

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 90
47 CFR FCC Part 2

Report No.: RFBCKS-WTW-P24050344

FCC ID: NKR-UMCSTD35GN

Product: Automotive 5G-NR NAD

Brand: WNC

Model No.: UMC-STD35GN

Received Date: 2024/5/14

Test Date: 2024/5/20 ~ 2024/7/17

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FCC Registration / 788550 / TW0003

Designation Number:

Approved by:



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, Date:

2024/8/5

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Prepared by : Gina Liu / Specialist



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Release Control Record

Issue No.	Description	Date Issued
RFBCKS-WTW-P24050344	Original release.	2024/8/5

1 Certificate

Product: Automotive 5G-NR NAD

Brand: WNC

Test Model: UMC-STD35GN

Sample Status: Engineering sample

Applicant: Wistron NeWeb Corporation

Test Date: 2024/5/20 ~ 2024/7/17

Standard: 47 CFR FCC Part 22
47 CFR FCC Part 24
47 CFR FCC Part 27
47 CFR FCC Part 90
47 CFR FCC Part 2

Measurement procedure: ANSI/TIA/EIA-603-E 2016
ANSI C63.26-2015
KDB 971168 D01 Power Meas License Digital Systems v03r01
KDB 971168 D02 Misc Rev Approv License Devices v02r02

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

2 Summary of Test Results

Standard / Clause	Test Item	Result	Remark
Part 2.1046 Part 22.913 (a) Part 24.232 (c) Part 27.50(d) Part 27.50(h) Part 27.50(c) Part 27.50(b) Part 90.635(b) Part 90.542(a)(7)	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(m) Part 27.53(g) Part 27.53(c)(f) Part 90.691 Part 90.543(e)(f)	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(m) Part 27.53(g) Part 27.53(c)(f) Part 90.691 Part 90.543(e)(f)	Radiated Spurious Emissions below 1GHz	Pass	Minimum passing margin is -15.46 dB at 31.94 MHz
Part 2.1053 Part 22.917 Part 24.238 Part 27.53(h) Part 27.53(m) Part 27.53(g) Part 27.53(c)(f) Part 90.691 Part 90.543(e)(f)	Radiated Spurious Emissions above 1GHz	Pass	Minimum passing margin is -6.87 dB at 5360.00 MHz
Part 2.1055 Part 22.355 Part 24.235 Part 27.54 Part 90.213 Part 90.539(e)	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	9 kHz ~ 30 MHz	2.44 dB
	30 MHz ~ 1 GHz	2.95 dB
Radiated Spurious Emissions above 1GHz	1 GHz ~ 18 GHz	2.26 dB
	18 GHz ~ 40 GHz	1.94 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	Automotive 5G-NR NAD
Brand	WNC
Test Model	UMC-STD35GN
Status of EUT	Engineering sample
Power Supply Rating	4.7 Vdc
EUT Category	Mobile station

Note:

1. EUT Overview

Mode	Bandwidth	TX Frequency Range (MHz)	Modulation	Max. ERP (W)	Max. ERP (dBm)	Emission Designator
LTE Band 5	1.4 MHz	824.7 ~ 848.3	QPSK	0.226	23.55	1M09G7D
			16QAM	0.213	23.29	1M09D7W
			64QAM	0.161	22.07	1M09D7W
			256QAM	0.077	18.86	1M08D7W
	3 MHz	825.5 ~ 847.5	QPSK	0.232	23.66	2M70G7D
			16QAM	0.212	23.26	2M69D7W
			64QAM	0.158	22	2M69D7W
			256QAM	0.074	18.72	2M69D7W
	5 MHz	826.5 ~ 846.5	QPSK	0.231	23.63	4M49G7D
			16QAM	0.209	23.21	4M49D7W
			64QAM	0.161	22.07	4M49D7W
			256QAM	0.076	18.79	4M49D7W
	10 MHz	829 ~ 844	QPSK	0.234	23.69	8M99G7D
			16QAM	0.214	23.3	8M99D7W
			64QAM	0.164	22.15	8M99D7W
			256QAM	0.076	18.82	8M99D7W
LTE Band 12	1.4 MHz	699.7 ~ 715.3	QPSK	0.188	22.74	1M09G7D
			16QAM	0.165	22.18	1M09D7W
			64QAM	0.130	21.13	1M09D7W
			256QAM	0.067	18.26	1M08D7W
	3 MHz	700.5 ~ 714.5	QPSK	0.189	22.76	2M70G7D
			16QAM	0.167	22.22	2M70D7W
			64QAM	0.130	21.13	2M69D7W
			256QAM	0.068	18.32	2M70D7W
	5 MHz	701.5 ~ 713.5	QPSK	0.187	22.72	4M50G7D
			16QAM	0.164	22.14	4M49D7W
			64QAM	0.129	21.12	4M50D7W
			256QAM	0.067	18.26	4M48D7W
	10 MHz	704 ~ 711	QPSK	0.192	22.83	8M98G7D
			16QAM	0.167	22.23	8M99D7W
			64QAM	0.133	21.25	8M98D7W
			256QAM	0.067	18.24	8M98D7W

Mode	Bandwidth	TX Frequency Range (MHz)	Modulation	Max. ERP (W)	Max. ERP (dBm)	Emission Designator
LTE Band 13	5 MHz	779.5 ~ 784.5	QPSK	0.200	23	4M50G7D
			16QAM	0.171	22.33	4M49D7W
			64QAM	0.131	21.16	4M50D7W
			256QAM	0.065	18.16	4M49D7W
	10 MHz	782	QPSK	0.202	23.05	8M96G7D
			16QAM	0.168	22.26	8M97D7W
			64QAM	0.135	21.29	8M96D7W
			256QAM	0.066	18.22	8M95D7W
LTE Band 14	5 MHz	790.5 ~ 795.5	QPSK	0.191	22.81	4M49G7D
			16QAM	0.171	22.33	4M49D7W
			64QAM	0.131	21.16	4M50D7W
			256QAM	0.066	18.22	4M49D7W
	10 MHz	793	QPSK	0.195	22.89	8M95G7D
			16QAM	0.161	22.06	8M95D7W
			64QAM	0.133	21.23	8M96D7W
			256QAM	0.064	18.07	8M95D7W
LTE Band 17	5 MHz	706.5 ~ 713.5	QPSK	0.179	22.54	4M49G7D
			16QAM	0.161	22.06	4M49D7W
			64QAM	0.122	20.86	4M49D7W
			256QAM	0.068	18.3	4M49D7W
	10 MHz	709 ~ 711	QPSK	0.183	22.63	8M98G7D
			16QAM	0.163	22.11	8M98D7W
			64QAM	0.124	20.92	8M98D7W
			256QAM	0.067	18.27	8M98D7W
LTE Band 26 (814 MHz ~ 824 MHz)	1.4 MHz	814.7 ~ 823.3	QPSK	0.226	23.55	1M09G7D
			16QAM	0.211	23.25	1M09D7W
			64QAM	0.164	22.16	1M09D7W
			256QAM	0.078	18.94	1M09D7W
	3 MHz	815.5 ~ 822.5	QPSK	0.230	23.62	2M70G7D
			16QAM	0.210	23.23	2M70D7W
			64QAM	0.163	22.13	2M69D7W
			256QAM	0.078	18.91	2M70D7W
	5 MHz	816.5 ~ 821.5	QPSK	0.234	23.7	4M50G7D
			16QAM	0.211	23.24	4M49D7W
			64QAM	0.164	22.15	4M50D7W
			256QAM	0.078	18.93	4M49D7W
	10 MHz	819	QPSK	0.227	23.56	8M95G7D
			16QAM	0.204	23.09	8M95D7W
			64QAM	0.157	21.95	8M96D7W
			256QAM	0.078	18.91	8M96D7W

Mode	Bandwidth	TX Frequency Range (MHz)	Modulation	Max. ERP (W)	Max. ERP (dBm)	Emission Designator
LTE Band 26 (824 MHz ~ 849 MHz)	1.4 MHz	824.7 ~ 848.3	QPSK	0.225	23.52	1M09G7D
			16QAM	0.204	23.1	1M09D7W
			64QAM	0.156	21.94	1M09D7W
			256QAM	0.079	18.97	1M09D7W
	3 MHz	825.5 ~ 847.5	QPSK	0.223	23.49	2M70G7D
			16QAM	0.2	23.00	2M70D7W
			64QAM	0.16	22.03	2M69D7W
			256QAM	0.077	18.87	2M69D7W
	5 MHz	826.5 ~ 846.5	QPSK	0.232	23.66	4M50G7D
			16QAM	0.203	23.08	4M49D7W
			64QAM	0.159	22.01	4M49D7W
			256QAM	0.079	18.99	4M49D7W
	10 MHz	829 ~ 844	QPSK	0.23	23.62	9M00G7D
			16QAM	0.199	22.99	8M99D7W
			64QAM	0.157	21.96	9M00D7W
			256QAM	0.079	18.97	8M99D7W
	15 MHz	831.5 ~ 841.5	QPSK	0.234	23.69	13M5G7D
			16QAM	0.2	23.02	13M5D7W
			64QAM	0.149	21.72	13M5D7W
			256QAM	0.111	20.44	13M5D7W
LTE Band 71	5 MHz	665.5 ~ 695.5	QPSK	0.19	22.78	4M49G7D
			16QAM	0.17	22.3	4M49D7W
			64QAM	0.124	20.93	4M50D7W
			256QAM	0.069	18.4	4M49D7W
	10 MHz	668 ~ 693	QPSK	0.183	22.63	8M98G7D
			16QAM	0.165	22.17	8M98D7W
			64QAM	0.125	20.96	8M98D7W
			256QAM	0.069	18.37	8M97D7W
	15 MHz	670.5 ~ 690.5	QPSK	0.19	22.78	13M5G7D
			16QAM	0.165	22.17	13M5D7W
			64QAM	0.129	21.1	13M4D7W
			256QAM	0.068	18.31	13M5D7W
	20 MHz	673 ~ 688	QPSK	0.196	22.93	17M9G7D
			16QAM	0.167	22.23	18M0D7W
			64QAM	0.126	21.02	18M0D7W
			256QAM	0.069	18.37	18M0D7W

Mode	Bandwidth	TX Frequency Range (MHz)	Modulation	Max. EIRP (W)	Max. EIRP (dBm)	Emission Designator
LTE Band 2	1.4 MHz	1850.7 ~ 1909.3	QPSK	0.308	24.89	1M09G7D
			16QAM	0.28	24.47	1M09D7W
			64QAM	0.216	23.34	1M09D7W
			256QAM	0.11	20.43	1M08D7W
	3 MHz	1851.5 ~ 1908.5	QPSK	0.306	24.86	2M70G7D
			16QAM	0.272	24.35	2M70D7W
			64QAM	0.218	23.39	2M69D7W
			256QAM	0.109	20.38	2M70D7W
	5 MHz	1852.5 ~ 1907.5	QPSK	0.305	24.85	4M50G7D
			16QAM	0.288	24.6	4M49D7W
			64QAM	0.224	23.51	4M50D7W
			256QAM	0.11	20.4	4M49D7W
	10 MHz	1855 ~ 1905	QPSK	0.305	24.85	8M97G7D
			16QAM	0.28	24.47	8M97D7W
			64QAM	0.215	23.33	8M98D7W
			256QAM	0.109	20.37	8M98D7W
	15 MHz	1857.5 ~ 1902.5	QPSK	0.31	24.92	13M5G7D
			16QAM	0.27	24.31	13M5D7W
			64QAM	0.217	23.37	13M5D7W
			256QAM	0.108	20.34	13M5D7W
	20 MHz	1860 ~ 1900	QPSK	0.316	24.99	18M0G7D
			16QAM	0.275	24.4	18M0D7W
			64QAM	0.208	23.18	18M0D7W
			256QAM	0.106	20.27	18M0D7W
LTE Band 4	1.4 MHz	1710.7 ~ 1754.3	QPSK	0.299	24.76	1M09G7D
			16QAM	0.255	24.07	1M09D7W
			64QAM	0.205	23.11	1M09D7W
			256QAM	0.1	19.99	1M08D7W
	3 MHz	1711.5 ~ 1753.5	QPSK	0.3	24.77	2M70G7D
			16QAM	0.264	24.22	2M70D7W
			64QAM	0.208	23.18	2M69D7W
			256QAM	0.099	19.95	2M70D7W
	5 MHz	1712.5 ~ 1752.5	QPSK	0.303	24.81	4M49G7D
			16QAM	0.262	24.18	4M49D7W
			64QAM	0.203	23.07	4M49D7W
			256QAM	0.098	19.93	4M49D7W
	10 MHz	1715 ~ 1750	QPSK	0.303	24.81	8M98G7D
			16QAM	0.261	24.17	8M97D7W
			64QAM	0.207	23.15	8M98D7W
			256QAM	0.099	19.94	8M97D7W
	15 MHz	1717.5 ~ 1747.5	QPSK	0.299	24.75	13M5G7D
			16QAM	0.259	24.13	13M5D7W
			64QAM	0.207	23.15	13M4D7W
			256QAM	0.097	19.89	13M5D7W
	20 MHz	1720 ~ 1745	QPSK	0.303	24.82	18M0G7D
			16QAM	0.262	24.18	18M0D7W
			64QAM	0.207	23.16	17M9D7W
			256QAM	0.102	20.09	18M0D7W

Mode	Bandwidth	TX Frequency Range (MHz)	Modulation	Max. EIRP (W)	Max. EIRP (dBm)	Emission Designator
LTE Band 7	5 MHz	2502.5 ~ 2567.5	QPSK	0.333	25.23	4M49G7D
			16QAM	0.282	24.5	4M49D7W
			64QAM	0.213	23.28	4M50D7W
			256QAM	0.114	20.57	4M49D7W
	10 MHz	2505 ~ 2565	QPSK	0.33	25.19	8M98G7D
			16QAM	0.284	24.53	8M98D7W
			64QAM	0.218	23.39	8M98D7W
			256QAM	0.117	20.68	8M97D7W
	15 MHz	2507.5 ~ 2562.5	QPSK	0.321	25.06	13M5G7D
			16QAM	0.288	24.59	13M5D7W
			64QAM	0.212	23.27	13M4D7W
			256QAM	0.117	20.7	13M5D7W
	20 MHz	2510 ~ 2560	QPSK	0.334	25.24	17M9G7D
			16QAM	0.285	24.55	18M0D7W
			64QAM	0.21	23.23	17M9D7W
			256QAM	0.119	20.74	17M9D7W
LTE Band 25	1.4 MHz	1850.7 ~ 1914.3	QPSK	0.32	25.05	1M09G7D
			16QAM	0.286	24.56	1M09D7W
			64QAM	0.232	23.66	1M09D7W
			256QAM	0.112	20.51	1M09D7W
	3 MHz	1851.5 ~ 1913.5	QPSK	0.316	25	2M69G7D
			16QAM	0.29	24.63	2M70D7W
			64QAM	0.231	23.63	2M69D7W
			256QAM	0.111	20.46	2M70D7W
	5 MHz	1852.5 ~ 1912.5	QPSK	0.32	25.05	4M49G7D
			16QAM	0.29	24.63	4M49D7W
			64QAM	0.223	23.49	4M49D7W
			256QAM	0.112	20.5	4M49D7W
	10 MHz	1855 ~ 1910	QPSK	0.32	25.05	8M98G7D
			16QAM	0.294	24.69	8M97D7W
			64QAM	0.234	23.69	8M98D7W
			256QAM	0.112	20.51	8M97D7W
	15 MHz	1857.5 ~ 1907.5	QPSK	0.32	25.05	13M5G7D
			16QAM	0.293	24.67	13M5D7W
			64QAM	0.225	23.52	13M5D7W
			256QAM	0.11	20.43	13M5D7W
	20 MHz	1860 ~ 1905	QPSK	0.321	25.07	17M9G7D
			16QAM	0.3	24.77	18M0D7W
			64QAM	0.232	23.66	18M0D7W
			256QAM	0.111	20.46	17M9D7W

Mode	Bandwidth	TX Frequency Range (MHz)	Modulation	Max. EIRP (W)	Max. EIRP (dBm)	Emission Designator
LTE Band 41	5 MHz	2498.5 ~ 2687.5	QPSK	0.343	25.35	4M50G7D
			16QAM	0.296	24.71	4M49D7W
			64QAM	0.215	23.32	4M53D7W
			256QAM	0.116	20.63	4M49D7W
	10 MHz	2501 ~ 2685	QPSK	0.348	25.42	8M98G7D
			16QAM	0.288	24.6	8M98D7W
			64QAM	0.209	23.21	9M01D7W
			256QAM	0.115	20.6	8M96D7W
	15 MHz	2503.5 ~ 2682.5	QPSK	0.35	25.44	13M5G7D
			16QAM	0.284	24.54	13M5D7W
			64QAM	0.213	23.29	13M5D7W
			256QAM	0.112	20.5	13M4D7W
	20 MHz	2506 ~ 2680	QPSK	0.349	25.43	18M0G7D
			16QAM	0.286	24.57	17M9D7W
			64QAM	0.213	23.29	18M0D7W
			256QAM	0.116	20.64	17M9D7W
LTE Band 66	1.4 MHz	1710.7 ~ 1779.3	QPSK	0.318	25.03	1M09G7D
			16QAM	0.303	24.82	1M09D7W
			64QAM	0.227	23.56	1M09D7W
			256QAM	0.109	20.39	1M09D7W
	3 MHz	1711.5 ~ 1778.5	QPSK	0.32	25.05	2M70G7D
			16QAM	0.297	24.73	2M70D7W
			64QAM	0.225	23.53	2M70D7W
			256QAM	0.11	20.43	2M70D7W
	5 MHz	1712.5 ~ 1777.5	QPSK	0.318	25.03	4M49G7D
			16QAM	0.294	24.69	4M49D7W
			64QAM	0.228	23.57	4M50D7W
			256QAM	0.114	20.55	4M49D7W
	10 MHz	1715 ~ 1775	QPSK	0.321	25.07	8M97G7D
			16QAM	0.301	24.79	8M97D7W
			64QAM	0.228	23.58	8M98D7W
			256QAM	0.113	20.52	8M97D7W
	15 MHz	1717.5 ~ 1772.5	QPSK	0.316	25	13M5G7D
			16QAM	0.305	24.85	13M5D7W
			64QAM	0.226	23.55	13M5D7W
			256QAM	0.111	20.47	13M5D7W
	20 MHz	1720 ~ 1770	QPSK	0.333	25.23	18M0G7D
			16QAM	0.305	24.84	18M0D7W
			64QAM	0.234	23.69	17M9D7W
			256QAM	0.113	20.53	18M0D7W

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

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna Type	Dipole
Antenna Connector	SMA
Band	Gain (dBi)
LTE Band 2	2.03
LTE Band 4	2.03
LTE Band 5	2.63
LTE Band 7	2.26
LTE Band 12	1.63
LTE Band 13	1.63
LTE Band 14	1.63
LTE Band 17	1.63
LTE Band 25	2.03
LTE Band 26	2.63
LTE Band 41	2.26
LTE Band 66	2.03
LTE Band 71	1.63

*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.

*The EUT support 1TX/4RX.

3.3 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. EUT can be used in the following ways: X-axis/ Y-axis/ Z-axis. Pre-scan these ways and find the worst case as a representative test condition. 2. The EUT's MCU, PMIC, Crystal, EMMC component will with shielding case or without shielding case. The EUT's RF component will always cover in the shielding case.
Worst Case:	1. X-axis/ Y-axis/ Z-axis Worst Condition: Z-axis 2. With shielding case or without shielding case (only MCU, PMIC, Crystal, EMMC component): without shielding case (only MCU, PMIC, Crystal, EMMC component) was chosen for final test; with shielding case was perform the radiated spurious emissions test only.

3.3.1 LTE Band 2

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Equivalent Isotropically Radiated Power	Without shielding case	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	Without shielding case	18900(1880.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Peak to Average Ratio	Without shielding case	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	Without shielding case	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	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Spurious Emissions	Without shielding case	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	With shielding case, Without shielding case	18900(1880.00 MHz)	20 MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	With shielding case, Without shielding case	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	Without shielding case	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	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Equivalent Isotropically Radiated Power	Without shielding case	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	Without shielding case	20175(1732.50 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	Without shielding case	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	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Bandwidth	Without shielding case	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	Without shielding case	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
Radiated Spurious Emissions below 1GHz	With shielding case, Without shielding case	20300(1745.00 MHz)	20 MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	With shielding case, Without shielding case	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

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Frequency Stability	Without shielding case	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	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Effective Radiated Power	Without shielding case	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	Without shielding case	20525(836.50 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	Without shielding case	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	Without shielding case	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	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Spurious Emissions	Without shielding case	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	With shielding case, Without shielding case	20525(836.50 MHz)	10 MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	With shielding case, Without shielding case	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	Without shielding case	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 7

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Equivalent Isotropically Radiated Power	Without shielding case	20775(2502.50 MHz) 21100(2535.00 MHz) 21425(2567.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		20800(2505.00 MHz) 21100(2535.00 MHz) 21400(2565.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		20825(2507.50 MHz) 21100(2535.00 MHz) 21375(2562.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		20850(2510.00 MHz) 21100(2535.00 MHz) 21350(2560.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	Without shielding case	21100(2535.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	Without shielding case	20775(2502.50 MHz) 21100(2535.00 MHz) 21425(2567.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		20800(2505.00 MHz) 21100(2535.00 MHz) 21400(2565.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		20825(2507.50 MHz) 21100(2535.00 MHz) 21375(2562.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		20850(2510.00 MHz) 21100(2535.00 MHz) 21350(2560.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
Bandwidth	Without shielding case	20775(2502.50 MHz) 21100(2535.00 MHz) 21425(2567.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		20800(2505.00 MHz) 21100(2535.00 MHz) 21400(2565.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		20825(2507.50 MHz) 21100(2535.00 MHz) 21375(2562.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		20850(2510.00 MHz) 21100(2535.00 MHz) 21350(2560.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Spurious Emissions	Without shielding case	20775(2502.50 MHz) 21100(2535.00 MHz) 21425(2567.50 MHz)	5 MHz	QPSK	1 RB Full RB
		20800(2505.00 MHz) 21100(2535.00 MHz) 21400(2565.00 MHz)	10 MHz	QPSK	1 RB Full RB
		20825(2507.50 MHz) 21100(2535.00 MHz) 21375(2562.50 MHz)	15 MHz	QPSK	1 RB Full RB
		20850(2510.00 MHz) 21100(2535.00 MHz) 21350(2560.00 MHz)	20 MHz	QPSK	1 RB Full RB
Radiated Spurious Emissions below 1GHz	With shielding case, Without shielding case	21100(2535.00 MHz)	20 MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	With shielding case, Without shielding case	20775(2502.50 MHz) 21100(2535.00 MHz) 21425(2567.50 MHz)	5 MHz	QPSK	1 RB
		20850(2510.00 MHz) 21100(2535.00 MHz) 21350(2560.00 MHz)	20 MHz	QPSK	1 RB
Frequency Stability	Without shielding case	20775(2502.50 MHz) 21425(2567.50 MHz)	5 MHz	QPSK	Full RB
		20800(2505.00 MHz) 21400(2565.00 MHz)	10 MHz	QPSK	Full RB
		20825(2507.50 MHz) 21375(2562.50 MHz)	15 MHz	QPSK	Full RB
		20850(2510.00 MHz) 21350(2560.00 MHz)	20 MHz	QPSK	Full RB

3.3.5 LTE Band 12

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Effective Radiated Power	Without shielding case	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	Without shielding case	23095(707.50 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	Without shielding case	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	Without shielding case	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	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Spurious Emissions	Without shielding case	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	With shielding case, Without shielding case	23095(707.50 MHz)	10 MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	With shielding case, Without shielding case	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	Without shielding case	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

3.3.6 LTE Band 13

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Effective Radiated Power	Without shielding case	23205(779.50 MHz) 23230(782.00 MHz) 23255(784.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		23230(782.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	Without shielding case	23230(782.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	Without shielding case	23205(779.50 MHz) 23230(782.00 MHz) 23255(784.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		23230(782.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
Bandwidth	Without shielding case	23205(779.50 MHz) 23230(782.00 MHz) 23255(784.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		23230(782.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Conducted Spurious Emissions	Without shielding case	23205(779.50 MHz) 23230(782.00 MHz) 23255(784.50 MHz)	5 MHz	QPSK	1 RB Full RB
		23230(782.00 MHz)	10 MHz	QPSK	1 RB Full RB
Radiated Spurious Emissions below 1GHz	With shielding case, Without shielding case	23230(782.00 MHz)	10 MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	With shielding case, Without shielding case	23205(779.50 MHz) 23230(782.00 MHz) 23255(784.50 MHz)	5 MHz	QPSK	1 RB
		23230(782.00 MHz)	10 MHz	QPSK	1 RB
Frequency Stability	Without shielding case	23205(779.50 MHz) 23255(784.50 MHz)	5 MHz	QPSK	Full RB
		23230(782.00 MHz)	10 MHz	QPSK	Full RB

3.3.7 LTE Band 14

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Effective Radiated Power	Without shielding case	23305(790.50 MHz) 23330(793.00 MHz) 23355(795.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		23330(793.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	Without shielding case	23330(793.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	Without shielding case	-	-	-	-
Bandwidth	Without shielding case	23305(790.50 MHz) 23330(793.00 MHz) 23355(795.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		23330(793.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Conducted Spurious Emissions	Without shielding case	23305(790.50 MHz) 23330(793.00 MHz) 23355(795.50 MHz)	5 MHz	QPSK	1 RB Full RB
		23330(793.00 MHz)	10 MHz	QPSK	1 RB Full RB
Radiated Spurious Emissions below 1GHz	With shielding case, Without shielding case	23330(793.00 MHz)	10 MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	With shielding case, Without shielding case	23305(790.50 MHz) 23330(793.00 MHz) 23355(795.50 MHz)	5 MHz	QPSK	1 RB
		23330(793.00 MHz)	10 MHz	QPSK	1 RB
Frequency Stability	Without shielding case	23305(790.50 MHz) 23355(795.50 MHz)	5 MHz	QPSK	Full RB
		23330(793.00 MHz)	10 MHz	QPSK	Full RB

3.3.8 LTE Band 17

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Effective Radiated Power	Without shielding case	23755(706.50 MHz) 23790(710.00 MHz) 23825(713.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		23780(709.00 MHz) 23790(710.00 MHz) 23800(711.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	Without shielding case	23790(710.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	Without shielding case	23755(706.50 MHz) 23790(710.00 MHz) 23825(713.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		23780(709.00 MHz) 23790(710.00 MHz) 23800(711.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
Bandwidth	Without shielding case	23755(706.50 MHz) 23790(710.00 MHz) 23825(713.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		23780(709.00 MHz) 23790(710.00 MHz) 23800(711.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Conducted Spurious Emissions	Without shielding case	23755(706.50 MHz) 23790(710.00 MHz) 23825(713.50 MHz)	5 MHz	QPSK	1 RB Full RB
		23780(709.00 MHz) 23790(710.00 MHz) 23800(711.00 MHz)	10 MHz	QPSK	1 RB Full RB
Radiated Spurious Emissions below 1GHz	With shielding case, Without shielding case	23790(710.00 MHz)	10 MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	With shielding case, Without shielding case	23755(706.50 MHz) 23790(710.00 MHz) 23825(713.50 MHz)	5 MHz	QPSK	1 RB
		23780(709.00 MHz) 23790(710.00 MHz) 23800(711.00 MHz)	10 MHz	QPSK	1 RB
Frequency Stability	Without shielding case	23755(706.50 MHz) 23825(713.50 MHz)	5 MHz	QPSK	Full RB
		23780(709.00 MHz) 23800(711.00 MHz)	10 MHz	QPSK	Full RB

3.3.9 LTE Band 25

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Equivalent Isotropically Radiated Power	Without shielding case	26047(1850.70 MHz) 26365(1882.50 MHz) 26683(1914.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		26055(1851.50 MHz) 26365(1882.50 MHz) 26675(1913.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		26065(1852.50 MHz) 26365(1882.50 MHz) 26665(1912.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		26090(1855.00 MHz) 26365(1882.50 MHz) 26640(1910.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		26115(1857.50 MHz) 26365(1882.50 MHz) 26615(1907.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		26140(1860.00 MHz) 26365(1882.50 MHz) 26590(1905.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	Without shielding case	26365(1882.50 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	Without shielding case	26047(1850.70 MHz) 26365(1882.50 MHz) 26683(1914.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		26055(1851.50 MHz) 26365(1882.50 MHz) 26675(1913.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		26065(1852.50 MHz) 26365(1882.50 MHz) 26665(1912.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		26090(1855.00 MHz) 26365(1882.50 MHz) 26640(1910.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		26115(1857.50 MHz) 26365(1882.50 MHz) 26615(1907.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		26140(1860.00 MHz) 26365(1882.50 MHz) 26590(1905.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Bandwidth	Without shielding case	26047(1850.70 MHz) 26365(1882.50 MHz) 26683(1914.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		26055(1851.50 MHz) 26365(1882.50 MHz) 26675(1913.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		26065(1852.50 MHz) 26365(1882.50 MHz) 26665(1912.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		26090(1855.00 MHz) 26365(1882.50 MHz) 26640(1910.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		26115(1857.50 MHz) 26365(1882.50 MHz) 26615(1907.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		26140(1860.00 MHz) 26365(1882.50 MHz) 26590(1905.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Conducted Spurious Emissions	Without shielding case	26047(1850.70 MHz) 26365(1882.50 MHz) 26683(1914.30 MHz)	1.4 MHz	QPSK	1 RB Full RB
		26055(1851.50 MHz) 26365(1882.50 MHz) 26675(1913.50 MHz)	3 MHz	QPSK	1 RB Full RB
		26065(1852.50 MHz) 26365(1882.50 MHz) 26665(1912.50 MHz)	5 MHz	QPSK	1 RB Full RB
		26090(1855.00 MHz) 26365(1882.50 MHz) 26640(1910.00 MHz)	10 MHz	QPSK	1 RB Full RB
		26115(1857.50 MHz) 26365(1882.50 MHz) 26615(1907.50 MHz)	15 MHz	QPSK	1 RB Full RB
		26140(1860.00 MHz) 26365(1882.50 MHz) 26590(1905.00 MHz)	20 MHz	QPSK	1 RB Full RB
Radiated Spurious Emissions below 1GHz	With shielding case, Without shielding case	26365(1882.50 MHz)	20 MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	With shielding case, Without shielding case	26047(1850.70 MHz) 26365(1882.50 MHz) 26683(1914.30 MHz)	1.4 MHz	QPSK	1 RB
		26065(1852.50 MHz) 26365(1882.50 MHz) 26665(1912.50 MHz)	5 MHz	QPSK	1 RB
		26140(1860.00 MHz) 26365(1882.50 MHz) 26590(1905.00 MHz)	20 MHz	QPSK	1 RB

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Frequency Stability	Without shielding case	26047(1850.70 MHz) 26683(1914.30 MHz)	1.4 MHz	QPSK	Full RB
		26055(1851.50 MHz) 26675(1913.50 MHz)	3 MHz	QPSK	Full RB
		26065(1852.50 MHz) 26665(1912.50 MHz)	5 MHz	QPSK	Full RB
		26090(1855.00 MHz) 26640(1910.00 MHz)	10 MHz	QPSK	Full RB
		26115(1857.50 MHz) 26615(1907.50 MHz)	15 MHz	QPSK	Full RB
		26140(1860.00 MHz) 26590(1905.00 MHz)	20 MHz	QPSK	Full RB

3.3.10 LTE Band 26 (814 MHz ~ 824 MHz)

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Effective Radiated Power	Without shielding case	26697(814.70 MHz) 26740(819.00 MHz) 26783(823.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		26705(815.50 MHz) 26740(819.00 MHz) 26775(822.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		26715(816.50 MHz) 26740(819.00 MHz) 26765(821.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		26740(819.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	Without shielding case	26740(819.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	Without shielding case	-	-	-	-
Bandwidth	Without shielding case	26697(814.70 MHz) 26740(819.00 MHz) 26783(823.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		26705(815.50 MHz) 26740(819.00 MHz) 26775(822.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		26715(816.50 MHz) 26740(819.00 MHz) 26765(821.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		26740(819.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Spurious Emissions	Without shielding case	26697(814.70 MHz) 26740(819.00 MHz) 26783(823.30 MHz)	1.4 MHz	QPSK	1 RB Full RB
		26705(815.50 MHz) 26740(819.00 MHz) 26775(822.50 MHz)	3 MHz	QPSK	1 RB Full RB
		26715(816.50 MHz) 26740(819.00 MHz) 26765(821.50 MHz)	5 MHz	QPSK	1 RB Full RB
		26740(819.00 MHz)	10 MHz	QPSK	1 RB Full RB
Radiated Spurious Emissions below 1GHz	With shielding case, Without shielding case	26740(819.00 MHz)	10 MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	With shielding case, Without shielding case	26697(814.70 MHz) 26740(819.00 MHz) 26783(823.30 MHz)	1.4 MHz	QPSK	1 RB
		26715(816.50 MHz) 26740(819.00 MHz) 26765(821.50 MHz)	5 MHz	QPSK	1 RB
		26740(819.00 MHz)	10 MHz	QPSK	1 RB
Frequency Stability	Without shielding case	26697(814.70 MHz) 26783(823.30 MHz)	1.4 MHz	QPSK	Full RB
		26705(815.50 MHz) 26775(822.50 MHz)	3 MHz	QPSK	Full RB
		26715(816.50 MHz) 26765(821.50 MHz)	5 MHz	QPSK	Full RB
		26740(819.00 MHz)	10 MHz	QPSK	Full RB

3.3.11 LTE Band 26 (824 MHz ~ 849 MHz)

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Effective Radiated Power	Without shielding case	26797(824.70 MHz) 26915(836.50 MHz) 27033(848.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		26805(825.50 MHz) 26915(836.50 MHz) 27025(847.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		26815(826.50 MHz) 26915(836.50 MHz) 27015(846.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		26840(829.00 MHz) 26915(836.50 MHz) 26990(844.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		26865(831.50 MHz) 26915(836.50 MHz) 26965(841.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	Without shielding case	26915(836.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	Without shielding case	26797(824.70 MHz) 26915(836.50 MHz) 27033(848.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		26805(825.50 MHz) 26915(836.50 MHz) 27025(847.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		26815(826.50 MHz) 26915(836.50 MHz) 27015(846.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		26840(829.00 MHz) 26915(836.50 MHz) 26990(844.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		26865(831.50 MHz) 26915(836.50 MHz) 26965(841.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Bandwidth	Without shielding case	26797(824.70 MHz) 26915(836.50 MHz) 27033(848.30 MHz)	1.4 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		26805(825.50 MHz) 26915(836.50 MHz) 27025(847.50 MHz)	3 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		26815(826.50 MHz) 26915(836.50 MHz) 27015(846.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		26840(829.00 MHz) 26915(836.50 MHz) 26990(844.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		26865(831.50 MHz) 26915(836.50 MHz) 26965(841.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Conducted Spurious Emissions	Without shielding case	26797(824.70 MHz) 26915(836.50 MHz) 27033(848.30 MHz)	1.4 MHz	QPSK	1 RB Full RB
		26805(825.50 MHz) 26915(836.50 MHz) 27025(847.50 MHz)	3 MHz	QPSK	1 RB Full RB
		26815(826.50 MHz) 26915(836.50 MHz) 27015(846.50 MHz)	5 MHz	QPSK	1 RB Full RB
		26840(829.00 MHz) 26915(836.50 MHz) 26990(844.00 MHz)	10 MHz	QPSK	1 RB Full RB
		26865(831.50 MHz) 26915(836.50 MHz) 26965(841.50 MHz)	15 MHz	QPSK	1 RB Full RB
Radiated Spurious Emissions below 1GHz	With shielding case, Without shielding case	26915(836.50 MHz)	15 MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	With shielding case, Without shielding case	26797(824.70 MHz) 26915(836.50 MHz) 27033(848.30 MHz)	1.4 MHz	QPSK	1 RB
		26815(826.50 MHz) 26915(836.50 MHz) 27015(846.50 MHz)	5 MHz	QPSK	1 RB
		26865(831.50 MHz) 26915(836.50 MHz) 26965(841.50 MHz)	15 MHz	QPSK	1 RB

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Frequency Stability	Without shielding case	26797(824.70 MHz) 27033(848.30 MHz)	1.4 MHz	QPSK	Full RB
		26805(825.50 MHz) 27025(847.50 MHz)	3 MHz	QPSK	Full RB
		26815(826.50 MHz) 27015(846.50 MHz)	5 MHz	QPSK	Full RB
		26840(829.00 MHz) 26990(844.00 MHz)	10 MHz	QPSK	Full RB
		26865(831.50 MHz) 26965(841.50 MHz)	15 MHz	QPSK	Full RB

3.3.12 LTE Band 41

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Equivalent Isotropically Radiated Power	Without shielding case	39675(2498.50 MHz) 40620(2593.00 MHz) 41565(2687.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		39700(2501.00 MHz) 40620(2593.00 MHz) 41540(2685.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		39725(2503.50 MHz) 40620(2593.00 MHz) 41515(2682.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		39750(2506.00 MHz) 40620(2593.00 MHz) 41490(2680.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	Without shielding case	40620(2593.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	Without shielding case	39675(2498.50 MHz) 40620(2593.00 MHz) 41565(2687.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		39700(2501.00 MHz) 40620(2593.00 MHz) 41540(2685.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		39725(2503.50 MHz) 40620(2593.00 MHz) 41515(2682.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		39750(2506.00 MHz) 40620(2593.00 MHz) 41490(2680.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Bandwidth	Without shielding case	39675(2498.50 MHz) 40620(2593.00 MHz) 41565(2687.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		39700(2501.00 MHz) 40620(2593.00 MHz) 41540(2685.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		39725(2503.50 MHz) 40620(2593.00 MHz) 41515(2682.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		39750(2506.00 MHz) 40620(2593.00 MHz) 41490(2680.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Conducted Spurious Emissions	Without shielding case	39675(2498.50 MHz) 40620(2593.00 MHz) 41565(2687.50 MHz)	5 MHz	QPSK	1 RB Full RB
		39700(2501.00 MHz) 40620(2593.00 MHz) 41540(2685.00 MHz)	10 MHz	QPSK	1 RB Full RB
		39725(2503.50 MHz) 40620(2593.00 MHz) 41515(2682.50 MHz)	15 MHz	QPSK	1 RB Full RB
		39750(2506.00 MHz) 40620(2593.00 MHz) 41490(2680.00 MHz)	20 MHz	QPSK	1 RB Full RB
Radiated Spurious Emissions below 1GHz	With shielding case, Without shielding case	41490(2680.00 MHz)	20 MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	With shielding case, Without shielding case	39675(2498.50 MHz) 40620(2593.00 MHz) 41565(2687.50 MHz)	5 MHz	QPSK	1 RB
		39750(2506.00 MHz) 40620(2593.00 MHz) 41490(2680.00 MHz)	20 MHz	QPSK	1 RB
Frequency Stability	Without shielding case	39675(2498.50 MHz) 41565(2687.50 MHz)	5 MHz	QPSK	Full RB
		39700(2501.00 MHz) 41540(2685.00 MHz)	10 MHz	QPSK	Full RB
		39725(2503.50 MHz) 41515(2682.50 MHz)	15 MHz	QPSK	Full RB
		39750(2506.00 MHz) 41490(2680.00 MHz)	20 MHz	QPSK	Full RB

3.3.13 LTE Band 66

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Equivalent Isotropically Radiated Power	Without shielding case	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	Without shielding case	132322(1745.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	Without shielding case	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	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Bandwidth	Without shielding case	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	Without shielding case	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
Radiated Spurious Emissions below 1GHz	With shielding case, Without shielding case	132322(1745.00 MHz)	20 MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	With shielding case, Without shielding case	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

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Frequency Stability	Without shielding case	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

3.3.14 LTE Band 71

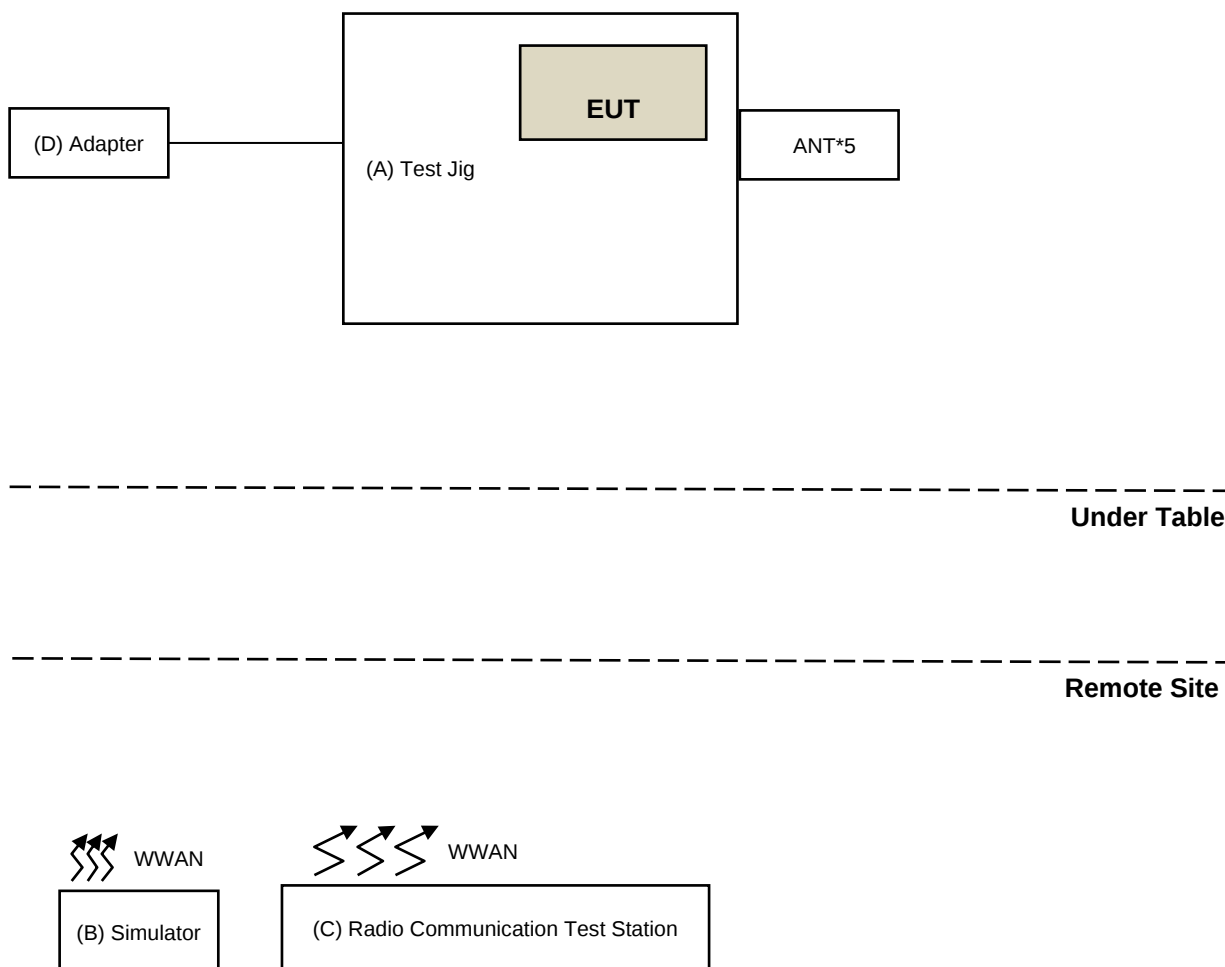
Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Effective Radiated Power	Without shielding case	133147(665.50 MHz) 133297(680.50 MHz) 133447(695.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		133172(668.00 MHz) 133297(680.50 MHz) 133422(693.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		133197(670.50 MHz) 133297(680.50 MHz) 133397(690.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
		133222(673.00 MHz) 133297(680.50 MHz) 133372(688.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
Modulation Characteristics	Without shielding case	133297(680.50 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Peak to Average Ratio	Without shielding case	133147(665.50 MHz) 133297(680.50 MHz) 133447(695.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		133172(668.00 MHz) 133297(680.50 MHz) 133422(693.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		133197(670.50 MHz) 133297(680.50 MHz) 133397(690.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB
		133222(673.00 MHz) 133297(680.50 MHz) 133372(688.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB

Test Item	EUT Configure Mode	Tested Channel	Channel Bandwidth	Modulation	Mode
Bandwidth	Without shielding case	133147(665.50 MHz) 133297(680.50 MHz) 133447(695.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		133172(668.00 MHz) 133297(680.50 MHz) 133422(693.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		133197(670.50 MHz) 133297(680.50 MHz) 133397(690.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
		133222(673.00 MHz) 133297(680.50 MHz) 133372(688.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	Full RB
Conducted Spurious Emissions	Without shielding case	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
Radiated Spurious Emissions below 1GHz	With shielding case, Without shielding case	133297(680.50 MHz)	20 MHz	QPSK	1 RB
Radiated Spurious Emissions above 1GHz	With shielding case, Without shielding case	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	Without shielding case	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

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

3.5 Connection Diagram of EUT and Peripheral Devices



3.6 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Test Jig	N/A	N/A	N/A	N/A	Supplied by applicant
B	Radio Communication Analyzer	Anritsu	MT8821C	6201462755	N/A	Provided by Lab
C	Radio Communication Test Station	Anritsu	MT8000A	6272278595	N/A	Provided by Lab
D	ADAPTER	LEADER	MU12B1120100-A1	N/A	N/A	Supplied by applicant

4 Test Instruments

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

4.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
PXA Signal Analyzer Keysight	N9030B	MY57140938	2024/3/20	2025/3/19
Radio Communication Analyzer Anritsu	MT8821C	6201462755	2024/3/13	2025/3/12
		6261806803	2024/2/15	2025/2/14
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: 2024/5/20 ~ 2024/7/10

4.2 Modulation Characteristics

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
PXA Signal Analyzer Keysight	N9030B	MY57140938	2024/3/20	2025/3/19
Radio Communication Analyzer Anritsu	MT8821C	6201462755	2024/3/13	2025/3/12
		6261806803	2024/2/15	2025/2/14
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: 2024/7/8 ~ 2024/7/10

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 & Turn Max-Full	MFA-440H	AT93021705	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-472	2023/10/16	2024/10/15
EXA Signal Analyzer Agilent	N9010A	MY52220207	2023/12/28	2024/12/27
Loop Antenna Electro-Metrics	EM-6879	269	2023/9/23	2024/9/22
Loop Antenna TESEQ	HLA 6121	45745	2023/8/8	2024/8/7
MXE EMI Receiver Agilent	N9038A	MY51210203	2023/8/24	2024/8/23
Preamplifier EMCI	EMC 330H	980112	2023/9/27	2024/9/26
	EMC001340	980201	2023/9/27	2024/9/26
RF Coaxial Cable Woken	8D-FB	Cable-Ch10-01	2023/9/27	2024/9/26
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MFT-201SS	N/A	N/A	N/A
Turn Table Controller Max-Full	MG-7802	N/A	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2024/6/6

4.7 Radiated Spurious Emissions above 1GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower & Turn Max-Full	MFA-440H	AT93021705	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	7	N/A	N/A
EXA Signal Analyzer Agilent	N9010A	MY52220207	2023/12/28	2024/12/27
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-969	2023/11/12	2024/11/11
	BBHA 9170	148	2023/11/12	2024/11/11
MXE EMI Receiver Agilent	N9038A	MY51210203	2023/8/24	2024/8/23
Preamplifier EMCI	EMC 012645	980115	2023/9/27	2024/9/26
	EMC 184045	980116	2023/9/27	2024/9/26
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2023/7/8	2024/7/7
	EMC102-KM-KM-3000	150929	2023/7/8	2024/7/7
	EMC104-SM-SM- 8000+3000	171005	2023/9/27	2024/9/26
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	EMC104-SM-SM- 1000(140807)	2023/9/27	2024/9/26
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MFT-201SS	N/A	N/A	N/A
Turn Table Controller Max-Full	MG-7802	N/A	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2024/5/29 ~ 2024/6/24

4.8 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
3-channel DC power supply JIN YIH Technology	ODP3033	ODP30332128138	N/A	N/A
Digital Multimeter Fluke	8050A	4660081	2024/6/14	2025/6/13
PXA Signal Analyzer Keysight	N9030B	MY57140938	2024/3/20	2025/3/19
Radio Communication Analyzer Anritsu	MT8821C	6261806803	2024/2/15	2025/2/14
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Temperature & Humidity Chamber Terchy	HRM-120RF	931022	2023/12/19	2024/12/18

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/7/17

5 Limits of Test Items

5.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

For LTE Band 5, LTE Band 26 (824 MHz ~ 849 MHz):

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

For LTE Band 2, LTE Band 25:

Mobile and portable stations are limited to 2 watts EIRP.

For LTE Band 14:

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

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

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

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

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

For LTE Band 13:

Control stations and mobile stations transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands and fixed stations transmitting in the 787-788 MHz and 805-806 MHz bands are limited to 30 watts ERP.

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 7, LTE Band 41:

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

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, LTE Band 25, LTE Band 26 (824 MHz ~ 849 MHz):

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 14:

According to FCC 47 CFR part 90.543 (e), for operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the 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, in accordance with the following:

- (1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than $65 + 10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations.
- (2) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least $43 + 10 \log(P)$ dB.

According to FCC 47 CFR part 90.543 (f), for operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power

(EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

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

According to FCC 47 CFR part 90.691 shall be tested the emission masks. For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log_{10}(f/6.1)$ decibels or $50 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

For §90.691(a), RBW = 300 Hz for offset less than 37.5 kHz from channel edge and RBW = 100 kHz for offsets greater than 37.5 kHz is allowed.

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

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

For LTE Band 13:

According to FCC 47 CFR part 27.53(c)(2), for on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) 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.

According to FCC 47 CFR part 27.53(c)(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations.

For operations in the 775-788 MHz, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz (EIRP). The limit of emissions is equal to -40 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 7, LTE Band 41:

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

5.6 Radiated Spurious Emissions below 1GHz

For LTE Band 2, LTE Band 5, LTE Band 25, LTE Band 26 (824 MHz ~ 849 MHz):

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 14:

According to FCC 47 CFR part 90.543 (e), for operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log(P)$ dB.

According to FCC 47 CFR part 90.543 (f), for operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

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

For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

For §90.691(a), RBW = 100 kHz for offset greater than 37.5 kHz from channel edge is allowed.

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

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

For LTE Band 13:

According to FCC 47 CFR part 27.53(c)(2), for on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB. The limit of emissions is equal to -13 dBm.

For operations in the 775-788 MHz, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz (EIRP). The limit of emissions is equal to -40 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 7, LTE Band 41:

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

5.7 Radiated Spurious Emissions above 1GHz

For LTE Band 2, LTE Band 5, LTE Band 25, LTE Band 26 (824 MHz ~ 849 MHz):

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 14:

According to FCC 47 CFR part 90.543 (e), for operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log(P)$ dB.

According to FCC 47 CFR part 90.543 (f), for operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

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

For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

For §90.691(a), RBW = 100 kHz for offset greater than 37.5 kHz from channel edge is allowed.

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

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

For LTE Band 13:

According to FCC 47 CFR part 27.53(c)(2), for on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB. The limit of emissions is equal to -13 dBm.

For operations in the 775-788 MHz, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz (EIRP). The limit of emissions is equal to -40 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 7, LTE Band 41:

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

5.8 Frequency Stability

For LTE Band 5, LTE Band 26 (814 MHz ~ 824 MHz), LTE Band 26 (824 MHz ~ 849 MHz):

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

For LTE Band 2, LTE Band 4, LTE Band 7, LTE Band 12, LTE Band 13, LTE Band 17, LTE Band 25, LTE Band 41, 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 14:

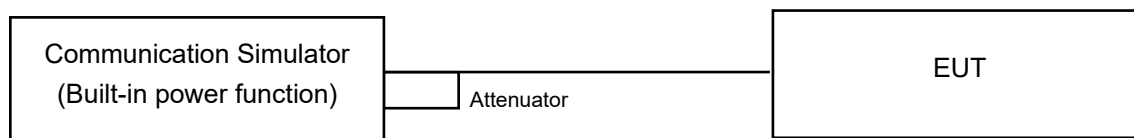
The frequency stability of mobile, portable and control transmitters operating in the wideband segment must be 1.25 parts per million or better when AFC is locked to a base station, and 5 parts per million or better when AFC is not locked.

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

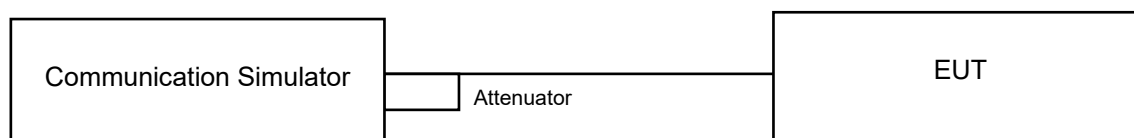
(expressed in the same units as P_{Meas} , e.g., dBm or dBW)

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

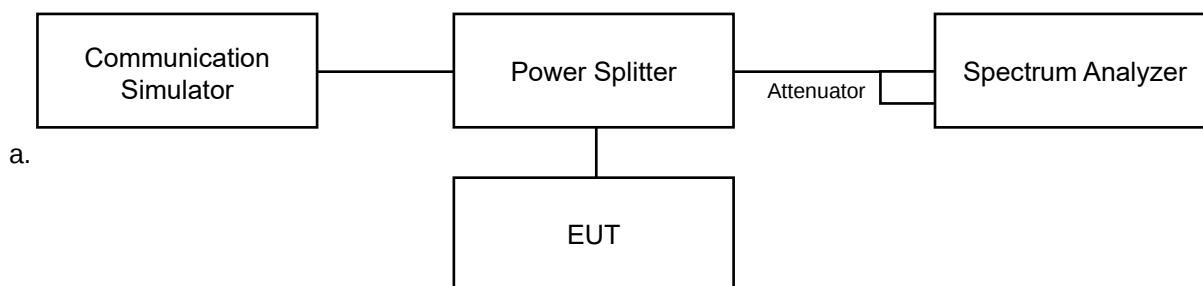


6.2.2 Test Procedure

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

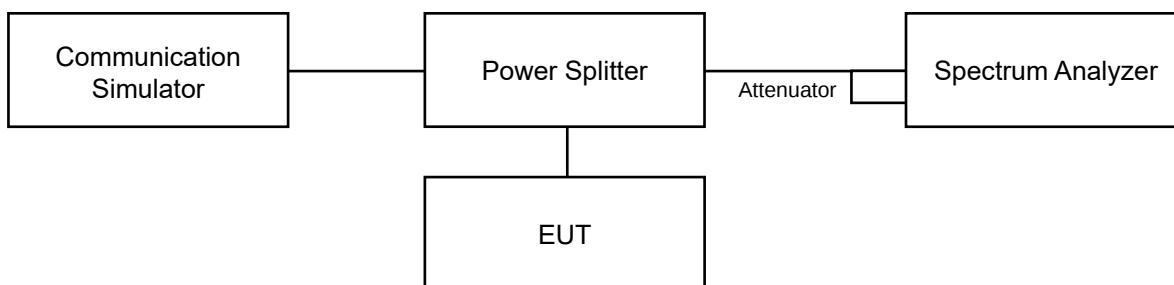


6.3.2 Test Procedure

- 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.

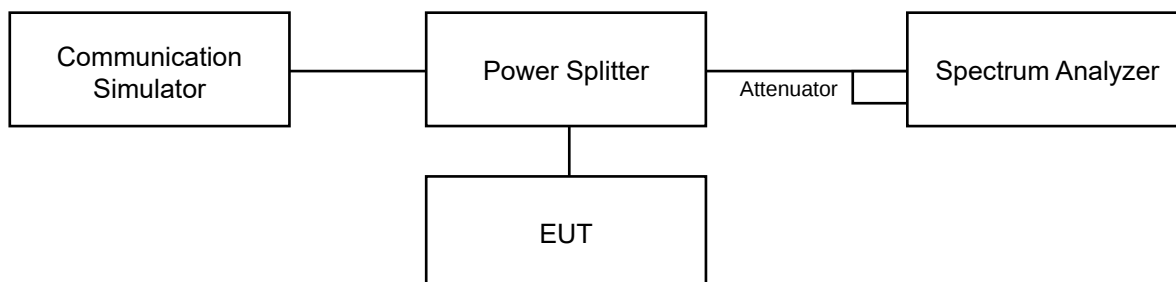
- The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
- The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and 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

- Measurement refer to ANSI C63.26 section 5.7.
- All measurements were done at 3 channels: low, middle and high operational frequency range.
- 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.
- The fundamental frequency above 1 GHz, the spectrum set RBW = 1 MHz, VBW = 3 MHz, Detector = Average.
- The fundamental frequency below 1 GHz, the spectrum set RBW $\geq$ 100 kHz, VBW $\geq$ 3 x RBW, Detector = Average.
- Measuring frequency band edge, narrow RBW (no less than 1% of the OBW) is used for conducted emission measurement.
- For the emissions measurement method, certain channel BW modes demonstrate compliance by integrating with the smaller RBW allowed by the rule.
- e.g. 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 limit, the limit line was reduced by 10 dB accordingly.
- Record the maximum power value test plot.

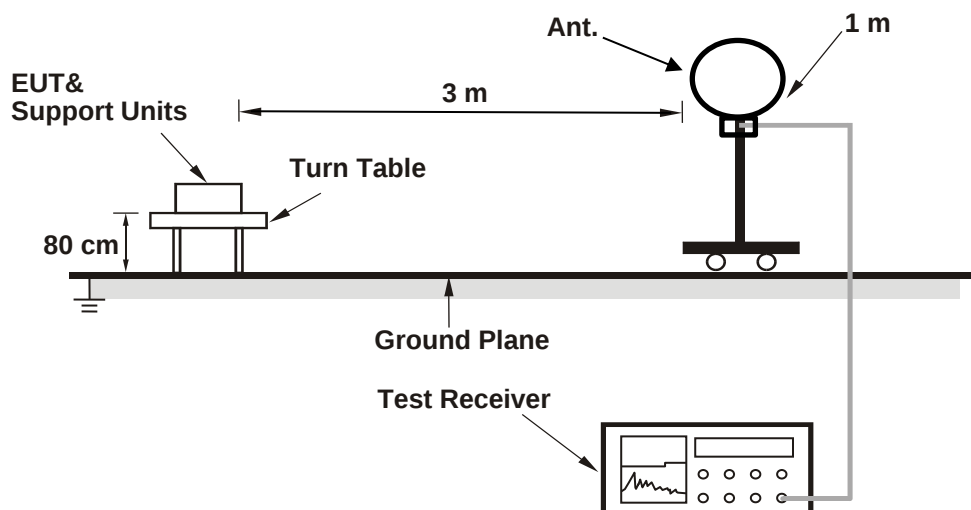
For Emission Mask:

- Measurement refer to ANSI C63.26 section 5.7.
- All measurements were done at 2 channels: low and high operational frequency range.
- According to FCC 47 CFR part 90.691(a), the spectrum set RBW = 300 Hz for offset less than 37.5 kHz from channel edge and RBW = 100 kHz for offsets greater than 37.5 kHz is allowed.
- For the emissions measurement method, certain channel BW modes demonstrate compliance by integrating with the smaller RBW allowed by the rule.
- e.g. 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 limit, the limit line was reduced by 10 dB accordingly.
- Record the maximum power value test plot.

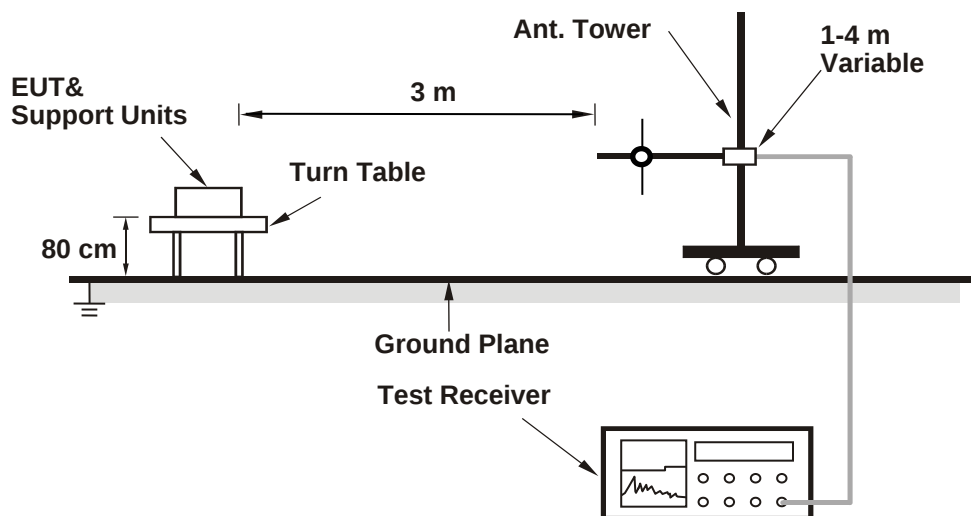
6.6 Radiated Spurious Emissions below 1GHz

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 by emulator to set data modulation and maximum power using WWAN technology.

- 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.
- 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.

- 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.

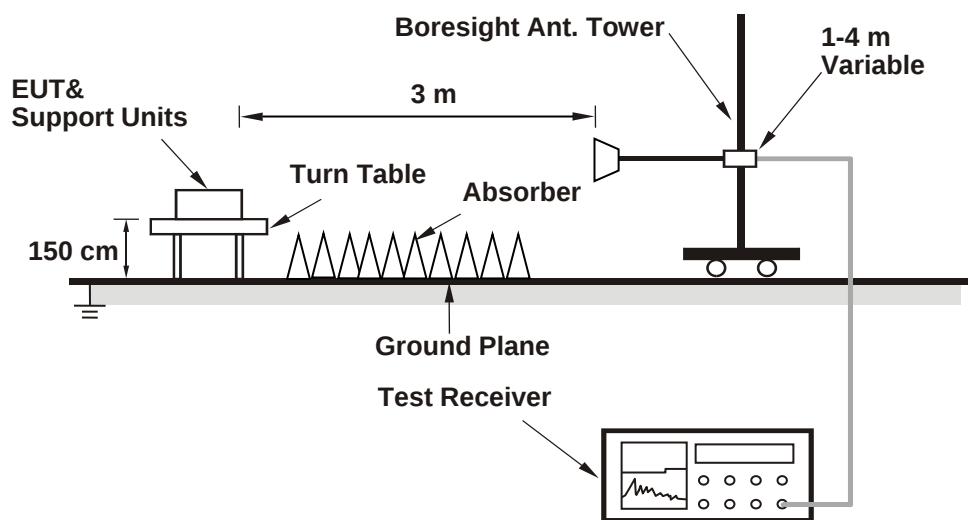
Note:

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 by emulator to set data modulation and maximum power using WWAN technology.

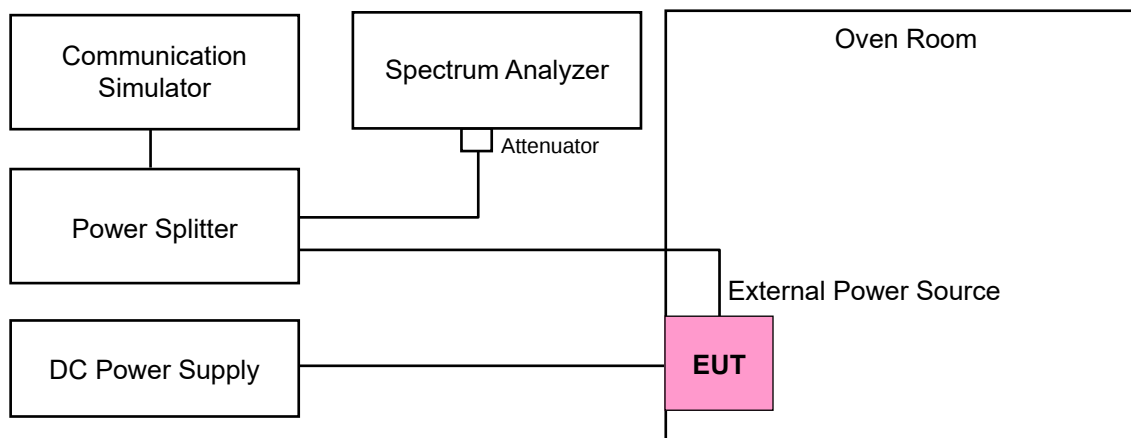
- a. In the semi-anechoic chamber, EUT placed on the 1.5 m height of turn table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.
- d. Following 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.

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:	4.7 Vdc	Environmental Conditions:	22°C, 68% RH	Tested By:	Noah Chang
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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	22.77	22.70	22.74
	1	2	22.75	22.73	22.86
	1	5	22.64	22.85	22.68
	3	0	22.71	22.76	22.70
	3	1	22.83	22.80	22.71
	3	3	22.72	22.85	22.72
	6	0	21.96	21.67	21.81
16QAM	1	0	22.01	22.36	22.03
	1	2	22.10	22.40	22.16
	1	5	22.13	22.44	22.37
	3	0	22.05	22.05	22.03
	3	1	21.93	21.98	21.97
	3	3	21.83	22.21	21.93
	6	0	21.02	20.80	21.02
64QAM	1	0	20.99	21.10	21.12
	1	2	21.24	21.31	21.26
	1	5	20.95	21.20	21.06
	3	0	21.10	21.07	21.16
	3	1	21.12	21.20	21.01
	3	3	21.14	21.15	21.16
	6	0	19.97	19.89	19.98
256QAM	1	0	18.21	18.09	18.27
	1	2	18.11	18.28	18.18
	1	5	18.29	18.29	18.05
	3	0	18.40	18.11	18.09
	3	1	18.07	18.20	17.97
	3	3	18.39	18.06	18.13
	6	0	18.06	18.02	17.93

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.67	23.7	22.86	24.89	33.01
16QAM	20.8	22.83	22.44	24.47	33.01
64QAM	19.89	21.92	21.31	23.34	33.01
256QAM	17.93	19.96	18.4	20.43	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	22.65	22.71	22.58
	1	7	22.83	22.67	22.73
	1	14	22.60	22.77	22.66
	8	0	21.80	21.97	21.65
	8	3	21.75	21.96	21.75
	8	7	22.04	21.95	21.74
	15	0	21.66	21.82	21.67
16QAM	1	0	21.97	22.16	22.05
	1	7	22.20	22.07	22.17
	1	14	22.04	22.32	22.05
	8	0	20.99	21.11	21.16
	8	3	21.16	21.14	21.02
	8	7	20.99	21.00	21.06
	15	0	20.93	20.83	21.02
64QAM	1	0	21.11	21.05	21.23
	1	7	21.16	21.14	21.23
	1	14	21.36	20.89	21.08
	8	0	20.20	19.86	20.10
	8	3	20.07	19.90	19.94
	8	7	20.02	20.10	20.13
	15	0	19.93	20.05	20.04
256QAM	1	0	17.80	17.99	18.23
	1	7	18.28	18.09	18.35
	1	14	18.02	18.16	18.17
	8	0	18.06	17.93	17.82
	8	3	17.88	17.87	17.95
	8	7	17.95	18.02	17.89
	15	0	17.89	17.92	17.87

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.65	23.68	22.83	24.86	33.01
16QAM	20.83	22.86	22.32	24.35	33.01
64QAM	19.86	21.89	21.36	23.39	33.01
256QAM	17.8	19.83	18.35	20.38	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	22.51	22.78	22.64
	1	12	22.70	22.78	22.82
	1	24	22.68	22.75	22.67
	12	0	22.06	21.96	21.85
	12	6	21.92	21.89	21.82
	12	13	21.94	22.01	21.61
	25	0	22.01	21.96	21.75
16QAM	1	0	22.24	22.57	22.37
	1	12	22.19	22.41	22.16
	1	24	22.22	22.25	22.14
	12	0	21.22	21.03	21.10
	12	6	21.15	21.11	21.12
	12	13	21.02	21.08	20.98
	25	0	20.94	21.07	21.02
64QAM	1	0	21.48	21.19	21.29
	1	12	21.37	21.16	21.10
	1	24	21.23	21.21	21.19
	12	0	20.07	20.03	20.06
	12	6	20.15	20.04	20.03
	12	13	19.91	20.13	19.88
	25	0	19.89	19.92	20.01
256QAM	1	0	18.33	18.37	18.32
	1	12	18.01	18.29	18.04
	1	24	17.97	18.25	18.20
	12	0	17.92	18.03	17.88
	12	6	17.93	17.92	17.96
	12	13	17.97	17.91	17.89
	25	0	17.86	17.93	17.90

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.61	23.64	22.82	24.85	33.01
16QAM	20.94	22.97	22.57	24.6	33.01
64QAM	19.88	21.91	21.48	23.51	33.01
256QAM	17.86	19.89	18.37	20.4	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	22.71	22.82	22.76
	1	24	22.76	22.75	22.66
	1	49	22.78	22.76	22.63
	25	0	21.93	22.00	21.75
	25	12	22.00	22.02	21.75
	25	25	21.92	21.77	21.77
	50	0	22.07	21.98	21.80
16QAM	1	0	22.06	22.44	22.01
	1	24	22.12	22.34	21.94
	1	49	22.29	22.01	21.85
	25	0	20.99	20.89	20.95
	25	12	21.10	21.03	20.97
	25	25	21.07	20.98	20.92
	50	0	20.96	20.90	20.96
64QAM	1	0	21.23	21.28	21.25
	1	24	21.30	21.03	21.10
	1	49	21.09	21.22	21.05
	25	0	20.09	20.05	20.04
	25	12	19.95	19.92	19.94
	25	25	20.05	19.89	19.97
	50	0	19.93	19.96	19.99
256QAM	1	0	18.34	18.26	18.29
	1	24	18.12	18.26	18.12
	1	49	18.31	18.09	18.10
	25	0	17.85	17.95	18.11
	25	12	17.96	17.93	18.02
	25	25	17.80	17.81	17.86
	50	0	17.89	17.83	17.82

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.75	23.78	22.82	24.85	33.01
16QAM	20.89	22.92	22.44	24.47	33.01
64QAM	19.89	21.92	21.3	23.33	33.01
256QAM	17.8	19.83	18.34	20.37	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	22.65	22.61	22.58
	1	37	22.89	22.70	22.64
	1	74	22.60	22.75	22.65
	36	0	22.00	21.92	21.89
	36	19	21.99	21.89	21.80
	36	39	22.04	21.88	21.87
	75	0	21.92	21.92	21.67
16QAM	1	0	22.15	22.28	21.97
	1	37	22.19	22.16	22.27
	1	74	22.10	22.10	22.15
	36	0	20.97	20.93	21.01
	36	19	21.11	21.09	20.97
	36	39	20.92	21.02	21.06
	75	0	20.91	20.93	20.88
64QAM	1	0	21.34	21.03	21.07
	1	37	20.98	21.09	21.06
	1	74	21.21	21.02	21.08
	36	0	19.94	19.96	20.01
	36	19	20.08	19.92	20.05
	36	39	19.97	20.00	19.93
	75	0	19.94	19.95	19.88
256QAM	1	0	18.13	18.14	17.95
	1	37	18.11	18.31	18.10
	1	74	17.88	18.15	18.20
	36	0	17.95	17.98	17.95
	36	19	17.83	17.82	17.96
	36	39	17.79	17.98	17.86
	75	0	17.91	17.86	17.88

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.67	23.7	22.89	24.92	33.01
16QAM	20.88	22.91	22.28	24.31	33.01
64QAM	19.88	21.91	21.34	23.37	33.01
256QAM	17.79	19.82	18.31	20.34	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	22.84	22.96	22.71
	1	50	22.88	22.75	22.80
	1	99	22.56	22.68	22.76
	50	0	22.02	22.04	21.85
	50	25	22.06	22.03	21.78
	50	50	22.10	21.74	21.71
	100	0	22.01	21.81	21.73
16QAM	1	0	22.18	22.34	22.07
	1	50	22.12	22.37	22.31
	1	99	22.31	22.22	21.87
	50	0	21.05	20.98	21.02
	50	25	21.03	21.02	20.92
	50	50	21.00	20.97	20.98
	100	0	20.99	20.84	20.94
64QAM	1	0	20.88	21.15	21.10
	1	50	21.08	21.02	20.99
	1	99	21.15	20.88	20.97
	50	0	20.01	19.88	19.97
	50	25	20.06	19.99	19.91
	50	50	20.00	19.91	19.94
	100	0	19.93	19.86	19.88
256QAM	1	0	18.07	18.04	18.07
	1	50	18.19	18.05	18.04
	1	99	18.24	17.96	17.99
	50	0	17.86	17.86	17.90
	50	25	18.01	17.92	18.01
	50	50	17.99	17.87	17.86
	100	0	17.84	17.79	17.78

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.71	23.74	22.96	24.99	33.01
16QAM	20.84	22.87	22.37	24.4	33.01
64QAM	19.86	21.89	21.15	23.18	33.01
256QAM	17.78	19.81	18.24	20.27	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	22.59	22.65	22.59
	1	2	22.54	22.73	22.37
	1	5	22.24	22.35	22.27
	3	0	21.79	21.72	21.85
	3	1	21.72	21.84	21.60
	3	3	21.79	21.63	21.38
	6	0	21.60	21.77	21.57
16QAM	1	0	21.74	21.91	21.76
	1	2	22.04	22.01	21.91
	1	5	21.95	21.94	22.01
	3	0	20.59	20.84	20.68
	3	1	20.88	20.94	20.90
	3	3	20.84	20.93	20.60
	6	0	20.81	20.84	20.57
64QAM	1	0	20.97	21.04	20.92
	1	2	20.84	21.08	20.92
	1	5	21.04	20.95	20.88
	3	0	19.62	19.78	19.86
	3	1	19.77	19.97	19.63
	3	3	19.59	19.76	19.69
	6	0	19.49	19.86	19.67
256QAM	1	0	17.74	17.96	17.80
	1	2	17.56	17.86	17.64
	1	5	17.49	17.73	17.49
	3	0	17.63	17.76	17.54
	3	1	17.71	17.77	17.64
	3	3	17.45	17.69	17.57
	6	0	17.41	17.77	17.60

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.38	23.41	22.73	24.76	30.00
16QAM	20.57	22.6	22.04	24.07	30.00
64QAM	19.49	21.52	21.08	23.11	30.00
256QAM	17.41	19.44	17.96	19.99	30.00

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	22.44	22.74	22.54
	1	7	22.38	22.60	22.47
	1	14	22.19	22.51	22.20
	8	0	21.89	21.88	21.44
	8	3	21.81	21.80	21.59
	8	7	21.52	21.90	21.60
	15	0	21.62	21.81	21.53
16QAM	1	0	21.97	21.89	21.74
	1	7	21.79	21.98	22.19
	1	14	21.94	22.07	21.76
	8	0	20.77	20.74	20.60
	8	3	20.69	20.78	20.66
	8	7	20.73	20.93	20.72
	15	0	20.85	20.73	20.49
64QAM	1	0	20.95	21.08	20.89
	1	7	21.09	21.05	21.01
	1	14	20.80	21.15	20.97
	8	0	19.59	19.72	19.54
	8	3	19.63	19.87	19.51
	8	7	19.71	19.81	19.64
	15	0	19.64	19.64	19.54
256QAM	1	0	17.86	17.83	17.92
	1	7	17.77	17.81	17.44
	1	14	17.77	17.68	17.83
	8	0	17.35	17.76	17.68
	8	3	17.58	17.70	17.65
	8	7	17.51	17.78	17.61
	15	0	17.77	17.78	17.32

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.44	23.47	22.74	24.77	30.00
16QAM	20.49	22.52	22.19	24.22	30.00
64QAM	19.51	21.54	21.15	23.18	30.00
256QAM	17.32	19.35	17.92	19.95	30.00

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	22.43	22.78	22.57
	1	12	22.29	22.70	22.42
	1	24	22.42	22.44	22.41
	12	0	21.52	21.79	21.69
	12	6	21.46	21.60	21.51
	12	13	21.47	21.79	21.72
	25	0	21.57	21.78	21.59
16QAM	1	0	21.91	22.07	21.80
	1	12	21.98	22.15	22.06
	1	24	21.72	22.08	21.81
	12	0	20.44	20.86	20.77
	12	6	20.79	20.93	20.60
	12	13	20.80	20.81	20.84
	25	0	20.53	20.82	20.48
64QAM	1	0	20.93	21.02	20.90
	1	12	20.89	21.04	20.81
	1	24	20.84	20.99	20.77
	12	0	19.60	19.87	19.55
	12	6	19.88	19.94	19.72
	12	13	19.62	19.85	19.55
	25	0	19.75	19.81	19.63
256QAM	1	0	17.63	17.80	17.86
	1	12	17.61	17.81	17.78
	1	24	17.74	17.63	17.67
	12	0	17.70	17.84	17.83
	12	6	17.90	17.64	17.74
	12	13	17.63	17.70	17.45
	25	0	17.81	17.62	17.60

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.46	23.49	22.78	24.81	30.00
16QAM	20.44	22.47	22.15	24.18	30.00
64QAM	19.55	21.58	21.04	23.07	30.00
256QAM	17.45	19.48	17.9	19.93	30.00

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	22.49	22.78	22.63
	1	24	22.35	22.46	22.61
	1	49	22.31	22.42	22.41
	25	0	21.89	21.82	21.69
	25	12	21.53	21.66	21.68
	25	25	21.86	21.75	21.40
	50	0	21.68	21.73	21.89
16QAM	1	0	21.87	22.14	21.90
	1	24	21.92	22.02	21.87
	1	49	21.96	22.00	21.80
	25	0	20.82	20.87	20.83
	25	12	20.61	20.86	20.84
	25	25	20.68	20.88	20.84
	50	0	20.60	20.72	20.76
64QAM	1	0	20.87	21.06	20.80
	1	24	20.84	20.92	20.94
	1	49	20.67	21.08	21.12
	25	0	19.79	19.77	19.64
	25	12	19.58	19.74	19.41
	25	25	19.63	19.78	19.63
	50	0	19.64	19.88	19.57
256QAM	1	0	17.56	17.91	17.69
	1	24	17.57	17.80	17.55
	1	49	17.48	17.65	17.75
	25	0	17.75	17.67	17.76
	25	12	17.64	17.73	17.60
	25	25	17.53	17.69	17.29
	50	0	17.52	17.58	17.83

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.4	23.43	22.78	24.81	30.00
16QAM	20.6	22.63	22.14	24.17	30.00
64QAM	19.41	21.44	21.12	23.15	30.00
256QAM	17.29	19.32	17.91	19.94	30.00

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	22.53	22.72	22.48
	1	37	22.48	22.48	22.58
	1	74	22.43	22.39	22.36
	36	0	21.60	21.87	21.62
	36	19	21.52	21.82	21.72
	36	39	21.54	21.74	21.58
	75	0	21.73	21.86	21.75
16QAM	1	0	21.84	22.03	21.60
	1	37	21.92	22.03	22.10
	1	74	21.85	21.96	21.81
	36	0	20.47	20.80	20.78
	36	19	20.63	20.89	20.65
	36	39	20.71	20.81	20.74
	75	0	20.80	20.76	20.86
64QAM	1	0	20.87	21.09	20.99
	1	37	21.02	21.00	21.12
	1	74	20.81	21.05	20.59
	36	0	19.49	19.86	19.64
	36	19	19.71	19.72	19.86
	36	39	19.63	19.68	19.50
	75	0	19.78	19.76	19.75
256QAM	1	0	17.69	17.86	17.69
	1	37	17.60	17.70	17.46
	1	74	17.62	17.72	17.67
	36	0	17.46	17.84	17.75
	36	19	17.64	17.83	17.82
	36	39	17.43	17.76	17.60
	75	0	17.64	17.77	17.56

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.52	23.55	22.72	24.75	30.00
16QAM	20.47	22.5	22.1	24.13	30.00
64QAM	19.49	21.52	21.12	23.15	30.00
256QAM	17.43	19.46	17.86	19.89	30.00

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	22.42	22.79	22.61
	1	50	22.48	22.71	22.68
	1	99	22.32	22.40	22.18
	50	0	21.76	21.83	21.53
	50	25	21.72	21.67	21.63
	50	50	21.63	21.92	21.74
	100	0	21.63	21.76	21.74
16QAM	1	0	21.74	22.10	21.90
	1	50	22.07	22.08	22.15
	1	99	21.89	21.98	21.97
	50	0	20.55	20.91	20.71
	50	25	20.65	20.91	20.85
	50	50	20.95	20.91	20.81
	100	0	20.85	20.91	20.75
64QAM	1	0	21.00	21.13	20.84
	1	50	20.94	21.09	21.10
	1	99	20.89	21.08	21.01
	50	0	19.62	19.76	19.85
	50	25	19.65	19.80	19.85
	50	50	19.71	19.75	19.57
	100	0	19.73	19.86	19.66
256QAM	1	0	17.66	17.99	18.06
	1	50	17.85	17.82	17.96
	1	99	17.62	17.63	17.61
	50	0	17.50	17.88	17.67
	50	25	17.66	17.75	17.52
	50	50	17.62	17.72	17.32
	100	0	17.47	17.63	17.57

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.53	23.56	22.79	24.82	30.00
16QAM	20.55	22.58	22.15	24.18	30.00
64QAM	19.57	21.6	21.13	23.16	30.00
256QAM	17.32	19.35	18.06	20.09	30.00

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	23.02	23.07	23.04
	1	2	23.05	23.04	22.94
	1	5	22.78	22.87	22.73
	3	0	21.77	22.16	21.91
	3	1	22.01	22.07	21.92
	3	3	21.87	22.13	21.73
	6	0	22.14	21.98	21.94
16QAM	1	0	22.49	22.79	22.59
	1	2	22.51	22.81	22.60
	1	5	22.37	22.58	22.39
	3	0	20.90	20.98	20.81
	3	1	20.92	21.03	20.85
	3	3	20.94	21.19	20.67
	6	0	21.10	20.80	20.77
64QAM	1	0	21.59	21.44	21.51
	1	2	21.32	21.47	21.04
	1	5	21.30	21.35	20.98
	3	0	19.74	20.00	19.60
	3	1	19.68	20.04	19.85
	3	3	19.97	19.89	19.95
	6	0	19.77	20.07	19.58
256QAM	1	0	18.29	18.38	17.92
	1	2	18.01	18.32	18.12
	1	5	17.83	18.15	18.13
	3	0	17.63	18.01	18.10
	3	1	17.71	18.15	17.87
	3	3	17.92	17.96	17.81
	6	0	17.83	17.91	17.85

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.73	22.21	23.07	23.55	38.45
16QAM	20.67	21.15	22.81	23.29	38.45
64QAM	19.58	20.06	21.59	22.07	38.45
256QAM	17.63	18.11	18.38	18.86	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	23.16	23.18	23.12
	1	7	23.15	23.12	23.00
	1	14	22.94	23.05	22.71
	8	0	21.94	21.94	21.93
	8	3	22.09	21.91	21.69
	8	7	21.86	21.98	22.06
	15	0	22.06	21.98	21.71
16QAM	1	0	22.43	22.66	22.68
	1	7	22.75	22.59	22.72
	1	14	22.78	22.63	22.34
	8	0	20.96	20.89	20.77
	8	3	20.96	21.20	20.93
	8	7	20.98	21.09	20.97
	15	0	20.75	21.09	21.17
64QAM	1	0	21.41	21.52	21.36
	1	7	21.52	21.50	21.24
	1	14	21.40	21.47	21.43
	8	0	20.00	19.87	19.71
	8	3	19.87	20.10	19.83
	8	7	19.88	19.98	19.72
	15	0	19.99	19.91	19.71
256QAM	1	0	18.12	18.19	18.18
	1	7	18.13	18.24	18.19
	1	14	18.04	18.01	18.03
	8	0	17.68	17.82	17.65
	8	3	17.79	18.02	17.81
	8	7	17.94	17.99	17.93
	15	0	17.85	17.81	17.70

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.69	22.17	23.18	23.66	38.45
16QAM	20.75	21.23	22.78	23.26	38.45
64QAM	19.71	20.19	21.52	22	38.45
256QAM	17.65	18.13	18.24	18.72	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	23.15	23.09	23.12
	1	12	22.87	23.09	23.00
	1	24	22.88	22.95	22.70
	12	0	22.00	21.99	21.87
	12	6	21.78	22.11	22.04
	12	13	21.67	22.13	22.17
	25	0	21.96	22.08	21.97
16QAM	1	0	22.53	22.53	22.68
	1	12	22.53	22.60	22.52
	1	24	22.68	22.73	22.25
	12	0	20.89	21.02	20.88
	12	6	20.94	21.05	20.98
	12	13	20.91	21.02	20.91
	25	0	20.82	20.99	20.92
64QAM	1	0	21.10	21.56	21.59
	1	12	21.17	21.48	21.33
	1	24	21.28	21.35	21.40
	12	0	19.96	19.97	19.95
	12	6	19.86	20.02	19.93
	12	13	19.99	20.01	19.84
	25	0	19.97	19.96	19.69
256QAM	1	0	18.11	18.18	18.14
	1	12	18.23	18.29	18.31
	1	24	18.10	18.30	17.93
	12	0	17.90	17.85	17.92
	12	6	17.94	18.09	17.73
	12	13	18.04	18.02	17.98
	25	0	17.76	17.93	17.71

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.67	22.15	23.15	23.63	38.45
16QAM	20.82	21.3	22.73	23.21	38.45
64QAM	19.69	20.17	21.59	22.07	38.45
256QAM	17.71	18.19	18.31	18.79	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	23.08	23.21	23.03
	1	24	22.98	23.20	23.13
	1	49	23.01	22.97	22.92
	25	0	22.10	22.04	22.02
	25	12	21.93	22.00	21.99
	25	25	21.85	22.06	21.88
	50	0	22.03	22.12	21.99
16QAM	1	0	22.54	22.82	22.60
	1	24	22.71	22.64	22.53
	1	49	22.50	22.67	22.68
	25	0	21.03	21.05	20.92
	25	12	21.04	21.27	21.12
	25	25	21.06	21.02	21.15
	50	0	21.07	21.07	20.93
64QAM	1	0	21.33	21.67	21.52
	1	24	21.34	21.52	21.34
	1	49	21.50	21.39	21.50
	25	0	19.97	19.92	20.03
	25	12	19.90	20.06	19.88
	25	25	19.76	19.95	19.87
	50	0	19.89	20.00	20.08
256QAM	1	0	18.20	18.26	18.02
	1	24	18.17	18.34	18.09
	1	49	18.03	18.19	18.01
	25	0	18.00	17.91	17.88
	25	12	17.91	18.14	18.01
	25	25	17.77	18.04	18.07
	50	0	18.00	17.90	17.64

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.85	22.33	23.21	23.69	38.45
16QAM	20.92	21.4	22.82	23.3	38.45
64QAM	19.76	20.24	21.67	22.15	38.45
256QAM	17.64	18.12	18.34	18.82	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 7

LTE Band 7, Channel Bandwidth: 5 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 20775	CH 21100	CH 21425
			2502.5 MHz	2535 MHz	2567.5 MHz
QPSK	1	0	22.72	22.97	22.60
	1	12	22.97	22.67	22.84
	1	24	22.42	22.49	22.48
	12	0	21.98	21.97	21.81
	12	6	21.66	21.91	21.82
	12	13	21.39	21.68	21.52
	25	0	21.60	21.60	21.65
16QAM	1	0	22.03	22.24	22.23
	1	12	22.16	22.20	22.07
	1	24	21.89	22.09	21.88
	12	0	20.82	21.03	20.60
	12	6	20.57	20.76	20.66
	12	13	20.51	20.70	20.77
	25	0	20.53	20.79	20.72
64QAM	1	0	21.01	21.00	20.89
	1	12	20.93	20.98	21.02
	1	24	20.84	20.98	20.71
	12	0	19.95	19.96	20.03
	12	6	19.79	19.91	19.88
	12	13	19.81	19.94	19.75
	25	0	19.77	19.93	20.03
256QAM	1	0	18.20	18.26	18.31
	1	12	18.09	18.19	17.91
	1	24	18.06	18.13	17.94
	12	0	17.91	17.87	17.68
	12	6	17.80	17.85	17.91
	12	13	17.54	17.77	17.52
	25	0	17.58	17.85	17.72

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.39	23.65	22.97	25.23	33.01
16QAM	20.51	22.77	22.24	24.5	33.01
64QAM	19.75	22.01	21.02	23.28	33.01
256QAM	17.52	19.78	18.31	20.57	33.01

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

LTE Band 7, Channel Bandwidth: 10 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 20800	CH 21100	CH 21400
			2505 MHz	2535 MHz	2565 MHz
QPSK	1	0	22.80	22.93	22.69
	1	24	22.62	22.86	22.59
	1	49	22.31	22.46	22.54
	25	0	21.78	21.84	21.70
	25	12	21.95	21.75	21.78
	25	25	21.72	21.57	21.55
	50	0	21.88	21.70	21.83
16QAM	1	0	22.22	22.15	22.27
	1	24	22.09	22.21	21.91
	1	49	22.02	22.19	21.76
	25	0	20.79	20.90	20.74
	25	12	20.72	20.61	20.53
	25	25	20.36	20.57	20.63
	50	0	20.66	20.68	20.80
64QAM	1	0	21.12	21.13	20.77
	1	24	21.00	21.00	20.79
	1	49	20.93	20.75	20.89
	25	0	19.75	19.90	19.87
	25	12	19.87	19.93	19.73
	25	25	19.61	19.84	19.78
	50	0	19.91	19.87	19.70
256QAM	1	0	18.42	18.27	18.05
	1	24	18.04	18.13	18.00
	1	49	18.10	18.02	17.92
	25	0	17.85	17.88	17.81
	25	12	17.41	17.79	17.81
	25	25	17.54	17.81	17.63
	50	0	17.76	17.88	17.62

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.55	23.81	22.93	25.19	33.01
16QAM	20.36	22.62	22.27	24.53	33.01
64QAM	19.61	21.87	21.13	23.39	33.01
256QAM	17.41	19.67	18.42	20.68	33.01

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

LTE Band 7, Channel Bandwidth: 15 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 20825	CH 21100	CH 21375
			2507.5 MHz	2535 MHz	2562.5 MHz
QPSK	1	0	22.74	22.78	22.73
	1	37	22.76	22.80	22.56
	1	74	22.48	22.76	22.29
	36	0	21.88	21.88	22.04
	36	19	21.71	21.75	21.82
	36	39	21.55	21.79	21.58
	75	0	21.69	21.68	21.60
16QAM	1	0	22.11	22.33	21.77
	1	37	22.14	22.26	21.80
	1	74	22.03	22.00	21.81
	36	0	20.88	20.86	20.77
	36	19	20.77	20.89	20.56
	36	39	20.65	20.61	20.51
	75	0	20.65	20.81	20.84
64QAM	1	0	20.99	21.01	21.01
	1	37	20.87	20.98	20.99
	1	74	20.59	20.94	20.83
	36	0	19.98	20.01	19.89
	36	19	19.81	19.99	19.98
	36	39	19.73	19.83	19.81
	75	0	19.96	20.10	20.03
256QAM	1	0	18.15	18.44	17.88
	1	37	18.11	18.15	17.84
	1	74	18.06	18.11	18.06
	36	0	17.95	17.95	17.90
	36	19	17.56	17.74	17.66
	36	39	17.75	17.65	17.68
	75	0	17.90	17.75	17.74

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.55	23.81	22.8	25.06	33.01
16QAM	20.51	22.77	22.33	24.59	33.01
64QAM	19.73	21.99	21.01	23.27	33.01
256QAM	17.56	19.82	18.44	20.7	33.01

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

LTE Band 7, Channel Bandwidth: 20 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 20850	CH 21100	CH 21350
			2510 MHz	2535 MHz	2560 MHz
QPSK	1	0	22.88	22.98	22.73
	1	50	22.74	22.89	22.83
	1	99	22.49	22.77	22.46
	50	0	21.85	22.06	21.65
	50	25	21.84	22.01	21.97
	50	50	21.63	21.79	21.64
	100	0	21.66	21.82	21.58
16QAM	1	0	22.29	22.24	22.29
	1	50	21.88	22.24	22.13
	1	99	21.96	22.23	22.06
	50	0	20.66	20.80	20.67
	50	25	20.65	20.93	20.64
	50	50	20.73	20.79	20.72
	100	0	20.64	20.83	20.63
64QAM	1	0	20.92	20.97	20.91
	1	50	20.79	20.93	20.85
	1	99	20.61	20.81	20.87
	50	0	19.94	20.09	20.08
	50	25	19.79	20.04	19.87
	50	50	19.64	19.78	19.86
	100	0	19.73	20.02	20.05
256QAM	1	0	18.23	18.48	18.15
	1	50	18.02	18.09	18.01
	1	99	18.17	18.17	18.11
	50	0	17.72	18.07	17.83
	50	25	17.52	17.89	17.71
	50	50	17.96	17.77	17.67
	100	0	17.73	18.00	17.68

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.58	23.84	22.98	25.24	33.01
16QAM	20.63	22.89	22.29	24.55	33.01
64QAM	19.64	21.9	20.97	23.23	33.01
256QAM	17.52	19.78	18.48	20.74	33.01

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

7.1.5 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	23.23	23.26	23.18
	1	2	23.20	23.19	22.78
	1	5	23.06	23.09	23.18
	3	0	21.85	22.41	22.01
	3	1	22.24	22.18	21.97
	3	3	22.15	22.44	22.24
	6	0	22.22	22.43	22.22
16QAM	1	0	22.41	22.70	22.50
	1	2	22.34	22.62	22.36
	1	5	22.49	22.46	22.20
	3	0	21.43	21.24	20.97
	3	1	21.11	21.17	21.26
	3	3	20.95	21.35	21.27
	6	0	21.34	21.34	21.14
64QAM	1	0	21.32	21.61	21.32
	1	2	21.65	21.53	21.30
	1	5	21.52	21.47	21.55
	3	0	20.20	20.37	20.43
	3	1	20.06	20.23	19.93
	3	3	20.07	20.27	20.18
	6	0	20.20	20.44	20.13
256QAM	1	0	18.78	18.75	18.77
	1	2	18.43	18.61	18.62
	1	5	18.50	18.69	18.65
	3	0	18.34	18.41	18.42
	3	1	18.15	18.43	18.41
	3	3	18.50	18.43	18.05
	6	0	18.20	18.42	18.18

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.85	21.33	23.26	22.74	34.77
16QAM	20.95	20.43	22.7	22.18	34.77
64QAM	19.93	19.41	21.65	21.13	34.77
256QAM	18.05	17.53	18.78	18.26	34.77

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	23.26	23.28	23.22
	1	7	23.01	23.05	22.87
	1	14	22.99	23.24	23.03
	8	0	22.13	22.19	21.96
	8	3	22.11	22.17	21.89
	8	7	22.32	22.22	22.24
	15	0	21.88	22.19	22.23
16QAM	1	0	22.48	22.74	22.52
	1	7	22.54	22.57	22.41
	1	14	22.24	22.61	22.26
	8	0	21.25	21.46	21.30
	8	3	21.11	21.26	21.17
	8	7	21.04	21.30	21.14
	15	0	21.11	21.34	21.13
64QAM	1	0	21.48	21.65	21.56
	1	7	21.31	21.62	21.53
	1	14	21.40	21.63	21.54
	8	0	20.25	20.45	20.13
	8	3	20.16	20.32	20.13
	8	7	20.17	20.15	20.09
	15	0	20.26	20.32	20.24
256QAM	1	0	18.84	18.68	18.46
	1	7	18.63	18.57	18.46
	1	14	18.50	18.60	18.63
	8	0	18.59	18.49	18.38
	8	3	18.32	18.33	18.32
	8	7	18.43	18.52	18.40
	15	0	18.36	18.48	18.16

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.88	21.36	23.28	22.76	34.77
16QAM	21.04	20.52	22.74	22.22	34.77
64QAM	20.09	19.57	21.65	21.13	34.77
256QAM	18.16	17.64	18.84	18.32	34.77

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	23.14	23.19	23.20
	1	12	22.79	23.18	23.24
	1	24	23.09	23.15	23.17
	12	0	22.28	22.23	22.36
	12	6	22.19	22.17	21.87
	12	13	22.40	22.38	22.08
	25	0	22.28	22.20	22.16
16QAM	1	0	22.30	22.54	22.47
	1	12	22.64	22.59	22.30
	1	24	22.65	22.66	22.28
	12	0	21.16	21.24	21.25
	12	6	21.13	21.17	20.90
	12	13	21.22	21.24	21.18
	25	0	21.19	21.34	21.17
64QAM	1	0	21.62	21.54	21.47
	1	12	21.53	21.64	21.59
	1	24	21.50	21.60	21.31
	12	0	20.19	20.42	20.26
	12	6	20.32	20.17	19.92
	12	13	20.11	20.23	20.26
	25	0	20.21	20.36	20.21
256QAM	1	0	18.65	18.73	18.78
	1	12	18.57	18.59	18.51
	1	24	18.57	18.65	18.46
	12	0	18.54	18.58	18.49
	12	6	18.13	18.36	18.30
	12	13	18.16	18.32	18.37
	25	0	18.27	18.45	18.15

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.87	21.35	23.24	22.72	34.77
16QAM	20.9	20.38	22.66	22.14	34.77
64QAM	19.92	19.4	21.64	21.12	34.77
256QAM	18.13	17.61	18.78	18.26	34.77

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	23.28	23.35	23.29
	1	24	23.17	23.23	23.01
	1	49	23.20	23.26	22.85
	25	0	22.14	22.31	22.15
	25	12	21.96	22.20	22.19
	25	25	22.13	22.36	22.24
	50	0	22.28	22.33	22.29
16QAM	1	0	22.45	22.75	22.40
	1	24	22.49	22.68	22.67
	1	49	22.46	22.70	22.31
	25	0	21.32	21.38	21.19
	25	12	21.11	21.34	21.38
	25	25	20.99	21.35	21.17
	50	0	21.00	21.42	21.24
64QAM	1	0	21.45	21.77	21.72
	1	24	21.38	21.61	21.64
	1	49	21.37	21.64	21.57
	25	0	20.23	20.33	20.36
	25	12	20.05	20.22	20.12
	25	25	20.07	20.34	20.29
	50	0	20.24	20.43	20.16
256QAM	1	0	18.62	18.76	18.73
	1	24	18.62	18.75	18.51
	1	49	18.52	18.75	18.44
	25	0	18.24	18.63	18.51
	25	12	18.12	18.39	18.28
	25	25	18.47	18.43	18.22
	50	0	18.48	18.51	18.55

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.96	21.44	23.35	22.83	34.77
16QAM	20.99	20.47	22.75	22.23	34.77
64QAM	20.05	19.53	21.77	21.25	34.77
256QAM	18.12	17.6	18.76	18.24	34.77

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

ERP (dBm) = EIRP (dBm) - 2.15

7.1.6 LTE Band 13

LTE Band 13, Channel Bandwidth: 5 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 23205	CH 23230	CH 23255
			779.5 MHz	782 MHz	784.5 MHz
QPSK	1	0	23.39	23.28	23.52
	1	12	23.25	23.25	23.46
	1	24	23.29	23.30	23.29
	12	0	22.09	22.27	22.17
	12	6	22.16	22.42	22.17
	12	13	22.02	22.40	22.18
	25	0	22.23	22.35	22.18
16QAM	1	0	22.65	22.76	22.45
	1	12	22.70	22.81	22.61
	1	24	22.85	22.64	22.62
	12	0	21.25	21.43	21.31
	12	6	21.26	21.44	21.24
	12	13	21.11	21.38	21.20
	25	0	21.39	21.30	20.96
64QAM	1	0	21.41	21.68	21.42
	1	12	21.34	21.50	21.54
	1	24	21.61	21.48	21.41
	12	0	20.15	20.31	20.39
	12	6	20.09	20.39	20.50
	12	13	20.29	20.22	20.29
	25	0	20.26	20.41	20.11
256QAM	1	0	18.42	18.63	18.55
	1	12	18.68	18.55	18.49
	1	24	18.53	18.62	18.65
	12	0	18.00	18.30	18.05
	12	6	18.09	18.27	17.99
	12	13	18.00	18.21	18.17
	25	0	18.12	18.12	17.95

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	22.02	21.5	23.52	23	34.77
16QAM	20.96	20.44	22.85	22.33	34.77
64QAM	20.09	19.57	21.68	21.16	34.77
256QAM	17.95	17.43	18.68	18.16	34.77

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

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 13, Channel Bandwidth: 10 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)
			CH 23230
			782 MHz
QPSK	1	0	23.57
	1	24	23.41
	1	49	23.33
	25	0	22.21
	25	12	22.13
	25	25	22.14
	50	0	22.35
16QAM	1	0	22.78
	1	24	22.73
	1	49	22.73
	25	0	21.16
	25	12	21.32
	25	25	21.17
	50	0	21.09
64QAM	1	0	21.81
	1	24	21.57
	1	49	21.53
	25	0	20.14
	25	12	20.37
	25	25	20.18
	50	0	20.29
256QAM	1	0	18.61
	1	24	18.64
	1	49	18.74
	25	0	18.09
	25	12	18.29
	25	25	18.23
	50	0	18.21

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	22.13	21.61	23.57	23.05	34.77
16QAM	21.09	20.57	22.78	22.26	34.77
64QAM	20.14	19.62	21.81	21.29	34.77
256QAM	18.09	17.57	18.74	18.22	34.77

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

ERP (dBm) = EIRP (dBm) - 2.15

7.1.7 LTE Band 14

LTE Band 14, Channel Bandwidth: 5 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 23305	CH 23330	CH 23355
			790.5 MHz	793 MHz	795.5 MHz
QPSK	1	0	23.32	23.33	23.31
	1	12	23.15	23.26	23.13
	1	24	22.94	23.32	23.12
	12	0	22.10	22.35	22.09
	12	6	22.08	22.36	22.27
	12	13	22.21	22.18	22.15
	25	0	22.10	22.20	21.92
16QAM	1	0	22.71	22.69	22.42
	1	12	22.59	22.84	22.70
	1	24	22.63	22.85	22.71
	12	0	21.21	21.25	21.06
	12	6	20.97	21.27	21.47
	12	13	21.17	21.22	21.03
	25	0	20.94	21.16	20.96
64QAM	1	0	21.44	21.57	21.46
	1	12	21.60	21.62	21.55
	1	24	21.30	21.58	21.68
	12	0	20.01	20.20	20.24
	12	6	20.17	20.41	20.18
	12	13	20.21	20.22	20.14
	25	0	20.19	20.12	19.93
256QAM	1	0	18.43	18.74	18.64
	1	12	18.35	18.70	18.24
	1	24	18.30	18.48	18.51
	12	0	17.78	18.23	17.98
	12	6	18.21	18.20	18.20
	12	13	18.20	18.23	18.26
	25	0	18.17	18.14	18.09

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.92	21.4	23.33	22.81	34.77
16QAM	20.94	20.42	22.85	22.33	34.77
64QAM	19.93	19.41	21.68	21.16	34.77
256QAM	17.78	17.26	18.74	18.22	34.77

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

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 14, Channel Bandwidth: 10 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)
			CH 23330
			793 MHz
QPSK	1	0	23.41
	1	24	23.35
	1	49	23.32
	25	0	22.16
	25	12	22.25
	25	25	22.15
	50	0	22.20
16QAM	1	0	22.58
	1	24	22.49
	1	49	22.57
	25	0	21.23
	25	12	21.37
	25	25	21.13
	50	0	21.28
64QAM	1	0	21.67
	1	24	21.75
	1	49	21.63
	25	0	20.05
	25	12	20.26
	25	25	20.28
	50	0	20.09
256QAM	1	0	18.50
	1	24	18.59
	1	49	18.50
	25	0	18.23
	25	12	18.21
	25	25	18.19
	50	0	18.13

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	22.15	21.63	23.41	22.89	34.77
16QAM	21.13	20.61	22.58	22.06	34.77
64QAM	20.05	19.53	21.75	21.23	34.77
256QAM	18.13	17.61	18.59	18.07	34.77

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

ERP (dBm) = EIRP (dBm) - 2.15

7.1.8 LTE Band 17

LTE Band 17, Channel Bandwidth: 5 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 23755	CH 23790	CH 23825
			706.5 MHz	710 MHz	713.5 MHz
QPSK	1	0	22.93	23.06	23.03
	1	12	22.92	22.90	22.76
	1	24	22.66	22.95	22.93
	12	0	21.85	21.88	21.86
	12	6	21.79	22.02	21.87
	12	13	21.82	22.04	21.97
	25	0	21.90	21.96	21.86
16QAM	1	0	22.42	22.58	22.38
	1	12	22.44	22.39	22.31
	1	24	22.19	22.43	22.37
	12	0	21.19	20.99	20.98
	12	6	20.90	21.08	20.89
	12	13	20.93	21.20	21.14
	25	0	20.76	21.14	20.90
64QAM	1	0	21.27	21.38	21.36
	1	12	21.22	21.20	21.20
	1	24	20.90	21.22	21.03
	12	0	19.97	19.98	19.87
	12	6	19.81	20.07	19.76
	12	13	19.93	20.00	20.16
	25	0	20.18	19.97	20.03
256QAM	1	0	18.80	18.82	18.36
	1	12	18.42	18.35	18.22
	1	24	18.64	18.52	18.39
	12	0	17.99	18.15	17.99
	12	6	17.89	18.26	18.28
	12	13	18.27	18.22	17.93
	25	0	17.99	18.15	17.96

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.79	21.27	23.06	22.54	34.77
16QAM	20.76	20.24	22.58	22.06	34.77
64QAM	19.76	19.24	21.38	20.86	34.77
256QAM	17.89	17.37	18.82	18.3	34.77

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

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 17, Channel Bandwidth: 10 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 23780	CH 23790	CH 23800
			709 MHz	710 MHz	711 MHz
QPSK	1	0	23.07	23.15	23.00
	1	24	22.96	22.98	23.09
	1	49	23.10	23.07	22.85
	25	0	21.89	22.00	21.85
	25	12	21.90	22.09	22.01
	25	25	22.09	22.14	21.82
	50	0	22.06	22.14	21.98
16QAM	1	0	22.55	22.63	22.58
	1	24	22.59	22.60	22.37
	1	49	22.30	22.47	22.29
	25	0	20.86	20.98	21.07
	25	12	21.14	21.12	21.03
	25	25	20.87	21.13	21.03
	50	0	20.95	21.11	20.92
64QAM	1	0	21.26	21.44	21.12
	1	24	21.20	21.26	21.25
	1	49	21.40	21.28	21.36
	25	0	20.08	20.09	20.14
	25	12	19.88	20.03	19.93
	25	25	20.18	20.20	20.02
	50	0	20.06	20.16	19.77
256QAM	1	0	18.76	18.79	18.51
	1	24	18.51	18.51	18.40
	1	49	18.48	18.64	18.48
	25	0	18.11	18.21	18.22
	25	12	17.93	18.14	18.19
	25	25	18.11	18.22	18.20
	50	0	18.15	18.23	18.22

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.82	21.3	23.15	22.63	34.77
16QAM	20.86	20.34	22.63	22.11	34.77
64QAM	19.77	19.25	21.44	20.92	34.77
256QAM	17.93	17.41	18.79	18.27	34.77

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

ERP (dBm) = EIRP (dBm) - 2.15

7.1.9 LTE Band 25

LTE Band 25, Channel Bandwidth: 1.4 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 26047	CH 26365	CH 26683
			1850.7 MHz	1882.5 MHz	1914.3 MHz
QPSK	1	0	22.74	22.89	23.02
	1	2	22.63	22.77	22.88
	1	5	22.71	22.79	22.69
	3	0	21.79	22.12	22.10
	3	1	21.95	22.11	21.75
	3	3	21.64	21.87	21.72
	6	0	21.69	21.80	21.71
16QAM	1	0	22.44	22.50	22.45
	1	2	22.36	22.53	22.38
	1	5	22.15	22.25	22.08
	3	0	21.00	20.97	21.12
	3	1	21.00	21.08	20.89
	3	3	20.88	21.30	20.94
	6	0	21.15	21.15	21.08
64QAM	1	0	21.26	21.43	21.19
	1	2	21.63	21.52	21.36
	1	5	21.45	21.38	21.18
	3	0	19.91	20.05	20.04
	3	1	19.90	20.07	20.14
	3	3	20.04	20.09	19.93
	6	0	19.95	20.13	19.93
256QAM	1	0	18.37	18.48	18.20
	1	2	18.26	18.28	18.17
	1	5	18.40	18.41	18.36
	3	0	18.06	18.08	17.83
	3	1	17.97	18.10	17.87
	3	3	18.04	18.05	17.98
	6	0	17.79	17.97	18.06

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.64	23.67	23.02	25.05	33.01
16QAM	20.88	22.91	22.53	24.56	33.01
64QAM	19.9	21.93	21.63	23.66	33.01
256QAM	17.79	19.82	18.48	20.51	33.01

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

LTE Band 25, Channel Bandwidth: 3 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 26055	CH 26365	CH 26675
			1851.5 MHz	1882.5 MHz	1913.5 MHz
QPSK	1	0	22.74	22.94	22.97
	1	7	22.84	22.94	22.80
	1	14	22.57	22.80	22.60
	8	0	22.07	22.11	21.83
	8	3	22.10	22.18	22.05
	8	7	21.82	21.93	21.90
	15	0	21.61	21.77	21.71
16QAM	1	7	22.24	22.55	22.12
	1	7	22.60	22.59	22.38
	1	14	22.03	22.33	22.30
	8	0	21.14	21.17	21.24
	8	3	21.11	21.36	20.93
	8	7	20.84	21.07	21.05
	15	0	20.83	21.15	21.15
64QAM	1	0	21.20	21.58	21.20
	1	7	21.31	21.60	21.19
	1	14	21.38	21.45	21.30
	8	0	20.12	20.06	19.95
	8	3	20.03	20.19	20.08
	8	7	19.81	20.02	19.97
	15	0	20.07	20.18	19.80
256QAM	1	0	18.22	18.41	18.43
	1	7	18.16	18.37	18.18
	1	14	18.30	18.16	18.15
	8	0	17.93	18.02	17.99
	8	3	18.10	17.99	18.03
	8	7	17.90	18.12	17.94
	15	0	17.97	17.93	17.76

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.61	23.64	22.97	25	33.01
16QAM	20.83	22.86	22.6	24.63	33.01
64QAM	19.8	21.83	21.6	23.63	33.01
256QAM	17.76	19.79	18.43	20.46	33.01

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

LTE Band 25, Channel Bandwidth: 5 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 26065	CH 26365	CH 26665
			1852.5 MHz	1882.5 MHz	1912.5 MHz
QPSK	1	0	22.79	23.02	22.93
	1	12	22.64	22.82	22.66
	1	24	22.52	22.83	22.68
	12	0	21.89	22.00	21.83
	12	6	21.90	22.08	21.98
	12	13	21.94	21.91	21.59
	25	0	21.67	21.89	21.73
16QAM	1	0	22.43	22.39	22.39
	1	12	22.38	22.60	22.46
	1	24	22.30	22.35	22.17
	12	0	20.97	21.06	20.98
	12	6	20.93	21.20	20.94
	12	13	21.04	21.21	20.91
	25	0	20.98	21.03	20.93
64QAM	1	0	21.30	21.46	21.46
	1	12	21.39	21.38	21.23
	1	24	21.14	21.37	21.22
	12	0	20.07	20.09	19.89
	12	6	20.12	20.08	19.76
	12	13	19.90	19.94	19.98
	25	0	19.84	20.14	20.00
256QAM	1	0	18.47	18.35	18.29
	1	12	18.24	18.43	18.37
	1	24	18.05	18.20	18.06
	12	0	17.96	18.10	17.95
	12	6	18.09	18.04	17.92
	12	13	17.77	18.12	17.79
	25	0	17.94	17.99	17.87

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.59	23.62	23.02	25.05	33.01
16QAM	20.91	22.94	22.6	24.63	33.01
64QAM	19.76	21.79	21.46	23.49	33.01
256QAM	17.77	19.8	18.47	20.5	33.01

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

LTE Band 25, Channel Bandwidth: 10 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 26090	CH 26365	CH 26640
			1855 MHz	1882.5 MHz	1910 MHz
QPSK	1	0	22.74	23.02	22.89
	1	24	22.75	22.96	22.93
	1	49	22.73	22.91	22.88
	25	0	21.79	22.02	22.04
	25	12	21.99	21.93	21.89
	25	25	21.98	22.09	21.82
	50	0	21.53	21.80	21.57
16QAM	1	0	22.34	22.40	22.40
	1	24	22.66	22.41	22.35
	1	49	21.89	22.31	21.89
	25	0	20.95	21.14	21.04
	25	12	20.88	21.07	21.03
	25	25	21.18	21.21	20.97
	50	0	21.10	21.15	20.78
64QAM	1	0	21.52	21.51	21.14
	1	24	21.22	21.59	21.66
	1	49	21.48	21.28	21.27
	25	0	19.87	20.04	19.79
	25	12	19.88	20.03	20.12
	25	25	20.02	19.94	19.69
	50	0	20.10	20.04	19.97
256QAM	1	0	18.21	18.48	18.28
	1	24	18.12	18.41	18.42
	1	49	18.07	18.31	18.06
	25	0	17.76	18.11	18.01
	25	12	17.90	18.16	18.03
	25	25	17.82	18.03	18.02
	50	0	17.82	17.96	17.96

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.53	23.56	23.02	25.05	33.01
16QAM	20.78	22.81	22.66	24.69	33.01
64QAM	19.69	21.72	21.66	23.69	33.01
256QAM	17.76	19.79	18.48	20.51	33.01

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

LTE Band 25, Channel Bandwidth: 15 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 26115	CH 26365	CH 26615
			1857.5 MHz	1882.5 MHz	1907.5 MHz
QPSK	1	0	22.69	22.88	22.97
	1	37	22.87	23.02	22.78
	1	74	22.78	22.84	22.79
	36	0	21.83	22.15	21.90
	36	19	21.88	22.06	21.75
	36	39	21.74	21.91	21.64
	75	0	21.76	21.92	21.79
16QAM	1	0	22.20	22.57	22.35
	1	37	22.34	22.51	22.64
	1	74	22.30	22.44	22.10
	36	0	21.01	21.13	20.93
	36	19	20.96	21.07	20.96
	36	39	21.04	21.02	20.78
	75	0	20.97	20.99	20.97
64QAM	1	0	21.33	21.45	21.49
	1	37	21.40	21.49	21.49
	1	74	21.16	21.35	21.31
	36	0	19.84	20.10	19.88
	36	19	20.00	20.03	19.78
	36	39	20.13	20.05	19.77
	75	0	19.79	19.92	20.02
256QAM	1	0	18.33	18.40	18.09
	1	37	18.31	18.39	18.37
	1	74	18.33	18.12	18.09
	36	0	18.05	18.18	17.84
	36	19	17.94	17.99	17.80
	36	39	17.81	18.06	18.04
	75	0	17.93	17.95	17.88

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.64	23.67	23.02	25.05	33.01
16QAM	20.78	22.81	22.64	24.67	33.01
64QAM	19.77	21.8	21.49	23.52	33.01
256QAM	17.8	19.83	18.4	20.43	33.01

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

LTE Band 25, Channel Bandwidth: 20 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 26140	CH 26365	CH 26590
			1860 MHz	1882.5 MHz	1905 MHz
QPSK	1	0	22.95	23.04	22.97
	1	50	22.74	22.97	22.91
	1	99	22.73	22.87	22.97
	50	0	22.20	22.21	21.97
	50	25	21.92	21.95	22.04
	50	50	21.98	21.93	21.96
	100	0	21.72	21.91	21.90
16QAM	1	0	22.29	22.61	22.39
	1	50	22.55	22.74	22.64
	1	99	22.36	22.38	22.11
	50	0	20.79	21.16	20.84
	50	25	20.93	21.27	20.90
	50	50	21.29	21.06	20.91
	100	0	21.00	21.08	20.94
64QAM	1	0	21.28	21.60	21.48
	1	50	21.59	21.55	21.63
	1	99	21.48	21.50	21.54
	50	0	19.80	19.99	20.13
	50	25	19.92	20.21	20.16
	50	50	19.85	20.24	19.85
	100	0	20.20	20.19	19.94
256QAM	1	0	18.43	18.36	18.42
	1	50	18.17	18.32	18.24
	1	99	18.09	18.33	18.40
	50	0	18.09	18.11	18.00
	50	25	17.85	18.20	17.91
	50	50	18.03	18.08	17.90
	100	0	18.03	18.19	17.99

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.72	23.75	23.04	25.07	33.01
16QAM	20.79	22.82	22.74	24.77	33.01
64QAM	19.8	21.83	21.63	23.66	33.01
256QAM	17.85	19.88	18.43	20.46	33.01

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

7.1.10 LTE Band 26 (814 MHz ~ 824 MHz)

LTE Band 26 (814 MHz ~ 824 MHz), Channel Bandwidth: 1.4 MHz

LTE Band 26 1.4M					
Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 26697	CH 26740	CH 26783
			814.7 MHz	819 MHz	823.3 MHz
QPSK	1	0	22.95	23.04	23.04
	1	2	22.84	23.02	22.84
	1	5	23.07	22.96	22.99
	3	0	22.06	22.08	21.88
	3	1	21.95	22.11	22.09
	3	3	22.02	22.12	22.21
	6	0	22.14	22.11	21.99
16QAM	1	0	22.65	22.77	22.57
	1	2	22.48	22.65	22.56
	1	5	22.46	22.54	22.41
	3	0	21.15	21.27	21.08
	3	1	21.16	21.27	21.14
	3	3	21.26	21.12	21.15
	6	0	21.10	21.19	21.06
64QAM	1	0	21.55	21.68	21.31
	1	2	21.44	21.52	21.63
	1	5	21.55	21.57	21.27
	3	0	19.98	20.19	20.00
	3	1	20.17	20.23	20.30
	3	3	20.03	20.31	19.98
	6	0	19.98	20.04	19.95
256QAM	1	0	18.34	18.46	18.24
	1	2	18.21	18.45	18.39
	1	5	18.17	18.35	18.04
	3	0	18.02	18.10	17.94
	3	1	18.04	18.05	18.03
	3	3	17.88	18.01	17.71
	6	0	17.94	18.11	18.07

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.88	22.36	23.07	23.55	50.00
16QAM	21.06	21.54	22.77	23.25	50.00
64QAM	19.95	20.43	21.68	22.16	50.00
256QAM	17.71	18.19	18.46	18.94	50.00

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

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 26 (814 MHz ~ 824 MHz), Channel Bandwidth: 3 MHz

LTE Band 26 3M					
Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 26705	CH 26740	CH 26775
			815.5 MHz	819 MHz	822.5 MHz
QPSK	1	0	23.02	23.06	23.13
	1	7	23.11	23.03	22.85
	1	14	22.96	23.14	22.96
	8	0	22.04	22.02	22.07
	8	3	22.18	22.17	22.02
	8	7	21.88	22.19	21.95
	15	0	21.96	22.14	21.90
16QAM	1	0	22.63	22.66	22.62
	1	7	22.75	22.44	22.61
	1	14	22.49	22.70	22.65
	8	0	20.83	21.24	20.92
	8	3	21.07	21.11	21.02
	8	7	21.02	21.17	20.91
	15	0	21.09	21.13	21.16
64QAM	1	0	21.32	21.54	21.43
	1	7	21.10	21.65	21.37
	1	14	21.28	21.53	21.49
	8	0	19.85	20.17	20.16
	8	3	19.91	20.06	19.87
	8	7	19.93	20.32	20.10
	15	0	19.84	20.27	20.04
256QAM	1	0	18.43	18.27	18.30
	1	7	18.25	18.31	18.01
	1	14	18.29	18.29	18.09
	8	0	18.12	17.92	17.75
	8	3	17.99	17.87	18.02
	8	7	18.01	18.05	17.69
	15	0	17.92	18.10	18.01

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.88	22.36	23.14	23.62	50.00
16QAM	20.83	21.31	22.75	23.23	50.00
64QAM	19.84	20.32	21.65	22.13	50.00
256QAM	17.69	18.17	18.43	18.91	50.00

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

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 26 (814 MHz ~ 824 MHz), Channel Bandwidth: 5 MHz

LTE Band 26 5M					
Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 26715	CH 26740	CH 26765
			816.5 MHz	819 MHz	821.5 MHz
QPSK	1	0	23.19	23.06	23.18
	1	12	22.98	23.08	22.83
	1	24	22.86	23.22	23.01
	12	0	22.23	22.16	22.08
	12	6	21.88	22.27	22.03
	12	13	22.13	22.26	22.04
	25	0	21.93	22.10	21.99
16QAM	1	0	22.75	22.73	22.58
	1	12	22.45	22.76	22.75
	1	24	22.53	22.74	22.41
	12	0	21.12	21.10	21.08
	12	6	21.14	21.20	21.26
	12	13	21.08	21.06	21.04
	25	0	21.11	21.22	21.31
64QAM	1	0	21.32	21.67	21.53
	1	12	21.61	21.58	21.47
	1	24	21.52	21.64	21.51
	12	0	19.97	20.29	19.95
	12	6	20.09	20.23	20.01
	12	13	20.24	20.16	19.89
	25	0	20.18	20.11	20.36
256QAM	1	0	18.17	18.45	18.33
	1	12	18.28	18.42	18.09
	1	24	18.39	18.35	18.20
	12	0	17.97	18.13	17.86
	12	6	18.00	18.01	18.01
	12	13	17.90	18.05	18.05
	25	0	18.09	18.23	18.08

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.88	22.36	23.22	23.7	50.00
16QAM	21.04	21.52	22.76	23.24	50.00
64QAM	19.89	20.37	21.67	22.15	50.00
256QAM	17.86	18.34	18.45	18.93	50.00

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

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 26 (814 MHz ~ 824 MHz), Channel Bandwidth: 10 MHz

LTE Band 26 10M			
Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)
			CH 26740
			819 MHz
QPSK	1	0	23.08
	1	24	23.06
	1	49	22.96
	25	0	21.95
	25	12	22.16
	25	25	21.94
	50	0	22.07
16QAM	1	0	22.49
	1	24	22.45
	1	49	22.61
	25	0	20.99
	25	12	21.16
	25	25	21.07
	50	0	21.10
64QAM	1	0	21.47
	1	24	21.23
	1	49	21.36
	25	0	20.07
	25	12	20.14
	25	25	20.04
	50	0	20.03
256QAM	1	0	18.43
	1	24	18.23
	1	49	18.08
	25	0	17.90
	25	12	17.99
	25	25	18.02
	50	0	18.01

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.94	22.42	23.08	23.56	50.00
16QAM	20.99	21.47	22.61	23.09	50.00
64QAM	20.03	20.51	21.47	21.95	50.00
256QAM	17.9	18.38	18.43	18.91	50.00

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

ERP (dBm) = EIRP (dBm) - 2.15

7.1.11 LTE Band 26 (824 MHz ~ 849 MHz)

LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 1.4 MHz

LTE Band 26 1.4M					
Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 26797	CH 26915	CH 27033
			824.7 MHz	836.5 MHz	848.3 MHz
QPSK	1	0	22.99	23.01	23.04
	1	2	22.95	23.04	22.95
	1	5	22.74	22.82	22.89
	3	0	21.83	21.93	22.09
	3	1	21.70	22.01	21.76
	3	3	21.83	21.97	21.93
	6	0	21.99	22.09	21.87
16QAM	1	0	22.27	22.53	22.38
	1	2	22.20	22.52	22.27
	1	5	22.42	22.62	22.12
	3	0	20.87	21.19	20.83
	3	1	20.99	21.01	20.80
	3	3	21.02	21.22	20.99
	6	0	20.73	21.06	20.86
64QAM	1	0	21.34	21.46	21.35
	1	2	21.08	21.25	21.27
	1	5	21.02	21.16	21.04
	3	0	19.80	20.02	19.62
	3	1	20.12	20.00	19.82
	3	3	19.96	20.12	19.91
	6	0	19.71	20.06	19.96
256QAM	1	0	18.22	18.33	18.17
	1	2	18.14	18.49	17.96
	1	5	18.28	18.37	18.06
	3	0	17.75	17.93	18.05
	3	1	17.83	17.89	18.03
	3	3	17.88	18.10	17.77
	6	0	17.65	18.11	17.87

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.7	22.18	23.04	23.52	38.45
16QAM	20.73	21.21	22.62	23.1	38.45
64QAM	19.62	20.1	21.46	21.94	38.45
256QAM	17.65	18.13	18.49	18.97	38.45

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

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 3 MHz

LTE Band 26 3M					
Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 26805	CH 26915	CH 27025
			825.5 MHz	836.5 MHz	847.5 MHz
QPSK	1	0	23.01	22.99	22.92
	1	7	22.97	22.97	22.94
	1	14	22.92	22.95	22.88
	8	0	22.08	22.07	21.88
	8	3	21.99	21.98	22.01
	8	7	22.24	22.07	22.05
	15	0	21.97	22.15	22.21
16QAM	1	0	22.39	22.52	22.40
	1	7	22.31	22.47	22.25
	1	14	22.18	22.52	22.18
	8	0	21.08	21.02	20.78
	8	3	20.95	21.01	20.88
	8	7	21.09	21.09	20.96
	15	0	20.96	20.93	20.96
64QAM	1	0	21.15	21.55	21.37
	1	7	21.14	21.29	20.97
	1	14	20.86	21.26	21.09
	8	0	20.06	20.00	19.86
	8	3	20.01	20.08	20.08
	8	7	20.00	20.04	20.02
	15	0	20.06	20.14	19.73
256QAM	1	0	18.09	18.39	18.34
	1	7	18.11	18.35	18.07
	1	14	18.38	18.36	18.15
	8	0	17.62	18.09	17.90
	8	3	17.89	18.05	17.85
	8	7	18.01	18.07	17.83
	15	0	17.78	18.02	17.90

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.88	22.36	23.01	23.49	38.45
16QAM	20.78	21.26	22.52	23.00	38.45
64QAM	19.73	20.21	21.55	22.03	38.45
256QAM	17.62	18.10	18.39	18.87	38.45

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

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 5 MHz

LTE Band 26 5M					
Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 26815	CH 26915	CH 27015
			826.5 MHz	836.5 MHz	846.5 MHz
QPSK	1	0	23.18	23.16	23.03
	1	12	23.06	23.06	22.89
	1	24	22.83	23.08	22.94
	12	0	21.92	22.14	22.12
	12	6	21.91	22.04	22.06
	12	13	21.87	22.17	22.14
	25	0	22.01	22.15	21.74
16QAM	1	0	22.37	22.56	22.51
	1	12	22.47	22.54	22.28
	1	24	22.28	22.45	22.60
	12	0	20.75	21.20	21.04
	12	6	21.18	21.10	21.16
	12	13	21.10	21.25	20.93
	25	0	20.88	21.07	20.95
64QAM	1	0	21.32	21.53	21.36
	1	12	21.18	21.21	21.27
	1	24	20.97	21.26	21.07
	12	0	19.76	20.11	20.00
	12	6	20.00	20.06	19.90
	12	13	19.98	20.13	19.85
	25	0	19.88	20.11	19.96
256QAM	1	0	18.28	18.40	18.28
	1	12	18.15	18.26	18.15
	1	24	18.26	18.51	18.32
	12	0	17.76	17.96	18.09
	12	6	17.76	18.05	17.79
	12	13	18.04	17.95	18.00
	25	0	17.81	18.03	18.08

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.74	22.22	23.18	23.66	38.45
16QAM	20.75	21.23	22.6	23.08	38.45
64QAM	19.76	20.24	21.53	22.01	38.45
256QAM	17.76	18.24	18.51	18.99	38.45

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

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 10 MHz

LTE Band 26 10M					
Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 26840	CH 26915	CH 26990
			829 MHz	836.5 MHz	844 MHz
QPSK	1	0	22.98	23.14	22.84
	1	24	22.99	22.94	22.87
	1	49	22.89	22.85	22.74
	25	0	21.83	22.16	22.04
	25	12	21.77	22.07	21.96
	25	25	21.95	22.13	21.99
	50	0	21.92	22.10	22.05
16QAM	1	0	22.24	22.48	22.32
	1	24	22.50	22.50	22.37
	1	49	22.33	22.51	22.50
	25	0	21.18	21.04	20.92
	25	12	21.11	21.19	21.09
	25	25	21.05	21.17	20.97
	50	0	20.86	21.07	21.02
64QAM	1	0	21.43	21.41	21.31
	1	24	21.18	21.32	21.48
	1	49	21.27	21.23	21.02
	25	0	19.89	20.00	20.11
	25	12	19.90	20.09	20.12
	25	25	19.89	20.20	20.06
	50	0	20.14	20.01	20.06
256QAM	1	0	18.33	18.47	18.16
	1	24	18.29	18.49	18.36
	1	49	18.23	18.42	18.37
	25	0	17.78	18.00	18.11
	25	12	17.81	18.09	18.04
	25	25	18.04	17.96	17.96
	50	0	17.95	17.94	17.89

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.77	22.25	23.14	23.62	38.45
16QAM	20.86	21.34	22.51	22.99	38.45
64QAM	19.89	20.37	21.48	21.96	38.45
256QAM	17.78	18.26	18.49	18.97	38.45

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

ERP (dBm) = EIRP (dBm) - 2.15

LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 15 MHz

LTE Band 26 15M					
Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 26865	CH 26915	CH 26965
			831.5 MHz	836.5 MHz	841.5 MHz
QPSK	1	0	23.09	23.21	22.93
	1	37	22.98	23.13	22.69
	1	74	22.97	22.94	22.90
	36	0	22.69	22.97	22.84
	36	19	21.83	21.96	21.63
	36	39	21.74	21.94	21.87
	75	0	21.89	21.99	21.95
16QAM	1	0	21.85	21.98	21.94
	1	37	22.41	22.37	22.13
	1	74	22.12	22.53	22.53
	36	0	22.25	22.54	22.44
	36	19	20.68	20.93	20.76
	36	39	21.10	21.04	21.06
	75	0	20.75	20.95	20.88
64QAM	1	0	20.98	21.02	20.98
	1	37	21.14	21.24	21.15
	1	74	21.11	21.15	21.05
	36	0	20.90	21.16	21.13
	36	19	19.90	20.04	19.99
	36	39	20.02	20.01	20.01
	75	0	19.85	20.03	19.76
256QAM	1	0	19.96	19.91	19.90
	1	37	18.25	18.21	18.16
	1	74	18.26	18.40	18.22
	36	0	18.00	18.20	18.15
	36	19	17.67	17.86	17.80
	36	39	17.86	17.90	17.71
	75	0	17.67	17.91	17.95

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.63	22.11	23.21	23.69	38.45
16QAM	20.68	21.16	22.54	23.02	38.45
64QAM	19.76	20.24	21.24	21.72	38.45
256QAM	17.67	18.15	19.96	20.44	38.45

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

ERP (dBm) = EIRP (dBm) - 2.15

7.1.12 LTE Band 41

LTE Band 41, Channel Bandwidth: 5 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 39675	CH 40620	CH 41565
			2498.5 MHz	2593 MHz	2687.5 MHz
QPSK	1	0	23.02	23.05	22.98
	1	12	23.08	23.09	22.69
	1	24	22.73	22.94	22.74
	12	0	21.89	22.05	21.79
	12	6	21.73	22.01	22.00
	12	13	21.84	22.00	21.92
	25	0	21.78	21.95	21.78
16QAM	1	0	22.21	22.22	22.25
	1	12	22.01	22.45	22.11
	1	24	22.06	22.00	22.11
	12	0	20.90	21.03	20.99
	12	6	20.69	21.07	20.73
	12	13	20.94	21.08	21.02
	25	0	20.84	20.91	20.74
64QAM	1	0	20.78	20.80	20.86
	1	12	20.84	21.06	20.67
	1	24	20.37	20.73	20.87
	12	0	20.22	20.22	19.94
	12	6	19.94	20.11	20.05
	12	13	19.94	20.03	19.89
	25	0	20.06	20.12	19.89
256QAM	1	0	17.66	17.89	17.84
	1	12	17.75	18.06	18.00
	1	24	17.77	17.85	17.71
	12	0	18.32	18.37	18.33
	12	6	18.17	18.19	18.10
	12	13	17.95	18.27	17.85
	25	0	17.92	18.22	17.73

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.73	23.99	23.09	25.35	33.01
16QAM	20.69	22.95	22.45	24.71	33.01
64QAM	19.89	22.15	21.06	23.32	33.01
256QAM	17.66	19.92	18.37	20.63	33.01

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

LTE Band 41, Channel Bandwidth: 10 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 39700	CH 40620	CH 41540
			2501 MHz	2593 MHz	2685 MHz
QPSK	1	0	23.01	23.16	22.93
	1	24	22.83	23.04	22.96
	1	49	22.67	22.82	22.76
	25	0	21.94	22.01	21.92
	25	12	21.92	21.91	21.90
	25	25	21.83	21.90	21.79
	50	0	21.97	22.07	21.68
16QAM	1	0	22.24	22.17	21.99
	1	24	22.26	22.34	22.20
	1	49	21.87	22.12	21.79
	25	0	21.07	21.19	20.96
	25	12	20.74	21.09	20.60
	25	25	20.76	21.00	21.02
	50	0	20.99	20.93	20.70
64QAM	1	0	20.74	20.88	20.76
	1	24	20.90	20.95	20.73
	1	49	20.78	20.93	20.76
	25	0	19.79	20.23	20.23
	25	12	20.00	20.23	19.89
	25	25	20.01	19.94	19.98
	50	0	19.87	20.23	19.77
256QAM	1	0	18.01	17.87	17.76
	1	24	17.65	17.98	17.78
	1	49	17.87	17.68	17.49
	25	0	18.07	18.15	17.90
	25	12	18.34	18.19	18.02
	25	25	17.92	18.03	17.99
	50	0	17.87	18.11	17.85

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.68	23.94	23.16	25.42	33.01
16QAM	20.6	22.86	22.34	24.6	33.01
64QAM	19.77	22.03	20.95	23.21	33.01
256QAM	17.49	19.75	18.34	20.6	33.01

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

LTE Band 41, Channel Bandwidth: 15 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 39725	CH 40620	CH 41515
			2503.5 MHz	2593 MHz	2682.5 MHz
QPSK	1	0	22.92	23.06	22.91
	1	37	22.76	23.18	23.00
	1	74	22.66	23.10	22.84
	36	0	22.07	22.00	21.74
	36	19	21.78	21.99	21.68
	36	39	21.68	22.03	22.02
	75	0	21.84	21.92	21.71
16QAM	1	0	22.12	22.26	22.22
	1	37	22.09	22.26	21.89
	1	74	21.92	22.28	21.84
	36	0	20.70	20.86	20.72
	36	19	20.93	21.06	20.80
	36	39	21.09	20.94	20.61
	75	0	20.90	21.13	20.76
64QAM	1	0	20.79	21.03	20.90
	1	37	20.93	20.95	20.91
	1	74	20.66	20.80	20.87
	36	0	20.11	20.25	20.02
	36	19	20.03	20.26	19.79
	36	39	19.98	20.14	19.99
	75	0	20.14	20.19	20.15
256QAM	1	0	17.87	18.14	17.97
	1	37	17.84	18.04	17.97
	1	74	17.82	17.89	17.59
	36	0	18.24	18.22	17.99
	36	19	17.83	18.14	17.92
	36	39	18.00	18.20	17.84
	75	0	18.09	18.18	18.07

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.68	23.94	23.18	25.44	33.01
16QAM	20.61	22.87	22.28	24.54	33.01
64QAM	19.79	22.05	21.03	23.29	33.01
256QAM	17.59	19.85	18.24	20.5	33.01

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

LTE Band 41, Channel Bandwidth: 20 MHz

Modulation	RB Size	RB Offset	Measurement Conducted Power (dBm)		
			CH 39750	CH 40620	CH 41490
			2506 MHz	2593 MHz	2680 MHz
QPSK	1	0	23.15	23.17	23.05
	1	50	23.09	23.07	22.95
	1	99	22.69	22.97	23.00
	50	0	21.78	22.11	21.93
	50	25	22.12	22.08	21.89
	50	50	21.72	22.09	21.92
	100	0	21.87	21.94	21.79
16QAM	1	0	22.21	22.20	22.21
	1	50	22.31	22.28	22.12
	1	99	22.04	22.07	22.00
	50	0	20.96	21.22	21.05
	50	25	21.05	20.98	21.05
	50	50	20.91	21.04	20.89
	100	0	20.98	20.98	20.83
64QAM	1	0	20.69	21.01	20.89
	1	50	20.77	21.03	20.96
	1	99	20.83	20.75	20.51
	50	0	20.11	20.14	20.02
	50	25	20.25	20.22	19.98
	50	50	20.14	20.19	19.93
	100	0	19.98	20.20	20.05
256QAM	1	0	17.91	17.95	17.76
	1	50	17.83	18.13	17.86
	1	99	17.64	17.78	17.89
	50	0	18.38	18.25	18.28
	50	25	18.20	18.24	17.99
	50	50	17.88	18.20	18.07
	100	0	18.23	18.16	17.77

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.72	23.98	23.17	25.43	33.01
16QAM	20.83	23.09	22.31	24.57	33.01
64QAM	19.93	22.19	21.03	23.29	33.01
256QAM	17.64	19.9	18.38	20.64	33.01

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

7.1.13 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	22.70	23.00	22.69
	1	2	22.75	22.91	22.61
	1	5	22.84	22.83	22.77
	3	0	21.98	22.12	21.77
	3	1	21.95	22.16	22.35
	3	3	22.08	22.09	21.84
	6	0	22.05	22.09	22.17
16QAM	1	0	22.13	22.26	21.88
	1	2	22.41	22.68	22.64
	1	5	22.52	22.79	22.47
	3	0	21.10	21.20	21.10
	3	1	21.07	21.25	21.29
	3	3	21.29	21.15	20.83
	6	0	20.77	20.97	20.84
64QAM	1	0	21.35	21.44	21.32
	1	2	21.53	21.39	21.39
	1	5	21.28	21.44	21.21
	3	0	19.93	20.19	19.69
	3	1	19.88	20.11	19.93
	3	3	20.06	20.18	19.76
	6	0	19.84	20.04	19.68
256QAM	1	0	18.22	18.14	17.97
	1	2	18.19	18.36	18.25
	1	5	18.18	18.36	18.11
	3	0	17.91	17.94	17.87
	3	1	17.97	18.01	17.80
	3	3	17.76	17.98	17.90
	6	0	18.08	18.04	17.80

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.77	23.8	23	25.03	30.00
16QAM	20.77	22.8	22.79	24.82	30.00
64QAM	19.68	21.71	21.53	23.56	30.00
256QAM	17.76	19.79	18.36	20.39	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	22.59	22.97	22.70
	1	7	22.89	22.72	22.75
	1	14	22.79	23.02	22.90
	8	0	21.96	22.01	22.01
	8	3	22.09	22.20	22.00
	8	7	21.79	21.99	22.13
	15	0	21.88	22.20	22.28
16QAM	1	0	22.15	22.20	22.10
	1	7	22.57	22.60	22.65
	1	14	22.49	22.70	22.26
	8	0	21.16	21.22	21.06
	8	3	21.01	21.34	21.02
	8	7	21.25	21.15	21.18
	15	0	20.94	21.05	20.82
64QAM	1	0	21.06	21.26	21.21
	1	7	21.38	21.37	21.16
	1	14	21.23	21.50	21.20
	8	0	20.02	20.22	20.05
	8	3	20.07	20.12	19.87
	8	7	19.95	20.11	19.99
	15	0	20.07	20.15	19.85
256QAM	1	0	18.11	18.31	18.06
	1	7	18.40	18.33	18.17
	1	14	17.98	18.26	18.09
	8	0	17.73	17.97	17.88
	8	3	17.69	18.11	17.64
	8	7	18.01	18.04	17.99
	15	0	17.73	18.22	17.88

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.79	23.82	23.02	25.05	30.00
16QAM	20.82	22.85	22.7	24.73	30.00
64QAM	19.85	21.88	21.5	23.53	30.00
256QAM	17.64	19.67	18.4	20.43	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	22.66	22.96	22.77
	1	12	22.51	22.77	22.55
	1	24	22.92	23.00	22.92
	12	0	22.09	22.19	22.06
	12	6	21.95	22.11	21.89
	12	13	21.96	21.93	22.05
	25	0	21.90	22.21	22.08
16QAM	1	0	22.25	22.16	22.10
	1	12	22.66	22.61	22.46
	1	24	22.55	22.65	22.66
	12	0	21.10	21.10	20.86
	12	6	21.28	21.21	21.12
	12	13	20.99	21.16	21.16
	25	0	20.96	21.08	20.84
64QAM	1	0	21.25	21.24	21.20
	1	12	21.48	21.37	21.54
	1	24	21.44	21.47	21.31
	12	0	20.16	20.14	19.88
	12	6	19.90	20.15	20.13
	12	13	19.99	20.05	19.87
	25	0	19.86	20.08	20.00
256QAM	1	0	18.10	18.32	18.35
	1	12	18.52	18.49	18.34
	1	24	17.94	18.29	18.15
	12	0	17.71	17.80	17.92
	12	6	17.92	18.08	18.11
	12	13	18.00	17.90	17.78
	25	0	17.78	17.92	18.03

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.89	23.92	23	25.03	30.00
16QAM	20.84	22.87	22.66	24.69	30.00
64QAM	19.86	21.89	21.54	23.57	30.00
256QAM	17.71	19.74	18.52	20.55	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	22.51	23.04	22.76
	1	24	22.69	22.90	22.63
	1	49	22.64	22.88	22.97
	25	0	22.00	22.17	22.14
	25	12	22.25	22.20	21.79
	25	25	21.94	21.99	21.84
	50	0	21.92	22.16	21.76
16QAM	1	0	22.33	22.16	22.28
	1	24	22.44	22.76	22.46
	1	49	22.54	22.65	22.46
	25	0	21.06	21.06	21.01
	25	12	21.28	21.15	21.00
	25	25	21.35	21.28	20.96
	50	0	20.97	21.22	21.13
64QAM	1	0	21.16	21.36	21.43
	1	24	21.55	21.34	21.21
	1	49	21.52	21.51	21.30
	25	0	20.08	20.11	20.05
	25	12	19.87	20.19	19.96
	25	25	19.60	19.99	20.06
	50	0	19.89	20.20	19.91
256QAM	1	0	18.05	18.20	18.14
	1	24	18.49	18.44	18.33
	1	49	18.12	18.15	18.08
	25	0	17.94	18.09	17.75
	25	12	17.79	18.00	17.76
	25	25	17.88	17.96	17.56
	50	0	17.96	18.02	17.65

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.76	23.79	23.04	25.07	30.00
16QAM	20.96	22.99	22.76	24.79	30.00
64QAM	19.6	21.63	21.55	23.58	30.00
256QAM	17.56	19.59	18.49	20.52	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	22.58	22.95	22.66
	1	37	22.53	22.72	22.62
	1	74	22.74	22.95	22.97
	36	0	22.13	22.14	21.98
	36	19	22.00	22.18	22.03
	36	39	21.94	22.00	21.93
	75	0	21.88	22.21	21.88
16QAM	1	0	22.10	22.26	22.25
	1	37	22.56	22.76	22.54
	1	74	22.79	22.82	22.55
	36	0	20.93	21.00	21.02
	36	19	21.06	21.20	21.11
	36	39	21.27	21.10	21.00
	75	0	21.00	21.03	21.17
64QAM	1	0	21.26	21.21	21.13
	1	37	21.35	21.52	21.30
	1	74	21.40	21.46	21.42
	36	0	20.14	20.05	20.06
	36	19	19.81	20.19	19.97
	36	39	19.92	20.00	19.89
	75	0	20.02	19.98	19.77
256QAM	1	0	18.25	18.12	17.93
	1	37	18.23	18.44	18.36
	1	74	18.05	18.30	18.34
	36	0	17.92	17.95	17.64
	36	19	17.93	18.11	17.79
	36	39	17.74	17.99	17.94
	75	0	17.84	18.11	18.00

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.88	23.91	22.97	25	30.00
16QAM	20.93	22.96	22.82	24.85	30.00
64QAM	19.77	21.8	21.52	23.55	30.00
256QAM	17.64	19.67	18.44	20.47	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	22.67	23.20	22.76
	1	50	22.86	22.93	22.81
	1	99	22.77	22.96	22.89
	50	0	22.18	22.08	22.03
	50	25	22.16	22.18	22.21
	50	50	22.11	22.06	21.97
	100	0	22.19	22.16	21.98
16QAM	1	0	22.24	22.37	22.08
	1	50	22.51	22.64	22.75
	1	99	22.60	22.77	22.81
	50	0	21.05	21.26	21.15
	50	25	20.92	21.27	21.21
	50	50	21.20	21.35	21.22
	100	0	21.02	21.18	21.02
64QAM	1	0	21.18	21.37	21.33
	1	50	21.35	21.39	21.22
	1	99	21.33	21.66	21.41
	50	0	20.17	20.15	20.15
	50	25	20.03	20.29	20.04
	50	50	19.95	20.13	19.97
	100	0	20.04	20.15	19.94
256QAM	1	0	18.13	18.31	18.16
	1	50	18.33	18.48	18.50
	1	99	18.26	18.34	18.34
	50	0	17.99	18.05	17.95
	50	25	17.92	18.05	18.09
	50	50	18.06	18.06	17.78
	100	0	17.94	17.99	18.01

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum Cond. Power (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	21.97	24	23.2	25.23	30.00
16QAM	20.92	22.95	22.81	24.84	30.00
64QAM	19.94	21.97	21.66	23.69	30.00
256QAM	17.78	19.81	18.5	20.53	30.00

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

7.1.14 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	23.13	23.23	23.27
	1	12	23.03	23.30	23.23
	1	24	23.09	22.90	22.91
	12	0	22.17	22.16	21.97
	12	6	22.10	22.10	22.01
	12	13	21.78	22.21	21.98
	25	0	22.17	22.10	21.94
16QAM	1	0	22.22	22.57	22.54
	1	12	22.53	22.82	22.44
	1	24	22.28	22.32	22.20
	12	0	21.20	21.16	21.05
	12	6	21.08	21.20	21.21
	12	13	20.88	21.25	21.17
	25	0	21.01	21.11	21.17
64QAM	1	0	21.31	21.45	21.13
	1	12	21.07	21.27	21.22
	1	24	21.32	21.28	21.19
	12	0	19.78	20.09	20.02
	12	6	20.08	20.06	19.91
	12	13	19.78	19.92	20.10
	25	0	19.89	20.19	19.97
256QAM	1	0	18.59	18.64	18.43
	1	12	18.84	18.92	18.68
	1	24	18.09	18.28	18.21
	12	0	18.31	18.36	18.16
	12	6	17.99	18.19	18.26
	12	13	18.06	18.32	18.11
	25	0	18.09	18.07	18.03

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.78	21.26	23.3	22.78	34.77
16QAM	20.88	20.36	22.82	22.3	34.77
64QAM	19.78	19.26	21.45	20.93	34.77
256QAM	17.99	17.47	18.92	18.4	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	23.09	23.15	23.03
	1	24	23.01	23.05	23.10
	1	49	23.09	23.08	22.97
	25	0	22.12	22.21	22.07
	25	12	22.07	22.30	21.99
	25	25	21.75	22.17	21.90
	50	0	21.92	21.99	22.14
16QAM	1	0	22.69	22.68	22.39
	1	24	22.48	22.50	22.50
	1	49	22.36	22.30	22.22
	25	0	20.93	21.19	21.06
	25	12	21.22	21.20	21.04
	25	25	20.99	21.17	20.82
	50	0	20.99	20.96	20.99
64QAM	1	0	21.18	21.48	21.38
	1	24	21.25	21.27	21.20
	1	49	21.20	21.42	21.12
	25	0	19.88	19.96	19.96
	25	12	20.07	20.22	20.02
	25	25	19.81	20.16	19.93
	50	0	19.97	20.16	20.13
256QAM	1	0	18.71	18.72	18.70
	1	24	18.65	18.89	18.80
	1	49	18.18	18.24	18.14
	25	0	18.17	18.41	18.07
	25	12	17.99	17.97	18.14
	25	25	18.18	18.34	17.97
	50	0	18.01	18.30	18.08

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.75	21.23	23.15	22.63	34.77
16QAM	20.82	20.3	22.69	22.17	34.77
64QAM	19.81	19.29	21.48	20.96	34.77
256QAM	17.97	17.45	18.89	18.37	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	23.27	23.30	23.28
	1	37	23.10	23.15	23.06
	1	74	23.03	23.06	23.10
	36	0	21.89	22.15	22.11
	36	19	22.04	22.17	21.96
	36	39	21.90	22.15	21.73
	75	0	21.95	21.98	22.10
16QAM	1	0	22.53	22.69	22.23
	1	37	22.24	22.52	22.45
	1	74	22.21	22.40	22.32
	36	0	20.93	21.19	21.03
	36	19	21.29	21.12	21.14
	36	39	20.93	21.24	21.01
	75	0	21.07	21.00	21.08
64QAM	1	0	21.29	21.49	21.62
	1	37	21.13	21.21	21.16
	1	74	21.27	21.32	21.09
	36	0	20.19	20.22	19.80
	36	19	20.02	20.10	19.87
	36	39	19.84	20.11	19.89
	75	0	19.91	20.20	20.03
256QAM	1	0	18.32	18.63	18.48
	1	37	18.73	18.83	18.75
	1	74	18.21	18.29	18.17
	36	0	18.07	18.24	18.24
	36	19	17.80	18.10	17.95
	36	39	18.23	18.24	18.15
	75	0	18.02	18.06	18.11

Output Power					
Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.73	21.21	23.3	22.78	34.77
16QAM	20.93	20.41	22.69	22.17	34.77
64QAM	19.8	19.28	21.62	21.1	34.77
256QAM	17.8	17.28	18.83	18.31	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	23.41	23.45	23.28
	1	50	22.93	23.19	23.24
	1	99	22.85	23.05	22.86
	50	0	22.00	22.17	21.91
	50	25	22.09	22.16	22.19
	50	50	22.09	22.20	22.23
	100	0	21.93	22.20	22.04
16QAM	1	0	22.71	22.60	22.53
	1	50	22.65	22.64	22.75
	1	99	22.47	22.42	22.17
	50	0	20.98	21.12	21.08
	50	25	21.21	21.19	21.07
	50	50	21.05	21.06	21.27
	100	0	20.91	21.29	21.17
64QAM	1	0	21.39	21.54	21.36
	1	50	21.28	21.36	21.27
	1	99	21.34	21.31	21.32
	50	0	20.18	20.11	20.13
	50	25	20.16	20.16	20.05
	50	50	20.21	20.11	20.08
	100	0	19.86	20.07	20.23
256QAM	1	0	18.51	18.63	18.55
	1	50	18.61	18.89	18.62
	1	99	18.46	18.40	18.16
	50	0	18.11	18.28	18.08
	50	25	17.92	18.19	18.03
	50	50	18.15	18.35	18.20
	100	0	18.02	18.23	18.10

Output Power

Modulation	Minimum Cond. Power (dBm)	Minimum ERP (dBm)	Maximum Cond. Power (dBm)	Maximum ERP (dBm)	ERP Limit (dBm)
QPSK	21.91	21.39	23.45	22.93	34.77
16QAM	20.91	20.39	22.75	22.23	34.77
64QAM	19.86	19.34	21.54	21.02	34.77
256QAM	17.92	17.40	18.89	18.37	34.77

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

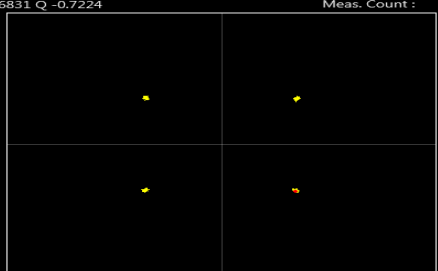
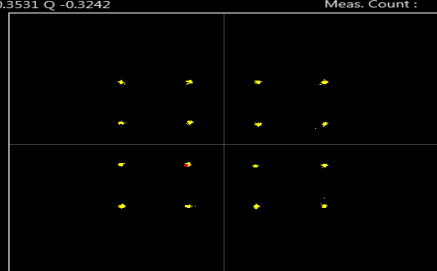
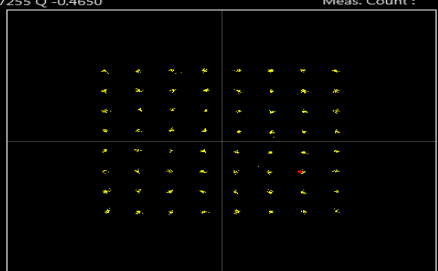
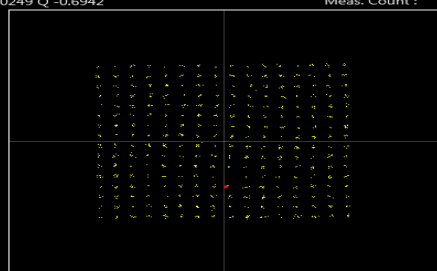
ERP (dBm) = EIRP (dBm) - 2.15

7.2 Modulation Characteristics

Input Power:	4.7 Vdc	Environmental Conditions:	24°C, 67% RH	Tested By:	Noah Chang
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7.2.1 LTE Band 2

LTE Band 2, Channel Bandwidth: 20 MHz

Fundamental > Constellation 0 Symbol I 0.6831 Q -0.7224 Meas. Count : 1/ 1  Q I <table><tr><td>EVM</td><td>Avg. 1.66</td><td>Max. 1.66</td><td>Min. 1.66 %(rms)</td><td>Limit ≤ 17.5 %(rms)</td></tr><tr><td>Peak Vector Error</td><td>15.16</td><td>15.16</td><td>15.16 %</td><td></td></tr><tr><td>Carrier Leakage</td><td>-61.53</td><td>-61.53</td><td>-61.53 dBc</td><td></td></tr><tr><td>IQ Imbalance</td><td>100.55</td><td>100.55</td><td>100.55 %(I/Q)</td><td></td></tr></table>	EVM	Avg. 1.66	Max. 1.66	Min. 1.66 %(rms)	Limit ≤ 17.5 %(rms)	Peak Vector Error	15.16	15.16	15.16 %		Carrier Leakage	-61.53	-61.53	-61.53 dBc		IQ Imbalance	100.55	100.55	100.55 %(I/Q)		Fundamental > Constellation 0 Symbol I -0.3531 Q -0.3242 Meas. Count : 1/ 1  Q I <table><tr><td>EVM</td><td>Avg. 2.04</td><td>Max. 2.04</td><td>Min. 2.04 %(rms)</td><td>Limit ≤ 12.5 %(rms)</td></tr><tr><td>Peak Vector Error</td><td>15.87</td><td>15.87</td><td>15.87 %</td><td></td></tr><tr><td>Carrier Leakage</td><td>-53.49</td><td>-53.49</td><td>-53.49 dBc</td><td></td></tr><tr><td>IQ Imbalance</td><td>99.89</td><td>99.89</td><td>99.89 %(I/Q)</td><td></td></tr></table>	EVM	Avg. 2.04	Max. 2.04	Min. 2.04 %(rms)	Limit ≤ 12.5 %(rms)	Peak Vector Error	15.87	15.87	15.87 %		Carrier Leakage	-53.49	-53.49	-53.49 dBc		IQ Imbalance	99.89	99.89	99.89 %(I/Q)	
EVM	Avg. 1.66	Max. 1.66	Min. 1.66 %(rms)	Limit ≤ 17.5 %(rms)																																					
Peak Vector Error	15.16	15.16	15.16 %																																						
Carrier Leakage	-61.53	-61.53	-61.53 dBc																																						
IQ Imbalance	100.55	100.55	100.55 %(I/Q)																																						
EVM	Avg. 2.04	Max. 2.04	Min. 2.04 %(rms)	Limit ≤ 12.5 %(rms)																																					
Peak Vector Error	15.87	15.87	15.87 %																																						
Carrier Leakage	-53.49	-53.49	-53.49 dBc																																						
IQ Imbalance	99.89	99.89	99.89 %(I/Q)																																						
QPSK CH 18900 (1880 MHz)	16QAM CH 18900 (1880 MHz)																																								
Fundamental > Constellation 0 Symbol I 0.7255 Q -0.4650 Meas. Count : 1/ 1  Q I <table><tr><td>EVM</td><td>Avg. 2.11</td><td>Max. 2.11</td><td>Min. 2.11 %(rms)</td><td>Limit ≤ 8.0 %(rms)</td></tr><tr><td>Peak Vector Error</td><td>17.18</td><td>17.18</td><td>17.18 %</td><td></td></tr><tr><td>Carrier Leakage</td><td>-52.91</td><td>-52.91</td><td>-52.91 dBc</td><td></td></tr><tr><td>IQ Imbalance</td><td>100.67</td><td>100.67</td><td>100.67 %(I/Q)</td><td></td></tr></table>	EVM	Avg. 2.11	Max. 2.11	Min. 2.11 %(rms)	Limit ≤ 8.0 %(rms)	Peak Vector Error	17.18	17.18	17.18 %		Carrier Leakage	-52.91	-52.91	-52.91 dBc		IQ Imbalance	100.67	100.67	100.67 %(I/Q)		Fundamental > Constellation 0 Symbol I 0.0249 Q -0.6942 Meas. Count : 1/ 1  Q I <table><tr><td>EVM</td><td>Avg. 2.21</td><td>Max. 2.21</td><td>Min. 2.21 %(rms)</td><td>Limit</td></tr><tr><td>Peak Vector Error</td><td>9.80</td><td>9.80</td><td>9.80 %</td><td></td></tr><tr><td>Carrier Leakage</td><td>-50.64</td><td>-50.64</td><td>-50.64 dBc</td><td></td></tr><tr><td>IQ Imbalance</td><td>100.93</td><td>100.93</td><td>100.93 %(I/Q)</td><td></td></tr></table>	EVM	Avg. 2.21	Max. 2.21	Min. 2.21 %(rms)	Limit	Peak Vector Error	9.80	9.80	9.80 %		Carrier Leakage	-50.64	-50.64	-50.64 dBc		IQ Imbalance	100.93	100.93	100.93 %(I/Q)	
EVM	Avg. 2.11	Max. 2.11	Min. 2.11 %(rms)	Limit ≤ 8.0 %(rms)																																					
Peak Vector Error	17.18	17.18	17.18 %																																						
Carrier Leakage	-52.91	-52.91	-52.91 dBc																																						
IQ Imbalance	100.67	100.67	100.67 %(I/Q)																																						
EVM	Avg. 2.21	Max. 2.21	Min. 2.21 %(rms)	Limit																																					
Peak Vector Error	9.80	9.80	9.80 %																																						
Carrier Leakage	-50.64	-50.64	-50.64 dBc																																						
IQ Imbalance	100.93	100.93	100.93 %(I/Q)																																						
64QAM CH 18900 (1880 MHz)	256QAM CH 18900 (1880 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



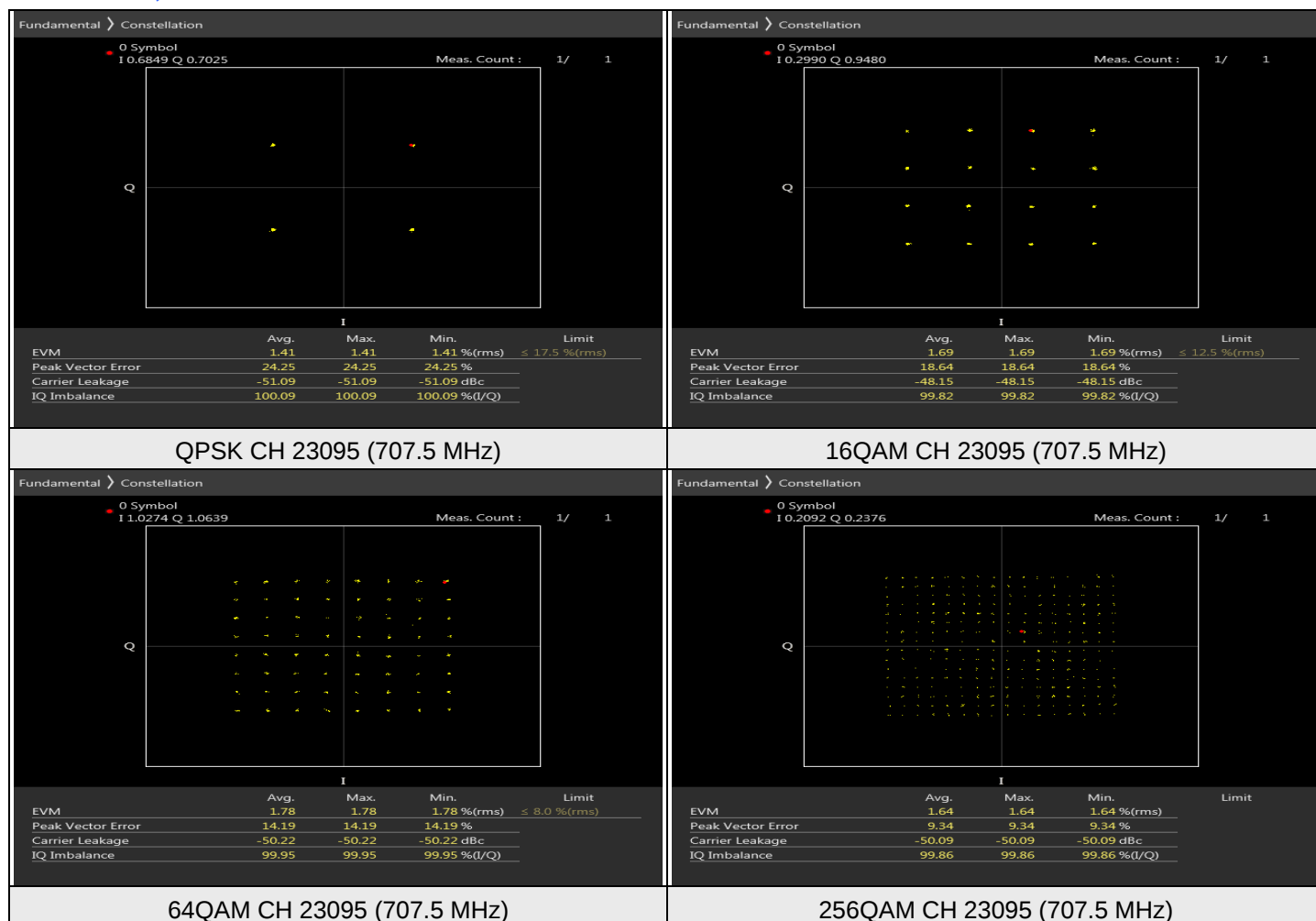
7.2.4 LTE Band 7

LTE Band 7, Channel Bandwidth: 20 MHz



7.2.5 LTE Band 12

LTE Band 12, Channel Bandwidth: 10 MHz



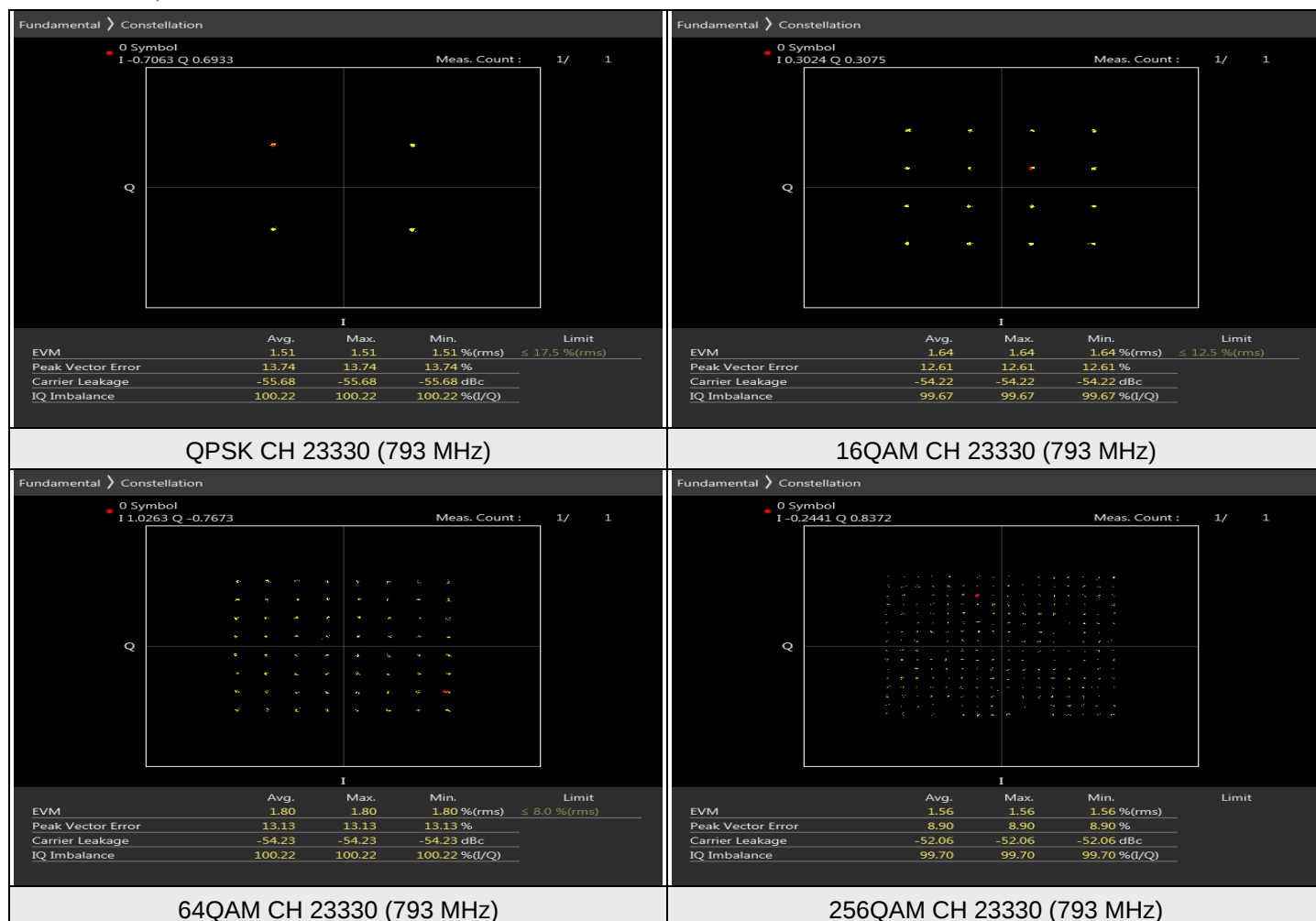
7.2.6 LTE Band 13

LTE Band 13, Channel Bandwidth: 10 MHz



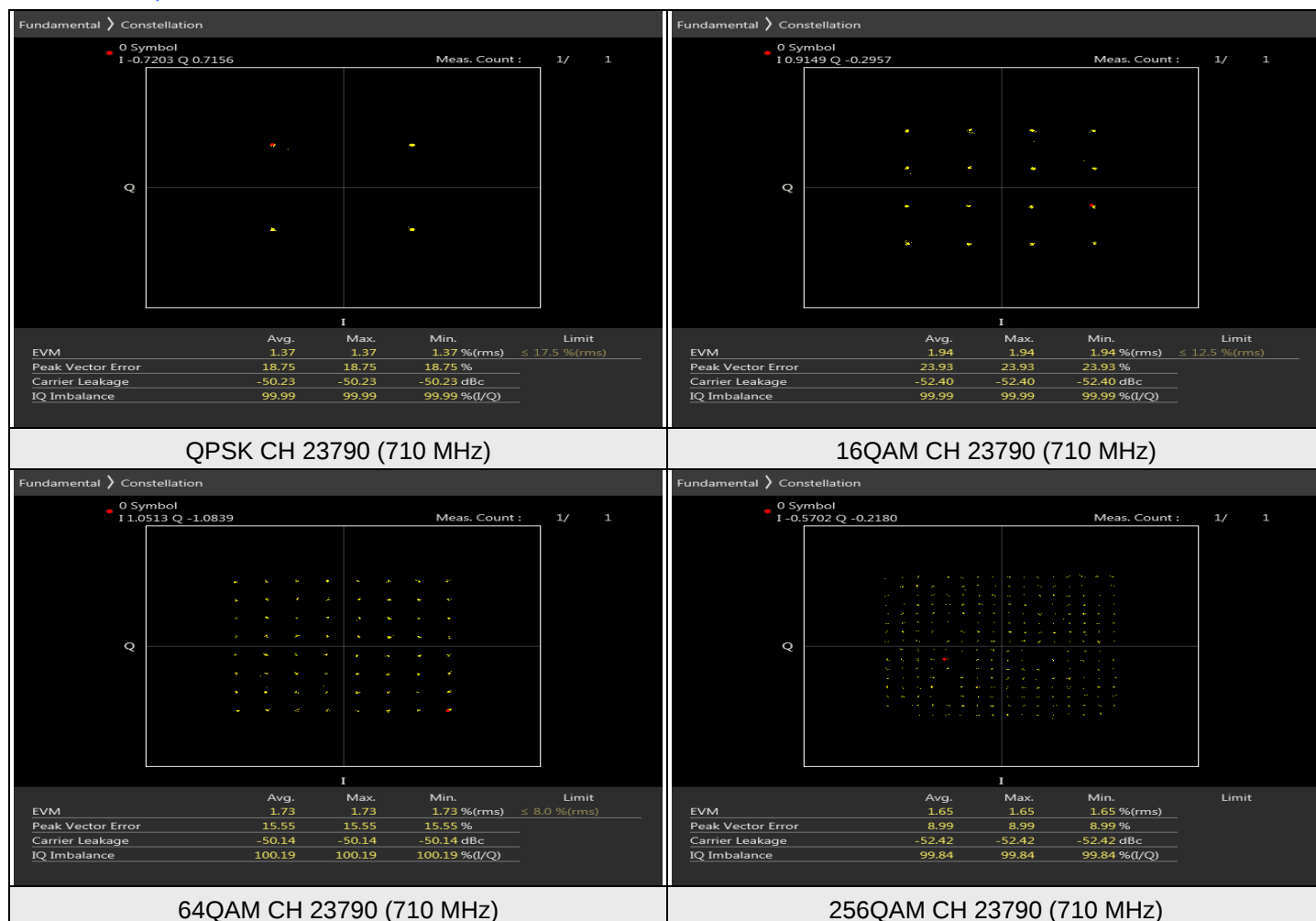
7.2.7 LTE Band 14

LTE Band 14, Channel Bandwidth: 10 MHz



7.2.8 LTE Band 17

LTE Band 17, Channel Bandwidth: 10 MHz



7.2.9 LTE Band 25

LTE Band 25, Channel Bandwidth: 20 MHz



7.2.10 LTE Band 26 (814 MHz ~ 824 MHz)

LTE Band 26 (814 MHz ~ 824 MHz), Channel Bandwidth: 10 MHz



7.2.11 LTE Band 26 (824 MHz ~ 849 MHz)

LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 15 MHz



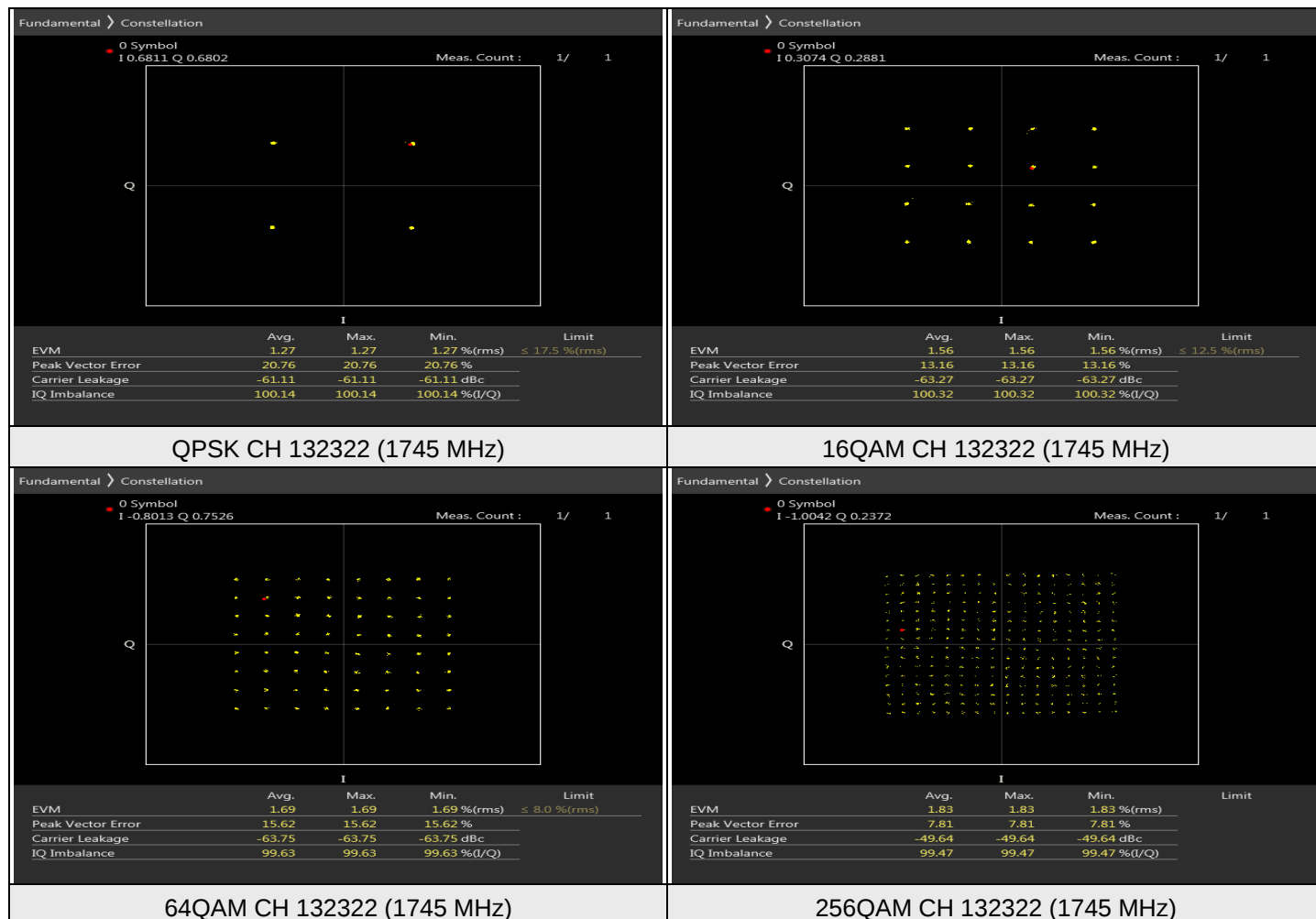
7.2.12 LTE Band 41

LTE Band 41, Channel Bandwidth: 20 MHz



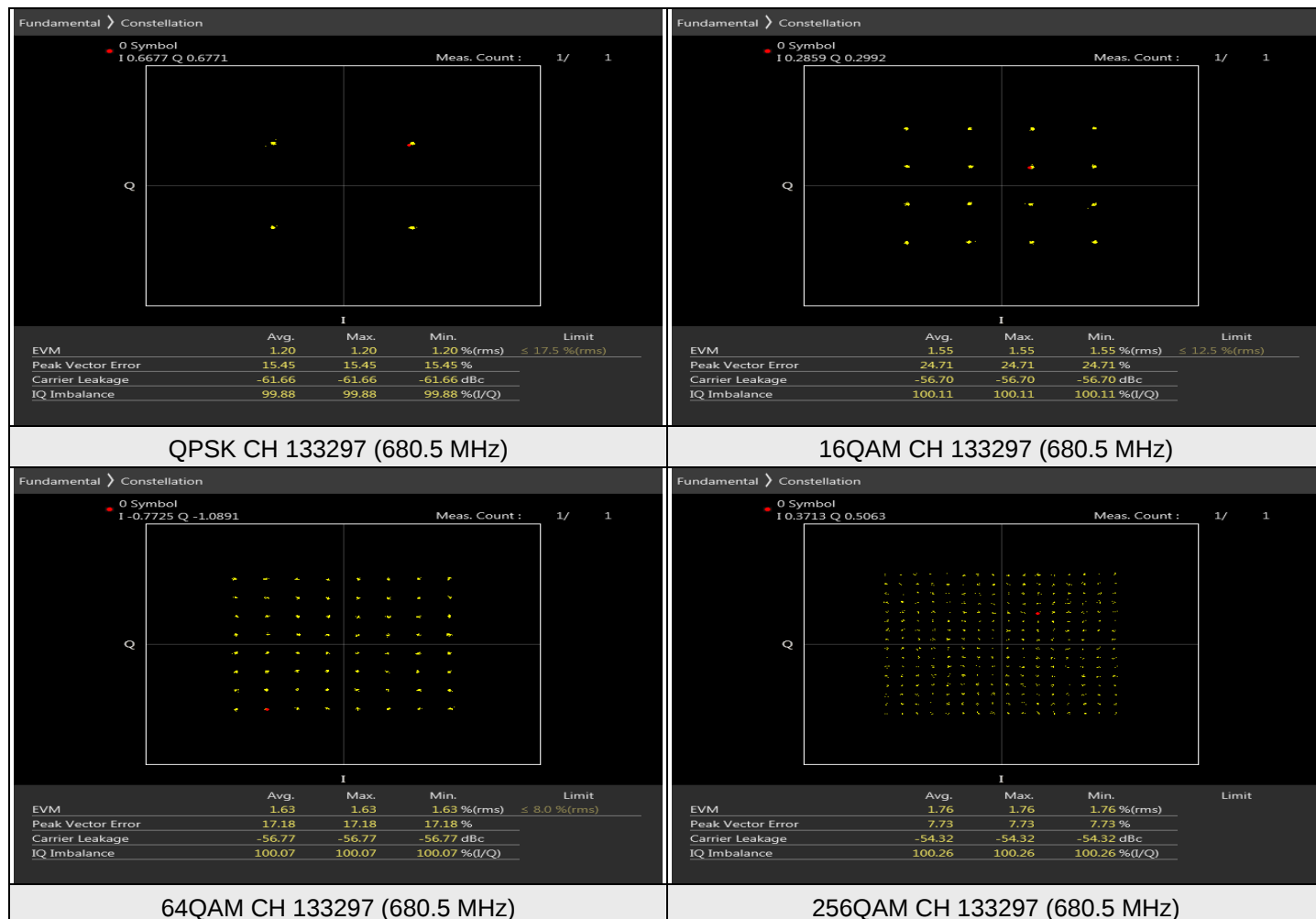
7.2.13 LTE Band 66

LTE Band 66, Channel Bandwidth: 20 MHz



7.2.14 LTE Band 71

LTE Band 71, Channel Bandwidth: 20 MHz



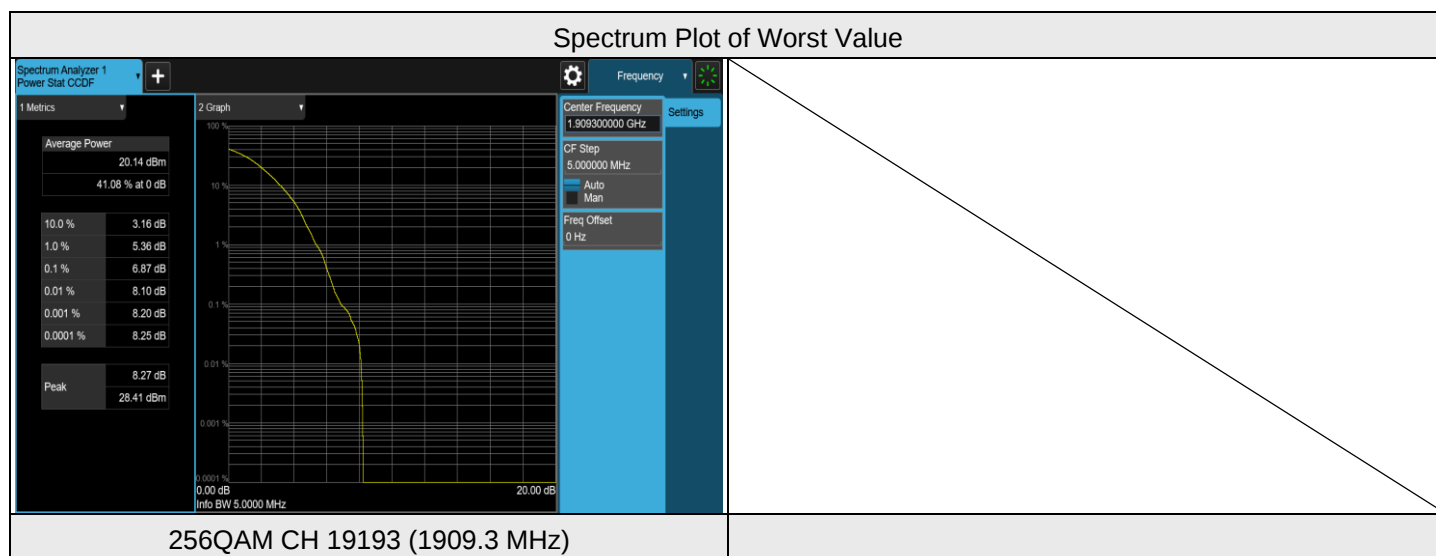
7.3 Peak to Average Ratio

Input Power:	4.7 Vdc	Environmental Conditions:	22°C, 73% RH	Tested By:	Willy Cheng
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7.3.1 LTE Band 2

LTE Band 2, Channel Bandwidth: 1.4 MHz

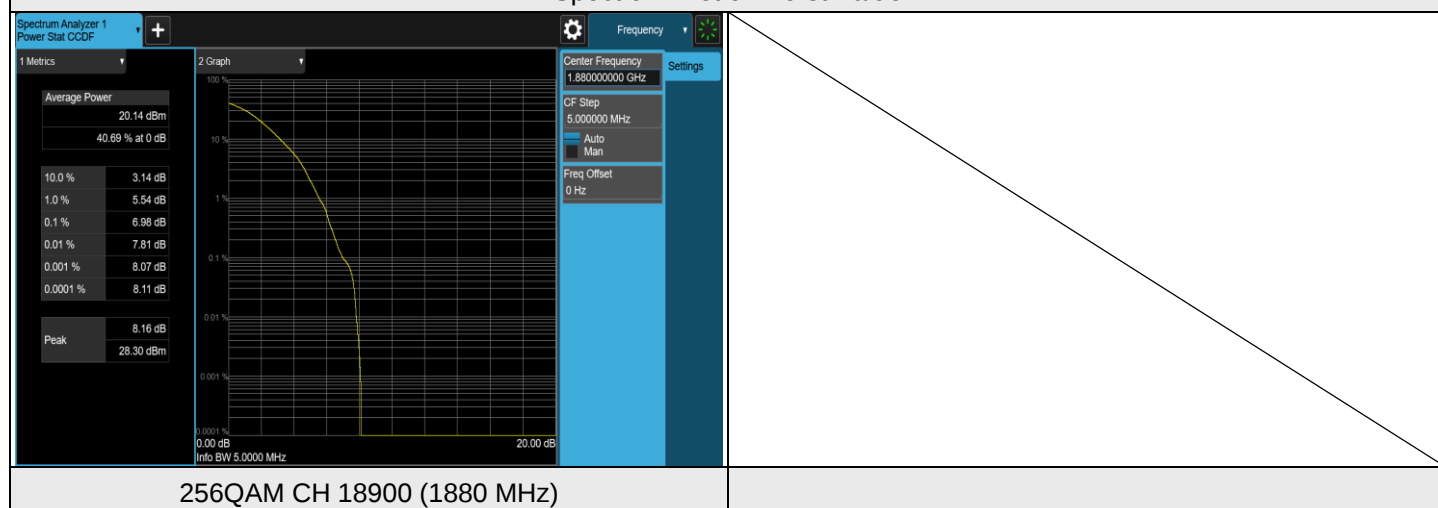
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	18607	1850.7	5.33	13	PASS
QPSK	18900	1880	5.10	13	PASS
QPSK	19193	1909.3	5.01	13	PASS
16QAM	18607	1850.7	6.35	13	PASS
16QAM	18900	1880	6.21	13	PASS
16QAM	19193	1909.3	6.05	13	PASS
64QAM	18607	1850.7	6.47	13	PASS
64QAM	18900	1880	6.50	13	PASS
64QAM	19193	1909.3	6.40	13	PASS
256QAM	18607	1850.7	6.78	13	PASS
256QAM	18900	1880	6.85	13	PASS
256QAM	19193	1909.3	6.87	13	PASS



LTE Band 2, Channel Bandwidth: 3 MHz

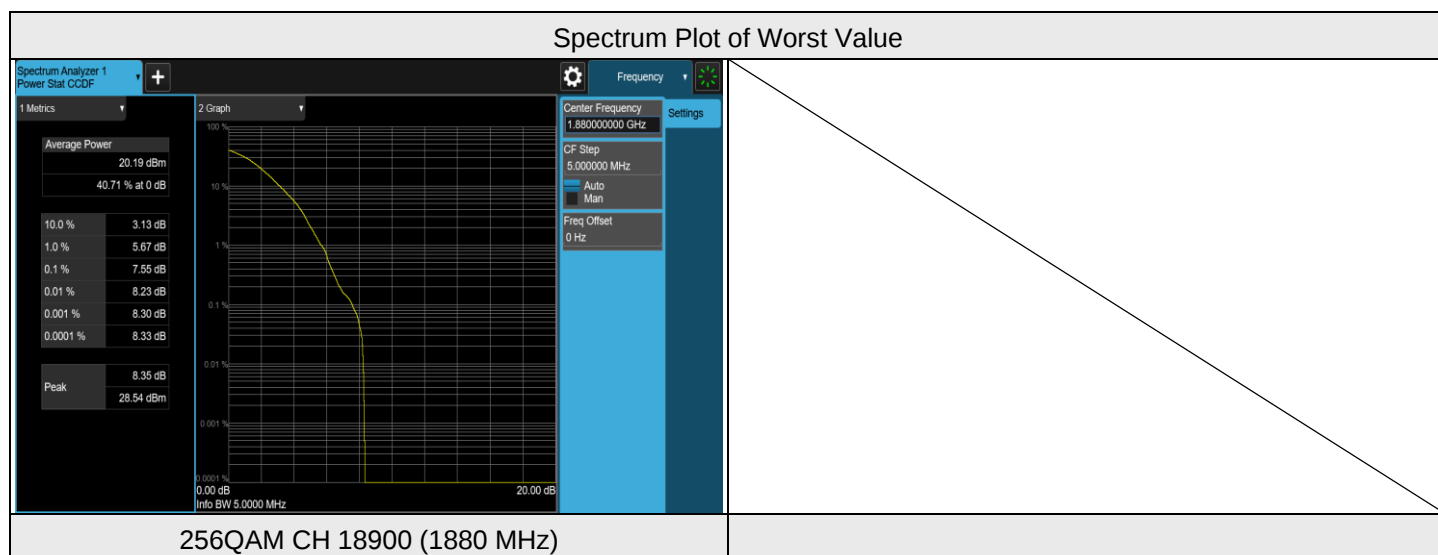
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	18615	1851.5	4.99	13	PASS
QPSK	18900	1880	5.04	13	PASS
QPSK	19185	1908.5	4.75	13	PASS
16QAM	18615	1851.5	6.08	13	PASS
16QAM	18900	1880	6.09	13	PASS
16QAM	19185	1908.5	5.82	13	PASS
64QAM	18615	1851.5	6.43	13	PASS
64QAM	18900	1880	6.45	13	PASS
64QAM	19185	1908.5	6.35	13	PASS
256QAM	18615	1851.5	6.74	13	PASS
256QAM	18900	1880	6.98	13	PASS
256QAM	19185	1908.5	6.79	13	PASS

Spectrum Plot of Worst Value



LTE Band 2, Channel Bandwidth: 5 MHz

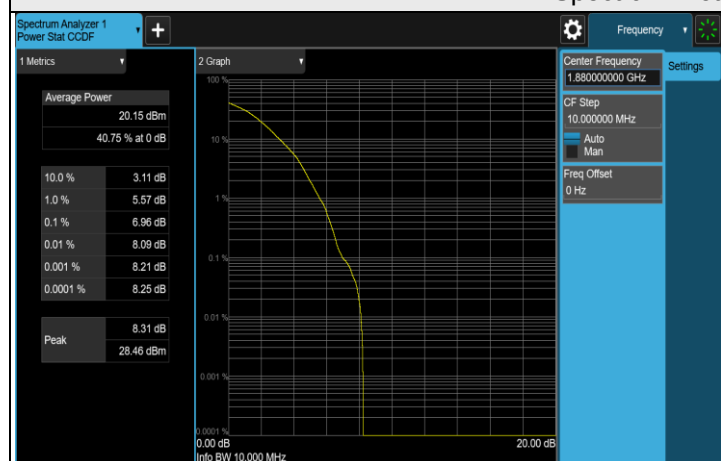
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	18625	1852.5	5.04	13	PASS
QPSK	18900	1880	5.02	13	PASS
QPSK	19175	1907.5	4.87	13	PASS
16QAM	18625	1852.5	6.73	13	PASS
16QAM	18900	1880	6.08	13	PASS
16QAM	19175	1907.5	6.04	13	PASS
64QAM	18625	1852.5	6.47	13	PASS
64QAM	18900	1880	6.50	13	PASS
64QAM	19175	1907.5	6.37	13	PASS
256QAM	18625	1852.5	7.18	13	PASS
256QAM	18900	1880	7.55	13	PASS
256QAM	19175	1907.5	7.20	13	PASS



LTE Band 2, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	18650	1855	5.09	13	PASS
QPSK	18900	1880	5.12	13	PASS
QPSK	19150	1905	4.92	13	PASS
16QAM	18650	1855	6.29	13	PASS
16QAM	18900	1880	6.32	13	PASS
16QAM	19150	1905	6.05	13	PASS
64QAM	18650	1855	6.43	13	PASS
64QAM	18900	1880	6.48	13	PASS
64QAM	19150	1905	6.38	13	PASS
256QAM	18650	1855	6.67	13	PASS
256QAM	18900	1880	6.96	13	PASS
256QAM	19150	1905	6.82	13	PASS

Spectrum Plot of Worst Value

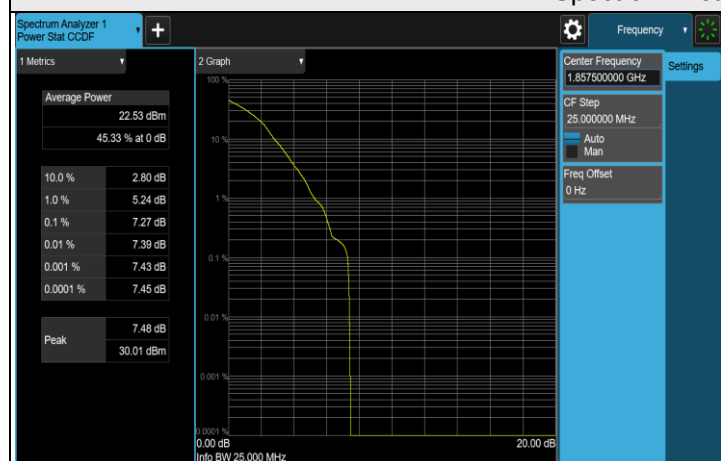


256QAM CH 18900 (1880 MHz)

LTE Band 2, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	18675	1857.5	5.04	13	PASS
QPSK	18900	1880	5.25	13	PASS
QPSK	19125	1902.5	5.13	13	PASS
16QAM	18675	1857.5	7.27	13	PASS
16QAM	18900	1880	6.03	13	PASS
16QAM	19125	1902.5	5.90	13	PASS
64QAM	18675	1857.5	6.64	13	PASS
64QAM	18900	1880	6.40	13	PASS
64QAM	19125	1902.5	6.57	13	PASS
256QAM	18675	1857.5	7.04	13	PASS
256QAM	18900	1880	7.04	13	PASS
256QAM	19125	1902.5	6.82	13	PASS

Spectrum Plot of Worst Value

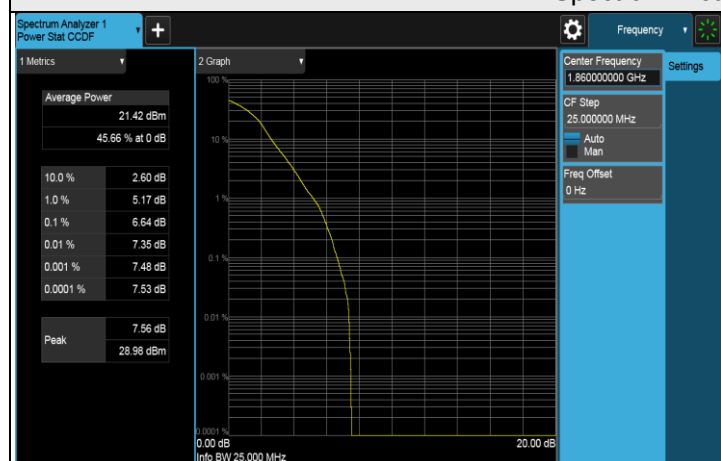


16QAM CH 18675 (1857.5 MHz)

LTE Band 2, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	18700	1860	5.38	13	PASS
QPSK	18900	1880	5.53	13	PASS
QPSK	19100	1900	5.54	13	PASS
16QAM	18700	1860	6.64	13	PASS
16QAM	18900	1880	6.45	13	PASS
16QAM	19100	1900	6.56	13	PASS
64QAM	18700	1860	6.56	13	PASS
64QAM	18900	1880	6.44	13	PASS
64QAM	19100	1900	6.46	13	PASS
256QAM	18700	1860	6.23	13	PASS
256QAM	18900	1880	6.30	13	PASS
256QAM	19100	1900	6.58	13	PASS

Spectrum Plot of Worst Value

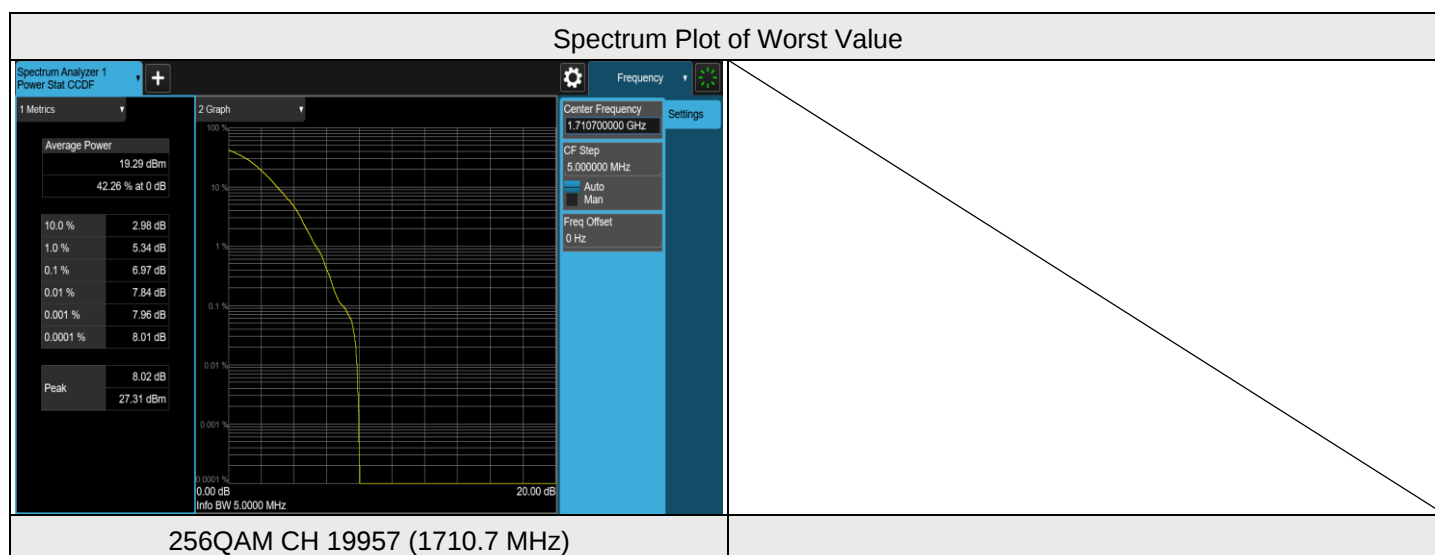


16QAM CH 18700 (1860 MHz)

7.3.2 LTE Band 4

LTE Band 4, Channel Bandwidth: 1.4 MHz

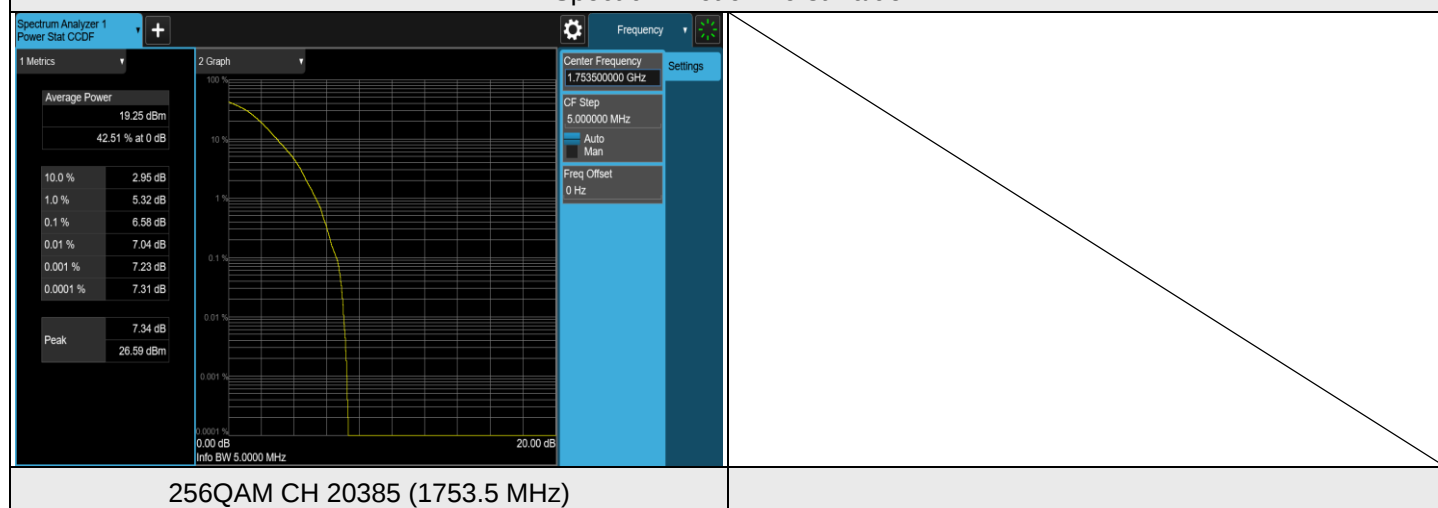
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (n(dB))	Result
QPSK	19957	1710.7	5.61	13	PASS
QPSK	20175	1732.5	5.26	13	PASS
QPSK	20393	1754.3	5.31	13	PASS
16QAM	19957	1710.7	6.46	13	PASS
16QAM	20175	1732.5	6.38	13	PASS
16QAM	20393	1754.3	6.37	13	PASS
64QAM	19957	1710.7	6.36	13	PASS
64QAM	20175	1732.5	6.34	13	PASS
64QAM	20393	1754.3	6.46	13	PASS
256QAM	19957	1710.7	6.97	13	PASS
256QAM	20175	1732.5	6.65	13	PASS
256QAM	20393	1754.3	6.51	13	PASS



LTE Band 4, Channel Bandwidth: 3 MHz

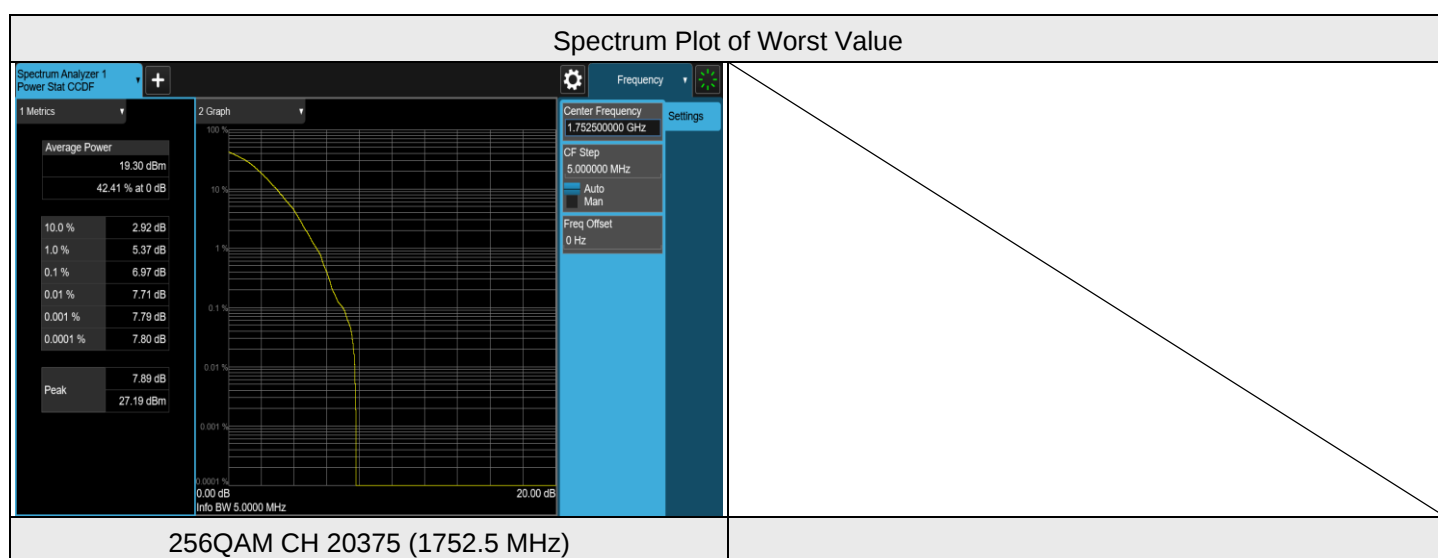
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	19965	1711.5	4.89	13	PASS
QPSK	20175	1732.5	4.83	13	PASS
QPSK	20385	1753.5	4.98	13	PASS
16QAM	19965	1711.5	5.85	13	PASS
16QAM	20175	1732.5	5.92	13	PASS
16QAM	20385	1753.5	5.93	13	PASS
64QAM	19965	1711.5	6.21	13	PASS
64QAM	20175	1732.5	6.22	13	PASS
64QAM	20385	1753.5	6.33	13	PASS
256QAM	19965	1711.5	6.46	13	PASS
256QAM	20175	1732.5	6.18	13	PASS
256QAM	20385	1753.5	6.58	13	PASS

Spectrum Plot of Worst Value



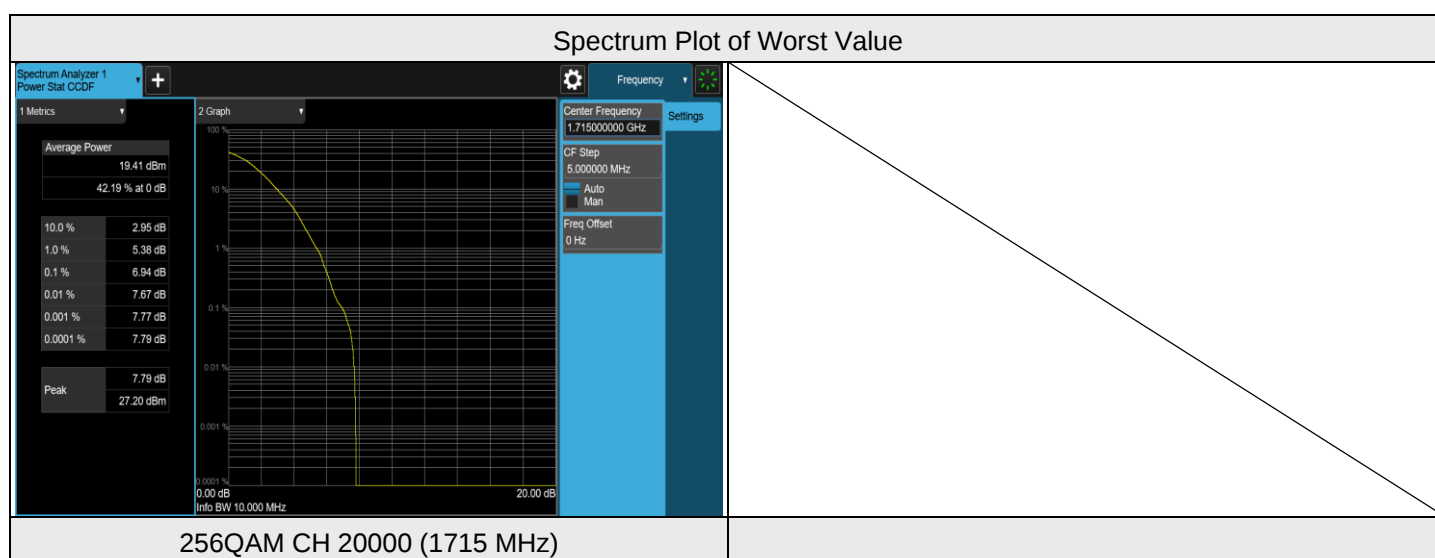
LTE Band 4, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	19975	1712.5	5.17	13	PASS
QPSK	20175	1732.5	5.08	13	PASS
QPSK	20375	1752.5	5.32	13	PASS
16QAM	19975	1712.5	6.30	13	PASS
16QAM	20175	1732.5	6.21	13	PASS
16QAM	20375	1752.5	6.55	13	PASS
64QAM	19975	1712.5	6.39	13	PASS
64QAM	20175	1732.5	6.30	13	PASS
64QAM	20375	1752.5	6.42	13	PASS
256QAM	19975	1712.5	6.82	13	PASS
256QAM	20175	1732.5	6.53	13	PASS
256QAM	20375	1752.5	6.97	13	PASS



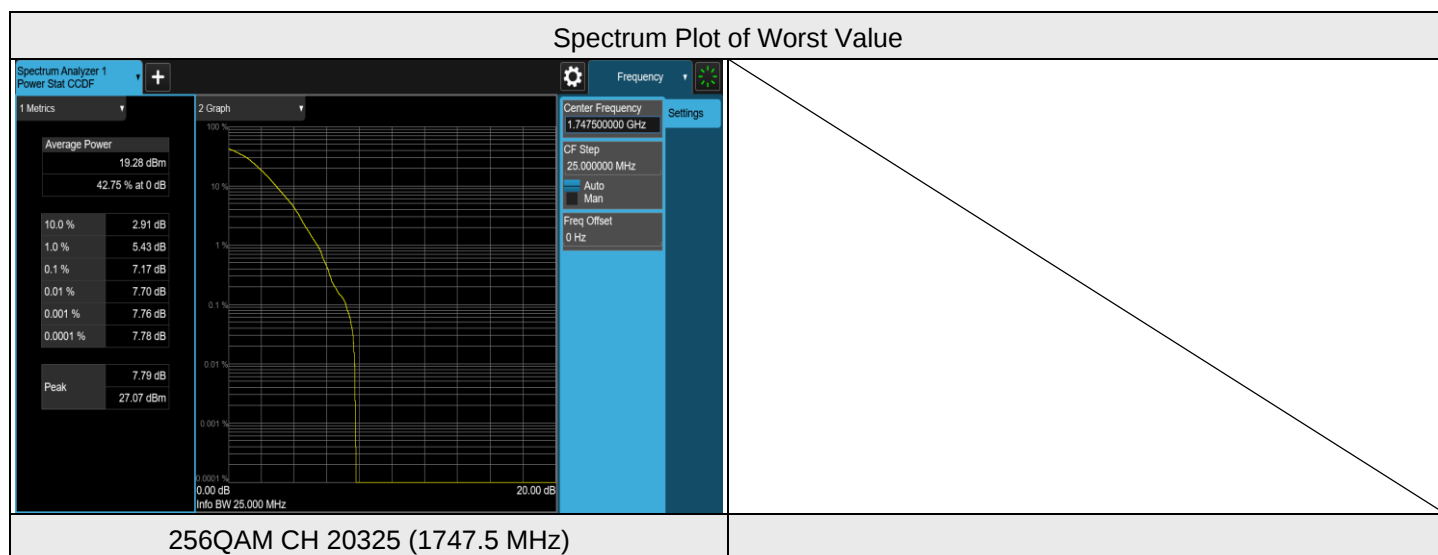
LTE Band 4, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	20000	1715	5.03	13	PASS
QPSK	20175	1732.5	5.18	13	PASS
QPSK	20350	1750	5.33	13	PASS
16QAM	20000	1715	6.33	13	PASS
16QAM	20175	1732.5	6.15	13	PASS
16QAM	20350	1750	6.28	13	PASS
64QAM	20000	1715	6.35	13	PASS
64QAM	20175	1732.5	6.29	13	PASS
64QAM	20350	1750	6.43	13	PASS
256QAM	20000	1715	6.94	13	PASS
256QAM	20175	1732.5	6.79	13	PASS
256QAM	20350	1750	6.66	13	PASS



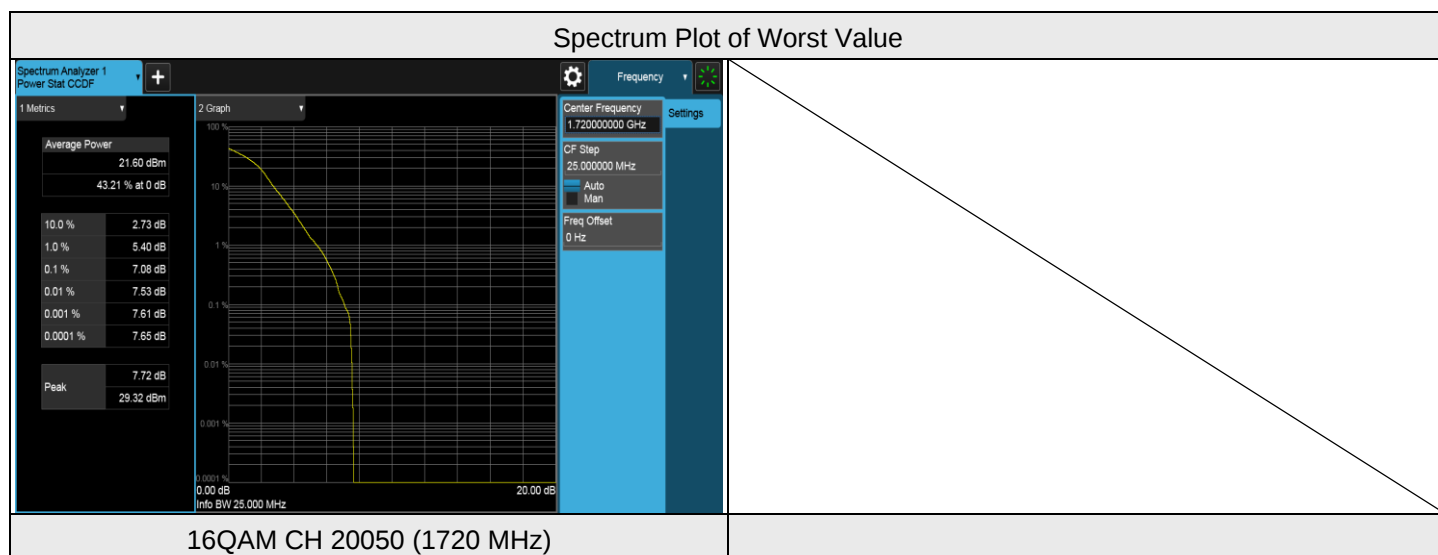
LTE Band 4, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	20025	1717.5	5.12	13	PASS
QPSK	20175	1732.5	5.03	13	PASS
QPSK	20325	1747.5	5.24	13	PASS
16QAM	20025	1717.5	6.92	13	PASS
16QAM	20175	1732.5	6.28	13	PASS
16QAM	20325	1747.5	7.06	13	PASS
64QAM	20025	1717.5	6.29	13	PASS
64QAM	20175	1732.5	6.17	13	PASS
64QAM	20325	1747.5	6.29	13	PASS
256QAM	20025	1717.5	7.00	13	PASS
256QAM	20175	1732.5	6.69	13	PASS
256QAM	20325	1747.5	7.17	13	PASS



LTE Band 4, Channel Bandwidth: 20 MHz

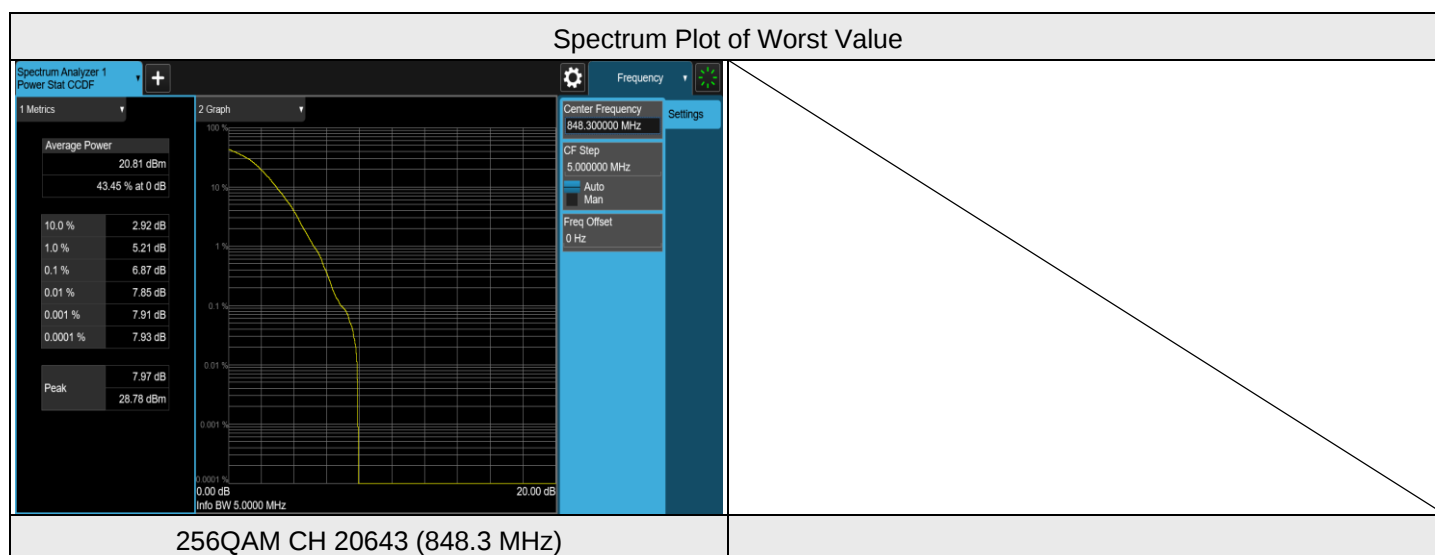
Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	20050	1720	5.77	13	PASS
QPSK	20175	1732.5	5.71	13	PASS
QPSK	20300	1745	5.82	13	PASS
16QAM	20050	1720	7.08	13	PASS
16QAM	20175	1732.5	6.74	13	PASS
16QAM	20300	1745	6.98	13	PASS
64QAM	20050	1720	6.60	13	PASS
64QAM	20175	1732.5	6.69	13	PASS
64QAM	20300	1745	6.88	13	PASS
256QAM	20050	1720	6.73	13	PASS
256QAM	20175	1732.5	6.22	13	PASS
256QAM	20300	1745	6.80	13	PASS



7.3.3 LTE Band 5

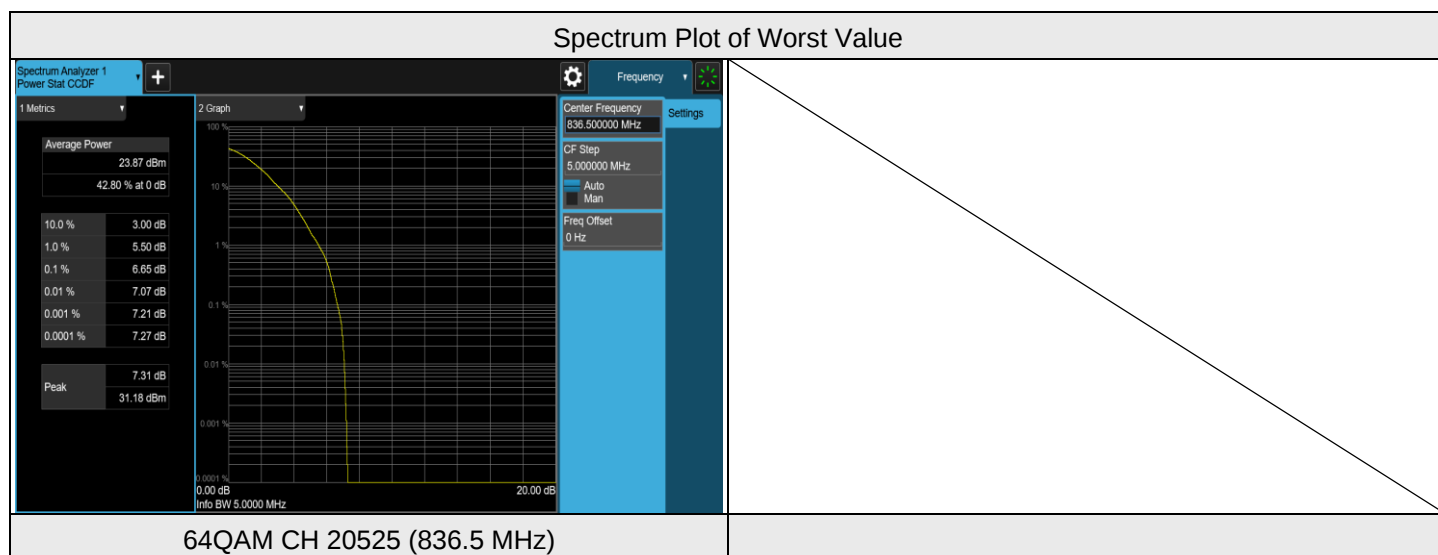
LTE Band 5, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	20407	824.7	4.50	13	PASS
QPSK	20525	836.5	4.97	13	PASS
QPSK	20643	848.3	3.56	13	PASS
16QAM	20407	824.7	5.56	13	PASS
16QAM	20525	836.5	6.00	13	PASS
16QAM	20643	848.3	4.88	13	PASS
64QAM	20407	824.7	6.02	13	PASS
64QAM	20525	836.5	6.64	13	PASS
64QAM	20643	848.3	5.61	13	PASS
256QAM	20407	824.7	6.36	13	PASS
256QAM	20525	836.5	6.77	13	PASS
256QAM	20643	848.3	6.87	13	PASS



LTE Band 5, Channel Bandwidth: 3 MHz

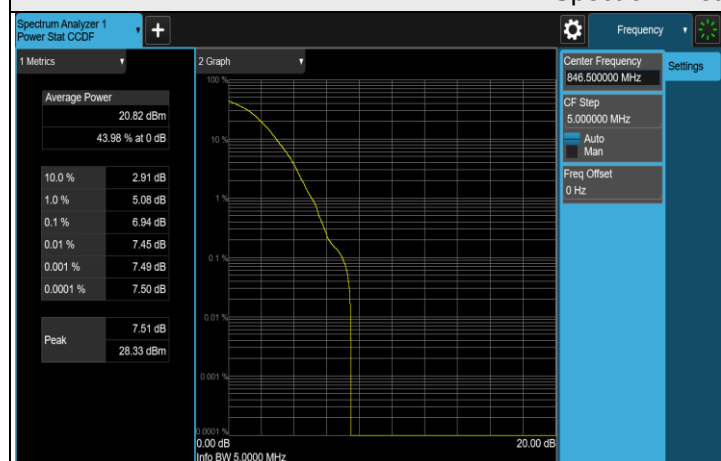
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	20415	825.5	4.43	13	PASS
QPSK	20525	836.5	5.14	13	PASS
QPSK	20635	847.5	4.45	13	PASS
16QAM	20415	825.5	5.42	13	PASS
16QAM	20525	836.5	5.85	13	PASS
16QAM	20635	847.5	5.52	13	PASS
64QAM	20415	825.5	5.82	13	PASS
64QAM	20525	836.5	6.65	13	PASS
64QAM	20635	847.5	6.19	13	PASS
256QAM	20415	825.5	6.25	13	PASS
256QAM	20525	836.5	6.22	13	PASS
256QAM	20635	847.5	5.94	13	PASS



LTE Band 5, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	20425	826.5	4.44	13	PASS
QPSK	20525	836.5	5.29	13	PASS
QPSK	20625	846.5	4.46	13	PASS
16QAM	20425	826.5	5.54	13	PASS
16QAM	20525	836.5	6.32	13	PASS
16QAM	20625	846.5	5.43	13	PASS
64QAM	20425	826.5	5.97	13	PASS
64QAM	20525	836.5	6.81	13	PASS
64QAM	20625	846.5	6.21	13	PASS
256QAM	20425	826.5	6.49	13	PASS
256QAM	20525	836.5	6.70	13	PASS
256QAM	20625	846.5	6.94	13	PASS

Spectrum Plot of Worst Value

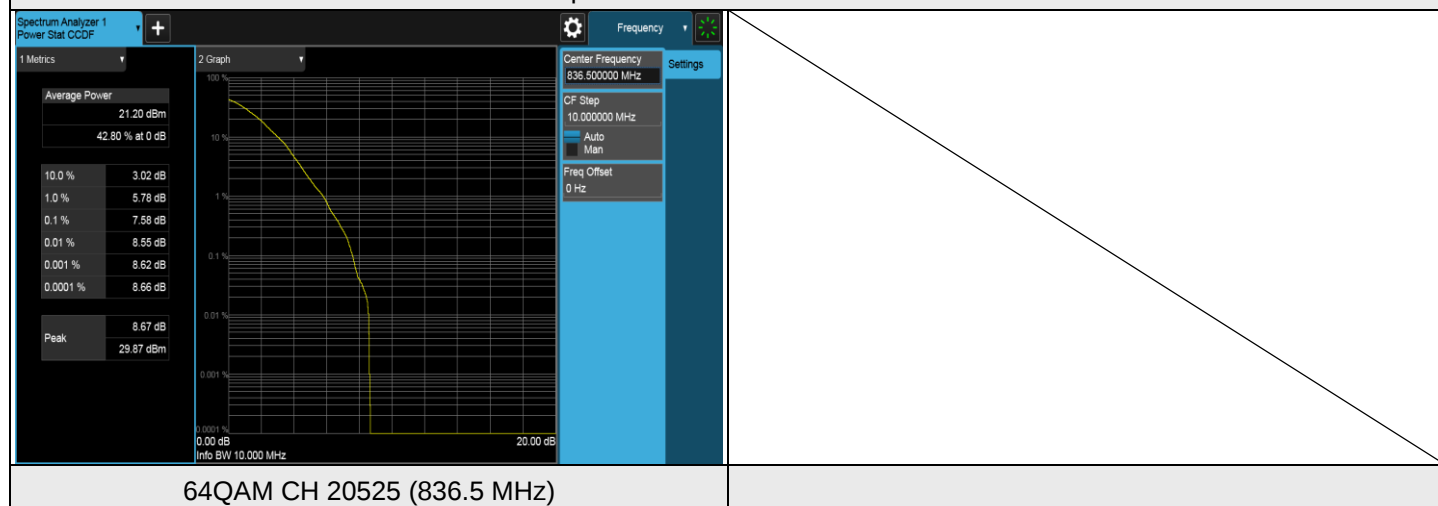


256QAM CH 20625 (846.5 MHz)

LTE Band 5, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	20450	829	5.47	13	PASS
QPSK	20525	836.5	6.41	13	PASS
QPSK	20600	844	5.19	13	PASS
16QAM	20450	829	6.50	13	PASS
16QAM	20525	836.5	7.40	13	PASS
16QAM	20600	844	6.25	13	PASS
64QAM	20450	829	6.62	13	PASS
64QAM	20525	836.5	7.58	13	PASS
64QAM	20600	844	6.44	13	PASS
256QAM	20450	829	6.73	13	PASS
256QAM	20525	836.5	6.86	13	PASS
256QAM	20600	844	6.49	13	PASS

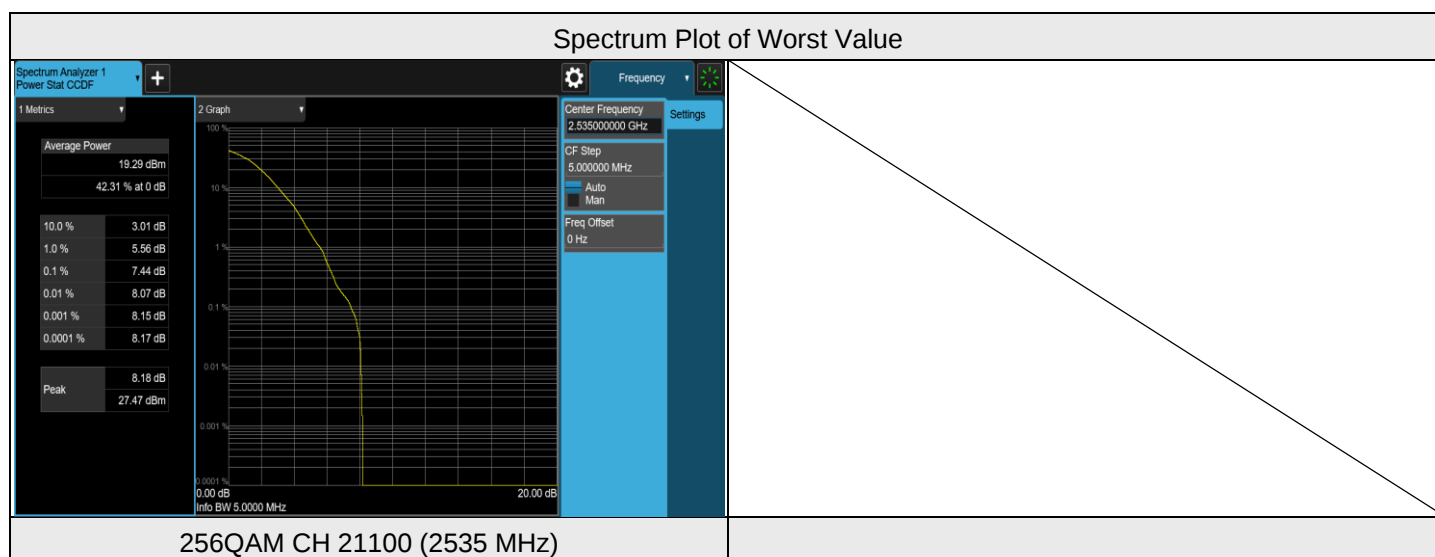
Spectrum Plot of Worst Value



7.3.4 LTE Band 7

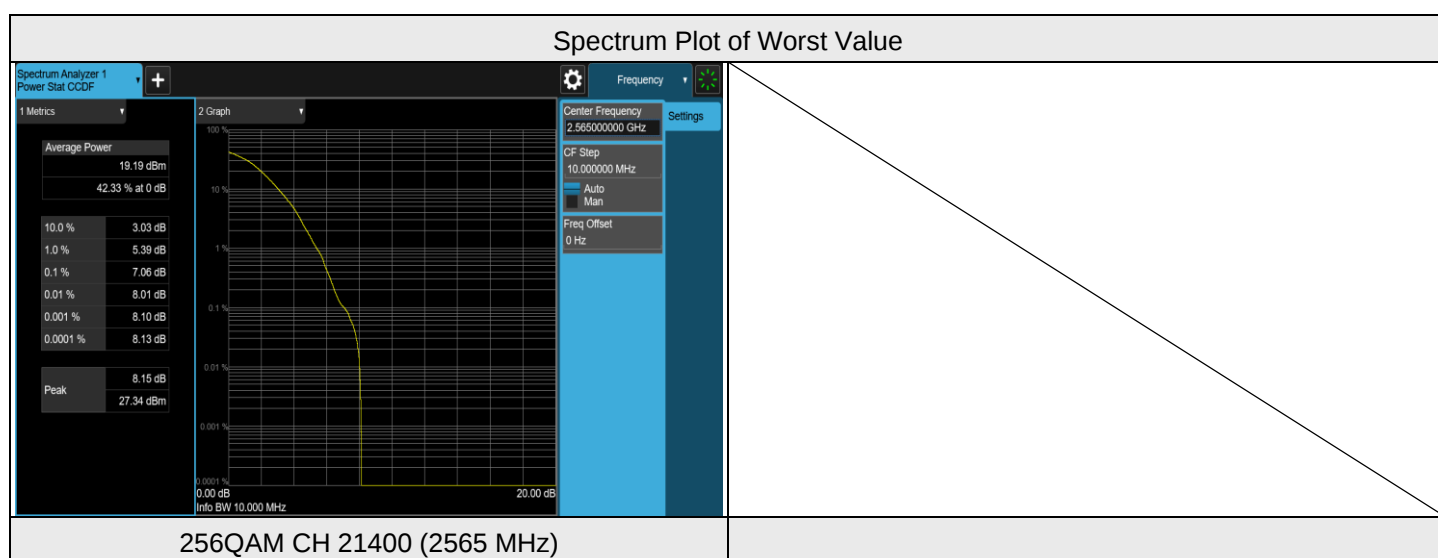
LTE Band 7, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (n(dB))	Result
QPSK	20775	2502.5	5.33	13	PASS
QPSK	21100	2535	5.77	13	PASS
QPSK	21425	2567.5	4.94	13	PASS
16QAM	20775	2502.5	6.17	13	PASS
16QAM	21100	2535	6.22	13	PASS
16QAM	21425	2567.5	6.05	13	PASS
64QAM	20775	2502.5	6.50	13	PASS
64QAM	21100	2535	6.53	13	PASS
64QAM	21425	2567.5	6.22	13	PASS
256QAM	20775	2502.5	7.23	13	PASS
256QAM	21100	2535	7.44	13	PASS
256QAM	21425	2567.5	7.05	13	PASS



LTE Band 7, Channel Bandwidth: 10 MHz

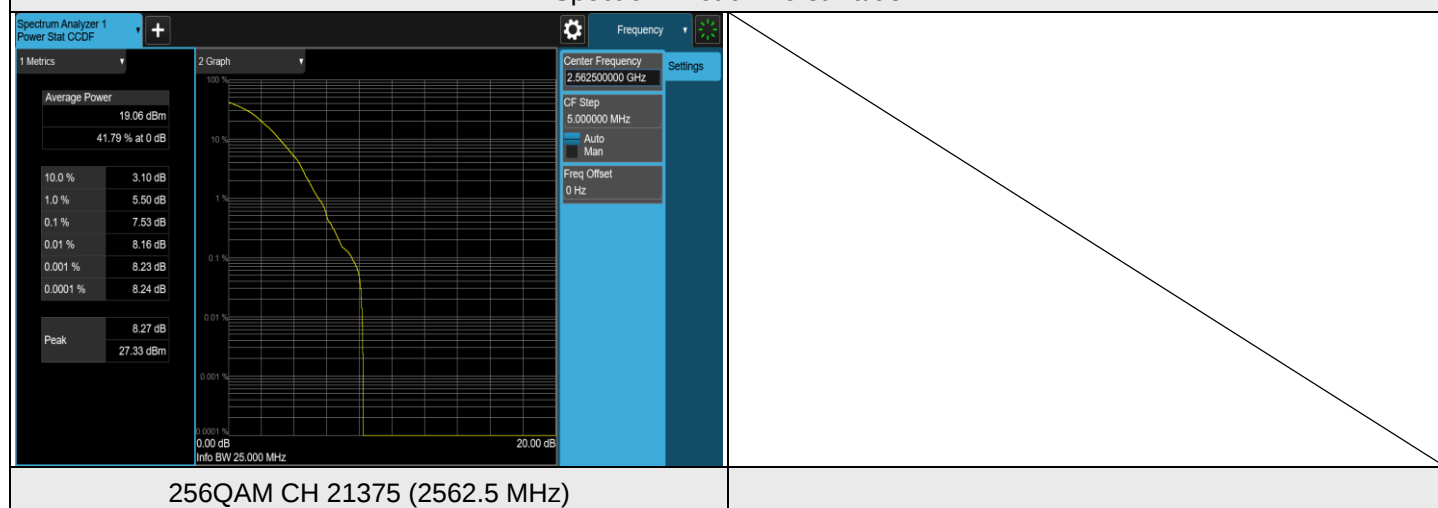
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	20800	2505	5.12	13	PASS
QPSK	21100	2535	5.10	13	PASS
QPSK	21400	2565	5.29	13	PASS
16QAM	20800	2505	6.41	13	PASS
16QAM	21100	2535	6.16	13	PASS
16QAM	21400	2565	6.41	13	PASS
64QAM	20800	2505	6.42	13	PASS
64QAM	21100	2535	6.42	13	PASS
64QAM	21400	2565	6.44	13	PASS
256QAM	20800	2505	6.81	13	PASS
256QAM	21100	2535	6.74	13	PASS
256QAM	21400	2565	7.06	13	PASS



LTE Band 7, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	20825	2507.5	5.14	13	PASS
QPSK	21100	2535	5.30	13	PASS
QPSK	21375	2562.5	5.32	13	PASS
16QAM	20825	2507.5	6.42	13	PASS
16QAM	21100	2535	5.91	13	PASS
16QAM	21375	2562.5	5.98	13	PASS
64QAM	20825	2507.5	6.56	13	PASS
64QAM	21100	2535	6.35	13	PASS
64QAM	21375	2562.5	6.67	13	PASS
256QAM	20825	2507.5	7.47	13	PASS
256QAM	21100	2535	6.64	13	PASS
256QAM	21375	2562.5	7.53	13	PASS

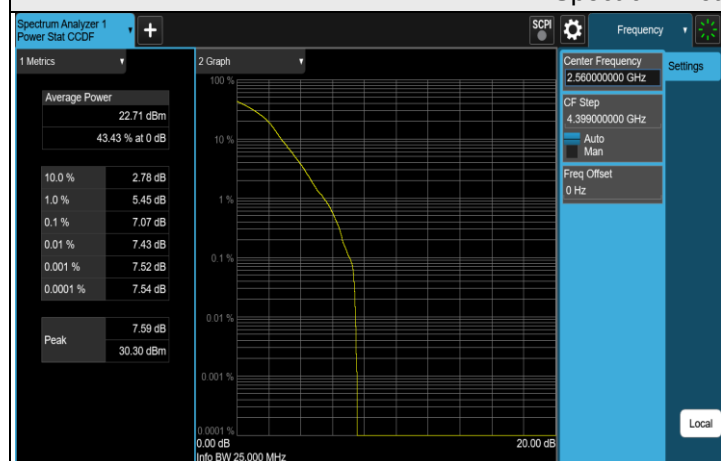
Spectrum Plot of Worst Value



LTE Band 7, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	20850	2510	5.66	13	PASS
QPSK	21100	2535	5.64	13	PASS
QPSK	21350	2560	5.60	13	PASS
16QAM	20850	2510	6.63	13	PASS
16QAM	21100	2535	6.94	13	PASS
16QAM	21350	2560	7.07	13	PASS
64QAM	20850	2510	6.70	13	PASS
64QAM	21100	2535	6.55	13	PASS
64QAM	21350	2560	6.74	13	PASS
256QAM	20850	2510	6.95	13	PASS
256QAM	21100	2535	6.98	13	PASS
256QAM	21350	2560	6.93	13	PASS

Spectrum Plot of Worst Value

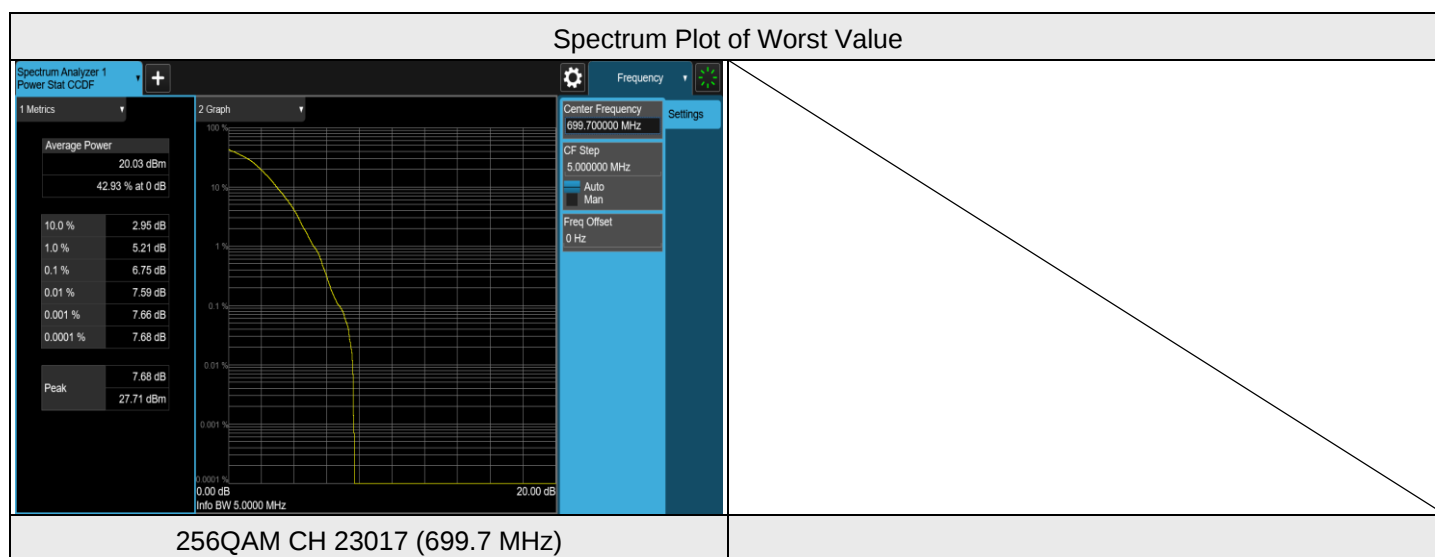


16QAM CH 21350 (2560 MHz)

7.3.5 LTE Band 12

LTE Band 12, Channel Bandwidth: 1.4 MHz

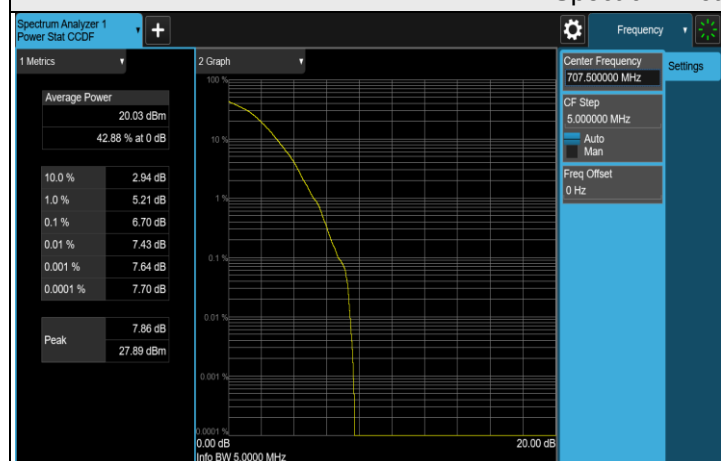
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	23017	699.7	4.57	13	PASS
QPSK	23095	707.5	4.99	13	PASS
QPSK	23173	715.3	4.75	13	PASS
16QAM	23017	699.7	5.57	13	PASS
16QAM	23095	707.5	6.05	13	PASS
16QAM	23173	715.3	5.75	13	PASS
64QAM	23017	699.7	5.90	13	PASS
64QAM	23095	707.5	6.12	13	PASS
64QAM	23173	715.3	5.98	13	PASS
256QAM	23017	699.7	6.75	13	PASS
256QAM	23095	707.5	6.67	13	PASS
256QAM	23173	715.3	6.71	13	PASS



LTE Band 12, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	23025	700.5	4.57	13	PASS
QPSK	23095	707.5	4.94	13	PASS
QPSK	23165	714.5	4.69	13	PASS
16QAM	23025	700.5	5.57	13	PASS
16QAM	23095	707.5	5.97	13	PASS
16QAM	23165	714.5	5.46	13	PASS
64QAM	23025	700.5	5.97	13	PASS
64QAM	23095	707.5	6.10	13	PASS
64QAM	23165	714.5	5.67	13	PASS
256QAM	23025	700.5	6.59	13	PASS
256QAM	23095	707.5	6.70	13	PASS
256QAM	23165	714.5	6.48	13	PASS

Spectrum Plot of Worst Value

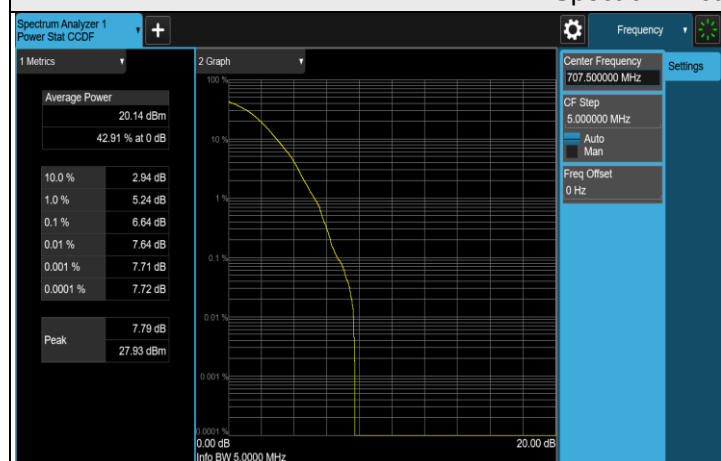


256QAM CH 23097 (707.5 MHz)

LTE Band 12, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	23035	701.5	4.57	13	PASS
QPSK	23095	707.5	4.98	13	PASS
QPSK	23155	713.5	4.63	13	PASS
16QAM	23035	701.5	5.55	13	PASS
16QAM	23095	707.5	6.11	13	PASS
16QAM	23155	713.5	5.83	13	PASS
64QAM	23035	701.5	5.79	13	PASS
64QAM	23095	707.5	6.07	13	PASS
64QAM	23155	713.5	5.96	13	PASS
256QAM	23035	701.5	6.38	13	PASS
256QAM	23095	707.5	6.64	13	PASS
256QAM	23155	713.5	6.62	13	PASS

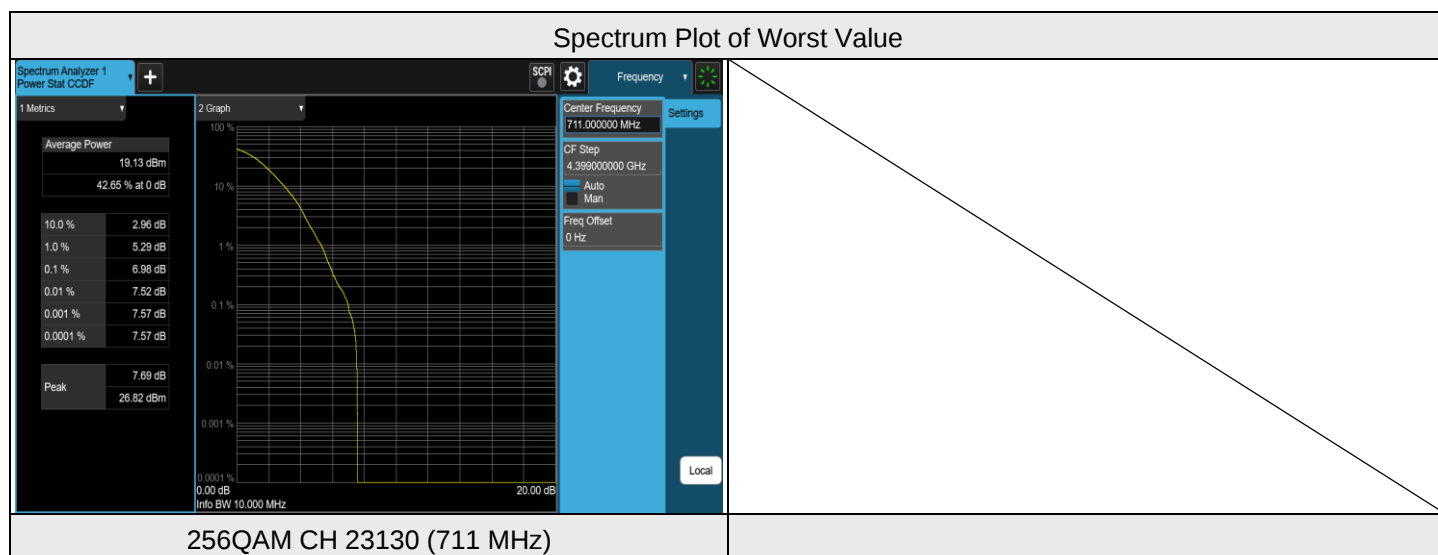
Spectrum Plot of Worst Value



256QAM CH 23095 (707.5 MHz)

LTE Band 12, Channel Bandwidth: 10 MHz

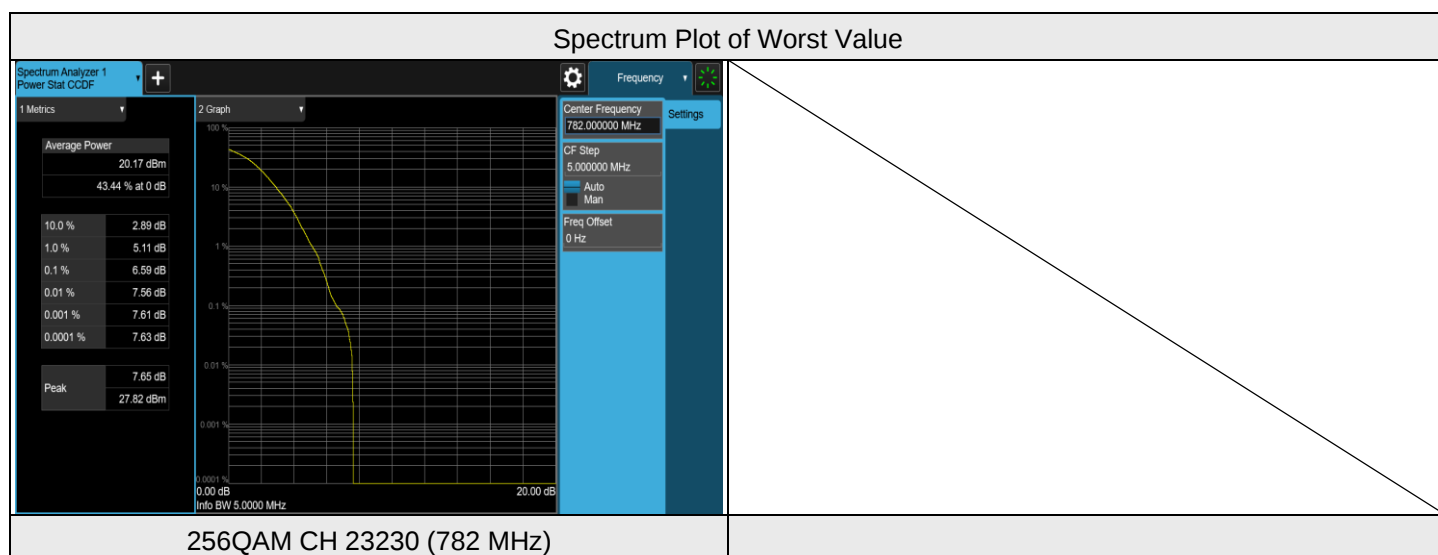
Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	23060	704	5.42	13	PASS
QPSK	23095	707.5	5.47	13	PASS
QPSK	23130	711	5.43	13	PASS
16QAM	23060	704	6.61	13	PASS
16QAM	23095	707.5	6.79	13	PASS
16QAM	23130	711	6.74	13	PASS
64QAM	23060	704	6.46	13	PASS
64QAM	23095	707.5	6.35	13	PASS
64QAM	23130	711	6.53	13	PASS
256QAM	23060	704	6.50	13	PASS
256QAM	23095	707.5	6.87	13	PASS
256QAM	23130	711	6.98	13	PASS



7.3.6 LTE Band 13

LTE Band 13, Channel Bandwidth: 5 MHz

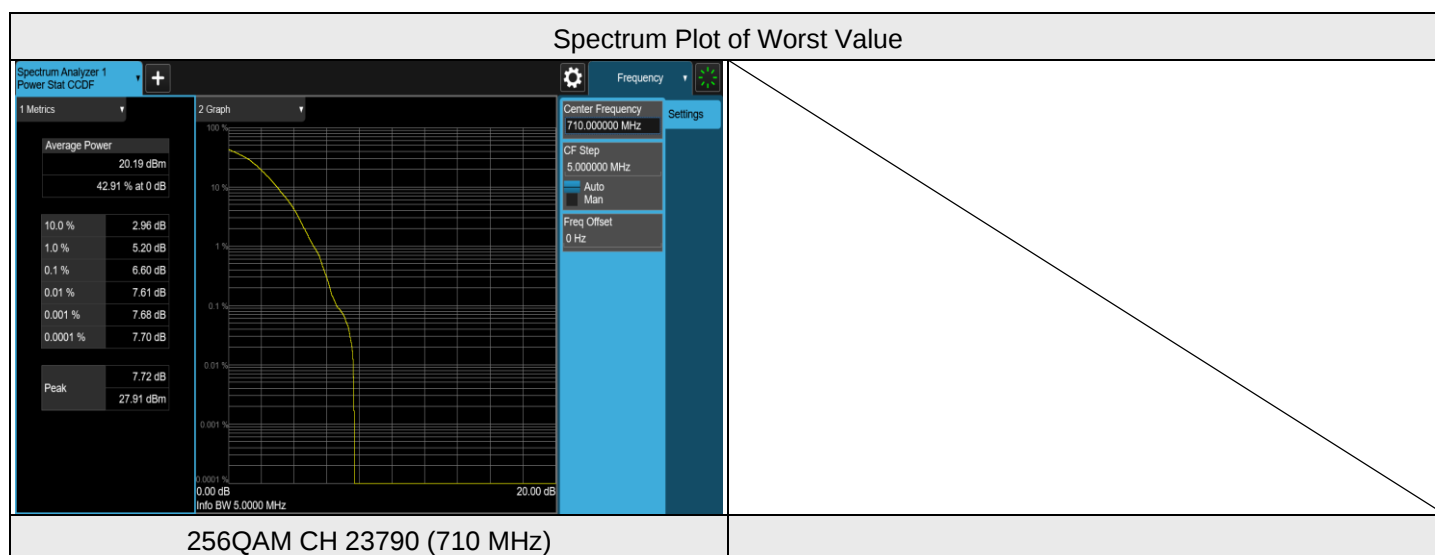
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	23205	779.5	4.12	13	PASS
QPSK	23230	782	4.37	13	PASS
QPSK	23255	784.5	4.36	13	PASS
16QAM	23205	779.5	5.11	13	PASS
16QAM	23230	782	6.04	13	PASS
16QAM	23255	784.5	5.34	13	PASS
64QAM	23205	779.5	5.69	13	PASS
64QAM	23230	782	5.82	13	PASS
64QAM	23255	784.5	5.76	13	PASS
256QAM	23205	779.5	6.47	13	PASS
256QAM	23230	782	6.59	13	PASS
256QAM	23255	784.5	6.43	13	PASS



7.3.7 LTE Band 17

LTE Band 17, Channel Bandwidth: 5 MHz

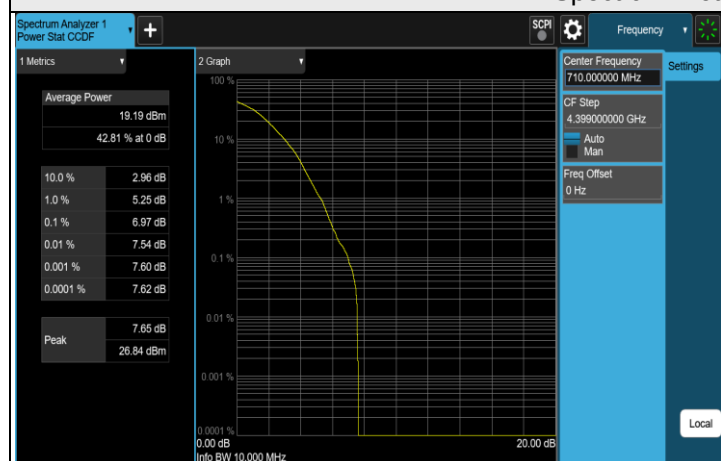
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	23755	706.5	4.86	13	PASS
QPSK	23790	710	4.97	13	PASS
QPSK	23825	713.5	4.89	13	PASS
16QAM	23755	706.5	6.02	13	PASS
16QAM	23790	710	6.10	13	PASS
16QAM	23825	713.5	5.80	13	PASS
64QAM	23755	706.5	5.60	13	PASS
64QAM	23790	710	6.06	13	PASS
64QAM	23825	713.5	5.99	13	PASS
256QAM	23755	706.5	6.54	13	PASS
256QAM	23790	710	6.60	13	PASS
256QAM	23825	713.5	6.60	13	PASS



LTE Band 17, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	23780	709	5.17	13	PASS
QPSK	23790	710	5.48	13	PASS
QPSK	23800	711	5.45	13	PASS
16QAM	23780	709	6.76	13	PASS
16QAM	23790	710	6.81	13	PASS
16QAM	23800	711	6.58	13	PASS
64QAM	23780	709	6.37	13	PASS
64QAM	23790	710	6.44	13	PASS
64QAM	23800	711	6.60	13	PASS
256QAM	23780	709	6.94	13	PASS
256QAM	23790	710	6.97	13	PASS
256QAM	23800	711	6.83	13	PASS

Spectrum Plot of Worst Value

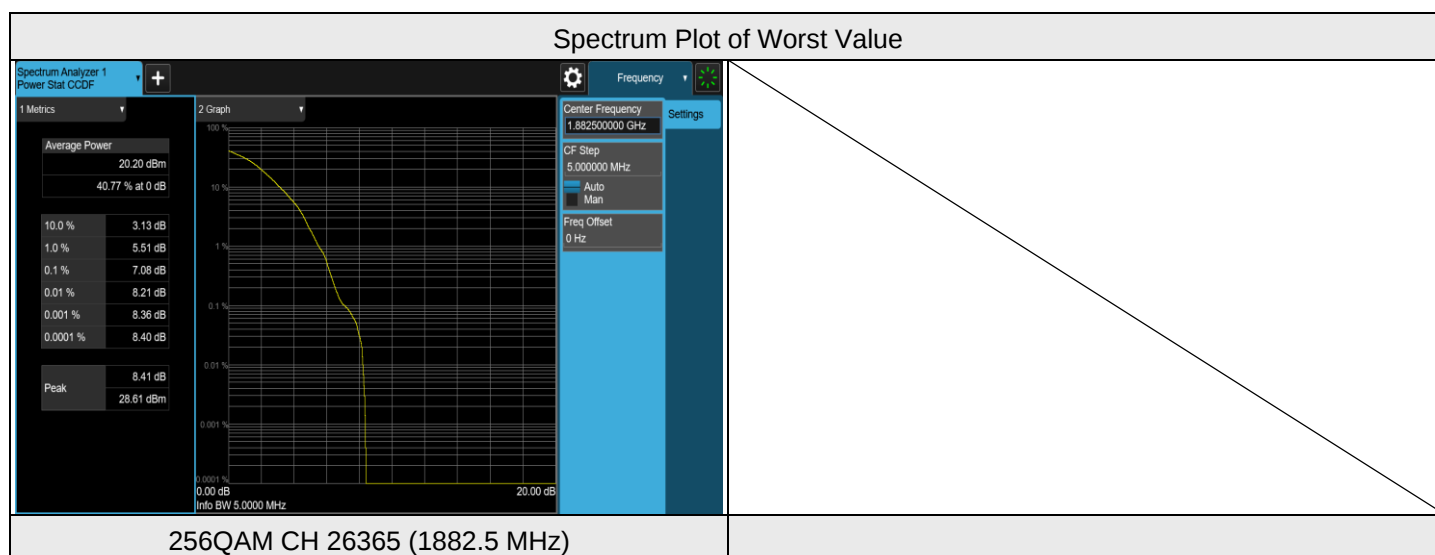


256QAM CH 23790 (710 MHz)

7.3.8 LTE Band 25

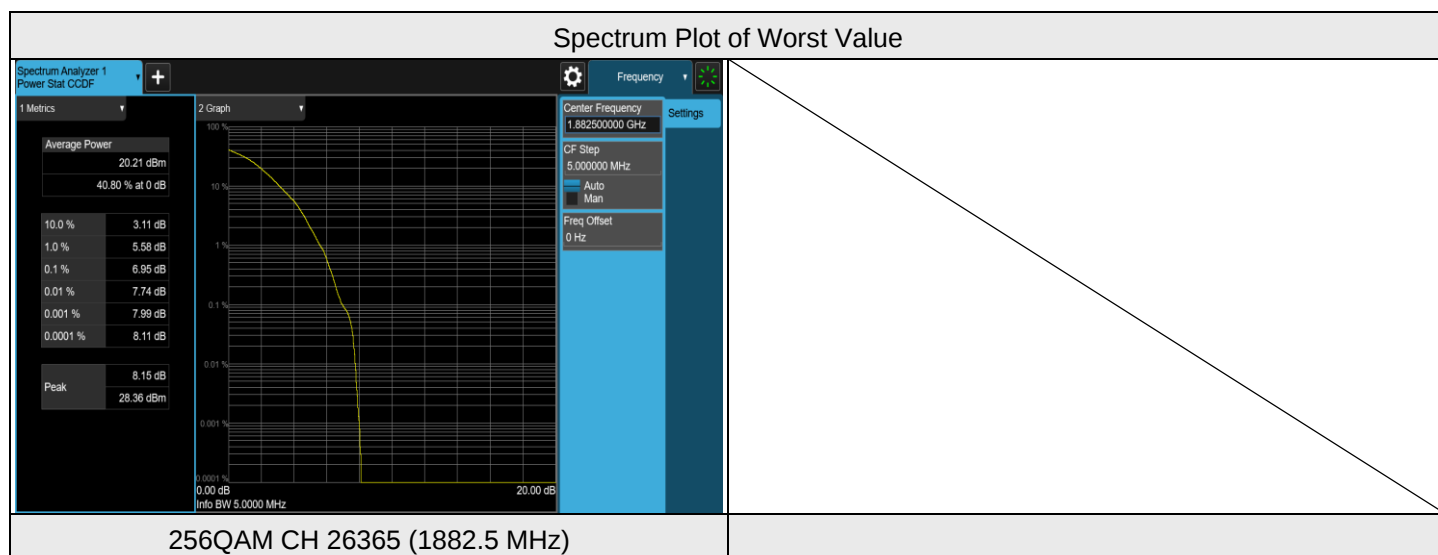
LTE Band 25, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	26047	1850.7	5.12	13	PASS
QPSK	26365	1882.5	5.05	13	PASS
QPSK	26683	1914.3	4.69	13	PASS
16QAM	26047	1850.7	6.23	13	PASS
16QAM	26365	1882.5	6.43	13	PASS
16QAM	26683	1914.3	5.92	13	PASS
64QAM	26047	1850.7	6.44	13	PASS
64QAM	26365	1882.5	6.45	13	PASS
64QAM	26683	1914.3	6.20	13	PASS
256QAM	26047	1850.7	6.60	13	PASS
256QAM	26365	1882.5	7.08	13	PASS
256QAM	26683	1914.3	7.08	13	PASS



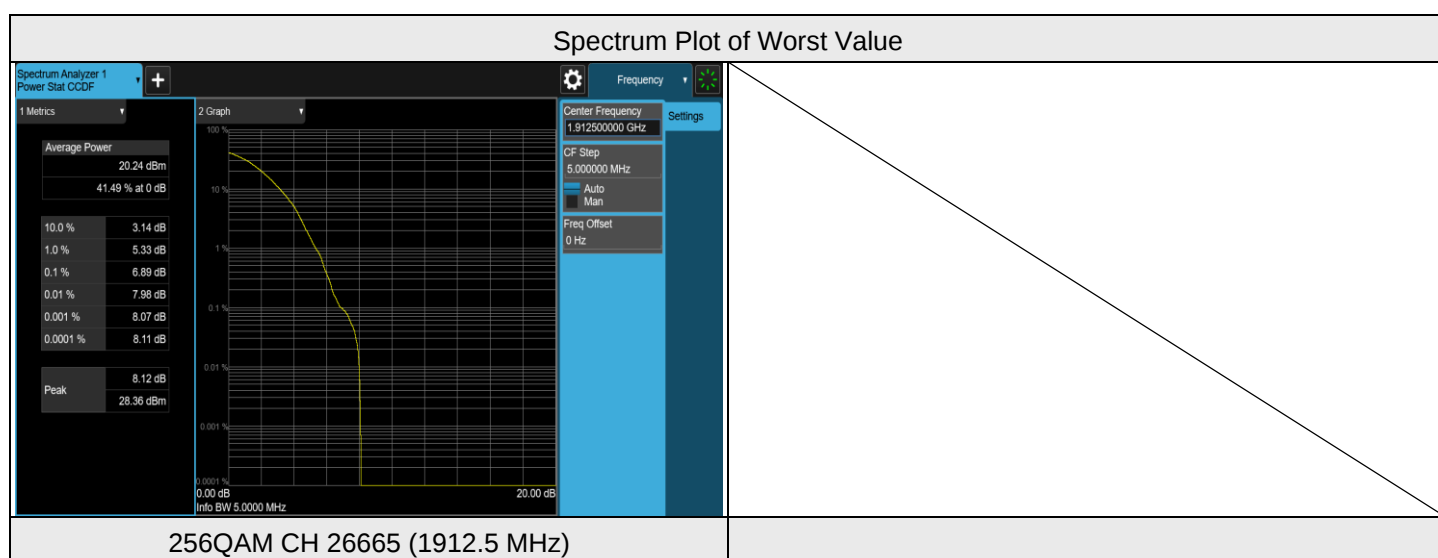
LTE Band 25, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	26055	1851.5	5.01	13	PASS
QPSK	26365	1882.5	5.00	13	PASS
QPSK	26675	1913.5	4.74	13	PASS
16QAM	26055	1851.5	6.01	13	PASS
16QAM	26365	1882.5	6.00	13	PASS
16QAM	26675	1913.5	5.89	13	PASS
64QAM	26055	1851.5	6.41	13	PASS
64QAM	26365	1882.5	6.45	13	PASS
64QAM	26675	1913.5	6.10	13	PASS
256QAM	26055	1851.5	6.69	13	PASS
256QAM	26365	1882.5	6.95	13	PASS
256QAM	26675	1913.5	6.68	13	PASS



LTE Band 25, Channel Bandwidth: 5 MHz

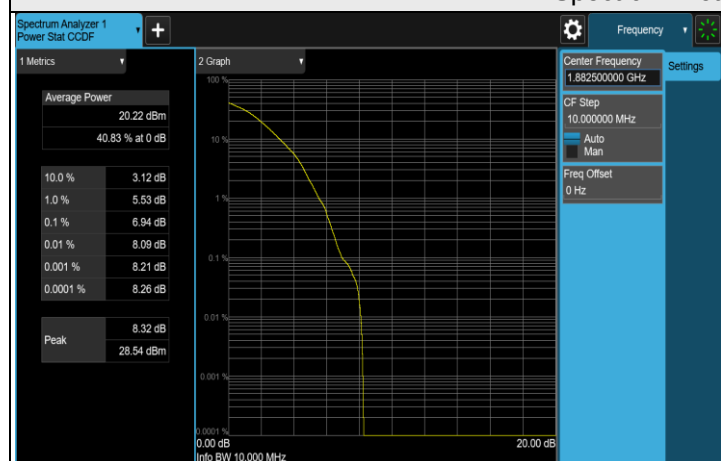
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	26065	1852.5	5.14	13	PASS
QPSK	26365	1882.5	5.04	13	PASS
QPSK	26665	1912.5	4.89	13	PASS
16QAM	26065	1852.5	6.42	13	PASS
16QAM	26365	1882.5	6.17	13	PASS
16QAM	26665	1912.5	6.07	13	PASS
64QAM	26065	1852.5	6.44	13	PASS
64QAM	26365	1882.5	6.44	13	PASS
64QAM	26665	1912.5	6.30	13	PASS
256QAM	26065	1852.5	6.72	13	PASS
256QAM	26365	1882.5	6.71	13	PASS
256QAM	26665	1912.5	6.89	13	PASS



LTE Band 25, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	26090	1855	5.03	13	PASS
QPSK	26365	1882.5	5.06	13	PASS
QPSK	26640	1910	4.85	13	PASS
16QAM	26090	1855	6.30	13	PASS
16QAM	26365	1882.5	6.10	13	PASS
16QAM	26640	1910	6.05	13	PASS
64QAM	26090	1855	6.47	13	PASS
64QAM	26365	1882.5	6.44	13	PASS
64QAM	26640	1910	6.34	13	PASS
256QAM	26090	1855	6.85	13	PASS
256QAM	26365	1882.5	6.94	13	PASS
256QAM	26640	1910	6.53	13	PASS

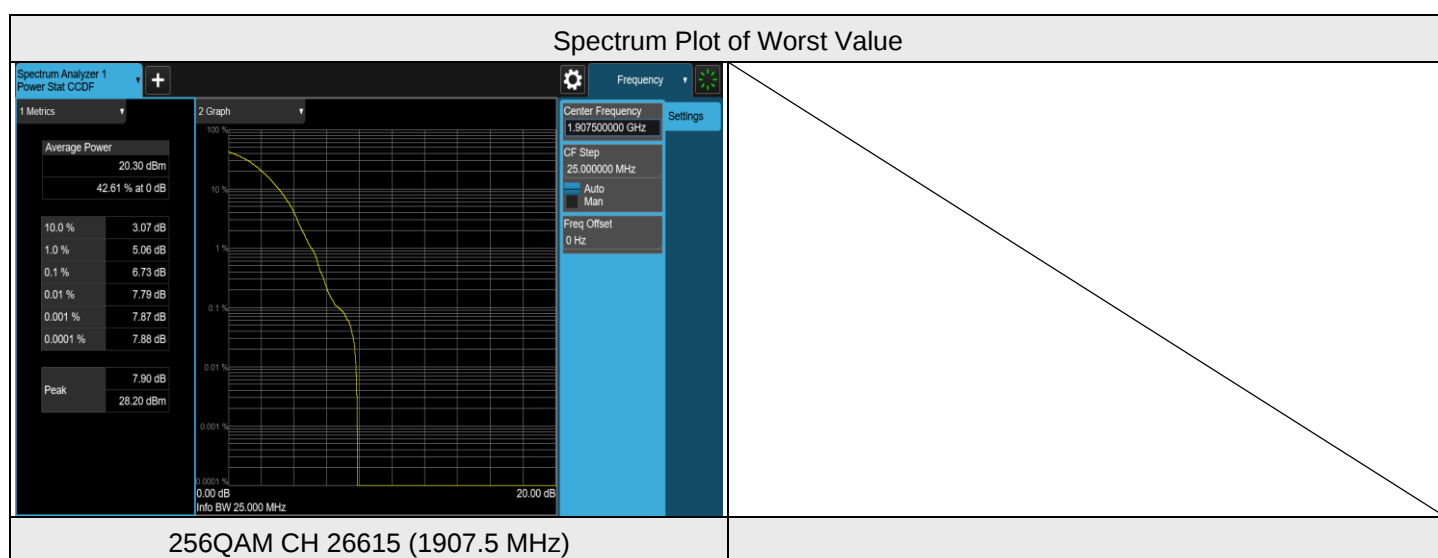
Spectrum Plot of Worst Value



256QAM CH 26365 (1882.5 MHz)

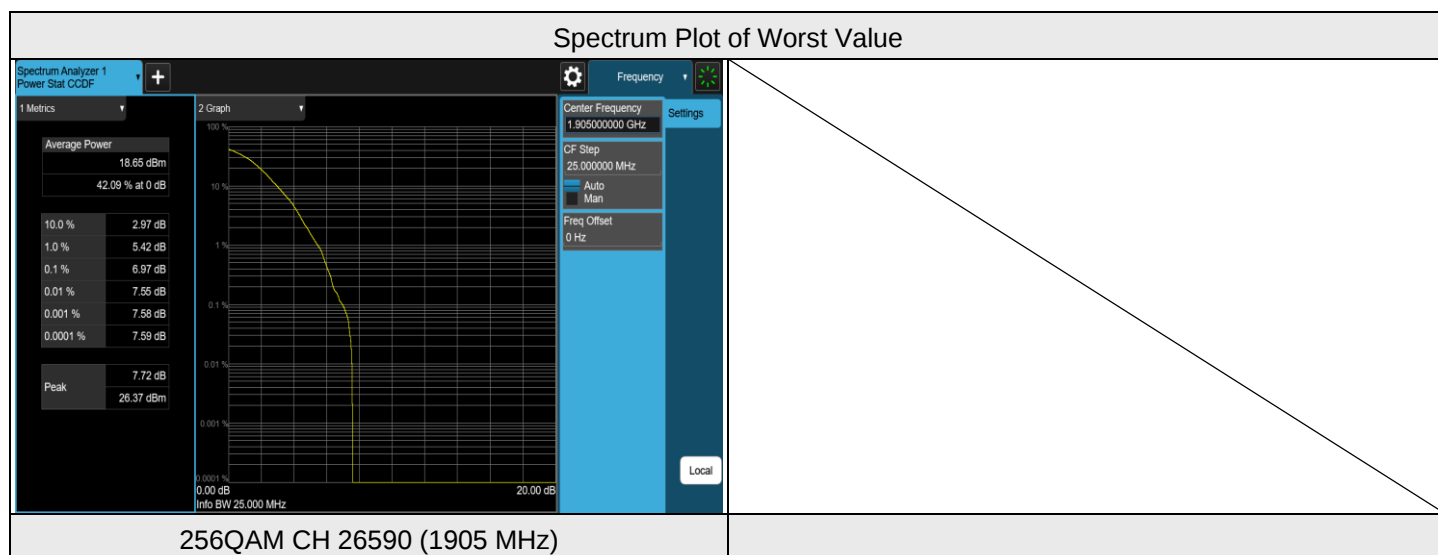
LTE Band 25, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	26115	1857.5	5.09	13	PASS
QPSK	26365	1882.5	5.08	13	PASS
QPSK	26615	1907.5	4.93	13	PASS
16QAM	26115	1857.5	6.25	13	PASS
16QAM	26365	1882.5	5.97	13	PASS
16QAM	26615	1907.5	6.07	13	PASS
64QAM	26115	1857.5	6.33	13	PASS
64QAM	26365	1882.5	6.47	13	PASS
64QAM	26615	1907.5	6.37	13	PASS
256QAM	26115	1857.5	6.62	13	PASS
256QAM	26365	1882.5	6.70	13	PASS
256QAM	26615	1907.5	6.73	13	PASS



LTE Band 25, Channel Bandwidth: 20 MHz

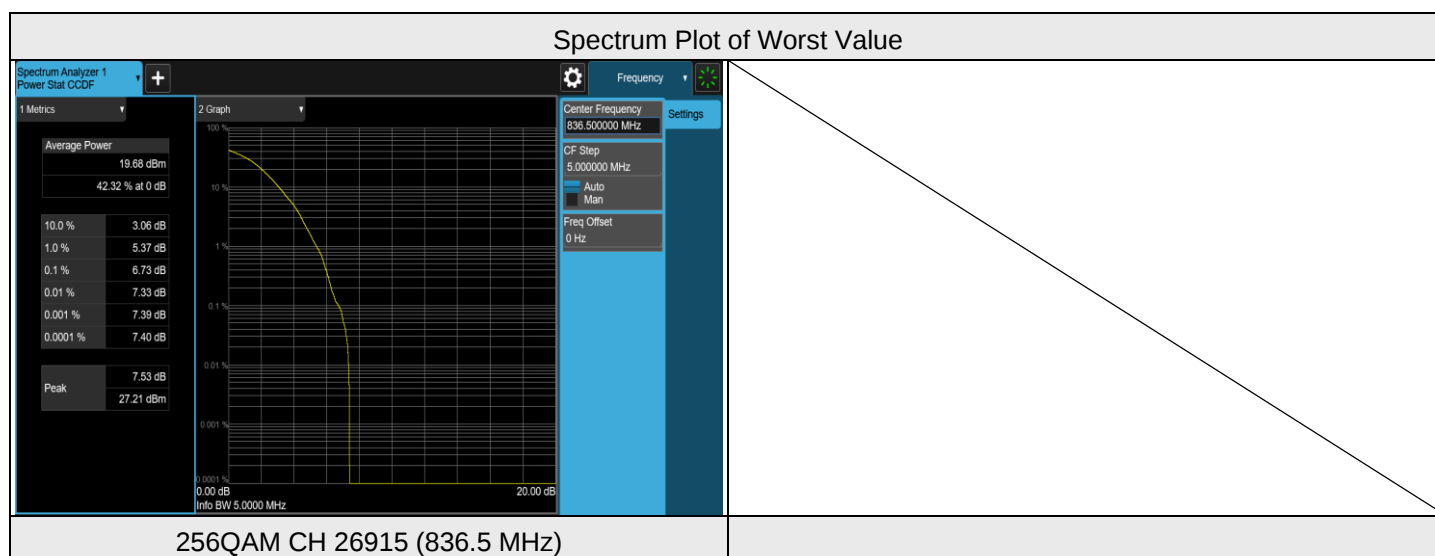
Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	26140	1860	5.27	13	PASS
QPSK	26365	1882.5	5.54	13	PASS
QPSK	26590	1905	5.58	13	PASS
16QAM	26140	1860	6.80	13	PASS
16QAM	26365	1882.5	6.64	13	PASS
16QAM	26590	1905	6.56	13	PASS
64QAM	26140	1860	6.52	13	PASS
64QAM	26365	1882.5	6.57	13	PASS
64QAM	26590	1905	6.57	13	PASS
256QAM	26140	1860	6.76	13	PASS
256QAM	26365	1882.5	6.87	13	PASS
256QAM	26590	1905	6.97	13	PASS



7.3.9 LTE Band 26 (824 MHz ~ 849 MHz)

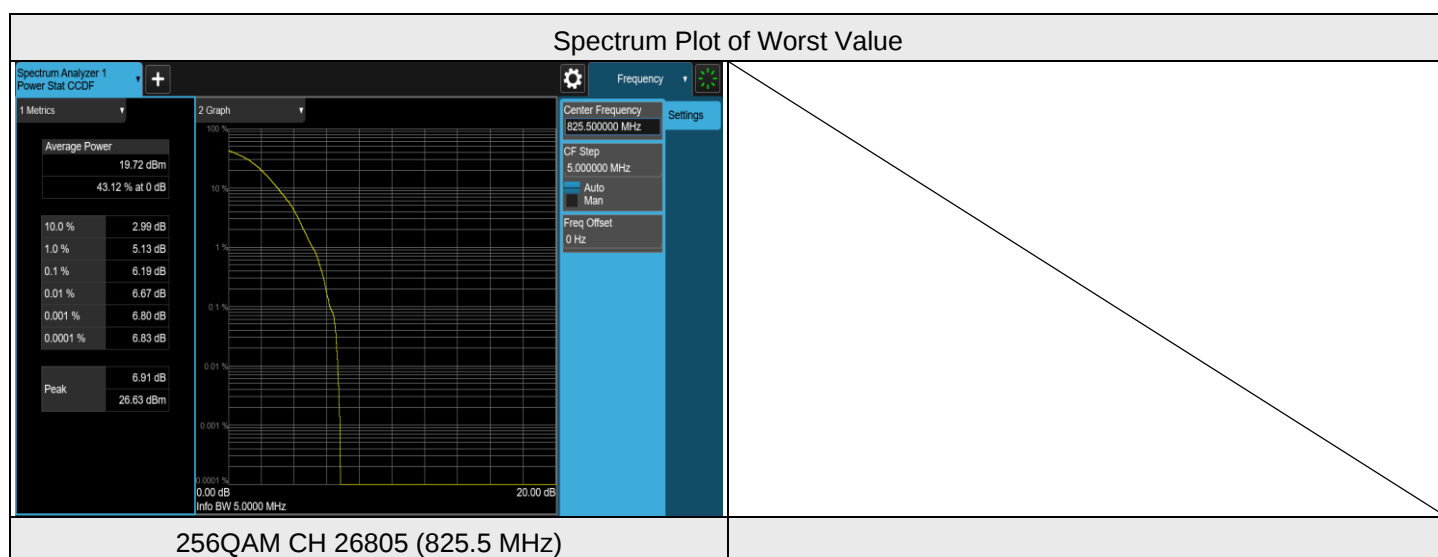
LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 1.4 MHz

LTE Band 26 1.4M					
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (n(dB))	Result
QPSK	26797	824.7	3.79	13	PASS
QPSK	26915	836.5	3.94	13	PASS
QPSK	27033	848.3	2.95	13	PASS
16QAM	26797	824.7	4.73	13	PASS
16QAM	26915	836.5	5.10	13	PASS
16QAM	27033	848.3	4.09	13	PASS
64QAM	26797	824.7	5.31	13	PASS
64QAM	26915	836.5	5.36	13	PASS
64QAM	27033	848.3	4.75	13	PASS
256QAM	26797	824.7	6.48	13	PASS
256QAM	26915	836.5	6.73	13	PASS
256QAM	27033	848.3	6.49	13	PASS



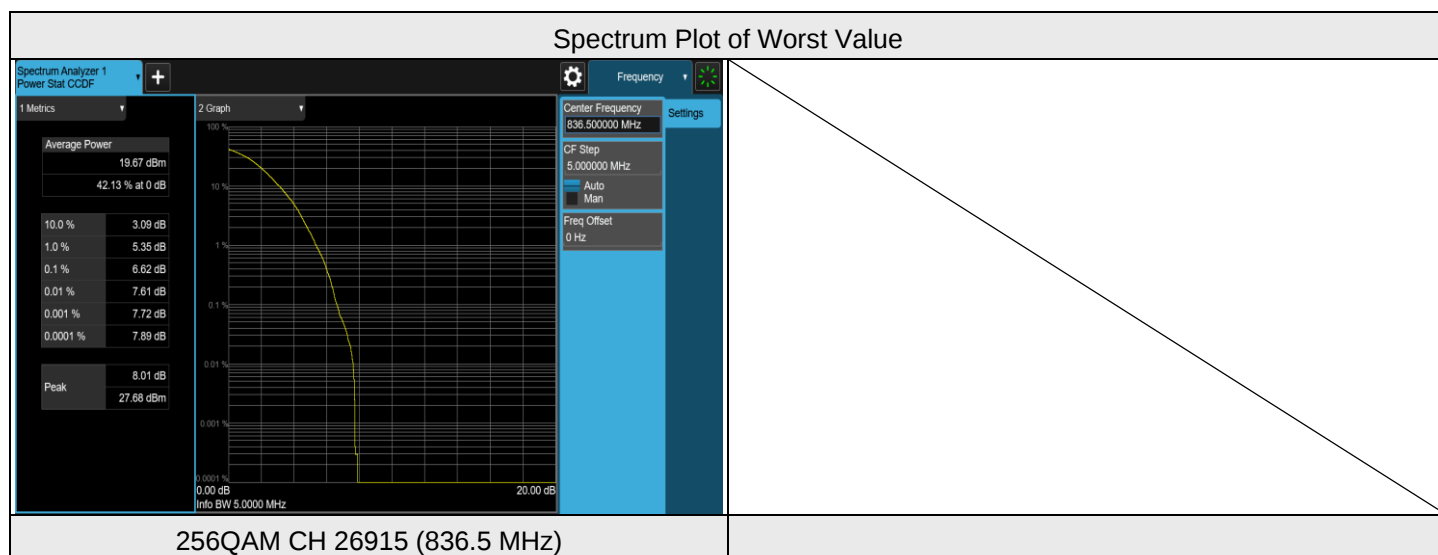
LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 3 MHz

LTE Band 26 3M					
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (n(dB))	Result
QPSK	26805	825.5	3.63	13	PASS
QPSK	26915	836.5	3.87	13	PASS
QPSK	27025	847.5	3.55	13	PASS
16QAM	26805	825.5	4.42	13	PASS
16QAM	26915	836.5	4.96	13	PASS
16QAM	27025	847.5	4.52	13	PASS
64QAM	26805	825.5	5.20	13	PASS
64QAM	26915	836.5	5.10	13	PASS
64QAM	27025	847.5	5.22	13	PASS
256QAM	26805	825.5	6.19	13	PASS
256QAM	26915	836.5	6.10	13	PASS
256QAM	27025	847.5	6.05	13	PASS



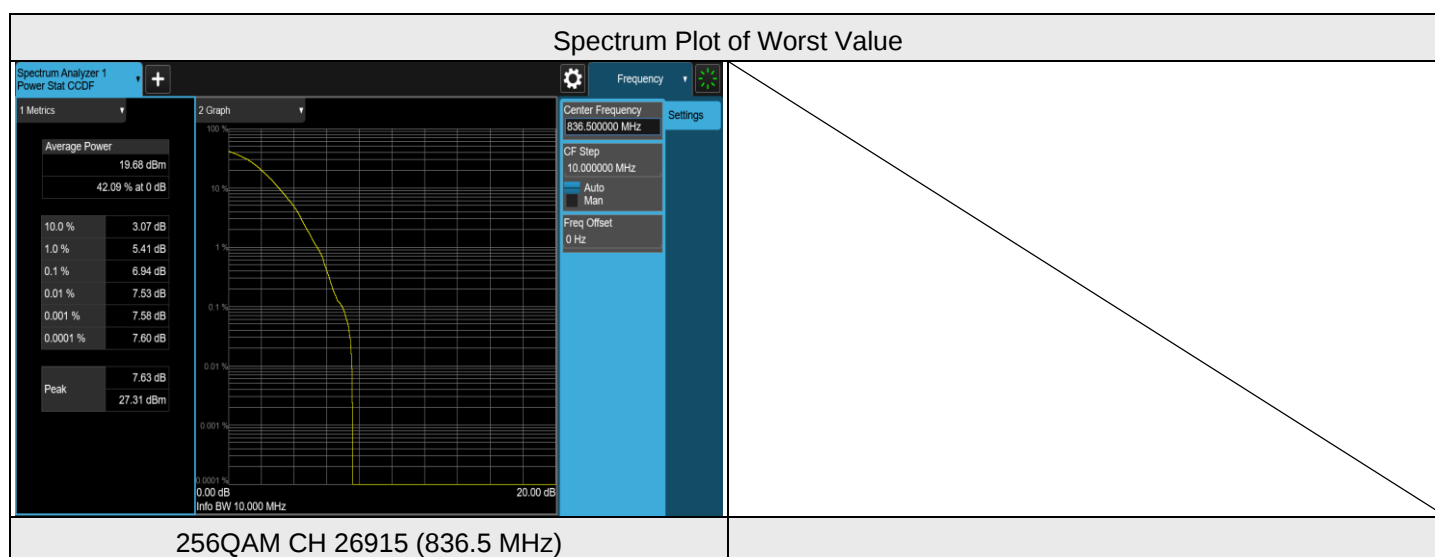
LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 5 MHz

LTE Band 26 5M					
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	26815	826.5	3.67	13	PASS
QPSK	26915	836.5	4.00	13	PASS
QPSK	27015	846.5	3.63	13	PASS
16QAM	26815	826.5	4.79	13	PASS
16QAM	26915	836.5	5.02	13	PASS
16QAM	27015	846.5	4.63	13	PASS
64QAM	26815	826.5	5.22	13	PASS
64QAM	26915	836.5	5.53	13	PASS
64QAM	27015	846.5	5.15	13	PASS
256QAM	26815	826.5	6.25	13	PASS
256QAM	26915	836.5	6.62	13	PASS
256QAM	27015	846.5	6.15	13	PASS



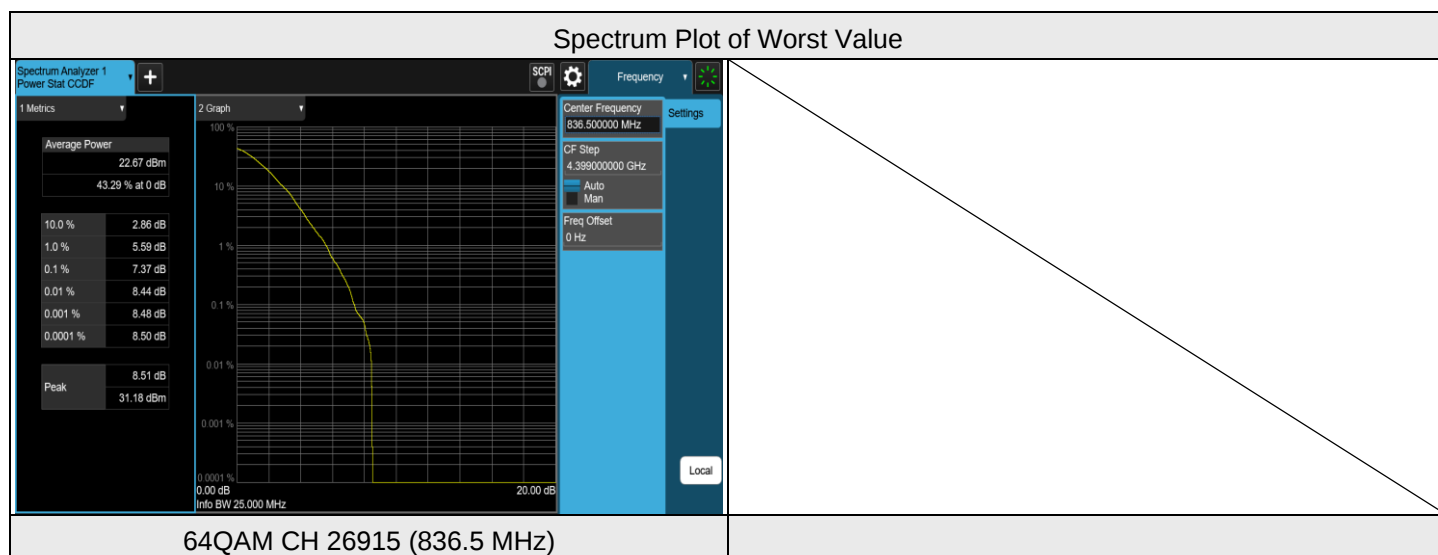
LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 10 MHz

LTE Band 26 10M					
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (n(dB))	Result
QPSK	26840	829	3.71	13	PASS
QPSK	26915	836.5	4.05	13	PASS
QPSK	26990	844	3.36	13	PASS
16QAM	26840	829	4.74	13	PASS
16QAM	26915	836.5	5.06	13	PASS
16QAM	26990	844	4.50	13	PASS
64QAM	26840	829	5.22	13	PASS
64QAM	26915	836.5	5.53	13	PASS
64QAM	26990	844	4.94	13	PASS
256QAM	26840	829	6.53	13	PASS
256QAM	26915	836.5	6.94	13	PASS
256QAM	26990	844	6.54	13	PASS



LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 15 MHz

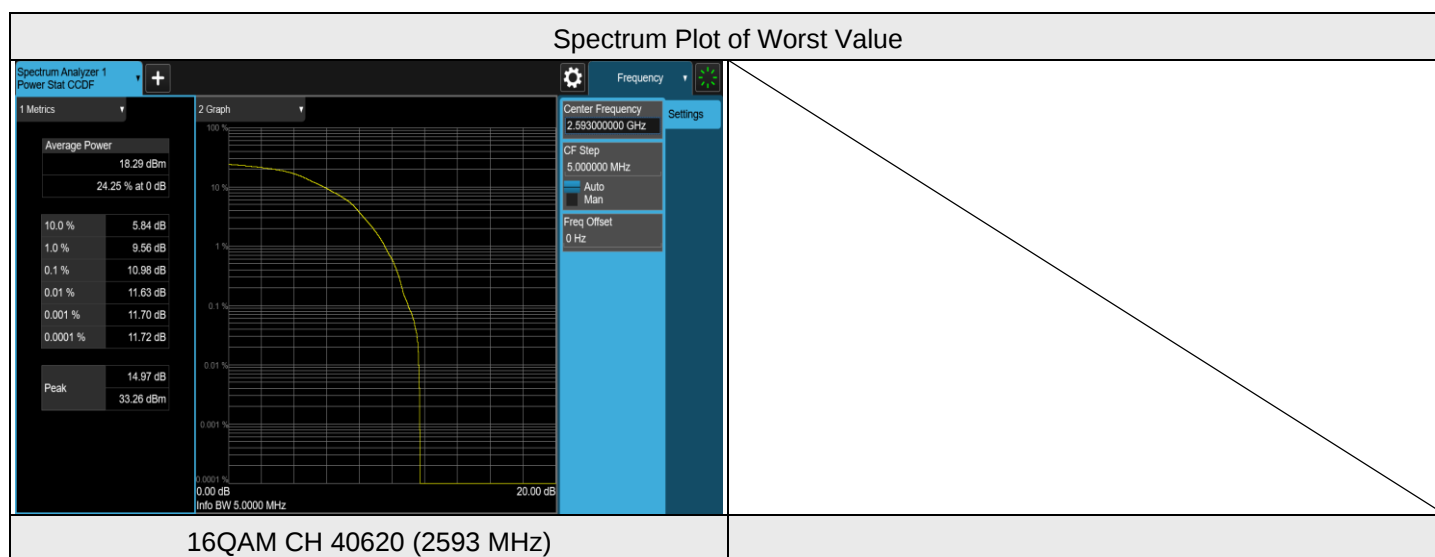
LTE Band 26 15M					
Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	26865	831.5	5.55	13	PASS
QPSK	26915	836.5	6.08	13	PASS
QPSK	26965	841.5	6.09	13	PASS
16QAM	26865	831.5	6.47	13	PASS
16QAM	26915	836.5	7.15	13	PASS
16QAM	26965	841.5	7.26	13	PASS
64QAM	26865	831.5	6.57	13	PASS
64QAM	26915	836.5	7.37	13	PASS
64QAM	26965	841.5	6.90	13	PASS
256QAM	26865	831.5	6.48	13	PASS
256QAM	26915	836.5	6.68	13	PASS
256QAM	26965	841.5	6.54	13	PASS



7.3.10 LTE Band 41

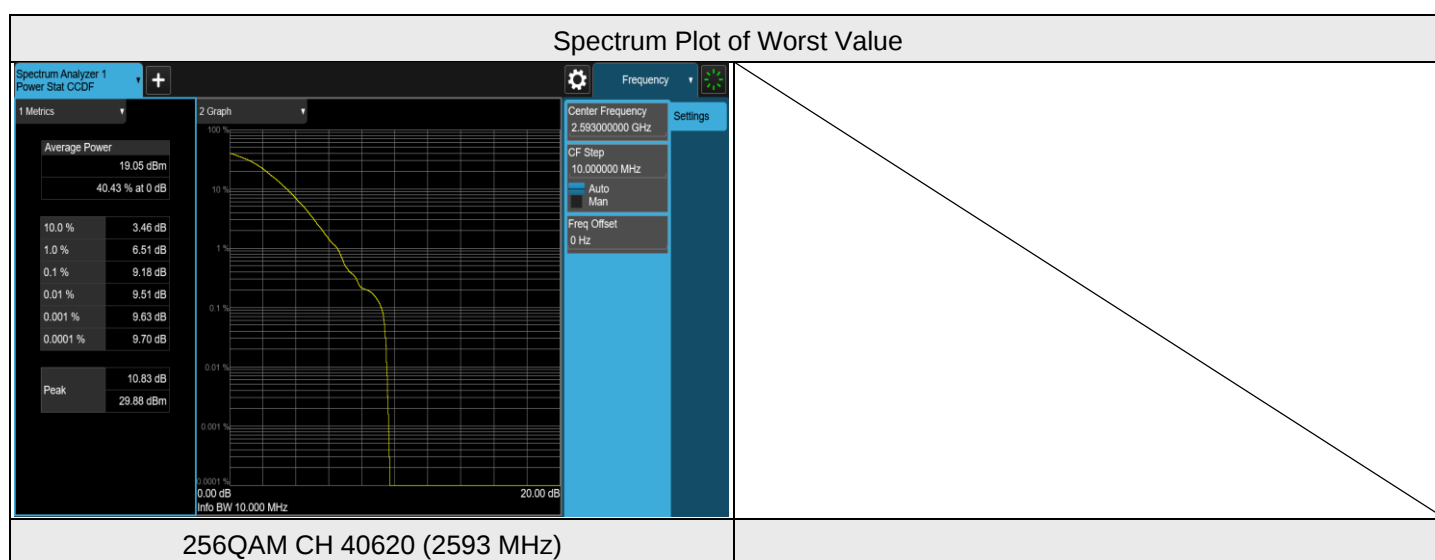
LTE Band 41, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	39675	2498.5	9.31	13	PASS
QPSK	40620	2593	9.32	13	PASS
QPSK	41565	2687.5	9.32	13	PASS
16QAM	39675	2498.5	6.39	13	PASS
16QAM	40620	2593	10.98	13	PASS
16QAM	41565	2687.5	9.77	13	PASS
64QAM	39675	2498.5	7.38	13	PASS
64QAM	40620	2593	9.99	13	PASS
64QAM	41565	2687.5	10.87	13	PASS
256QAM	39675	2498.5	8.93	13	PASS
256QAM	40620	2593	8.78	13	PASS
256QAM	41565	2687.5	9.39	13	PASS



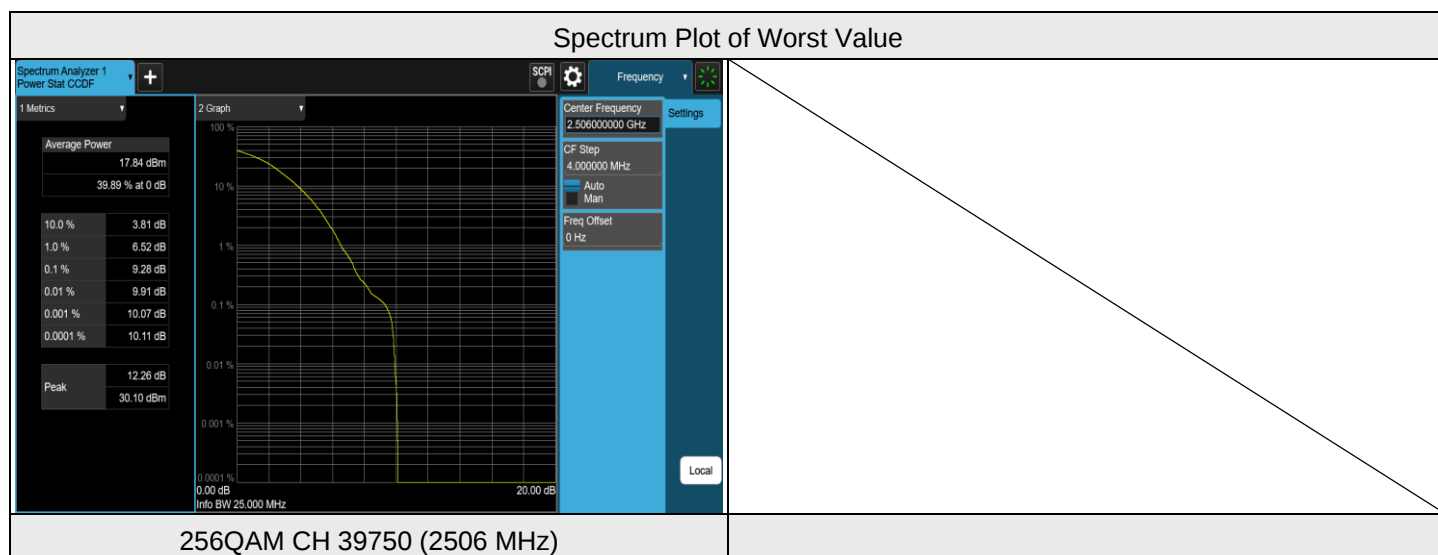
LTE Band 41, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	39700	2501	5.56	13	PASS
QPSK	40620	2593	5.45	13	PASS
QPSK	41540	2685	5.09	13	PASS
16QAM	39700	2501	6.15	13	PASS
16QAM	40620	2593	6.69	13	PASS
16QAM	41540	2685	5.95	13	PASS
64QAM	39700	2501	6.78	13	PASS
64QAM	40620	2593	7.12	13	PASS
64QAM	41540	2685	6.77	13	PASS
256QAM	39700	2501	8.83	13	PASS
256QAM	40620	2593	9.18	13	PASS
256QAM	41540	2685	6.95	13	PASS



LTE Band 41, Channel Bandwidth: 20 MHz

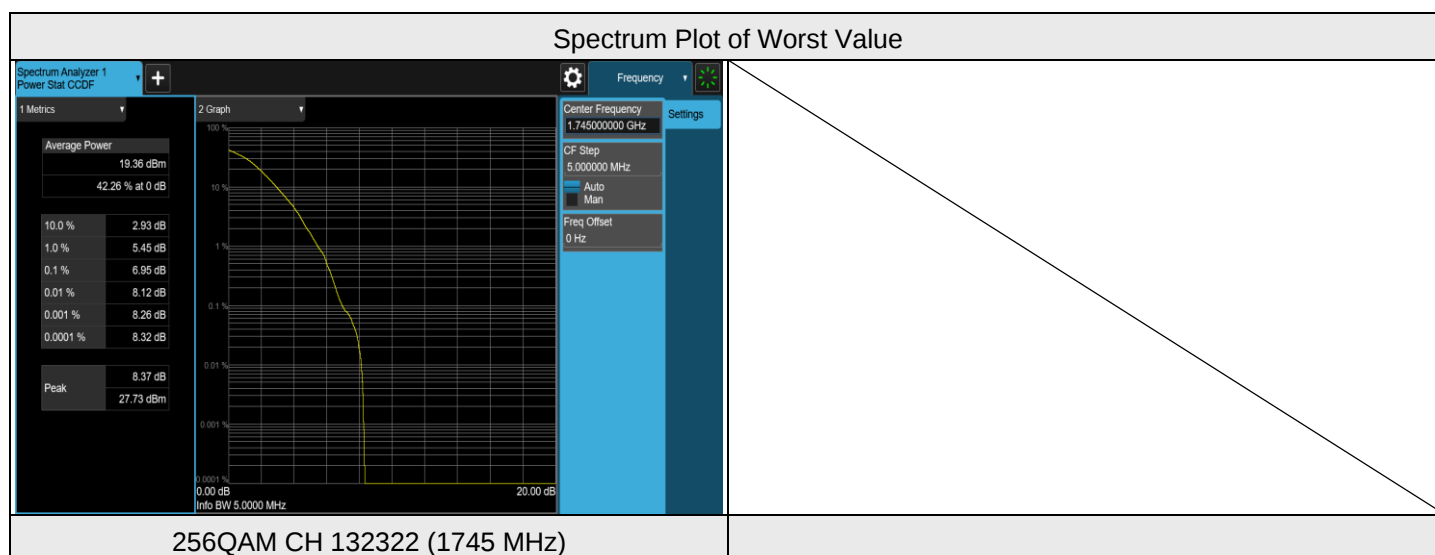
Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	39750	2506	6.86	13	PASS
QPSK	40620	2593	7.13	13	PASS
QPSK	41490	2680	6.96	13	PASS
16QAM	39750	2506	8.39	13	PASS
16QAM	40620	2593	8.74	13	PASS
16QAM	41490	2680	8.29	13	PASS
64QAM	39750	2506	7.67	13	PASS
64QAM	40620	2593	7.98	13	PASS
64QAM	41490	2680	8.07	13	PASS
256QAM	39750	2506	9.28	13	PASS
256QAM	40620	2593	9.07	13	PASS
256QAM	41490	2680	9.10	13	PASS



7.3.11 LTE Band 66

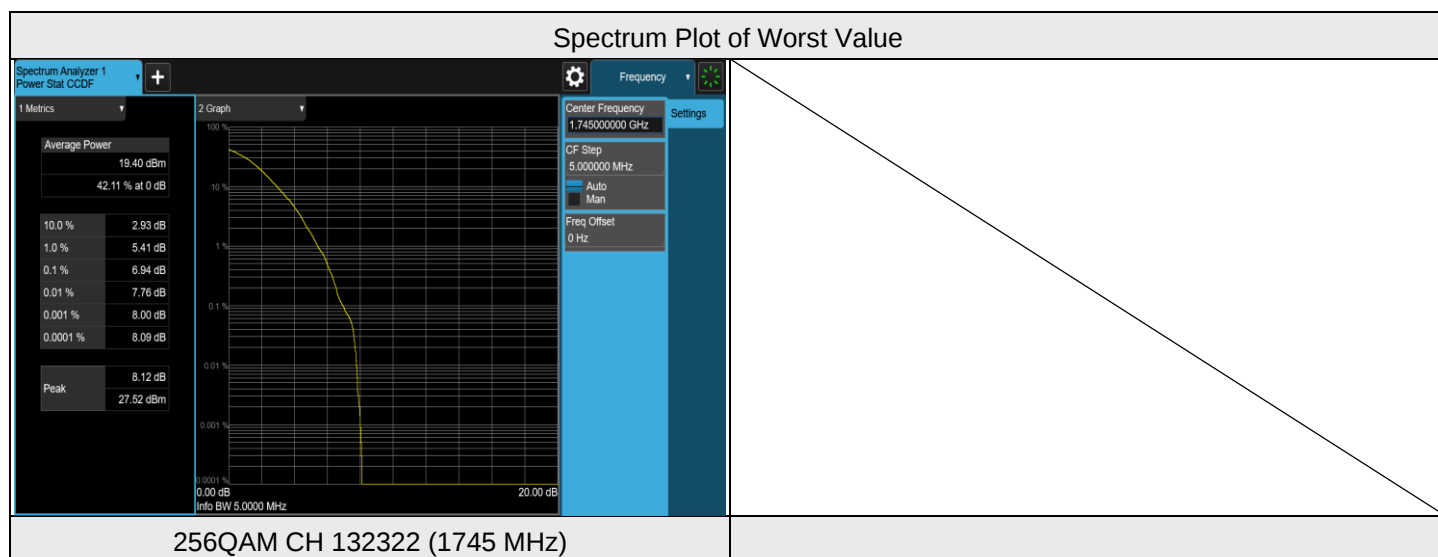
LTE Band 66, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	131979	1710.7	5.67	13	PASS
QPSK	132322	1745	5.88	13	PASS
QPSK	132665	1779.3	5.68	13	PASS
16QAM	131979	1710.7	6.56	13	PASS
16QAM	132322	1745	6.69	13	PASS
16QAM	132665	1779.3	6.58	13	PASS
64QAM	131979	1710.7	6.20	13	PASS
64QAM	132322	1745	6.69	13	PASS
64QAM	132665	1779.3	6.75	13	PASS
256QAM	131979	1710.7	6.76	13	PASS
256QAM	132322	1745	6.95	13	PASS
256QAM	132665	1779.3	6.94	13	PASS



LTE Band 66, Channel Bandwidth: 3 MHz

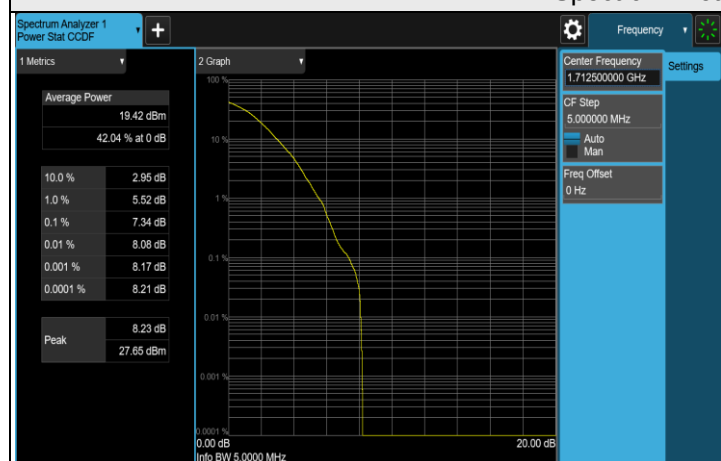
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\n(dB))	Result
QPSK	131987	1711.5	5.32	13	PASS
QPSK	132322	1745	5.44	13	PASS
QPSK	132657	1778.5	5.46	13	PASS
16QAM	131987	1711.5	6.32	13	PASS
16QAM	132322	1745	6.56	13	PASS
16QAM	132657	1778.5	6.43	13	PASS
64QAM	131987	1711.5	6.51	13	PASS
64QAM	132322	1745	6.75	13	PASS
64QAM	132657	1778.5	6.72	13	PASS
256QAM	131987	1711.5	6.82	13	PASS
256QAM	132322	1745	6.94	13	PASS
256QAM	132657	1778.5	6.90	13	PASS



LTE Band 66, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	131997	1712.5	5.33	13	PASS
QPSK	132322	1745	5.46	13	PASS
QPSK	132647	1777.5	5.39	13	PASS
16QAM	131997	1712.5	6.74	13	PASS
16QAM	132322	1745	6.64	13	PASS
16QAM	132647	1777.5	6.77	13	PASS
64QAM	131997	1712.5	6.54	13	PASS
64QAM	132322	1745	6.65	13	PASS
64QAM	132647	1777.5	6.68	13	PASS
256QAM	131997	1712.5	7.34	13	PASS
256QAM	132322	1745	6.83	13	PASS
256QAM	132647	1777.5	6.80	13	PASS

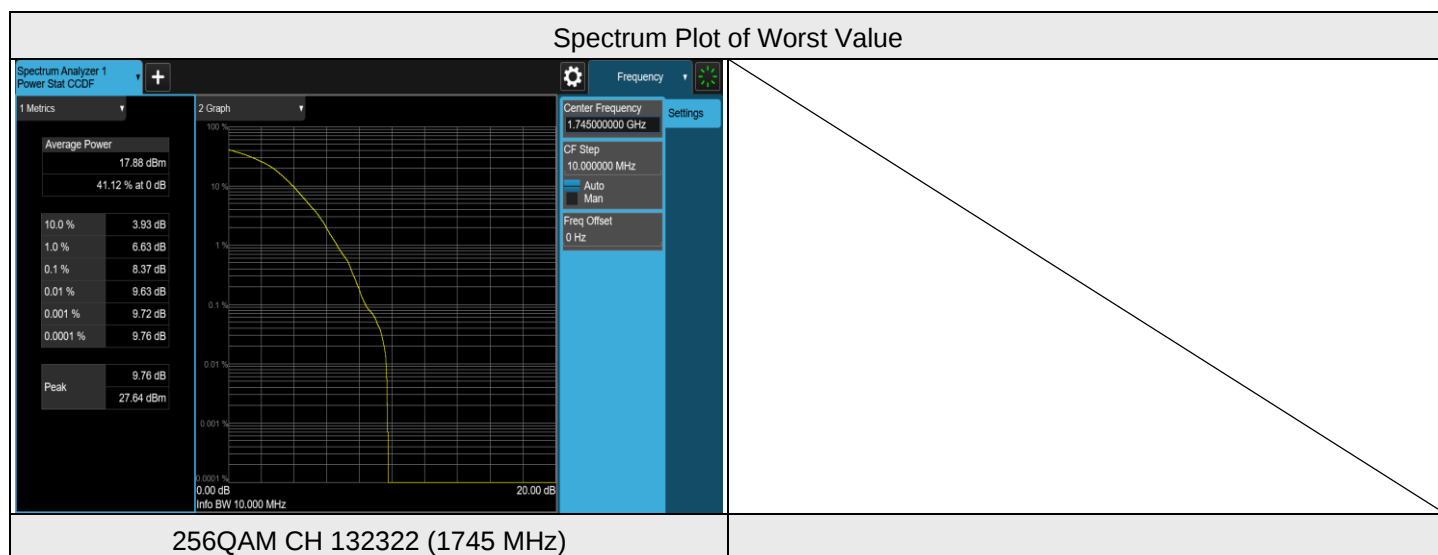
Spectrum Plot of Worst Value



256QAM CH 131997 (1712.5 MHz)

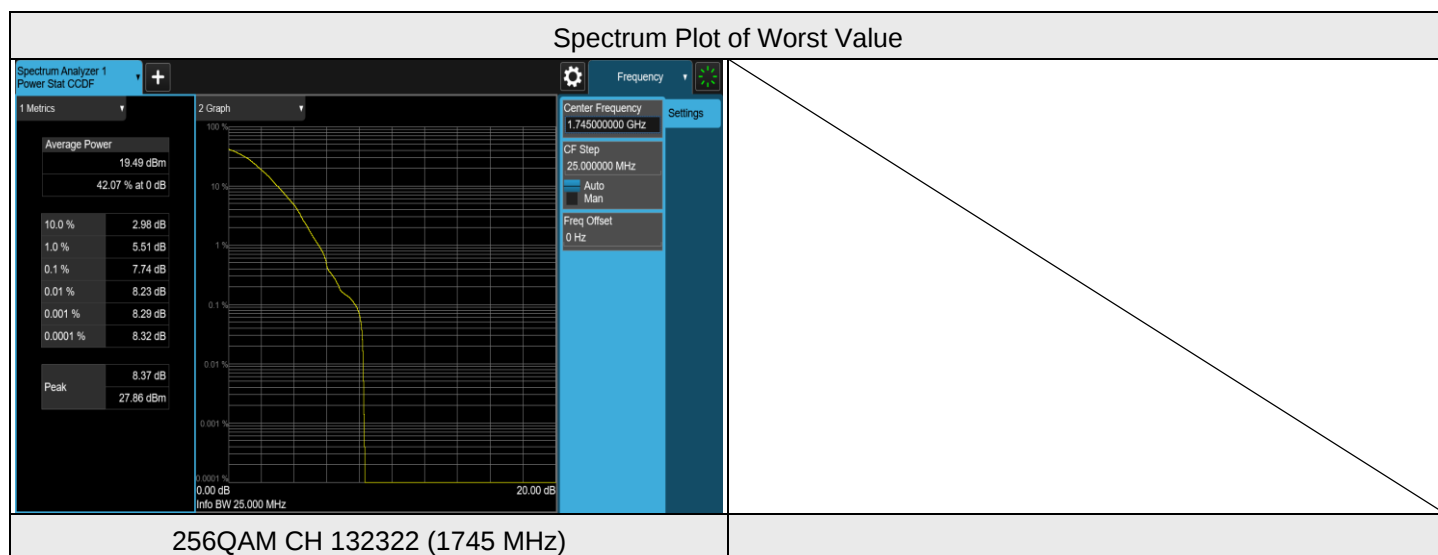
LTE Band 66, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	132022	1715	5.30	13	PASS
QPSK	132322	1745	5.47	13	PASS
QPSK	132622	1775	5.71	13	PASS
16QAM	132022	1715	6.76	13	PASS
16QAM	132322	1745	6.76	13	PASS
16QAM	132622	1775	6.41	13	PASS
64QAM	132022	1715	6.48	13	PASS
64QAM	132322	1745	6.64	13	PASS
64QAM	132622	1775	6.60	13	PASS
256QAM	132022	1715	7.32	13	PASS
256QAM	132322	1745	8.37	13	PASS
256QAM	132622	1775	7.07	13	PASS



LTE Band 66, Channel Bandwidth: 15 MHz

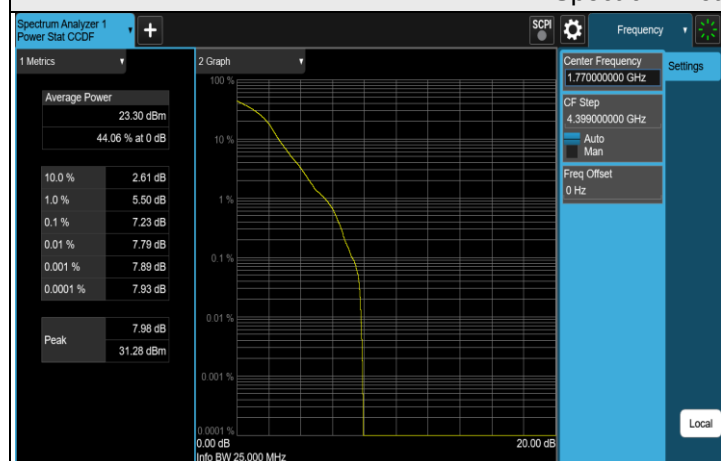
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	132047	1717.5	5.31	13	PASS
QPSK	132322	1745	5.40	13	PASS
QPSK	132597	1772.5	5.06	13	PASS
16QAM	132047	1717.5	6.32	13	PASS
16QAM	132322	1745	7.43	13	PASS
16QAM	132597	1772.5	6.04	13	PASS
64QAM	132047	1717.5	6.70	13	PASS
64QAM	132322	1745	6.74	13	PASS
64QAM	132597	1772.5	6.14	13	PASS
256QAM	132047	1717.5	6.36	13	PASS
256QAM	132322	1745	7.74	13	PASS
256QAM	132597	1772.5	6.82	13	PASS



LTE Band 66, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	132072	1720	5.72	13	PASS
QPSK	132322	1745	5.77	13	PASS
QPSK	132572	1770	5.77	13	PASS
16QAM	132072	1720	6.97	13	PASS
16QAM	132322	1745	7.16	13	PASS
16QAM	132572	1770	7.23	13	PASS
64QAM	132072	1720	6.83	13	PASS
64QAM	132322	1745	6.80	13	PASS
64QAM	132572	1770	6.76	13	PASS
256QAM	132072	1720	7.03	13	PASS
256QAM	132322	1745	6.80	13	PASS
256QAM	132572	1770	6.86	13	PASS

Spectrum Plot of Worst Value

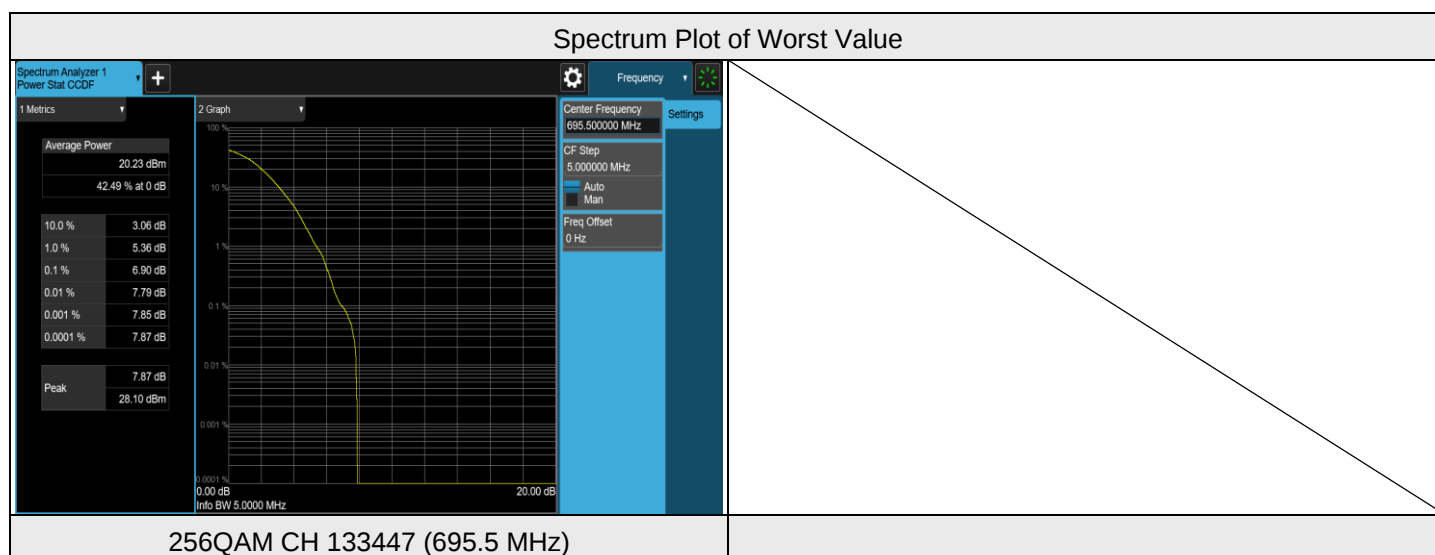


16QAM CH 132572 (1770 MHz)

7.3.12 LTE Band 71

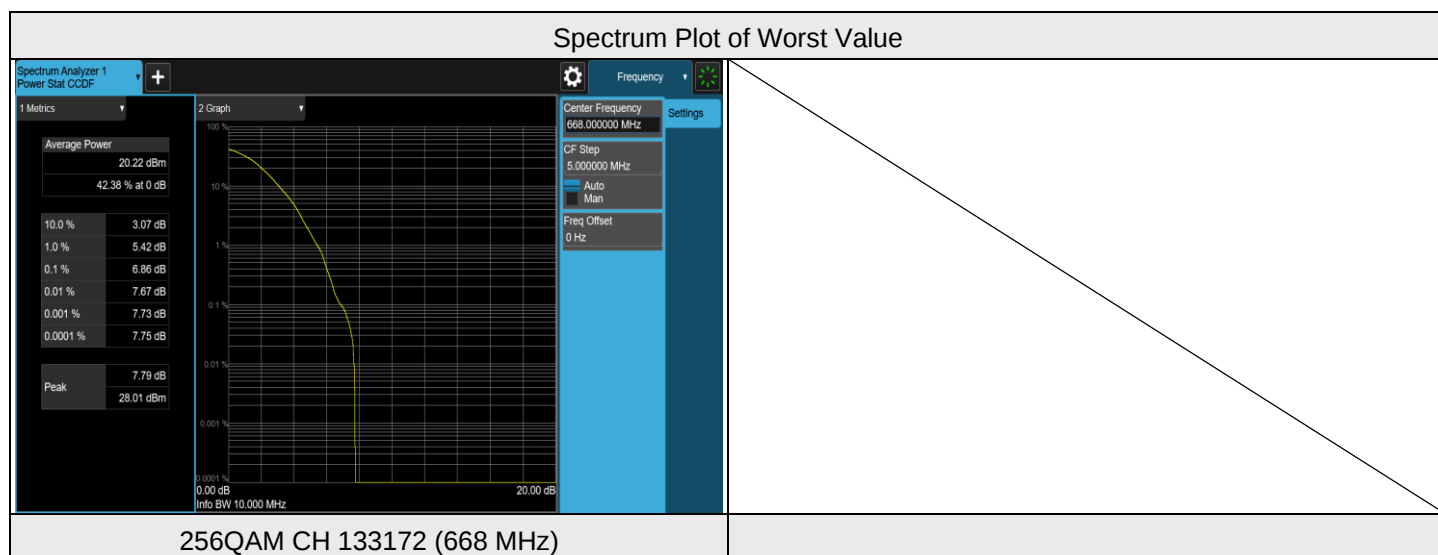
LTE Band 71, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	133147	665.5	4.59	13	PASS
QPSK	133297	680.5	4.39	13	PASS
QPSK	133447	695.5	4.39	13	PASS
16QAM	133147	665.5	5.61	13	PASS
16QAM	133297	680.5	5.47	13	PASS
16QAM	133447	695.5	5.44	13	PASS
64QAM	133147	665.5	5.93	13	PASS
64QAM	133297	680.5	5.86	13	PASS
64QAM	133447	695.5	5.96	13	PASS
256QAM	133147	665.5	6.69	13	PASS
256QAM	133297	680.5	6.69	13	PASS
256QAM	133447	695.5	6.90	13	PASS



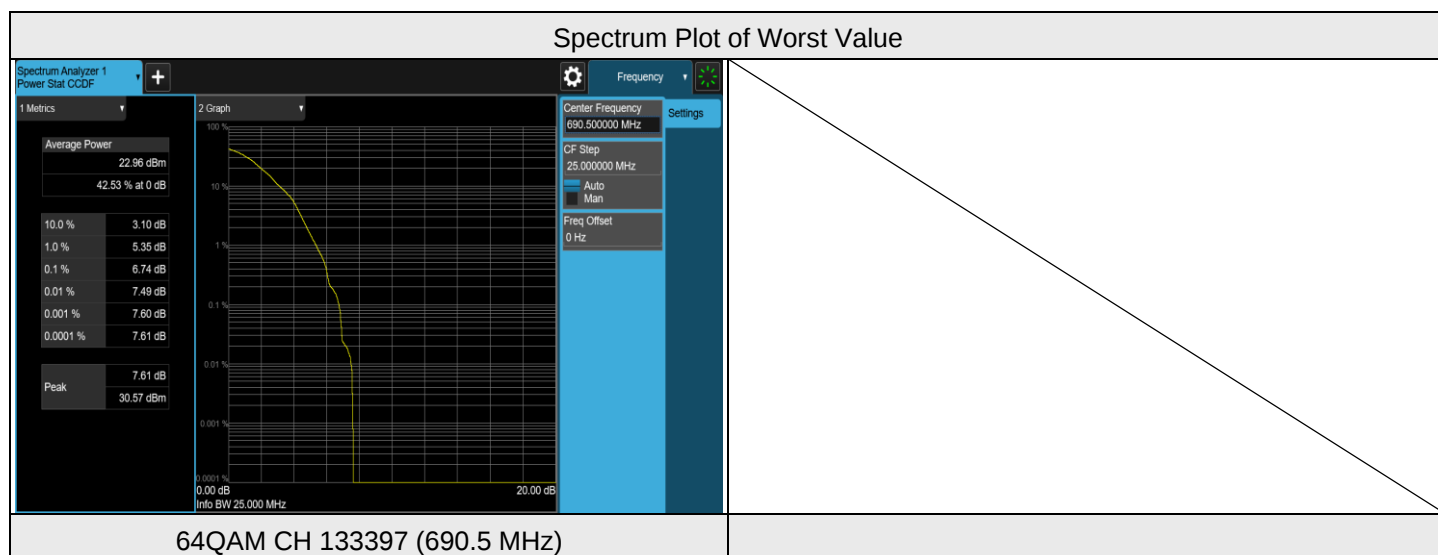
LTE Band 71, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	133172	668	4.65	13	PASS
QPSK	133297	680.5	4.21	13	PASS
QPSK	133422	693	4.35	13	PASS
16QAM	133172	668	5.57	13	PASS
16QAM	133297	680.5	5.28	13	PASS
16QAM	133422	693	5.47	13	PASS
64QAM	133172	668	5.95	13	PASS
64QAM	133297	680.5	5.73	13	PASS
64QAM	133422	693	5.93	13	PASS
256QAM	133172	668	6.86	13	PASS
256QAM	133297	680.5	6.50	13	PASS
256QAM	133422	693	6.74	13	PASS



LTE Band 71, Channel Bandwidth: 15 MHz

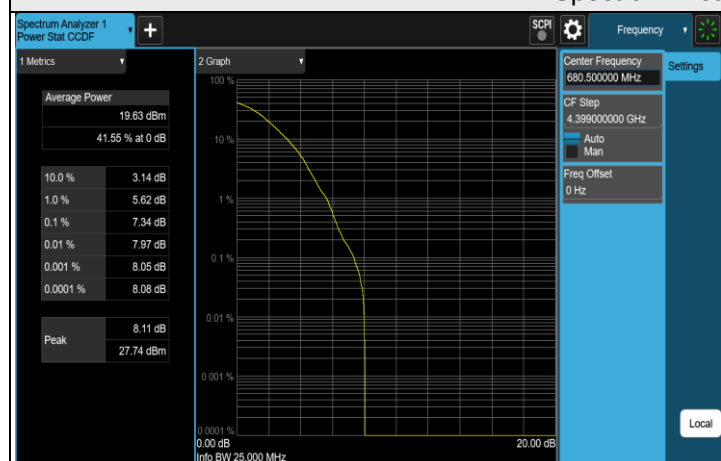
Modulation	Channel	Frequency (MHz)	Measurement Value((dB))	Limit (\\n(dB))	Result
QPSK	133197	670.5	4.54	13	PASS
QPSK	133297	680.5	4.29	13	PASS
QPSK	133397	690.5	4.97	13	PASS
16QAM	133197	670.5	5.35	13	PASS
16QAM	133297	680.5	5.21	13	PASS
16QAM	133397	690.5	5.97	13	PASS
64QAM	133197	670.5	5.85	13	PASS
64QAM	133297	680.5	5.78	13	PASS
64QAM	133397	690.5	6.74	13	PASS
256QAM	133197	670.5	6.39	13	PASS
256QAM	133297	680.5	6.30	13	PASS
256QAM	133397	690.5	6.56	13	PASS



LTE Band 71, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Measurement Value(dB)	Limit (dB)	Result
QPSK	133222	673	5.72	13	PASS
QPSK	133297	680.5	5.69	13	PASS
QPSK	133372	688	5.76	13	PASS
16QAM	133222	673	7.04	13	PASS
16QAM	133297	680.5	6.99	13	PASS
16QAM	133372	688	6.80	13	PASS
64QAM	133222	673	6.75	13	PASS
64QAM	133297	680.5	6.73	13	PASS
64QAM	133372	688	6.84	13	PASS
256QAM	133222	673	7.04	13	PASS
256QAM	133297	680.5	7.34	13	PASS
256QAM	133372	688	6.86	13	PASS

Spectrum Plot of Worst Value



256QAM CH 133297 (680.5 MHz)

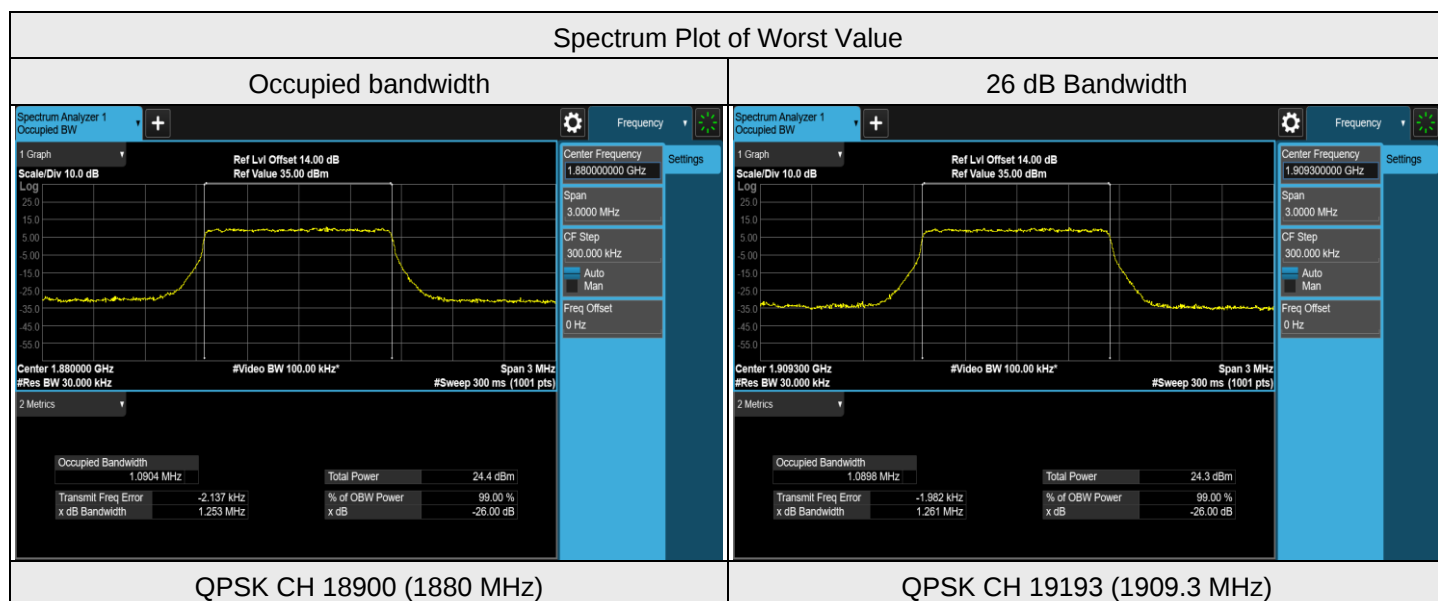
7.4 Bandwidth

Input Power:	4.7 Vdc	Environmental Conditions:	22°C, 73% RH	Tested By:	Willy Cheng
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7.4.1 LTE Band 2

LTE Band 2, Channel Bandwidth: 1.4 MHz

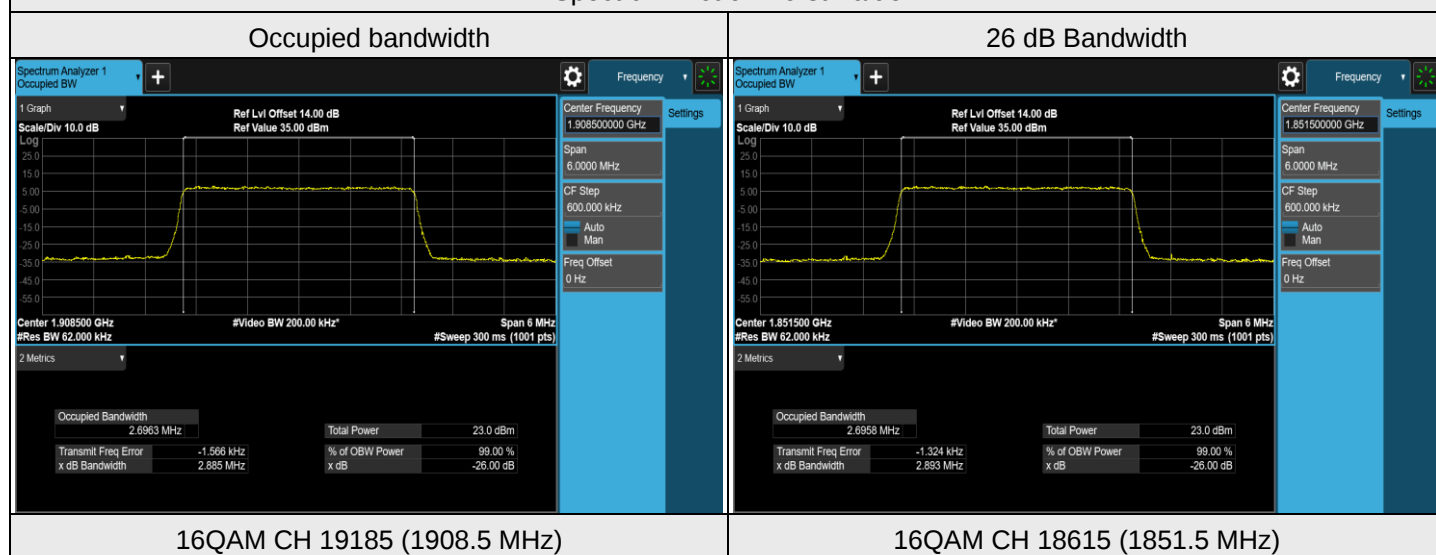
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	18607	1850.7	1.0848	1.248
QPSK	18900	1880	1.0904	1.253
QPSK	19193	1909.3	1.0898	1.261
16QAM	18607	1850.7	1.0874	1.243
16QAM	18900	1880	1.0877	1.246
16QAM	19193	1909.3	1.0884	1.253
64QAM	18607	1850.7	1.0891	1.255
64QAM	18900	1880	1.0894	1.251
64QAM	19193	1909.3	1.0897	1.252
256QAM	18607	1850.7	1.0840	1.241
256QAM	18900	1880	1.0848	1.240
256QAM	19193	1909.3	1.0843	1.231



LTE Band 2, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	18615	1851.5	2.6949	2.881
QPSK	18900	1880	2.6961	2.878
QPSK	19185	1908.5	2.6945	2.881
16QAM	18615	1851.5	2.6958	2.893
16QAM	18900	1880	2.6960	2.887
16QAM	19185	1908.5	2.6963	2.885
64QAM	18615	1851.5	2.6941	2.870
64QAM	18900	1880	2.6926	2.873
64QAM	19185	1908.5	2.6946	2.873
256QAM	18615	1851.5	2.6947	2.881
256QAM	18900	1880	2.6955	2.883
256QAM	19185	1908.5	2.6953	2.885

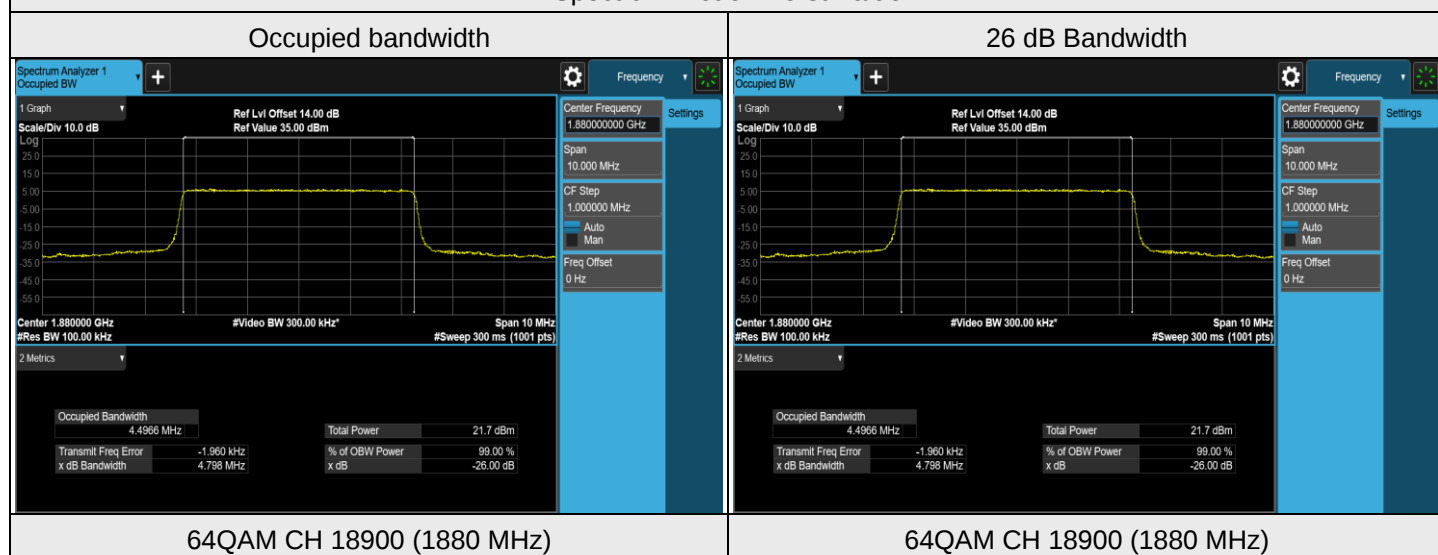
Spectrum Plot of Worst Value



LTE Band 2, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	18625	1852.5	4.4948	4.785
QPSK	18900	1880	4.4954	4.782
QPSK	19175	1907.5	4.4929	4.786
16QAM	18625	1852.5	4.4895	4.778
16QAM	18900	1880	4.4897	4.784
16QAM	19175	1907.5	4.4910	4.776
64QAM	18625	1852.5	4.4935	4.792
64QAM	18900	1880	4.4966	4.798
64QAM	19175	1907.5	4.4930	4.795
256QAM	18625	1852.5	4.4892	4.792
256QAM	18900	1880	4.4906	4.796
256QAM	19175	1907.5	4.4874	4.796

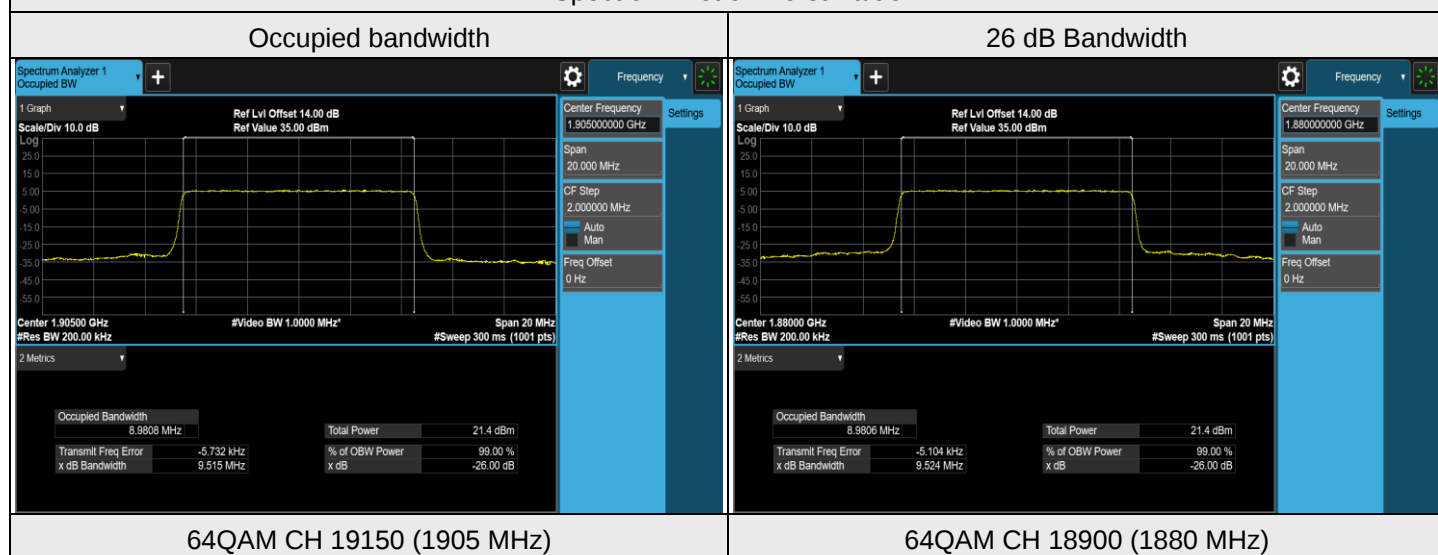
Spectrum Plot of Worst Value



LTE Band 2, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	18650	1855	8.9746	9.497
QPSK	18900	1880	8.9745	9.509
QPSK	19150	1905	8.9736	9.501
16QAM	18650	1855	8.9705	9.505
16QAM	18900	1880	8.9719	9.502
16QAM	19150	1905	8.9711	9.492
64QAM	18650	1855	8.9759	9.510
64QAM	18900	1880	8.9806	9.524
64QAM	19150	1905	8.9808	9.515
256QAM	18650	1855	8.9715	9.511
256QAM	18900	1880	8.9774	9.516
256QAM	19150	1905	8.9718	9.516

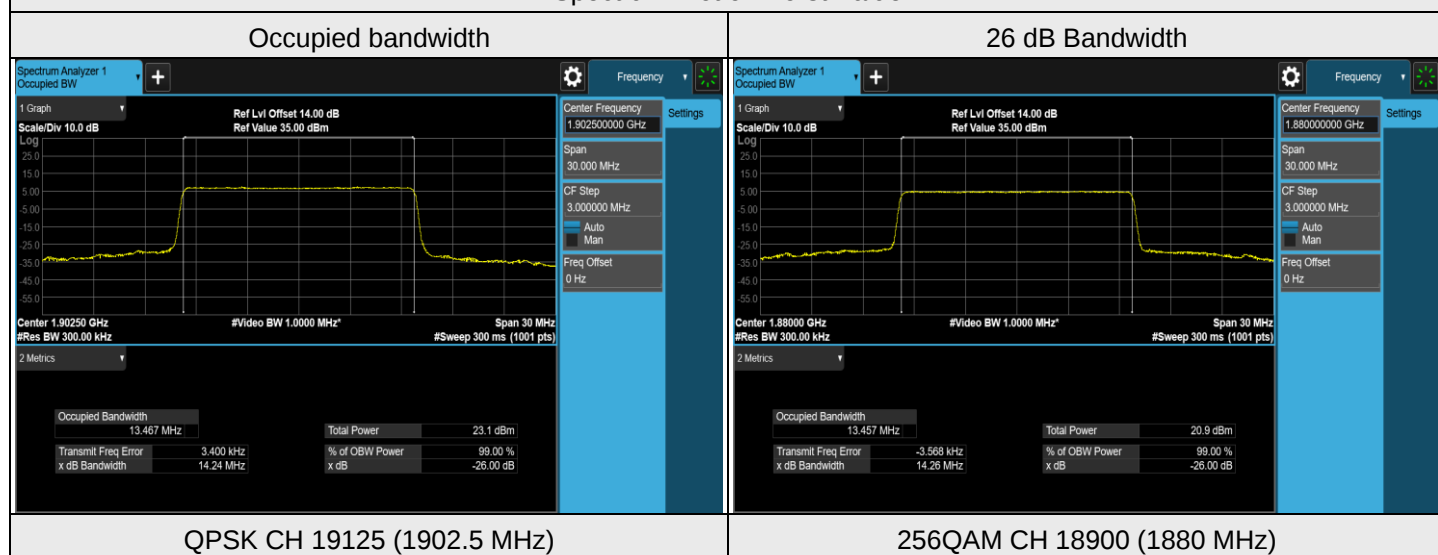
Spectrum Plot of Worst Value



LTE Band 2, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth ((MHz))	26 dB Bandwidth ((MHz))
QPSK	18675	1857.5	13.4617	14.232
QPSK	18900	1880	13.4557	14.232
QPSK	19125	1902.5	13.4674	14.237
16QAM	18675	1857.5	13.4574	14.244
16QAM	18900	1880	13.4533	14.225
16QAM	19125	1902.5	13.4563	14.230
64QAM	18675	1857.5	13.4526	14.237
64QAM	18900	1880	13.4567	14.238
64QAM	19125	1902.5	13.4551	14.238
256QAM	18675	1857.5	13.4584	14.247
256QAM	18900	1880	13.4570	14.259
256QAM	19125	1902.5	13.4636	14.243

Spectrum Plot of Worst Value



LTE Band 2, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	18700	1860	17.9351	19.025
QPSK	18900	1880	17.9407	19.037
QPSK	19100	1900	17.9587	19.062
16QAM	18700	1860	17.9563	19.028
16QAM	18900	1880	17.9541	19.027
16QAM	19100	1900	17.9746	19.056
64QAM	18700	1860	17.9504	19.037
64QAM	18900	1880	17.9527	19.029
64QAM	19100	1900	17.9602	19.055
256QAM	18700	1860	17.9526	19.029
256QAM	18900	1880	17.9586	19.039
256QAM	19100	1900	17.9531	19.042

Spectrum Plot of Worst Value

