



# FCC RF Test Report

**APPLICANT** : Hewlett-Packard Company  
**EQUIPMENT** : Tablet PC  
**BRAND NAME** : hp  
**MODEL NAME** : HSTNN-C78C  
**FCC ID** : B94HNC78BWTXN  
**STANDARD** : FCC 47 CFR Part 2, 22(H), 24(E), 27(L)  
**CLASSIFICATION** : PCS Licensed Transmitter (PCB)

The product was received on Sep. 05, 2013 and testing was completed on Oct. 13, 2013. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA / EIA-603-C-2004 and has been in 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: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager



## SPORTON INTERNATIONAL INC.

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



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### SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	§2.1046	RSS-132 (5.4) RSS-133 (6.4) RSS-139 (6.4)	Conducted Output Power	Reporting Only	PASS(*)	-
3.1	§22.913(a)(2)	RSS-132(5.4) SRSP-503(5.1.3)	Effective Radiated Power	< 7 Watts	PASS(*)	-
	§24.232(c)	RSS-133 (6.4) SRSP-510(5.1.2)	Equivalent Isotropic Radiated Power	< 2 Watts	PASS(*)	-
	§27.50(d)(4)	RSS-139 (6.4) SRSP-513(5.1.2)	Equivalent Isotropic Radiated Power	< 1 Watts	PASS(*)	-
3.2	§2.1053 §22.917(a) §24.238(a) §27.53(h)	RSS-GEN(4.9) RSS-132 (5.5) RSS-133 (6.5) RSS-139 (6.5)	Field Strength of Spurious Radiation	< 43+10log10(P[Watts])	PASS(*)	Under limit 12.85 dB at 1696.000 MHz

Note: The "\*" means the FG392719-15A report reuses data from the certified FG392719A report.



# 1 General Description

## 1.1 Applicant

**Hewlett-Packard Company**  
3000 Hanover Street, Palo Alto, California 94304, USA

## 1.2 Manufacturer

**COMPAL ELECTRONICS, INC.**  
No. 581, Ruiguang Rd., Neihu District, Taipei City 11492, Taiwan (R.O.C.)

## 1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Tablet PC
Brand Name	hp
Model Name	HSTNN-C78C
Integrated WWAN Module	Brand Name: SIERRA WIRELESS Model Name: EM7355
FCC ID	B94HNC78BWTXN
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE
EUT Stage	Identical Prototype

**Remark:**

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. There have two batteries for EUT, The Battery 1 (model name: HSTNN-IB50) and Battery 2 (model name: HSTNN-LB50) are identical on power rating. The only differences are vendor and model name. All the tests were performed with Battery 1.



### 1.4 Product Specification subjective to this standard

Product Specification subjective to this standard	
<b>Tx Frequency</b>	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band IV : 1712.4 MHz ~ 1752.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz CDMA2000 BC0: 824.70 MHz ~ 848.31 MHz CDMA2000 BC1: 1851.25 MHz ~ 1908.75 MHz
<b>Rx Frequency</b>	GSM850: 869.2 MHz ~ 893.8 MHz GSM1900: 1930.2 MHz ~ 1989.8 MHz WCDMA Band V: 871.4 MHz ~ 891.6 MHz WCDMA Band IV : 2112.4 MHz ~ 2152.6 MHz WCDMA Band II : 1932.4 MHz ~ 1987.6 MHz CDMA2000 BC0: 869.70 MHz ~ 893.31 MHz CDMA2000 BC1: 1931.25 MHz ~ 1988.75 MHz
<b>Maximum Output Power to Antenna</b>	GSM850 : 32.29 dBm GSM1900 : 29.59 dBm WCDMA Band V : 23.51 dBm WCDMA Band IV : 23.80 dBm WCDMA Band II : 22.69 dBm CDMA2000 BC0 : 23.73 dBm CDMA2000 BC1 : 23.99 dBm
<b>Antenna Type</b>	Main Antenna :PIFA Antenna Aux. Antenna :Coupling Type Antenna
<b>Antenna Gain</b>	Cellular Band: -1.16 dBi PCS Band: 0.25 dBi AWS Band: 0.97 dBi
<b>Type of Modulation</b>	GPRS: GMSK EDGE: GMSK / 8PSK WCDMA: QPSK (Uplink) HSDPA: QPSK (Uplink) HSUPA: QPSK (Uplink) CDMA2000 : QPSK CDMA2000 1xEV-DO : QPSK/8PSK

### 1.5 Modification of EUT

No modifications are made to the EUT during all test items.



### 1.6 Maximum ERP/EIRP Power

FCC Rule	System	Type of Modulation	Maximum ERP/EIRP (W)
Part 22	GSM850 GPRS class 8	GMSK	0.79
Part 22	GSM850 EDGE class 8	8PSK	0.23
Part 22	WCDMA Band V RMC 12.2Kbps	QPSK	0.10
Part 22	CDMA2000 BC0 1xEV-DO Rev. 0	QPSK	0.11
Part 24	GSM1900 GPRS class 8	GMSK	0.96
Part 24	GSM1900 EDGE class 8	8PSK	0.36
Part 24	WCDMA Band II RMC 12.2Kbps	QPSK	0.25
Part 24	CDMA2000 BC1 1xEV-DO Rev. 0	QPSK	0.27
Part 27	WCDMA Band IV RMC 12.2Kbps	QPSK	0.23

### 1.7 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1022 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

<b>Test Site</b>	SPORTON INTERNATIONAL INC.	
<b>Test Site Location</b>	No. 52, Hwa Ya 1 <sup>st</sup> Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978	
<b>Test Site No.</b>	<b>Sporton Site No.</b>	
	TH02-HY	03CH07-HY



## 1.8 Applicable Standards

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

- ♦ 47 CFR Part 2, 22(H), 24(E), 27(L)
- ♦ ANSI / TIA / EIA-603-C-2004
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v02r01
- ♦ FCC KDB 412172 D01 Determining ERP and ERIP v01

**Remark:** All test items were verified and recorded according to the standards and without any deviation during the test.



## 2 Test Configuration of Equipment Under Test

### 2.1 Test Mode

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems v02r01 with maximum output power.

Radiated measurements were performed with rotating EUT in different three orthogonal test planes to find the maximum emission.

Radiated emissions were investigated as following frequency range:

1. 30 MHz to 9000 MHz for GSM850, WCDMA Band V, and CDMA2000 BC0.
2. 30 MHz to 18000 MHz for WCDMA Band IV.
3. 30 MHz to 19000 MHz for GSM1900, WCDMA Band II, and CDMA2000 BC1.

Test Modes	
Band	Radiated TCs
GSM 850	<ul style="list-style-type: none"> <li>■ GPRS class 8 Link</li> <li>■ EDGE class 8 Link</li> </ul>
GSM 1900	<ul style="list-style-type: none"> <li>■ GPRS class 8 Link</li> <li>■ EDGE class 8 Link</li> </ul>
WCDMA Band V	<ul style="list-style-type: none"> <li>■ RMC 12.2Kbps Link</li> </ul>
WCDMA Band IV	<ul style="list-style-type: none"> <li>■ RMC 12.2Kbps Link</li> </ul>
WCDMA Band II	<ul style="list-style-type: none"> <li>■ RMC 12.2Kbps Link</li> </ul>
CDMA2000 BC0	<ul style="list-style-type: none"> <li>■ 1xEV-DO Rev. 0 Link Mode</li> </ul>
CDMA2000 BC1	<ul style="list-style-type: none"> <li>■ 1xEV-DO Rev. 0 Link Mode</li> </ul>

**Note:** The maximum power levels are chosen to test as the worst case configuration as follows:

- GPRS multi-slot class 8 mode for GMSK modulation,
- EDGE multi-slot class 8 mode for 8PSK modulation,
- RMC 12.2Kbps mode for WCDMA band V,
- RMC 12.2Kbps mode for WCDMA band IV,
- RMC 12.2Kbps mode for WCDMA band II,
- 1xEV-DO Rev. 0 RTAP 153.6K mode for CDMA2000 BC0,
- 1xEV-DO Rev. 0 RTAP 153.6K mode for CDMA2000 BC1, only these modes were used for all tests.



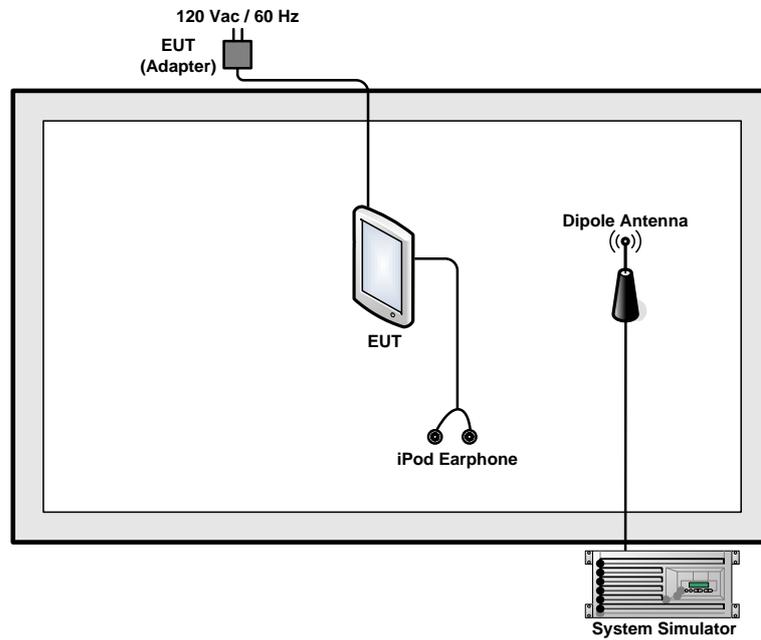
Conducted Power Measurement Results:

Conducted Power (*Unit: dBm)						
Band	GSM850			GSM1900		
Channel	128	189	251	512	661	810
Frequency	824.2	836.4	848.8	1850.2	1880	1909.8
GPRS class 8	32.29	32.27	32.22	29.59	29.45	29.38
GPRS class 10	32.21	32.16	32.08	29.50	29.38	29.29
EGPRS class 8	27.02	26.96	26.91	25.36	25.30	25.31
EGPRS class 10	26.82	26.76	26.71	25.30	25.24	25.22
EGPRS class 11	26.63	26.50	26.47	25.15	25.13	25.12
EGPRS class 12	26.66	26.59	26.55	25.10	25.08	25.03

Conducted Power (*Unit: dBm)									
Band	WCDMA Band V			WCDMA Band II			WCDMA Band IV		
Channel	4132	4182	4233	9262	9400	9538	1312	1413	1513
Frequency	826.4	836.4	846.6	1852.4	1880	1907.6	1712.4	1732.6	1752.6
RMC 12.2K	23.45	23.51	23.16	23.64	23.65	23.80	22.52	22.69	22.49
HSDPA Subtest-1	23.26	23.33	23.44	23.46	23.51	23.66	22.38	22.46	22.67
HSDPA Subtest-2	23.24	23.31	23.36	23.34	23.42	23.63	22.38	22.49	22.60
HSDPA Subtest-3	22.74	22.83	22.96	22.84	22.95	23.21	21.86	21.97	22.23
HSDPA Subtest-4	22.72	22.82	22.91	22.82	22.93	23.19	21.88	21.81	21.83
HSUPA Subtest-1	23.11	23.10	23.15	22.81	23.01	23.07	22.23	22.36	22.38
HSUPA Subtest-2	21.73	21.88	21.95	21.60	21.80	21.90	20.36	20.38	20.39
HSUPA Subtest-3	22.12	22.10	22.16	21.70	21.84	21.93	21.17	21.24	21.79
HSUPA Subtest-4	21.80	21.92	22.00	21.63	21.70	21.95	20.38	20.40	20.43
HSUPA Subtest-5	23.25	23.32	23.33	23.39	23.45	23.60	22.20	22.23	22.29

Conducted Power (*Unit: dBm)						
Band	CDMA2000 BC0			CDMA2000 BC1		
Channel	1013	384	777	25	600	1175
Frequency	824.7	836.52	848.31	1851.25	1880	1908.75
1xRTT RC1+SO55	23.58	23.72	23.54	23.87	23.80	23.93
1xRTT RC3+SO55	23.55	23.71	23.50	23.93	23.79	23.92
1xEV-DO RTAP 153.6Kbps	23.61	23.73	23.60	23.99	23.80	23.90
1xEV-DO RETAP 4096Bits	23.50	23.72	23.52	23.85	23.76	23.84

## 2.2 Connection Diagram of Test System



## 2.3 Support Unit used in test configuration

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A

### 3 Test Result

#### 3.1 Conducted Output Power and ERP/EIRP Measurement

##### 3.1.1 Description of the Conducted Output Power and ERP/EIRP Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to enforce EUT transmitting at the maximum power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The ERP of mobile transmitters must not exceed 7 Watts (Cellular Band) and the EIRP of mobile transmitters are limited to 2 Watts (PCS Band) and 1 Watts (AWS Band). According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$ ,  $ERP = EIRP - 2.15$ , where

$P_T$  = transmitter output power in dBm

$G_T$  = gain of the transmitting antenna in dBi

$L_C$  = signal attenuation in the connecting cable between the transmitter and antenna in dB

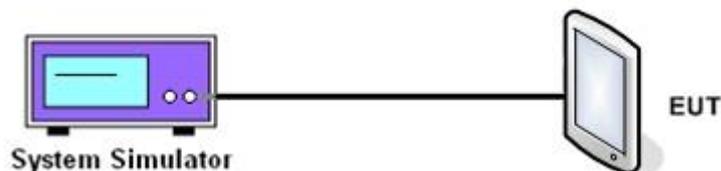
##### 3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

##### 3.1.3 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure the maximum burst average power for GSM and maximum average power for other modulation signal.

##### 3.1.4 Test Setup



**3.1.5 Test Result of Conducted Output Power**

Cellular Band ( $G_T - L_C = -1.16$ dB)									
Modes	GSM850 (GPRS class 8)			GSM850 (EDGE class 8)			WCDMA Band V (RMC 12.2Kbps)		
Channel	128 (Low)	189 (Mid)	251 (High)	128 (Low)	189 (Mid)	251 (High)	4132 (Low)	4182 (Mid)	4233 (High)
Frequency (MHz)	824.2	836.4	848.8	824.2	836.4	848.8	826.4	836.4	846.6
Conducted Power (dBm)	32.29	32.27	32.22	27.02	26.96	26.91	23.45	23.51	23.16
Conducted Power (Watts)	1.69	1.69	1.67	0.50	0.50	0.49	0.22	0.22	0.21
ERP(dBm)	28.98	28.96	28.91	23.71	23.65	23.60	20.14	20.20	19.85
ERP(Watts)	0.79	0.79	0.78	0.23	0.23	0.23	0.10	0.10	0.10

PCS Band ( $G_T - L_C = 0.25$ dB)									
Modes	GSM1900 (GPRS class 8)			GSM1900 (EDGE class 8)			WCDMA Band II (RMC 12.2Kbps)		
Channel	512 (Low)	661 (Mid)	810 (High)	512 (Low)	661 (Mid)	810 (High)	9262 (Low)	9400 (Mid)	9538 (High)
Frequency (MHz)	1850.2	1880	1909.8	1850.2	1880	1909.8	1852.4	1880	1907.6
Conducted Power (dBm)	29.59	29.45	29.38	25.36	25.30	25.31	23.64	23.65	23.80
Conducted Power (Watts)	0.91	0.88	0.87	0.34	0.34	0.34	0.23	0.23	0.24
EIRP(dBm)	29.84	29.70	29.63	25.61	25.55	25.56	23.89	23.90	24.05
EIRP(Watts)	0.96	0.93	0.92	0.36	0.36	0.36	0.24	0.25	0.25



AWS Band ( $G_T - L_C = 0.97$ dB)			
Modes	WCDMA Band IV (RMC 12.2Kbps)		
Channel	1312(Low)	1413 (Mid)	1513 (High)
Frequency (MHz)	1712.4	1732.6	1752.6
Conducted Power (dBm)	22.52	22.69	22.49
Conducted Power (Watts)	0.18	0.19	0.18
EIRP(dBm)	23.49	23.66	23.46
EIRP(Watts)	0.22	0.23	0.22

CDMA2000 BC0 ( $G_T - L_C = -1.16$ dB)			
Test Mode	CDMA 2000 1xEV-DO Rev. 0		
Test Status	RTAP 153.6Kbps		
Channel	1013 (Low)	384 (Mid)	777 (High)
Frequency (MHz)	824.70	836.52	848.31
Conducted Power (dBm)	23.61	23.73	23.60
Conducted Power (Watts)	0.23	0.24	0.23
ERP(dBm)	20.30	20.42	20.29
ERP(Watts)	0.11	0.11	0.11



CDMA2000 BC1 ( $G_T - L_C = 0.25$ dB)			
Test Mode	CDMA 2000 1xEV-DO Rev. 0		
Test Status	RTAP 153.6Kbps		
Channel	25 (Low)	600 (Mid)	1175 (High)
Frequency (MHz)	1851.25	1880.00	1908.75
Conducted Power (dBm)	23.99	23.80	23.90
Conducted Power (Watts)	0.25	0.24	0.25
EIRP(dBm)	24.24	24.05	24.15
EIRP(Watts)	0.27	0.25	0.26

**Note:** maximum burst average power for GSM and maximum average power for other modulation signal.

$EIRP = P_T + G_T - L_C$ ,  $ERP = EIRP - 2.15$ , where

$P_T$  = transmitter output power in dBm

$G_T$  = gain of the transmitting antenna in dBi

$L_C$  = signal attenuation in the connecting cable between the transmitter and antenna in dB



## 3.2 Field Strength of Spurious Radiation Measurement

### 3.2.1 Description of Field Strength of Spurious Radiated Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $43 + 10 \log (P)$  dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

### 3.2.2 Measuring Instruments

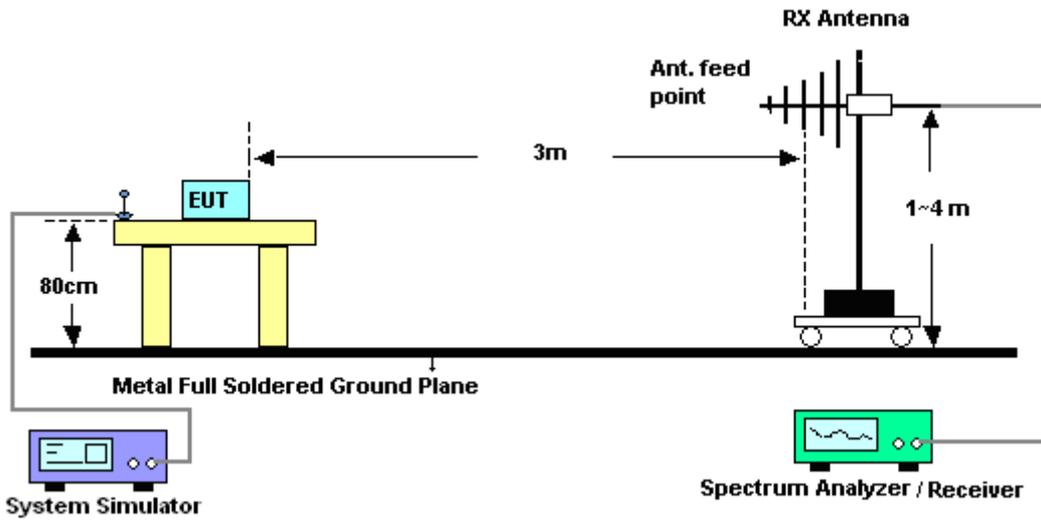
The measuring equipment is listed in the section 4 of this test report.

### 3.2.3 Test Procedures

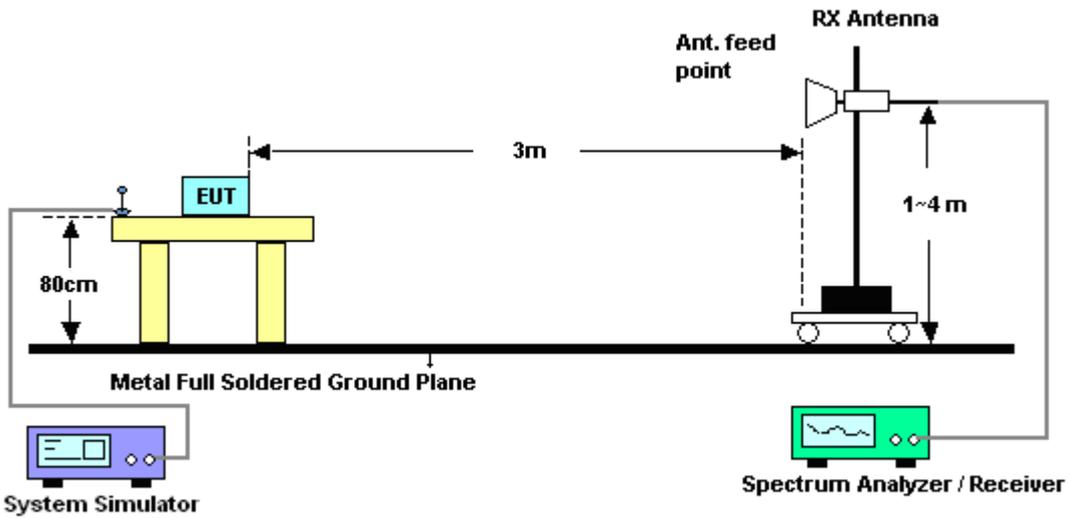
1. The EUT was placed on a rotatable wooden table 0.8 meters above the ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search for the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10.  $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
11.  $ERP \text{ (dBm)} = EIRP - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
13. The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)  
 $= P(W) - [43 + 10\log(P)] \text{ (dB)}$   
 $= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$   
 $= -13\text{dBm}.$

### 3.2.4 Test Setup

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz





3.2.5 Test Result of Field Strength of Spurious Radiated

<Low Channel>

<b>Band :</b>	GSM850		<b>Temperature :</b>	21~24°C					
<b>Test Mode :</b>	GPRS class 8 Link (GMSK)		<b>Relative Humidity :</b>	51~53%					
<b>Test Engineer :</b>	Kyle Jhuang		<b>Polarization :</b>	Horizontal					
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1648	-27.69	-13	-14.69	-34.37	-29.54	1.53	5.53	H	Pass
2472	-36.37	-13	-23.37	-47.29	-38.31	2.06	6.15	H	Pass
3296	-35.35	-13	-22.35	-47.3	-38.65	2.48	7.93	H	Pass
4120	-33.79	-13	-20.79	-47.88	-38.27	2.54	9.17	H	Pass
4944	-40.64	-13	-27.64	-56.01	-46.01	2.74	10.26	H	Pass
5768	-35.08	-13	-22.08	-54.05	-40.66	2.97	10.70	H	Pass
6592	-41.00	-13	-28.00	-63.32	-46.73	3.2	11.08	H	Pass

<b>Band :</b>	GSM850		<b>Temperature :</b>	21~24°C					
<b>Test Mode :</b>	GPRS class 8 Link (GMSK)		<b>Relative Humidity :</b>	51~53%					
<b>Test Engineer :</b>	Kyle Jhuang		<b>Polarization :</b>	Vertical					
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1648	-29.69	-13	-16.69	-33.54	-31.54	1.53	5.53	V	Pass
2472	-32.82	-13	-19.82	-44.26	-34.76	2.06	6.15	V	Pass
3296	-35.92	-13	-22.92	-49.45	-39.22	2.48	7.93	V	Pass
4120	-38.01	-13	-25.01	-53	-42.49	2.54	9.17	V	Pass
4944	-42.94	-13	-29.94	-58.67	-48.31	2.74	10.26	V	Pass
5768	-36.45	-13	-23.45	-55.23	-42.03	2.97	10.70	V	Pass
6592	-42.95	-13	-29.95	-64.67	-48.68	3.2	11.08	V	Pass



<b>Band :</b>	GSM850				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	EDGE class 8 Link (8PSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Horizontal			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1648	-36.00	-13	-23.00	-42.55	-37.85	1.53	5.53	H	Pass
2472	-43.09	-13	-30.09	-54.13	-45.03	2.06	6.15	H	Pass
3296	-38.71	-13	-25.71	-50.48	-42.01	2.48	7.93	H	Pass
4120	-37.38	-13	-24.38	-51.43	-41.86	2.54	9.17	H	Pass
4944	-50.17	-13	-37.17	-65.74	-55.54	2.74	10.26	H	Pass
5768	-37.44	-13	-24.44	-56.54	-43.02	2.97	10.70	H	Pass
6592	-43.50	-13	-30.50	-65.83	-49.23	3.2	11.08	H	Pass

<b>Band :</b>	GSM850				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	EDGE class 8 Link (8PSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Vertical			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1648	-35.49	-13	-22.49	-44.47	-37.34	1.53	5.53	V	Pass
2472	-38.64	-13	-25.64	-49.76	-40.58	2.06	6.15	V	Pass
3296	-39.18	-13	-26.18	-52.75	-42.48	2.48	7.93	V	Pass
4120	-39.53	-13	-26.53	-54.33	-44.01	2.54	9.17	V	Pass
4944	-50.22	-13	-37.22	-65.91	-55.59	2.74	10.26	V	Pass
5768	-41.24	-13	-28.24	-60.15	-46.82	2.97	10.70	V	Pass
6592	-43.49	-13	-30.49	-65.34	-49.22	3.2	11.08	V	Pass



<b>Band :</b>	GSM1900		<b>Temperature :</b>	21~24°C					
<b>Test Mode :</b>	GPRS class 8 Link (GMSK)		<b>Relative Humidity :</b>	51~53%					
<b>Test Engineer :</b>	Kyle Jhuang		<b>Polarization :</b>	Horizontal					
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3700	-28.14	-13	-15.14	-43.3	-34.29	2.59	8.74	H	Pass
5548	-29.59	-13	-16.59	-50.05	-37.25	3.04	10.70	H	Pass
7400	-36.62	-13	-23.62	-64.11	-45.36	3.28	12.02	H	Pass

<b>Band :</b>	GSM1900		<b>Temperature :</b>	21~24°C					
<b>Test Mode :</b>	GPRS class 8 Link (GMSK)		<b>Relative Humidity :</b>	51~53%					
<b>Test Engineer :</b>	Kyle Jhuang		<b>Polarization :</b>	Vertical					
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3700	-35.38	-13	-22.38	-51.37	-41.53	2.59	8.74	V	Pass
5548	-31.81	-13	-18.81	-52.13	-39.47	3.04	10.70	V	Pass
7400	-38.64	-13	-25.64	-65.55	-47.38	3.28	12.02	V	Pass



<b>Band :</b>	GSM1900	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	EDGE class 8 Link (8PSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Horizontal						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3700	-38.28	-13	-25.28	-53.42	-44.43	2.59	8.74	H	Pass
5548	-36.01	-13	-23.01	-56.42	-43.67	3.04	10.70	H	Pass
7400	-43.04	-13	-30.04	-70.42	-51.78	3.28	12.02	H	Pass

<b>Band :</b>	GSM1900	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	EDGE class 8 Link (8PSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Vertical						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3700	-39.86	-13	-26.86	-55.91	-46.01	2.59	8.74	V	Pass
5548	-34.20	-13	-21.20	-54.33	-41.86	3.04	10.70	V	Pass
7400	-43.38	-13	-30.38	-70.31	-52.12	3.28	12.02	V	Pass



<b>Band :</b>	WCDMA Band V				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Horizontal			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1648	-57.00	-13	-44.00	-63.74	-58.85	1.53	5.53	H	Pass
2472	-56.75	-13	-43.75	-67.39	-58.69	2.06	6.15	H	Pass
3296	-52.55	-13	-39.55	-64.34	-55.85	2.48	7.93	H	Pass

<b>Band :</b>	WCDMA Band V				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Vertical			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1648	-55.27	-13	-42.27	-64.15	-57.12	1.53	5.53	V	Pass
2472	-55.92	-13	-42.92	-67.31	-57.86	2.06	6.15	V	Pass
3296	-53.71	-13	-40.71	-66.85	-57.01	2.48	7.93	V	Pass



<b>Band :</b>	WCDMA Band IV				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Horizontal			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3420	-42.18	-13	-29.18	-56.36	-46.01	4.48	8.31	H	Pass
5128	-51.72	-13	-38.72	-70.37	-56.36	5.332	9.98	H	Pass
6843	-43.78	-13	-30.78	-69.4	-49.02	6.1	11.34	H	Pass

<b>Band :</b>	WCDMA Band IV				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Vertical			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3420	-40.71	-13	-27.71	-56.22	-44.54	4.48	8.31	V	Pass
5130	-51.83	-13	-38.83	-70.3	-56.47	5.332	9.98	V	Pass
6843	-44.76	-13	-31.76	-69.78	-50	6.1	11.34	V	Pass



<b>Band :</b>	WCDMA Band II	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Horizontal						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3700	-42.04	-13	-29.04	-57.25	-48.19	2.59	8.74	H	Pass
5548	-44.02	-13	-31.02	-64.53	-51.68	3.04	10.70	H	Pass
7403	-43.26	-13	-30.26	-70.57	-52	3.28	12.02	H	Pass

<b>Band :</b>	WCDMA Band II	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Vertical						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3700	-41.70	-13	-28.70	-57.52	-47.85	2.59	8.74	V	Pass
5552	-41.67	-13	-28.67	-62.01	-49.33	3.04	10.70	V	Pass
7400	-42.43	-13	-29.43	-69.28	-51.17	3.28	12.02	V	Pass



<b>Band :</b>	CDMA2000 BC0				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	1xEV-DO Rev. 0 (QPSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Horizontal			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1648	-35.02	-13	-22.02	-41.6	-36.87	1.53	5.53	H	Pass
2472	-37.48	-13	-24.48	-48.38	-39.42	2.06	6.15	H	Pass
3296	-37.59	-13	-24.59	-49.23	-40.89	2.48	7.93	H	Pass
4120	-35.85	-13	-22.85	-50.07	-40.33	2.54	9.17	H	Pass
4944	-49.55	-13	-36.55	-65.05	-54.92	2.74	10.26	H	Pass
5776	-33.64	-13	-20.64	-52.75	-39.22	2.97	10.70	H	Pass
6600	-42.27	-13	-29.27	-64.52	-48	3.2	11.08	H	Pass

<b>Band :</b>	CDMA2000 BC0				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	1xEV-DO Rev. 0 (QPSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Vertical			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1648	-33.39	-13	-20.39	-42.31	-35.24	1.53	5.53	V	Pass
2472	-35.92	-13	-22.92	-47.55	-37.86	2.06	6.15	V	Pass
3296	-37.57	-13	-24.57	-50.91	-40.87	2.48	7.93	V	Pass
4120	-37.62	-13	-24.62	-52.5	-42.1	2.54	9.17	V	Pass
4944	-49.88	-13	-36.88	-65.55	-55.25	2.74	10.26	V	Pass
5768	-37.08	-13	-24.08	-55.92	-42.66	2.97	10.70	V	Pass
6600	-43.51	-13	-30.51	-65.37	-49.24	3.2	11.08	V	Pass



<b>Band :</b>	CDMA2000 BC1	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	1xEV-DO Rev. 0 (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Horizontal						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3700	-32.71	-13	-19.71	-47.69	-38.86	2.59	8.74	H	Pass
5555	-38.67	-13	-25.67	-59.16	-46.33	3.04	10.70	H	Pass
7403	-40.89	-13	-27.89	-68.27	-49.63	3.28	12.02	H	Pass

<b>Band :</b>	CDMA2000 BC1	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	1xEV-DO Rev. 0 (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Vertical						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3700	-33.70	-13	-20.70	-49.78	-39.85	2.59	8.74	V	Pass
5555	-34.46	-13	-21.46	-54.74	-42.12	3.04	10.70	V	Pass
7403	-41.12	-13	-28.12	-68.13	-49.86	3.28	12.02	V	Pass



<Middle Channel>

<b>Band :</b>	GSM850				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	GPRS class 8 Link (GMSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Horizontal			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1672	-29.16	-13	-16.16	-36.01	-30.88	1.62	5.49	H	Pass
2509	-34.25	-13	-21.25	-45.32	-36.22	2.1	6.22	H	Pass
3346	-34.22	-13	-21.22	-46.15	-37.11	3.03	8.07	H	Pass
4180	-35.34	-13	-22.34	-49.45	-39.88	2.52	9.21	H	Pass
5015	-38.78	-13	-25.78	-54.61	-44.23	3.1	10.70	H	Pass
5855	-35.89	-13	-22.89	-55.54	-41.13	2.92	10.31	H	Pass
6690	-43.04	-13	-30.04	-65.98	-48.66	3.38	11.15	H	Pass

<b>Band :</b>	GSM850				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	GPRS class 8 Link (GMSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Vertical			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1672	-28.39	-13	-15.39	-37.18	-30.11	1.62	5.49	V	Pass
2509	-31.77	-13	-18.77	-43.52	-33.74	2.1	6.22	V	Pass
3346	-37.22	-13	-24.22	-50.74	-40.11	3.03	8.07	V	Pass
4180	-35.23	-13	-22.23	-50.09	-39.77	2.52	9.21	V	Pass
5015	-40.58	-13	-27.58	-56.61	-46.03	3.1	10.70	V	Pass
5855	-37.53	-13	-24.53	-56.76	-42.77	2.92	10.31	V	Pass



<b>Band :</b>	GSM850				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	EDGE class 8 Link (8PSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Horizontal			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1672	-29.56	-13	-16.56	-36.86	-31.28	1.62	5.49	H	Pass
2509	-37.59	-13	-24.59	-48.69	-39.56	2.1	6.22	H	Pass
3346	-35.27	-13	-22.27	-47.19	-38.16	3.03	8.07	H	Pass
4180	-34.68	-13	-21.68	-49	-39.22	2.52	9.21	H	Pass
5015	-42.89	-13	-29.89	-58.75	-48.34	3.1	10.70	H	Pass
5855	-37.31	-13	-24.31	-56.82	-42.55	2.92	10.31	H	Pass
6690	-44.40	-13	-31.40	-67.25	-50.02	3.38	11.15	H	Pass

<b>Band :</b>	GSM850				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	EDGE class 8 Link (8PSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Vertical			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1672	-33.63	-13	-20.63	-42.88	-35.35	1.62	5.49	V	Pass
2509	-35.44	-13	-22.44	-47.31	-37.41	2.1	6.22	V	Pass
3346	-37.67	-13	-24.67	-51.21	-40.56	3.03	8.07	V	Pass
4180	-36.74	-13	-23.74	-52.02	-41.28	2.52	9.21	V	Pass
5015	-46.66	-13	-33.66	-62.66	-52.11	3.1	10.70	V	Pass
5855	-34.76	-13	-21.76	-54.18	-40	2.92	10.31	V	Pass



<b>Band :</b>	GSM1900		<b>Temperature :</b>	21~24°C					
<b>Test Mode :</b>	GPRS class 8 Link (GMSK)		<b>Relative Humidity :</b>	51~53%					
<b>Test Engineer :</b>	Kyle Jhuang		<b>Polarization :</b>	Horizontal					
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3760	-26.37	-13	-13.37	-41.66	-32.67	2.51	8.81	H	Pass
5640	-27.62	-13	-14.62	-48.56	-35.33	2.99	10.70	H	Pass
7520	-35.22	-13	-22.22	-62.6	-43.75	3.59	12.12	H	Pass

<b>Band :</b>	GSM1900		<b>Temperature :</b>	21~24°C					
<b>Test Mode :</b>	GPRS class 8 Link (GMSK)		<b>Relative Humidity :</b>	51~53%					
<b>Test Engineer :</b>	Kyle Jhuang		<b>Polarization :</b>	Vertical					
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3760	-31.12	-13	-18.12	-47.87	-37.42	2.51	8.81	V	Pass
5640	-29.97	-13	-16.97	-50.59	-37.68	2.99	10.70	V	Pass
7520	-36.10	-13	-23.10	-63.27	-44.63	3.59	12.12	V	Pass



<b>Band :</b>	GSM1900				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	EDGE class 8 Link (8PSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Horizontal			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3760	-36.68	-13	-23.68	-52.05	-42.98	2.51	8.81	H	Pass
5640	-33.05	-13	-20.05	-53.98	-40.76	2.99	10.70	H	Pass
7520	-42.05	-13	-29.05	-69.54	-50.58	3.59	12.12	H	Pass

<b>Band :</b>	GSM1900				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	EDGE class 8 Link (8PSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Vertical			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3760	-37.82	-13	-24.82	-54.29	-44.12	2.51	8.81	V	Pass
5640	-32.32	-13	-19.32	-53.18	-40.03	2.99	10.70	V	Pass
7520	-42.71	-13	-29.71	-69.78	-51.24	3.59	12.12	V	Pass



<b>Band :</b>	WCDMA Band V				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Horizontal			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1669	-54.02	-13	-41.02	-60.89	-55.74	1.62	5.49	H	Pass
2506	-50.82	-13	-37.82	-61.95	-52.79	2.1	6.22	H	Pass
3346	-55.23	-13	-42.23	-67.38	-58.12	3.03	8.07	H	Pass

<b>Band :</b>	WCDMA Band V				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Vertical			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1675	-55.16	-13	-42.16	-64.2	-56.88	1.62	5.49	V	Pass
2512	-53.58	-13	-40.58	-64.68	-55.55	2.1	6.22	V	Pass
3346	-53.85	-13	-40.85	-67.35	-56.74	3.03	8.07	V	Pass
4180	-50.14	-13	-37.14	-65.29	-54.68	2.52	9.21	V	Pass



<b>Band :</b>	WCDMA Band IV					<b>Temperature :</b>	21~24°C		
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)					<b>Relative Humidity :</b>	51~53%		
<b>Test Engineer :</b>	Kyle Jhuang					<b>Polarization :</b>	Horizontal		
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3465	-46.35	-13	-33.35	-60.47	-50.18	4.48	8.31	H	Pass
5197	-49.25	-13	-36.25	-69.09	-53.89	5.332	9.98	H	Pass
6930	-43.89	-13	-30.89	-70.88	-49.13	6.1	11.34	H	Pass

<b>Band :</b>	WCDMA Band IV					<b>Temperature :</b>	21~24°C		
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)					<b>Relative Humidity :</b>	51~53%		
<b>Test Engineer :</b>	Kyle Jhuang					<b>Polarization :</b>	Vertical		
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3465	-44.44	-13	-31.44	-60.49	-48.27	4.48	8.31	V	Pass
5197	-49.70	-13	-36.70	-69.54	-54.34	5.332	9.98	V	Pass
6930	-45.50	-13	-32.50	-71.12	-50.74	6.1	11.34	V	Pass



<b>Band :</b>	WCDMA Band II	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Horizontal						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3756	-47.09	-13	-34.09	-62.42	-53.39	2.51	8.81	H	Pass
5644	-41.22	-13	-28.22	-62.02	-48.93	2.99	10.70	H	Pass
7520	-41.35	-13	-28.35	-68.61	-49.88	3.59	12.12	H	Pass

<b>Band :</b>	WCDMA Band II	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Vertical						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3756	-43.81	-13	-30.81	-60.17	-50.11	2.51	8.81	V	Pass
5644	-38.64	-13	-25.64	-59.4	-46.35	2.99	10.70	V	Pass
7520	-40.68	-13	-27.68	-67.83	-49.21	3.59	12.12	V	Pass



<b>Band :</b>	CDMA2000 BC0				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	1xEV-DO Rev. 0 (QPSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Horizontal			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1672	-28.76	-13	-15.76	-37.82	-30.48	1.62	5.49	H	Pass
2512	-38.03	-13	-25.03	-51.37	-40	2.1	6.22	H	Pass
3344	-35.12	-13	-22.12	-49.21	-38.01	3.03	8.07	H	Pass
4184	-32.45	-13	-19.45	-48.66	-36.99	2.52	9.21	H	Pass
5016	-44.96	-13	-31.96	-62.81	-50.41	3.1	10.70	H	Pass
5856	-31.52	-13	-18.52	-52.91	-36.76	2.92	10.31	H	Pass
6688	-37.82	-13	-24.82	-62.67	-43.44	3.38	11.15	H	Pass

<b>Band :</b>	CDMA2000 BC0				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	1xEV-DO Rev. 0 (QPSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Vertical			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1672	-32.49	-13	-19.49	-43.66	-34.21	1.62	5.49	V	Pass
2512	-31.35	-13	-18.35	-45.19	-33.32	2.1	6.22	V	Pass
3344	-33.85	-13	-20.85	-49.4	-36.74	3.03	8.07	V	Pass
4184	-36.04	-13	-23.04	-53.2	-40.58	2.52	9.21	V	Pass
5016	-45.57	-13	-32.57	-63.51	-51.02	3.1	10.70	V	Pass
5856	-31.90	-13	-18.90	-53.11	-37.14	2.92	10.31	V	Pass
6696	-39.36	-13	-26.36	-63.76	-44.98	3.38	11.15	V	Pass



<b>Band :</b>	CDMA2000 BC1	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	1xEV-DO Rev. 0 (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Horizontal						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3760	-52.71	-13	-39.71	-68.18	-59.01	2.51	8.81	H	Pass
5640	-49.17	-13	-36.17	-70.08	-56.88	2.99	10.70	H	Pass
7520	-42.13	-13	-29.13	-69.47	-50.66	3.59	12.12	H	Pass

<b>Band :</b>	CDMA2000 BC1	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	1xEV-DO Rev. 0 (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Vertical						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3760	-52.58	-13	-39.58	-68.93	-58.88	2.51	8.81	V	Pass
5640	-49.07	-13	-36.07	-69.88	-56.78	2.99	10.70	V	Pass
7520	-42.16	-13	-29.16	-69.22	-50.69	3.59	12.12	V	Pass



<High Channel>

<b>Band :</b>	GSM850					<b>Temperature :</b>	21~24°C		
<b>Test Mode :</b>	GPRS class 8 Link (GMSK)					<b>Relative Humidity :</b>	51~53%		
<b>Test Engineer :</b>	Kyle Jhuang					<b>Polarization :</b>	Horizontal		
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1696	-25.85	-13	-12.85	-32.73	-27.58	1.57	5.45	H	Pass
2544	-35.18	-13	-22.18	-46.36	-37.29	2.02	6.28	H	Pass
3392	-33.47	-13	-20.47	-45.52	-37.22	2.3	8.20	H	Pass
4240	-35.77	-13	-22.77	-49.77	-40.13	2.73	9.24	H	Pass
5096	-38.42	-13	-25.42	-54.53	-43.89	2.75	10.37	H	Pass
5944	-34.46	-13	-21.46	-54.14	-40	3.01	10.70	H	Pass
6792	-37.17	-13	-24.17	-60.44	-42.85	3.4	11.23	H	Pass

<b>Band :</b>	GSM850					<b>Temperature :</b>	21~24°C		
<b>Test Mode :</b>	GPRS class 8 Link (GMSK)					<b>Relative Humidity :</b>	51~53%		
<b>Test Engineer :</b>	Kyle Jhuang					<b>Polarization :</b>	Vertical		
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1696	-28.52	-13	-15.52	-37.62	-30.25	1.57	5.45	V	Pass
2544	-31.90	-13	-18.90	-43.58	-34.01	2.02	6.28	V	Pass
3392	-33.14	-13	-20.14	-46.54	-36.89	2.3	8.20	V	Pass
4240	-37.22	-13	-24.22	-52.27	-41.58	2.73	9.24	V	Pass
5096	-38.55	-13	-25.55	-54.7	-44.02	2.75	10.37	V	Pass
5944	-35.69	-13	-22.69	-55.17	-41.23	3.01	10.70	V	Pass
6792	-39.68	-13	-26.68	-62.15	-45.36	3.4	11.23	V	Pass



<b>Band :</b>	GSM850				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	EDGE class 8 Link (8PSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Horizontal			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1696	-28.69	-13	-15.69	-35.58	-30.42	1.57	5.45	H	Pass
2544	-37.90	-13	-24.90	-48.99	-40.01	2.02	6.28	H	Pass
3392	-36.37	-13	-23.37	-48.38	-40.12	2.3	8.20	H	Pass
4240	-36.09	-13	-23.09	-50.04	-40.45	2.73	9.24	H	Pass
5096	-43.92	-13	-30.92	-60.16	-49.39	2.75	10.37	H	Pass
5944	-35.33	-13	-22.33	-54.96	-40.87	3.01	10.70	H	Pass
6792	-38.43	-13	-25.43	-61.76	-44.11	3.4	11.23	H	Pass

<b>Band :</b>	GSM850				<b>Temperature :</b>	21~24°C			
<b>Test Mode :</b>	EDGE class 8 Link (8PSK)				<b>Relative Humidity :</b>	51~53%			
<b>Test Engineer :</b>	Kyle Jhuang				<b>Polarization :</b>	Vertical			
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1696	-31.92	-13	-18.92	-41.04	-33.65	1.57	5.45	V	Pass
2544	-33.35	-13	-20.35	-45.07	-35.46	2.02	6.28	V	Pass
3392	-35.60	-13	-22.60	-49.01	-39.35	2.3	8.20	V	Pass
4240	-39.52	-13	-26.52	-54.38	-43.88	2.73	9.24	V	Pass
5096	-43.26	-13	-30.26	-59.56	-48.73	2.75	10.37	V	Pass
5944	-34.28	-13	-21.28	-53.65	-39.82	3.01	10.70	V	Pass
6792	-40.74	-13	-27.74	-63.36	-46.42	3.4	11.23	V	Pass



<b>Band :</b>	GSM1900		<b>Temperature :</b>	21~24°C					
<b>Test Mode :</b>	GPRS class 8 Link (GMSK)		<b>Relative Humidity :</b>	51~53%					
<b>Test Engineer :</b>	Kyle Jhuang		<b>Polarization :</b>	Horizontal					
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3819	-27.94	-13	-14.94	-43.52	-34.35	2.47	8.88	H	Pass
5730	-30.00	-13	-17.00	-51.32	-37.7	3	10.70	H	Pass
7641	-38.90	-13	-25.90	-65.27	-47.68	3.43	12.21	H	Pass

<b>Band :</b>	GSM1900		<b>Temperature :</b>	21~24°C					
<b>Test Mode :</b>	GPRS class 8 Link (GMSK)		<b>Relative Humidity :</b>	51~53%					
<b>Test Engineer :</b>	Kyle Jhuang		<b>Polarization :</b>	Vertical					
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3819	-32.07	-13	-19.07	-48.51	-38.48	2.47	8.88	V	Pass
5730	-30.40	-13	-17.40	-51.26	-38.1	3	10.70	V	Pass
7640	-38.85	-13	-25.85	-65	-47.63	3.43	12.21	V	Pass



<b>Band :</b>	GSM1900	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	EDGE class 8 Link (8PSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Horizontal						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3819	-35.05	-13	-22.05	-50.69	-41.46	2.47	8.88	H	Pass
5730	-36.66	-13	-23.66	-57.75	-44.36	3	10.70	H	Pass
7640	-42.64	-13	-29.64	-69.3	-51.42	3.43	12.21	H	Pass

<b>Band :</b>	GSM1900	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	EDGE class 8 Link (8PSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Vertical						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3819	-39.60	-13	-26.60	-55.98	-46.01	2.47	8.88	V	Pass
5730	-36.45	-13	-23.45	-57.35	-44.15	3	10.70	V	Pass
7640	-43.52	-13	-30.52	-69.4	-52.3	3.43	12.21	V	Pass



<b>Band :</b>	WCDMA Band V	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Horizontal						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1696	-56.72	-13	-43.72	-63.62	-58.45	1.57	5.45	H	Pass
2544	-56.90	-13	-43.90	-68.07	-59.01	2.02	6.28	H	Pass
3392	-53.36	-13	-40.36	-65.53	-57.11	2.3	8.20	H	Pass

<b>Band :</b>	WCDMA Band V	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Vertical						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1696	-57.81	-13	-44.81	-66.87	-59.54	1.57	5.45	V	Pass
2544	-55.91	-13	-42.91	-67.62	-58.02	2.02	6.28	V	Pass
3392	-53.40	-13	-40.40	-66.69	-57.15	2.3	8.20	V	Pass



<b>Band :</b>	WCDMA Band IV	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Horizontal						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3504	-42.17	-13	-29.17	-56.49	-46	4.48	8.31	H	Pass
5254	-49.54	-13	-36.54	-68.53	-54.18	5.332	9.98	H	Pass
7011	-43.29	-13	-30.29	-69.89	-48.53	6.1	11.34	H	Pass

<b>Band :</b>	WCDMA Band IV	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Vertical						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3504	-40.84	-13	-27.84	-56.23	-44.67	4.48	8.31	V	Pass
5254	-49.48	-13	-36.48	-69.58	-54.12	5.332	9.98	V	Pass
7011	-44.11	-13	-31.11	-69.77	-49.35	6.1	11.34	V	Pass



<b>Band :</b>	WCDMA Band II	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Horizontal						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3819	-43.01	-13	-30.01	-58.7	-49.42	2.47	8.88	H	Pass
5730	-42.94	-13	-29.94	-64.07	-50.64	3	10.70	H	Pass
7641	-43.23	-13	-30.23	-69.48	-52.01	3.43	12.21	H	Pass

<b>Band :</b>	WCDMA Band II	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	RMC 12.2Kbps Link (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Vertical						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3819	-44.45	-13	-31.45	-60.88	-50.86	2.47	8.88	V	Pass
5730	-38.06	-13	-25.06	-58.91	-45.76	3	10.70	V	Pass
7640	-42.36	-13	-29.36	-68.47	-51.14	3.43	12.21	V	Pass



<b>Band :</b>	CDMA2000 BC0		<b>Temperature :</b>	21~24°C					
<b>Test Mode :</b>	1xEV-DO Rev. 0 (QPSK)		<b>Relative Humidity :</b>	51~53%					
<b>Test Engineer :</b>	Kyle Jhuang		<b>Polarization :</b>	Horizontal					
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1696	-34.80	-13	-21.80	-41.77	-36.53	1.57	5.45	H	Pass
2544	-32.89	-13	-19.89	-44.04	-35	2.02	6.28	H	Pass
3392	-34.26	-13	-21.26	-46.22	-38.01	2.3	8.20	H	Pass
4240	-39.62	-13	-26.62	-53.68	-43.98	2.73	9.24	H	Pass
5088	-44.39	-13	-31.39	-60.58	-49.86	2.75	10.37	H	Pass
5936	-32.32	-13	-19.32	-51.96	-37.86	3.01	10.70	H	Pass
6792	-40.80	-13	-27.80	-64.23	-46.48	3.4	11.23	H	Pass

<b>Band :</b>	CDMA2000 BC0		<b>Temperature :</b>	21~24°C					
<b>Test Mode :</b>	1xEV-DO Rev. 0 (QPSK)		<b>Relative Humidity :</b>	51~53%					
<b>Test Engineer :</b>	Kyle Jhuang		<b>Polarization :</b>	Vertical					
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1696	-32.52	-13	-19.52	-41.68	-34.25	1.57	5.45	V	Pass
2544	-32.99	-13	-19.99	-44.36	-35.1	2.02	6.28	V	Pass
3392	-33.12	-13	-20.12	-46.51	-36.87	2.3	8.20	V	Pass
4240	-38.65	-13	-25.65	-53.54	-43.01	2.73	9.24	V	Pass
5088	-44.74	-13	-31.74	-61.08	-50.21	2.75	10.37	V	Pass
5936	-32.87	-13	-19.87	-52.27	-38.41	3.01	10.70	V	Pass
6784	-41.67	-13	-28.67	-64.2	-47.35	3.4	11.23	V	Pass



<b>Band :</b>	CDMA2000 BC1	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	1xEV-DO Rev. 0 (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Horizontal						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3819	-35.43	-13	-22.43	-51.11	-41.84	2.47	8.88	H	Pass
5728	-31.30	-13	-18.30	-52.23	-39	3	10.70	H	Pass
7641	-42.23	-13	-29.23	-68.55	-51.01	3.43	12.21	H	Pass

<b>Band :</b>	CDMA2000 BC1	<b>Temperature :</b>	21~24°C						
<b>Test Mode :</b>	1xEV-DO Rev. 0 (QPSK)	<b>Relative Humidity :</b>	51~53%						
<b>Test Engineer :</b>	Kyle Jhuang	<b>Polarization :</b>	Vertical						
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3819	-37.84	-13	-24.84	-54.24	-44.25	2.47	8.88	V	Pass
5728	-28.05	-13	-15.05	-48.94	-35.75	3	10.70	V	Pass
7638	-42.15	-13	-29.15	-68.47	-50.93	3.43	12.21	V	Pass



## 4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
System Simulator	Rohde & Schwarz	CMU200	117591	N/A	Oct. 21, 2011	Sep. 05, 2013	Oct. 20, 2013	Conducted (TH02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101067	9kHz~30GHz	Nov. 30, 2012	Oct. 08, 2013~ Oct. 13, 2013	Nov. 29, 2013	Radiation (03CH07-HY)
Bilog Antenna	Teseq GmbH	CBL6112D	35379	30MHz~2GHz	Mar. 28, 2013	Oct. 08, 2013~ Oct. 13, 2013	Mar. 27, 2014	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	75962	1GHz~18GHz	Aug. 22, 2013	Oct. 08, 2013~ Oct. 13, 2013	Aug. 21, 2014	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	30MHz~1GHz	Feb. 26, 2013	Oct. 08, 2013~ Oct. 13, 2013	Feb. 25, 2014	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Dec. 01, 2012	Oct. 08, 2013~ Oct. 13, 2013	Nov. 30, 2013	Radiation (03CH07-HY)
Turn Table	ChainTek	ChainTek 3000	N/A	0 ~ 360 degree	N/A	Oct. 08, 2013~ Oct. 13, 2013	N/A	Radiation (03CH07-HY)
Antenna Mast	ChainTek	ChainTek 3000	N/A	N/A	N/A	Oct. 08, 2013~ Oct. 13, 2013	N/A	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA917025 1	15GHz- 40GHz	Oct. 03, 2013	Oct. 08, 2013~ Oct. 13, 2013	Oct. 02, 2014	Radiation (03CH07-HY)



## 5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.50
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