FCC REPORT
(LTE)

Applicant:	Sun Cupid Technology (HK) Ltd.
Address of Applicant:	16/F, CEO Tower, 77 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong.

Equipment Under Test (EUT)

Product Name:	LTE Smart phone
Model No.:	S6003L, X6 Plus
Trade mark:	NUU
FCC ID:	2ADINS6003L
Applicable standards:	FCC CFR Title 47 Part 2 FCC CFR Title 47 Part 22 Subpart H FCC CFR Title 47 Part 24 Subpart E FCC CFR Title 47 Part 27 Subpart L FCC CFR Title 47 Part 27 Subpart H FCC CFR Title 47 Part 27 Subpart E FCC CFR Title 47 Part 27 Subpart N
Date of sample receipt:	12 May, 2020
Date of Test:	13 May, to 22 Jun., 2020
Date of report issued:	24 Jun., 2020
Test Result:	PASS*

*In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Bruce Zhang
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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2. Version

Version No.	Date	Description
00	*24 Jun., 2020*	*Original*

Tested by: ***Date:*** *24 Jun., 2020*

Test Engineer

Reviewed by: ***Date:*** *24 Jun., 2020*

Project Engineer

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4. Test Summary

Test Items	Section in CFR 47	Result
RF Exposure (SAR)	Part 1.1307 Part 2.1093	Passed (Please refer to SAR Report)
RF Output Power	Part 2.1046 Part 22.913 (a)(5) Part 24.232 (c) Part 27.50 (b)(10) Part 27.50 (c)(10) Part 27.50 (d)(4)	Pass
Peak-to-Average Ratio	Part 22.913 (d) Part 24.232 (d) Part 27.50 (d)(5)	Pass
Modulation Characteristics	Part 2.1047	Pass
99% & -26 dB Occupied Bandwidth	Part 2.1049 Part 22.917 (b) Part 24.238 (b) Part 27.53 (c) Part 27.53 (g) Part 27.53 (h)	Pass
Out of band emission at antenna terminals	Part 2.1053 Part 22.917(a) Part 24.238 (a) Part 27.53 (c) Part 27.53 (g) Part 27.53 (h)	Pass
Field strength of spurious radiation	Part 2.1053 Part 22.917(a) Part 24.238 (a) Part 27.53 (g) Part 27.53 (h) Part 27.53(m)	Pass
Frequency stability vs. temperature	Part 22.355 Part 24.235 Part 27.54 Part 2.1055(a)(1)(b)	Pass
Frequency stability vs. voltage	Part 22.355 Part 24.235 Part 27.54 Part 2.1055(d)(2)	Pass

Remark:

1. *Pass: The EUT complies with the essential requirements in the standard.*
2. *The cable insertion loss used by "RF Output Power" and other conduction measurement items is 0.5dB(Fundamental Frequency below 1GHz)/1.0dB(Fundamental Frequency above 1GHz) (provided by the customer).*

Test Method:	*ANSI/TIA-603-E-2016* *ANSI C63.26-2015*

5. General Information

5.1 Client Information

Applicant:	Sun Cupid Technology (HK) Ltd.
Address:	16/F, CEO Tower, 77 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong.
Manufacturer:	Sun Cupid Technology (HK) Ltd.
Address:	16/F, CEO Tower, 77 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong.
Factory:	SUNCUPID (ShenZhen) Electronic Ltd
Address:	Baolong Industrial City, Longgang District, Shenzhen Hi-Tech Road, Building 1, A 7, China.

5.2 General Description of E.U.T.

Product Name:	LTE Smart phone
Model No.:	S6003L, X6 Plus
Operation Frequency range:	LTE Band 2: TX: 1850MHz-1910MHz, RX: 1930MHz-1990MHz LTE Band 4: TX: 1710MHz-1755MHz, RX: 2110MHz-2155MHz LTE Band 5: TX :824MHz-849MHz, RX: 869MHz-894MHz LTE Band 12: TX: 699MHz-716MHz, RX: 729MHz-746MHz LTE Band 13: TX: 777MHz-787MHz, RX: 746MHz-756MHz LTE Band 17: TX: 704MHz-716MHz, RX: 734MHz-746MHz LTE Band 66: TX: 1710MHz-1780MHz, RX: 2110MHz-2200MHz LTE Band 71: TX: 663MHz-698MHz, RX: 617MHz-652MHz
Modulation type:	QPSK, 16QAM
Antenna type:	Internal Antenna
Antenna gain:	LTE Band 2: -1.0dBi LTE Band 4: 0dBi LTE Band 5: 0dBi LTE Band 12: -1.5dBi LTE Band 13: -1.0dBi LTE Band 17: -1.5dBi LTE Band 66: 0dBi LTE Band 71: -2.5dBi
Power supply:	Rechargeable Li-ion Polymer Battery DC3.8V, 3120mAh
AC adapter:	Model: A8A-050200U-US1 Input: AC100-240V, 50/60Hz, 0.35A Output: DC 5.0V, 2A
Remark:	Model No.: S6003L, X6 Plus, were identical inside, the electrical circuit design, layout, components used and internal wiring, with only difference being model name.
Test Sample Condition:	The applicant provided engineering samples for staying in continuously transmitting for testing.

Operation Frequency List:

LTE Band 2 (1.4MHz)		LTE Band 2 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18607	1850.70	18615	1851.50
18608	1850.80	18616	1851.60
….	….	….	….
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
…	…	…	…
19193	1909.20	19185	1908.40
19194	1909.30	19186	1908.50
LTE Band 2 (5MHz)		LTE Band 2 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18625	1852.50	18650	1855.00
18626	1852.60	18651	1855.10
….	….	….	….
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
…	…	…	…
19175	1907.40	19150	1904.90
19176	1907.50	19151	1905.00
LTE Band 2 (15MHz)		LTE Band 2 (20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18675	1857.50	18700	1860.00
18676	1857.60	18701	1860.10
….	….	….	….
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
…	…	…	…
19125	1902.40	19100	1899.90
19126	1902.50	19101	1900.00

LTE Band 4 (1.4MHz)		LTE Band 4 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
19957	1710.70	19965	1711.50
19958	1710.80	19966	1711.60
….	….	….	….
20174	1732.40	20174	1732.40
20175	1732.50	20175	1732.50
20176	1732.60	20176	1732.60
…	…	…	…
20392	1754.20	20384	1753.40
20393	1754.30	20385	1753.50
LTE Band 4 (5MHz)		LTE Band 4 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
19975	1712.50	20000	1715.00
19976	1712.60	20001	1715.10
….	….	….	….
20174	1732.40	20174	1732.40
20175	1732.50	20175	1732.50
20176	1732.60	20176	1732.60
…	…	…	…
20374	1752.40	20349	1749.90
20375	1752.50	20350	1750.00
LTE Band 4 (15MHz)		LTE Band 4 (20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20025	1717.50	20050	1720.00
20026	1717.60	20051	1720.10
….	….	….	….
20174	1732.40	20174	1732.40
20175	1732.50	20175	1732.50
20176	1732.60	20176	1732.60
…	…	…	…
20324	1747.40	20299	1744.90
20325	1747.50	20300	1745.00

LTE Band 5 (1.4MHz)		LTE Band 5 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20407	824.70	20415	825.50
20408	824.80	20416	825.60
….	….	….	….
20524	836.40	20524	836.40
20525	836.50	20525	836.50
20526	836.60	20526	836.60
…	…	…	…
20642	848.20	20634	847.40
20643	848.30	20635	847.50
LTE Band 5 (5MHz)		LTE Band 5 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20425	826.50	20450	829.00
20426	826.60	20451	829.10
….	….	….	….
20524	836.40	20524	836.40
20525	836.50	20525	836.50
20526	836.60	20526	836.60
…	…	…	…
20624	846.40	20599	839.90
20625	846.50	20600	844.00

LTE Band 12 (1.4MHz)		LTE Band 12 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23017	699.70	23025	700.50
23756	699.80	23026	700.60
….	….	….	….
23094	707.40	23094	707.40
23095	707.50	23095	707.50
23096	707.60	23096	707.60
…	…	…	…
23172	715.20	23164	714.40
23173	715.30	23165	714.50
LTE Band 12 (5MHz)		LTE Band 12 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23035	701.50	23060	704.00
23036	701.60	23061	704.10
….	….	….	….
23094	707.40	23094	707.40
23095	707.50	23095	707.50
23096	707.60	23096	707.60
…	…	…	…
23154	713.40	23129	710.90
23155	713.50	23130	711.00

LTE Band 13 (5MHz)		LTE Band 13 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23205	779.50	/	/
23206	779.60	/	/
….	….	/	/
23229	781.90	/	/
23230	782.00	23230	782.00
23231	782.10	/	/
…	…	/	/
23255	784.50	/	/
23256	784.60	/	/

LTE Band 17 (5MHz)		LTE Band 17 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23755	706.50	23780	709.00
23756	706.60	23781	709.10
….	….	….	….
23789	709.90	23789	709.90
23790	710.00	23790	710.00
23791	710.10	23791	710.10
…	…	…	…
23824	713.40	23799	710.90
23825	713.50	23800	711.00

LTE Band 66 (1.4MHz)		LTE Band 66 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
131979	1710.70	131987	1711.50
131980	1710.80	131988	1711.60
….	….	….	….
132321	1744.90	132321	1744.90
132322	1745.00	132322	1745.00
132323	1745.10	132323	1745.10
…	…	…	…
132664	1779.20	132656	1778.40
132665	1779.30	132657	1778.50
LTE Band 66 (5MHz)		LTE Band 66 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
131997	1712.50	132022	1715.00
131998	1712.60	132023	1715.10
….	….	….	….
132321	1744.90	132321	1744.90
132322	1745.00	132322	1745.00
132323	1745.10	132323	1745.10
…	…	…	…
136246	1777.40	132621	1774.90
136247	1777.50	132622	1775.00
LTE Band 66 (15MHz)		LTE Band 66 (20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
132047	1717.50	132072	1720.00
132048	1717.60	132073	1720.10
….	….	….	….
132321	1744.90	132321	1744.90
132322	1745.00	132322	1745.00
132323	1745.10	132323	1745.10
…	…	…	…
132596	1772.40	132571	1769.90
132597	1772.50	132572	1770.00

LTE Band 71 (5MHz)		LTE Band 71 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
133147	665.50	133172	668.00
133148	665.60	133173	668.10
….	….	….	….
133296	680.40	133296	680.40
133297	680.50	133297	680.50
133298	680.60	133298	680.60
…	…	…	…
133446	695.40	133421	692.90
133447	695.50	133422	693.00
LTE Band 71 (15MHz)		LTE Band 71 (20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
133197	670.50	133222	673.00
133198	670.60	133223	673.10
….	….	….	….
133296	680.40	133321	682.90
133297	680.50	133322	683.00
133298	680.60	133323	683.10
…	…	…	…
133396	690.40	133371	687.90
133397	690.50	133372	688.00

Regards to the operating frequency range, the lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channels as below:

LTE Band 2 (1.4MHz)			LTE Band 2 (3MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	18607	1850.70	Lowest channel	18615	1851.50
Middle channel	18900	1880.00	Middle channel	18900	1880.00
Highest channel	19193	1909.30	Highest channel	19185	1908.50
LTE Band 2 (5MHz)			LTE Band 2 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	18625	1852.50	Lowest channel	18650	1855.00
Middle channel	18900	1880.00	Middle channel	18900	1880.00
Highest channel	19175	1907.50	Highest channel	19150	1905.00
LTE Band 2 (15MHz)			LTE Band 2 (20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	18675	1857.50	Lowest channel	18700	1860.00
Middle channel	18900	1880.00	Middle channel	18900	1880.00
Highest channel	19125	1902.50	Highest channel	19100	1900.00

LTE Band 4 (1.4MHz)			LTE Band 4 (3MHz)		
Channel:		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	19957	1710.70	Lowest channel	19965	1711.50
Middle channel	20175	1732.50	Middle channel	20175	1732.50
Highest channel	20393	1754.30	Highest channel	20385	1753.50
LTE Band 4 (5MHz)			LTE Band 4 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	19975	1712.50	Lowest channel	20000	1715.00
Middle channel	20175	1732.50	Middle channel	20175	1732.50
Highest channel	20375	1752.50	Highest channel	20350	1750.00
LTE Band 4 (15MHz)			LTE Band 4 (20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	20025	1717.50	Lowest channel	20050	1720.00
Middle channel	20175	1732.50	Middle channel	20175	1732.50
Highest channel	20325	1747.50	Highest channel	20300	1745.00

LTE Band 5 (1.4MHz)			LTE Band 5 (3MHz)		
Channel:		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	20407	824.70	Lowest channel	20415	825.50
Middle channel	20525	836.50	Middle channel	20525	836.50
Highest channel	20643	848.30	Highest channel	20635	847.50
LTE Band 5 (5MHz)			LTE Band 5 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	20425	826.50	Lowest channel	20450	829.00
Middle channel	20525	836.50	Middle channel	20525	836.50
Highest channel	20625	846.50	Highest channel	20600	844.00

LTE Band 12(1.4MHz)			LTE Band 12(3MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	23017	699.70	Lowest channel	23025	700.50
Middle channel	23095	707.50	Middle channel	23095	707.50
Highest channel	23173	715.30	Highest channel	23165	714.50
LTE Band 12(5MHz)			LTE Band 12(10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	23035	701.50	Lowest channel	23060	704.00
Middle channel	23095	707.50	Middle channel	23095	707.50
Highest channel	23155	713.50	Highest channel	23130	711.00

LTE Band 13(5MHz)			LTE Band 13(10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	23205	779.5	Lowest channel	/	/
Middle channel	23230	782.0	Middle channel	23230	782.00
Highest channel	23255	784.5	Highest channel	/	/

LTE Band 17(5MHz)			LTE Band 17(10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	23755	706.50	Lowest channel	23780	709.00
Middle channel	23790	710.00	Middle channel	23790	710.00
Highest channel	23825	713.50	Highest channel	23800	711.00

LTE Band 66 (1.4MHz)			LTE Band 66 (3MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	131979	1710.7	Lowest channel	131987	1711.5
Middle channel	132322	1745.0	Middle channel	132322	1745.0
Highest channel	132665	1779.3	Highest channel	132657	1778.5
LTE Band 66 (5MHz)			LTE Band 66 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	131997	1712.5	Lowest channel	132022	1715.0
Middle channel	132322	1745.5	Middle channel	132322	1745.0
Highest channel	132647	1777.5	Highest channel	132622	1775.0
LTE Band 66 (15MHz)			LTE Band 66 (20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	132047	1717.5	Lowest channel	132072	1720.0
Middle channel	132322	1745.0	Middle channel	132322	1745.0
Highest channel	132597	1772.5	Highest channel	132572	1770.0

LTE Band 71 (5MHz)			LTE Band 71 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	133147	665.5	Lowest channel	133172	668.0
Middle channel	133297	680.5	Middle channel	133297	680.5
Highest channel	133447	695.5	Highest channel	133422	693.0
LTE Band 71 (15MHz)			LTE Band 71 (20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	133197	670.5	Lowest channel	133222	673.0
Middle channel	133297	680.5	Middle channel	133322	683.0
Highest channel	133397	690.5	Highest channel	133372	688.0

5.3 Test environment and mode

Operating Environment:	
Temperature:	Normal: 15℃ ~ 35℃, Extreme: -30℃ ~ +50℃
Humidity:	20 % ~ 75 % RH
Atmospheric Pressure:	1008 mbar
Voltage:	Nominal: 3.8Vdc, Extreme: Low 3.5Vdc, High 4.35Vdc
Test mode:	
LTE QPSK mode	Keep the EUT communication with simulated station in QPSK mode
LTE 16-QAM mode	Keep the EUT communication with simulated station in 16-QAM mode
Remark: The EUT has been tested under continuous transmitting mode. Channel Low, Mid and High for each type band with rated data rate were chosen for full testing. The field strength of spurious radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for these modes. Just the worst case position (H mode) shown in report.	

5.4 Description of Support Units

Test Equipment	Manufacturer	Model No.	Serial No.
Simulated Station	Anritsu	MT8820C	6201026545

5.5 Measurement Uncertainty

Parameters	Expanded Uncertainty
Radiated Emission (9kHz ~ 30MHz)	±3.12 dB (k=2)
Radiated Emission (30MHz ~ 1000MHz)	±4.32 dB (k=2)
Radiated Emission (1GHz ~ 18GHz)	±5.16 dB (k=2)
Radiated Emission (18GHz ~ 40GHz)	±3.20 dB (k=2)

5.6 Related Submittal(s) / Grant (s)

This is an original grant, no related submittals and grants.

5.7 Additions to, deviations, or exclusions from the method

No

5.8 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC - Designation No.: CN1211**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been accredited as a testing laboratory by FCC (Federal Communications Commission). The test firm Registration No. is 727551.

- **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: https://portal.a2la.org/scopepdf/4346-01.pdf

5.9 Laboratory Location

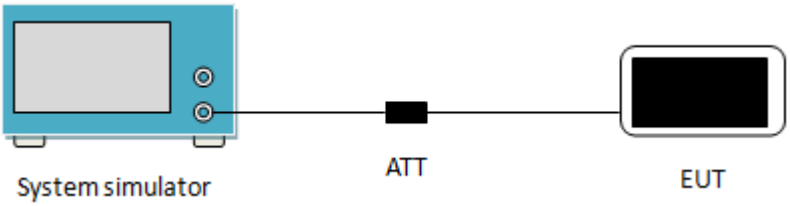
Shenzhen Zhongjian Nanfang Testing Co., Ltd.
Address: No.110~116, Building B, Jinyuan Business Building, Xixiang Road, Bao'an District, Shenzhen, Guangdong, China
Tel: +86-755-23118282, Fax: +86-755-23116366
Email: info@ccis-cb.com, Website: http://www.ccis-cb.com

5.10 Test Instruments list

Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
3m SAC	SAEMC	9m*6m*6m	966	07-22-2017	07-21-2020
BiConiLog Antenna	SCHWARZBECK	VULB9163	497	03-18-2020	03-17-2021
Biconical Antenna	SCHWARZBECK	VUBA9117	359	06-22-2017	06-21-2020
Horn Antenna	SCHWARZBECK	BBHA9120D	916	03-07-2020	03-06-2021
Horn Antenna	SCHWARZBECK	BBHA9120D	1805	06-22-2017	06-21-2020
				06-19-2020	06-20-2021
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170582	11-18-2019	11-17-2020
EMI Test Software	AUDIX	E3	Version: 6.110919b		
Pre-amplifier	HP	8447D	2944A09358	03-07-2020	03-06-2021
Pre-amplifier	CD	PAP-1G18	11804	03-07-2020	03-06-2021
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-05-2020	03-04-2021
Spectrum analyzer	Rohde & Schwarz	FSP40	100363	11-18-2019	11-17-2020
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-05-2020	03-04-2021
Spectrum Analyzer	Agilent	N9020A	MY50510123	11-18-2019	11-17-2020
Signal Generator	Rohde & Schwarz	SMX	835454/016	03-05-2020	03-04-2021
Signal Generator	R&S	SMR20	1008100050	03-05-2020	03-04-2021
RF Switch Unit	MWRFTEST	MW200	N/A	N/A	N/A
Test Software	MWRFTEST	MTS8200	Version: 2.0.0.0		
Cable	ZDECL	Z108-NJ-NJ-81	1608458	03-07-2020	03-06-2021
Cable	MICRO-COAX	MFR64639	K10742-5	03-07-2020	03-06-2021
Cable	SUHNER	SUCOFLEX100	58193/4PE	03-07-2020	03-06-2021
DC Power Supply	XinNuoEr	WYK-10020K	1409050110020	09-25-2019	09-24-2020
Temperature Humidity Chamber	HengPu	HPGDS-500	20140828008	11-01-2019	11-31-2020
Simulated Station	Rohde & Schwarz	CMW500	140493	07-22-2019	07-21-2020

6. Test results

6.1 Conducted Output Power, ERP and EIRP

Test Requirement:	Part 22.913(a)(5), Part 24.232(c), part 27.50(b)(10), part 27.50(c)(10), Part 27.50(d)(4)
Limit:	LTE Band 2: 2W, LTE Band 4: 1W, LTE Band 5: 7W, LTE Band 12: 3W, LTE Band 13: 3W, LTE Band 17: 3W, LTE Band 66: 1W, LTE Band 71: 3W
Test Setup:	
Test Procedure:	The transmitter output was connected to a calibrated attenuator, the other end of which was connected to the CMW500. Transmitter output power was read off in dBm.
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data:

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					18607	18900	19193
					1850.7MHz	1880.0MHz	1909.3MHz
2	1.4	QPSK	1	0	23.63	23.59	23.65
			1	2	23.79	23.73	23.76
			1	5	23.75	23.60	23.70
			3	0	22.86	22.61	22.72
			3	1	22.87	22.67	22.92
			3	2	22.86	22.74	22.75
			6	0	22.88	22.78	22.84
		Antenna Gain (dBi):			-1.0		
		Max. EIRP (dBm):			22.79		
		EIRP Limit (dBm):			33.00		
		16QAM	1	0	22.97	22.81	22.76
			1	2	22.81	22.84	22.87
			1	5	22.72	22.97	22.77
			3	0	21.73	21.81	21.78
			3	1	21.83	21.84	21.88
			3	2	21.79	21.75	21.71
			6	0	21.77	21.83	21.94
		Antenna Gain (dBi):			-1.0		
		Max. EIRP (dBm):			21.97		
		EIRP Limit (dBm):			33.00		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					18615	18900	19185
					1851.5MHz	1880.0MHz	1908.5MHz
2	3	QPSK	1	0	23.64	23.63	23.72
			1	7	23.66	23.64	23.67
			1	14	23.76	23.66	23.69
			8	0	22.77	22.60	22.69
			8	4	22.76	22.75	22.72
			8	7	22.71	22.71	22.82
			15	0	22.69	22.70	22.74
		Antenna Gain (dBi):			-1.0		
		Max. EIRP (dBm):			22.76		
		EIRP Limit (dBm):			33.00		
		16QAM	1	0	22.70	22.79	22.78
			1	7	22.75	22.68	22.85
			1	14	22.97	22.67	22.65
			8	0	21.72	21.70	21.61
			8	4	21.64	21.67	21.84
			8	7	21.74	21.64	21.75
			15	0	21.76	21.76	21.77
		Antenna Gain (dBi):			-1.0		
		Max. EIRP (dBm):			21.97		
		EIRP Limit (dBm):			33.00		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					18625	18900	19175
					1852.5MHz	1880.0MHz	1907.5MHz
2	5	QPSK	1	0	23.74	23.66	23.57
			1	12	23.81	23.79	23.73
			1	24	23.60	23.62	23.84
			12	0	22.84	22.78	22.85
			12	6	22.87	22.82	22.88
			12	11	22.82	22.83	22.76
			25	0	22.76	22.80	22.88
		Antenna Gain (dBi):			-1.0		
		Max. EIRP (dBm):			22.84		
		EIRP Limit (dBm):			33.00		
		16QAM	1	0	23.05	23.14	23.04
			1	12	23.13	23.18	23.17
			1	24	23.01	23.03	23.01
			12	0	21.68	21.86	21.89
			12	6	21.82	21.92	21.80
			12	11	21.65	21.81	21.79
			25	0	21.71	21.80	21.84
		Antenna Gain (dBi):			-1.0		
		Max. EIRP (dBm):			22.18		
		EIRP Limit (dBm):			33.00		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					18650	18900	19150
					1855.0MHz	1880.0MHz	1905.0MHz
2	10	QPSK	1	0	23.78	23.88	23.72
			1	24	23.94	23.98	23.79
			1	49	23.62	23.78	23.81
			25	0	22.92	22.96	23.10
			25	12	22.87	22.87	23.06
			25	24	22.98	22.92	23.00
			50	0	22.95	22.89	22.99
		Antenna Gain (dBi):			-1.0		
		Max. EIRP (dBm):			22.98		
		EIRP Limit (dBm):			33.00		
		16QAM	1	0	23.24	23.19	22.89
			1	24	23.26	23.01	23.08
			1	49	23.08	23.14	23.06
			25	0	21.97	22.00	22.04
			25	12	21.87	21.99	21.92
			25	24	21.86	22.03	21.94
			50	0	21.91	21.90	21.89
		Antenna Gain (dBi):			-1.0		
		Max. EIRP (dBm):			22.26		
		EIRP Limit (dBm):			33.00		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					18675	18900	19125
					1857.5MHz	1880.0MHz	1902.5MHz
2	15	QPSK	1	0	23.61	23.54	23.59
			1	37	23.68	23.62	23.74
			1	74	23.56	23.58	23.63
			36	0	22.75	22.77	22.66
			36	16	22.77	22.79	22.90
			36	35	22.78	22.91	22.80
			75	0	22.75	22.82	22.81
		Antenna Gain (dBi):			-1.0		
		Max. EIRP (dBm):			22.74		
		EIRP Limit (dBm):			33.00		
		16QAM	1	0	22.83	22.80	22.86
			1	37	22.85	22.86	22.78
			1	74	22.68	22.71	22.84
			36	0	21.63	21.78	21.73
			36	16	21.77	21.72	21.72
			36	35	21.71	21.69	21.68
			75	0	21.85	21.88	21.76
		Antenna Gain (dBi):			-1.0		
		Max. EIRP (dBm):			21.86		
		EIRP Limit (dBm):			33.00		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					18700	18900	19100
					1860.0MHz	1880.0MHz	1900.0MHz
2	20	QPSK	1	0	23.45	23.46	23.47
			1	49	23.60	23.86	23.68
			1	99	23.36	23.39	23.43
			50	0	22.81	22.81	22.83
			50	24	22.76	22.75	22.89
			50	49	22.75	22.71	22.67
			100	0	22.93	22.83	22.81
		Antenna Gain (dBi):			-1.0		
		Max. EIRP (dBm):			22.86		
		EIRP Limit (dBm):			33.00		
		16QAM	1	0	22.60	22.85	22.72
			1	49	22.54	22.72	22.69
			1	99	22.56	22.68	22.50
			50	0	21.71	21.89	21.89
			50	24	21.84	21.75	21.84
			50	49	21.80	21.87	21.71
			100	0	21.82	21.82	21.87
		Antenna Gain (dBi):			-1.0		
		Max. EIRP (dBm):			21.85		
		EIRP Limit (dBm):			33.00		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					19957	20175	20393
					1710.7MHz	1732.5MHz	1754.3MHz
4	1.4	QPSK	1	0	23.52	23.48	23.55
			1	2	23.65	23.59	23.59
			1	5	23.71	23.47	23.50
			3	0	22.62	22.55	22.72
			3	1	22.67	22.74	22.72
			3	2	22.76	22.81	22.83
			6	0	22.83	22.65	22.77
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.71		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	22.63	22.73	22.63
			1	2	22.87	22.76	22.80
			1	5	22.85	22.70	22.70
			3	0	21.51	21.73	21.64
			3	1	21.45	21.62	21.67
			3	2	21.54	21.84	21.45
			6	0	21.68	21.78	21.71
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			22.87		
		EIRP Limit (dBm):			30.00		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					19965	20175	20385
					1711.5MHz	1732.5MHz	1753.5MHz
4	3	QPSK	1	0	23.68	23.54	23.47
			1	7	23.47	23.49	23.63
			1	14	23.48	23.54	23.70
			8	0	22.62	22.67	22.59
			8	4	22.58	22.73	22.69
			8	7	22.65	22.63	22.47
			15	0	22.63	22.54	22.66
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.70		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	22.83	22.95	22.83
			1	7	22.77	22.74	22.72
			1	14	22.45	22.71	22.64
			8	0	21.73	21.60	21.87
			8	4	21.53	21.79	21.70
			8	7	21.48	21.62	21.66
			15	0	21.55	21.58	21.67
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			22.95		
		EIRP Limit (dBm):			30.00		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					19975	20175	20375
					1712.5MHz	1732.5MHz	1752.5MHz
4	5	QPSK	1	0	23.62	23.68	23.59
			1	12	23.66	23.65	23.65
			1	24	23.61	23.62	23.50
			12	0	22.70	22.76	22.72
			12	6	22.85	22.77	22.81
			12	11	22.66	22.65	22.77
			25	0	22.81	22.70	22.71
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.68		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	22.83	23.06	22.66
			1	12	22.66	22.82	22.69
			1	24	22.50	22.73	22.67
			12	0	21.61	21.76	21.81
			12	6	21.68	21.80	21.68
			12	11	21.60	21.69	21.72
			25	0	21.54	21.76	21.83
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.06		
		EIRP Limit (dBm):			30.00		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					20000	20175	20350
					1715.0MHz	1732.5MHz	1750.0MHz
4	10	QPSK	1	0	23.62	23.69	23.52
			1	24	23.63	23.60	23.67
			1	49	23.59	23.56	23.62
			25	0	22.84	22.86	23.03
			25	12	22.90	22.87	22.91
			25	24	22.87	22.93	23.01
			50	0	22.96	22.91	22.78
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.69		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	23.06	23.05	23.10
			1	24	23.03	23.05	23.12
			1	49	23.01	23.14	23.04
			25	0	21.97	21.91	21.98
			25	12	21.89	21.85	22.00
			25	24	21.81	21.92	21.84
			50	0	21.84	21.86	21.94
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.14		
		EIRP Limit (dBm):			30.00		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					20025	20175	20325
					1717.5MHz	1732.5MHz	1747.5MHz
4	15	QPSK	1	0	23.43	23.60	23.54
			1	37	23.54	23.71	23.69
			1	74	23.53	23.35	23.43
			36	0	22.56	22.67	22.77
			36	16	22.62	22.66	22.72
			36	35	22.65	22.60	22.75
			75	0	22.64	22.67	22.75
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.71		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	22.66	22.79	22.71
			1	37	22.71	22.74	22.82
			1	74	22.71	22.73	22.64
			36	0	21.49	21.74	21.77
			36	16	21.66	21.73	21.75
			36	35	21.68	21.66	21.63
			75	0	21.62	21.71	21.77
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			22.82		
		EIRP Limit (dBm):			30.00		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					20050	20175	20300
					1720.0MHz	1732.5MHz	1745.0MHz
4	20	QPSK	1	0	23.25	23.37	23.44
			1	49	23.54	23.59	23.51
			1	99	23.16	23.15	23.21
			50	0	22.63	22.79	22.87
			50	24	22.92	22.67	22.77
			50	49	22.72	22.60	22.71
			100	0	22.64	22.71	22.76
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.59		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	22.55	22.26	22.74
			1	49	22.97	22.99	22.78
			1	99	22.94	22.81	22.56
			50	0	21.76	21.79	21.75
			50	24	21.65	21.89	21.81
			50	49	21.79	21.64	21.67
			100	0	21.70	21.77	21.68
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			22.99		
		EIRP Limit (dBm):			30.00		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					20407	20525	20643
					824.7MHz	836.5MHz	848.3MHz
5	1.4	QPSK	1	0	23.52	23.66	23.46
			1	2	23.81	23.55	23.59
			1	5	23.56	23.72	23.50
			3	0	22.61	22.62	22.52
			3	1	22.67	22.66	22.64
			3	2	22.76	22.60	22.66
			6	0	22.72	22.71	22.65
		Antenna Gain(dBi):			0		
		Max. ERP (dBm):			21.66		
		ERP Limit (dBm):			38.45		
		16QAM	1	0	22.96	22.62	22.60
			1	2	22.63	22.75	22.84
			1	5	22.67	22.65	22.66
			3	0	21.57	21.50	21.53
			3	1	21.65	21.78	21.70
			3	2	21.62	21.52	21.55
			6	0	21.76	21.73	21.64
		Antenna Gain(dBi):			0		
		Max. ERP (dBm):			20.81		
		ERP Limit (dBm):			38.45		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					20415	20525	20635
					825.5MHz	836.5MHz	847.50MHz
5	3	QPSK	1	0	23.57	23.45	23.46
			1	7	23.48	23.46	23.40
			1	14	23.49	23.54	23.54
			8	0	22.53	22.58	22.56
			8	4	22.55	22.61	22.63
			8	7	22.53	22.58	22.54
			15	0	22.56	22.52	22.56
		Antenna Gain(dBi):			0		
		Max. ERP (dBm):			21.42		
		ERP Limit (dBm):			38.45		
		16QAM	1	0	22.83	22.92	22.54
			1	7	22.93	22.97	22.60
			1	14	22.51	22.67	22.49
			8	0	21.77	21.63	21.75
			8	4	21.67	21.74	21.52
			8	7	21.58	21.64	21.44
			15	0	21.54	21.54	21.57
		Antenna Gain(dBi):			00		
		Max. ERP (dBm):			20.82		
		ERP Limit (dBm):			38.45		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).
ERP (dBm) = EIRP (dBm) - 2.15 (dB).

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					20425	20525	20625
					826.5MHz	836.5MHz	846.5MHz
5	5	QPSK	1	0	23.42	23.44	23.40
			1	12	23.64	23.65	23.59
			1	24	23.59	23.43	23.46
			12	0	22.68	22.60	22.59
			12	6	22.74	22.66	22.61
			12	11	22.68	22.57	22.49
			25	0	22.62	22.56	22.54
		Antenna Gain(dBi):			0		
		Max. ERP (dBm):			21.50		
		ERP Limit (dBm):			38.45		
		16QAM	1	0	22.93	22.58	22.55
			1	12	22.72	22.74	22.64
			1	24	22.92	22.50	22.89
			12	0	21.58	21.65	21.71
			12	6	21.75	21.71	21.59
			12	11	21.62	21.68	21.53
			25	0	21.73	21.58	21.62
		Antenna Gain(dBi):			0		
		Max. ERP (dBm):			20.78		
		ERP Limit (dBm):			38.45		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					20450	20525	20600
					829.0MHz	836.5MHz	844.0MHz
5	10	QPSK	1	0	23.79	23.71	23.65
			1	24	23.75	23.92	23.88
			1	49	23.62	23.66	23.59
			25	0	22.85	22.81	22.79
			25	12	22.84	22.82	22.83
			25	24	22.91	22.84	22.74
			50	0	22.84	22.96	22.89
		Antenna Gain(dBi):			0		
		Max. ERP (dBm):			21.77		
		ERP Limit (dBm):			38.45		
		16QAM	1	0	23.14	23.09	23.08
			1	24	23.11	23.21	23.15
			1	49	23.17	23.06	23.04
			25	0	21.78	22.01	21.82
			25	12	21.93	21.85	21.77
			25	24	21.81	21.91	21.83
			50	0	21.88	21.76	21.80
		Antenna Gain(dBi):			0		
		Max. ERP (dBm):			21.06		
		ERP Limit (dBm):			38.45		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).
ERP (dBm) = EIRP (dBm) - 2.15 (dB).

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					23017	23095	23173
					699.7MHz	707.5MHz	715.3MHz
12	1.4	QPSK	1	0	23.71	23.60	23.54
			1	2	23.91	23.79	23.64
			1	5	23.63	23.65	23.53
			3	0	22.73	22.78	22.65
			3	1	22.82	22.78	22.67
			3	2	22.75	22.79	22.65
			6	0	22.85	22.75	22.72
		Antenna Gain(dBi):			-1.5		
		Max. ERP (dBm):			20.26		
		ERP Limit (dBm):			34.77		
		16QAM	1	0	22.76	22.76	22.73
			1	2	22.80	22.68	22.84
			1	5	22.76	22.78	22.68
			3	0	21.73	21.77	21.77
			3	1	21.70	21.65	21.65
			3	2	21.67	21.78	21.43
			6	0	21.71	21.79	21.73
		Antenna Gain(dBi):			-1.5		
		Max. ERP (dBm):			19.19		
		ERP Limit (dBm):			34.77		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					23025	23095	23165
					700.5MHz	707.5MHz	714.5MHz
12	3	QPSK	1	0	23.64	23.63	23.59
			1	7	23.65	23.65	23.56
			1	14	23.54	23.61	23.51
			8	0	22.64	22.64	22.67
			8	4	22.71	22.66	22.63
			8	7	22.65	22.64	22.66
			15	0	22.64	22.58	22.66
		Antenna Gain(dBi):			-1.5		
		Max. ERP (dBm):			20.00		
		ERP Limit (dBm):			34.77		
		16QAM	1	0	22.82	22.79	22.94
			1	7	22.86	22.76	22.66
			1	14	22.75	22.79	22.63
			8	0	21.74	21.58	21.52
			8	4	21.75	21.73	21.70
			8	7	21.79	21.66	21.52
			15	0	21.67	21.78	21.57
		Antenna Gain(dBi):			-1.5		
		Max. ERP (dBm):			19.29		
		ERP Limit (dBm):			34.77		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).
ERP (dBm) = EIRP (dBm) - 2.15 (dB).

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					23035	23095	23155
					701.5MHz	707.5MHz	713.5MHz
12	5	QPSK	1	0	23.58	23.54	23.43
			1	12	23.74	23.69	23.79
			1	24	23.59	23.61	23.66
			12	0	22.53	22.73	22.69
			12	6	22.73	22.72	22.78
			12	11	22.72	22.71	22.63
			25	0	22.63	22.68	22.66
		Antenna Gain(dBi):			-1.5		
		Max. ERP (dBm):			20.14		
		ERP Limit (dBm):			34.77		
		16QAM	1	0	22.66	22.70	22.77
			1	12	22.78	22.82	22.63
			1	24	22.30	22.69	22.58
			12	0	21.63	21.69	21.59
			12	6	21.68	21.70	21.61
			12	11	21.88	21.72	21.66
			25	0	21.74	21.78	21.68
		Antenna Gain(dBi):			-1.5		
		Max. ERP (dBm):			19.17		
		ERP Limit (dBm):			34.77		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					23060	23095	23130
					704.0MHz	707.5MHz	711.0MHz
12	10	QPSK	1	0	23.93	23.89	23.90
			1	24	23.96	23.97	23.95
			1	49	23.95	23.92	23.81
			25	0	23.02	23.01	23.02
			25	12	23.04	23.03	23.12
			25	24	23.05	23.14	23.02
			50	0	23.11	23.01	23.01
		Antenna Gain(dBi):			-1.5		
		Max. ERP (dBm):			20.32		
		ERP Limit (dBm):			34.77		
		16QAM	1	0	23.34	23.09	23.02
			1	24	23.17	23.52	23.10
			1	49	23.02	23.04	23.24
			25	0	22.02	22.02	22.01
			25	12	22.04	22.05	22.01
			25	24	22.10	22.07	22.04
			50	0	22.01	22.08	22.06
		Antenna Gain(dBi):			-1.5		
		Max. ERP (dBm):			19.87		
		ERP Limit (dBm):			34.77		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).
ERP (dBm) = EIRP (dBm) - 2.15 (dB).

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					23205	23230	23255
					779.5MHz	782.0MHz	784.5MHz
13	5	QPSK	1	0	23.42	23.34	23.42
			1	12	23.53	23.55	23.47
			1	24	23.40	23.39	23.36
			12	0	22.55	22.53	22.52
			12	6	22.53	22.67	22.60
			12	11	22.57	22.59	22.52
			25	0	22.64	22.67	22.54
		Antenna Gain(dBi):			-1.0		
		Max. ERP (dBm):			20.40		
		ERP Limit (dBm):			34.77		
		16QAM	1	0	22.56	22.61	22.41
			1	12	22.66	22.62	22.63
			1	24	22.59	22.12	22.28
			12	0	21.53	21.54	21.44
			12	6	21.64	21.55	21.47
			12	11	21.55	21.50	21.54
			25	0	21.56	21.47	21.52
		Antenna Gain(dBi):			-1.0		
		Max. ERP (dBm):			19.51		
		ERP Limit (dBm):			34.77		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					23230	23230	23230
					782.0MHz	782.0MHz	782.0MHz
13	10	QPSK	1	0	/	23.89	/
			1	24	/	23.91	/
			1	49	/	23.90	/
			25	0	/	23.01	/
			25	12	/	23.09	/
			25	24	/	23.04	/
			50	0	/	23.02	/
		Antenna Gain(dBi):			-1.0		
		Max. ERP (dBm):			20.76		
		ERP Limit (dBm):			34.77		
		16QAM	1	0	/	23.26	/
			1	24	/	23.28	/
			1	49	/	23.10	/
			25	0	/	22.07	/
			25	12	/	22.13	/
			25	24	/	22.03	/
			50	0	/	22.08	/
		Antenna Gain(dBi):			-1.0		
		Max. ERP (dBm):			20.13		
		ERP Limit (dBm):			34.77		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).
ERP (dBm) = EIRP (dBm) - 2.15 (dB).

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					23755	23790	23825
					706.5MHz	710.0MHz	713.5MHz
17	5	QPSK	1	0	23.58	23.64	23.44
			1	12	23.76	23.63	23.75
			1	24	23.60	23.55	23.43
			12	0	22.69	22.61	22.64
			12	6	22.81	22.81	22.76
			12	11	22.75	22.70	22.65
			25	0	22.67	22.66	22.72
		Antenna Gain(dBi):			-1.5		
		Max. ERP (dBm):			20.11		
		ERP Limit (dBm):			34.77		
		16QAM	1	0	22.58	22.73	22.58
			1	12	22.66	22.87	22.80
			1	24	22.27	22.65	22.95
			12	0	21.59	21.69	21.54
			12	6	21.69	21.77	21.59
			12	11	21.76	21.57	21.61
			25	0	21.79	21.71	21.66
		Antenna Gain(dBi):			-1.5		
		Max. ERP (dBm):			19.30		
		ERP Limit (dBm):			34.77		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					23780	23790	23800
					709.0MHz	710.0MHz	711.0MHz
17	10	QPSK	1	0	23.96	23.93	23.78
			1	24	23.91	23.96	23.95
			1	49	23.93	23.90	23.94
			25	0	23.16	23.04	23.08
			25	12	23.11	23.03	23.05
			25	24	23.08	23.09	23.03
			50	0	23.15	23.04	23.06
		Antenna Gain(dBi):			-1.5		
		Max. ERP (dBm):			20.31		
		ERP Limit (dBm):			34.77		
		16QAM	1	0	23.10	23.11	23.02
			1	24	23.24	23.30	23.13
			1	49	23.10	23.09	23.05
			25	0	22.04	22.11	22.13
			25	12	22.09	22.10	22.03
			25	24	22.14	22.07	22.04
			50	0	22.12	22.08	22.03
		Antenna Gain(dBi):			-1.5		
		Max. ERP (dBm):			19.65		
		ERP Limit (dBm):			34.77		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).
ERP (dBm) = EIRP (dBm) - 2.15 (dB).

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					131979	132322	132665
					1710.7MHz	1745.0MHz	1779.3MHz
66	1.4	QPSK	1	0	23.71	23.55	23.55
			1	2	23.97	23.75	23.75
			1	5	23.74	23.55	23.57
			3	0	22.58	22.52	22.58
			3	1	22.86	22.65	22.72
			3	2	22.61	22.55	22.56
			6	0	22.81	22.65	22.60
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.97		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	22.54	22.58	22.45
			1	2	22.77	22.75	22.63
			1	5	22.58	22.54	22.46
			3	0	21.55	21.43	21.67
			3	1	21.71	21.54	21.81
			3	2	21.53	21.44	21.66
			6	0	21.57	21.62	21.58
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			22.77		
		EIRP Limit (dBm):			30.00		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					131987	132322	132657
					1711.5MHz	1745.0MHz	1778.5MHz
66	3	QPSK	1	0	23.73	23.61	23.59
			1	7	23.70	23.56	23.58
			1	14	23.72	23.58	23.60
			8	0	22.67	22.56	22.58
			8	4	22.65	22.54	22.56
			8	7	22.62	22.55	22.57
			15	0	22.56	22.51	22.53
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.73		
		EIRP Limit (dBm):			30.00		
		16QAM Modulation	1	0	22.58	22.93	22.67
			1	7	22.51	22.88	22.59
			1	14	22.46	22.87	22.61
			8	0	21.59	21.68	21.54
			8	4	21.56	21.67	21.53
			8	7	21.54	21.69	21.51
			15	0	21.52	21.56	21.47
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			22.93		
		EIRP Limit (dBm):			30.00		

Note: EIRP (dBm) = Burst Average power (dBm) + Antenna Gain (dBi).
ERP (dBm) = EIRP (dBm) - 2.15 (dB).

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					131997	132322	132647
					1712.5MHz	1745.0MHz	1777.5MHz
66	5	QPSK	1	0	23.61	23.47	23.41
			1	12	23.66	23.56	23.55
			1	24	23.52	23.46	23.50
			12	0	22.57	22.51	22.56
			12	6	22.56	22.49	22.54
			12	11	22.54	22.47	22.52
			25	0	22.50	22.46	22.49
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.66		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	22.52	22.26	22.48
			1	12	22.55	22.33	22.51
			1	24	22.46	22.28	22.45
			12	0	21.43	21.46	21.55
			12	6	21.42	21.44	21.53
			12	11	21.41	21.45	21.51
			25	0	21.45	21.52	21.54
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			22.55		
		EIRP Limit (dBm):			30.00		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					132022	132322	132622
					1715.0MHz	1745.0MHz	1775.0MHz
66	10	QPSK	1	0	23.76	23.57	23.54
			1	24	23.88	23.81	23.74
			1	49	23.71	23.65	23.58
			25	0	22.60	22.58	22.61
			25	12	22.75	22.71	22.72
			25	24	22.58	22.53	22.54
			50	0	22.54	22.53	22.58
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.88		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	22.55	22.97	22.68
			1	24	22.65	23.12	22.80
			1	49	22.52	22.92	22.64
			25	0	21.62	21.65	21.68
			25	12	21.71	21.70	21.76
			25	24	21.60	21.57	21.60
			50	0	21.55	21.57	21.61
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.12		
		EIRP Limit (dBm):			30.00		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					132047	132322	132597
					1717.5MHz	1745.0MHz	1772.5MHz
66	15	QPSK	1	0	23.72	23.52	23.05
			1	37	23.78	23.48	23.07
			1	74	23.62	23.31	23.04
			36	0	22.84	22.76	22.24
			36	16	22.86	22.71	22.26
			36	35	22.85	22.67	22.22
			75	0	22.80	22.72	22.18
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.78		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	22.74	22.93	22.13
			1	37	22.81	22.97	22.24
			1	74	22.79	22.85	22.16
			36	0	21.68	21.68	21.53
			36	16	21.65	21.65	21.42
			36	35	21.66	21.64	21.36
			75	0	21.66	21.67	21.54
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			22.97		
		EIRP Limit (dBm):			30.00		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					132072	132322	132572
					1720.0MHz	1745.0MHz	1770.0MHz
66	20	QPSK	1	0	23.53	23.55	23.46
			1	49	23.78	23.95	23.74
			1	99	23.31	23.35	23.38
			50	0	22.66	22.85	22.58
			50	24	22.87	22.98	22.71
			50	49	22.73	22.83	22.51
			100	0	22.78	22.81	22.53
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.95		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	22.76	22.55	22.08
			1	49	23.08	22.91	22.35
			1	99	22.78	22.50	22.44
			50	0	21.50	21.48	21.21
			50	24	21.61	21.56	21.32
			50	49	21.55	21.45	21.18
			100	0	21.52	21.55	21.33
		Antenna Gain (dBi):			0		
		Max. EIRP (dBm):			23.08		
		EIRP Limit (dBm):			30.00		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					133147	133297	133447
					665.5MHz	680.5MHz	695.5MHz
71	5	QPSK	1	0	23.41	23.38	23.41
			1	12	23.54	23.51	23.54
			1	24	23.45	23.43	23.45
			12	0	22.48	22.39	22.56
			12	6	22.58	22.54	22.61
			12	11	22.56	22.51	22.58
			25	0	22.48	22.45	22.55
		Antenna Gain (dBi):			-2.5		
		Max. ERP (dBm):			18.89		
		EIRP Limit (dBm):			34.77		
		16QAM	1	0	22.24	22.68	22.48
			1	12	22.37	22.77	22.64
			1	24	22.31	22.73	22.54
			12	0	21.45	21.47	21.53
			12	6	21.57	21.59	21.59
			12	11	21.51	21.55	21.57
			25	0	21.57	21.47	21.59
		Antenna Gain (dBi):			-2.5		
		Max. ERP (dBm):			18.12		
		EIRP Limit (dBm):			34.77		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					133172	133297	133422
					668.0MHz	680.5MHz	693.0MHz
71	10	QPSK	1	0	23.49	23.47	23.45
			1	24	23.72	23.65	23.66
			1	49	23.52	23.55	23.56
			25	0	22.45	22.50	22.57
			25	12	22.71	22.72	22.69
			25	24	22.55	22.57	22.58
			50	0	22.49	22.54	22.57
		Antenna Gain (dBi):			-2.5		
		Max. ERP (dBm):			19.07		
		EIRP Limit (dBm):			34.77		
		16QAM	1	0	22.52	22.45	23.02
			1	24	22.76	21.64	23.20
			1	49	22.68	21.52	23.08
			25	0	21.48	21.62	21.67
			25	12	21.68	21.75	21.78
			25	24	21.56	21.63	21.66
			50	0	21.52	21.56	21.60
		Antenna Gain (dBi):			-2.5		
		Max. ERP (dBm):			18.55		
		EIRP Limit (dBm):			34.77		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).

ERP (dBm) = EIRP (dBm) - 2.15 (dB).

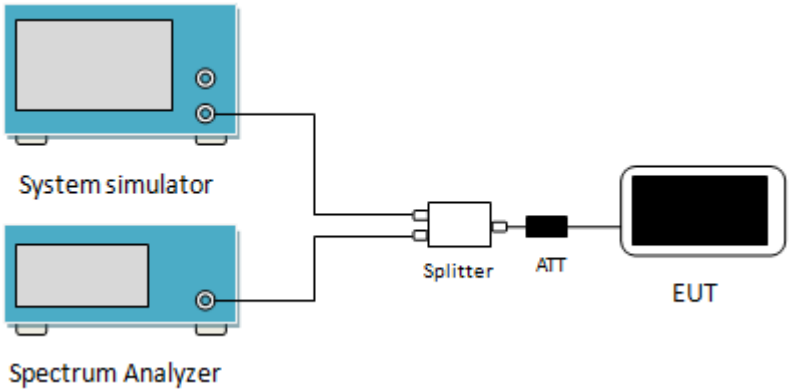
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					133197	133297	133397
					670.5MHz	680.5MHz	690.5MHz
71	15	QPSK	1	0	23.46	23.39	23.44
			1	37	23.52	23.49	23.51
			1	74	23.45	23.44	23.54
			36	0	22.54	22.59	22.57
			36	16	22.68	22.74	22.69
			36	35	22.63	22.68	22.68
			75	0	22.62	22.63	22.61
		Antenna Gain (dBi):			-2.5		
		Max. ERP (dBm):			18.89		
		EIRP Limit (dBm):			34.77		
		16QAM	1	0	22.71	22.95	22.57
			1	37	22.91	23.06	22.67
			1	74	22.82	23.02	22.65
			36	0	21.46	21.53	21.56
			36	16	21.65	21.72	21.68
			36	35	21.58	21.64	21.65
			75	0	21.53	21.59	21.62
		Antenna Gain (dBi):			-2.5		
		Max. ERP (dBm):			18.41		
		EIRP Limit (dBm):			34.77		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					133222	133322	133372
					673.0MHz	683.0MHz	688.0MHz
71	20	QPSK	1	0	23.21	23.22	23.24
			1	49	23.62	23.61	23.67
			1	99	23.25	23.35	23.39
			50	0	22.39	22.47	22.48
			50	24	22.69	22.71	22.72
			50	49	22.51	22.65	22.54
			100	0	22.43	22.57	22.48
		Antenna Gain (dBi):			-2.5		
		Max. ERP (dBm):			19.02		
		EIRP Limit (dBm):			34.77		
		16QAM	1	0	22.72	22.54	22.43
			1	49	23.18	22.92	22.87
			1	99	22.85	22.62	22.58
			50	0	21.43	21.50	21.45
			50	24	21.69	21.84	21.69
			50	49	21.52	21.66	21.55
			100	0	21.44	21.59	21.51
		Antenna Gain (dBi):			-2.5		
		Max. ERP (dBm):			18.53		
		EIRP Limit (dBm):			34.77		

Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).

ERP (dBm) = EIRP (dBm) - 2.15 (dB).

6.2 Peak-to-Average Ratio

Test Requirement:	Part 22.913(d), Part 24.232 (d), Part 27.50(d)(5)
Limit:	The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.
Test Setup:	
Test Procedure:	1 The RF output of the transceiver was connected to a spectrum Analyzer through appropriate attenuation. 2 Set the CCDF option in spectrum Analyzer, RBW ≥ OBW, 3 Set the EUT working in highest power level, measured and recorded the 0.1% as PAPR level. 4 Repeat step 1~3 at other frequency and modulations.
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

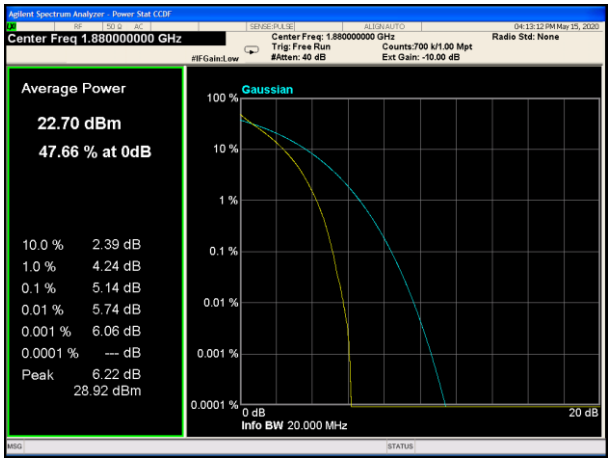
Measurement Data (Worst case):

Bandwidth	Modulation	RB Size	RB Offset	PAPR
LTE Band 2 (Middle Channel)				
20MHz	QPSK	100	0	5.14
	16QAM	100	0	5.89
LTE Band 4 (Middle Channel)				
20MHz	QPSK	100	0	5.21
	16QAM	100	0	6.03
LTE Band 5 (Middle Channel)				
10MHz	QPSK	50	0	5.30
	16QAM	50	0	5.96
LTE Band 12 (Middle Channel)				
20MHz	QPSK	100	0	5.48
	16QAM	100	0	6.17
LTE Band 13 (Middle Channel)				
10MHz	QPSK	50	0	5.34
	16QAM	50	0	5.97
LTE Band 17 (Middle Channel)				
10MHz	QPSK	50	0	4.46
	16QAM	50	0	6.18
LTE Band 66 (Middle Channel)				
10MHz	QPSK	50	0	4.87
	16QAM	50	0	5.66
LTE Band 71 (Middle Channel)				
10MHz	QPSK	50	0	5.48
	16QAM	50	0	6.27

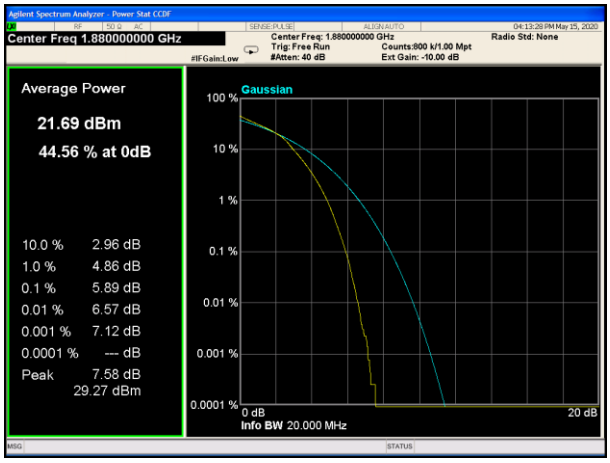
Test plots as below:

LTE Band 2 Middle channel

Modulation: QPSK

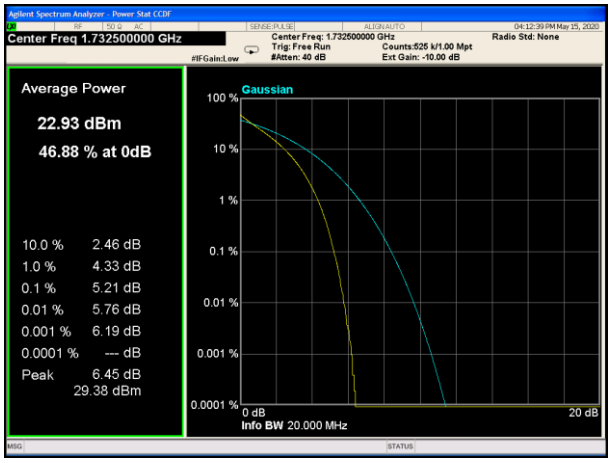


Modulation:16QAM

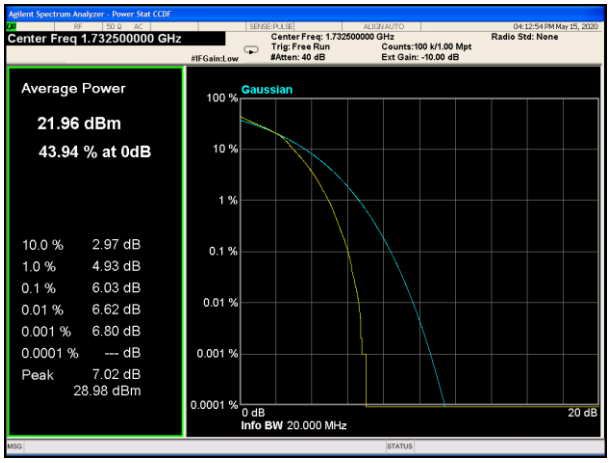


LTE Band 4 Middle channel

Modulation: QPSK

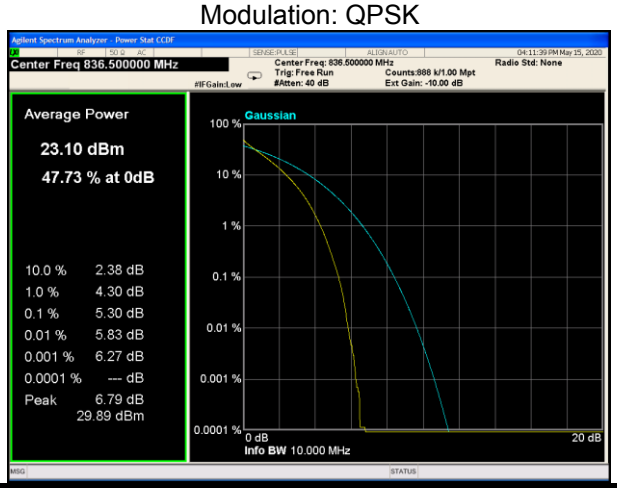


Modulation:16QAM

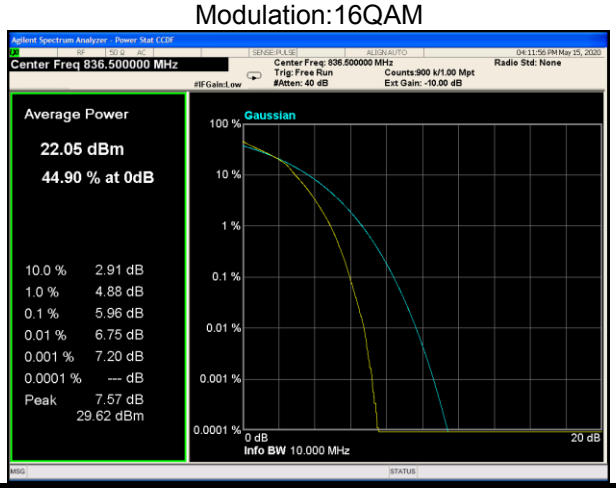


LTE Band 5 Middle channel

Modulation: QPSK

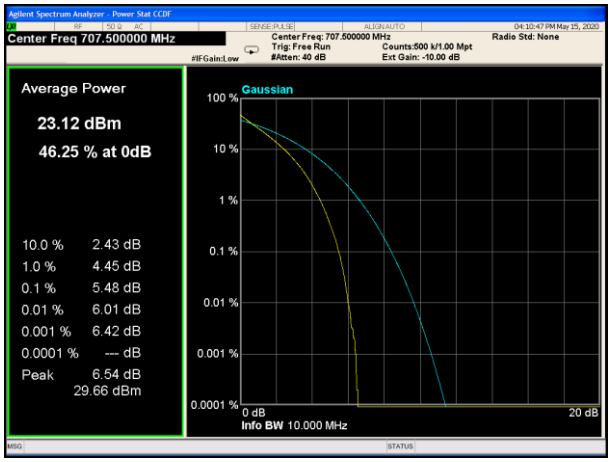


Modulation:16QAM

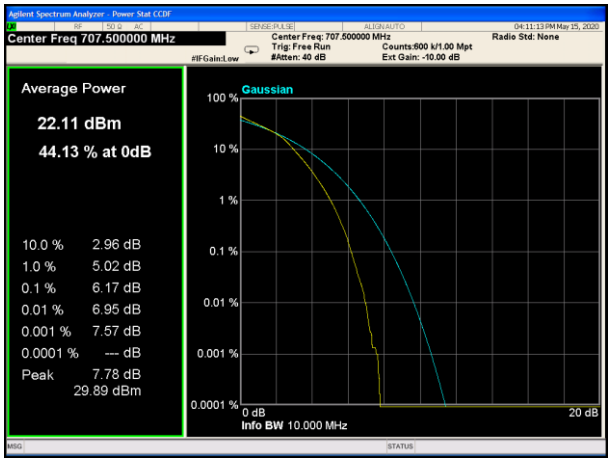


LTE Band 12 Middle channel

Modulation: QPSK

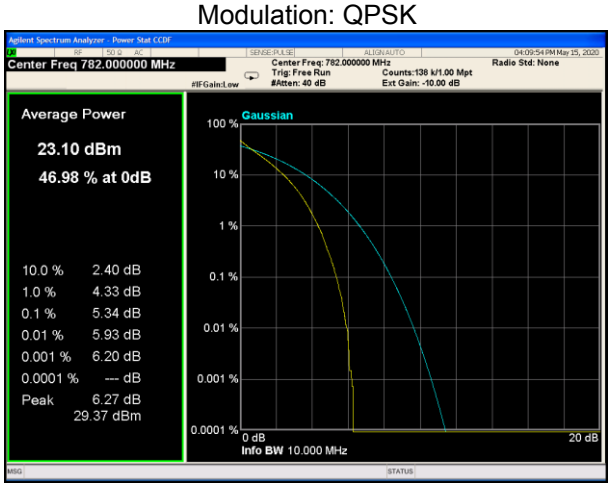


Modulation:16QAM

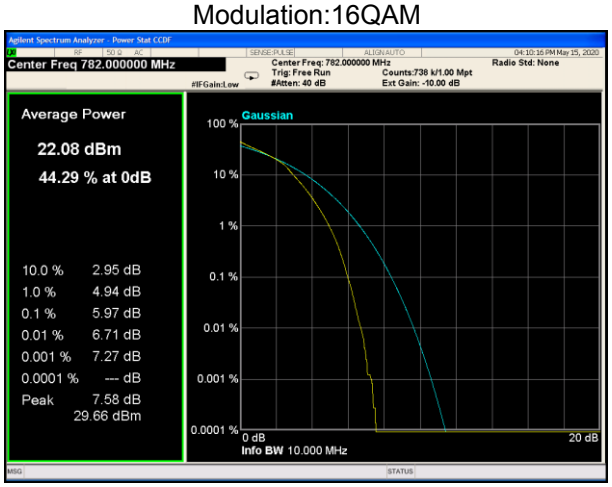


LTE Band 13 Middle channel

Modulation: QPSK

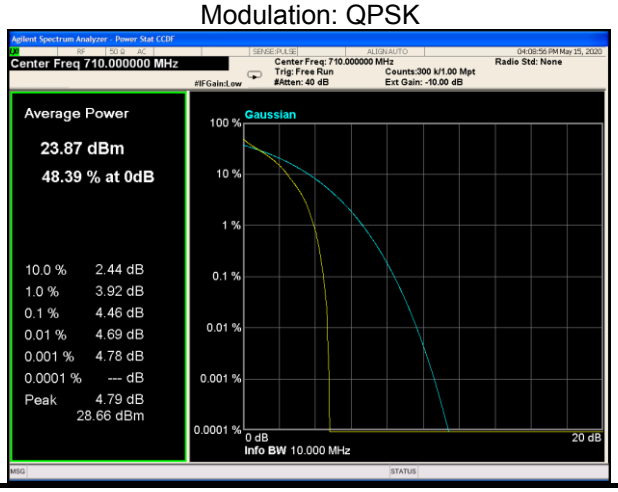


Modulation:16QAM

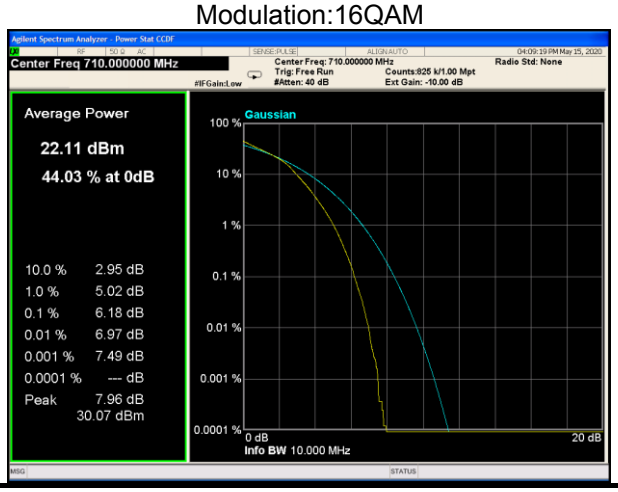


LTE Band 17 Middle channel

Modulation: QPSK

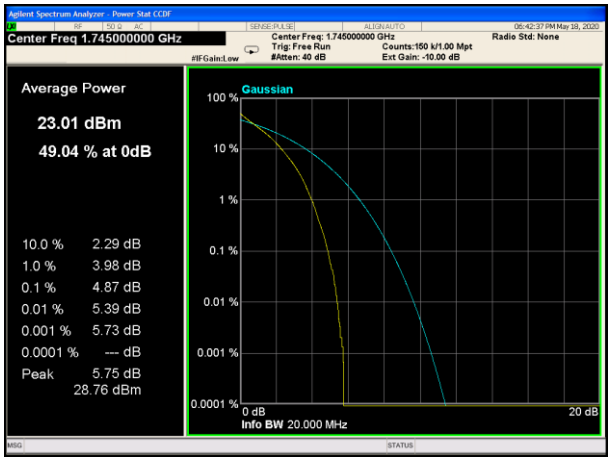


Modulation:16QAM

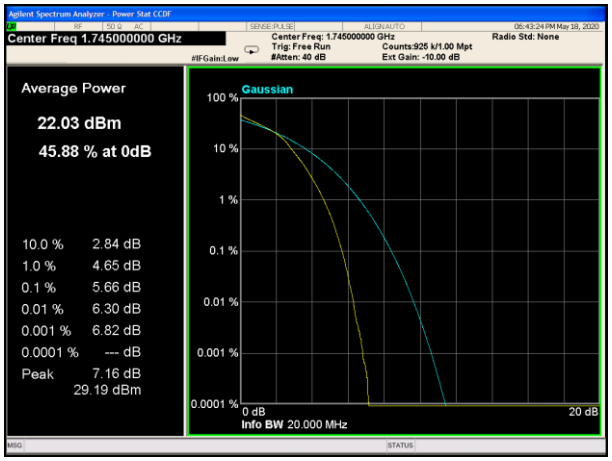


LTE Band 66 Middle channel

Modulation: QPSK

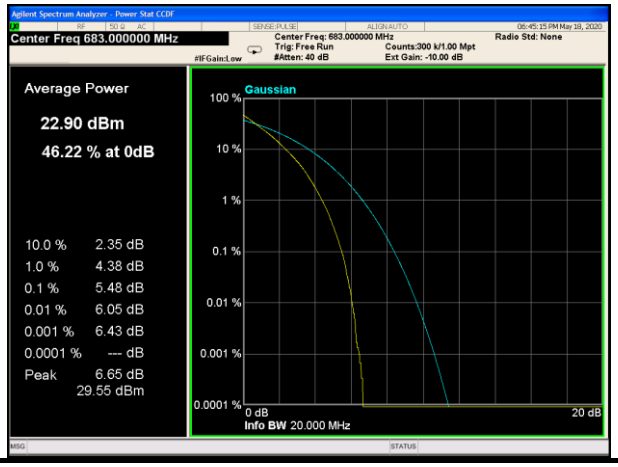


Modulation:16QAM

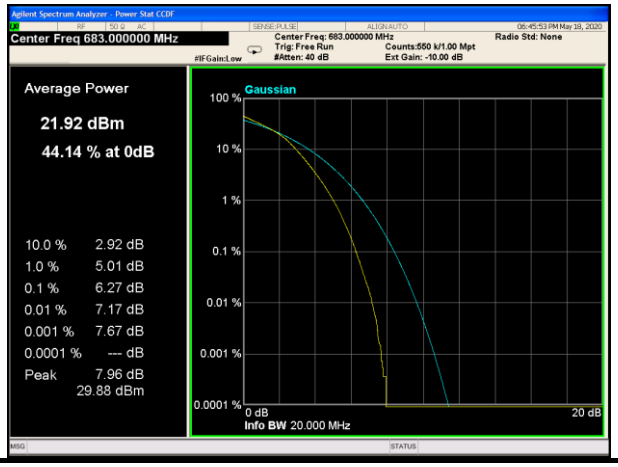


LTE Band 71 Middle channel

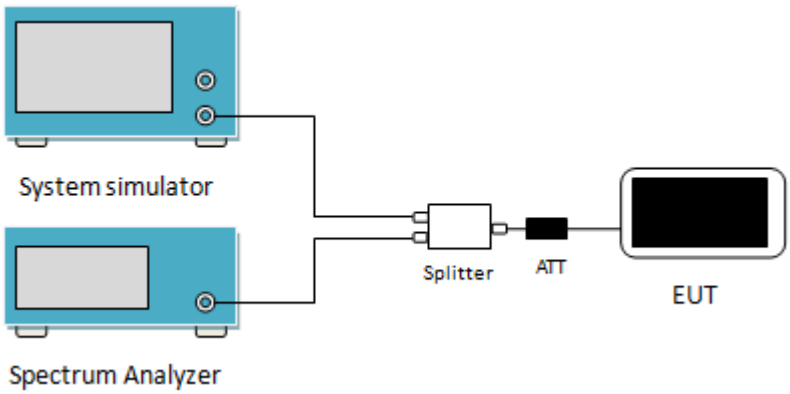
Modulation: QPSK



Modulation:16QAM



6.3 Occupy Bandwidth

Test Requirement:	Part 22.917(b), Part 24.238(b), Part 27.53(c), Part 27.53(g), Part 27.53(h)
Test Setup:	
Test Procedure:	1. The EUT's output RF connector was connected with a short cable to the spectrum analyzer 2. RBW was set to about 1% ~ 5% of emission BW, VBW= 3 times RBW. 3. -26dBc display line was placed on the screen (or 99% bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace.
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data:

LTE Band 2					
Bandwidth	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
1.4MHz	18607	1850.70	16QAM	1098	1290
			QPSK	1104	1284
	18900	1880.00	16QAM	1092	1266
			QPSK	1098	1278
	19193	1909.30	16QAM	1098	1290
			QPSK	1104	1278
3MHz	18615	1851.50	16QAM	2712	2988
			QPSK	2724	3000
	18900	1880.00	16QAM	2724	2964
			QPSK	2736	3012
	19185	1908.50	16QAM	2724	2964
			QPSK	2736	3000
5MHz	18625	1852.50	16QAM	4480	4860
			QPSK	4500	4900
	18900	1880.00	16QAM	4520	4860
			QPSK	4540	4880
	19175	1907.50	16QAM	4500	4840
			QPSK	4500	4880
10MHz	18650	1855.00	16QAM	9120	10080
			QPSK	9120	10080
	18900	1880.00	16QAM	9080	10040
			QPSK	9080	10080
	19150	1905.00	16QAM	9080	9920
			QPSK	9080	10080
15MHz	18675	1857.50	16QAM	13560	14640
			QPSK	13500	14580
	18900	1880.00	16QAM	13560	14580
			QPSK	13560	14700
	19125	1902.50	16QAM	13500	14700
			QPSK	13560	14700
20MHz	18700	1860.00	16QAM	18000	19120
			QPSK	18000	19280
	18900	1880.00	16QAM	18000	19200
			QPSK	18000	19440
	19100	1900.00	16QAM	17920	19200
			QPSK	17920	19280

LTE Band 4					
Bandwidth	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
1.4MHz	19957	1710.7	16QAM	1092	1272
			QPSK	1098	1284
	20175	1732.5	16QAM	1098	1284
			QPSK	1098	1278
	20393	1754.3	16QAM	1092	1284
			QPSK	1104	1296
3MHz	19965	1711.5	16QAM	2724	2940
			QPSK	2736	2976
	20175	1732.5	16QAM	2712	2976
			QPSK	2736	2976
	20385	1750.5	16QAM	2724	2964
			QPSK	2724	3000
5MHz	19975	1712.5	16QAM	4480	4800
			QPSK	4520	4880
	20175	1732.5	16QAM	4500	4780
			QPSK	4500	4860
	20375	1752.5	16QAM	4500	4880
			QPSK	4500	4880
10MHz	20000	1715.0	16QAM	9120	9960
			QPSK	9160	10200
	20175	1732.5	16QAM	9080	10000
			QPSK	9080	10120
	20350	1750.0	16QAM	9120	10000
			QPSK	9120	10160
15MHz	20025	1717.5	16QAM	13560	14640
			QPSK	13560	14880
	20175	1732.5	16QAM	13500	14700
			QPSK	13500	14700
	20325	1747.5	16QAM	13560	14640
			QPSK	13500	14580
20MHz	20050	1720.0	16QAM	17920	19280
			QPSK	18000	19280
	20175	1732.5	16QAM	18000	19120
			QPSK	18000	19200
	20300	1745.0	16QAM	18000	19120
			QPSK	17920	19200

TE Band 5					
Bandwidth	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
1.4MHz	20407	824.7	16QAM	1092	1254
			QPSK	1104	1260
	20525	836.5	16QAM	1098	1278
			QPSK	1098	1266
	20643	848.3	16QAM	1092	1266
			QPSK	1092	1278
3MHz	20415	825.5	16QAM	2712	2964
			QPSK	2724	3000
	20525	836.50	16QAM	2724	2964
			QPSK	2724	3012
	20635	847.50	16QAM	2712	2928
			QPSK	2724	2988
5MHz	20425	826.50	16QAM	4500	4780
			QPSK	4500	4820
	20525	836.50	16QAM	4520	4880
			QPSK	4500	4900
	20625	846.50	16QAM	4480	4820
			QPSK	4480	4840
10MHz	20450	829.00	16QAM	9080	9960
			QPSK	9080	10120
	20525	836.50	16QAM	9080	10000
			QPSK	9080	10080
	20600	844.00	16QAM	9120	9960
			QPSK	9080	10080

LTE Band 12					
Bandwidth	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
1.4MHz	23017	699.7	16QAM	1092	1260
			QPSK	1098	1296
	23095	707.5	16QAM	1092	1278
			QPSK	1098	1290
	23173	715.3	16QAM	1092	1296
			QPSK	1104	1290
3MHz	23025	700.5	16QAM	2724	2952
			QPSK	2724	3000
	23095	707.5	16QAM	2724	2976
			QPSK	2724	2988
	23165	714.5	16QAM	2712	2976
			QPSK	2724	2976
5MHz	23035	701.5	16QAM	4500	4960
			QPSK	4520	5060
	23095	707.5	16QAM	4520	4920
			QPSK	4520	5120
	23155	713.5	16QAM	4520	4920
			QPSK	4520	5060
10MHz	23060	704.0	16QAM	9120	10280
			QPSK	9120	10400
	23095	707.5	16QAM	9120	10040
			QPSK	9120	10080
	23130	711.0	16QAM	9080	10120
			QPSK	9120	10440

LTE Band 13					
Bandwidth	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
5MHz	23205	779.5	16QAM	4500	5120
			QPSK	4520	5080
	23230	782.0	16QAM	4520	5020
			QPSK	4520	5080
	23255	784.5	16QAM	4520	5080
			QPSK	4520	5040
10MHz	23230	782.0	16QAM	9120	10160
			QPSK	9120	10280

LTE Band 17					
Bandwidth	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
5MHz	23755	706.5	16QAM	4520	4920
			QPSK	4520	5120
	23790	710.0	16QAM	4480	5000
			QPSK	4520	5080
	23825	713.5	16QAM	4480	4920
			QPSK	4520	5000
10MHz	23780	709.0	16QAM	9120	10120
			QPSK	9120	10400
	23790	710.0	16QAM	9080	10200
			QPSK	9120	10320
	23130	711.0	16QAM	9080	10080
			QPSK	9080	10360

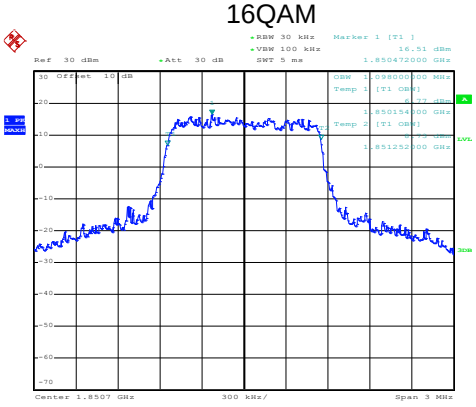
LTE Band 66					
Bandwidth	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
1.4MHz	131979	1710.7	16QAM	1098	1290
			QPSK	1098	1320
	132322	1745.0	16QAM	1098	1296
			QPSK	1098	1278
	132665	1779.3	16QAM	1092	1284
			QPSK	1098	1284
3MHz	131987	1711.5	16QAM	2736	2988
			QPSK	2736	3012
	132322	1745.0	16QAM	2736	2988
			QPSK	2724	2976
	132657	1778.5	16QAM	2724	2976
			QPSK	2736	2976
5MHz	131997	1712.5	16QAM	4540	4980
			QPSK	4520	5120
	132322	1745.0	16QAM	4520	4920
			QPSK	4540	5140
	132647	1777.5	16QAM	4520	5100
			QPSK	4540	5160
10MHz	132022	1715.0	16QAM	9120	10200
			QPSK	9160	10280
	132322	1745.0	16QAM	9200	10280
			QPSK	9200	10400
	132622	1775.0	16QAM	9120	10320
			QPSK	9120	10360
15MHz	132047	1717.5	16QAM	13560	15120
			QPSK	13620	15120
	132322	1745.0	16QAM	13560	14940
			QPSK	13560	15120
	132597	1772.5	16QAM	13560	14940
			QPSK	13560	15060
20MHz	132072	1720.0	16QAM	18000	19520
			QPSK	18080	19440
	132322	1745.0	16QAM	18080	19520
			QPSK	17920	19760
	132572	1770.0	16QAM	17920	19360
			QPSK	17920	19520

LTE Band 71					
Bandwidth	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
5MHz	133147	665.5	16QAM	4540	4900
			QPSK	4520	5080
	133297	680.5	16QAM	4520	4900
			QPSK	4520	5100
	133447	695.5	16QAM	4520	4840
			QPSK	4520	4940
10MHz	133172	668.0	16QAM	9080	9920
			QPSK	9080	10360
	133297	680.5	16QAM	9120	10120
			QPSK	9160	10240
	133422	693.0	16QAM	9080	10240
			QPSK	9120	10440
15MHz	133197	670.5	16QAM	13500	14880
			QPSK	13500	15000
	133297	680.5	16QAM	13560	14940
			QPSK	13560	15060
	133397	690.5	16QAM	13560	14640
			QPSK	13560	15000
20MHz	133222	673.0	16QAM	18000	19520
			QPSK	18000	19600
	133322	683.0	16QAM	17920	19440
			QPSK	18000	19520
	133372	688.0	16QAM	17920	19360
			QPSK	17920	19440

Test plot as follows:
LTE Band 2 part:

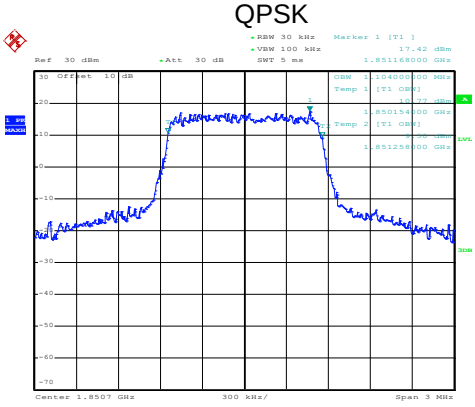
LTE Band 2: 99% Occupy bandwidth
BW: 1.4MHz

16QAM



Date: 15.MAY.2020 10:15:37

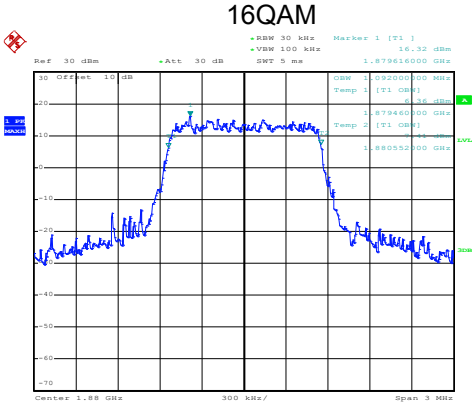
QPSK



Date: 15.MAY.2020 10:15:32

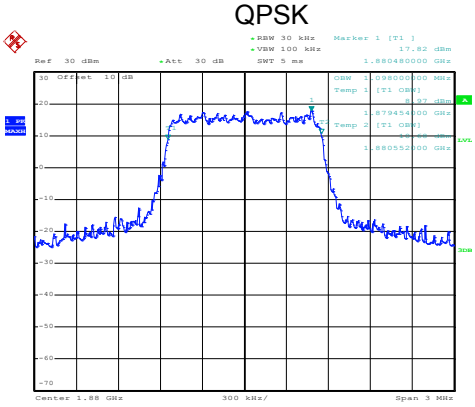
Lowest channel

16QAM



Date: 15.MAY.2020 10:16:16

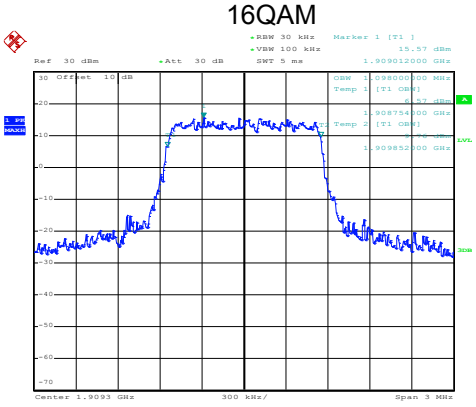
QPSK



Date: 15.MAY.2020 10:16:13

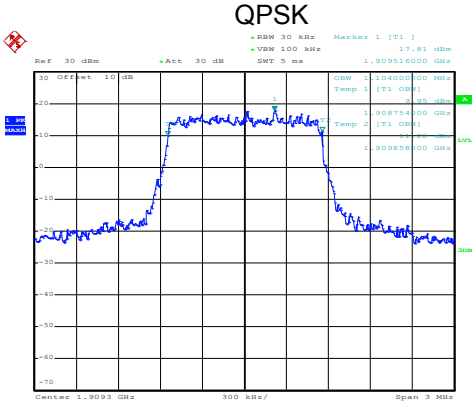
Middle channel

16QAM



Date: 15.MAY.2020 10:16:33

QPSK

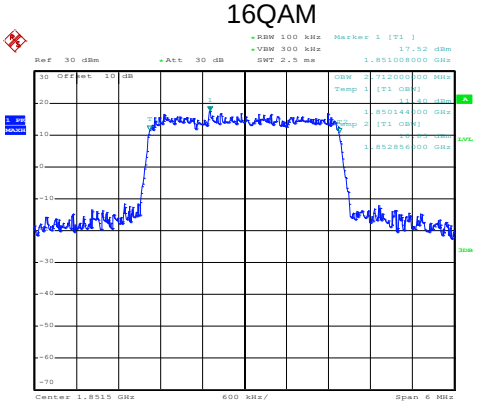


Date: 15.MAY.2020 10:16:28

Highest channel

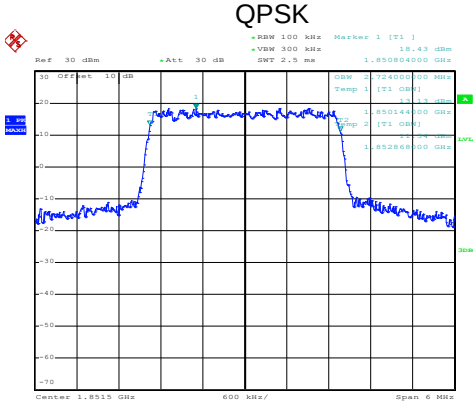
LTE Band 2: 99% Occupy bandwidth
BW: 3MHz

16QAM



Date: 15.MAY.2020 10:17:26

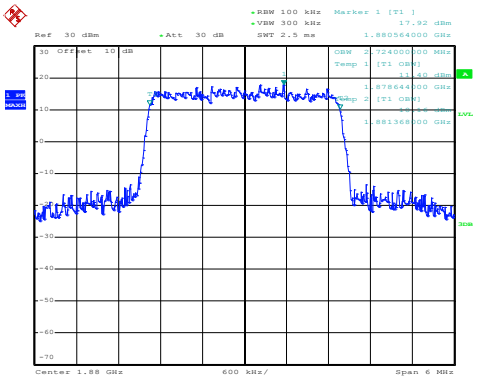
QPSK



Date: 15.MAY.2020 10:17:22

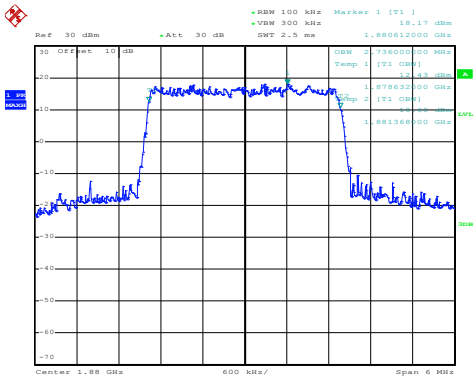
Lowest channel

16QAM



Date: 15.MAY.2020 10:17:38

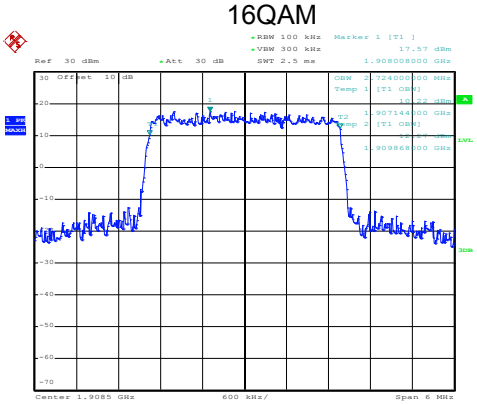
QPSK



Date: 15.MAY.2020 10:17:33

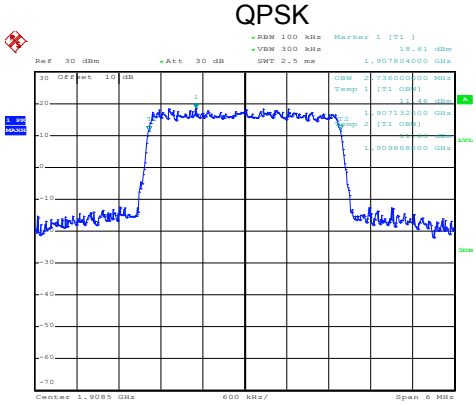
Middle channel

16QAM



Date: 15.MAY.2020 10:18:22

QPSK

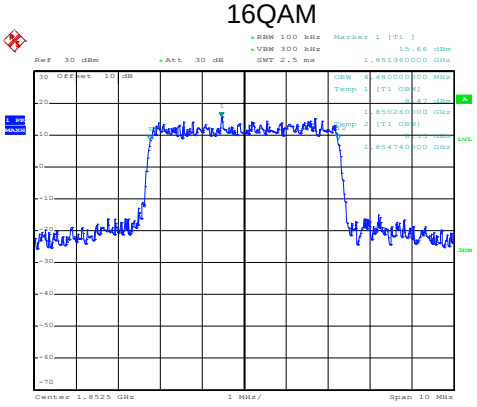


Date: 15.MAY.2020 10:18:17

Highest channel

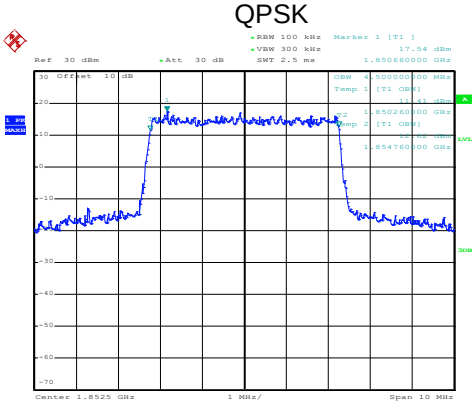
LTE Band 2: 99% Occupy bandwidth
BW: 5MHz

16QAM



Date: 15.MAY.2020 10:18:51

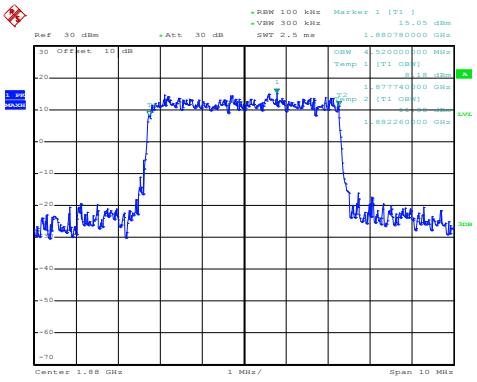
QPSK



Date: 15.MAY.2020 10:18:48

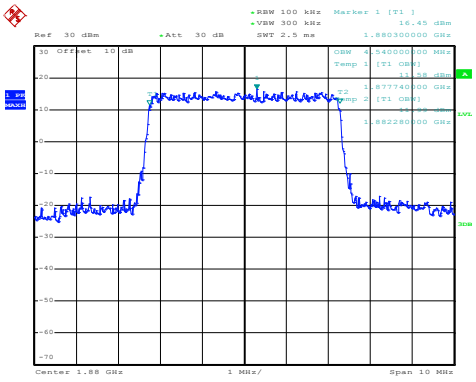
Lowest channel

16QAM



Date: 15.MAY.2020 10:19:24

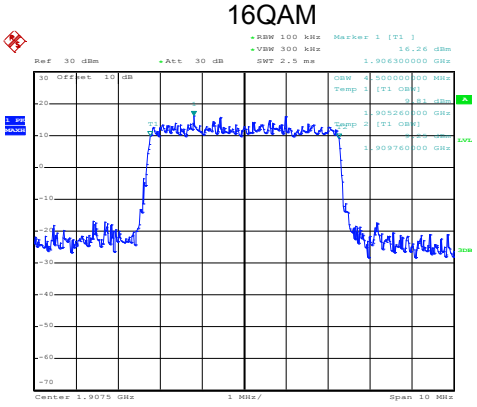
QPSK



Date: 15.MAY.2020 10:19:21

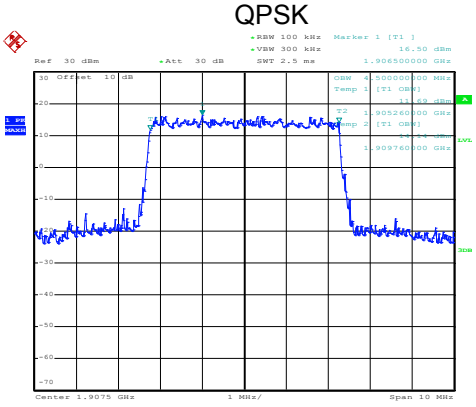
Middle channel

16QAM



Date: 15.MAY.2020 10:19:38

QPSK

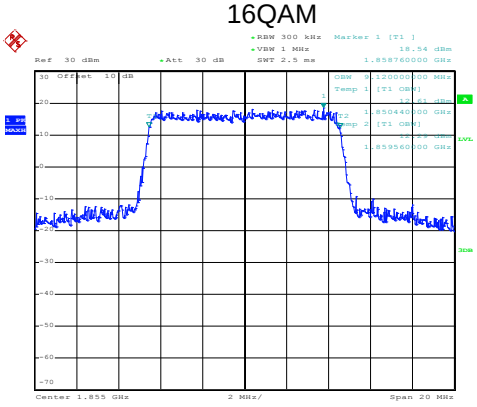


Date: 15.MAY.2020 10:19:34

Highest channel

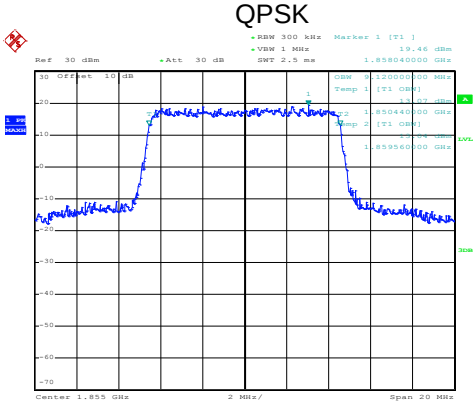
LTE Band 2: 99% Occupy bandwidth
BW: 10MHz

16QAM



Date: 15.MAY.2020 10:20:36

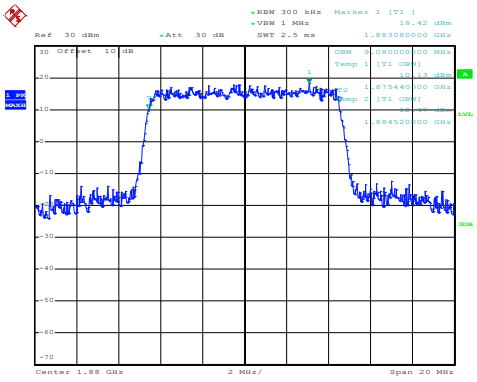
QPSK



Date: 15.MAY.2020 10:20:31

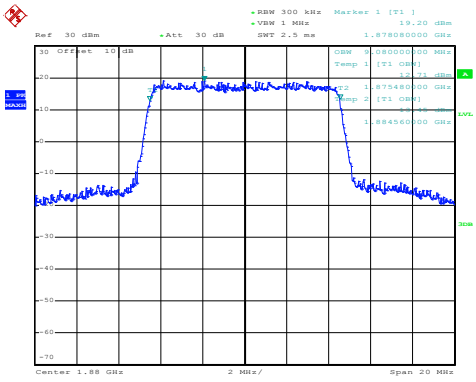
Lowest channel

16QAM



Date: 15.MAY.2020 10:20:50

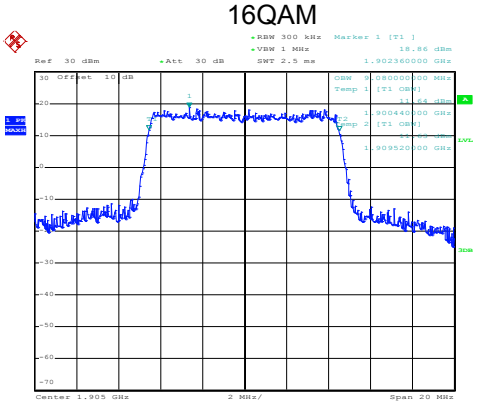
QPSK



Date: 15.MAY.2020 10:20:46

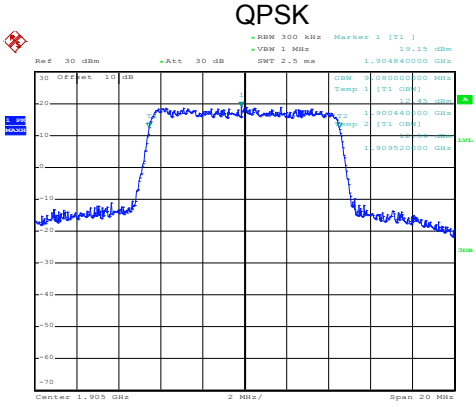
Middle channel

16QAM



Date: 15.MAY.2020 10:21:27

QPSK

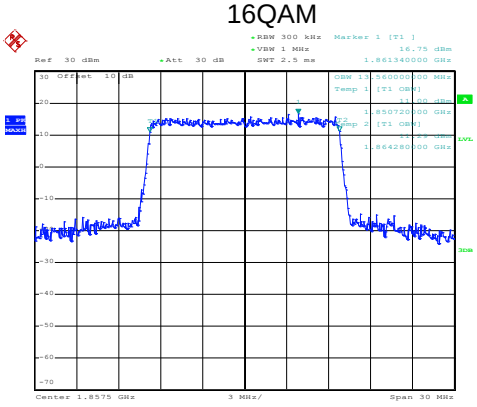


Date: 15.MAY.2020 10:21:22

Highest channel

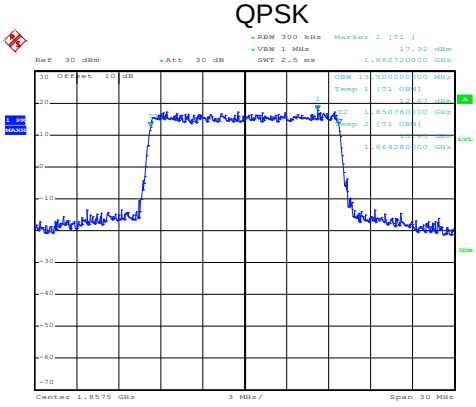
LTE Band 2: 99% Occupy bandwidth
BW: 15MHz

16QAM



Date: 15.MAY.2020 10:21:52

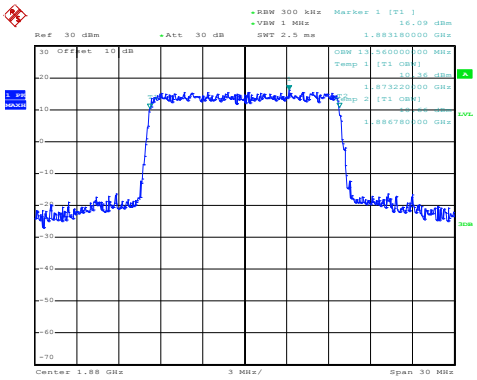
QPSK



Date: 15.MAY.2020 10:21:47

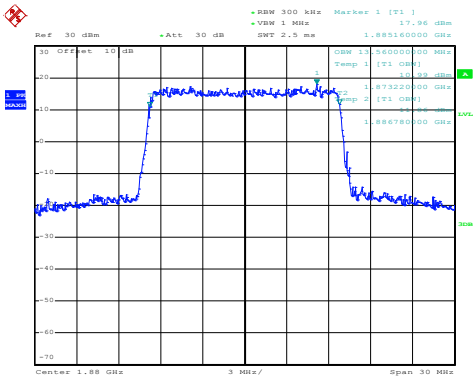
Lowest channel

16QAM



Date: 15.MAY.2020 10:22:34

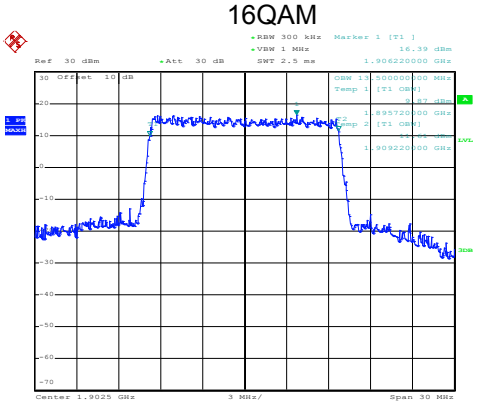
QPSK



Date: 15.MAY.2020 10:22:30

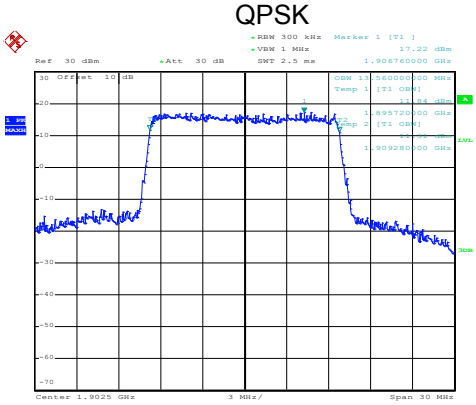
Middle channel

16QAM



Date: 15.MAY.2020 10:22:52

QPSK

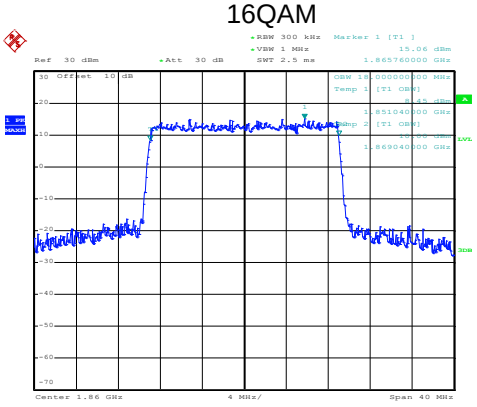


Date: 15.MAY.2020 10:22:46

Highest channel

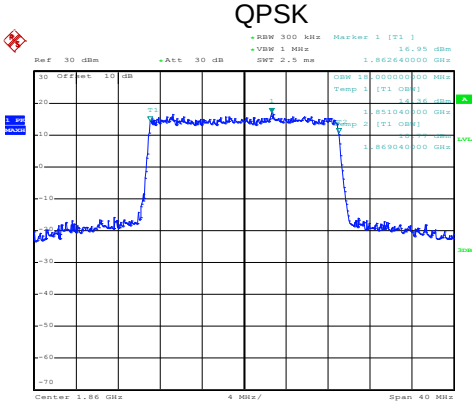
LTE Band 2: 99% Occupy bandwidth
BW: 20MHz

16QAM



Date: 15.MAY.2020 10:23:46

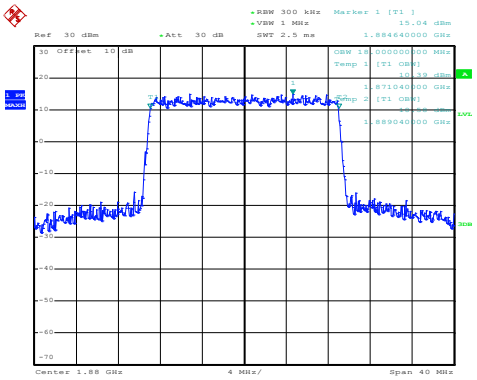
QPSK



Date: 15.MAY.2020 10:23:42

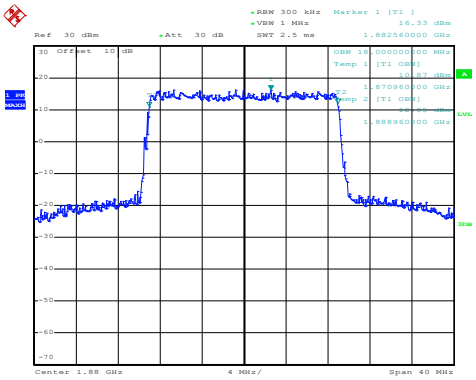
Lowest channel

16QAM



Date: 15.MAY.2020 10:24:01

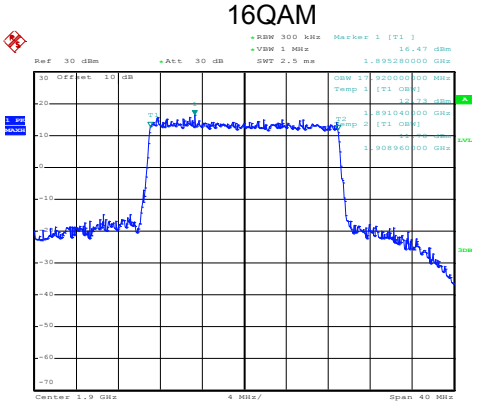
QPSK



Date: 15.MAY.2020 10:23:57

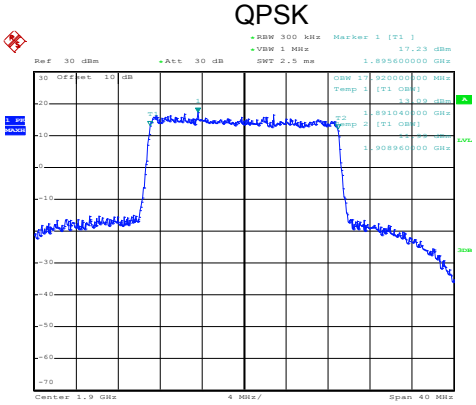
Middle channel

16QAM



Date: 15.MAY.2020 10:24:39

QPSK

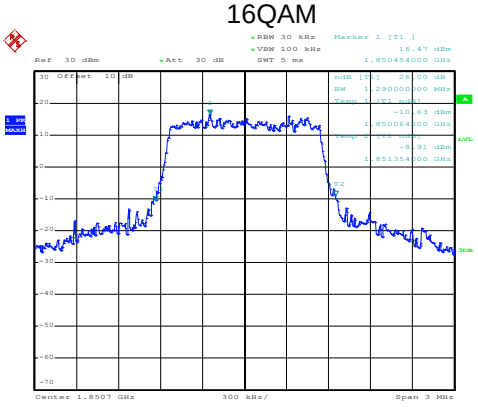


Date: 15.MAY.2020 10:24:33

Highest channel

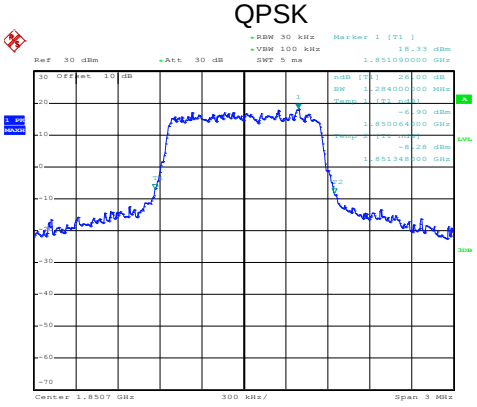
LTE Band 2: -26dBc bandwidth
BW: 1.4MHz

16QAM



Date: 15.MAY.2020 10:15:51

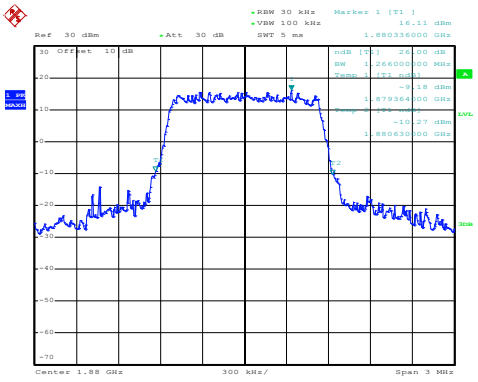
QPSK



Date: 15.MAY.2020 10:15:46

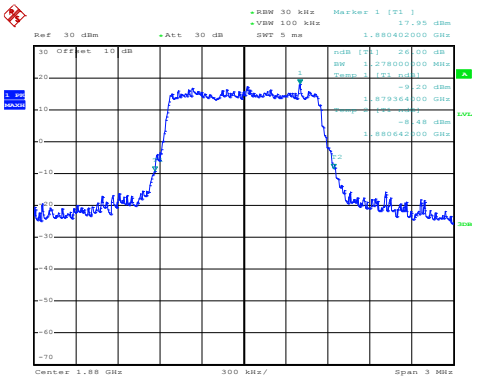
Lowest channel

16QAM



Date: 15.MAY.2020 10:16:06

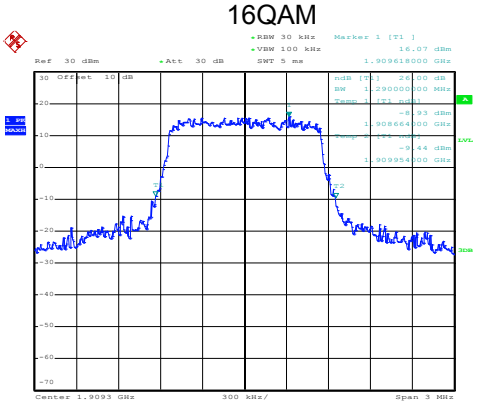
QPSK



Date: 15.MAY.2020 10:16:01

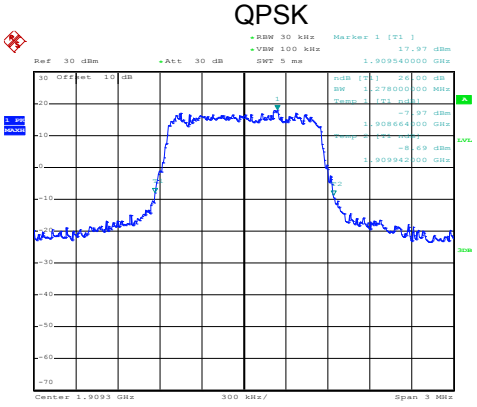
Middle channel

16QAM



Date: 15.MAY.2020 10:16:45

QPSK

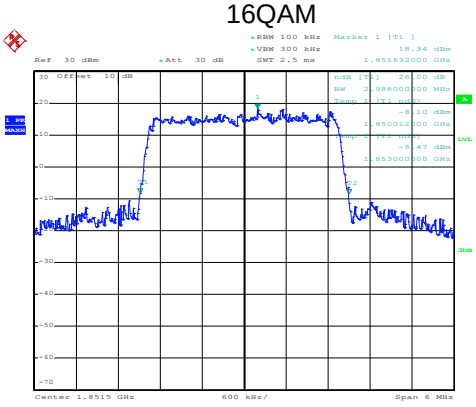


Date: 15.MAY.2020 10:16:40

Highest channel

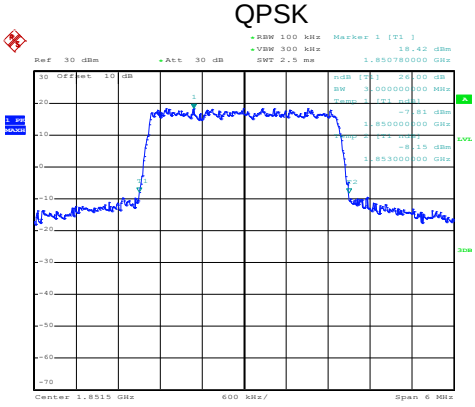
LTE Band 2: -26dBc bandwidth
BW: 3MHz

16QAM



Date: 15.MAY.2020 10:17:15

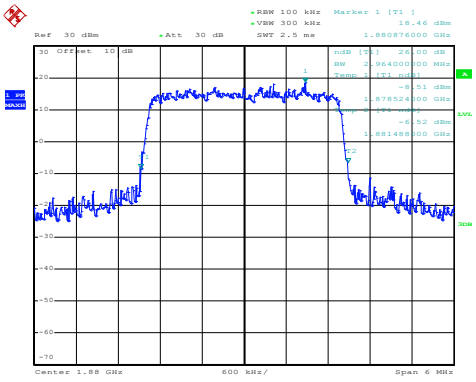
QPSK



Date: 15.MAY.2020 10:17:11

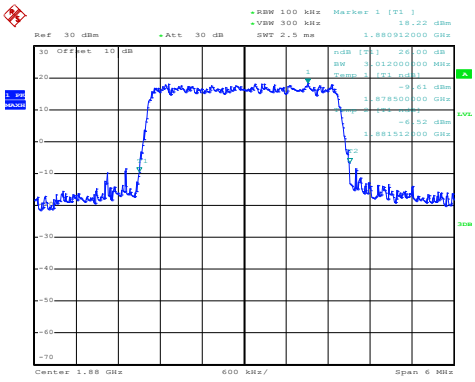
Lowest channel

16QAM



Date: 15.MAY.2020 10:17:54

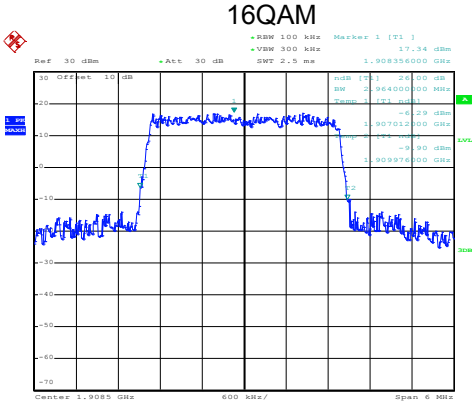
QPSK



Date: 15.MAY.2020 10:17:50

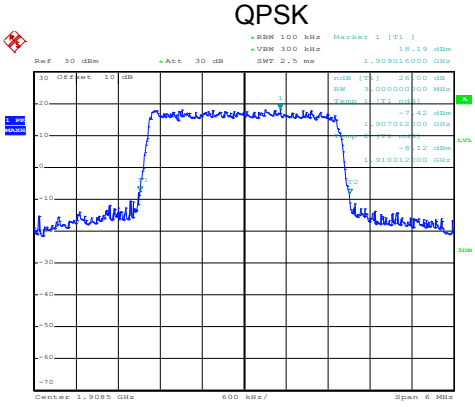
Middle channel

16QAM



Date: 15.MAY.2020 10:18:11

QPSK

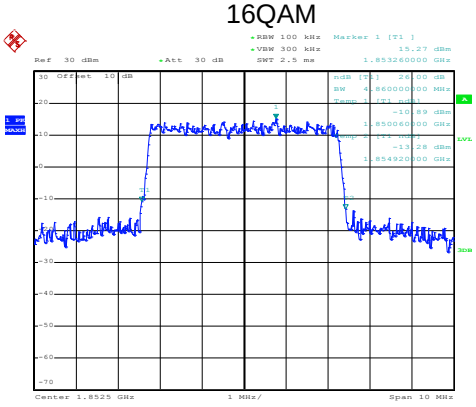


Date: 15.MAY.2020 10:18:07

Highest channel

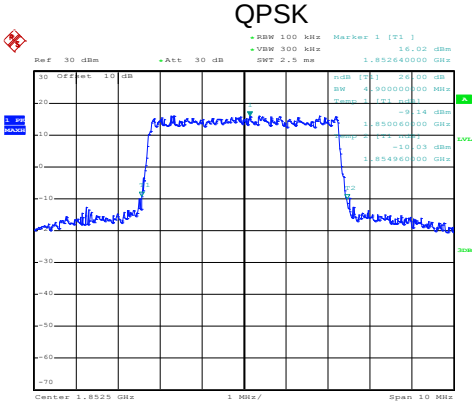
LTE Band 2: -26dBc bandwidth
BW: 5MHz

16QAM



Date: 15.MAY.2020 10:19:02

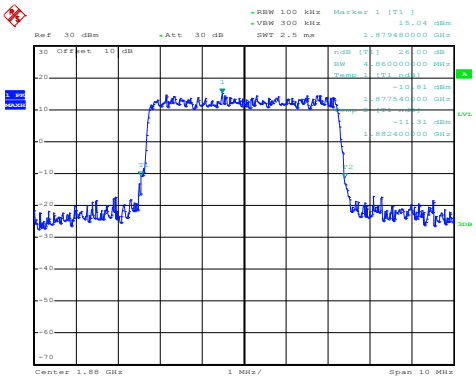
QPSK



Date: 15.MAY.2020 10:18:58

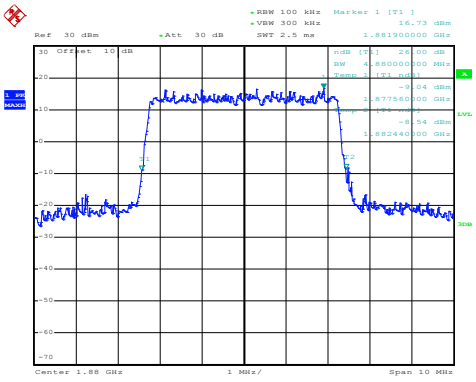
Lowest channel

16QAM



Date: 15.MAY.2020 10:19:14

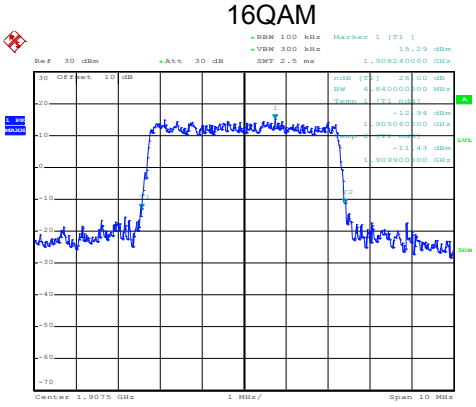
QPSK



Date: 15.MAY.2020 10:19:10

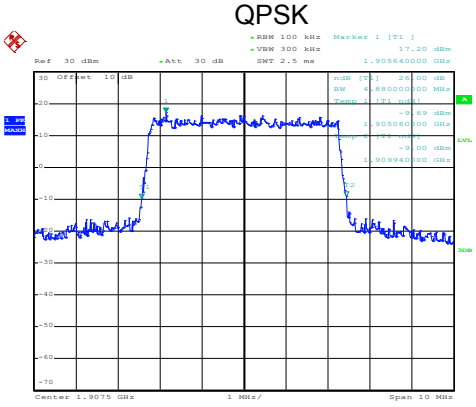
Middle channel

16QAM



Date: 15.MAY.2020 10:19:48

QPSK

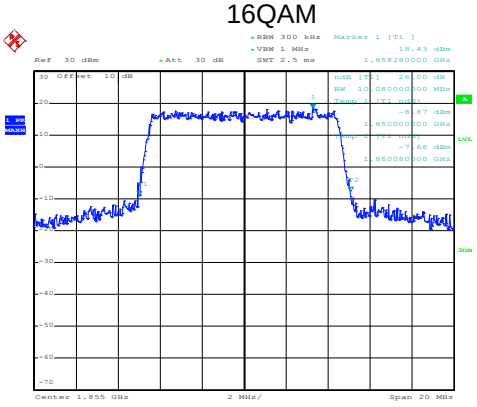


Date: 15.MAY.2020 10:19:44

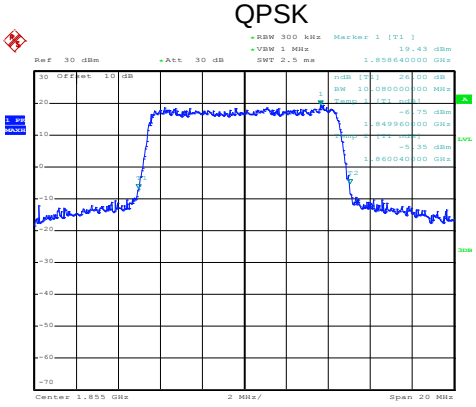
Highest channel

LTE Band 2: -26dBc bandwidth
BW: 10MHz

16QAM

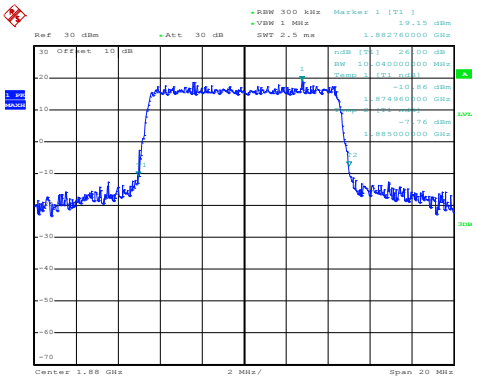


QPSK

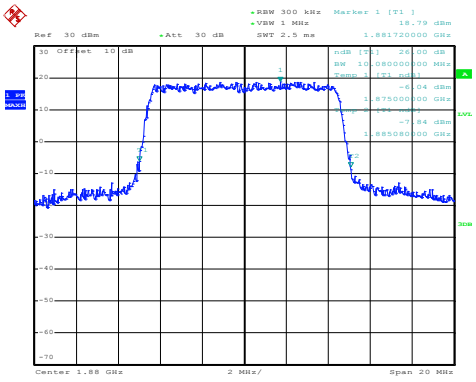


Lowest channel

16QAM

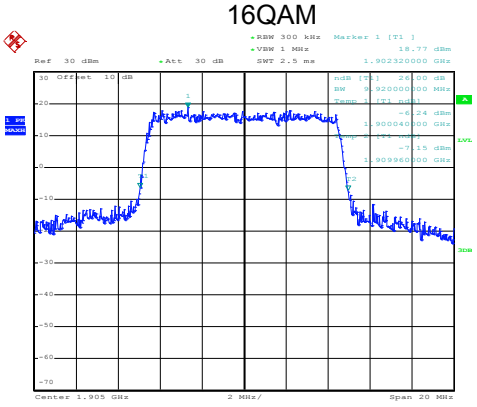


QPSK

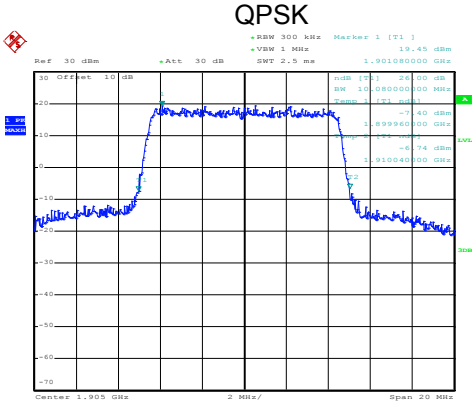


Middle channel

16QAM



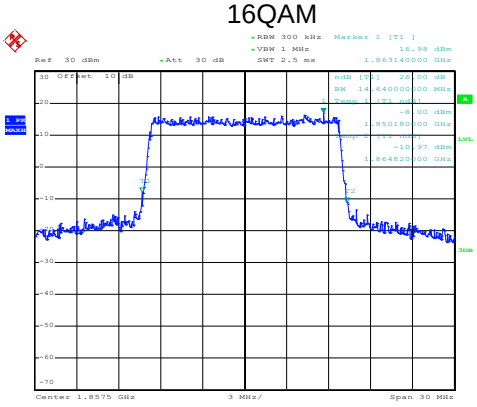
QPSK



Highest channel

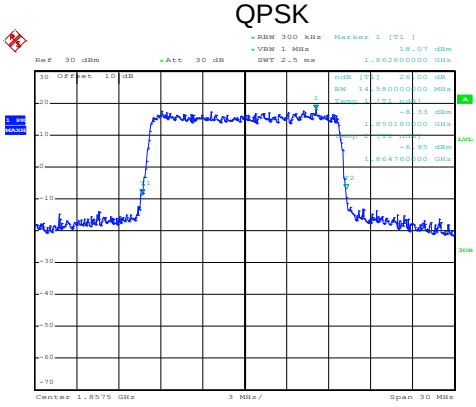
LTE Band 2: -26dBc bandwidth
BW: 15MHz

16QAM



Date: 15.MAY.2020 10:22:04

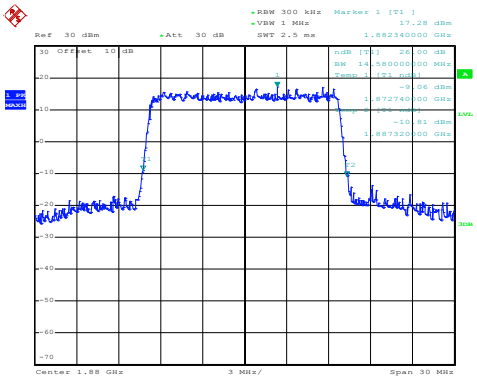
QPSK



Date: 15.MAY.2020 10:21:58

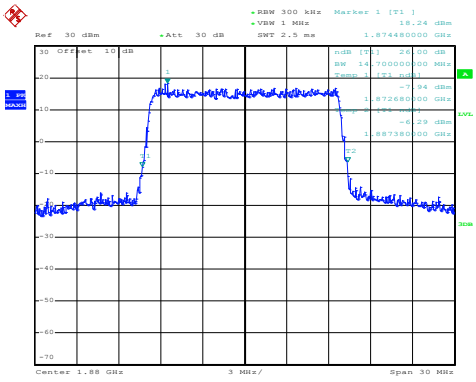
Lowest channel

16QAM



Date: 15.MAY.2020 10:22:23

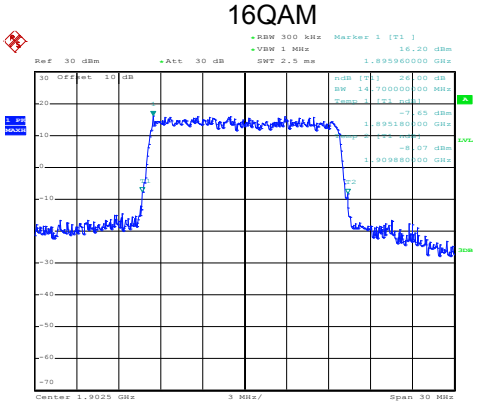
QPSK



Date: 15.MAY.2020 10:22:18

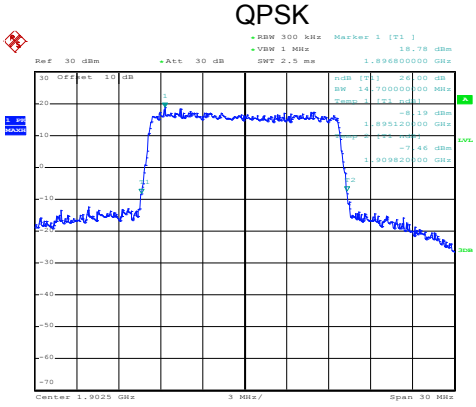
Middle channel

16QAM



Date: 15.MAY.2020 10:23:07

QPSK

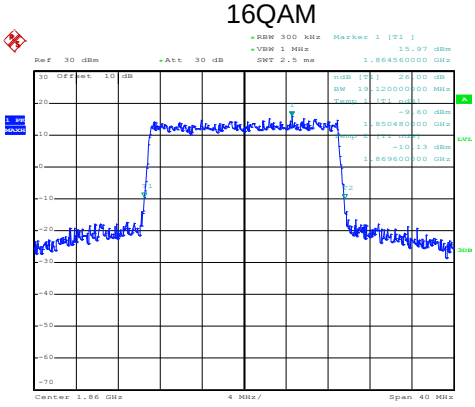


Date: 15.MAY.2020 10:23:02

Highest channel

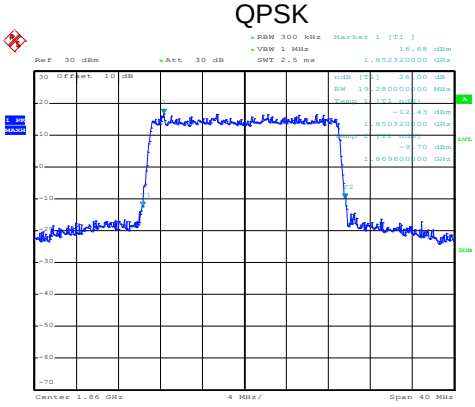
LTE Band 2: -26dBc bandwidth
BW: 20MHz

16QAM



Date: 15.MAY.2020 10:23:33

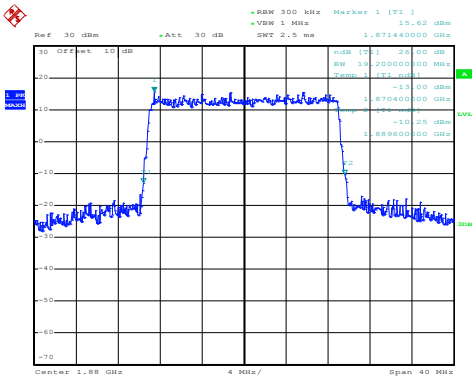
QPSK



Date: 15.MAY.2020 10:23:29

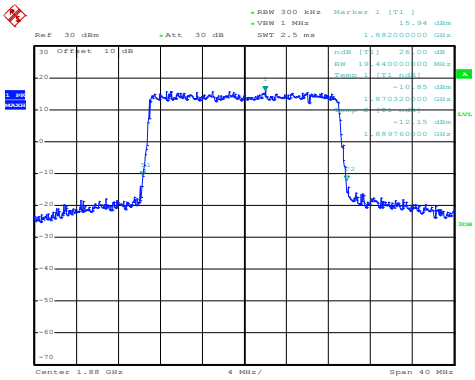
Lowest channel

16QAM



Date: 15.MAY.2020 10:24:12

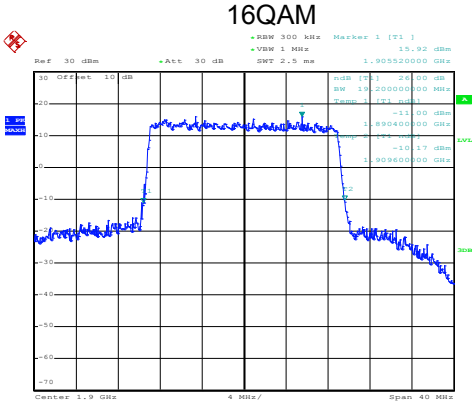
QPSK



Date: 15.MAY.2020 10:24:07

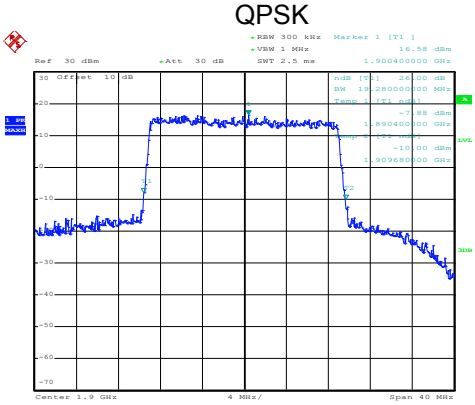
Middle channel

16QAM



Date: 15.MAY.2020 10:24:26

QPSK



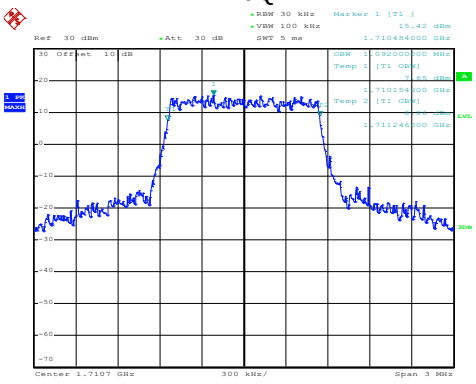
Date: 15.MAY.2020 10:24:21

Highest channel

LTE Band 4 part:

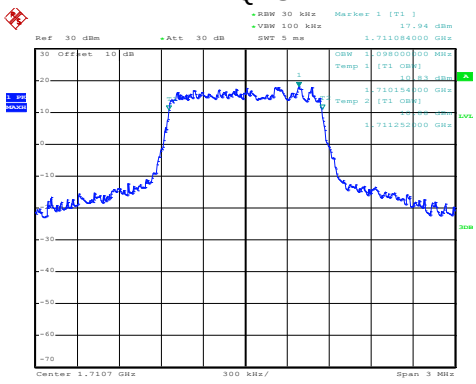
LTE Band 4: 99% Occupy bandwidth
BW: 1.4MHz

16QAM



Date: 15.MAY.2020 10:14:25

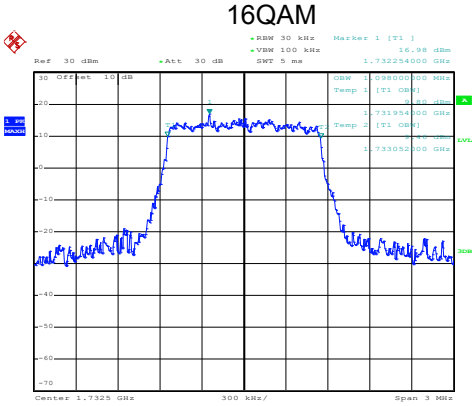
QPSK



Date: 15.MAY.2020 10:14:21

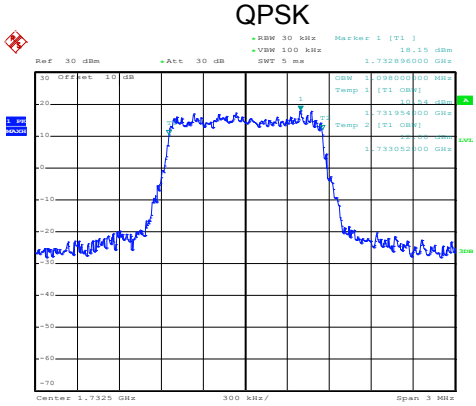
Lowest channel

16QAM



Date: 15.MAY.2020 10:14:36

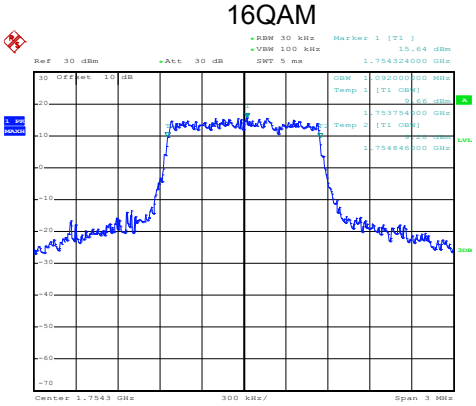
QPSK



Date: 15.MAY.2020 10:14:32

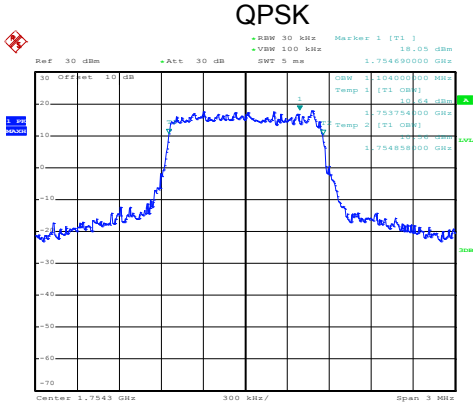
Middle channel

16QAM



Date: 15.MAY.2020 10:15:13

QPSK

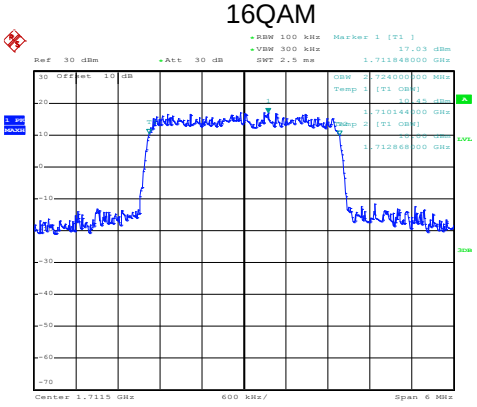


Date: 15.MAY.2020 10:15:09

Highest channel

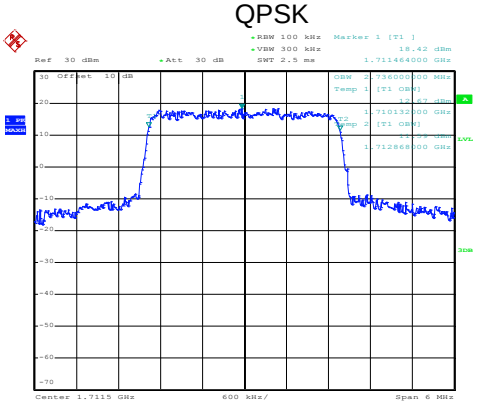
LTE Band 4: 99% Occupy bandwidth
BW: 3MHz

16QAM



Date: 15.MAY.2020 10:12:46

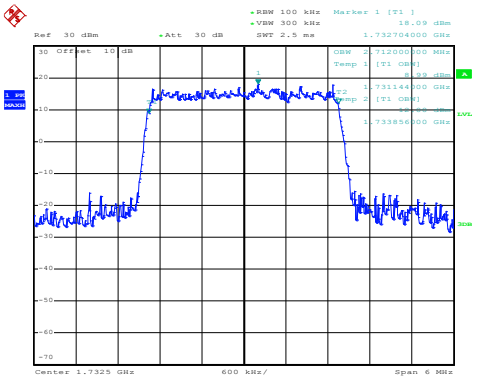
QPSK



Date: 15.MAY.2020 10:12:43

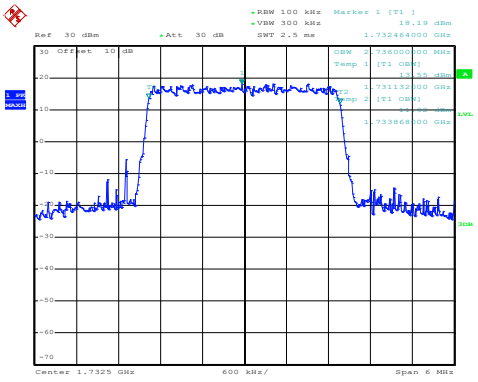
Lowest channel

16QAM



Date: 15.MAY.2020 10:13:18

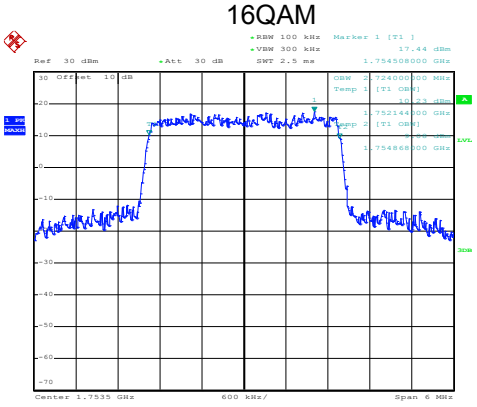
QPSK



Date: 15.MAY.2020 10:13:14

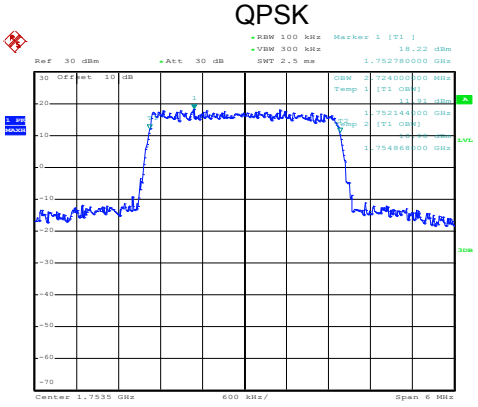
Middle channel

16QAM



Date: 15.MAY.2020 10:13:36

QPSK

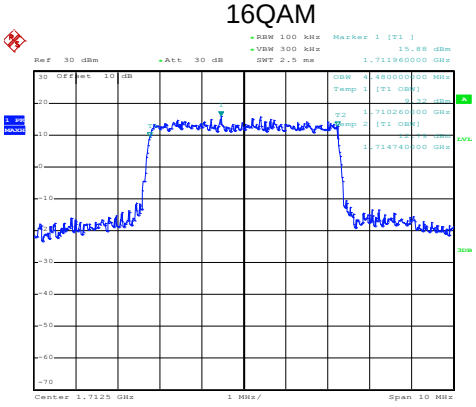


Date: 15.MAY.2020 10:13:32

Highest channel

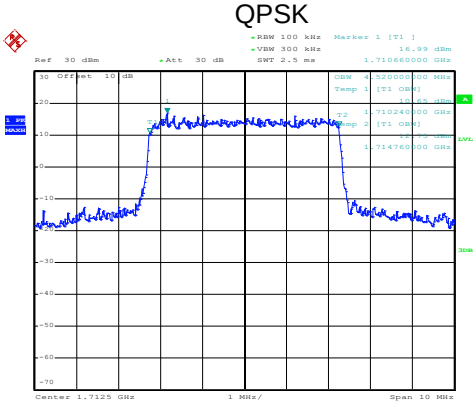
LTE Band 4: 99% Occupy bandwidth
BW: 5MHz

16QAM



Date: 15.MAY.2020 10:11:33

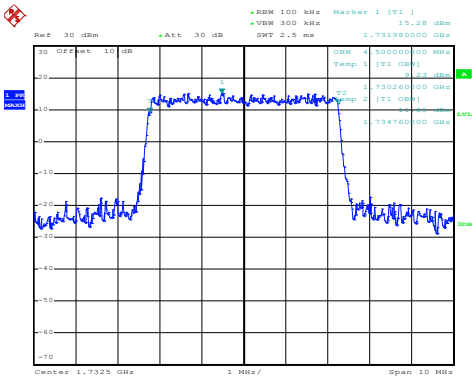
QPSK



Date: 15.MAY.2020 10:11:28

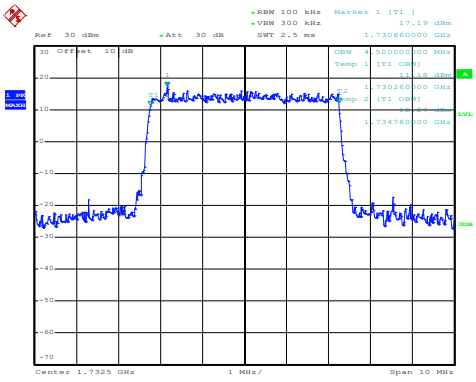
Lowest channel

16QAM



Date: 15.MAY.2020 10:11:45

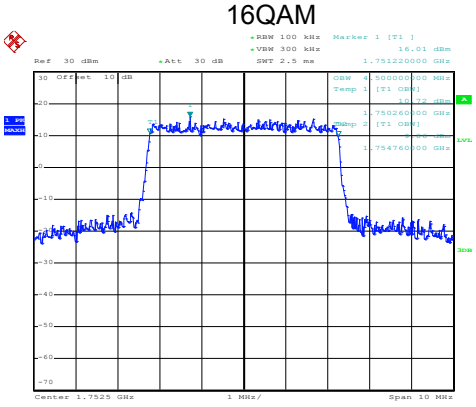
QPSK



Date: 15.MAY.2020 10:11:40

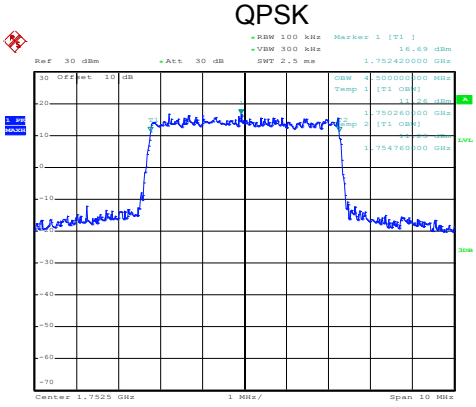
Middle channel

16QAM



Date: 15.MAY.2020 10:12:22

QPSK

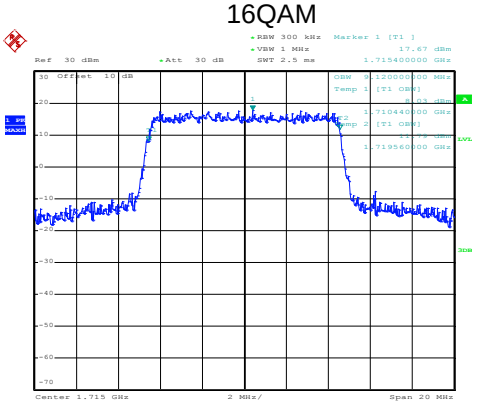


Date: 15.MAY.2020 10:12:17

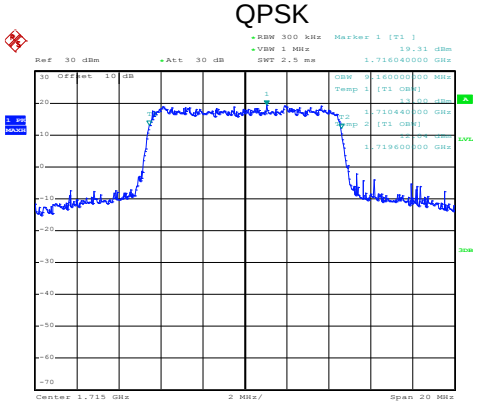
Highest channel

LTE Band 4: 99% Occupy bandwidth
BW: 10MHz

16QAM

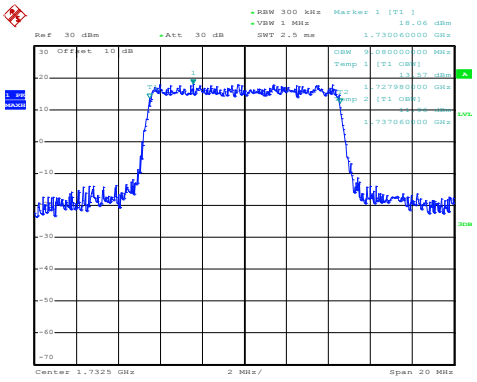


QPSK

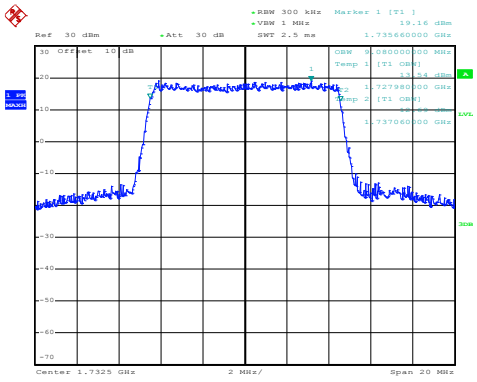


Lowest channel

16QAM

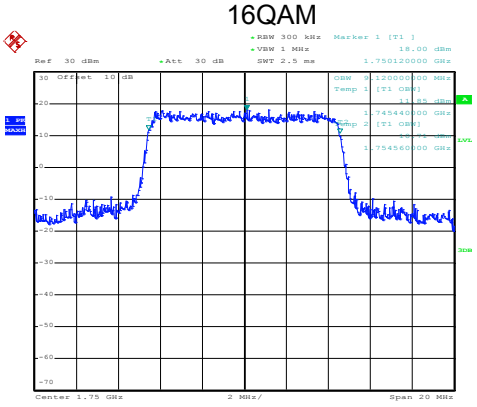


QPSK

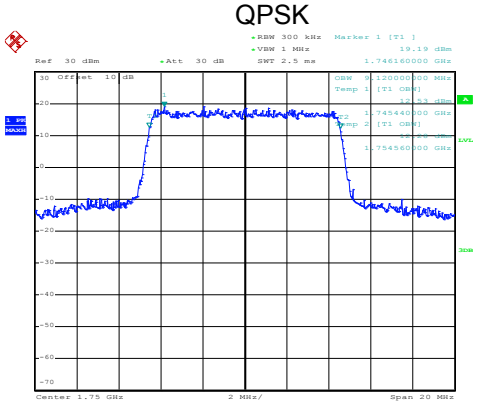


Middle channel

16QAM



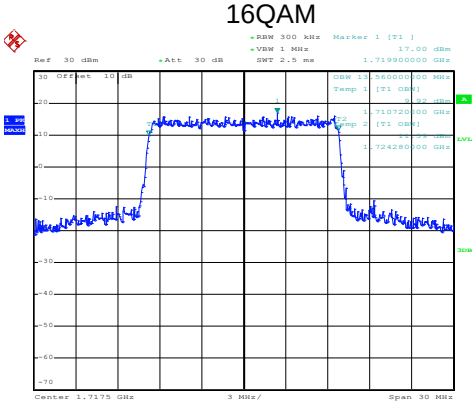
QPSK



Highest channel

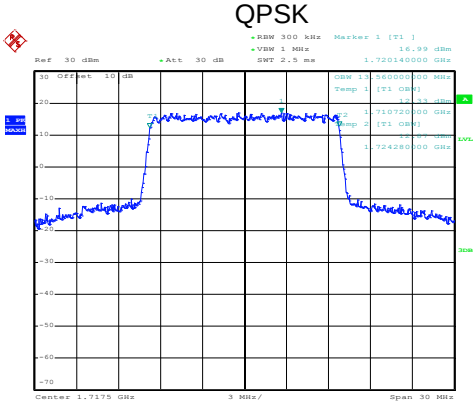
LTE Band 4: 99% Occupy bandwidth
BW: 15MHz

16QAM



Date: 15.MAY.2020 10:08:36

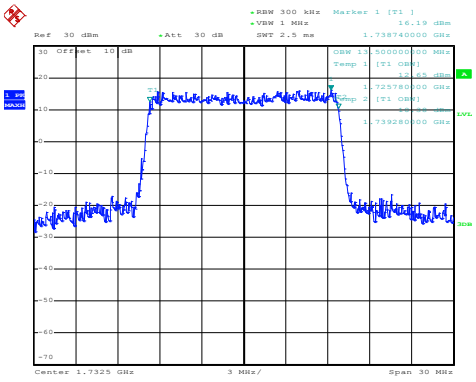
QPSK



Date: 15.MAY.2020 10:08:33

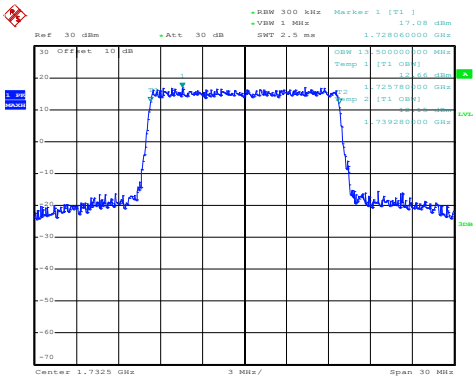
Lowest channel

16QAM



Date: 15.MAY.2020 10:08:48

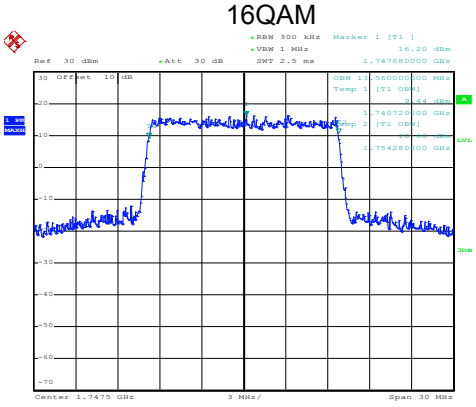
QPSK



Date: 15.MAY.2020 10:08:45

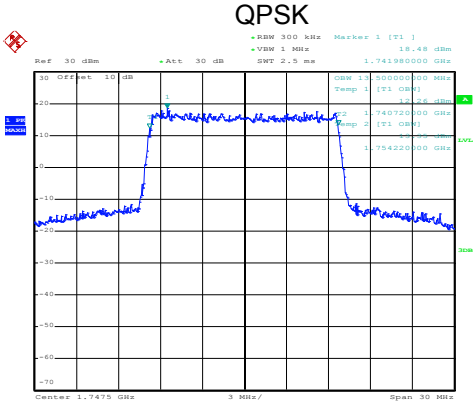
Middle channel

16QAM



Date: 15.MAY.2020 10:09:25

QPSK

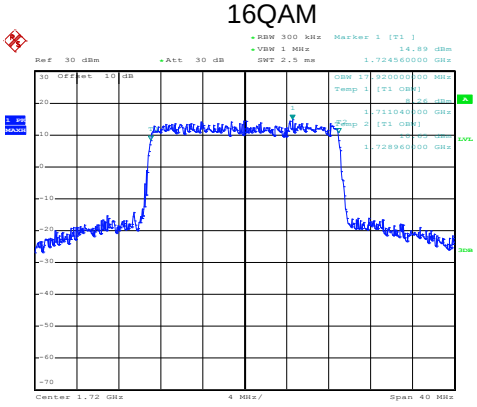


Date: 15.MAY.2020 10:09:21

Highest channel

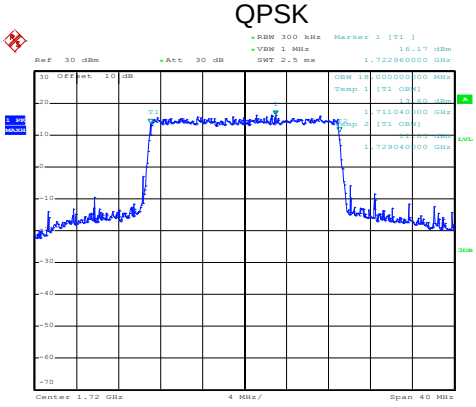
LTE Band 4: 99% Occupy bandwidth
BW: 20MHz

16QAM



Date: 15.MAY.2020 10:06:57

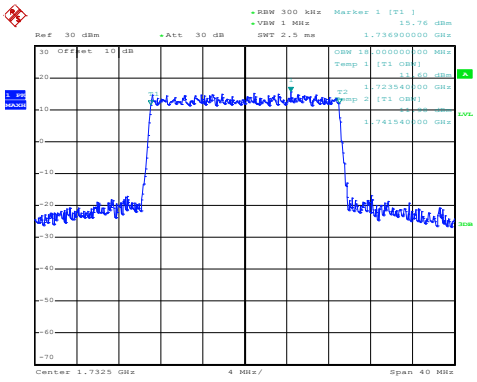
QPSK



Date: 15.MAY.2020 10:06:54

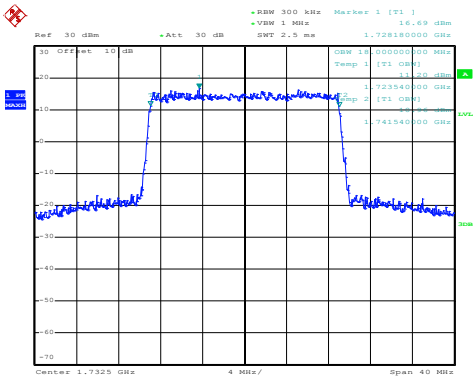
Lowest channel

16QAM



Date: 15.MAY.2020 10:07:35

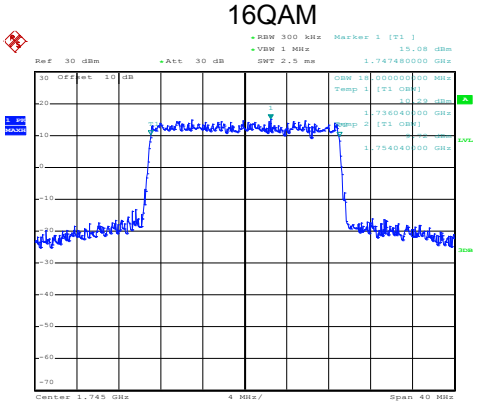
QPSK



Date: 15.MAY.2020 10:07:30

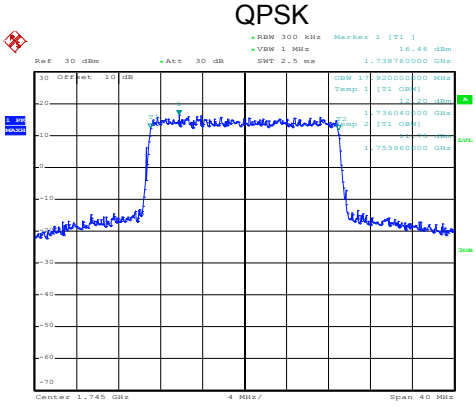
Middle channel

16QAM



Date: 15.MAY.2020 10:07:51

QPSK

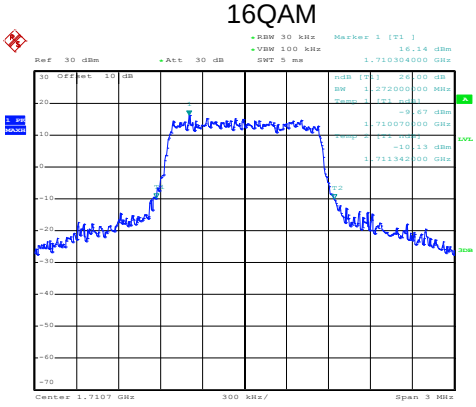


Date: 15.MAY.2020 10:07:47

Highest channel

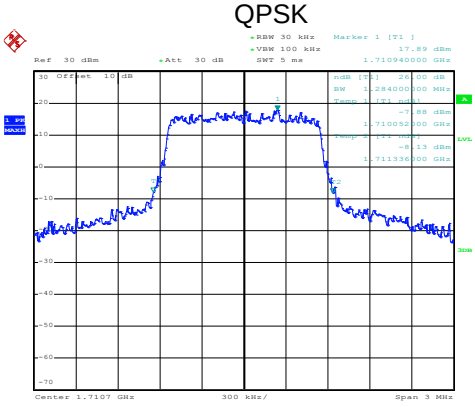
LTE Band 4: -26dBc bandwidth
BW: 1.4MHz

16QAM



Date: 15.MAY.2020 10:14:13

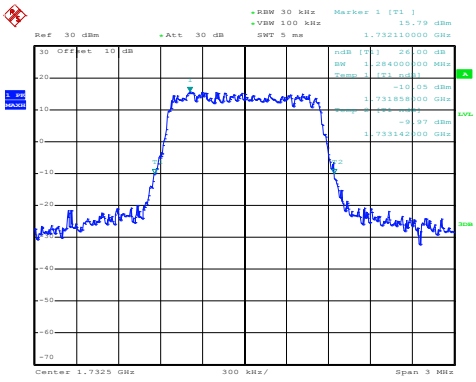
QPSK



Date: 15.MAY.2020 10:14:09

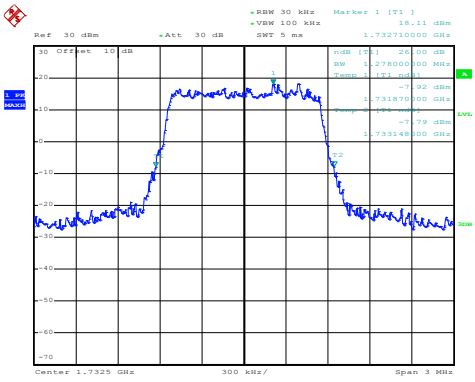
Lowest channel

16QAM



Date: 15.MAY.2020 10:14:47

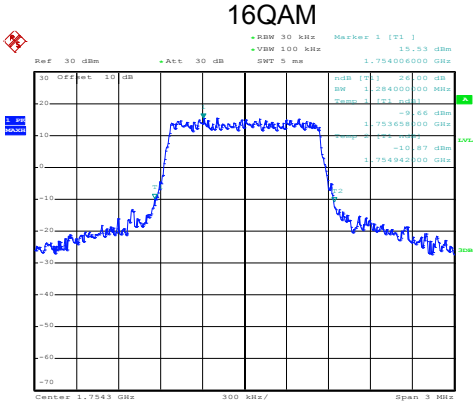
QPSK



Date: 15.MAY.2020 10:14:42

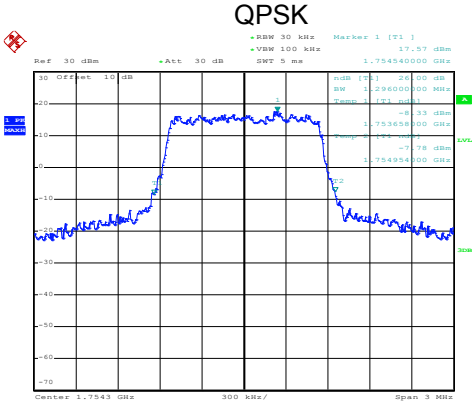
Middle channel

16QAM



Date: 15.MAY.2020 10:15:02

QPSK

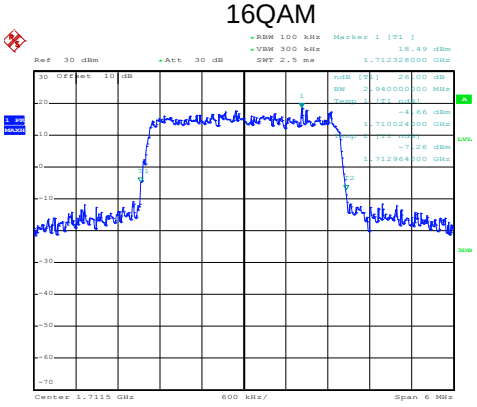


Date: 15.MAY.2020 10:14:58

Highest channel

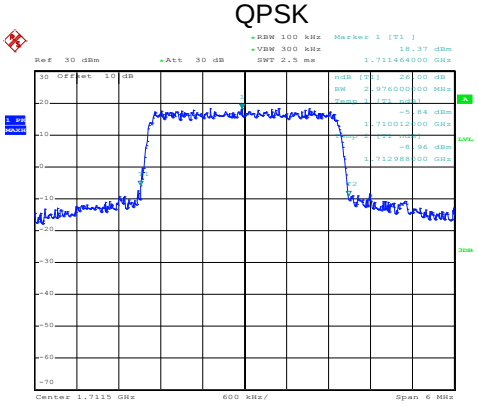
LTE Band 4: -26dBc bandwidth
BW: 3MHz

16QAM



Date: 15.MAY.2020 10:12:56

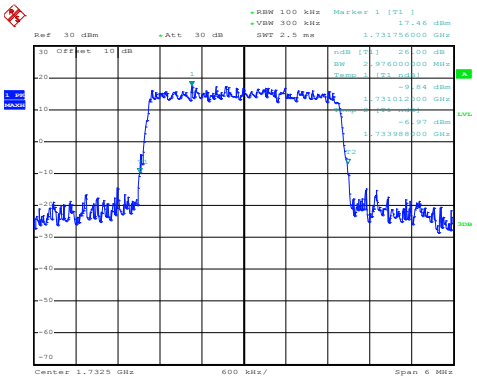
QPSK



Date: 15.MAY.2020 10:12:52

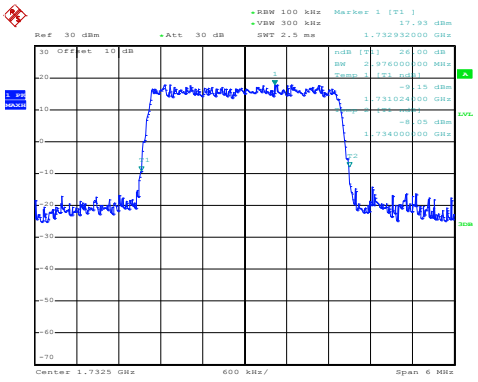
Lowest channel

16QAM



Date: 15.MAY.2020 10:13:08

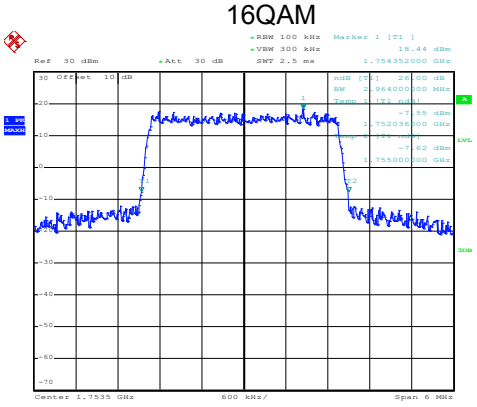
QPSK



Date: 15.MAY.2020 10:13:04

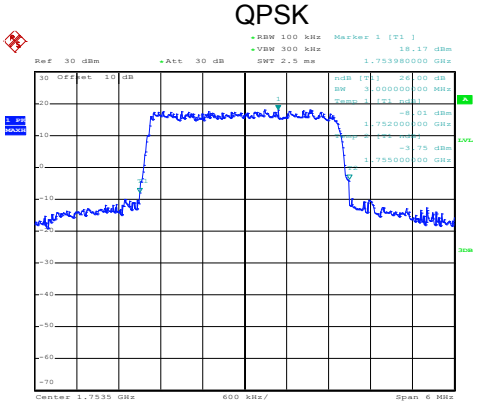
Middle channel

16QAM



Date: 15.MAY.2020 10:13:47

QPSK

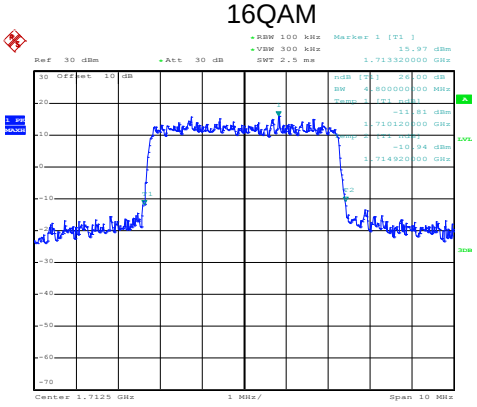


Date: 15.MAY.2020 10:13:42

Highest channel

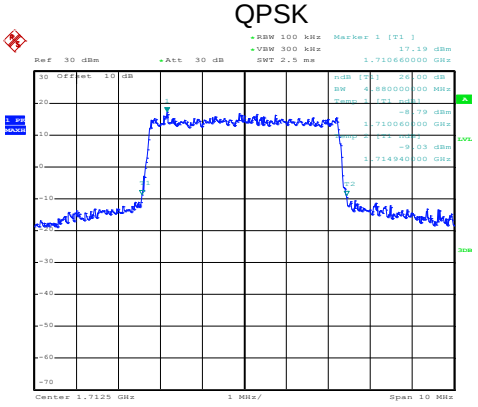
LTE Band 4: -26dBc bandwidth
BW: 5MHz

16QAM



Date: 15.MAY.2020 10:11:23

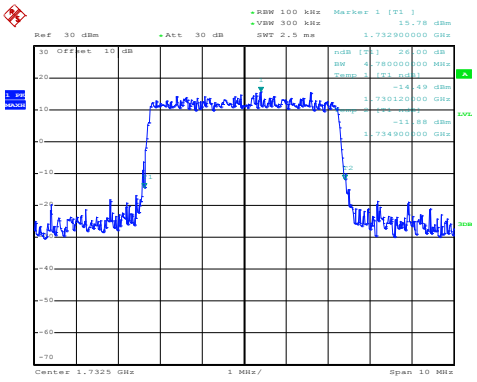
QPSK



Date: 15.MAY.2020 10:11:19

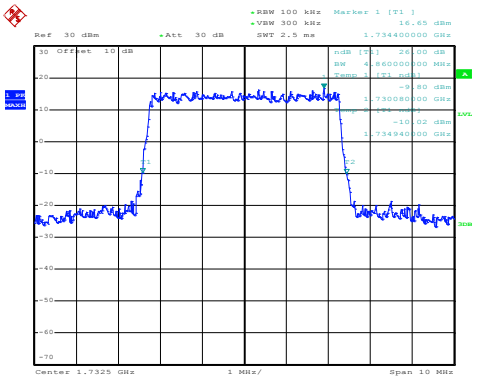
Lowest channel

16QAM



Date: 15.MAY.2020 10:11:54

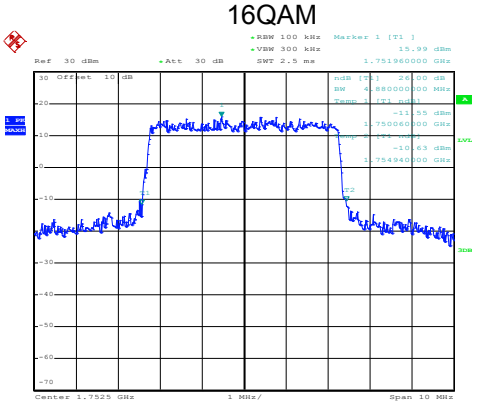
QPSK



Date: 15.MAY.2020 10:11:51

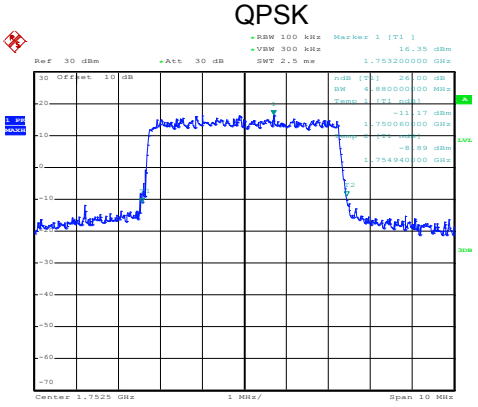
Middle channel

16QAM



Date: 15.MAY.2020 10:12:11

QPSK

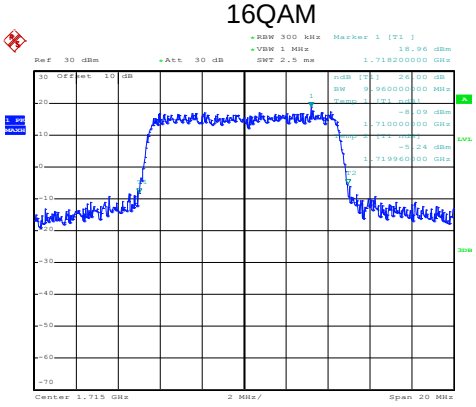


Date: 15.MAY.2020 10:12:06

Highest channel

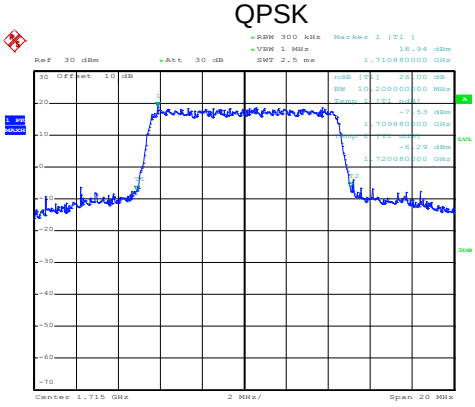
LTE Band 4: -26dBc bandwidth
BW: 10MHz

16QAM



Date: 15.MAY.2020 10:10:05

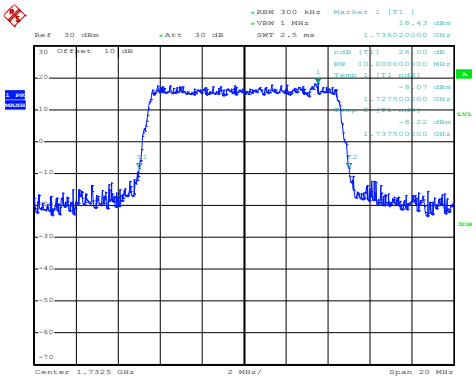
QPSK



Date: 15.MAY.2020 10:10:02

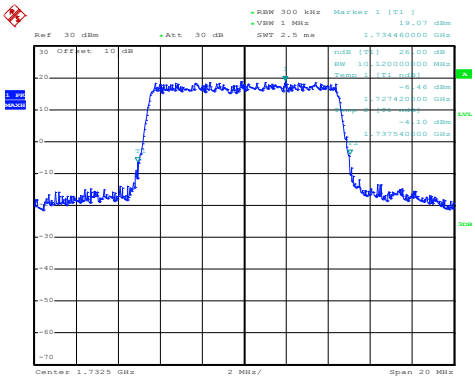
Lowest channel

16QAM



Date: 15.MAY.2020 10:10:18

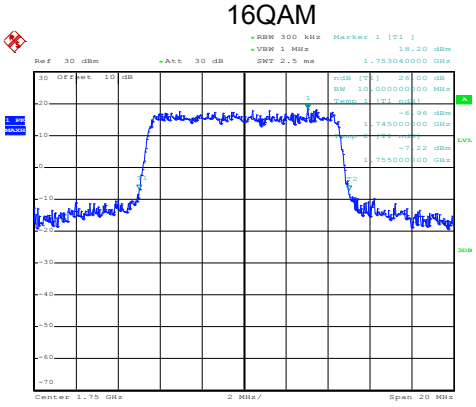
QPSK



Date: 15.MAY.2020 10:10:14

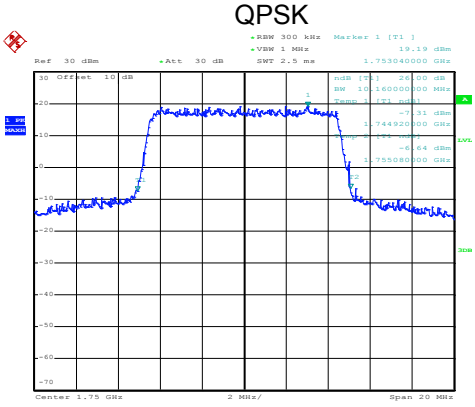
Middle channel

16QAM



Date: 15.MAY.2020 10:10:53

QPSK

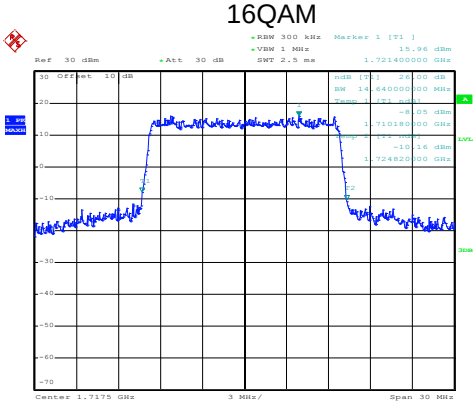


Date: 15.MAY.2020 10:10:50

Highest channel

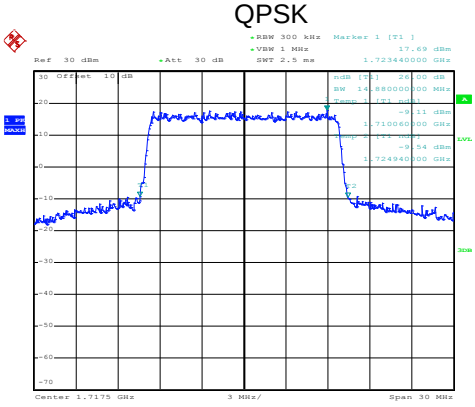
LTE Band 4: -26dBc bandwidth
BW: 15MHz

16QAM



Date: 15.MAY.2020 10:08:26

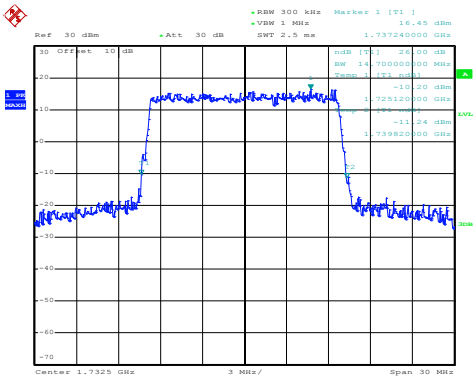
QPSK



Date: 15.MAY.2020 10:08:23

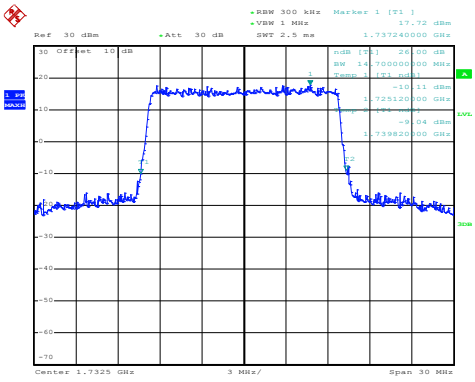
Lowest channel

16QAM



Date: 15.MAY.2020 10:08:59

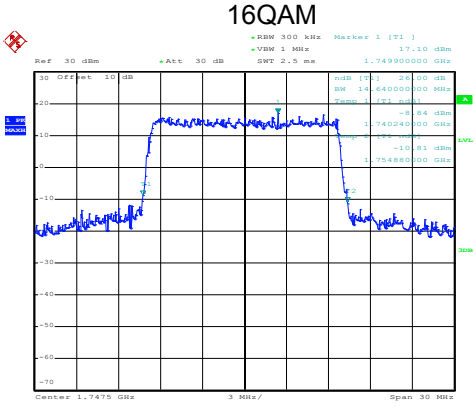
QPSK



Date: 15.MAY.2020 10:08:55

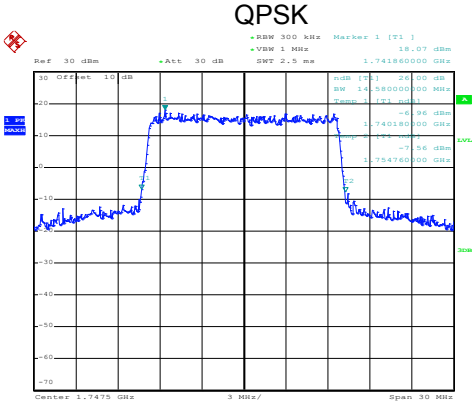
Middle channel

16QAM



Date: 15.MAY.2020 10:09:14

QPSK



Date: 15.MAY.2020 10:09:10

Highest channel