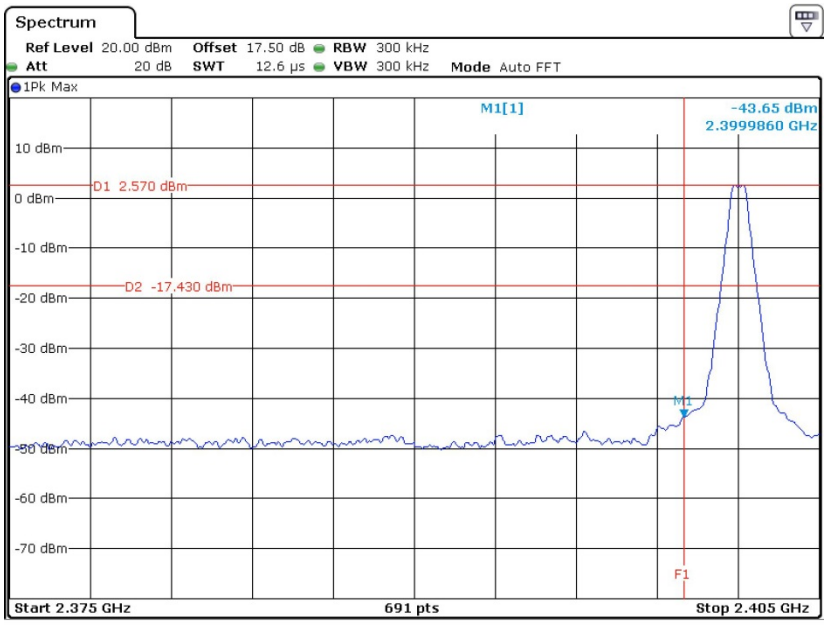
3.6.5 Test Result of Conducted Band Edges

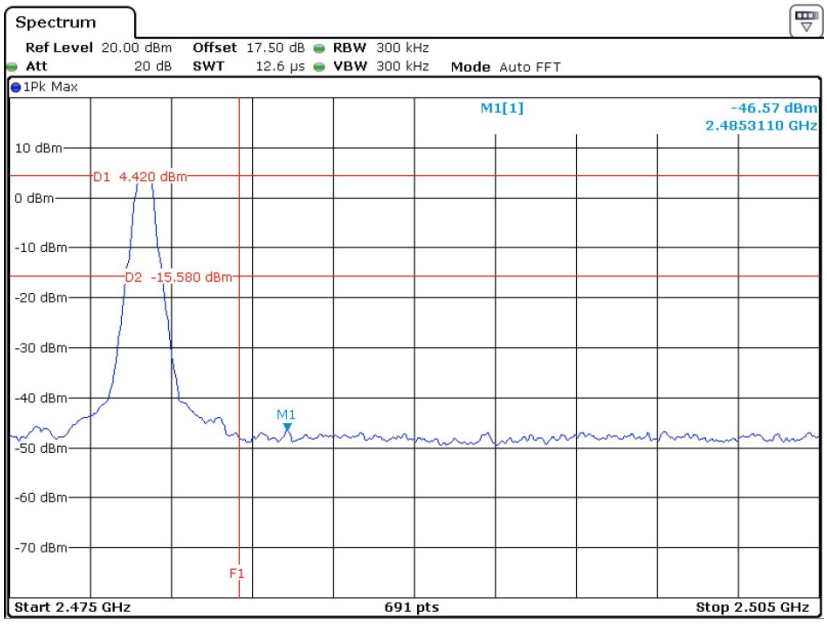
Test Mode :	1Mbps	Temperature :	24~25℃
Test Channel :	00 and 78	Relative Humidity :	50~53%
		Test Engineer :	Fly Chen

Low Band Edge Plot on Channel 00



Date: 6.MAY.2013 09:22:35

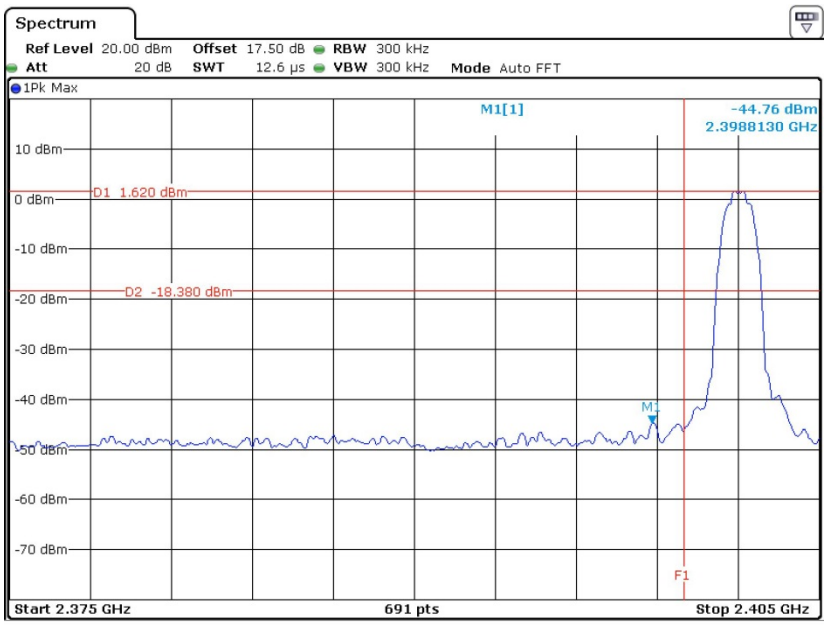
High Band Edge Plot on Channel 78



Date: 6.MAY.2013 09:20:58

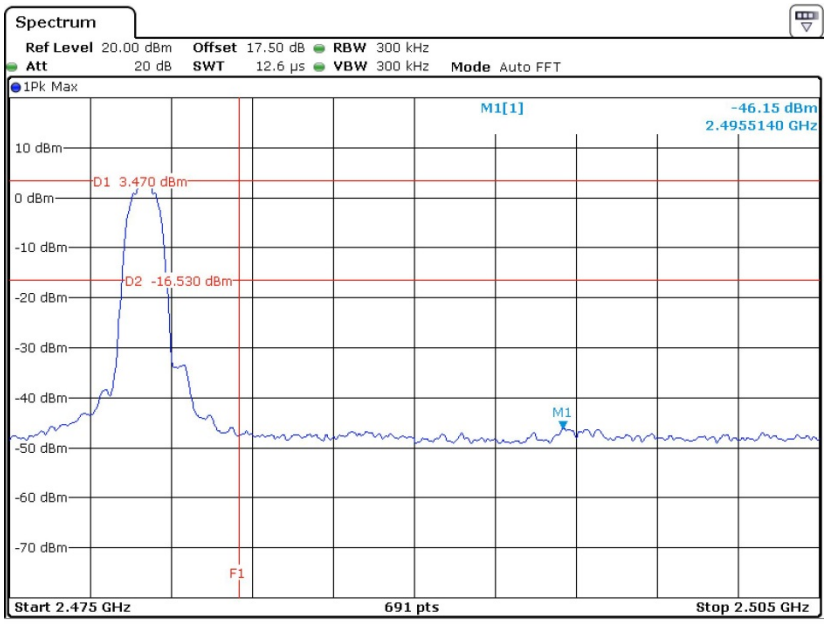
Test Mode :	2Mbps	Temperature :	24~25℃
Test Channel :	00 and 78	Relative Humidity :	50~53%
		Test Engineer :	Fly Chen

Low Band Edge Plot on Channel 00



Date: 6.MAY.2013 09:42:42

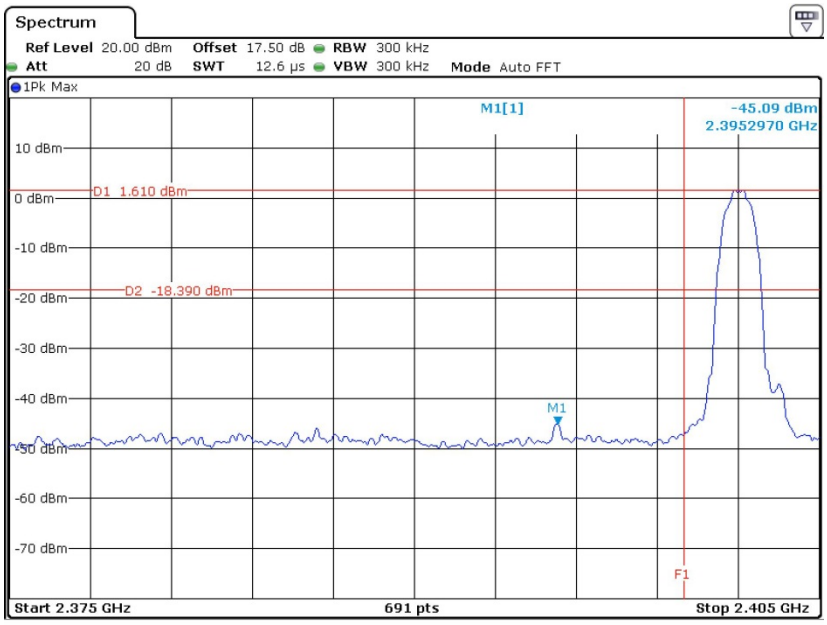
High Band Edge Plot on Channel 78



Date: 6.MAY.2013 09:41:37

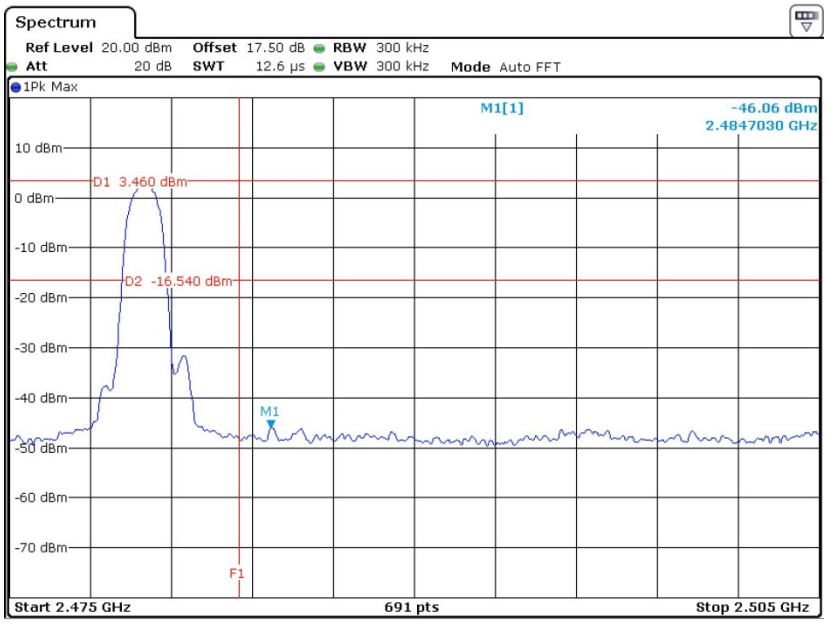
Test Mode :	3Mbps	**Temperature :**	24~25℃
Test Channel :	00 and 78	**Relative Humidity :**	50~53%
		Test Engineer :	Fly Chen

Low Band Edge Plot on Channel 00



Date: 6.MAY.2013 09:39:20

High Band Edge Plot on Channel 78

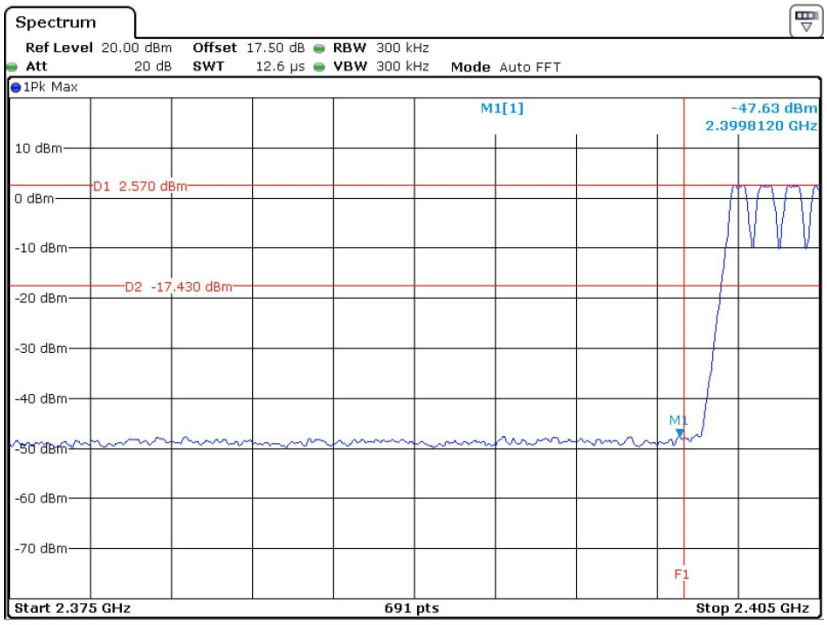


Date: 6.MAY.2013 09:38:10

3.6.6 Test Result of Conducted Hopping Mode Band Edges

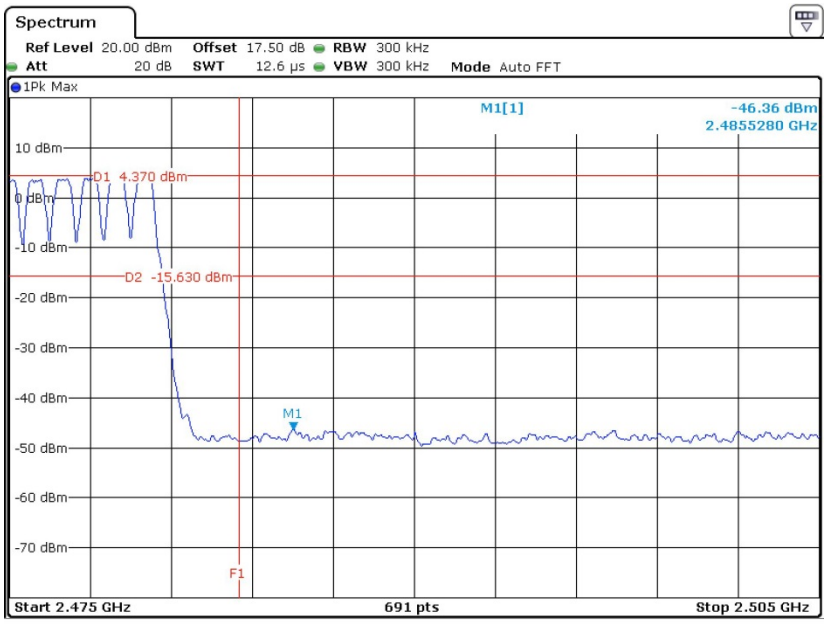
Test Mode :	1Mbps	Temperature :	24~25℃
Test Engineer :	Fly Chen	Relative Humidity :	50~53%

Hopping Mode Low Band Edge Plot on Channel 00



Date: 6.MAY.2013 09:26:15

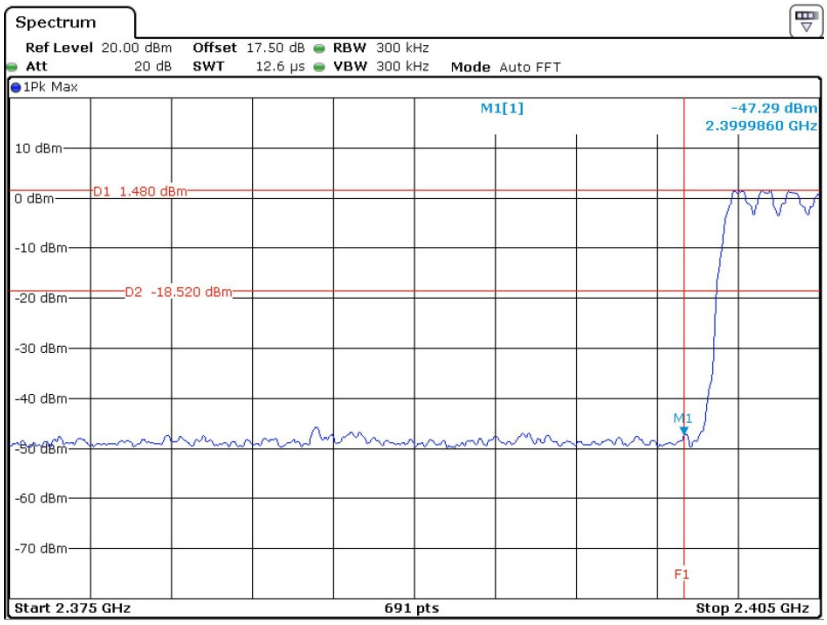
Hopping Mode High Band Edge Plot on Channel 78



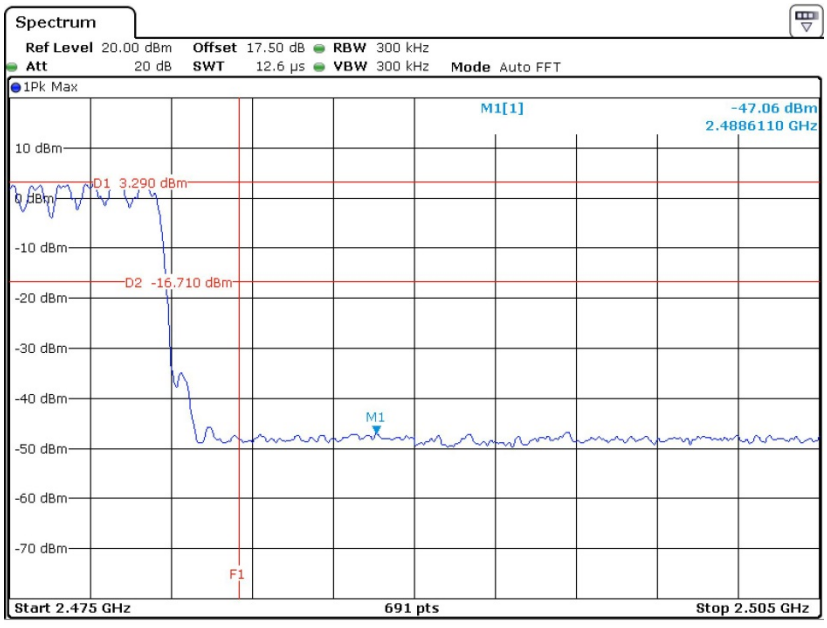
Date: 6.MAY.2013 09:25:04

Test Mode :	2Mbps	Temperature :	24~25℃
Test Engineer :	Fly Chen	Relative Humidity :	50~53%

Hopping Mode Low Band Edge Plot on Channel 00

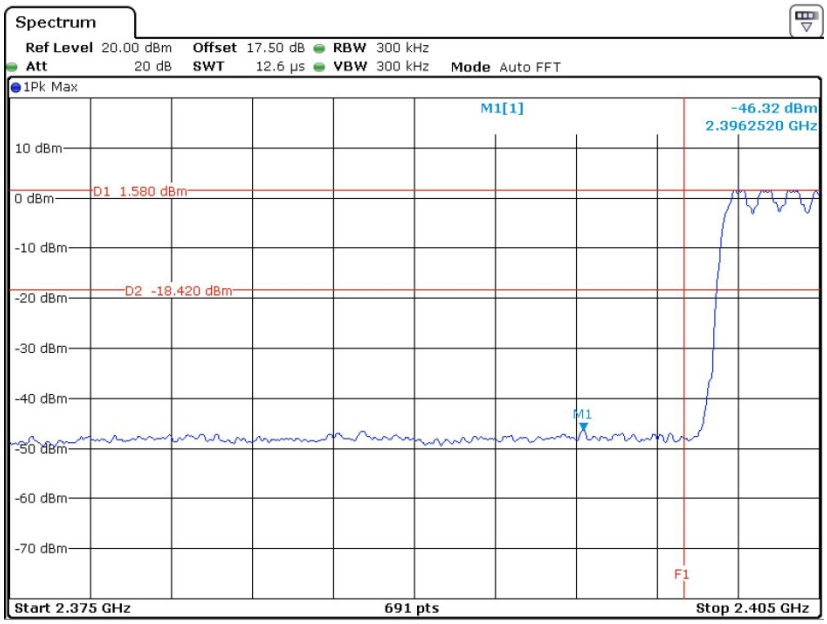


Hopping Mode High Band Edge Plot on Channel 78



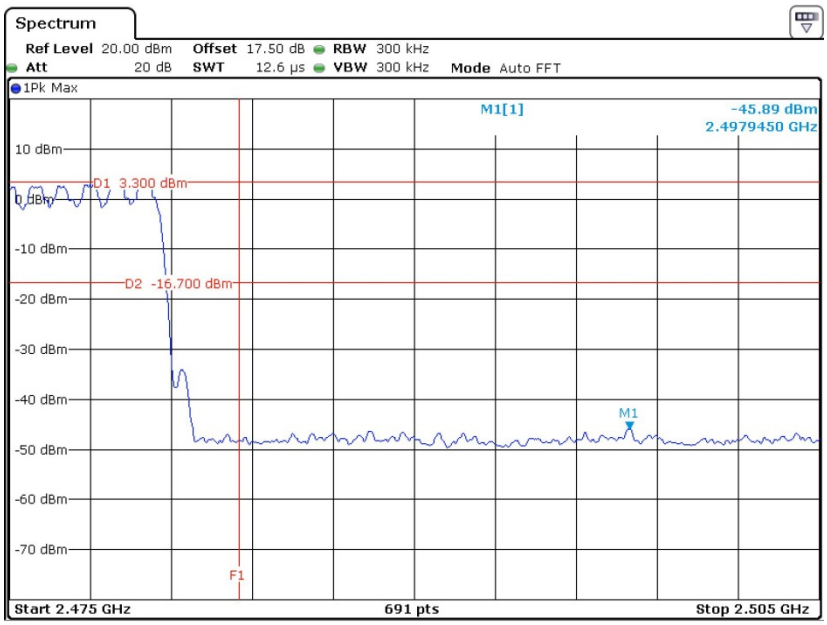
Test Mode :	3Mbps	Temperature :	24~25℃
Test Engineer :	Fly Chen	Relative Humidity :	50~53%

Hopping Mode Low Band Edge Plot on Channel 00



Date: 6.MAY.2013 09:35:50

Hopping Mode High Band Edge Plot on Channel 78



Date: 6.MAY.2013 09:32:32

3.7 Conducted Spurious Emission Measurement

3.7.1 Limit of Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.

3.7.2 Measuring Instruments

See list of measuring instruments of this test report.

3.7.3 Test Procedure

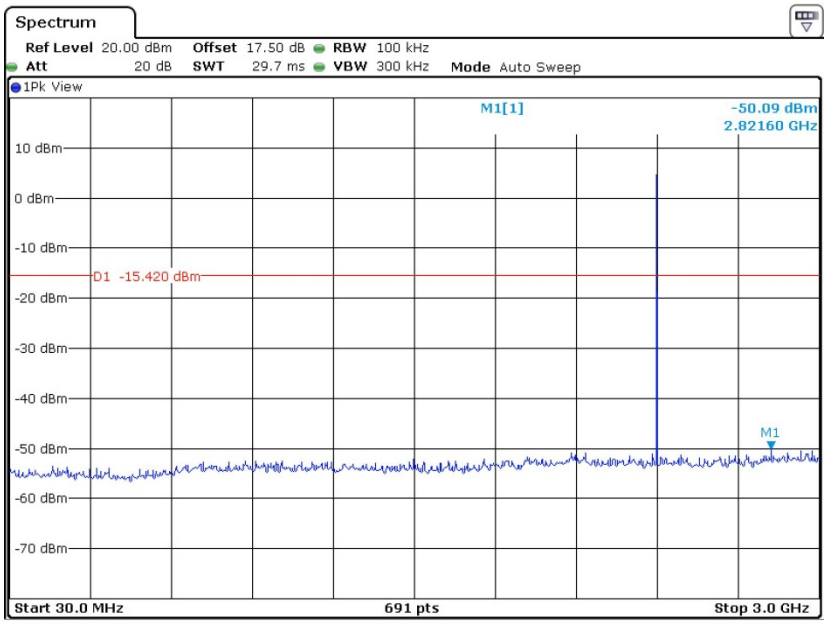
1. The testing follows the guidelines in Spurious RF Conducted Emissions of FCC Public Notice DA 00-705 Measurement Guidelines
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW = 100 kHz, VBW = 300kHz, scan up through 10th harmonic. All harmonics / spurs must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.7.4 Test Setup

3.7.5 Test Results

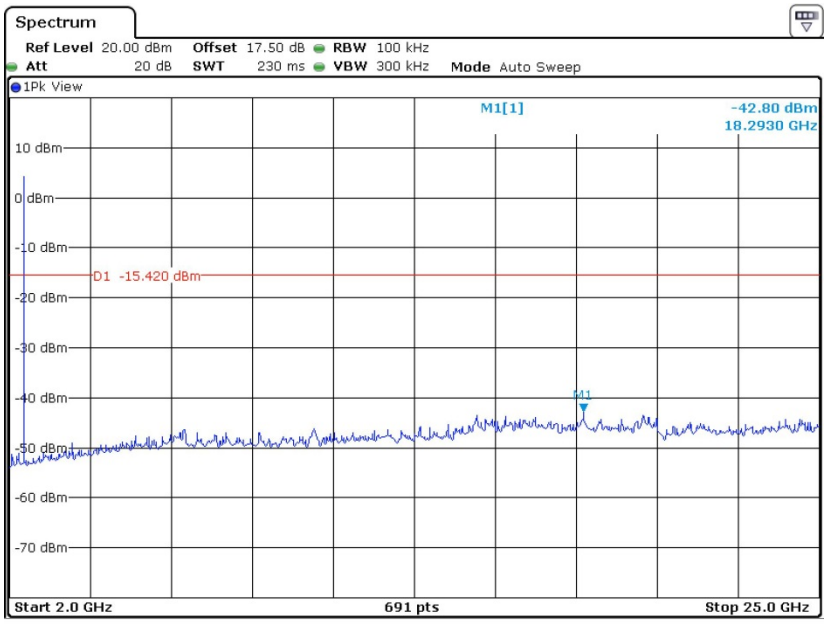
Test Mode :	1Mbps	Temperature :	24~25℃
Test Channel :	00	Relative Humidity :	50~53%
		Test Engineer :	Fly Chen

Conducted Spurious Emission Plot between 30MHz ~ 3 GHz



Date: 6.MAY.2013 10:28:07

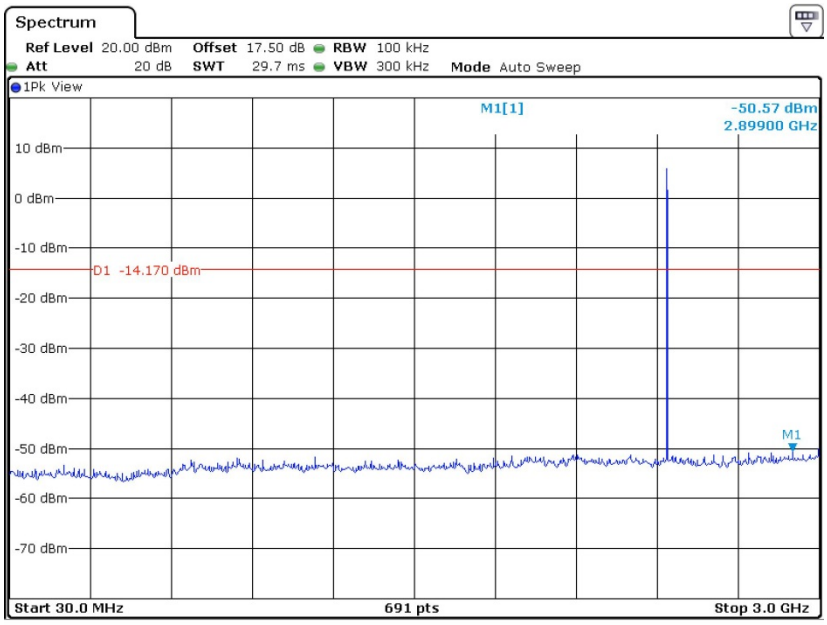
Conducted Spurious Emission Plot between 2 GHz ~ 25 GHz



Date: 6.MAY.2013 10:29:03

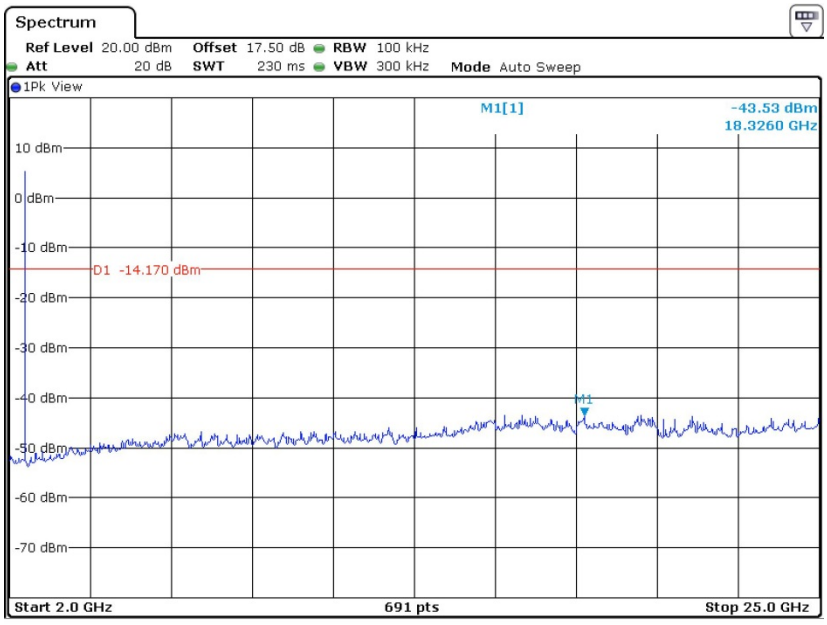
Test Mode :	1Mbps	Temperature :	24~25℃
Test Channel :	39	Relative Humidity :	50~53%
		Test Engineer :	Fly Chen

Conducted Spurious Emission Plot between 30MHz ~ 3 GHz



Date: 6.MAY.2013 10:29:51

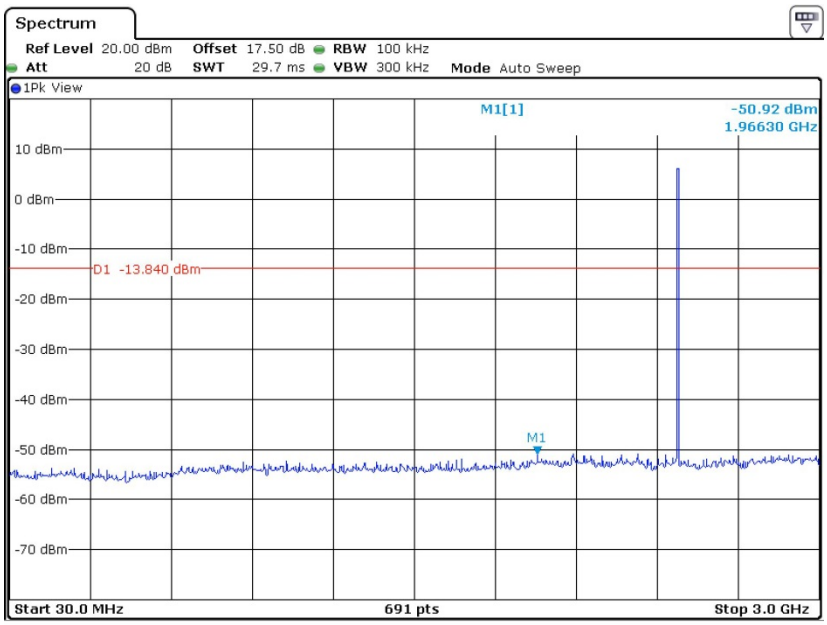
Conducted Spurious Emission Plot between 2 GHz ~ 25 GHz



Date: 6.MAY.2013 10:30:33

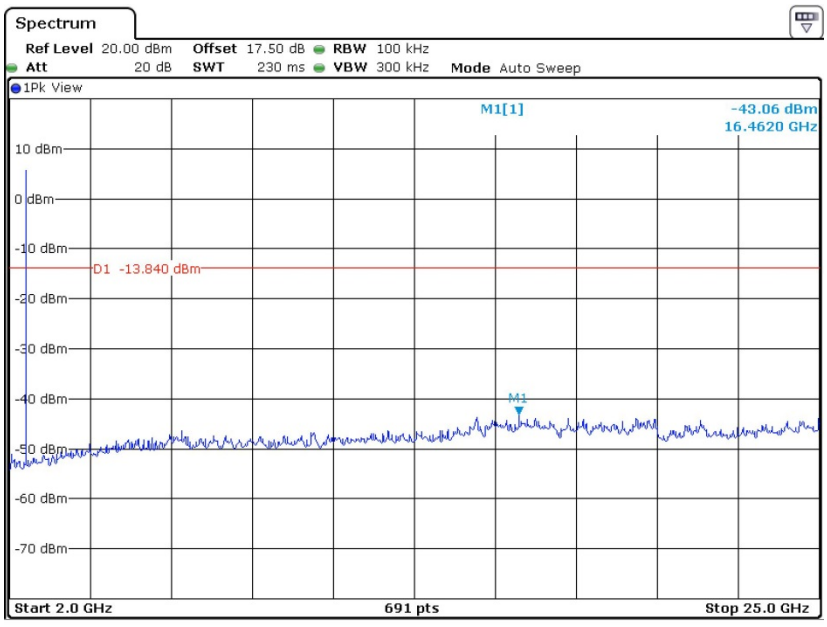
Test Mode :	1Mbps	Temperature :	24~25℃
Test Channel :	78	Relative Humidity :	50~53%
		Test Engineer :	Fly Chen

Conducted Spurious Emission Plot between 30MHz ~ 3 GHz



Date: 6.MAY.2013 10:31:21

Conducted Spurious Emission Plot between 2 GHz ~ 25 GHz



Date: 6.MAY.2013 10:31:55

3.8 Radiated Band Edges and Spurious Emission Measurement

3.8.1 Limit of Radiated Band Edges and Spurious Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. In addition, radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.8.2 Measuring Instruments

See list of measuring instruments of this test report.

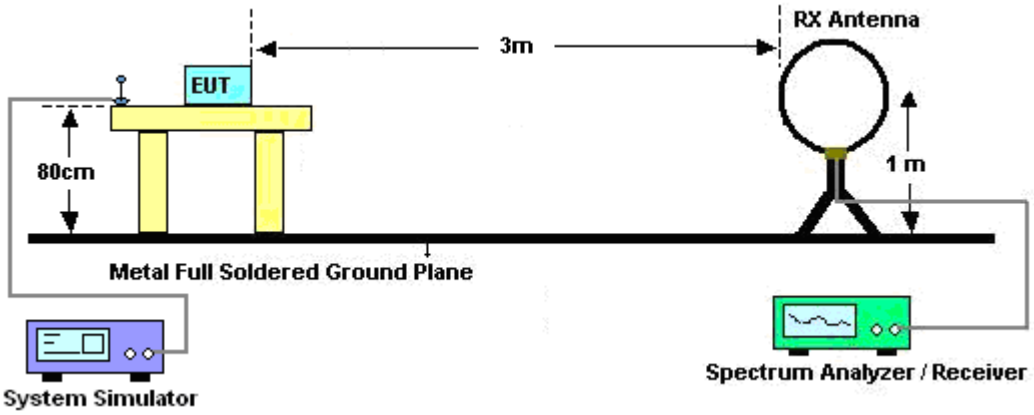
3.8.3 Test Procedures

1. The testing follows the guidelines in Spurious Radiated Emissions of FCC Public Notice DA 00-705 Measurement Guidelines and the guidelines in ANSI C63.10-2009 test site requirement.
2. The EUT was placed on a turntable with 0.8 meter above ground.
3. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings:
   (1) Span shall wide enough to fully capture the emission being measured;
   (2) Set RBW=100 kHz for f < 1 GHz, RBW=1MHz for f>1GHz ; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold for peak
   (3) For average measurement: use duty cycle correction factor method per 15.35(c).
   Duty cycle = On time/100 milliseconds
   On time = $N_1*L_1+N_2*L_2+...+N_{n-1}*LN_{n-1}+N_n*L_n$
   Where N_1 is number of type 1 pulses, L_1 is length of type 1 pulses, etc.
   Average Level = Peak Level + 20*log(Duty cycle)
7. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

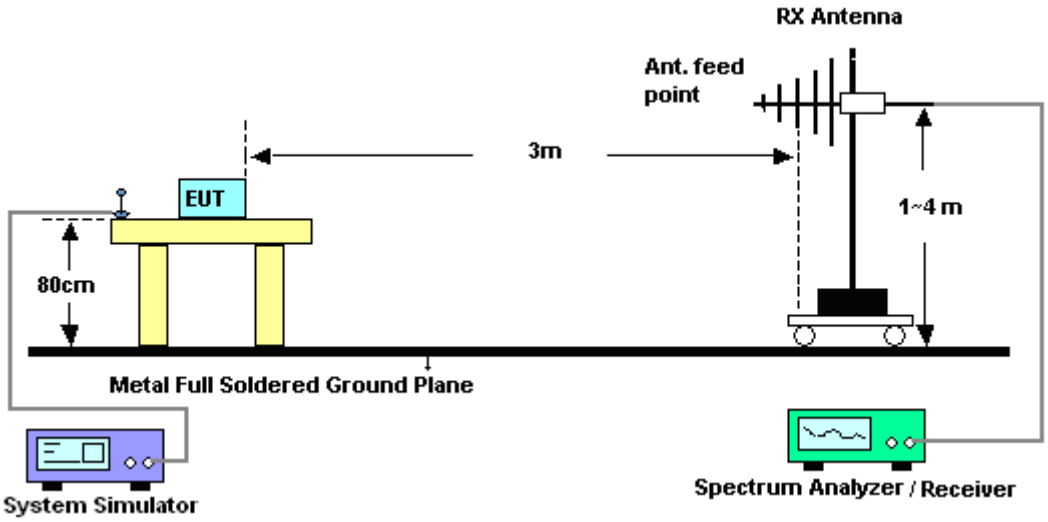
Note: The average levels were calculated from the peak level corrected with duty cycle correction factor (24.79dB) derived from 20log (dwell time/100ms).

3.8.4 Test Setup

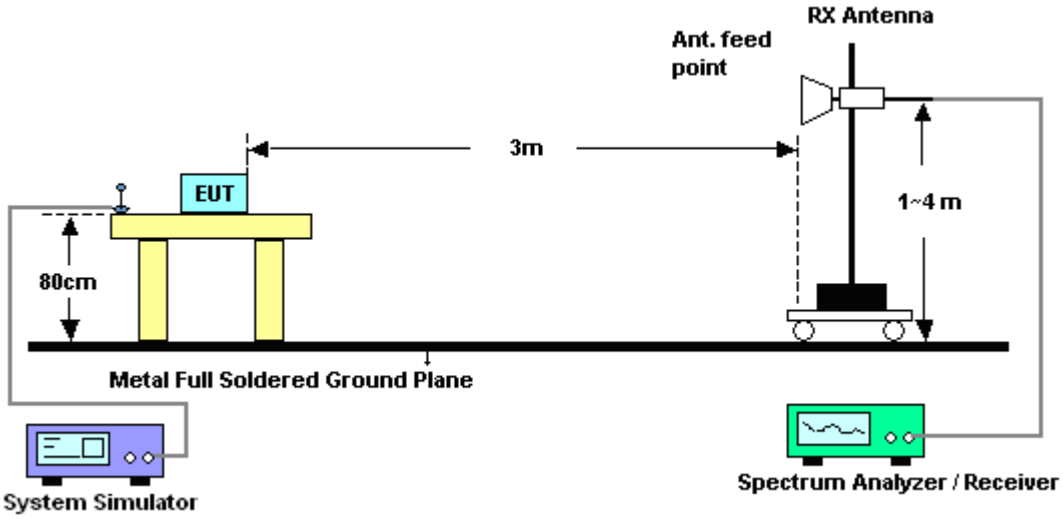
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz

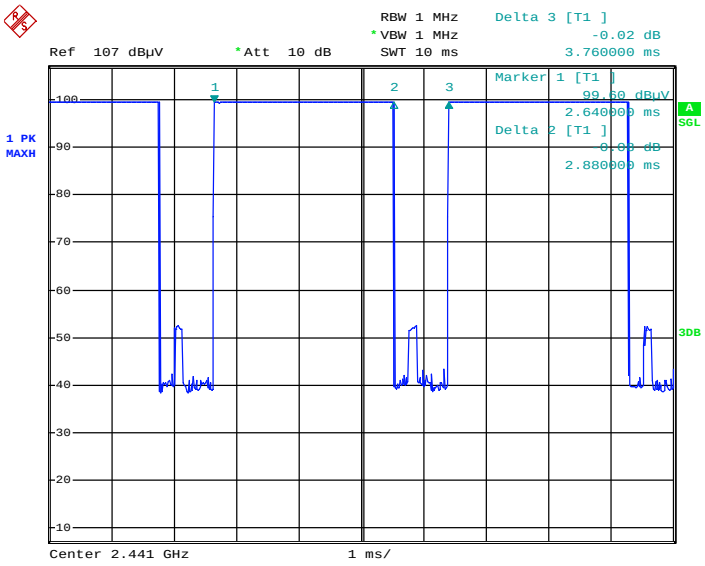


3.8.5 Test Results of Radiated Spurious Emission (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

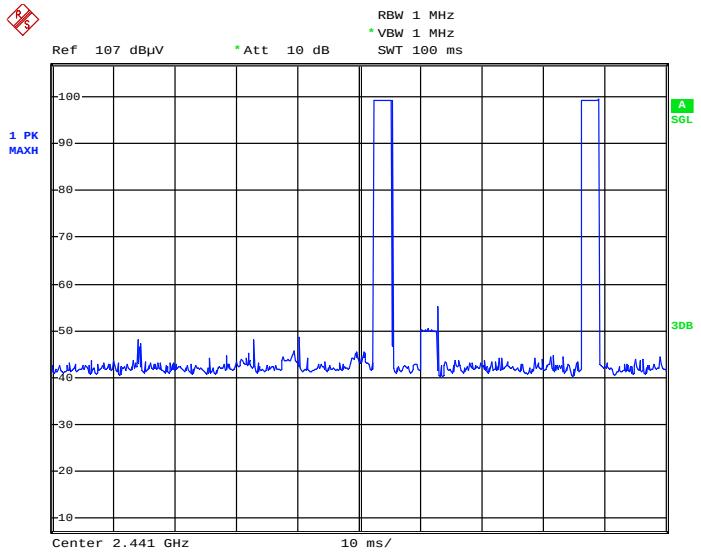
3.8.6 Duty cycle correction factor for average measurement

DH5 on time (One Pulse) Plot on Channel 39



Date: 9.MAY.2013 20:53:12

DH5 on time (Count Pulses) Plot on Channel 39



Date: 9.MAY.2013 20:56:37

Note:

1. Duty cycle = on time/100 milliseconds = 2 * 2.88 / 100 = 5.76 %
2. Duty cycle correction factor = 20*log(Duty cycle) = -24.79 dB
3. DH5 has the highest duty cycle and is reported.

Duty Cycle Correction Factor Consideration for AFH mode:

Bluetooth normal hopping rate is 1600Hz and reduced to 800Hz in AFH mode; due to the reduced number of hopping frequencies, with the same packet configuration the dwell time in each channel frequency within 100msec period is longer in AFH mode than normal mode.

In AFH mode, the minimum hopping frequencies are 20, to get the longest dwell time DH5 packet is observed; the period to have DH5 packet completing one hopping sequence is

2.88 ms x 20 channels = 57.6 ms

There cannot be 2 complete hopping sequences within 100ms period, considering the random hopping behavior, maximum 2 hops can be possibly observed within the period. [100ms / 57.6ms] = 2 hops

Thus, the maximum possible ON time:

2.88 ms x 2 = 5.76 ms

Worst case Duty Cycle Correction factor, which is derived from the maximum possible ON time,

20 x log(5.76 ms/100ms) = -24.79 *dB*

3.8.7 Test Result of Radiated Band Edges

Test Mode :	1Mbps	Temperature :	23~24°C
Test Channel :	00	Relative Humidity :	43~44%
		Test Engineer :	Stone Gu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2386.05	51.06	-22.94	74	47.6	32.86	2.11	31.51	111	66	Peak
2386.05	26.27	-27.73	54	-	-	-	-	-	-	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2386.14	49.72	-24.28	74	46.26	32.86	2.11	31.51	128	79	Peak
2386.14	24.93	-29.07	54	-	-	-	-	-	-	Average

Note: The average levels were calculated from the peak level corrected with duty cycle correction factor (24.79dB) derived from 20log (dwell time/100ms).

For example: Average level = 51.06dBuV/m – 24.79 (dB) = 26.27dBuV/m.

Test Mode :	1Mbps	Temperature :	23~24°C
Test Channel :	78	Relative Humidity :	43~44%
		Test Engineer :	Stone Gu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.5	65.27	-8.73	74	61.61	33.01	2.16	31.51	106	51	Peak
2483.5	40.48	-13.52	54	-	-	-	-	-	-	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.5	64.69	-9.31	74	61.03	33.01	2.16	31.51	100	112	Peak
2483.5	39.90	-14.10	54	-	-	-	-	-	-	Average

3.8.8 Test Result of Radiated Spurious Emission (30 MHz ~ 10th Harmonic)

Note: Below 1GHz for radiated emission measurement, pre-scanned all test modes and only choose the worst case mode was recorded in the report.

Test Mode :	1Mbps	**Temperature :**	23~24°C
Test Channel :	00	**Relative Humidity :**	43~44%
Test Engineer :	Stone Gu	**Polarization :**	Horizontal
Remark :	1. 2402 MHz is fundamental signal which can be ignored. 2. 2399 MHz and 7206 MHz are not within a restricted bands, and its limit lines are 20dB below the highest emission level. For example, 103.36 dBuV/m - 20dB = 83.36 dBuV/m. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2399	68.77	-14.59	83.36	65.31	32.86	2.11	31.51	127	87	Peak
2402	103.36	-	-	99.9	32.86	2.11	31.51	112	186	Peak
2402	78.57	-	-	-	-	-	-	-	-	Average
4804	48.97	-25.03	74	42.26	35.17	3.08	31.54	110	89	Peak
7206	50.12	-33.24	83.36	41.68	36.16	3.24	30.96	121	88	Peak

Note: Other harmonics are lower than background noise.

Test Mode :	1Mbps	Temperature :	23~24°C
Test Channel :	00	Relative Humidity :	43~44%
Test Engineer :	Stone Gu	Polarization :	Vertical
Remark :	1. 2402 MHz is fundamental signal which can be ignored. 2. 2399 MHz and 7206 MHz are not within a restricted bands, and its limit lines are 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2399	66.41	-19.69	86.1	62.95	32.86	2.11	31.51	114	102	Peak
2402	106.1	-	-	102.64	32.86	2.11	31.51	134	115	Peak
2402	81.31	-	-	-	-	-	-	-	-	Average
4804	49.59	-24.41	74	42.88	35.17	3.08	31.54	124	77	Peak
7206	50.8	-35.3	86.1	42.36	36.16	3.24	30.96	100	91	Peak

Note: Other harmonics are lower than background noise.

Test Mode :	1Mbps	Temperature :	23~24°C
Test Channel :	39	Relative Humidity :	43~44%
Test Engineer :	Stone Gu	Polarization :	Horizontal
Remark :	1. 2441 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2441	105.65	-	-	102.07	32.95	2.14	31.51	139	54	Peak
2441	80.86	-	-	-	-	-	-	-	-	Average
4882	48.46	-25.54	74	41.68	35.18	3.12	31.52	121	87	Peak
7323	50.29	-23.71	74	41.81	36.21	3.21	30.94	141	67	Peak

Note: Other harmonics are lower than background noise.

Test Mode :	1Mbps	Temperature :	23~24°C
Test Channel :	39	Relative Humidity :	43~44%
Test Engineer :	Stone Gu	Polarization :	Vertical
Remark :	1. 2441 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2441	105.61	-	-	102.03	32.95	2.14	31.51	126	97	Peak
2441	80.82	-	-	-	-	-	-	-	-	Average
4882	48.71	-25.29	74	41.93	35.18	3.12	31.52	131	67	Peak
7323	49.43	-24.57	74	40.95	36.21	3.21	30.94	125	72	Peak

Note: Other harmonics are lower than background noise.

Test Mode :	1Mbps	Temperature :	23~24°C
Test Channel :	78	Relative Humidity :	43~44%
Test Engineer :	Stone Gu	Polarization :	Horizontal
Remark :	1. 2480 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
31.84	19.51	-20.49	40	36.19	16.55	0.35	33.58	-	-	Peak
89.59	37.2	-6.3	43.5	61.66	8.61	0.55	33.62	142	96	Peak
131.30	32.03	-11.47	43.5	53.31	11.63	0.68	33.59	-	-	Peak
162.61	30.28	-13.22	43.5	53.62	9.49	0.75	33.58	-	-	Peak
262.90	25.71	-20.29	46	46	12.21	0.93	33.43	-	-	Peak
396.24	21.52	-24.48	46	37.74	15.94	1.15	33.31	-	-	Peak
2480	104.69	-	-	101.03	33.01	2.16	31.51	106	52	Peak
2480	79.9	-	-	-	-	-	-	-	-	Average
4960	48.07	-25.93	74	41.22	35.2	3.16	31.51	100	64	Peak
7440	50.29	-23.71	74	41.76	36.27	3.18	30.92	146	56	Peak

Note: Other harmonics are lower than background noise.

Test Mode :	1Mbps	Temperature :	23~24°C
Test Channel :	78	Relative Humidity :	43~44%
Test Engineer :	Stone Gu	Polarization :	Vertical
Remark :	1. 2480 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.53	22.6	-17.4	40	38.55	17.29	0.34	33.58	100	29	Peak
40.42	21.36	-18.64	40	42.97	11.64	0.39	33.64	-	-	Peak
66.73	19.26	-20.74	40	47.09	5.25	0.51	33.59	-	-	Peak
88.34	22.8	-20.7	43.5	47.57	8.3	0.55	33.62	-	-	Peak
132.22	16.6	-26.9	43.5	37.96	11.55	0.68	33.59	-	-	Peak
872.18	22.79	-23.21	46	33.22	20.49	1.69	32.61	-	-	Peak
2480	104.68	-	-	101.02	33.01	2.16	31.51	100	109	Peak
2480	79.89	-	-	-	-	-	-	-	-	Average
4960	48	-26	74	41.15	35.2	3.16	31.51	100	76	Peak
7440	51.34	-22.66	74	42.81	36.27	3.18	30.92	128	49	Peak
7440	26.55	-27.45	54	-	-	-	-	128	49	Average

Note: Other harmonics are lower than background noise.

3.9 AC Conducted Emission Measurement

3.9.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted 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.

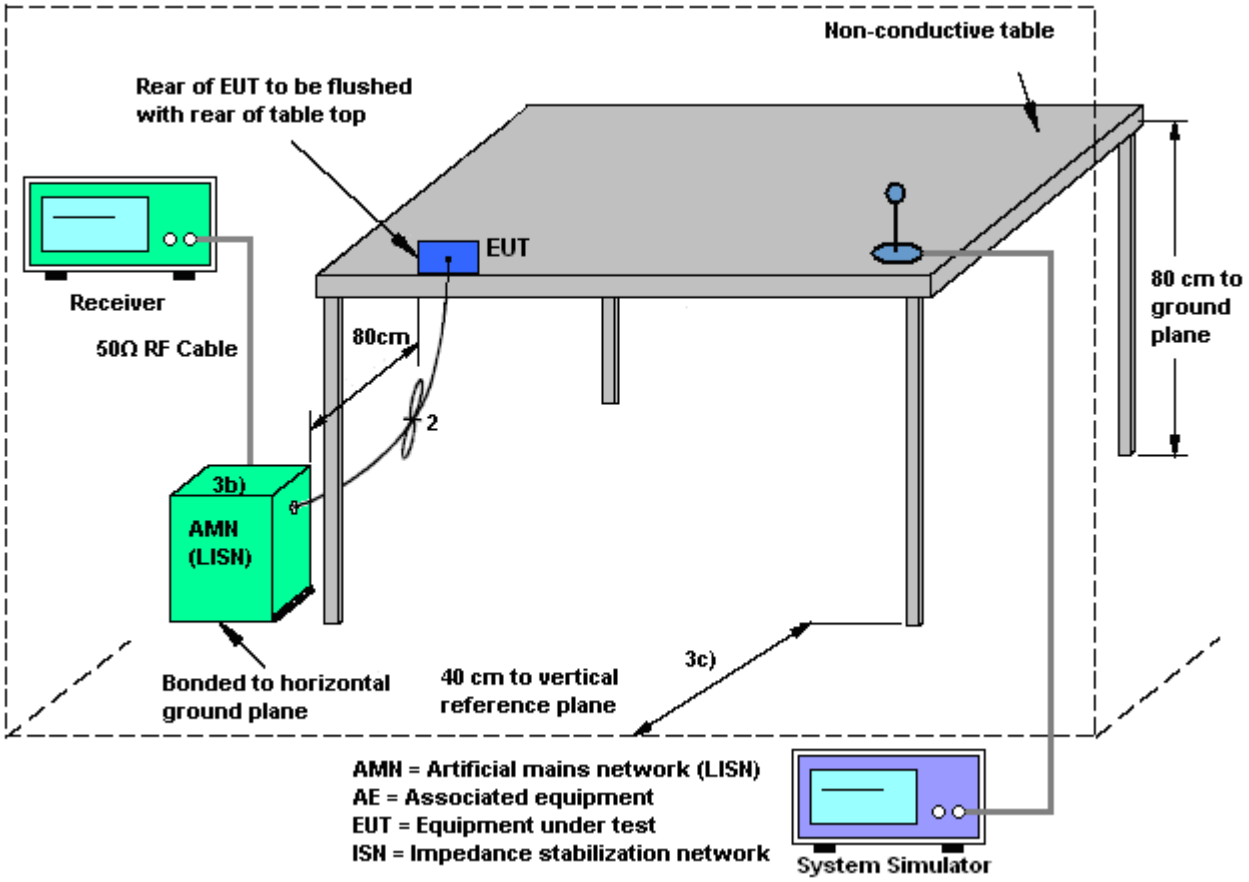
3.9.2 Measuring Instruments

See list of measuring instruments of this test report.

3.9.3 Test Procedures

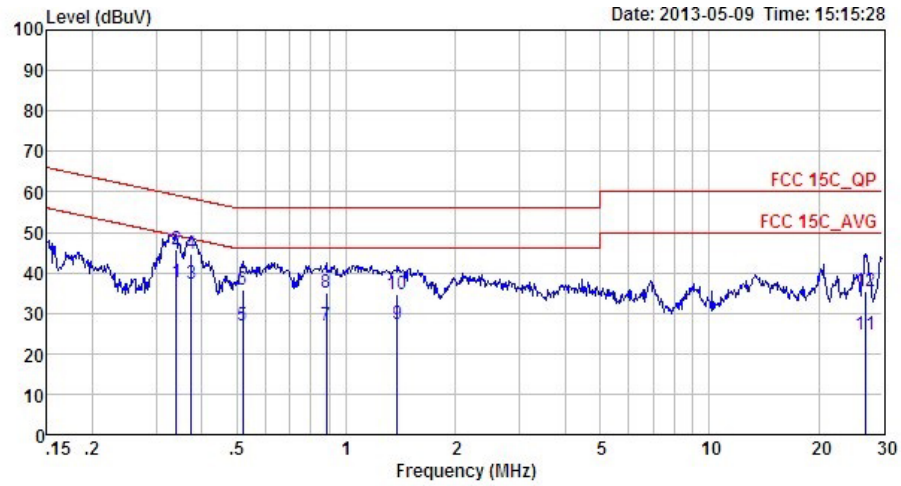
1. The test follows the guidelines in ANSI C63.10-2009 test site requirement.
2. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
3. Connect EUT to the power mains through a line impedance stabilization network (LISN).
4. All the support units are connecting to the other LISN.
5. The LISN provides 50 ohm coupling impedance for the measuring instrument.
6. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
7. Both sides of AC line were checked for maximum conducted interference.
8. The frequency range from 150 kHz to 30 MHz was searched.
9. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.9.4 Test Setup



3.9.5 Test Result of AC Conducted Emission

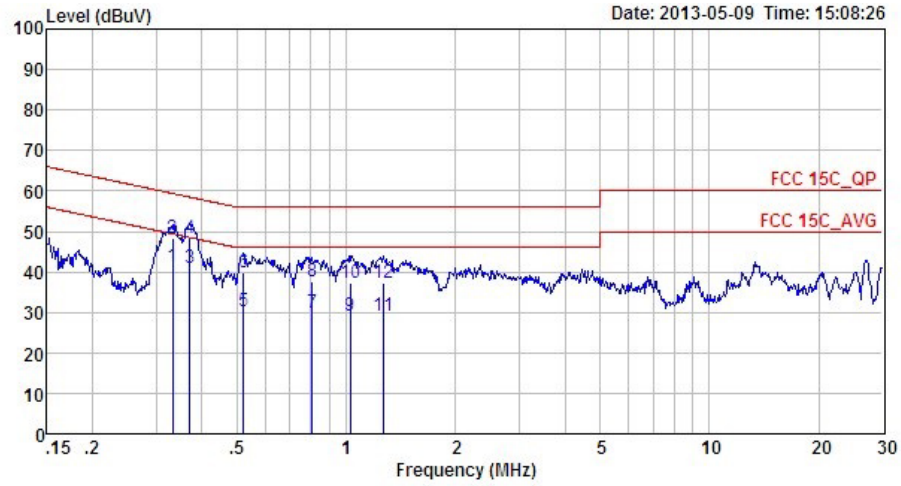
Test Mode :	Mode 1	**Temperature :**	24~25℃
Test Engineer :	Leo Liao	**Relative Humidity :**	50~51%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Function Type :	GSM850 Idle + Bluetooth Link + WLAN Link + USB Cable (Charging from Adapter) + Earphone		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-SZ
Condition: FCC 15C_QP LISN_L_2000601 LINE

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.34	37.69	-11.49	49.18	27.60	0.02	10.07	Average
2		0.34	45.79	-13.39	59.18	35.70	0.02	10.07	QP
3	*	0.38	37.30	-11.09	48.39	27.21	0.02	10.07	Average
4		0.38	44.70	-13.69	58.39	34.61	0.02	10.07	QP
5		0.52	27.11	-18.89	46.00	17.00	0.02	10.09	Average
6		0.52	35.91	-20.09	56.00	25.80	0.02	10.09	QP
7		0.88	26.93	-19.07	46.00	16.80	0.02	10.11	Average
8		0.88	35.03	-20.97	56.00	24.90	0.02	10.11	QP
9		1.38	27.35	-18.65	46.00	17.20	0.03	10.12	Average
10		1.38	34.85	-21.15	56.00	24.70	0.03	10.12	QP
11		26.98	24.90	-25.10	50.00	13.90	0.57	10.43	Average
12		26.98	35.60	-24.40	60.00	24.60	0.57	10.43	QP

Test Mode :	Mode 1	Temperature :	24~25℃
Test Engineer :	Leo Liao	Relative Humidity :	50~51%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Link + WLAN Link + USB Cable (Charging from Adapter) + Earphone		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-SZ
Condition: FCC 15C_QP LISN_N_2000601 NEUTRAL

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.33	41.38	-8.02	49.40	31.29	0.02	10.07	Average
2		0.33	48.28	-11.12	59.40	38.19	0.02	10.07	QP
3	*	0.37	40.89	-7.58	48.47	30.80	0.02	10.07	Average
4		0.37	48.39	-10.08	58.47	38.30	0.02	10.07	QP
5		0.52	30.30	-15.70	46.00	20.19	0.02	10.09	Average
6		0.52	39.70	-16.30	56.00	29.59	0.02	10.09	QP
7		0.80	29.93	-16.07	46.00	19.80	0.02	10.11	Average
8		0.80	37.73	-18.27	56.00	27.60	0.02	10.11	QP
9		1.03	29.14	-16.86	46.00	19.01	0.02	10.11	Average
10		1.03	37.44	-18.56	56.00	27.31	0.02	10.11	QP
11		1.26	29.05	-16.95	46.00	18.91	0.02	10.12	Average
12		1.26	37.35	-18.65	56.00	27.21	0.02	10.12	QP

3.10 Antenna Requirements

3.10.1 Standard Applicable

If directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

3.10.2 Antenna Connected Construction

Non-standard connector used.

3.10.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP30	101400	9kHz~30GHz	Jun. 01, 2012	May 02, 2013~ May 06, 2013	May 31, 2013	Conducted (TH01-SZ)
Power meter	Anritsu	ML2495A	1218010	N/A	Mar. 28, 2013	May 02, 2013~ May 06, 2013	Mar. 27, 2014	Conducted (TH01-SZ)
Power Senso	Anritsu	MA2411B	1207253	N/A	Mar. 28, 2013	May 02, 2013~ May 06, 2013	Mar. 27, 2014	Conducted (TH01-SZ)
EMI Test Receiver	R&S	ESCI	100534	9kHz~3GHz	Nov. 08, 2012	May 09, 2013	Nov. 07, 2013	Radiation (03CH01-KS)
Spectrum Analyzer	R&S	FSP30	100400	9kHz~30GHz	Jun. 01, 2012	May 09, 2013	May 31, 2013	Radiation (03CH01-KS)
Bilog Antenna	SCHAFFNER	CBL6112D	23182	25MHz~2GHz	Dec. 07, 2012	May 09, 2013	Dec. 06, 2013	Radiation (03CH01-KS)
HFH2-Z2 Loop Antenna	R&S	HFH2-Z2	100321	9kHZ-30MHZ	Oct. 22, 2012	May 09, 2013	Oct. 21, 2013	Radiation (03CH01-KS)
Double Ridge Horn Antenna	ETS-Lindgren	1908/7/13	00075957	1GHz~18GHz	Dec. 07, 2012	May 09, 2013	Dec. 06, 2013	Radiation (03CH01-KS)
Amplifier	com-power	PA-103A	161069	1MHz~1GHz	Jun. 01, 2012	May 09, 2013	May 31, 2013	Radiation (03CH01-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Dec. 29, 2012	May 09, 2013	Dec. 28, 2013	Radiation (03CH01-KS)
Active Horn Antenna	com-power	AHA-118	701023	1GHz~18GHz	Nov. 07, 2012	May 09, 2013	Nov. 06, 2013	Radiation (03CH01-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	9170249	15GHz~40GHz	Nov. 23, 2012	May 09, 2013	Nov. 22, 2013	Radiation (03CH01-KS)
ESCIO TEST Receiver	R&S	1142.8007.03	100724	9K-3GHz	Mar. 28, 2013	May 09, 2013	Mar. 27, 2014	Conduction (CO01-SZ)
AC LISN	ETS-LINDGREN	3816/2SH	00103912	9kHz~30MHz	Mar. 28, 2013	May 09, 2013	Mar. 27, 2014	Conduction (CO01-SZ)
AC LISN	ETS-LINDGREN	3816/2SH	00103892	9kHz~30MHz	Mar. 28, 2013	May 09, 2013	Mar. 27, 2014	Conduction (CO01-SZ)
AC Source	Chroma	61602	616020000891	N/A	Nov.20, 2012	May 09, 2013	Nov. 19, 2013	Conduction (CO01-SZ)

5 Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.26**

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.54**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.72**

Appendix A. Photographs of EUT

Please refer to Sporton report number EP342511 as below.