



FCC RF Test Report

APPLICANT : Quectel Wireless Solutions Co., Ltd.
EQUIPMENT : LTE-A Cat 12 M.2 Module
BRAND NAME : Quectel
MODEL NAME : EM12-G
FCC ID : XMR201901EM12G
STANDARD : 47 CFR Part 2, 22(H), 24(E), 27(L), 27(M), 27(F) ,
27(H)
CLASSIFICATION : PCS Licensed Transmitter (PCB)

The product was received on Nov. 29, 2018 and completely tested on Jan. 17, 2019. We, Sporton International (Kunshan) 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 (Kunshan) Inc., the test report shall not be reproduced except in full.

James Huang



Approved by: James Huang / Manager

Sporton International (Kunshan) Inc.
No. 1098, Pengxi North Road, Kunshan Economic Development Zone,
Jiangsu Province 215335, China



TABLE OF CONTENTS

REVISION HISTORY.....	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	6
1.1 Applicant	6
1.2 Manufacturer	6
1.3 Product Feature of Equipment Under Test.....	6
1.4 Product Specification of Equipment Under Test.....	7
1.5 Modification of EUT	8
1.6 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator	9
1.7 Testing Location	14
1.8 Applicable Standards.....	14
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	15
2.1 Test Mode	15
2.2 Connection Diagram of Test System.....	20
2.3 Support Unit used in test configuration and system	20
2.4 Measurement Results Explanation Example.....	21
2.5 Frequency List of Low/Middle/High Channels	21
3 CONDUCTED TEST ITEMS	30
3.1 Measuring Instruments	30
3.2 Test Setup	30
3.3 Test Result of Conducted Test	30
3.4 Conducted Output Power and ERP/EIRP	31
3.5 Peak-to-Average Ratio	32
3.6 Occupied Bandwidth	33
3.7 Conducted Band Edge	34
3.8 Conducted Spurious Emission	36
3.9 Frequency Stability	37
4 RADIATED TEST ITEMS	38
4.1 Measuring Instruments	38
4.2 Test Setup	38
4.3 Test Result of Radiated Test	38
4.4 Radiated Spurious Emission	39
5 LIST OF MEASURING EQUIPMENT	40
6 UNCERTAINTY OF EVALUATION	41
APPENDIX A. TEST RESULTS OF CONDUCTED TEST	
APPENDIX B. TEST RESULTS OF RADIATED TEST	
APPENDIX C. TEST SETUP PHOTOGRAPHS	



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG8N2911B	Rev. 01	Initial issue of report	Jan. 30, 2019

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§22.913(a)(5)	Effective Radiated Power (Band 5) (Band 26)	ERP < 7 Watt	PASS	-
	§27.50(b)(10) §27.50(c)(10)	Effective Radiated Power (Band 12) (Band 13) (Band 17)	ERP < 3 Watt	PASS	-
	§24.232(c) §27.50(h)(2)	Equivalent Isotropic Radiated Power (Band 2) (Band 25) (Band 7) (Band 38) (Band 41)	EIRP < 2Watt	PASS	-
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4) (Band 66)	EIRP < 1Watt	PASS	-
3.5	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §22.917(a) §24.238(a) §27.53(c)(2)(4) §27.53(g) §27.53(h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 25) (Band 26) (Band 66)	< 43+10log ₁₀ (P[Watts])	PASS	-
	§27.53(m)(4)	Conducted Band Edge Measurement (Band 7) (Band 38) (Band 41)	§27.53(m)(4)		
3.8	§2.1051 §22.917(a) §24.238(a) §27.53(c)(2) §27.53(g) §27.53(h)	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 25) (Band 26) (Band 66)	< 43+10log ₁₀ (P[Watts])	PASS	-
	§2.1051 §27.53(m)(4)	Conducted Spurious Emission (Band 7) (Band 38) (Band 41)	< 55+10log ₁₀ (P[Watts])		
3.9	§2.1055 §22.355	Frequency Stability Temperature & Voltage	< 2.5 ppm for Part 22H	PASS	-
	§2.1055 §24.235 §27.54		Within Authorized Band		



Report Section	FCC Rule	Description	Limit	Result	Remark
4.4	§2.1053 §22.917(a) §24.238(a) §27.53(c)(2) §27.53(f) §27.53(g) §27.53(h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 25) (Band 26) (Band 66)	$< 43 + 10\log_{10}(P[\text{Watts}])$	PASS	Under limit 5.64 dB at 7652.000 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (Band 7) (Band 38) (Band 41)	$< 55 + 10\log_{10}(P[\text{Watts}])$		



1 General Description

1.1 Applicant

Quectel Wireless Solutions Co., Ltd.

7th Floor, Hongye Building, No.1801 Hongmei Road, Xuhui District, Shanghai 200233, China

1.2 Manufacturer

Quectel Wireless Solutions Co., Ltd.

7th Floor, Hongye Building, No.1801 Hongmei Road, Xuhui District, Shanghai 200233, China

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	LTE-A Cat 12 M.2 Module
Brand Name	Quectel
Model Name	EM12-G
FCC ID	XMR201901EM12G
EUT supports Radios application	WCDMA/HSPA/DC-HSDPA/HSPA+/LTE
IMEI Code	Conducted: 869710030006559 for LTE B7/B12/B13/B25/B26/B41/B66 869710030007334 for LTE B7CA/B41CA Radiation: 869710030006542 for LTE B7/B12/B13/B25/B26/B41/B66 869710030007334 for LTE B7CA/B41CA
HW Version	R1.0
SW Version	EM12GPAR01A08M4G
EUT Stage	Identical Prototype

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 7 : 2502.5 MHz ~ 2567.5 MHz LTE Band 12 : 699.7 MHz ~ 715.3 MHz LTE Band 13 : 779.5 MHz ~ 784.5 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz LTE Band 25 : 1850.7MHz ~ 1914.3 MHz LTE Band 26 : 824.7MHz ~ 848.3 MHz LTE Band 38 : 2572.5MHz ~ 2617.5MHz LTE Band 41 : 2498.5 MHz ~ 2687.5 MHz LTE Band 66 : 1710.7 MHz ~ 1779.3 MHz
Rx Frequency	LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 7 : 2622.5MHz ~ 2687.5 MHz LTE Band 12 : 729.7 MHz ~ 745.3 MHz LTE Band 13 : 748.5 MHz ~ 753.5 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz LTE Band 25 : 1930.7MHz ~ 1994.3 MHz LTE Band 26 : 869.7MHz ~ 893.3MHz LTE Band 38 : 2572.5MHz ~ 2617.5MHz LTE Band 41 : 2498.5 MHz ~ 2687.5 MHz LTE Band 66 : 2110.7 MHz~ 2179.3 MHz
Bandwidth	LTE Band 2 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 5 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 7 : 5MHz/ 10MHz / 15MHz / 20MHz LTE Band 12 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 13 : 5MHz / 10MHz LTE Band 17 : 5MHz / 10MHz LTE Band 25 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 26 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz LTE Band 38 : 5MHz / 10MHz / 15MHz / 20MHz LTE Band 41 : 5MHz / 10MHz / 15MHz / 20MHz LTE Band 66 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	LTE Band 2 : 24.22 dBm LTE Band 4 : 23.72 dBm LTE Band 5 : 23.16 dBm LTE Band 7 : 23.55 dBm; Band 7_CA: 23.70 dBm LTE Band 12 : 23.48 dBm LTE Band 13 : 23.20 dBm LTE Band 17 : 23.27 dBm LTE Band 25 : 24.21 dBm LTE Band 26 : 24.04 dBm LTE Band 38 : 23.59 dBm; Band 38_CA: 23.98 dBm LTE Band 41 : 23.58 dBm; Band 41_CA: 23.97 dBm LTE Band 66 : 23.91 dBm



Antenna Gain	LTE Band 2 : 3.00 dBi
	LTE Band 4 : 4.50 dBi
	LTE Band 5 : 0.88 dBi
	LTE Band 7 : 3.51 dBi
	LTE Band 12 : 1.01 dBi
	LTE Band 13 : 1.64 dBi
	LTE Band 17 : 1.01 dBi
	LTE Band 25 : 3.00 dBi
	LTE Band 26 : 0.88 dBi
	LTE Band 38 : 4.40 dBi
	LTE Band 41 : 4.40 dBi
	LTE Band 66 : 4.50 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM(Downlink only)

1.5 Modification of EUT

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



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

LTE Band 2/25		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1850.7 ~ 1914.3	1M10G7D	-	0.4831	1M09W7D	-	0.4217
3	1851.5 ~ 1913.5	2M72G7D	-	0.4932	2M73W7D	-	0.4266
5	1852.5 ~ 1912.5	4M49G7D	-	0.5012	4M50W7D	-	0.4335
10	1855.0 ~ 1910.0	9M05G7D	0.0020	0.5093	9M07W7D	-	0.4467
15	1857.5 ~ 1907.5	13M5G7D	-	0.5224	13M5W7D	-	0.4276
20	1860.0 ~ 1905.0	18M4G7D	-	0.5260	18M3W7D	-	0.4276
LTE Band 2/25		64QAM					
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)		Frequency Tolerance (ppm)		Maximum EIRP(W)	
1.4	1850.7 ~ 1914.3	1M10W7D		-		0.4217	
3	1851.5 ~ 1913.5	2M72W7D		-		0.4159	
5	1852.5 ~ 1912.5	4M51W7D		-		0.4111	
10	1855.0 ~ 1910.0	9M05W7D		-		0.4416	
15	1857.5 ~ 1907.5	13M5W7D		-		0.4246	
20	1860.0 ~ 1905.0	18M3W7D		-		0.4285	
LTE Band 7		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
5	2502.5 ~ 2567.5	4M50G7D	-	0.4920	4M51W7D	-	0.4315
10	2505.0 ~ 2565.0	9M11G7D	0.0026	0.5047	9M01W7D	-	0.4446
15	2507.5 ~ 2562.5	13M5G7D	-	0.5012	13M5W7D	-	0.4227
20	2510.0 ~ 2560.0	18M4G7D	-	0.5082	18M5W7D	-	0.4416
LTE Band 7		64QAM					
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)		Frequency Tolerance (ppm)		Maximum EIRP(W)	
5	2502.5 ~ 2567.5	4M49W7D		-		0.4325	
10	2505.0 ~ 2565.0	9M07W7D		-		0.4365	
15	2507.5 ~ 2562.5	13M4W7D		-		0.4188	
20	2510.0 ~ 2560.0	18M3W7D		-		0.4246	



LTE Band 12/17		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)
1.4	699.7 ~ 715.3	1M09G7D	-	0.1633	1M10W7D	-	0.1472
3	700.5 ~ 714.5	2M72G7D	-	0.1641	2M73W7D	-	0.1476
5	701.5 ~ 713.5	4M51G7D	-	0.1714	4M49W7D	-	0.1459
10	704.0 ~ 711.0	9M05G7D	0.0102	0.1683	9M01W7D	-	0.1503
LTE Band 12/17		64QAM					
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)		Frequency Tolerance (ppm)		Maximum ERP(W)	
1.4	699.7 ~ 715.3	1M09W7D		-		0.1380	
3	700.5 ~ 714.5	2M74W7D		-		0.1429	
5	701.5 ~ 713.5	4M51W7D		-		0.1384	
10	704.0 ~ 711.0	9M07W7D		-		0.1455	
LTE Band 13		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)
5	779.5 ~ 784.5	4M50G7D	-	0.1858	4M51W7D	-	0.1633
10	782.0	9M07G7D	0.0088	0.1820	9M03W7D	-	0.1667
LTE Band 13		64QAM					
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)		Frequency Tolerance (ppm)		Maximum ERP(W)	
5	779.5 ~ 784.5	4M50W7D		-		0.1596	
10	782.0	9M05W7D		-		0.1622	
LTE Band 5/26		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	824.7 ~ 848.3	1M09G7D	-	0.1849	1M10W7D	-	0.1607
3	825.5 ~ 847.5	2M73G7D	-	0.1837	2M73W7D	-	0.1476
5	826.5 ~ 846.5	4M52G7D	-	0.1862	4M50W7D	-	0.1641
10	829.0 ~ 844.0	9M05G7D	0.0078	0.1892	9M03W7D	-	0.1622
15	831.5 ~ 841.5	13M5G7D	-	0.1722	13M5W7D	-	0.1574
CH26765	821.5	13M4G7D	-	0.1698	13M4W7D	-	0.1476



LTE Band 5/26		64QAM					
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)		Frequency Tolerance (ppm)		Maximum ERP(W)	
1.4	824.7 ~ 848.3	1M10W7D		-		0.1538	
3	825.5 ~ 847.5	2M73W7D		-		0.1510	
5	826.5 ~ 846.5	4M50W7D		-		0.1629	
10	829.0 ~ 844.0	9M03W7D		-		0.1652	
15	831.5 ~ 841.5	13M4W7D		-		0.1403	
CH26765	821.5	13M5W7D		-		0.1413	
LTE Band 38/41		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
5	2498.5 ~ 2687.5	4M49G7D	-	0.6138	4M50W7D	-	0.4977
10	2501.0 ~ 2685.0	9M05G7D	0.0020	0.6266	9M01W7D	-	0.5140
15	2503.5 ~ 2682.5	13M5G7D	-	0.6252	13M5W7D	-	0.5129
20	2506.0 ~ 2680.0	18M3G7D	-	0.6281	18M3W7D	-	0.5164
LTE Band 38/41		64QAM					
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)		Frequency Tolerance (ppm)		Maximum EIRP(W)	
5	2498.5 ~ 2687.5	4M51W7D		-		0.4699	
10	2501.0 ~ 2685.0	9M05W7D		-		0.4864	
15	2503.5 ~ 2682.5	13M4W7D		-		0.4842	
20	2506.0 ~ 2680.0	18M4W7D		-		0.4842	
LTE Band 4/66		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1710.7 ~ 1779.3	1M09G7D	-	0.6412	1M09W7D	-	0.5358
3	1711.5 ~ 1778.5	2M72G7D	-	0.6324	2M73W7D	-	0.5689
5	1712.5 ~ 1777.5	4M51G7D	-	0.6516	4M50W7D	-	0.5623
10	1715.0 ~ 1775.0	9M09G7D	0.0023	0.6397	9M05W7D	-	0.5768
15	1717.5 ~ 1772.5	13M5G7D	-	0.6653	13M5W7D	-	0.6223
20	1720.0 ~ 1770.0	18M4G7D	-	0.6934	18M5W7D	-	0.5957



LTE Band 4/66		64QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1710.7 ~ 1779.3	1M09W7D	-	0.5458
3	1711.5 ~ 1778.5	2M71W7D	-	0.5610
5	1712.5 ~ 1777.5	4M51W7D	-	0.5534
10	1715.0 ~ 1775.0	9M03W7D	-	0.5521
15	1717.5 ~ 1772.5	13M5W7D	-	0.5508
20	1720.0 ~ 1770.0	18M4W7D	-	0.5861

LTE Band 7 CA		QPSK		16QAM		
BW (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
10MHz+20MHz	28M1G7D	-	0.4207	28M1W7D	-	0.3741
15MHz+15MHz	28M7G7D	-	0.4236	28M6W7D	-	0.3811
15MHz+20MHz	32M7G7D	-	0.4159	32M9W7D	-	0.3664
15MHz+10MHz	23M5G7D	-	0.4236	23M3W7D	-	0.3733
20MHz+10MHz	28M1G7D	-	0.4207	28M1W7D	-	0.3606
20MHz+15MHz	33M0G7D	-	0.5260	33M2W7D	-	0.4764
20MHz+20MHz	37M6G7D	-	0.4093	37M4W7D	-	0.3664

LTE Band 7 CA	64QAM		
BW (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
10MHz+20MHz	28M0W7D	-	0.2270
15MHz+15MHz	28M7W7D	-	0.2355
15MHz+20MHz	32M9W7D	-	0.2259
15MHz+10MHz	23M4W7D	-	0.2360
20MHz+10MHz	28M2W7D	-	0.2559
20MHz+15MHz	32M9W7D	-	0.4688
20MHz+20MHz	37M7W7D	-	0.3311



LTE Band 38/41 CA	QPSK			16QAM		
BW (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
5MHz+20MHz	23M4G7D	-	0.5445	23M3W7D	-	0.4111
10MHz+20MHz	28M1G7D	-	0.5358	28M1W7D	-	0.4345
10MHz+15MHz	23M5G7D	-	0.5521	23M5W7D	-	0.4256
15MHz+15MHz	28M7G7D	-	0.5559	28M7W7D	-	0.4519
15MHz+20MHz	32M8G7D	-	0.5458	32M8W7D	-	0.4416
15MHz+10MHz	23M5G7D	-	0.5559	23M4W7D	-	0.4529
20MHz+5MHz	23M4G7D	-	0.5321	23M4W7D	-	0.4227
20MHz+10MHz	28M1G7D	-	0.5483	28M2W7D	-	0.4498
20MHz+15MHz	32M9G7D	-	0.6871	33M1W7D	-	0.5916
20MHz+20MHz	37M7G7D	-	0.5546	37M7W7D	-	0.4519
LTE Band 38/41 CA	64QAM					
BW (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)			
5MHz+20MHz	23M4W7D	-	0.2831			
10MHz+20MHz	28M1W7D	-	0.2630			
10MHz+15MHz	23M4W7D	-	0.2667			
15MHz+15MHz	28M6W7D	-	0.2636			
15MHz+20MHz	33M0W7D	-	0.2793			
15MHz+10MHz	23M4W7D	-	0.2818			
20MHz+5MHz	23M3W7D	-	0.2812			
20MHz+10MHz	28M1W7D	-	0.2844			
20MHz+15MHz	33M0W7D	-	0.3062			
20MHz+20MHz	37M6W7D	-	0.3296			

Note:

1. LTE Band 26 overlaps the entire frequency range of LTE Band 5. Therefore, the test results provided in this report covers Band 5 and the portion of Band 26 subject to Part 22.
2. LTE Band 66 overlaps the entire frequency range of LTE Band 4. Therefore, the test results provided in this report covers Band 66 as well as Band 4.
3. LTE Band 25 overlaps the entire frequency range of LTE Band 2. Therefore, the test results provided in this report covers Band 25 as well as Band 2.
4. LTE Band 12 overlaps the entire frequency range of LTE Band 17. Therefore, the test results provided in



this report covers Band 12 as well as Band 17.

5. 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.

1.7 Testing Location

Sporton International (Kunshan) Inc. is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600155-0).

Test Site	Sporton International (Kunshan) Inc.		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone, Jiangsu Province 215335, China TEL : 86-512-57900158 FAX : 86-512-57900958		
Test Site No.	Sporton Site No.	FCC designation No.	FCC Test Firm Registration No.
	TH01-KS 03CH06-KS	CN5013	630927

1.8 Applicable Standards

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

- ♦ 47 CFR Part 2, 22(H), 24(E), 27(L), 27(M), 27(F) , 27(H)
- ♦ 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.



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	2	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	5	v	v	v	v	-	-	v	v	v	v	v	v	v	v	v
	7	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v
	12	v	v	v	v	-	-	v	v	v	v	v	v	v	v	v
	13	-	-	v		-	-	v	v	v	v	v	v	v	v	v
		-	-		v	-	-	v	v	v	v	v	v		v	
	17	-	-	v	v	-	-	v	v	v	v	v	v	v	v	v
	25	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	26	v	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
	66	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	7	-	-				v	v	v	v	v		v	v	v	v
	12				v	-	-	v	v	v	v		v	v	v	v
	13	-	-		v	-	-	v	v	v	v		v	v	v	v
	25						v	v	v	v	v		v	v	v	v
	26				v		-	v	v	v	v		v	v	v	v
	41	-	-				v	v	v	v	v		v	v	v	v
	66						v	v	v	v	v		v	v	v	v



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
26dB and 99% Bandwidth	7	-	-	v	v	v	v	v	v	v			v	v	v	v
	12	v	v	v	v	-	-	v	v	v			v	v	v	v
	13	-	-	v		-	-	v	v	v			v	v	v	v
		-	-		v	-	-	v	v	v			v		v	
	25	v	v	v	v	v	v	v	v	v			v	v	v	v
	26	v	v	v	v	v	-	v	v	v			v	v	v	v
	41	-	-	v	v	v	v	v	v	v			v	v	v	v
	66	v	v	v	v	v	v	v	v	v			v	v	v	v
Conducted Band Edge	7	-	-	v	v	v	v	v	v	v	v		v	v		v
	12	v	v	v	v	-	-	v	v	v	v		v	v		v
	13	-	-	v		-	-	v	v	v	v		v	v		v
		-	-		v	-	-	v	v	v	v		v		v	
	25	v	v	v	v	v	v	v	v	v	v		v	v		v
	26	v	v	v	v	v	-	v	v	v	v		v	v		v
	41	-	-	v	v	v	v	v	v	v	v		v	v		v
	66	v	v	v	v	v	v	v	v	v	v		v	v		v



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
Conducted Spurious Emission	7	-	-	V	V	V	V	V	V	V	V			V	V	V
	12	V	V	V	V	-	-	V	V	V	V			V	V	V
	13	-	-	V		-	-	V	V	V	V			V	V	V
		-	-		V	-	-	V	V	V	V				V	
	25	V	V	V	V	V	V	V	V	V	V			V	V	V
	26	V	V	V	V	V	-	V	V	V	V			V	V	V
	41	-	-	V	V	V	V	V	V	V	V			V	V	V
	66	V	V	V	V	V	V	V	V	V	V			V	V	V
Frequency Stability	7	-	-		V			V					V		V	
	12				V	-	-	V					V		V	
	13	-	-		V	-	-	V					V		V	
	25				V			V					V		V	
	26				V		-	V					V		V	
	41	-	-		V			V					V		V	
	66				V			V					V		V	

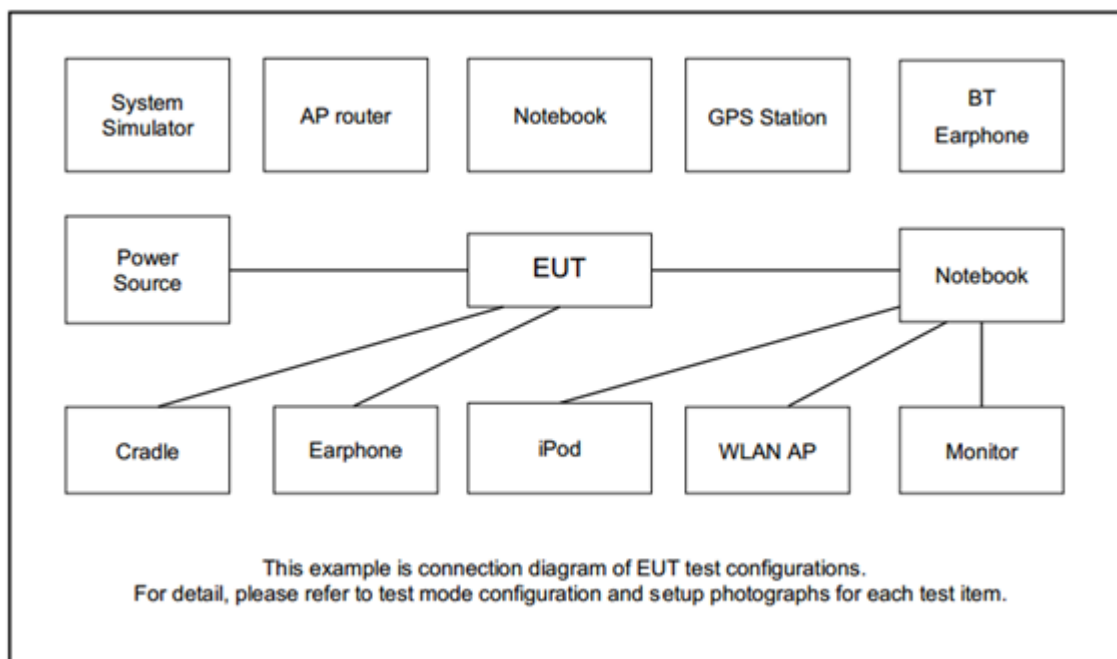


Test Items	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
E.R.P / E.I.R.P	7	-	-	v	v	v	v	v	v	v	v			v	v	v
	12	v	v	v	v	-	-	v	v	v	v			v	v	v
	13	-	-	v		-	-	v	v	v	v			v	v	v
		-	-		v	-	-	v	v	v	v				v	
	25	v	v	v	v	v	v	v	v	v	v			v	v	v
	26	v	v	v	v	v	-	v	v	v	v			v	v	v
	41	-	-	v	v	v	v	v	v	v	v			v	v	v
	66	v	v	v	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	7	Worst Case												v	v	v
	12	Worst Case												v	v	v
	13	Worst Case												v	v	v
	25	Worst Case												v	v	v
	26	Worst Case												v	v	v
	41	Worst Case												v	v	v
	66	Worst Case												v	v	v
Note	1. The mark “v ” means that this configuration is chosen for testing 2. The mark “-“ means that this bandwidth is not supported. 3. 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. 4. LTE Band 26 overlaps the entire frequency range of LTE Band 5. Therefore, the test results provided in this report covers Band 5 and the portion of Band 26 subject to Part 22. 5. LTE Band 66 overlaps the entire frequency range of LTE Band 4. Therefore, the test results provided in this report covers Band 66 as well as Band 4. 6. LTE Band 25 overlaps the entire frequency range of LTE Band 2. Therefore, the test results provided in this report covers Band 25 as well as Band 2. 7. LTE Band 12 overlaps the entire frequency range of LTE Band 17. Therefore, the test results provided in this report covers Band 12 as well as Band 17. 8. 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.															



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	7_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v	v	v	v	v	v
	41_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
26dB and 99% Bandwidth	7_CA	v	v	v	v	v	-	-	v	v	-	v	v	v			v	v	v	v
	41_CA	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v	v
Conducted Band Edge	7_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v		v	v		v
	41_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v		v	v		v
Conducted Spurious Emission	7_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v			v	v	v
	41_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v
E.I.R.P.	7_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v			v	v	v
	41_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	7_CA	Worst Case																v	v	v
	41_CA	Worst Case																v	v	v
Note	1. The mark “v ” means that this configuration is chosen for testing 2. The mark “-“ means that this bandwidth is not supported. 3. 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. 4. 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.																			

2.2 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.	DC Power Supply	GW	GPS-3030D	N/A	N/A	Unshielded, 1.8 m
3.	Test jig	N/A	N/A	N/A	N/A	N/A
4.	WWAN Antenna	N/A	N/A	N/A	N/A	N/A
5.	GNSS Antenna	N/A	N/A	N/A	N/A	N/A
6.	Adapter	N/A	N/A	N/A	Unshielded,1.2m	N/A

2.4 Measurement Results Explanation Example

For all conducted test items:

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

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

Offset = RF cable loss.

Following shows an offset computation example with cable loss 4.1 dB

Example :

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)} \\ &= 4.1 \text{ (dB)} \end{aligned}$$

2.5 Frequency List of Low/Middle/High Channels

LTE Band 2 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	18700	18900	19100
	Frequency	1860	1880	1900
15	Channel	18675	18900	19125
	Frequency	1857.5	1880	1902.5
10	Channel	18650	18900	19150
	Frequency	1855	1880	1905
5	Channel	18625	18900	19175
	Frequency	1852.5	1880	1907.5
3	Channel	18615	18900	19185
	Frequency	1851.5	1880	1908.5
1.4	Channel	18607	18900	19193
	Frequency	1850.7	1880	1909.3



LTE Band 4 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20050	20175	20300
	Frequency	1720	1732.5	1745
15	Channel	20025	20175	20325
	Frequency	1717.5	1732.5	1747.5
10	Channel	20000	20175	20350
	Frequency	1715	1732.5	1750
5	Channel	19975	20175	20375
	Frequency	1712.5	1732.5	1752.5
3	Channel	19965	20175	20385
	Frequency	1711.5	1732.5	1753.5
1.4	Channel	19957	20175	20393
	Frequency	1710.7	1732.5	1754.3

LTE Band 5 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	20450	20525	20600
	Frequency	829	836.5	844
5	Channel	20425	20525	20625
	Frequency	826.5	836.5	846.5
3	Channel	20415	20525	20635
	Frequency	825.5	836.5	847.5
1.4	Channel	20407	20525	20643
	Frequency	824.7	836.5	848.3



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 12 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	23060	23095	23130
	Frequency	704	707.5	711
5	Channel	23035	23095	23155
	Frequency	701.5	707.5	713.5
3	Channel	23025	23095	23165
	Frequency	700.5	707.5	714.5
1.4	Channel	23017	23095	23173
	Frequency	699.7	707.5	715.3

LTE Band 13 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	-	23230	-
	Frequency	-	782	-
5	Channel	23205	23230	23255
	Frequency	779.5	782	784.5

LTE Band 17 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	23780	23790	23800
	Frequency	709	710	711
5	Channel	23755	23790	23825
	Frequency	706.5	710	713.5



LTE Band 25 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	26140	26340	26590
	Frequency	1860	1880	1905
15	Channel	26115	26340	26615
	Frequency	1857.5	1880	1907.5
10	Channel	26090	26340	26640
	Frequency	1855	1880	1910
5	Channel	26065	26340	26665
	Frequency	1852.5	1880	1912.5
3	Channel	26055	26340	26675
	Frequency	1851.5	1880	1913.5
1.4	Channel	26047	26340	26683
	Frequency	1850.7	1880	1914.3

LTE Band 26 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
15	Channel	26865	26915	26965
	Frequency	831.5	836.5	841.5
10	Channel	26840	26915	26990
	Frequency	829	836.5	844
5	Channel	26815	26915	27015
	Frequency	826.5	836.5	846.5
3	Channel	26805	26915	27025
	Frequency	825.5	836.5	847.5
1.4	Channel	26797	26915	27033
	Frequency	824.7	836.5	848.3



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 66 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	132072	132322	132572
	Frequency	1720	1745	1770
15	Channel	132047	132322	132597
	Frequency	1717.5	1745	1772.5
10	Channel	132022	132322	132622
	Frequency	1715	1745	1775
5	Channel	131997	132322	132647
	Frequency	1712.5	1745	1777.5
3	Channel	131987	132322	132657
	Frequency	1711.5	1745	1778.5
1.4	Channel	131979	132322	132665
	Frequency	1710.7	1745	1779.3



LTE Band 7 Channel and Frequency List_CA					
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 38 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 41 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 41 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

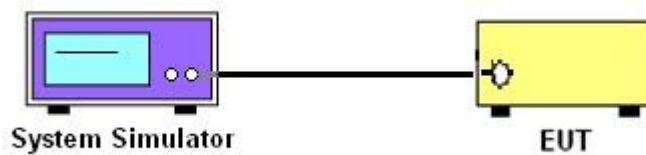
3 Conducted Test Items

3.1 Measuring Instruments

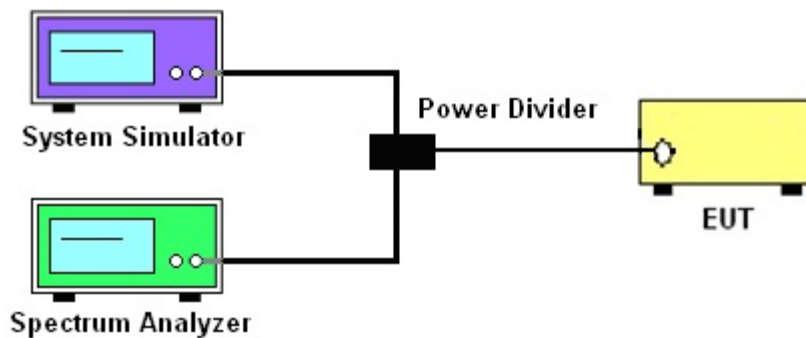
See list of measuring instruments of this test report.

3.2 Test Setup

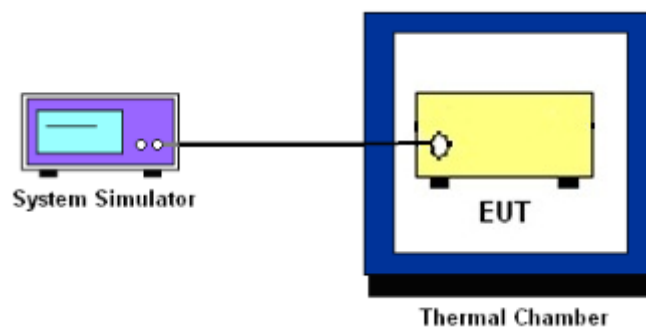
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied Bandwidth ,Conducted Band-Edge and Conducted Spurious Emission



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and ERP/EIRP

3.4.1 Description of the Conducted Output Power Measurement and ERP/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 ERP of mobile transmitters must not exceed 7 Watts for LTE Band 5 and Band 26.

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 12, Band 13 and Band 17.

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2 and Band 25 and Band 7 and Band 38 and Band 41.

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4 and Band 66.

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

3.4.2 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.

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.5.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2.3.4 (CCDF).
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.

3.6 Occupied Bandwidth

3.6.1 Description of Occupied Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

3.6.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.4
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
4. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
5. Set the detection mode to peak, and the trace mode to max hold.
6. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace.
(this is the reference value)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “-X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.



3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

22.917(a)

For operations in the 824 – 849 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

24.238 (a)

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53 (c)

For operations in the 776-788 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100 kHz bandwidth. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed. In addition, the power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least $65 + 10 \log_{10} p(\text{watts})$, dB, for mobile and portable equipment.

27.53 (g)

For operations in the 600MHz band and 698 -746 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

27.53 (h)

For operations in the 1710 – 1755 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53(m)(4)

For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

3.7.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used or a narrower RBW was used and the measured power was integrated over the full required measurement bandwidth of 1 MHz.
6. Offset has included the duty factor for LTE Band 38/41. Duty factor $= 10 \log (1/x)$, where x is the measured duty cycle.
7. Set spectrum analyzer with RMS detector.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. Checked that all the results comply with the emission limit line.

Example:

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

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

$$= [30 + 10 \log (P)] \text{ (dBm)} - [43 + 10 \log (P)] \text{ (dB)} = -13 \text{ dBm.}$$

10. For LTE Band 7, 38, 41, the other 40 dB, and 55 dB have additionally applied same calculation above.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than 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 lower than the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.
The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Offset has included the duty factor for LTE Band 38/41. Duty factor = $10 \log (1/x)$, where x is the measured duty cycle
9. Taking the record of maximum spurious emission.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
11. 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)
 $= -13$ dBm.
12. For Band 7, 38, 41
The limit line is derived from $55 + 10 \log (P)$ dB below the transmitter power P(Watts)
 $= P(W) - [55 + 10 \log (P)]$ (dB)
 $= [30 + 10 \log (P)]$ (dBm) - $[55 + 10 \log (P)]$ (dB)
 $= -25$ dBm.

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

3.9.2 Test Procedures for Temperature Variation

1. The testing follows ANSI C63.26 section 5.6.4
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in 10°C step up to 50°C . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.9.3 Test Procedures for Voltage Variation

1. The testing follows ANSI C63.26 section 5.6.5
2. The EUT was placed in a temperature chamber at $20\pm 5^{\circ}\text{C}$ and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
4. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

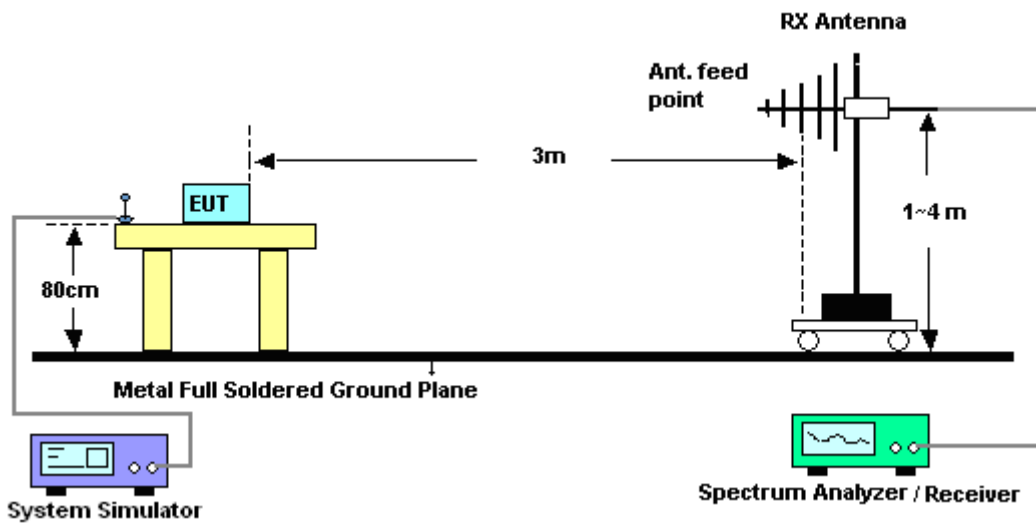
4 Radiated Test Items

4.1 Measuring Instruments

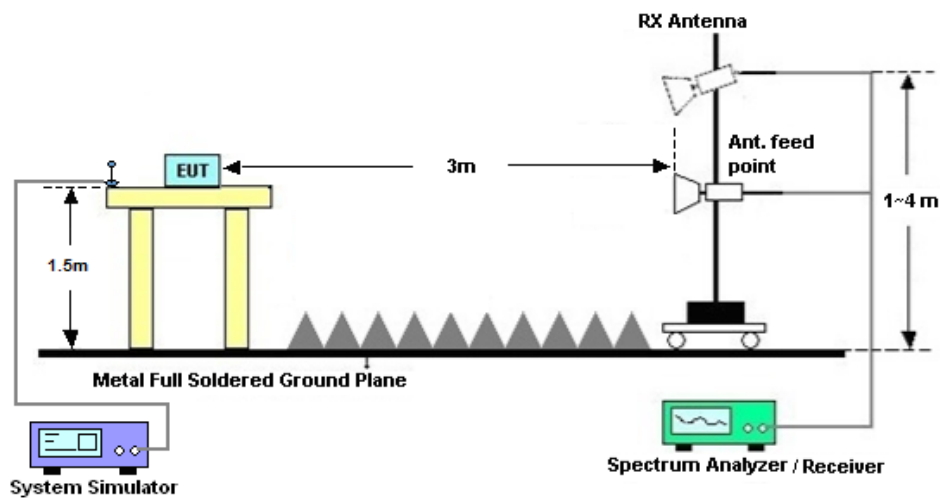
See list of measuring instruments of this test report.

4.2 Test Setup

4.2.1 For radiated test from 30MHz to 1GHz



4.2.2 For radiated test above 1GHz



4.3 Test Result of Radiated Test

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.

For LTE Band 13

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

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

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. $\text{EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$
11. $\text{ERP (dBm)} = \text{EIRP} - 2.15$
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)
 $= P(W) - [43 + 10\log(P)] \text{ (dB)}$
 $= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$
 $= -13\text{dBm}.$

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
Spectrum Analyzer	R&S	FSP40	100319	9kHz~40GHz	Oct. 11, 2018	Dec. 21, 2018~Jan. 17, 2019	Oct. 10, 2019	Conducted (TH01-KS)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jun. 27, 2018	Dec. 21, 2018~Jan. 17, 2019	Jun. 26, 2019	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY57471084	10Hz~44GHz	Jun. 25, 2018	Dec. 08, 2018~Jan. 11, 2019	Jun. 24, 2019	Radiation (03CH06-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz~1GHz	Jan. 29, 2018	Dec. 08, 2018~Jan. 11, 2019	Jan. 28, 2019	Radiation (03CH06-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 20, 2018	Dec. 08, 2018~Jan. 11, 2019	Oct. 19, 2019	Radiation (03CH06-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz~40GHz	Feb. 07, 2018	Dec. 08, 2018~Jan. 11, 2019	Feb. 06, 2019	Radiation (03CH06-KS)
Amplifier	SONOMA	310N	187289	9KHz ~1GHZ	Aug. 06, 2018	Dec. 08, 2018~Jan. 11, 2019	Aug. 05, 2019	Radiation (03CH06-KS)
Amplifier	MITEQ	TTA1840-35-HG	2014749	18~40GHz	Feb. 08, 2018	Dec. 08, 2018~Jan. 11, 2019	Feb. 07, 2019	Radiation (03CH06-KS)
high gain Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P	2025788	1Ghz-18Ghz	Apr. 17, 2018	Dec. 08, 2018~Jan. 11, 2019	Apr. 16, 2019	Radiation (03CH06-KS)
Amplifier	Keysight	83017A	MY53270203	500MHz~26.5GHz	Apr. 18, 2018	Dec. 08, 2018~Jan. 11, 2019	Apr. 17, 2019	Radiation (03CH06-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Dec. 08, 2018~Jan. 11, 2019	NCR	Radiation (03CH06-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Dec. 08, 2018~Jan. 11, 2019	NCR	Radiation (03CH06-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Dec. 08, 2018~Jan. 11, 2019	NCR	Radiation (03CH06-KS)

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% ($U = 2Uc(y)$)	2.5 dB
---	--------

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.0 dB
---	--------

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.0 dB
---	--------



Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	24.01	23.90	24.22
20	1	49		23.55	23.68	24.05
20	1	99		23.56	23.65	24.10
20	50	0		22.84	23.00	23.09
20	50	24		22.84	22.88	23.04
20	50	50		22.72	22.75	23.03
20	100	0		22.85	22.89	23.06
20	1	0	16-QAM	23.21	23.04	23.50
20	1	49		22.92	23.07	23.37
20	1	99		22.83	22.93	23.06
20	50	0		21.96	22.03	22.19
20	50	24		21.99	22.00	22.11
20	50	50		21.87	21.87	22.11
20	100	0		21.94	22.01	22.14
20	1	0	64QAM	22.84	22.79	23.48
20	1	49		22.55	23.04	23.28
20	1	99		22.50	23.05	22.96
20	50	0		21.94	22.04	22.19
20	50	24		21.98	21.99	22.11
20	50	50		21.87	21.89	22.11
20	100	0		21.91	21.94	22.07
15	1	0	QPSK	23.94	23.83	24.11
15	1	37		23.65	23.75	23.91
15	1	74		23.74	23.73	23.93
15	36	0		22.89	22.92	23.07
15	36	20		22.73	22.85	23.09
15	36	39		22.77	22.80	23.03
15	75	0		22.80	22.89	22.98



15	1	0	16-QAM	23.09	22.88	23.23
15	1	37		22.79	22.83	23.13
15	1	74		22.85	22.81	22.67
15	36	0		21.96	22.02	22.06
15	36	20		21.90	21.99	22.18
15	36	39		21.87	21.93	22.08
15	75	0		21.89	21.93	22.01
15	1	0	64QAM	23.13	23.05	23.36
15	1	37		22.85	22.97	23.14
15	1	74		22.92	23.03	22.92
15	36	0		21.96	21.96	22.05
15	36	20		21.81	21.97	22.10
15	36	39		21.85	21.92	22.09
15	75	0		21.92	21.93	22.01



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.77	23.91	24.04
10	1	25		23.65	23.72	23.93
10	1	49		23.55	23.66	23.89
10	25	0		22.80	22.85	23.09
10	25	12		22.77	22.87	23.02
10	25	25		22.59	22.79	22.97
10	50	0		22.69	22.88	23.04
10	1	0	16-QAM	23.28	23.44	23.45
10	1	25		23.19	23.28	23.40
10	1	49		23.07	23.27	23.46
10	25	0		21.84	21.97	22.24
10	25	12		21.77	21.94	22.20
10	25	25		21.75	21.81	22.15
10	50	0		21.75	21.86	22.20
10	1	0	64QAM	22.91	23.38	23.44
10	1	25		22.81	23.36	23.47
10	1	49		22.73	23.31	23.45
10	25	0		21.89	22.03	22.22
10	25	12		21.77	21.89	22.14
10	25	25		21.78	21.89	22.18
10	50	0		21.79	21.91	22.15
5	1	0	QPSK	23.78	23.81	24.03
5	1	12		23.65	23.81	23.99
5	1	24		23.64	23.75	23.80
5	12	0		22.74	22.83	23.05
5	12	7		22.75	22.79	23.02
5	12	13		22.69	22.78	22.95
5	25	0		22.71	22.77	23.00



5	1	0	16-QAM	23.23	23.37	23.25
5	1	12		23.17	23.36	23.18
5	1	24		23.20	23.32	23.20
5	12	0		21.78	21.90	22.11
5	12	7		21.79	21.96	22.15
5	12	13		21.75	21.80	22.06
5	25	0		21.88	21.96	22.13
5	1	0	64QAM	23.30	23.01	23.15
5	1	12		22.83	22.93	23.15
5	1	24		22.79	23.24	23.14
5	12	0		21.69	21.97	22.12
5	12	7		21.76	21.93	22.12
5	12	13		21.60	21.71	21.91
5	25	0		21.83	21.96	22.03



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	23.59	23.80	23.98
3	1	8		23.70	23.79	23.89
3	1	14		23.76	23.78	23.87
3	8	0		22.74	22.80	22.89
3	8	4		22.78	22.81	23.01
3	8	7		22.69	22.79	22.98
3	15	0		22.72	22.85	22.93
3	1	0	16-QAM	23.23	23.29	23.50
3	1	8		23.10	23.35	23.10
3	1	14		23.02	23.23	23.39
3	8	0		21.76	21.94	22.15
3	8	4		21.83	22.01	22.15
3	8	7		21.89	22.00	22.14
3	15	0		21.82	21.86	22.07
3	1	0	64QAM	22.88	23.22	23.38
3	1	8		22.98	23.25	23.38
3	1	14		22.91	23.19	23.35
3	8	0		21.86	21.98	22.08
3	8	4		21.85	21.89	22.31
3	8	7		21.80	21.94	22.07
3	15	0		21.79	21.84	22.12
1.4	1	0	QPSK	23.64	23.68	23.84
1.4	1	3		23.70	23.81	23.87
1.4	1	5		23.71	23.77	23.82
1.4	3	0		23.66	23.74	23.89
1.4	3	1		23.76	23.74	23.91
1.4	3	3		23.60	23.77	23.89
1.4	6	0		22.62	22.74	22.94



1.4	1	0	16-QAM	22.95	23.08	23.17
1.4	1	3		23.13	23.13	23.27
1.4	1	5		23.17	23.10	23.24
1.4	3	0		22.68	22.77	22.99
1.4	3	1		22.88	22.87	23.07
1.4	3	3		22.68	22.78	22.97
1.4	6	0	64QAM	21.90	22.00	22.10
1.4	1	0		22.85	22.93	22.79
1.4	1	3		22.93	23.04	23.36
1.4	1	5		22.81	22.91	23.33
1.4	3	0		22.99	23.08	23.19
1.4	3	1		22.97	23.09	23.17
1.4	3	3		22.97	23.00	23.07
1.4	6	0		21.74	21.91	22.09



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	23.51	23.57	23.72
20	1	49		23.35	23.40	23.48
20	1	99		23.45	23.29	23.37
20	50	0		22.40	22.59	22.58
20	50	24		22.50	22.47	22.47
20	50	50		22.46	22.46	22.51
20	100	0		22.46	22.48	22.46
20	1	0	16-QAM	22.66	22.82	22.59
20	1	49		22.46	22.56	22.42
20	1	99		22.31	22.30	22.51
20	50	0		21.58	21.70	21.62
20	50	24		21.52	21.64	21.60
20	50	50		21.57	21.50	21.64
20	100	0		21.51	21.56	21.59
20	1	0	64QAM	22.68	22.88	22.64
20	1	49		22.49	22.65	22.66
20	1	99		22.67	22.51	22.36
20	50	0		21.52	21.75	21.69
20	50	24		21.54	21.59	21.59
20	50	50		21.57	21.53	21.60
20	100	0		21.58	21.64	21.56
15	1	0	QPSK	23.46	23.50	23.54
15	1	37		23.25	23.33	23.44
15	1	74		23.34	23.41	23.46
15	36	0		22.47	22.61	22.47
15	36	20		22.51	22.57	22.59
15	36	39		22.40	22.46	22.54
15	75	0		22.47	22.53	22.46



15	1	0	16-QAM	22.50	22.84	23.12
15	1	37		22.56	22.90	22.63
15	1	74		22.58	22.57	23.01
15	36	0		21.52	21.68	21.53
15	36	20		21.54	21.60	21.66
15	36	39		21.47	21.55	21.65
15	75	0		21.58	21.64	21.55
15	1	0	64QAM	22.43	22.57	22.69
15	1	37		22.27	22.29	22.56
15	1	74		22.28	22.40	22.65
15	36	0		21.53	21.63	21.57
15	36	20		21.44	21.49	21.66
15	36	39		21.43	21.55	21.58
15	75	0		21.55	21.62	21.51



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.35	23.54	23.58
10	1	25		23.25	23.44	23.51
10	1	49		23.22	23.37	23.39
10	25	0		22.38	22.53	22.48
10	25	12		22.36	22.48	22.53
10	25	25		22.29	22.40	22.44
10	50	0		22.33	22.50	22.53
10	1	0	16-QAM	22.89	23.07	22.77
10	1	25		22.92	22.64	22.69
10	1	49		22.79	22.97	22.68
10	25	0		21.55	21.69	21.71
10	25	12		21.49	21.66	21.58
10	25	25		21.41	21.58	21.61
10	50	0		21.40	21.62	21.59
10	1	0	64QAM	22.44	23.09	22.74
10	1	25		22.81	22.54	22.69
10	1	49		22.81	22.45	22.56
10	25	0		21.47	21.63	21.65
10	25	12		21.54	21.55	21.55
10	25	25		21.43	21.52	21.55
10	50	0		21.48	21.59	21.56
5	1	0	QPSK	23.20	23.41	23.42
5	1	12		23.23	23.31	23.26
5	1	24		23.13	23.34	23.24
5	12	0		22.25	22.51	22.49
5	12	7		22.25	22.53	22.49
5	12	13		22.35	22.43	22.48
5	25	0		22.34	22.45	22.50



5	1	0	16-QAM	22.50	22.75	22.79
5	1	12		22.42	22.69	22.73
5	1	24		22.58	22.58	22.71
5	12	0		21.22	21.47	21.55
5	12	7		21.41	21.48	21.55
5	12	13		21.36	21.50	21.48
5	25	0		21.47	21.51	21.56
5	1	0	64QAM	22.46	22.41	22.74
5	1	12		22.11	22.54	22.74
5	1	24		22.24	22.38	22.35
5	12	0		21.37	21.64	21.68
5	12	7		21.38	21.54	21.64
5	12	13		21.48	21.62	21.57
5	25	0		21.42	21.59	21.51



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	23.25	23.39	23.47
3	1	8		23.21	23.45	23.47
3	1	14		23.20	23.48	23.49
3	8	0		22.20	22.48	22.46
3	8	4		22.19	22.44	22.49
3	8	7		22.17	22.41	22.40
3	15	0		22.24	22.48	22.44
3	1	0	16-QAM	22.74	22.59	23.00
3	1	8		22.16	22.96	22.42
3	1	14		22.74	22.95	22.54
3	8	0		21.38	21.67	21.72
3	8	4		21.34	21.70	21.68
3	8	7		21.44	21.60	21.66
3	15	0		21.35	21.72	21.62
3	1	0	64QAM	22.72	22.64	22.70
3	1	8		22.65	22.63	22.61
3	1	14		22.62	22.88	22.59
3	8	0		21.30	21.70	21.61
3	8	4		21.40	21.76	21.75
3	8	7		21.36	21.67	21.68
3	15	0		21.33	21.70	21.61
1.4	1	0	QPSK	23.17	23.29	23.31
1.4	1	3		23.13	23.47	23.37
1.4	1	5		23.12	23.24	23.34
1.4	3	0		23.08	23.36	23.32
1.4	3	1		23.13	23.35	23.30
1.4	3	3		23.14	23.36	23.27
1.4	6	0		22.21	22.38	22.34



1.4	1	0	16-QAM	22.44	22.69	22.73
1.4	1	3		22.47	22.78	22.96
1.4	1	5		22.47	22.75	22.90
1.4	3	0		22.14	22.46	22.41
1.4	3	1		22.26	22.46	22.51
1.4	3	3		22.14	22.38	22.48
1.4	6	0	64QAM	21.36	21.57	21.48
1.4	1	0		22.28	22.80	22.83
1.4	1	3		22.43	22.69	22.93
1.4	1	5		22.37	22.46	22.27
1.4	3	0		22.44	22.64	22.51
1.4	3	1		22.46	22.56	22.57
1.4	3	3		22.34	22.61	22.53
1.4	6	0		21.25	21.53	21.51



LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.18	23.15	23.03
10	1	25		23.07	22.98	23.01
10	1	49		23.09	22.99	22.88
10	25	0		22.10	22.07	21.97
10	25	12		22.09	22.10	22.05
10	25	25		22.08	22.02	21.95
10	50	0		22.05	22.02	21.86
10	1	0	16-QAM	22.28	22.27	21.96
10	1	25		22.24	22.03	22.12
10	1	49		22.21	21.91	21.91
10	25	0		21.24	21.12	21.12
10	25	12		21.26	21.24	21.16
10	25	25		21.26	21.09	21.04
10	50	0		21.11	21.16	21.08
10	1	0	64QAM	22.33	22.33	22.24
10	1	25		22.27	22.12	22.26
10	1	49		22.31	22.16	22.11
10	25	0		21.31	21.11	21.07
10	25	12		21.22	21.16	21.11
10	25	25		21.22	21.08	21.05
10	50	0		21.12	21.10	21.01
5	1	0	QPSK	22.89	22.95	22.99
5	1	12		22.85	22.91	22.86
5	1	24		22.87	22.90	22.88
5	12	0		21.98	22.05	22.06
5	12	7		22.16	22.03	22.04
5	12	13		22.04	21.95	21.93
5	25	0		22.05	22.01	21.94



5	1	0	16-QAM	22.54	22.23	22.52
5	1	12		22.23	22.62	22.12
5	1	24		22.18	22.45	22.45
5	12	0		21.14	21.20	21.13
5	12	7		21.21	21.12	21.07
5	12	13		21.20	21.13	21.04
5	25	0		21.16	21.06	21.00
5	1	0	64QAM	22.20	22.19	22.13
5	1	12		21.91	22.04	21.95
5	1	24		22.16	21.89	22.05
5	12	0		21.00	21.09	21.01
5	12	7		21.18	21.08	21.06
5	12	13		21.16	21.06	20.92
5	25	0		21.12	20.98	21.08



LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.93	23.05	22.95
3	1	8		22.94	22.99	22.91
3	1	14		22.88	22.93	22.87
3	8	0		21.96	21.98	21.98
3	8	4		21.97	22.02	21.97
3	8	7		21.93	22.00	21.96
3	15	0		21.95	21.97	21.98
3	1	0	16-QAM	22.51	22.70	22.19
3	1	8		22.55	22.53	22.16
3	1	14		22.14	22.52	22.11
3	8	0		21.09	21.12	21.08
3	8	4		21.16	21.14	21.10
3	8	7		21.15	21.10	21.12
3	15	0		21.07	21.11	21.03
3	1	0	64QAM	22.54	22.50	22.05
3	1	8		22.09	22.48	21.97
3	1	14		22.43	22.10	22.18
3	8	0		21.03	21.09	21.12
3	8	4		21.01	21.06	21.10
3	8	7		20.98	21.04	21.11
3	15	0		20.98	20.98	20.96
1.4	1	0	QPSK	22.93	22.91	22.82
1.4	1	3		23.01	22.99	22.90
1.4	1	5		22.83	22.86	22.81
1.4	3	0		23.00	22.97	22.80
1.4	3	1		23.04	23.04	22.85
1.4	3	3		22.92	22.95	22.81
1.4	6	0		21.88	21.94	21.95



1.4	1	0	16-QAM	22.23	22.26	22.23
1.4	1	3		22.21	22.51	22.28
1.4	1	5		22.17	22.22	22.28
1.4	3	0		21.95	22.02	22.01
1.4	3	1		22.16	22.04	21.92
1.4	3	3		22.00	21.92	21.86
1.4	6	0		20.99	21.20	21.13
1.4	1	0	64QAM	21.89	22.16	22.01
1.4	1	3		21.85	22.20	22.10
1.4	1	5		21.83	22.10	22.25
1.4	3	0		22.26	22.26	22.12
1.4	3	1		22.05	22.29	22.22
1.4	3	3		21.92	21.97	22.00
1.4	6	0		20.99	21.06	20.95



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	23.41	23.53	23.55
20	1	49		23.30	23.35	23.28
20	1	99		23.24	23.34	23.36
20	50	0		22.36	22.44	22.47
20	50	24		22.30	22.33	22.43
20	50	50		22.36	22.33	22.38
20	100	0		22.37	22.35	22.49
20	1	0	16-QAM	22.94	22.62	22.57
20	1	49		22.79	22.45	22.34
20	1	99		22.88	22.83	22.53
20	50	0		21.37	21.52	21.56
20	50	24		21.36	21.41	21.58
20	50	50		21.45	21.42	21.54
20	100	0		21.51	21.46	21.55
20	1	0	64QAM	22.39	22.64	22.77
20	1	49		22.50	22.51	22.63
20	1	99		22.57	22.52	22.56
20	50	0		21.35	21.44	21.56
20	50	24		21.36	21.50	21.53
20	50	50		21.44	21.45	21.52
20	100	0		21.50	21.40	21.49
15	1	0	QPSK	23.31	23.40	23.49
15	1	37		23.22	23.21	23.29
15	1	74		23.16	23.21	23.26
15	36	0		22.24	22.37	22.42
15	36	20		22.31	22.38	22.45
15	36	39		22.27	22.30	22.34
15	75	0		22.24	22.31	22.37



15	1	0	16-QAM	22.47	22.48	22.75
15	1	37		22.40	22.58	22.60
15	1	74		22.34	22.43	22.68
15	36	0		21.39	21.50	21.47
15	36	20		21.38	21.41	21.53
15	36	39		21.34	21.45	21.45
15	75	0		21.31	21.45	21.55
15	1	0	64QAM	22.53	22.65	22.71
15	1	37		22.56	22.29	22.41
15	1	74		22.50	22.34	22.25
15	36	0		21.44	21.37	21.45
15	36	20		21.43	21.43	21.50
15	36	39		21.39	21.38	21.38
15	75	0		21.38	21.40	21.49



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.20	23.39	23.52
10	1	25		23.15	23.23	23.40
10	1	49		23.15	23.30	23.28
10	25	0		22.28	22.33	22.40
10	25	12		22.29	22.32	22.42
10	25	25		22.24	22.25	22.40
10	50	0		22.28	22.28	22.38
10	1	0	16-QAM	22.90	22.58	22.97
10	1	25		22.78	22.49	22.86
10	1	49		22.77	22.81	22.86
10	25	0		21.29	21.48	21.49
10	25	12		21.32	21.45	21.59
10	25	25		21.33	21.40	21.52
10	50	0		21.36	21.45	21.52
10	1	0	64QAM	22.45	22.89	22.89
10	1	25		22.35	22.26	22.88
10	1	49		22.41	22.43	22.46
10	25	0		21.34	21.49	21.55
10	25	12		21.47	21.47	21.49
10	25	25		21.30	21.46	21.44
10	50	0		21.38	21.40	21.50
5	1	0	QPSK	23.25	23.17	23.32
5	1	12		23.23	23.35	23.23
5	1	24		23.24	23.19	23.41
5	12	0		22.29	22.33	22.32
5	12	7		22.29	22.33	22.37
5	12	13		22.20	22.32	22.40
5	25	0		22.24	22.27	22.33



5	1	0	16-QAM	22.81	22.54	22.56
5	1	12		22.84	22.67	22.54
5	1	24		22.77	22.48	22.49
5	12	0		21.40	21.48	21.37
5	12	7		21.52	21.53	21.46
5	12	13		21.26	21.41	21.36
5	25	0		21.40	21.44	21.53
5	1	0	64QAM	22.85	22.41	22.29
5	1	12		22.45	22.48	22.47
5	1	24		22.73	22.39	22.50
5	12	0		21.35	21.44	21.58
5	12	7		21.26	21.60	21.51
5	12	13		21.48	21.37	21.55
5	25	0		21.32	21.38	21.45



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.40	23.25	23.27
10	1	25		23.23	23.18	23.23
10	1	49		23.24	23.21	23.22
10	25	0		22.34	22.30	22.20
10	25	12		22.33	22.23	22.15
10	25	25		22.28	22.23	22.14
10	50	0		22.26	22.23	22.22
10	1	0	16-QAM	22.88	22.40	22.85
10	1	25		22.81	22.84	22.90
10	1	49		22.90	22.91	22.38
10	25	0		21.46	21.42	21.40
10	25	12		21.31	21.28	21.38
10	25	25		21.39	21.35	21.24
10	50	0		21.34	21.37	21.32
10	1	0	64QAM	22.39	22.30	22.43
10	1	25		22.39	22.15	22.77
10	1	49		22.49	22.39	22.27
10	25	0		21.37	21.35	21.32
10	25	12		21.36	21.38	21.31
10	25	25		21.38	21.29	21.29
10	50	0		21.44	21.29	21.27
5	1	0	QPSK	23.33	23.16	23.19
5	1	12		23.31	23.14	23.24
5	1	24		23.48	23.27	23.03
5	12	0		22.32	22.21	22.17
5	12	7		22.33	22.23	22.18
5	12	13		22.37	22.24	22.09
5	25	0		22.36	22.22	22.13



5	1	0	16-QAM	22.78	22.66	22.69
5	1	12		22.48	22.53	22.50
5	1	24		22.62	22.63	22.43
5	12	0		21.44	21.32	21.35
5	12	7		21.46	21.28	21.25
5	12	13		21.48	21.31	21.12
5	25	0		21.53	21.34	21.15
5	1	0	64QAM	22.52	22.31	22.42
5	1	12		22.48	22.55	22.39
5	1	24		22.38	22.17	22.43
5	12	0		21.49	21.50	21.25
5	12	7		21.41	21.41	21.23
5	12	13		21.38	21.37	21.19
5	25	0		21.48	21.37	21.15



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	23.29	23.17	23.13
3	1	8		23.05	23.18	23.05
3	1	14		23.10	23.19	23.05
3	8	0		22.27	22.14	22.03
3	8	4		22.23	22.27	22.18
3	8	7		22.25	22.20	22.09
3	15	0		22.22	22.25	22.10
3	1	0	16-QAM	22.69	22.83	22.73
3	1	8		22.40	22.80	22.63
3	1	14		22.74	22.74	22.76
3	8	0		21.38	21.30	21.20
3	8	4		21.25	21.37	21.24
3	8	7		21.40	21.43	21.30
3	15	0		21.40	21.38	21.23
3	1	0	64QAM	22.35	22.36	22.69
3	1	8		22.32	22.39	22.63
3	1	14		22.35	22.32	22.64
3	8	0		21.32	21.22	21.14
3	8	4		21.28	21.25	21.27
3	8	7		21.32	21.31	21.08
3	15	0		21.36	21.25	21.15
1.4	1	0	QPSK	23.08	23.08	22.99
1.4	1	3		23.22	23.27	23.06
1.4	1	5		23.14	23.09	23.10
1.4	3	0		23.17	23.18	23.06
1.4	3	1		23.22	23.21	23.02
1.4	3	3		23.08	23.17	23.11
1.4	6	0		22.16	22.09	21.93



1.4	1	0	16-QAM	22.51	22.53	22.32
1.4	1	3		22.82	22.51	22.50
1.4	1	5		22.39	22.36	22.25
1.4	3	0		22.20	22.31	22.04
1.4	3	1		22.28	22.38	22.20
1.4	3	3		22.23	22.34	22.21
1.4	6	0		21.34	21.30	21.26
1.4	1	0	64QAM	22.10	22.19	22.27
1.4	1	3		22.14	22.54	22.19
1.4	1	5		22.12	22.28	22.13
1.4	3	0		22.31	22.32	22.12
1.4	3	1		22.37	22.27	22.46
1.4	3	3		22.28	22.51	22.34
1.4	6	0		21.14	21.20	21.10



LTE Band 13 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK		23.11	
10	1	25			23.10	
10	1	49			23.07	
10	25	0			22.08	
10	25	12			22.04	
10	25	25			21.92	
10	50	0			22.08	
10	1	0	16-QAM		22.73	
10	1	25			22.68	
10	1	49			22.61	
10	25	0			21.07	
10	25	12			21.07	
10	25	25			21.04	
10	50	0			21.18	
10	1	0	64QAM		22.28	
10	1	25			22.61	
10	1	49			22.25	
10	25	0			21.15	
10	25	12			21.15	
10	25	25			21.13	
10	50	0			21.08	
5	1	0	QPSK	23.20	23.08	23.05
5	1	12		23.09	23.09	23.08
5	1	24		23.05	22.92	23.04
5	12	0		22.09	22.09	22.05
5	12	7		22.10	22.00	21.99
5	12	13		22.05	22.00	21.95
5	25	0		22.10	22.01	21.97



5	1	0	16-QAM	22.08	22.64	22.16
5	1	12		22.15	22.04	22.07
5	1	24		22.27	22.20	22.07
5	12	0		21.21	21.22	21.18
5	12	7		21.29	21.18	21.11
5	12	13		21.23	21.17	21.05
5	25	0		21.10	21.16	21.10
5	1	0	64QAM	22.54	22.28	22.24
5	1	12		22.41	22.18	22.20
5	1	24		22.33	22.23	22.20
5	12	0		21.16	21.15	21.11
5	12	7		21.24	21.11	21.07
5	12	13		21.10	21.10	21.06
5	25	0		21.16	21.15	21.05



LTE Band 17 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.27	23.17	23.18
10	1	25		23.20	23.21	23.11
10	1	49		23.13	23.01	23.00
10	25	0		22.23	22.27	22.20
10	25	12		22.25	22.18	22.23
10	25	25		22.21	22.16	22.12
10	50	0		22.21	22.20	22.21
10	1	0	16-QAM	22.50	22.43	22.53
10	1	25		22.87	22.50	22.45
10	1	49		22.65	22.36	22.37
10	25	0		21.42	21.35	21.35
10	25	12		21.32	21.34	21.32
10	25	25		21.35	21.30	21.27
10	50	0		21.33	21.38	21.31
10	1	0	64QAM	22.68	22.30	22.77
10	1	25		22.39	22.15	22.40
10	1	49		22.22	22.11	22.23
10	25	0		21.31	21.36	21.31
10	25	12		21.38	21.26	21.32
10	25	25		21.28	21.26	21.22
10	50	0		21.41	21.25	21.30
5	1	0	QPSK	23.24	23.20	23.25
5	1	12		23.14	23.04	22.90
5	1	24		23.14	23.03	23.11
5	12	0		22.16	22.19	22.15
5	12	7		22.29	22.19	22.02
5	12	13		22.23	22.20	22.13
5	25	0		22.22	22.22	22.20



5	1	0	16-QAM	22.64	22.52	22.69
5	1	12		22.59	22.66	22.52
5	1	24		22.76	22.51	22.59
5	12	0		21.20	21.38	21.43
5	12	7		21.32	21.25	21.22
5	12	13		21.27	21.24	21.15
5	25	0		21.33	21.28	21.28
5	1	0	64QAM	22.12	22.51	22.49
5	1	12		22.64	22.47	22.40
5	1	24		22.50	22.64	22.60
5	12	0		21.30	21.36	21.40
5	12	7		21.52	21.34	21.28
5	12	13		21.50	21.29	21.20
5	25	0		21.33	21.31	21.37



LTE Band 25 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	23.88	23.92	24.21
20	1	49		23.64	23.91	23.88
20	1	99		23.53	23.60	23.96
20	50	0		22.88	22.95	23.00
20	50	24		22.76	22.86	23.03
20	50	50		22.79	22.83	22.86
20	100	0		22.81	22.84	22.93
20	1	0	16-QAM	22.99	22.99	23.31
20	1	49		23.16	22.95	22.90
20	1	99		23.14	22.81	22.81
20	50	0		21.93	22.07	22.01
20	50	24		21.89	21.90	22.13
20	50	50		21.79	21.87	22.02
20	100	0		21.90	21.91	21.99
20	1	0	64QAM	23.14	23.03	23.32
20	1	49		23.13	22.94	23.06
20	1	99		22.81	22.87	22.55
20	50	0		21.98	21.99	22.08
20	50	24		21.94	21.92	22.06
20	50	50		21.84	21.79	22.04
20	100	0		21.93	21.89	21.95
15	1	0	QPSK	23.80	23.90	24.18
15	1	37		23.61	23.74	23.95
15	1	74		23.58	23.69	23.56
15	36	0		22.81	22.91	23.15
15	36	20		22.69	22.85	22.93
15	36	39		22.72	22.70	22.96
15	75	0		22.79	22.82	22.97



15	1	0	16-QAM	23.05	23.04	23.31
15	1	37		22.70	22.85	23.22
15	1	74		22.84	22.77	22.66
15	36	0		21.89	21.99	22.18
15	36	20		21.75	21.99	22.06
15	36	39		21.81	21.89	21.99
15	75	0		21.91	21.91	22.10
15	1	0	64QAM	23.01	23.09	23.28
15	1	37		22.87	23.03	22.83
15	1	74		22.69	22.80	22.53
15	36	0		21.84	21.96	22.15
15	36	20		21.82	21.92	22.13
15	36	39		21.76	21.83	21.96
15	75	0		21.87	21.93	22.10



LTE Band 25 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.77	23.81	24.07
10	1	25		23.58	23.64	23.93
10	1	49		23.51	23.69	23.75
10	25	0		22.71	22.87	23.06
10	25	12		22.75	22.81	23.02
10	25	25		22.65	22.74	22.93
10	50	0		22.76	22.83	23.06
10	1	0	16-QAM	23.30	23.33	23.42
10	1	25		22.86	23.30	23.50
10	1	49		23.16	23.25	23.28
10	25	0		21.87	21.99	22.18
10	25	12		21.78	21.96	22.13
10	25	25		21.77	21.86	22.04
10	50	0		21.83	21.99	22.15
10	1	0	64QAM	23.25	23.26	23.44
10	1	25		22.83	23.29	23.45
10	1	49		23.09	22.94	23.18
10	25	0		21.96	21.95	22.15
10	25	12		21.73	21.93	22.10
10	25	25		21.80	21.91	21.99
10	50	0		21.81	21.97	22.06
5	1	0	QPSK	23.78	23.85	24.00
5	1	12		23.66	23.82	23.91
5	1	24		23.54	23.62	23.77
5	12	0		22.77	22.83	22.95
5	12	7		22.66	22.82	22.93
5	12	13		22.66	22.73	22.91
5	25	0		22.64	22.76	22.92



5	1	0	16-QAM	23.03	23.08	23.37
5	1	12		22.94	23.24	23.23
5	1	24		22.87	23.18	22.96
5	12	0		21.74	21.87	22.02
5	12	7		21.90	21.89	21.97
5	12	13		21.78	21.87	22.02
5	25	0		21.81	21.89	22.06
5	1	0	64QAM	22.64	23.05	23.14
5	1	12		22.92	22.95	23.06
5	1	24		22.57	22.98	22.77
5	12	0		21.97	21.98	22.11
5	12	7		21.91	22.02	22.08
5	12	13		21.88	21.89	22.11
5	25	0		21.77	21.88	22.03



LTE Band 25 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	23.73	23.78	23.93
3	1	8		23.72	23.78	23.81
3	1	14		23.67	23.77	23.63
3	8	0		22.75	22.84	22.89
3	8	4		22.75	22.85	22.92
3	8	7		22.70	22.76	22.68
3	15	0	16-QAM	22.69	22.88	22.85
3	1	0		23.23	22.96	22.94
3	1	8		23.10	23.30	22.69
3	1	14		23.24	23.29	22.50
3	8	0		21.98	22.01	21.98
3	8	4		22.09	22.04	22.17
3	8	7	64QAM	21.98	22.05	21.87
3	15	0		21.89	21.93	22.12
3	1	0		22.93	23.04	23.14
3	1	8		23.19	22.97	22.96
3	1	14		23.18	22.96	22.72
3	8	0		21.83	22.14	22.23
3	8	4	QPSK	21.87	22.16	21.94
3	8	7		21.82	21.95	21.81
3	15	0		21.83	21.79	22.06
1.4	1	0		23.66	23.68	23.70
1.4	1	3		23.74	23.78	23.75
1.4	1	5		23.54	23.67	23.72
1.4	3	0	QPSK	23.63	23.70	23.79
1.4	3	1		23.77	23.77	23.84
1.4	3	3		23.67	23.69	23.68
1.4	6	0		22.72	22.78	22.80



1.4	1	0	16-QAM	22.88	22.96	23.25
1.4	1	3		22.87	23.05	23.21
1.4	1	5		22.90	22.93	23.09
1.4	3	0		22.83	22.89	22.78
1.4	3	1		22.85	22.91	22.79
1.4	3	3		22.78	22.84	22.63
1.4	6	0		21.90	22.00	21.93
1.4	1	0	64QAM	22.64	23.25	22.89
1.4	1	3		22.71	22.87	22.73
1.4	1	5		22.62	22.71	23.08
1.4	3	0		22.54	22.60	22.84
1.4	3	1		22.62	22.76	22.67
1.4	3	3		22.74	22.93	22.56
1.4	6	0		21.73	21.75	21.78



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.54	23.63	23.61
15	1	37		23.02	23.12	22.98
15	1	74		23.54	23.57	23.42
15	36	0		22.34	22.25	22.26
15	36	20		22.16	22.09	22.12
15	36	39		22.33	22.23	22.18
15	75	0		22.33	22.26	22.23
15	1	0	16-QAM	22.93	23.08	23.24
15	1	37		22.33	22.27	22.27
15	1	74		22.84	23.17	22.81
15	36	0		21.42	21.44	21.30
15	36	20		21.17	21.21	21.12
15	36	39		21.37	21.29	21.24
15	75	0		21.44	21.25	21.26
15	1	0	64QAM	22.58	22.80	22.81
15	1	37		22.29	22.17	22.26
15	1	74		22.74	22.58	23.02
15	36	0		21.40	21.40	21.31
15	36	20		21.18	21.14	21.08
15	36	39		21.35	21.30	21.18
15	75	0		21.49	21.24	21.29



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.77	23.77	24.04
10	1	25		23.64	23.65	23.96
10	1	49		23.63	23.57	23.76
10	25	0		22.75	22.91	23.00
10	25	12		22.66	22.80	22.95
10	25	25		22.53	22.67	22.95
10	50	0		22.69	22.78	23.01
10	1	0	16-QAM	23.29	23.34	23.37
10	1	25		23.23	23.32	23.18
10	1	49		23.09	23.33	23.33
10	25	0		21.90	22.08	22.14
10	25	12		21.85	21.97	22.12
10	25	25		21.83	21.88	22.00
10	50	0		21.85	21.91	22.10
10	1	0	64QAM	22.90	23.24	23.38
10	1	25		23.24	22.86	23.45
10	1	49		22.54	23.25	22.85
10	25	0		21.83	21.92	22.17
10	25	12		21.76	21.95	22.10
10	25	25		21.70	21.84	22.05
10	50	0		21.81	21.92	22.13
5	1	0	QPSK	23.62	23.75	23.97
5	1	12		23.57	23.85	23.96
5	1	24		23.59	23.71	23.76
5	12	0		22.70	22.76	22.92
5	12	7		22.66	22.78	22.98
5	12	13		22.68	22.79	22.94
5	25	0		22.64	22.75	22.90



5	1	0	16-QAM	23.14	23.17	23.42
5	1	12		23.24	23.23	23.41
5	1	24		23.01	23.30	23.05
5	12	0		21.74	21.89	21.97
5	12	7		21.89	21.86	22.09
5	12	13		21.73	21.85	22.05
5	25	0		21.78	21.84	22.07
5	1	0	64QAM	23.21	23.03	23.39
5	1	12		22.81	23.25	23.05
5	1	24		22.85	22.99	22.86
5	12	0		21.83	21.88	22.11
5	12	7		21.81	21.93	22.09
5	12	13		21.82	21.91	21.97
5	25	0		21.78	21.92	22.10



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	23.71	23.87	23.91
3	1	8		23.67	23.69	23.83
3	1	14		23.67	23.81	23.54
3	8	0		22.70	22.74	22.85
3	8	4		22.74	22.80	22.94
3	8	7		22.70	22.76	22.65
3	15	0		22.67	22.78	22.90
3	1	0	16-QAM	22.78	22.94	22.87
3	1	8		22.89	22.96	22.70
3	1	14		22.76	22.85	22.44
3	8	0		21.93	21.87	22.09
3	8	4		21.92	21.88	22.02
3	8	7		21.85	21.95	21.87
3	15	0		21.90	21.84	21.98
3	1	0	64QAM	22.91	22.91	23.06
3	1	8		22.84	23.00	22.84
3	1	14		22.80	23.00	22.67
3	8	0		21.74	22.06	21.91
3	8	4		21.68	21.89	22.03
3	8	7		21.89	21.81	21.79
3	15	0		21.76	21.84	21.94
1.4	1	0	QPSK	22.63	23.67	23.79
1.4	1	3		23.70	23.72	23.94
1.4	1	5		23.58	23.60	23.58
1.4	3	0		23.62	23.76	23.90
1.4	3	1		23.70	23.72	23.93
1.4	3	3		23.57	23.66	23.72
1.4	6	0		22.61	22.67	22.75



1.4	1	0	16-QAM	22.80	23.23	22.96
1.4	1	3		23.19	23.33	23.05
1.4	1	5		23.18	23.23	23.06
1.4	3	0		22.60	22.71	22.86
1.4	3	1		22.81	22.85	22.94
1.4	3	3		22.58	22.90	22.65
1.4	6	0	64QAM	21.76	21.77	21.91
1.4	1	0		23.08	22.76	22.94
1.4	1	3		23.14	22.84	22.86
1.4	1	5		22.64	22.64	22.78
1.4	3	0		22.78	22.90	22.94
1.4	3	1		22.89	22.94	22.86
1.4	3	3		22.78	22.74	22.56
1.4	6	0		21.73	21.76	21.82



LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	23.56	23.52	23.55
20	1	49		23.44	23.36	23.53
20	1	99		23.43	23.38	23.59
20	50	0		22.61	22.53	22.50
20	50	24		22.52	22.46	22.45
20	50	50		22.52	22.37	22.51
20	100	0		22.48	22.43	22.43
20	1	0	16-QAM	22.69	22.67	22.72
20	1	49		22.58	22.49	22.61
20	1	99		22.55	22.50	22.71
20	50	0		21.68	21.63	21.61
20	50	24		21.62	21.58	21.58
20	50	50		21.63	21.48	21.60
20	100	0		21.59	21.56	21.56
20	1	0	64QAM	22.44	22.38	22.44
20	1	49		22.30	22.22	22.38
20	1	99		22.29	22.23	22.45
20	50	0		21.61	21.58	21.56
20	50	24		21.54	21.50	21.49
20	50	50		21.57	21.42	21.54
20	100	0		21.66	21.57	21.58
15	1	0	QPSK	23.51	23.53	23.50
15	1	37		23.42	23.32	23.50
15	1	74		23.40	23.37	23.57
15	36	0		22.56	22.43	22.45
15	36	20		22.48	22.39	22.54
15	36	39		22.42	22.33	22.49
15	75	0		22.49	22.40	22.53



15	1	0	16-QAM	22.65	22.67	22.64
15	1	37		22.59	22.47	22.63
15	1	74		22.55	22.52	22.71
15	36	0		21.60	21.54	21.51
15	36	20		21.57	21.45	21.58
15	36	39		21.47	21.40	21.52
15	75	0		21.60	21.52	21.64
15	1	0	64QAM	22.41	22.45	22.37
15	1	37		22.31	22.21	22.36
15	1	74		22.26	22.22	22.46
15	36	0		21.66	21.57	21.56
15	36	20		21.57	21.51	21.61
15	36	39		21.51	21.42	21.57
15	75	0		21.60	21.51	21.62



LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.44	23.43	23.56
10	1	25		23.37	23.39	23.49
10	1	49		23.39	23.38	23.54
10	25	0		22.39	22.40	22.49
10	25	12		22.51	22.41	22.49
10	25	25		22.45	22.33	22.46
10	50	0		22.51	22.40	22.50
10	1	0	16-QAM	22.57	22.58	22.70
10	1	25		22.48	22.48	22.64
10	1	49		22.50	22.48	22.65
10	25	0		21.51	21.55	21.62
10	25	12		21.60	21.49	21.64
10	25	25		21.58	21.46	21.59
10	50	0		21.60	21.48	21.60
10	1	0	64QAM	22.33	22.31	22.45
10	1	25		22.22	22.20	22.38
10	1	49		22.23	22.24	22.42
10	25	0		21.45	21.48	21.56
10	25	12		21.55	21.46	21.56
10	25	25		21.52	21.38	21.54
10	50	0		21.53	21.43	21.57
5	1	0	QPSK	23.37	23.36	23.58
5	1	12		23.32	23.30	23.54
5	1	24		23.27	23.25	23.50
5	12	0		22.40	22.39	22.57
5	12	7		22.40	22.37	22.61
5	12	13		22.38	22.38	22.60
5	25	0		22.35	22.36	22.58



5	1	0	16-QAM	22.50	22.48	22.69
5	1	12		22.47	22.46	22.68
5	1	24		22.44	22.42	22.68
5	12	0		21.44	21.42	21.67
5	12	7		21.46	21.46	21.69
5	12	13		21.43	21.43	21.64
5	25	0		21.51	21.48	21.67
5	1	0	64QAM	22.27	22.23	22.47
5	1	12		22.23	22.19	22.45
5	1	24		22.20	22.15	22.42
5	12	0		21.44	21.45	21.65
5	12	7		21.46	21.46	21.64
5	12	13		21.43	21.44	21.60
5	25	0		21.42	21.44	21.64



LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	23.48	23.58	22.55
20	1	49		23.41	23.35	23.39
20	1	99		23.39	23.35	23.20
20	50	0		22.55	22.47	22.49
20	50	24		22.52	22.40	22.50
20	50	50		22.47	22.35	22.33
20	100	0	16-QAM	22.48	22.41	22.40
20	1	0		22.68	22.73	21.71
20	1	49		22.53	22.45	22.50
20	1	99		22.50	22.43	22.20
20	50	0		21.63	21.60	21.57
20	50	24		21.59	21.50	21.59
20	50	50	64QAM	21.55	21.43	21.43
20	100	0		21.58	21.50	21.48
20	1	0		22.40	22.45	22.10
20	1	49		22.32	22.21	22.25
20	1	99		22.26	22.17	22.00
20	50	0		21.60	21.54	21.49
20	50	24	QPSK	21.51	21.44	21.53
20	50	50		21.48	21.38	21.39
20	100	0		21.65	21.56	21.51
15	1	0		23.44	23.53	23.56
15	1	37		23.26	23.31	23.42
15	1	74		23.43	23.24	23.43
15	36	0	QPSK	22.41	22.44	22.50
15	36	20		22.48	22.35	22.42
15	36	39		22.44	22.29	22.48
15	75	0		22.46	22.36	22.46



15	1	0	16-QAM	22.60	22.66	22.70
15	1	37		22.39	22.43	22.55
15	1	74		22.53	22.40	22.53
15	36	0		21.45	21.51	21.54
15	36	20		21.53	21.46	21.47
15	36	39		21.46	21.36	21.55
15	75	0		21.54	21.47	21.58
15	1	0	64QAM	22.34	22.42	22.45
15	1	37		22.10	22.19	22.31
15	1	74		22.29	22.14	22.30
15	36	0		21.49	21.55	21.58
15	36	20		21.57	21.45	21.50
15	36	39		21.48	21.40	21.57
15	75	0		21.55	21.48	21.56



LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.35	23.42	23.57
10	1	25		23.29	23.33	23.45
10	1	49		23.45	23.30	23.53
10	25	0		22.34	22.41	22.43
10	25	12		22.33	22.36	22.47
10	25	25		22.40	22.30	22.49
10	50	0		22.46	22.36	22.43
10	1	0	16-QAM	22.51	22.58	22.71
10	1	25		22.41	22.47	22.57
10	1	49		22.54	22.34	22.64
10	25	0		21.48	21.49	21.51
10	25	12		21.45	21.48	21.59
10	25	25		21.49	21.42	21.58
10	50	0		21.56	21.48	21.55
10	1	0	64QAM	22.25	22.33	22.47
10	1	25		22.14	22.20	22.32
10	1	49		22.27	22.11	22.35
10	25	0		21.41	21.46	21.48
10	25	12		21.41	21.41	21.55
10	25	25		21.46	21.39	21.54
10	50	0		21.50	21.42	21.47
5	1	0	QPSK	23.29	23.36	23.48
5	1	12		23.25	23.33	23.44
5	1	24		23.19	23.24	23.33
5	12	0		22.35	22.37	22.46
5	12	7		22.35	22.38	22.49
5	12	13		22.32	22.35	22.45
5	25	0		22.30	22.33	22.44



5	1	0	16-QAM	22.42	22.48	22.55
5	1	12		22.41	22.45	22.57
5	1	24		22.36	22.43	22.52
5	12	0		21.38	21.40	21.51
5	12	7		21.39	21.43	21.52
5	12	13		21.35	21.39	21.50
5	25	0		21.44	21.44	21.57
5	1	0	64QAM	22.21	22.24	22.32
5	1	12		22.14	22.19	22.32
5	1	24		22.13	22.14	22.28
5	12	0		21.39	21.40	21.49
5	12	7		21.41	21.41	21.51
5	12	13		21.35	21.38	21.49
5	25	0		21.37	21.39	21.49



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	23.55	23.74	23.91
20	1	49		23.39	23.50	23.65
20	1	99		23.38	23.46	23.39
20	50	0		22.45	22.72	22.69
20	50	24		22.39	22.63	22.66
20	50	50		22.49	22.53	22.52
20	100	0		22.36	22.61	22.70
20	1	0	16-QAM	22.89	23.25	22.94
20	1	49		22.74	22.68	22.70
20	1	99		22.86	22.93	22.64
20	50	0		21.57	21.81	21.82
20	50	24		21.52	21.72	21.75
20	50	50		21.43	21.61	21.62
20	100	0		21.48	21.64	21.68
20	1	0	64QAM	22.76	23.18	22.99
20	1	49		22.81	22.77	22.75
20	1	99		22.82	22.95	22.97
20	50	0		21.54	21.74	21.77
20	50	24		21.44	21.61	21.70
20	50	50		21.53	21.58	21.62
20	100	0		21.50	21.65	21.69
15	1	0	QPSK	23.36	23.66	23.73
15	1	37		23.09	23.44	23.50
15	1	74		23.28	23.48	23.44
15	36	0		22.37	22.68	22.69
15	36	20		22.34	22.60	22.59
15	36	39		22.33	22.51	22.57
15	75	0		22.40	22.55	22.60



15	1	0	16-QAM	22.40	22.81	23.44
15	1	37		22.31	22.62	22.65
15	1	74		22.27	22.61	22.63
15	36	0		21.46	21.76	21.77
15	36	20		21.49	21.73	21.69
15	36	39		21.37	21.61	21.57
15	75	0		21.48	21.70	21.73
15	1	0	64QAM	22.67	22.79	22.91
15	1	37		22.23	22.73	22.71
15	1	74		22.49	22.63	22.59
15	36	0		21.37	21.72	21.75
15	36	20		21.45	21.69	21.67
15	36	39		21.33	21.58	21.66
15	75	0		21.51	21.62	21.74



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.33	23.56	23.54
10	1	25		23.20	23.47	23.50
10	1	49		23.21	23.45	23.49
10	25	0		22.35	22.67	22.62
10	25	12		22.23	22.55	22.57
10	25	25		22.26	22.53	22.49
10	50	0		22.33	22.56	22.56
10	1	0	16-QAM	22.85	23.11	22.90
10	1	25		22.85	22.70	22.75
10	1	49		22.39	22.99	22.72
10	25	0		21.43	21.69	21.70
10	25	12		21.37	21.71	21.63
10	25	25		21.40	21.60	21.48
10	50	0		21.39	21.70	21.64
10	1	0	64QAM	22.80	22.70	22.92
10	1	25		22.76	22.61	22.79
10	1	49		22.32	22.60	22.55
10	25	0		21.38	21.65	21.73
10	25	12		21.33	21.58	21.65
10	25	25		21.32	21.60	21.54
10	50	0		21.40	21.66	21.66
5	1	0	QPSK	23.24	23.44	23.64
5	1	12		23.26	23.52	23.63
5	1	24		23.11	23.43	23.45
5	12	0		22.24	22.51	22.63
5	12	7		22.31	22.48	22.58
5	12	13		22.20	22.52	22.50
5	25	0		22.22	22.61	22.51



5	1	0	16-QAM	22.74	23.00	22.77
5	1	12		22.74	22.65	22.47
5	1	24		22.74	22.66	22.41
5	12	0		21.36	21.68	21.74
5	12	7		21.41	21.71	21.65
5	12	13		21.36	21.67	21.52
5	25	0		21.35	21.58	21.57
5	1	0	64QAM	22.75	22.64	22.76
5	1	12		22.41	22.74	22.67
5	1	24		22.44	22.93	22.61
5	12	0		21.41	21.66	21.66
5	12	7		21.37	21.63	21.58
5	12	13		21.41	21.59	21.57
5	25	0		21.36	21.65	21.59



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	23.28	23.38	23.47
3	1	8		23.19	23.51	23.46
3	1	14		23.02	23.37	23.44
3	8	0		22.21	22.49	22.52
3	8	4		22.25	22.56	22.55
3	8	7		22.24	22.50	22.51
3	15	0		22.20	22.47	22.50
3	1	0	16-QAM	22.30	22.58	23.05
3	1	8		22.45	22.70	22.69
3	1	14		22.35	22.69	22.93
3	8	0		21.30	21.61	21.60
3	8	4		21.30	21.67	21.63
3	8	7		21.38	21.64	21.59
3	15	0		21.33	21.72	21.64
3	1	0	64QAM	22.21	22.90	22.65
3	1	8		22.21	22.49	22.63
3	1	14		22.22	22.59	22.99
3	8	0		21.30	21.56	21.57
3	8	4		21.30	21.59	21.50
3	8	7		21.22	21.52	21.52
3	15	0		21.26	21.57	21.44
1.4	1	0	QPSK	23.18	23.39	23.42
1.4	1	3		23.22	23.57	23.45
1.4	1	5		23.05	23.39	23.40
1.4	3	0		23.22	23.46	23.39
1.4	3	1		23.13	23.53	23.41
1.4	3	3		23.15	23.50	23.44
1.4	6	0		22.14	22.49	22.50



1.4	1	0	16-QAM	22.38	22.73	22.67
1.4	1	3		22.42	22.79	22.66
1.4	1	5		22.32	22.68	22.77
1.4	3	0		22.20	22.64	22.54
1.4	3	1		22.22	22.48	22.56
1.4	3	3		22.28	22.58	22.48
1.4	6	0		21.50	21.58	21.68
1.4	1	0	64QAM	22.08	22.58	22.86
1.4	1	3		22.12	22.43	22.87
1.4	1	5		22.00	22.56	22.60
1.4	3	0		22.20	22.78	22.61
1.4	3	1		22.27	22.63	22.61
1.4	3	3		22.19	22.66	22.61
1.4	6	0		21.30	21.53	21.56

**CA Power**

CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	0	0	1	99	1	22.26
			1	0	0	0	1	22.29
			100	0	0	0	100	21.46
			100	0	100	0	200	20.38
			1	0	1	99	2	13.85
			1	0	1	0	2	16.32
			1	99	1	0	2	22.4
			100	0	1	99	101	18.98
		16QAM	0	0	1	99	1	21.86
			1	0	0	0	1	21.78
			100	0	0	0	100	20.62
			100	0	100	0	200	19.54
			1	0	1	99	2	14.26
			1	0	1	0	2	16.28
			1	99	1	0	2	21.93
			100	0	1	99	101	19.05
		64QAM	0	0	1	99	1	20.62
			1	0	0	0	1	21.6
			100	0	0	0	100	20.64
			100	0	100	0	200	19.6
			1	0	1	99	2	14.21
			1	0	1	0	2	16.16
			1	99	1	0	2	19.69
			100	0	1	99	101	19.07



21001	21199	QPSK	0	0	1	99	1	22.34
			1	0	0	0	1	22.42
			100	0	0	0	100	21.53
			100	0	100	0	200	20.45
			1	0	1	99	2	13.86
			1	0	1	0	2	17.93
			1	99	1	0	2	22.49
			100	0	1	99	101	19
		16QAM	0	0	1	99	1	22.13
			1	23	0	0	1	21.93
			100	0	0	0	100	20.57
			100	0	100	0	200	19.63
			1	0	1	99	2	14.5
			1	0	1	0	2	18.4
			1	99	1	0	2	21.95
			100	0	1	99	101	19.1
		64QAM	0	0	1	99	1	20.78
			1	0	0	0	1	21.69
			100	0	0	0	100	20.61
			100	0	100	0	200	19.57
			1	0	1	99	2	14.11
			1	0	1	0	2	17.18
			1	99	1	0	2	19.83
			100	0	1	99	101	19.07



21152	21350	QPSK	0	0	1	99	1	22.3
			1	0	0	0	1	22.34
			100	0	0	0	100	21.56
			100	0	100	0	200	20.47
			1	0	1	99	2	13.78
			1	0	1	0	2	17.8
			1	99	1	0	2	22.61
			100	0	1	99	101	14.31
		16QAM	0	0	1	99	1	21.28
			1	0	0	0	1	21.95
			100	0	0	0	100	20.57
			100	0	100	0	200	19.61
			1	0	1	99	2	14.42
			1	0	1	0	2	18.39
			1	99	1	0	2	21.92
			100	0	1	99	101	17.93
		64QAM	0	0	1	99	1	19.38
			1	0	0	0	1	20.66
			100	0	0	0	100	19.58
			100	0	100	0	200	19.63
			1	0	1	99	2	14.21
			1	0	1	0	2	17.58
			1	99	1	0	2	20.04
			100	0	1	99	101	17.86



CA_7C								
Combination 20MHz+15MHz (100RB+75RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21021	QPSK	100	0	75	0	175	21.01
		QPSK	1	0	1	74	2	14.33
		QPSK	1	99	1	0	2	23.7
		16QAM	100	0	75	0	175	20.21
		16QAM	1	0	1	74	2	15.16
		16QAM	1	99	1	0	2	23.05
		64QAM	100	0	75	0	175	20.82
		64QAM	1	0	1	74	2	14.43
		64QAM	1	99	1	0	2	20.43
21026	21197	QPSK	100	0	75	0	175	20.96
		QPSK	1	0	1	74	2	14.26
		QPSK	1	99	1	0	2	23.67
		16QAM	100	0	75	0	175	20.17
		16QAM	1	0	1	74	2	15.15
		16QAM	1	99	1	0	2	23.27
		64QAM	100	0	75	0	175	20.1
		64QAM	1	0	1	74	2	14.16
		64QAM	1	99	1	0	2	23.2
21201	21372	QPSK	100	0	75	0	175	20.77
		QPSK	1	0	1	74	2	14.12
		QPSK	1	99	1	0	2	23.65
		16QAM	100	0	75	0	175	19.98
		16QAM	1	0	1	74	2	14.74
		16QAM	1	99	1	0	2	23.1
		64QAM	100	0	75	0	175	19.89
		64QAM	1	0	1	74	2	14.73
		64QAM	1	99	1	0	2	20.13



Combination 15MHz+20MHz (75RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20828	20999	QPSK	75	0	100	0	175	20.8
		QPSK	1	0	1	99	2	14.08
		QPSK	1	74	1	0	2	22.62
		16QAM	75	0	100	0	175	19.88
		16QAM	1	0	1	99	2	14.77
		16QAM	1	74	1	0	2	21.82
		64QAM	75	0	100	0	175	19.84
		64QAM	1	0	1	99	2	14.43
		64QAM	1	74	1	0	2	20.03
21003	21174	QPSK	75	0	100	0	175	20.72
		QPSK	1	0	1	99	2	14.05
		QPSK	1	74	1	0	2	22.68
		16QAM	75	0	100	0	175	19.78
		16QAM	1	0	1	99	2	14.54
		16QAM	1	74	1	0	2	22.01
		64QAM	75	0	100	0	175	19.72
		64QAM	1	0	1	99	2	14.35
		64QAM	1	74	1	0	2	20.01
21179	21350	QPSK	75	0	100	0	175	20.68
		QPSK	1	0	1	99	2	13.99
		QPSK	1	74	1	0	2	22.62
		16QAM	75	0	100	0	175	19.8
		16QAM	1	0	1	99	2	14.71
		16QAM	1	74	1	0	2	22.13
		64QAM	75	0	100	0	175	19.79
		64QAM	1	0	1	99	2	14.3
		64QAM	1	74	1	0	2	19.96



Combination 20MHz+10MHz (100RB+50RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
20850	20994	QPSK	100	0	50	0	150	20.78
		QPSK	1	0	1	49	2	14.14
		QPSK	1	99	1	0	2	21.91
		16QAM	100	0	50	0	150	19.9
		16QAM	1	0	1	49	2	14.85
		16QAM	1	99	1	0	2	21.35
		64QAM	100	0	50	0	150	18.49
		64QAM	1	0	1	49	2	14.74
		64QAM	1	99	1	0	2	19.65
21051	21195	QPSK	100	0	50	0	150	20.84
		QPSK	1	0	1	49	2	14.23
		QPSK	1	99	1	0	2	22.73
		16QAM	100	0	50	0	150	19.92
		16QAM	1	0	1	49	2	14.83
		16QAM	1	99	1	0	2	22.06
		64QAM	100	0	50	0	150	20.57
		64QAM	1	0	1	49	2	14.7
		64QAM	1	99	1	0	2	20.35
21251	21395	QPSK	100	0	50	0	150	20.83
		QPSK	1	0	1	49	2	14.22
		QPSK	1	99	1	0	2	22.31
		16QAM	100	0	50	0	150	19.94
		16QAM	1	0	1	49	2	14.78
		16QAM	1	99	1	0	2	21.42
		64QAM	100	0	50	0	150	19.59
		64QAM	1	0	1	49	2	14.54
		64QAM	1	99	1	0	2	19.89



Combination 10MHz+20MHz (50RB+100RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
20805	20949	QPSK	50	0	100	0	150	20.94
		QPSK	1	0	1	99	2	14.31
		QPSK	1	49	1	0	2	21.18
		16QAM	50	0	100	0	150	20.01
		16QAM	1	0	1	99	2	14.82
		16QAM	1	49	1	0	2	20.43
		64QAM	50	0	100	0	150	19.99
		64QAM	1	0	1	99	2	14.56
		64QAM	1	49	1	0	2	19.33
21006	21150	QPSK	50	0	100	0	150	20.84
		QPSK	1	0	1	99	2	14.24
		QPSK	1	49	1	0	2	22.58
		16QAM	50	0	100	0	150	19.89
		16QAM	1	0	1	99	2	14.76
		16QAM	1	49	1	0	2	22.05
		64QAM	50	0	100	0	150	19.9
		64QAM	1	0	1	99	2	14.4
		64QAM	1	49	1	0	2	19.98
21206	21350	QPSK	50	0	100	0	150	20.82
		QPSK	1	0	1	99	2	14.21
		QPSK	1	49	1	0	2	22.73
		16QAM	50	0	100	0	150	19.93
		16QAM	1	0	1	99	2	14.82
		16QAM	1	49	1	0	2	22.22
		64QAM	50	0	100	0	150	19.9
		64QAM	1	0	1	99	2	14.53
		64QAM	1	49	1	0	2	20.05



Combination 15MHz+15MHz (75RB+75RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
20825	20975	QPSK	75	0	75	0	150	17.96
		QPSK	1	0	1	74	2	14.54
		QPSK	1	74	1	0	2	22.51
		16QAM	75	0	75	0	150	18.65
		16QAM	1	0	1	74	2	14.8
		16QAM	1	74	1	0	2	21.69
		64QAM	75	0	75	0	150	17.76
		64QAM	1	0	1	74	2	14.56
		64QAM	1	74	1	0	2	20.18
21025	21175	QPSK	75	0	75	0	150	20.24
		QPSK	1	0	1	74	2	14.28
		QPSK	1	74	1	0	2	22.64
		16QAM	75	0	75	0	150	16.88
		16QAM	1	0	1	74	2	14.89
		16QAM	1	74	1	0	2	22.23
		64QAM	75	0	75	0	150	18.93
		64QAM	1	0	1	74	2	14.44
		64QAM	1	74	1	0	2	20.21
21225	21375	QPSK	75	0	75	0	150	19.85
		QPSK	1	0	1	74	2	14.13
		QPSK	1	74	1	0	2	22.76
		16QAM	75	0	75	0	150	19.18
		16QAM	1	0	1	74	2	14.59
		16QAM	1	74	1	0	2	22.3
		64QAM	75	0	75	0	150	18.14
		64QAM	1	0	1	74	2	14.52
		64QAM	1	74	1	0	2	20.16



Combination 15MHz+10MHz (75RB+50RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
20825	20945	QPSK	75	0	50	0	125	20.95
		QPSK	1	0	1	49	2	14.25
		QPSK	1	74	1	0	2	22.09
		16QAM	75	0	50	0	125	18.48
		16QAM	1	0	1	49	2	14.93
		16QAM	1	74	1	0	2	21.19
		64QAM	75	0	50	0	125	18.34
		64QAM	1	0	1	49	2	14.73
		64QAM	1	74	1	0	2	19.34
21051	21171	QPSK	75	0	50	0	125	20.86
		QPSK	1	0	1	49	2	14.23
		QPSK	1	74	1	0	2	22.76
		16QAM	75	0	50	0	125	19.96
		16QAM	1	0	1	49	2	14.79
		16QAM	1	74	1	0	2	22.21
		64QAM	75	0	50	0	125	19.95
		64QAM	1	0	1	49	2	14.49
		64QAM	1	74	1	0	2	20.22
21277	21397	QPSK	75	0	50	0	125	20.96
		QPSK	1	0	1	49	2	14.3
		QPSK	1	74	1	0	2	22.01
		16QAM	75	0	50	0	125	20.08
		16QAM	1	0	1	49	2	14.8
		16QAM	1	74	1	0	2	21.28
		64QAM	75	0	50	0	125	19.76
		64QAM	1	0	1	49	2	14.56
		64QAM	1	74	1	0	2	20.14



CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	0	0	1	99	1	22.36
			1	0	0	0	1	22.85
			100	0	0	0	100	21.84
			100	0	100	0	200	20.4
			1	0	1	99	2	14.13
			1	0	1	0	2	18.26
			1	99	1	0	2	22.45
			100	0	1	99	101	18.35
		16QAM	0	0	1	99	1	21.46
			1	0	0	0	1	21.94
			100	0	0	0	100	20.94
			100	0	100	0	200	19.62
			1	0	1	99	2	14.23
			1	0	1	0	2	18.09
			1	99	1	0	2	21.51
			100	0	1	99	101	18.42
		64QAM	0	0	1	99	1	20.04
			1	0	0	0	1	20.51
			100	0	0	0	100	19.94
			100	0	100	0	200	18.94
			1	0	1	99	2	13.78
			1	0	1	0	2	16.79
			1	99	1	0	2	19.24
			100	0	1	99	101	18.26



37901	38099	QPSK	0	0	1	99	1	22.25
			1	0	0	0	1	22.77
			100	0	0	0	100	21.73
			100	0	100	0	200	20.4
			1	0	1	99	2	14.02
			1	0	1	0	2	18.1
			1	99	1	0	2	22.27
			100	0	1	99	101	18.31
		16QAM	0	0	1	99	1	21.35
			1	0	0	0	1	21.81
			100	0	0	0	100	20.82
			100	0	100	0	200	19.58
			1	0	1	99	2	14.08
			1	0	1	0	2	18.19
			1	99	1	0	2	21.38
			100	0	1	99	101	18.33
		64QAM	0	0	1	99	1	19.97
			1	0	0	0	1	20.52
			100	0	0	0	100	19.84
			100	0	100	0	200	18.75
			1	0	1	99	2	13.68
			1	0	1	0	2	16.8
			1	99	1	0	2	19.13
			100	0	1	99	101	18.41



37952	38150	QPSK	0	0	1	99	1	22.19
			1	0	0	0	1	22.7
			100	0	0	0	100	21.68
			100	0	100	0	200	20.39
			1	0	1	99	2	13.97
			1	0	1	0	2	18.03
			1	99	1	0	2	22.24
			100	0	1	99	101	18.26
		16QAM	0	0	1	99	1	21.36
			1	0	0	0	1	21.8
			100	0	0	0	100	20.73
			100	0	100	0	200	19.563
			1	0	1	99	2	14.07
			1	0	1	0	2	18.15
			1	99	1	0	2	21.36
			100	0	1	99	101	18.44
		64QAM	0	0	1	99	1	19.93
			1	0	0	0	1	20.41
			100	0	0	0	100	19.73
			100	0	100	0	200	18.83
			1	0	1	99	2	13.67
			1	0	1	0	2	16.83
			1	99	1	0	2	19.08
			100	0	1	99	101	18.39



CA_38C								
Combination 15MHz+15MHz (75RB+75RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
37825	37975	QPSK	75	0	75	0	150	21.27
		QPSK	1	0	1	74	2	14.7
		QPSK	1	74	1	0	2	23.96
		16QAM	75	0	75	0	150	20.45
		16QAM	1	0	1	74	2	15.03
		16QAM	1	74	1	0	2	23.18
		64QAM	75	0	75	0	150	20.32
		64QAM	1	0	1	74	2	14.97
		64QAM	1	74	1	0	2	20.07
37925	38075	QPSK	75	0	75	0	150	21.32
		QPSK	1	0	1	74	2	14.85
		QPSK	1	74	1	0	2	23.98
		16QAM	75	0	75	0	150	20.5
		16QAM	1	0	1	74	2	15.17
		16QAM	1	74	1	0	2	23.29
		64QAM	75	0	75	0	150	20.41
		64QAM	1	0	1	74	2	15.08
		64QAM	1	74	1	0	2	20.24
38025	38175	QPSK	75	0	75	0	150	21.25
		QPSK	1	0	1	74	2	14.95
		QPSK	1	74	1	0	2	23.78
		16QAM	75	0	75	0	150	20.4
		16QAM	1	0	1	74	2	15.28
		16QAM	1	74	1	0	2	23.07
		64QAM	75	0	75	0	150	20.31
		64QAM	1	0	1	74	2	15.12
		64QAM	1	74	1	0	2	20.21



CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	0	0	1	99	1	22.68
			1	0	0	0	1	22.57
			100	0	0	0	100	21.67
			100	0	100	0	200	20.65
			1	0	1	99	2	14.08
			1	0	1	0	2	18.09
			1	99	1	0	2	22.68
			100	0	1	99	101	18.24
		16QAM	0	0	1	99	1	21.82
			1	0	0	0	1	21.6
			100	0	0	0	100	20.76
			100	0	100	0	200	19.74
			1	0	1	99	2	14.21
			1	0	1	0	2	17.99
			1	99	1	0	2	21.8
			100	0	1	99	101	18.62
		64QAM	0	0	1	99	1	20.43
			1	0	0	0	1	20.77
			100	0	0	0	100	19.75
			100	0	100	0	200	19.63
			1	0	1	99	2	13.82
			1	0	1	0	2	16.65
			1	99	1	0	2	19.41
			100	0	1	99	101	18.56



40521	40719	QPSK	0	0	1	99	1	22.57
			1	0	0	0	1	23.04
			100	0	0	0	100	21.89
			100	0	100	0	200	20.65
			1	0	1	99	2	14.29
			1	0	1	0	2	18.35
			1	99	1	0	2	22.51
			100	0	1	99	101	18.79
		16QAM	0	0	1	99	1	21.65
			1	0	0	0	1	22.15
			100	0	0	0	100	21.02
			100	0	100	0	200	19.77
			1	0	1	99	2	14.43
			1	0	1	0	2	18.31
			1	99	1	0	2	21.64
			100	0	1	99	101	18.52
		64QAM	0	0	1	99	1	20.29
			1	0	0	0	1	20.78
			100	0	0	0	100	20.03
			100	0	100	0	200	19.05
			1	0	1	99	2	14.05
			1	0	1	0	2	17.02
			1	99	1	0	2	19.39
			100	0	1	99	101	18.49



41292	41490	QPSK	0	0	1	99	1	22.09
			1	0	0	0	1	22.7
			100	0	0	0	100	21.71
			100	0	100	0	200	20.45
			1	0	1	99	2	13.93
			1	0	1	0	2	18.18
			1	99	1	0	2	22.6
			100	0	1	99	101	18.86
		16QAM	0	0	1	99	1	21.25
			1	0	0	0	1	21.86
			100	0	0	0	100	20.83
			100	0	100	0	200	19..59
			1	0	1	99	2	14.04
			1	0	1	0	2	18.33
			1	99	1	0	2	21.72
			100	0	1	99	101	18.78
		64QAM	0	0	1	99	1	19.88
			1	0	0	0	1	20.44
			100	0	0	0	100	19.8
			100	0	100	0	200	19.57
			1	0	1	99	2	13.65
			1	0	1	0	2	17.83
			1	99	1	0	2	19.44
			100	0	1	99	101	18.67



CA_41C								
Combination 20MHz+15MHz (100RB+75RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39921	QPSK	100	0	75	0	175	21.25
		QPSK	1	0	1	74	2	14.53
		QPSK	1	99	1	0	2	23.97
		16QAM	100	0	75	0	175	20.33
		16QAM	1	0	1	74	2	15.01
		16QAM	1	99	1	0	2	23.32
		64QAM	100	0	75	0	175	20.24
		64QAM	1	0	1	74	2	14.88
		64QAM	1	99	1	0	2	20.31
40546	40717	QPSK	100	0	75	0	175	21.33
		QPSK	1	0	1	74	2	14.7
		QPSK	1	99	1	0	2	23.84
		16QAM	100	0	75	0	175	20.43
		16QAM	1	0	1	74	2	15.29
		16QAM	1	99	1	0	2	23.26
		64QAM	100	0	75	0	175	20.46
		64QAM	1	0	1	74	2	14.85
		64QAM	1	99	1	0	2	20.15
41341	41512	QPSK	100	0	75	0	175	21.06
		QPSK	1	0	1	74	2	14.43
		QPSK	1	99	1	0	2	23.86
		16QAM	100	0	75	0	175	20.09
		16QAM	1	0	1	74	2	14.58
		16QAM	1	99	1	0	2	23.05
		64QAM	100	0	75	0	175	20.17
		64QAM	1	0	1	74	2	14.58
		64QAM	1	99	1	0	2	20.11



Combination 15MHz+20MHz (75RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39728	39899	QPSK	75	0	100	0	175	20.97
		QPSK	1	0	1	99	2	14.41
		QPSK	1	74	1	0	2	22.97
		16QAM	75	0	100	0	175	20.06
		16QAM	1	0	1	99	2	14.55
		16QAM	1	74	1	0	2	22.05
		64QAM	75	0	100	0	175	20.06
		64QAM	1	0	1	99	2	14.13
		64QAM	1	74	1	0	2	19.69
40523	40694	QPSK	75	0	100	0	175	20.9
		QPSK	1	0	1	99	2	14.53
		QPSK	1	74	1	0	2	22.77
		16QAM	75	0	100	0	175	20.02
		16QAM	1	0	1	99	2	14.66
		16QAM	1	74	1	0	2	21.81
		64QAM	75	0	100	0	175	19.38
		64QAM	1	0	1	99	2	14.26
		64QAM	1	74	1	0	2	19.6
41319	41490	QPSK	75	0	100	0	175	20.73
		QPSK	1	0	1	99	2	14.2
		QPSK	1	74	1	0	2	22.84
		16QAM	75	0	100	0	175	19.86
		16QAM	1	0	1	99	2	14.34
		16QAM	1	74	1	0	2	21.92
		64QAM	75	0	100	0	175	19.7
		64QAM	1	0	1	99	2	13.94
		64QAM	1	74	1	0	2	19.73



Combination 20MHz+10MHz (100RB+50RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
39750	39894	QPSK	100	0	50	0	150	21.01
		QPSK	1	0	1	49	2	14.47
		QPSK	1	99	1	0	2	22.99
		16QAM	100	0	50	0	150	20.13
		16QAM	1	0	1	49	2	14.56
		16QAM	1	99	1	0	2	22.13
		64QAM	100	0	50	0	150	20.14
		64QAM	1	0	1	49	2	14.19
		64QAM	1	99	1	0	2	19.75
40571	40715	QPSK	100	0	50	0	150	20.88
		QPSK	1	0	1	49	2	14.54
		QPSK	1	99	1	0	2	22.6
		16QAM	100	0	50	0	150	19.98
		16QAM	1	0	1	49	2	14.68
		16QAM	1	99	1	0	2	21.65
		64QAM	100	0	50	0	150	19.46
		64QAM	1	0	1	49	2	14.27
		64QAM	1	99	1	0	2	19.48
41391	41535	QPSK	100	0	50	0	150	20.8
		QPSK	1	0	1	49	2	14.27
		QPSK	1	99	1	0	2	22.66
		16QAM	100	0	50	0	150	19.87
		16QAM	1	0	1	49	2	14.43
		16QAM	1	99	1	0	2	21.75
		64QAM	100	0	50	0	150	19.7
		64QAM	1	0	1	49	2	14.03
		64QAM	1	99	1	0	2	19.54



Combination 10MHz+20MHz (50RB+100RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
39705	39849	QPSK	50	0	100	0	150	20.98
		QPSK	1	0	1	99	2	14.42
		QPSK	1	49	1	0	2	22.89
		16QAM	50	0	100	0	150	20.08
		16QAM	1	0	1	99	2	14.57
		16QAM	1	49	1	0	2	21.98
		64QAM	50	0	100	0	150	19.8
		64QAM	1	0	1	99	2	14.17
		64QAM	1	49	1	0	2	19.68
40526	40670	QPSK	50	0	100	0	150	20.89
		QPSK	1	0	1	99	2	14.48
		QPSK	1	49	1	0	2	22.63
		16QAM	50	0	100	0	150	20.03
		16QAM	1	0	1	99	2	14.63
		16QAM	1	49	1	0	2	21.68
		64QAM	50	0	100	0	150	19.26
		64QAM	1	0	1	99	2	14.24
		64QAM	1	49	1	0	2	19.6
41346	41490	QPSK	50	0	100	0	150	20.82
		QPSK	1	0	1	99	2	14.21
		QPSK	1	49	1	0	2	22.84
		16QAM	50	0	100	0	150	19.94
		16QAM	1	0	1	99	2	14.38
		16QAM	1	49	1	0	2	21.93
		64QAM	50	0	100	0	150	19.5
		64QAM	1	0	1	99	2	13.97
		64QAM	1	49	1	0	2	19.74



Combination 20MHz+5MHz (100RB+25RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
39750	39867	QPSK	100	0	25	0	125	20.97
		QPSK	1	0	1	24	2	14.38
		QPSK	1	99	1	0	2	22.86
		16QAM	100	0	25	0	125	20.06
		16QAM	1	0	1	24	2	14.53
		16QAM	1	99	1	0	2	21.75
		64QAM	100	0	25	0	125	20.09
		64QAM	1	0	1	24	2	14.14
		64QAM	1	99	1	0	2	20.02
40595	40712	QPSK	100	0	25	0	125	20.86
		QPSK	1	0	1	24	2	14.51
		QPSK	1	99	1	0	2	22.78
		16QAM	100	0	25	0	125	19.95
		16QAM	1	0	1	24	2	14.68
		16QAM	1	99	1	0	2	21.56
		64QAM	100	0	25	0	125	19.7
		64QAM	1	0	1	24	2	14.29
		64QAM	1	99	1	0	2	20.01
41440	41557	QPSK	100	0	25	0	125	20.77
		QPSK	1	0	1	24	2	14.26
		QPSK	1	99	1	0	2	22.67
		16QAM	100	0	25	0	125	19.89
		16QAM	1	0	1	24	2	14.43
		16QAM	1	99	1	0	2	21.86
		64QAM	100	0	25	0	125	19.88
		64QAM	1	0	1	24	2	14.03
		64QAM	1	99	1	0	2	20.05



Combination 5MHz+20MHz (25RB+100RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
39683	39800	QPSK	25	0	100	0	125	20.97
		QPSK	1	0	1	99	2	14.44
		QPSK	1	24	1	0	2	22.94
		16QAM	25	0	100	0	125	20.05
		16QAM	1	0	1	99	2	14.55
		16QAM	1	24	1	0	2	21.68
		64QAM	25	0	100	0	125	19.83
		64QAM	1	0	1	99	2	14.16
		64QAM	1	24	1	0	2	20.12
40528	40645	QPSK	25	0	100	0	125	21
		QPSK	1	0	1	99	2	14.52
		QPSK	1	24	1	0	2	22.76
		16QAM	25	0	100	0	125	20.11
		16QAM	1	0	1	99	2	14.66
		16QAM	1	24	1	0	2	21.54
		64QAM	25	0	100	0	125	19.88
		64QAM	1	0	1	99	2	14.26
		64QAM	1	24	1	0	2	20.05
41373	41490	QPSK	25	0	100	0	125	20.91
		QPSK	1	0	1	99	2	14.18
		QPSK	1	24	1	0	2	22.96
		16QAM	25	0	100	0	125	20.02
		16QAM	1	0	1	99	2	14.33
		16QAM	1	24	1	0	2	21.74
		64QAM	25	0	100	0	125	19.77
		64QAM	1	0	1	99	2	13.96
		64QAM	1	24	1	0	2	20.12



Combination 15MHz+15MHz (75RB+75RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
39725	39875	QPSK	75	0	75	0	150	20.31
		QPSK	1	0	1	74	2	14.52
		QPSK	1	74	1	0	2	23.03
		16QAM	75	0	75	0	150	19.85
		16QAM	1	0	1	74	2	14.51
		16QAM	1	74	1	0	2	22.12
		64QAM	75	0	75	0	150	19.78
		64QAM	1	0	1	74	2	14.31
		64QAM	1	74	1	0	2	19.81
40545	40695	QPSK	75	0	75	0	150	20.22
		QPSK	1	0	1	74	2	14.36
		QPSK	1	74	1	0	2	22.99
		16QAM	75	0	75	0	150	19.73
		16QAM	1	0	1	74	2	14.35
		16QAM	1	74	1	0	2	22.01
		64QAM	75	0	75	0	150	19.68
		64QAM	1	0	1	74	2	14.59
		64QAM	1	74	1	0	2	19.78
41365	41515	QPSK	75	0	75	0	150	22.16
		QPSK	1	0	1	74	2	14.25
		QPSK	1	74	1	0	2	23.05
		16QAM	75	0	75	0	150	19.69
		16QAM	1	0	1	74	2	14.56
		16QAM	1	74	1	0	2	22.15
		64QAM	75	0	75	0	150	19.65
		64QAM	1	0	1	74	2	14.63
		64QAM	1	74	1	0	2	19.74



Combination 15MHz+10MHz (75RB+50RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
39725	39845	QPSK	75	0	50	0	125	20.99
		QPSK	1	0	1	49	2	14.43
		QPSK	1	74	1	0	2	23.05
		16QAM	75	0	50	0	125	20.12
		16QAM	1	0	1	49	2	14.56
		16QAM	1	74	1	0	2	22.16
		64QAM	75	0	50	0	125	20.1
		64QAM	1	0	1	49	2	14.18
		64QAM	1	74	1	0	2	19.8
40571	40691	QPSK	75	0	50	0	125	20.91
		QPSK	1	0	1	49	2	14.53
		QPSK	1	74	1	0	2	22.68
		16QAM	75	0	50	0	125	20.02
		16QAM	1	0	1	49	2	14.65
		16QAM	1	74	1	0	2	21.78
		64QAM	75	0	50	0	125	19.86
		64QAM	1	0	1	49	2	14.28
		64QAM	1	74	1	0	2	19.58
41417	41537	QPSK	75	0	50	0	125	20.84
		QPSK	1	0	1	49	2	14.19
		QPSK	1	74	1	0	2	22.77
		16QAM	75	0	50	0	125	19.96
		16QAM	1	0	1	49	2	14.34
		16QAM	1	74	1	0	2	21.86
		64QAM	75	0	50	0	125	19.78
		64QAM	1	0	1	49	2	13.97
		64QAM	1	74	1	0	2	19.75



Combination 10MHz+15MHz (50RB+75RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
39703	39823	QPSK	50	0	75	0	125	20.86
		QPSK	1	49	1	0	2	14.53
		QPSK	1	0	1	74	2	23.01
		16QAM	50	0	75	0	125	19.95
		16QAM	1	49	1	0	2	14.12
		16QAM	1	0	1	74	2	21.89
		64QAM	50	0	75	0	125	19.86
		64QAM	1	49	1	0	2	14.21
		64QAM	1	0	1	74	2	19.78
40549	40669	QPSK	50	0	75	0	125	20.81
		QPSK	1	49	1	0	2	14.31
		QPSK	1	0	1	74	2	23.02
		16QAM	50	0	75	0	125	19.78
		16QAM	1	49	1	0	2	14.26
		16QAM	1	0	1	74	2	21.76
		64QAM	50	0	75	0	125	19.74
		64QAM	1	49	1	0	2	14.36
		64QAM	1	0	1	74	2	19.83
41395	41515	QPSK	50	0	75	0	125	20.74
		QPSK	1	49	1	0	2	14.15
		QPSK	1	0	1	74	2	22.98
		16QAM	50	0	75	0	125	19.79
		16QAM	1	49	1	0	2	14.56
		16QAM	1	0	1	74	2	21.89
		64QAM	50	0	75	0	125	19.86
		64QAM	1	49	1	0	2	14.45
		64QAM	1	0	1	74	2	19.82

**ERP/EIRP**

LTE Band 7 (GT - LC = 3.51 dBi) QPSK			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency	2502.5	2535	2567.5
(MHz)			
Conducted Power (dBm)	23.24	23.19	23.41
Conducted Power (Watts)	0.2109	0.2084	0.2193
EIRP(dBm)	26.75	26.70	26.92
EIRP(Watts)	0.4732	0.4677	0.4920

LTE Band 7 (GT - LC = 3.51 dBi) 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)	23.20	23.39	23.52	23.31	23.40	23.49	23.41	23.53	23.55
Conducted Power (Watts)	0.2089	0.2183	0.2249	0.2143	0.2188	0.2234	0.2193	0.2254	0.2265
EIRP(dBm)	26.71	26.90	27.03	26.82	26.91	27.00	26.92	27.04	27.06
EIRP(Watts)	0.4688	0.4898	0.5047	0.4808	0.4909	0.5012	0.4920	0.5058	0.5082



LTE Band 7 (GT - LC = 3.51 dBi) 16QAM			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency	2502.5	2535	2567.5
(MHz)			
Conducted Power (dBm)	22.84	22.67	22.54
Conducted Power (Watts)	0.1923	0.1849	0.1795
EIRP(dBm)	26.35	26.18	26.05
EIRP(Watts)	0.4315	0.4150	0.4027

LTE Band 7 (GT - LC = 3.51 dBi) 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	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
(MHz)									
Conducted Power (dBm)	22.90	22.58	22.97	22.47	22.48	22.75	22.94	22.62	22.57
Conducted Power (Watts)	0.1950	0.1811	0.1982	0.1766	0.1770	0.1884	0.1968	0.1828	0.1807
EIRP(dBm)	26.41	26.09	26.48	25.98	25.99	26.26	26.45	26.13	26.08
EIRP(Watts)	0.4375	0.4064	0.4446	0.3963	0.3972	0.4227	0.4416	0.4102	0.4055



LTE Band 7 (GT - LC = 3.51 dBi) 64QAM			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency	2502.5	2535	2567.5
(MHz)			
Conducted Power (dBm)	22.85	22.41	22.29
Conducted Power (Watts)	0.1928	0.1742	0.1694
EIRP(dBm)	26.36	25.92	25.80
EIRP(Watts)	0.4325	0.3908	0.3802

LTE Band 7 (GT - LC = 3.51 dBi) 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)	22.45	22.89	22.89	22.53	22.65	22.71	22.39	22.64	22.77
Conducted Power (Watts)	0.1758	0.1945	0.1945	0.1791	0.1841	0.1866	0.1734	0.1837	0.1892
EIRP(dBm)	25.96	26.40	26.40	26.04	26.16	26.22	25.90	26.15	26.28
EIRP(Watts)	0.3945	0.4365	0.4365	0.4018	0.4130	0.4188	0.3890	0.4121	0.4246



LTE Band 12 (GT - LC = 1.01 dBi) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	23017	23095	23173	23025	23095	23165	23035	23095	23155
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	699.7	707.5	715.3	700.5	707.5	714.5	701.5	707.5	713.5
Conducted Power (dBm)	23.22	23.27	23.06	23.29	23.17	23.13	23.48	23.27	23.03
Conducted Power (Watts)	0.2099	0.2123	0.2023	0.2133	0.2075	0.2056	0.2228	0.2123	0.2009
ERP(dBm)	22.08	22.13	21.92	22.15	22.03	21.99	22.34	22.13	21.89
ERP(Watts)	0.1614	0.1633	0.1556	0.1641	0.1596	0.1581	0.1714	0.1633	0.1545

LTE Band 12 (GT - LC = 1.01 dBi) QPSK			
Bandwidth	10M		
Channel	23060	23095	23130
	(Low)	(Mid)	(High)
Frequency (MHz)	704	707.5	711
Conducted Power (dBm)	23.40	23.25	23.27
Conducted Power (Watts)	0.2188	0.2113	0.2123
ERP(dBm)	22.26	22.11	22.13
ERP(Watts)	0.1683	0.1626	0.1633



LTE Band 12 (GT - LC = 1.01 dBi) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	23017	23095	23173	23025	23095	23165	23035	23095	23155
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	699.7	707.5	715.3	700.5	707.5	714.5	701.5	707.5	713.5
Conducted Power (dBm)	22.82	22.51	22.50	22.69	22.83	22.73	22.78	22.66	22.69
Conducted Power (Watts)	0.1914	0.1782	0.1778	0.1858	0.1919	0.1875	0.1897	0.1845	0.1858
ERP(dBm)	21.68	21.37	21.36	21.55	21.69	21.59	21.64	21.52	21.55
ERP(Watts)	0.1472	0.1371	0.1368	0.1429	0.1476	0.1442	0.1459	0.1419	0.1429

LTE Band 12 (GT - LC = 1.01 dBi) 16QAM			
Bandwidth	10M		
Channel	23060	23095	23130
	(Low)	(Mid)	(High)
Frequency (MHz)	704	707.5	711
Conducted Power (dBm)	22.90	22.91	22.38
Conducted Power (Watts)	0.1950	0.1954	0.1730
ERP(dBm)	21.76	21.77	21.24
ERP(Watts)	0.1500	0.1503	0.1330



LTE Band 12 (GT - LC = 1.01 dBi) 64QAM									
Bandwidth	1.4M			3M			5M		
Channel	23017	23095	23173	23025	23095	23165	23035	23095	23155
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	699.7	707.5	715.3	700.5	707.5	714.5	701.5	707.5	713.5
Conducted Power (dBm)	22.14	22.54	22.19	22.35	22.36	22.69	22.48	22.55	22.39
Conducted Power (Watts)	0.1637	0.1795	0.1656	0.1718	0.1722	0.1858	0.1770	0.1799	0.1734
ERP(dBm)	21.00	21.40	21.05	21.21	21.22	21.55	21.34	21.41	21.25
ERP(Watts)	0.1259	0.1380	0.1274	0.1321	0.1324	0.1429	0.1361	0.1384	0.1334

LTE Band 12 (GT - LC = 1.01 dBi) 64QAM			
Bandwidth	10M		
Channel	23060	23095	23130
	(Low)	(Mid)	(High)
Frequency (MHz)	704	707.5	711
Conducted Power (dBm)	22.39	22.15	22.77
Conducted Power (Watts)	0.1734	0.1641	0.1892
ERP(dBm)	21.25	21.01	21.63
ERP(Watts)	0.1334	0.1262	0.1455



LTE Band 13 (GT - LC = 1.64 dBi) QPSK						
Bandwidth	5M			10M		
Channel	23205	23230	23255	23230		
	(Low)	(Mid)	(High)	-	(Mid)	-
Frequency	779.5	782	784.5	-	782	-
(MHz)						
Conducted Power (dBm)	23.20	23.08	23.05		23.11	-
Conducted Power (Watts)	0.2089	0.2032	0.2018		0.2046	-
ERP(dBm)	22.69	22.57	22.54		22.60	-
ERP(Watts)	0.1858	0.1807	0.1795		0.1820	-

LTE Band 13 (GT - LC = 1.64 dBi) 16QAM						
Bandwidth	5M			10M		
Channel	23205	23230	23255	23230		
	(Low)	(Mid)	(High)	-	(Mid)	-
Frequency	779.5	782	784.5	-	782	-
(MHz)						
Conducted Power (dBm)	22.08	22.64	22.16		22.73	-
Conducted Power (Watts)	0.1614	0.1837	0.1644		0.1875	-
ERP(dBm)	21.57	22.13	21.65		22.22	-
ERP(Watts)	0.1435	0.1633	0.1462		0.1667	-

LTE Band 13 (GT - LC = 1.64 dBi) 64QAM						
Bandwidth	5M			10M		
Channel	23205	23230	23255	23230		
	(Low)	(Mid)	(High)	-	(Mid)	-
Frequency	779.5	782	784.5	-	782	-
(MHz)						
Conducted Power (dBm)	22.54	22.28	22.24	-	22.61	-
Conducted Power (Watts)	0.1795	0.1690	0.1675	-	0.1824	-
ERP(dBm)	22.03	21.77	21.73	-	22.10	-
ERP(Watts)	0.1596	0.1503	0.1489	-	0.1622	-



LTE Band 25 (GT - LC = 3.00 dBi) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	26407	26340	26683	26055	26340	26675	26065	26340	26665
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1850.7	1880	1914.3	1851.5	1880	1913.5	1852.5	1880	1912.5
(MHz)									
Conducted Power (dBm)	23.77	23.77	23.84	23.73	23.78	23.93	23.78	23.85	24.00
Conducted Power (Watts)	0.2382	0.2382	0.2421	0.2360	0.2388	0.2472	0.2388	0.2427	0.2512
EIRP(dBm)	26.77	26.77	26.84	26.73	26.78	26.93	26.78	26.85	27.00
EIRP(Watts)	0.4753	0.4753	0.4831	0.4710	0.4764	0.4932	0.4764	0.4842	0.5012

LTE Band 25 (GT - LC = 3.00 dBi) QPSK									
Bandwidth	10M			15M			20M		
Channel	26090	26340	26640	26115	26340	26615	26140	26340	26590
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1855	1880	1910	1857.5	1880	1907.5	1860	1880	1905
(MHz)									
Conducted Power (dBm)	23.77	23.81	24.07	23.80	23.90	24.18	23.88	23.92	24.21
Conducted Power (Watts)	0.2382	0.2404	0.2553	0.2399	0.2455	0.2618	0.2443	0.2466	0.2636
EIRP(dBm)	26.77	26.81	27.07	26.80	26.90	27.18	26.88	26.92	27.21
EIRP(Watts)	0.4753	0.4797	0.5093	0.4786	0.4898	0.5224	0.4875	0.4920	0.5260



LTE Band 25 (GT - LC = 3.00 dBi) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	26407	26340	26683	26055	26340	26675	26065	26340	26665
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1850.7	1880	1914.3	1851.5	1880	1913.5	1852.5	1880	1912.5
(MHz)									
Conducted Power (dBm)	22.88	22.96	23.25	23.10	23.30	22.69	23.03	23.08	23.37
Conducted Power (Watts)	0.1941	0.1977	0.2113	0.2042	0.2138	0.1858	0.2009	0.2032	0.2173
EIRP(dBm)	25.88	25.96	26.25	26.10	26.30	25.69	26.03	26.08	26.37
EIRP(Watts)	0.3873	0.3945	0.4217	0.4074	0.4266	0.3707	0.4009	0.4055	0.4335

LTE Band 25 (GT - LC = 3.00 dBi) 16QAM									
Bandwidth	10M			15M			20M		
Channel	26090	26340	26640	26115	26340	26615	26140	26340	26590
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1855	1880	1910	1857.5	1880	1907.5	1860	1880	1905
(MHz)									
Conducted Power (dBm)	22.86	23.30	23.50	23.05	23.04	23.31	22.99	22.99	23.31
Conducted Power (Watts)	0.1932	0.2138	0.2239	0.2018	0.2014	0.2143	0.1991	0.1991	0.2143
EIRP(dBm)	25.86	26.30	26.50	26.05	26.04	26.31	25.99	25.99	26.31
EIRP(Watts)	0.3855	0.4266	0.4467	0.4027	0.4018	0.4276	0.3972	0.3972	0.4276



LTE Band 25 (GT - LC = 3.00 dBi) 64QAM									
Bandwidth	1.4M			3M			5M		
Channel	26407	26340	26683	26055	26340	26675	26065	26340	26665
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1850.7	1880	1914.3	1851.5	1880	1913.5	1852.5	1880	1912.5
(MHz)									
Conducted Power (dBm)	22.64	23.25	22.89	23.19	22.97	22.96	22.64	23.05	23.14
Conducted Power (Watts)	0.1837	0.2113	0.1945	0.2084	0.1982	0.1977	0.1837	0.2018	0.2061
EIRP(dBm)	25.64	26.25	25.89	26.19	25.97	25.96	25.64	26.05	26.14
EIRP(Watts)	0.3664	0.4217	0.3882	0.4159	0.3954	0.3945	0.3664	0.4027	0.4111

LTE Band 25 (GT - LC = 3.00 dBi) 64QAM									
Bandwidth	10M			15M			20M		
Channel	26090	26340	26640	26115	26340	26615	26140	26340	26590
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1855	1880	1910	1857.5	1880	1907.5	1860	1880	1905
(MHz)									
Conducted Power (dBm)	22.83	23.29	23.45	23.01	23.09	23.28	23.14	23.03	23.32
Conducted Power (Watts)	0.1919	0.2133	0.2213	0.2000	0.2037	0.2128	0.2061	0.2009	0.2148
EIRP(dBm)	25.83	26.29	26.45	26.01	26.09	26.28	26.14	26.03	26.32
EIRP(Watts)	0.3828	0.4256	0.4416	0.3990	0.4064	0.4246	0.4111	0.4009	0.4285



LTE Band 26 (GT - LC = 0.88 dBi) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	26797	26915	27033	26805	26915	27025	26815	26915	27015
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5
(MHz)									
Conducted Power (dBm)	23.70	23.72	23.94	23.71	23.87	23.91	23.62	23.75	23.97
Conducted Power (Watts)	0.2344	0.2355	0.2477	0.2350	0.2438	0.2460	0.2301	0.2371	0.2495
ERP(dBm)	22.43	22.45	22.67	22.44	22.60	22.64	22.35	22.48	22.70
ERP(Watts)	0.1750	0.1758	0.1849	0.1754	0.1820	0.1837	0.1718	0.1770	0.1862

LTE Band 26 (GT - LC = 0.88 dBi) QPSK							
Bandwidth	10M			15M			15M
Channel	26840	26915	26990	26865	26915	26965	26765
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)
Frequency	829	836.5	844	831.5	836.5	841.5	821.5
(MHz)							
Conducted Power (dBm)	23.77	23.77	24.04	23.54	23.63	23.61	23.57
Conducted Power (Watts)	0.2382	0.2382	0.2535	0.2259	0.2307	0.2296	0.2275
ERP(dBm)	22.50	22.50	22.77	22.27	22.36	22.34	22.30
ERP(Watts)	0.1778	0.1778	0.1892	0.1687	0.1722	0.1714	0.1698



LTE Band 26 (GT - LC = 0.88 dBi) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	26797	26915	27033	26805	26915	27025	26815	26915	27015
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5
(MHz)									
Conducted Power (dBm)	23.19	23.33	23.05	22.89	22.96	22.70	23.14	23.17	23.42
Conducted Power (Watts)	0.2084	0.2153	0.2018	0.1945	0.1977	0.1862	0.2061	0.2075	0.2198
ERP(dBm)	21.92	22.06	21.78	21.62	21.69	21.43	21.87	21.90	22.15
ERP(Watts)	0.1556	0.1607	0.1507	0.1452	0.1476	0.1390	0.1538	0.1549	0.1641

LTE Band 26 (GT - LC = 0.88 dBi) 16QAM							
Bandwidth	10M			15M			15M
Channel	26840	26915	26990	26865	26915	26965	26765
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)
Frequency	829	836.5	844	831.5	836.5	841.5	821.5
(MHz)							
Conducted Power (dBm)	23.29	23.34	23.37	22.93	23.08	23.24	22.96
Conducted Power (Watts)	0.2133	0.2158	0.2173	0.1963	0.2032	0.2109	0.1977
ERP(dBm)	22.02	22.07	22.10	21.66	21.81	21.97	21.69
ERP(Watts)	0.1592	0.1611	0.1622	0.1466	0.1517	0.1574	0.1476



LTE Band 26 (GT - LC = 0.88 dBi) 64QAM									
Bandwidth	1.4M			3M			5M		
Channel	26797	26915	27033	26805	26915	27025	26815	26915	27015
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5
(MHz)									
Conducted Power (dBm)	23.14	22.84	22.86	22.91	22.91	23.06	23.21	23.03	23.39
Conducted Power (Watts)	0.2061	0.1923	0.1932	0.1954	0.1954	0.2023	0.2094	0.2009	0.2183
ERP(dBm)	21.87	21.57	21.59	21.64	21.64	21.79	21.94	21.76	22.12
ERP(Watts)	0.1538	0.1435	0.1442	0.1459	0.1459	0.1510	0.1563	0.1500	0.1629

LTE Band 26 (GT - LC = 0.88 dB) 64QAM							
Bandwidth	10M			15M			15M
Channel	26840	26915	26990	26865	26915	26965	26765
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)
Frequency	829	836.5	844	831.5	836.5	841.5	821.5
(MHz)							
Conducted Power (dBm)	23.24	22.86	23.45	22.74	22.58	23.02	22.77
Conducted Power (Watts)	0.2109	0.1932	0.2213	0.1879	0.1811	0.2004	0.1892
ERP(dBm)	21.97	21.59	22.18	21.47	21.31	21.75	21.50
ERP(Watts)	0.1574	0.1442	0.1652	0.1403	0.1352	0.1496	0.1413

LTE Band 41 ($G_T - L_C = 4.40$ dBi) 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	2498.5	2593	2687.5	2501	2593	2685	2503.5	2593	2682.5
(MHz)									
Conducted Power (dBm)	23.29	23.36	23.48	23.35	23.42	23.57	23.44	23.53	23.56
Conducted Power (Watts)	0.2133	0.2168	0.2228	0.2163	0.2198	0.2275	0.2208	0.2254	0.2270
EIRP(dBm)	27.69	27.76	27.88	27.75	27.82	27.97	27.84	27.93	27.96
EIRP(Watts)	0.5875	0.5970	0.6138	0.5957	0.6053	0.6266	0.6081	0.6209	0.6252

LTE Band 41 ($G_T - L_C = 4.40$ dBi) QPSK			
Bandwidth	20M		
Channel	39750	40620	41490
	(Low)	(Mid)	(High)
Frequency	2506	2593	2680
(MHz)			
Conducted Power (dBm)	23.48	23.58	22.55
Conducted Power (Watts)	0.2228	0.2280	0.1799
EIRP(dBm)	27.88	27.98	26.95
EIRP(Watts)	0.6138	0.6281	0.4955



LTE Band 41 ($G_T - L_C = 4.40$ dBi) 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)	22.41	22.45	22.57	22.51	22.58	22.71	22.60	22.66	22.70
Conducted Power (Watts)	0.1742	0.1758	0.1807	0.1782	0.1811	0.1866	0.1820	0.1845	0.1862
EIRP(dBm)	26.81	26.85	26.97	26.91	26.98	27.11	27.00	27.06	27.10
EIRP(Watts)	0.4797	0.4842	0.4977	0.4909	0.4989	0.5140	0.5012	0.5082	0.5129

LTE Band 41 ($G_T - L_C = 4.40$ dBi) 16QAM			
Bandwidth	20M		
Channel	39750	40620	41490
	(Low)	(Mid)	(High)
Frequency	2506	2593	2680
(MHz)			
Conducted Power (dBm)	22.68	22.73	21.71
Conducted Power (Watts)	0.1854	0.1875	0.1483
EIRP(dBm)	27.08	27.13	26.11
EIRP(Watts)	0.5105	0.5164	0.4083



LTE Band 41 ($G_T - L_C = 4.40$ dBi) 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 (MHz)	2498.5	2593	2687.5	2501	2593	2685	2503.5	2593	2682.5
Conducted Power (dBm)	22.21	22.24	22.32	22.25	22.33	22.47	22.34	22.42	22.45
Conducted Power (Watts)	0.1663	0.1675	0.1706	0.1679	0.1710	0.1766	0.1714	0.1746	0.1758
EIRP(dBm)	26.61	26.64	26.72	26.65	26.73	26.87	26.74	26.82	26.85
EIRP(Watts)	0.4581	0.4613	0.4699	0.4624	0.4710	0.4864	0.4721	0.4808	0.4842

LTE Band 41 ($G_T - L_C = 4.40$ dBi) 64QAM			
Bandwidth	20M		
Channel	39750	40620	41490
	(Low)	(Mid)	(High)
Frequency (MHz)	2506	2593	2680
Conducted Power (dBm)	22.40	22.45	22.10
Conducted Power (Watts)	0.1738	0.1758	0.1622
EIRP(dBm)	26.80	26.85	26.50
EIRP(Watts)	0.4786	0.4842	0.4467



LTE Band 66 (GT - LC = 4.50 dBi) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	131979	132322	132665	131987	132322	132657	131997	132322	132647
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1710.7	1745	1779.3	1711.5	1745	1778.5	1712.5	1745	1777.5
(MHz)									
Conducted Power (dBm)	23.22	23.57	23.45	23.19	23.51	23.46	23.24	23.44	23.64
Conducted Power (Watts)	0.2099	0.2275	0.2213	0.2084	0.2244	0.2218	0.2109	0.2208	0.2312
EIRP(dBm)	27.72	28.07	27.95	27.69	28.01	27.96	27.74	27.94	28.14
EIRP(Watts)	0.5916	0.6412	0.6237	0.5875	0.6324	0.6252	0.5943	0.6223	0.6516

LTE Band 66 (GT - LC = 4.50 dBi) QPSK									
Bandwidth	10M			15M			20M		
Channel	132022	132322	132622	132047	132322	132597	132072	132322	132572
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(Mid)
Frequency	1715	1745	1775	1717.5	1745	1772.5	1720	1745	1770
(MHz)									
Conducted Power (dBm)	23.33	23.56	23.54	23.36	23.66	23.73	23.55	23.74	23.91
Conducted Power (Watts)	0.2153	0.2270	0.2259	0.2168	0.2323	0.2360	0.2265	0.2366	0.2460
EIRP(dBm)	27.83	28.06	28.04	27.86	28.16	28.23	28.05	28.24	28.41
EIRP(Watts)	0.6067	0.6397	0.6368	0.6109	0.6546	0.6653	0.6383	0.6668	0.6934



LTE Band 66 (GT - LC = 4.50 dBi) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	131979	132322	132665	131987	132322	132657	131997	132322	132647
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1710.7	1745	1779.3	1711.5	1745	1778.5	1712.5	1745	1777.5
(MHz)									
Conducted Power (dBm)	22.42	22.79	22.66	22.30	22.58	23.05	22.74	23.00	22.77
Conducted Power (Watts)	0.1746	0.1901	0.1845	0.1698	0.1811	0.2018	0.1879	0.1995	0.1892
EIRP(dBm)	26.92	27.29	27.16	26.80	27.08	27.55	27.24	27.50	27.27
EIRP(Watts)	0.4920	0.5358	0.5200	0.4786	0.5105	0.5689	0.5297	0.5623	0.5333

LTE Band 66 (GT - LC = 4.50 dBi) 16QAM									
Bandwidth	10M			15M			20M		
Channel	132022	132322	132622	132047	132322	132597	132072	132322	132572
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(Mid)
Frequency	1715	1745	1775	1717.5	1745	1772.5	1720	1745	1770
(MHz)									
Conducted Power (dBm)	22.85	23.11	22.90	22.40	22.81	23.44	22.89	23.25	22.94
Conducted Power (Watts)	0.1928	0.2046	0.1950	0.1738	0.1910	0.2208	0.1945	0.2113	0.1968
EIRP(dBm)	27.35	27.61	27.40	26.90	27.31	27.94	27.39	27.75	27.44
EIRP(Watts)	0.5433	0.5768	0.5495	0.4898	0.5383	0.6223	0.5483	0.5957	0.5546



LTE Band 66 (GT - LC = 4.50 dBi) 64QAM									
Bandwidth	1.4M			3M			5M		
Channel	131979	132322	132665	131987	132322	132657	131997	132322	132647
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1710.7	1745	1779.3	1711.5	1745	1778.5	1712.5	1745	1777.5
(MHz)									
Conducted Power (dBm)	22.12	22.43	22.87	22.22	22.59	22.99	22.44	22.93	22.61
Conducted Power (Watts)	0.1629	0.1750	0.1936	0.1667	0.1816	0.1991	0.1754	0.1963	0.1824
EIRP(dBm)	26.62	26.93	27.37	26.72	27.09	27.49	26.94	27.43	27.11
EIRP(Watts)	0.4592	0.4932	0.5458	0.4699	0.5117	0.5610	0.4943	0.5534	0.5140

LTE Band 66 (GT - LC =4.50 dBi) 64QAM									
Bandwidth	10M			15M			20M		
Channel	132022	132322	132622	132047	132322	132597	132072	132322	132572
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(Mid)
Frequency	1715	1745	1775	1717.5	1745	1772.5	1720	1745	1770
(MHz)									
Conducted Power (dBm)	22.80	22.70	22.92	22.67	22.79	22.91	22.76	23.18	22.99
Conducted Power (Watts)	0.1905	0.1862	0.1959	0.1849	0.1901	0.1954	0.1888	0.2080	0.1991
EIRP(dBm)	27.30	27.20	27.42	27.17	27.29	27.41	27.26	27.68	27.49
EIRP(Watts)	0.5370	0.5248	0.5521	0.5212	0.5358	0.5508	0.5321	0.5861	0.5610

CA EIRP

LTE Band 7 CA (GT - LC = 3.51 dBi) 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)	22.51	22.64	22.76	21.18	22.58	22.73	21.91	22.73	22.31
Conducted Power (Watts)	0.1782	0.1837	0.1888	0.1312	0.1811	0.1875	0.1552	0.1875	0.1702
EIRP(dBm)	26.02	26.15	26.27	24.69	26.09	26.24	25.42	26.24	25.82
EIRP(Watts)	0.3999	0.4121	0.4236	0.2944	0.4064	0.4207	0.3483	0.4207	0.3819

LTE Band 7 CA (GT - LC = 3.51 dBi) 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)	22.62	22.68	22.62	23.70	23.67	23.65	22.40	22.49	22.61
Conducted Power (Watts)	0.1828	0.1854	0.1828	0.2344	0.2328	0.2317	0.1738	0.1774	0.1824
EIRP(dBm)	26.13	26.19	26.13	27.21	27.18	27.16	25.91	26.00	26.12
EIRP(Watts)	0.4102	0.4159	0.4102	0.5260	0.5224	0.5200	0.3899	0.3981	0.4093



LTE Band 7 CA (GT - LC = 3.51 dBi) 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)	21.69	22.23	22.3	20.43	22.05	22.22	21.35	22.06	21.42
Conducted Power (Watts)	0.1476	0.1671	0.1698	0.1104	0.1603	0.1667	0.1365	0.1607	0.1387
EIRP(dBm)	25.20	25.74	25.81	23.94	25.56	25.73	24.86	25.57	24.93
EIRP(Watts)	0.3311	0.3750	0.3811	0.2477	0.3597	0.3741	0.3062	0.3606	0.3112

LTE Band 7 CA (GT - LC = 3.51 dBi) 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)	21.82	22.01	22.13	23.05	23.27	23.1	21.93	22.13	21.95
Conducted Power (Watts)	0.1521	0.1589	0.1633	0.2018	0.2123	0.2042	0.1560	0.1633	0.1567
EIRP(dBm)	25.33	25.52	25.64	26.56	26.78	26.61	25.44	25.64	25.46
EIRP(Watts)	0.3412	0.3565	0.3664	0.4529	0.4764	0.4581	0.3499	0.3664	0.3516



LTE Band 7 CA (GT - LC = 3.51 dBi) 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)	20.18	20.21	20.16	19.99	19.98	20.05	19.65	20.57	19.89
Conducted Power (Watts)	0.1042	0.1050	0.1038	0.0998	0.0995	0.1012	0.0923	0.1140	0.0975
EIRP(dBm)	23.69	23.72	23.67	23.50	23.49	23.56	23.16	24.08	23.40
EIRP(Watts)	0.2339	0.2355	0.2328	0.2239	0.2234	0.2270	0.2070	0.2559	0.2188

LTE Band 7 CA (GT - LC = 3.51 dBi) 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)	20.03	20.01	19.96	20.82	23.2	20.13	21.60	21.69	20.66
Conducted Power (Watts)	0.1007	0.1002	0.0991	0.1208	0.2089	0.1030	0.1445	0.1476	0.1164
EIRP(dBm)	23.54	23.52	23.47	24.33	26.71	23.64	25.11	25.20	24.17
EIRP(Watts)	0.2259	0.2249	0.2223	0.2710	0.4688	0.2312	0.3243	0.3311	0.2612



LTE Band 7 CA (GT - LC = 3.51 dBi) QPSK			
Bandwidth	15M + 10M		
Channel PCC	20825	21025	21225
	(Low)	(Mid)	(High)
Channel SCC	20975	21175	21375
	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.09	22.76	22.01
Conducted Power (Watts)	0.1618	0.1888	0.1589
EIRP(dBm)	25.60	26.27	25.52
EIRP(Watts)	0.3631	0.4236	0.3565

LTE Band 7 CA (GT - LC = 3.51 dBi) 16QAM			
Bandwidth	15M + 10M		
Channel PCC	20825	21025	21225
	(Low)	(Mid)	(High)
Channel SCC	20975	21175	21375
	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.19	22.21	21.28
Conducted Power (Watts)	0.1315	0.1663	0.1343
EIRP(dBm)	24.70	25.72	24.79
EIRP(Watts)	0.2951	0.3733	0.3013

LTE Band 7 CA (GT - LC =3.51 dBi) 64QAM			
Bandwidth	15M + 10M		
Channel PCC	20825	21025	21225
	(Low)	(Mid)	(High)
Channel SCC	20975	21175	21375
	(Low)	(Mid)	(High)
Conducted Power (dBm)	19.34	20.22	20.14
Conducted Power (Watts)	0.0859	0.1052	0.1033
EIRP(dBm)	22.85	23.73	23.65
EIRP(Watts)	0.1928	0.2360	0.2317

LTE Band 41 CA (GT - LC = 4.40 dBi) 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)	23.03	22.99	23.05	22.94	22.76	22.96	22.86	22.78	22.67
Conducted Power (Watts)	0.2009	0.1991	0.2018	0.1968	0.1888	0.1977	0.1932	0.1897	0.1849
EIRP(dBm)	27.43	27.39	27.45	27.34	27.16	27.36	27.26	27.18	27.07
EIRP(Watts)	0.5534	0.5483	0.5559	0.5420	0.5200	0.5445	0.5321	0.5224	0.5093

LTE Band 41 CA (GT - LC = 4.40 dBi) 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)	22.89	22.63	22.84	22.99	22.6	22.66	22.97	22.77	22.84
Conducted Power (Watts)	0.1945	0.1832	0.1923	0.1991	0.1820	0.1845	0.1982	0.1892	0.1923
EIRP(dBm)	27.29	27.03	27.24	27.39	27.00	27.06	27.37	27.17	27.24
EIRP(Watts)	0.5358	0.5047	0.5297	0.5483	0.5012	0.5082	0.5458	0.5212	0.5297



LTE Band 41 CA (GT - LC = 4.40 dBi) 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)	23.97	23.84	23.86	22.68	23.04	22.7
Conducted Power (Watts)	0.2495	0.2421	0.2432	0.1854	0.2014	0.1862
EIRP(dBm)	28.37	28.24	28.26	27.08	27.44	27.10
EIRP(Watts)	0.6871	0.6668	0.6699	0.5105	0.5546	0.5129

LTE Band 41 CA (GT - LC = 4.40 dBi) 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)	23.05	22.68	22.77	23.01	23.02	22.98
Conducted Power (Watts)	0.2018	0.1854	0.1892	0.2000	0.2004	0.1986
EIRP(dBm)	27.45	27.08	27.17	27.41	27.42	27.38
EIRP(Watts)	0.5559	0.5105	0.5212	0.5508	0.5521	0.5470



LTE Band 41 CA (GT - LC = 4.40 dBi) 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)	22.12	22.01	22.15	21.68	21.54	21.74	21.75	21.56	21.86
Conducted Power (Watts)	0.1629	0.1589	0.1641	0.1472	0.1426	0.1493	0.1496	0.1432	0.1535
EIRP(dBm)	26.52	26.41	26.55	26.08	25.94	26.14	26.15	25.96	26.26
EIRP(Watts)	0.4487	0.4375	0.4519	0.4055	0.3926	0.4111	0.4121	0.3945	0.4227

LTE Band 41 CA (GT - LC = 4.40 dBi) 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)	21.98	21.68	21.93	22.13	21.65	21.75	22.05	21.81	21.92
Conducted Power (Watts)	0.1578	0.1472	0.1560	0.1633	0.1462	0.1496	0.1603	0.1517	0.1556
EIRP(dBm)	26.38	26.08	26.33	26.53	26.05	26.15	26.45	26.21	26.32
EIRP(Watts)	0.4345	0.4055	0.4295	0.4498	0.4027	0.4121	0.4416	0.4178	0.4285



LTE Band 41 CA (GT - LC = 4.40 dBi) 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)	23.32	23.26	23.05	21.82	22.15	21.86
Conducted Power (Watts)	0.2148	0.2118	0.2018	0.1521	0.1641	0.1535
EIRP(dBm)	27.72	27.66	27.45	26.22	26.55	26.26
EIRP(Watts)	0.5916	0.5834	0.5559	0.4188	0.4519	0.4227

LTE Band 41 CA (GT - LC = 4.40 dBi) 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)	22.16	21.78	21.86	21.89	21.76	21.89
Conducted Power (Watts)	0.1644	0.1507	0.1535	0.1545	0.1500	0.1545
EIRP(dBm)	26.56	26.18	26.26	26.29	26.16	26.29
EIRP(Watts)	0.4529	0.4150	0.4227	0.4256	0.4130	0.4256



LTE Band 41 CA (GT - LC = 4.40 dBi) 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)	19.81	19.78	19.74	20.12	20.05	20.12	20.09	20.01	20.05
Conducted Power (Watts)	0.0957	0.0951	0.0942	0.1028	0.1012	0.1028	0.1021	0.1002	0.1012
EIRP(dBm)	24.21	24.18	24.14	24.52	24.45	24.52	24.49	24.41	24.45
EIRP(Watts)	0.2636	0.2618	0.2594	0.2831	0.2786	0.2831	0.2812	0.2761	0.2786

LTE Band 41 CA (GT - LC = 4.40 dBi) 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)	19.80	19.6	19.74	20.14	19.48	19.7	20.06	19.6	19.73
Conducted Power (Watts)	0.0955	0.0912	0.0942	0.1033	0.0887	0.0933	0.1014	0.0912	0.0940
EIRP(dBm)	24.20	24.00	24.14	24.54	23.88	24.10	24.46	24.00	24.13
EIRP(Watts)	0.2630	0.2512	0.2594	0.2844	0.2443	0.2570	0.2793	0.2512	0.2588

LTE Band 41 CA (GT - LC = 4.40 dBi) 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)	20.31	20.46	20.17	20.77	20.78	20.44
Conducted Power (Watts)	0.1074	0.1112	0.1040	0.1194	0.1197	0.1107
EIRP(dBm)	24.71	24.86	24.57	25.17	25.18	24.84
EIRP(Watts)	0.2958	0.3062	0.2864	0.3289	0.3296	0.3048



LTE Band 41 CA (GT - LC = 4.40 dBi) 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)	20.10	19.86	19.78	19.86	19.83	19.86
Conducted Power (Watts)	0.1023	0.0968	0.0951	0.0968	0.0962	0.0968
EIRP(dBm)	24.50	24.26	24.18	24.26	24.23	24.26
EIRP(Watts)	0.2818	0.2667	0.2618	0.2667	0.2649	0.2667

**Peak-to-Average Ratio**

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.51	4.23	4.72	5.65	PASS
Middle CH	3.57	4.46	5.16	5.8	
Highest CH	3.57	4.32	5.51	5.8	
Mod.	64QAM		-		Limit: 13dB
RB Size	1RB	Full RB	-	-	Result
Lowest CH	5.97	6.26	-	-	PASS
Middle CH	5.42	6.29	-	-	
Highest CH	5.39	6.35	-	-	

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.68	4.7	5.25	5.97	PASS
Middle CH	3.65	4.7	5.62	5.94	
Highest CH	3.68	4.64	5.48	6.03	
Mod.	64QAM		Limit: 13dB		
RB Size	1RB	Full RB	Result		
Lowest CH	5.57	5.94	PASS		
Middle CH	5.36	5.94			
Highest CH	5.3	5.94			

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.62	4.67	5.01	5.97	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM		-		Limit: 13dB
RB Size	1RB	Full RB	-	-	Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.2	6.41	-	-	
Highest CH	-	-	-	-	



Mode	LTE Band 25 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.59	4.35	4.61	5.74	PASS
Middle CH	3.62	4.52	4.64	5.86	
Highest CH	3.57	4.41	5.28	5.62	
Mod.	64QAM		-		Limit: 13dB
RB Size	1RB	Full RB	-	-	Result
Lowest CH	5.74	6.35	-	-	PASS
Middle CH	5.74	6.38	-	-	
Highest CH	5.86	6.23	-	-	

Mode	LTE Band 26 / 15MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.59	4.67	5.13	6.03	PASS
Middle CH	3.59	4.78	5.22	6.09	
Highest CH	3.57	4.75	5.25	6	
Mod.	64QAM		Limit: 13dB		
RB Size	1RB	Full RB	Result		
Lowest CH	6.35	6.43	PASS		
Middle CH	6.29	6.46			
Highest CH	6.75	6.52			

Mode	LTE Band 41 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	5.51	6.2	5.57	6.43	PASS
Middle CH	3.88	4.75	6.58	7.07	
Highest CH	4.09	5.59	5.71	6.64	
Mode	LTE Band 41 / 20MHz				
Mod.	64QAM		-		Limit: 13dB
RB Size	1RB	Full RB	-	-	Result
Lowest CH	6.99	6.93	-	-	PASS
Middle CH	6.9	6.9	-	-	
Highest CH	6.72	6.9	-	-	

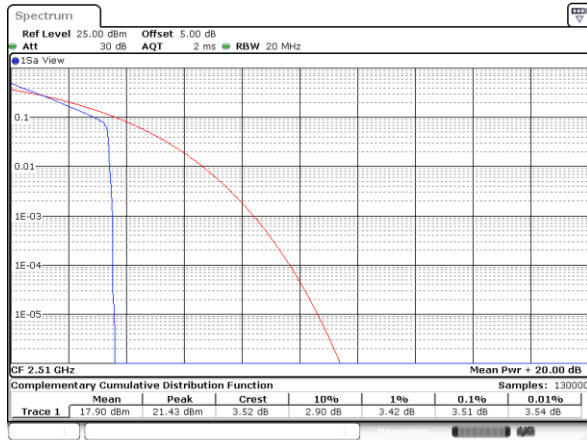


Mode	LTE Band 66 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.45	4.29	4.41	5.57	PASS
Middle CH	3.59	4.23	4.58	5.51	
Highest CH	3.59	4.2	4.46	5.48	
Mode	LTE Band 66 / 20MHz				
Mod.	64QAM		-		Limit: 13dB
RB Size	1RB	Full RB	-	-	Result
Lowest CH	5.13	6.23	-	-	PASS
Middle CH	5.28	6.14	-	-	
Highest CH	5.91	6.17	-	-	

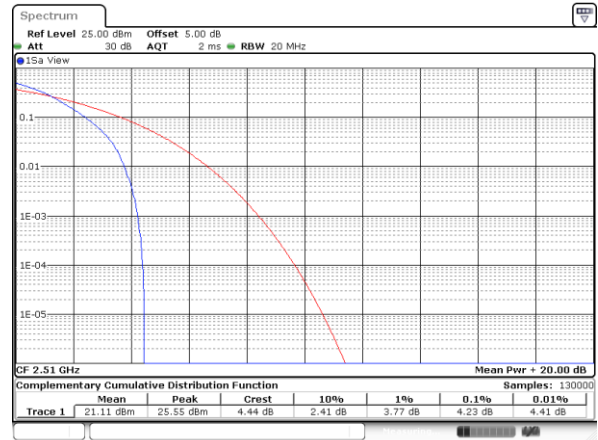


LTE Band 7 / 20MHz / QPSK

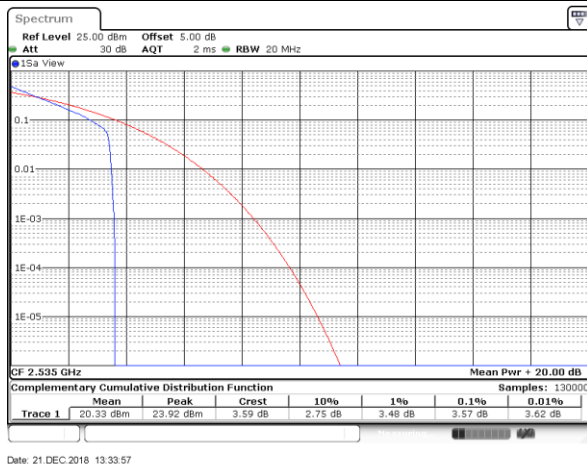
Lowest Channel / 1RB



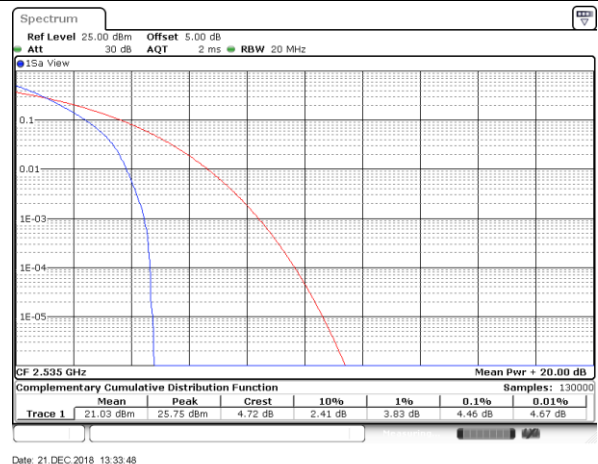
Lowest Channel / Full RB



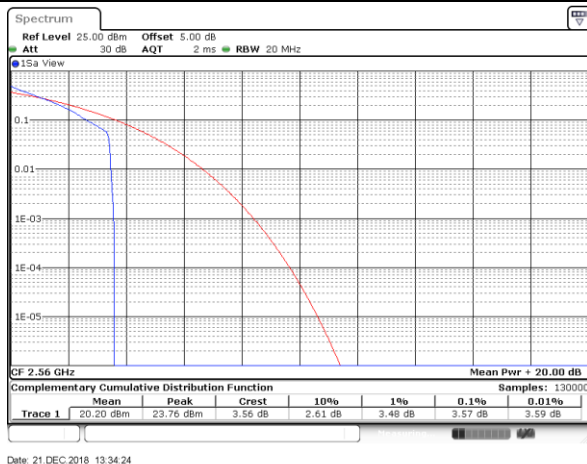
Middle Channel / 1RB



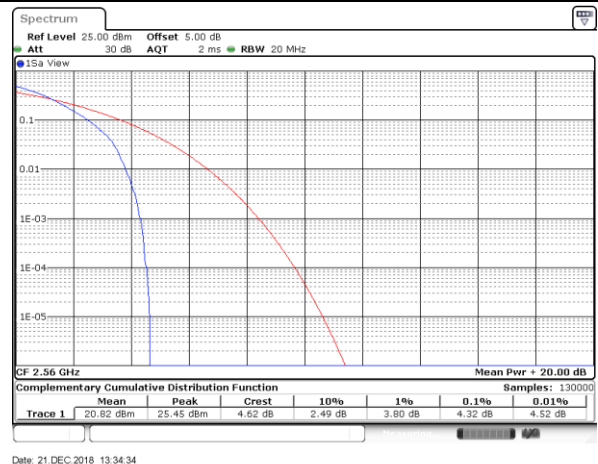
Middle Channel / Full RB



Highest Channel / 1RB



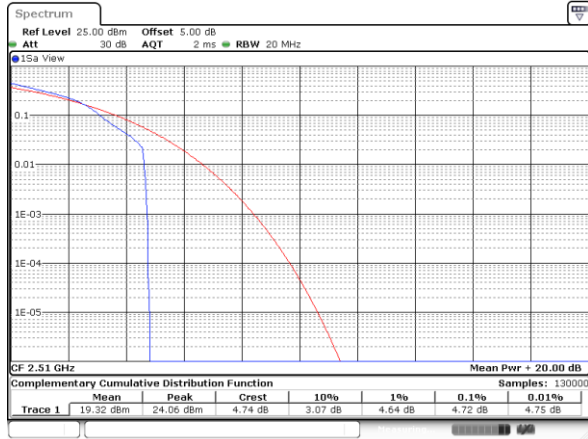
Highest Channel / Full RB



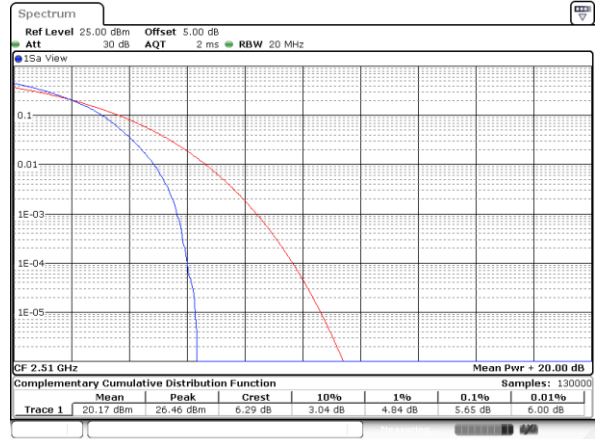


LTE Band 7 / 20MHz / 16QAM

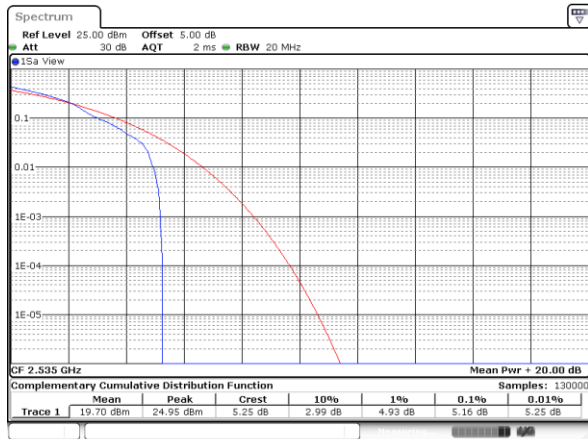
Lowest Channel / 1RB



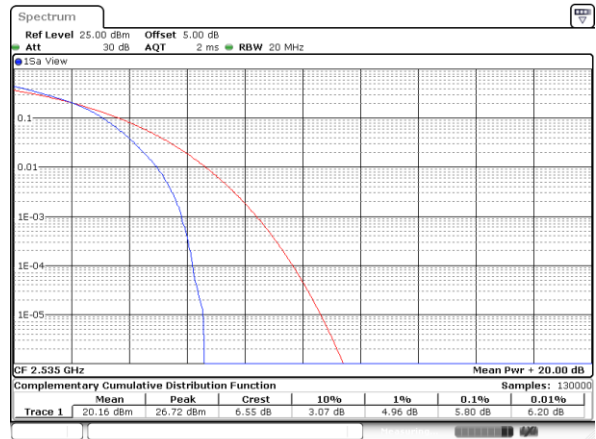
Lowest Channel / Full RB



Middle Channel / 1RB



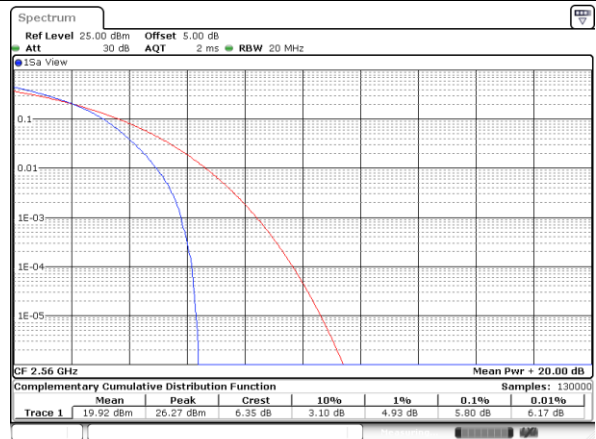
Middle Channel / Full RB



Highest Channel / 1RB



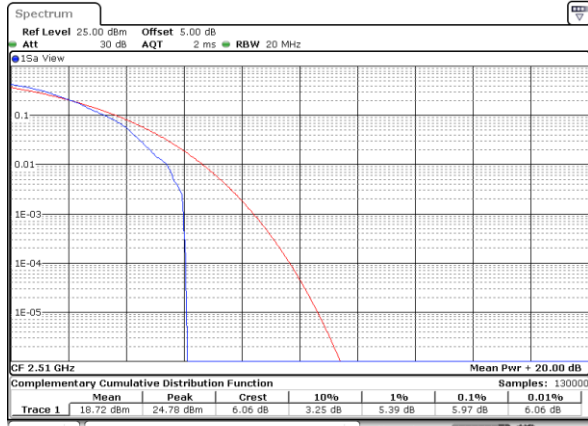
Highest Channel / Full RB





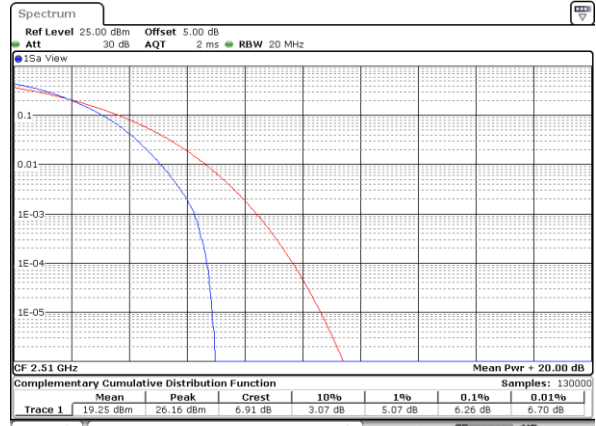
LTE Band 7 / 20MHz / 64QAM

Lowest Channel / 1RB



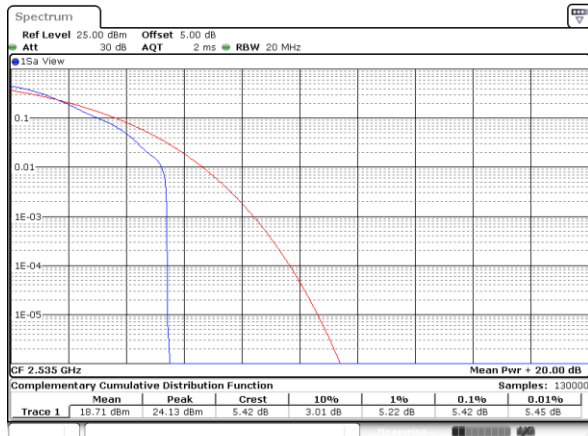
Date: 21 DEC 2018 13:59:09

Lowest Channel / Full RB



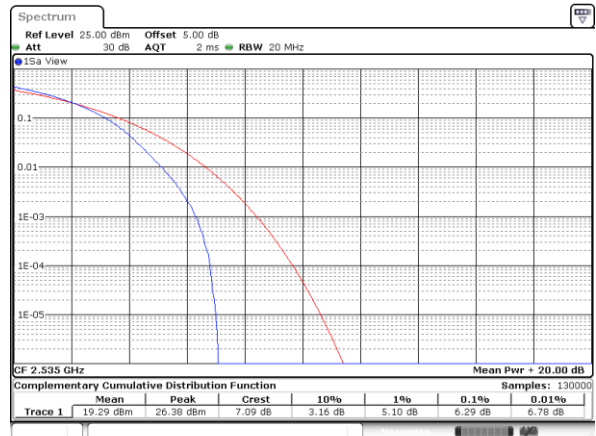
Date: 21 DEC 2018 13:59:19

Middle Channel / 1RB



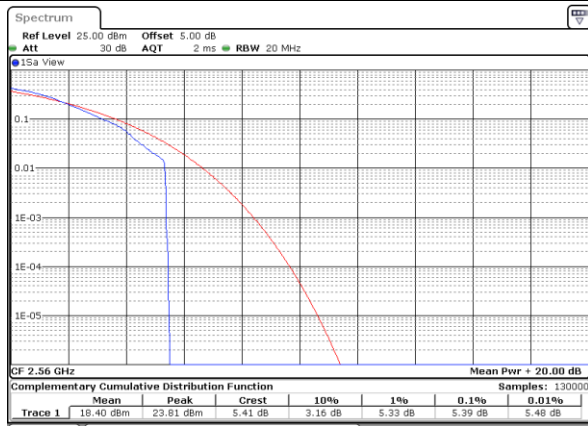
Date: 21 DEC 2018 13:59:38

Middle Channel / Full RB



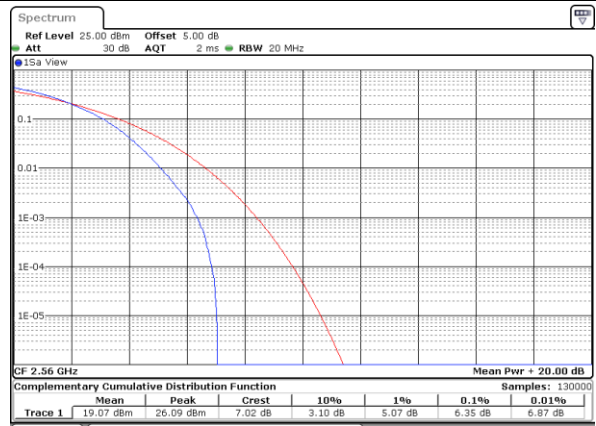
Date: 21 DEC 2018 13:59:29

Highest Channel / 1RB



Date: 21 DEC 2018 13:59:49

Highest Channel / Full RB

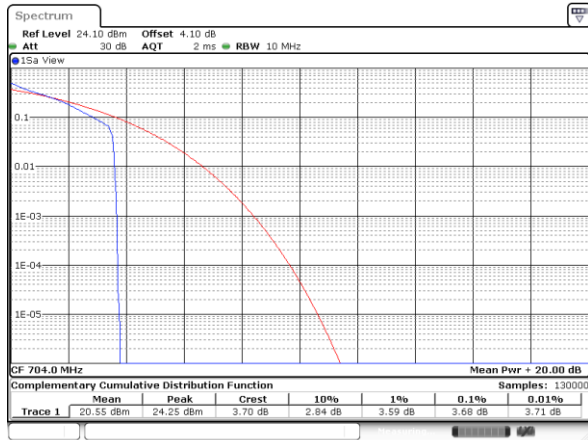


Date: 21 DEC 2018 13:59:59

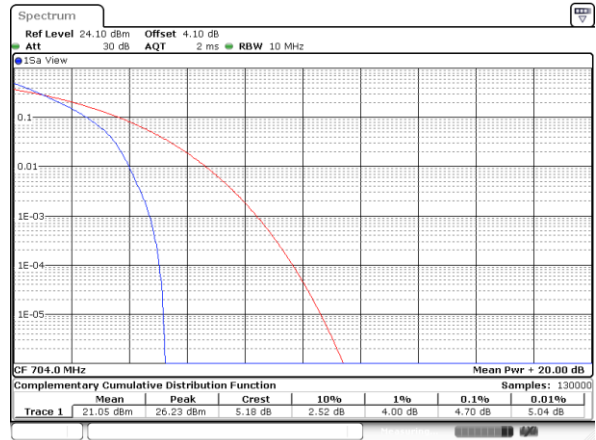


LTE Band 12 / 10MHz / QPSK

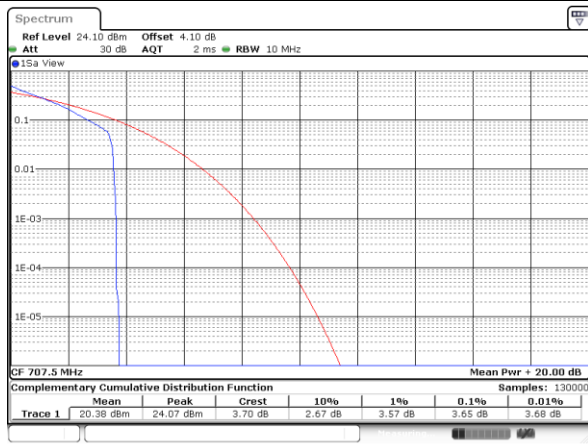
Lowest Channel / 1RB



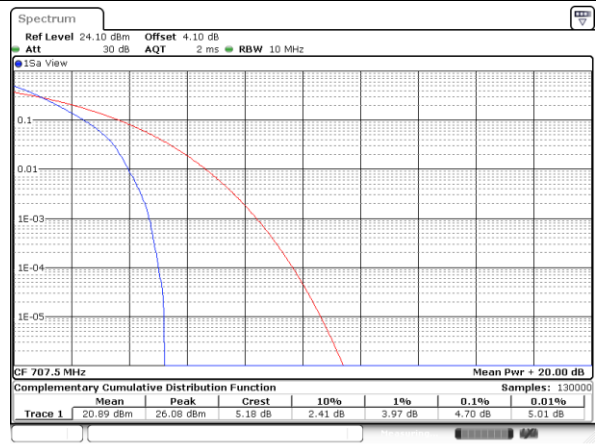
Lowest Channel / Full RB



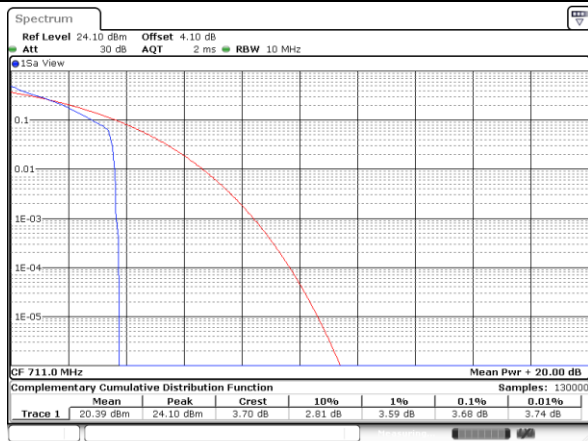
Middle Channel / 1RB



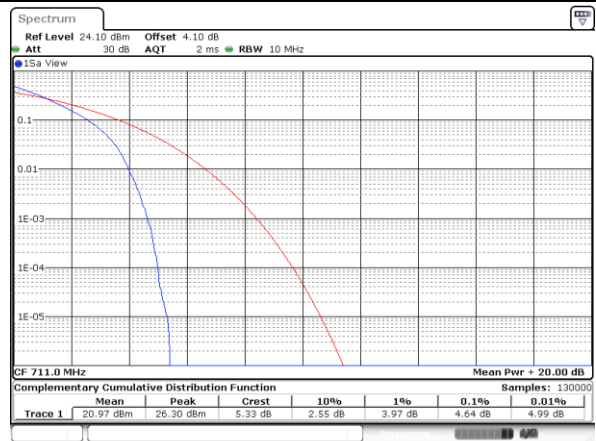
Middle Channel / Full RB



Highest Channel / 1RB



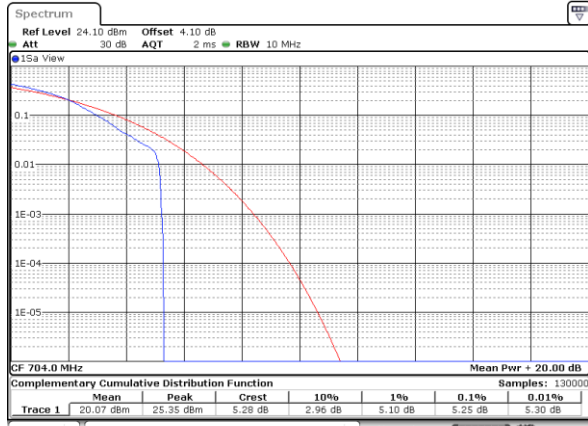
Highest Channel / Full RB





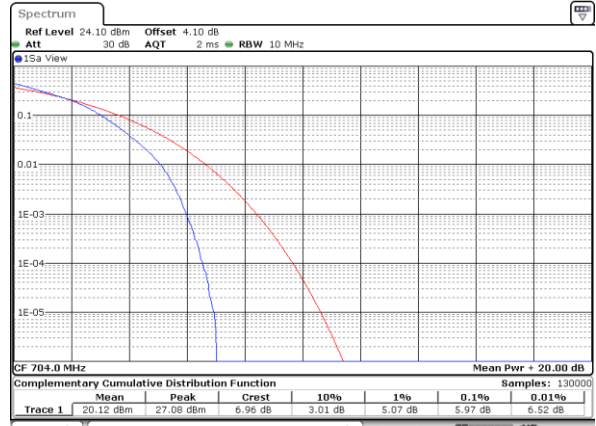
LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



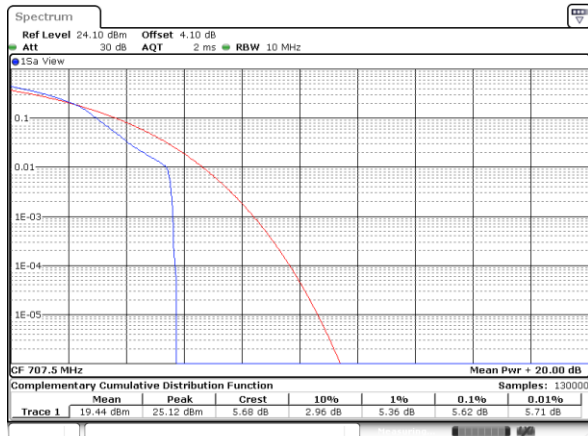
Date: 21 DEC 2018 10:23:12

Lowest Channel / Full RB



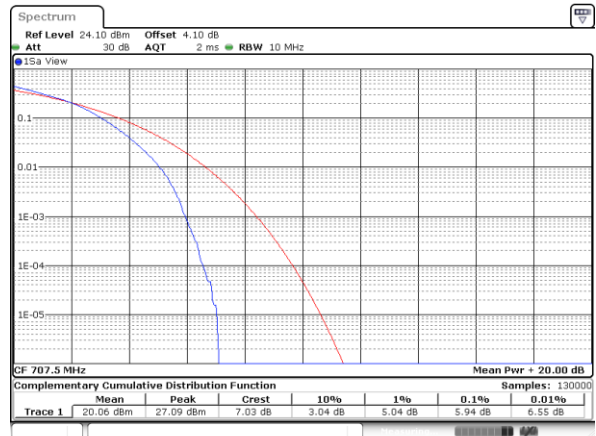
Date: 21 DEC 2018 10:23:03

Middle Channel / 1RB



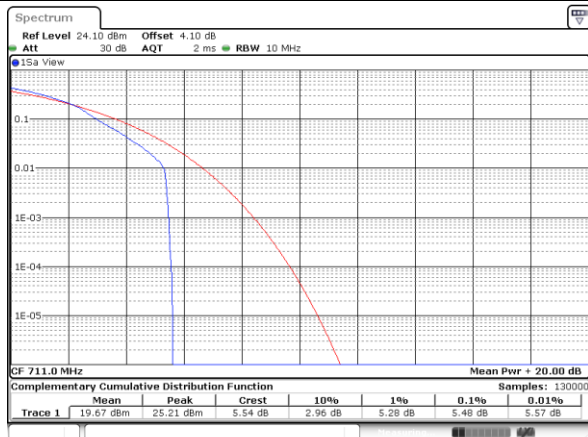
Date: 21 DEC 2018 10:23:22

Middle Channel / Full RB



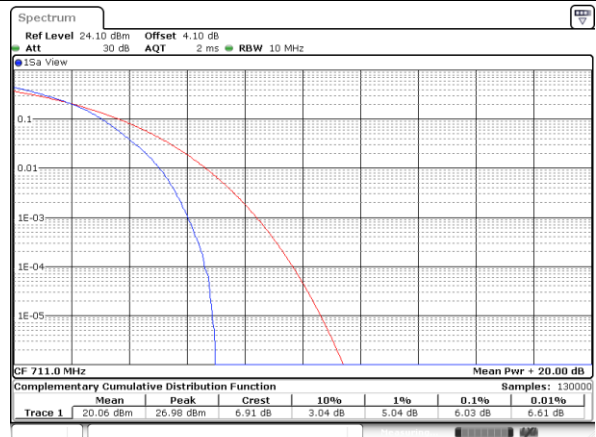
Date: 21 DEC 2018 10:23:35

Highest Channel / 1RB



Date: 21 DEC 2018 10:23:54

Highest Channel / Full RB

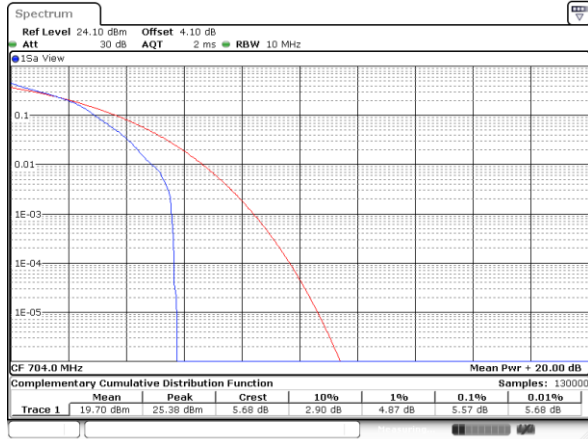


Date: 21 DEC 2018 10:23:45

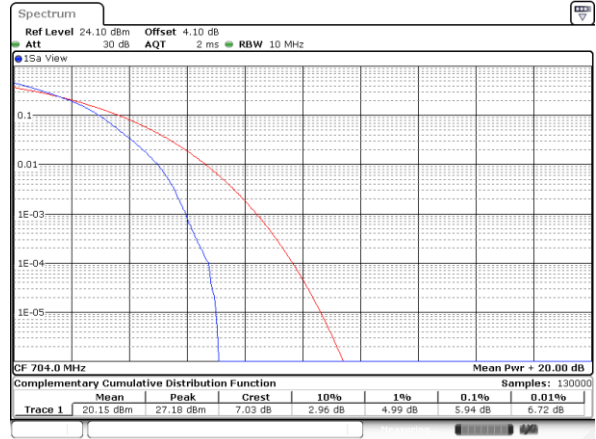


LTE Band 12 / 10MHz / 64QAM

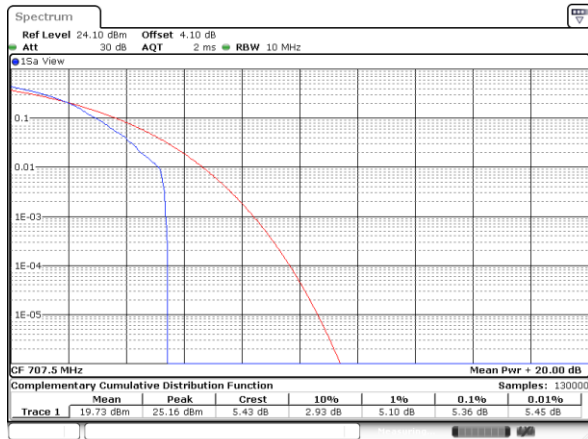
Lowest Channel / 1RB



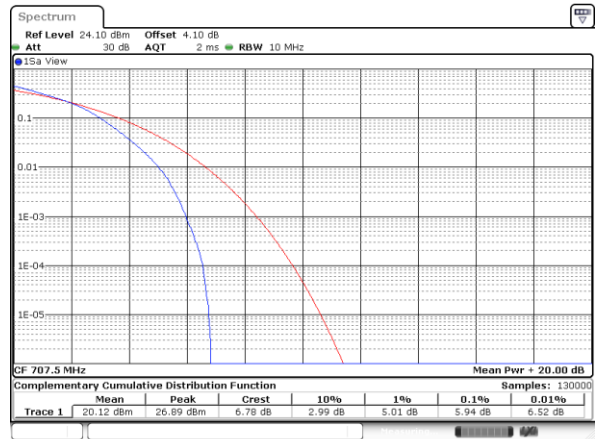
Lowest Channel / Full RB



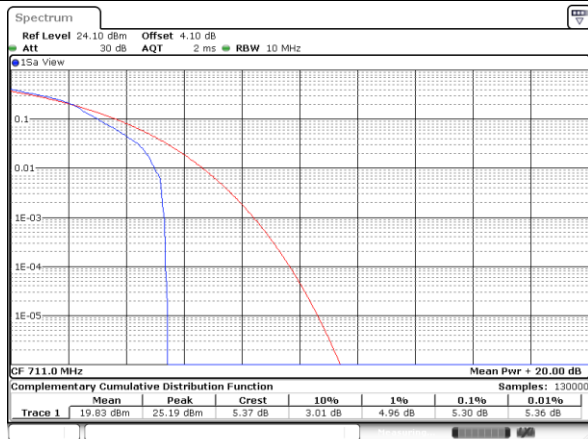
Middle Channel / 1RB



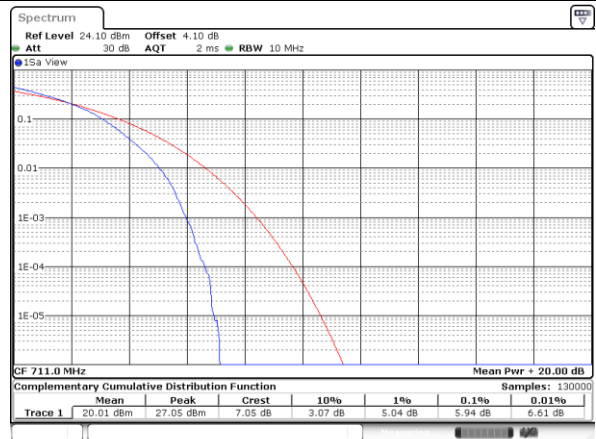
Middle Channel / Full RB



Highest Channel / 1RB



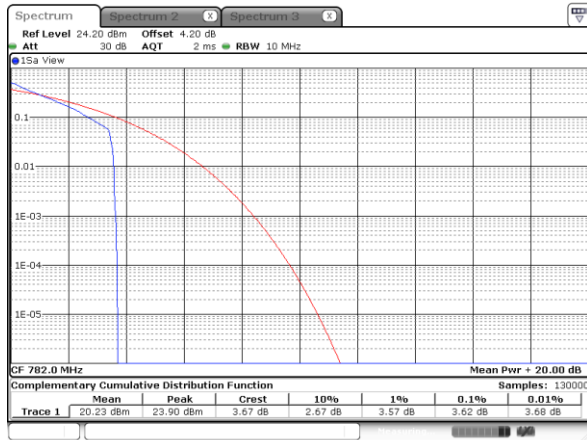
Highest Channel / Full RB





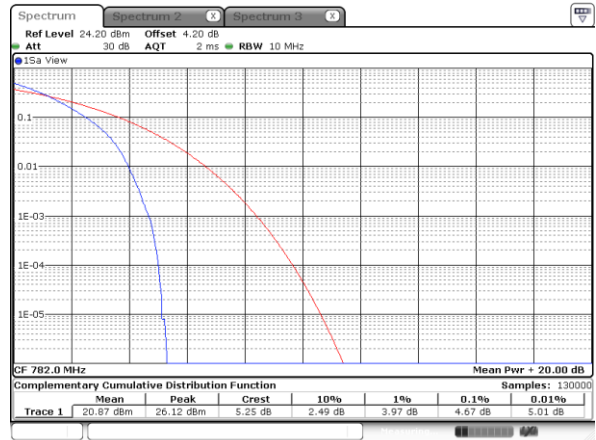
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 8 JAN 2019 17:38:58

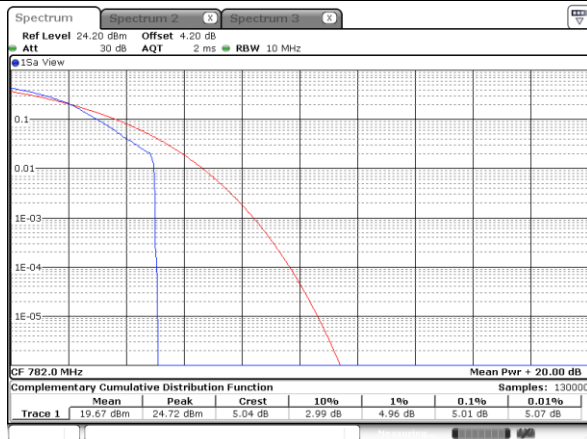
Middle Channel / Full RB



Date: 8 JAN 2019 17:39:24

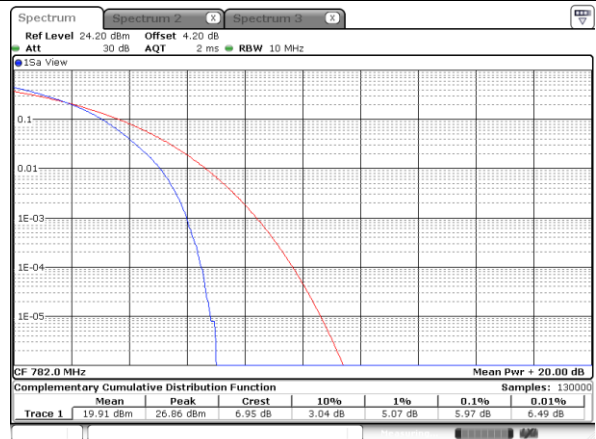
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 8 JAN 2019 17:39:06

Middle Channel / Full RB



Date: 8 JAN 2019 17:39:15

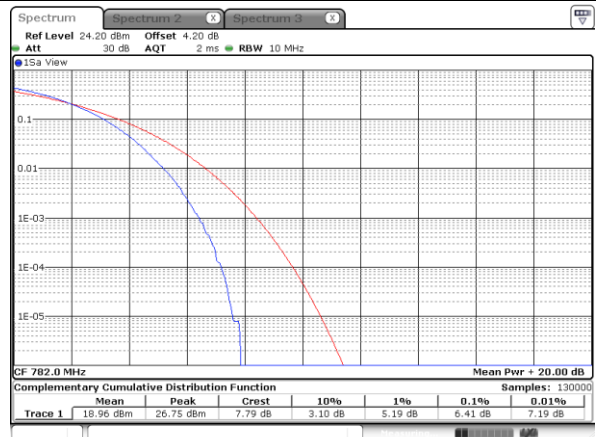
LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 8 JAN 2019 18:01:27

Middle Channel / Full RB

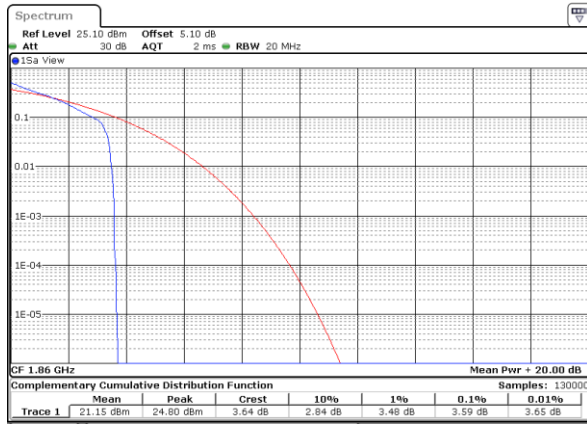


Date: 8 JAN 2019 18:01:38



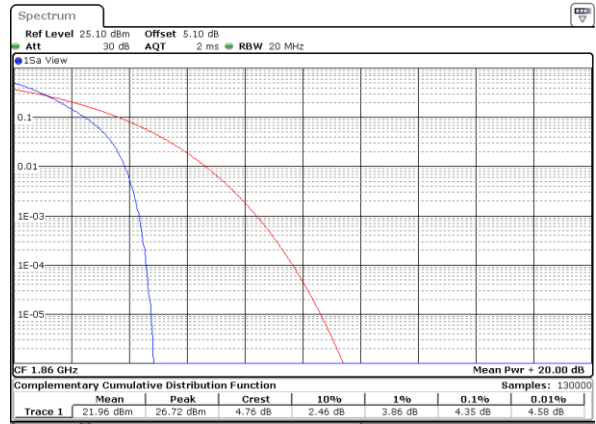
LTE Band 25 / 20MHz / QPSK

Lowest Channel / 1RB



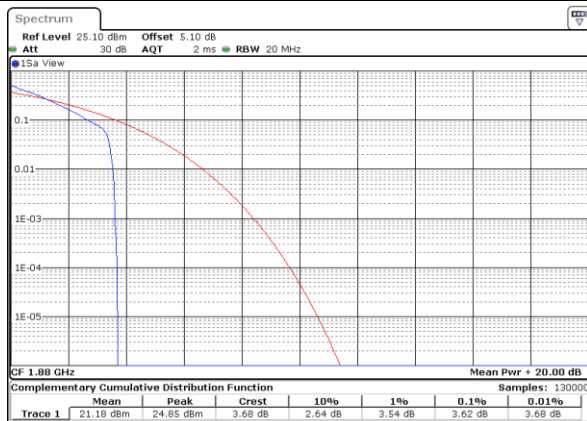
Date: 10 JAN 2019 16:45:48

Lowest Channel / Full RB



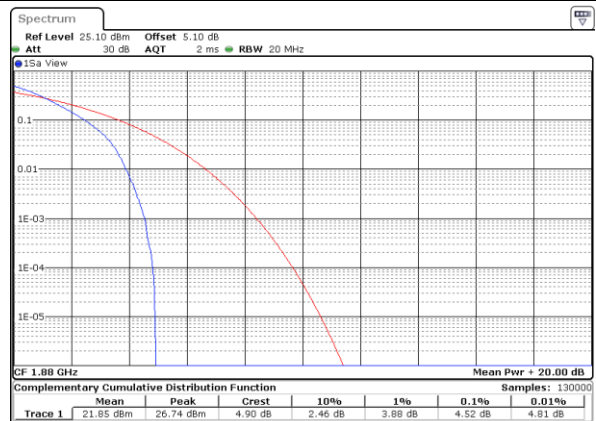
Date: 10 JAN 2019 16:46:46

Middle Channel / 1RB



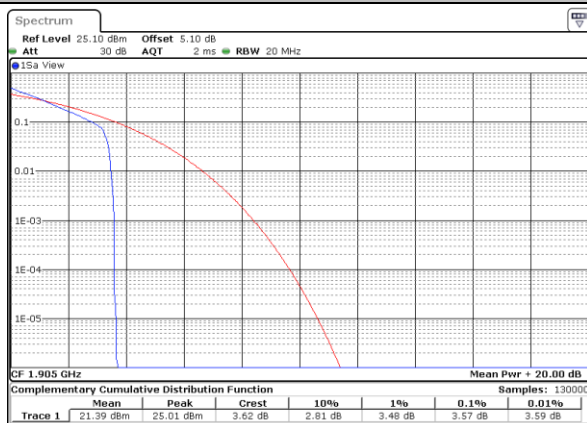
Date: 10 JAN 2019 16:47:43

Middle Channel / Full RB



Date: 10 JAN 2019 16:46:55

Highest Channel / 1RB



Date: 10 JAN 2019 16:47:53

Highest Channel / Full RB

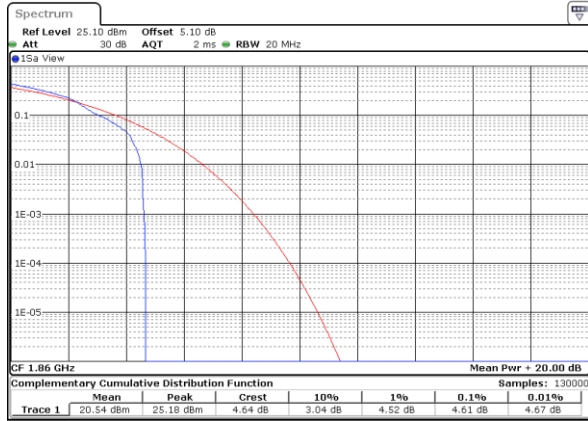


Date: 10 JAN 2019 16:50:02

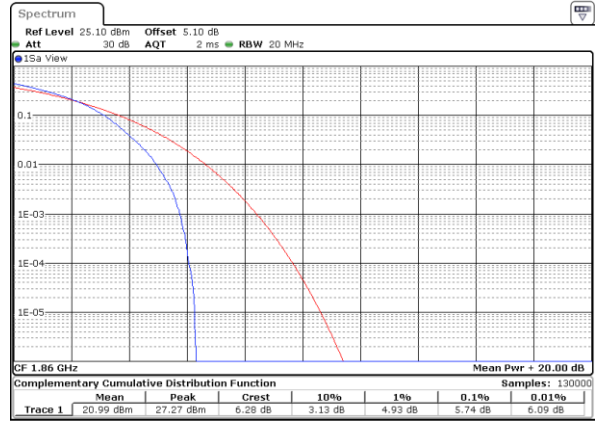


LTE Band 25 / 20MHz / 16QAM

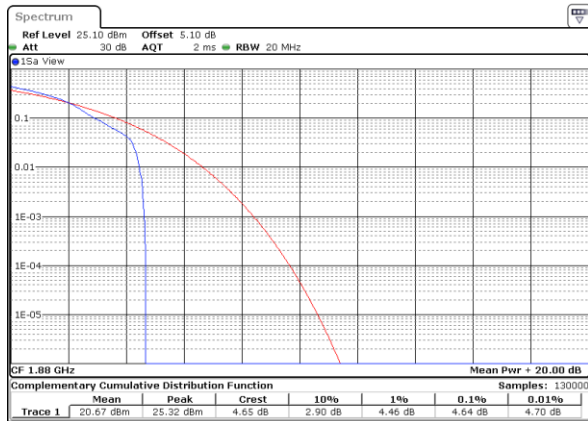
Lowest Channel / 1RB



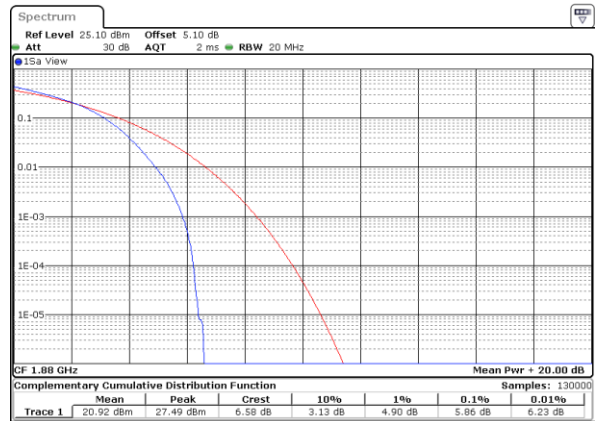
Lowest Channel / Full RB



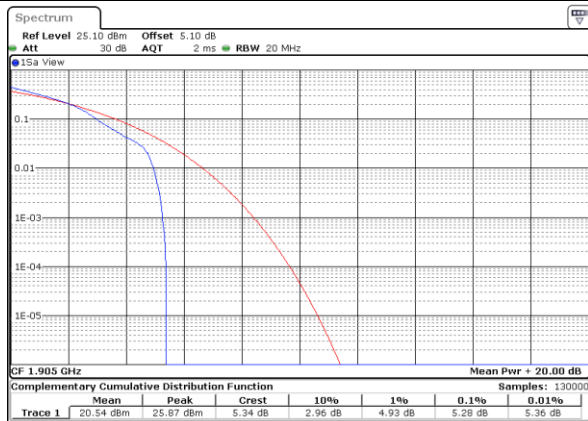
Middle Channel / 1RB



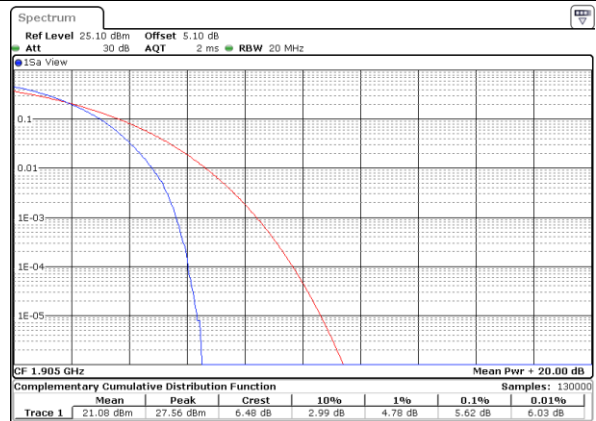
Middle Channel / Full RB



Highest Channel / 1RB



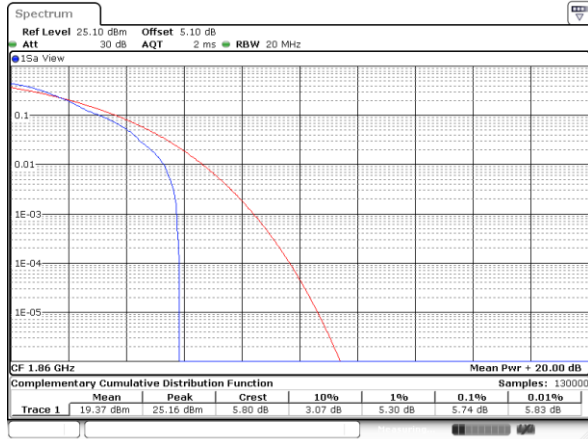
Highest Channel / Full RB





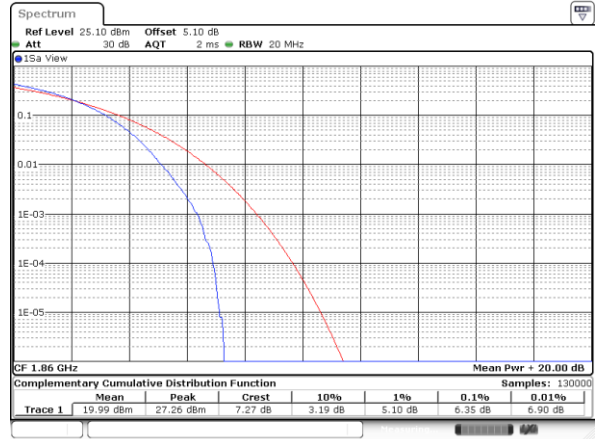
LTE Band 25 / 20MHz / 64QAM

Lowest Channel / 1RB



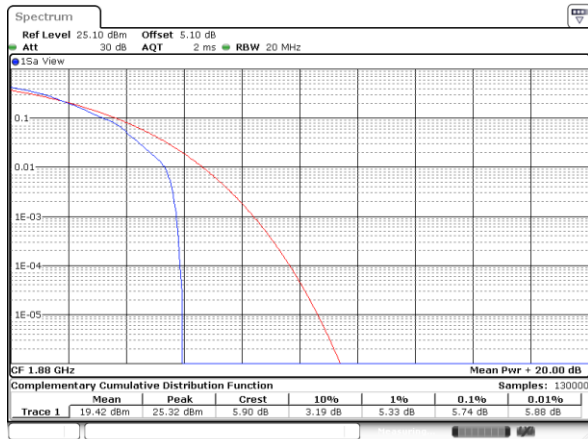
Date: 10 JAN 2019 16:46:10

Lowest Channel / Full RB



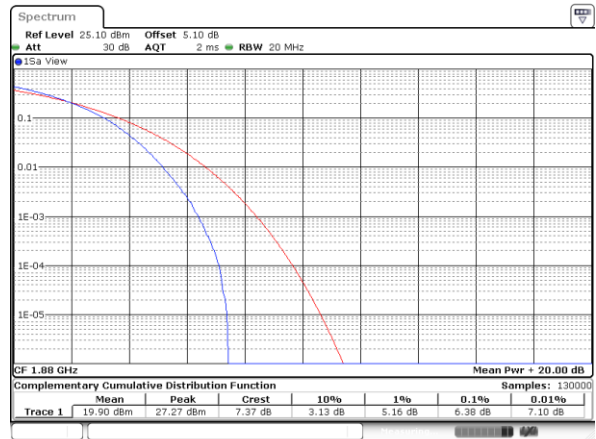
Date: 10 JAN 2019 16:46:24

Middle Channel / 1RB



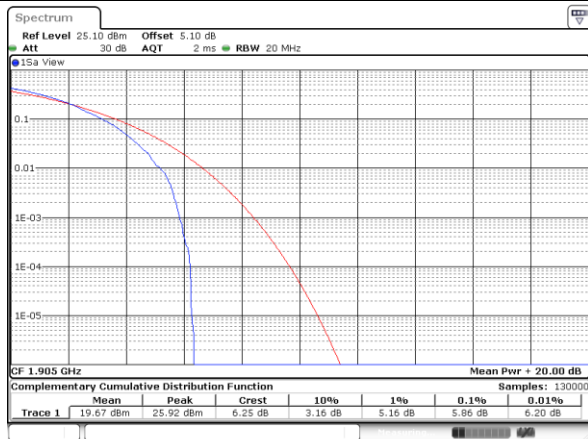
Date: 10 JAN 2019 16:47:24

Middle Channel / Full RB



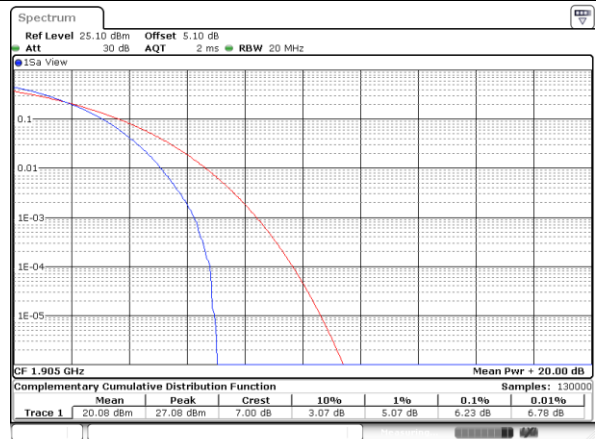
Date: 10 JAN 2019 16:47:15

Highest Channel / 1RB



Date: 10 JAN 2019 16:48:23

Highest Channel / Full RB



Date: 10 JAN 2019 16:49:41

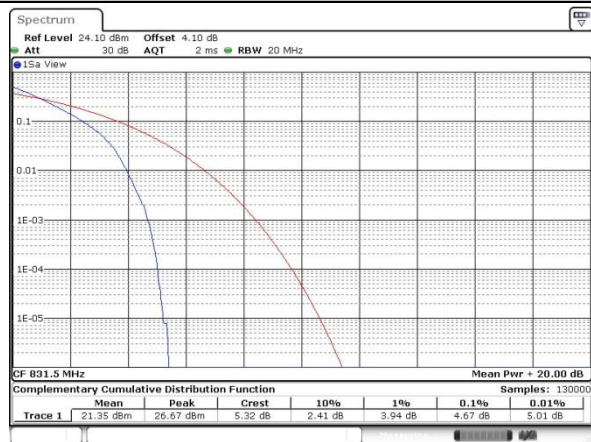


LTE Band 26 / 15MHz / QPSK

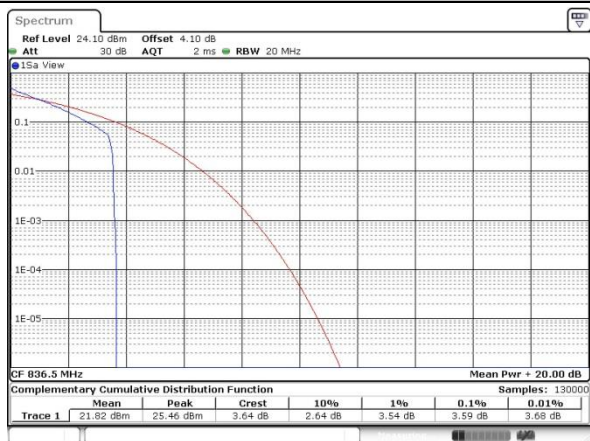
Lowest Channel / 1RB



Lowest Channel / Full RB



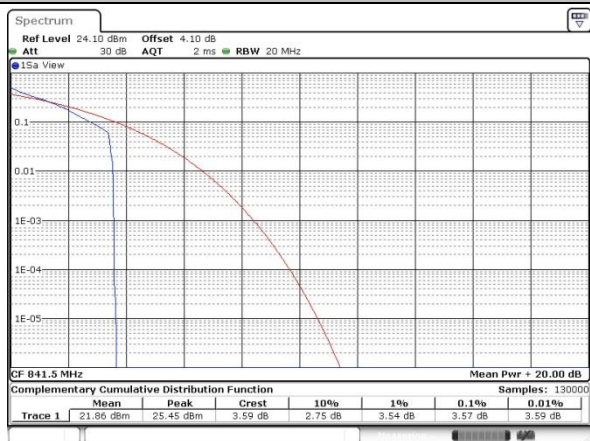
Middle Channel / 1RB



Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB

