



FCC/IC RF Test Report

APPLICANT : VERTU Corporation Limited
EQUIPMENT : Cellular Telephone
BRAND NAME : VERTU
MODEL NAME : ASTER
TYPE NAME (LTE) VM-01
TYPE NAME (WCDMA) VM-01C
FCC ID : P7QVM-01
IC : 4299A-VM01
STANDARD : 47 CFR Part 2, 22(H), 24(E), 27
IC RSS-130 issue 1
IC RSS-132 issue 3
IC RSS-133 issue 6
IC RSS-139 issue 2
IC RSS-199 issue 1
CLASSIFICATION : PCS Licensed Transmitter (PCB)

The product was received on Jul. 02, 2014 and testing was completed on Jul. 25, 2014. 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 the testing has shown the tested sample to be 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
FG462340B	Rev. 01	Initial issue of report	Jul. 25, 2014



SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	§2.1046	RSS-Gen(4.8) RSS-130(4.4) RSS-132 (5.4) RSS-133 (6.4) RSS-139 (6.4) RSS-199 (4.4)	Conducted Output Power	Reporting Only	PASS	-
-	§24.232(d)	RSS-130(4.4) RSS-132 (5.4) RSS-133 (6.4) RSS-139 (6.4)	Peak-to-Average Ratio	<13 dB	Not Performed	Please refer to Sporton Report No. : FG430469B
3.2	§22.913(a)(2)	RSS-132(5.4) SRSP-503(5.1.3)	Effective Radiated Power (Band 5)	ERP < 7 Watt	PASS	-
	§27.50(c)(10)	N/A	Effective Radiated Power (Band 17)	ERP < 3 Watt		
	N/A	RSS-130(4.4)	Equivalent Isotropic Radiated Power (Band 17)	EIRP < 5 Watt		
	§24.232(c) §27.50(h)(2)	RSS-133 (6.4) SRSP-510(5.1.2) RSS-199 (4.4)	Equivalent Isotropic Radiated Power (Band 2)(Band 25) (Band 7)	EIRP < 2Watt		
	§27.50(d)(4)	RSS-139 (6.4) SRSP-513(5.1.2)	Equivalent Isotropic Radiated Power (Band 4)	EIRP < 1Watt		
-	§2.1049 §22.917(b) §24.238(b) §27.53(h)(3) §27.53(m)(6)	RSS-GEN(4.6.1) RSS-132 (3.1) RSS-133 (3.1) RSS-139 (3.1) RSS-199 (4.2)	Occupied Bandwidth	Reporting Only	Not Performed	Please refer to Sporton Report No. : FG430469B
-	§2.1051 §22.917(a) §24.238(a) §27.53(g) §27.53(h) §27.53(m)(4)	RSS-GEN(4.9) RSS-132 (5.5) RSS-133 (6.5.1) RSS-130(4.6) RSS-139 (6.5) RSS-199 (4.5)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 17) (Band 25) (Band 7)	< 43+10log10(P[Watt])	Not Performed	Please refer to Sporton Report No. : FG430469B



Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
-	§2.1051 §22.917(a) §24.238(a) §27.53(g) §27.53(h)	RSS-GEN(4.9) RSS-132 (5.5) RSS-133 (6.5.1) RSS-130(4.6) RSS-139 (6.5)	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 25)	$< 43+10\log_{10}(P[\text{Watt}])$	Not Performed	Please refer to Sporton Report No. : FG430469B
	§2.1051 §27.53(m)(4)	RSS-GEN(4.9) RSS-199 (4.5)	Conducted Spurious Emission (Band 7)	$< 55+10\log_{10}(P[\text{Watt}])$		
3.3	§2.1053 §22.917(a) §24.238(a) §27.53(f) §27.53(g) §27.53(h)	RSS-GEN(4.9) RSS-132 (5.5) RSS-133 (6.5.1) RSS-130(4.6) RSS-139 (6.5)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 17)(Band 25)	$< 43+10\log_{10}(P[\text{Watt}])$	PASS	Under limit 14.25 dB at 10008.000 MHz
	§2.1053 §27.53(m)(4)	RSS-GEN(4.9) RSS-199 (4.5)	Radiated Spurious Emission (Band 7)	$< 55+10\log_{10}(P[\text{Watt}])$	PASS	
	§2.1055 §22.355 §24.235 §27.54	RSS-GEN(4.7) RSS-132(5.3) RSS-133(6.3) RSS-130(4.3) RSS-139 (6.3) RSS-199 (4.3)	Frequency Stability Temperature & Voltage	$< 2.5 \text{ ppm}$	Not Performed	Please refer to Sporton Report No. : FG430469B



1 General Description

1.1 Applicant

VERTU Corporation Limited

Beacon Hill Road, Church Crookham, Hampshire GU52 8DY, United Kingdom

1.2 Manufacturer

VERTU Corporation Limited

Beacon Hill Road, Church Crookham, Hampshire GU52 8DY, United Kingdom

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Cellular Telephone
Brand Name	VERTU
Model Name	ASTER
FCC ID	P7QVM-01
IC	4299A-VM01
Type Name (LTE)	VM-01
Type Name (WCDMA)	VM-01C
Sample 1	LTE Sku
Sample 2	WCDMA Sku
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE/NFC WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth v4.0 EDR/LE
HW Version	F2
SW Version	000C_1_420
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 are two different types of EUT sample #1, and sample #2. For WWAN bands, Sample 1 support GSM, WCDMA and LTE bands. Sample #2 only support GSM and WCDMA bands, and LTE band is disabled by software.

List of Accessory:

Specification of Accessory		
AC Adapter	Brand Name	VERTU
	Model Name	AC-32V
Battery	Brand Name	VERTU
	Model Name	BP-9V
Car Charger	Brand Name	VERTU
	Model Name	DC-30V
Portable Power Charger	Brand Name	VERTU
	Model Name	DC-15V
Earphone 1	Brand Name	VERTU
	Model Name	WH-4V
Earphone 2	Brand Name	VERTU
	Model Name	WH-5V
Earphone 3	Brand Name	VERTU
	Model Name	HP-1V
USB Cable	Brand Name	VERTU
	Model Name	CA-225DV
Wireless Charger	Brand Name	VERTU
	Model Name	AC-35V
Wireless Speaker	Brand Name	VERTU
	Model Name	SP-1V

1.4 Product Specification subjective to this standard

Product Specification subjective to this standard	
Tx Frequency	LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 7 : 2502.5 MHz ~ 2567.5 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz LTE Band 25 : 1850.7MHz ~ 1914.3 MHz
Rx Frequency	LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 7 : 2622.5MHz ~ 2687.5 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz LTE Band 25 : 1930.7MHz ~ 1994.3 MHz
Bandwidth	LTE Band 2 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 5 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 7 : 5MHz/ 10MHz / 15MHz / 20MHz LTE Band 17 : 5MHz / 10MHz LTE Band 25 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	LTE Band 2 : 23.24 dBm LTE Band 4 : 23.71 dBm LTE Band 5 : 22.55 dBm LTE Band 7 : 23.37 dBm LTE Band 17 : 22.80 dBm LTE Band 25 : 23.37 dBm
Antenna Type	Monopole + Parasitic Antenna
Type of Modulation	QPSK / 16QAM

1.5 Modification of EUT

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

1.6 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator

FCC Rule	System	Type of Modulation	BW	Maximum ERP/EIRP
Part 22	LTE Band 5	QPSK	1.4 MHz	0.07 W
Part 22	LTE Band 5	16QAM	1.4 MHz	0.05 W
Part 22	LTE Band 5	QPSK	3 MHz	-
Part 22	LTE Band 5	16QAM	3 MHz	-
Part 22	LTE Band 5	QPSK	5 MHz	-
Part 22	LTE Band 5	16QAM	5 MHz	-
Part 22	LTE Band 5	QPSK	10 MHz	0.07 W
Part 22	LTE Band 5	16QAM	10 MHz	0.05 W



FCC Rule	System	Type of Modulation	BW	Maximum ERP/EIRP
Part 24	LTE Band 2	QPSK	1.4 MHz	0.12 W
Part 24	LTE Band 2	16QAM	1.4 MHz	0.10 W
Part 24	LTE Band 2	QPSK	3 MHz	-
Part 24	LTE Band 2	16QAM	3 MHz	-
Part 24	LTE Band 2	QPSK	5 MHz	-
Part 24	LTE Band 2	16QAM	5 MHz	-
Part 24	LTE Band 2	QPSK	10 MHz	-
Part 24	LTE Band 2	16QAM	10 MHz	-
Part 24	LTE Band 2	QPSK	15 MHz	-
Part 24	LTE Band 2	16QAM	15 MHz	-
Part 24	LTE Band 2	QPSK	20 MHz	0.13 W
Part 24	LTE Band 2	16QAM	20 MHz	0.10 W
Part 24	LTE Band 25	QPSK	1.4 MHz	0.14 W
Part 24	LTE Band 25	16QAM	1.4 MHz	0.10 W
Part 24	LTE Band 25	QPSK	3 MHz	0.14 W
Part 24	LTE Band 25 With WPC	QPSK	3 MHz	0.13 W
Part 24	LTE Band 25	16QAM	3 MHz	0.11 W
Part 24	LTE Band 25	QPSK	5 MHz	-
Part 24	LTE Band 25	16QAM	5 MHz	-
Part 24	LTE Band 25	QPSK	10 MHz	-
Part 24	LTE Band 25	16QAM	10 MHz	-
Part 24	LTE Band 25	QPSK	15 MHz	-
Part 24	LTE Band 25	16QAM	15 MHz	-
Part 24	LTE Band 25	QPSK	20 MHz	0.12 W
Part 24	LTE Band 25	16QAM	20 MHz	0.09 W



FCC Rule	System	Type of Modulation	BW	Maximum ERP/EIRP
Part 27	LTE Band 4	QPSK	1.4 MHz	0.11 W
Part 27	LTE Band 4	16QAM	1.4 MHz	0.09 W
Part 27	LTE Band 4	QPSK	3 MHz	-
Part 27	LTE Band 4	16QAM	3 MHz	-
Part 27	LTE Band 4	QPSK	5MHz	-
Part 27	LTE Band 4	16QAM	5MHz	-
Part 27	LTE Band 4	QPSK	10MHz	-
Part 27	LTE Band 4	16QAM	10MHz	-
Part 27	LTE Band 4	QPSK	15MHz	-
Part 27	LTE Band 4	16QAM	15MHz	-
Part 27	LTE Band 4	QPSK	20MHz	0.11 W
Part 27	LTE Band 4	16QAM	20MHz	0.09 W
Part 27	LTE Band 17	QPSK	5MHz	0.08 W
Part 27	LTE Band 17	16QAM	5MHz	0.06 W
Part 27	LTE Band 17	QPSK	10MHz	0.08 W
Part 27	LTE Band 17	16QAM	10MHz	0.06 W
Part 27	LTE Band 7	QPSK	5MHz	0.11 W
Part 27	LTE Band 7	16QAM	5MHz	0.09 W
Part 27	LTE Band 7	QPSK	10MHz	-
Part 27	LTE Band 7	16QAM	10MHz	-
Part 27	LTE Band 7	QPSK	15MHz	-
Part 27	LTE Band 7	16QAM	15MHz	0.09 W
Part 27	LTE Band 7	QPSK	20MHz	0.10 W
Part 27	LTE Band 7	16QAM	20MHz	0.08 W

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 1 st 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.		IC Registration No.
	TH02-HY	03CH07-HY	4086B-1

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
- ♦ ANSI / TIA / EIA-603-C-2004
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v02r01
- ♦ IC RSS-130 Issue1
- ♦ IC RSS-132 Issue 3
- ♦ IC RSS-133 Issue 6
- ♦ IC RSS-139 Issue 2
- ♦ IC RSS-199 Issue 1
- ♦ IC RSS-Gen Issue 3
- ♦ NOTICE 2012-DRS0126

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.
3. Per the section 2.2.3 of Notice of 2012-DRS0126, "Receivers Excluded from Industry Canada Requirements", only radiocommunication receivers operating in stand-alone mode within the band 30-960 MHz and scanner receivers are subject to Industry Canada requirements.



2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

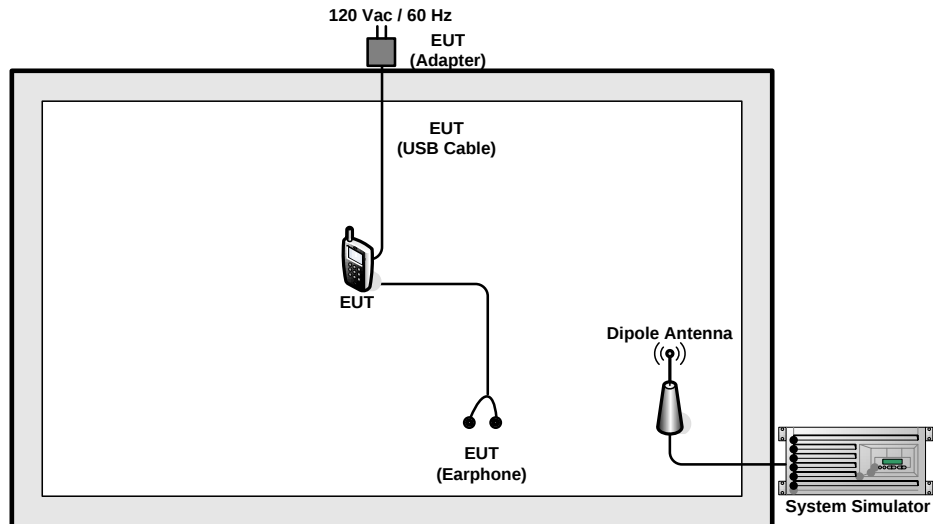
Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

Test Items	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Max. Output Power	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	25	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	5	✓	✓	✓	✓	-	-	✓	✓	✓	✓	✓	✓	✓	✓
	7	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	17	-	-	✓	✓	-	-	✓	✓	✓	✓	✓	✓	✓	✓

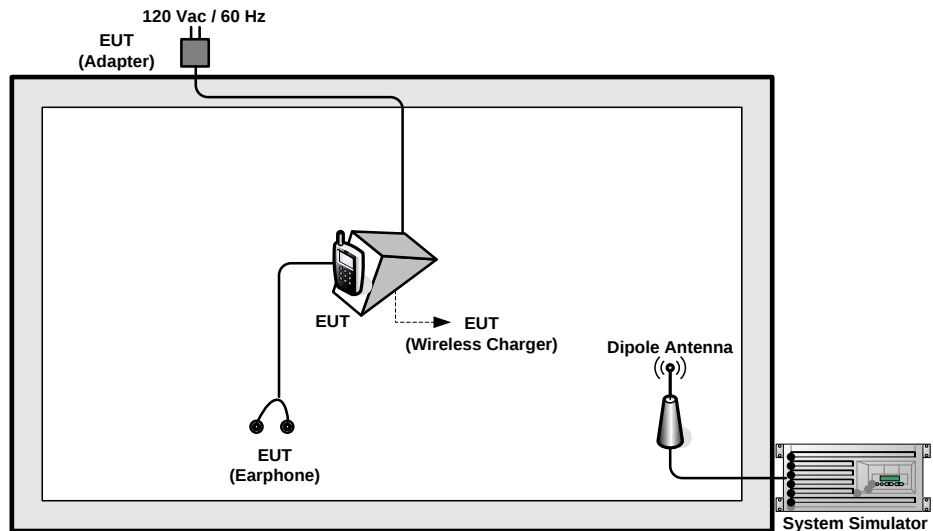
Test Items	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
E.R.P/ E.I.R.P.	2	v					v	v	v	v			v	v	v
	25	v	v				v	v	v	v					v
	25 (WPC)		v					v		v					v
	4	v					v	v	v	v			v	v	v
	5	v			v	-	-	v	v	v			v	v	v
	7	-	-	v		v (16QAM)	v	v	v	v			v	v	v
	17	-	-	v	v	-	-	v	v	v			v	v	v
Radiated Spurious Emission	2	v	v	v	v	v	v	v		v			v	v	v
	25	v	v	v	v	v	v	v		v			v	v	v
	4	v	v	v	v	v	v	v		v			v	v	v
	5	v	v	v	v	-	-	v		v			v	v	v
	7	-	-	v	v	v	v	v		v			v	v	v
	7 (WPC)	-	-				v	v		v			v	v	v
	17	-	-	v	v	-	-	v		v			v	v	v
Note	- The mark "v" means that this configuration is chosen for testing - The mark "-" means that this bandwidth is not supported. - For E.R.P/E.I.R.P. measurement, the widest bandwidth of each band is chosen for testing due to highest conducted power. Besides, the lowest bandwidth of each band is also measured for reporting only. - The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.														

2.2 Connection Diagram of Test System

<EUT with Adapter Mode>



<EUT with WPC charging mode>



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Example :

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

$$= 4.2 + 10 = 14.2 \text{ (dB)}$$

3 Test Result

3.1 Conducted Output Power Measurement

3.1.1 Description of the Conducted Output Power Measurement

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

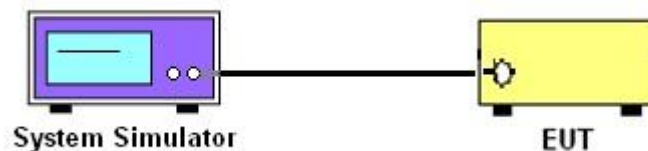
3.1.2 Measuring Instruments

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 the system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.

3.1.4 Test Setup





3.1.5 Test Result of Conducted Output Power

<LTE Band 5 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20450	20525	20600
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	22.32	22.32	22.41
10	QPSK	1	24	22.35	22.40	22.37
10	QPSK	1	49	22.31	22.39	22.47
10	QPSK	25	0	21.40	21.43	21.51
10	QPSK	25	12	21.43	21.38	21.42
10	QPSK	25	24	21.41	21.47	21.60
10	QPSK	50	0	21.41	21.39	21.57
10	16QAM	1	0	21.33	21.31	21.43
10	16QAM	1	24	21.32	21.37	21.35
10	16QAM	1	49	21.28	21.35	21.46
10	16QAM	25	0	20.51	20.44	20.54
10	16QAM	25	12	20.45	20.44	20.49
10	16QAM	25	24	20.44	20.55	20.57
10	16QAM	50	0	20.43	20.40	20.55
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	22.38	22.30	22.50
5	QPSK	1	12	22.26	22.40	22.44
5	QPSK	1	24	22.33	22.40	22.47
5	QPSK	12	0	21.45	21.38	21.54
5	QPSK	12	6	21.32	21.40	21.59
5	QPSK	12	11	21.34	21.46	21.58
5	QPSK	25	0	21.38	21.38	21.58
5	16QAM	1	0	21.30	21.28	21.45
5	16QAM	1	12	21.19	21.34	21.46
5	16QAM	1	24	21.26	21.34	21.42
5	16QAM	12	0	20.50	20.46	20.61
5	16QAM	12	6	20.38	20.43	20.59
5	16QAM	12	11	20.41	20.52	20.59
5	16QAM	25	0	20.48	20.42	20.58



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	22.37	22.32	22.49
3	QPSK	1	7	22.25	22.40	22.48
3	QPSK	1	14	22.29	22.39	22.52
3	QPSK	8	0	21.41	21.42	21.58
3	QPSK	8	4	21.35	21.50	21.54
3	QPSK	8	7	21.32	21.50	21.61
3	QPSK	15	0	21.47	21.41	21.56
3	16QAM	1	0	21.30	21.32	21.47
3	16QAM	1	7	21.15	21.38	21.44
3	16QAM	1	14	21.18	21.38	21.51
3	16QAM	8	0	20.47	20.47	20.60
3	16QAM	8	4	20.41	20.54	20.66
3	16QAM	8	7	20.43	20.58	20.63
3	16QAM	15	0	20.46	20.41	20.58
Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	22.41	22.43	22.55
1.4	QPSK	1	2	22.36	22.43	22.51
1.4	QPSK	1	5	22.31	22.44	22.52
1.4	QPSK	3	0	22.40	22.49	22.54
1.4	QPSK	3	1	22.43	22.43	22.51
1.4	QPSK	3	2	22.41	22.43	22.53
1.4	QPSK	6	0	21.44	21.56	21.59
1.4	16QAM	1	0	21.36	21.42	21.53
1.4	16QAM	1	2	21.36	21.44	21.55
1.4	16QAM	1	5	21.25	21.44	21.53
1.4	16QAM	3	0	21.39	21.44	21.55
1.4	16QAM	3	1	21.34	21.45	21.51
1.4	16QAM	3	2	21.35	21.44	21.56
1.4	16QAM	6	0	20.36	20.42	20.51



<LTE Band 2 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				18700	18900	19100
Frequency (MHz)				1860	1880	1900
20	QPSK	1	0	23.24	22.92	22.98
20	QPSK	1	49	23.12	22.93	22.89
20	QPSK	1	99	22.81	22.81	23.13
20	QPSK	50	0	22.33	22.05	21.90
20	QPSK	50	24	22.21	22.00	21.84
20	QPSK	50	49	22.03	21.90	21.94
20	QPSK	100	0	22.12	22.00	22.03
20	16QAM	1	0	22.18	21.85	21.89
20	16QAM	1	49	22.09	21.87	21.81
20	16QAM	1	99	21.77	21.74	22.10
20	16QAM	50	0	21.24	21.01	20.95
20	16QAM	50	24	21.17	20.95	20.92
20	16QAM	50	49	21.01	20.91	21.00
20	16QAM	100	0	21.06	21.02	20.98
Channel				18675	18900	19125
Frequency (MHz)				1857.5	1880	1902.5
15	QPSK	1	0	23.23	22.95	22.90
15	QPSK	1	37	23.21	22.94	22.79
15	QPSK	1	74	22.95	22.92	23.15
15	QPSK	36	0	22.27	21.91	21.88
15	QPSK	36	18	22.28	22.00	21.90
15	QPSK	36	37	22.11	22.04	22.05
15	QPSK	75	0	22.22	22.02	21.99
15	16QAM	1	0	22.16	21.91	21.80
15	16QAM	1	37	22.17	21.91	21.81
15	16QAM	1	74	21.92	21.84	22.10
15	16QAM	36	0	21.18	20.94	20.87
15	16QAM	36	18	21.20	20.96	20.88
15	16QAM	36	37	21.02	21.03	21.08
15	16QAM	75	0	21.18	20.96	21.04



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				18650	18900	19150
Frequency (MHz)				1855	1880	1905
10	QPSK	1	0	23.15	22.98	22.92
10	QPSK	1	24	23.20	22.96	22.92
10	QPSK	1	49	23.09	22.91	23.15
10	QPSK	25	0	22.21	21.94	21.92
10	QPSK	25	12	22.23	22.00	22.00
10	QPSK	25	24	22.25	21.99	22.07
10	QPSK	50	0	22.27	21.96	22.02
10	16QAM	1	0	22.16	21.93	21.84
10	16QAM	1	24	22.11	21.87	21.86
10	16QAM	1	49	22.07	21.84	22.08
10	16QAM	25	0	21.23	20.99	20.90
10	16QAM	25	12	21.24	21.04	21.06
10	16QAM	25	24	21.22	21.02	21.10
10	16QAM	50	0	21.20	20.99	20.98
Channel				18625	18900	19175
Frequency (MHz)				1852.5	1880	1907.5
5	QPSK	1	0	23.19	23.02	22.94
5	QPSK	1	12	23.15	22.93	23.12
5	QPSK	1	24	23.16	22.98	23.13
5	QPSK	12	0	22.23	21.95	22.08
5	QPSK	12	6	22.23	21.99	22.22
5	QPSK	12	11	22.23	22.02	22.19
5	QPSK	25	0	22.23	21.96	22.19
5	16QAM	1	0	22.09	21.99	21.91
5	16QAM	1	12	22.09	21.87	22.07
5	16QAM	1	24	22.09	21.86	22.08
5	16QAM	12	0	21.22	21.00	21.12
5	16QAM	12	6	21.20	21.02	21.23
5	16QAM	12	11	21.22	21.01	21.24
5	16QAM	25	0	21.21	21.01	21.22



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				18615	18900	19185
Frequency (MHz)				1851.5	1880	1908.5
3	QPSK	1	0	23.21	22.95	23.16
3	QPSK	1	7	23.19	22.96	23.16
3	QPSK	1	14	23.22	22.98	23.16
3	QPSK	8	0	22.23	21.96	22.19
3	QPSK	8	4	22.15	22.01	22.25
3	QPSK	8	7	22.19	22.00	22.23
3	QPSK	15	0	22.20	21.97	22.24
3	16QAM	1	0	22.10	21.90	22.09
3	16QAM	1	7	22.08	21.89	22.09
3	16QAM	1	14	22.13	21.94	22.15
3	16QAM	8	0	21.17	21.04	21.24
3	16QAM	8	4	21.18	20.99	21.22
3	16QAM	8	7	21.21	21.01	21.27
3	16QAM	15	0	21.16	21.01	21.20
Channel				18607	18900	19193
Frequency (MHz)				1850.7	1880	1909.3
1.4	QPSK	1	0	23.24	23.00	23.19
1.4	QPSK	1	2	23.19	22.97	23.16
1.4	QPSK	1	5	23.22	23.02	23.20
1.4	QPSK	3	0	23.20	23.06	23.22
1.4	QPSK	3	1	23.17	23.03	23.23
1.4	QPSK	3	2	23.18	23.02	23.16
1.4	QPSK	6	0	22.28	22.01	22.28
1.4	16QAM	1	0	22.16	21.93	22.15
1.4	16QAM	1	2	22.16	21.91	22.16
1.4	16QAM	1	5	22.15	21.90	22.13
1.4	16QAM	3	0	22.16	21.96	22.17
1.4	16QAM	3	1	22.17	21.93	22.16
1.4	16QAM	3	2	22.14	21.93	22.19
1.4	16QAM	6	0	21.07	20.94	21.15



<LTE Band 25 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				26140	26340	26590
Frequency (MHz)				1860	1880	1905
20	QPSK	1	0	23.37	23.17	23.02
20	QPSK	1	49	23.28	23.14	23.09
20	QPSK	1	99	23.07	22.96	22.40
20	QPSK	50	0	22.38	22.15	22.16
20	QPSK	50	24	22.32	22.24	22.22
20	QPSK	50	49	22.31	22.26	22.38
20	QPSK	100	0	22.35	22.21	22.17
20	16QAM	1	0	22.38	22.12	22.04
20	16QAM	1	49	22.25	22.13	22.06
20	16QAM	1	99	22.02	21.97	21.61
20	16QAM	50	0	21.37	21.16	21.17
20	16QAM	50	24	21.33	21.15	21.23
20	16QAM	50	49	21.28	21.18	21.31
20	16QAM	100	0	21.40	21.19	21.17
Channel				26115	26340	26615
Frequency (MHz)				1857.5	1880	1907.5
15	QPSK	1	0	23.35	23.15	23.02
15	QPSK	1	37	23.27	23.14	23.12
15	QPSK	1	74	23.22	23.08	22.45
15	QPSK	36	0	22.26	22.15	22.23
15	QPSK	36	18	22.26	22.20	22.55
15	QPSK	36	37	22.27	22.21	22.29
15	QPSK	75	0	22.33	22.20	22.22
15	16QAM	1	0	22.36	22.19	22.02
15	16QAM	1	37	22.24	22.14	22.08
15	16QAM	1	74	22.16	22.04	21.76
15	16QAM	36	0	21.27	21.11	21.24
15	16QAM	36	18	21.26	21.09	21.37
15	16QAM	36	37	21.29	21.13	21.21
15	16QAM	75	0	21.34	21.18	21.15



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				26090	26340	26640
Frequency (MHz)				1855	1880	1910
10	QPSK	1	0	23.33	23.20	23.09
10	QPSK	1	24	23.24	23.12	23.16
10	QPSK	1	49	23.27	23.03	22.50
10	QPSK	25	0	22.27	22.13	22.41
10	QPSK	25	12	22.26	22.17	22.29
10	QPSK	25	24	22.23	22.22	22.29
10	QPSK	50	0	22.27	22.23	22.31
10	16QAM	1	0	22.29	22.17	22.12
10	16QAM	1	24	22.14	22.09	22.20
10	16QAM	1	49	22.21	22.01	21.77
10	16QAM	25	0	21.36	21.14	21.46
10	16QAM	25	12	21.31	21.18	21.29
10	16QAM	25	24	21.35	21.22	21.23
10	16QAM	50	0	21.27	21.15	21.23
Channel				26065	26340	26665
Frequency (MHz)				1852.5	1880	1912.5
5	QPSK	1	0	23.32	23.10	23.17
5	QPSK	1	12	23.23	23.11	23.20
5	QPSK	1	24	23.20	23.15	22.50
5	QPSK	12	0	22.32	22.20	22.42
5	QPSK	12	6	22.25	22.14	22.28
5	QPSK	12	11	22.24	22.20	22.02
5	QPSK	25	0	22.22	22.16	22.22
5	16QAM	1	0	22.27	22.07	22.16
5	16QAM	1	12	22.12	22.05	22.14
5	16QAM	1	24	22.11	22.05	21.60
5	16QAM	12	0	21.41	21.18	21.45
5	16QAM	12	6	21.28	21.17	21.28
5	16QAM	12	11	21.29	21.19	21.07
5	16QAM	25	0	21.31	21.18	21.26



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				26055	26340	26675
Frequency (MHz)				1851.5	1880	1913.5
3	QPSK	1	0	23.33	23.16	23.22
3	QPSK	1	7	23.29	23.14	22.91
3	QPSK	1	14	23.22	23.13	22.53
3	QPSK	8	0	22.30	22.16	22.21
3	QPSK	8	4	22.31	22.13	21.95
3	QPSK	8	7	22.28	22.14	21.64
3	QPSK	15	0	22.33	22.20	21.90
3	16QAM	1	0	22.25	22.08	22.31
3	16QAM	1	7	22.22	22.03	22.04
3	16QAM	1	14	22.16	22.10	21.63
3	16QAM	8	0	21.37	21.20	21.29
3	16QAM	8	4	21.36	21.20	21.02
3	16QAM	8	7	21.41	21.21	20.72
3	16QAM	15	0	21.33	21.13	20.96
Channel				26047	26340	26683
Frequency (MHz)				1850.7	1880	1914.3
1.4	QPSK	1	0	23.34	23.18	22.76
1.4	QPSK	1	2	23.32	23.19	22.64
1.4	QPSK	1	5	23.35	23.19	22.28
1.4	QPSK	3	0	23.36	23.15	22.66
1.4	QPSK	3	1	23.35	23.18	22.60
1.4	QPSK	3	2	23.31	23.20	22.50
1.4	QPSK	6	0	22.33	22.24	21.62
1.4	16QAM	1	0	22.28	22.11	21.99
1.4	16QAM	1	2	22.28	22.12	21.91
1.4	16QAM	1	5	22.32	22.15	21.57
1.4	16QAM	3	0	22.27	22.13	21.75
1.4	16QAM	3	1	22.23	22.13	21.69
1.4	16QAM	3	2	22.23	22.14	21.58
1.4	16QAM	6	0	21.26	21.02	20.72



<LTE Band 4 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20050	20175	20300
Frequency (MHz)				1720	1732.5	1745
20	QPSK	1	0	23.23	23.71	23.09
20	QPSK	1	49	23.50	23.50	22.60
20	QPSK	1	99	23.40	23.07	22.53
20	QPSK	50	0	22.56	22.77	21.78
20	QPSK	50	24	22.58	22.60	21.68
20	QPSK	50	49	22.61	22.02	21.67
20	QPSK	100	0	22.59	22.41	21.71
20	16QAM	1	0	22.38	22.68	22.38
20	16QAM	1	49	22.44	22.47	21.74
20	16QAM	1	99	22.46	22.03	21.88
20	16QAM	50	0	21.60	21.77	20.79
20	16QAM	50	24	21.59	21.64	20.67
20	16QAM	50	49	21.60	21.02	20.68
20	16QAM	100	0	21.59	21.42	20.62
Channel				20025	20175	20325
Frequency (MHz)				1717.5	1732.5	1747.5
15	QPSK	1	0	23.19	23.65	22.84
15	QPSK	1	37	23.64	23.43	22.73
15	QPSK	1	74	23.58	22.95	22.76
15	QPSK	36	0	22.50	22.74	21.77
15	QPSK	36	18	22.58	22.57	21.68
15	QPSK	36	37	22.57	22.10	21.83
15	QPSK	75	0	22.61	22.54	21.66
15	16QAM	1	0	22.40	22.72	21.92
15	16QAM	1	37	22.47	22.46	21.78
15	16QAM	1	74	22.54	22.03	21.94
15	16QAM	36	0	21.49	21.70	20.72
15	16QAM	36	18	21.57	21.62	20.68
15	16QAM	36	37	21.54	21.14	20.85
15	16QAM	75	0	21.62	21.57	20.67



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20000	20175	20350
Frequency (MHz)				1715	1732.5	1750
10	QPSK	1	0	23.17	23.54	22.56
10	QPSK	1	24	23.70	23.50	22.84
10	QPSK	1	49	23.47	22.92	22.59
10	QPSK	25	0	22.48	22.73	21.75
10	QPSK	25	12	22.54	22.56	21.88
10	QPSK	25	24	22.55	22.38	21.91
10	QPSK	50	0	22.59	22.62	21.78
10	16QAM	1	0	22.40	22.52	21.81
10	16QAM	1	24	22.41	22.47	22.08
10	16QAM	1	49	22.44	22.23	21.96
10	16QAM	25	0	21.48	21.65	20.70
10	16QAM	25	12	21.63	21.63	20.87
10	16QAM	25	24	21.57	21.45	20.94
10	16QAM	50	0	21.59	21.69	20.79
Channel				19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5
5	QPSK	1	0	23.04	23.53	22.87
5	QPSK	1	12	23.37	23.47	22.78
5	QPSK	1	24	23.66	23.27	22.71
5	QPSK	12	0	22.25	22.81	21.94
5	QPSK	12	6	22.38	22.66	21.90
5	QPSK	12	11	22.54	22.54	21.85
5	QPSK	25	0	22.38	22.63	21.87
5	16QAM	1	0	22.26	22.49	22.11
5	16QAM	1	12	22.63	22.44	22.10
5	16QAM	1	24	22.44	22.43	21.90
5	16QAM	12	0	21.25	21.67	20.96
5	16QAM	12	6	21.39	21.63	20.94
5	16QAM	12	11	21.55	21.60	20.93
5	16QAM	25	0	21.39	21.62	20.92



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				19965	20175	20385
Frequency (MHz)				1711.5	1732.5	1753.5
3	QPSK	1	0	23.03	23.55	22.86
3	QPSK	1	7	23.27	23.50	22.70
3	QPSK	1	14	23.45	23.36	22.49
3	QPSK	8	0	22.12	22.72	21.88
3	QPSK	8	4	22.29	22.63	21.84
3	QPSK	8	7	22.36	22.52	21.74
3	QPSK	15	0	22.24	22.63	21.81
3	16QAM	1	0	22.25	22.48	22.15
3	16QAM	1	7	22.51	22.43	22.07
3	16QAM	1	14	22.62	22.48	21.89
3	16QAM	8	0	21.16	21.64	20.98
3	16QAM	8	4	21.33	21.64	20.96
3	16QAM	8	7	21.41	21.64	20.88
3	16QAM	15	0	21.24	21.60	20.90
Channel				19957	20175	20393
Frequency (MHz)				1710.7	1732.5	1754.3
1.4	QPSK	1	0	22.94	23.51	22.59
1.4	QPSK	1	2	23.10	23.52	22.61
1.4	QPSK	1	5	23.12	23.38	22.44
1.4	QPSK	3	0	23.02	23.48	22.57
1.4	QPSK	3	1	23.09	23.50	22.59
1.4	QPSK	3	2	23.12	23.49	22.55
1.4	QPSK	6	0	22.05	22.55	21.69
1.4	16QAM	1	0	22.16	22.77	21.91
1.4	16QAM	1	2	22.34	22.53	21.97
1.4	16QAM	1	5	22.35	22.49	21.81
1.4	16QAM	3	0	22.02	22.54	21.72
1.4	16QAM	3	1	22.09	22.54	21.76
1.4	16QAM	3	2	22.11	22.51	21.75
1.4	16QAM	6	0	21.11	21.52	20.87



<LTE Band 17 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				23780	23790	23800
Frequency (MHz)				709	710	711
10	QPSK	1	0	22.67	22.67	22.70
10	QPSK	1	24	22.70	22.72	22.73
10	QPSK	1	49	22.77	22.79	22.75
10	QPSK	25	0	21.85	21.75	21.80
10	QPSK	25	12	21.81	21.77	21.79
10	QPSK	25	24	21.82	21.82	21.80
10	QPSK	50	0	21.81	21.83	21.81
10	16QAM	1	0	21.65	21.66	21.67
10	16QAM	1	24	21.68	21.69	21.70
10	16QAM	1	49	21.69	21.69	21.72
10	16QAM	25	0	20.91	20.83	20.83
10	16QAM	25	12	20.82	20.84	20.85
10	16QAM	25	24	20.82	20.83	20.84
10	16QAM	50	0	20.82	20.86	20.82
Channel				23755	23790	23825
Frequency (MHz)				706.5	710	713.5
5	QPSK	1	0	22.78	22.77	22.65
5	QPSK	1	12	22.73	22.72	22.74
5	QPSK	1	24	22.80	22.77	22.79
5	QPSK	12	0	21.80	21.77	21.75
5	QPSK	12	6	21.77	21.79	21.84
5	QPSK	12	11	21.80	21.80	21.85
5	QPSK	25	0	21.82	21.78	21.81
5	16QAM	1	0	21.75	21.74	21.66
5	16QAM	1	12	21.69	21.71	21.71
5	16QAM	1	24	21.77	21.78	21.75
5	16QAM	12	0	20.82	20.79	20.83
5	16QAM	12	6	20.86	20.82	20.87
5	16QAM	12	11	20.85	20.85	20.85
5	16QAM	25	0	20.78	20.79	20.83



<LTE Band 7 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20050	20175	20300
Frequency (MHz)				1720	1732.5	1745
20	QPSK	1	0	22.83	23.37	22.38
20	QPSK	1	49	22.49	22.97	22.39
20	QPSK	1	99	22.94	22.79	22.06
20	QPSK	50	0	21.66	22.46	21.48
20	QPSK	50	24	21.55	22.19	21.45
20	QPSK	50	49	21.59	21.81	21.33
20	QPSK	100	0	21.65	22.04	21.31
20	16QAM	1	0	22.06	22.42	21.52
20	16QAM	1	49	21.70	22.28	21.70
20	16QAM	1	99	22.14	21.68	21.15
20	16QAM	50	0	20.65	21.51	20.55
20	16QAM	50	24	20.52	21.25	20.49
20	16QAM	50	49	20.54	20.85	20.38
20	16QAM	100	0	20.62	21.08	20.32
Channel				20025	20175	20325
Frequency (MHz)				1717.5	1732.5	1747.5
15	QPSK	1	0	22.66	23.35	22.38
15	QPSK	1	37	22.27	22.76	22.20
15	QPSK	1	74	22.42	22.70	22.01
15	QPSK	36	0	21.62	22.38	21.39
15	QPSK	36	18	21.42	22.01	21.37
15	QPSK	36	37	21.30	21.77	21.23
15	QPSK	75	0	21.48	22.00	21.27
15	16QAM	1	0	21.99	22.61	21.65
15	16QAM	1	37	21.56	22.06	21.50
15	16QAM	1	74	21.70	21.79	21.16
15	16QAM	36	0	20.67	21.46	20.50
15	16QAM	36	18	20.44	21.09	20.43
15	16QAM	36	37	20.30	20.85	20.29
15	16QAM	75	0	20.50	21.08	20.30



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20000	20175	20350
Frequency (MHz)				1715	1732.5	1750
10	QPSK	1	0	22.63	23.36	22.38
10	QPSK	1	24	22.38	22.75	22.12
10	QPSK	1	49	22.23	22.68	22.06
10	QPSK	25	0	21.62	22.20	21.32
10	QPSK	25	12	21.53	21.93	21.25
10	QPSK	25	24	21.40	21.79	21.14
10	QPSK	50	0	21.50	21.96	21.21
10	16QAM	1	0	21.98	22.55	21.62
10	16QAM	1	24	21.70	22.06	21.44
10	16QAM	1	49	21.53	21.88	21.18
10	16QAM	25	0	20.70	21.29	20.38
10	16QAM	25	12	20.59	21.01	20.32
10	16QAM	25	24	20.44	20.71	20.21
10	16QAM	50	0	20.57	20.67	20.28
Channel				19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5
5	QPSK	1	0	22.60	22.96	22.26
5	QPSK	1	12	22.44	22.66	22.05
5	QPSK	1	24	22.38	22.61	22.01
5	QPSK	12	0	21.67	22.01	21.32
5	QPSK	12	6	21.62	21.87	21.20
5	QPSK	12	11	21.57	21.82	21.40
5	QPSK	25	0	21.61	21.86	21.21
5	16QAM	1	0	21.93	22.28	21.34
5	16QAM	1	12	21.75	21.98	21.16
5	16QAM	1	24	21.68	21.92	21.04
5	16QAM	12	0	20.75	21.12	20.19
5	16QAM	12	6	20.70	20.96	20.08
5	16QAM	12	11	20.64	20.90	20.03
5	16QAM	25	0	20.69	20.95	20.10

Note: maximum average power for LTE.

3.2 Effective Radiated Power and Equivalent Isotropic Radiated Power Measurement

3.2.1 Description of the ERP/EIRP Measurement

Effective radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-C-2004, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r01. Mobile and portable (hand-held) stations operating are limited to average ERP of 7 watts with LTE band 5 and 3 watts with LTE band 17.

Equivalent isotropic radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-C-2004, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r01. Mobile and portable (hand-held) stations operating are limited to average EIRP of 2 watts with LTE band 2 / 25 / 7 and 1 watt with LTE band 4.

3.2.2 Measuring Instruments

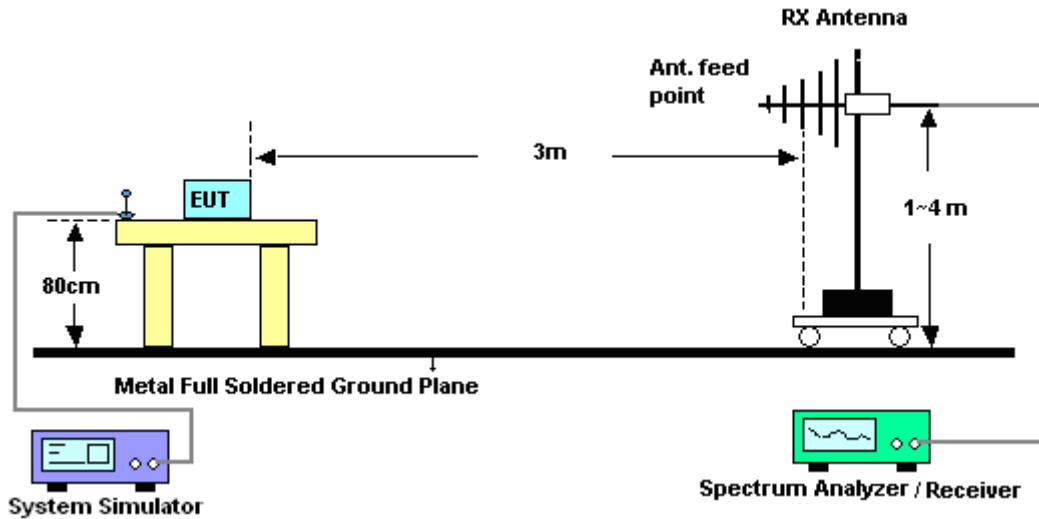
The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

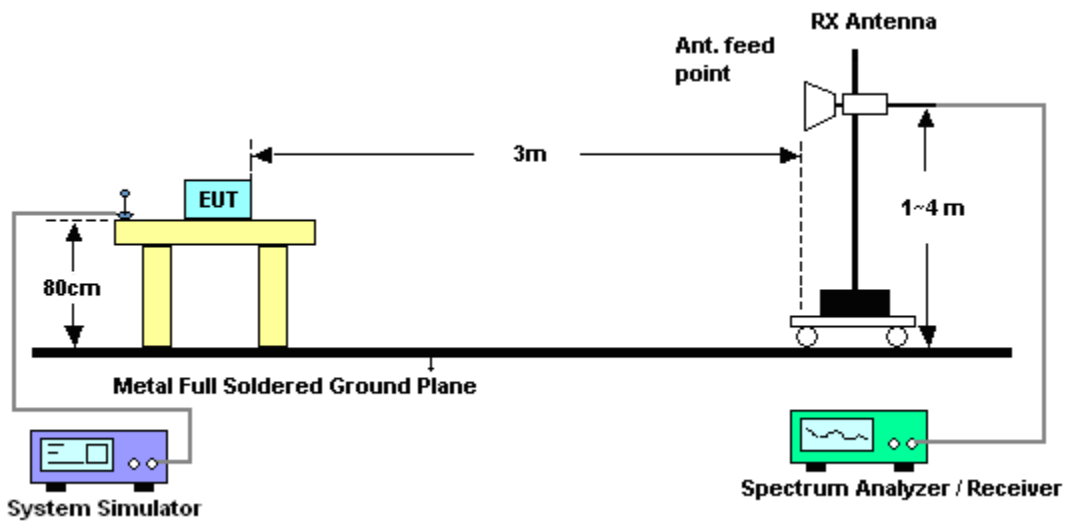
1. The EUT was placed on a non-conductive rotating platform 0.8 meters high in a semi-anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RMS detector per section 5. of KDB 971168 D01.
2. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power. The maximum emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
3. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to TIA/EIA-603-C. The EUT was replaced by dipole antenna (substitution antenna) at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain - Analyzer reading. Then the EUT's EIRP was calculated with the correction factor, $EIRP = LVL + \text{Correction factor}$ and $ERP = EIRP - 2.15$.

3.2.4 Test Setup

For Effective Radiated Power



For Equivalent Isotropic Radiated Power



3.2.5 Test Result of ERP/EIRP

LTE Band 5 Radiated Power ERP for BW 1.4MHz / QPSK				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
824.70	-20.90	31.54	8.49	0.01
836.50	-21.06	32.04	8.83	0.01
848.30	-20.94	32.59	9.50	0.01
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
824.70	-12.15	32.93	18.63	0.07
836.50	-12.21	32.82	18.46	0.07
848.30	-13.00	33.62	18.47	0.07

LTE Band 5 Radiated Power ERP for BW 1.4MHz / 16QAM				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
824.70	-21.77	31.54	7.62	0.01
836.50	-22.11	32.04	7.78	0.01
848.30	-21.99	32.59	8.45	0.01
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
824.70	-13.06	32.93	17.72	0.06
836.50	-13.33	32.82	17.34	0.05
848.30	-14.10	33.62	17.37	0.05

* ERP = LVL (dBm) + Correction Factor (dB) - 2.15

LTE Band 5 Radiated Power ERP for BW 10MHz / QPSK				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
829.00	-20.53	31.44	8.76	0.01
836.50	-20.80	32.04	9.09	0.01
844.00	-20.97	32.63	9.51	0.01
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
829.00	-12.34	32.78	18.29	0.07
836.50	-12.32	32.82	18.35	0.07
844.00	-12.92	33.40	18.33	0.07

LTE Band 5 Radiated Power ERP for BW 10MHz / 16QAM				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
829.00	-21.74	31.44	7.55	0.01
836.50	-21.98	32.04	7.91	0.01
844.00	-22.08	32.63	8.40	0.01
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
829.00	-13.50	32.78	17.13	0.05
836.50	-13.46	32.82	17.21	0.05
844.00	-14.04	33.40	17.21	0.05

* ERP = LVL (dBm) + Correction Factor (dB) - 2.15

LTE Band 2 Radiated Power EIRP for BW 1.4MHz / QPSK				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1850.70	-28.11	45.68	17.57	0.06
1880.00	-27.56	46.01	18.45	0.07
1909.30	-26.71	45.76	19.05	0.08
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1850.70	-28.35	49.18	20.83	0.12
1880.00	-29.47	50.42	20.95	0.12
1909.30	-28.22	48.94	20.72	0.12

LTE Band 2 Radiated Power EIRP for BW 1.4MHz / 16QAM				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1850.70	-29.11	45.68	16.57	0.05
1880.00	-28.53	46.01	17.48	0.06
1909.30	-27.62	45.76	18.14	0.07
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1850.70	-29.32	49.18	19.86	0.10
1880.00	-30.49	50.42	19.93	0.10
1909.30	-29.19	48.94	19.75	0.09

LTE Band 2 Radiated Power EIRP for BW 20MHz / QPSK				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1860.00	-29.51	46.88	17.37	0.05
1880.00	-28.05	46.01	17.96	0.06
1900.00	-27.98	46.57	18.59	0.07
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1860.00	-28.91	49.69	20.78	0.12
1880.00	-29.45	50.42	20.97	0.13
1900.00	-29.03	48.87	19.84	0.10

LTE Band 2 Radiated Power EIRP for BW 20MHz / 16QAM				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1860.00	-30.59	46.88	16.29	0.04
1880.00	-29.14	46.01	16.87	0.05
1900.00	-29.10	46.57	17.47	0.06
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1860.00	-30.04	49.69	19.65	0.09
1880.00	-30.59	50.42	19.83	0.10
1900.00	-30.13	48.87	18.74	0.07

LTE Band 25 Radiated Power EIRP for BW 1.4MHz / QPSK				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1914.30	-26.40	46.08	19.68	0.09
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1914.30	-27.86	49.21	21.35	0.14

LTE Band 25 Radiated Power EIRP for BW 1.4MHz / 16QAM				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1914.30	-27.57	46.08	18.51	0.07
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1914.30	-29.01	49.21	20.20	0.10



LTE Band 25 Radiated Power EIRP for BW 3MHz / QPSK				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1913.50	-26.73	46.45	19.72	0.09
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1913.50	-28.01	49.48	21.47	0.14

LTE Band 25 Radiated Power EIRP for BW 3MHz / 16QAM				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1913.50	-27.94	46.45	18.51	0.07
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1913.50	-29.26	49.48	20.22	0.11

LTE Band 25 Radiated Power EIRP for BW 20MHz / QPSK				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1905.00	-27.29	46.56	19.27	0.08
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1905.00	-27.40	48.13	20.73	0.12

LTE Band 25 Radiated Power EIRP for BW 20MHz / 16QAM				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1905.00	-28.33	46.56	18.23	0.07
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1905.00	-28.50	48.13	19.63	0.09

LTE Band 4 Radiated Power EIRP for BW 1.4MHz / QPSK				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1710.70	-25.02	43.43	18.41	0.07
1732.50	-24.81	43.34	18.53	0.07
1754.30	-25.26	43.65	18.39	0.07
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1710.70	-26.49	46.93	20.44	0.11
1732.50	-25.68	46.19	20.51	0.11
1754.30	-26.75	47.30	20.55	0.11

LTE Band 4 Radiated Power EIRP for BW 1.4MHz / 16QAM				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1710.70	-25.88	43.43	17.55	0.06
1732.50	-26.04	43.34	17.30	0.05
1754.30	-26.22	43.65	17.43	0.06
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1710.70	-27.32	46.93	19.61	0.09
1732.50	-26.69	46.19	19.50	0.09
1754.30	-27.69	47.30	19.61	0.09

LTE Band 4 Radiated Power EIRP for BW 20MHz / QPSK				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1720.00	-24.91	43.42	18.51	0.07
1732.50	-24.72	43.34	18.62	0.07
1745.00	-25.43	43.62	18.19	0.07
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1720.00	-25.87	46.18	20.31	0.11
1732.50	-25.79	46.19	20.40	0.11
1745.00	-26.27	46.54	20.27	0.11

LTE Band 4 Radiated Power EIRP for BW 20MHz / 16QAM				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1720.00	-25.78	43.42	17.64	0.06
1732.50	-26.23	43.34	17.11	0.05
1745.00	-26.50	43.62	17.12	0.05
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
1720.00	-26.70	46.18	19.48	0.09
1732.50	-26.87	46.19	19.32	0.09
1745.00	-27.42	46.54	19.12	0.08

LTE Band 17 Radiated Power ERP for BW 5MHz / QPSK				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
706.50	-21.30	30.84	7.39	0.005
710.00	-22.36	30.86	6.35	0.004
713.50	-21.59	30.81	7.07	0.005
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
706.50	-13.99	34.59	18.45	0.07
710.00	-13.37	34.03	18.51	0.07
713.50	-12.63	33.68	18.90	0.08

LTE Band 17 Radiated Power ERP for BW 5MHz / 16QAM				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
706.50	-22.40	30.84	6.29	0.004
710.00	-23.60	30.86	5.11	0.003
713.50	-22.71	30.81	5.95	0.004
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
706.50	-15.19	34.59	17.25	0.05
710.00	-14.53	34.03	17.35	0.05
713.50	-13.75	33.68	17.78	0.06

* ERP = LVL (dBm) + Correction Factor (dB) - 2.15

LTE Band 17 Radiated Power ERP for BW 10MHz / QPSK				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
709.00	-21.34	30.77	7.28	0.01
710.00	-21.74	30.86	6.97	0.01
711.00	-21.19	30.82	7.48	0.01
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
709.00	-13.48	34.16	18.53	0.07
710.00	-13.02	34.03	18.86	0.08
711.00	-12.78	33.94	19.01	0.08

LTE Band 17 Radiated Power ERP for BW 10MHz / 16QAM				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
709.00	-22.49	30.77	6.13	0.004
710.00	-22.87	30.86	5.84	0.004
711.00	-22.26	30.82	6.41	0.004
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)
709.00	-14.59	34.16	17.42	0.06
710.00	-14.17	34.03	17.71	0.06
711.00	-13.90	33.94	17.89	0.06

* ERP = LVL (dBm) + Correction Factor (dB) - 2.15

LTE Band 7 Radiated Power EIRP for BW 5MHz / QPSK				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
2502.50	-27.31	46.44	19.13	0.08
2535.00	-27.69	46.85	19.16	0.08
2567.50	-28.78	46.93	18.15	0.07
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
2502.50	-28.67	48.49	19.82	0.10
2535.00	-27.19	47.50	20.31	0.11
2567.50	-28.86	48.26	19.40	0.09

LTE Band 7 Radiated Power EIRP for BW 5MHz / 16QAM				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
2502.50	-28.22	46.44	18.22	0.07
2535.00	-28.66	46.85	18.19	0.07
2567.50	-29.47	46.93	17.46	0.06
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
2502.50	-29.55	48.49	18.94	0.08
2535.00	-28.16	47.50	19.34	0.09
2567.50	-29.56	48.26	18.70	0.07



LTE Band 7 Radiated Power EIRP for BW 15MHz / 16QAM				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
2507.50	-27.73	46.51	18.78	0.08
2535.00	-28.54	46.85	18.31	0.07
2562.50	-29.06	46.44	17.38	0.05
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
2507.50	-28.40	47.86	19.46	0.09
2535.00	-28.20	47.50	19.30	0.09
2562.50	-29.35	48.09	18.74	0.07

LTE Band 7 Radiated Power EIRP for BW 20MHz / QPSK				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
2510.00	-26.96	46.54	19.58	0.09
2535.00	-27.89	46.85	18.96	0.08
2560.00	-28.59	46.49	17.90	0.06
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
2510.00	-27.57	47.75	20.18	0.10
2535.00	-27.44	47.50	20.06	0.10
2560.00	-29.38	48.43	19.05	0.08

LTE Band 7 Radiated Power EIRP for BW 20MHz / 16QAM				
Horizontal Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
2510.00	-27.98	46.54	18.56	0.07
2535.00	-28.71	46.85	18.14	0.07
2560.00	-29.15	46.49	17.34	0.05
Vertical Polarization				
Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)
2510.00	-28.52	47.75	19.23	0.08
2535.00	-28.23	47.50	19.27	0.08
2560.00	-29.93	48.43	18.50	0.07



3.3 Radiated Spurious Emission Measurement

3.3.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. 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.

For Band 7

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 $55 + 10 \log (P)$ dB.

For LTE Band 17

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

1. The EUT was placed on a rotatable wooden table with 0.8 meter above 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 the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the 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. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

$$= -13\text{dBm.}$$

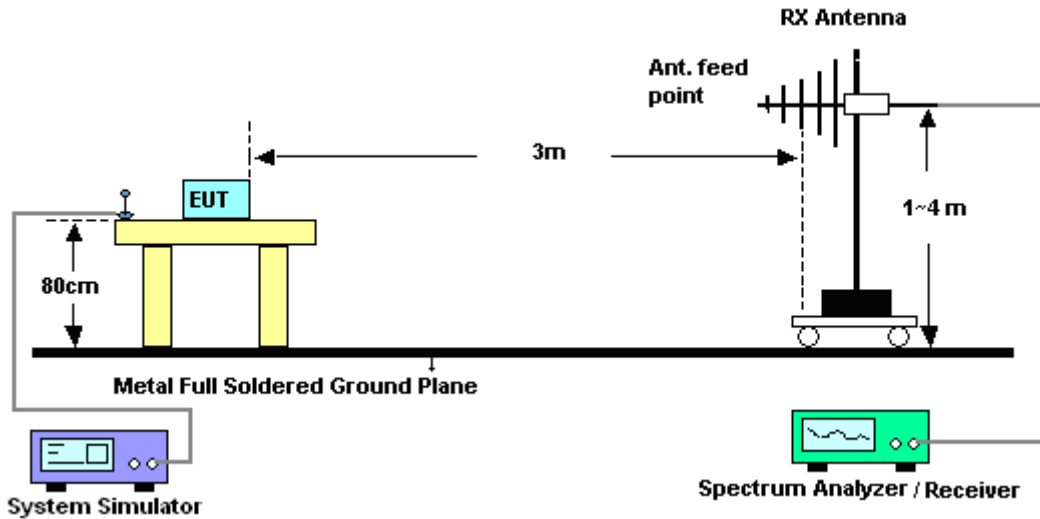
For Band 7

The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P(Watts)

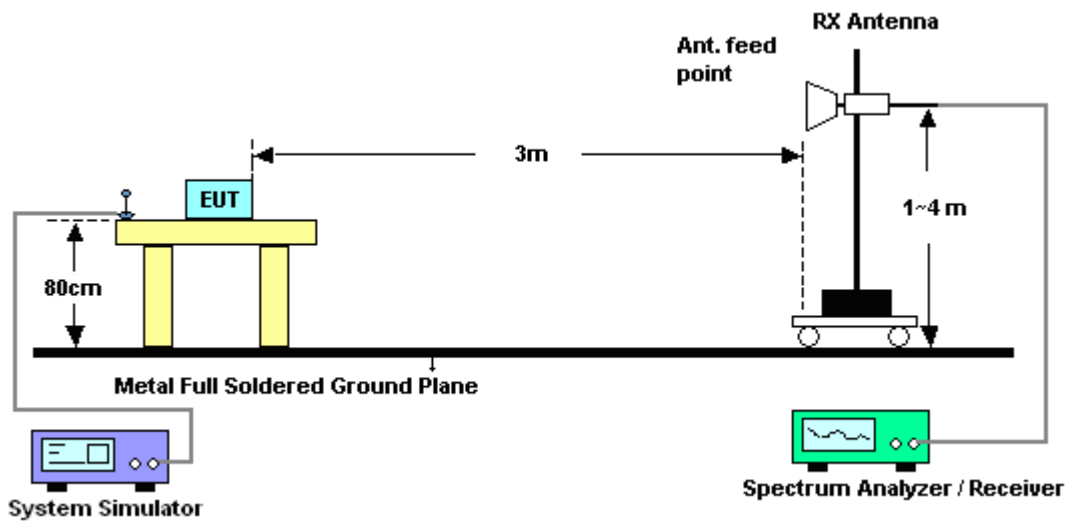
11. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
12. ERP (dBm) = EIRP - 2.15

3.3.4 Test Setup

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz





3.3.5 Test Result of Field Strength of Spurious Radiated

<Low Channel>

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1648	-56.50	-13	-43.50	-65.24	-60.39	1.61	5.50	H	Pass
2473	-43.90	-13	-30.90	-57.09	-48.05	2.09	6.24	H	Pass
3298	-53.34	-13	-40.34	-67.36	-58.35	3.08	8.09	H	Pass

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1649	-55.04	-13	-42.04	-66.01	-58.93	1.61	5.50	V	Pass
2473	-47.97	-13	-34.97	-61.61	-52.12	2.09	6.24	V	Pass
3298	-52.45	-13	-39.45	-68.08	-57.46	3.08	8.09	V	Pass

**<Middle Channel>**

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1673	-57.26	-13	-44.26	-66.17	-61.13	1.62	5.49	H	Pass
2509	-44.96	-13	-31.96	-58.27	-49.08	2.1	6.22	H	Pass
3346	-53.41	-13	-40.41	-67.52	-58.45	3.03	8.07	H	Pass

Band :	LTE Band 5				Temperature :	23~25°C			
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1673	-54.68	-13	-41.68	-65.8	-58.55	1.62	5.49	V	Pass
2509	-48.12	-13	-35.12	-61.88	-52.24	2.1	6.22	V	Pass
3346	-52.23	-13	-39.23	-67.86	-57.27	3.03	8.07	V	Pass



<High Channel>

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1696	-57.34	-13	-44.34	-66.33	-61.23	1.58	5.47	H	Pass
2545	-43.59	-13	-30.59	-56.87	-47.87	2.03	6.31	H	Pass
3393	-53.63	-13	-40.63	-67.83	-59.55	2.31	8.23	H	Pass

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1696	-54.12	-13	-41.12	-65.38	-58.01	1.58	5.47	V	Pass
2545	-49.03	-13	-36.03	-62.88	-53.31	2.03	6.31	V	Pass
3394	-52.17	-13	-39.17	-67.76	-58.09	2.31	8.23	V	Pass



<Low Channel>

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1648	-55.56	-13	-42.56	-64.34	-59.45	1.6	5.49	H	Pass
2473	-43.71	-13	-30.71	-56.89	-47.89	2.08	6.26	H	Pass
3297	-53.86	-13	-40.86	-67.84	-58.88	3.09	8.11	H	Pass

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1648	-54.67	-13	-41.67	-65.6	-58.56	1.6	5.49	V	Pass
2473	-45.80	-13	-32.80	-59.44	-49.98	2.08	6.26	V	Pass
3297	-51.69	-13	-38.69	-67.37	-56.71	3.09	8.11	V	Pass

**<Middle Channel>**

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1670	-57.08	-13	-44.08	-65.87	-60.95	1.62	5.49	H	Pass
2506	-45.44	-13	-32.44	-58.74	-49.56	2.1	6.22	H	Pass
3341	-53.55	-13	-40.55	-67.61	-58.59	3.03	8.07	H	Pass

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1670	-55.17	-13	-42.17	-66.27	-59.04	1.62	5.49	V	Pass
2509	-48.76	-13	-35.76	-62.45	-52.88	2.1	6.22	V	Pass
3341	-51.11	-13	-38.11	-66.66	-56.15	3.03	8.07	V	Pass



<High Channel>

Band :	LTE Band 5	Temperature :	23~25°C						
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1695	-58.10	-13	-45.10	-67.11	-61.99	1.56	5.45	H	Pass
2539	-42.29	-13	-29.29	-55.58	-46.55	2.02	6.28	H	Pass
3390	-53.56	-13	-40.56	-67.69	-59.46	2.29	8.19	H	Pass

Band :	LTE Band 5				Temperature :	23~25°C			
Test Mode :	3MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1695	-55.23	-13	-42.23	-66.47	-59.12	1.56	5.45	V	Pass
2539	-46.77	-13	-33.77	-60.65	-51.03	2.02	6.28	V	Pass
3390	-51.76	-13	-38.76	-67.24	-57.66	2.29	8.19	V	Pass

**<Low Channel>**

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1648	-55.94	-13	-42.94	-64.71	-59.84	1.61	5.51	H	Pass
2473	-43.07	-13	-30.07	-56.26	-47.23	2.1	6.26	H	Pass
3297	-53.46	-13	-40.46	-67.39	-58.46	3.12	8.12	H	Pass

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1648	-54.49	-13	-41.49	-65.43	-58.39	1.61	5.51	V	Pass
2473	-47.72	-13	-34.72	-61.43	-51.88	2.1	6.26	V	Pass
3297	-51.78	-13	-38.78	-67.39	-56.78	3.12	8.12	V	Pass

**<Middle Channel>**

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1668	-56.92	-13	-43.92	-65.82	-60.79	1.62	5.49	H	Pass
2503	-45.91	-13	-32.91	-59.22	-50.03	2.1	6.22	H	Pass
3337	-53.19	-13	-40.19	-67.29	-58.23	3.03	8.07	H	Pass

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1668	-54.67	-13	-41.67	-65.77	-58.54	1.62	5.49	V	Pass
2503	-48.32	-13	-35.32	-62.04	-52.44	2.1	6.22	V	Pass
3337	-51.52	-13	-38.52	-67.14	-56.56	3.03	8.07	V	Pass



<High Channel>

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1688	-57.43	-13	-44.43	-66.35	-61.33	1.54	5.44	H	Pass
2533	-43.20	-13	-30.20	-56.55	-47.46	2.01	6.27	H	Pass
3377	-52.95	-13	-39.95	-67.12	-58.95	2.18	8.18	H	Pass

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1688	-54.35	-13	-41.35	-65.49	-58.25	1.54	5.44	V	Pass
2533	-46.52	-13	-33.52	-60.28	-50.78	2.01	6.27	V	Pass
3377	-51.89	-13	-38.89	-67.42	-57.89	2.18	8.18	V	Pass



<Low Channel>

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1648	-55.11	-13	-42.11	-63.89	-59.06	1.63	5.58	H	Pass
2473	-45.33	-13	-32.33	-58.52	-49.43	2.21	6.31	H	Pass
3297	-53.30	-13	-40.30	-67.34	-58.33	3.1	8.13	H	Pass

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1658	-54.93	-13	-41.93	-65.91	-58.88	1.63	5.58	V	Pass
2473	-48.62	-13	-35.62	-62.2	-52.72	2.21	6.31	V	Pass
3298	-51.76	-13	-38.76	-67.35	-56.79	3.1	8.13	V	Pass

**<Middle Channel>**

Band :	LTE Band 5	Temperature :	23~25°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1664	-57.81	-13	-44.81	-66.63	-61.68	1.62	5.49	H	Pass
2497	-46.53	-13	-33.53	-59.81	-50.65	2.1	6.22	H	Pass
3329	-53.84	-13	-40.84	-67.9	-58.88	3.03	8.07	H	Pass

Band :	LTE Band 5				Temperature :	23~25°C			
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1664	-55.29	-13	-42.29	-66.35	-59.16	1.62	5.49	V	Pass
2497	-49.21	-13	-36.21	-62.89	-53.33	2.1	6.22	V	Pass
3329	-52.45	-13	-39.45	-68.05	-57.49	3.03	8.07	V	Pass

**<High Channel>**

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1678	-55.98	-13	-42.98	-64.91	-59.88	1.52	5.42	H	Pass
2518	-41.30	-13	-28.30	-54.6	-45.56	1.99	6.25	H	Pass
3357	-53.85	-13	-40.85	-67.97	-59.85	2.14	8.14	H	Pass

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1678	-55.32	-13	-42.32	-66.49	-59.22	1.52	5.42	V	Pass
2518	-45.69	-13	-32.69	-59.43	-49.95	1.99	6.25	V	Pass
3357	-52.31	-13	-39.31	-67.9	-58.31	2.14	8.14	V	Pass

**<Low Channel>**

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3700	-53.24	-13	-40.24	-68.35	-59.5	2.48	8.74	H	Pass
5548	-43.41	-13	-30.41	-64.11	-51.1	2.96	10.65	H	Pass
7400	-41.57	-13	-28.57	-68.54	-50.2	3.48	12.11	H	Pass

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3700	-52.64	-13	-39.64	-68.35	-58.9	2.48	8.74	V	Pass
5548	-39.01	-13	-26.01	-59.39	-46.7	2.96	10.65	V	Pass
7400	-42.67	-13	-29.67	-69.18	-51.3	3.48	12.11	V	Pass



<Middle Channel>

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3758	-52.10	-13	-39.10	-67.4	-58.4	2.51	8.81	H	Pass
5639	-40.49	-13	-27.49	-61.8	-48.2	2.99	10.70	H	Pass
7517	-41.27	-13	-28.27	-68.28	-49.8	3.59	12.12	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3758	-51.80	-13	-38.80	-67.75	-58.1	2.51	8.81	V	Pass
5639	-39.39	-13	-26.39	-60.03	-47.1	2.99	10.70	V	Pass
7517	-41.87	-13	-28.87	-68.81	-50.4	3.59	12.12	V	Pass

**<High Channel>**

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3817	-51.04	-13	-38.04	-66.54	-57.3	2.61	8.87	H	Pass
5726	-36.30	-13	-23.30	-57.68	-44.1	3.09	10.89	H	Pass
7634	-42.60	-13	-29.60	-69.05	-51.1	3.68	12.18	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3817	-49.64	-13	-36.64	-66.47	-55.9	2.61	8.87	V	Pass
5726	-36.50	-13	-23.50	-57.58	-44.3	3.09	10.89	V	Pass
7634	-43.00	-13	-30.00	-69.43	-51.5	3.68	12.18	V	Pass



<Low Channel>

Band :	LTE Band 2				Temperature :		23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3700	-53.14	-13	-40.14	-68.15	-59.4	2.47	8.73	H	Pass
5548	-42.65	-13	-29.65	-63.6	-50.4	2.93	10.68	H	Pass
7401	-41.38	-13	-28.38	-68.67	-50.1	3.42	12.14	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	3MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3700	-52.14	-13	-39.14	-68.3	-58.4	2.47	8.73	V	Pass
5548	-38.55	-13	-25.55	-59.28	-46.3	2.93	10.68	V	Pass
7401	-41.58	-13	-28.58	-68.14	-50.3	3.42	12.14	V	Pass



<Middle Channel>

Band :	LTE Band 2				Temperature :		23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3756	-52.20	-13	-39.20	-67.31	-58.5	2.51	8.81	H	Pass
5639	-41.19	-13	-28.19	-62.51	-48.9	2.99	10.70	H	Pass
7515	-41.67	-13	-28.67	-68.77	-50.2	3.59	12.12	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	3MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3756	-51.10	-13	-38.10	-67.38	-57.4	2.51	8.81	V	Pass
5639	-38.19	-13	-25.19	-58.89	-45.9	2.99	10.70	V	Pass
7515	-41.97	-13	-28.97	-68.95	-50.5	3.59	12.12	V	Pass



<High Channel>

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3814	-51.57	-13	-38.57	-67.16	-57.8	2.64	8.87	H	Pass
5723	-35.76	-13	-22.76	-57.05	-43.5	3.08	10.82	H	Pass
7628	-41.91	-13	-28.91	-68.48	-50.4	3.64	12.13	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	3MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3814	-49.87	-13	-36.87	-66.5	-56.1	2.64	8.87	V	Pass
5723	-36.76	-13	-23.76	-57.95	-44.5	3.08	10.82	V	Pass
7628	-42.71	-13	-29.71	-68.91	-51.2	3.64	12.13	V	Pass

**<Low Channel>**

Band :	LTE Band 2				Temperature :		23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3700	-52.57	-13	-39.57	-67.81	-58.9	2.46	8.79	H	Pass
5548	-43.13	-13	-30.13	-63.64	-51	2.9	10.77	H	Pass
7400	-41.58	-13	-28.58	-68.63	-50.4	3.42	12.24	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3700	-52.67	-13	-39.67	-68.56	-59	2.46	8.79	V	Pass
5548	-39.33	-13	-26.33	-60.08	-47.2	2.9	10.77	V	Pass
7400	-41.98	-13	-28.98	-68.57	-50.8	3.42	12.24	V	Pass

**<Middle Channel>**

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3755	-52.50	-13	-39.50	-67.66	-58.8	2.51	8.81	H	Pass
5632	-40.79	-13	-27.79	-61.56	-48.5	2.99	10.70	H	Pass
7510	-41.97	-13	-28.97	-69.01	-50.5	3.59	12.12	H	Pass

Band :	LTE Band 2	Temperature :	23~25°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain		
		(dB)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3755	-50.20	-13	-37.20	-66.5	-56.5	2.51	8.81	V	Pass
5632	-38.49	-13	-25.49	-59.32	-46.2	2.99	10.70	V	Pass
7510	-42.17	-13	-29.17	-69.1	-50.7	3.59	12.12	V	Pass

**<High Channel>**

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3810	-52.16	-13	-39.16	-67.44	-58.5	2.59	8.93	H	Pass
5716	-38.20	-13	-25.20	-59.51	-46.1	3.08	10.98	H	Pass
7620	-42.97	-13	-29.97	-69.35	-51.5	3.64	12.17	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3810	-50.96	-13	-37.96	-67.32	-57.3	2.59	8.93	V	Pass
5716	-37.40	-13	-24.40	-58.8	-45.3	3.08	10.98	V	Pass
7620	-42.97	-13	-29.97	-69.43	-51.5	3.64	12.17	V	Pass

**<Low Channel>**

Band :	LTE Band 2				Temperature :		23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3701	-53.08	-13	-40.08	-68	-59.5	2.47	8.89	H	Pass
5548	-41.24	-13	-28.24	-62.03	-49.1	2.93	10.79	H	Pass
7400	-41.69	-13	-28.69	-68.89	-50.5	3.45	12.26	H	Pass

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3701	-52.78	-13	-39.78	-68.46	-59.2	2.47	8.89	V	Pass
5548	-40.24	-13	-27.24	-60.65	-48.1	2.93	10.79	V	Pass
7400	-42.59	-13	-29.59	-69.44	-51.4	3.45	12.26	V	Pass



<Middle Channel>

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3749	-53.30	-13	-40.30	-68.45	-59.6	2.51	8.81	H	Pass
5625	-39.89	-13	-26.89	-60.77	-47.6	2.99	10.70	H	Pass
7500	-41.67	-13	-28.67	-68.84	-50.2	3.59	12.12	H	Pass

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3749	-50.80	-13	-37.80	-67.14	-57.1	2.51	8.81	V	Pass
5625	-37.99	-13	-24.99	-58.66	-45.7	2.99	10.70	V	Pass
7500	-42.47	-13	-29.47	-69.39	-51	3.59	12.12	V	Pass

**<High Channel>**

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3798	-52.44	-13	-39.44	-67.65	-58.8	2.52	8.88	H	Pass
5702	-40.84	-13	-27.84	-62.05	-48.5	3.09	10.75	H	Pass
7600	-41.56	-13	-28.56	-68.21	-50.2	3.65	12.29	H	Pass

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3800	-51.54	-13	-38.54	-67.58	-57.9	2.52	8.88	V	Pass
5702	-40.54	-13	-27.54	-61.38	-48.2	3.09	10.75	V	Pass
7600	-43.06	-13	-30.06	-69.46	-51.7	3.65	12.29	V	Pass



<Low Channel>

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3700	-52.95	-13	-39.95	-67.93	-59.3	2.49	8.84	H	Pass
5555	-43.05	-13	-30.05	-64.01	-50.9	3.01	10.86	H	Pass
7400	-41.53	-13	-28.53	-69.16	-50.5	3.38	12.35	H	Pass

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3700	-52.25	-13	-39.25	-68.36	-58.6	2.49	8.84	V	Pass
5555	-40.45	-13	-27.45	-60.96	-48.3	3.01	10.86	V	Pass
7400	-40.23	-13	-27.23	-67.28	-49.2	3.38	12.35	V	Pass



<Middle Channel>

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3745	-53.30	-13	-40.30	-68.43	-59.6	2.51	8.81	H	Pass
5618	-39.99	-13	-26.99	-61.22	-47.7	2.99	10.70	H	Pass
7490	-42.27	-13	-29.27	-69.41	-50.8	3.59	12.12	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3745	-51.50	-13	-38.50	-67.72	-57.8	2.51	8.81	V	Pass
5618	-39.19	-13	-26.19	-59.78	-46.9	2.99	10.70	V	Pass
7490	-41.87	-13	-28.87	-68.93	-50.4	3.59	12.12	V	Pass



<High Channel>

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3790	-52.89	-13	-39.89	-67.16	-59.2	2.52	8.83	H	Pass
5688	-39.37	-13	-26.37	-60.52	-47.1	3.03	10.76	H	Pass
7580	-41.35	-13	-28.35	-68.1	-49.9	3.61	12.16	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3790	-50.89	-13	-37.89	-67.29	-57.2	2.52	8.83	V	Pass
5688	-37.77	-13	-24.77	-58.59	-45.5	3.03	10.76	V	Pass
7580	-43.15	-13	-30.15	-69.14	-51.7	3.61	12.16	V	Pass



<Low Channel>

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3700	-53.52	-13	-40.52	-68.69	-59.9	2.51	8.89	H	Pass
5555	-42.54	-13	-29.54	-63.53	-50.4	3.03	10.89	H	Pass
7400	-42.16	-13	-29.16	-68.92	-51.3	3.24	12.38	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3700	-52.42	-13	-39.42	-68.5	-58.8	2.51	8.89	V	Pass
5555	-39.54	-13	-26.54	-60.05	-47.4	3.03	10.89	V	Pass
7400	-41.76	-13	-28.76	-68.71	-50.9	3.24	12.38	V	Pass



<Middle Channel>

Band :	LTE Band 2				Temperature :		23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3740	-52.80	-13	-39.80	-68.17	-59.1	2.51	8.81	H	Pass
5611	-39.79	-13	-26.79	-60.87	-47.5	2.99	10.70	H	Pass
7480	-41.17	-13	-28.17	-68.59	-49.7	3.59	12.12	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3740	-52.20	-13	-39.20	-68.14	-58.5	2.51	8.81	V	Pass
5611	-40.29	-13	-27.29	-60.94	-48	2.99	10.70	V	Pass
7480	-42.37	-13	-29.37	-69.16	-50.9	3.59	12.12	V	Pass



<High Channel>

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3780	-52.52	-13	-39.52	-68.12	-58.9	2.52	8.90	H	Pass
5674	-37.55	-13	-24.55	-58.8	-45.3	3.01	10.76	H	Pass
7560	-41.97	-13	-28.97	-69	-50.5	3.62	12.15	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3780	-51.22	-13	-38.22	-67.35	-57.6	2.52	8.90	V	Pass
5674	-37.65	-13	-24.65	-58.59	-45.4	3.01	10.76	V	Pass
7560	-42.67	-13	-29.67	-68.95	-51.2	3.62	12.15	V	Pass

**<High Channel>**

Band :	LTE Band 25				Temperature :		23~25°C		
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3826	-49.65	-13	-36.65	-65.05	-55.91	2.65	8.91	H	Pass
5744	-39.33	-13	-26.33	-60.28	-47.14	3.12	10.93	H	Pass
7655	-40.24	-13	-27.24	-66.37	-48.80	3.71	12.27	H	Pass

Band :	LTE Band 25				Temperature :	23~25°C			
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3826	-48.10	-13	-35.10	-64.41	-54.36	2.65	8.91	V	Pass
5744	-39.77	-13	-26.77	-60.48	-47.58	3.12	10.93	V	Pass
7655	-41.71	-13	-28.71	-67.67	-50.27	3.71	12.27	V	Pass

**<High Channel>**

Band :	LTE Band 25					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3824	-50.44	-13	-37.44	-66.17	-56.7	2.64	8.90	H	Pass
5737	-42.39	-13	-29.39	-63.85	-50.2	3.11	10.92	H	Pass
7648	-43.15	-13	-30.15	-69.28	-51.7	3.7	12.25	H	Pass

Band :	LTE Band 25				Temperature :	23~25°C			
Test Mode :	3MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3824	-50.24	-13	-37.24	-66.59	-56.5	2.64	8.90	V	Pass
5737	-40.59	-13	-27.59	-61.65	-48.4	3.11	10.92	V	Pass
7648	-42.95	-13	-29.95	-68.8	-51.5	3.7	12.25	V	Pass



<High Channel>

Band :	LTE Band 25				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3820	-51.83	-13	-38.83	-67.2	-58.1	2.62	8.89	H	Pass
5730	-39.68	-13	-26.68	-61.08	-47.5	3.09	10.91	H	Pass
7640	-42.35	-13	-29.35	-68.8	-50.9	3.68	12.23	H	Pass

Band :	LTE Band 25				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading	Power	loss	Gain	(H/V)	
(dB)	(dB)	(dB)	(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3820	-51.53	-13	-38.53	-67.98	-57.8	2.62	8.89	V	Pass
5730	-39.68	-13	-26.68	-60.65	-47.5	3.09	10.91	V	Pass
7640	-42.05	-13	-29.05	-68.69	-50.6	3.68	12.23	V	Pass



<High Channel>

Band :	LTE Band 25				Temperature :	23~25°C			
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3810	-51.53	-13	-38.53	-67.35	-57.8	2.6	8.87	H	Pass
5716	-37.29	-13	-24.29	-58.42	-45.1	3.08	10.89	H	Pass
7620	-42.15	-13	-29.15	-68.5	-50.7	3.66	12.21	H	Pass

Band :	LTE Band 25				Temperature :	23~25°C			
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3810	-51.13	-13	-38.13	-67.39	-57.4	2.6	8.87	V	Pass
5716	-39.39	-13	-26.39	-60.38	-47.2	3.08	10.89	V	Pass
7620	-43.85	-13	-30.85	-69.72	-52.4	3.66	12.21	V	Pass

**<High Channel>**

Band :	LTE Band 25				Temperature :	23~25°C			
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3800	-52.16	-13	-39.16	-67.63	-58.5	2.59	8.93	H	Pass
5702	-40.80	-13	-27.80	-62	-48.7	3.08	10.98	H	Pass
7600	-43.07	-13	-30.07	-69.82	-51.6	3.64	12.17	H	Pass

Band :	LTE Band 25				Temperature :	23~25°C			
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3800	-50.16	-13	-37.16	-66.52	-56.5	2.59	8.93	V	Pass
5702	-43.20	-13	-30.20	-64.18	-51.1	3.08	10.98	V	Pass
7600	-43.57	-13	-30.57	-69.7	-52.1	3.64	12.17	V	Pass

**<High Channel>**

Band :	LTE Band 25					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3790	-52.54	-13	-39.54	-67.76	-58.9	2.52	8.88	H	Pass
5688	-41.24	-13	-28.24	-62.49	-48.9	3.09	10.75	H	Pass
7580	-43.06	-13	-30.06	-69.62	-51.7	3.65	12.29	H	Pass

Band :	LTE Band 25				Temperature :	23~25°C			
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3790	-51.54	-13	-38.54	-67.77	-57.9	2.52	8.88	V	Pass
5688	-41.44	-13	-28.44	-62.07	-49.1	3.09	10.75	V	Pass
7580	-42.66	-13	-29.66	-69.2	-51.3	3.65	12.29	V	Pass



<Low Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3420	-47.63	-13	-34.63	-62.03	-51.5	4.41	8.28	H	Pass
5128	-38.23	-13	-25.23	-56.72	-42.8	5.28	9.85	H	Pass
6840	-43.37	-13	-30.37	-68.97	-48.6	6.01	11.24	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-46.33	-13	-33.33	-62.15	-50.2	4.41	8.28	V	Pass
5128	-38.13	-13	-25.13	-56.7	-42.7	5.28	9.85	V	Pass
6840	-43.27	-13	-30.27	-68.32	-48.5	6.01	11.24	V	Pass

**<Middle Channel>**

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3462	-47.67	-13	-34.67	-62.23	-51.5	4.48	8.31	H	Pass
5198	-34.66	-13	-21.66	-53.49	-39.3	5.332	9.98	H	Pass
6927	-42.86	-13	-29.86	-68.93	-48.1	6.1	11.34	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3462	-46.37	-13	-33.37	-62.14	-50.2	4.48	8.31	V	Pass
5198	-35.86	-13	-22.86	-54.99	-40.5	5.332	9.98	V	Pass
6927	-43.86	-13	-30.86	-69.12	-49.1	6.1	11.34	V	Pass



<High Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3507	-48.23	-13	-35.23	-62.71	-52.5	4.14	8.41	H	Pass
5261	-37.15	-13	-24.15	-56.43	-42.1	5.12	10.07	H	Pass
7014	-42.81	-13	-29.81	-69.17	-48.1	6.13	11.42	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3507	-48.43	-13	-35.43	-63.94	-52.7	4.14	8.41	V	Pass
5261	-38.95	-13	-25.95	-58.62	-43.9	5.12	10.07	V	Pass
7014	-43.71	-13	-30.71	-69.35	-49	6.13	11.42	V	Pass

**<Low Channel>**

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3420	-49.22	-13	-36.22	-63.56	-53.1	4.43	8.31	H	Pass
5128	-38.23	-13	-25.23	-56.87	-42.8	5.31	9.88	H	Pass
6840	-42.17	-13	-29.17	-68.14	-47.5	6.02	11.35	H	Pass

Band :	LTE Band 4				Temperature :	23~25°C			
Test Mode :	3MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-48.22	-13	-35.22	-63.9	-52.1	4.43	8.31	V	Pass
5128	-37.93	-13	-24.93	-56.52	-42.5	5.31	9.88	V	Pass
6840	-43.17	-13	-30.17	-68.52	-48.5	6.02	11.35	V	Pass

**<Middle Channel>**

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3462	-48.57	-13	-35.57	-63.15	-52.4	4.48	8.31	H	Pass
5191	-33.86	-13	-20.86	-52.9	-38.5	5.332	9.98	H	Pass
6924	-42.66	-13	-29.66	-68.97	-47.9	6.1	11.34	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3462	-46.67	-13	-33.67	-62.3	-50.5	4.48	8.31	V	Pass
5197	-35.46	-13	-22.46	-54.43	-40.1	5.332	9.98	V	Pass
6930	-42.86	-13	-29.86	-67.91	-48.1	6.1	11.34	V	Pass



<High Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3504	-49.53	-13	-36.53	-64.26	-53.8	4.14	8.41	H	Pass
5254	-39.25	-13	-26.25	-58.72	-44.2	5.12	10.07	H	Pass
7008	-42.31	-13	-29.31	-68.91	-47.6	6.13	11.42	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3504	-49.63	-13	-36.63	-65.32	-53.9	4.14	8.41	V	Pass
5254	-39.95	-13	-26.95	-59.08	-44.9	5.12	10.07	V	Pass
7008	-43.81	-13	-30.81	-69.54	-49.1	6.13	11.42	V	Pass



<Low Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3420	-50.07	-13	-37.07	-64.73	-53.9	4.48	8.31	H	Pass
5128	-38.86	-13	-25.86	-57.44	-43.5	5.332	9.98	H	Pass
6840	-42.86	-13	-29.86	-68.73	-48.1	6.1	11.34	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-49.27	-13	-36.27	-64.78	-53.1	4.48	8.31	V	Pass
5128	-38.06	-13	-25.06	-56.66	-42.7	5.332	9.98	V	Pass
6840	-43.26	-13	-30.26	-68.74	-48.5	6.1	11.34	V	Pass



<Middle Channel>

Band :	LTE Band 4				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3462	-50.27	-13	-37.27	-64.52	-54.1	4.48	8.31	H	Pass
5191	-33.46	-13	-20.46	-52.57	-38.1	5.332	9.98	H	Pass
6920	-42.26	-13	-29.26	-68.76	-47.5	6.1	11.34	H	Pass

Band :	LTE Band 4				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain		
			(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3462	-47.97	-13	-34.97	-63.88	-51.8	4.48	8.31	V	Pass
5191	-35.16	-13	-22.16	-54.28	-39.8	5.332	9.98	V	Pass
6920	-43.86	-13	-30.86	-69.32	-49.1	6.1	11.34	V	Pass

**<High Channel>**

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3497	-50.83	-13	-37.83	-65.33	-55.1	4.16	8.43	H	Pass
5254	-38.94	-13	-25.94	-58.37	-43.9	5.13	10.09	H	Pass
7000	-41.22	-13	-28.22	-67.85	-46.5	6.15	11.43	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3500	-51.13	-13	-38.13	-66.84	-55.4	4.16	8.43	V	Pass
5247	-40.94	-13	-27.94	-60.39	-45.9	5.13	10.09	V	Pass
7000	-42.22	-13	-29.22	-68.31	-47.5	6.15	11.43	V	Pass

**<Low Channel>**

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-52.68	-13	-39.68	-66.89	-56.5	4.51	8.33	H	Pass
5128	-41.53	-13	-28.53	-60.24	-46.2	5.36	10.03	H	Pass
6840	-43.17	-13	-30.17	-69.07	-48.4	6.13	11.36	H	Pass

Band :	LTE Band 4				Temperature :	23~25°C			
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)	(dBm)	(dB)	(dBm)	(dBm)	(dBm)	(dB)	(dBi)		
3420	-48.58	-13	-35.58	-64.37	-52.4	4.51	8.33	V	Pass
5128	-38.83	-13	-25.83	-57.49	-43.5	5.36	10.03	V	Pass
6840	-42.87	-13	-29.87	-67.8	-48.1	6.13	11.36	V	Pass

**<Middle Channel>**

Band :	LTE Band 4				Temperature :		23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3455	-52.97	-13	-39.97	-67.05	-56.8	4.48	8.31	H	Pass
5184	-34.46	-13	-21.46	-53.58	-39.1	5.332	9.98	H	Pass
6910	-43.56	-13	-30.56	-59.09	-48.8	6.1	11.34	H	Pass

Band :	LTE Band 4				Temperature :	23~25°C			
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3455	-50.37	-13	-37.37	-65.95	-54.2	4.48	8.31	V	Pass
5184	-36.56	-13	-23.56	-55.51	-41.2	5.332	9.98	V	Pass
6910	-43.86	-13	-30.86	-68.42	-49.1	6.1	11.34	V	Pass



<High Channel>

Band :	LTE Band 4				Temperature :		23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3490	-52.61	-13	-39.61	-67.07	-56.8	4.2	8.39	H	Pass
5235	-40.62	-13	-27.62	-59.9	-45.5	5.17	10.05	H	Pass
6980	-42.50	-13	-29.50	-68.42	-47.7	6.2	11.40	H	Pass

Band :	LTE Band 4				Temperature :	23~25°C			
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3490	-52.01	-13	-39.01	-67.66	-56.2	4.2	8.39	V	Pass
5235	-40.22	-13	-27.22	-59.1	-45.1	5.17	10.05	V	Pass
6980	-42.90	-13	-29.90	-68.48	-48.1	6.2	11.40	V	Pass



<Low Channel>

Band :	LTE Band 4				Temperature :		23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3423	-51.38	-13	-38.38	-65.65	-55.15	4.59	8.36	H	Pass
5135	-49.98	-13	-36.98	-68.42	-54.62	5.41	10.05	H	Pass
6846	-42.27	-13	-29.27	-67.98	-47.51	6.15	11.39	H	Pass

Band :	LTE Band 4				Temperature :	23~25°C			
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3423	-51.59	-13	-38.59	-67.12	-55.36	4.59	8.36	V	Pass
5135	-48.05	-13	-35.05	-66.64	-52.69	5.41	10.05	V	Pass
6846	-42.74	-13	-29.74	-67.72	-47.98	6.15	11.39	V	Pass



<Middle Channel>

Band :	LTE Band 4				Temperature :		23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3451	-51.39	-13	-38.39	-65.65	-55.22	4.48	8.31	H	Pass
5177	-47.60	-13	-34.60	-66.22	-52.24	5.332	9.98	H	Pass
6902	-43.05	-13	-30.05	-69.01	-48.29	6.1	11.34	H	Pass

Band :	LTE Band 4				Temperature :	23~25°C			
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3451	-50.72	-13	-37.72	-66.2	-54.55	4.48	8.31	V	Pass
5177	-45.72	-13	-32.72	-64.44	-50.36	5.332	9.98	V	Pass
6899	-43.71	-13	-30.71	-68.91	-48.95	6.1	11.34	V	Pass



<High Channel>

Band :	LTE Band 4				Temperature :		23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3483	-52.42	-13	-39.42	-66.81	-56.56	4.24	8.38	H	Pass
5224	-49.79	-13	-36.79	-68.57	-54.66	5.18	10.05	H	Pass
6966	-41.96	-13	-28.96	-68.28	-47.15	6.19	11.38	H	Pass

Band :	LTE Band 4				Temperature :	23~25°C			
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3483	-51.52	-13	-38.52	-67.11	-55.66	4.24	8.38	V	Pass
5224	-50.31	-13	-37.31	-69.2	-55.18	5.18	10.05	V	Pass
6966	-42.40	-13	-29.40	-67.82	-47.59	6.19	11.38	V	Pass

**<Low Channel>**

Band :	LTE Band 4				Temperature :		23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3421	-51.57	-13	-38.57	-65.78	-55.35	4.62	8.40	H	Pass
5132	-49.39	-13	-36.39	-67.86	-54.02	5.45	10.08	H	Pass
6842	-43.32	-13	-30.32	-68.97	-48.56	6.18	11.42	H	Pass

Band :	LTE Band 4				Temperature :	23~25°C			
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-51.26	-13	-38.26	-66.82	-55.04	4.62	8.40	V	Pass
5132	-48.35	-13	-35.35	-66.85	-52.98	5.45	10.08	V	Pass
6842	-43.78	-13	-30.78	-68.77	-49.02	6.18	11.42	V	Pass



<Middle Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3448	-52.15	-13	-39.15	-66.38	-55.98	4.48	8.31	H	Pass
5170	-48.21	-13	-35.21	-66.77	-52.85	5.332	9.98	H	Pass
6893	-42.64	-13	-29.64	-68.53	-47.88	6.1	11.34	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3446	-49.15	-13	-36.15	-64.69	-52.98	4.48	8.31	V	Pass
5170	-46.31	-13	-33.31	-65.01	-50.95	5.332	9.98	V	Pass
6892	-43.02	-13	-30.02	-68.24	-48.26	6.1	11.34	V	Pass

**<High Channel>**

Band :	LTE Band 4				Temperature :		23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3469	-52.36	-13	-39.36	-66.66	-56.45	4.28	8.37	H	Pass
5205	-49.75	-13	-36.75	-68.65	-54.56	5.22	10.03	H	Pass
6941	-42.20	-13	-29.20	-68.39	-47.33	6.23	11.36	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3469	-50.94	-13	-37.94	-66.48	-55.03	4.28	8.37	V	Pass
5205	-48.61	-13	-35.61	-67.45	-53.42	5.22	10.03	V	Pass
6941	-43.42	-13	-30.42	-68.72	-48.55	6.23	11.36	V	Pass



<Low Channel>

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
2112	-54.37	-13	-41.37	-65.59	-58.55	1.82	6.00	H	Pass
2816	-53.56	-13	-40.56	-67.6	-58.34	2.2	6.98	H	Pass
3520	-48.47	-13	-35.47	-63.96	-54.29	2.42	8.24	H	Pass

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
2112	-51.27	-13	-38.27	-63.45	-55.45	1.82	6.00	V	Pass
2816	-51.00	-13	-38.00	-66.63	-55.78	2.2	6.98	V	Pass
3520	-49.52	-13	-36.52	-66.14	-55.34	2.42	8.24	V	Pass



<Middle Channel>

Band :	LTE Band 17				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
2121	-53.39	-13	-40.39	-64.75	-57.56	1.85	6.02	H	Pass
2828	-52.26	-13	-39.26	-66.28	-57.02	2.24	7.00	H	Pass
3536	-47.26	-13	-34.26	-62.77	-53.06	2.46	8.26	H	Pass

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
2121	-51.14	-13	-38.14	-64.27	-55.31	1.85	6.02	V	Pass
2828	-51.69	-13	-38.69	-67.39	-56.45	2.24	7.00	V	Pass
3536	-45.82	-13	-32.82	-62.53	-51.62	2.46	8.26	V	Pass



<High Channel>

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
2136	-53.91	-13	-40.91	-65.35	-58.12	1.87	6.08	H	Pass
2848	-53.37	-13	-40.37	-67.45	-58.22	2.26	7.11	H	Pass
3560	-47.53	-13	-34.53	-63.06	-53.36	2.48	8.31	H	Pass

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
2136	-51.00	-13	-38.00	-64.21	-55.21	1.87	6.08	V	Pass
2848	-52.04	-13	-39.04	-67.73	-56.89	2.26	7.11	V	Pass
3560	-47.41	-13	-34.41	-64.11	-53.24	2.48	8.31	V	Pass



<Low Channel>

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1408	-57.36	-13	-44.36	-65.5	-61.45	1.52	5.61	H	Pass
2112	-54.23	-13	-41.23	-65.41	-58.42	1.83	6.02	H	Pass
2816	-53.59	-13	-40.59	-66.99	-58.36	2.24	7.01	H	Pass
3520	-49.91	-13	-36.91	-64.31	-55.62	2.5	8.21	H	Pass

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1408	-54.79	-13	-41.79	-65.06	-58.89	1.51	5.61	V	Pass
2112	-48.88	-13	-35.88	-61.98	-53.08	1.82	6.02	V	Pass
2816	-52.08	-13	-39.08	-67.03	-56.89	2.2	7.01	V	Pass
3520	-48.57	-13	-35.57	-64.09	-54.36	2.42	8.21	V	Pass



<Middle Channel>

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1408	-56.14	-13	-43.14	-64.31	-60.22	1.53	5.61	H	Pass
2112	-53.39	-13	-40.39	-64.39	-57.56	1.85	6.02	H	Pass
2816	-53.60	-13	-40.60	-66.97	-58.36	2.24	7.00	H	Pass
3528	-47.45	-13	-34.45	-61.91	-53.25	2.46	8.26	H	Pass

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1408	-53.25	-13	-40.25	-63.64	-57.33	1.53	5.61	V	Pass
2112	-49.67	-13	-36.67	-62.69	-53.84	1.85	6.02	V	Pass
2816	-52.39	-13	-39.39	-67.32	-57.15	2.24	7.00	V	Pass
3528	-48.56	-13	-35.56	-64.17	-54.36	2.46	8.26	V	Pass



<High Channel>

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1413	-57.21	-13	-44.21	-65.36	-61.31	1.53	5.63	H	Pass
2120	-51.92	-13	-38.92	-63.14	-56.12	1.88	6.08	H	Pass
2826	-51.87	-13	-38.87	-65.34	-56.71	2.27	7.11	H	Pass
3536	-47.38	-13	-34.38	-61.92	-53.24	2.45	8.31	H	Pass

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1413	-55.45	-13	-42.45	-65.78	-59.55	1.53	5.63	V	Pass
2120	-49.43	-13	-36.43	-62.59	-53.63	1.88	6.08	V	Pass
2826	-51.59	-13	-38.59	-66.56	-56.43	2.27	7.11	V	Pass
3536	-46.50	-13	-33.50	-62.08	-52.36	2.45	8.31	V	Pass

**<Low Channel>**

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
4998	-48.84	-25	-23.84	-66.64	-52.4	6.78	10.34	H	Pass
7500	-40.26	-25	-15.26	-68.06	-43.3	9.22	12.26	H	Pass
10002	-40.46	-25	-15.46	-68.76	-44.8	8.51	12.85	H	Pass

Band :	LTE Band 7	Temperature :	23~25℃						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
4998	-45.54	-25	-20.54	-63.59	-49.1	6.78	10.34	V	Pass
7500	-40.86	-25	-15.86	-68.21	-43.9	9.22	12.26	V	Pass
10002	-41.46	-25	-16.46	-69.31	-45.8	8.51	12.85	V	Pass



<Middle Channel>

Band :	LTE Band 7				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5064	-48.01	-25	-23.01	-66.49	-51.5	6.86	10.35	H	Pass
7598	-43.01	-25	-18.01	-69.52	-45.9	9.34	12.23	H	Pass
10130	-40.90	-25	-15.90	-68.82	-45	8.64	12.74	H	Pass

Band :	LTE Band 7				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5064	-44.71	-25	-19.71	-63.3	-48.2	6.86	10.35	V	Pass
7598	-42.91	-25	-17.91	-68.6	-45.8	9.34	12.23	V	Pass
10130	-41.60	-25	-16.60	-69.35	-45.7	8.64	12.74	V	Pass

**<High Channel>**

Band :	LTE Band 7				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5130	-44.27	-25	-19.27	-63.1	-47.8	6.9	10.43	H	Pass
7695	-42.57	-25	-17.57	-68.46	-45.5	9.39	12.32	H	Pass
10260	-40.56	-25	-15.56	-69.41	-44.7	8.71	12.85	H	Pass

Band :	LTE Band 7	Temperature :	23~25°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5130	-48.57	-25	-23.57	-67.52	-52.1	6.9	10.43	V	Pass
7695	-42.37	-25	-17.37	-68.45	-45.3	9.39	12.32	V	Pass
10260	-40.66	-25	-15.66	-68.46	-44.8	8.71	12.85	V	Pass



<Low Channel>

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
4998	-46.26	-25	-21.26	-64.26	-49.8	6.81	10.35	H	Pass
7500	-41.22	-25	-16.22	-68.55	-44.2	9.26	12.24	H	Pass
10000	-39.81	-25	-14.81	-68.73	-44.1	8.54	12.83	H	Pass

Band :	LTE Band 7				Temperature :	23~25°C			
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
4998	-50.36	-25	-25.36	-68.16	-53.9	6.81	10.35	V	Pass
7500	-42.12	-25	-17.12	-69.31	-45.1	9.26	12.24	V	Pass
10000	-41.61	-25	-16.61	-69.29	-45.9	8.54	12.83	V	Pass

**<Middle Channel>**

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5058	-45.11	-25	-20.11	-63.57	-48.6	6.86	10.35	H	Pass
7590	-40.01	-25	-15.01	-66.98	-42.9	9.34	12.23	H	Pass
10122	-40.10	-25	-15.10	-68.94	-44.2	8.64	12.74	H	Pass

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5058	-49.41	-25	-24.41	-68.08	-52.9	6.86	10.35	V	Pass
7590	-42.31	-25	-17.31	-69.01	-45.2	9.34	12.23	V	Pass
10122	-41.40	-25	-16.40	-69.35	-45.5	8.64	12.74	V	Pass

**<High Channel>**

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5118	-45.56	-25	-20.56	-64.47	-49.1	6.88	10.42	H	Pass
7680	-42.16	-25	-17.16	-68.42	-45.1	9.37	12.31	H	Pass
10242	-39.61	-25	-14.61	-69.09	-43.8	8.64	12.83	H	Pass

Band :	LTE Band 7				Temperature :	23~25°C			
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5118	-49.56	-25	-24.56	-68.32	-53.1	6.88	10.42	V	Pass
7680	-42.96	-25	-17.96	-69.1	-45.9	9.37	12.31	V	Pass
10240	-41.31	-25	-16.31	-69.18	-45.5	8.64	12.83	V	Pass



<Low Channel>

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5004	-47.00	-25	-22.00	-64.7	-50.55	6.82	10.37	H	Pass
7506	-41.97	-25	-16.97	-69.18	-44.96	9.27	12.26	H	Pass
10008	-39.98	-25	-14.98	-68.49	-44.31	8.55	12.88	H	Pass

Band :	LTE Band 7				Temperature :	23~25°C			
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5004	-49.75	-25	-24.75	-67.61	-53.30	6.82	10.37	V	Pass
7506	-42.40	-25	-17.40	-69.36	-45.39	9.27	12.26	V	Pass
10008	-41.11	-25	-16.11	-68.71	-45.44	8.55	12.88	V	Pass



<Middle Channel>

Band :	LTE Band 7				Temperature :		23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5058	-45.45	-25	-20.45	-63.38	-48.94	6.86	10.35	H	Pass
7587	-41.63	-25	-16.63	-68.29	-44.52	9.34	12.23	H	Pass
10116	-39.81	-25	-14.81	-68.45	-43.91	8.64	12.74	H	Pass

Band :	LTE Band 7				Temperature :	23~25°C			
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5058	-47.91	-25	-22.91	-65.97	-51.40	6.86	10.35	V	Pass
7587	-41.95	-25	-16.95	-68.42	-44.84	9.34	12.23	V	Pass
10116	-41.48	-25	-16.48	-69.15	-45.58	8.64	12.74	V	Pass

**<High Channel>**

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
5112	-47.90	-25	-22.90	-66.09	-51.44	6.87	10.41	H	Pass
7668	-42.73	-25	-17.73	-68.74	-45.68	9.35	12.30	H	Pass
10224	-40.21	-25	-15.21	-69.02	-44.40	8.63	12.82	H	Pass

Band :	LTE Band 7				Temperature :	23~25°C			
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5112	-49.64	-25	-24.64	-67.92	-53.18	6.87	10.41	V	Pass
7668	-43.35	-25	-18.35	-69.19	-46.30	9.35	12.30	V	Pass
10224	-41.40	-25	-16.40	-69.22	-45.59	8.63	12.82	V	Pass



<Low Channel>

Band :	LTE Band 7				Temperature :		23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5004	-46.22	-25	-21.22	-63.93	-49.77	6.83	10.38	H	Pass
7506	-40.52	-25	-15.52	-67.72	-43.49	9.28	12.25	H	Pass
10008	-39.25	-25	-14.25	-67.75	-43.60	8.54	12.89	H	Pass

Band :	LTE Band 7				Temperature :	23~25°C			
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5004	-48.87	-25	-23.87	-66.72	-52.42	6.83	10.38	V	Pass
7506	-39.95	-25	-14.95	-66.92	-42.92	9.28	12.25	V	Pass
10008	-40.69	-25	-15.69	-68.26	-45.04	8.54	12.89	V	Pass

**<Middle Channel>**

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5052	-44.79	-25	-19.79	-62.66	-48.28	6.86	10.35	H	Pass
7578	-40.91	-25	-15.91	-67.58	-43.80	9.34	12.23	H	Pass
10106	-39.89	-25	-14.89	-68.52	-43.99	8.64	12.74	H	Pass

Band :	LTE Band 7				Temperature :	23~25°C			
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5052	-47.98	-25	-22.98	-65.98	-51.47	6.86	10.35	V	Pass
7578	-42.74	-25	-17.74	-69.21	-45.63	9.34	12.23	V	Pass
10106	-41.41	-25	-16.41	-69.09	-45.51	8.64	12.74	V	Pass



<High Channel>

Band :	LTE Band 7				Temperature :		23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5100	-46.95	-25	-21.95	-65.06	-51.49	5.84	10.38	H	Pass
7652	-41.95	-25	-16.95	-68.09	-44.89	9.33	12.27	H	Pass
10204	-39.92	-25	-14.92	-68.7	-44.12	8.6	12.80	H	Pass

Band :	LTE Band 7				Temperature :	23~25°C			
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5100	-49.12	-25	-24.12	-67.33	-53.66	5.84	10.38	V	Pass
7652	-42.83	-25	-17.83	-68.79	-45.77	9.33	12.27	V	Pass
10204	-41.05	-25	-16.05	-68.87	-45.25	8.6	12.80	V	Pass



<For WPC Mode>

<Low Channel>

Band :	LTE Band 7				Temperature :		23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5004	-50.39	-25	-25.39	-68.22	-53.94	6.83	10.38	H	Pass
7506	-40.63	-25	-15.63	-65.96	-43.60	9.28	12.25	H	Pass
10008	-40.16	-25	-15.16	-69	-44.51	8.54	12.89	H	Pass

Band :	LTE Band 7				Temperature :	23~25°C			
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5004	-48.42	-25	-23.42	-66.55	-51.97	6.83	10.38	V	Pass
7506	-40.89	-25	-15.89	-67.88	-43.86	9.28	12.25	V	Pass
10008	-41.27	-25	-16.27	-68.96	-45.62	8.54	12.89	V	Pass



<Middle Channel>

Band :	LTE Band 7				Temperature :		23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5052	-50.71	-25	-25.71	-68.65	-54.20	6.86	10.35	H	Pass
7578	-39.55	-25	-14.55	-66.5	-42.44	9.34	12.23	H	Pass
10104	-40.63	-25	-15.63	-69.37	-44.73	8.64	12.74	H	Pass

Band :	LTE Band 7				Temperature :	23~25°C			
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5052	-49.25	-25	-24.25	-67.33	-52.74	6.86	10.35	V	Pass
7578	-40.03	-25	-15.03	-66.73	-42.92	9.34	12.23	V	Pass
10104	-40.59	-25	-15.59	-68.38	-44.69	8.64	12.74	V	Pass

**<High Channel>**

Band :	LTE Band 7				Temperature :		23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5100	-51.99	-25	-26.99	-70.09	-56.53	5.84	10.38	H	Pass
7650	-42.03	-25	-17.03	-68.3	-44.97	9.33	12.27	H	Pass
10206	-40.06	-25	-15.06	-69.03	-44.26	8.6	12.80	H	Pass

Band :	LTE Band 7				Temperature :	23~25°C			
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Kai Wang, Stan Hsieh, and Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5100	-49.87	-25	-24.87	-68.27	-54.41	5.84	10.38	V	Pass
7650	-39.78	-25	-14.78	-65.69	-42.72	9.33	12.27	V	Pass
10206	-40.96	-25	-15.96	-68.76	-45.16	8.6	12.80	V	Pass



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LTE Base Station	Anritsu	MT8820C	6201026480	30MHz~2.7GHz SISO	Jan. 07, 2014	Jul. 02, 2014	Jan. 06, 2015	Conducted (TH02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV30	101749	10Hz ~ 30GHz	Feb. 10, 2014	Jul. 14, 2014~ Jul. 25, 2014	Feb. 09, 2015	Radiation (03CH07-HY)
Bilog Antenna	Schaffner	CBL6111C	2726	30MHz ~ 1GHz	Oct. 10, 2013	Jul. 14, 2014~ Jul. 25, 2014	Oct. 09, 2014	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	75962	1GHz~18GHz	Aug. 22, 2013	Jul. 14, 2014~ Jul. 25, 2014	Aug. 21, 2014	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10 MHz ~ 1000MHz	Mar. 17, 2014	Jul. 14, 2014~ Jul. 25, 2014	Mar. 16, 2015	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1 GHz~26.5 GHz	Nov. 29, 2013	Jul. 14, 2014~ Jul. 25, 2014	Nov. 28, 2014	Radiation (03CH07-HY)
Turn Table	ChainTek	ChainTek 3000	N/A	0 ~ 360 degree	N/A	Jul. 14, 2014~ Jul. 25, 2014	N/A	Radiation (03CH07-HY)
Antenna Mast	ChainTek	M-400-0	114/8000604	N/A	N/A	Jul. 14, 2014~ Jul. 25, 2014	N/A	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBEC K	BBHA 9170	BBHA91702 51	15GHz- 40GHz	Oct. 03, 2013	Jul. 14, 2014~ Jul. 25, 2014	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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