

FCC PART 18
TEST REPORT

For

Liting Universal (Zhejiang) Co., Ltd.

Jinsha Village, Quantang Industry Zone, Pinghu City,
Zhejiang 314204, China

FCC ID: OPWNEONLAMP201207

Report Type: Original Report	Product Type: Neon Lamp
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Report Number: RSZ120719806-00	
Report Date: 2012-09-17	
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* This report may contain data that are not covered by the NVLAP accreditation and shall be marked with an asterisk "★"

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *Liting Universal (Zhejiang) Co., Ltd*'s model: NL-1201, NL-1202, NL-1203, NL-1204, NL-1205, NL-1206, NL-1207, NL-1208 (FCC ID: OPWNEONLAMP201207) (or the "EUT") in this report are *Neon Lamps*, which were measured approximately: 18 cm (L) x 18cm (W) x 30cm (H) for NL-1201, NL-1202 and NL-1203; 18 cm (L) x 18cm (W) x 29cm (H) for NL-1204; 18 cm (L) x 18cm (W) x 36cm (H) for NL-1205, NL-1206, NL-1207 and NL-1208, rated input voltage: AC 120V/60Hz. The highest operating frequency is 60 kHz.

Adapter Information: AC/DC ADAPTOR

Model: RK-1200300

Input : 100-120V~60Hz 0.2A

Output : 12VDC 0.3A

Note: The product Neon Lamp, the serial models: NL-1201, NL-1202, NL-1203, NL-1204, NL-1205, NL-1206, NL-1207 and NL-1208, all of them were selected to test, the differences among them were explained in the attached product similarity declaration letter.

** All measurement and test data in this report was gathered from production sample serial number: 1207806 (Assigned by BACL, Shenzhen). The EUT supplied by applicant was received on 2012-07-19.*

Objective

This report is prepared on behalf of *Liting Universal (Zhejiang) Co., Ltd* in accordance with Part 2-Subpart J, and Part 18-Subparts A, B and C of the Federal Communication Commissions rules and regulations.

The objective of the manufacturer is to determine the compliance of EUT with FCC Part 18 limits.

Related Submittal(s)/Grant(s)

No related submittal(s).

Test Methodology

All measurements contained in this report were conducted with MP-5, FCC Methods of Measurements of Radio Noise Emissions from ISM Equipment, February 1986. All measurement was performed at Bay Area Compliance Laboratories Corp. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China.

Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on December 06, 2010. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2009.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Laboratories Corp. (Shenzhen) is an ISO/IEC 17025 accredited laboratory, and is accredited by National Voluntary Laboratory Accredited Program (Lab Code 200707-0).



The current scope of accreditations can be found at <http://ts.nist.gov/Standards/scopes/2007070.htm>

SYSTEM TEST CONFIGURATION

Justification

The system was configured for testing in a typical fashion (as normally used by a typical user).

EUT Exercise Software

No exercise software was used.

Special Accessories

The special accessories were supplied by Bay Area Compliance Laboratories Corp.

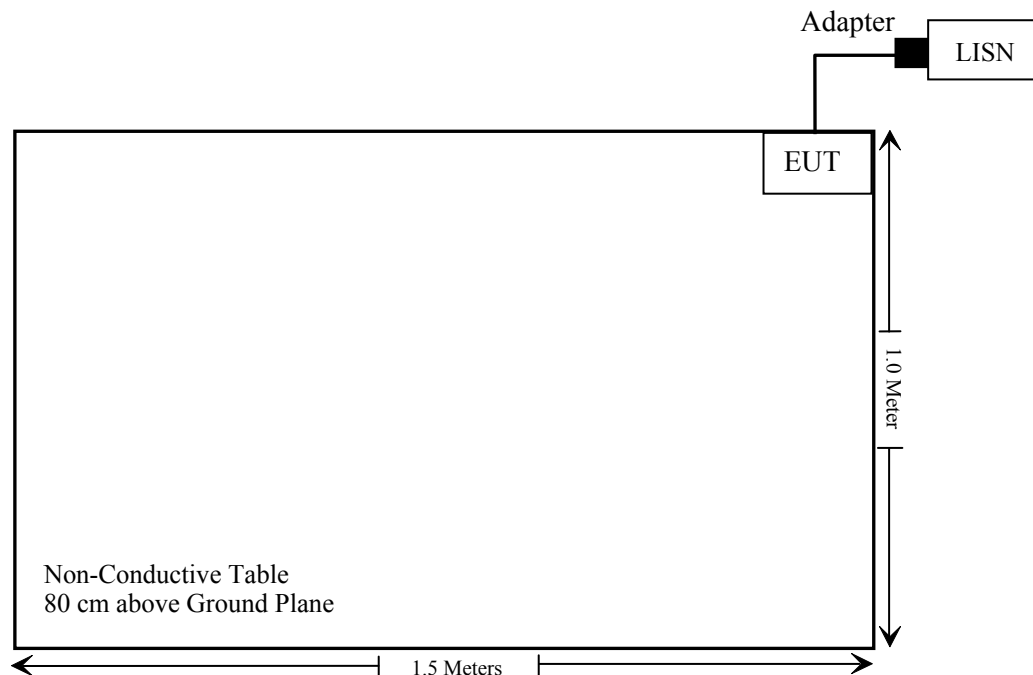
Equipment Modifications

No modifications were made to the EUT tested.

External I/O Cable

Cable Description	Length (m)	From Port	To
Unshielded Undetachable DC Power Cable	1.5	EUT	Adapter

Block Diagram of Test Setup

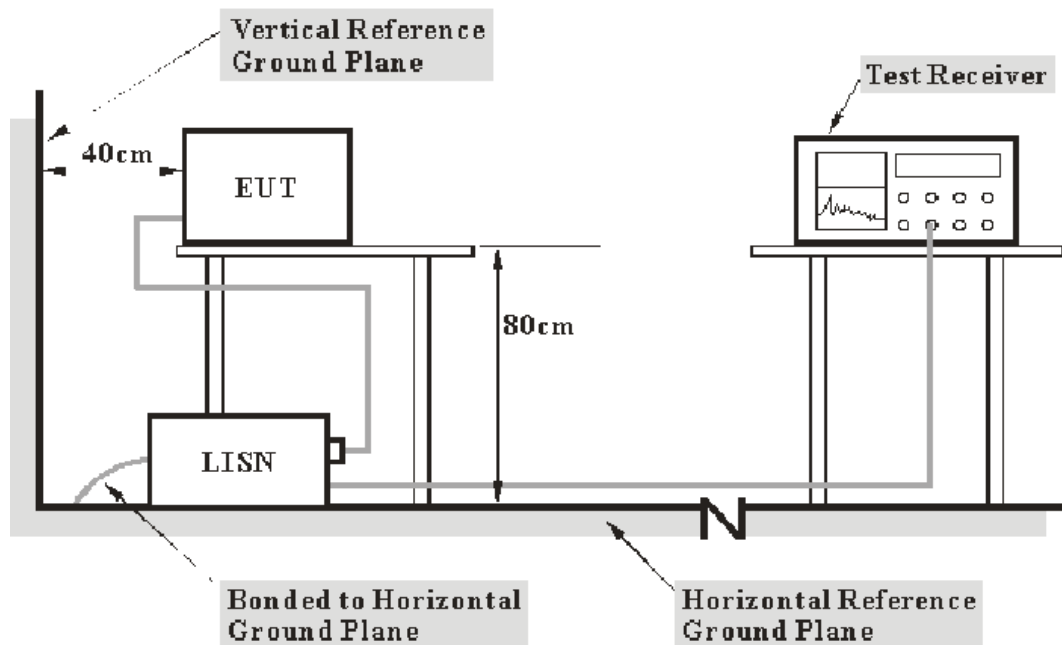


FCC §18.307 - AC LINE CONDUCTED EMISSIONS

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

EUT Setup



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

The setup of EUT is according with MP-5: 1986 measurement procedure. Specification used was with the FCC Part 18 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The adapter was connected to a 120 VAC/60 Hz power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 450 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

<u>Frequency Range</u>	<u>IFBW</u>
450 kHz – 30 MHz	9 kHz

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCS30	100176	2011-11-24	2012-11-23
Rohde & Schwarz	L.I.S.N.	ESH2-Z5	892107/021	2011-11-17	2012-11-16
Rohde & Schwarz	Pulse limiter	ESH3Z2	DE25985	2012-07-08	2013-07-07

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-Peak detection mode.

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 18, with the worst margin reading of:

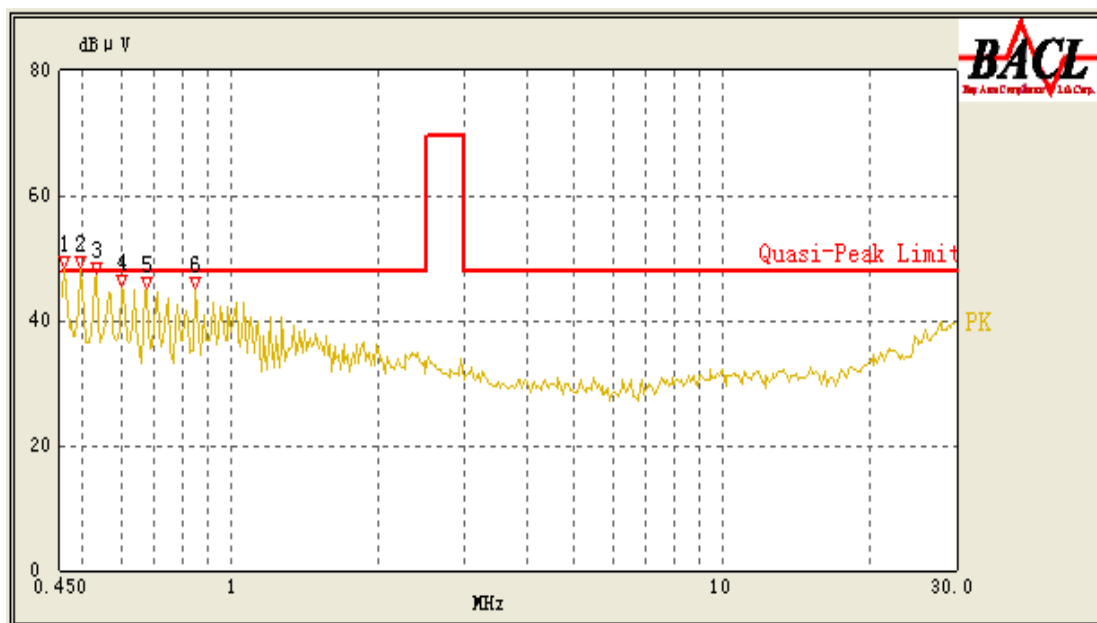
0.38 dB at 0.490 MHz in the **Line** conducted mode for model NL-1204

Test Data**Environmental Conditions**

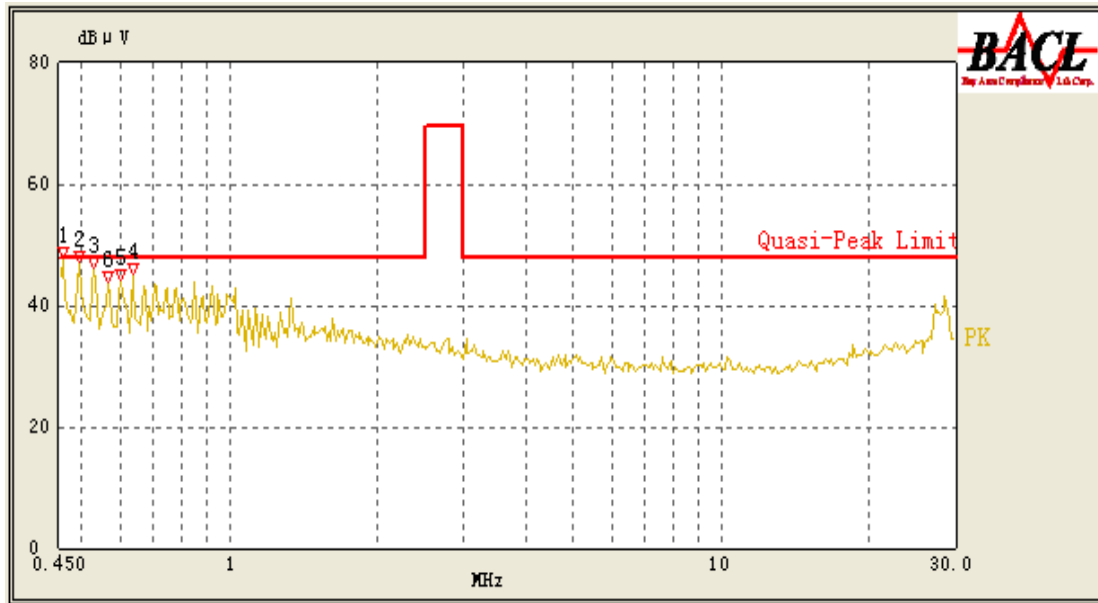
Temperature:	25 °C
Relative Humidity:	48 %
ATM Pressure:	101.0 kPa

Testing was performed by Andrew Shu on 2012-08-10.

AC 120V/60 Hz, Line:



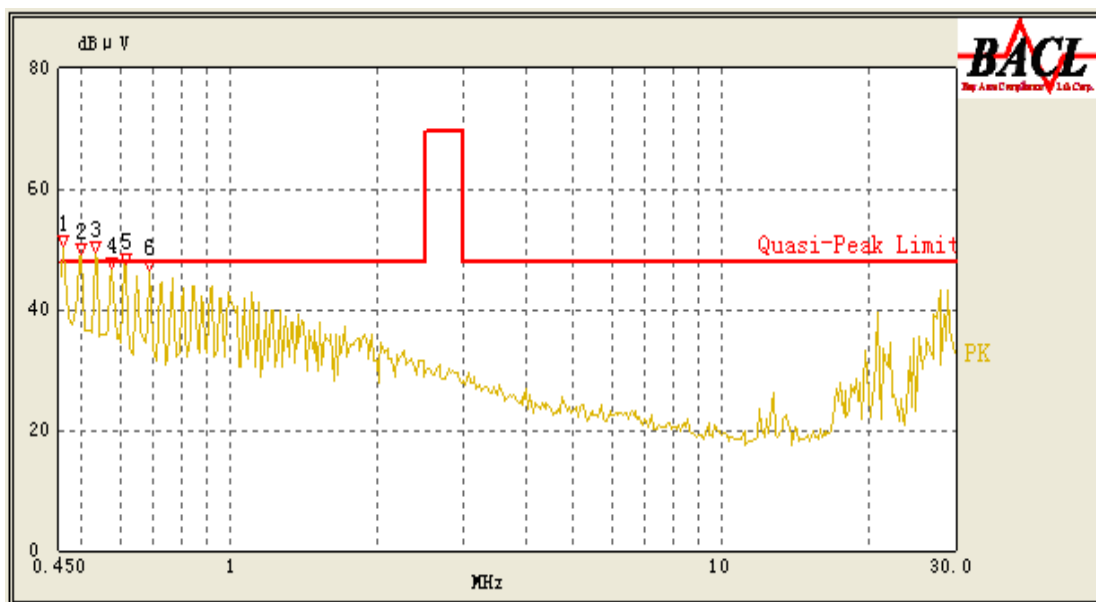
Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.460	46.75	10.26	48.00	1.25
0.495	45.85	10.25	48.00	2.15
0.600	43.80	10.24	48.00	4.20
0.535	43.43	10.25	48.00	4.57
0.850	42.51	10.19	48.00	5.49
0.675	42.29	10.22	48.00	5.71

AC 120V/ 60 Hz, Neutral:

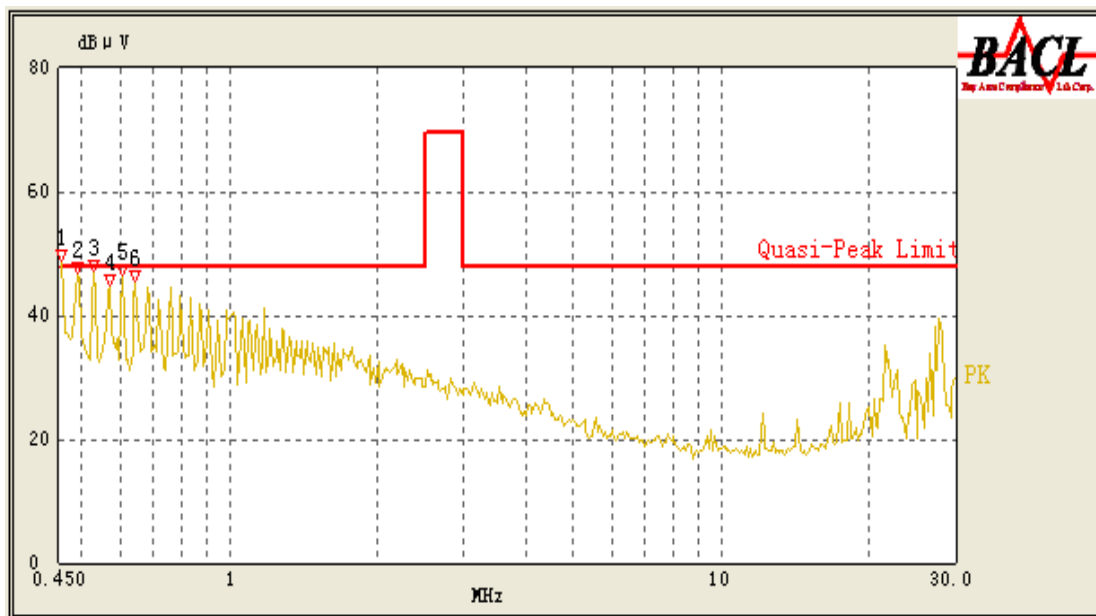
Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.495	43.66	10.24	48.00	4.34
0.460	43.65	10.25	48.00	4.35
0.530	43.39	10.24	48.00	4.61
0.635	42.06	10.22	48.00	5.94
0.600	41.67	10.23	48.00	6.33
0.565	40.82	10.23	48.00	7.18

Test Mode: On (Model: NL-1202)

AC 120V/60 Hz, Line:



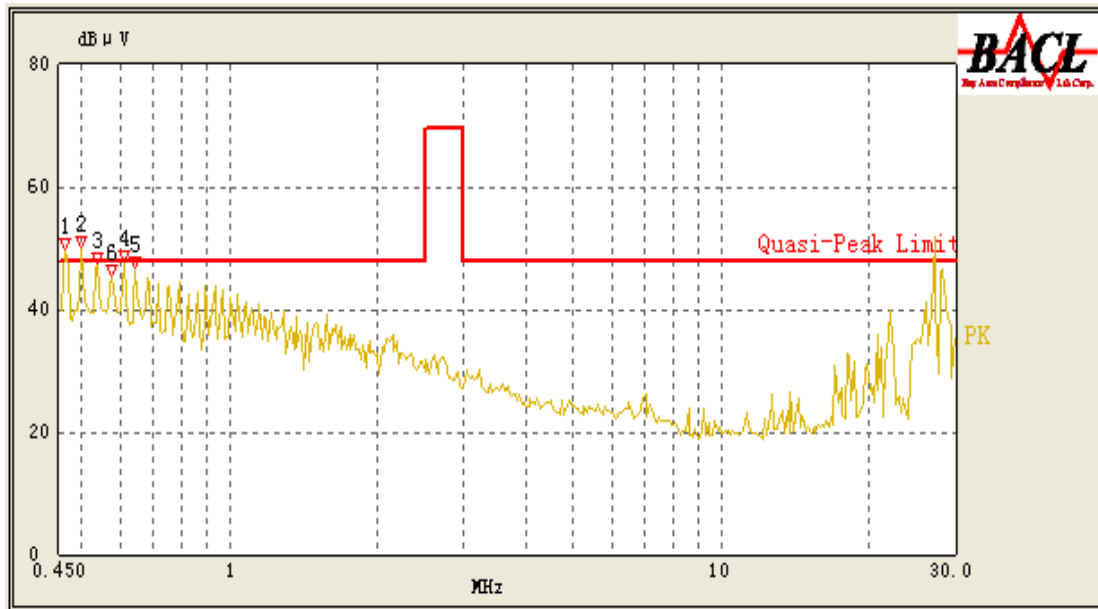
Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.535	44.05	10.25	48.00	3.95
0.460	43.74	10.26	48.00	4.26
0.575	39.01	10.24	48.00	8.99
0.500	36.77	10.25	48.00	11.23
0.690	33.85	10.22	48.00	14.15
0.615	32.20	10.23	48.00	15.80

AC 120V/ 60 Hz, Neutral:

Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.455	45.85	10.25	48.00	2.15
0.490	45.38	10.24	48.00	2.62
0.530	44.92	10.24	48.00	3.08
0.605	43.87	10.23	48.00	4.13
0.570	41.42	10.23	48.00	6.58
0.645	41.35	10.22	48.00	6.65

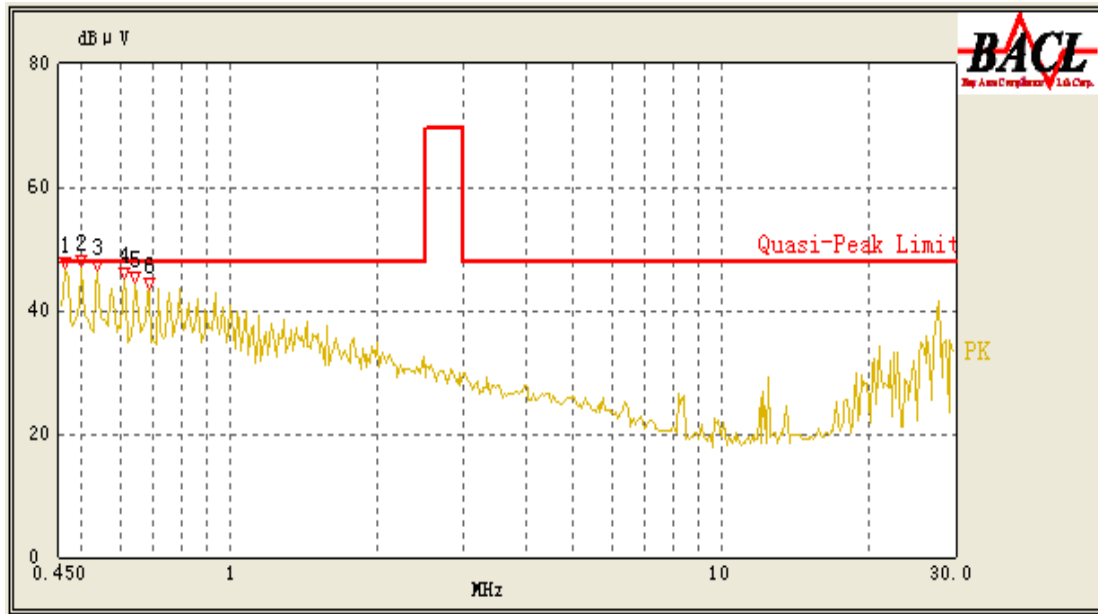
Test Mode: On (Model: NL-1203)

AC 120V/60 Hz, Line:



Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.465	47.36	10.26	48.00	0.64
0.500	46.62	10.25	48.00	1.38
0.540	44.86	10.25	48.00	3.14
0.610	44.13	10.23	48.00	3.87
0.645	43.21	10.23	48.00	4.79
0.575	42.95	10.24	48.00	5.05

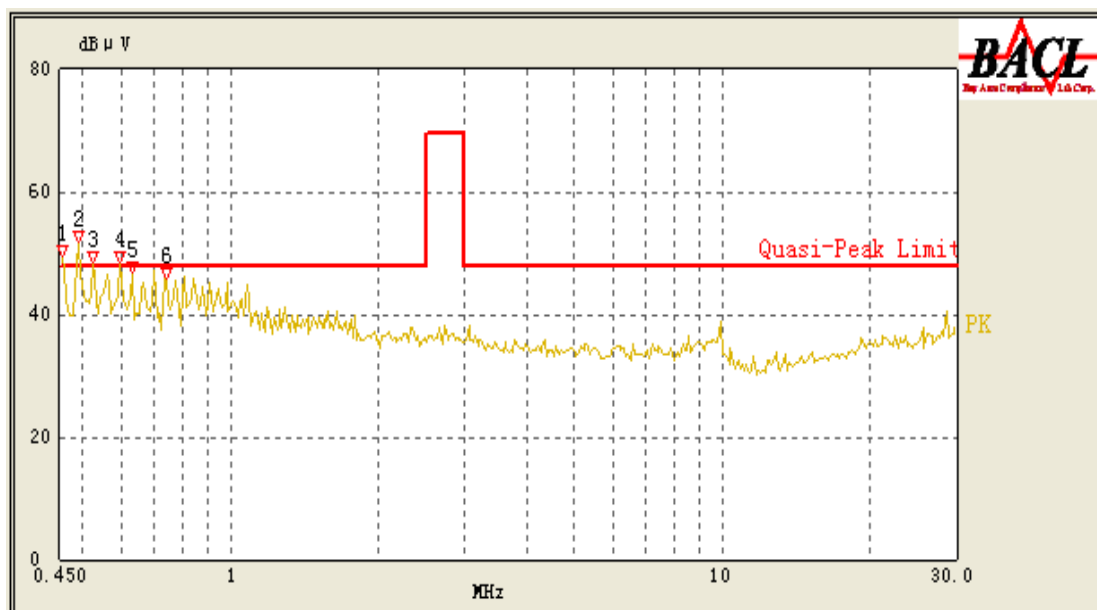
AC 120V/ 60 Hz, Neutral:



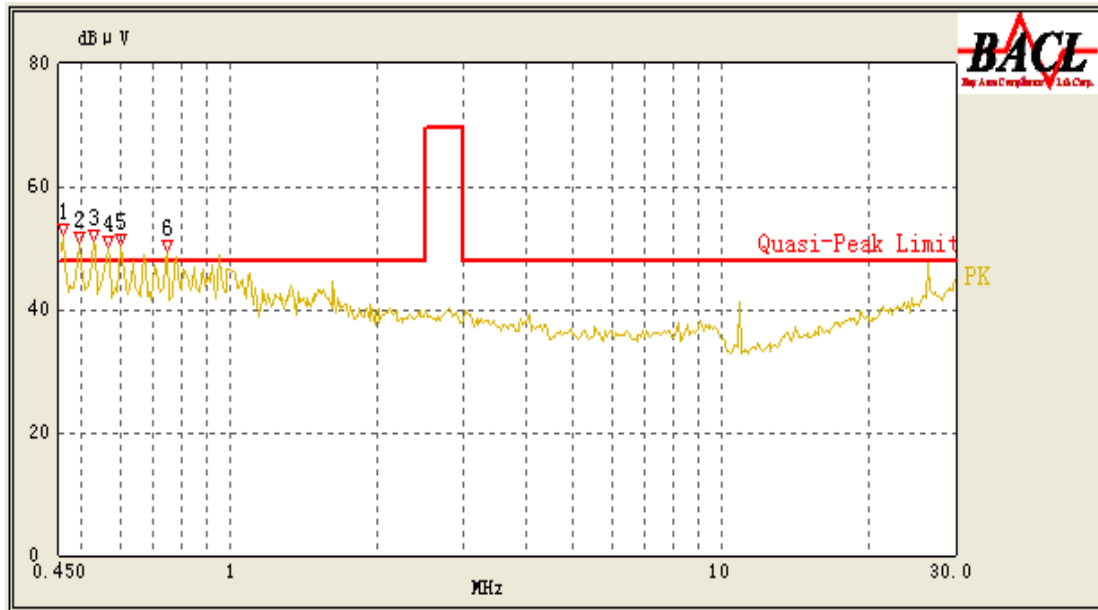
Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.465	45.17	10.25	48.00	2.83
0.500	43.75	10.24	48.00	4.25
0.540	43.45	10.24	48.00	4.55
0.610	42.70	10.23	48.00	5.30
0.645	41.52	10.22	48.00	6.48
0.685	39.89	10.22	48.00	8.11

Test Mode: On (Model: NL-1204)

AC 120V/60 Hz, Line:



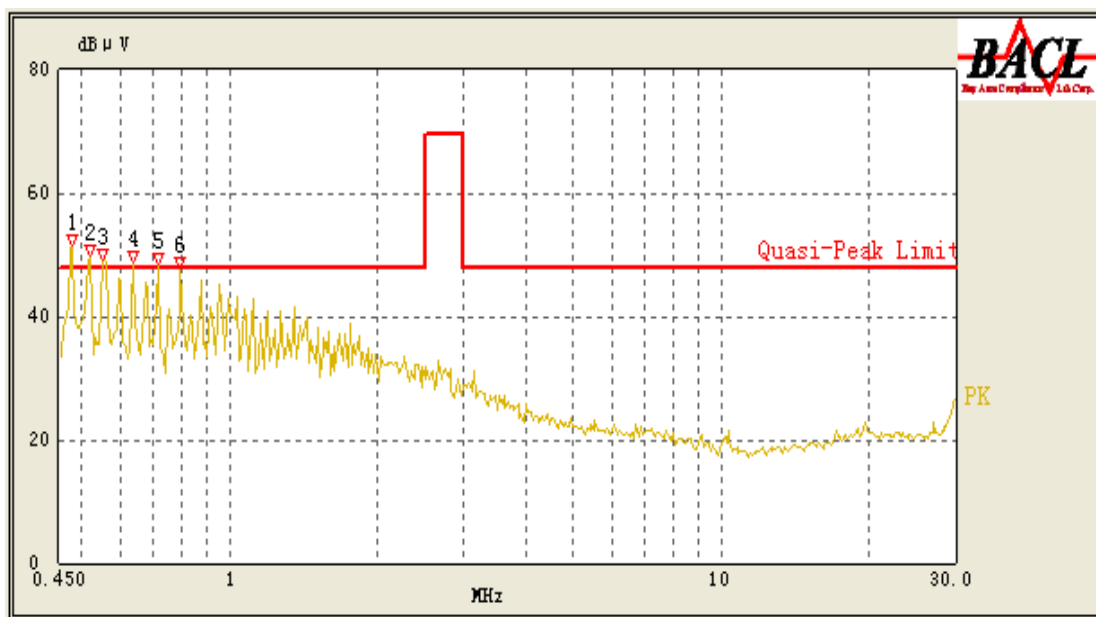
Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.490	47.62	10.25	48.00	0.38
0.455	47.45	10.26	48.00	0.55
0.525	45.52	10.25	48.00	2.48
0.595	45.42	10.24	48.00	2.58
0.630	43.80	10.23	48.00	4.20
0.740	37.96	10.21	48.00	10.04

AC 120V/ 60 Hz, Neutral:

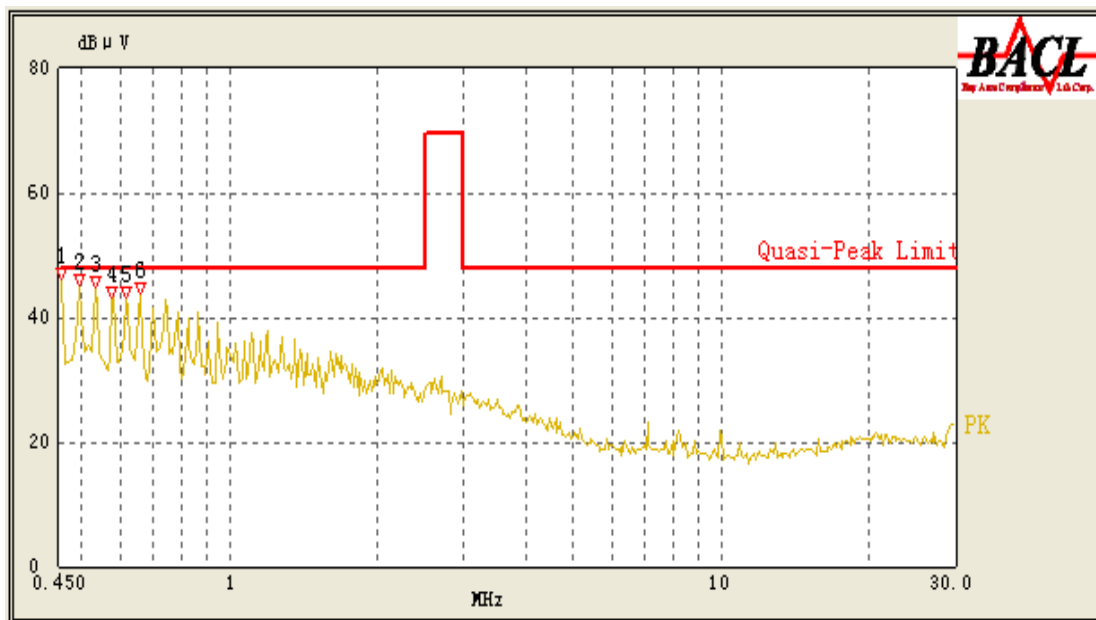
Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.460	47.52	10.25	48.00	0.48
0.495	46.64	10.24	48.00	1.36
0.530	45.91	10.24	48.00	2.09
0.600	45.64	10.23	48.00	2.36
0.565	44.31	10.23	48.00	3.69
0.745	37.07	10.21	48.00	10.93

Test Mode: On (Model: NL-1205)

AC 120V/60 Hz, Line:



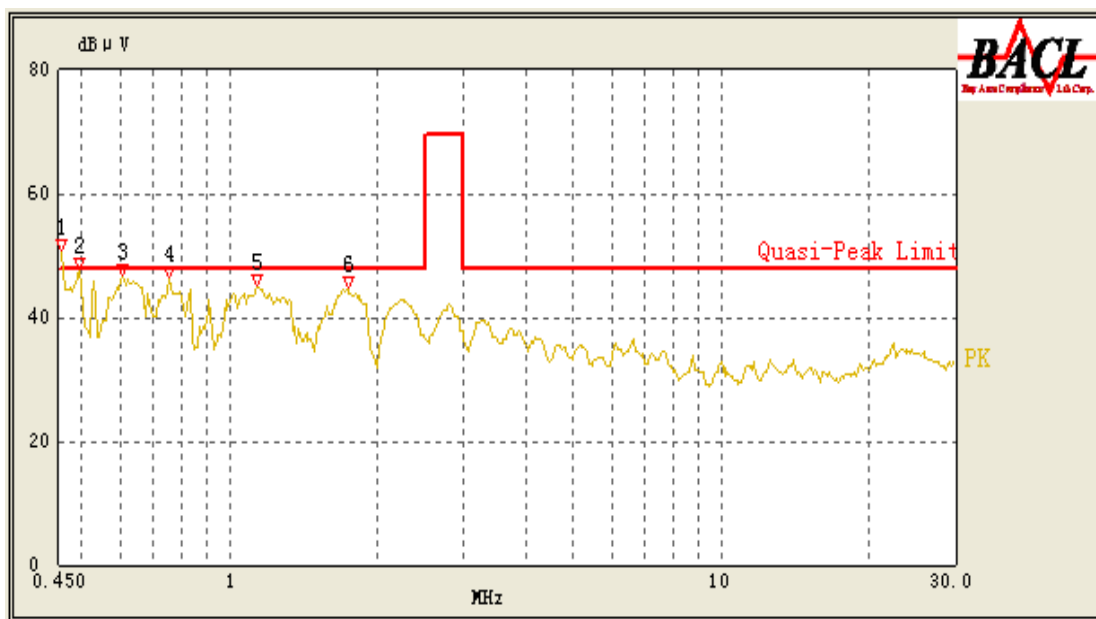
Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.555	45.55	10.24	48.00	2.45
0.635	41.83	10.23	48.00	6.17
0.715	37.30	10.22	48.00	10.70
0.480	35.85	10.26	48.00	12.15
0.520	33.67	10.25	48.00	14.33
0.795	33.61	10.20	48.00	14.39

AC 120V/ 60 Hz, Neutral:

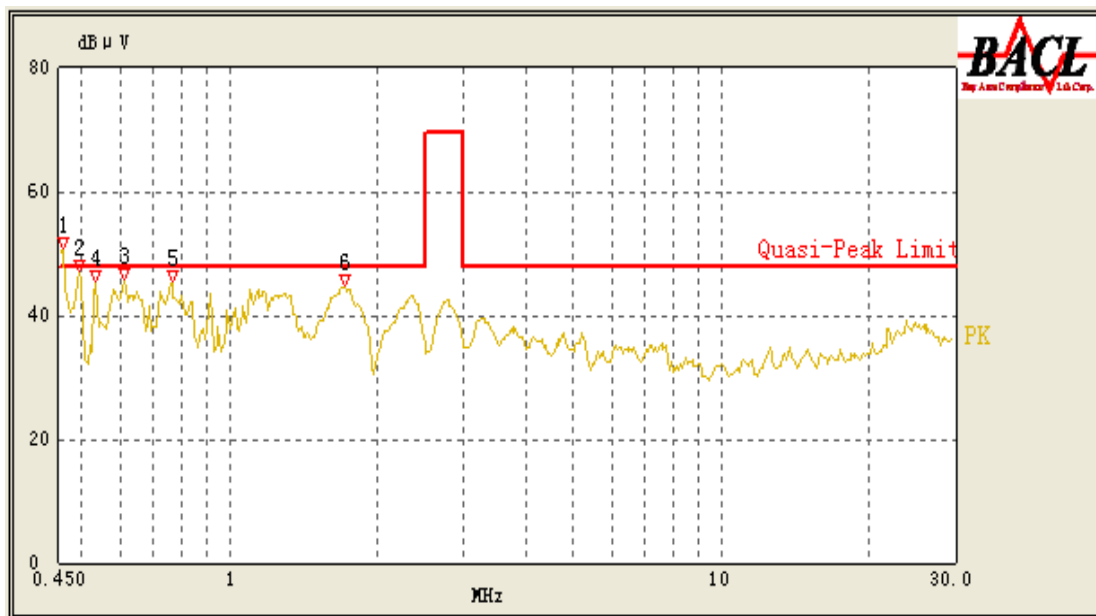
Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.495	33.27	10.24	48.00	14.73
0.575	32.52	10.23	48.00	15.48
0.615	30.72	10.23	48.00	17.28
0.660	30.36	10.22	48.00	17.64
0.535	29.90	10.24	48.00	18.10
0.455	26.71	10.25	48.00	21.29

Test Mode: On (Model: NL-1206)

AC 120V/60 Hz, Line:



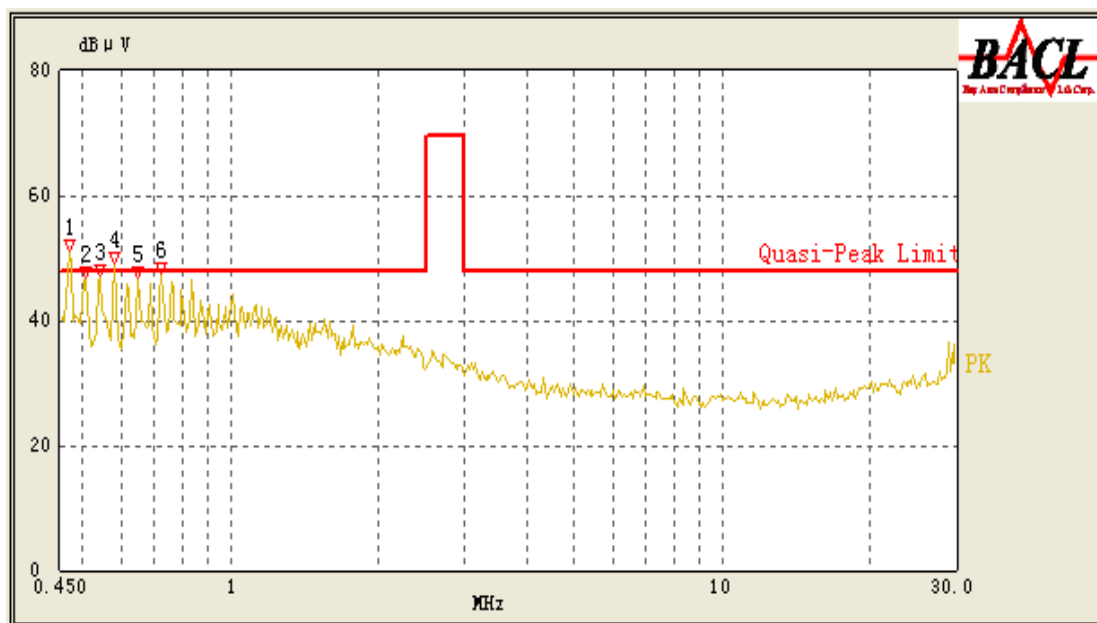
Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.455	47.15	10.26	48.00	0.85
0.495	43.92	10.25	48.00	4.08
0.605	43.73	10.23	48.00	4.27
0.755	43.69	10.21	48.00	4.31
1.740	42.29	10.19	48.00	5.71
1.135	41.84	10.17	48.00	6.16

AC 120V/ 60 Hz, Neutral:

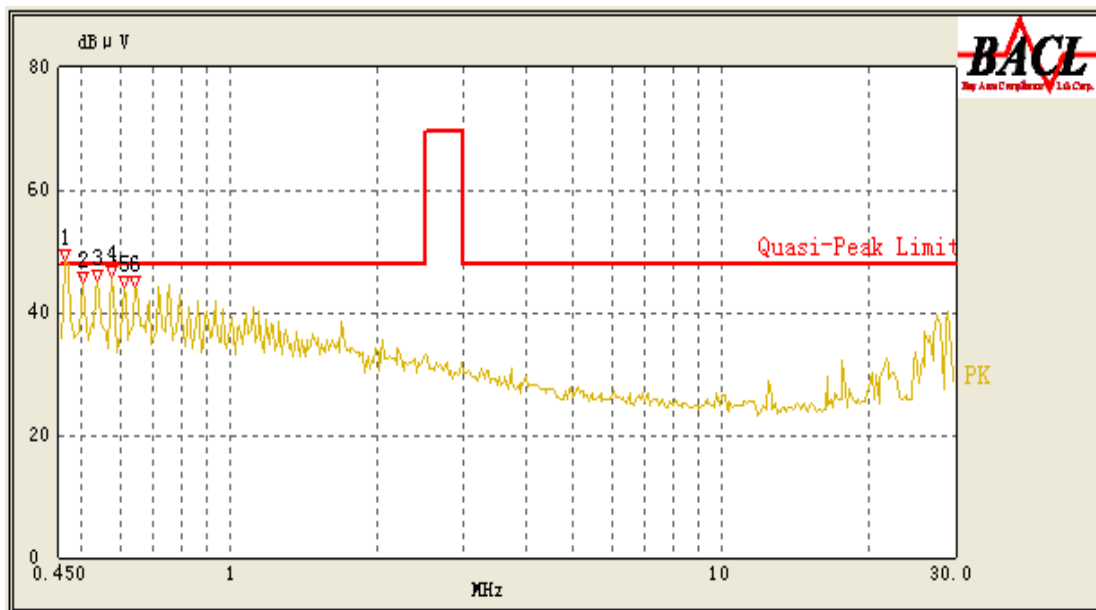
Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.495	44.48	10.24	48.00	3.52
0.460	43.54	10.25	48.00	4.46
0.610	42.60	10.23	48.00	5.40
0.765	41.48	10.20	48.00	6.52
0.535	40.51	10.24	48.00	7.49
1.725	40.29	10.19	48.00	7.71

Test Mode: On (Model: NL-1207)

AC 120V/60 Hz, Line:



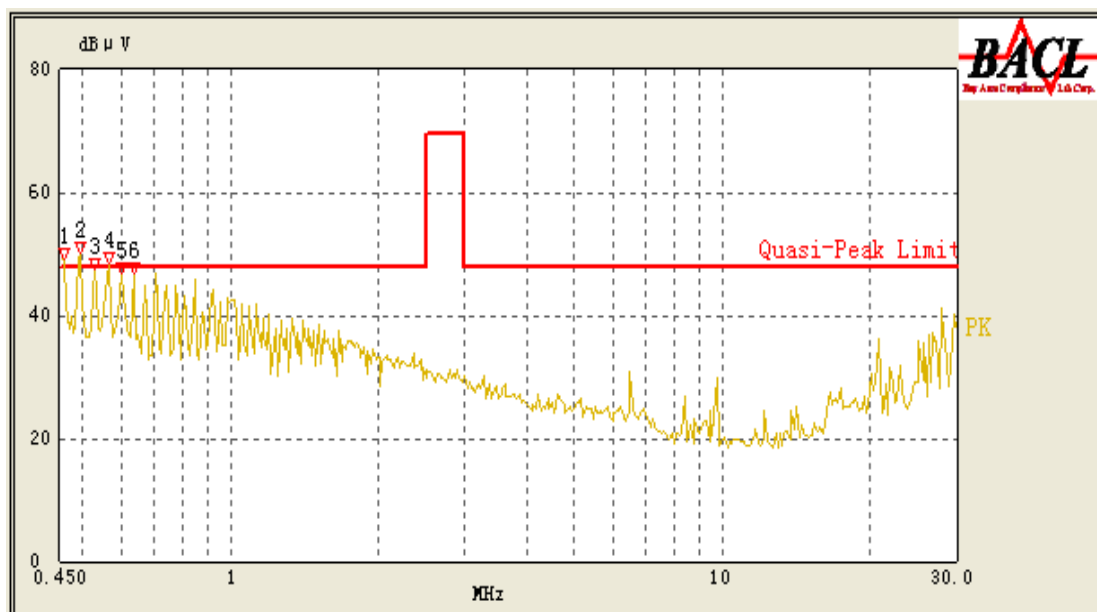
Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.470	46.98	10.26	48.00	1.02
0.650	43.35	10.23	48.00	4.65
0.580	42.76	10.24	48.00	5.24
0.545	42.50	10.24	48.00	5.50
0.725	40.39	10.22	48.00	7.61
0.510	38.84	10.25	48.00	9.16

AC 120V/ 60 Hz, Neutral:

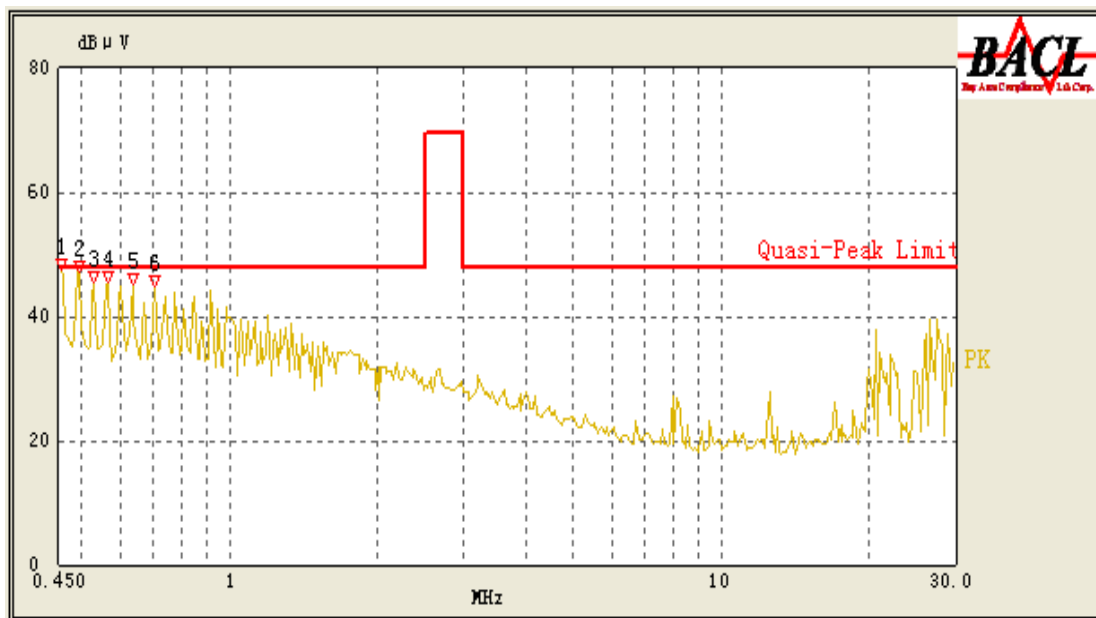
Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.465	45.27	10.25	48.00	2.73
0.575	43.98	10.23	48.00	4.02
0.540	43.57	10.24	48.00	4.43
0.645	42.44	10.22	48.00	5.56
0.610	42.06	10.23	48.00	5.94
0.505	41.82	10.24	48.00	6.18

Test Mode: On (Model: NL-1208)

AC 120V/60 Hz, Line:



Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.495	47.34	10.25	48.00	0.66
0.460	46.16	10.26	48.00	1.84
0.530	45.03	10.25	48.00	2.97
0.565	44.98	10.24	48.00	3.02
0.600	44.97	10.24	48.00	3.03
0.635	44.37	10.23	48.00	3.63

AC 120V/ 60 Hz, Neutral:

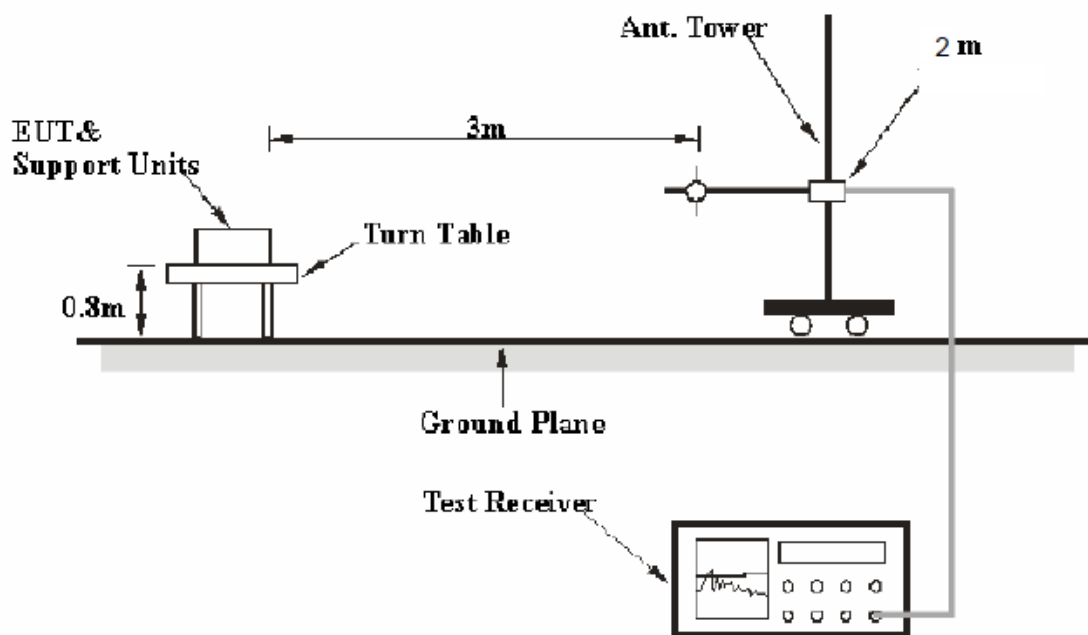
Conducted Emissions		FCC Part 18.307		
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)
0.495	45.78	10.24	48.00	2.22
0.455	44.20	10.25	48.00	3.80
0.565	43.60	10.23	48.00	4.40
0.530	43.29	10.24	48.00	4.71
0.705	43.21	10.21	48.00	4.79
0.635	42.85	10.22	48.00	5.15

FCC §18.305 – FIELD STRENGTH

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

EUT Setup



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the FCC MP - 5.

The adapter was connected to 120 VAC/60 Hz power source.

EMI Test Receiver Setup

The system was investigated from 9 kHz to 30 MHz.

During the radiated emission test, the EMI test receiver and Spectrum Analyzer were set with the following configurations:

<i>Frequency Range</i>	<i>R B/W</i>	<i>Video B/W</i>	<i>IF B/W</i>
9kHz– 150kHz	100 Hz	300 Hz	200Hz
150kHz– 30 MHz	10 kHz	30 kHz	9 kHz

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
ETS-LINDGREN	Passive Loop Antenna	6512	00029604	2011-11-30	2012-11-29
Rohde & Schwarz	EMI Test Receiver	ESCI	101122	2011-11-17	2012-11-16
Sunol Sciences	Broadband Antenna	JB1	A040904-2	2011-11-28	2012-11-27
HP	Pre-Amplifier	8447E	1937A01046	2011-11-24	2012-11-23

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed per the NVLAP requirements, traceable to NIST.

Test Procedure

For the radiated emissions test, the adapter was connected to the AC floor outlet.

Maximizing procedure was performed on the six (6) highest emissions to ensure that the EUT complied with all installation combinations.

All data was recorded in the Quasi-peak detection mode from 9 kHz to 1000 MHz.

Corrected Amplitude Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7 dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Data

Environmental Conditions

Temperature:	26 °C
Relative Humidity:	46 %
ATM Pressure:	101.0 kPa

The testing was performed by Andrew Shu on 2012-08-10.

Test Mode: On

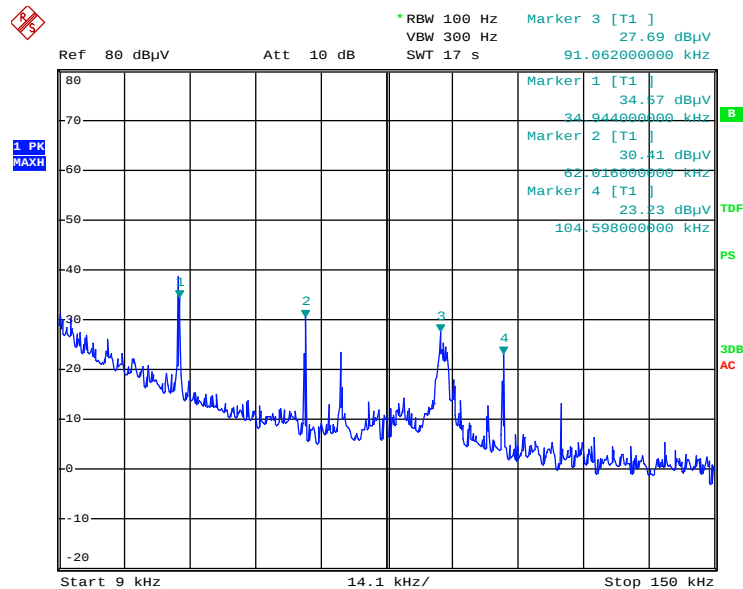
Model: NL-1201

Frequency (MHz)	Level (dBμV/m)	Detector (PK/QP/Ave.)	Direction (Degree)	Ant. Height (m)	Correction Factor (dB)	Part 18.305 Limit (dBμV/m)	Margin (dB)
0.035	34.57	PK	123	2	76.18	103.52	68.95
0.062	30.41	PK	95	2	69.69	103.52	73.11
0.091	27.69	PK	307	2	66.10	103.52	75.83
0.070	23.60	PK	214	2	68.85	103.52	79.92
0.110	22.56	PK	59	2	54.47	103.52	80.96
0.117	13.32	PK	97	2	64.94	103.52	90.20

Note: 1) No emissions are detected above 30 MHz.

2) Field strength limit at 300m distance is 15 dBμV/m, convert it to 3m distance is 103.52 dBμV/m.

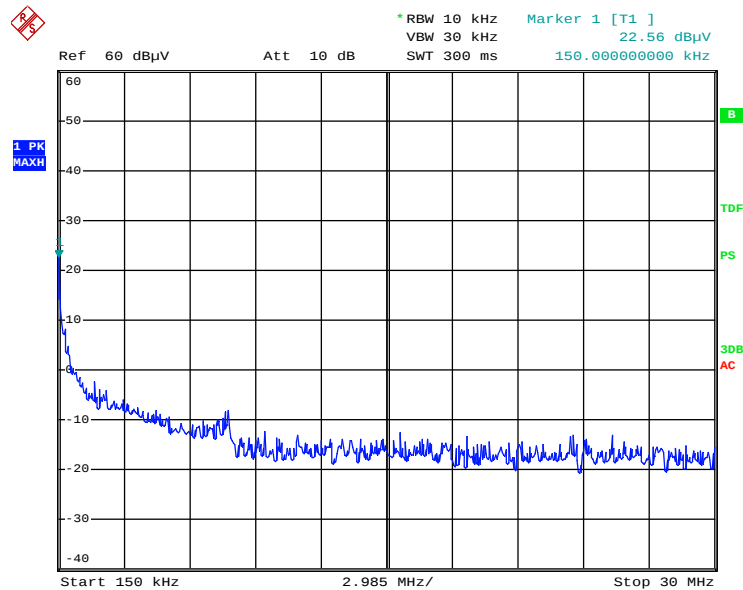
9 kHz-150 kHz



EUT

Date: 13.SEP.2012 05:17:18

150 kHz-30 MHz



EUT

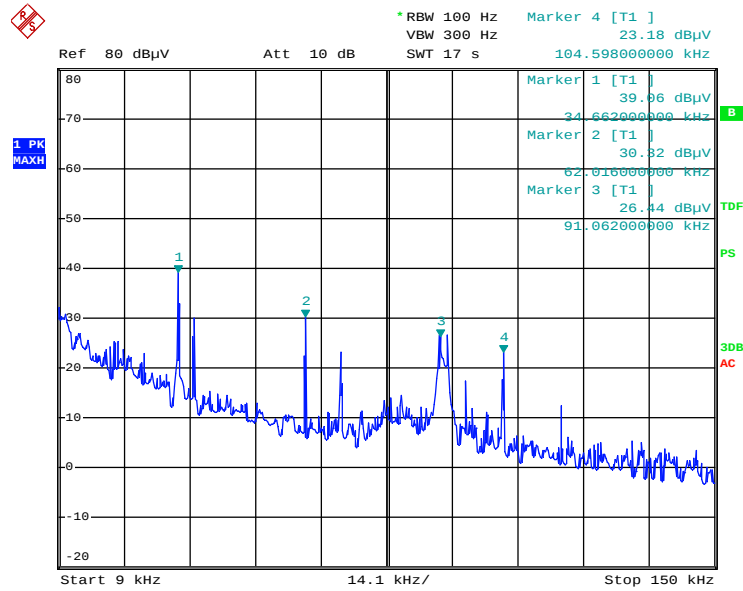
Date: 13.SEP.2012 05:15:39

Model: NL-1202

Frequency (MHz)	Level (dBμV/m)	Detector (PK/QP/Ave.)	Direction (Degree)	Ant. Height (m)	Correction Factor (dB)	Part 18.305 Limit (dBμV/m)	Margin (dB)
0.035	39.06	PK	23	2	76.18	103.52	64.46
0.062	30.32	PK	75	2	69.69	103.52	73.20
0.091	26.44	PK	124	2	66.10	103.52	77.08
0.070	24.03	PK	68	2	68.85	103.52	79.49
0.105	23.16	PK	307	2	65.48	103.52	80.36
0.117	13.71	PK	82	2	64.94	103.52	89.81

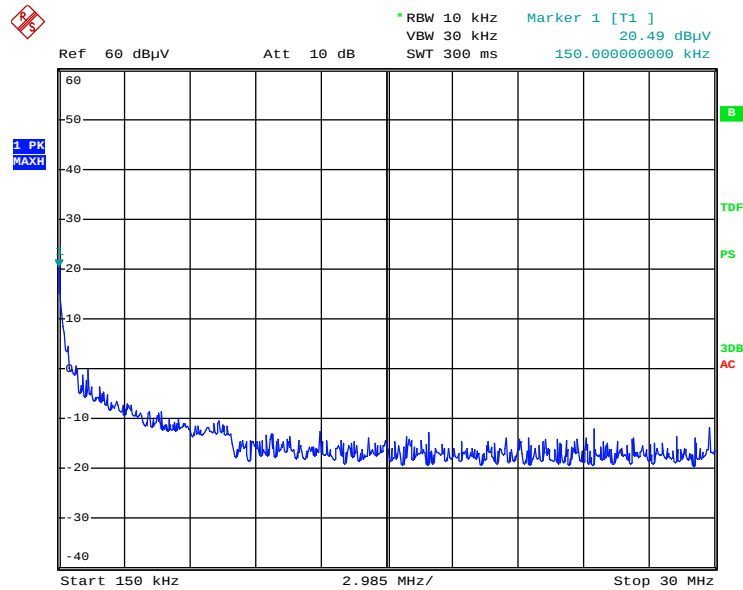
Note: 1) No emissions are detected above 30 MHz.

2) Field strength limit at 300m distance is 15 dBμV/m, convert it to 3m distance is 103.52 dBμV/m.

9 kHz-150 kHz

EUT

Date: 13.SEP.2012 05:20:05

150 kHz-30 MHz

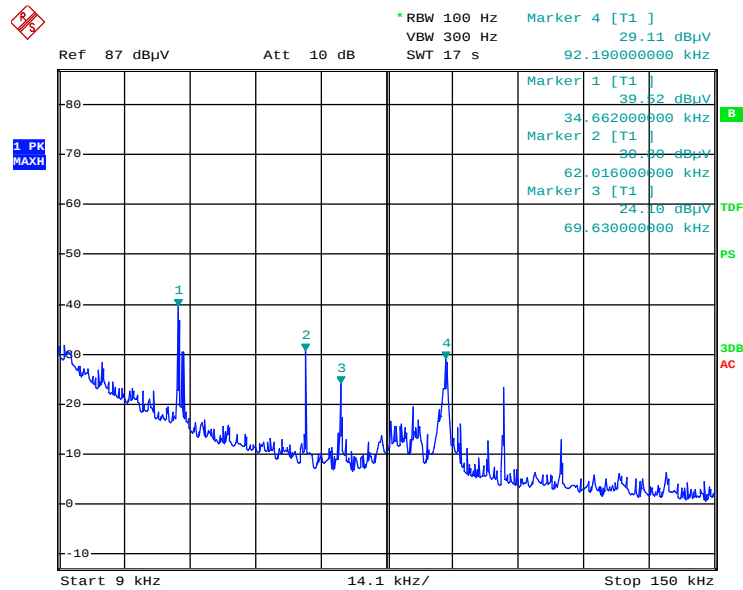
EUT

Date: 13.SEP.2012 05:23:20

Model: NL-1203

Frequency (MHz)	Level (dB μ V/m)	Detector (PK/QP/Ave.)	Direction (Degree)	Ant. Height (m)	Correction Factor (dB)	Part 18.305 Limit (dB μ V/m)	Margin (dB)
0.035	39.52	PK	187	2	76.18	103.52	64.00
0.062	30.00	PK	56	2	69.69	103.52	73.52
0.093	29.11	PK	56	2	66.44	103.52	74.41
0.069	24.10	PK	283	2	68.85	103.52	79.42
0.105	23.58	PK	325	2	65.48	103.52	79.94
1.117	12.80	PK	28	2	64.94	103.52	90.72

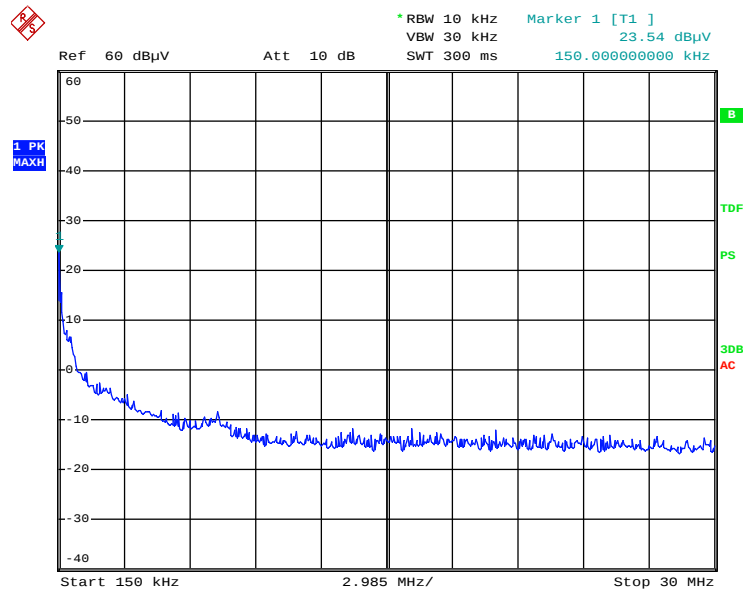
Note: 1) No emissions are detected above 30 MHz.

2) Field strength limit at 300m distance is 15 dB μ V/m, convert it to 3m distance is 103.52 dB μ V/m.**9 kHz-150 kHz**

EUT

Date: 13.SEP.2012 04:57:26

150 kHz-30 MHz



EUT

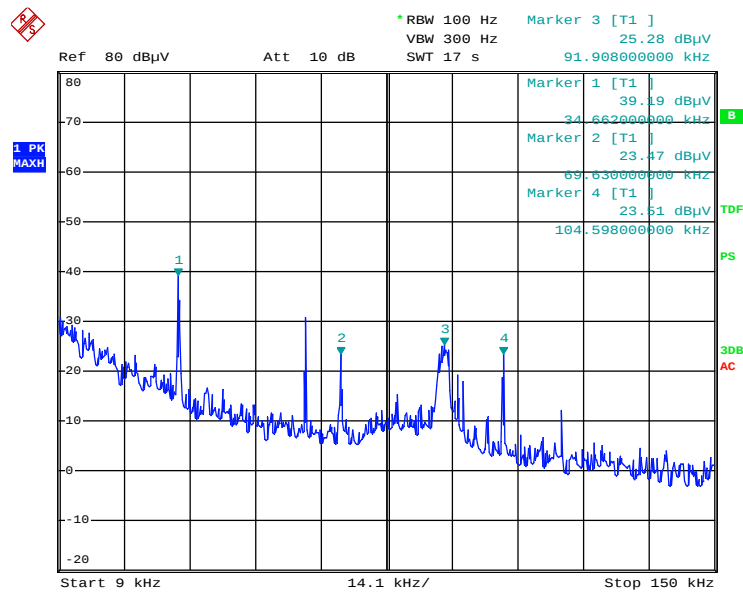
Date: 13.SEP.2012 05:00:13

Model: NL-1204

Frequency (MHz)	Level (dBμV/m)	Detector (PK/QP/Ave.)	Direction (Degree)	Ant. Height (m)	Correction Factor (dB)	Part 18.305 Limit (dBμV/m)	Margin (dB)
0.035	38.04	PK	58	2	76.18	103.52	65.48
0.062	30.43	PK	49	2	69.69	103.52	73.09
0.092	23.71	PK	124	2	66.54	103.52	79.81
0.070	23.47	PK	86	2	68.85	103.52	80.05
0.105	23.09	PK	248	2	65.48	103.52	80.43
0.150	19.39	PK	72	2	54.47	103.52	84.13

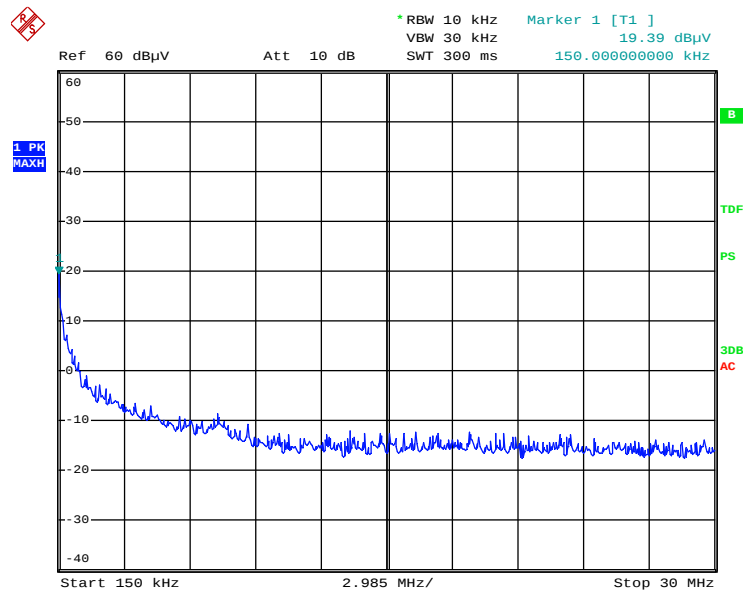
Note: 1) No emissions are detected above 30 MHz.

2) Field strength limit at 300m distance is 15 dBμV/m, convert it to 3m distance is 103.52 dBμV/m.

9 kHz-150 kHz

EUT

Date: 13.SEP.2012 05:14:09

150 kHz-30 MHz

EUT

Date: 13.SEP.2012 05:14:47

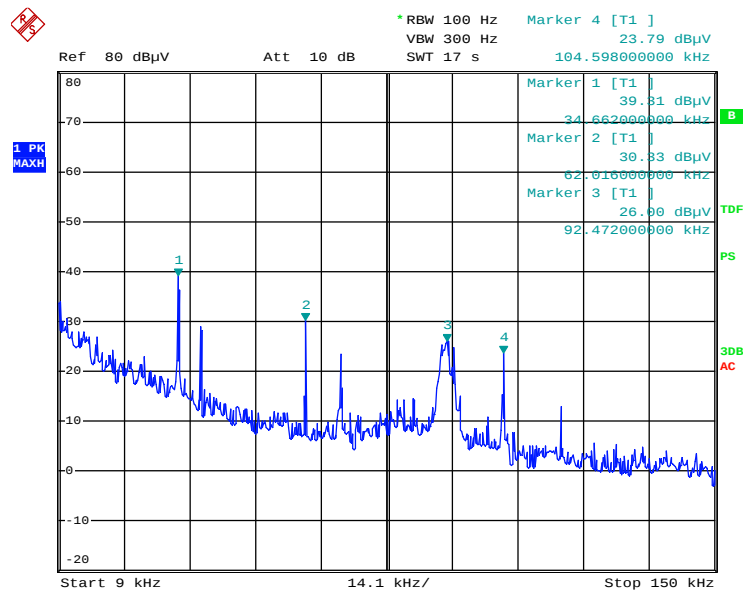
Model: NL-1205

Frequency (MHz)	Level (dB μ V/m)	Detector (PK/QP/Ave.)	Direction (Degree)	Ant. Height (m)	Correction Factor (dB)	Part 18.305 Limit (dB μ V/m)	Margin (dB)
0.035	39.31	PK	25	2	76.18	103.52	64.21
0.062	30.33	PK	75	2	69.69	103.52	73.19
0.040	28.26	PK	248	2	75.00	103.52	75.26
0.092	26.00	PK	46	2	66.54	103.52	77.52
0.105	23.79	PK	113	2	65.48	103.52	79.73
0.117	12.88	PK	168	2	64.94	103.52	90.64

Note: 1) No emissions are detected above 30 MHz.

2) Field strength limit at 300m distance is 15 dB μ V/m, convert it to 3m distance is 103.52 dB μ V/m.

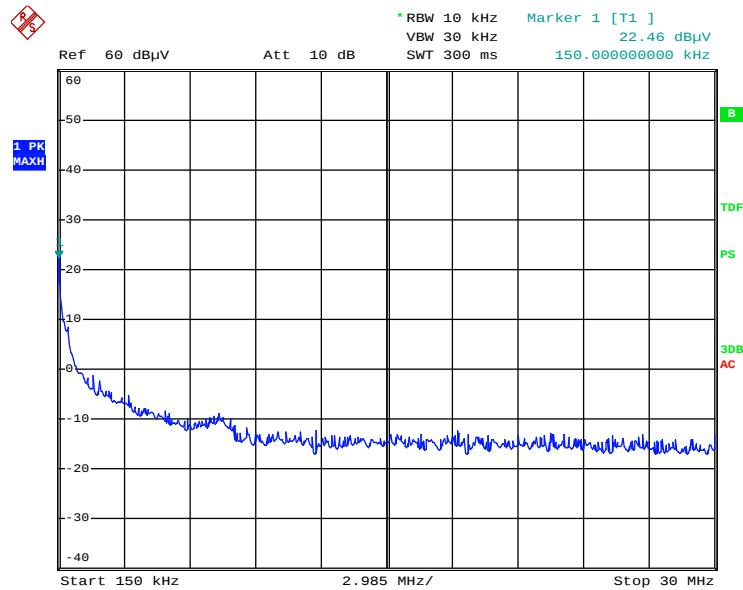
9 kHz-150 kHz



EUT

Date: 13.SEP.2012 05:03:35

150 kHz-30 MHz



EUT

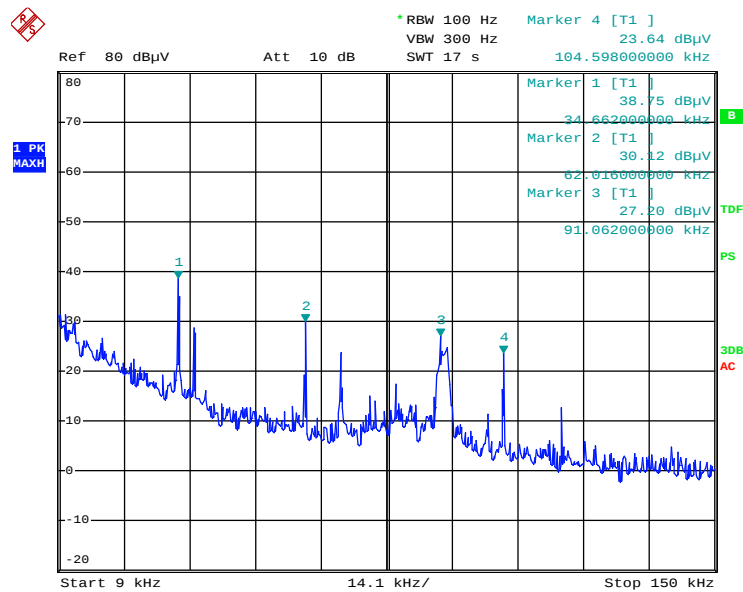
Date: 13.SEP.2012 05:01:41

Model: NL-1206

Frequency (MHz)	Level (dBμV/m)	Detector (PK/QP/Ave.)	Direction (Degree)	Ant. Height (m)	Correction Factor (dB)	Part 18.305 Limit (dBμV/m)	Margin (dB)
0.035	38.75	PK	125	2	76.18	103.52	64.77
0.062	30.12	PK	48	2	69.69	103.52	73.40
0.038	29.52	PK	74	2	76.38	103.52	74.00
0.091	27.20	PK	258	2	66.65	103.52	76.32
0.070	23.82	PK	28	2	68.85	103.52	79.7
0.605	23.64	PK	326	2	51.13	103.52	79.88

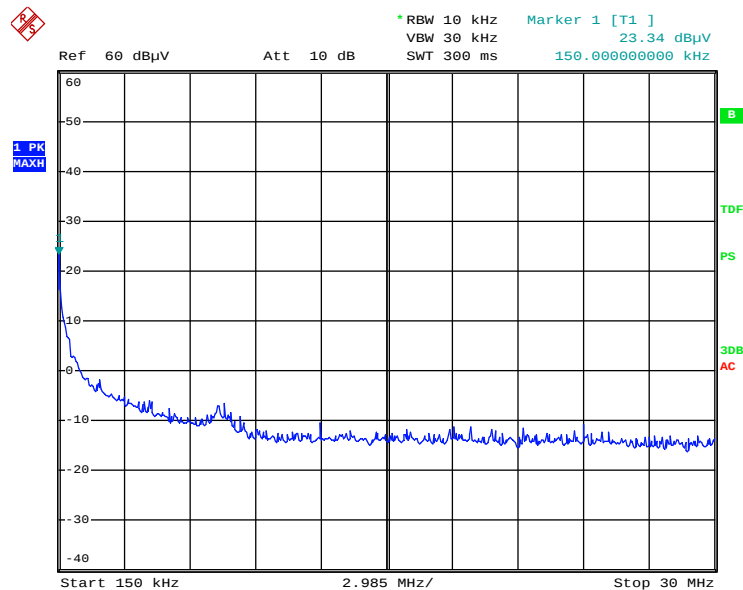
Note: 1) No emissions are detected above 30 MHz.

2) Field strength limit at 300m distance is 15 dBμV/m, convert it to 3m distance is 103.52 dBμV/m.

9 kHz-150 kHz

EUT

Date: 13.SEP.2012 05:12:08

150 kHz-30 MHz

EUT

Date: 13.SEP.2012 05:10:34

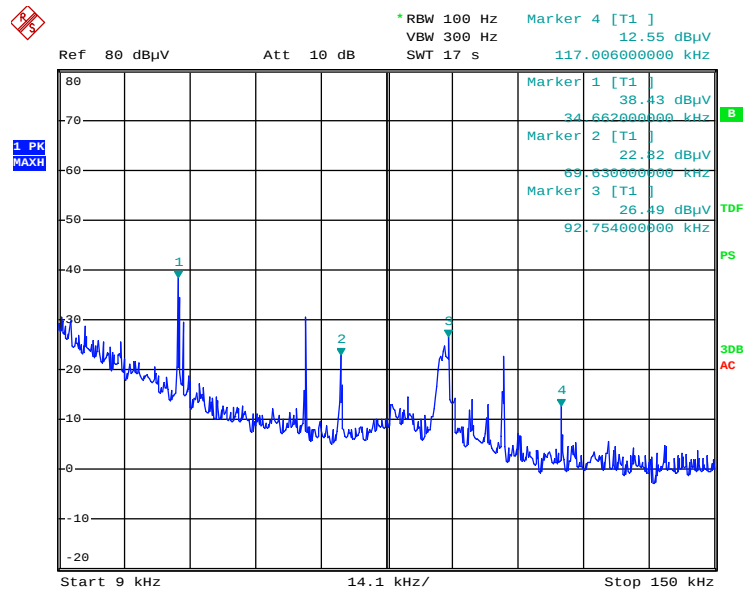
Model: NL-1207

Frequency (MHz)	Level (dB μ V/m)	Detector (PK/QP/Ave.)	Direction (Degree)	Ant. Height (m)	Correction Factor (dB)	Part 18.305 Limit (dB μ V/m)	Margin (dB)
0.035	38.22	PK	124	2	76.18	103.52	65.30
0.062	30.28	PK	47	2	69.69	103.52	73.24
0.093	22.59	PK	57	2	66.44	103.52	80.93
0.105	22.69	PK	58	2	65.48	103.52	80.83
0.070	22.82	PK	158	2	68.85	103.52	80.70
0.117	12.55	PK	235	2	64.94	103.52	90.97

Note: 1) No emissions are detected above 30 MHz.

2) Field strength limit at 300m distance is 15 dB μ V/m, convert it to 3m distance is 103.52 dB μ V/m.

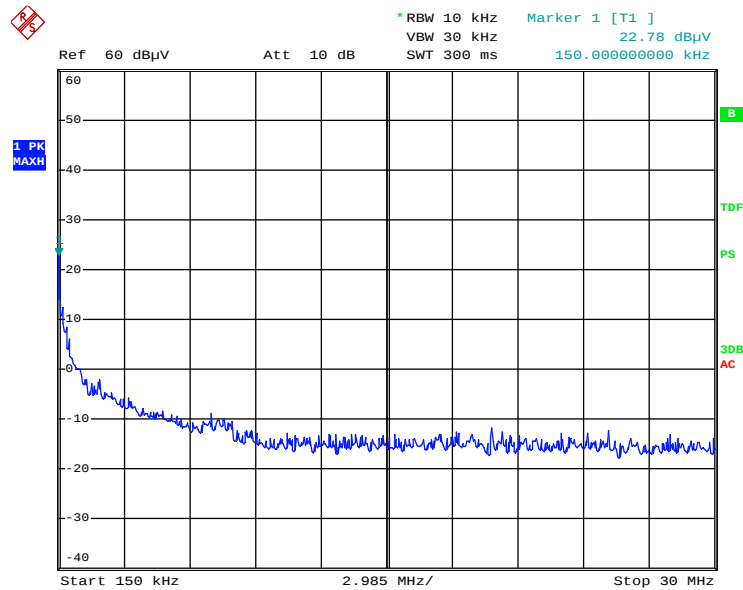
9 kHz-150 kHz



EUT

Date: 13.SEP.2012 05:08:50

150 kHz-30 MHz



EUT

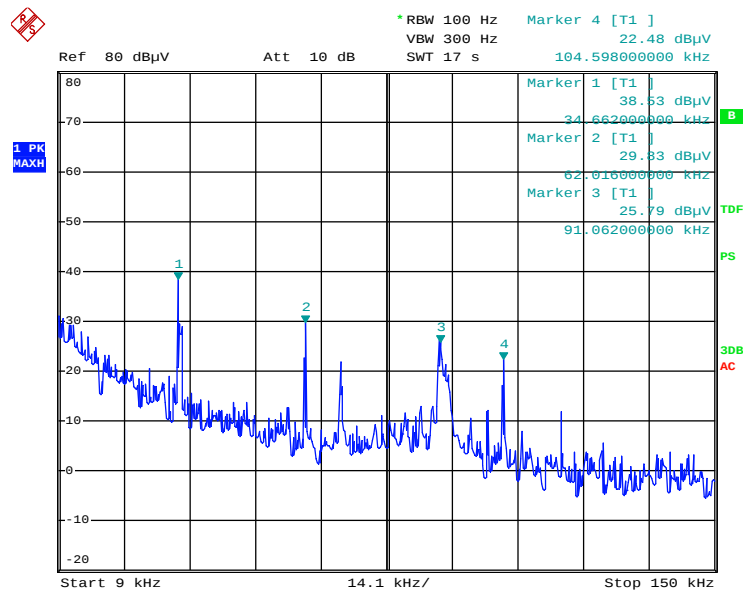
Date: 13.SEP.2012 05:09:39

Model: NL-1208

Frequency (MHz)	Level (dBμV/m)	Detector (PK/QP/Ave.)	Direction (Degree)	Ant. Height (m)	Correction Factor (dB)	Part 18.305 Limit (dBμV/m)	Margin (dB)
0.035	38.53	PK	123	2	76.18	103.52	64.99
0.062	29.83	PK	28	2	69.69	103.52	73.69
0.091	25.79	PK	158	2	66.65	103.52	77.73
0.070	23.01	PK	64	2	68.85	103.52	80.51
0.105	22.48	PK	169	2	65.48	103.52	81.04
0.117	12.33	PK	37	2	64.94	103.52	91.19

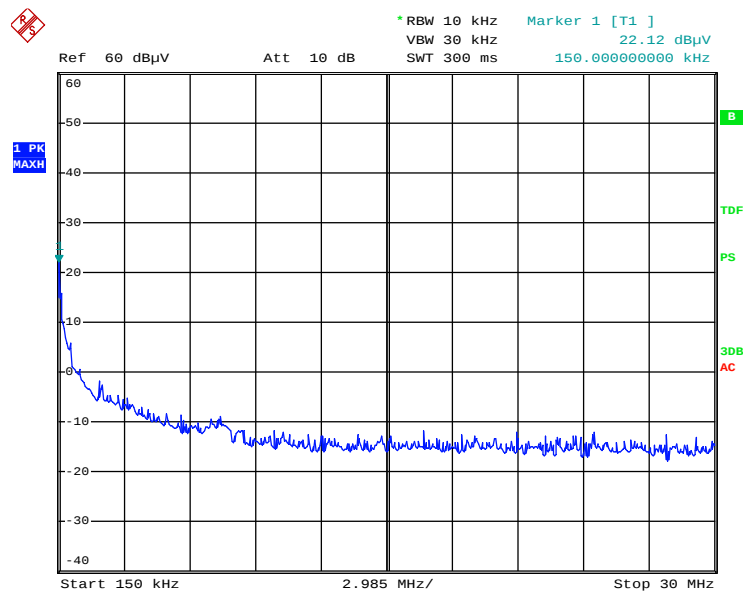
Note: 1) No emissions are detected above 30 MHz.

2) Field strength limit at 300m distance is 15 dBμV/m, convert it to 3m distance is 103.52 dBμV/m.

9 kHz-150 kHz

EUT

Date: 13.SEP.2012 05:21:45

150 kHz-30 MHz

EUT

Date: 13.SEP.2012 05:22:59

PRODUCT SIMILARITY DECLARATION LETTER

Company: Liting Universal (Zhejiang) Co., Ltd

Add : Jinsha Village, Quantang Industry Zone, Pinghu City, Zhejiang Province, 314204, China

Tel: 0573-85807600

Fax: 0573-85807622

Product Similarity Declaration

To Whom It May Concern,

We, Liting Universal (Zhejiang) Co., Ltd, hereby declare that our NL-1201, NL-1202, NL-1203, NL-1204, NL-1205, NL-1206, NL-1207, NL-1208 was test by BACL, and for our marketing purpose, we would like to list 8 models on reports and certificate, all the models share the similar PCB layouts. the differences between these model are appearance colour and different power.

The details as below:

Production name	Model no.	power
Neon lamp	NL-1201	3.2-3.6W
Neon lamp	NL-1202	3.2-3.6W
Neon lamp	NL-1203	3.2-3.6W
Neon lamp	NL-1204	3.2-3.6W
Neon lamp	NL-1205	3.2-3.6W
Neon lamp	NL-1206	3.2-3.6W
Neon lamp	NL-1207	3.2-3.6W
Neon lamp	NL-1208	3.2-3.6W

No other differences are made to them.

Please contact me if you have any question.

Sincerely,

Signature :

Micky.Chen

General manager

***** END OF REPORT *****