

VCCI Test Report

Product Name : Network Camera

Model No. : MD9561-H, MD9581-H, MD9581-HTPM

Applicant : VIVOTEK INC.

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

Date of Receipt : 2019/04/02

Issued Date : 2019/11/14

Report No. : 1940043R-ITJPP01V00

Report Version : V2.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

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Test Report

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Applicant : VIVOTEK INC.
Address : 6F, No.192, Lien-Cheng Rd., Chung-Ho, New Taipei City,
Taiwan, R.O.C.
Manufacturer : VIVOTEK INC.
Model No. : MD9561-H, MD9581-H, MD9581-HTPM
EUT Rated Voltage : By PoE
EUT Test Voltage : By PoE
Trade Name : VIVOTEK
Applicable Standard : VCCI CISPR 32: 2016-11, Class B
Test Result : Complied
Performed Location : DEKRA Testing and Certification Co., Ltd.
Linkou Laboratory
No. 5-22, Ruishukeng
Linkou District, New Taipei City, 24451, Taiwan
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Documented By :



(Senior Adm. Specialist / Leven Huang)

Reviewed By :



(Engineer / Wright Tsai)

Approved By :



(Director / Vincent Lin)

Laboratory Information

We, **DEKRA Testing and Certification Co., Ltd.**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted (audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scopes:

Taiwan	:	BSMI, NCC, TAF
Norway	:	DNVGL
USA	:	FCC
Japan	:	VCCI

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site : <http://www.dekra.com.tw>

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1. General Information

1.1. EUT Description

Product Name	Network Camera
Trade Name	VIVOTEK
Model No.	MD9561-H, MD9581-H, MD9581-HTPM

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

Model Number	Description
MD9561-H	2M sensor.
MD9581-H	5M sensor.
MD9581-HTPM	5M sensor. Waterproof membrane design on PCB.

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:

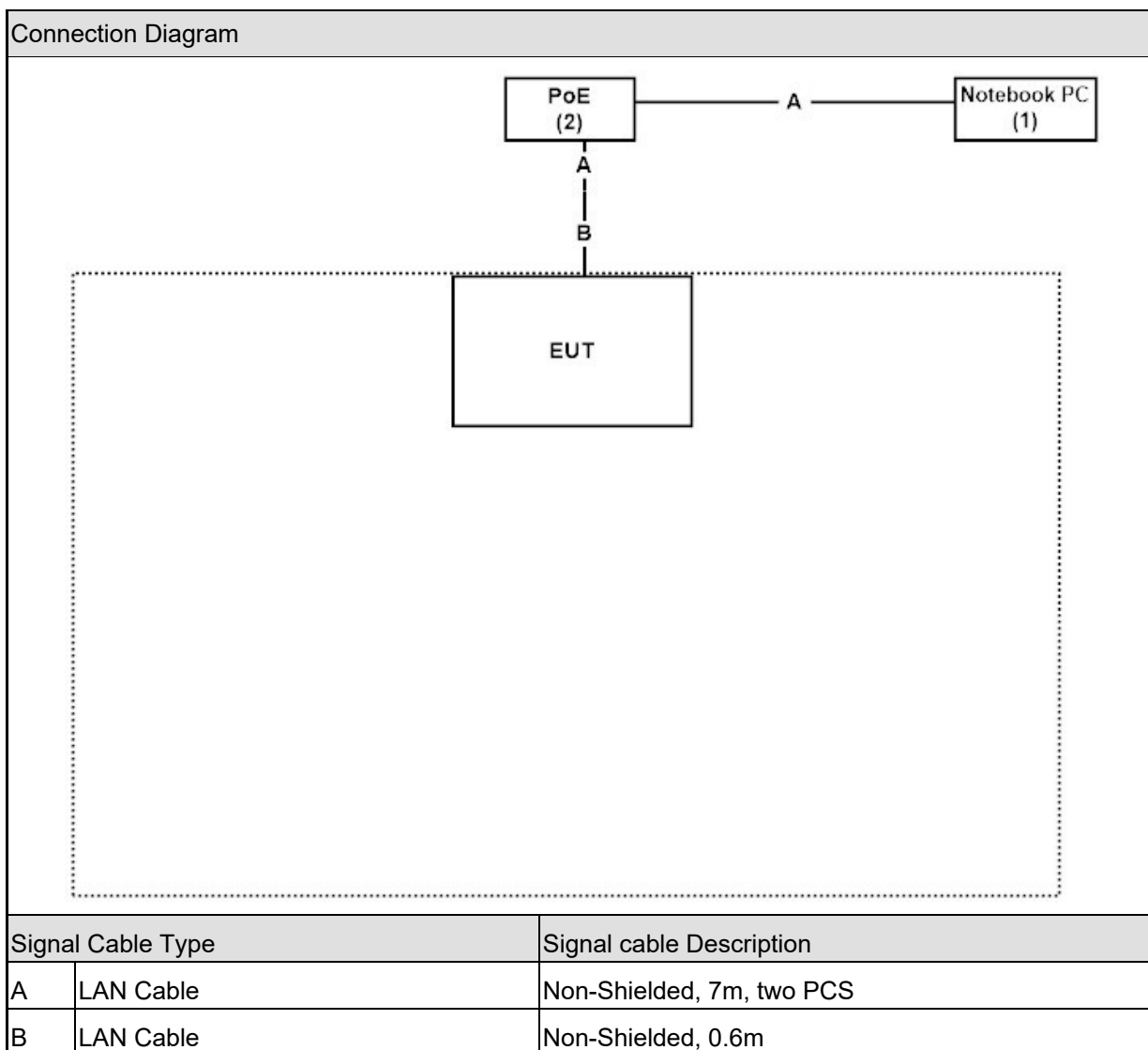
Pre-Test Mode	
Mode 1: MD9561-H , PoE Mode 2: MD9581-H , PoE	
Final Test Mode	
Emission	Mode 1: MD9561-H , PoE Mode 2: MD9581-H , PoE
Note: According to pre-test data, we choose the worst case mode 1, 2 as the final and full testing.	

1.3. Tested System Details

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

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	DELL	Latitude 5491	BJ746S2	Non-Shielded, 0.8m
2	PoE	N/A	N/A	N/A	Non-Shielded, 1.8m

1.4. Configuration of Tested System



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
Conducted Emission	VCCI CISPR 32: 2016-11 Class B	No	No
Impedance Stabilization Network	VCCI CISPR 32: 2016-11 Class B	Yes	No
Radiated Emission	VCCI CISPR 32: 2016-11 Class B	Yes	No

2.2. List of Test Equipment

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	2018/06/21
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	2018/07/12

Radiated Emission / Site7

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Broadband Antenna	Schwarzbeck	VULB 9168	0852	2019/02/02
EMI Test Receiver	R&S	ESCI	100649	2018/07/20
Coaxial Cable	DEKRA	RG 214	LC007-RG	2018/06/18
Pre-Amplifier	DEKRA	AP/0100A	CHM/1009094	2018/06/18
Site7 NSA	DEKRA	N/A	N/A	2018/06/18

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	2018/06/25

VCCI Test Site:

Test Item	Test Site	VCCI No.
Conducted Emission (Telecommunication Port)	SR8	T-1887
Radiated Emission	Site 7	R-3748
Radiated Emission (Above 1GHz)	CB7(9x6x6_Chamber)	G-10035

2.3. Measurement Uncertainty

Impedance Stabilization Network

The measurement uncertainty is evaluated as ± 3.88 dB.

Radiated Emission(Under 1GHz)

The measurement uncertainty is evaluated as ± 4.22 dB.

Radiated Emission(Above 1GHz)

The measurement uncertainty is evaluated as ± 5.08 dB.

2.4. Test Environment

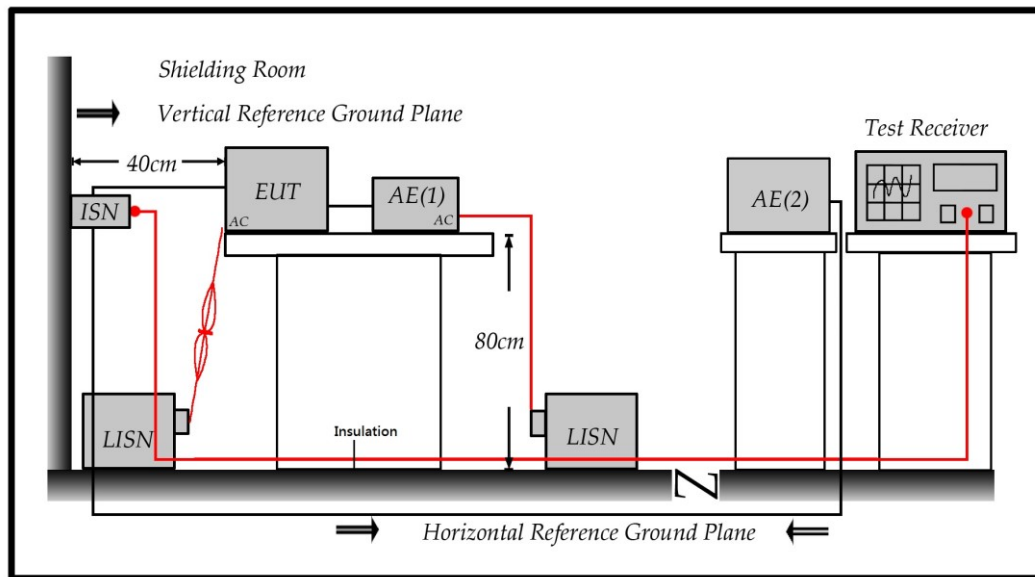
Performed Item	Items	Required	Actual
Impedance Stabilization Network	Temperature (°C)	15-35	20
	Humidity (%RH)	25-75	51
	Barometric pressure (mbar)	860-1060	950-1000
Radiated Emission	Temperature (°C)	15-35	25.2
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000

3. Conducted Emissions (Telecommunication Ports)

3.1. Test Specification

According to EMC Standard: VCCI CISPR 32

3.2. Test Setup



3.3. Limit

Applicable to					
1. wired network ports					
2. optical fibre port with metallic shield or tension members					
3. antenna ports					
Frequency range MHz	Coupling device	Detector type / Bandwidth	Class B voltage limits dB (µV)	Class B current limits dB (µA)	
0.15 – 0.5	AAN	Quasi Peak / 9 KHz	84 – 74	N / A	
0.5 – 30			74		
0.15 – 0.5	AAN	Average / 9 KHz	74 – 64		
0.5 – 30			64		
0.15 – 0.5	CVP And current probe	Quasi Peak / 9 KHz	84 – 74	40 – 30	
0.5 – 30			74	30	
0.15 – 0.5	CVP And current probe	Average / 9 KHz	74 – 64	30 – 20	
0.5 – 30			64	20	
0.15 – 0.5	Current Probe	Quasi Peak / 9 KHz	N / A	40 – 30	
0.5 – 30				30	
0.15 – 0.5	Current Probe	Average / 9 KHz		30 – 20	
0.5 – 30				20	
The choice of coupling device and measurement procedure is defined in EN55032:2012 Annex C.					
Screened ports including TV broadcast receiver tuner ports are tested with a common-mode impedance of 150 Ω.					
This is typically accomplished with the screen terminated by 150 Ω to earth.					
AC mains ports that also have the function of a wired network port shall meet the limits given in EN55032:2012+AC 2013 Table A.9.					
The test shall cover the entire frequency range.					
The application of the voltage and/or current limits is dependent on the measurement procedure used. Refer to EN55032:2012+AC 2013 Table C.1 for applicability.					
Testing is required at only one EUT supply voltage and frequency.					
Applicable to ports listed above and intended to connect to cables longer than 3 m					
Remarks:					
The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz~0.50 MHz.					

3.4. 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.

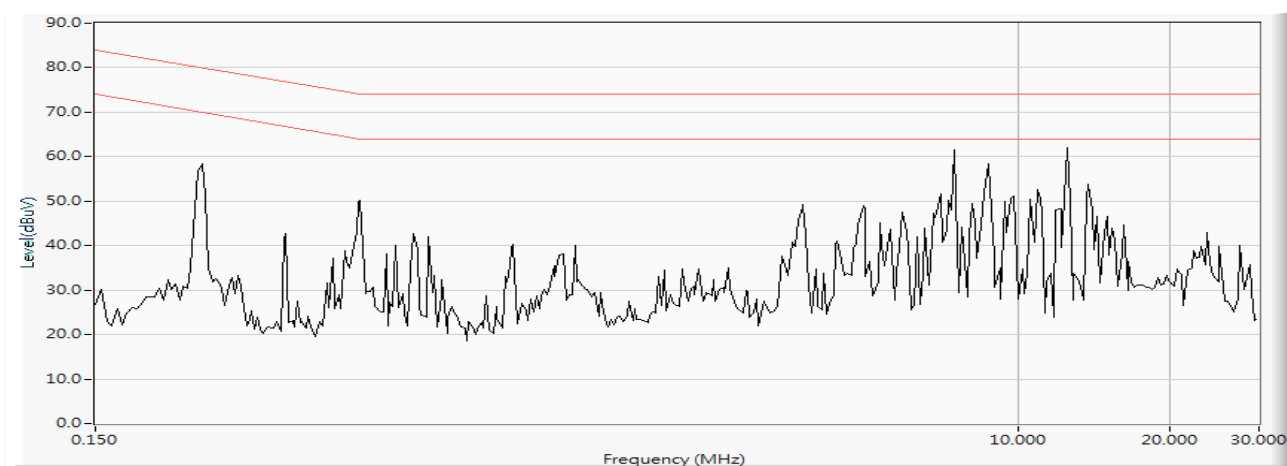
The 75dB LCL ISN is used for cat. 6 cable, the 65dB LCL ISN is used for cat. 5 cable, 55dB LCL ISN is used for cat. 3.

3.5. Deviation from Test Standard

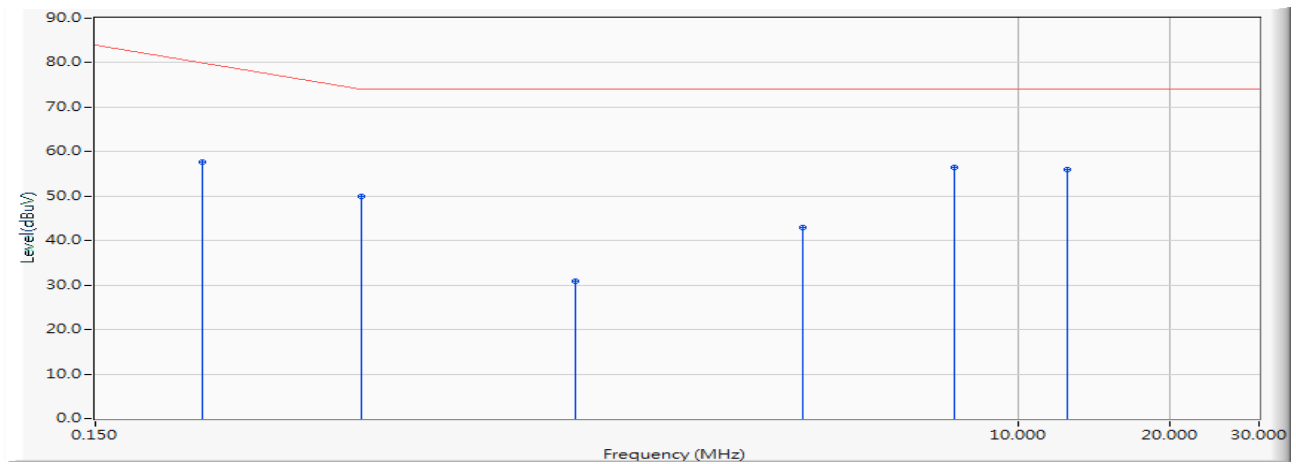
No deviation.

3.6. Test Result

Site : SR8	Time : 2019/04/09 - 11:39
Limit : ISN_Voltage_B_00M_QP	Margin : 10
EUT : Network Camera	Probe : TESEQ_T8_42815 - Line1
Power : POE	Note : Mode 1, ISN 10M



Site : SR8	Time : 2019/04/09 - 11:41
Limit : ISN_Voltage_B_00M_QP	Margin : 0
EUT : Network Camera	Probe : TESEQ_T8_42815 - Line1
Power : POE	Note : Mode 1, ISN 10M

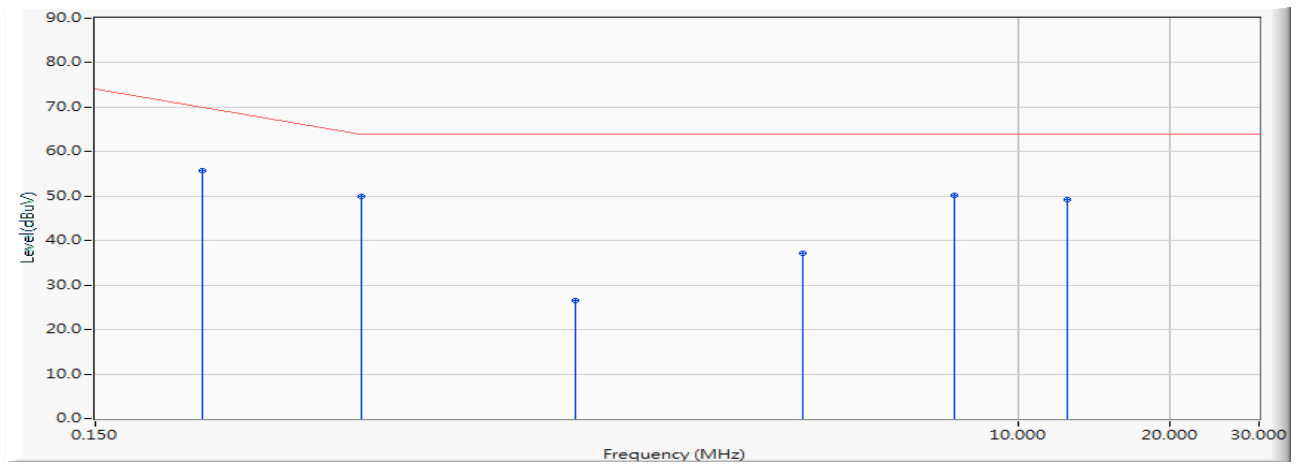


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.244	10.204	47.460	57.664	-23.650	81.314	QUASIPeAK
2		0.502	10.012	39.960	49.972	-24.028	74.000	QUASIPeAK
3		1.334	9.924	20.920	30.844	-43.156	74.000	QUASIPeAK
4		3.750	9.899	33.100	42.999	-31.001	74.000	QUASIPeAK
5	*	7.500	9.970	46.380	56.350	-17.650	74.000	QUASIPeAK
6		12.500	10.090	45.780	55.870	-18.130	74.000	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 : 2019/04/09 - 11:41
Limit : ISN_Voltage_B_00M_AV	Margin : 0
EUT : Network Camera	Probe : TESEQ_T8_42815 - Line1
Power : POE	Note : Mode 1, ISN 10M

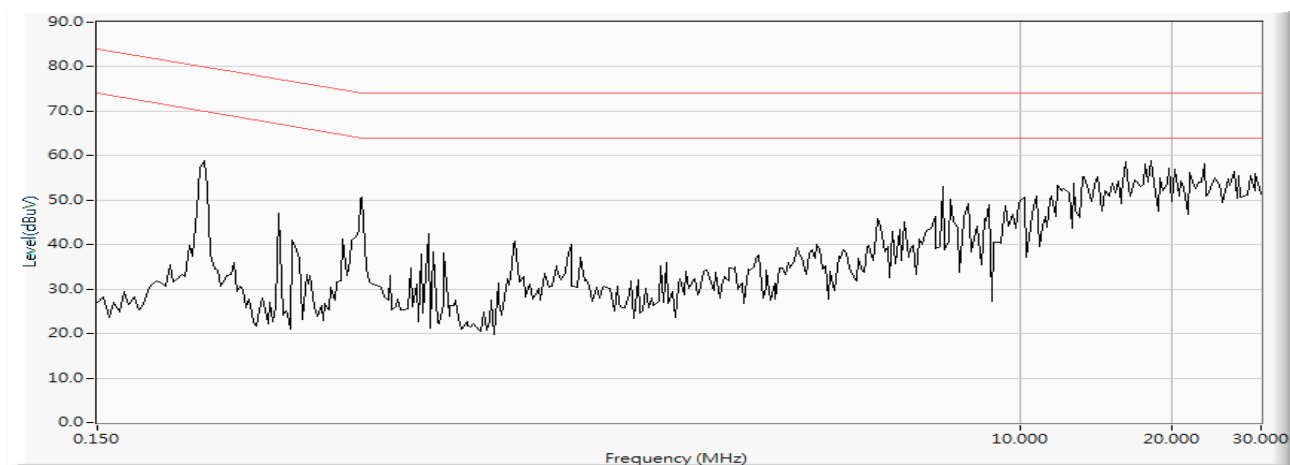


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.244	10.204	45.440	55.644	-15.670	71.314	AVERAGE
2		0.502	10.012	39.820	49.832	-14.168	64.000	AVERAGE
3		1.334	9.924	16.720	26.644	-37.356	64.000	AVERAGE
4		3.750	9.899	27.280	37.179	-26.821	64.000	AVERAGE
5	*	7.500	9.970	40.200	50.170	-13.830	64.000	AVERAGE
6		12.500	10.090	39.200	49.290	-14.710	64.000	AVERAGE

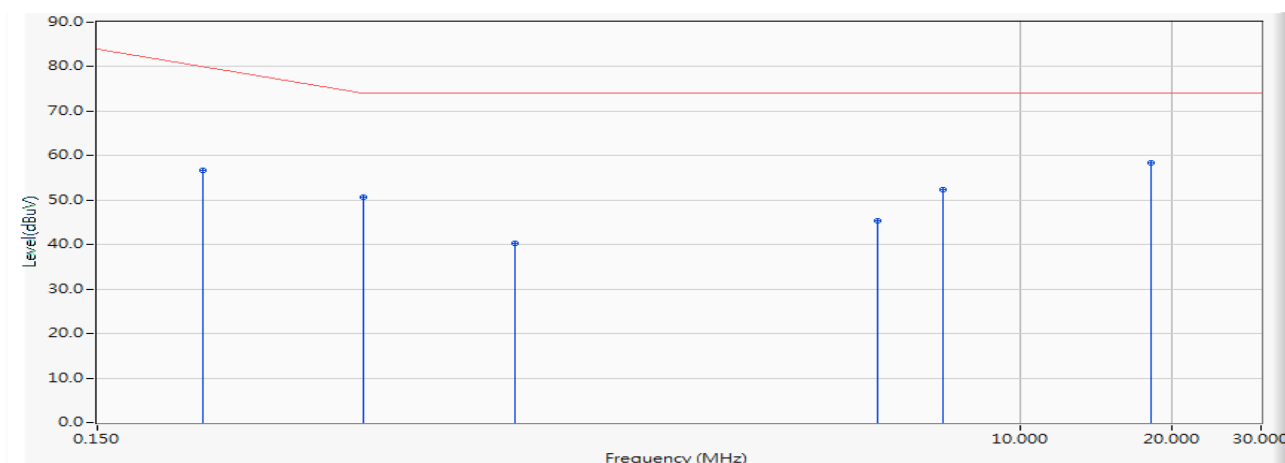
Note:

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 : 2019/04/09 - 11:36
Limit : ISN_Voltage_B_00M_QP	Margin : 10
EUT : Network Camera	Probe : TESEQ_T8_42815 - Line1
Power : POE	Note : Mode 1, ISN 100M



Site : SR8	Time : 2019/04/09 - 11:38
Limit : ISN_Voltage_B_00M_QP	Margin : 0
EUT : Network Camera	Probe : TESEQ_T8_42815 - Line1
Power : POE	Note : Mode 1, ISN 100M

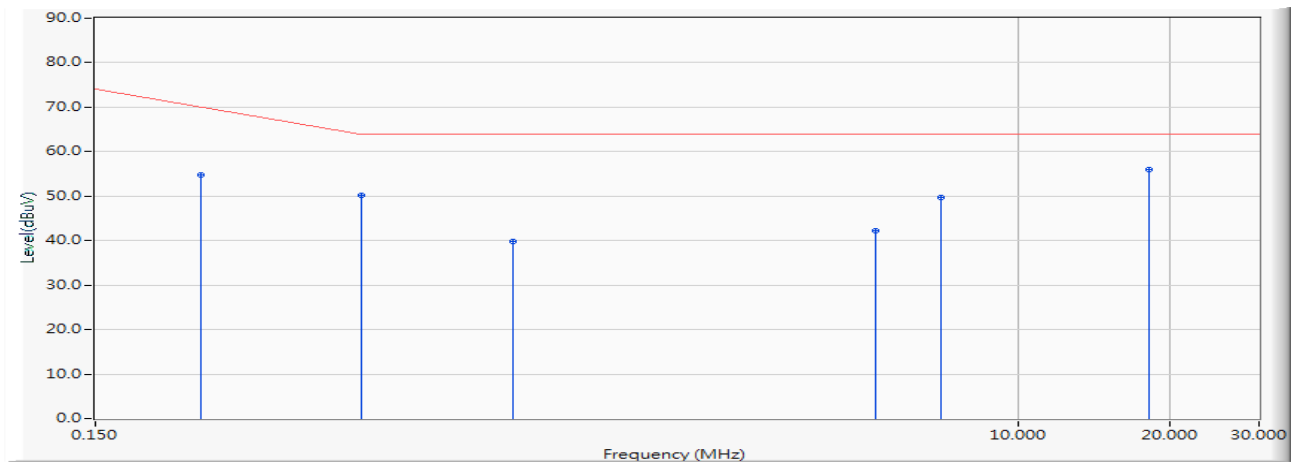


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.242	10.207	46.500	56.706	-24.665	81.371	QUASIPeAK
2		0.502	10.012	40.700	50.712	-23.288	74.000	QUASIPeAK
3		1.002	9.931	30.400	40.331	-33.669	74.000	QUASIPeAK
4		5.236	9.919	35.520	45.439	-28.561	74.000	QUASIPeAK
5		7.041	9.960	42.380	52.340	-21.660	74.000	QUASIPeAK
6	*	18.244	10.239	48.260	58.499	-15.501	74.000	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 : 2019/04/09 - 11:38
Limit : ISN_Voltage_B_00M_AV	Margin : 0
EUT : Network Camera	Probe : TESEQ_T8_42815 - Line1
Power : POE	Note : Mode 1, ISN 100M

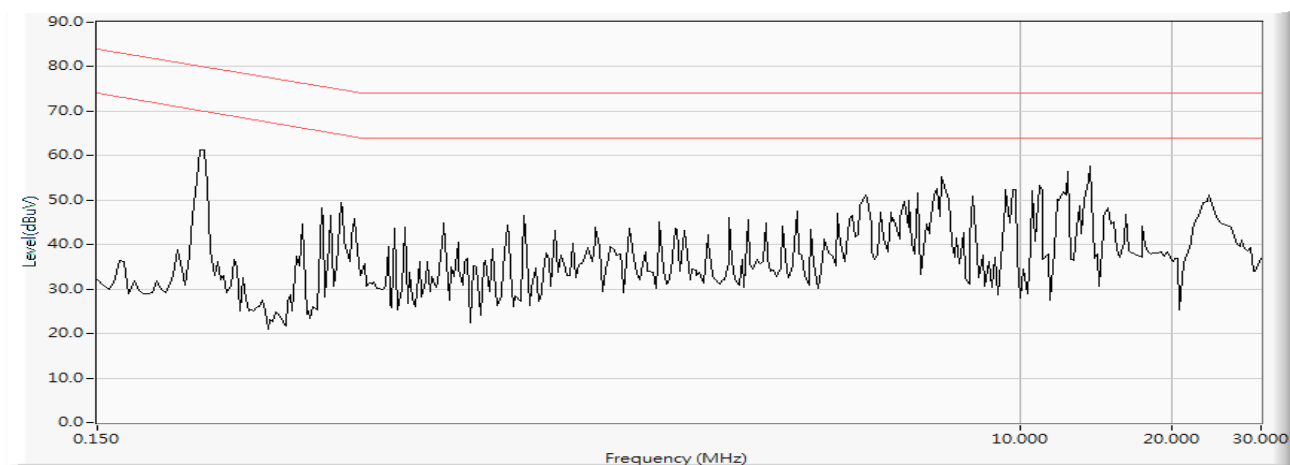


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.242	10.207	44.480	54.686	-16.685	71.371	AVERAGE
2		0.502	10.012	40.240	50.252	-13.748	64.000	AVERAGE
3		1.002	9.931	29.920	39.851	-24.149	64.000	AVERAGE
4		5.236	9.919	32.280	42.199	-21.801	64.000	AVERAGE
5		7.041	9.960	39.660	49.620	-14.380	64.000	AVERAGE
6	*	18.244	10.239	45.640	55.879	-8.121	64.000	AVERAGE

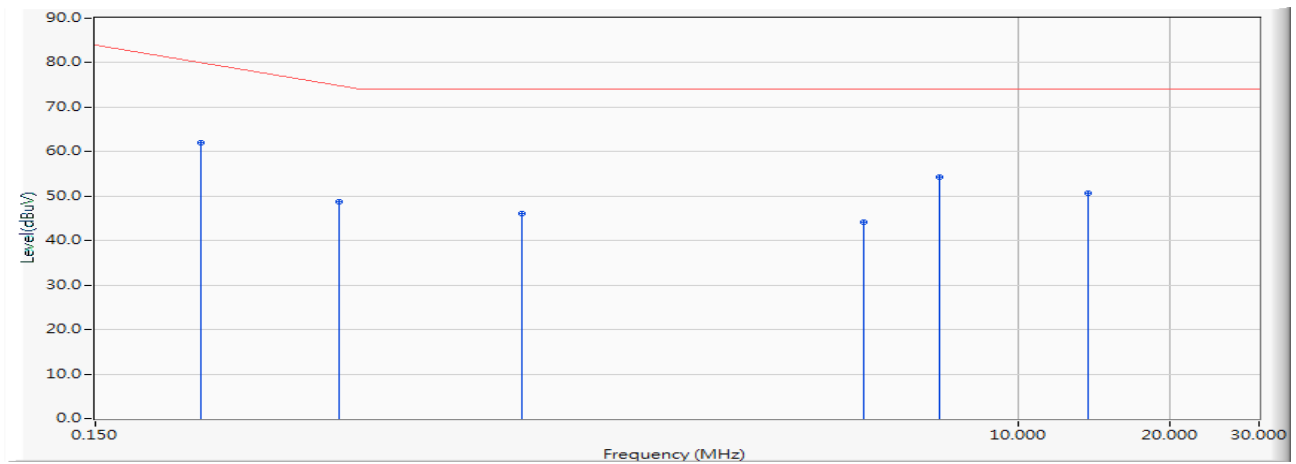
Note:

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 : 2019/04/09 - 11:30
Limit : ISN_Voltage_B_00M_QP	Margin : 10
EUT : Network Camera	Probe : TESEQ_T8_42815 - Line1
Power : POE	Note : Mode 2, ISN 10M



Site : SR8	Time : 2019/04/09 - 11:32
Limit : ISN_Voltage_B_00M_QP	Margin : 0
EUT : Network Camera	Probe : TESEQ_T8_42815 - Line1
Power : POE	Note : Mode 2, ISN 10M

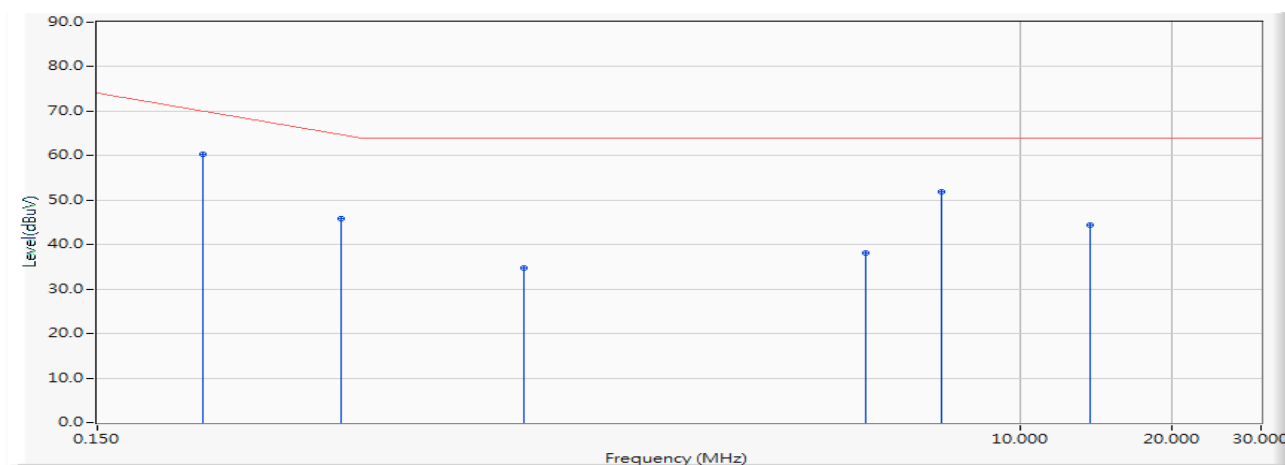


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.242	10.206	51.860	62.066	-19.305	81.371	QUASIPeAK
2		0.455	10.026	38.620	48.646	-26.640	75.286	QUASIPeAK
3		1.048	9.932	36.180	46.112	-27.888	74.000	QUASIPeAK
4		4.947	9.912	34.360	44.272	-29.728	74.000	QUASIPeAK
5		7.017	9.959	44.400	54.359	-19.641	74.000	QUASIPeAK
6		13.752	10.120	40.620	50.740	-23.260	74.000	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 : 2019/04/09 - 11:32
Limit : ISN_Voltage_B_00M_AV	Margin : 0
EUT : Network Camera	Probe : TESEQ_T8_42815 - Line1
Power : POE	Note : Mode 2, ISN 10M

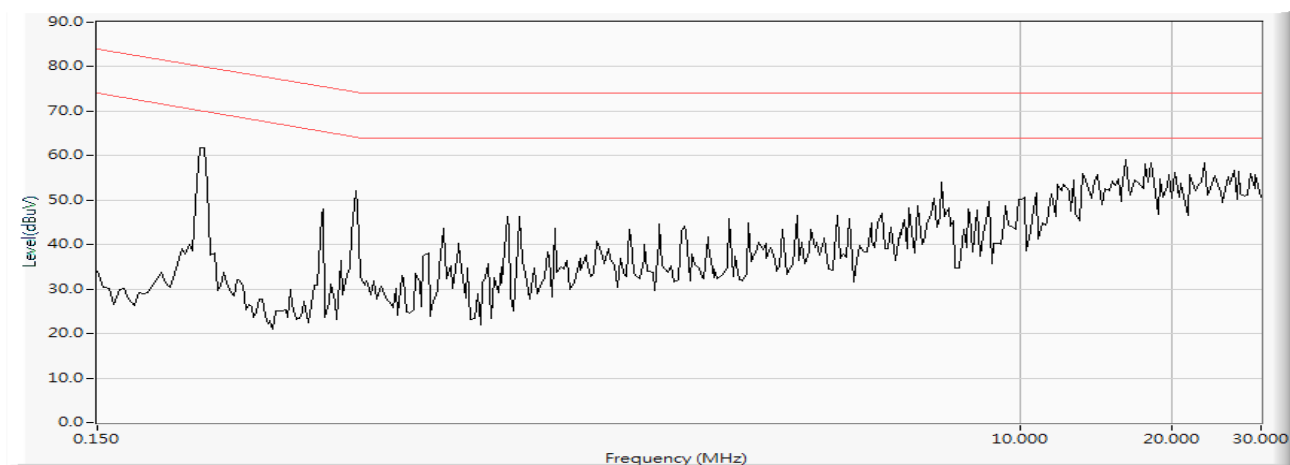


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.242	10.206	50.040	60.246	-11.125	71.371	AVERAGE
2		0.455	10.026	35.840	45.866	-19.420	65.286	AVERAGE
3		1.048	9.932	24.800	34.732	-29.268	64.000	AVERAGE
4		4.947	9.912	28.260	38.172	-25.828	64.000	AVERAGE
5		7.017	9.959	41.800	51.759	-12.241	64.000	AVERAGE
6		13.752	10.120	34.200	44.320	-19.680	64.000	AVERAGE

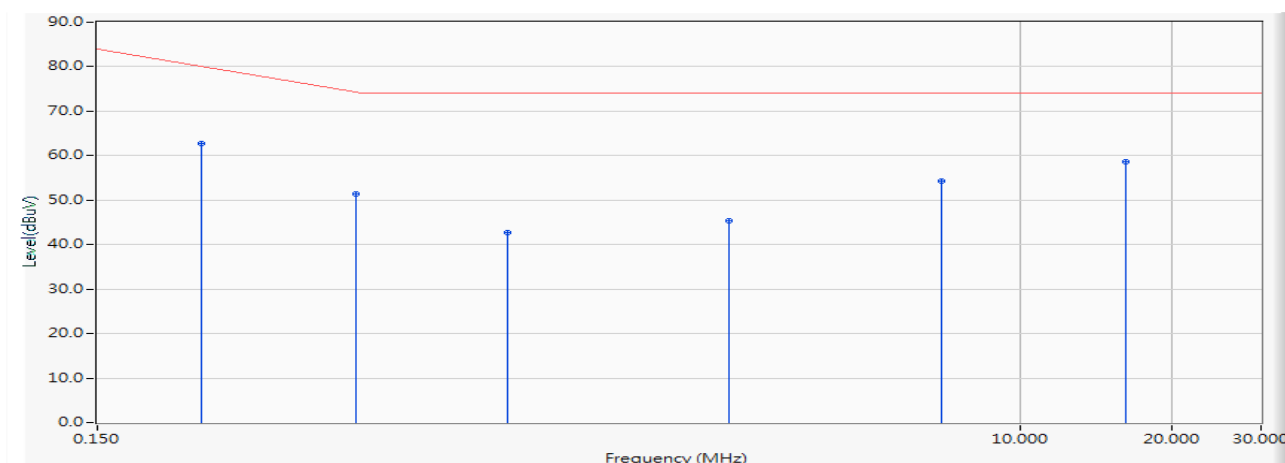
Note:

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 : 2019/04/09 - 11:27
Limit : ISN_Voltage_B_00M_QP	Margin : 10
EUT : Network Camera	Probe : TESEQ_T8_42815 - Line1
Power : POE	Note : Mode 2, ISN 100M



Site : SR8	Time : 2019/04/09 - 11:29
Limit : ISN_Voltage_B_00M_QP	Margin : 0
EUT : Network Camera	Probe : TESEQ_T8_42815 - Line1
Power : POE	Note : Mode 2, ISN 100M

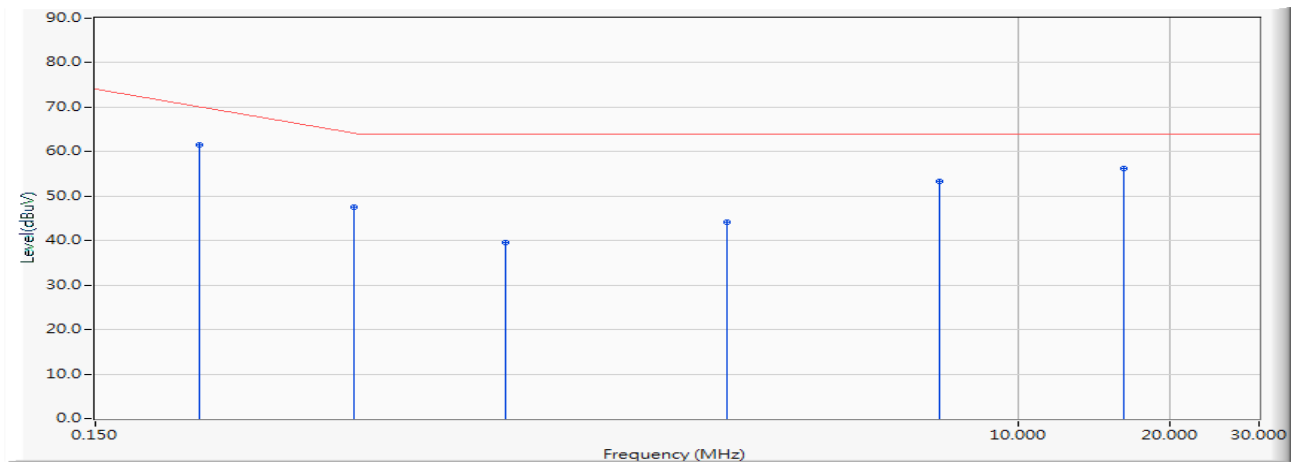


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.241	10.208	52.520	62.727	-18.673	81.400	QUASIPeAK
2		0.487	10.017	41.260	51.277	-23.094	74.371	QUASIPeAK
3		0.972	9.929	32.760	42.689	-31.311	74.000	QUASIPeAK
4		2.662	9.900	35.360	45.260	-28.740	74.000	QUASIPeAK
5		7.017	9.959	44.420	54.379	-19.621	74.000	QUASIPeAK
6	*	16.229	10.191	48.420	58.611	-15.389	74.000	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 : 2019/04/09 - 11:29
Limit : ISN_Voltage_B_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		0.241	10.208	51.300	61.507	-9.893	71.400	AVERAGE
2		0.487	10.017	37.560	47.577	-16.794	64.371	AVERAGE
3		0.972	9.929	29.540	39.469	-24.531	64.000	AVERAGE
4		2.662	9.900	34.200	44.100	-19.900	64.000	AVERAGE
5		7.017	9.959	43.420	53.379	-10.621	64.000	AVERAGE
6	*	16.229	10.191	46.060	56.251	-7.749	64.000	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: MD9561-H , PoE

Description : Front View of ISN Test



Test Mode : Mode 1: MD9561-H , PoE

Description : Back View of ISN Test



Test Mode : Mode 2: MD9581-H , PoE

Description : Front View of ISN Test



Test Mode : Mode 2: MD9581-H , PoE

Description : Back View of ISN Test



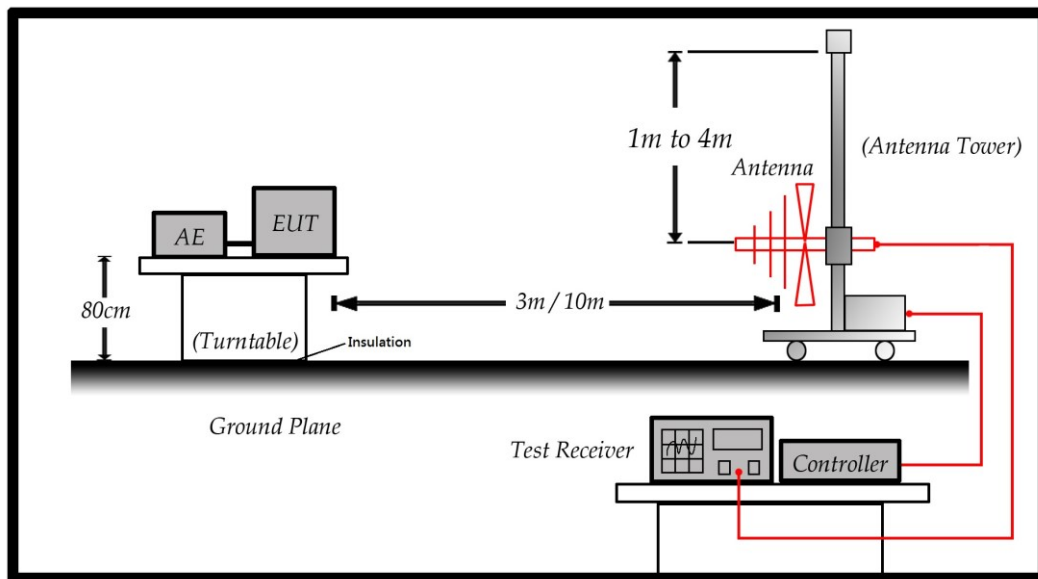
4. Radiated Emission

4.1. Test Specification

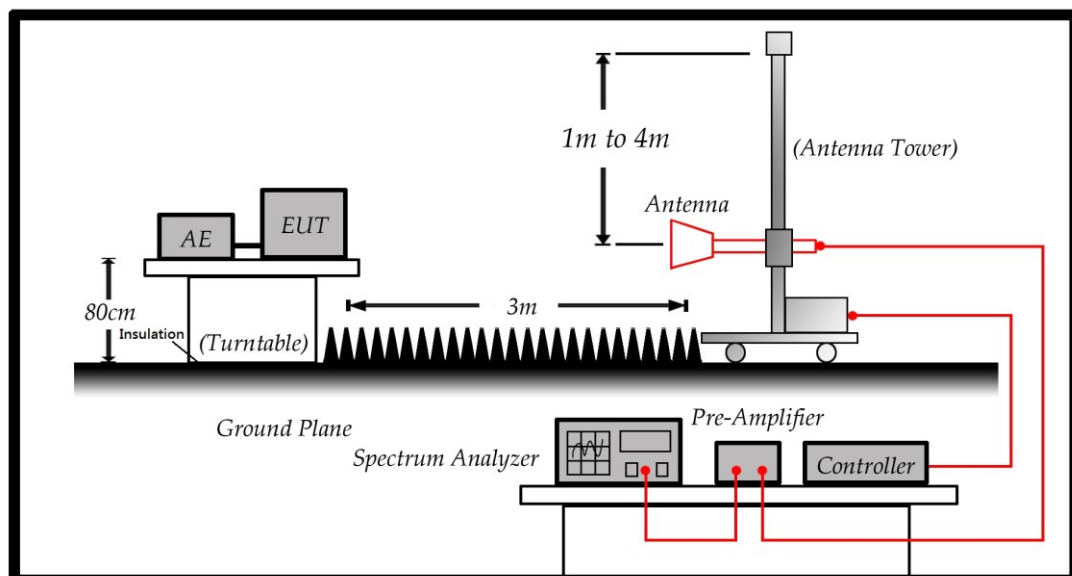
According to EMC Standard: VCCI CISPR 32

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

Radiated emissions at frequencies up to 1 GHz

for Class B equipment

Frequency range MHz	Measurement		Class B limits dB(μV/m)
	Distance m	Detector type/ Bandwidth	OATS / SAC
30-230	10	Quasi Peak / 120 KHz	30
230-1000			37
30-230	3		40
230-1000			47
Apply only 3m or 10m across the entire frequency range			

Radiated emissions at frequencies above 1 GHz

for Class B equipment

Frequency range MHz	Measurement		Class B limits dB(μV/m)
	Distance m	Detector type/ Bandwidth	OATS / SAC
1000-3000	3	Average / 1 MHz	50
3000-6000			54
1000-3000		Peak / 1 MHz	70
3000-6000			74
Both apply across the frequency range from 1000 MHz to the highest required frequency of measurement derived from			

Required highest frequency for radiated measurement

Highest internal frequency (F_x)	Highest measured frequency
$F_x \leq 108 \text{ MHz}$	1 GHz
$108 \text{ MHz} < F_x \leq 500 \text{ MHz}$	2 GHz
$500 \text{ MHz} < F_x \leq 1 \text{ GHz}$	5 GHz
$F_x > 1 \text{ GHz}$	$5 \times F_x$ up to a maximum of 6 GHz
NOTE 1 For FM and TV broadcast receivers, F_x is determined from the highest frequency generated or used excluding the local oscillator and tuned frequencies.	
NOTE 2 F_x is defined in 3.1.19.	

4.4. Test Procedure

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 3/10 meters. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

All cable leaving the table-top EUT for a connection outside the test site (for example, mains cable, telephone lines, connections to auxiliary equipment located outside the test area) shall be fitted with ferrite clamps placed on the floor at the point where the cable reached the floor. 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 investigated over the frequency range from 30MHz to 1GHz using a receiver bandwidth of 120kHz and above 1GHz using a receiver bandwidth of 1MHz.

30MHz to 1GHz Radiated was performed at an antenna to EUT distance of 10 meters.

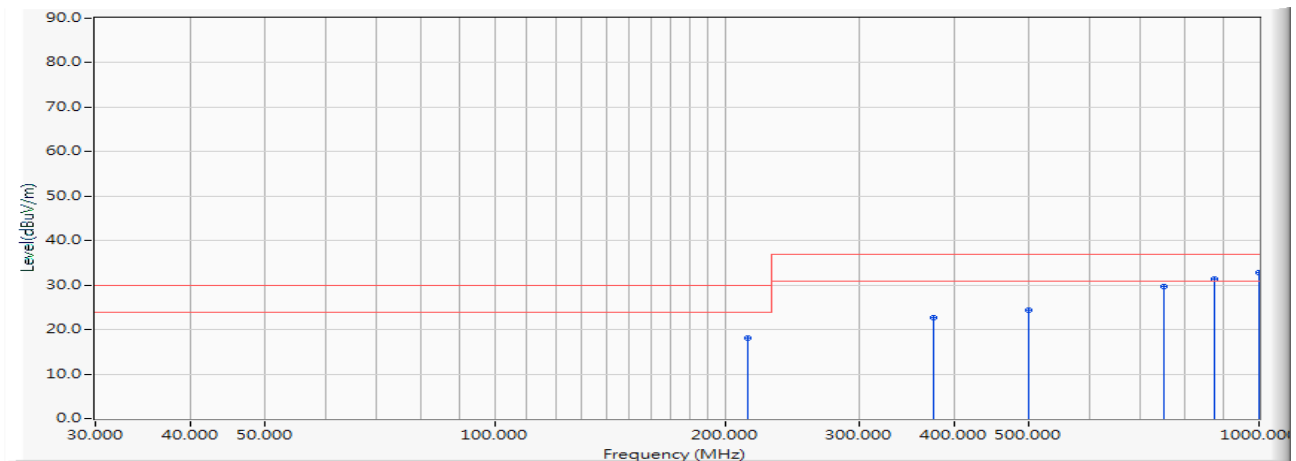
Above 1GHz Radiated was performed at an antenna to EUT distance of 3 meters.

4.5. Deviation from Test Standard

No deviation.

4.6. Test Result

Site : SITE7	Time : 2019/03/19 - 14:31
Limit : CISPR_B_10M_QP	Margin : 6
EUT : Network Camera	Probe : Site7_VULB9168_10m_1804 - HORIZONTAL
Power : POE	Note : Mode 1

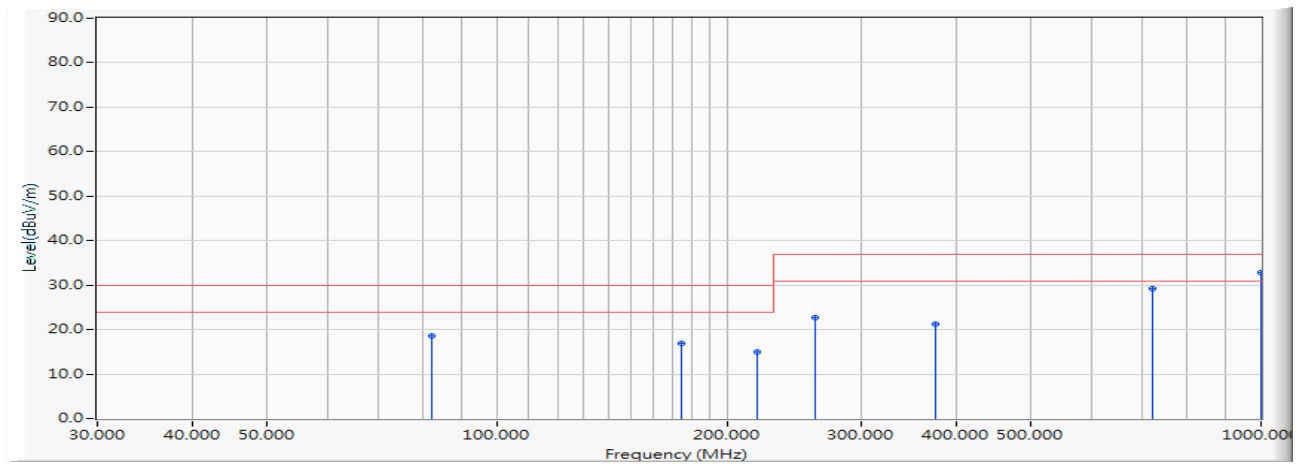


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		214.600	-12.601	30.600	17.999	-12.001	30.000	QUASPEAK	380.000	66.000
2		375.000	-5.843	28.600	22.757	-14.243	37.000	QUASPEAK	300.000	-85.000
3		500.000	-1.909	26.200	24.291	-12.709	37.000	QUASPEAK	200.000	-48.000
4		750.000	4.566	25.200	29.765	-7.235	37.000	QUASPEAK	115.000	31.000
5		875.000	6.091	25.300	31.391	-5.609	37.000	QUASPEAK	100.000	-49.000
6	*	1000.000	7.730	25.200	32.930	-4.070	37.000	QUASPEAK	165.000	31.000

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 : 2019/03/19 - 14:31
Limit : CISPR_B_10M_QP	Margin : 6
EUT : Network Camera	Probe : Site7_VULB9168_10m_1804 - VERTICAL
Power : POE	Note : Mode 1

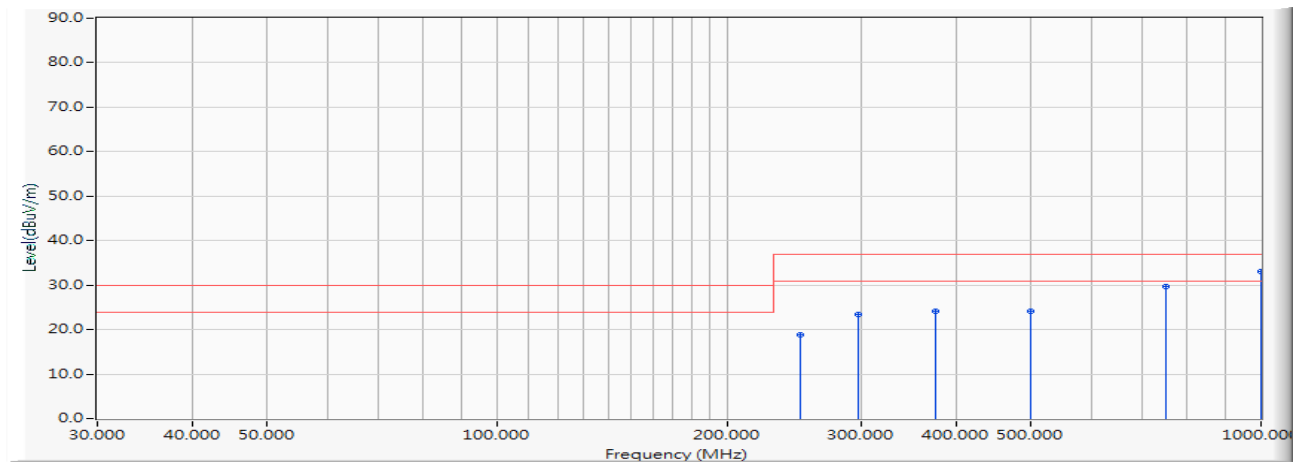


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	82.100	-15.961	34.600	18.639	-11.361	30.000	QUASIPeAK	100.000	-139.000
2	174.190	-10.765	27.600	16.835	-13.165	30.000	QUASIPeAK	100.000	-94.000
3	219.200	-12.458	27.500	15.042	-14.958	30.000	QUASIPeAK	100.000	62.000
4	261.400	-9.886	32.500	22.613	-14.387	37.000	QUASIPeAK	100.000	-99.000
5	375.000	-5.843	27.000	21.157	-15.843	37.000	QUASIPeAK	100.000	-94.000
6	720.000	3.653	25.600	29.254	-7.746	37.000	QUASIPeAK	260.000	-39.000
7	* 1000.000	7.730	25.200	32.930	-4.070	37.000	QUASIPeAK	165.000	31.000

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 : 2019/03/19 - 15:17
Limit : CISPR_B_10M_QP	Margin : 6
EUT : Network Camera	Probe : Site7_VULB9168_10m_1804 - HORIZONTAL
Power : POE	Note : Mode 2

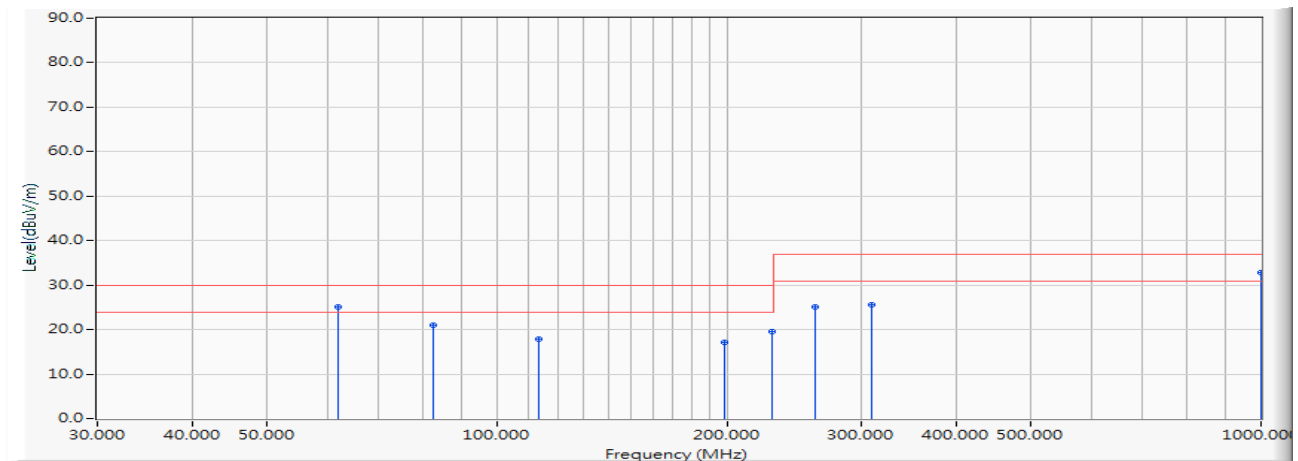


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		250.000	-10.388	29.300	18.912	-18.088	37.000	QUASIPeAK	365.000	32.000
2		297.000	-8.171	31.500	23.328	-13.672	37.000	QUASIPeAK	385.000	-88.000
3		375.000	-5.843	30.000	24.157	-12.843	37.000	QUASIPeAK	280.000	-41.000
4		500.000	-1.909	26.000	24.091	-12.909	37.000	QUASIPeAK	200.000	36.000
5		750.000	4.566	25.000	29.565	-7.435	37.000	QUASIPeAK	100.000	39.000
6	*	1000.000	7.730	25.300	33.030	-3.970	37.000	QUASIPeAK	100.000	-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 : 2019/03/19 - 15:17
Limit : CISPR_B_10M_QP	Margin : 6
EUT : Network Camera	Probe : Site7_VULB9168_10m_1804 - VERTICAL
Power : POE	Note : Mode 2

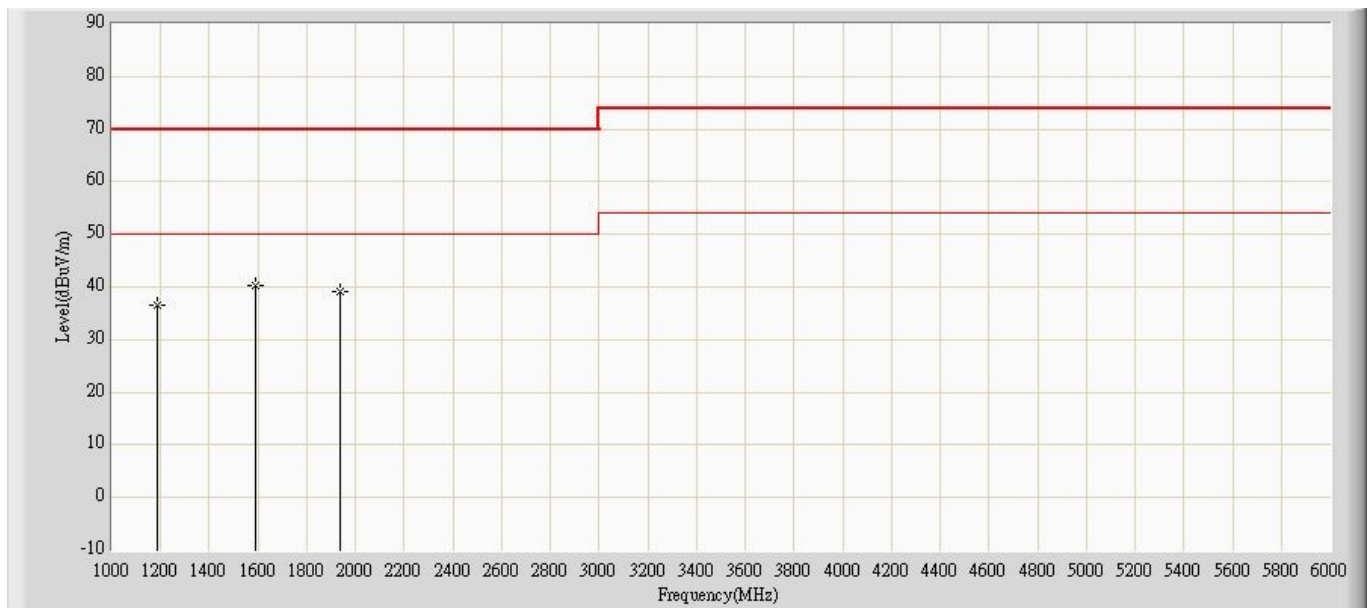


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	62.000	-11.978	37.000	25.022	-4.978	30.000	QUASIPeAK	100.000	45.000
2	82.645	-16.020	37.000	20.980	-9.020	30.000	QUASIPeAK	100.000	84.000
3	113.250	-13.628	31.600	17.972	-12.028	30.000	QUASIPeAK	100.000	94.000
4	198.500	-12.809	30.000	17.192	-12.808	30.000	QUASIPeAK	100.000	-53.000
5	228.700	-12.155	31.600	19.445	-10.555	30.000	QUASIPeAK	100.000	96.000
6	261.000	-9.912	35.000	25.089	-11.911	37.000	QUASIPeAK	100.000	97.000
7	309.600	-7.823	33.500	25.677	-11.323	37.000	QUASIPeAK	100.000	12.000
8	* 1000.000	7.730	25.100	32.830	-4.170	37.000	QUASIPeAK	1650.000	21.000

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: 2019/04/08 - 14:43
Limit: CISPR_B_(Above_1G)	Margin: 0
Probe: CB7_Horn_3117_1808	Polarity: Horizontal
EUT: Network Camera	Power: POE
Note: Mode 1	

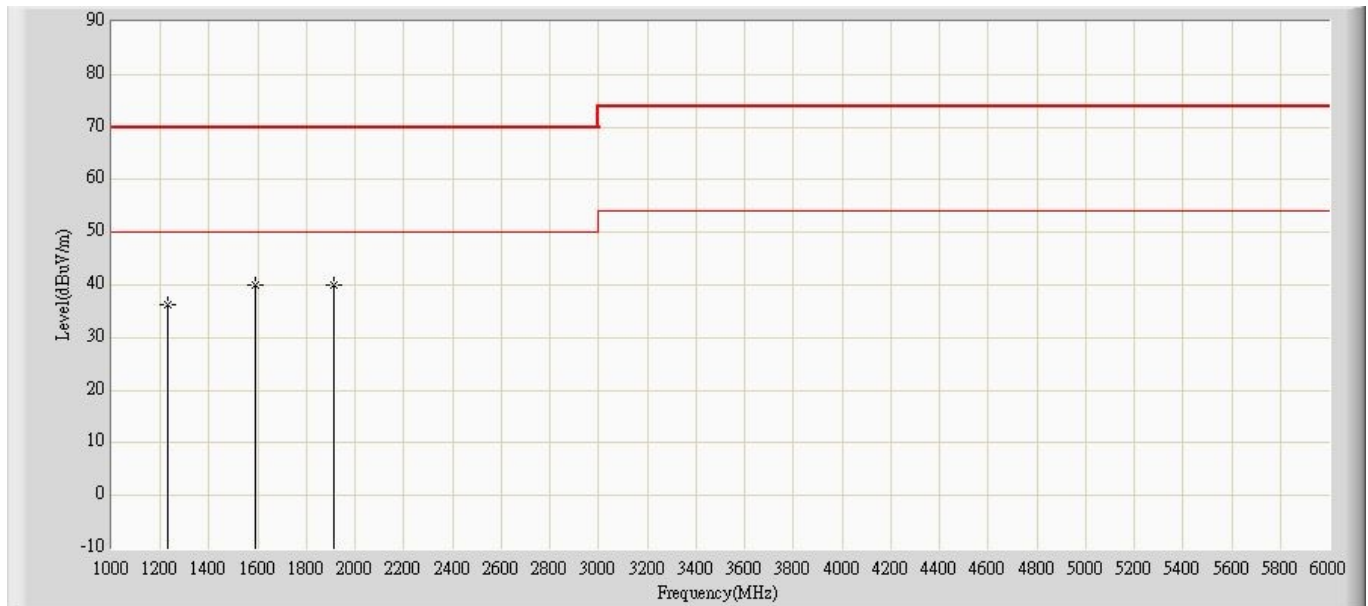


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Ant Pos (cm)	Table Pos (deg)	Type
1			1189.000	36.574	50.760	-33.426	70.000	-14.186	100	200	PK
2		*	1590.000	40.181	53.610	-29.819	70.000	-13.429	100	170	PK
3			1934.000	39.102	49.300	-30.898	70.000	-10.198	100	130	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: 2019/04/08 - 14:49
Limit: CISPR_B_(Above_1G)	Margin: 0
Probe: CB7_Horn_3117_1808	Polarity: Vertical
EUT: Network Camera	Power: POE
Note: Mode 1	

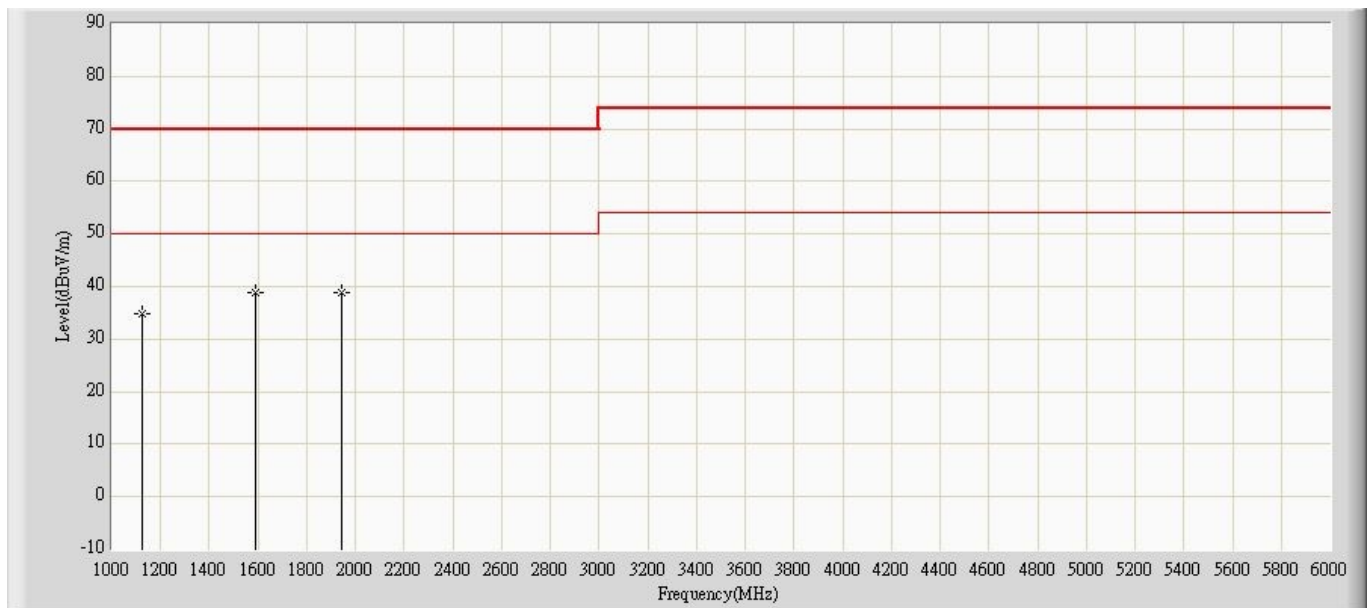


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Ant Pos (cm)	Table Pos (deg)	Type
1			1229.000	36.338	50.510	-33.662	70.000	-14.172	100	190	PK
2		*	1590.000	40.021	53.450	-29.979	70.000	-13.429	100	32	PK
3			1910.000	39.901	50.290	-30.099	70.000	-10.390	100	200	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: 2019/04/08 - 14:33
Limit: CISPR_B_(Above_1G)	Margin: 0
Probe: CB7_Horn_3117_1808	Polarity: Horizontal
EUT: Network Camera	Power: POE
Note: Mode 2	

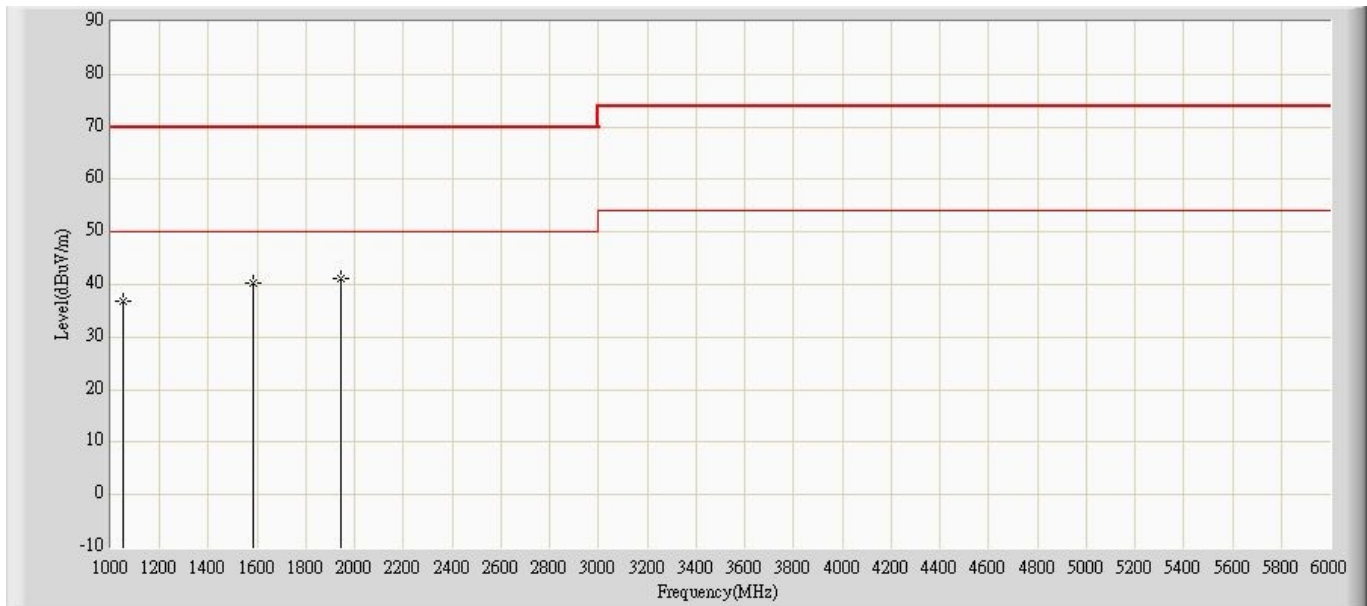


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Ant Pos (cm)	Table Pos (deg)	Type
1			1125.000	34.963	49.560	-35.037	70.000	-14.596	100	120	PK
2		*	1590.000	38.981	52.410	-31.019	70.000	-13.429	100	160	PK
3			1942.000	38.795	48.940	-31.205	70.000	-10.145	100	170	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: 2019/04/08 - 14:36
Limit: CISPR_B_(Above_1G)	Margin: 0
Probe: CB7_Horn_3117_1808	Polarity: Vertical
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			1050.000	36.963	52.300	-33.037	70.000	-15.337	100	130	PK
2			1586.000	40.219	53.700	-29.781	70.000	-13.481	100	190	PK
3		*	1940.000	41.042	51.200	-28.958	70.000	-10.158	100	188	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).

4.7. Test Photograph

Test Mode : Mode 1: MD9561-H , PoE

Description : Front View of Radiated Test



Test Mode : Mode 1: MD9561-H , PoE

Description : Back View of Radiated Test



Test Mode : Mode 1: MD9561-H , PoE

Description : Front View of High Frequency Radiated Test



Test Mode : Mode 2: MD9581-H , PoE

Description : Front View of Radiated Test



Test Mode : Mode 2: MD9581-H , PoE

Description : Back View of Radiated Test



Test Mode : Mode 2: MD9581-H , PoE

Description : Front View of High Frequency Radiated Test



5. Attachment

➤ **EUT Photograph**

(1) EUT Photo (M/N: MD9561-H)



(2) EUT Photo (M/N: MD9561-H)



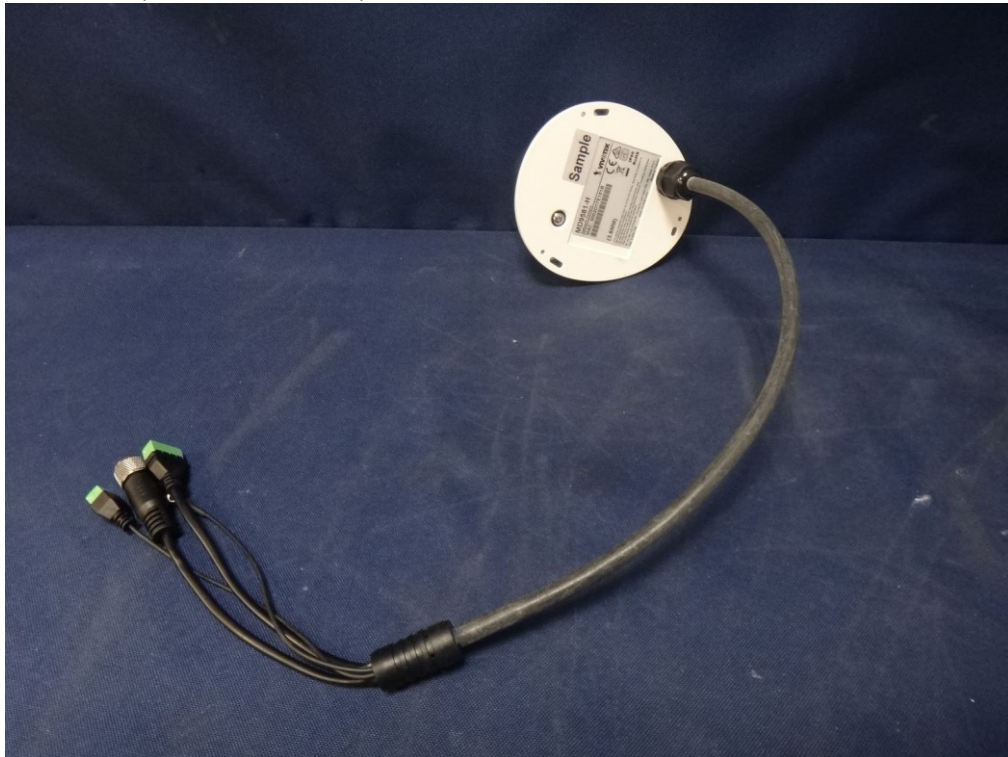
(3) EUT Photo (M/N: MD9561-H)



(4) EUT Photo (M/N: MD9581-H)



(5) EUT Photo (M/N: MD9581-H)



(6) EUT Photo (M/N: MD9581-H)



(7) EUT Photo

