VCCI Test Report

Product Name ： Network Camera
Model No. ： FE9182-H, FE9382-EHV

Applicant ： VIVOTEK INC.
Address ： 6F, No.192, Lien-Cheng Rd., Chung-Ho , New Taipei City, 235, Taiwan, R.O.C.

Date of Receipt ： 2016/08/16
Issued Date ： 2016/09/02
Report No. ： 1680369R-ITJPP01V00
Report Version ： V1.0

Testing Laboratory
3023

Test Report

Issued Date : 2016/09/02
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Product Name	:	Network Camera
Applicant	:	VIVOTEK INC.
Address	:	6F, No.192, Lien-Cheng Rd., Chung-Ho , New Taipei City, 235, Taiwan, R.O.C.
Manufacturer	:	VIVOTEK INC.
Model No.	:	FE9182-H, FE9382-EHV
EUT Rated Voltage	:	DC 12V, By PoE
EUT Test Voltage	:	DC 12V, By PoE
Trade Name	:	VIVOTEK
Applicable Standard	:	VCCI: 2015-04 Class B
Test Result	:	Complied
Performed Location	:	Quietek Corporation (Linkou Laboratory) No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C. TEL:+866-2-8601-3788 / FAX:+886-2-8601-3789

Documented By : Jessie Ciou
(Adm. Assistant / Jessie Ciou)

Reviewed By : Eddie Tseng
(Engineer / Eddie Tseng)

Approved By :
(Director / Vincent Lin)

Laboratory Information

We, **QuieTek Corporation**, 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 R.O.C.	**:**	**BSMI, NCC, TAF**
Norway	**:**	**DNV**
USA	**:**	**FCC**
Japan	**:**	**VCCI**

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : http://www.quietek.com/chinese/about/certificates.aspx?bval=5
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

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TEL : +86-512-6251-5088 / FAX : +86-512-6251-5098 E-Mail : service@quietek.com

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1. General Information

1.1. EUT Description

Product Name	Network Camera
Trade Name	VIVOTEK
Model No.	FE9182-H, FE9382-EHV

1.2. Mode of Operation

QuieTek 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: FE9382-EHV, DC Mode 2: FE9382-EHV, PoE Mode 3: FE9182-H, DC Mode 4: FE9182-H, PoE	
Final Test Mode	
Emission	Mode 1: FE9382-EHV, DC Mode 2: FE9382-EHV, PoE

1.3. Tested System Details

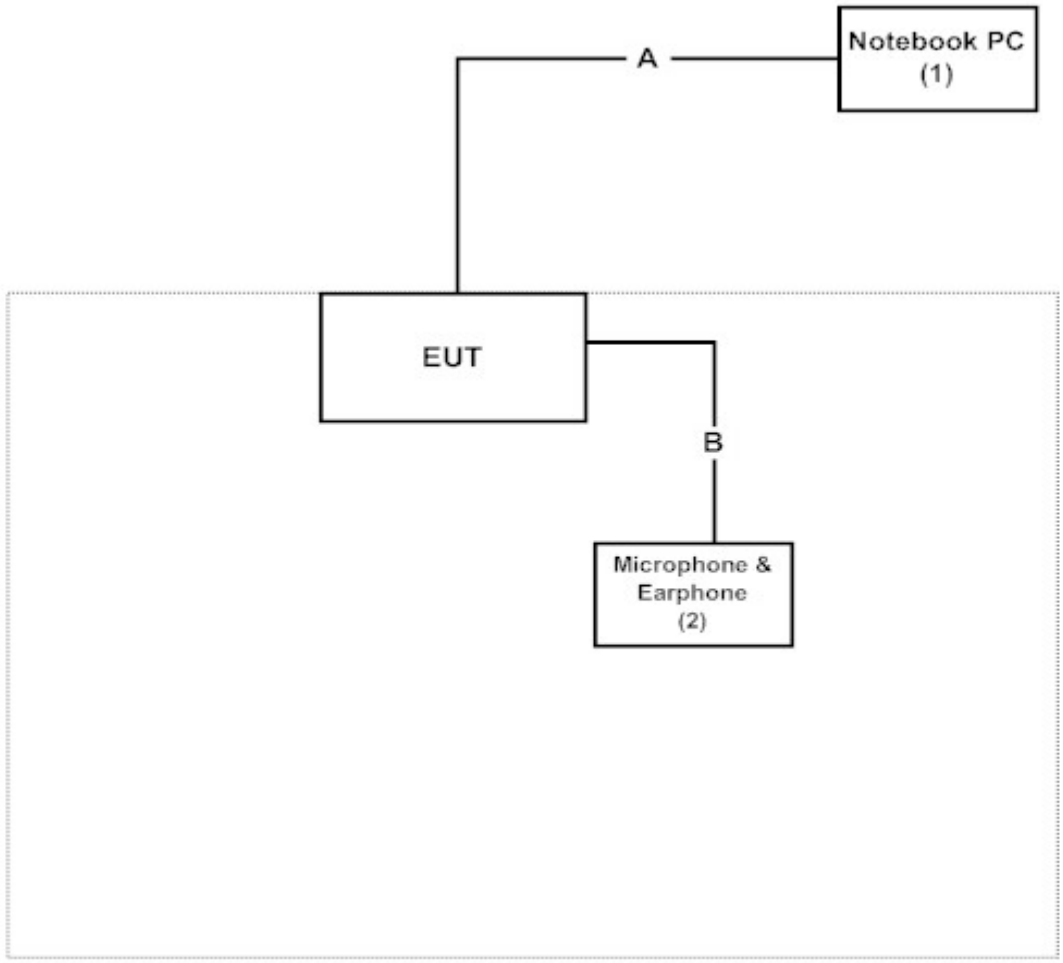
The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Test Mode		Mode 1			
Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	DELL	E5530	24QPXW1	Non-Shielded, 0.8m
2	Microphone & Earphone	Ergotech	E201	N/A	N/A

Test Mode		Mode 2			
Product		Manufacturer	Model No.	Serial No.	Power Cord
1	POE	N/A	N/A	N/A	N/A
2	Notebook PC	DELL	E5530	24QPXW1	Non-Shielded, 0.8m
3	Microphone & Earphone	Ergotech	E201	N/A	N/A

1.4. Configuration of Tested System

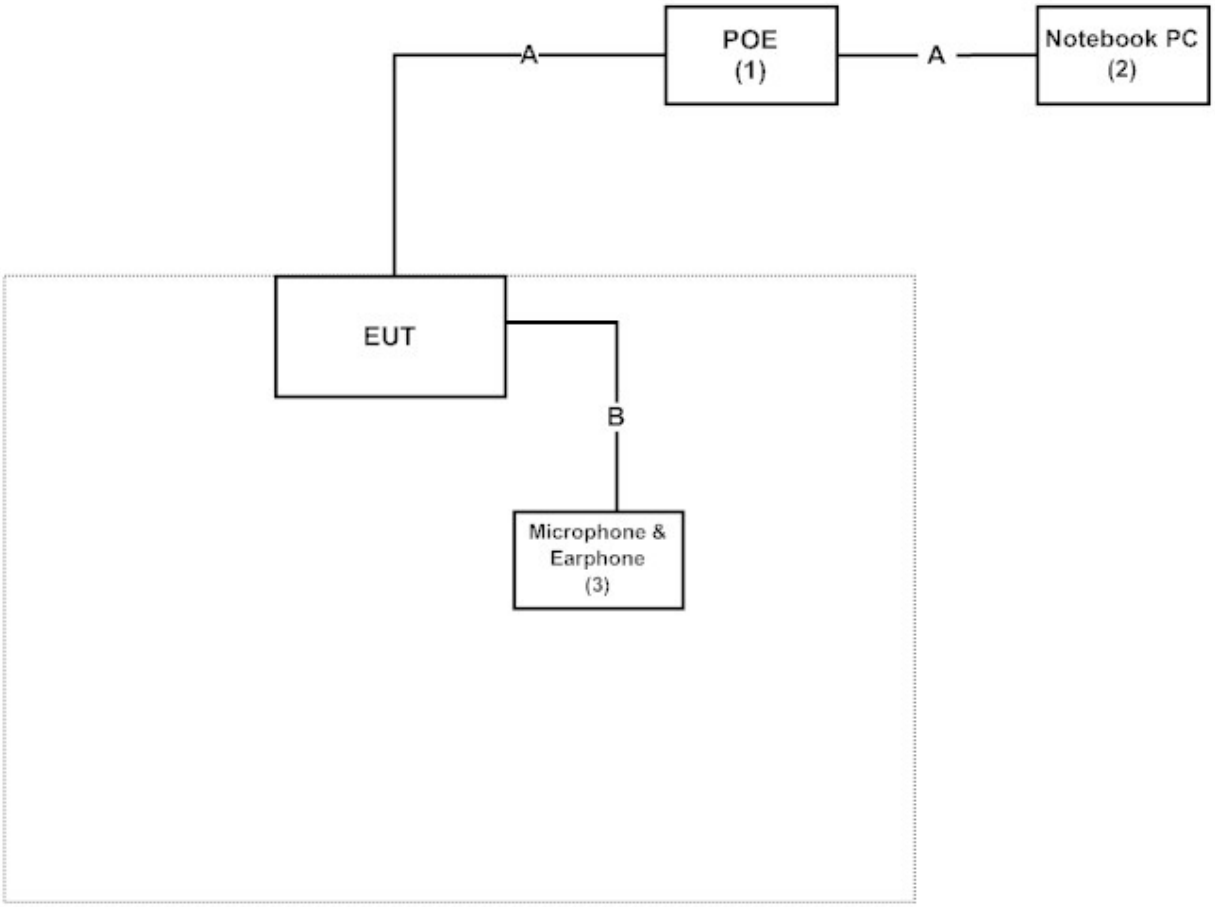
Test Mode	Mode 1
Connection Diagram	



Signal Cable Type		Signal cable Description
A	LAN Cable	Non-Shielded, 6.0m
B	Microphone & Earphone Cable	Non-Shielded, 2.0m

Test Mode	Mode 2

Connection Diagram



Signal Cable Type		Signal cable Description
A	LAN Cable	Non-Shielded, 6.0m, two PCS.
B	Microphone & Earphone Cable	Non-Shielded, 2.0m

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	The EUT will start to operate and display the video figure from the signal source.
4	The EUT will display “video figure” on monitor.
5	SD card works while the EUT is recording.
6	Repeat the above procedure (3) to (5).

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: 2015-04 Class B	Yes	No
Impedance Stabilization Network	VCCI: 2015-04 Class B	Yes	No
Radiated Emission	VCCI: 2015-04 Class B	Yes	No

2.2. List of Test Equipment

Conducted Emission / SR1

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
EMI Test Receiver	R&S	ESCS 30	100367	2015/12/21
LISN	R&S	ENV216	100085	2016/01/21
LISN	R&S	ESH3-Z5	836679/023	2016/07/12
Coaxial Cable	QTK(Arnist)	RG 400	LC016-RG	2016/06/23

Impedance Stabilization Network / SR1

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Capacitive Voltage Probe	Schaffner	CVP2200A	18331	2015/10/30
EMI Test Receiver	R&S	ESCS 30	100367	2015/12/21
LISN	R&S	ENV216	100085	2016/01/21
LISN	R&S	ESH3-Z5	836679/023	2016/07/12
RF Current Probe	FCC	F-65 10KHz~1GHz	198	2015/11/03
Coaxial Cable	QTK(Arnist)	RG 400	LC016-RG	2016/06/23
Coupling Decoupling Network	Teseq	CDN ST08A	33998	2016/08/31
Coupling Decoupling Network	Teseq	CDN T800	30303	2016/04/01
BALANCED TELECOM ISN	FCC	FCC-TLISN-T2-02	20316	2016/08/09

Radiated Emission / Site1

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Bilog Antenna	Schaffner Chase	CBL6112B	2905	2016/06/11
EMI Test Receiver	R&S	ESCS 30	100121	2016/04/23
Coaxial Cable	QTK(Arnist)	RG 214	LC001-RG	2016/06/14
Coaxial signal switch	Arnist	MP59B	6200436229	2016/06/14
Site1 NSA	QTK	N/A	N/A	2016/06/14

Radiated Emission / CB7

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
EMI Test Receiver	R&S	ESU26	100433	2016/09/03
Horn Antenna	SCHWARZBECK	9120D	576	2015/11/25
Pre-Amplifier	COM-POWER	PAM-118	443019	2016/07/19
CB7 VSWR	QTK	N/A	N/A	2016/06/24

VCCI Test Site:

Test Item	Test Site	VCCI No.
Conducted Emission	SR1	C-2428
Conducted Emission	SR2	C-3837
Conducted Emission	SR8	C-3723
Conducted Emission (Telecommunication Port)	SR1	T-1473
Conducted Emission (Telecommunication Port)	SR2	T-1955
Conducted Emission (Telecommunication Port)	SR8	T-1887
Radiated Emission	Site 1	R-2231
Radiated Emission	Site 2	R-2232
Radiated Emission	Site 3	R-2233
Radiated Emission	Site 4	R-2592
Radiated Emission	Site 5	R-2593
Radiated Emission	Site 6	R-2828
Radiated Emission	Site 7	R-3748
Radiated Emission	CB7	R-3107
Radiated Emission (Above 1GHz)	CB7(9x6x6_Chamber)	G-35
Radiated Emission (Above 1GHz)	CB8(9x6x6_Chamber)	G-947

2.3. Measurement Uncertainty

Conducted Emission

The measurement uncertainty is evaluated as ± 2.26 dB.

Impedance Stabilization Network

The measurement uncertainty is evaluated as ± 2.26 dB.

Radiated Emission

The measurement uncertainty is evaluated as ± 3.19 dB.

2.4. Test Environment

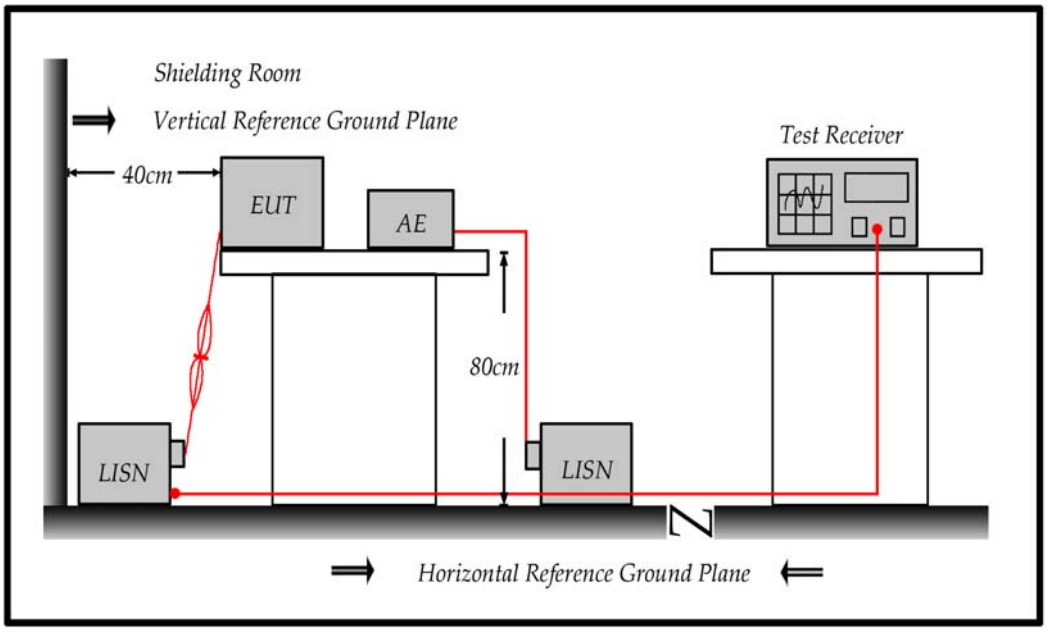
Performed Item	Items	Required	Actual
Conducted Emission	Temperature (°C)	15-35	26.3
	Humidity (%RH)	25-75	62
	Barometric pressure (mbar)	860-1060	950-1000
Impedance Stabilization Network	Temperature (°C)	15-35	26.3
	Humidity (%RH)	25-75	62
	Barometric pressure (mbar)	860-1060	950-1000
Radiated Emission	Temperature (°C)	15-35	26.3
	Humidity (%RH)	25-75	62
	Barometric pressure (mbar)	860-1060	950-1000

3. Conducted Emission

3.1. Test Specification

According to EMC Standard : VCCI

3.2. Test Setup



3.3. Limit

Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 – 46
0.50-5.0	56	46
5.0 - 30	60	50

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

3.4. Test Procedure

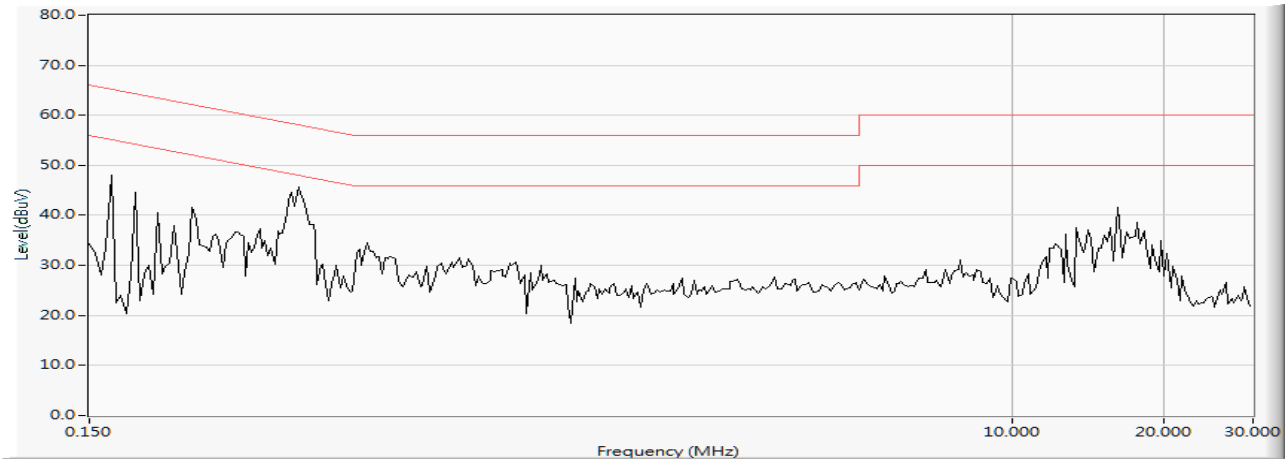
The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination.
(Please refers to the block diagram of the test setup and photographs.)
Both sides of A.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 according to VCCI 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

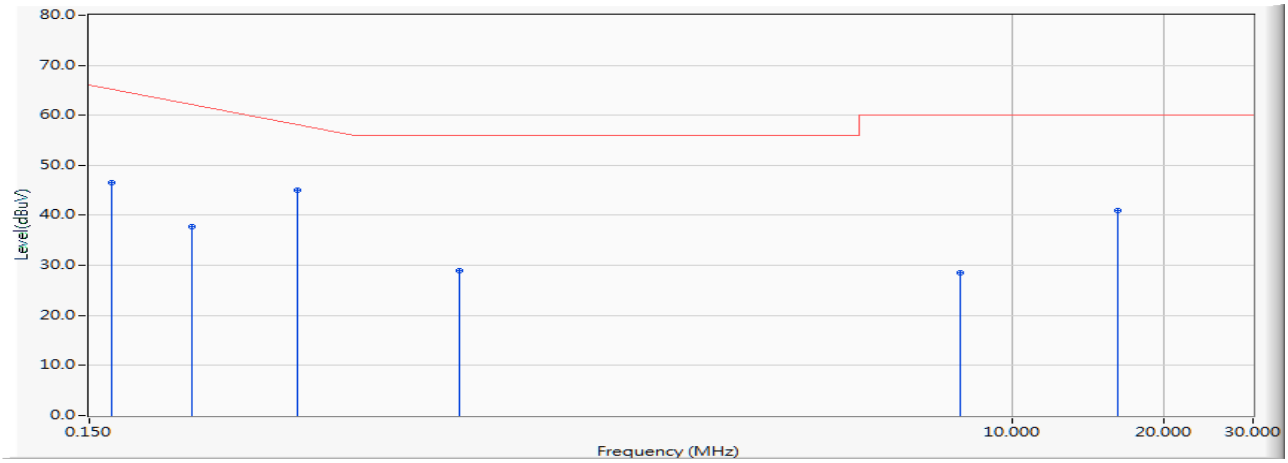
No deviation.

3.6. Test Result

Site : SR1	**Time : 2016/08/19 - 17:08**
Limit : CISPR_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : ENV216_L1 - Line1**
Power : AC 100V/50Hz	**Note : Mode 1**



Site : SR1	**Time : 2016/08/19 - 17:08**
Limit : CISPR_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : ENV216_L1 - Line1**
Power : AC 100V/50Hz	**Note : Mode 1**

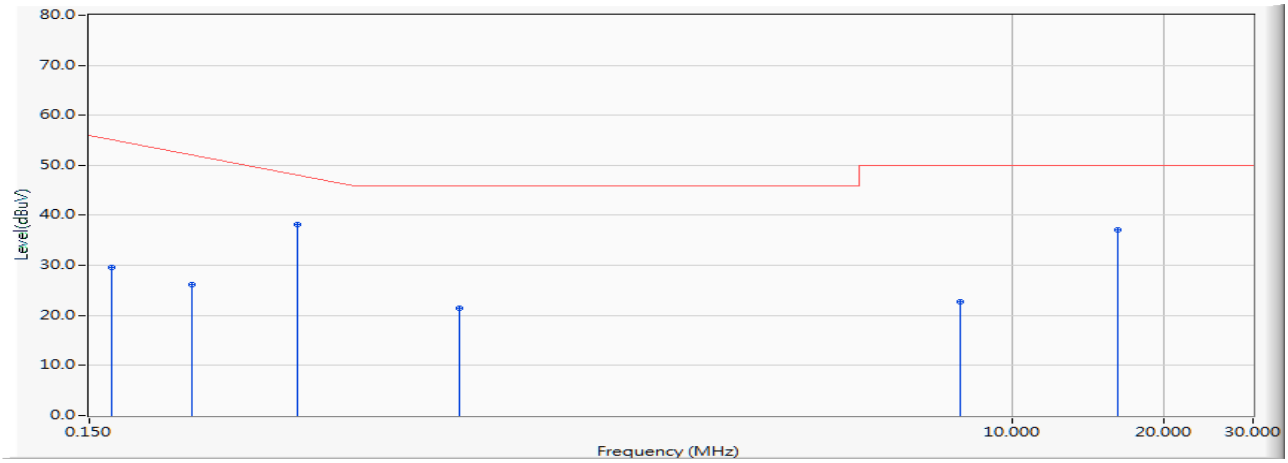


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	9.703	36.820	46.523	-19.020	65.543	QUASIPEAK
2		0.240	9.697	28.150	37.847	-25.582	63.429	QUASIPEAK
3	*	0.388	9.702	35.350	45.052	-14.148	59.200	QUASIPEAK
4		0.810	9.715	19.200	28.915	-27.085	56.000	QUASIPEAK
5		7.923	9.908	18.640	28.548	-31.452	60.000	QUASIPEAK
6		16.228	10.071	30.930	41.001	-18.999	60.000	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

Site : SR1	**Time : 2016/08/19 - 17:08**
Limit : CISPR_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : ENV216_L1 - Line1**
Power : AC 100V/50Hz	**Note : Mode 1**

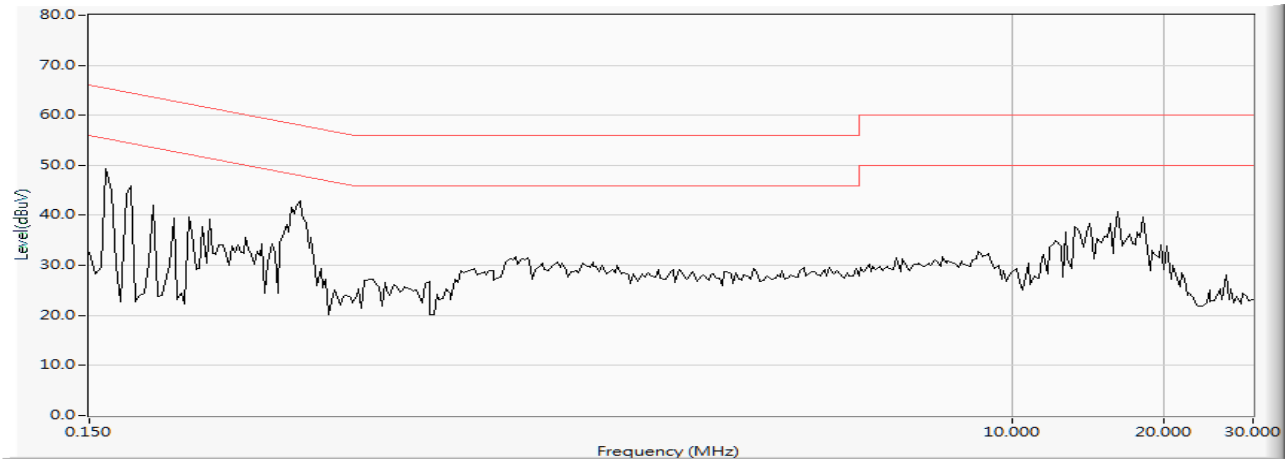


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	9.703	19.900	29.603	-25.940	55.543	AVERAGE
2		0.240	9.697	16.370	26.067	-27.362	53.429	AVERAGE
3	*	0.388	9.702	28.540	38.242	-10.958	49.200	AVERAGE
4		0.810	9.715	11.820	21.535	-24.465	46.000	AVERAGE
5		7.923	9.908	12.860	22.768	-27.232	50.000	AVERAGE
6		16.228	10.071	27.030	37.101	-12.899	50.000	AVERAGE

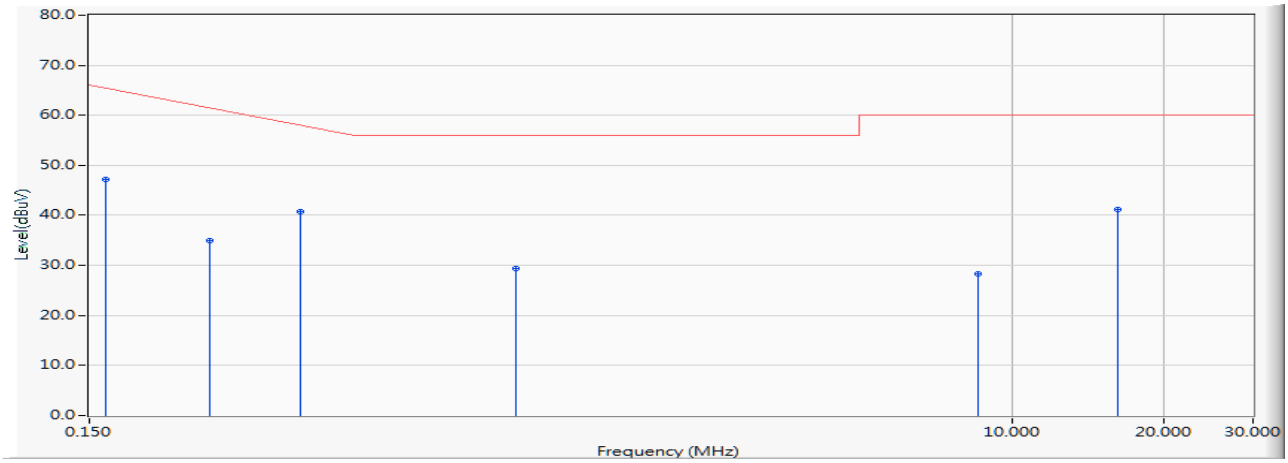
Note:

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

Site : SR1	**Time : 2016/08/19 - 17:10**
Limit : CISPR_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : ENV216_N - Line2**
Power : AC 100V/50Hz	**Note : Mode 1**



Site : SR1	**Time : 2016/08/19 - 17:11**
Limit : CISPR_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : ENV216_N - Line2**
Power : AC 100V/50Hz	**Note : Mode 1**

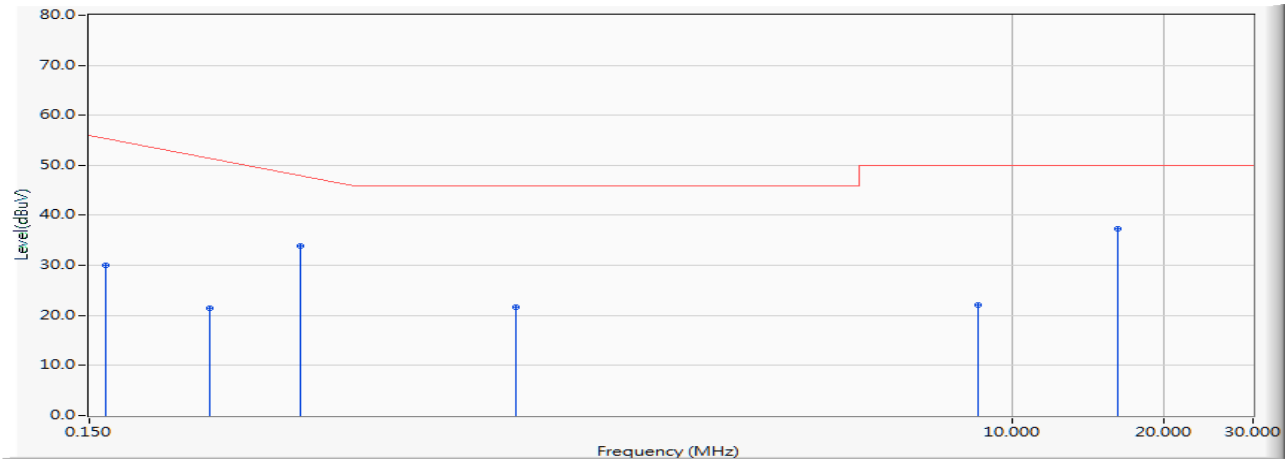


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.162	9.704	37.490	47.194	-18.463	65.657	QUASIPEAK
2		0.259	9.698	25.190	34.888	-27.998	62.886	QUASIPEAK
3	*	0.392	9.692	31.030	40.722	-18.364	59.086	QUASIPEAK
4		1.048	9.713	19.710	29.423	-26.577	56.000	QUASIPEAK
5		8.599	9.937	18.480	28.417	-31.583	60.000	QUASIPEAK
6		16.228	10.171	31.050	41.221	-18.779	60.000	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

Site : SR1	**Time : 2016/08/19 - 17:11**
Limit : CISPR_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : ENV216_N - Line2**
Power : AC 100V/50Hz	**Note : Mode 1**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.162	9.704	20.270	29.974	-25.683	55.657	AVERAGE
2		0.259	9.698	11.730	21.428	-31.458	52.886	AVERAGE
3		0.392	9.692	24.170	33.862	-15.224	49.086	AVERAGE
4		1.048	9.713	11.940	21.653	-24.347	46.000	AVERAGE
5		8.599	9.937	12.200	22.137	-27.863	50.000	AVERAGE
6	*	16.228	10.171	27.160	37.331	-12.669	50.000	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

3.7. Test Photograph

Test Mode : Mode 1: FE9382-EHV, DC

Description : Front View of Conducted Test

Test Mode : Mode 1: FE9382-EHV, DC

Description : Back View of Conducted Test

Test Mode : Mode 1: FE9382-EHV, DC

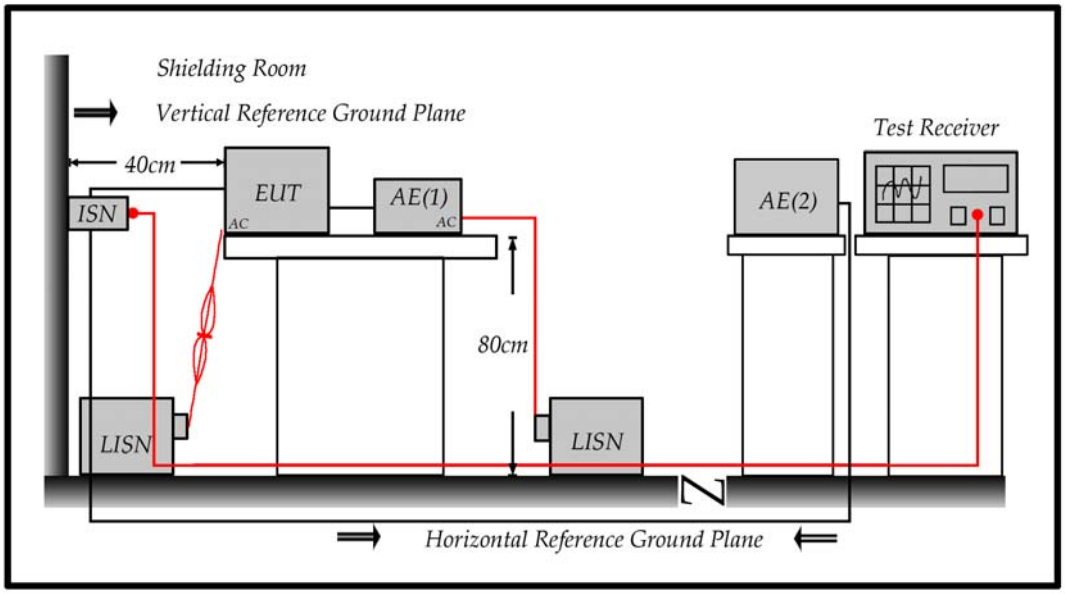
Description : Back View of Conducted Test

4. Conducted Emissions (Telecommunication Ports)

4.1. Test Specification

According to EMC Standard : VCCI

4.2. Test Setup



4.3. Limit

Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	84 – 74	74 – 64
0.50 - 30	74	64

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:

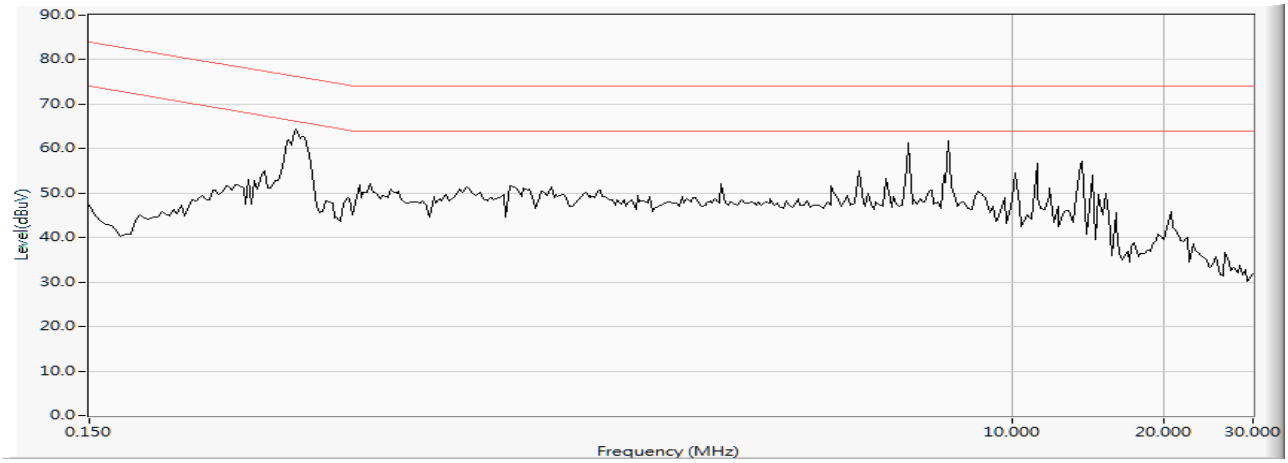
The mains voltage shall be supplied to the EUT via the LISN when the measurement of telecommunication port is performed. The common mode disturbances at the telecommunication port shall be connected to the ISN, which is 150 ohm impedance.
Both alternative cables are tested related to the LCL requested. 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

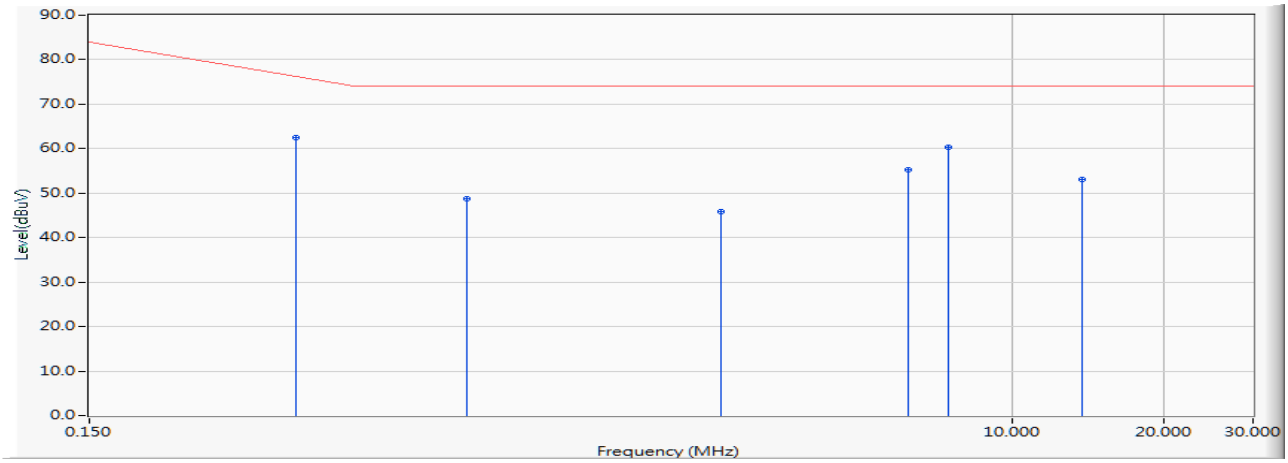
No deviation.

4.6. Test Result

Site : SR1	**Time : 2016/08/19 - 17:15**
Limit : ISN_Voltage_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : TESEQ_T8 - Line1**
Power : AC 100V/50Hz	**Note : Mode 1,ISN 10M**



Site : SR1	**Time : 2016/08/19 - 17:17**
Limit : ISN_Voltage_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8 - Line1**
Power : AC 100V/50Hz	**Note : Mode 1,ISN 10M**

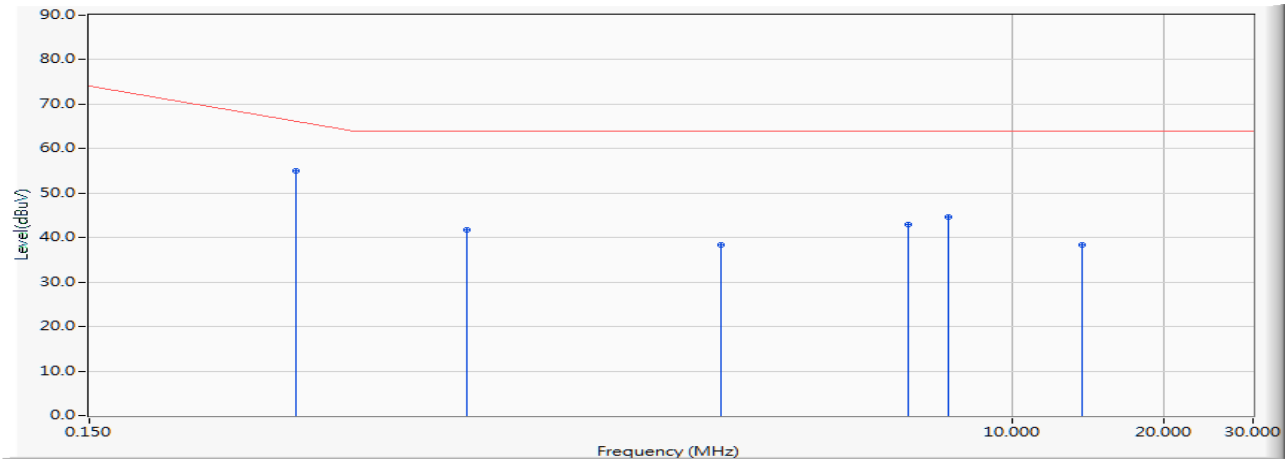


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.384	9.855	52.740	62.595	-14.719	77.314	QUASIPEAK
2		0.838	9.736	39.030	48.766	-25.234	74.000	QUASIPEAK
3		2.662	9.674	36.230	45.904	-28.096	74.000	QUASIPEAK
4		6.248	9.693	45.610	55.303	-18.697	74.000	QUASIPEAK
5	*	7.502	9.705	50.650	60.355	-13.645	74.000	QUASIPEAK
6		13.752	9.840	43.220	53.060	-20.940	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

Site : SR1	**Time : 2016/08/19 - 17:17**
Limit : ISN_Voltage_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8 - Line1**
Power : AC 100V/50Hz	**Note : Mode 1,ISN 10M**

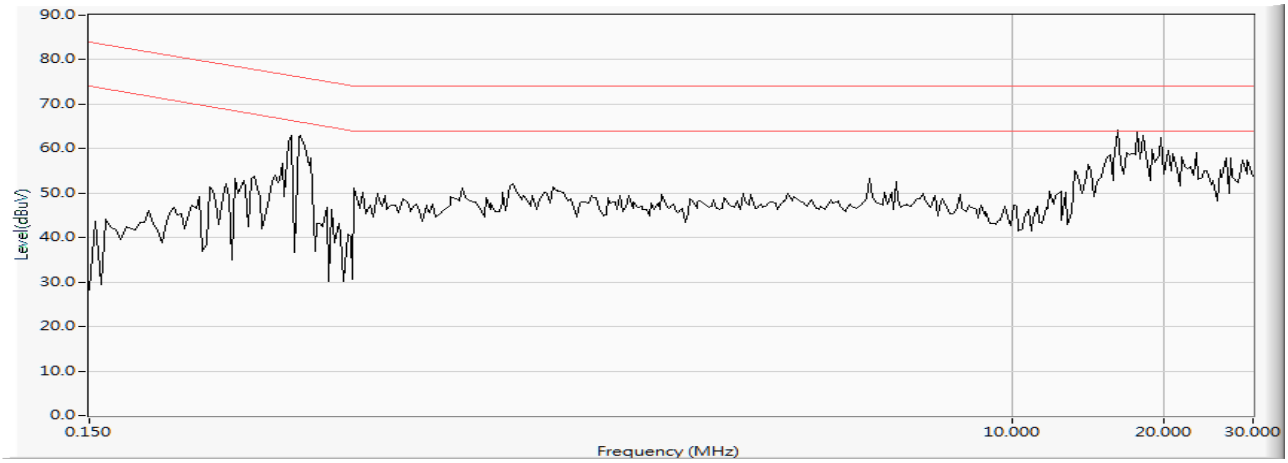


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.384	9.855	45.180	55.035	-12.279	67.314	AVERAGE
2		0.838	9.736	31.910	41.646	-22.354	64.000	AVERAGE
3		2.662	9.674	28.790	38.464	-25.536	64.000	AVERAGE
4		6.248	9.693	33.330	43.023	-20.977	64.000	AVERAGE
5		7.502	9.705	34.950	44.655	-19.345	64.000	AVERAGE
6		13.752	9.840	28.640	38.480	-25.520	64.000	AVERAGE

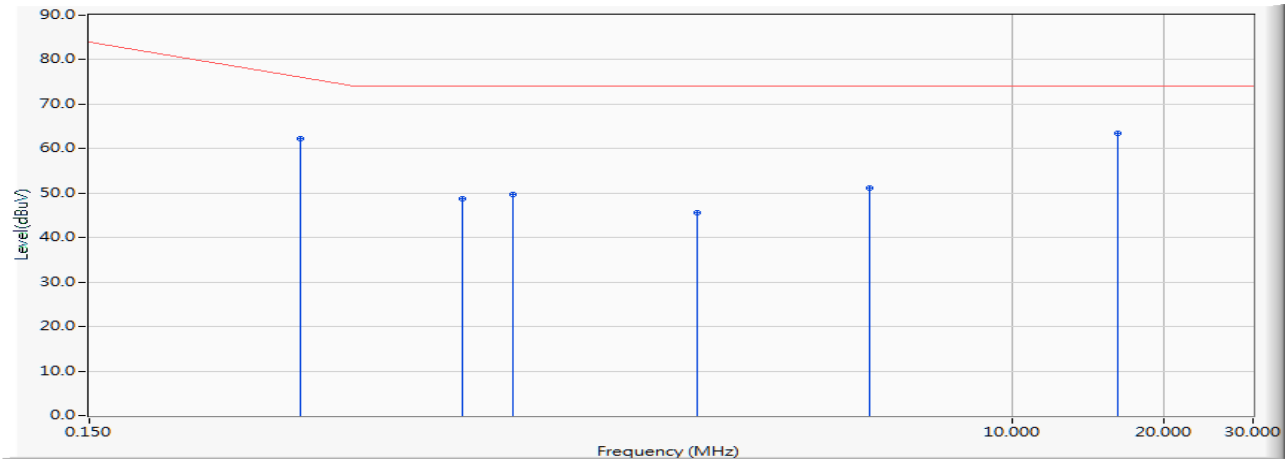
Note:

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

Site : SR1	**Time : 2016/08/19 - 17:18**
Limit : ISN_Voltage_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : TESEQ_T8 - Line1**
Power : AC 100V/50Hz	**Note : Mode 1,ISN 100M**



Site : SR1	**Time : 2016/08/19 - 17:19**
Limit : ISN_Voltage_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8 - Line1**
Power : AC 100V/50Hz	**Note : Mode 1,ISN 100M**

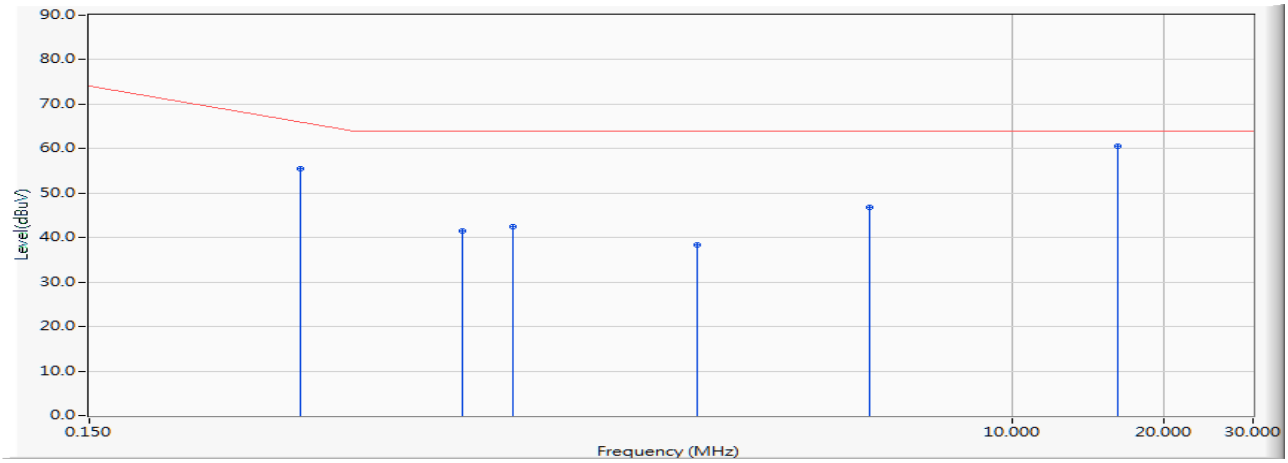


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.392	9.850	52.380	62.230	-14.856	77.086	QUASIPEAK
2		0.822	9.741	39.020	48.761	-25.239	74.000	QUASIPEAK
3		1.029	9.722	40.020	49.742	-24.258	74.000	QUASIPEAK
4		2.384	9.682	36.000	45.682	-28.318	74.000	QUASIPEAK
5		5.236	9.685	41.430	51.115	-22.885	74.000	QUASIPEAK
6	*	16.228	9.911	53.630	63.541	-10.459	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

Site : SR1	**Time : 2016/08/19 - 17:19**
Limit : ISN_Voltage_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8 - Line1**
Power : AC 100V/50Hz	**Note : Mode 1,ISN 100M**

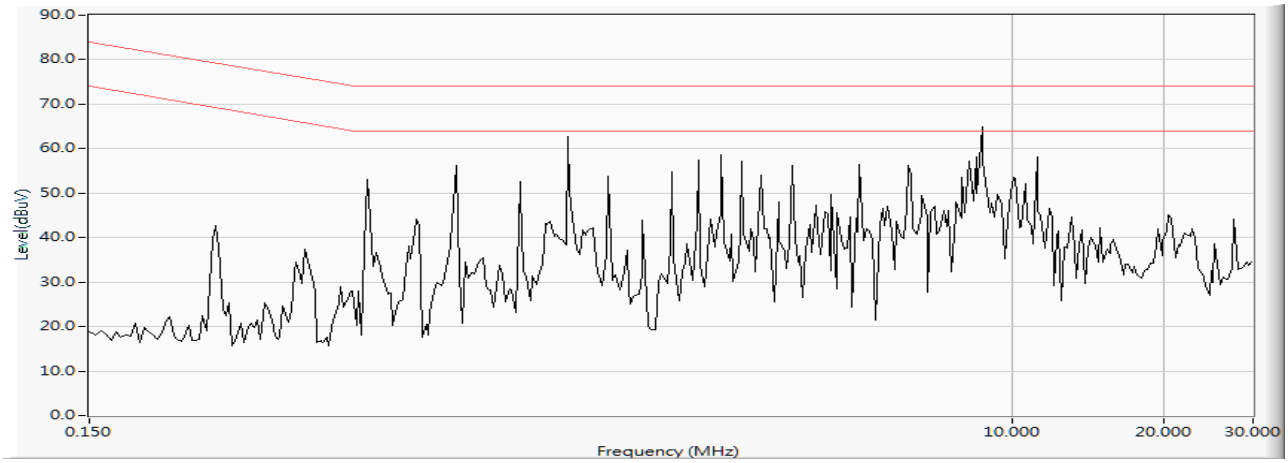


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.392	9.850	45.590	55.440	-11.646	67.086	AVERAGE
2		0.822	9.741	31.700	41.441	-22.559	64.000	AVERAGE
3		1.029	9.722	32.660	42.382	-21.618	64.000	AVERAGE
4		2.384	9.682	28.770	38.452	-25.548	64.000	AVERAGE
5		5.236	9.685	37.040	46.725	-17.275	64.000	AVERAGE
6	*	16.228	9.911	50.620	60.531	-3.469	64.000	AVERAGE

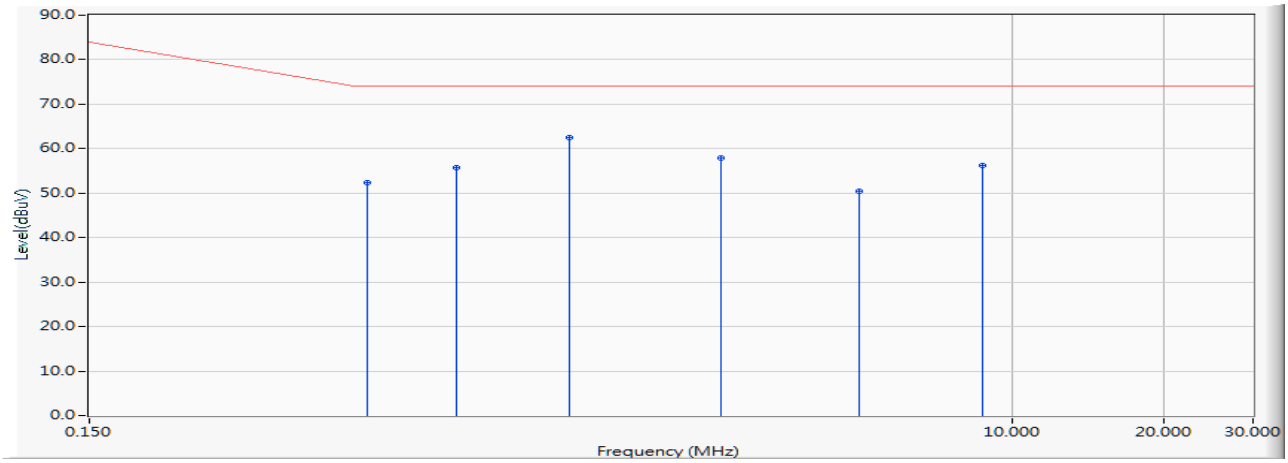
Note:

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

Site : SR1	**Time : 2016/08/19 - 17:33**
Limit : ISN_Voltage_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : TESEQ_T8 - Line1**
Power : PoE	**Note : Mode 2,ISN 10M**



Site : SR1	**Time : 2016/08/19 - 17:34**
Limit : ISN_Voltage_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8 - Line1**
Power : PoE	**Note : Mode 2,ISN 10M**

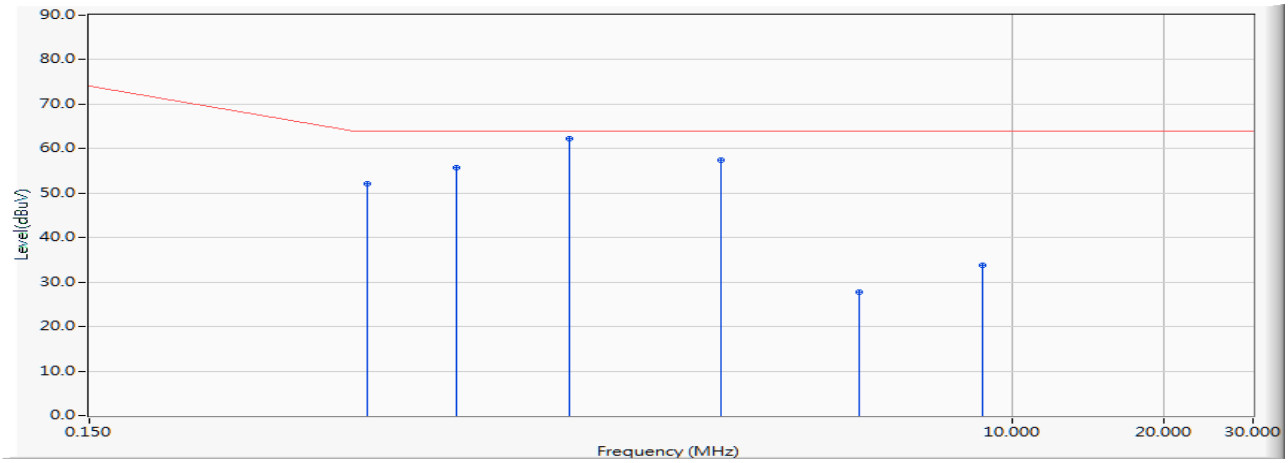


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.533	9.866	42.520	52.386	-21.614	74.000	QUASIPEAK
2		0.798	9.745	46.080	55.825	-18.175	74.000	QUASIPEAK
3	*	1.330	9.712	52.670	62.382	-11.618	74.000	QUASIPEAK
4		2.662	9.674	48.130	57.804	-16.196	74.000	QUASIPEAK
5		5.002	9.681	40.670	50.351	-23.649	74.000	QUASIPEAK
6		8.752	9.729	46.460	56.189	-17.811	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

Site : SR1	**Time : 2016/08/19 - 17:34**
Limit : ISN_Voltage_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8 - Line1**
Power : PoE	**Note : Mode 2,ISN 10M**

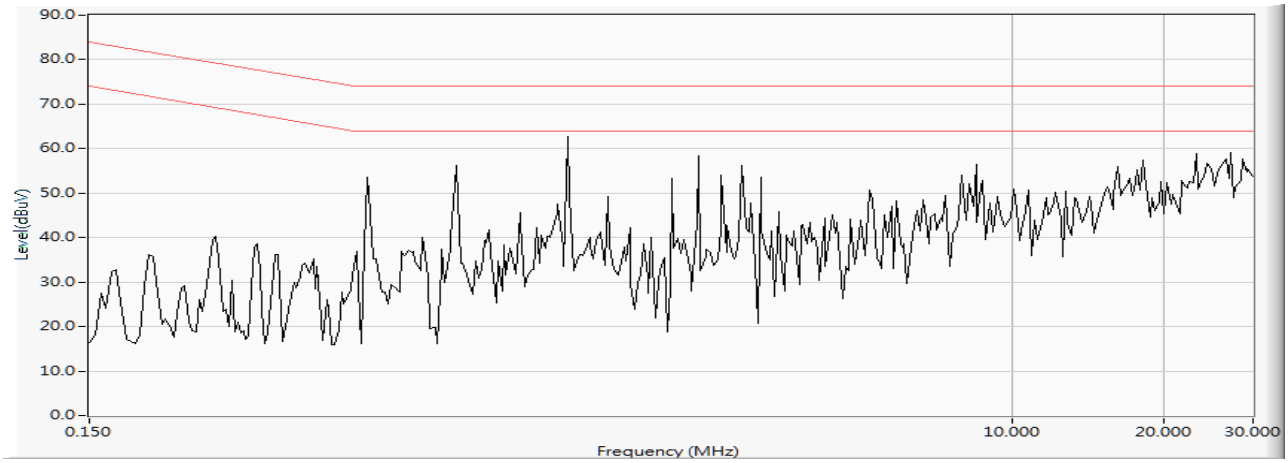


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.533	9.866	42.350	52.216	-11.784	64.000	AVERAGE
2		0.798	9.745	46.000	55.745	-8.255	64.000	AVERAGE
3	*	1.330	9.712	52.600	62.312	-1.688	64.000	AVERAGE
4		2.662	9.674	47.680	57.354	-6.646	64.000	AVERAGE
5		5.002	9.681	18.180	27.861	-36.139	64.000	AVERAGE
6		8.752	9.729	24.010	33.739	-30.261	64.000	AVERAGE

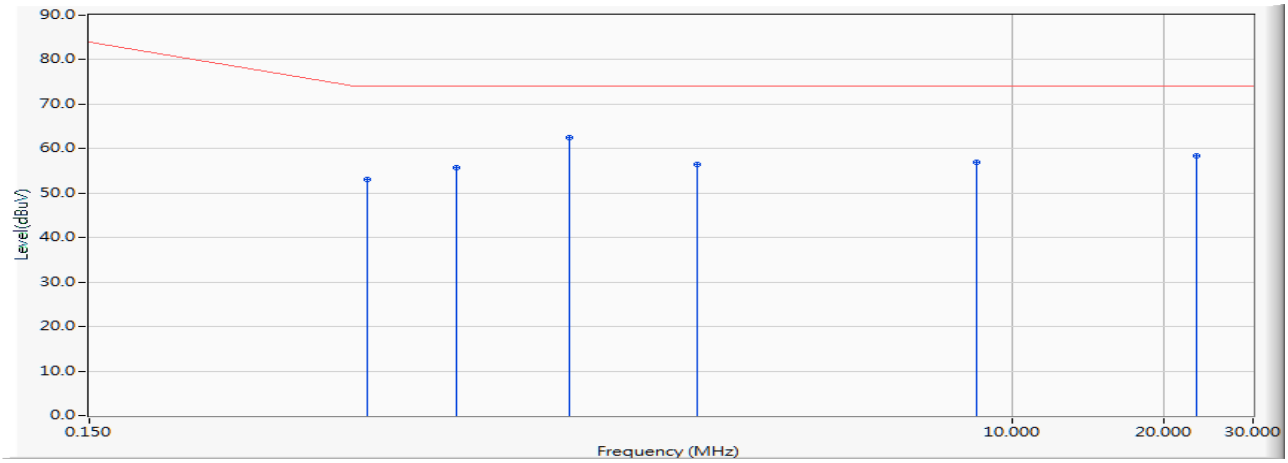
Note:

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

Site : SR1	**Time : 2016/08/19 - 17:35**
Limit : ISN_Voltage_B_00M_QP	**Margin : 10**
EUT : Network Camera	**Probe : TESEQ_T8 - Line1**
Power : PoE	**Note : Mode 2,ISN 100M**



Site : SR1	**Time : 2016/08/19 - 17:36**
Limit : ISN_Voltage_B_00M_QP	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8 - Line1**
Power : PoE	**Note : Mode 2,ISN 100M**

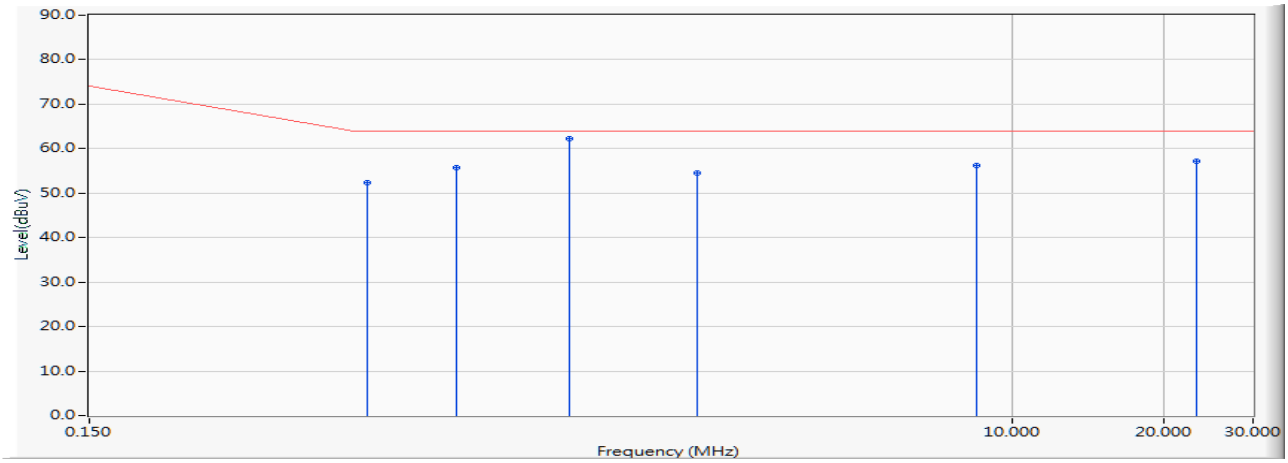


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.533	9.866	43.160	53.026	-20.974	74.000	QUASIPEAK
2		0.798	9.745	46.040	55.785	-18.215	74.000	QUASIPEAK
3	*	1.330	9.712	52.730	62.442	-11.558	74.000	QUASIPEAK
4		2.396	9.682	46.790	56.472	-17.528	74.000	QUASIPEAK
5		8.517	9.726	47.200	56.926	-17.074	74.000	QUASIPEAK
6		23.127	10.115	48.170	58.285	-15.715	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

Site : SR1	**Time : 2016/08/19 - 17:36**
Limit : ISN_Voltage_B_00M_AV	**Margin : 0**
EUT : Network Camera	**Probe : TESEQ_T8 - 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		0.533	9.866	42.510	52.376	-11.624	64.000	AVERAGE
2		0.798	9.745	46.000	55.745	-8.255	64.000	AVERAGE
3	*	1.330	9.712	52.650	62.362	-1.638	64.000	AVERAGE
4		2.396	9.682	44.960	54.642	-9.358	64.000	AVERAGE
5		8.517	9.726	46.480	56.206	-7.794	64.000	AVERAGE
6		23.127	10.115	47.020	57.135	-6.865	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

4.7. Test Photograph

Test Mode : Mode 1: FE9382-EHV, DC

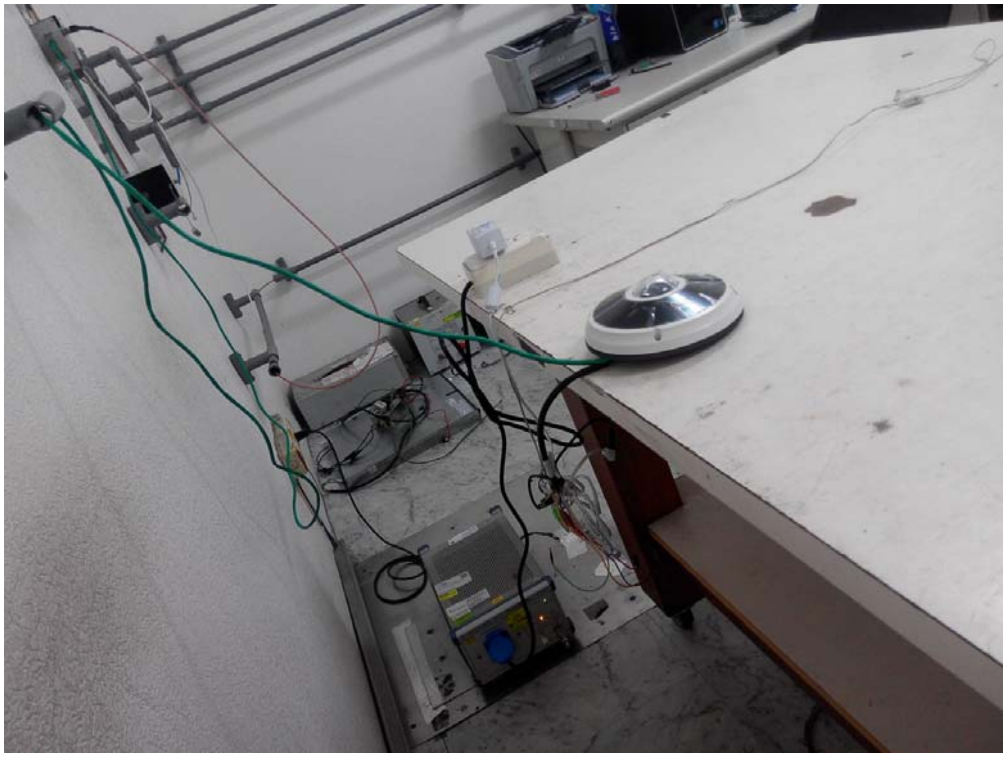
Description : Front View of ISN Test

Test Mode : Mode 1: FE9382-EHV, DC

Description : Back View of ISN Test

Test Mode : Mode 1: FE9382-EHV, DC

Description : Back View of ISN Test



Test Mode : Mode 2: FE9382-EHV, PoE

Description : Front View of ISN Test

Test Mode : Mode 2: FE9382-EHV, PoE

Description : Back View of ISN Test

Test Mode : Mode 2: FE9382-EHV, PoE

Description : Back View of ISN Test

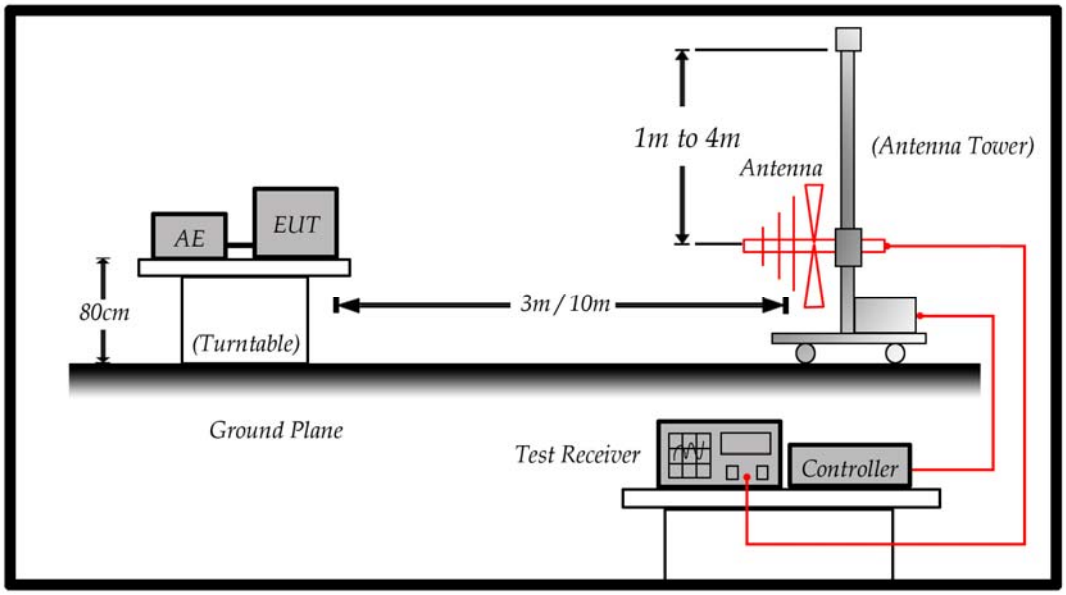
5. Radiated Emission

5.1. Test Specification

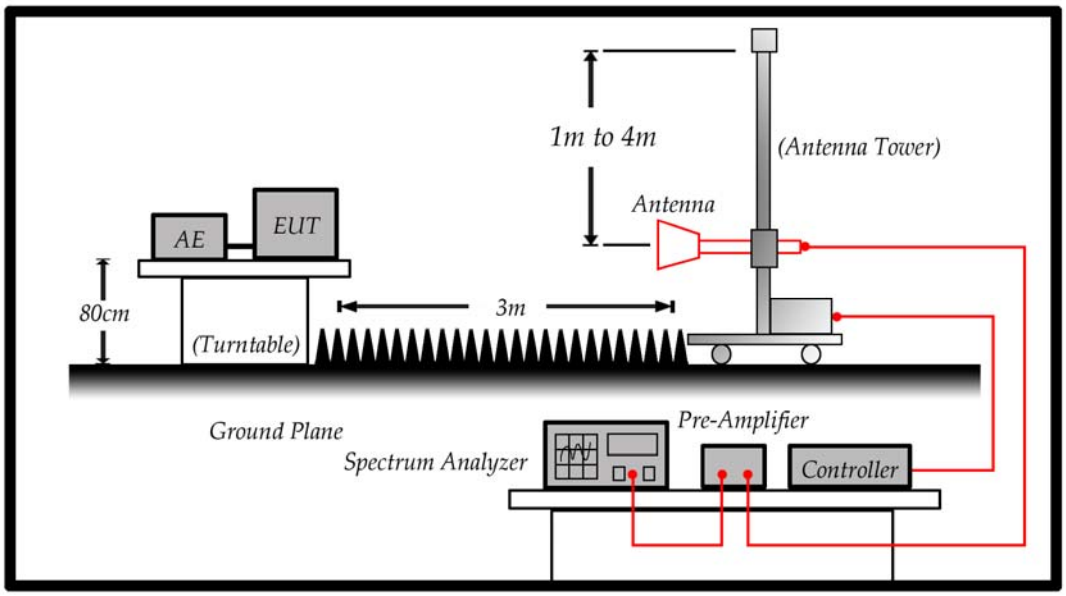
According to EMC Standard : VCCI

5.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



5.3. Limit

Under 1GHz test shall not exceed the following value:

Limits		
Frequency (MHz)	Distance (m)	dBuV/m
30 – 230	10	30
230 – 1000	10	37

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.

Above 1GHz test shall not exceed the following value:

Limits (dBuV/m)			
Frequency (GHz)	Distance (m)	Peak limit dB(μV/m)	Average limit dB(μV/m)
1-3	3	70	50
3-6	3	74	54

NOTE: The lower limit applies at the transition frequency

5.4. 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 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 outsidethe 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 according to VCCI 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.

Conditional testing procedure:

The highest internal source of an EUT is defined as the highest frequency generated or used within the EUT or on which the EUT operates or tunes.

If the highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1 GHz.

If the highest frequency of the internal sources of the EUT is between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz.

If the highest frequency of the internal sources of the EUT is between 500 MHz and 1 GHz, the measurement shall only be made up to 5 GHz.

If the highest frequency of the internal sources of the EUT is above 1 GHz, the measurement shall be made up to 5 times the highest frequency or 6 GHz, whichever is less.

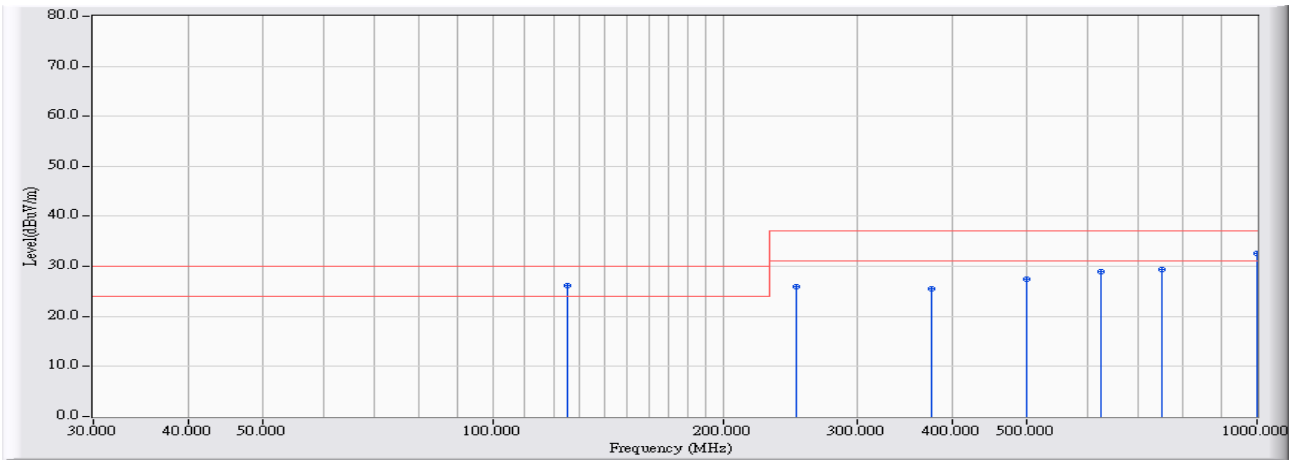
It is placed with absorb on the ground between EUT and Antenna.

5.5. Deviation from Test Standard

No deviation.

5.6. Test Result

Site : Site1	**Time : 2016/08/18 - 06:30**
Limit : CISPR_B_10M_QP	**Margin : 6**
EUT : Network Camera	**Probe : Site1_CBL6112_10M_1506 - HORIZONTAL**
Power : AC 100V/50Hz to DC 12V	**Note : Mode 1**

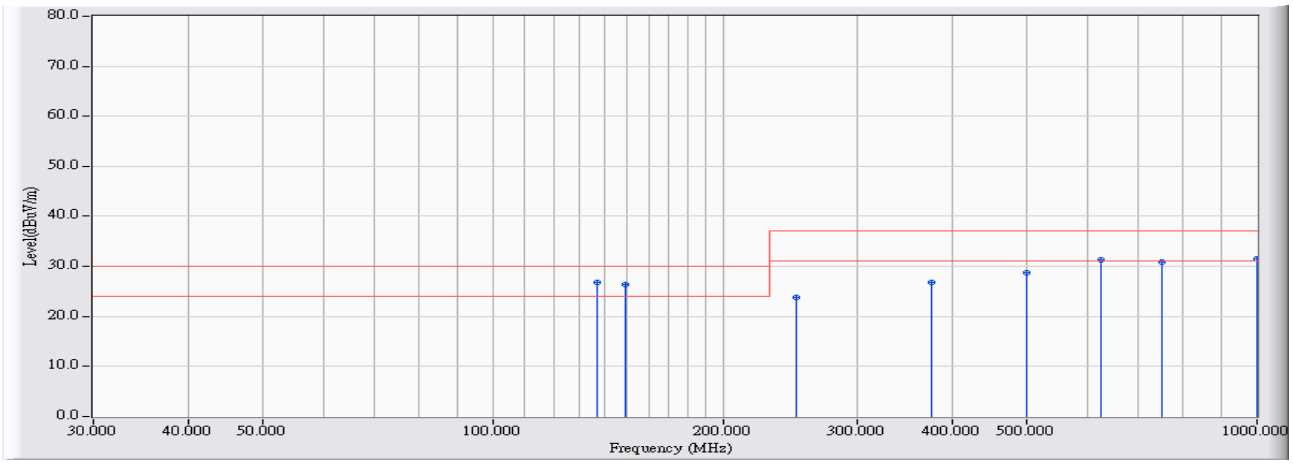


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	125.003	14.342	11.748	26.090	-3.910	30.000	QUASIPEAK
2		250.004	15.846	10.054	25.900	-11.100	37.000	QUASIPEAK
3		375.001	19.397	6.135	25.532	-11.468	37.000	QUASIPEAK
4		500.003	22.371	5.107	27.478	-9.522	37.000	QUASIPEAK
5		625.000	24.418	4.570	28.988	-8.012	37.000	QUASIPEAK
6		749.994	26.020	3.311	29.331	-7.669	37.000	QUASIPEAK
7		999.994	29.600	2.947	32.547	-4.453	37.000	QUASIPEAK

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

Site : Site1	**Time : 2016/08/18 - 06:52**
Limit : CISPR_B_10M_QP	**Margin : 6**
EUT : Network Camera	**Probe : Site1_CBL6112_10M_1506 - VERTICAL**
Power : AC 100V/50Hz to DC 12V	**Note : Mode 1**

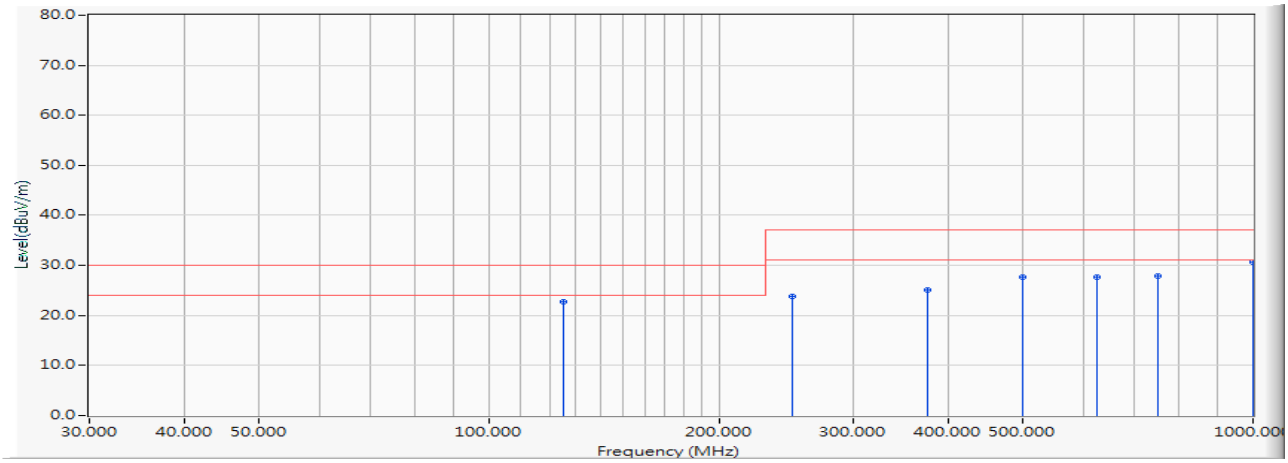


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	137.201	13.814	13.015	26.830	-3.170	30.000	QUASIPEAK
2		148.994	12.986	13.341	26.327	-3.673	30.000	QUASIPEAK
3		250.001	15.846	8.017	23.863	-13.137	37.000	QUASIPEAK
4		374.994	19.397	7.378	26.775	-10.225	37.000	QUASIPEAK
5		499.990	22.371	6.296	28.667	-8.333	37.000	QUASIPEAK
6		625.005	24.418	6.863	31.281	-5.719	37.000	QUASIPEAK
7		750.000	26.020	4.936	30.956	-6.044	37.000	QUASIPEAK
8		999.992	29.600	1.876	31.476	-5.524	37.000	QUASIPEAK

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

Site : site1	**Time : 2016/08/18 - 05:29**
Limit : CISPR_B_10M_QP	**Margin : 6**
EUT : Network Camera	**Probe : Site1_CBL6112_10M_1506 - HORIZONTAL**
Power : PoE	**Note : Mode 2**

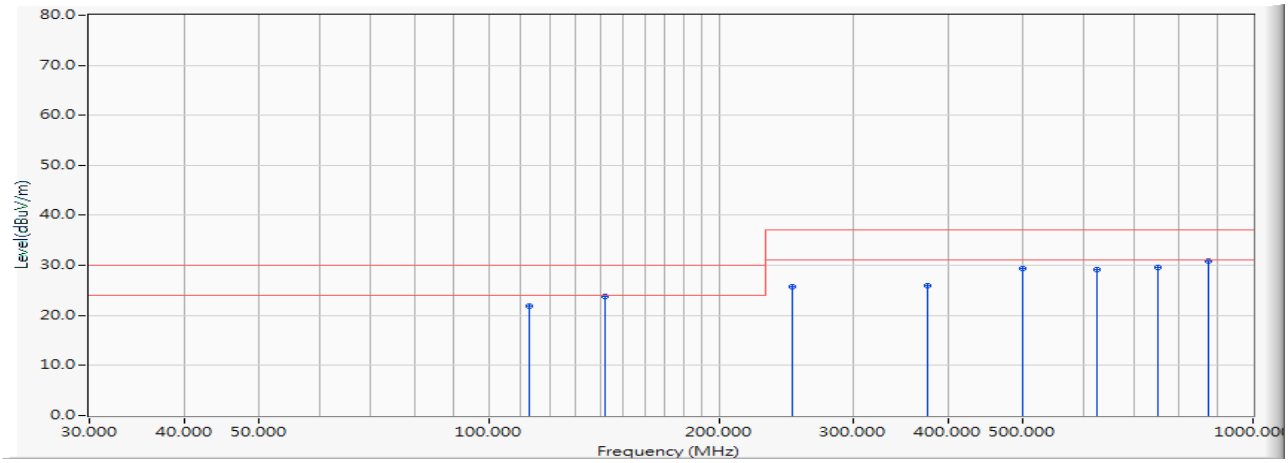


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		125.000	14.342	8.400	22.742	-7.258	30.000	QUASIPEAK
2		250.000	15.846	7.900	23.746	-13.254	37.000	QUASIPEAK
3		375.000	19.397	5.800	25.197	-11.803	37.000	QUASIPEAK
4		500.000	22.371	5.200	27.571	-9.429	37.000	QUASIPEAK
5		625.000	24.418	3.300	27.718	-9.282	37.000	QUASIPEAK
6		750.000	26.020	1.900	27.920	-9.080	37.000	QUASIPEAK
7	*	1000.000	29.600	1.100	30.700	-6.300	37.000	QUASIPEAK

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

Site : site1	**Time : 2016/08/18 - 05:53**
Limit : CISPR_B_10M_QP	**Margin : 6**
EUT : Network Camera	**Probe : Site1_CBL6112_10M_1506 - VERTICAL**
Power : PoE	**Note : Mode 2**

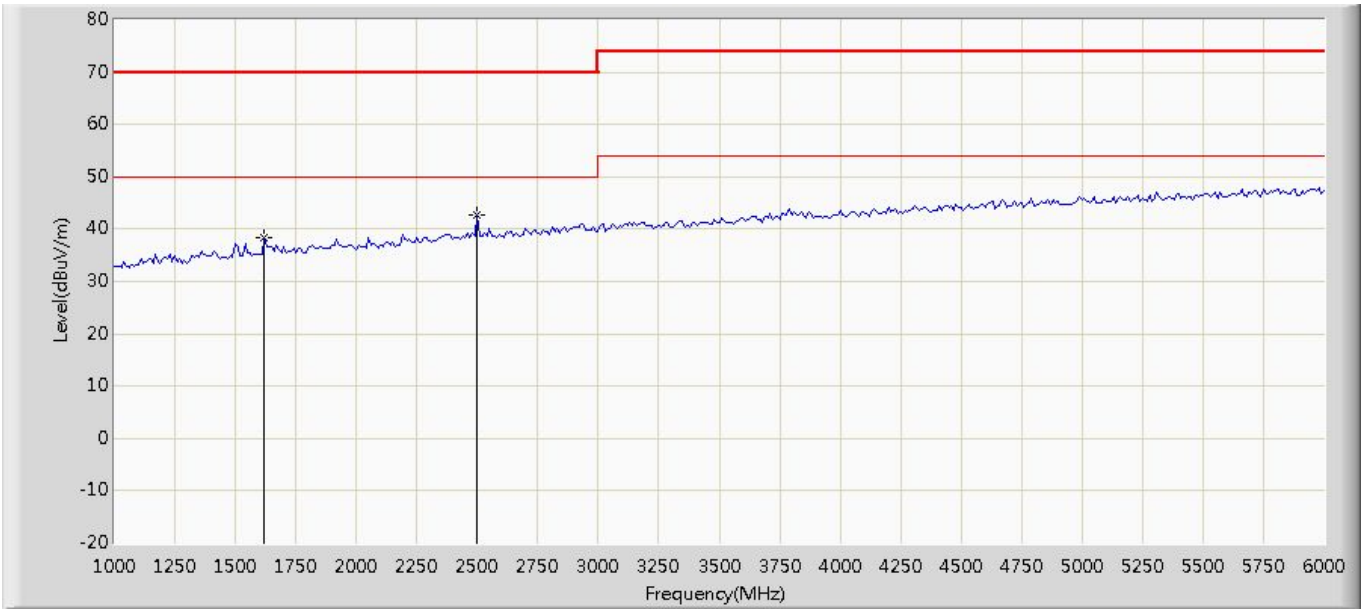


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		113.045	14.378	7.600	21.978	-8.022	30.000	QUASIPEAK
2		141.902	13.551	10.300	23.851	-6.149	30.000	QUASIPEAK
3		250.000	15.846	9.900	25.746	-11.254	37.000	QUASIPEAK
4		375.000	19.397	6.600	25.997	-11.003	37.000	QUASIPEAK
5		500.000	22.371	7.000	29.371	-7.629	37.000	QUASIPEAK
6		625.000	24.418	4.800	29.218	-7.782	37.000	QUASIPEAK
7		750.000	26.020	3.600	29.620	-7.380	37.000	QUASIPEAK
8	*	875.000	27.541	3.400	30.941	-6.059	37.000	QUASIPEAK

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

Site: CB7	Time: 2016/08/19 - 01:31
Limit: VCCI_B_(Above_1G)	Margin: 0
Probe: CB7_Horn_9120D_1511	Polarity: Horizontal
EUT: Network Camera	Power: AC 100V/50Hz to DC 12V
Note: Mode 1	

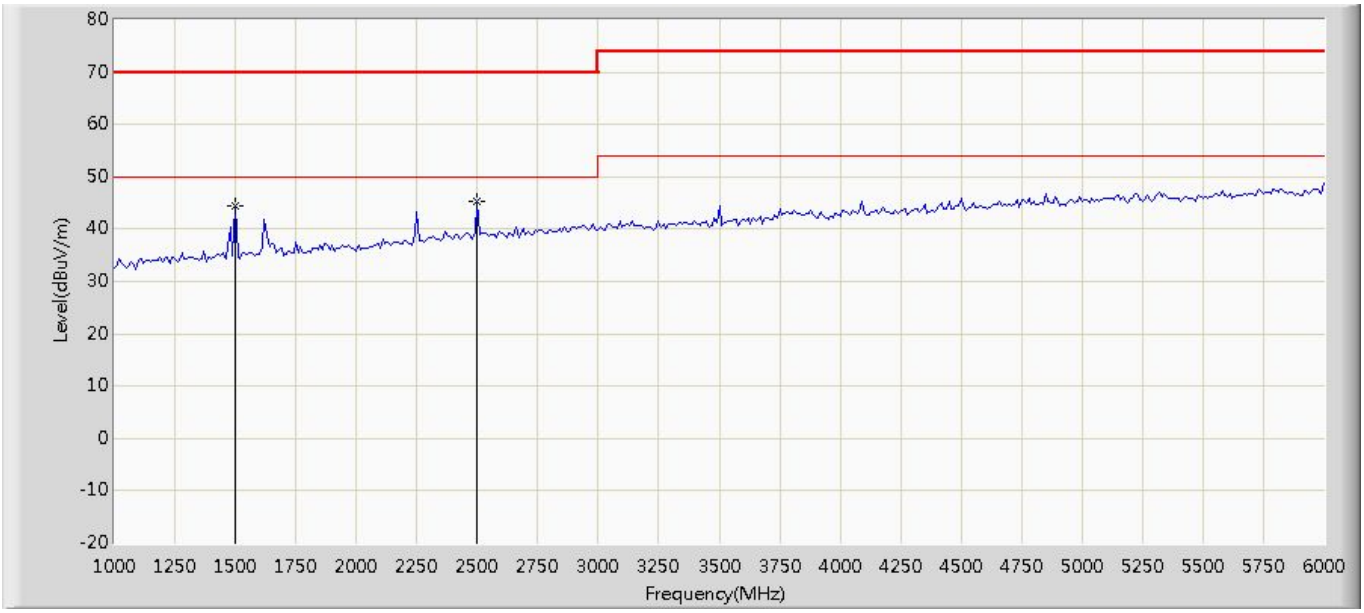


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			1620.000	38.514	34.991	-31.486	70.000	3.523	PK
2		*	2500.000	42.823	35.950	-27.177	70.000	6.873	PK

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: 2016/08/19 - 01:31
Limit: VCCI_B_(Above_1G)	Margin: 0
Probe: CB7_Horn_9120D_1511	Polarity: Vertical
EUT: Network Camera	Power: AC 100V/50Hz to DC 12V
Note: Mode 1	

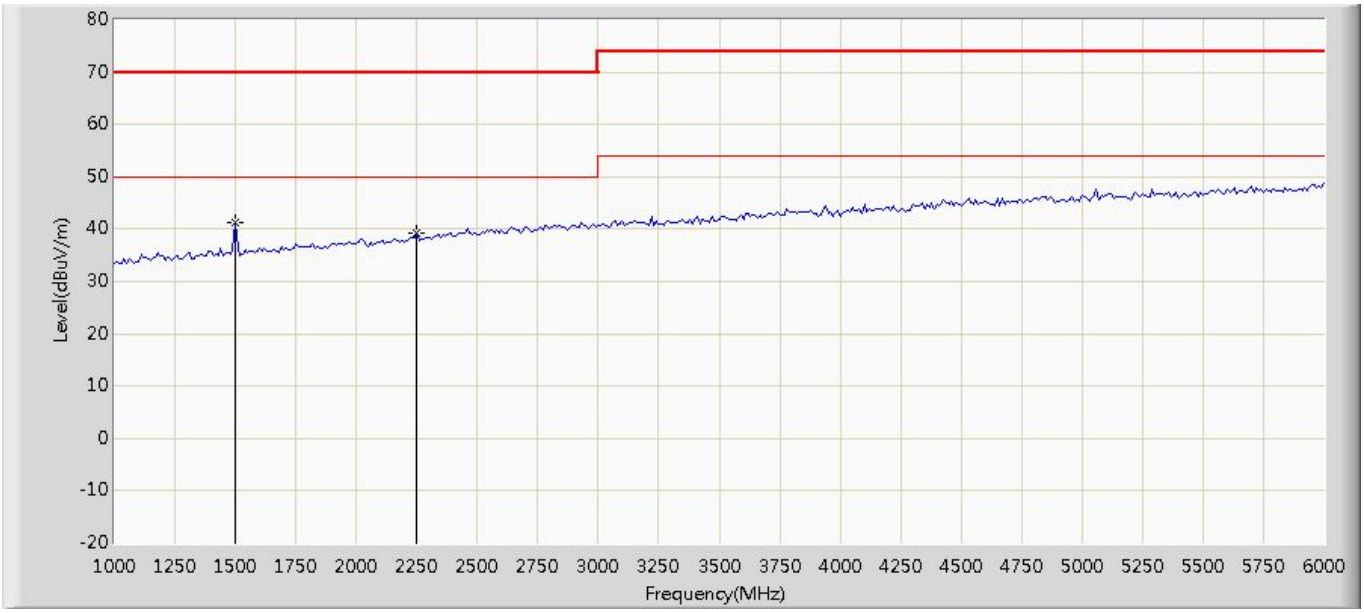


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			1500.000	44.535	41.431	-25.465	70.000	3.104	PK
2		*	2500.000	45.333	38.460	-24.667	70.000	6.873	PK

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: 2016/08/19 - 01:32
Limit: VCCI_B_(Above_1G)	Margin: 0
Probe: CB7_Horn_9120D_1511	Polarity: Horizontal
EUT: Network Camera	Power: POE
Note: Mode 2	

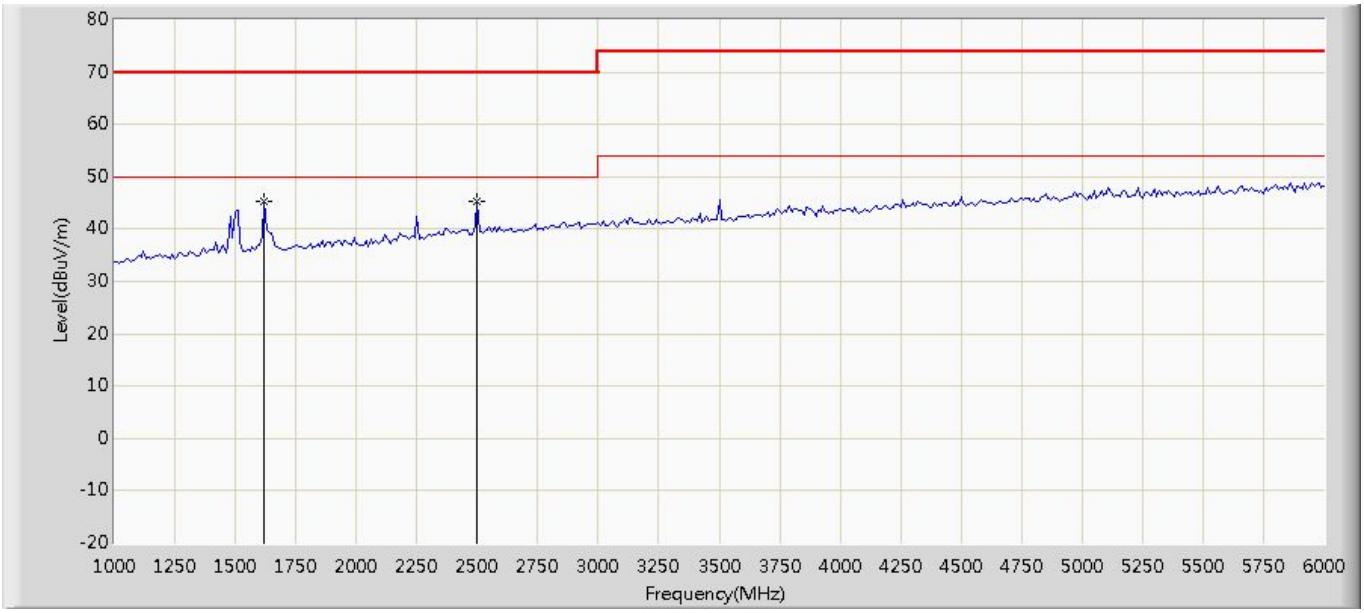


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	1500.000	41.213	38.109	-28.787	70.000	3.104	PK
2			2250.000	39.306	33.377	-30.694	70.000	5.929	PK

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: 2016/08/19 - 01:32
Limit: VCCI_B_(Above_1G)	Margin: 0
Probe: CB7_Horn_9120D_1511	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	Type
1		*	1620.000	45.442	41.919	-24.558	70.000	3.523	PK
2			2500.000	45.236	38.363	-24.764	70.000	6.873	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: FE9382-EHV, DC

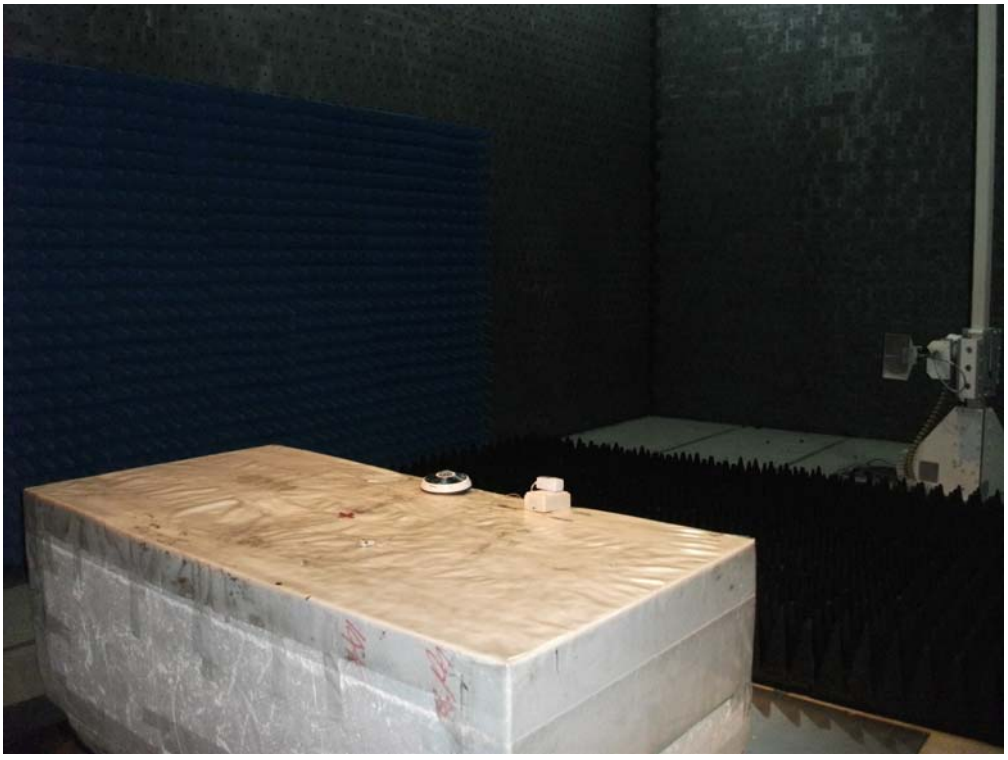
Description : Front View of Radiated Test

Test Mode : Mode 1: FE9382-EHV, DC

Description : Back View of Radiated Test

Test Mode : Mode 1: FE9382-EHV, DC

Description : Front View of High Frequency Radiated Test



Test Mode : Mode 2: FE9382-EHV, PoE

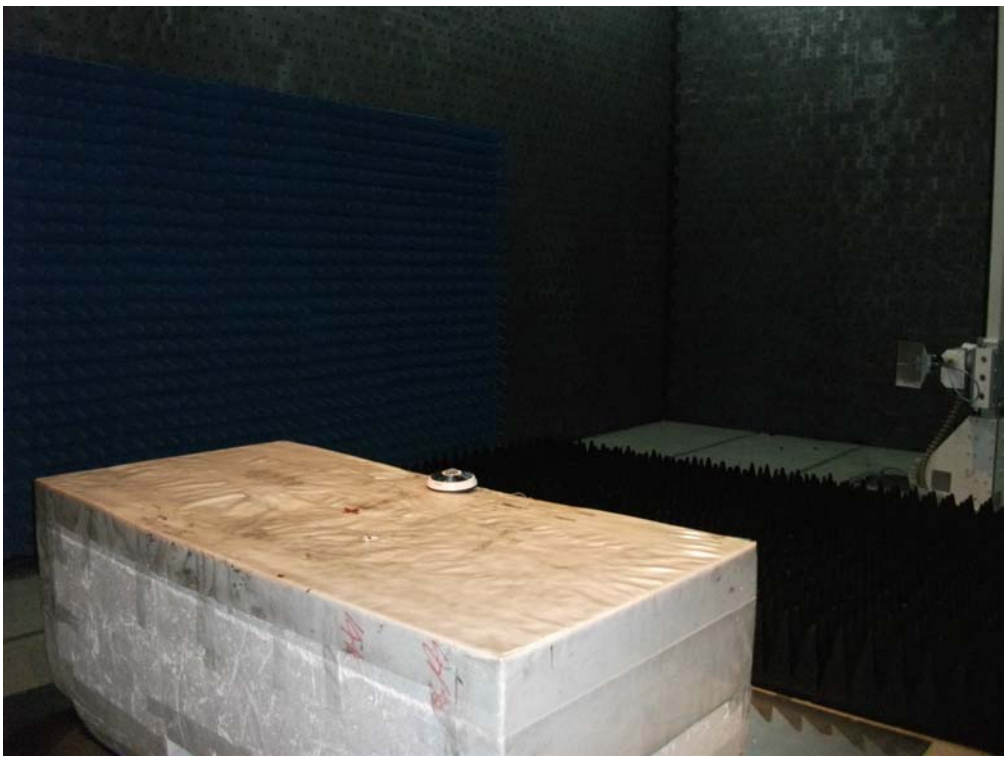
Description : Front View of Radiated Test

Test Mode : Mode 2: FE9382-EHV, PoE

Description : Back View of Radiated Test

Test Mode : Mode 2: FE9382-EHV, PoE

Description : Front View of High Frequency Radiated Test



6. Attachment

➢ EUT Photograph

(1) EUT Photo

(2) EUT Photo

(3) EUT Photo

(4) EUT Photo