

# **FCC REPORT**

**Applicant:** Sky Channel Technologies (Shenzhen) Ltd.

**Address of Applicant:** Room 567, 5th Floor, Build 1, Zhongxing Industrial Park,  
Chuangye Road, Nanshan District, Shenzhen P.R. China

**Equipment Under Test (EUT)**

Product Name: Master

Model No.: MS02

Trade mark: Skyflo

**FCC ID:** ZQHMS1108

**Applicable standards:** FCC CFR Title 47 Part 15 Subpart C Section 15.249:2010

**Date of sample receipt:** 19 Jul., 2011

**Date of Test:** 20-23 Jul., 2011

**Date of report issued:** 26 Jul., 2011

**Test Result :** PASS \*

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

Authorized Signature:



Robinson Lo  
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the GTS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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## 2 Version

Version No.	Date	Description
00	2011-07-26	Original

**Prepared By:**

*Collin He*

**Date:**

2011-07-26

**Project Engineer**

**Check By:**

*Hans.Hu*

**Date:**

2011-07-26

**Reviewer**

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## 4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
AC Power Line Conducted Emission	15.207	Pass
Field strength of the fundamental signal	15.249 (a)	Pass
Spurious emissions	15.249 (a) (d)/15.209	Pass
20dB Occupied Bandwidth	15.215 (c)	Pass

*Remark:*

*Pass: The EUT complies with the essential requirements in the standard.*

## 5 General Information

### 5.1 Client Information

Applicant:	Sky Channel Technologies (Shenzhen) Ltd.
Address of Applicant:	Room 567, 5th Floor, Build 1, Zhongxing Industrial Park, Chuangye Road, Nanshan District, Shenzhen P.R. China
Manufacturer/ Factory:	Sky Channel Technologies (Shenzhen) Ltd.
Address of Manufacturer/ Factory:	Room 567, 5th Floor, Build 1, Zhongxing Industrial Park, Chuangye Road, Nanshan District, Shenzhen P.R. China

### 5.2 General Description of E.U.T.

Product Name:	Master
Model No.:	MS02
Operation Frequency:	908.30MHz, 908.95MHz
Test Frequency:	Channel 1=908.30MHz, channel 2=908.95MHz
Modulation type:	GFSK
Antenna Type:	Integral
Antenna gain:	4.45dBi
Power supply:	Input: AC 100-240V 50/60Hz 0.4A Output: DC 5V 2.0A

## 5.3 Test mode

Transmitting mode	Keep the EUT in transmitting mode		
Pre-Test Mode:			
GTS has verified the construction and function in typical operation, The EUT was placed on three different polar directions; i.e. X axis, Y axis, Z axis. which was shown in this test report and defined as follows: Channel 1=908.30MHz			
Axis	X	Y	Z
Field Strength(dBuV/m)	88.52	91.67	85.46
Final Test Mode:			
According to ANSI C63.4 standards, the test results are both the “worst case” and “worst setup”: Y axis (see the test setup photo)			

## 5.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations: ● <b>FCC —Registration No.: 600491</b> Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully 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. ● <b>Industry Canada (IC)</b> 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.
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## 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
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## 5.6 Other Information Requested by the Customer

None.
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## 5.7 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	Aug. 03 2010	Aug. 02 2011
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	Aug. 03 2010	Aug. 02 2011
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	Apr. 01 2011	Mar. 31 2012
9	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
11	Coaxial Cable	GTS	N/A	GTS212	Apr. 01 2011	Mar. 31 2012
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	Jul. 04 2011	Jul. 03 2012
13	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	Jul. 04 2011	Jul. 03 2012
14	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	Aug. 03 2010	Aug. 02 2011
15	Band filter	Amindeon	82346	GTS219	Aug. 03 2010	Aug. 02 2011

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

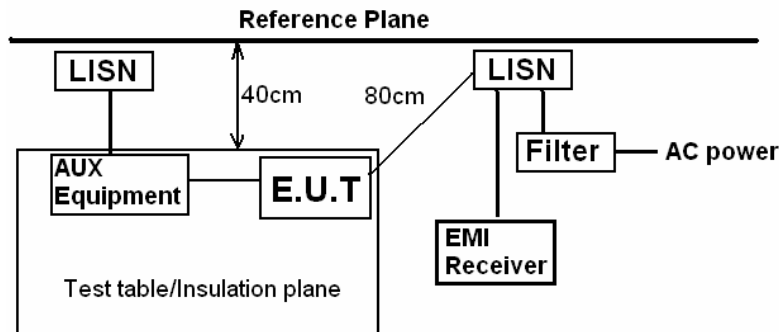
## 6 Test results and Measurement Data

### 6.1 Antenna requirement:

<b>Standard requirement:</b>	FCC Part15 C Section 15.203
<p>15.203 requirement:  <i>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</i></p>	
<b>E.U.T Antenna:</b>	
<p>The antenna port is an inverted, unconventional port; the best case gain of the antenna is 4.45dBi.</p>	
	

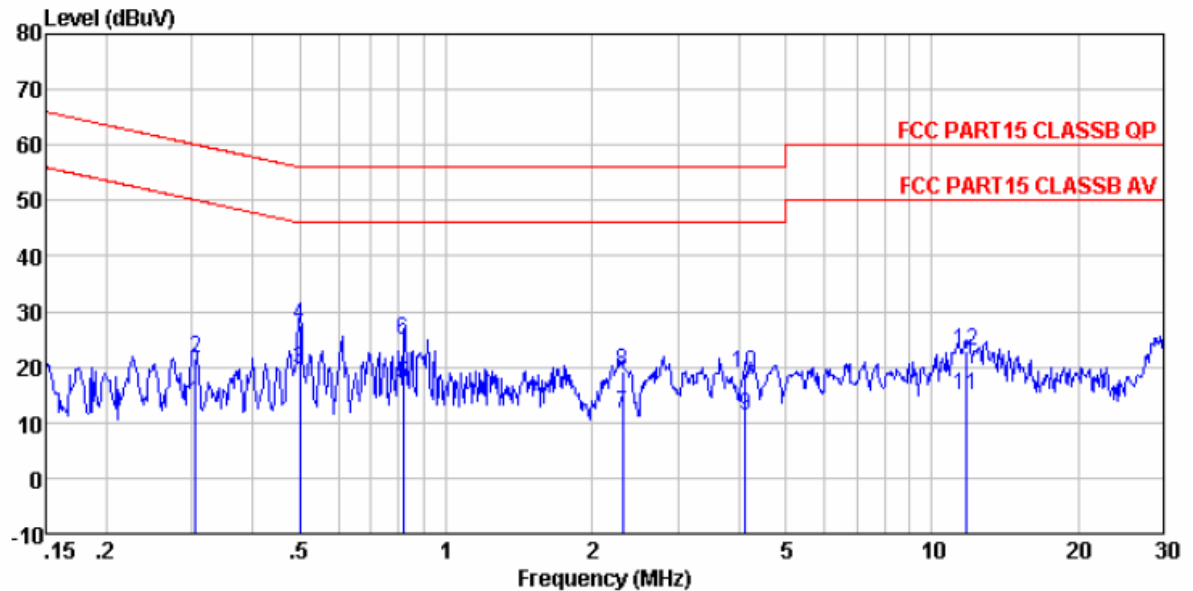


## 6.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207		
Test Method:	ANSI C63.4: 2003		
Test Frequency Range:	150KHz to 30MHz		
Class / Severity:	Class B		
Receiver setup:	RBW=9KHz, VBW=30KHz		
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 procedure	<p>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.</p>		
Test setup:	<div><p style="text-align: center;"><b>Reference Plane</b></p><p><i>Remark</i> E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p></div>		
Test Instruments:	Refer to section 5.7 for details		
Test mode:	Refer to section 5.3 for details		
Test results:	Pass		

## Measurement Result:

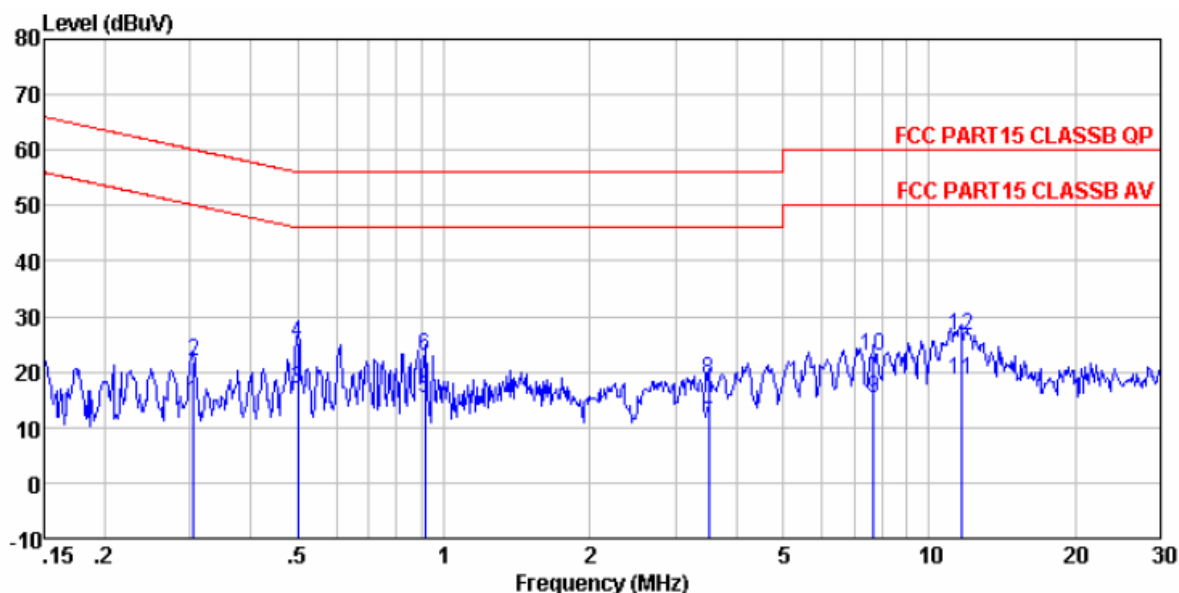
Line:



Condition : FCC PART15 CLASSB QP LISN(2011) LINE  
 Job No. : 580RF  
 Test Mode : Transmitting mode  
 Test Engineer: Dick

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.305	12.93	0.61	0.10	13.64	50.10	-36.46	Average
2	0.305	20.95	0.61	0.10	21.66	60.10	-38.44	QP
3	0.499	18.98	0.55	0.10	19.63	46.01	-26.38	Average
4	0.499	26.77	0.55	0.10	27.42	56.01	-28.59	QP
5	0.817	16.34	0.50	0.10	16.94	46.00	-29.06	Average
6	0.817	24.24	0.50	0.10	24.84	56.00	-31.16	QP
7	2.309	11.05	0.38	0.10	11.53	46.00	-34.47	Average
8	2.309	18.88	0.38	0.10	19.36	56.00	-36.64	QP
9	4.136	10.87	0.32	0.10	11.29	46.00	-34.71	Average
10	4.136	18.60	0.32	0.10	19.02	56.00	-36.98	QP
11	11.745	14.65	0.20	0.20	15.05	50.00	-34.95	Average
12	11.745	22.57	0.20	0.20	22.97	60.00	-37.03	QP

Neutral:



Condition : FCC PART15 CLASSB QP LISN(2011) NEUTRAL  
 Job No. : 580RF  
 Test Mode : Transmitting mode  
 Test Engineer: Dick

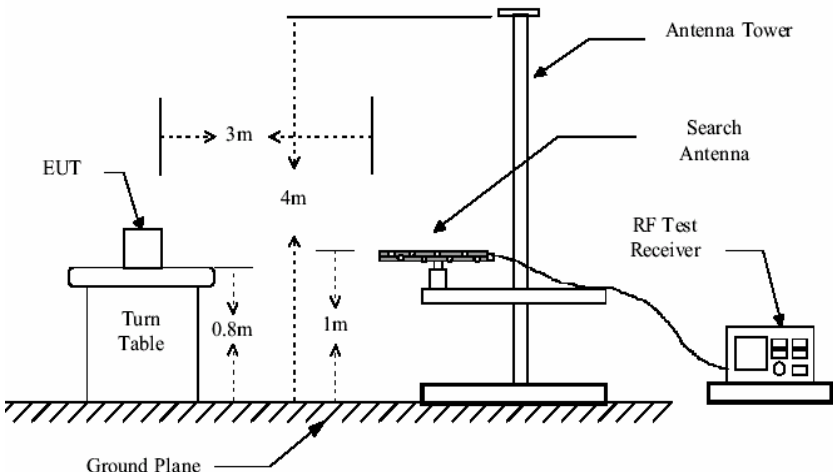
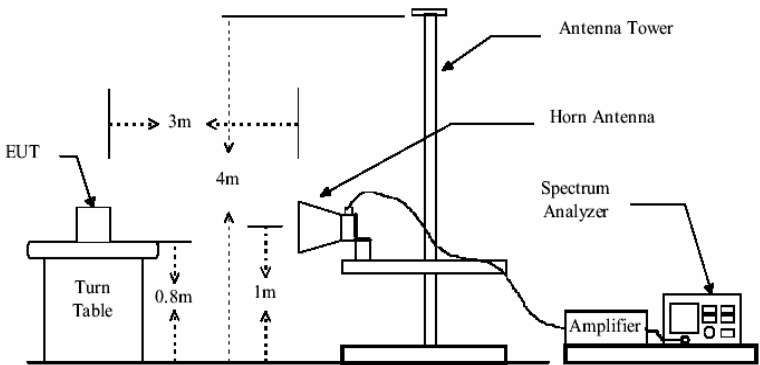
	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.305	13.87	0.61	0.10	14.58	50.10	-35.52	Average
2	0.305	21.29	0.61	0.10	22.00	60.10	-38.10	QP
3	0.499	16.37	0.55	0.10	17.02	46.01	-28.99	Average
4	0.499	24.52	0.55	0.10	25.17	56.01	-30.84	QP
5	0.914	14.75	0.49	0.10	15.34	46.00	-30.66	Average
6	0.914	22.35	0.49	0.10	22.94	56.00	-33.06	QP
7	3.509	10.18	0.34	0.10	10.62	46.00	-35.38	Average
8	3.509	18.03	0.34	0.10	18.47	56.00	-37.53	QP
9	7.687	14.73	0.25	0.17	15.15	50.00	-34.85	Average
10	7.687	22.50	0.25	0.17	22.92	60.00	-37.08	QP
11	11.621	18.16	0.21	0.20	18.57	50.00	-31.43	Average
12	11.621	26.07	0.21	0.20	26.48	60.00	-33.52	QP

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.

## 6.3 Radiated Emission

Test Requirement:	FCC Part15 C Section 15.249 and 15.209				
Test Method:	ANSI C63.4:2003				
Test Frequency Range:	30MHz to 10000MHz				
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)				
Receiver setup:					
	Frequency	Detector	RBW	VBW	Remark
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
Peak		1MHz	10Hz	Average Value	
Limit: (Field strength of the fundamental signal)					
	Frequency		Limit (dBuV/m @3m)		Remark
	902MHz-928MHz		94.0		Quasi-peak Value
Limit: (Spurious Emissions)					
	Frequency		Limit (dBuV/m @3m)		Remark
	30MHz-88MHz		40.0		Quasi-peak Value
	88MHz-216MHz		43.5		Quasi-peak Value
	216MHz-960MHz		46.0		Quasi-peak Value
	960MHz-1GHz		54.0		Quasi-peak Value
	Above 1GHz	54.0		Average Value	
74.0		Peak Value			
Limit: (band edge)	Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.				
Test Procedure:	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</p> <p>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-</p>				

	peak or average method as specified and then reported in a data sheet.
Test setup:	<p>Below 1GHz</p>  <p>Above 1GHz</p> 
Test Instruments:	Refer to section 5.7 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:

$$\text{Final Test Level} = \text{Receiver Reading} + \text{Antenna Factor} + \text{Cable Factor} - \text{Preamplifier Factor}$$

**Measurement Data****6.3.1 Field Strength Of The Fundamental Signal****Channel 1=908.30MHz**

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
908.30	94.89	24.90	3.35	31.47	91.67	94.00	-2.33	Horizontal
908.30	94.18	24.35	3.35	31.47	90.41	94.00	-3.59	Vertical

**Channel 2=908.95MHz**

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
908.95	94.58	24.90	3.35	31.47	91.36	94.00	-2.64	Horizontal
908.95	94.16	24.35	3.35	31.47	90.39	94.00	-3.61	Vertical

## 6.3.2 Spurious Emissions

Channel 1=908.30MHz

30MHz~1GHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
33.68	49.91	14.90	0.62	32.23	33.20	40.00	-6.80	Vertical
50.59	49.45	16.17	0.68	32.01	34.29	40.00	-5.71	Vertical
183.84	48.80	10.42	1.70	32.17	28.75	43.50	-14.75	Vertical
300.37	50.97	12.51	2.07	32.30	33.25	46.00	-12.75	Vertical
400.43	50.90	14.22	2.26	32.32	35.06	46.00	-10.94	Vertical
55.22	40.63	13.45	0.69	31.99	22.78	40.00	-17.22	Horizontal
90.86	43.38	11.58	1.07	31.75	24.28	43.50	-19.22	Horizontal
183.84	48.86	10.91	1.70	32.17	29.30	43.50	-14.20	Horizontal
300.37	57.58	13.04	2.07	32.30	40.39	46.00	-5.61	Horizontal
400.43	53.58	15.64	2.26	32.32	39.16	46.00	-6.84	Horizontal

## Above 1GHz

Peak:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
1816.60	58.77	25.37	2.64	30.95	55.83	74.00	-18.17	Vertical
2724.90	39.52	28.21	3.75	30.34	41.14	74.00	-32.86	Vertical
3633.20	33.29	29.18	4.18	27.65	39.00	74.00	-35.00	Vertical
4541.50	30.43	31.42	4.88	24.45	42.28	74.00	-31.72	Vertical
5449.80	31.02	31.86	5.78	23.81	44.85	74.00	-29.15	Vertical
6358.10	31.16	33.39	6.29	24.49	46.35	74.00	-27.65	Vertical
7266.40	32.94	36.28	6.89	26.47	49.64	74.00	-24.36	Vertical
1816.60	50.44	25.37	2.64	30.95	47.50	74.00	-26.50	Horizontal
2724.90	38.98	28.21	3.75	30.34	40.60	74.00	-33.40	Horizontal
3633.20	33.80	29.18	4.18	27.65	39.51	74.00	-34.49	Horizontal
4541.50	31.65	31.42	4.88	24.45	43.50	74.00	-30.50	Horizontal
5449.80	31.13	31.89	5.78	23.81	44.99	74.00	-29.01	Horizontal
6358.10	30.94	33.39	6.29	24.49	46.13	74.00	-27.87	Horizontal
7266.40	32.22	36.28	6.89	26.47	48.92	74.00	-25.08	Horizontal

Average:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
1816.60	53.67	25.37	2.64	30.95	50.73	54.00	-3.27	Vertical
2724.90	31.62	28.21	3.75	30.34	33.24	54.00	-20.76	Vertical
3633.20	25.29	29.18	4.18	27.65	31.00	54.00	-23.00	Vertical
4541.50	22.33	31.42	4.88	24.45	34.18	54.00	-19.82	Vertical
5449.80	23.22	31.86	5.78	23.81	37.05	54.00	-16.95	Vertical
6358.10	23.26	33.39	6.29	24.49	38.45	54.00	-15.55	Vertical
7266.40	24.94	36.28	6.89	26.47	41.64	54.00	-12.36	Vertical
1816.60	42.64	25.37	2.64	30.95	39.70	54.00	-14.30	Horizontal
2724.90	31.08	28.21	3.75	30.34	32.70	54.00	-21.30	Horizontal
3633.20	25.80	29.18	4.18	27.65	31.51	54.00	-22.49	Horizontal
4541.50	23.55	31.42	4.88	24.45	35.40	54.00	-18.60	Horizontal
5449.80	23.33	31.89	5.78	23.81	37.19	54.00	-16.81	Horizontal
6358.10	23.04	33.39	6.29	24.49	38.23	54.00	-15.77	Horizontal
7266.40	24.22	36.28	6.89	26.47	40.92	54.00	-13.08	Horizontal

Remark:

1. Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.



Channel 2=908.95MHz

30MHz~1GHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
33.56	50.16	14.87	0.62	32.23	33.42	40.00	-6.58	Vertical
50.94	48.83	16.14	0.68	32.01	33.64	40.00	-6.36	Vertical
79.52	45.46	12.13	0.95	31.83	26.71	40.00	-13.29	Vertical
182.56	50.24	10.39	1.69	32.17	30.15	43.50	-13.35	Vertical
742.26	39.76	21.37	3.03	31.61	32.55	46.00	-13.45	Vertical
53.13	40.14	14.98	0.68	31.99	23.81	40.00	-16.19	Horizontal
183.84	47.61	10.91	1.70	32.17	28.05	43.50	-15.45	Horizontal
300.37	57.46	13.04	2.07	32.30	40.27	46.00	-5.73	Horizontal
400.43	53.98	15.64	2.26	32.32	39.56	46.00	-6.44	Horizontal
742.26	39.74	22.49	3.03	31.61	33.65	46.00	-12.35	Horizontal

## Above 1GHz

Peak:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
1817.90	45.48	25.37	2.64	30.95	42.54	74.00	-31.46	Vertical
2726.85	39.17	28.21	3.75	30.34	40.79	74.00	-33.21	Vertical
3635.80	35.18	29.18	4.18	27.65	40.89	74.00	-33.11	Vertical
4544.75	30.79	31.42	4.88	24.45	42.64	74.00	-31.36	Vertical
5453.70	31.09	31.89	5.78	23.81	44.95	74.00	-29.05	Vertical
6362.65	32.10	33.39	6.29	24.53	47.25	74.00	-26.75	Vertical
7271.60	32.95	36.28	6.89	26.51	49.61	74.00	-24.39	Vertical
1817.90	46.38	25.37	2.64	30.95	43.44	74.00	-30.56	Horizontal
2726.85	39.85	28.21	3.75	30.34	41.47	74.00	-32.53	Horizontal
3635.80	34.76	29.18	4.18	27.65	40.47	74.00	-33.53	Horizontal
4544.75	31.33	31.42	4.88	24.45	43.18	74.00	-30.82	Horizontal
5453.70	30.79	31.89	5.78	23.81	44.65	74.00	-29.35	Horizontal
6362.65	32.32	33.39	6.29	24.53	47.47	74.00	-26.53	Horizontal
7271.60	32.70	36.28	6.89	26.51	49.36	74.00	-24.64	Horizontal

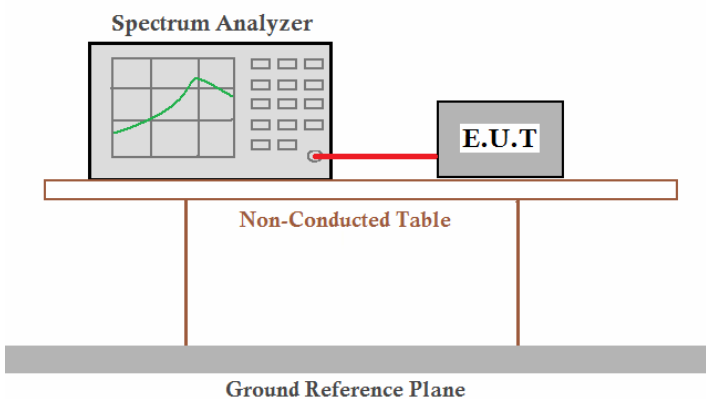
Average:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
1817.90	37.68	25.37	2.64	30.95	34.74	54.00	-19.26	Vertical
2726.85	31.27	28.21	3.75	30.34	32.89	54.00	-21.11	Vertical
3635.80	27.18	29.18	4.18	27.65	32.89	54.00	-21.11	Vertical
4544.75	22.69	31.42	4.88	24.45	34.54	54.00	-19.46	Vertical
5453.70	23.29	31.89	5.78	23.81	37.15	54.00	-16.85	Vertical
6362.65	24.20	33.39	6.29	24.53	39.35	54.00	-14.65	Vertical
7271.60	24.95	36.28	6.89	26.51	41.61	54.00	-12.39	Vertical
1817.90	38.58	25.37	2.64	30.95	35.64	54.00	-18.36	Horizontal
2726.85	31.95	28.21	3.75	30.34	33.57	54.00	-20.43	Horizontal
3635.80	26.76	29.18	4.18	27.65	32.47	54.00	-21.53	Horizontal
4544.75	23.23	31.42	4.88	24.45	35.08	54.00	-18.92	Horizontal
5453.70	22.99	31.89	5.78	23.81	36.85	54.00	-17.15	Horizontal
6362.65	24.42	33.39	6.29	24.53	39.57	54.00	-14.43	Horizontal
7271.60	24.70	36.28	6.89	26.51	41.36	54.00	-12.64	Horizontal

Remark:

1. Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

## 6.4 20dB Bandwidth

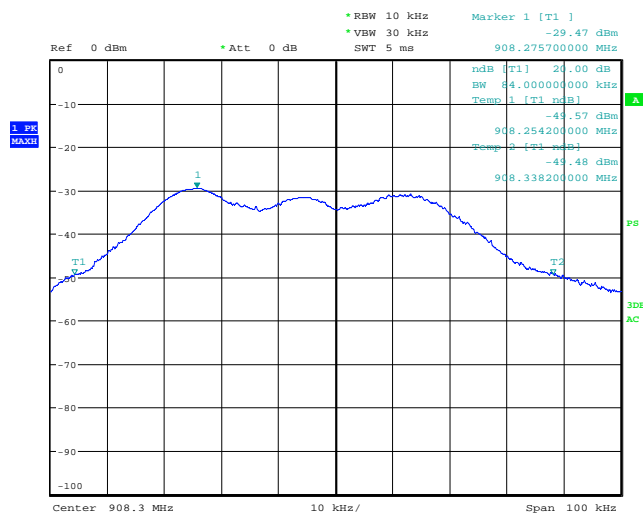
Test Requirement:	FCC Part15 C Section 15.249/15.215
Test Method:	ANSI C63.4:2003
Receiver setup:	RBW=10KHz, VBW=30KHz, detector: Peak
Limit:	Within operation frequency range 902MHz-928MHz
Test Procedure:	<ol style="list-style-type: none"> <li>1. According to the follow Test-setup, keep the relative position between the artificial antenna and the EUT.</li> <li>2. Set the EUT to proper test channel.</li> <li>3. Max hold the radiated emissions, mark the peak power frequency point and the -20dB upper and lower frequency points.</li> <li>4. Read 20dB bandwidth.</li> </ol>
Test setup:	 <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected via a red cable to an E.U.T. (Equipment Under Test). Both are placed on a Non-Conducted Table. Below the table is a Ground Reference Plane.</p>
Test Instruments:	Refer to section 5.7 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

### Measurement Data

Test Frequency(MHz)	20dB bandwidth (kHz)	Results
908.30	84.00	Pass
908.95	48.40	Pass

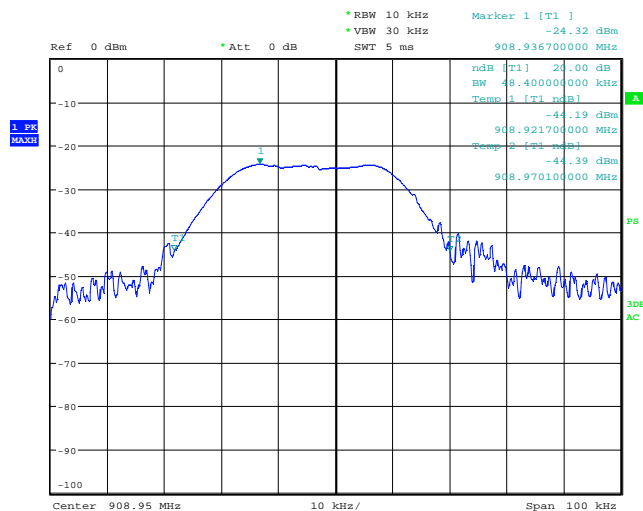
Test plot as follows:

## Channel 1=908.30MHz



Date: 23.JUL.2011 19:21:34

## Channel 1=908.95MHz



Date: 23.JUL.2011 19:22:37