Report No: GTSE11120102204

TEST REPORT

Applicant:	Corporativo Lanix S.A. de C.V.
Address of Applicant:	Carretera internacional Hermosillo-Nogale Km.8.5 Hermosillo, Sonora, Mexico

Equipment Under Test (EUT)

Product Name:	GSM Dual Band GPRS Digital Mobile Phone
Model No.:	LX12
Trade mark :	LANIX
FCC ID:	ZC4LX12
Applicable standards:	FCC CFR Title 47 Part 15 Subpart B
Date of sample receipt:	Dec. 22, 2011
Date of Test:	Dec. 23-27, 2011
Date of report issued:	Dec. 28, 2011
Test Result :	PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Stephen Guo
Laboratory Manager

2 Version

Version No.	Date	Description
00	*Dec. 28, 2011*	*Original*

Prepared by: Collin. He ***Date:*** *Dec. 28, 2011*

Project Engineer

Reviewed by: Hans. Hu ***Date:*** *Dec. 28, 2011*

Reviewer

3 Contents

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4 Test Summary

Test Item	Section in CFR 47	Result
Conducted Emission	Part15.107	PASS
Readiated Emissions	Part15.109	PASS

PASS: The EUT complies with the essential requirements in the standard.

5 General Information

5.1 Client Information

Applicant:	Corporativo Lanix S.A. de C.V.
Address of Applicant:	Carretera internacional Hermosillo-Nogale Km.8.5 Hermosillo, Sonora, Mexico
Manufacturer:	ShenZhen Konka Telecommunication Technology Co., Ltd
Address of Manufacturer:	No.9008 Shennan Road, Overseas Chinese Town, ShenZhen, Guangdong, China
Factory:	SHENZHEN KONKA TELECOMMUNICATION TECHNOLOGY CO., LTD
Address of Factory:	No.9008 Shennan Road, Overseas Chinese Town, ShenZhen, Guangdong, China

5.2 General Description of E.U.T.

Product Name:	GSM Dual Band GPRS Digital Mobile Phone
Model No.:	LX12
AC adapter:	Model : LX12-C Input: AC 100-240V 50/60Hz Output: DC 5V 500mA
Power supply:	Model : LX12-BAT Type: lithium-ion 3.7V 900mAh Voltage: DC 3.7V

5.3 Test mode and voltage

Test mode:	
Exchange mode	Keep the EUT in exchanging data between the EUT and PC
Test voltage:	AC 120V/60Hz

5.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC —Registration No.: 600491**

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fuly described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 600491, July 20, 2010.

● **Industry Canada (IC)**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-1.

5.5 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.
Address: 2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District, Shenzhen, China
Tel: 0755-27798480
Fax: 0755-27798960

5.6 Description of Support Units

Manufacturer	Description	Model	Serial Number
DELL	PC Host	OPTIPLEX745	GTS237
DELL	MONITOR	VS12490	GTS237-1
DELL	KEYBOARD	SK-8115	GTS237-2
DELL	MOUSE	MOC5UO	GTS237-3
HP	Printer	CB495A	05257893

5.7 Deviation from Standards

Biconical, log.per. antenna and horn antenna were used instead of dipole antenna.
Semi-anechoic Chamber was used as alternation of open air test sites, and all test suites were performed with radiated method in it.

5.8 Abnormalities from Standard Conditions

None.

5.9 Other Information Requested by the Customer

None.

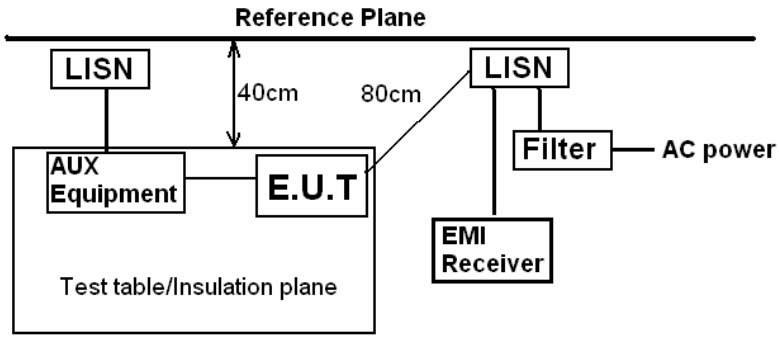
6 Test Instruments list

Radiated Emission:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	Mar. 30 2011	Mar. 29 2012
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Jul. 04 2011	Jul. 03 2012
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	Feb. 26 2011	Feb. 25 2012
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June 30 2011	June 29 2012
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
7	Coaxial Cable	GTS	N/A	GTS213	Apr. 01 2011	Mar. 31 2012
8	Coaxial Cable	GTS	N/A	GTS211	Apr. 01 2011	Mar. 31 2012
9	Coaxial cable	GTS	N/A	GTS210	Apr. 01 2011	Mar. 31 2012
9	Coaxial Cable	GTS	N/A	GTS212	Apr. 01 2011	Mar. 31 2012
10	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	Jul. 04 2011	Jul. 03 2012
11	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	Jul. 04 2011	Jul. 03 2012
12	Band filter	Amindeon	82346	GTS219	Apr. 01 2011	Mar. 31 2012
13	Temp. Humidity/ Barometer	Oregon Scientific	BA-888	GTS248	May 11 2011	May 10 2012

Conducted Emission						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	Shielding Room	ZhongYu Electron	7.0(L)x3.0(W)x3.0(H)	GTS252	Jul. 04 2011	Jul. 03 2012
2	EMI Test Receiver	Rohde & Schwarz	ESCS30	GTS223	Jul. 04 2011	Jul. 03 2012
3	10dB Pulse Limita	Rohde & Schwarz	N/A	GTS224	Jul. 04 2011	Jul. 03 2012
4	LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	GTS226	Jul. 04 2011	Jul. 03 2012
5	Coaxial Cable	GTS	N/A	GTS227	Apr. 01 2011	Mar. 31 2012
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A

7 Test results and Measurement Data

7.1 Conducted Emissions

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 B Section 15.107</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.4:2003</td></tr>
<tr><td>Test Frequency Range:</td><td>150kHz to 30MHz</td></tr>
<tr><td>Class / Severity:</td><td>Class B</td></tr>
<tr><td>Receiver setup:</td><td>RBW=9kHz, VBW=30kHz</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><td rowspan="2">Frequency range (MHz)</td><td colspan="2">Limit (dBµV)</td></tr>
<tr><td>Quasi-peak</td><td>Average</td></tr>
<tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr>
<tr><td>0.5-5</td><td>56</td><td>46</td></tr>
<tr><td>0.5-30</td><td>60</td><td>50</td></tr>
</table>
</td></tr>
<tr><td>Test procedure</td><td>The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/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 ANSI C63.4: 2003 on conducted measurement.</td></tr>
<tr><td>Test setup:</td><td> 

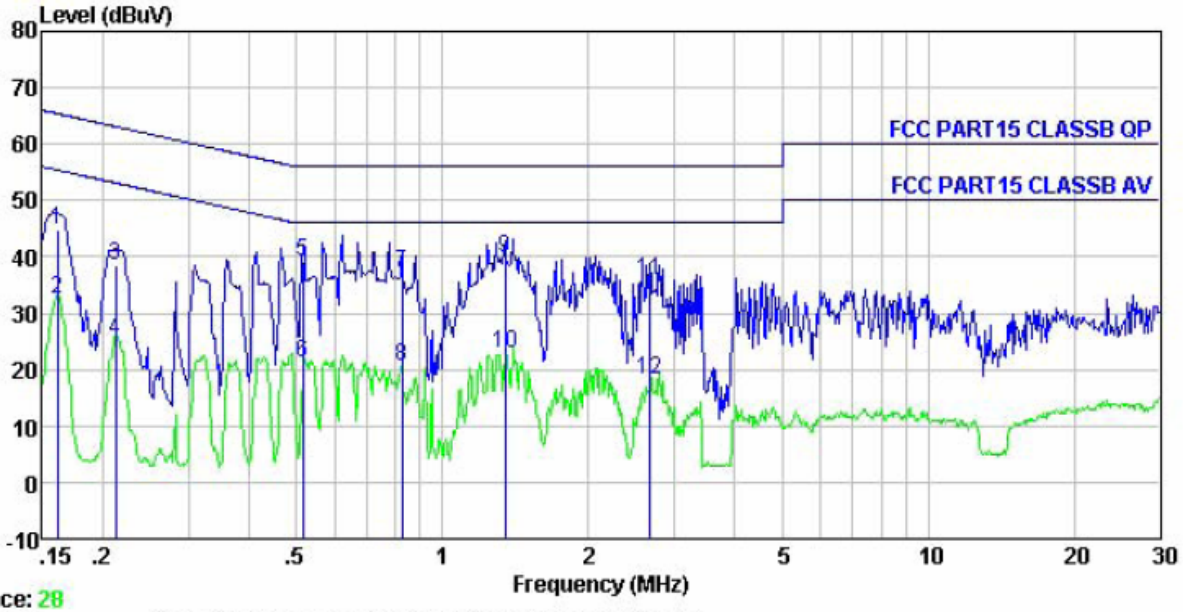
Remark:
E.U.T: Equipment Under Test
LISN: Line Impedence Stabilization Network
Test table height=0.8m</td></tr>
<tr><td>Test environment:</td><td>Temp.: 25 °C Humid.: 52% Press.: 1 012mbar</td></tr>
<tr><td>Measurement Record:</td><td>Uncertainty: ± 3.45dB</td></tr>
<tr><td>Test Instruments:</td><td>Refer to section 6 for details</td></tr>
<tr><td>Test mode:</td><td>Refer to section 5.3 for details</td></tr>
<tr><td>Test results:</td><td>Pass</td></tr>
</table>

Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Line:

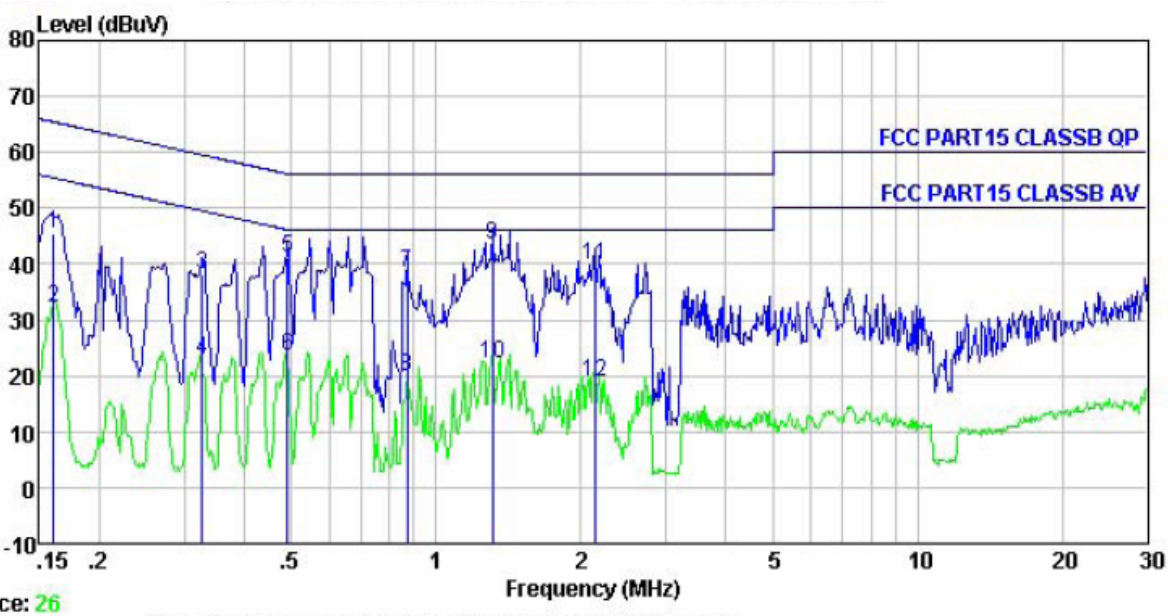


Trace: 28

Condition : FCC PART15 CLASSB QP LISN(2011) LINE
Job No. : 1022RF
Test Mode : PC mode
Test Engineer: Gavin

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.162	43.92	0.68	0.10	44.70	65.38	-20.68	QP
2	0.162	31.71	0.68	0.10	32.49	55.38	-22.89	Average
3	0.213	37.64	0.65	0.10	38.39	63.10	-24.71	QP
4	0.213	24.37	0.65	0.10	25.12	53.10	-27.98	Average
5	0.516	38.37	0.55	0.10	39.02	56.00	-16.98	QP
6	0.516	20.61	0.55	0.10	21.26	46.00	-24.74	Average
7	0.826	36.57	0.50	0.10	37.17	56.00	-18.83	QP
8	0.826	20.08	0.50	0.10	20.68	46.00	-25.32	Average
9	1.345	39.38	0.44	0.10	39.92	56.00	-16.08	QP
10	1.345	22.47	0.44	0.10	23.01	46.00	-22.99	Average
11	2.678	35.47	0.37	0.10	35.94	56.00	-20.06	QP
12	2.678	17.82	0.37	0.10	18.29	46.00	-27.71	Average

Neutral:



Trace: 26

Condition : FCC PART15 CLASSB QP LISN(2011) NEUTRAL
Job No. : 1022RF
Test Mode : PC mode
Test Engineer: Gavin

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.161	44.83	0.68	0.10	45.61	65.43	-19.82	QP
2	0.161	31.43	0.68	0.10	32.21	55.43	-23.22	Average
3	0.327	37.45	0.60	0.10	38.15	59.53	-21.38	QP
4	0.327	22.18	0.60	0.10	22.88	49.53	-26.65	Average
5	0.491	40.50	0.56	0.10	41.16	56.14	-14.98	QP
6	0.491	22.92	0.56	0.10	23.58	46.14	-22.56	Average
7	0.871	38.00	0.49	0.10	38.59	56.00	-17.41	QP
8	0.871	19.35	0.49	0.10	19.94	46.00	-26.06	Average
9	1.310	42.96	0.45	0.10	43.51	56.00	-12.49	QP
10	1.310	21.68	0.45	0.10	22.23	46.00	-23.77	Average
11	2.133	39.47	0.39	0.10	39.96	56.00	-16.04	QP
12	2.133	18.39	0.39	0.10	18.88	46.00	-27.12	Average

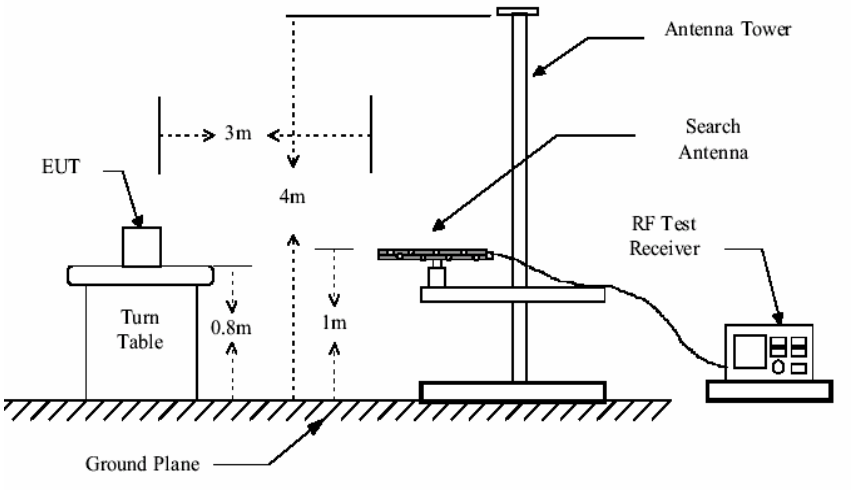
Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:

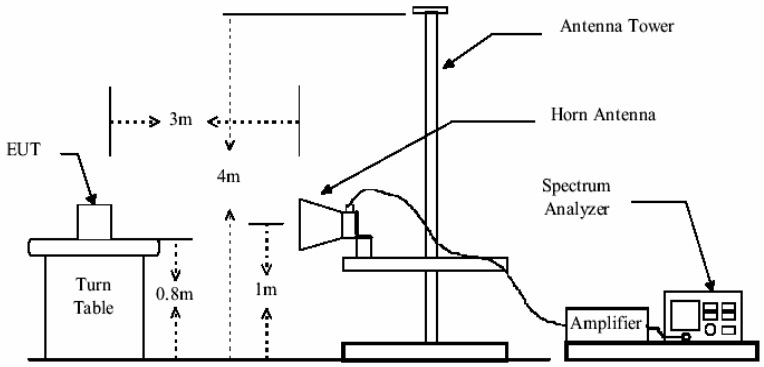
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.

7.2 Radiated Emission

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 B Section 15.109</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.4:2003</td></tr>
<tr><td>Test Frequency Range:</td><td>30MHz to 6000MHz</td></tr>
<tr><td>Test site:</td><td>Measurement Distance: 3m (Semi-Anechoic Chamber)</td></tr>
<tr><td>Receiver setup:</td><td>
<table>
<tr><th>Frequency</th><th>Detector</th><th>RBW</th><th>VBW</th><th>Remark</th></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr>
<tr><td>Peak</td><td>1MHz</td><td>10Hz</td><td>Average Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><th>Frequency</th><th>Limit (dBuV/m @3m)</th><th>Remark</th></tr>
<tr><td>30MHz-88MHz</td><td>40.0</td><td>Quasi-peak Value</td></tr>
<tr><td>88MHz-216MHz</td><td>43.5</td><td>Quasi-peak Value</td></tr>
<tr><td>216MHz-960MHz</td><td>46.0</td><td>Quasi-peak Value</td></tr>
<tr><td>960MHz-1GHz</td><td>54.0</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>54.0</td><td>Average Value</td></tr>
<tr><td>74.0</td><td>Peak Value</td></tr>
</table>
</td></tr>
<tr><td>Test Procedure:</td><td>a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. 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 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.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</td></tr>
<tr><td>Test setup:</td><td>Below 1GHz</td></tr>
</table>



Above 1GHz



Test environment:	Temp.: 25 °C Humid.: 52% Press.: 1 012mbar
Measurement Record:	Uncertainty: ± 4.5dB
Test Instruments:	Refer to section 6 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

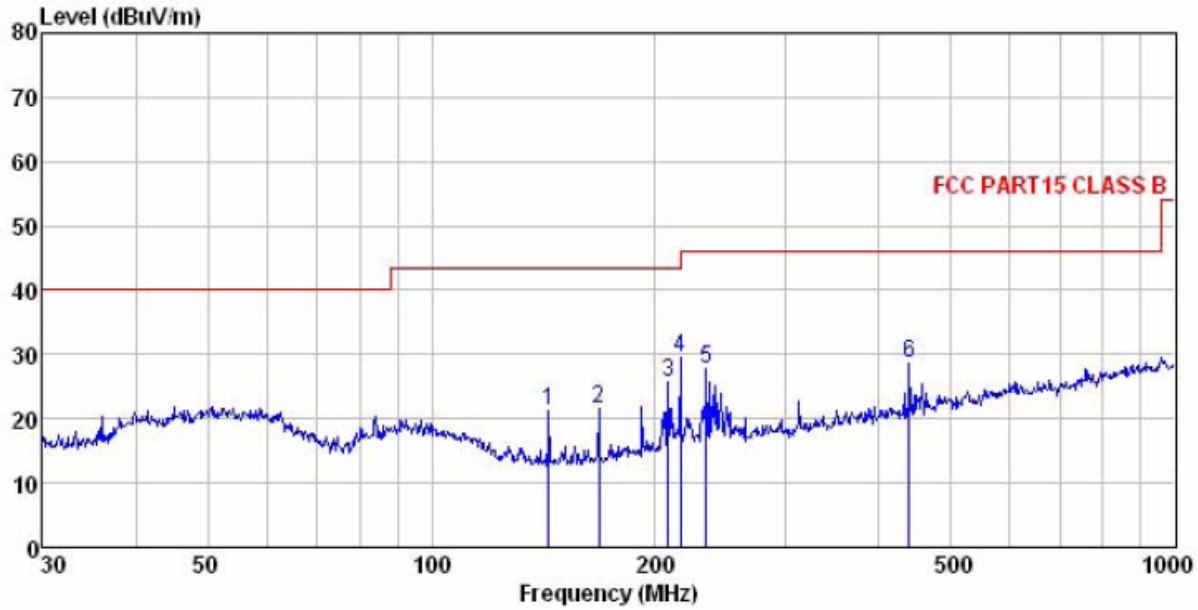
Note:
The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor

Measurement Data

Below 1G

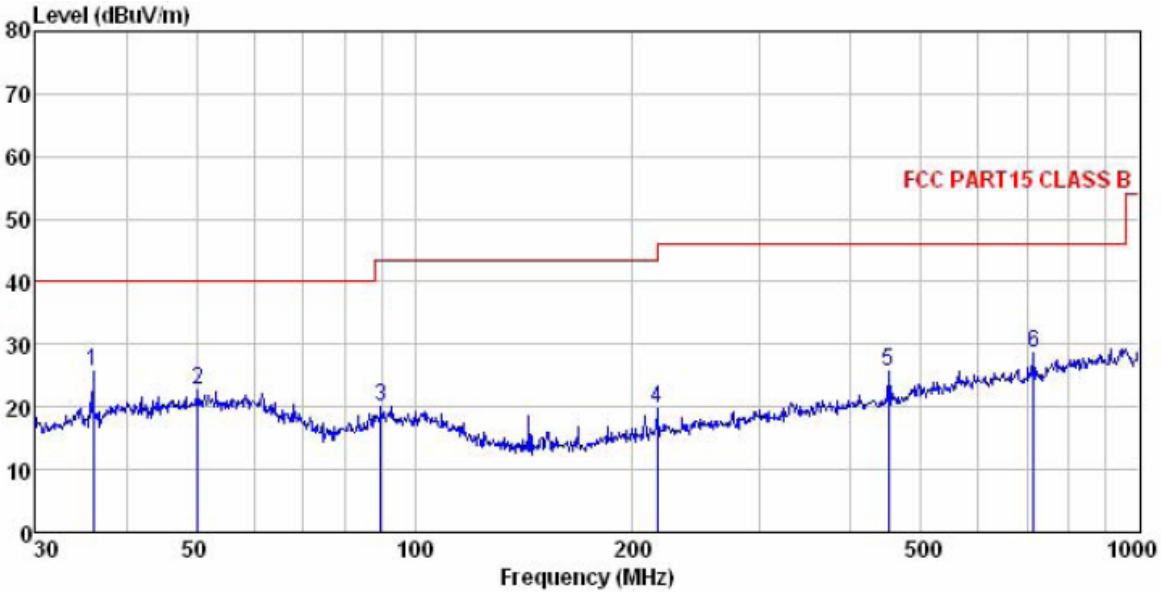
Horizontal:



Site : 3m chamber
Condition : FCC PART15 CLASS B 3m VULB9163 (2011-11) HORIZONTAL
Job No. : 1022RF
Test mode : PC mode
Test Engineer: Joe

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	143.83	44.27	8.25	0.60	31.95	21.17	43.50	-22.33	QP
2	167.82	44.11	8.92	0.65	32.08	21.60	43.50	-21.90	QP
3	207.85	46.50	10.81	0.74	32.27	25.78	43.50	-17.72	QP
4	216.02	49.82	11.08	0.78	32.27	29.41	46.00	-16.59	QP
5	234.17	47.22	11.83	0.85	32.28	27.62	46.00	-18.38	QP
6	438.66	43.80	15.51	1.33	32.04	28.60	46.00	-17.40	QP

Vertical:

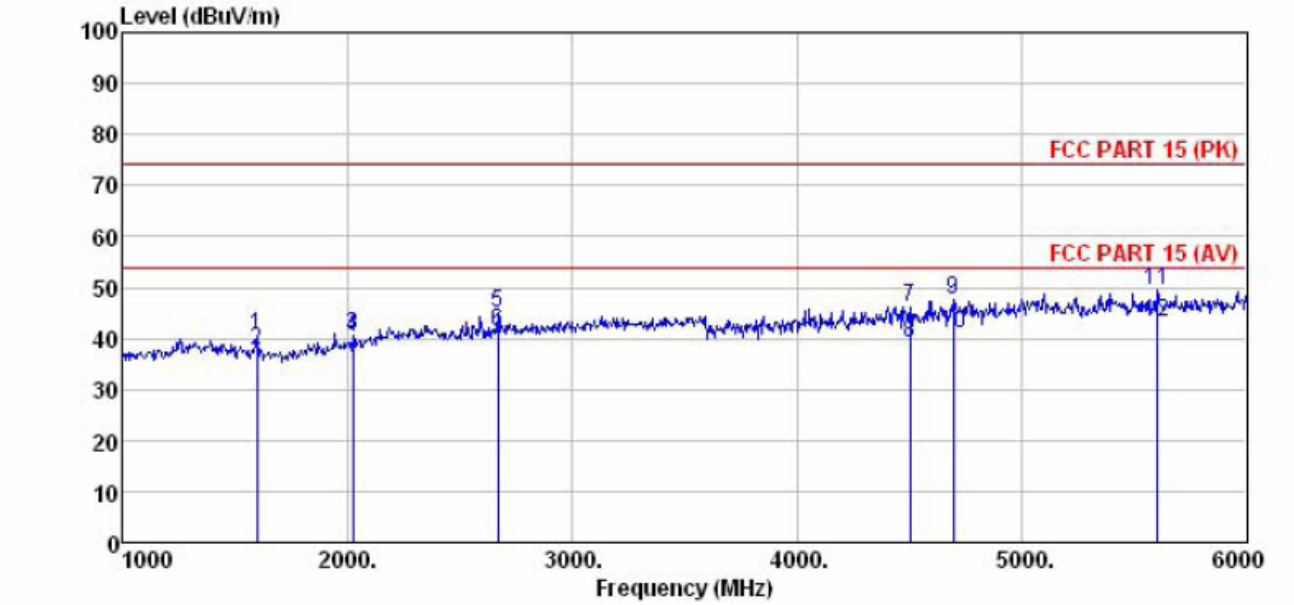


Site : 3m chamber
Condition : FCC PART15 CLASS B 3m VULB9163 (2011-11) VERTICAL
Job No. : 1022RF
Test mode : PC mode
Test Engineer: Joe

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	36.00	45.01	12.58	0.24	32.20	25.63	40.00	-14.37	QP
2	50.23	38.26	16.26	0.32	32.01	22.83	40.00	-17.17	QP
3	89.90	37.70	13.81	0.45	31.75	20.21	43.50	-23.29	QP
4	216.02	40.31	11.08	0.78	32.27	19.90	46.00	-26.10	QP
5	451.14	40.78	15.56	1.36	31.96	25.74	46.00	-20.26	QP
6	714.17	39.50	19.00	1.94	31.67	28.77	46.00	-17.23	QP

Above 1G

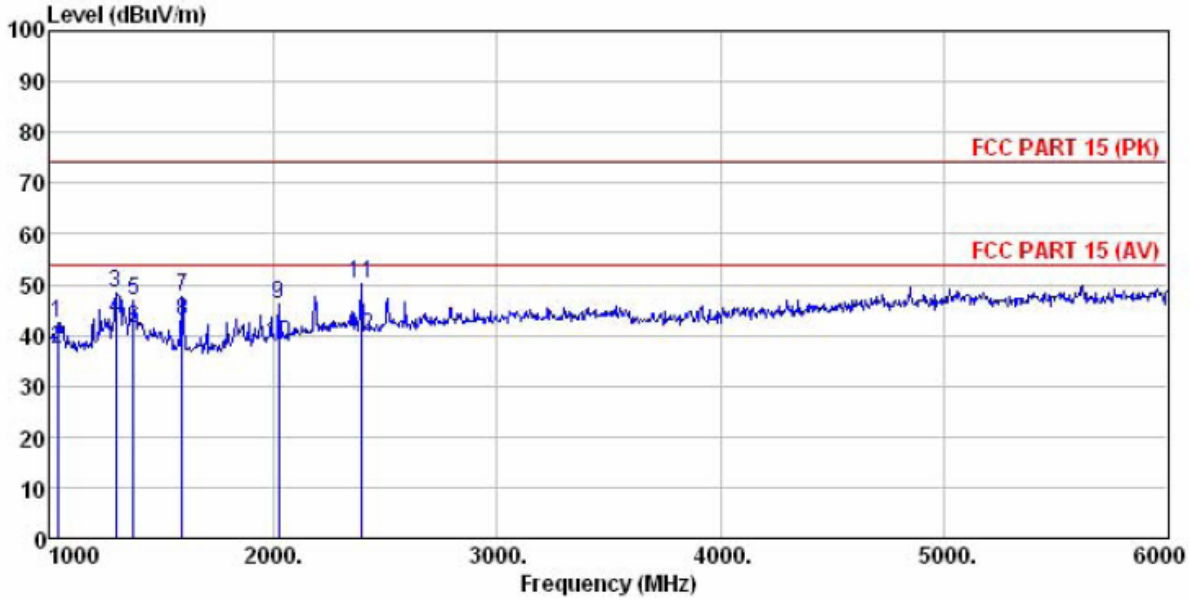
Horizontal:



Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120(>1GHZ) HORIZONTAL
Job No. : 1022RF
Test mode : PC mode
Test Engineer: Joe

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1595.0000	47.12	24.98	3.11	34.64	40.57	74.00	-33.43	Peak
2	1595.0000	44.32	24.98	3.11	34.64	37.77	54.00	-16.23	Average
3	2025.0000	45.56	26.24	3.53	34.71	40.62	74.00	-33.38	Peak
4	2025.0000	45.31	26.24	3.53	34.71	40.37	54.00	-13.63	Average
5	2670.0000	47.89	28.04	4.01	34.91	45.03	74.00	-28.97	Peak
6	2670.0000	44.11	28.04	4.01	34.91	41.25	54.00	-12.75	Average
7	4505.0000	45.11	30.72	5.66	35.41	46.08	74.00	-27.92	Peak
8	4505.0000	38.22	30.72	5.66	35.41	39.19	54.00	-14.81	Average
9	4695.0000	45.96	31.32	5.79	35.44	47.63	74.00	-26.37	Peak
10	4695.0000	39.34	31.32	5.79	35.44	41.01	54.00	-12.99	Average
11	5600.0000	46.63	32.08	6.33	35.46	49.58	74.00	-24.42	Peak
12	5600.0000	40.28	32.08	6.33	35.46	43.23	54.00	-10.77	Average

Vertical:



Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120(>1GHZ) VERTICAL
Job No. : 1022RF
Test mode : PC mode
Test Engineer: Joe

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1035.0000	50.21	24.35	2.34	34.51	42.39	74.00	-31.61	Peak
2	1035.0000	45.26	24.35	2.34	34.51	37.44	54.00	-16.56	Average
3	1295.0000	54.77	25.52	2.74	34.57	48.46	74.00	-25.54	Peak
4	1295.0000	49.37	25.52	2.74	34.57	43.06	54.00	-10.94	Average
5	1375.0000	52.86	25.61	2.84	34.59	46.72	74.00	-27.28	Peak
6	1375.0000	47.39	25.61	2.84	34.59	41.25	54.00	-12.75	Average
7	1590.0000	54.31	24.98	3.10	34.63	47.76	74.00	-26.24	Peak
8	1590.0000	49.25	24.98	3.10	34.63	42.70	54.00	-11.30	Average
9	2025.0000	51.00	26.24	3.53	34.71	46.06	74.00	-27.94	Peak
10	2025.0000	43.17	26.24	3.53	34.71	38.23	54.00	-15.77	Average
11	2395.0000	53.46	27.58	3.81	34.83	50.02	74.00	-23.98	Peak
12	2395.0000	43.29	27.58	3.81	34.83	39.85	54.00	-14.15	Average