FCC Test Report

FCC ID:2AFZT-L1

Product： Intelligent micro laser projection

Trade Name： LTV

Model Number： L1

Serial Model： N/A

Report No.： NTEK-2015NT07162286F1

Prepared for

ILLUMINANCE(CANTON) Co.,LTD.

Room 17B, 17th floor, building A, central avenue, No.2002 BaoYuan Road, XiXiang, Bao'an disrict, Shenzhen, Guangdong, P. R. China

Prepared by

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Website: www.ntek.org.cn

TEST RESULT CERTIFICATION

Applicant's name	:	ILLUMINANCE(CANTON) Co.,LTD.
Address	:	Room 17B, 17th floor, building A, central avenue, No.2002 BaoYuan Road,XiXiang, Bao'an disrict, Shenzhen, Guangdong, P. R. China
Manufacturer's Name	:	ILLUMINANCE(CANTON) Co.,LTD.
Address	:	Room 17B, 17th floor, building A, central avenue, No.2002 BaoYuan Road,XiXiang, Bao'an disrict, Shenzhen, Guangdong, P. R. China

Product description

Product name	:	Intelligent micro laser projection
Model and/or type reference	:	L1
Standards	:	FCC Part15B:01 Oct.2014 ANSI C63.4:2014

This device described above has been tested by NTEK, and the test results show that the equipment under test (EUT) is in compliance with Part 15 of FCC Rules. And it is applicable only to the tested sample identified in the report.

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Date of Test	:	
Date (s) of performance of tests	:	16 Jul. 2015 ~01 Sep. 2015
Date of Issue	:	01 Sep. 2015
Test Result	:	**Pass**

Testing Engineer : Allen Liu

(Allen Liu)

Technical Manager : Brown Lu

(Brown Lu)

Authorized Signatory : Sam. Chen

(Sam Chen)

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1. TEST SUMMARY

Test procedures according to the technical standards:

EMC Emission				
Standard	Test Item	Limit	Judgment	Remark
FCC Part15B:2014 ANSI C63.4: 2014	Conducted Emission	Class B	PASS	
	Radiated Emission	Class B	PASS	

NOTE:

(1) 'N/A' denotes test is not applicable in this Test Report

(2) For client's request and manual description, the test will not be executed.

1.1 TEST FACILITY

NTEK Testing Technology Co., Ltd
Add. : 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.
FCC Registration Number:238937; IC Registration Number:9270A-1
CNAS Registration Number:L5516

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y ± U**，where expended uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**，providing a level of confidence of approximately **95** %.

A. Conducted Measurement :

Test Site	Method	Measurement Frequency Range	U，(dB)	NOTE
NTEKC01	ANSI	150 KHz ~ 30MHz	3.2	

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	U，(dB)	NOTE
NTEKA01	ANSI	30MHz ~ 1000MHz	4.7	
		1GHz ~12.4GHz	5.0	

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

<table>
<tr><td>Equipment</td><td>Intelligent micro laser projection</td></tr>
<tr><td>Model Name</td><td>L1</td></tr>
<tr><td>Additional Model Number(s)</td><td>LTV</td></tr>
<tr><td>Model Difference</td><td>N/A</td></tr>
<tr><td>Product Description</td><td>The EUT is a Intelligent micro laser projection.

<table><tr><td>Connecting I/O port:</td><td>USB, DC in</td></tr><tr><td>Operation Frequency:</td><td>BT:2402~2480 MHz
WIFI(2.4G):802.11b/g/n(20MHz): 2412~2462MHz
WIFI(5.2G): 5180 MHz ~ 5240 MHz
WIFI(5.8G): 5725 MHz ~ 5850 MHz</td></tr><tr><td>Modulation Type:</td><td>BT(1Mbps): GFSK
BT EDR(2Mbps): π/4-DQPSK
BT EDR(3Mbps): 8-DPSK
WIFI(2.4G):IEEE 802.11b : DSSS (CCK, QPSK, DBPSK)
IEEE 802.11g/n (HT20) : OFDM (64QAM, 16QAM, QPSK, BPSK)
WIFI(5 G):OFDM (BPSK / QPSK / 16QAM / 64QAM)</td></tr></table></td></tr>
<tr><td>Power Source</td><td>DC Voltage</td></tr>
<tr><td>Adapter</td><td>Mode : S31A22
Input: 100-240V~, 50/60Hz, 0.35A
Output: 5.0V⎓, 2.0A</td></tr>
<tr><td>Battery</td><td>DC 3.7V, 3000mAh</td></tr>
</table>

2.1.1 DESCRIPTION OF TEST MODES

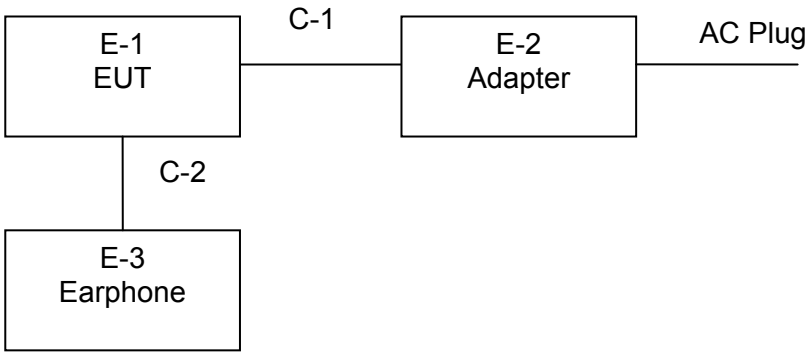
To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	Running Mode+ Charging Mode

For Conducted Test	
Final Test Mode	Description
Mode 1	Running Mode+ Charging Mode

For Radiated Test	
Final Test Mode	Description
Mode 1	Running Mode+ Charging Mode

2.2 DESCRIPTION OF TEST SETUP



2.3 DESCRIPTION TEST PERIPHERAL AND EUT PERIPHERAL

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Brand	Model/Type No.	Series No.	Note
E-1	Intelligent micro laser projection	LTV	L1	N/A	EUT
E-2	Adapter	N/A	S31A22	N/A	
E-3	Earphone	N/A	2688		

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	1.2m	
C-2	NO	NO	1.0m	

Note:

(1) The support equipment was authorized by Declaration of Confirmation.
(2) For detachable type I/O cable should be specified the length in cm in『Length』column.
(3) “YES” means “shielded” “with core”; “NO” means “unshielded” “without core”.

2.4 MEASUREMENT INSTRUMENTS LIST

2.4.1 CONDUCTED TEST SITE

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	LISN	R&S	ENV216	101313	Jul. 06, 2015	Jul. 05, 2016	1 year
2	LISN	SCHWARZBECK	NNLK 8129	8129245	Dec. 25, 2014	Dec. 24, 2015	1 year
3	Pulse Limiter	SCHWARZBECK	VTSD 9561F	9716	Dec. 25, 2014	Dec. 24, 2015	1 year
4	50Ω Switch	ANRITSU CORP	MP59B	6200983704	Jul. 06, 2015	Jul. 05, 2016	1 year
5	Test Cable	N/A	C01	N/A	Jul. 06, 2015	Jul. 05, 2016	1 year
6	Test Cable	N/A	C02	N/A	Jul. 06, 2015	Jul. 05, 2016	1 year
7	Test Cable	N/A	C03	N/A	Jul. 06, 2015	Jul. 05, 2016	1 year
8	EMI Test Receiver	R&S	ESCI	101160	Jul. 06, 2015	Jul. 05, 2016	1 year
9	Passive Voltage Probe	ESH2-Z3	R&S	100196	Jul. 06, 2015	Jul. 05, 2016	1 year
10	Absorbing Clamp	R&S	MDS-21	100423	Jul. 08, 2015	Jul. 07, 2016	1 year

2.4.2 RADIATED TEST SITE

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Bilog Antenna	TESEQ	CBL6111D	31216	Jul. 06, 2015	Jul. 05, 2016	1 year
2	Test Cable	N/A	R-01	N/A	Dec. 25, 2014	Dec. 24, 2015	1 year
3	Test Cable	N/A	R-02	N/A	Dec. 25, 2014	Dec. 24, 2015	1 year
4	EMI Test Receiver	R&S	ESCI-7	101318	Jul. 06, 2015	Jul. 05, 2016	1 year
5	Antenna Mast	EM	SC100_1	N/A	N/A	N/A	N/A
6	Turn Table	EM	SC100	060531	N/A	N/A	N/A
7	50Ω Switch	Anritsu Corp	MP59B	6200983705	Jul. 06, 2015	Jul. 05, 2016	1 year
8	Spectrum Analyzer	Aglient	E4407B	MY45108040	Jul. 06, 2015	Jul. 05, 2016	1 year
9	Horn Antenna	EM	EM-AH-10180	2011071402	Jul. 06, 2015	Jul. 05, 2016	1 year
10	Amplifier	EM	EM-30180	060538	Jul. 06, 2015	Jul. 05, 2016	1 year
11	Loop Antenna	ARA	PLA-1030/B	1029	Jul. 06, 2015	Jul. 05, 2016	1 year

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *
0.50 -5.0	73.00	60.00	56.00	46.00
5.0 -30.0	73.00	60.00	60.00	50.00

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

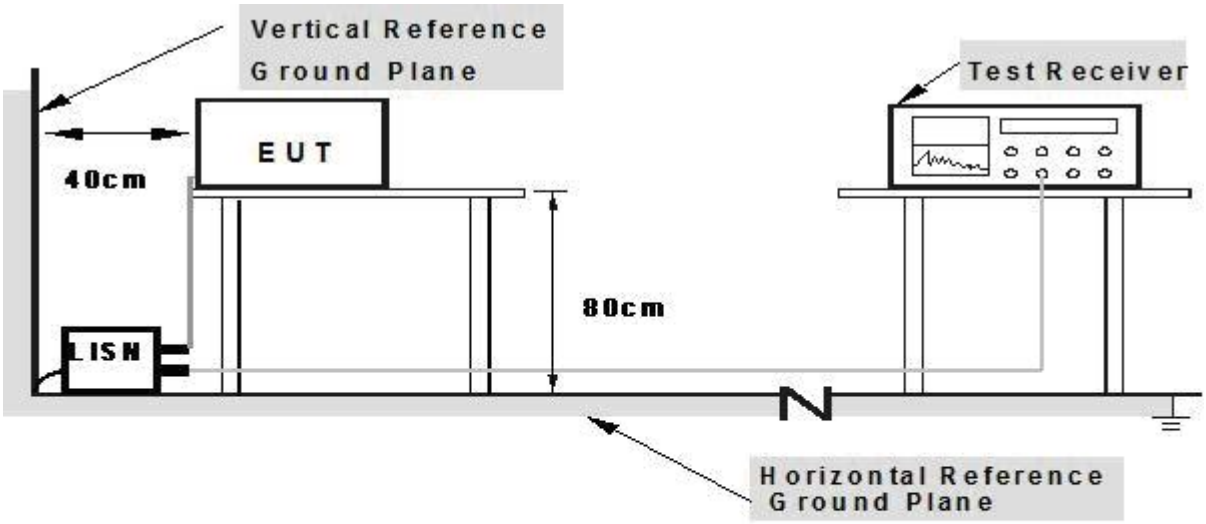
The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

3.1.2 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.1.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the follows during the testing.

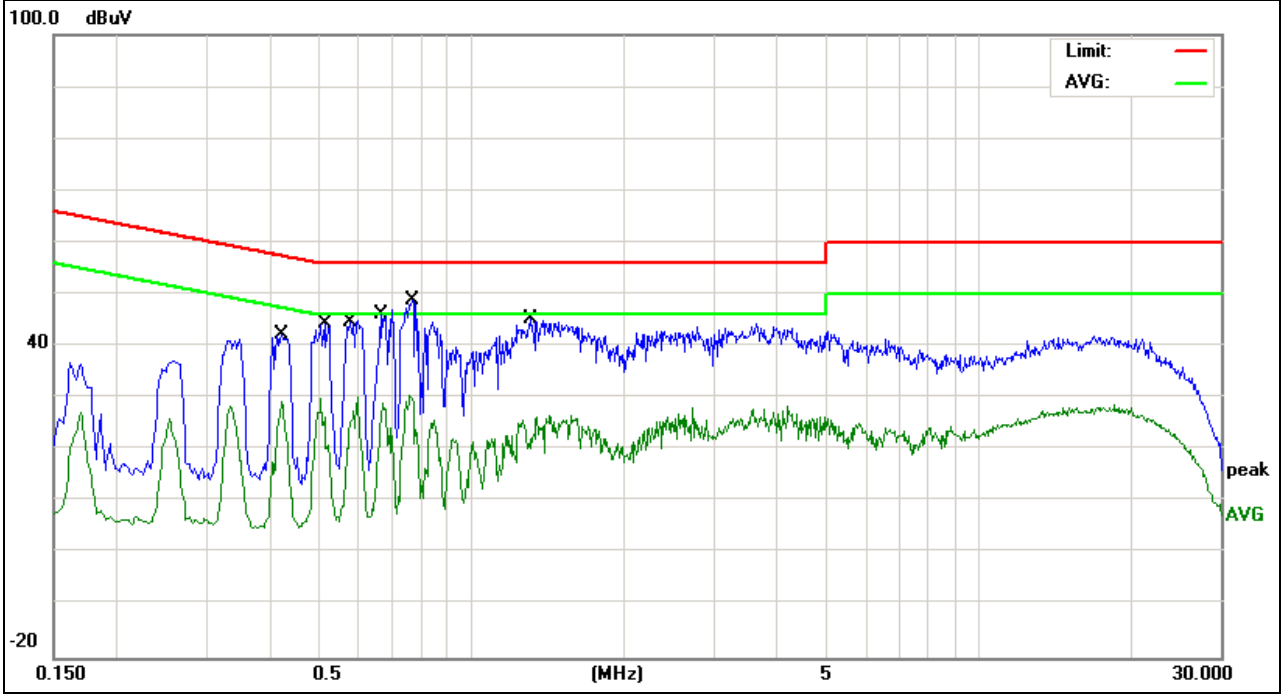
3.1.5 TEST RESULTS

EUT：	Intelligent micro laser projection	Model Name. ：	L1
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Test Date：	2015-08-28
Test Mode：	Mode 1	Phase：	L
Test Voltage ：	DC 5V From Adapter AC 120V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.4218	32.66	9.45	42.11	57.41	-15.30	QP
0.4218	21.57	9.45	31.02	47.41	-16.39	AVG
0.5140	34.51	9.77	44.28	56.00	-11.72	QP
0.5140	20.43	9.77	30.20	46.00	-15.80	AVG
0.5778	34.81	9.77	44.58	56.00	-11.42	QP
0.5778	19.81	9.77	29.58	46.00	-16.42	AVG
0.6620	36.28	9.78	46.06	56.00	-9.94	QP
0.6620	21.26	9.78	31.04	46.00	-14.96	AVG
0.7660	39.05	9.77	48.82	56.00	-7.18	QP
0.7660	22.78	9.77	32.55	46.00	-13.45	AVG
1.3140	35.44	9.71	45.15	56.00	-10.85	QP
1.3140	19.87	9.71	29.58	46.00	-16.42	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

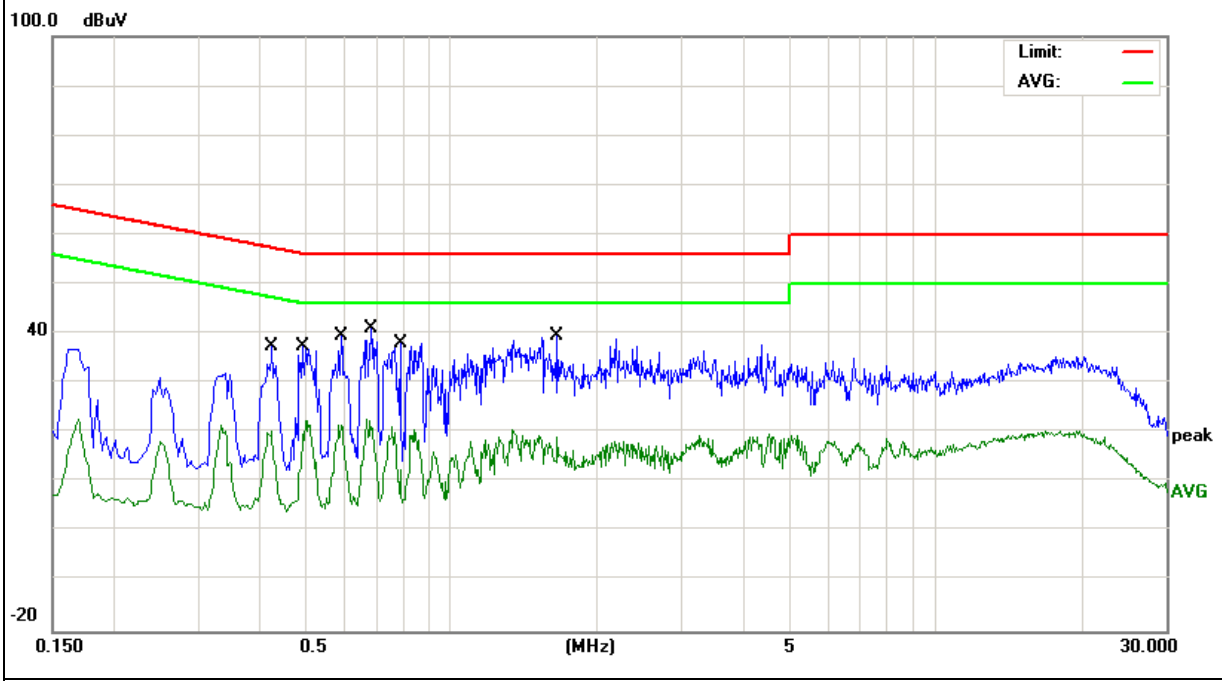


EUT：	Intelligent micro laser projection	Model Name. ：	L1
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Test Date：	2015-08-28
Test Mode：	Mode 1	Phase：	N
Test Voltage ：	DC 5V From Adapter AC 120V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.4259	28.04	9.46	37.50	57.33	-19.83	QP
0.4259	16.76	9.46	26.22	47.33	-21.11	AVG
0.4939	27.55	9.75	37.30	56.10	-18.80	QP
0.4939	17.94	9.75	27.69	46.10	-18.41	AVG
0.5938	29.79	9.77	39.56	56.00	-16.44	QP
0.5938	19.55	9.77	29.32	46.00	-16.68	AVG
0.6860	31.29	9.78	41.07	56.00	-14.93	QP
0.6860	22.24	9.78	32.02	46.00	-13.98	AVG
0.7860	28.41	9.77	38.18	56.00	-17.82	QP
0.7860	18.45	9.77	28.22	46.00	-17.78	AVG
1.6578	29.93	9.67	39.60	56.00	-16.40	QP
1.6578	17.98	9.67	27.65	46.00	-18.35	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

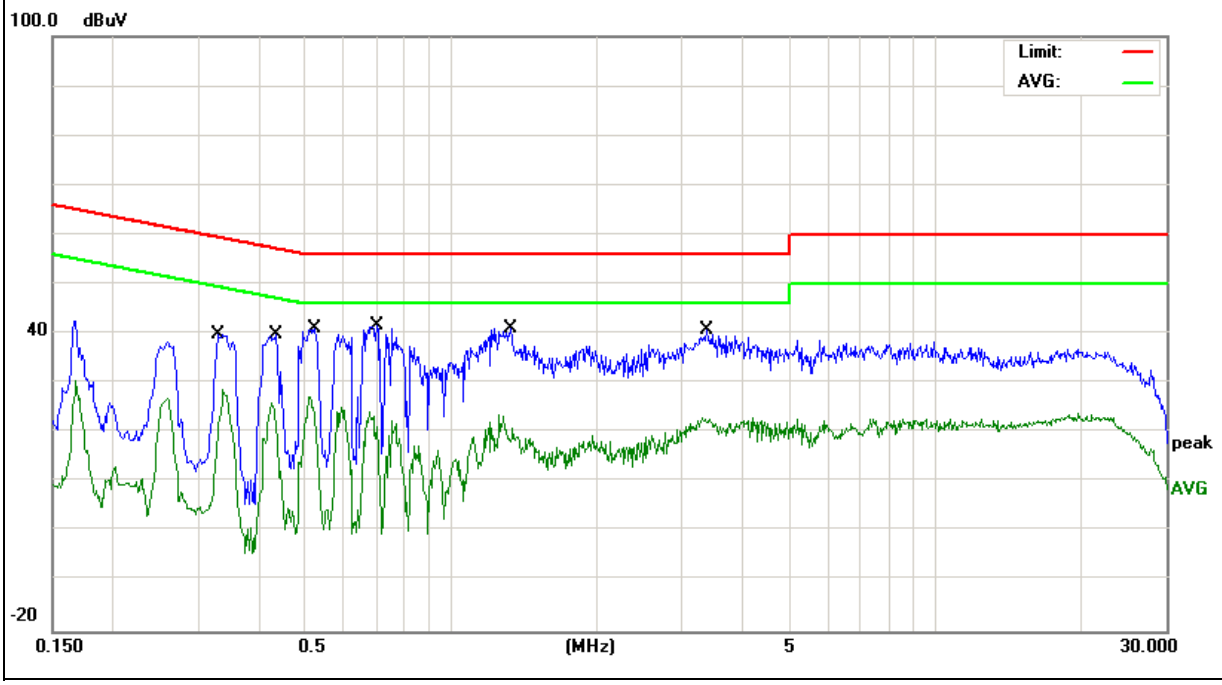


EUT：	Intelligent micro laser projection	Model Name. ：	L1
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Test Date：	2015-08-28
Test Mode：	Mode 1	Phase：	L
Test Voltage ：	DC 5V From Adapter AC 240V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.3300	30.24	9.63	39.87	59.45	-19.58	QP
0.3300	19.39	9.63	29.02	49.45	-20.43	AVG
0.4339	30.27	9.50	39.77	57.18	-17.41	QP
0.4339	20.08	9.50	29.58	47.18	-17.60	AVG
0.5220	31.20	9.77	40.97	56.00	-15.03	QP
0.5220	16.81	9.77	26.58	46.00	-19.42	AVG
0.7016	31.79	9.78	41.57	56.00	-14.43	QP
0.7016	22.55	9.78	32.33	46.00	-13.67	AVG
1.3300	31.43	9.71	41.14	56.00	-14.86	QP
1.3300	21.31	9.71	31.02	46.00	-14.98	AVG
3.3740	31.02	9.68	40.70	56.00	-15.30	QP
3.3740	22.76	9.68	32.44	46.00	-13.56	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

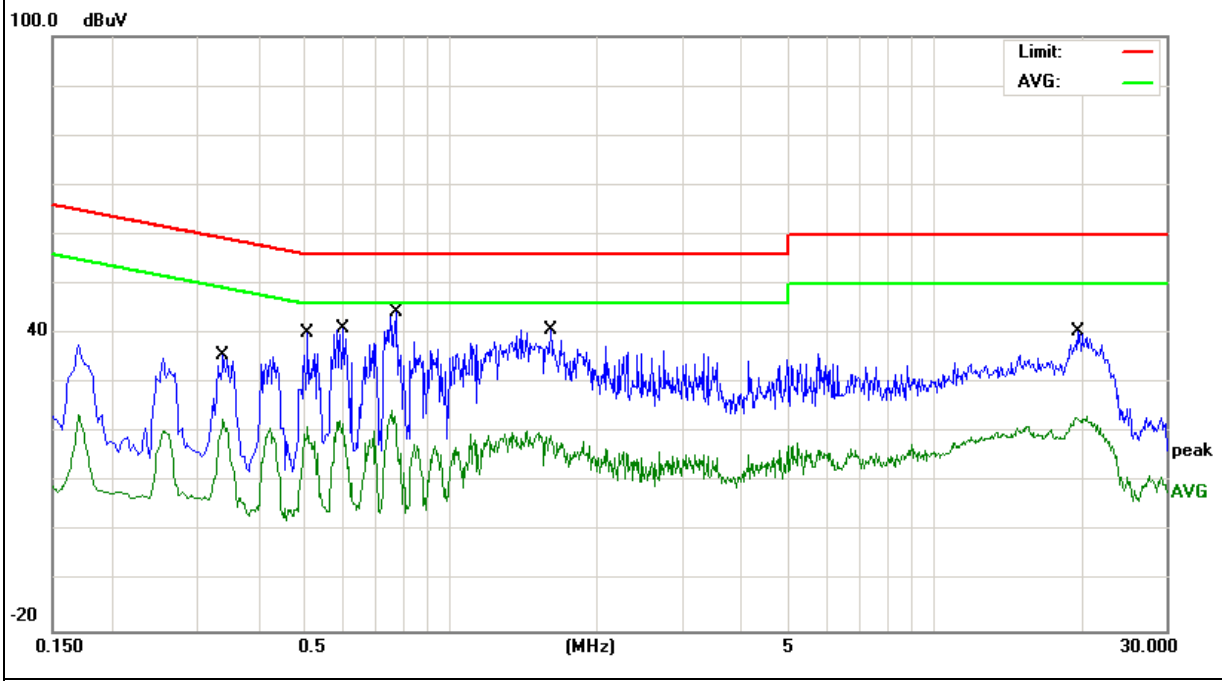


EUT：	Intelligent micro laser projection	Model Name. ：	L1
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Test Date：	2015-08-28
Test Mode：	Mode 1	Phase：	N
Test Voltage ：	DC 5V From Adapter AC 240V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.3379	26.21	9.59	35.80	59.25	-23.45	QP
0.3379	15.52	9.59	25.11	49.25	-24.14	AVG
0.5060	30.41	9.77	40.18	56.00	-15.82	QP
0.5060	21.25	9.77	31.02	46.00	-14.98	AVG
0.5977	31.19	9.77	40.96	56.00	-15.04	QP
0.5977	18.81	9.77	28.58	46.00	-17.42	AVG
0.7740	34.65	9.77	44.42	56.00	-11.58	QP
0.7740	19.89	9.77	29.66	46.00	-16.34	AVG
1.6019	30.93	9.68	40.61	56.00	-15.39	QP
1.6019	21.36	9.68	31.04	46.00	-14.96	AVG
19.6579	30.44	9.96	40.40	60.00	-19.60	QP
19.6579	18.51	9.96	28.47	50.00	-21.53	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

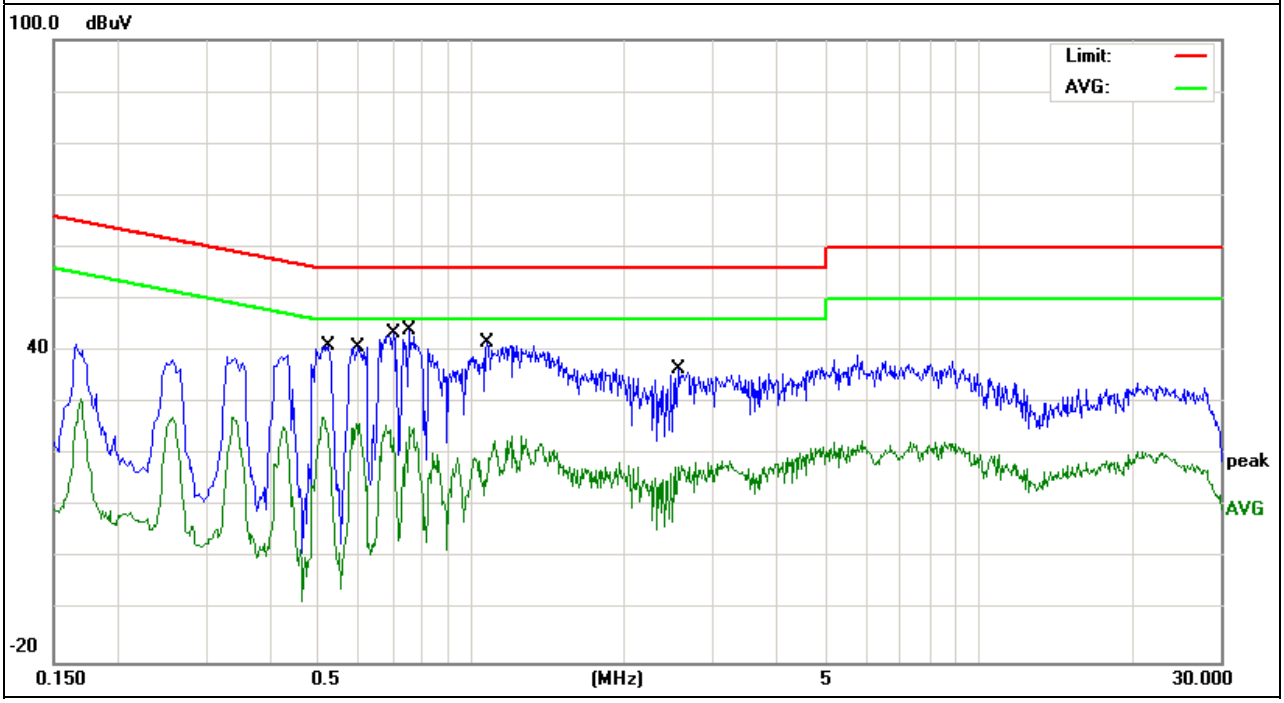


EUT：	Intelligent micro laser projection	Model Name. ：	L1
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Test Date：	2015-08-28
Test Mode：	Mode 1	Phase：	L
Test Voltage ：	DC 5V From PC AC 120V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.5220	31.20	9.77	40.97	56.00	-15.03	QP
0.5220	22.25	9.77	32.02	46.00	-13.98	AVG
0.5977	30.85	9.77	40.62	56.00	-15.38	QP
0.5977	19.81	9.77	29.58	46.00	-16.42	AVG
0.7016	33.79	9.78	43.57	56.00	-12.43	QP
0.7016	21.69	9.78	31.47	46.00	-14.53	AVG
0.7539	34.15	9.77	43.92	56.00	-12.08	QP
0.7539	21.19	9.77	30.96	46.00	-15.04	AVG
1.0740	31.87	9.72	41.59	56.00	-14.41	QP
1.0740	16.86	9.72	26.58	46.00	-19.42	AVG
2.5539	26.97	9.66	36.63	56.00	-19.37	QP
2.5539	17.49	9.66	27.15	46.00	-18.85	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



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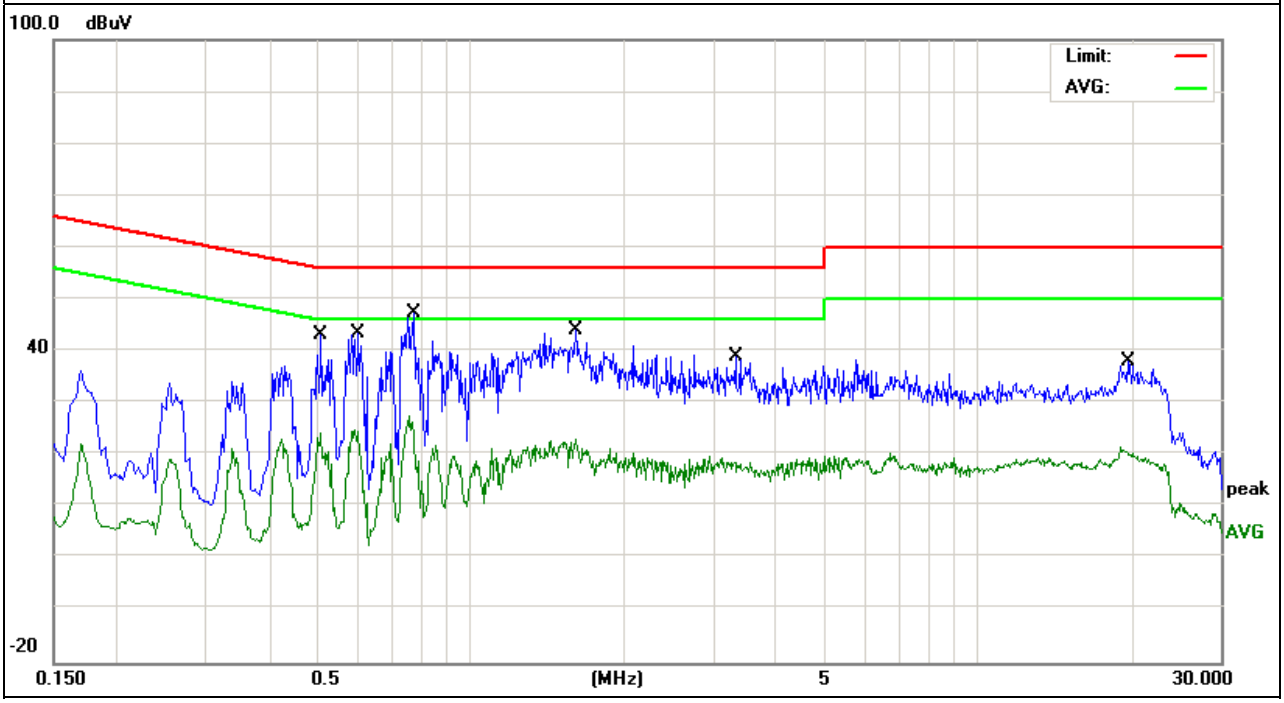
Test Mode：	Mode 1	Phase：	N
Test Voltage ：	DC 5V From PC AC 120V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.5060	33.41	9.77	43.18	56.00	-12.82	QP
0.5060	21.92	9.77	31.69	46.00	-14.31	AVG
0.5977	33.69	9.77	43.46	56.00	-12.54	QP
0.5977	22.34	9.77	32.11	46.00	-13.89	AVG
0.7740	37.65	9.77	47.42	56.00	-8.58	QP
0.7740	20.81	9.77	30.58	46.00	-15.42	AVG
1.6019	34.43	9.68	44.11	56.00	-11.89	QP
1.6019	19.77	9.68	29.45	46.00	-16.55	AVG
3.3220	29.26	9.68	38.94	56.00	-17.06	QP
3.3220	17.68	9.68	27.36	46.00	-18.64	AVG
19.6579	27.94	9.96	37.90	60.00	-22.10	QP
19.6579	15.73	9.96	25.69	50.00	-24.31	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



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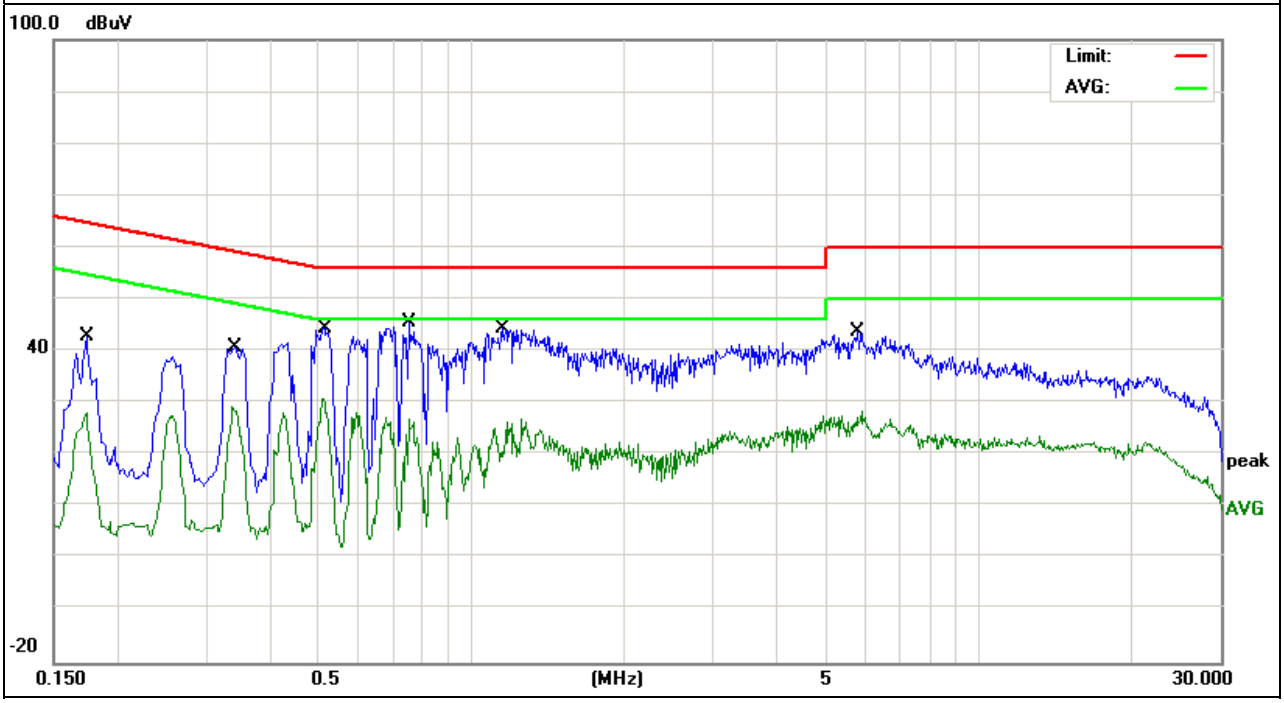
Pressure：	1010hPa	Test Date：	2015-08-28
Test Mode：	Mode 1	Phase：	L
Test Voltage ：	DC 5V From PC AC 240V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1737	33.35	9.62	42.97	64.78	-21.81	QP
0.1737	20.96	9.62	30.58	54.78	-24.20	AVG
0.3420	31.06	9.58	40.64	59.15	-18.51	QP
0.3420	19.67	9.58	29.25	49.15	-19.90	AVG
0.5140	34.60	9.77	44.37	56.00	-11.63	QP
0.5140	20.08	9.77	29.85	46.00	-16.15	AVG
0.7539	35.65	9.77	45.42	56.00	-10.58	QP
0.7539	21.59	9.77	31.36	46.00	-14.64	AVG
1.1495	34.66	9.72	44.38	56.00	-11.62	QP
1.1495	18.57	9.72	28.29	46.00	-17.71	AVG
5.7899	33.90	9.70	43.60	60.00	-16.40	QP
5.7899	17.96	9.70	27.66	50.00	-22.34	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

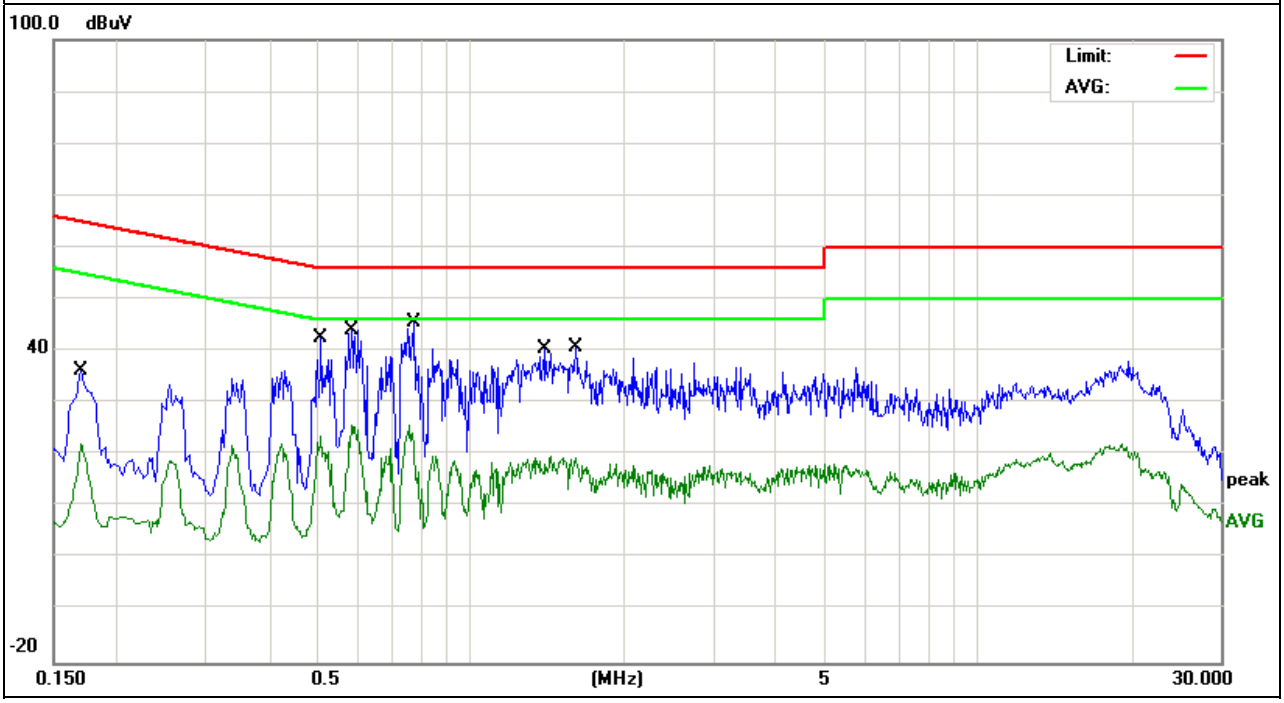


EUT：	Intelligent micro laser projection	Model Name. ：	L1
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Test Date：	2015-08-28
Test Mode：	Mode 1	Phase：	N
Test Voltage ：	DC 5V From PC AC 240V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1700	26.56	9.62	36.18	64.96	-28.78	QP
0.1700	16.26	9.62	25.88	54.96	-29.08	AVG
0.5060	32.91	9.77	42.68	56.00	-13.32	QP
0.5060	19.81	9.77	29.58	46.00	-16.42	AVG
0.5816	34.34	9.77	44.11	56.00	-11.89	QP
0.5816	17.92	9.77	27.69	46.00	-18.31	AVG
0.7740	35.65	9.77	45.42	56.00	-10.58	QP
0.7740	21.48	9.77	31.25	46.00	-14.75	AVG
1.4013	30.70	9.70	40.40	56.00	-15.60	QP
1.4013	21.17	9.70	30.87	46.00	-15.13	AVG
1.6019	30.93	9.68	40.61	56.00	-15.39	QP
1.6019	20.20	9.68	29.88	46.00	-16.12	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class A (at 10m)	Class B (at 3m)
	dBuV/m	dBuV/m
30 ~ 88	39.0	40.0
88 ~ 216	43.5	43.5
216 ~ 960	46.5	46.0
Above 960	49.5	54.0

Notes:

(1) The limit for radiated test was performed according to as following: FCC PART 15B /ICES-003.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

3.2.2 TEST PROCEDURE

Test Arrangement for Radiated Emissions up to 1 GHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at an accredited test facility. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

Note: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for quasi-peak detection (QP) at frequency below 1GHz.

Test Arrangement for Radiated Emissions above 1 GHz.

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at an accredited chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna can be varied from one meter to four meters, the height of adjustment depends on the EUT height and the antenna 3dB beamwidth both, to detect the maximum value of the field strength.Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

Note：For the hand-held device, the EUT should be measured for all 3 axes and only the worst

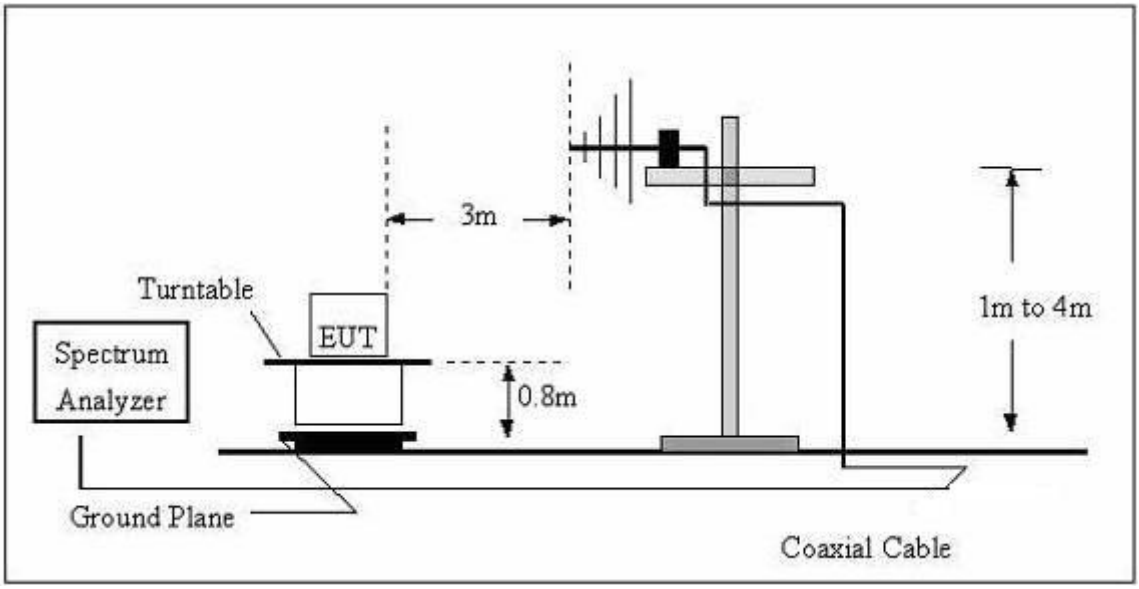
case is recorded in the report

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

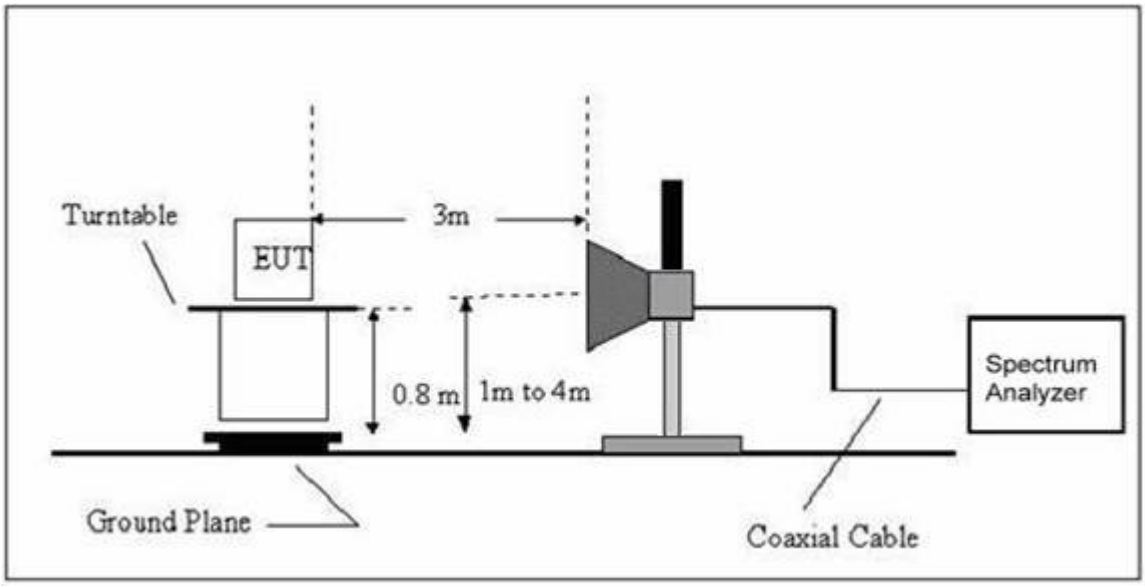
Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	1 MHz
	Peak	1 MHz	10 Hz

3.2.3 TEST SETUP

For Radiated Emission 30~1000MHz



(B) Radiated Emission Test Set-Up Frequency Above 1GHz



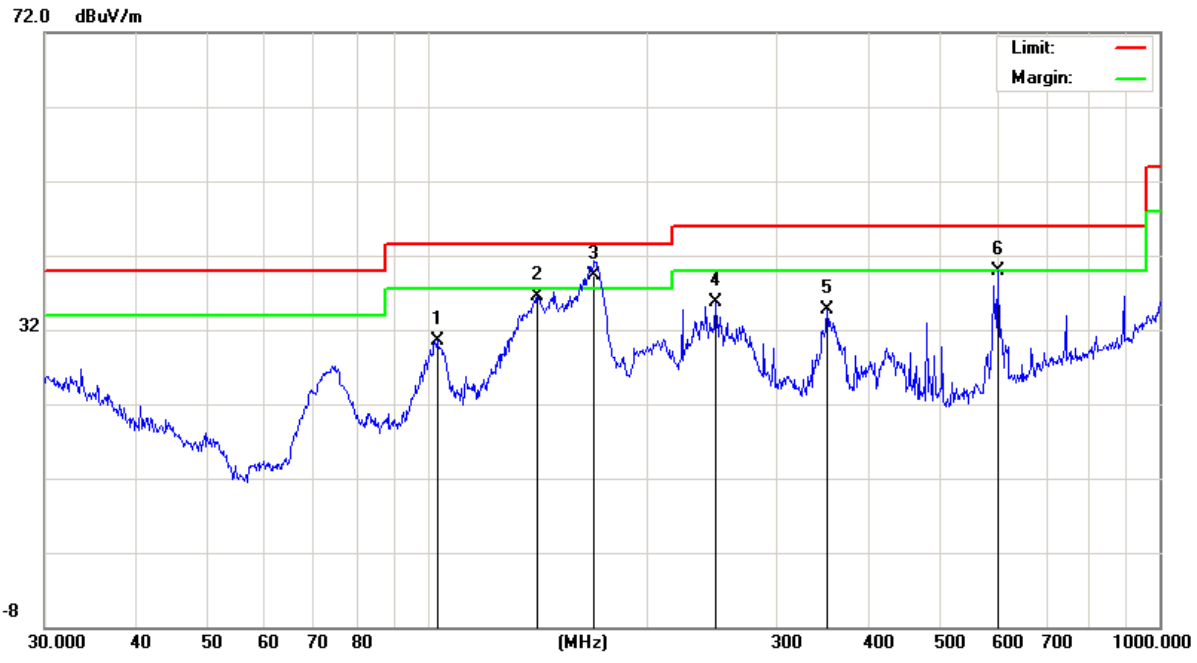
3.2.4 TEST RESULTS

TEST RESULTS (30~1000 MHz)

EUT：	Intelligent micro laser projection	Model Name ：	L1
Temperature：	24 ℃	Relative Humidity：	54%
Pressure：	1010 hPa	Test Date：	2015-08-28
Test Mode ：	Mode 1	Polarization：	Horizontal
Test Power ：	DC 5V From Adapter AC 120V/60Hz		

Freq. (MHz)	Reading (dBuV)	Factor (dBuV)	Measurement (dBuV)	Limit (dBuV)	Over (dB)	Remark
103.0798	20.29	10.27	30.56	43.50	-12.94	QP
141.3298	25.46	11.08	36.54	43.50	-6.96	QP
169.0054	26.91	12.39	39.30	43.50	-4.20	QP
247.6819	24.92	10.74	35.66	46.00	-10.34	QP
351.7078	20.65	14.14	34.79	46.00	-11.21	QP
601.4265	20.50	19.49	39.99	46.00	-6.01	QP

Remark:
Factor = Antenna Factor + Cable Loss - Amplifier.

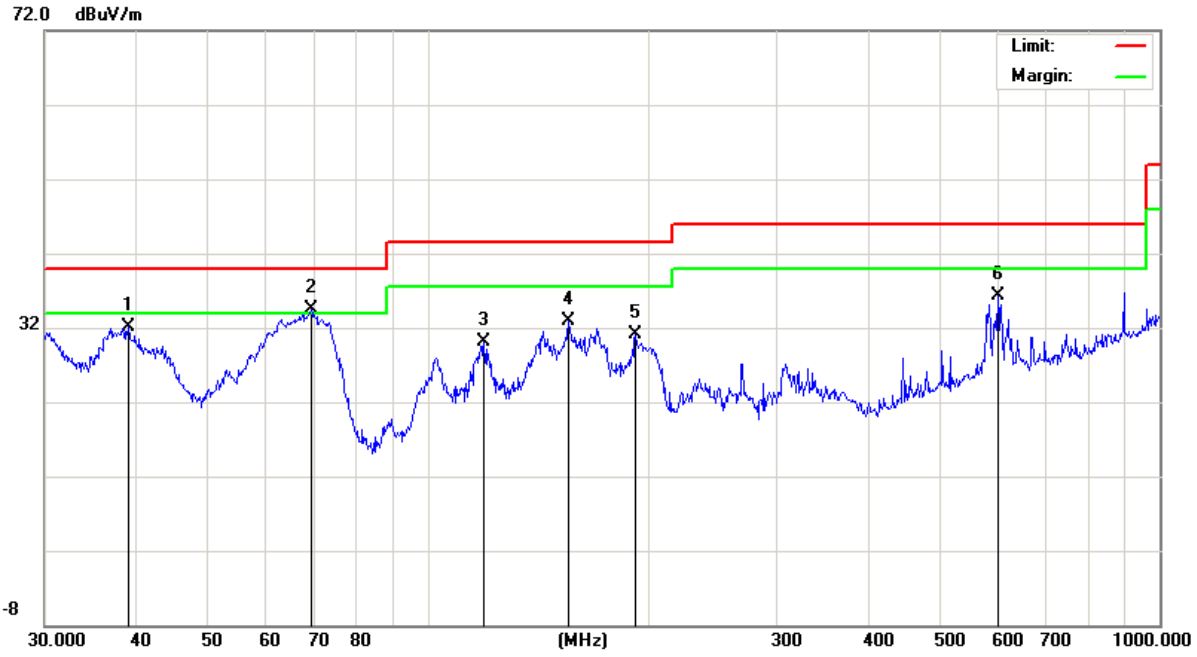


EUT：	Intelligent micro laser projection	Model Name ：	L1
Temperature：	24 ℃	Relative Humidity：	54%
Pressure：	1010 hPa	Test Date：	2015-08-28
Test Mode ：	Mode 1	Polarization：	Vertical
Test Power ：	DC 5V From Adapter AC 120V/60Hz		

Freq. (MHz)	Reading (dBuV)	Factor (dBuV)	Measurement (dBuV)	Limit (dBuV)	Over (dB)	Remark
39.0245	16.96	15.12	32.08	40.00	-7.92	QP
69.3568	25.76	8.65	34.41	40.00	-5.59	QP
119.4360	19.68	10.48	30.16	43.50	-13.34	QP
155.9098	21.10	11.79	32.89	43.50	-10.61	QP
192.4183	19.66	11.35	31.01	43.50	-12.49	QP
601.4265	16.83	19.49	36.32	46.00	-9.68	QP

Remark:

Factor = Antenna Factor + Cable Loss - Amplifier.



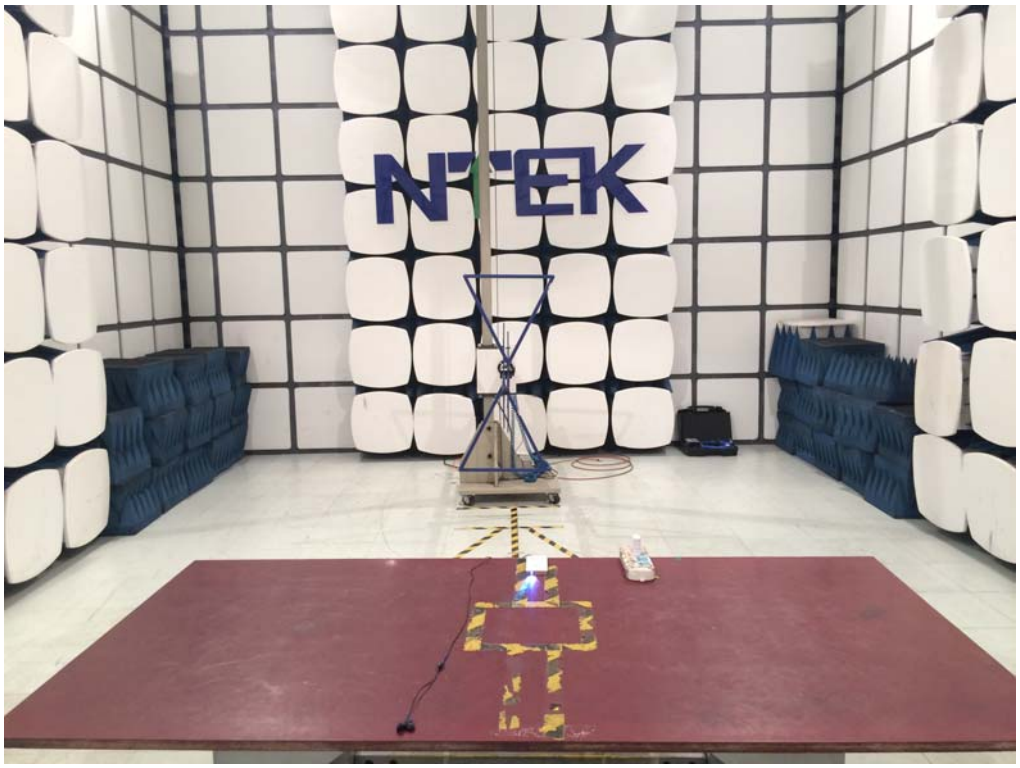
3.2.5 TEST RESULTS(1000~12400MHz)

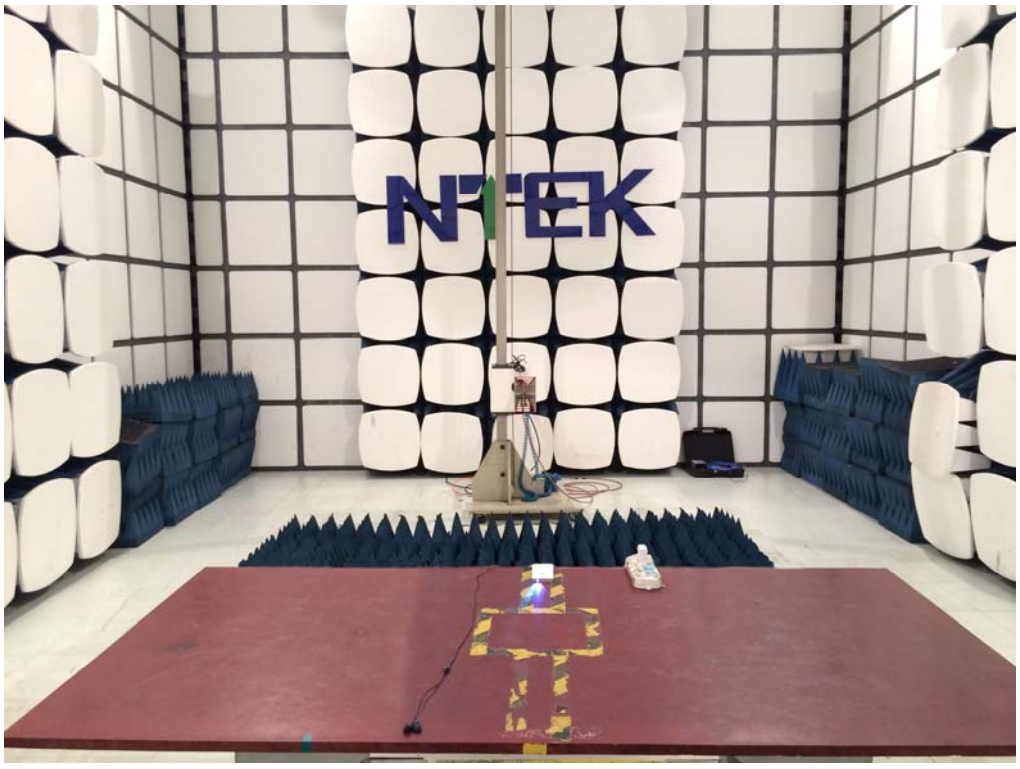
Polar (H/V)	Frequency (MHz)	Meter Reading (dBm)	Factor (dB)	Emission Level (dBm)	Limits (dBm)	Margin (dB)	Remark
V	1397.609	64.64	-13.16	51.48	74.00	-22.52	peak
V	1397.609	49.74	-13.16	36.58	54.00	-17.42	AVG
V	1592.217	62.69	-11.92	50.77	74.00	-23.23	peak
V	1592.217	51.17	-11.92	39.25	54.00	-14.75	AVG
V	2106.799	61.19	-8.19	53.00	74.00	-21.00	peak
V	2106.799	48.21	-8.19	40.02	54.00	-13.98	AVG
H	1195.599	63.19	-12.47	50.72	74.00	-23.28	peak
H	1195.599	52.05	-12.47	39.58	54.00	-14.42	AVG
H	1796.491	60.02	-10.87	49.15	74.00	-24.85	peak
H	1796.491	46.12	-10.87	35.25	54.00	-18.75	AVG
H	2168.725	60.76	-8.57	52.19	74.00	-21.81	peak
H	2168.725	48.72	-8.57	40.15	54.00	-13.85	AVG

Remark:
Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit

4. EUT TEST PHOTO

Radiated Measurement Photos





Conducted Measurement Photos