

TEST REPORT

Reference No...... : WTD23D02024586W002
FCC ID : 2BADD-R4GLITE
Applicant..... : Black Gate Hunting Products, LLC
Address..... : 8200 Canthy Circle, Garner, NC 27529, United States
Manufacturer : HuaRui Technology(ShenZhen)CO.,Ltd
Address..... : 401, Building 3, No.32, Dafu Road, Zhangge Community, Fucheng Street, Longhua District, Shenzhen, China
Product..... : Wireless Trail camera
Model(s) : R4G-Lite
Standards..... : FCC CFR47 Part 22 Subpart H: 2018
FCC CFR47 Part 24 Subpart E: 2018
FCC CFR47 Part 27: 2018
Date of Receipt sample : 2023-01-21
Date of Test : 2023-01-21 to 2023-03-02
Date of Issue..... : 2023-06-15
Test Result..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:

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3 **Revision History**

Test report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTD23D02024586W002	2023-01-21	2023-01-21 to 2023-03-02	2023-06-15	Original	-	Valid

4 General Information

4.1 General Description of E.U.T.

Product:	Wireless Trail camera
Model(s):	R4G-Lite
Model Description:	N/A
WCDMA Band(s):	FDD Band II/IV/V
LTE Band(s):	FDD Band 2/4/5/12/13/25/26
Hardware Version:	R4GLMV02
Software Version:	R4G_Lite_015
Highest frequency (Exclude Radio):	24MHz
Storage Location:	Internal Storage

4.2 Details of E.U.T.

Operation Frequency:	LTE Band 2: 1850~1910MHz LTE Band 4: 1710~1755MHz LTE Band 5: 824~849MHz LTE Band 12: 699~716MHz LTE Band 13: 777~787MHz LTE Band 25 1850~1915MHz LTE Band 26 (Part 22): 824~849MHz
Max. RF output power:	LTE Band 2: 23.20dBm LTE Band 4: 22.71dBm LTE Band 5: 22.63dBm LTE Band 12: 22.34dBm LTE Band 13: 22.23dBm LTE Band 25: 22.93dBm LTE Band 26 (Part 22): 23.41dBm
Type of Modulation:	LTE: QPSK, 16QAM
Antenna installation:	External antenna
Antenna Gain:	LTE Band 2: 3.0dBi LTE Band 4: 3.0dBi LTE Band 5: -0.2dBi LTE Band 12: -0.9dBi LTE Band 13: -0.9dBi LTE Band 25: 3.0dBi LTE Band 26: -0.2dBi
Ratings:	DC 12V
Type of Emission:	LTE Band 2 1.4MHz: 1M09G7D(QPSK), 1M09W7D(16QAM)

LTE Band 2 3MHz: 2M68G7D(QPSK), 2M68W7D(16QAM)
LTE Band 2 5MHz: 4M49G7D(QPSK), 4M49W7D(16QAM)
LTE Band 2 10 MHz: 8M91G7D(QPSK), 8M92W7D(16QAM)
LTE Band 2 15MHz: 13M4G7D(QPSK), 13M4W7D(16QAM)
LTE Band 2 20MHz: 17M8G7D(QPSK), 17M8W7D(16QAM)
LTE Band 4 1.4MHz: 1M09G7D(QPSK), 1M09W7D(16QAM)
LTE Band 4 3MHz: 2M68G7D(QPSK), 2M68W7D(16QAM)
LTE Band 4 5MHz: 4M49G7D(QPSK), 4M49W7D(16QAM)
LTE Band 4 10 MHz: 8M91G7D(QPSK), 8M93W7D(16QAM)
LTE Band 4 15MHz: 13M4G7D(QPSK), 13M4W7D(16QAM)
LTE Band 4 20MHz: 17M8G7D(QPSK), 17M9W7D(16QAM)
LTE Band 5 1.4MHz: 1M09G7D(QPSK), 1M09W7D(16QAM)
LTE Band 5 3MHz: 2M68G7D(QPSK), 2M68W7D(16QAM)
LTE Band 5 5MHz: 4M49G7D(QPSK), 4M49W7D(16QAM)
LTE Band 5 10 MHz: 8M92G7D(QPSK), 8M91W7D(16QAM)
LTE Band 12 1.4MHz: 1M09G7D(QPSK), 1M09W7D(16QAM)
LTE Band 12 3MHz: 2M68G7D(QPSK), 2M68W7D(16QAM)
LTE Band 12 5MHz: 4M49G7D(QPSK), 4M49W7D(16QAM)
LTE Band 12 10MHz: 8M92G7D(QPSK), 8M95W7D(16QAM)
LTE Band 13 5MHz: 4M49G7D(QPSK), 4M49W7D(16QAM)
LTE Band 13 10 MHz: 8M91G7D(QPSK), 8M98W7D(16QAM)
LTE Band 25 1.4MHz: 1M09G7D(QPSK), 1M09W7D(16QAM)
LTE Band 25 3MHz: 2M69G7D(QPSK), 2M68W7D(16QAM)
LTE Band 25 5MHz: 4M49G7D(QPSK), 4M49W7D(16QAM)
LTE Band 25 10 MHz: 8M92G7D(QPSK), 8M92W7D(16QAM)
LTE Band 25 15MHz: 13M4G7D(QPSK), 13M4W7D(16QAM)
LTE Band 25 20MHz: 17M8G7D(QPSK), 17M8W7D(16QAM)
LTE Band 26 (Part 22) 1.4MHz: 1M09G7D(QPSK), 1M09W7D(16QAM)
LTE Band 26 (Part 22) 3MHz: 2M68G7D(QPSK), 2M68W7D(16QAM)
LTE Band 26 (Part 22) 5MHz: 4M49G7D(QPSK), 4M49W7D(16QAM)
LTE Band 26 (Part 22)10 MHz: 8M92G7D(QPSK), 8M90W7D(16QAM)
LTE Band 26 (Part 22) 15MHz: 13M4G7D(QPSK), 13M7W7D(16QAM)

4.3 Test Mode

All test mode(s) and condition(s) mentioned were considered and evaluated respectively by performing full tests, the worst data were recorded and reported.

Support Band	Test Mode BW(MHz)	Channel Frequency	Channel Number
LTE Band 2	1.4	1850.7 MHz	18607
		1880.0 MHz	18900
		1909.3 MHz	19193
	3	1851.5 MHz	18615
		1880.0 MHz	18900
		1908.5 MHz	19185
	5	1852.5 MHz	18625
		1880.0 MHz	18900
		1907.5 MHz	19175
	10	1855.0 MHz	18650
		1880.0 MHz	18900
		1905.0 MHz	19150
	15	1857.5 MHz	18675
		1880.0 MHz	18900
		1902.5 MHz	19125
	20	1860.0 MHz	18700
		1880.0 MHz	18900
		1900.0 MHz	19100
LTE Band 4	1.4	1710.7 MHz	19957
		1732.5 MHz	20175
		1754.3 MHz	20393
	3	1711.5 MHz	19965
		1732.5 MHz	20175
		1753.5 MHz	20385
	5	1712.5 MHz	19975
		1732.5 MHz	20175
		1752.5 MHz	20375
	10	1715.0 MHz	20000
		1732.5 MHz	20175
		1750.0 MHz	20350
	15	1717.5 MHz	20025
		1732.5 MHz	20175
		1747.5 MHz	20325
	20	1720.0 MHz	20050
		1732.5 MHz	20175
		1745.0 MHz	20300

LTE Band 5	1.4	824.7 MHz	20407
		836.5 MHz	20525
		848.3 MHz	20643
	3	825.5 MHz	20415
		836.5 MHz	20525
		847.5 MHz	20635
	5	826.5 MHz	20425
		836.5 MHz	20525
		846.5 MHz	20625
	10	829.0 MHz	20450
836.5 MHz		20525	
844.0 MHz		20600	
LTE Band 12	1.4	699.7 MHz	23017
		707.5 MHz	23095
		715.3 MHz	23173
	3	700.5 MHz	23025
		707.5 MHz	23095
		714.5 MHz	23165
	5	701.5 MHz	23035
		707.5 MHz	23095
		713.5 MHz	23155
	10	704.0 MHz	23060
707.5 MHz		23095	
711.0 MHz		23130	
LTE Band 13	5	779.5 MHz	23205
		782.0 MHz	23230
		784.5 MHz	23255
	10	782.0 MHz	23230
LTE Band 25	1.4	1850.7 MHz	26047
		1882.5 MHz	26365
		1914.3 MHz	26683
	3	1851.5 MHz	26055
		1882.5 MHz	26365
		1913.5 MHz	26675
	5	1852.5 MHz	26065
		1882.5 MHz	26365
		1912.5 MHz	26665
	10	1855.0 MHz	26090
		1882.5 MHz	26365
		1910.0 MHz	26640
	15	1857.5 MHz	26155
		1882.5 MHz	26365
		1907.5 MHz	26615
20	1860.0 MHz	26140	
	1882.5 MHz	26365	

		1905.0 MHz	26590	
LTE Band 26 (Part 22H) UL: 824-849MHz	1.4	824.7 MHz	26797	
		836.5 MHz	26915	
		848.3 MHz	27033	
	3	825.5 MHz	26805	
		836.5 MHz	26915	
		847.5 MHz	27025	
	5	826.5 MHz	26815	
		836.5 MHz	26915	
		846.5 MHz	27015	
	10	829.0 MHz	26840	
		836.5 MHz	26915	
		844.0 MHz	26990	
	15	831.5 MHz	26865	
		836.5 MHz	26915	
		841.5 MHz	26965	
		824.7 MHz	26797	
Remark: All mode(s) were tested and the worst data was recorded.				

4.4 Test Facility

The test facility has a test site registered with the following organizations:

ISED CAB identifier: CN0013. Test Firm Registration No.: 7760A.

Waltek Testing Group Co., Ltd. Has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files.

Registration number 7760A, October 15, 2016.

FCC Designation No.: CN1201. Test Firm Registration No.: 523476.

Waltek Testing Group Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration number 523476, September 10, 2019.

5 Test Summary

Test Items	Test Requirement	Result
RF Output Power	2.1046 22.913 (a) 24.232 (c) 27.50(h.2) 27.50(d.4) 90.635	PASS
Peak-to-Average Ratio	24.232 (d) 27.50(d)	PASS
Bandwidth	2.1049 22.905 22.917 24.238 27.53(a) 90.691	PASS
Spurious Emissions at Antenna Terminal	2.1051 22.917 (a) 24.238 (a) 27.53(h) 27.53(m)(4) 90.691	PASS
Field Strength of Spurious Radiation	2.1053 22.917 (a) 24.238 (a) 27.53(h) 27.53(m)(4) 90.691	PASS
Out of band emission	22.917 (a) 24.238 (a) 27.53(h) 27.53(m)(4) 90.691	PASS
Frequency Stability	2.1055 22.355 24.235 27.5(h) 27.54 90.231	PASS
Maximum Permissible Exposure (MPE)	1.1307	PASS

6 Equipment Used during Test

6.1 Equipments List

3m Semi-anechoic Chamber for Radiation Emissions Test site 1#						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	Spectrum Analyzer	R&S	FSP	100091	2022-04-28	2023-04-25
2	Active Loop Antenna	Beijing Dazhi	ZN30900A	-	2022-04-28	2022-04-28
3	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	336	2022-08-07	2023-08-06
4	Coaxial Cable (below 1GHz)	Top	TYPE16(13M)	-	2022-04-28	2023-04-25
5	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	2022-04-28	2023-04-25
6	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9170	335	2022-07-29	2023-07-28
7	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	2022-08-08	2023-08-07
8	Coaxial Cable (above 1GHz)	Top	1GHz-25GHz	EW02014-7	2022-04-28	2023-04-25
9	Universal Radio Communication Tester	R&S	CMU 200	112461	2022-04-28	2023-04-25
10	Signal Generator	R&S	SMR20	100046	2022-04-28	2023-04-25
11	Smart Antenna	SCHWARZBECK	HA08	-	2022-04-28	2022-04-28
3m Semi-anechoic Chamber for Radiation Emissions Test site 2#						
Item	Equipment	Manufacturer	Model No.	Serial No	Last Calibration Date	Calibration Due Date
1	Test Receiver	R&S	ESCI	101296	2022-04-28	2023-04-25
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	2022-10-30	2023-10-290
3	Amplifier	Compliance pirection systems inc	PAP-0203	22024	2022-04-28	2022-04-28
4	Cable	HUBER+SUHNER	CBL2	525178	2022-04-28	2022-04-28
RF Conducted Testing						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1.	Spectrum Analyzer	Agilent	N9020A	MY49100060	2022-08-01	2023-07-31
2.	Universal Radio Communication Tester	R&S	CMW 500	127818	2022-04-28	2023-04-27

6.2 Measurement Uncertainty

Parameter	Uncertainty
Conducted Emission	± 3.64 dB(AC mains 150KHz~30MHz)
Radiated Spurious Emissions	± 5.08 dB (Bilog antenna 30M~1000MHz)
	± 5.47 dB (Horn antenna 1000M~25000MHz)
Radio Frequency	± 1 x 10 ⁻⁷ Hz
RF Power	± 0.42 dB
RF Power Density	± 0.7dB
Conducted Spurious Emissions	± 2.76 dB (9kHz~26500MHz)
Confidence interval: 95%. Confidence factor:k=2	

6.3 Test Equipment Calibration

All the test equipments used are valid and calibrated by CEPREI Certification Body that address is No.110 Dongguan Zhuang RD. Guangzhou, P.R.China.

7 RF OUTPUT POWER

Test Requirement:	FCC Part 2.1046, 22.913 (a), 24.232 (c), 27.50(h.2); 27.50(d.4); 90.635
Test Method:	ANSI C63.26:2015 ANSI/TIA-603-E:2016
Test Mode:	TX transmitting

7.1 EUT Operation

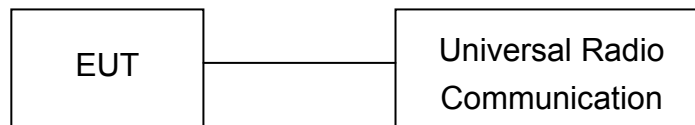
Operating Environment :

Temperature:	22.5 °C
Humidity:	52.1 % RH
Atmospheric Pressure:	101.2kPa

7.2 Test Procedure

Conducted method:

The RF output of the transmitter was connected to the wireless test set and the spectrum analyzer through sufficient attenuation.



Radiated method:

1. The setup of EUT is according with per TIA/EIA Standard 603D:2010.
2. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.
3. The frequency range up to tenth harmonic of the fundamental frequency was investigated.
4. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

7.3 Test Result

Conducted Power

LTE Band 2:

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)			
1.4MHz	18607	1850.7	QPSK	1	0	22.17	23.0±1	/			
				1	2	22.13	23.0±1	/			
				1	5	22.17	23.0±1	/			
				3	0	22.23	23.0±1	/			
				3	1	22.29	23.0±1	/			
				3	2	22.25	23.0±1	/			
			16QAM	6	0	21.43	22.0±1	1.0			
				1	0	21.06	22.0±1	1.0			
				1	2	21.06	22.0±1	1.0			
				1	5	21.14	22.0±1	1.0			
				3	0	21.49	22.0±1	1.0			
				3	1	21.35	22.0±1	1.0			
	18900	1880	QPSK	3	2	21.3	22.0±1	1.0			
				6	0	20.36	21.0±1	1.0			
				1	0	22.36	23.0±1	/			
				1	2	22.39	23.0±1	/			
				1	5	22.34	23.0±1	/			
				3	0	22.43	23.0±1	/			
			16QAM	3	1	22.34	23.0±1	/			
				3	2	22.3	23.0±1	/			
				6	0	21.57	22.0±1	1.0			
				1	0	21.69	22.0±1	1.0			
				1	2	21.87	22.0±1	1.0			
				1	5	21.69	22.0±1	1.0			
			16QAM	3	0	21.8	22.0±1	1.0			
				3	1	21.84	22.0±1	1.0			
				3	2	21.8	22.0±1	1.0			
				6	0	20.76	21.0±1	1.0			
				19193	1909.3	QPSK	1	0	22.31	23.0±1	/
							1	2	22.42	23.0±1	/
1	5	22.41	23.0±1				/				
3	0	22.45	23.0±1				/				
3	1	22.55	23.0±1				/				
3	2	22.53	23.0±1				/				
16QAM	6	0	21.5			22.0±1	1.0				
	1	0	21.5			22.0±1	1.0				
	1	2	21.42			22.0±1	1.0				
	1	5	21.24			22.0±1	1.0				
	3	0	21.61			22.0±1	1.0				
	3	1	21.49			22.0±1	1.0				
3	2	21.36	22.0±1	1.0							
6	0	20.27	21.0±1	1.0							

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
3MHz	18615	1851.5	QPSK	1	0	22.3	23.0±1	/
				1	8	22.03	23.0±1	/
				1	14	22.23	23.0±1	/
				6	0	21.3	22.0±1	1.0
				6	4	21.29	22.0±1	1.0
				6	9	21.28	22.0±1	1.0
				15	0	21.23	22.0±1	1.0
			16QAM	1	0	21.18	22.0±1	1.0
				1	8	20.9	21.0±1	1.0
				1	14	21.11	22.0±1	1.0
				6	0	19.95	20.0±1	1.0
				6	4	19.91	20.0±1	1.0
				6	9	20.52	21.0±1	1.0
				15	0	20.41	21.0±1	1.0
	18900	1880	QPSK	1	0	22.25	23.0±1	/
				1	8	22.3	23.0±1	/
				1	14	22.71	23.0±1	/
				6	0	21.38	22.0±1	1.0
				6	4	21.42	22.0±1	1.0
				6	9	21.42	22.0±1	1.0
				15	0	21.39	22.0±1	1.0
			16QAM	1	0	21.22	22.0±1	1.0
				1	8	20.99	21.0±1	1.0
				1	14	21.09	22.0±1	1.0
				6	0	20.34	21.0±1	1.0
				6	4	20.39	21.0±1	1.0
				6	9	20.48	21.0±1	1.0
				15	0	20.48	21.0±1	1.0
	19185	1908.5	QPSK	1	0	22.38	23.0±1	/
				1	8	22.23	23.0±1	/
				1	14	22.3	23.0±1	/
				6	0	21.61	22.0±1	1.0
				6	4	21.44	22.0±1	1.0
				6	9	21.51	22.0±1	1.0
				15	0	21.51	22.0±1	1.0
			16QAM	1	0	21.27	22.0±1	1.0
				1	8	21.26	22.0±1	1.0
				1	14	21.3	22.0±1	1.0
				6	0	20.81	21.0±1	1.0
				6	4	20.64	21.0±1	1.0
				6	9	20.41	21.0±1	1.0
				15	0	20.45	21.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
5MHz	18625	1852.5	QPSK	1	0	22.17	23.0±1	/
				1	12	22.09	23.0±1	/
				1	24	22.27	23.0±1	/
				12	0	21.17	22.0±1	1.0
				12	6	21.05	22.0±1	1.0
				12	11	21.21	22.0±1	1.0
				25	0	21.14	22.0±1	1.0
			16QAM	1	0	20.57	21.0±1	1.0
				1	12	20.52	21.0±1	1.0
				1	24	20.64	21.0±1	1.0
				12	0	20.2	21.0±1	1.0
				12	6	19.99	20.0±1	1.0
				12	11	20.03	21.0±1	1.0
				25	0	20.23	21.0±1	1.0
	18900	1880	QPSK	1	0	22.14	23.0±1	/
				1	12	22.14	23.0±1	/
				1	24	22.32	23.0±1	/
				12	0	21.31	22.0±1	1.0
				12	6	21.34	22.0±1	1.0
				12	11	21.47	22.0±1	1.0
				25	0	21.44	22.0±1	1.0
			16QAM	1	0	21.22	22.0±1	1.0
				1	12	20.85	21.0±1	1.0
				1	24	20.91	21.0±1	1.0
				12	0	20.2	21.0±1	1.0
				12	6	20.2	21.0±1	1.0
				12	11	20.26	21.0±1	1.0
				25	0	20.36	21.0±1	1.0
	19175	1907.5	QPSK	1	0	22.29	23.0±1	/
				1	12	22.34	23.0±1	/
				1	24	22.52	23.0±1	/
				12	0	21.49	22.0±1	1.0
				12	6	21.51	22.0±1	1.0
				12	11	21.38	22.0±1	1.0
				25	0	21.54	22.0±1	1.0
			16QAM	1	0	21.24	22.0±1	1.0
				1	12	21.03	22.0±1	1.0
				1	24	20.92	21.0±1	1.0
				12	0	20.61	21.0±1	1.0
				12	6	20.44	21.0±1	1.0
				12	11	20.52	21.0±1	1.0
				25	0	20.59	21.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
10MHz	18650	1855	QPSK	1	0	22.43	23.0±1	/
				1	24	22.37	23.0±1	/
				1	49	22.26	23.0±1	/
				25	0	21.32	22.0±1	1.0
				25	12	21.36	22.0±1	1.0
				25	24	21.3	22.0±1	1.0
				50	0	21.25	22.0±1	1.0
			16QAM	1	0	21.01	22.0±1	1.0
				1	24	21.15	22.0±1	1.0
				1	49	20.93	21.0±1	1.0
				25	0	19.98	20.0±1	1.0
				25	12	20.15	21.0±1	1.0
				25	24	20.26	21.0±1	1.0
				50	0	21.24	22.0±1	1.0
	18900	1880	QPSK	1	0	21.22	22.0±1	/
				1	24	21.3	22.0±1	/
				1	49	21.28	22.0±1	/
				25	0	21.27	22.0±1	1.0
				25	12	21.25	22.0±1	1.0
				25	24	21.24	22.0±1	1.0
				50	0	21.35	22.0±1	1.0
			16QAM	1	0	21.33	22.0±1	1.0
				1	24	21.33	22.0±1	1.0
				1	49	21.2	22.0±1	1.0
				25	0	21.19	22.0±1	1.0
				25	12	21.18	22.0±1	1.0
				25	24	21.18	22.0±1	1.0
				50	0	21.17	22.0±1	1.0
	19150	1905	QPSK	1	0	22.54	23.0±1	/
				1	24	22.59	23.0±1	/
				1	49	22.31	23.0±1	/
				25	0	21.46	22.0±1	1.0
				25	12	21.51	22.0±1	1.0
				25	24	21.4	22.0±1	1.0
				50	0	21.43	22.0±1	1.0
			16QAM	1	0	21.69	22.0±1	1.0
				1	24	21.65	22.0±1	1.0
				1	49	21.46	22.0±1	1.0
				25	0	20.77	21.0±1	1.0
				25	12	20.52	21.0±1	1.0
				25	24	20.6	21.0±1	1.0
				50	0	20.3	21.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
15MHz	18675	1857.5	QPSK	1	0	22.32	23.0±1	/
				1	37	22.1	23.0±1	/
				1	74	22.11	23.0±1	/
				36	0	21.28	22.0±1	1.0
				36	16	21.33	22.0±1	1.0
				36	35	21.32	22.0±1	1.0
				75	0	21.25	22.0±1	1.0
			16QAM	1	0	21.38	22.0±1	1.0
				1	37	21.32	22.0±1	1.0
				1	74	21.76	22.0±1	1.0
				36	0	21.38	22.0±1	1.0
				36	16	21.27	22.0±1	1.0
				36	35	21.35	22.0±1	1.0
				75	0	21.16	22.0±1	1.0
	18900	1880	QPSK	1	0	22.38	23.0±1	/
				1	37	22.13	23.0±1	/
				1	74	22.36	23.0±1	/
				36	0	21.21	22.0±1	1.0
				36	16	21.3	22.0±1	1.0
				36	35	21.36	22.0±1	1.0
				75	0	21.2	22.0±1	1.0
			16QAM	1	0	20.88	21.0±1	1.0
				1	37	20.99	21.0±1	1.0
				1	74	21.14	22.0±1	1.0
				36	0	21.16	22.0±1	1.0
				36	16	21.28	22.0±1	1.0
				36	35	21.46	22.0±1	1.0
				75	0	21.23	22.0±1	1.0
	19125	1902.5	QPSK	1	0	22.62	23.0±1	/
				1	37	22.39	23.0±1	/
				1	74	22.19	23.0±1	/
				36	0	21.42	22.0±1	1.0
				36	16	21.31	22.0±1	1.0
				36	35	21.35	22.0±1	1.0
				75	0	21.42	22.0±1	1.0
			16QAM	1	0	21.58	22.0±1	1.0
				1	37	21.04	22.0±1	1.0
				1	74	21.17	22.0±1	1.0
				36	0	21.26	22.0±1	1.0
				36	16	21.24	22.0±1	1.0
				36	35	21.32	22.0±1	1.0
				75	0	21.31	22.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
20MHz	18700	1860	QPSK	1	0	22.01	23.0±1	/
				1	49	22.42	23.0±1	/
				1	99	22.13	23.0±1	/
				50	0	21.19	22.0±1	1.0
				50	24	21.27	22.0±1	1.0
				50	49	21.24	22.0±1	1.0
				100	0	21.34	22.0±1	1.0
			16QAM	1	0	21.3	22.0±1	1.0
				1	49	21.24	22.0±1	1.0
				1	99	20.78	21.0±1	1.0
				50	0	21.41	22.0±1	1.0
				50	24	21.34	22.0±1	1.0
				50	49	21.34	22.0±1	1.0
				100	0	21.3	22.0±1	1.0
	18900	1880	QPSK	1	0	22.48	23.0±1	/
				1	49	22.66	23.0±1	/
				1	99	23.2	23.0±1	/
				50	0	21.42	22.0±1	1.0
				50	24	21.41	22.0±1	1.0
				50	49	21.51	22.0±1	1.0
				100	0	21.49	22.0±1	1.0
			16QAM	1	0	21.47	22.0±1	1.0
				1	49	21.46	22.0±1	1.0
				1	99	21.54	22.0±1	1.0
				50	0	21.5	22.0±1	1.0
				50	24	21.41	22.0±1	1.0
				50	49	21.38	22.0±1	1.0
				100	0	21.37	22.0±1	1.0
	19100	1900	QPSK	1	0	22.51	23.0±1	/
				1	49	22.81	23.0±1	/
				1	99	22.24	23.0±1	/
				50	0	21.45	22.0±1	1.0
				50	24	21.45	22.0±1	1.0
				50	49	21.37	22.0±1	1.0
				100	0	21.52	22.0±1	1.0
			16QAM	1	0	21.53	22.0±1	1.0
				1	49	21.22	22.0±1	1.0
				1	99	21.01	22.0±1	1.0
				50	0	21.26	22.0±1	1.0
				50	24	21.24	22.0±1	1.0
				50	49	21.36	22.0±1	1.0
				100	0	21.38	22.0±1	1.0

LTE Band 4:

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
1.4MHz	19957	1710.7	QPSK	1	0	22.32	23.0±1	/
				1	2	22.35	23.0±1	/
				1	5	22.29	23.0±1	/
				3	0	22.26	23.0±1	/
				3	1	22.31	23.0±1	/
				3	2	22.32	23.0±1	/
				6	0	21.22	22.0±1	1.0
			16QAM	1	0	21.4	22.0±1	1.0
				1	2	21.57	22.0±1	1.0
				1	5	21.44	22.0±1	1.0
				3	0	21.21	22.0±1	1.0
				3	1	21.26	22.0±1	1.0
				3	2	21.24	22.0±1	1.0
				6	0	20.28	21.0±1	1.0
	20175	1732.5	QPSK	1	0	21.92	22.0±1	/
				1	2	22.12	23.0±1	/
				1	5	21.96	22.0±1	/
				3	0	21.86	22.0±1	/
				3	1	21.9	22.0±1	/
				3	2	21.85	22.0±1	/
				6	0	20.84	21.0±1	1.0
			16QAM	1	0	20.66	21.0±1	1.0
				1	2	20.37	21.0±1	1.0
				1	5	20.37	21.0±1	1.0
				3	0	20.68	21.0±1	1.0
				3	1	20.43	21.0±1	1.0
				3	2	20.34	21.0±1	1.0
				6	0	19.65	20.0±1	1.0
	20393	1754.3	QPSK	1	0	21.81	22.0±1	/
				1	2	21.87	22.0±1	/
				1	5	21.81	22.0±1	/
				3	0	22.03	23.0±1	/
				3	1	21.99	22.0±1	/
				3	2	21.91	22.0±1	/
				6	0	20.8	21.0±1	1.0
			16QAM	1	0	20.84	21.0±1	1.0
				1	2	20.85	21.0±1	1.0
				1	5	20.76	21.0±1	1.0
				3	0	21.1	22.0±1	1.0
				3	1	21.07	22.0±1	1.0
				3	2	20.98	21.0±1	1.0
				6	0	20.08	21.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
3MHz	19965	1711.5	QPSK	1	0	22.19	23.0±1	/
				1	8	22.23	23.0±1	/
				1	14	22.18	23.0±1	/
				6	0	21.02	22.0±1	1.0
				6	4	21.1	22.0±1	1.0
				6	9	21.08	22.0±1	1.0
				15	0	21.05	22.0±1	1.0
			16QAM	1	0	21.05	22.0±1	1.0
				1	8	20.79	21.0±1	1.0
				1	14	21.15	22.0±1	1.0
				8	0	19.87	20.0±1	1.0
				8	4	19.81	20.0±1	1.0
				8	9	19.8	20.0±1	1.0
				15	0	20.12	20.0±1	1.0
	20175	1732.5	QPSK	1	0	21.92	22.0±1	/
				1	8	21.75	22.0±1	/
				1	14	21.77	22.0±1	/
				6	0	20.79	21.0±1	1.0
				6	4	20.81	21.0±1	1.0
				6	9	20.79	21.0±1	1.0
				15	0	20.79	21.0±1	1.0
			16QAM	1	0	20.61	21.0±1	1.0
				1	8	20.56	21.0±1	1.0
				1	14	20.59	21.0±1	1.0
				6	0	19.69	20.0±1	1.0
				6	4	19.81	20.0±1	1.0
				6	9	19.76	20.0±1	1.0
				15	0	19.86	20.0±1	1.0
	20385	1753.5	QPSK	1	0	21.77	22.0±1	/
				1	8	21.63	22.0±1	/
				1	14	21.79	22.0±1	/
				6	0	20.79	21.0±1	1.0
				6	4	20.96	21.0±1	1.0
				6	9	20.88	21.0±1	1.0
				15	0	20.96	21.0±1	1.0
			16QAM	1	0	20.89	21.0±1	1.0
				1	8	20.77	21.0±1	1.0
				1	14	20.9	21.0±1	1.0
				8	0	19.84	20.0±1	1.0
				8	4	20.00	20.0±1	1.0
				8	9	19.95	20.0±1	1.0
				15	0	19.82	20.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
5MHz	19975	1712.5	QPSK	1	0	22.16	23.0±1	/
				1	49	22.01	23.0±1	/
				1	99	21.88	22.0±1	/
				12	0	20.92	21.0±1	1.0
				12	24	21.00	22.0±1	1.0
				12	49	21.01	22.0±1	1.0
				25	0	20.96	21.0±1	1.0
			16QAM	1	0	20.93	21.0±1	1.0
				1	49	20.75	21.0±1	1.0
				1	99	20.69	21.0±1	1.0
				12	0	19.82	20.0±1	1.0
				12	24	19.8	20.0±1	1.0
				12	49	20.03	21.0±1	1.0
				25	0	20.03	21.0±1	1.0
	20175	1732.5	QPSK	1	0	21.66	22.0±1	/
				1	49	21.77	22.0±1	/
				1	99	21.83	22.0±1	/
				12	0	20.87	21.0±1	1.0
				12	24	20.79	21.0±1	1.0
				12	49	20.84	21.0±1	1.0
				25	0	20.86	21.0±1	1.0
			16QAM	1	0	20.86	21.0±1	1.0
				1	49	20.78	21.0±1	1.0
				1	99	20.81	21.0±1	1.0
				12	0	19.74	20.0±1	1.0
				12	24	19.75	20.0±1	1.0
				12	49	19.83	20.0±1	1.0
				25	0	19.76	20.0±1	1.0
	20375	1752.5	QPSK	1	0	21.8	22.0±1	/
				1	49	21.8	22.0±1	/
				1	99	22.14	23.0±1	/
				12	0	20.78	21.0±1	1.0
				12	24	20.78	21.0±1	1.0
				12	49	20.96	21.0±1	1.0
				25	0	20.9	21.0±1	1.0
			16QAM	1	0	20.23	21.0±1	1.0
				1	49	20.06	21.0±1	1.0
				1	99	20.17	21.0±1	1.0
				12	0	19.83	20.0±1	1.0
				12	24	19.74	20.0±1	1.0
				12	49	19.95	20.0±1	1.0
				25	0	19.83	20.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
10MHz	20000	1715	QPSK	1	0	22.18	22.0±1	/
				1	49	22.23	22.0±1	/
				1	99	22.04	22.0±1	/
				25	0	20.87	21.0±1	1.0
				25	24	21.05	22.0±1	1.0
				25	49	21.01	22.0±1	1.0
				50	0	20.83	21.0±1	1.0
			16QAM	1	0	20.83	21.0±1	1.0
				1	49	21.00	22.0±1	1.0
				1	99	20.63	21.0±1	1.0
				25	0	20.02	21.0±1	1.0
				25	24	20.09	21.0±1	1.0
				25	49	20.05	21.0±1	1.0
				50	0	21.19	22.0±1	1.0
	20175	1732.5	QPSK	1	0	21.98	22.0±1	/
				1	49	21.97	22.0±1	/
				1	99	22.07	23.0±1	/
				25	0	20.92	21.0±1	1.0
				25	24	20.96	21.0±1	1.0
				25	49	21.02	22.0±1	1.0
				50	0	20.91	21.0±1	1.0
			16QAM	1	0	20.83	21.0±1	1.0
				1	49	20.99	21.0±1	1.0
				1	99	20.61	21.0±1	1.0
				25	0	19.9	20.0±1	1.0
				25	24	19.93	20.0±1	1.0
				25	49	20.01	21.0±1	1.0
				50	0	20.97	21.0±1	1.0
	20350	1750	QPSK	1	0	22.02	23.0±1	/
				1	49	22.42	23.0±1	/
				1	99	22.14	23.0±1	/
				25	0	21.04	22.0±1	1.0
				25	24	20.92	21.0±1	1.0
				25	49	21.14	22.0±1	1.0
				50	0	21.04	22.0±1	1.0
			16QAM	1	0	21.25	22.0±1	1.0
				1	49	20.95	21.0±1	1.0
				1	99	21.16	22.0±1	1.0
				25	0	20.23	21.0±1	1.0
				25	24	20.2	21.0±1	1.0
				25	49	20.24	21.0±1	1.0
				50	0	21.13	22.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
15MHz	20025	1717.5	QPSK	1	0	22.18	23.0±1	/
				1	49	22.2	23.0±1	/
				1	99	22.09	23.0±1	/
				36	0	21.17	22.0±1	1.0
				36	24	21.13	22.0±1	1.0
				36	49	21.01	22.0±1	1.0
				75	0	21.16	22.0±1	1.0
			16QAM	1	0	21.85	22.0±1	1.0
				1	49	21.71	22.0±1	1.0
				1	99	21.71	22.0±1	1.0
				36	0	21.55	22.0±1	1.0
				36	24	21.45	22.0±1	1.0
				36	49	21.12	22.0±1	1.0
				75	0	21.15	22.0±1	1.0
	20175	1732.5	QPSK	1	0	21.73	22.0±1	/
				1	49	21.81	22.0±1	/
				1	99	21.98	22.0±1	/
				36	0	20.85	21.0±1	1.0
				36	24	20.9	21.0±1	1.0
				36	49	20.96	21.0±1	1.0
				75	0	20.89	21.0±1	1.0
			16QAM	1	0	20.94	21.0±1	1.0
				1	49	20.92	21.0±1	1.0
				1	99	20.91	21.0±1	1.0
				36	0	20.9	21.0±1	1.0
				36	24	20.89	21.0±1	1.0
				36	49	20.88	21.0±1	1.0
				75	0	20.87	21.0±1	1.0
	20325	1747.5	QPSK	1	0	21.89	22.0±1	/
				1	49	21.91	22.0±1	/
				1	99	21.86	22.0±1	/
				36	0	21.08	22.0±1	1.0
				36	24	20.93	21.0±1	1.0
				36	49	21.04	22.0±1	1.0
				75	0	21.28	22.0±1	1.0
			16QAM	1	0	20.95	21.0±1	1.0
				1	49	20.9	21.0±1	1.0
				1	99	20.68	21.0±1	1.0
				36	0	21.25	22.0±1	1.0
				36	24	21.2	22.0±1	1.0
				36	49	21.17	22.0±1	1.0
				75	0	21.04	22.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
20MHz	20050	1720	QPSK	1	0	22.23	23.0±1	/
				1	49	22.24	23.0±1	/
				1	99	21.96	22.0±1	/
				50	0	21.19	22.0±1	1.0
				50	24	21.07	22.0±1	1.0
				50	49	21.03	22.0±1	1.0
				100	0	20.99	21.0±1	1.0
			16QAM	1	0	20.98	21.0±1	1.0
				1	49	20.97	21.0±1	1.0
				1	99	20.95	21.0±1	1.0
				50	0	20.94	21.0±1	1.0
				50	24	20.94	21.0±1	1.0
				50	49	21.04	22.0±1	1.0
				100	0	21.04	22.0±1	1.0
	20175	1732.5	QPSK	1	0	21.96	22.0±1	/
				1	49	21.95	22.0±1	/
				1	99	21.87	22.0±1	/
				50	0	20.91	21.0±1	1.0
				50	24	21.09	22.0±1	1.0
				50	49	21.00	22.0±1	1.0
				100	0	21.2	22.0±1	1.0
			16QAM	1	0	20.92	21.0±1	1.0
				1	49	21.06	22.0±1	1.0
				1	99	20.87	21.0±1	1.0
				50	0	21.32	22.0±1	1.0
				50	24	21.23	22.0±1	1.0
				50	49	21.32	22.0±1	1.0
				100	0	21.31	22.0±1	1.0
	20300	1745	QPSK	1	0	22.54	23.0±1	/
				1	49	22.71	23.0±1	/
				1	99	22.45	23.0±1	/
				50	0	21.57	22.0±1	1.0
				50	24	21.54	22.0±1	1.0
				50	49	21.34	22.0±1	1.0
				100	0	21.32	22.0±1	1.0
			16QAM	1	0	21.2	22.0±1	1.0
				1	49	21.31	22.0±1	1.0
				1	99	21.17	22.0±1	1.0
				50	0	21.26	22.0±1	1.0
				50	24	21.26	22.0±1	1.0
				50	49	21.41	22.0±1	1.0
				100	0	21.4	22.0±1	1.0

LTE Band 5:

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
1.4MHz	20407	824.7	QPSK	1	0	22.19	23.0±1	/
				1	2	22.44	23.0±1	/
				1	5	22.36	23.0±1	/
				3	0	22.03	23.0±1	/
				3	1	22.05	23.0±1	/
				3	2	22.17	23.0±1	/
				6	0	20.89	21.0±1	1.0
			16QAM	1	0	20.8	21.0±1	1.0
				1	2	20.71	21.0±1	1.0
				1	5	20.74	21.0±1	1.0
				3	0	20.82	21.0±1	1.0
				3	1	20.94	21.0±1	1.0
				3	2	21.1	22.0±1	1.0
				6	0	20.11	21.0±1	1.0
	20525	836.5	QPSK	1	0	21.95	22.0±1	/
				1	2	22.04	23.0±1	/
				1	5	21.72	22.0±1	/
				3	0	21.83	22.0±1	/
				3	1	21.91	22.0±1	/
				3	2	21.88	22.0±1	/
				6	0	20.89	21.0±1	1.0
			16QAM	1	0	21.07	22.0±1	1.0
				1	2	21.17	22.0±1	1.0
				1	5	20.94	21.0±1	1.0
				3	0	20.82	21.0±1	1.0
				3	1	20.88	21.0±1	1.0
				3	2	20.84	21.0±1	1.0
				6	0	19.57	20.0±1	1.0
	20634	848.3	QPSK	1	0	21.86	22.0±1	/
				1	2	22.27	23.0±1	/
				1	5	21.8	22.0±1	/
				3	0	21.81	22.0±1	/
				3	1	21.95	22.0±1	/
				3	2	21.86	22.0±1	/
				6	0	20.78	21.0±1	1.0
			16QAM	1	0	20.67	21.0±1	1.0
				1	2	20.88	21.0±1	1.0
				1	5	20.87	21.0±1	1.0
				3	0	21.06	22.0±1	1.0
				3	1	21.11	22.0±1	1.0
				3	2	21.01	22.0±1	1.0
				6	0	19.97	20.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
3MHz	20415	825.5	QPSK	1	0	22.17	23.0±1	/
				1	8	22.23	23.0±1	/
				1	14	22.04	23.0±1	/
				6	0	21.32	22.0±1	1.0
				6	4	21.22	22.0±1	1.0
				6	9	21.05	22.0±1	1.0
				15	0	21.18	22.0±1	1.0
			16QAM	1	0	21.22	22.0±1	1.0
				1	8	20.89	21.0±1	1.0
				1	14	20.94	21.0±1	1.0
				8	0	20.25	21.0±1	1.0
				8	4	20.26	21.0±1	1.0
				8	9	20.26	21.0±1	1.0
				15	0	20.2	21.0±1	1.0
	20525	836.5	QPSK	1	0	21.84	22.0±1	/
				1	8	22.09	23.0±1	/
				1	14	22.14	23.0±1	/
				6	0	20.94	21.0±1	1.0
				6	4	21.05	22.0±1	1.0
				6	9	20.97	21.0±1	1.0
				15	0	20.92	21.0±1	1.0
			16QAM	1	0	21.56	22.0±1	1.0
				1	8	21.62	22.0±1	1.0
				1	14	20.77	21.0±1	1.0
				6	0	19.89	20.0±1	1.0
				6	4	20.11	21.0±1	1.0
				6	9	20.11	21.0±1	1.0
				15	0	20.01	21.0±1	1.0
	20635	847.5	QPSK	1	0	21.91	22.0±1	/
				1	8	21.89	22.0±1	/
				1	14	21.88	22.0±1	/
				6	0	20.79	21.0±1	1.0
				6	4	21.03	22.0±1	1.0
				6	9	21.04	22.0±1	1.0
				15	0	20.9	21.0±1	1.0
			16QAM	1	0	21.00	22.0±1	1.0
				1	8	20.8	21.0±1	1.0
				1	14	20.81	21.0±1	1.0
				8	0	19.61	20.0±1	1.0
				8	4	19.77	20.0±1	1.0
				8	9	20.00	21.0±1	1.0
				15	0	19.81	20.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
5MHz	20425	826.5	QPSK	1	0	22.02	23.0±1	/
				1	49	22.1	23.0±1	/
				1	99	22.03	23.0±1	/
				12	0	21.09	22.0±1	1.0
				12	24	21.00	22.0±1	1.0
				12	49	21.01	22.0±1	1.0
				25	0	21.15	22.0±1	1.0
			16QAM	1	0	20.65	21.0±1	1.0
				1	49	20.18	21.0±1	1.0
				1	99	19.96	20.0±1	1.0
				12	0	20.23	21.0±1	1.0
				12	24	20.06	21.0±1	1.0
				12	49	19.97	20.0±1	1.0
				25	0	20.24	21.0±1	1.0
	20525	836.5	QPSK	1	0	21.78	22.0±1	/
				1	49	21.78	22.0±1	/
				1	99	21.78	22.0±1	/
				12	0	20.99	21.0±1	1.0
				12	24	21.07	22.0±1	1.0
				12	49	20.97	21.0±1	1.0
				25	0	21.00	22.0±1	1.0
			16QAM	1	0	21.00	22.0±1	1.0
				1	49	20.9	21.0±1	1.0
				1	99	21.01	22.0±1	1.0
				12	0	19.89	20.0±1	1.0
				12	24	20.08	21.0±1	1.0
				12	49	19.99	20.0±1	1.0
				25	0	20.12	21.0±1	1.0
	20625	846.5	QPSK	1	0	21.57	22.0±1	/
				1	49	21.82	22.0±1	/
				1	99	22.02	23.0±1	/
				12	0	20.73	21.0±1	1.0
				12	24	20.89	21.0±1	1.0
				12	49	20.95	21.0±1	1.0
				25	0	20.78	21.0±1	1.0
			16QAM	1	0	20.55	21.0±1	1.0
				1	49	20.43	21.0±1	1.0
				1	99	20.65	21.0±1	1.0
				12	0	19.86	20.0±1	1.0
				12	24	19.92	20.0±1	1.0
				12	49	19.98	20.0±1	1.0
				25	0	19.83	20.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
10MHz	20450	829	QPSK	1	0	22.3	23.0±1	/
				1	49	22.13	23.0±1	/
				1	99	22.09	23.0±1	/
				25	0	21.32	22.0±1	1.0
				25	24	21.02	22.0±1	1.0
				25	49	21.21	22.0±1	1.0
				50	0	21.07	22.0±1	1.0
			16QAM	1	0	21.02	22.0±1	1.0
				1	49	20.91	21.0±1	1.0
				1	99	20.76	21.0±1	1.0
				25	0	20.28	21.0±1	1.0
				25	24	20.07	21.0±1	1.0
				25	49	20.22	21.0±1	1.0
				50	0	21.37	22.0±1	1.0
	20525	836.5	QPSK	1	0	22.38	23.0±1	/
				1	49	22.63	23.0±1	/
				1	99	22.27	23.0±1	/
				25	0	21.13	22.0±1	1.0
				25	24	21.27	22.0±1	1.0
				25	49	21.25	22.0±1	1.0
				50	0	21.2	22.0±1	1.0
			16QAM	1	0	21.19	22.0±1	1.0
				1	49	21.13	22.0±1	1.0
				1	99	20.93	21.0±1	1.0
				25	0	20.23	21.0±1	1.0
				25	24	20.36	21.0±1	1.0
				25	49	20.43	21.0±1	1.0
				50	0	21.07	22.0±1	1.0
	20600	844	QPSK	1	0	22.03	23.0±1	/
				1	49	21.76	22.0±1	/
				1	99	21.78	22.0±1	/
				25	0	20.91	21.0±1	1.0
				25	24	20.68	21.0±1	1.0
				25	49	20.76	21.0±1	1.0
				50	0	20.94	21.0±1	1.0
			16QAM	1	0	20.48	21.0±1	1.0
				1	49	20.45	21.0±1	1.0
				1	99	20.57	21.0±1	1.0
				25	0	20.03	21.0±1	1.0
				25	24	19.78	20.0±1	1.0
				25	49	20.07	21.0±1	1.0
				50	0	21.47	22.0±1	1.0

LTE Band 12:

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
1.4MHz	23017	699.7	QPSK	1	0	22.34	23.0±1	/
				1	2	22.27	23.0±1	/
				1	5	22.26	23.0±1	/
				3	0	22.16	23.0±1	/
				3	1	22.16	23.0±1	/
				3	2	22.13	23.0±1	/
				6	0	21.12	22.0±1	1.0
			16QAM	1	0	21.46	22.0±1	1.0
				1	2	21.52	22.0±1	1.0
				1	5	21.33	22.0±1	1.0
				3	0	21.25	22.0±1	1.0
				3	1	21.05	22.0±1	1.0
				3	2	21.25	22.0±1	1.0
				6	0	20.24	21.0±1	1.0
	23095	707.5	QPSK	1	0	21.82	22.0±1	/
				1	2	21.71	22.0±1	/
				1	5	21.65	22.0±1	/
				3	0	21.8	22.0±1	/
				3	1	21.86	22.0±1	/
				3	2	21.81	22.0±1	/
				6	0	20.77	21.0±1	1.0
			16QAM	1	0	20.76	21.0±1	1.0
				1	2	20.66	21.0±1	1.0
				1	5	20.52	21.0±1	1.0
				3	0	20.52	21.0±1	1.0
				3	1	20.37	21.0±1	1.0
				3	2	20.51	21.0±1	1.0
				6	0	19.55	20.0±1	1.0
	23173	715.3	QPSK	1	0	21.67	22.0±1	/
				1	2	21.73	22.0±1	/
				1	5	21.76	22.0±1	/
				3	0	21.67	22.0±1	/
				3	1	21.82	22.0±1	/
				3	2	21.78	22.0±1	/
				6	0	20.66	21.0±1	1.0
			16QAM	1	0	20.63	21.0±1	1.0
				1	2	20.52	21.0±1	1.0
				1	5	20.61	21.0±1	1.0
				3	0	20.82	21.0±1	1.0
				3	1	20.78	21.0±1	1.0
				3	2	20.63	21.0±1	1.0
				6	0	19.82	20.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
3MHz	23025	700.5	QPSK	1	0	21.05	22.0±1	/
				1	8	21.12	22.0±1	/
				1	14	22.05	23.0±1	/
				8	0	21.34	22.0±1	1.0
				8	4	21.27	22.0±1	1.0
				8	9	21.26	22.0±1	1.0
				15	0	21.27	22.0±1	1.0
			16QAM	1	0	21.11	22.0±1	1.0
				1	8	21.08	22.0±1	1.0
				1	14	20.85	21.0±1	1.0
				8	0	20.15	21.0±1	1.0
				8	4	20.19	21.0±1	1.0
				8	9	20.16	21.0±1	1.0
				15	0	20.15	21.0±1	1.0
	23095	707.5	QPSK	1	0	22.02	23.0±1	/
				1	8	22.2	23.0±1	/
				1	14	21.71	22.0±1	/
				8	0	21.15	22.0±1	1.0
				8	4	21.06	22.0±1	1.0
				8	9	21.04	22.0±1	1.0
				15	0	21.09	22.0±1	1.0
			16QAM	1	0	21.00	22.0±1	1.0
				1	8	20.89	21.0±1	1.0
				1	14	20.78	21.0±1	1.0
				8	0	20.24	21.0±1	1.0
				8	4	20.06	21.0±1	1.0
				8	9	19.84	20.0±1	1.0
				15	0	19.91	20.0±1	1.0
	23165	714.5	QPSK	1	0	22.05	23.0±1	/
				1	8	21.93	22.0±1	/
				1	14	21.82	22.0±1	/
				8	0	21.14	22.0±1	1.0
				8	4	21.1	22.0±1	1.0
				8	9	21.09	22.0±1	1.0
				15	0	21.12	22.0±1	1.0
			16QAM	1	0	21.01	22.0±1	1.0
				1	8	21.09	22.0±1	1.0
				1	14	20.8	21.0±1	1.0
				8	0	20.09	21.0±1	1.0
				8	4	20.08	21.0±1	1.0
				8	9	20.03	21.0±1	1.0
				15	0	20.1	21.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
5MHz	23035	701.5	QPSK	1	0	22.24	23.0±1	/
				1	49	22.07	23.0±1	/
				1	99	22.01	23.0±1	/
				12	0	20.98	21.0±1	1.0
				12	24	21.17	22.0±1	1.0
				12	49	21.08	22.0±1	1.0
				25	0	21.03	22.0±1	1.0
			16QAM	1	0	21.25	22.0±1	1.0
				1	49	20.9	21.0±1	1.0
				1	99	20.48	21.0±1	1.0
				12	0	19.93	20.0±1	1.0
				12	24	20.17	21.0±1	1.0
				12	49	20.13	21.0±1	1.0
				25	0	20.21	21.0±1	1.0
	23095	707.5	QPSK	1	0	21.91	22.0±1	/
				1	49	22.1	23.0±1	/
				1	99	21.62	22.0±1	/
				12	0	21.12	22.0±1	1.0
				12	24	21.01	22.0±1	1.0
				12	49	20.94	21.0±1	1.0
				25	0	21.04	22.0±1	1.0
			16QAM	1	0	21.13	22.0±1	1.0
				1	49	20.99	21.0±1	1.0
				1	99	20.46	21.0±1	1.0
				12	0	19.92	20.0±1	1.0
				12	24	19.84	20.0±1	1.0
				12	49	19.76	20.0±1	1.0
				25	0	20.04	21.0±1	1.0
	23155	713.5	QPSK	1	0	21.89	22.0±1	/
				1	49	21.91	22.0±1	/
				1	99	21.73	22.0±1	/
				12	0	20.93	21.0±1	1.0
				12	24	20.96	21.0±1	1.0
				12	49	20.85	21.0±1	1.0
				25	0	20.85	21.0±1	1.0
			16QAM	1	0	20.77	21.0±1	1.0
				1	49	20.61	21.0±1	1.0
				1	99	20.06	21.0±1	1.0
				12	0	19.77	20.0±1	1.0
				12	24	19.89	20.0±1	1.0
				12	49	19.81	20.0±1	1.0
				25	0	19.8	20.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
10MHz	23060	704	QPSK	1	0	22.06	23.0±1	/
				1	49	22.15	23.0±1	/
				1	99	21.7	22.0±1	/
				25	0	21.01	22.0±1	1.0
				25	24	21.09	22.0±1	1.0
				25	49	20.92	21.0±1	1.0
				50	0	20.92	21.0±1	1.0
			16QAM	1	0	20.94	21.0±1	1.0
				1	49	21.53	22.0±1	1.0
				1	99	20.56	21.0±1	1.0
				25	0	19.98	20.0±1	1.0
				25	24	19.86	20.0±1	1.0
				25	49	19.9	20.0±1	1.0
				50	0	21.11	22.0±1	1.0
	23095	707.5	QPSK	1	0	22.04	23.0±1	/
				1	49	22.33	23.0±1	/
				1	99	21.81	22.0±1	/
				25	0	21.15	22.0±1	1.0
				25	24	21.1	22.0±1	1.0
				25	49	20.91	21.0±1	1.0
				50	0	21.03	22.0±1	1.0
			16QAM	1	0	21.07	22.0±1	1.0
				1	49	20.98	21.0±1	1.0
				1	99	20.84	21.0±1	1.0
				25	0	20.08	21.0±1	1.0
				25	24	20.04	21.0±1	1.0
				25	49	19.92	20.0±1	1.0
				50	0	21.13	22.0±1	1.0
	23130	711	QPSK	1	0	22.15	23.0±1	/
				1	49	22.34	23.0±1	/
				1	99	21.83	22.0±1	/
				25	0	21.04	22.0±1	1.0
				25	24	21.11	22.0±1	1.0
				25	49	21.1	22.0±1	1.0
				50	0	21.07	22.0±1	1.0
			16QAM	1	0	20.87	21.0±1	1.0
				1	49	20.93	21.0±1	1.0
				1	99	20.68	21.0±1	1.0
				25	0	20.26	21.0±1	1.0
				25	24	20.04	21.0±1	1.0
				25	49	20.03	21.0±1	1.0
				50	0	21.17	22.0±1	1.0

LTE Band 13:

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
5MHz	23205	779.5	QPSK	1	0	22.09	23.0±1	/
				1	49	22.16	23.0±1	/
				1	99	22.07	23.0±1	/
				12	0	21.33	22.0±1	1.0
				12	24	21.31	22.0±1	1.0
				12	49	21.34	22.0±1	1.0
				25	0	21.28	22.0±1	1.0
			16QAM	1	0	21.15	22.0±1	1.0
				1	49	21.32	22.0±1	1.0
				1	99	20.86	21.0±1	1.0
				12	0	20.29	21.0±1	1.0
				12	24	20.33	21.0±1	1.0
				12	49	20.19	21.0±1	1.0
				25	0	20.16	21.0±1	1.0
	23230	782.0	QPSK	1	0	22.21	23.0±1	/
				1	49	22.05	23.0±1	/
				1	99	22.2	23.0±1	/
				12	0	21.29	22.0±1	1.0
				12	24	21.1	22.0±1	1.0
				12	49	21.19	22.0±1	1.0
				25	0	21.26	22.0±1	1.0
			16QAM	1	0	21.14	22.0±1	1.0
				1	49	20.8	21.0±1	1.0
				1	99	20.85	21.0±1	1.0
				12	0	20.18	21.0±1	1.0
				12	24	20.28	21.0±1	1.0
				12	49	20.09	21.0±1	1.0
				25	0	20.22	21.0±1	1.0
	23255	784.5	QPSK	1	0	21.93	22.0±1	/
				1	49	21.91	22.0±1	/
				1	99	22.23	23.0±1	/
				12	0	21.17	22.0±1	1.0
				12	24	21.22	22.0±1	1.0
				12	49	21.31	22.0±1	1.0
				25	0	21.26	22.0±1	1.0
			16QAM	1	0	21.3	22.0±1	1.0
				1	49	21.3	22.0±1	1.0
				1	99	21.46	22.0±1	1.0
				12	0	20.19	21.0±1	1.0
				12	24	20.28	21.0±1	1.0
				12	49	20.29	21.0±1	1.0
				25	0	20.36	21.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
10MHz	23230	782.0	QPSK	1	0	22.23	23.0±1	/
				1	49	22.1	23.0±1	/
				1	99	22.22	23.0±1	/
				25	0	21.42	22.0±1	1.0
				25	24	21.25	22.0±1	1.0
				25	49	21.21	22.0±1	1.0
				50	0	21.31	22.0±1	1.0
			16QAM	1	0	21.57	22.0±1	1.0
				1	49	21.07	22.0±1	1.0
				1	99	21.12	22.0±1	1.0
				25	0	20.28	21.0±1	1.0
				25	24	20.14	21.0±1	1.0
				25	49	20.12	21.0±1	1.0
				50	0	21.14	22.0±1	1.0

LTE Band 25:

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
1.4MHz	26047	1850.7	QPSK	1	0	21.98	22.0±1	/
				1	2	22.04	23.0±1	/
				1	5	22.12	23.0±1	/
				3	0	21.94	22.0±1	/
				3	1	21.81	22.0±1	/
				3	2	21.88	22.0±1	/
				6	0	20.93	21.0±1	1.0
			16QAM	1	0	20.62	21.0±1	1.0
				1	2	20.52	21.0±1	1.0
				1	5	20.49	21.0±1	1.0
				3	0	20.45	21.0±1	1.0
				3	1	20.42	21.0±1	1.0
				3	2	20.6	21.0±1	1.0
				6	0	19.64	20.0±1	1.0
	26365	1882.5	QPSK	1	0	21.81	22.0±1	/
				1	2	21.89	22.0±1	/
				1	5	21.81	22.0±1	/
				3	0	21.93	22.0±1	/
				3	1	22.04	23.0±1	/
				3	2	21.97	22.0±1	/
				6	0	20.92	21.0±1	1.0
			16QAM	1	0	20.61	21.0±1	1.0
				1	2	20.53	21.0±1	1.0
				1	5	20.31	21.0±1	1.0
				3	0	20.7	21.0±1	1.0
				3	1	20.69	21.0±1	1.0
				3	2	20.62	21.0±1	1.0
				6	0	19.67	20.0±1	1.0
	26683	1914.3	QPSK	1	0	22.00	23.0±1	/
				1	2	22.47	22.0±1	/
				1	5	22.24	22.0±1	/
				3	0	22.13	22.0±1	/
				3	1	22.21	22.0±1	/
				3	2	22.1	22.0±1	/
				6	0	21.29	22.0±1	1.0
			16QAM	1	0	21.11	22.0±1	1.0
				1	2	21.11	22.0±1	1.0
				1	5	21.12	22.0±1	1.0
				3	0	21.02	22.0±1	1.0
				3	1	21.04	22.0±1	1.0
				3	2	20.91	21.0±1	1.0
				6	0	20.34	21.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
3MHz	26055	1851.5	QPSK	1	0	21.82	22.0±1	/
				1	8	21.74	22.0±1	/
				1	14	21.8	22.0±1	/
				6	0	20.74	21.0±1	1.0
				6	4	20.76	21.0±1	1.0
				6	9	20.7	21.0±1	1.0
				15	0	20.67	21.0±1	1.0
			16QAM	1	0	20.79	21.0±1	1.0
				1	8	21.03	22.0±1	1.0
				1	14	20.81	21.0±1	1.0
				8	0	19.91	20.0±1	1.0
				8	4	19.58	20.0±1	1.0
				8	9	19.46	20.0±1	1.0
				15	0	19.88	20.0±1	1.0
	26365	1882.5	QPSK	1	0	21.8	22.0±1	/
				1	8	21.94	22.0±1	/
				1	14	22.06	23.0±1	/
				6	0	21.04	22.0±1	1.0
				6	4	20.92	21.0±1	1.0
				6	9	20.87	21.0±1	1.0
				15	0	20.91	21.0±1	1.0
			16QAM	1	0	20.29	21.0±1	1.0
				1	8	20.13	21.0±1	1.0
				1	14	20.29	21.0±1	1.0
				6	0	19.87	20.0±1	1.0
				6	4	19.85	20.0±1	1.0
				6	9	20.13	21.0±1	1.0
				15	0	20.03	21.0±1	1.0
	26675	1913.5	QPSK	1	0	22.01	23.0±1	/
				1	8	22.04	23.0±1	/
				1	14	22.06	23.0±1	/
				6	0	20.99	21.0±1	1.0
				6	4	21.16	22.0±1	1.0
				6	9	21.18	22.0±1	1.0
				15	0	21.13	22.0±1	1.0
			16QAM	1	0	21.18	22.0±1	1.0
				1	8	21.02	22.0±1	1.0
				1	14	21.07	22.0±1	1.0
				8	0	19.9	20.0±1	1.0
				8	4	20.18	21.0±1	1.0
				8	9	19.94	20.0±1	1.0
				15	0	20.06	21.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
5MHz	26065	1852.5	QPSK	1	0	21.74	22.0±1	/
				1	49	21.89	22.0±1	/
				1	99	21.81	22.0±1	/
				12	0	20.77	21.0±1	1.0
				12	24	20.87	21.0±1	1.0
				12	49	20.78	21.0±1	1.0
				25	0	20.83	21.0±1	1.0
			16QAM	1	0	20.41	21.0±1	1.0
				1	49	20.44	21.0±1	1.0
				1	99	20.33	21.0±1	1.0
				12	0	19.72	20.0±1	1.0
				12	24	19.73	20.0±1	1.0
				12	49	19.74	20.0±1	1.0
				25	0	20.03	21.0±1	1.0
	26365	1882.5	QPSK	1	0	21.63	22.0±1	/
				1	49	21.8	22.0±1	/
				1	99	21.92	22.0±1	/
				12	0	20.83	21.0±1	1.0
				12	24	20.81	21.0±1	1.0
				12	49	20.96	21.0±1	1.0
				25	0	20.8	21.0±1	1.0
			16QAM	1	0	20.73	21.0±1	1.0
				1	49	20.82	21.0±1	1.0
				1	99	20.94	21.0±1	1.0
				12	0	19.84	20.0±1	1.0
				12	24	19.83	20.0±1	1.0
				12	49	19.85	20.0±1	1.0
				25	0	19.94	20.0±1	1.0
	26665	1912.5	QPSK	1	0	21.97	22.0±1	/
				1	49	22.2	23.0±1	/
				1	99	22.27	23.0±1	/
				12	0	21.01	22.0±1	1.0
				12	24	21.09	22.0±1	1.0
				12	49	21.18	22.0±1	1.0
				25	0	21.09	22.0±1	1.0
			16QAM	1	0	20.78	21.0±1	1.0
				1	49	20.88	21.0±1	1.0
				1	99	21.01	22.0±1	1.0
				12	0	20.07	21.0±1	1.0
				12	24	20.00	21.0±1	1.0
				12	49	20.23	21.0±1	1.0
				25	0	20.15	21.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
10MHz	26090	1855	QPSK	1	0	22.09	23.0±1	/
				1	49	22.18	23.0±1	/
				1	99	21.83	22.0±1	/
				25	0	20.86	21.0±1	1.0
				25	24	21.00	22.0±1	1.0
				25	49	20.97	21.0±1	1.0
				50	0	20.87	21.0±1	1.0
			16QAM	1	0	20.71	21.0±1	1.0
				1	49	21.19	22.0±1	1.0
				1	99	20.56	21.0±1	1.0
				25	0	19.94	20.0±1	1.0
				25	24	19.97	20.0±1	1.0
				25	49	19.94	20.0±1	1.0
				50	0	20.75	21.0±1	1.0
	26365	1882.5	QPSK	1	0	22.08	23.0±1	/
				1	49	22.28	23.0±1	/
				1	99	21.95	22.0±1	/
				25	0	20.9	21.0±1	1.0
				25	24	21.02	22.0±1	1.0
				25	49	21.01	22.0±1	1.0
				50	0	20.91	21.0±1	1.0
			16QAM	1	0	20.75	21.0±1	1.0
				1	49	20.6	21.0±1	1.0
				1	99	20.65	21.0±1	1.0
				25	0	19.92	20.0±1	1.0
				25	24	20.04	21.0±1	1.0
				25	49	20.12	21.0±1	1.0
				50	0	21.25	22.0±1	1.0
	26640	1910	QPSK	1	0	22.53	23.0±1	/
				1	49	22.63	23.0±1	/
				1	99	22.42	23.0±1	/
				25	0	21.5	21.0±1	1.0
				25	24	21.47	22.0±1	1.0
				25	49	21.45	22.0±1	1.0
				50	0	21.44	22.0±1	1.0
			16QAM	1	0	21.32	22.0±1	1.0
				1	49	21.34	22.0±1	1.0
				1	99	21.59	22.0±1	1.0
				25	0	20.57	21.0±1	1.0
				25	24	20.56	21.0±1	1.0
				25	49	20.55	21.0±1	1.0
				50	0	21.39	22.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
15MHz	26115	1857.5	QPSK	1	0	22.4	23.0±1	/
				1	49	22.31	23.0±1	/
				1	99	22.14	23.0±1	/
				36	0	21.4	22.0±1	1.0
				36	24	21.35	22.0±1	1.0
				36	49	21.27	22.0±1	1.0
				75	0	20.97	21.0±1	1.0
			16QAM	1	0	21.14	22.0±1	1.0
				1	49	21.06	22.0±1	1.0
				1	99	20.47	21.0±1	1.0
				36	0	21.19	22.0±1	1.0
				36	24	21.17	22.0±1	1.0
				36	49	21.15	22.0±1	1.0
				75	0	21.14	22.0±1	1.0
	26365	1882.5	QPSK	1	0	22.15	23.0±1	/
				1	49	22.12	23.0±1	/
				1	99	22.13	23.0±1	/
				36	0	21.09	22.0±1	1.0
				36	24	21.16	22.0±1	1.0
				36	49	21.15	22.0±1	1.0
				75	0	21.25	22.0±1	1.0
			16QAM	1	0	21.16	22.0±1	1.0
				1	49	21.74	22.0±1	1.0
				1	99	21.29	22.0±1	1.0
				36	0	21.44	22.0±1	1.0
				36	24	21.42	22.0±1	1.0
				36	49	21.41	22.0±1	1.0
				75	0	21.39	22.0±1	1.0
	26615	1907.5	QPSK	1	0	22.45	23.0±1	/
				1	49	22.59	23.0±1	/
				1	99	22.48	23.0±1	/
				36	0	21.66	22.0±1	1.0
				36	24	21.53	22.0±1	1.0
				36	49	21.37	22.0±1	1.0
				75	0	21.5	22.0±1	1.0
			16QAM	1	0	21.48	22.0±1	1.0
				1	49	21.47	22.0±1	1.0
				1	99	21.54	22.0±1	1.0
				36	0	21.53	22.0±1	1.0
				36	24	21.52	22.0±1	1.0
				36	49	21.51	22.0±1	1.0
				75	0	21.5	22.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
20MHz	26140	1860	QPSK	1	0	22.28	23.0±1	/
				1	49	22.68	23.0±1	/
				1	99	22.19	23.0±1	/
				50	0	21.45	22.0±1	1.0
				50	24	21.4	22.0±1	1.0
				50	49	21.37	22.0±1	1.0
				100	0	21.35	22.0±1	1.0
			16QAM	1	0	21.34	22.0±1	1.0
				1	49	21.33	22.0±1	1.0
				1	99	21.31	22.0±1	1.0
				50	0	21.3	22.0±1	1.0
				50	24	21.29	22.0±1	1.0
				50	49	21.32	22.0±1	1.0
				100	0	21.38	22.0±1	1.0
	26365	1882.5	QPSK	1	0	22.01	23.0±1	/
				1	49	22.55	23.0±1	/
				1	99	22.36	23.0±1	/
				50	0	21.24	22.0±1	1.0
				50	24	21.3	22.0±1	1.0
				50	49	21.35	22.0±1	1.0
				100	0	21.4	22.0±1	1.0
			16QAM	1	0	21.57	22.0±1	1.0
				1	49	21.61	22.0±1	1.0
				1	99	20.96	21.0±1	1.0
				50	0	21.44	22.0±1	1.0
				50	24	21.42	22.0±1	1.0
				50	49	21.41	22.0±1	1.0
				100	0	21.39	22.0±1	1.0
	26590	1905.0	QPSK	1	0	22.47	23.0±1	/
				1	49	22.93	23.0±1	/
				1	99	22.64	23.0±1	/
				50	0	21.47	22.0±1	1.0
				50	24	21.42	22.0±1	1.0
				50	49	21.45	22.0±1	1.0
				100	0	21.26	22.0±1	1.0
			16QAM	1	0	21.46	22.0±1	1.0
				1	49	21.74	22.0±1	1.0
				1	99	20.99	21.0±1	1.0
				50	0	21.37	22.0±1	1.0
				50	24	21.34	22.0±1	1.0
				50	49	21.4	22.0±1	1.0
				100	0	21.38	22.0±1	1.0

LTE Band 26(Part 22H):

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
1.4MHz	26797	824.7	QPSK	1	0	22.01	23.0±1	/
				1	2	22	23.0±1	/
				1	5	21.99	23.0±1	/
				3	0	21.87	23.0±1	/
				3	1	21.86	23.0±1	/
				3	2	21.85	23.0±1	/
				6	0	21.85	22.0±1	1.0
			16QAM	1	0	21.84	22.0±1	1.0
				1	2	21.83	22.0±1	1.0
				1	5	21.83	22.0±1	1.0
				3	0	21.82	22.0±1	1.0
				3	1	21.93	22.0±1	1.0
				3	2	21.93	22.0±1	1.0
				6	0	21.92	22.0±1	1.0
	26915	836.5	QPSK	1	0	22.74	23.0±1	/
				1	2	22.9	23.0±1	/
				1	5	22.69	23.0±1	/
				3	0	22.87	23.0±1	/
				3	1	22.87	23.0±1	/
				3	2	22.9	23.0±1	/
				6	0	22	23.0±1	1.0
			16QAM	1	0	21.97	21.0±1	1.0
				1	2	21.97	21.0±1	1.0
				1	5	21.83	21.0±1	1.0
				3	0	21.76	21.0±1	1.0
				3	1	21.66	21.0±1	1.0
				3	2	21.66	21.0±1	1.0
				6	0	20.7	21.0±1	1.0
	27033	848.3	QPSK	1	0	22.87	23.0±1	/
				1	2	23.01	23.0±1	/
				1	5	22.94	23.0±1	/
				3	0	23.11	23.0±1	/
				3	1	23.07	23.0±1	/
				3	2	23.02	23.0±1	/
				6	0	22.02	22.0±1	1.0
			16QAM	1	0	22	22.0±1	1.0
				1	2	21.98	22.0±1	1.0
				1	5	21.99	22.0±1	1.0
				3	0	22.34	22.0±1	1.0
				3	1	22.22	22.0±1	1.0
				3	2	22.17	22.0±1	1.0
				6	0	21.09	22.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
3MHz	26805	825.5	QPSK	1	0	23.01	22.0±1	/
				1	8	22.94	22.0±1	/
				1	14	22.95	22.0±1	/
				6	0	22.03	22.0±1	1.0
				6	4	21.96	22.0±1	1.0
				6	9	22	22.0±1	1.0
				15	0	22	22.0±1	1.0
			16QAM	1	0	21.71	21.0±1	1.0
				1	8	21.55	21.0±1	1.0
				1	14	21.55	21.0±1	1.0
				8	0	20.89	21.0±1	1.0
				8	4	20.97	21.0±1	1.0
				8	9	20.99	21.0±1	1.0
				15	0	21.02	21.0±1	1.0
	26915	836.5	QPSK	1	0	22.78	22.0±1	/
				1	8	22.91	22.0±1	/
				1	14	22.82	22.0±1	/
				6	0	21.97	22.0±1	1.0
				6	4	21.94	22.0±1	1.0
				6	9	21.92	22.0±1	1.0
				15	0	21.99	22.0±1	1.0
			16QAM	1	0	21.84	21.0±1	1.0
				1	8	21.61	21.0±1	1.0
				1	14	21.59	21.0±1	1.0
				6	0	20.86	21.0±1	1.0
				6	4	20.83	21.0±1	1.0
				6	9	20.76	21.0±1	1.0
				15	0	20.89	21.0±1	1.0
	27025	847.5	QPSK	1	0	23.03	23.0±1	/
				1	8	22.69	23.0±1	/
				1	14	22.75	23.0±1	/
				6	0	21.95	22.0±1	1.0
				6	4	21.99	22.0±1	1.0
				6	9	21.95	22.0±1	1.0
				15	0	21.89	22.0±1	1.0
			16QAM	1	0	22.02	21.0±1	1.0
				1	8	21.85	21.0±1	1.0
				1	14	21.78	21.0±1	1.0
				8	0	21	21.0±1	1.0
				8	4	20.93	21.0±1	1.0
				8	9	20.92	21.0±1	1.0
				15	0	20.92	21.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
5MHz	26815	826.5	QPSK	1	0	22.69	22.0±1	/
				1	49	22.8	22.0±1	/
				1	99	22.6	22.0±1	/
				12	0	21.84	22.0±1	1.0
				12	24	21.82	22.0±1	1.0
				12	49	21.82	22.0±1	1.0
				25	0	21.97	21.0±1	1.0
			16QAM	1	0	21.44	21.0±1	1.0
				1	49	21.3	21.0±1	1.0
				1	99	21.23	21.0±1	1.0
				12	0	20.89	21.0±1	1.0
				12	24	20.72	21.0±1	1.0
				12	49	20.67	21.0±1	1.0
				25	0	21.08	21.0±1	1.0
	26915	836.5	QPSK	1	0	22.6	22.0±1	/
				1	49	22.74	22.0±1	/
				1	99	22.58	22.0±1	/
				12	0	21.92	22.0±1	1.0
				12	24	21.9	22.0±1	1.0
				12	49	21.95	22.0±1	1.0
				25	0	21.9	22.0±1	1.0
			16QAM	1	0	21.81	21.0±1	1.0
				1	49	21.81	21.0±1	1.0
				1	99	21.43	21.0±1	1.0
				12	0	20.82	21.0±1	1.0
				12	24	20.86	21.0±1	1.0
				12	49	20.83	21.0±1	1.0
				25	0	21.04	21.0±1	1.0
	27015	846.5	QPSK	1	0	22.64	22.0±1	/
				1	49	22.89	22.0±1	/
				1	99	22.99	22.0±1	/
				12	0	21.96	22.0±1	1.0
				12	24	21.96	22.0±1	1.0
				12	49	22.06	22.0±1	1.0
				25	0	21.98	22.0±1	1.0
			16QAM	1	0	22.09	21.0±1	1.0
				1	49	22.23	21.0±1	1.0
				1	99	21.74	21.0±1	1.0
				12	0	20.79	21.0±1	1.0
				12	24	20.8	21.0±1	1.0
				12	49	20.84	21.0±1	1.0
				25	0	21.04	21.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
10MHz	26840	829.0	QPSK	1	0	22.98	23.0±1	/
				1	49	23.12	23.0±1	/
				1	99	22.93	23.0±1	/
				25	0	21.94	22.0±1	1.0
				25	24	22	22.0±1	1.0
				25	49	22.01	22.0±1	1.0
				50	0	21.93	22.0±1	1.0
			16QAM	1	0	21.82	21.0±1	1.0
				1	49	21.81	21.0±1	1.0
				1	99	21.82	21.0±1	1.0
				25	0	20.92	21.0±1	1.0
				25	24	20.96	21.0±1	1.0
				25	49	21	21.0±1	1.0
				50	0	22.08	21.0±1	1.0
	26915	836..5	QPSK	1	0	22.99	23.0±1	/
				1	49	23.41	23.0±1	/
				1	99	22.89	23.0±1	/
				25	0	21.95	22.0±1	1.0
				25	24	21.92	22.0±1	1.0
				25	49	21.99	22.0±1	1.0
				50	0	22.06	22.0±1	1.0
			16QAM	1	0	21.8	22.0±1	1.0
				1	49	21.96	22.0±1	1.0
				1	99	21.68	22.0±1	1.0
				25	0	21.22	22.0±1	1.0
				25	24	21.27	22.0±1	1.0
				25	49	21.04	22.0±1	1.0
				50	0	22.11	22.0±1	1.0
	26990	844.0	QPSK	1	0	23.07	23.0±1	/
				1	49	23.04	23.0±1	/
				1	99	23.07	23.0±1	/
				25	0	21.87	22.0±1	1.0
				25	24	21.9	22.0±1	1.0
				25	49	22.08	22.0±1	1.0
				50	0	21.96	22.0±1	1.0
			16QAM	1	0	21.9	21.0±1	1.0
				1	49	22.29	21.0±1	1.0
				1	99	21.95	21.0±1	1.0
				25	0	20.91	21.0±1	1.0
				25	24	20.95	21.0±1	1.0
				25	49	21.12	21.0±1	1.0
				50	0	21.99	21.0±1	1.0

BW(MHz)	Ch	Freq(MHz)	Mode	UL RB Allocation	UL RB Offset	Average Power (dbm)	Tune up limited(dBm)	MPR (dB)
15MHz	26865	831.5	QPSK	1	0	23.26	23.0±1	/
				1	49	23.13	23.0±1	/
				1	99	23.21	23.0±1	/
				36	0	21.89	22.0±1	1.0
				36	24	22.1	22.0±1	1.0
				36	49	22.08	22.0±1	1.0
				75	0	22.02	22.0±1	1.0
			16QAM	1	0	22.01	22.0±1	1.0
				1	49	22	22.0±1	1.0
				1	99	21.98	22.0±1	1.0
				36	0	21.97	22.0±1	1.0
				36	24	21.97	22.0±1	1.0
				36	49	21.95	22.0±1	1.0
				75	0	21.95	22.0±1	1.0
	26915	836.5	QPSK	1	0	23	23.0±1	/
				1	49	23.07	23.0±1	/
				1	99	22.84	23.0±1	/
				36	0	22.08	22.0±1	1.0
				36	24	22.02	22.0±1	1.0
				36	49	21.91	22.0±1	1.0
				75	0	22.08	22.0±1	1.0
			16QAM	1	0	21.95	22.0±1	1.0
				1	49	21.93	22.0±1	1.0
				1	99	22.03	22.0±1	1.0
				36	0	22.02	22.0±1	1.0
				36	24	22.01	22.0±1	1.0
				36	49	22.07	22.0±1	1.0
				75	0	22.07	22.0±1	1.0
	26965	841.5	QPSK	1	0	22.88	22.0±1	/
				1	49	22.7	22.0±1	/
				1	99	22.98	22.0±1	/
				36	0	21.99	22.0±1	1.0
				36	24	21.91	22.0±1	1.0
				36	49	22.03	22.0±1	1.0
				75	0	22	22.0±1	1.0
			16QAM	1	0	21.99	22.0±1	1.0
				1	49	21.97	22.0±1	1.0
				1	99	21.96	22.0±1	1.0
				36	0	21.95	22.0±1	1.0
				36	24	22.03	22.0±1	1.0
				36	49	22.02	22.0±1	1.0
				75	0	22.01	22.0±1	1.0

ERP and EIRP**LTE Band 2**

Frequency	Receiver Reading	Turn table Angle	RX Antenna		Substituted			Absolute Level	Part 24E	
			Height	Polar	SG Level	Cable	Antenna Gain		Limit	Margin
(MHz)	(dBμV)	Degree	(m)	(H/V)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)
LTE Band 2 Channel 18607 – 1.4MHz – QPSK										
1850.7	88.88	359	1.9	H	14.91	0.31	10.40	25.00	33	-8.00
1850.7	88.63	114	1.1	V	15.35	0.31	10.40	25.44	33	-7.56
LTE Band 2 Channel 18900 – 1.4MHz – QPSK										
1880	88.63	272	2.0	H	14.78	0.31	10.40	24.87	33	-8.13
1880	88.80	171	2.3	V	15.68	0.31	10.40	25.77	33	-7.23
LTE Band 2 Channel 19193 – 1.4MHz – QPSK										
1909.3	88.71	240	1.4	H	14.98	0.32	10.40	25.06	33	-7.94
1909.3	88.89	273	2.1	V	15.93	0.32	10.40	26.01	33	-6.99
LTE Band 2 Channel 18607 – 1.4MHz – 16QAM										
1850.7	89.13	55	2.4	H	15.16	0.31	10.40	25.25	33	-7.75
1850.7	88.87	100	1.3	V	15.59	0.31	10.40	25.68	33	-7.32
LTE Band 2 Channel 18900 – 1.4MHz – 16QAM										
1880	89.02	270	2.2	H	15.17	0.31	10.40	25.26	33	-7.74
1880	89.07	75	1.1	V	15.95	0.31	10.40	26.04	33	-6.96
LTE Band 2 Channel 19193 – 1.4MHz – 16QAM										
1909.3	88.89	41	1.3	H	15.16	0.32	10.40	25.24	33	-7.76
1909.3	88.76	196	1.6	V	15.80	0.32	10.40	25.88	33	-7.12
LTE Band 2 Channel 18615 – 3MHz – QPSK										
1851.5	88.72	296	2.4	H	14.75	0.31	10.40	24.84	33	-8.16
1851.5	88.57	50	2.3	V	15.29	0.31	10.40	25.38	33	-7.62
LTE Band 2 Channel 18900 – 3MHz – QPSK										
1880	88.99	22	1.0	H	15.14	0.31	10.40	25.23	33	-7.77
1880	88.76	357	2.0	V	15.64	0.31	10.40	25.73	33	-7.27
LTE Band 2 Channel 19185 – 3MHz – QPSK										
1908.5	89.29	187	1.3	H	15.56	0.32	10.40	25.64	33	-7.36
1908.5	88.52	97	1.1	V	15.56	0.32	10.40	25.64	33	-7.36
LTE Band 2 Channel 18615 – 3MHz – 16QAM										
1851.5	88.80	310	1.6	H	14.83	0.31	10.40	24.92	33	-8.08
1851.5	88.54	50	1.4	V	15.26	0.31	10.40	25.35	33	-7.65

LTE Band 2 Channel 18900 – 3MHz – 16QAM										
1880	88.89	77	1.2	H	15.04	0.31	10.40	25.13	33	-7.87
1880	88.80	350	1.2	V	15.68	0.31	10.40	25.77	33	-7.23
LTE Band 2 Channel 19185 – 3MHz – 16QAM										
1908.5	88.85	132	1.3	H	15.12	0.32	10.40	25.20	33	-7.80
1908.5	88.90	121	1.6	V	15.94	0.32	10.40	26.02	33	-6.98
LTE Band 2 Channel 18625 – 5MHz – QPSK										
1852.5	88.83	252	1.7	H	14.86	0.31	10.40	24.95	33	-8.05
1852.5	88.87	200	1.7	V	15.59	0.31	10.40	25.68	33	-7.32
LTE Band 2 Channel 18900 – 5MHz – QPSK										
1880	88.78	39	2.3	H	14.93	0.31	10.40	25.02	33	-7.98
1880	88.70	12	1.8	V	15.58	0.31	10.40	25.67	33	-7.33
LTE Band 2 Channel 19175 – 5MHz – QPSK										
1907.5	88.86	200	1.5	H	15.13	0.32	10.40	25.21	33	-7.79
1907.5	88.76	88	2.4	V	15.80	0.32	10.40	25.88	33	-7.12
LTE Band 2 Channel 18625 – 5MHz – 16QAM										
1852.5	88.86	92	1.8	H	14.89	0.31	10.40	24.98	33	-8.02
1852.5	88.78	298	1.7	V	15.50	0.31	10.40	25.59	33	-7.41
LTE Band 2 Channel 18900 – 5MHz – 16QAM										
1880	88.98	189	1.5	H	15.13	0.31	10.40	25.22	33	-7.78
1880	89.04	58	2.2	V	15.92	0.31	10.40	26.01	33	-6.99
LTE Band 2 Channel 19175 – 5MHz – 16QAM										
1907.5	88.97	180	1.2	H	15.24	0.32	10.40	25.32	33	-7.68
1907.5	88.73	121	1.1	V	15.77	0.32	10.40	25.85	33	-7.15
LTE Band 2 Channel 18650 – 10MHz – QPSK										
1855	88.90	55	1.7	H	14.93	0.31	10.40	25.02	33	-7.98
1855	88.89	67	1.7	V	15.61	0.31	10.40	25.70	33	-7.30
LTE Band 2 Channel 18900 – 10MHz – QPSK										
1880	88.57	7	1.0	H	14.72	0.31	10.40	24.81	33	-8.19
1880	88.75	219	1.0	V	15.63	0.31	10.40	25.72	33	-7.28
LTE Band 2 Channel 19150 – 10MHz – QPSK										
1905	88.81	263	1.8	H	15.08	0.32	10.40	25.16	33	-7.84
1905	89.05	162	2.3	V	16.09	0.32	10.40	26.17	33	-6.83
LTE Band 2 Channel 18650 – 10MHz – 16QAM										
1855	88.81	113	1.5	H	14.84	0.31	10.40	24.93	33	-8.07
1855	88.83	100	2.2	V	15.55	0.31	10.40	25.64	33	-7.36

LTE Band 2 Channel 18900 – 10MHz – 16QAM										
1880	89.03	193	2.1	H	15.18	0.31	10.40	25.27	33	-7.73
1880	89.22	35	1.8	V	16.10	0.31	10.40	26.19	33	-6.81
LTE Band 2 Channel 19150 – 10MHz – 16QAM										
1905	88.59	194	1.3	H	14.86	0.32	10.40	24.94	33	-8.06
1905	88.93	122	1.1	V	15.97	0.32	10.40	26.05	33	-6.95
LTE Band 2 Channel 18675 – 15MHz – QPSK										
1857.5	88.57	115	1.6	H	14.60	0.31	10.40	24.69	33	-8.31
1857.5	89.06	316	2.1	V	15.78	0.31	10.40	25.87	33	-7.13
LTE Band 2 Channel 18900 – 15MHz – QPSK										
1880	89.25	306	1.9	H	15.40	0.31	10.40	25.49	33	-7.51
1880	89.07	264	1.2	V	15.95	0.31	10.40	26.04	33	-6.96
LTE Band 2 Channel 19125 – 15MHz – QPSK										
1902.5	88.96	269	1.4	H	15.23	0.32	10.40	25.31	33	-7.69
1902.5	88.57	241	1.6	V	15.61	0.32	10.40	25.69	33	-7.31
LTE Band 2 Channel 18675 – 15MHz – 16QAM										
1857.5	88.98	68	1.7	H	15.01	0.31	10.40	25.10	33	-7.90
1857.5	88.85	75	2.3	V	15.57	0.31	10.40	25.66	33	-7.34
LTE Band 2 Channel 18900 – 15MHz – 16QAM										
1880	89.02	360	1.2	H	15.17	0.31	10.40	25.26	33	-7.74
1880	88.84	271	1.2	V	15.72	0.31	10.40	25.81	33	-7.19
LTE Band 2 Channel 19125 – 15MHz – 16QAM										
1902.5	88.92	213	2.3	H	15.19	0.32	10.40	25.27	33	-7.73
1902.5	89.04	242	1.8	V	16.08	0.32	10.40	26.16	33	-6.84
LTE Band 2 Channel 18700 – 20MHz – QPSK										
1860	89.13	327	1.1	H	15.16	0.31	10.40	25.25	33	-7.75
1860	89.01	272	1.9	V	15.73	0.31	10.40	25.82	33	-7.18
LTE Band 2 Channel 18900 – 20MHz – QPSK										
1880	88.87	205	1.6	H	15.02	0.31	10.40	25.11	33	-7.89
1880	89.21	213	1.2	V	16.09	0.31	10.40	26.18	33	-6.82
LTE Band 2 Channel 19100 – 20MHz – QPSK										
1900	88.94	196	1.1	H	15.21	0.32	10.40	25.29	33	-7.71
1900	88.94	347	2.0	V	15.98	0.32	10.40	26.06	33	-6.94
LTE Band 2 Channel 18670 – 20MHz – 16QAM										
1860	89.23	130	1.2	H	15.26	0.31	10.40	25.35	33	-7.65
1860	88.47	331	1.0	V	15.19	0.31	10.40	25.28	33	-7.72

LTE Band 2 Channel 18900 – 20MHz – 16QAM										
1880	88.73	203	1.8	H	14.88	0.31	10.40	24.97	33	-8.03
1880	88.50	253	1.0	V	15.38	0.31	10.40	25.47	33	-7.53
LTE Band 2 Channel 19100 – 20MHz – 16QAM										
1900	89.14	222	2.0	H	15.41	0.32	10.40	25.49	33	-7.51
1900	88.85	106	1.3	V	15.89	0.32	10.40	25.97	33	-7.03

LTE Band 4

Frequency	Receiver Reading	Turn table Angle	RX Antenna		Substituted			Absolute Level	Part 27	
			Height	Polar	SG Level	Cable	Antenna Gain		Limit	Margin
(MHz)	(dBμV)	Degree	(m)	(H/V)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)
LTE Band 4 Channel 19957 – 1.4MHz – QPSK										
1710.7	89.71	249	2.4	H	15.60	0.30	9.40	24.70	30	-5.30
1710.7	89.74	101	1.5	V	16.21	0.30	9.40	25.31	30	-4.69
LTE Band 4 Channel 20175 – 1.4MHz – QPSK										
1732.5	89.61	350	1.0	H	15.50	0.30	9.40	24.60	30	-5.40
1732.5	89.70	308	1.0	V	16.17	0.30	9.40	25.27	30	-4.73
LTE Band 4 Channel 20393 – 1.4MHz – QPSK										
1754.3	89.71	213	1.3	H	15.60	0.30	9.40	24.70	30	-5.30
1754.3	89.49	325	1.9	V	15.96	0.30	9.40	25.06	30	-4.94
LTE Band 4 Channel 19957 – 1.4MHz – 16QAM										
1710.7	89.67	79	1.5	H	15.56	0.30	9.40	24.66	30	-5.34
1710.7	90.04	123	1.1	V	16.51	0.30	9.40	25.61	30	-4.39
LTE Band 4 Channel 20175 – 1.4MHz – 16QAM										
1732.5	89.50	219	2.3	H	15.39	0.30	9.40	24.49	30	-5.51
1732.5	89.93	212	1.5	V	16.40	0.30	9.40	25.50	30	-4.50
LTE Band 4 Channel 20393 – 1.4MHz – 16QAM										
1754.3	89.88	39	2.3	H	15.77	0.30	9.40	24.87	30	-5.13
1754.3	89.73	3	1.3	V	16.20	0.30	9.40	25.30	30	-4.70
LTE Band 4 Channel 19965 – 3MHz – QPSK										
1711.5	89.79	261	1.3	H	15.68	0.30	9.40	24.78	30	-5.22
1711.5	89.98	344	2.3	V	16.45	0.30	9.40	25.55	30	-4.45
LTE Band 4 Channel 20175 – 3MHz – QPSK										
1732.5	89.92	253	2.4	H	15.81	0.30	9.40	24.91	30	-5.09
1732.5	89.98	268	2.4	V	16.45	0.30	9.40	25.55	30	-4.45
LTE Band 4 Channel 20385 – 3MHz – QPSK										
1753.5	89.57	249	1.3	H	15.46	0.30	9.40	24.56	30	-5.44
1753.5	89.58	146	2.2	V	16.05	0.30	9.40	25.15	30	-4.85
LTE Band 4 Channel 19965 – 3MHz – 16QAM										
1711.5	89.56	88	1.4	H	15.45	0.30	9.40	24.55	30	-5.45
1711.5	89.55	244	2.4	V	16.02	0.30	9.40	25.12	30	-4.88
LTE Band 4 Channel 20175 – 3MHz – 16QAM										

1732.5	89.72	4	1.9	H	15.61	0.30	9.40	24.71	30	-5.29
1732.5	90.09	344	1.9	V	16.56	0.30	9.40	25.66	30	-4.34
LTE Band 4 Channel 20385 – 3MHz – 16QAM										
1753.5	89.36	114	2.0	H	15.25	0.30	9.40	24.35	30	-5.65
1753.5	89.89	189	2.1	V	16.36	0.30	9.40	25.46	30	-4.54
LTE Band 4 Channel 19975 – 5MHz – QPSK										
1712.5	89.68	192	1.7	H	15.57	0.30	9.40	24.67	30	-5.33
1712.5	89.45	335	1.3	V	15.92	0.30	9.40	25.02	30	-4.98
LTE Band 4 Channel 20175 – 5MHz – QPSK										
1732.5	89.64	292	1.5	H	15.53	0.30	9.40	24.63	30	-5.37
1732.5	90.04	61	1.2	V	16.51	0.30	9.40	25.61	30	-4.39
LTE Band 4 Channel 20375 – 5MHz – QPSK										
1752.5	89.27	107	2.1	H	15.16	0.30	9.40	24.26	30	-5.74
1752.5	89.81	296	2.2	V	16.28	0.30	9.40	25.38	30	-4.62
LTE Band 4 Channel 19975 – 5MHz – 16QAM										
1712.5	89.70	35	1.9	H	15.59	0.30	9.40	24.69	30	-5.31
1712.5	89.99	85	2.4	V	16.46	0.30	9.40	25.56	30	-4.44
LTE Band 4 Channel 20175 – 5MHz – 16QAM										
1732.5	90.02	282	1.2	H	15.91	0.30	9.40	25.01	30	-4.99
1732.5	89.63	77	2.5	V	16.10	0.30	9.40	25.20	30	-4.80
LTE Band 4 Channel 20375 – 5MHz – 16QAM										
1752.5	89.29	288	1.4	H	15.18	0.30	9.40	24.28	30	-5.72
1752.5	89.77	236	1.5	V	16.24	0.30	9.40	25.34	30	-4.66
LTE Band 4 Channel 20000 – 10MHz – QPSK										
1715	89.66	180	1.8	H	15.55	0.30	9.40	24.65	30	-5.35
1715	89.58	295	1.6	V	16.05	0.30	9.40	25.15	30	-4.85
LTE Band 4 Channel 20175 – 10MHz – QPSK										
1732.5	89.77	352	2.2	H	15.66	0.30	9.40	24.76	30	-5.24
1732.5	89.99	293	1.4	V	16.46	0.30	9.40	25.56	30	-4.44
LTE Band 4 Channel 20350 – 10MHz – QPSK										
1750	89.74	72	2.3	H	15.63	0.30	9.40	24.73	30	-5.27
1750	89.95	176	1.3	V	16.42	0.30	9.40	25.52	30	-4.48
LTE Band 4 Channel 20000 – 10MHz – 16QAM										
1715	89.65	314	1.1	H	15.54	0.30	9.40	24.64	30	-5.36
1715	89.70	17	2.5	V	16.17	0.30	9.40	25.27	30	-4.73

LTE Band 4 Channel 20175 – 10MHz – 16QAM										
1732.5	89.84	177	2.1	H	15.73	0.30	9.40	24.83	30	-5.17
1732.5	89.77	84	2.2	V	16.24	0.30	9.40	25.34	30	-4.66
LTE Band 4 Channel 20350 – 10MHz – 16QAM										
1750	89.54	86	1.3	H	15.43	0.30	9.40	24.53	30	-5.47
1750	89.64	212	1.4	V	16.11	0.30	9.40	25.21	30	-4.79
LTE Band 4 Channel 20025 – 15MHz – QPSK										
1717.5	89.87	212	1.3	H	15.76	0.30	9.40	24.86	30	-5.14
1717.5	89.44	151	2.1	V	15.91	0.30	9.40	25.01	30	-4.99
LTE Band 4 Channel 20175 – 15MHz – QPSK										
1732.5	89.62	121	2.2	H	15.51	0.30	9.40	24.61	30	-5.39
1732.5	89.41	15	2.0	V	15.88	0.30	9.40	24.98	30	-5.02
LTE Band 4 Channel 20325 – 15MHz – QPSK										
1747.5	89.59	357	2.3	H	15.48	0.30	9.40	24.58	30	-5.42
1747.5	89.52	249	2.3	V	15.99	0.30	9.40	25.09	30	-4.91
LTE Band 4 Channel 20025 – 15MHz – 16QAM										
1717.5	89.60	12	2.3	H	15.49	0.30	9.40	24.59	30	-5.41
1717.5	89.61	351	1.8	V	16.08	0.30	9.40	25.18	30	-4.82
LTE Band 4 Channel 20175 – 15MHz – 16QAM										
1732.5	89.51	222	2.2	H	15.40	0.30	9.40	24.50	30	-5.50
1732.5	89.67	164	1.8	V	16.14	0.30	9.40	25.24	30	-4.76
LTE Band 4 Channel 20325 – 15MHz – 16QAM										
1747.5	90.10	193	2.4	H	15.99	0.30	9.40	25.09	30	-4.91
1747.5	89.94	112	1.0	V	16.41	0.30	9.40	25.51	30	-4.49
LTE Band 4 Channel 20050 – 20MHz – QPSK										
1720	89.49	225	1.7	H	15.38	0.30	9.40	24.48	30	-5.52
1720	89.89	273	1.1	V	16.36	0.30	9.40	25.46	30	-4.54
LTE Band 4 Channel 20175 – 20MHz – QPSK										
1732.5	89.81	238	1.6	H	15.70	0.30	9.40	24.80	30	-5.20
1732.5	89.56	37	1.2	V	16.03	0.30	9.40	25.13	30	-4.87
LTE Band 4 Channel 20300 – 20MHz – QPSK										
1745	89.82	272	2.4	H	15.71	0.30	9.40	24.81	30	-5.19
1745	90.10	111	1.2	V	16.57	0.30	9.40	25.67	30	-4.33
LTE Band 4 Channel 20050 – 20MHz – 16QAM										
1720	89.48	52	1.4	H	15.37	0.30	9.40	24.47	30	-5.53
1720	89.76	299	2.0	V	16.23	0.30	9.40	25.33	30	-4.67

LTE Band 4 Channel 20175 – 20MHz – 16QAM										
1732.5	89.42	184	2.1	H	15.31	0.30	9.40	24.41	30	-5.59
1732.5	90.09	245	1.0	V	16.56	0.30	9.40	25.66	30	-4.34
LTE Band 4 Channel 20300 – 20MHz – 16QAM										
1745	89.59	175	2.0	H	15.48	0.30	9.40	24.58	30	-5.42
1745	89.87	118	2.3	V	16.34	0.30	9.40	25.44	30	-4.56

LTE Band 5

Frequency	Receiver Reading	Turn table Angle	RX Antenna		Substituted			Absolute Level	Part 22H	
			Height	Polar	SG Level	Cable	Antenna Gain		Limit	Margin
(MHz)	(dBμV)	Degree	(m)	(H/V)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)
LTE Band 5 Channel 20407 – 1.4MHz – QPSK										
824.7	83.19	189	1.3	H	16.08	0.30	9.40	25.18	38.45	-13.27
824.7	83.15	173	1.3	V	15.62	0.30	9.40	24.72	38.45	-13.73
LTE Band 5 Channel 20525 – 1.4MHz – QPSK										
836.5	83.21	292	2.4	H	16.10	0.30	9.40	25.20	38.45	-13.25
836.5	83.19	357	1.2	V	15.66	0.30	9.40	24.76	38.45	-13.69
LTE Band 5 Channel 20643 – 1.4MHz – QPSK										
848.3	82.85	179	1.9	H	15.74	0.30	9.40	24.84	38.45	-13.61
848.3	83.11	246	2.4	V	15.58	0.30	9.40	24.68	38.45	-13.77
LTE Band 5 Channel 20407 – 1.4MHz – 16QAM										
824.7	83.43	329	1.7	H	16.32	0.30	9.40	25.42	38.45	-13.03
824.7	83.07	264	2.1	V	15.54	0.30	9.40	24.64	38.45	-13.81
LTE Band 5 Channel 20525 – 1.4MHz – 16QAM										
836.5	83.20	324	1.9	H	16.09	0.30	9.40	25.19	38.45	-13.26
836.5	83.39	186	1.6	V	15.86	0.30	9.40	24.96	38.45	-13.49
LTE Band 5 Channel 20643 – 1.4MHz – 16QAM										
848.3	83.21	98	2.4	H	16.10	0.30	9.40	25.20	38.45	-13.25
848.3	83.27	33	2.3	V	15.74	0.30	9.40	24.84	38.45	-13.61
LTE Band 5 Channel 20415 – 3MHz – QPSK										
825.5	83.25	320	1.6	H	16.14	0.30	9.40	25.24	38.45	-13.21
825.5	83.23	181	1.4	V	15.70	0.30	9.40	24.80	38.45	-13.65
LTE Band 5 Channel 20525 – 3MHz – QPSK										
836.5	83.35	162	2.3	H	16.24	0.30	9.40	25.34	38.45	-13.11
836.5	82.77	58	2.4	V	15.24	0.30	9.40	24.34	38.45	-14.11
LTE Band 5 Channel 20635 – 3MHz – QPSK										

847.5	83.08	268	2.1	H	15.97	0.30	9.40	25.07	38.45	-13.38
847.5	83.20	51	1.3	V	15.67	0.30	9.40	24.77	38.45	-13.68
LTE Band 5 Channel 20415 – 3MHz – 16QAM										
825.5	82.98	30	1.2	H	15.87	0.30	9.40	24.97	38.45	-13.48
825.5	83.29	91	1.6	V	15.76	0.30	9.40	24.86	38.45	-13.59
LTE Band 5 Channel 20525 – 3MHz – 16QAM										
836.5	83.15	228	2.4	H	16.04	0.30	9.40	25.14	38.45	-13.31
836.5	83.28	312	1.8	V	15.75	0.30	9.40	24.85	38.45	-13.60
LTE Band 5 Channel 20635 – 3MHz – 16QAM										
847.5	83.53	127	1.5	H	16.42	0.30	9.40	25.52	38.45	-12.93
847.5	83.16	328	2.4	V	15.63	0.30	9.40	24.73	38.45	-13.72
LTE Band 5 Channel 20425 – 5MHz – QPSK										
826.5	83.07	162	1.8	H	15.96	0.30	9.40	25.06	38.45	-13.39
826.5	83.03	314	1.8	V	15.50	0.30	9.40	24.60	38.45	-13.85
LTE Band 5 Channel 20525 – 5MHz – QPSK										
836.5	83.06	324	2.2	H	15.95	0.30	9.40	25.05	38.45	-13.40
836.5	83.14	81	1.0	V	15.61	0.30	9.40	24.71	38.45	-13.74
LTE Band 5 Channel 20625 – 5MHz – QPSK										
846.5	83.47	8	1.3	H	16.36	0.30	9.40	25.46	38.45	-12.99
846.5	83.15	132	1.8	V	15.62	0.30	9.40	24.72	38.45	-13.73
LTE Band 5 Channel 20425 – 5MHz – 16QAM										
826.5	83.15	306	2.1	H	16.04	0.30	9.40	25.14	38.45	-13.31
826.5	82.75	296	2.3	V	15.22	0.30	9.40	24.32	38.45	-14.13
LTE Band 5 Channel 20525 – 5MHz – 16QAM										
836.5	83.36	327	1.2	H	16.25	0.30	9.40	25.35	38.45	-13.10
836.5	82.99	125	2.2	V	15.46	0.30	9.40	24.56	38.45	-13.89
LTE Band 5 Channel 20625 – 5MHz – 16QAM										
846.5	83.43	49	1.4	H	16.32	0.30	9.40	25.42	38.45	-13.03
846.5	83.20	305	1.1	V	15.67	0.30	9.40	24.77	38.45	-13.68
LTE Band 5 Channel 20450 – 10MHz – QPSK										
829	83.43	308	1.6	H	16.32	0.30	9.40	25.42	38.45	-13.03
829	82.79	43	1.7	V	15.26	0.30	9.40	24.36	38.45	-14.09
LTE Band 5 Channel 20525 – 10MHz – QPSK										
836.5	83.53	210	2.1	H	16.42	0.30	9.40	25.52	38.45	-12.93
836.5	83.20	324	1.1	V	15.67	0.30	9.40	24.77	38.45	-13.68
LTE Band 5 Channel 20600 – 10MHz – QPSK										

844	82.93	358	2.3	H	15.82	0.30	9.40	24.92	38.45	-13.53
844	83.18	193	1.6	V	15.65	0.30	9.40	24.75	38.45	-13.70
LTE Band 5 Channel 20450 – 10MHz – 16QAM										
829	83.18	331	1.0	H	16.07	0.30	9.40	25.17	38.45	-13.28
829	83.42	150	2.5	V	15.89	0.30	9.40	24.99	38.45	-13.46
LTE Band 5 Channel 20525 – 10MHz – 16QAM										
836.5	82.96	112	1.6	H	15.85	0.30	9.40	24.95	38.45	-13.50
836.5	83.40	66	1.7	V	15.87	0.30	9.40	24.97	38.45	-13.48
LTE Band 5 Channel 20600 – 10MHz – 16QAM										
844	83.06	175	1.4	H	15.95	0.30	9.40	25.05	38.45	-13.40
844	83.29	206	1.2	V	15.76	0.30	9.40	24.86	38.45	-13.59

LTE Band 12

Frequency	Receiver Reading	Turn table Angle	RX Antenna		Substituted			Absolute Level	Part 27	
			Height	Polar	SG Level	Cable	Antenna Gain		Limit	Margin
(MHz)	(dBμV)	Degree	(m)	(H/V)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)
LTE Band 12 Channel 23017 – 1.4MHz – QPSK										
699.70	96.21	6	2.4	H	25.21	0.20	0.00	25.01	34.77	-9.76
699.70	96.06	45	1.4	V	23.78	0.20	0.00	23.58	34.77	-11.19
LTE Band 12 Channel 23095 – 1.4MHz – QPSK										
707.50	96.29	145	1.5	H	25.29	0.20	0.00	25.09	34.77	-9.68
707.50	96.18	262	1.2	V	23.90	0.20	0.00	23.70	34.77	-11.07
LTE Band 12 Channel 23173 – 1.4MHz – QPSK										
715.30	96.35	33	1.9	H	25.35	0.20	0.00	25.15	34.77	-9.62
715.30	96.59	193	1.1	V	24.31	0.20	0.00	24.11	34.77	-10.66
LTE Band 12 Channel 23017 – 1.4MHz – 16QAM										
699.70	96.36	228	2.5	H	25.36	0.20	0.00	25.16	34.77	-9.61
699.70	96.15	202	1.4	V	23.87	0.20	0.00	23.67	34.77	-11.10
LTE Band 12 Channel 23095 – 1.4MHz – 16QAM										
707.50	96.30	300	2.2	H	25.30	0.20	0.00	25.10	34.77	-9.67
707.50	96.38	82	1.9	V	24.10	0.20	0.00	23.90	34.77	-10.87
LTE Band 12 Channel 23173 – 1.4MHz – 16QAM										
715.30	96.30	351	1.3	H	25.30	0.20	0.00	25.10	34.77	-9.67
715.30	95.90	68	1.6	V	23.62	0.20	0.00	23.42	34.77	-11.35
LTE Band 12 Channel 23025 – 3MHz – QPSK										
700.50	96.07	255	2.5	H	25.07	0.20	0.00	24.87	34.77	-9.90

700.50	96.53	26	1.7	V	24.25	0.20	0.00	24.05	34.77	-10.72
LTE Band 12 Channel 23095 – 3MHz – QPSK										
707.50	96.25	154	1.9	H	25.25	0.20	0.00	25.05	34.77	-9.72
707.50	96.58	265	1.3	V	24.30	0.20	0.00	24.10	34.77	-10.67
LTE Band 12 Channel 23165 – 3MHz – QPSK										
714.50	96.24	337	1.5	H	25.24	0.20	0.00	25.04	34.77	-9.73
714.50	95.97	4	1.8	V	23.69	0.20	0.00	23.49	34.77	-11.28
LTE Band 12 Channel 23025 – 3MHz – 16QAM										
700.50	96.17	282	2.4	H	25.17	0.20	0.00	24.97	34.77	-9.80
700.50	96.20	160	1.1	V	23.92	0.20	0.00	23.72	34.77	-11.05
LTE Band 12 Channel 23095 – 3MHz – 16QAM										
707.50	96.40	343	2.2	H	25.40	0.20	0.00	25.20	34.77	-9.57
707.50	96.28	179	2.1	V	24.00	0.20	0.00	23.80	34.77	-10.97
LTE Band 12 Channel 23165 – 3MHz – 16QAM										
714.50	95.84	153	2.5	H	24.84	0.20	0.00	24.64	34.77	-10.13
714.50	96.51	240	1.6	V	24.23	0.20	0.00	24.03	34.77	-10.74
LTE Band 12 Channel 23035 – 5MHz – QPSK										
701.50	96.17	4	1.4	H	25.17	0.20	0.00	24.97	34.77	-9.80
701.50	96.30	287	1.1	V	24.02	0.20	0.00	23.82	34.77	-10.95
LTE Band 12 Channel 23095 – 5MHz – QPSK										
707.50	96.45	175	2.0	H	25.45	0.20	0.00	25.25	34.77	-9.52
707.50	96.09	37	1.7	V	23.81	0.20	0.00	23.61	34.77	-11.16
LTE Band 12 Channel 23155 – 5MHz – QPSK										
713.50	95.97	158	1.6	H	24.97	0.20	0.00	24.77	34.77	-10.00
713.50	95.89	179	2.4	V	23.61	0.20	0.00	23.41	34.77	-11.36
LTE Band 12 Channel 23035 – 5MHz – 16QAM										
701.50	96.01	95	2.1	H	25.01	0.20	0.00	24.81	34.77	-9.96
701.50	95.95	49	1.2	V	23.67	0.20	0.00	23.47	34.77	-11.30
LTE Band 12 Channel 23095 – 5MHz – 16QAM										
707.50	96.10	338	2.0	H	25.10	0.20	0.00	24.90	34.77	-9.87
707.50	95.88	239	1.7	V	23.60	0.20	0.00	23.40	34.77	-11.37
LTE Band 12 Channel 23155 – 5MHz – 16QAM										
713.50	96.29	179	1.8	H	25.29	0.20	0.00	25.09	34.77	-9.68
713.50	96.19	45	1.1	V	23.91	0.20	0.00	23.71	34.77	-11.06
LTE Band 12 Channel 23060 – 10MHz – QPSK										
704.00	96.49	270	1.0	H	25.49	0.20	0.00	25.29	34.77	-9.48

704.00	96.47	155	1.3	V	24.19	0.20	0.00	23.99	34.77	-10.78
LTE Band 12 Channel 23095 – 10MHz – QPSK										
707.50	96.48	290	1.6	H	25.48	0.20	0.00	25.28	34.77	-9.49
707.50	96.53	101	1.7	V	24.25	0.20	0.00	24.05	34.77	-10.72
LTE Band 12 Channel 23130 – 10MHz – QPSK										
711.00	96.09	304	1.3	H	25.09	0.20	0.00	24.89	34.77	-9.88
711.00	96.19	149	1.2	V	23.91	0.20	0.00	23.71	34.77	-11.06
LTE Band 12 Channel 23060 – 10MHz – 16QAM										
704.00	96.45	298	2.3	H	25.45	0.20	0.00	25.25	34.77	-9.52
704.00	96.41	2	2.3	V	24.13	0.20	0.00	23.93	34.77	-10.84
LTE Band 12 Channel 23095 – 10MHz – 16QAM										
707.50	96.14	343	1.0	H	25.14	0.20	0.00	24.94	34.77	-9.83
707.50	96.12	21	1.1	V	23.84	0.20	0.00	23.64	34.77	-11.13
LTE Band 12 Channel 23130 – 10MHz – 16QAM										
711.00	96.50	251	2.2	H	25.50	0.20	0.00	25.30	34.77	-9.47
711.00	96.48	85	2.2	V	24.20	0.20	0.00	24.00	34.77	-10.77

LTE Band 13

Frequency	Receiver Reading	Turn table Angle	RX Antenna		Substituted			Absolute Level	Part 27	
			Height	Polar	SG Level	Cable	Antenna Gain		Limit	Margin
(MHz)	(dBμV)	Degree	(m)	(H/V)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)
LTE Band 13 Channel 23205 – 5MHz – QPSK										
779.50	96.00	162	1.1	H	25.00	0.20	0.00	24.80	34.77	-9.97
779.50	96.13	310	1.5	V	23.85	0.20	0.00	23.65	34.77	-11.12
LTE Band 13 Channel 23230 – 5MHz – QPSK										
782.00	96.36	0	2.4	H	25.36	0.20	0.00	25.16	34.77	-9.61
782.00	94.76	298	1.3	V	22.48	0.20	0.00	22.28	34.77	-12.49
LTE Band 13 Channel 23255 – 5MHz – QPSK										
784.50	96.24	51	2.1	H	25.24	0.20	0.00	25.04	34.77	-9.73
784.50	95.06	110	2.1	V	22.78	0.20	0.00	22.58	34.77	-12.19
LTE Band 13 Channel 23205 – 5MHz – 16QAM										
779.50	96.27	110	1.5	H	25.27	0.20	0.00	25.07	34.77	-9.70
779.50	95.02	326	1.1	V	22.74	0.20	0.00	22.54	34.77	-12.23
LTE Band 13 Channel 23230 – 5MHz – 16QAM										
782.00	95.73	178	1.1	H	24.73	0.20	0.00	24.53	34.77	-10.24

782.00	95.41	271	1.4	V	23.13	0.20	0.00	22.93	34.77	-11.84
LTE Band 13 Channel 23255 – 5MHz – 16QAM										
784.50	96.18	14	2.2	H	25.18	0.20	0.00	24.98	34.77	-9.79
784.50	95.32	122	1.0	V	23.04	0.20	0.00	22.84	34.77	-11.93
LTE Band 13 Channel 23230 – 10MHz – QPSK										
782.00	96.19	100	1.8	H	25.19	0.20	0.00	24.99	34.77	-9.78
782.00	95.53	18	1.4	V	23.25	0.20	0.00	23.05	34.77	-11.72
LTE Band 13 Channel 23230 – 10MHz – 16QAM										
782.00	96.41	282	2.0	H	25.41	0.20	0.00	25.21	34.77	-9.56
782.00	95.57	18	1.1	V	23.29	0.20	0.00	23.09	34.77	-11.68

LTE Band 25

Frequency	Receiver Reading	Turn table Angle	RX Antenna		Substituted			Absolute Level	Part 27	
			Height	Polar	SG Level	Cable	Antenna Gain		Limit	Margin
(MHz)	(dBμV)	Degree	(m)	(H/V)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)
LTE Band 25 Channel 26047 – 1.4MHz – QPSK										
1850.70	88.43	72	1.6	H	14.46	0.31	10.40	24.55	33	-8.45
1850.70	88.47	12	1.5	V	15.19	0.31	10.40	25.28	33	-7.72
LTE Band 25 Channel 26365 – 1.4MHz – QPSK										
1882.50	88.37	6	2.3	H	14.52	0.31	10.40	24.61	33	-8.39
1882.50	88.45	104	2.4	V	15.33	0.31	10.40	25.42	33	-7.58
LTE Band 25 Channel 26683 – 1.4MHz – QPSK										
1914.30	88.81	148	1.5	H	15.08	0.32	10.40	25.16	33	-7.84
1914.30	88.51	16	2.4	V	15.55	0.32	10.40	25.63	33	-7.37
LTE Band 25 Channel 26047 – 1.4MHz – 16QAM										
1850.70	88.87	50	2.3	H	14.90	0.31	10.40	24.99	33	-8.01
1850.70	88.80	233	2.1	V	15.52	0.31	10.40	25.61	33	-7.39
LTE Band 25 Channel 26365 – 1.4MHz – 16QAM										
1882.50	88.78	242	2.5	H	14.93	0.31	10.40	25.02	33	-7.98
1882.50	88.27	133	1.3	V	15.15	0.31	10.40	25.24	33	-7.76
LTE Band 25 Channel 26683 – 1.4MHz – 16QAM										
1914.30	88.32	136	2.2	H	14.59	0.32	10.40	24.67	33	-8.33
1914.30	88.44	125	2.4	V	15.48	0.32	10.40	25.56	33	-7.44
LTE Band 25 Channel 26055 – 3MHz – QPSK										
1851.50	88.58	66	2.2	H	14.61	0.31	10.40	24.70	33	-8.30
1851.50	88.15	320	2.3	V	14.87	0.31	10.40	24.96	33	-8.04
LTE Band 25 Channel 26365 – 3MHz – QPSK										
1882.50	88.42	113	2.1	H	14.57	0.31	10.40	24.66	33	-8.34
1882.50	88.89	280	2.3	V	15.77	0.31	10.40	25.86	33	-7.14
LTE Band 25 Channel 26675 – 3MHz – QPSK										
1913.50	88.71	156	1.5	H	14.98	0.32	10.40	25.06	33	-7.94
1913.50	88.42	158	2.3	V	15.46	0.32	10.40	25.54	33	-7.46

LTE Band 25 Channel 26055 – 3MHz – 16QAM										
1851.50	88.49	89	1.4	H	14.52	0.31	10.40	24.61	33	-8.39
1851.50	88.59	157	2.0	V	15.31	0.31	10.40	25.40	33	-7.60
LTE Band 25 Channel 26365 – 3MHz – 16QAM										
1882.50	88.40	182	1.2	H	14.55	0.31	10.40	24.64	33	-8.36
1882.50	88.54	145	1.1	V	15.42	0.31	10.40	25.51	33	-7.49
LTE Band 25 Channel 26675 – 3MHz – 16QAM										
1913.50	88.53	120	1.8	H	14.80	0.32	10.40	24.88	33	-8.12
1913.50	88.30	222	1.4	V	15.34	0.32	10.40	25.42	33	-7.58
LTE Band 25 Channel 26065 – 5MHz – QPSK										
1852.50	88.60	73	1.9	H	14.63	0.31	10.40	24.72	33	-8.28
1852.50	88.68	352	1.9	V	15.40	0.31	10.40	25.49	33	-7.51
LTE Band 25 Channel 26365 – 5MHz – QPSK										
1882.50	88.30	138	1.5	H	14.45	0.31	10.40	24.54	33	-8.46
1882.50	88.51	251	1.8	V	15.39	0.31	10.40	25.48	33	-7.52
LTE Band 25 Channel 26665 – 5MHz – QPSK										
1912.50	88.46	144	2.1	H	14.73	0.32	10.40	24.81	33	-8.19
1912.50	88.45	2	1.8	V	15.49	0.32	10.40	25.57	33	-7.43
LTE Band 25 Channel 26065 – 5MHz – 16QAM										
1852.50	88.62	261	2.2	H	14.65	0.31	10.40	24.74	33	-8.26
1852.50	88.37	283	2.3	V	15.09	0.31	10.40	25.18	33	-7.82
LTE Band 25 Channel 26365 – 5MHz – 16QAM										
1882.50	88.80	288	2.0	H	14.95	0.31	10.40	25.04	33	-7.96
1882.50	88.33	186	1.3	V	15.21	0.31	10.40	25.30	33	-7.70
LTE Band 25 Channel 26665 – 5MHz – 16QAM										
1912.50	88.38	326	1.4	H	14.65	0.32	10.40	24.73	33	-8.27
1912.50	88.58	202	1.6	V	15.62	0.32	10.40	25.70	33	-7.30
LTE Band 25 Channel 26090 – 10MHz – QPSK										
1855.00	88.32	271	1.2	H	14.35	0.31	10.40	24.44	33	-8.56
1855.00	88.74	334	2.2	V	15.46	0.31	10.40	25.55	33	-7.45
LTE Band 25 Channel 26365 – 10MHz – QPSK										
1882.50	88.37	342	1.1	H	14.52	0.31	10.40	24.61	33	-8.39
1882.50	88.74	166	1.3	V	15.62	0.31	10.40	25.71	33	-7.29
LTE Band 25 Channel 26640 – 10MHz – QPSK										
1910.00	88.46	228	1.1	H	14.73	0.32	10.40	24.81	33	-8.19
1910.00	88.36	24	1.5	V	15.40	0.32	10.40	25.48	33	-7.52
LTE Band 25 Channel 26090 – 10MHz – 16QAM										
1855.00	88.44	80	1.3	H	14.47	0.31	10.40	24.56	33	-8.44
1855.00	88.47	348	2.1	V	15.19	0.31	10.40	25.28	33	-7.72
LTE Band 25 Channel 26365 – 10MHz – 16QAM										
1882.50	89.00	24	1.7	H	15.15	0.31	10.40	25.24	33	-7.76
1882.50	88.32	279	1.8	V	15.20	0.31	10.40	25.29	33	-7.71
LTE Band 25 Channel 26640 – 10MHz – 16QAM										
1910.00	88.66	246	1.0	H	14.93	0.32	10.40	25.01	33	-7.99
1910.00	88.70	216	2.4	V	15.74	0.32	10.40	25.82	33	-7.18
LTE Band 25 Channel 26115 – 15MHz – QPSK										
1857.50	88.40	112	1.4	H	14.43	0.31	10.40	24.52	33	-8.48

1857.50	88.41	320	1.8	V	15.13	0.31	10.40	25.22	33	-7.78
LTE Band 25 Channel 26365 – 15MHz – QPSK										
1882.50	88.27	267	2.5	H	14.42	0.31	10.40	24.51	33	-8.49
1882.50	88.44	69	1.7	V	15.32	0.31	10.40	25.41	33	-7.59
LTE Band 25 Channel 26615 – 15MHz – QPSK										
1907.50	88.24	265	1.7	H	14.51	0.32	10.40	24.59	33	-8.41
1907.50	88.57	171	2.0	V	15.61	0.32	10.40	25.69	33	-7.31
LTE Band 25 Channel 26115 – 15MHz – 16QAM										
1857.50	88.21	272	1.3	H	14.24	0.31	10.40	24.33	33	-8.67
1857.50	88.29	219	2.2	V	15.01	0.31	10.40	25.10	33	-7.90
LTE Band 25 Channel 26365 – 15MHz – 16QAM										
1882.50	88.28	168	1.0	H	14.43	0.31	10.40	24.52	33	-8.48
1882.50	88.43	274	1.1	V	15.31	0.31	10.40	25.40	33	-7.60
LTE Band 25 Channel 26615 – 15MHz – 16QAM										
1907.50	88.49	2	2.3	H	14.76	0.32	10.40	24.84	33	-8.16
1907.50	88.28	207	1.9	V	15.32	0.32	10.40	25.40	33	-7.60
LTE Band 25 Channel 26140 – 20MHz – QPSK										
1860.00	88.79	338	1.2	H	14.82	0.31	10.40	24.91	33	-8.09
1860.00	89.12	3	2.3	V	15.84	0.31	10.40	25.93	33	-7.07
LTE Band 25 Channel 26365 – 20MHz – QPSK										
1882.50	88.74	280	2.4	H	14.89	0.31	10.40	24.98	33	-8.02
1882.50	88.77	358	2.0	V	15.65	0.31	10.40	25.74	33	-7.26
LTE Band 25 Channel 26590 – 20MHz – QPSK										
1905.00	88.99	6	1.6	H	15.26	0.32	10.40	25.34	33	-7.66
1905.00	88.76	15	2.4	V	15.80	0.32	10.40	25.88	33	-7.12
LTE Band 25 Channel 26140 – 20MHz – 16QAM										
1860.00	88.86	133	1.4	H	14.89	0.31	10.40	24.98	33	-8.02
1860.00	88.74	158	2.1	V	15.46	0.31	10.40	25.55	33	-7.45
LTE Band 25 Channel 26365 – 20MHz – 16QAM										
1882.50	88.98	247	1.4	H	15.13	0.31	10.40	25.22	33	-7.78
1882.50	88.48	325	1.6	V	15.36	0.31	10.40	25.45	33	-7.55
LTE Band 25 Channel 26590 – 20MHz – 16QAM										
1905.00	88.76	39	1.2	H	15.03	0.32	10.40	25.11	33	-7.89
1905.00	88.58	46	1.9	V	15.62	0.32	10.40	25.70	33	-7.30

LTE Band 26

Frequency	Receiver Reading	Turn table Angle	RX Antenna		Substituted			Absolute Level	Result	
			Height	Polar	SG Level	Cable	Antenna Gain		Limit	Margin
(MHz)	(dBμV)	Degree	(m)	(H/V)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dB)
LTE Band 26 Channel 26797 – 1.4MHz – QPSK										
824.7	76.64	259	2.1	H	9.53	0.30	9.40	18.63	38.45	-19.82
824.7	78.91	241	1.3	V	11.38	0.30	9.40	20.48	38.45	-17.97
LTE Band 26 Channel 26915 – 1.4MHz – QPSK										
836.5	75.20	149	1.9	H	8.09	0.30	9.40	17.19	38.45	-21.26
836.5	79.87	98	1.1	V	12.34	0.30	9.40	21.44	38.45	-17.01
LTE Band 26 Channel 27033 – 1.4MHz – QPSK										

848.3	78.42	300	1.9	H	11.31	0.30	9.40	20.41	38.45	-18.04
848.3	79.18	145	1.6	V	11.65	0.30	9.40	20.75	38.45	-17.70
LTE Band 26 Channel 26797 – 1.4MHz – 16QAM										
824.7	73.53	200	1.5	H	6.42	0.30	9.40	15.52	38.45	-22.93
824.7	79.66	281	1.8	V	12.13	0.30	9.40	21.23	38.45	-17.22
LTE Band 26 Channel 26915 – 1.4MHz – 16QAM										
836.5	73.10	268	1.9	H	5.99	0.30	9.40	15.09	38.45	-23.36
836.5	79.14	319	1.3	V	11.61	0.30	9.40	20.71	38.45	-17.74
LTE Band 26 Channel 27033 – 1.4MHz – 16QAM										
848.3	73.65	295	1.5	H	6.54	0.30	9.40	15.64	38.45	-22.81
848.3	79.73	285	1.9	V	12.20	0.30	9.40	21.30	38.45	-17.15
LTE Band 26 Channel 26805 – 3MHz – QPSK										
825.5	73.27	8	1.4	H	6.16	0.30	9.40	15.26	38.45	-23.19
825.5	79.75	111	1.6	V	12.22	0.30	9.40	21.32	38.45	-17.13
LTE Band 26 Channel 26915 – 3MHz – QPSK										
836.5	75.81	156	2.3	H	8.70	0.30	9.40	17.80	38.45	-20.65
836.5	79.16	67	1.6	V	11.63	0.30	9.40	20.73	38.45	-17.72
LTE Band 26 Channel 27025 – 3MHz – QPSK										
847.5	74.39	318	1.6	H	7.28	0.30	9.40	16.38	38.45	-22.07
847.5	79.88	97	2.0	V	12.35	0.30	9.40	21.45	38.45	-17.00
LTE Band 26 Channel 26805 – 3MHz – 16QAM										
825.5	73.77	43	1.3	H	6.66	0.30	9.40	15.76	38.45	-22.69
825.5	79.04	11	2.3	V	11.51	0.30	9.40	20.61	38.45	-17.84
LTE Band 26 Channel 26915 – 3MHz – 16QAM										
836.5	75.33	290	1.7	H	8.22	0.30	9.40	17.32	38.45	-21.13
836.5	79.10	338	1.7	V	11.57	0.30	9.40	20.67	38.45	-17.78
LTE Band 26 Channel 27025 – 3MHz – 16QAM										
847.5	73.35	97	1.2	H	6.24	0.30	9.40	15.34	38.45	-23.11
847.5	79.52	243	1.3	V	11.99	0.30	9.40	21.09	38.45	-17.36
LTE Band 26 Channel 26815 – 5MHz – QPSK										
826.5	73.74	299	1.9	H	6.63	0.30	9.40	15.73	38.45	-22.72
826.5	79.65	91	1.6	V	12.12	0.30	9.40	21.22	38.45	-17.23
LTE Band 26 Channel 26915 – 5MHz – QPSK										
836.5	75.55	44	1.9	H	8.44	0.30	9.40	17.54	38.45	-20.91
836.5	79.69	174	2.1	V	12.16	0.30	9.40	21.26	38.45	-17.19
LTE Band 26 Channel 27015 – 5MHz – QPSK										
846.5	73.97	290	2.1	H	6.86	0.30	9.40	15.96	38.45	-22.49
846.5	79.89	148	1.5	V	12.36	0.30	9.40	21.46	38.45	-16.99
LTE Band 26 Channel 26815 – 5MHz – 16QAM										
826.5	74.49	254	1.3	H	7.38	0.30	9.40	16.48	38.45	-21.97
826.5	79.11	12	1.6	V	11.58	0.30	9.40	20.68	38.45	-17.77
LTE Band 26 Channel 26915 – 5MHz – 16QAM										
836.5	72.87	56	2.4	H	5.76	0.30	9.40	14.86	38.45	-23.59
836.5	79.11	79	1.3	V	11.58	0.30	9.40	20.68	38.45	-17.77
LTE Band 26 Channel 27015 – 5MHz – 16QAM										
846.5	75.20	47	1.5	H	8.09	0.30	9.40	17.19	38.45	-21.26
846.5	79.43	185	1.1	V	11.90	0.30	9.40	21.00	38.45	-17.45

LTE Band 26 Channel 26840 – 10MHz – QPSK										
829	74.54	188	2.4	H	7.43	0.30	9.40	16.53	38.45	-21.92
829	79.52	94	2.2	V	11.99	0.30	9.40	21.09	38.45	-17.36
LTE Band 26 Channel 26915 – 10MHz – QPSK										
836.5	72.86	9	2.1	H	5.75	0.30	9.40	14.85	38.45	-23.60
836.5	79.53	226	1.1	V	12.00	0.30	9.40	21.10	38.45	-17.35
LTE Band 26 Channel 26990 – 10MHz – QPSK										
844	72.88	117	1.9	H	5.77	0.30	9.40	14.87	38.45	-23.58
844	79.95	35	1.5	V	12.42	0.30	9.40	21.52	38.45	-16.93
LTE Band 26 Channel 26840 – 10MHz – 16QAM										
829	72.45	270	1.4	H	5.34	0.30	9.40	14.44	38.45	-24.01
829	79.88	272	2.3	V	12.35	0.30	9.40	21.45	38.45	-17.00
LTE Band 26 Channel 26915 – 10MHz – 16QAM										
836.5	75.65	240	2.5	H	8.54	0.30	9.40	17.64	38.45	-20.81
836.5	79.17	114	2.2	V	11.64	0.30	9.40	20.74	38.45	-17.71
LTE Band 26 Channel 26990 – 10MHz – 16QAM										
844	74.47	44	2.5	H	7.36	0.30	9.40	16.46	38.45	-21.99
844	79.18	293	1.6	V	11.65	0.30	9.40	20.75	38.45	-17.70
LTE Band 26 Channel 26865 – 15MHz – QPSK										
831.5	79.36	90	2.4	H	12.25	0.30	9.40	21.35	38.45	-17.10
831.5	79.77	64	1.8	V	12.24	0.30	9.40	21.34	38.45	-17.11
LTE Band 26 Channel 26915 – 15MHz – QPSK										
836.5	81.02	145	2.3	H	13.91	0.30	9.40	23.01	38.45	-15.44
836.5	79.13	338	1.4	V	11.60	0.30	9.40	20.70	38.45	-17.75
LTE Band 26 Channel 26965 – 15MHz – QPSK										
841.5	79.36	187	1.6	H	12.25	0.30	9.40	21.35	38.45	-17.10
841.5	79.54	180	2.5	V	12.01	0.30	9.40	21.11	38.45	-17.34
LTE Band 26 Channel 26865 – 15MHz – 16QAM										
831.5	81.03	142	1.7	H	13.92	0.30	9.40	23.02	38.45	-15.43
831.5	79.06	355	1.9	V	11.53	0.30	9.40	20.63	38.45	-17.82
LTE Band 26 Channel 26915 – 15MHz – 16QAM										
836.5	79.34	25	1.6	H	12.23	0.30	9.40	21.33	38.45	-17.12
836.5	79.69	237	2.2	V	12.16	0.30	9.40	21.26	38.45	-17.19
LTE Band 26 Channel 26965 – 15MHz – 16QAM										
841.5	80.49	176	2.3	H	13.38	0.30	9.40	22.48	38.45	-15.97
841.5	79.50	157	1.4	V	11.97	0.30	9.40	21.07	38.45	-17.38

8 Peak-to-Average Ratio

Test Requirement:	24.232 (d), 27.50(d)
Test Method:	N/A
Test Mode:	TX transmitting

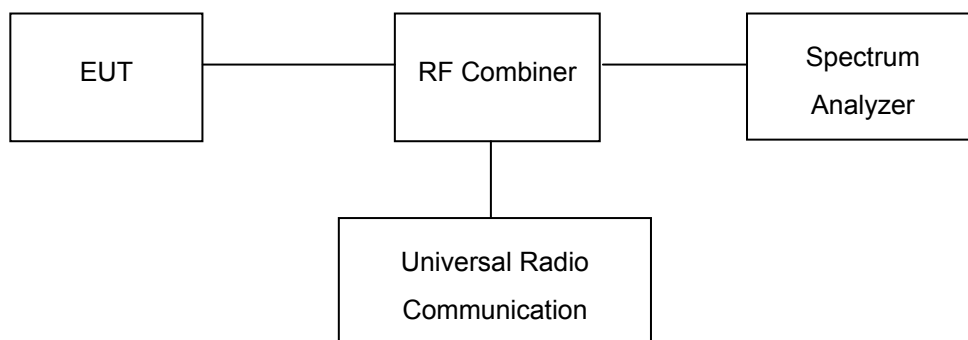
8.1 EUT Operation

Operating Environment :

Temperature:	22.5 °C
Humidity:	52.3% RH
Atmospheric Pressure:	101.2kPa

8.2 Test Procedure

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. Set EUT to transmit at maximum output power.
3. When the duty cycle is less than 98%, then signal gating will be implemented on the spectrum analyzer by triggering from the system simulator.
4. Set the CCDF (Complementary Cumulative Distribution Function) option of the spectrum analyzer. Record the maximum PAPR level associated with a probability of 0.1%.



8.3 Test Result

PASS

LTE Band

Please refer to the Annex B. LTE Peak to Average Ratio for LTE Band 2/4/5/12/13/25/26

9 BANDWIDTH

Test Requirement:	FCC Part 2.1049, 22.917, 22.905, 24.238, 27.53(a); 90.691
Test Method:	ANSI C63.26:2015 ANSI/TIA-603-E:2016
Test Mode:	TX transmitting

9.1 EUT Operation

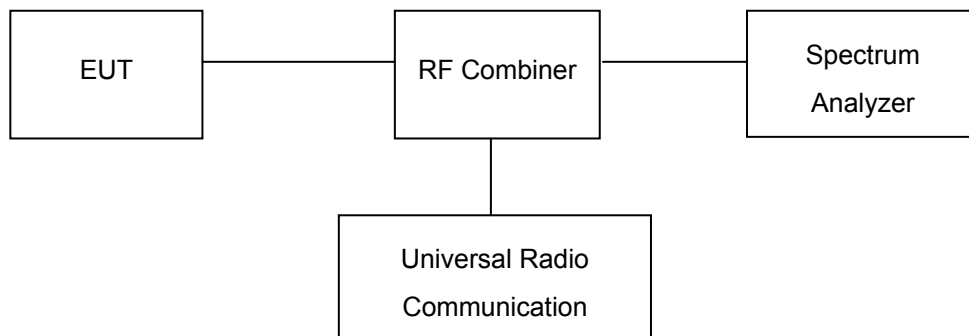
Operating Environment :

Temperature:	22.5 °C
Humidity:	52.3% RH
Atmospheric Pressure:	101.2kPa

9.2 Test Procedure

The RF output of the transmitter was connected to the wireless test set and the spectrum analyzer through sufficient attenuation.

The resolution bandwidth of the spectrum analyzer was set in the range of 1 to 5 % of the anticipated OBW and the 26 dB & 99%bandwidth was recorded.



9.3 Test Result

LTE Band 2 (Part 24E):

BW(MHz)	Channel	Frequency (MHz)	Modulation	99% Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
1.4	18607	1850.7	QPSK	1.09	1.25
			16QAM	1.08	1.2
1.4	18900	1880	QPSK	1.09	1.26
			16QAM	1.09	1.25
1.4	19193	1909.3	QPSK	1.09	1.26
			16QAM	1.09	1.27
3	18615	1851.5	QPSK	2.68	2.88
			16QAM	2.68	2.88
3	18900	1880	QPSK	2.68	2.9
			16QAM	2.68	2.9
3	19185	1908.5	QPSK	2.68	2.9
			16QAM	2.68	2.9
5	18625	1852.5	QPSK	4.49	4.84
			16QAM	4.49	4.81
5	18900	1880	QPSK	4.49	4.83
			16QAM	4.49	4.83
5	19175	1907.5	QPSK	4.48	4.82
			16QAM	4.48	4.82
10	18650	1855	QPSK	8.91	9.35
			16QAM	8.92	9.32
10	18900	1880	QPSK	8.92	9.38
			16QAM	8.91	9.29
10	19150	1905	QPSK	8.89	9.34
			16QAM	8.92	9.31
15	18675	1857.5	QPSK	13.43	14.22
			16QAM	13.45	14.23
15	18900	1880	QPSK	13.42	14.23
			16QAM	13.45	14.22
15	19125	1902.5	QPSK	13.4	14.22
			16QAM	13.46	14.22
20	18700	1860	QPSK	17.82	18.73
			16QAM	17.88	18.73
20	18900	1880	QPSK	17.84	18.72
			16QAM	17.89	18.74
20	19100	1900	QPSK	17.85	18.73
			16QAM	17.89	18.72

LTE Band 4 (Part 27):

BW(MHz)	Channel	Frequency (MHz)	Modulation	99% Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
1.4	19957	1710.7	QPSK	1.09	1.24
			16QAM	1.08	1.25
1.4	2.175	1732.5	QPSK	1.09	1.25
			16QAM	1.09	1.24
1.4	20393	1754.3	QPSK	1.09	1.26
			16QAM	1.09	1.27
3	19965	1711.5	QPSK	2.68	2.89
			16QAM	2.68	2.89
3	2.175	1732.5	QPSK	2.68	2.89
			16QAM	2.68	2.89
3	2.385	1753.5	QPSK	2.68	2.89
			16QAM	2.68	2.91
5	19975	1712.5	QPSK	4.49	4.84
			16QAM	4.49	4.81
5	20175	1732.5	QPSK	4.49	4.82
			16QAM	4.49	4.82
5	20375	1752.5	QPSK	4.48	4.81
			16QAM	4.48	4.83
10	2000	1715	QPSK	8.91	9.34
			16QAM	8.93	9.4
10	20175	1732.5	QPSK	8.91	9.38
			16QAM	8.92	9.35
10	20350	1750	QPSK	8.9	9.35
			16QAM	8.93	9.42
15	20025	1717.5	QPSK	13.41	14.22
			16QAM	13.47	14.26
15	20175	1732.5	QPSK	13.41	14.23
			16QAM	13.45	14.27
15	20325	1747.5	QPSK	13.41	14.21
			16QAM	13.47	14.26
20	20050	1720	QPSK	17.83	18.74
			16QAM	17.89	18.76

20	20175	1732.5	QPSK	17.82	18.71
			16QAM	17.88	18.77
20	20300	1745	QPSK	17.82	18.71
			16QAM	17.91	18.76

LTE Band 5 (Part 22H):

BW(MHz)	Channel	Frequency (MHz)	Modulation	99% Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
1.4	20407	824.7	QPSK	1.09	1.25
			16QAM	1.08	1.27
1.4	20525	836.5	QPSK	1.09	1.24
			16QAM	1.09	1.24
1.4	20643	848.3	QPSK	1.09	1.26
			16QAM	1.09	1.26
3	20415	825.5	QPSK	2.68	2.89
			16QAM	2.68	2.89
3	20525	836.5	QPSK	2.68	2.89
			16QAM	2.68	2.89
3	20635	847.5	QPSK	2.68	2.9
			16QAM	2.68	2.9
5	20425	826.5	QPSK	4.49	4.85
			16QAM	4.49	4.81
5	20525	836.5	QPSK	4.49	4.82
			16QAM	4.48	4.83
5	20625	846.5	QPSK	4.48	4.8
			16QAM	4.48	4.83
10	20450	829.0	QPSK	8.92	9.39
			16QAM	8.91	9.38
10	20525	836.5	QPSK	8.9	9.33
			16QAM	8.91	9.37
10	20600	844.0	QPSK	8.91	9.34
			16QAM	8.91	9.34

LTE Band 12 (Part 27):

BW(MHz)	Channel	Frequency (MHz)	Modulation	99% Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
1.4	23017	699.7	QPSK	1.09	1.26
			16QAM	1.09	1.27
1.4	23095	707.5	QPSK	1.09	1.25
			16QAM	1.09	1.27
1.4	23173	715.3	QPSK	1.09	1.26
			16QAM	1.09	1.24
3	23025	700.5	QPSK	2.68	2.89
			16QAM	2.68	2.89
3	23095	707.5	QPSK	2.68	2.9
			16QAM	2.68	2.9
3	23165	714.5	QPSK	2.68	2.9
			16QAM	2.68	2.89
5	23035	701.5	QPSK	4.49	4.82
			16QAM	4.49	4.81
5	23095	707.5	QPSK	4.49	4.82
			16QAM	4.49	4.82
5	23155	713.5	QPSK	4.49	4.84
			16QAM	4.49	4.81
10	23060	704	QPSK	8.91	9.36
			16QAM	8.89	9.26
10	23095	707.5	QPSK	8.92	9.37
			16QAM	8.95	9.36
10	23130	711	QPSK	8.9	9.33
			16QAM	8.86	9.25

LTE Band 13 (Part 27)

BW(MHz)	Channel	Frequency (MHz)	Modulation	99% Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
5	23205	779.5	QPSK	4.48	4.81
			16QAM	4.48	4.78
5	23230	782.0	QPSK	4.49	4.83
			16QAM	4.49	4.83
5	23255	784.5	QPSK	4.49	4.86
			16QAM	4.49	4.85
10	23230	782.0	QPSK	8.91	9.36
			16QAM	8.978	9.322

LTE Band 25 (Part 27)

BW(MHz)	Channel	Frequency (MHz)	Modulation	99% Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
1.4	26047	1850.7	QPSK	1.09	1.26
			16QAM	1.09	1.27
1.4	26365	1882.5	QPSK	1.09	1.25
			16QAM	1.09	1.27
1.4	26683	1914.3	QPSK	1.09	1.27
			16QAM	1.09	1.26
3	26055	1851.5	QPSK	2.68	2.89
			16QAM	2.68	2.89
3	26365	1882.5	QPSK	2.68	2.9
			16QAM	2.68	2.89
3	26675	1913.5	QPSK	2.69	2.9
			16QAM	2.68	2.91
5	26065	1852.5	QPSK	4.49	4.86
			16QAM	4.49	4.81
5	26365	1882.5	QPSK	4.49	4.82
			16QAM	4.49	4.84
5	26665	1912.5	QPSK	4.48	4.82
			16QAM	4.49	4.83
10	26090	1855	QPSK	8.91	9.36
			16QAM	8.91	9.36
10	26365	1882.5	QPSK	8.92	9.4
			16QAM	8.92	9.4

10	26640	1910	QPSK	8.9	9.34
			16QAM	8.9	9.34
15	26115	1857.5	QPSK	13.42	14.24
			16QAM	13.42	14.24
15	26365	1882.5	QPSK	13.42	14.23
			16QAM	13.42	14.23
15	26615	1907.5	QPSK	13.38	14.19
			16QAM	13.38	14.19
20	26140	1860	QPSK	17.83	18.73
			16QAM	17.83	18.73
20	26365	1882.5	QPSK	17.83	18.71
			16QAM	17.83	18.71
20	26590	1905.0	QPSK	17.79	18.7
			16QAM	17.79	18.7

LTE Band 26 (Part 22)

(Remark: Uplink: 824-849MHz is for FCC Part 22.)

BW(MHz)	Channel	Frequency (MHz)	Modulation	99% Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
1.4	26797	824.7	QPSK	1.09	1.26
			16QAM	1.09	1.27
1.4	26915	836.5	QPSK	1.08	1.24
			16QAM	1.09	1.26
1.4	27033	848.3	QPSK	1.09	1.25
			16QAM	1.09	1.24
3	26805	825.5	QPSK	2.68	2.89
			16QAM	2.68	2.88
3	26915	836.5	QPSK	2.68	2.88
			16QAM	2.68	2.89
3	27025	847.5	QPSK	2.68	2.89
			16QAM	2.68	2.9
5	26815	826.5	QPSK	4.49	4.84
			16QAM	4.49	4.81
5	26915	836.5	QPSK	4.48	4.83
			16QAM	4.48	4.83
5	27015	846.5	QPSK	4.47	4.79

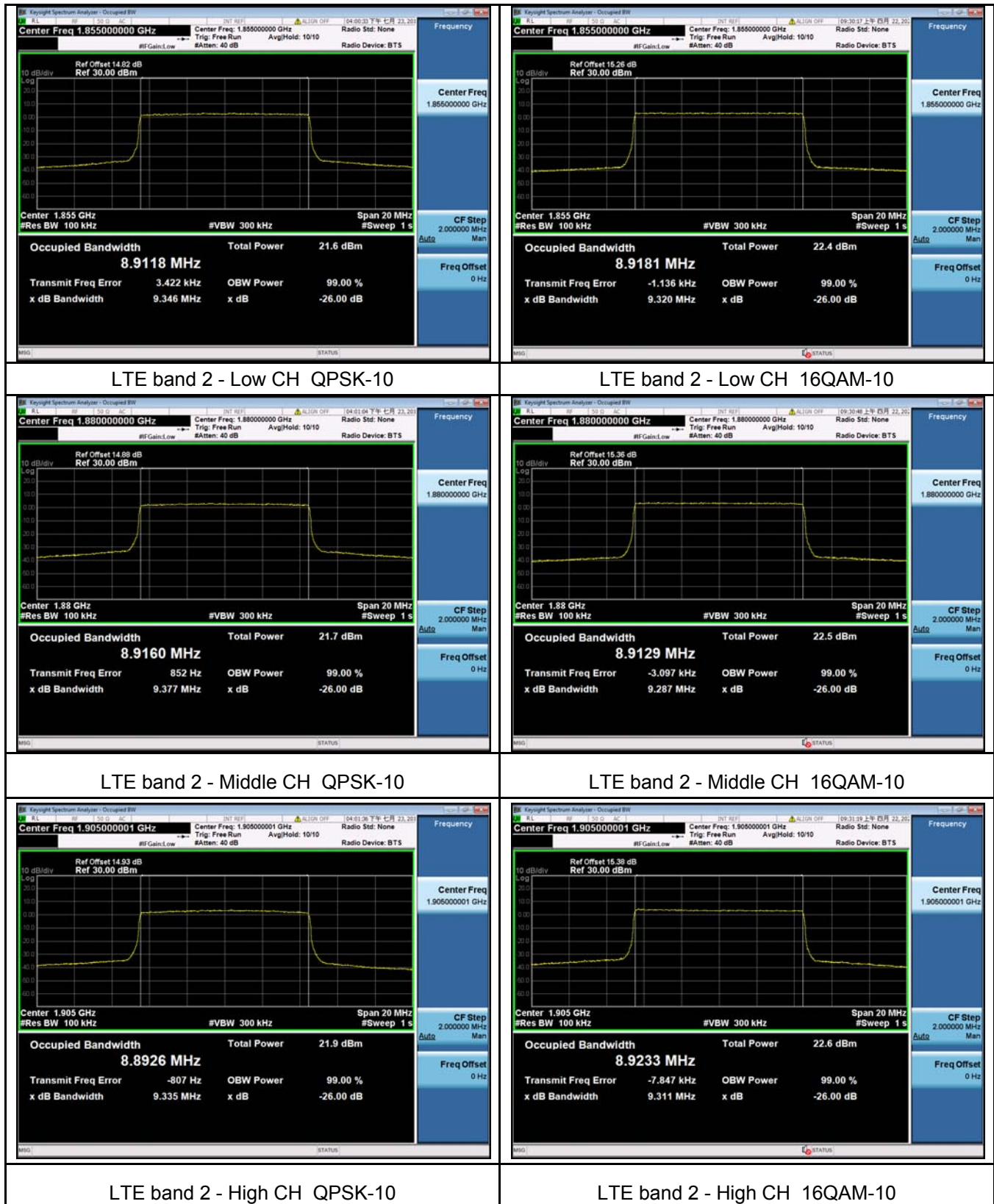
			16QAM	4.48	4.82
10	26840	829.0	QPSK	8.92	9.36
			16QAM	8.7	9.35
10	26915	836..5	QPSK	8.9	9.34
			16QAM	8.8	9.35
10	26990	844.0	QPSK	8.9	9.32
			16QAM	8.9	9.82
15	26865	831.5	QPSK	13.41	14.21
			16QAM	13.73	14.71
15	26915	836.5	QPSK	13.41	14.21
			16QAM	13.73	14.81
15	26965	841.5	QPSK	13.42	14.23
			16QAM	13.73	14.27

Test Plots LTE Band 2 (Part 24E)

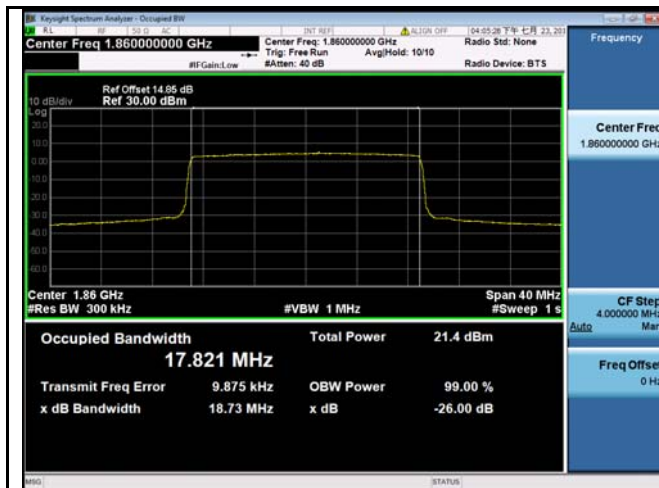




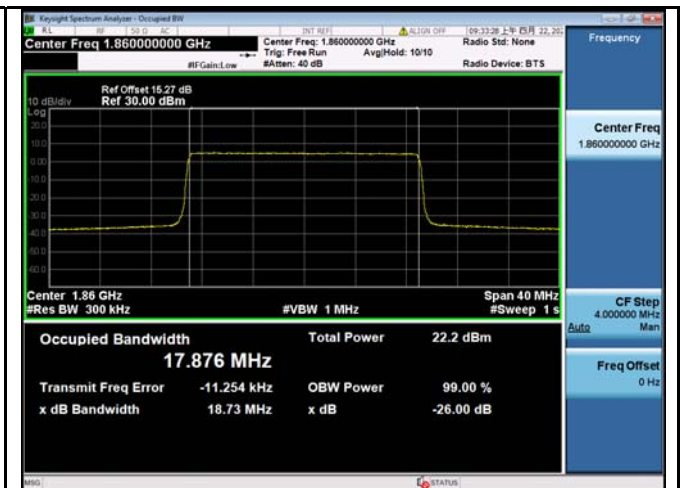




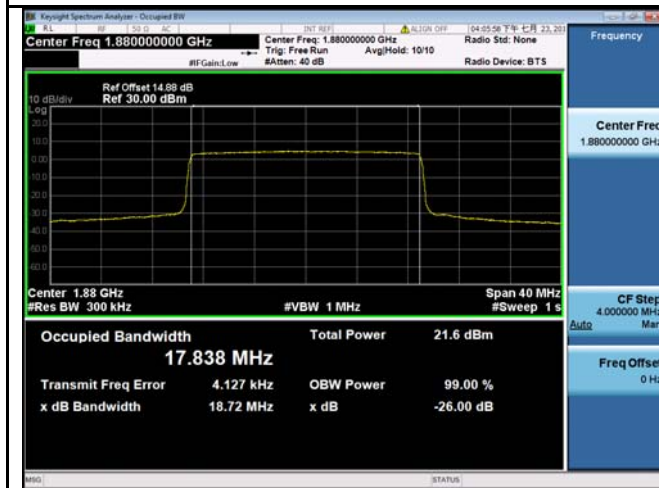




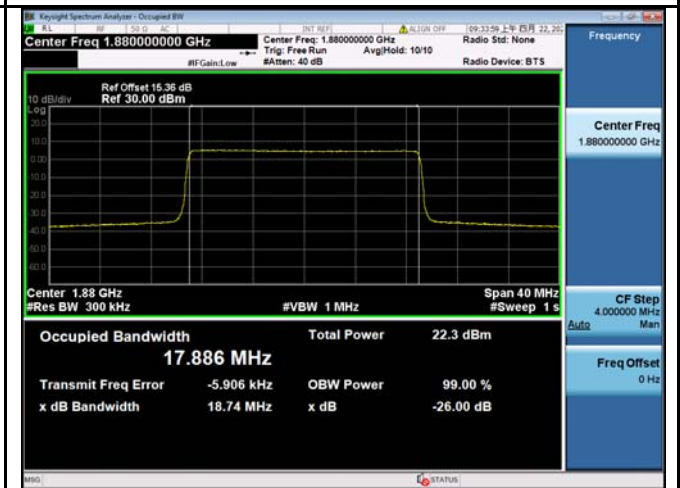
LTE band 2 - Low CH QPSK-20



LTE band 2 - Low CH 16QAM-20



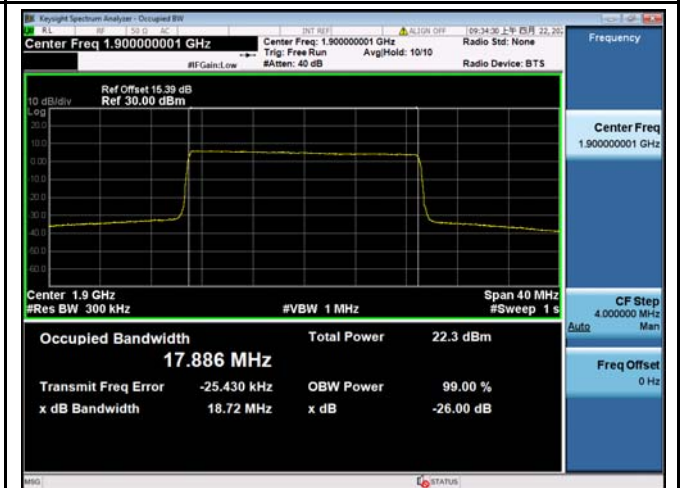
LTE band 2 - Middle CH QPSK-20



LTE band 2 - Middle CH 16QAM-20

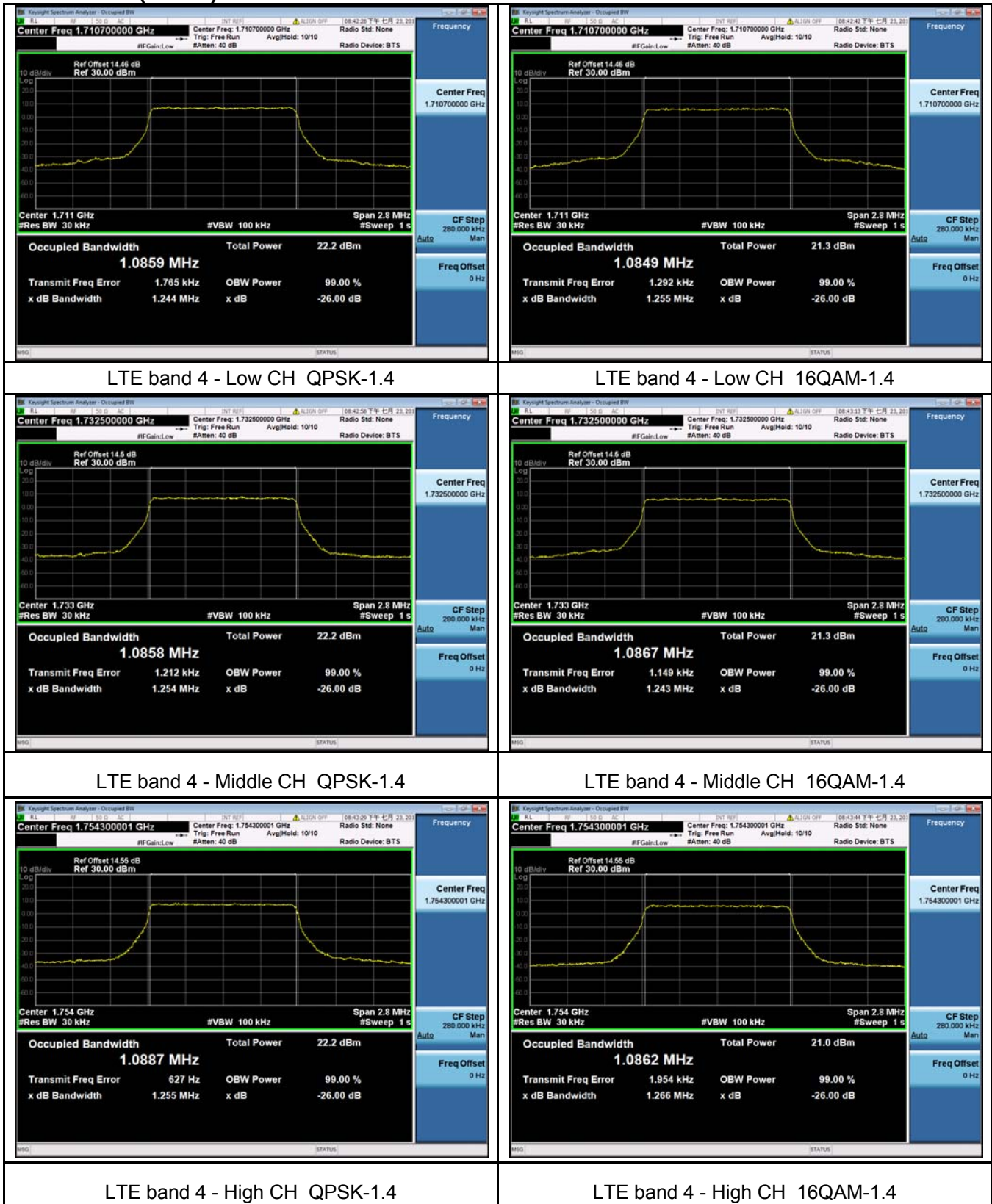


LTE band 2 - High CH QPSK-20



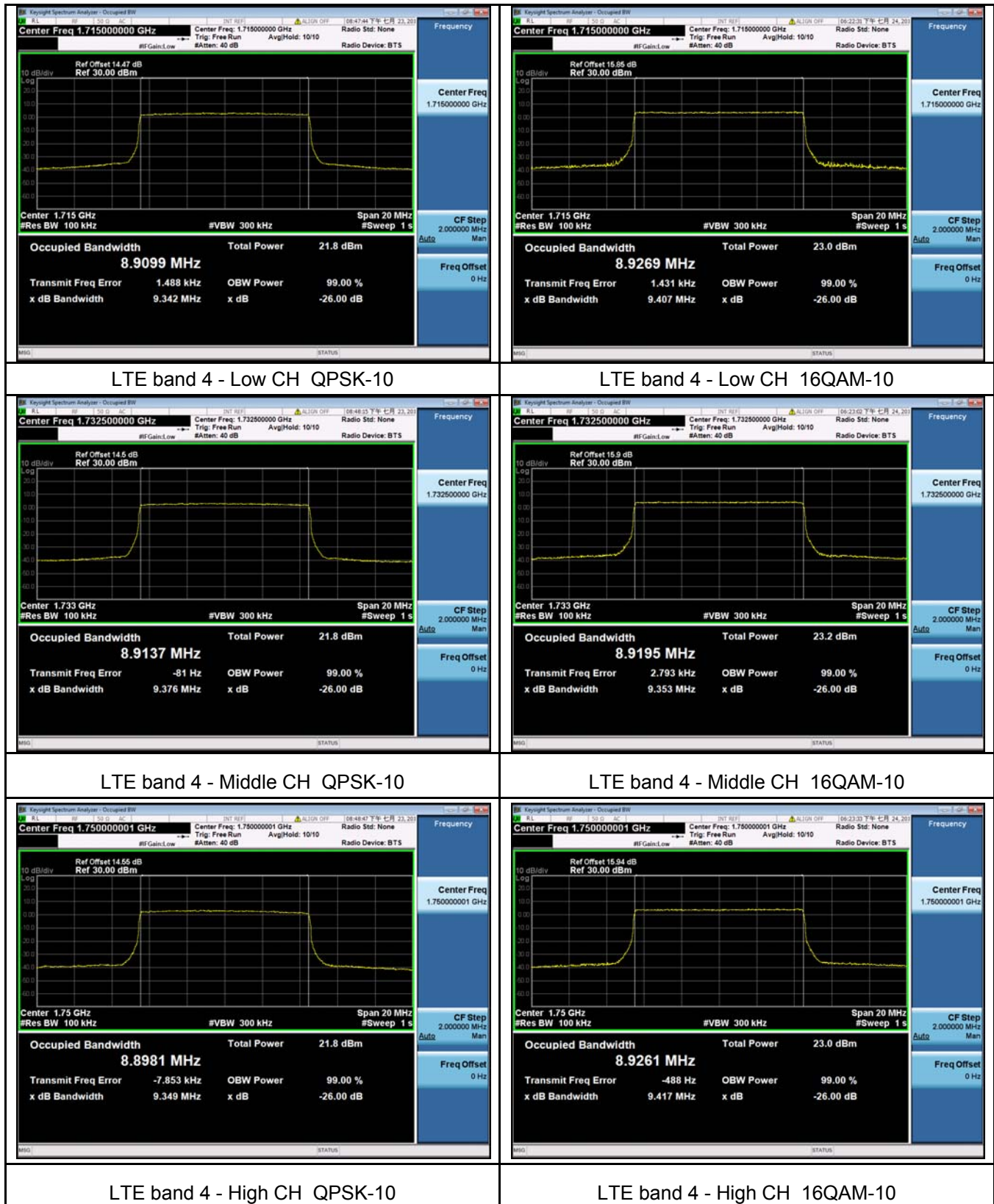
LTE band 2 - High CH 16QAM-20

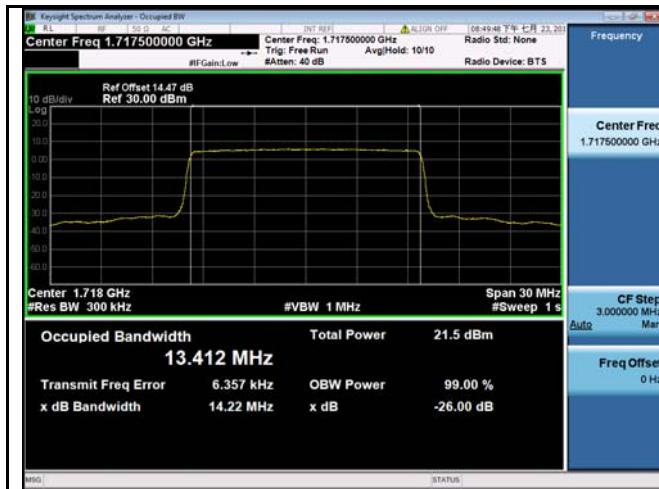
LTE Band 4 (Part 27)



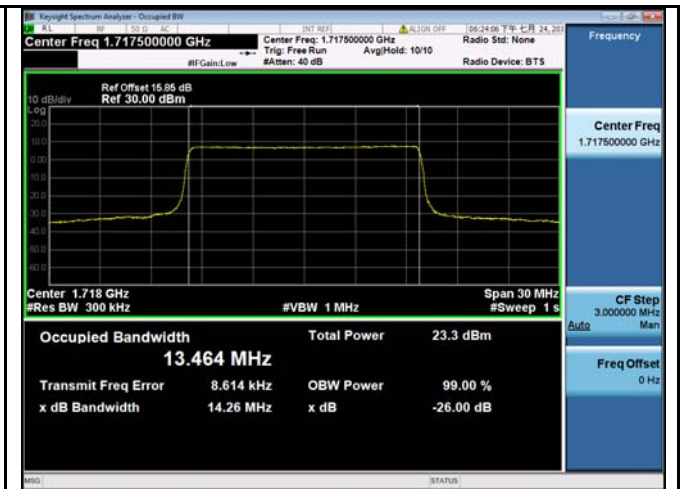




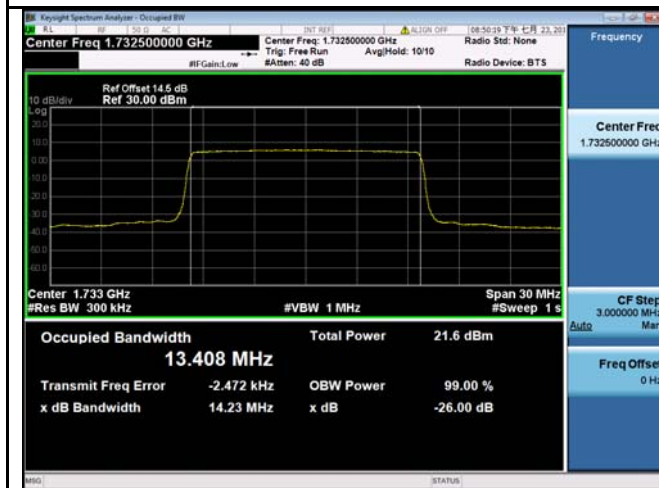




LTE band 4 - Low CH QPSK-15



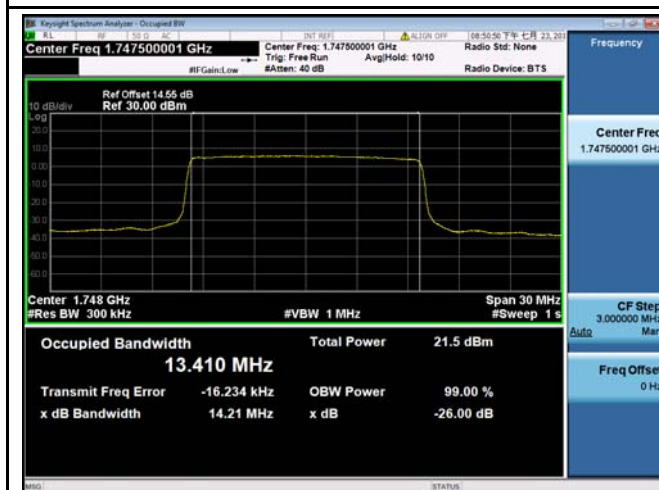
LTE band 4 - Low CH 16QAM-15



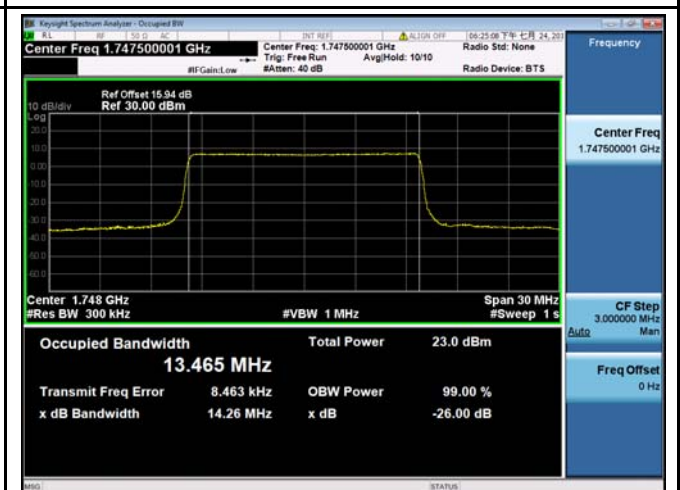
LTE band 4 - Middle CH QPSK-15



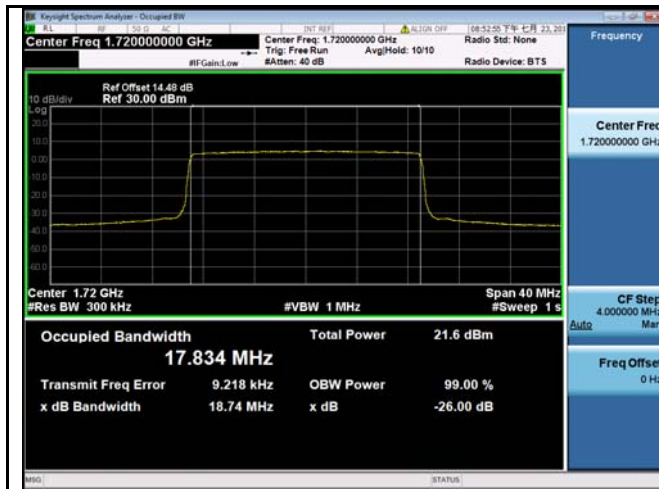
LTE band 4 - Middle CH 16QAM-15



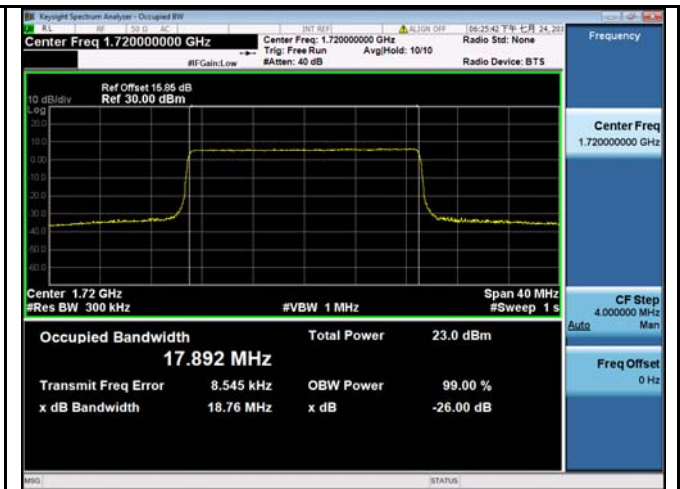
LTE band 4 - High CH QPSK-15



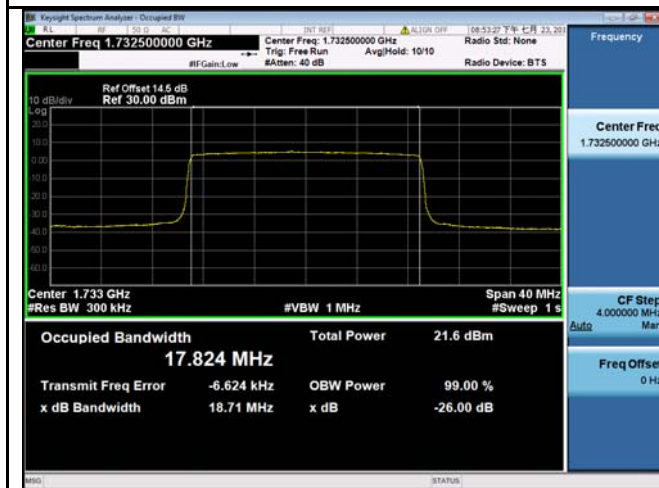
LTE band 4 - High CH 16QAM-15



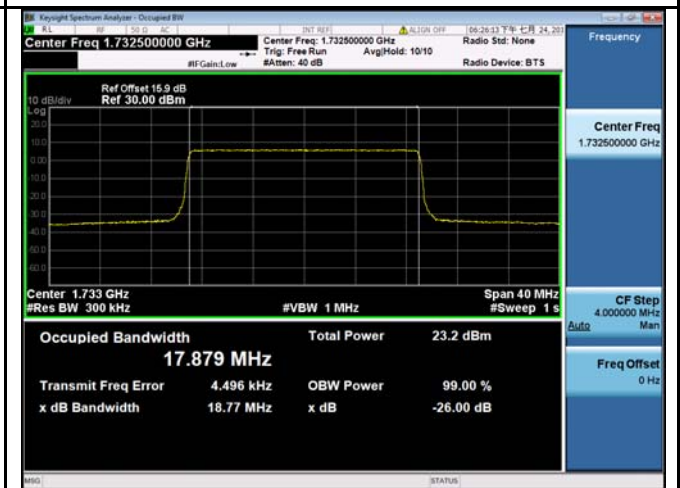
LTE band 4 - Low CH QPSK-20



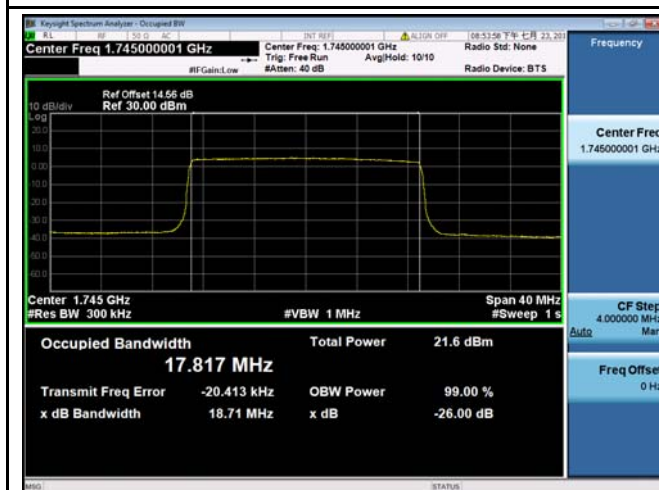
LTE band 4 - Low CH 16QAM-20



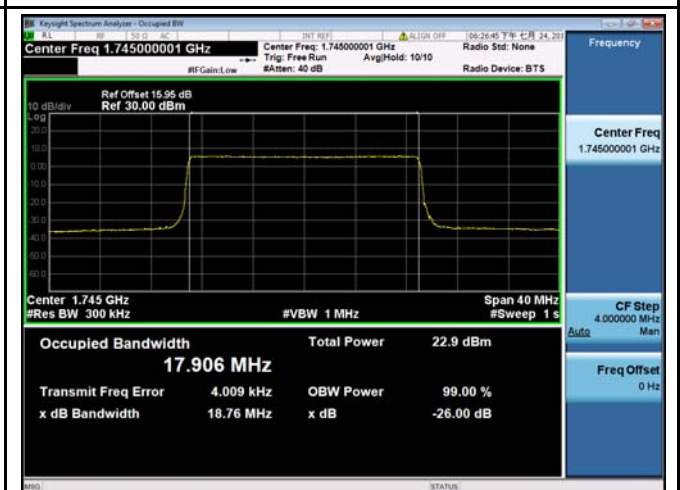
LTE band 4 - Middle CH QPSK-20



LTE band 4 - Middle CH 16QAM-20

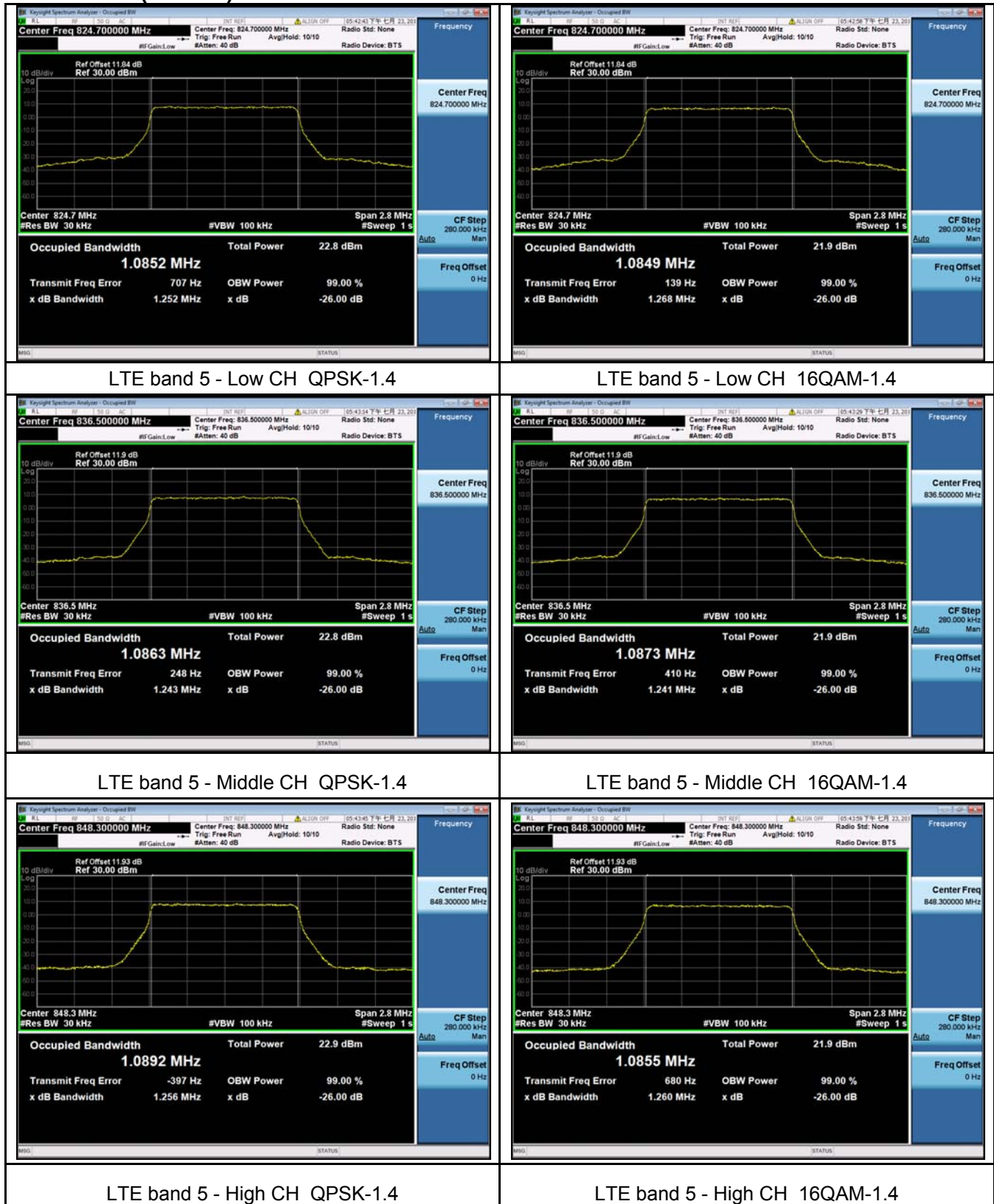


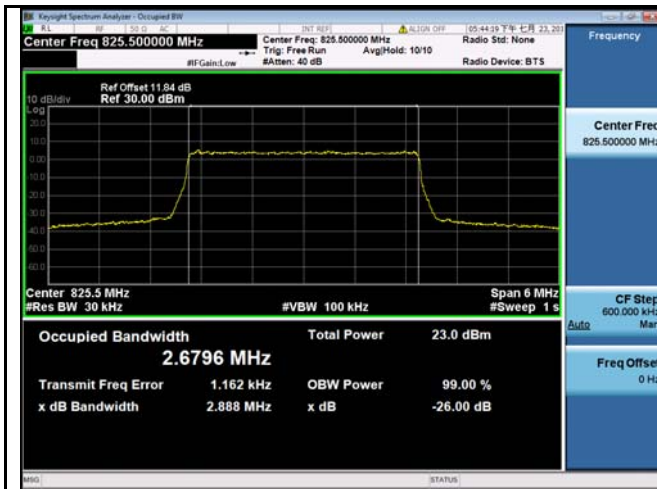
LTE band 4 - High CH QPSK-20



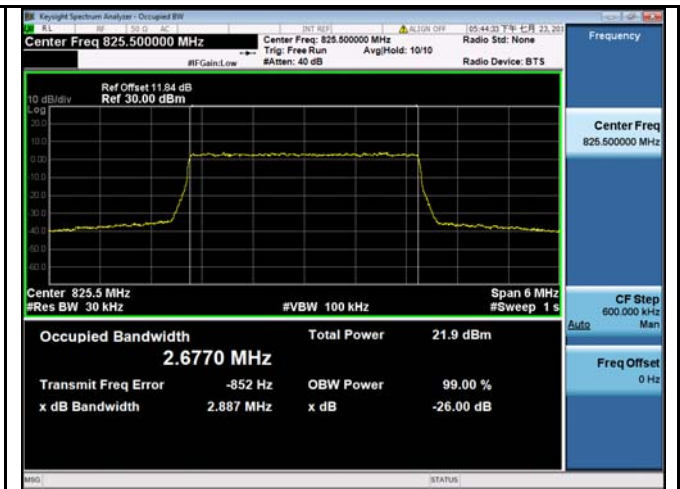
LTE band 4 - High CH 16QAM-20

LTE Band 5 (Part 22H)





LTE band 5 - Low CH QPSK-3



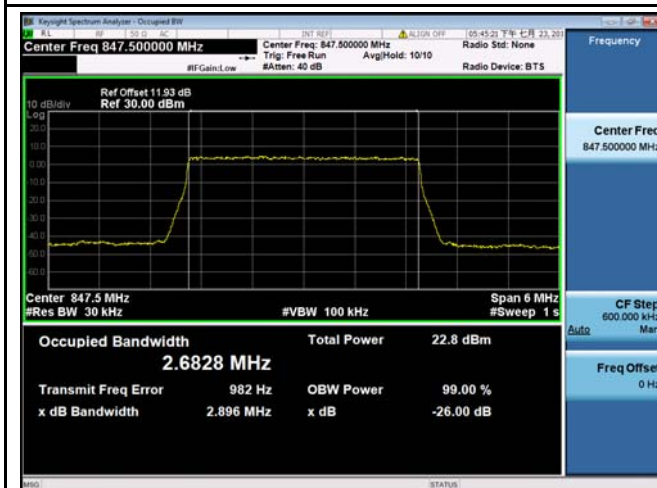
LTE band 5 - Low CH 16QAM-3



LTE band 5 - Middle CH QPSK-3



LTE band 5 - Middle CH 16QAM-3

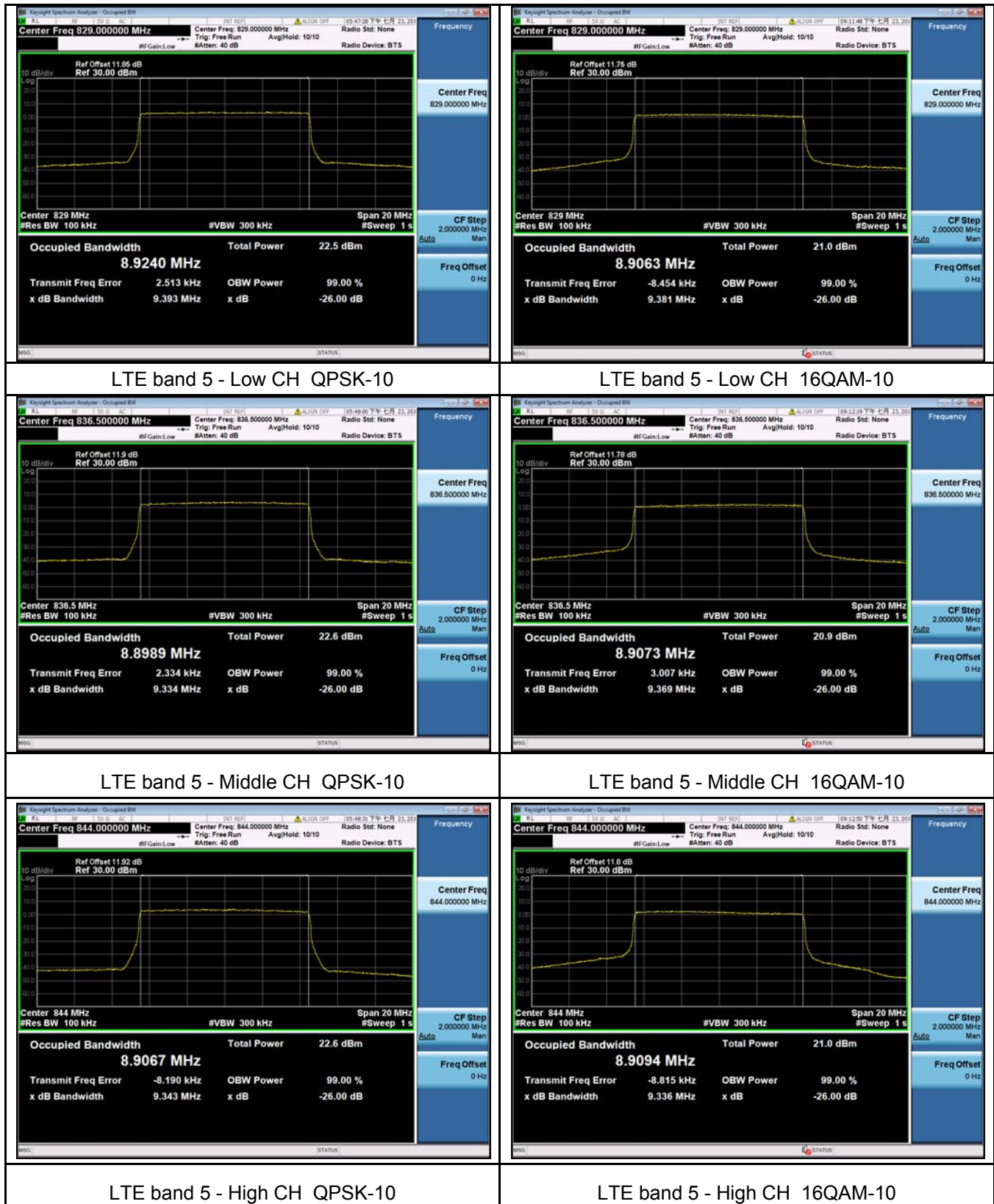


LTE band 5 - High CH QPSK-3

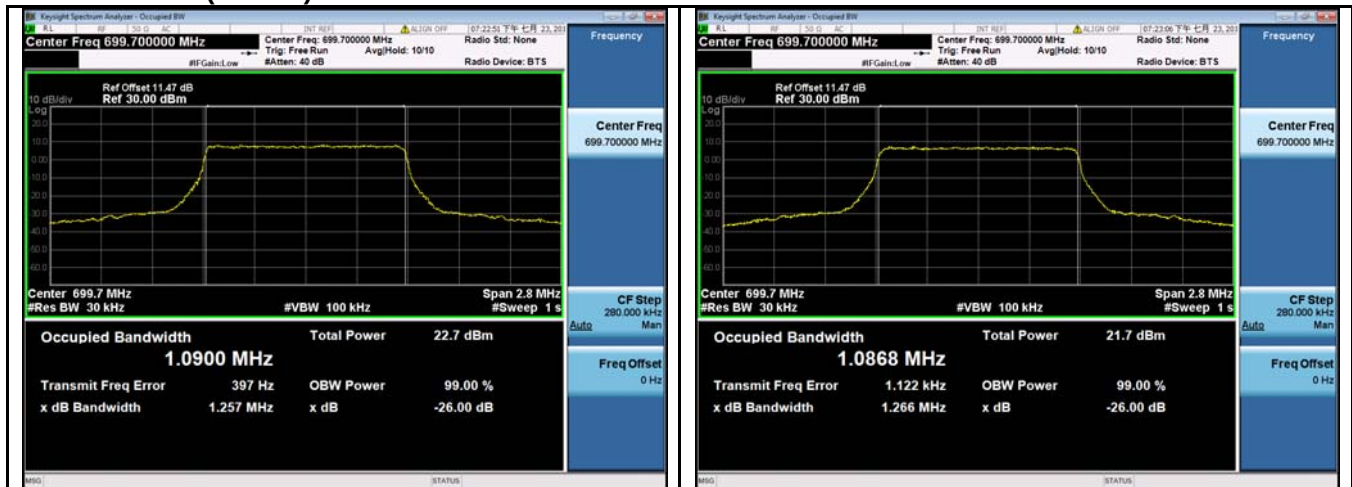


LTE band 5 - High CH 16QAM-3



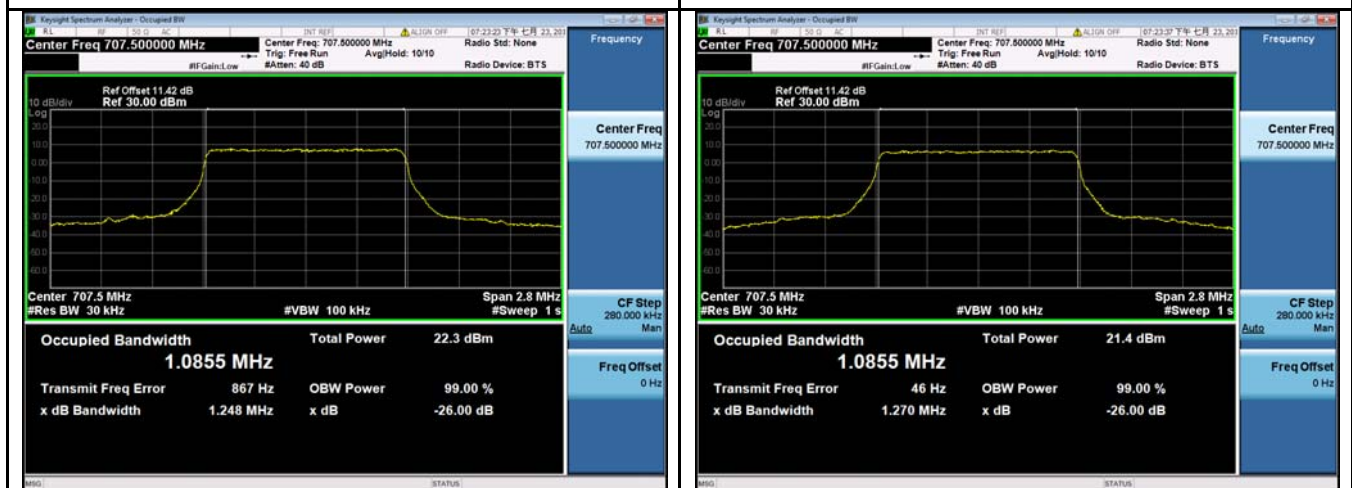


LTE Band 12 (Part 27)



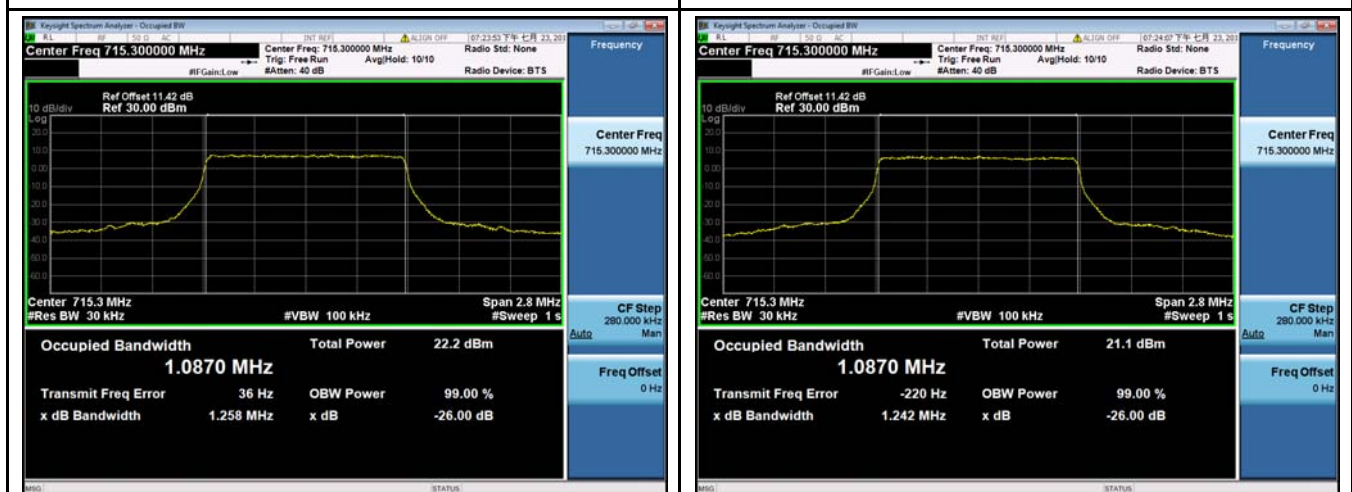
LTE band 12 - Low CH QPSK-1.4

LTE band 12 - Low CH 16QAM-1.4



LTE band 12 - Middle CH QPSK-1.4

LTE band 12 - Middle CH 16QAM-1.4



LTE band 12 - High CH QPSK-1.4

LTE band 12 - High CH 16QAM-1.4

