



# FCC RF Test Report

**APPLICANT** : Motorola Mobility LLC  
**EQUIPMENT** : Mobile Cellular Phone  
**BRAND NAME** : Motorola  
**MODEL NAME** : XT2153-1  
**FCC ID** : IHDT56ZW2  
**STANDARD** : 47 CFR Part 2, 27(M)  
**CLASSIFICATION** : PCS Licensed Transmitter Held to Ear (PCE)  
**TEST DATE(S)** : May 30, 2021 ~ Jun. 17, 2021

We, Sporton International (ShenZhen) Inc., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 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 (ShenZhen) Inc., the test report shall not be reproduced except in full.

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager



**Sporton International (ShenZhen) Inc.**

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People's Republic of China



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### REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG151407C	Rev. 01	Initial issue of report	Jun. 29, 2021



### SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.2	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§27.50(h)(2)	Equivalent Isotropic Radiated Power (Band 7) (Band 38) (Band 41)	EIRP < 2Watt	PASS	-
4.4	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (Band 7) (Band 38) (Band 41)	< 55+10log <sub>10</sub> (P[Watts])	PASS	Under limit 23.48 dB at 10336.360 MHz

**Declaration of Conformity:**

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

**Comments and Explanations:**

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.



# 1 General Description

## 1.1 Applicant

Motorola Mobility LLC  
222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.2 Manufacturer

Motorola Mobility LLC  
222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2153-1
FCC ID	IHDT56ZW2
EUT supports Radios application	GSM/WCDMA/LTE/5G NR WLAN 2.4GHz 802.11b/g/n/ac/ax HT20/VHT20/HE20 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 WLAN 5GHz 802.11ax HE20/HE40/HE80 Bluetooth BR/EDR/LE NFC and GNSS
IMEI Code	Radiation: 356368690018156/356368690018164
HW Version	DVT2
SW Version	RRA31.43
EUT Stage	Identical Prototype



### 1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
<b>Tx Frequency</b>	LTE Band 7 : 2500 MHz ~ 2570 MHz LTE Band 38 : 2570 MHz ~ 2620 MHz LTE Band 41 : 2496 MHz ~ 2690 MHz
<b>Rx Frequency</b>	LTE Band 7 : 2620 MHz ~ 2690 MHz LTE Band 38 : 2570 MHz ~ 2620 MHz LTE Band 41 : 2496 MHz ~ 2690 MHz
<b>Bandwidth</b>	LTE Band 7 : 5MHz/ 10MHz / 15MHz / 20MHz LTE Band 38 : 5MHz / 10MHz / 15MHz / 20MHz LTE Band 41 : 5MHz / 10MHz / 15MHz / 20MHz
<b>Maximum Output Power to Antenna</b>	LTE Band 7 : 22.80 dBm LTE Band 7_CA : 23.22 dBm LTE Band 38 : 22.84 dBm LTE Band 38_CA : 23.01 dBm LTE Band 41 : 22.85 dBm LTE Band 41_CA : 23.18 dBm
<b>Antenna Gain</b>	LTE Band 7 : 0.30 dBi LTE Band 38 : -1.10 dBi LTE Band 41 : 0.30 dBi
<b>Type of Modulation</b>	QPSK / 16QAM / 64QAM

### 1.5 Modification of EUT

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



### 1.6 Maximum ERP/EIRP Power and Emission Designator

LTE Band 7		QPSK		16QAM/64QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2502.5 ~ 2567.5	0.2023	-	0.1734	-
10	2505.0 ~ 2565.0	0.2014	-	0.1746	-
15	2507.5 ~ 2562.5	0.2028	-	0.1746	-
20	2510.0 ~ 2560.0	0.2042	-	0.1770	-
LTE Band 38		QPSK		16QAM/64QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2572.5 ~ 2617.5	0.2032	-	0.1698	-
10	2575.0 ~ 2615.0	0.2046	-	0.1656	-
15	2577.5 ~ 2612.5	0.2014	-	0.1656	-
20	2580.0 ~ 2610.0	0.2065	-	0.1683	-
LTE Band 41		QPSK		16QAM/64QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2498.5 ~ 2687.5	0.2032	-	0.1698	-
10	2501.0 ~ 2685.0	0.2046	-	0.1656	-
15	2503.5 ~ 2682.5	0.2014	-	0.1656	-
20	2506.0 ~ 2680.0	0.2065	-	0.1683	-



LTE Band 7 CA	QPSK		16QAM/64QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
10MHz+20MHz	0.2188	-	0.1986	-
15MHz+15MHz	0.2244	-	0.1884	-
15MHz+20MHz	0.2153	-	0.2004	-
15MHz+10MHz	0.2000	-	0.1714	-
20MHz+10MHz	0.2249	-	0.1871	-
20MHz+15MHz	0.2032	-	0.1722	-
20MHz+20MHz	0.1722	-	0.1832	-
LTE Band 38 CA	QPSK		16QAM/64QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
15MHz+15MHz	0.2178	-	0.1766	-
20MHz+20MHz	0.2042	-	0.1766	-
LTE Band 41 CA	QPSK		16QAM/64QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5MHz+20MHz	0.2188	-	0.1832	-
10MHz+20MHz	0.2223	-	0.1824	-
10MHz+15MHz	0.2113	-	0.1742	-
15MHz+15MHz	0.2178	-	0.1766	-
15MHz+20MHz	0.2223	-	0.1762	-
15MHz+10MHz	0.2148	-	0.1766	-
20MHz+5MHz	0.2203	-	0.1811	-
20MHz+10MHz	0.2143	-	0.1770	-
20MHz+15MHz	0.2228	-	0.1766	-
20MHz+20MHz	0.2042	-	0.1766	-

**Note:**

1. LTE Band 41 overlaps the entire frequency range of LTE Band 38. Therefore, the test results provided in this report covers Band 41 as well as Band 38.
2. Based on engineering evaluation, only the worst modulation test results are shown in the report.





## 1.7 Re-use of Measured Data

### 1.7.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: XT2153-1, FCC ID: IHDT56ZW2) is electrically identical to the reference device (Model: XT2125-4, FCC ID: IHDT56ZR1) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

### 1.7.2 Difference Section

For details concerning the similarity with respect to component placement, mechanical/electrical design etc., please refer to the Product Equality Declaration.

The re-used RF data includes the following bands provided in Appendix D (Sporton RF Report No. FG0N0201C for the reference device Model: XT2125-4, FCC ID: IHDT56ZR1).

### 1.7.3 Reference detail Section:

Equipment Class	Reference FCC ID	Folder Test	Report Title/Section
PCE	IHDT56ZR1	Part27M (Report No. FG0N0201C)	All sections applicable except Power, EIRP and RSE

### 1.7.4 Spot Check Verification Data Section

In order to confirm hardware similarity of the subject device with the reference device, spot check measurements were performed on the subject device for the following test items, the test result were consistent with FCC ID: IHDT56ZR1.

Assertions concerning the similarity of these devices are based on representations by the applicant. The applicant accepts full responsibility for the validity of the similarity claim, and for the determination that verification test data are sufficient to support it.

Test Item	Mode	IHDT56ZR1 Worst Result	IHDT56ZW2 Worst Result	Difference (dB)
Conducted Power (dBm)	LTE Band 7	23.22	22.80	0.42
	LTE Band 38	22.87	22.84	0.03
	LTE Band 41	22.89	22.85	0.04
	LTE Band 7C_CA	23.12	23.32	0.20
	LTE Band 38C_CA	22.77	23.01	0.24
	LTE Band 41C_CA	22.81	23.18	0.37



### 1.8 Testing Location

Sporton International (Shenzhen) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

<b>Test Firm</b>	Sporton International (Shenzhen) Inc.		
<b>Test Site Location</b>	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City Guangdong Province China 518103 TEL: +86-755-33202398		
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC Designation No.</b>	<b>FCC Test Firm Registration No.</b>
	03CH01-SZ	CN1256	421272

### 1.9 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH01-SZ	AUDIX	E3	6.2009-8-24

### 1.10 Applicable Standards

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

- 47 CFR Part 2, 27(M)
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

**Remark:**

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



### 1.11 Specification of Accessory

Specification of Accessory				
AC Adapter 1(US)	Brand Name	Motorola (Acbel)	Model Name	MC-301
AC Adapter 1(EU)	Brand Name	Motorola (Acbel)	Model Name	MC-302
AC Adapter 1(UK)	Brand Name	Motorola (Acbel)	Model Name	MC-303
AC Adapter 1(IN)	Brand Name	Motorola (Acbel)	Model Name	MC-304
AC Adapter 1(AU)	Brand Name	Motorola (Acbel)	Model Name	MC-305
AC Adapter 1(AR)	Brand Name	Motorola (Acbel)	Model Name	MC-306
AC Adapter 2(US)	Brand Name	Motorola (Salom)	Model Name	MC-301
AC Adapter 2(EU)	Brand Name	Motorola (Salom)	Model Name	MC-302
AC Adapter 2(UK)	Brand Name	Motorola (Salom)	Model Name	MC-303
AC Adapter 2(AU)	Brand Name	Motorola (Salom)	Model Name	MC-305
AC Adapter 2(AR)	Brand Name	Motorola (Salom)	Model Name	MC-306
AC Adapter 2(BR)	Brand Name	Motorola (Salom)	Model Name	MC-307
AC Adapter 2(BR)	Brand Name	Motorola (flex)	Model Name	MC-307
Battery	Brand Name	Motorola (ATL)	Model Name	MT45
Earphone	Brand Name	Motorola (Lyand)	Model Name	MD211(SH38D20195)
USB Cable 1	Brand Name	Motorola (Luxshare)	Model Name	SC18D13217
USB Cable 2	Brand Name	Motorola (Saibao)	Model Name	SC18D13215
USB Cable 3	Brand Name	Motorola (Cabletech)	Model Name	SC18D13216
HDMI Cable	Brand Name	Motorola (Linxee)	Model Name	SC18D02146



## 2 Test Configuration of Equipment Under Test

### 2.1 Test Mode

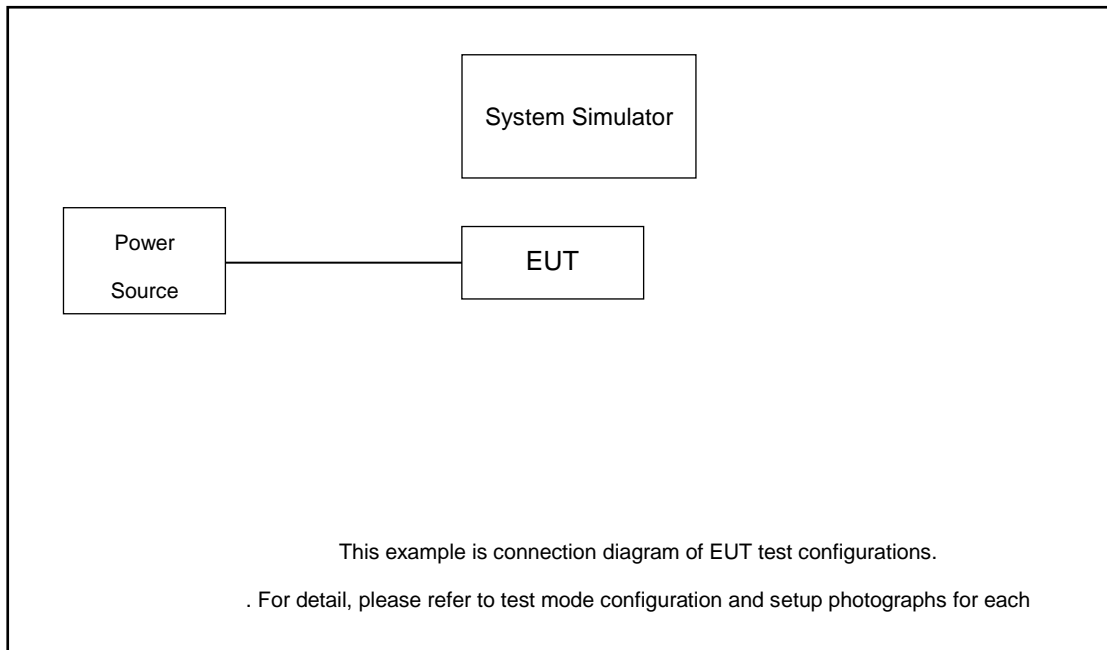
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

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	64QAM	1	Half	Full	L	M	H		
Max. Output Power	7	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v		
	38	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v		
	41	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v		
E.R.P / E.I.R.P	7	-	-	v	v	v	v	v	v	v	v			v	v	v		
	41	-	-	v	v	v	v	v	v	v	v			v	v	v		
Radiated Spurious Emission	7	Worst Case															v	
	41	Worst Case															v	
Note	<ol style="list-style-type: none"> <li>The mark "v" means that this configuration is chosen for testing</li> <li>The mark "-" means that this bandwidth is not supported.</li> <li>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.</li> </ol>																	

Test Items	Band	Bandwidth (MHz)										Modulation			RB #			Test Channel		
		20+20	20+15	15+20	20+10	10+20	20+5	5+20	15+15	15+10	10+15	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Max. Output Power	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v	v	v	v	v	v
	38C_CA	v	-	-	-	-	-	-	v	-	-	v	v	v	v	v	v	v	v	v
	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
E.I.R.P.	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v			v	v	v
	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	7C_CA	Worst Case															v			
	41C_CA	Worst Case															v			
Note	<ol style="list-style-type: none"> <li>The mark "v" means that this configuration is chosen for testing</li> <li>The mark "-" means that this bandwidth is not supported.</li> <li>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.</li> </ol>																			

## 2.2 Connection Diagram of Test System



## 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



### 2.4 Frequency List of Low/Middle/High Channels

LTE Band 7 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20850	21100	21350
	Frequency	2510	2535	2560
15	Channel	20825	21100	21375
	Frequency	2507.5	2535	2562.5
10	Channel	20800	21100	21400
	Frequency	2505	2535	2565
5	Channel	20775	21100	21425
	Frequency	2502.5	2535	2567.5

LTE Band 38 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	37850	38000	38150
	Frequency	2580	2595	2610
15	Channel	37825	38000	38175
	Frequency	2577.5	2595	2612.5
10	Channel	37800	38000	38200
	Frequency	2575	2595	2615
5	Channel	37775	38000	38225
	Frequency	2572.5	2595	2617.5

LTE Band 41 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	39750	40620	41490
	Frequency	2506	2593	2680
15	Channel	39725	40620	41515
	Frequency	2503.5	2593	2682.5
10	Channel	39700	40620	41540
	Frequency	2501	2593	2685
5	Channel	39675	40620	41565
	Frequency	2498.5	2593	2687.5



LTE Band 7C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	20850	21001	21152
		Frequency	2510.0	2525.1	2540.2
	SCC	Channel	21048	21199	21350
		Frequency	2529.8	2544.9	2560.0
20 + 15	PCC	Channel	20850	21026	21201
		Frequency	2510.0	2527.6	2545.1
	SCC	Channel	21021	21197	21372
		Frequency	2527.1	2544.7	2562.2
15 + 20	PCC	Channel	20828	21003	21179
		Frequency	2507.8	2525.3	2542.9
	SCC	Channel	20999	21174	21350
		Frequency	2524.9	2542.4	2560.0
20 + 10	PCC	Channel	20850	21051	21251
		Frequency	2510.0	2530.1	2550.1
	SCC	Channel	20994	21195	21395
		Frequency	2524.4	2544.5	2564.5
10 + 20	PCC	Channel	20805	21006	21206
		Frequency	2505.5	2525.6	2545.6
	SCC	Channel	20949	21150	21350
		Frequency	2519.9	2540.0	2560.0
15 + 15	PCC	Channel	20825	21025	21225
		Frequency	2507.5	2527.5	2547.5
	SCC	Channel	20975	21175	21375
		Frequency	2522.5	2542.5	2562.5
15 + 10	PCC	Channel	20825	21051	21277
		Frequency	2507.5	2530.1	2552.7
	SCC	Channel	20945	21171	21397
		Frequency	2519.5	2542.1	2564.7



LTE Band 38C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	37850	37901	37952
		Frequency	2580.0	2585.1	2590.2
	SCC	Channel	38048	38099	38150
		Frequency	2599.8	2604.9	2610.0
15+ 15	PCC	Channel	37825	37925	38025
		Frequency	2577.5	2587.5	2597.5
	SCC	Channel	37975	38075	38175
		Frequency	2592.5	2602.5	2612.5

LTE Band 41C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	39750	40521	41292
		Frequency	2506.0	2583.1	2660.2
	SCC	Channel	39948	40719	41490
		Frequency	2525.8	2602.9	2680.0
20 + 15	PCC	Channel	39750	40546	41341
		Frequency	2506.0	2585.6	2665.1
	SCC	Channel	39921	40717	41512
		Frequency	2523.1	2602.7	2682.2
15 + 20	PCC	Channel	39728	40523	41319
		Frequency	2503.8	2593.3	2662.9
	SCC	Channel	39899	40694	41490
		Frequency	2520.9	2600.4	2680.0
20 + 10	PCC	Channel	39750	40571	41391
		Frequency	2506.0	2588.1	2670.1
	SCC	Channel	39894	40715	41535
		Frequency	2520.4	2602.5	2684.5
10 + 20	PCC	Channel	39705	40526	41346
		Frequency	2501.5	2583.6	2665.6
	SCC	Channel	39849	40670	41490
		Frequency	2515.9	2598.0	2680.0





LTE Band 41C_CA Channel and Frequency List					
20 + 5	PCC	Channel	39750	40595	41440
		Frequency	2506.0	2590.5	2675.0
	SCC	Channel	39867	40712	41557
		Frequency	2517.7	2602.2	2686.7
5 + 20	PCC	Channel	39683	40528	41373
		Frequency	2499.3	2583.8	2668.3
	SCC	Channel	39800	40645	41490
		Frequency	2511.0	2595.5	2680.0
15 + 15	PCC	Channel	39725	40545	41365
		Frequency	2503.5	2585.5	2667.5
	SCC	Channel	39875	40695	41515
		Frequency	2518.5	2600.5	2682.5
10 + 15	PCC	Channel	39703	40549	41395
		Frequency	2501.3	2585.9	2670.5
	SCC	Channel	39823	40669	41515
		Frequency	2513.3	2597.9	2682.5
15 + 10	PCC	Channel	39725	40571	41417
		Frequency	2503.5	2588.1	2672.7
	SCC	Channel	39845	40691	41537
		Frequency	2515.5	2600.1	2684.7



### 3 Conducted Test Items

#### 3.1 Test Result of Conducted Test

Please refer to Appendix A.

#### 3.2 Conducted Output Power and EIRP

##### 3.2.1 Description of the Conducted Output Power Measurement and EIRP 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.

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 7 and Band 38 and Band 41.

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

##### 3.2.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.

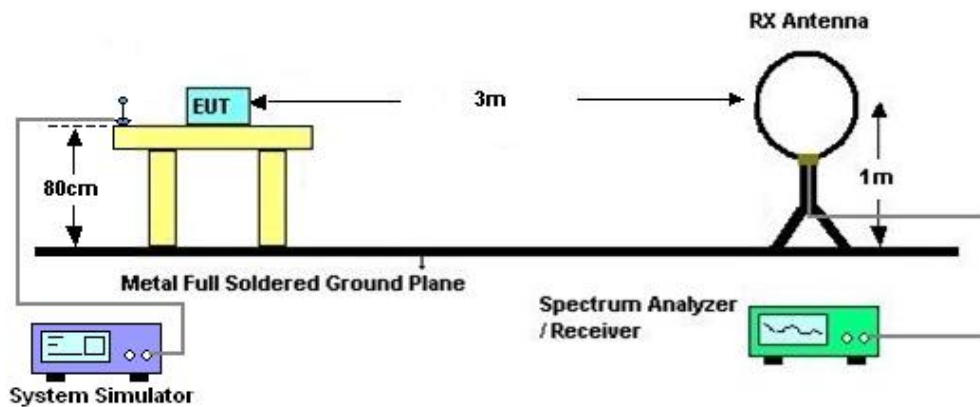
## 4 Radiated Test Items

### 4.1 Measuring Instruments

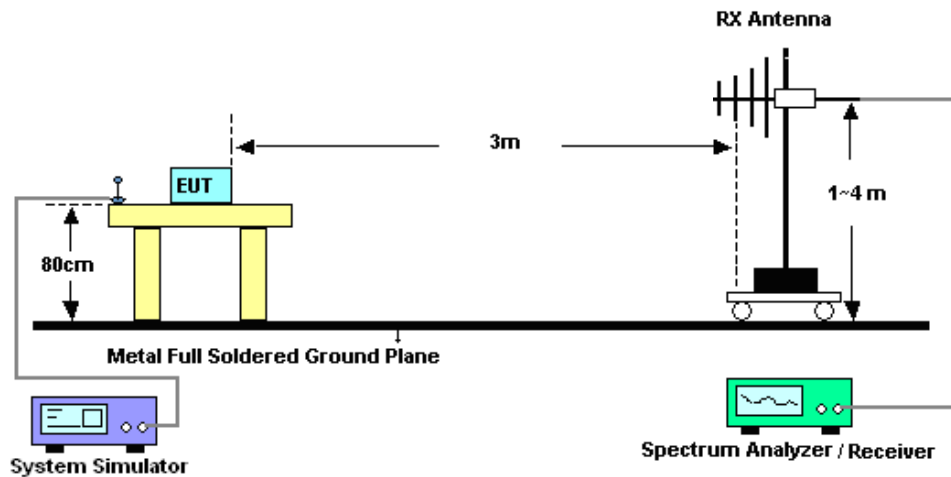
See list of measuring instruments of this test report.

### 4.2 Test Setup

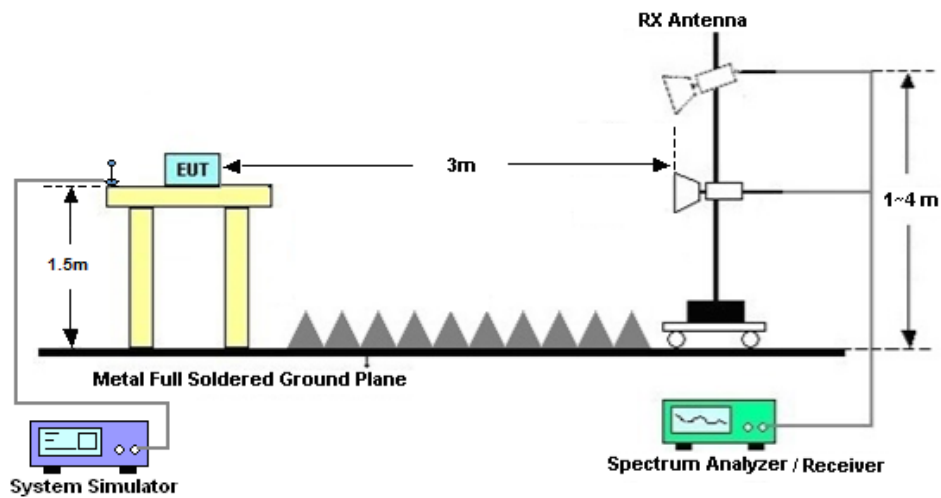
#### 4.2.1 For radiated test below 30MHz



#### 4.2.2 For radiated test from 30MHz to 1GHz



### 4.2.3 For radiated test above 1GHz



### 4.3 Test Result of Radiated Test

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix B.



## 4.4 Radiated Spurious Emission

### 4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. 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, 38, 41

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.

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

### 4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10.  $EIRP (dBm) = S.G. Power - Tx Cable Loss + Tx Antenna Gain$
11.  $ERP (dBm) = EIRP - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from  $43 + 10\log(P)$ dB below the transmitter power P(Watts)  
 $= P(W) - [43 + 10\log(P)] (dB)$   
 $= [30 + 10\log(P)] (dBm) - [43 + 10\log(P)] (dB)$   
 $= -13dBm.$

13. For Band 7, 38, 41:

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



## 5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Jul. 21, 2020	May 30, 2021~ Jun. 17, 2021	Jul. 20, 2021	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jul. 22, 2020	May 30, 2021~ Jun. 17, 2021	Jul. 21, 2021	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 16, 2020	May 30, 2021~ Jun. 17, 2021	Oct. 15, 2021	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Jul. 15, 2020	May 30, 2021~ Jun. 17, 2021	Jul. 14, 2021	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 25, 2020	May 30, 2021~ Jun. 17, 2021	Jul. 24, 2021	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 23, 2021	May 30, 2021~ Jun. 17, 2021	Apr. 22, 2022	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 18, 2021	May 30, 2021~ Jun. 17, 2021	Apr. 17, 2022	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P-R	1943528	1GHz~18GHz	Oct. 17, 2020	May 30, 2021~ Jun. 17, 2021	Oct. 16, 2021	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 21, 2020	May 30, 2021~ Jun. 17, 2021	Jul. 20, 2021	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	May 30, 2021~ Jun. 17, 2021	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	May 30, 2021~ Jun. 17, 2021	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	May 30, 2021~ Jun. 17, 2021	NCR	Radiation (03CH01-SZ)

NCR: No Calibration Required.



## 6 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.48dB
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### Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.53dB
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### Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.02dB
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### Appendix A. Test Results of Conducted Test

#### Conducted Output Power(Average power)

LTE Band 7:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				20850	21100	21350
Frequency (MHz)				2510	2535	2560
20	QPSK	1	0	22.71	22.74	22.72
20	QPSK	1	49	22.72	22.80	22.77
20	QPSK	1	99	22.70	22.74	22.72
20	QPSK	50	0	21.73	21.81	21.76
20	QPSK	50	24	21.76	21.88	21.84
20	QPSK	50	50	21.75	21.83	21.80
20	QPSK	100	0	21.69	21.84	21.79
20	16QAM	1	0	22.08	22.04	22.07
20	16QAM	1	49	22.06	22.09	22.13
20	16QAM	1	99	22.08	22.12	22.18
20	16QAM	50	0	20.76	20.82	20.81
20	16QAM	50	24	20.82	20.92	20.91
20	16QAM	50	50	20.76	20.86	20.86
20	16QAM	100	0	20.69	20.84	20.79
20	64QAM	1	0	21.00	20.99	20.88
20	64QAM	1	49	20.99	20.96	20.95
20	64QAM	1	99	20.98	20.97	21.10
20	64QAM	50	0	19.76	19.84	19.85
20	64QAM	50	24	19.82	19.93	19.91
20	64QAM	50	50	19.77	19.90	19.89
20	64QAM	100	0	19.73	19.87	19.81
Channel				20825	21100	21375
Frequency (MHz)				2507.5	2535	2562.5
15	QPSK	1	0	22.66	22.71	22.72
15	QPSK	1	37	22.66	22.68	22.75





15	QPSK	1	74	22.69	22.76	22.77
15	QPSK	36	0	21.68	21.78	21.74
15	QPSK	36	20	21.79	21.83	21.84
15	QPSK	36	39	21.66	21.77	21.85
15	QPSK	75	0	21.66	21.78	21.79
15	16QAM	1	0	21.98	22.00	22.00
15	16QAM	1	37	22.00	21.97	22.04
15	16QAM	1	74	22.02	22.07	22.12
15	16QAM	36	0	20.70	20.75	20.79
15	16QAM	36	20	20.79	20.83	20.81
15	16QAM	36	39	20.70	20.77	20.86
15	16QAM	75	0	20.67	20.78	20.80
15	64QAM	1	0	20.88	20.94	20.87
15	64QAM	1	37	20.89	20.90	21.01
15	64QAM	1	74	20.85	20.98	21.02
15	64QAM	36	0	19.72	19.79	19.80
15	64QAM	36	20	19.84	19.86	19.90
15	64QAM	36	39	19.76	19.83	19.92
15	64QAM	75	0	19.65	19.78	19.83
Channel				20800	21100	21400
Frequency (MHz)				2505	2535	2565
10	QPSK	1	0	22.60	22.66	22.66
10	QPSK	1	25	22.59	22.65	22.68
10	QPSK	1	49	22.63	22.74	22.74
10	QPSK	25	0	21.74	21.81	21.71
10	QPSK	25	12	21.76	21.84	21.75
10	QPSK	25	25	21.74	21.83	21.83
10	QPSK	50	0	21.69	21.75	21.71
10	16QAM	1	0	21.98	22.07	22.02
10	16QAM	1	25	21.99	22.05	22.05
10	16QAM	1	49	22.01	22.12	22.11
10	16QAM	25	0	20.74	20.82	20.76
10	16QAM	25	12	20.75	20.83	20.77
10	16QAM	25	25	20.74	20.84	20.82
10	16QAM	50	0	20.71	20.77	20.69
10	64QAM	1	0	20.89	20.94	20.91



10	64QAM	1	25	20.97	21.03	20.99
10	64QAM	1	49	20.92	21.00	21.05
10	64QAM	25	0	19.77	19.84	19.75
10	64QAM	25	12	19.80	19.88	19.82
10	64QAM	25	25	19.81	19.88	19.86
10	64QAM	50	0	19.71	19.78	19.74
Channel				20775	21100	21425
Frequency (MHz)				2502.5	2535	2567.5
5	QPSK	1	0	22.66	22.72	22.75
5	QPSK	1	12	22.63	22.76	22.71
5	QPSK	1	24	22.68	22.75	22.71
5	QPSK	12	0	21.71	21.80	21.78
5	QPSK	12	7	21.73	21.84	21.85
5	QPSK	12	13	21.74	21.85	21.80
5	QPSK	25	0	21.72	21.78	21.79
5	16QAM	1	0	21.99	22.04	22.07
5	16QAM	1	12	21.98	22.05	22.08
5	16QAM	1	24	21.98	22.09	22.04
5	16QAM	12	0	20.71	20.84	20.87
5	16QAM	12	7	20.78	20.85	20.85
5	16QAM	12	13	20.76	20.80	20.83
5	16QAM	25	0	20.70	20.81	20.83
5	64QAM	1	0	20.90	20.98	20.95
5	64QAM	1	12	20.85	20.99	20.99
5	64QAM	1	24	20.90	20.99	21.01
5	64QAM	12	0	19.80	19.89	19.88
5	64QAM	12	7	19.81	19.95	19.94
5	64QAM	12	13	19.81	19.87	19.87
5	64QAM	25	0	19.76	19.83	19.85



LTE Band 38:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				37850	38000	38150
Frequency (MHz)				2580	2595	2610
20	QPSK	1	0	22.81	22.68	22.69
20	QPSK	1	49	22.84	22.66	22.76
20	QPSK	1	99	22.83	22.64	22.74
20	QPSK	50	0	21.84	21.63	21.75
20	QPSK	50	24	22.02	21.83	21.89
20	QPSK	50	50	21.94	21.72	21.76
20	QPSK	100	0	21.93	21.71	21.74
20	16QAM	1	0	22.16	21.83	21.86
20	16QAM	1	49	22.01	21.78	21.84
20	16QAM	1	99	21.95	21.81	21.78
20	16QAM	50	0	20.84	20.73	20.64
20	16QAM	50	24	21.07	20.83	20.74
20	16QAM	50	50	20.90	20.62	20.73
20	16QAM	100	0	20.99	20.66	20.66
20	64QAM	1	0	20.83	20.48	20.66
20	64QAM	1	49	20.84	20.57	20.61
20	64QAM	1	99	20.71	20.48	20.70
20	64QAM	50	0	19.90	19.62	19.67
20	64QAM	50	24	20.04	19.85	19.76
20	64QAM	50	50	19.92	19.83	19.75
20	64QAM	100	0	19.99	19.74	19.67
Channel				37825	38000	38175
Frequency (MHz)				2577.5	2595	2612.5
15	QPSK	1	0	22.82	22.63	22.82
15	QPSK	1	37	22.81	22.77	22.82
15	QPSK	1	74	22.78	22.69	22.72
15	QPSK	36	0	21.93	21.67	21.68
15	QPSK	36	20	22.08	21.79	21.73
15	QPSK	36	39	21.95	21.79	21.84
15	QPSK	75	0	22.01	21.77	21.61



15	16QAM	1	0	22.03	21.83	22.04
15	16QAM	1	37	21.82	21.81	21.89
15	16QAM	1	74	22.16	21.80	21.95
15	16QAM	36	0	20.91	20.57	20.72
15	16QAM	36	20	21.02	20.81	20.85
15	16QAM	36	39	20.97	20.65	20.73
15	16QAM	75	0	20.93	20.74	20.70
15	64QAM	1	0	20.77	20.55	20.47
15	64QAM	1	37	20.76	20.45	20.60
15	64QAM	1	74	20.73	20.67	20.64
15	64QAM	36	0	19.94	19.67	19.73
15	64QAM	36	20	20.07	19.71	19.81
15	64QAM	36	39	19.90	19.74	19.80
15	64QAM	75	0	19.93	19.78	19.83
Channel				37800	38000	38200
Frequency (MHz)				2575	2595	2615
10	QPSK	1	0	22.67	22.56	22.74
10	QPSK	1	25	22.82	22.72	22.68
10	QPSK	1	49	22.71	22.78	22.75
10	QPSK	25	0	21.98	21.60	21.68
10	QPSK	25	12	22.02	21.77	21.83
10	QPSK	25	25	22.00	21.73	21.81
10	QPSK	50	0	21.95	21.72	21.81
10	16QAM	1	0	21.87	21.83	22.03
10	16QAM	1	25	22.13	21.82	21.79
10	16QAM	1	49	21.82	21.66	21.91
10	16QAM	25	0	20.87	20.64	20.70
10	16QAM	25	12	21.10	20.84	20.73
10	16QAM	25	25	20.98	20.60	20.79
10	16QAM	50	0	20.98	20.79	20.80
10	64QAM	1	0	20.44	20.53	20.52
10	64QAM	1	25	20.89	20.46	20.70
10	64QAM	1	49	20.39	20.43	20.70
10	64QAM	25	0	20.01	19.64	19.85
10	64QAM	25	12	20.01	19.86	19.80
10	64QAM	25	25	19.94	19.72	19.96



10	64QAM	50	0	19.94	19.81	19.81
Channel				37775	38000	38225
Frequency (MHz)				2572.5	2595	2617.5
5	QPSK	1	0	22.82	22.54	22.73
5	QPSK	1	12	22.82	22.57	22.71
5	QPSK	1	24	22.82	22.65	22.69
5	QPSK	12	0	22.00	21.63	21.83
5	QPSK	12	7	22.11	21.86	21.94
5	QPSK	12	13	22.07	21.84	21.96
5	QPSK	25	0	22.07	21.80	21.78
5	16QAM	1	0	22.00	21.70	21.84
5	16QAM	1	12	22.18	22.16	21.86
5	16QAM	1	24	22.13	21.80	21.88
5	16QAM	12	0	20.95	20.65	20.85
5	16QAM	12	7	21.01	20.84	20.84
5	16QAM	12	13	21.07	20.79	20.81
5	16QAM	25	0	21.11	20.71	20.89
5	64QAM	1	0	20.78	20.44	20.66
5	64QAM	1	12	20.81	20.48	20.65
5	64QAM	1	24	20.71	20.50	20.58
5	64QAM	12	0	20.10	19.76	19.85
5	64QAM	12	7	20.10	19.79	19.86
5	64QAM	12	13	20.04	19.76	19.89
5	64QAM	25	0	20.02	19.87	19.84



LTE Band 41:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				39750	40620	41490
Frequency (MHz)				2506	2593	2680
20	QPSK	1	0	22.85	22.45	22.47
20	QPSK	1	49	22.77	22.61	22.67
20	QPSK	1	99	22.76	22.44	22.49
20	QPSK	50	0	21.81	21.67	21.71
20	QPSK	50	24	22.02	21.81	21.83
20	QPSK	50	50	21.89	21.71	21.73
20	QPSK	100	0	21.87	21.74	21.77
20	16QAM	1	0	21.93	21.54	21.54
20	16QAM	1	49	21.96	21.88	21.82
20	16QAM	1	99	21.83	21.64	21.71
20	16QAM	50	0	20.75	20.79	20.59
20	16QAM	50	24	21.08	20.90	20.88
20	16QAM	50	50	20.93	20.86	20.74
20	16QAM	100	0	20.94	20.86	20.74
20	64QAM	1	0	20.71	20.36	20.28
20	64QAM	1	49	20.66	20.56	20.53
20	64QAM	1	99	20.61	20.32	20.37
20	64QAM	50	0	19.85	19.69	19.56
20	64QAM	50	24	20.05	19.87	19.84
20	64QAM	50	50	19.93	19.85	19.83
20	64QAM	100	0	19.92	19.86	19.74
Channel				39725	40620	41515
Frequency (MHz)				2503.5	2593	2682.5
15	QPSK	1	0	22.70	22.52	22.31
15	QPSK	1	37	22.74	22.73	22.58
15	QPSK	1	74	22.70	22.60	22.62
15	QPSK	36	0	21.82	21.64	21.60
15	QPSK	36	20	21.91	21.79	21.65
15	QPSK	36	39	21.88	21.76	21.74
15	QPSK	75	0	21.89	21.80	21.64



15	16QAM	1	0	21.89	21.57	21.44
15	16QAM	1	37	21.81	21.64	21.68
15	16QAM	1	74	21.87	21.65	21.67
15	16QAM	36	0	20.74	20.66	20.51
15	16QAM	36	20	20.77	20.79	20.57
15	16QAM	36	39	20.81	20.72	20.65
15	16QAM	75	0	20.83	20.74	20.63
15	64QAM	1	0	20.56	20.19	20.23
15	64QAM	1	37	20.59	20.58	20.51
15	64QAM	1	74	20.62	20.41	20.42
15	64QAM	36	0	19.84	19.76	19.60
15	64QAM	36	20	19.96	19.85	19.54
15	64QAM	36	39	19.89	19.81	19.68
15	64QAM	75	0	19.80	19.73	19.60
Channel				39700	40620	41540
Frequency (MHz)				2501	2593	2685
10	QPSK	1	0	22.79	22.47	22.37
10	QPSK	1	25	22.77	22.66	22.70
10	QPSK	1	49	22.81	22.51	22.45
10	QPSK	25	0	21.96	21.76	21.64
10	QPSK	25	12	21.87	21.87	21.77
10	QPSK	25	25	21.84	21.76	21.62
10	QPSK	50	0	21.78	21.82	21.47
10	16QAM	1	0	21.84	21.56	21.42
10	16QAM	1	25	21.80	21.75	21.60
10	16QAM	1	49	21.89	21.52	21.41
10	16QAM	25	0	20.86	20.65	20.60
10	16QAM	25	12	20.87	20.83	20.70
10	16QAM	25	25	20.75	20.75	20.60
10	16QAM	50	0	20.82	20.77	20.54
10	64QAM	1	0	20.46	20.09	20.12
10	64QAM	1	25	20.57	20.40	20.41
10	64QAM	1	49	20.52	20.35	20.20
10	64QAM	25	0	19.86	19.77	19.70
10	64QAM	25	12	19.92	19.86	19.61
10	64QAM	25	25	19.86	19.77	19.70



10	64QAM	50	0	19.78	19.83	19.62
Channel				39675	40620	41565
Frequency (MHz)				2498.5	2593	2687.5
5	QPSK	1	0	22.78	22.64	22.57
5	QPSK	1	12	22.75	22.60	22.49
5	QPSK	1	24	22.75	22.70	22.51
5	QPSK	12	0	21.88	21.85	21.68
5	QPSK	12	7	21.86	21.76	21.68
5	QPSK	12	13	21.90	21.74	21.63
5	QPSK	25	0	21.91	21.86	21.69
5	16QAM	1	0	21.88	21.78	21.67
5	16QAM	1	12	22.00	21.79	21.65
5	16QAM	1	24	21.92	21.85	21.60
5	16QAM	12	0	20.94	20.82	20.58
5	16QAM	12	7	20.88	20.75	20.66
5	16QAM	12	13	20.80	20.84	20.60
5	16QAM	25	0	20.89	20.83	20.67
5	64QAM	1	0	20.67	20.54	20.42
5	64QAM	1	12	20.51	20.47	20.44
5	64QAM	1	24	20.60	20.49	20.33
5	64QAM	12	0	19.92	19.81	19.70
5	64QAM	12	7	19.92	19.93	19.73
5	64QAM	12	13	19.94	19.89	19.68
5	64QAM	25	0	19.88	19.88	19.72





**CA Power**

CA_7C									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
20850	21048	QPSK	100	0	100	0	200	≤2	21.58
			1	0	1	99	2	≤8.5	15.1
			1	99	1	0	2	≤0	21.76
		16QAM	100	0	100	0	200	≤3	20.64
			1	0	1	99	2	≤8.5	15.44
			1	99	1	0	2	≤1	22.22
		64QAM	100	0	100	0	200	≤3	20.64
			1	0	1	99	2	≤8.5	15.26
			1	99	1	0	2	1	21.72
21001	21199	QPSK	100	0	100	0	200	≤2	21.64
			1	0	1	99	2	≤8.5	15.19
			1	99	1	0	2	≤0	22.06
		16QAM	100	0	100	0	200	≤3	20.68
			1	0	1	99	2	≤8.5	15.46
			1	99	1	0	2	≤1	22.29
		64QAM	100	0	100	0	200	≤3	20.76
			1	0	1	99	2	≤8.5	15.24
			1	99	1	0	2	≤3	21.68
21152	21350	QPSK	100	0	100	0	200	≤2	21.74
			1	0	1	99	2	≤8.5	15.17
			1	99	1	0	2	≤0	21.75
		16QAM	100	0	100	0	200	≤3	20.67
			1	0	1	99	2	≤8.5	15.63
			1	99	1	0	2	≤1	22.33
		64QAM	100	0	100	0	200	≤3	20.74
			1	0	1	99	2	≤8.5	15.15
			1	99	1	0	2	≤3	21.6



CA_7C									
Combination 20MHz+15MHz (100RB+75RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
20850	21021	QPSK	100	0	75	0	175	≤2	21.3
		QPSK	1	0	1	74	2	≤8.5	14.78
		QPSK	1	99	1	0	2	≤0	22.62
		16QAM	100	0	75	0	175	≤3	20.26
		16QAM	1	0	1	74	2	≤8.5	15.24
		16QAM	1	99	1	0	2	≤1	22.01
		64QAM	100	0	75	0	175	≤3	20.3
		64QAM	1	0	1	74	2	≤8.5	15.02
		64QAM	1	99	1	0	2	≤3	21.3
21026	21197	QPSK	100	0	75	0	175	≤2	21.34
		QPSK	1	0	1	74	2	≤8.5	14.81
		QPSK	1	99	1	0	2	≤0	22.55
		16QAM	100	0	75	0	175	≤3	20.35
		16QAM	1	0	1	74	2	≤8.5	15.15
		16QAM	1	99	1	0	2	≤1	22
		64QAM	100	0	75	0	175	≤3	20.31
		64QAM	1	0	1	74	2	≤8.5	15.23
		64QAM	1	99	1	0	2	≤3	21.29
21201	21372	QPSK	100	0	75	0	175	≤2	21.3
		QPSK	1	0	1	74	2	≤8.5	14.85
		QPSK	1	99	1	0	2	≤0	22.78
		16QAM	100	0	75	0	175	≤3	20.37
		16QAM	1	0	1	74	2	≤8.5	15
		16QAM	1	99	1	0	2	≤1	22.06
		64QAM	100	0	75	0	175	≤3	20.3
		64QAM	1	0	1	74	2	≤8.5	14.78
		64QAM	1	99	1	0	2	≤3	21.51



Combination 15MHz+20MHz (75RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
20828	20999	QPSK	75	0	100	0	175	≤2	21.44
		QPSK	1	0	1	99	2	≤8.5	14.94
		QPSK	1	74	1	0	2	≤0	23.03
		16QAM	75	0	100	0	175	≤3	20.25
		16QAM	1	0	1	99	2	≤8.5	15
		16QAM	1	74	1	0	2	≤1	22.72
		64QAM	75	0	100	0	175	≤3	20.37
		64QAM	1	0	1	99	2	≤8.5	15.14
		64QAM	1	74	1	0	2	≤3	20.82
21003	21174	QPSK	75	0	100	0	175	≤2	21.39
		QPSK	1	0	1	99	2	≤8.5	14.91
		QPSK	1	74	1	0	2	≤0	22.96
		16QAM	75	0	100	0	175	≤3	20.2
		16QAM	1	0	1	99	2	≤8.5	14.95
		16QAM	1	74	1	0	2	≤1	22.7
		64QAM	75	0	100	0	175	≤3	20.28
		64QAM	1	0	1	99	2	≤8.5	15.07
		64QAM	1	74	1	0	2	≤3	20.74
21179	21350	QPSK	75	0	100	0	175	≤2	21.38
		QPSK	1	0	1	99	2	≤8.5	14.87
		QPSK	1	74	1	0	2	≤0	22.99
		16QAM	75	0	100	0	175	≤3	20.21
		16QAM	1	0	1	99	2	≤8.5	14.91
		16QAM	1	74	1	0	2	≤1	22.65
		64QAM	75	0	100	0	175	≤3	20.29
		64QAM	1	0	1	99	2	≤8.5	15.11
		64QAM	1	74	1	0	2	≤3	20.73



Combination 20MHz+10MHz (100RB+50RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
20850	20994	QPSK	100	0	50	0	150	≤2	21.21
		QPSK	1	0	1	49	2	≤8.5	14.98
		QPSK	1	99	1	0	2	≤0	23.22
		16QAM	100	0	50	0	150	≤3	20.33
		16QAM	1	0	1	49	2	≤8.5	15.05
		16QAM	1	99	1	0	2	≤1	22.42
		64QAM	100	0	50	0	150	≤3	20.32
		64QAM	1	0	1	49	2	≤8.5	15.07
		64QAM	1	99	1	0	2	≤3	21.42
21051	21195	QPSK	100	0	50	0	150	≤2	21.15
		QPSK	1	0	1	49	2	≤8.5	14.92
		QPSK	1	99	1	0	2	≤0	23.18
		16QAM	100	0	50	0	150	≤3	20.24
		16QAM	1	0	1	49	2	≤8.5	15
		16QAM	1	99	1	0	2	≤1	22.37
		64QAM	100	0	50	0	150	≤3	20.26
		64QAM	1	0	1	49	2	≤8.5	15.05
		64QAM	1	99	1	0	2	≤3	21.39
21251	21395	QPSK	100	0	50	0	150	≤2	21.18
		QPSK	1	0	1	49	2	≤8.5	14.9
		QPSK	1	99	1	0	2	≤0	23.13
		16QAM	100	0	50	0	150	≤3	20.24
		16QAM	1	0	1	49	2	≤8.5	14.99
		16QAM	1	99	1	0	2	≤1	22.4
		64QAM	100	0	50	0	150	≤3	20.29
		64QAM	1	0	1	49	2	≤8.5	15.01
		64QAM	1	99	1	0	2	≤3	21.37



Combination 10MHz+20MHz (50RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
20805	20949	QPSK	50	0	100	0	150	≤2	21.27
		QPSK	1	0	1	99	2	≤8.5	14.73
		QPSK	1	49	1	0	2	≤0	23.1
		16QAM	50	0	100	0	150	≤3	20.29
		16QAM	1	0	1	99	2	≤8.5	14.98
		16QAM	1	49	1	0	2	≤1	22.68
		64QAM	50	0	100	0	150	≤3	20.33
		64QAM	1	0	1	99	2	≤8.5	15.4
		64QAM	1	49	1	0	2	≤3	20.96
21006	21150	QPSK	50	0	100	0	150	≤2	21.18
		QPSK	1	0	1	99	2	≤8.5	14.67
		QPSK	1	49	1	0	2	≤0	23.05
		16QAM	50	0	100	0	150	≤3	20.25
		16QAM	1	0	1	99	2	≤8.5	14.93
		16QAM	1	49	1	0	2	≤1	22.63
		64QAM	50	0	100	0	150	≤3	20.24
		64QAM	1	0	1	99	2	≤8.5	15.32
		64QAM	1	49	1	0	2	≤3	20.92
21206	21350	QPSK	50	0	100	0	150	≤2	21.18
		QPSK	1	0	1	99	2	≤8.5	14.71
		QPSK	1	49	1	0	2	≤0	23.03
		16QAM	50	0	100	0	150	≤3	20.23
		16QAM	1	0	1	99	2	≤8.5	14.91
		16QAM	1	49	1	0	2	≤1	22.59
		64QAM	50	0	100	0	150	≤3	20.26
		64QAM	1	0	1	99	2	≤8.5	15.37
		64QAM	1	49	1	0	2	≤3	20.87



Combination 15MHz+15MHz (75RB+75RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
20825	20975	QPSK	75	0	75	0	150	≤2	21.25
		QPSK	1	0	1	74	2	≤8.5	14.81
		QPSK	1	74	1	0	2	≤0	23.21
		16QAM	75	0	75	0	150	≤3	20.3
		16QAM	1	0	1	74	2	≤8.5	15.07
		16QAM	1	74	1	0	2	≤1	22.45
		64QAM	75	0	75	0	150	≤3	20.31
		64QAM	1	0	1	74	2	≤8.5	15
		64QAM	1	74	1	0	2	≤3	21.04
21025	21175	QPSK	75	0	75	0	150	≤2	21.18
		QPSK	1	0	1	74	2	≤8.5	14.78
		QPSK	1	74	1	0	2	≤0	23.19
		16QAM	75	0	75	0	150	≤3	20.22
		16QAM	1	0	1	74	2	≤8.5	14.98
		16QAM	1	74	1	0	2	≤1	22.4
		64QAM	75	0	75	0	150	≤3	20.29
		64QAM	1	0	1	74	2	≤8.5	14.92
		64QAM	1	74	1	0	2	≤3	21.02
21225	21375	QPSK	75	0	75	0	150	≤2	21.21
		QPSK	1	0	1	74	2	≤8.5	14.79
		QPSK	1	74	1	0	2	≤0	23.12
		16QAM	75	0	75	0	150	≤3	20.22
		16QAM	1	0	1	74	2	≤8.5	14.98
		16QAM	1	74	1	0	2	≤1	22.41
		64QAM	75	0	75	0	150	≤3	20.29
		64QAM	1	0	1	74	2	≤8.5	14.95
		64QAM	1	74	1	0	2	≤3	20.98



Combination 15MHz+10MHz (75RB+50RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
20825	20945	QPSK	75	0	50	0	125	≤2	21.77
		QPSK	1	0	1	49	2	≤8.5	22.64
		QPSK	1	74	1	0	2	≤0	22.71
		16QAM	75	0	50	0	125	≤3	20.79
		16QAM	1	0	1	49	2	≤8.5	22.01
		16QAM	1	74	1	0	2	≤1	22.04
		64QAM	75	0	50	0	125	≤3	19.75
		64QAM	1	0	1	49	2	≤8.5	20.98
		64QAM	1	74	1	0	2	≤3	21.16
21051	21171	QPSK	75	0	50	0	125	≤2	21.75
		QPSK	1	0	1	49	2	≤8.5	22.59
		QPSK	1	74	1	0	2	≤0	22.62
		16QAM	75	0	50	0	125	≤3	20.74
		16QAM	1	0	1	49	2	≤8.5	21.92
		16QAM	1	74	1	0	2	≤1	22
		64QAM	75	0	50	0	125	≤3	19.68
		64QAM	1	0	1	49	2	≤8.5	20.92
		64QAM	1	74	1	0	2	≤3	21.07
21277	21397	QPSK	75	0	50	0	125	≤2	21.75
		QPSK	1	0	1	49	2	≤8.5	22.58
		QPSK	1	74	1	0	2	≤0	22.64
		16QAM	75	0	50	0	125	≤3	20.75
		16QAM	1	0	1	49	2	≤8.5	21.98
		16QAM	1	74	1	0	2	≤1	22
		64QAM	75	0	50	0	125	≤3	19.71
		64QAM	1	0	1	49	2	≤8.5	20.89
		64QAM	1	74	1	0	2	≤3	21.08



CA_38C									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
37850	38048	QPSK	100	0	100	0	200	≤2	21.25
			1	0	1	99	2	≤8.5	14.81
			1	99	1	0	2	≤0	22.76
		16QAM	100	0	100	0	200	≤3	20.33
			1	0	1	99	2	≤8.5	14.74
			1	99	1	0	2	≤1	22.17
		64QAM	100	0	100	0	200	≤3	20.32
			1	0	1	99	2	≤8.5	14.73
			1	99	1	0	2	≤3	21.11
37901	38099	QPSK	100	0	100	0	200	≤2	21.05
			1	0	1	99	2	≤8.5	14.58
			1	99	1	0	2	≤0	22.7
		16QAM	100	0	100	0	200	≤3	20.27
			1	0	1	99	2	≤8.5	14.69
			1	99	1	0	2	≤1	21.99
		64QAM	100	0	100	0	200	≤3	20.21
			1	0	1	99	2	≤8.5	14.67
			1	99	1	0	2	≤3	20.99
37952	38150	QPSK	100	0	100	0	200	≤2	21.08
			1	0	1	99	2	≤8.5	14.65
			1	99	1	0	2	≤0	22.73
		16QAM	100	0	100	0	200	≤3	20.32
			1	0	1	99	2	≤8.5	14.73
			1	99	1	0	2	≤1	22.02
		64QAM	100	0	100	0	200	≤3	20.29
			1	0	1	99	2	≤8.5	14.69
			1	99	1	0	2	≤3	21.02





CA_38C									
Combination 15MHz+15MHz (75RB+75RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
37825	37975	QPSK	75	0	75	0	150	≤2	21.14
		QPSK	1	0	1	74	2	≤8.5	14.85
		QPSK	1	74	1	0	2	≤0	23.01
		16QAM	75	0	75	0	150	≤3	20.44
		16QAM	1	0	1	74	2	≤8.5	14.96
		16QAM	1	74	1	0	2	≤1	22.34
		64QAM	75	0	75	0	150	≤3	19.55
		64QAM	1	0	1	74	2	≤8.5	14.9
		64QAM	1	74	1	0	2	≤3	21.31
37925	38075	QPSK	75	0	75	0	150	≤2	21.13
		QPSK	1	0	1	74	2	≤8.5	14.8
		QPSK	1	74	1	0	2	≤0	22.99
		16QAM	75	0	75	0	150	≤3	20.37
		16QAM	1	0	1	74	2	≤8.5	14.9
		16QAM	1	74	1	0	2	≤1	22.26
		64QAM	75	0	75	0	150	≤3	19.52
		64QAM	1	0	1	74	2	≤8.5	14.82
		64QAM	1	74	1	0	2	≤3	21.23
38025	38175	QPSK	75	0	75	0	150	≤2	21.16
		QPSK	1	0	1	74	2	≤8.5	14.94
		QPSK	1	74	1	0	2	≤0	22.97
		16QAM	75	0	75	0	150	≤3	20.47
		16QAM	1	0	1	74	2	≤8.5	15.04
		16QAM	1	74	1	0	2	≤1	22.37
		64QAM	75	0	75	0	150	≤3	19.62
		64QAM	1	0	1	74	2	≤8.5	14.97
		64QAM	1	74	1	0	2	≤3	21.36



CA_41C									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39750	39948	QPSK	100	0	100	0	200	≤2	21.2
			1	0	1	99	2	≤8.5	14.62
			1	99	1	0	2	≤0	22.78
		16QAM	100	0	100	0	200	≤3	20.27
			1	0	1	99	2	≤8.5	14.77
			1	99	1	0	2	≤1	22.13
		64QAM	100	0	100	0	200	≤3	20.29
			1	0	1	99	2	≤8.5	14.75
			1	99	1	0	2	≤3	20.95
40521	40719	QPSK	100	0	100	0	200	≤2	21.29
			1	0	1	99	2	≤8.5	14.66
			1	99	1	0	2	≤0	22.8
		16QAM	100	0	100	0	200	≤3	20.31
			1	0	1	99	2	≤8.5	14.82
			1	99	1	0	2	≤1	22.17
		64QAM	100	0	100	0	200	≤3	20.31
			1	0	1	99	2	≤8.5	14.8
			1	99	1	0	2	≤3	20.98
41292	41490	QPSK	100	0	100	0	200	≤2	21.15
			1	0	1	99	2	≤8.5	14.58
			1	99	1	0	2	≤0	22.71
		16QAM	100	0	100	0	200	≤3	20.24
			1	0	1	99	2	≤8.5	14.74
			1	99	1	0	2	≤1	22.11
		64QAM	100	0	100	0	200	≤3	20.25
			1	0	1	99	2	≤8.5	14.73
			1	99	1	0	2	≤3	20.89



CA_41C									
Combination 20MHz+15MHz (100RB+75RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39750	39921	QPSK	100	0	75	0	175	≤2	21.13
		QPSK	1	0	1	74	2	≤8.5	14.86
		QPSK	1	99	1	0	2	≤0	23.18
		16QAM	100	0	75	0	175	≤3	20.37
		16QAM	1	0	1	74	2	≤8.5	14.88
		16QAM	1	99	1	0	2	≤1	22.14
		64QAM	100	0	75	0	175	≤3	20.36
		64QAM	1	0	1	74	2	≤8.5	14.79
		64QAM	1	99	1	0	2	≤3	21.23
40546	40717	QPSK	100	0	75	0	175	≤2	21.23
		QPSK	1	0	1	74	2	≤8.5	14.8
		QPSK	1	99	1	0	2	≤0	23.09
		16QAM	100	0	75	0	175	≤3	20.29
		16QAM	1	0	1	74	2	≤8.5	14.8
		16QAM	1	99	1	0	2	≤1	22.09
		64QAM	100	0	75	0	175	≤3	20.32
		64QAM	1	0	1	74	2	≤8.5	14.74
		64QAM	1	99	1	0	2	≤3	21.14
41341	41512	QPSK	100	0	75	0	175	≤2	21.3
		QPSK	1	0	1	74	2	≤8.5	14.88
		QPSK	1	99	1	0	2	≤0	23.11
		16QAM	100	0	75	0	175	≤3	20.43
		16QAM	1	0	1	74	2	≤8.5	14.91
		16QAM	1	99	1	0	2	≤1	22.17
		64QAM	100	0	75	0	175	≤3	20.42
		64QAM	1	0	1	74	2	≤8.5	14.84
		64QAM	1	99	1	0	2	≤3	21.32



Combination 15MHz+20MHz (75RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39728	39899	QPSK	75	0	100	0	175	≤2	19.96
		QPSK	1	0	1	99	2	≤8.5	14.88
		QPSK	1	74	1	0	2	≤0	23.17
		16QAM	75	0	100	0	175	≤3	20.38
		16QAM	1	0	1	99	2	≤8.5	14.91
		16QAM	1	74	1	0	2	≤1	22.12
		64QAM	75	0	100	0	175	≤3	20.37
		64QAM	1	0	1	99	2	≤8.5	14.85
		64QAM	1	74	1	0	2	≤3	21.25
40523	40694	QPSK	75	0	100	0	175	≤2	21.01
		QPSK	1	0	1	99	2	≤8.5	14.81
		QPSK	1	74	1	0	2	≤0	23.08
		16QAM	75	0	100	0	175	≤3	20.31
		16QAM	1	0	1	99	2	≤8.5	14.83
		16QAM	1	74	1	0	2	≤1	22.1
		64QAM	75	0	100	0	175	≤3	20.34
		64QAM	1	0	1	99	2	≤8.5	14.83
		64QAM	1	74	1	0	2	≤3	21.21
41319	41490	QPSK	75	0	100	0	175	≤2	21.02
		QPSK	1	0	1	99	2	≤8.5	14.92
		QPSK	1	74	1	0	2	≤0	23.11
		16QAM	75	0	100	0	175	≤3	20.45
		16QAM	1	0	1	99	2	≤8.5	14.93
		16QAM	1	74	1	0	2	≤1	22.16
		64QAM	75	0	100	0	175	≤3	20.41
		64QAM	1	0	1	99	2	≤8.5	14.88
		64QAM	1	74	1	0	2	≤3	21.27



Combination 20MHz+10MHz (100RB+50RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39750	39894	QPSK	100	0	50	0	150	≤2	21.3
		QPSK	1	0	1	49	2	≤8.5	14.82
		QPSK	1	99	1	0	2	≤0	23.01
		16QAM	100	0	50	0	150	≤3	20.35
		16QAM	1	0	1	49	2	≤8.5	14.83
		16QAM	1	99	1	0	2	≤1	22.18
		64QAM	100	0	50	0	150	≤3	20.34
		64QAM	1	0	1	49	2	≤8.5	14.75
		64QAM	1	99	1	0	2	≤3	21.32
40571	40715	QPSK	100	0	50	0	150	≤2	21.25
		QPSK	1	0	1	49	2	≤8.5	14.79
		QPSK	1	99	1	0	2	≤0	22.94
		16QAM	100	0	50	0	150	≤3	20.3
		16QAM	1	0	1	49	2	≤8.5	14.76
		16QAM	1	99	1	0	2	≤1	22.13
		64QAM	100	0	50	0	150	≤3	20.28
		64QAM	1	0	1	49	2	≤8.5	14.67
		64QAM	1	99	1	0	2	≤3	21.25
41391	41535	QPSK	100	0	50	0	150	≤2	21.28
		QPSK	1	0	1	49	2	≤8.5	14.77
		QPSK	1	99	1	0	2	≤0	22.92
		16QAM	100	0	50	0	150	≤3	20.29
		16QAM	1	0	1	49	2	≤8.5	14.75
		16QAM	1	99	1	0	2	≤1	22.13
		64QAM	100	0	50	0	150	≤3	20.32
		64QAM	1	0	1	49	2	≤8.5	14.67
		64QAM	1	99	1	0	2	≤3	21.29



Combination 10MHz+20MHz (50RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39705	39849	QPSK	50	0	100	0	150	≤2	21.37
		QPSK	1	0	1	99	2	≤8.5	14.87
		QPSK	1	49	1	0	2	≤0	23.17
		16QAM	50	0	100	0	150	≤3	20.39
		16QAM	1	0	1	99	2	≤8.5	14.84
		16QAM	1	49	1	0	2	≤1	22.26
		64QAM	50	0	100	0	150	≤3	20.34
		64QAM	1	0	1	99	2	≤8.5	14.86
		64QAM	1	49	1	0	2	≤3	21.29
40526	40670	QPSK	50	0	100	0	150	≤2	21.43
		QPSK	1	0	1	99	2	≤8.5	14.9
		QPSK	1	49	1	0	2	≤0	23.11
		16QAM	50	0	100	0	150	≤3	20.43
		16QAM	1	0	1	99	2	≤8.5	14.89
		16QAM	1	49	1	0	2	≤1	22.28
		64QAM	50	0	100	0	150	≤3	20.41
		64QAM	1	0	1	99	2	≤8.5	14.92
		64QAM	1	49	1	0	2	≤3	21.38
41346	41490	QPSK	50	0	100	0	150	≤2	21.43
		QPSK	1	0	1	99	2	≤8.5	14.92
		QPSK	1	49	1	0	2	≤0	23.08
		16QAM	50	0	100	0	150	≤3	20.44
		16QAM	1	0	1	99	2	≤8.5	14.92
		16QAM	1	49	1	0	2	≤1	22.31
		64QAM	50	0	100	0	150	≤3	20.4
		64QAM	1	0	1	99	2	≤8.5	14.88
		64QAM	1	49	1	0	2	≤3	21.31



Combination 20MHz+5MHz (100RB+25RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39750	39867	QPSK	100	0	25	0	125	≤2	21.31
		QPSK	1	0	1	24	2	≤8.5	14.87
		QPSK	1	99	1	0	2	≤0	23.08
		16QAM	100	0	25	0	125	≤3	20.34
		16QAM	1	0	1	24	2	≤8.5	14.86
		16QAM	1	99	1	0	2	≤1	22.21
		64QAM	100	0	25	0	125	≤3	20.4
		64QAM	1	0	1	24	2	≤8.5	14.86
		64QAM	1	99	1	0	2	≤3	21.3
40595	40712	QPSK	100	0	25	0	125	≤2	21.23
		QPSK	1	0	1	24	2	≤8.5	14.78
		QPSK	1	99	1	0	2	≤0	22.99
		16QAM	100	0	25	0	125	≤3	20.3
		16QAM	1	0	1	24	2	≤8.5	14.83
		16QAM	1	99	1	0	2	≤1	22.19
		64QAM	100	0	25	0	125	≤3	20.36
		64QAM	1	0	1	24	2	≤8.5	14.83
		64QAM	1	99	1	0	2	≤3	21.22
41440	41557	QPSK	100	0	25	0	125	≤2	21.33
		QPSK	1	0	1	24	2	≤8.5	14.89
		QPSK	1	99	1	0	2	≤0	23.13
		16QAM	100	0	25	0	125	≤3	20.43
		16QAM	1	0	1	24	2	≤8.5	14.88
		16QAM	1	99	1	0	2	≤1	22.28
		64QAM	100	0	25	0	125	≤3	20.49
		64QAM	1	0	1	24	2	≤8.5	14.92
		64QAM	1	99	1	0	2	≤3	21.32



Combination 5MHz+20MHz (25RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39683	39800	QPSK	25	0	100	0	125	≤2	21.31
		QPSK	1	0	1	99	2	≤8.5	14.82
		QPSK	1	24	1	0	2	≤0	23.08
		16QAM	25	0	100	0	125	≤3	20.3
		16QAM	1	0	1	99	2	≤8.5	14.82
		16QAM	1	24	1	0	2	≤1	22.3
		64QAM	25	0	100	0	125	≤3	20.35
		64QAM	1	0	1	99	2	≤8.5	14.85
		64QAM	1	24	1	0	2	≤3	21.3
40528	40645	QPSK	25	0	100	0	125	≤2	21.35
		QPSK	1	0	1	99	2	≤8.5	14.9
		QPSK	1	24	1	0	2	≤0	23.04
		16QAM	25	0	100	0	125	≤3	20.39
		16QAM	1	0	1	99	2	≤8.5	14.9
		16QAM	1	24	1	0	2	≤1	22.33
		64QAM	25	0	100	0	125	≤3	20.44
		64QAM	1	0	1	99	2	≤8.5	14.88
		64QAM	1	24	1	0	2	≤3	21.35
41373	41490	QPSK	25	0	100	0	125	≤2	21.22
		QPSK	1	0	1	99	2	≤8.5	14.76
		QPSK	1	24	1	0	2	≤0	23.1
		16QAM	25	0	100	0	125	≤3	20.24
		16QAM	1	0	1	99	2	≤8.5	14.78
		16QAM	1	24	1	0	2	≤1	22.24
		64QAM	25	0	100	0	125	≤3	20.3
		64QAM	1	0	1	99	2	≤8.5	14.82
		64QAM	1	24	1	0	2	≤3	21.21





Combination 15MHz+10MHz (75RB+50RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39725	39845	QPSK	75	0	50	0	125	≤2	21.31
		QPSK	1	0	1	49	2	≤8.5	14.84
		QPSK	1	74	1	0	2	≤0	23.06
		16QAM	75	0	50	0	125	≤3	20.34
		16QAM	1	0	1	49	2	≤8.5	14.82
		16QAM	1	74	1	0	2	≤1	22.17
		64QAM	75	0	50	0	125	≤3	20.39
		64QAM	1	0	1	49	2	≤8.5	14.92
		64QAM	1	74	1	0	2	≤3	21.32
40571	40691	QPSK	75	0	50	0	125	≤2	21.28
		QPSK	1	0	1	49	2	≤8.5	14.79
		QPSK	1	74	1	0	2	≤0	22.97
		16QAM	75	0	50	0	125	≤3	20.32
		16QAM	1	0	1	49	2	≤8.5	14.74
		16QAM	1	74	1	0	2	≤1	22.08
		64QAM	75	0	50	0	125	≤3	20.35
		64QAM	1	0	1	49	2	≤8.5	14.9
		64QAM	1	74	1	0	2	≤3	21.26
41417	41537	QPSK	75	0	50	0	125	≤2	21.23
		QPSK	1	0	1	49	2	≤8.5	14.8
		QPSK	1	74	1	0	2	≤0	23.02
		16QAM	75	0	50	0	125	≤3	20.3
		16QAM	1	0	1	49	2	≤8.5	14.75
		16QAM	1	74	1	0	2	≤1	22.15
		64QAM	75	0	50	0	125	≤3	20.31
		64QAM	1	0	1	49	2	≤8.5	14.83
		64QAM	1	74	1	0	2	≤3	21.3



Combination 10MHz+15MHz (50RB+75RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39703	39823	QPSK	50	0	75	0	125	≤2	21.3
		QPSK	1	49	1	0	2	≤8.5	22.95
		QPSK	1	0	1	74	2	≤0	14.91
		16QAM	50	0	75	0	125	≤3	20.34
		16QAM	1	49	1	0	2	≤8.5	22.11
		16QAM	1	0	1	74	2	≤1	14.85
		64QAM	50	0	75	0	125	≤3	20.39
		64QAM	1	49	1	0	2	≤8.5	21.29
		64QAM	1	0	1	74	2	≤3	14.92
40549	40669	QPSK	50	0	75	0	125	≤2	21.2
		QPSK	1	49	1	0	2	≤8.5	22.81
		QPSK	1	0	1	74	2	≤0	14.73
		16QAM	50	0	75	0	125	≤3	20.19
		16QAM	1	49	1	0	2	≤8.5	21.96
		16QAM	1	0	1	74	2	≤1	14.72
		64QAM	50	0	75	0	125	≤3	20.25
		64QAM	1	49	1	0	2	≤8.5	21.2
		64QAM	1	0	1	74	2	≤3	14.81
41395	41515	QPSK	50	0	75	0	125	≤2	21.25
		QPSK	1	49	1	0	2	≤8.5	22.87
		QPSK	1	0	1	74	2	≤0	14.83
		16QAM	50	0	75	0	125	≤3	20.3
		16QAM	1	49	1	0	2	≤8.5	22.09
		16QAM	1	0	1	74	2	≤1	14.79
		64QAM	50	0	75	0	125	≤3	20.32
		64QAM	1	49	1	0	2	≤8.5	21.21
		64QAM	1	0	1	74	2	≤3	14.86



Combination 15MHz+15MHz (75RB+75RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39725	39875	QPSK	75	0	75	0	150	≤2	21.34
		QPSK	1	0	1	74	2	≤8.5	14.88
		QPSK	1	74	1	0	2	≤0	23.08
		16QAM	75	0	75	0	150	≤3	20.35
		16QAM	1	0	1	74	2	≤8.5	14.99
		16QAM	1	74	1	0	2	≤1	22.17
		64QAM	75	0	75	0	150	≤3	20.4
		64QAM	1	0	1	74	2	≤8.5	14.91
		64QAM	1	74	1	0	2	≤3	21.29
40545	40695	QPSK	75	0	75	0	150	≤2	21.31
		QPSK	1	0	1	74	2	≤8.5	14.86
		QPSK	1	74	1	0	2	≤0	23.07
		16QAM	75	0	75	0	150	≤3	20.26
		16QAM	1	0	1	74	2	≤8.5	14.92
		16QAM	1	74	1	0	2	≤1	22.09
		64QAM	75	0	75	0	150	≤3	20.33
		64QAM	1	0	1	74	2	≤8.5	14.88
		64QAM	1	74	1	0	2	≤3	21.24
41365	41515	QPSK	75	0	75	0	150	≤2	21.3
		QPSK	1	0	1	74	2	≤8.5	14.81
		QPSK	1	74	1	0	2	≤0	22.98
		16QAM	75	0	75	0	150	≤3	20.32
		16QAM	1	0	1	74	2	≤8.5	14.97
		16QAM	1	74	1	0	2	≤1	22.11
		64QAM	75	0	75	0	150	≤3	20.32
		64QAM	1	0	1	74	2	≤8.5	14.87
		64QAM	1	74	1	0	2	≤3	21.24



**EIRP**

LTE Band 7 (GT - LC = 0.3 dB) QPSK			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency	2502.5	2535	2567.5
(MHz)			
Conducted Power (dBm)	22.63	22.76	22.71
Conducted Power (Watts)	0.1832	0.1888	0.1866
EIRP(dBm)	22.93	23.06	23.01
EIRP(Watts)	0.1963	0.2023	0.2000

LTE Band 7 (GT - LC = 0.3 dB) QPSK									
Bandwidth	10M			15M			20M		
Channel	20800	21100	21400	20825	21100	21375	20850	21100	21350
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
(MHz)									
Conducted Power (dBm)	22.63	22.74	22.74	22.69	22.76	22.77	22.72	22.80	22.77
Conducted Power (Watts)	0.1832	0.1879	0.1879	0.1858	0.1888	0.1892	0.1871	0.1905	0.1892
EIRP(dBm)	22.93	23.04	23.04	22.99	23.06	23.07	23.02	23.10	23.07
EIRP(Watts)	0.1963	0.2014	0.2014	0.1991	0.2023	0.2028	0.2004	0.2042	0.2028



LTE Band 7 (GT - LC = 0.3 dB) 16QAM			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency (MHz)	2502.5	2535	2567.5
	Conducted Power (dBm)	21.98	22.09
Conducted Power (Watts)	0.1578	0.1618	0.1600
EIRP(dBm)	22.28	22.39	22.34
EIRP(Watts)	0.1690	0.1734	0.1714

LTE Band 7 (GT - LC = 0.3 dB) 16QAM									
Bandwidth	10M			15M			20M		
Channel	20800	21100	21400	20825	21100	21375	20850	21100	21350
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
	Conducted Power (dBm)	22.01	22.12	22.11	22.02	22.07	22.12	22.08	22.12
Conducted Power (Watts)	0.1589	0.1629	0.1626	0.1592	0.1611	0.1629	0.1614	0.1629	0.1652
EIRP(dBm)	22.31	22.42	22.41	22.32	22.37	22.42	22.38	22.42	22.48
EIRP(Watts)	0.1702	0.1746	0.1742	0.1706	0.1726	0.1746	0.1730	0.1746	0.1770



LTE Band 7 (GT - LC = 0.3 dB) 64QAM			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency	2502.5	2535	2567.5
(MHz)			
Conducted Power (dBm)	20.90	20.99	21.01
Conducted Power (Watts)	0.1230	0.1256	0.1262
EIRP(dBm)	21.20	21.29	21.31
EIRP(Watts)	0.1318	0.1346	0.1352

LTE Band 7 (GT - LC = 0.3 dB) 64QAM									
Bandwidth	10M			15M			20M		
Channel	20800	21100	21400	20825	21100	21375	20850	21100	21350
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
(MHz)									
Conducted Power (dBm)	20.92	21.00	21.05	20.85	20.98	21.02	20.98	20.97	21.10
Conducted Power (Watts)	0.1236	0.1259	0.1274	0.1216	0.1253	0.1265	0.1253	0.1250	0.1288
EIRP(dBm)	21.22	21.30	21.35	21.15	21.28	21.32	21.28	21.27	21.40
EIRP(Watts)	0.1324	0.1349	0.1365	0.1303	0.1343	0.1355	0.1343	0.1340	0.1380



LTE Band 41 (G <sub>T</sub> - L <sub>C</sub> = 0.3 dB) QPSK									
Bandwidth	5M			10M			15M		
Channel	39675	40620	41565	39700	40620	41540	39725	40620	41515
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	2498.5	2593	2687.5	2501	2593	2685	2503.5	2593	2682.5
Conducted Power (dBm)	22.78	22.64	22.57	22.81	22.51	22.45	22.74	22.73	22.58
Conducted Power (Watts)	0.1897	0.1837	0.1807	0.1910	0.1782	0.1758	0.1879	0.1875	0.1811
EIRP(dBm)	23.08	22.94	22.87	23.11	22.81	22.75	23.04	23.03	22.88
EIRP(Watts)	0.2032	0.1968	0.1936	0.2046	0.1910	0.1884	0.2014	0.2009	0.1941

LTE Band 41 (G <sub>T</sub> - L <sub>C</sub> = 0.3 dB) QPSK			
Bandwidth	20M		
Channel	39750	40620	41490
	(Low)	(Mid)	(High)
Frequency (MHz)	2506	2593	2680
Conducted Power (dBm)	22.85	22.45	22.47
Conducted Power (Watts)	0.1928	0.1758	0.1766
EIRP(dBm)	23.15	22.75	22.77
EIRP(Watts)	0.2065	0.1884	0.1892



LTE Band 41 (G <sub>T</sub> - L <sub>C</sub> = 0.3 dB) 16QAM									
Bandwidth	5M			10M			15M		
Channel	39675	40620	41565	39700	40620	41540	39725	40620	41515
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	2498.5	2593	2687.5	2501	2593	2685	2503.5	2593	2682.5
(MHz)									
Conducted Power (dBm)	22.00	21.79	21.65	21.89	21.52	21.41	21.89	21.57	21.44
Conducted Power (Watts)	0.1585	0.1510	0.1462	0.1545	0.1419	0.1384	0.1545	0.1435	0.1393
EIRP(dBm)	22.30	22.09	21.95	22.19	21.82	21.71	22.19	21.87	21.74
EIRP(Watts)	0.1698	0.1618	0.1567	0.1656	0.1521	0.1483	0.1656	0.1538	0.1493

LTE Band 41 (G <sub>T</sub> - L <sub>C</sub> = 0.3 dB) 16QAM			
Bandwidth	20M		
Channel	39750	40620	41490
	(Low)	(Mid)	(High)
Frequency	2506	2593	2680
(MHz)			
Conducted Power (dBm)	21.96	21.88	21.82
Conducted Power (Watts)	0.1570	0.1542	0.1521
EIRP(dBm)	22.26	22.18	22.12
EIRP(Watts)	0.1683	0.1652	0.1629





LTE Band 41 (G <sub>T</sub> - L <sub>C</sub> = 0.3 dB) 64QAM									
Bandwidth	5M			10M			15M		
Channel	39675	40620	41565	39700	40620	41540	39725	40620	41515
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	2498.5	2593	2687.5	2501	2593	2685	2503.5	2593	2682.5
(MHz)									
Conducted Power (dBm)	20.67	20.54	20.42	20.57	20.40	20.41	20.62	20.41	20.42
Conducted Power (Watts)	0.1167	0.1132	0.1102	0.1140	0.1096	0.1099	0.1153	0.1099	0.1102
EIRP(dBm)	20.97	20.84	20.72	20.87	20.70	20.71	20.92	20.71	20.72
EIRP(Watts)	0.1250	0.1213	0.1180	0.1222	0.1175	0.1178	0.1236	0.1178	0.1180

LTE Band 41 (G <sub>T</sub> - L <sub>C</sub> = 0.3 dB) 64QAM			
Bandwidth	20M		
Channel	39750	40620	41490
	(Low)	(Mid)	(High)
Frequency	2506	2593	2680
(MHz)			
Conducted Power (dBm)	20.71	20.36	20.28
Conducted Power (Watts)	0.1178	0.1086	0.1067
EIRP(dBm)	21.01	20.66	20.58
EIRP(Watts)	0.1262	0.1164	0.1143



**CA EIRP**

LTE Band 7 CA (GT - LC = 0.3 dB) QPSK									
Bandwidth	15M + 15M			10M + 20M			20M+10M		
Channel PCC	20825	21025	21225	20805	21006	21206	20850	21051	21251
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	20975	21175	21375	20949	21150	21350	20994	21195	21395
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	23.21	23.19	23.12	23.10	23.05	23.03	23.22	23.18	23.13
Conducted Power (Watts)	0.2094	0.2084	0.2051	0.2042	0.2018	0.2009	0.2099	0.2080	0.2056
EIRP(dBm)	23.51	23.49	23.42	23.40	23.35	23.33	23.52	23.48	23.43
EIRP(Watts)	0.2244	0.2234	0.2198	0.2188	0.2163	0.2153	0.2249	0.2228	0.2203

LTE Band 7 CA (GT - LC = 0.3 dB) QPSK									
Bandwidth	15M+20M			20M+15M			20M + 20M		
Channel PCC	20828	21003	21179	20850	21026	21201	20850	21001	21152
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	20999	21174	21350	21021	21197	21372	21048	21199	21350
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	23.03	22.96	22.99	22.62	22.55	22.78	21.76	22.06	21.75
Conducted Power (Watts)	0.2009	0.1977	0.1991	0.1828	0.1799	0.1897	0.1500	0.1607	0.1496
EIRP(dBm)	23.33	23.26	23.29	22.92	22.85	23.08	22.06	22.36	22.05
EIRP(Watts)	0.2153	0.2118	0.2133	0.1959	0.1928	0.2032	0.1607	0.1722	0.1603



LTE Band 7 CA (GT - LC = 0.3 dB) 16QAM									
Bandwidth	15M + 15M			10M + 20M			20M+10M		
Channel PCC	20825	21025	21225	20805	21006	21206	20850	21051	21251
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	20975	21175	21375	20949	21150	21350	20994	21195	21395
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.45	22.40	22.41	22.68	22.63	22.59	22.42	22.37	22.40
Conducted Power (Watts)	0.1758	0.1738	0.1742	0.1854	0.1832	0.1816	0.1746	0.1726	0.1738
EIRP(dBm)	22.75	22.70	22.71	22.98	22.93	22.89	22.72	22.67	22.70
EIRP(Watts)	0.1884	0.1862	0.1866	0.1986	0.1963	0.1945	0.1871	0.1849	0.1862

LTE Band 7 CA (GT - LC = 0.3 dB) 16QAM									
Bandwidth	15M+20M			20M+15M			20M + 20M		
Channel PCC	20828	21003	21179	20850	21026	21201	20850	21001	21152
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	20999	21174	21350	21021	21197	21372	21048	21199	21350
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.72	22.70	22.65	22.01	22.00	22.06	22.22	22.29	22.33
Conducted Power (Watts)	0.1871	0.1862	0.1841	0.1589	0.1585	0.1607	0.1667	0.1694	0.1710
EIRP(dBm)	23.02	23.00	22.95	22.31	22.30	22.36	22.52	22.59	22.63
EIRP(Watts)	0.2004	0.1995	0.1972	0.1702	0.1698	0.1722	0.1786	0.1816	0.1832



LTE Band 7 CA (GT - LC = 0.3 dB) 64QAM									
Bandwidth	15M + 15M			10M + 20M			20M+10M		
Channel PCC	20825	21025	21225	20805	21006	21206	20850	21051	21251
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	20975	21175	21375	20949	21150	21350	20994	21195	21395
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.04	21.02	20.98	20.96	20.92	20.87	21.42	21.39	21.37
Conducted Power (Watts)	0.1271	0.1265	0.1253	0.1247	0.1236	0.1222	0.1387	0.1377	0.1371
EIRP(dBm)	21.34	21.32	21.28	21.26	21.22	21.17	21.72	21.69	21.67
EIRP(Watts)	0.1361	0.1355	0.1343	0.1337	0.1324	0.1309	0.1486	0.1476	0.1469

LTE Band 7 CA (GT - LC = 0.3 dB) 64QAM									
Bandwidth	15M+20M			20M+15M			20M + 20M		
Channel PCC	20828	21003	21179	20850	21026	21201	20850	21001	21152
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	20999	21174	21350	21021	21197	21372	21048	21199	21350
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	20.82	20.74	20.73	21.30	21.29	21.51	21.72	21.68	21.60
Conducted Power (Watts)	0.1208	0.1186	0.1183	0.1349	0.1346	0.1416	0.1486	0.1472	0.1445
EIRP(dBm)	21.12	21.04	21.03	21.60	21.59	21.81	22.02	21.98	21.90
EIRP(Watts)	0.1294	0.1271	0.1268	0.1445	0.1442	0.1517	0.1592	0.1578	0.1549



LTE Band 7 CA (GT - LC = 0.3 dB) QPSK			
Bandwidth	15M + 10M		
Channel PCC	20825	21025	21225
	(Low)	(Mid)	(High)
Channel SCC	20975	21175	21375
	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.71	22.62	22.64
Conducted Power (Watts)	0.1866	0.1828	0.1837
EIRP(dBm)	23.01	22.92	22.94
EIRP(Watts)	0.2000	0.1959	0.1968

LTE Band 7 CA (GT - LC = 0.3 dB) 16QAM			
Bandwidth	15M + 10M		
Channel PCC	20825	21025	21225
	(Low)	(Mid)	(High)
Channel SCC	20975	21175	21375
	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.04	22.00	22.00
Conducted Power (Watts)	0.1600	0.1585	0.1585
EIRP(dBm)	22.34	22.30	22.30
EIRP(Watts)	0.1714	0.1698	0.1698

LTE Band 7 CA (GT - LC = 0.3 dB) 64QAM			
Bandwidth	15M + 10M		
Channel PCC	20825	21025	21225
	(Low)	(Mid)	(High)
Channel SCC	20975	21175	21375
	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.16	21.07	21.08
Conducted Power (Watts)	0.1306	0.1279	0.1282
EIRP(dBm)	21.46	21.37	21.38
EIRP(Watts)	0.1400	0.1371	0.1374



LTE Band 41 CA (GT - LC = 0.3 dB) QPSK									
Bandwidth	15M + 15M			5M + 20M			20M + 5M		
Channel PCC	39725	40545	41365	39683	40528	41373	39750	40595	41440
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39875	40695	41515	39800	40645	41490	39867	40712	41557
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	23.08	23.07	22.98	23.08	23.04	23.10	23.08	22.99	23.13
Conducted Power (Watts)	0.2032	0.2028	0.1986	0.2032	0.2014	0.2042	0.2032	0.1991	0.2056
EIRP(dBm)	23.38	23.37	23.28	23.38	23.34	23.40	23.38	23.29	23.43
EIRP(Watts)	0.2178	0.2173	0.2128	0.2178	0.2158	0.2188	0.2178	0.2133	0.2203

LTE Band 41 CA (GT - LC = 0.3 dB) QPSK									
Bandwidth	10M + 20M			20M + 10M			15M + 20M		
Channel PCC	39705	40526	41346	39750	40571	41391	39728	40523	41319
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39849	40670	41490	39894	40715	41535	39899	40694	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	23.17	21.21	23.08	23.01	22.94	22.92	23.17	23.08	23.11
Conducted Power (Watts)	0.2075	0.1321	0.2032	0.2000	0.1968	0.1959	0.2075	0.2032	0.2046
EIRP(dBm)	23.47	21.51	23.38	23.31	23.24	23.22	23.47	23.38	23.41
EIRP(Watts)	0.2223	0.1416	0.2178	0.2143	0.2109	0.2099	0.2223	0.2178	0.2193



LTE Band 41 CA (GT - LC = 0.3 dB) QPSK						
Bandwidth	20M+15M			20M+20M		
Channel PCC	39750	40546	41341	39750	40521	41292
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39921	40717	41512	39948	40719	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	23.18	23.09	23.11	22.78	22.80	22.71
Conducted Power (Watts)	0.2080	0.2037	0.2046	0.1897	0.1905	0.1866
EIRP(dBm)	23.48	23.39	23.41	23.08	23.10	23.01
EIRP(Watts)	0.2228	0.2183	0.2193	0.2032	0.2042	0.2000

LTE Band 41 CA (GT - LC = 0.3 dB) QPSK						
Bandwidth	15M+10M			10M+15M		
Channel PCC	39725	40571	41417	39703	40549	41395
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39845	40691	41537	39823	40669	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.06	22.97	23.02	22.95	22.81	22.87
Conducted Power (Watts)	0.1276	0.1982	0.2004	0.1972	0.1910	0.1936
EIRP(dBm)	21.36	23.27	23.32	23.25	23.11	23.17
EIRP(Watts)	0.1368	0.2123	0.2148	0.2113	0.2046	0.2075



LTE Band 41 CA (GT - LC = 0.3 dB) 16QAM									
Bandwidth	15M + 15M			5M + 20M			20M + 5M		
Channel PCC	39725	40545	41365	39683	40528	41373	39750	40595	41440
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39875	40695	41515	39800	40645	41490	39867	40712	41557
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.17	22.09	22.11	22.30	22.33	22.24	22.21	22.19	22.28
Conducted Power (Watts)	0.1648	0.1618	0.1626	0.1698	0.1710	0.1675	0.1663	0.1656	0.1690
EIRP(dBm)	22.47	22.39	22.41	22.60	22.63	22.54	22.51	22.49	22.58
EIRP(Watts)	0.1766	0.1734	0.1742	0.1820	0.1832	0.1795	0.1782	0.1774	0.1811

LTE Band 41 CA (GT - LC = 0.3 dB) 16QAM									
Bandwidth	10M + 20M			20M + 10M			15M + 20M		
Channel PCC	39705	40526	41346	39750	40571	41391	39728	40523	41319
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39849	40670	41490	39894	40715	41535	39899	40694	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.26	22.28	22.31	22.18	22.13	22.13	22.12	22.10	22.16
Conducted Power (Watts)	0.1683	0.1690	0.1702	0.1652	0.1633	0.1633	0.1629	0.1622	0.1644
EIRP(dBm)	22.56	22.58	22.61	22.48	22.43	22.43	22.42	22.40	22.46
EIRP(Watts)	0.1803	0.1811	0.1824	0.1770	0.1750	0.1750	0.1746	0.1738	0.1762





LTE Band 41 CA (GT - LC = 0.3 dB) 16QAM						
Bandwidth	20M+15M			20M+20M		
Channel PCC	39750	40546	41341	39750	40521	41292
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39921	40717	41512	39948	40719	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.14	22.09	22.17	22.13	22.17	22.11
Conducted Power (Watts)	0.1637	0.1618	0.1648	0.1633	0.1648	0.1626
EIRP(dBm)	22.44	22.39	22.47	22.43	22.47	22.41
EIRP(Watts)	0.1754	0.1734	0.1766	0.1750	0.1766	0.1742

LTE Band 41 CA (GT - LC = 0.3 dB) 16QAM						
Bandwidth	15M+10M			10M+15M		
Channel PCC	39725	40571	41417	39703	40549	41395
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39845	40691	41537	39823	40669	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.17	22.08	22.15	22.11	21.96	22.09
Conducted Power (Watts)	0.1648	0.1614	0.1641	0.1626	0.1570	0.1618
EIRP(dBm)	22.47	22.38	22.45	22.41	22.26	22.39
EIRP(Watts)	0.1766	0.1730	0.1758	0.1742	0.1683	0.1734



LTE Band 41 CA (GT - LC = 0.3 dB) 64QAM									
Bandwidth	15M + 15M			5M + 20M			20M + 5M		
Channel PCC	39725	40545	41365	39683	40528	41373	39750	40595	41440
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39875	40695	41515	39800	40645	41490	39867	40712	41557
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.29	21.24	21.24	21.30	21.35	21.21	21.30	21.22	21.32
Conducted Power (Watts)	0.1346	0.1330	0.1330	0.1349	0.1365	0.1321	0.1349	0.1324	0.1355
EIRP(dBm)	21.59	21.54	21.54	21.60	21.65	21.51	21.60	21.52	21.62
EIRP(Watts)	0.1442	0.1426	0.1426	0.1445	0.1462	0.1416	0.1445	0.1419	0.1452

LTE Band 41 CA (GT - LC = 0.3 dB) 64QAM									
Bandwidth	10M + 20M			20M + 10M			15M + 20M		
Channel PCC	39705	40526	41346	39750	40571	41391	39728	40523	41319
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39849	40670	41490	39894	40715	41535	39899	40694	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.29	21.38	21.31	21.32	21.15	21.29	21.25	21.21	21.27
Conducted Power (Watts)	0.1346	0.1374	0.1352	0.1355	0.1303	0.1346	0.1334	0.1321	0.1340
EIRP(dBm)	21.59	21.68	21.61	21.62	21.45	21.59	21.55	21.51	21.57
EIRP(Watts)	0.1442	0.1472	0.1449	0.1452	0.1396	0.1442	0.1429	0.1416	0.1435



LTE Band 41 CA (GT - LC = 0.3 dB) 64QAM						
Bandwidth	20M+15M			20M+20M		
Channel PCC	39750	40546	41341	39750	40521	41292
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39921	40717	41512	39948	40719	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.23	21.14	21.32	20.95	20.98	20.89
Conducted Power (Watts)	0.1327	0.1300	0.1355	0.1245	0.1253	0.1227
EIRP(dBm)	21.53	21.44	21.62	21.25	21.28	21.19
EIRP(Watts)	0.1422	0.1393	0.1452	0.1334	0.1343	0.1315

LTE Band 41 CA (GT - LC = 0.3 dB) 64QAM						
Bandwidth	15M+10M			10M+15M		
Channel PCC	39725	40571	41417	39703	40549	41395
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39845	40691	41537	39823	40669	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.32	21.26	21.30	21.29	21.20	21.21
Conducted Power (Watts)	0.1355	0.1337	0.1349	0.1346	0.1318	0.1321
EIRP(dBm)	21.62	21.56	21.60	21.59	21.50	21.51
EIRP(Watts)	0.1452	0.1432	0.1445	0.1442	0.1413	0.1416



## Appendix B. Test Results of Radiated Test

### Radiated Spurious Emission

LTE Band 7 / 20MHz / QPSK									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5052.00	-56.09	-25	-31.09	-79.19	-61.65	7.14	12.70	H
	7578.27	-53.74	-25	-28.74	-79.82	-57.04	8.30	11.60	H
	10104.36	-51.12	-25	-26.12	-81.32	-52.64	10.48	12.00	H
	5052.18	-54.74	-25	-29.74	-79.17	-60.30	7.14	12.70	V
	7578.27	-53.72	-25	-28.72	-79.8	-57.02	8.30	11.60	V
	10104.36	-50.24	-25	-25.24	-81.42	-51.76	10.48	12.00	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 41 / 20MHz / QPSK									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5168.18	-54.82	-25	-29.82	-78.74	-60.38	7.14	12.70	H
	7752.27	-54.19	-25	-29.19	-79.76	-57.49	8.30	11.60	H
	10336.36	-50.86	-25	-25.86	-81.45	-52.38	10.48	12.00	H
	5168.18	-54.31	-25	-29.31	-78.73	-59.87	7.14	12.70	V
	7752.27	-50.68	-25	-25.68	-79.34	-53.98	8.30	11.60	V
	10336.36	-48.48	-25	-23.48	-80.82	-50.00	10.48	12.00	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 7C_CA / 20MHz+20MHz / QPSK									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5070.00	-55.76	-25	-30.76	-78.97	-61.32	7.14	12.70	H
	7605.00	-54.45	-25	-29.45	-80.42	-57.75	8.30	11.60	H
	10140.00	-50.96	-25	-25.96	-81.23	-52.48	10.48	12.00	H
	5070.00	-54.50	-25	-29.50	-78.92	-60.06	7.14	12.70	V
	7605.00	-53.90	-25	-28.90	-80.21	-57.20	8.30	11.60	V
	10140.00	-49.93	-25	-24.93	-81.3	-51.45	10.48	12.00	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 41C_CA / 20MHz+20MHz / QPSK									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5168.18	-55.14	-25	-30.14	-79.06	-60.70	7.14	12.70	H
	7752.27	-54.24	-25	-29.24	-79.81	-57.54	8.30	11.60	H
	10336.36	-50.41	-25	-25.41	-81.00	-51.93	10.48	12.00	H
	5168.18	-54.72	-25	-29.72	-79.14	-60.28	7.14	12.70	V
	7752.27	-51.02	-25	-26.02	-79.68	-54.32	8.30	11.60	V
	10336.36	-48.66	-25	-23.66	-81	-50.18	10.48	12.00	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



## **Appendix D. Reference Report**

Please refer to Sporton report number FG0N0201C which is issued separately.