

# Partial FCC RF Test Report

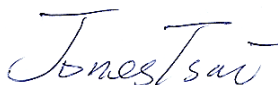
APPLICANT : Getac Technology Corporation.  
EQUIPMENT : Wireless module  
BRAND NAME : Sierra  
MODEL NAME : EM7355  
FCC ID : QYLEM7355V  
STANDARD : 47 CFR Part 2, 22(H), 24(E), 27  
CLASSIFICATION : PCS Licensed Transmitter (PCB)

This is a partial report which is included the Conducted Output Power and ERP/EIRP test item. The product was received on Sep. 17, 2013 and completely tested on Oct. 25, 2013. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI / TIA / EIA-603-C-2004 and shown compliance with the applicable technical standards.

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



Reviewed by: Joseph Lin / Supervisor



Approved by: Jones Tsai / Manager



## SPORTON INTERNATIONAL INC.

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FCC ID : QYLEM7355V

Page Number : 1 of 41

Report Issued Date : Nov. 13, 2013

Report Version : Rev. 01



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### REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG3O1142B	Rev. 01	Initial issue of report	Nov. 13, 2013



### SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	§2.1046	RSS-132 (5.4) RSS-133 (6.4) RSS-139(6.4)	Conducted Output Power	Reporting Only	PASS	-
3.1	§22.913(a)(2)	RSS-132(5.4) SRSP-503(5.1.3)	Effective Radiated Power (Band 5)	ERP < 7 Watts	PASS	-
	§27.50(c)(10)	N/A	Effective Radiated Power (Band 13) (Band 17)	ERP < 3 Watts		
	§24.232(c)	RSS-133 (6.4) SRSP-510(5.1.2)	Equivalent Isotropic Radiated Power (Band 2)(Band 25)	EIRP < 2Watt		
	§27.50(d)(4)	RSS-139 (6.4) SRSP-513(5.1.2)	Equivalent Isotropic Radiated Power (Band 4)	EIRP < 1Watt		

**Remark:** Due to the antenna-gains of the module in host evaluated in all dedicated bands are less than those in the module report in accordance with MPE value so that we do not perform the procedure for RSE measurement.

# 1 General Description

## 1.1 Applicant

Getac Technology Corporation.

5F., Building A, No. 209, Sec.1, Nangang Rd., Nangang Dist., Taipei City 11568, Taiwan, R.O.C.

## 1.2 Manufacturer

Getac Technology(Kunshan)Co., LTD.

No. 269, No. 2 Avenue, Kunshan Comprehensive Free Trade Zone, Jiangsu Province, P.R.C

## 1.3 Feature of Equipment Under Test

Product Feature	
Equipment	Wireless module
Brand Name	Sierra
Model Name	EM7355
Installed Notebook	Brand Name: Getac Model Name: V110 Marketing Name: V110
FCC ID	QYLEM7355V
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE
EUT Stage	Production Unit

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

### 1.4 Product Specification of Equipment Under Test

Product Specification subjective to this standard	
<b>Tx Frequency</b>	LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 25 : 1850.7MHz ~ 1914.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 13 : 779.5 MHz ~ 784.5 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz
<b>Rx Frequency</b>	LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 25 : 1930.7MHz ~ 1994.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 13 : 748.5 MHz ~ 753.5 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz
<b>Bandwidth</b>	1.4MHz / 3MHz / 5MHz / 10MHz (Band 5) 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz (Band 2) 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz (Band 25) 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz (Band 4) 5MHz / 10MHz (Band 13) 5MHz / 10MHz (Band 17)
<b>Maximum Output Power to Antenna</b>	LTE Band 5 : 22.72 dBm / 0.1871 W LTE Band 2 : 22.93 dBm / 0.1963 W LTE Band 25 : 22.77 dBm / 0.1892 W LTE Band 4 : 22.95 dBm / 0.1972 W LTE Band 13 : 22.67 dBm / 0.1849 W LTE Band 17 : 22.69 dBm / 0.1858 W
<b>Antenna Type</b>	PIFA Antenna
<b>Antenna Gain</b>	LTE Band 5 : 0.78 dBi LTE Band 2 : 2.36 dBi LTE Band 4 : 2.12 dBi LTE Band 13 : 1.80 dBi LTE Band 17 : 2.06 dBi LTE Band 25 : 2.36 dBi
<b>Type of Modulation</b>	QPSK / 16QAM

### 1.5 Modification of EUT

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



### 1.6 Emission Designator

FCC Rule	System	Type of Modulation	BW	Maximum ERP/EIRP
Part 22	LTE Band 5	QPSK	1.4 MHz	0.14 W
Part 22	LTE Band 5	16QAM	1.4 MHz	0.11 W
Part 22	LTE Band 5	QPSK	3 MHz	0.13 W
Part 22	LTE Band 5	16QAM	3 MHz	0.11 W
Part 22	LTE Band 5	QPSK	5 MHz	0.14 W
Part 22	LTE Band 5	16QAM	5 MHz	0.11 W
Part 22	LTE Band 5	QPSK	10 MHz	0.14 W
Part 22	LTE Band 5	16QAM	10 MHz	0.11 W
Part 24	LTE Band 2	QPSK	1.4 MHz	0.34 W
Part 24	LTE Band 2	16QAM	1.4 MHz	0.26 W
Part 24	LTE Band 2	QPSK	3 MHz	0.33 W
Part 24	LTE Band 2	16QAM	3 MHz	0.25 W
Part 24	LTE Band 2	QPSK	5 MHz	0.34 W
Part 24	LTE Band 2	16QAM	5 MHz	0.25 W
Part 24	LTE Band 2	QPSK	10 MHz	0.32 W
Part 24	LTE Band 2	16QAM	10 MHz	0.27 W
Part 24	LTE Band 2	QPSK	15 MHz	0.33 W
Part 24	LTE Band 2	16QAM	15 MHz	0.27 W
Part 24	LTE Band 2	QPSK	20 MHz	0.34 W
Part 24	LTE Band 2	16QAM	20 MHz	0.26 W



<b>FCC Rule</b>	<b>System</b>	<b>Type of Modulation</b>	<b>BW</b>	<b>Maximum ERP/EIRP</b>
Part 24	LTE Band 25	QPSK	1.4 MHz	0.32 W
Part 24	LTE Band 25	16QAM	1.4 MHz	0.29 W
Part 24	LTE Band 25	QPSK	3 MHz	0.33 W
Part 24	LTE Band 25	16QAM	3 MHz	0.26 W
Part 24	LTE Band 25	QPSK	5 MHz	0.32 W
Part 24	LTE Band 25	16QAM	5 MHz	0.29 W
Part 24	LTE Band 25	QPSK	10 MHz	0.32 W
Part 24	LTE Band 25	16QAM	10 MHz	0.29 W
Part 24	LTE Band 25	QPSK	15 MHz	0.32 W
Part 24	LTE Band 25	16QAM	15 MHz	0.25 W
Part 24	LTE Band 25	QPSK	20 MHz	0.33 W
Part 24	LTE Band 25	16QAM	20 MHz	0.26 W





FCC Rule	System	Type of Modulation	BW	Maximum ERP/EIRP
Part 27	LTE Band 4	QPSK	1.4 MHz	0.32 W
Part 27	LTE Band 4	16QAM	1.4 MHz	0.25 W
Part 27	LTE Band 4	QPSK	3 MHz	0.28 W
Part 27	LTE Band 4	16QAM	3 MHz	0.23 W
Part 27	LTE Band 4	QPSK	5MHz	0.32 W
Part 27	LTE Band 4	16QAM	5MHz	0.25 W
Part 27	LTE Band 4	QPSK	10MHz	0.32 W
Part 27	LTE Band 4	16QAM	10MHz	0.25 W
Part 27	LTE Band 4	QPSK	15MHz	0.32 W
Part 27	LTE Band 4	16QAM	15MHz	0.25 W
Part 27	LTE Band 4	QPSK	20MHz	0.32 W
Part 27	LTE Band 4	16QAM	20MHz	0.24 W
Part 27	LTE Band 13	QPSK	5MHz	0.15 W
Part 27	LTE Band 13	16QAM	5MHz	0.13 W
Part 27	LTE Band 13	QPSK	10MHz	0.17 W
Part 27	LTE Band 13	16QAM	10MHz	0.13 W
Part 27	LTE Band 17	QPSK	5MHz	0.18 W
Part 27	LTE Band 17	16QAM	5MHz	0.15 W
Part 27	LTE Band 17	QPSK	10MHz	0.18 W
Part 27	LTE Band 17	16QAM	10MHz	0.14 W

## 1.7 Testing Site

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

## 1.8 Applied 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
- ♦ FCC KDB 412172 D01 Determining ERP and ERIP v01

### 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.



## 2 Test Configuration of Equipment Under Test

### 2.1 Test Mode

Test Modes		
Band		Conducted TCs
LTE Band 5	BW 1.4MHz	■ LTE (RB Size 1) Link ■ LTE (RB Size 3) Link ■ LTE (RB Size 6) Link
	BW 3MHz	■ LTE (RB Size 1) Link ■ LTE (RB Size 8) Link ■ LTE (RB Size 15) Link
	BW 5MHz	■ LTE (RB Size 1) Link ■ LTE (RB Size 12) Link ■ LTE (RB Size 25) Link
	BW 10MHz	■ LTE (RB Size 1) Link ■ LTE (RB Size 25) Link ■ LTE (RB Size 50) Link



Test Modes		
Band	Conducted TCs	
LTE Band 2	BW 1.4MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 3) Link</li> <li>■ LTE (RB Size 6) Link</li> </ul>
	BW 3MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 8) Link</li> <li>■ LTE (RB Size 15) Link</li> </ul>
	BW 5MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 12) Link</li> <li>■ LTE (RB Size 25) Link</li> </ul>
	BW 10MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 25) Link</li> <li>■ LTE (RB Size 50) Link</li> </ul>
	BW 15MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 36) Link</li> <li>■ LTE (RB Size 75) Link</li> </ul>
	BW 20MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 50) Link</li> <li>■ LTE (RB Size 100) Link</li> </ul>
LTE Band 25	BW 1.4MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 3) Link</li> <li>■ LTE (RB Size 6) Link</li> </ul>
	BW 3MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 8) Link</li> <li>■ LTE (RB Size 15) Link</li> </ul>
	BW 5MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 12) Link</li> <li>■ LTE (RB Size 25) Link</li> </ul>
	BW 10MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 25) Link</li> <li>■ LTE (RB Size 50) Link</li> </ul>
	BW 15MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 36) Link</li> <li>■ LTE (RB Size 75) Link</li> </ul>
	BW 20MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 50) Link</li> <li>■ LTE (RB Size 100) Link</li> </ul>



Test Modes		
Band		Conducted TCs
LTE Band 4	BW 1.4MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 3) Link</li> <li>■ LTE (RB Size 6) Link</li> </ul>
	BW 3MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 8) Link</li> <li>■ LTE (RB Size 15) Link</li> </ul>
	BW 5MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 12) Link</li> <li>■ LTE (RB Size 25) Link</li> </ul>
	BW 10MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 25) Link</li> <li>■ LTE (RB Size 50) Link</li> </ul>
	BW 15MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 36) Link</li> <li>■ LTE (RB Size 75) Link</li> </ul>
	BW 20MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 50) Link</li> <li>■ LTE (RB Size 100) Link</li> </ul>
LTE Band 13	BW 5MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 12) Link</li> <li>■ LTE (RB Size 25) Link</li> </ul>
	BW 10MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 25) Link</li> <li>■ LTE (RB Size 50) Link</li> </ul>
LTE Band 17	BW 5MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 12) Link</li> <li>■ LTE (RB Size 25) Link</li> </ul>
	BW 10MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1) Link</li> <li>■ LTE (RB Size 25) Link</li> <li>■ LTE (RB Size 50) Link</li> </ul>

### 3 Test Result

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

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

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

The ERP of mobile transmitters must not exceed 7 Watts for LTE Band 5.

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 13 and Band 17.

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2 and Band 25.

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4.

According to KDB 412172 D01 Power Approach,

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

$P_T$  = transmitter output power in dBm

$G_T$  = gain of the transmitting antenna in dBi

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

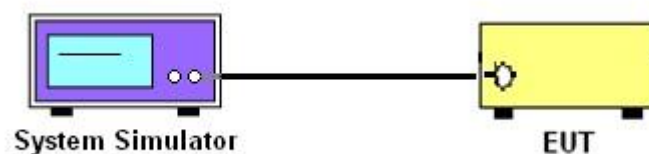
##### 3.1.2 Measuring Instruments

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

##### 3.1.3 Test Procedures

1. The transmitter output port was connected to base station.
2. Set EUT at maximum power through base station.
3. Select lowest, middle, and highest channels for each band and different modulation.

##### 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 Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
<b>Channel</b>				<b>20450</b>	<b>20525</b>	<b>20600</b>
<b>Frequency (MHz)</b>				<b>829</b>	<b>836.5</b>	<b>844</b>
10	QPSK	1	0	22.71	22.63	22.50
10	QPSK	1	24	22.67	22.38	22.51
10	QPSK	1	49	22.72	22.50	22.23
10	QPSK	25	0	21.71	21.59	21.40
10	QPSK	25	12	21.67	21.51	21.47
10	QPSK	25	24	21.67	21.40	21.33
10	QPSK	50	0	21.58	21.35	21.34
10	16QAM	1	0	21.71	21.68	21.51
10	16QAM	1	24	21.68	21.47	21.50
10	16QAM	1	49	21.81	21.53	21.53
10	16QAM	25	0	20.62	20.49	20.41
10	16QAM	25	12	20.56	20.43	20.44
10	16QAM	25	24	20.57	20.38	20.33
10	16QAM	50	0	20.58	20.34	20.33
<b>Channel</b>				<b>20425</b>	<b>20525</b>	<b>20625</b>
<b>Frequency (MHz)</b>				<b>826.5</b>	<b>836.5</b>	<b>846.5</b>
5	QPSK	1	0	22.42	22.59	22.43
5	QPSK	1	12	22.68	22.35	22.34
5	QPSK	1	24	22.46	22.43	22.37
5	QPSK	12	0	21.63	21.60	21.45
5	QPSK	12	6	21.51	21.64	21.21
5	QPSK	12	11	21.72	21.44	21.44
5	QPSK	25	0	21.69	21.44	21.43
5	16QAM	1	0	21.68	21.46	21.56
5	16QAM	1	12	21.55	21.16	21.45
5	16QAM	1	24	21.60	21.16	21.40
5	16QAM	12	0	20.78	20.49	20.68
5	16QAM	12	6	20.66	20.76	20.47
5	16QAM	12	11	20.79	20.70	20.59
5	16QAM	25	0	20.78	20.39	20.30



BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
<b>Channel</b>				<b>20415</b>	<b>20525</b>	<b>20635</b>
<b>Frequency (MHz)</b>				<b>825.5</b>	<b>836.5</b>	<b>847.5</b>
3	QPSK	1	0	22.46	22.45	22.17
3	QPSK	1	7	22.53	22.30	22.23
3	QPSK	1	14	22.30	22.40	22.29
3	QPSK	8	0	21.72	21.91	21.45
3	QPSK	8	4	21.55	21.77	21.35
3	QPSK	8	7	21.53	21.49	21.37
3	QPSK	15	0	21.80	21.61	21.40
3	16QAM	1	0	21.59	21.56	21.35
3	16QAM	1	7	21.66	21.40	21.18
3	16QAM	1	14	21.60	21.46	21.23
3	16QAM	8	0	20.50	20.65	20.46
3	16QAM	8	4	20.47	20.50	20.24
3	16QAM	8	7	20.60	20.46	20.42
3	16QAM	15	0	20.91	20.54	20.48
<b>Channel</b>				<b>20407</b>	<b>20525</b>	<b>20643</b>
<b>Frequency (MHz)</b>				<b>824.7</b>	<b>836.5</b>	<b>848.3</b>
1.4	QPSK	1	0	22.57	22.42	22.26
1.4	QPSK	1	2	22.54	22.25	22.40
1.4	QPSK	1	5	22.41	22.35	22.20
1.4	QPSK	3	0	22.66	22.68	22.38
1.4	QPSK	3	1	22.45	22.69	22.35
1.4	QPSK	3	2	22.60	22.45	22.38
1.4	QPSK	6	0	21.88	21.60	21.38
1.4	16QAM	1	0	21.26	21.32	21.20
1.4	16QAM	1	2	21.63	21.54	21.26
1.4	16QAM	1	5	21.30	21.16	21.03
1.4	16QAM	3	0	21.64	21.49	21.60
1.4	16QAM	3	1	21.59	21.65	21.63
1.4	16QAM	3	2	21.58	21.75	21.73
1.4	16QAM	6	0	20.75	20.50	20.58





<LTE Band 2 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
<b>Channel</b>				<b>18700</b>	<b>18900</b>	<b>19100</b>
<b>Frequency (MHz)</b>				<b>1860</b>	<b>1880</b>	<b>1900</b>
20	QPSK	1	0	22.93	22.74	22.60
20	QPSK	1	49	22.69	22.63	22.61
20	QPSK	1	99	22.63	22.57	22.66
20	QPSK	50	0	21.60	21.51	21.50
20	QPSK	50	24	21.49	21.48	21.45
20	QPSK	50	49	21.40	21.43	21.39
20	QPSK	100	0	21.48	21.45	21.44
20	16QAM	1	0	21.75	21.60	21.44
20	16QAM	1	49	21.70	21.56	21.36
20	16QAM	1	99	21.85	21.46	21.51
20	16QAM	50	0	20.53	20.44	20.39
20	16QAM	50	24	20.53	20.45	20.35
20	16QAM	50	49	20.31	20.50	20.34
20	16QAM	100	0	20.41	20.48	20.41
<b>Channel</b>				<b>18675</b>	<b>18900</b>	<b>19125</b>
<b>Frequency (MHz)</b>				<b>1857.5</b>	<b>1880</b>	<b>1902.5</b>
15	QPSK	1	0	22.53	22.42	22.49
15	QPSK	1	37	22.67	22.82	22.57
15	QPSK	1	74	22.43	22.68	22.59
15	QPSK	36	0	21.45	21.65	21.40
15	QPSK	36	18	21.40	21.64	21.50
15	QPSK	36	37	21.39	21.58	21.33
15	QPSK	75	0	21.30	21.46	21.42
15	16QAM	1	0	21.71	21.86	21.53
15	16QAM	1	37	21.86	21.91	21.60
15	16QAM	1	74	21.70	21.70	21.56
15	16QAM	36	0	20.50	20.64	20.76
15	16QAM	36	18	20.75	20.70	20.62
15	16QAM	36	37	20.51	20.68	20.52
15	16QAM	75	0	20.49	20.66	20.42



BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
<b>Channel</b>				<b>18650</b>	<b>18900</b>	<b>19150</b>
<b>Frequency (MHz)</b>				<b>1855</b>	<b>1880</b>	<b>1905</b>
10	QPSK	1	0	22.43	22.60	22.73
10	QPSK	1	24	22.59	22.67	22.42
10	QPSK	1	49	22.46	22.70	22.66
10	QPSK	25	0	21.53	21.73	21.73
10	QPSK	25	12	21.61	21.54	21.77
10	QPSK	25	24	21.58	21.53	21.63
10	QPSK	50	0	21.40	21.35	21.50
10	16QAM	1	0	21.75	21.93	21.50
10	16QAM	1	24	21.90	21.84	21.78
10	16QAM	1	49	22.01	21.92	21.83
10	16QAM	25	0	20.51	20.76	20.68
10	16QAM	25	12	20.79	20.67	20.62
10	16QAM	25	24	20.52	20.62	20.58
10	16QAM	50	0	20.40	20.14	20.37
<b>Channel</b>				<b>18625</b>	<b>18900</b>	<b>19175</b>
<b>Frequency (MHz)</b>				<b>1852.5</b>	<b>1880</b>	<b>1907.5</b>
5	QPSK	1	0	22.56	22.62	22.91
5	QPSK	1	12	22.52	22.64	22.65
5	QPSK	1	24	22.50	22.47	22.72
5	QPSK	12	0	21.55	21.87	21.91
5	QPSK	12	6	21.76	21.92	21.82
5	QPSK	12	11	21.68	21.67	21.61
5	QPSK	25	0	21.59	21.58	21.57
5	16QAM	1	0	21.31	21.68	21.50
5	16QAM	1	12	21.20	21.53	21.69
5	16QAM	1	24	21.33	21.37	21.61
5	16QAM	12	0	20.50	20.88	20.98
5	16QAM	12	6	20.69	20.84	20.80
5	16QAM	12	11	20.54	20.76	20.77
5	16QAM	25	0	20.75	20.35	20.68



BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
<b>Channel</b>				<b>18615</b>	<b>18900</b>	<b>19185</b>
<b>Frequency (MHz)</b>				<b>1851.5</b>	<b>1880</b>	<b>1908.5</b>
3	QPSK	1	0	22.61	22.63	22.65
3	QPSK	1	7	22.49	22.84	22.63
3	QPSK	1	14	22.74	22.56	22.66
3	QPSK	8	0	21.67	21.75	21.76
3	QPSK	8	4	21.81	21.81	21.86
3	QPSK	8	7	21.76	21.82	21.67
3	QPSK	15	0	21.66	21.52	21.61
3	16QAM	1	0	21.68	21.66	21.49
3	16QAM	1	7	21.59	21.65	21.65
3	16QAM	1	14	21.53	21.66	21.29
3	16QAM	8	0	20.58	20.66	20.76
3	16QAM	8	4	20.91	20.89	20.77
3	16QAM	8	7	20.71	20.73	20.73
3	16QAM	15	0	20.60	20.43	20.44
<b>Channel</b>				<b>18607</b>	<b>18900</b>	<b>19193</b>
<b>Frequency (MHz)</b>				<b>1850.7</b>	<b>1880</b>	<b>1909.3</b>
1.4	QPSK	1	0	22.63	22.79	22.89
1.4	QPSK	1	2	22.54	22.68	22.44
1.4	QPSK	1	5	22.62	22.66	22.59
1.4	QPSK	3	0	22.68	22.79	22.81
1.4	QPSK	3	1	22.75	22.88	22.92
1.4	QPSK	3	2	22.60	22.71	22.49
1.4	QPSK	6	0	21.72	21.70	21.80
1.4	16QAM	1	0	21.70	21.86	21.65
1.4	16QAM	1	2	21.75	21.74	21.50
1.4	16QAM	1	5	21.76	21.72	21.51
1.4	16QAM	3	0	21.10	21.16	21.06
1.4	16QAM	3	1	21.13	21.10	21.07
1.4	16QAM	3	2	21.14	21.17	21.05
1.4	16QAM	6	0	21.18	21.16	21.00



<LTE Band 25 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
<b>Channel</b>				<b>26140</b>	<b>26365</b>	<b>26590</b>
<b>Frequency (MHz)</b>				<b>1860</b>	<b>1882.5</b>	<b>1905</b>
20	QPSK	1	0	22.57	22.58	22.77
20	QPSK	1	49	22.52	22.54	22.65
20	QPSK	1	99	22.51	22.70	22.59
20	QPSK	50	0	21.44	21.49	21.50
20	QPSK	50	24	21.47	21.45	21.40
20	QPSK	50	49	21.43	21.53	21.43
20	QPSK	100	0	21.46	21.46	21.45
20	16QAM	1	0	21.70	21.61	21.59
20	16QAM	1	49	21.61	21.54	21.73
20	16QAM	1	99	21.73	21.51	21.78
20	16QAM	50	0	20.52	20.46	20.41
20	16QAM	50	24	20.48	20.55	20.46
20	16QAM	50	49	20.45	20.60	20.42
20	16QAM	100	0	20.48	20.43	20.53
<b>Channel</b>				<b>26115</b>	<b>26365</b>	<b>26615</b>
<b>Frequency (MHz)</b>				<b>1857.5</b>	<b>1882.5</b>	<b>1907.5</b>
15	QPSK	1	0	22.55	22.47	22.43
15	QPSK	1	37	22.50	22.73	22.75
15	QPSK	1	74	22.53	22.50	22.58
15	QPSK	36	0	21.58	21.64	21.51
15	QPSK	36	18	21.73	21.49	21.90
15	QPSK	36	37	21.64	21.46	21.53
15	QPSK	75	0	21.43	21.48	21.49
15	16QAM	1	0	21.58	21.60	21.66
15	16QAM	1	37	21.52	21.55	21.63
15	16QAM	1	74	21.55	21.49	21.69
15	16QAM	36	0	20.82	20.90	21.27
15	16QAM	36	18	20.89	21.01	21.21
15	16QAM	36	37	20.87	20.84	20.92
15	16QAM	75	0	20.87	20.94	21.18



BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
<b>Channel</b>				<b>26090</b>	<b>26365</b>	<b>26640</b>
<b>Frequency (MHz)</b>				<b>1855</b>	<b>1882.5</b>	<b>1910</b>
10	QPSK	1	0	22.51	22.50	22.52
10	QPSK	1	24	22.50	22.50	22.62
10	QPSK	1	49	22.56	22.55	22.66
10	QPSK	25	0	21.46	21.80	21.66
10	QPSK	25	12	21.45	21.58	21.69
10	QPSK	25	24	21.42	21.52	21.55
10	QPSK	50	0	21.41	21.49	21.46
10	16QAM	1	0	22.00	21.80	22.20
10	16QAM	1	24	21.46	21.90	21.85
10	16QAM	1	49	21.94	21.93	22.24
10	16QAM	25	0	20.62	20.48	20.68
10	16QAM	25	12	20.54	20.52	20.66
10	16QAM	25	24	20.48	20.53	20.59
10	16QAM	50	0	20.43	20.55	20.58
<b>Channel</b>				<b>26065</b>	<b>26365</b>	<b>26665</b>
<b>Frequency (MHz)</b>				<b>1852.5</b>	<b>1882.5</b>	<b>1912.5</b>
5	QPSK	1	0	22.41	22.63	22.46
5	QPSK	1	12	22.55	22.72	22.58
5	QPSK	1	24	22.71	22.65	22.52
5	QPSK	12	0	21.53	21.73	21.84
5	QPSK	12	6	21.56	21.49	21.70
5	QPSK	12	11	21.64	21.54	21.44
5	QPSK	25	0	21.55	21.40	21.49
5	16QAM	1	0	21.80	22.16	22.00
5	16QAM	1	12	21.90	22.18	22.19
5	16QAM	1	24	22.25	22.12	22.17
5	16QAM	12	0	20.40	20.56	20.75
5	16QAM	12	6	20.50	20.68	20.71
5	16QAM	12	11	20.68	20.54	20.62
5	16QAM	25	0	20.51	20.55	20.75



BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
<b>Channel</b>				<b>26055</b>	<b>26365</b>	<b>26675</b>
<b>Frequency (MHz)</b>				<b>1851.5</b>	<b>1882.5</b>	<b>1913.5</b>
3	QPSK	1	0	22.41	22.60	22.45
3	QPSK	1	7	22.45	22.49	22.49
3	QPSK	1	14	22.76	22.44	22.58
3	QPSK	8	0	21.60	21.75	21.61
3	QPSK	8	4	21.55	21.68	21.70
3	QPSK	8	7	21.59	21.57	21.60
3	QPSK	15	0	21.46	21.54	21.53
3	16QAM	1	0	21.64	21.83	21.45
3	16QAM	1	7	21.56	21.63	21.60
3	16QAM	1	14	21.76	21.48	21.62
3	16QAM	8	0	20.46	20.45	20.50
3	16QAM	8	4	20.46	20.50	20.63
3	16QAM	8	7	20.41	20.55	20.59
3	16QAM	15	0	20.53	20.49	20.54
<b>Channel</b>				<b>26047</b>	<b>26365</b>	<b>26683</b>
<b>Frequency (MHz)</b>				<b>1850.7</b>	<b>1882.5</b>	<b>1914.3</b>
1.4	QPSK	1	0	22.48	22.48	22.57
1.4	QPSK	1	2	22.53	22.47	22.49
1.4	QPSK	1	5	22.50	22.46	22.68
1.4	QPSK	3	0	22.46	22.74	22.51
1.4	QPSK	3	1	22.55	22.55	22.54
1.4	QPSK	3	2	22.48	22.60	22.53
1.4	QPSK	6	0	21.43	21.58	21.51
1.4	16QAM	1	0	22.00	22.32	22.09
1.4	16QAM	1	2	21.96	21.91	21.92
1.4	16QAM	1	5	22.02	21.80	22.15
1.4	16QAM	3	0	21.41	21.49	21.63
1.4	16QAM	3	1	21.43	21.59	21.68
1.4	16QAM	3	2	21.46	21.72	21.53
1.4	16QAM	6	0	20.60	20.47	20.58



<LTE Band 4 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
<b>Channel</b>				<b>20050</b>	<b>20175</b>	<b>20300</b>
<b>Frequency (MHz)</b>				<b>1720</b>	<b>1732.5</b>	<b>1745</b>
20	QPSK	1	0	22.57	22.60	22.95
20	QPSK	1	49	22.53	22.50	22.64
20	QPSK	1	99	22.46	22.70	22.47
20	QPSK	50	0	21.35	21.37	21.49
20	QPSK	50	24	21.35	21.40	21.46
20	QPSK	50	49	21.25	21.44	21.35
20	QPSK	100	0	21.36	21.44	21.49
20	16QAM	1	0	21.56	21.61	21.68
20	16QAM	1	49	21.44	21.59	21.67
20	16QAM	1	99	21.51	21.68	21.58
20	16QAM	50	0	20.33	20.30	20.48
20	16QAM	50	24	20.29	20.32	20.44
20	16QAM	50	49	20.23	20.38	20.38
20	16QAM	100	0	20.35	20.36	20.61
<b>Channel</b>				<b>20025</b>	<b>20175</b>	<b>20325</b>
<b>Frequency (MHz)</b>				<b>1717.5</b>	<b>1732.5</b>	<b>1747.5</b>
15	QPSK	1	0	22.78	22.78	22.67
15	QPSK	1	37	22.76	22.80	22.91
15	QPSK	1	74	22.88	22.88	22.51
15	QPSK	36	0	21.80	21.80	21.85
15	QPSK	36	18	21.85	21.83	21.83
15	QPSK	36	37	21.79	21.75	21.80
15	QPSK	75	0	21.66	21.69	21.75
15	16QAM	1	0	21.86	21.72	21.70
15	16QAM	1	37	21.81	21.69	21.68
15	16QAM	1	74	21.85	21.77	21.69
15	16QAM	36	0	20.81	20.86	20.86
15	16QAM	36	18	20.85	20.70	20.80
15	16QAM	36	37	20.80	20.69	20.76
15	16QAM	75	0	20.88	20.68	20.69



BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
<b>Channel</b>				<b>20000</b>	<b>20175</b>	<b>20350</b>
<b>Frequency (MHz)</b>				<b>1715</b>	<b>1732.5</b>	<b>1750</b>
10	QPSK	1	0	22.55	22.85	22.61
10	QPSK	1	24	22.59	22.83	22.75
10	QPSK	1	49	22.64	22.94	22.53
10	QPSK	25	0	21.65	21.60	21.70
10	QPSK	25	12	21.51	21.58	21.54
10	QPSK	25	24	21.61	21.82	21.33
10	QPSK	50	0	21.39	21.57	21.33
10	16QAM	1	0	21.70	21.68	21.76
10	16QAM	1	24	21.56	21.81	21.66
10	16QAM	1	49	21.45	21.70	21.80
10	16QAM	25	0	20.36	20.80	20.71
10	16QAM	25	12	20.38	20.86	20.46
10	16QAM	25	24	20.29	20.78	20.39
10	16QAM	50	0	20.43	20.93	20.69
<b>Channel</b>				<b>19975</b>	<b>20175</b>	<b>20375</b>
<b>Frequency (MHz)</b>				<b>1712.5</b>	<b>1732.5</b>	<b>1752.5</b>
5	QPSK	1	0	22.78	22.48	22.54
5	QPSK	1	12	22.71	22.46	22.60
5	QPSK	1	24	22.75	22.95	22.52
5	QPSK	12	0	21.64	21.74	21.72
5	QPSK	12	6	21.75	21.56	21.71
5	QPSK	12	11	21.70	21.64	21.40
5	QPSK	25	0	21.74	21.61	21.38
5	16QAM	1	0	21.73	21.63	21.48
5	16QAM	1	12	21.77	21.77	21.45
5	16QAM	1	24	21.70	21.88	21.44
5	16QAM	12	0	20.70	20.76	20.54
5	16QAM	12	6	20.61	20.75	20.63
5	16QAM	12	11	20.68	20.75	20.53
5	16QAM	25	0	20.69	20.78	20.51





BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
<b>Channel</b>				<b>19965</b>	<b>20175</b>	<b>20385</b>
<b>Frequency (MHz)</b>				<b>1711.5</b>	<b>1732.5</b>	<b>1753.5</b>
3	QPSK	1	0	22.28	22.35	22.23
3	QPSK	1	7	22.06	22.30	22.42
3	QPSK	1	14	22.33	22.25	22.18
3	QPSK	8	0	21.16	21.20	21.45
3	QPSK	8	4	21.19	21.36	21.21
3	QPSK	8	7	21.13	21.45	21.21
3	QPSK	15	0	21.28	21.36	21.14
3	16QAM	1	0	21.40	21.26	21.37
3	16QAM	1	7	21.30	21.41	21.36
3	16QAM	1	14	21.36	21.59	21.21
3	16QAM	8	0	20.15	20.50	20.41
3	16QAM	8	4	20.24	20.53	20.17
3	16QAM	8	7	20.08	20.44	20.06
3	16QAM	15	0	20.24	20.40	20.19
<b>Channel</b>				<b>19957</b>	<b>20175</b>	<b>20393</b>
<b>Frequency (MHz)</b>				<b>1710.7</b>	<b>1732.5</b>	<b>1754.3</b>
1.4	QPSK	1	0	22.71	22.39	22.37
1.4	QPSK	1	2	22.64	22.41	22.42
1.4	QPSK	1	5	22.87	22.95	22.50
1.4	QPSK	3	0	22.56	22.62	22.20
1.4	QPSK	3	1	22.69	22.61	22.43
1.4	QPSK	3	2	22.78	22.76	22.50
1.4	QPSK	6	0	21.68	21.69	21.37
1.4	16QAM	1	0	21.86	21.69	21.43
1.4	16QAM	1	2	21.70	21.85	21.45
1.4	16QAM	1	5	21.77	21.94	21.44
1.4	16QAM	3	0	21.60	21.70	21.50
1.4	16QAM	3	1	21.78	21.76	21.56
1.4	16QAM	3	2	21.76	21.80	21.53
1.4	16QAM	6	0	21.00	21.00	21.01



<LTE Band 13 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
<b>Channel</b>					<b>23230</b>	
<b>Frequency (MHz)</b>					<b>782</b>	
10	QPSK	1	0		22.67	
10	QPSK	1	24		22.50	
10	QPSK	1	49		22.43	
10	QPSK	25	0		21.60	
10	QPSK	25	12		21.30	
10	QPSK	25	24		21.40	
10	QPSK	50	0		21.52	
10	16QAM	1	0		21.53	
10	16QAM	1	24		21.30	
10	16QAM	1	49		21.17	
10	16QAM	25	0		20.57	
10	16QAM	25	12		20.46	
10	16QAM	25	24		20.38	
10	16QAM	50	0		20.40	
<b>Channel</b>				<b>23205</b>	<b>23230</b>	<b>23255</b>
<b>Frequency (MHz)</b>				<b>779.5</b>	<b>782</b>	<b>784.5</b>
5	QPSK	1	0	22.14	22.07	22.01
5	QPSK	1	12	22.02	22.04	22.13
5	QPSK	1	24	22.23	22.14	22.10
5	QPSK	12	0	21.25	21.34	21.24
5	QPSK	12	6	21.31	21.22	21.19
5	QPSK	12	11	21.25	21.29	21.15
5	QPSK	25	0	21.15	21.08	21.03
5	16QAM	1	0	21.00	21.09	21.04
5	16QAM	1	12	21.37	21.27	21.29
5	16QAM	1	24	21.05	21.03	21.23
5	16QAM	12	0	20.17	20.15	20.22
5	16QAM	12	6	20.18	20.26	20.27
5	16QAM	12	11	20.18	20.25	20.10
5	16QAM	25	0	20.05	20.26	20.06



<LTE Band 17 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
<b>Channel</b>				<b>23780</b>	<b>23790</b>	<b>23800</b>
<b>Frequency (MHz)</b>				<b>709</b>	<b>710</b>	<b>711</b>
10	QPSK	1	0	22.61	22.36	22.69
10	QPSK	1	24	22.48	22.47	22.62
10	QPSK	1	49	22.55	22.40	22.24
10	QPSK	25	0	21.56	21.57	21.56
10	QPSK	25	12	21.56	21.47	21.46
10	QPSK	25	24	21.45	21.45	21.37
10	QPSK	50	0	21.47	21.44	21.40
10	16QAM	1	0	21.61	21.39	21.63
10	16QAM	1	24	21.55	21.56	21.65
10	16QAM	1	49	21.53	21.54	21.45
10	16QAM	25	0	20.58	20.54	20.55
10	16QAM	25	12	20.51	20.50	20.44
10	16QAM	25	24	20.50	20.43	20.36
10	16QAM	50	0	20.46	20.43	20.43
<b>Channel</b>				<b>23755</b>	<b>23790</b>	<b>23825</b>
<b>Frequency (MHz)</b>				<b>706.5</b>	<b>710</b>	<b>713.5</b>
5	QPSK	1	0	22.55	22.46	22.31
5	QPSK	1	12	22.43	22.30	22.29
5	QPSK	1	24	22.48	22.58	22.35
5	QPSK	12	0	21.65	21.57	21.64
5	QPSK	12	6	21.55	21.43	21.61
5	QPSK	12	11	21.54	21.54	21.45
5	QPSK	25	0	21.41	21.40	21.48
5	16QAM	1	0	21.31	21.70	21.50
5	16QAM	1	12	21.45	21.65	21.74
5	16QAM	1	24	21.43	21.47	21.35
5	16QAM	12	0	20.63	20.48	20.30
5	16QAM	12	6	20.73	20.70	20.28
5	16QAM	12	11	20.54	20.67	20.30
5	16QAM	25	0	20.24	20.39	20.39

**Note:** maximum average power for LTE.

3.1.6 Test Result of Conducted Output Power and ERP/EIRP

Cellular Band ( $G_T - L_C = 0.78$ dB)						
Modes	LTE Band 5 (QPSK, BW=1.4M)			LTE Band 5 (16QAM, BW=1.4M)		
Channel	20407 (Low)	20525 (Mid)	20643 (High)	20407 (Low)	20525 (Mid)	20643 (High)
Frequency (MHz)	824.7	836.5	848.3	824.7	836.5	848.3
Conducted Power (dBm)	22.66	22.69	22.40	21.64	21.75	21.73
Conducted Power (Watts)	0.18	0.19	0.17	0.15	0.15	0.15
ERP(dBm)	21.29	21.32	21.03	20.27	20.38	20.36
ERP(Watts)	0.13	0.14	0.13	0.11	0.11	0.11

Cellular Band ( $G_T - L_C = 0.78$ dB)						
Modes	LTE Band 5 (QPSK, BW=3M)			LTE Band 5 (16QAM, BW=3M)		
Channel	20415 (Low)	20525 (Mid)	20635 (High)	20415 (Low)	20525 (Mid)	20635 (High)
Frequency (MHz)	825.5	836.5	847.5	825.5	836.5	847.5
Conducted Power (dBm)	22.53	22.45	22.29	21.66	21.56	21.35
Conducted Power (Watts)	0.18	0.18	0.17	0.15	0.14	0.14
ERP(dBm)	21.16	21.08	20.92	20.29	20.19	19.98
ERP(Watts)	0.13	0.13	0.12	0.11	0.10	0.10



Cellular Band ( $G_T - L_C = 0.78$ dB)						
Modes	LTE Band 5 (QPSK, BW=5M)			LTE Band 5 (16QAM, BW=5M)		
Channel	20425 (Low)	20525 (Mid)	20625 (High)	20425 (Low)	20525 (Mid)	20625 (High)
Frequency (MHz)	826.5	836.5	846.5	826.5	836.5	846.5
Conducted Power (dBm)	22.68	22.59	22.43	21.68	21.46	21.56
Conducted Power (Watts)	0.19	0.18	0.17	0.15	0.14	0.14
ERP(dBm)	21.31	21.22	21.06	20.31	20.09	20.19
ERP(Watts)	0.14	0.13	0.13	0.11	0.10	0.10

Cellular Band ( $G_T - L_C = 0.78$ dB)						
Modes	LTE Band 5 (QPSK, BW=10M)			LTE Band 5 (16QAM, BW=10M)		
Channel	20450 (Low)	20525 (Mid)	20600 (High)	20450 (Low)	20525 (Mid)	20600 (High)
Frequency (MHz)	829	836.5	844	829	836.5	844
Conducted Power (dBm)	22.72	22.63	22.51	21.81	21.68	21.53
Conducted Power (Watts)	0.19	0.18	0.18	0.15	0.15	0.14
ERP(dBm)	21.35	21.26	21.14	20.44	20.31	20.16
ERP(Watts)	0.14	0.13	0.13	0.11	0.11	0.10



PCS Band ( $G_T - L_C = 2.36$ dB)						
Modes	LTE Band 2 (QPSK, BW=1.4M)			LTE Band 2 (16QAM, BW=1.4M)		
Channel	18607(Low)	18900 (Mid)	19193 (High)	18607(Low)	18900 (Mid)	19193 (High)
Frequency (MHz)	1850.7	1880	1909.3	1850.7	1880	1909.3
Conducted Power (dBm)	22.75	22.88	22.92	21.76	21.86	21.65
Conducted Power (Watts)	0.19	0.19	0.20	0.15	0.15	0.15
EIRP(dBm)	25.11	25.24	25.28	24.12	24.22	24.01
EIRP(Watts)	0.32	0.33	0.34	0.26	0.26	0.25

PCS Band ( $G_T - L_C = 2.36$ dB)						
Modes	LTE Band 2 (QPSK, BW=3M)			LTE Band 2 (16QAM, BW=3M)		
Channel	18615(Low)	18900 (Mid)	19185 (High)	18615(Low)	18900 (Mid)	19185 (High)
Frequency (MHz)	1851.5	1880	1908.5	1851.5	1880	1908.5
Conducted Power (dBm)	22.74	22.84	22.66	21.68	21.66	21.65
Conducted Power (Watts)	0.19	0.19	0.18	0.15	0.15	0.15
EIRP(dBm)	25.10	25.20	25.02	24.04	24.02	24.01
EIRP(Watts)	0.32	0.33	0.32	0.25	0.25	0.25



PCS Band ( $G_T - L_C = 2.36$ dB)						
Modes	LTE Band 2 (QPSK, BW=5M)			LTE Band 2 (16QAM, BW=5M)		
Channel	18625(Low)	18900 (Mid)	19175 (High)	18625(Low)	18900 (Mid)	19175 (High)
Frequency (MHz)	1852.5	1880	1907.5	1852.5	1880	1907.5
Conducted Power (dBm)	22.56	22.64	22.91	21.33	21.68	21.69
Conducted Power (Watts)	0.18	0.18	0.20	0.14	0.15	0.15
EIRP(dBm)	24.92	25.00	25.27	23.69	24.04	24.05
EIRP(Watts)	0.31	0.32	0.34	0.23	0.25	0.25

PCS Band ( $G_T - L_C = 2.36$ dB)						
Modes	LTE Band 2 (QPSK, BW=10M)			LTE Band 2 (16QAM, BW=10M)		
Channel	18650(Low)	18900 (Mid)	19150 (High)	18650(Low)	18900 (Mid)	19150 (High)
Frequency (MHz)	1855	1880	1905	1855	1880	1905
Conducted Power (dBm)	22.59	22.70	22.73	22.01	21.93	21.83
Conducted Power (Watts)	0.18	0.19	0.19	0.16	0.16	0.15
EIRP(dBm)	24.95	25.06	25.09	24.37	24.29	24.19
EIRP(Watts)	0.31	0.32	0.32	0.27	0.27	0.26



PCS Band ( $G_T - L_C = 2.36$ dB)						
Modes	LTE Band 2 (QPSK, BW=15M)			LTE Band 2 (16QAM, BW=15M)		
Channel	18675(Low)	18900 (Mid)	19125 (High)	18675(Low)	18900 (Mid)	19125 (High)
Frequency (MHz)	1857.5	1880	1902.5	1857.5	1880	1902.5
Conducted Power (dBm)	22.67	22.82	22.59	21.86	21.91	21.60
Conducted Power (Watts)	0.18	0.19	0.18	0.15	0.16	0.14
EIRP(dBm)	25.03	25.18	24.95	24.22	24.27	23.96
EIRP(Watts)	0.32	0.33	0.31	0.26	0.27	0.25

PCS Band ( $G_T - L_C = 2.36$ dB)						
Modes	LTE Band 2 (QPSK, BW=20M)			LTE Band 2 (16QAM, BW=20M)		
Channel	18700(Low)	18900 (Mid)	19100 (High)	18700(Low)	18900 (Mid)	19100 (High)
Frequency (MHz)	1860	1880	1900	1860	1880	1900
Conducted Power (dBm)	22.93	22.74	22.66	21.85	21.60	21.51
Conducted Power (Watts)	0.20	0.19	0.18	0.15	0.14	0.14
EIRP(dBm)	25.29	25.10	25.02	24.21	23.96	23.87
EIRP(Watts)	0.34	0.32	0.32	0.26	0.25	0.24





PCS Band ( $G_T - L_C = 2.36$ dB)						
Modes	LTE Band 25 (QPSK, BW=1.4M)			LTE Band 25 (16QAM, BW=1.4M)		
Channel	26047 (Low)	26365 (Mid)	26683 (High)	26047 (Low)	26365 (Mid)	26683 (High)
Frequency (MHz)	1850.7	1882.5	1914.3	1850.7	1882.5	1914.3
Conducted Power (dBm)	22.55	22.74	22.68	22.02	22.32	22.15
Conducted Power (Watts)	0.18	0.19	0.19	0.16	0.17	0.16
EIRP(dBm)	24.91	25.10	25.04	24.38	24.68	24.51
EIRP(Watts)	0.31	0.32	0.32	0.27	0.29	0.28

PCS Band ( $G_T - L_C = 2.36$ dB)						
Modes	LTE Band 25 (QPSK, BW=3M)			LTE Band 25 (16QAM, BW=3M)		
Channel	26055 (Low)	26365 (Mid)	26675 (High)	26055 (Low)	26365 (Mid)	26675 (High)
Frequency (MHz)	1851.5	1882.5	1913.5	1851.5	1882.5	1913.5
Conducted Power (dBm)	22.76	22.60	22.58	21.76	21.83	21.62
Conducted Power (Watts)	0.19	0.18	0.18	0.15	0.15	0.15
EIRP(dBm)	25.12	24.96	24.94	24.12	24.19	23.98
EIRP(Watts)	0.33	0.31	0.31	0.26	0.26	0.25



PCS Band ( $G_T - L_C = 2.36$ dB)						
Modes	LTE Band 25 (QPSK, BW=5M)			LTE Band 25 (16QAM, BW=5M)		
Channel	26065 (Low)	26365 (Mid)	26665 (High)	26065 (Low)	26365 (Mid)	26665 (High)
Frequency (MHz)	1852.5	1882.5	1912.5	1852.5	1882.5	1912.5
Conducted Power (dBm)	22.71	22.72	22.58	22.25	22.18	22.19
Conducted Power (Watts)	0.19	0.19	0.18	0.17	0.17	0.17
EIRP(dBm)	25.07	25.08	24.94	24.61	24.54	24.55
EIRP(Watts)	0.32	0.32	0.31	0.29	0.28	0.29

PCS Band ( $G_T - L_C = 2.36$ dB)						
Modes	LTE Band 25 (QPSK, BW=10M)			LTE Band 25 (16QAM, BW=10M)		
Channel	26090 (Low)	26365 (Mid)	26640 (High)	26090 (Low)	26365 (Mid)	26640 (High)
Frequency (MHz)	1855	1882.5	1910	1855	1882.5	1910
Conducted Power (dBm)	22.56	22.55	22.66	22.00	21.93	22.24
Conducted Power (Watts)	0.18	0.18	0.18	0.16	0.16	0.17
EIRP(dBm)	24.92	24.91	25.02	24.36	24.29	24.60
EIRP(Watts)	0.31	0.31	0.32	0.27	0.27	0.29



PCS Band ( $G_T - L_C = 2.36$ dB)						
Modes	LTE Band 25 (QPSK,BW=15M)			LTE Band 25 (16QAM,BW=15M)		
Channel	26115 (Low)	26365 (Mid)	26615 (High)	26115 (Low)	26365 (Mid)	26615 (High)
Frequency (MHz)	1857.5	1882.5	1907.5	1857.5	1882.5	1907.5
Conducted Power (dBm)	22.55	22.73	22.75	21.58	21.60	21.69
Conducted Power (Watts)	0.18	0.19	0.19	0.14	0.14	0.15
EIRP(dBm)	24.91	25.09	25.11	23.94	23.96	24.05
EIRP(Watts)	0.31	0.32	0.32	0.25	0.25	0.25

PCS Band ( $G_T - L_C = 2.36$ dB)						
Modes	LTE Band 25 (QPSK,BW=20M)			LTE Band 25 (16QAM,BW=20M)		
Channel	26140 (Low)	26365 (Mid)	26590 (High)	26140 (Low)	26365 (Mid)	26590 (High)
Frequency (MHz)	1860	1882.5	1905	1860	1882.5	1905
Conducted Power (dBm)	22.57	22.70	22.77	21.73	21.61	21.78
Conducted Power (Watts)	0.18	0.19	0.19	0.15	0.14	0.15
EIRP(dBm)	24.93	25.06	25.13	24.09	23.97	24.14
EIRP(Watts)	0.31	0.32	0.33	0.26	0.25	0.26



PCS Band ( $G_T - L_C = 2.12$ dB)						
Modes	LTE Band 4 (QPSK, BW=1.4M)			LTE Band 4 (16QAM, BW=1.4M)		
Channel	19957 (Low)	20175 (Mid)	20393 (High)	19957 (Low)	20175 (Mid)	20393 (High)
Frequency (MHz)	1710.7	1732.5	1754.3	1710.7	1732.5	1754.3
Conducted Power (dBm)	22.87	22.95	22.50	21.86	21.94	21.56
Conducted Power (Watts)	0.19	0.20	0.18	0.15	0.16	0.14
EIRP(dBm)	24.99	25.07	24.62	23.98	24.06	23.68
EIRP(Watts)	0.32	0.32	0.29	0.25	0.25	0.23

PCS Band ( $G_T - L_C = 2.12$ dB)						
Modes	LTE Band 4 (QPSK, BW=3M)			LTE Band 4 (16QAM, BW=3M)		
Channel	19965(Low)	20175 (Mid)	20385 (High)	19965(Low)	20175 (Mid)	20385 (High)
Frequency (MHz)	1711.5	1732.5	1753.5	1711.5	1732.5	1753.5
Conducted Power (dBm)	22.33	22.35	22.42	21.40	21.59	21.37
Conducted Power (Watts)	0.17	0.17	0.17	0.14	0.14	0.14
EIRP(dBm)	24.45	24.47	24.54	23.52	23.71	23.49
EIRP(Watts)	0.28	0.28	0.28	0.22	0.23	0.22



PCS Band ( $G_T - L_C = 2.12$ dB)						
Modes	LTE Band 4 (QPSK, BW=5M)			LTE Band 4 (16QAM, BW=5M)		
Channel	19975(Low)	20175 (Mid)	20375 (High)	19975(Low)	20175 (Mid)	20375 (High)
Frequency (MHz)	1712.5	1732.5	1752.5	1712.5	1732.5	1752.5
Conducted Power (dBm)	22.78	22.95	22.60	21.77	21.88	21.48
Conducted Power (Watts)	0.19	0.20	0.18	0.15	0.15	0.14
EIRP(dBm)	24.90	25.07	24.72	23.89	24.00	23.60
EIRP(Watts)	0.31	0.32	0.30	0.24	0.25	0.23

PCS Band ( $G_T - L_C = 2.12$ dB)						
Modes	LTE Band 4 (QPSK, BW=10M)			LTE Band 4 (16QAM, BW=10M)		
Channel	20000 (Low)	20175 (Mid)	20350 (High)	20000 (Low)	20175 (Mid)	20350 (High)
Frequency (MHz)	1715	1732.5	1750	1715	1732.5	1750
Conducted Power (dBm)	22.64	22.94	22.75	21.70	21.81	21.80
Conducted Power (Watts)	0.18	0.20	0.19	0.15	0.15	0.15
EIRP(dBm)	24.76	25.06	24.87	23.82	23.93	23.92
EIRP(Watts)	0.30	0.32	0.31	0.24	0.25	0.25



PCS Band ( $G_T - L_C = 2.12$ dB)						
Modes	LTE Band 4 (QPSK, BW=15M)			LTE Band 4 (16QAM, BW=15M)		
Channel	20025 (Low)	20175 (Mid)	20325 (High)	20025 (Low)	20175 (Mid)	20325 (High)
Frequency (MHz)	1717.5	1732.5	1747.5	1717.5	1732.5	1747.5
Conducted Power (dBm)	22.88	22.88	22.91	21.86	21.77	21.70
Conducted Power (Watts)	0.19	0.19	0.20	0.15	0.15	0.15
EIRP(dBm)	25.00	25.00	25.03	23.98	23.89	23.82
EIRP(Watts)	0.32	0.32	0.32	0.25	0.24	0.24

PCS Band ( $G_T - L_C = 2.12$ dB)						
Modes	LTE Band 4 (QPSK, BW=20M)			LTE Band 4 (16QAM, BW=20M)		
Channel	20050 (Low)	20175 (Mid)	20300 (High)	20050 (Low)	20175 (Mid)	20300 (High)
Frequency (MHz)	1720	1732.5	1745	1720	1732.5	1745
Conducted Power (dBm)	22.57	22.70	22.95	21.56	21.68	21.68
Conducted Power (Watts)	0.18	0.19	0.20	0.14	0.15	0.15
EIRP(dBm)	24.69	24.82	25.07	23.68	23.80	23.80
EIRP(Watts)	0.29	0.30	0.32	0.23	0.24	0.24



Cellular Band ( $G_T - L_C = 1.80$ dB)						
Modes	LTE Band 13 (QPSK,BW=5M)			LTE Band 13 (16QAM,BW=5M)		
Channel	23205 (Low)	23230 (Mid)	23255 (High)	23205 (Low)	23230 (Mid)	23255 (High)
Frequency (MHz)	779.5	782	784.5	779.5	782	784.5
Conducted Power (dBm)	22.23	22.14	22.13	21.37	21.27	21.29
Conducted Power (Watts)	0.17	0.16	0.16	0.14	0.13	0.13
ERP(dBm)	21.88	21.79	21.78	21.02	20.92	20.94
ERP(Watts)	0.15	0.15	0.15	0.13	0.12	0.12

Cellular Band ( $G_T - L_C = 1.80$ dB)		
Modes	LTE Band 13 (QPSK,BW=10M)	LTE Band 13 (16QAM,BW=10M)
Channel	23230 (Mid)	23230 (Mid)
Frequency (MHz)	782	782
Conducted Power (dBm)	22.67	21.53
Conducted Power (Watts)	0.18	0.14
ERP(dBm)	22.32	21.18
ERP(Watts)	0.17	0.13



Cellular Band ( $G_T - L_C = 2.06$ dB)						
Modes	LTE Band 17 (QPSK, BW=5M)			LTE Band 17 (16QAM, BW=5M)		
Channel	23755 (Low)	23790 (Mid)	23825 (High)	23755 (Low)	23790 (Mid)	23825 (High)
Frequency (MHz)	706.5	710	713.5	706.5	710	713.5
Conducted Power (dBm)	22.55	22.58	22.35	21.45	21.70	21.74
Conducted Power (Watts)	0.18	0.18	0.17	0.14	0.15	0.15
ERP(dBm)	22.46	22.49	22.26	21.36	21.61	21.65
ERP(Watts)	0.18	0.18	0.17	0.14	0.14	0.15

Cellular Band ( $G_T - L_C = 2.06$ dB)						
Modes	LTE Band 17 (QPSK, BW=10M)			LTE Band 17 (16QAM, BW=10M)		
Channel	23780 (Low)	23790 (Mid)	23800 (High)	23780 (Low)	23790 (Mid)	23800 (High)
Frequency (MHz)	709	710	711	709	710	711
Conducted Power (dBm)	22.61	22.47	22.69	21.61	21.56	21.65
Conducted Power (Watts)	0.18	0.18	0.19	0.14	0.14	0.15
ERP(dBm)	22.52	22.38	22.60	21.52	21.47	21.56
ERP(Watts)	0.18	0.17	0.18	0.14	0.14	0.14





### 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(FDD Band 1~26)	Jan. 04, 2013	Oct. 25, 2013	Jan. 03, 2014	Conducted (TH02-HY)