TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 22** **47 CFR FCC Part 24** **47 CFR FCC Part 27** **47 CFR FCC Part 2**
Report No.:	RFBICM-WTW-P22110528-6
FCC ID:	S9E-125500
Product:	Rugged Handheld Computer
Brand:	Trimble SPECTRA
Model No.:	125500
Received Date:	2022/12/7
Test Date:	2022/12/21 ~ 2023/7/24
Issued Date:	2023/10/27
Applicant:	Trimble Inc.
Address:	5475 Kellenburger Road, Dayton, Ohio, 45424
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location (1):	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN
FCC Registration / Designation Number:	788550 / TW0003
Test Location (2):	No. 70, Wenming Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)
FCC Registration / Designation Number:	281270 / TW0032

Approved by: Jeremy . Lin , **Date:** **2023/10/27**

Jeremy Lin / Project Engineer

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Prepared by : Gina Liu / Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBICM-WTW-P22110528-6	Original release.	2023/10/27

1 Certificate

Product:	Rugged Handheld Computer
Brand:	Trimble SPECTRA
Test Model:	125500
Sample Status:	Engineering sample
Applicant:	Trimble Inc.
Test Date:	2022/12/21 ~ 2023/7/24
Standard:	47 CFR FCC Part 22 47 CFR FCC Part 24 47 CFR FCC Part 27 47 CFR FCC Part 2
Measurement procedure:	ANSI/TIA/EIA-603-E 2016 ANSI C63.26-2015 KDB 971168 D01 Power Meas License Digital Systems v03r01 KDB 971168 D02 Misc Rev Approv License Devices v02r02

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

2 Summary of Test Results

47 CFR FCC Part 22 47 CFR FCC Part 24 47 CFR FCC Part 27 47 CFR FCC Part 2			
Standard / Clause	Test Item	Result	Remark
FCC 47 CFR Part 2.1046 FCC 47 CFR Part 22.913 (a) FCC 47 CFR Part 24.232 (c) FCC 47 CFR Part 27.50(d) FCC 47 CFR Part 27.50(h) FCC 47 CFR Part 27.50(c)	Effective Radiated Power and Equivalent Isotropically Radiated Power	Pass	Meet the requirement of limit.
FCC 47 CFR Part 2.1047	Modulation Characteristics	Pass	Meet the requirement of limit.
FCC 47 CFR Part 22.913 (d) FCC 47 CFR Part 24.232 (d) FCC 47 CFR Part 27.50(d)	Peak to Average Ratio	Pass	Meet the requirement of limit.
FCC 47 CFR Part 2.1049	Bandwidth	Pass	Meet the requirement of limit.
FCC 47 CFR Part 2.1051 FCC 47 CFR Part 22.917 FCC 47 CFR Part 24.238 FCC 47 CFR Part 27.53(h) FCC 47 CFR Part 27.53(m) FCC 47 CFR Part 27.53(g)	Conducted Spurious Emissions	Pass	Meet the requirement of limit.
FCC 47 CFR Part 2.1053 FCC 47 CFR Part 22.917 FCC 47 CFR Part 24.238 FCC 47 CFR Part 27.53(h) FCC 47 CFR Part 27.53(m) FCC 47 CFR Part 27.53(g)	Radiated Spurious Emissions below 1GHz	Pass	Minimum passing margin is -20.19 dB at 33.88 MHz

47 CFR FCC Part 22 47 CFR FCC Part 24 47 CFR FCC Part 27 47 CFR FCC Part 2			
Standard / Clause	Test Item	Result	Remark
FCC 47 CFR Part 2.1053 FCC 47 CFR Part 22.917 FCC 47 CFR Part 24.238 FCC 47 CFR Part 27.53(h) FCC 47 CFR Part 27.53(m) FCC 47 CFR Part 27.53(g)	Radiated Spurious Emissions above 1GHz	Pass	Minimum passing margin is -22.91 dB at 5145.00 MHz
FCC 47 CFR Part 2.1055 FCC 47 CFR Part 22.355 FCC 47 CFR Part 24.235 FCC 47 CFR Part 27.54	Frequency Stability	Pass	Meet the requirement of limit.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Specification	Expanded Uncertainty (k=2) (±)
Radiated Spurious Emissions below 1GHz	9 kHz ~ 30 MHz	3.00 dB
	30 MHz ~ 1 GHz	2.93 dB
Radiated Spurious Emissions above 1GHz	1 GHz ~ 18 GHz	1.76 dB
	18 GHz ~ 40 GHz	1.77 dB

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Rugged Handheld Computer
Brand	Trimble SPECTRA
Test Model	125500
Status of EUT	Engineering sample
Power Supply Rating	Refer to note

Note:

1. EUT Overview

Band / Bandwidth	TX Frequency Range (MHz)	Max. EIRP Power
PCS1900	1850.2-1909.8	1129.796mW (30.53dBm)
WCDMA Band 2	1852.4-1907.6	285.102mW (24.55dBm)

Band / Bandwidth	TX Frequency Range (MHz)	Max. ERP Power
GSM850	824.2-848.8	810.961mW (29.09dBm)
WCDMA Band 5	826.4-846.6	111.173mW (20.46dBm)

Band / Bandwidth	TX Frequency Range (MHz)	Max. EIRP Power			
		QPSK	16QAM	64QAM	256QAM
LTE Band 2 (Channel Bandwidth 1.4MHz)	1850.7-1909.3	331.131mW (25.20dBm)	261.216mW (24.17dBm)	207.491mW (23.17dBm)	104.232mW (20.18dBm)
LTE Band 2 (Channel Bandwidth 3MHz)	1851.5-1908.5	331.894mW (25.21dBm)	263.633mW (24.21dBm)	207.491mW (23.17dBm)	104.954mW (20.21dBm)
LTE Band 2 (Channel Bandwidth 5MHz)	1852.5-1907.5	331.894mW (25.21dBm)	262.422mW (24.19dBm)	208.449mW (23.19dBm)	105.196mW (20.22dBm)
LTE Band 2 (Channel Bandwidth 10MHz)	1855.0-1905.0	330.370mW (25.19dBm)	260.615mW (24.16dBm)	207.491mW (23.17dBm)	104.954mW (20.21dBm)
LTE Band 2 (Channel Bandwidth 15MHz)	1857.5-1902.5	335.738mW (25.26dBm)	264.241mW (24.22dBm)	210.378mW (23.23dBm)	105.439mW (20.23dBm)
LTE Band 2 (Channel Bandwidth 20MHz)	1860.0-1900.0	337.287mW (25.28dBm)	266.073mW (24.25dBm)	211.349mW (23.25dBm)	105.925mW (20.25dBm)
LTE Band 4 (Channel Bandwidth 1.4MHz)	1710.7-1754.3	252.930mW (24.03dBm)	197.242mW (22.95dBm)	159.588mW (22.03dBm)	80.168mW (19.04dBm)
LTE Band 4 (Channel Bandwidth 3MHz)	1711.5-1753.5	251.768mW (24.01dBm)	199.986mW (23.01dBm)	158.125mW (21.99dBm)	79.068mW (18.98dBm)
LTE Band 4 (Channel Bandwidth 5MHz)	1712.5-1752.5	250.035mW (23.98dBm)	200.447mW (23.02dBm)	157.036mW (21.96dBm)	79.799mW (19.02dBm)
LTE Band 4 (Channel Bandwidth 10MHz)	1715.0-1750.0	254.683mW (24.06dBm)	199.067mW (22.99dBm)	155.239mW (21.91dBm)	79.616mW (19.01dBm)
LTE Band 4 (Channel Bandwidth 15MHz)	1717.5-1747.5	249.459mW (23.97dBm)	200.447mW (23.02dBm)	159.221mW (22.02dBm)	79.068mW (18.98dBm)
LTE Band 4 (Channel Bandwidth 20MHz)	1720.0-1745.0	255.270mW (24.07dBm)	203.236mW (23.08dBm)	161.808mW (22.09dBm)	80.538mW (19.06dBm)

Band / Bandwidth	TX Frequency Range (MHz)	Max. EIRP Power			
		QPSK	16QAM	64QAM	256QAM
LTE Band 7 (Channel Bandwidth 5MHz)	2502.5-2567.5	272.270mW (24.35dBm)	217.771mW (23.38dBm)	174.985mW (22.43dBm)	88.920mW (19.49dBm)
LTE Band 7 (Channel Bandwidth 10MHz)	2505.0-2565.0	270.396mW (24.32dBm)	218.776mW (23.40dBm)	175.388mW (22.44dBm)	89.950mW (19.54dBm)
LTE Band 7 (Channel Bandwidth 15MHz)	2507.5-2562.5	278.612mW (24.45dBm)	217.771mW (23.38dBm)	179.061mW (22.53dBm)	90.573mW (19.57dBm)
LTE Band 7 (Channel Bandwidth 20MHz)	2510.0-2560.0	281.838mW (24.50dBm)	221.820mW (23.46dBm)	179.061mW (22.53dBm)	90.573mW (19.57dBm)
LTE Band 38 (Channel Bandwidth 5MHz)	2572.5-2617.5	248.313mW (23.95dBm)	197.697mW (22.96dBm)	159.588mW (22.03dBm)	79.799mW (19.02dBm)
LTE Band 38 (Channel Bandwidth 10MHz)	2575.0-2615.0	248.886mW (23.96dBm)	198.609mW (22.98dBm)	157.398mW (21.97dBm)	80.353mW (19.05dBm)
LTE Band 38 (Channel Bandwidth 15MHz)	2577.5-2612.5	254.097mW (24.05dBm)	200.909mW (23.03dBm)	158.489mW (22.00dBm)	79.983mW (19.03dBm)
LTE Band 38 (Channel Bandwidth 20MHz)	2580.0-2610.0	255.859mW (24.08dBm)	201.837mW (23.05dBm)	161.065mW (22.07dBm)	80.538mW (19.06dBm)
LTE Band 41 (Channel Bandwidth 5MHz)	2498.5-2687.5	281.838mW (24.50dBm)	223.357mW (23.49dBm)	177.419mW (22.49dBm)	90.157mW (19.55dBm)
LTE Band 41 (Channel Bandwidth 10MHz)	2501.0-2685.0	279.254mW (24.46dBm)	222.331mW (23.47dBm)	175.388mW (22.44dBm)	90.365mW (19.56dBm)
LTE Band 41 (Channel Bandwidth 15MHz)	2503.5-2682.5	283.139mW (24.52dBm)	224.388mW (23.51dBm)	177.828mW (22.50dBm)	90.365mW (19.56dBm)
LTE Band 41 (Channel Bandwidth 20MHz)	2506.0-2680.0	285.759mW (24.56dBm)	225.424mW (23.53dBm)	181.552mW (22.59dBm)	89.331mW (19.51dBm)

Band / Bandwidth	TX Frequency Range (MHz)	Max. ERP Power			
		QPSK	16QAM	64QAM	256QAM
LTE Band 5 (Channel Bandwidth 1.4MHz)	824.7-848.3	106.905mW (20.29dBm)	83.368mW (19.21dBm)	68.391mW (18.35dBm)	34.754mW (15.41dBm)
LTE Band 5 (Channel Bandwidth 3MHz)	825.5-847.5	108.893mW (20.37dBm)	84.723mW (19.28dBm)	67.608mW (18.30dBm)	34.514mW (15.38dBm)
LTE Band 5 (Channel Bandwidth 5MHz)	826.5-846.5	108.643mW (20.36dBm)	87.096mW (19.40dBm)	68.707mW (18.37dBm)	34.594mW (15.39dBm)
LTE Band 5 (Channel Bandwidth 10MHz)	829.0-844.0	109.648mW (20.40dBm)	87.096mW (19.40dBm)	69.183mW (18.40dBm)	34.834mW (15.42dBm)
LTE Band 12 (Channel Bandwidth 1.4MHz)	699.7-715.3	132.434mW (21.22dBm)	102.329mW (20.10dBm)	82.224mW (19.15dBm)	41.305mW (16.16dBm)
LTE Band 12 (Channel Bandwidth 3MHz)	700.5-714.5	128.529mW (21.09dBm)	102.565mW (20.11dBm)	82.985mW (19.19dBm)	41.687mW (16.20dBm)
LTE Band 12 (Channel Bandwidth 5MHz)	701.5-713.5	132.434mW (21.22dBm)	103.753mW (20.16dBm)	83.560mW (19.22dBm)	41.591mW (16.19dBm)
LTE Band 12 (Channel Bandwidth 10MHz)	704.0-711.0	133.352mW (21.25dBm)	105.196mW (20.22dBm)	83.560mW (19.22dBm)	41.783mW (16.21dBm)
LTE Band 17 (Channel Bandwidth 5MHz)	706.5-713.5	129.122mW (21.11dBm)	101.391mW (20.06dBm)	81.096mW (19.09dBm)	40.926mW (16.12dBm)
LTE Band 17 (Channel Bandwidth 10MHz)	709.0-711.0	130.017mW (21.14dBm)	103.039mW (20.13dBm)	81.470mW (19.11dBm)	41.305mW (16.16dBm)
LTE Band 71 (Channel Bandwidth 5MHz)	665.5-695.5	103.276mW (20.14dBm)	85.310mW (19.31dBm)	66.222mW (18.21dBm)	34.198mW (15.34dBm)
LTE Band 71 (Channel Bandwidth 10MHz)	668.0-693.0	102.565mW (20.11dBm)	85.507mW (19.32dBm)	66.527mW (18.23dBm)	34.277mW (15.35dBm)
LTE Band 71 (Channel Bandwidth 15MHz)	670.5-690.5	103.039mW (20.13dBm)	85.310mW (19.31dBm)	66.069mW (18.20dBm)	33.806mW (15.29dBm)
LTE Band 71 (Channel Bandwidth 20MHz)	673.0-688.0	108.643mW (20.36dBm)	86.497mW (19.37dBm)	67.298mW (18.28dBm)	34.514mW (15.38dBm)

Band / Bandwidth	TX Frequency Range (MHz)	Emission Designator
GSM850	824.2-848.8	246KGXW
EDGE850	824.2-848.8	246KG7W
PCS1900	1850.2-1909.8	249KGXW
EDGE1900	1850.2-1909.8	247KG7W
WCDMA Band 2	1852.4-1907.6	4M17F9W
WCDMA Band 5	826.4-846.6	4M16F9W

Band / Bandwidth	TX Frequency Range (MHz)	Emission Designator			
		QPSK	16QAM	64QAM	256QAM
LTE Band 2 (Channel Bandwidth 1.4MHz)	1850.7-1909.3	1M09G7D	1M09D7W	1M09D7W	1M08D7W
LTE Band 2 (Channel Bandwidth 3MHz)	1851.5-1908.5	2M71G7D	2M70D7W	2M70D7W	2M70D7W
LTE Band 2 (Channel Bandwidth 5MHz)	1852.5-1907.5	4M50G7D	4M50D7W	4M50D7W	4M49D7W
LTE Band 2 (Channel Bandwidth 10MHz)	1855.0-1905.0	8M99G7D	8M99D7W	8M99D7W	8M98D7W
LTE Band 2 (Channel Bandwidth 15MHz)	1857.5-1902.5	13M5G7D	13M5D7W	13M5D7W	13M5D7W
LTE Band 2 (Channel Bandwidth 20MHz)	1860.0-1900.0	18M0G7D	18M0D7W	18M0D7W	18M0D7W
LTE Band 4 (Channel Bandwidth 1.4MHz)	1710.7-1754.3	1M09G7D	1M09D7W	1M09D7W	1M09D7W
LTE Band 4 (Channel Bandwidth 3MHz)	1711.5-1753.5	2M70G7D	2M70D7W	2M70D7W	2M70D7W
LTE Band 4 (Channel Bandwidth 5MHz)	1712.5-1752.5	4M50G7D	4M49D7W	4M50D7W	4M49D7W
LTE Band 4 (Channel Bandwidth 10MHz)	1715.0-1750.0	8M98G7D	8M98D7W	8M98D7W	9M00D7W
LTE Band 4 (Channel Bandwidth 15MHz)	1717.5-1747.5	13M5G7D	13M5D7W	13M5D7W	13M5D7W
LTE Band 4 (Channel Bandwidth 20MHz)	1720.0-1745.0	18M0G7D	18M0D7W	18M0D7W	18M0D7W
LTE Band 5 (Channel Bandwidth 1.4MHz)	824.7-848.3	1M09G7D	1M09D7W	1M09D7W	1M08D7W
LTE Band 5 (Channel Bandwidth 3MHz)	825.5-847.5	2M70G7D	2M70D7W	2M69D7W	2M70D7W
LTE Band 5 (Channel Bandwidth 5MHz)	826.5-846.5	4M50G7D	4M49D7W	4M50D7W	4M49D7W
LTE Band 5 (Channel Bandwidth 10MHz)	829.0-844.0	8M96G7D	8M97D7W	8M97D7W	8M97D7W
LTE Band 7 (Channel Bandwidth 5MHz)	2502.5-2567.5	4M50G7D	4M49D7W	4M50D7W	4M49D7W
LTE Band 7 (Channel Bandwidth 10MHz)	2505.0-2565.0	8M98G7D	8M98D7W	8M98D7W	8M98D7W
LTE Band 7 (Channel Bandwidth 15MHz)	2507.5-2562.5	13M5G7D	13M5D7W	13M5D7W	13M5D7W
LTE Band 7 (Channel Bandwidth 20MHz)	2510.0-2560.0	18M0G7D	18M0D7W	18M0D7W	18M0D7W
LTE Band 12 (Channel Bandwidth 1.4MHz)	699.7-715.3	1M09G7D	1M09D7W	1M09D7W	1M08D7W
LTE Band 12 (Channel Bandwidth 3MHz)	700.5-714.5	2M70G7D	2M70D7W	2M70D7W	2M70D7W
LTE Band 12 (Channel Bandwidth 5MHz)	701.5-713.5	4M50G7D	4M49D7W	4M50D7W	4M49D7W
LTE Band 12 (Channel Bandwidth 10MHz)	704.0-711.0	8M97G7D	8M97D7W	8M98D7W	8M97D7W
LTE Band 17 (Channel Bandwidth 5MHz)	706.5-713.5	4M49G7D	4M50D7W	4M50D7W	4M50D7W
LTE Band 17 (Channel Bandwidth 10MHz)	709.0-711.0	8M97G7D	8M97D7W	8M97D7W	8M99D7W
LTE Band 38 (Channel Bandwidth 5MHz)	2572.5-2617.5	4M50G7D	4M49D7W	4M50D7W	4M48D7W
LTE Band 38 (Channel Bandwidth 10MHz)	2575.0-2615.0	8M97G7D	8M97D7W	8M97D7W	8M97D7W
LTE Band 38 (Channel Bandwidth 15MHz)	2577.5-2612.5	13M5G7D	13M5D7W	13M4D7W	13M4D7W
LTE Band 38 (Channel Bandwidth 20MHz)	2580.0-2610.0	17M9G7D	17M9D7W	17M9D7W	17M9D7W

Band / Bandwidth	TX Frequency Range (MHz)	Emission Designator			
		QPSK	16QAM	64QAM	256QAM
LTE Band 41 (Channel Bandwidth 5MHz)	2498.5-2687.5	4M50G7D	4M49D7W	4M50D7W	4M49D7W
LTE Band 41 (Channel Bandwidth 10MHz)	2501.0-2685.0	8M98G7D	8M98D7W	8M97D7W	8M97D7W
LTE Band 41 (Channel Bandwidth 15MHz)	2503.5-2682.5	13M5G7D	13M5D7W	13M5D7W	13M4D7W
LTE Band 41 (Channel Bandwidth 20MHz)	2506.0-2680.0	17M9G7D	17M9D7W	18M0D7W	17M9D7W
LTE Band 71 (Channel Bandwidth 5MHz)	665.5-695.5	4M50G7D	4M50D7W	4M50D7W	4M50D7W
LTE Band 71 (Channel Bandwidth 10MHz)	668.0-693.0	8M98G7D	8M97D7W	8M98D7W	8M99D7W
LTE Band 71 (Channel Bandwidth 15MHz)	670.5-690.5	13M5G7D	13M5D7W	13M5D7W	13M5D7W
LTE Band 71 (Channel Bandwidth 20MHz)	673.0-688.0	17M9G7D	18M0D7W	17M9D7W	18M0D7W

2. The EUT uses following accessories.

Battery		
Brand	Model	Specification
N/A	1400-900069G	Manufacturer : LIFUN TECHNOLOGY CO.,LTD. Power Rating : 3.85 Vdc 4950mAh
USB Cable		
Brand	Model	Specification
Trimble	121920	Signal Line : 2 meters, shielded cable. w/o ferrite core

3. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna Type		LDS	
Antenna Connector		shrarpel	
Item	Antenna No.	Band	Gain (dBi)
LTE	ANT0	Band 2	0.3
		Band 4	-0.79
		Band 5	-2.2
		Band 7	0.04
		Band 12	-1.57
		Band 17	-1.57
		Band 38	-0.41
		Band 41	0.04
		Band 71	-2.45
WCDMA	ANT0	Band 2	0.3
		Band 5	-2.2
GSM	ANT0	850	-2.2
		1900	0.3

* Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

3.3 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	EUT can be used in the following ways: X-axis/ Y-axis/ Z-axis. Pre-scan these ways and find the worst case as a representative test condition.
Worst Case:	X-axis/ Y-axis/ Z-axis Worst Condition: Y-axis

For GSM850

Test Item	Tested Channel	Mode
ERP	128 (824.20 MHz) 189 (836.40 MHz) 251 (848.80 MHz)	GSM, EDGE
Modulation Characteristics	189 (836.40 MHz)	GSM, EDGE
Frequency Stability	128 (824.20 MHz) 251 (848.80 MHz)	GSM, EDGE
Occupied Bandwidth	128 (824.20 MHz) 189 (836.40 MHz) 251 (848.80 MHz)	GSM, EDGE
Peak to Average Ratio	128 (824.20 MHz) 189 (836.40 MHz) 251 (848.80 MHz)	GSM, EDGE
Conducted Emission	128 (824.20 MHz) 189 (836.40 MHz) 251 (848.80 MHz)	GSM, EDGE
RE Below 1GHz	189 (836.40 MHz)	GSM, EDGE
RE Above 1GHz	128 (824.20 MHz) 189 (836.40 MHz) 251 (848.80 MHz)	GSM, EDGE

For PCS1900

Test Item	Tested Channel	Mode
EIRP	512 (1850.20 MHz) 661 (1880.00 MHz) 810 (1909.80 MHz)	GSM, EDGE
Modulation Characteristics	661 (1880.00 MHz)	GSM, EDGE
Frequency Stability	512 (1850.20 MHz) 810 (1909.80 MHz)	GSM, EDGE
Occupied Bandwidth	512 (1850.20 MHz) 661 (1880.00 MHz) 810 (1909.80 MHz)	GSM, EDGE
Peak to Average Ratio	512 (1850.20 MHz) 661 (1880.00 MHz) 810 (1909.80 MHz)	GSM, EDGE
Conducted Emission	512 (1850.20 MHz) 661 (1880.00 MHz) 810 (1909.80 MHz)	GSM, EDGE
RE Below 1GHz	810 (1909.80 MHz)	GSM, EDGE
RE Above 1GHz	512 (1850.20 MHz) 661 (1880.00 MHz) 810 (1909.80 MHz)	GSM, EDGE

For WCDMA Band 2

Test Item	Tested Channel	Mode
EIRP	9262 (1852.40 MHz) 9400 (1880.00 MHz) 9538 (1907.60 MHz)	WCDMA HSDPA HSUPA
Modulation Characteristics	9400 (1880.00 MHz)	WCDMA HSDPA HSUPA
Frequency Stability	9262 (1852.40 MHz) 9538 (1907.60 MHz)	WCDMA
Occupied Bandwidth	9262 (1852.40 MHz) 9400 (1880.00 MHz) 9538 (1907.60 MHz)	WCDMA HSDPA HSUPA
Peak to Average Ratio	9262 (1852.40 MHz) 9400 (1880.00 MHz) 9538 (1907.60 MHz)	WCDMA HSDPA HSUPA
Conducted Emission	9262 (1852.40 MHz) 9400 (1880.00 MHz) 9538 (1907.60 MHz)	WCDMA HSDPA HSUPA
RE Below 1GHz	9538 (1907.60 MHz)	WCDMA
RE Above 1GHz	9262 (1852.40 MHz) 9400 (1880.00 MHz) 9538 (1907.60 MHz)	WCDMA

For WCDMA Band 5

Test Item	Tested Channel	Mode
ERP	4132 (826.40 MHz) 4182 (836.40 MHz) 4233 (846.60 MHz)	WCDMA HSDPA HSUPA
Modulation Characteristics	4182 (836.40 MHz)	WCDMA HSDPA HSUPA
Frequency Stability	4132 (826.40 MHz) 4233 (846.60 MHz)	WCDMA
Occupied Bandwidth	4132 (826.40 MHz) 4182 (836.40 MHz) 4233 (846.60 MHz)	WCDMA HSDPA HSUPA
Peak to Average Ratio	4132 (826.40 MHz) 4182 (836.40 MHz) 4233 (846.60 MHz)	WCDMA HSDPA HSUPA
Conducted Emission	4132 (826.40 MHz) 4182 (836.40 MHz) 4233 (846.60 MHz)	WCDMA HSDPA HSUPA
RE Below 1GHz	4182 (836.40 MHz)	WCDMA
RE Above 1GHz	4132 (826.40 MHz) 4182 (836.40 MHz) 4233 (846.60 MHz)	WCDMA

For LTE Band 2

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
EIRP	18607 (1850.70 MHz) 18900 (1880.00 MHz) 19193 (1909.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	18615 (1851.50 MHz) 18900 (1880.00 MHz) 19185 (1908.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	18625 (1852.50 MHz) 18900 (1880.00 MHz) 19175 (1907.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	18650 (1855.00 MHz) 18900 (1880.00 MHz) 19150 (1905.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	18675 (1857.50 MHz) 18900 (1880.00 MHz) 19125 (1902.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	18700 (1860.00 MHz) 18900 (1880.00 MHz) 19100 (1900.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	18900 (1880.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Frequency Stability	18607 (1850.70 MHz) 19193 (1909.30 MHz)	1.4 MHz	QPSK	Full RB
	18615 (1851.50 MHz) 19185 (1908.50 MHz)	3 MHz	QPSK	Full RB
	18625 (1852.50 MHz) 19175 (1907.50 MHz)	5 MHz	QPSK	Full RB
	18650 (1855.00 MHz) 19150 (1905.00 MHz)	10 MHz	QPSK	Full RB
	18675 (1857.50 MHz) 19125 (1902.50 MHz)	15 MHz	QPSK	Full RB
	18700 (1860.00 MHz) 19100 (1900.00 MHz)	20 MHz	QPSK	Full RB

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Occupied Bandwidth	18607 (1850.70 MHz) 18900 (1880.00 MHz) 19193 (1909.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	18615 (1851.50 MHz) 18900 (1880.00 MHz) 19185 (1908.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	18625 (1852.50 MHz) 18900 (1880.00 MHz) 19175 (1907.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	18650 (1855.00 MHz) 18900 (1880.00 MHz) 19150 (1905.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	18675 (1857.50 MHz) 18900 (1880.00 MHz) 19125 (1902.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	18700 (1860.00 MHz) 18900 (1880.00 MHz) 19100 (1900.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	18607 (1850.70 MHz) 18900 (1880.00 MHz) 19193 (1909.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	18615 (1851.50 MHz) 18900 (1880.00 MHz) 19185 (1908.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	18625 (1852.50 MHz) 18900 (1880.00 MHz) 19175 (1907.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	18650 (1855.00 MHz) 18900 (1880.00 MHz) 19150 (1905.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	18675 (1857.50 MHz) 18900 (1880.00 MHz) 19125 (1902.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	18700 (1860.00 MHz) 18900 (1880.00 MHz) 19100 (1900.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Emission	18607 (1850.70 MHz) 18900 (1880.00 MHz) 19193 (1909.30 MHz)	1.4 MHz	QPSK	1 RB Full RB
	18615 (1851.50 MHz) 18900 (1880.00 MHz) 19185 (1908.50 MHz)	3 MHz	QPSK	1 RB Full RB
	18625 (1852.50 MHz) 18900 (1880.00 MHz) 19175 (1907.50 MHz)	5 MHz	QPSK	1 RB Full RB
	18650 (1855.00 MHz) 18900 (1880.00 MHz) 19150 (1905.00 MHz)	10 MHz	QPSK	1 RB Full RB
	18675 (1857.50 MHz) 18900 (1880.00 MHz) 19125 (1902.50 MHz)	15 MHz	QPSK	1 RB Full RB
	18700 (1860.00 MHz) 18900 (1880.00 MHz) 19100 (1900.00 MHz)	20 MHz	QPSK	1 RB Full RB
RE Below 1GHz	19193 (1909.30 MHz)	1.4 MHz	QPSK	1 RB
RE Above 1GHz	18607 (1850.70 MHz) 18900 (1880.00 MHz) 19193 (1909.30 MHz)	1.4 MHz	QPSK	1 RB
	18625 (1852.50 MHz) 18900 (1880.00 MHz) 19175 (1907.50 MHz)	5 MHz	QPSK	1 RB
	18700 (1860.00 MHz) 18900 (1880.00 MHz) 19100 (1900.00 MHz)	20 MHz	QPSK	1 RB

For LTE Band 4

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
EIRP	19957 (1710.70 MHz) 20175 (1732.50 MHz) 20393 (1754.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	19965 (1711.50 MHz) 20175 (1732.50 MHz) 20385 (1753.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	19975 (1712.50 MHz) 20175 (1732.50 MHz) 20375 (1752.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	20000 (1715.00 MHz) 20175 (1732.50 MHz) 20350 (1750.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	20025 (1717.50 MHz) 20175 (1732.50 MHz) 20325 (1747.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	20050 (1720.00 MHz) 20175 (1732.50 MHz) 20300 (1745.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	20175 (1732.50 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Frequency Stability	19957 (1710.70 MHz) 20393 (1754.30 MHz)	1.4 MHz	QPSK	Full RB
	19965 (1711.50 MHz) 20385 (1753.50 MHz)	3 MHz	QPSK	Full RB
	19975 (1712.50 MHz) 20375 (1752.50 MHz)	5 MHz	QPSK	Full RB
	20000 (1715.00 MHz) 20350 (1750.00 MHz)	10 MHz	QPSK	Full RB
	20025 (1717.50 MHz) 20325 (1747.50 MHz)	15 MHz	QPSK	Full RB
	20050 (1720.00 MHz) 20300 (1745.00 MHz)	20 MHz	QPSK	Full RB
Occupied Bandwidth	19957 (1710.70 MHz) 20175 (1732.50 MHz) 20393 (1754.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	19965 (1711.50 MHz) 20175 (1732.50 MHz) 20385 (1753.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	19975 (1712.50 MHz) 20175 (1732.50 MHz) 20375 (1752.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	20000 (1715.00 MHz) 20175 (1732.50 MHz) 20350 (1750.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	20025 (1717.50 MHz) 20175 (1732.50 MHz) 20325 (1747.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	20050 (1720.00 MHz) 20175 (1732.50 MHz) 20300 (1745.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Peak to Average Ratio	19957 (1710.70 MHz) 20175 (1732.50 MHz) 20393 (1754.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	19965 (1711.50 MHz) 20175 (1732.50 MHz) 20385 (1753.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	19975 (1712.50 MHz) 20175 (1732.50 MHz) 20375 (1752.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	20000 (1715.00 MHz) 20175 (1732.50 MHz) 20350 (1750.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	20025 (1717.50 MHz) 20175 (1732.50 MHz) 20325 (1747.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	20050 (1720.00 MHz) 20175 (1732.50 MHz) 20300 (1745.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
Conducted Emission	19957 (1710.70 MHz) 20175 (1732.50 MHz) 20393 (1754.30 MHz)	1.4 MHz	QPSK	1 RB Full RB
	19965 (1711.50 MHz) 20175 (1732.50 MHz) 20385 (1753.50 MHz)	3 MHz	QPSK	1 RB Full RB
	19975 (1712.50 MHz) 20175 (1732.50 MHz) 20375 (1752.50 MHz)	5 MHz	QPSK	1 RB Full RB
	20000 (1715.00 MHz) 20175 (1732.50 MHz) 20350 (1750.00 MHz)	10 MHz	QPSK	1 RB Full RB
	20025 (1717.50 MHz) 20175 (1732.50 MHz) 20325 (1747.50 MHz)	15 MHz	QPSK	1 RB Full RB
	20050 (1720.00 MHz) 20175 (1732.50 MHz) 20300 (1745.00 MHz)	20 MHz	QPSK	1 RB Full RB
RE Below 1GHz	20050 (1720.00 MHz)	20 MHz	QPSK	1 RB
RE Above 1GHz	19957 (1710.70 MHz) 20175 (1732.50 MHz) 20393 (1754.30 MHz)	1.4 MHz	QPSK	1 RB
	19975 (1712.50 MHz) 20175 (1732.50 MHz) 20375 (1752.50 MHz)	5 MHz	QPSK	1 RB
	20050 (1720.00 MHz) 20175 (1732.50 MHz) 20300 (1745.00 MHz)	20 MHz	QPSK	1 RB

For LTE Band 5

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
ERP	20407 (824.70 MHz) 20525 (836.50 MHz) 20643 (848.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	20415 (825.50 MHz) 20525 (836.50 MHz) 20635 (847.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	20425 (826.50 MHz) 20525 (836.50 MHz) 20625 (846.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	20450 (829.00 MHz) 20525 (836.50 MHz) 20600 (844.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	20525 (836.50 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Frequency Stability	20407 (824.70 MHz) 20643 (848.30 MHz)	1.4 MHz	QPSK	Full RB
	20415 (825.50 MHz) 20635 (847.50 MHz)	3 MHz	QPSK	Full RB
	20425 (826.50 MHz) 20625 (846.50 MHz)	5 MHz	QPSK	Full RB
	20450 (829.00 MHz) 20600 (844.00 MHz)	10 MHz	QPSK	Full RB
Occupied Bandwidth	20407 (824.70 MHz) 20525 (836.50 MHz) 20643 (848.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	20415 (825.50 MHz) 20525 (836.50 MHz) 20635 (847.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	20425 (826.50 MHz) 20525 (836.50 MHz) 20625 (846.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	20450 (829.00 MHz) 20525 (836.50 MHz) 20600 (844.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	20407 (824.70 MHz) 20525 (836.50 MHz) 20643 (848.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	20415 (825.50 MHz) 20525 (836.50 MHz) 20635 (847.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	20425 (826.50 MHz) 20525 (836.50 MHz) 20625 (846.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	20450 (829.00 MHz) 20525 (836.50 MHz) 20600 (844.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Emission	20407 (824.70 MHz) 20525 (836.50 MHz) 20643 (848.30 MHz)	1.4 MHz	QPSK	1 RB Full RB
	20415 (825.50 MHz) 20525 (836.50 MHz) 20635 (847.50 MHz)	3 MHz	QPSK	1 RB Full RB
	20425 (826.50 MHz) 20525 (836.50 MHz) 20625 (846.50 MHz)	5 MHz	QPSK	1 RB Full RB
	20450 (829.00 MHz) 20525 (836.50 MHz) 20600 (844.00 MHz)	10 MHz	QPSK	1 RB Full RB
RE Below 1GHz	20625 (846.50 MHz)	5 MHz	QPSK	1 RB
RE Above 1GHz	20407 (824.70 MHz) 20525 (836.50 MHz) 20643 (848.30 MHz)	1.4 MHz	QPSK	1 RB
	20425 (826.50 MHz) 20525 (836.50 MHz) 20625 (846.50 MHz)	5 MHz	QPSK	1 RB
	20450 (829.00 MHz) 20525 (836.50 MHz) 20600 (844.00 MHz)	10 MHz	QPSK	1 RB

For LTE Band 7

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
EIRP	20775 (2502.50 MHz) 21100 (2535.00 MHz) 21425 (2567.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	20800 (2505.00 MHz) 21100 (2535.00 MHz) 21400 (2565.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	20825 (2507.50 MHz) 21100 (2535.00 MHz) 21375 (2562.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	20850 (2510.00 MHz) 21100 (2535.00 MHz) 21350 (2560.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	21100 (2535.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Frequency Stability	20775 (2502.50 MHz) 21425 (2567.50 MHz)	5 MHz	QPSK	Full RB
	20800 (2505.00 MHz) 21400 (2565.00 MHz)	10 MHz	QPSK	Full RB
	20825 (2507.50 MHz) 21375 (2562.50 MHz)	15 MHz	QPSK	Full RB
	20850 (2510.00 MHz) 21350 (2560.00 MHz)	20 MHz	QPSK	Full RB
Occupied Bandwidth	20775 (2502.50 MHz) 21100 (2535.00 MHz) 21425 (2567.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	20800 (2505.00 MHz) 21100 (2535.00 MHz) 21400 (2565.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	20825 (2507.50 MHz) 21100 (2535.00 MHz) 21375 (2562.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	20850 (2510.00 MHz) 21100 (2535.00 MHz) 21350 (2560.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	20775 (2502.50 MHz) 21100 (2535.00 MHz) 21425 (2567.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	20800 (2505.00 MHz) 21100 (2535.00 MHz) 21400 (2565.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	20825 (2507.50 MHz) 21100 (2535.00 MHz) 21375 (2562.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	20850 (2510.00 MHz) 21100 (2535.00 MHz) 21350 (2560.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Emission	20775 (2502.50 MHz) 21100 (2535.00 MHz) 21425 (2567.50 MHz)	5 MHz	QPSK	1 RB Full RB
	20800 (2505.00 MHz) 21100 (2535.00 MHz) 21400 (2565.00 MHz)	10 MHz	QPSK	1 RB Full RB
	20825 (2507.50 MHz) 21100 (2535.00 MHz) 21375 (2562.50 MHz)	15 MHz	QPSK	1 RB Full RB
	20850 (2510.00 MHz) 21100 (2535.00 MHz) 21350 (2560.00 MHz)	20 MHz	QPSK	1 RB Full RB
RE Below 1GHz	21100 (2535.00 MHz)	5 MHz	QPSK	1 RB
RE Above 1GHz	20775 (2502.50 MHz) 21100 (2535.00 MHz) 21425 (2567.50 MHz)	5 MHz	QPSK	1 RB
	20850 (2510.00 MHz) 21100 (2535.00 MHz) 21350 (2560.00 MHz)	20 MHz	QPSK	1 RB

For LTE Band 12

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
ERP	23017 (699.70 MHz) 23095 (707.50 MHz) 23173 (715.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	23025 (700.50 MHz) 23095 (707.50 MHz) 23165 (714.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	23035 (701.50 MHz) 23095 (707.50 MHz) 23155 (713.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	23060 (704.00 MHz) 23095 (707.50 MHz) 23130 (711.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	23095 (707.50 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Frequency Stability	23017 (699.70 MHz) 23173 (715.30 MHz)	1.4 MHz	QPSK	Full RB
	23025 (700.50 MHz) 23165 (714.50 MHz)	3 MHz	QPSK	Full RB
	23035 (701.50 MHz) 23155 (713.50 MHz)	5 MHz	QPSK	Full RB
	23060 (704.00 MHz) 23130 (711.00 MHz)	10 MHz	QPSK	Full RB
Occupied Bandwidth	23017 (699.70 MHz) 23095 (707.50 MHz) 23173 (715.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	23025 (700.50 MHz) 23095 (707.50 MHz) 23165 (714.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	23035 (701.50 MHz) 23095 (707.50 MHz) 23155 (713.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	23060 (704.00 MHz) 23095 (707.50 MHz) 23130 (711.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	23017 (699.70 MHz) 23095 (707.50 MHz) 23173 (715.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	23025 (700.50 MHz) 23095 (707.50 MHz) 23165 (714.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	23035 (701.50 MHz) 23095 (707.50 MHz) 23155 (713.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	23060 (704.00 MHz) 23095 (707.50 MHz) 23130 (711.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Emission	23017 (699.70 MHz) 23095 (707.50 MHz) 23173 (715.30 MHz)	1.4 MHz	QPSK	1 RB Full RB
	23025 (700.50 MHz) 23095 (707.50 MHz) 23165 (714.50 MHz)	3 MHz	QPSK	1 RB Full RB
	23035 (701.50 MHz) 23095 (707.50 MHz) 23155 (713.50 MHz)	5 MHz	QPSK	1 RB Full RB
	23060 (704.00 MHz) 23095 (707.50 MHz) 23130 (711.00 MHz)	10 MHz	QPSK	1 RB Full RB
RE Below 1GHz	23035 (701.50 MHz)	5 MHz	QPSK	1 RB
RE Above 1GHz	23017 (699.70 MHz) 23095 (707.50 MHz) 23173 (715.30 MHz)	1.4 MHz	QPSK	1 RB
	23035 (701.50 MHz) 23095 (707.50 MHz) 23155 (713.50 MHz)	5 MHz	QPSK	1 RB
	23060 (704.00 MHz) 23095 (707.50 MHz) 23130 (711.00 MHz)	10 MHz	QPSK	1 RB

For LTE Band 17

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
ERP	23755 (706.50 MHz) 23790 (710.00 MHz) 23825 (713.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	23780 (709.00 MHz) 23790 (710.00 MHz) 23800 (711.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	23790 (710.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Frequency Stability	23755 (706.50 MHz) 23825 (713.50 MHz)	5 MHz	QPSK	Full RB
	23780 (709.00 MHz) 23800 (711.00 MHz)	10 MHz	QPSK	Full RB
Occupied Bandwidth	23755 (706.50 MHz) 23790 (710.00 MHz) 23825 (713.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	23780 (709.00 MHz) 23790 (710.00 MHz) 23800 (711.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	23755 (706.50 MHz) 23790 (710.00 MHz) 23825 (713.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	23780 (709.00 MHz) 23790 (710.00 MHz) 23800 (711.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
Conducted Emission	23755 (706.50 MHz) 23790 (710.00 MHz) 23825 (713.50 MHz)	5 MHz	QPSK	1 RB Full RB
	23780 (709.00 MHz) 23790 (710.00 MHz) 23800 (711.00 MHz)	10 MHz	QPSK	1 RB Full RB
RE Below 1GHz	23790 (710.00 MHz)	10 MHz	QPSK	1 RB
RE Above 1GHz	23755 (706.50 MHz) 23790 (710.00 MHz) 23825 (713.50 MHz)	5 MHz	QPSK	1 RB
	23780 (709.00 MHz) 23790 (710.00 MHz) 23800 (711.00 MHz)	10 MHz	QPSK	1 RB

For LTE Band 38

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
EIRP	37775 (2572.50MHz) 38000 (2595.00MHz) 38225 (2617.50MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	37800 (2575.00MHz) 38000 (2595.00MHz) 38200 (2615.00MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	37825 (2577.50MHz) 38000 (2595.00MHz) 38175 (2612.50MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	37850 (2580.00MHz) 38000 (2595.00MHz) 38150 (2610.00MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	38000 (2595.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Frequency Stability	37775 (2572.50MHz) 38225 (2617.50MHz)	5MHz	QPSK	Full RB
	37800 (2575.00MHz) 38200 (2615.00MHz)	10MHz	QPSK	Full RB
	37825 (2577.50MHz) 38175 (2612.50MHz)	15MHz	QPSK	Full RB
	37850 (2580.00MHz) 38150 (2610.00MHz)	20MHz	QPSK	Full RB
Occupied Bandwidth	37775 (2572.50MHz) 38000 (2595.00MHz) 38225 (2617.50MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	37800 (2575.00MHz) 38000 (2595.00MHz) 38200 (2615.00MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	37825 (2577.50MHz) 38000 (2595.00MHz) 38175 (2612.50MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	37850 (2580.00MHz) 38000 (2595.00MHz) 38150 (2610.00MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	37775 (2572.50MHz) 38000 (2595.00MHz) 38225 (2617.50MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	37800 (2575.00MHz) 38000 (2595.00MHz) 38200 (2615.00MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	37825 (2577.50MHz) 38000 (2595.00MHz) 38175 (2612.50MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	37850 (2580.00MHz) 38000 (2595.00MHz) 38150 (2610.00MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Emission	37775 (2572.50MHz) 38000 (2595.00MHz) 38225 (2617.50MHz)	5MHz	QPSK	1 RB Full RB
	37800 (2575.00MHz) 38000 (2595.00MHz) 38200 (2615.00MHz)	10MHz	QPSK	1 RB Full RB
	37825 (2577.50MHz) 38000 (2595.00MHz) 38175 (2612.50MHz)	15MHz	QPSK	1 RB Full RB
	37850 (2580.00MHz) 38000 (2595.00MHz) 38150 (2610.00MHz)	20MHz	QPSK	1 RB Full RB
Radiated Spurious Emissions below 1GHz	37775 (2572.50MHz)	5MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	37775 (2572.50MHz) 38000 (2595.00MHz) 38225 (2617.50MHz)	5MHz	QPSK	1 RB
	37850 (2580.00MHz) 38000 (2595.00MHz) 38150 (2610.00MHz)	20MHz	QPSK	1 RB

For LTE Band 41

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
EIRP	39675 (2498.50 MHz) 40620 (2593.00 MHz) 41565 (2687.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	39700 (2501.00 MHz) 40620 (2593.00 MHz) 41540 (2685.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	39725 (2503.50 MHz) 40620 (2593.00 MHz) 41515 (2682.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	39750 (2506.00 MHz) 40620 (2593.00 MHz) 41490 (2680.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	40620 (2593.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Frequency Stability	39675 (2498.50 MHz) 41565 (2687.50 MHz)	5 MHz	QPSK	Full RB
	39700 (2501.00 MHz) 41540 (2685.00 MHz)	10 MHz	QPSK	Full RB
	39725 (2503.50 MHz) 41515 (2682.50 MHz)	15 MHz	QPSK	Full RB
	39750 (2506.00 MHz) 41490 (2680.00 MHz)	20 MHz	QPSK	Full RB
Occupied Bandwidth	39675 (2498.50 MHz) 40620 (2593.00 MHz) 41565 (2687.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	39700 (2501.00 MHz) 40620 (2593.00 MHz) 41540 (2685.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	39725 (2503.50 MHz) 40620 (2593.00 MHz) 41515 (2682.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	39750 (2506.00 MHz) 40620 (2593.00 MHz) 41490 (2680.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	39675 (2498.50 MHz) 40620 (2593.00 MHz) 41565 (2687.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	39700 (2501.00 MHz) 40620 (2593.00 MHz) 41540 (2685.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	39725 (2503.50 MHz) 40620 (2593.00 MHz) 41515 (2682.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	39750 (2506.00 MHz) 40620 (2593.00 MHz) 41490 (2680.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Emission	39675 (2498.50 MHz) 40620 (2593.00 MHz) 41565 (2687.50 MHz)	5 MHz	QPSK	1 RB Full RB
	39700 (2501.00 MHz) 40620 (2593.00 MHz) 41540 (2685.00 MHz)	10 MHz	QPSK	1 RB Full RB
	39725 (2503.50 MHz) 40620 (2593.00 MHz) 41515 (2682.50 MHz)	15 MHz	QPSK	1 RB Full RB
	39750 (2506.00 MHz) 40620 (2593.00 MHz) 41490 (2680.00 MHz)	20 MHz	QPSK	1 RB Full RB
RE Below 1GHz	39675 (2498.50 MHz)	5 MHz	QPSK	1 RB
RE Above 1GHz	39675 (2498.50 MHz) 40620 (2593.00 MHz) 41565 (2687.50 MHz)	5 MHz	QPSK	1 RB
	39750 (2506.00 MHz) 40620 (2593.00 MHz) 41490 (2680.00 MHz)	20 MHz	QPSK	1 RB

For LTE Band 71

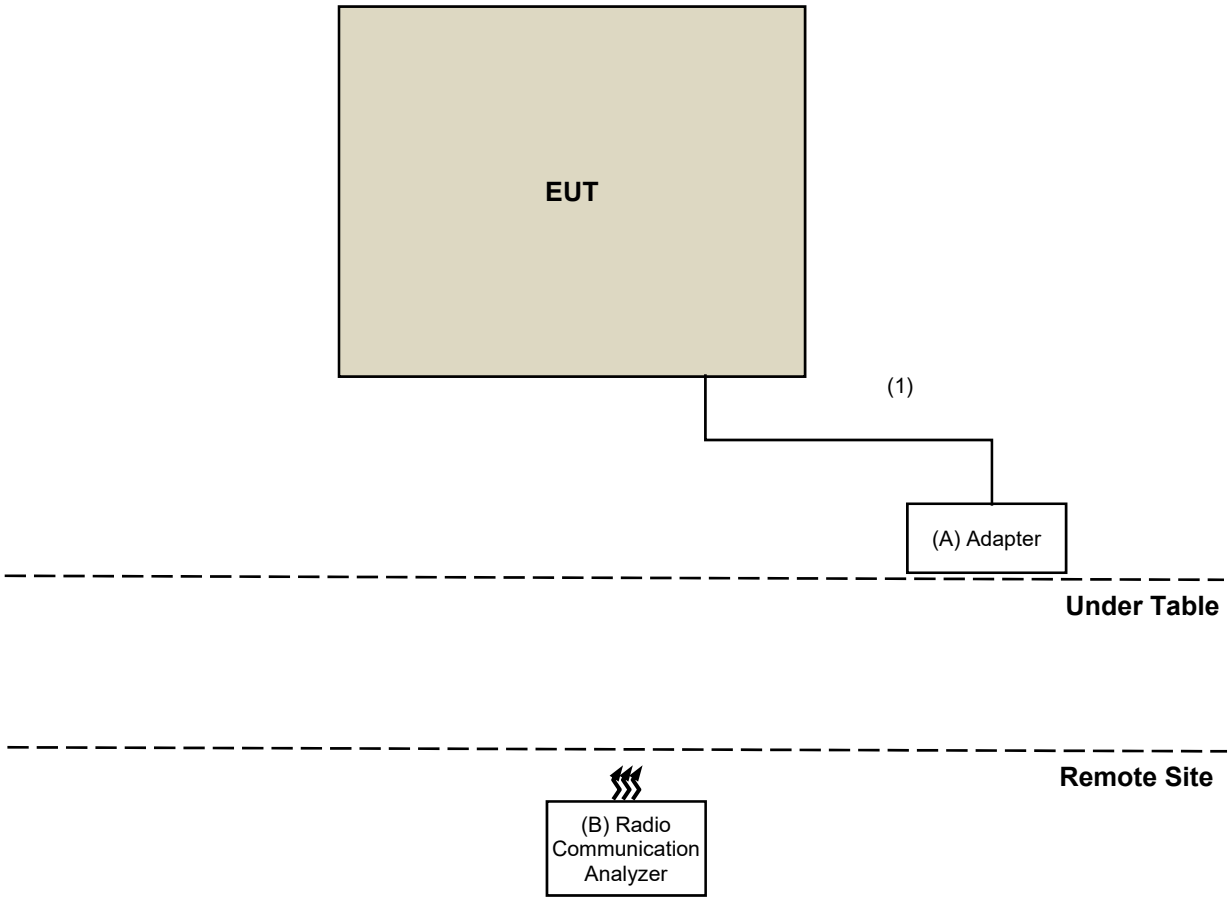
Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
ERP	133147 (665.50 MHz) 133297 (680.50 MHz) 133447 (695.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	133172 (668.00 MHz) 133297 (680.50 MHz) 133422 (693.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	133197 (670.50 MHz) 133297 (680.50 MHz) 133397 (690.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	133222 (673.00 MHz) 133297 (680.50 MHz) 133372 (688.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	133297 (680.50 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Frequency Stability	133147 (665.50 MHz) 133447 (695.50 MHz)	5 MHz	QPSK	Full RB
	133172 (668.00 MHz) 133422 (693.00 MHz)	10 MHz	QPSK	Full RB
	133197 (670.50 MHz) 133397 (690.50 MHz)	15 MHz	QPSK	Full RB
	133222 (673.00 MHz) 133372 (688.00 MHz)	20 MHz	QPSK	Full RB
Occupied Bandwidth	133147 (665.50 MHz) 133297 (680.50 MHz) 133447 (695.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	133172 (668.00 MHz) 133297 (680.50 MHz) 133422 (693.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	133197 (670.50 MHz) 133297 (680.50 MHz) 133397 (690.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	133222 (673.00 MHz) 133297 (680.50 MHz) 133372 (688.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	133147 (665.50 MHz) 133297 (680.50 MHz) 133447 (695.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	133172 (668.00 MHz) 133297 (680.50 MHz) 133422 (693.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	133197 (670.50 MHz) 133297 (680.50 MHz) 133397 (690.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	133222 (673.00 MHz) 133297 (680.50 MHz) 133372 (688.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Emission	133147 (665.50 MHz) 133297 (680.50 MHz) 133447 (695.50 MHz)	5 MHz	QPSK	1 RB Full RB
	133172 (668.00 MHz) 133297 (680.50 MHz) 133422 (693.00 MHz)	10 MHz	QPSK	1 RB Full RB
	133197 (670.50 MHz) 133297 (680.50 MHz) 133397 (690.50 MHz)	15 MHz	QPSK	1 RB Full RB
	133222 (673.00 MHz) 133297 (680.50 MHz) 133372 (688.00 MHz)	20 MHz	QPSK	1 RB Full RB
RE Below 1GHz	133222 (673.00 MHz)	20 MHz	QPSK	1 RB
RE Above 1GHz	133147 (665.50 MHz) 133297 (680.50 MHz) 133447 (695.50 MHz)	5 MHz	QPSK	1 RB
	133222 (673.00 MHz) 133297 (680.50 MHz) 133372 (688.00 MHz)	20 MHz	QPSK	1 RB

3.4 Test Program Used and Operation Descriptions

There is no need to controlling software during the test, and the EUT can be paired with the Radio Communication Analyzer to test the connection when it is powered on.

3.5 Connection Diagram of EUT and Peripheral Devices



3.6 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Adapter	FULLPOWER	TYPE-C45IC	N/A	N/A	Supplied by applicant
B	Radio Communication Analyzer	Anritsu	MT8821C	6201462755	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	Type-C Cable	1	2	Yes	0	Supplied by applicant

4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
N9030B - PXA Signal Analyzer KEYSIGHT	N9030B	MY57140488	2023/3/6	2024/3/5
Radio Communication Analyzer Anritsu	MT8821C	6201462755	2023/3/3	2024/3/2
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2023/6/13 ~ 2023/7/24

4.2 Modulation Characteristics

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
N9030B - PXA Signal Analyzer KEYSIGHT	N9030B	MY57140938	2022/3/15	2023/3/14
			2023/3/16	2024/3/15
Radio Communication Analyzer Anritsu	MT8821C	6201462755	2022/3/3	2023/3/2
			2023/3/3	2024/3/2
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2022/12/21 ~ 2023/6/13

4.3 Peak to Average Ratio

Refer to section 4.2 to get information of the instruments.

4.4 Bandwidth

Refer to section 4.2 to get information of the instruments.

4.5 Conducted Spurious Emissions

Refer to section 4.2 to get information of the instruments.

4.6 Radiated Spurious Emissions below 1GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-1213	2022/10/20	2023/10/19
EMI Test Receiver R&S	ESR3	102782	2022/12/12	2023/12/11
Loop Antenna Electro-Metrics	EM-6879	269	2022/9/19	2023/9/18
Loop Antenna TESEQ	HLA 6121	45745	2022/7/27	2023/7/26
Preamplifier EMCI	EMC330N	980782	2023/1/16	2024/1/15
	EMC001340	980201	2022/9/23	2023/9/22
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2023/1/7	2024/1/6
	EMCCFD400-NM-NM-500	201233	2023/1/16	2024/1/15
	EMCCFD400-NM-NM-3000	201235	2023/1/16	2024/1/15
	EMCCFD400-NM-NM-9000	201236(with PAD)	2023/1/16	2024/1/15
Signal & Spectrum Analyzer R&S	FSW43	101866	2023/1/10	2024/1/9
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MF-7802BS	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208674	N/A	N/A

Notes:

1. The test was performed in WM - 966 chamber 8.
2. Tested Date: 2023/7/5

4.7 Radiated Spurious Emissions above 1GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
EMI Test Receiver R&S	ESR3	102782	2022/12/12	2023/12/11
Horn Antenna RFSPIN	DRH18-E	210103A18E	2022/11/13	2023/11/12
Horn Antenna Schwarzbeck	BBHA 9170	9170-1049	2022/11/13	2023/11/12
Preamplifier EMCI	EMC118A45SE	980808	2022/12/29	2023/12/28
	EMC184045SE	980788	2023/1/16	2024/1/15
RF Coaxial Cable EMCI	EMC101G-KM-KM-2000	201254	2023/1/16	2024/1/15
	EMC101G-KM-KM-3000	201257	2023/1/16	2024/1/15
	EMC101G-KM-KM-5000	201260	2023/1/16	2024/1/15
	EMC104-SM-SM-1000	210102	2023/1/16	2024/1/15
	EMC104-SM-SM-3000	201231	2023/1/16	2024/1/15
	EMC104-SM-SM-9000	201243	2023/1/16	2024/1/15
Signal & Spectrum Analyzer R&S	FSW43	101866	2023/1/10	2024/1/9
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MF-7802BS	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208674	N/A	N/A

Notes:

1. The test was performed in WM - 966 chamber 8.
2. Tested Date: 2023/6/29 ~ 2023/6/30

4.8 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
3-channel DC power supply JIN YIH Technology	ODP3033	ODP30332128138	N/A	N/A
Digital Multimeter Fluke	87-III	70360742	2022/6/23	2023/6/22
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	100980	2023/5/3	2024/5/2
Temperature & Humidity Chamber TERCHY	HRM-120RF	931022	2022/12/27	2023/12/26
Radio Communication Analyzer Anritsu	MT8821C	6201462755	2023/3/3	2024/3/2

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2023/6/13

5 Limits of Test Items

5.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

For PCS1900, WCDMA Band 2, LTE Band 2:

Mobile and portable stations are limited to 2 watts EIRP.

For LTE Band 4:

Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

For GSM850, WCDMA Band 5, LTE Band 5:

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

For LTE Band 7, LTE Band 38, LTE Band 41:

Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

For LTE Band 12, LTE Band 17, LTE Band 71:

Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

5.2 Modulation Characteristics

A curve or equivalent data which shows that the equipment will meet the modulation requirements of the rules under which the equipment is to be licensed.

5.3 Peak to Average Ratio

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB.

5.4 Bandwidth

According to FCC 47 CFR part 2.1049, the occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5% of the total mean power radiated by a given emission.

5.5 Conducted Spurious Emissions

For GSM850, PCS1900, WCDMA Band 2, WCDMA Band 5, LTE Band 2, LTE Band 5:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to –13 dBm.

For LTE Band 4:

According to FCC 47 CFR part 27.53(h), for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log (P) dB. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

For LTE Band 7, LTE Band 38, LTE Band 41:

According to FCC 47 CFR part 27.53(m)(4) regulations, any transmit power outside of the channel edge must be attenuated below the transmitting power (P) by a factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed, except when the 1 megahertz band is 2495-2496 MHz, in which case a resolution bandwidth of at least one percent may be employed.

For LTE Band 12, LTE Band 17, LTE Band 71:

According to FCC 47 CFR part 27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

5.6 Radiated Spurious Emissions below 1GHz

For GSM850, PCS1900, WCDMA Band 2, WCDMA Band 5, LTE Band 2, LTE Band 5:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to –13 dBm.

For LTE Band 4:

According to FCC 47 CFR part 27.53(h), for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log (P) dB. The limit of emission is equal to -13 dBm.

For LTE Band 7, LTE Band 38, LTE Band 41:

According to FCC 47 CFR part 27.53(m)(4), on any frequency outside a licensee’s frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least 55 + 10 log (P) dB. The emission limit equal to –25 dBm.

For LTE Band 12, LTE Band 17, LTE Band 71:

According to FCC 47 CFR part 27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. The limit of emissions is equal to -13 dBm.

5.7 Radiated Spurious Emissions above 1GHz

For GSM850, PCS1900, WCDMA Band 2, WCDMA Band 5, LTE Band 2, LTE Band 5:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to –13 dBm.

For LTE Band 4:

According to FCC 47 CFR part 27.53(h), for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log (P) dB. The limit of emission is equal to -13 dBm.

For LTE Band 7, LTE Band 38, LTE Band 41:

According to FCC 47 CFR part 27.53(m)(4), on any frequency outside a licensee’s frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least 55 + 10 log (P) dB. The emission limit equal to –25 dBm.

For LTE Band 12, LTE Band 17, LTE Band 71:

According to FCC 47 CFR part 27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. The limit of emissions is equal to -13 dBm.

5.8 Frequency Stability

For GSM850, WCDMA Band 5, LTE Band 5:

1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

For PCS1900, WCDMA Band 2, LTE Band 2, LTE Band 4, LTE Band 7, LTE Band 12, LTE Band 17, LTE Band 38, LTE Band 41, LTE Band 71:

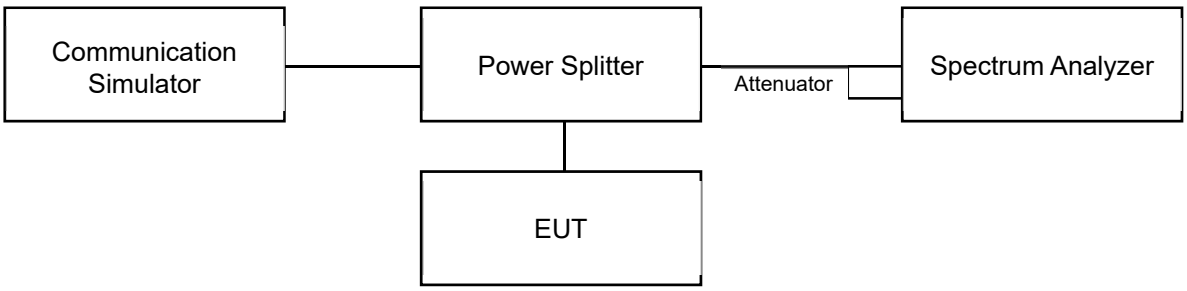
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation (authorized frequency block).

6 Test Arrangements

6.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

6.1.1 Test Setup

Conducted Power Measurement:



6.1.2 Test Procedure

Conducted Power Measurement:

The EUT is configured by emulator to set data modulation and maximum power using WWAN technology. The average (rms) power measurement was performed on emulator and power value was measured from power function on emulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

Maximum EIRP / ERP

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation as follows:

$EIRP = P_{Meas} + G_T$

$ERP = P_{Meas} + G_T - 2.15$

where

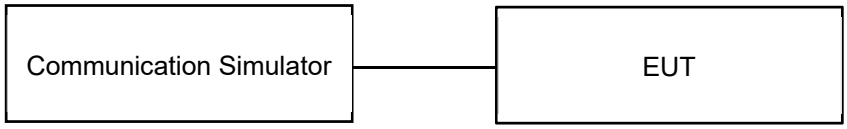
ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, e.g., dBm or dBW)

P_{Meas} measured transmitter output power or PSD, in dBm or dBW

G_T gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

6.2 Modulation Characteristics

6.2.1 Test Setup

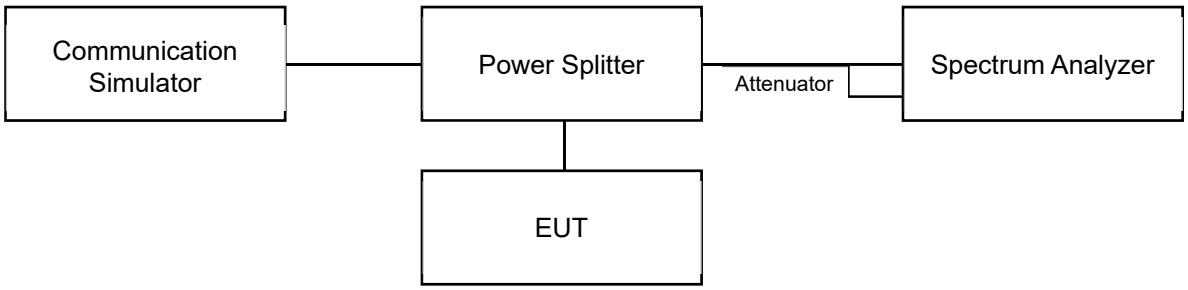


6.2.2 Test Procedure

Connect the EUT to Communication Simulator via the antenna connector, the frequency band is set as EUT supported Modulation and Channels, the EUT output is matched with 50 ohm load, the waveform quality and constellation of the EUT was tested.

6.3 Peak to Average Ratio

6.3.1 Test Setup

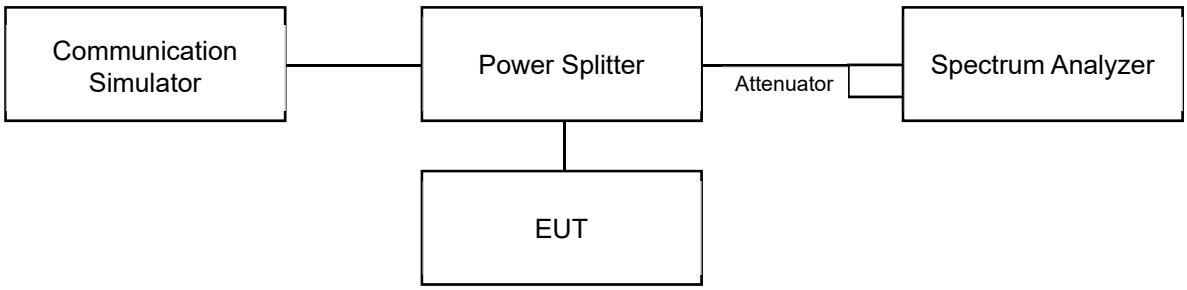


6.3.2 Test Procedure

a. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
b. Set the number of counts to a value that stabilizes the measured CCDF curve;
c. Record the maximum PAPR level associated with a probability of 0.1%.

6.4 Bandwidth

6.4.1 Test Setup



6.4.2 Test Procedure

For the 26 dBc bandwidth measurement method, please refer to section 5.4.3 of ANSI C63.26.

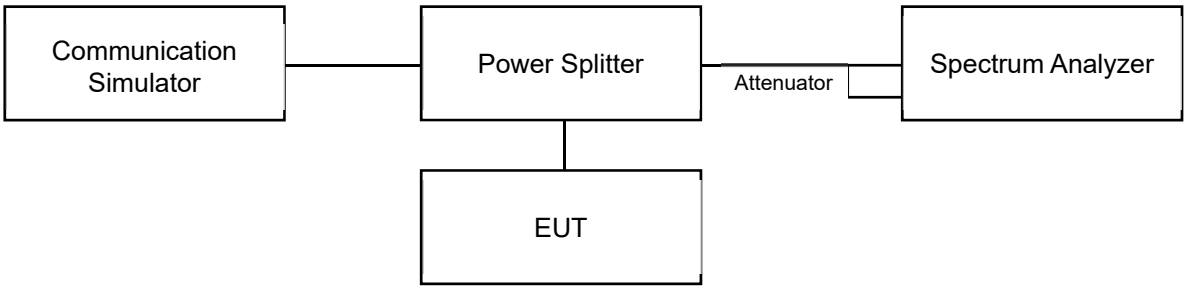
a. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
b. The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set ≥ 3 × RBW.
c. Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.
d. The dynamic range of the spectrum analyzer at the selected RBW shall be more than 10 dB below the target "−X dB" requirement, i.e., if the requirement calls for measuring the −26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be at least 36 dB below the reference level.
e. Set spectrum analyzer detection mode to peak, and the trace mode to max hold.
f. Determine the following reference values: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).
g. Determine the "−X dB amplitude" as equal to (Reference Value − X). Alternatively, this calculation can be performed on the spectrum analyzer using the delta-marker measurement function.
h. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the "−X dB amplitude" determined in step f). If a marker is below this "−X dB amplitude" value it should be as close as possible to this value. The OBW is the positive frequency difference between the two markers.
i. The OBW shall be reported by providing plot(s) of the measuring instrument display, to include markers depicting the relevant frequency and amplitude information (e.g., marker table). The frequency and amplitude axis and scale shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

For the occupied bandwidth measurement method, please refer to section 5.4.4 of ANSI C63.26.

a. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
b. The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set ≥ 3 × RBW.
c. Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.
d. The dynamic range of the spectrum analyzer at the selected RBW shall be more than 10 dB below the target "−X dB" requirement, i.e., if the requirement calls for measuring the −26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be at least 36 dB below the reference level.
e. Set spectrum analyzer detection mode to peak, and the trace mode to max hold.
f. Determine the reference value by either of the following:
g. 1) Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).
h. 2) Set the EUT to transmit an unmodulated carrier. Set the spectrum analyzer marker to the level of the carrier.
i. Determine the "−X dB amplitude" as equal to (Reference Value − X). Alternatively, this calculation can be performed on the spectrum analyzer using the delta-marker measurement function.
j. If the reference value was determined using an unmodulated carrier, turn the EUT modulation on, then either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise the trace from step f) shall be used for step i).
k. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the "−X dB amplitude" determined in step f). If a marker is below this "−X dB amplitude" value it should be as close as possible to this value. The OBW is the positive frequency difference between the two markers. The spectral envelope can cross the "−X dB amplitude" at multiple points. The lowest or highest frequency shall be selected as the frequencies that are the farthest away from the center frequency at which the spectral envelope crosses the "−X dB amplitude."
l. The OBW shall be reported by providing plot(s) of the measuring instrument display, to include markers depicting the relevant frequency and amplitude information (e.g., marker table). The frequency and amplitude axis and scale shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

6.5 Conducted Spurious Emissions

6.5.1 Test Setup



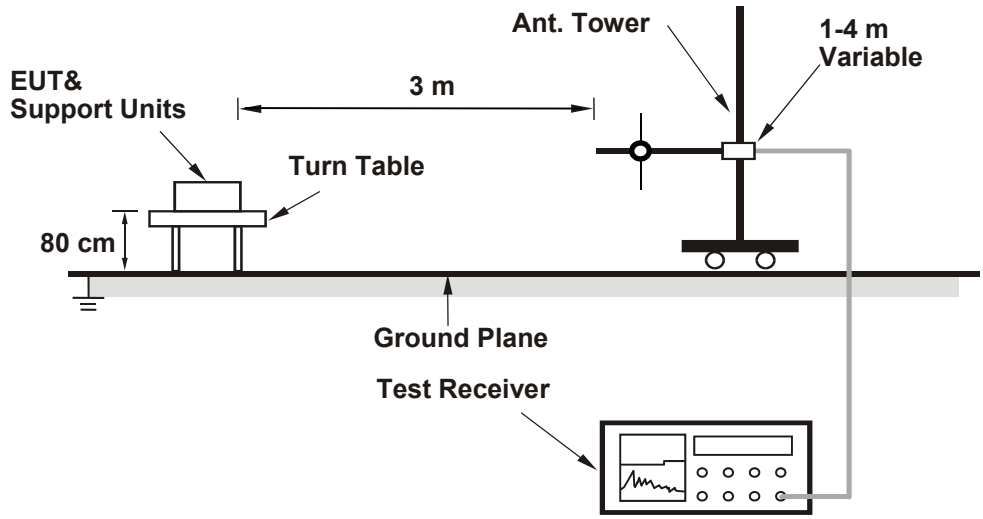
6.5.2 Test Procedure

a. Measurement refer to ANSI C63.26 section 5.7.
b. All measurements were done at 3 channels: low, middle and high operational frequency range.
c. Measuring frequency range is from 9 kHz up to the tenth harmonic of the hightest fundamental frequency or to 40 GHz, whichever is lower. 20 dB attenuation pad is connected with spectrum.
d. The fundamental frequency above 1 GHz, the spectrum set RBW = 1 MHz, VBW = 3 MHz, Detector = Average.
e. The fundamental frequency below 1 GHz, the spectrum set RBW ≥ 100 kHz, VBW ≥ 3 x RBW, Detector = Average.
f. Measuring frequency band edge, narrow RBW (no less than 1% of the OBW) is used for conducted emission measurement.
g. LTE Band 7, Band 38 and Band 41 operations in the 5 MHz and 10 MHz channel BW mode, extend the 1% range from 1M to 2M above and below the channel edge and then reduce the limit further by 10 log (1000/100) = 10dB (i.e. total -10 + -10=-20dB) to compensate for the integration from 100k to 1M.

6.6 Radiated Spurious Emissions below 1GHz

6.6.1 Test Setup

For radiated emission 30 MHz to 1 GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.6.2 Test Procedure

The EUT is configured by emulator to set data modulation and maximum power using WWAN technology.

a. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) height of turn table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.

b. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.

d. Following C63.26 section 5.5 and 5.2.7

e. EIRP (dBm) = E (dBμV/m) + 20log(D) - 104.8; where D is the measurement distance (in the far field region) in m.

f. ERP (dBm) = E (dBμV/m) + 20log(D) - 104.8 - 2.15; where D is the measurement distance (in the far field region) in m.

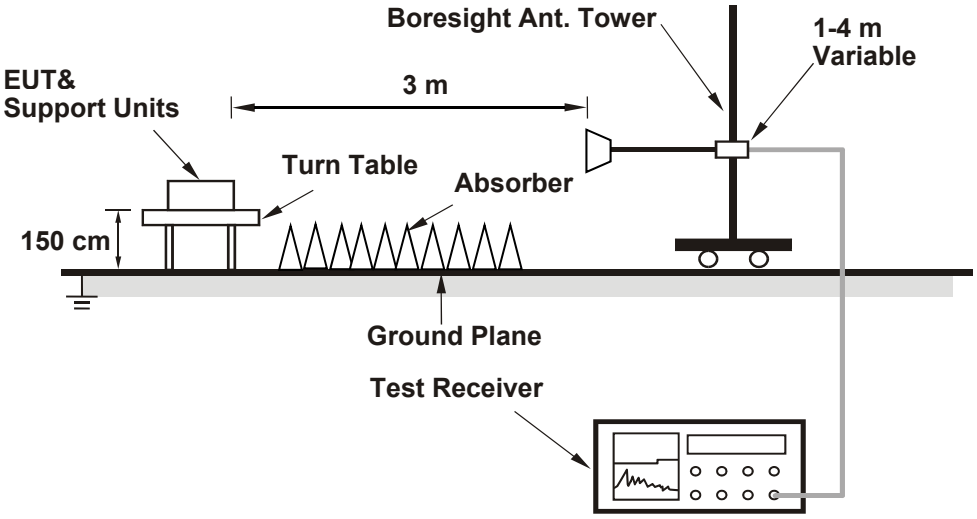
Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz.
2. The emission levels were against the limit of frequency range 9 kHz ~ 30 MHz:
   The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

6.7 Radiated Spurious Emissions above 1GHz

6.7.1 Test Setup

For radiated emission above 1 GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.7.2 Test Procedure

The EUT is configured by emulator to set data modulation and maximum power using WWAN technology.

a. In the semi-anechoic chamber, EUT placed on the 1.5 m height of turn table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.

b. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.

d. Following C63.26 section 5.5 and 5.2.7

e. EIRP (dBm) = E (dBμV/m) + 20log(D) - 104.8; where D is the measurement distance (in the far field region) in m.

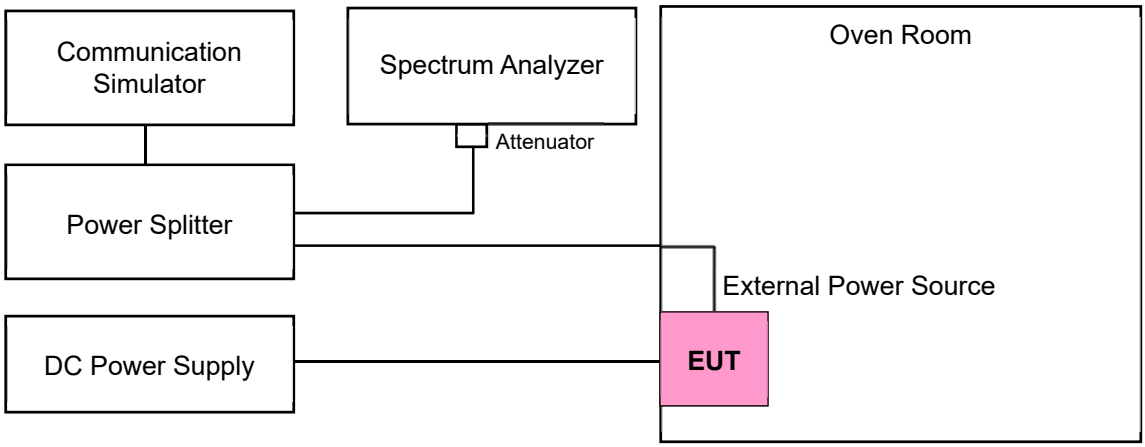
f. ERP (dBm) = E (dBμV/m) + 20log(D) - 104.8 - 2.15; where D is the measurement distance (in the far field region) in m.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz.

6.8 Frequency Stability

6.8.1 Test Setup



6.8.2 Test Procedure

The EUT is configured by emulator to set data modulation and maximum power using WWAN technology.

a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.

b. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.

c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5℃ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

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

7 Test Results of Test Item

7.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

Input Power:	3.85 Vdc	Environmental Conditions:	22°C, 73% RH	Tested By:	Willy Cheng

7.1.1 GSM850

Conducted Output Power (dBm)

Band	GSM850		
Channel	128	189	251
Frequency (MHz)	824.2	836.4	848.8
GSM (GMSK, 1Tx-slot)	32.92	32.94	33.44
GPRS (GMSK, 1Tx-slot)	32.11	32.98	32.97
GPRS (GMSK, 2Tx-slot)	31.45	31.81	31.05
GPRS (GMSK, 3Tx-slot)	30.23	29.96	29.83
GPRS (GMSK, 4Tx-slot)	28.00	28.41	28.03
EDGE (8PSK, 1Tx-slot)	27.38	27.48	27.30
EDGE (8PSK, 2Tx-slot)	25.92	25.93	25.87
EDGE (8PSK, 3Tx-slot)	24.85	24.84	24.37
EDGE (8PSK, 4Tx-slot)	22.56	22.66	22.60

ERP Power (dBm)

Band	GSM850		
Channel	128	189	251
Frequency (MHz)	824.2	836.4	848.8
GSM (GMSK, 1Tx-slot)	28.57	28.59	29.09
GPRS (GMSK, 1Tx-slot)	27.76	28.63	28.62
GPRS (GMSK, 2Tx-slot)	27.10	27.46	26.70
GPRS (GMSK, 3Tx-slot)	25.88	25.61	25.48
GPRS (GMSK, 4Tx-slot)	23.65	24.06	23.68
EDGE (8PSK, 1Tx-slot)	23.03	23.13	22.95
EDGE (8PSK, 2Tx-slot)	21.57	21.58	21.52
EDGE (8PSK, 3Tx-slot)	20.50	20.49	20.02
EDGE (8PSK, 4Tx-slot)	18.21	18.31	18.25

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

7.1.2 PCS1900

Conducted Output Power (dBm)

Band	PCS1900		
Channel	512	661	810
Frequency (MHz)	1850.2	1880	1909.8
GSM (GMSK, 1Tx-slot)	30.17	30.23	29.75
GPRS (GMSK, 1Tx-slot)	29.99	29.95	29.76
GPRS (GMSK, 2Tx-slot)	28.66	28.99	28.73
GPRS (GMSK, 3Tx-slot)	27.47	27.86	27.65
GPRS (GMSK, 4Tx-slot)	25.05	25.54	25.40
EDGE (8PSK, 1Tx-slot)	25.75	25.99	26.00
EDGE (8PSK, 2Tx-slot)	24.33	24.83	24.02
EDGE (8PSK, 3Tx-slot)	23.61	23.11	23.92
EDGE (8PSK, 4Tx-slot)	20.94	21.00	20.61

EIRP Power (dBm)

Band	PCS1900		
Channel	512	661	810
Frequency (MHz)	1850.2	1880	1909.8
GSM (GMSK, 1Tx-slot)	30.47	30.53	30.05
GPRS (GMSK, 1Tx-slot)	30.29	30.25	30.06
GPRS (GMSK, 2Tx-slot)	28.96	29.29	29.03
GPRS (GMSK, 3Tx-slot)	27.77	28.16	27.95
GPRS (GMSK, 4Tx-slot)	25.35	25.84	25.70
EDGE (8PSK, 1Tx-slot)	26.05	26.29	26.30
EDGE (8PSK, 2Tx-slot)	24.63	25.13	24.32
EDGE (8PSK, 3Tx-slot)	23.91	23.41	24.22
EDGE (8PSK, 4Tx-slot)	21.24	21.30	20.91

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

7.1.3 WCDMA Band 2

Conducted Output Power (dBm)

Band	WCDMA II		
TX Channel	9262	9400	9538
Rx Channel	9662	9800	9938
Frequency	1852.4	1880	1907.6
RMC 12.2K	24.13	24.25	24.18
HSDPA Subtest-1	23.24	23.36	23.29
HSDPA Subtest-2	23.11	23.23	23.16
HSDPA Subtest-3	22.74	22.86	22.79
HSDPA Subtest-4	22.70	22.82	22.75
DC-HSDPA Subtest-1	23.21	23.33	23.26
DC-HSDPA Subtest-2	23.09	23.21	23.14
DC-HSDPA Subtest-3	22.71	22.83	22.76
DC-HSDPA Subtest-4	22.67	22.79	22.72
HSUPA Subtest-1	23.20	23.32	23.25
HSUPA Subtest-2	21.27	21.39	21.32
HSUPA Subtest-3	22.24	22.36	22.29
HSUPA Subtest-4	21.20	21.32	21.25
HSUPA Subtest-5	23.25	23.37	23.30
HSPA+ Subtest-1	20.77	20.89	20.82

EIRP Power (dBm)

Band	WCDMA II		
TX Channel	9262	9400	9538
Rx Channel	9662	9800	9938
Frequency	1852.4	1880	1907.6
RMC 12.2K	24.43	24.55	24.48
HSDPA Subtest-1	23.54	23.66	23.59
HSDPA Subtest-2	23.41	23.53	23.46
HSDPA Subtest-3	23.04	23.16	23.09
HSDPA Subtest-4	23.00	23.12	23.05
DC-HSDPA Subtest-1	23.51	23.63	23.56
DC-HSDPA Subtest-2	23.39	23.51	23.44
DC-HSDPA Subtest-3	23.01	23.13	23.06
DC-HSDPA Subtest-4	22.97	23.09	23.02
HSUPA Subtest-1	23.50	23.62	23.55
HSUPA Subtest-2	21.57	21.69	21.62
HSUPA Subtest-3	22.54	22.66	22.59
HSUPA Subtest-4	21.50	21.62	21.55
HSUPA Subtest-5	23.55	23.67	23.60
HSPA+ Subtest-1	21.07	21.19	21.12

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

7.1.4 WCDMA Band 5

Conducted Output Power (dBm)

Band	WCDMA V		
TX Channel	4132	4182	4233
Rx Channel	4357	4407	4458
Frequency	826.4	836.4	846.6
RMC 12.2K	24.72	24.81	24.68
HSDPA Subtest-1	23.77	23.86	23.73
HSDPA Subtest-2	23.74	23.83	23.70
HSDPA Subtest-3	23.26	23.35	23.22
HSDPA Subtest-4	23.23	23.32	23.19
DC-HSDPA Subtest-1	23.74	23.83	23.70
DC-HSDPA Subtest-2	23.72	23.81	23.68
DC-HSDPA Subtest-3	23.23	23.32	23.19
DC-HSDPA Subtest-4	23.20	23.29	23.16
HSUPA Subtest-1	23.69	23.78	23.65
HSUPA Subtest-2	21.65	21.74	21.61
HSUPA Subtest-3	22.68	22.77	22.64
HSUPA Subtest-4	21.60	21.69	21.56
HSUPA Subtest-5	23.69	23.78	23.65
HSPA+ Subtest-1	21.14	21.23	21.10

ERP Power (dBm)

Band	WCDMA V		
TX Channel	4132	4182	4233
Rx Channel	4357	4407	4458
Frequency	826.4	836.4	846.6
RMC 12.2K	20.37	20.46	20.33
HSDPA Subtest-1	19.42	19.51	19.38
HSDPA Subtest-2	19.39	19.48	19.35
HSDPA Subtest-3	18.91	19.00	18.87
HSDPA Subtest-4	18.88	18.97	18.84
DC-HSDPA Subtest-1	19.39	19.48	19.35
DC-HSDPA Subtest-2	19.37	19.46	19.33
DC-HSDPA Subtest-3	18.88	18.97	18.84
DC-HSDPA Subtest-4	18.85	18.94	18.81
HSUPA Subtest-1	19.34	19.43	19.30
HSUPA Subtest-2	17.30	17.39	17.26
HSUPA Subtest-3	18.33	18.42	18.29
HSUPA Subtest-4	17.25	17.34	17.21
HSUPA Subtest-5	19.34	19.43	19.30
HSPA+ Subtest-1	16.79	16.88	16.75

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

7.1.5 LTE Band 2

Conducted Output Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18700	18900	19100
		Frequency (MHz)		1860	1880	1900
20M	QPSK	1	0	24.94	24.96	24.98
		1	50	24.92	24.94	24.96
		1	99	24.89	24.91	24.93
		50	0	23.93	23.95	23.97
		50	25	23.90	23.92	23.94
		50	50	23.86	23.88	23.90
		100	0	23.89	23.91	23.93
20M	16QAM	1	0	23.91	23.93	23.95
		1	50	23.89	23.91	23.93
		1	99	23.86	23.88	23.90
		50	0	22.92	22.94	22.96
		50	25	22.89	22.91	22.93
		50	50	22.85	22.87	22.89
		100	0	22.87	22.89	22.91
20M	64QAM	1	0	22.91	22.93	22.95
		1	50	22.89	22.91	22.93
		1	99	22.86	22.88	22.90
		50	0	21.93	21.95	21.97
		50	25	21.90	21.92	21.94
		50	50	21.84	21.86	21.88
		100	0	21.87	21.89	21.91
20M	256QAM	1	0	19.91	19.93	19.95
		1	50	19.87	19.89	19.91
		1	99	19.85	19.87	19.89
		50	0	19.89	19.91	19.93
		50	25	19.83	19.85	19.87
		50	50	19.80	19.82	19.84
		100	0	19.81	19.83	19.85

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18675	18900	19125
		Frequency (MHz)		1857.5	1880	1902.5
15M	QPSK	1	0	24.89	24.95	24.96
		1	37	24.84	24.91	24.93
		1	74	24.80	24.89	24.91
		36	0	23.89	23.86	23.96
		36	19	23.88	23.85	23.94
		36	39	23.78	23.80	23.81
		75	0	23.87	23.83	23.93
15M	16QAM	1	0	23.85	23.83	23.87
		1	37	23.86	23.86	23.92
		1	74	23.79	23.78	23.82
		36	0	22.82	22.85	22.94
		36	19	22.79	22.86	22.90
		36	39	22.84	22.86	22.87
		75	0	22.82	22.79	22.91
15M	64QAM	1	0	22.88	22.93	22.92
		1	37	22.79	22.82	22.87
		1	74	22.77	22.86	22.85
		36	0	21.83	21.93	21.87
		36	19	21.90	21.85	21.92
		36	39	21.81	21.78	21.86
		75	0	21.86	21.82	21.88
15M	256QAM	1	0	19.88	19.90	19.93
		1	37	19.80	19.83	19.88
		1	74	19.81	19.82	19.81
		36	0	19.85	19.83	19.84
		36	19	19.75	19.76	19.87
		36	39	19.74	19.77	19.76
		75	0	19.76	19.73	19.75

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18650	18900	19150
		Frequency (MHz)		1855	1880	1905
10M	QPSK	1	0	24.89	24.84	24.82
		1	24	24.87	24.78	24.86
		1	49	24.80	24.80	24.81
		25	0	23.80	23.80	23.78
		25	12	23.71	23.74	23.87
		25	25	23.64	23.76	23.82
		50	0	23.77	23.76	23.71
10M	16QAM	1	0	23.83	23.80	23.86
		1	24	23.64	23.75	23.82
		1	49	23.71	23.70	23.80
		25	0	22.84	22.91	22.78
		25	12	22.69	22.80	22.69
		25	25	22.68	22.79	22.75
		50	0	22.75	22.75	22.75
10M	64QAM	1	0	22.83	22.76	22.83
		1	24	22.68	22.84	22.87
		1	49	22.77	22.73	22.78
		25	0	21.89	21.83	21.83
		25	12	21.84	21.77	21.80
		25	25	21.73	21.68	21.81
		50	0	21.81	21.76	21.82
10M	256QAM	1	0	19.91	19.84	19.89
		1	24	19.85	19.88	19.81
		1	49	19.84	19.84	19.85
		25	0	19.89	19.87	19.84
		25	12	19.76	19.78	19.85
		25	25	19.73	19.75	19.83
		50	0	19.75	19.81	19.84

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18625	18900	19175
		Frequency (MHz)		1852.5	1880	1907.5
5M	QPSK	1	0	24.76	24.91	24.82
		1	12	24.73	24.85	24.82
		1	24	24.74	24.71	24.61
		12	0	23.77	23.73	23.70
		12	6	23.67	23.85	23.64
		12	13	23.86	23.69	23.66
		25	0	23.74	23.82	23.74
5M	16QAM	1	0	23.76	23.89	23.74
		1	12	23.80	23.82	23.76
		1	24	23.78	23.79	23.75
		12	0	22.80	22.82	22.78
		12	6	22.82	22.86	22.83
		12	13	22.73	22.69	22.74
		25	0	22.71	22.79	22.71
5M	64QAM	1	0	22.81	22.83	22.82
		1	12	22.86	22.89	22.77
		1	24	22.81	22.78	22.75
		12	0	21.81	21.73	21.88
		12	6	21.69	21.91	21.81
		12	13	21.75	21.71	21.71
		25	0	21.77	21.83	21.82
5M	256QAM	1	0	19.86	19.83	19.92
		1	12	19.78	19.79	19.85
		1	24	19.79	19.83	19.86
		12	0	19.80	19.82	19.86
		12	6	19.77	19.85	19.82
		12	13	19.73	19.77	19.81
		25	0	19.72	19.79	19.84

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18615	18900	19185
		Frequency (MHz)		1851.5	1880	1908.5
3M	QPSK	1	0	24.89	24.74	24.82
		1	7	24.91	24.90	24.90
		1	14	24.70	24.73	24.81
		8	0	23.85	23.73	23.96
		8	3	23.76	23.75	23.86
		8	7	23.72	23.77	23.70
		15	0	23.77	23.80	23.84
3M	16QAM	1	0	23.75	23.85	23.84
		1	7	23.75	23.91	23.77
		1	14	23.83	23.72	23.70
		8	0	22.75	22.85	22.88
		8	3	22.69	22.72	22.82
		8	7	22.63	22.74	22.78
		15	0	22.78	22.73	22.82
3M	64QAM	1	0	22.75	22.82	22.84
		1	7	22.76	22.79	22.87
		1	14	22.72	22.65	22.74
		8	0	21.83	21.86	21.85
		8	3	21.80	21.73	21.74
		8	7	21.75	21.77	21.86
		15	0	21.69	21.83	21.88
3M	256QAM	1	0	19.84	19.84	19.91
		1	7	19.80	19.80	19.90
		1	14	19.77	19.80	19.83
		8	0	19.81	19.86	19.86
		8	3	19.76	19.81	19.86
		8	7	19.74	19.75	19.82
		15	0	19.72	19.78	19.82

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18607	18900	19193
		Frequency (MHz)		1850.7	1880	1909.3
1.4M	QPSK	1	0	24.79	24.86	24.84
		1	2	24.70	24.77	24.72
		1	5	24.74	24.77	24.73
		3	0	24.86	24.85	24.90
		3	1	24.70	24.69	24.81
		3	3	24.85	24.79	24.90
		6	0	23.79	23.81	23.84
1.4M	16QAM	1	0	23.80	23.79	23.77
		1	2	23.73	23.76	23.87
		1	5	23.64	23.80	23.81
		3	0	23.68	23.86	23.81
		3	1	23.71	23.73	23.70
		3	3	23.66	23.80	23.75
		6	0	22.70	22.79	22.72
1.4M	64QAM	1	0	22.73	22.82	22.82
		1	2	22.75	22.85	22.74
		1	5	22.70	22.66	22.82
		3	0	22.85	22.82	22.82
		3	1	22.87	22.86	22.85
		3	3	22.70	22.77	22.74
		6	0	21.75	21.66	21.80
1.4M	256QAM	1	0	19.83	19.85	19.88
		1	2	19.78	19.85	19.81
		1	5	19.78	19.80	19.88
		3	0	19.88	19.85	19.84
		3	1	19.78	19.81	19.83
		3	3	19.77	19.78	19.74
		6	0	19.81	19.78	19.75

EIRP Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18700	18900	19100
		Frequency (MHz)		1860	1880	1900
20M	QPSK	1	0	25.24	25.26	25.28
		1	50	25.22	25.24	25.26
		1	99	25.19	25.21	25.23
		50	0	24.23	24.25	24.27
		50	25	24.20	24.22	24.24
		50	50	24.16	24.18	24.20
		100	0	24.19	24.21	24.23
20M	16QAM	1	0	24.21	24.23	24.25
		1	50	24.19	24.21	24.23
		1	99	24.16	24.18	24.20
		50	0	23.22	23.24	23.26
		50	25	23.19	23.21	23.23
		50	50	23.15	23.17	23.19
		100	0	23.17	23.19	23.21
20M	64QAM	1	0	23.21	23.23	23.25
		1	50	23.19	23.21	23.23
		1	99	23.16	23.18	23.20
		50	0	22.23	22.25	22.27
		50	25	22.20	22.22	22.24
		50	50	22.14	22.16	22.18
		100	0	22.17	22.19	22.21
20M	256QAM	1	0	20.21	20.23	20.25
		1	50	20.17	20.19	20.21
		1	99	20.15	20.17	20.19
		50	0	20.19	20.21	20.23
		50	25	20.13	20.15	20.17
		50	50	20.10	20.12	20.14
		100	0	20.11	20.13	20.15

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18675	18900	19125
		Frequency (MHz)		1857.5	1880	1902.5
15M	QPSK	1	0	25.19	25.25	25.26
		1	37	25.14	25.21	25.23
		1	74	25.10	25.19	25.21
		36	0	24.19	24.16	24.26
		36	19	24.18	24.15	24.24
		36	39	24.08	24.10	24.11
		75	0	24.17	24.13	24.23
15M	16QAM	1	0	24.15	24.13	24.17
		1	37	24.16	24.16	24.22
		1	74	24.09	24.08	24.12
		36	0	23.12	23.15	23.24
		36	19	23.09	23.16	23.20
		36	39	23.14	23.16	23.17
		75	0	23.12	23.09	23.21
15M	64QAM	1	0	23.18	23.23	23.22
		1	37	23.09	23.12	23.17
		1	74	23.07	23.16	23.15
		36	0	22.13	22.23	22.17
		36	19	22.20	22.15	22.22
		36	39	22.11	22.08	22.16
		75	0	22.16	22.12	22.18
15M	256QAM	1	0	20.18	20.20	20.23
		1	37	20.10	20.13	20.18
		1	74	20.11	20.12	20.11
		36	0	20.15	20.13	20.14
		36	19	20.05	20.06	20.17
		36	39	20.04	20.07	20.06
		75	0	20.06	20.03	20.05

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18650	18900	19150
		Frequency (MHz)		1855	1880	1905
10M	QPSK	1	0	25.19	25.14	25.12
		1	24	25.17	25.08	25.16
		1	49	25.10	25.10	25.11
		25	0	24.10	24.10	24.08
		25	12	24.01	24.04	24.17
		25	25	23.94	24.06	24.12
		50	0	24.07	24.06	24.01
10M	16QAM	1	0	24.13	24.10	24.16
		1	24	23.94	24.05	24.12
		1	49	24.01	24.00	24.10
		25	0	23.14	23.21	23.08
		25	12	22.99	23.10	22.99
		25	25	22.98	23.09	23.05
		50	0	23.05	23.05	23.05
10M	64QAM	1	0	23.13	23.06	23.13
		1	24	22.98	23.14	23.17
		1	49	23.07	23.03	23.08
		25	0	22.19	22.13	22.13
		25	12	22.14	22.07	22.10
		25	25	22.03	21.98	22.11
		50	0	22.11	22.06	22.12
10M	256QAM	1	0	20.21	20.14	20.19
		1	24	20.15	20.18	20.11
		1	49	20.14	20.14	20.15
		25	0	20.19	20.17	20.14
		25	12	20.06	20.08	20.15
		25	25	20.03	20.05	20.13
		50	0	20.05	20.11	20.14

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18625	18900	19175
		Frequency (MHz)		1852.5	1880	1907.5
5M	QPSK	1	0	25.06	25.21	25.12
		1	12	25.03	25.15	25.12
		1	24	25.04	25.01	24.91
		12	0	24.07	24.03	24.00
		12	6	23.97	24.15	23.94
		12	13	24.16	23.99	23.96
		25	0	24.04	24.12	24.04
5M	16QAM	1	0	24.06	24.19	24.04
		1	12	24.10	24.12	24.06
		1	24	24.08	24.09	24.05
		12	0	23.10	23.12	23.08
		12	6	23.12	23.16	23.13
		12	13	23.03	22.99	23.04
		25	0	23.01	23.09	23.01
5M	64QAM	1	0	23.11	23.13	23.12
		1	12	23.16	23.19	23.07
		1	24	23.11	23.08	23.05
		12	0	22.11	22.03	22.18
		12	6	21.99	22.21	22.11
		12	13	22.05	22.01	22.01
		25	0	22.07	22.13	22.12
5M	256QAM	1	0	20.16	20.13	20.22
		1	12	20.08	20.09	20.15
		1	24	20.09	20.13	20.16
		12	0	20.10	20.12	20.16
		12	6	20.07	20.15	20.12
		12	13	20.03	20.07	20.11
		25	0	20.02	20.09	20.14

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18615	18900	19185
		Frequency (MHz)		1851.5	1880	1908.5
3M	QPSK	1	0	25.19	25.04	25.12
		1	7	25.21	25.20	25.20
		1	14	25.00	25.03	25.11
		8	0	24.15	24.03	24.26
		8	3	24.06	24.05	24.16
		8	7	24.02	24.07	24.00
		15	0	24.07	24.10	24.14
3M	16QAM	1	0	24.05	24.15	24.14
		1	7	24.05	24.21	24.07
		1	14	24.13	24.02	24.00
		8	0	23.05	23.15	23.18
		8	3	22.99	23.02	23.12
		8	7	22.93	23.04	23.08
		15	0	23.08	23.03	23.12
3M	64QAM	1	0	23.05	23.12	23.14
		1	7	23.06	23.09	23.17
		1	14	23.02	22.95	23.04
		8	0	22.13	22.16	22.15
		8	3	22.10	22.03	22.04
		8	7	22.05	22.07	22.16
		15	0	21.99	22.13	22.18
3M	256QAM	1	0	20.14	20.14	20.21
		1	7	20.10	20.10	20.20
		1	14	20.07	20.10	20.13
		8	0	20.11	20.16	20.16
		8	3	20.06	20.11	20.16
		8	7	20.04	20.05	20.12
		15	0	20.02	20.08	20.12

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18607	18900	19193
		Frequency (MHz)		1850.7	1880	1909.3
1.4M	QPSK	1	0	25.09	25.16	25.14
		1	2	25.00	25.07	25.02
		1	5	25.04	25.07	25.03
		3	0	25.16	25.15	25.20
		3	1	25.00	24.99	25.11
		3	3	25.15	25.09	25.20
		6	0	24.09	24.11	24.14
1.4M	16QAM	1	0	24.10	24.09	24.07
		1	2	24.03	24.06	24.17
		1	5	23.94	24.10	24.11
		3	0	23.98	24.16	24.11
		3	1	24.01	24.03	24.00
		3	3	23.96	24.10	24.05
		6	0	23.00	23.09	23.02
1.4M	64QAM	1	0	23.03	23.12	23.12
		1	2	23.05	23.15	23.04
		1	5	23.00	22.96	23.12
		3	0	23.15	23.12	23.12
		3	1	23.17	23.16	23.15
		3	3	23.00	23.07	23.04
		6	0	22.05	21.96	22.10
1.4M	256QAM	1	0	20.13	20.15	20.18
		1	2	20.08	20.15	20.11
		1	5	20.08	20.10	20.18
		3	0	20.18	20.15	20.14
		3	1	20.08	20.11	20.13
		3	3	20.07	20.08	20.04
		6	0	20.11	20.08	20.05

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

7.1.6 LTE Band 4

Conducted Output Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20050	20175	20300
		Frequency (MHz)		1720	1732.5	1745
20M	QPSK	1	0	24.74	24.69	24.86
		1	50	24.71	24.66	24.83
		1	99	24.69	24.64	24.81
		50	0	23.79	23.74	23.91
		50	25	23.73	23.68	23.85
		50	50	23.69	23.64	23.81
		100	0	23.71	23.66	23.83
20M	16QAM	1	0	23.75	23.70	23.87
		1	50	23.72	23.67	23.84
		1	99	23.69	23.64	23.81
		50	0	22.79	22.74	22.91
		50	25	22.74	22.69	22.86
		50	50	22.69	22.64	22.81
		100	0	22.72	22.67	22.84
20M	64QAM	1	0	22.76	22.71	22.88
		1	50	22.72	22.67	22.84
		1	99	22.69	22.64	22.81
		50	0	21.75	21.70	21.87
		50	25	21.72	21.67	21.84
		50	50	21.67	21.62	21.79
		100	0	21.70	21.65	21.82
20M	256QAM	1	0	19.73	19.68	19.85
		1	50	19.70	19.65	19.82
		1	99	19.66	19.61	19.78
		50	0	19.69	19.64	19.81
		50	25	19.65	19.60	19.77
		50	50	19.60	19.55	19.72
		100	0	19.62	19.57	19.74

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20025	20175	20325
		Frequency (MHz)		1717.5	1732.5	1747.5
15M	QPSK	1	0	24.69	24.67	24.76
		1	37	24.70	24.64	24.75
		1	74	24.59	24.62	24.76
		36	0	23.73	23.69	23.91
		36	19	23.65	23.66	23.75
		36	39	23.66	23.59	23.73
		75	0	23.63	23.58	23.79
15M	16QAM	1	0	23.74	23.64	23.78
		1	37	23.69	23.60	23.81
		1	74	23.59	23.54	23.75
		36	0	22.75	22.70	22.84
		36	19	22.71	22.61	22.82
		36	39	22.67	22.56	22.74
		75	0	22.64	22.64	22.79
15M	64QAM	1	0	22.68	22.69	22.78
		1	37	22.63	22.60	22.79
		1	74	22.66	22.60	22.81
		36	0	21.70	21.70	21.83
		36	19	21.68	21.57	21.78
		36	39	21.64	21.56	21.75
		75	0	21.70	21.62	21.73
15M	256QAM	1	0	19.65	19.62	19.75
		1	37	19.70	19.56	19.77
		1	74	19.56	19.60	19.70
		36	0	19.62	19.54	19.75
		36	19	19.61	19.55	19.76
		36	39	19.51	19.50	19.64
		75	0	19.54	19.48	19.67

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20000	20175	20350
		Frequency (MHz)		1715	1732.5	1750
10M	QPSK	1	0	24.65	24.61	24.85
		1	24	24.57	24.54	24.69
		1	49	24.61	24.49	24.75
		25	0	23.58	23.55	23.77
		25	12	23.69	23.58	23.71
		25	25	23.62	23.52	23.68
		50	0	23.56	23.53	23.61
10M	16QAM	1	0	23.59	23.54	23.78
		1	24	23.55	23.58	23.73
		1	49	23.45	23.56	23.68
		25	0	22.66	22.54	22.88
		25	12	22.69	22.52	22.74
		25	25	22.51	22.57	22.73
		50	0	22.59	22.56	22.64
10M	64QAM	1	0	22.65	22.66	22.66
		1	24	22.56	22.63	22.70
		1	49	22.53	22.53	22.64
		25	0	21.58	21.59	21.74
		25	12	21.54	21.48	21.68
		25	25	21.42	21.59	21.64
		50	0	21.52	21.61	21.63
10M	256QAM	1	0	19.67	19.63	19.80
		1	24	19.62	19.64	19.76
		1	49	19.60	19.60	19.74
		25	0	19.62	19.58	19.72
		25	12	19.63	19.54	19.77
		25	25	19.60	19.55	19.68
		50	0	19.59	19.56	19.72

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19975	20175	20375
		Frequency (MHz)		1712.5	1732.5	1752.5
5M	QPSK	1	0	24.64	24.64	24.77
		1	12	24.65	24.49	24.59
		1	24	24.53	24.47	24.62
		12	0	23.74	23.68	23.76
		12	6	23.64	23.62	23.69
		12	13	23.63	23.50	23.56
		25	0	23.64	23.52	23.67
5M	16QAM	1	0	23.66	23.53	23.68
		1	12	23.59	23.58	23.81
		1	24	23.47	23.47	23.66
		12	0	22.65	22.54	22.76
		12	6	22.63	22.51	22.65
		12	13	22.61	22.55	22.72
		25	0	22.66	22.51	22.60
5M	64QAM	1	0	22.74	22.62	22.75
		1	12	22.58	22.46	22.74
		1	24	22.54	22.42	22.68
		12	0	21.68	21.53	21.76
		12	6	21.62	21.56	21.74
		12	13	21.45	21.54	21.59
		25	0	21.65	21.56	21.61
5M	256QAM	1	0	19.64	19.59	19.77
		1	12	19.60	19.65	19.77
		1	24	19.63	19.59	19.78
		12	0	19.65	19.60	19.81
		12	6	19.57	19.56	19.69
		12	13	19.59	19.47	19.62
		25	0	19.57	19.51	19.73

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19965	20175	20385
		Frequency (MHz)		1711.5	1732.5	1753.5
3M	QPSK	1	0	24.64	24.56	24.80
		1	7	24.50	24.49	24.74
		1	14	24.55	24.61	24.64
		8	0	23.65	23.63	23.84
		8	3	23.69	23.51	23.75
		8	7	23.65	23.58	23.67
		15	0	23.61	23.59	23.67
3M	16QAM	1	0	23.64	23.59	23.80
		1	7	23.70	23.54	23.72
		1	14	23.46	23.51	23.67
		8	0	22.64	22.57	22.89
		8	3	22.63	22.53	22.82
		8	7	22.58	22.44	22.59
		15	0	22.54	22.51	22.70
3M	64QAM	1	0	22.68	22.67	22.78
		1	7	22.58	22.52	22.67
		1	14	22.48	22.49	22.64
		8	0	21.61	21.53	21.69
		8	3	21.52	21.59	21.72
		8	7	21.57	21.40	21.60
		15	0	21.58	21.56	21.64
3M	256QAM	1	0	19.63	19.60	19.76
		1	7	19.67	19.63	19.73
		1	14	19.63	19.54	19.77
		8	0	19.66	19.62	19.73
		8	3	19.63	19.50	19.68
		8	7	19.58	19.50	19.66
		15	0	19.58	19.50	19.74

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19957	20175	20393
		Frequency (MHz)		1710.7	1732.5	1754.3
1.4M	QPSK	1	0	24.57	24.49	24.69
		1	2	24.61	24.51	24.69
		1	5	24.51	24.50	24.66
		3	0	24.63	24.67	24.82
		3	1	24.59	24.56	24.76
		3	3	24.59	24.61	24.61
		6	0	23.55	23.58	23.70
1.4M	16QAM	1	0	23.67	23.49	23.67
		1	2	23.57	23.59	23.62
		1	5	23.64	23.60	23.65
		3	0	23.71	23.52	23.68
		3	1	23.63	23.63	23.74
		3	3	23.55	23.53	23.64
		6	0	22.48	22.63	22.64
1.4M	64QAM	1	0	22.63	22.60	22.82
		1	2	22.54	22.64	22.75
		1	5	22.53	22.46	22.66
		3	0	22.54	22.57	22.81
		3	1	22.49	22.56	22.73
		3	3	22.43	22.56	22.72
		6	0	21.54	21.58	21.75
1.4M	256QAM	1	0	19.73	19.64	19.83
		1	2	19.68	19.56	19.79
		1	5	19.62	19.52	19.68
		3	0	19.62	19.63	19.78
		3	1	19.57	19.53	19.72
		3	3	19.57	19.49	19.72
		6	0	19.55	19.48	19.71

EIRP Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20050	20175	20300
		Frequency (MHz)		1720	1732.5	1745
20M	QPSK	1	0	23.95	23.90	24.07
		1	50	23.92	23.87	24.04
		1	99	23.90	23.85	24.02
		50	0	23.00	22.95	23.12
		50	25	22.94	22.89	23.06
		50	50	22.90	22.85	23.02
		100	0	22.92	22.87	23.04
20M	16QAM	1	0	22.96	22.91	23.08
		1	50	22.93	22.88	23.05
		1	99	22.90	22.85	23.02
		50	0	22.00	21.95	22.12
		50	25	21.95	21.90	22.07
		50	50	21.90	21.85	22.02
		100	0	21.93	21.88	22.05
20M	64QAM	1	0	21.97	21.92	22.09
		1	50	21.93	21.88	22.05
		1	99	21.90	21.85	22.02
		50	0	20.96	20.91	21.08
		50	25	20.93	20.88	21.05
		50	50	20.88	20.83	21.00
		100	0	20.91	20.86	21.03
20M	256QAM	1	0	18.94	18.89	19.06
		1	50	18.91	18.86	19.03
		1	99	18.87	18.82	18.99
		50	0	18.90	18.85	19.02
		50	25	18.86	18.81	18.98
		50	50	18.81	18.76	18.93
		100	0	18.83	18.78	18.95

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20025	20175	20325
		Frequency (MHz)		1717.5	1732.5	1747.5
15M	QPSK	1	0	23.90	23.88	23.97
		1	37	23.91	23.85	23.96
		1	74	23.80	23.83	23.97
		36	0	22.94	22.90	23.12
		36	19	22.86	22.87	22.96
		36	39	22.87	22.80	22.94
		75	0	22.84	22.79	23.00
15M	16QAM	1	0	22.95	22.85	22.99
		1	37	22.90	22.81	23.02
		1	74	22.80	22.75	22.96
		36	0	21.96	21.91	22.05
		36	19	21.92	21.82	22.03
		36	39	21.88	21.77	21.95
		75	0	21.85	21.85	22.00
15M	64QAM	1	0	21.89	21.90	21.99
		1	37	21.84	21.81	22.00
		1	74	21.87	21.81	22.02
		36	0	20.91	20.91	21.04
		36	19	20.89	20.78	20.99
		36	39	20.85	20.77	20.96
		75	0	20.91	20.83	20.94
15M	256QAM	1	0	18.86	18.83	18.96
		1	37	18.91	18.77	18.98
		1	74	18.77	18.81	18.91
		36	0	18.83	18.75	18.96
		36	19	18.82	18.76	18.97
		36	39	18.72	18.71	18.85
		75	0	18.75	18.69	18.88

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20000	20175	20350
		Frequency (MHz)		1715	1732.5	1750
10M	QPSK	1	0	23.86	23.82	24.06
		1	24	23.78	23.75	23.90
		1	49	23.82	23.70	23.96
		25	0	22.79	22.76	22.98
		25	12	22.90	22.79	22.92
		25	25	22.83	22.73	22.89
		50	0	22.77	22.74	22.82
10M	16QAM	1	0	22.80	22.75	22.99
		1	24	22.76	22.79	22.94
		1	49	22.66	22.77	22.89
		25	0	21.87	21.75	22.09
		25	12	21.90	21.73	21.95
		25	25	21.72	21.78	21.94
		50	0	21.80	21.77	21.85
10M	64QAM	1	0	21.86	21.87	21.87
		1	24	21.77	21.84	21.91
		1	49	21.74	21.74	21.85
		25	0	20.79	20.80	20.95
		25	12	20.75	20.69	20.89
		25	25	20.63	20.80	20.85
		50	0	20.73	20.82	20.84
10M	256QAM	1	0	18.88	18.84	19.01
		1	24	18.83	18.85	18.97
		1	49	18.81	18.81	18.95
		25	0	18.83	18.79	18.93
		25	12	18.84	18.75	18.98
		25	25	18.81	18.76	18.89
		50	0	18.80	18.77	18.93

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19975	20175	20375
		Frequency (MHz)		1712.5	1732.5	1752.5
5M	QPSK	1	0	23.85	23.85	23.98
		1	12	23.86	23.70	23.80
		1	24	23.74	23.68	23.83
		12	0	22.95	22.89	22.97
		12	6	22.85	22.83	22.90
		12	13	22.84	22.71	22.77
		25	0	22.85	22.73	22.88
5M	16QAM	1	0	22.87	22.74	22.89
		1	12	22.80	22.79	23.02
		1	24	22.68	22.68	22.87
		12	0	21.86	21.75	21.97
		12	6	21.84	21.72	21.86
		12	13	21.82	21.76	21.93
		25	0	21.87	21.72	21.81
5M	64QAM	1	0	21.95	21.83	21.96
		1	12	21.79	21.67	21.95
		1	24	21.75	21.63	21.89
		12	0	20.89	20.74	20.97
		12	6	20.83	20.77	20.95
		12	13	20.66	20.75	20.80
		25	0	20.86	20.77	20.82
5M	256QAM	1	0	18.85	18.80	18.98
		1	12	18.81	18.86	18.98
		1	24	18.84	18.80	18.99
		12	0	18.86	18.81	19.02
		12	6	18.78	18.77	18.90
		12	13	18.80	18.68	18.83
		25	0	18.78	18.72	18.94

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19965	20175	20385
		Frequency (MHz)		1711.5	1732.5	1753.5
3M	QPSK	1	0	23.85	23.77	24.01
		1	7	23.71	23.70	23.95
		1	14	23.76	23.82	23.85
		8	0	22.86	22.84	23.05
		8	3	22.90	22.72	22.96
		8	7	22.86	22.79	22.88
		15	0	22.82	22.80	22.88
3M	16QAM	1	0	22.85	22.80	23.01
		1	7	22.91	22.75	22.93
		1	14	22.67	22.72	22.88
		8	0	21.85	21.78	22.10
		8	3	21.84	21.74	22.03
		8	7	21.79	21.65	21.80
		15	0	21.75	21.72	21.91
3M	64QAM	1	0	21.89	21.88	21.99
		1	7	21.79	21.73	21.88
		1	14	21.69	21.70	21.85
		8	0	20.82	20.74	20.90
		8	3	20.73	20.80	20.93
		8	7	20.78	20.61	20.81
		15	0	20.79	20.77	20.85
3M	256QAM	1	0	18.84	18.81	18.97
		1	7	18.88	18.84	18.94
		1	14	18.84	18.75	18.98
		8	0	18.87	18.83	18.94
		8	3	18.84	18.71	18.89
		8	7	18.79	18.71	18.87
		15	0	18.79	18.71	18.95

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19957	20175	20393
		Frequency (MHz)		1710.7	1732.5	1754.3
1.4M	QPSK	1	0	23.78	23.70	23.90
		1	2	23.82	23.72	23.90
		1	5	23.72	23.71	23.87
		3	0	23.84	23.88	24.03
		3	1	23.80	23.77	23.97
		3	3	23.80	23.82	23.82
		6	0	22.76	22.79	22.91
1.4M	16QAM	1	0	22.88	22.70	22.88
		1	2	22.78	22.80	22.83
		1	5	22.85	22.81	22.86
		3	0	22.92	22.73	22.89
		3	1	22.84	22.84	22.95
		3	3	22.76	22.74	22.85
		6	0	21.69	21.84	21.85
1.4M	64QAM	1	0	21.84	21.81	22.03
		1	2	21.75	21.85	21.96
		1	5	21.74	21.67	21.87
		3	0	21.75	21.78	22.02
		3	1	21.70	21.77	21.94
		3	3	21.64	21.77	21.93
		6	0	20.75	20.79	20.96
1.4M	256QAM	1	0	18.94	18.85	19.04
		1	2	18.89	18.77	19.00
		1	5	18.83	18.73	18.89
		3	0	18.83	18.84	18.99
		3	1	18.78	18.74	18.93
		3	3	18.78	18.70	18.93
		6	0	18.76	18.69	18.92

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

7.1.7 LTE Band 5

Conducted Output Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20450	20525	20600
		Frequency (MHz)		829	836.5	844
10M	QPSK	1	0	24.56	24.75	24.62
		1	24	24.53	24.72	24.59
		1	49	24.47	24.66	24.53
		25	0	23.59	23.78	23.65
		25	12	23.55	23.74	23.61
		25	25	23.50	23.69	23.56
		50	0	23.53	23.72	23.59
10M	16QAM	1	0	23.56	23.75	23.62
		1	24	23.53	23.72	23.59
		1	49	23.49	23.68	23.55
		25	0	22.62	22.81	22.68
		25	12	22.58	22.77	22.64
		25	25	22.53	22.72	22.59
		50	0	22.55	22.74	22.61
10M	64QAM	1	0	22.56	22.75	22.62
		1	24	22.52	22.71	22.58
		1	49	22.48	22.67	22.54
		25	0	21.60	21.79	21.66
		25	12	21.56	21.75	21.62
		25	25	21.52	21.71	21.58
		50	0	21.54	21.73	21.60
10M	256QAM	1	0	19.58	19.77	19.64
		1	24	19.55	19.74	19.61
		1	49	19.53	19.72	19.59
		25	0	19.56	19.75	19.62
		25	12	19.52	19.71	19.58
		25	25	19.47	19.66	19.53
		50	0	19.49	19.68	19.55

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20425	20525	20625
		Frequency (MHz)		826.5	836.5	846.5
5M	QPSK	1	0	24.51	24.67	24.62
		1	12	24.50	24.71	24.53
		1	24	24.45	24.62	24.45
		12	0	23.58	23.74	23.64
		12	6	23.45	23.70	23.56
		12	13	23.42	23.60	23.50
		25	0	23.53	23.71	23.57
5M	16QAM	1	0	23.47	23.75	23.58
		1	12	23.45	23.67	23.55
		1	24	23.46	23.61	23.48
		12	0	22.52	22.75	22.68
		12	6	22.48	22.73	22.57
		12	13	22.47	22.62	22.49
		25	0	22.51	22.74	22.51
5M	64QAM	1	0	22.55	22.72	22.61
		1	12	22.51	22.67	22.57
		1	24	22.39	22.62	22.49
		12	0	21.54	21.78	21.64
		12	6	21.46	21.70	21.58
		12	13	21.44	21.63	21.54
		25	0	21.44	21.66	21.55
5M	256QAM	1	0	19.48	19.74	19.58
		1	12	19.45	19.70	19.60
		1	24	19.47	19.72	19.53
		12	0	19.52	19.69	19.52
		12	6	19.49	19.68	19.54
		12	13	19.46	19.62	19.49
		25	0	19.49	19.67	19.49

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20415	20525	20635
		Frequency (MHz)		825.5	836.5	847.5
3M	QPSK	1	0	24.37	24.72	24.57
		1	7	24.47	24.59	24.44
		1	14	24.27	24.48	24.39
		8	0	23.51	23.74	23.51
		8	3	23.43	23.63	23.52
		8	7	23.50	23.51	23.35
		15	0	23.48	23.63	23.51
3M	16QAM	1	0	23.42	23.60	23.50
		1	7	23.47	23.63	23.43
		1	14	23.33	23.56	23.38
		8	0	22.47	22.73	22.51
		8	3	22.55	22.61	22.48
		8	7	22.47	22.65	22.44
		15	0	22.47	22.64	22.51
3M	64QAM	1	0	22.39	22.65	22.44
		1	7	22.47	22.55	22.44
		1	14	22.27	22.52	22.43
		8	0	21.47	21.63	21.56
		8	3	21.41	21.57	21.37
		8	7	21.39	21.66	21.40
		15	0	21.42	21.63	21.50
3M	256QAM	1	0	19.50	19.67	19.54
		1	7	19.45	19.73	19.51
		1	14	19.53	19.63	19.59
		8	0	19.52	19.73	19.59
		8	3	19.49	19.66	19.55
		8	7	19.41	19.59	19.49
		15	0	19.49	19.65	19.49

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20407	20525	20643
		Frequency (MHz)		824.7	836.5	848.3
1.4M	QPSK	1	0	24.35	24.64	24.56
		1	2	24.37	24.63	24.31
		1	5	24.28	24.47	24.32
		3	0	23.51	23.73	23.42
		3	1	23.45	23.59	23.39
		3	3	23.39	23.63	23.33
		6	0	23.43	23.67	23.41
1.4M	16QAM	1	0	23.46	23.56	23.51
		1	2	23.45	23.48	23.46
		1	5	23.46	23.54	23.35
		3	0	22.57	22.61	22.66
		3	1	22.37	22.72	22.54
		3	3	22.36	22.56	22.40
		6	0	22.42	22.59	22.42
1.4M	64QAM	1	0	22.36	22.64	22.48
		1	2	22.38	22.70	22.43
		1	5	22.33	22.49	22.49
		3	0	21.44	21.66	21.49
		3	1	21.39	21.70	21.46
		3	3	21.32	21.58	21.43
		6	0	21.40	21.54	21.36
1.4M	256QAM	1	0	19.50	19.76	19.64
		1	2	19.51	19.73	19.60
		1	5	19.52	19.72	19.54
		3	0	19.54	19.68	19.53
		3	1	19.44	19.71	19.55
		3	3	19.41	19.62	19.45
		6	0	19.39	19.60	19.54

ERP Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20450	20525	20600
		Frequency (MHz)		829	836.5	844
10M	QPSK	1	0	20.21	20.40	20.27
		1	24	20.18	20.37	20.24
		1	49	20.12	20.31	20.18
		25	0	19.24	19.43	19.30
		25	12	19.20	19.39	19.26
		25	25	19.15	19.34	19.21
		50	0	19.18	19.37	19.24
10M	16QAM	1	0	19.21	19.40	19.27
		1	24	19.18	19.37	19.24
		1	49	19.14	19.33	19.20
		25	0	18.27	18.46	18.33
		25	12	18.23	18.42	18.29
		25	25	18.18	18.37	18.24
		50	0	18.20	18.39	18.26
10M	64QAM	1	0	18.21	18.40	18.27
		1	24	18.17	18.36	18.23
		1	49	18.13	18.32	18.19
		25	0	17.25	17.44	17.31
		25	12	17.21	17.40	17.27
		25	25	17.17	17.36	17.23
		50	0	17.19	17.38	17.25
10M	256QAM	1	0	15.23	15.42	15.29
		1	24	15.20	15.39	15.26
		1	49	15.18	15.37	15.24
		25	0	15.21	15.40	15.27
		25	12	15.17	15.36	15.23
		25	25	15.12	15.31	15.18
		50	0	15.14	15.33	15.20

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20425	20525	20625
		Frequency (MHz)		826.5	836.5	846.5
5M	QPSK	1	0	20.16	20.32	20.27
		1	12	20.15	20.36	20.18
		1	24	20.10	20.27	20.10
		12	0	19.23	19.39	19.29
		12	6	19.10	19.35	19.21
		12	13	19.07	19.25	19.15
		25	0	19.18	19.36	19.22
5M	16QAM	1	0	19.12	19.40	19.23
		1	12	19.10	19.32	19.20
		1	24	19.11	19.26	19.13
		12	0	18.17	18.40	18.33
		12	6	18.13	18.38	18.22
		12	13	18.12	18.27	18.14
		25	0	18.16	18.39	18.16
5M	64QAM	1	0	18.20	18.37	18.26
		1	12	18.16	18.32	18.22
		1	24	18.04	18.27	18.14
		12	0	17.19	17.43	17.29
		12	6	17.11	17.35	17.23
		12	13	17.09	17.28	17.19
		25	0	17.09	17.31	17.20
5M	256QAM	1	0	15.13	15.39	15.23
		1	12	15.10	15.35	15.25
		1	24	15.12	15.37	15.18
		12	0	15.17	15.34	15.17
		12	6	15.14	15.33	15.19
		12	13	15.11	15.27	15.14
		25	0	15.14	15.32	15.14

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20415	20525	20635
		Frequency (MHz)		825.5	836.5	847.5
3M	QPSK	1	0	20.02	20.37	20.22
		1	7	20.12	20.24	20.09
		1	14	19.92	20.13	20.04
		8	0	19.16	19.39	19.16
		8	3	19.08	19.28	19.17
		8	7	19.15	19.16	19.00
		15	0	19.13	19.28	19.16
3M	16QAM	1	0	19.07	19.25	19.15
		1	7	19.12	19.28	19.08
		1	14	18.98	19.21	19.03
		8	0	18.12	18.38	18.16
		8	3	18.20	18.26	18.13
		8	7	18.12	18.30	18.09
		15	0	18.12	18.29	18.16
3M	64QAM	1	0	18.04	18.30	18.09
		1	7	18.12	18.20	18.09
		1	14	17.92	18.17	18.08
		8	0	17.12	17.28	17.21
		8	3	17.06	17.22	17.02
		8	7	17.04	17.31	17.05
		15	0	17.07	17.28	17.15
3M	256QAM	1	0	15.15	15.32	15.19
		1	7	15.10	15.38	15.16
		1	14	15.18	15.28	15.24
		8	0	15.17	15.38	15.24
		8	3	15.14	15.31	15.20
		8	7	15.06	15.24	15.14
		15	0	15.14	15.30	15.14

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20407	20525	20643
		Frequency (MHz)		824.7	836.5	848.3
1.4M	QPSK	1	0	20.00	20.29	20.21
		1	2	20.02	20.28	19.96
		1	5	19.93	20.12	19.97
		3	0	19.16	19.38	19.07
		3	1	19.10	19.24	19.04
		3	3	19.04	19.28	18.98
		6	0	19.08	19.32	19.06
1.4M	16QAM	1	0	19.11	19.21	19.16
		1	2	19.10	19.13	19.11
		1	5	19.11	19.19	19.00
		3	0	18.22	18.26	18.31
		3	1	18.02	18.37	18.19
		3	3	18.01	18.21	18.05
		6	0	18.07	18.24	18.07
1.4M	64QAM	1	0	18.01	18.29	18.13
		1	2	18.03	18.35	18.08
		1	5	17.98	18.14	18.14
		3	0	17.09	17.31	17.14
		3	1	17.04	17.35	17.11
		3	3	16.97	17.23	17.08
		6	0	17.05	17.19	17.01
1.4M	256QAM	1	0	15.15	15.41	15.29
		1	2	15.16	15.38	15.25
		1	5	15.17	15.37	15.19
		3	0	15.19	15.33	15.18
		3	1	15.09	15.36	15.20
		3	3	15.06	15.27	15.10
		6	0	15.04	15.25	15.19

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

7.1.8 LTE Band 7

Conducted Output Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20850	21100	21350
		Frequency (MHz)		2510	2535	2560
20M	QPSK	1	0	24.32	24.37	24.46
		1	50	24.28	24.33	24.42
		1	99	24.23	24.28	24.37
		50	0	23.37	23.42	23.51
		50	25	23.32	23.37	23.46
		50	50	23.27	23.32	23.41
		100	0	23.29	23.34	23.43
20M	16QAM	1	0	23.28	23.33	23.42
		1	50	23.23	23.28	23.37
		1	99	23.19	23.24	23.33
		50	0	22.37	22.42	22.51
		50	25	22.32	22.37	22.46
		50	50	22.23	22.28	22.37
		100	0	22.25	22.30	22.39
20M	64QAM	1	0	22.35	22.40	22.49
		1	50	22.32	22.37	22.46
		1	99	22.28	22.33	22.42
		50	0	21.34	21.39	21.48
		50	25	21.30	21.35	21.44
		50	50	21.22	21.27	21.36
		100	0	21.25	21.30	21.39
20M	256QAM	1	0	19.39	19.44	19.53
		1	50	19.37	19.42	19.51
		1	99	19.33	19.38	19.47
		50	0	19.35	19.40	19.49
		50	25	19.31	19.36	19.45
		50	50	19.23	19.28	19.37
		100	0	19.27	19.32	19.41

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20825	21100	21375
		Frequency (MHz)		2507.5	2535	2562.5
15M	QPSK	1	0	24.28	24.30	24.38
		1	37	24.26	24.25	24.41
		1	74	24.15	24.23	24.29
		36	0	23.27	23.34	23.47
		36	19	23.24	23.34	23.42
		36	39	23.27	23.32	23.37
		75	0	23.28	23.25	23.40
15M	16QAM	1	0	23.23	23.31	23.34
		1	37	23.22	23.25	23.32
		1	74	23.12	23.19	23.23
		36	0	22.31	22.37	22.41
		36	19	22.22	22.27	22.40
		36	39	22.23	22.19	22.29
		75	0	22.22	22.20	22.29
15M	64QAM	1	0	22.32	22.34	22.49
		1	37	22.30	22.33	22.36
		1	74	22.22	22.30	22.42
		36	0	21.30	21.37	21.48
		36	19	21.30	21.32	21.44
		36	39	21.21	21.17	21.29
		75	0	21.19	21.21	21.32
15M	256QAM	1	0	19.38	19.38	19.53
		1	37	19.27	19.41	19.42
		1	74	19.26	19.38	19.41
		36	0	19.32	19.31	19.44
		36	19	19.26	19.28	19.43
		36	39	19.19	19.18	19.35
		75	0	19.22	19.29	19.33

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20800	21100	21400
		Frequency (MHz)		2505	2535	2565
10M	QPSK	1	0	24.14	24.22	24.28
		1	24	24.25	24.16	24.27
		1	49	24.19	24.07	24.25
		25	0	23.14	23.24	23.45
		25	12	23.11	23.24	23.31
		25	25	23.10	23.10	23.18
		50	0	23.20	23.29	23.27
10M	16QAM	1	0	23.20	23.16	23.36
		1	24	23.05	23.13	23.13
		1	49	23.15	23.15	23.21
		25	0	22.24	22.27	22.47
		25	12	22.21	22.27	22.36
		25	25	22.07	22.13	22.37
		50	0	22.19	22.20	22.25
10M	64QAM	1	0	22.20	22.27	22.40
		1	24	22.18	22.19	22.38
		1	49	22.11	22.16	22.19
		25	0	21.29	21.22	21.36
		25	12	21.16	21.18	21.31
		25	25	21.01	21.05	21.17
		50	0	21.15	21.12	21.21
10M	256QAM	1	0	19.32	19.42	19.48
		1	24	19.35	19.33	19.50
		1	49	19.28	19.34	19.47
		25	0	19.30	19.39	19.40
		25	12	19.27	19.33	19.42
		25	25	19.13	19.21	19.30
		50	0	19.27	19.28	19.41

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20775	21100	21425
		Frequency (MHz)		2502.5	2535	2567.5
5M	QPSK	1	0	24.27	24.31	24.10
		1	12	24.09	24.21	24.18
		1	24	24.06	24.13	24.28
		12	0	23.24	23.42	23.27
		12	6	23.20	23.27	23.25
		12	13	23.22	23.16	23.21
		25	0	23.16	23.30	23.21
5M	16QAM	1	0	23.10	23.13	23.34
		1	12	23.12	23.08	23.22
		1	24	23.01	23.05	23.26
		12	0	22.30	22.32	22.42
		12	6	22.27	22.28	22.43
		12	13	22.05	22.12	22.26
		25	0	22.16	22.13	22.32
5M	64QAM	1	0	22.30	22.16	22.39
		1	12	22.15	22.25	22.31
		1	24	22.17	22.18	22.34
		12	0	21.12	21.26	21.25
		12	6	21.18	21.25	21.36
		12	13	21.00	21.19	21.23
		25	0	21.20	21.21	21.25
5M	256QAM	1	0	19.33	19.43	19.45
		1	12	19.35	19.39	19.41
		1	24	19.23	19.30	19.42
		12	0	19.34	19.34	19.39
		12	6	19.27	19.32	19.37
		12	13	19.13	19.28	19.36
		25	0	19.22	19.27	19.41

EIRP Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20850	21100	21350
		Frequency (MHz)		2510	2535	2560
20M	QPSK	1	0	24.36	24.41	24.50
		1	50	24.32	24.37	24.46
		1	99	24.27	24.32	24.41
		50	0	23.41	23.46	23.55
		50	25	23.36	23.41	23.50
		50	50	23.31	23.36	23.45
		100	0	23.33	23.38	23.47
20M	16QAM	1	0	23.32	23.37	23.46
		1	50	23.27	23.32	23.41
		1	99	23.23	23.28	23.37
		50	0	22.41	22.46	22.55
		50	25	22.36	22.41	22.50
		50	50	22.27	22.32	22.41
		100	0	22.29	22.34	22.43
20M	64QAM	1	0	22.39	22.44	22.53
		1	50	22.36	22.41	22.50
		1	99	22.32	22.37	22.46
		50	0	21.38	21.43	21.52
		50	25	21.34	21.39	21.48
		50	50	21.26	21.31	21.40
		100	0	21.29	21.34	21.43
20M	256QAM	1	0	19.43	19.48	19.57
		1	50	19.41	19.46	19.55
		1	99	19.37	19.42	19.51
		50	0	19.39	19.44	19.53
		50	25	19.35	19.40	19.49
		50	50	19.27	19.32	19.41
		100	0	19.31	19.36	19.45

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20825	21100	21375
		Frequency (MHz)		2507.5	2535	2562.5
15M	QPSK	1	0	24.32	24.34	24.42
		1	37	24.30	24.29	24.45
		1	74	24.19	24.27	24.33
		36	0	23.31	23.38	23.51
		36	19	23.28	23.38	23.46
		36	39	23.31	23.36	23.41
		75	0	23.32	23.29	23.44
15M	16QAM	1	0	23.27	23.35	23.38
		1	37	23.26	23.29	23.36
		1	74	23.16	23.23	23.27
		36	0	22.35	22.41	22.45
		36	19	22.26	22.31	22.44
		36	39	22.27	22.23	22.33
		75	0	22.26	22.24	22.33
15M	64QAM	1	0	22.36	22.38	22.53
		1	37	22.34	22.37	22.40
		1	74	22.26	22.34	22.46
		36	0	21.34	21.41	21.52
		36	19	21.34	21.36	21.48
		36	39	21.25	21.21	21.33
		75	0	21.23	21.25	21.36
15M	256QAM	1	0	19.42	19.42	19.57
		1	37	19.31	19.45	19.46
		1	74	19.30	19.42	19.45
		36	0	19.36	19.35	19.48
		36	19	19.30	19.32	19.47
		36	39	19.23	19.22	19.39
		75	0	19.26	19.33	19.37

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20800	21100	21400
		Frequency (MHz)		2505	2535	2565
10M	QPSK	1	0	24.18	24.26	24.32
		1	24	24.29	24.20	24.31
		1	49	24.23	24.11	24.29
		25	0	23.18	23.28	23.49
		25	12	23.15	23.28	23.35
		25	25	23.14	23.14	23.22
		50	0	23.24	23.33	23.31
10M	16QAM	1	0	23.24	23.20	23.40
		1	24	23.09	23.17	23.17
		1	49	23.19	23.19	23.25
		25	0	22.28	22.31	22.51
		25	12	22.25	22.31	22.40
		25	25	22.11	22.17	22.41
		50	0	22.23	22.24	22.29
10M	64QAM	1	0	22.24	22.31	22.44
		1	24	22.22	22.23	22.42
		1	49	22.15	22.20	22.23
		25	0	21.33	21.26	21.40
		25	12	21.20	21.22	21.35
		25	25	21.05	21.09	21.21
		50	0	21.19	21.16	21.25
10M	256QAM	1	0	19.36	19.46	19.52
		1	24	19.39	19.37	19.54
		1	49	19.32	19.38	19.51
		25	0	19.34	19.43	19.44
		25	12	19.31	19.37	19.46
		25	25	19.17	19.25	19.34
		50	0	19.31	19.32	19.45

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20775	21100	21425
		Frequency (MHz)		2502.5	2535	2567.5
5M	QPSK	1	0	24.31	24.35	24.14
		1	12	24.13	24.25	24.22
		1	24	24.10	24.17	24.32
		12	0	23.28	23.46	23.31
		12	6	23.24	23.31	23.29
		12	13	23.26	23.20	23.25
		25	0	23.20	23.34	23.25
5M	16QAM	1	0	23.14	23.17	23.38
		1	12	23.16	23.12	23.26
		1	24	23.05	23.09	23.30
		12	0	22.34	22.36	22.46
		12	6	22.31	22.32	22.47
		12	13	22.09	22.16	22.30
		25	0	22.20	22.17	22.36
5M	64QAM	1	0	22.34	22.20	22.43
		1	12	22.19	22.29	22.35
		1	24	22.21	22.22	22.38
		12	0	21.16	21.30	21.29
		12	6	21.22	21.29	21.40
		12	13	21.04	21.23	21.27
		25	0	21.24	21.25	21.29
5M	256QAM	1	0	19.37	19.47	19.49
		1	12	19.39	19.43	19.45
		1	24	19.27	19.34	19.46
		12	0	19.38	19.38	19.43
		12	6	19.31	19.36	19.41
		12	13	19.17	19.32	19.40
		25	0	19.26	19.31	19.45

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

7.1.9 LTE Band 12

Conducted Output Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23060	23095	23130
		Frequency (MHz)		704	707.5	711
10M	QPSK	1	0	24.95	24.97	24.91
		1	24	24.92	24.94	24.88
		1	49	24.89	24.91	24.85
		25	0	23.94	23.96	23.90
		25	12	23.92	23.94	23.88
		25	25	23.86	23.88	23.82
		50	0	23.90	23.92	23.86
10M	16QAM	1	0	23.92	23.94	23.88
		1	24	23.89	23.91	23.85
		1	49	23.85	23.87	23.81
		25	0	22.96	22.98	22.92
		25	12	22.94	22.96	22.90
		25	25	22.87	22.89	22.83
		50	0	22.91	22.93	22.87
10M	64QAM	1	0	22.92	22.94	22.88
		1	24	22.89	22.91	22.85
		1	49	22.85	22.87	22.81
		25	0	21.87	21.89	21.83
		25	12	21.84	21.86	21.80
		25	25	21.76	21.78	21.72
		50	0	21.81	21.83	21.77
10M	256QAM	1	0	19.91	19.93	19.87
		1	24	19.89	19.91	19.85
		1	49	19.83	19.85	19.79
		25	0	19.90	19.92	19.86
		25	12	19.84	19.86	19.80
		25	25	19.80	19.82	19.76
		50	0	19.82	19.84	19.78

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23035	23095	23155
		Frequency (MHz)		701.5	707.5	713.5
5M	QPSK	1	0	24.89	24.94	24.82
		1	12	24.88	24.90	24.82
		1	24	24.79	24.91	24.81
		12	0	23.89	23.90	23.88
		12	6	23.82	23.93	23.85
		12	13	23.78	23.78	23.73
		25	0	23.85	23.88	23.85
5M	16QAM	1	0	23.86	23.84	23.85
		1	12	23.85	23.88	23.78
		1	24	23.79	23.80	23.80
		12	0	22.94	22.89	22.92
		12	6	22.85	22.89	22.85
		12	13	22.83	22.89	22.82
		25	0	22.83	22.85	22.87
5M	64QAM	1	0	22.82	22.94	22.84
		1	12	22.83	22.86	22.80
		1	24	22.78	22.79	22.80
		12	0	21.84	21.82	21.80
		12	6	21.83	21.82	21.80
		12	13	21.67	21.75	21.71
		25	0	21.77	21.79	21.75
5M	256QAM	1	0	19.91	19.87	19.80
		1	12	19.88	19.82	19.75
		1	24	19.80	19.81	19.75
		12	0	19.89	19.84	19.82
		12	6	19.74	19.80	19.74
		12	13	19.70	19.74	19.74
		25	0	19.78	19.83	19.73

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23025	23095	23165
		Frequency (MHz)		700.5	707.5	714.5
3M	QPSK	1	0	24.73	24.80	24.81
		1	7	24.80	24.78	24.80
		1	14	24.72	24.79	24.72
		8	0	23.86	23.79	23.81
		8	3	23.84	23.84	23.75
		8	7	23.67	23.73	23.78
		15	0	23.73	23.78	23.67
3M	16QAM	1	0	23.83	23.76	23.78
		1	7	23.76	23.76	23.65
		1	14	23.74	23.80	23.69
		8	0	22.83	22.84	22.72
		8	3	22.70	22.78	22.68
		8	7	22.81	22.85	22.66
		15	0	22.73	22.82	22.77
3M	64QAM	1	0	22.91	22.89	22.78
		1	7	22.68	22.73	22.69
		1	14	22.69	22.75	22.66
		8	0	21.76	21.77	21.72
		8	3	21.65	21.67	21.63
		8	7	21.51	21.61	21.61
		15	0	21.63	21.66	21.65
3M	256QAM	1	0	19.91	19.92	19.81
		1	7	19.82	19.91	19.75
		1	14	19.82	19.82	19.75
		8	0	19.90	19.83	19.80
		8	3	19.82	19.80	19.71
		8	7	19.80	19.77	19.68
		15	0	19.81	19.82	19.76

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23017	23095	23173
		Frequency (MHz)		699.7	707.5	715.3
1.4M	QPSK	1	0	24.78	24.94	24.70
		1	2	24.90	24.81	24.77
		1	5	24.77	24.73	24.64
		3	0	23.87	23.84	23.66
		3	1	23.88	23.84	23.60
		3	3	23.74	23.81	23.64
		6	0	23.79	23.70	23.76
1.4M	16QAM	1	0	23.80	23.82	23.69
		1	2	23.74	23.81	23.69
		1	5	23.67	23.70	23.77
		3	0	22.85	22.88	22.84
		3	1	22.77	22.81	22.87
		3	3	22.73	22.77	22.71
		6	0	22.79	22.77	22.86
1.4M	64QAM	1	0	22.72	22.82	22.67
		1	2	22.75	22.87	22.71
		1	5	22.66	22.68	22.74
		3	0	21.76	21.73	21.75
		3	1	21.76	21.69	21.65
		3	3	21.63	21.59	21.62
		6	0	21.77	21.71	21.71
1.4M	256QAM	1	0	19.84	19.87	19.81
		1	2	19.88	19.87	19.75
		1	5	19.83	19.75	19.79
		3	0	19.83	19.88	19.79
		3	1	19.77	19.82	19.72
		3	3	19.80	19.72	19.74
		6	0	19.76	19.81	19.75

ERP Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23060	23095	23130
		Frequency (MHz)		704	707.5	711
10M	QPSK	1	0	21.23	21.25	21.19
		1	24	21.20	21.22	21.16
		1	49	21.17	21.19	21.13
		25	0	20.22	20.24	20.18
		25	12	20.20	20.22	20.16
		25	25	20.14	20.16	20.10
		50	0	20.18	20.20	20.14
10M	16QAM	1	0	20.20	20.22	20.16
		1	24	20.17	20.19	20.13
		1	49	20.13	20.15	20.09
		25	0	19.24	19.26	19.20
		25	12	19.22	19.24	19.18
		25	25	19.15	19.17	19.11
		50	0	19.19	19.21	19.15
10M	64QAM	1	0	19.20	19.22	19.16
		1	24	19.17	19.19	19.13
		1	49	19.13	19.15	19.09
		25	0	18.15	18.17	18.11
		25	12	18.12	18.14	18.08
		25	25	18.04	18.06	18.00
		50	0	18.09	18.11	18.05
10M	256QAM	1	0	16.19	16.21	16.15
		1	24	16.17	16.19	16.13
		1	49	16.11	16.13	16.07
		25	0	16.18	16.20	16.14
		25	12	16.12	16.14	16.08
		25	25	16.08	16.10	16.04
		50	0	16.10	16.12	16.06

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23035	23095	23155
		Frequency (MHz)		701.5	707.5	713.5
5M	QPSK	1	0	21.17	21.22	21.10
		1	12	21.16	21.18	21.10
		1	24	21.07	21.19	21.09
		12	0	20.17	20.18	20.16
		12	6	20.10	20.21	20.13
		12	13	20.06	20.06	20.01
		25	0	20.13	20.16	20.13
5M	16QAM	1	0	20.14	20.12	20.13
		1	12	20.13	20.16	20.06
		1	24	20.07	20.08	20.08
		12	0	19.22	19.17	19.20
		12	6	19.13	19.17	19.13
		12	13	19.11	19.17	19.10
		25	0	19.11	19.13	19.15
5M	64QAM	1	0	19.10	19.22	19.12
		1	12	19.11	19.14	19.08
		1	24	19.06	19.07	19.08
		12	0	18.12	18.10	18.08
		12	6	18.11	18.10	18.08
		12	13	17.95	18.03	17.99
		25	0	18.05	18.07	18.03
5M	256QAM	1	0	16.19	16.15	16.08
		1	12	16.16	16.10	16.03
		1	24	16.08	16.09	16.03
		12	0	16.17	16.12	16.10
		12	6	16.02	16.08	16.02
		12	13	15.98	16.02	16.02
		25	0	16.06	16.11	16.01

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23025	23095	23165
		Frequency (MHz)		700.5	707.5	714.5
3M	QPSK	1	0	21.01	21.08	21.09
		1	7	21.08	21.06	21.08
		1	14	21.00	21.07	21.00
		8	0	20.14	20.07	20.09
		8	3	20.12	20.12	20.03
		8	7	19.95	20.01	20.06
		15	0	20.01	20.06	19.95
3M	16QAM	1	0	20.11	20.04	20.06
		1	7	20.04	20.04	19.93
		1	14	20.02	20.08	19.97
		8	0	19.11	19.12	19.00
		8	3	18.98	19.06	18.96
		8	7	19.09	19.13	18.94
		15	0	19.01	19.10	19.05
3M	64QAM	1	0	19.19	19.17	19.06
		1	7	18.96	19.01	18.97
		1	14	18.97	19.03	18.94
		8	0	18.04	18.05	18.00
		8	3	17.93	17.95	17.91
		8	7	17.79	17.89	17.89
		15	0	17.91	17.94	17.93
3M	256QAM	1	0	16.19	16.20	16.09
		1	7	16.10	16.19	16.03
		1	14	16.10	16.10	16.03
		8	0	16.18	16.11	16.08
		8	3	16.10	16.08	15.99
		8	7	16.08	16.05	15.96
		15	0	16.09	16.10	16.04

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23017	23095	23173
		Frequency (MHz)		699.7	707.5	715.3
1.4M	QPSK	1	0	21.06	21.22	20.98
		1	2	21.18	21.09	21.05
		1	5	21.05	21.01	20.92
		3	0	20.15	20.12	19.94
		3	1	20.16	20.12	19.88
		3	3	20.02	20.09	19.92
		6	0	20.07	19.98	20.04
1.4M	16QAM	1	0	20.08	20.10	19.97
		1	2	20.02	20.09	19.97
		1	5	19.95	19.98	20.05
		3	0	19.13	19.16	19.12
		3	1	19.05	19.09	19.15
		3	3	19.01	19.05	18.99
		6	0	19.07	19.05	19.14
1.4M	64QAM	1	0	19.00	19.10	18.95
		1	2	19.03	19.15	18.99
		1	5	18.94	18.96	19.02
		3	0	18.04	18.01	18.03
		3	1	18.04	17.97	17.93
		3	3	17.91	17.87	17.90
		6	0	18.05	17.99	17.99
1.4M	256QAM	1	0	16.12	16.15	16.09
		1	2	16.16	16.15	16.03
		1	5	16.11	16.03	16.07
		3	0	16.11	16.16	16.07
		3	1	16.05	16.10	16.00
		3	3	16.08	16.00	16.02
		6	0	16.04	16.09	16.03

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

7.1.10 LTE Band 17

Conducted Output Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23780	23790	23800
		Frequency (MHz)		709	710	711
10M	QPSK	1	0	24.77	24.86	24.84
		1	24	24.74	24.83	24.81
		1	49	24.69	24.78	24.76
		25	0	23.80	23.89	23.87
		25	12	23.76	23.85	23.83
		25	25	23.70	23.79	23.77
		50	0	23.74	23.83	23.81
10M	16QAM	1	0	23.76	23.85	23.83
		1	24	23.73	23.82	23.80
		1	49	23.68	23.77	23.75
		25	0	22.82	22.91	22.89
		25	12	22.77	22.86	22.84
		25	25	22.73	22.82	22.80
		50	0	22.75	22.84	22.82
10M	64QAM	1	0	22.74	22.83	22.81
		1	24	22.72	22.81	22.79
		1	49	22.65	22.74	22.72
		25	0	21.80	21.89	21.87
		25	12	21.75	21.84	21.82
		25	25	21.65	21.74	21.72
		50	0	21.67	21.76	21.74
10M	256QAM	1	0	19.79	19.88	19.86
		1	24	19.76	19.85	19.83
		1	49	19.73	19.82	19.80
		25	0	19.75	19.84	19.82
		25	12	19.72	19.81	19.79
		25	25	19.64	19.73	19.71
		50	0	19.66	19.75	19.73

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23755	23790	23825
		Frequency (MHz)		706.5	710	713.5
5M	QPSK	1	0	24.68	24.81	24.83
		1	12	24.72	24.78	24.76
		1	24	24.68	24.77	24.75
		12	0	23.73	23.79	23.81
		12	6	23.68	23.81	23.77
		12	13	23.66	23.70	23.73
		25	0	23.72	23.78	23.76
5M	16QAM	1	0	23.71	23.78	23.78
		1	12	23.67	23.76	23.74
		1	24	23.66	23.73	23.70
		12	0	22.81	22.81	22.85
		12	6	22.77	22.81	22.79
		12	13	22.67	22.74	22.80
		25	0	22.67	22.75	22.74
5M	64QAM	1	0	22.69	22.74	22.81
		1	12	22.68	22.73	22.75
		1	24	22.61	22.74	22.66
		12	0	21.77	21.88	21.78
		12	6	21.75	21.78	21.77
		12	13	21.64	21.65	21.70
		25	0	21.62	21.68	21.67
5M	256QAM	1	0	19.74	19.84	19.76
		1	12	19.73	19.80	19.73
		1	24	19.70	19.73	19.80
		12	0	19.75	19.76	19.74
		12	6	19.72	19.72	19.74
		12	13	19.61	19.73	19.61
		25	0	19.57	19.66	19.68

ERP Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23780	23790	23800
		Frequency (MHz)		709	710	711
10M	QPSK	1	0	21.05	21.14	21.12
		1	24	21.02	21.11	21.09
		1	49	20.97	21.06	21.04
		25	0	20.08	20.17	20.15
		25	12	20.04	20.13	20.11
		25	25	19.98	20.07	20.05
		50	0	20.02	20.11	20.09
10M	16QAM	1	0	20.04	20.13	20.11
		1	24	20.01	20.10	20.08
		1	49	19.96	20.05	20.03
		25	0	19.10	19.19	19.17
		25	12	19.05	19.14	19.12
		25	25	19.01	19.10	19.08
		50	0	19.03	19.12	19.10
10M	64QAM	1	0	19.02	19.11	19.09
		1	24	19.00	19.09	19.07
		1	49	18.93	19.02	19.00
		25	0	18.08	18.17	18.15
		25	12	18.03	18.12	18.10
		25	25	17.93	18.02	18.00
		50	0	17.95	18.04	18.02
10M	256QAM	1	0	16.07	16.16	16.14
		1	24	16.04	16.13	16.11
		1	49	16.01	16.10	16.08
		25	0	16.03	16.12	16.10
		25	12	16.00	16.09	16.07
		25	25	15.92	16.01	15.99
		50	0	15.94	16.03	16.01

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23755	23790	23825
		Frequency (MHz)		706.5	710	713.5
5M	QPSK	1	0	20.96	21.09	21.11
		1	12	21.00	21.06	21.04
		1	24	20.96	21.05	21.03
		12	0	20.01	20.07	20.09
		12	6	19.96	20.09	20.05
		12	13	19.94	19.98	20.01
		25	0	20.00	20.06	20.04
5M	16QAM	1	0	19.99	20.06	20.06
		1	12	19.95	20.04	20.02
		1	24	19.94	20.01	19.98
		12	0	19.09	19.09	19.13
		12	6	19.05	19.09	19.07
		12	13	18.95	19.02	19.08
		25	0	18.95	19.03	19.02
5M	64QAM	1	0	18.97	19.02	19.09
		1	12	18.96	19.01	19.03
		1	24	18.89	19.02	18.94
		12	0	18.05	18.16	18.06
		12	6	18.03	18.06	18.05
		12	13	17.92	17.93	17.98
		25	0	17.90	17.96	17.95
5M	256QAM	1	0	16.02	16.12	16.04
		1	12	16.01	16.08	16.01
		1	24	15.98	16.01	16.08
		12	0	16.03	16.04	16.02
		12	6	16.00	16.00	16.02
		12	13	15.89	16.01	15.89
		25	0	15.85	15.94	15.96

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

7.1.11 LTE Band 38

Conducted Output Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37850	38000	38150
		Frequency (MHz)		2580	2595	2610
20M	QPSK	1	0	24.41	24.46	24.49
		1	50	24.36	24.41	24.44
		1	99	24.34	24.39	24.42
		50	0	23.45	23.50	23.53
		50	25	23.43	23.48	23.51
		50	50	23.37	23.42	23.45
		100	0	23.40	23.45	23.48
20M	16QAM	1	0	23.38	23.43	23.46
		1	50	23.34	23.39	23.42
		1	99	23.29	23.34	23.37
		50	0	22.44	22.49	22.52
		50	25	22.39	22.44	22.47
		50	50	22.34	22.39	22.42
		100	0	22.36	22.41	22.44
20M	64QAM	1	0	22.40	22.45	22.48
		1	50	22.37	22.42	22.45
		1	99	22.34	22.39	22.42
		50	0	21.41	21.46	21.49
		50	25	21.38	21.43	21.46
		50	50	21.33	21.38	21.41
		100	0	21.35	21.40	21.43
20M	256QAM	1	0	19.39	19.44	19.47
		1	50	19.36	19.41	19.44
		1	99	19.34	19.39	19.42
		50	0	19.37	19.42	19.45
		50	25	19.33	19.38	19.41
		50	50	19.28	19.33	19.36
		100	0	19.29	19.34	19.37

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37825	38000	38175
		Frequency (MHz)		2577.5	2595	2612.5
15M	QPSK	1	0	24.31	24.46	24.45
		1	37	24.26	24.38	24.43
		1	74	24.33	24.35	24.42
		36	0	23.42	23.48	23.45
		36	19	23.40	23.38	23.50
		36	39	23.27	23.32	23.35
		75	0	23.34	23.45	23.48
15M	16QAM	1	0	23.37	23.40	23.44
		1	37	23.33	23.33	23.41
		1	74	23.28	23.24	23.34
		36	0	22.34	22.40	22.45
		36	19	22.37	22.42	22.38
		36	39	22.28	22.31	22.39
		75	0	22.35	22.33	22.44
15M	64QAM	1	0	22.36	22.35	22.38
		1	37	22.27	22.39	22.41
		1	74	22.25	22.39	22.40
		36	0	21.35	21.41	21.49
		36	19	21.35	21.40	21.37
		36	39	21.26	21.28	21.38
		75	0	21.32	21.38	21.33
15M	256QAM	1	0	19.33	19.44	19.41
		1	37	19.31	19.36	19.42
		1	74	19.26	19.39	19.37
		36	0	19.29	19.40	19.42
		36	19	19.27	19.32	19.41
		36	39	19.24	19.32	19.28
		75	0	19.25	19.29	19.35

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37800	38000	38200
		Frequency (MHz)		2575	2595	2615
10M	QPSK	1	0	24.19	24.34	24.31
		1	24	24.24	24.31	24.25
		1	49	24.16	24.27	24.37
		25	0	23.29	23.38	23.52
		25	12	23.36	23.33	23.48
		25	25	23.20	23.28	23.24
		50	0	23.30	23.34	23.43
10M	16QAM	1	0	23.34	23.32	23.37
		1	24	23.25	23.39	23.29
		1	49	23.20	23.25	23.21
		25	0	22.28	22.40	22.46
		25	12	22.28	22.34	22.33
		25	25	22.24	22.30	22.30
		50	0	22.30	22.27	22.38
10M	64QAM	1	0	22.35	22.31	22.35
		1	24	22.28	22.38	22.38
		1	49	22.20	22.30	22.34
		25	0	21.25	21.28	21.42
		25	12	21.29	21.27	21.35
		25	25	21.19	21.34	21.30
		50	0	21.26	21.26	21.33
10M	256QAM	1	0	19.37	19.44	19.46
		1	24	19.36	19.35	19.37
		1	49	19.24	19.31	19.38
		25	0	19.28	19.40	19.41
		25	12	19.31	19.28	19.36
		25	25	19.27	19.26	19.34
		50	0	19.19	19.33	19.31

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37775	38000	38225
		Frequency (MHz)		2572.5	2595	2617.5
5M	QPSK	1	0	24.32	24.26	24.36
		1	12	24.20	24.31	24.13
		1	24	24.19	24.33	24.36
		12	0	23.36	23.41	23.33
		12	6	23.30	23.43	23.28
		12	13	23.22	23.21	23.19
		25	0	23.24	23.25	23.21
5M	16QAM	1	0	23.37	23.35	23.31
		1	12	23.25	23.20	23.24
		1	24	23.12	23.14	23.18
		12	0	22.35	22.28	22.45
		12	6	22.19	22.22	22.47
		12	13	22.24	22.30	22.40
		25	0	22.24	22.26	22.29
5M	64QAM	1	0	22.20	22.23	22.37
		1	12	22.27	22.31	22.44
		1	24	22.25	22.25	22.31
		12	0	21.19	21.31	21.41
		12	6	21.22	21.41	21.33
		12	13	21.22	21.27	21.26
		25	0	21.31	21.22	21.32
5M	256QAM	1	0	19.36	19.36	19.41
		1	12	19.29	19.41	19.37
		1	24	19.26	19.33	19.40
		12	0	19.27	19.32	19.43
		12	6	19.32	19.30	19.32
		12	13	19.28	19.26	19.30
		25	0	19.22	19.28	19.35

EIRP Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37850	38000	38150
		Frequency (MHz)		2580	2595	2610
20M	QPSK	1	0	24.00	24.05	24.08
		1	50	23.95	24.00	24.03
		1	99	23.93	23.98	24.01
		50	0	23.04	23.09	23.12
		50	25	23.02	23.07	23.10
		50	50	22.96	23.01	23.04
		100	0	22.99	23.04	23.07
20M	16QAM	1	0	22.97	23.02	23.05
		1	50	22.93	22.98	23.01
		1	99	22.88	22.93	22.96
		50	0	22.03	22.08	22.11
		50	25	21.98	22.03	22.06
		50	50	21.93	21.98	22.01
		100	0	21.95	22.00	22.03
20M	64QAM	1	0	21.99	22.04	22.07
		1	50	21.96	22.01	22.04
		1	99	21.93	21.98	22.01
		50	0	21.00	21.05	21.08
		50	25	20.97	21.02	21.05
		50	50	20.92	20.97	21.00
		100	0	20.94	20.99	21.02
20M	256QAM	1	0	18.98	19.03	19.06
		1	50	18.95	19.00	19.03
		1	99	18.93	18.98	19.01
		50	0	18.96	19.01	19.04
		50	25	18.92	18.97	19.00
		50	50	18.87	18.92	18.95
		100	0	18.88	18.93	18.96

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37825	38000	38175
		Frequency (MHz)		2577.5	2595	2612.5
15M	QPSK	1	0	23.90	24.05	24.04
		1	37	23.85	23.97	24.02
		1	74	23.92	23.94	24.01
		36	0	23.01	23.07	23.04
		36	19	22.99	22.97	23.09
		36	39	22.86	22.91	22.94
		75	0	22.93	23.04	23.07
15M	16QAM	1	0	22.96	22.99	23.03
		1	37	22.92	22.92	23.00
		1	74	22.87	22.83	22.93
		36	0	21.93	21.99	22.04
		36	19	21.96	22.01	21.97
		36	39	21.87	21.90	21.98
		75	0	21.94	21.92	22.03
15M	64QAM	1	0	21.95	21.94	21.97
		1	37	21.86	21.98	22.00
		1	74	21.84	21.98	21.99
		36	0	20.94	21.00	21.08
		36	19	20.94	20.99	20.96
		36	39	20.85	20.87	20.97
		75	0	20.91	20.97	20.92
15M	256QAM	1	0	18.92	19.03	19.00
		1	37	18.90	18.95	19.01
		1	74	18.85	18.98	18.96
		36	0	18.88	18.99	19.01
		36	19	18.86	18.91	19.00
		36	39	18.83	18.91	18.87
		75	0	18.84	18.88	18.94

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37800	38000	38200
		Frequency (MHz)		2575	2595	2615
10M	QPSK	1	0	23.78	23.93	23.90
		1	24	23.83	23.90	23.84
		1	49	23.75	23.86	23.96
		25	0	22.88	22.97	23.11
		25	12	22.95	22.92	23.07
		25	25	22.79	22.87	22.83
		50	0	22.89	22.93	23.02
10M	16QAM	1	0	22.93	22.91	22.96
		1	24	22.84	22.98	22.88
		1	49	22.79	22.84	22.80
		25	0	21.87	21.99	22.05
		25	12	21.87	21.93	21.92
		25	25	21.83	21.89	21.89
		50	0	21.89	21.86	21.97
10M	64QAM	1	0	21.94	21.90	21.94
		1	24	21.87	21.97	21.97
		1	49	21.79	21.89	21.93
		25	0	20.84	20.87	21.01
		25	12	20.88	20.86	20.94
		25	25	20.78	20.93	20.89
		50	0	20.85	20.85	20.92
10M	256QAM	1	0	18.96	19.03	19.05
		1	24	18.95	18.94	18.96
		1	49	18.83	18.90	18.97
		25	0	18.87	18.99	19.00
		25	12	18.90	18.87	18.95
		25	25	18.86	18.85	18.93
		50	0	18.78	18.92	18.90

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37775	38000	38225
		Frequency (MHz)		2572.5	2595	2617.5
5M	QPSK	1	0	23.91	23.85	23.95
		1	12	23.79	23.90	23.72
		1	24	23.78	23.92	23.95
		12	0	22.95	23.00	22.92
		12	6	22.89	23.02	22.87
		12	13	22.81	22.80	22.78
		25	0	22.83	22.84	22.80
5M	16QAM	1	0	22.96	22.94	22.90
		1	12	22.84	22.79	22.83
		1	24	22.71	22.73	22.77
		12	0	21.94	21.87	22.04
		12	6	21.78	21.81	22.06
		12	13	21.83	21.89	21.99
		25	0	21.83	21.85	21.88
5M	64QAM	1	0	21.79	21.82	21.96
		1	12	21.86	21.90	22.03
		1	24	21.84	21.84	21.90
		12	0	20.78	20.90	21.00
		12	6	20.81	21.00	20.92
		12	13	20.81	20.86	20.85
		25	0	20.90	20.81	20.91
5M	256QAM	1	0	18.95	18.95	19.00
		1	12	18.88	19.00	18.96
		1	24	18.85	18.92	18.99
		12	0	18.86	18.91	19.02
		12	6	18.91	18.89	18.91
		12	13	18.87	18.85	18.89
		25	0	18.81	18.87	18.94

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

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Conducted Output Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39750	40620	41490
		Frequency (MHz)		2506	2593	2680
20M	QPSK	1	0	24.39	24.51	24.52
		1	50	24.36	24.48	24.49
		1	99	24.32	24.44	24.45
		50	0	23.41	23.53	23.54
		50	25	23.37	23.49	23.50
		50	50	23.29	23.41	23.42
		100	0	23.32	23.44	23.45
20M	16QAM	1	0	23.36	23.48	23.49
		1	50	23.32	23.44	23.45
		1	99	23.28	23.40	23.41
		50	0	22.47	22.59	22.60
		50	25	22.41	22.53	22.54
		50	50	22.36	22.48	22.49
		100	0	22.38	22.50	22.51
20M	64QAM	1	0	22.42	22.54	22.55
		1	50	22.38	22.50	22.51
		1	99	22.32	22.44	22.45
		50	0	21.36	21.48	21.49
		50	25	21.31	21.43	21.44
		50	50	21.23	21.35	21.36
		100	0	21.28	21.40	21.41
20M	256QAM	1	0	19.34	19.46	19.47
		1	50	19.28	19.40	19.41
		1	99	19.21	19.33	19.34
		50	0	19.24	19.36	19.37
		50	25	19.20	19.32	19.33
		50	50	19.12	19.24	19.25
		100	0	19.14	19.26	19.27

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39725	40620	41515
		Frequency (MHz)		2503.5	2593	2682.5
15M	QPSK	1	0	24.33	24.48	24.47
		1	37	24.35	24.47	24.41
		1	74	24.32	24.38	24.39
		36	0	23.38	23.47	23.47
		36	19	23.30	23.39	23.44
		36	39	23.26	23.39	23.34
		75	0	23.30	23.35	23.44
15M	16QAM	1	0	23.32	23.46	23.47
		1	37	23.35	23.45	23.43
		1	74	23.28	23.35	23.42
		36	0	22.31	22.49	22.52
		36	19	22.33	22.43	22.50
		36	39	22.26	22.31	22.37
		75	0	22.27	22.34	22.38
15M	64QAM	1	0	22.31	22.46	22.45
		1	37	22.35	22.46	22.44
		1	74	22.22	22.35	22.36
		36	0	21.34	21.44	21.44
		36	19	21.34	21.47	21.40
		36	39	21.22	21.41	21.34
		75	0	21.29	21.39	21.36
15M	256QAM	1	0	19.33	19.50	19.43
		1	37	19.26	19.43	19.40
		1	74	19.26	19.41	19.40
		36	0	19.37	19.52	19.52
		36	19	19.31	19.40	19.49
		36	39	19.23	19.41	19.39
		75	0	19.29	19.41	19.44

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39700	40620	41540
		Frequency (MHz)		2501	2593	2685
10M	QPSK	1	0	24.23	24.31	24.42
		1	24	24.30	24.30	24.33
		1	49	24.19	24.31	24.34
		25	0	23.28	23.42	23.44
		25	12	23.30	23.47	23.39
		25	25	23.21	23.27	23.33
		50	0	23.28	23.39	23.35
10M	16QAM	1	0	23.32	23.37	23.43
		1	24	23.25	23.31	23.39
		1	49	23.18	23.26	23.40
		25	0	22.26	22.44	22.34
		25	12	22.25	22.46	22.45
		25	25	22.19	22.29	22.34
		50	0	22.22	22.30	22.33
10M	64QAM	1	0	22.30	22.40	22.36
		1	24	22.32	22.31	22.35
		1	49	22.15	22.35	22.39
		25	0	21.25	21.41	21.37
		25	12	21.23	21.45	21.35
		25	25	21.16	21.25	21.38
		50	0	21.29	21.36	21.36
10M	256QAM	1	0	19.34	19.49	19.45
		1	24	19.35	19.45	19.41
		1	49	19.30	19.44	19.35
		25	0	19.37	19.46	19.52
		25	12	19.27	19.47	19.41
		25	25	19.25	19.37	19.35
		50	0	19.30	19.41	19.35

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39675	40620	41565
		Frequency (MHz)		2498.5	2593	2687.5
5M	QPSK	1	0	24.20	24.41	24.37
		1	12	24.22	24.46	24.36
		1	24	24.26	24.33	24.42
		12	0	23.37	23.42	23.49
		12	6	23.19	23.33	23.41
		12	13	23.20	23.34	23.30
		25	0	23.20	23.37	23.34
5M	16QAM	1	0	23.29	23.41	23.38
		1	12	23.25	23.45	23.31
		1	24	23.23	23.32	23.40
		12	0	22.31	22.45	22.48
		12	6	22.23	22.33	22.43
		12	13	22.23	22.33	22.32
		25	0	22.17	22.33	22.38
5M	64QAM	1	0	22.29	22.44	22.40
		1	12	22.26	22.45	22.33
		1	24	22.27	22.31	22.43
		12	0	21.38	21.42	21.42
		12	6	21.25	21.40	21.47
		12	13	21.17	21.34	21.35
		25	0	21.18	21.37	21.28
5M	256QAM	1	0	19.39	19.51	19.44
		1	12	19.33	19.44	19.42
		1	24	19.30	19.43	19.36
		12	0	19.40	19.46	19.49
		12	6	19.31	19.47	19.48
		12	13	19.22	19.37	19.42
		25	0	19.24	19.34	19.39

EIRP Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39750	40620	41490
		Frequency (MHz)		2506	2593	2680
20M	QPSK	1	0	24.43	24.55	24.56
		1	50	24.40	24.52	24.53
		1	99	24.36	24.48	24.49
		50	0	23.45	23.57	23.58
		50	25	23.41	23.53	23.54
		50	50	23.33	23.45	23.46
		100	0	23.36	23.48	23.49
20M	16QAM	1	0	23.40	23.52	23.53
		1	50	23.36	23.48	23.49
		1	99	23.32	23.44	23.45
		50	0	22.51	22.63	22.64
		50	25	22.45	22.57	22.58
		50	50	22.40	22.52	22.53
		100	0	22.42	22.54	22.55
20M	64QAM	1	0	22.46	22.58	22.59
		1	50	22.42	22.54	22.55
		1	99	22.36	22.48	22.49
		50	0	21.40	21.52	21.53
		50	25	21.35	21.47	21.48
		50	50	21.27	21.39	21.40
		100	0	21.32	21.44	21.45
20M	256QAM	1	0	19.38	19.50	19.51
		1	50	19.32	19.44	19.45
		1	99	19.25	19.37	19.38
		50	0	19.28	19.40	19.41
		50	25	19.24	19.36	19.37
		50	50	19.16	19.28	19.29
		100	0	19.18	19.30	19.31

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39725	40620	41515
		Frequency (MHz)		2503.5	2593	2682.5
15M	QPSK	1	0	24.37	24.52	24.51
		1	37	24.39	24.51	24.45
		1	74	24.36	24.42	24.43
		36	0	23.42	23.51	23.51
		36	19	23.34	23.43	23.48
		36	39	23.30	23.43	23.38
		75	0	23.34	23.39	23.48
15M	16QAM	1	0	23.36	23.50	23.51
		1	37	23.39	23.49	23.47
		1	74	23.32	23.39	23.46
		36	0	22.35	22.53	22.56
		36	19	22.37	22.47	22.54
		36	39	22.30	22.35	22.41
		75	0	22.31	22.38	22.42
15M	64QAM	1	0	22.35	22.50	22.49
		1	37	22.39	22.50	22.48
		1	74	22.26	22.39	22.40
		36	0	21.38	21.48	21.48
		36	19	21.38	21.51	21.44
		36	39	21.26	21.45	21.38
		75	0	21.33	21.43	21.40
15M	256QAM	1	0	19.37	19.54	19.47
		1	37	19.30	19.47	19.44
		1	74	19.30	19.45	19.44
		36	0	19.41	19.56	19.56
		36	19	19.35	19.44	19.53
		36	39	19.27	19.45	19.43
		75	0	19.33	19.45	19.48

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39700	40620	41540
		Frequency (MHz)		2501	2593	2685
10M	QPSK	1	0	24.27	24.35	24.46
		1	24	24.34	24.34	24.37
		1	49	24.23	24.35	24.38
		25	0	23.32	23.46	23.48
		25	12	23.34	23.51	23.43
		25	25	23.25	23.31	23.37
		50	0	23.32	23.43	23.39
10M	16QAM	1	0	23.36	23.41	23.47
		1	24	23.29	23.35	23.43
		1	49	23.22	23.30	23.44
		25	0	22.30	22.48	22.38
		25	12	22.29	22.50	22.49
		25	25	22.23	22.33	22.38
		50	0	22.26	22.34	22.37
10M	64QAM	1	0	22.34	22.44	22.40
		1	24	22.36	22.35	22.39
		1	49	22.19	22.39	22.43
		25	0	21.29	21.45	21.41
		25	12	21.27	21.49	21.39
		25	25	21.20	21.29	21.42
		50	0	21.33	21.40	21.40
10M	256QAM	1	0	19.38	19.53	19.49
		1	24	19.39	19.49	19.45
		1	49	19.34	19.48	19.39
		25	0	19.41	19.50	19.56
		25	12	19.31	19.51	19.45
		25	25	19.29	19.41	19.39
		50	0	19.34	19.45	19.39

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39675	40620	41565
		Frequency (MHz)		2498.5	2593	2687.5
5M	QPSK	1	0	24.24	24.45	24.41
		1	12	24.26	24.50	24.40
		1	24	24.30	24.37	24.46
		12	0	23.41	23.46	23.53
		12	6	23.23	23.37	23.45
		12	13	23.24	23.38	23.34
		25	0	23.24	23.41	23.38
5M	16QAM	1	0	23.33	23.45	23.42
		1	12	23.29	23.49	23.35
		1	24	23.27	23.36	23.44
		12	0	22.35	22.49	22.52
		12	6	22.27	22.37	22.47
		12	13	22.27	22.37	22.36
		25	0	22.21	22.37	22.42
5M	64QAM	1	0	22.33	22.48	22.44
		1	12	22.30	22.49	22.37
		1	24	22.31	22.35	22.47
		12	0	21.42	21.46	21.46
		12	6	21.29	21.44	21.51
		12	13	21.21	21.38	21.39
		25	0	21.22	21.41	21.32
5M	256QAM	1	0	19.43	19.55	19.48
		1	12	19.37	19.48	19.46
		1	24	19.34	19.47	19.40
		12	0	19.44	19.50	19.53
		12	6	19.35	19.51	19.52
		12	13	19.26	19.41	19.46
		25	0	19.28	19.38	19.43

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

7.1.13 LTE Band 71

Conducted Output Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133222	133297	133372
		Frequency (MHz)		673	680.5	688
20M	QPSK	1	0	24.96	24.89	24.91
		1	50	24.75	24.69	24.70
		1	99	24.67	24.61	24.59
		50	0	23.92	23.85	23.85
		50	25	23.87	23.82	23.80
		50	50	23.84	23.80	23.78
		100	0	23.83	23.77	23.75
20M	16QAM	1	0	23.97	23.89	23.89
		1	50	23.94	23.89	23.86
		1	99	23.87	23.78	23.79
		50	0	22.92	22.87	22.86
		50	25	22.87	22.81	22.78
		50	50	22.78	22.73	22.73
		100	0	22.74	22.69	22.66
20M	64QAM	1	0	22.88	22.81	22.83
		1	50	22.82	22.77	22.76
		1	99	22.71	22.64	22.62
		50	0	21.78	21.69	21.73
		50	25	21.64	21.57	21.57
		50	50	21.58	21.52	21.53
		100	0	21.53	21.47	21.49
20M	256QAM	1	0	19.87	19.98	19.45
		1	50	19.77	19.88	19.44
		1	99	19.66	19.84	19.43
		50	0	19.54	19.79	19.40
		50	25	19.47	19.56	19.32
		50	50	19.42	19.44	19.21
		100	0	19.25	19.30	19.08

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133197	133297	133397
		Frequency (MHz)		670.5	680.5	690.5
15M	QPSK	1	0	24.73	24.66	24.69
		1	37	24.71	24.64	24.67
		1	74	24.63	24.55	24.55
		36	0	23.87	23.80	23.80
		36	19	23.81	23.72	23.74
		36	39	23.78	23.70	23.70
		75	0	23.74	23.65	23.65
15M	16QAM	1	0	23.91	23.83	23.84
		1	37	23.90	23.82	23.86
		1	74	23.81	23.75	23.75
		36	0	22.87	22.82	22.78
		36	19	22.78	22.72	22.70
		36	39	22.69	22.60	22.61
		75	0	22.69	22.61	22.65
15M	64QAM	1	0	22.80	22.74	22.73
		1	37	22.74	22.70	22.66
		1	74	22.63	22.58	22.54
		36	0	21.73	21.64	21.68
		36	19	21.59	21.50	21.55
		36	39	21.54	21.48	21.46
		75	0	21.49	21.40	21.42
15M	256QAM	1	0	19.82	19.89	19.45
		1	37	19.68	19.80	19.42
		1	74	19.62	19.84	19.37
		36	0	19.45	19.75	19.32
		36	19	19.44	19.54	19.27
		36	39	19.39	19.41	19.14
		75	0	19.15	19.29	19.00

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133172	133297	133422
		Frequency (MHz)		668	680.5	693
10M	QPSK	1	0	24.71	24.65	24.63
		1	24	24.70	24.61	24.65
		1	49	24.58	24.54	24.51
		25	0	23.86	23.78	23.79
		25	12	23.78	23.73	23.69
		25	25	23.75	23.71	23.69
		50	0	23.75	23.67	23.68
10M	16QAM	1	0	23.92	23.88	23.85
		1	24	23.88	23.79	23.83
		1	49	23.80	23.75	23.75
		25	0	22.84	22.78	22.77
		25	12	22.78	22.71	22.72
		25	25	22.70	22.64	22.64
		50	0	22.69	22.64	22.65
10M	64QAM	1	0	22.83	22.75	22.74
		1	24	22.76	22.67	22.72
		1	49	22.65	22.59	22.58
		25	0	21.71	21.63	21.67
		25	12	21.58	21.53	21.52
		25	25	21.50	21.41	21.45
		50	0	21.45	21.40	21.39
10M	256QAM	1	0	19.84	19.95	19.37
		1	24	19.74	19.85	19.38
		1	49	19.66	19.78	19.40
		25	0	19.52	19.77	19.39
		25	12	19.44	19.54	19.22
		25	25	19.35	19.35	19.16
		50	0	19.15	19.27	18.99

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133147	133297	133447
		Frequency (MHz)		665.5	680.5	695.5
5M	QPSK	1	0	24.74	24.67	24.67
		1	12	24.71	24.65	24.66
		1	24	24.58	24.50	24.49
		12	0	23.88	23.82	23.80
		12	6	23.79	23.75	23.72
		12	13	23.77	23.68	23.70
		25	0	23.79	23.75	23.75
5M	16QAM	1	0	23.91	23.85	23.87
		1	12	23.85	23.76	23.78
		1	24	23.79	23.70	23.70
		12	0	22.84	22.78	22.76
		12	6	22.82	22.75	22.73
		12	13	22.72	22.63	22.64
		25	0	22.68	22.62	22.62
5M	64QAM	1	0	22.81	22.76	22.73
		1	12	22.78	22.73	22.73
		1	24	22.63	22.57	22.57
		12	0	21.74	21.66	21.65
		12	6	21.59	21.51	21.55
		12	13	21.54	21.46	21.50
		25	0	21.45	21.37	21.38
5M	256QAM	1	0	19.85	19.94	19.44
		1	12	19.72	19.81	19.41
		1	24	19.56	19.75	19.33
		12	0	19.45	19.76	19.31
		12	6	19.37	19.50	19.30
		12	13	19.34	19.35	19.17
		25	0	19.21	19.27	19.03

ERP Power (dBm)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133222	133297	133372
		Frequency (MHz)		673	680.5	688
20M	QPSK	1	0	20.36	20.29	20.31
		1	50	20.15	20.09	20.10
		1	99	20.07	20.01	19.99
		50	0	19.32	19.25	19.25
		50	25	19.27	19.22	19.20
		50	50	19.24	19.20	19.18
		100	0	19.23	19.17	19.15
20M	16QAM	1	0	19.37	19.29	19.29
		1	50	19.34	19.29	19.26
		1	99	19.27	19.18	19.19
		50	0	18.32	18.27	18.26
		50	25	18.27	18.21	18.18
		50	50	18.18	18.13	18.13
		100	0	18.14	18.09	18.06
20M	64QAM	1	0	18.28	18.21	18.23
		1	50	18.22	18.17	18.16
		1	99	18.11	18.04	18.02
		50	0	17.18	17.09	17.13
		50	25	17.04	16.97	16.97
		50	50	16.98	16.92	16.93
		100	0	16.93	16.87	16.89
20M	256QAM	1	0	15.27	15.38	14.85
		1	50	15.17	15.28	14.84
		1	99	15.06	15.24	14.83
		50	0	14.94	15.19	14.80
		50	25	14.87	14.96	14.72
		50	50	14.82	14.84	14.61
		100	0	14.65	14.70	14.48

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133197	133297	133397
		Frequency (MHz)		670.5	680.5	690.5
15M	QPSK	1	0	20.13	20.06	20.09
		1	37	20.11	20.04	20.07
		1	74	20.03	19.95	19.95
		36	0	19.27	19.20	19.20
		36	19	19.21	19.12	19.14
		36	39	19.18	19.10	19.10
		75	0	19.14	19.05	19.05
15M	16QAM	1	0	19.31	19.23	19.24
		1	37	19.30	19.22	19.26
		1	74	19.21	19.15	19.15
		36	0	18.27	18.22	18.18
		36	19	18.18	18.12	18.10
		36	39	18.09	18.00	18.01
		75	0	18.09	18.01	18.05
15M	64QAM	1	0	18.20	18.14	18.13
		1	37	18.14	18.10	18.06
		1	74	18.03	17.98	17.94
		36	0	17.13	17.04	17.08
		36	19	16.99	16.90	16.95
		36	39	16.94	16.88	16.86
		75	0	16.89	16.80	16.82
15M	256QAM	1	0	15.22	15.29	14.85
		1	37	15.08	15.20	14.82
		1	74	15.02	15.24	14.77
		36	0	14.85	15.15	14.72
		36	19	14.84	14.94	14.67
		36	39	14.79	14.81	14.54
		75	0	14.55	14.69	14.40

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133172	133297	133422
		Frequency (MHz)		668	680.5	693
10M	QPSK	1	0	20.11	20.05	20.03
		1	24	20.10	20.01	20.05
		1	49	19.98	19.94	19.91
		25	0	19.26	19.18	19.19
		25	12	19.18	19.13	19.09
		25	25	19.15	19.11	19.09
		50	0	19.15	19.07	19.08
10M	16QAM	1	0	19.32	19.28	19.25
		1	24	19.28	19.19	19.23
		1	49	19.20	19.15	19.15
		25	0	18.24	18.18	18.17
		25	12	18.18	18.11	18.12
		25	25	18.10	18.04	18.04
		50	0	18.09	18.04	18.05
10M	64QAM	1	0	18.23	18.15	18.14
		1	24	18.16	18.07	18.12
		1	49	18.05	17.99	17.98
		25	0	17.11	17.03	17.07
		25	12	16.98	16.93	16.92
		25	25	16.90	16.81	16.85
		50	0	16.85	16.80	16.79
10M	256QAM	1	0	15.24	15.35	14.77
		1	24	15.14	15.25	14.78
		1	49	15.06	15.18	14.80
		25	0	14.92	15.17	14.79
		25	12	14.84	14.94	14.62
		25	25	14.75	14.75	14.56
		50	0	14.55	14.67	14.39

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

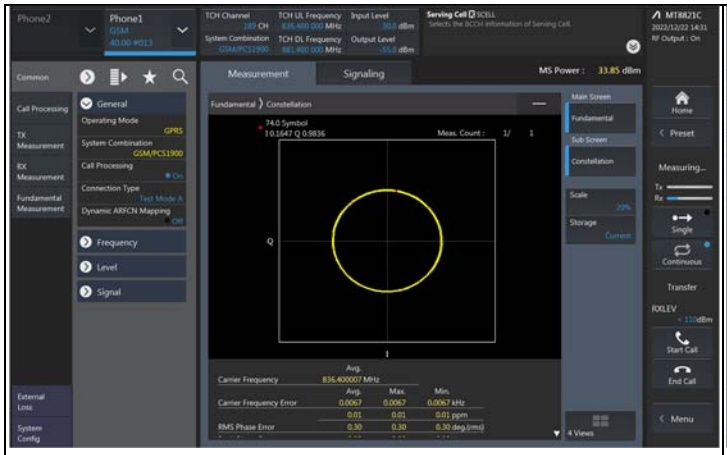
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133147	133297	133447
		Frequency (MHz)		665.5	680.5	695.5
5M	QPSK	1	0	20.14	20.07	20.07
		1	12	20.11	20.05	20.06
		1	24	19.98	19.90	19.89
		12	0	19.28	19.22	19.20
		12	6	19.19	19.15	19.12
		12	13	19.17	19.08	19.10
		25	0	19.19	19.15	19.15
5M	16QAM	1	0	19.31	19.25	19.27
		1	12	19.25	19.16	19.18
		1	24	19.19	19.10	19.10
		12	0	18.24	18.18	18.16
		12	6	18.22	18.15	18.13
		12	13	18.12	18.03	18.04
		25	0	18.08	18.02	18.02
5M	64QAM	1	0	18.21	18.16	18.13
		1	12	18.18	18.13	18.13
		1	24	18.03	17.97	17.97
		12	0	17.14	17.06	17.05
		12	6	16.99	16.91	16.95
		12	13	16.94	16.86	16.90
		25	0	16.85	16.77	16.78
5M	256QAM	1	0	15.25	15.34	14.84
		1	12	15.12	15.21	14.81
		1	24	14.96	15.15	14.73
		12	0	14.85	15.16	14.71
		12	6	14.77	14.90	14.70
		12	13	14.74	14.75	14.57
		25	0	14.61	14.67	14.43

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

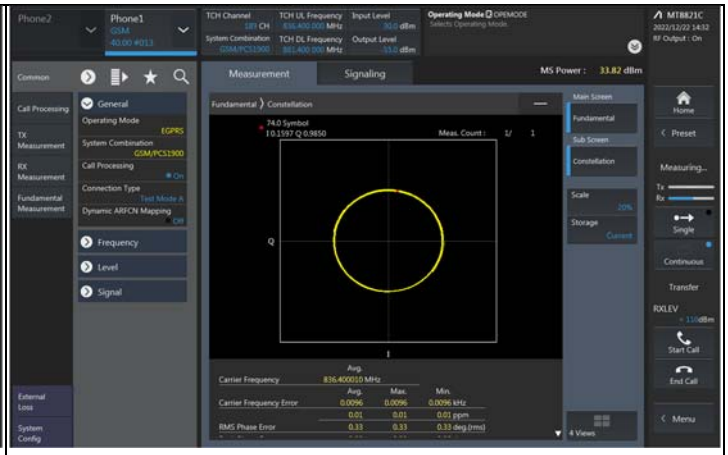
7.2 Modulation Characteristics

Input Power:	3.85 Vdc	Environmental Conditions:	22°C, 73% RH	Tested By:	Willy Cheng

7.2.1 GSM850

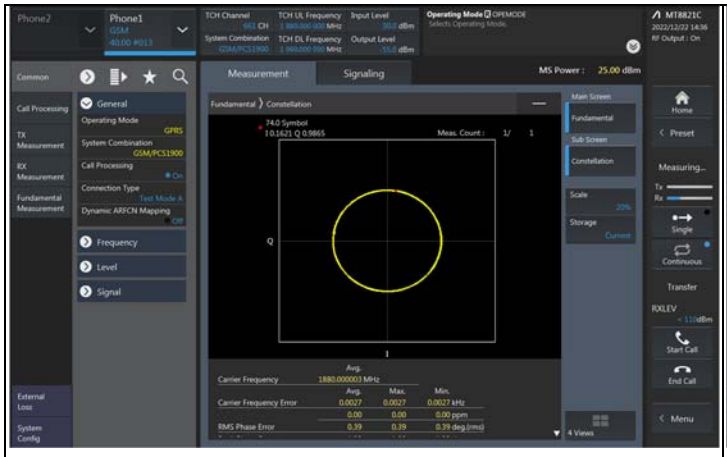


GSM

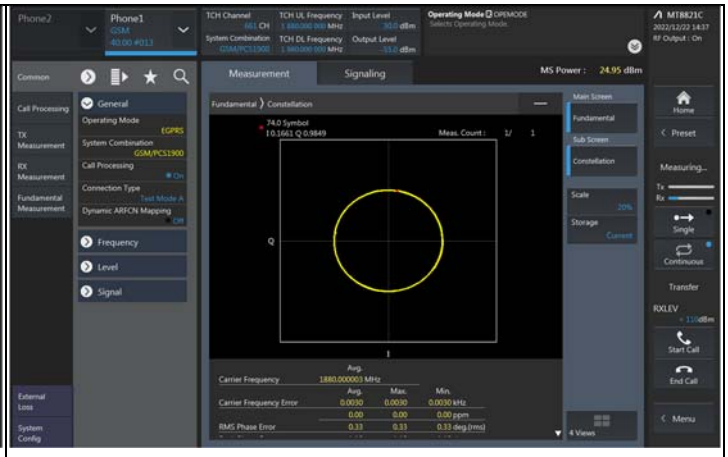


EDGE

7.2.2 PCS1900

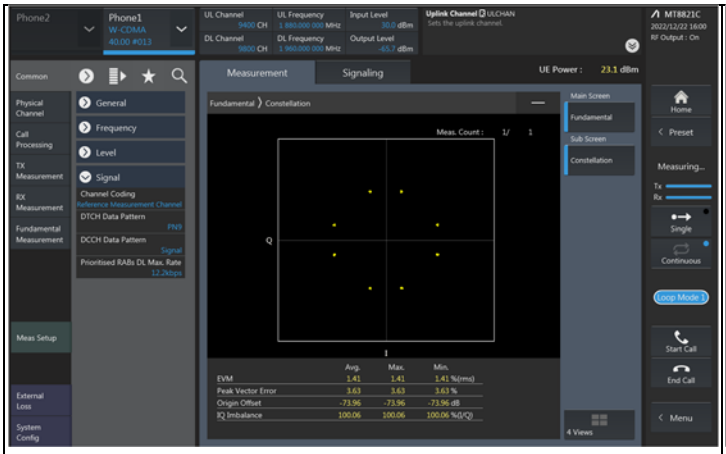
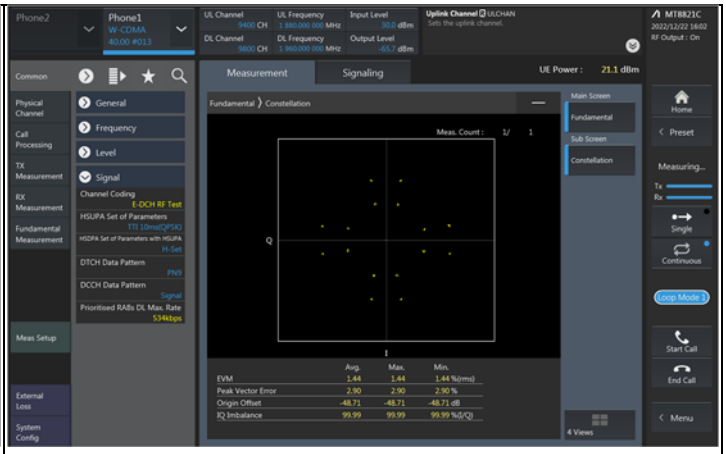


GSM



EDGE

7.2.3 WCDMA Band 2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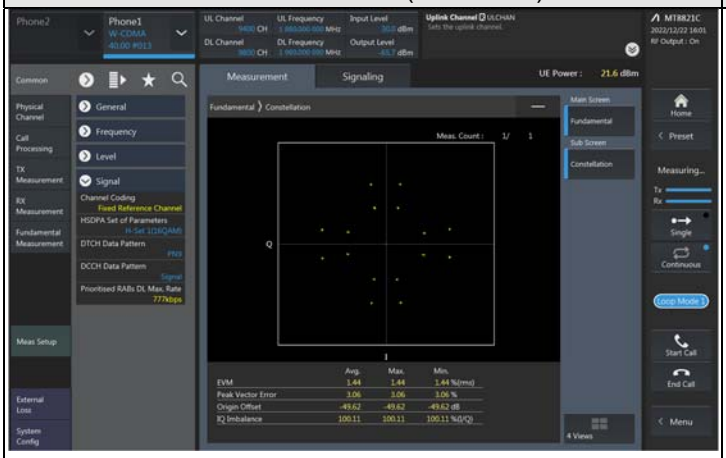
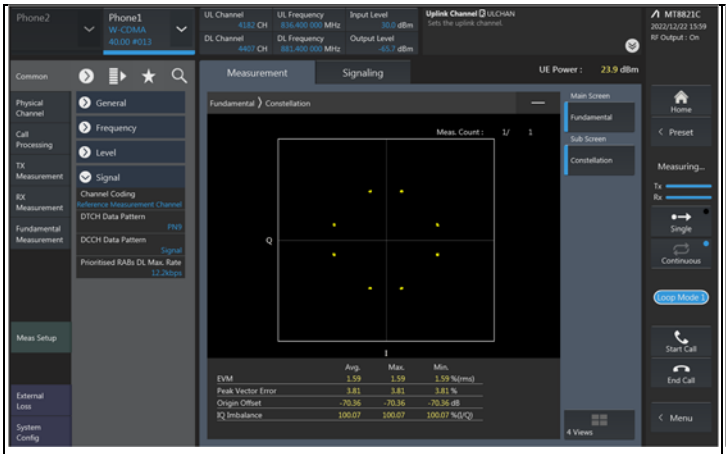
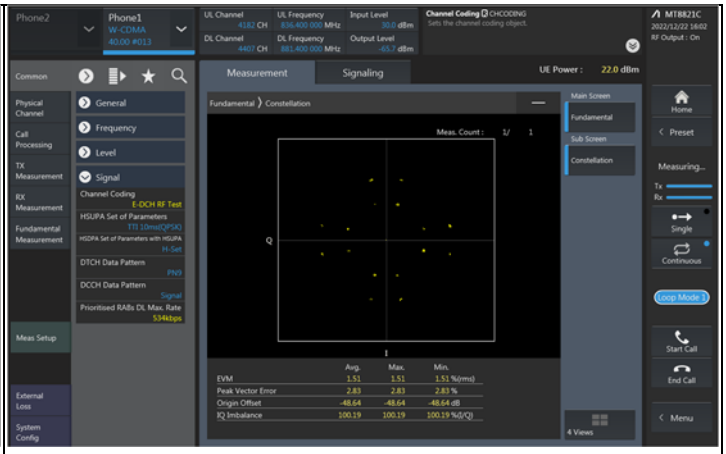
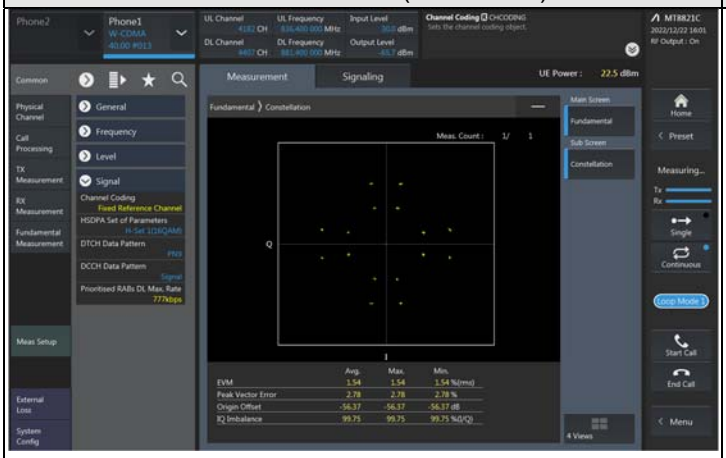
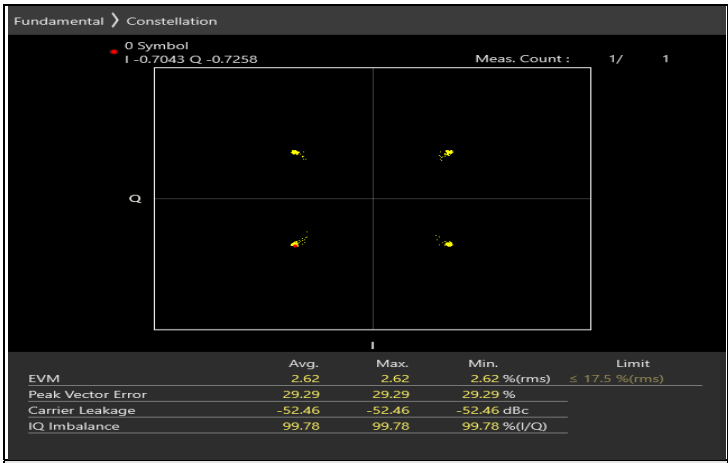
	
HSDPA CH 9400 (1880 MHz)	

7.2.4 WCDMA Band 5

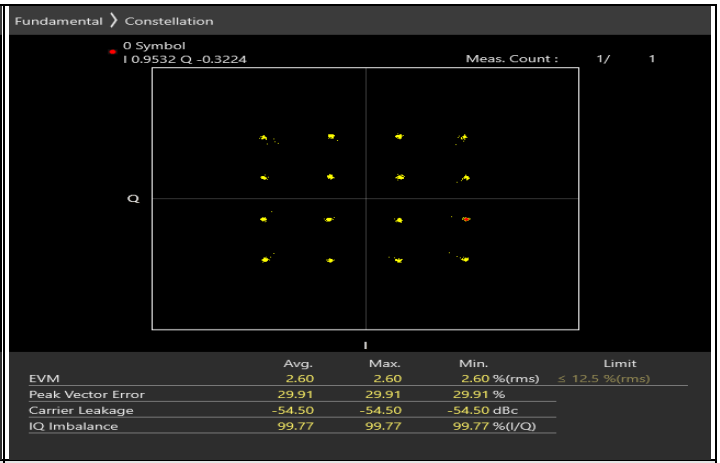
	
WCDMA CH 4182 (836.4 MHz)	HSUPA CH 4182 (836.4 MHz)
	
HSDPA CH 4182 (836.4 MHz)	

7.2.5 LTE Band 2

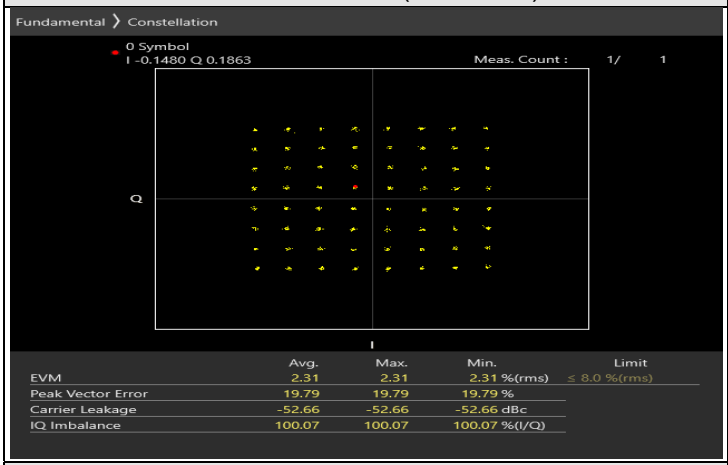
LTE Band 2, Channel Bandwidth: 20 MHz



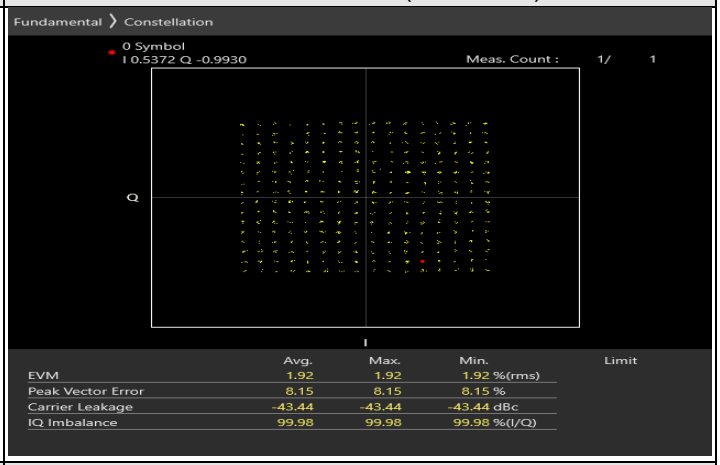
QPSK CH 18900 (1880 MHz)



16QAM CH 18900 (1880 MHz)



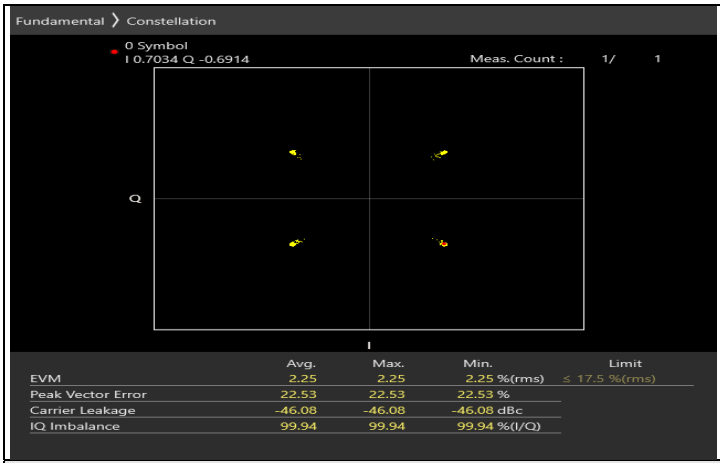
64QAM CH 18900 (1880 MHz)



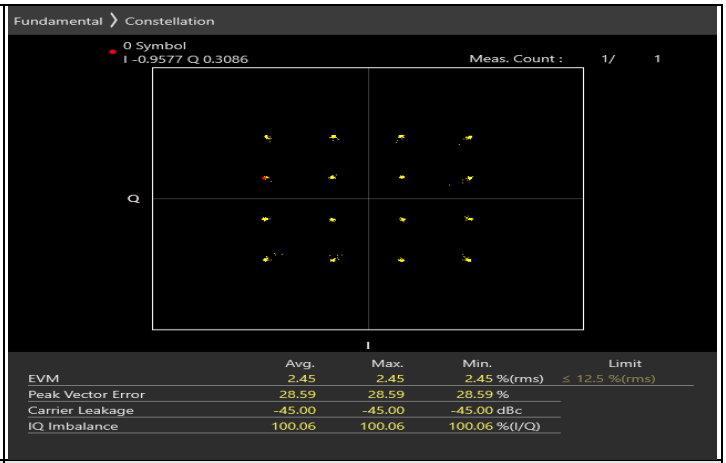
256QAM CH 18900 (1880 MHz)

7.2.6 LTE Band 4

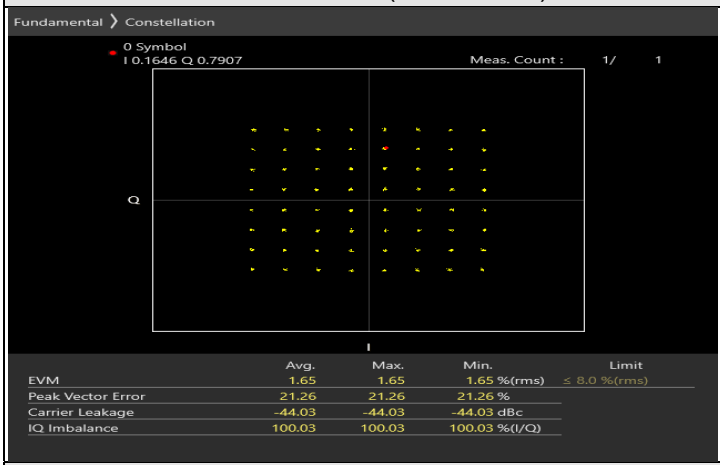
LTE Band 4, Channel Bandwidth: 20 MHz



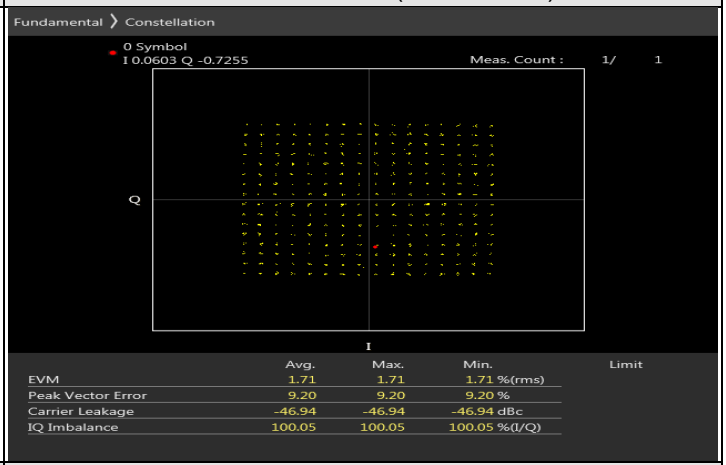
QPSK CH 20175 (1732.5 MHz)



16QAM CH 20175 (1732.5 MHz)



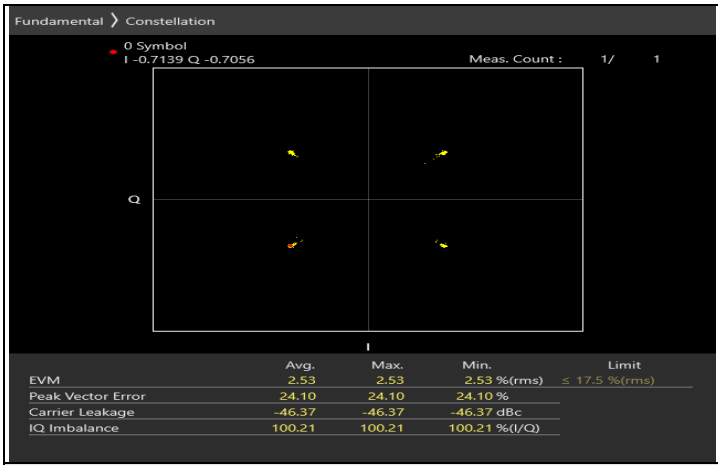
64QAM CH 20175 (1732.5 MHz)



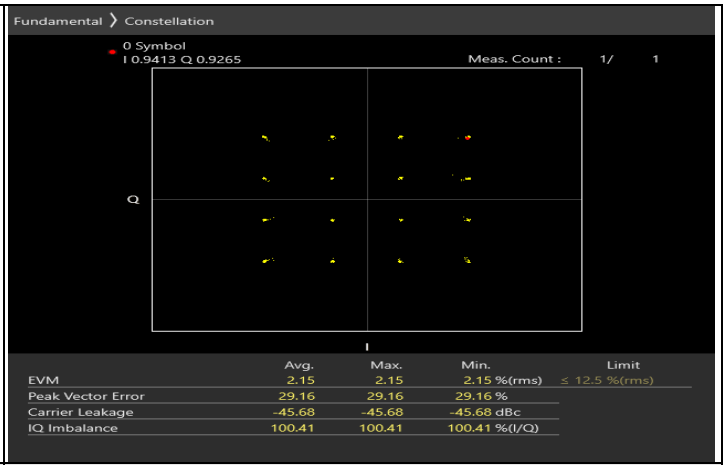
256QAM CH 20175 (1732.5 MHz)

7.2.7 LTE Band 5

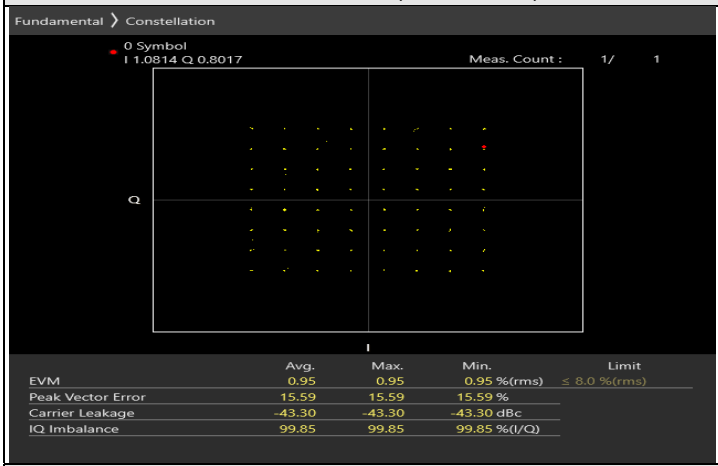
LTE Band 5, Channel Bandwidth: 10 MHz



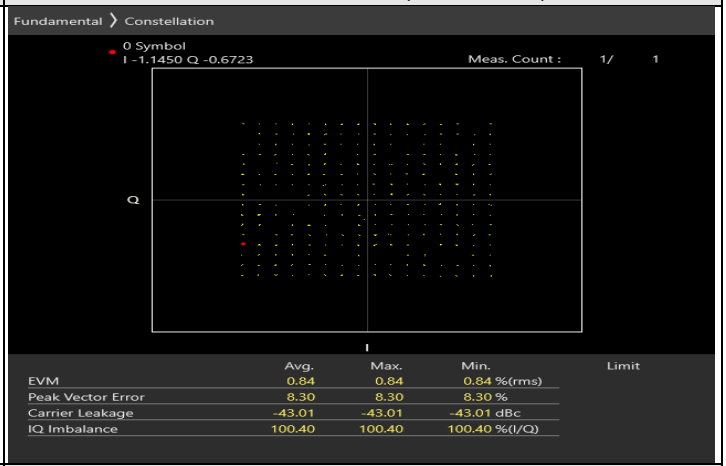
QPSK CH 20525 (836.5 MHz)



16QAM CH 20525 (836.5 MHz)



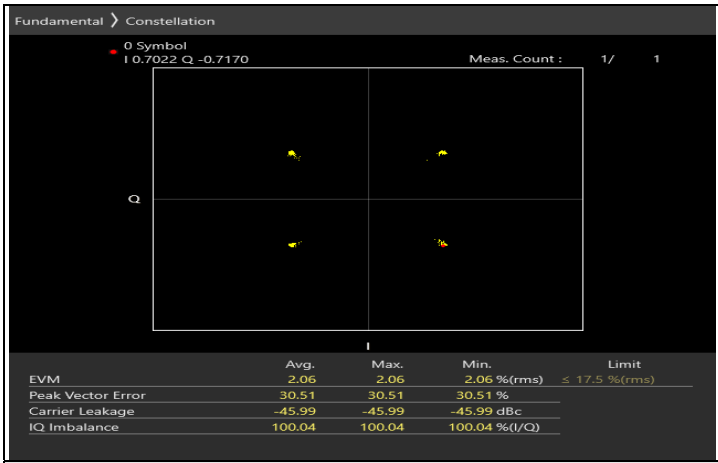
64QAM CH 20525 (836.5 MHz)



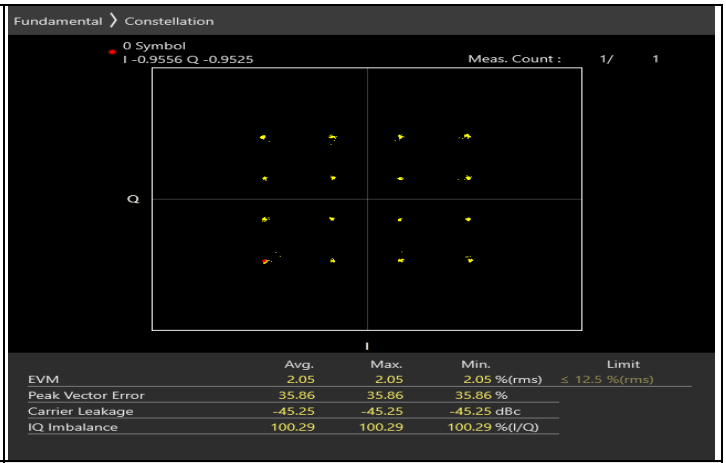
256QAM CH 20525 (836.5 MHz)

7.2.8 LTE Band 7

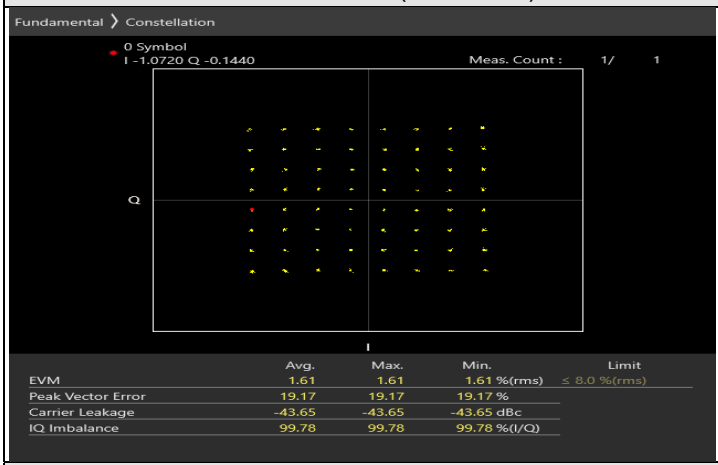
LTE Band 7, Channel Bandwidth: 20 MHz



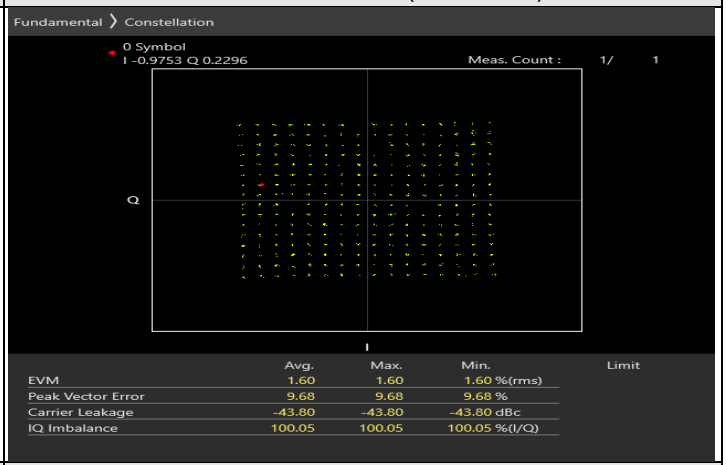
QPSK CH 21100 (2535 MHz)



16QAM CH 21100 (2535 MHz)



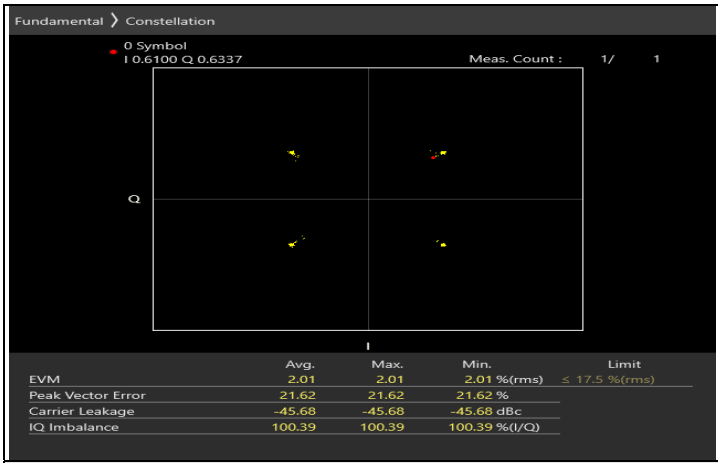
64QAM CH 21100 (2535 MHz)



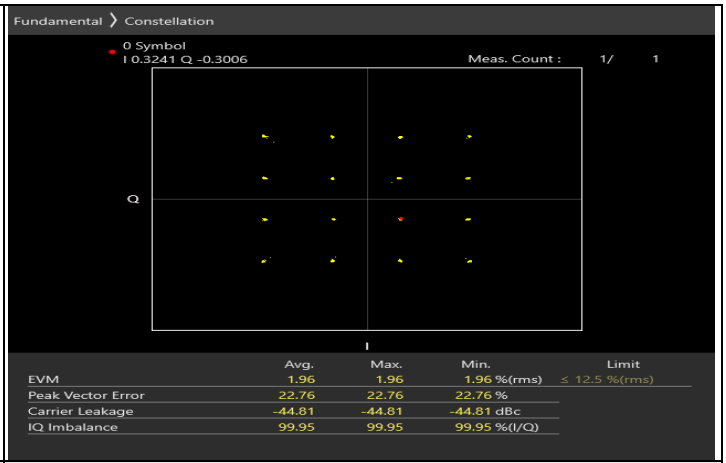
256QAM CH 21100 (2535 MHz)

7.2.9 LTE Band 12

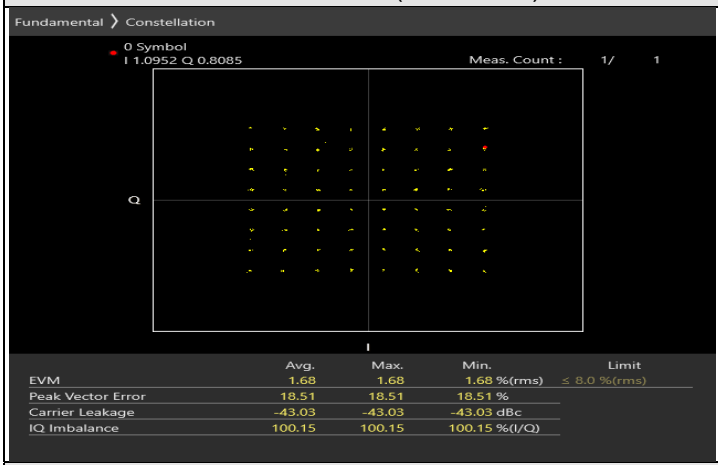
LTE Band 12, Channel Bandwidth: 10 MHz



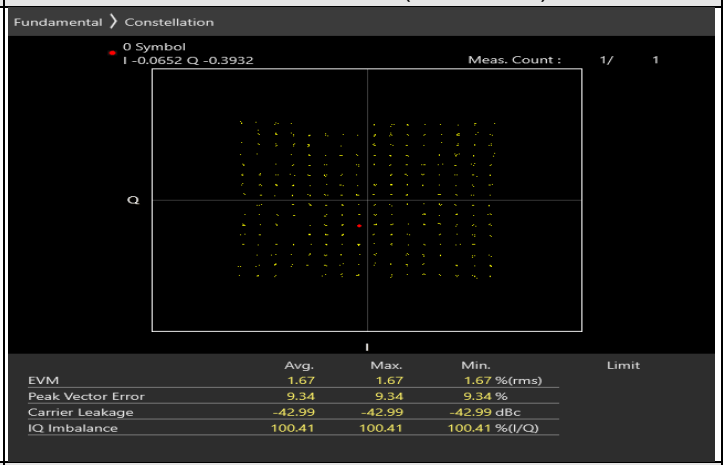
QPSK CH 23095 (707.5 MHz)



16QAM CH 23095 (707.5 MHz)



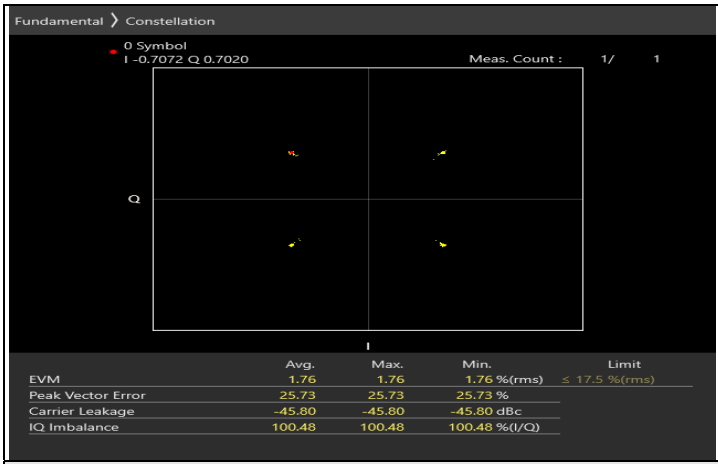
64QAM CH 23095 (707.5 MHz)



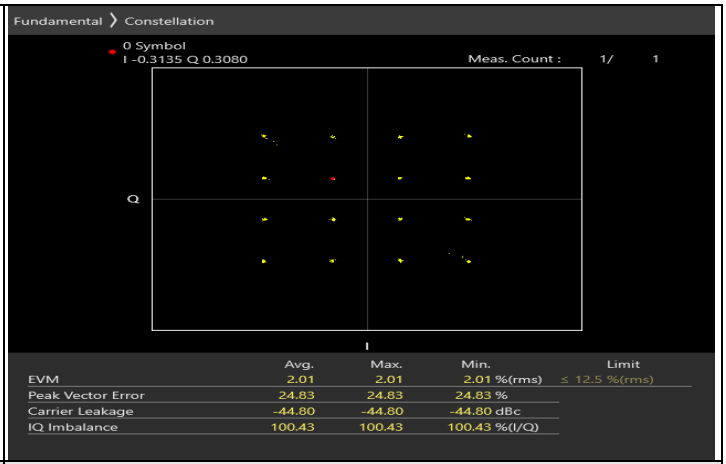
256QAM CH 23095 (707.5 MHz)

7.2.10 LTE Band 17

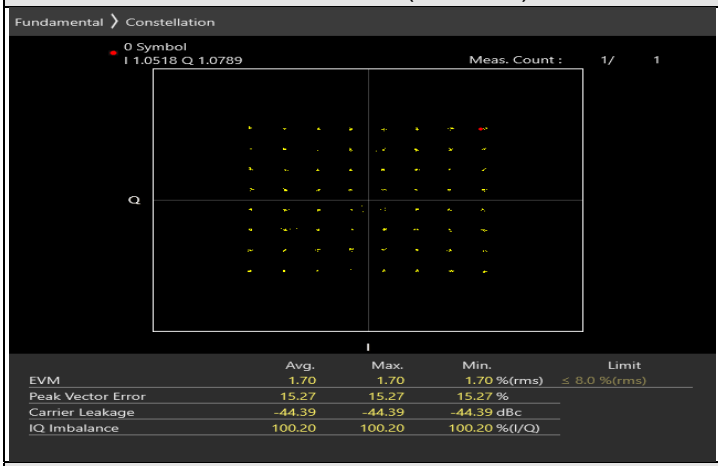
LTE Band 17, Channel Bandwidth: 10 MHz



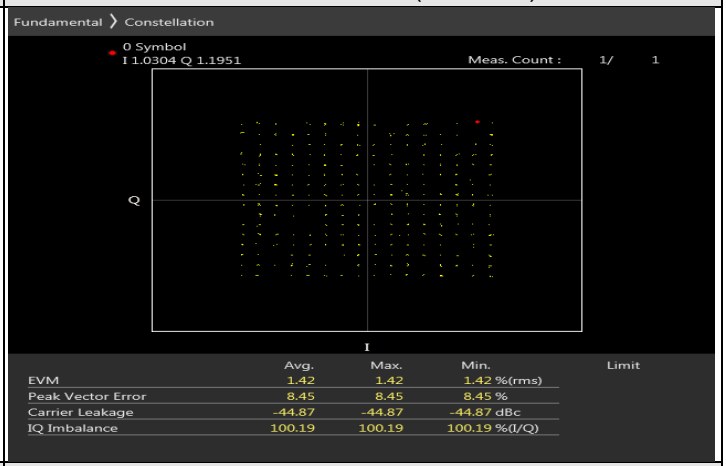
QPSK CH 23790 (710 MHz)



16QAM CH 23790 (710 MHz)



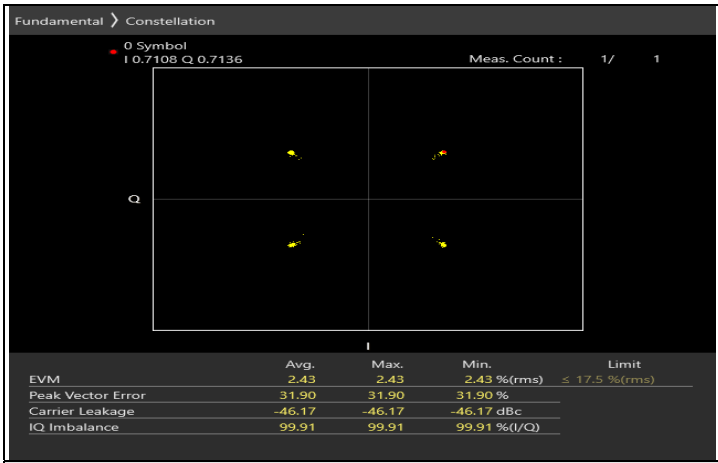
64QAM CH 23790 (710 MHz)



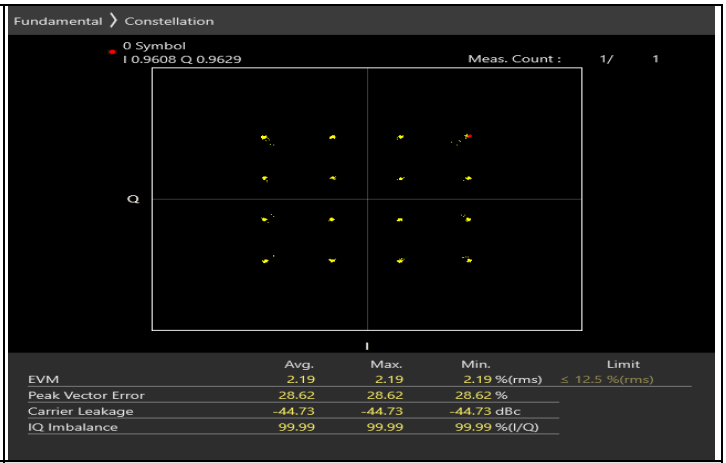
256QAM CH 23790 (710 MHz)

7.2.11 LTE Band 38

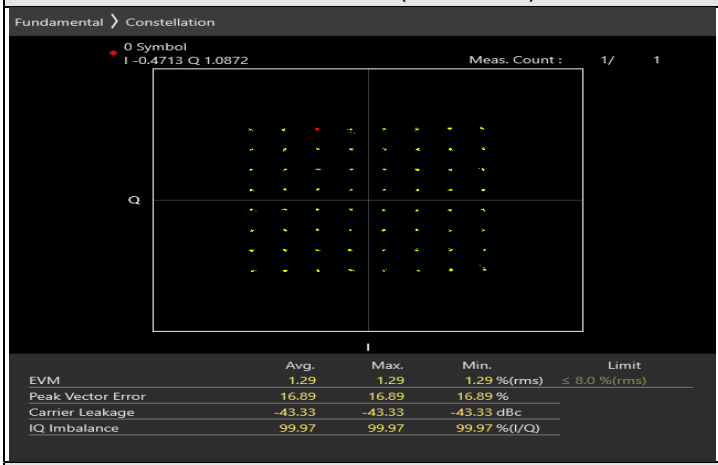
LTE Band 38, Channel Bandwidth: 20 MHz



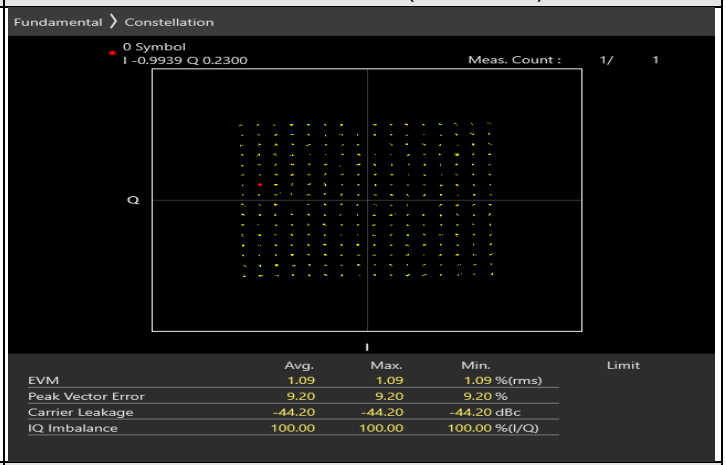
QPSK CH 38000 (2595 MHz)



16QAM CH 38000 (2595 MHz)



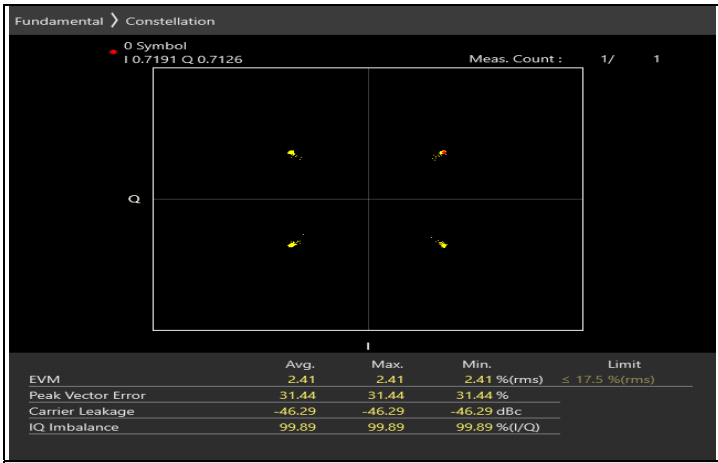
64QAM CH 38000 (2595 MHz)



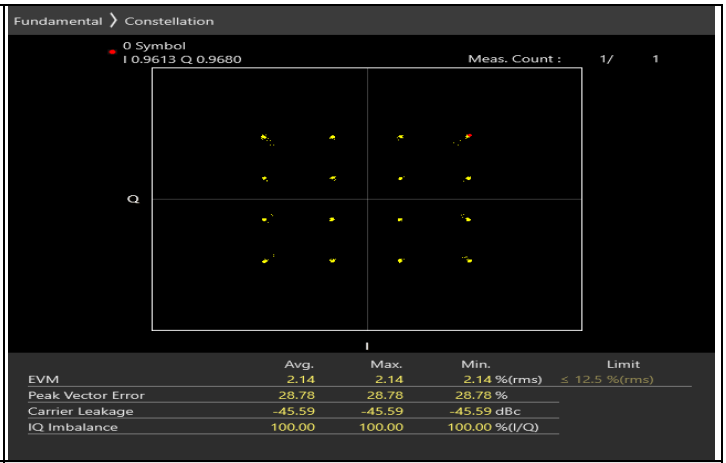
256QAM CH 38000 (2595 MHz)

7.2.12 LTE Band 41

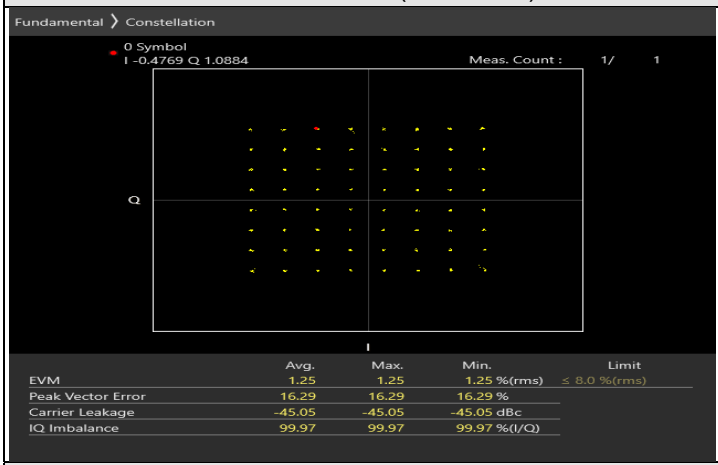
LTE Band 41, Channel Bandwidth: 20 MHz



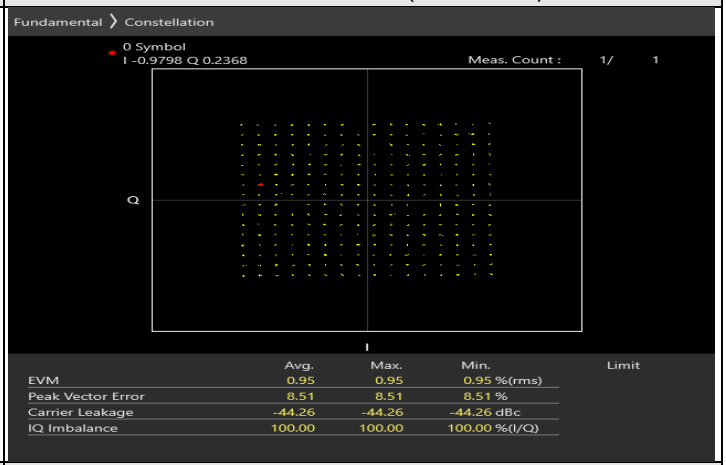
QPSK CH 40620 (2593 MHz)



16QAM CH 40620 (2593 MHz)



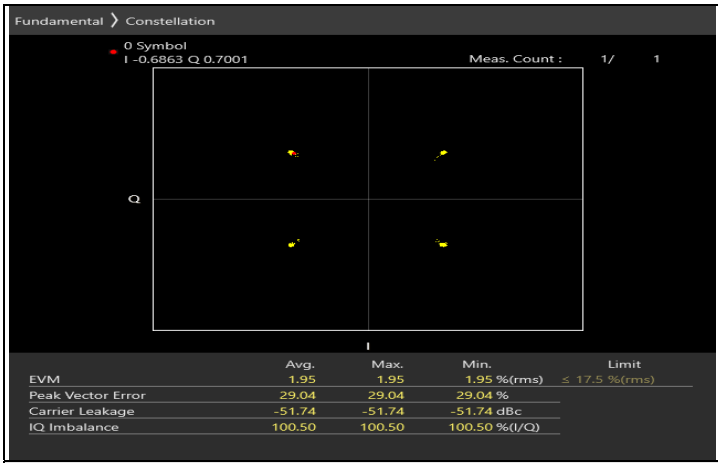
64QAM CH 40620 (2593 MHz)



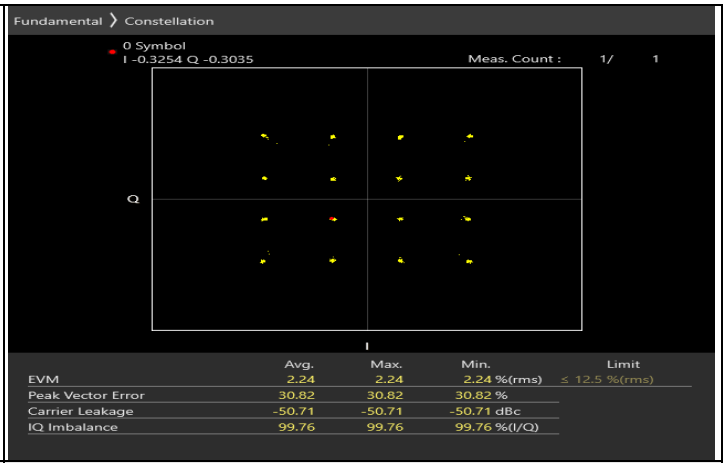
256QAM CH 40620 (2593 MHz)

7.2.13 LTE Band 71

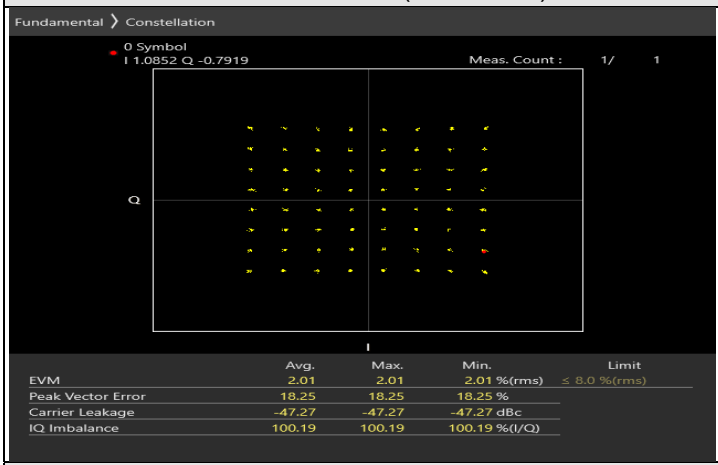
LTE Band 71, Channel Bandwidth: 20 MHz



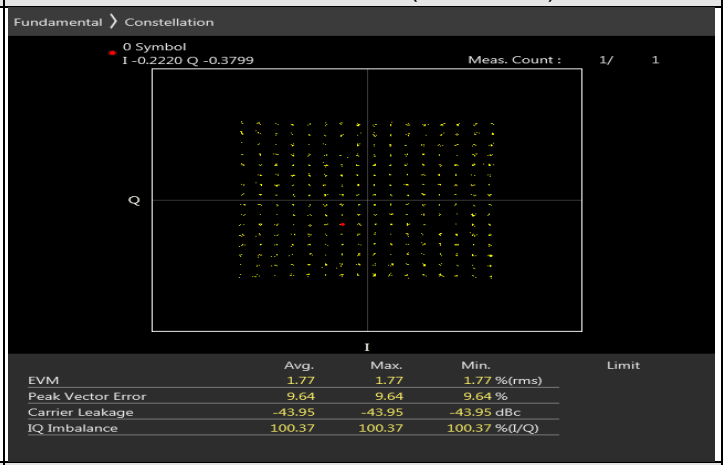
QPSK CH 133297 (680.5 MHz)



16QAM CH 133297 (680.5 MHz)



64QAM CH 133297 (680.5 MHz)



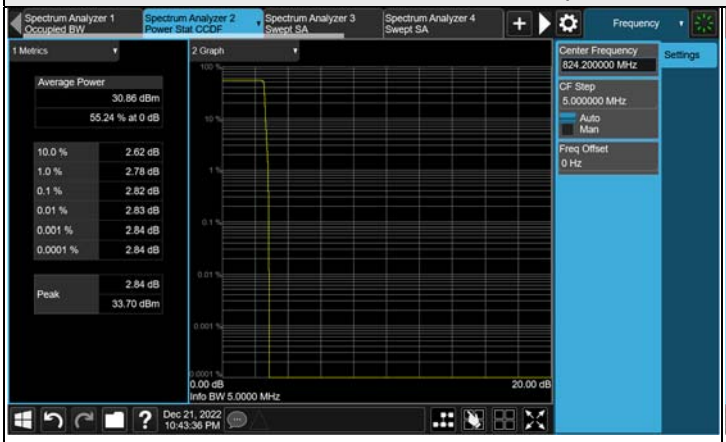
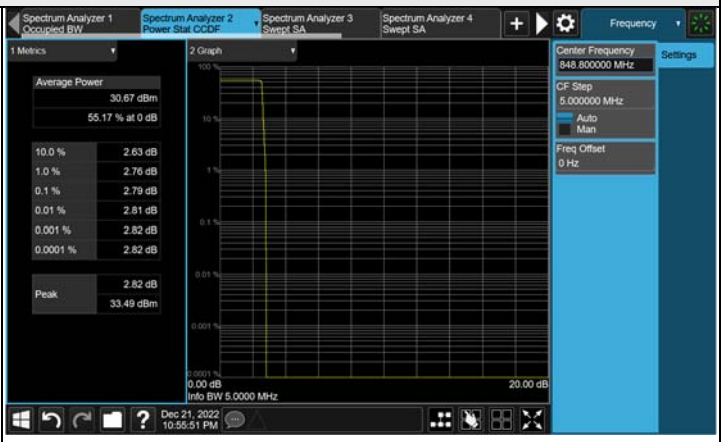
256QAM CH 133297 (680.5 MHz)

7.3 Peak to Average Ratio

Input Power:	3.85 Vdc	Environmental Conditions:	22°C, 73% RH	Tested By:	Willy Cheng

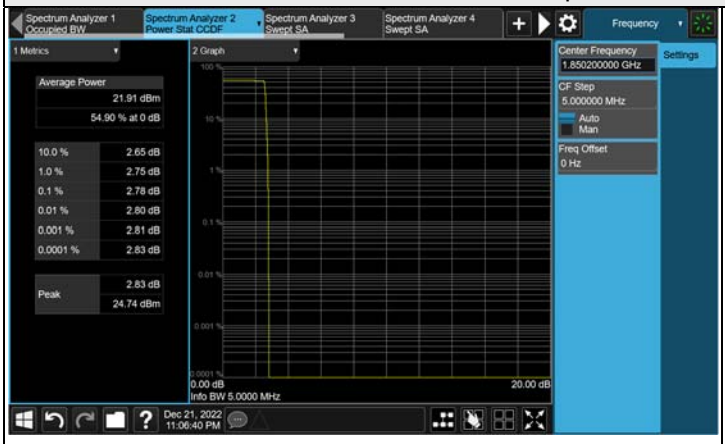
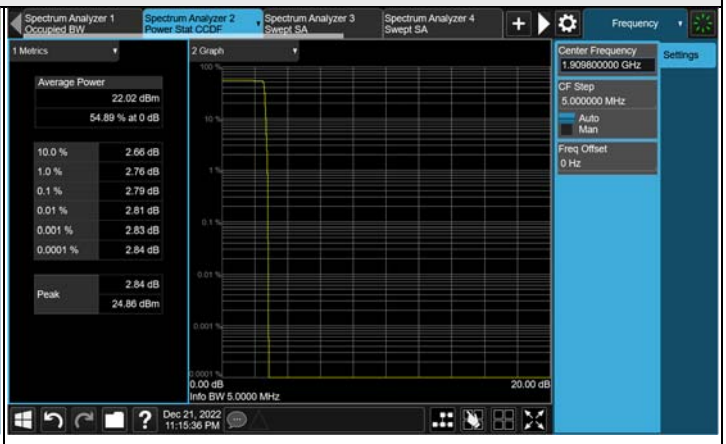
7.3.1 GSM850

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
GSM	128	824.2	2.82	13	Pass
GSM	189	836.4	2.77	13	Pass
GSM	251	848.8	2.79	13	Pass
EDGE	128	824.2	2.78	13	Pass
EDGE	189	836.4	2.77	13	Pass
EDGE	251	848.8	2.79	13	Pass

Spectrum Plot of Worst Value	
	
GSM CH 128 (824.2 MHz)	EDGE CH 251 (848.8 MHz)

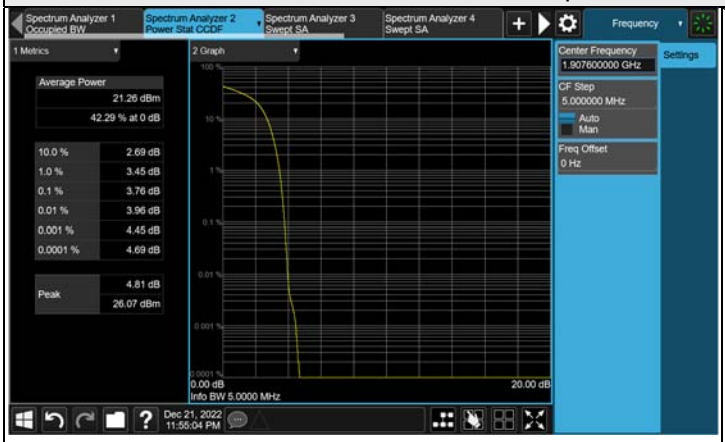
7.3.2 PCS1900

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
GSM	512	1850.2	2.78	13	Pass
GSM	661	1880.0	2.78	13	Pass
GSM	810	1909.8	2.77	13	Pass
EDGE	512	1850.2	2.78	13	Pass
EDGE	661	1880.0	2.77	13	Pass
EDGE	810	1909.8	2.79	13	Pass

Spectrum Plot of Worst Value	
	
GSM CH 512 (1850.2 MHz)	EDGE CH 810 (1909.8 MHz)

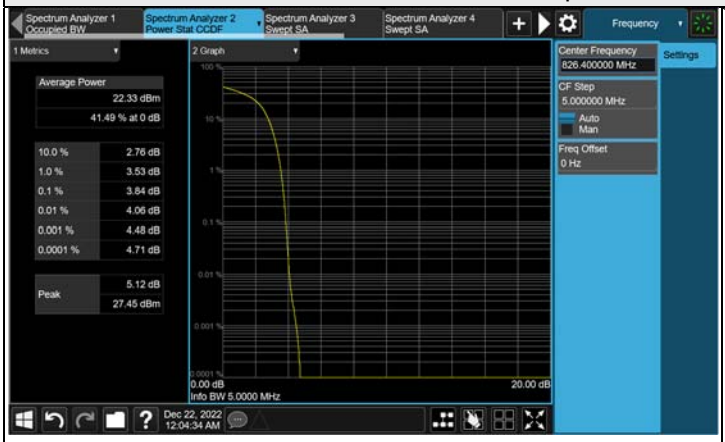
7.3.3 WCDMA Band 2

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
WCDMA	9262	1852.4	2.88	13	Pass
WCDMA	9400	1880	2.91	13	Pass
WCDMA	9538	1907.6	2.82	13	Pass
HSDPA	9262	1852.4	3.68	13	Pass
HSDPA	9400	1880	3.70	13	Pass
HSDPA	9538	1907.6	3.71	13	Pass
HSUPA	9262	1852.4	3.73	13	Pass
HSUPA	9400	1880	3.71	13	Pass
HSUPA	9538	1907.6	3.76	13	Pass

Spectrum Plot of Worst Value	
	
HSUPA CH 9538 (1907.6 MHz)	

7.3.4 WCDMA Band 5

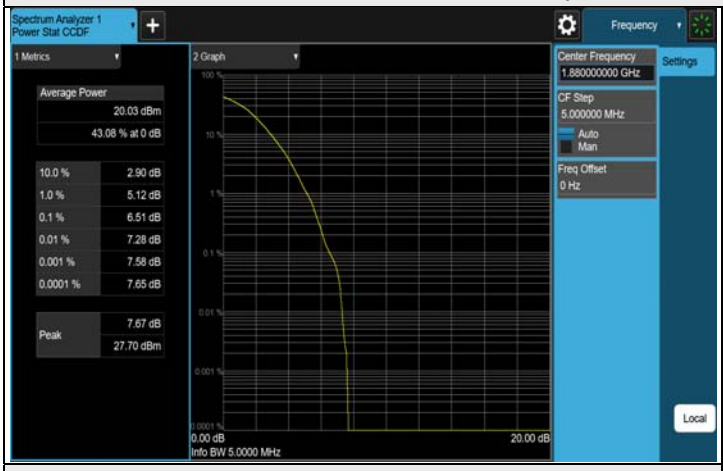
Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
WCDMA	4132	826.4	2.88	13	Pass
WCDMA	4182	836.4	2.79	13	Pass
WCDMA	4223	846.6	2.83	13	Pass
HSDPA	4132	826.4	3.80	13	Pass
HSDPA	4182	836.4	3.67	13	Pass
HSDPA	4223	846.6	3.81	13	Pass
HSUPA	4132	826.4	3.84	13	Pass
HSUPA	4182	836.4	3.73	13	Pass
HSUPA	4223	846.6	3.83	13	Pass

Spectrum Plot of Worst Value	
	
HSUPA CH 4132 (826.4 MHz)	

7.3.5 LTE Band 2

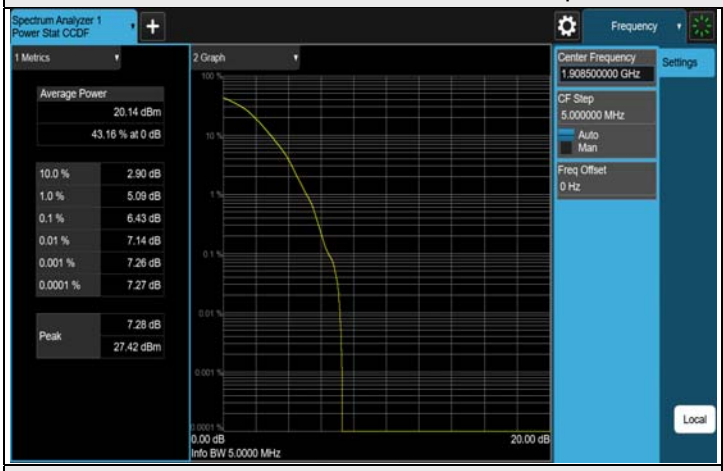
LTE Band 2, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	18607	1850.7	3.25	13	PASS
QPSK	18900	1880	3.36	13	PASS
QPSK	19193	1909.3	2.68	13	PASS
16QAM	18607	1850.7	4.70	13	PASS
16QAM	18900	1880	4.91	13	PASS
16QAM	19193	1909.3	3.87	13	PASS
64QAM	18607	1850.7	4.71	13	PASS
64QAM	18900	1880	5.86	13	PASS
64QAM	19193	1909.3	5.00	13	PASS
256QAM	18607	1850.7	6.41	13	PASS
256QAM	18900	1880	6.51	13	PASS
256QAM	19193	1909.3	6.37	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 18900 (1880 MHz)	

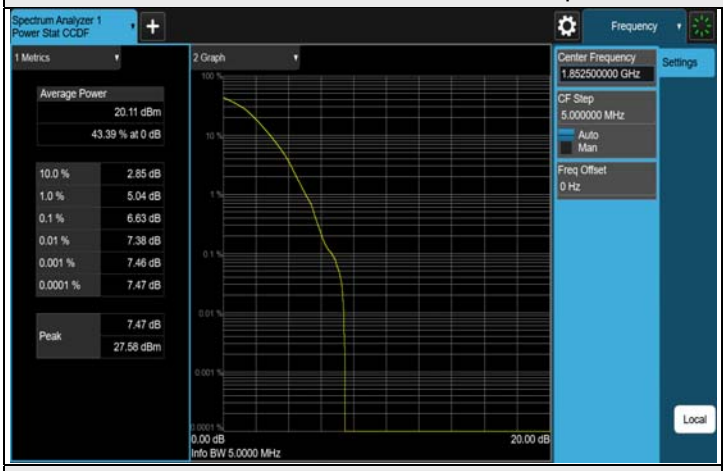
LTE Band 2, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	18615	1851.5	3.12	13	PASS
QPSK	18900	1880	3.23	13	PASS
QPSK	19185	1908.5	2.92	13	PASS
16QAM	18615	1851.5	4.66	13	PASS
16QAM	18900	1880	4.87	13	PASS
16QAM	19185	1908.5	4.35	13	PASS
64QAM	18615	1851.5	4.70	13	PASS
64QAM	18900	1880	5.81	13	PASS
64QAM	19185	1908.5	5.40	13	PASS
256QAM	18615	1851.5	6.42	13	PASS
256QAM	18900	1880	6.41	13	PASS
256QAM	19185	1908.5	6.43	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 19185 (1908.5 MHz)	

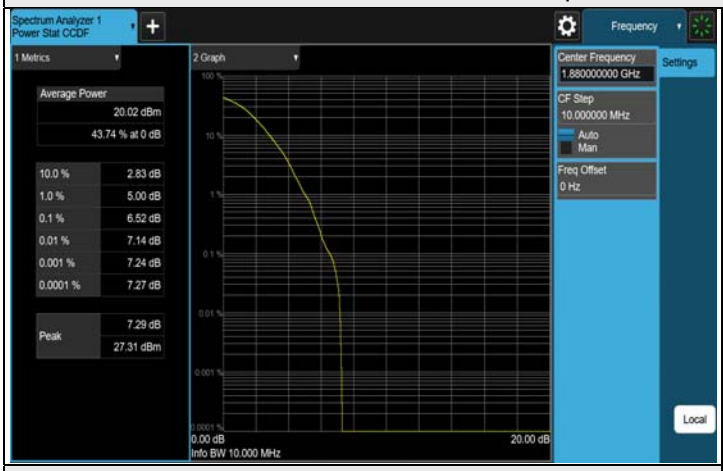
LTE Band 2, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	18625	1852.5	3.12	13	PASS
QPSK	18900	1880	3.19	13	PASS
QPSK	19175	1907.5	3.03	13	PASS
16QAM	18625	1852.5	4.55	13	PASS
16QAM	18900	1880	4.83	13	PASS
16QAM	19175	1907.5	4.52	13	PASS
64QAM	18625	1852.5	5.59	13	PASS
64QAM	18900	1880	5.79	13	PASS
64QAM	19175	1907.5	5.49	13	PASS
256QAM	18625	1852.5	6.63	13	PASS
256QAM	18900	1880	6.45	13	PASS
256QAM	19175	1907.5	6.45	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 18625 (1852.5 MHz)	

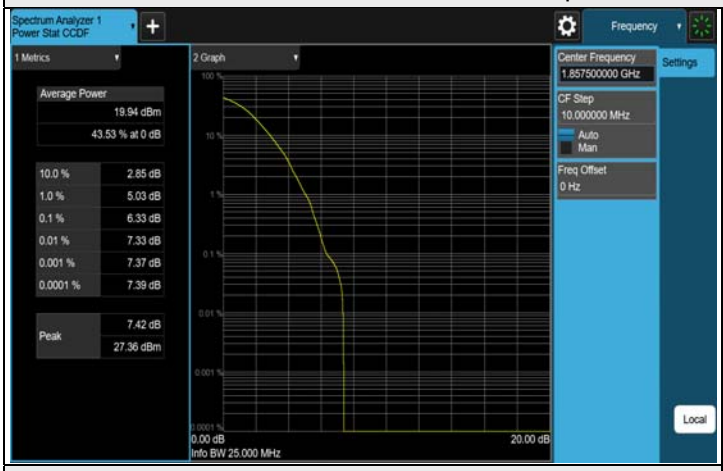
LTE Band 2, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	18650	1855	3.07	13	PASS
QPSK	18900	1880	3.17	13	PASS
QPSK	19150	1905	2.79	13	PASS
16QAM	18650	1855	4.54	13	PASS
16QAM	18900	1880	4.66	13	PASS
16QAM	19150	1905	4.12	13	PASS
64QAM	18650	1855	5.58	13	PASS
64QAM	18900	1880	5.74	13	PASS
64QAM	19150	1905	5.00	13	PASS
256QAM	18650	1855	6.35	13	PASS
256QAM	18900	1880	6.52	13	PASS
256QAM	19150	1905	5.91	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 18900 (1880 MHz)	

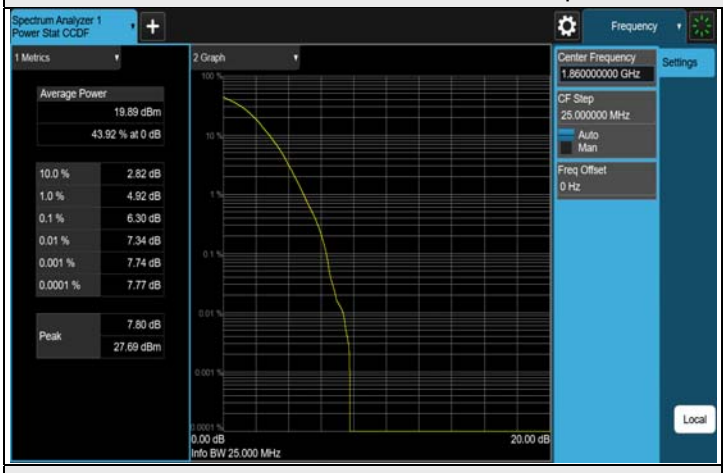
LTE Band 2, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	18675	1857.5	3.08	13	PASS
QPSK	18900	1880	3.16	13	PASS
QPSK	19125	1902.5	2.76	13	PASS
16QAM	18675	1857.5	4.55	13	PASS
16QAM	18900	1880	4.66	13	PASS
16QAM	19125	1902.5	3.84	13	PASS
64QAM	18675	1857.5	5.64	13	PASS
64QAM	18900	1880	5.68	13	PASS
64QAM	19125	1902.5	4.80	13	PASS
256QAM	18675	1857.5	6.33	13	PASS
256QAM	18900	1880	6.28	13	PASS
256QAM	19125	1902.5	6.09	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 18675 (1857.5 MHz)	

LTE Band 2, Channel Bandwidth: 20 MHz

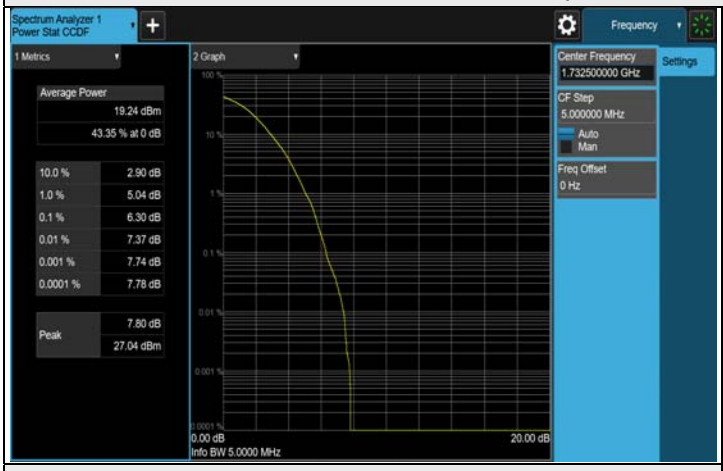
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	18700	1860	3.03	13	PASS
QPSK	18900	1880	3.08	13	PASS
QPSK	19100	1900	2.80	13	PASS
16QAM	18700	1860	4.61	13	PASS
16QAM	18900	1880	4.58	13	PASS
16QAM	19100	1900	4.15	13	PASS
64QAM	18700	1860	5.66	13	PASS
64QAM	18900	1880	5.71	13	PASS
64QAM	19100	1900	5.25	13	PASS
256QAM	18700	1860	6.30	13	PASS
256QAM	18900	1880	6.10	13	PASS
256QAM	19100	1900	6.07	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 18700 (1860 MHz)	

7.3.6 LTE Band 4

LTE Band 4, Channel Bandwidth: 1.4 MHz

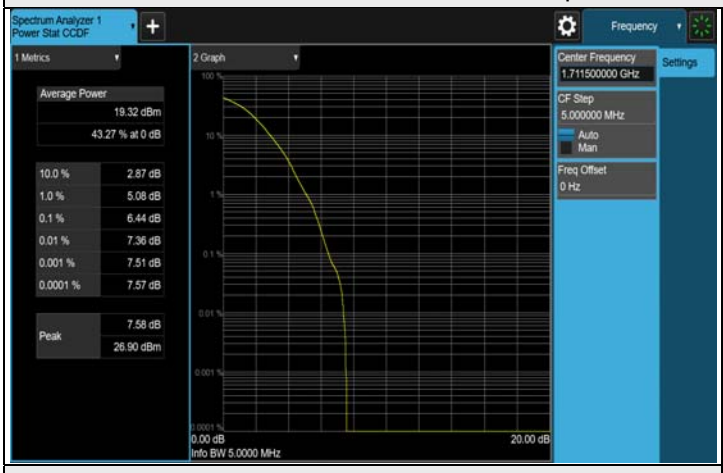
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	19957	1710.7	2.97	13	PASS
QPSK	20175	1732.5	3.25	13	PASS
QPSK	20393	1754.3	3.10	13	PASS
16QAM	19957	1710.7	4.10	13	PASS
16QAM	20175	1732.5	4.59	13	PASS
16QAM	20393	1754.3	4.45	13	PASS
64QAM	19957	1710.7	5.06	13	PASS
64QAM	20175	1732.5	5.56	13	PASS
64QAM	20393	1754.3	4.45	13	PASS
256QAM	19957	1710.7	6.28	13	PASS
256QAM	20175	1732.5	6.30	13	PASS
256QAM	20393	1754.3	6.16	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 20175 (1732.5 MHz)	

LTE Band 4, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	19965	1711.5	2.79	13	PASS
QPSK	20175	1732.5	3.06	13	PASS
QPSK	20385	1753.5	2.93	13	PASS
16QAM	19965	1711.5	4.02	13	PASS
16QAM	20175	1732.5	4.49	13	PASS
16QAM	20385	1753.5	4.39	13	PASS
64QAM	19965	1711.5	4.99	13	PASS
64QAM	20175	1732.5	5.46	13	PASS
64QAM	20385	1753.5	5.43	13	PASS
256QAM	19965	1711.5	6.44	13	PASS
256QAM	20175	1732.5	6.40	13	PASS
256QAM	20385	1753.5	6.16	13	PASS

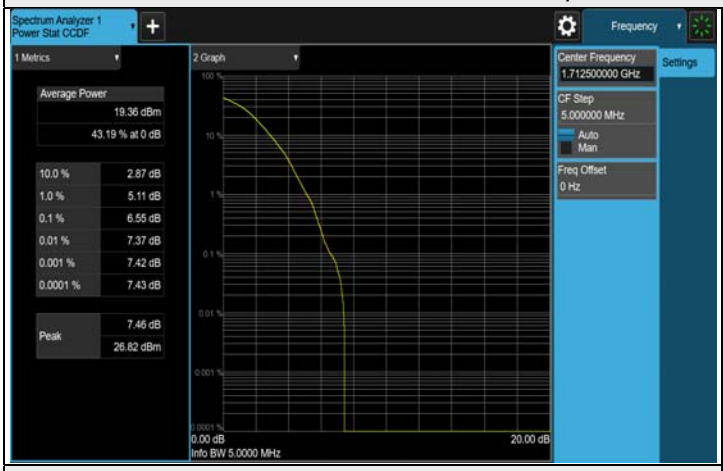
Spectrum Plot of Worst Value



256QAM CH 19965 (1711.5 MHz)

LTE Band 4, Channel Bandwidth: 5 MHz

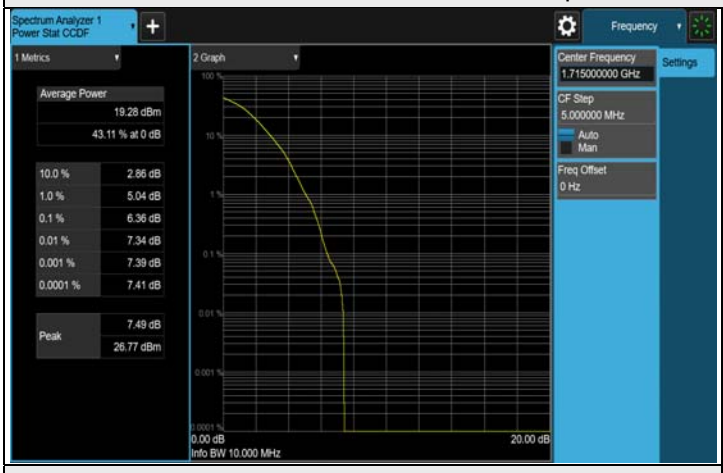
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	19975	1712.5	2.78	13	PASS
QPSK	20175	1732.5	3.00	13	PASS
QPSK	20375	1752.5	3.00	13	PASS
16QAM	19975	1712.5	4.02	13	PASS
16QAM	20175	1732.5	4.40	13	PASS
16QAM	20375	1752.5	4.45	13	PASS
64QAM	19975	1712.5	5.00	13	PASS
64QAM	20175	1732.5	5.40	13	PASS
64QAM	20375	1752.5	5.46	13	PASS
256QAM	19975	1712.5	6.55	13	PASS
256QAM	20175	1732.5	6.31	13	PASS
256QAM	20375	1752.5	6.04	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 19975 (1712.5 MHz)	

LTE Band 4, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	20000	1715	2.86	13	PASS
QPSK	20175	1732.5	2.95	13	PASS
QPSK	20350	1750	3.18	13	PASS
16QAM	20000	1715	4.06	13	PASS
16QAM	20175	1732.5	4.20	13	PASS
16QAM	20350	1750	4.62	13	PASS
64QAM	20000	1715	4.97	13	PASS
64QAM	20175	1732.5	5.25	13	PASS
64QAM	20350	1750	5.65	13	PASS
256QAM	20000	1715	6.36	13	PASS
256QAM	20175	1732.5	6.20	13	PASS
256QAM	20350	1750	6.15	13	PASS

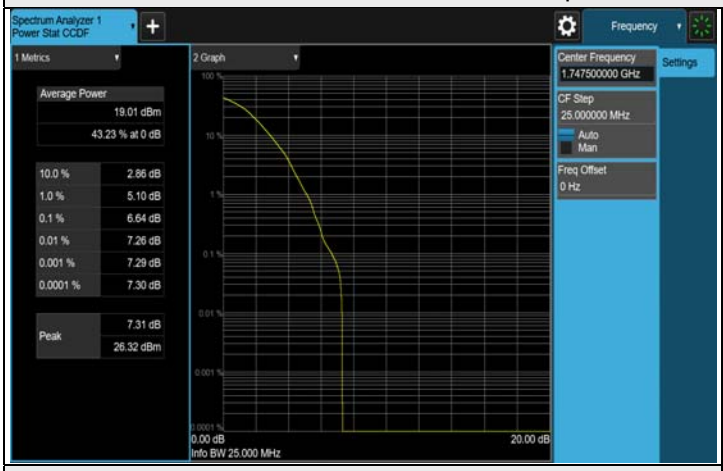
Spectrum Plot of Worst Value



256QAM CH 20000 (1715 MHz)

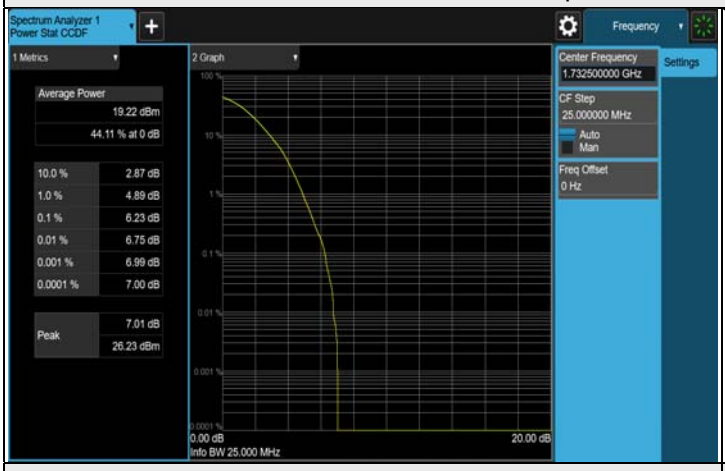
LTE Band 4, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	20025	1717.5	2.89	13	PASS
QPSK	20175	1732.5	2.92	13	PASS
QPSK	20325	1747.5	3.21	13	PASS
16QAM	20025	1717.5	4.12	13	PASS
16QAM	20175	1732.5	4.24	13	PASS
16QAM	20325	1747.5	4.78	13	PASS
64QAM	20025	1717.5	5.14	13	PASS
64QAM	20175	1732.5	5.29	13	PASS
64QAM	20325	1747.5	5.77	13	PASS
256QAM	20025	1717.5	6.00	13	PASS
256QAM	20175	1732.5	5.76	13	PASS
256QAM	20325	1747.5	6.64	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 20325 (1747.5 MHz)	

LTE Band 4, Channel Bandwidth: 20 MHz

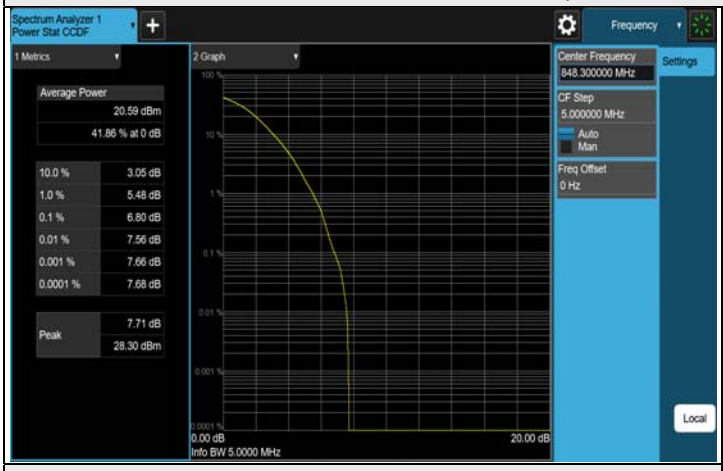
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	20050	1720	2.88	13	PASS
QPSK	20175	1732.5	2.89	13	PASS
QPSK	20300	1745	3.15	13	PASS
16QAM	20050	1720	4.19	13	PASS
16QAM	20175	1732.5	4.18	13	PASS
16QAM	20300	1745	4.65	13	PASS
64QAM	20050	1720	5.16	13	PASS
64QAM	20175	1732.5	5.27	13	PASS
64QAM	20300	1745	5.70	13	PASS
256QAM	20050	1720	6.01	13	PASS
256QAM	20175	1732.5	6.23	13	PASS
256QAM	20300	1745	6.23	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 20175 (1732.5 MHz)	

7.3.7 LTE Band 5

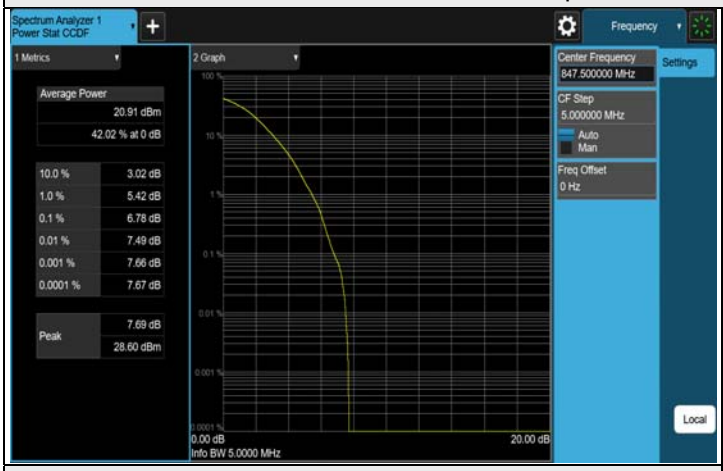
LTE Band 5, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	20407	824.7	3.22	13	PASS
QPSK	20525	836.5	2.96	13	PASS
QPSK	20643	848.3	3.43	13	PASS
16QAM	20407	824.7	4.58	13	PASS
16QAM	20525	836.5	4.30	13	PASS
16QAM	20643	848.3	4.92	13	PASS
64QAM	20407	824.7	5.87	13	PASS
64QAM	20525	836.5	5.63	13	PASS
64QAM	20643	848.3	6.21	13	PASS
256QAM	20407	824.7	6.64	13	PASS
256QAM	20525	836.5	6.70	13	PASS
256QAM	20643	848.3	6.80	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 20643 (848.3 MHz)	

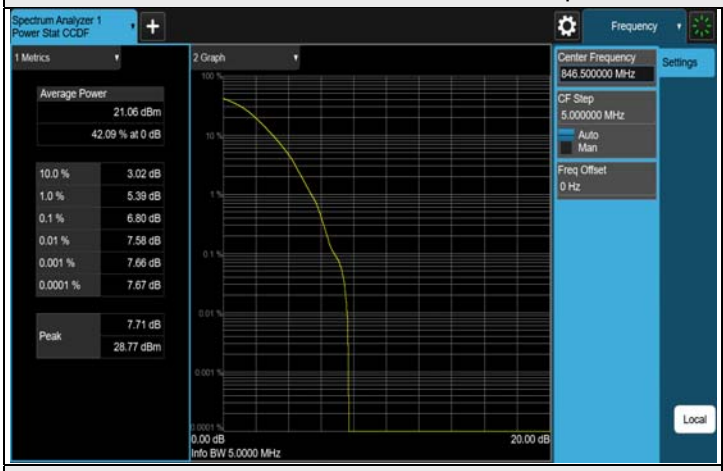
LTE Band 5, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	20415	825.5	3.10	13	PASS
QPSK	20525	836.5	2.89	13	PASS
QPSK	20635	847.5	3.21	13	PASS
16QAM	20415	825.5	4.54	13	PASS
16QAM	20525	836.5	4.30	13	PASS
16QAM	20635	847.5	4.76	13	PASS
64QAM	20415	825.5	5.94	13	PASS
64QAM	20525	836.5	5.69	13	PASS
64QAM	20635	847.5	6.16	13	PASS
256QAM	20415	825.5	6.64	13	PASS
256QAM	20525	836.5	6.63	13	PASS
256QAM	20635	847.5	6.78	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 20635 (847.5 MHz)	

LTE Band 5, Channel Bandwidth: 5 MHz

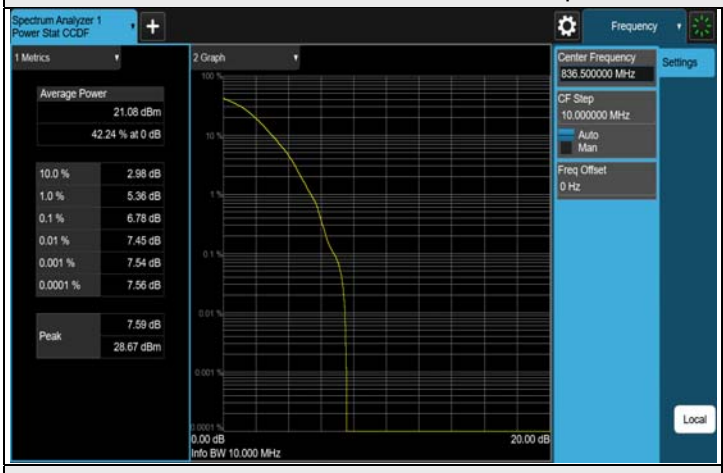
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	20425	826.5	3.12	13	PASS
QPSK	20525	836.5	2.93	13	PASS
QPSK	20625	846.5	3.28	13	PASS
16QAM	20425	826.5	4.55	13	PASS
16QAM	20525	836.5	4.35	13	PASS
16QAM	20625	846.5	4.86	13	PASS
64QAM	20425	826.5	5.95	13	PASS
64QAM	20525	836.5	5.80	13	PASS
64QAM	20625	846.5	6.32	13	PASS
256QAM	20425	826.5	6.74	13	PASS
256QAM	20525	836.5	6.73	13	PASS
256QAM	20625	846.5	6.80	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 20625 (846.5 MHz)	

LTE Band 5, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	20450	829	3.15	13	PASS
QPSK	20525	836.5	2.98	13	PASS
QPSK	20600	844	2.98	13	PASS
16QAM	20450	829	4.59	13	PASS
16QAM	20525	836.5	4.42	13	PASS
16QAM	20600	844	4.40	13	PASS
64QAM	20450	829	5.90	13	PASS
64QAM	20525	836.5	5.85	13	PASS
64QAM	20600	844	5.80	13	PASS
256QAM	20450	829	6.56	13	PASS
256QAM	20525	836.5	6.78	13	PASS
256QAM	20600	844	6.72	13	PASS

Spectrum Plot of Worst Value

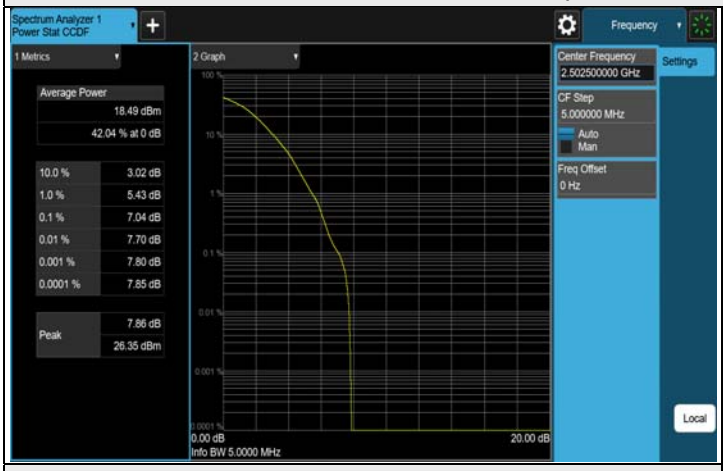


256QAM CH 20525 (836.5 MHz)

7.3.8 LTE Band 7

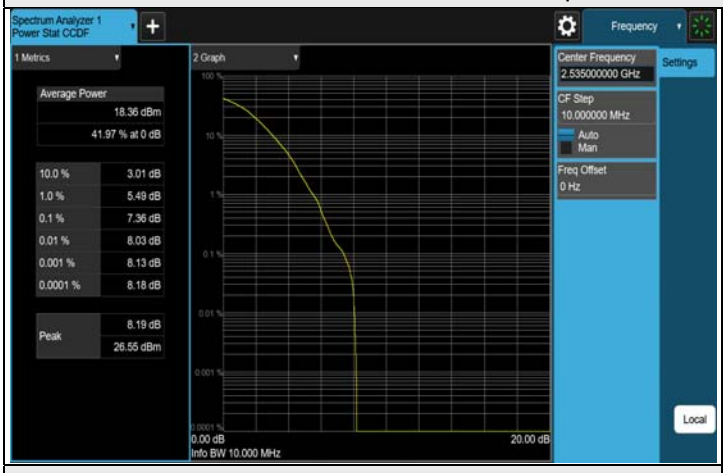
LTE Band 7, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	20775	2502.5	3.14	13	PASS
QPSK	21100	2535	3.43	13	PASS
QPSK	21425	2567.5	3.12	13	PASS
16QAM	20775	2502.5	4.48	13	PASS
16QAM	21100	2535	5.04	13	PASS
16QAM	21425	2567.5	4.55	13	PASS
64QAM	20775	2502.5	5.51	13	PASS
64QAM	21100	2535	6.13	13	PASS
64QAM	21425	2567.5	5.62	13	PASS
256QAM	20775	2502.5	7.04	13	PASS
256QAM	21100	2535	7.00	13	PASS
256QAM	21425	2567.5	6.93	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 20775 (2502.5 MHz)	

LTE Band 7, Channel Bandwidth: 10 MHz

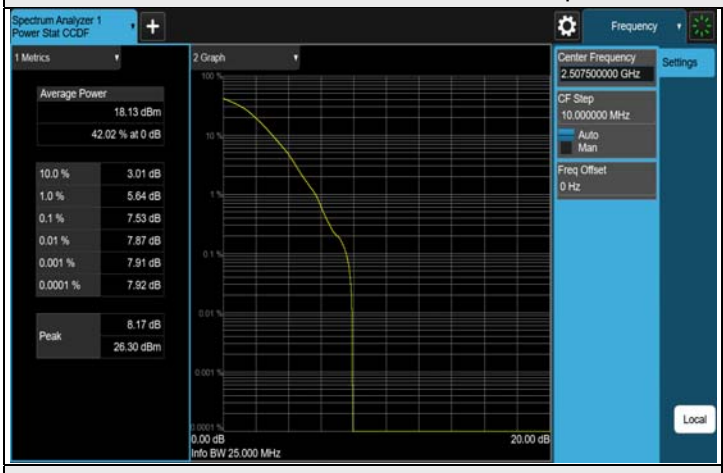
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	20800	2505	3.10	13	PASS
QPSK	21100	2535	3.44	13	PASS
QPSK	21400	2565	3.31	13	PASS
16QAM	20800	2505	4.46	13	PASS
16QAM	21100	2535	5.02	13	PASS
16QAM	21400	2565	4.81	13	PASS
64QAM	20800	2505	5.46	13	PASS
64QAM	21100	2535	6.13	13	PASS
64QAM	21400	2565	5.86	13	PASS
256QAM	20800	2505	6.80	13	PASS
256QAM	21100	2535	7.36	13	PASS
256QAM	21400	2565	6.97	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 21100 (2535 MHz)	

LTE Band 7, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	20825	2507.5	3.15	13	PASS
QPSK	21100	2535	3.40	13	PASS
QPSK	21375	2562.5	3.34	13	PASS
16QAM	20825	2507.5	4.59	13	PASS
16QAM	21100	2535	5.06	13	PASS
16QAM	21375	2562.5	4.96	13	PASS
64QAM	20825	2507.5	5.65	13	PASS
64QAM	21100	2535	6.16	13	PASS
64QAM	21375	2562.5	6.00	13	PASS
256QAM	20825	2507.5	7.53	13	PASS
256QAM	21100	2535	6.64	13	PASS
256QAM	21375	2562.5	7.02	13	PASS

Spectrum Plot of Worst Value

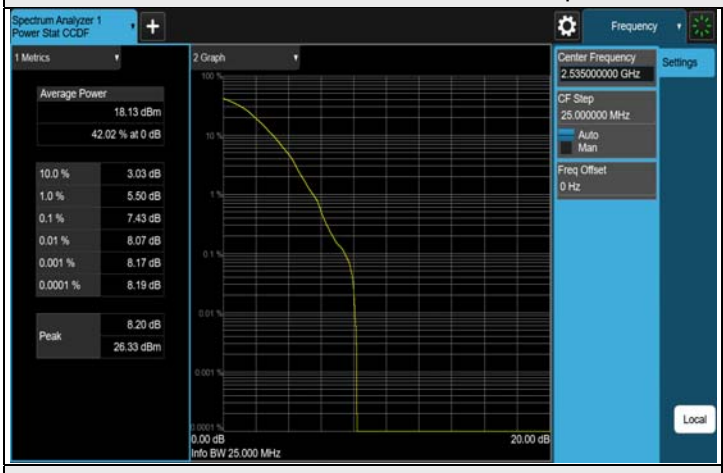


256QAM CH 20825 (2507.5 MHz)

LTE Band 7, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	20850	2510	3.15	13	PASS
QPSK	21100	2535	3.36	13	PASS
QPSK	21350	2560	3.33	13	PASS
16QAM	20850	2510	4.56	13	PASS
16QAM	21100	2535	5.00	13	PASS
16QAM	21350	2560	4.93	13	PASS
64QAM	20850	2510	5.67	13	PASS
64QAM	21100	2535	6.07	13	PASS
64QAM	21350	2560	6.08	13	PASS
256QAM	20850	2510	7.40	13	PASS
256QAM	21100	2535	7.43	13	PASS
256QAM	21350	2560	6.55	13	PASS

Spectrum Plot of Worst Value

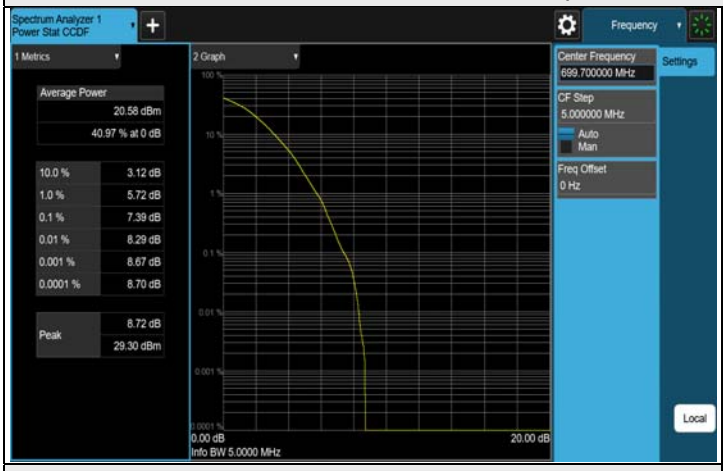


256QAM CH 21100 (2535 MHz)

7.3.9 LTE Band 12

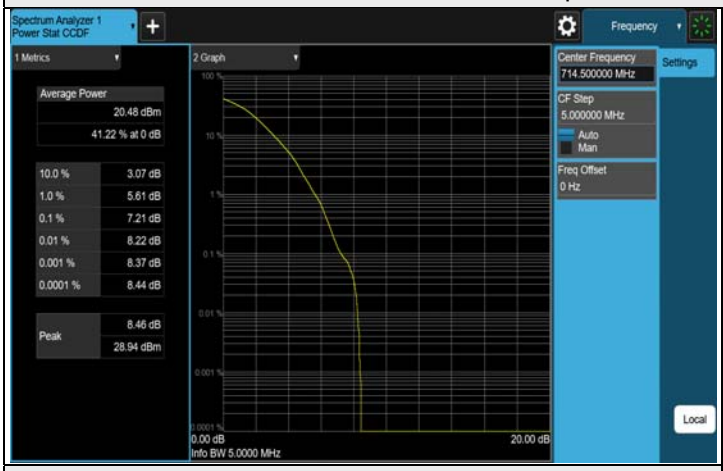
LTE Band 12, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	23017	699.7	3.93	13	PASS
QPSK	23095	707.5	3.79	13	PASS
QPSK	23173	715.3	3.75	13	PASS
16QAM	23017	699.7	5.62	13	PASS
16QAM	23095	707.5	5.35	13	PASS
16QAM	23173	715.3	5.32	13	PASS
64QAM	23017	699.7	6.60	13	PASS
64QAM	23095	707.5	6.33	13	PASS
64QAM	23173	715.3	6.34	13	PASS
256QAM	23017	699.7	7.39	13	PASS
256QAM	23095	707.5	7.09	13	PASS
256QAM	23173	715.3	7.23	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 23017 (699.7 MHz)	

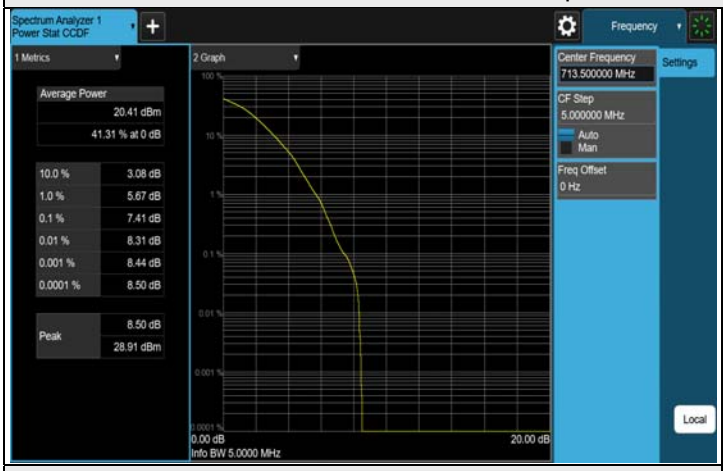
LTE Band 12, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	23025	700.5	3.67	13	PASS
QPSK	23095	707.5	3.59	13	PASS
QPSK	23165	714.5	3.55	13	PASS
16QAM	23025	700.5	5.44	13	PASS
16QAM	23095	707.5	5.22	13	PASS
16QAM	23165	714.5	5.18	13	PASS
64QAM	23025	700.5	6.56	13	PASS
64QAM	23095	707.5	6.31	13	PASS
64QAM	23165	714.5	6.31	13	PASS
256QAM	23025	700.5	7.06	13	PASS
256QAM	23095	707.5	7.18	13	PASS
256QAM	23165	714.5	7.21	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 23165 (714.5 MHz)	

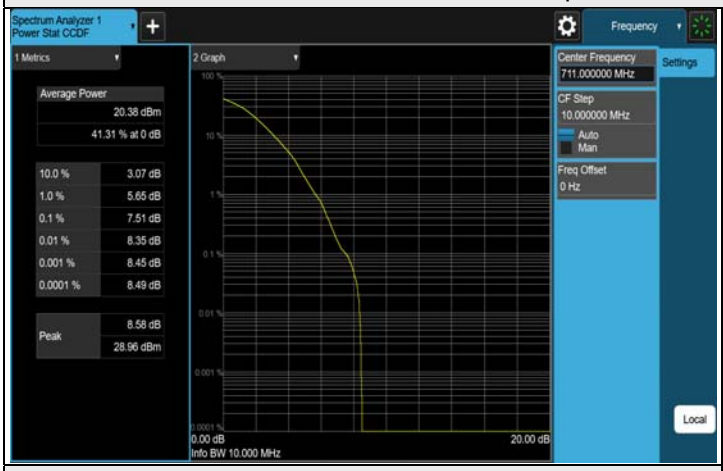
LTE Band 12, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	23035	701.5	3.66	13	PASS
QPSK	23095	707.5	3.53	13	PASS
QPSK	23155	713.5	3.58	13	PASS
16QAM	23035	701.5	5.42	13	PASS
16QAM	23095	707.5	5.11	13	PASS
16QAM	23155	713.5	5.22	13	PASS
64QAM	23035	701.5	6.52	13	PASS
64QAM	23095	707.5	6.21	13	PASS
64QAM	23155	713.5	6.32	13	PASS
256QAM	23035	701.5	7.27	13	PASS
256QAM	23095	707.5	7.22	13	PASS
256QAM	23155	713.5	7.41	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 23155 (713.5 MHz)	

LTE Band 12, Channel Bandwidth: 10 MHz

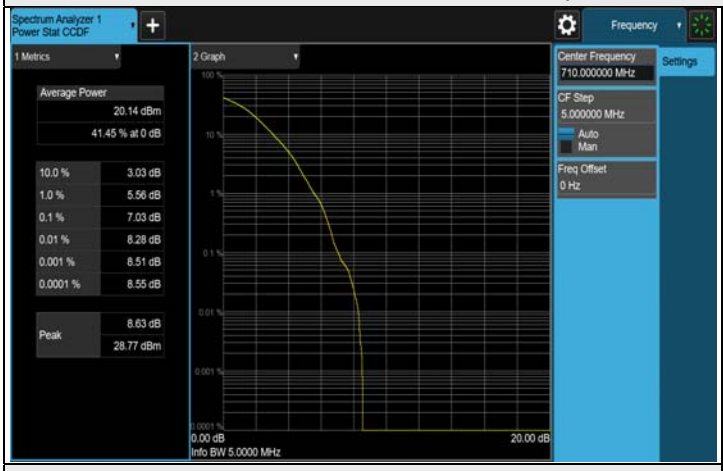
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	23060	704	3.65	13	PASS
QPSK	23095	707.5	3.58	13	PASS
QPSK	23130	711	3.59	13	PASS
16QAM	23060	704	5.36	13	PASS
16QAM	23095	707.5	5.19	13	PASS
16QAM	23130	711	5.15	13	PASS
64QAM	23060	704	6.51	13	PASS
64QAM	23095	707.5	6.25	13	PASS
64QAM	23130	711	6.28	13	PASS
256QAM	23060	704	7.40	13	PASS
256QAM	23095	707.5	6.97	13	PASS
256QAM	23130	711	7.51	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 23130 (711 MHz)	

7.3.10 LTE Band 17

LTE Band 17, Channel Bandwidth: 5 MHz

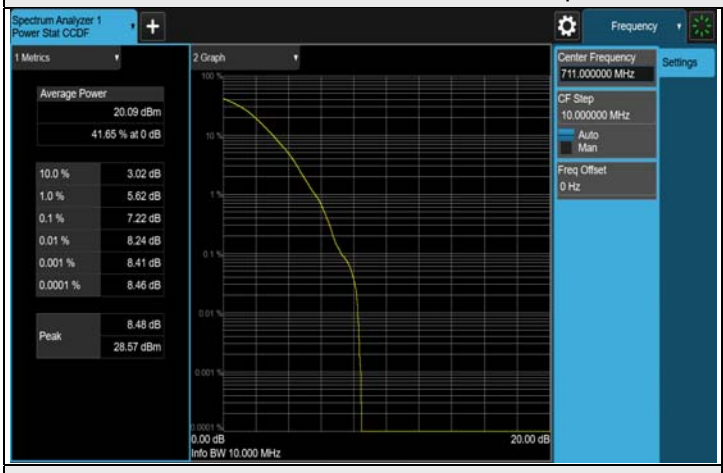
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	23755	706.5	3.63	13	PASS
QPSK	23790	710	3.62	13	PASS
QPSK	23825	713.5	3.57	13	PASS
16QAM	23755	706.5	5.16	13	PASS
16QAM	23790	710	5.20	13	PASS
16QAM	23825	713.5	5.23	13	PASS
64QAM	23755	706.5	6.28	13	PASS
64QAM	23790	710	6.31	13	PASS
64QAM	23825	713.5	6.33	13	PASS
256QAM	23755	706.5	6.89	13	PASS
256QAM	23790	710	7.03	13	PASS
256QAM	23825	713.5	6.88	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 23790 (710 MHz)	

LTE Band 17, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	23780	709	3.60	13	PASS
QPSK	23790	710	3.55	13	PASS
QPSK	23800	711	3.55	13	PASS
16QAM	23780	709	5.09	13	PASS
16QAM	23790	710	5.09	13	PASS
16QAM	23800	711	5.14	13	PASS
64QAM	23780	709	6.07	13	PASS
64QAM	23790	710	6.19	13	PASS
64QAM	23800	711	6.23	13	PASS
256QAM	23780	709	7.13	13	PASS
256QAM	23790	710	6.99	13	PASS
256QAM	23800	711	7.22	13	PASS

Spectrum Plot of Worst Value

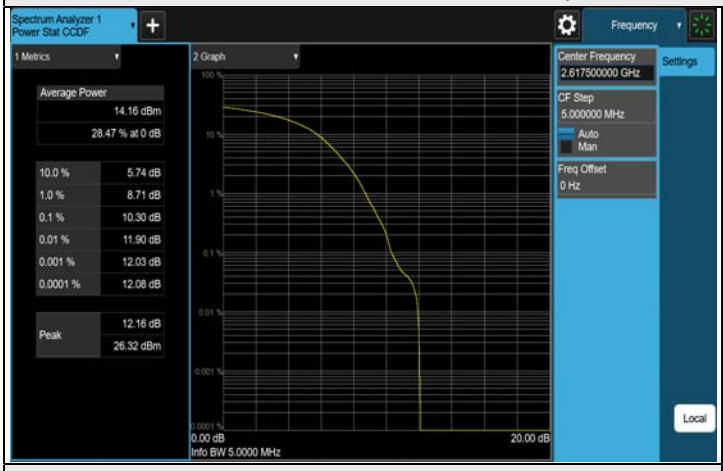


256QAM CH 23800 (711 MHz)

7.3.11 LTE Band 38

LTE Band 38, Channel Bandwidth: 5 MHz

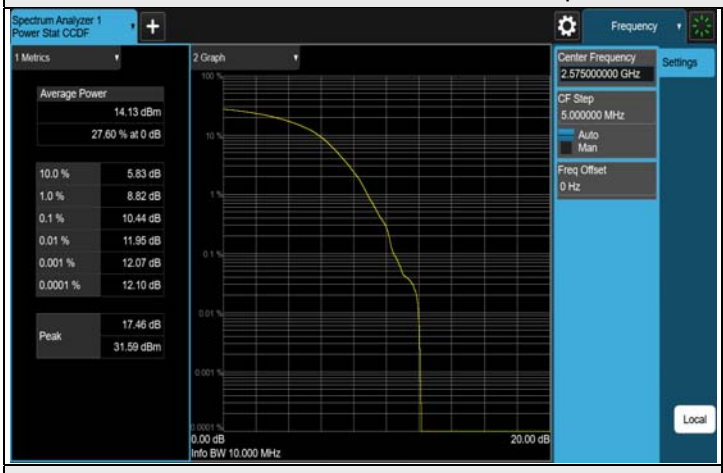
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	37775	2572.5	7.19	13	PASS
QPSK	38000	2595	7.33	13	PASS
QPSK	38225	2617.5	7.22	13	PASS
16QAM	37775	2572.5	8.41	13	PASS
16QAM	38000	2595	8.34	13	PASS
16QAM	38225	2617.5	8.90	13	PASS
64QAM	37775	2572.5	9.62	13	PASS
64QAM	38000	2595	9.55	13	PASS
64QAM	38225	2617.5	9.61	13	PASS
256QAM	37775	2572.5	10.19	13	PASS
256QAM	38000	2595	10.28	13	PASS
256QAM	38225	2617.5	10.30	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 38225 (2617.5 MHz)	

LTE Band 38, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	37800	2575	7.34	13	PASS
QPSK	38000	2595	6.94	13	PASS
QPSK	38200	2615	6.98	13	PASS
16QAM	37800	2575	8.17	13	PASS
16QAM	38000	2595	9.21	13	PASS
16QAM	38200	2615	8.13	13	PASS
64QAM	37800	2575	9.20	13	PASS
64QAM	38000	2595	9.43	13	PASS
64QAM	38200	2615	9.39	13	PASS
256QAM	37800	2575	10.44	13	PASS
256QAM	38000	2595	10.31	13	PASS
256QAM	38200	2615	9.76	13	PASS

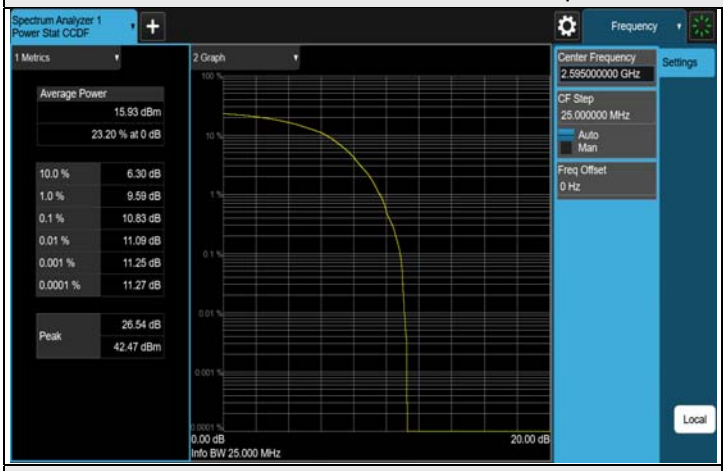
Spectrum Plot of Worst Value



256QAM CH 37800 (2575 MHz)

LTE Band 38, Channel Bandwidth: 15 MHz

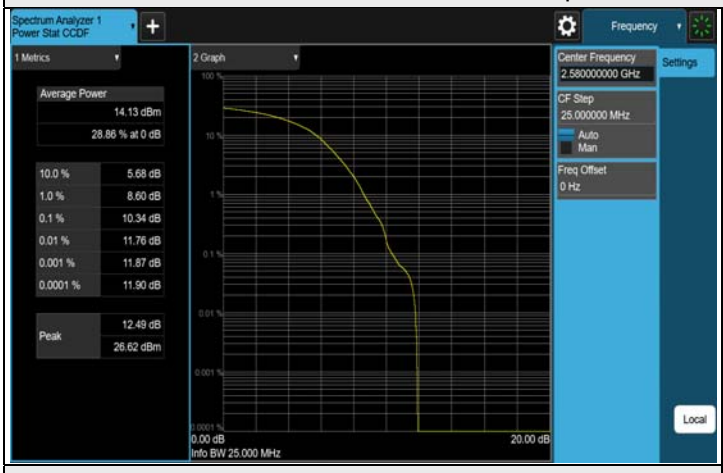
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	37825	2577.5	6.62	13	PASS
QPSK	38000	2595	6.99	13	PASS
QPSK	38175	2612.5	6.67	13	PASS
16QAM	37825	2577.5	8.87	13	PASS
16QAM	38000	2595	8.85	13	PASS
16QAM	38175	2612.5	8.79	13	PASS
64QAM	37825	2577.5	9.14	13	PASS
64QAM	38000	2595	10.83	13	PASS
64QAM	38175	2612.5	9.27	13	PASS
256QAM	37825	2577.5	10.23	13	PASS
256QAM	38000	2595	9.95	13	PASS
256QAM	38175	2612.5	9.20	13	PASS

Spectrum Plot of Worst Value	
	
64QAM CH 38000 (2595 MHz)	

LTE Band 38, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	37850	2580	6.63	13	PASS
QPSK	38000	2595	7.81	13	PASS
QPSK	38150	2610	8.46	13	PASS
16QAM	37850	2580	8.96	13	PASS
16QAM	38000	2595	7.21	13	PASS
16QAM	38150	2610	8.55	13	PASS
64QAM	37850	2580	9.65	13	PASS
64QAM	38000	2595	8.91	13	PASS
64QAM	38150	2610	9.33	13	PASS
256QAM	37850	2580	10.34	13	PASS
256QAM	38000	2595	8.86	13	PASS
256QAM	38150	2610	9.62	13	PASS

Spectrum Plot of Worst Value

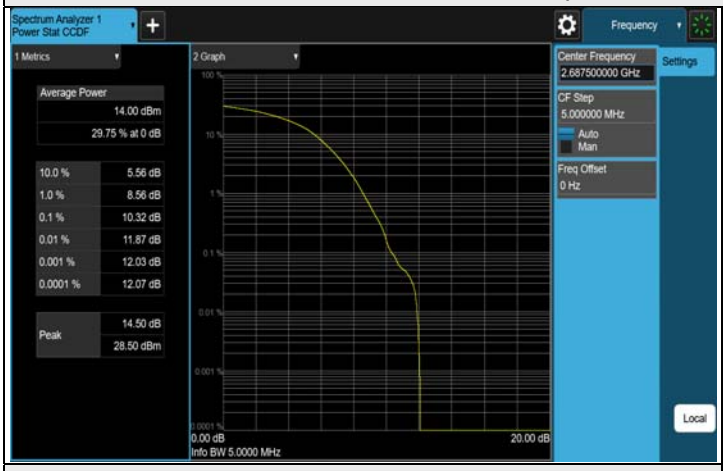


256QAM CH 37850 (2580 MHz)

7.3.12 LTE Band 41

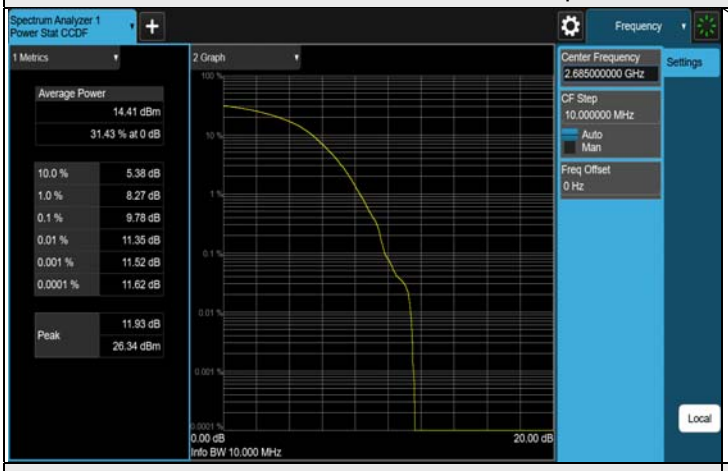
LTE Band 41, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	39675	2498.5	7.90	13	PASS
QPSK	40620	2593	7.11	13	PASS
QPSK	41565	2687.5	7.38	13	PASS
16QAM	39675	2498.5	8.39	13	PASS
16QAM	40620	2593	8.34	13	PASS
16QAM	41565	2687.5	9.42	13	PASS
64QAM	39675	2498.5	9.34	13	PASS
64QAM	40620	2593	9.28	13	PASS
64QAM	41565	2687.5	9.45	13	PASS
256QAM	39675	2498.5	9.98	13	PASS
256QAM	40620	2593	10.25	13	PASS
256QAM	41565	2687.5	10.32	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 41565 (2687.5 MHz)	

LTE Band 41, Channel Bandwidth: 10 MHz

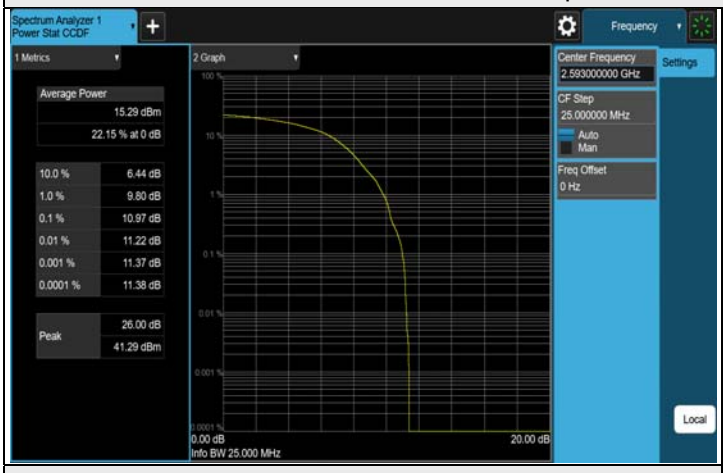
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	39700	2501	8.05	13	PASS
QPSK	40620	2593	6.89	13	PASS
QPSK	41540	2685	7.13	13	PASS
16QAM	39700	2501	8.20	13	PASS
16QAM	40620	2593	7.63	13	PASS
16QAM	41540	2685	9.28	13	PASS
64QAM	39700	2501	9.71	13	PASS
64QAM	40620	2593	9.37	13	PASS
64QAM	41540	2685	9.33	13	PASS
256QAM	39700	2501	9.75	13	PASS
256QAM	40620	2593	9.74	13	PASS
256QAM	41540	2685	9.78	13	PASS

Spectrum Plot of Worst Value	
	
256QAM CH 41540 (2685 MHz)	

LTE Band 41, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	39725	2503.5	7.61	13	PASS
QPSK	40620	2593	6.60	13	PASS
QPSK	41515	2682.5	6.56	13	PASS
16QAM	39725	2503.5	8.89	13	PASS
16QAM	40620	2593	9.25	13	PASS
16QAM	41515	2682.5	8.19	13	PASS
64QAM	39725	2503.5	9.96	13	PASS
64QAM	40620	2593	10.97	13	PASS
64QAM	41515	2682.5	10.85	13	PASS
256QAM	39765	2503.5	10.06	13	PASS
256QAM	40620	2593	9.87	13	PASS
256QAM	41515	2682.5	9.89	13	PASS

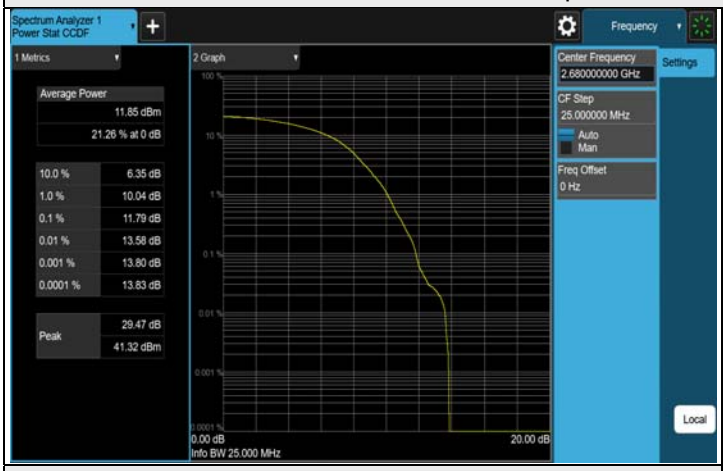
Spectrum Plot of Worst Value



64QAM CH 40620 (2593 MHz)

LTE Band 41, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	39750	2506	6.73	13	PASS
QPSK	40620	2593	6.90	13	PASS
QPSK	41490	2680	7.74	13	PASS
16QAM	39750	2506	8.86	13	PASS
16QAM	40620	2593	9.77	13	PASS
16QAM	41490	2680	7.84	13	PASS
64QAM	39750	2506	9.71	13	PASS
64QAM	40620	2593	9.55	13	PASS
64QAM	41490	2680	9.98	13	PASS
256QAM	39750	2506	10.68	13	PASS
256QAM	40620	2593	10.01	13	PASS
256QAM	41490	2680	11.79	13	PASS

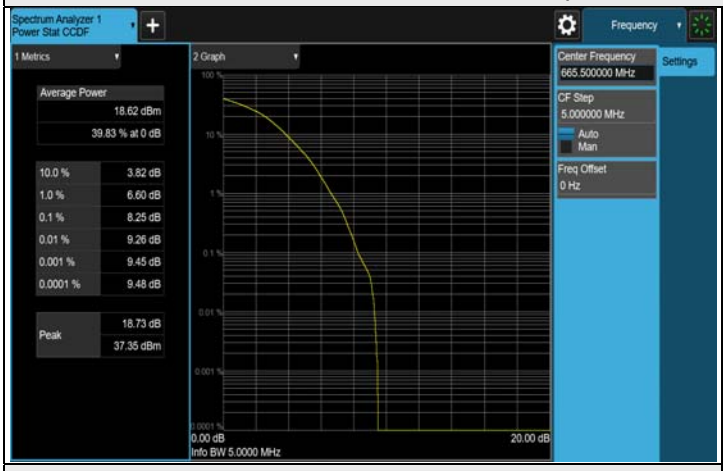
Spectrum Plot of Worst Value	
	
256QAM CH 41490 (2680 MHz)	

7.3.13 LTE Band 71

LTE Band 71, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	133147	665.5	3.38	13	PASS
QPSK	133297	680.5	3.60	13	PASS
QPSK	133447	695.5	3.28	13	PASS
16QAM	133147	665.5	4.69	13	PASS
16QAM	133297	680.5	5.11	13	PASS
16QAM	133447	695.5	4.66	13	PASS
64QAM	133147	665.5	5.84	13	PASS
64QAM	133297	680.5	6.26	13	PASS
64QAM	133447	695.5	5.80	13	PASS
256QAM	133147	665.5	8.25	13	PASS
256QAM	133297	680.5	7.31	13	PASS
256QAM	133447	695.5	7.33	13	PASS

Spectrum Plot of Worst Value

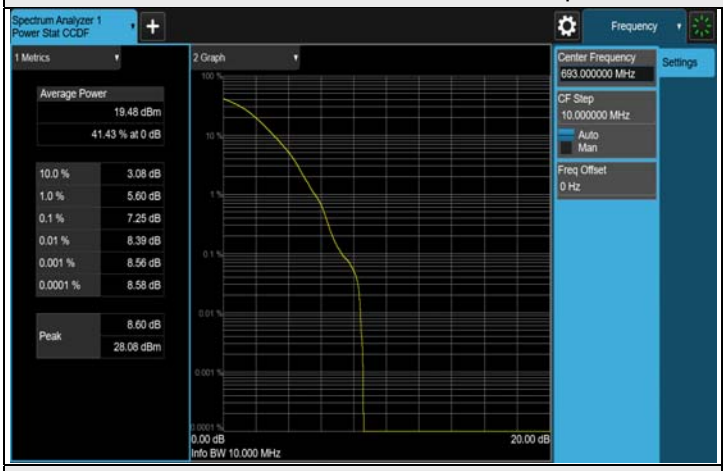


256QAM CH 133147 (665.5 MHz)

LTE Band 71, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	133172	668	3.38	13	PASS
QPSK	133297	680.5	3.52	13	PASS
QPSK	133422	693	3.57	13	PASS
16QAM	133172	668	4.78	13	PASS
16QAM	133297	680.5	5.06	13	PASS
16QAM	133422	693	5.17	13	PASS
64QAM	133172	668	5.83	13	PASS
64QAM	133297	680.5	6.07	13	PASS
64QAM	133422	693	6.36	13	PASS
256QAM	133172	668	7.12	13	PASS
256QAM	133297	680.5	7.08	13	PASS
256QAM	133422	693	7.25	13	PASS

Spectrum Plot of Worst Value

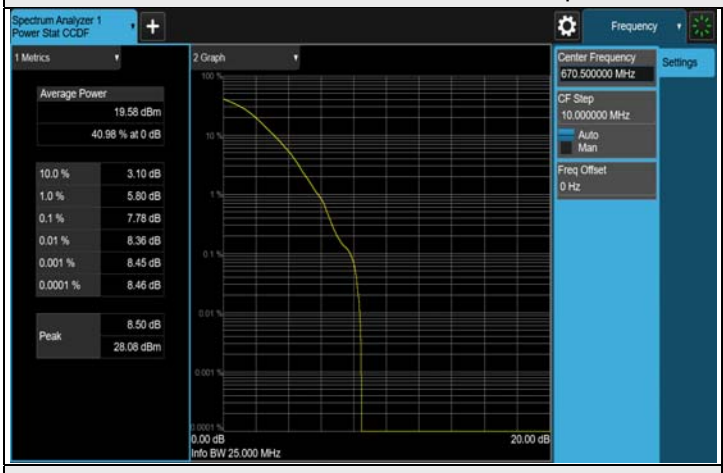


256QAM CH 133422 (693 MHz)

LTE Band 71, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	133197	670.5	3.42	13	PASS
QPSK	133297	680.5	3.43	13	PASS
QPSK	133397	690.5	3.63	13	PASS
16QAM	133197	670.5	4.83	13	PASS
16QAM	133297	680.5	4.95	13	PASS
16QAM	133397	690.5	5.35	13	PASS
64QAM	133197	670.5	5.94	13	PASS
64QAM	133297	680.5	6.03	13	PASS
64QAM	133397	690.5	6.45	13	PASS
256QAM	133197	670.5	7.78	13	PASS
256QAM	133297	680.5	6.71	13	PASS
256QAM	133397	690.5	7.11	13	PASS

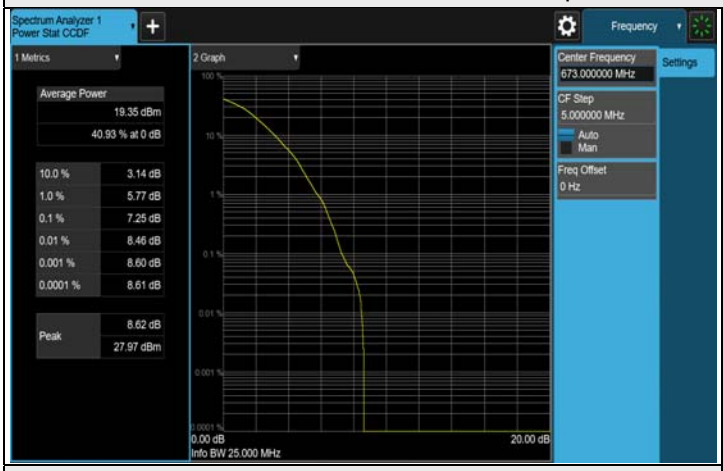
Spectrum Plot of Worst Value



256QAM CH 133197 (670.5 MHz)

LTE Band 71, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	133222	673	3.46	13	PASS
QPSK	133297	680.5	3.45	13	PASS
QPSK	133372	688	3.62	13	PASS
16QAM	133222	673	4.99	13	PASS
16QAM	133297	680.5	5.00	13	PASS
16QAM	133372	688	5.23	13	PASS
64QAM	133222	673	5.92	13	PASS
64QAM	133297	680.5	6.23	13	PASS
64QAM	133372	688	6.30	13	PASS
256QAM	133222	673	7.25	13	PASS
256QAM	133297	680.5	6.91	13	PASS
256QAM	133372	688	6.82	13	PASS

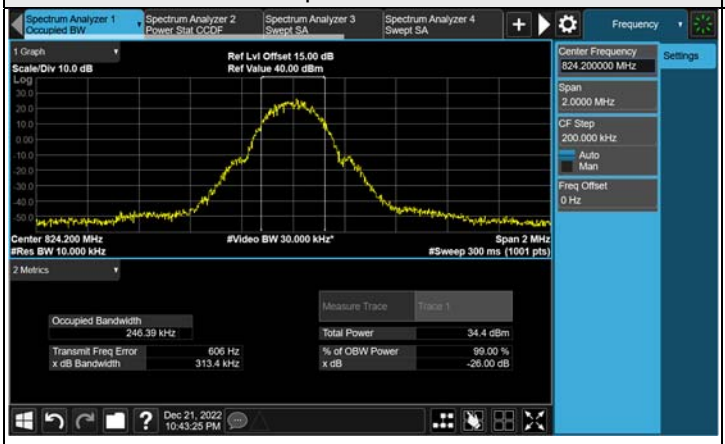
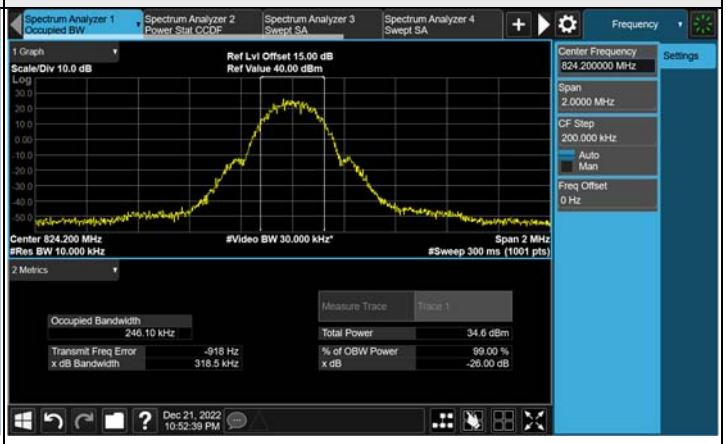
Spectrum Plot of Worst Value	
	
256QAM CH 133222 (673 MHz)	

7.4 Bandwidth

Input Power:	3.85 Vdc	Environmental Conditions:	22°C, 71% RH	Tested By:	Willy Cheng

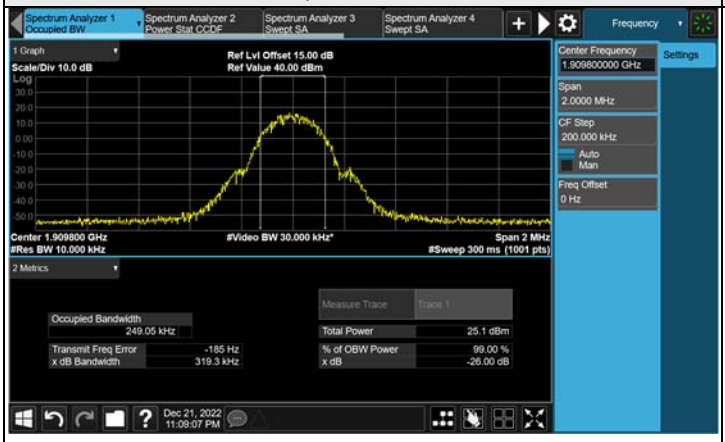
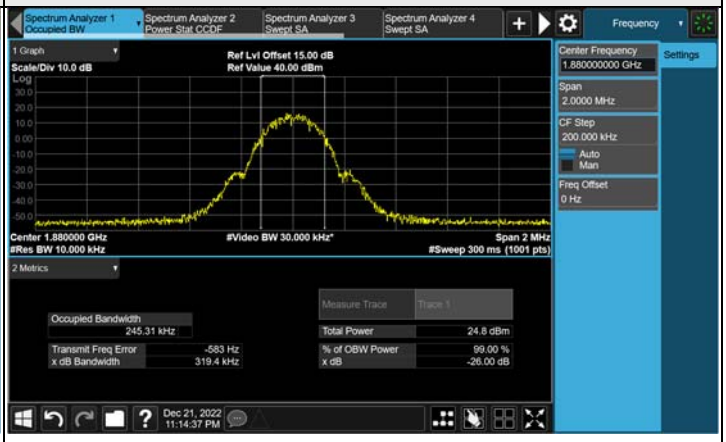
7.4.1 GSM850

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (kHz)	26 dB Bandwidth (kHz)
GSM	128	824.2	246.39	313.4
GSM	189	836.4	245.62	315.1
GSM	251	848.8	245.79	317.0
EDGE	128	824.2	246.10	318.5
EDGE	189	836.4	244.70	311.9
EDGE	251	848.8	243.12	307.0

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
GSM CH 128 (824.2 MHz)	EDGE CH 128 (824.2 MHz)

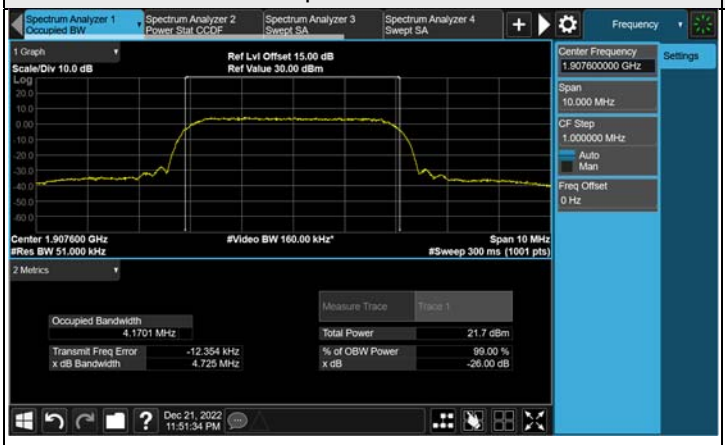
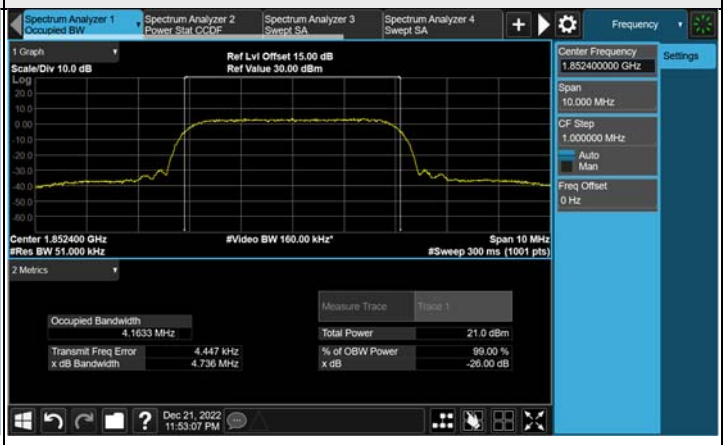
7.4.2 PCS1900

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (kHz)	26 dB Bandwidth (kHz)
GSM	512	1850.2	245.39	317.7
GSM	661	1880.0	247.09	312.1
GSM	810	1909.8	249.05	319.3
EDGE	512	1850.2	246.83	315.3
EDGE	661	1880.0	245.31	319.4
EDGE	810	1909.8	246.90	315.2

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
GSM CH 128 (824.2 MHz)	EDGE CH 128 (824.2 MHz)

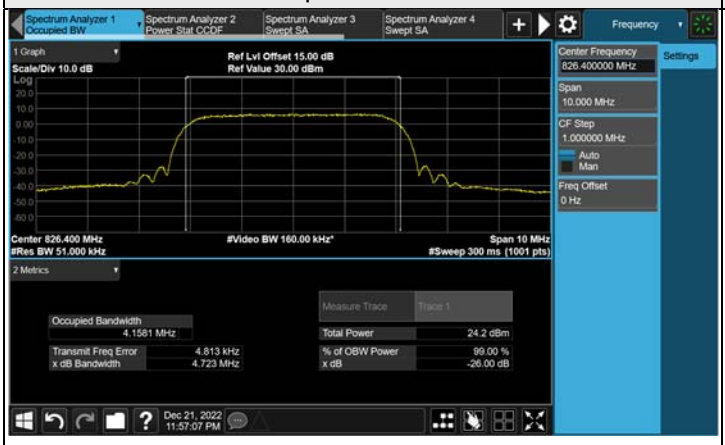
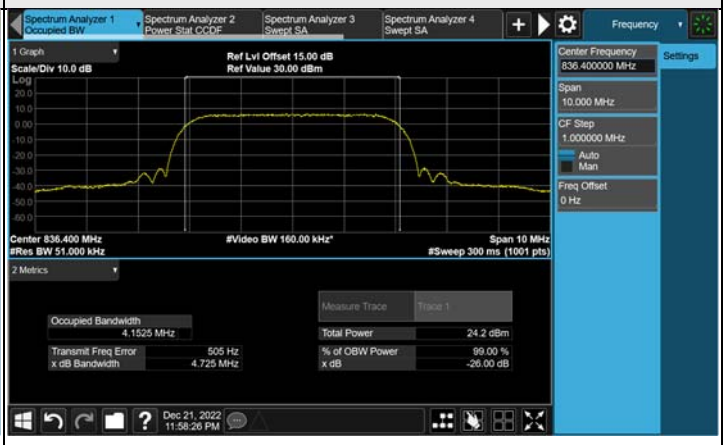
7.4.3 WCDMA Band 2

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
WCDMA	9262	1852.4	4.1613	4.729
WCDMA	9400	1880	4.1617	4.731
WCDMA	9538	1907.6	4.1648	4.734
HSDPA	9262	1852.4	4.1637	4.725
HSDPA	9400	1880	4.1659	4.729
HSDPA	9538	1907.6	4.1701	4.725
HSUPA	9262	1852.4	4.1633	4.736
HSUPA	9400	1880	4.1567	4.730
HSUPA	9538	1907.6	4.1659	4.730

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
HSDPA CH 9538 (1907.6 MHz)	HSUPA CH 9262 (1852.4 MHz)

7.4.4 WCDMA Band 5

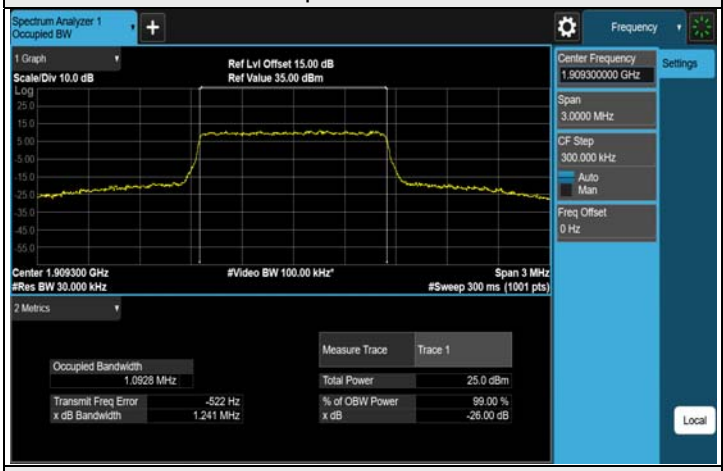
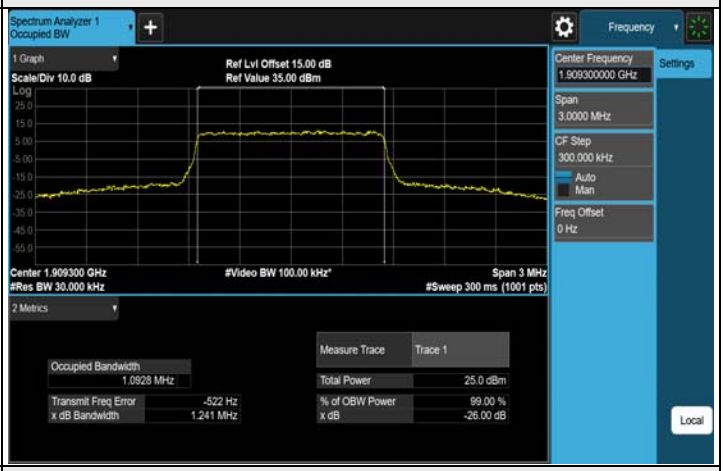
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
WCDMA	4132	826.4	4.1581	4.723
WCDMA	4182	836.4	4.1525	4.725
WCDMA	4223	846.6	4.1451	4.723
HSDPA	4132	826.4	4.1504	4.715
HSDPA	4182	836.4	4.1445	4.715
HSDPA	4223	846.6	4.1350	4.710
HSUPA	4132	826.4	4.1532	4.721
HSUPA	4182	836.4	4.1486	4.711
HSUPA	4223	846.6	4.1341	4.709

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
WCDMA CH 4132 (826.4 MHz)	WCDMA CH 4182 (836.4 MHz)

7.4.5 LTE Band 2

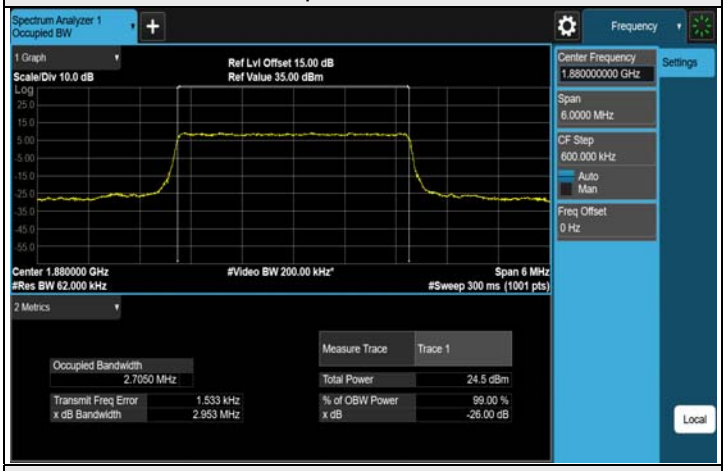
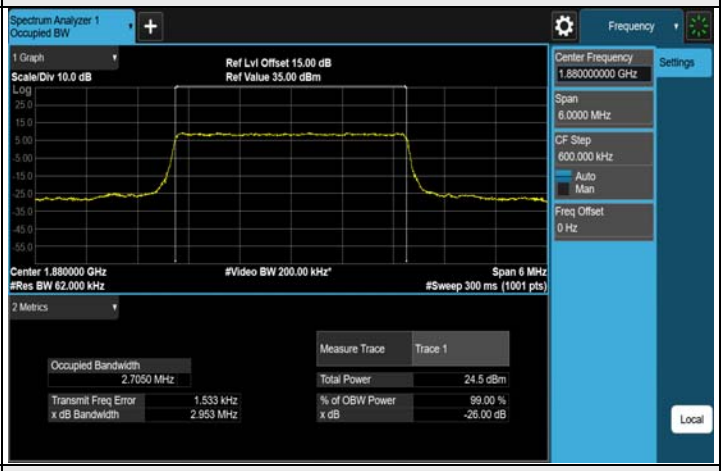
LTE Band 2, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	18607	1850.7	1.0875	1.225
QPSK	18900	1880	1.0905	1.225
QPSK	19193	1909.3	1.0928	1.241
16QAM	18607	1850.7	1.0881	1.219
16QAM	18900	1880	1.0869	1.212
16QAM	19193	1909.3	1.0887	1.222
64QAM	18607	1850.7	1.0873	1.223
64QAM	18900	1880	1.0863	1.221
64QAM	19193	1909.3	1.0879	1.216
256QAM	18607	1850.7	1.0840	1.214
256QAM	18900	1880	1.0844	1.209
256QAM	19193	1909.3	1.0843	1.203

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 19193 (1909.3 MHz)	QPSK CH 19193 (1909.3 MHz)

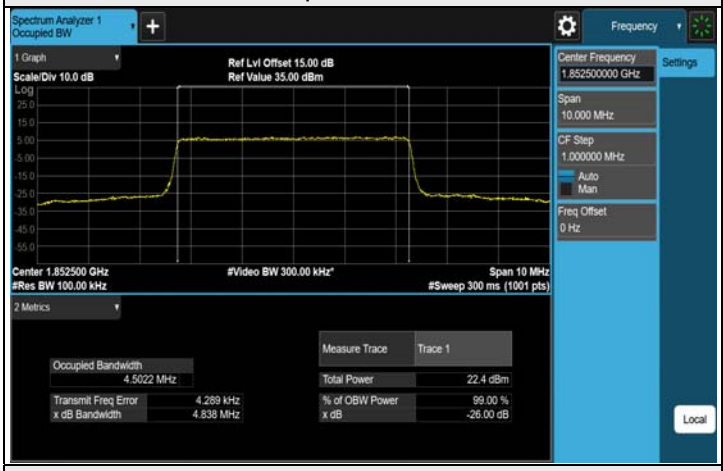
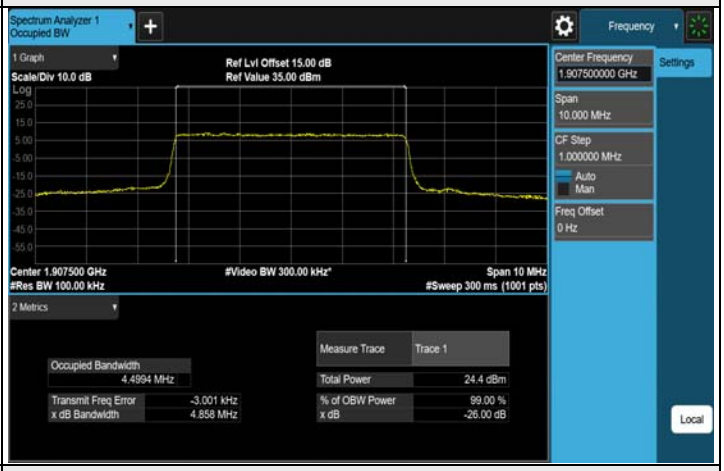
LTE Band 2, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	18615	1851.5	2.7041	2.931
QPSK	18900	1880	2.7050	2.953
QPSK	19185	1908.5	2.7008	2.936
16QAM	18615	1851.5	2.6991	2.941
16QAM	18900	1880	2.6989	2.938
16QAM	19185	1908.5	2.6996	2.949
64QAM	18615	1851.5	2.7025	2.931
64QAM	18900	1880	2.6970	2.905
64QAM	19185	1908.5	2.6992	2.912
256QAM	18615	1851.5	2.6975	2.907
256QAM	18900	1880	2.6970	2.916
256QAM	19185	1908.5	2.6977	2.915

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 18900 (1880 MHz)	QPSK CH 18900 (1880 MHz)

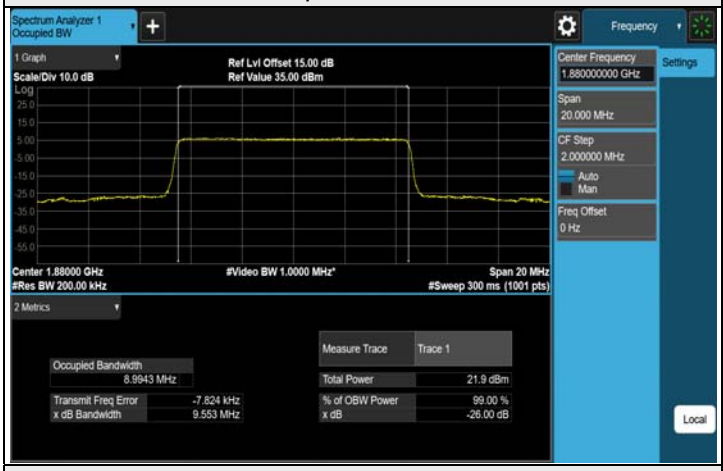
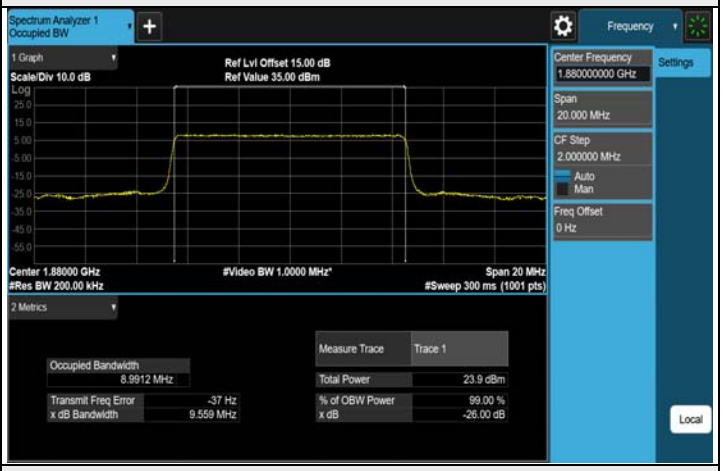
LTE Band 2, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	18625	1852.5	4.5001	4.843
QPSK	18900	1880	4.4981	4.829
QPSK	19175	1907.5	4.4994	4.858
16QAM	18625	1852.5	4.4945	4.819
16QAM	18900	1880	4.4975	4.833
16QAM	19175	1907.5	4.4996	4.840
64QAM	18625	1852.5	4.5022	4.838
64QAM	18900	1880	4.4977	4.819
64QAM	19175	1907.5	4.5012	4.832
256QAM	18625	1852.5	4.4898	4.809
256QAM	18900	1880	4.4921	4.825
256QAM	19175	1907.5	4.4924	4.792

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 18625 (1852.5 MHz)	QPSK CH 19175 (1907.5 MHz)

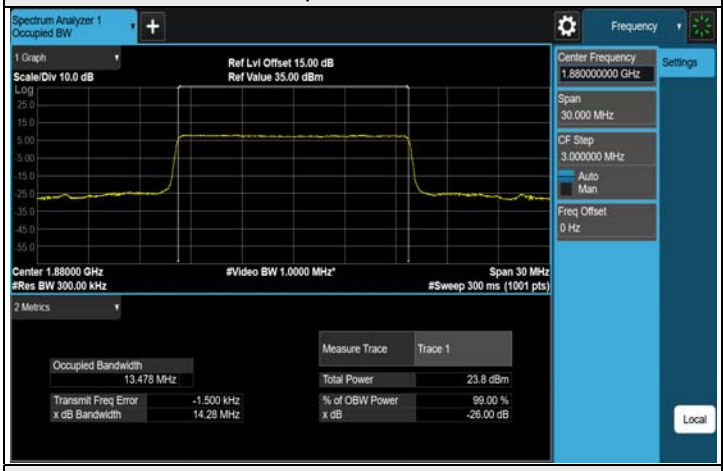
LTE Band 2, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	18650	1855	8.9854	9.544
QPSK	18900	1880	8.9912	9.559
QPSK	19150	1905	8.9906	9.544
16QAM	18650	1855	8.9866	9.525
16QAM	18900	1880	8.9849	9.540
16QAM	19150	1905	8.9914	9.512
64QAM	18650	1855	8.9859	9.543
64QAM	18900	1880	8.9943	9.553
64QAM	19150	1905	8.9929	9.544
256QAM	18650	1855	8.9729	9.510
256QAM	18900	1880	8.9762	9.554
256QAM	19150	1905	8.9736	9.530

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 18900 (1880 MHz)	QPSK CH 18900 (1880 MHz)

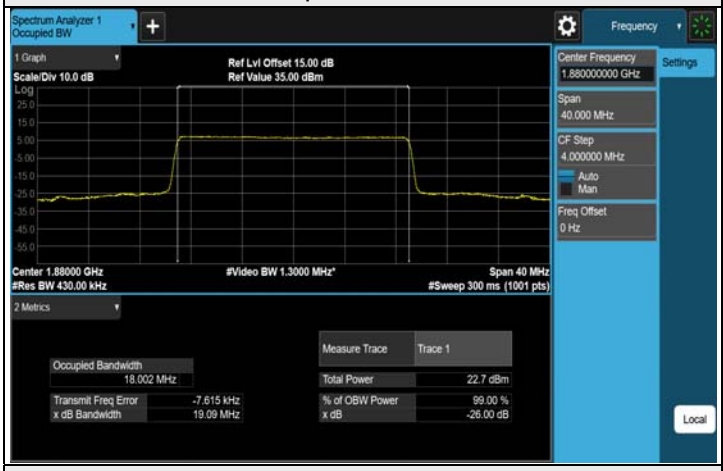
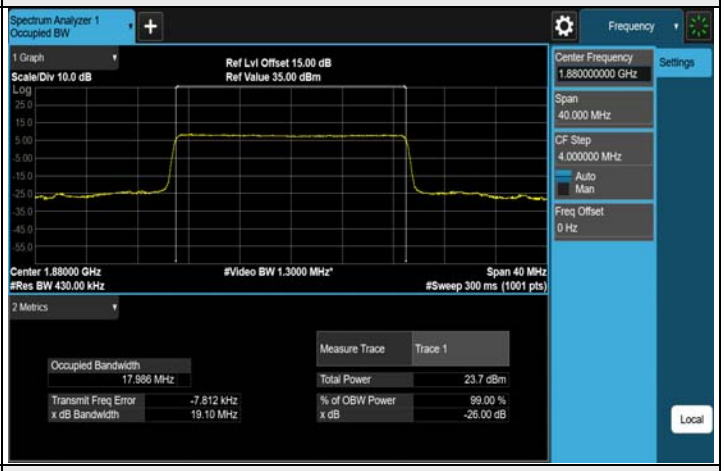
LTE Band 2, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	18675	1857.5	13.4604	14.244
QPSK	18900	1880	13.4778	14.282
QPSK	19125	1902.5	13.4629	14.272
16QAM	18675	1857.5	13.4563	14.251
16QAM	18900	1880	13.4762	14.282
16QAM	19125	1902.5	13.4505	14.254
64QAM	18675	1857.5	13.4503	14.241
64QAM	18900	1880	13.4717	14.276
64QAM	19125	1902.5	13.4392	14.225
256QAM	18675	1857.5	13.4582	14.245
256QAM	18900	1880	13.4758	14.268
256QAM	19125	1902.5	13.4404	14.225

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 18900 (1880 MHz)	QPSK CH 18900 (1880 MHz)

LTE Band 2, Channel Bandwidth: 20 MHz

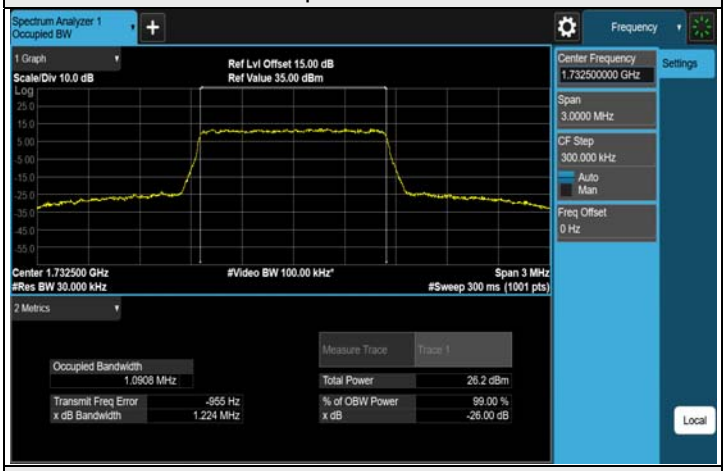
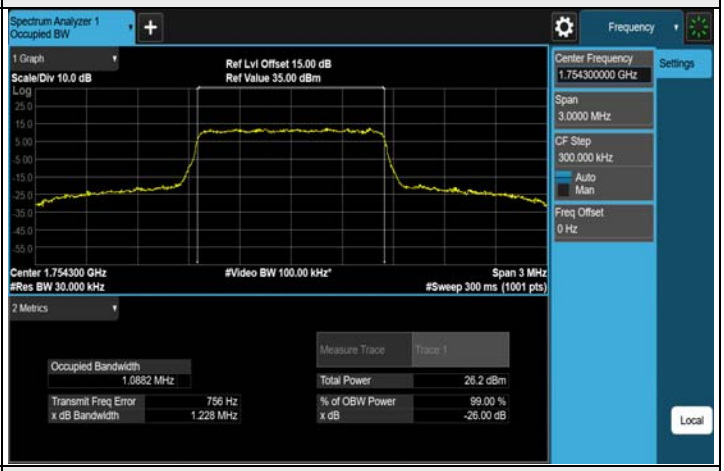
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	18700	1860	17.9366	19.045
QPSK	18900	1880	17.9861	19.095
QPSK	19100	1900	17.9164	19.065
16QAM	18700	1860	17.9467	19.040
16QAM	18900	1880	18.0017	19.086
16QAM	19100	1900	17.9290	19.008
64QAM	18700	1860	17.9417	19.021
64QAM	18900	1880	17.9881	19.074
64QAM	19100	1900	17.9164	19.016
256QAM	18700	1860	17.9522	19.011
256QAM	18900	1880	17.9828	19.046
256QAM	19100	1900	17.8950	18.999

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 18900 (1880 MHz)	QPSK CH 18900 (1880 MHz)

7.4.6 LTE Band 4

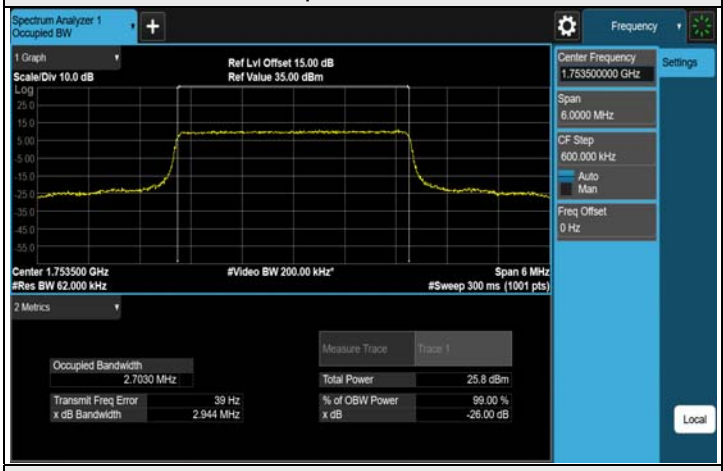
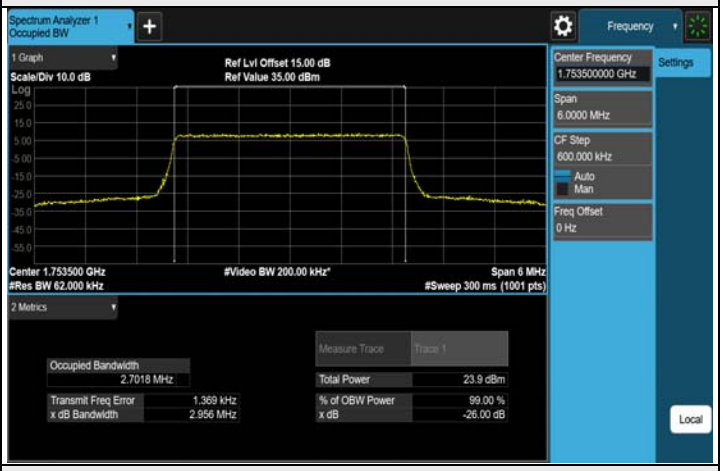
LTE Band 4, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	19957	1710.7	1.0888	1.217
QPSK	20175	1732.5	1.0908	1.224
QPSK	20393	1754.3	1.0882	1.228
16QAM	19957	1710.7	1.0884	1.212
16QAM	20175	1732.5	1.0882	1.215
16QAM	20393	1754.3	1.0885	1.218
64QAM	19957	1710.7	1.0887	1.215
64QAM	20175	1732.5	1.0891	1.215
64QAM	20393	1754.3	1.0874	1.221
256QAM	19957	1710.7	1.0844	1.204
256QAM	20175	1732.5	1.0843	1.218
256QAM	20393	1754.3	1.0850	1.209

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 20175 (1732.5 MHz)	QPSK CH 20393 (1754.3 MHz)

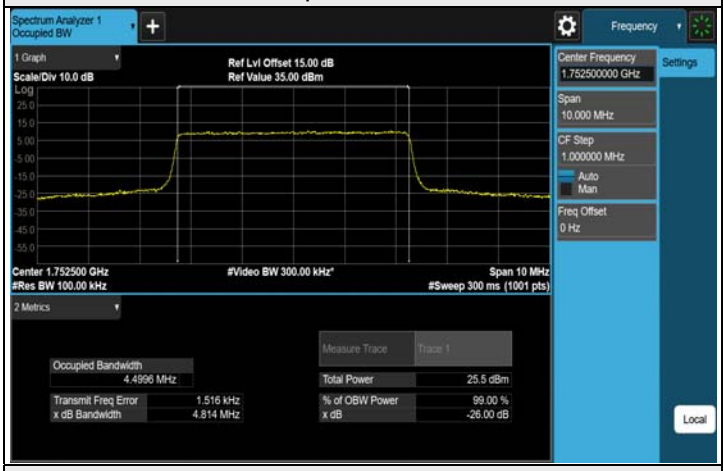
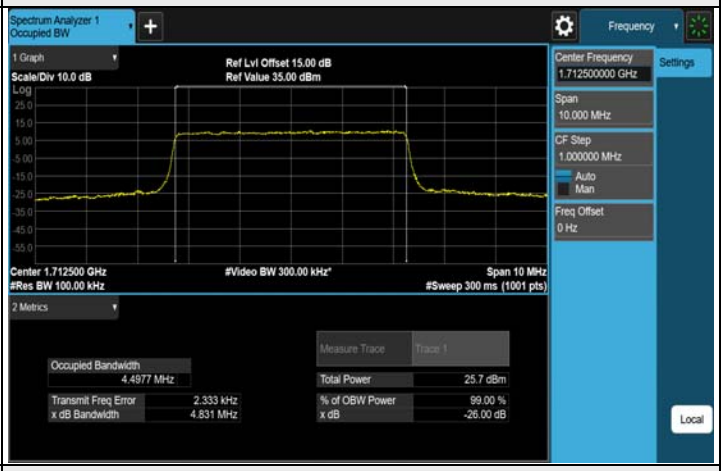
LTE Band 4, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	19965	1711.5	2.6971	2.925
QPSK	20175	1732.5	2.6952	2.917
QPSK	20385	1753.5	2.7030	2.944
16QAM	19965	1711.5	2.6950	2.933
16QAM	20175	1732.5	2.6946	2.937
16QAM	20385	1753.5	2.6991	2.929
64QAM	19965	1711.5	2.6956	2.903
64QAM	20175	1732.5	2.6972	2.906
64QAM	20385	1753.5	2.7018	2.956
256QAM	19965	1711.5	2.6992	2.922
256QAM	20175	1732.5	2.6990	2.925
256QAM	20385	1753.5	2.6985	2.919

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 20385 (1753.5 MHz)	64QAM CH 20385 (1753.5 MHz)

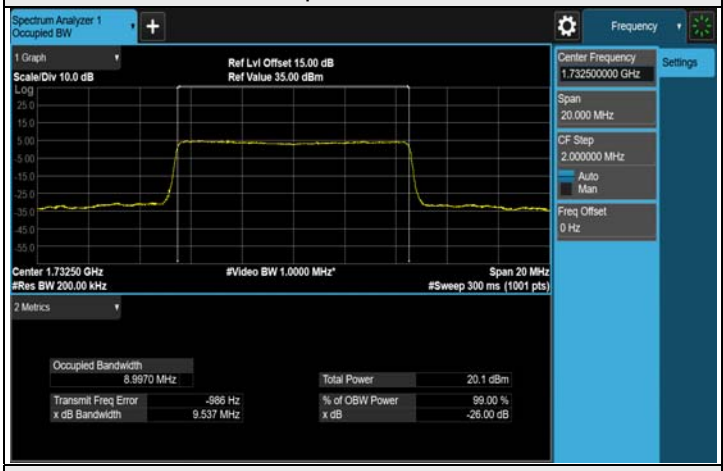
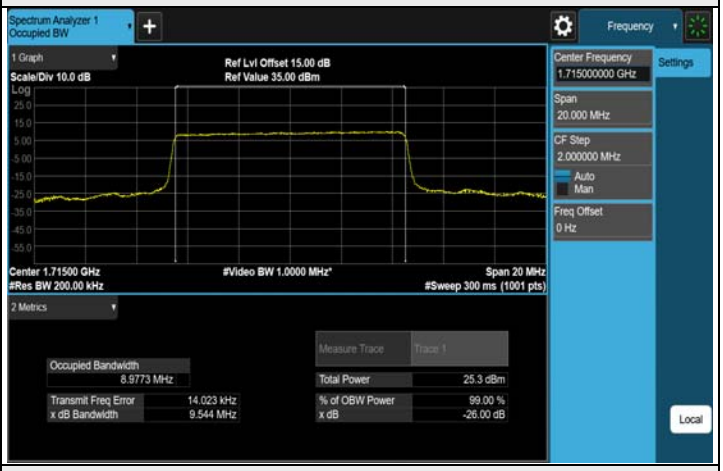
LTE Band 4, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	19975	1712.5	4.4977	4.831
QPSK	20175	1732.5	4.4943	4.816
QPSK	20375	1752.5	4.4996	4.814
16QAM	19975	1712.5	4.4934	4.822
16QAM	20175	1732.5	4.4933	4.825
16QAM	20375	1752.5	4.4934	4.824
64QAM	19975	1712.5	4.4990	4.805
64QAM	20175	1732.5	4.4993	4.818
64QAM	20375	1752.5	4.4973	4.798
256QAM	19975	1712.5	4.4929	4.797
256QAM	20175	1732.5	4.4925	4.734
256QAM	20375	1752.5	4.4944	4.796

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 20375 (1752.5 MHz)	QPSK CH 19975 (1712.5 MHz)

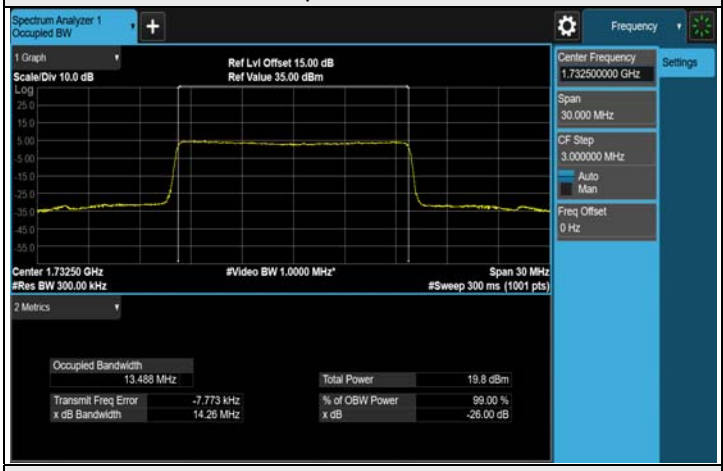
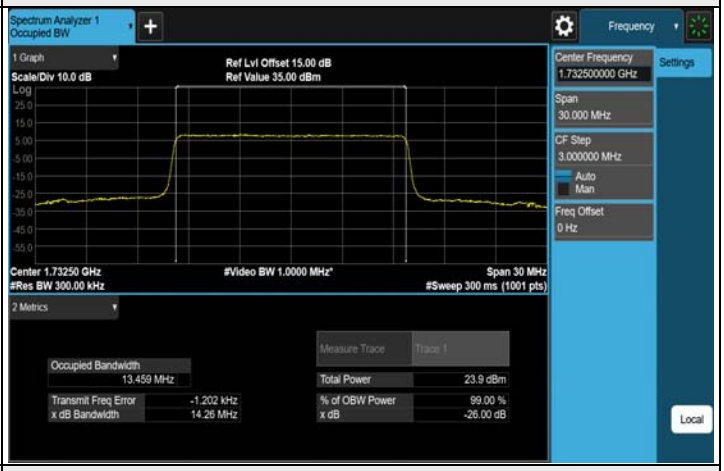
LTE Band 4, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	20000	1715	8.9773	9.544
QPSK	20175	1732.5	8.9777	9.532
QPSK	20350	1750	8.9809	9.530
16QAM	20000	1715	8.9741	9.527
16QAM	20175	1732.5	8.9795	9.529
16QAM	20350	1750	8.9817	9.524
64QAM	20000	1715	8.9728	9.521
64QAM	20175	1732.5	8.9769	9.530
64QAM	20350	1750	8.9795	9.529
256QAM	20000	1715	8.9866	9.519
256QAM	20175	1732.5	8.9970	9.537
256QAM	20350	1750	8.9873	9.516

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 20175 (1732.5 MHz)	QPSK CH 20000 (1715 MHz)

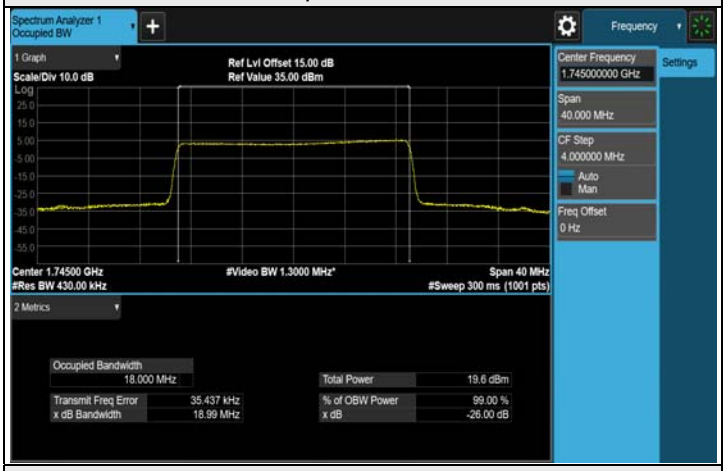
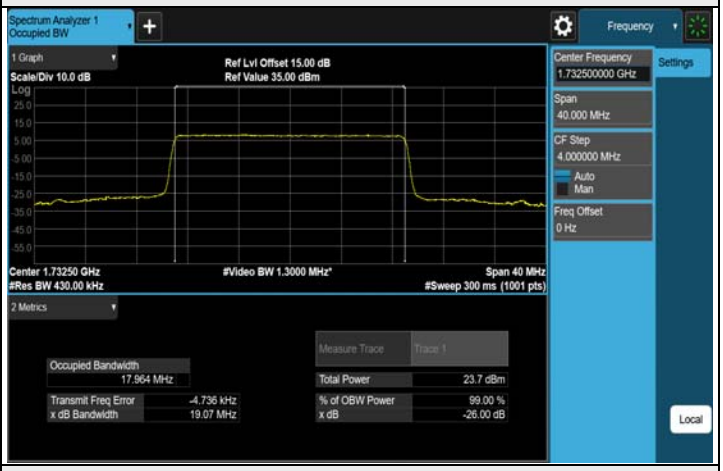
LTE Band 4, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	20025	1717.5	13.4561	14.247
QPSK	20175	1732.5	13.4712	14.263
QPSK	20325	1747.5	13.4692	14.247
16QAM	20025	1717.5	13.4429	14.253
16QAM	20175	1732.5	13.4594	14.265
16QAM	20325	1747.5	13.4565	14.257
64QAM	20025	1717.5	13.4367	14.245
64QAM	20175	1732.5	13.4528	14.263
64QAM	20325	1747.5	13.4496	14.242
256QAM	20025	1717.5	13.4621	14.225
256QAM	20175	1732.5	13.4880	14.262
256QAM	20325	1747.5	13.4783	14.231

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 20175 (1732.5 MHz)	16QAM CH 20175 (1732.5 MHz)

LTE Band 4, Channel Bandwidth: 20 MHz

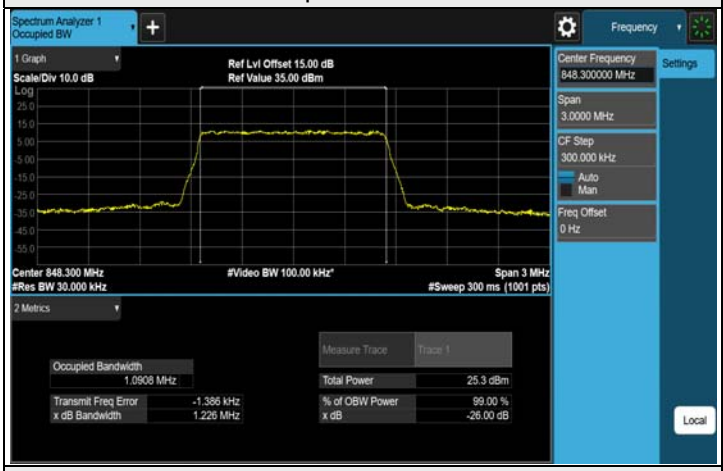
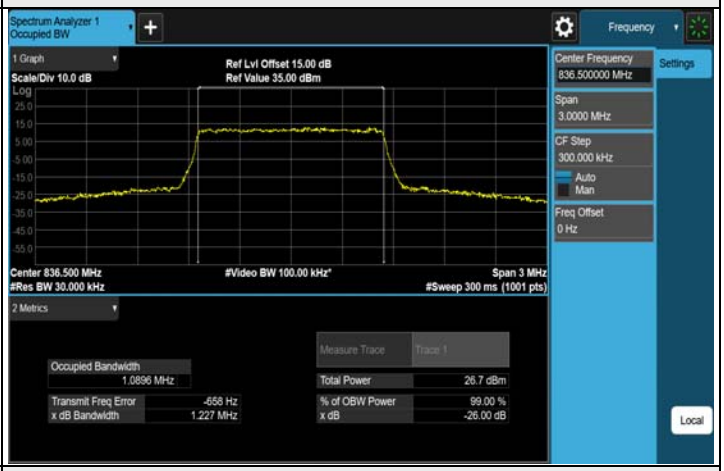
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	20050	1720	17.9187	19.040
QPSK	20175	1732.5	17.9633	19.063
QPSK	20300	1745	17.9665	19.067
16QAM	20050	1720	17.9393	19.048
16QAM	20175	1732.5	17.9640	19.069
16QAM	20300	1745	17.9772	19.060
64QAM	20050	1720	17.9259	19.016
64QAM	20175	1732.5	17.9622	19.052
64QAM	20300	1745	17.9623	19.040
256QAM	20050	1720	17.9482	19.007
256QAM	20175	1732.5	17.9966	19.033
256QAM	20300	1745	17.9995	18.988

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 20300 (1745 MHz)	16QAM CH 20175 (1732.5 MHz)

7.4.7 LTE Band 5

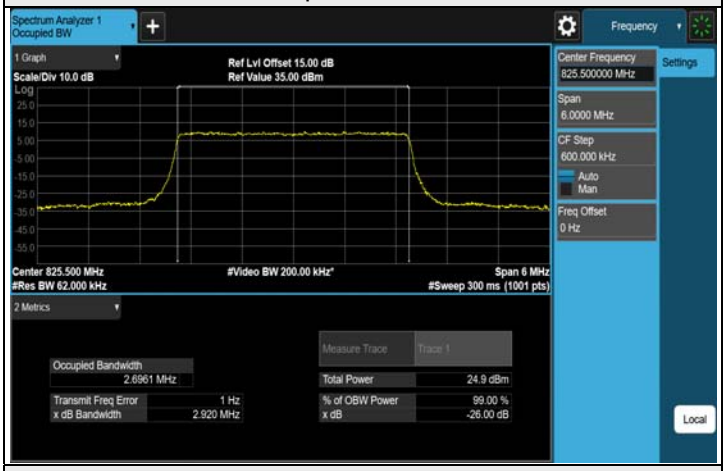
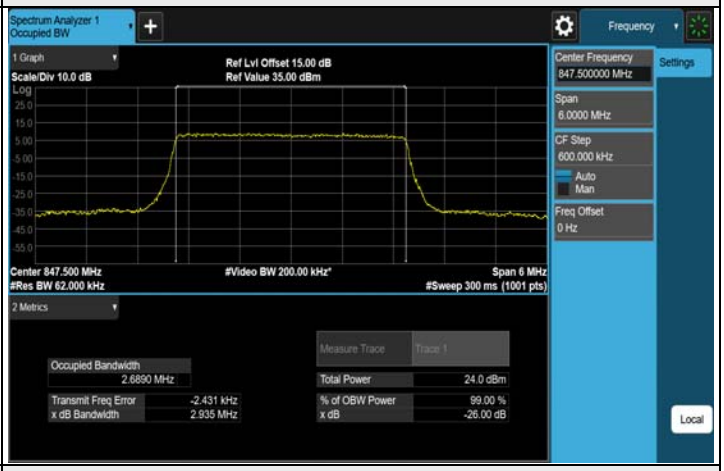
LTE Band 5, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	20407	824.7	1.0874	1.220
QPSK	20525	836.5	1.0896	1.227
QPSK	20643	848.3	1.0908	1.226
16QAM	20407	824.7	1.0878	1.214
16QAM	20525	836.5	1.0876	1.216
16QAM	20643	848.3	1.0874	1.217
64QAM	20407	824.7	1.0868	1.213
64QAM	20525	836.5	1.0873	1.208
64QAM	20643	848.3	1.0871	1.210
256QAM	20407	824.7	1.0843	1.207
256QAM	20525	836.5	1.0838	1.208
256QAM	20643	848.3	1.0835	1.209

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 20643 (848.3 MHz)	QPSK CH 20525 (836.5 MHz)

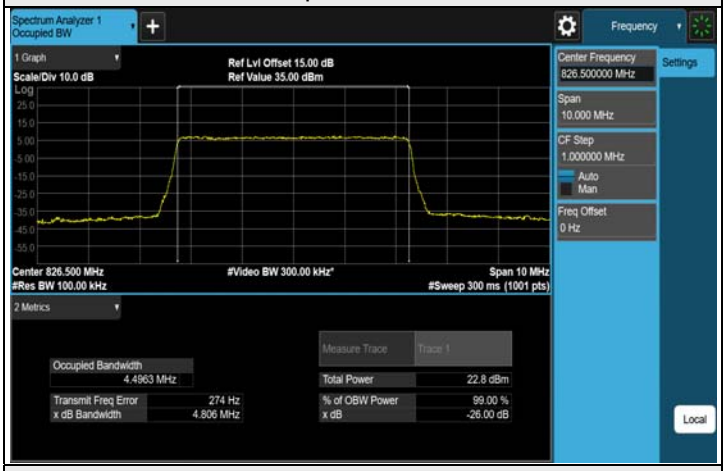
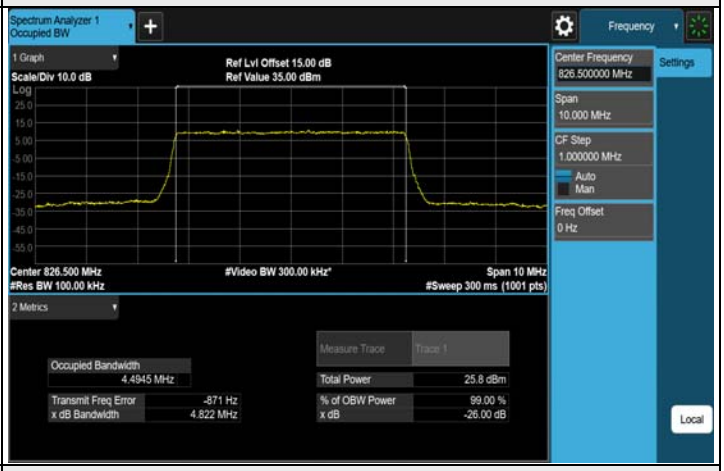
LTE Band 5, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	20415	825.5	2.6956	2.923
QPSK	20525	836.5	2.6926	2.910
QPSK	20635	847.5	2.6897	2.896
16QAM	20415	825.5	2.6961	2.920
16QAM	20525	836.5	2.6935	2.930
16QAM	20635	847.5	2.6890	2.935
64QAM	20415	825.5	2.6927	2.898
64QAM	20525	836.5	2.6924	2.894
64QAM	20635	847.5	2.6920	2.894
256QAM	20415	825.5	2.6951	2.906
256QAM	20525	836.5	2.6953	2.911
256QAM	20635	847.5	2.6928	2.902

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 20415 (825.5 MHz)	16QAM CH 20635 (847.5 MHz)

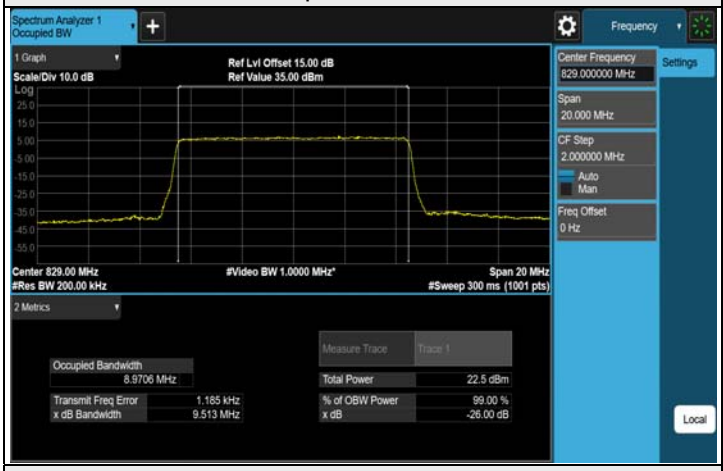
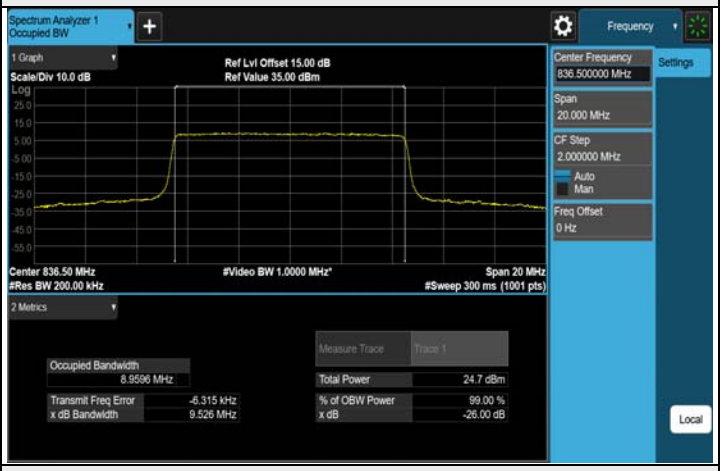
LTE Band 5, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	20425	826.5	4.4945	4.822
QPSK	20525	836.5	4.4955	4.799
QPSK	20625	846.5	4.4868	4.806
16QAM	20425	826.5	4.4943	4.810
16QAM	20525	836.5	4.4948	4.808
16QAM	20625	846.5	4.4869	4.796
64QAM	20425	826.5	4.4963	4.806
64QAM	20525	836.5	4.4936	4.811
64QAM	20625	846.5	4.4910	4.796
256QAM	20425	826.5	4.4910	4.801
256QAM	20525	836.5	4.4886	4.802
256QAM	20625	846.5	4.4849	4.803

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 20425 (826.5 MHz)	QPSK CH 20425 (826.5 MHz)

LTE Band 5, Channel Bandwidth: 10 MHz

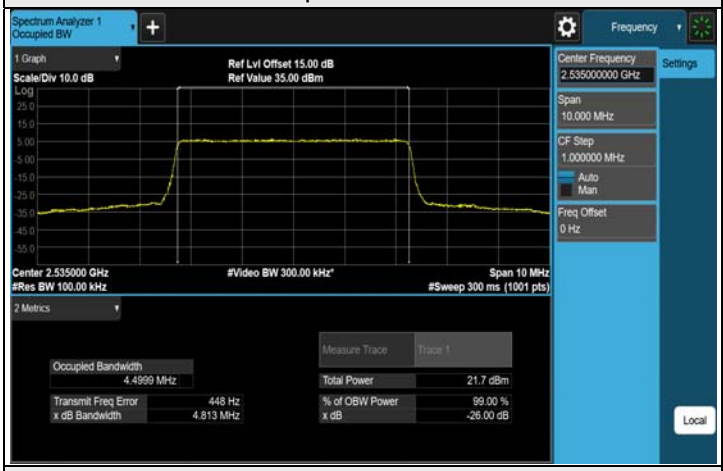
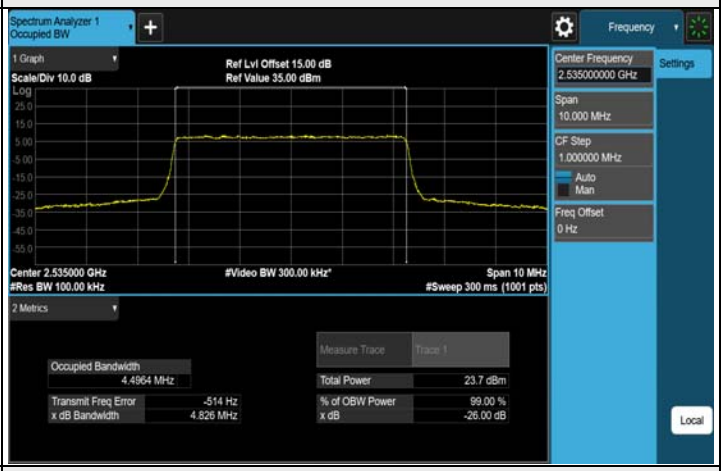
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	20450	829	8.9528	9.482
QPSK	20525	836.5	8.9610	9.523
QPSK	20600	844	8.9579	9.500
16QAM	20450	829	8.9689	9.507
16QAM	20525	836.5	8.9596	9.526
16QAM	20600	844	8.9517	9.506
64QAM	20450	829	8.9706	9.513
64QAM	20525	836.5	8.9610	9.504
64QAM	20600	844	8.9635	9.517
256QAM	20450	829	8.9680	9.516
256QAM	20525	836.5	8.9502	9.503
256QAM	20600	844	8.9588	9.504

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 20450 (829 MHz)	16QAM CH 20525 (836.5 MHz)

7.4.8 LTE Band 7

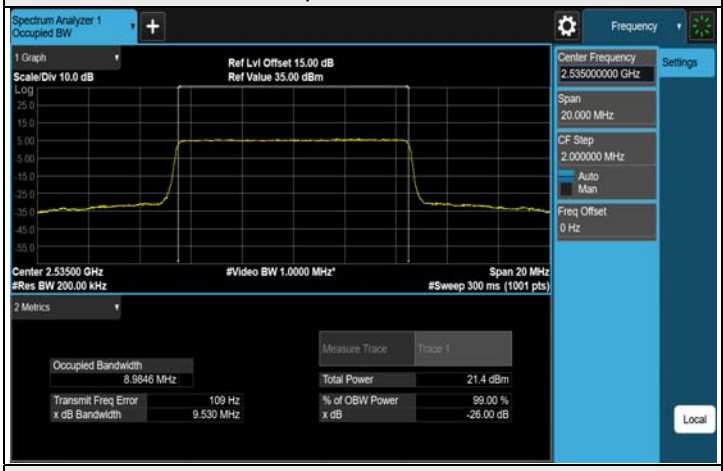
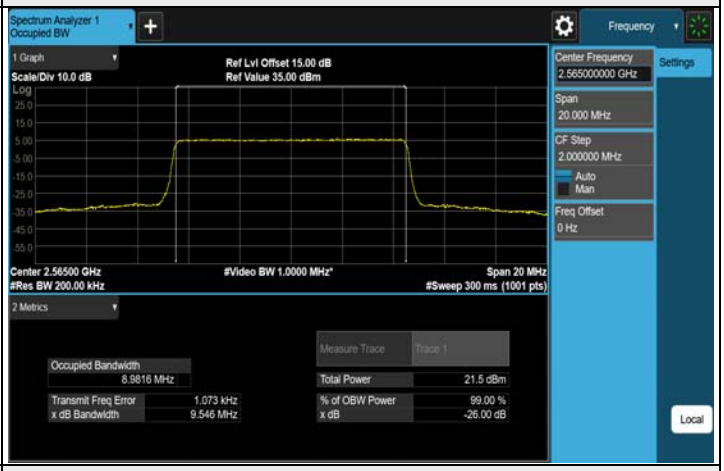
LTE Band 7, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	20775	2502.5	4.4920	4.809
QPSK	21100	2535	4.4964	4.826
QPSK	21425	2567.5	4.4968	4.825
16QAM	20775	2502.5	4.4945	4.809
16QAM	21100	2535	4.4935	4.823
16QAM	21425	2567.5	4.4935	4.812
64QAM	20775	2502.5	4.4956	4.795
64QAM	21100	2535	4.4999	4.813
64QAM	21425	2567.5	4.4965	4.820
256QAM	20775	2502.5	4.4877	4.821
256QAM	21100	2535	4.4898	4.813
256QAM	21425	2567.5	4.4926	4.824

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 21100 (2535 MHz)	QPSK CH 21100 (2535 MHz)

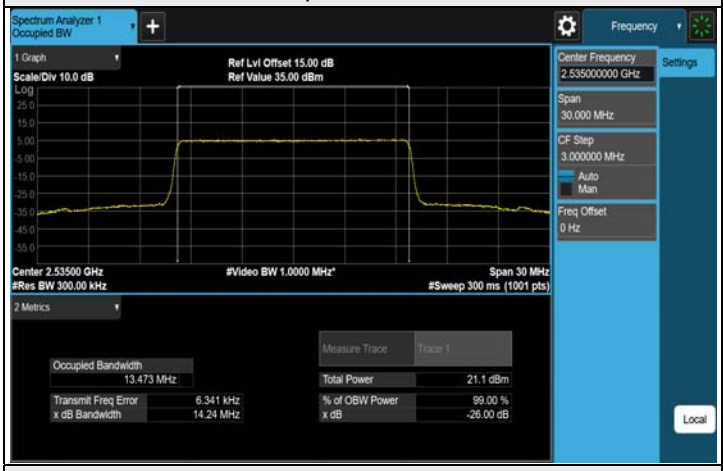
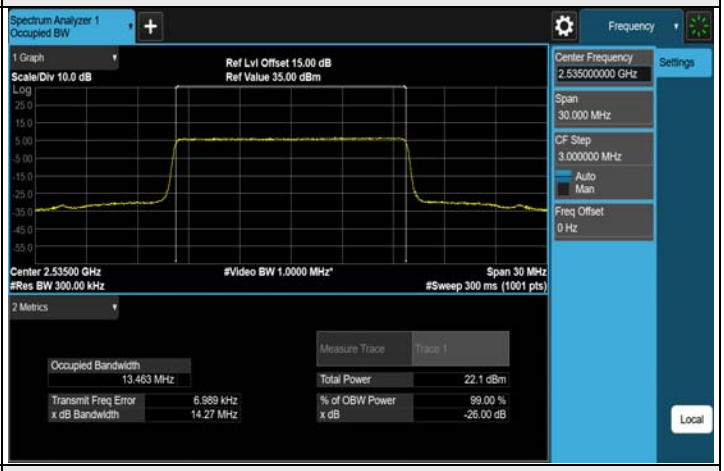
LTE Band 7, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	20800	2505	8.9790	9.535
QPSK	21100	2535	8.9805	9.538
QPSK	21400	2565	8.9809	9.538
16QAM	20800	2505	8.9790	9.512
16QAM	21100	2535	8.9840	9.525
16QAM	21400	2565	8.9765	9.538
64QAM	20800	2505	8.9790	9.526
64QAM	21100	2535	8.9846	9.530
64QAM	21400	2565	8.9816	9.546
256QAM	20800	2505	8.9763	9.522
256QAM	21100	2535	8.9789	9.516
256QAM	21400	2565	8.9741	9.532

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 21100 (2535 MHz)	64QAM CH 21400 (2565 MHz)

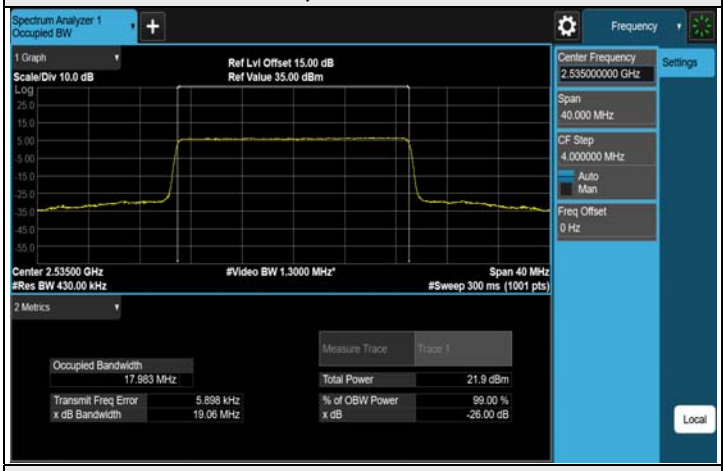
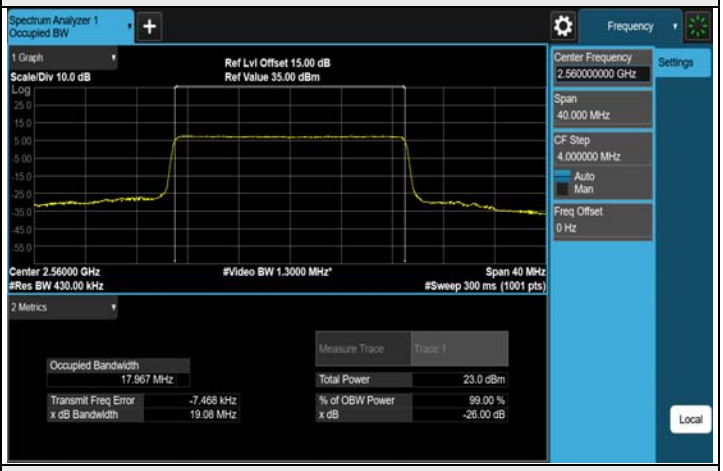
LTE Band 7, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	20825	2507.5	13.4159	13.895
QPSK	21100	2535	13.4680	14.254
QPSK	21375	2562.5	13.4657	14.263
16QAM	20825	2507.5	13.4687	14.235
16QAM	21100	2535	13.4632	14.271
16QAM	21375	2562.5	13.4630	14.258
64QAM	20825	2507.5	13.4607	14.249
64QAM	21100	2535	13.4732	14.243
64QAM	21375	2562.5	13.4564	14.260
256QAM	20825	2507.5	13.4556	14.228
256QAM	21100	2535	13.4639	14.246
256QAM	21375	2562.5	13.4621	14.254

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 21100 (2535 MHz)	16QAM CH 21100 (2535 MHz)

LTE Band 7, Channel Bandwidth: 20 MHz

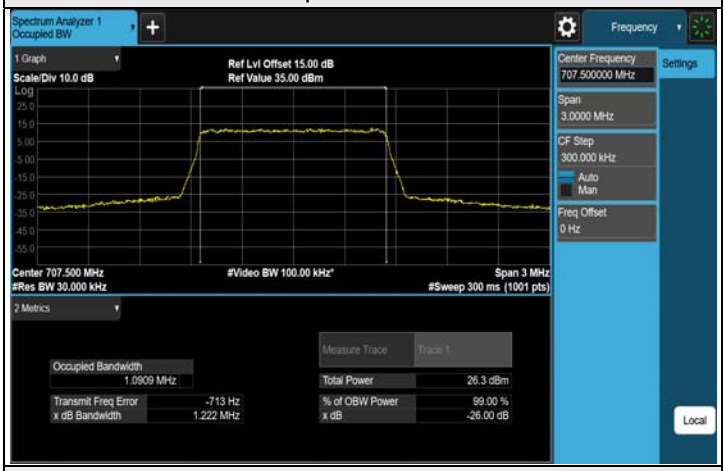
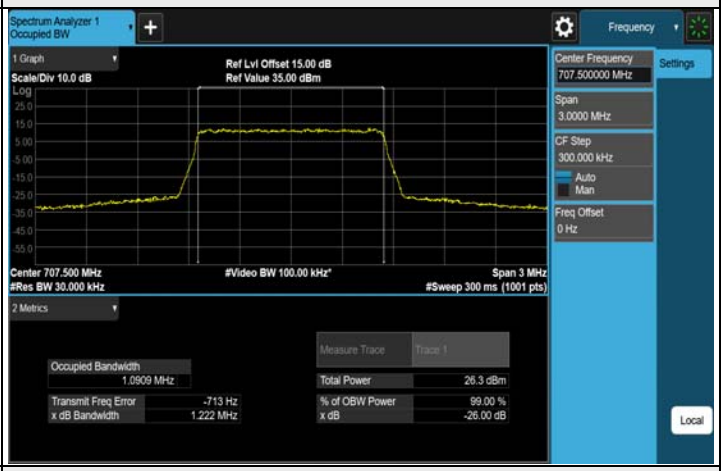
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	20850	2510	17.9498	19.045
QPSK	21100	2535	17.9627	19.035
QPSK	21350	2560	17.9668	19.078
16QAM	20850	2510	17.9658	19.044
16QAM	21100	2535	17.9827	19.059
16QAM	21350	2560	17.9823	19.056
64QAM	20850	2510	17.9534	19.044
64QAM	21100	2535	17.9752	19.048
64QAM	21350	2560	17.9731	19.052
256QAM	20850	2510	17.9522	19.032
256QAM	21100	2535	17.9685	19.039
256QAM	21350	2560	17.9763	19.049

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 21100 (2535 MHz)	QPSK CH 21350 (2560 MHz)

7.4.9 LTE Band 12

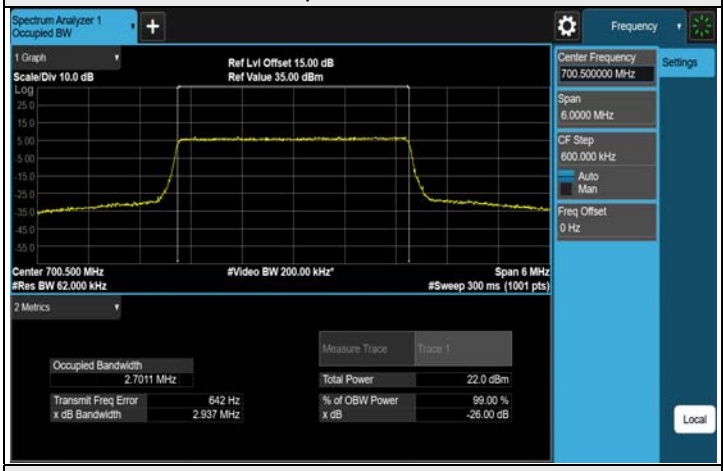
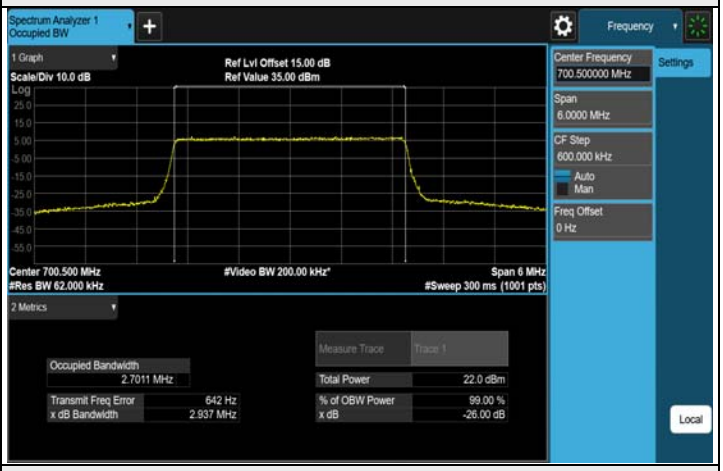
LTE Band 12, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	23017	699.7	1.0887	1.218
QPSK	23095	707.5	1.0909	1.222
QPSK	23173	715.3	1.0903	1.217
16QAM	23017	699.7	1.0883	1.216
16QAM	23095	707.5	1.0884	1.218
16QAM	23173	715.3	1.0883	1.209
64QAM	23017	699.7	1.0884	1.214
64QAM	23095	707.5	1.0892	1.216
64QAM	23173	715.3	1.0882	1.216
256QAM	23017	699.7	1.0845	1.208
256QAM	23095	707.5	1.0843	1.207
256QAM	23173	715.3	1.0845	1.203

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 23095 (707.5 MHz)	QPSK CH 23095 (707.5 MHz)

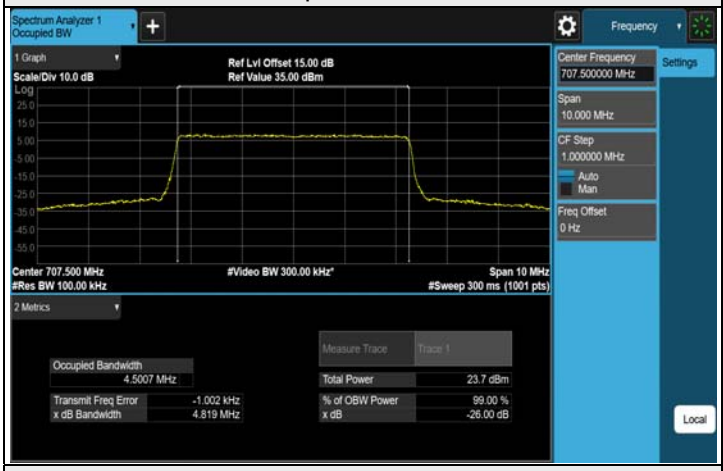
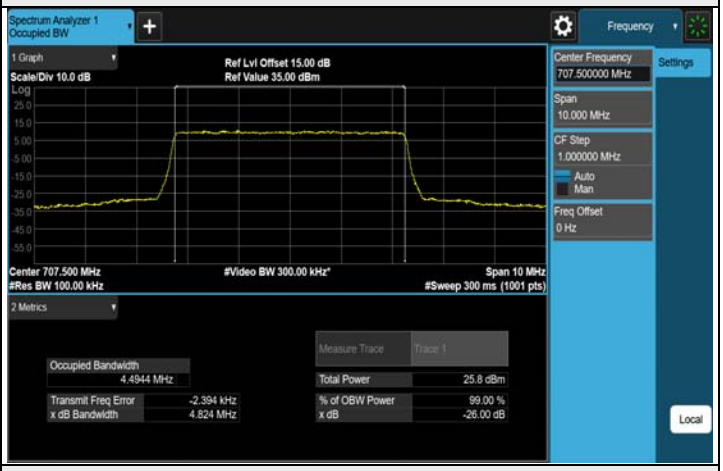
LTE Band 12, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	23025	700.5	2.6934	2.903
QPSK	23095	707.5	2.7003	2.922
QPSK	23165	714.5	2.6964	2.933
16QAM	23025	700.5	2.6995	2.923
16QAM	23095	707.5	2.6967	2.918
16QAM	23165	714.5	2.6963	2.918
64QAM	23025	700.5	2.6958	2.907
64QAM	23095	707.5	2.7004	2.927
64QAM	23165	714.5	2.6932	2.891
256QAM	23025	700.5	2.7011	2.937
256QAM	23095	707.5	2.6966	2.923
256QAM	23165	714.5	2.6929	2.907

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 23025 (700.5 MHz)	256QAM CH 23025 (700.5 MHz)

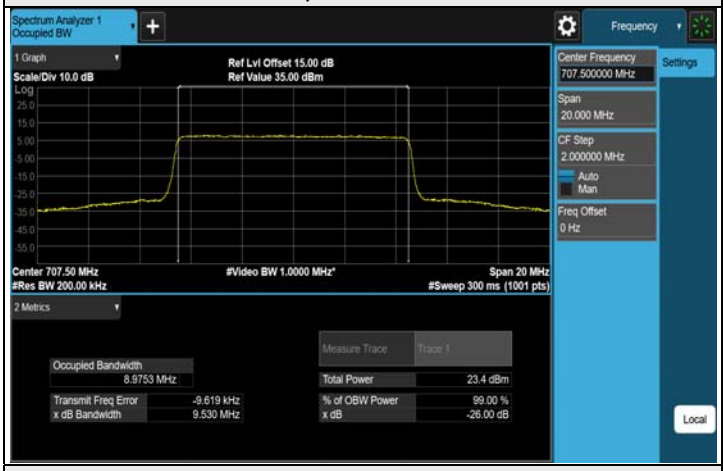
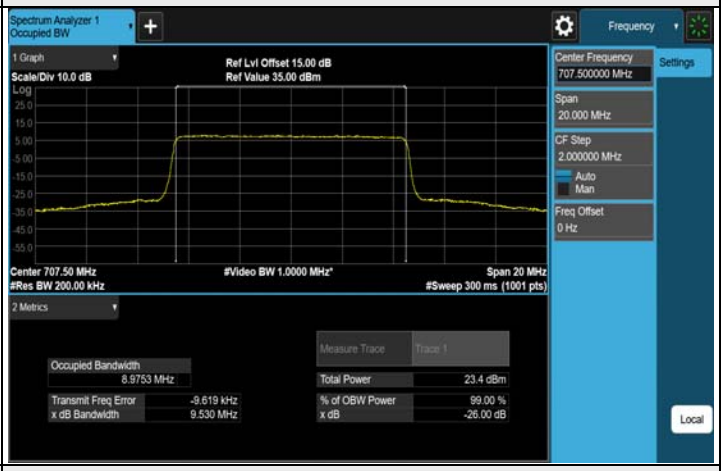
LTE Band 12, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	23035	701.5	4.4959	4.804
QPSK	23095	707.5	4.4944	4.824
QPSK	23155	713.5	4.4892	4.803
16QAM	23035	701.5	4.4903	4.796
16QAM	23095	707.5	4.4927	4.803
16QAM	23155	713.5	4.4870	4.792
64QAM	23035	701.5	4.4967	4.812
64QAM	23095	707.5	4.5007	4.819
64QAM	23155	713.5	4.4947	4.805
256QAM	23035	701.5	4.4887	4.796
256QAM	23095	707.5	4.4904	4.817
256QAM	23155	713.5	4.4851	4.799

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 23095 (707.5 MHz)	QPSK CH 23095 (707.5 MHz)

LTE Band 12, Channel Bandwidth: 10 MHz

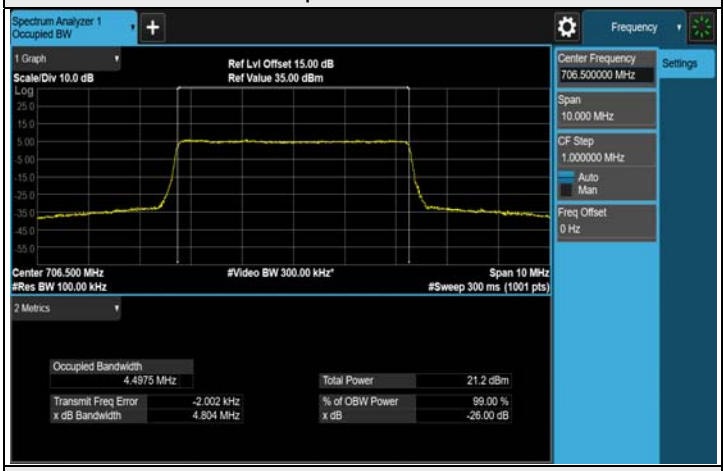
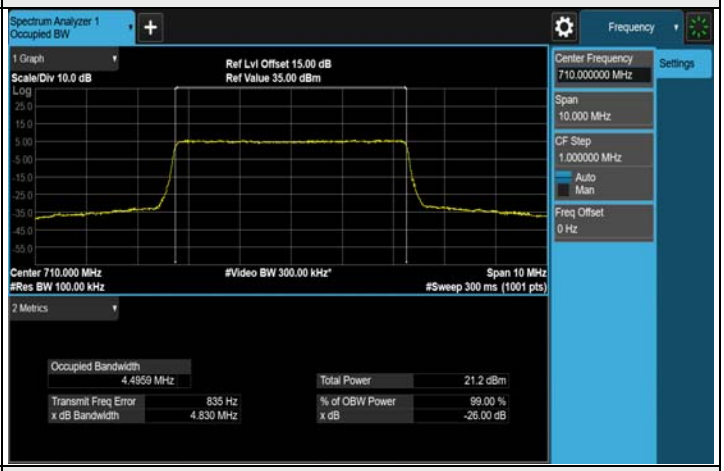
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	23060	704	8.9545	9.490
QPSK	23095	707.5	8.9697	9.512
QPSK	23130	711	8.9595	9.502
16QAM	23060	704	8.9534	9.497
16QAM	23095	707.5	8.9733	9.502
16QAM	23130	711	8.9635	9.504
64QAM	23060	704	8.9542	9.506
64QAM	23095	707.5	8.9753	9.530
64QAM	23130	711	8.9617	9.518
256QAM	23060	704	8.9474	9.495
256QAM	23095	707.5	8.9612	9.511
256QAM	23130	711	8.9668	9.504

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 23095 (707.5 MHz)	64QAM CH 23095 (707.5 MHz)

7.4.10 LTE Band 17

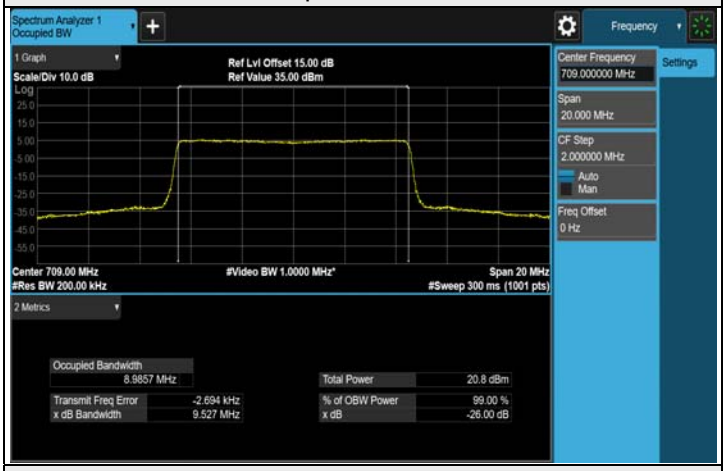
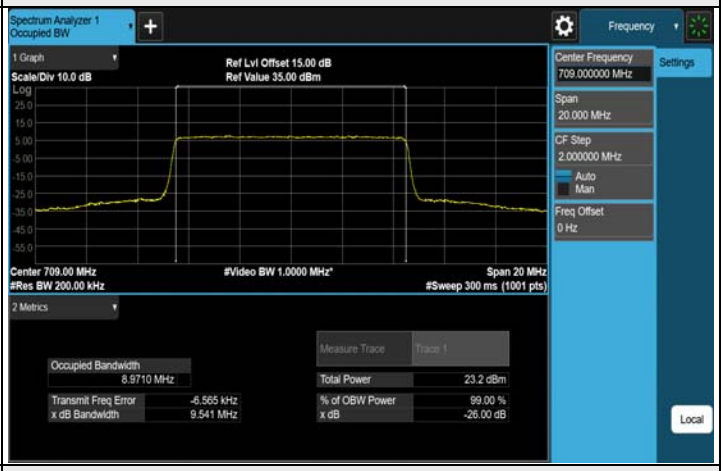
LTE Band 17, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	23755	706.5	4.4928	4.821
QPSK	23790	710	4.4944	4.806
QPSK	23825	713.5	4.4896	4.819
16QAM	23755	706.5	4.4954	4.818
16QAM	23790	710	4.4923	4.808
16QAM	23825	713.5	4.4915	4.803
64QAM	23755	706.5	4.4973	4.819
64QAM	23790	710	4.4946	4.806
64QAM	23825	713.5	4.4914	4.804
256QAM	23755	706.5	4.4975	4.804
256QAM	23790	710	4.4959	4.830
256QAM	23825	713.5	4.4879	4.782

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 23755 (706.5 MHz)	256QAM CH 23790 (710 MHz)

LTE Band 17, Channel Bandwidth: 10 MHz

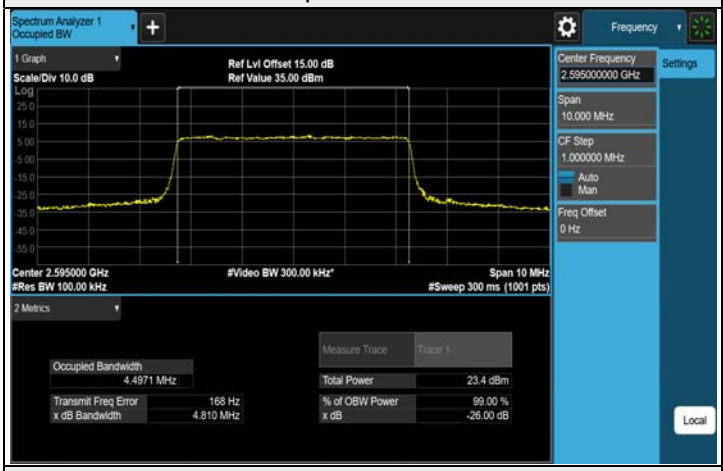
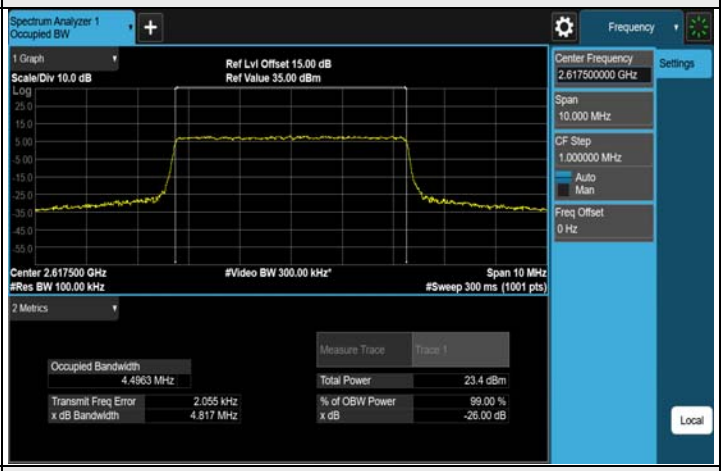
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	23780	709	8.9692	9.526
QPSK	23790	710	8.9645	9.519
QPSK	23800	711	8.9632	9.516
16QAM	23780	709	8.9695	9.497
16QAM	23790	710	8.9655	9.513
16QAM	23800	711	8.9541	9.506
64QAM	23780	709	8.9710	9.541
64QAM	23790	710	8.9691	9.518
64QAM	23800	711	8.9629	9.513
256QAM	23780	709	8.9857	9.527
256QAM	23790	710	8.9796	9.491
256QAM	23800	711	8.9699	9.505

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 23780 (709 MHz)	64QAM CH 23780 (709 MHz)

7.4.11 LTE Band 38

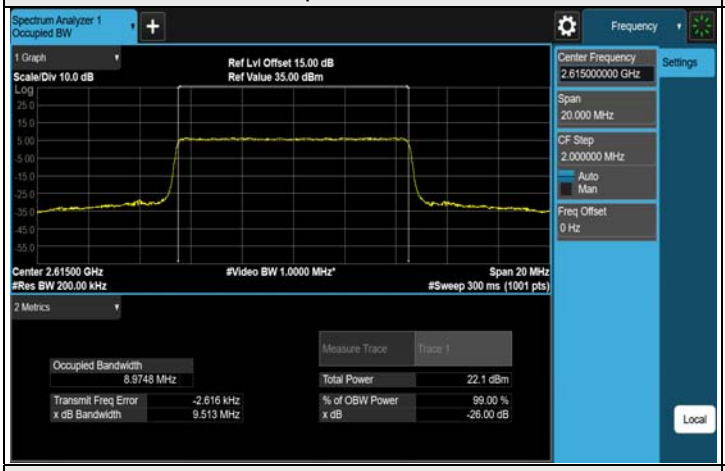
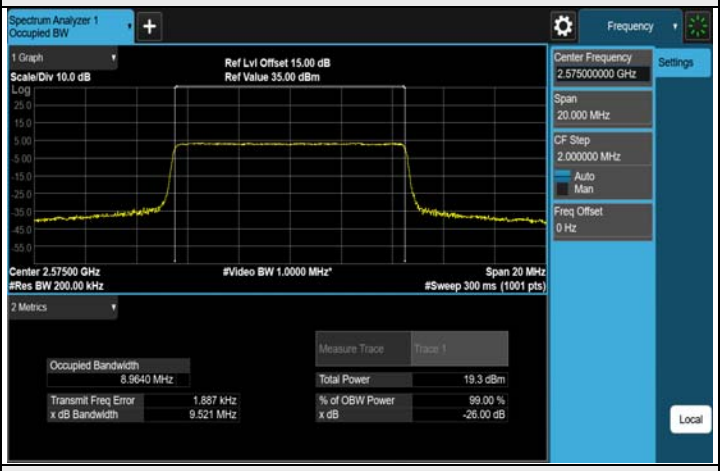
LTE Band 38, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	37775	2572.5	4.4871	4.803
QPSK	38000	2595	4.4971	4.810
QPSK	38225	2617.5	4.4963	4.817
16QAM	37775	2572.5	4.4892	4.793
16QAM	38000	2595	4.4932	4.781
16QAM	38225	2617.5	4.4884	4.783
64QAM	37775	2572.5	4.4947	4.795
64QAM	38000	2595	4.4969	4.777
64QAM	38225	2617.5	4.4955	4.783
256QAM	37775	2572.5	4.4811	4.804
256QAM	38000	2595	4.4743	4.784
256QAM	38225	2617.5	4.4809	4.775

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 38000 (2595 MHz)	QPSK CH 38225 (2617.5 MHz)

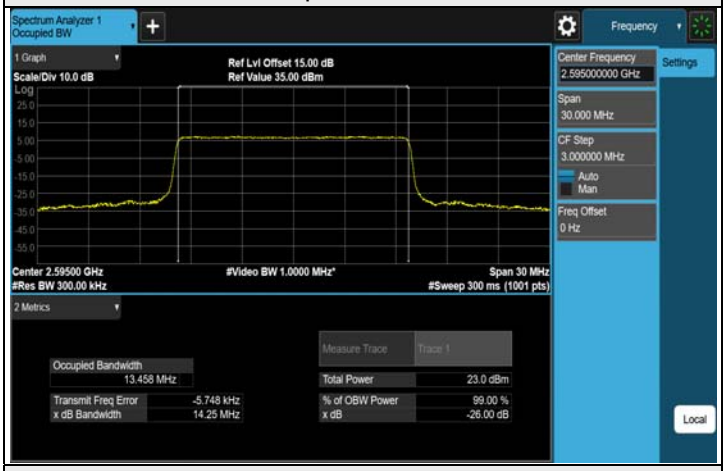
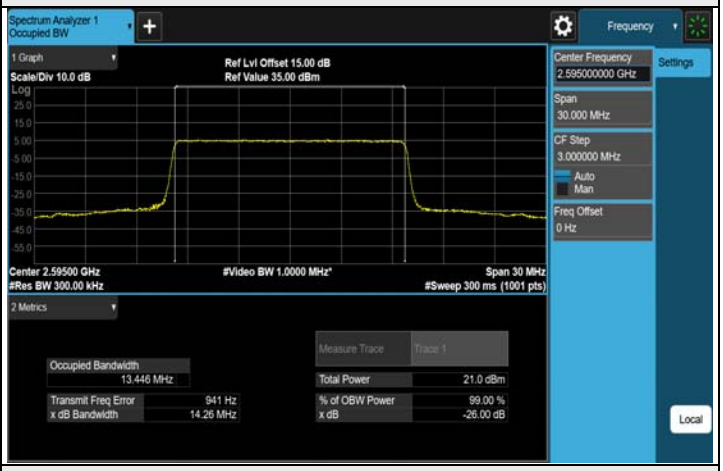
LTE Band 38, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	37800	2575	8.9717	9.506
QPSK	38000	2595	8.9693	9.508
QPSK	38200	2615	8.9741	9.499
16QAM	37800	2575	8.9687	9.507
16QAM	38000	2595	8.9729	9.513
16QAM	38200	2615	8.9748	9.513
64QAM	37800	2575	8.9683	9.509
64QAM	38000	2595	8.9735	9.494
64QAM	38200	2615	8.9682	9.506
256QAM	37800	2575	8.9640	9.521
256QAM	38000	2595	8.9641	9.503
256QAM	38200	2615	8.9667	9.516

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 38200 (2615 MHz)	256QAM CH 37800 (2575 MHz)

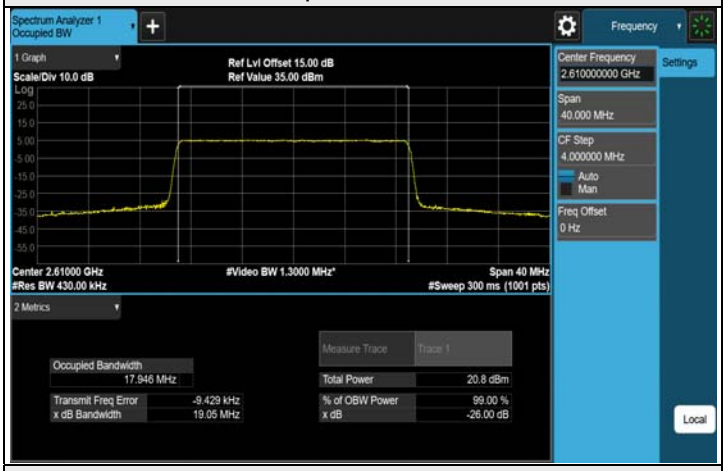
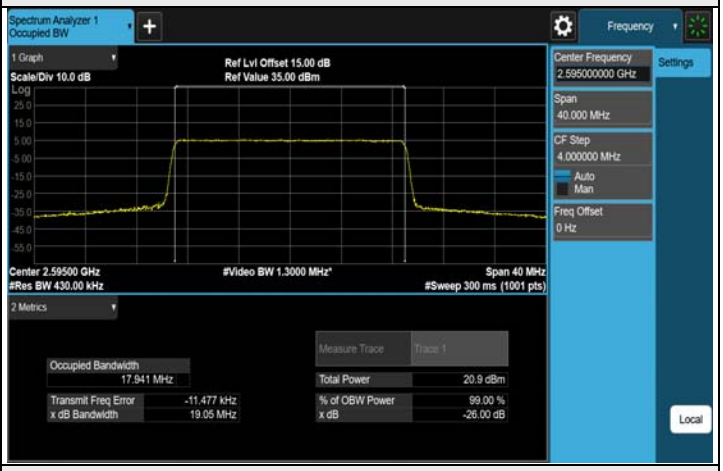
LTE Band 38, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	37825	2577.5	13.4522	14.243
QPSK	38000	2595	13.4576	14.253
QPSK	38175	2612.5	13.4567	14.249
16QAM	37825	2577.5	13.4394	14.225
16QAM	38000	2595	13.4485	14.242
16QAM	38175	2612.5	13.4513	14.253
64QAM	37825	2577.5	13.4415	14.256
64QAM	38000	2595	13.4460	14.260
64QAM	38175	2612.5	13.4438	14.257
256QAM	37825	2577.5	13.4392	14.251
256QAM	38000	2595	13.4416	14.241
256QAM	38175	2612.5	13.4449	14.214

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 38000 (2595 MHz)	64QAM CH 38000 (2595 MHz)

LTE Band 38, Channel Bandwidth: 20 MHz

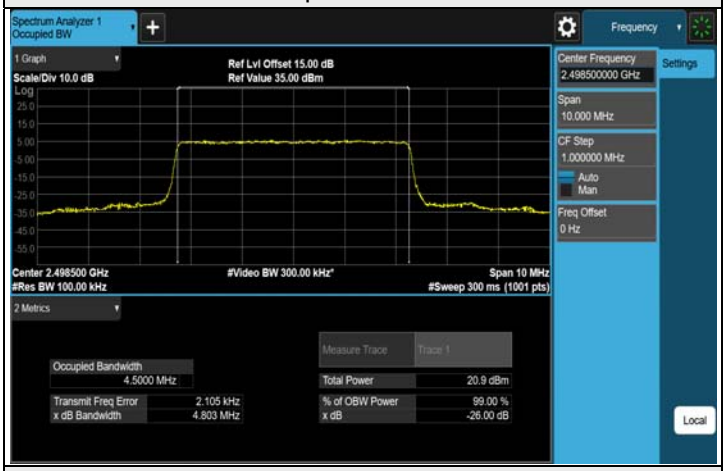
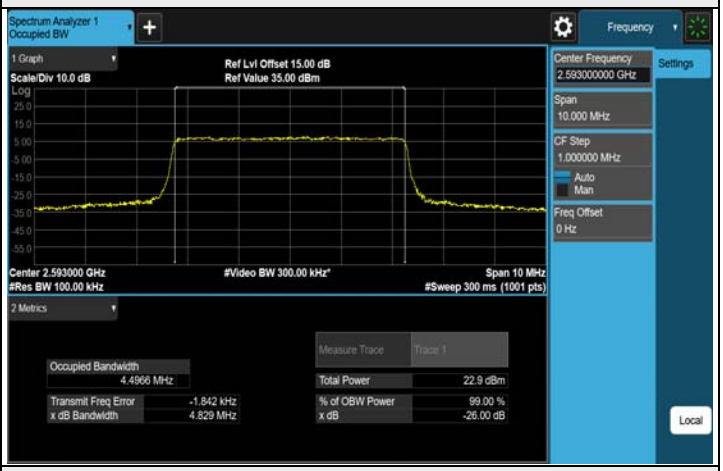
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	37850	2580	17.9279	19.028
QPSK	38000	2595	17.9254	19.020
QPSK	38150	2610	17.9282	19.033
16QAM	37850	2580	17.9266	19.030
16QAM	38000	2595	17.9371	19.033
16QAM	38150	2610	17.9371	19.036
64QAM	37850	2580	17.9458	19.037
64QAM	38000	2595	17.9412	19.049
64QAM	38150	2610	17.9462	19.046
256QAM	37850	2580	17.9302	19.024
256QAM	38000	2595	17.9312	19.026
256QAM	38150	2610	17.9354	19.020

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 38150 (2610 MHz)	64QAM CH 38000 (2595 MHz)

7.4.12 LTE Band 41

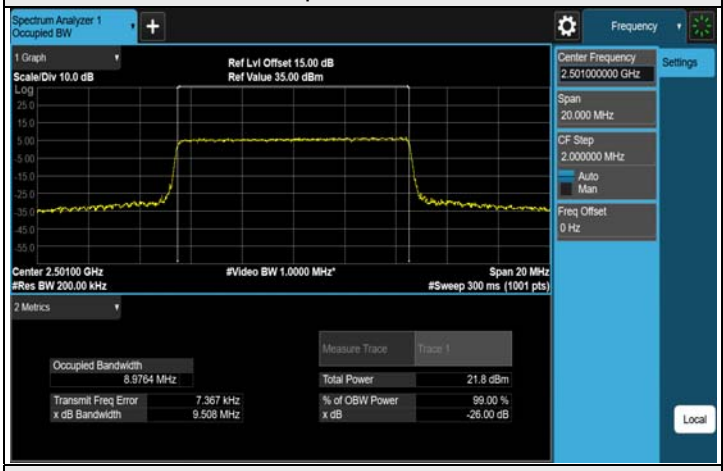
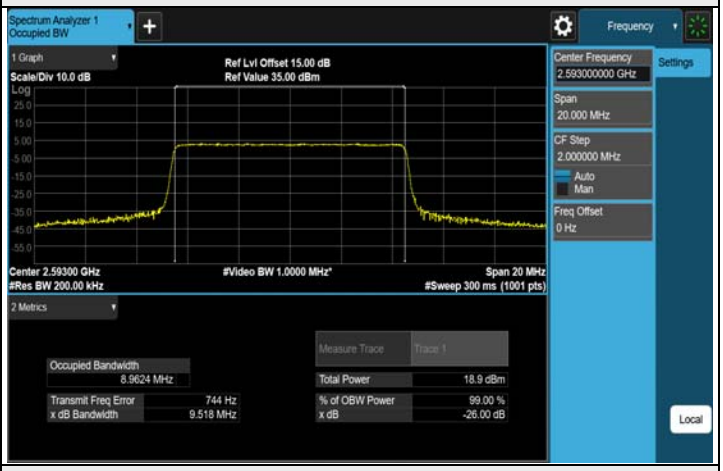
LTE Band 41, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	39675	2498.5	4.4902	4.802
QPSK	40620	2593	4.4966	4.829
QPSK	41565	2687.5	4.4934	4.794
16QAM	39675	2498.5	4.4905	4.807
16QAM	40620	2593	4.4918	4.801
16QAM	41565	2687.5	4.4903	4.781
64QAM	39675	2498.5	4.5000	4.803
64QAM	40620	2593	4.4948	4.788
64QAM	41565	2687.5	4.4961	4.772
256QAM	39675	2498.5	4.4851	4.779
256QAM	40620	2593	4.4783	4.809
256QAM	41565	2687.5	4.4867	4.806

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 39675 (2498.5 MHz)	QPSK CH 40620 (2593 MHz)

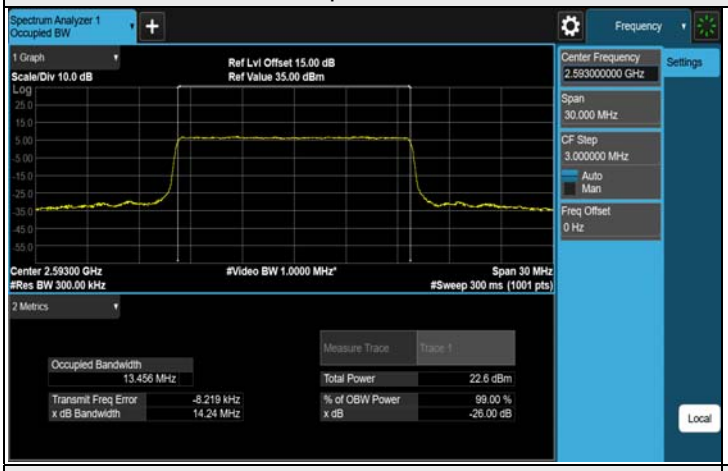
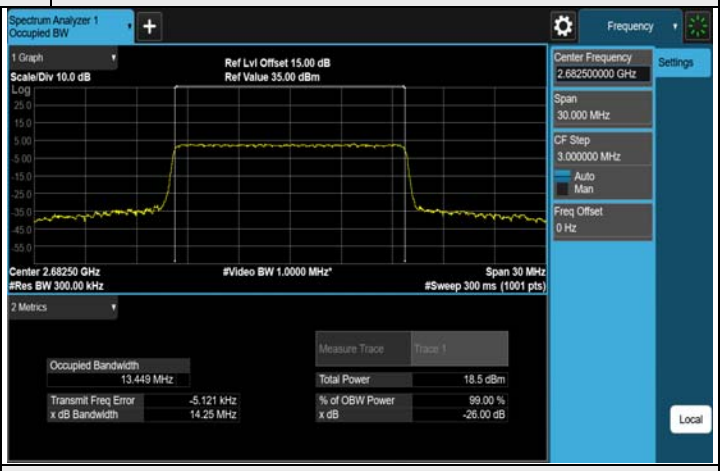
LTE Band 41, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	39700	2501	8.9761	9.493
QPSK	40620	2593	8.9614	9.507
QPSK	41540	2685	8.9732	9.510
16QAM	39700	2501	8.9764	9.508
16QAM	40620	2593	8.9735	9.507
16QAM	41540	2685	8.9727	9.514
64QAM	39700	2501	8.9662	9.505
64QAM	40620	2593	8.9662	9.512
64QAM	41540	2685	8.9743	9.491
256QAM	39700	2501	8.9605	9.503
256QAM	40620	2593	8.9624	9.518
256QAM	41540	2685	8.9650	9.503

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 39700 (2501 MHz)	256QAM CH 40620 (2593 MHz)

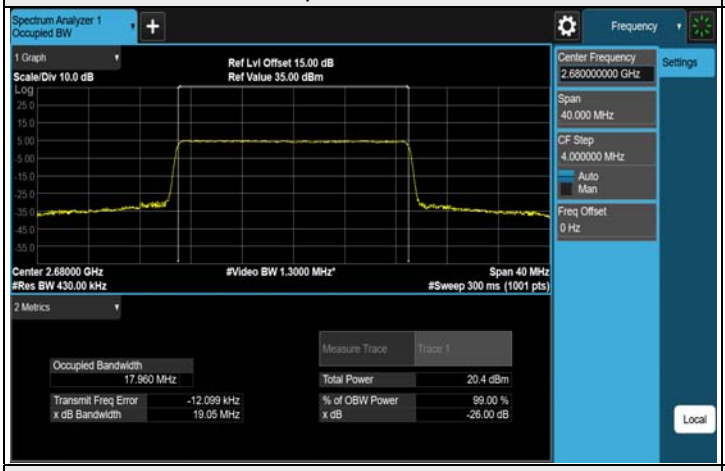
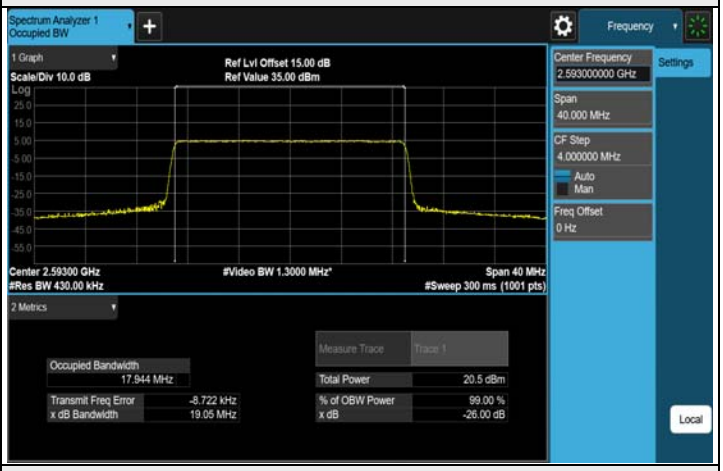
LTE Band 41, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	39725	2503.5	13.4450	14.234
QPSK	40620	2593	13.4557	14.245
QPSK	41515	2682.5	13.4391	14.243
16QAM	39725	2503.5	13.4422	14.214
16QAM	40620	2593	13.4552	14.241
16QAM	41515	2682.5	13.4507	14.234
64QAM	39725	2503.5	13.4453	14.245
64QAM	40620	2593	13.4536	14.239
64QAM	41515	2682.5	13.4530	14.230
256QAM	39725	2503.5	13.4489	14.231
256QAM	40620	2593	13.4371	14.235
256QAM	41515	2682.5	13.4491	14.254

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 40620 (2593 MHz)	256QAM CH 41515 (2682.5 MHz)

LTE Band 41, Channel Bandwidth: 20 MHz

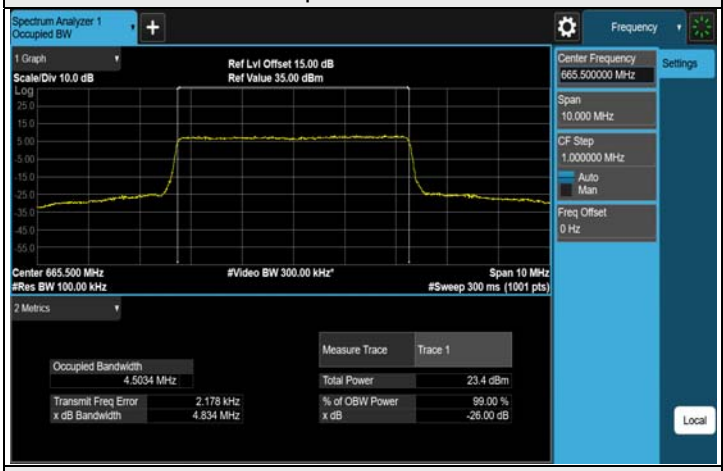
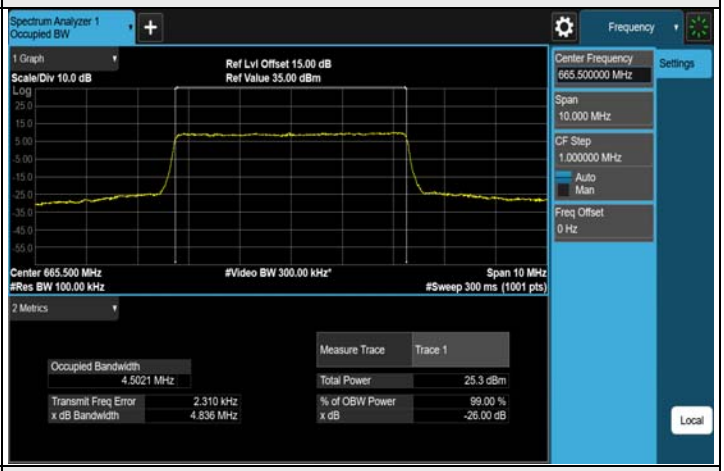
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	39750	2506	17.9118	19.006
QPSK	40620	2593	17.9291	19.028
QPSK	41490	2680	17.9435	19.030
16QAM	39750	2506	17.9203	19.019
16QAM	40620	2593	17.9238	19.033
16QAM	41490	2680	17.9344	19.038
64QAM	39750	2506	17.9393	19.027
64QAM	40620	2593	17.9437	19.049
64QAM	41490	2680	17.9595	19.045
256QAM	39750	2506	17.9028	19.012
256QAM	40620	2593	17.9286	19.010
256QAM	41490	2680	17.9451	19.031

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 41490 (2680 MHz)	64QAM CH 40620 (2593 MHz)

7.4.13 LTE Band 71

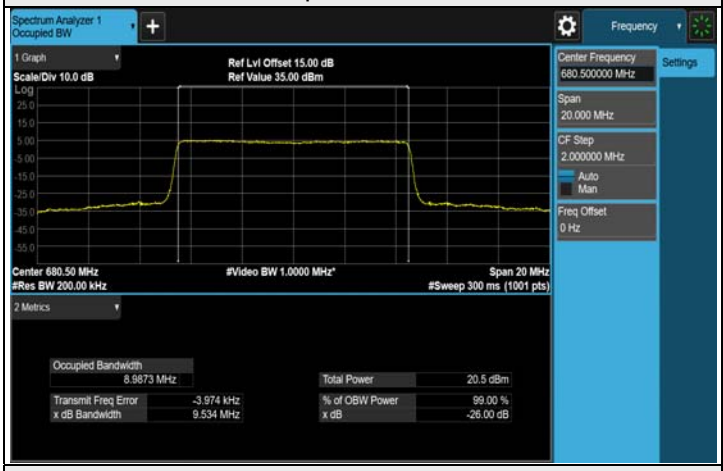
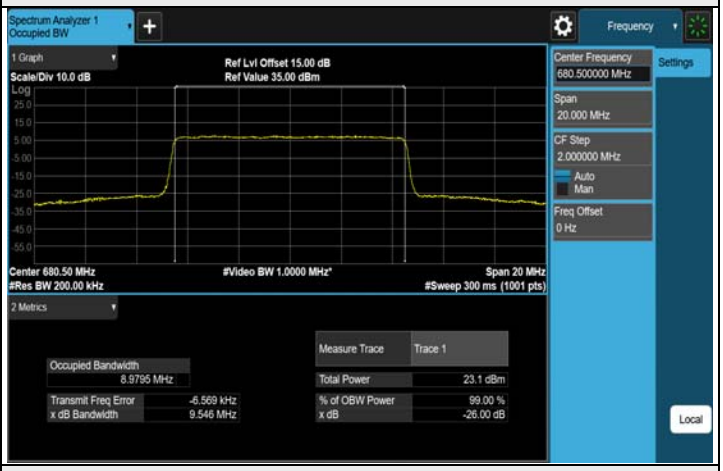
LTE Band 71, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	133147	665.5	4.5021	4.836
QPSK	133297	680.5	4.4960	4.830
QPSK	133447	695.5	4.4926	4.817
16QAM	133147	665.5	4.4985	4.810
16QAM	133297	680.5	4.4945	4.810
16QAM	133447	695.5	4.4923	4.787
64QAM	133147	665.5	4.5034	4.834
64QAM	133297	680.5	4.4981	4.812
64QAM	133447	695.5	4.4958	4.815
256QAM	133147	665.5	4.5017	4.811
256QAM	133297	680.5	4.4951	4.809
256QAM	133447	695.5	4.4943	4.794

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 133147 (665.5 MHz)	QPSK CH 133147 (665.5 MHz)

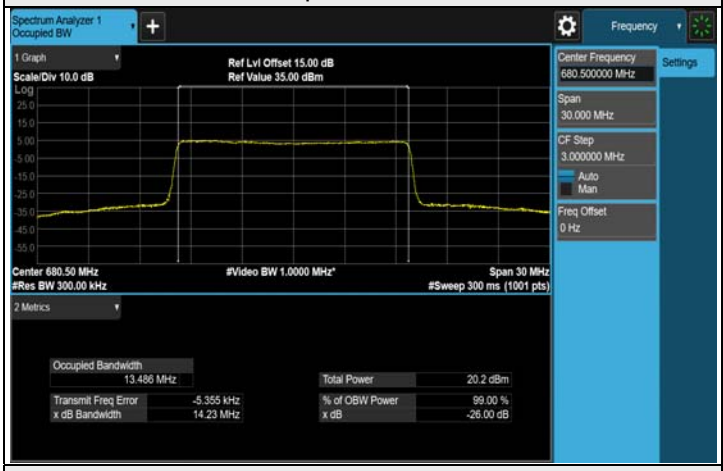
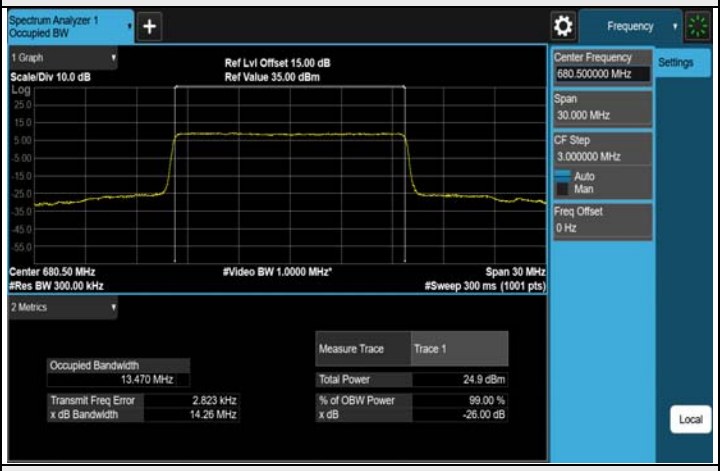
LTE Band 71, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	133172	668	8.9667	9.522
QPSK	133297	680.5	8.9768	9.541
QPSK	133422	693	8.9587	9.505
16QAM	133172	668	8.9692	9.516
16QAM	133297	680.5	8.9720	9.514
16QAM	133422	693	8.9575	9.498
64QAM	133172	668	8.9649	9.524
64QAM	133297	680.5	8.9795	9.546
64QAM	133422	693	8.9605	9.520
256QAM	133172	668	8.9817	9.506
256QAM	133297	680.5	8.9873	9.534
256QAM	133422	693	8.9630	9.515

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 133297 (680.5 MHz)	64QAM CH 133297 (680.5 MHz)

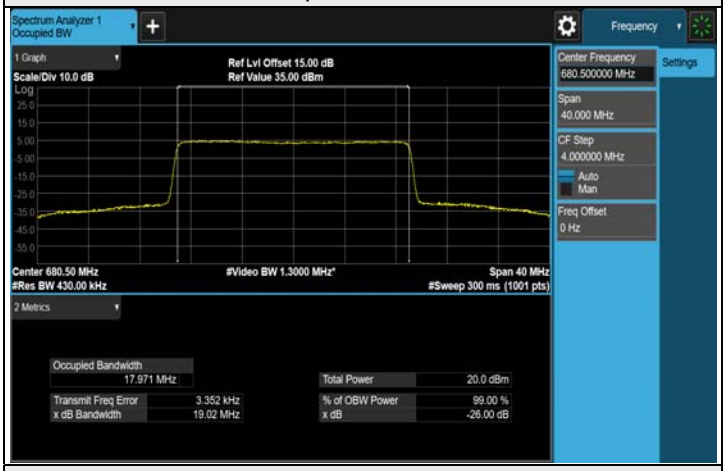
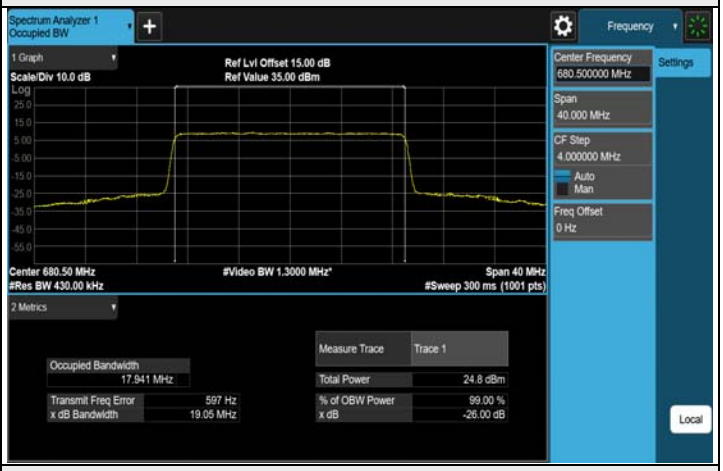
LTE Band 71, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	133197	670.5	13.4278	14.224
QPSK	133297	680.5	13.4701	14.261
QPSK	133397	690.5	13.4347	14.218
16QAM	133197	670.5	13.4198	14.226
16QAM	133297	680.5	13.4672	14.236
16QAM	133397	690.5	13.4240	14.229
64QAM	133197	670.5	13.4212	14.237
64QAM	133297	680.5	13.4607	14.242
64QAM	133397	690.5	13.4204	14.233
256QAM	133197	670.5	13.4457	14.202
256QAM	133297	680.5	13.4859	14.233
256QAM	133397	690.5	13.4503	14.231

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 133297 (680.5 MHz)	QPSK CH 133297 (680.5 MHz)

LTE Band 71, Channel Bandwidth: 20 MHz

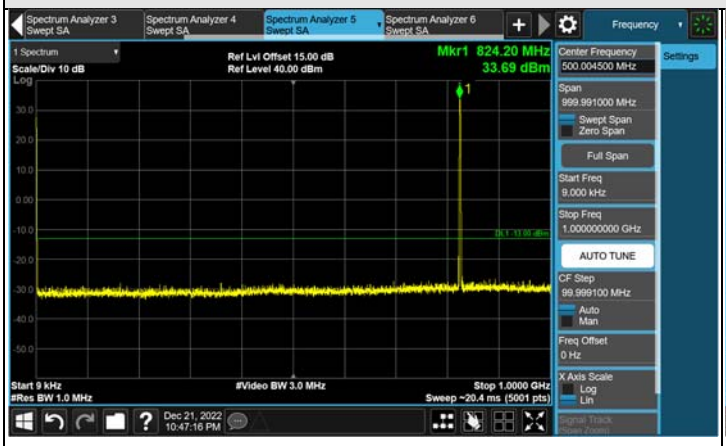
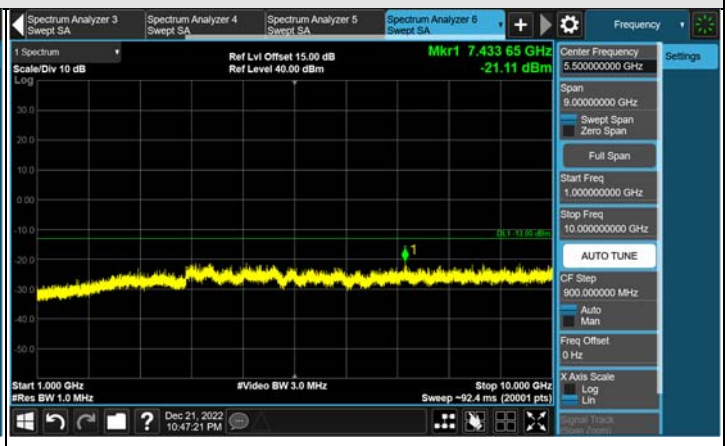
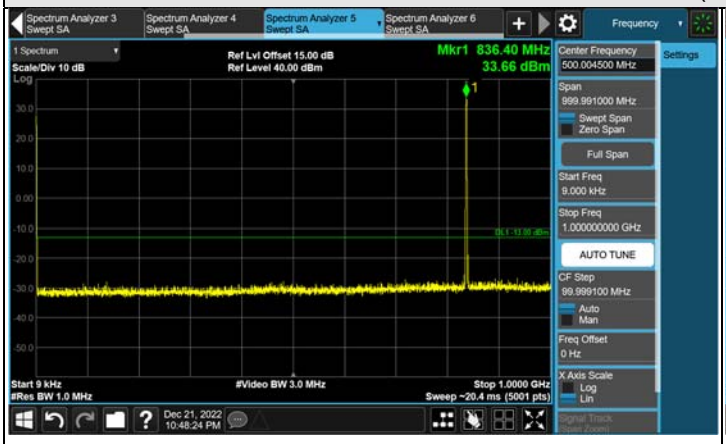
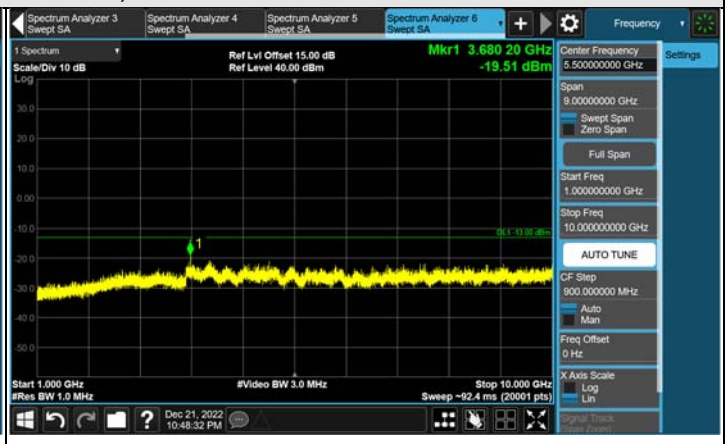
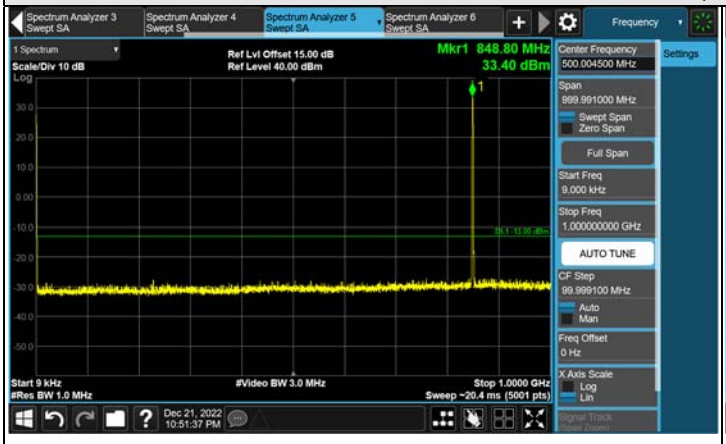
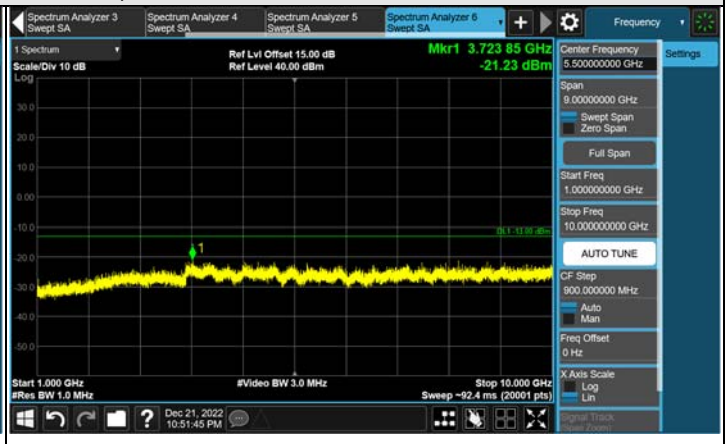
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	133222	673	17.8707	18.997
QPSK	133297	680.5	17.9406	19.048
QPSK	133372	688	17.8870	19.012
16QAM	133222	673	17.8940	19.008
16QAM	133297	680.5	17.9621	19.041
16QAM	133372	688	17.9067	18.997
64QAM	133222	673	17.8838	19.010
64QAM	133297	680.5	17.9482	19.047
64QAM	133372	688	17.9062	19.016
256QAM	133222	673	17.9189	19.011
256QAM	133297	680.5	17.9706	19.021
256QAM	133372	688	17.9505	19.008

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 133297 (680.5 MHz)	QPSK CH 133297 (680.5 MHz)

7.5 Conducted Spurious Emissions

Input Power:	3.85 Vdc	Environmental Conditions:	22°C, 73% RH	Tested By:	Willy Cheng

7.5.1 GSM850

GSM	
	
CH 128 (824.2 MHz)	
	
CH 189 (836.4 MHz)	
	
CH 251 (848.8 MHz)	

Note: The signal at 9 kHz is IF signal from spectrum analyzer.