

Report No. : FR232306-03A

Variant FCC RF Test Report

APPLICANT : Intel Corp.

EQUIPMENT: Android Smart Phone

BRAND NAME : Intel
MODEL NAME : AZ210
MARKETING NAME : AZ210

FCC ID : 02Z-AZ210

STANDARD : FCC Part 15 Subpart C §15.247

CLASSIFICATION : (DSS) Spread Spectrum Transmitter

This is a variant report which is only valid together with the original test report. The product was received on Aug. 21, 2012 and completely tested on Sep. 01, 2012. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and shown the compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:

Jones Tsai / Manager





SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR232306-03A	Rev. 01	This is a variant report based on the original report, Sporton Report Number FR232306A. Detail changes list as below: 1. HW change. 2. Change HW/SW version. 3. GPRS power reduction (GMPP2→1) via software setting change. Based on the product-equality-declaration exhibit, only the worst radiated test case found in the original report is verified.	Sep. 12, 2012

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SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.247(b)(1)	A8.1(b)	Peak Output Power	≤ 1 w for 1Mbps ≤ 125 Mw for 2, 3Mbps	Pass	-
3.2	15.247(d)	A8.5	Radiated Band Edges	15.209(a) & 15.247(d)	Pass	-
3.3	15.247(d)	A8.5	Radiated Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 2.99 dB at 247.080 MHz for Quasi Peak
3.4	15.203 & 15.247(b)	A8.4	Antenna Requirement	N/A	Pass	-

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1 General Description

1.1 Applicant

Intel Corp.

RNB-5-112, 2200 Mission College Blvd, Santa Clara, CA 95054, USA

1.2 Manufacturer

Chi Mei Communication Systems, Inc.

No. 4, Mingsheng Street, Tucheng City, New Taipei City 23678, Taiwan

1.3 Feature of Equipment Under Test

Product Feature				
Equipment	Android Smart Phone			
Brand Name	Intel			
Model Name	AZ210			
Marketing Name	AZ210			
FCC ID	O2Z-AZ210			
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA WLAN 11abgn / Bluetooth / NFC			
HW Version	DV3.0			
SW Version	6082			
EUT Stage	Production Unit			

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Product Specification subjective to this standard			
Tx/Rx Frequency Range	2402 MHz ~ 2480 MHz		
Number of Channels	79		
Carrier Frequency of Each Channel	2402+n*1 MHz; n=0~78		
Maximum Output Power to Antenna	Bluetooth (1Mbps) : 8.26 dBm (0.0067 W) Bluetooth EDR (2Mbps) : 8.23 dBm (0.0067 W) Bluetooth EDR (3Mbps) : 8.87 dBm (0.0077 W)		
Antenna Type	PIFA Antenna with gain 0.95 dBi		
Type of Modulation	Bluetooth (1Mbps) : GFSK Bluetooth 2.1 EDR (2Mbps) : π /4-DQPSK Bluetooth 2.1 EDR (3Mbps) : 8-DPSK		

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1.4 Testing Site

Test Site	SPORTON INTERNATIONAL INC.			
	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park,			
Test Site Location	Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.			
	TEL: +886-3-3273456 /	FAX: +886-3-3284978		
Toot Site No	Sporton Site No. FCC/IC Registration N			
Test Site No.	TH02-HY	03CH07-HY	722060/4086B-1	

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1.5 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart C §15.247
- FCC Public Notice DA 00-705
- ANSI C63.4-2003 and ANSI C63.10-2009
- IC RSS-210 Issue 8
- IC RSS-Gen Issue 3

Remark:

- 1. All test items were verified and recorded according to the standards and without any deviation during the test.
- 2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

1.6 Ancillary Equipment List

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Base Station	R&S	CBT32	N/A	N/A	Unshielded, 1.8 m

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2 Test Configuration of Equipment Under Test

2.1 RF Output Power

Preliminary tests were performed in different data rate and recorded the RF output power in the following table:

Band	E	Bluetooth RF Output Powe	r
Channel	00	39	78
Frequency	2402	2441	2480
Peak Power	8.21	8.71	<mark>8.87</mark>

Remark:

- 1. All the test data for each data rate were verified, but only the worst case was reported.
- 2. The data rate was set in 3Mbps for all the test items due to the highest RF output power.
- **3.** The EUT is programmed to transmit signals continuously for all testing.

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2.2 Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and ANSI C63.10-2009 and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction (150 KHz to 30 MHz), radiation (9 KHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

Pre-scanned tests, X, Y, Z in three orthogonal panels, were conducted to determine the final configuration from all possible combinations.

The following tables are showing the test modes as the worst cases (Y plane) and recorded in this report.

Test Cases						
		Data Rate / Modulation				
Test Item	Bluetooth 1Mbps	Bluetooth EDR 2Mbps	Bluetooth EDR 3Mbps			
	GFSK	π/4-DQPSK	8-DPSK			
Radiated	Pretest	Pretest	Mode 1: CH78 2480 MHz			
TCs	Fielest	Fielest	IVIOUE 1. CH/6_2460 IVIH2			

Remark: For radiated TCs, the data rate was set in 3Mbps due to the highest RF output power; only the data of these modes was reported.

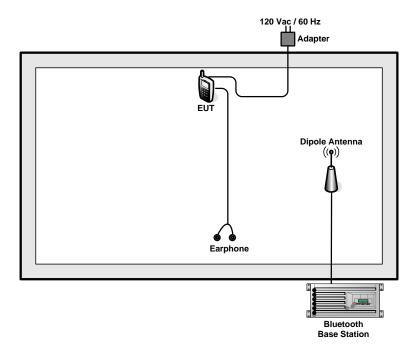
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2.3 Connection Diagram of Test System



2.4 RF Utility

For Bluetooth function, the RF utility, "Intel bt/wifi tools-bt test mode" was installed in EUT which was programmed in order to make the EUT contact with Bluetooth base station for continuous transmitting and receiving signals.

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3 Test Result

3.1 Peak Output Power Measurement

3.1.1 Limit of Peak Output Power

Section 15.247 (b) The maximum peak conducted output power of the intentional radiator shall not exceed the following: (1) For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band 0.125 watts. The power limit for 1Mbps is 1watt, and for 2Mbps, and 3Mbps are 0.125 watts.

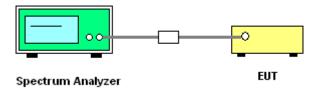
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

- 1. The testing follows FCC Public Notice DA 00-705 Measurement Guidelines.
- 2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
- 3. Set to the maximum power setting and enable the EUT transmit continuously.
- 4. Measure the conducted output power and record the results in the test report.

3.1.4 Test Setup



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3.1.5 Test Result of Peak Output Power

Test Mode :	1Mbps	Temperature :	24~26℃
Test Engineer :	Book Lin	Relative Humidity :	50~53%

	Eroguenev	RF Power (dBm)			
Channel	Frequency	GFSK	Max. Limits	Pass/Fail	
	(MHz)	1 Mbps	(dBm)	Pass/Faii	
00	2402	7.63	30.00	Pass	
39	2441	8.11	30.00	Pass	
78	2480	8.26	30.00	Pass	

Test Mode :	2Mbps	Temperature :	24~26 ℃
Test Engineer :	Book Lin	Relative Humidity :	50~53%

	Eroguenev	R	F Power (dBm)	
Channel	Frequency	π/4-DQPSK	Max. Limits	Pass/Fail
	(MHz)	2 Mbps	(dBm)	Pass/Faii
00	2402	7.57	20.97	Pass
39	2441	8.06	20.97	Pass
78	2480	8.23	20.97	Pass

Test Mode :	3Mbps	Temperature :	24~26 ℃
Test Engineer :	Book Lin	Relative Humidity :	50~53%

	Eromuonov	RF Power (dBm)				
Channel	Frequency	8-DPSK	Max. Limits	Dece/Feil		
	(MHz)	3 Mbps	(dBm)	Pass/Fail		
00	2402	8.21	20.97	Pass		
39	2441	8.71	20.97	Pass		
78	2480	8.87	20.97	Pass		

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3.2 Radiated Band Edges Measurement

3.2.1 Limit of Radiated Band Edges

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	Field Strength	Measurement Distance
(MHz)	(microvolts/meter)	(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

3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

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3.2.3 **Test Procedures**

- The testing follows the guidelines in Spurious Radiated Emissions of FCC Public Notice DA 1. 00-705 Measurement Guidelines and fulfills ANSI C63.4-2003 and the guidelines in ANSI C63.10-2009 test site requirement.
- 1. The EUT was placed on a turntable with 0.8 meter above ground.
- 2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 3. 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.
- 4. Set to the maximum power setting and enable the EUT transmit continuously.
- 5. Applies to band edge emissions that fall in the restricted bands listed in FCC Section 15.205, the maximum permitted field strength is listed in FCC Section 15.209. A pre-amp is necessary for this measurement. For measurements above 1 GHz, set RBW = 1MHz, VBW = 1MHz, Sweep: Auto for Peak; set RBW = 1MHz, VBW = 10 Hz, Sweep: Auto for Average.
- 6. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

Note: The average measurement for Bluetooth may calculate from the peak level corrected with duty cycle correction factor, derived from the appropriate duty cycle calculation per 15.35(b) and (c). The result by calculation method is no worse than direct measurement by using VBW=10Hz.

Marker-Delta method in DA 00-705:

- (1) Use a 1 MHz RBW, a 1 MHz VBW, and a peak detector (as required by Section 15.35). Repeat the measurement with an average detector (i.e., 1 MHz RBW with 10 Hz VBW).
- (2) Set span = 10MHz, that encompasses both the peak of the fundamental emission and the band-edge emission under investigation. Set RBW = 100KHz, 1% of the total span . Set VBW = 300KHz >= RBW.
- (3) Subtract the delta measured in step (2) from the field strengths measured in step (1). The resultant field strengths (peak/average) are then used to determine band-edge compliance as required by Section 15.205.

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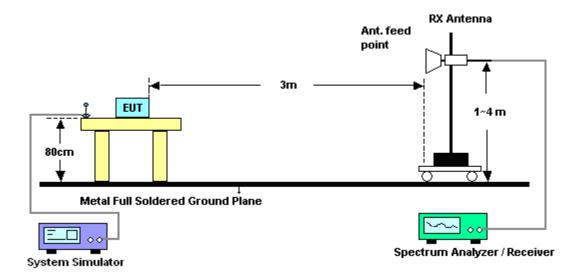
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3.2.4 Test Setup



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3.2.5 Test Result of Radiated Band Edges

※工作頻率範圍外之不必要發射落於限制頻帶 2483.5 MHz 至 2500 MHz 之輻射電場強度(水平):

CH78

Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB)	(dB)	(dB)	(cm)	(deg)	
2483.5	66.3	-7.7	74	61.74	32.38	6.18	34	114	216	Peak
2483.5	54.9	0.9	54	50.34	32.38	6.18	34	114	216	Average
2483.5	49.69	-24.31	74	-	-	-	-	-	-	Peak
2483.5	31.14	-22.86	54	-	-	-	-	-	-	Average

Summary results of marker-delta method:

Test mode	Maximum field strength of the fundamental emission (dBμV/m)	Delta Result (dB)	Measurement Result (dBμV/m)	Limit (dBµV/m)	Margin (dB)	Result
Peak	104.71	55.02	49.69	74	-24.31	Pass
Average	86.16	55.02	31.14	54	-22.86	Pass

Note: Measurement result = Maximum field strength - Delta result

※ 工作頻率範圍外之不必要發射落於限制頻帶 2483.5MHz 至 2500MHz 之輻射電場強度(垂直): CH78

01170										
Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB)	(dB)	(dB)	(cm)	(deg)	
2483.5	67.78	-6.22	74	63.22	32.38	6.18	34	123	262	Peak
2483.5	56.01	2.01	54	51.45	32.38	6.18	34	123	262	Average
2483.5	51.22	-22.78	74	-	-	-	-	-	-	Peak
2483.5	32.25	-21.75	54	-	-	-	-	-	-	Average

Summary results of marker-delta method:

Test mode	Maximum field strength of the fundamental emission (dBμV/m)	Delta Result (dB)	Measurement Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
Peak	106.42	55.2	51.22	74	-22.78	Pass
Average	87.45	55.2	32.25	54	-21.75	Pass

Note: Measurement result = Maximum field strength - Delta result

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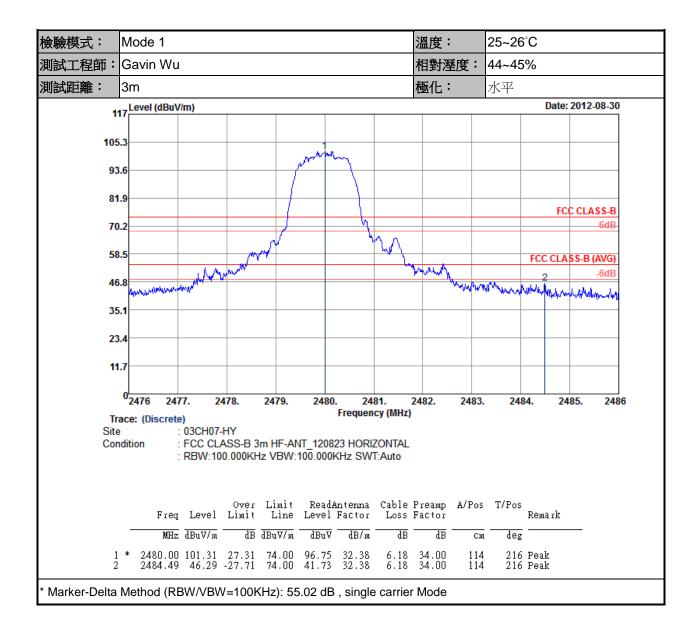
FCC RF Test Report

檢驗模式: Mode 1 温度: 25~26°C 測試工程師: Gavin Wu 相對溼度: 44~45% 水平 測試距離: 3m 極化: 117 Level (dBuV/m) Date: 2012-08-30 105.3 93.6 81.9 70.2 58.5 46.8 35.1 23.4 11.7 ⁰2476.5 2478. 2479. 2480. 2481. 2482. 2483.5 Frequency (MHz) Trace: (Discrete) : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT 120823 HORIZONTAL : RBW:1000.000KHz VBW:1000.000KHz SWT:Auto Over Limit ReadAntenna Cable Preamp A/Pos T/Pos Freq Level Limit Line Level Factor Loss Factor Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dΒ Cm deg 6.18 34.00 6.18 34.00 216 Average 216 Peak Maximum field strength of the fundamental emission

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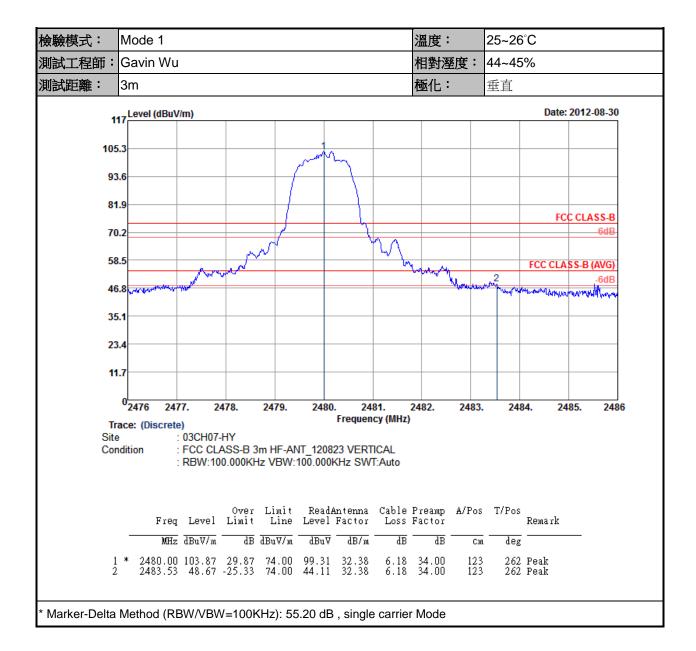
FCC RF Test Report

Maximum field strength of the fundamental emission

檢驗模式: Mode 1 温度: 25~26°C 測試工程師: Gavin Wu 相對溼度: 44~45% 測試距離: 極化: 垂直 3m 117 Level (dBuV/m) Date: 2012-08-30 105.3 93.6 81.9 FCC CLASS-B 70.2 58.5 FCC CLASS-B (AVG) -6dF 46.8 35.1 23.4 11.7 ⁰2476.5 2483.5 2478. 2479. 2480. 2481. 2482. Frequency (MHz) Trace: (Discrete) : 03CH07-HY Site Condition : FCC CLASS-B 3m HF-ANT_120823 VERTICAL : RBW:1000.000KHz VBW:1000.000KHz SWT:Auto ReadAntenna Cable Preamp A/Pos T/Pos Over Limit ReadAntenna Limit Line Level Factor Freq Level Limit Loss Factor Remark dB dBuV/m dBuV dB/m dΒ MHz dBuV/m deg Cm 6.18 6.18 2480.00 87.45 33.45 2480.00 106.42 32.42 54.00 82.89 32.38 74.00 101.86 32.38 34.00 34.00 123 123 262 Average 262 Peak

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3.3 Radiated Spurious Emission Measurement

3.3.1 Limit of Radiated 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	Field Strength	Measurement Distance
(MHz)	(microvolts/meter)	(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

3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

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3.3.3 Test Procedures

- The testing follows the guidelines in Spurious Radiated Emissions of FCC Public Notice DA 00-705 Measurement Guidelines and fulfills ANSI C63.4-2003 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.
- 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; Set RBW = 1MHz, VBW = 10 Hz, Sweep = auto for average.
- 7. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level
- 8. For measurement below 1GHz, if the emission level of the EUT measured by the peak detector is more than 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement by using the quasi-peak detector will be reported.

Note: The average measurement for Bluetooth may calculate from the peak level corrected with duty cycle correction factor, derived from the appropriate duty cycle calculation per 15.35(b) and (c). The result by calculation method is no worse than direct measurement by using VBW=10Hz.

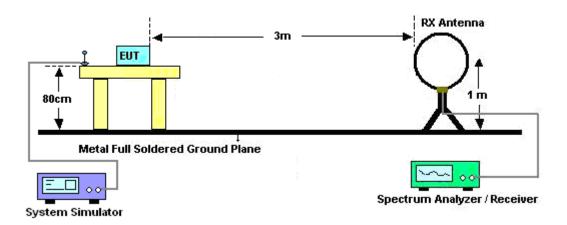
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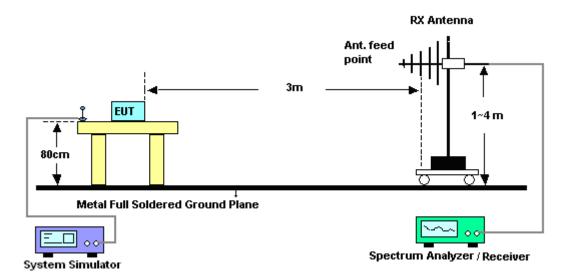
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3.3.4 Test Setup

For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



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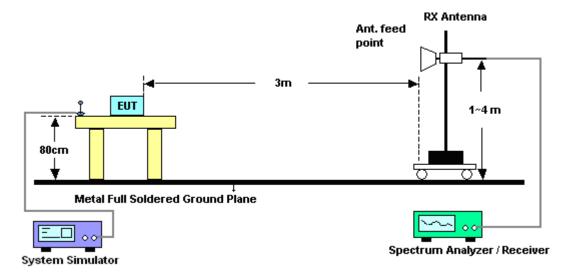
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For radiated emissions above 1GHz



3.3.5 Test Results of Radiated Emissions (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.

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

Test Mode :	Mode 1	Temperature :	25~26°C					
Test Channel :	78	Relative Humidity :	44~45%					
Test Engineer :	Gavin Wu	Polarization : Horizontal						
Remark :	2480 MHz is fundamental si	2480 MHz is fundamental signal which can be ignored.						

Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
(MHz)	(dBµV/m)	Limit (dB)	Line (dBµV/m)	Level (dBµV)	Factor (dB)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	
221.7	42.97	-3.03	46	62.11	10.65	1.43	31.22	-	-	Peak
228	38.56	-7.44	46	57.25	11.05	1.47	31.21	100	17	QP
247.08	43.01	-2.99	46	60.25	12.4	1.53	31.17	100	263	QP
316.8	39.64	-6.36	46	55.21	13.77	1.8	31.14	-	-	Peak
319.6	40.15	-5.85	46	55.61	13.85	1.81	31.12	-	-	Peak
332.2	38.66	-7.34	46	53.9	14.19	1.86	31.29	-	-	Peak
2480	86.16	-	-	81.6	32.38	6.18	34	114	216	Average
2480	104.16	-	-	99.6	32.38	6.18	34	114	216	Peak
4962	47.33	-26.67	74	61.75	33.91	9.16	57.49	100	0	Peak

Test Mode :	Mode 1	Temperature :	25~26°C					
Test Channel :	78	Relative Humidity :	44~45%					
Test Engineer :	Gavin Wu	avin Wu Polarization : Vertical						
Remark :	2480 MHz is fundamental si	2480 MHz is fundamental signal which can be ignored.						

Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB)	(dB)	(dB)	(cm)	(deg)	
30.27	36.2	-3.8	40	47.54	20	0.53	31.87	102	325	Peak
158.52	38.1	-5.4	43.5	57.63	10.64	1.22	31.39	-	-	Peak
247.35	40.77	-5.23	46	58.01	12.4	1.53	31.17	-	-	Peak
323.1	38.34	-7.66	46	53.75	13.93	1.82	31.16	-	-	Peak
326.6	38.95	-7.05	46	54.3	14.03	1.84	31.22	-	-	Peak
335.7	37.75	-8.25	46	52.96	14.27	1.87	31.35	-	-	Peak
2480	87.45	-	-	82.89	32.38	6.18	34	123	262	Average
2480	106.03	-	-	101.47	32.38	6.18	34	123	262	Peak
4962	48.24	-25.76	74	62.66	33.91	9.16	57.49	100	0	Peak

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3.4 Antenna Requirements

3.4.1 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.

3.4.2 Antenna Connected Construction

Non-standard connector used.

3.4.3 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.

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4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100055	9kHz~40GHz	Jun. 06, 2012	Aug. 30, 2012	Jun. 05, 2013	Conducted (TH02-HY)
Bluetooth Base Station	R&S	CBT32	100522	N/A	Feb. 09, 2012	Aug. 30, 2012	Feb. 08, 2014	Conducted (TH02-HY)
Bilog Antenna	SCHAFFNER	CBL6111C	2726	30MHz ~ 1GHz	Oct. 22, 2011	Aug. 30, 2012 ~ Sep. 01, 2012	Oct. 21, 2012	Radiation (03CH07-HY)
Spectrum Analyzer	R&S	FSP30	101067	9KHz ~ 30GHz	Dec. 06, 2011	Aug. 30, 2012 ~ Sep. 01, 2012	Dec. 05, 2012	Radiation (03CH07-HY)
Double Ridge Horn Antenna	EMCO	3117	00066583	1GHz ~ 18GHz	Aug. 01, 2012	Aug. 30, 2012 ~ Sep. 01, 2012	Jul. 31, 2013	Radiation (03CH07-HY)
Pre Amplifier	Agilent	8449B	3008A023 62	1GHz ~ 26.5GHz	Dec. 05, 2011	Aug. 30, 2012 ~ Sep. 01, 2012	Dec. 04, 2012	Radiation (03CH07-HY)
Pre Amplifier	COM-POWER	PA-103A	161241	10-1000MHz.32 dB.GAIN	Feb. 27, 2012	Aug. 30, 2012 ~ Sep. 01, 2012	Feb. 26, 2013	Radiation (03CH07-HY)
Signal Analyzer	Rohde & Schwarz	FSQ	200578/02	20Hz~26.5GHz	Feb. 06, 2012	Aug. 30, 2012 ~ Sep. 01, 2012	Feb. 05, 2013	Radiation (03CH07-HY)
Pre Amplifier	MITEQ	AMF-7D-0010 1800-30-10P	159088	1GHz ~ 18GHz	Mar. 10, 2012	Aug. 30, 2012 ~ Sep. 01, 2012	Mar. 09, 2013	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170 251	15GHz ~ 40GHz	Oct. 21, 2011	Aug. 30, 2012 ~ Sep. 01, 2012	Oct. 20, 2012	Radiation (03CH07-HY)
Loop Antenna	R&S	HFH2-Z2	860004/00 1	9KHz ~ 30MHz	Jul. 03, 2012	Aug. 30, 2012 ~ Sep. 01, 2012	Jul. 02, 2014	Radiation (03CH07-HY)
Bluetooth Base Station	R&S	CBT32	100522	N/A	Feb. 09, 2012	Aug. 30, 2012 ~ Sep. 01, 2012	Feb. 08, 2014	Radiation (03CH07-HY)

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5 Uncertainty of Evaluation

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

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

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

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

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Appendix A. Photographs of EUT

Please refer to Sporton report number EP232306-03 as below.

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