Report No.: GTSE14070113104

FCC Report

Applicant:	Shenzhen Konka Telecommunications Technology Co., Ltd.
Address of Applicant:	No.9008 Shennan Road, Overseas Chinese Town, ShenZhen, Guangdong, China

Equipment Under Test (EUT)

Product Name:	Mobile Phone
Model No.:	I128
Trade Mark:	TOPHOUSE
FCC ID:	UT3I128
Applicable standards:	FCC CFR Title 47 Part 15 Subpart B:2013
Date of sample receipt:	July 02, 2014
Date of Test:	July 02-03, 2014
Date of report issue:	September 10, 2014
Test Result :	PASS *

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

Authorized Signature:

Robinson Lo
Laboratory Manager

2 Version

Version No.	Date	Description
00	*September 10, 2014*	*Original*

Prepared By: Edward.Pan ***Date:*** *September 10, 2014*

Project Engineer

Check By: hank.yan ***Date:*** *September 10, 2014*

Reviewer

3 Contents

4 Test Summary

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

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

5 General Information

5.1 Client Information

Applicant:	Shenzhen Konka Telecommunications Technology Co., Ltd.
Address of Applicant:	No.9008 Shennan Road, Overseas Chinese Town, ShenZhen, Guangdong, China
Manufacturer/Factory:	Shenzhen Konka Telecommunications Technology Co., Ltd.
Address of Manufacturer/ Factory:	No.9008 Shennan Road, Overseas Chinese Town, ShenZhen, Guangdong, China

5.2 General Description of EUT

Product Name:	Mobile Phone
Model No.:	I128
Power supply:	Model No.: HJ-050100-AR Input: AC 100-240V, 50/60Hz, 0.15A Output: DC 5.0V, 1A DC 3.7V Li-ion Battery, 1500mAh

5.3 Test mode

Test mode:	
Playing mode	Keep the EUT in Playing mode
Video Record mode	Keep the EUT in Video Recording mode
PC mode	Keep the EUT in exchanging data mode.

5.4 Test Facility

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

● **CNAS —Registration No.: CNAS L5775**

CNAS has accredited Global United Technology Services Co., Ltd. To ISO/IEC 17025 General Requirements for the competence of testing and calibration laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

● **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, June 28, 2013.

● **Industry Canada (IC) —Registration No.: 9079A-2**

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-2, June 26, 2013.

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	FCC ID/DoC
HP	Printer	CB495A	05257893	DoC
Lenovo	PC Host	M6900	EA05257893	DoC
DELL	MONITOR	E178FPC	N/A	DoC
DELL	KEYBOARD	SK-8115	N/A	DoC
DELL	MOUSE	MOC5UO	N/A	DoC

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

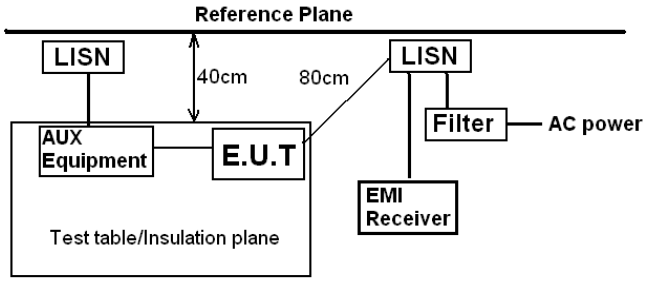
Radiated Emission:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.0(L)*6.0(W)* 6.0(H)	GTS250	Mar. 28 2014	Mar. 27 2015
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	ESU EMI Test Receiver	R&S	ESU26	GTS203	July 01 2014	June 30 2015
4	BiConiLog Antenna	SCHWARZBECK	VULB9163	GTS214	July 01 2014	June 30 2015
5	Double -ridged waveguide horn	SCHWARZBECK	9120D	GTS208	June 27 2014	June 26 2015
6	RF Amplifier	HP	8347A	GTS204	July 01 2014	June 30 2015
7	Preamplifier	HP	8349B	GTS206	July 01 2014	June 30 2015
8	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
9	Coaxial cable	GTS	N/A	GTS210	Mar. 29 2014	Mar. 28 2015
10	Coaxial Cable	GTS	N/A	GTS211	Mar. 29 2014	Mar. 28 2015

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)	GTS264	Sep. 07 2013	Sep. 06 2015
2	EMI Test Receiver	Rohde & Schwarz	ESCS30	GTS223	July 01 2014	June 30 2015
3	10dB Pulse Limita	Rohde & Schwarz	N/A	GTS224	July 01 2014	June 30 2015
4	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	July 01 2014	June 30 2015
5	LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	GTS226	July 01 2014	June 30 2015
6	Coaxial Cable	GTS	N/A	GTS227	July 01 2014	June 30 2015
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A

General used equipment:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	Barometer	ChangChun	DYM3	GTS257	July 09 2013	July 08 2014

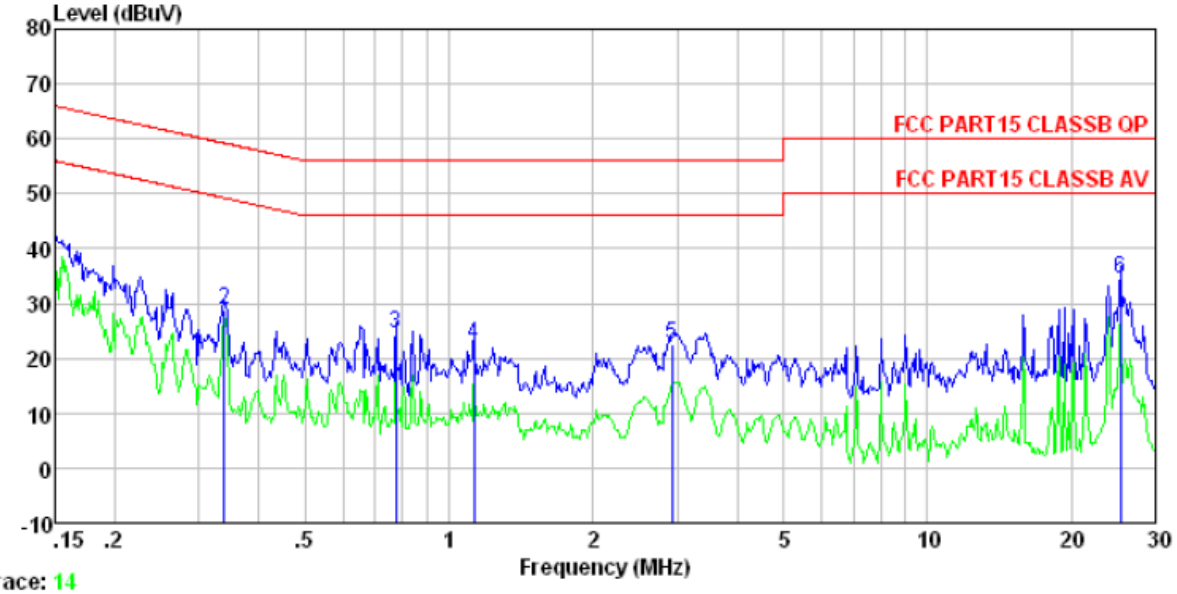
7 Test Results and Measurement Data

7.1 Conducted Emissions

Test Requirement:	FCC Part15 B Section 15.107
Test Method:	ANSI C63.4:2003
Test Frequency Range:	150KHz to 30MHz
Class / Severity:	Class B
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto
Limit:	Frequency range (MHz) / Limit (dBuV): Quasi-peak / Average 0.15-0.5: 66 to 56* / 56 to 46* 0.5-5: 56 / 46 5-30: 60 / 50 * Decreases with the logarithm of the frequency.
Test setup:	 *Remark:* *E.U.T: Equipment Under Test* *LISN: Line Impedence Stabilization Network* *Test table height=0.8m*
Test procedure:	1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. 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.
Test Instruments:	Refer to section 6 for details
Test mode:	Pre-scan all modes in section 5.3, and found the PC mode which is the worst mode, so only the data of worst mode was show on the test report.
Test results:	Pass

Measurement Data

Line:

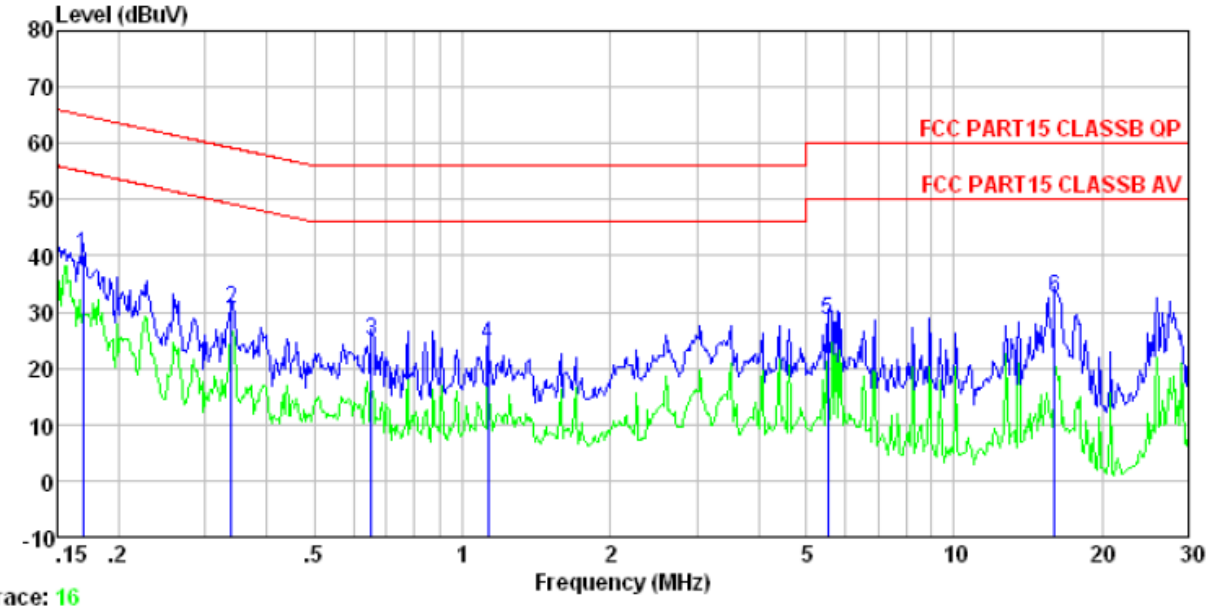


Trace: 14

Condition : FCC PART15 CLASSB QP LISN-2013 LINE

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.150	40.41	0.15	0.12	40.68	66.00	-25.32	QP
2	0.339	28.70	0.11	0.10	28.91	59.22	-30.31	QP
3	0.775	24.28	0.14	0.13	24.55	56.00	-31.45	QP
4	1.129	22.31	0.13	0.13	22.57	56.00	-33.43	QP
5	2.931	22.35	0.15	0.15	22.65	56.00	-33.35	QP
6	25.321	33.29	1.14	0.23	34.66	60.00	-25.34	QP

Neutral:



Trace: 16

Condition : FCC PART15 CLASSB QP LISN-2013 NEUTRAL

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.169	40.00	0.07	0.12	40.19	64.99	-24.80	QP
2	0.339	30.38	0.06	0.10	30.54	59.22	-28.68	QP
3	0.654	24.76	0.07	0.13	24.96	56.00	-31.04	QP
4	1.129	24.15	0.08	0.13	24.36	56.00	-31.64	QP
5	5.535	28.35	0.16	0.15	28.66	60.00	-31.34	QP
6	16.055	32.07	0.36	0.22	32.65	60.00	-27.35	QP

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level =Receiver Read level + LISN Factor + Cable Loss
4. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.

7.2 Radiated Emission

Test Requirement:	FCC Part15 B Section 15.109
Test Method:	ANSI C63.4:2003
Test Frequency Range:	30MHz to 9GHz
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)
Receiver setup:	

Frequency	Detector	RBW	VBW	Remark
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak Value
Above 1GHz	Peak	1MHz	3MHz	Peak Value
	Peak	1MHz	10Hz	Average Value

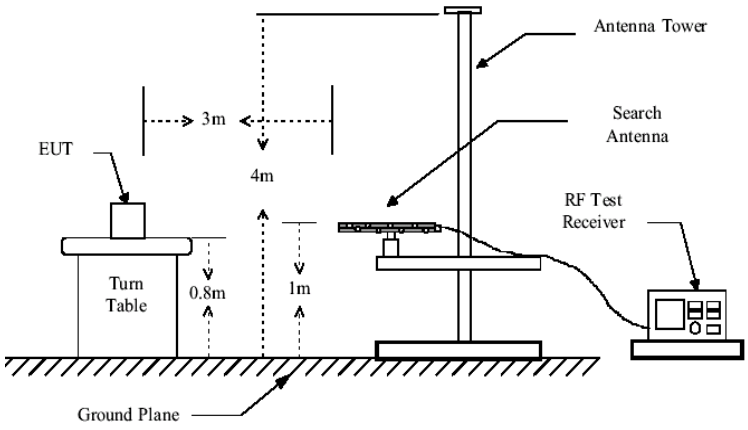
Limit:

Frequency	Limit (dBuV/m @3m)	Remark
30MHz-88MHz	40.00	Quasi-peak Value
88MHz-216MHz	43.50	Quasi-peak Value
216MHz-960MHz	46.00	Quasi-peak Value
960MHz-1GHz	54.00	Quasi-peak Value
Above 1GHz	54.00	Average Value
	74.00	Peak Value

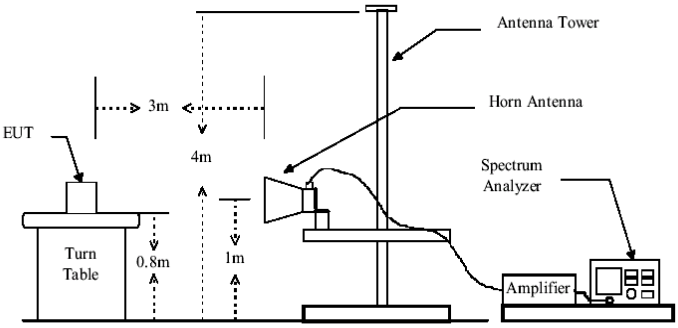
Test Procedure:

1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. 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.
4. 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. 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.

Test setup:	Below 1GHz



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:	Pre-scan all modes in section 5.3, and found the PC mode which is the worst mode, so only the data of worst mode was show on the test report.
Test results:	Pass

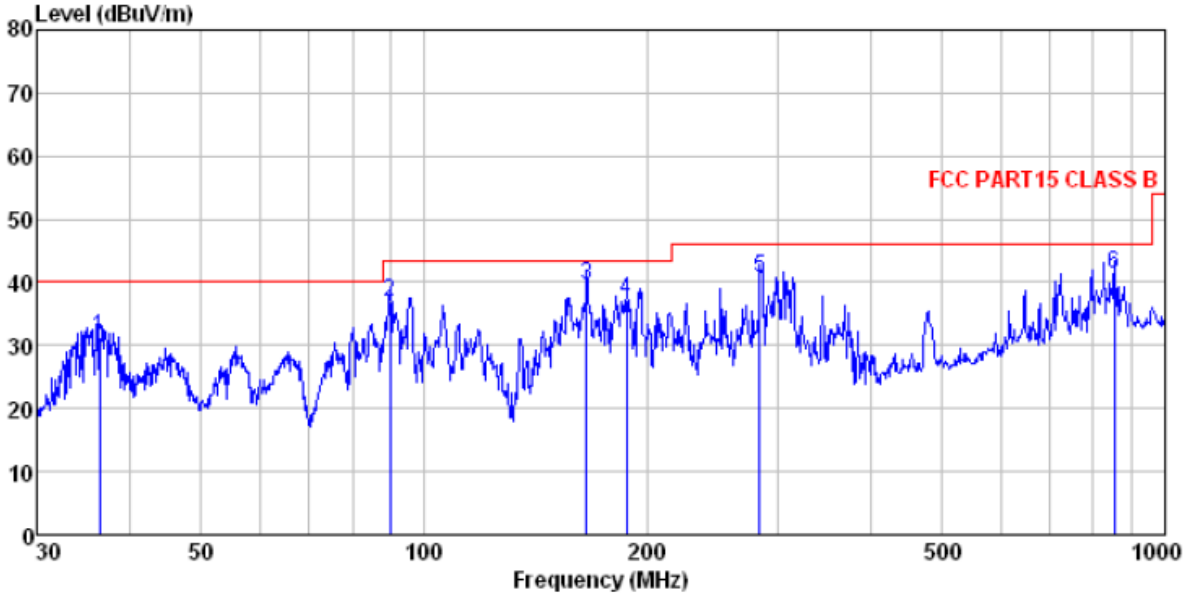
Note:
The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

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

Measurement Data

Below 1GHz

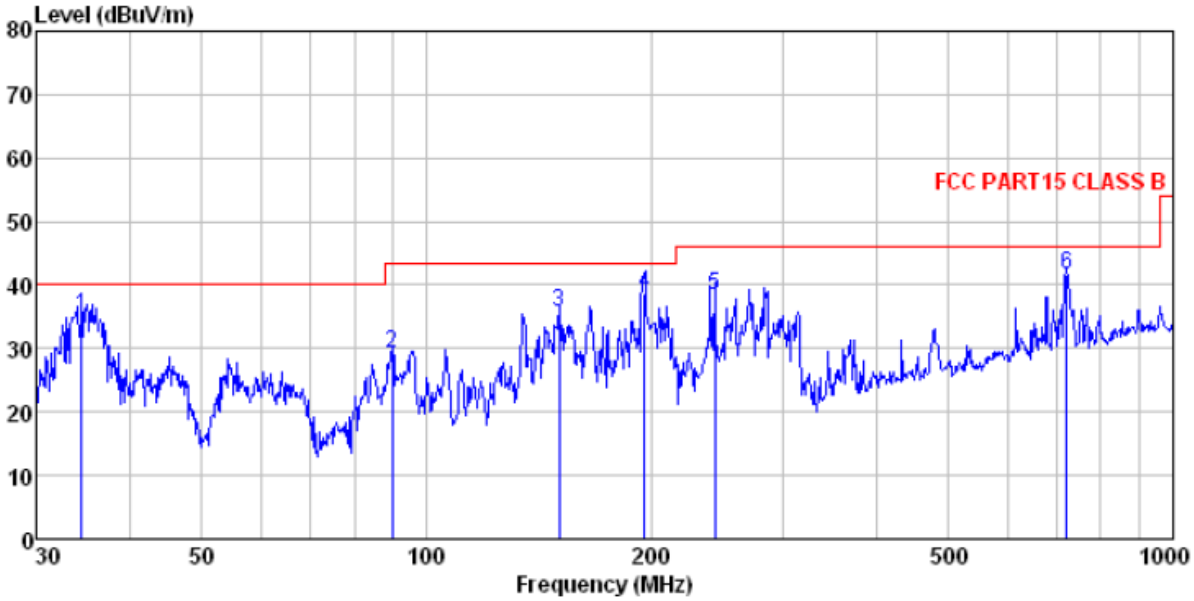
Horizontal:



Site : 3m chamber
Condition : FCC_PART15 CLASS B 3m VULB9163-2013M HORIZONTAL

	Freq	ReadAntenna 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	36.509	48.10	14.73	0.62	32.06	31.39	40.00	-8.61	QP
2	89.905	53.63	13.90	1.11	31.72	36.92	43.50	-6.58	QP
3	165.487	59.19	10.82	1.66	32.04	39.63	43.50	-3.87	QP
4	187.753	55.26	12.32	1.78	32.11	37.25	43.50	-6.25	QP
5	283.979	55.95	14.75	2.29	32.17	40.82	46.00	-5.18	QP
6	854.025	45.31	22.64	4.68	31.24	41.39	46.00	-4.61	QP

Vertical:

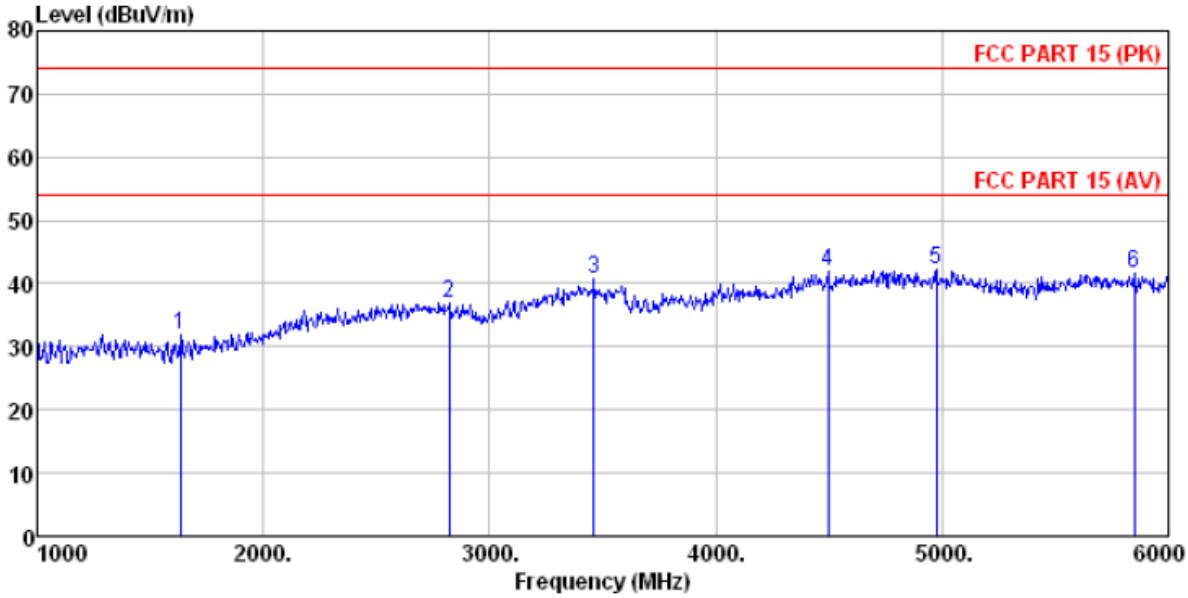


Site : 3m chamber
Condition : FCC_PART15 CLASS B 3m VULB9163-2013M VERTICAL

	Freq	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	34.517	52.19	14.30	0.60	32.06	35.03	40.00	-4.97	QP
2	89.905	46.06	13.90	1.11	31.72	29.35	43.50	-14.15	QP
3	150.538	55.74	10.29	1.57	31.98	35.62	43.50	-7.88	QP
4	195.822	56.50	12.57	1.82	32.13	38.76	43.50	-4.74	QP
5	243.377	54.42	14.08	2.09	32.16	38.43	46.00	-7.57	QP
6	719.200	47.62	21.05	4.15	31.22	41.60	46.00	-4.40	QP

Above 1GHz

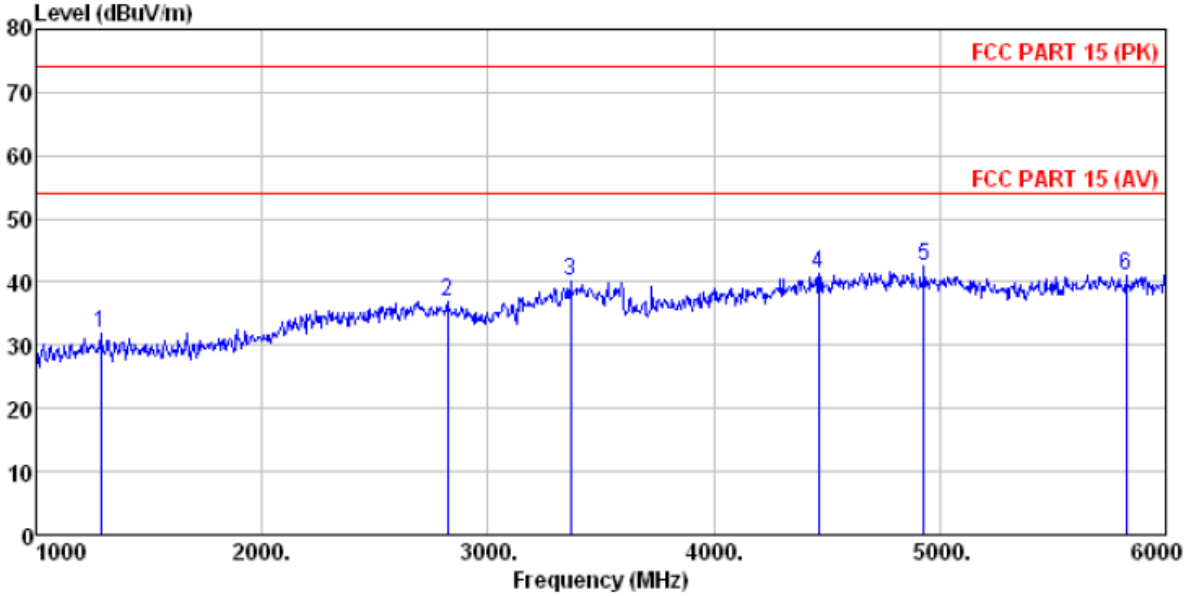
Horizontal:



Site : 3m chamber
Condition : FCC_PART 15 (PK) 3m BBHA9120D ANT(>1GHZ) HORIZONTAL

	Freq	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1635.000	36.02	24.90	4.76	33.82	31.86	74.00	-42.14	Peak
2	2820.000	36.24	28.41	5.78	33.53	36.90	74.00	-37.10	Peak
3	3460.000	37.91	28.84	6.88	32.79	40.84	74.00	-33.16	Peak
4	4495.000	34.14	31.32	8.33	31.94	41.85	74.00	-32.15	Peak
5	4975.000	33.70	31.94	8.74	32.17	42.21	74.00	-31.79	Peak
6	5850.000	31.08	32.70	9.99	32.22	41.55	74.00	-32.45	Peak

Vertical:

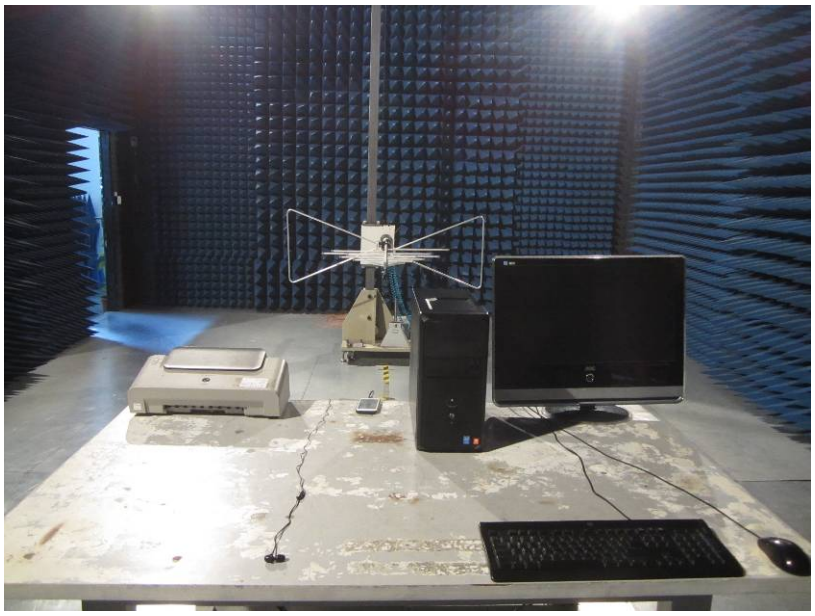


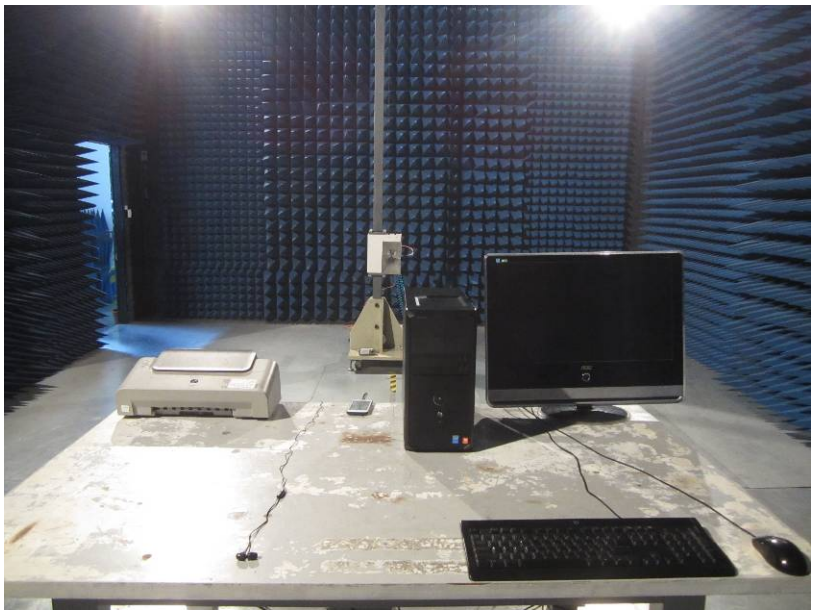
Site : 3m chamber
Condition : FCC_PART 15 (PK) 3m BBHA9120D ANT(>1GHZ) VERTICAL

	Freq	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1285.000	35.07	25.60	4.53	33.24	31.96	74.00	-42.04	Peak
2	2820.000	36.22	28.41	5.78	33.53	36.88	74.00	-37.12	Peak
3	3365.000	37.94	28.51	6.70	32.91	40.24	74.00	-33.76	Peak
4	4465.000	33.73	31.26	8.31	31.92	41.38	74.00	-32.62	Peak
5	4930.000	34.07	31.90	8.70	32.15	42.52	74.00	-31.48	Peak
6	5825.000	30.49	32.68	9.97	32.23	40.91	74.00	-33.09	Peak

8 Test Setup Photo

Radiated Emission





Conducted Emission

9 EUT Constructional Details

Reference to the test report No. GTSE14070113101

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