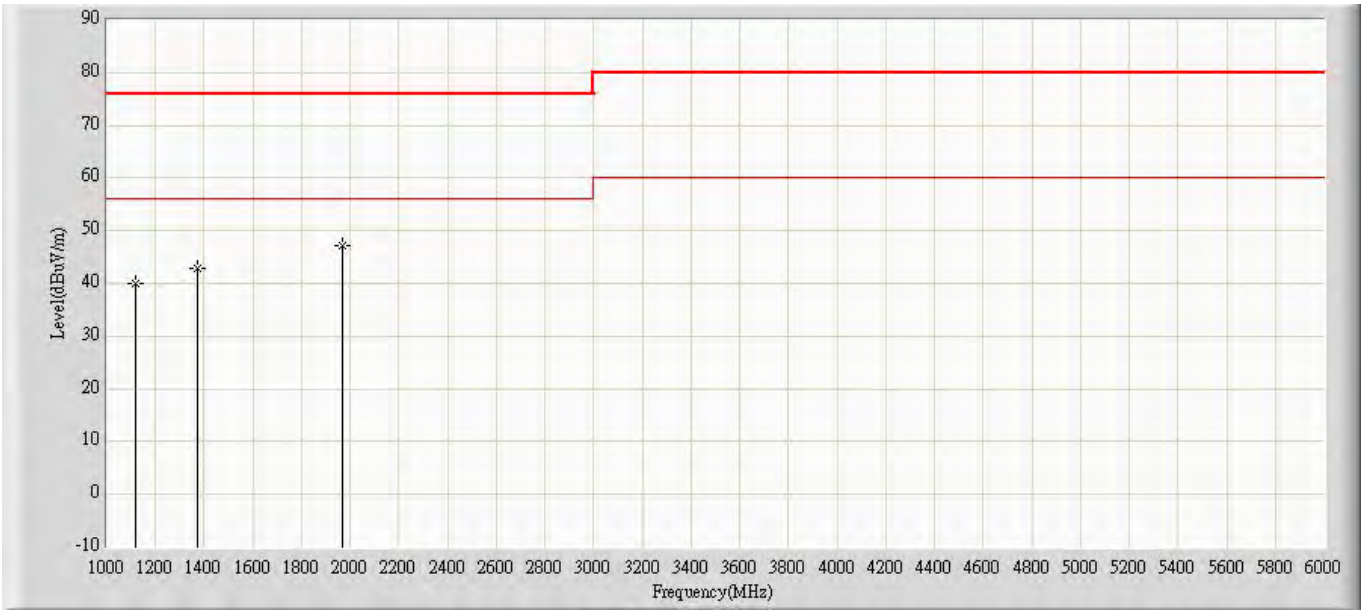


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		60.700	-11.663	33.000	21.337	-18.663	40.000	QUASIPEAK	100.000	41.000
2		195.000	-12.573	29.500	16.927	-23.073	40.000	QUASIPEAK	100.000	-48.000
3		203.000	-12.783	29.600	16.816	-23.184	40.000	QUASIPEAK	100.000	-47.000
4		250.000	-10.488	28.600	18.112	-28.888	47.000	QUASIPEAK	100.000	-47.000
5		500.000	-1.815	26.000	24.185	-22.815	47.000	QUASIPEAK	315.000	34.000
6	*	875.000	6.141	25.100	31.241	-15.759	47.000	QUASIPEAK	160.000	34.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor(Probe+Cable-Amp).

Site: CB7	Time: 2019/06/13 - 13:48
Limit: CISPR_A(Above_1G)	Margin: 0
Probe: CB7_Horn_3117_1808	Polarity: Horizontal
EUT: Network Camera	Power: AC 230V/50Hz
Note: Mode 1	

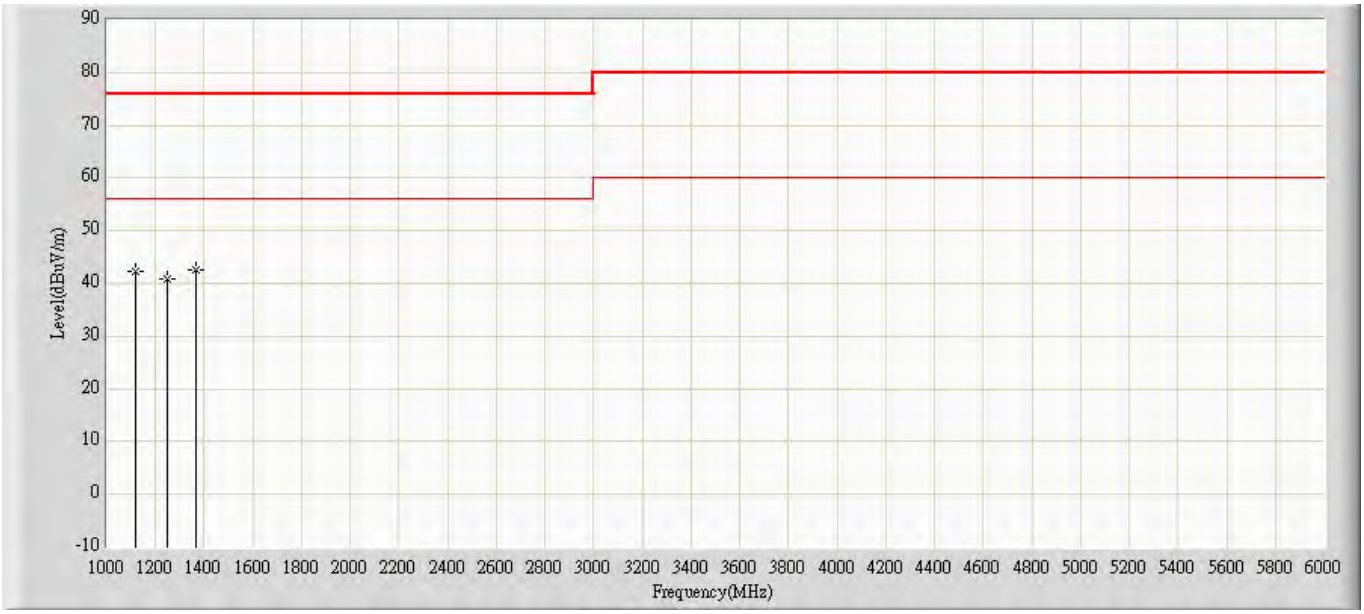


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Ant Pos (cm)	Table Pos (deg)	Type
1			1117.000	40.005	54.710	-35.995	76.000	-14.705	100	122	PK
2			1370.000	42.825	56.720	-33.175	76.000	-13.895	100	37	PK
3		*	1970.000	47.196	57.140	-28.804	76.000	-9.945	100	165	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Site: CB7	Time: 2019/06/13 - 13:49
Limit: CISPR_A(Above_1G)	Margin: 0
Probe: CB7_Horn_3117_1808	Polarity: Vertical
EUT: Network Camera	Power: AC 230V/50Hz
Note: Mode 1	

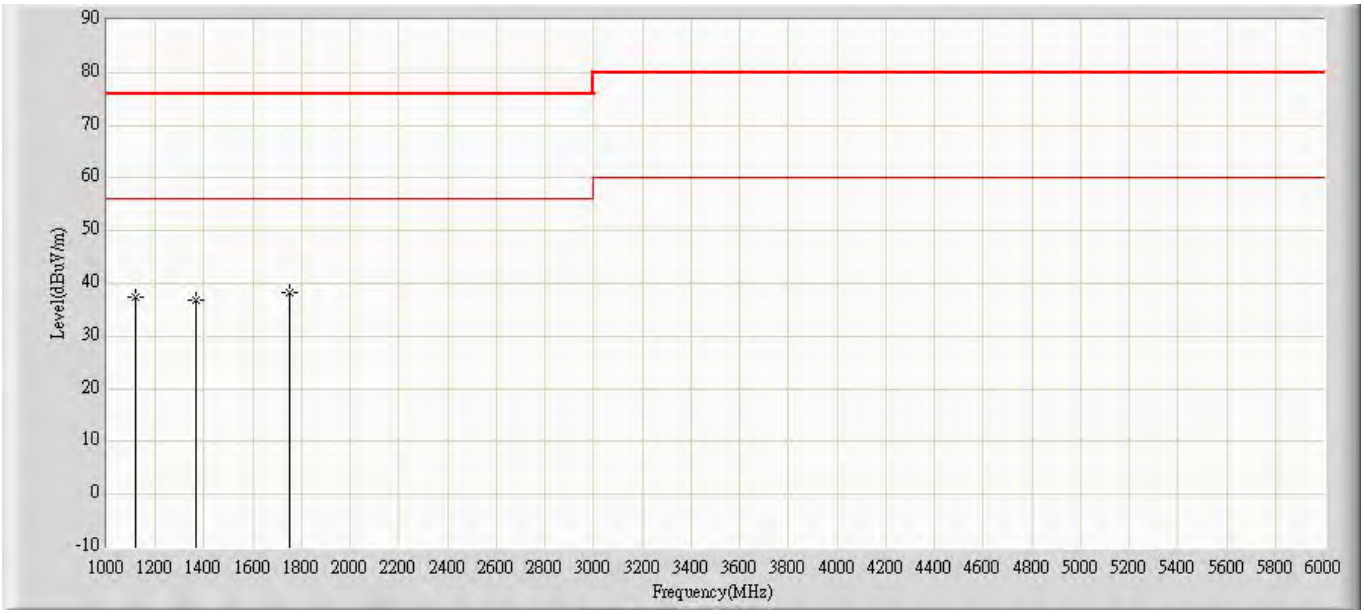


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Ant Pos (cm)	Table Pos (deg)	Type
1			1117.000	42.275	56.980	-33.725	76.000	-14.705	100	132	PK
2			1248.000	40.772	54.940	-35.228	76.000	-14.168	100	112	PK
3		*	1368.000	42.476	56.360	-33.524	76.000	-13.884	100	181	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Site: CB7	Time: 2019/06/13 - 13:51
Limit: CISPR_A(Above_1G)	Margin: 0
Probe: CB7_Horn_3117_1808	Polarity: Horizontal
EUT: Network Camera	Power:POE
Note: Mode 2	

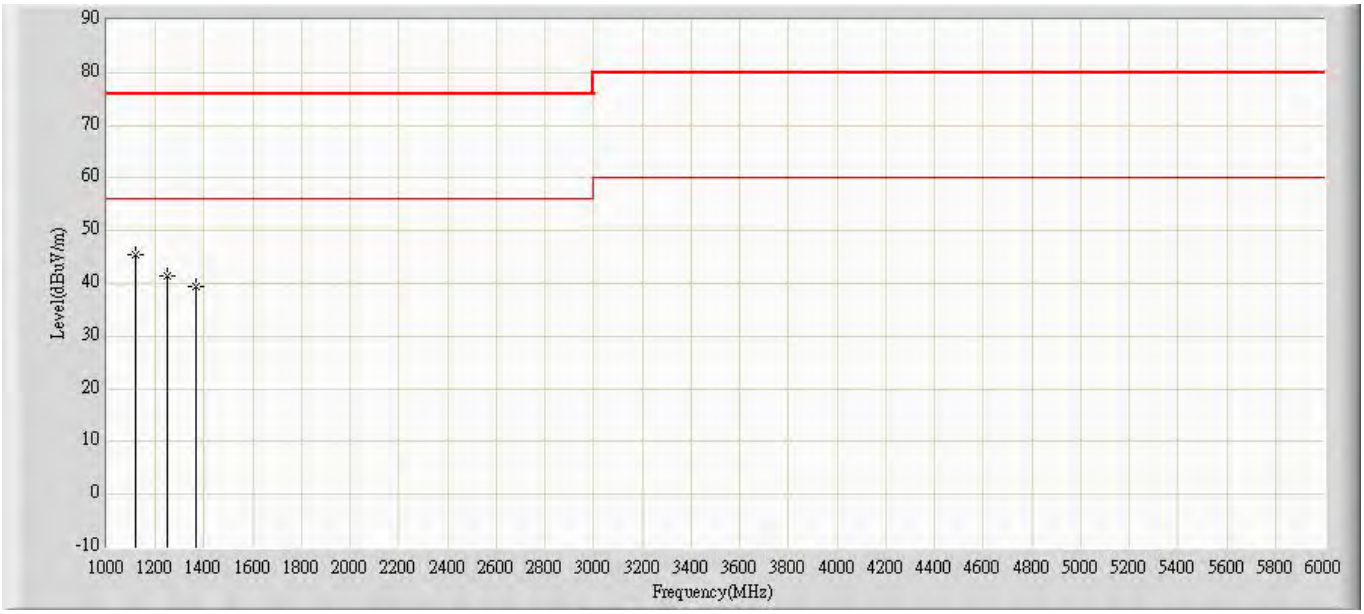


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Ant Pos (cm)	Table Pos (deg)	Type
1			1120.000	37.525	52.190	-38.475	76.000	-14.664	100	134	PK
2			1368.000	36.696	50.580	-39.304	76.000	-13.884	100	46	PK
3		*	1753.000	38.192	50.320	-37.808	76.000	-12.127	100	174	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Site: CB7	Time: 2019/06/13 - 13:52
Limit: CISPR_A(Above_1G)	Margin: 0
Probe: CB7_Horn_3117_1808	Polarity: Vertical
EUT: Network Camera	Power: AC POE
Note: Mode 2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Ant Pos (cm)	Table Pos (deg)	Type
1		*	1120.000	45.405	60.070	-30.595	76.000	-14.664	100	124	PK
2			1248.000	41.392	55.560	-34.608	76.000	-14.168	100	197	PK
3			1368.000	39.306	53.190	-36.694	76.000	-13.884	100	117	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

5.7. Test Photograph

Test Mode : Mode 1: MD9560-DH_DC12V

Description : Front View of Radiated Test

Test Mode : Mode 1: MD9560-DH_DC12V

Description : Back View of Radiated Test

Test Mode : Mode 1: MD9560-DH_DC12V

Description : Front View of High Frequency Radiated Test

Test Mode : Mode 2: MD9560-H_POE

Description : Front View of Radiated Test

Test Mode : Mode 2: MD9560-H_POE

Description : Back View of Radiated Test

Test Mode : Mode 2: MD9560-H_POE

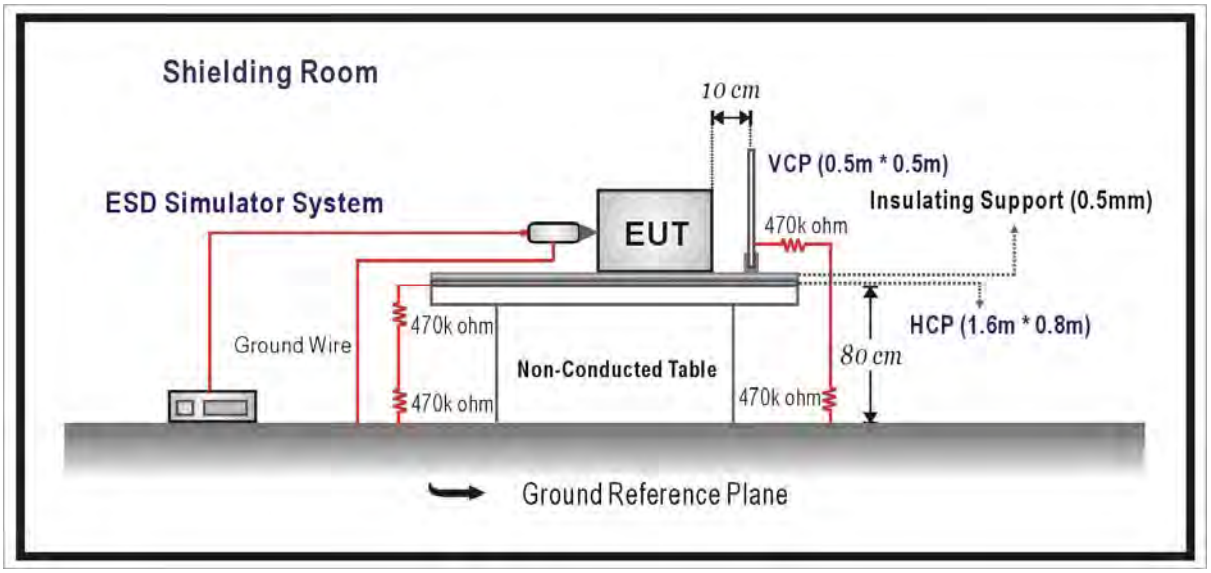
Description : Front View of High Frequency Radiated Test

6. Electrostatic Discharge

6.1. Test Specification

According to EN 50121-4 clause 6.

6.2. Test Setup



6.3. Limit

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Enclosure Port				
	Electrostatic Discharge	kV(Charge Voltage)	±8 Air Discharge ±6 Contact Discharge	B

6.4. Test Procedure

According to EN 61000-4-2.

Direct application of discharges to the EUT:

Contact discharge was applied only to conductive surfaces of the EUT.

Air discharges were applied only to non-conductive surfaces of the EUT.

During the test, it was performed with single discharges. For the single discharge time between successive single discharges will be keep longer 1 second. It was at least ten single discharges with positive and negative at the same selected point.

The selected point, which was performed with electrostatic discharge, was marked on the red label of the EUT.

Indirect application of discharges to the EUT:

Vertical Coupling Plane (VCP):

The coupling plane, of dimensions 0.5m x 0.5m, is placed parallel to, and positioned at a distance 0.1m from, the EUT, with the Discharge Electrode touching the coupling plane.

The four faces of the EUT will be performed with electrostatic discharge. It was at least ten single discharges with positive and negative at the same selected point.

Horizontal Coupling Plane (HCP):

The coupling plane is placed under to the EUT. The generator shall be positioned vertically at a distance of 0.1m from the EUT, with the Discharge Electrode touching the coupling plane.

The four faces of the EUT will be performed with electrostatic discharge. It was at least ten single discharges with positive and negative at the same selected point.

6.5. Deviation from Test Standard

No deviation..

6.6. Test Result

Product	Network Camera		
Test Item	Electrostatic Discharge		
Test Mode	Mode 1: MD9560-DH_DC12V		
Date of Test	2019/06/20	Test Site	No.7 Shielded Room

Item	Amount of Discharge	Voltage	Required Criteria	Complied To Criteria (A,B,C)	Results
Air Discharge	10	+8kV	B	B	Pass
	10	-8kV	B	B	Pass
Contact Discharge	25	+6kV	B	B	Pass
	25	-6kV	B	B	Pass
Indirect Discharge (HCP)	25	+6kV	B	A	Pass
	25	-6kV	B	A	Pass
Indirect Discharge (VCP)	25	+6kV	B	A	Pass
	25	-6kV	B	A	Pass

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test

☒ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at ____ kV.

☒ No false alarms or other malfunctions were observed during or after the test.

Remark:

The Contact discharges were applied at least total 200 discharges at a minimum of four test points.

Product	Network Camera		
Test Item	Electrostatic Discharge		
Test Mode	Mode 2: MD9560-H_POE		
Date of Test	2019/06/20	Test Site	No.7 Shielded Room

Item	Amount of Discharge	Voltage	Required Criteria	Complied To Criteria (A,B,C)	Results
Air Discharge	10	+8kV	B	B	Pass
	10	-8kV	B	B	Pass
Contact Discharge	25	+6kV	B	B	Pass
	25	-6kV	B	B	Pass
Indirect Discharge (HCP)	25	+6kV	B	A	Pass
	25	-6kV	B	A	Pass
Indirect Discharge (VCP)	25	+6kV	B	A	Pass
	25	-6kV	B	A	Pass

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

NR: No Requirement

☒ Meet criteria A: Operate as intended during and after the test

☒ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

☐ Additional Information

☐ EUT stopped operation and could / could not be reset by operator at ____ kV.

☒ No false alarms or other malfunctions were observed during or after the test.

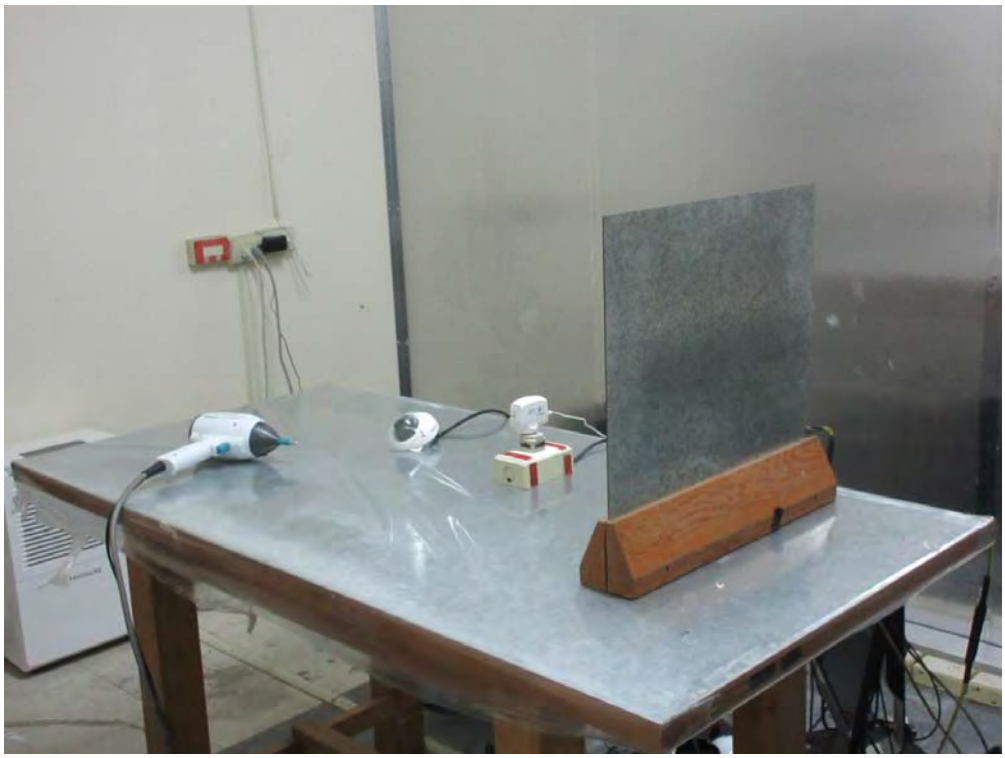
Remark:

The Contact discharges were applied at least total 200 discharges at a minimum of four test points.

6.7. Test Photograph

Test Mode : Mode 1: MD9560-DH_DC12V

Description : ESD Test Setup



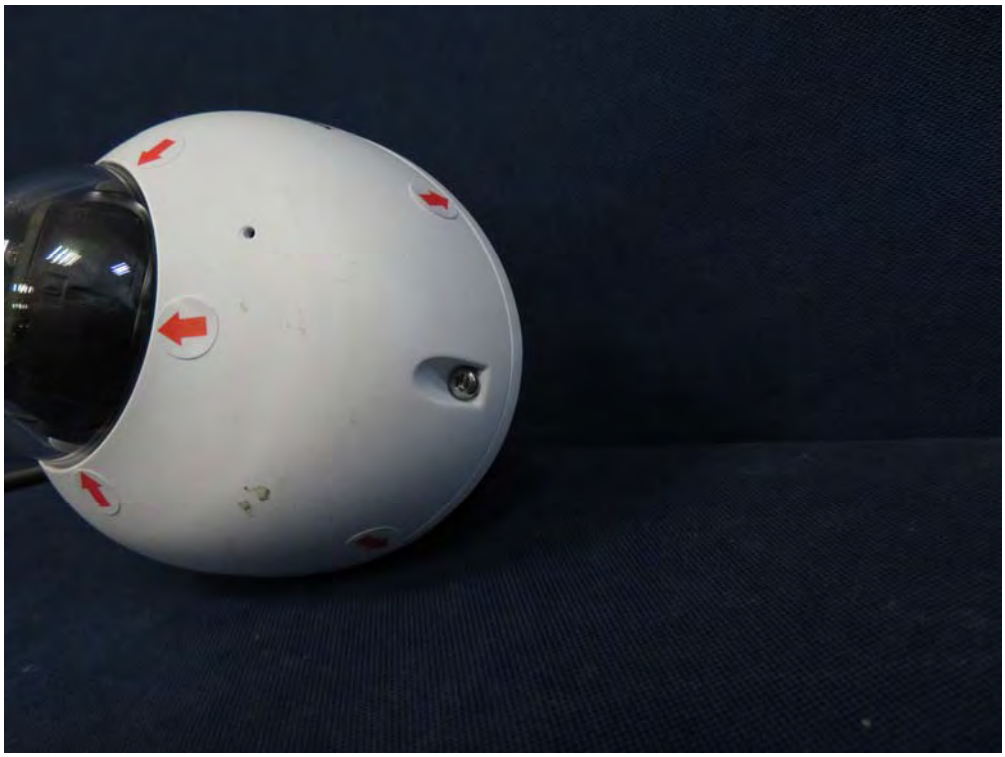
Test Mode : Mode 2: MD9560-H_POE

Description : ESD Test Setup

6.8. EUT to dot photo for ESD test

Test dot: (Air Discharge) (M/N: MD9560-DH)

Test dot: (Air Discharge) (M/N: MD9560-DH)



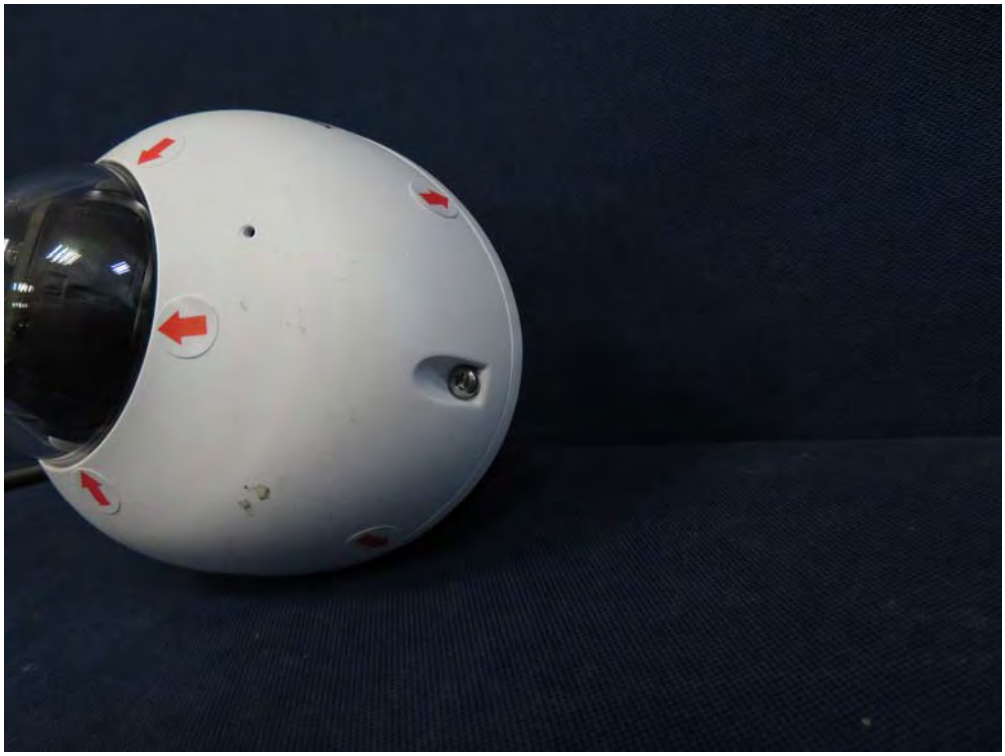
Test dot: (Air Discharge) (M/N: MD9560-DH)

Test dot: (Contact Discharge) (M/N: MD9560-DH)

Test dot: (Contact Discharge) (M/N: MD9560-DH)

Test dot: (Air Discharge) (M/N: MD9560-H)

Test dot: (Air Discharge) (M/N: MD9560-H)



Test dot: (Air Discharge) (M/N: MD9560-H)

Test dot: (Contact Discharge) (M/N: MD9560-H)

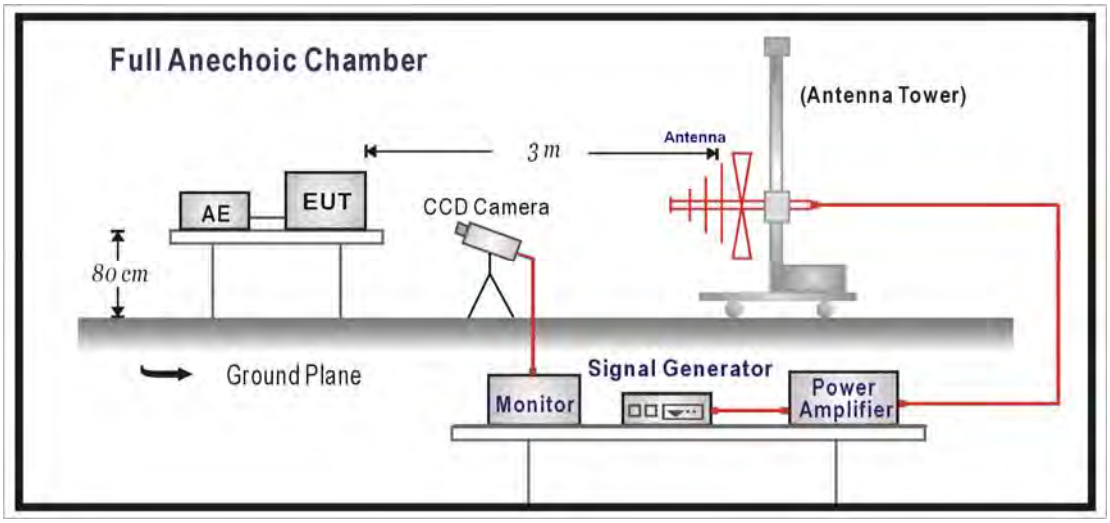
Test dot: (Contact Discharge) (M/N: MD9560-H)

7. Radiated Susceptibility

7.1. Test Specification

According to EN 50121-4 clause 6.

7.2. Test Setup



7.3. Limit

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Enclosure Port				
	Radio-Frequency Electromagnetic Field Amplitude Modulated	MHz V/m(Un-modulated, rms) % AM (1kHz)	80-800 10 80	A
	Radio-Frequency Electromagnetic Field Amplitude Modulated	MHz V/m(Un-modulated, rms) % AM (1kHz)	800-1000 20 80	A
	Radio-Frequency Electromagnetic Field Amplitude Modulated	MHz V/m(Un-modulated, rms) % AM (1kHz)	1400-2000 10 80	A
	Radio-Frequency Electromagnetic Field Amplitude Modulated	MHz V/m(Un-modulated, rms) % AM (1kHz)	2000-2700 5 80	A
	Radio-Frequency Electromagnetic Field Amplitude Modulated	MHz V/m(Un-modulated, rms) % AM (1kHz)	5100-6000 3 80	A

7.4. Test Procedure

According to EN 61000-4-3

The EUT and load, which are placed on a table that is 0.8 meter above ground, are placed with one coincident with the calibration plane such that the distance from antenna to the EUT was 3 meters.
Both horizontal and vertical polarization of the antenna and four sides of the EUT are set on measurement.
In order to judge the EUT performance, a CCD camera is used to monitor EUT screen.

All the scanning conditions are as follows:

	Condition of Test	Remarks
1.	Field Strength	5, 10, 20V/m
2.	Radiated Signal	AM 80% Modulated with 1kHz
3.	Scanning Frequency	80MHz-800MHz for 10V/m 800MHz-1000MHz for 20V/m 1400MHz-2000MHz for 10V/m 2000MHz-2700MHz for 5V/m 5100MHz-6000MHz for 3V/m
4	Dwell Time	3 Seconds
5.	Frequency step size Δf :	1%
6.	The rate of Swept of Frequency	1.5 x 10^{-3} decades/s

7.5. Deviation from Test Standard

No deviation.

7.6. Test Result

Product	Network Camera		
Test Item	Radiated susceptibility		
Test Mode	Mode 1: MD9560-DH_DC12V		
Date of Test	2019/06/18	Test Site	Chamber9

Frequency (MHz)	Position (Angle)	Polarity (H or V)	Field Strength (V/m)	Required Criteria	Complied To Criteria (A,B,C)	Results
80-800	0°	H	10	A	A	PASS
80-800	0°	V	10	A	A	PASS
80-800	90°	H	10	A	A	PASS
80-800	90°	V	10	A	A	PASS
80-800	180°	H	10	A	A	PASS
80-800	180°	V	10	A	A	PASS
80-800	270°	H	10	A	A	PASS
80-800	270°	V	10	A	A	PASS
800-1000	0°	H	20	A	A	PASS
800-1000	0°	V	20	A	A	PASS
800-1000	90°	H	20	A	A	PASS
800-1000	90°	V	20	A	A	PASS
800-1000	180°	H	20	A	A	PASS
800-1000	180°	V	20	A	A	PASS
800-1000	270°	H	20	A	A	PASS
800-1000	270°	V	20	A	A	PASS
1400-2000	0°	H	10	A	A	PASS
1400-2000	0°	V	10	A	A	PASS
1400-2000	90°	H	10	A	A	PASS
1400-2000	90°	V	10	A	A	PASS
1400-2000	180°	H	10	A	A	PASS
1400-2000	180°	V	10	A	A	PASS
1400-2000	270°	H	10	A	A	PASS
1400-2000	270°	V	10	A	A	PASS
2000-2700	0°	H	5	A	A	PASS
2000-2700	0°	V	5	A	A	PASS
2000-2700	90°	H	5	A	A	PASS
2000-2700	90°	V	5	A	A	PASS
2000-2700	180°	H	5	A	A	PASS
2000-2700	180°	V	5	A	A	PASS
2000-2700	270°	H	5	A	A	PASS
2000-2700	270°	V	5	A	A	PASS
5100-6000	0°	H	3	A	A	PASS
5100-6000	0°	V	3	A	A	PASS
5100-6000	90°	H	3	A	A	PASS
5100-6000	90°	V	3	A	A	PASS
5100-6000	180°	H	3	A	A	PASS
5100-6000	180°	V	3	A	A	PASS
5100-6000	270°	H	3	A	A	PASS
5100-6000	270°	V	3	A	A	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☒ Meet criteria A: Operate as intended during and after the test
☐ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
  ☐ There was no observable degradation in performance.
  ☐ EUT stopped operation and could / could not be reset by operator at _____ V/m at frequency _____MHz.

☒ No false alarms or other malfunctions were observed during or after the test.

Product	Network Camera		
Test Item	Radiated susceptibility		
Test Mode	Mode 2: MD9560-H_POE		
Date of Test	2019/06/18	Test Site	Chamber9

Frequency (MHz)	Position (Angle)	Polarity (H or V)	Field Strength (V/m)	Required Criteria	Complied To Criteria (A,B,C)	Results
80-800	0°	H	10	A	A	PASS
80-800	0°	V	10	A	A	PASS
80-800	90°	H	10	A	A	PASS
80-800	90°	V	10	A	A	PASS
80-800	180°	H	10	A	A	PASS
80-800	180°	V	10	A	A	PASS
80-800	270°	H	10	A	A	PASS
80-800	270°	V	10	A	A	PASS
800-1000	0°	H	20	A	A	PASS
800-1000	0°	V	20	A	A	PASS
800-1000	90°	H	20	A	A	PASS
800-1000	90°	V	20	A	A	PASS
800-1000	180°	H	20	A	A	PASS
800-1000	180°	V	20	A	A	PASS
800-1000	270°	H	20	A	A	PASS
800-1000	270°	V	20	A	A	PASS
1400-2000	0°	H	10	A	A	PASS
1400-2000	0°	V	10	A	A	PASS
1400-2000	90°	H	10	A	A	PASS
1400-2000	90°	V	10	A	A	PASS
1400-2000	180°	H	10	A	A	PASS
1400-2000	180°	V	10	A	A	PASS
1400-2000	270°	H	10	A	A	PASS
1400-2000	270°	V	10	A	A	PASS
2000-2700	0°	H	5	A	A	PASS
2000-2700	0°	V	5	A	A	PASS
2000-2700	90°	H	5	A	A	PASS
2000-2700	90°	V	5	A	A	PASS
2000-2700	180°	H	5	A	A	PASS
2000-2700	180°	V	5	A	A	PASS
2000-2700	270°	H	5	A	A	PASS
2000-2700	270°	V	5	A	A	PASS
5100-6000	0°	H	3	A	A	PASS
5100-6000	0°	V	3	A	A	PASS
5100-6000	90°	H	3	A	A	PASS
5100-6000	90°	V	3	A	A	PASS
5100-6000	180°	H	3	A	A	PASS
5100-6000	180°	V	3	A	A	PASS
5100-6000	270°	H	3	A	A	PASS
5100-6000	270°	V	3	A	A	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

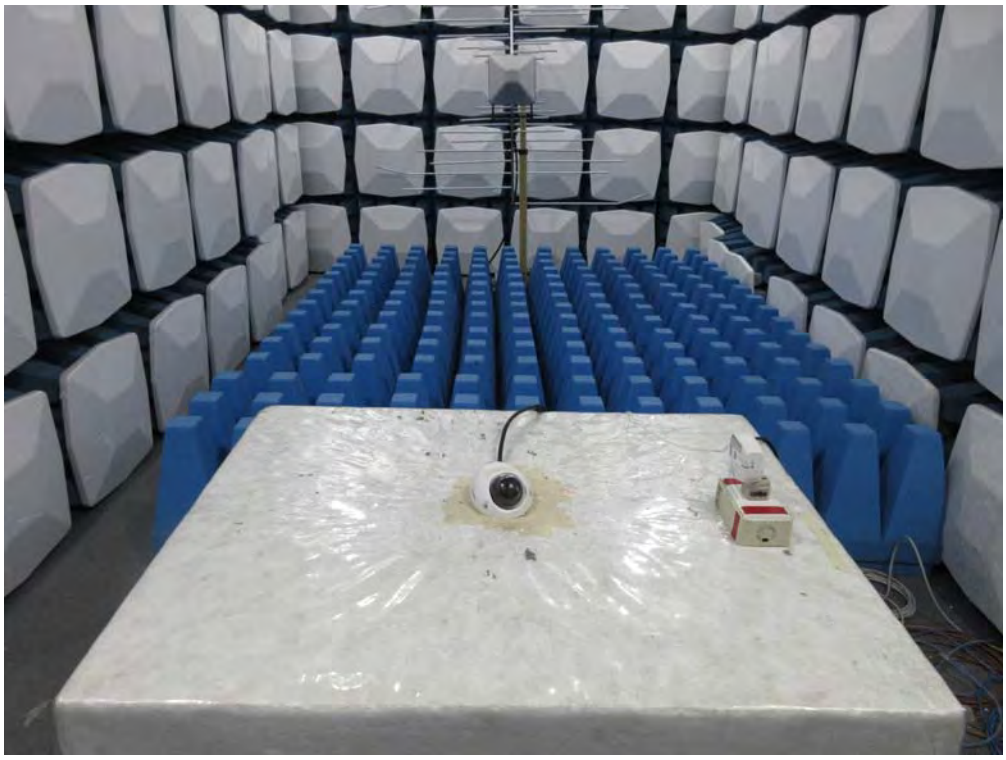
☒ Meet criteria A: Operate as intended during and after the test
☐ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
  ☐ There was no observable degradation in performance.
  ☐ EUT stopped operation and could / could not be reset by operator at _____ V/m at frequency _____MHz.

☒ No false alarms or other malfunctions were observed during or after the test.

7.7. Test Photograph

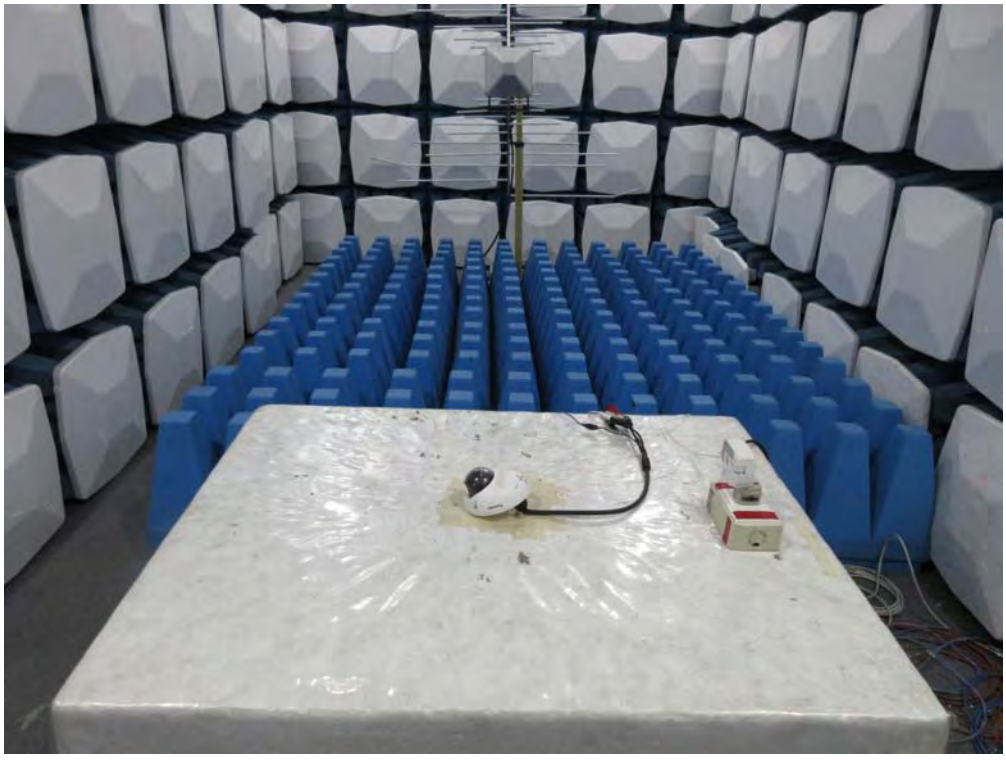
Test Mode : Mode 1: MD9560-DH_DC12V

Description : Radiated Susceptibility Test Setup



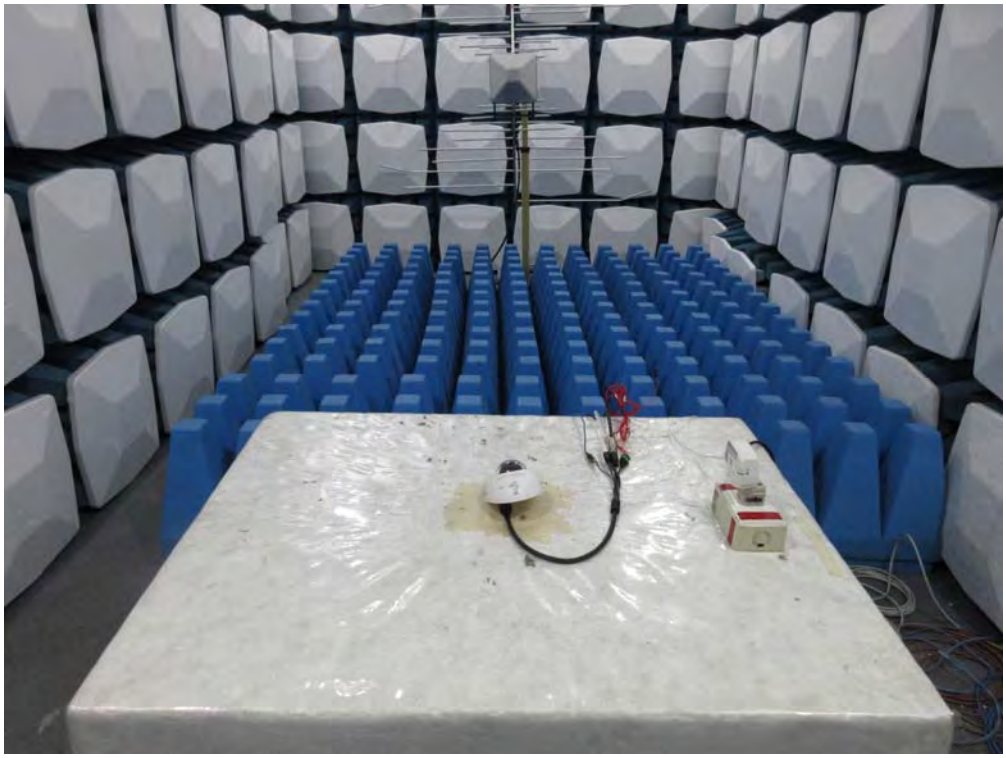
Test Mode : Mode 1: MD9560-DH_DC12V

Description : Radiated Susceptibility Test Setup



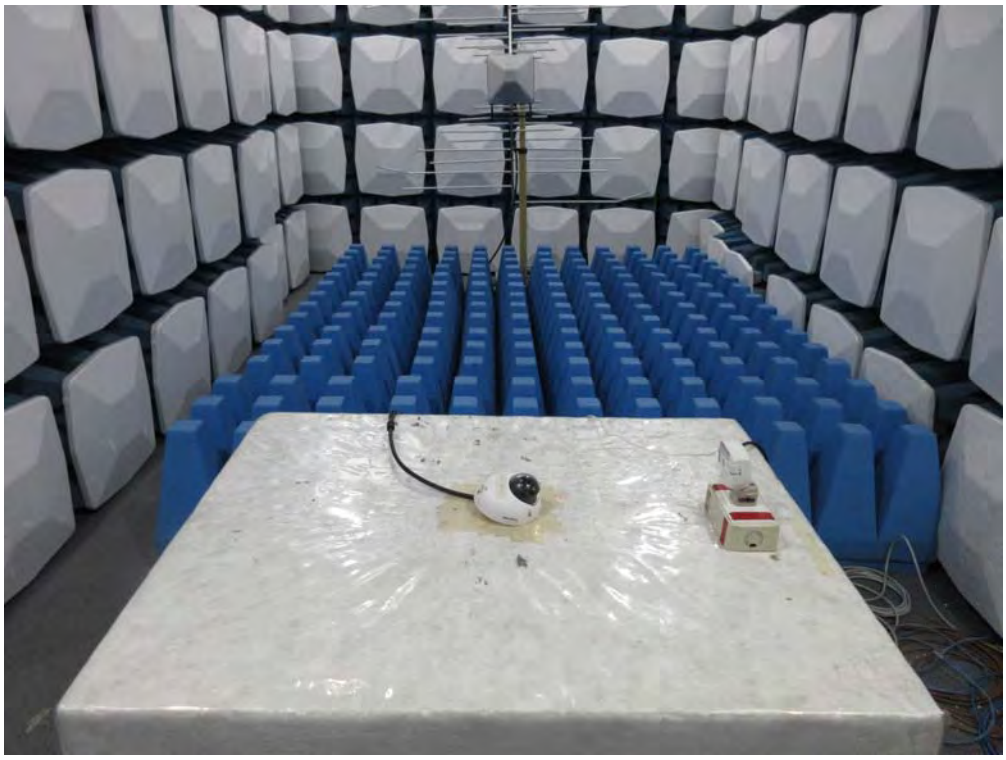
Test Mode : Mode 1: MD9560-DH_DC12V

Description : Radiated Susceptibility Test Setup



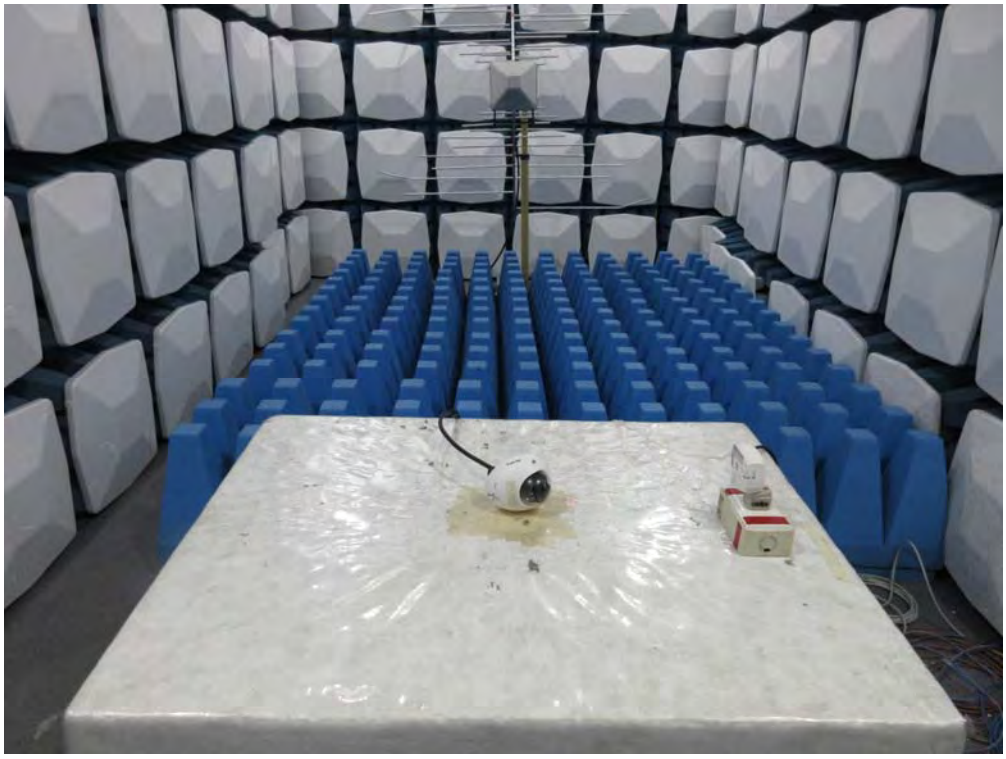
Test Mode : Mode 1: MD9560-DH_DC12V

Description : Radiated Susceptibility Test Setup



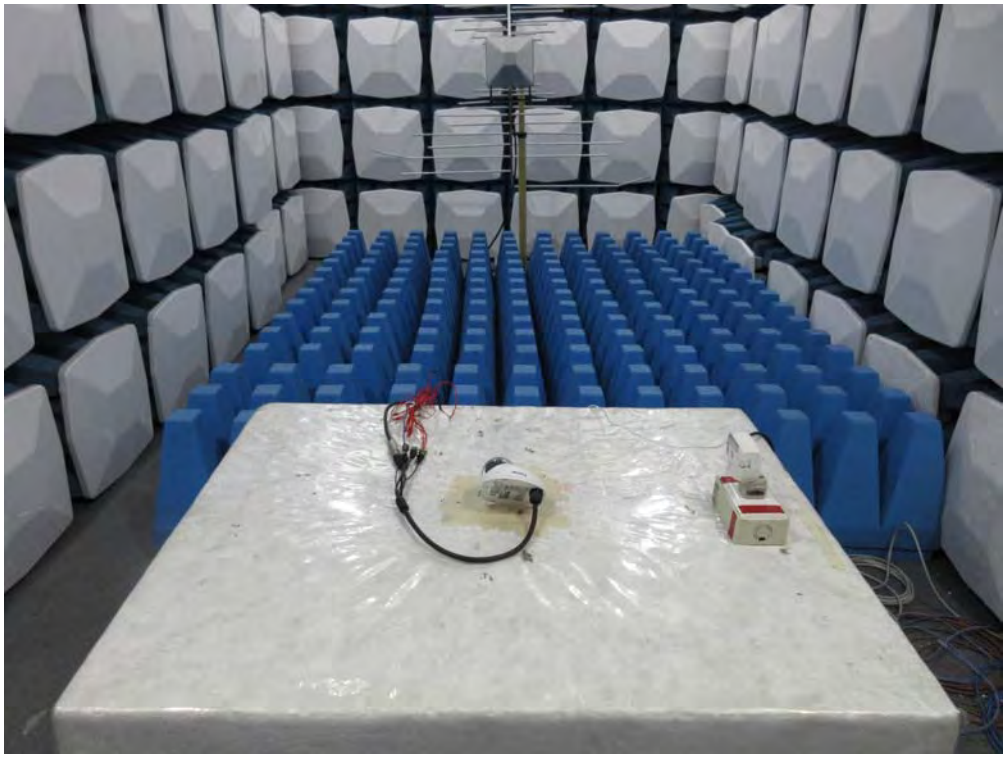
Test Mode : Mode 1: MD9560-DH_DC12V

Description : Radiated Susceptibility Test Setup



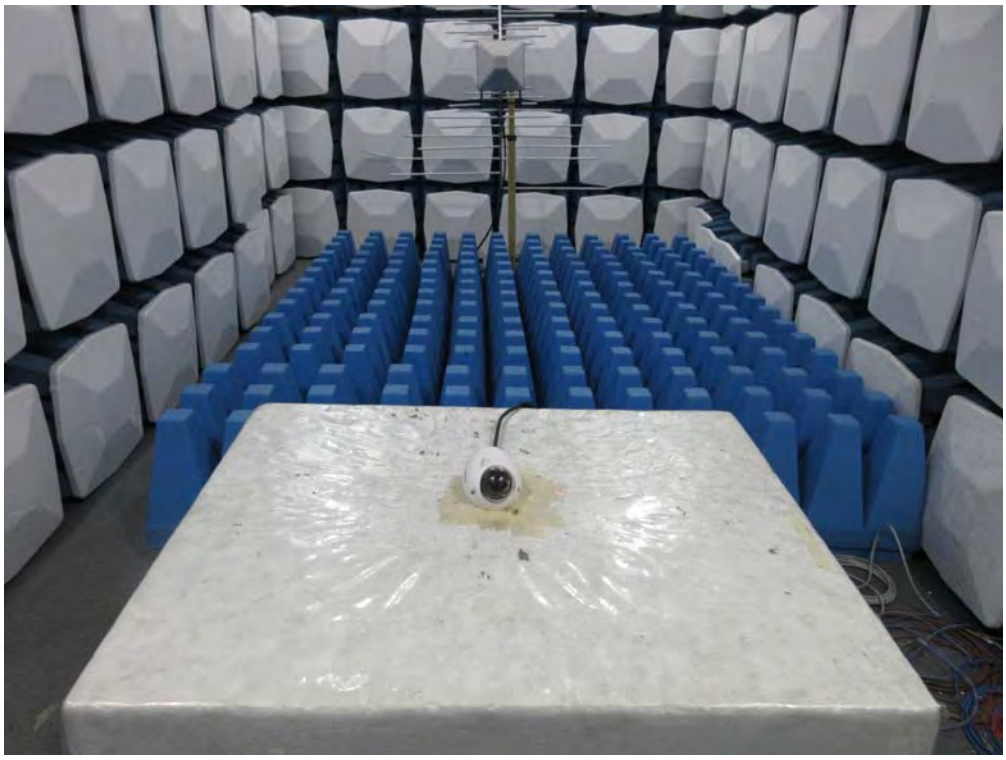
Test Mode : Mode 1: MD9560-DH_DC12V

Description : Radiated Susceptibility Test Setup



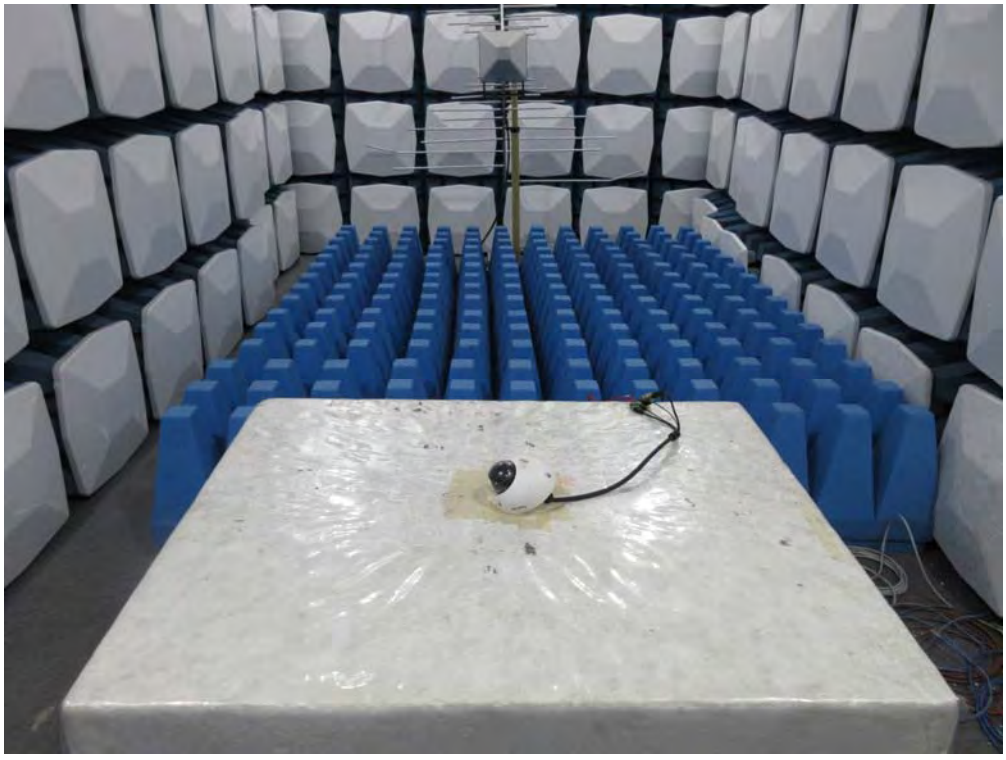
Test Mode : Mode 2: MD9560-H_POE

Description : Radiated Susceptibility Test Setup



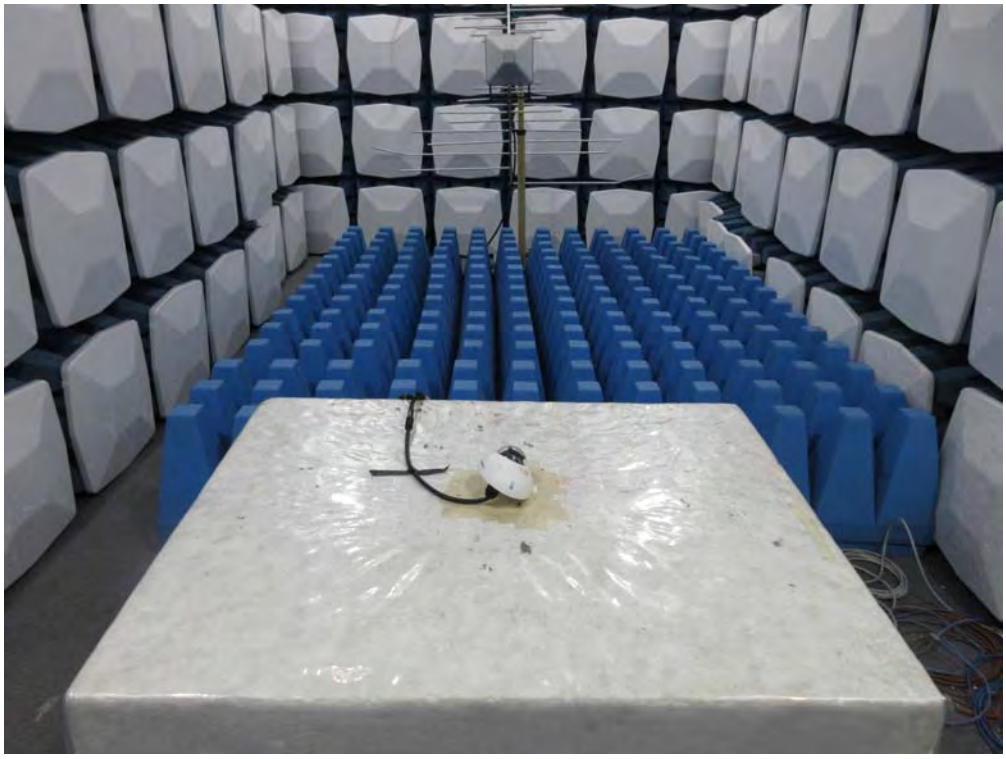
Test Mode : Mode 2: MD9560-H_POE

Description : Radiated Susceptibility Test Setup



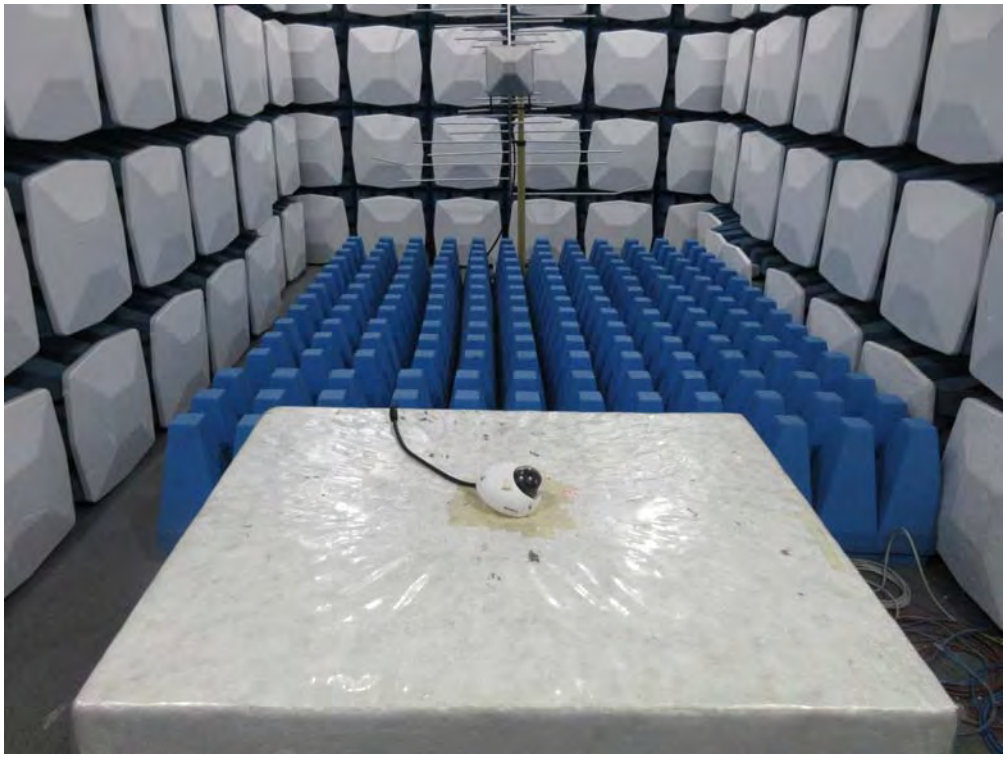
Test Mode : Mode 2: MD9560-H_POE

Description : Radiated Susceptibility Test Setup



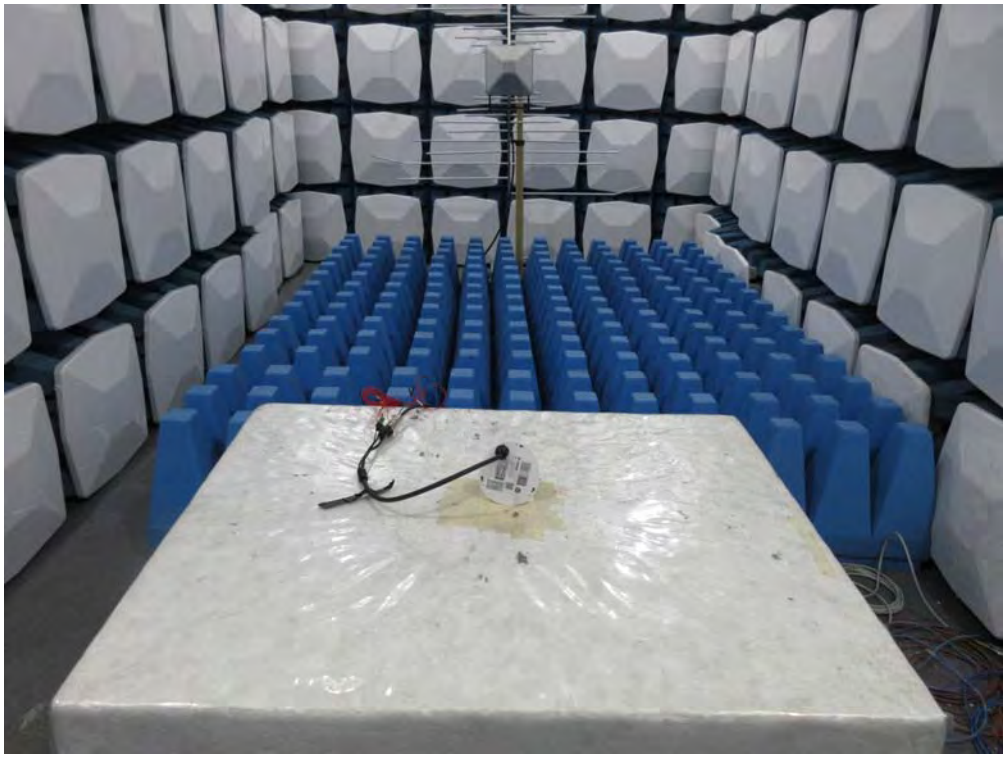
Test Mode : Mode 2: MD9560-H_POE

Description : Radiated Susceptibility Test Setup



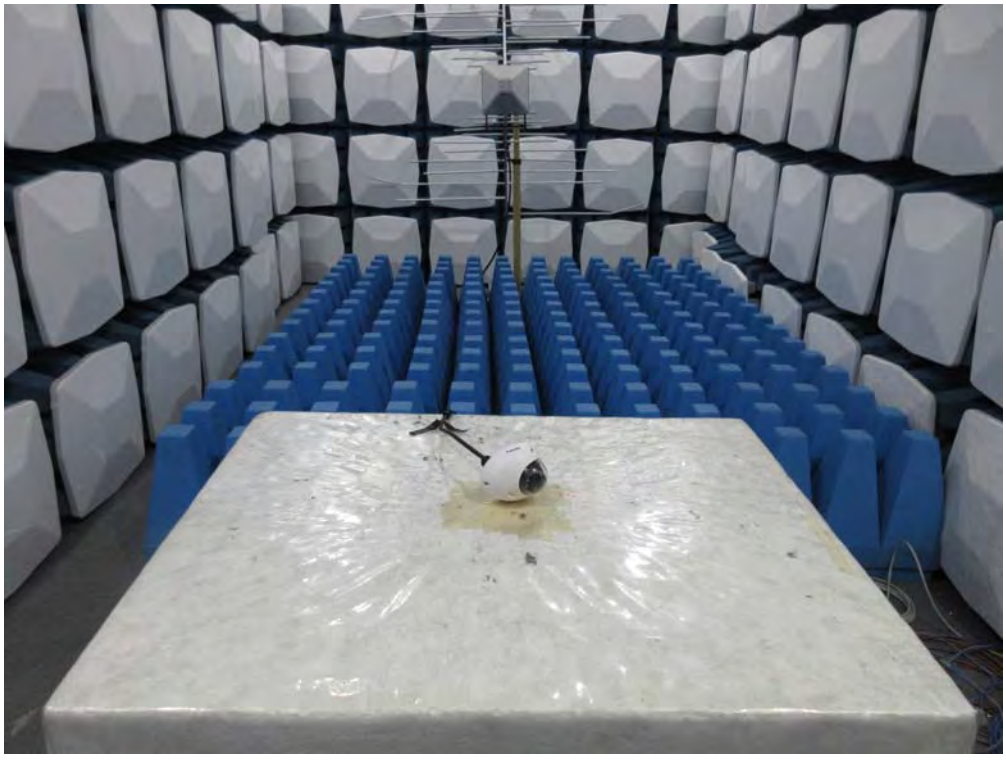
Test Mode : Mode 2: MD9560-H_POE

Description : Radiated Susceptibility Test Setup



Test Mode : Mode 2: MD9560-H_POE

Description : Radiated Susceptibility Test Setup

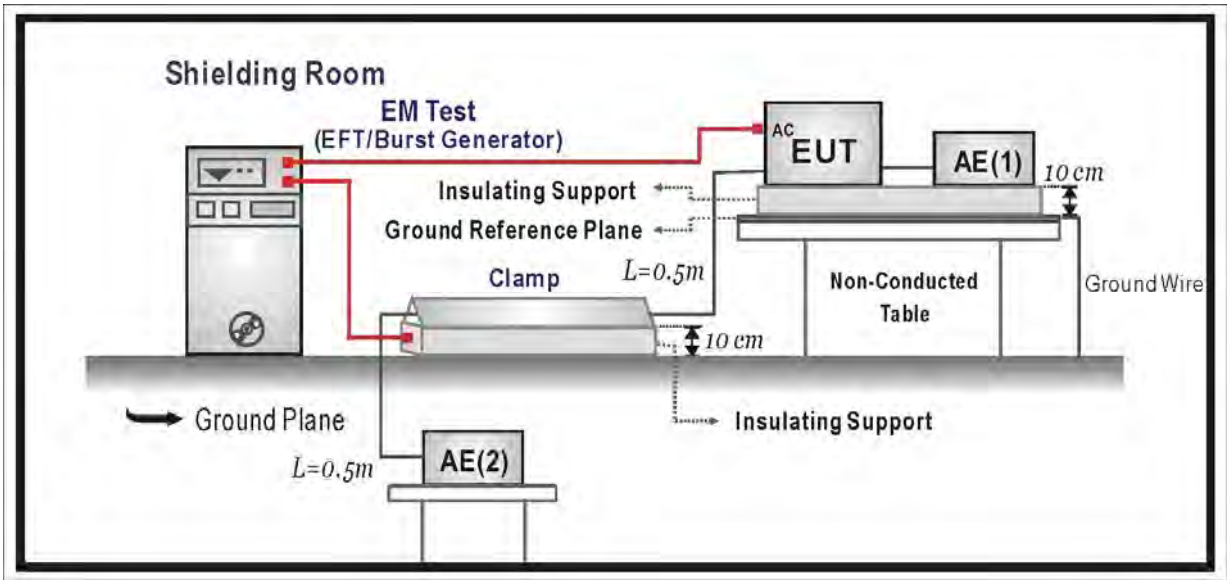


8. Electrical Fast Transient/Burst

8.1. Test Specification

According to EN 50121-4 clause 6.

8.2. Test Setup



8.3. Limit

Item	Environmental Phenomena	Units	Test Specificatio	Performance Criteria
Signal and Telecommunication Ports				
	Fast Transients Common Mode	kV (Peak) Tr/Th ns Rep. Frequency kHz	±2 5/50 5	A
Input DC Power Ports				
	Fast Transients Common Mode	kV (Peak) Tr/Th ns Rep. Frequency kHz	±2 5/50 5	A
Input AC Power Ports				
	Fast Transients Common Mode	kV (Peak) Tr/Th ns Rep. Frequency kHz	±2 5/50 5	A

8.4. Test Procedure

According to EN 61000-4-4.

The EUT is placed on a table that is 0.8 meter height. A ground reference plane is placed on the table, and uses a 0.1m insulation between the EUT and ground reference plane.
The minimum area of the ground reference plane is 1m*1m, and 0.65mm thick min, and projected beyond the EUT by at least 0.1m on all sides.

Test on I/O and communication ports:
The EFT interference signal is through a coupling clamp device couples to the signal and control lines of the EUT with burst noise for 1minute.

Test on power supply ports:
The EUT is connected to the power mains through a coupling device that directly couples the EFT/B interference signal.
Each of the Line and Neutral conductors is impressed with burst noise for 1 minute.

The length of the signal and power lines between the coupling device and the EUT is 0.5m.

8.5. Deviation from Test Standard

No deviation

8.6. Test Result

Product	Network Camera		
Test Item	Electrical fast transient/burst		
Test Mode	Mode 1: MD9560-DH_DC12V		
Date of Test	2019/06/20	Test Site	No.3 Shielded Room

Inject Line	Polarity	Voltage kV	Inject Time (Second)	Inject Method	Required Criteria	Complied to Criteria	Result
L	±	2kV	60	Direct	A	A	PASS
N	±	2kV	60	Direct	A	A	PASS
PE	±	2kV	60	Direct	A	A	PASS
L-N-PE	±	2kV	60	Direct	A	A	PASS
LAN	±	2kV	60	Clamp	A	A	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.
☒ No false alarms or other malfunctions were observed during or after the test.

Product	Network Camera		
Test Item	Electrical fast transient/burst		
Test Mode	Mode 2: MD9560-H_POE		
Date of Test	2019/06/20	Test Site	No.3 Shielded Room

Inject Line	Polarity	Voltage kV	Inject Time (Second)	Inject Method	Required Criteria	Complied to Criteria	Result
LAN	±	2kV	60	Clamp	A	A	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.
☒ No false alarms or other malfunctions were observed during or after the test.

8.7. Test Photograph

Test Mode : Mode 1: MD9560-DH_DC12V

Description : EFT/B Test Setup

Test Mode : Mode 1: MD9560-DH_DC12V

Description : EFT/B Test Setup-Clamp

Test Mode : Mode 2: MD9560-H_POE

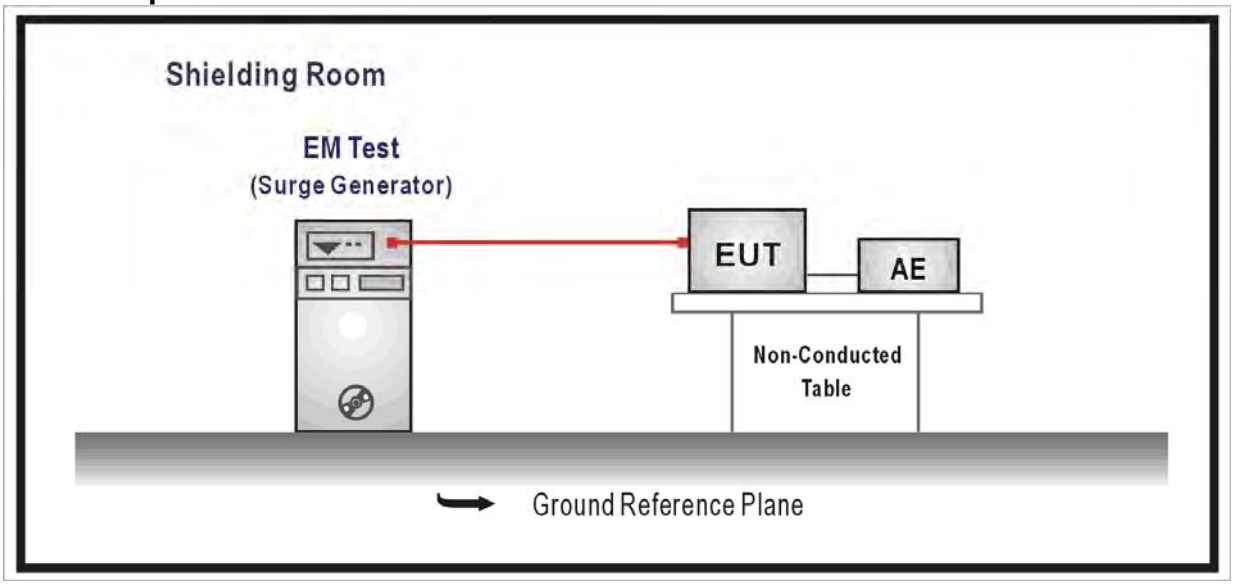
Description : EFT/B Test Setup-Clamp

9. Surge

9.1. Test Specification

According to EN 50121-4 clause 6.

9.2. Test Setup



9.3. Limit

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Signal Ports and Telecommunication Ports(See 1) and 2))				
	Surges Line to Line Line to Ground	Tr/Th us KV kV Output Impedance Ω Coupling Capacitance μF	1.2/50 (8/20) ± 1 ± 2 42 0.5	B
Input DC Power Ports				
	Surges Line to Line Line to Ground	Tr/Th us kV KV Output Impedance Ω Coupling Capacitance μF	1.2/50 (8/20) ± 1 ± 2 42 0.5	B
Input AC Power Ports				
	Surges Line to Line Line to Ground	Tr/Th us kV kV	1.2/50 (8/20) ± 1 ± 2	B

Notes:

1) For telecommunication ports and other ports intended for connection to highly balanced pairs, a line to line test is not required.
2) Ports directly connected to power ports or to the (public) low voltage network are classified as power ports also.

9.4. Test Procedure

According to EN 61000-4-5.

The EUT and its load are placed on a table that is 0.8 meter above a metal ground plane measured 1m*1m min. and 0.65mm thick min. And projected beyond the EUT by at least 0.1m on all sides. The length of power cord between the coupling device and the EUT shall be 2m or less.
For Input and Output AC Power or DC Input and DC Output Power Ports:
The EUT is connected to the power mains through a coupling device that directly couples the Surge interference signal.
The surge noise shall be applied synchronized to the voltage phase at 0^0, 90^0, 180^0, 270^0 and the peak value of the a.c. voltage wave. (Positive and negative)
Each of Line-Earth and Line-Line is impressed with a sequence of five surge voltages with interval of 1 min.

9.5. Deviation from Test Standard

No deviation.

9.6. Test Result

Product	Network Camera		
Test Item	Surge		
Test Mode	Mode 1: MD9560-DH_DC12V		
Date of Test	2019/07/06	Test Site	No.3 Shielded Room

Inject Line	Polarity	Voltage kV	Angle	Time Interval (Second)	Inject Method	Required Criteria	Complied to Criteria	Result
L-N	±	1kV	0	60	Direct	B	A	PASS
L-N	±	1kV	90	60	Direct	B	A	PASS
L-N	±	1kV	180	60	Direct	B	A	PASS
L-N	±	1kV	270	60	Direct	B	A	PASS
L-PE	±	2kV	0	60	Direct	B	A	PASS
L-PE	±	2kV	90	60	Direct	B	A	PASS
L-PE	±	2kV	180	60	Direct	B	A	PASS
L-PE	±	2kV	270	60	Direct	B	A	PASS
N-PE	±	2kV	0	60	Direct	B	A	PASS
N-PE	±	2kV	90	60	Direct	B	A	PASS
N-PE	±	2kV	180	60	Direct	B	A	PASS
N-PE	±	2kV	270	60	Direct	B	A	PASS
LAN (Line to Ground)	±	4kV	--	60	Direct	B	B	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☐ Meet criteria A : Operate as intended during and after the test
☒ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.
☒ No false alarms or other malfunctions were observed during or after the test.

Product	Network Camera		
Test Item	Surge		
Test Mode	Mode 2: MD9560-H_POE		
Date of Test	2019/07/06	Test Site	No.3 Shielded Room

Inject Line	Polarity	Voltage kV	Angle	Time Interval (Second)	Inject Method	Required Criteria	Complied to Criteria	Result
LAN (Line to Ground)	±	4kV	--	60	Direct	B	B	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

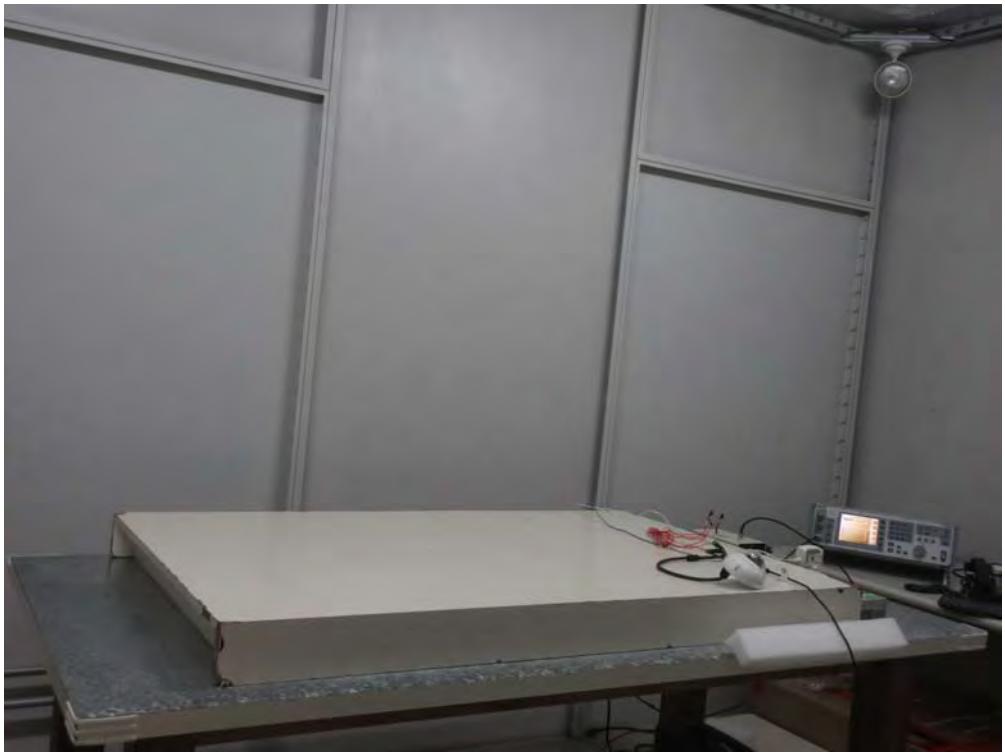
☐ Meet criteria A : Operate as intended during and after the test
☒ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.

☒ No false alarms or other malfunctions were observed during or after the test.

9.7. Test Photograph

Test Mode : Mode 1: MD9560-DH_DC12V

Description : Conducted Susceptibility Test Setup



Test Mode : Mode 1: MD9560-DH_DC12V

Description : Conducted Susceptibility Test Setup-CDN

Test Mode : Mode 2: MD9560-H_POE

Description : Conducted Susceptibility Test Setup-CDN

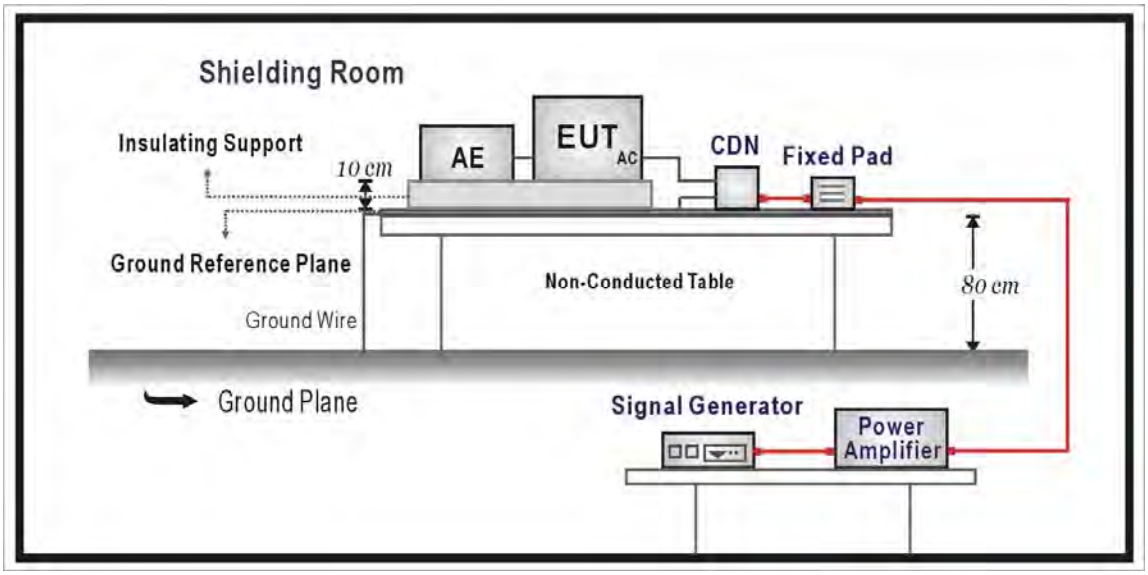
10. Conducted Susceptibility

10.1. Test Specification

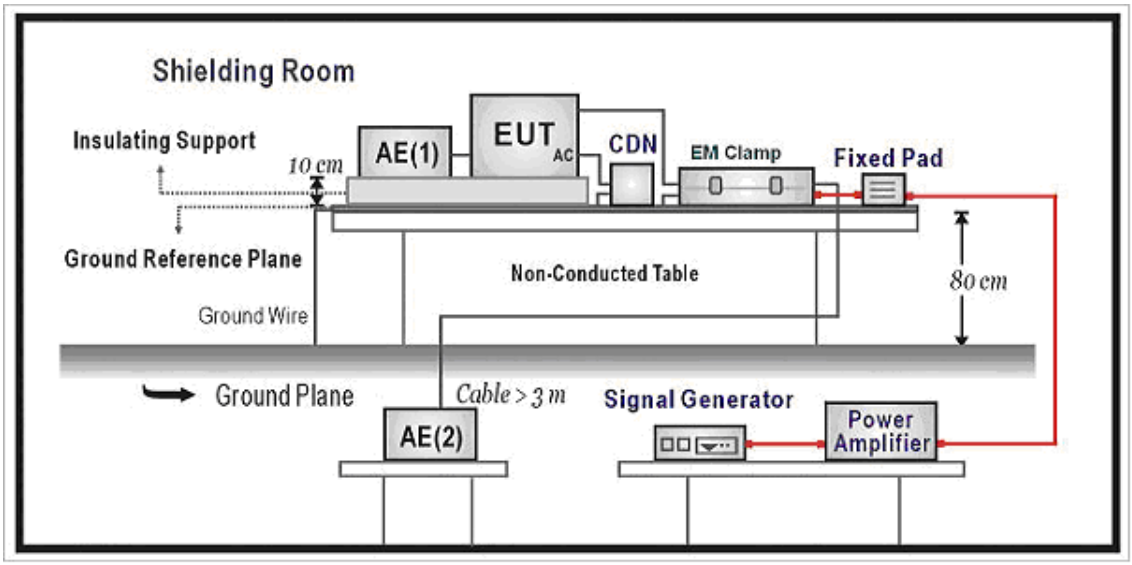
According to EN 50121-4 clause 6.

10.2. Test Setup

CDN Inject Method



EM Clamp Inject Method



10.3. Limit

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Signal Ports and Telecommunication Ports				
	Radio-Frequency Continuous Conducted	MHz V (rms, Un-modulated) % AM (1kHz)	0.15-80 10 80	A
Input DC Power Ports				
	Radio-Frequency Continuous Conducted	MHz V (rms, Un-modulated) % AM (1kHz)	0.15-80 10 80	A
Input AC Power Ports				
	Radio-Frequency Continuous Conducted	MHz V (rms, Un-modulated) % AM (1kHz)	0.15-80 10 80	A

10.4. Test Procedure

According to EN 61000-4-6.

The EUT are placed on a table that is 0.8 meter height, and a Ground reference plane on the table, EUT are placed upon table and use a 10cm insulation between the EUT and Ground reference plane.
For Signal Ports and Telecommunication Ports
The disturbance signal is through a coupling and decoupling networks (CDN) or EM-clamp device couples to the signal and Telecommunication lines of the EUT.
For Input DC and AC Power Ports
The EUT is connected to the power mains through a coupling and decoupling networks for power supply lines. And directly couples the disturbances signal into EUT.
Used CDN-M2 for two wires or CDN-M3 for three wires.

All the scanning conditions are as follows:

	Condition of Test		Remarks
1.	Field Strength		140dBμV(10V) Level 3
2.	Radiated Signal		AM 80% Modulated with 1kHz
3.	Scanning Frequency		0.15MHz – 80MHz
4	Dwell Time		3 Seconds
5.	Frequency step size	Δf :	1%

10.5. Deviation from Test Standard

No deviation.

10.6. Test Result

Product	Network Camera		
Test Item	Conducted susceptibility		
Test Mode	Mode 1: MD9560-DH_DC12V		
Date of Test	2019/06/19	Test Site	No.12 Shielded Room

Frequency Range (MHz)	Voltage Applied dBuV(V)	Inject Method	Tested Port of EUT	Required Criteria	Performance Criteria Complied To	Result
0.15~80	10V	CDN	AC IN	A	A	PASS
0.15~80	10V	CDN	LAN	A	A	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ dBuV(V) at frequency _____MHz.
  ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Network Camera		
Test Item	Conducted susceptibility		
Test Mode	Mode 2: MD9560-H_POE		
Date of Test	2019/06/19	Test Site	No.12 Shielded Room

Frequency Range (MHz)	Voltage Applied dBuV(V)	Inject Method	Tested Port of EUT	Required Criteria	Performance Criteria Complied To	Result
0.15~80	10V	CDN	LAN	A	A	PASS

Note:

The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

☒ Meet criteria A : Operate as intended during and after the test
☐ Meet criteria B : Operate as intended after the test
☐ Meet criteria C : Loss/Error of function
☐ Additional Information
- ☐ EUT stopped operation and could / could not be reset by operator at _____ dBuV(V) at frequency _____MHz.
- ☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

10.7. Test Photograph

Test Mode : Mode 1: MD9560-DH_DC12V

Description : Conducted Susceptibility Test Setup-CDN

Test Mode : Mode 2: MD9560-H_POE

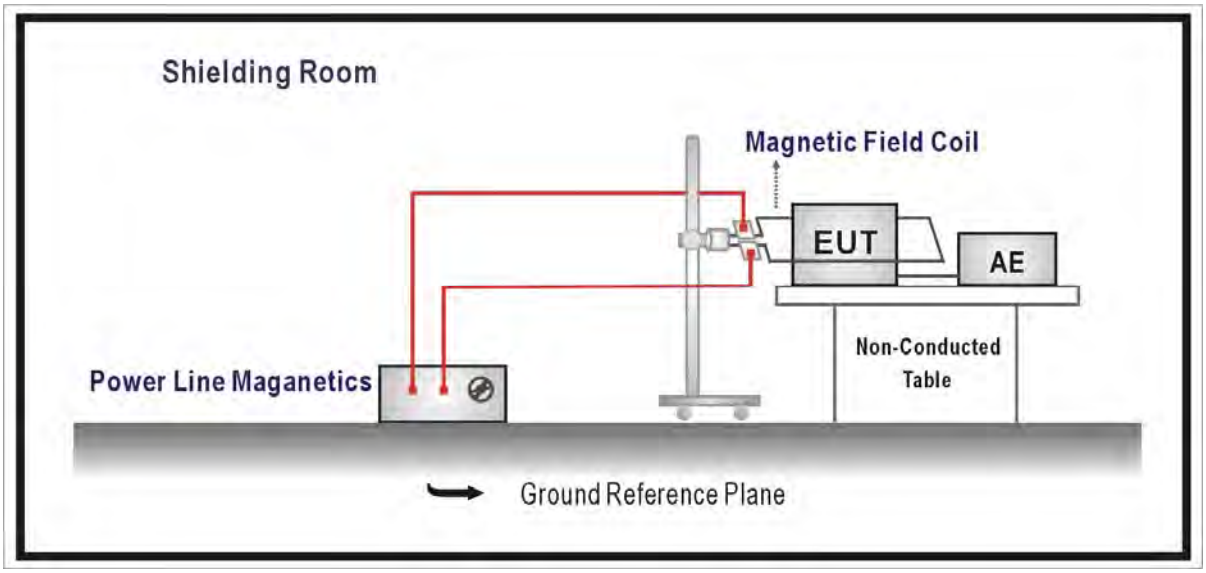
Description : Conducted Susceptibility Test Setup-CDN

11. Power Frequency Magnetic Field

11.1. Test Specification

According to EN 50121-4 clause 6.

11.2. Test Setup



11.3. Limit

Item	Environmental Phenomena	Units	Test Specification	Performance Criteria
Enclosure Port				
	Power-Frequency Magnetic Field	Hz Hz Hz A/m (r.m.s.) A/m (r.m.s.)	16.7 50 0 d.c 100 a.c. systems 300 d.c. systems	A

Note: Test only applies to apparatus containing devices sensitive to magnetic fields, such as Hall elements, electro-dynamic microphones etc.

11.4. Test Procedure

According to EN 61000-4-8.

The EUT and its load are placed on a table which is 0.8 meter above a metal ground plane measured at least 1m*1m min. The test magnetic field shall be placed at central of the induction coil.

The plane of the inductive coil shall then be rotated by 90° in order to expose the EUT to the test field with different orientations(X, Y, Z Orientations) and the same procedure.

11.5. Deviation from Test Standard

No deviation.

11.6. Test Result

Product	Network Camera		
Test Item	Power frequency magnetic field		
Test Mode	Mode 1: MD9560-DH_DC12V		
Date of Test	2019/06/17	Test Site	No.3 Shielded Room

Polarization	Frequency (Hz)	Inject Time (s)	Magnetic Strength (A/m)	Required Performance Criteria	Performance Criteria Complied To	Test Result
X Orientation	50	60	100	A	A	PASS
Y Orientation	50	60	100	A	A	PASS
Z Orientation	50	60	100	A	A	PASS
X Orientation	16.7	60	100	A	A	PASS
Y Orientation	16.7	60	100	A	A	PASS
Z Orientation	16.7	60	100	A	A	PASS
X Orientation	0	60	300	A	A	PASS
Y Orientation	0	60	300	A	A	PASS
Z Orientation	0	60	300	A	A	PASS

☒ Meet criteria A: Operate as intended during and after the test
☐ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
  ☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.

☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

Product	Network Camera		
Test Item	Power frequency magnetic field		
Test Mode	Mode 2: MD9560-H_POE		
Date of Test	2019/06/17	Test Site	No.3 Shielded Room

Polarization	Frequency (Hz)	Inject Time (s)	Magnetic Strength (A/m)	Required Performance Criteria	Performance Criteria Complied To	Test Result
X Orientation	50	60	100	A	A	PASS
Y Orientation	50	60	100	A	A	PASS
Z Orientation	50	60	100	A	A	PASS
X Orientation	16.7	60	100	A	A	PASS
Y Orientation	16.7	60	100	A	A	PASS
Z Orientation	16.7	60	100	A	A	PASS
X Orientation	0	60	300	A	A	PASS
Y Orientation	0	60	300	A	A	PASS
Z Orientation	0	60	300	A	A	PASS

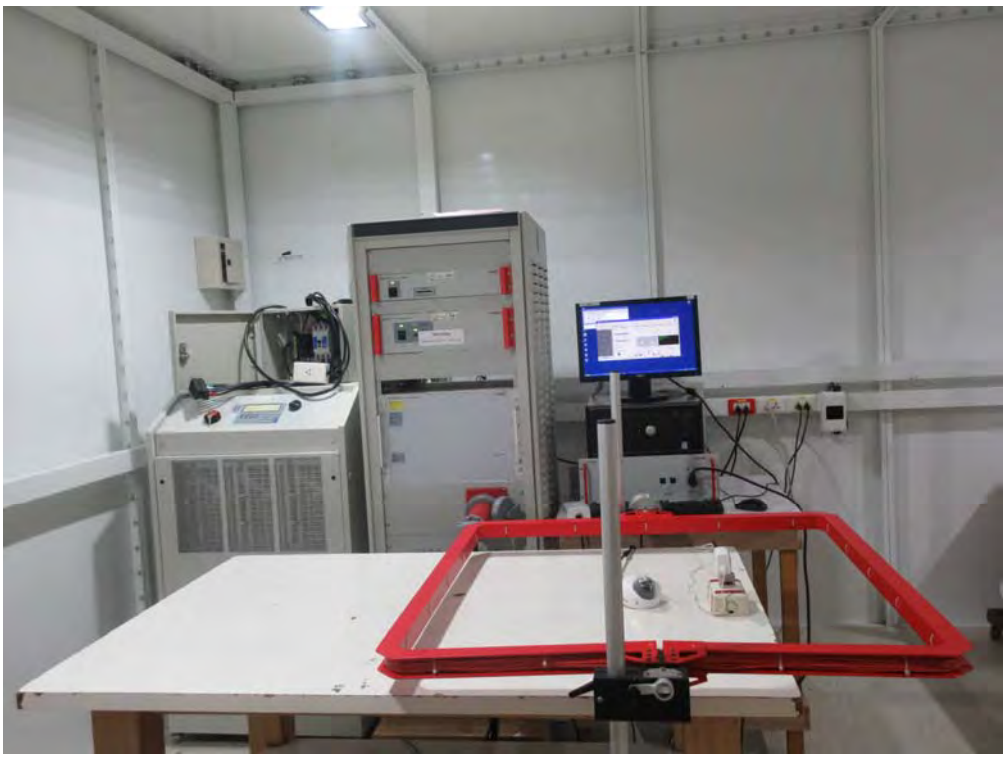
☒ Meet criteria A: Operate as intended during and after the test
☐ Meet criteria B: Operate as intended after the test
☐ Meet criteria C: Loss/Error of function
☐ Additional Information
☐ EUT stopped operation and could / could not be reset by operator at _____ kV of Line _____.

☒ No false alarms or other malfunctions were observed during or after the test. The acceptance criteria were met, and the EUT passed the test.

11.7. Test Photograph

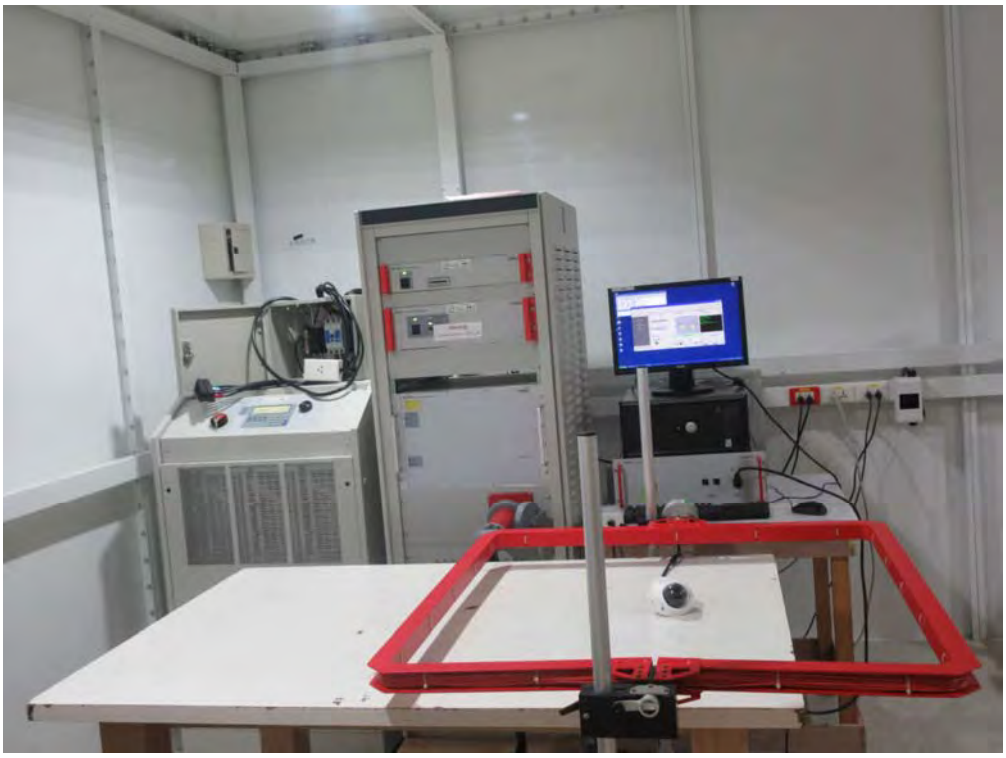
Test Mode : Mode 1: MD9560-DH_DC12V

Description : Power Frequency Magnetic Field Test Setup



Test Mode : Mode 2: MD9560-H_POE

Description : Power Frequency Magnetic Field Test Setup



12. Attachment

➢ EUT Photograph

(1) EUT Photo (M/N: MD9560-DH)

(2) EUT Photo (M/N: MD9560-DH)

(3) EUT Photo (M/N: MD9560-DH)

(4) EUT Photo (M/N: MD9560-H)

(5) EUT Photo (M/N: MD9560-H)

(6) EUT Photo (M/N: MD9560-H)