

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.: RFBCMA-WTW-P25030861-7

FCC ID: RAXTMOG5AR

Product: 5G Gateway

Brand: T-Mobile

Model No.: TMO-G5AR

Received Date: 2025/3/24

Test Date: 2025/4/17 ~ 2025/5/19

Issued Date: 2025/5/29

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FCC Registration / 788550 / TW0003

Designation Number:

Approved by: Jeremy Lin, **Date:** 2025/5/29
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Prepared by : Celine Chou / Senior Specialist



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Release Control Record

Issue No.	Description	Date Issued
RFBCMA-WTW-P25030861-7	Original release.	2025/5/29

1 Certificate

Product: 5G Gateway

Brand: T-Mobile

Test Model: TMO-G5AR

Sample Status: Engineering sample

Applicant: Arcadyan Technology Corporation

Test Date: 2025/4/17 ~ 2025/5/19

Standard: 47 CFR FCC Part 22
47 CFR FCC Part 24
47 CFR FCC Part 27
47 CFR FCC Part 2

Measurement ANSI/TIA/EIA-603-E 2016

procedure: 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

Standard / Clause	Test Item	Result	Remark
Part 2.1046 Part 22.913 (a) Part 24.232 (c) Part 27.50(d) Part 27.50(c)	Effective Radiated Power and Equivalent Isotropically Radiated Power	Pass	Meet the requirement of limit.
Part 2.1047	Modulation Characteristics	Pass	Meet the requirement of limit.
Part 22.913 (d) Part 24.232 (d) Part 27.50(d)	Peak to Average Ratio	Pass	Meet the requirement of limit.
Part 2.1049	Bandwidth	Pass	Meet the requirement of limit.
Part 2.1051 Part 22.917 Part 24.238 Part 27.53(h) Part 27.53(g)	Conducted Spurious Emissions	Pass	Meet the requirement of limit.
Part 2.1053 Part 22.917 Part 24.238 Part 27.53(h) Part 27.53(g)	Radiated Spurious Emissions below 1GHz	Pass	Minimum passing margin is -19.69 dB at 38.73 MHz
Part 2.1053 Part 22.917 Part 24.238 Part 27.53(h) Part 27.53(g)	Radiated Spurious Emissions above 1GHz	Pass	Minimum passing margin is -30.08 dB at 1415.00 MHz
Part 2.1055 Part 22.355 Part 24.235 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:

Parameter	Specification	Uncertainty (±)
Effective Radiated Power and Equivalent Isotropically Radiated Power	-	1.371 dB
Peak to Average Ratio	-	0.920 dB
Bandwidth	-	960 Hz
Conducted Spurious Emissions	-	2.12 dB
Radiated Spurious Emissions below 1GHz	30 MHz ~ 1 GHz	3.64 dB
Radiated Spurious Emissions above 1GHz	1 GHz ~ 18 GHz	2.29 dB
	18 GHz ~ 40 GHz	2.29 dB
Frequency Stability	-	0.176 ppm

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	5G Gateway
Brand	T-Mobile
Test Model	TMO-G5AR
Status of EUT	Engineering sample
Power Supply Rating	100-240 Vac
EUT Category	Mobile station
Modulation Type	QPSK, 16QAM, 64QAM, 256QAM
LTE support SISO bands	B2, B4, B5, B12, B66, B71
PC3 for Power Class	B2, B4, B5, B12, B66, B71

Note:

1. EUT Overview

LTE Band 2

Bandwidth	TX Frequency Range (MHz)	Modulation	Max. EIRP (W)	Max. EIRP (dBm)	Emission Designator
1.4 MHz	1850.7 ~ 1909.3	QPSK	0.413	26.16	1M09G7D
		16QAM	0.337	25.27	1M09D7W
		64QAM	0.259	24.13	1M09D7W
		256QAM	0.131	21.16	1M09D7W
3 MHz	1851.5 ~ 1908.5	QPSK	0.400	26.02	2M70G7D
		16QAM	0.340	25.31	2M70D7W
		64QAM	0.264	24.21	2M70D7W
		256QAM	0.130	21.15	2M70D7W
5 MHz	1852.5 ~ 1907.5	QPSK	0.403	26.05	4M50G7D
		16QAM	0.343	25.35	4M49D7W
		64QAM	0.265	24.23	4M50D7W
		256QAM	0.131	21.18	4M49D7W
10 MHz	1855 ~ 1905	QPSK	0.411	26.14	8M97G7D
		16QAM	0.344	25.37	8M97D7W
		64QAM	0.267	24.26	8M97D7W
		256QAM	0.132	21.21	8M97D7W
15 MHz	1857.5 ~ 1902.5	QPSK	0.419	26.22	13M5G7D
		16QAM	0.352	25.46	13M5D7W
		64QAM	0.269	24.29	13M5D7W
		256QAM	0.132	21.22	13M5D7W
20 MHz	1860 ~ 1900	QPSK	0.423	26.26	18M0G7D
		16QAM	0.355	25.50	18M0D7W
		64QAM	0.274	24.37	18M0D7W
		256QAM	0.134	21.27	18M0D7W

LTE Band 4

Bandwidth	TX Frequency Range (MHz)	Modulation	Max. EIRP (W)	Max. EIRP (dBm)	Emission Designator
1.4 MHz	1710.7 ~ 1754.3	QPSK	0.439	26.42	1M09G7D
		16QAM	0.352	25.46	1M09D7W
		64QAM	0.261	24.17	1M09D7W
		256QAM	0.126	21.02	1M09D7W
3 MHz	1711.5 ~ 1753.5	QPSK	0.442	26.45	2M70G7D
		16QAM	0.362	25.59	2M70D7W
		64QAM	0.267	24.26	2M70D7W
		256QAM	0.128	21.08	2M70D7W
5 MHz	1712.5 ~ 1752.5	QPSK	0.445	26.48	4M49G7D
		16QAM	0.366	25.64	4M49D7W
		64QAM	0.272	24.34	4M50D7W
		256QAM	0.130	21.14	4M48D7W
10 MHz	1715 ~ 1750	QPSK	0.449	26.52	8M98G7D
		16QAM	0.367	25.65	8M98D7W
		64QAM	0.272	24.35	8M98D7W
		256QAM	0.131	21.17	8M97D7W
15 MHz	1717.5 ~ 1747.5	QPSK	0.453	26.56	13M5G7D
		16QAM	0.376	25.75	13M5D7W
		64QAM	0.275	24.39	13M5D7W
		256QAM	0.133	21.24	13M5D7W
20 MHz	1720 ~ 1745	QPSK	0.460	26.63	18M0G7D
		16QAM	0.378	25.78	18M0D7W
		64QAM	0.281	24.49	18M0D7W
		256QAM	0.134	21.26	18M0D7W

LTE Band 5

Bandwidth	TX Frequency Range (MHz)	Modulation	Max. ERP (W)	Max. ERP (dBm)	Emission Designator
1.4 MHz	824.7 ~ 848.3	QPSK	0.313	24.96	1M09G7D
		16QAM	0.256	24.08	1M09D7W
		64QAM	0.202	23.06	1M09D7W
		256QAM	0.102	20.08	1M09D7W
3 MHz	825.5 ~ 847.5	QPSK	0.326	25.13	2M70G7D
		16QAM	0.260	24.15	2M70D7W
		64QAM	0.205	23.12	2M70D7W
		256QAM	0.104	20.17	2M70D7W
5 MHz	826.5 ~ 846.5	QPSK	0.333	25.22	4M49G7D
		16QAM	0.263	24.20	4M49D7W
		64QAM	0.206	23.13	4M49D7W
		256QAM	0.106	20.27	4M49D7W
10 MHz	829 ~ 844	QPSK	0.336	25.26	8M98G7D
		16QAM	0.264	24.22	8M98D7W
		64QAM	0.206	23.13	8M98D7W
		256QAM	0.108	20.34	8M97D7W

LTE Band 12

Bandwidth	TX Frequency Range (MHz)	Modulation	Max. ERP (W)	Max. ERP (dBm)	Emission Designator
1.4 MHz	699.7 ~ 715.3	QPSK	0.350	25.44	1M09G7D
		16QAM	0.281	24.48	1M09D7W
		64QAM	0.230	23.61	1M09D7W
		256QAM	0.113	20.53	1M09D7W
3 MHz	700.5 ~ 714.5	QPSK	0.348	25.41	2M70G7D
		16QAM	0.285	24.55	2M70D7W
		64QAM	0.231	23.63	2M70D7W
		256QAM	0.117	20.67	2M70D7W
5 MHz	701.5 ~ 713.5	QPSK	0.351	25.45	4M50G7D
		16QAM	0.288	24.60	4M50D7W
		64QAM	0.233	23.67	4M50D7W
		256QAM	0.117	20.68	4M49D7W
10 MHz	704 ~ 711	QPSK	0.355	25.50	8M99G7D
		16QAM	0.293	24.67	8M99D7W
		64QAM	0.234	23.69	8M99D7W
		256QAM	0.117	20.69	9M00D7W

LTE Band 66

Bandwidth	TX Frequency Range (MHz)	Modulation	Max. EIRP (W)	Max. EIRP (dBm)	Emission Designator
1.4 MHz	1710.7 ~ 1779.3	QPSK	0.395	25.97	1M09G7D
		16QAM	0.325	25.12	1M09D7W
		64QAM	0.255	24.07	1M09D7W
		256QAM	0.126	20.99	1M09D7W
3 MHz	1711.5 ~ 1778.5	QPSK	0.406	26.09	2M70G7D
		16QAM	0.340	25.32	2M70D7W
		64QAM	0.261	24.17	2M70D7W
		256QAM	0.129	21.10	2M70D7W
5 MHz	1712.5 ~ 1777.5	QPSK	0.407	26.10	4M49G7D
		16QAM	0.341	25.33	4M49D7W
		64QAM	0.263	24.20	4M50D7W
		256QAM	0.130	21.15	4M49D7W
10 MHz	1715 ~ 1775	QPSK	0.410	26.13	8M98G7D
		16QAM	0.343	25.35	8M98D7W
		64QAM	0.263	24.20	8M98D7W
		256QAM	0.130	21.15	8M97D7W
15 MHz	1717.5 ~ 1772.5	QPSK	0.412	26.15	13M5G7D
		16QAM	0.348	25.41	13M5D7W
		64QAM	0.266	24.25	13M5D7W
		256QAM	0.132	21.22	13M5D7W
20 MHz	1720 ~ 1770	QPSK	0.418	26.21	18M0G7D
		16QAM	0.351	25.45	18M0D7W
		64QAM	0.269	24.29	18M0D7W
		256QAM	0.133	21.25	18M0D7W

LTE Band 71

Bandwidth	TX Frequency Range (MHz)	Modulation	Max. ERP (W)	Max. ERP (dBm)	Emission Designator
5 MHz	665.5 ~ 695.5	QPSK	0.271	24.33	4M50G7D
		16QAM	0.207	23.16	4M50D7W
		64QAM	0.183	22.63	4M50D7W
		256QAM	0.092	19.66	4M49D7W
10 MHz	668 ~ 693	QPSK	0.274	24.37	8M99G7D
		16QAM	0.204	23.10	8M99D7W
		64QAM	0.180	22.56	9M00D7W
		256QAM	0.092	19.66	8M99D7W
15 MHz	670.5 ~ 690.5	QPSK	0.275	24.39	13M5G7D
		16QAM	0.206	23.13	13M5D7W
		64QAM	0.182	22.60	13M5D7W
		256QAM	0.092	19.63	13M5D7W
20 MHz	673 ~ 688	QPSK	0.277	24.43	18M0G7D
		16QAM	0.207	23.16	18M0D7W
		64QAM	0.183	22.63	18M0D7W
		256QAM	0.093	19.70	18M0D7W

2. The EUT uses following accessories.

Item	Brand	Model	Specification
AC Adapter 1	MOSO	P30-V3000R200-060Q0-US	AC Input: 100~240 Vac, 1.7 A, 50/60 Hz DC Output: 5.0 Vdc, 3.0 A; 9.0 Vdc, 3.0 A; 12.0 Vdc, 3.0 A; 15.0 Vdc, 3.0 A; 20.0 Vdc, 3.0 A DC Output Cable: 1.85 m, non-shielded cable, W/O ferrite core Plug: US
AC Adapter 2	MASS POWER	PD065E-D1C0AVU	AC Input: 100~240 Vac, 1.5 A, 50/60 Hz DC Output: 5.0 Vdc, 3.0 A; 9.0 Vdc, 3.0 A; 12.0 Vdc, 3.0 A; 15.0 Vdc, 3.0 A; 20.0 Vdc, 2.25 A DC Output Cable: 1.8 m, non-shielded cable, W/O ferrite core Plug: US

3. For detailed information about each WWAN bands frequency range, bandwidth mode of the product, please refer to section 3.3 of the report.

4. 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 No.	Brand	Model	RF Chain No.	Antenna Net Gain (dBi)	Frequency Range	Antenna Type	Connector Type
ANT0	ARC	120800158700J	TX0	0.95	FDD B2	Monopole	MHF1
				1.02	FDD B4		
				2.06	FDD B5		
				2.46	FDD B12		
				0.95	FDD n25		
			RX	3.93	TDD n41		
				3.79	TDD n48		
			TX0/ TX0	1.02	FDD B66/n66		
				1.90	FDD B71/n71		
			RX	3.79	TDD n77		
ANT1	ARC	120800158800J	RX	1.08	FDD B2	Monopole	MHF1
				0.95	FDD B4		
				1.68	FDD B5		
				1.55	FDD B12		
			TX1	1.08	FDD n25		
				1.04	TDD n41		
				1.00	TDD n48		
			RX/ TX1	0.95	FDD B66/n66		
				3.54	FDD B71/n71		
			TX1	0.79	TDD n77		
ANT2	ARC	120800158900J	RX	5.13	FDD B2	Monopole	MHF1
				4.51	FDD B4		
				2.14	FDD B5		
				2.36	FDD B12		
				5.13	FDD n25		
			TX0	1.05	TDD n41		
				0.72	TDD n48		
			RX/ RX	4.51	FDD B66/n66		
				2.16	FDD B71/n71		
			TX0	0.96	TDD n77		
ANT3	ARC	120800159000J	RX	1.63	FDD B2	Monopole	MHF1
				4.70	FDD B4		
				1.79	FDD B5		
				2.08	FDD B12		
				1.63	FDD n25		
				2.04	TDD n41		
				4.16	TDD n48		
				4.70	FDD B66/n66		
				2.87	FDD B71/n71		
				4.16	TDD n77		

Antenna No.	Antenna Type	Antenna Connector	RF Chain No.	Antenna Net Gain (dBi)	Frequency Range	Antenna Type	Connector Type
ANT4	ARC	120800159100J	RX	4.66	FDD B2	Dipole	MHF1
				3.77	FDD B4		
				4.66	FDD n25		
				3.45	TDD n41		
				4.32	TDD n48		
				3.77	FDD B66/n66		
				4.32	TDD n77		
ANT5	ARC	120800159200J	RX	3.95	FDD B2	Dipole	MHF1
				5.35	FDD B4		
				3.95	FDD n25		
				4.89	TDD n41		
				3.50	TDD n48		
				5.35	FDD B66/n66		
				3.50	TDD n77		
ANT6	ARC	120800159400J	RX	5.87	FDD B2	Dipole	MHF1
				4.40	FDD B4		
				5.87	FDD B25/n25		
				4.76	TDD n41		
				3.44	TDD n48		
				4.40	FDD B66/n66		
				3.44	TDD n77		
ANT7	ARC	120800159500J	RX	4.79	FDD B2	Dipole	MHF1
				4.62	FDD B4		
				4.79	FDD n25		
				5.64	TDD n41		
				3.88	TDD n48		
				4.62	FDD B66/n66		
				3.88	TDD n77		

* The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

* For SISO mode:

1. LTE B2, B4, B5, B12, B66 and B71 were fixed on ANT0.

3.3 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. The AC Adapter has the following models: MOSO P30-V3000R200-060Q0-US / MASS POWER PD065E-D1C0AVU. Pre-scan these models of AC Adapters and find the worst case as a representative test condition. 2. Pre-Scan has been conducted to determine the worst-case mode from all bandwidths, RB configurations and modulations.
Worst Case:	1. AC Adapter Worst Condition: MASS POWER PD065E-D1C0AVU 2. The EUT is designed to be positioned on the Z-axis only.

3.3.1 LTE Band 2

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Equivalent Isotropically Radiated Power	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

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
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
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

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Spurious Emissions	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
Radiated Spurious Emissions below 1GHz	19175(1907.50 MHz)	5 MHz	QPSK	1 RB
Radiated Spurious Emissions 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
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

3.3.2 LTE Band 4

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Equivalent Isotropically Radiated Power	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
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

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
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
Conducted Spurious Emissions	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

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Radiated Spurious Emissions below 1GHz	20175(1732.50 MHz)	20 MHz	QPSK	1 RB
Radiated Spurious Emissions 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
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

3.3.3 LTE Band 5

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Effective Radiated Power	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
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
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

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Spurious Emissions	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
Radiated Spurious Emissions below 1GHz	20600(844.00 MHz)	10 MHz	QPSK	1 RB
Radiated Spurious Emissions 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
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

3.3.4 LTE Band 12

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Effective Radiated Power	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
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
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

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Spurious Emissions	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
Radiated Spurious Emissions below 1GHz	23095(707.50 MHz)	10 MHz	QPSK	1 RB
Radiated Spurious Emissions 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
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

3.3.5 LTE Band 66

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Equivalent Isotropically Radiated Power	131979(1710.70 MHz) 132322(1745.00 MHz) 132665(1779.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	131987(1711.50 MHz) 132322(1745.00 MHz) 132657(1778.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	131997(1712.50 MHz) 132322(1745.00 MHz) 132647(1777.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	132022(1715.00 MHz) 132322(1745.00 MHz) 132622(1775.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	132047(1717.50 MHz) 132322(1745.00 MHz) 132597(1772.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	132072(1720.00 MHz) 132322(1745.00 MHz) 132572(1770.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	132322(1745.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	131979(1710.70 MHz) 132322(1745.00 MHz) 132665(1779.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	131987(1711.50 MHz) 132322(1745.00 MHz) 132657(1778.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	131997(1712.50 MHz) 132322(1745.00 MHz) 132647(1777.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	132022(1715.00 MHz) 132322(1745.00 MHz) 132622(1775.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	132047(1717.50 MHz) 132322(1745.00 MHz) 132597(1772.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	132072(1720.00 MHz) 132322(1745.00 MHz) 132572(1770.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Bandwidth	131979(1710.70 MHz) 132322(1745.00 MHz) 132665(1779.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	131987(1711.50 MHz) 132322(1745.00 MHz) 132657(1778.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	131997(1712.50 MHz) 132322(1745.00 MHz) 132647(1777.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	132022(1715.00 MHz) 132322(1745.00 MHz) 132622(1775.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	132047(1717.50 MHz) 132322(1745.00 MHz) 132597(1772.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	132072(1720.00 MHz) 132322(1745.00 MHz) 132572(1770.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Conducted Spurious Emissions	131979(1710.70 MHz) 132322(1745.00 MHz) 132665(1779.30 MHz)	1.4 MHz	QPSK	1 RB Full RB
	131987(1711.50 MHz) 132322(1745.00 MHz) 132657(1778.50 MHz)	3 MHz	QPSK	1 RB Full RB
	131997(1712.50 MHz) 132322(1745.00 MHz) 132647(1777.50 MHz)	5 MHz	QPSK	1 RB Full RB
	132022(1715.00 MHz) 132322(1745.00 MHz) 132622(1775.00 MHz)	10 MHz	QPSK	1 RB Full RB
	132047(1717.50 MHz) 132322(1745.00 MHz) 132597(1772.50 MHz)	15 MHz	QPSK	1 RB Full RB
	132072(1720.00 MHz) 132322(1745.00 MHz) 132572(1770.00 MHz)	20 MHz	QPSK	1 RB Full RB

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Radiated Spurious Emissions below 1GHz	132665(1779.30 MHz)	1.4 MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	131979(1710.70 MHz) 132322(1745.00 MHz) 132665(1779.30 MHz)	1.4 MHz	QPSK	1 RB
	131997(1712.50 MHz) 132322(1745.00 MHz) 132647(1777.50 MHz)	5 MHz	QPSK	1 RB
	132072(1720.00 MHz) 132322(1745.00 MHz) 132572(1770.00 MHz)	20 MHz	QPSK	1 RB
Frequency Stability	131979(1710.70 MHz) 132665(1779.30 MHz)	1.4 MHz	QPSK	Full RB
	131987(1711.50 MHz) 132657(1778.50 MHz)	3 MHz	QPSK	Full RB
	131997(1712.50 MHz) 132647(1777.50 MHz)	5 MHz	QPSK	Full RB
	132022(1715.00 MHz) 132622(1775.00 MHz)	10 MHz	QPSK	Full RB
	132047(1717.50 MHz) 132597(1772.50 MHz)	15 MHz	QPSK	Full RB
	132072(1720.00 MHz) 132572(1770.00 MHz)	20 MHz	QPSK	Full RB

3.3.6 LTE Band 71

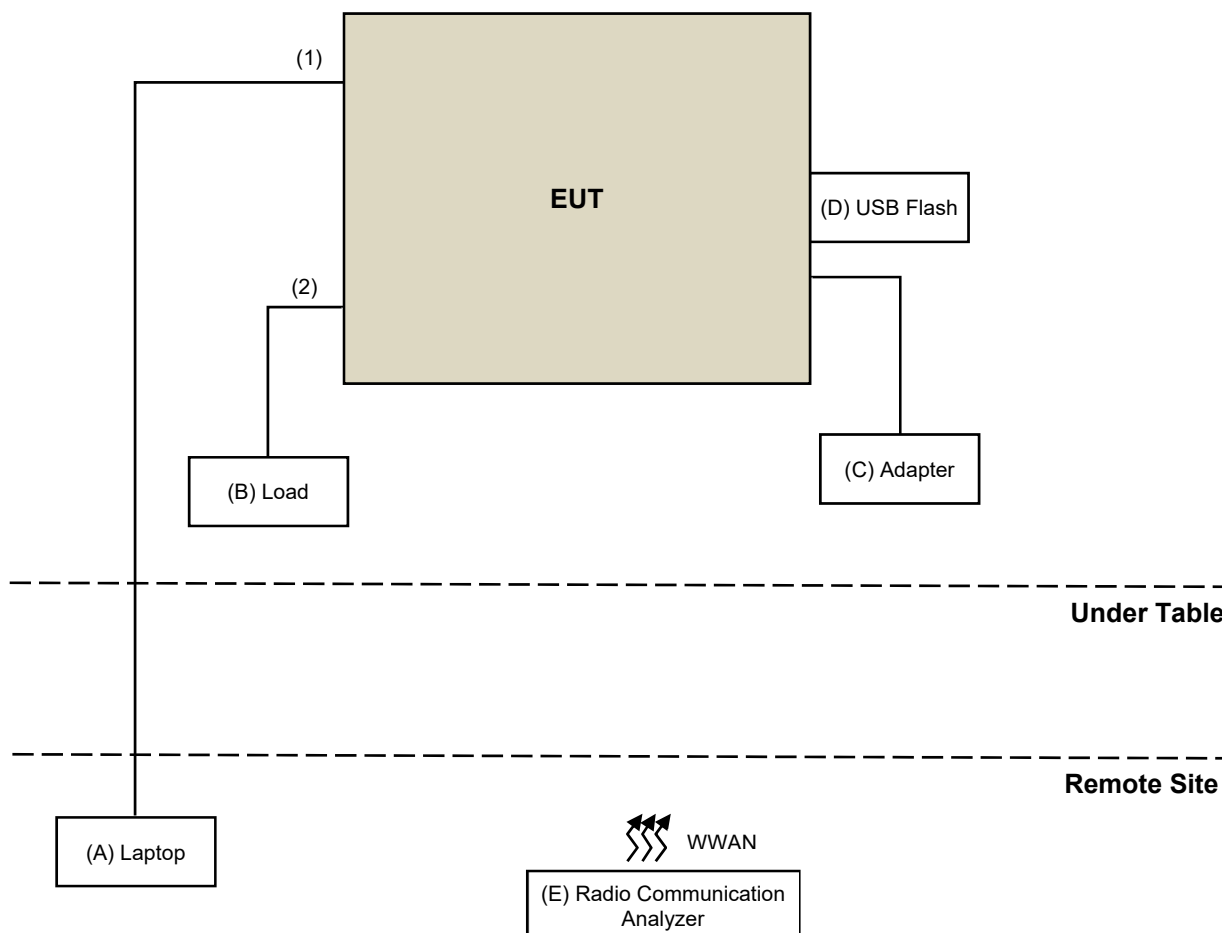
Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Effective Radiated Power	133147(665.50 MHz) 133297(680.50 MHz) 133447(695.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	133172(668.00 MHz) 133297(680.50 MHz) 133422(693.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half 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
	133297(680.50 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	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
Peak to Average Ratio	133222(673.00 MHz) 133297(680.50 MHz) 133372(688.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
	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
Bandwidth	133222(673.00 MHz) 133297(680.50 MHz) 133372(688.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
	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

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Spurious Emissions	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
	133297(680.50 MHz)	20 MHz	QPSK	1 RB
	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
	133147(665.50 MHz) 133447(695.50 MHz)	5 MHz	QPSK	Full RB
Radiated Spurious Emissions below 1GHz	133297(680.50 MHz)	20 MHz	QPSK	1 RB
Radiated Spurious Emissions 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
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

3.4 Test Program Used and Operation Descriptions

EUT link Simulator has been activated to set the EUT under transmission condition continuously at specific channel frequency.

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	Laptop	DELL	E5430	2RL3YW1	N/A	Provided by Lab
B	Load	N/A	N/A	N/A	N/A	Provided by Lab
C	Adapter	MASS POWER	PD065E-D1C0AVU	N/A	N/A	Supplied by applicant
D	USB Flash	SanDisk	SDDDC3-032G	N/A	N/A	Provided by Lab
E	Radio Communication Analyzer	Anritsu	MT8821C	6201462755	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	RJ-45 Cable	1	10	N	0	Provided by Lab
2	RJ-45 Cable	1	1.5	N	0	Provided by Lab

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
PXA Signal Analyzer Keysight	N9030B	MY57140938	2025/3/24	2026/3/23
Radio Communication Analyzer Anritsu	MT8821C	6261806803	2025/2/19	2026/2/18
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2025/4/17 ~ 2025/5/16

4.2 Modulation Characteristics

Refer to section 4.1 to get the tested date and information of the instruments.

4.3 Peak to Average Ratio

Refer to section 4.1 to get the tested date and information of the instruments.

4.4 Bandwidth

Refer to section 4.1 to get the tested date and information of the instruments.

4.5 Conducted Spurious Emissions

Refer to section 4.1 to get the tested date and information of the instruments.

4.6 Radiated Spurious Emissions below 1GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-155	2024/10/14	2025/10/13
EMI Test Receiver R&S	ESR3	102782	2024/12/10	2025/12/9
Preamplifier Agilent	8447D	2944A10631	2025/4/27	2026/4/26
RF Coaxial Cable Woken	8D-FB	Cable-CH4-01	2024/7/6	2025/7/5
Signal & Spectrum Analyzer R&S	FSV3044	101105	2025/2/25	2026/2/24
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2025/5/12

4.7 Radiated Spurious Emissions above 1GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	5	N/A	N/A
EMI Test Receiver R&S	ESR3	102782	2024/12/10	2025/12/9
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-408	2024/11/10	2025/11/9
	BBHA 9170	9170-480	2024/11/10	2025/11/9
		BBHA9170241	2024/10/18	2025/10/17
		BBHA9170243	2024/11/10	2025/11/9
Preamplifier EMCI	EMC 184045	980116	2024/9/24	2025/9/23
Preamplifier Keysight	83017A	MY53270295	2025/4/27	2026/4/26
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2024/7/6	2025/7/5
	EMC102-KM-KM-3000	150929	2024/7/6	2025/7/5
RF Coaxial Cable HUBER+SUHNER	EMC104-SM-SM-10000	Cable-CH1-01(RFC-SMS-100-SMS-120+RFC-SMS-100-SMS-4)	2025/4/27	2026/4/26
	SUCOFLEX 104	Cable-CH4-03(250724)	2025/4/27	2026/4/26
Signal & Spectrum Analyzer R&S	FSV3044	101105	2025/2/25	2026/2/24
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2025/5/9 ~ 2025/5/10

4.8 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
AC Power Supply Extech Electronics Co.	6905S	1720444	N/A	N/A
Digital Multimeter Fluke	8050A	4660081	2024/6/14	2025/6/13
PXA Signal Analyzer Keysight	N9030B	MY57140938	2025/3/24	2026/3/23
Radio Communication Analyzer Anritsu	MT8821C	6261806803	2025/2/19	2026/2/18
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Temperature & Humidity Chamber Terchy	MHU-225AU	920842	2024/6/21	2025/6/20

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2025/5/19

5 Limits of Test Items

5.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

For LTE Band 2:

Mobile and portable stations are limited to 2 watts EIRP.

For LTE Band 4, LTE Band 66:

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 LTE Band 5:

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

For LTE Band 12, LTE Band 71:

Control and mobile stations in the 698-746 MHz band are limited to 30 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 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, LTE Band 66:

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 12, 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 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, LTE Band 66:

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 12, 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 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, LTE Band 66:

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 12, 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 LTE Band 2, LTE Band 4, LTE Band 12, LTE Band 66, 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).

For LTE Band 5:

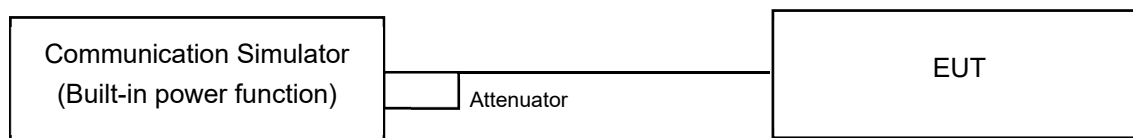
1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

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:

$$\text{EIRP} = P_{\text{Meas}} + G_T$$

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

where

ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively

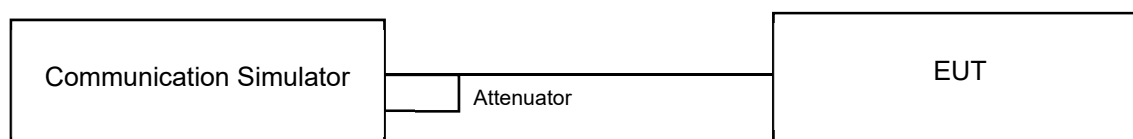
(expressed in the same units as P_{Meas} , e.g., dBm or dBW)

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

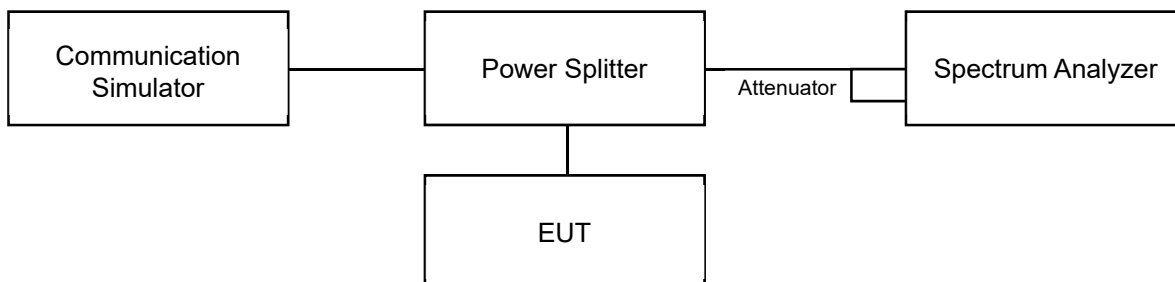


6.2.2 Test Procedure

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

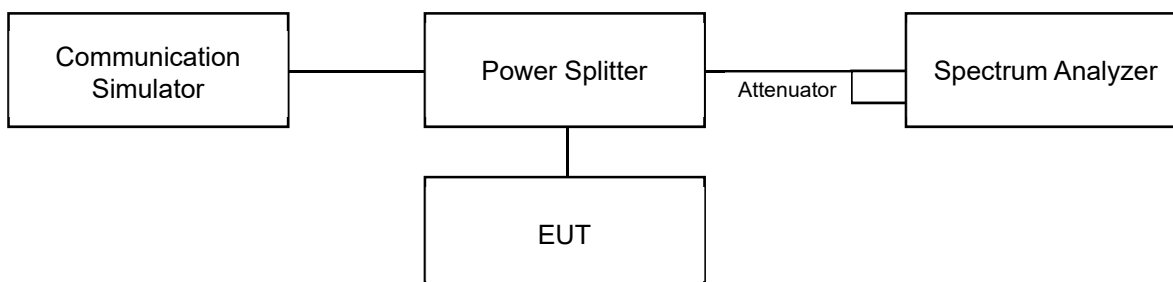


6.3.2 Test Procedure

- Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth;
- Set the number of counts to a value that stabilizes the measured CCDF curve;
- 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.

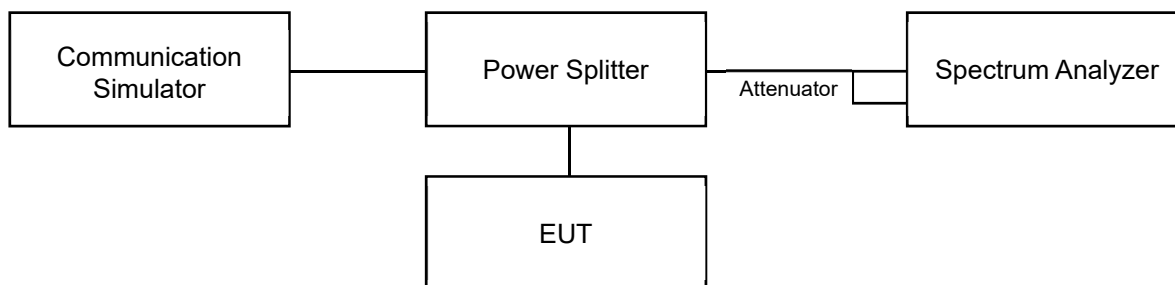
- The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
- The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set $\geq 3 \times$ RBW.
- 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.
- 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.
- Set spectrum analyzer detection mode to peak, and the trace mode to max hold.
- 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).
- 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.
- 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 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 $\geq 3 \times$ 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



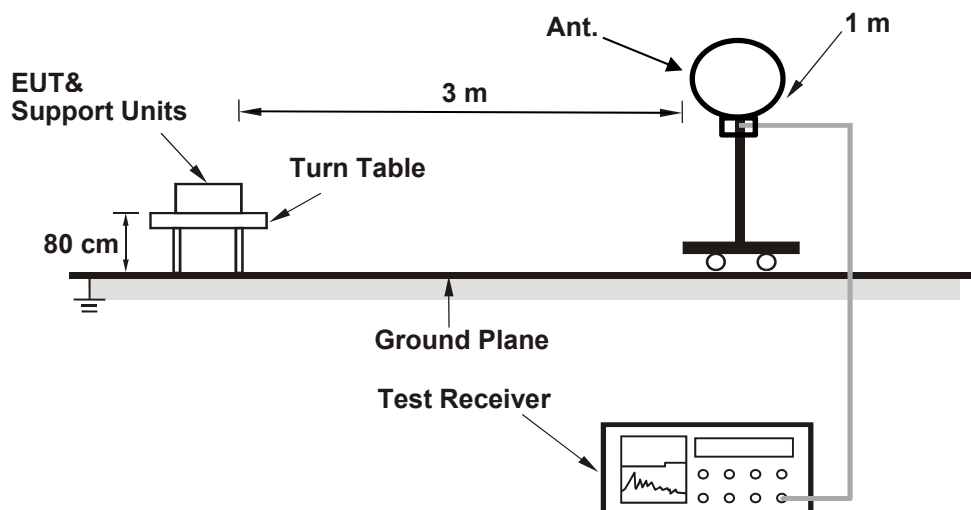
6.5.2 Test Procedure

- 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 highest 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 $\geq$ 100 kHz, VBW $\geq$ 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. For the emissions measurement method, certain channel BW modes demonstrate compliance by integrating with the smaller RBW allowed by the rule.
For example: Where Reference RBW = 1 MHz and a smaller RBW = 100 kHz is used, worst-case integrated BW power = [Max Measured Value (dBm) with RBW = 100 kHz] + $10 \cdot \log(1000/100)$. To compensate for this integration before comparison to the value, the adjusted reference level offset was increase by 10 dB accordingly.
- h. Record the maximum power value test plot.

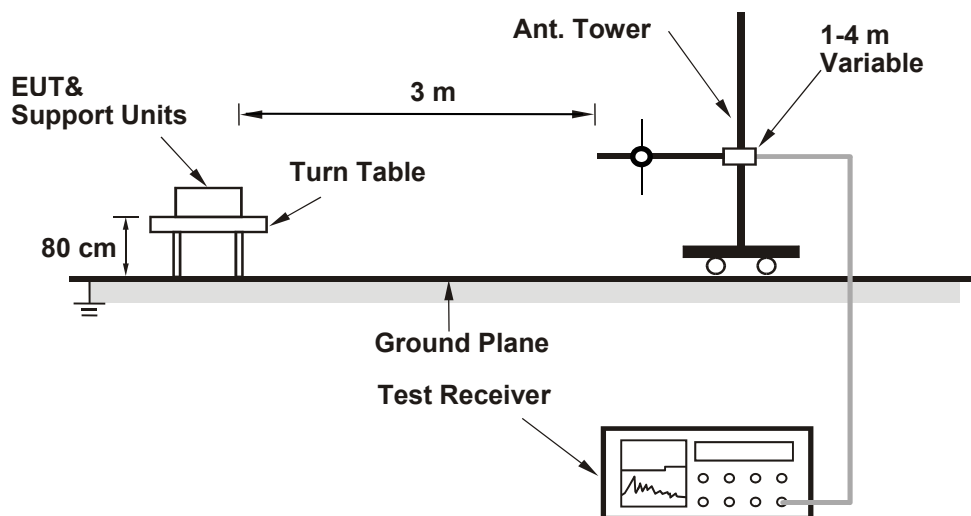
6.6 Radiated Spurious Emissions below 1GHz

6.6.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



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

6.6.2 Test Procedure

The EUT is configured 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 ANSI C63.26 section 5.5 and 5.2.7
- e. $EIRP (dBm) = E (dB\mu V/m) + 20\log(D) - 104.8$; where D is the measurement distance (in the far field region) in m.
- f. $ERP (dBm) = E (dB\mu V/m) + 20\log(D) - 104.8 - 2.15$; where D is the measurement distance (in the far field region) in m.

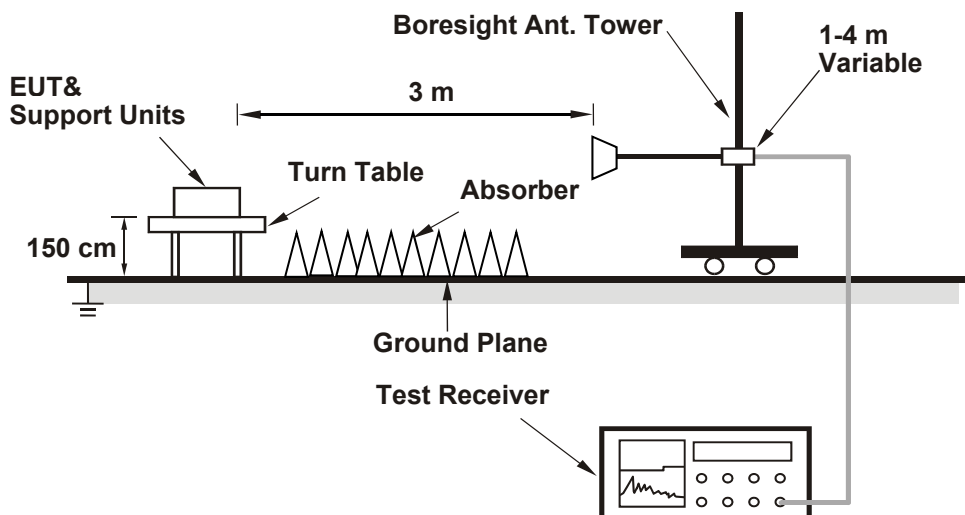
Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz. Set detector = average.
2. The amplitude of spurious emissions in the range 9 kHz to 30 MHz which are attenuated more than 20 dB below the permissible value need not be reported.

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

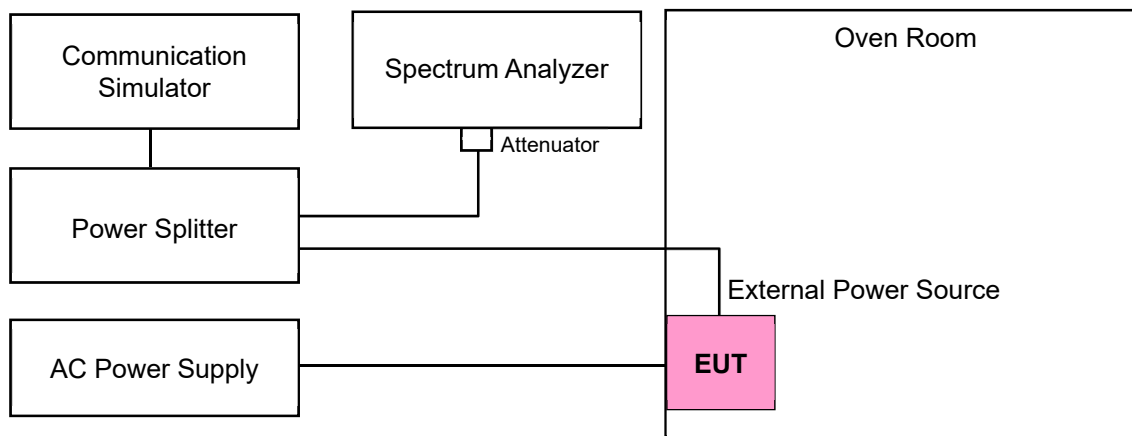
The EUT is configured to set data modulation and maximum power using WWAN technology.

- 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.
- 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.
- 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.
- Following ANSI C63.26 section 5.5 and 5.2.7
- $EIRP \text{ (dBm)} = E \text{ (dB}\mu\text{V/m)} + 20\log(D) - 104.8$; where D is the measurement distance (in the far field region) in m.
- $ERP \text{ (dBm)} = E \text{ (dB}\mu\text{V/m)} + 20\log(D) - 104.8 - 2.15$; where D is the measurement distance (in the far field region) in m.

Note: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz. Set detector = average.

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.

- 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.
- 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.
- The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the $\pm 0.5^{\circ}\text{C}$ 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:	120 Vac, 60 Hz	Environmental Conditions:	22°C, 68% RH	Tested By:	Willy Cheng
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7.1.1 LTE Band 2

LTE Band 2, Channel Bandwidth: 1.4 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 18607	CH 18900	CH 19193
			1850.7 MHz	1880 MHz	1909.3 MHz
QPSK	1	0	24.90	24.80	24.49
	1	2	24.95	23.93	22.40
	1	5	24.96	24.05	22.57
	3	0	24.92	23.99	22.43
	3	1	25.02	23.90	22.50
	3	3	25.21	24.00	22.57
	6	0	24.08	22.86	21.50
16QAM	1	0	23.99	23.89	23.68
	1	2	24.30	24.23	23.72
	1	5	24.32	24.04	23.71
	3	0	24.04	23.95	23.64
	3	1	24.07	23.91	23.58
	3	3	23.94	24.02	23.63
	6	0	22.96	22.75	22.47
64QAM	1	0	23.14	23.00	22.66
	1	2	23.15	22.97	22.53
	1	5	23.18	23.03	22.77
	3	0	22.95	23.00	22.44
	3	1	22.92	22.94	22.56
	3	3	22.97	22.88	22.49
	6	0	22.07	21.97	21.47
256QAM	1	0	19.99	19.72	19.36
	1	2	20.17	19.89	19.59
	1	5	19.88	20.21	19.56
	3	0	20.01	19.97	19.35
	3	1	19.92	19.89	19.47
	3	3	20.02	19.90	19.33
	6	0	19.85	19.80	19.29

Output Power					
Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.50	25.21	22.45	26.16	33.01
16QAM	22.47	24.32	23.42	25.27	33.01
64QAM	21.47	23.18	22.42	24.13	33.01
256QAM	19.29	20.21	20.24	21.16	33.01

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

LTE Band 2, Channel Bandwidth: 3 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 18615	CH 18900	CH 19185
			1851.5 MHz	1880 MHz	1908.5 MHz
QPSK	1	0	25.03	24.90	24.52
	1	7	24.93	23.97	22.50
	1	14	25.07	24.09	22.63
	8	0	24.10	23.11	21.59
	8	3	24.06	23.02	21.58
	8	7	24.27	23.08	21.69
	15	0	24.17	23.03	21.67
16QAM	1	0	24.01	24.11	23.71
	1	7	24.35	24.21	23.85
	1	14	24.36	24.15	23.83
	8	0	23.08	23.04	22.67
	8	3	23.12	23.00	22.57
	8	7	23.12	23.11	22.67
	15	0	23.08	22.90	22.58
64QAM	1	0	23.16	23.14	22.73
	1	7	23.19	23.04	22.70
	1	14	23.14	23.26	22.87
	8	0	22.02	22.02	21.53
	8	3	22.03	22.01	21.65
	8	7	22.00	21.94	21.55
	15	0	22.01	22.06	21.62
256QAM	1	0	20.15	19.85	19.43
	1	7	20.09	20.03	19.59
	1	14	19.97	20.20	19.57
	8	0	20.05	19.95	19.50
	8	3	19.94	20.01	19.54
	8	7	20.14	19.96	19.56
	15	0	20.05	19.91	19.47

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.58	25.07	22.53	26.02	33.01
16QAM	22.57	24.36	23.52	25.31	33.01
64QAM	21.53	23.26	22.48	24.21	33.01
256QAM	19.43	20.20	20.38	21.15	33.01

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

LTE Band 2, Channel Bandwidth: 5 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 18625	CH 18900	CH 19175
			1852.5 MHz	1880 MHz	1907.5 MHz
QPSK	1	0	25.08	24.94	24.57
	1	12	25.03	24.03	22.60
	1	24	25.10	24.14	22.66
	12	0	24.14	23.15	21.66
	12	6	24.08	23.03	21.59
	12	13	24.33	23.13	21.76
	25	0	24.17	23.03	21.69
16QAM	1	0	24.11	24.11	23.79
	1	12	24.40	24.30	23.91
	1	24	24.36	24.22	23.87
	12	0	23.14	23.08	22.71
	12	6	23.17	23.04	22.66
	12	13	23.12	23.13	22.70
	25	0	23.14	22.99	22.58
64QAM	1	0	23.16	23.16	22.74
	1	12	23.23	23.06	22.71
	1	24	23.19	23.28	22.88
	12	0	22.07	22.04	21.58
	12	6	22.06	22.05	21.72
	12	13	22.08	22.01	21.61
	25	0	22.11	22.13	21.69
256QAM	1	0	20.18	19.93	19.44
	1	12	20.19	20.06	19.69
	1	24	20.04	20.23	19.61
	12	0	20.06	20.02	19.54
	12	6	20.02	20.09	19.56
	12	13	20.16	20.06	19.56
	25	0	20.05	19.95	19.47

Output Power					
Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.59	25.10	22.54	26.05	33.01
16QAM	22.58	24.40	23.53	25.35	33.01
64QAM	21.58	23.28	22.53	24.23	33.01
256QAM	19.44	20.23	20.39	21.18	33.01

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

LTE Band 2, Channel Bandwidth: 10 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 18650	CH 18900	CH 19150
			1855 MHz	1880 MHz	1905 MHz
QPSK	1	0	25.08	25.03	24.65
	1	24	25.13	24.03	22.63
	1	49	25.19	24.15	22.67
	25	0	24.17	23.21	21.70
	25	12	24.11	23.13	21.64
	25	25	24.35	23.14	21.82
	50	0	24.18	23.08	21.72
16QAM	1	0	24.18	24.14	23.83
	1	24	24.42	24.37	23.95
	1	49	24.36	24.26	23.90
	25	0	23.16	23.16	22.73
	25	12	23.17	23.06	22.72
	25	25	23.22	23.16	22.79
	50	0	23.18	23.09	22.65
64QAM	1	0	23.26	23.16	22.81
	1	24	23.23	23.11	22.75
	1	49	23.29	23.31	22.90
	25	0	22.15	22.14	21.63
	25	12	22.11	22.07	21.78
	25	25	22.14	22.06	21.62
	50	0	22.17	22.15	21.74
256QAM	1	0	20.24	19.99	19.50
	1	24	20.19	20.10	19.74
	1	49	20.14	20.26	19.70
	25	0	20.16	20.04	19.62
	25	12	20.02	20.13	19.62
	25	25	20.22	20.11	19.63
	50	0	20.08	20.05	19.56

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.64	25.19	22.59	26.14	33.01
16QAM	22.65	24.42	23.60	25.37	33.01
64QAM	21.62	23.31	22.57	24.26	33.01
256QAM	19.50	20.26	20.45	21.21	33.01

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

LTE Band 2, Channel Bandwidth: 15 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 18675	CH 18900	CH 19125
			1857.5 MHz	1880 MHz	1902.5 MHz
QPSK	1	0	25.15	25.12	24.71
	1	37	25.22	24.13	22.70
	1	74	25.27	24.25	22.75
	36	0	24.25	23.24	21.76
	36	19	24.18	23.17	21.69
	36	39	24.38	23.24	21.89
	75	0	24.24	23.14	21.73
16QAM	1	0	24.28	24.23	23.83
	1	37	24.51	24.41	24.00
	1	74	24.41	24.36	23.91
	36	0	23.20	23.22	22.79
	36	19	23.25	23.15	22.75
	36	39	23.25	23.22	22.80
	75	0	23.22	23.10	22.66
64QAM	1	0	23.31	23.25	22.89
	1	37	23.28	23.21	22.77
	1	74	23.34	23.34	22.93
	36	0	22.18	22.17	21.66
	36	19	22.20	22.12	21.79
	36	39	22.21	22.16	21.69
	75	0	22.24	22.18	21.75
256QAM	1	0	20.24	20.07	19.58
	1	37	20.20	20.13	19.75
	1	74	20.23	20.27	19.77
	36	0	20.18	20.08	19.69
	36	19	20.08	20.15	19.66
	36	39	20.23	20.18	19.68
	75	0	20.15	20.10	19.63

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.69	25.27	22.64	26.22	33.01
16QAM	22.66	24.51	23.61	25.46	33.01
64QAM	21.66	23.34	22.61	24.29	33.01
256QAM	19.58	20.27	20.53	21.22	33.01

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

LTE Band 2, Channel Bandwidth: 20 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 18700	CH 18900	CH 19100
			1860 MHz	1880 MHz	1900 MHz
QPSK	1	0	25.25	25.19	24.78
	1	50	25.27	24.21	22.75
	1	99	25.31	24.25	22.80
	50	0	24.28	23.26	21.77
	50	25	24.25	23.23	21.74
	50	50	24.38	23.32	21.91
	100	0	24.27	23.22	21.76
16QAM	1	0	24.35	24.27	23.88
	1	50	24.55	24.50	24.06
	1	99	24.51	24.42	23.99
	50	0	23.23	23.23	22.80
	50	25	23.28	23.19	22.77
	50	50	23.33	23.23	22.81
	100	0	23.27	23.18	22.69
64QAM	1	0	23.37	23.31	22.89
	1	50	23.37	23.27	22.82
	1	99	23.42	23.38	22.94
	50	0	22.27	22.19	21.75
	50	25	22.25	22.21	21.79
	50	50	22.31	22.22	21.73
	100	0	22.32	22.23	21.77
256QAM	1	0	20.26	20.16	19.67
	1	50	20.25	20.15	19.75
	1	99	20.32	20.31	19.82
	50	0	20.18	20.14	19.74
	50	25	20.18	20.16	19.72
	50	50	20.27	20.19	19.76
	100	0	20.23	20.17	19.68

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.74	25.31	22.69	26.26	33.01
16QAM	22.69	24.55	23.64	25.50	33.01
64QAM	21.73	23.42	22.68	24.37	33.01
256QAM	19.67	20.32	20.62	21.27	33.01

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

7.1.2 LTE Band 4

LTE Band 4, Channel Bandwidth: 1.4 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 19957	CH 20175	CH 20393
			1710.7 MHz	1732.5 MHz	1754.3 MHz
QPSK	1	0	24.74	24.52	24.66
	1	2	24.92	24.93	24.95
	1	5	25.28	25.22	25.40
	3	0	24.93	24.68	24.89
	3	1	25.10	24.99	25.12
	3	3	24.93	24.98	24.99
	6	0	23.90	23.91	24.16
16QAM	1	0	23.83	23.91	23.81
	1	2	24.36	24.23	24.25
	1	5	24.43	24.30	24.44
	3	0	23.94	23.65	23.80
	3	1	23.96	23.71	24.06
	3	3	24.09	24.04	24.16
	6	0	22.86	22.72	23.00
64QAM	1	0	22.52	22.58	22.60
	1	2	22.60	22.49	22.67
	1	5	23.15	23.02	23.10
	3	0	22.51	22.42	22.65
	3	1	22.64	22.26	22.52
	3	3	22.44	22.51	22.65
	6	0	21.71	21.31	21.54
256QAM	1	0	19.46	19.23	19.64
	1	2	19.44	19.29	19.49
	1	5	19.88	19.76	20.00
	3	0	19.42	19.26	19.38
	3	1	19.50	19.30	19.51
	3	3	19.62	19.58	19.62
	6	0	19.07	18.86	19.00

Output Power					
Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	23.90	25.40	24.92	26.42	30
16QAM	22.72	24.44	23.74	25.46	30
64QAM	21.31	23.15	22.33	24.17	30
256QAM	18.86	20.00	19.88	21.02	30

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

LTE Band 4, Channel Bandwidth: 3 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 19965	CH 20175	CH 20385
			1711.5 MHz	1732.5 MHz	1753.5 MHz
QPSK	1	0	24.80	24.72	24.84
	1	7	25.08	25.03	25.12
	1	14	25.40	25.28	25.43
	8	0	24.07	23.82	24.03
	8	3	24.10	24.13	24.15
	8	7	24.13	24.12	24.22
	15	0	24.07	23.94	24.21
16QAM	1	0	23.95	23.98	23.99
	1	7	24.37	24.40	24.43
	1	14	24.52	24.44	24.57
	8	0	23.04	22.83	23.01
	8	3	23.19	22.91	23.13
	8	7	23.22	23.22	23.25
	15	0	22.98	22.90	23.05
64QAM	1	0	22.68	22.64	22.73
	1	7	22.74	22.65	22.74
	1	14	23.24	23.13	23.24
	8	0	21.59	21.49	21.68
	8	3	21.72	21.45	21.66
	8	7	21.65	21.68	21.80
	15	0	21.73	21.49	21.66
256QAM	1	0	19.62	19.44	19.74
	1	7	19.56	19.44	19.65
	1	14	20.05	19.92	20.06
	8	0	19.56	19.48	19.57
	8	3	19.54	19.39	19.56
	8	7	19.75	19.64	19.72
	15	0	19.20	18.97	19.03

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	23.82	25.43	24.84	26.45	30
16QAM	22.83	24.57	23.85	25.59	30
64QAM	21.45	23.24	22.47	24.26	30
256QAM	18.97	20.06	19.99	21.08	30

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

LTE Band 4, Channel Bandwidth: 5 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 19975	CH 20175	CH 20375
			1712.5 MHz	1732.5 MHz	1752.5 MHz
QPSK	1	0	24.82	24.72	24.91
	1	12	25.09	25.10	25.15
	1	24	25.42	25.34	25.46
	12	0	24.09	23.92	24.06
	12	6	24.14	24.14	24.21
	12	13	24.23	24.17	24.30
	25	0	24.14	24.02	24.24
16QAM	1	0	23.95	24.01	24.01
	1	12	24.40	24.45	24.51
	1	24	24.57	24.48	24.62
	12	0	23.04	22.88	23.07
	12	6	23.19	23.00	23.22
	12	13	23.30	23.24	23.30
	25	0	23.03	22.94	23.10
64QAM	1	0	22.75	22.66	22.77
	1	12	22.81	22.72	22.83
	1	24	23.32	23.19	23.27
	12	0	21.68	21.59	21.72
	12	6	21.73	21.53	21.73
	12	13	21.75	21.69	21.88
	25	0	21.75	21.56	21.73
256QAM	1	0	19.62	19.52	19.80
	1	12	19.58	19.53	19.75
	1	24	20.07	20.00	20.12
	12	0	19.64	19.55	19.60
	12	6	19.60	19.48	19.65
	12	13	19.78	19.68	19.81
	25	0	19.23	19.00	19.12

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	23.92	25.46	24.94	26.48	30
16QAM	22.88	24.62	23.90	25.64	30
64QAM	21.53	23.32	22.55	24.34	30
256QAM	19.00	20.12	20.02	21.14	30

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

LTE Band 4, Channel Bandwidth: 10 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 20000	CH 20175	CH 20350
			1715 MHz	1732.5 MHz	1750 MHz
QPSK	1	0	24.86	24.80	24.95
	1	24	25.18	25.19	25.17
	1	49	25.42	25.35	25.50
	25	0	24.13	24.01	24.08
	25	12	24.16	24.20	24.27
	25	25	24.25	24.23	24.37
	50	0	24.20	24.11	24.31
16QAM	1	0	24.01	24.08	24.10
	1	24	24.48	24.49	24.55
	1	49	24.62	24.57	24.63
	25	0	23.04	22.91	23.13
	25	12	23.25	23.10	23.23
	25	25	23.38	23.28	23.34
	50	0	23.11	22.97	23.20
64QAM	1	0	22.85	22.74	22.81
	1	24	22.90	22.77	22.88
	1	49	23.33	23.26	23.33
	25	0	21.72	21.59	21.74
	25	12	21.73	21.63	21.82
	25	25	21.82	21.73	21.96
	50	0	21.79	21.61	21.77
256QAM	1	0	19.71	19.62	19.81
	1	24	19.67	19.59	19.77
	1	49	20.14	20.09	20.15
	25	0	19.68	19.65	19.63
	25	12	19.65	19.50	19.73
	25	25	19.80	19.73	19.83
	50	0	19.24	19.03	19.18

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	24.01	25.50	25.03	26.52	30
16QAM	22.91	24.63	23.93	25.65	30
64QAM	21.59	23.33	22.61	24.35	30
256QAM	19.03	20.15	20.05	21.17	30

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

LTE Band 4, Channel Bandwidth: 15 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 20025	CH 20175	CH 20325
			1717.5 MHz	1732.5 MHz	1747.5 MHz
QPSK	1	0	24.88	24.84	24.95
	1	37	25.23	25.20	25.26
	1	74	25.50	25.38	25.54
	36	0	24.15	24.11	24.14
	36	19	24.26	24.26	24.36
	36	39	24.33	24.24	24.44
	75	0	24.26	24.14	24.34
16QAM	1	0	24.09	24.11	24.16
	1	37	24.58	24.53	24.59
	1	74	24.64	24.57	24.73
	36	0	23.08	22.99	23.20
	36	19	23.25	23.18	23.23
	36	39	23.38	23.33	23.43
	75	0	23.17	23.07	23.21
64QAM	1	0	22.85	22.76	22.89
	1	37	22.97	22.84	22.92
	1	74	23.36	23.28	23.37
	36	0	21.72	21.63	21.78
	36	19	21.83	21.69	21.84
	36	39	21.84	21.80	22.00
	75	0	21.82	21.70	21.82
256QAM	1	0	19.75	19.68	19.81
	1	37	19.77	19.63	19.81
	1	74	20.22	20.13	20.18
	36	0	19.73	19.65	19.70
	36	19	19.66	19.58	19.77
	36	39	19.80	19.75	19.88
	75	0	19.26	19.13	19.22

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	24.11	25.54	25.13	26.56	30
16QAM	22.99	24.73	24.01	25.75	30
64QAM	21.63	23.37	22.65	24.39	30
256QAM	19.13	20.22	20.15	21.24	30

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

LTE Band 4, Channel Bandwidth: 20 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 20050	CH 20175	CH 20300
			1720 MHz	1732.5 MHz	1745 MHz
QPSK	1	0	24.90	24.87	25.02
	1	50	25.30	25.24	25.35
	1	99	25.54	25.48	25.61
	50	0	24.22	24.17	24.23
	50	25	24.36	24.31	24.37
	50	50	24.37	24.33	24.45
	100	0	24.33	24.24	24.36
16QAM	1	0	24.16	24.16	24.19
	1	50	24.63	24.55	24.64
	1	99	24.69	24.63	24.76
	50	0	23.12	23.08	23.22
	50	25	23.25	23.19	23.33
	50	50	23.42	23.38	23.45
	100	0	23.26	23.17	23.31
64QAM	1	0	22.88	22.79	22.96
	1	50	23.01	22.91	23.02
	1	99	23.41	23.31	23.47
	50	0	21.75	21.65	21.82
	50	25	21.84	21.78	21.86
	50	50	21.94	21.85	22.04
	100	0	21.82	21.72	21.92
256QAM	1	0	19.80	19.77	19.89
	1	50	19.78	19.70	19.83
	1	99	20.23	20.20	20.24
	50	0	19.75	19.68	19.77
	50	25	19.76	19.67	19.81
	50	50	19.89	19.85	19.93
	100	0	19.27	19.17	19.32

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	24.17	25.61	25.19	26.63	30
16QAM	23.08	24.76	24.10	25.78	30
64QAM	21.65	23.47	22.67	24.49	30
256QAM	19.17	20.24	20.19	21.26	30

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

7.1.3 LTE Band 5

LTE Band 5, Channel Bandwidth: 1.4 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 20407	CH 20525	CH 20643
			824.7 MHz	836.5 MHz	848.3 MHz
QPSK	1	0	25.05	24.64	24.68
	1	2	24.72	24.72	24.51
	1	5	25.03	24.93	24.84
	3	0	24.61	24.67	24.48
	3	1	24.56	24.54	24.57
	3	3	24.72	24.76	24.66
	6	0	23.76	23.76	23.61
16QAM	1	0	23.77	23.75	23.68
	1	2	23.81	23.88	23.95
	1	5	24.17	24.02	23.86
	3	0	23.62	23.43	23.59
	3	1	23.59	23.62	23.42
	3	3	23.71	23.84	23.72
	6	0	22.61	22.57	22.51
64QAM	1	0	22.57	22.65	22.55
	1	2	22.96	22.75	22.68
	1	5	23.00	23.03	22.89
	3	0	23.03	22.92	22.87
	3	1	23.07	22.94	23.06
	3	3	23.15	23.10	23.14
	6	0	21.87	21.83	21.73
256QAM	1	0	19.85	19.95	19.78
	1	2	19.98	20.10	20.08
	1	5	20.05	20.13	20.17
	3	0	19.99	19.75	19.86
	3	1	20.02	19.84	19.76
	3	3	20.08	19.97	19.97
	6	0	19.91	19.81	19.81

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	23.61	25.05	23.52	24.96	38.45
16QAM	22.51	24.17	22.42	24.08	38.45
64QAM	21.73	23.15	21.64	23.06	38.45
256QAM	19.75	20.17	19.66	20.08	38.45

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 5, Channel Bandwidth: 3 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 20415	CH 20525	CH 20635
			825.5 MHz	836.5 MHz	847.5 MHz
QPSK	1	0	25.22	24.81	24.81
	1	7	24.80	24.80	24.61
	1	14	25.09	25.00	24.94
	8	0	23.67	23.73	23.70
	8	3	23.72	23.61	23.60
	8	7	23.91	23.91	23.79
	15	0	23.77	23.83	23.78
16QAM	1	0	23.90	23.90	23.83
	1	7	24.02	24.03	24.01
	1	14	24.24	24.10	24.04
	8	0	22.74	22.65	22.62
	8	3	22.74	22.81	22.64
	8	7	22.91	22.96	22.87
	15	0	22.70	22.78	22.71
64QAM	1	0	22.80	22.79	22.68
	1	7	23.02	22.84	22.74
	1	14	23.21	23.09	23.00
	8	0	22.07	22.04	21.87
	8	3	22.15	22.06	22.06
	8	7	22.16	22.20	22.20
	15	0	22.04	22.01	21.91
256QAM	1	0	20.00	20.01	19.91
	1	7	20.21	20.12	20.16
	1	14	20.25	20.26	20.24
	8	0	19.99	19.91	19.97
	8	3	20.15	20.00	19.89
	8	7	20.19	20.05	20.11
	15	0	20.01	19.94	19.99

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	23.60	25.22	23.51	25.13	38.45
16QAM	22.62	24.24	22.53	24.15	38.45
64QAM	21.87	23.21	21.78	23.12	38.45
256QAM	19.89	20.26	19.80	20.17	38.45

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 5, Channel Bandwidth: 5 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 20425	CH 20525	CH 20625
			826.5 MHz	836.5 MHz	846.5 MHz
QPSK	1	0	25.31	24.84	24.82
	1	12	24.89	24.83	24.68
	1	24	25.09	25.04	25.01
	12	0	23.76	23.77	23.74
	12	6	23.74	23.70	23.69
	12	13	23.97	23.98	23.88
	25	0	23.86	23.93	23.81
16QAM	1	0	24.00	23.92	23.89
	1	12	24.09	24.13	24.09
	1	24	24.29	24.15	24.09
	12	0	22.77	22.74	22.68
	12	6	22.83	22.83	22.68
	12	13	22.93	22.99	22.90
	25	0	22.77	22.85	22.74
64QAM	1	0	22.90	22.80	22.69
	1	12	23.02	22.90	22.84
	1	24	23.22	23.16	23.07
	12	0	22.10	22.07	21.93
	12	6	22.19	22.06	22.11
	12	13	22.24	22.24	22.22
	25	0	22.14	22.05	21.98
256QAM	1	0	20.10	20.01	19.98
	1	12	20.21	20.15	20.19
	1	24	20.33	20.36	20.32
	12	0	20.04	19.97	19.99
	12	6	20.15	20.01	19.91
	12	13	20.27	20.11	20.12
	25	0	20.09	19.97	20.01

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	23.69	25.31	23.60	25.22	38.45
16QAM	22.68	24.29	22.59	24.20	38.45
64QAM	21.93	23.22	21.84	23.13	38.45
256QAM	19.91	20.36	19.82	20.27	38.45

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 5, Channel Bandwidth: 10 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 20450	CH 20525	CH 20600
			829 MHz	836.5 MHz	844 MHz
QPSK	1	0	25.35	24.87	24.82
	1	24	24.92	24.83	24.75
	1	49	25.11	25.06	25.03
	25	0	23.85	23.84	23.78
	25	12	23.81	23.71	23.70
	25	25	24.06	24.02	23.93
	50	0	23.95	23.93	23.85
16QAM	1	0	24.04	23.99	23.89
	1	24	24.19	24.19	24.17
	1	49	24.31	24.23	24.14
	25	0	22.82	22.82	22.74
	25	12	22.88	22.86	22.78
	25	25	23.03	23.01	23.00
	50	0	22.87	22.86	22.81
64QAM	1	0	22.91	22.83	22.74
	1	24	23.02	22.94	22.85
	1	49	23.22	23.19	23.16
	25	0	22.16	22.12	22.03
	25	12	22.19	22.12	22.11
	25	25	22.31	22.26	22.22
	50	0	22.16	22.09	22.02
256QAM	1	0	20.17	20.11	20.06
	1	24	20.23	20.22	20.20
	1	49	20.43	20.42	20.37
	25	0	20.12	20.07	20.00
	25	12	20.17	20.07	19.97
	25	25	20.27	20.19	20.19
	50	0	20.15	20.07	20.04

Output Power					
Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	23.70	25.35	23.61	25.26	38.45
16QAM	22.74	24.31	22.65	24.22	38.45
64QAM	22.02	23.22	21.93	23.13	38.45
256QAM	19.97	20.43	19.88	20.34	38.45

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

ERP (dBm) = EIRP (dBm) - 2.15

7.1.4 LTE Band 12

LTE Band 12, Channel Bandwidth: 1.4 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 23017	CH 23095	CH 23173
			699.7 MHz	707.5 MHz	715.3 MHz
QPSK	1	0	25.02	24.92	25.00
	1	2	24.92	24.88	24.88
	1	5	24.83	24.52	24.47
	3	0	24.94	24.77	24.88
	3	1	24.73	24.68	24.76
	3	3	25.13	24.86	24.88
	6	0	24.06	23.81	23.93
16QAM	1	0	24.07	24.11	24.14
	1	2	24.05	24.09	24.17
	1	5	23.77	23.66	23.71
	3	0	24.07	24.12	24.11
	3	1	24.17	24.17	24.13
	3	3	24.17	24.14	24.04
	6	0	23.11	23.05	23.16
64QAM	1	0	23.09	23.30	23.20
	1	2	23.16	23.05	22.88
	1	5	23.16	23.15	23.13
	3	0	23.27	23.19	23.13
	3	1	23.13	22.99	23.04
	3	3	23.22	23.05	22.98
	6	0	22.07	22.13	22.11
256QAM	1	0	20.17	20.10	19.98
	1	2	20.16	20.12	20.04
	1	5	20.20	20.10	20.06
	3	0	20.06	20.18	20.05
	3	1	20.12	20.06	19.92
	3	3	20.06	20.15	20.00
	6	0	20.22	20.11	20.08

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	23.81	25.13	24.12	25.44	44.77
16QAM	23.05	24.17	23.36	24.48	44.77
64QAM	22.07	23.3	22.38	23.61	44.77
256QAM	19.92	20.22	20.23	20.53	44.77

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 12, Channel Bandwidth: 3 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 23025	CH 23095	CH 23165
			700.5 MHz	707.5 MHz	714.5 MHz
QPSK	1	0	25.10	24.95	24.99
	1	7	25.02	24.88	24.98
	1	14	24.86	24.70	24.68
	8	0	23.94	23.87	23.95
	8	3	23.91	23.77	23.82
	8	7	24.17	23.98	24.02
	15	0	24.12	23.99	23.98
16QAM	1	0	24.23	24.24	24.21
	1	7	24.14	24.17	24.14
	1	14	23.88	23.83	23.74
	8	0	23.27	23.21	23.16
	8	3	23.26	23.15	23.18
	8	7	23.28	23.31	23.09
	15	0	23.15	23.14	23.17
64QAM	1	0	23.26	23.32	23.25
	1	7	23.18	23.14	23.06
	1	14	23.15	23.17	23.14
	8	0	22.25	22.26	22.20
	8	3	22.26	22.09	22.08
	8	7	22.17	22.12	22.08
	15	0	22.13	22.27	22.10
256QAM	1	0	20.26	20.11	20.16
	1	7	20.20	20.20	20.19
	1	14	20.27	20.16	20.12
	8	0	20.13	20.20	20.12
	8	3	20.16	20.09	20.00
	8	7	20.21	20.15	20.01
	15	0	20.36	20.12	20.15

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	23.77	25.10	24.08	25.41	44.77
16QAM	23.09	24.24	23.40	24.55	44.77
64QAM	22.08	23.32	22.39	23.63	44.77
256QAM	20.00	20.36	20.31	20.67	44.77

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 12, Channel Bandwidth: 5 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 23035	CH 23095	CH 23155
			701.5 MHz	707.5 MHz	713.5 MHz
QPSK	1	0	25.14	25.05	25.05
	1	12	25.08	24.95	25.01
	1	24	24.91	24.73	24.70
	12	0	24.01	23.96	24.01
	12	6	23.95	23.82	23.87
	12	13	24.18	24.07	24.03
	25	0	24.14	24.02	23.98
16QAM	1	0	24.29	24.26	24.26
	1	12	24.21	24.24	24.21
	1	24	23.95	23.87	23.80
	12	0	23.27	23.28	23.23
	12	6	23.28	23.24	23.24
	12	13	23.31	23.33	23.16
	25	0	23.23	23.21	23.22
64QAM	1	0	23.28	23.36	23.33
	1	12	23.26	23.19	23.12
	1	24	23.24	23.23	23.22
	12	0	22.34	22.26	22.24
	12	6	22.28	22.16	22.11
	12	13	22.25	22.14	22.12
	25	0	22.21	22.27	22.19
256QAM	1	0	20.27	20.13	20.16
	1	12	20.28	20.21	20.20
	1	24	20.30	20.20	20.15
	12	0	20.21	20.20	20.17
	12	6	20.26	20.17	20.04
	12	13	20.26	20.23	20.11
	25	0	20.37	20.22	20.22

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	23.82	25.14	24.13	25.45	44.77
16QAM	23.16	24.29	23.47	24.60	44.77
64QAM	22.11	23.36	22.42	23.67	44.77
256QAM	20.04	20.37	20.35	20.68	44.77

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 12, Channel Bandwidth: 10 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 23060	CH 23095	CH 23130
			704 MHz	707.5 MHz	711 MHz
QPSK	1	0	25.19	25.12	25.07
	1	24	25.08	25.05	25.02
	1	49	24.91	24.83	24.73
	25	0	24.09	24.02	24.02
	25	12	24.02	23.92	23.87
	25	25	24.18	24.17	24.08
	50	0	24.17	24.07	23.98
16QAM	1	0	24.36	24.31	24.27
	1	24	24.28	24.27	24.26
	1	49	23.96	23.92	23.86
	25	0	23.34	23.31	23.30
	25	12	23.30	23.29	23.26
	25	25	23.38	23.34	23.24
	50	0	23.32	23.30	23.25
64QAM	1	0	23.38	23.37	23.36
	1	24	23.30	23.23	23.17
	1	49	23.32	23.28	23.23
	25	0	22.36	22.35	22.28
	25	12	22.32	22.23	22.21
	25	25	22.29	22.22	22.14
	50	0	22.29	22.29	22.29
256QAM	1	0	20.29	20.21	20.21
	1	24	20.35	20.31	20.25
	1	49	20.30	20.25	20.19
	25	0	20.31	20.27	20.18
	25	12	20.29	20.19	20.11
	25	25	20.31	20.26	20.20
	50	0	20.38	20.32	20.24

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	23.87	25.19	24.18	25.50	44.77
16QAM	23.24	24.36	23.55	24.67	44.77
64QAM	22.14	23.38	22.45	23.69	44.77
256QAM	20.11	20.38	20.42	20.69	44.77

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

ERP (dBm) = EIRP (dBm) - 2.15

7.1.5 LTE Band 66

LTE Band 66, Channel Bandwidth: 1.4 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 131979	CH 132322	CH 132665
			1710.7 MHz	1745 MHz	1779.3 MHz
QPSK	1	0	24.86	24.69	24.75
	1	2	24.67	24.80	24.95
	1	5	24.82	24.66	24.78
	3	0	24.74	24.74	24.78
	3	1	24.69	24.78	24.84
	3	3	24.70	24.68	24.91
	6	0	23.70	23.68	23.81
16QAM	1	0	23.79	23.90	24.05
	1	2	23.83	23.88	24.10
	1	5	23.98	24.04	23.89
	3	0	23.84	23.75	23.75
	3	1	23.90	23.83	23.87
	3	3	23.84	23.75	23.94
	6	0	22.83	22.71	22.84
64QAM	1	0	22.73	22.66	22.74
	1	2	22.85	22.79	23.05
	1	5	22.80	22.86	22.87
	3	0	22.72	22.64	22.77
	3	1	22.76	22.77	22.88
	3	3	22.89	22.68	22.80
	6	0	21.62	21.66	21.78
256QAM	1	0	19.82	19.56	19.63
	1	2	19.97	19.83	19.84
	1	5	19.78	19.71	19.81
	3	0	19.74	19.38	19.80
	3	1	19.68	19.64	19.76
	3	3	19.63	19.64	19.68
	6	0	19.65	19.43	19.77

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	23.68	24.95	24.70	25.97	30.00
16QAM	22.71	24.10	23.73	25.12	30.00
64QAM	21.62	23.05	22.64	24.07	30.00
256QAM	19.38	19.97	20.40	20.99	30.00

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

LTE Band 66, Channel Bandwidth: 3 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 131987	CH 132322	CH 132657
			1711.5 MHz	1745 MHz	1778.5 MHz
QPSK	1	0	24.91	24.76	24.86
	1	7	24.76	24.91	25.07
	1	14	24.91	24.76	24.94
	8	0	23.87	23.80	23.99
	8	3	23.81	23.84	23.94
	8	7	23.92	23.77	23.95
	15	0	23.80	23.78	23.97
16QAM	1	0	23.97	24.02	24.30
	1	7	24.00	24.10	24.21
	1	14	24.12	24.17	24.14
	8	0	22.88	22.92	22.87
	8	3	22.99	22.93	23.02
	8	7	23.02	22.91	23.02
	15	0	23.01	22.86	22.93
64QAM	1	0	22.83	22.79	22.94
	1	7	23.03	22.89	23.15
	1	14	22.97	22.97	22.99
	8	0	21.84	21.87	21.87
	8	3	21.86	21.87	21.99
	8	7	21.99	21.84	21.99
	15	0	21.74	21.70	21.94
256QAM	1	0	19.85	19.74	19.77
	1	7	20.08	19.94	19.93
	1	14	19.89	19.86	19.93
	8	0	19.78	19.61	19.86
	8	3	19.75	19.73	19.88
	8	7	19.74	19.79	19.76
	15	0	19.77	19.56	19.89

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	23.77	25.07	24.79	26.09	30.00
16QAM	22.86	24.30	23.88	25.32	30.00
64QAM	21.70	23.15	22.72	24.17	30.00
256QAM	19.56	20.08	20.58	21.10	30.00

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

LTE Band 66, Channel Bandwidth: 5 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 131997	CH 132322	CH 132647
			1712.5 MHz	1745 MHz	1777.5 MHz
QPSK	1	0	25.00	24.80	24.92
	1	12	24.85	24.91	25.08
	1	24	24.98	24.84	24.99
	12	0	23.90	23.89	24.08
	12	6	23.91	23.94	24.00
	12	13	24.00	23.87	23.96
	25	0	23.86	23.83	24.04
16QAM	1	0	24.01	24.09	24.31
	1	12	24.09	24.17	24.22
	1	24	24.18	24.18	24.23
	12	0	22.91	22.97	22.95
	12	6	23.01	22.95	23.09
	12	13	23.02	22.92	23.07
	25	0	23.01	22.91	22.94
64QAM	1	0	22.93	22.89	23.04
	1	12	23.04	22.98	23.18
	1	24	23.07	23.01	23.09
	12	0	21.92	21.91	21.96
	12	6	21.88	21.88	22.06
	12	13	22.00	21.91	22.06
	25	0	21.81	21.70	21.95
256QAM	1	0	19.92	19.81	19.83
	1	12	20.13	20.02	20.00
	1	24	19.92	19.96	20.00
	12	0	19.88	19.64	19.89
	12	6	19.78	19.82	19.90
	12	13	19.78	19.79	19.84
	25	0	19.86	19.64	19.96

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	23.83	25.08	24.85	26.10	30.00
16QAM	22.91	24.31	23.93	25.33	30.00
64QAM	21.70	23.18	22.72	24.20	30.00
256QAM	19.64	20.13	20.66	21.15	30.00

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

LTE Band 66, Channel Bandwidth: 10 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 132022	CH 132322	CH 132622
			1715 MHz	1745 MHz	1775 MHz
QPSK	1	0	25.00	24.88	24.98
	1	24	24.89	24.95	25.11
	1	49	25.01	24.93	25.07
	25	0	23.99	23.92	24.10
	25	12	23.99	23.98	24.06
	25	25	24.10	23.90	24.05
	50	0	23.93	23.83	24.08
16QAM	1	0	24.11	24.13	24.33
	1	24	24.15	24.20	24.32
	1	49	24.27	24.23	24.32
	25	0	22.94	22.99	23.03
	25	12	23.09	22.98	23.09
	25	25	23.05	22.98	23.10
	50	0	23.02	22.91	23.02
64QAM	1	0	22.95	22.97	23.05
	1	24	23.08	23.04	23.18
	1	49	23.15	23.05	23.10
	25	0	22.00	22.00	22.02
	25	12	21.95	21.91	22.06
	25	25	22.00	22.01	22.07
	50	0	21.83	21.80	21.99
256QAM	1	0	19.92	19.89	19.93
	1	24	20.13	20.12	20.10
	1	49	19.94	20.05	20.06
	25	0	19.95	19.74	19.96
	25	12	19.83	19.90	19.95
	25	25	19.79	19.84	19.91
	50	0	19.90	19.71	20.04

Output Power					
Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	23.83	25.11	24.85	26.13	30.00
16QAM	22.91	24.33	23.93	25.35	30.00
64QAM	21.80	23.18	22.82	24.20	30.00
256QAM	19.71	20.13	20.73	21.15	30.00

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

LTE Band 66, Channel Bandwidth: 15 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 132047	CH 132322	CH 132597
			1717.5 MHz	1745 MHz	1772.5 MHz
QPSK	1	0	25.04	24.91	25.07
	1	37	24.99	24.96	25.12
	1	74	25.04	25.01	25.13
	36	0	24.07	23.98	24.13
	36	19	24.08	24.01	24.15
	36	39	24.12	23.98	24.14
	75	0	23.97	23.88	24.12
16QAM	1	0	24.16	24.15	24.34
	1	37	24.20	24.27	24.38
	1	74	24.34	24.23	24.39
	36	0	22.98	22.99	23.12
	36	19	23.10	23.05	23.18
	36	39	23.10	22.98	23.10
	75	0	23.02	22.96	23.03
64QAM	1	0	22.98	23.01	23.15
	1	37	23.11	23.13	23.23
	1	74	23.20	23.14	23.19
	36	0	22.02	22.02	22.05
	36	19	22.01	21.99	22.08
	36	39	22.03	22.05	22.10
	75	0	21.93	21.83	22.01
256QAM	1	0	20.00	19.91	20.02
	1	37	20.14	20.13	20.20
	1	74	20.04	20.07	20.14
	36	0	20.00	19.84	20.03
	36	19	19.92	19.97	20.00
	36	39	19.86	19.84	19.94
	75	0	19.94	19.80	20.08

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	23.88	25.13	24.90	26.15	30.00
16QAM	22.96	24.39	23.98	25.41	30.00
64QAM	21.83	23.23	22.85	24.25	30.00
256QAM	19.80	20.20	20.82	21.22	30.00

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

LTE Band 66, Channel Bandwidth: 20 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 132072	CH 132322	CH 132572
			1720 MHz	1745 MHz	1770 MHz
QPSK	1	0	25.06	24.92	25.09
	1	50	25.04	24.98	25.14
	1	99	25.09	25.02	25.19
	50	0	24.09	24.05	24.18
	50	25	24.15	24.10	24.21
	50	50	24.12	24.08	24.19
	100	0	24.01	23.93	24.15
16QAM	1	0	24.26	24.21	24.34
	1	50	24.28	24.27	24.39
	1	99	24.36	24.30	24.43
	50	0	23.03	23.00	23.17
	50	25	23.15	23.14	23.19
	50	50	23.10	23.07	23.17
	100	0	23.03	22.98	23.10
64QAM	1	0	23.07	23.01	23.17
	1	50	23.15	23.13	23.24
	1	99	23.21	23.14	23.27
	50	0	22.11	22.05	22.15
	50	25	22.11	22.03	22.18
	50	50	22.11	22.08	22.16
	100	0	21.94	21.86	22.08
256QAM	1	0	20.06	19.96	20.11
	1	50	20.16	20.13	20.23
	1	99	20.13	20.12	20.19
	50	0	20.03	19.93	20.09
	50	25	20.02	19.97	20.07
	50	50	19.96	19.94	20.02
	100	0	19.97	19.88	20.09

Output Power					
Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	23.93	25.19	24.95	26.21	30.00
16QAM	22.98	24.43	24.00	25.45	30.00
64QAM	21.86	23.27	22.88	24.29	30.00
256QAM	19.88	20.23	20.90	21.25	30.00

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

7.1.6 LTE Band 71

LTE Band 71, Channel Bandwidth: 5 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 133147	CH 133297	CH 133447
			665.5 MHz	680.5 MHz	695.5 MHz
QPSK	1	0	24.58	24.57	24.56
	1	12	24.56	24.33	24.44
	1	24	24.56	24.40	24.54
	12	0	23.75	23.68	23.72
	12	6	23.96	23.80	23.83
	12	13	23.76	23.61	23.60
	25	0	23.73	23.67	23.73
16QAM	1	0	23.41	23.20	23.31
	1	12	23.25	23.13	23.15
	1	24	23.14	23.03	23.09
	12	0	22.68	22.59	22.71
	12	6	22.96	22.83	22.90
	12	13	22.80	22.71	22.83
	25	0	22.71	22.51	22.57
64QAM	1	0	22.88	22.67	22.78
	1	12	22.83	22.71	22.75
	1	24	22.72	22.68	22.75
	12	0	21.72	21.69	21.62
	12	6	21.89	21.71	21.87
	12	13	21.69	21.66	21.66
	25	0	21.71	21.54	21.67
256QAM	1	0	19.91	19.86	19.91
	1	12	19.91	19.74	19.88
	1	24	19.90	19.70	19.82
	12	0	19.81	19.72	19.75
	12	6	19.86	19.72	19.72
	12	13	19.67	19.50	19.58
	25	0	19.65	19.52	19.62

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	23.60	24.58	23.35	24.33	34.77
16QAM	22.51	23.41	22.26	23.16	34.77
64QAM	21.54	22.88	21.29	22.63	34.77
256QAM	19.50	19.91	19.25	19.66	34.77

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 71, Channel Bandwidth: 10 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 133172	CH 133297	CH 133422
			668 MHz	680.5 MHz	693 MHz
QPSK	1	0	24.62	24.53	24.52
	1	24	24.55	24.31	24.43
	1	49	24.55	24.44	24.54
	25	0	23.70	23.68	23.67
	25	12	23.94	23.77	23.83
	25	25	23.78	23.60	23.65
	50	0	23.73	23.66	23.70
16QAM	1	0	23.35	23.18	23.27
	1	24	23.19	23.20	23.14
	1	49	23.05	22.96	23.03
	25	0	22.71	22.65	22.72
	25	12	22.94	22.87	22.96
	25	25	22.84	22.65	22.84
	50	0	22.72	22.57	22.61
64QAM	1	0	22.78	22.63	22.72
	1	24	22.77	22.77	22.77
	1	49	22.81	22.62	22.78
	25	0	21.62	21.72	21.65
	25	12	21.90	21.78	21.82
	25	25	21.76	21.73	21.70
	50	0	21.66	21.55	21.61
256QAM	1	0	19.91	19.83	19.86
	1	24	19.81	19.79	19.81
	1	49	19.83	19.67	19.84
	25	0	19.76	19.71	19.72
	25	12	19.83	19.67	19.77
	25	25	19.66	19.59	19.52
	50	0	19.67	19.52	19.63

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	23.60	24.62	23.35	24.37	34.77
16QAM	22.57	23.35	22.32	23.10	34.77
64QAM	21.55	22.81	21.30	22.56	34.77
256QAM	19.52	19.91	19.27	19.66	34.77

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 71, Channel Bandwidth: 15 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 133197	CH 133297	CH 133397
			670.5 MHz	680.5 MHz	690.5 MHz
QPSK	1	0	24.64	24.50	24.54
	1	37	24.57	24.36	24.48
	1	74	24.52	24.46	24.54
	36	0	23.78	23.68	23.75
	36	19	23.97	23.72	23.89
	36	39	23.72	23.57	23.63
	75	0	23.65	23.63	23.70
16QAM	1	0	23.38	23.17	23.28
	1	37	23.23	23.15	23.16
	1	74	23.06	23.04	23.12
	36	0	22.77	22.62	22.74
	36	19	22.98	22.88	22.93
	36	39	22.79	22.71	22.76
	75	0	22.70	22.57	22.55
64QAM	1	0	22.85	22.63	22.74
	1	37	22.84	22.71	22.79
	1	74	22.74	22.64	22.77
	36	0	21.72	21.64	21.67
	36	19	21.89	21.71	21.85
	36	39	21.73	21.67	21.68
	75	0	21.72	21.57	21.61
256QAM	1	0	19.86	19.88	19.87
	1	37	19.87	19.77	19.87
	1	74	19.86	19.69	19.80
	36	0	19.73	19.71	19.66
	36	19	19.85	19.67	19.78
	36	39	19.64	19.59	19.59
	75	0	19.62	19.51	19.64

Output Power

Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	23.57	24.64	23.32	24.39	34.77
16QAM	22.55	23.38	22.30	23.13	34.77
64QAM	21.57	22.85	21.32	22.60	34.77
256QAM	19.51	19.88	19.26	19.63	34.77

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 71, Channel Bandwidth: 20 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 133222	CH 133297	CH 133372
			673 MHz	680.5 MHz	688 MHz
QPSK	1	0	24.68	24.59	24.61
	1	50	24.57	24.41	24.49
	1	99	24.57	24.46	24.56
	50	0	23.80	23.71	23.77
	50	25	24.00	23.82	23.92
	50	50	23.80	23.65	23.70
	100	0	23.75	23.69	23.74
16QAM	1	0	23.41	23.27	23.36
	1	50	23.27	23.21	23.23
	1	99	23.14	23.06	23.13
	50	0	22.77	22.67	22.76
	50	25	23.00	22.92	23.00
	50	50	22.86	22.75	22.85
	100	0	22.75	22.57	22.65
64QAM	1	0	22.88	22.71	22.81
	1	50	22.86	22.78	22.80
	1	99	22.82	22.72	22.78
	50	0	21.72	21.72	21.72
	50	25	21.93	21.81	21.87
	50	50	21.77	21.73	21.76
	100	0	21.74	21.61	21.70
256QAM	1	0	19.95	19.88	19.93
	1	50	19.91	19.81	19.89
	1	99	19.90	19.76	19.84
	50	0	19.82	19.75	19.76
	50	25	19.89	19.73	19.79
	50	50	19.67	19.59	19.62
	100	0	19.69	19.59	19.66

Output Power					
Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	23.65	24.68	23.40	24.43	34.77
16QAM	22.57	23.41	22.32	23.16	34.77
64QAM	21.61	22.88	21.36	22.63	34.77
256QAM	19.59	19.95	19.34	19.70	34.77

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

ERP (dBm) = EIRP (dBm) - 2.15

7.2 Modulation Characteristics

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	21°C, 69% RH	Tested By:	Willy Cheng
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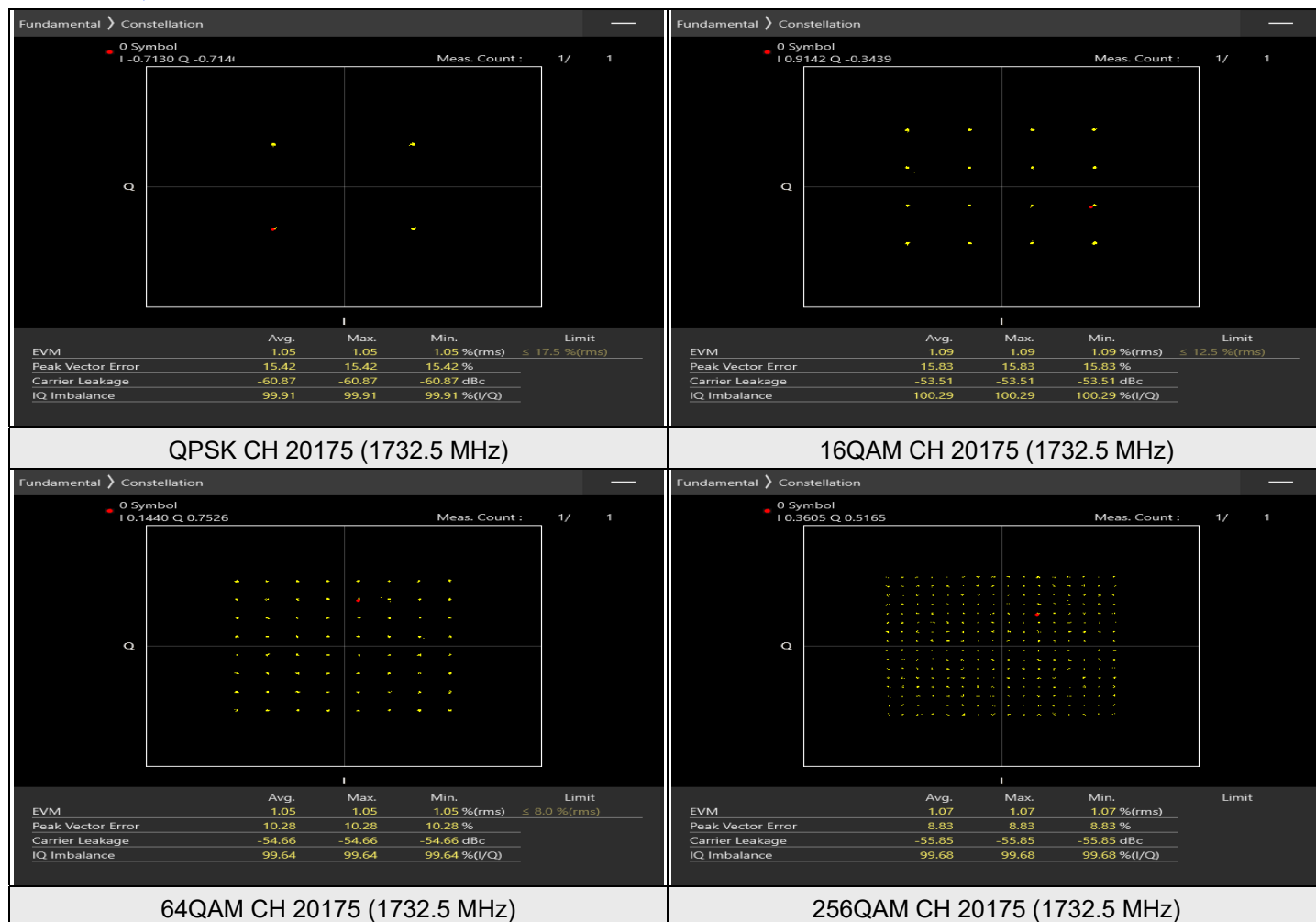
7.2.1 LTE Band 2

LTE Band 2, Channel Bandwidth: 20 MHz



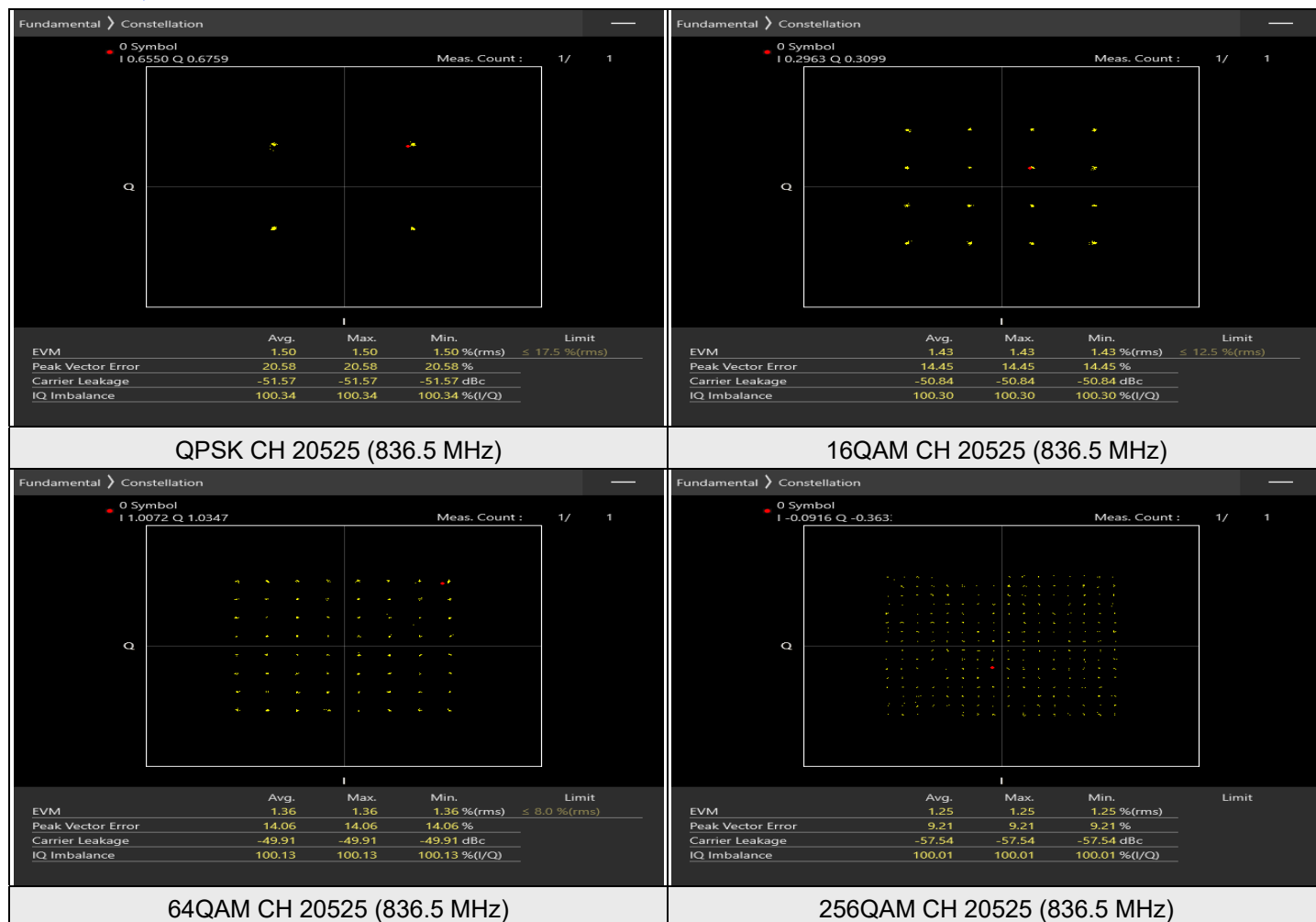
7.2.2 LTE Band 4

LTE Band 4, Channel Bandwidth: 20 MHz



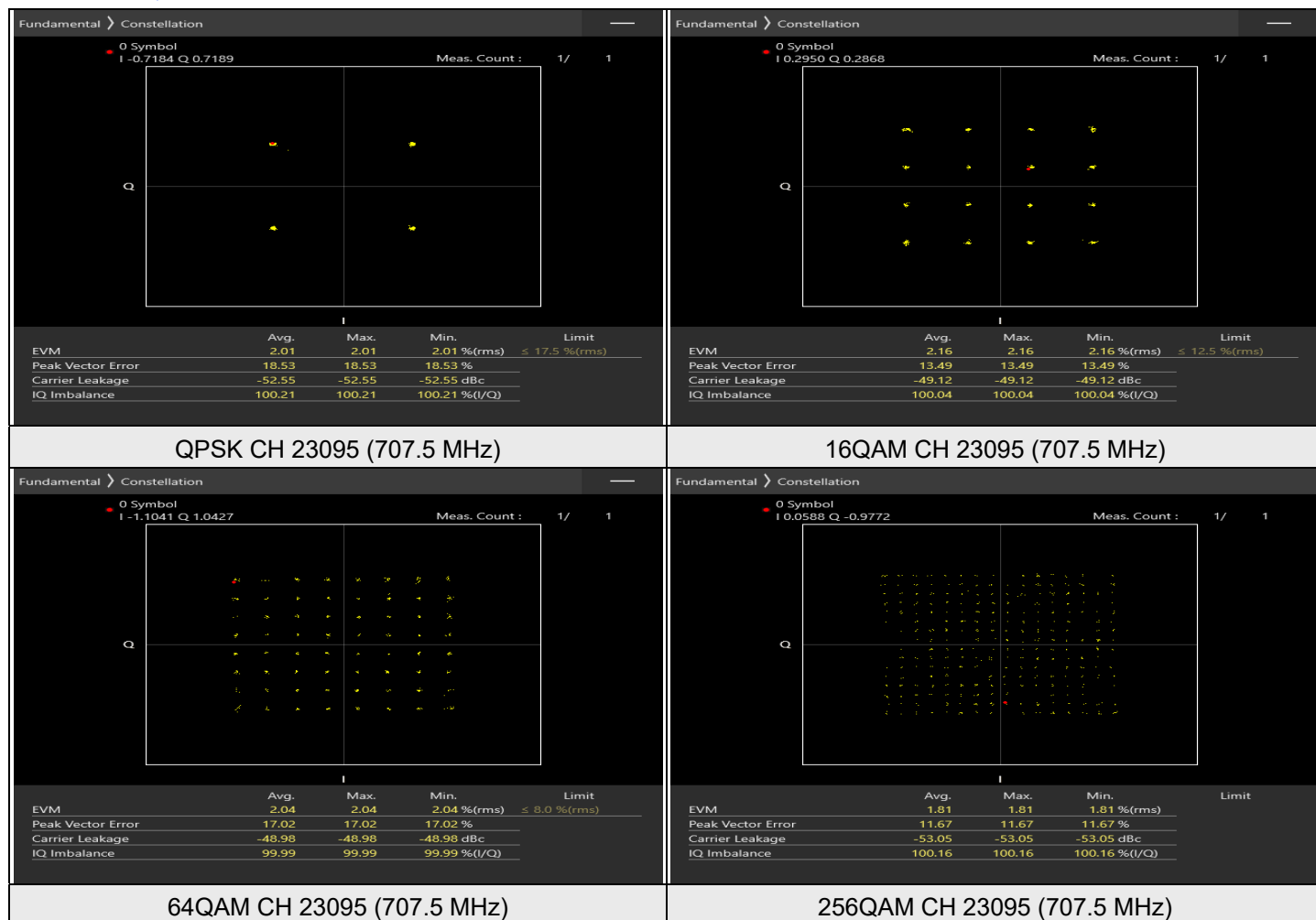
7.2.3 LTE Band 5

LTE Band 5, Channel Bandwidth: 10 MHz



7.2.4 LTE Band 12

LTE Band 12, Channel Bandwidth: 10 MHz



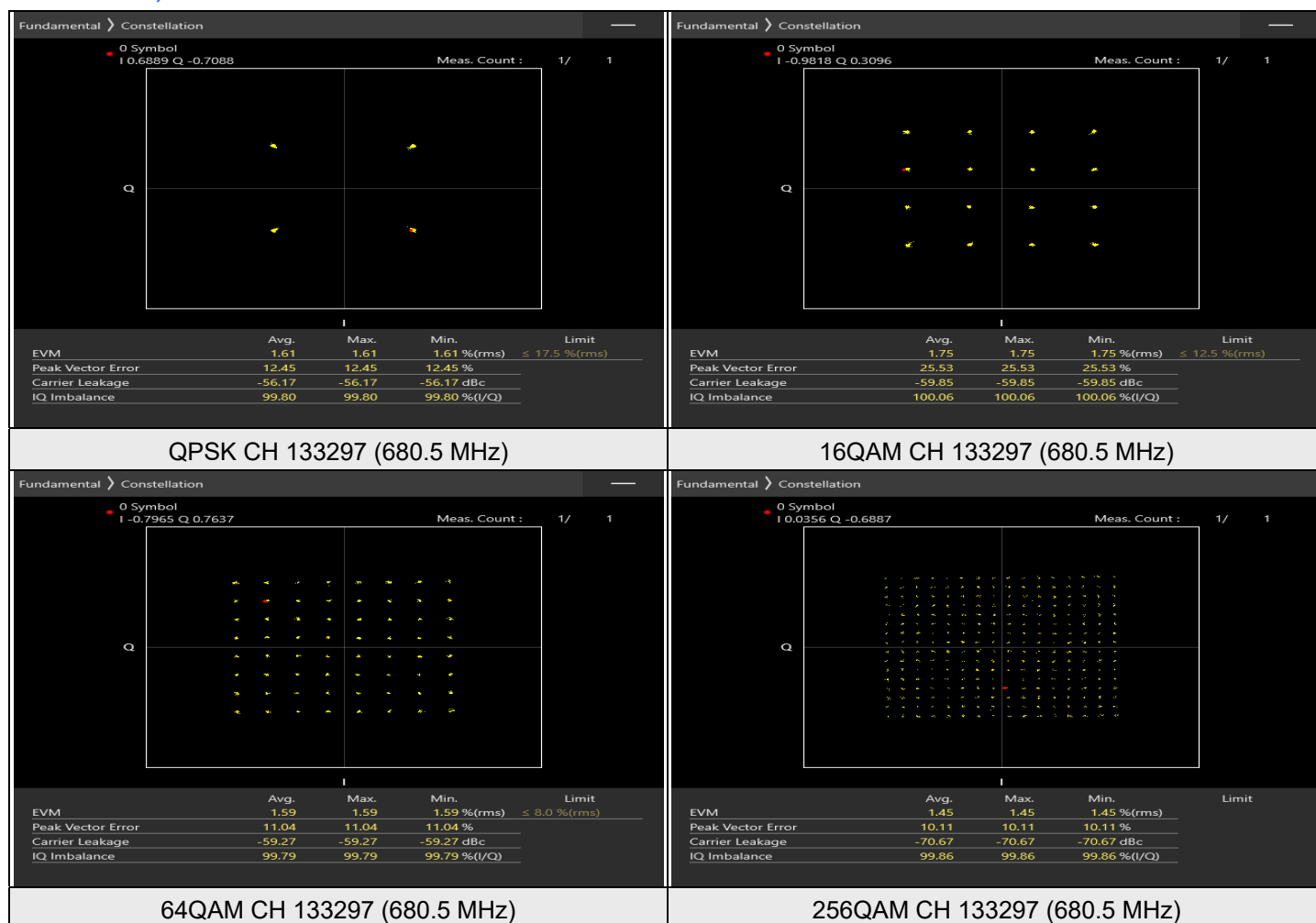
7.2.5 LTE Band 66

LTE Band 66, Channel Bandwidth: 20 MHz



7.2.6 LTE Band 71

LTE Band 71, Channel Bandwidth: 20 MHz



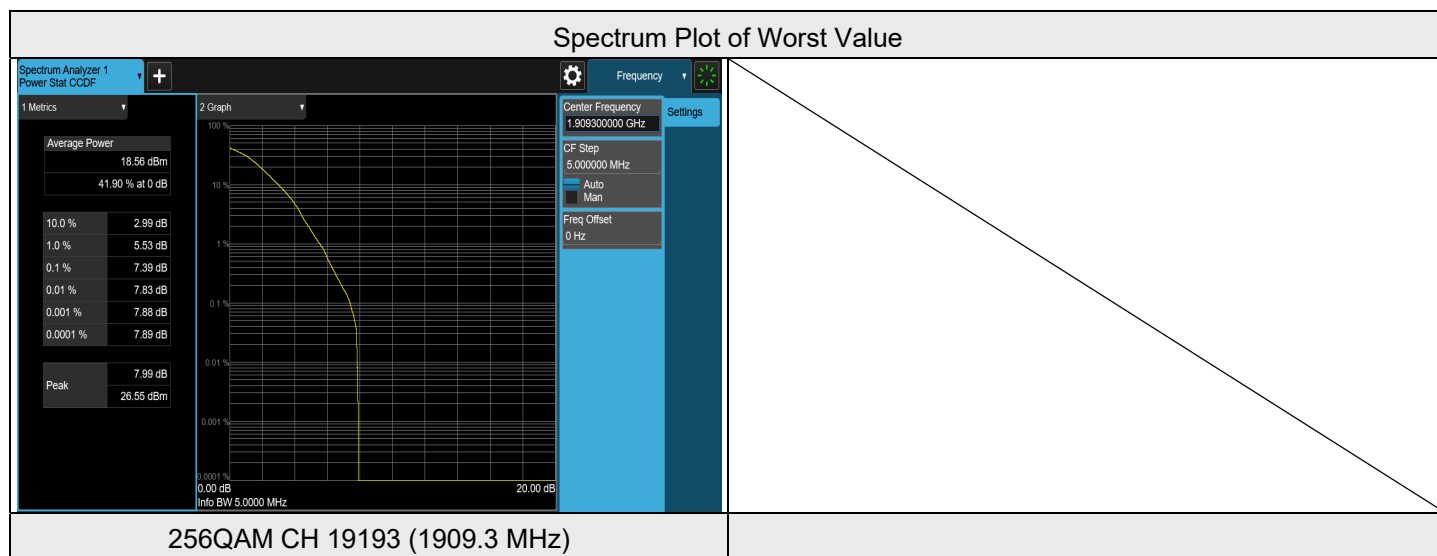
7.3 Peak to Average Ratio

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	21°C, 69% RH	Tested By:	Willy Cheng
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7.3.1 LTE Band 2

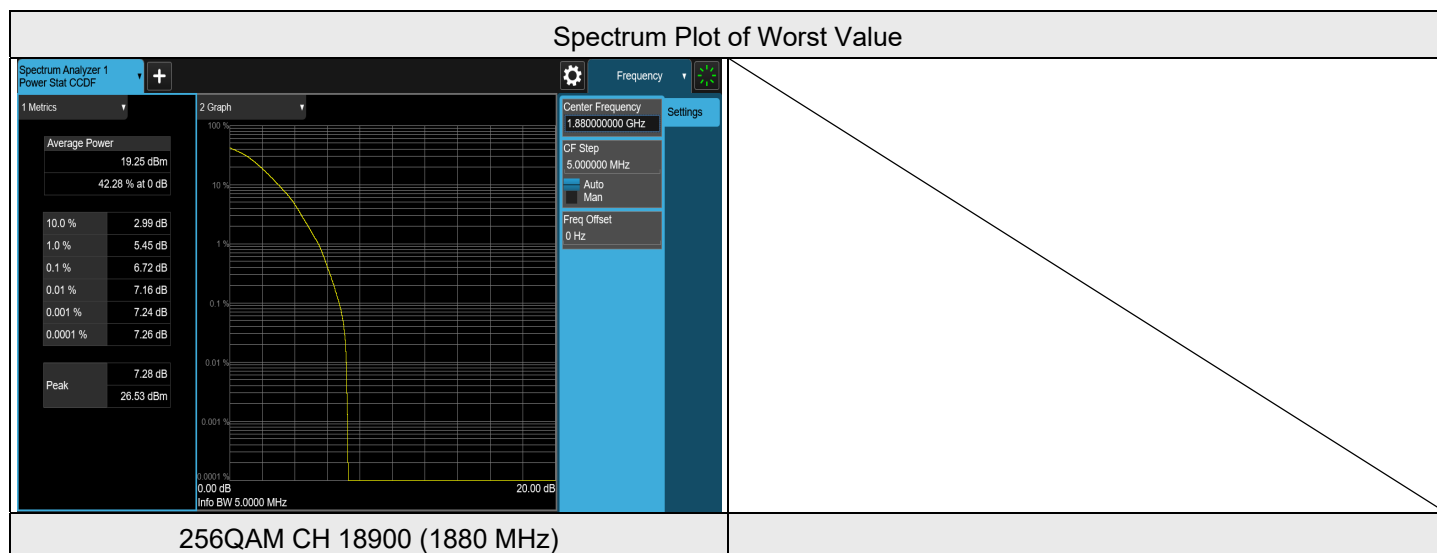
LTE Band 2, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	18607	1850.7	4.70	13	PASS
QPSK	18900	1880	4.88	13	PASS
QPSK	19193	1909.3	4.76	13	PASS
16QAM	18607	1850.7	5.70	13	PASS
16QAM	18900	1880	5.74	13	PASS
16QAM	19193	1909.3	5.65	13	PASS
64QAM	18607	1850.7	6.11	13	PASS
64QAM	18900	1880	6.20	13	PASS
64QAM	19193	1909.3	6.27	13	PASS
256QAM	18607	1850.7	7.26	13	PASS
256QAM	18900	1880	7.27	13	PASS
256QAM	19193	1909.3	7.39	13	PASS



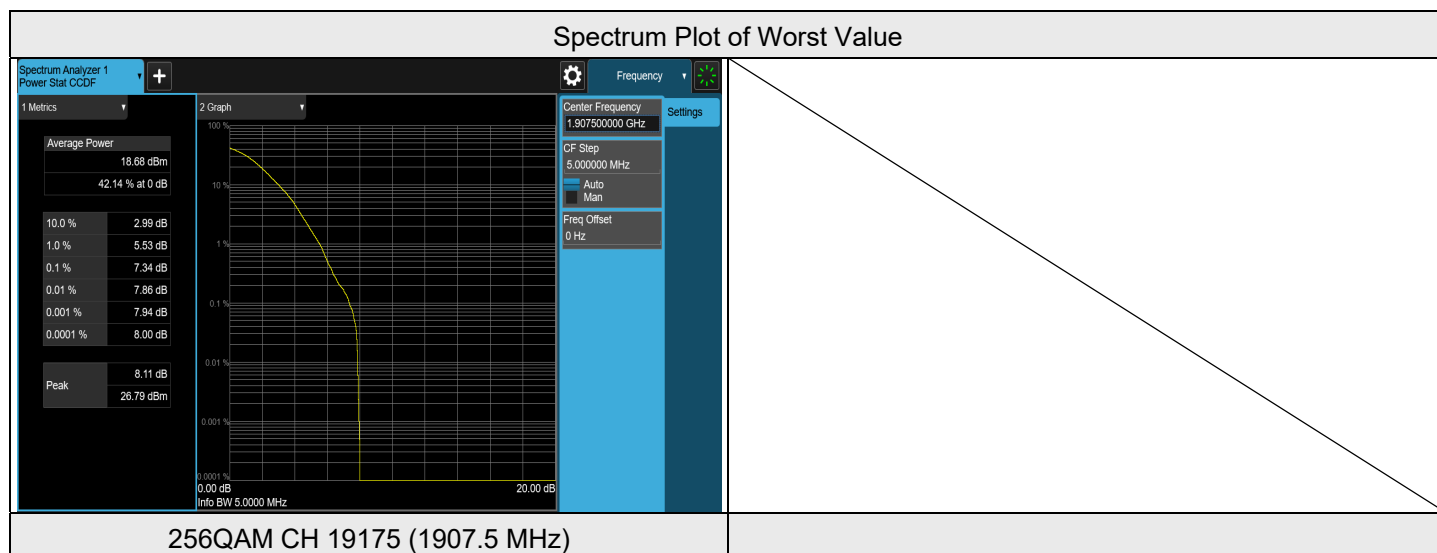
LTE Band 2, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	18615	1851.5	4.73	13	PASS
QPSK	18900	1880	4.92	13	PASS
QPSK	19185	1908.5	4.81	13	PASS
16QAM	18615	1851.5	5.68	13	PASS
16QAM	18900	1880	5.75	13	PASS
16QAM	19185	1908.5	5.72	13	PASS
64QAM	18615	1851.5	6.20	13	PASS
64QAM	18900	1880	6.29	13	PASS
64QAM	19185	1908.5	6.29	13	PASS
256QAM	18615	1851.5	6.62	13	PASS
256QAM	18900	1880	6.72	13	PASS
256QAM	19185	1908.5	6.56	13	PASS



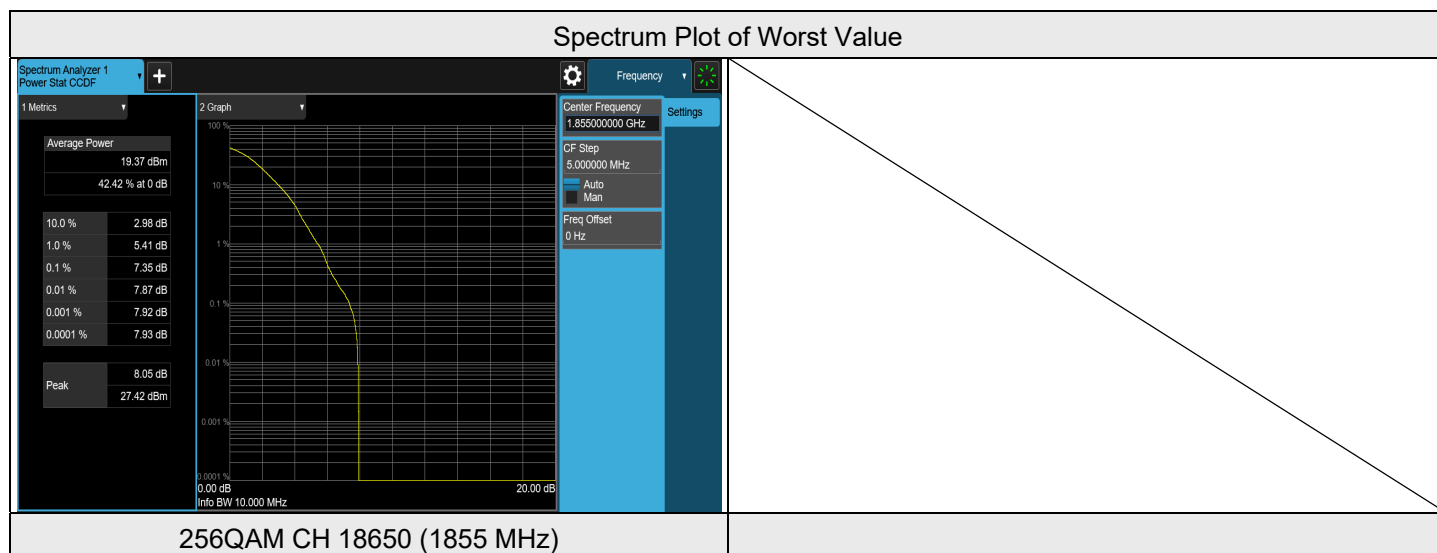
LTE Band 2, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	18625	1852.5	4.72	13	PASS
QPSK	18900	1880	4.81	13	PASS
QPSK	19175	1907.5	4.84	13	PASS
16QAM	18625	1852.5	5.68	13	PASS
16QAM	18900	1880	5.81	13	PASS
16QAM	19175	1907.5	5.85	13	PASS
64QAM	18625	1852.5	6.11	13	PASS
64QAM	18900	1880	6.29	13	PASS
64QAM	19175	1907.5	6.28	13	PASS
256QAM	18625	1852.5	7.33	13	PASS
256QAM	18900	1880	7.28	13	PASS
256QAM	19175	1907.5	7.34	13	PASS



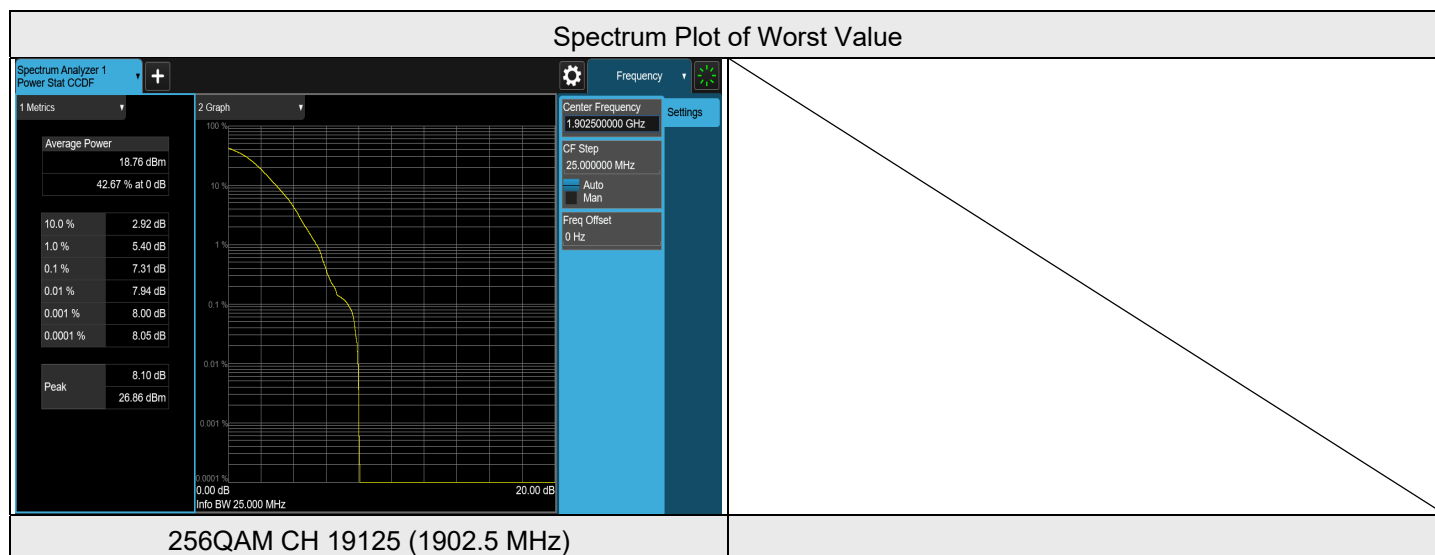
LTE Band 2, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	18650	1855	4.73	13	PASS
QPSK	18900	1880	4.80	13	PASS
QPSK	19150	1905	5.06	13	PASS
16QAM	18650	1855	5.69	13	PASS
16QAM	18900	1880	5.79	13	PASS
16QAM	19150	1905	6.06	13	PASS
64QAM	18650	1855	6.16	13	PASS
64QAM	18900	1880	6.21	13	PASS
64QAM	19150	1905	6.36	13	PASS
256QAM	18650	1855	7.35	13	PASS
256QAM	18900	1880	7.08	13	PASS
256QAM	19150	1905	7.23	13	PASS



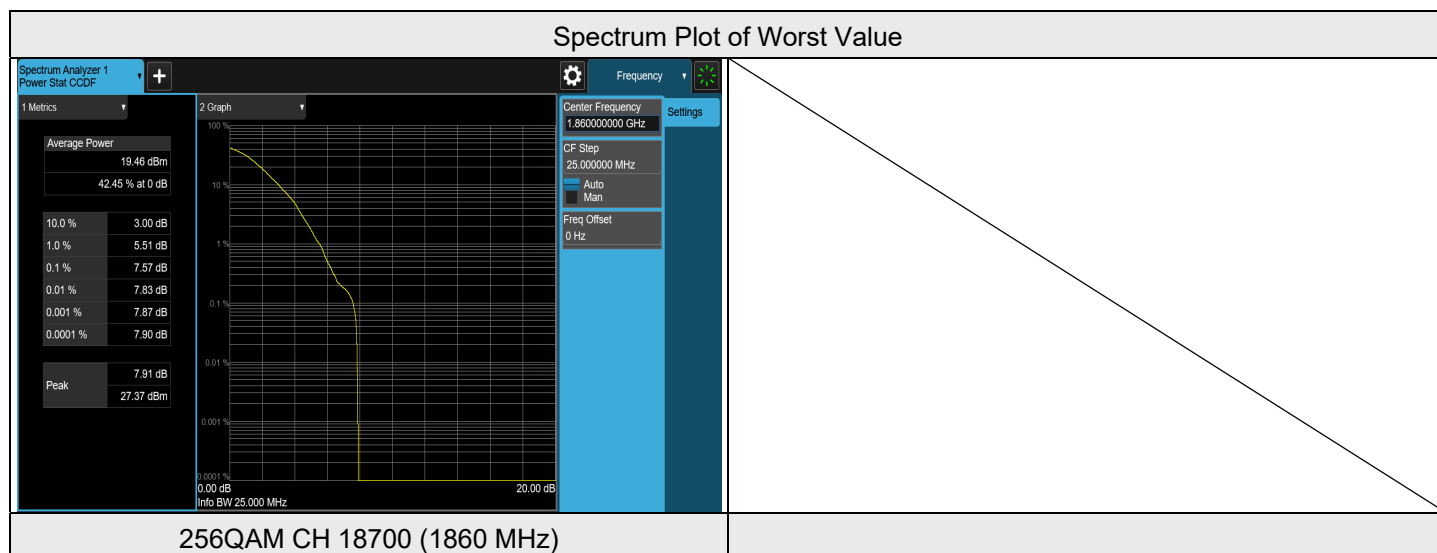
LTE Band 2, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	18675	1857.5	4.68	13	PASS
QPSK	18900	1880	4.87	13	PASS
QPSK	19125	1902.5	5.11	13	PASS
16QAM	18675	1857.5	5.72	13	PASS
16QAM	18900	1880	5.94	13	PASS
16QAM	19125	1902.5	6.14	13	PASS
64QAM	18675	1857.5	6.22	13	PASS
64QAM	18900	1880	6.30	13	PASS
64QAM	19125	1902.5	6.41	13	PASS
256QAM	18675	1857.5	6.73	13	PASS
256QAM	18900	1880	7.01	13	PASS
256QAM	19125	1902.5	7.31	13	PASS



LTE Band 2, Channel Bandwidth: 20 MHz

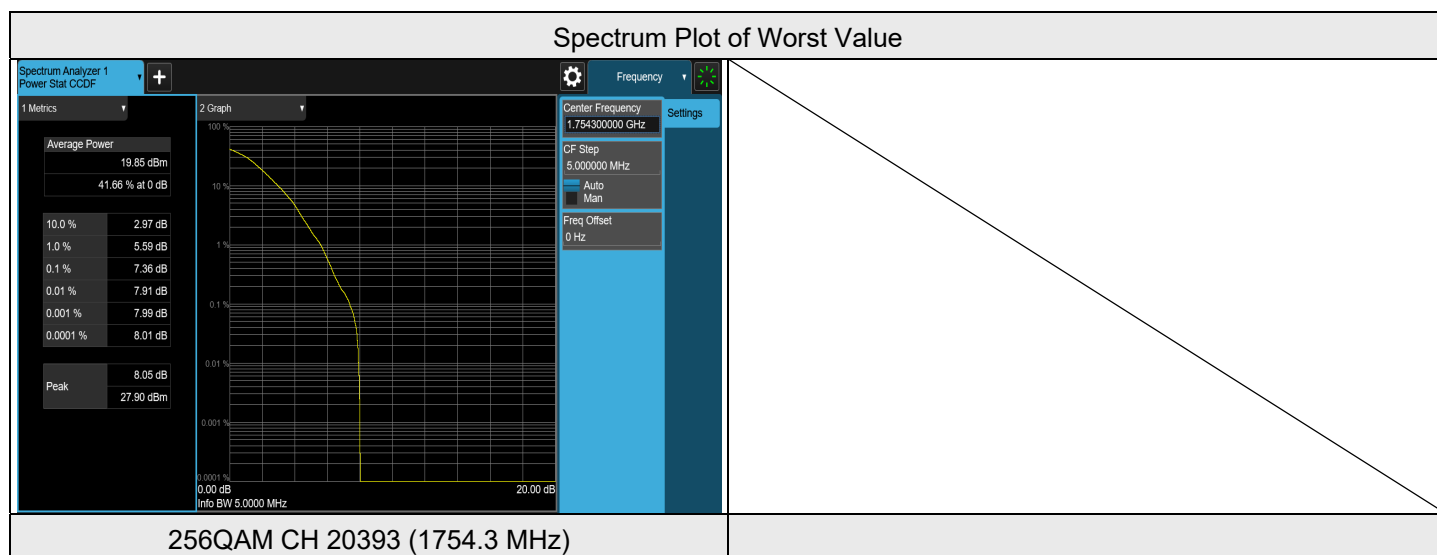
Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	18700	1860	4.70	13	PASS
QPSK	18900	1880	4.82	13	PASS
QPSK	19100	1900	4.88	13	PASS
16QAM	18700	1860	5.63	13	PASS
16QAM	18900	1880	5.82	13	PASS
16QAM	19100	1900	5.84	13	PASS
64QAM	18700	1860	6.21	13	PASS
64QAM	18900	1880	6.28	13	PASS
64QAM	19100	1900	6.33	13	PASS
256QAM	18700	1860	7.57	13	PASS
256QAM	18900	1880	7.32	13	PASS
256QAM	19100	1900	6.32	13	PASS



7.3.2 LTE Band 4

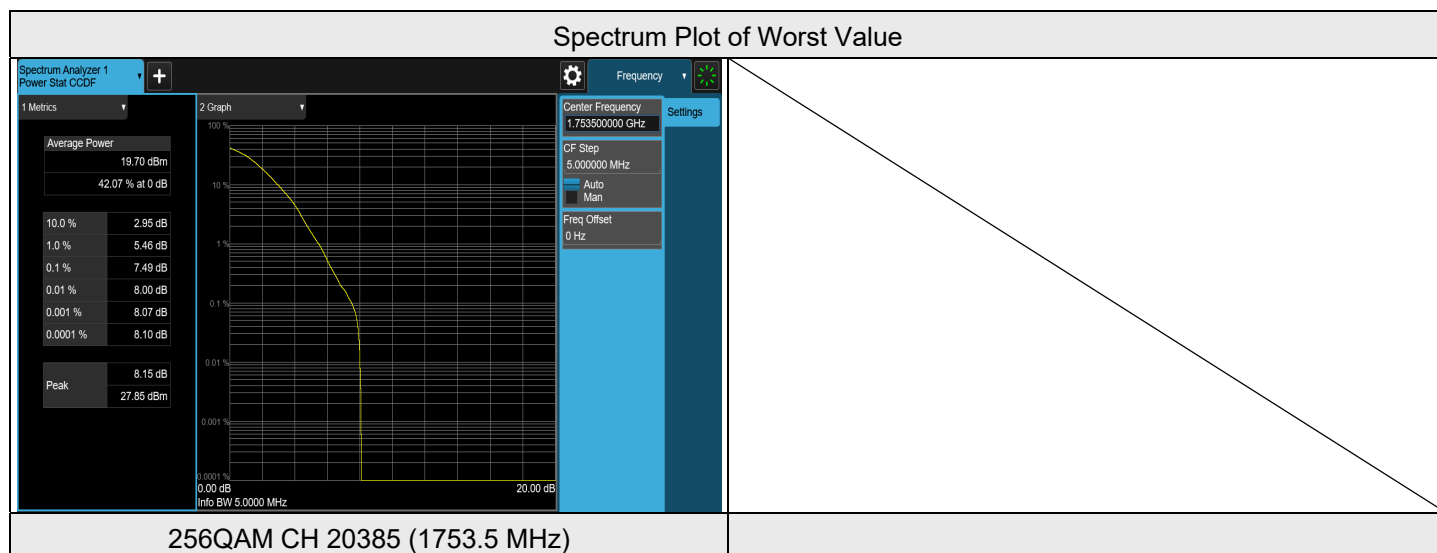
LTE Band 4, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	19957	1710.7	5.14	13	PASS
QPSK	20175	1732.5	4.84	13	PASS
QPSK	20393	1754.3	4.75	13	PASS
16QAM	19957	1710.7	6.17	13	PASS
16QAM	20175	1732.5	5.87	13	PASS
16QAM	20393	1754.3	5.75	13	PASS
64QAM	19957	1710.7	6.36	13	PASS
64QAM	20175	1732.5	6.39	13	PASS
64QAM	20393	1754.3	6.05	13	PASS
256QAM	19957	1710.7	7.26	13	PASS
256QAM	20175	1732.5	7.09	13	PASS
256QAM	20393	1754.3	7.36	13	PASS



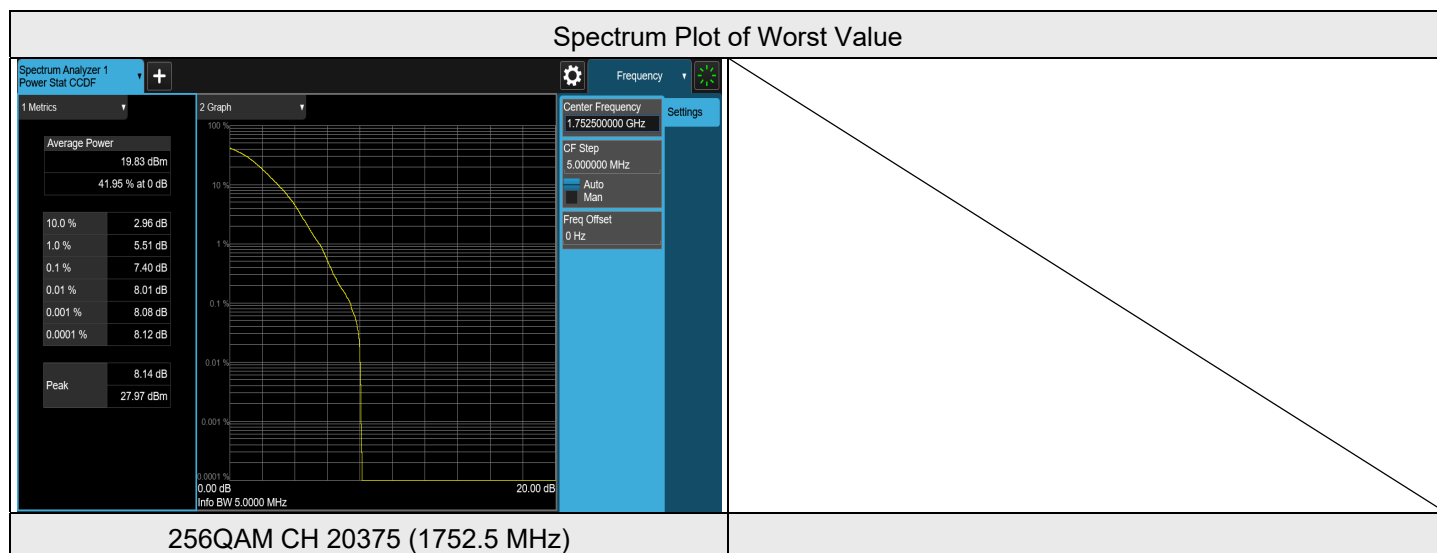
LTE Band 4, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	19965	1711.5	5.16	13	PASS
QPSK	20175	1732.5	4.84	13	PASS
QPSK	20385	1753.5	4.79	13	PASS
16QAM	19965	1711.5	6.18	13	PASS
16QAM	20175	1732.5	5.83	13	PASS
16QAM	20385	1753.5	5.85	13	PASS
64QAM	19965	1711.5	6.38	13	PASS
64QAM	20175	1732.5	6.36	13	PASS
64QAM	20385	1753.5	6.06	13	PASS
256QAM	19965	1711.5	7.36	13	PASS
256QAM	20175	1732.5	6.94	13	PASS
256QAM	20385	1753.5	7.49	13	PASS



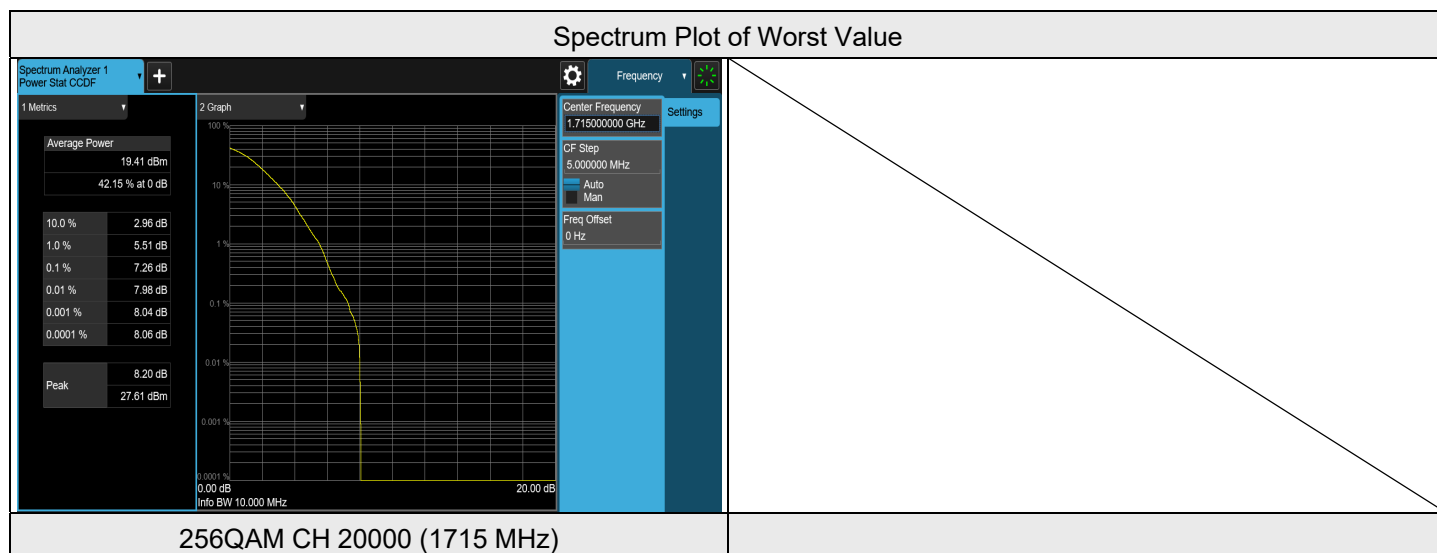
LTE Band 4, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	19975	1712.5	5.05	13	PASS
QPSK	20175	1732.5	4.79	13	PASS
QPSK	20375	1752.5	4.80	13	PASS
16QAM	19975	1712.5	6.13	13	PASS
16QAM	20175	1732.5	5.86	13	PASS
16QAM	20375	1752.5	5.89	13	PASS
64QAM	19975	1712.5	6.38	13	PASS
64QAM	20175	1732.5	6.34	13	PASS
64QAM	20375	1752.5	6.11	13	PASS
256QAM	19975	1712.5	7.31	13	PASS
256QAM	20175	1732.5	6.91	13	PASS
256QAM	20375	1752.5	7.40	13	PASS



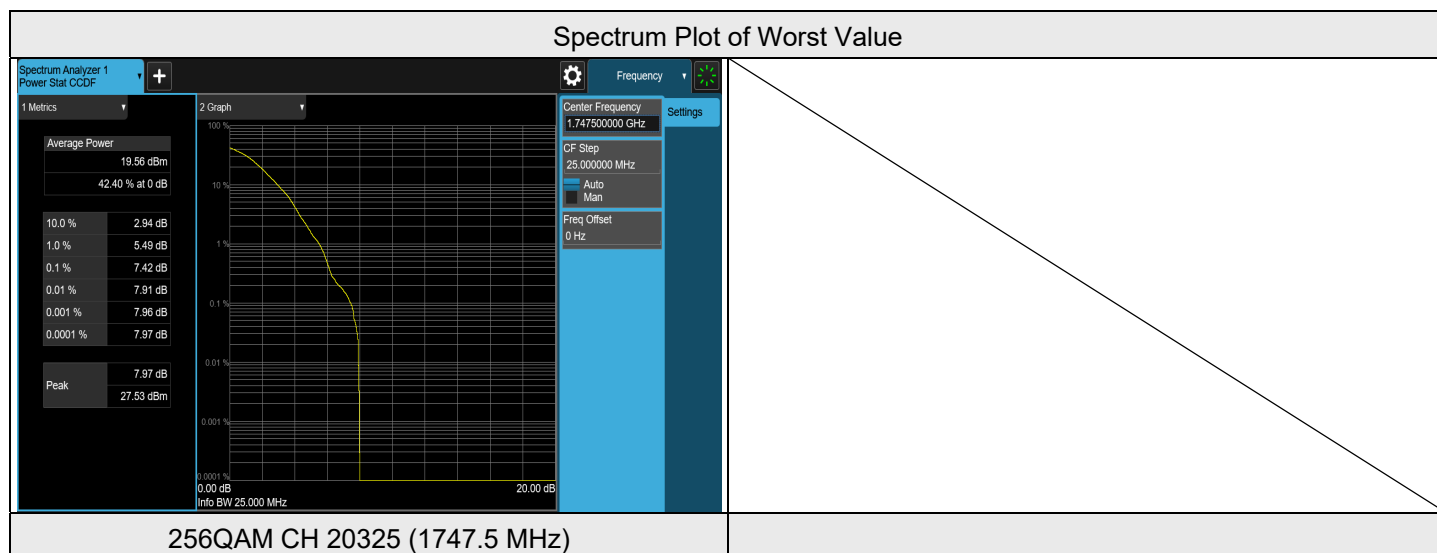
LTE Band 4, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	20000	1715	5.09	13	PASS
QPSK	20175	1732.5	4.81	13	PASS
QPSK	20350	1750	4.96	13	PASS
16QAM	20000	1715	6.26	13	PASS
16QAM	20175	1732.5	5.89	13	PASS
16QAM	20350	1750	6.04	13	PASS
64QAM	20000	1715	6.37	13	PASS
64QAM	20175	1732.5	6.28	13	PASS
64QAM	20350	1750	6.29	13	PASS
256QAM	20000	1715	7.26	13	PASS
256QAM	20175	1732.5	6.94	13	PASS
256QAM	20350	1750	6.95	13	PASS



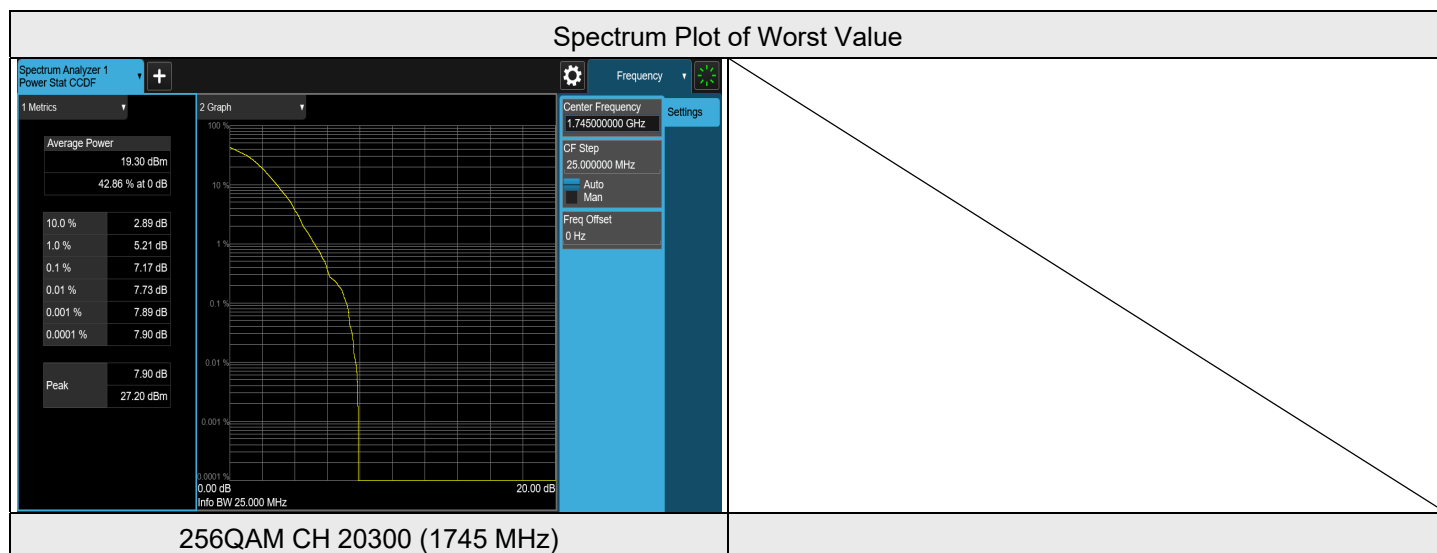
LTE Band 4, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	20025	1717.5	5.02	13	PASS
QPSK	20175	1732.5	4.85	13	PASS
QPSK	20325	1747.5	4.87	13	PASS
16QAM	20025	1717.5	6.21	13	PASS
16QAM	20175	1732.5	5.74	13	PASS
16QAM	20325	1747.5	5.95	13	PASS
64QAM	20025	1717.5	6.16	13	PASS
64QAM	20175	1732.5	6.23	13	PASS
64QAM	20325	1747.5	6.39	13	PASS
256QAM	20025	1717.5	6.12	13	PASS
256QAM	20175	1732.5	7.33	13	PASS
256QAM	20325	1747.5	7.42	13	PASS



LTE Band 4, Channel Bandwidth: 20 MHz

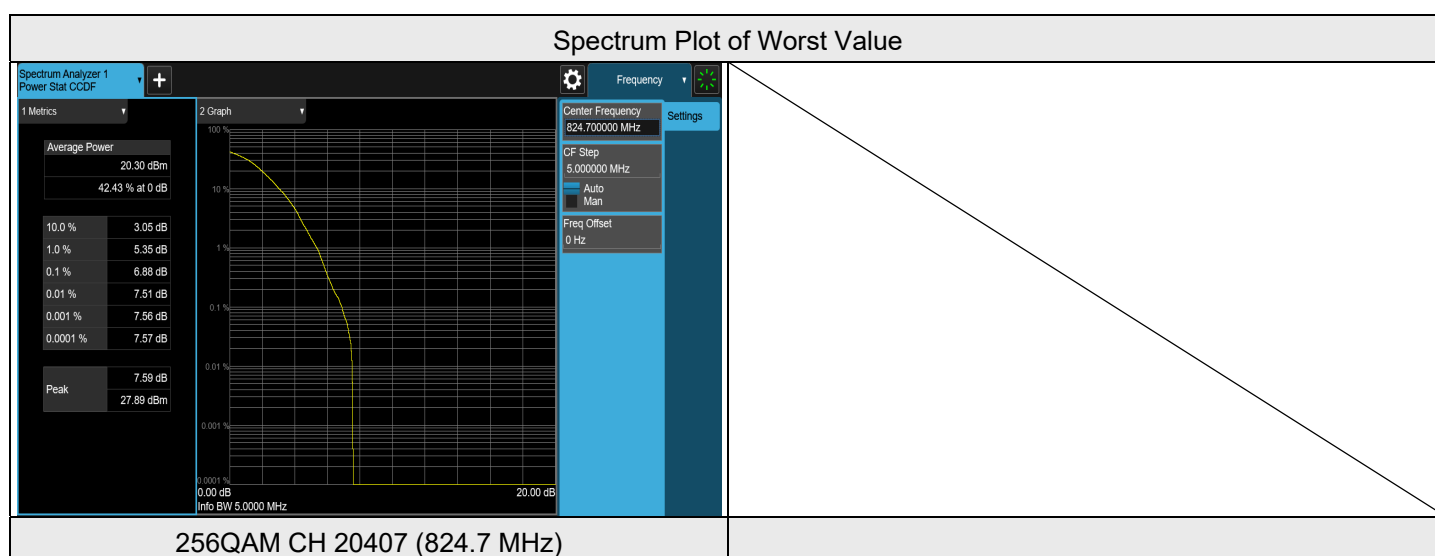
Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	20050	1720	5.03	13	PASS
QPSK	20175	1732.5	4.78	13	PASS
QPSK	20300	1745	4.88	13	PASS
16QAM	20050	1720	6.08	13	PASS
16QAM	20175	1732.5	5.85	13	PASS
16QAM	20300	1745	5.84	13	PASS
64QAM	20050	1720	6.16	13	PASS
64QAM	20175	1732.5	6.27	13	PASS
64QAM	20300	1745	6.17	13	PASS
256QAM	20050	1720	6.49	13	PASS
256QAM	20175	1732.5	5.87	13	PASS
256QAM	20300	1745	7.17	13	PASS



7.3.3 LTE Band 5

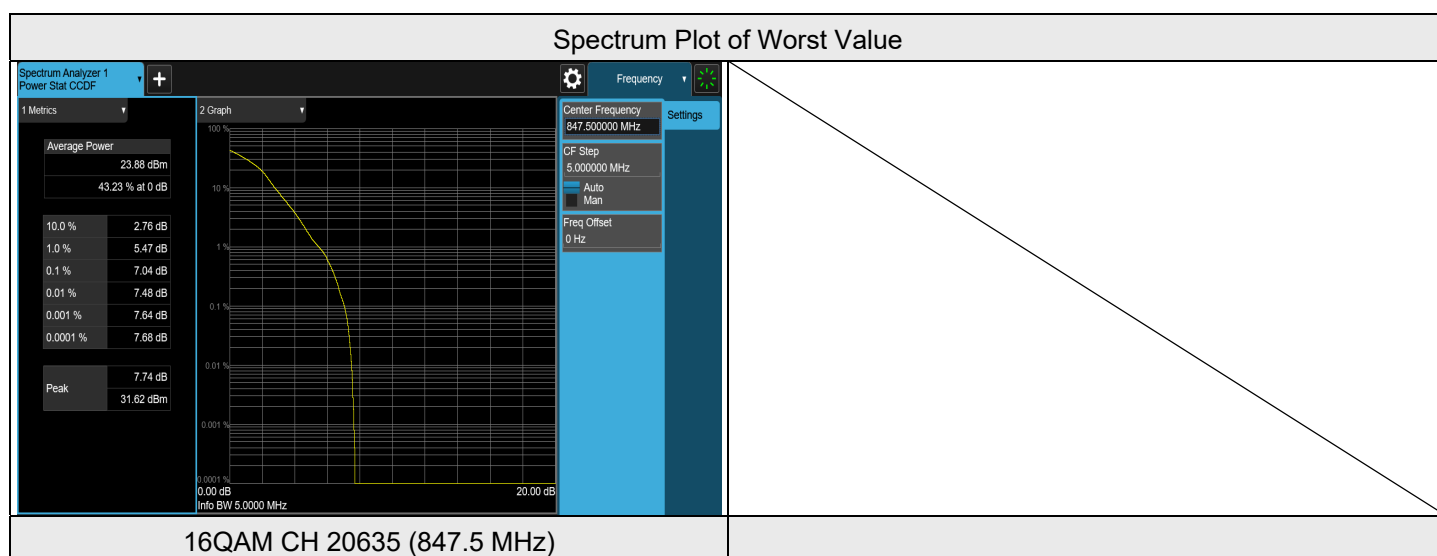
LTE Band 5, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	20407	824.7	5.46	13	PASS
QPSK	20525	836.5	5.10	13	PASS
QPSK	20643	848.3	5.82	13	PASS
16QAM	20407	824.7	6.86	13	PASS
16QAM	20525	836.5	6.15	13	PASS
16QAM	20643	848.3	6.80	13	PASS
64QAM	20407	824.7	6.67	13	PASS
64QAM	20525	836.5	6.24	13	PASS
64QAM	20643	848.3	6.73	13	PASS
256QAM	20407	824.7	6.88	13	PASS
256QAM	20525	836.5	6.71	13	PASS
256QAM	20643	848.3	6.87	13	PASS



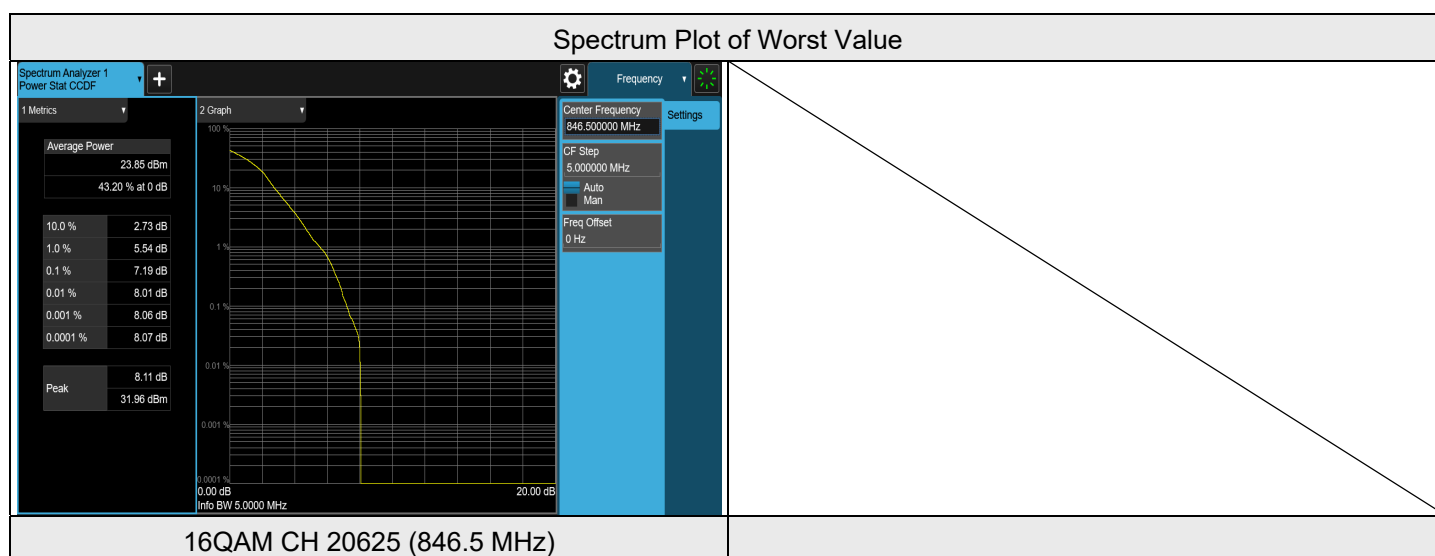
LTE Band 5, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	20415	825.5	5.59	13	PASS
QPSK	20525	836.5	5.02	13	PASS
QPSK	20635	847.5	5.86	13	PASS
16QAM	20415	825.5	6.67	13	PASS
16QAM	20525	836.5	6.10	13	PASS
16QAM	20635	847.5	7.04	13	PASS
64QAM	20415	825.5	6.79	13	PASS
64QAM	20525	836.5	6.20	13	PASS
64QAM	20635	847.5	6.90	13	PASS
256QAM	20415	825.5	6.90	13	PASS
256QAM	20525	836.5	6.32	13	PASS
256QAM	20635	847.5	6.81	13	PASS



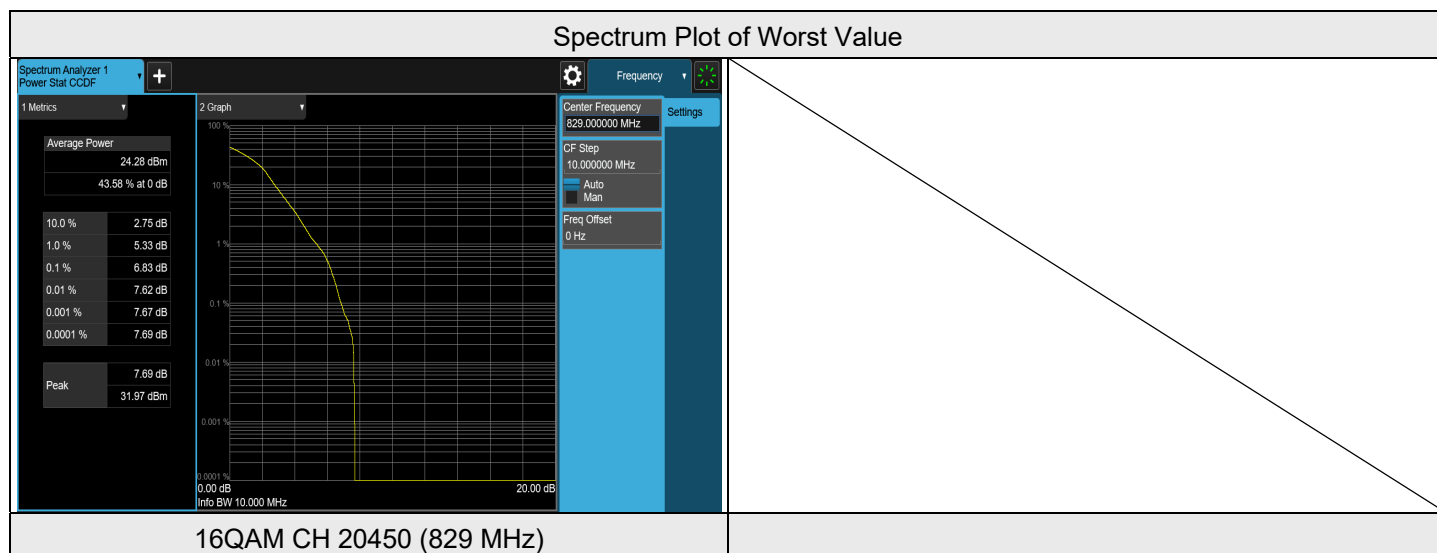
LTE Band 5, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	20425	826.5	5.70	13	PASS
QPSK	20525	836.5	4.95	13	PASS
QPSK	20625	846.5	5.96	13	PASS
16QAM	20425	826.5	6.93	13	PASS
16QAM	20525	836.5	6.07	13	PASS
16QAM	20625	846.5	7.19	13	PASS
64QAM	20425	826.5	6.74	13	PASS
64QAM	20525	836.5	6.11	13	PASS
64QAM	20625	846.5	6.78	13	PASS
256QAM	20425	826.5	6.92	13	PASS
256QAM	20525	836.5	6.54	13	PASS
256QAM	20625	846.5	6.80	13	PASS



LTE Band 5, Channel Bandwidth: 10 MHz

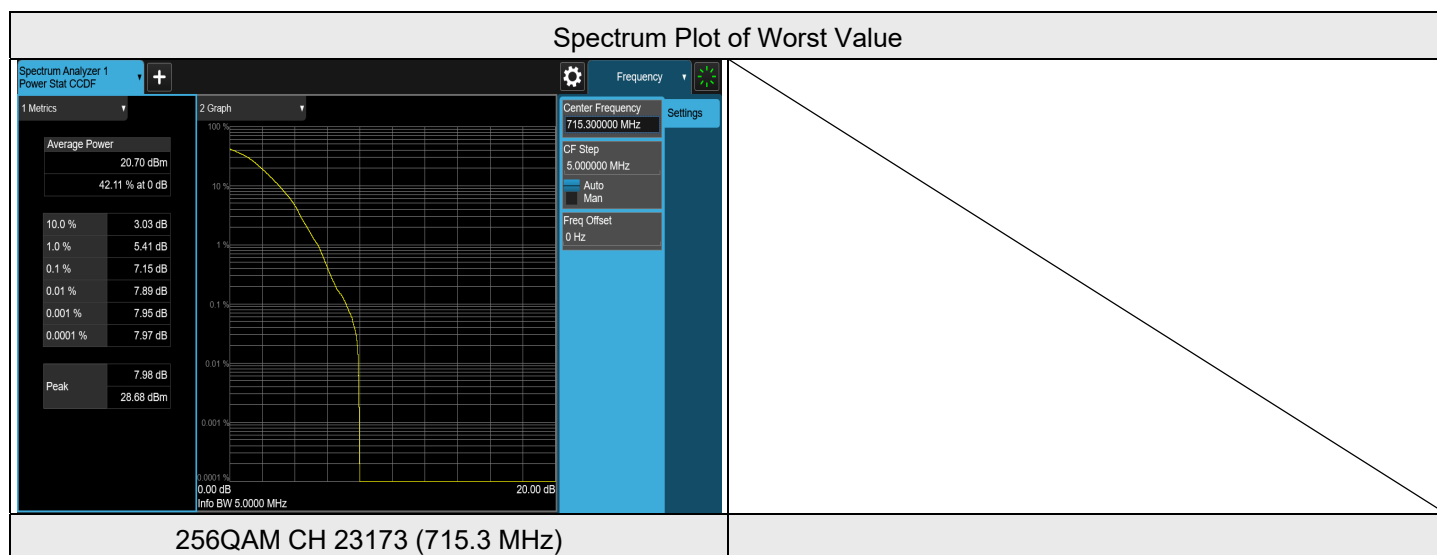
Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	20450	829	5.71	13	PASS
QPSK	20525	836.5	4.99	13	PASS
QPSK	20600	844	5.50	13	PASS
16QAM	20450	829	6.83	13	PASS
16QAM	20525	836.5	6.11	13	PASS
16QAM	20600	844	6.66	13	PASS
64QAM	20450	829	6.69	13	PASS
64QAM	20525	836.5	6.22	13	PASS
64QAM	20600	844	6.52	13	PASS
256QAM	20450	829	6.81	13	PASS
256QAM	20525	836.5	6.58	13	PASS
256QAM	20600	844	6.82	13	PASS



7.3.4 LTE Band 12

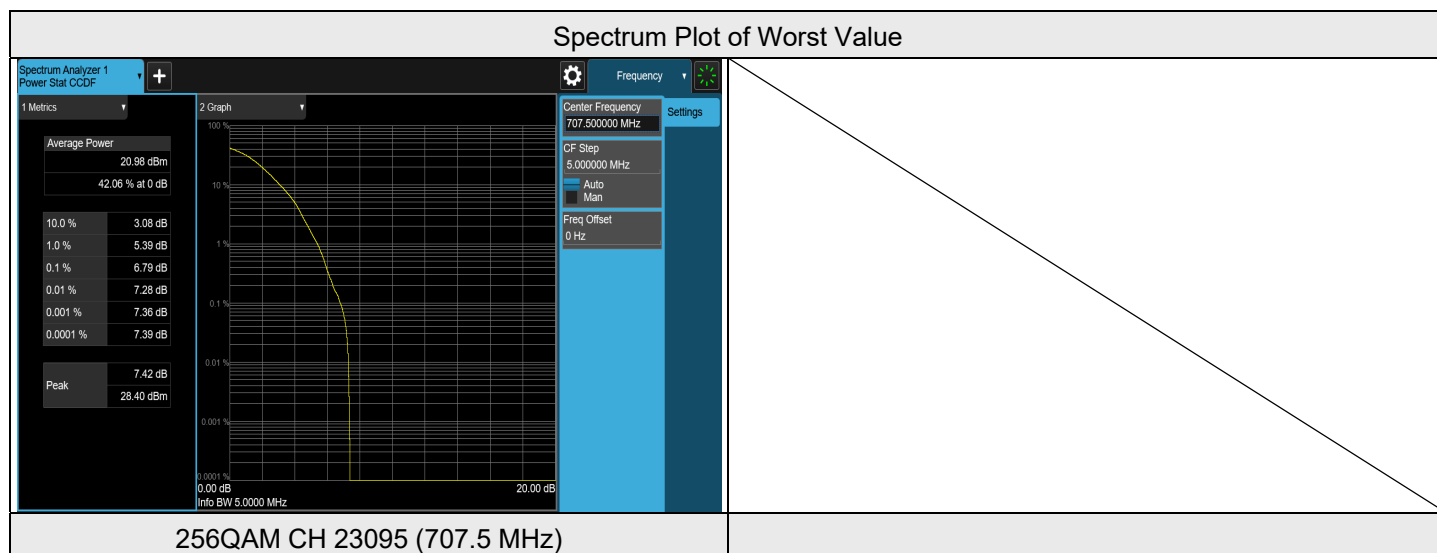
LTE Band 12, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	23017	699.7	5.02	13	PASS
QPSK	23095	707.5	4.30	13	PASS
QPSK	23173	715.3	5.73	13	PASS
16QAM	23017	699.7	6.16	13	PASS
16QAM	23095	707.5	5.40	13	PASS
16QAM	23173	715.3	6.67	13	PASS
64QAM	23017	699.7	6.15	13	PASS
64QAM	23095	707.5	5.60	13	PASS
64QAM	23173	715.3	7.01	13	PASS
256QAM	23017	699.7	6.63	13	PASS
256QAM	23095	707.5	6.81	13	PASS
256QAM	23173	715.3	7.15	13	PASS



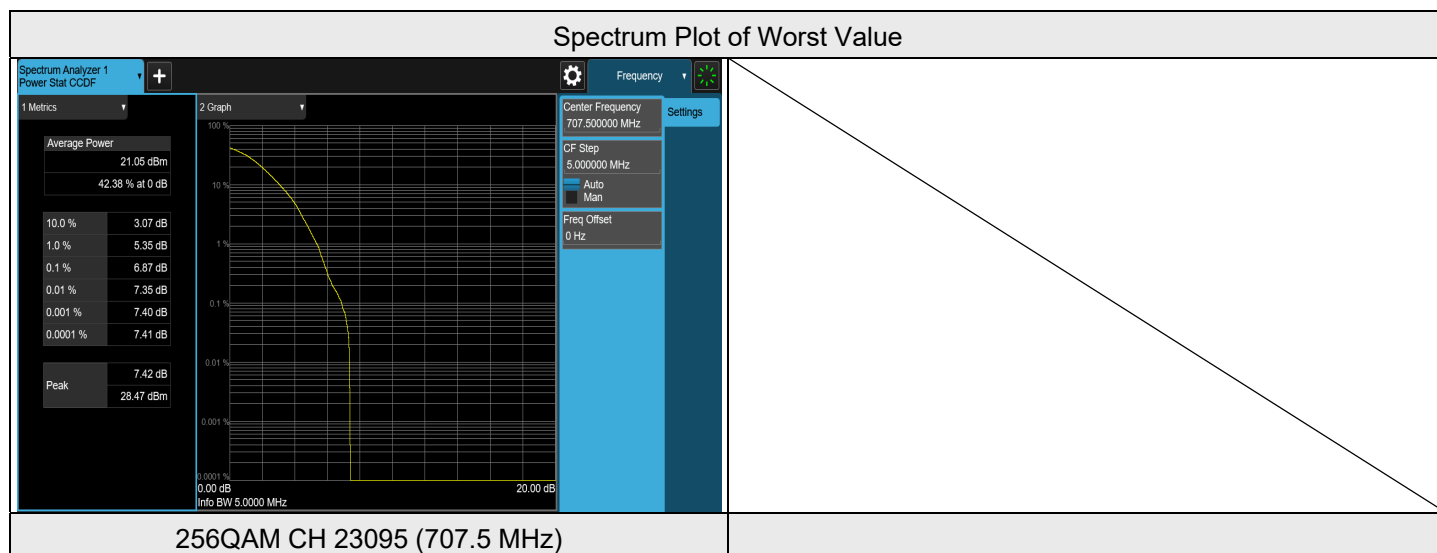
LTE Band 12, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	23025	700.5	4.91	13	PASS
QPSK	23095	707.5	4.60	13	PASS
QPSK	23165	714.5	5.52	13	PASS
16QAM	23025	700.5	5.86	13	PASS
16QAM	23095	707.5	5.65	13	PASS
16QAM	23165	714.5	6.48	13	PASS
64QAM	23025	700.5	6.18	13	PASS
64QAM	23095	707.5	5.96	13	PASS
64QAM	23165	714.5	6.72	13	PASS
256QAM	23025	700.5	6.54	13	PASS
256QAM	23095	707.5	6.79	13	PASS
256QAM	23165	714.5	6.44	13	PASS



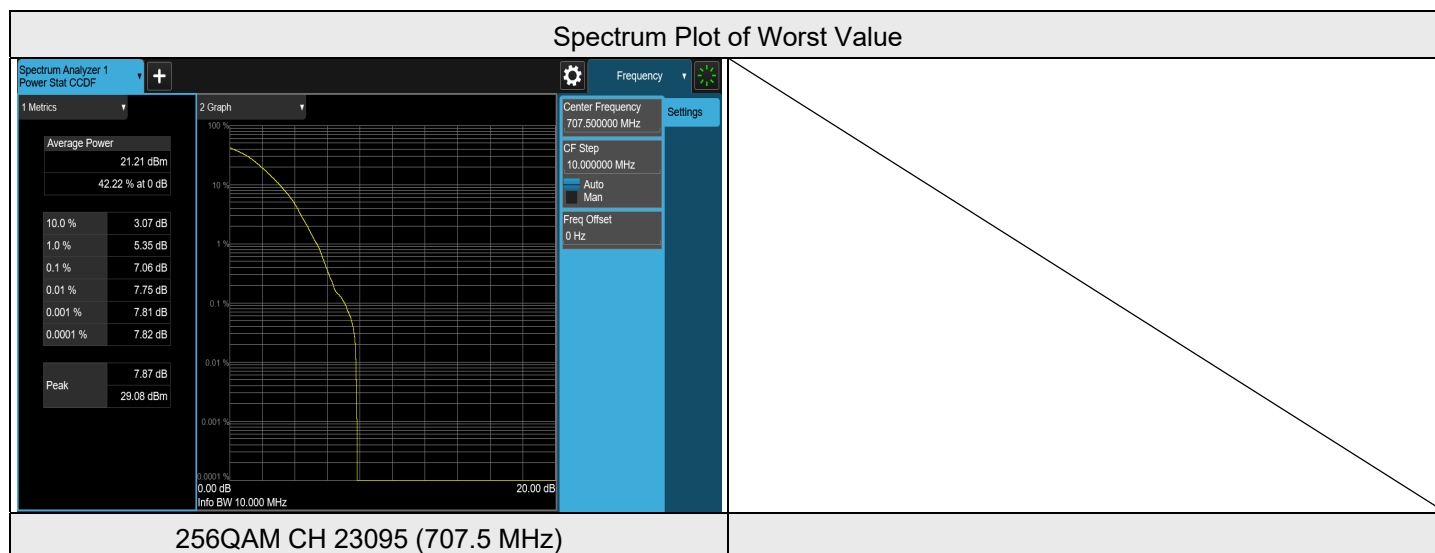
LTE Band 12, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	23035	701.5	5.26	13	PASS
QPSK	23095	707.5	5.05	13	PASS
QPSK	23155	713.5	4.64	13	PASS
16QAM	23035	701.5	6.25	13	PASS
16QAM	23095	707.5	6.09	13	PASS
16QAM	23155	713.5	5.51	13	PASS
64QAM	23035	701.5	6.24	13	PASS
64QAM	23095	707.5	6.34	13	PASS
64QAM	23155	713.5	5.72	13	PASS
256QAM	23035	701.5	6.53	13	PASS
256QAM	23095	707.5	6.87	13	PASS
256QAM	23155	713.5	6.56	13	PASS



LTE Band 12, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	23060	704	5.36	13	PASS
QPSK	23095	707.5	5.21	13	PASS
QPSK	23130	711	4.44	13	PASS
16QAM	23060	704	6.34	13	PASS
16QAM	23095	707.5	6.22	13	PASS
16QAM	23130	711	5.52	13	PASS
64QAM	23060	704	6.37	13	PASS
64QAM	23095	707.5	6.69	13	PASS
64QAM	23130	711	5.82	13	PASS
256QAM	23060	704	6.68	13	PASS
256QAM	23095	707.5	7.06	13	PASS
256QAM	23130	711	6.86	13	PASS

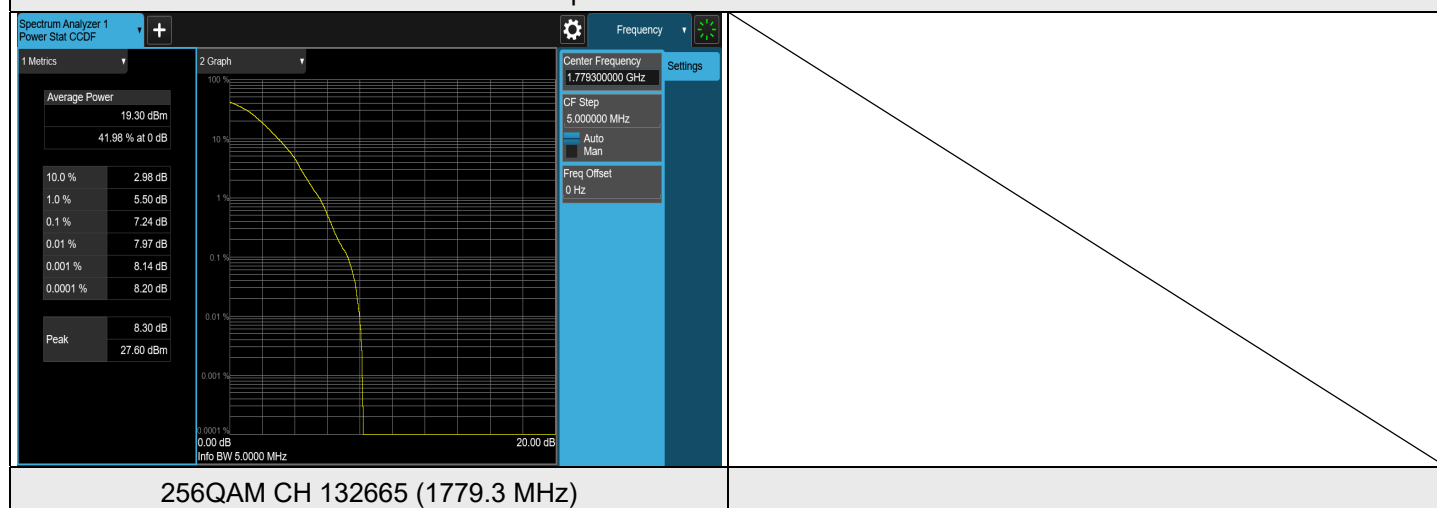


7.3.5 LTE Band 66

LTE Band 66, Channel Bandwidth: 1.4 MHz

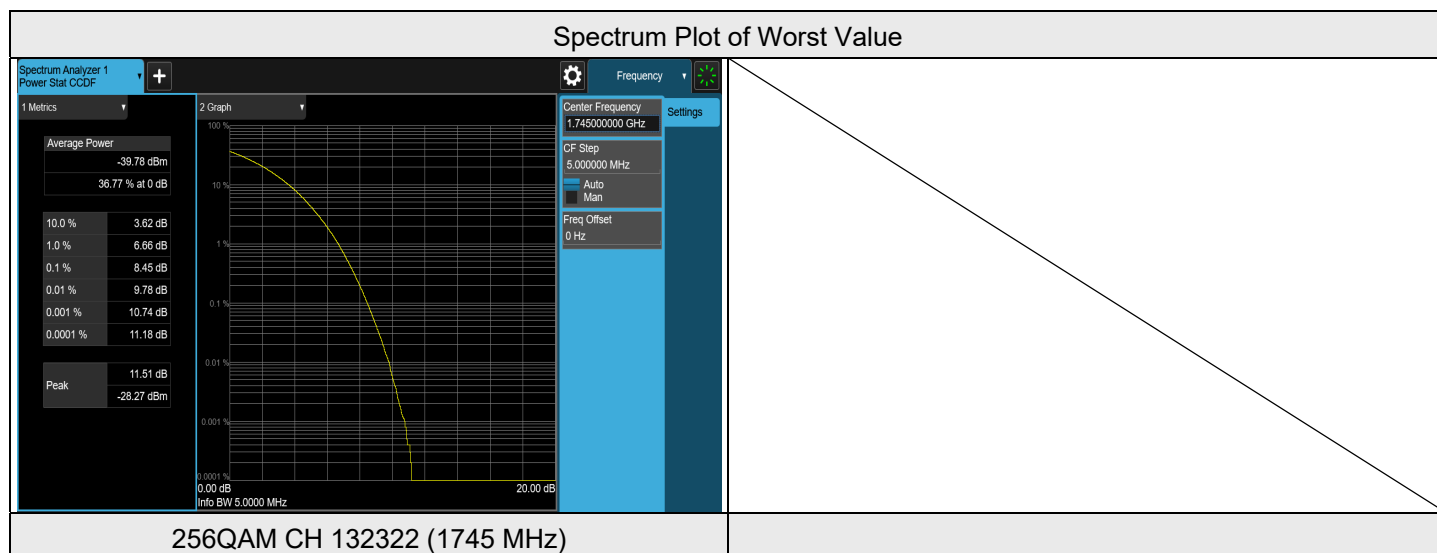
Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	131979	1710.7	5.12	13	PASS
QPSK	132322	1745	5.13	13	PASS
QPSK	132665	1779.3	4.76	13	PASS
16QAM	131979	1710.7	6.14	13	PASS
16QAM	132322	1745	6.12	13	PASS
16QAM	132665	1779.3	5.67	13	PASS
64QAM	131979	1710.7	6.37	13	PASS
64QAM	132322	1745	6.45	13	PASS
64QAM	132665	1779.3	6.04	13	PASS
256QAM	131979	1710.7	7.01	13	PASS
256QAM	132322	1745	7.11	13	PASS
256QAM	132665	1779.3	7.24	13	PASS

Spectrum Plot of Worst Value



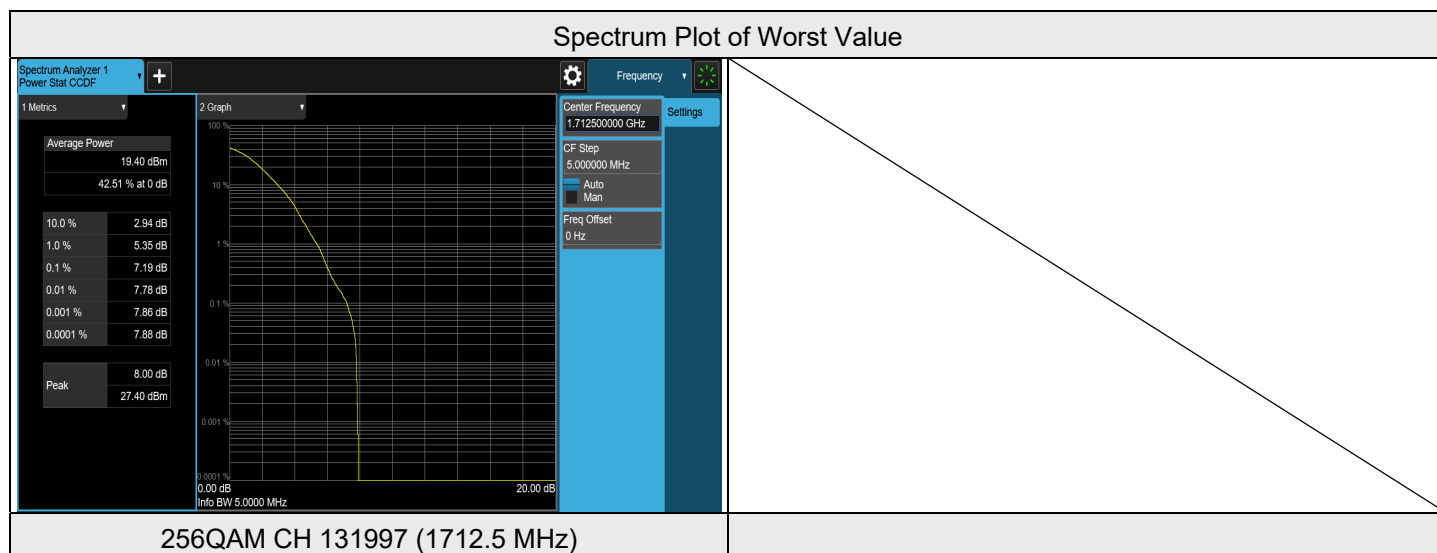
LTE Band 66, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	131987	1711.5	5.06	13	PASS
QPSK	132322	1745	5.03	13	PASS
QPSK	132657	1778.5	4.83	13	PASS
16QAM	131987	1711.5	6.14	13	PASS
16QAM	132322	1745	5.89	13	PASS
16QAM	132657	1778.5	5.46	13	PASS
64QAM	131987	1711.5	6.26	13	PASS
64QAM	132322	1745	6.53	13	PASS
64QAM	132657	1778.5	6.10	13	PASS
256QAM	131987	1711.5	6.85	13	PASS
256QAM	132322	1745	8.45	13	PASS
256QAM	132657	1778.5	6.98	13	PASS



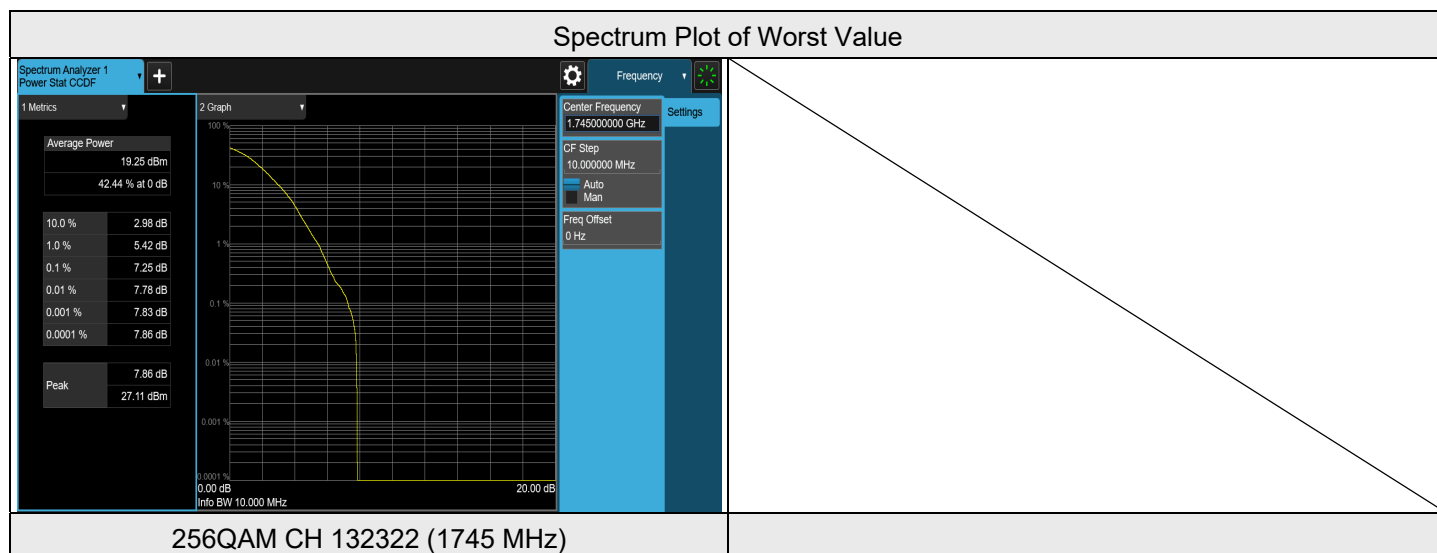
LTE Band 66, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	131997	1712.5	5.03	13	PASS
QPSK	132322	1745	5.08	13	PASS
QPSK	132647	1777.5	4.84	13	PASS
16QAM	131997	1712.5	6.12	13	PASS
16QAM	132322	1745	6.19	13	PASS
16QAM	132647	1777.5	5.86	13	PASS
64QAM	131997	1712.5	6.34	13	PASS
64QAM	132322	1745	6.55	13	PASS
64QAM	132647	1777.5	6.17	13	PASS
256QAM	131997	1712.5	7.19	13	PASS
256QAM	132322	1745	7.09	13	PASS
256QAM	132647	1777.5	7.19	13	PASS



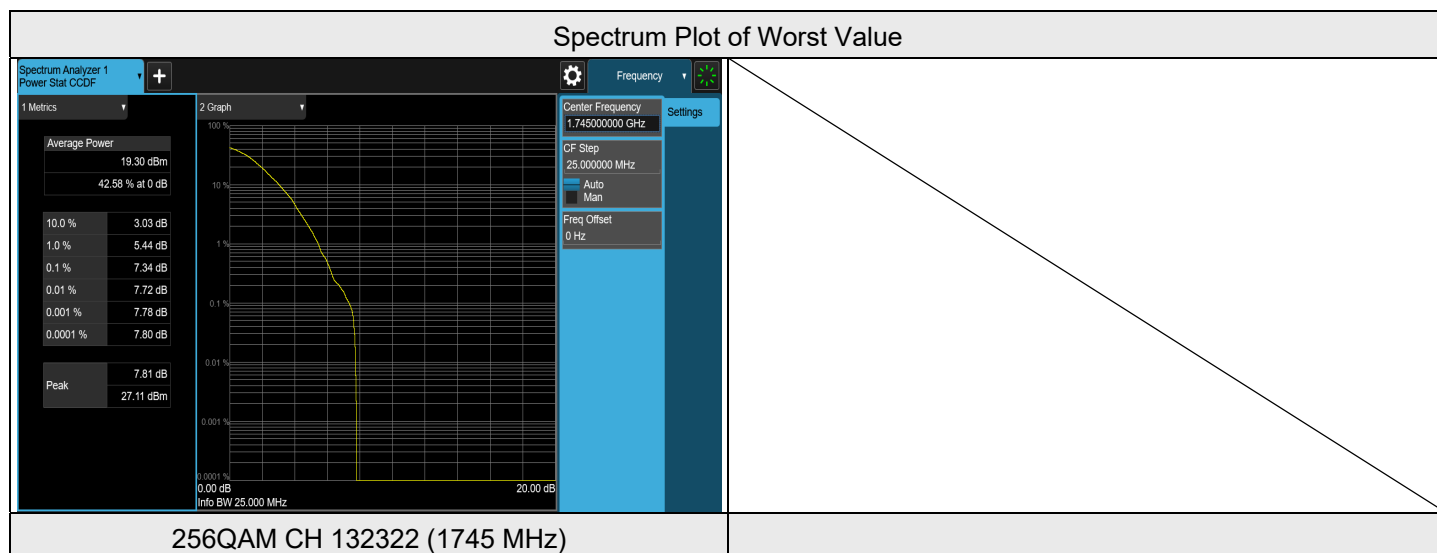
LTE Band 66, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	132022	1715	5.01	13	PASS
QPSK	132322	1745	5.07	13	PASS
QPSK	132622	1775	4.69	13	PASS
16QAM	132022	1715	6.10	13	PASS
16QAM	132322	1745	6.11	13	PASS
16QAM	132622	1775	5.70	13	PASS
64QAM	132022	1715	6.28	13	PASS
64QAM	132322	1745	6.59	13	PASS
64QAM	132622	1775	6.19	13	PASS
256QAM	132022	1715	6.83	13	PASS
256QAM	132322	1745	7.25	13	PASS
256QAM	132622	1775	7.14	13	PASS



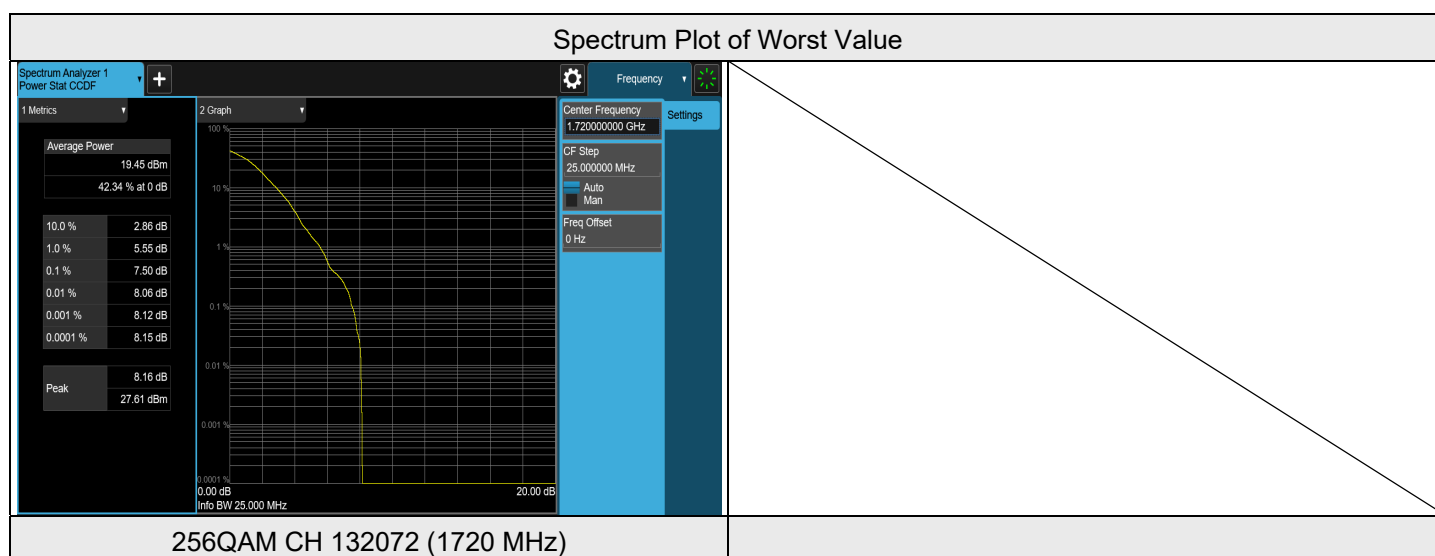
LTE Band 66, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	132047	1717.5	5.02	13	PASS
QPSK	132322	1745	4.96	13	PASS
QPSK	132597	1772.5	4.75	13	PASS
16QAM	132047	1717.5	6.14	13	PASS
16QAM	132322	1745	5.93	13	PASS
16QAM	132597	1772.5	5.66	13	PASS
64QAM	132047	1717.5	6.28	13	PASS
64QAM	132322	1745	6.41	13	PASS
64QAM	132597	1772.5	6.21	13	PASS
256QAM	132047	1717.5	6.91	13	PASS
256QAM	132322	1745	7.34	13	PASS
256QAM	132597	1772.5	6.48	13	PASS



LTE Band 66, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	132072	1720	4.99	13	PASS
QPSK	132322	1745	4.92	13	PASS
QPSK	132572	1770	4.79	13	PASS
16QAM	132072	1720	5.87	13	PASS
16QAM	132322	1745	5.75	13	PASS
16QAM	132572	1770	5.78	13	PASS
64QAM	132072	1720	6.09	13	PASS
64QAM	132322	1745	6.34	13	PASS
64QAM	132572	1770	6.18	13	PASS
256QAM	132072	1720	7.50	13	PASS
256QAM	132322	1745	5.97	13	PASS
256QAM	132572	1770	7.50	13	PASS

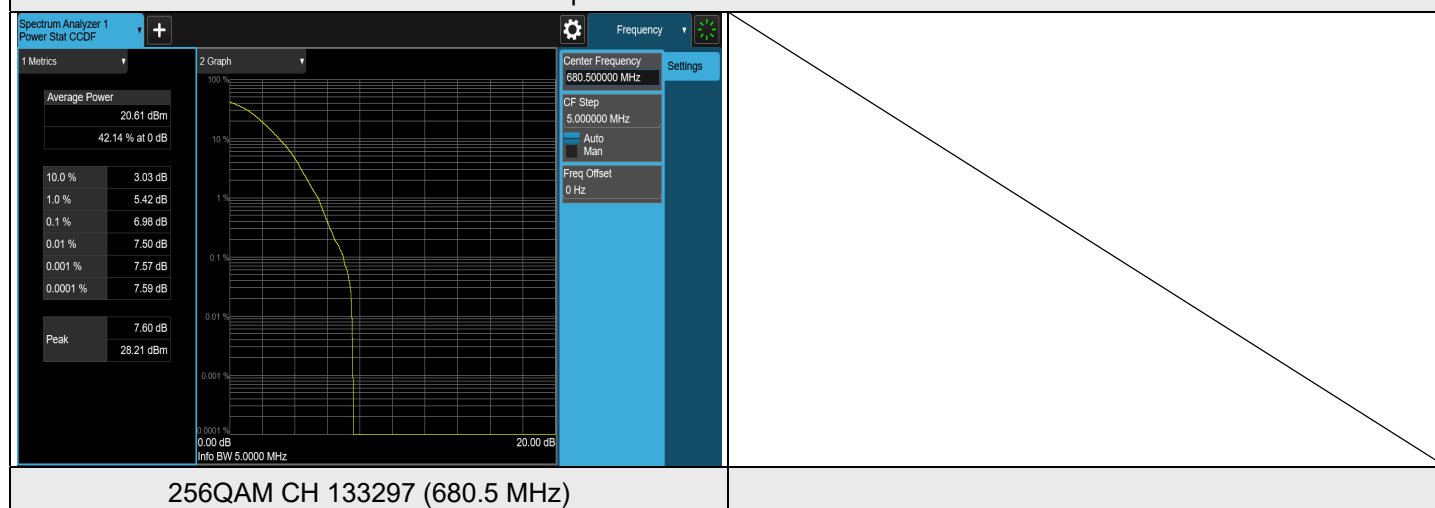


7.3.6 LTE Band 71

LTE Band 71, Channel Bandwidth: 5 MHz

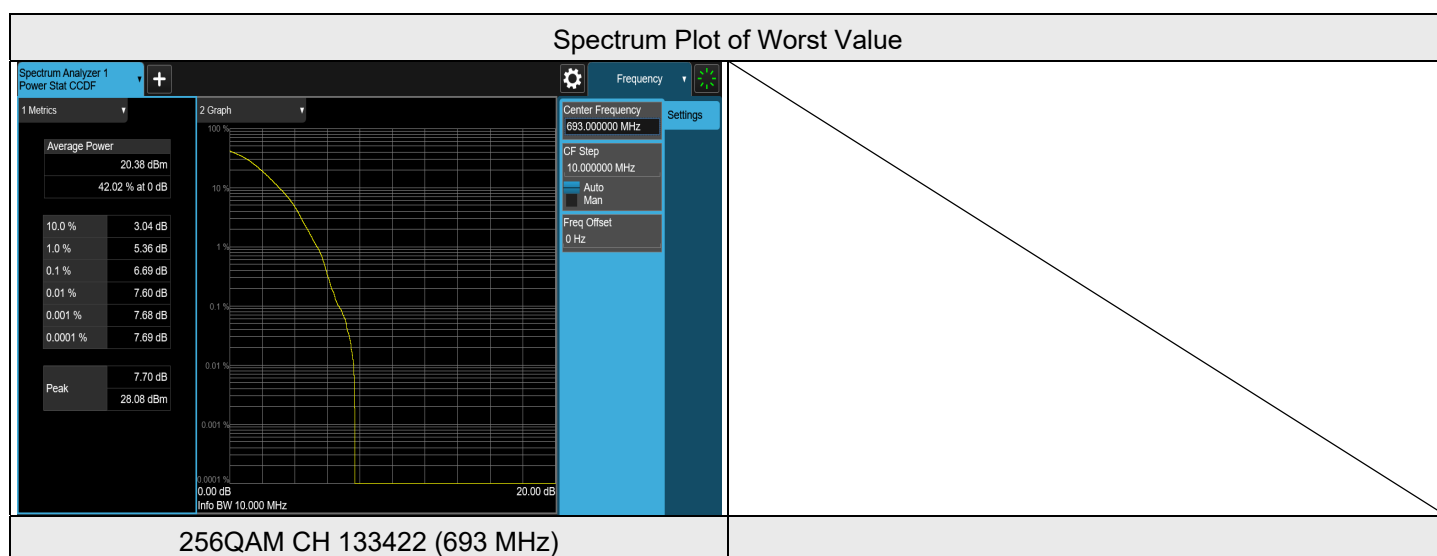
Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	133147	665.5	4.43	13	PASS
QPSK	133297	680.5	5.22	13	PASS
QPSK	133447	695.5	5.12	13	PASS
16QAM	133147	665.5	5.31	13	PASS
16QAM	133297	680.5	6.37	13	PASS
16QAM	133447	695.5	6.12	13	PASS
64QAM	133147	665.5	5.49	13	PASS
64QAM	133297	680.5	6.28	13	PASS
64QAM	133447	695.5	6.26	13	PASS
256QAM	133147	665.5	6.44	13	PASS
256QAM	133297	680.5	6.98	13	PASS
256QAM	133447	695.5	6.86	13	PASS

Spectrum Plot of Worst Value



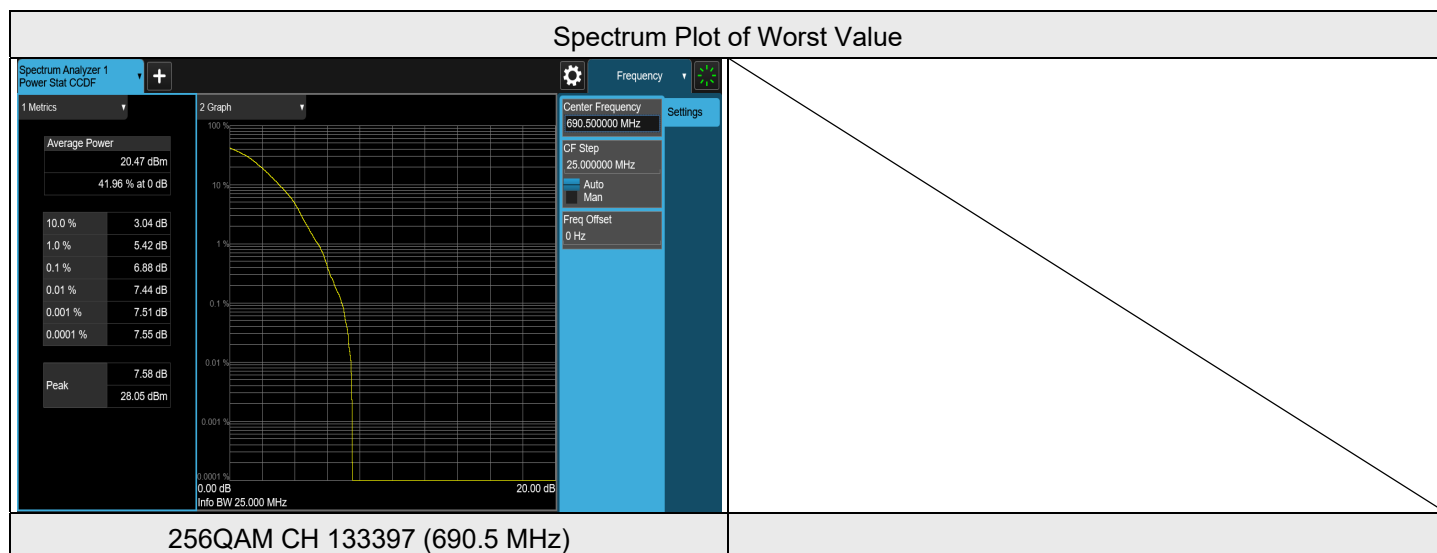
LTE Band 71, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	133172	668	4.52	13	PASS
QPSK	133297	680.5	4.99	13	PASS
QPSK	133422	693	5.21	13	PASS
16QAM	133172	668	5.52	13	PASS
16QAM	133297	680.5	6.04	13	PASS
16QAM	133422	693	6.23	13	PASS
64QAM	133172	668	5.64	13	PASS
64QAM	133297	680.5	6.17	13	PASS
64QAM	133422	693	6.13	13	PASS
256QAM	133172	668	6.45	13	PASS
256QAM	133297	680.5	6.63	13	PASS
256QAM	133422	693	6.69	13	PASS



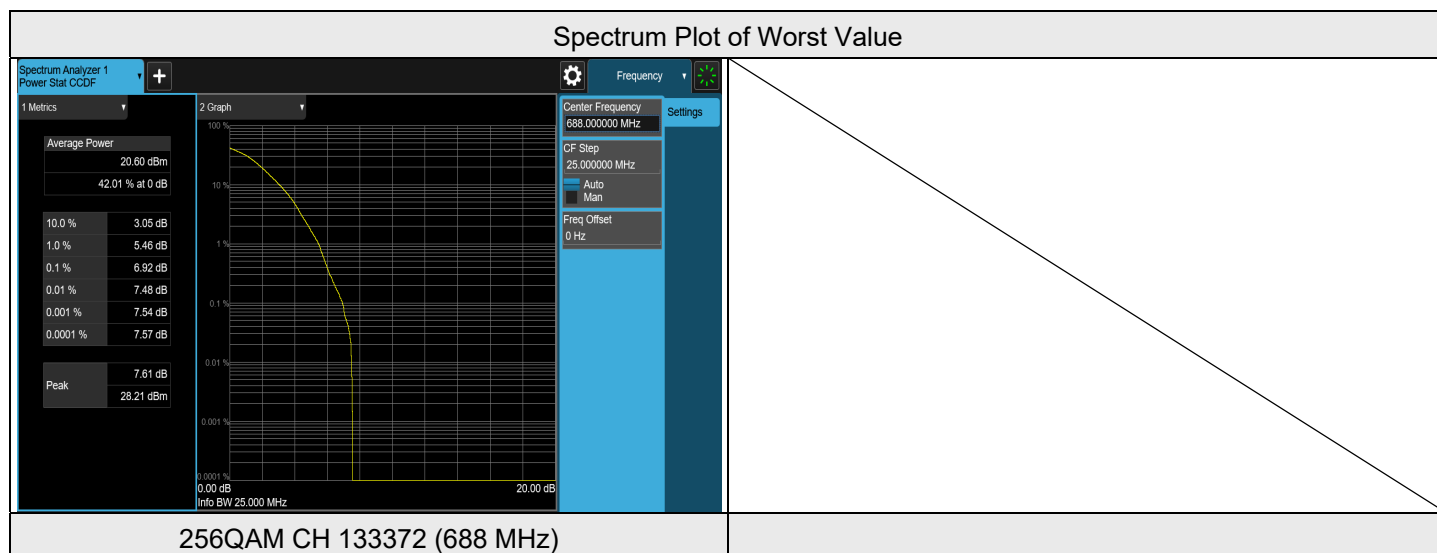
LTE Band 71, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	133197	670.5	4.61	13	PASS
QPSK	133297	680.5	4.79	13	PASS
QPSK	133397	690.5	5.28	13	PASS
16QAM	133197	670.5	5.35	13	PASS
16QAM	133297	680.5	5.66	13	PASS
16QAM	133397	690.5	6.34	13	PASS
64QAM	133197	670.5	5.70	13	PASS
64QAM	133297	680.5	5.83	13	PASS
64QAM	133397	690.5	6.37	13	PASS
256QAM	133197	670.5	6.70	13	PASS
256QAM	133297	680.5	6.41	13	PASS
256QAM	133397	690.5	6.88	13	PASS



LTE Band 71, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	133222	673	4.69	13	PASS
QPSK	133297	680.5	4.77	13	PASS
QPSK	133372	688	5.13	13	PASS
16QAM	133222	673	5.66	13	PASS
16QAM	133297	680.5	5.57	13	PASS
16QAM	133372	688	6.79	13	PASS
64QAM	133222	673	5.78	13	PASS
64QAM	133297	680.5	5.86	13	PASS
64QAM	133372	688	6.28	13	PASS
256QAM	133222	673	6.74	13	PASS
256QAM	133297	680.5	6.84	13	PASS
256QAM	133372	688	6.92	13	PASS



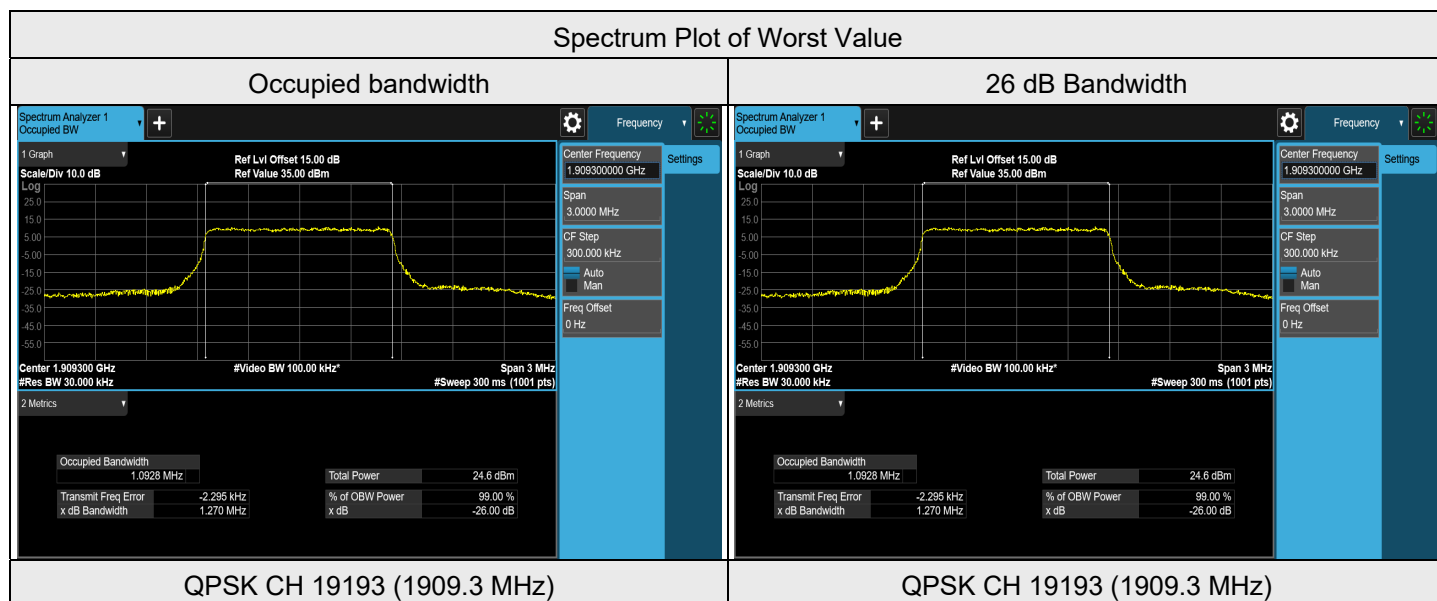
7.4 Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	21°C, 69% RH	Tested By:	Willy Cheng
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7.4.1 LTE Band 2

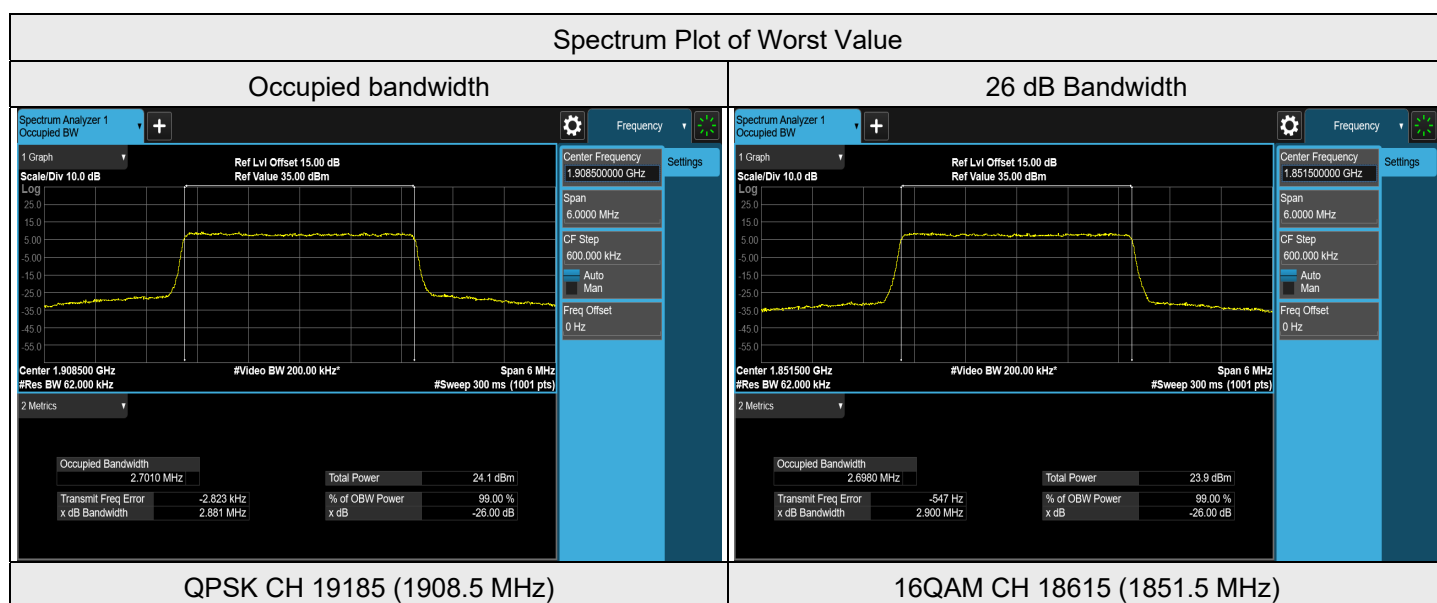
LTE Band 2, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	18607	1850.7	1.0831	1.240
QPSK	18900	1880	1.0924	1.257
QPSK	19193	1909.3	1.0928	1.270
16QAM	18607	1850.7	1.0898	1.254
16QAM	18900	1880	1.0904	1.251
16QAM	19193	1909.3	1.0907	1.258
64QAM	18607	1850.7	1.0894	1.260
64QAM	18900	1880	1.0888	1.251
64QAM	19193	1909.3	1.0886	1.255
256QAM	18607	1850.7	1.0859	1.234
256QAM	18900	1880	1.0849	1.251
256QAM	19193	1909.3	1.0853	1.234



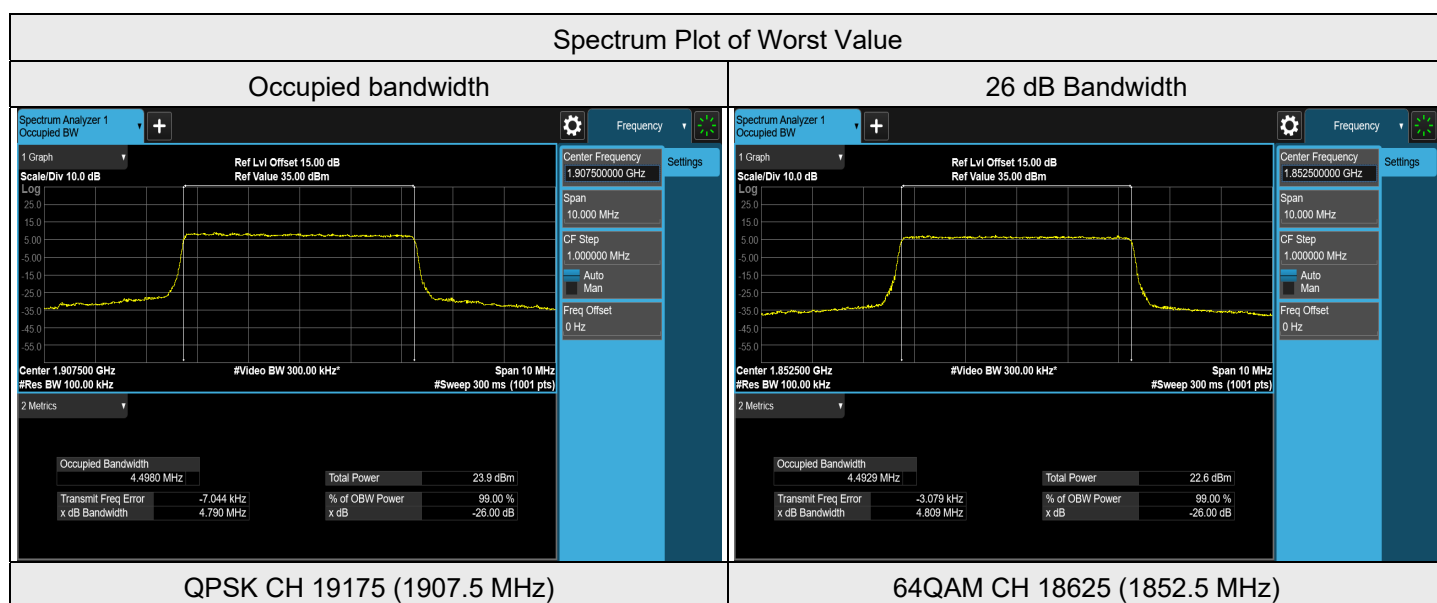
LTE Band 2, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	18615	1851.5	2.7006	2.880
QPSK	18900	1880	2.6992	2.878
QPSK	19185	1908.5	2.7010	2.881
16QAM	18615	1851.5	2.6980	2.900
16QAM	18900	1880	2.6989	2.886
16QAM	19185	1908.5	2.6973	2.893
64QAM	18615	1851.5	2.6963	2.877
64QAM	18900	1880	2.6975	2.877
64QAM	19185	1908.5	2.6987	2.880
256QAM	18615	1851.5	2.6983	2.878
256QAM	18900	1880	2.6976	2.874
256QAM	19185	1908.5	2.6988	2.883



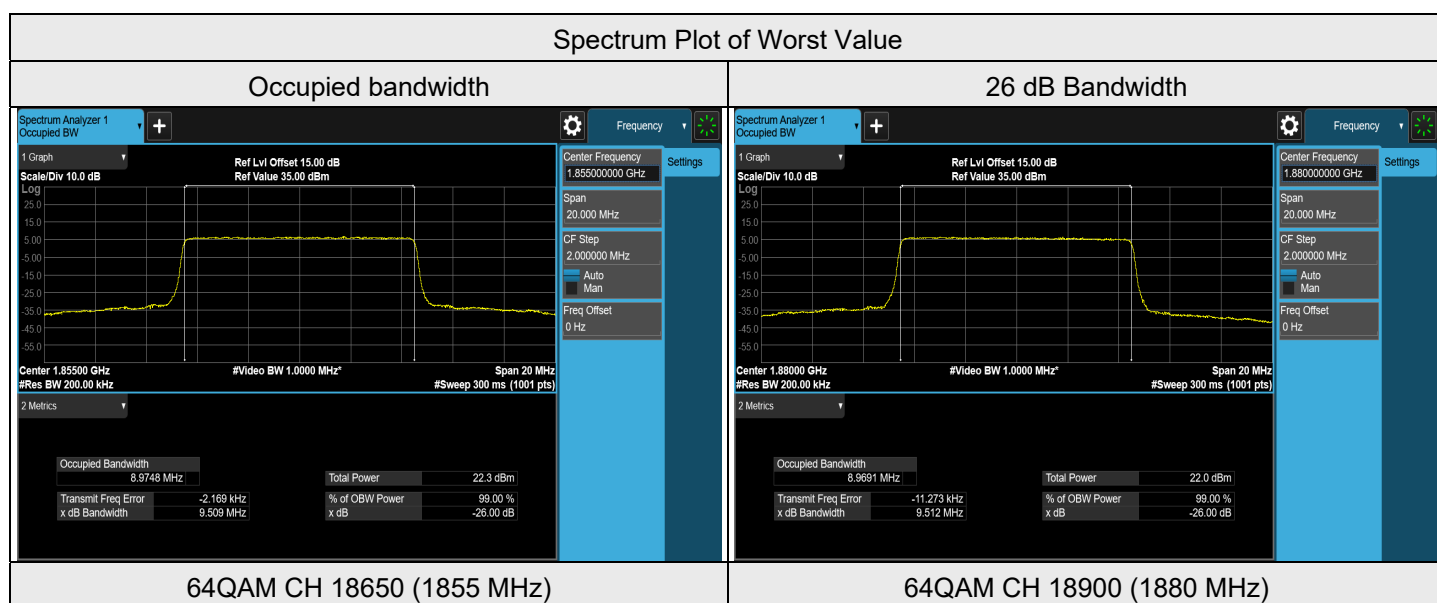
LTE Band 2, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	18625	1852.5	4.4918	4.787
QPSK	18900	1880	4.4911	4.792
QPSK	19175	1907.5	4.4980	4.790
16QAM	18625	1852.5	4.4880	4.778
16QAM	18900	1880	4.4873	4.782
16QAM	19175	1907.5	4.4934	4.779
64QAM	18625	1852.5	4.4929	4.809
64QAM	18900	1880	4.4943	4.777
64QAM	19175	1907.5	4.4964	4.802
256QAM	18625	1852.5	4.4851	4.780
256QAM	18900	1880	4.4850	4.776
256QAM	19175	1907.5	4.4846	4.784



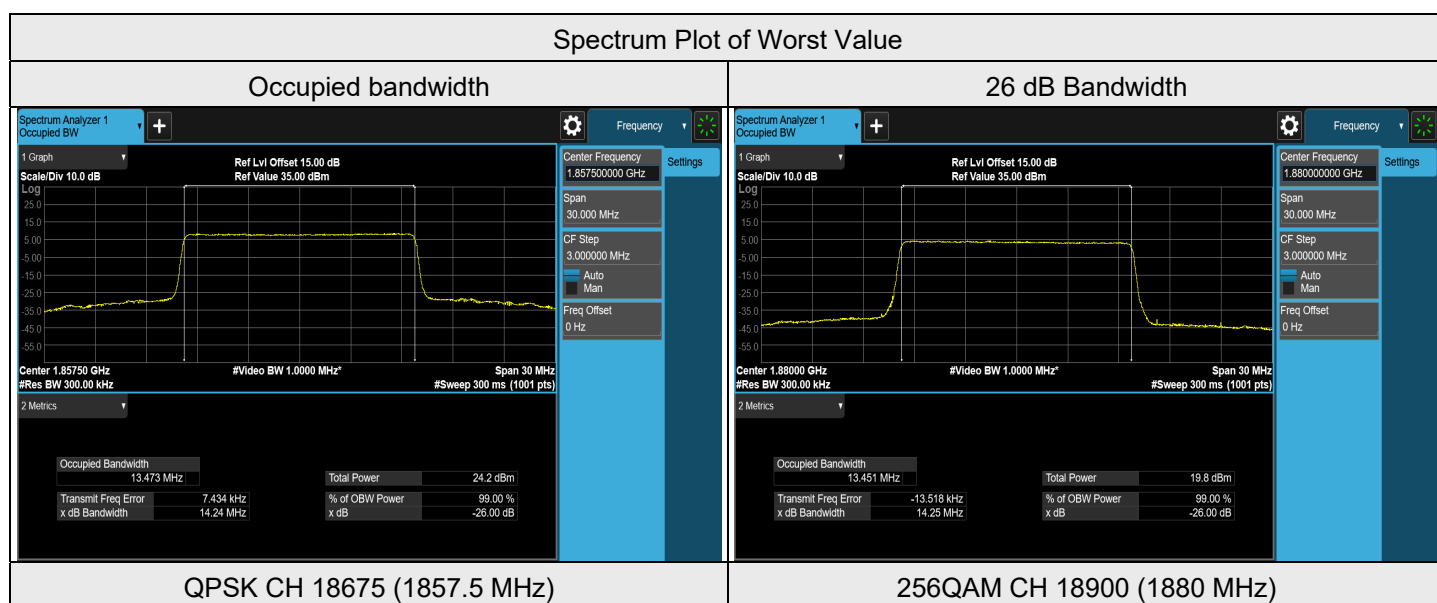
LTE Band 2, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	18650	1855	8.9747	9.504
QPSK	18900	1880	8.9704	9.500
QPSK	19150	1905	8.9688	9.499
16QAM	18650	1855	8.9738	9.502
16QAM	18900	1880	8.9717	9.490
16QAM	19150	1905	8.9668	9.489
64QAM	18650	1855	8.9748	9.509
64QAM	18900	1880	8.9691	9.512
64QAM	19150	1905	8.9709	9.508
256QAM	18650	1855	8.9678	9.506
256QAM	18900	1880	8.9614	9.497
256QAM	19150	1905	8.9621	9.487



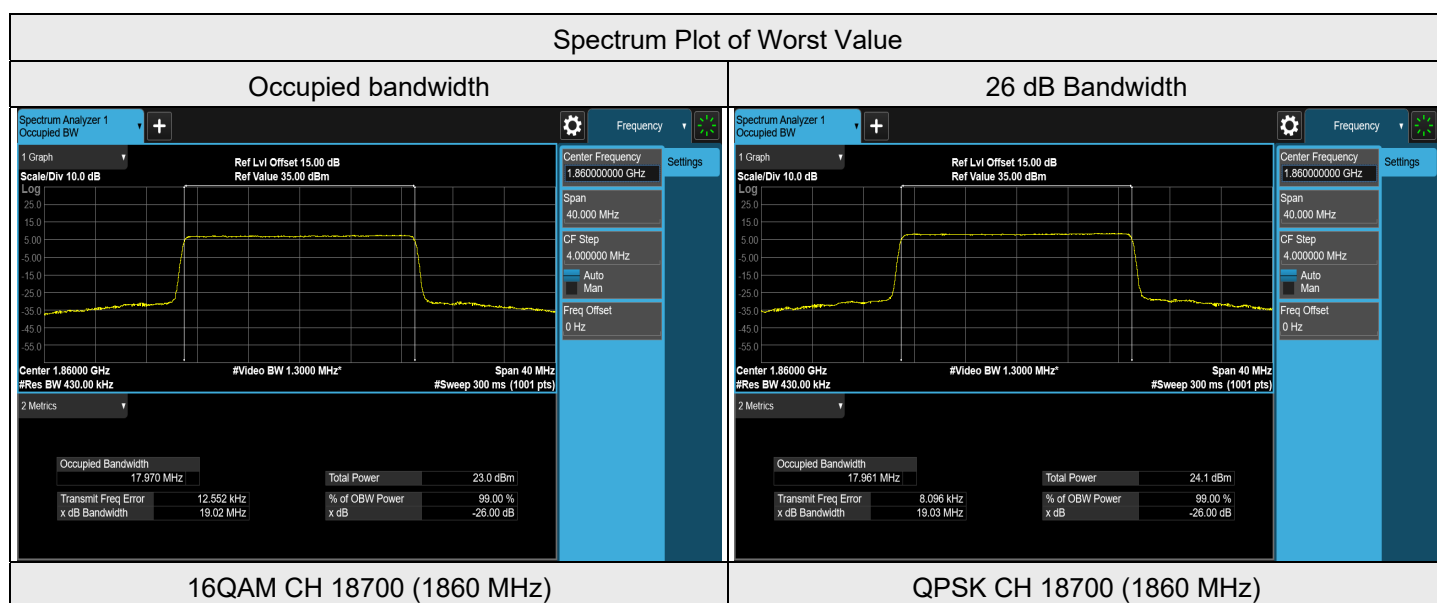
LTE Band 2, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	18675	1857.5	13.4727	14.240
QPSK	18900	1880	13.4661	14.235
QPSK	19125	1902.5	13.4377	14.211
16QAM	18675	1857.5	13.4556	14.241
16QAM	18900	1880	13.4563	14.234
16QAM	19125	1902.5	13.4303	14.223
64QAM	18675	1857.5	13.4564	14.236
64QAM	18900	1880	13.4486	14.238
64QAM	19125	1902.5	13.4227	14.211
256QAM	18675	1857.5	13.4567	14.241
256QAM	18900	1880	13.4508	14.246
256QAM	19125	1902.5	13.4271	14.207



LTE Band 2, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	18700	1860	17.9613	19.033
QPSK	18900	1880	17.9472	18.999
QPSK	19100	1900	17.9108	19.012
16QAM	18700	1860	17.9696	19.018
16QAM	18900	1880	17.9626	19.016
16QAM	19100	1900	17.9208	18.990
64QAM	18700	1860	17.9635	19.021
64QAM	18900	1880	17.9545	19.014
64QAM	19100	1900	17.9150	19.002
256QAM	18700	1860	17.9643	19.006
256QAM	18900	1880	17.9536	19.004
256QAM	19100	1900	17.9112	18.983

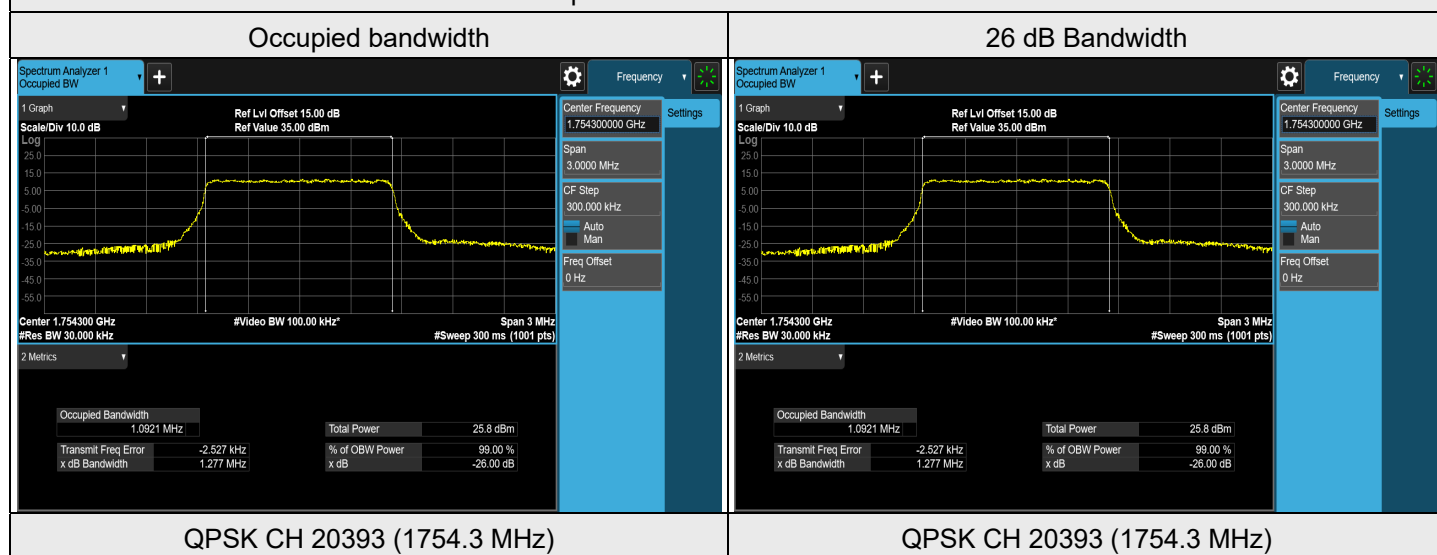


7.4.2 LTE Band 4

LTE Band 4, Channel Bandwidth: 1.4 MHz

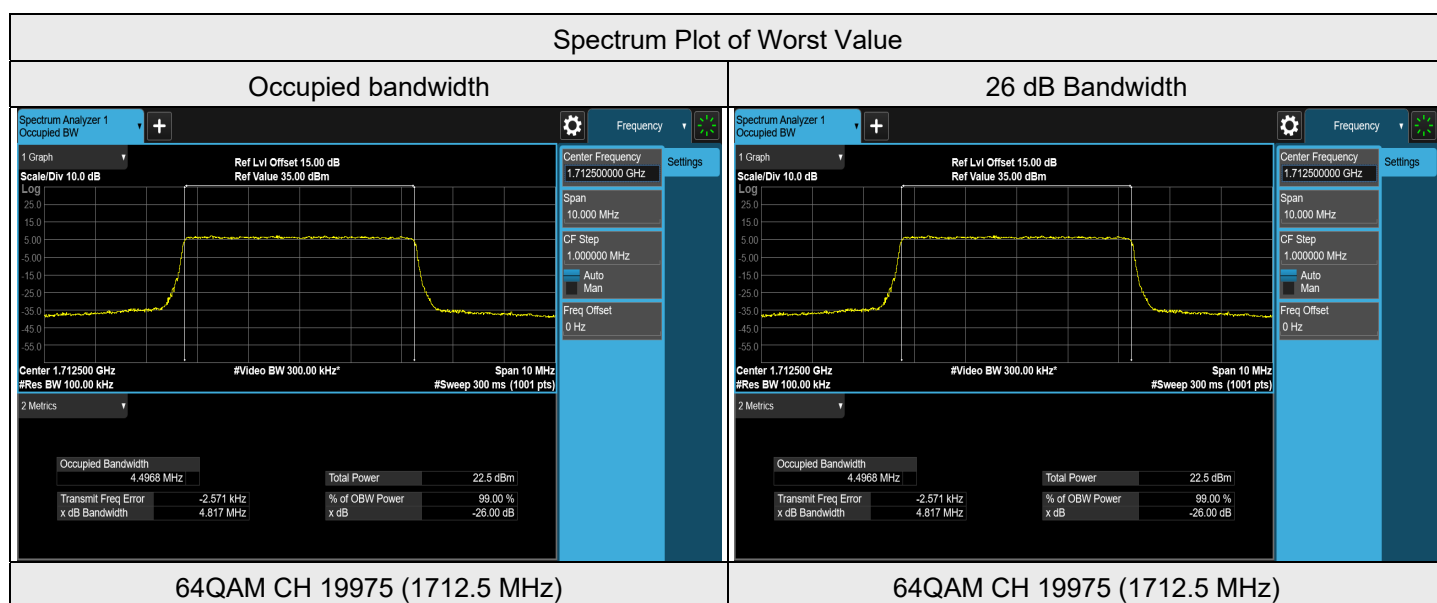
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	19957	1710.7	1.0845	1.238
QPSK	20175	1732.5	1.0905	1.251
QPSK	20393	1754.3	1.0921	1.277
16QAM	19957	1710.7	1.0881	1.256
16QAM	20175	1732.5	1.0893	1.248
16QAM	20393	1754.3	1.0900	1.251
64QAM	19957	1710.7	1.0887	1.253
64QAM	20175	1732.5	1.0878	1.257
64QAM	20393	1754.3	1.0880	1.259
256QAM	19957	1710.7	1.0852	1.241
256QAM	20175	1732.5	1.0841	1.239
256QAM	20393	1754.3	1.0857	1.239

Spectrum Plot of Worst Value



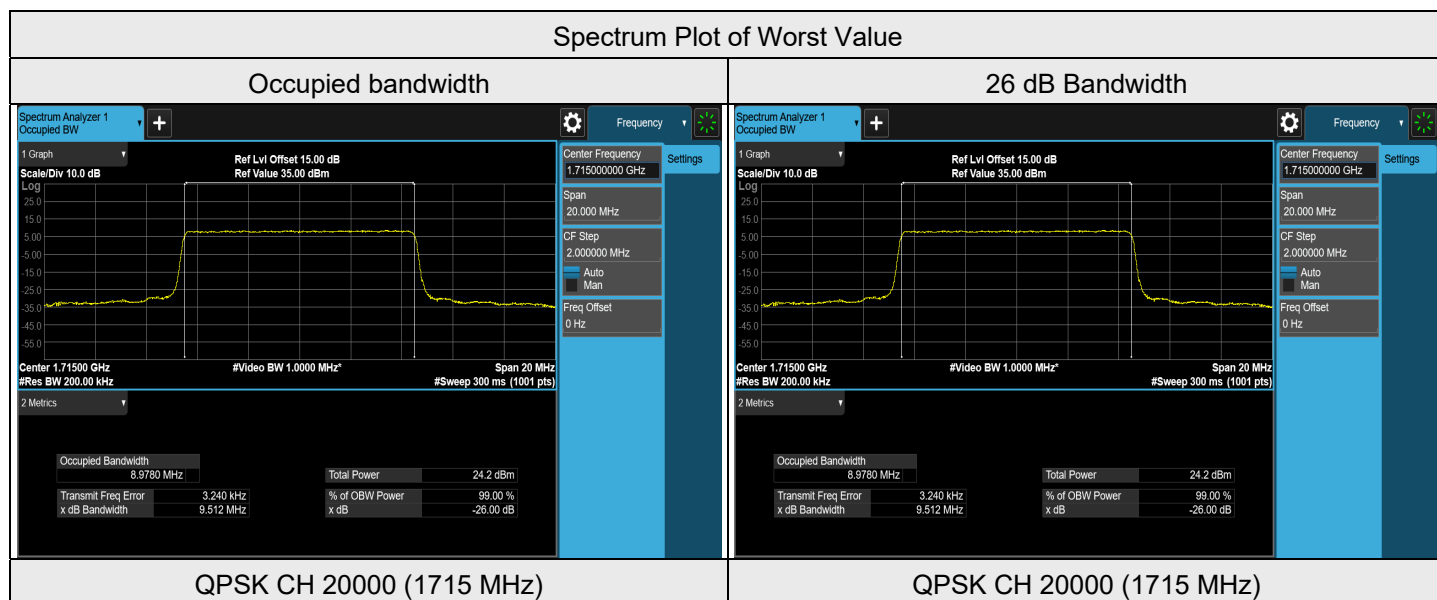
LTE Band 4, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	19975	1712.5	4.4940	4.785
QPSK	20175	1732.5	4.4899	4.791
QPSK	20375	1752.5	4.4947	4.795
16QAM	19975	1712.5	4.4912	4.781
16QAM	20175	1732.5	4.4866	4.772
16QAM	20375	1752.5	4.4870	4.785
64QAM	19975	1712.5	4.4968	4.817
64QAM	20175	1732.5	4.4944	4.808
64QAM	20375	1752.5	4.4950	4.799
256QAM	19975	1712.5	4.4841	4.777
256QAM	20175	1732.5	4.4846	4.783
256QAM	20375	1752.5	4.4843	4.787



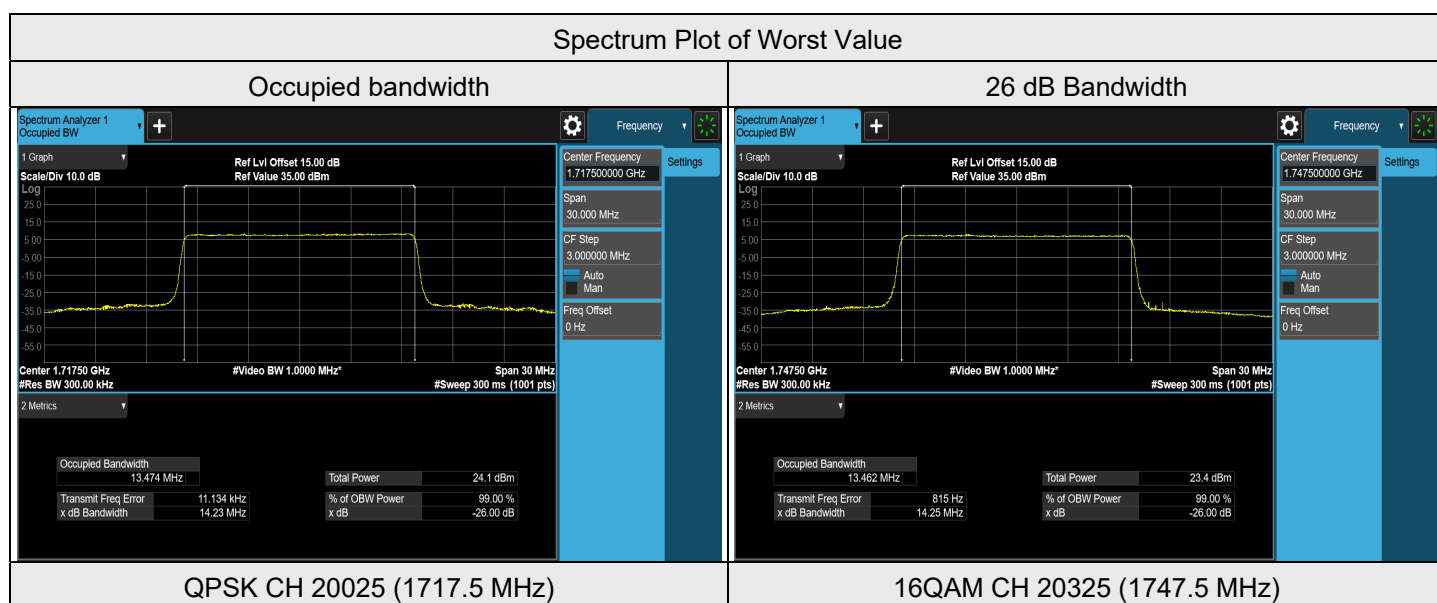
LTE Band 4, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	20000	1715	8.9780	9.512
QPSK	20175	1732.5	8.9707	9.505
QPSK	20350	1750	8.9752	9.508
16QAM	20000	1715	8.9750	9.503
16QAM	20175	1732.5	8.9695	9.505
16QAM	20350	1750	8.9752	9.507
64QAM	20000	1715	8.9770	9.498
64QAM	20175	1732.5	8.9705	9.512
64QAM	20350	1750	8.9751	9.507
256QAM	20000	1715	8.9693	9.506
256QAM	20175	1732.5	8.9592	9.488
256QAM	20350	1750	8.9689	9.480



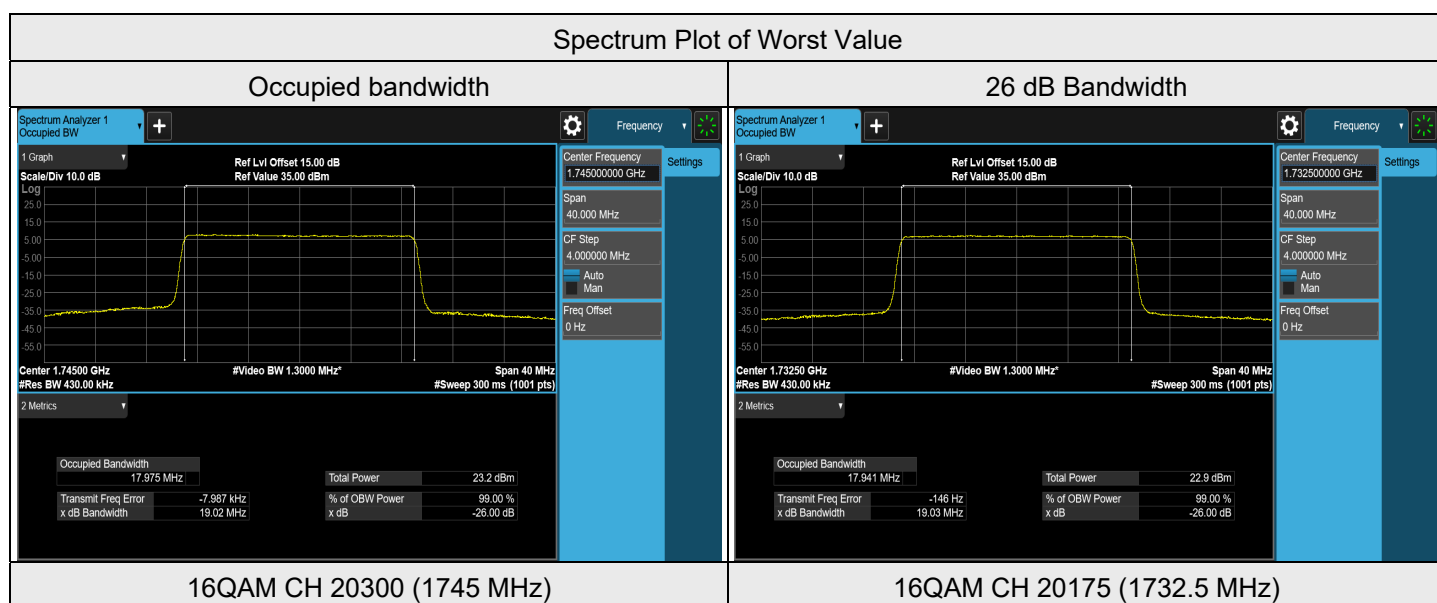
LTE Band 4, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	20025	1717.5	13.4737	14.233
QPSK	20175	1732.5	13.4621	14.228
QPSK	20325	1747.5	13.4729	14.241
16QAM	20025	1717.5	13.4621	14.248
16QAM	20175	1732.5	13.4463	14.245
16QAM	20325	1747.5	13.4621	14.254
64QAM	20025	1717.5	13.4520	14.239
64QAM	20175	1732.5	13.4428	14.227
64QAM	20325	1747.5	13.4585	14.229
256QAM	20025	1717.5	13.4600	14.238
256QAM	20175	1732.5	13.4417	14.205
256QAM	20325	1747.5	13.4577	14.238



LTE Band 4, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	20050	1720	17.9635	19.019
QPSK	20175	1732.5	17.9372	19.023
QPSK	20300	1745	17.9647	19.021
16QAM	20050	1720	17.9705	19.015
16QAM	20175	1732.5	17.9414	19.029
16QAM	20300	1745	17.9753	19.021
64QAM	20050	1720	17.9622	19.018
64QAM	20175	1732.5	17.9401	19.015
64QAM	20300	1745	17.9677	19.021
256QAM	20050	1720	17.9602	19.012
256QAM	20175	1732.5	17.9387	19.013
256QAM	20300	1745	17.9619	19.023

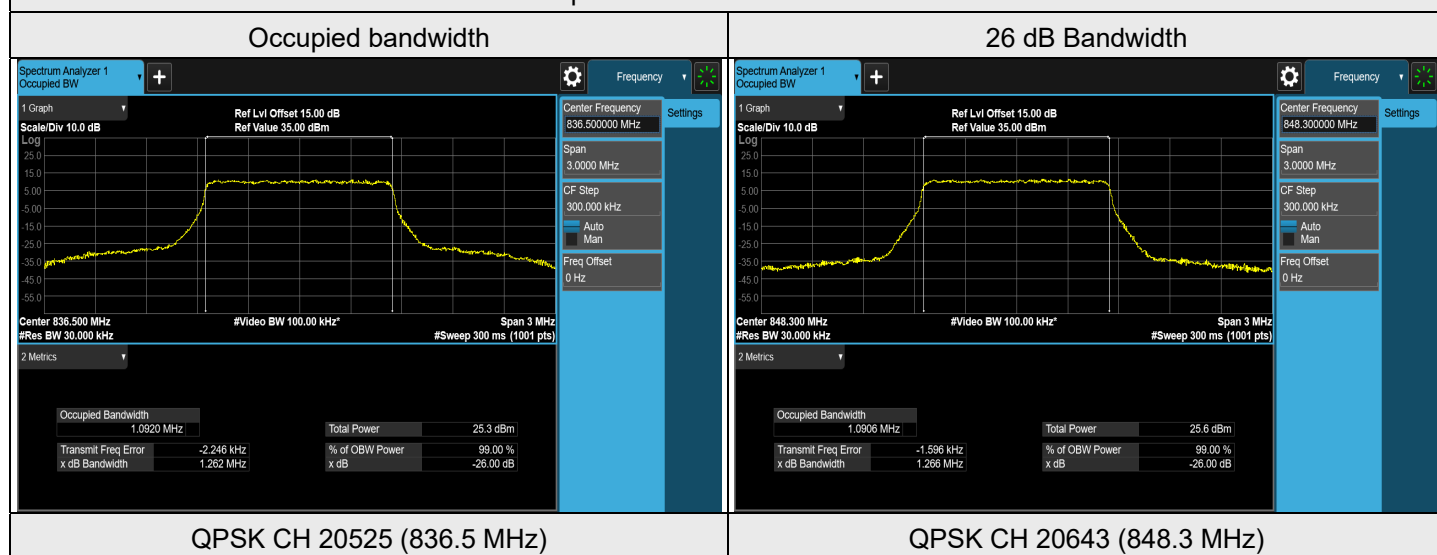


7.4.3 LTE Band 5

LTE Band 5, Channel Bandwidth: 1.4 MHz

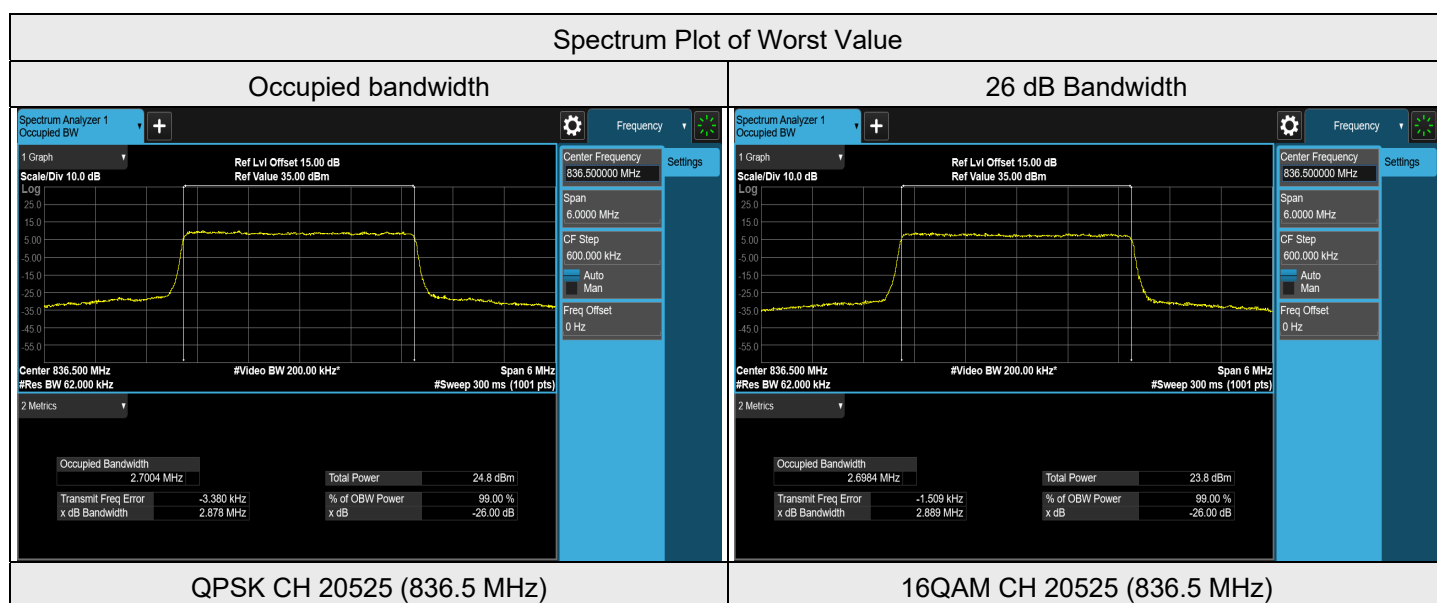
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	20407	824.7	1.0888	1.253
QPSK	20525	836.5	1.0920	1.262
QPSK	20643	848.3	1.0906	1.266
16QAM	20407	824.7	1.0890	1.255
16QAM	20525	836.5	1.0895	1.257
16QAM	20643	848.3	1.0897	1.262
64QAM	20407	824.7	1.0891	1.260
64QAM	20525	836.5	1.0881	1.260
64QAM	20643	848.3	1.0892	1.257
256QAM	20407	824.7	1.0846	1.225
256QAM	20525	836.5	1.0851	1.240
256QAM	20643	848.3	1.0859	1.225

Spectrum Plot of Worst Value



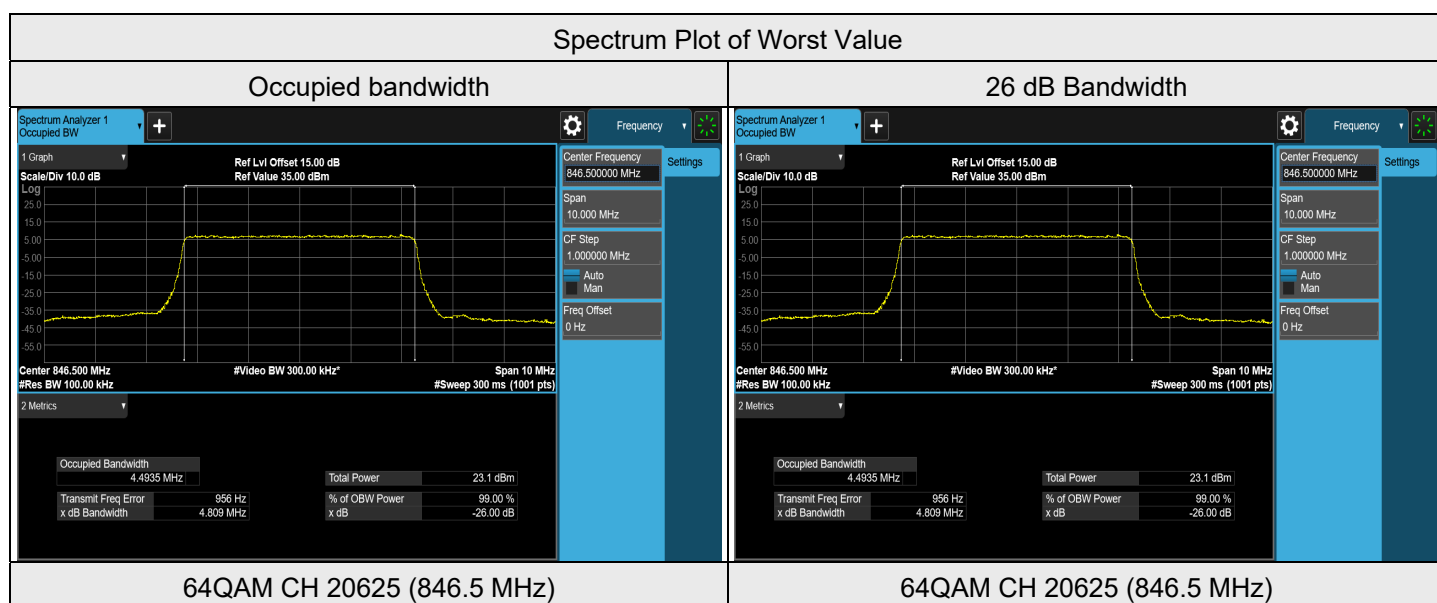
LTE Band 5, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	20415	825.5	2.6978	2.881
QPSK	20525	836.5	2.7004	2.878
QPSK	20635	847.5	2.6993	2.876
16QAM	20415	825.5	2.6985	2.888
16QAM	20525	836.5	2.6984	2.889
16QAM	20635	847.5	2.6974	2.885
64QAM	20415	825.5	2.6981	2.873
64QAM	20525	836.5	2.6979	2.872
64QAM	20635	847.5	2.6986	2.873
256QAM	20415	825.5	2.6961	2.875
256QAM	20525	836.5	2.6980	2.871
256QAM	20635	847.5	2.6979	2.881



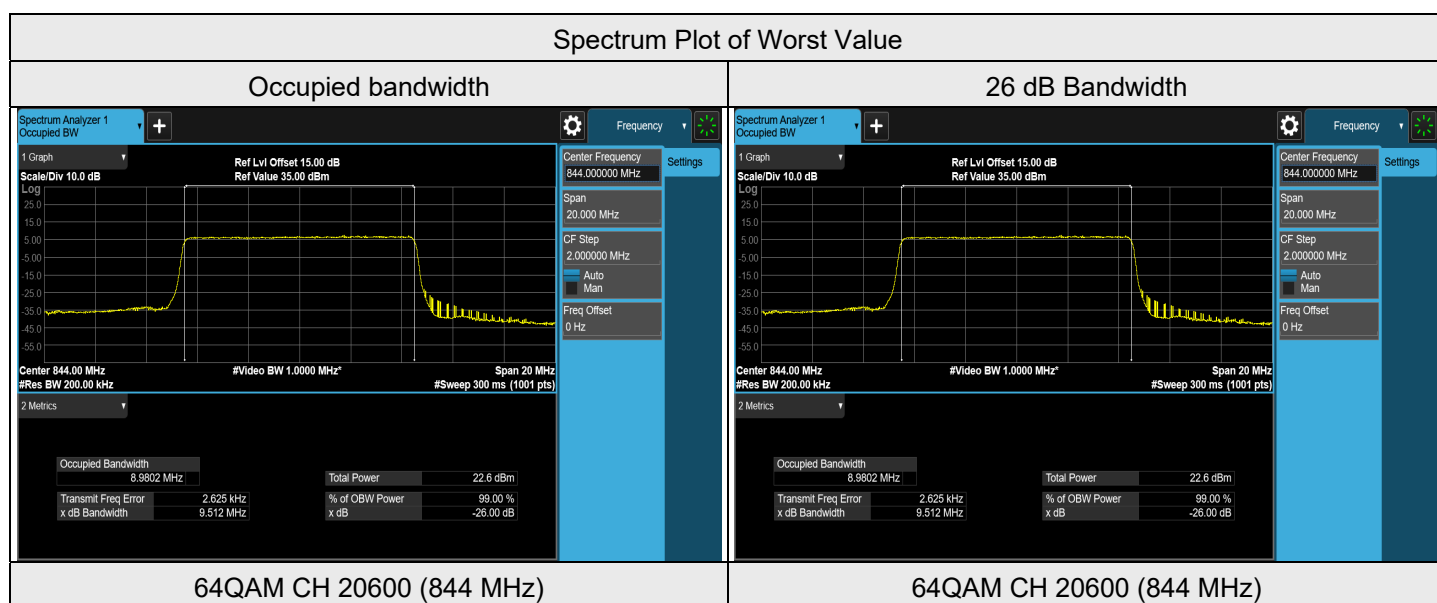
LTE Band 5, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	20425	826.5	4.4912	4.796
QPSK	20525	836.5	4.4900	4.798
QPSK	20625	846.5	4.4889	4.797
16QAM	20425	826.5	4.4870	4.781
16QAM	20525	836.5	4.4906	4.777
16QAM	20625	846.5	4.4896	4.782
64QAM	20425	826.5	4.4934	4.807
64QAM	20525	836.5	4.4922	4.791
64QAM	20625	846.5	4.4935	4.809
256QAM	20425	826.5	4.4846	4.779
256QAM	20525	836.5	4.4868	4.769
256QAM	20625	846.5	4.4852	4.794



LTE Band 5, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	20450	829	8.9594	9.484
QPSK	20525	836.5	8.9739	9.504
QPSK	20600	844	8.9794	9.500
16QAM	20450	829	8.9550	9.487
16QAM	20525	836.5	8.9706	9.493
16QAM	20600	844	8.9786	9.503
64QAM	20450	829	8.9576	9.501
64QAM	20525	836.5	8.9719	9.508
64QAM	20600	844	8.9802	9.512
256QAM	20450	829	8.9586	9.489
256QAM	20525	836.5	8.9667	9.495
256QAM	20600	844	8.9737	9.509

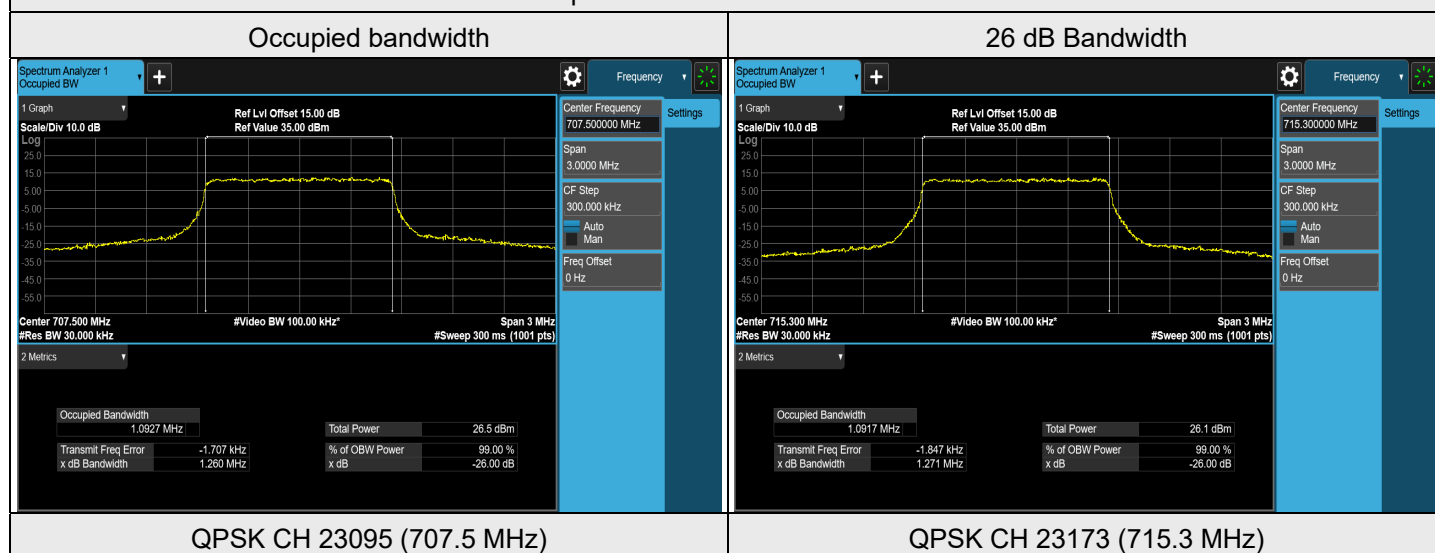


7.4.4 LTE Band 12

LTE Band 12, Channel Bandwidth: 1.4 MHz

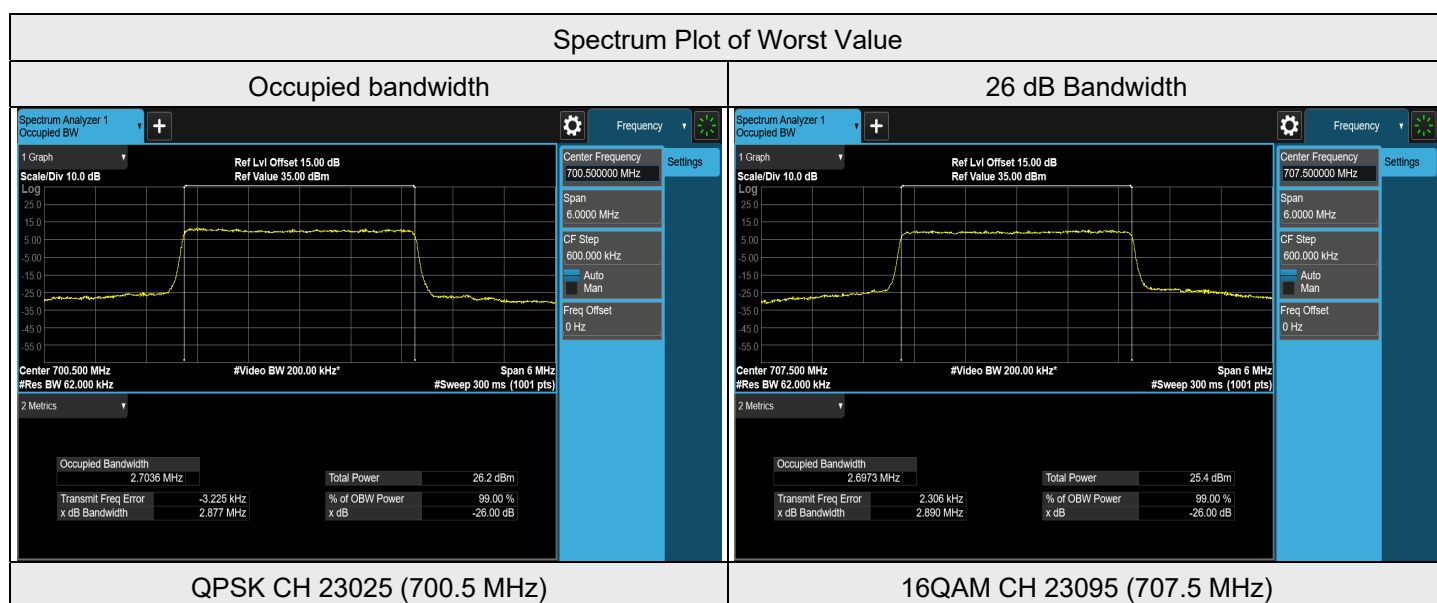
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	23017	699.7	1.0880	1.254
QPSK	23095	707.5	1.0927	1.260
QPSK	23173	715.3	1.0917	1.271
16QAM	23017	699.7	1.0880	1.246
16QAM	23095	707.5	1.0911	1.263
16QAM	23173	715.3	1.0918	1.256
64QAM	23017	699.7	1.0891	1.256
64QAM	23095	707.5	1.0887	1.259
64QAM	23173	715.3	1.0893	1.262
256QAM	23017	699.7	1.0849	1.248
256QAM	23095	707.5	1.0851	1.248
256QAM	23173	715.3	1.0856	1.233

Spectrum Plot of Worst Value



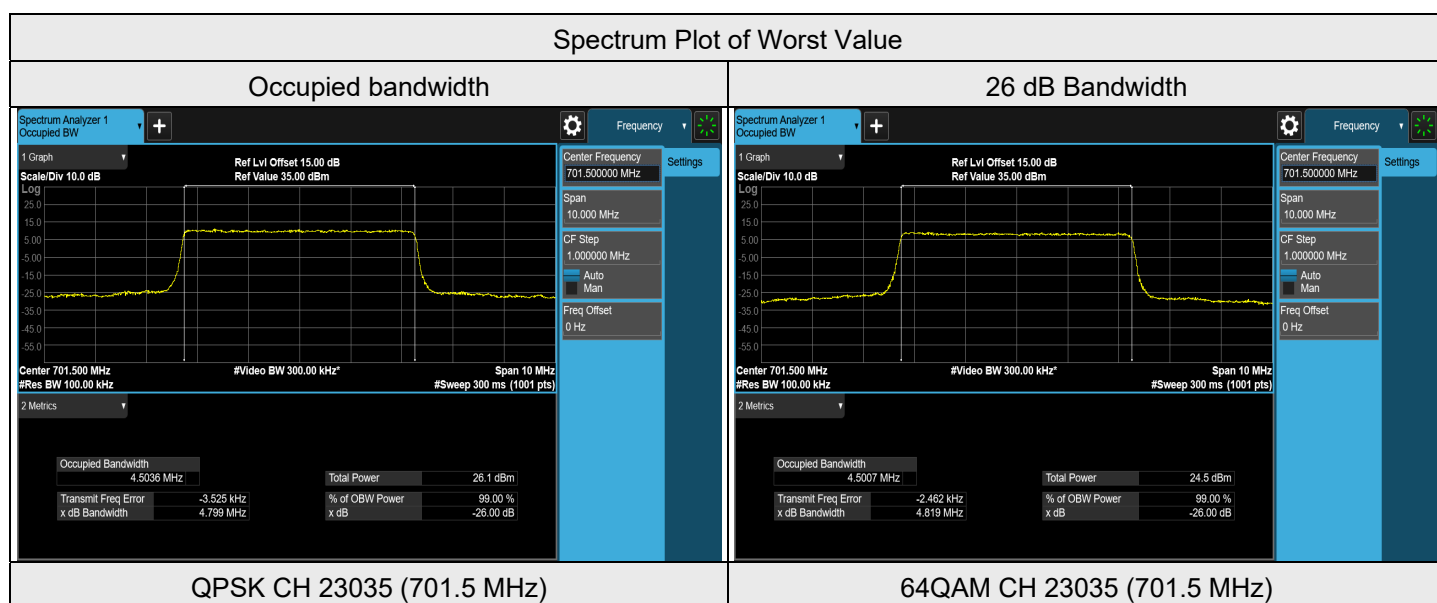
LTE Band 12, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	23025	700.5	2.7036	2.877
QPSK	23095	707.5	2.6961	2.881
QPSK	23165	714.5	2.7028	2.884
16QAM	23025	700.5	2.7001	2.889
16QAM	23095	707.5	2.6973	2.890
16QAM	23165	714.5	2.7015	2.886
64QAM	23025	700.5	2.7006	2.877
64QAM	23095	707.5	2.6971	2.872
64QAM	23165	714.5	2.7006	2.875
256QAM	23025	700.5	2.6998	2.879
256QAM	23095	707.5	2.6976	2.875
256QAM	23165	714.5	2.6998	2.877



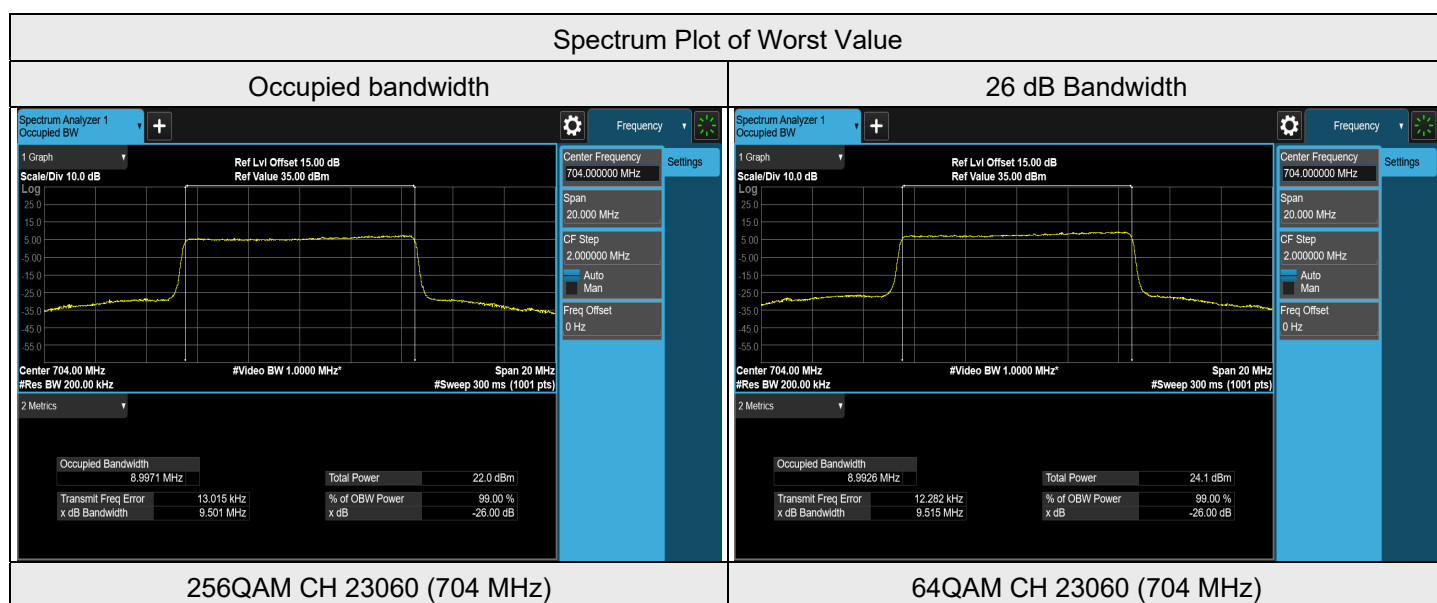
LTE Band 12, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	23035	701.5	4.5036	4.799
QPSK	23095	707.5	4.4847	4.789
QPSK	23155	713.5	4.4985	4.808
16QAM	23035	701.5	4.4956	4.791
16QAM	23095	707.5	4.4801	4.770
16QAM	23155	713.5	4.4946	4.784
64QAM	23035	701.5	4.5007	4.819
64QAM	23095	707.5	4.4871	4.773
64QAM	23155	713.5	4.5030	4.811
256QAM	23035	701.5	4.4938	4.774
256QAM	23095	707.5	4.4775	4.776
256QAM	23155	713.5	4.4900	4.768



LTE Band 12, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	23060	704	8.9899	9.508
QPSK	23095	707.5	8.9275	9.474
QPSK	23130	711	8.9608	9.484
16QAM	23060	704	8.9905	9.505
16QAM	23095	707.5	8.9237	9.460
16QAM	23130	711	8.9561	9.480
64QAM	23060	704	8.9926	9.515
64QAM	23095	707.5	8.9283	9.474
64QAM	23130	711	8.9520	9.484
256QAM	23060	704	8.9971	9.501
256QAM	23095	707.5	8.9222	9.473
256QAM	23130	711	8.9349	9.461

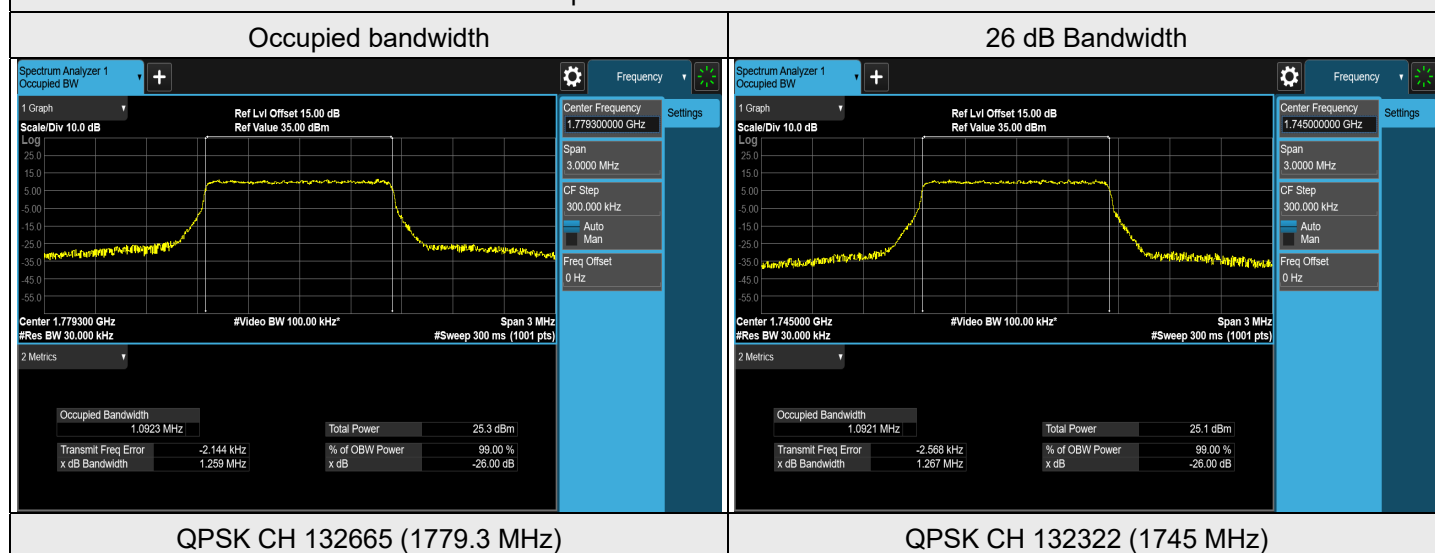


7.4.5 LTE Band 66

LTE Band 66, Channel Bandwidth: 1.4 MHz

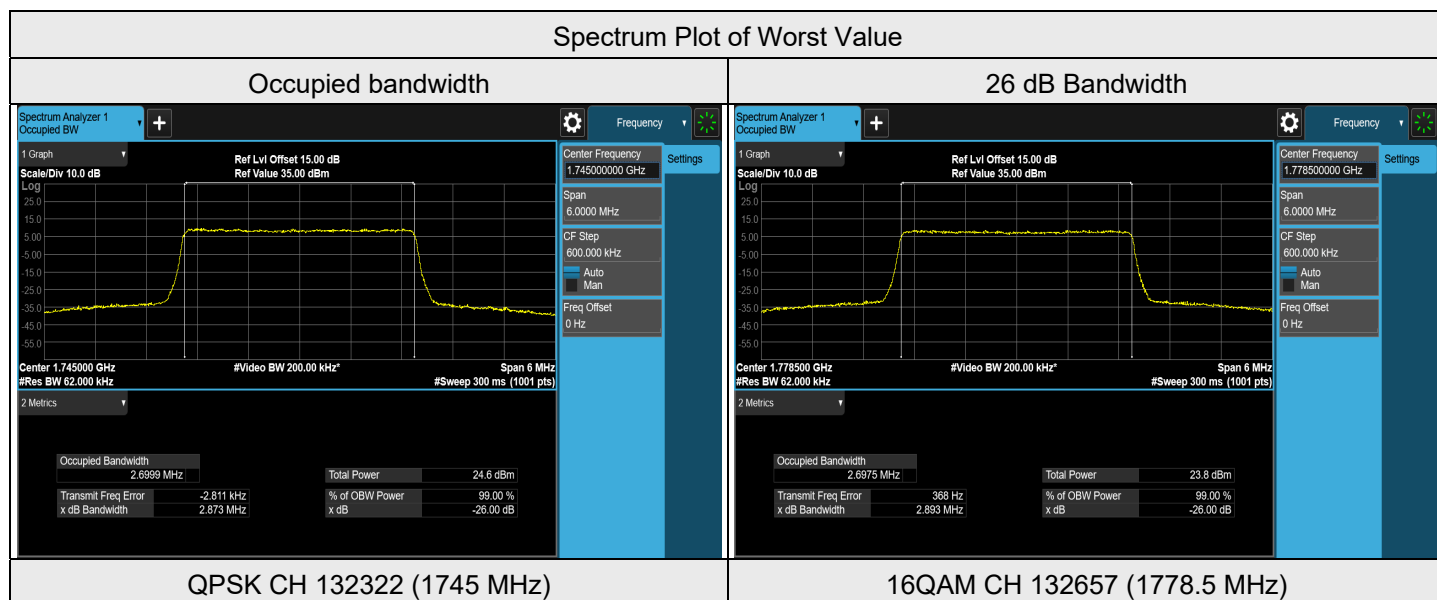
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	131979	1710.7	1.0835	1.236
QPSK	132322	1745	1.0921	1.267
QPSK	132665	1779.3	1.0923	1.259
16QAM	131979	1710.7	1.0893	1.255
16QAM	132322	1745	1.0899	1.258
16QAM	132665	1779.3	1.0915	1.255
64QAM	131979	1710.7	1.0876	1.254
64QAM	132322	1745	1.0882	1.255
64QAM	132665	1779.3	1.0887	1.254
256QAM	131979	1710.7	1.0854	1.242
256QAM	132322	1745	1.0845	1.234
256QAM	132665	1779.3	1.0848	1.237

Spectrum Plot of Worst Value



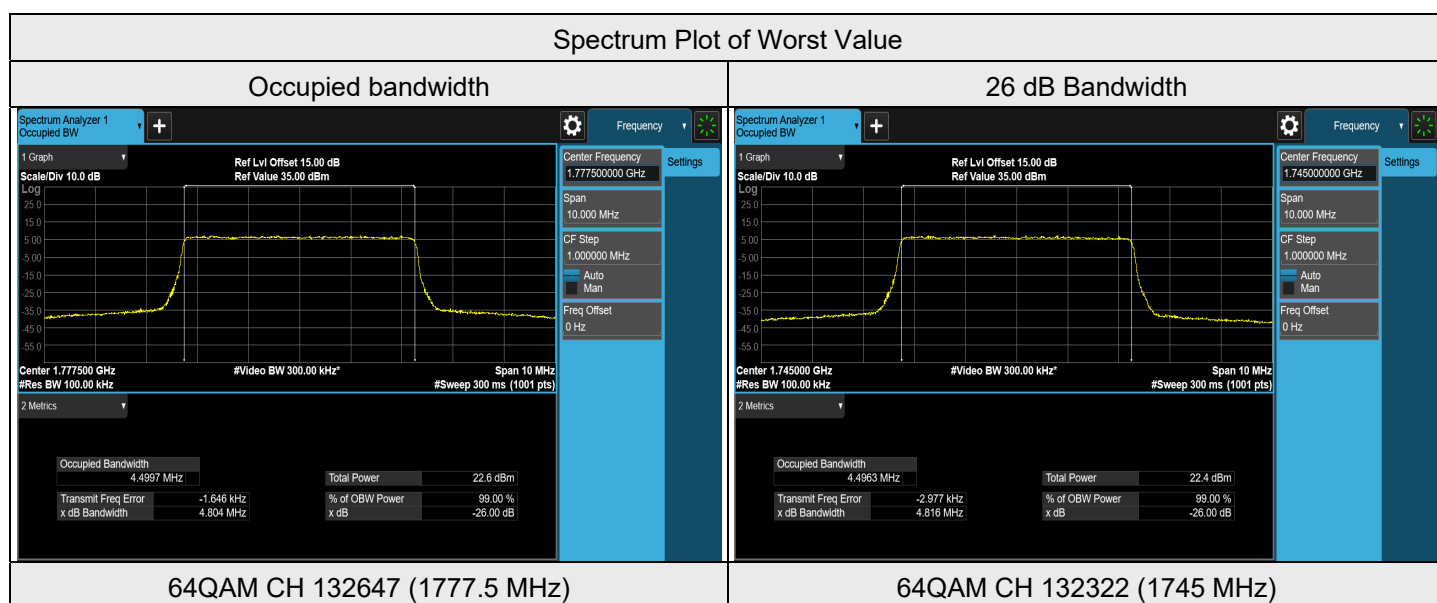
LTE Band 66, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	131987	1711.5	2.6982	2.880
QPSK	132322	1745	2.6999	2.873
QPSK	132657	1778.5	2.6994	2.881
16QAM	131987	1711.5	2.6984	2.887
16QAM	132322	1745	2.6982	2.887
16QAM	132657	1778.5	2.6975	2.893
64QAM	131987	1711.5	2.6978	2.878
64QAM	132322	1745	2.6988	2.874
64QAM	132657	1778.5	2.6981	2.876
256QAM	131987	1711.5	2.6993	2.881
256QAM	132322	1745	2.6959	2.879
256QAM	132657	1778.5	2.6988	2.879



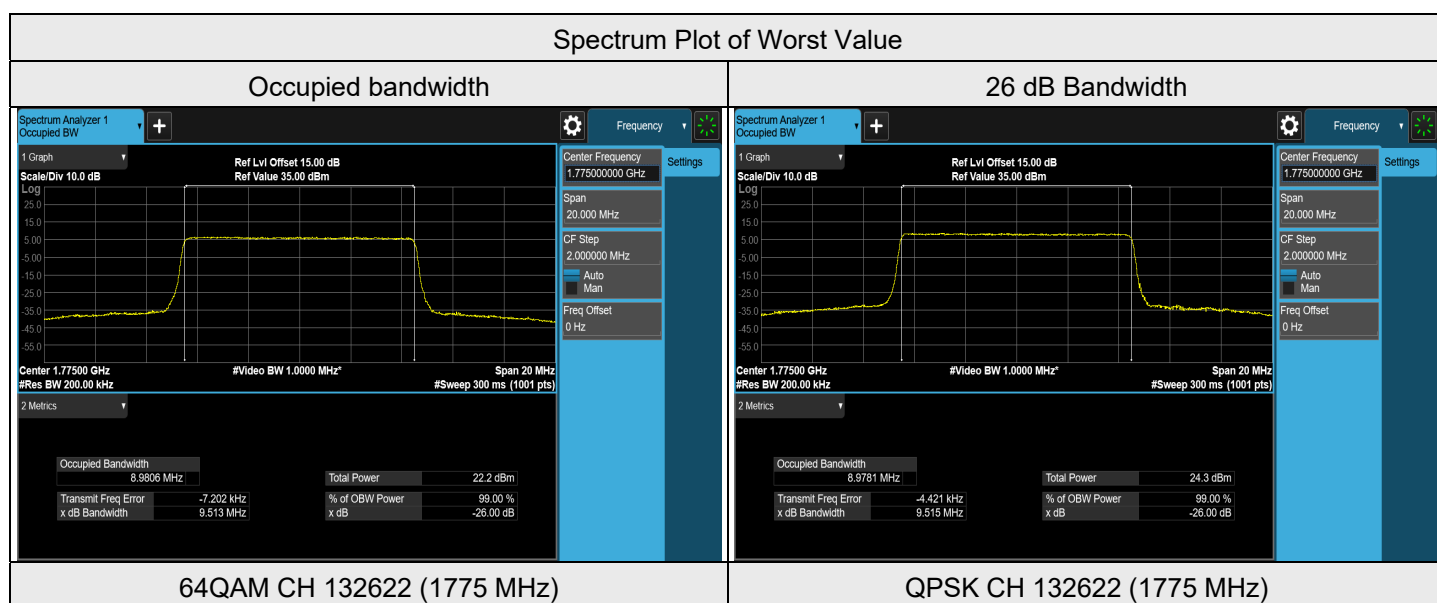
LTE Band 66, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	131997	1712.5	4.4940	4.796
QPSK	132322	1745	4.4929	4.791
QPSK	132647	1777.5	4.4924	4.793
16QAM	131997	1712.5	4.4874	4.774
16QAM	132322	1745	4.4863	4.784
16QAM	132647	1777.5	4.4899	4.780
64QAM	131997	1712.5	4.4945	4.794
64QAM	132322	1745	4.4963	4.816
64QAM	132647	1777.5	4.4997	4.804
256QAM	131997	1712.5	4.4850	4.780
256QAM	132322	1745	4.4840	4.777
256QAM	132647	1777.5	4.4871	4.783



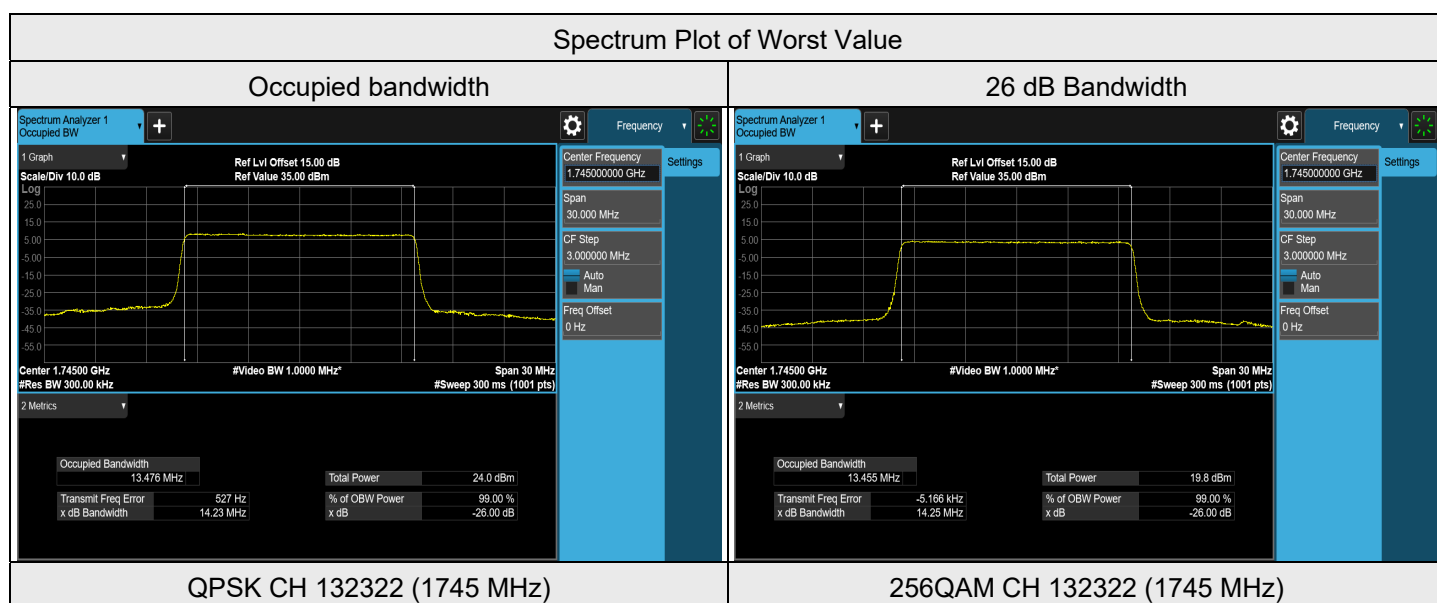
LTE Band 66, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	132022	1715	8.9763	9.502
QPSK	132322	1745	8.9744	9.506
QPSK	132622	1775	8.9781	9.515
16QAM	132022	1715	8.9724	9.507
16QAM	132322	1745	8.9696	9.502
16QAM	132622	1775	8.9774	9.509
64QAM	132022	1715	8.9732	9.515
64QAM	132322	1745	8.9762	9.510
64QAM	132622	1775	8.9806	9.513
256QAM	132022	1715	8.9674	9.506
256QAM	132322	1745	8.9675	9.498
256QAM	132622	1775	8.9711	9.498



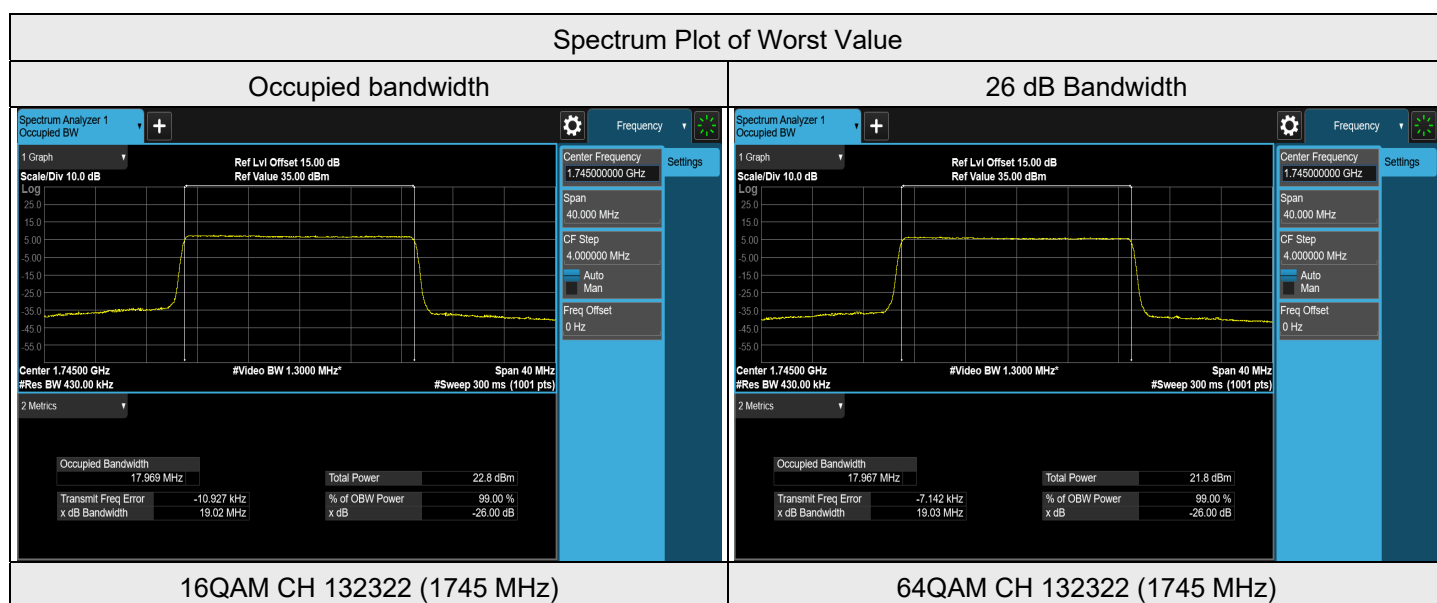
LTE Band 66, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	132047	1717.5	13.4638	14.231
QPSK	132322	1745	13.4761	14.231
QPSK	132597	1772.5	13.4691	14.228
16QAM	132047	1717.5	13.4605	14.241
16QAM	132322	1745	13.4575	14.237
16QAM	132597	1772.5	13.4596	14.236
64QAM	132047	1717.5	13.4559	14.230
64QAM	132322	1745	13.4528	14.219
64QAM	132597	1772.5	13.4555	14.233
256QAM	132047	1717.5	13.4626	14.236
256QAM	132322	1745	13.4548	14.245
256QAM	132597	1772.5	13.4555	14.226



LTE Band 66, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	132072	1720	17.9619	19.018
QPSK	132322	1745	17.9580	19.019
QPSK	132572	1770	17.9508	19.016
16QAM	132072	1720	17.9671	19.023
16QAM	132322	1745	17.9692	19.020
16QAM	132572	1770	17.9577	19.025
64QAM	132072	1720	17.9620	19.022
64QAM	132322	1745	17.9673	19.027
64QAM	132572	1770	17.9539	19.023
256QAM	132072	1720	17.9561	19.002
256QAM	132322	1745	17.9669	19.018
256QAM	132572	1770	17.9467	19.014

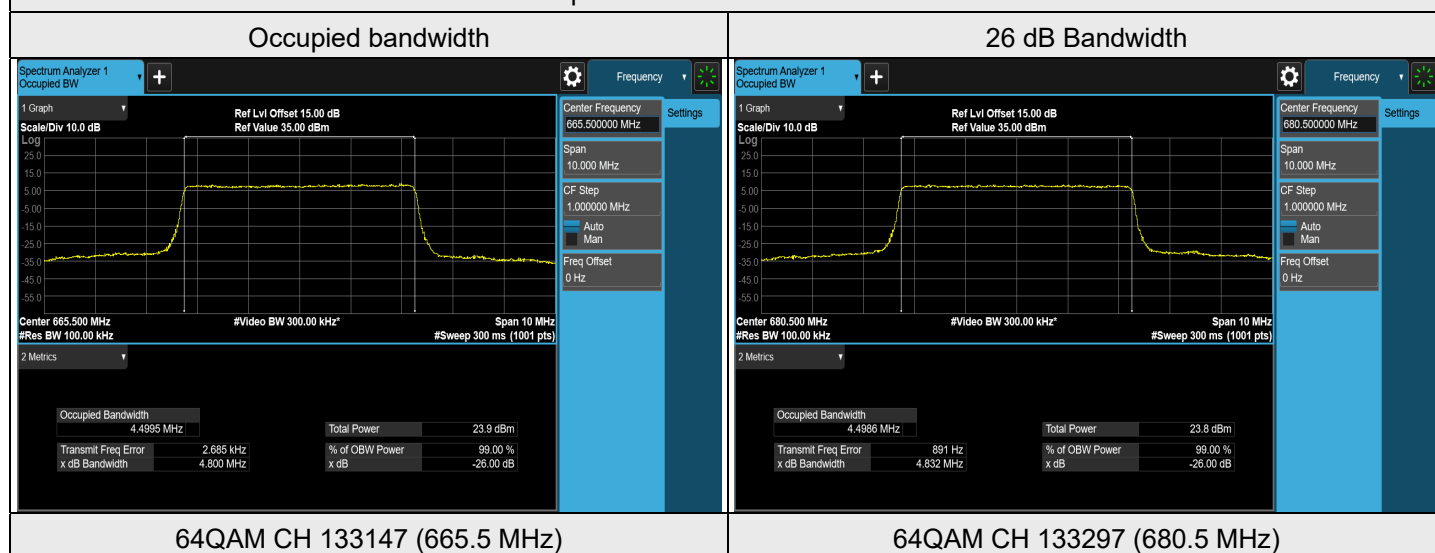


7.4.6 LTE Band 71

LTE Band 71, Channel Bandwidth: 5 MHz

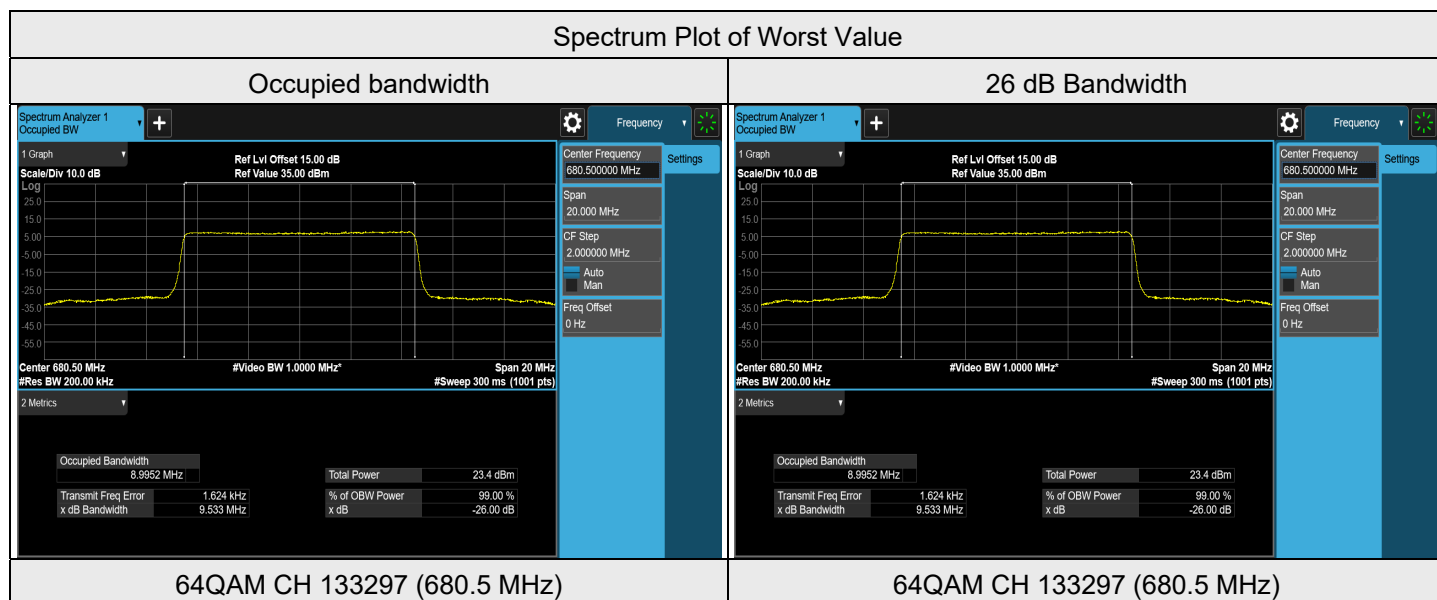
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	133147	665.5	4.4989	4.784
QPSK	133297	680.5	4.4930	4.815
QPSK	133447	695.5	4.4902	4.788
16QAM	133147	665.5	4.4950	4.782
16QAM	133297	680.5	4.4899	4.785
16QAM	133447	695.5	4.4866	4.773
64QAM	133147	665.5	4.4995	4.800
64QAM	133297	680.5	4.4986	4.832
64QAM	133447	695.5	4.4937	4.790
256QAM	133147	665.5	4.4914	4.791
256QAM	133297	680.5	4.4874	4.787
256QAM	133447	695.5	4.4839	4.770

Spectrum Plot of Worst Value



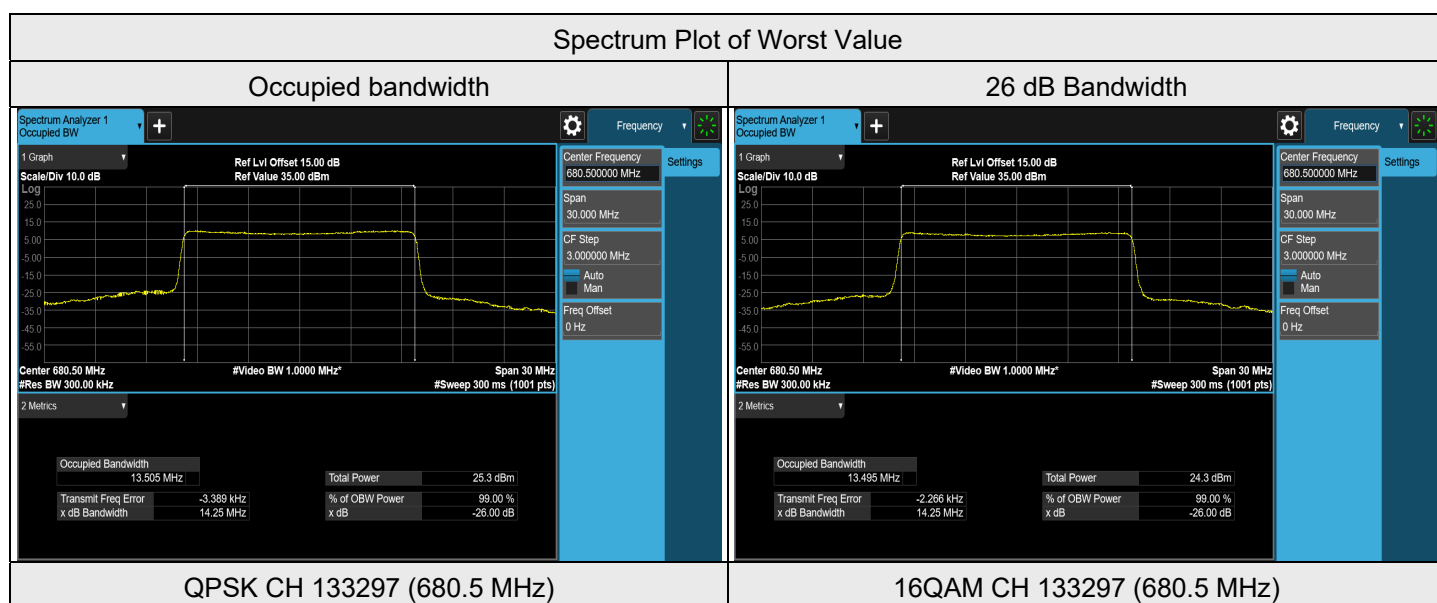
LTE Band 71, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	133172	668	8.9664	9.499
QPSK	133297	680.5	8.9932	9.509
QPSK	133422	693	8.9673	9.475
16QAM	133172	668	8.9716	9.479
16QAM	133297	680.5	8.9924	9.510
16QAM	133422	693	8.9648	9.482
64QAM	133172	668	8.9681	9.489
64QAM	133297	680.5	8.9952	9.533
64QAM	133422	693	8.9642	9.518
256QAM	133172	668	8.9662	9.489
256QAM	133297	680.5	8.9896	9.509
256QAM	133422	693	8.9584	9.493



LTE Band 71, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	133197	670.5	13.4009	14.196
QPSK	133297	680.5	13.5052	14.249
QPSK	133397	690.5	13.4265	14.202
16QAM	133197	670.5	13.3931	14.195
16QAM	133297	680.5	13.4948	14.255
16QAM	133397	690.5	13.4155	14.209
64QAM	133197	670.5	13.3860	14.184
64QAM	133297	680.5	13.4900	14.247
64QAM	133397	690.5	13.4068	14.209
256QAM	133197	670.5	13.3997	14.178
256QAM	133297	680.5	13.4924	14.234
256QAM	133397	690.5	13.4024	14.195



LTE Band 71, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	133222	673	17.8799	18.956
QPSK	133297	680.5	18.0309	19.040
QPSK	133372	688	17.8734	18.968
16QAM	133222	673	17.8898	18.959
16QAM	133297	680.5	18.0340	19.031
16QAM	133372	688	17.8931	18.982
64QAM	133222	673	17.8850	18.959
64QAM	133297	680.5	18.0343	19.033
64QAM	133372	688	17.8912	18.976
256QAM	133222	673	17.8763	18.954
256QAM	133297	680.5	18.0246	19.030
256QAM	133372	688	17.8879	18.959

