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Report No.: TMWK2305001412KR

FCC ID: P4Q-N635RN
IC: 2420C-N635RN

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Rev.: 02

FCC/ISED TEST REPORT

For

Chrion Pro

Trade Name: Mio, MiTAC, Magellan, Teletrac Navman

Model: N635RN

Issued to

FCC: Mitac Digital Technology Corporation
4F., No. 1, R&D Road 2, Hsinchu Science Park, Hsinchu 30076 Taiwan
IC: MiTAC Digital Technology Corporation
4F., No. 1, R&D Road 2, Hsinchu Science Park, Hsinchu 30076 Taiwan

Issued by

Compliance Certification Services Inc.
Wugu Laboratory
No.11, Wugong 6th Rd., Wugu Dist.,
New Taipei City, Taiwan
Issued Date: March 13, 2024

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	January 4, 2024	Initial Issue	ALL	Allison Chen
01	January 17, 2024	See the following Note Rev.(01)	P.7-8, 11-12, 60-76	Allison Chen
02	March 13, 2024	See the following Note Rev.(01)	P.1, 4, 6, 15	Allison Chen

Note:

Rev.(01)

- 1. Modify frequency range and ERP/EIRP measurement for band 26 and band 41.

Rev.(02)

- 1. Applicant modified model name.

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1. TEST RESULT CERTIFICATION

FCC Applicant: Mitac Digital Technology Corporation
4F., No. 1, R&D Road 2, Hsinchu Science Park, Hsinchu 30076
Taiwan

IC Applicant: MiTAC Digital Technology Corporation
4F., No. 1, R&D Road 2, Hsinchu Science Park, Hsinchu 30076
Taiwan

Manufacturer: MITAC COMPUTER (KUNSHAN) CO., LTD.
No. 269, 2nd Avenue, District A, Comprehensive Free Trade
Zone, Kunshan, Jiangsu, P.R. China

Equipment Under Test: Chrion Pro

Trade Name: Mio, MiTAC, Magellan, Teletrac Navman

Model Number: N635RN

Date of Test: October 13 ~ December 15, 2023



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APPLICABLE STANDARDS	
STANDARD	TEST RESULT
FCC 47 CFR PART 22 SUBPART H FCC 47 CFR PART 24 SUBPART E FCC 47 CFR PART 27 SUBPART C, L, M .F FCC 47 CFR PART 90 SUBPART S, R FCC CFR 47 Part 2 ISED RSS-130 Issue 2 Feb. 2019 ISED RSS-132 Issue 4 Jan. 2023 ISED RSS-133 Issue 6, Amendment 1 Jan.18,2018 ISED RSS-139 Issue 4, September 29, 2022 ISED RSS-140 Issue 1 Apr. 2018 ISED RSS-199 Issue 4, July. 2023 ISED RSS-GEN Issue 5 April. 2018	Compliance
Statements of Conformity	
Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.	

We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in TIA/EIA-603-C and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of

Approved by:

Dally Hong
Sr. Engineer

2. EUT DESCRIPTION

Product	Chrion Pro
Trade Name	Mio, MiTAC, Magellan, Teletrac Navman
Model:	N635RN
Serial Number	N/A
Model Discrepancy	Difference of the those trade names (list on this report) are just for marketing purpose only.
Received Date	May 25, 2023
Power Supply	1. Powered from AC Adapter. I/P: 100-240Vac, 50-60Hz, 0.3A; O/P: Vdc,5V 2.0A 2. Powered from car charge. I/P: 12-24Vdc; O/P: 5Vdc, 2A (Max) 3. Powered from Rechargeable Li-ion Polymer Battery. Rating: 3.7VDC, 4000mAh, 14.8Wh
Antenna Specification	Antenna Type: PIFA Antenna Brand/Model: (1) Main: Auden / B31639-01 Brand/Model: (2) Aux: Auden / B31614-00 Antenna Gain Band 2: 2.92 dBi Band 4: 3.19 dBi Band 5: 1.84 dBi Band 7: 1.75 dBi Band 12: -1.58 dBi Band 13: -0.34 dBi Band 14: 0.03 dBi Band 17: -1.58 dBi Band 25: 2.92 dBi Band 26: 1.84 dBi Band 41: 1.99 dBi Band 66: 3.19 dBi Band 71: -2.35 dBi
Modulation Technique	LTE Band 2, 4, 5, 7, 12, 13, 14, 17, 25, 26, 41, 66, 71: QPSK, 16QAM

Frequency Range

LTE Band 2			
BW (MHz)	Operation Frequency (MHz)		
1.4	1850.7	-	1909.3
3	1851.5	-	1908.5
5	1852.5	-	1907.5
10	1855.0	-	1905.0
15	1857.5	-	1902.5
20	1860.0	-	1900.0

LTE Band 4			
BW (MHz)	Operation Frequency (MHz)		
1.4	1710.7	-	1754.3
3	1711.5	-	1753.5
5	1712.5	-	1752.5
10	1715.0	-	1750.0
15	1717.5	-	1747.5
20	1720.0	-	1745.0

LTE Band 5			
BW (MHz)	Operation Frequency (MHz)		
1.4	824.7	-	848.3
3	825.5	-	847.5
5	826.5	-	846.5
10	829.0	-	844.0

LTE Band 7			
BW (MHz)	Operation Frequency (MHz)		
5	2502.5	-	2567.5
10	2505.0	-	2565.0
15	2507.5	-	2562.5
20	2510.0	-	2560.0

LTE Band 12			
BW (MHz)	Operation Frequency (MHz)		
1.4	699.7	-	715.3
3	700.5	-	714.5
5	701.5	-	713.5
10	704.0	-	711.0

LTE Band 13			
BW (MHz)	Operation Frequency (MHz)		
5	779.5	-	784.5
10	782.0		

LTE Band 14			
BW (MHz)	Operation Frequency (MHz)		
5	790.5	-	795.5
10	793.0		

LTE Band 17			
BW (MHz)	Operation Frequency (MHz)		
5	706.5	-	713.5
10	709.0	-	711.0

LTE Band 25			
BW (MHz)	Operation Frequency (MHz)		
1.4	1850.7	-	1914.3
3	1851.5	-	1913.5
5	1852.5	-	1912.5
10	1855.0	-	1910.0
15	1857.5	-	1907.5
20	1860.0	-	1905.0

LTE Band 26 (FCC/IC)			
BW (MHz)	Operation Frequency (MHz)		
1.4	824.7	-	848.3
3	825.5	-	847.5
5	826.5	-	846.5
10	829.0	-	844.0
15	831.5	-	841.5

LTE Band 26 (FCC)			
BW (MHz)	Operation Frequency (MHz)		
1.4	814.7	-	823.3
3	815.5	-	822.5
5	816.5	-	821.5
10	819.0		

Frequency Range	LTE Band 41 (FCC)				LTE Band 66			
	BW (MHz)	Operation Frequency (MHz)			BW (MHz)	Operation Frequency (MHz)		
	5	2498.5	-	2687.5	1.4	1710.7	-	1779.3
	10	2501.0	-	2685.0	3	1711.5	-	1778.5
	15	2503.5	-	2682.5	5	1712.5	-	1777.5
	20	2506.0	-	2680.0	10	1715.0	-	1775.0
					15	1717.5	-	1772.5
					20	1720.0	-	1770.0
	LTE Band 41 (IC)				LTE Band 71			
	BW (MHz)	Operation Frequency (MHz)			BW (MHz)	Operation Frequency (MHz)		
	5	2502.5	-	2687.5	5	665.5	-	695.5
	10	2505.0	-	2685.0	10	688.0	-	693.0
	15	2507.5	-	2682.5	15	670.5	-	690.5
	20	2510.0	-	2680.0	20	673.0	-	688.0

Remark:

1. For more details, please refer to the User's manual of the EUT.
2. Disclaimer: Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.
3. Disclaimer: The variant model numbers / trademarks are assessed as identical in hardware and software to each other, hence all variants are fully covered by the test results in this test report without further verification test.

3. TEST METHODOLOGY

Both conducted and radiated testing were performed according to TIA -603-E, FCC CFR 47 Part 2, Part 22 Subpart H, Part 24 Subpart E, Part 27 Subpart C,L,M,F, Part 90 and ISSED RSS-130, RSS- 132, RSS-133, RSS-139, RSS-140, RSS-199, RSS-GEN, SPSR503, SPSR510 and ANSI C63.26: 2015.

Three channels had been tested for each channel bandwidth.

LTE Band 2: 1850MHz ~ 1910MHz

Channel Bandwidth	1.4MHz		3MHz		5MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	18607	1850.7	18615	1851.5	18625	1852.5
Middle CH	18900	1880.0	18900	1880.0	18900	1880.0
High CH	19193	1909.3	19185	1908.5	19175	1907.5
Channel Bandwidth	10MHz		15MHz		20MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	18650	1855.0	18675	1857.5	18700	1860.0
Middle CH	18900	1880.0	18900	1880.0	18900	1880.0
High CH	19150	1905.0	19125	1902.5	19100	1900.0

LTE Band 4: 1710MHz ~ 1755MHz

Channel Bandwidth	1.4MHz		3MHz		5MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	19957	1710.7	19965	1711.5	19975	1712.5
Middle CH	20175	1732.5	20175	1732.5	20175	1732.5
High CH	20393	1754.3	20385	1753.5	20375	1752.5
Channel Bandwidth	10MHz		15MHz		20MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	20000	1715.0	20025	1717.5	20050	1720.00
Middle CH	20175	1732.5	20175	1732.5	20175	1732.50
High CH	20350	1750.0	20325	1747.5	20300	1745.00

LTE Band 5: 824MHz ~ 849MHz

Channel Bandwidth	1.4MHz		3MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	20407	824.7	20415	825.5
Middle CH	20525	836.5	20525	836.5
High CH	20634	848.3	20635	847.5
Channel Bandwidth	5MHz		10MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	20425	826.5	20450	829.0
Middle CH	20525	836.5	20525	836.5
High CH	20625	846.5	20600	844.0

LTE Band 7: 2500 MHz ~ 2570 MHz

Channel Bandwidth	5MHz		10MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	20775	2502.5	20800	2505.0
Middle CH	21100	2535.0	21100	2535.0
High CH	21425	2567.5	21400	2565.0
Channel Bandwidth	15MHz		20MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	20825	2507.5	20850	2510.0
Middle CH	21100	2535.0	21100	2535.0
High CH	21375	2562.5	21350	2560.0

LTE Band 12: 699 MHz ~ 716 MHz

Channel Bandwidth	1.4MHz		3MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	23017	699.7	23025	700.5
Middle CH	23095	707.5	23095	707.5
High CH	23173	715.3	23165	714.5
Channel Bandwidth	5MHz		10MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	23035	701.5	23060	704
Middle CH	23095	707.5	23095	707.5
High CH	23155	713.5	23130	711

LTE Band 13: 777 MHz ~ 787 MHz

Channel	5MHz		10MHz	
	Channel	Frequency(MHz)	Channel	Frequency(MHz)
Low CH	23205	779.5	-	-
Middle CH	23230	782.0	23230	782.0
High CH	23255	784.5	-	-

LTE Band 14: 790.5 MHz ~ 795.5 MHz

Channel Bandwidth	5MHz		10MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	23305	790.5	-	-
Middle CH	23330	793.0	23330	793.0
High CH	23355	795.5	-	-

LTE Band 17: 704 MHz ~ 716 MHz

Channel Bandwidth	5MHz		10MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	23755	706.5	23780	709.0
Middle CH	23790	710.0	23790	710.0
High CH	23825	713.5	23800	711.0

LTE Band 25

Channel Bandwidth	1.4MHz		3MHz		5MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	26047	1850.7	26055	1851.5	26065	1852.5
Middle CH	26365	1882.5	26365	1882.5	26365	1882.5
High CH	26683	1914.3	26675	1913.5	26665	1912.5
Channel Bandwidth	10MHz		15MHz		20MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	26090	1855.0	26115	1857.5	26140	1860.0
Middle CH	26365	1882.5	26365	1882.5	26365	1882.5
High CH	26640	1910.0	26615	1907.5	26590	1905.0

(For FCC/IC) LTE Band 26: 824 MHz ~ 849 MHz

Channel Bandwidth	1.4MHz		3MHz		5MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	26797	824.7	26805	825.5	26815	826.5
Middle CH	26915	836.5	26915	836.5	26915	836.5
High CH	27033	848.3	27025	847.5	27015	846.5
Channel Bandwidth	10MHz		15MHz		-	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	-	-
Low CH	26840	829	26865	831.5	-	-
Middle CH	26915	836.5	26915	836.5	-	-
High CH	26990	844	26965	841.5	-	-

(For FCC) LTE Band 26: 814 MHz ~ 824 MHz

Channel Bandwidth	1.4MHz		3MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	26697	814.7	26705	815.5
Middle CH	26740	819	26740	819
High CH	26783	823.3	26775	822.5
Channel Bandwidth	5MHz		10MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	26715	816.5	-	-
Middle CH	26740	819	26740	819
High CH	26765	821.5	-	-

(For FCC) LTE Band 41: 2496MHz ~ 2690MHz

Channel Bandwidth	5MHz		10MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	39675	2498.5	39700	2501
Middle CH	40620	2593	40620	2593
High CH	41565	2687.5	41540	2685
Channel Bandwidth	15MHz		20MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	39725	2503.5	39750	2506
Middle CH	40620	2593	40620	2593
High CH	41515	2682.5	41490	2680

(For IC) LTE Band 41: 2500MHz ~ 2690MHz

Channel Bandwidth	5MHz		10MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	39715	2502.5	39740	2505
Middle CH	40620	2593	40620	2593
High CH	41565	2687.5	41540	2685
Channel Bandwidth	15MHz		20MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	39765	2507.5	39790	2510
Middle CH	40620	2593	40620	2593
High CH	41515	2682.5	41490	2680

LTE Band 66: 1710.7MHz ~ 1779.3MHz

Channel Bandwidth	1.4MHz		3MHz		5MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	131979	1710.7	131987	1711.5	131997	1712.5
Middle CH	132322	1745	132322	1745	132322	1745
High CH	132665	1779.3	132657	1778.5	132647	1777.5
Channel Bandwidth	10MHz		15MHz		20MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	132022	1715	132047	1717.5	132072	1720
Middle CH	132322	1745	132322	1745	132322	1745
High CH	132622	1775	132597	1772.5	132572	1770

LTE Band 71:

Channel Bandwidth	5MHz		10MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	133147	665.5	133172	668
Middle CH	133297	680.5	133297	680.5
High CH	133447	695.5	133422	693
Channel Bandwidth	15MHz		20MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	133197	670.5	133222	673
Middle CH	133297	680.5	133297	680.5
High CH	133397	690.5	133372	688

3.1 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

3.2 EUT EXERCISE

1. The transmitter output power was connected to the call box.
2. Set EUT at maximum output power via call box.
3. Set Call box at lowest, middle and highest channels for each band and modulation.

3.3 GENERAL TEST PROCEDURES

Conducted Emissions

According to the requirements in ANSI C63.26: 2015. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in ANSI C63.26: 2015.

3.4 DESCRIPTION OF TEST MODES

Connect the EUT (model: N635RN) to the call box, set the EUT to the maximum output power through the call box, and set the call box to the lowest, middle, and highest channels of each frequency band and modulation.

3.4.1 The worst mode of measurement

Radiated Emission Measurement Above 1G	
Test Condition	Radiated Emission Above 1G
Power supply Mode	Mode 1: EUT power by Adapter without Cradle
Worst Mode	☒ Mode 1 ☐ Mode 2 ☐ Mode 3 ☐ Mode 4
Worst Position	☐ Placed in fixed position. ☒ Placed in fixed position at X-Plane (E2-Plane) ☐ Placed in fixed position at Y-Plane (E1-Plane) ☐ Placed in fixed position at Z-Plane (H-Plane)

Radiated Emission Measurement Below 1G	
Test Condition	Radiated Emission Below 1G
Power supply Mode	Mode 1: EUT power by Adapter without Cradle Mode 2: EUT power by N635_V+CarCharger Mode 3: EUT power by N564_TN+CarCharger Mode 4: EUT power by N635_V+Adapter Mode 5: EUT power by N564_TN+Adapter
Worst Mode	☒ Mode 1 ☐ Mode 2 ☐ Mode 3 ☐ Mode 4

Remark:

1. The worst mode was record in this test report.
2. EUT pre-scanned in three axis ,X,Y, Z and two polarity, for radiated measurement. The worst case(X-Plane) were recorded in this report

4. TEST SUMMARY

FCC Standard Sec.	IC Standard Sec.	Report Section	Test Item	Result
-	-	2	Antenna Requirement	Pass
§2.1046 22.913(a), 24.232(c) 27.50(b) 27.50(c) 27.50(d) 27.50(h) 90.635(b) 90.542(a)(7)	RSS-130, section 4.6 RSS-132, section 5.4 RSS-133, section 6.4 RSS-139, section 5.5 RSS-140, section 4.3 RSS-199, section 5.5	8.1	ERP and EIRP Measurement	Pass
§2.1055, 22.355, 24.235, 27.54 90.213 90.539 (e)	RSS-130 section 4.5 RSS-132 section 5.3 RSS-133 section 6.3 RSS-139, section 5.4 RSS-140, section 4.2 RSS-199, section 5.4	8.2	Frequency Stability v.s. temperature measurement	Pass
§2.1049	RSS-GEN 6.7	8.3	Occupied Bandwidth Measurement	Pass
§2.1046 22.913(d) 24.232(d) 27.50(a) 27.50(d) 90.691	RSS-130 section 4.6.1 RSS-132 section 5.4 RSS-133 section 6.4 RSS-139, section 5.5 RSS-140 section 4.3 RSS-199, section 5.5	8.4	Peak to Average Ratio	Pass
§2.1051 22.917(a), 24.238(a) 27.53(c) 27.53(h) 27.53(g) 27.53(m) 90.543 90.691	RSS-GEN 6.13 RSS-130 section 4.7 RSS-132 section 5.5 RSS-133 section 6.5 RSS-139 section 5.6 RSS-140 section 4.4 RSS-199, section 5.6	8.5	Out of Band Emission at Antenna Terminals	Pass
§2.1051 22.917(a), 24.238(a) 27.53(c) 27.53(h) 27.53(g) 27.53(m) 90.543 90.691	RSS-GEN 6.13 RSS-130 section 4.7 RSS-132 section 5.5 RSS-133 section 6.5 RSS-139 section 5.6 RSS-140 section 4.4 RSS-199, section 5.6	8.6	Spurious Radiation Measurement	Pass

5. INSTRUMENT CALIBRATION

5.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

5.2 MEASUREMENT EQUIPMENT USED

Equipment Used for Emissions Measurement

Remark: Each piece of equipment is scheduled for calibration once a year and Loop Antenna is scheduled for calibration once three years.

Conducted_FCC/IC/NCC (WWAN)					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
EXA Signal Analyzer	Keysight	N9010B	MY60242460	2023-02-02	2024-02-01
Radio Communication Analyzer	Rohde & Schwarz	CMW500	116875	2023-06-08	2024-06-07
Cable	Woken	SUMITOMO	1	2023-03-02	2024-03-01
Software	Radio Test Software Ver. 21				

966A_Radiated WWAN					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Loop Antenna	COM-POWER	AL-130	121051	2023-05-23	2024-05-22
Preamplifier	EMEC	EM330	060609	2023-02-22	2024-02-21
Thermo-Hygro Meter	WISEWIND	1206	D07	2022-12-19	2023-12-18
Signal Analyzer	KEYSIGHT	N9010A	MY54200716	2023-10-13	2024-10-12
Preamplifier	HP	8449B	3008A00965	2022-12-23	2023-12-22
Bi-Log Antenna	Sunol Sciences	JB1	A052609	2023-02-09	2024-02-08
Bi-Log Antenna	Sunol Sciences	JB3	A030105	2023-08-08	2024-08-07
Cable	Huber+Suhner	104PEA	20995+21000+182330	2023-02-22	2024-02-21
Cable	EMCI	EMC101G	221213+221011+221012	2023-10-17	2024-10-16
Cable	EMCI	EMC104G	SN230204	2023-05-13	2024-05-12
Horn Antenna	ETS LINDGREN	3117	55165	2023-07-12	2024-07-11
Horn Antenna	ETC	MCTD 1209	DRH13M02003	2023-01-12	2024-01-11
Horn Antenna	SCHWARZBECK	BBHA9170	1047	2022-12-30	2023-12-29
Pre-Amplifier	EMCI	EMC184045SE	980860	2022-12-27	2023-12-26
Signal Generator	Agilent	E8257C	US42340383	2023-06-17	2024-06-16
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
Software	e3 V9-210616c				

5.3 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
RF Output Power	± 2.533 dB
Channel Bandwidth	± 2.532 MHz
Peak to average ratio	± 2.531 dB
Conducted Bandedge	± 2.532 dB
Conducted Unwanted Emissions	± 2.533 dB
Frequency Stability	± 2.579 Hz
Radiated Emission_9kHz-30MHz	± 3.778 dB
Radiated Emission_30MHz-200MHz	± 3.457 dB
Radiated Emission_200MHz-1GHz	± 3.962 dB
Radiated Emission_1GHz-6GHz	± 4.804 dB
Radiated Emission_6GHz-18GHz	± 4.781 dB
Radiated Emission_18GHz-26GHz	± 3.112 dB
Radiated Emission_26GHz-40GHz	± 3.314 dB

Remark: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.



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6. FACILITIES AND ACCREDITATIONS

6.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

- ☒ No.11, Wugong 6th Rd., Wugu Dist., New Taipei City, Taiwan.
Tel: 886-2-2299-9720 / Fax: 886-2-2299-9721

7. SETUP OF EQUIPMENT UNDER TEST

7.1 SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix II for the actual connections between EUT and support equipment.

7.2 SUPPORT EQUIPMENT

Conducted_Sup_Units(WWAN)					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Cable	SP	Type C Cable	N/A	N/A	N/A

Support Unit List					
NO	Kind	Brand	Model	Core	Length
1	NB(D)	Lenovo	ThinkPad X260	N/A	N/A
A	Adapter	TPT	MSS050200BI	NA	NA
B	TypeA to TypeC	N/A	N/A	N/A	N/A

Remark:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

8. TEST PROCEDURE AND RESULT

8.1 ERP & EIRP MEASUREMENT

LIMIT

According to FCC §2.1046

FCC 22.913(a), LTE Band 5

(5) mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

FCC 22.913(b), LTE Band 26

The Effective Radiated Power (ERP) of mobile transmitters must not exceed 7 Watts.

FCC 24.232(c), LTE Band 2, 25

Mobile and portable stations are limited to 2 W EIRP.

FCC 27.50 (b), LTE Band 13

(9) Control stations and mobile stations transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 30 watts ERP.

FCC 27.50(c), LTE Band 12, 17, 71

(9) Control and mobile stations in the 698-746 MHz band are limited to 30 watts ERP.

FCC 27.50(d), LTE Band 4, 66

(4) Mobile, and portable (hand-held) stations operating in the 1710-1755 MHz, 1695-1710 MHz and 1755-1780 MHz bands are limited to 1W EIRP.

(10) Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

FCC 27, 50(h), LTE Band 7, 41

(2) Mobile and other user stations transmitting in the BRS and EBS bands are limited to 2 W EIRP.

FCC 90.542(a), LTE Band 14

(6) Control stations and mobile stations transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 30 watts ERP.

FCC 90.635(b), LTE Band 26

The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw).

RSS-130 §4.6, LTE Band 12, 13, 17, 71

The e.r.p. shall not exceed 3 watts for mobile equipment, fixed subscriber equipment and portable equipment operating in the Band 617-652 and 663-698MHz.

The e.r.p. shall not exceed 3 watts for portable equipment and indoor fixed subscriber equipment operating in 698-756 and 777-787 MHz.

RSS-132 §5.4, LTE Band 5, 26

824-849 MHz and 869-894 MHz The transmitter output power shall be measured in terms of average power. The equivalent radiated power (e.r.p.) shall not exceed 7 watts for mobile equipment and 3 watts for portable equipment.

RSS-133 §6.4, LTE Band 2, 25

The equivalent isotropically radiated power (e.i.r.p.) for transmitters shall not exceed the limits given in SRSP-510.

According to section 5.1.2 of SRSP-510, Mobile stations and hand-held portables are limited to 2 watts maximum e.i.r.p. The equipment shall employ means to limit the power to the minimum necessary for successful communication.

RSS-139 §5.5, LTE Band 4, 66

1710-1780 MHz and 2110-2180 MHz user equipment maximum power is 30 dBm e.i.r.p./channel bandwidth

RSS-140 §4.3, LTE Band 14

The equivalent radiated power (e.r.p.) for control and mobile equipment shall not exceed 30 W. The e.r.p. for portable equipment including handheld devices shall not exceed 3 W.

RSS-199 §4.4, LTE Band 7, 41

For mobile subscriber equipment operating in the Band 2500-2690MHz, the e.i.r.p. shall not exceed 2 W.



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TEST PROCEDURES

CONDUCTED POWER MEASUREMENT:

1. The transmitter output power was connected to the call box.
2. Set EUT at maximum output power via call box.
3. Set Call box at lowest, middle and highest channels for each band and modulation.

TEST RESULTS

Compliance.

Temperature: 21.6~25.6°C

Test date: October 13~December 15, 2023

Humidity: 50~62% RH

Tested by: Allen Shen

LTE Band 2

Antenna gain (dBi)		2.92							
LTE Band 2_Uplink frequency band : 1850 to 1910 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	18607	1850.7	QPSK	1	0	22.62	25.54	33	-7.46
				1	5	22.40	25.32	33	-7.68
				3	2	22.29	25.21	33	-7.79
				6	0	21.44	24.36	33	-8.64
	18900	1880	QPSK	1	0	22.42	25.34	33	-7.66
				1	5	22.44	25.36	33	-7.64
				3	2	22.53	25.45	33	-7.55
				6	0	21.40	24.32	33	-8.68
	19193	1909.3	QPSK	1	0	22.27	25.19	33	-7.81
				1	5	22.19	25.11	33	-7.89
				3	2	22.37	25.29	33	-7.71
				6	0	21.26	24.18	33	-8.82
1.4	18607	1850.7	16QAM	1	0	21.63	24.55	33	-8.45
				1	5	21.47	24.39	33	-8.61
				3	2	21.61	24.53	33	-8.47
				6	0	20.38	23.30	33	-9.7
	18900	1880	16QAM	1	0	21.64	24.56	33	-8.44
				1	5	21.54	24.46	33	-8.54
				3	2	21.64	24.56	33	-8.44
				6	0	20.56	23.48	33	-9.52
	19193	1909.3	16QAM	1	0	21.16	24.08	33	-8.92
				1	5	21.32	24.24	33	-8.76
				3	2	21.41	24.33	33	-8.67
				6	0	20.35	23.27	33	-9.73
1.4	18607	1850.7	64QAM	1	0	21.67	24.59	33	-8.41
				1	5	21.61	24.53	33	-8.47
				3	2	21.68	24.60	33	-8.4
				6	0	20.54	23.46	33	-9.54
	18900	1880	64QAM	1	0	21.39	24.31	33	-8.69
				1	5	21.58	24.50	33	-8.5
				3	2	21.50	24.42	33	-8.58
				6	0	20.50	23.42	33	-9.58
	19193	1909.3	64QAM	1	0	21.33	24.25	33	-8.75
				1	5	21.36	24.28	33	-8.72
				3	2	21.35	24.27	33	-8.73
				6	0	20.28	23.20	33	-9.8

Antenna gain (dBi)		2.92							
LTE Band 2_Uplink frequency band : 1850 to 1910 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3	18615	1851.5	QPSK	1	0	22.65	25.57	33	-7.43
				1	14	22.45	25.37	33	-7.63
				8	4	21.58	24.50	33	-8.5
				15	0	21.56	24.48	33	-8.52
	18900	1880	QPSK	1	0	22.44	25.36	33	-7.64
				1	14	22.49	25.41	33	-7.59
				8	4	21.52	24.44	33	-8.56
				15	0	21.51	24.43	33	-8.57
	19185	1908.5	QPSK	1	0	22.41	25.33	33	-7.67
				1	14	22.28	25.20	33	-7.8
				8	4	21.24	24.16	33	-8.84
				15	0	21.22	24.14	33	-8.86
3	18615	1851.5	16QAM	1	0	21.85	24.77	33	-8.23
				1	14	21.59	24.51	33	-8.49
				8	4	20.67	23.59	33	-9.41
				15	0	20.60	23.52	33	-9.48
	18900	1880	16QAM	1	0	21.58	24.50	33	-8.5
				1	14	21.54	24.46	33	-8.54
				8	4	20.64	23.56	33	-9.44
				15	0	20.49	23.41	33	-9.59
	19185	1908.5	16QAM	1	0	21.42	24.34	33	-8.66
				1	14	21.30	24.22	33	-8.78
				8	4	20.36	23.28	33	-9.72
				15	0	20.28	23.20	33	-9.8
3	18615	1851.5	64QAM	1	0	21.79	24.71	33	-8.29
				1	14	21.53	24.45	33	-8.55
				8	4	20.54	23.46	33	-9.54
				15	0	20.60	23.52	33	-9.48
	18900	1880	64QAM	1	0	21.64	24.56	33	-8.44
				1	14	21.68	24.60	33	-8.4
				8	4	20.48	23.40	33	-9.6
				15	0	20.45	23.37	33	-9.63
	19185	1908.5	64QAM	1	0	21.29	24.21	33	-8.79
				1	14	21.51	24.43	33	-8.57
				8	4	20.32	23.24	33	-9.76
				15	0	20.26	23.18	33	-9.82

Antenna gain (dBi)		2.92							
LTE Band 2_Uplink frequency band : 1850 to 1910 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	18625	1852.5	QPSK	1	0	22.76	25.68	33	-7.32
				1	24	22.46	25.38	33	-7.62
				12	6	21.47	24.39	33	-8.61
				25	0	21.62	24.54	33	-8.46
	18900	1880	QPSK	1	0	22.62	25.54	33	-7.46
				1	24	22.41	25.33	33	-7.67
				12	6	21.57	24.49	33	-8.51
				25	0	21.49	24.41	33	-8.59
	19175	1907.5	QPSK	1	0	22.43	25.35	33	-7.65
				1	24	22.29	25.21	33	-7.79
				12	6	21.35	24.27	33	-8.73
				25	0	21.31	24.23	33	-8.77
5	18625	1852.5	16QAM	1	0	22.00	24.92	33	-8.08
				1	24	21.58	24.50	33	-8.5
				12	6	20.52	23.44	33	-9.56
				25	0	20.66	23.58	33	-9.42
	18900	1880	16QAM	1	0	21.87	24.79	33	-8.21
				1	24	21.52	24.44	33	-8.56
				12	6	20.64	23.56	33	-9.44
				25	0	20.46	23.38	33	-9.62
	19175	1907.5	16QAM	1	0	21.84	24.76	33	-8.24
				1	24	21.48	24.40	33	-8.6
				12	6	20.41	23.33	33	-9.67
				25	0	20.25	23.17	33	-9.83
5	18625	1852.5	64QAM	1	0	21.91	24.83	33	-8.17
				1	24	21.70	24.62	33	-8.38
				12	6	20.50	23.42	33	-9.58
				25	0	20.65	23.57	33	-9.43
	18900	1880	64QAM	1	0	21.66	24.58	33	-8.42
				1	24	21.60	24.52	33	-8.48
				12	6	20.62	23.54	33	-9.46
				25	0	20.57	23.49	33	-9.51
	19175	1907.5	64QAM	1	0	21.41	24.33	33	-8.67
				1	24	21.47	24.39	33	-8.61
				12	6	20.39	23.31	33	-9.69
				25	0	20.25	23.17	33	-9.83

Antenna gain (dBi)		2.92							
LTE Band 2_Uplink frequency band : 1850 to 1910 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	18650	1855	QPSK	1	0	22.77	25.69	33	-7.31
				1	49	22.77	25.69	33	-7.31
				25	12	21.59	24.51	33	-8.49
				50	0	21.59	24.51	33	-8.49
	18900	1880	QPSK	1	0	22.70	25.62	33	-7.38
				1	49	22.63	25.55	33	-7.45
				25	12	21.58	24.50	33	-8.5
				50	0	21.57	24.49	33	-8.51
	19150	1905	QPSK	1	0	22.66	25.58	33	-7.42
				1	49	22.55	25.47	33	-7.53
				25	12	21.42	24.34	33	-8.66
				50	0	21.45	24.37	33	-8.63
10	18650	1855	16QAM	1	0	22.19	25.11	33	-7.89
				1	49	22.02	24.94	33	-8.06
				25	12	20.51	23.43	33	-9.57
				50	0	20.61	23.53	33	-9.47
	18900	1880	16QAM	1	0	21.94	24.86	33	-8.14
				1	49	22.02	24.94	33	-8.06
				25	12	20.52	23.44	33	-9.56
				50	0	20.52	23.44	33	-9.56
	19150	1905	16QAM	1	0	21.98	24.90	33	-8.1
				1	49	22.00	24.92	33	-8.08
				25	12	20.47	23.39	33	-9.61
				50	0	20.41	23.33	33	-9.67
10	18650	1855	64QAM	1	0	22.05	24.97	33	-8.03
				1	49	22.02	24.94	33	-8.06
				25	12	20.60	23.52	33	-9.48
				50	0	20.58	23.50	33	-9.5
	18900	1880	64QAM	1	0	21.86	24.78	33	-8.22
				1	49	22.06	24.98	33	-8.02
				25	12	20.59	23.51	33	-9.49
				50	0	20.62	23.54	33	-9.46
	19150	1905	64QAM	1	0	21.82	24.74	33	-8.26
				1	49	21.87	24.79	33	-8.21
				25	12	20.46	23.38	33	-9.62
				50	0	20.39	23.31	33	-9.69

Antenna gain (dBi)		2.92							
LTE Band 2_Uplink frequency band : 1850 to 1910 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15	18675	1857.5	QPSK	1	0	22.82	25.74	33	-7.26
				1	74	22.91	25.83	33	-7.17
				36	18	21.37	24.29	33	-8.71
				75	0	21.57	24.49	33	-8.51
	18900	1880	QPSK	1	0	22.69	25.61	33	-7.39
				1	74	22.71	25.63	33	-7.37
				36	18	21.34	24.26	33	-8.74
				75	0	21.38	24.30	33	-8.7
	19125	1902.5	QPSK	1	0	22.56	25.48	33	-7.52
				1	74	22.35	25.27	33	-7.73
				36	18	21.22	24.14	33	-8.86
				75	0	21.22	24.14	33	-8.86
15	18675	1857.5	16QAM	1	0	22.20	25.12	33	-7.88
				1	74	22.20	25.12	33	-7.88
				36	18	20.42	23.34	33	-9.66
				75	0	20.51	23.43	33	-9.57
	18900	1880	16QAM	1	0	22.01	24.93	33	-8.07
				1	74	22.07	24.99	33	-8.01
				36	18	20.40	23.32	33	-9.68
				75	0	20.43	23.35	33	-9.65
	19125	1902.5	16QAM	1	0	21.95	24.87	33	-8.13
				1	74	22.05	24.97	33	-8.03
				36	18	20.25	23.17	33	-9.83
				75	0	20.31	23.23	33	-9.77
15	18675	1857.5	64QAM	1	0	22.16	25.08	33	-7.92
				1	74	22.03	24.95	33	-8.05
				36	18	20.47	23.39	33	-9.61
				75	0	20.51	23.43	33	-9.57
	18900	1880	64QAM	1	0	21.85	24.77	33	-8.23
				1	74	21.76	24.68	33	-8.32
				36	18	20.39	23.31	33	-9.69
				75	0	20.40	23.32	33	-9.68
	19125	1902.5	64QAM	1	0	21.76	24.68	33	-8.32
				1	74	21.82	24.74	33	-8.26
				36	18	20.25	23.17	33	-9.83
				75	0	20.29	23.21	33	-9.79

Antenna gain (dBi)		2.92							
LTE Band 2_Uplink frequency band : 1850 to 1910 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20	18700	1860	QPSK	1	0	22.80	25.72	33	-7.28
				1	99	22.62	25.54	33	-7.46
				50	25	21.42	24.34	33	-8.66
				100	0	21.55	24.47	33	-8.53
	18900	1880	QPSK	1	0	22.57	25.49	33	-7.51
				1	99	22.52	25.44	33	-7.56
				50	25	21.35	24.27	33	-8.73
				100	0	21.50	24.42	33	-8.58
	19100	1900	QPSK	1	0	22.65	25.57	33	-7.43
				1	99	22.43	25.35	33	-7.65
				50	25	21.33	24.25	33	-8.75
				100	0	21.39	24.31	33	-8.69
20	18700	1860	16QAM	1	0	22.12	25.04	33	-7.96
				1	99	21.98	24.90	33	-8.1
				50	25	20.45	23.37	33	-9.63
				100	0	20.44	23.36	33	-9.64
	18900	1880	16QAM	1	0	21.99	24.91	33	-8.09
				1	99	21.87	24.79	33	-8.21
				50	25	20.42	23.34	33	-9.66
				100	0	20.33	23.25	33	-9.75
	19100	1900	16QAM	1	0	21.94	24.86	33	-8.14
				1	99	21.79	24.71	33	-8.29
				50	25	20.39	23.31	33	-9.69
				100	0	20.37	23.29	33	-9.71
20	18700	1860	64QAM	1	0	21.99	24.91	33	-8.09
				1	99	21.83	24.75	33	-8.25
				50	25	20.43	23.35	33	-9.65
				100	0	20.44	23.36	33	-9.64
	18900	1880	64QAM	1	0	21.74	24.66	33	-8.34
				1	99	21.79	24.71	33	-8.29
				50	25	20.41	23.33	33	-9.67
				100	0	20.33	23.25	33	-9.75
	19100	1900	64QAM	1	0	21.87	24.79	33	-8.21
				1	99	21.65	24.57	33	-8.43
				50	25	20.28	23.20	33	-9.8
				100	0	20.26	23.18	33	-9.82

LTE Band 4

Antenna gain (dBi)		3.19							
LTE Band 4_Uplink frequency band : 1710 to 1755 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	19957	1710.7	QPSK	1	0	21.95	25.14	30	-4.86
				1	5	21.92	25.11	30	-4.89
				3	2	22.09	25.28	30	-4.72
				6	0	20.87	24.06	30	-5.94
	20175	1732.5	QPSK	1	0	22.23	25.42	30	-4.58
				1	5	22.28	25.47	30	-4.53
				3	2	22.38	25.57	30	-4.43
				6	0	21.22	24.41	30	-5.59
	20393	1754.3	QPSK	1	0	22.43	25.62	30	-4.38
				1	5	22.44	25.63	30	-4.37
				3	2	22.43	25.62	30	-4.38
				6	0	21.51	24.70	30	-5.3
1.4	19957	1710.7	16QAM	1	0	21.10	24.29	30	-5.71
				1	5	20.92	24.11	30	-5.89
				3	2	21.12	24.31	30	-5.69
				6	0	20.10	23.29	30	-6.71
	20175	1732.5	16QAM	1	0	21.27	24.46	30	-5.54
				1	5	21.43	24.62	30	-5.38
				3	2	21.42	24.61	30	-5.39
				6	0	20.14	23.33	30	-6.67
	20393	1754.3	16QAM	1	0	21.56	24.75	30	-5.25
				1	5	21.61	24.80	30	-5.2
				3	2	21.60	24.79	30	-5.21
				6	0	20.56	23.75	30	-6.25
1.4	19957	1710.7	64QAM	1	0	21.10	24.29	30	-5.71
				1	5	21.09	24.28	30	-5.72
				3	2	21.19	24.38	30	-5.62
				6	0	20.00	23.19	30	-6.81
	20175	1732.5	64QAM	1	0	21.26	24.45	30	-5.55
				1	5	21.25	24.44	30	-5.56
				3	2	21.38	24.57	30	-5.43
				6	0	20.19	23.38	30	-6.62
	20393	1754.3	64QAM	1	0	21.56	24.75	30	-5.25
				1	5	21.53	24.72	30	-5.28
				3	2	21.69	24.88	30	-5.12
				6	0	19.95	23.14	30	-6.86

Antenna gain (dBi)		3.19							
LTE Band 4_Uplink frequency band : 1710 to 1755 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3	19965	1711.5	QPSK	1	0	22.09	25.28	30	-4.72
				1	14	22.04	25.23	30	-4.77
				8	4	20.97	24.16	30	-5.84
				15	0	20.91	24.10	30	-5.9
	20175	1732.5	QPSK	1	0	22.15	25.34	30	-4.66
				1	14	22.19	25.38	30	-4.62
				8	4	21.26	24.45	30	-5.55
				15	0	21.23	24.42	30	-5.58
	20385	1753.5	QPSK	1	0	22.45	25.64	30	-4.36
				1	14	22.55	25.74	30	-4.26
				8	4	21.52	24.71	30	-5.29
				15	0	21.49	24.68	30	-5.32
3	19965	1711.5	16QAM	1	0	21.25	24.44	30	-5.56
				1	14	21.19	24.38	30	-5.62
				8	4	20.16	23.35	30	-6.65
				15	0	20.04	23.23	30	-6.77
	20175	1732.5	16QAM	1	0	21.58	24.77	30	-5.23
				1	14	21.24	24.43	30	-5.57
				8	4	20.37	23.56	30	-6.44
				15	0	20.21	23.40	30	-6.6
	20385	1753.5	16QAM	1	0	21.63	24.82	30	-5.18
				1	14	21.79	24.98	30	-5.02
				8	4	20.61	23.80	30	-6.2
				15	0	20.44	23.63	30	-6.37
3	19965	1711.5	64QAM	1	0	21.17	24.36	30	-5.64
				1	14	21.11	24.30	30	-5.7
				8	4	20.01	23.20	30	-6.8
				15	0	20.04	23.23	30	-6.77
	20175	1732.5	64QAM	1	0	21.23	24.42	30	-5.58
				1	14	21.32	24.51	30	-5.49
				8	4	20.21	23.40	30	-6.6
				15	0	20.20	23.39	30	-6.61
	20385	1753.5	64QAM	1	0	20.90	24.09	30	-5.91
				1	14	20.87	24.06	30	-5.94
				8	4	19.96	23.15	30	-6.85
				15	0	20.02	23.21	30	-6.79

Antenna gain (dBi)		3.19							
LTE Band 4_Uplink frequency band : 1710 to 1755 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	19975	1712.5	QPSK	1	0	22.11	25.30	30	-4.7
				1	24	22.10	25.29	30	-4.71
				12	6	21.04	24.23	30	-5.77
				25	0	21.09	24.28	30	-5.72
	20175	1732.5	QPSK	1	0	22.27	25.46	30	-4.54
				1	24	22.30	25.49	30	-4.51
				12	6	21.30	24.49	30	-5.51
				25	0	21.32	24.51	30	-5.49
	20375	1752.5	QPSK	1	0	22.51	25.70	30	-4.3
				1	24	22.52	25.71	30	-4.29
				12	6	21.58	24.77	30	-5.23
				25	0	21.55	24.74	30	-5.26
5	19975	1712.5	16QAM	1	0	21.37	24.56	30	-5.44
				1	24	21.32	24.51	30	-5.49
				12	6	20.09	23.28	30	-6.72
				25	0	20.08	23.27	30	-6.73
	20175	1732.5	16QAM	1	0	21.71	24.90	30	-5.1
				1	24	21.50	24.69	30	-5.31
				12	6	20.37	23.56	30	-6.44
				25	0	20.30	23.49	30	-6.51
	20375	1752.5	16QAM	1	0	21.76	24.95	30	-5.05
				1	24	21.77	24.96	30	-5.04
				12	6	20.63	23.82	30	-6.18
				25	0	20.53	23.72	30	-6.28
5	19975	1712.5	64QAM	1	0	21.28	24.47	30	-5.53
				1	24	21.40	24.59	30	-5.41
				12	6	20.05	23.24	30	-6.76
				25	0	20.12	23.31	30	-6.69
	20175	1732.5	64QAM	1	0	21.44	24.63	30	-5.37
				1	24	21.37	24.56	30	-5.44
				12	6	20.34	23.53	30	-6.47
				25	0	20.38	23.57	30	-6.43
	20375	1752.5	64QAM	1	0	20.96	24.15	30	-5.85
				1	24	20.94	24.13	30	-5.87
				12	6	20.62	23.81	30	-6.19
				25	0	19.93	23.12	30	-6.88

Antenna gain (dBi)		3.19							
LTE Band 4_Uplink frequency band : 1710 to 1755 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	20000	1715	QPSK	1	0	22.35	25.54	30	-4.46
				1	49	22.59	25.78	30	-4.22
				25	12	21.23	24.42	30	-5.58
				50	0	21.14	24.33	30	-5.67
	20175	1732.5	QPSK	1	0	22.52	25.71	30	-4.29
				1	49	22.67	25.86	30	-4.14
				25	12	21.26	24.45	30	-5.55
				50	0	21.23	24.42	30	-5.58
	20350	1750	QPSK	1	0	22.76	25.95	30	-4.05
				1	49	22.92	26.11	30	-3.89
				25	12	21.50	24.69	30	-5.31
				50	0	21.58	24.77	30	-5.23
10	20000	1715	16QAM	1	0	21.78	24.97	30	-5.03
				1	49	22.00	25.19	30	-4.81
				25	12	20.13	23.32	30	-6.68
				50	0	20.07	23.26	30	-6.74
	20175	1732.5	16QAM	1	0	21.74	24.93	30	-5.07
				1	49	22.14	25.33	30	-4.67
				25	12	20.21	23.40	30	-6.6
				50	0	20.30	23.49	30	-6.51
	20350	1750	16QAM	1	0	22.00	25.19	30	-4.81
				1	49	22.35	25.54	30	-4.46
				25	12	20.44	23.63	30	-6.37
				50	0	20.63	23.82	30	-6.18
10	20000	1715	64QAM	1	0	21.50	24.69	30	-5.31
				1	49	20.71	23.90	30	-6.1
				25	12	20.14	23.33	30	-6.67
				50	0	20.06	23.25	30	-6.75
	20175	1732.5	64QAM	1	0	20.82	24.01	30	-5.99
				1	49	20.76	23.95	30	-6.05
				25	12	20.33	23.52	30	-6.48
				50	0	20.29	23.48	30	-6.52
	20350	1750	64QAM	1	0	20.99	24.18	30	-5.82
				1	49	21.02	24.21	30	-5.79
				25	12	19.84	23.03	30	-6.97
				50	0	20.03	23.22	30	-6.78

Antenna gain (dBi)		3.19							
LTE Band 4_Uplink frequency band : 1710 to 1755 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15	20025	1717.5	QPSK	1	0	21.97	25.16	30	-4.84
				1	74	21.83	25.02	30	-4.98
				36	18	21.01	24.20	30	-5.8
				75	0	20.96	24.15	30	-5.85
	20175	1732.5	QPSK	1	0	21.96	25.15	30	-4.85
				1	74	22.11	25.30	30	-4.7
				36	18	21.22	24.41	30	-5.59
				75	0	21.10	24.29	30	-5.71
	20325	1747.5	QPSK	1	0	22.15	25.34	30	-4.66
				1	74	22.19	25.38	30	-4.62
				36	18	21.34	24.53	30	-5.47
				75	0	21.35	24.54	30	-5.46
15	20025	1717.5	16QAM	1	0	21.40	24.59	30	-5.41
				1	74	21.47	24.66	30	-5.34
				36	18	20.24	23.43	30	-6.57
				75	0	20.20	23.39	30	-6.61
	20175	1732.5	16QAM	1	0	21.37	24.56	30	-5.44
				1	74	21.79	24.98	30	-5.02
				36	18	20.27	23.46	30	-6.54
				75	0	20.31	23.50	30	-6.5
	20325	1747.5	16QAM	1	0	21.76	24.95	30	-5.05
				1	74	21.76	24.95	30	-5.05
				36	18	20.36	23.55	30	-6.45
				75	0	20.27	23.46	30	-6.54
15	20025	1717.5	64QAM	1	0	21.07	24.26	30	-5.74
				1	74	21.24	24.43	30	-5.57
				36	18	20.05	23.24	30	-6.76
				75	0	20.03	23.22	30	-6.78
	20175	1732.5	64QAM	1	0	21.21	24.40	30	-5.6
				1	74	20.95	24.14	30	-5.86
				36	18	20.24	23.43	30	-6.57
				75	0	20.21	23.40	30	-6.6
	20325	1747.5	64QAM	1	0	21.57	24.76	30	-5.24
				1	74	21.76	24.95	30	-5.05
				36	18	20.37	23.56	30	-6.44
				75	0	20.27	23.46	30	-6.54

Antenna gain (dBi)		3.19							
LTE Band 4_Uplink frequency band : 1710 to 1755 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20	20050	1720	QPSK	1	0	21.85	25.04	30	-4.96
				1	99	22.17	25.36	30	-4.64
				50	25	20.95	24.14	30	-5.86
				100	0	20.93	24.12	30	-5.88
	20175	1732.5	QPSK	1	0	21.82	25.01	30	-4.99
				1	99	22.16	25.35	30	-4.65
				50	25	21.03	24.22	30	-5.78
				100	0	21.11	24.30	30	-5.7
	20300	1745	QPSK	1	0	22.01	25.20	30	-4.8
				1	99	22.31	25.50	30	-4.5
				50	25	21.34	24.53	30	-5.47
				100	0	21.31	24.50	30	-5.5
20	20050	1720	16QAM	1	0	21.36	24.55	30	-5.45
				1	99	21.59	24.78	30	-5.22
				50	25	20.10	23.29	30	-6.71
				100	0	20.19	23.38	30	-6.62
	20175	1732.5	16QAM	1	0	21.23	24.42	30	-5.58
				1	99	22.05	25.24	30	-4.76
				50	25	20.03	23.22	30	-6.78
				100	0	20.09	23.28	30	-6.72
	20300	1745	16QAM	1	0	21.52	24.71	30	-5.29
				1	99	21.88	25.07	30	-4.93
				50	25	20.38	23.57	30	-6.43
				100	0	20.33	23.52	30	-6.48
20	20050	1720	64QAM	1	0	21.01	24.20	30	-5.8
				1	99	21.41	24.60	30	-5.4
				50	25	20.02	23.21	30	-6.79
				100	0	20.08	23.27	30	-6.73
	20175	1732.5	64QAM	1	0	21.06	24.25	30	-5.75
				1	99	20.77	23.96	30	-6.04
				50	25	20.05	23.24	30	-6.76
				100	0	20.13	23.32	30	-6.68
	20300	1745	64QAM	1	0	21.34	24.53	30	-5.47
				1	99	20.93	24.12	30	-5.88
				50	25	20.26	23.45	30	-6.55
				100	0	20.35	23.54	30	-6.46

LTE Band 5

Antenna gain (dBi)		1.84								
LTE Band 5_Uplink frequency band : 824 to 849 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	20407	824.7	QPSK	1	0	22.46	24.30	22.15	38.45	-16.30
				1	5	22.40	24.24	22.09	38.45	-16.36
				3	2	22.50	24.34	22.19	38.45	-16.26
				6	0	21.42	23.26	21.11	38.45	-17.34
	20525	836.5	QPSK	1	0	22.65	24.49	22.34	38.45	-16.11
				1	5	22.68	24.52	22.37	38.45	-16.08
				3	2	22.83	24.67	22.52	38.45	-15.93
				6	0	21.65	23.49	21.34	38.45	-17.11
	20643	848.3	QPSK	1	0	22.93	24.77	22.62	38.45	-15.83
				1	5	22.85	24.69	22.54	38.45	-15.91
				3	2	22.92	24.76	22.61	38.45	-15.84
				6	0	21.91	23.75	21.60	38.45	-16.85
1.4	20407	824.7	16QAM	1	0	21.79	23.63	21.48	38.45	-16.97
				1	5	21.69	23.53	21.38	38.45	-17.07
				3	2	21.40	23.24	21.09	38.45	-17.36
				6	0	20.51	22.35	20.20	38.45	-18.25
	20525	836.5	16QAM	1	0	21.91	23.75	21.60	38.45	-16.85
				1	5	22.06	23.90	21.75	38.45	-16.70
				3	2	21.75	23.59	21.44	38.45	-17.01
				6	0	20.82	22.66	20.51	38.45	-17.94
	20643	848.3	16QAM	1	0	22.38	24.22	22.07	38.45	-16.38
				1	5	22.33	24.17	22.02	38.45	-16.43
				3	2	21.93	23.77	21.62	38.45	-16.83
				6	0	20.98	22.82	20.67	38.45	-17.78
1.4	20407	824.7	64QAM	1	0	21.62	23.46	21.31	38.45	-17.14
				1	5	21.52	23.36	21.21	38.45	-17.24
				3	2	21.40	23.24	21.09	38.45	-17.36
				6	0	20.44	22.28	20.13	38.45	-18.32
	20525	836.5	64QAM	1	0	21.87	23.71	21.56	38.45	-16.89
				1	5	21.89	23.73	21.58	38.45	-16.87
				3	2	21.85	23.69	21.54	38.45	-16.91
				6	0	20.73	22.57	20.42	38.45	-18.03
	20643	848.3	64QAM	1	0	21.31	23.15	21.00	38.45	-17.45
				1	5	21.90	23.74	21.59	38.45	-16.86
				3	2	21.96	23.80	21.65	38.45	-16.80
				6	0	20.75	22.59	20.44	38.45	-18.01

Antenna gain (dBi)		1.84								
LTE Band 5_Uplink frequency band : 824 to 849 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3	20415	825.5	QPSK	1	0	22.39	24.23	22.08	38.45	-16.37
				1	14	22.34	24.18	22.03	38.45	-16.42
				8	4	21.36	23.20	21.05	38.45	-17.40
				15	0	21.32	23.16	21.01	38.45	-17.44
	20525	836.5	QPSK	1	0	22.69	24.53	22.38	38.45	-16.07
				1	14	22.81	24.65	22.50	38.45	-15.95
				8	4	21.67	23.51	21.36	38.45	-17.09
				15	0	21.67	23.51	21.36	38.45	-17.09
	20635	847.5	QPSK	1	0	23.02	24.86	22.71	38.45	-15.74
				1	14	22.88	24.72	22.57	38.45	-15.88
				8	4	21.98	23.82	21.67	38.45	-16.78
				15	0	22.08	23.92	21.77	38.45	-16.68
3	20415	825.5	16QAM	1	0	21.66	23.50	21.35	38.45	-17.10
				1	14	21.62	23.46	21.31	38.45	-17.14
				8	4	20.43	22.27	20.12	38.45	-18.33
				15	0	20.39	22.23	20.08	38.45	-18.37
	20525	836.5	16QAM	1	0	22.02	23.86	21.71	38.45	-16.74
				1	14	22.04	23.88	21.73	38.45	-16.72
				8	4	20.79	22.63	20.48	38.45	-17.97
				15	0	20.78	22.62	20.47	38.45	-17.98
	20635	847.5	16QAM	1	0	22.62	24.46	22.31	38.45	-16.14
				1	14	22.27	24.11	21.96	38.45	-16.49
				8	4	20.99	22.83	20.68	38.45	-17.77
				15	0	20.95	22.79	20.64	38.45	-17.81
3	20415	825.5	64QAM	1	0	21.56	23.40	21.25	38.45	-17.20
				1	14	21.41	23.25	21.10	38.45	-17.35
				8	4	20.34	22.18	20.03	38.45	-18.42
				15	0	20.37	22.21	20.06	38.45	-18.39
	20525	836.5	64QAM	1	0	21.89	23.73	21.58	38.45	-16.87
				1	14	21.96	23.80	21.65	38.45	-16.80
				8	4	20.77	22.61	20.46	38.45	-17.99
				15	0	20.73	22.57	20.42	38.45	-18.03
	20635	847.5	64QAM	1	0	21.13	22.97	20.82	38.45	-17.63
				1	14	21.18	23.02	20.87	38.45	-17.58
				8	4	20.30	22.14	19.99	38.45	-18.46
				15	0	20.93	22.77	20.62	38.45	-17.83

Antenna gain (dBi)		1.84								
LTE Band 5_Uplink frequency band : 824 to 849 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5	20425	826.5	QPSK	1	0	22.47	24.31	22.16	38.45	-16.29
				1	24	22.57	24.41	22.26	38.45	-16.19
				12	6	21.49	23.33	21.18	38.45	-17.27
				25	0	21.50	23.34	21.19	38.45	-17.26
	20525	836.5	QPSK	1	0	22.76	24.60	22.45	38.45	-16.00
				1	24	22.83	24.67	22.52	38.45	-15.93
				12	6	21.69	23.53	21.38	38.45	-17.07
				25	0	21.81	23.65	21.50	38.45	-16.95
	20625	846.5	QPSK	1	0	22.99	24.83	22.68	38.45	-15.77
				1	24	22.96	24.80	22.65	38.45	-15.80
				12	6	21.99	23.83	21.68	38.45	-16.77
				25	0	22.05	23.89	21.74	38.45	-16.71
5	20425	826.5	16QAM	1	0	21.83	23.67	21.52	38.45	-16.93
				1	24	21.93	23.77	21.62	38.45	-16.83
				12	6	20.46	22.30	20.15	38.45	-18.30
				25	0	20.47	22.31	20.16	38.45	-18.29
	20525	836.5	16QAM	1	0	21.99	23.83	21.68	38.45	-16.77
				1	24	22.04	23.88	21.73	38.45	-16.72
				12	6	20.77	22.61	20.46	38.45	-17.99
				25	0	20.88	22.72	20.57	38.45	-17.88
	20625	846.5	16QAM	1	0	22.18	24.02	21.87	38.45	-16.58
				1	24	22.29	24.13	21.98	38.45	-16.47
				12	6	21.01	22.85	20.70	38.45	-17.75
				25	0	21.10	22.94	20.79	38.45	-17.66
5	20425	826.5	64QAM	1	0	21.66	23.50	21.35	38.45	-17.10
				1	24	21.79	23.63	21.48	38.45	-16.97
				12	6	20.44	22.28	20.13	38.45	-18.32
				25	0	20.48	22.32	20.17	38.45	-18.28
	20525	836.5	64QAM	1	0	21.97	23.81	21.66	38.45	-16.79
				1	24	21.94	23.78	21.63	38.45	-16.82
				12	6	20.75	22.59	20.44	38.45	-18.01
				25	0	20.89	22.73	20.58	38.45	-17.87
	20625	846.5	64QAM	1	0	21.28	23.12	20.97	38.45	-17.48
				1	24	21.30	23.14	20.99	38.45	-17.46
				12	6	20.23	22.07	19.92	38.45	-18.53
				25	0	20.18	22.02	19.87	38.45	-18.58

Antenna gain (dBi)		1.84								
LTE Band 5_Uplink frequency band : 824 to 849 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10	20450	829	QPSK	1	0	22.79	24.63	22.48	38.45	-15.97
				1	49	22.82	24.66	22.51	38.45	-15.94
				25	12	21.54	23.38	21.23	38.45	-17.22
				50	0	21.69	23.53	21.38	38.45	-17.07
	20525	836.5	QPSK	1	0	23.16	25.00	22.85	38.45	-15.60
				1	49	23.17	25.01	22.86	38.45	-15.59
				25	12	21.89	23.73	21.58	38.45	-16.87
				50	0	21.90	23.74	21.59	38.45	-16.86
	20600	844	QPSK	1	0	23.30	25.14	22.99	38.45	-15.46
				1	49	23.39	25.23	23.08	38.45	-15.37
				25	12	22.06	23.90	21.75	38.45	-16.70
				50	0	22.15	23.99	21.84	38.45	-16.61
10	20450	829	16QAM	1	0	21.88	23.72	21.57	38.45	-16.88
				1	49	22.18	24.02	21.87	38.45	-16.58
				25	12	20.57	22.41	20.26	38.45	-18.19
				50	0	20.65	22.49	20.34	38.45	-18.11
	20525	836.5	16QAM	1	0	22.20	24.04	21.89	38.45	-16.56
				1	49	22.43	24.27	22.12	38.45	-16.33
				25	12	20.94	22.78	20.63	38.45	-17.82
				50	0	20.89	22.73	20.58	38.45	-17.87
	20600	844	16QAM	1	0	22.47	24.31	22.16	38.45	-16.29
				1	49	22.52	24.36	22.21	38.45	-16.24
				25	12	21.13	22.97	20.82	38.45	-17.63
				50	0	21.10	22.94	20.79	38.45	-17.66
10	20450	829	64QAM	1	0	20.96	22.80	20.65	38.45	-17.80
				1	49	21.09	22.93	20.78	38.45	-17.67
				25	12	20.53	22.37	20.22	38.45	-18.23
				50	0	20.61	22.45	20.30	38.45	-18.15
	20525	836.5	64QAM	1	0	21.15	22.99	20.84	38.45	-17.61
				1	49	21.31	23.15	21.00	38.45	-17.45
				25	12	20.96	22.80	20.65	38.45	-17.80
				50	0	20.86	22.70	20.55	38.45	-17.90
	20600	844	64QAM	1	0	21.21	23.05	20.90	38.45	-17.55
				1	49	21.20	23.04	20.89	38.45	-17.56
				25	12	20.31	22.15	20.00	38.45	-18.45
				50	0	20.22	22.06	19.91	38.45	-18.54

LTE Band 7

Antenna gain (dBi)		1.75							
LTE Band 7_Uplink frequency band : 2500 to 2570 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	20775	2502.5	QPSK	1	0	22.49	24.24	33	-8.76
				1	24	22.23	23.98	33	-9.02
				12	6	21.42	23.17	33	-9.83
				25	0	21.46	23.21	33	-9.79
	21100	2535	QPSK	1	0	22.25	24.00	33	-9
				1	24	22.15	23.90	33	-9.1
				12	6	21.20	22.95	33	-10.05
				25	0	21.27	23.02	33	-9.98
	21425	2567.5	QPSK	1	0	22.29	24.04	33	-8.96
				1	24	22.05	23.80	33	-9.2
				12	6	21.21	22.96	33	-10.04
				25	0	21.23	22.98	33	-10.02
5	20775	2502.5	16QAM	1	0	21.78	23.53	33	-9.47
				1	24	21.46	23.21	33	-9.79
				12	6	20.44	22.19	33	-10.81
				25	0	20.51	22.26	33	-10.74
	21100	2535	16QAM	1	0	21.52	23.27	33	-9.73
				1	24	21.44	23.19	33	-9.81
				12	6	20.24	21.99	33	-11.01
				25	0	20.29	22.04	33	-10.96
	21425	2567.5	16QAM	1	0	21.50	23.25	33	-9.75
				1	24	21.39	23.14	33	-9.86
				12	6	20.25	22.00	33	-11
				25	0	20.22	21.97	33	-11.03
5	20775	2502.5	64QAM	1	0	20.73	22.48	33	-10.52
				1	24	21.44	23.19	33	-9.81
				12	6	20.42	22.17	33	-10.83
				25	0	20.50	22.25	33	-10.75
	21100	2535	64QAM	1	0	21.46	23.21	33	-9.79
				1	24	21.20	22.95	33	-10.05
				12	6	20.21	21.96	33	-11.04
				25	0	20.28	22.03	33	-10.97
	21425	2567.5	64QAM	1	0	21.36	23.11	33	-9.89
				1	24	21.21	22.96	33	-10.04
				12	6	20.17	21.92	33	-11.08
				25	0	20.22	21.97	33	-11.03

Antenna gain (dBi)		1.75							
LTE Band 7_Uplink frequency band : 2500 to 2570 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	20800	2505	QPSK	1	0	22.69	24.44	33	-8.56
				1	49	22.45	24.20	33	-8.8
				25	12	21.24	22.99	33	-10.01
				50	0	21.45	23.20	33	-9.8
	21100	2535	QPSK	1	0	22.46	24.21	33	-8.79
				1	49	22.22	23.97	33	-9.03
				25	12	21.22	22.97	33	-10.03
				50	0	21.28	23.03	33	-9.97
	21400	2565	QPSK	1	0	22.41	24.16	33	-8.84
				1	49	22.22	23.97	33	-9.03
				25	12	21.21	22.96	33	-10.04
				50	0	21.22	22.97	33	-10.03
10	20800	2505	16QAM	1	0	21.77	23.52	33	-9.48
				1	49	21.67	23.42	33	-9.58
				25	12	20.21	21.96	33	-11.04
				50	0	20.38	22.13	33	-10.87
	21100	2535	16QAM	1	0	21.82	23.57	33	-9.43
				1	49	21.54	23.29	33	-9.71
				25	12	20.24	21.99	33	-11.01
				50	0	20.33	22.08	33	-10.92
	21400	2565	16QAM	1	0	21.63	23.38	33	-9.62
				1	49	21.52	23.27	33	-9.73
				25	12	20.17	21.92	33	-11.08
				50	0	20.08	21.83	33	-11.17
10	20800	2505	64QAM	1	0	20.71	22.46	33	-10.54
				1	49	20.80	22.55	33	-10.45
				25	12	20.22	21.97	33	-11.03
				50	0	20.38	22.13	33	-10.87
	21100	2535	64QAM	1	0	20.89	22.64	33	-10.36
				1	49	20.80	22.55	33	-10.45
				25	12	20.23	21.98	33	-11.02
				50	0	20.31	22.06	33	-10.94
	21400	2565	64QAM	1	0	20.87	22.62	33	-10.38
				1	49	20.84	22.59	33	-10.41
				25	12	20.18	21.93	33	-11.07
				50	0	20.09	21.84	33	-11.16

Antenna gain (dBi)		1.75							
LTE Band 7_Uplink frequency band : 2500 to 2570 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15	20825	2507.5	QPSK	1	0	22.61	24.36	33	-8.64
				1	74	22.31	24.06	33	-8.94
				36	18	21.52	23.27	33	-9.73
				75	0	21.52	23.27	33	-9.73
	21100	2535	QPSK	1	0	22.29	24.04	33	-8.96
				1	74	22.11	23.86	33	-9.14
				36	18	21.27	23.02	33	-9.98
				75	0	21.22	22.97	33	-10.03
	21375	2562.5	QPSK	1	0	22.19	23.94	33	-9.06
				1	74	21.91	23.66	33	-9.34
				36	18	21.16	22.91	33	-10.09
				75	0	21.12	22.87	33	-10.13
15	20825	2507.5	16QAM	1	0	21.81	23.56	33	-9.44
				1	74	21.49	23.24	33	-9.76
				36	18	20.50	22.25	33	-10.75
				75	0	20.49	22.24	33	-10.76
	21100	2535	16QAM	1	0	21.55	23.30	33	-9.7
				1	74	21.53	23.28	33	-9.72
				36	18	20.27	22.02	33	-10.98
				75	0	20.22	21.97	33	-11.03
	21375	2562.5	16QAM	1	0	21.47	23.22	33	-9.78
				1	74	21.26	23.01	33	-9.99
				36	18	20.20	21.95	33	-11.05
				75	0	20.27	22.02	33	-10.98
15	20825	2507.5	64QAM	1	0	20.82	22.57	33	-10.43
				1	74	20.76	22.51	33	-10.49
				36	18	20.48	22.23	33	-10.77
				75	0	20.48	22.23	33	-10.77
	21100	2535	64QAM	1	0	21.41	23.16	33	-9.84
				1	74	20.70	22.45	33	-10.55
				36	18	20.28	22.03	33	-10.97
				75	0	20.22	21.97	33	-11.03
	21375	2562.5	64QAM	1	0	20.85	22.60	33	-10.4
				1	74	20.74	22.49	33	-10.51
				36	18	20.20	21.95	33	-11.05
				75	0	20.25	22.00	33	-11

Antenna gain (dBi)		1.75							
LTE Band 7_Uplink frequency band : 2500 to 2570 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20	20850	2510	QPSK	1	0	22.71	24.46	33	-8.54
				1	99	22.25	24.00	33	-9
				50	25	21.52	23.27	33	-9.73
				100	0	21.61	23.36	33	-9.64
	21100	2535	QPSK	1	0	22.40	24.15	33	-8.85
				1	99	22.16	23.91	33	-9.09
				50	25	21.36	23.11	33	-9.89
				100	0	21.43	23.18	33	-9.82
	21350	2560	QPSK	1	0	22.27	24.02	33	-8.98
				1	99	22.03	23.78	33	-9.22
				50	25	21.26	23.01	33	-9.99
				100	0	21.30	23.05	33	-9.95
20	20850	2510	16QAM	1	0	21.96	23.71	33	-9.29
				1	99	21.52	23.27	33	-9.73
				50	25	20.54	22.29	33	-10.71
				100	0	20.53	22.28	33	-10.72
	21100	2535	16QAM	1	0	21.69	23.44	33	-9.56
				1	99	21.48	23.23	33	-9.77
				50	25	20.36	22.11	33	-10.89
				100	0	20.31	22.06	33	-10.94
	21350	2560	16QAM	1	0	21.62	23.37	33	-9.63
				1	99	21.24	22.99	33	-10.01
				50	25	20.20	21.95	33	-11.05
				100	0	20.22	21.97	33	-11.03
20	20850	2510	64QAM	1	0	21.29	23.04	33	-9.96
				1	99	20.76	22.51	33	-10.49
				50	25	20.48	22.23	33	-10.77
				100	0	19.72	21.47	33	-11.53
	21100	2535	64QAM	1	0	21.23	22.98	33	-10.02
				1	99	20.74	22.49	33	-10.51
				50	25	20.32	22.07	33	-10.93
				100	0	20.29	22.04	33	-10.96
	21350	2560	64QAM	1	0	21.44	23.19	33	-9.81
				1	99	21.22	22.97	33	-10.03
				50	25	20.18	21.93	33	-11.07
				100	0	20.24	21.99	33	-11.01

LTE Band 12

Antenna gain (dBi)		-1.58								
LTE Band 12_Uplink frequency band : 699 to 716 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	23017	699.7	QPSK	1	0	22.62	21.04	18.89	34.77	-15.88
				1	5	22.40	20.82	18.67	34.77	-16.10
				3	2	22.59	21.01	18.86	34.77	-15.91
				6	0	21.59	20.01	17.86	34.77	-16.91
	23095	707.5	QPSK	1	0	22.37	20.79	18.64	34.77	-16.13
				1	5	22.38	20.80	18.65	34.77	-16.12
				3	2	22.47	20.89	18.74	34.77	-16.03
				6	0	21.52	19.94	17.79	34.77	-16.98
	23173	715.5	QPSK	1	0	22.39	20.81	18.66	34.77	-16.11
				1	5	22.56	20.98	18.83	34.77	-15.94
				3	2	22.53	20.95	18.80	34.77	-15.97
				6	0	21.62	20.04	17.89	34.77	-16.88
1.4	23017	699.7	16QAM	1	0	21.76	20.18	18.03	34.77	-16.74
				1	5	21.67	20.09	17.94	34.77	-16.83
				3	2	21.69	20.11	17.96	34.77	-16.81
				6	0	20.56	18.98	16.83	34.77	-17.94
	23095	707.5	16QAM	1	0	21.51	19.93	17.78	34.77	-16.99
				1	5	21.61	20.03	17.88	34.77	-16.89
				3	2	21.59	20.01	17.86	34.77	-16.91
				6	0	20.67	19.09	16.94	34.77	-17.83
	23173	715.5	16QAM	1	0	21.85	20.27	18.12	34.77	-16.65
				1	5	21.71	20.13	17.98	34.77	-16.79
				3	2	21.64	20.06	17.91	34.77	-16.86
				6	0	20.68	19.10	16.95	34.77	-17.82
1.4	23017	699.7	64QAM	1	0	20.86	19.28	17.13	34.77	-17.64
				1	5	20.91	19.33	17.18	34.77	-17.59
				3	2	21.80	20.22	18.07	34.77	-16.70
				6	0	19.90	18.32	16.17	34.77	-18.60
	23095	707.5	64QAM	1	0	20.77	19.19	17.04	34.77	-17.73
				1	5	20.72	19.14	16.99	34.77	-17.78
				3	2	21.60	20.02	17.87	34.77	-16.90
				6	0	19.68	18.10	15.95	34.77	-18.82
	23173	715.5	64QAM	1	0	20.86	19.28	17.13	34.77	-17.64
				1	5	20.85	19.27	17.12	34.77	-17.65
				3	2	20.93	19.35	17.20	34.77	-17.57
				6	0	20.03	18.45	16.30	34.77	-18.47

Antenna gain (dBi)		-1.58								
LTE Band 12_Uplink frequency band : 699 to 716 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3	23025	700.5	QPSK	1	0	22.75	21.17	19.02	34.77	-15.75
				1	14	22.41	20.83	18.68	34.77	-16.09
				8	4	21.65	20.07	17.92	34.77	-16.85
				15	0	21.65	20.07	17.92	34.77	-16.85
	23095	707.5	QPSK	1	0	22.53	20.95	18.80	34.77	-15.97
				1	14	22.44	20.86	18.71	34.77	-16.06
				8	4	21.66	20.08	17.93	34.77	-16.84
				15	0	21.53	19.95	17.80	34.77	-16.97
	23165	714.5	QPSK	1	0	22.54	20.96	18.81	34.77	-15.96
				1	14	22.63	21.05	18.90	34.77	-15.87
				8	4	21.73	20.15	18.00	34.77	-16.77
				15	0	21.69	20.11	17.96	34.77	-16.81
3	23025	700.5	16QAM	1	0	21.75	20.17	18.02	34.77	-16.75
				1	14	21.63	20.05	17.90	34.77	-16.87
				8	4	20.73	19.15	17.00	34.77	-17.77
				15	0	20.68	19.10	16.95	34.77	-17.82
	23095	707.5	16QAM	1	0	21.55	19.97	17.82	34.77	-16.95
				1	14	21.73	20.15	18.00	34.77	-16.77
				8	4	20.63	19.05	16.90	34.77	-17.87
				15	0	20.61	19.03	16.88	34.77	-17.89
	23165	714.5	16QAM	1	0	21.80	20.22	18.07	34.77	-16.70
				1	14	21.75	20.17	18.02	34.77	-16.75
				8	4	20.79	19.21	17.06	34.77	-17.71
				15	0	20.67	19.09	16.94	34.77	-17.83
3	23025	700.5	64QAM	1	0	20.78	19.20	17.05	34.77	-17.72
				1	14	20.94	19.36	17.21	34.77	-17.56
				8	4	19.96	18.38	16.23	34.77	-18.54
				15	0	19.93	18.35	16.20	34.77	-18.57
	23095	707.5	64QAM	1	0	20.74	19.16	17.01	34.77	-17.76
				1	14	20.64	19.06	16.91	34.77	-17.86
				8	4	19.72	18.14	15.99	34.77	-18.78
				15	0	19.75	18.17	16.02	34.77	-18.75
	23165	714.5	64QAM	1	0	21.02	19.44	17.29	34.77	-17.48
				1	14	20.96	19.38	17.23	34.77	-17.54
				8	4	19.78	18.20	16.05	34.77	-18.72
				15	0	19.97	18.39	16.24	34.77	-18.53

Antenna gain (dBi)		-1.58								
LTE Band 12_Uplink frequency band : 699 to 716 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5	23035	701.5	QPSK	1	0	22.71	21.13	18.98	34.77	-15.79
				1	24	22.45	20.87	18.72	34.77	-16.05
				12	6	21.68	20.10	17.95	34.77	-16.82
				25	0	21.72	20.14	17.99	34.77	-16.78
	23095	707.5	QPSK	1	0	22.47	20.89	18.74	34.77	-16.03
				1	24	22.51	20.93	18.78	34.77	-15.99
				12	6	21.53	19.95	17.80	34.77	-16.97
				25	0	21.57	19.99	17.84	34.77	-16.93
	23155	713.5	QPSK	1	0	22.55	20.97	18.82	34.77	-15.95
				1	24	22.52	20.94	18.79	34.77	-15.98
				12	6	21.65	20.07	17.92	34.77	-16.85
				25	0	21.64	20.06	17.91	34.77	-16.86
5	23035	701.5	16QAM	1	0	21.81	20.23	18.08	34.77	-16.69
				1	24	21.95	20.37	18.22	34.77	-16.55
				12	6	20.66	19.08	16.93	34.77	-17.84
				25	0	20.58	19.00	16.85	34.77	-17.92
	23095	707.5	16QAM	1	0	21.91	20.33	18.18	34.77	-16.59
				1	24	21.64	20.06	17.91	34.77	-16.86
				12	6	20.61	19.03	16.88	34.77	-17.89
				25	0	20.65	19.07	16.92	34.77	-17.85
	23155	713.5	16QAM	1	0	22.01	20.43	18.28	34.77	-16.49
				1	24	21.85	20.27	18.12	34.77	-16.65
				12	6	20.63	19.05	16.90	34.77	-17.87
				25	0	20.63	19.05	16.90	34.77	-17.87
5	23035	701.5	64QAM	1	0	20.96	19.38	17.23	34.77	-17.54
				1	24	20.88	19.30	17.15	34.77	-17.62
				12	6	20.66	19.08	16.93	34.77	-17.84
				25	0	19.90	18.32	16.17	34.77	-18.60
	23095	707.5	64QAM	1	0	20.69	19.11	16.96	34.77	-17.81
				1	24	20.66	19.08	16.93	34.77	-17.84
				12	6	20.59	19.01	16.86	34.77	-17.91
				25	0	19.73	18.15	16.00	34.77	-18.77
	23155	713.5	64QAM	1	0	20.97	19.39	17.24	34.77	-17.53
				1	24	20.95	19.37	17.22	34.77	-17.55
				12	6	20.72	19.14	16.99	34.77	-17.78
				25	0	19.96	18.38	16.23	34.77	-18.54

Antenna gain (dBi)		-1.58								
LTE Band 12_Uplink frequency band : 699 to 716 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10	23060	704	QPSK	1	0	23.11	21.53	19.38	34.77	-15.39
				1	49	22.65	21.07	18.92	34.77	-15.85
				25	12	21.76	20.18	18.03	34.77	-16.74
				50	0	21.82	20.24	18.09	34.77	-16.68
	23095	707.5	QPSK	1	0	22.82	21.24	19.09	34.77	-15.68
				1	49	22.45	20.87	18.72	34.77	-16.05
				25	12	21.62	20.04	17.89	34.77	-16.88
				50	0	21.54	19.96	17.81	34.77	-16.96
	23130	711	QPSK	1	0	22.93	21.35	19.20	34.77	-15.57
				1	49	22.69	21.11	18.96	34.77	-15.81
				25	12	21.60	20.02	17.87	34.77	-16.90
				50	0	21.70	20.12	17.97	34.77	-16.80
10	23060	704	16QAM	1	0	22.31	20.73	18.58	34.77	-16.19
				1	49	22.13	20.55	18.40	34.77	-16.37
				25	12	20.65	19.07	16.92	34.77	-17.85
				50	0	20.81	19.23	17.08	34.77	-17.69
	23095	707.5	16QAM	1	0	22.07	20.49	18.34	34.77	-16.43
				1	49	21.94	20.36	18.21	34.77	-16.56
				25	12	20.60	19.02	16.87	34.77	-17.90
				50	0	20.62	19.04	16.89	34.77	-17.88
	23130	711	16QAM	1	0	22.23	20.65	18.50	34.77	-16.27
				1	49	22.03	20.45	18.30	34.77	-16.47
				25	12	20.65	19.07	16.92	34.77	-17.85
				50	0	20.87	19.29	17.14	34.77	-17.63
10	23060	704	64QAM	1	0	20.99	19.41	17.26	34.77	-17.51
				1	49	20.94	19.36	17.21	34.77	-17.56
				25	12	19.89	18.31	16.16	34.77	-18.61
				50	0	19.95	18.37	16.22	34.77	-18.55
	23095	707.5	64QAM	1	0	20.69	19.11	16.96	34.77	-17.81
				1	49	20.70	19.12	16.97	34.77	-17.80
				25	12	19.66	18.08	15.93	34.77	-18.84
				50	0	19.84	18.26	16.11	34.77	-18.66
	23130	711	64QAM	1	0	20.82	19.24	17.09	34.77	-17.68
				1	49	20.89	19.31	17.16	34.77	-17.61
				25	12	19.86	18.28	16.13	34.77	-18.64
				50	0	19.90	18.32	16.17	34.77	-18.60

LTE Band 13

Antenna gain (dBi)		-0.34								
LTE Band 13_Uplink frequency band : 777 to 787 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5	23205	779.5	QPSK	1	0	22.38	22.04	19.89	34.77	-14.88
				1	24	22.47	22.13	19.98	34.77	-14.79
				12	6	21.52	21.18	19.03	34.77	-15.74
				25	0	21.53	21.19	19.04	34.77	-15.73
	23230	782	QPSK	1	0	22.56	22.22	20.07	34.77	-14.70
				1	24	22.52	22.18	20.03	34.77	-14.74
				12	6	21.57	21.23	19.08	34.77	-15.69
				25	0	21.64	21.30	19.15	34.77	-15.62
	23255	784.5	QPSK	1	0	22.82	22.48	20.33	34.77	-14.44
				1	24	22.73	22.39	20.24	34.77	-14.53
				12	6	21.83	21.49	19.34	34.77	-15.43
				25	0	21.90	21.56	19.41	34.77	-15.36
5	23205	779.5	16QAM	1	0	21.58	21.24	19.09	34.77	-15.68
				1	24	21.83	21.49	19.34	34.77	-15.43
				12	6	20.68	20.34	18.19	34.77	-16.58
				25	0	20.38	20.04	17.89	34.77	-16.88
	23230	782	16QAM	1	0	21.89	21.55	19.40	34.77	-15.37
				1	24	21.90	21.56	19.41	34.77	-15.36
				12	6	20.47	20.13	17.98	34.77	-16.79
				25	0	20.79	20.45	18.30	34.77	-16.47
	23255	784.5	16QAM	1	0	22.22	21.88	19.73	34.77	-15.04
				1	24	22.14	21.80	19.65	34.77	-15.12
				12	6	20.92	20.58	18.43	34.77	-16.34
				25	0	20.89	20.55	18.40	34.77	-16.37
5	23205	779.5	64QAM	1	0	20.53	20.19	18.04	34.77	-16.73
				1	24	20.45	20.11	17.96	34.77	-16.81
				12	6	20.50	20.16	18.01	34.77	-16.76
				25	0	19.46	19.12	16.97	34.77	-17.80
	23230	782	64QAM	1	0	20.68	20.34	18.19	34.77	-16.58
				1	24	20.68	20.34	18.19	34.77	-16.58
				12	6	20.57	20.23	18.08	34.77	-16.69
				25	0	19.67	19.33	17.18	34.77	-17.59
	23255	784.5	64QAM	1	0	20.84	20.50	18.35	34.77	-16.42
				1	24	20.85	20.51	18.36	34.77	-16.41
				12	6	20.88	20.54	18.39	34.77	-16.38
				25	0	19.86	19.52	17.37	34.77	-17.40

Antenna gain (dBi)		-0.34								
LTE Band 13_Uplink frequency band : 777 to 787 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10	23230	782	QPSK	1	0	22.87	22.53	20.38	34.77	-14.39
				1	49	22.56	22.22	20.07	34.77	-14.70
				25	12	21.70	21.36	19.21	34.77	-15.56
				50	0	21.49	21.15	19.00	34.77	-15.77
10	23230	782	16QAM	1	0	21.97	21.63	19.48	34.77	-15.29
				1	49	21.92	21.58	19.43	34.77	-15.34
				25	12	20.61	20.27	18.12	34.77	-16.65
				50	0	20.37	20.03	17.88	34.77	-16.89
10	23230	782	64QAM	1	0	21.81	21.47	19.32	34.77	-15.45
				1	49	21.94	21.60	19.45	34.77	-15.32
				25	12	19.94	19.60	17.45	34.77	-17.32
				50	0	20.02	19.68	17.53	34.77	-17.24



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LTE Band 14

Antenna gain (dBi)		0.03								
LTE Band 14_Uplink frequency band : 788 to 798 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5	23305	790.5	QPSK	1	0	22.91	22.94	20.79	34.77	-13.98
				1	24	22.94	22.97	20.82	34.77	-13.95
				12	6	22.08	22.11	19.96	34.77	-14.81
				25	0	22.08	22.11	19.96	34.77	-14.81
	23330	793	QPSK	1	0	23.12	23.15	21.00	34.77	-13.77
				1	24	23.01	23.04	20.89	34.77	-13.88
				12	6	22.05	22.08	19.93	34.77	-14.84
				25	0	22.08	22.11	19.96	34.77	-14.81
	23355	795.5	QPSK	1	0	23.11	23.14	20.99	34.77	-13.78
				1	24	23.18	23.21	21.06	34.77	-13.71
				12	6	22.11	22.14	19.99	34.77	-14.78
				25	0	22.12	22.15	20.00	34.77	-14.77
5	23305	790.5	16QAM	1	0	22.11	22.14	19.99	34.77	-14.78
				1	24	22.19	22.22	20.07	34.77	-14.70
				12	6	21.14	21.17	19.02	34.77	-15.75
				25	0	20.91	20.94	18.79	34.77	-15.98
	23330	793	16QAM	1	0	22.44	22.47	20.32	34.77	-14.45
				1	24	22.35	22.38	20.23	34.77	-14.54
				12	6	21.04	21.07	18.92	34.77	-15.85
				25	0	20.98	21.01	18.86	34.77	-15.91
	23355	795.5	16QAM	1	0	22.39	22.42	20.27	34.77	-14.50
				1	24	22.45	22.48	20.33	34.77	-14.44
				12	6	21.18	21.21	19.06	34.77	-15.71
				25	0	21.22	21.25	19.10	34.77	-15.67
5	23305	790.5	64QAM	1	0	21.80	21.83	19.68	34.77	-15.09
				1	24	20.87	20.90	18.75	34.77	-16.02
				12	6	20.92	20.95	18.80	34.77	-15.97
				25	0	20.97	21.00	18.85	34.77	-15.92
	23330	793	64QAM	1	0	22.20	22.23	20.08	34.77	-14.69
				1	24	22.10	22.13	19.98	34.77	-14.79
				12	6	21.04	21.07	18.92	34.77	-15.85
				25	0	20.96	20.99	18.84	34.77	-15.93
	23355	795.5	64QAM	1	0	22.20	22.23	20.08	34.77	-14.69
				1	24	22.35	22.38	20.23	34.77	-14.54
				12	6	21.19	21.22	19.07	34.77	-15.70
				25	0	19.93	19.96	17.81	34.77	-16.96



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Antenna gain (dBi)		0.03								
LTE Band 14_Uplink frequency band : 788 to 798 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10	23330	793	QPSK	1	0	23.36	23.39	21.24	34.77	-13.53
				1	49	23.12	23.15	21.00	34.77	-13.77
				25	12	22.14	22.17	20.02	34.77	-14.75
				50	0	22.18	22.21	20.06	34.77	-14.71
10	23330	793	16QAM	1	0	22.74	22.77	20.62	34.77	-14.15
				1	49	22.49	22.52	20.37	34.77	-14.40
				25	12	21.03	21.06	18.91	34.77	-15.86
				50	0	21.30	21.33	19.18	34.77	-15.59
10	23330	793	64QAM	1	0	21.22	21.25	19.10	34.77	-15.67
				1	49	21.38	21.41	19.26	34.77	-15.51
				25	12	21.07	21.10	18.95	34.77	-15.82
				50	0	20.23	20.26	18.11	34.77	-16.66

LTE Band 17

Antenna gain (dBi)		-1.58		LTE Band 17_Uplink frequency band : 704 to 716 MHz						
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5	23755	706.5	QPSK	1	0	22.72	21.14	18.99	34.77	-15.78
				1	24	22.54	20.96	18.81	34.77	-15.96
				12	6	21.65	20.07	17.92	34.77	-16.85
				25	0	21.60	20.02	17.87	34.77	-16.90
	23790	710	QPSK	1	0	22.58	21.00	18.85	34.77	-15.92
				1	24	22.66	21.08	18.93	34.77	-15.84
				12	6	21.70	20.12	17.97	34.77	-16.80
				25	0	21.55	19.97	17.82	34.77	-16.95
	23825	713.5	QPSK	1	0	22.65	21.07	18.92	34.77	-15.85
				1	24	22.65	21.07	18.92	34.77	-15.85
				12	6	21.69	20.11	17.96	34.77	-16.81
				25	0	21.69	20.11	17.96	34.77	-16.81
5	23755	706.5	16QAM	1	0	22.15	20.57	18.42	34.77	-16.35
				1	24	21.79	20.21	18.06	34.77	-16.71
				12	6	20.72	19.14	16.99	34.77	-17.78
				25	0	20.64	19.06	16.91	34.77	-17.86
	23790	710	16QAM	1	0	21.91	20.33	18.18	34.77	-16.59
				1	24	21.88	20.30	18.15	34.77	-16.62
				12	6	20.78	19.20	17.05	34.77	-17.72
				25	0	20.58	19.00	16.85	34.77	-17.92
	23825	713.5	16QAM	1	0	21.89	20.31	18.16	34.77	-16.61
				1	24	21.97	20.39	18.24	34.77	-16.53
				12	6	20.63	19.05	16.90	34.77	-17.87
				25	0	20.66	19.08	16.93	34.77	-17.84
5	23755	706.5	64QAM	1	0	20.94	19.36	17.21	34.77	-17.56
				1	24	20.90	19.32	17.17	34.77	-17.60
				12	6	20.56	18.98	16.83	34.77	-17.94
				25	0	19.95	18.37	16.22	34.77	-18.55
	23790	710	64QAM	1	0	21.01	19.43	17.28	34.77	-17.49
				1	24	21.15	19.57	17.42	34.77	-17.35
				12	6	20.72	19.14	16.99	34.77	-17.78
				25	0	20.08	18.50	16.35	34.77	-18.42
	23825	713.5	64QAM	1	0	20.64	19.06	16.91	34.77	-17.86
				1	24	20.78	19.20	17.05	34.77	-17.72
				12	6	20.63	19.05	16.90	34.77	-17.87
				25	0	19.70	18.12	15.97	34.77	-18.80

Antenna gain (dBi)		-1.58								
LTE Band 17_Uplink frequency band : 704 to 716 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10	23780	709	QPSK	1	0	22.97	21.39	19.24	34.77	-15.53
				1	49	22.69	21.11	18.96	34.77	-15.81
				25	12	21.66	20.08	17.93	34.77	-16.84
				50	0	21.68	20.10	17.95	34.77	-16.82
	23790	710	QPSK	1	0	22.97	21.39	19.24	34.77	-15.53
				1	49	22.77	21.19	19.04	34.77	-15.73
				25	12	21.63	20.05	17.90	34.77	-16.87
				50	0	21.64	20.06	17.91	34.77	-16.86
	23800	711	QPSK	1	0	22.79	21.21	19.06	34.77	-15.71
				1	49	22.70	21.12	18.97	34.77	-15.80
				25	12	21.68	20.10	17.95	34.77	-16.82
				50	0	21.67	20.09	17.94	34.77	-16.83
10	23780	709	16QAM	1	0	22.14	20.56	18.41	34.77	-16.36
				1	49	22.07	20.49	18.34	34.77	-16.43
				25	12	20.58	19.00	16.85	34.77	-17.92
				50	0	20.72	19.14	16.99	34.77	-17.78
	23790	710	16QAM	1	0	22.39	20.81	18.66	34.77	-16.11
				1	49	22.08	20.50	18.35	34.77	-16.42
				25	12	20.61	19.03	16.88	34.77	-17.89
				50	0	20.83	19.25	17.10	34.77	-17.67
	23800	711	16QAM	1	0	22.33	20.75	18.60	34.77	-16.17
				1	49	22.13	20.55	18.40	34.77	-16.37
				25	12	20.61	19.03	16.88	34.77	-17.89
				50	0	20.88	19.30	17.15	34.77	-17.62
10	23780	709	64QAM	1	0	20.98	19.40	17.25	34.77	-17.52
				1	49	20.96	19.38	17.23	34.77	-17.54
				25	12	20.64	19.06	16.91	34.77	-17.86
				50	0	19.84	18.26	16.11	34.77	-18.66
	23790	710	64QAM	1	0	21.00	19.42	17.27	34.77	-17.50
				1	49	21.06	19.48	17.33	34.77	-17.44
				25	12	20.57	18.99	16.84	34.77	-17.93
				50	0	19.98	18.40	16.25	34.77	-18.52
	23800	711	64QAM	1	0	20.72	19.14	16.99	34.77	-17.78
				1	49	20.73	19.15	17.00	34.77	-17.77
				25	12	20.68	19.10	16.95	34.77	-17.82
				50	0	19.74	18.16	16.01	34.77	-18.76

LTE Band 25

Antenna gain (dBi)		2.92							
LTE Band 25_Uplink frequency band : 1850 to 1915 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	26047	1850.7	QPSK	1	0	22.57	25.49	33	-7.51
				1	5	22.34	25.26	33	-7.74
				3	2	22.26	25.18	33	-7.82
				6	0	21.42	24.34	33	-8.66
	26365	1882.5	QPSK	1	0	22.09	25.01	33	-7.99
				1	5	22.01	24.93	33	-8.07
				3	2	22.11	25.03	33	-7.97
				6	0	21.11	24.03	33	-8.97
	26683	1914.3	QPSK	1	0	22.28	25.20	33	-7.8
				1	5	22.07	24.99	33	-8.01
				3	2	22.19	25.11	33	-7.89
				6	0	21.15	24.07	33	-8.93
1.4	26047	1850.7	16QAM	1	0	21.44	24.36	33	-8.64
				1	5	21.47	24.39	33	-8.61
				3	2	21.61	24.53	33	-8.47
				6	0	20.33	23.25	33	-9.75
	26365	1882.5	16QAM	1	0	21.16	24.08	33	-8.92
				1	5	21.08	24.00	33	-9
				3	2	21.25	24.17	33	-8.83
				6	0	20.22	23.14	33	-9.86
	26683	1914.3	16QAM	1	0	21.51	24.43	33	-8.57
				1	5	21.51	24.43	33	-8.57
				3	2	21.36	24.28	33	-8.72
				6	0	20.12	23.04	33	-9.96
1.4	26047	1850.7	64QAM	1	0	20.61	23.53	33	-9.47
				1	5	21.48	24.40	33	-8.6
				3	2	21.66	24.58	33	-8.42
				6	0	20.44	23.36	33	-9.64
	26365	1882.5	64QAM	1	0	21.29	24.21	33	-8.79
				1	5	21.21	24.13	33	-8.87
				3	2	21.08	24.00	33	-9
				6	0	20.04	22.96	33	-10.04
	26683	1914.3	64QAM	1	0	21.37	24.29	33	-8.71
				1	5	21.37	24.29	33	-8.71
				3	2	21.27	24.19	33	-8.81
				6	0	20.11	23.03	33	-9.97

Antenna gain (dBi)		2.92							
LTE Band 25_Uplink frequency band : 1850 to 1915 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3	26055	1851.5	QPSK	1	0	22.61	25.53	33	-7.47
				1	14	22.10	25.02	33	-7.98
				8	4	21.60	24.52	33	-8.48
				15	0	21.55	24.47	33	-8.53
	26365	1882.5	QPSK	1	0	22.09	25.01	33	-7.99
				1	14	22.07	24.99	33	-8.01
				8	4	21.12	24.04	33	-8.96
				15	0	21.11	24.03	33	-8.97
	26675	1913.5	QPSK	1	0	22.34	25.26	33	-7.74
				1	14	22.05	24.97	33	-8.03
				8	4	21.29	24.21	33	-8.79
				15	0	21.40	24.32	33	-8.68
3	26055	1851.5	16QAM	1	0	21.94	24.86	33	-8.14
				1	14	21.88	24.80	33	-8.2
				8	4	20.64	23.56	33	-9.44
				15	0	20.51	23.43	33	-9.57
	26365	1882.5	16QAM	1	0	21.03	23.95	33	-9.05
				1	14	21.12	24.04	33	-8.96
				8	4	20.26	23.18	33	-9.82
				15	0	20.06	22.98	33	-10.02
	26675	1913.5	16QAM	1	0	21.57	24.49	33	-8.51
				1	14	21.44	24.36	33	-8.64
				8	4	20.30	23.22	33	-9.78
				15	0	20.28	23.20	33	-9.8
3	26055	1851.5	64QAM	1	0	20.72	23.64	33	-9.36
				1	14	21.67	24.59	33	-8.41
				8	4	19.78	22.70	33	-10.3
				15	0	20.48	23.40	33	-9.6
	26365	1882.5	64QAM	1	0	21.27	24.19	33	-8.81
				1	14	21.19	24.11	33	-8.89
				8	4	20.11	23.03	33	-9.97
				15	0	20.13	23.05	33	-9.95
	26675	1913.5	64QAM	1	0	21.04	23.96	33	-9.04
				1	14	21.28	24.20	33	-8.8
				8	4	20.26	23.18	33	-9.82
				15	0	20.26	23.18	33	-9.82

Antenna gain (dBi)		2.92							
LTE Band 25_Uplink frequency band : 1850 to 1915 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	26065	1852.5	QPSK	1	0	22.54	25.46	33	-7.54
				1	24	22.25	25.17	33	-7.83
				12	6	21.31	24.23	33	-8.77
				25	0	21.47	24.39	33	-8.61
	26365	1882.5	QPSK	1	0	22.29	25.21	33	-7.79
				1	24	22.01	24.93	33	-8.07
				12	6	21.13	24.05	33	-8.95
				25	0	21.27	24.19	33	-8.81
	26665	1912.5	QPSK	1	0	22.40	25.32	33	-7.68
				1	24	22.25	25.17	33	-7.83
				12	6	21.27	24.19	33	-8.81
				25	0	21.42	24.34	33	-8.66
5	26065	1852.5	16QAM	1	0	21.85	24.77	33	-8.23
				1	24	21.60	24.52	33	-8.48
				12	6	20.36	23.28	33	-9.72
				25	0	20.42	23.34	33	-9.66
	26365	1882.5	16QAM	1	0	21.34	24.26	33	-8.74
				1	24	21.24	24.16	33	-8.84
				12	6	20.12	23.04	33	-9.96
				25	0	20.23	23.15	33	-9.85
	26665	1912.5	16QAM	1	0	21.67	24.59	33	-8.41
				1	24	21.44	24.36	33	-8.64
				12	6	20.36	23.28	33	-9.72
				25	0	20.31	23.23	33	-9.77
5	26065	1852.5	64QAM	1	0	20.78	23.70	33	-9.3
				1	24	21.48	24.40	33	-8.6
				12	6	20.35	23.27	33	-9.73
				25	0	20.42	23.34	33	-9.66
	26365	1882.5	64QAM	1	0	21.24	24.16	33	-8.84
				1	24	21.33	24.25	33	-8.75
				12	6	20.21	23.13	33	-9.87
				25	0	20.24	23.16	33	-9.84
	26665	1912.5	64QAM	1	0	20.91	23.83	33	-9.17
				1	24	21.40	24.32	33	-8.68
				12	6	20.35	23.27	33	-9.73
				25	0	20.40	23.32	33	-9.68

Antenna gain (dBi)		2.92							
LTE Band 25_Uplink frequency band : 1850 to 1915 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	26090	1855	QPSK	1	0	22.55	25.47	33	-7.53
				1	49	22.56	25.48	33	-7.52
				25	12	21.40	24.32	33	-8.68
				50	0	21.39	24.31	33	-8.69
	26365	1882.5	QPSK	1	0	22.29	25.21	33	-7.79
				1	49	22.21	25.13	33	-7.87
				25	12	21.32	24.24	33	-8.76
				50	0	21.22	24.14	33	-8.86
	26640	1910	QPSK	1	0	22.42	25.34	33	-7.66
				1	49	22.52	25.44	33	-7.56
				25	12	21.33	24.25	33	-8.75
				50	0	21.35	24.27	33	-8.73
10	26090	1855	16QAM	1	0	21.94	24.86	33	-8.14
				1	49	21.85	24.77	33	-8.23
				25	12	20.35	23.27	33	-9.73
				50	0	20.45	23.37	33	-9.63
	26365	1882.5	16QAM	1	0	21.53	24.45	33	-8.55
				1	49	21.80	24.72	33	-8.28
				25	12	20.20	23.12	33	-9.88
				50	0	20.21	23.13	33	-9.87
	26640	1910	16QAM	1	0	21.65	24.57	33	-8.43
				1	49	21.86	24.78	33	-8.22
				25	12	20.30	23.22	33	-9.78
				50	0	20.30	23.22	33	-9.78
10	26090	1855	64QAM	1	0	20.67	23.59	33	-9.41
				1	49	20.78	23.70	33	-9.3
				25	12	20.37	23.29	33	-9.71
				50	0	20.35	23.27	33	-9.73
	26365	1882.5	64QAM	1	0	20.57	23.49	33	-9.51
				1	49	20.75	23.67	33	-9.33
				25	12	20.27	23.19	33	-9.81
				50	0	20.20	23.12	33	-9.88
	26640	1910	64QAM	1	0	21.02	23.94	33	-9.06
				1	49	21.00	23.92	33	-9.08
				25	12	20.30	23.22	33	-9.78
				50	0	20.29	23.21	33	-9.79

Antenna gain (dBi)		2.92							
LTE Band 25_Uplink frequency band : 1850 to 1915 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15	26115	1857.5	QPSK	1	0	22.36	25.28	33	-7.72
				1	74	22.36	25.28	33	-7.72
				36	18	21.35	24.27	33	-8.73
				75	0	21.46	24.38	33	-8.62
	26365	1882.5	QPSK	1	0	22.25	25.17	33	-7.83
				1	74	22.15	25.07	33	-7.93
				36	18	21.27	24.19	33	-8.81
				75	0	21.31	24.23	33	-8.77
	26615	1907.5	QPSK	1	0	22.46	25.38	33	-7.62
				1	74	22.42	25.34	33	-7.66
				36	18	21.48	24.40	33	-8.6
				75	0	21.53	24.45	33	-8.55
15	26115	1857.5	16QAM	1	0	21.80	24.72	33	-8.28
				1	74	21.80	24.72	33	-8.28
				36	18	20.31	23.23	33	-9.77
				75	0	20.46	23.38	33	-9.62
	26365	1882.5	16QAM	1	0	21.70	24.62	33	-8.38
				1	74	21.50	24.42	33	-8.58
				36	18	20.23	23.15	33	-9.85
				75	0	20.36	23.28	33	-9.72
	26615	1907.5	16QAM	1	0	21.80	24.72	33	-8.28
				1	74	21.72	24.64	33	-8.36
				36	18	20.53	23.45	33	-9.55
				75	0	20.60	23.52	33	-9.48
15	26115	1857.5	64QAM	1	0	20.70	23.62	33	-9.38
				1	74	20.64	23.56	33	-9.44
				36	18	20.40	23.32	33	-9.68
				75	0	20.45	23.37	33	-9.63
	26365	1882.5	64QAM	1	0	21.45	24.37	33	-8.63
				1	74	21.46	24.38	33	-8.62
				36	18	20.24	23.16	33	-9.84
				75	0	20.35	23.27	33	-9.73
	26615	1907.5	64QAM	1	0	20.97	23.89	33	-9.11
				1	74	21.08	24.00	33	-9
				36	18	20.53	23.45	33	-9.55
				75	0	20.00	22.92	33	-10.08

Antenna gain (dBi)		2.92							
LTE Band 25_Uplink frequency band : 1850 to 1915 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20	26140	1860	QPSK	1	0	22.68	25.60	33	-7.4
				1	99	22.19	25.11	33	-7.89
				50	25	21.39	24.31	33	-8.69
				100	0	21.38	24.30	33	-8.7
	26365	1882.5	QPSK	1	0	22.46	25.38	33	-7.62
				1	99	22.04	24.96	33	-8.04
				50	25	21.23	24.15	33	-8.85
				100	0	21.27	24.19	33	-8.81
	26590	1905	QPSK	1	0	22.50	25.42	33	-7.58
				1	99	22.18	25.10	33	-7.9
				50	25	21.45	24.37	33	-8.63
				100	0	21.55	24.47	33	-8.53
20	26140	1860	16QAM	1	0	21.80	24.72	33	-8.28
				1	99	21.47	24.39	33	-8.61
				50	25	20.40	23.32	33	-9.68
				100	0	20.30	23.22	33	-9.78
	26365	1882.5	16QAM	1	0	21.81	24.73	33	-8.27
				1	99	21.43	24.35	33	-8.65
				50	25	20.19	23.11	33	-9.89
				100	0	20.27	23.19	33	-9.81
	26590	1905	16QAM	1	0	21.90	24.82	33	-8.18
				1	99	21.44	24.36	33	-8.64
				50	25	20.41	23.33	33	-9.67
				100	0	20.48	23.40	33	-9.6
20	26140	1860	64QAM	1	0	19.78	22.70	33	-10.3
				1	99	21.36	24.28	33	-8.72
				50	25	20.27	23.19	33	-9.81
				100	0	20.29	23.21	33	-9.79
	26365	1882.5	64QAM	1	0	19.69	22.61	33	-10.39
				1	99	21.25	24.17	33	-8.83
				50	25	20.16	23.08	33	-9.92
				100	0	20.28	23.20	33	-9.8
	26590	1905	64QAM	1	0	20.00	22.92	33	-10.08
				1	99	21.39	24.31	33	-8.69
				50	25	20.49	23.41	33	-9.59
				100	0	20.48	23.40	33	-9.6

(For FCC/IC) LTE Band 26

Antenna gain (dBi)		1.84								
LTE Band 26 Uplink frequency band : 824 to 849 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	26797	824.7	QPSK	1	0	21.96	23.80	21.65	38.45	-16.80
				1	5	22.08	23.92	21.77	38.45	-16.68
				3	2	22.02	23.86	21.71	38.45	-16.74
				6	0	21.00	22.84	20.69	38.45	-17.76
	26915	836.5	QPSK	1	0	22.53	24.37	22.22	38.45	-16.23
				1	5	22.50	24.34	22.19	38.45	-16.26
				3	2	22.53	24.37	22.22	38.45	-16.23
				6	0	21.57	23.41	21.26	38.45	-17.19
	27033	848.3	QPSK	1	0	22.74	24.58	22.43	38.45	-16.02
				1	5	22.73	24.57	22.42	38.45	-16.03
				3	2	22.80	24.64	22.49	38.45	-15.96
				6	0	21.76	23.60	21.45	38.45	-17.00
1.4	26797	824.7	16QAM	1	0	21.36	23.20	21.05	38.45	-17.40
				1	5	21.06	22.90	20.75	38.45	-17.70
				3	2	20.99	22.83	20.68	38.45	-17.77
				6	0	20.16	22.00	19.85	38.45	-18.60
	26915	836.5	16QAM	1	0	21.79	23.63	21.48	38.45	-16.97
				1	5	21.90	23.74	21.59	38.45	-16.86
				3	2	21.44	23.28	21.13	38.45	-17.32
				6	0	20.66	22.50	20.35	38.45	-18.10
	27033	848.3	16QAM	1	0	22.38	24.22	22.07	38.45	-16.38
				1	5	22.14	23.98	21.83	38.45	-16.62
				3	2	21.72	23.56	21.41	38.45	-17.04
				6	0	20.85	22.69	20.54	38.45	-17.91
1.4	26797	824.7	64QAM	1	0	21.10	22.94	20.79	38.45	-17.66
				1	5	21.17	23.01	20.86	38.45	-17.59
				3	2	21.05	22.89	20.74	38.45	-17.71
				6	0	20.08	21.92	19.77	38.45	-18.68
	26915	836.5	64QAM	1	0	21.65	23.49	21.34	38.45	-17.11
				1	5	21.65	23.49	21.34	38.45	-17.11
				3	2	21.58	23.42	21.27	38.45	-17.18
				6	0	20.50	22.34	20.19	38.45	-18.26
	27033	848.3	64QAM	1	0	21.94	23.78	21.63	38.45	-16.82
				1	5	21.88	23.72	21.57	38.45	-16.88
				3	2	21.80	23.64	21.49	38.45	-16.96
				6	0	20.71	22.55	20.40	38.45	-18.05

Antenna gain (dBi)		1.84								
LTE Band 26_Uplink frequency band : 824 to 849 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3	26805	825.5	QPSK	1	0	22.00	23.84	21.69	38.45	-16.76
				1	14	22.00	23.84	21.69	38.45	-16.76
				8	4	21.04	22.88	20.73	38.45	-17.72
				15	0	20.99	22.83	20.68	38.45	-17.77
	26915	836.5	QPSK	1	0	22.63	24.47	22.32	38.45	-16.13
				1	14	22.65	24.49	22.34	38.45	-16.11
				8	4	21.57	23.41	21.26	38.45	-17.19
				15	0	21.58	23.42	21.27	38.45	-17.18
	27025	847.5	QPSK	1	0	22.86	24.70	22.55	38.45	-15.90
				1	14	22.77	24.61	22.46	38.45	-15.99
				8	4	21.64	23.48	21.33	38.45	-17.12
				15	0	21.92	23.76	21.61	38.45	-16.84
3	26805	825.5	16QAM	1	0	21.35	23.19	21.04	38.45	-17.41
				1	14	21.45	23.29	21.14	38.45	-17.31
				8	4	20.07	21.91	19.76	38.45	-18.69
				15	0	20.08	21.92	19.77	38.45	-18.68
	26915	836.5	16QAM	1	0	21.89	23.73	21.58	38.45	-16.87
				1	14	21.91	23.75	21.60	38.45	-16.85
				8	4	20.54	22.38	20.23	38.45	-18.22
				15	0	20.59	22.43	20.28	38.45	-18.17
	27025	847.5	16QAM	1	0	22.53	24.37	22.22	38.45	-16.23
				1	14	22.21	24.05	21.90	38.45	-16.55
				8	4	20.82	22.66	20.51	38.45	-17.94
				15	0	20.90	22.74	20.59	38.45	-17.86
3	26805	825.5	64QAM	1	0	21.14	22.98	20.83	38.45	-17.62
				1	14	21.35	23.19	21.04	38.45	-17.41
				8	4	20.01	21.85	19.70	38.45	-18.75
				15	0	20.06	21.90	19.75	38.45	-18.70
	26915	836.5	64QAM	1	0	21.79	23.63	21.48	38.45	-16.97
				1	14	21.83	23.67	21.52	38.45	-16.93
				8	4	20.58	22.42	20.27	38.45	-18.18
				15	0	20.57	22.41	20.26	38.45	-18.19
	27025	847.5	64QAM	1	0	21.39	23.23	21.08	38.45	-17.37
				1	14	21.92	23.76	21.61	38.45	-16.84
				8	4	20.97	22.81	20.66	38.45	-17.79
				15	0	20.86	22.70	20.55	38.45	-17.90

Antenna gain (dBi)		1.84								
LTE Band 26_Uplink frequency band : 824 to 849 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5	26815	826.5	QPSK	1	0	22.08	23.92	21.77	38.45	-16.68
				1	24	22.19	24.03	21.88	38.45	-16.57
				12	6	21.05	22.89	20.74	38.45	-17.71
				25	0	21.09	22.93	20.78	38.45	-17.67
	26915	836.5	QPSK	1	0	22.66	24.50	22.35	38.45	-16.10
				1	24	22.61	24.45	22.30	38.45	-16.15
				12	6	21.59	23.43	21.28	38.45	-17.17
				25	0	21.52	23.36	21.21	38.45	-17.24
	27015	846.5	QPSK	1	0	22.98	24.82	22.67	38.45	-15.78
				1	24	22.90	24.74	22.59	38.45	-15.86
				12	6	21.76	23.60	21.45	38.45	-17.00
				25	0	21.85	23.69	21.54	38.45	-16.91
5	26815	826.5	16QAM	1	0	21.22	23.06	20.91	38.45	-17.54
				1	24	21.47	23.31	21.16	38.45	-17.29
				12	6	20.04	21.88	19.73	38.45	-18.72
				25	0	20.17	22.01	19.86	38.45	-18.59
	26915	836.5	16QAM	1	0	21.87	23.71	21.56	38.45	-16.89
				1	24	21.91	23.75	21.60	38.45	-16.85
				12	6	20.62	22.46	20.31	38.45	-18.14
				25	0	20.54	22.38	20.23	38.45	-18.22
	27015	846.5	16QAM	1	0	22.22	24.06	21.91	38.45	-16.54
				1	24	22.10	23.94	21.79	38.45	-16.66
				12	6	20.89	22.73	20.58	38.45	-17.87
				25	0	20.98	22.82	20.67	38.45	-17.78
5	26815	826.5	64QAM	1	0	21.20	23.04	20.89	38.45	-17.56
				1	24	21.18	23.02	20.87	38.45	-17.58
				12	6	20.05	21.89	19.74	38.45	-18.71
				25	0	20.06	21.90	19.75	38.45	-18.70
	26915	836.5	64QAM	1	0	21.65	23.49	21.34	38.45	-17.11
				1	24	21.76	23.60	21.45	38.45	-17.00
				12	6	20.57	22.41	20.26	38.45	-18.19
				25	0	20.54	22.38	20.23	38.45	-18.22
	27015	846.5	64QAM	1	0	20.86	22.70	20.55	38.45	-17.90
				1	24	21.95	23.79	21.64	38.45	-16.81
				12	6	20.90	22.74	20.59	38.45	-17.86
				25	0	20.91	22.75	20.60	38.45	-17.85

Antenna gain (dBi)		1.84								
LTE Band 26_Uplink frequency band : 824 to 849 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10	26840	829	QPSK	1	0	22.33	24.17	22.02	38.45	-16.43
				1	49	22.51	24.35	22.20	38.45	-16.25
				25	12	21.10	22.94	20.79	38.45	-17.66
				50	0	21.19	23.03	20.88	38.45	-17.57
	26915	836.5	QPSK	1	0	22.89	24.73	22.58	38.45	-15.87
				1	49	23.03	24.87	22.72	38.45	-15.73
				25	12	21.54	23.38	21.23	38.45	-17.22
				50	0	21.69	23.53	21.38	38.45	-17.07
	26990	844	QPSK	1	0	23.19	25.03	22.88	38.45	-15.57
				1	49	23.09	24.93	22.78	38.45	-15.67
				25	12	21.78	23.62	21.47	38.45	-16.98
				50	0	22.04	23.88	21.73	38.45	-16.72
10	26840	829	16QAM	1	0	21.63	23.47	21.32	38.45	-17.13
				1	49	21.72	23.56	21.41	38.45	-17.04
				25	12	20.19	22.03	19.88	38.45	-18.57
				50	0	20.21	22.05	19.90	38.45	-18.55
	26915	836.5	16QAM	1	0	21.86	23.70	21.55	38.45	-16.90
				1	49	22.29	24.13	21.98	38.45	-16.47
				25	12	20.64	22.48	20.33	38.45	-18.12
				50	0	20.71	22.55	20.40	38.45	-18.05
	26990	844	16QAM	1	0	22.16	24.00	21.85	38.45	-16.60
				1	49	22.27	24.11	21.96	38.45	-16.49
				25	12	20.80	22.64	20.49	38.45	-17.96
				50	0	20.98	22.82	20.67	38.45	-17.78
10	26840	829	64QAM	1	0	21.37	23.21	21.06	38.45	-17.39
				1	49	21.70	23.54	21.39	38.45	-17.06
				25	12	20.08	21.92	19.77	38.45	-18.68
				50	0	20.20	22.04	19.89	38.45	-18.56
	26915	836.5	64QAM	1	0	21.79	23.63	21.48	38.45	-16.97
				1	49	21.09	22.93	20.78	38.45	-17.67
				25	12	20.56	22.40	20.25	38.45	-18.20
				50	0	20.69	22.53	20.38	38.45	-18.07
	26990	844	64QAM	1	0	20.85	22.69	20.54	38.45	-17.91
				1	49	21.36	23.20	21.05	38.45	-17.40
				25	12	20.80	22.64	20.49	38.45	-17.96
				50	0	20.41	22.25	20.10	38.45	-18.35

Antenna gain (dBi)		1.84								
LTE Band 26 Uplink frequency band : 824 to 849 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
15	26865	831.5	QPSK	1	0	22.60	24.44	22.29	38.45	-16.16
				1	74	22.89	24.73	22.58	38.45	-15.87
				36	18	21.55	23.39	21.24	38.45	-17.21
				75	0	21.47	23.31	21.16	38.45	-17.29
	26915	836.5	QPSK	1	0	22.94	24.78	22.63	38.45	-15.82
				1	74	23.07	24.91	22.76	38.45	-15.69
				36	18	21.66	23.50	21.35	38.45	-17.10
				75	0	21.74	23.58	21.43	38.45	-17.02
	26965	841.5	QPSK	1	0	23.14	24.98	22.83	38.45	-15.62
				1	74	23.24	25.08	22.93	38.45	-15.52
				36	18	22.03	23.87	21.72	38.45	-16.73
				75	0	21.97	23.81	21.66	38.45	-16.79
15	26865	831.5	16QAM	1	0	21.58	23.42	21.27	38.45	-17.18
				1	74	22.05	23.89	21.74	38.45	-16.71
				36	18	20.51	22.35	20.20	38.45	-18.25
				75	0	20.57	22.41	20.26	38.45	-18.19
	26915	836.5	16QAM	1	0	21.84	23.68	21.53	38.45	-16.92
				1	74	22.13	23.97	21.82	38.45	-16.63
				36	18	20.68	22.52	20.37	38.45	-18.08
				75	0	20.75	22.59	20.44	38.45	-18.01
	26965	841.5	16QAM	1	0	22.11	23.95	21.80	38.45	-16.65
				1	74	22.34	24.18	22.03	38.45	-16.42
				36	18	20.90	22.74	20.59	38.45	-17.86
				75	0	20.80	22.64	20.49	38.45	-17.96
15	26865	831.5	64QAM	1	0	21.65	23.49	21.34	38.45	-17.11
				1	74	21.95	23.79	21.64	38.45	-16.81
				36	18	20.48	22.32	20.17	38.45	-18.28
				75	0	20.57	22.41	20.26	38.45	-18.19
	26915	836.5	64QAM	1	0	21.75	23.59	21.44	38.45	-17.01
				1	74	21.98	23.82	21.67	38.45	-16.78
				36	18	20.76	22.60	20.45	38.45	-18.00
				75	0	20.75	22.59	20.44	38.45	-18.01
	26965	841.5	64QAM	1	0	21.43	23.27	21.12	38.45	-17.33
				1	74	21.38	23.22	21.07	38.45	-17.38
				36	18	20.92	22.76	20.61	38.45	-17.84
				75	0	20.95	22.79	20.64	38.45	-17.81

(For FCC) Band 26

Antenna gain (dBi)		1.62								
Part 90S_LTE Band 26_Uplink frequency band : 814 to 824 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	26697	814.7	QPSK	1	0	22.68	24.30	22.15	50	-27.85
				1	5	22.54	24.16	22.01	50	-27.99
				3	2	22.52	24.14	21.99	50	-28.01
				6	0	21.59	23.21	21.06	50	-28.94
	26740	819	QPSK	1	0	22.47	24.09	21.94	50	-28.06
				1	5	22.49	24.11	21.96	50	-28.04
				3	2	22.47	24.09	21.94	50	-28.06
				6	0	21.49	23.11	20.96	50	-29.04
	26783	823.3	QPSK	1	0	22.40	24.02	21.87	50	-28.13
				1	5	22.34	23.96	21.81	50	-28.19
				3	2	22.39	24.01	21.86	50	-28.14
				6	0	21.32	22.94	20.79	50	-29.21
1.4	26697	814.7	16QAM	1	0	22.08	23.70	21.55	50	-28.45
				1	5	22.02	23.64	21.49	50	-28.51
				3	2	21.56	23.18	21.03	50	-28.97
				6	0	20.73	22.35	20.20	50	-29.80
	26740	819	16QAM	1	0	21.62	23.24	21.09	50	-28.91
				1	5	21.54	23.16	21.01	50	-28.99
				3	2	21.40	23.02	20.87	50	-29.13
				6	0	20.54	22.16	20.01	50	-29.99
	26783	823.3	16QAM	1	0	21.76	23.38	21.23	50	-28.77
				1	5	21.75	23.37	21.22	50	-28.78
				3	2	21.40	23.02	20.87	50	-29.13
				6	0	20.49	22.11	19.96	50	-30.04
1.4	26697	814.7	64QAM	1	0	21.77	23.39	21.24	50	-28.76
				1	5	21.59	23.21	21.06	50	-28.94
				3	2	21.78	23.40	21.25	50	-28.75
				6	0	20.68	22.30	20.15	50	-29.85
	26740	819	64QAM	1	0	21.55	23.17	21.02	50	-28.98
				1	5	21.47	23.09	20.94	50	-29.06
				3	2	21.35	22.97	20.82	50	-29.18
				6	0	20.36	21.98	19.83	50	-30.17
	26783	823.3	64QAM	1	0	21.54	23.16	21.01	50	-28.99
				1	5	21.43	23.05	20.90	50	-29.10
				3	2	21.40	23.02	20.87	50	-29.13
				6	0	20.34	21.96	19.81	50	-30.19

Antenna gain (dBi)		1.62									
Part 90S_LTE Band 26_Uplink frequency band : 814 to 824 MHz											
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)	
3	26705	815.5	QPSK	1	0	22.76	24.38	22.23	50	-27.77	
				1	14	22.62	24.24	22.09	50	-27.91	
				8	4	21.54	23.16	21.01	50	-28.99	
				15	0	21.62	23.24	21.09	50	-28.91	
	26740	819	QPSK	1	0	22.48	24.10	21.95	50	-28.05	
				1	14	22.47	24.09	21.94	50	-28.06	
				8	4	21.52	23.14	20.99	50	-29.01	
				15	0	21.53	23.15	21.00	50	-29.00	
	26775	822.5	QPSK	1	0	22.31	23.93	21.78	50	-28.22	
				1	14	22.35	23.97	21.82	50	-28.18	
				8	4	21.42	23.04	20.89	50	-29.11	
				15	0	21.44	23.06	20.91	50	-29.09	
3	26705	815.5	16QAM	1	0	21.84	23.46	21.31	50	-28.69	
				1	14	21.76	23.38	21.23	50	-28.77	
				8	4	20.50	22.12	19.97	50	-30.03	
				15	0	20.69	22.31	20.16	50	-29.84	
	26740	819	16QAM	1	0	21.97	23.59	21.44	50	-28.56	
				1	14	21.90	23.52	21.37	50	-28.63	
				8	4	20.56	22.18	20.03	50	-29.97	
				15	0	20.51	22.13	19.98	50	-30.02	
	26775	822.5	16QAM	1	0	21.89	23.51	21.36	50	-28.64	
				1	14	21.83	23.45	21.30	50	-28.70	
				8	4	20.51	22.13	19.98	50	-30.02	
				15	0	20.56	22.18	20.03	50	-29.97	
3	26705	815.5	64QAM	1	0	21.75	23.37	21.22	50	-28.78	
				1	14	21.64	23.26	21.11	50	-28.89	
				8	4	20.54	22.16	20.01	50	-29.99	
				15	0	20.64	22.26	20.11	50	-29.89	
	26740	819	64QAM	1	0	21.83	23.45	21.30	50	-28.70	
				1	14	21.81	23.43	21.28	50	-28.72	
				8	4	20.59	22.21	20.06	50	-29.94	
				15	0	20.57	22.19	20.04	50	-29.96	
	26775	822.5	64QAM	1	0	21.59	23.21	21.06	50	-28.94	
				1	14	21.58	23.20	21.05	50	-28.95	
				8	4	20.59	22.21	20.06	50	-29.94	
				15	0	20.50	22.12	19.97	50	-30.03	

Antenna gain (dBi)		1.62									
Part 90S_LTE Band 26_Uplink frequency band : 814 to 824 MHz											
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)	
5	26715	816.5	QPSK	1	0	22.86	24.48	22.33	50	-27.67	
				1	24	22.61	24.23	22.08	50	-27.92	
				12	6	21.73	23.35	21.20	50	-28.80	
				25	0	21.65	23.27	21.12	50	-28.88	
	26740	819	QPSK	1	0	22.69	24.31	22.16	50	-27.84	
				1	24	22.56	24.18	22.03	50	-27.97	
				12	6	21.63	23.25	21.10	50	-28.90	
				25	0	21.53	23.15	21.00	50	-29.00	
	26765	821.5	QPSK	1	0	22.68	24.30	22.15	50	-27.85	
				1	24	22.51	24.13	21.98	50	-28.02	
				12	6	21.49	23.11	20.96	50	-29.04	
				25	0	21.52	23.14	20.99	50	-29.01	
5	26715	816.5	16QAM	1	0	22.05	23.67	21.52	50	-28.48	
				1	24	21.81	23.43	21.28	50	-28.72	
				12	6	20.67	22.29	20.14	50	-29.86	
				25	0	20.59	22.21	20.06	50	-29.94	
	26740	819	16QAM	1	0	22.05	23.67	21.52	50	-28.48	
				1	24	21.97	23.59	21.44	50	-28.56	
				12	6	20.63	22.25	20.10	50	-29.90	
				25	0	20.53	22.15	20.00	50	-30.00	
	26765	821.5	16QAM	1	0	22.09	23.71	21.56	50	-28.44	
				1	24	22.01	23.63	21.48	50	-28.52	
				12	6	20.46	22.08	19.93	50	-30.07	
				25	0	20.53	22.15	20.00	50	-30.00	
5	26715	816.5	64QAM	1	0	21.77	23.39	21.24	50	-28.76	
				1	24	21.64	23.26	21.11	50	-28.89	
				12	6	20.64	22.26	20.11	50	-29.89	
				25	0	20.57	22.19	20.04	50	-29.96	
	26740	819	64QAM	1	0	21.79	23.41	21.26	50	-28.74	
				1	24	21.66	23.28	21.13	50	-28.87	
				12	6	20.51	22.13	19.98	50	-30.02	
				25	0	20.55	22.17	20.02	50	-29.98	
	26765	821.5	64QAM	1	0	21.70	23.32	21.17	50	-28.83	
				1	24	21.58	23.20	21.05	50	-28.95	
				12	6	20.49	22.11	19.96	50	-30.04	
				25	0	20.50	22.12	19.97	50	-30.03	

Antenna gain (dBi)		1.62									
Part 90S_LTE Band 26_Uplink frequency band : 814 to 824 MHz											
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)	
10	26740	819	QPSK	1	0	23.13	24.75	22.60	50	-27.40	
				1	49	22.83	24.45	22.30	50	-27.70	
				25	12	21.67	23.29	21.14	50	-28.86	
				50	0	21.78	23.40	21.25	50	-28.75	
10	26740	819	16QAM	1	0	21.99	23.61	21.46	50	-28.54	
				1	49	21.91	23.53	21.38	50	-28.62	
				25	12	20.67	22.29	20.14	50	-29.86	
				50	0	20.77	22.39	20.24	50	-29.76	
10	26740	819	64QAM	1	0	22.14	23.76	21.61	50	-28.39	
				1	49	22.02	23.64	21.49	50	-28.51	
				25	12	20.64	22.26	20.11	50	-29.89	
				50	0	20.75	22.37	20.22	50	-29.78	

(For FCC) LTE Band 41

Antenna gain (dBi)		1.99							
LTE Band 41_(FCC) Uplink frequency band : 2496 to 2690 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	39675	2498.5	QPSK	1	0	22.42	24.41	33	-8.59
				1	24	22.54	24.53	33	-8.47
				12	6	21.66	23.65	33	-9.35
				25	0	21.68	23.67	33	-9.33
	40620	2593	QPSK	1	0	22.72	24.71	33	-8.29
				1	24	22.56	24.55	33	-8.45
				12	6	21.71	23.70	33	-9.3
				25	0	21.70	23.69	33	-9.31
	41565	2687.5	QPSK	1	0	22.54	24.53	33	-8.47
				1	24	22.40	24.39	33	-8.61
				12	6	21.54	23.53	33	-9.47
				25	0	21.58	23.57	33	-9.43
5	39675	2498.5	16QAM	1	0	21.95	23.94	33	-9.06
				1	24	21.74	23.73	33	-9.27
				12	6	20.80	22.79	33	-10.21
				25	0	20.76	22.75	33	-10.25
	40620	2593	16QAM	1	0	21.88	23.87	33	-9.13
				1	24	21.95	23.94	33	-9.06
				12	6	20.83	22.82	33	-10.18
				25	0	20.83	22.82	33	-10.18
	41565	2687.5	16QAM	1	0	21.74	23.73	33	-9.27
				1	24	21.66	23.65	33	-9.35
				12	6	20.48	22.47	33	-10.53
				25	0	20.50	22.49	33	-10.51
5	39675	2498.5	64QAM	1	0	21.43	23.42	33	-9.58
				1	24	21.23	23.22	33	-9.78
				12	6	20.78	22.77	33	-10.23
				25	0	20.45	22.44	33	-10.56
	40620	2593	64QAM	1	0	21.19	23.18	33	-9.82
				1	24	20.75	22.74	33	-10.26
				12	6	20.84	22.83	33	-10.17
				25	0	20.34	22.33	33	-10.67
	41565	2687.5	64QAM	1	0	21.55	23.54	33	-9.46
				1	24	21.20	23.19	33	-9.81
				12	6	20.65	22.64	33	-10.36
				25	0	20.41	22.40	33	-10.6

Antenna gain (dBi)		1.99							
LTE Band 41_(FCC) Uplink frequency band : 2496 to 2690 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	39700	2501	QPSK	1	0	22.54	24.53	33	-8.47
				1	49	22.54	24.53	33	-8.47
				25	12	21.76	23.75	33	-9.25
				50	0	21.72	23.71	33	-9.29
	40620	2593	QPSK	1	0	22.59	24.58	33	-8.42
				1	49	22.65	24.64	33	-8.36
				25	12	21.60	23.59	33	-9.41
				50	0	21.70	23.69	33	-9.31
	41540	2685	QPSK	1	0	22.37	24.36	33	-8.64
				1	49	22.34	24.33	33	-8.67
				25	12	21.46	23.45	33	-9.55
				50	0	21.46	23.45	33	-9.55
10	39700	2501	16QAM	1	0	21.75	23.74	33	-9.26
				1	49	21.75	23.74	33	-9.26
				25	12	20.84	22.83	33	-10.17
				50	0	20.73	22.72	33	-10.28
	40620	2593	16QAM	1	0	21.87	23.86	33	-9.14
				1	49	21.97	23.96	33	-9.04
				25	12	20.71	22.70	33	-10.3
				50	0	20.65	22.64	33	-10.36
	41540	2685	16QAM	1	0	21.60	23.59	33	-9.41
				1	49	21.58	23.57	33	-9.43
				25	12	20.51	22.50	33	-10.5
				50	0	20.54	22.53	33	-10.47
10	39700	2501	64QAM	1	0	21.43	23.42	33	-9.58
				1	49	21.25	23.24	33	-9.76
				25	12	20.72	22.71	33	-10.29
				50	0	20.38	22.37	33	-10.63
	40620	2593	64QAM	1	0	21.11	23.10	33	-9.9
				1	49	20.80	22.79	33	-10.21
				25	12	20.74	22.73	33	-10.27
				50	0	20.25	22.24	33	-10.76
	41540	2685	64QAM	1	0	21.45	23.44	33	-9.56
				1	49	21.34	23.33	33	-9.67
				25	12	20.39	22.38	33	-10.62
				50	0	20.49	22.48	33	-10.52

Antenna gain (dBi)		1.99							
LTE Band 41_(FCC) Uplink frequency band : 2496 to 2690 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15	39725	2503.5	QPSK	1	0	22.20	24.19	33	-8.81
				1	74	21.94	23.93	33	-9.07
				36	18	21.56	23.55	33	-9.45
				75	0	21.56	23.55	33	-9.45
	40620	2593	QPSK	1	0	21.99	23.98	33	-9.02
				1	74	22.13	24.12	33	-8.88
				36	18	21.74	23.73	33	-9.27
				75	0	21.63	23.62	33	-9.38
	41515	2682.5	QPSK	1	0	21.69	23.68	33	-9.32
				1	74	21.45	23.44	33	-9.56
				36	18	21.36	23.35	33	-9.65
				75	0	21.30	23.29	33	-9.71
15	39725	2503.5	16QAM	1	0	21.41	23.40	33	-9.6
				1	74	20.98	22.97	33	-10.03
				36	18	20.37	22.36	33	-10.64
				75	0	20.62	22.61	33	-10.39
	40620	2593	16QAM	1	0	21.14	23.13	33	-9.87
				1	74	21.22	23.21	33	-9.79
				36	18	20.77	22.76	33	-10.24
				75	0	20.76	22.75	33	-10.25
	41515	2682.5	16QAM	1	0	20.95	22.94	33	-10.06
				1	74	20.75	22.74	33	-10.26
				36	18	20.37	22.36	33	-10.64
				75	0	20.48	22.47	33	-10.53
15	39725	2503.5	64QAM	1	0	21.21	23.20	33	-9.8
				1	74	20.66	22.65	33	-10.35
				36	18	20.66	22.65	33	-10.35
				75	0	20.45	22.44	33	-10.56
	40620	2593	64QAM	1	0	21.03	23.02	33	-9.98
				1	74	21.06	23.05	33	-9.95
				36	18	20.65	22.64	33	-10.36
				75	0	20.25	22.24	33	-10.76
	41515	2682.5	64QAM	1	0	20.83	22.82	33	-10.18
				1	74	20.70	22.69	33	-10.31
				36	18	20.38	22.37	33	-10.63
				75	0	20.44	22.43	33	-10.57

Antenna gain (dBi)		1.99							
LTE Band 41_(FCC) Uplink frequency band : 2496 to 2690 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20	39750	2506	QPSK	1	0	22.39	24.38	33	-8.62
				1	99	21.85	23.84	33	-9.16
				50	25	21.52	23.51	33	-9.49
				100	0	21.52	23.51	33	-9.49
	40620	2593	QPSK	1	0	22.46	24.45	33	-8.55
				1	99	22.16	24.15	33	-8.85
				50	25	21.74	23.73	33	-9.27
				100	0	21.70	23.69	33	-9.31
	41490	2680	QPSK	1	0	21.65	23.64	33	-9.36
				1	99	21.69	23.68	33	-9.32
				50	25	21.42	23.41	33	-9.59
				100	0	21.31	23.30	33	-9.7
20	39750	2506	16QAM	1	0	21.56	23.55	33	-9.45
				1	99	21.03	23.02	33	-9.98
				50	25	20.64	22.63	33	-10.37
				100	0	20.51	22.50	33	-10.5
	40620	2593	16QAM	1	0	21.58	23.57	33	-9.43
				1	99	21.31	23.30	33	-9.7
				50	25	20.77	22.76	33	-10.24
				100	0	20.69	22.68	33	-10.32
	41490	2680	16QAM	1	0	20.86	22.85	33	-10.15
				1	99	20.88	22.87	33	-10.13
				50	25	20.40	22.39	33	-10.61
				100	0	20.36	22.35	33	-10.65
20	39750	2506	64QAM	1	0	21.39	23.38	33	-9.62
				1	99	20.97	22.96	33	-10.04
				50	25	20.60	22.59	33	-10.41
				100	0	20.39	22.38	33	-10.62
	40620	2593	64QAM	1	0	21.49	23.48	33	-9.52
				1	99	21.08	23.07	33	-9.93
				50	25	20.73	22.72	33	-10.28
				100	0	20.39	22.38	33	-10.62
	41490	2680	64QAM	1	0	20.74	22.73	33	-10.27
				1	99	20.85	22.84	33	-10.16
				50	25	20.45	22.44	33	-10.56
				100	0	20.09	22.08	33	-10.92

(For IC) LTE Band 41

Antenna gain (dBi)		1.99							
LTE Band 41 (IC)_ Uplink frequency band : 2500 to 2690 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	39715	2502.5	QPSK	1	0	22.31	24.30	33	-8.7
				1	24	22.42	24.41	33	-8.59
				12	6	21.51	23.50	33	-9.5
				25	0	21.54	23.53	33	-9.47
	40620	2593	QPSK	1	0	22.72	24.71	33	-8.29
				1	24	22.56	24.55	33	-8.45
				12	6	21.71	23.70	33	-9.3
				25	0	21.70	23.69	33	-9.31
	41565	2687.5	QPSK	1	0	22.54	24.53	33	-8.47
				1	24	22.40	24.39	33	-8.61
				12	6	21.54	23.53	33	-9.47
				25	0	21.58	23.57	33	-9.43
5	39715	2502.5	16QAM	1	0	21.87	23.86	33	-9.14
				1	24	21.63	23.62	33	-9.38
				12	6	20.65	22.64	33	-10.36
				25	0	20.72	22.71	33	-10.29
	40620	2593	16QAM	1	0	21.88	23.87	33	-9.13
				1	24	21.95	23.94	33	-9.06
				12	6	20.83	22.82	33	-10.18
				25	0	20.83	22.82	33	-10.18
	41565	2687.5	16QAM	1	0	21.74	23.73	33	-9.27
				1	24	21.66	23.65	33	-9.35
				12	6	20.48	22.47	33	-10.53
				25	0	20.50	22.49	33	-10.51
5	39715	2502.5	64QAM	1	0	21.37	23.36	33	-9.64
				1	24	21.15	23.14	33	-9.86
				12	6	20.68	22.67	33	-10.33
				25	0	20.33	22.32	33	-10.68
	40620	2593	64QAM	1	0	21.19	23.18	33	-9.82
				1	24	20.75	22.74	33	-10.26
				12	6	20.84	22.83	33	-10.17
				25	0	20.34	22.33	33	-10.67
	41565	2687.5	64QAM	1	0	21.55	23.54	33	-9.46
				1	24	21.20	23.19	33	-9.81
				12	6	20.65	22.64	33	-10.36
				25	0	20.41	22.40	33	-10.6

Antenna gain (dBi)		1.99							
LTE Band 41 (IC)_Uplink frequency band : 2500 to 2690 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	39740	2505	QPSK	1	0	22.45	24.44	33	-8.56
				1	49	22.49	24.48	33	-8.52
				25	12	21.70	23.69	33	-9.31
				50	0	21.64	23.63	33	-9.37
	40620	2593	QPSK	1	0	22.59	24.58	33	-8.42
				1	49	22.65	24.64	33	-8.36
				25	12	21.60	23.59	33	-9.41
				50	0	21.70	23.69	33	-9.31
	41540	2685	QPSK	1	0	22.37	24.36	33	-8.64
				1	49	22.34	24.33	33	-8.67
				25	12	21.46	23.45	33	-9.55
				50	0	21.46	23.45	33	-9.55
10	39740	2505	16QAM	1	0	21.71	23.70	33	-9.3
				1	49	21.71	23.70	33	-9.3
				25	12	20.78	22.77	33	-10.23
				50	0	20.64	22.63	33	-10.37
	40620	2593	16QAM	1	0	21.87	23.86	33	-9.14
				1	49	21.97	23.96	33	-9.04
				25	12	20.71	22.70	33	-10.3
				50	0	20.65	22.64	33	-10.36
	41540	2685	16QAM	1	0	21.60	23.59	33	-9.41
				1	49	21.58	23.57	33	-9.43
				25	12	20.51	22.50	33	-10.5
				50	0	20.54	22.53	33	-10.47
10	39740	2505	64QAM	1	0	21.40	23.39	33	-9.61
				1	49	21.19	23.18	33	-9.82
				25	12	20.64	22.63	33	-10.37
				50	0	20.33	22.32	33	-10.68
	40620	2593	64QAM	1	0	21.11	23.10	33	-9.9
				1	49	20.80	22.79	33	-10.21
				25	12	20.74	22.73	33	-10.27
				50	0	20.25	22.24	33	-10.76
	41540	2685	64QAM	1	0	21.45	23.44	33	-9.56
				1	49	21.34	23.33	33	-9.67
				25	12	20.39	22.38	33	-10.62
				50	0	20.49	22.48	33	-10.52

Antenna gain (dBi)		1.99							
LTE Band 41 (IC)_Uplink frequency band : 2500 to 2690 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15	39765	2507.5	QPSK	1	0	22.22	24.21	33	-8.79
				1	74	21.90	23.89	33	-9.11
				36	18	21.06	23.05	33	-9.95
				75	0	20.86	22.85	33	-10.15
	40620	2593	QPSK	1	0	21.99	23.98	33	-9.02
				1	74	22.13	24.12	33	-8.88
				36	18	21.74	23.73	33	-9.27
				75	0	21.63	23.62	33	-9.38
	41515	2682.5	QPSK	1	0	21.69	23.68	33	-9.32
				1	74	21.45	23.44	33	-9.56
				36	18	21.36	23.35	33	-9.65
				75	0	21.30	23.29	33	-9.71
15	39765	2507.5	16QAM	1	0	21.45	23.44	33	-9.56
				1	74	20.58	22.57	33	-10.43
				36	18	20.07	22.06	33	-10.94
				75	0	20.02	22.01	33	-10.99
	40620	2593	16QAM	1	0	21.14	23.13	33	-9.87
				1	74	21.22	23.21	33	-9.79
				36	18	20.77	22.76	33	-10.24
				75	0	20.76	22.75	33	-10.25
	41515	2682.5	16QAM	1	0	20.95	22.94	33	-10.06
				1	74	20.75	22.74	33	-10.26
				36	18	20.37	22.36	33	-10.64
				75	0	20.48	22.47	33	-10.53
15	39765	2507.5	64QAM	1	0	21.41	23.40	33	-9.6
				1	74	20.55	22.54	33	-10.46
				36	18	20.45	22.44	33	-10.56
				75	0	19.97	21.96	33	-11.04
	40620	2593	64QAM	1	0	21.03	23.02	33	-9.98
				1	74	21.06	23.05	33	-9.95
				36	18	20.65	22.64	33	-10.36
				75	0	20.25	22.24	33	-10.76
	41515	2682.5	64QAM	1	0	20.83	22.82	33	-10.18
				1	74	20.70	22.69	33	-10.31
				36	18	20.38	22.37	33	-10.63
				75	0	20.44	22.43	33	-10.57

Antenna gain (dBi)		1.99							
LTE Band 41 (IC)_ Uplink frequency band : 2500 to 2690 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20	39790	2510	QPSK	1	0	21.99	23.98	33	-9.02
				1	99	21.35	23.34	33	-9.66
				50	25	21.12	23.11	33	-9.89
				100	0	21.22	23.21	33	-9.79
	40620	2593	QPSK	1	0	22.46	24.45	33	-8.55
				1	99	22.16	24.15	33	-8.85
				50	25	21.74	23.73	33	-9.27
				100	0	21.70	23.69	33	-9.31
	41490	2680	QPSK	1	0	21.65	23.64	33	-9.36
				1	99	21.69	23.68	33	-9.32
				50	25	21.42	23.41	33	-9.59
				100	0	21.31	23.30	33	-9.7
20	39790	2510	16QAM	1	0	21.16	23.15	33	-9.85
				1	99	20.53	22.52	33	-10.48
				50	25	20.24	22.23	33	-10.77
				100	0	20.31	22.30	33	-10.7
	40620	2593	16QAM	1	0	21.58	23.57	33	-9.43
				1	99	21.31	23.30	33	-9.7
				50	25	20.77	22.76	33	-10.24
				100	0	20.69	22.68	33	-10.32
	41490	2680	16QAM	1	0	20.86	22.85	33	-10.15
				1	99	20.88	22.87	33	-10.13
				50	25	20.40	22.39	33	-10.61
				100	0	20.36	22.35	33	-10.65
20	39790	2510	64QAM	1	0	21.19	23.18	33	-9.82
				1	99	20.37	22.36	33	-10.64
				50	25	20.20	22.19	33	-10.81
				100	0	19.99	21.98	33	-11.02
	40620	2593	64QAM	1	0	21.49	23.48	33	-9.52
				1	99	21.08	23.07	33	-9.93
				50	25	20.73	22.72	33	-10.28
				100	0	20.39	22.38	33	-10.62
	41490	2680	64QAM	1	0	20.74	22.73	33	-10.27
				1	99	20.85	22.84	33	-10.16
				50	25	20.45	22.44	33	-10.56
				100	0	20.09	22.08	33	-10.92

LTE Band 66

Antenna gain (dBi)		3.19							
LTE Band 66_Uplink frequency band : 1710 to 1780 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	131979	1710.7	QPSK	1	0	21.95	25.14	30	-4.86
				1	5	21.83	25.02	30	-4.98
				3	2	21.91	25.10	30	-4.9
				6	0	20.93	24.12	30	-5.88
	132322	1745	QPSK	1	0	22.49	25.68	30	-4.32
				1	5	22.51	25.70	30	-4.3
				3	2	22.53	25.72	30	-4.28
				6	0	21.42	24.61	30	-5.39
	132665	1779.3	QPSK	1	0	22.53	25.72	30	-4.28
				1	5	22.45	25.64	30	-4.36
				3	2	22.54	25.73	30	-4.27
				6	0	21.43	24.62	30	-5.38
1.4	131979	1710.7	16QAM	1	0	21.14	24.33	30	-5.67
				1	5	21.12	24.31	30	-5.69
				3	2	21.12	24.31	30	-5.69
				6	0	20.01	23.20	30	-6.8
	132322	1745	16QAM	1	0	21.73	24.92	30	-5.08
				1	5	21.64	24.83	30	-5.17
				3	2	21.64	24.83	30	-5.17
				6	0	20.54	23.73	30	-6.27
	132665	1779.3	16QAM	1	0	21.57	24.76	30	-5.24
				1	5	21.65	24.84	30	-5.16
				3	2	21.59	24.78	30	-5.22
				6	0	20.55	23.74	30	-6.26
1.4	131979	1710.7	64QAM	1	0	21.04	24.23	30	-5.77
				1	5	21.30	24.49	30	-5.51
				3	2	21.00	24.19	30	-5.81
				6	0	20.02	23.21	30	-6.79
	132322	1745	64QAM	1	0	21.40	24.59	30	-5.41
				1	5	20.75	23.94	30	-6.06
				3	2	21.57	24.76	30	-5.24
				6	0	19.74	22.93	30	-7.07
	132665	1779.3	64QAM	1	0	20.65	23.84	30	-6.16
				1	5	20.57	23.76	30	-6.24
				3	2	21.56	24.75	30	-5.25
				6	0	20.48	23.67	30	-6.33

Antenna gain (dBi)		3.19							
LTE Band 66_Uplink frequency band : 1710 to 1780 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3	131987	1711.5	QPSK	1	0	22.03	25.22	30	-4.78
				1	14	22.11	25.30	30	-4.7
				8	4	21.07	24.26	30	-5.74
				15	0	21.00	24.19	30	-5.81
	132322	1745	QPSK	1	0	22.48	25.67	30	-4.33
				1	14	22.51	25.70	30	-4.3
				8	4	21.52	24.71	30	-5.29
				15	0	21.50	24.69	30	-5.31
	132657	1778.5	QPSK	1	0	22.56	25.75	30	-4.25
				1	14	22.49	25.68	30	-4.32
				8	4	21.52	24.71	30	-5.29
				15	0	21.50	24.69	30	-5.31
3	131987	1711.5	16QAM	1	0	21.11	24.30	30	-5.7
				1	14	21.15	24.34	30	-5.66
				8	4	20.12	23.31	30	-6.69
				15	0	20.05	23.24	30	-6.76
	132322	1745	16QAM	1	0	21.77	24.96	30	-5.04
				1	14	21.77	24.96	30	-5.04
				8	4	20.61	23.80	30	-6.2
				15	0	20.55	23.74	30	-6.26
	132657	1778.5	16QAM	1	0	21.59	24.78	30	-5.22
				1	14	21.66	24.85	30	-5.15
				8	4	20.65	23.84	30	-6.16
				15	0	20.58	23.77	30	-6.23
3	131987	1711.5	64QAM	1	0	20.91	24.10	30	-5.9
				1	14	21.10	24.29	30	-5.71
				8	4	20.16	23.35	30	-6.65
				15	0	20.09	23.28	30	-6.72
	132322	1745	64QAM	1	0	20.76	23.95	30	-6.05
				1	14	20.61	23.80	30	-6.2
				8	4	20.57	23.76	30	-6.24
				15	0	19.58	22.77	30	-7.23
	132657	1778.5	64QAM	1	0	20.67	23.86	30	-6.14
				1	14	20.64	23.83	30	-6.17
				8	4	20.59	23.78	30	-6.22
				15	0	19.62	22.81	30	-7.19

Antenna gain (dBi)		3.19							
LTE Band 66_Uplink frequency band : 1710 to 1780 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5	131997	1712.5	QPSK	1	0	22.21	25.40	30	-4.6
				1	24	22.10	25.29	30	-4.71
				12	6	21.07	24.26	30	-5.74
				25	0	21.02	24.21	30	-5.79
	132322	1745	QPSK	1	0	22.59	25.78	30	-4.22
				1	24	22.55	25.74	30	-4.26
				12	6	21.61	24.80	30	-5.2
				25	0	21.62	24.81	30	-5.19
	132647	1777.5	QPSK	1	0	22.69	25.88	30	-4.12
				1	24	22.59	25.78	30	-4.22
				12	6	21.61	24.80	30	-5.2
				25	0	21.59	24.78	30	-5.22
5	131997	1712.5	16QAM	1	0	21.23	24.42	30	-5.58
				1	24	21.11	24.30	30	-5.7
				12	6	20.17	23.36	30	-6.64
				25	0	20.05	23.24	30	-6.76
	132322	1745	16QAM	1	0	21.85	25.04	30	-4.96
				1	24	21.87	25.06	30	-4.94
				12	6	20.59	23.78	30	-6.22
				25	0	20.67	23.86	30	-6.14
	132647	1777.5	16QAM	1	0	21.98	25.17	30	-4.83
				1	24	21.83	25.02	30	-4.98
				12	6	20.62	23.81	30	-6.19
				25	0	20.53	23.72	30	-6.28
5	131997	1712.5	64QAM	1	0	21.09	24.28	30	-5.72
				1	24	21.06	24.25	30	-5.75
				12	6	20.15	23.34	30	-6.66
				25	0	20.03	23.22	30	-6.78
	132322	1745	64QAM	1	0	20.61	23.80	30	-6.2
				1	24	20.58	23.77	30	-6.23
				12	6	20.58	23.77	30	-6.23
				25	0	19.73	22.92	30	-7.08
	132647	1777.5	64QAM	1	0	20.69	23.88	30	-6.12
				1	24	20.61	23.80	30	-6.2
				12	6	20.63	23.82	30	-6.18
				25	0	19.61	22.80	30	-7.2

Antenna gain (dBi)		3.19							
LTE Band 66_Uplink frequency band : 1710 to 1780 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10	132022	1715	QPSK	1	0	21.40	24.59	30	-5.41
				1	49	22.58	25.77	30	-4.23
				25	12	21.09	24.28	30	-5.72
				50	0	21.15	24.34	30	-5.66
	132322	1745	QPSK	1	0	21.92	25.11	30	-4.89
				1	49	23.04	26.23	30	-3.77
				25	12	21.59	24.78	30	-5.22
				50	0	21.60	24.79	30	-5.21
	132622	1775	QPSK	1	0	21.96	25.15	30	-4.85
				1	49	22.97	26.16	30	-3.84
				25	12	21.63	24.82	30	-5.18
				50	0	21.56	24.75	30	-5.25
10	132022	1715	16QAM	1	0	20.74	23.93	30	-6.07
				1	49	21.78	24.97	30	-5.03
				25	12	20.04	23.23	30	-6.77
				50	0	20.04	23.23	30	-6.77
	132322	1745	16QAM	1	0	21.07	24.26	30	-5.74
				1	49	22.34	25.53	30	-4.47
				25	12	20.65	23.84	30	-6.16
				50	0	20.63	23.82	30	-6.18
	132622	1775	16QAM	1	0	21.33	24.52	30	-5.48
				1	49	22.39	25.58	30	-4.42
				25	12	20.61	23.80	30	-6.2
				50	0	20.61	23.80	30	-6.2
10	132022	1715	64QAM	1	0	20.52	23.71	30	-6.29
				1	49	20.64	23.83	30	-6.17
				25	12	20.00	23.19	30	-6.81
				50	0	20.02	23.21	30	-6.79
	132322	1745	64QAM	1	0	21.03	24.22	30	-5.78
				1	49	20.63	23.82	30	-6.18
				25	12	20.68	23.87	30	-6.13
				50	0	19.66	22.85	30	-7.15
	132622	1775	64QAM	1	0	21.06	24.25	30	-5.75
				1	49	20.58	23.77	30	-6.23
				25	12	20.60	23.79	30	-6.21
				50	0	19.61	22.80	30	-7.2

Antenna gain (dBi)		3.19							
LTE Band 66_Uplink frequency band : 1710 to 1780 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15	132047	1717.5	QPSK	1	0	22.32	25.51	30	-4.49
				1	74	22.52	25.71	30	-4.29
				36	18	21.15	24.34	30	-5.66
				75	0	21.20	24.39	30	-5.61
	132322	1745	QPSK	1	0	22.69	25.88	30	-4.12
				1	74	22.82	26.01	30	-3.99
				36	18	21.51	24.70	30	-5.3
				75	0	21.60	24.79	30	-5.21
	132597	1772.5	QPSK	1	0	22.85	26.04	30	-3.96
				1	74	22.73	25.92	30	-4.08
				36	18	21.51	24.70	30	-5.3
				75	0	21.56	24.75	30	-5.25
15	132047	1717.5	16QAM	1	0	21.71	24.90	30	-5.1
				1	74	21.65	24.84	30	-5.16
				36	18	20.12	23.31	30	-6.69
				75	0	20.21	23.40	30	-6.6
	132322	1745	16QAM	1	0	22.12	25.31	30	-4.69
				1	74	21.95	25.14	30	-4.86
				36	18	20.54	23.73	30	-6.27
				75	0	20.54	23.73	30	-6.27
	132597	1772.5	16QAM	1	0	22.06	25.25	30	-4.75
				1	74	22.01	25.20	30	-4.8
				36	18	20.57	23.76	30	-6.24
				75	0	20.62	23.81	30	-6.19
15	132047	1717.5	64QAM	1	0	20.70	23.89	30	-6.11
				1	74	20.68	23.87	30	-6.13
				36	18	20.23	23.42	30	-6.58
				75	0	20.21	23.40	30	-6.6
	132322	1745	64QAM	1	0	20.72	23.91	30	-6.09
				1	74	20.67	23.86	30	-6.14
				36	18	20.55	23.74	30	-6.26
				75	0	19.62	22.81	30	-7.19
	132597	1772.5	64QAM	1	0	20.64	23.83	30	-6.17
				1	74	20.66	23.85	30	-6.15
				36	18	20.56	23.75	30	-6.25
				75	0	19.58	22.77	30	-7.23

Antenna gain (dBi)		3.19							
LTE Band 66_Uplink frequency band : 1710 to 1780 MHz									
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20	132072	1720	QPSK	1	0	22.11	25.30	30	-4.7
				1	99	22.89	26.08	30	-3.92
				50	25	21.18	24.37	30	-5.63
				100	0	21.30	24.49	30	-5.51
	132322	1745	QPSK	1	0	22.36	25.55	30	-4.45
				1	99	23.19	26.38	30	-3.62
				50	25	21.58	24.77	30	-5.23
				100	0	21.61	24.80	30	-5.2
	132572	1770	QPSK	1	0	22.50	25.69	30	-4.31
				1	99	23.05	26.24	30	-3.76
				50	25	21.54	24.73	30	-5.27
				100	0	21.61	24.80	30	-5.2
20	132072	1720	16QAM	1	0	21.45	24.64	30	-5.36
				1	99	22.22	25.41	30	-4.59
				50	25	20.37	23.56	30	-6.44
				100	0	20.26	23.45	30	-6.55
	132322	1745	16QAM	1	0	21.63	24.82	30	-5.18
				1	99	22.35	25.54	30	-4.46
				50	25	20.58	23.77	30	-6.23
				100	0	20.63	23.82	30	-6.18
	132572	1770	16QAM	1	0	21.81	25.00	30	-5
				1	99	22.46	25.65	30	-4.35
				50	25	20.62	23.81	30	-6.19
				100	0	20.56	23.75	30	-6.25
20	132072	1720	64QAM	1	0	20.67	23.86	30	-6.14
				1	99	20.66	23.85	30	-6.15
				50	25	20.22	23.41	30	-6.59
				100	0	20.25	23.44	30	-6.56
	132322	1745	64QAM	1	0	20.63	23.82	30	-6.18
				1	99	20.75	23.94	30	-6.06
				50	25	20.56	23.75	30	-6.25
				100	0	19.75	22.94	30	-7.06
	132572	1770	64QAM	1	0	20.68	23.87	30	-6.13
				1	99	20.67	23.86	30	-6.14
				50	25	20.60	23.79	30	-6.21
				100	0	19.63	22.82	30	-7.18

LTE Band 71

Antenna gain (dBi)		-2.35								
LTE Band 71_Uplink frequency band : 663 to 698 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5	133147	665.5	QPSK	1	0	23.08	20.73	18.58	34.77	-16.19
				1	24	22.96	20.61	18.46	34.77	-16.31
				12	6	22.05	19.70	17.55	34.77	-17.22
				25	0	22.05	19.70	17.55	34.77	-17.22
	133297	680.5	QPSK	1	0	23.06	20.71	18.56	34.77	-16.21
				1	24	22.97	20.62	18.47	34.77	-16.30
				12	6	21.94	19.59	17.44	34.77	-17.33
				25	0	21.96	19.61	17.46	34.77	-17.31
	133447	695.5	QPSK	1	0	23.06	20.71	18.56	34.77	-16.21
				1	24	22.97	20.62	18.47	34.77	-16.30
				12	6	21.94	19.59	17.44	34.77	-17.33
				25	0	21.96	19.61	17.46	34.77	-17.31
5	133147	665.5	16QAM	1	0	22.09	19.74	17.59	34.77	-17.18
				1	24	22.35	20.00	17.85	34.77	-16.92
				12	6	21.07	18.72	16.57	34.77	-18.20
				25	0	20.96	18.61	16.46	34.77	-18.31
	133297	680.5	16QAM	1	0	22.44	20.09	17.94	34.77	-16.83
				1	24	22.24	19.89	17.74	34.77	-17.03
				12	6	21.15	18.80	16.65	34.77	-18.12
				25	0	20.95	18.60	16.45	34.77	-18.32
	133447	695.5	16QAM	1	0	22.44	20.09	17.94	34.77	-16.83
				1	24	22.24	19.89	17.74	34.77	-17.03
				12	6	21.13	18.78	16.63	34.77	-18.14
				25	0	20.90	18.55	16.40	34.77	-18.37
5	133147	665.5	64QAM	1	0	21.14	18.79	16.64	34.77	-18.13
				1	24	21.14	18.79	16.64	34.77	-18.13
				12	6	21.08	18.73	16.58	34.77	-18.19
				25	0	20.15	17.80	15.65	34.77	-19.12
	133297	680.5	64QAM	1	0	20.84	18.49	16.34	34.77	-18.43
				1	24	20.96	18.61	16.46	34.77	-18.31
				12	6	21.00	18.65	16.50	34.77	-18.27
				25	0	20.00	17.65	15.50	34.77	-19.27
	133447	695.5	64QAM	1	0	20.90	18.55	16.40	34.77	-18.37
				1	24	20.94	18.59	16.44	34.77	-18.33
				12	6	21.00	18.65	16.50	34.77	-18.27
				25	0	19.91	17.56	15.41	34.77	-19.36

Antenna gain (dBi)		-2.35								
LTE Band 71_Uplink frequency band : 663 to 698 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10	133172	668	QPSK	1	0	23.00	20.65	18.50	34.77	-16.27
				1	49	22.82	20.47	18.32	34.77	-16.45
				25	12	21.94	19.59	17.44	34.77	-17.33
				50	0	22.01	19.66	17.51	34.77	-17.26
	133297	680.5	QPSK	1	0	23.22	20.87	18.72	34.77	-16.05
				1	49	23.02	20.67	18.52	34.77	-16.25
				25	12	22.08	19.73	17.58	34.77	-17.19
				50	0	21.91	19.56	17.41	34.77	-17.36
	133422	693	QPSK	1	0	23.07	20.72	18.57	34.77	-16.20
				1	49	22.69	20.34	18.19	34.77	-16.58
				25	12	21.92	19.57	17.42	34.77	-17.35
				50	0	21.81	19.46	17.31	34.77	-17.46
10	133172	668	16QAM	1	0	22.34	19.99	17.84	34.77	-16.93
				1	49	22.18	19.83	17.68	34.77	-17.09
				25	12	20.91	18.56	16.41	34.77	-18.36
				50	0	20.97	18.62	16.47	34.77	-18.30
	133297	680.5	16QAM	1	0	21.96	19.61	17.46	34.77	-17.31
				1	49	22.48	20.13	17.98	34.77	-16.79
				25	12	20.96	18.61	16.46	34.77	-18.31
				50	0	21.08	18.73	16.58	34.77	-18.19
	133422	693	16QAM	1	0	22.25	19.90	17.75	34.77	-17.02
				1	49	22.09	19.74	17.59	34.77	-17.18
				25	12	20.92	18.57	16.42	34.77	-18.35
				50	0	20.78	18.43	16.28	34.77	-18.49
10	133172	668	64QAM	1	0	21.20	18.85	16.70	34.77	-18.07
				1	49	21.09	18.74	16.59	34.77	-18.18
				25	12	20.89	18.54	16.39	34.77	-18.38
				50	0	20.20	17.85	15.70	34.77	-19.07
	133297	680.5	64QAM	1	0	20.94	18.59	16.44	34.77	-18.33
				1	49	20.97	18.62	16.47	34.77	-18.30
				25	12	20.97	18.62	16.47	34.77	-18.30
				50	0	19.98	17.63	15.48	34.77	-19.29
	133422	693	64QAM	1	0	21.01	18.66	16.51	34.77	-18.26
				1	49	21.09	18.74	16.59	34.77	-18.18
				25	12	20.91	18.56	16.41	34.77	-18.36
				50	0	19.93	17.58	15.43	34.77	-19.34

Antenna gain (dBi)		-2.35								
LTE Band 71_Uplink frequency band : 663 to 698 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
15	133197	670.5	QPSK	1	0	23.01	20.66	18.51	34.77	-16.26
				1	74	22.88	20.53	18.38	34.77	-16.39
				36	18	21.87	19.52	17.37	34.77	-17.40
				75	0	22.04	19.69	17.54	34.77	-17.23
	133297	680.5	QPSK	1	0	23.08	20.73	18.58	34.77	-16.19
				1	74	22.80	20.45	18.30	34.77	-16.47
				36	18	21.91	19.56	17.41	34.77	-17.36
				75	0	21.96	19.61	17.46	34.77	-17.31
	133397	690.5	QPSK	1	0	23.16	20.81	18.66	34.77	-16.11
				1	74	22.78	20.43	18.28	34.77	-16.49
				36	18	21.81	19.46	17.31	34.77	-17.46
				75	0	21.86	19.51	17.36	34.77	-17.41
15	133197	670.5	16QAM	1	0	22.39	20.04	17.89	34.77	-16.88
				1	74	22.35	20.00	17.85	34.77	-16.92
				36	18	20.81	18.46	16.31	34.77	-18.46
				75	0	20.91	18.56	16.41	34.77	-18.36
	133297	680.5	16QAM	1	0	22.50	20.15	18.00	34.77	-16.77
				1	74	22.13	19.78	17.63	34.77	-17.14
				36	18	20.87	18.52	16.37	34.77	-18.40
				75	0	20.93	18.58	16.43	34.77	-18.34
	133397	690.5	16QAM	1	0	22.37	20.02	17.87	34.77	-16.90
				1	74	22.19	19.84	17.69	34.77	-17.08
				36	18	20.75	18.40	16.25	34.77	-18.52
				75	0	20.81	18.46	16.31	34.77	-18.46
15	133197	670.5	64QAM	1	0	21.00	18.65	16.50	34.77	-18.27
				1	74	21.14	18.79	16.64	34.77	-18.13
				36	18	20.91	18.56	16.41	34.77	-18.36
				75	0	20.14	17.79	15.64	34.77	-19.13
	133297	680.5	64QAM	1	0	20.85	18.50	16.35	34.77	-18.42
				1	74	20.98	18.63	16.48	34.77	-18.29
				36	18	20.86	18.51	16.36	34.77	-18.41
				75	0	19.84	17.49	15.34	34.77	-19.43
	133397	690.5	64QAM	1	0	21.08	18.73	16.58	34.77	-18.19
				1	74	20.95	18.60	16.45	34.77	-18.32
				36	18	20.75	18.40	16.25	34.77	-18.52
				75	0	19.94	17.59	15.44	34.77	-19.33

Antenna gain (dBi)		-2.35								
LTE Band 71_Uplink frequency band : 663 to 698 MHz										
BW (MHz)	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
20	133222	673	QPSK	1	0	23.21	20.86	18.71	34.77	-16.06
				1	99	22.92	20.57	18.42	34.77	-16.35
				50	25	21.90	19.55	17.40	34.77	-17.37
				100	0	22.11	19.76	17.61	34.77	-17.16
	133297	680.5	QPSK	1	0	23.31	20.96	18.81	34.77	-15.96
				1	99	22.89	20.54	18.39	34.77	-16.38
				50	25	21.89	19.54	17.39	34.77	-17.38
				100	0	21.84	19.49	17.34	34.77	-17.43
	133372	688	QPSK	1	0	23.23	20.88	18.73	34.77	-16.04
				1	99	22.87	20.52	18.37	34.77	-16.40
				50	25	21.89	19.54	17.39	34.77	-17.38
				100	0	21.71	19.36	17.21	34.77	-17.56
20	133222	673	16QAM	1	0	22.03	19.68	17.53	34.77	-17.24
				1	99	22.05	19.70	17.55	34.77	-17.22
				50	25	20.83	18.48	16.33	34.77	-18.44
				100	0	20.31	17.96	15.81	34.77	-18.96
	133297	680.5	16QAM	1	0	21.88	19.53	17.38	34.77	-17.39
				1	99	21.84	19.49	17.34	34.77	-17.43
				50	25	20.96	18.61	16.46	34.77	-18.31
				100	0	21.02	18.67	16.52	34.77	-18.25
	133372	688	16QAM	1	0	22.04	19.69	17.54	34.77	-17.23
				1	99	22.10	19.75	17.60	34.77	-17.17
				50	25	20.99	18.64	16.49	34.77	-18.28
				100	0	20.94	18.59	16.44	34.77	-18.33
20	133222	673	64QAM	1	0	21.18	18.83	16.68	34.77	-18.09
				1	99	21.07	18.72	16.57	34.77	-18.20
				50	25	20.94	18.59	16.44	34.77	-18.33
				100	0	20.18	17.83	15.68	34.77	-19.09
	133297	680.5	64QAM	1	0	21.00	18.65	16.50	34.77	-18.27
				1	99	20.89	18.54	16.39	34.77	-18.38
				50	25	20.85	18.50	16.35	34.77	-18.42
				100	0	19.87	17.52	15.37	34.77	-19.40
	133372	688	64QAM	1	0	20.94	18.59	16.44	34.77	-18.33
				1	99	21.00	18.65	16.50	34.77	-18.27
				50	25	20.80	18.45	16.30	34.77	-18.47
				100	0	20.08	17.73	15.58	34.77	-19.19

8.2 FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT

LIMIT

According to FCC §2.1055, FCC §22.355, FCC §24.235, FCC §27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

According to RSS -130 section 4.5,

The carrier frequency shall not depart from the reference frequency, in excess of ± 2.5 ppm for mobile stations and ± 1.0 ppm for base stations.

In lieu of meeting the above stability values, the test report may show that the frequency stability is sufficient to ensure that the emission bandwidth stays within the operating frequency block when tested to the temperature and supply voltage variations specified in RSS-Gen.

According to RSS-132 section 5.3,

The carrier frequency shall not depart from the reference frequency, in excess of ± 2.5 ppm for mobile stations and ± 1.5 ppm for base stations.

In lieu of meeting the above stability values, the test report may show that the frequency stability is sufficient to ensure that the emission bandwidth stays within the operating frequency block when tested to the temperature and supply voltage variations specified in RSS-Gen.

According to RSS -133 section 6.3,

The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations and ± 1.0 ppm for base stations.

In lieu of meeting the above stability values, the test report may show that the frequency stability is sufficient to ensure that the occupied bandwidth stays within each of the sub-bands (see Section 5.1) when tested to the temperature and supply voltage variations specified in RSS-Gen.

According to RSS -139 section 6.4

The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block when tested to the temperature and supply voltage variations specified in RSS-Gen.



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According to RSS -199 section 4.3,

The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block or frequency block group when tested to the temperature and supply voltage variations specified in RSS-Gen.

TEST PROCEDURE

Use Anritsu 8820 with frequency Error measurement capability.

Temp = -30°C to +50°C

Voltage= 85% to 115% of the nominal value for AC powered equipment.

NOTE: The frequency error was recorded frequency error from the communication simulator.

TEST RESULTS

Compliance.

Temperature: 21.6~25.6°C

Test date:

October 13~December
15, 2023

Humidity: 50~62% RH

Tested by:

Allen Shen

FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT:

Reference Freq.:		LTE B2 Mid Channel	1880.0000	MHz	10M QPSK CH 18900
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	(ppm)	Limit	
Freq. ERROR vs. VOLTAGE					
5.75	25	1880.000001	0.0007	+/- 2.5 ppm	
5	25	1880.000000	0.0001		
4.25	25	1880.000001	0.0005		
3.08 (End Point)	25	1880.000001	0.0003		
Freq. ERROR vs. Temp.					
5	-30	1880.000003	0.0014	+/- 2.5 ppm	
5	-20	1879.999999	-0.0004		
5	-10	1880.000001	0.0003		
5	0	1880.000003	0.0016		
5	10	1879.999999	-0.0005		
5	20	1879.999998	-0.0011		
5	30	1880.000002	0.0010		
5	40	1880.000000	-0.0001		
5	50	1880.000002	0.0010		



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Reference Freq.:		LTE B5 Mid Channel		836.5000	MHz 10M QPSK CH 20525
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	(ppm)	Limit	
Freq. ERROR vs. VOLTAGE					
5.75	25	836.499999	-0.0018	+/- 2.5 ppm	
5	25	836.499999	-0.0017		
4.25	25	836.500000	-0.0004		
3.08 (End Point)	25	836.499999	-0.0008		
Freq. ERROR vs. Temp.					
5	-30	836.499999	-0.0011	+/- 2.5 ppm	
5	-20	836.499998	-0.0020		
5	-10	836.500000	-0.0005		
5	0	836.500000	-0.0002		
5	10	836.500001	0.0013		
5	20	836.500001	0.0007		
5	30	836.499998	-0.0022		
5	40	836.499999	-0.0011		
5	50	836.499999	-0.0012		

Reference Freq.:		LTE B25 Mid Channel		1882.5000	MHz 10M QPSK CH 26365
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	Delta (Hz)	Limit	
Freq. ERROR vs. VOLTAGE					
5.75	25	1882.500000	-0.0002	+/- 2.5 ppm	
5	25	1882.500003	0.0018		
4.25	25	1882.500001	0.0007		
3.08 (End Point)	25	1882.499999	-0.0005		
Freq. ERROR vs. Temp.					
5	-30	1882.499999	-0.0007	+/- 2.5 ppm	
5	-20	1882.499998	-0.0008		
5	-10	1882.499999	-0.0004		
5	0	1882.500002	0.0012		
5	10	1882.500001	0.0006		
5	20	1882.500004	0.0020		
5	30	1882.500003	0.0013		
5	40	1882.500000	0.0001		
5	50	1882.500002	0.0011		



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Reference Freq.:		LTE B4 Mid Channel		1732.5000	MHz	10M QPSK CH 20175
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	(ppm)	Limit		
Freq. ERROR vs. VOLTAGE						
5.75	25	1732.500000	-0.0002	+/- 2.5 ppm		
5	25	1732.500002	0.0011			
4.25	25	1732.499996	-0.0021			
3.08 (End Point)	25	1732.500001	0.0007			
Freq. ERROR vs. Temp.						
5	-30	1732.500000	0.0002	+/- 2.5 ppm		
5	-20	1732.500001	0.0006			
5	-10	1732.500000	0.0002			
5	0	1732.499999	-0.0009			
5	10	1732.500000	-0.0002			
5	20	1732.499999	-0.0006			
5	30	1732.499998	-0.0010			
5	40	1732.500000	-0.0001			
5	50	1732.500000	-0.0002			

Reference Freq.:		LTE B7 Mid Channel		2535.0000	MHz 10M QPSK CH 21100
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	(ppm)	Limit	
Freq. ERROR vs. VOLTAGE					
5.75	25	2534.999994	-0.0024	+/- 2.5 ppm	
5	25	2534.999999	-0.0003		
4.25	25	2534.999996	-0.0015		
3.08 (End Point)	25	2534.999997	-0.0013		
Freq. ERROR vs. Temp.					
5	-30	2534.999998	-0.0009	+/- 2.5 ppm	
5	-20	2535.000001	0.0004		
5	-10	2534.999993	-0.0028		
5	0	2534.999993	-0.0030		
5	10	2534.999996	-0.0016		
5	20	2534.999997	-0.0013		
5	30	2534.999996	-0.0017		
5	40	2534.999995	-0.0019		
5	50	2534.999997	-0.0011		



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Reference Freq.:		LTE B12 Mid Channel		707.5000	MHz 10M QPSK CH 23095
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	(ppm)	Limit	
Freq. ERROR vs. VOLTAGE					
5.75	25	707.499997	-0.0045	+/- 2.5 ppm	
5	25	707.499999	-0.0011		
4.25	25	707.500001	0.0008		
3.08 (End Point)	25	707.499998	-0.0030		
Freq. ERROR vs. Temp.					
5	-30	707.500002	0.0030	+/- 2.5 ppm	
5	-20	707.499999	-0.0017		
5	-10	707.499997	-0.0047		
5	0	707.499999	-0.0014		
5	10	707.499996	-0.0055		
5	20	707.500001	0.0017		
5	30	707.499998	-0.0035		
5	40	707.499998	-0.0034		
5	50	707.500001	0.0014		

Reference Freq.:		LTE B13 Mid Channel		782.0000	MHz 10M QPSK CH 23230
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	(ppm)	Limit	
Freq. ERROR vs. VOLTAGE					
5.75	25	782.000002	0.0029	+/- 2.5 ppm	
5	25	781.999998	-0.0032		
4.25	25	782.000001	0.0018		
3.08 (End Point)	25	782.000001	0.0008		
Freq. ERROR vs. Temp.					
5	-30	781.999997	-0.0036	+/- 2.5 ppm	
5	-20	781.999999	-0.0008		
5	-10	782.000001	0.0009		
5	0	781.999999	-0.0019		
5	10	781.999998	-0.0022		
5	20	782.000002	0.0024		
5	30	782.000000	-0.0006		
5	40	781.999998	-0.0023		
5	50	781.999997	-0.0042		

Reference Freq.:		LTE B14 Mid Channel		793.0000	MHz 10M QPSK CH 23330
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	(ppm)	Limit	
Freq. ERROR vs. VOLTAGE					
5.75	25	793.000002	0.0023	+/- 2.5 ppm	
5	25	792.999998	-0.0032		
4.25	25	792.999998	-0.0020		
3.08 (End Point)	25	793.000000	0.0005		
Freq. ERROR vs. Temp.					
5	-30	792.999999	-0.0009	+/- 2.5 ppm	
5	-20	792.999998	-0.0026		
5	-10	793.000001	0.0008		
5	0	793.000000	0.0004		
5	10	793.000001	0.0014		
5	20	792.999999	-0.0011		
5	30	793.000000	-0.0006		
5	40	793.000000	-0.0003		
5	50	793.000001	0.0010		

Reference Freq.:		LTE B17 Mid Channel		710.0000	MHz 10M QPSK CH 23790
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	(ppm)	Limit	
Freq. ERROR vs. VOLTAGE					
5.75	25	710.000000	-0.0007	+/- 2.5 ppm	
5	25	709.999999	-0.0017		
4.25	25	710.000000	-0.0004		
3.08 (End Point)	25	710.000001	0.0007		
Freq. ERROR vs. Temp.					
5	-30	710.000002	0.0021	+/- 2.5 ppm	
5	-20	710.000000	0.0003		
5	-10	709.999999	-0.0014		
5	0	709.999999	-0.0015		
5	10	710.000000	-0.0003		
5	20	709.999998	-0.0028		
5	30	709.999999	-0.0018		
5	40	710.000000	-0.0006		
5	50	709.999999	-0.0011		



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Reference Freq.:		LTE B25 Mid Channel		1882.5000	MHz 10M QPSK CH 26365
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	Delta (Hz)	Limit	
Freq. ERROR vs. VOLTAGE					
5.75	25	1882.500000	-0.0002	+/- 2.5 ppm	
5	25	1882.500003	0.0018		
4.25	25	1882.500001	0.0007		
3.08 (End Point)	25	1882.499999	-0.0005		
Freq. ERROR vs. Temp.					
5	-30	1882.499999	-0.0007	+/- 2.5 ppm	
5	-20	1882.499998	-0.0008		
5	-10	1882.499999	-0.0004		
5	0	1882.500002	0.0012		
5	10	1882.500001	0.0006		
5	20	1882.500004	0.0020		
5	30	1882.500003	0.0013		
5	40	1882.500000	0.0001		
5	50	1882.500002	0.0011		

Reference Freq.:		LTE B26 Mid Channel		831.5000	MHz 10M QPSK CH 26865
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	(ppm)	Limit	
Freq. ERROR vs. VOLTAGE					
5.75	25	831.500000	0.0005	+/- 2.5 ppm	
5	25	831.500002	0.0020		
4.25	25	831.500002	0.0025		
3.08 (End Point)	25	831.500002	0.0022		
Freq. ERROR vs. Temp.					
5	-30	831.500001	0.0008	+/- 2.5 ppm	
5	-20	831.500000	0.0001		
5	-10	831.499998	-0.0019		
5	0	831.500000	-0.0002		
5	10	831.499999	-0.0014		
5	20	831.499999	-0.0011		
5	30	831.499999	-0.0018		
5	40	831.500001	0.0016		
5	50	831.499999	-0.0007		



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Reference Freq.:		LTE B41 Mid Channel		2593.0000	MHz 10M QPSK CH 40620
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	(ppm)	Limit	
Freq. ERROR vs. VOLTAGE					
5.75	25	2592.999995	-0.0018	+/- 2.5 ppm	
5	25	2592.999990	-0.0037		
4.25	25	2592.999998	-0.0007		
3.08 (End Point)	25	2592.999993	-0.0027		
Freq. ERROR vs. Temp.					
5	-30	2592.999997	-0.0012	+/- 2.5 ppm	
5	-20	2592.999998	-0.0009		
5	-10	2592.999995	-0.0021		
5	0	2592.999997	-0.0013		
5	10	2592.999993	-0.0028		
5	20	2593.000001	0.0003		
5	30	2592.999996	-0.0015		
5	40	2592.999996	-0.0014		
5	50	2593.000001	0.0003		



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Reference Freq.:		LTE B66 Mid Channel		1745.0000	MHz	10M QPSK CH 132322
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	(ppm)	Limit		
Freq. ERROR vs. VOLTAGE						
5.75	25	1744.999998	-0.0014	+/- 2.5 ppm		
5	25	1744.999997	-0.0018			
4.25	25	1745.000000	-0.0002			
3.08 (End Point)	25	1744.999996	-0.0022			
Freq. ERROR vs. Temp.						
5	-30	1744.999997	-0.0016	+/- 2.5 ppm		
5	-20	1744.999999	-0.0006			
5	-10	1744.999997	-0.0018			
5	0	1744.999995	-0.0030			
5	10	1744.999997	-0.0019			
5	20	1744.999997	-0.0020			
5	30	1744.999999	-0.0007			
5	40	1744.999995	-0.0028			
5	50	1744.999997	-0.0017			



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Reference Freq.:		LTE B71 Mid Channel		680.5000	MHz	10M QPSK CH 133297
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	(ppm)	Limit		
Freq. ERROR vs. VOLTAGE						
5.75	25	680.499999	-0.0018	+/- 2.5 ppm		
5	25	680.500000	-0.0006			
4.25	25	680.499996	-0.0059			
3.08 (End Point)	25	680.499997	-0.0047			
Freq. ERROR vs. Temp.						
5	-30	680.499996	-0.0056	+/- 2.5 ppm		
5	-20	680.499998	-0.0032			
5	-10	680.499997	-0.0051			
5	0	680.499999	-0.0019			
5	10	680.499998	-0.0028			
5	20	680.499997	-0.0041			
5	30	680.499998	-0.0025			
5	40	680.499999	-0.0022			
5	50	680.499996	-0.0063			

8.3 OCCUPIED BANDWIDTH MEASUREMENT

LIMIT

According to §FCC 2.1049 & RSS-GEN 6.7

TEST PROCEDURE

KDB 971168 D01

1. The occupied bandwidth was measured with the spectrum analyzer at the lowest, middle and highest channels in each band and different modulation. The 99% and -26dB bandwidth was measured and recorded.
2. RBW = 1-5% of the expected OBW
3. VBW $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = max. hold

TEST RESULTS

Compliance

Temperature: 21.6~25.6°C

Test date:

October 13~December
15, 2023

Humidity: 50~62% RH

Tested by:

Allen Shen

Test Data

LTE Band 2

LTE BAND 2 Channel bandwidth: 1.4MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1850.7	18607	1.0897	1.0865	1.0893	1.283	1.280	1.274
1880.0	18900	1.0880	1.0912	1.0881	1.289	1.272	1.279
1909.3	19193	1.0895	1.0883	1.0893	1.276	1.269	1.276

LTE BAND 2 Channel bandwidth: 3MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1851.5	18615	2.6895	2.6900	2.6987	2.952	2.953	2.956
1880.0	18900	2.6846	2.6875	2.6966	2.936	2.955	2.956
1908.5	19185	2.6862	2.6877	2.6943	2.954	2.961	2.961

LTE BAND 2 Channel bandwidth: 5MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1852.5	18625	4.4881	4.4874	4.4865	4.991	4.988	4.928
1880.0	18900	4.4853	4.4855	4.4852	4.968	4.940	4.926
1907.5	19175	4.4872	4.4874	4.4882	4.980	4.950	4.947

LTE BAND 2 Channel bandwidth: 10MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1855.0	18650	8.9593	8.9471	8.9642	9.782	9.786	9.844
1880.0	18900	8.9800	8.9451	8.9607	9.778	9.757	9.773
1905.0	19150	8.9652	8.9474	8.9636	9.836	9.806	9.857

LTE BAND 2 Channel bandwidth: 15MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1857.5	18675	13.446	13.421	13.437	14.54	14.48	14.52
1880.0	18900	13.454	13.431	13.440	14.56	14.72	14.67
1902.5	19125	13.442	13.450	13.450	14.60	14.62	14.55

LTE BAND 2 Channel bandwidth: 20MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1860.0	18700	17.853	17.914	17.872	19.36	19.26	19.15
1880.0	18900	17.905	17.930	17.925	19.38	19.28	19.38
1900.0	19100	17.893	17.906	17.890	19.37	19.33	19.24

LTE Band 4

LTE BAND 4 Channel bandwidth: 1.4MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1710.7	19957	1.0854	1.0902	1.0903	1.279	1.268	1.289
1732.5	20175	1.0843	1.0898	1.0897	1.275	1.277	1.282
1754.3	20393	1.0845	1.0890	1.0890	1.270	1.272	1.286

LTE BAND 4 Channel bandwidth: 3MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1711.5	19965	2.6874	2.6854	2.6931	2.949	2.929	2.972
1732.5	20175	2.6885	2.6898	2.6944	2.951	2.952	2.962
1753.5	20385	2.6854	2.6914	2.6942	2.948	2.950	2.957

LTE BAND 4 Channel bandwidth: 5MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1712.5	19975	4.4851	4.4846	4.4838	4.963	4.987	4.944
1732.5	20175	4.4867	4.4880	4.4861	4.960	4.970	4.921
1752.5	20375	4.4846	4.4797	4.4829	4.989	4.965	4.938

LTE BAND 4 Channel bandwidth: 10MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1715.0	20000	8.9708	8.9304	8.9561	9.815	9.713	9.744
1732.5	20175	8.9742	8.9393	8.9566	9.819	9.733	9.845
1750.0	20350	8.9540	8.9277	8.9616	9.771	9.682	9.796

LTE BAND 4 Channel bandwidth: 15MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1717.5	20025	13.416	13.394	13.384	14.51	14.65	14.58
1732.5	20175	13.469	13.429	13.446	14.60	14.69	14.67
1747.5	20325	13.452	13.416	13.430	14.53	14.72	14.57

LTE BAND 4 Channel bandwidth: 20MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1720.0	20050	17.820	17.854	17.824	19.28	19.23	19.24
1732.5	20175	17.925	17.942	17.910	19.39	19.35	19.33
1745.0	20300	17.894	17.892	17.884	19.30	19.35	19.33

LTE Band 5

LTE BAND 5 Channel bandwidth: 1.4MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
824.7	20407	1.0877	1.0896	1.0890	1.270	1.274	1.283
836.5	20525	1.0877	1.0901	1.0895	1.273	1.277	1.274
848.3	20643	1.0885	1.0903	1.0886	1.268	1.278	1.276

LTE BAND 5 Channel bandwidth: 3MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
825.5	20415	2.6854	2.6866	2.6942	2.944	2.957	2.967
836.5	20525	2.6872	2.6891	2.6947	2.941	2.955	2.966
847.5	20635	2.6877	2.6913	2.6969	2.961	2.953	2.968

LTE BAND 5 Channel bandwidth: 5MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
826.5	20425	4.4829	4.4784	4.4856	4.971	4.945	4.945
836.5	20525	4.4883	4.4867	4.4920	4.996	4.969	4.938
846.5	20625	4.4869	4.4864	4.4777	4.986	4.964	4.918

LTE BAND 5 Channel bandwidth: 10MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
829.0	20450	8.9659	8.9301	8.9479	9.781	9.762	9.807
836.5	20525	8.9941	8.9603	8.9862	9.853	9.818	9.867
844.0	20600	8.9326	8.8983	8.9233	9.690	9.701	9.780

LTE Band 7

LTE BAND 7 Channel bandwidth: 5MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2502.5	20775	4.4822	4.4872	4.4840	4.990	4.976	4.930
2535.0	21100	4.4853	4.4884	4.4857	4.976	4.980	4.936
2567.5	21425	4.4823	4.4826	4.4857	4.971	4.965	4.936

LTE BAND 7 Channel bandwidth: 10MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2505.0	20800	8.9809	8.9347	8.9623	9.822	9.721	9.811
2535.0	21100	8.9726	8.9374	8.9744	9.795	9.759	9.842
2565.0	21400	8.9715	8.9269	8.9562	9.794	9.754	9.796

LTE BAND 7 Channel bandwidth: 15MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2507.5	20825	13.457	13.427	13.422	14.58	14.70	14.54
2535.0	21100	13.457	13.439	13.454	14.61	14.62	14.59
2562.5	21375	13.420	13.416	13.408	14.60	14.58	14.52

LTE BAND 7 Channel bandwidth: 20MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2510.0	20850	17.888	17.874	17.892	19.38	19.32	19.28
2535.0	21100	17.894	17.885	17.916	19.40	19.49	19.38
2560.0	21350	17.876	17.905	17.870	19.27	19.33	19.22

LTE Band 12

LTE BAND 12 Channel bandwidth: 1.4MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
699.7	23017	1.0886	1.0893	1.0888	1.264	1.264	1.273
707.5	23095	1.0899	1.0897	1.0880	1.283	1.264	1.241
715.3	23173	1.0972	1.0890	1.0863	1.208	1.223	1.220

LTE BAND 12 Channel bandwidth: 3MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
700.5	23025	2.6843	2.6847	2.6905	2.944	2.963	2.959
707.5	23095	2.6882	2.6930	2.6960	2.957	2.966	2.955
714.5	23165	2.6885	2.6876	2.7019	2.958	2.951	2.842

LTE BAND 12 Channel bandwidth: 5MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
701.5	23035	4.4767	4.4826	4.4791	4.972	4.927	4.938
707.5	23095	4.4896	4.4924	4.4880	4.966	4.960	4.957
713.5	23155	4.4784	4.4778	4.4800	4.962	4.943	4.938

LTE BAND 12 Channel bandwidth: 10MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
704.0	23060	8.9653	8.9278	8.9502	9.787	9.751	9.750
707.5	23095	8.9978	8.9764	8.9899	9.891	9.795	9.805
711.0	23130	8.9485	8.9261	8.9442	9.762	9.679	9.775

LTE Band 13

LTE BAND 13 Channel bandwidth: 5MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
779.5	23205	4.4708	4.4767	4.4742	4.939	4.962	4.930
782.0	23230	4.4808	4.4796	4.4749	4.957	4.977	4.921
784.5	23255	4.4969	4.4988	4.4975	5.028	5.023	4.975

LTE BAND 13 Channel bandwidth: 10MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
782.0	23230	8.9366	8.9210	8.9494	9.744	9.763	9.790

LTE Band 14

LTE BAND 14 Channel bandwidth: 5MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
790.5	23305	4.4766	4.4772	4.4760	4.954	4.962	4.901
793.0	23330	4.4684	4.4745	4.4732	4.938	4.944	4.901
795.5	23355	4.4801	4.4818	4.4777	4.966	4.959	4.926

LTE BAND 14 Channel bandwidth: 10MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
793.0	23330	8.9327	8.8814	8.9016	9.673	9.672	9.798

LTE Band 17

LTE BAND 17 Channel bandwidth: 5MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
706.5	23755	4.4890	4.4912	4.4912	4.998	4.980	4.948
710.0	23790	4.4850	4.4906	4.4884	4.993	4.958	4.956
713.5	23825	4.4786	4.4818	4.4768	4.946	4.941	4.932

LTE BAND 17 Channel bandwidth: 10MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
709.0	23780	8.9920	8.9504	8.9786	9.876	9.711	9.852
710.0	23790	8.9700	8.9411	8.9672	9.835	9.689	9.844
711.0	23800	8.9663	8.9350	8.9455	9.760	9.758	9.779

LTE Band 25

LTE BAND 25 Channel bandwidth: 1.4MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1850.7	26047	1.0898	1.0899	1.0896	1.289	1.277	1.277
1882.5	26365	1.0897	1.0904	1.0896	1.292	1.277	1.279
1914.3	26683	1.0895	1.0891	1.0894	1.269	1.277	1.278

LTE BAND 25 Channel bandwidth: 5MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1852.5	26065	4.4851	4.4863	4.4817	4.973	4.988	4.929
1882.5	26365	4.4854	4.4806	4.4857	4.997	4.974	4.937
1912.5	26665	4.4800	4.4795	4.4808	4.977	4.978	4.937

LTE BAND 25 Channel bandwidth: 15MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1857.5	26115	13.425	13.444	13.439	14.51	14.72	14.64
1882.5	26365	13.451	13.442	13.446	14.61	14.72	14.66
1907.5	26615	13.425	13.415	13.428	14.52	14.60	14.51

LTE BAND 25 Channel bandwidth: 3MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1851.5	26055	2.6875	2.6907	2.6961	2.940	2.962	2.964
1882.5	26365	2.6869	2.6904	2.6947	2.949	2.951	2.964
1913.5	26675	2.6969	2.6884	2.6939	2.963	2.949	2.959

LTE BAND 25 Channel bandwidth: 10MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1855.0	26090	8.9852	8.9492	8.9718	9.869	9.774	9.833
1882.5	26365	8.9763	8.9381	8.9561	9.838	9.785	9.886
1910.0	26640	8.9543	8.9201	8.9523	9.786	9.743	9.845

LTE BAND 25 Channel bandwidth: 20MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1860.0	26140	17.879	17.892	17.874	19.31	19.33	19.25
1882.5	26365	17.934	17.951	17.909	19.40	19.39	19.41
1905.0	26590	17.896	17.909	17.881	19.30	19.30	19.25

LTE Band 26

LTE BAND 26 Channel bandwidth: 1.4MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
824.7	26797	1.0875	1.0900	1.0887	1.260	1.280	1.277
836.5	26915	1.0885	1.0901	1.0888	1.278	1.277	1.275
848.3	27033	1.0896	1.0904	1.0880	1.289	1.278	1.278

LTE BAND 26 Channel bandwidth: 5MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
826.5	26815	4.4824	4.4843	4.4830	4.988	4.964	4.934
836.5	26915	4.4889	4.4889	4.4889	4.989	4.976	4.953
846.5	27015	4.4866	4.4848	4.4876	5.001	4.968	4.953

LTE BAND 26 Channel bandwidth: 15MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
831.5	26865	13.437	13.437	13.433	14.62	14.63	14.63
836.5	26915	13.472	13.483	13.499	14.68	14.79	14.60
841.5	26965	13.423	13.389	13.392	14.49	14.66	14.51

LTE BAND 26 Channel bandwidth: 3MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
825.5	26805	2.6839	2.6866	2.6952	2.940	2.957	2.968
836.5	26915	2.6911	2.6880	2.6929	2.953	2.957	2.965
847.5	27025	2.6883	2.6916	2.6979	2.962	2.949	2.970

LTE BAND 26 Channel bandwidth: 10MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
829.0	26840	8.9413	8.9256	8.9584	9.790	9.744	9.811
836.5	26915	8.9832	8.9637	8.9871	9.891	9.824	9.846
844.0	26990	8.9301	8.9043	8.9219	9.752	9.807	9.729

LTE BAND 26 for part 90S Channel bandwidth: 1.4MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
814.7	26697	1.0891	1.0899	1.0885	1.269	1.287	1.276
819.0	26740	1.0885	1.0900	1.0843	1.267	1.284	1.202
823.3	26783	1.0876	1.0897	1.0829	1.275	1.273	1.174

LTE BAND 26 for part 90S Channel bandwidth: 3MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
815.5	26705	2.6938	2.6864	2.6858	2.968	2.960	2.946
819.0	26740	2.6948	2.6868	2.6928	2.953	2.944	2.964
822.5	26775	2.6987	2.6842	2.6969	2.960	2.946	2.925

LTE BAND 26 for part 90S Channel bandwidth: 5MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
816.5	26715	4.4808	4.4880	4.4852	4.967	4.977	4.959
819.0	26740	4.4904	4.4905	4.4876	4.920	4.963	4.948
821.5	26765	4.4568	4.4866	4.4873	4.726	4.970	4.941

LTE BAND 26 for part 90S Channel bandwidth: 10MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
819.0	26740	8.9285	8.9529	8.9559	9.514	9.791	9.873

LTE Band 41

LTE BAND 41 Channel bandwidth: 5MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2498.5	39675	4.4947	4.4888	4.4784	5.048	4.958	4.985
2593.0	40620	4.4922	4.4893	4.4869	5.102	5.022	4.994
2687.5	41565	4.4734	4.4867	4.5132	4.990	5.070	5.436
LTE BAND 41 Channel bandwidth: 15MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2503.5	39725	13.426	13.469	13.446	14.74	15.02	15.13
2593.0	40620	13.422	13.458	13.430	14.84	14.96	14.91
2682.5	41515	13.4450	13.4750	13.4490	14.710	15.010	15.310

LTE BAND 41 Channel bandwidth: 10MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2501.0	39700	8.9690	8.9481	8.9472	9.750	10.04	9.803
2593.0	40620	8.9694	8.9471	8.9613	9.746	10.07	10.13
2685.0	41540	8.9550	9.0007	8.9887	9.795	9.850	10.080
LTE BAND 41 Channel bandwidth: 20MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2506.0	39750	17.899	17.853	17.881	19.78	19.30	19.31
2593.0	40620	17.922	17.926	17.891	19.60	19.66	19.21
2680.0	41490	17.9280	17.9020	17.9140	19.560	19.980	19.390

LTE Band 66

LTE BAND 66 Channel bandwidth: 1.4MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1710.7	131979	1.0897	1.0904	1.0893	1.270	1.278	1.291
1745.0	132322	1.0882	1.0900	1.0899	1.267	1.276	1.300
1779.3	132665	1.0893	1.0896	1.0888	1.277	1.280	1.279

LTE BAND 66 Channel bandwidth: 3MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1711.5	131987	2.6857	2.6886	2.6944	2.940	2.972	2.978
1745.0	132322	2.6884	2.6904	2.6954	2.942	2.974	2.968
1778.5	132657	2.6868	2.6891	2.6944	2.943	2.961	2.978

LTE BAND 66 Channel bandwidth: 5MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1712.5	131997	4.4824	4.4900	4.4839	4.990	4.988	4.925
1745.0	132322	4.4773	4.4871	4.4856	4.841	4.987	4.940
1777.5	132647	4.4812	4.4831	4.4868	4.950	4.958	4.931

LTE BAND 66 Channel bandwidth: 10MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1715.0	132022	8.9628	8.9374	8.9461	9.794	9.671	9.782
1745.0	132322	9.0101	8.9366	8.9615	9.547	9.742	9.778
1775.0	132622	8.9799	8.9373	8.9626	9.765	9.707	9.861

LTE BAND 66 Channel bandwidth: 15MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1717.5	132047	13.404	13.404	13.391	14.48	14.54	14.52
1745.0	132322	13.593	13.435	13.441	14.27	14.74	14.62
1772.5	132597	13.451	13.434	13.445	14.65	14.60	14.69

LTE BAND 66 Channel bandwidth: 20MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1720.0	132072	17.818	17.834	17.825	19.18	19.25	19.16
1745.0	132322	18.064	17.927	17.889	18.88	19.32	19.31
1770.0	132572	17.919	17.956	17.932	19.41	19.42	19.34

LTE Band 71

LTE BAND 71 Channel bandwidth: 5MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
665.5	133147	4.4936	4.4979	4.4964	4.998	4.992	4.954
680.5	133297	4.4906	4.4916	4.4853	5.002	4.973	4.945
695.5	133447	4.4853	4.4871	4.4878	4.968	4.969	4.935

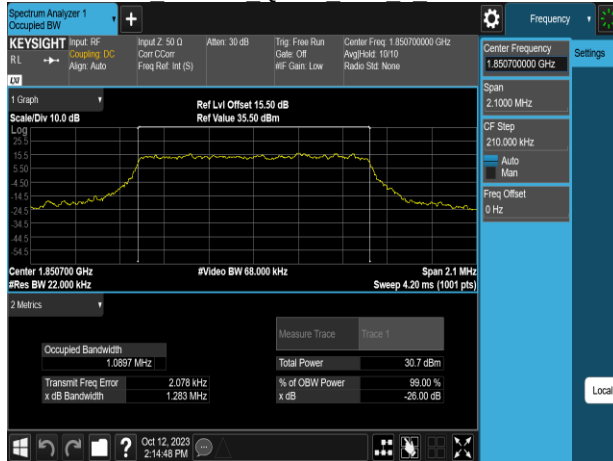
LTE BAND 71 Channel bandwidth: 10MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
688.0	133172	8.9639	8.9384	8.9594	9.799	9.708	9.732
680.5	133297	8.9921	8.9604	8.9800	9.822	9.775	9.777
693.0	133422	8.9651	8.9329	8.9565	9.758	9.766	9.856

LTE BAND 71 Channel bandwidth: 15MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
670.5	133197	13.385	13.394	13.388	14.50	14.59	14.48
680.5	133297	13.491	13.484	13.493	14.64	14.70	14.77
690.5	133397	13.418	13.404	13.403	14.55	14.66	14.61

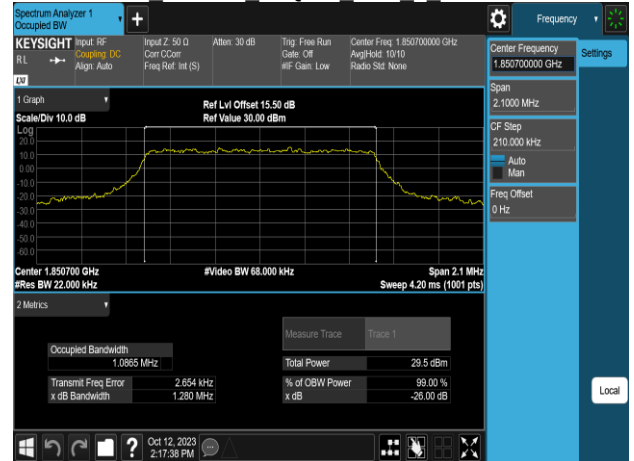
LTE BAND 71 Channel bandwidth: 20MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
673.0	133222	17.852	17.884	17.861	19.36	19.27	19.26
680.5	133297	17.958	17.982	17.961	19.48	19.36	19.43
688.0	133372	17.839	17.832	17.854	19.25	19.29	19.14

Test Plot(s)

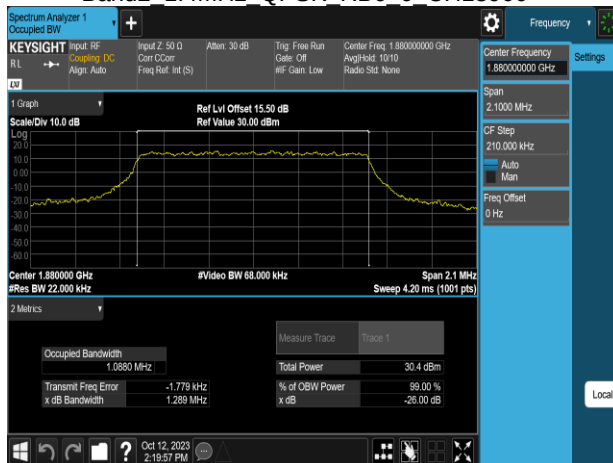
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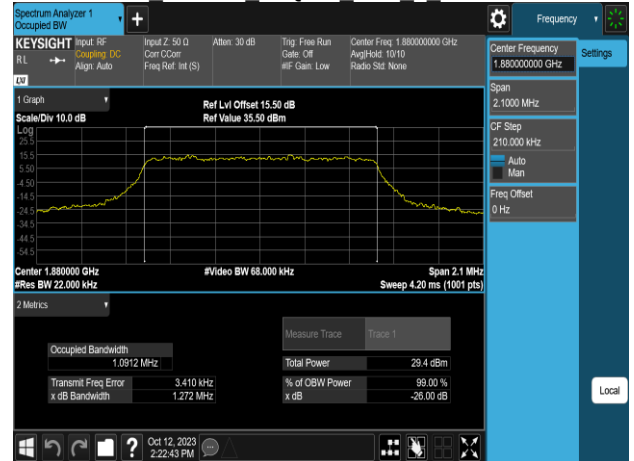
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Band2 1.4MHz QPSK RB6 0 CH18900



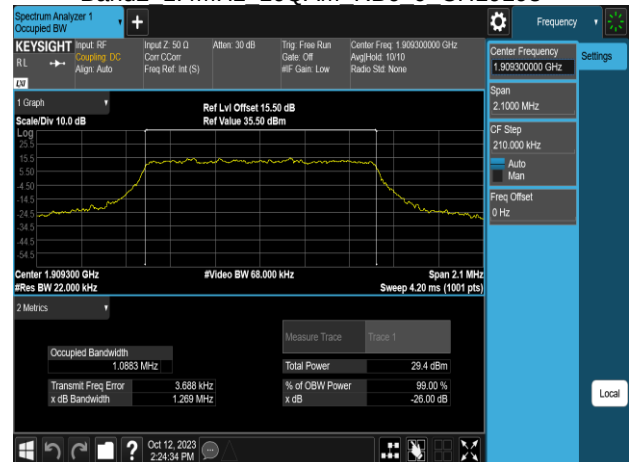
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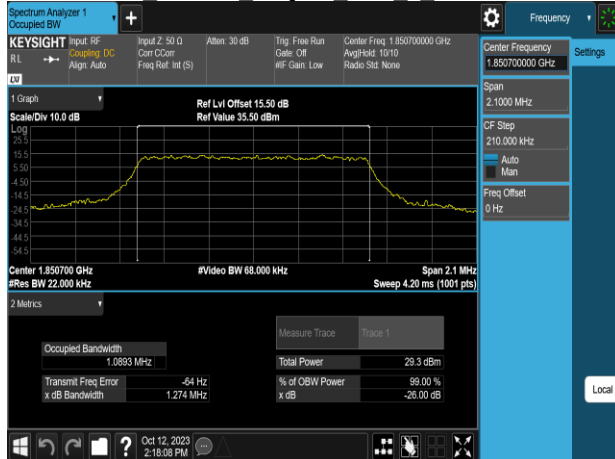
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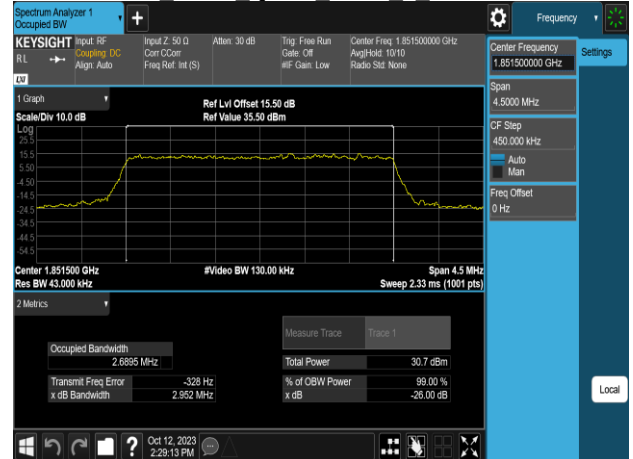
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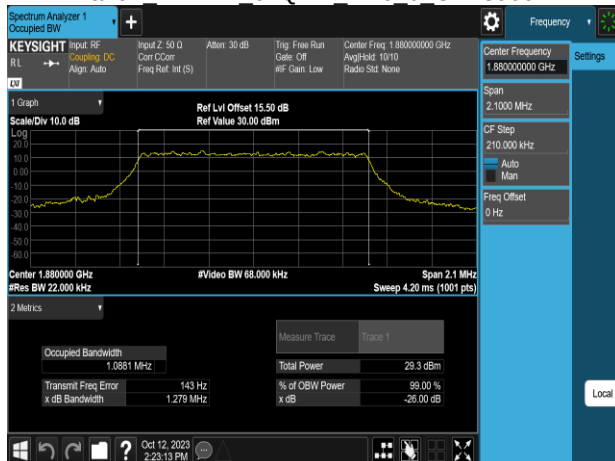
Band2 1.4MHz 64QAM RB6 0 CH18607



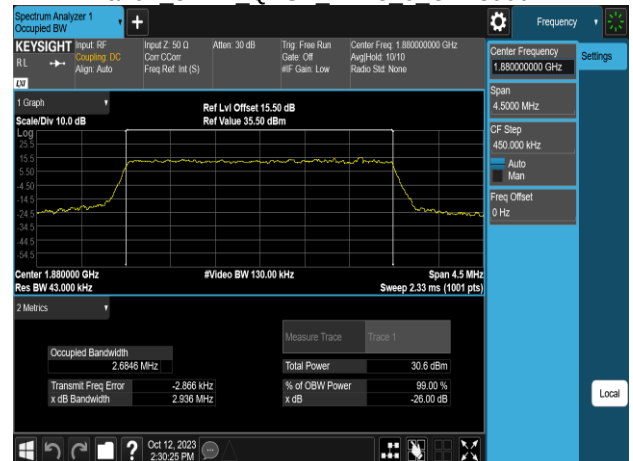
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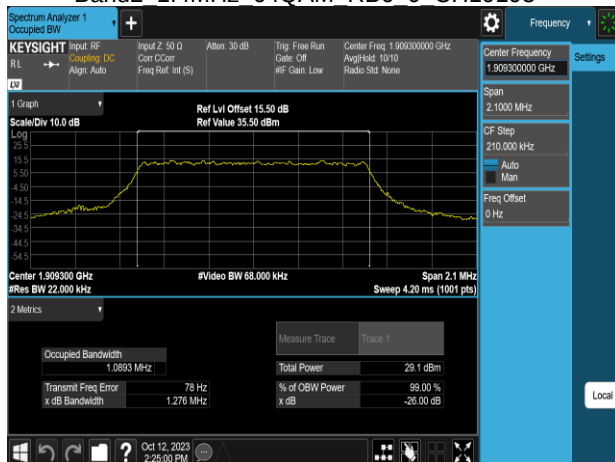
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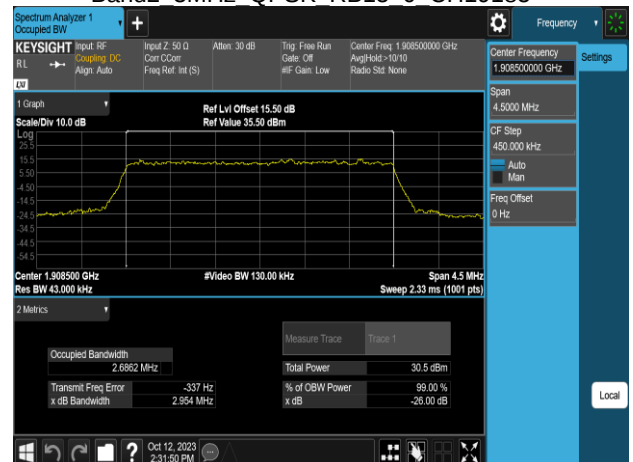
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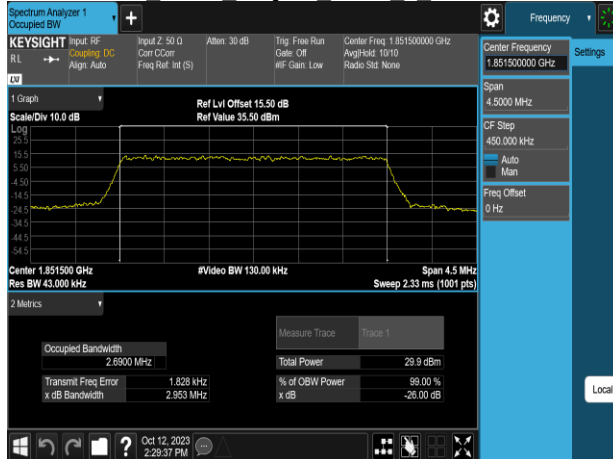
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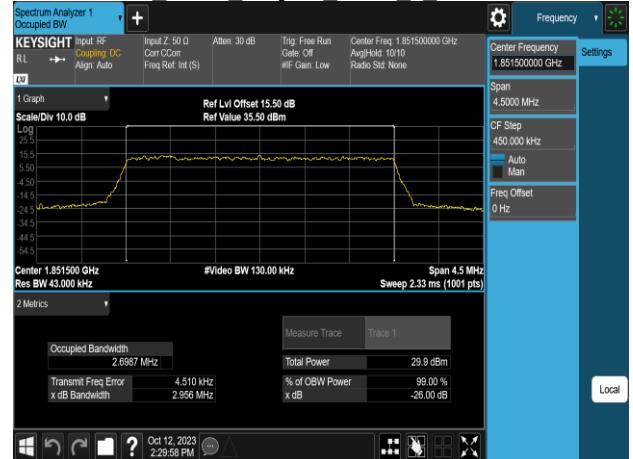
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Band2 3MHz 16QAM RB15 0 CH18615



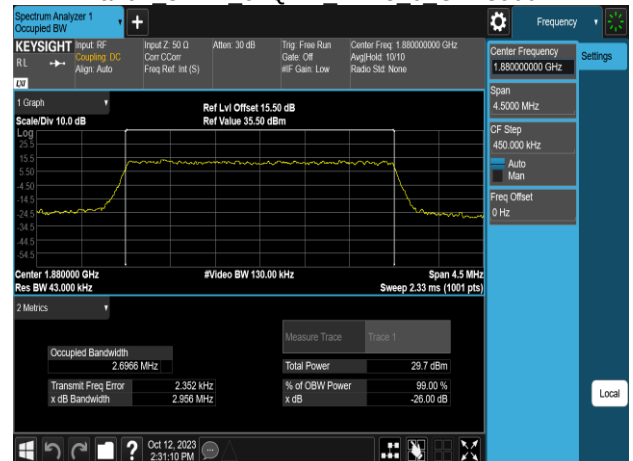
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Band2 3MHz 16QAM RB15 0 CH18900



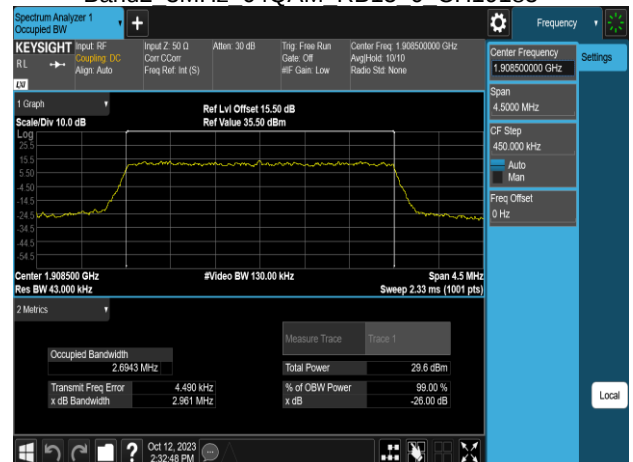
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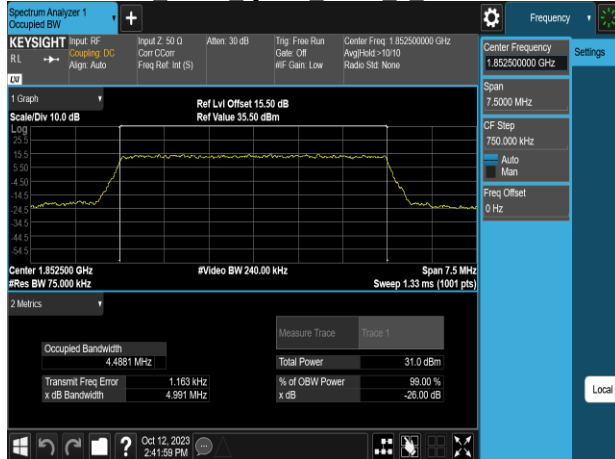
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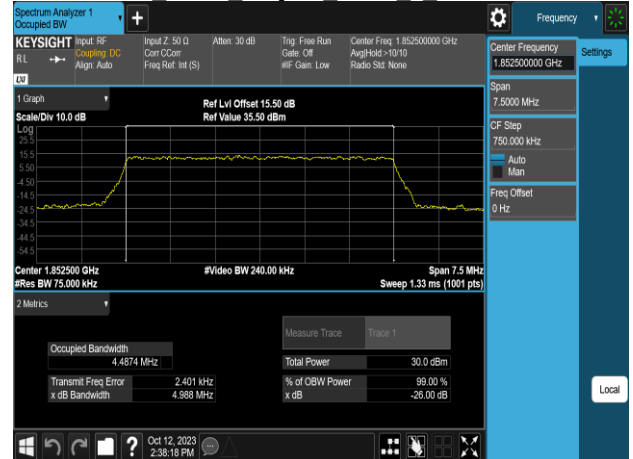
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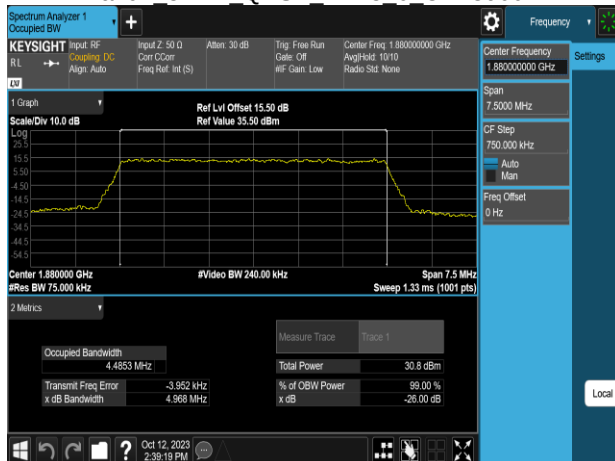
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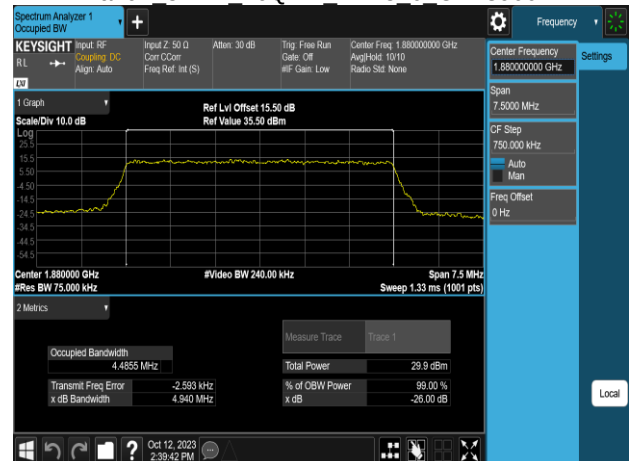
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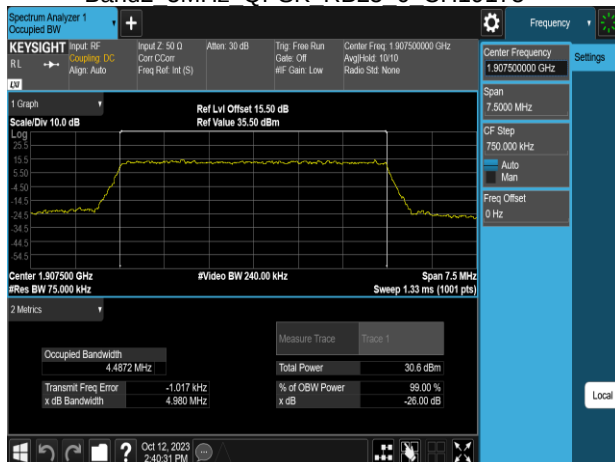
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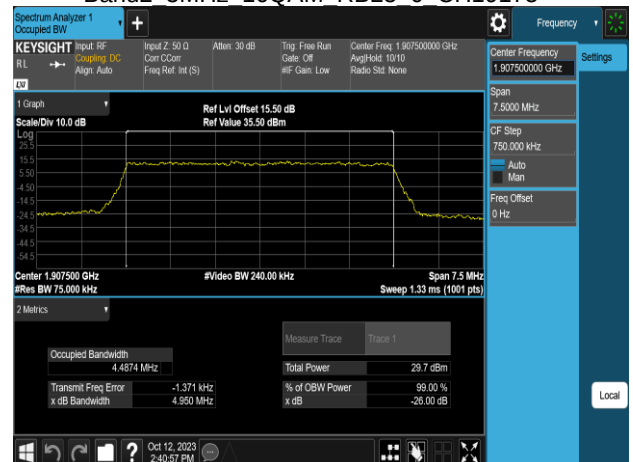
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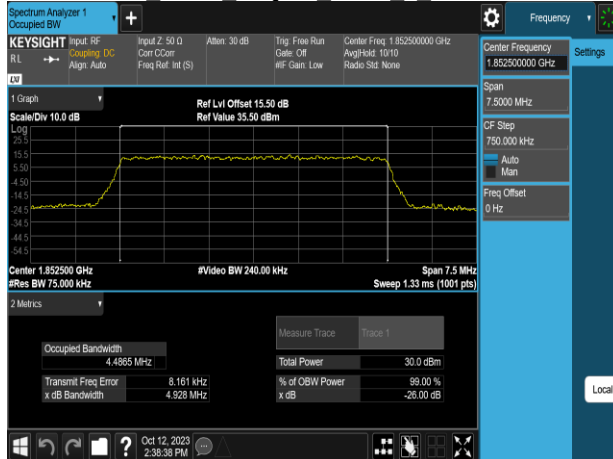
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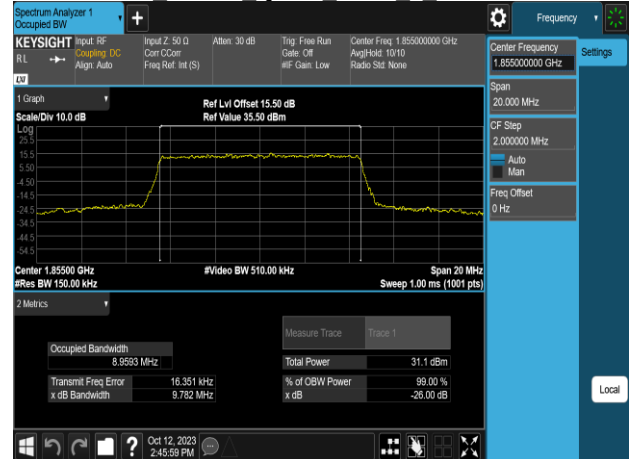
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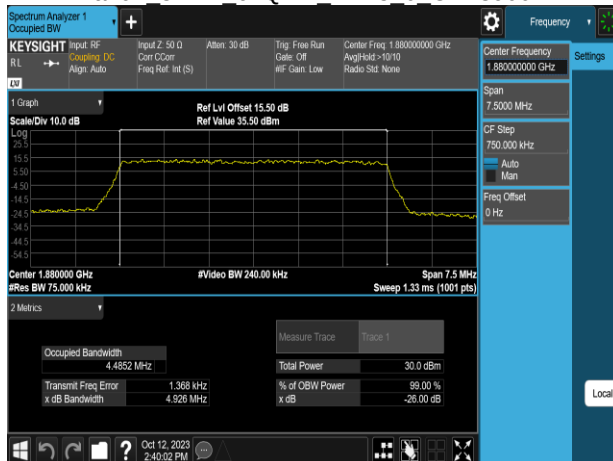
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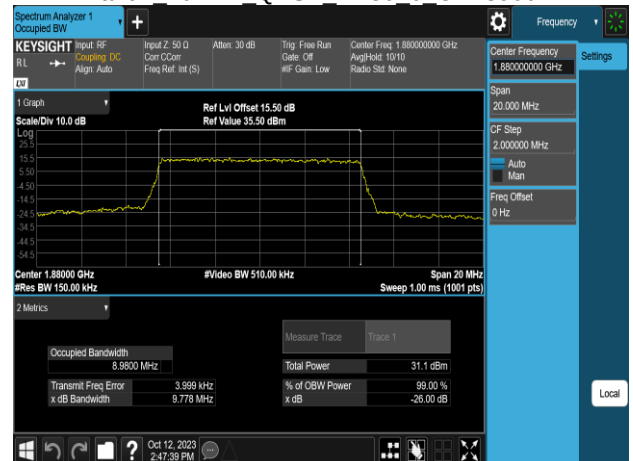
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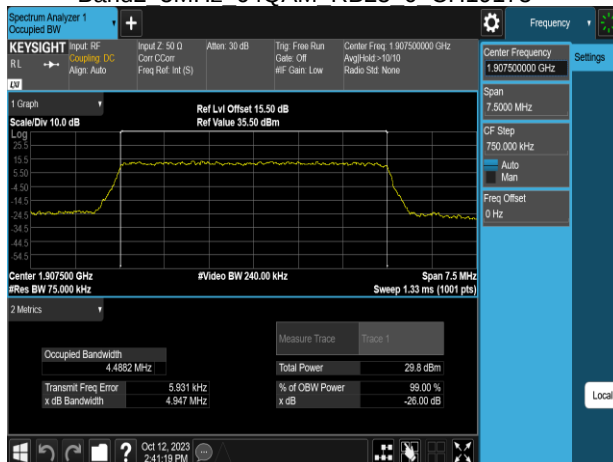
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Band2 10MHz QPSK RB50 0 CH18900



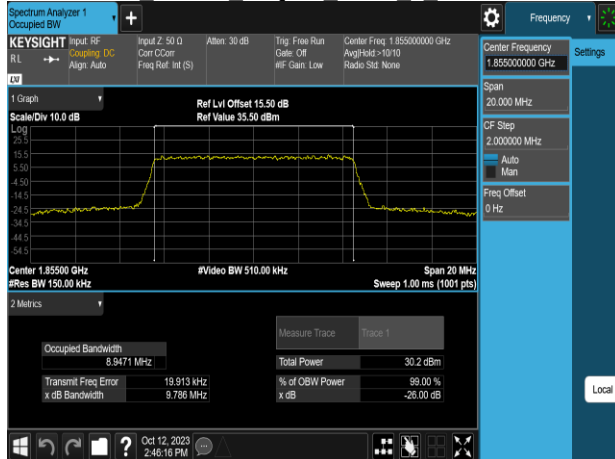
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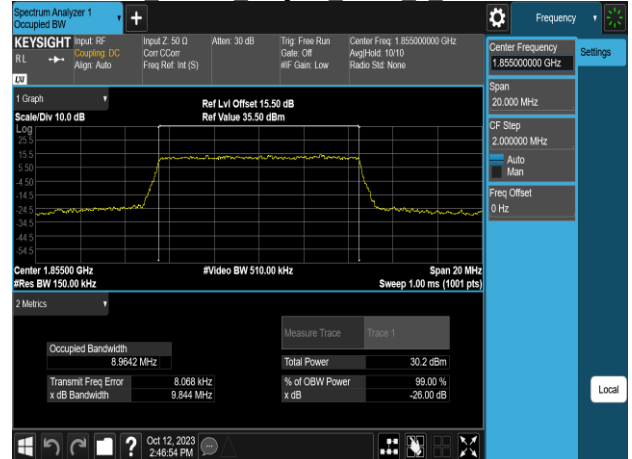
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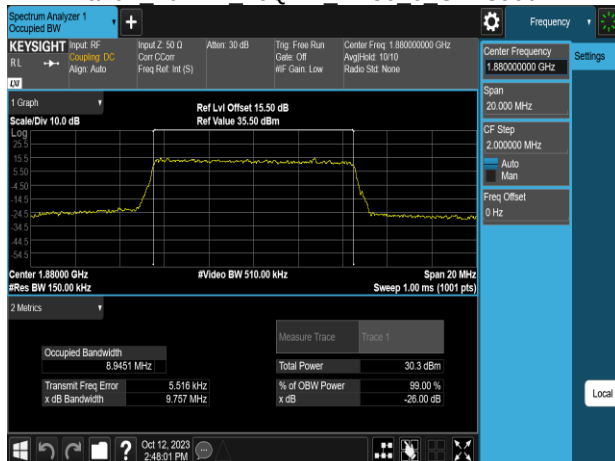
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Band2 10MHz 64QAM RB50 0 CH18650



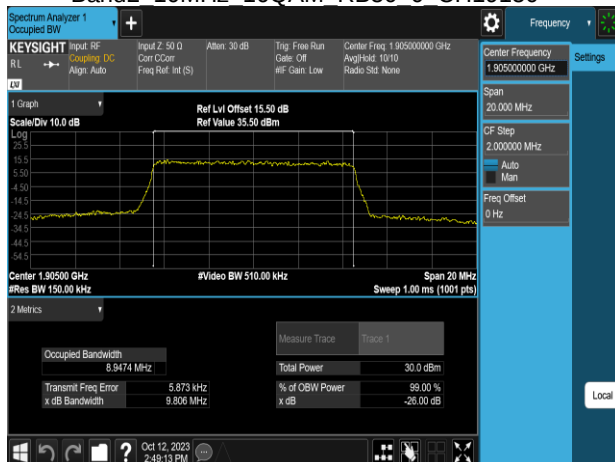
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Band2 10MHz 64QAM RB50 0 CH18900



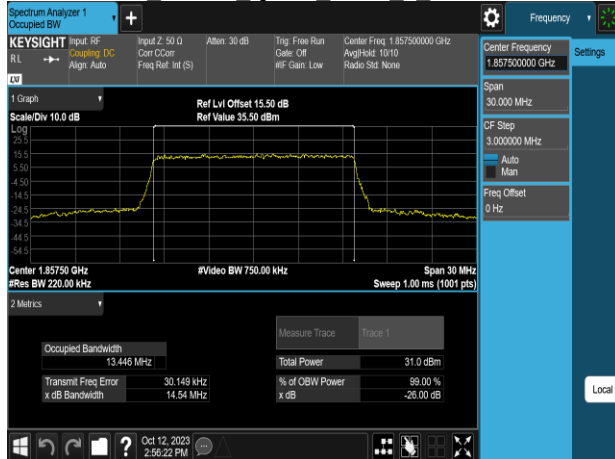
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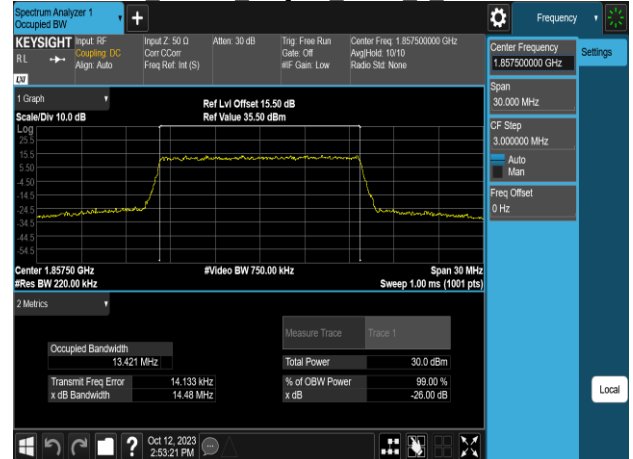
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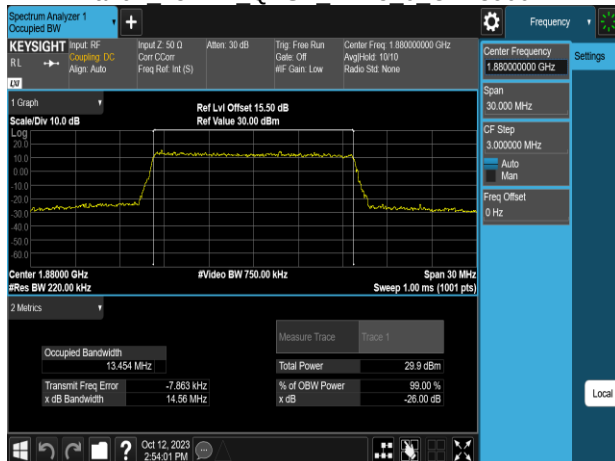
Band2 15MHz QPSK RB75 0 CH18675



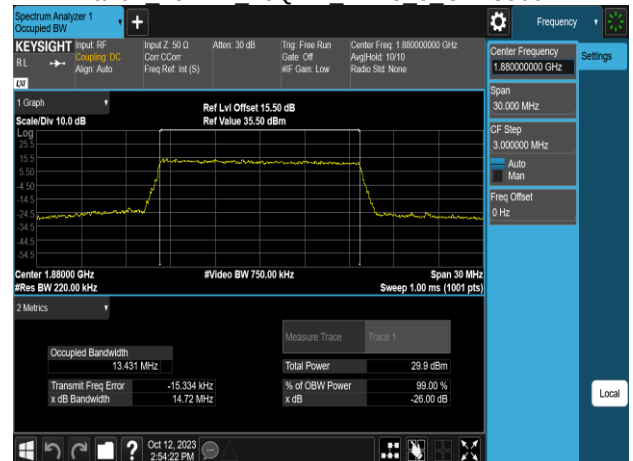
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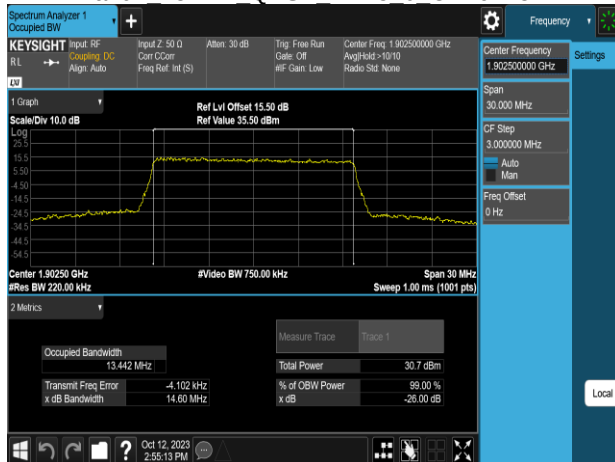
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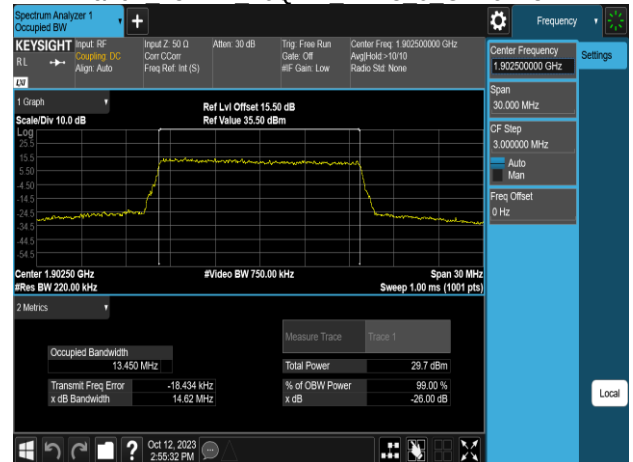
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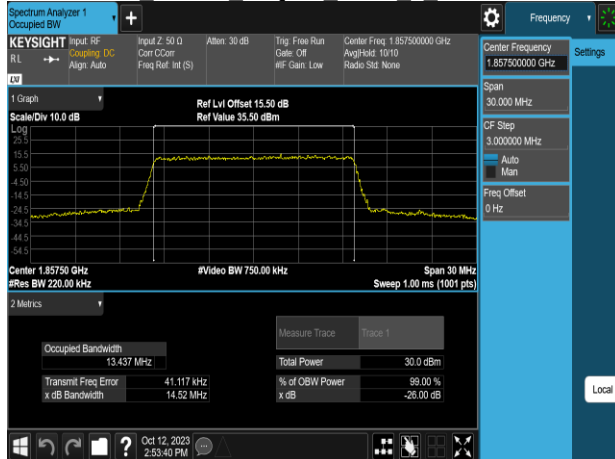
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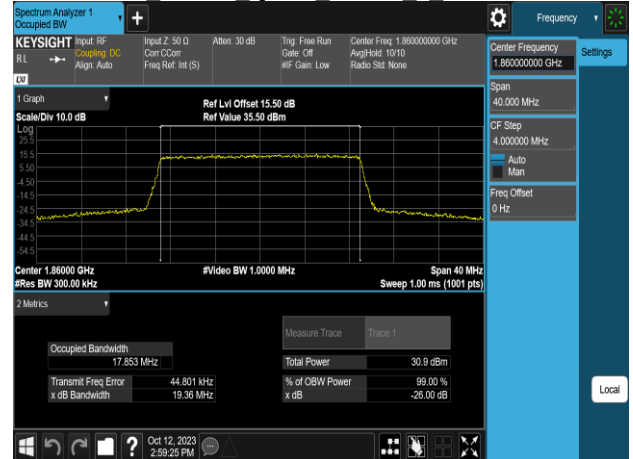
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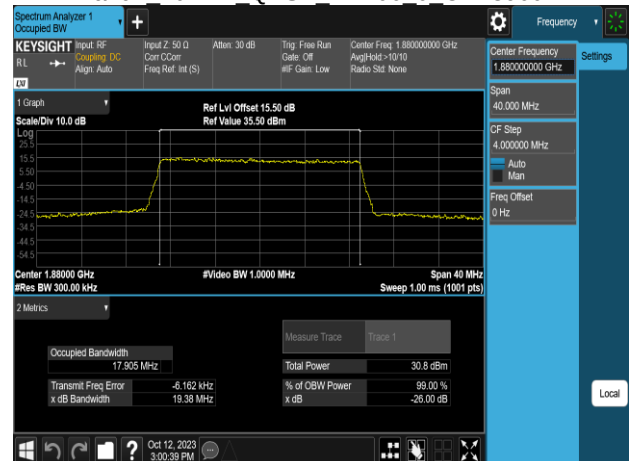
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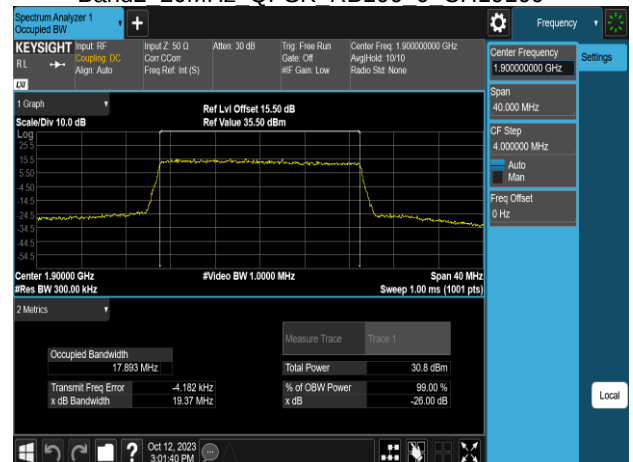
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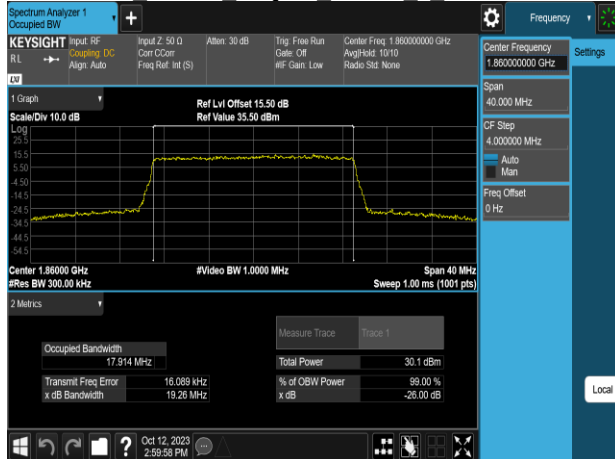
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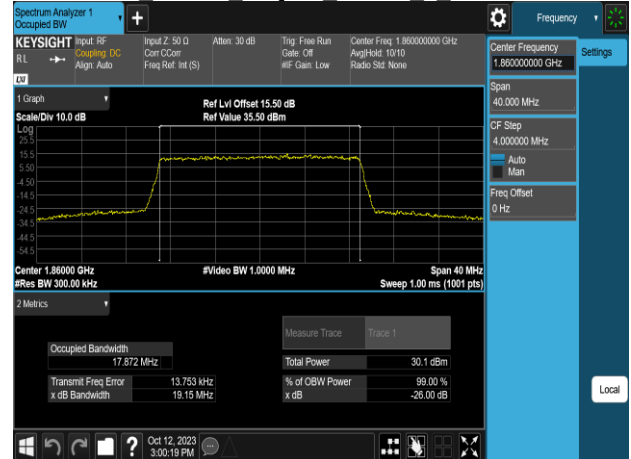
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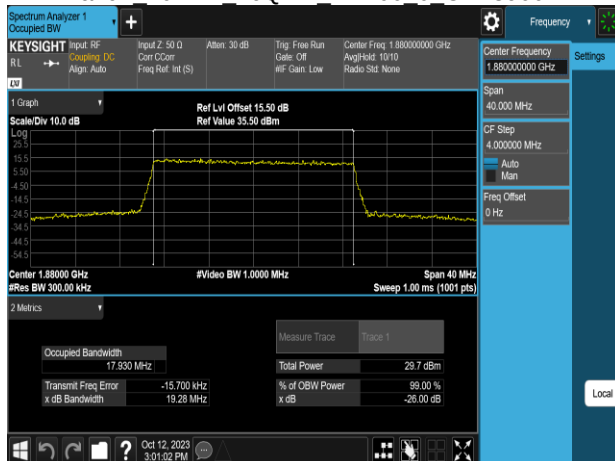
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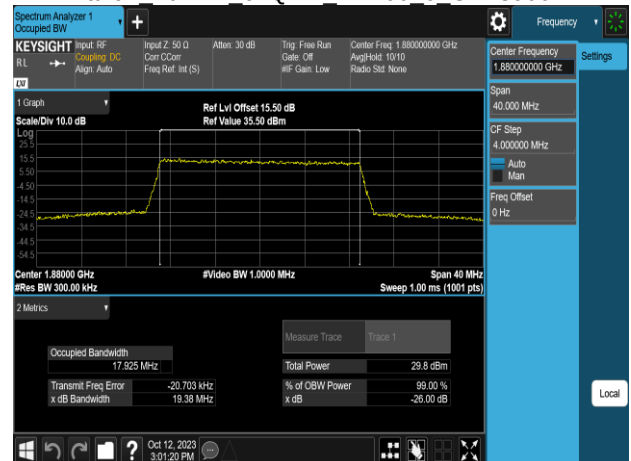
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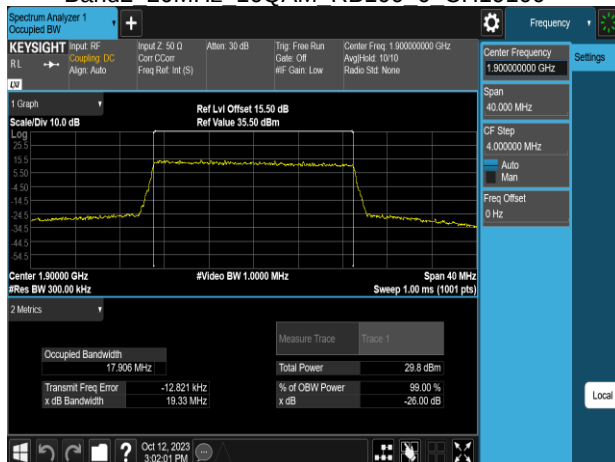
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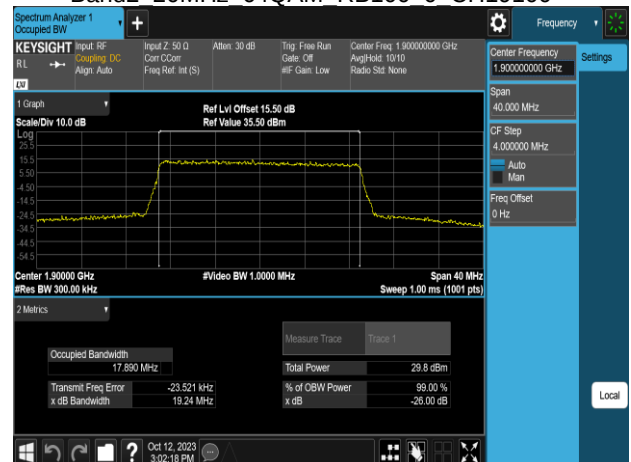
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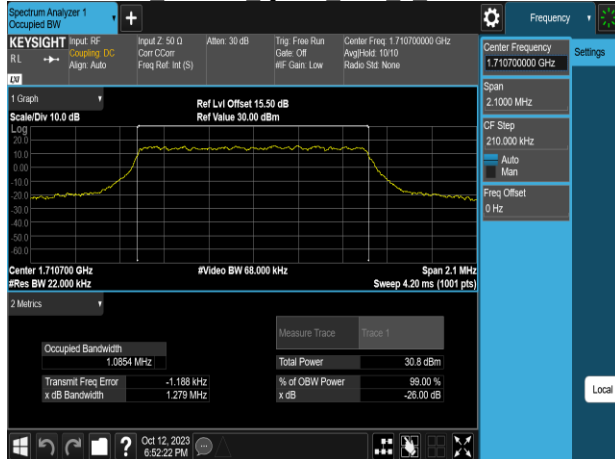
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Band2 20MHz 64QAM RB100 0 CH19100



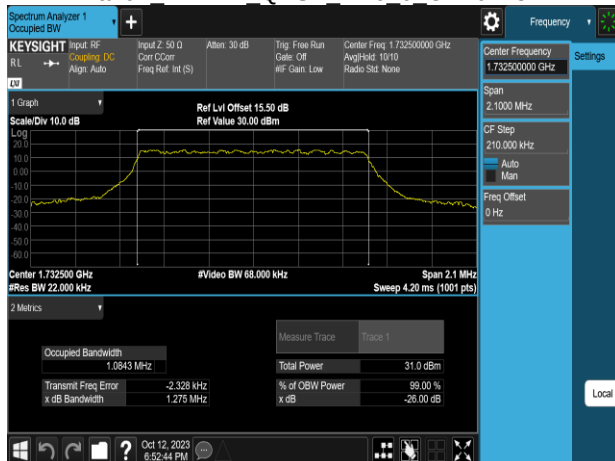
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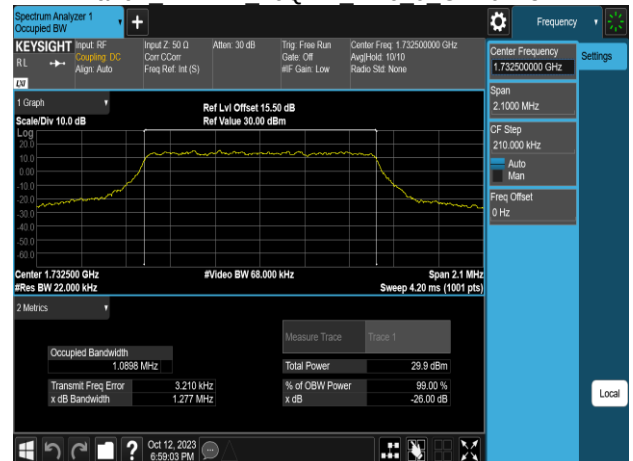
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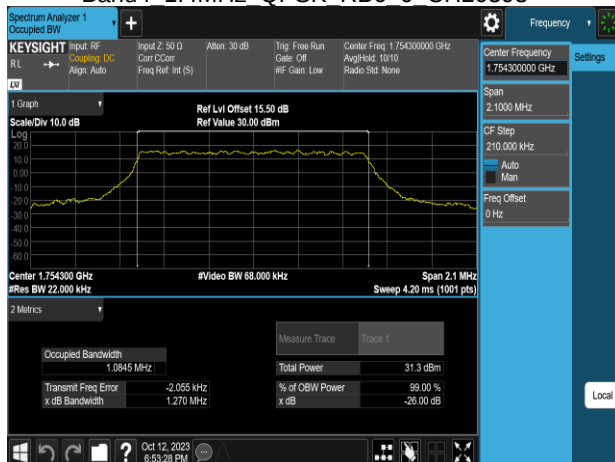
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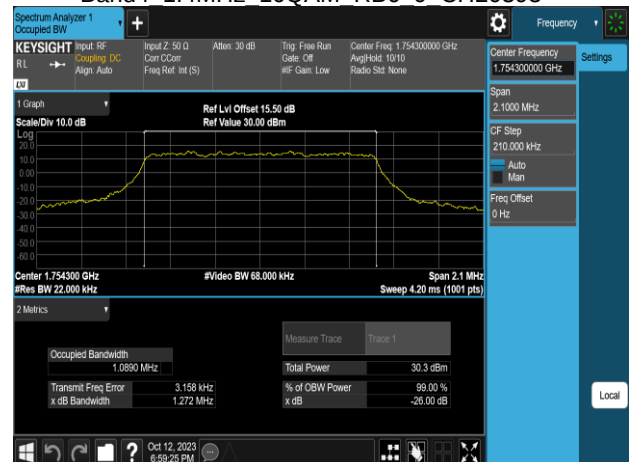
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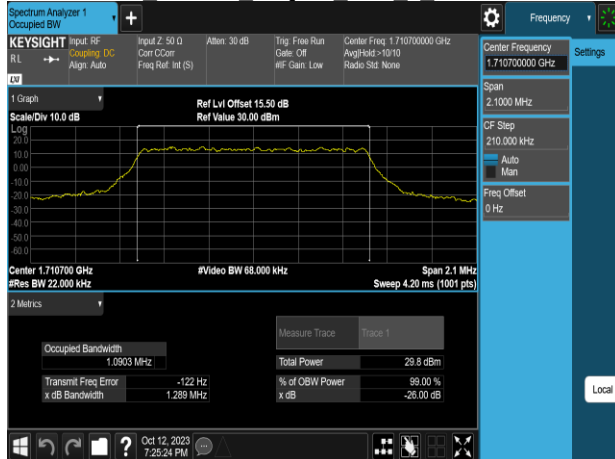
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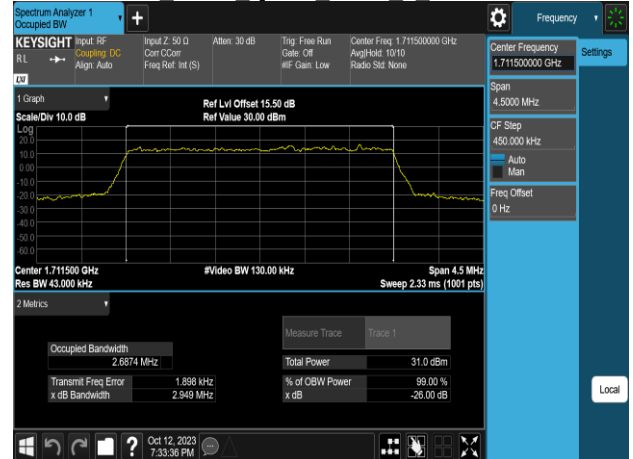
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Band4 1.4MHz 64QAM RB6 0 CH19957



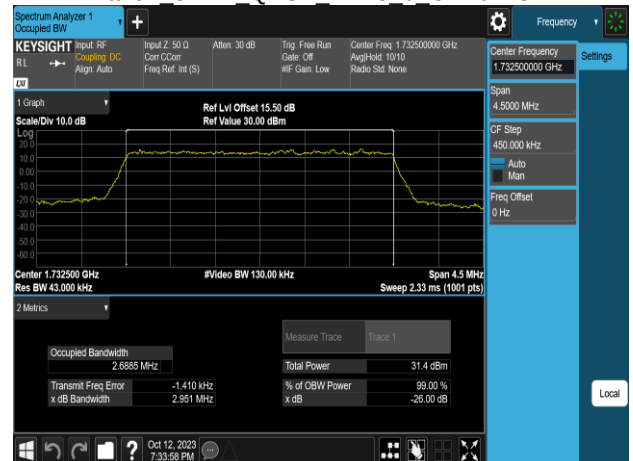
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Band4 1.4MHz 64QAM RB6 0 CH20175



Band4 3MHz QPSK RB15 0 CH20175



Band4 1.4MHz 64QAM RB6 0 CH20393



Band4 3MHz QPSK RB15 0 CH20385

