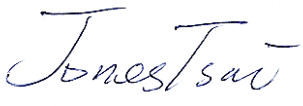
FCC RF Test Report

APPLICANT	:	Hewlett-Packard Company
EQUIPMENT	:	Tablet PC
BRAND NAME	:	hp
MODEL NAME	:	HSTNN-C78C
FCC ID	:	B94HNC78BWRXN
STANDARD	:	FCC 47 CFR Part 2, 22(H), 24(E), 27(L)
CLASSIFICATION	:	PCS Licensed Transmitter (PCB)

The product was received on Oct. 21, 2013 and testing was completed on Nov. 05, 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

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG392719-17	Rev. 01	Initial issue of report	Jul. 30, 2014

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 14.22 dB at 5552.000 MHz

Note: The "*" means the FG392719-17 report data followed the certified FG392719-03 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: HUAWEI Model Name: MU736
FCC ID	B94HNC78BWRXN
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA WLAN 11abgn / Bluetooth v4.0
EUT Stage	Identical Prototype

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

1.4 Product Specification subjective to this standard

Product Specification subjective to this standard	
Tx Frequency	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
Rx Frequency	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
Maximum Output Power to Antenna	GSM850 : 32.91 dBm GSM1900 : 30.23 dBm WCDMA Band V : 24.30 dBm WCDMA Band IV : 23.83 dBm WCDMA Band II : 23.98 dBm
Antenna Type	Main: PIFA Antenna Aux.: Coupling Antenna
Antenna Gain	Cellular Band: -1.34 dBi PCS Band: 0.56 dBi AWS Band: 0.56 dBi
Type of Modulation	GPRS: GMSK EDGE: GMSK / 8PSK WCDMA: QPSK (Uplink) HSDPA: QPSK (Uplink) HSUPA: QPSK (Uplink)

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	0.88
Part 22	GSM850 EDGE class 8	8PSK	0.22
Part 22	WCDMA Band V RMC 12.2Kbps	QPSK	0.12
Part 24	GSM1900 GPRS class 8	GMSK	1.20
Part 24	GSM1900 EDGE class 8	8PSK	0.43
Part 24	WCDMA Band II RMC 12.2Kbps	QPSK	0.28
Part 27	WCDMA Band IV RMC 12.2Kbps	QPSK	0.28

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.

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1st 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	
Test Site No.	**Sporton Site No.**	
	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 and WCDMA Band V.
2. 30 MHz to 18000 MHz for WCDMA Band IV.
3. 30 MHz to 19000 MHz for GSM1900 and WCDMA Band II.

Test Modes	
Band	**Radiated TCs**
GSM 850	■ GPRS class 8 Link ■ EDGE class 8 Link
GSM 1900	■ GPRS class 8 Link ■ EDGE class 8 Link
WCDMA Band V	■ RMC 12.2Kbps Link
WCDMA Band IV	■ RMC 12.2Kbps Link
WCDMA Band II	■ RMC 12.2Kbps Link

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,

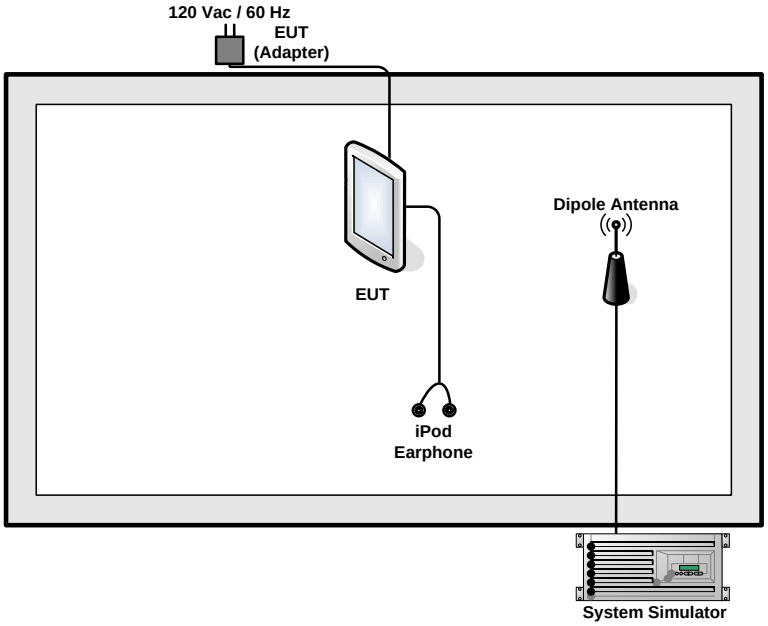
RMC 12.2Kbps mode for WCDMA band II, only these modes were used for all tests.

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	1880.0	1909.8
GPRS class 8	32.90	32.89	32.91	30.13	30.22	30.23
GPRS class 10	30.70	30.62	30.61	27.36	27.45	27.47
EGPRS class 8	26.99	26.89	26.84	25.62	25.68	25.74
EGPRS class 10	24.56	24.41	24.39	23.43	23.46	23.38
EGPRS class 11	23.01	22.88	22.88	21.90	21.81	21.87
EGPRS class 12	21.43	21.45	21.33	20.44	20.64	20.43

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	24.30	24.10	24.11	23.80	23.83	23.72	23.98	23.82	23.87
HSDPA Subtest-1	24.08	23.91	23.92	23.58	23.65	23.33	23.67	23.52	23.59
HSDPA Subtest-2	23.04	22.86	22.88	22.53	22.59	22.57	22.68	22.50	22.61
HSDPA Subtest-3	22.75	22.60	22.61	22.29	22.37	22.13	22.44	22.28	22.32
HSDPA Subtest-4	22.48	22.30	22.31	21.99	22.09	21.88	22.15	22.03	22.05
HSUPA Subtest-1	23.02	22.82	22.85	22.48	22.57	22.34	22.67	22.57	22.59
HSUPA Subtest-2	20.90	20.75	20.78	20.54	20.55	20.38	20.64	20.55	20.58
HSUPA Subtest-3	21.73	21.56	21.58	21.28	21.29	21.09	21.40	21.33	21.37
HSUPA Subtest-4	21.24	21.07	21.09	20.81	20.90	20.65	21.01	20.97	20.98
HSUPA Subtest-5	23.11	22.88	22.89	22.57	22.64	22.41	22.74	22.34	22.43

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

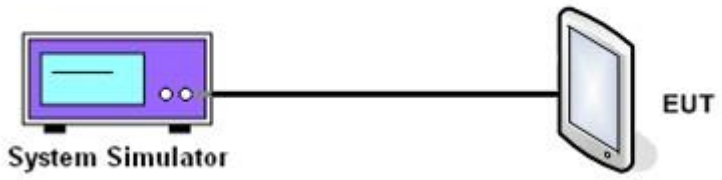
3.1.2 Measuring Instruments

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



3.1.6 Test Result of Conducted Output Power

Cellular Band (G_T - L_C = -1.34 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)	32.9	32.89	32.91	26.99	26.89	26.84	24.3	24.1	24.11
Conducted Power (Watts)	1.95	1.95	1.95	0.50	0.49	0.48	0.27	0.26	0.26
ERP(dBm)	29.41	29.40	29.42	23.50	23.40	23.35	20.81	20.61	20.62
ERP(Watts)	0.87	0.87	0.88	0.22	0.22	0.22	0.12	0.12	0.12

PCS Band (G_T - L_C = 0.56 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)	30.13	30.22	30.23	25.62	25.68	25.74	23.80	23.83	23.72
Conducted Power (Watts)	1.03	1.05	1.05	0.36	0.37	0.37	0.24	0.24	0.24
EIRP(dBm)	30.69	30.78	30.79	26.18	26.24	26.30	24.36	24.39	24.28
EIRP(Watts)	1.17	1.20	1.20	0.42	0.42	0.43	0.27	0.28	0.27

AWS Band (G_T - L_C = 0.56 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)	23.98	23.82	23.87
Conducted Power (Watts)	0.25	0.24	0.24
EIRP(dBm)	24.54	24.38	24.43
EIRP(Watts)	0.28	0.27	0.28

Note: maximum burst average power for GSM, and maximum average power for WCDMA.

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 (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (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 + 10log(P) dB below the transmitter power P(Watts)

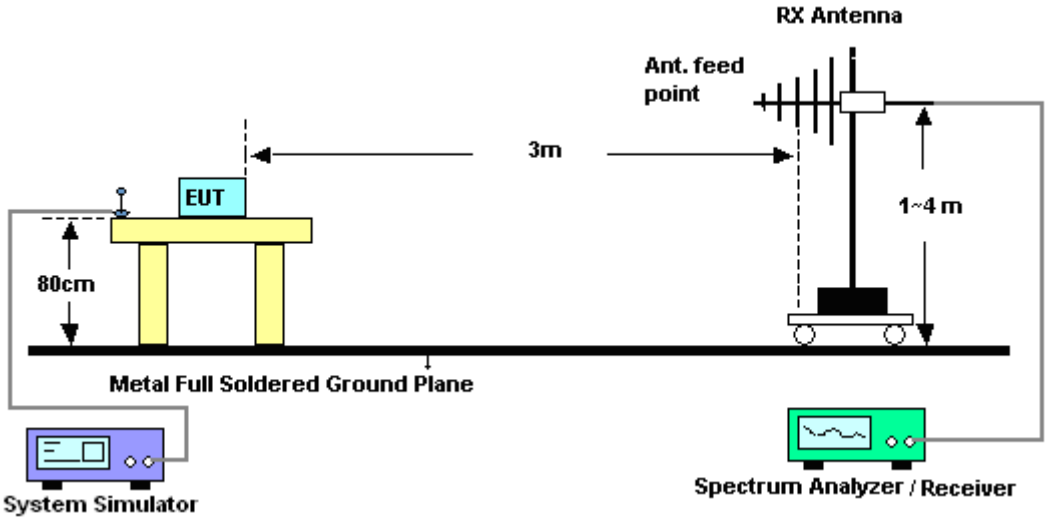
    = P(W) - [43 + 10log(P)] (dB)

    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)

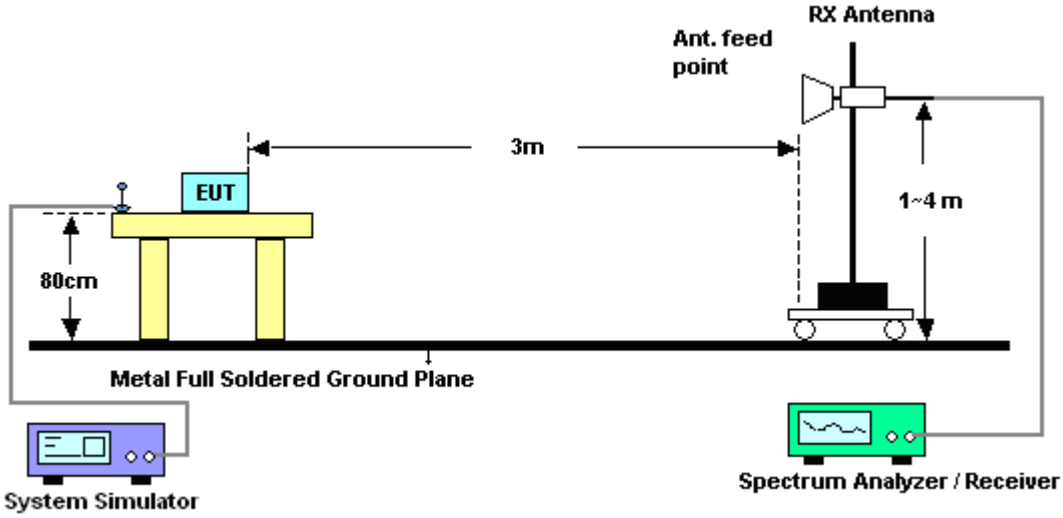
    = -13dBm.

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>

Band :	GSM850	**Temperature :**	21~24°C
Test Mode :	GPRS class 8 Link (GMSK)	**Relative Humidity :**	51~54%
Test Engineer :	Eric Shih	**Polarization :**	Horizontal
Remark :	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
1649	-31.25	-13	-18.25	-38.1	-33.1	1.53	5.53	H	Pass
2474	-29.26	-13	-16.26	-40.45	-31.2	2.06	6.15	H	Pass
3298	-42.60	-13	-29.60	-55	-45.9	2.48	7.93	H	Pass
4123	-38.02	-13	-25.02	-52.48	-42.5	2.54	9.17	H	Pass
4948	-38.73	-13	-25.73	-54.52	-44.1	2.74	10.26	H	Pass
5772	-40.32	-13	-27.32	-59.58	-45.9	2.97	10.70	H	Pass
6597	-38.47	-13	-25.47	-61.05	-44.2	3.2	11.08	H	Pass
7422	-41.58	-13	-28.58	-66.97	-48	3.47	12.04	H	Pass

Band :	GSM850	**Temperature :**	21~24°C
Test Mode :	GPRS class 8 Link (GMSK)	**Relative Humidity :**	51~54%
Test Engineer :	Eric Shih	**Polarization :**	Vertical
Remark :	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
1649	-30.25	-13	-17.25	-39.26	-32.1	1.53	5.53	V	Pass
2474	-35.76	-13	-22.76	-47.27	-37.7	2.06	6.15	V	Pass
3298	-44.40	-13	-31.40	-58.05	-47.7	2.48	7.93	V	Pass
4123	-37.52	-13	-24.52	-52.44	-42	2.54	9.17	V	Pass
4948	-40.53	-13	-27.53	-56.38	-45.9	2.74	10.26	V	Pass
5772	-34.52	-13	-21.52	-53.77	-40.1	2.97	10.70	V	Pass
6597	-36.37	-13	-23.37	-57.45	-42.1	3.2	11.08	V	Pass
7422	-40.21	-13	-27.21	-65.14	-46.63	3.47	12.04	V	Pass

Band :	GSM850	Temperature :	21~24°C
Test Mode :	EDGE class 8 Link (8PSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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
1649	-35.85	-13	-22.85	-42.6	-37.7	1.53	5.53	H	Pass
2474	-31.06	-13	-18.06	-42.14	-33	2.06	6.15	H	Pass
3298	-42.60	-13	-29.60	-54.84	-45.9	2.48	7.93	H	Pass
4123	-45.72	-13	-32.72	-60.17	-50.2	2.54	9.17	H	Pass
4948	-47.13	-13	-34.13	-62.76	-52.5	2.74	10.26	H	Pass
5772	-49.22	-13	-36.22	-68.48	-54.8	2.97	10.70	H	Pass
6597	-42.67	-13	-29.67	-65.15	-48.4	3.2	11.08	H	Pass

Band :	GSM850	Temperature :	21~24°C
Test Mode :	EDGE class 8 Link (8PSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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
1649	-33.35	-13	-20.35	-42.53	-35.2	1.53	5.53	V	Pass
2474	-38.56	-13	-25.56	-50.38	-40.5	2.06	6.15	V	Pass
3298	-45.90	-13	-32.90	-59.44	-49.2	2.48	7.93	V	Pass
4123	-47.62	-13	-34.62	-62.43	-52.1	2.54	9.17	V	Pass
4948	-44.73	-13	-31.73	-60.69	-50.1	2.74	10.26	V	Pass
5772	-45.32	-13	-32.32	-64.26	-50.9	2.97	10.70	V	Pass
6597	-38.17	-13	-25.17	-60.63	-43.9	3.2	11.08	V	Pass

Band :	GSM1900	Temperature :	21~24°C
Test Mode :	GPRS class 8 Link (GMSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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	-43.57	-13	-30.57	-58.62	-49.72	2.59	8.74	H	Pass
5552	-39.63	-13	-26.63	-60.12	-47.29	3.04	10.70	H	Pass
7400	-40.91	-13	-27.91	-68.36	-49.65	3.28	12.02	H	Pass

Band :	GSM1900	Temperature :	21~24°C
Test Mode :	GPRS class 8 Link (GMSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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	-46.32	-13	-33.32	-62.39	-52.47	2.59	8.74	V	Pass
5552	-40.26	-13	-27.26	-60.43	-47.92	3.04	10.70	V	Pass
7400	-42.14	-13	-29.14	-69.02	-50.88	3.28	12.02	V	Pass

Band :	GSM1900	Temperature :	21~24°C
Test Mode :	EDGE class 8 Link (8PSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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	-34.87	-13	-21.87	-50.01	-41.02	2.59	8.74	H	Pass
5552	-27.22	-13	-14.22	-47.54	-34.88	3.04	10.70	H	Pass
7400	-31.72	-13	-18.72	-59.3	-40.46	3.28	12.02	H	Pass

Band :	GSM1900	Temperature :	21~24°C
Test Mode :	EDGE class 8 Link (8PSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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	-39.81	-13	-26.81	-56.08	-45.96	2.59	8.74	V	Pass
5552	-27.49	-13	-14.49	-47.85	-35.15	3.04	10.70	V	Pass
7400	-37.27	-13	-24.27	-64.23	-46.01	3.28	12.02	V	Pass

Band :	WCDMA Band V	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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
1651	-45.37	-13	-32.37	-52.01	-47.22	1.53	5.53	H	Pass
2482	-48.54	-13	-35.54	-59.51	-50.48	2.06	6.15	H	Pass
3301	-54.39	-13	-41.39	-66.11	-57.69	2.48	7.93	H	Pass

Band :	WCDMA Band V	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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
1651	-43.00	-13	-30.00	-51.77	-44.85	1.53	5.53	V	Pass
2482	-43.42	-13	-30.42	-55.02	-45.36	2.06	6.15	V	Pass
3302	-53.36	-13	-40.36	-66.81	-56.66	2.48	7.93	V	Pass

Band :	WCDMA Band IV	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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	-32.37	-13	-19.37	-46.81	-36.2	4.48	8.31	H	Pass
5140	-39.26	-13	-26.26	-57.8	-43.9	5.332	9.98	H	Pass
6848	-43.86	-13	-30.86	-69.73	-49.1	6.1	11.34	H	Pass

Band :	WCDMA Band IV	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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	-32.27	-13	-19.27	-48.85	-36.1	4.48	8.31	V	Pass
5140	-38.56	-13	-25.56	-57.48	-43.2	5.332	9.98	V	Pass
6848	-43.86	-13	-30.86	-69.26	-49.1	6.1	11.34	V	Pass

Band :	WCDMA Band II	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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
3704	-42.95	-13	-29.95	-58.14	-49.1	2.59	8.74	H	Pass
5552	-46.44	-13	-33.44	-66.94	-54.1	3.04	10.70	H	Pass
7408	-41.36	-13	-28.36	-68.68	-50.1	3.28	12.02	H	Pass

Band :	WCDMA Band II	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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	-44.35	-13	-31.35	-60.82	-50.5	2.59	8.74	V	Pass
5556	-43.84	-13	-30.84	-64.29	-51.5	3.04	10.70	V	Pass
7412	-41.66	-13	-28.66	-68.92	-50.4	3.28	12.02	V	Pass

<Middle Channel>

Band :	GSM850	**Temperature :**	21~24°C
Test Mode :	GPRS class 8 Link (GMSK)	**Relative Humidity :**	51~54%
Test Engineer :	Eric Shih	**Polarization :**	Horizontal
Remark :	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	-29.08	-13	-16.08	-35.94	-30.8	1.62	5.49	H	Pass
2509	-32.13	-13	-19.13	-43.45	-34.1	2.1	6.22	H	Pass
3345	-42.81	-13	-29.81	-54.7	-45.7	3.03	8.07	H	Pass
4182	-37.56	-13	-24.56	-51.71	-42.1	2.52	9.21	H	Pass
5018	-39.65	-13	-26.65	-55.58	-45.1	3.1	10.70	H	Pass
5854	-41.26	-13	-28.26	-60.7	-46.5	2.92	10.31	H	Pass
6691	-39.48	-13	-26.48	-62.84	-45.1	3.38	11.15	H	Pass
7527	-42.35	-13	-29.35	-62.77	-48.8	3.52	12.12	H	Pass

Band :	GSM850	**Temperature :**	21~24°C
Test Mode :	GPRS class 8 Link (GMSK)	**Relative Humidity :**	51~54%
Test Engineer :	Eric Shih	**Polarization :**	Vertical
Remark :	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	-32.58	-13	-19.58	-41.91	-34.3	1.62	5.49	V	Pass
2509	-38.91	-13	-25.91	-50.66	-40.88	2.1	6.22	V	Pass
3345	-42.51	-13	-29.51	-56.15	-45.4	3.03	8.07	V	Pass
4182	-33.96	-13	-20.96	-48.94	-38.5	2.52	9.21	V	Pass
5018	-39.55	-13	-26.55	-55.79	-45	3.1	10.70	V	Pass
5854	-35.96	-13	-22.96	-55.42	-41.2	2.92	10.31	V	Pass
6691	-35.78	-13	-22.78	-58.12	-41.4	3.38	11.15	V	Pass
7527	-38.95	-13	-25.95	-64.21	-45.4	3.52	12.12	V	Pass

Band :	GSM850	Temperature :	21~24°C
Test Mode :	EDGE class 8 Link (8PSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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	-30.48	-13	-17.48	-37.52	-32.2	1.62	5.49	H	Pass
2509	-33.33	-13	-20.33	-44.55	-35.3	2.1	6.22	H	Pass
3345	-41.21	-13	-28.21	-53.1	-44.1	3.03	8.07	H	Pass
4182	-44.66	-13	-31.66	-58.1	-49.2	2.52	9.21	H	Pass
5018	-40.15	-13	-27.15	-55.93	-45.6	3.1	10.70	H	Pass
5854	-45.96	-13	-32.96	-65.84	-51.2	2.92	10.31	H	Pass
6691	-42.48	-13	-29.48	-65.7	-48.1	3.38	11.15	H	Pass

Band :	GSM850	Temperature :	21~24°C
Test Mode :	EDGE class 8 Link (8PSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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	-36.98	-13	-23.98	-46.02	-38.7	1.62	5.49	V	Pass
2509	-32.83	-13	-19.83	-44.51	-34.8	2.1	6.22	V	Pass
3345	-43.51	-13	-30.51	-57.15	-46.4	3.03	8.07	V	Pass
4182	-47.16	-13	-34.16	-62.21	-51.7	2.52	9.21	V	Pass
5018	-41.65	-13	-28.65	-57.37	-47.1	3.1	10.70	V	Pass
5854	-40.96	-13	-27.96	-60.63	-46.2	2.92	10.31	V	Pass
6691	-37.58	-13	-24.58	-59.88	-43.2	3.38	11.15	V	Pass

Band :	GSM1900	Temperature :	21~24°C
Test Mode :	GPRS class 8 Link (GMSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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	-42.06	-13	-29.06	-57.44	-48.36	2.51	8.81	H	Pass
5640	-41.47	-13	-28.47	-62.37	-49.18	2.99	10.70	H	Pass
7520	-38.58	-13	-25.58	-65.86	-47.11	3.59	12.12	H	Pass

Band :	GSM1900	Temperature :	21~24°C
Test Mode :	GPRS class 8 Link (GMSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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	-41.71	-13	-28.71	-58.01	-48.01	2.51	8.81	V	Pass
5640	-38.12	-13	-25.12	-58.7	-45.83	2.99	10.70	V	Pass
7520	-38.09	-13	-25.09	-65.12	-46.62	3.59	12.12	V	Pass

Band :	GSM1900	Temperature :	21~24°C
Test Mode :	EDGE class 8 Link (8PSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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	-39.28	-13	-26.28	-54.78	-45.58	2.51	8.81	H	Pass
5640	-33.52	-13	-20.52	-54.3	-41.23	2.99	10.70	H	Pass
7520	-37.34	-13	-24.34	-64.38	-45.87	3.59	12.12	H	Pass

Band :	GSM1900	Temperature :	21~24°C
Test Mode :	EDGE class 8 Link (8PSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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	-41.33	-13	-28.33	-57.45	-47.63	2.51	8.81	V	Pass
5640	-31.57	-13	-18.57	-52.1	-39.28	2.99	10.70	V	Pass
7520	-40.16	-13	-27.16	-67.34	-48.69	3.59	12.12	V	Pass

Band :	WCDMA Band V	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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	-41.29	-13	-28.29	-48	-43.01	1.62	5.49	H	Pass
2512	-40.42	-13	-27.42	-51.8	-42.39	2.1	6.22	H	Pass
3338	-55.54	-13	-42.54	-67.36	-58.43	3.03	8.07	H	Pass

Band :	WCDMA Band V	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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	-43.22	-13	-30.22	-52	-44.94	1.62	5.49	V	Pass
2512	-38.88	-13	-25.88	-50.65	-40.85	2.1	6.22	V	Pass
3338	-54.47	-13	-41.47	-67.94	-57.36	3.03	8.07	V	Pass

Band :	WCDMA Band IV	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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
3464	-38.27	-13	-25.27	-52.84	-42.1	4.48	8.31	H	Pass
5200	-37.06	-13	-24.06	-55.96	-41.7	5.332	9.98	H	Pass
6931	-43.56	-13	-30.56	-69.83	-48.8	6.1	11.34	H	Pass

Band :	WCDMA Band IV	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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
3464	-36.67	-13	-23.67	-52.42	-40.5	4.48	8.31	V	Pass
5200	-36.56	-13	-23.56	-55.57	-41.2	5.332	9.98	V	Pass
6931	-44.16	-13	-31.16	-69.65	-49.4	6.1	11.34	V	Pass

Band :	WCDMA Band II	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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	-44.70	-13	-31.70	-60.25	-51	2.51	8.81	H	Pass
5644	-47.39	-13	-34.39	-68.33	-55.1	2.99	10.70	H	Pass
7520	-39.57	-13	-26.57	-67.27	-48.1	3.59	12.12	H	Pass

Band :	WCDMA Band II	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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	-46.00	-13	-33.00	-62.4	-52.3	2.51	8.81	V	Pass
5644	-47.69	-13	-34.69	-68.67	-55.4	2.99	10.70	V	Pass
7520	-38.67	-13	-25.67	-66.25	-47.2	3.59	12.12	V	Pass

<High Channel>

Band :	GSM850	**Temperature :**	21~24°C
Test Mode :	GPRS class 8 Link (GMSK)	**Relative Humidity :**	51~54%
Test Engineer :	Eric Shih	**Polarization :**	Horizontal
Remark :	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	-30.77	-13	-17.77	-37.93	-32.5	1.57	5.45	H	Pass
2544	-37.39	-13	-24.39	-48.72	-39.5	2.02	6.28	H	Pass
3393	-38.35	-13	-25.35	-50.37	-42.1	2.3	8.20	H	Pass
4241	-41.44	-13	-28.44	-55.64	-45.8	2.73	9.24	H	Pass
5089	-41.63	-13	-28.63	-58.03	-47.1	2.75	10.37	H	Pass
5938	-40.96	-13	-27.96	-60.96	-46.5	3.01	10.70	H	Pass
6786	-40.22	-13	-27.22	-64.06	-45.9	3.4	11.23	H	Pass
7634	-41.43	-13	-28.43	-65.81	-48	3.49	12.21	H	Pass

Band :	GSM850	**Temperature :**	21~24°C
Test Mode :	GPRS class 8 Link (GMSK)	**Relative Humidity :**	51~54%
Test Engineer :	Eric Shih	**Polarization :**	Vertical
Remark :	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	-37.77	-13	-24.77	-47.06	-39.5	1.57	5.45	V	Pass
2544	-42.09	-13	-29.09	-54.13	-44.2	2.02	6.28	V	Pass
3393	-39.65	-13	-26.65	-53.56	-43.4	2.3	8.20	V	Pass
4241	-39.54	-13	-26.54	-54.51	-43.9	2.73	9.24	V	Pass
5089	-39.53	-13	-26.53	-55.73	-45	2.75	10.37	V	Pass
5938	-37.66	-13	-24.66	-57.31	-43.2	3.01	10.70	V	Pass
6786	-32.82	-13	-19.82	-55.7	-38.5	3.4	11.23	V	Pass
7634	-41.03	-13	-28.03	-65.17	-47.6	3.49	12.21	V	Pass

Band :	GSM850	Temperature :	21~24°C
Test Mode :	EDGE class 8 Link (8PSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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	-35.05	-13	-22.05	-40.91	-36.78	1.57	5.45	H	Pass
2544	-40.81	-13	-27.81	-50.96	-42.92	2.02	6.28	H	Pass
3393	-40.67	-13	-27.67	-51.7	-44.42	2.3	8.20	H	Pass
4241	-45.74	-13	-32.74	-59.95	-50.1	2.73	9.24	H	Pass
5089	-48.03	-13	-35.03	-64.01	-53.5	2.75	10.37	H	Pass
5938	-46.26	-13	-33.26	-66.16	-51.8	3.01	10.70	H	Pass
6786	-44.42	-13	-31.42	-68.8	-50.1	3.4	11.23	H	Pass

Band :	GSM850	Temperature :	21~24°C
Test Mode :	EDGE class 8 Link (8PSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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	-36.47	-13	-23.47	-45.84	-38.2	1.57	5.45	V	Pass
2544	-41.39	-13	-28.39	-53.39	-43.5	2.02	6.28	V	Pass
3393	-39.45	-13	-26.45	-53.18	-43.2	2.3	8.20	V	Pass
4241	-47.74	-13	-34.74	-62.53	-52.1	2.73	9.24	V	Pass
5089	-44.03	-13	-31.03	-60.21	-49.5	2.75	10.37	V	Pass
5938	-44.16	-13	-31.16	-63.64	-49.7	3.01	10.70	V	Pass
6786	-35.12	-13	-22.12	-57.91	-40.8	3.4	11.23	V	Pass

Band :	GSM1900	Temperature :	21~24°C
Test Mode :	GPRS class 8 Link (GMSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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
3820	-47.81	-13	-34.81	-63.45	-54.22	2.47	8.88	H	Pass
5732	-45.40	-13	-32.40	-66.42	-53.1	3	10.70	H	Pass
7640	-40.36	-13	-27.36	-66.74	-49.14	3.43	12.21	H	Pass

Band :	GSM1900	Temperature :	21~24°C
Test Mode :	GPRS class 8 Link (GMSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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
3820	-47.60	-13	-34.60	-63.96	-54.01	2.47	8.88	V	Pass
5730	-48.17	-13	-35.17	-68.87	-55.87	3	10.70	V	Pass
7640	-39.24	-13	-26.24	-65.38	-48.02	3.43	12.21	V	Pass

Band :	GSM1900	Temperature :	21~24°C
Test Mode :	EDGE class 8 Link (8PSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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
3820	-39.60	-13	-26.60	-55.03	-46.01	2.47	8.88	H	Pass
5732	-40.22	-13	-27.22	-61.24	-47.92	3	10.70	H	Pass
7640	-41.25	-13	-28.25	-67.52	-50.03	3.43	12.21	H	Pass

Band :	GSM1900	Temperature :	21~24°C
Test Mode :	EDGE class 8 Link (8PSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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
3820	-45.33	-13	-32.33	-61.73	-51.74	2.47	8.88	V	Pass
5732	-41.51	-13	-28.51	-62.79	-49.21	3	10.70	V	Pass
7636	-39.99	-13	-26.99	-66.34	-48.77	3.43	12.21	V	Pass

Band :	WCDMA Band V	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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
1693	-45.37	-13	-32.37	-52.12	-47.1	1.57	5.45	H	Pass
2542	-53.14	-13	-40.14	-64.22	-55.25	2.02	6.28	H	Pass
3385	-54.42	-13	-41.42	-66.53	-58.17	2.3	8.20	H	Pass

Band :	WCDMA Band V	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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	-46.52	-13	-33.52	-55.7	-48.25	1.57	5.45	V	Pass
2536	-51.65	-13	-38.65	-63.31	-53.76	2.02	6.28	V	Pass
3385	-54.55	-13	-41.55	-67.71	-58.3	2.3	8.20	V	Pass

Band :	WCDMA Band IV	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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	-38.27	-13	-25.27	-52.92	-42.1	4.48	8.31	H	Pass
5260	-40.06	-13	-27.06	-59.36	-44.7	5.332	9.98	H	Pass
7012	-42.26	-13	-29.26	-68.96	-47.5	6.1	11.34	H	Pass

Band :	WCDMA Band IV	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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	-32.27	-13	-19.27	-48.02	-36.1	4.48	8.31	V	Pass
5260	-36.86	-13	-23.86	-56.28	-41.5	5.332	9.98	V	Pass
7012	-43.66	-13	-30.66	-68.86	-48.9	6.1	11.34	V	Pass

Band :	WCDMA Band II	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Horizontal
Remark :	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
3817	-44.69	-13	-31.69	-60.25	-51.1	2.47	8.88	H	Pass
5726	-48.40	-13	-35.40	-69.81	-56.1	3	10.70	H	Pass
7635	-40.22	-13	-27.22	-66.59	-49	3.43	12.21	H	Pass

Band :	WCDMA Band II	Temperature :	21~24°C
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	51~54%
Test Engineer :	Eric Shih	Polarization :	Vertical
Remark :	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
3817	-44.09	-13	-31.09	-60.61	-50.5	2.47	8.88	V	Pass
5726	-48.70	-13	-35.70	-69.87	-56.4	3	10.70	V	Pass
7635	-39.32	-13	-26.32	-66.08	-48.1	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	117995	N/A	Aug. 01, 2013	Nov. 05, 2013	Jul. 31, 2014	Conducted (TH02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101067	9kHz~30GHz	Nov. 30, 2012	Oct. 31, 2013 ~ Nov. 02, 2013	Nov. 29, 2013	Radiation (03CH07-HY)
Bilog Antenna	Schaffner	CBL6111C	2726	30MHz ~ 1GHz	Oct. 10, 2013	Oct. 31, 2013 ~ Nov. 02, 2013	Oct. 09, 2014	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	75962	1GHz~18GHz	Aug. 22, 2013	Oct. 31, 2013 ~ Nov. 02, 2013	Aug. 21, 2014	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	15GHz- 40GHz	Oct. 03, 2013	Oct. 31, 2013 ~ Nov. 02, 2013	Oct. 02, 2014	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	30MHz~1GHz	Feb. 26, 2013	Oct. 31, 2013 ~ Nov. 02, 2013	Feb. 25, 2014	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Dec. 01, 2012	Oct. 31, 2013 ~ Nov. 02, 2013	Nov. 30, 2013	Radiation (03CH07-HY)
Turn Table	ChainTek	ChainTek 3000	N/A	0 ~ 360 degree	N/A	Oct. 31, 2013 ~ Nov. 02, 2013	N/A	Radiation (03CH07-HY)
Antenna Mast	ChainTek	ChainTek 3000	N/A	N/A	N/A	Oct. 31, 2013 ~ Nov. 02, 2013	N/A	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**