FCC REPORT
(LTE)

Applicant:	Xwireless LLC
Address of Applicant:	11565 Old Georgetown Road, Rockville, MD 20852United States
Equipment Under Test (EUT)	
Product Name:	LTE smartphone
Model No.:	MUV
Trade mark:	Vortex
FCC ID:	2ADLJMUV
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 M FCC CFR Title 47 Part 90 Subpart S FCC CFR Title 47 Part 27 Subpart F FCC CFR Title 47 Part 27 Subpart N
Date of sample receipt:	16 Aug., 2019
Date of Test:	17 Aug., to 19 Sep., 2019
Date of report issued:	23 Sep., 2019
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	*23 Sep., 2019*	*Original*

Tested by: Carey Chen ***Date:*** *23 Sep., 2019*

Test Engineer

Reviewed by: Winner zhang ***Date:*** *23 Sep., 2019*

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)(2) Part 24.232 (c) Part 27.50 (c)(10) Part 27.50 (d)(4) Part 27.50 (h)(2) Part 90.635 (b)	Pass
Peak-to-Average Ratio	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(g) Part 27.53(h) Part 27.53(m) Part 90.691(a)	Pass
Out of band emission at antenna terminals	Part 2.1053 Part 22.917(a) Part 24.238 (a) Part 27.53 (g) Part 27.53 (h) Part 27.53(m) Part 90.691(a)	Pass
Field strength of spurious radiation	Part 22.917(a) Part 24.238 (a) Part 27.53 (g) Part 27.53 (h) Part 27.53(m) Part 90.691(a)	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 (provided by the customer).*

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

5. General Information

5.1 Client Information

Applicant:	Xwireless LLC
Address:	11565 Old Georgetown Road, Rockville, MD 20852United States
Manufacturer/Factory:	Xwireless LLC
Address:	11565 Old Georgetown Road, Rockville, MD 20852United States

5.2 General Description of E.U.T.

Product Name:	LTE smartphone
Model No.:	MUV
Operation Frequency range:	LTE Band 2: TX: 1850 MHz-1910 MHz, RX: 1930 MHz-1990 MHz 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 25: TX: 1850 MHz-1915 MHz, RX: 1930 MHz-1995 MHz LTE Band 26: TX: 814MHz-849MHz, RX: 859MHz-894MHz LTE Band 41: TX: 2555MHz-2655MHz, RX: 2555 MHz-2655 MHz 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: 3.1dBi; LTE Band 4: 2.9dBi; LTE Band 5: 2.2dBi; LTE Band 12: 2.5dBi; LTE Band 25: 2.2dBi; LTE Band 26: 2.3dBi; LTE Band 41: 2.2dBi; LTE Band 66: 2.5dBi; LTE Band 71: 1.89dBi
Power supply:	Rechargeable Li-ion Battery DC3.7V-2000mAh
AC adapter:	Model: MUV Input: AC100-240V, 50/60Hz, 0.2A Output: DC 5.0V, 8000mA
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 25 (1.4MHz)		LTE Band 25 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
26047	1850.70	26055	1851.50
26048	1850.80	26056	1851.60
….	….	….	….
26364	1882.40	26367	1882.40
26365	1882.50	26365	1882.50
26366	1882.60	26366	1882.60
…	…	…	…
26682	1914.20	26676	1913.40
26683	1914.30	26675	1913.50
LTE Band 25 (5MHz)		LTE Band 25 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
26065	1852.50	26090	1855.00
26066	1852.60	26091	1855.10
….	….	….	….
26364	1882.40	26364	1882.40
26365	1882.50	26365	1882.50
26366	1882.60	26366	1882.60
…	…	…	…
26664	1912.40	26639	1909.90
26665	1912.50	26640	1910.00
LTE Band 25 (15MHz)		LTE Band 25 (20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
26115	1857.50	26140	1860.00
26116	1857.60	26139	1860.10
….	….	….	….
26364	1882.40	26364	1882.40
26365	1882.50	26365	1882.50
36366	1882.60	26366	1882.60
…	…	…	…
26614	1907.40	26589	1904.90
26615	1907.50	26590	1905.00

LTE Band 26 (1.4MHz)		LTE Band 26 (3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
26697	814.70	26705	815.50
26698	814.80	26706	815.60
….	….	….	….
26864	831.40	26864	831.40
26865	831.50	26865	831.50
26866	831.60	26866	831.60
…	…	…	…
27032	848.20	27024	847.40
27033	848.30	27025	847.50
LTE Band 26 (5MHz)		LTE Band 26 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
26715	816.50	26750	820.00
26716	816.60	26760	820.10
….	….	….	….
26864	831.40	26864	831.40
26865	831.50	26865	831.50
26866	831.60	26866	831.60
…	…	…	…
27014	846.40	26980	843.90
27015	846.50	26990	844.00
LTE Band 26 (15MHz)			
Channel	Frequency (MHz)		
26775	822.50		
26776	822.60		
….	….		
26864	831.40		
26865	831.50		
26866	831.60		
…	…		
26964	841.40		
26965	841.50		

LTE Band 41 (5MHz)		LTE Band 41 (10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
40265	2557.50	40290	2560.00
40266	2557.60	40291	2560.10
….	….	….	….
40739	2604.90	40739	2604.90
40740	2605.00	40740	2605.00
40741	2605.10	40741	2605.10
…	…	…	…
41214	2652.40	21189	2649.90
41215	2652.50	21190	2650.00
LTE Band 41 (15MHz)		LTE Band 41 (20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
40315	2562.50	40340	2565.00
40316	2562.60	40341	2565.10
….	….	….	….
40739	2604.90	40739	2604.90
40740	2605.00	40740	2605.00
40741	2605.10	40741	2605.10
…	…	…	…
41164	2647.40	41139	2644.90
41165	2647.50	41140	2645.00

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 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 25 includes LTE Band 2:

LTE Band 25 (1.4MHz)			LTE Band 25 (3MHz)		
Channel:		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	26047	1850.70	Lowest channel	26055	1851.50
Middle channel	26365	1882.50	Middle channel	26365	1882.50
Highest channel	26683	1914.30	Highest channel	26675	1913.50
LTE Band 25 (5MHz)			LTE Band 25 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	26065	1852.50	Lowest channel	26090	1855.00
Middle channel	26365	1882.50	Middle channel	26365	1882.50
Highest channel	26665	1912.50	Highest channel	26640	1910.00
LTE Band 25 (15MHz)			LTE Band 25 (20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	26115	1857.50	Lowest channel	26140	1860.00
Middle channel	26365	1882.50	Middle channel	26365	1882.50
Highest channel	26615	1907.50	Highest channel	26590	1905.00

LTE Band 5&26(1.4MHz) for Part 22			LTE Band 26(1.4MHz) for Part 90		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	26797	824.7	Lowest channel	26697	814.7
Middle channel	26915	836.5	Middle channel	26740	819.0
Highest channel	27033	848.3	Highest channel	26783	823.3
LTE Band 5&26(3MHz) for Part 22			LTE Band 26(3MHz) for Part 90		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	26805	825.5	Lowest channel	26705	815.5
Middle channel	26915	836.5	Middle channel	26740	819.0
Highest channel	27025	847.5	Highest channel	26775	822.5
LTE Band 5&26(5MHz) for Part 22			LTE Band 26(5MHz) for Part 90		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	26815	826.5	Lowest channel	26715	816.5
Middle channel	26915	836.5	Middle channel	26740	819.0
Highest channel	27015	846.5	Highest channel	26765	821.5
LTE Band 5&26(10MHz) for Part 22			LTE Band 26(10MHz) for Part 90		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	26840	829.0	Lowest channel	/	/
Middle channel	26915	836.5	Middle channel	26740	819.0
Highest channel	26990	844.0	Highest channel	/	/
LTE Band 26(15MHz) for Part 22H			LTE Band 26(15MHz) (Straddling Part 22H, 90S)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	26865	831.5	Lowest channel	26765	821.5
Middle Channel	26915	836.5	/	/	/
Highest channel	26965	841.5	/	/	/

LTE Band 41 (5MHz)			LTE Band 41 (10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	40265	2557.5	Lowest channel	40290	2560.0
Middle channel	40740	2605.0	Middle channel	40740	2605.0
Highest channel	41215	2652.5	Highest channel	41190	2650.0
LTE Band 41 (15MHz)			LTE Band 41 (20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	40315	2562.5	Lowest channel	40340	2565.0
Middle channel	40740	2605.0	Middle channel	40740	2605.0
Highest channel	41165	2647.5	Highest channel	41140	2645.0

LTE Band 66 includes LTE Band 4:

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: 3.7Vdc, Extreme: Low 3.5Vdc, High 4.2Vdc
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 with power adaptor, earphone and Data cable. 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
Simulated Station	Rohde & Schwarz	CMW500	140493

5.5 Measurement Uncertainty

Parameters	Expanded Uncertainty
Radiated Emission (9kHz ~ 30MHz)	±2.76 dB (k=2)
Radiated Emission (30MHz ~ 1000MHz)	±4.28 dB (k=2)
Radiated Emission (1GHz ~ 18GHz)	±5.72 dB (k=2)
Radiated Emission (18GHz ~ 40GHz)	±2.88 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.

- **CNAS - Registration No.: CNAS L6048**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

- **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. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,
Bao'an District, Shenzhen, Guangdong, China
Tel: +86-755-23118282, Fax: +86-755-23116366

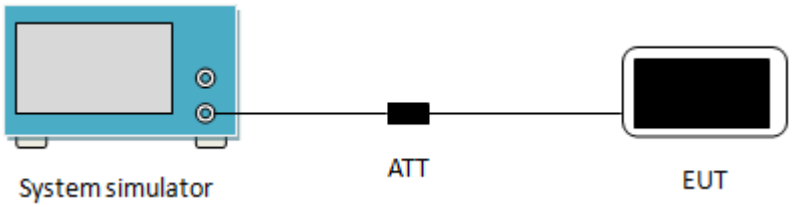
Email: info@ccis-cb.com, Website: http://www.ccis-cb.com

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	03-18-2019	03-17-2020
Biconical Antenna	SCHWARZBECK	VUBA9117	359	06-22-2017	06-21-2020
Horn Antenna	SCHWARZBECK	BBHA9120D	916	03-18-2019	03-17-2020
Horn Antenna	SCHWARZBECK	BBHA9120D	1805	06-22-2017	06-21-2020
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170582	11-21-2018	11-20-2019
EMI Test Software	AUDIX	E3	Version: 6.110919b		
Pre-amplifier	HP	8447D	2944A09358	03-18-2019	03-17-2020
Pre-amplifier	CD	PAP-1G18	11804	03-18-2019	03-17-2020
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-18-2019	03-17-2020
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-18-2019	03-17-2020
Spectrum Analyzer	Agilent	N9020A	MY50510123	10-29-2018	10-28-2019
Signal Generator	Rohde & Schwarz	SMX	835454/016	03-18-2019	03-17-2020
Signal Generator	R&S	SMR20	1008100050	03-18-2019	03-17-2020
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	03-18-2019	03-17-2020
Cable	MICRO-COAX	MFR64639	K10742-5	03-18-2019	03-17-2020
Cable	SUHNER	SUCOFLEX100	58193/4PE	03-18-2019	03-17-2020
DC Power Supply	XinNuoEr	WYK-10020K	1409050110020	10-31-2018	10-30-2019
Temperature Humidity Chamber	HengPu	HPGDS-500	20140828008	09-24-2018	09-23-2019
Simulated Station	Rohde & Schwarz	CMW500	140493	07-16-2019	07-15-2020

6. Test results

6.1 Conducted Output Power, ERP and EIRP

Test Requirement:	Part 22.913(a)(2), Part 24.232(c), part 27.50(c)(10), Part 27.50(d)(4), Part 27.50 (h)(2), Part 90.635(b)
Limit:	LTE Band 12: 3W, LTE Band 25: 2W, LTE Band 26: 7W(for Part 22H), 100W (for Part 90S), LTE Band 41: 2W, 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)		
					23017	23095	23173
					699.7MHz	707.5MHz	715.3MHz
12	1.4	QPSK	1	0	22.67	22.98	22.25
			1	2	22.91	22.96	22.55
			1	5	22.76	22.94	22.30
			3	0	21.80	21.90	21.50
			3	1	21.92	21.92	21.65
			3	2	21.97	21.91	21.52
			6	0	22.10	22.22	21.68
		Antenna Gain(dBi):			2.50		
		Max. ERP (dBm):			23.33		
		ERP Limit (dBm):			34.77		
		16QAM	1	0	22.28	22.02	21.77
			1	2	22.22	22.28	21.80
			1	5	22.01	22.01	21.42
			3	0	21.19	21.14	20.53
			3	1	21.22	21.19	20.62
			3	2	21.11	21.03	20.55
			6	0	21.20	21.06	20.64
		Antenna Gain(dBi):			2.50		
		Max. ERP (dBm):			22.63		
		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	22.36	22.36	22.52
			1	7	22.62	22.61	22.51
			1	14	22.48	22.43	22.34
			8	0	21.63	21.67	21.65
			8	4	21.67	21.65	21.69
			8	7	21.61	21.55	21.74
			15	0	21.64	21.65	21.68
		Antenna Gain(dBi):			2.50		
		Max. ERP (dBm):			22.97		
		ERP Limit (dBm):			34.77		
		16QAM	1	0	21.89	21.62	21.91
			1	7	21.66	21.94	21.68
			1	14	21.65	21.62	21.60
			8	0	20.51	20.67	20.81
			8	4	20.61	20.74	20.69
			8	7	20.60	20.70	20.51
			15	0	20.54	20.63	20.68
		Antenna Gain(dBi):			2.50		
		Max. ERP (dBm):			22.29		
		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	22.31	22.39	22.27
			1	12	22.62	22.60	22.57
			1	24	22.28	22.28	22.37
			12	0	21.63	21.62	21.62
			12	6	21.73	21.63	21.59
			12	11	21.64	21.55	21.70
			25	0	21.65	21.71	21.73
		Antenna Gain(dBi):			2.50		
		Max. ERP (dBm):			22.95		
		ERP Limit (dBm):			34.77		
		16QAM	1	0	21.52	21.40	21.47
			1	12	22.10	21.69	21.76
			1	24	21.63	21.34	21.62
			12	0	20.56	20.65	20.56
			12	6	20.70	20.72	20.64
			12	11	20.59	20.56	20.49
			25	0	20.61	20.65	20.65
		Antenna Gain(dBi):			2.50		
		Max. ERP (dBm):			22.45		
		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	22.28	22.31	22.43
			1	24	22.67	22.78	22.60
			1	49	22.35	22.43	22.52
			25	0	21.61	21.74	21.72
			25	12	21.67	21.64	21.69
			25	24	21.63	21.65	21.80
			50	0	21.71	21.67	21.77
		Antenna Gain(dBi):			2.50		
		Max. ERP (dBm):			23.13		
		ERP Limit (dBm):			34.77		
		16QAM	1	0	21.27	21.54	21.61
			1	24	22.06	21.80	21.68
			1	49	21.86	21.36	21.48
			25	0	20.56	20.55	20.63
			25	12	20.64	20.69	20.68
			25	24	20.68	20.65	20.77
			50	0	20.55	20.61	20.67
		Antenna Gain(dBi):			2.50		
		Max. ERP (dBm):			22.41		
		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)		
					18607	18900	19193
					1850.7MHz	1880.0MHz	1909.3MHz
25	1.4	QPSK	1	0	22.65	22.75	22.70
			1	2	22.97	23.00	22.91
			1	5	22.69	22.84	22.78
			3	0	22.35	22.28	22.35
			3	1	22.30	22.37	22.32
			3	2	22.39	22.27	22.38
			6	0	22.07	22.05	22.23
			Antenna Gain(dBi):		2.2		
			Max. EIRP(dBm):		25.20		
			EIRP Limit(dBm):		33.00		
		16QAM	1	0	22.32	22.21	22.02
			1	2	22.12	22.22	22.00
			1	5	22.19	22.31	22.09
			3	0	21.23	21.21	21.24
			3	1	21.41	21.32	21.29
			3	2	21.20	21.20	21.25
			6	0	21.05	21.01	21.02
			Antenna Gain(dBi):		2.2		
			Max. EIRP(dBm):		24.52		
			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
25	3	QPSK	1	0	22.57	22.80	22.77
			1	7	22.73	22.88	22.89
			1	14	22.74	22.76	22.96
			8	0	21.97	22.07	22.12
			8	4	21.94	22.05	22.02
			8	7	21.95	22.03	22.03
			15	0	21.87	22.02	22.09
			Antenna Gain(dBi):		2.2		
			Max. EIRP(dBm):		25.16		
			EIRP Limit(dBm):		33.00		
		16QAM	1	0	22.21	22.26	22.16
			1	7	22.22	22.12	22.22
			1	14	22.26	22.05	22.20
			8	0	21.11	21.15	21.12
			8	4	21.06	21.10	21.04
			8	7	21.02	21.06	21.06
			15	0	20.90	21.02	21.10
			Antenna Gain(dBi):		2.2		
			Max. EIRP(dBm):		24.46		
			EIRP Limit(dBm):		33.00		

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)		
					18625	18900	19175
					1852.5MHz	1880.0MHz	1907.5MHz
25	5	QPSK	1	0	22.65	22.62	22.63
			1	12	22.79	22.82	22.92
			1	24	22.59	22.57	22.62
			12	0	21.92	22.02	22.04
			12	6	21.98	22.10	22.12
			12	11	21.90	21.96	22.06
			25	0	21.92	22.02	22.14
			Antenna Gain(dBi):		2.2		
			Max. EIRP(dBm):		25.12		
			EIRP Limit(dBm):		33.00		
		16QAM	1	0	22.17	21.65	21.86
			1	12	22.08	22.05	22.03
			1	24	22.12	22.67	21.81
			12	0	20.88	21.04	21.11
			12	6	21.01	21.03	21.06
			12	11	20.94	21.00	21.05
			25	0	20.97	21.08	21.10
			Antenna Gain(dBi):		2.2		
			Max. EIRP(dBm):		24.87		
			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
25	10	QPSK	1	0	22.64	22.69	22.95
			1	24	22.89	22.89	22.92
			1	49	22.58	22.74	22.73
			25	0	22.03	22.13	22.22
			25	12	22.06	22.05	22.24
			25	24	22.07	22.10	22.09
			50	0	22.09	22.11	22.29
			Antenna Gain(dBi):		2.2		
			Max. EIRP(dBm):		25.15		
			EIRP Limit(dBm):		33.00		
		16QAM	1	0	22.28	22.30	22.35
			1	24	22.42	22.11	22.15
			1	49	22.27	22.29	22.23
			25	0	21.10	21.12	21.16
			25	12	21.03	21.16	21.11
			25	24	21.02	21.14	21.10
			50	0	21.04	21.07	21.14
			Antenna Gain(dBi):		2.2		
			Max. EIRP(dBm):		24.62		
			EIRP Limit(dBm):		33.00		

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)		
					18675	18900	19125
					1857.5MHz	1880.0MHz	1902.5MHz
25	15	QPSK	1	0	22.59	22.73	22.66
			1	37	22.92	22.92	22.93
			1	74	22.63	22.76	22.87
			36	0	22.00	22.05	22.13
			36	16	22.08	22.03	22.15
			36	35	22.04	22.05	22.08
			75	0	22.06	22.11	22.23
			Antenna Gain(dBi):		2.2		
			Max. EIRP(dBm):		25.13		
			EIRP Limit(dBm):		33.00		
		16QAM	1	0	22.41	22.01	22.40
			1	37	22.54	22.28	22.23
			1	74	22.38	22.50	22.25
			36	0	21.10	21.13	21.15
			36	16	21.11	21.07	21.21
			36	35	21.03	21.08	21.09
			75	0	21.06	21.02	21.11
			Antenna Gain(dBi):		2.2		
			Max. EIRP(dBm):		24.74		
			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
25	20	QPSK	1	0	22.44	22.44	22.53
			1	49	22.97	22.90	23.06
			1	99	22.31	22.49	22.50
			50	0	22.09	22.15	22.10
			50	24	22.08	22.12	22.25
			50	49	22.05	22.06	22.15
			100	0	22.02	22.01	22.22
			Antenna Gain(dBi):		2.2		
			Max. EIRP(dBm):		25.26		
			EIRP Limit(dBm):		33.00		
		16QAM	1	0	22.21	22.22	22.27
			1	49	22.32	22.61	22.33
			1	99	22.20	22.31	22.05
			50	0	21.00	21.02	21.19
			50	24	21.01	21.10	21.11
			50	49	21.07	21.00	21.04
			100	0	21.05	21.03	21.08
			Antenna Gain(dBi):		2.2		
			Max. EIRP(dBm):		24.81		
			EIRP Limit(dBm):		33.00		

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)		
					26797	26915	27033
					824.7MHz	836.5MHz	848.3MHz
5&26 (Part 22H)	1.4	QPSK	1	0	22.45	22.41	22.57
			1	2	22.67	22.63	22.55
			1	5	22.44	22.44	22.33
			3	0	21.69	21.62	21.57
			3	1	21.75	21.54	21.55
			3	2	21.65	21.60	21.59
			6	0	21.79	21.69	21.63
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.82		
			ERP Limit (dBm):		38.45		
		16QAM	1	0	22.03	21.38	21.83
			1	2	22.09	22.02	21.92
			1	5	21.98	21.85	21.68
			3	0	20.65	20.61	20.60
			3	1	20.61	20.50	20.65
			3	2	20.64	20.62	20.55
			6	0	20.80	20.62	20.72
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.24		
			ERP Limit (dBm):		38.45		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					26805	26915	27025
					825.5MHz	836.5MHz	847.50MHz
5&26 (Part 22H)	3	QPSK	1	0	22.57	22.37	22.55
			1	7	22.63	22.55	22.64
			1	14	22.44	22.60	22.59
			8	0	21.66	21.57	21.62
			8	4	21.74	21.71	21.68
			8	7	21.60	21.67	21.67
			15	0	21.63	21.64	21.63
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.79		
			ERP Limit (dBm):		38.45		
		16QAM	1	0	21.62	21.93	21.53
			1	7	21.73	22.03	21.69
			1	14	21.98	21.93	21.85
			8	0	20.71	20.81	20.67
			8	4	20.84	20.73	20.68
			8	7	20.66	20.71	20.72
			15	0	20.56	20.67	20.73
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.18		
			ERP Limit (dBm):		38.45		

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)		
					26815	26915	27015
					826.5MHz	836.5MHz	846.5MHz
5&26 (Part 22H)	5	QPSK	1	0	22.37	22.41	22.32
			1	12	22.66	22.61	22.55
			1	24	22.39	22.45	22.37
			12	0	21.70	21.51	21.65
			12	6	21.69	21.61	21.71
			12	11	21.68	21.62	21.58
			25	0	21.63	21.63	21.68
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.81		
			ERP Limit (dBm):		38.45		
		16QAM	1	0	21.55	21.59	21.38
			1	12	21.85	22.06	21.64
			1	24	21.92	21.45	21.40
			12	0	20.66	20.56	20.73
			12	6	20.69	20.77	20.67
			12	11	20.78	20.74	20.60
			25	0	20.79	20.70	20.76
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.21		
			ERP Limit (dBm):		38.45		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					26840	26915	26990
					829.0MHz	836.5MHz	844.0MHz
5&26 (Part 22H)	10	QPSK	1	0	22.55	22.45	22.54
			1	24	22.77	22.67	22.63
			1	49	22.49	22.41	22.44
			25	0	21.77	21.65	21.77
			25	12	21.63	21.68	21.72
			25	24	21.78	21.73	21.58
			50	0	21.64	21.77	21.63
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.92		
			ERP Limit (dBm):		38.45		
		16QAM	1	0	21.58	21.95	21.59
			1	24	21.95	22.03	21.88
			1	49	21.60	21.56	21.47
			25	0	20.81	20.67	20.56
			25	12	20.85	20.76	20.77
			25	24	20.77	20.78	20.61
			50	0	20.78	20.66	20.71
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.18		
			ERP Limit (dBm):		38.45		

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)		
					26865	26915	26965
					831.5MHz	836.5MHz	841.5MHz
26 (Part 22H)	15	QPSK	1	0	22.47	22.58	22.48
			1	37	22.60	22.59	22.51
			1	74	22.36	22.27	22.50
			36	0	21.72	21.61	21.60
			36	16	21.65	21.60	21.62
			36	35	21.74	21.58	21.67
			75	0	21.73	21.61	21.60
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.75		
			ERP Limit (dBm):		38.45		
		16QAM	1	0	22.06	22.17	22.02
			1	37	22.25	22.30	22.09
			1	74	21.96	21.97	21.84
			36	0	20.87	20.72	20.67
			36	16	20.79	20.81	20.75
			36	35	20.76	20.76	20.66
			75	0	20.68	20.70	20.70
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.45		
			ERP Limit (dBm):		38.45		

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)		
					26697	26740	26783
					814.7MHz	819.0MHz	823.3MHz
26 (Part 90S)	1.4	QPSK	1	0	22.54	22.40	22.39
			1	2	22.74	22.61	22.83
			1	5	22.56	22.49	22.48
			3	0	21.72	21.51	21.62
			3	1	21.67	21.74	21.67
			3	2	21.67	21.67	21.61
			6	0	21.88	21.74	21.61
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.98		
			ERP Limit (dBm):		50.00		
		16QAM	1	0	21.65	21.83	21.98
			1	2	22.11	21.72	22.08
			1	5	21.90	21.62	21.94
			3	0	20.86	20.65	20.74
			3	1	20.70	20.41	20.66
			3	2	20.74	20.74	20.63
			6	0	20.82	20.76	20.68
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.26		
			ERP Limit (dBm):		50.00		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					26705	26740	26775
					815.5MHz	819.0MHz	822.5MHz
26 (Part 90S)	3	QPSK	1	0	22.55	22.59	22.51
			1	7	22.70	22.58	22.62
			1	14	22.68	22.44	22.58
			8	0	21.74	21.61	21.55
			8	4	21.73	21.60	21.70
			8	7	21.68	21.68	21.60
			15	0	21.75	21.66	21.72
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.85		
			ERP Limit (dBm):		50.00		
		16QAM	1	0	22.05	21.97	21.95
			1	7	22.09	21.77	22.10
			1	14	22.00	21.92	22.00
			8	0	20.86	20.66	20.74
			8	4	20.79	20.80	20.72
			8	7	20.82	20.65	20.68
			15	0	20.72	20.75	20.71
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.25		
			ERP Limit (dBm):		50.00		

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)		
					26715	26740	26765
					816.5MHz	819.0MHz	821.5MHz
26 (Part 90S)	5	QPSK	1	0	22.50	22.44	22.41
			1	12	22.63	22.62	22.55
			1	24	22.45	22.35	22.33
			12	0	21.67	21.55	21.55
			12	6	21.75	21.78	21.67
			12	11	21.63	21.58	21.56
			25	0	21.68	21.65	21.58
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.78		
			ERP Limit (dBm):		50.00		
		16QAM	1	0	21.61	21.54	21.56
			1	12	21.81	21.50	21.70
			1	24	21.57	21.56	21.48
			12	0	20.76	20.64	20.61
			12	6	20.77	20.67	20.72
			12	11	20.79	20.78	20.55
			25	0	20.72	20.68	20.75
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		21.96		
			ERP Limit (dBm):		50.00		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					/	26740	/
					/	819MHz	/
26 (Part 90S)	10	QPSK	1	0	/	22.56	/
			1	24	/	22.67	/
			1	49	/	22.48	/
			25	0	/	21.64	/
			25	12	/	21.72	/
			25	24	/	21.78	/
			50	0	/	21.63	/
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.82		
			ERP Limit (dBm):		50.00		
		16QAM	1	0	/	21.66	/
			1	24	/	22.13	/
			1	49	/	21.89	/
			25	0	/	20.71	/
			25	12	/	21.72	/
			25	24	/	20.79	/
			50	0	/	20.79	/
			Antenna Gain(dBi):		2.3		
			Max. ERP (dBm):		22.28		
			ERP Limit (dBm):		50.00		

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)		
					26765	/	/
					821.5MHz	/	/
26 (Part 22H &Part 90S)	15	QPSK	1	0	23.05	/	/
			1	37	22.56	/	/
			1	74	22.38	/	/
			36	0	21.62	/	/
			36	16	21.66	/	/
			36	35	21.64	/	/
			75	0	21.66	/	/
			Antenna Gain(dBi):		2.3		
			Max. EIRP (dBm):		23.20		
			Limit (dBm):		38.45		
		16QAM	1	0	21.88	/	/
			1	37	21.94	/	/
			1	74	22.07	/	/
			36	0	20.61	/	/
			36	16	20.74	/	/
			36	35	20.73	/	/
			75	0	20.70	/	/
			Antenna Gain(dBi):		2.3		
			Max. EIRP (dBm):		22.22		
			Limit (dBm):		50.00		

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

Band 26 BW=15MHz ERP in frequency band below 1GHz were measured using a substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated as follows.

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					40265	40740	41215
					2557.5MHz	2605.0MHz	2652.5MHz
41	5	QPSK	1	0	23.46	23.40	23.31
			1	12	23.73	23.65	23.52
			1	24	23.51	23.45	23.27
			12	0	22.90	22.93	22.78
			12	6	22.95	22.89	22.82
			12	11	22.89	22.86	22.71
			25	0	22.91	22.84	22.76
		Antenna Gain (dBi):			2.2		
		Max. EIRP (dBm):			25.93		
		EIRP Limit (dBm):			33.00		
		16QAM	1	0	22.72	22.69	22.65
			1	12	22.94	22.90	22.70
			1	24	22.73	22.66	22.53
			12	0	21.77	21.85	21.79
			12	6	21.91	21.87	21.78
			12	11	21.92	21.84	21.72
			25	0	21.94	21.89	21.83
		Antenna Gain (dBi):			2.2		
		Max. EIRP (dBm):			25.14		
		EIRP Limit (dBm):			33.00		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					40290	40740	41190
					2560.0MHz	2605.0MHz	2650.0MHz
41	10	QPSK	1	0	23.51	23.52	23.40
			1	24	23.80	23.71	23.60
			1	49	23.59	23.47	23.32
			25	0	22.92	22.95	22.87
			25	12	23.02	22.98	22.83
			25	24	23.01	22.96	22.77
			50	0	23.00	23.01	22.86
		Antenna Gain (dBi):			2.2		
		Max. EIRP (dBm):			26.00		
		EIRP Limit (dBm):			33.00		
		16QAM	1	0	22.78	22.77	22.60
			1	24	23.00	22.92	22.80
			1	49	22.81	22.73	22.76
			25	0	21.94	21.88	21.79
			25	12	21.95	21.94	21.86
			25	24	21.98	21.91	21.78
			50	0	21.97	21.88	21.82
		Antenna Gain (dBi):			2.2		
		Max. EIRP (dBm):			25.20		
		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)		
					40315	40740	41165
					2562.5MHz	2605.0MHz	2647.5MHz
41	15	QPSK	1	0	23.41	23.32	23.35
			1	37	23.64	23.62	23.55
			1	74	23.50	23.44	23.30
			36	0	22.92	22.95	22.82
			36	16	22.94	22.90	22.84
			36	35	22.99	22.88	22.80
			75	0	22.95	22.93	22.79
		Antenna Gain (dBi):			2.2		
		Max. EIRP (dBm):			25.84		
		EIRP Limit (dBm):			33.00		
		16QAM	1	0	22.78	22.71	22.65
			1	37	22.96	22.90	22.82
			1	74	22.77	22.73	22.53
			36	0	21.88	21.95	21.82
			36	16	21.86	21.98	21.87
			36	35	21.97	21.87	21.81
			75	0	21.91	21.94	21.79
		Antenna Gain (dBi):			2.2		
		Max. EIRP (dBm):			25.16		
		EIRP Limit (dBm):			33.00		

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					40340	40740	41140
					2565.0MHz	2605.0MHz	2645.0MHz
41	20	QPSK	1	0	23.27	23.22	23.17
			1	49	23.73	23.65	23.55
			1	99	23.29	23.23	23.07
			50	0	22.85	22.92	22.84
			50	24	22.97	22.95	22.85
			50	49	23.02	22.80	22.83
			100	0	22.99	23.00	22.88
		Antenna Gain (dBi):			2.2		
		Max. EIRP (dBm):			25.93		
		EIRP Limit (dBm):			33.00		
		16QAM	1	0	22.63	22.44	22.44
			1	49	23.04	22.96	22.84
			1	99	22.65	22.51	22.45
			50	0	21.77	21.91	21.85
			50	24	21.96	21.92	21.83
			50	49	21.99	21.85	21.80
			100	0	22.01	21.96	21.84
		Antenna Gain (dBi):			2.2		
		Max. EIRP (dBm):			25.24		
		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)		
					131979	132322	132665
					1710.7MHz	1745.0MHz	1779.3MHz
66	1.4	QPSK	1	0	22.67	22.71	22.74
			1	2	22.85	22.88	22.92
			1	5	22.68	22.70	22.76
			3	0	21.80	21.85	21.84
			3	1	21.98	21.98	21.97
			3	2	21.79	21.81	21.82
			6	0	21.83	21.83	21.91
		Antenna Gain (dBi):			2.50		
		Max. EIRP (dBm):			25.42		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	21.80	21.87	21.95
			1	2	21.97	21.99	22.11
			1	5	21.78	21.86	21.92
			3	0	21.09	21.16	20.87
			3	1	21.32	21.34	21.12
			3	2	21.12	21.17	20.89
			6	0	20.84	20.90	20.92
		Antenna Gain (dBi):			2.50		
		Max. EIRP (dBm):			24.61		
		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	22.77	22.83	22.83.
			1	7	22.72	22.75	22.81
			1	14	22.76	22.77	22.82
			8	0	21.88	21.94	21.94
			8	4	21.86	21.95	21.93
			8	7	21.85	21.93	21.92
			15	0	21.84	21.94	21.93
		Antenna Gain (dBi):			2.50		
		Max. EIRP (dBm):			25.33		
		EIRP Limit (dBm):			30.00		
		16QAM Modulation	1	0	21.92	22.48	22.02
			1	7	21.85	22.43	22.01
			1	14	21.84	22.42	22.00
			8	0	20.93	21.11	20.90
			8	4	20.92	21.12	20.88
			8	7	20.90	21.09	20.87
			15	0	20.91	21.02	20.88
		Antenna Gain (dBi):			2.50		
		Max. EIRP (dBm):			24.98		
		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	22.62	22.73	22.70
			1	12	22.74	22.84	22.79
			1	24	22.66	22.76	22.69
			12	0	21.82	21.90	21.88
			12	6	21.97	21.98	21.95
			12	11	21.86	21.92	21.87
			25	0	21.83	21.93	21.88
		Antenna Gain (dBi):			2.50		
		Max. EIRP (dBm):			25.34		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	21.63	22.16	21.85
			1	12	21.74	22.24	21.93
			1	24	21.66	22.14	21.81
			12	0	20.86	20.97	20.86
			12	6	20.98	21.03	20.95
			12	11	20.88	20.98	20.88
			25	0	20.91	20.95	20.90
		Antenna Gain (dBi):			2.50		
		Max. EIRP (dBm):			24.74		
		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	22.75	22.80	22.84
			1	24	22.93	22.99	22.99
			1	49	22.77	22.81	22.82
			25	0	21.93	22.05	22.03
			25	12	22.12	22.18	22.15
			25	24	21.98	22.04	22.00
			50	0	22.02	22.05	22.01
		Antenna Gain (dBi):			2.50		
		Max. EIRP (dBm):			25.49		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	21.87	22.51	22.04
			1	24	22.04	22.63	22.20
			1	49	21.89	22.50	22.00
			25	0	21.04	21.08	21.03
			25	12	21.16	21.17	21.18
			25	24	21.08	21.07	21.02
			50	0	21.05	21.06	21.01
		Antenna Gain (dBi):			2.50		
		Max. EIRP (dBm):			25.13		
		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	22.71	22.73	22.76
			1	37	22.85	22.84	22.86
			1	74	22.72	22.72	22.72
			36	0	21.92	22.00	22.05
			36	16	22.08	22.11	22.14
			36	35	21.95	21.99	22.03
			75	0	21.99	22.01	22.04
		Antenna Gain (dBi):			2.50		
		Max. EIRP (dBm):			25.36		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	22.23	22.43	21.98
			1	37	22.33	22.54	22.08
			1	74	22.24	22.41	21.93
			36	0	20.91	21.01	21.04
			36	16	21.04	21.10	21.12
			36	35	20.95	21.00	21.01
			75	0	20.94	21.01	21.02
		Antenna Gain (dBi):			2.50		
		Max. EIRP (dBm):			25.04		
		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	22.52	22.62	22.61
			1	49	22.93	23.03	23.02
			1	99	22.52	22.58	22.60
			50	0	21.87	21.99	21.96
			50	24	22.24	22.32	22.34
			50	49	21.93	21.98	21.90
			100	0	21.86	21.97	21.94
		Antenna Gain (dBi):			2.50		
		Max. EIRP (dBm):			25.53		
		EIRP Limit (dBm):			30.00		
		16QAM	1	0	22.23	22.04	21.90
			1	49	22.61	22.42	22.28
			1	99	22.22	22.01	21.82
			50	0	20.87	20.98	20.96
			50	24	21.26	21.33	21.30
			50	49	20.91	20.99	20.88
			100	0	20.88	21.00	20.93
		Antenna Gain (dBi):			2.50		
		Max. EIRP (dBm):			24.91		
		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	22.73	22.58	22.51
			1	12	22.85	22.67	22.66
			1	24	22.66	22.55	22.56
			12	0	21.79	21.71	21.66
			12	6	21.92	21.79	21.74
			12	11	21.80	21.69	21.72
			25	0	21.79	21.70	21.71
		Antenna Gain (dBi):			1.89		
		Max. ERP (dBm):			22.59		
		EIRP Limit (dBm):			34.77		
		16QAM	1	0	21.98	21.50	21.61
			1	12	22.02	21.60	21.80
			1	24	21.97	21.47	21.63
			12	0	20.78	20.67	20.60
			12	6	20.88	20.72	20.76
			12	11	20.80	20.63	20.66
			25	0	20.77	20.75	20.70
		Antenna Gain (dBi):			1.89		
		Max. ERP (dBm):			21.76		
		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	22.86	22.68	22.57
			1	24	22.92	22.85	22.75
			1	49	22.72	22.71	22.62
			25	0	21.82	21.83	21.73
			25	12	21.96	21.98	21.87
			25	24	21.86	21.74	21.78
			50	0	21.84	21.72	21.80
		Antenna Gain (dBi):			1.89		
		Max. ERP (dBm):			22.66		
		EIRP Limit (dBm):			34.77		
		16QAM	1	0	21.78	21.72	21.82
			1	24	21.93	21.88	21.96
			1	49	21.75	21.75	21.83
			25	0	20.89	20.91	20.74
			25	12	21.10	21.18	21.05
			25	24	20.93	20.78	20.84
			50	0	20.83	20.78	20.76
		Antenna Gain (dBi):			1.89		
		Max. ERP (dBm):			21.70		
		EIRP Limit (dBm):			34.77		

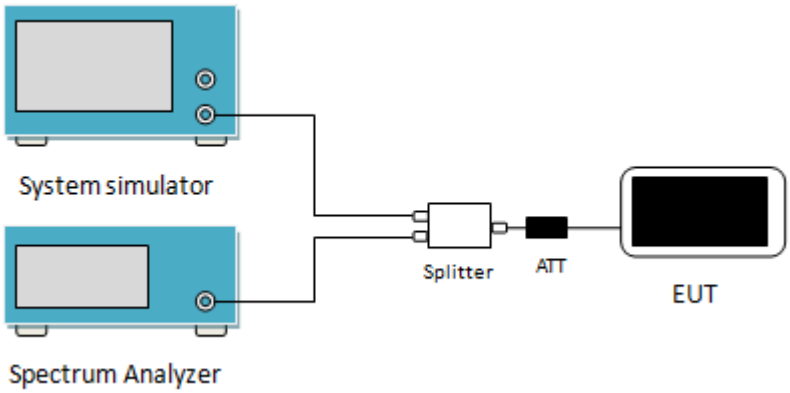
Note: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi).

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	22.78	22.82	22.54
			1	37	22.79	22.91	22.68
			1	74	22.61	22.83	22.59
			36	0	21.93	22.08	21.78
			36	16	21.95	22.15	21.98
			36	35	21.92	22.06	21.89
			75	0	21.96	22.08	21.86
		Antenna Gain (dBi):			1.89		
		Max. ERP (dBm):			22.80		
		EIRP Limit (dBm):			34.77		
		16QAM	1	0	22.02	22.13	22.14
			1	37	22.20	22.23	22.24
			1	74	22.03	22.16	22.16
			36	0	20.81	20.75	20.74
			36	16	20.97	20.84	20.94
			36	35	20.85	20.70	20.83
			75	0	20.86	20.72	20.77
		Antenna Gain (dBi):			1.89		
		Max. ERP (dBm):			21.98		
		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	22.46	22.39	22.36
			1	49	22.80	22.77	22.82
			1	99	22.33	22.44	22.44
			50	0	21.72	21.64	21.68
			50	24	21.98	21.86	22.05
			50	49	21.70	21.72	21.81
			100	0	21.72	21.71	21.82
		Antenna Gain (dBi):			1.89		
		Max. ERP (dBm):			22.56		
		EIRP Limit (dBm):			34.77		
		16QAM	1	0	22.00	21.76	21.56
			1	49	22.40	22.05	22.08
			1	99	22.01	21.82	21.66
			50	0	20.72	20.60	20.70
			50	24	22.95	20.84	20.97
			50	49	20.69	20.72	20.77
			100	0	20.70	20.68	20.74
		Antenna Gain (dBi):			1.89		
		Max. ERP (dBm):			22.69		
		EIRP Limit (dBm):			34.77		

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

6.2 Peak-to-Average Ratio

Test Requirement:	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

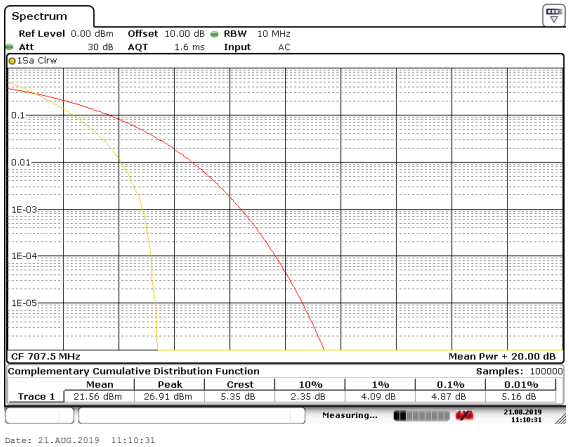
Measurement Data (Worst case):

Bandwidth	Modulation	RB Size	RB Offset	PAPR
LTE Band 12 (Middle Channel)				
10MHz	QPSK	50	0	4.87
	16QAM	50	0	5.86
LTE Band 25 (Middle Channel)				
20MHz	QPSK	50	0	5.25
	16QAM	50	0	6.17
LTE Band 5&26(part 22H) (Middle Channel)				
15MHz	QPSK	50	0	5.10
	16QAM	50	0	5.91
LTE Band 26(part 90S) (Middle Channel)				
15MHz	QPSK	50	0	5.28
	16QAM	50	0	6.12
LTE Band 41 (Middle Channel)				
20MHz	QPSK	50	0	6.81
	16QAM	50	0	5.86
LTE Band 66 (Middle Channel)				
20MHz	QPSK	50	0	5.39
	16QAM	50	0	6.32
LTE Band 71 (Middle Channel)				
20MHz	QPSK	50	0	4.96
	16QAM	50	0	5.91

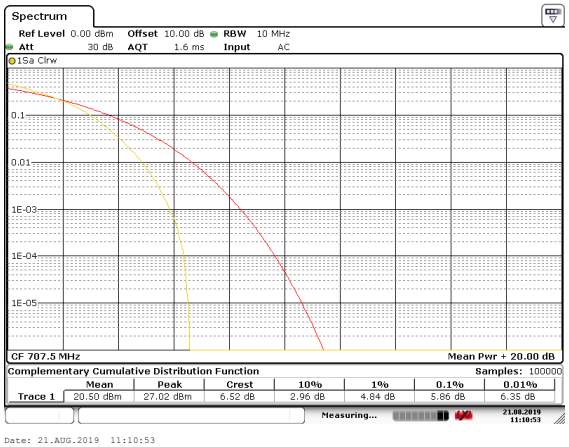
Test plots as below:

LTE Band 12 Middle channel

Modulation: QPSK

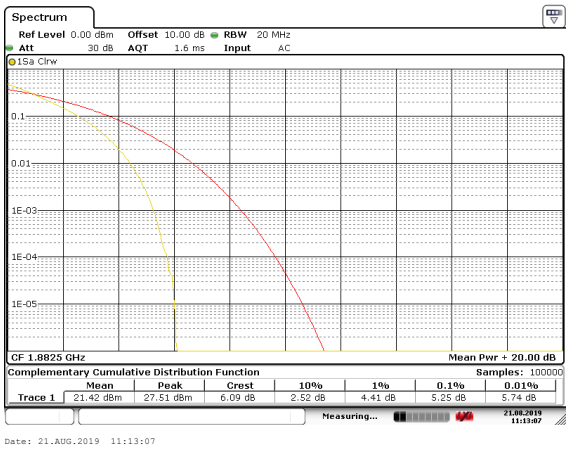


Modulation:16QAM

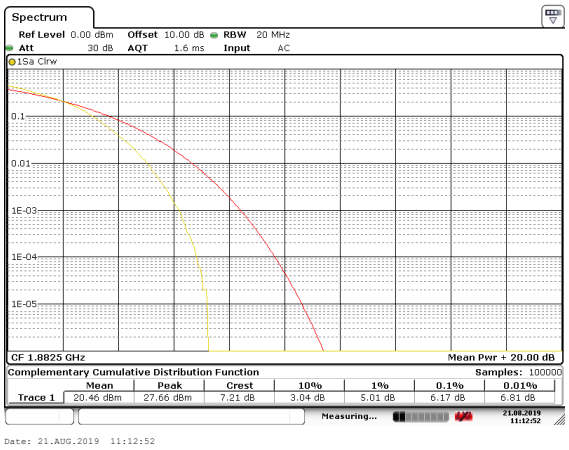


LTE Band 25 Middle channel

Modulation: QPSK

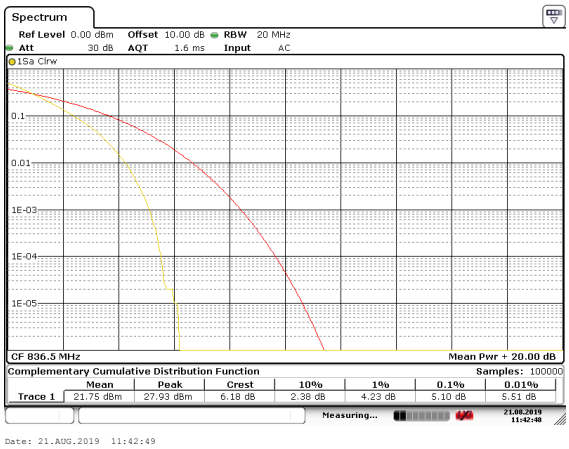


Modulation:16QAM

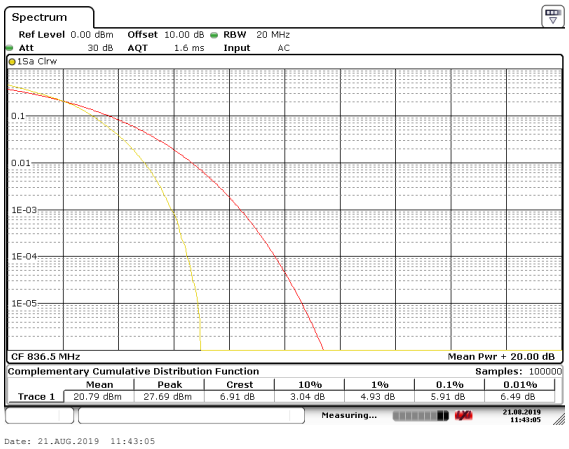


LTE Band 5&26(part 22H) Middle channel

Modulation: QPSK

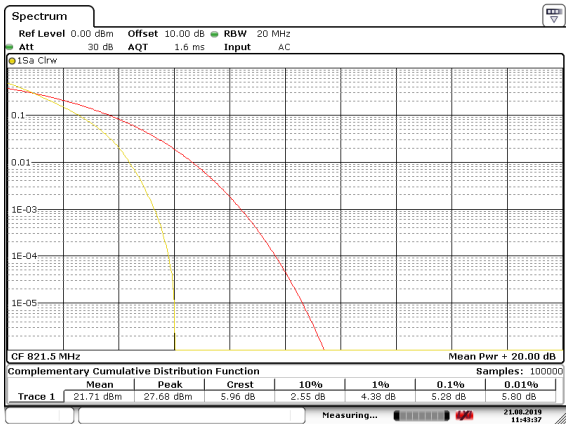


Modulation:16QAM

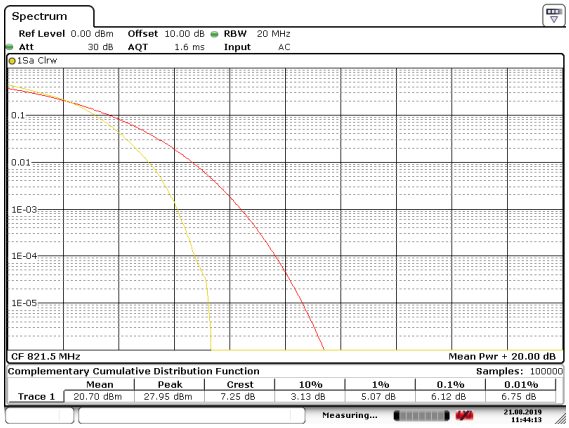


LTE Band 26(part 90S) Middle channel

Modulation: QPSK

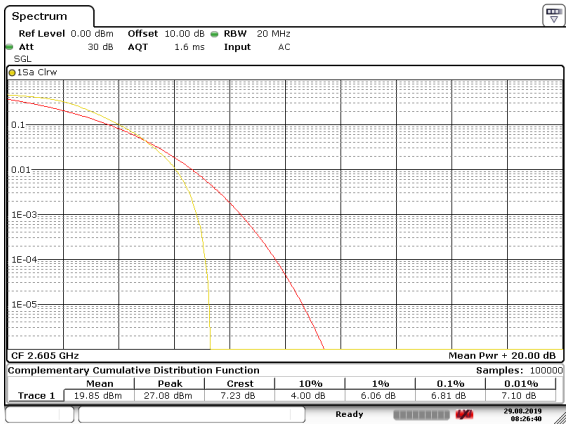


Modulation:16QAM

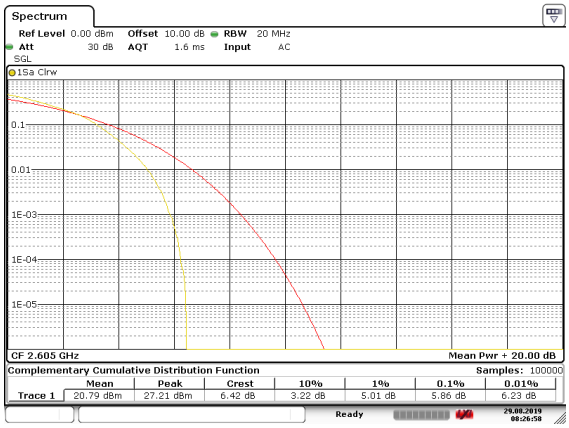


LTE Band 41 Middle channel

Modulation: QPSK

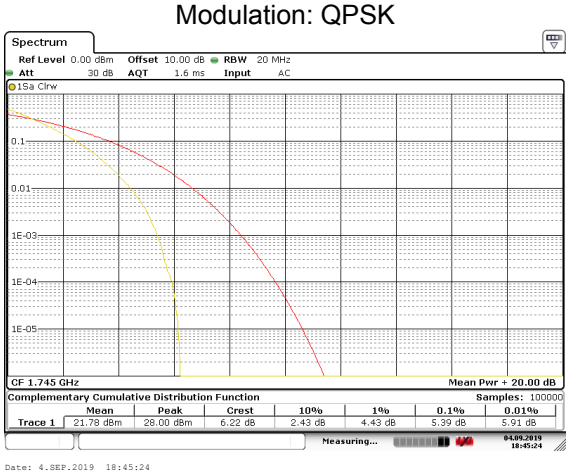


Modulation:16QAM

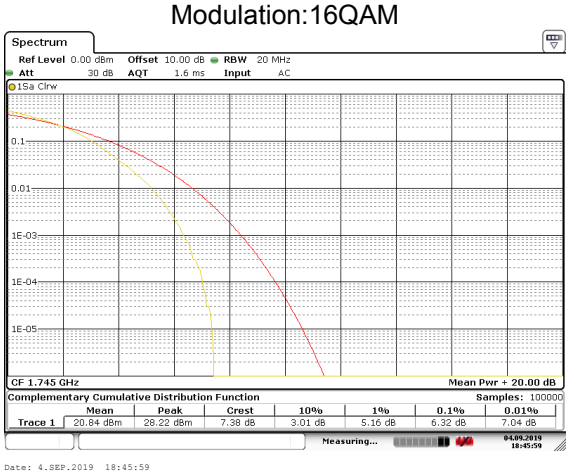


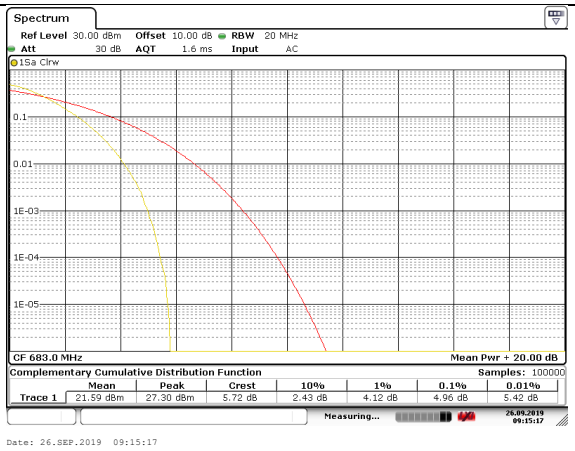
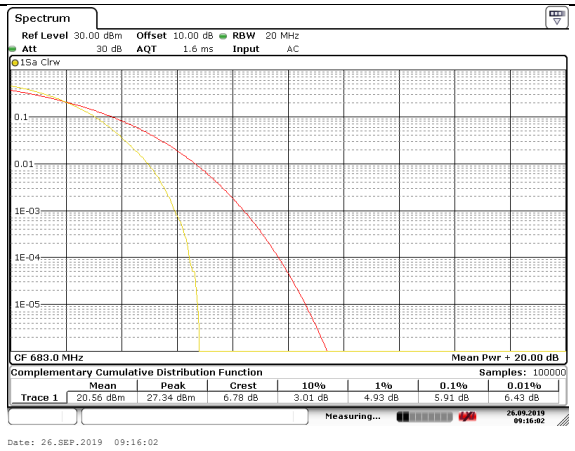
LTE Band 66 Middle channel

Modulation: QPSK

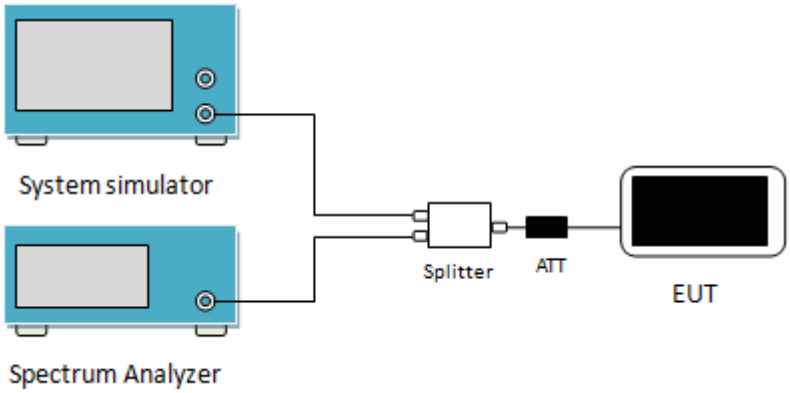


Modulation:16QAM



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(g), Part 27.53(h), Part 27.53(m), Part 90.691(a)
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 12					
Bandwidth	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
1.4MHz	23017	699.7	16QAM	1092	1272
			QPSK	1104	1290
	23095	707.5	16QAM	1092	1272
			QPSK	1104	1296
	23173	715.3	16QAM	1098	1296
			QPSK	1104	1296
3MHz	23025	700.5	16QAM	2712	2940
			QPSK	2724	3000
	23095	707.5	16QAM	2712	2976
			QPSK	2724	2988
	23165	714.5	16QAM	2724	2928
			QPSK	2736	3000
5MHz	23035	701.5	16QAM	4500	4920
			QPSK	4500	5040
	23095	707.5	16QAM	4480	4940
			QPSK	4520	5040
	23155	713.5	16QAM	4500	5000
			QPSK	4500	5040
10MHz	23060	704.0	16QAM	9120	10240
			QPSK	9120	10440
	23095	707.5	16QAM	9120	10240
			QPSK	9120	10440
	23130	711.0	16QAM	9080	9920
			QPSK	9120	10400

LTE Band 25					
Bandwidth	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
1.4MHz	26047	1850.7	16QAM	1092	1266
			QPSK	1098	1290
	26365	1882.5	16QAM	1092	1266
			QPSK	1098	1278
	26683	1914.3	16QAM	1098	1254
			QPSK	1104	1278
3MHz	26055	1851.5	16QAM	2712	2928
			QPSK	2712	3000
	26365	1882.5	16QAM	2724	2940
			QPSK	2724	3000
	26675	1913.5	16QAM	2724	2952
			QPSK	2724	1290
5MHz	26065	1852.5	16QAM	4480	4840
			QPSK	4520	5060
	26365	1882.5	16QAM	4480	4840
			QPSK	4520	5180
	26665	1912.5	16QAM	4480	4860
			QPSK	4520	5080
10MHz	26090	1855.0	16QAM	9120	10160
			QPSK	9120	10440
	26365	1882.5	16QAM	9080	10240
			QPSK	9120	10480
	26640	1910.0	16QAM	9120	10200
			QPSK	9120	10280
15MHz	26115	1857.5	16QAM	13620	14760
			QPSK	13620	15120
	26365	1882.5	16QAM	13560	14700
			QPSK	13560	14880
	26615	1907.5	16QAM	13560	14940
			QPSK	13560	14940
20MHz	26140	1860.0	16QAM	18000	19040
			QPSK	18080	19760
	26365	1882.5	16QAM	18000	19520
			QPSK	18000	19680
	26590	1905.0	16QAM	17920	19600
			QPSK	17920	19520

LTE Band 5&26(part 22H)					
Bandwidth	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
1.4MHz	26697	824.7	16QAM	1092	1266
			QPSK	1104	1290
	26865	836.5	16QAM	1086	1272
			QPSK	1098	1290
	27033	848.3	16QAM	1098	1296
			QPSK	1098	1290
3MHz	26705	825.5	16QAM	2724	3000
			QPSK	2736	3012
	26865	836.5	16QAM	2712	2952
			QPSK	2724	3000
	27025	847.5	16QAM	2712	2952
			QPSK	2736	3012
5MHz	26715	826.5	16QAM	4500	4980
			QPSK	4500	5060
	26865	836.5	16QAM	4500	4960
			QPSK	4500	5080
	27015	846.5	16QAM	4480	4960
			QPSK	4520	5060
10MHz	26740	829.0	16QAM	9120	10240
			QPSK	9160	10440
	26865	836.5	16QAM	9080	10120
			QPSK	9120	10240
	26990	844.0	16QAM	9120	10240
			QPSK	9120	10480
15MHz	26765	831.5	16QAM	13620	14640
			QPSK	13560	15120
	26865	836.5	16QAM	13500	14820
			QPSK	13500	14940
	26965	841.5	16QAM	13560	14880
			QPSK	13500	15120

LTE Band 26(part 90S)					
Bandwidth	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
1.4MHz	26697	814.7	16QAM	1098	1284
			QPSK	1104	1278
	26865	819.0	16QAM	1092	1266
			QPSK	1098	1290
	27033	823.3	16QAM	1092	1272
			QPSK	1104	1296
3MHz	26705	815.5	16QAM	2712	2940
			QPSK	2724	3000
	26865	819.0	16QAM	2712	2952
			QPSK	2724	3012
	27025	822.5	16QAM	2712	2964
			QPSK	2724	3000
5MHz	26715	816.5	16QAM	4500	4920
			QPSK	4520	5060
	26865	819.0	16QAM	4500	4940
			QPSK	4520	5120
	27015	821.5	16QAM	4500	4980
			QPSK	4520	5120
10 MHz	26865	819.0	16QAM	9080	10080
			QPSK	9120	10440
15 MHz	26765	821.5	16QAM	13500	14760
			QPSK	13500	15120

LTE Band 41					
Bandwidth	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
5MHz	40265	2557.5	16QAM	4520	4900
			QPSK	4540	5040
	40740	2605.0	16QAM	4520	4820
			QPSK	4520	5020
	41215	2652.5	16QAM	4520	4940
			QPSK	4520	5080
10MHz	40290	2560.0	16QAM	9080	10000
			QPSK	9160	10280
	40740	2605.0	16QAM	9120	10080
			QPSK	9120	10160
	41190	2650.0	16QAM	9120	10000
			QPSK	9120	10360
15MHz	40315	2562.5	16QAM	13560	14580
			QPSK	13500	15060
	40740	2605.0	16QAM	13500	15000
			QPSK	13560	14820
	41165	2647.5	16QAM	13440	14760
			QPSK	13560	14940
20MHz	40340	2565.0	16QAM	18000	19200
			QPSK	18000	19360
	40740	2605.0	16QAM	17920	19360
			QPSK	17920	19520
	41140	2645.0	16QAM	17920	19360
			QPSK	18080	19440

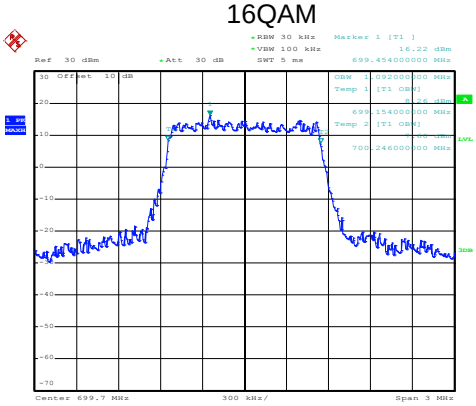
LTE Band 66					
Bandwidth	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
1.4MHz	131979	1710.7	16QAM	1098	1284
			QPSK	1104	1296
	132322	1745.0	16QAM	1098	1260
			QPSK	1086	1290
	132665	1779.3	16QAM	1092	1272
			QPSK	1098	1284
3MHz	131987	1711.5	16QAM	2736	2964
			QPSK	2736	2976
	132322	1745.0	16QAM	2724	2952
			QPSK	2736	3012
	132657	1778.5	16QAM	2736	2952
			QPSK	2724	3000
5MHz	131997	1712.5	16QAM	4520	4920
			QPSK	4520	5200
	132322	1745.0	16QAM	4520	5060
			QPSK	4520	5080
	132647	1777.5	16QAM	4520	5060
			QPSK	4540	5080
10MHz	132022	1715.0	16QAM	9080	10160
			QPSK	9120	10360
	132322	1745.0	16QAM	9160	10000
			QPSK	9160	10240
	132622	1775.0	16QAM	9120	10240
			QPSK	9120	10360
15MHz	132047	1717.5	16QAM	13560	14760
			QPSK	13620	15300
	132322	1745.0	16QAM	13500	15000
			QPSK	13500	15120
	132597	1772.5	16QAM	13560	14580
			QPSK	13560	15000
20MHz	132072	1720.0	16QAM	18000	19200
			QPSK	18000	19600
	132322	1745.0	16QAM	17920	19280
			QPSK	18000	19520
	132572	1770.0	16QAM	18000	19280
			QPSK	18080	19760

LTE Band 71					
Bandwidth	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
5MHz	133147	665.5	16QAM	4520	4960
			QPSK	4520	5080
	133297	680.5	16QAM	4520	4820
			QPSK	4540	5120
	133447	695.5	16QAM	4500	4860
			QPSK	4520	5060
10MHz	133172	668.0	16QAM	9080	10120
			QPSK	9120	10360
	133297	680.5	16QAM	9120	10160
			QPSK	9200	10280
	133422	693.0	16QAM	9120	10040
			QPSK	9120	10360
15MHz	133197	670.5	16QAM	13560	15060
			QPSK	13560	15180
	133297	680.5	16QAM	13500	14640
			QPSK	13560	15240
	133397	690.5	16QAM	13250	14820
			QPSK	13500	14940
20MHz	133222	673.0	16QAM	18000	19360
			QPSK	18000	19920
	133322	683.0	16QAM	18000	19440
			QPSK	18000	19600
	133372	688.0	16QAM	18000	19040
			QPSK	18000	19600

Test plot as follows:
LTE Band 12 part:

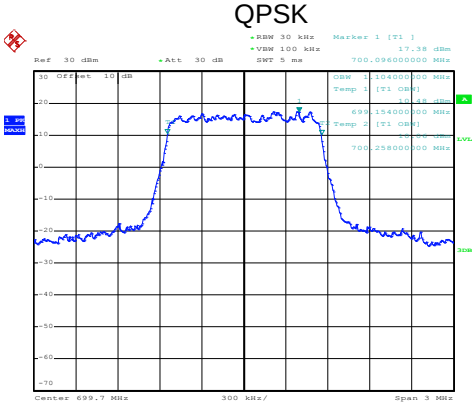
LTE Band 12: 99% Occupy bandwidth
BW: 1.4MHz

16QAM



Date: 21.AUG.2019 15:33:25

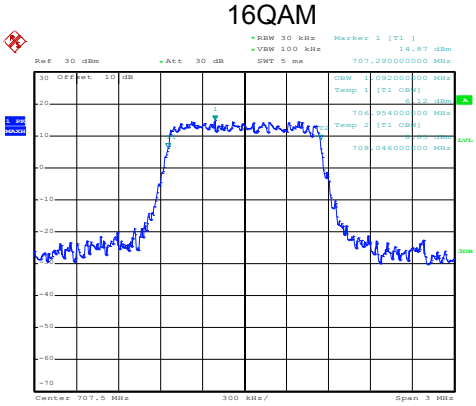
QPSK



Date: 21.AUG.2019 15:33:16

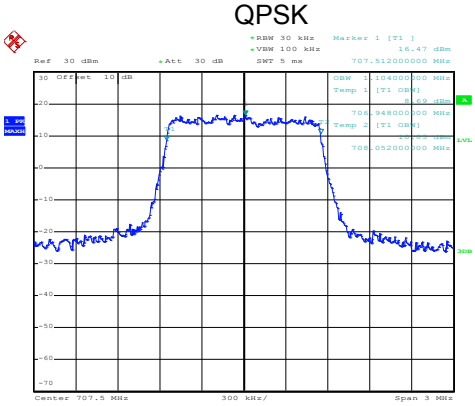
Lowest channel

16QAM



Date: 21.AUG.2019 15:34:33

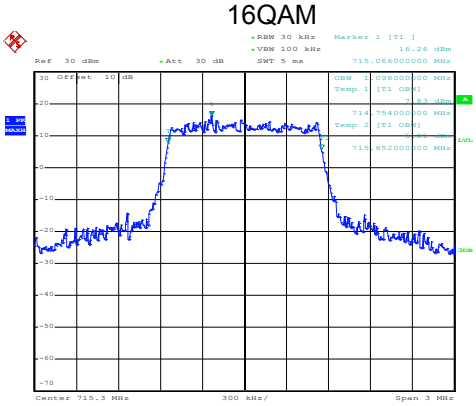
QPSK



Date: 21.AUG.2019 15:34:29

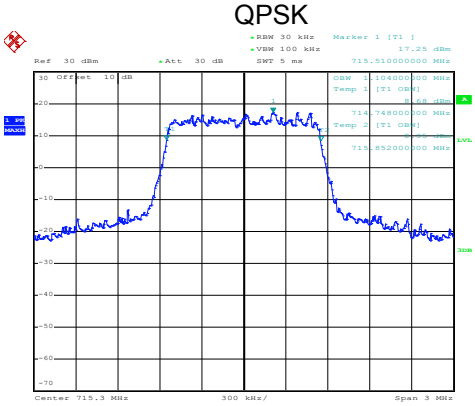
Middle channel

16QAM



Date: 21.AUG.2019 15:34:57

QPSK

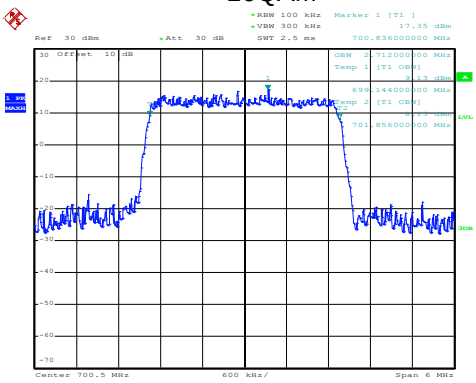


Date: 21.AUG.2019 15:34:53

Highest channel

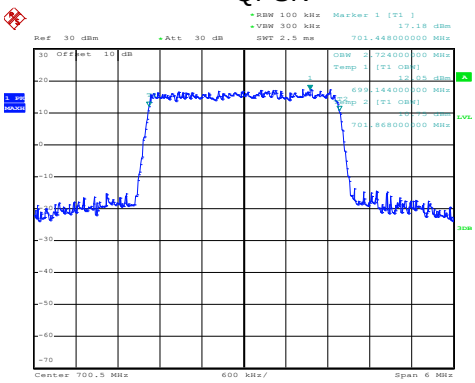
LTE Band 12: 99% Occupy bandwidth
BW: 3MHz

16QAM



Date: 21.AUG.2019 15:36:54

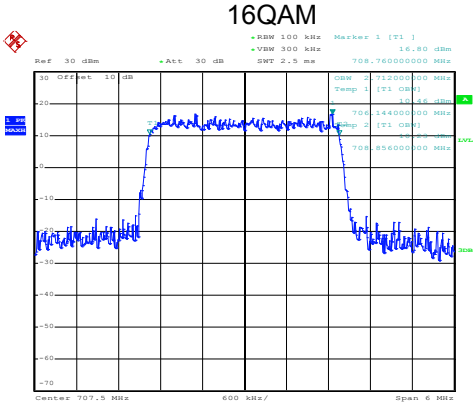
QPSK



Date: 21.AUG.2019 15:36:50

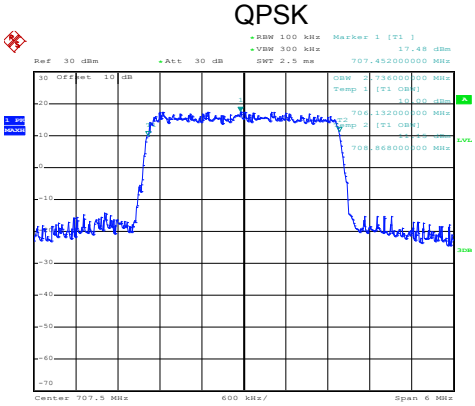
Lowest channel

16QAM



Date: 21.AUG.2019 15:37:11

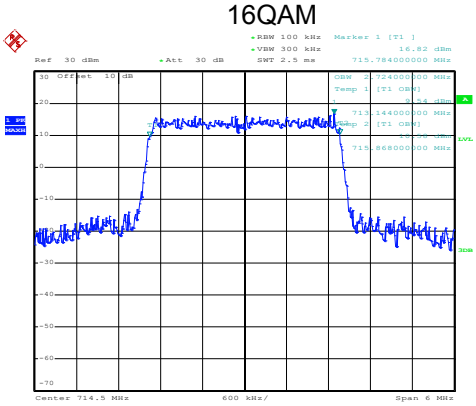
QPSK



Date: 21.AUG.2019 15:37:08

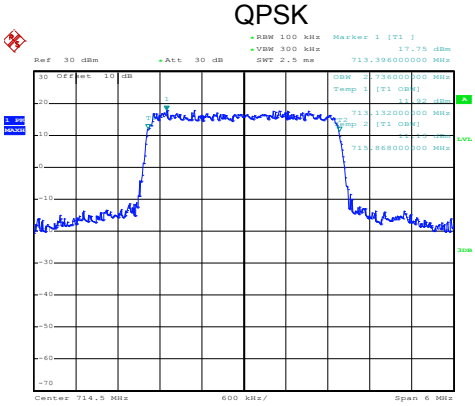
Middle channel

16QAM



Date: 21.AUG.2019 15:37:58

QPSK

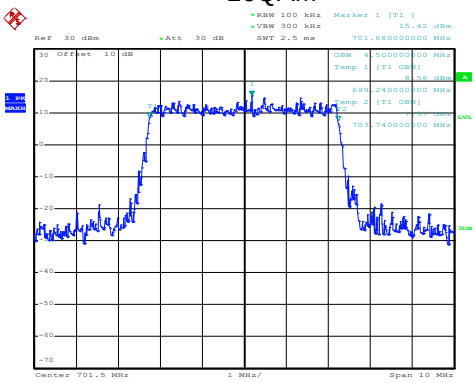


Date: 21.AUG.2019 15:37:55

Highest channel

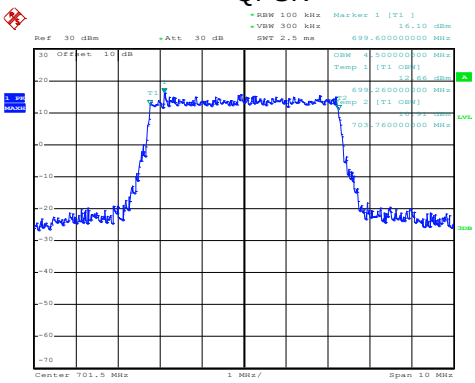
LTE Band 12: 99% Occupy bandwidth
BW: 5MHz

16QAM



Date: 21.AUG.2019 15:38:45

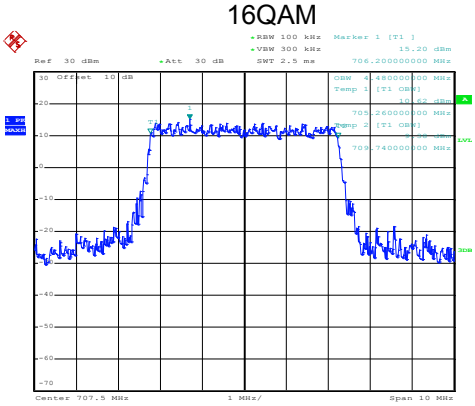
QPSK



Date: 21.AUG.2019 15:38:41

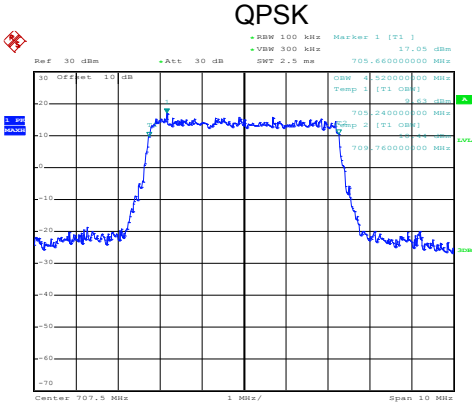
Lowest channel

16QAM



Date: 21.AUG.2019 15:39:36

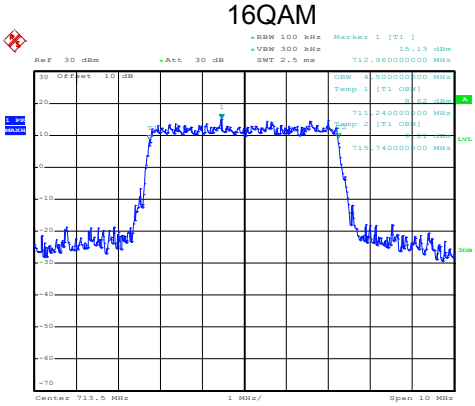
QPSK



Date: 21.AUG.2019 15:39:33

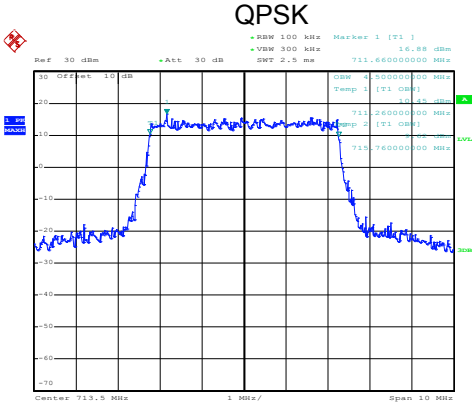
Middle channel

16QAM



Date: 21.AUG.2019 15:39:59

QPSK

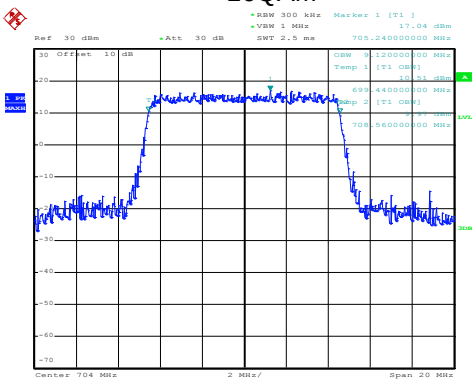


Date: 21.AUG.2019 15:39:54

Highest channel

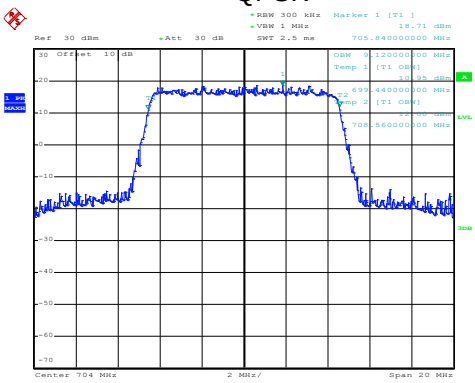
LTE Band 12: 99% Occupy bandwidth
BW: 10MHz

16QAM



Date: 21.AUG.2019 15:41:17

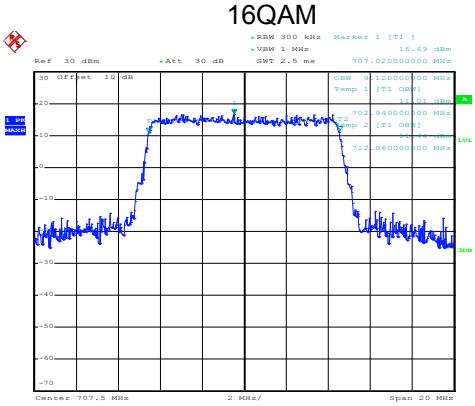
QPSK



Date: 21.AUG.2019 15:41:13

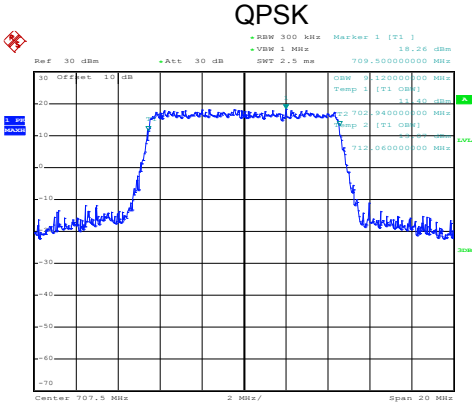
Lowest channel

16QAM



Date: 21.AUG.2019 15:41:46

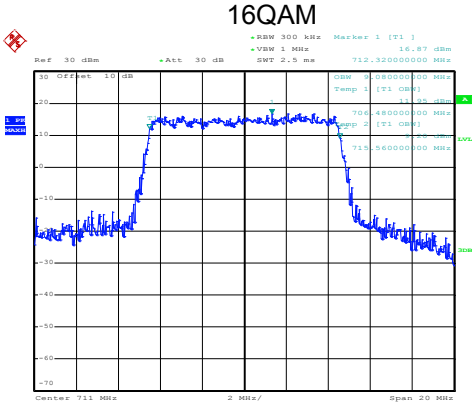
QPSK



Date: 21.AUG.2019 15:41:42

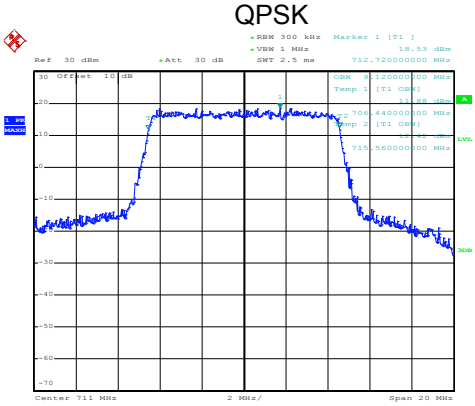
Middle channel

16QAM



Date: 21.AUG.2019 15:42:32

QPSK

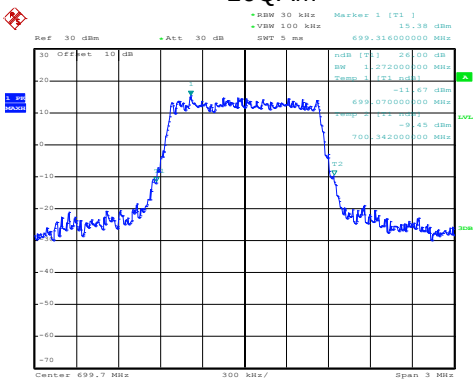


Date: 21.AUG.2019 15:42:29

Highest channel

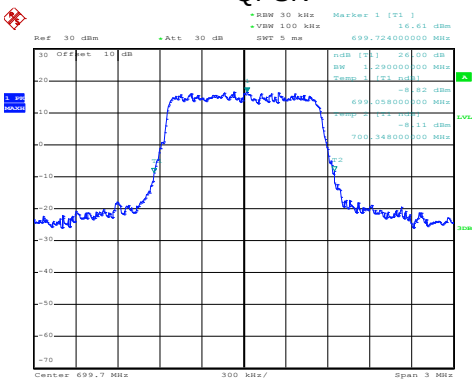
LTE Band 12: -26dBc bandwidth
BW: 1.4MHz

16QAM



Date: 21.AUG.2019 15:33:43

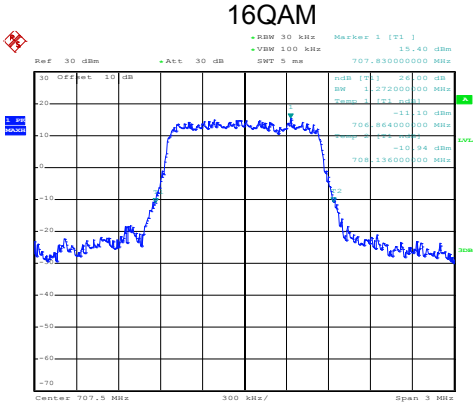
QPSK



Date: 21.AUG.2019 15:33:39

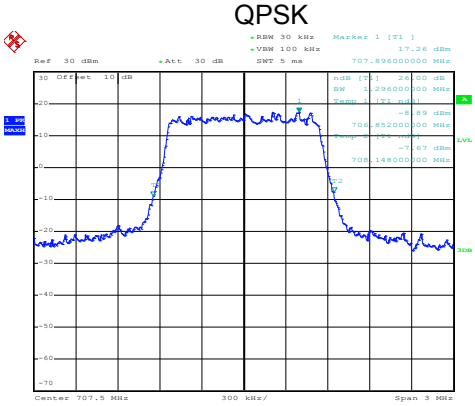
Lowest channel

16QAM



Date: 21.AUG.2019 15:34:19

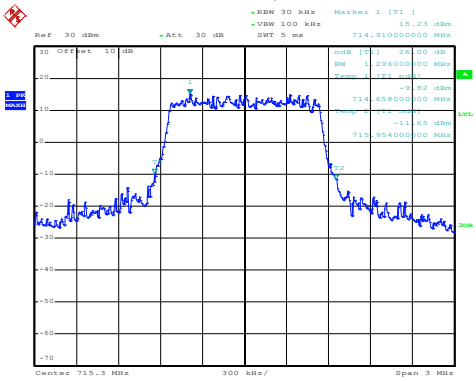
QPSK



Date: 21.AUG.2019 15:34:13

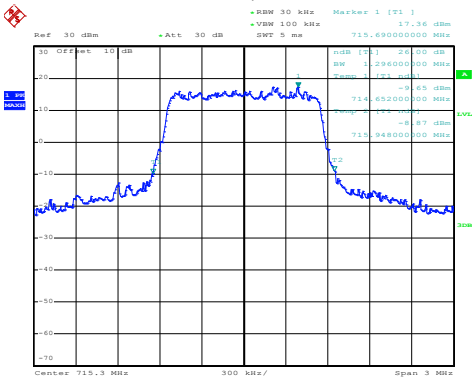
Middle channel

16QAM



Date: 21.AUG.2019 15:35:11

QPSK

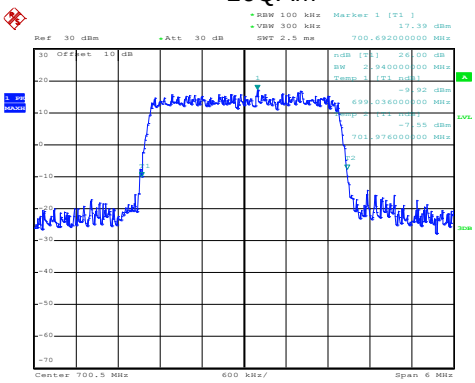


Date: 21.AUG.2019 15:35:07

Highest channel

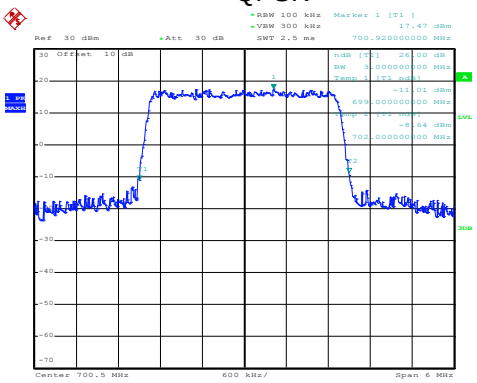
LTE Band 12: -26dBc bandwidth
BW: 3MHz

16QAM



Date: 21.AUG.2019 15:36:40

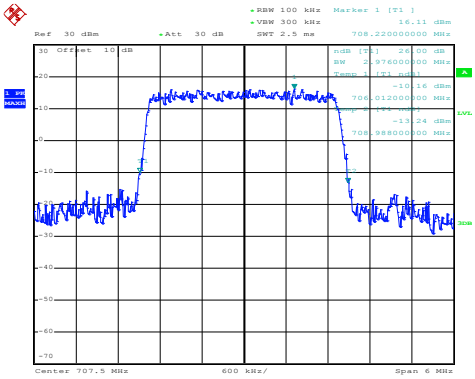
QPSK



Date: 21.AUG.2019 15:36:36

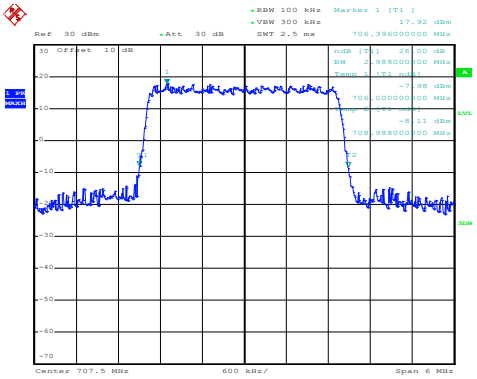
Lowest channel

16QAM



Date: 21.AUG.2019 15:37:24

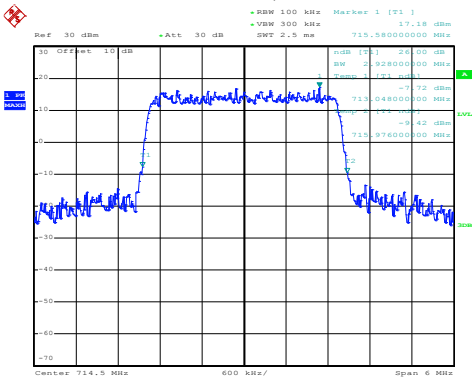
QPSK



Date: 21.AUG.2019 15:37:21

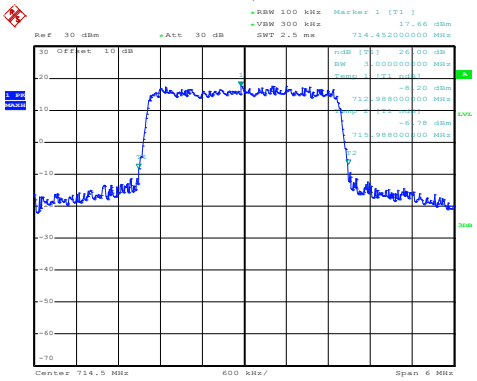
Middle channel

16QAM



Date: 21.AUG.2019 15:37:44

QPSK

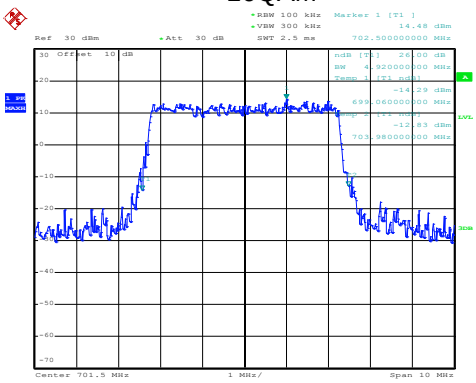


Date: 21.AUG.2019 15:37:40

Highest channel

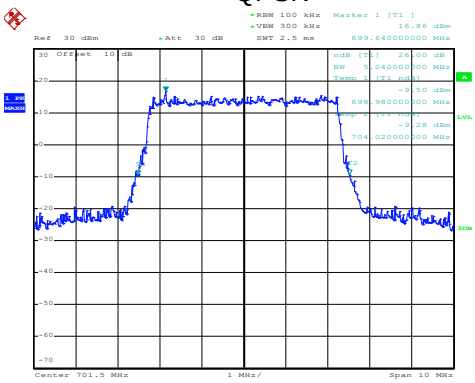
LTE Band 12: -26dBc bandwidth
BW: 5MHz

16QAM



Date: 21.AUG.2019 15:39:00

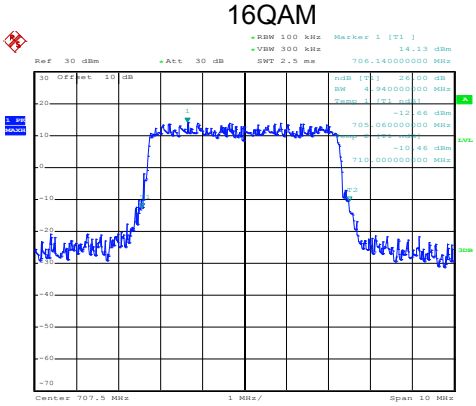
QPSK



Date: 21.AUG.2019 15:38:56

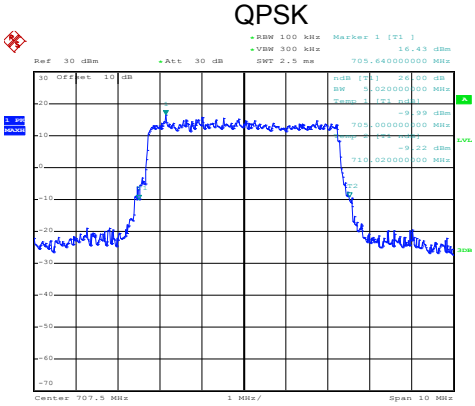
Lowest channel

16QAM



Date: 21.AUG.2019 15:39:22

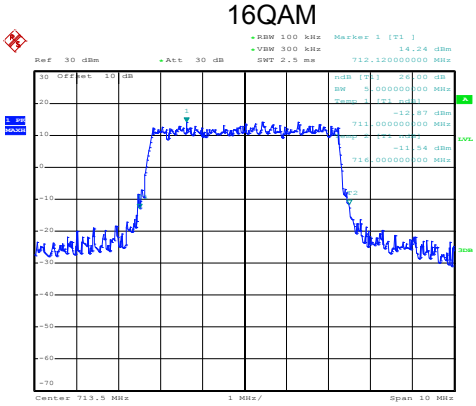
QPSK



Date: 21.AUG.2019 15:39:19

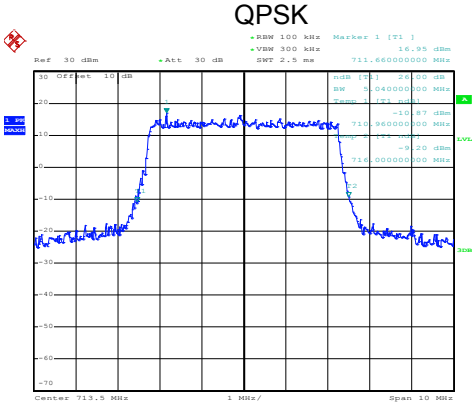
Middle channel

16QAM



Date: 21.AUG.2019 15:40:12

QPSK

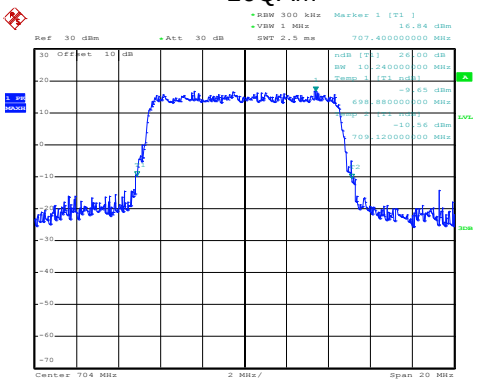


Date: 21.AUG.2019 15:40:08

Highest channel

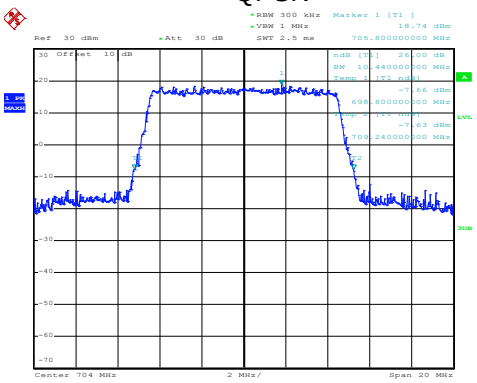
LTE Band 12: -26dBc bandwidth
BW: 10MHz

16QAM



Date: 21.AUG.2019 15:41:04

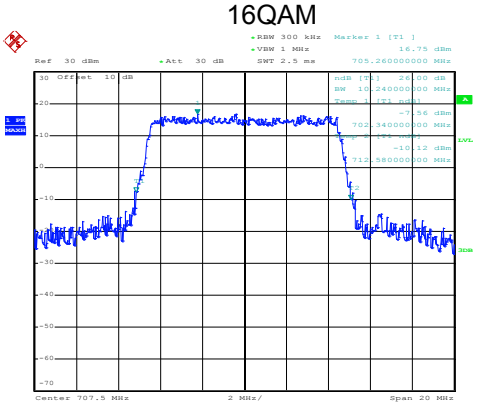
QPSK



Date: 21.AUG.2019 15:41:00

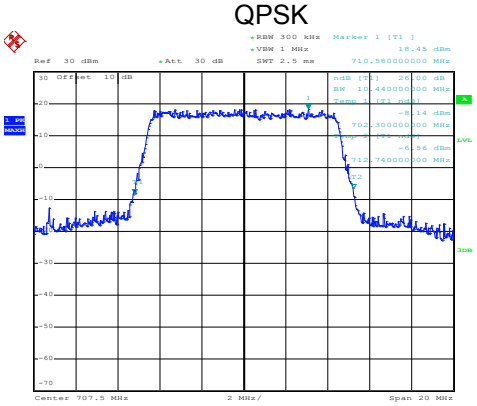
Lowest channel

16QAM



Date: 21.AUG.2019 15:42:00

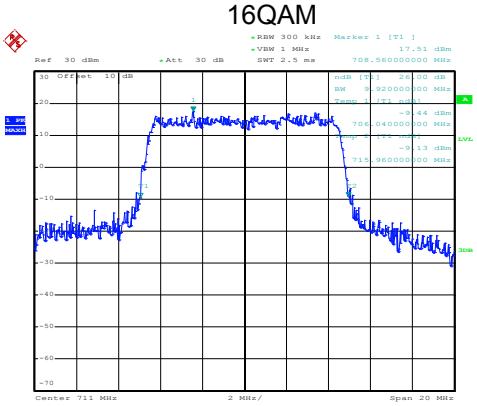
QPSK



Date: 21.AUG.2019 15:41:56

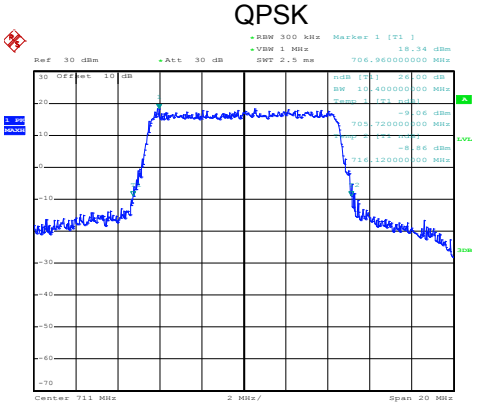
Middle channel

16QAM



Date: 21.AUG.2019 15:42:20

QPSK



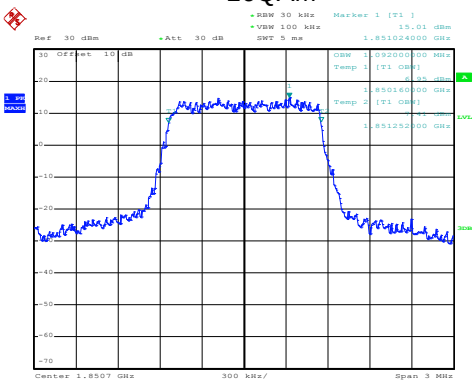
Date: 21.AUG.2019 15:42:17

Highest channel

LTE Band 25 part:

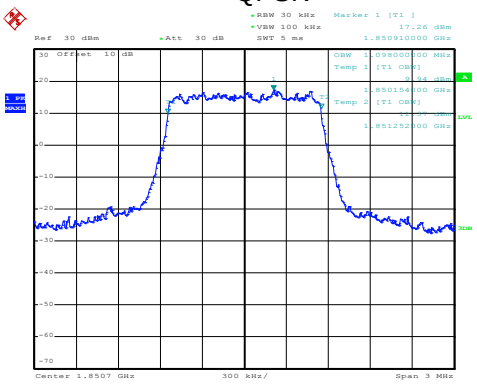
LTE Band 25: 99% Occupy bandwidth
BW: 1.4MHz

16QAM



Date: 21.AUG.2019 15:49:47

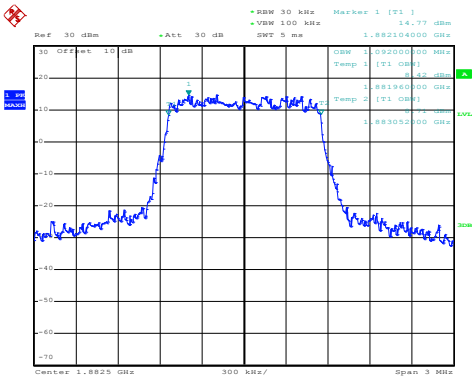
QPSK



Date: 21.AUG.2019 15:49:42

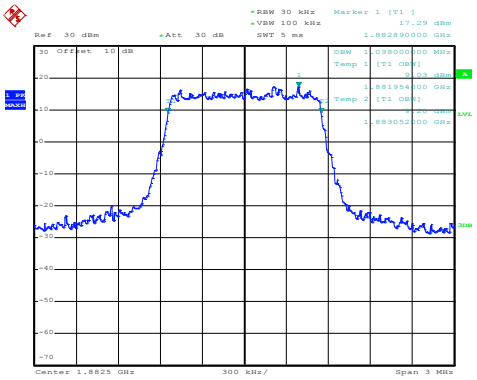
Lowest channel

16QAM



Date: 21.AUG.2019 15:50:36

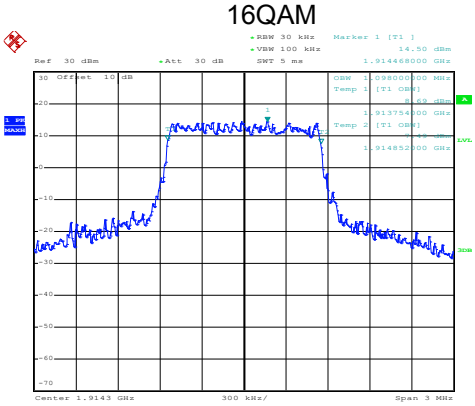
QPSK



Date: 21.AUG.2019 15:50:33

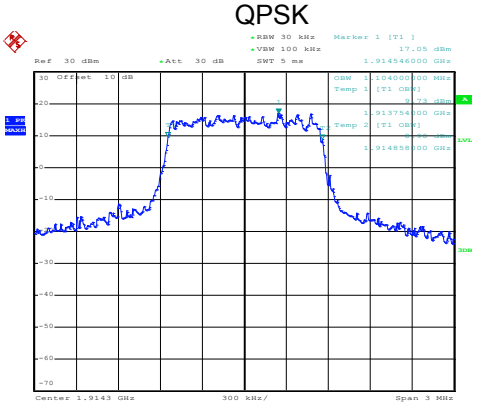
Middle channel

16QAM



Date: 21.AUG.2019 15:51:02

QPSK

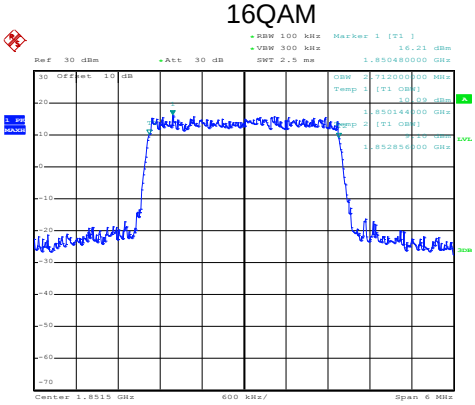


Date: 21.AUG.2019 15:50:58

Highest channel

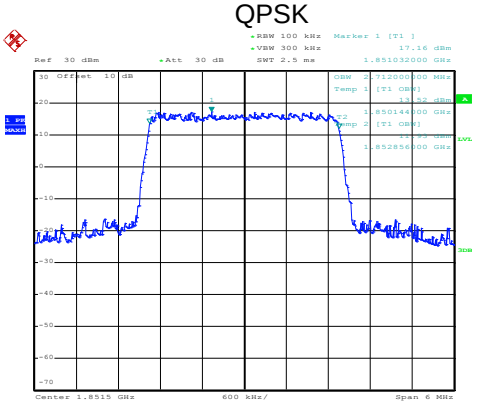
LTE Band 25: 99% Occupy bandwidth
BW: 3MHz

16QAM



Date: 21.AUG.2019 15:52:12

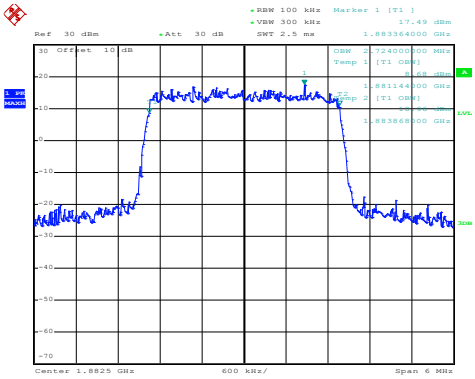
QPSK



Date: 21.AUG.2019 15:52:09

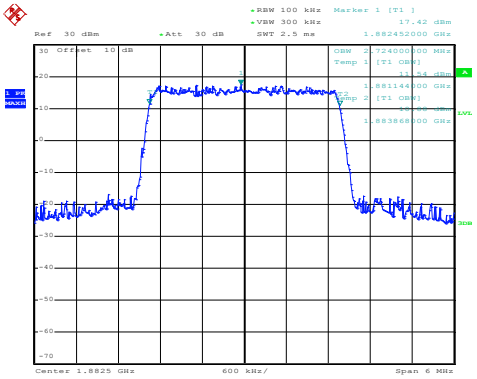
Lowest channel

16QAM



Date: 21.AUG.2019 15:52:29

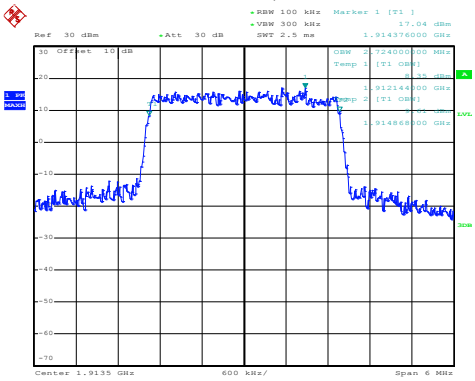
QPSK



Date: 21.AUG.2019 15:52:25

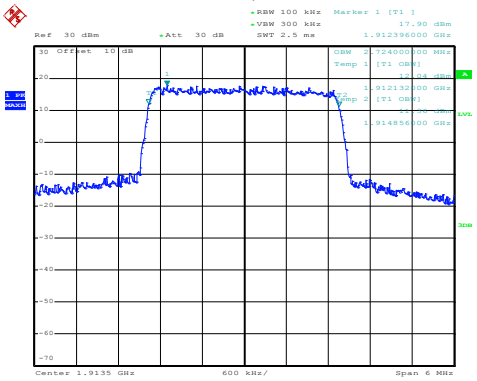
Middle channel

16QAM



Date: 21.AUG.2019 15:53:24

QPSK

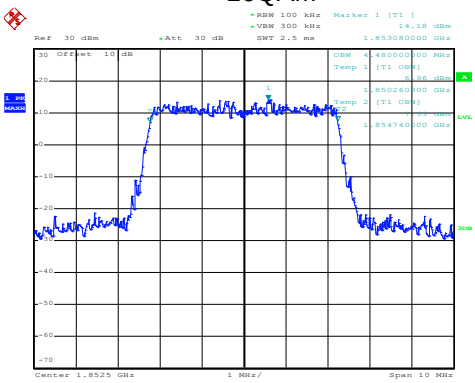


Date: 21.AUG.2019 15:53:21

Highest channel

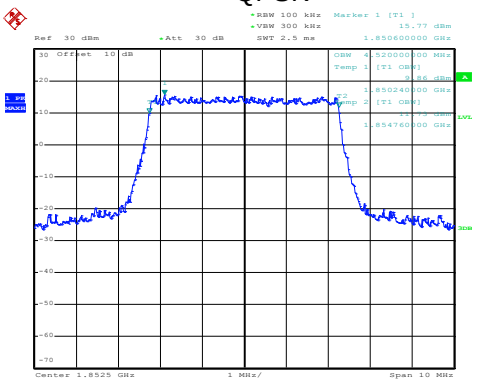
LTE Band 25: 99% Occupy bandwidth
BW: 5MHz

16QAM



Date: 21.AUG.2019 15:54:25

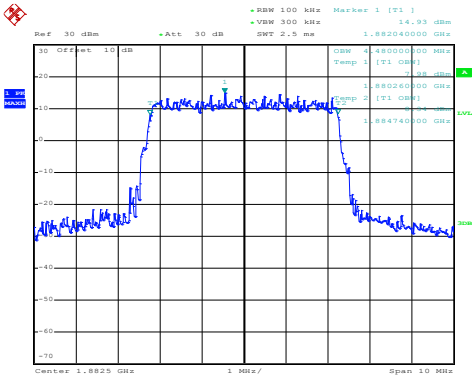
QPSK



Date: 21.AUG.2019 15:54:22

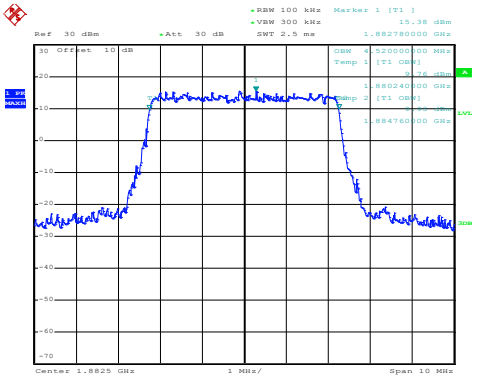
Lowest channel

16QAM



Date: 21.AUG.2019 15:55:06

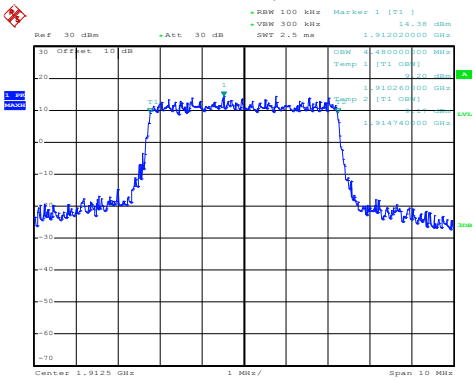
QPSK



Date: 21.AUG.2019 15:55:01

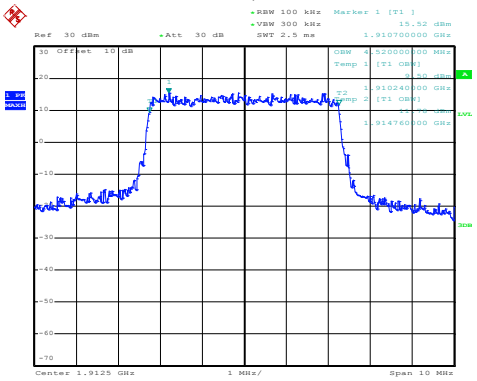
Middle channel

16QAM



Date: 21.AUG.2019 15:55:29

QPSK

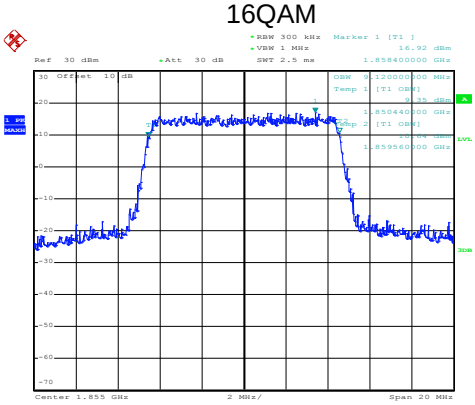


Date: 21.AUG.2019 15:55:25

Highest channel

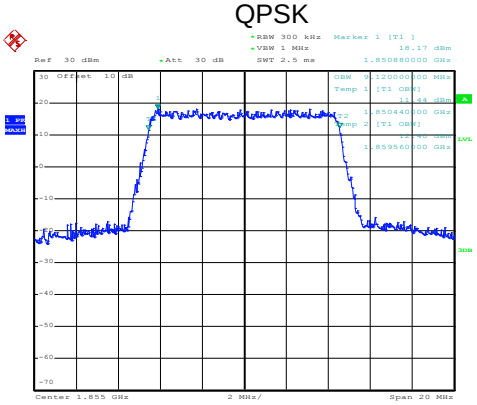
LTE Band 25: 99% Occupy bandwidth
BW: 10MHz

16QAM



Date: 21.AUG.2019 15:56:35

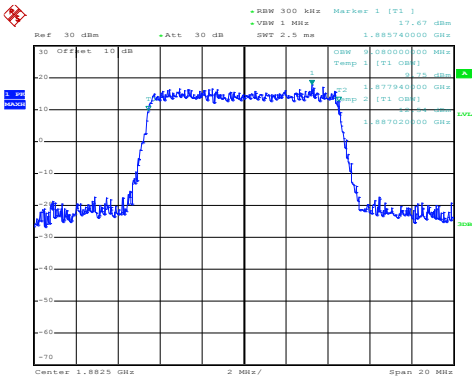
QPSK



Date: 21.AUG.2019 15:56:32

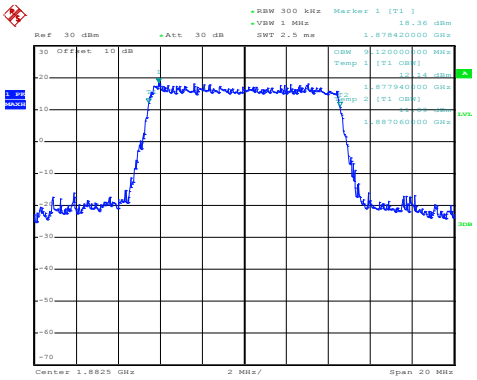
Lowest channel

16QAM



Date: 21.AUG.2019 15:56:57

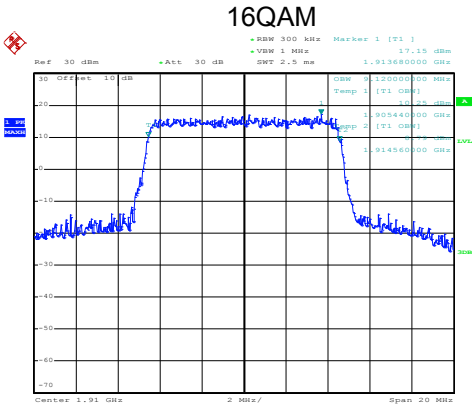
QPSK



Date: 21.AUG.2019 15:56:53

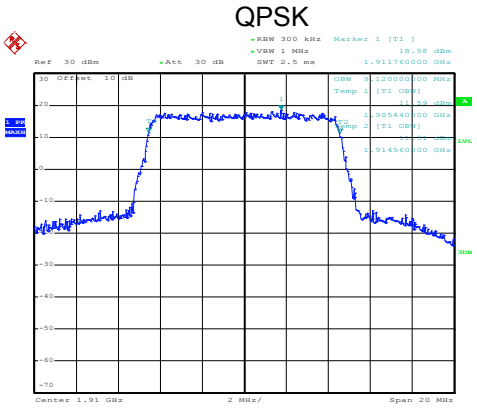
Middle channel

16QAM



Date: 21.AUG.2019 15:57:56

QPSK

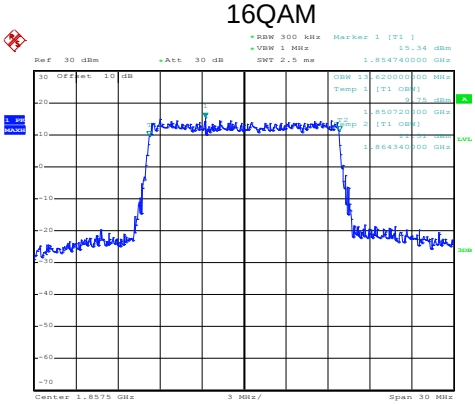


Date: 21.AUG.2019 15:57:47

Highest channel

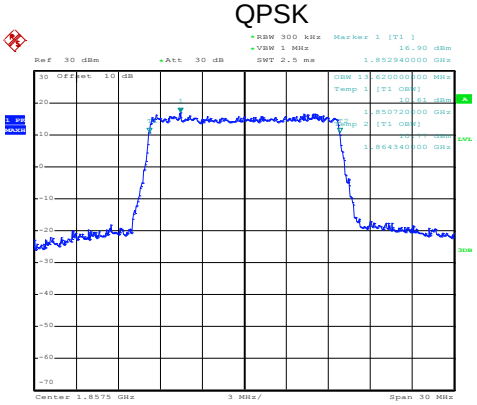
LTE Band 25: 99% Occupy bandwidth
BW: 15MHz

16QAM



Date: 21.AUG.2019 16:00:00

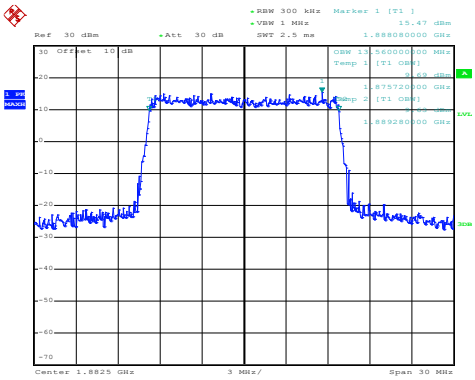
QPSK



Date: 21.AUG.2019 15:59:57

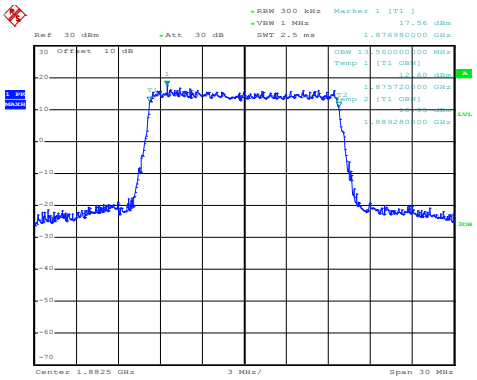
Lowest channel

16QAM



Date: 21.AUG.2019 16:00:45

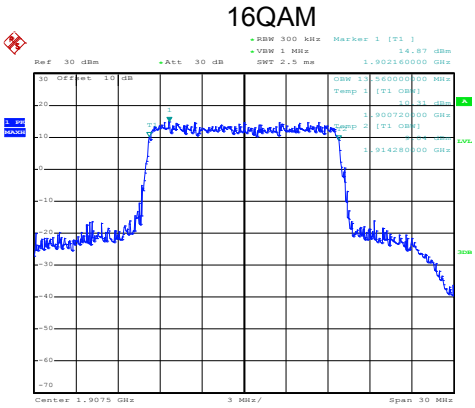
QPSK



Date: 21.AUG.2019 16:00:41

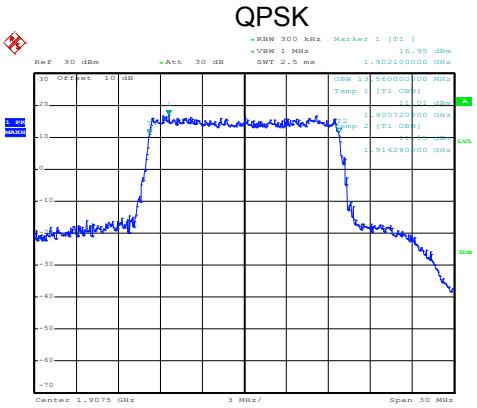
Middle channel

16QAM



Date: 21.AUG.2019 16:01:08

QPSK

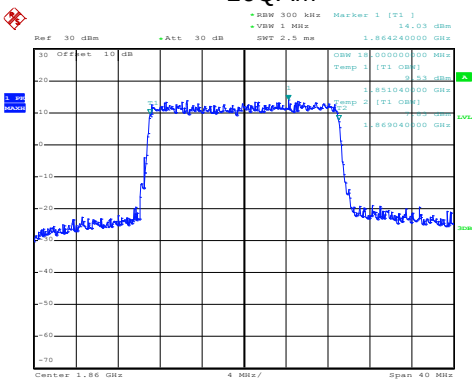


Date: 21.AUG.2019 16:01:05

Highest channel

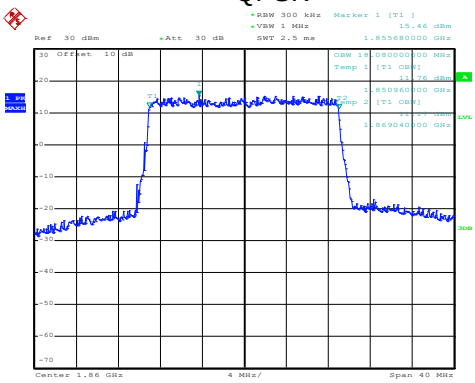
LTE Band 25: 99% Occupy bandwidth
BW: 20MHz

16QAM



Date: 21.AUG.2019 16:02:22

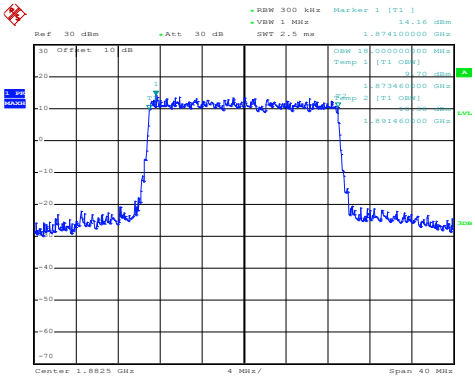
QPSK



Date: 21.AUG.2019 16:02:18

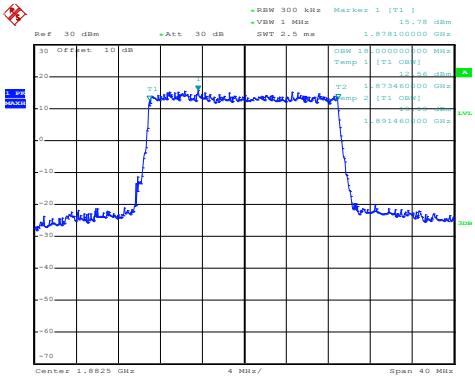
Lowest channel

16QAM



Date: 21.AUG.2019 16:02:50

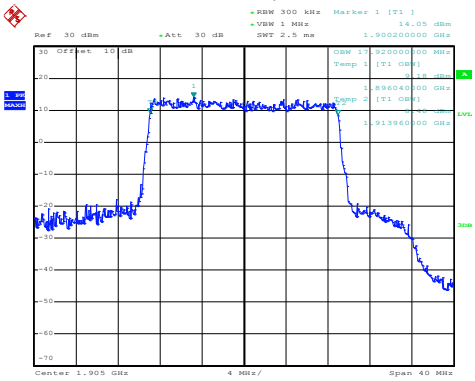
QPSK



Date: 21.AUG.2019 16:02:46

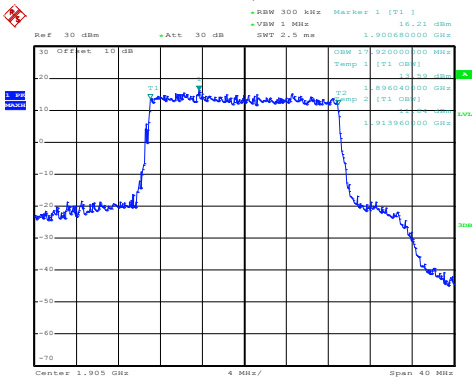
Middle channel

16QAM



Date: 21.AUG.2019 16:04:06

QPSK

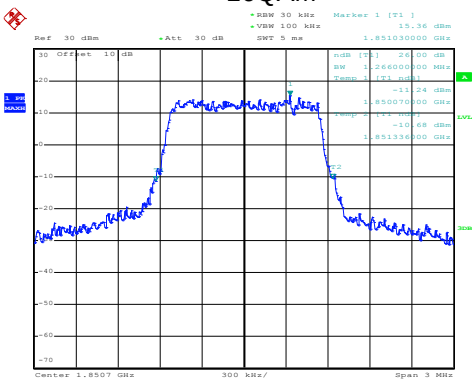


Date: 21.AUG.2019 16:04:01

Highest channel

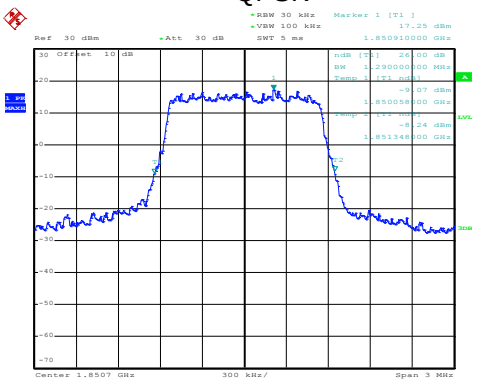
LTE Band 25: -26dBc bandwidth
BW: 1.4MHz

16QAM



Date: 21.AUG.2019 15:50:01

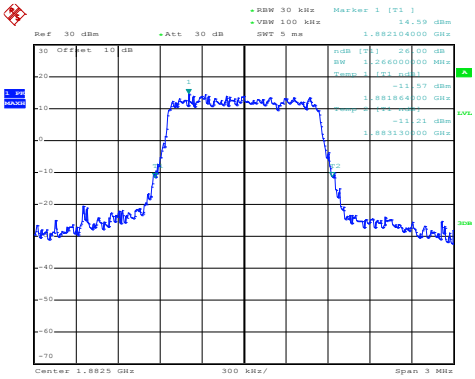
QPSK



Date: 21.AUG.2019 15:49:57

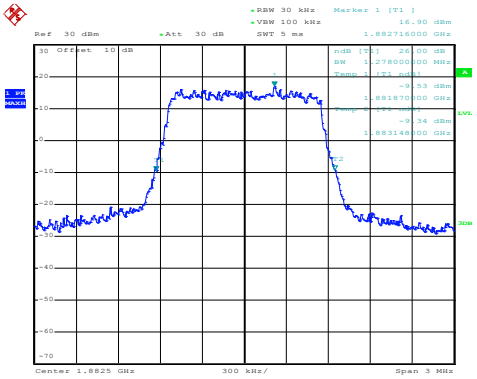
Lowest channel

16QAM



Date: 21.AUG.2019 15:50:24

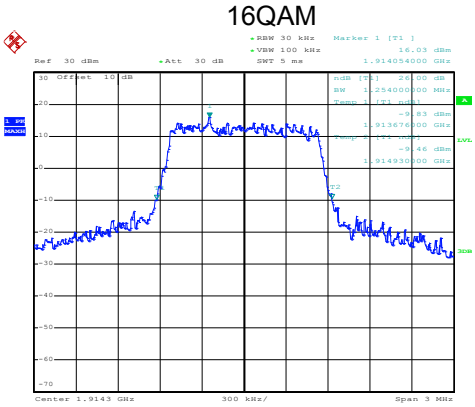
QPSK



Date: 21.AUG.2019 15:50:20

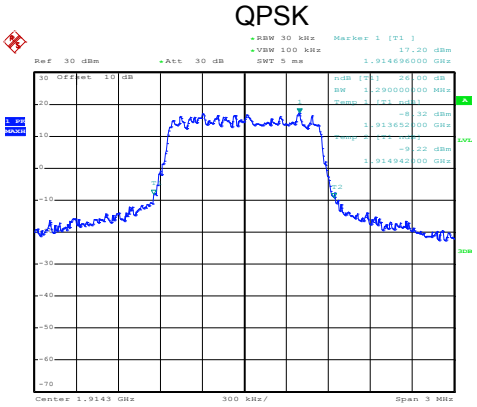
Middle channel

16QAM



Date: 21.AUG.2019 15:51:13

QPSK

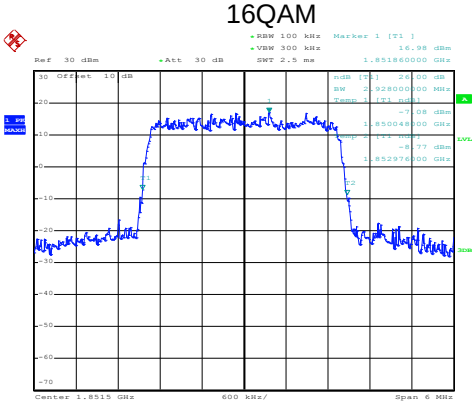


Date: 21.AUG.2019 15:51:10

Highest channel

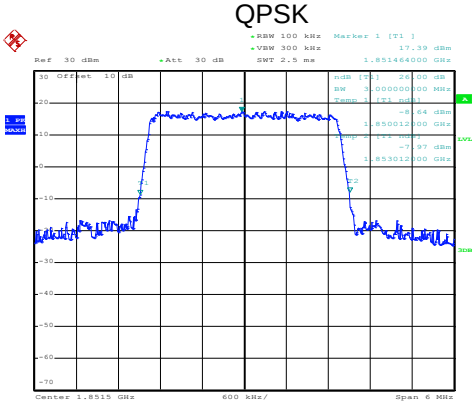
LTE Band 25: -26dBc bandwidth
BW: 3MHz

16QAM



Date: 21.AUG.2019 15:52:00

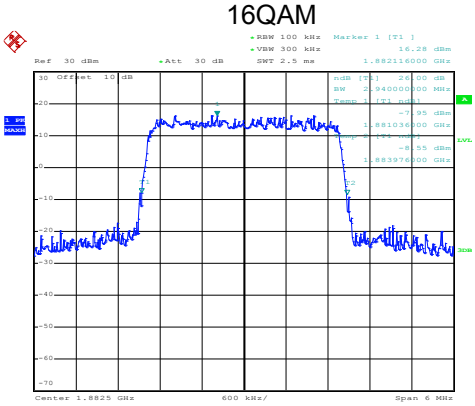
QPSK



Date: 21.AUG.2019 15:51:56

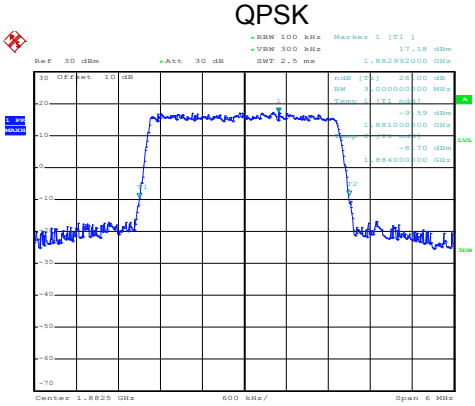
Lowest channel

16QAM



Date: 21.AUG.2019 15:52:49

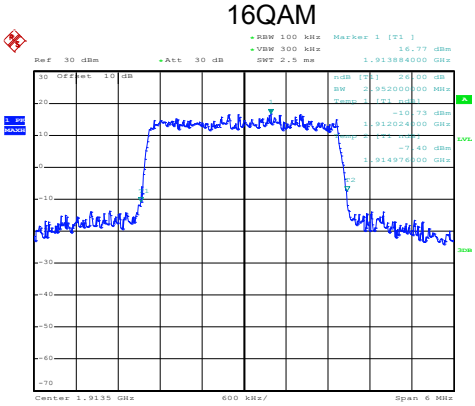
QPSK



Date: 21.AUG.2019 15:52:46

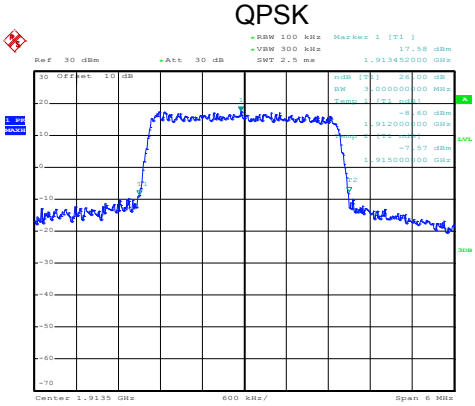
Middle channel

16QAM



Date: 21.AUG.2019 15:53:10

QPSK

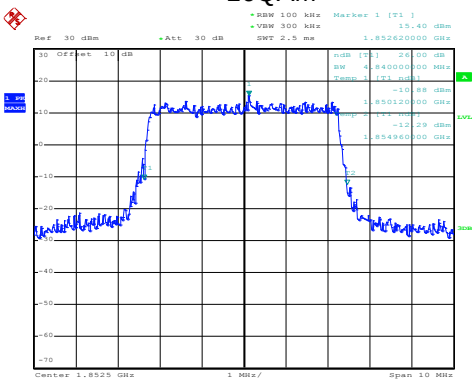


Date: 21.AUG.2019 15:53:07

Highest channel

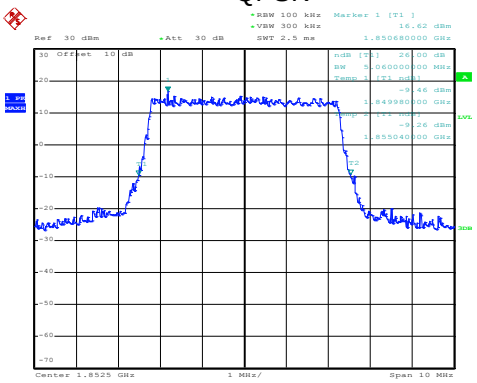
LTE Band 25: -26dBc bandwidth
BW: 5MHz

16QAM



Date: 21.AUG.2019 15:54:38

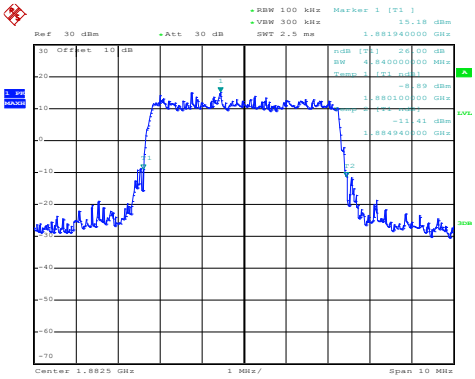
QPSK



Date: 21.AUG.2019 15:54:34

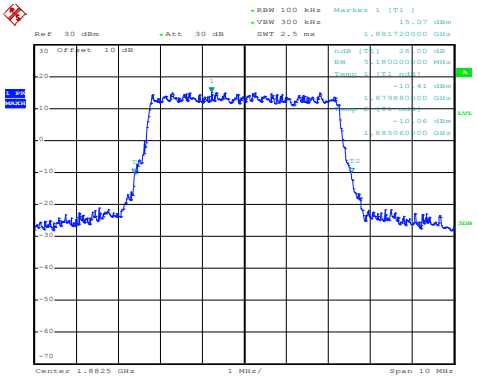
Lowest channel

16QAM



Date: 21.AUG.2019 15:54:52

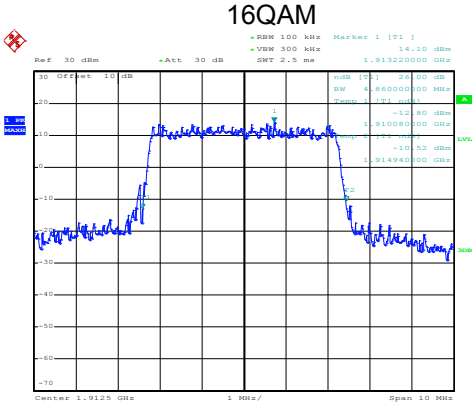
QPSK



Date: 21.AUG.2019 15:54:49

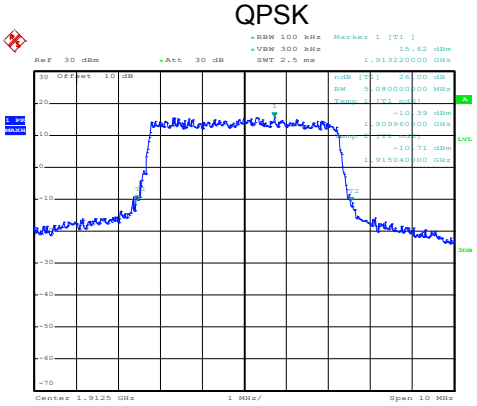
Middle channel

16QAM



Date: 21.AUG.2019 15:55:41

QPSK

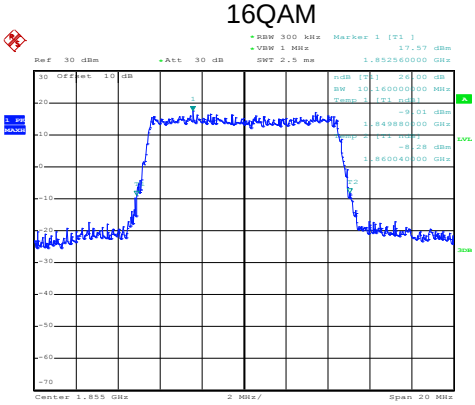


Date: 21.AUG.2019 15:55:37

Highest channel

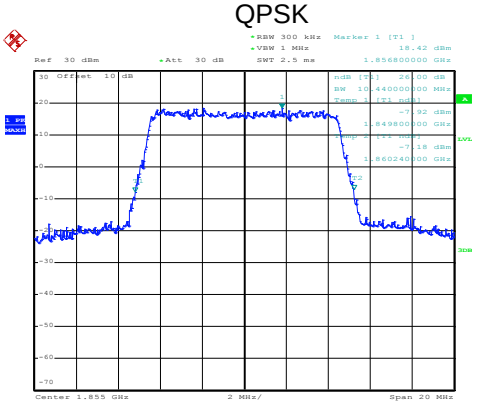
LTE Band 25: -26dBc bandwidth
BW: 10MHz

16QAM



Date: 21.AUG.2019 15:56:23

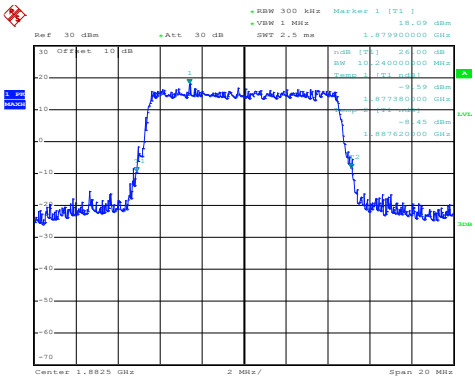
QPSK



Date: 21.AUG.2019 15:56:20

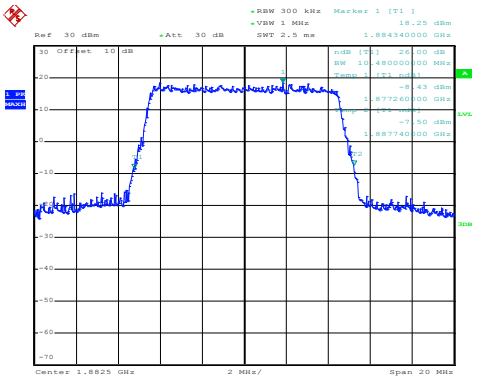
Lowest channel

16QAM



Date: 21.AUG.2019 15:57:10

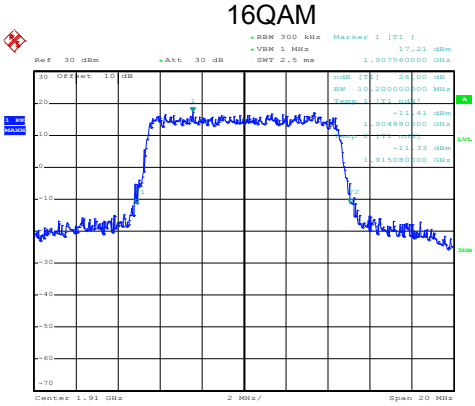
QPSK



Date: 21.AUG.2019 15:57:05

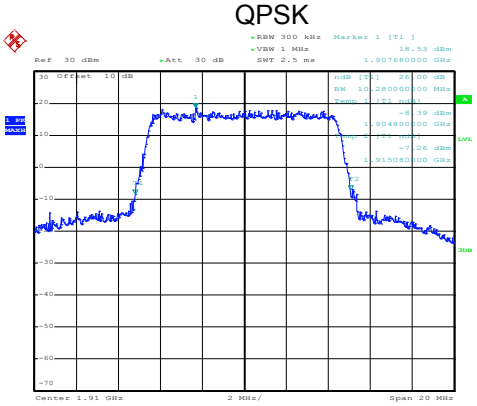
Middle channel

16QAM



Date: 21.AUG.2019 15:57:37

QPSK

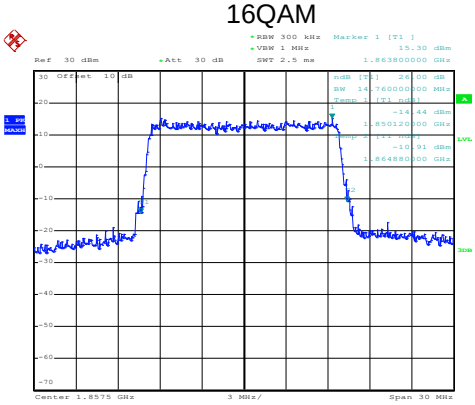


Date: 21.AUG.2019 15:57:33

Highest channel

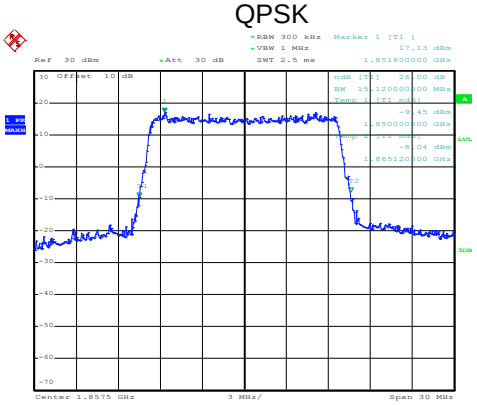
LTE Band 25: -26dBc bandwidth
BW: 15MHz

16QAM



Date: 21.AUG.2019 16:00:17

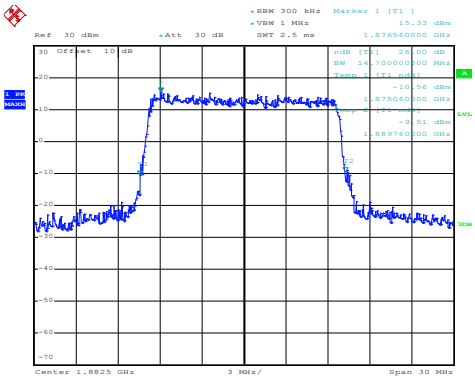
QPSK



Date: 21.AUG.2019 16:00:13

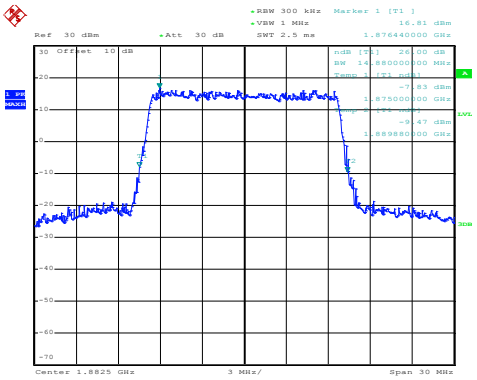
Lowest channel

16QAM



Date: 21.AUG.2019 16:00:33

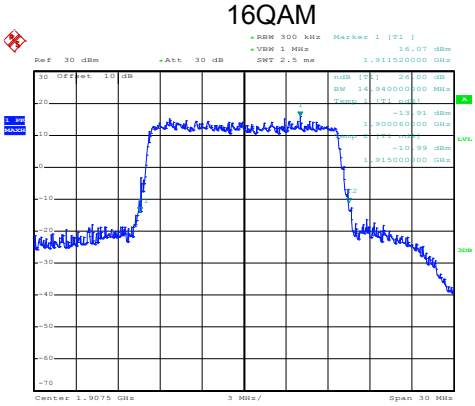
QPSK



Date: 21.AUG.2019 16:00:29

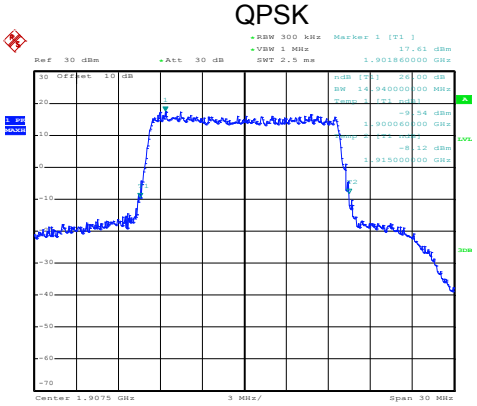
Middle channel

16QAM



Date: 21.AUG.2019 16:01:21

QPSK

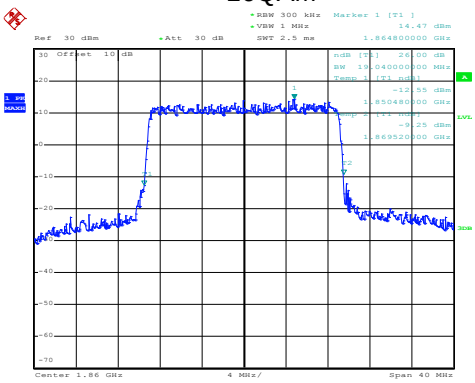


Date: 21.AUG.2019 16:01:17

Highest channel

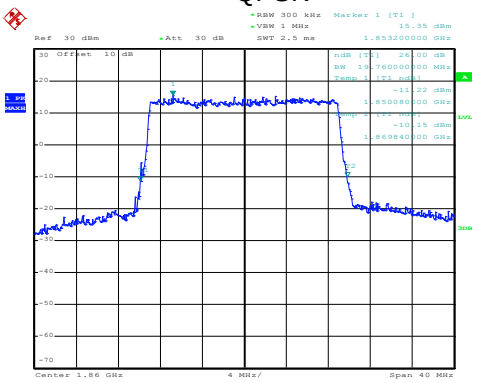
LTE Band 25: -26dBc bandwidth
BW: 20MHz

16QAM



Date: 21.AUG.2019 16:02:09

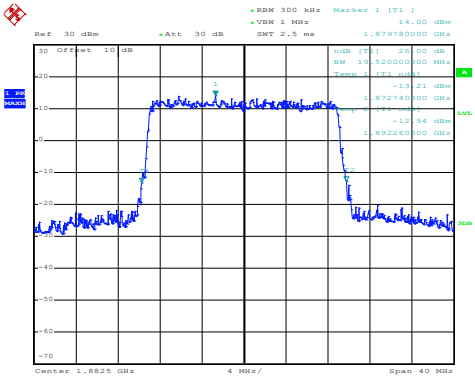
QPSK



Date: 21.AUG.2019 16:02:05

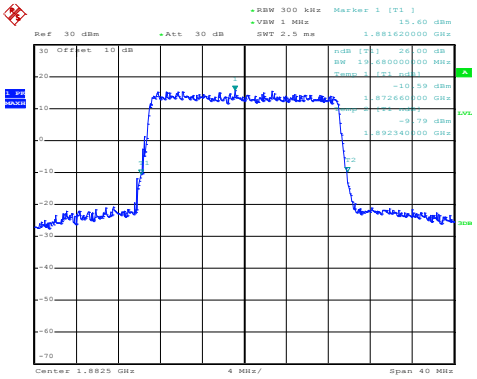
Lowest channel

16QAM



Date: 21.AUG.2019 16:03:03

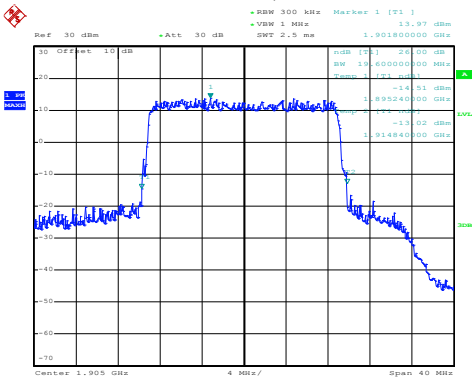
QPSK



Date: 21.AUG.2019 16:02:59

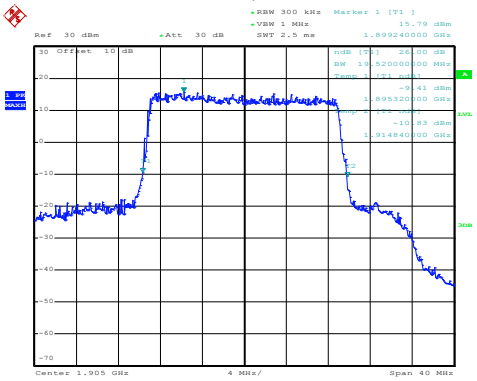
Middle channel

16QAM



Date: 21.AUG.2019 16:03:52

QPSK



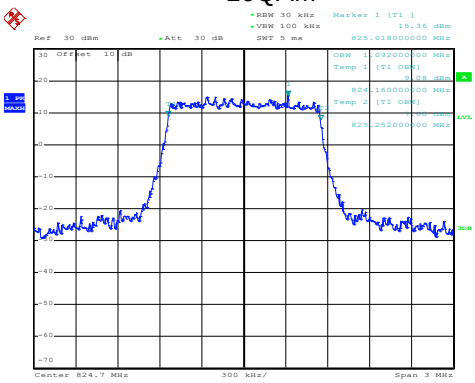
Date: 21.AUG.2019 16:03:49

Highest channel

LTE Band 5&26(part 22H) part:

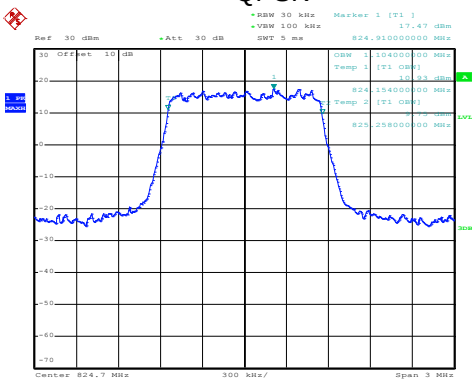
LTE Band 5&26(part 22H): 99% Occupy bandwidth
BW: 1.4MHz

16QAM



Date: 21.AUG.2019 16:06:33

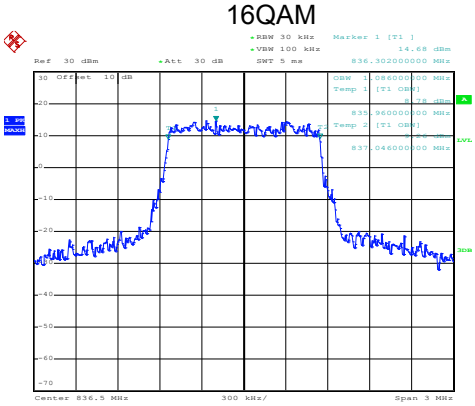
QPSK



Date: 21.AUG.2019 16:06:28

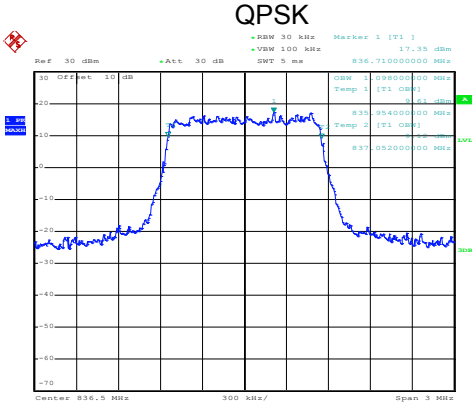
Lowest channel

16QAM



Date: 21.AUG.2019 16:07:25

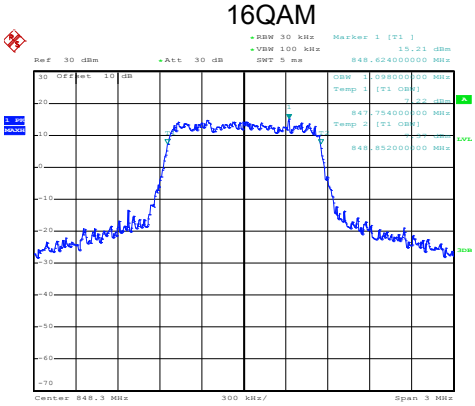
QPSK



Date: 21.AUG.2019 16:07:22

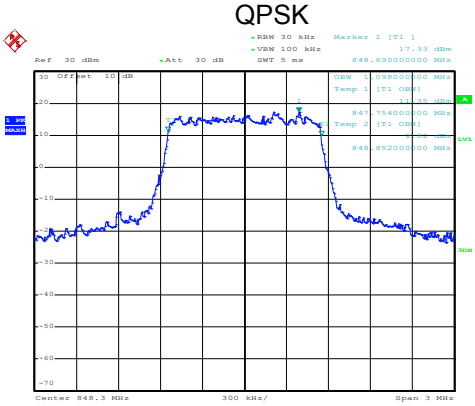
Middle channel

16QAM



Date: 21.AUG.2019 16:07:52

QPSK

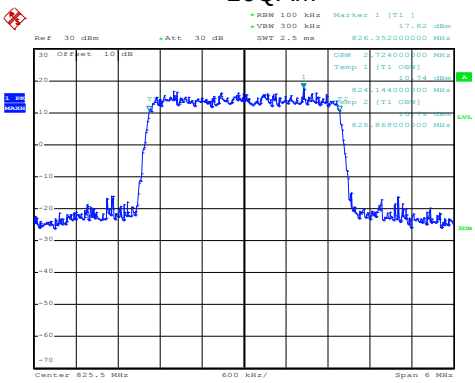


Date: 21.AUG.2019 16:07:48

Highest channel

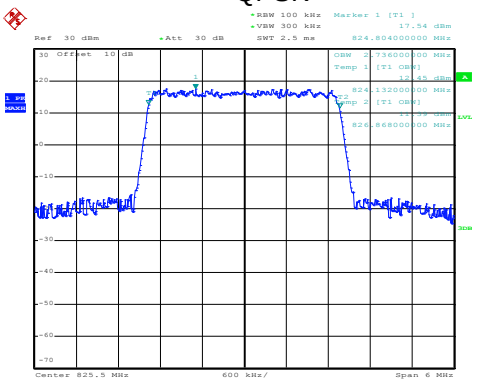
LTE Band 5&26(part 22H): 99% Occupy bandwidth
BW: 3MHz

16QAM



Date: 21.AUG.2019 16:09:12

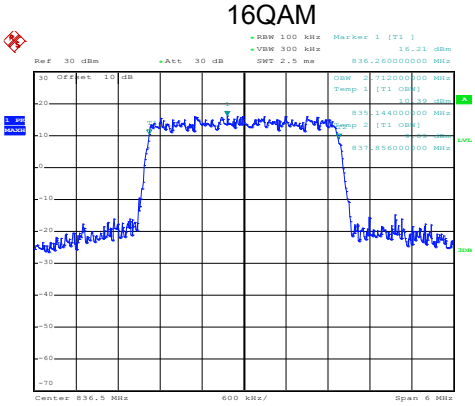
QPSK



Date: 21.AUG.2019 16:09:08

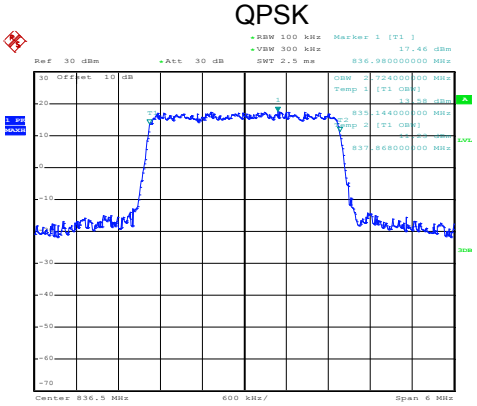
Lowest channel

16QAM



Date: 21.AUG.2019 16:09:30

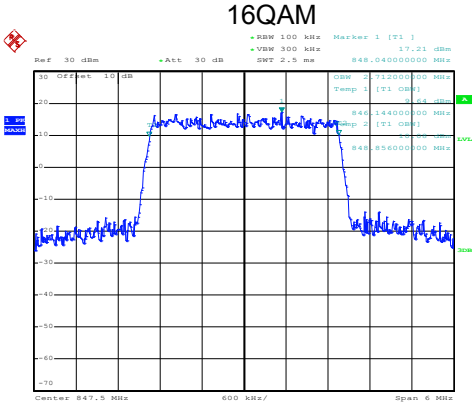
QPSK



Date: 21.AUG.2019 16:10:03

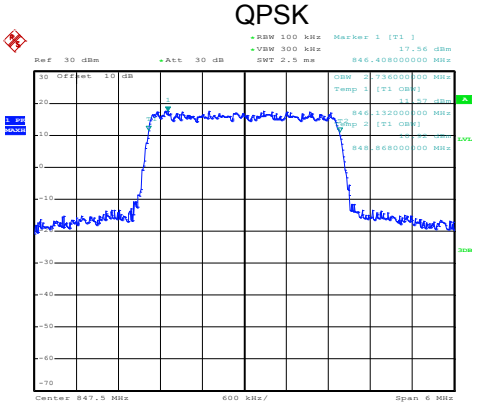
Middle channel

16QAM



Date: 21.AUG.2019 16:10:30

QPSK

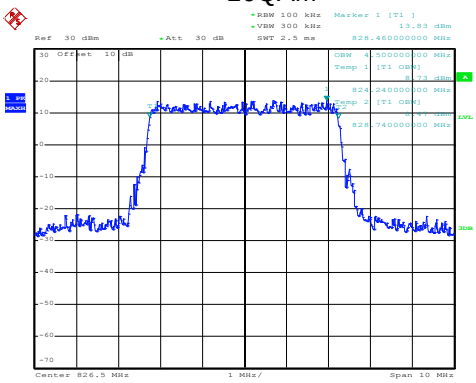


Date: 21.AUG.2019 16:10:26

Highest channel

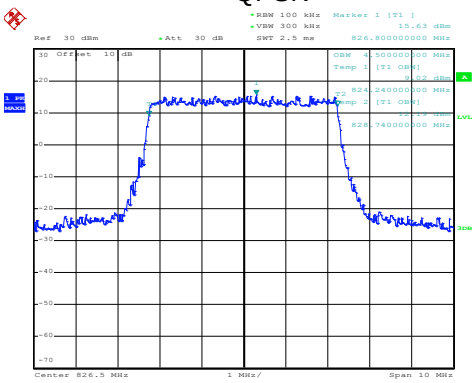
LTE Band 5&26(part 22H): 99% Occupy bandwidth
BW: 5MHz

16QAM



Date: 21.AUG.2019 16:12:27

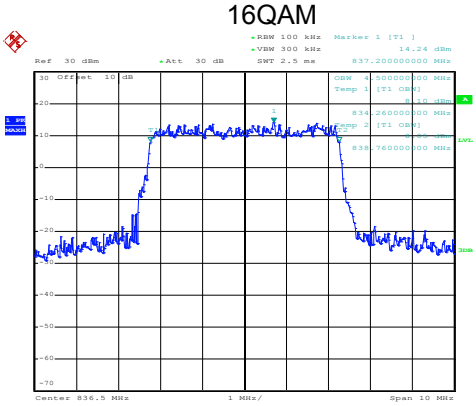
QPSK



Date: 21.AUG.2019 16:12:23

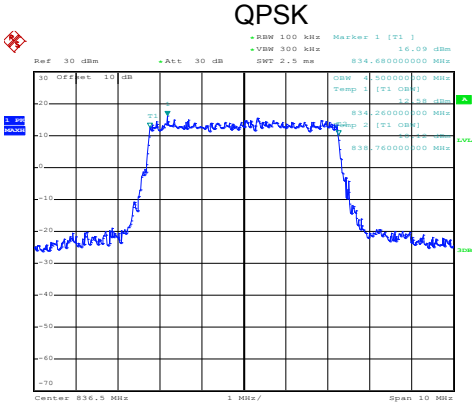
Lowest channel

16QAM



Date: 21.AUG.2019 16:12:53

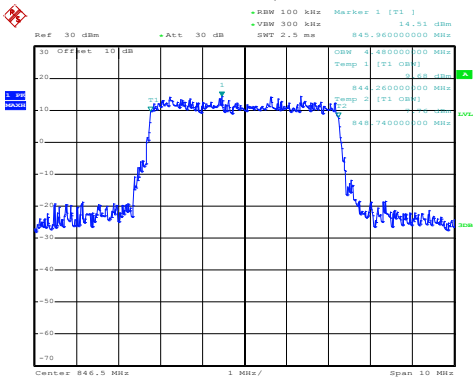
QPSK



Date: 21.AUG.2019 16:12:49

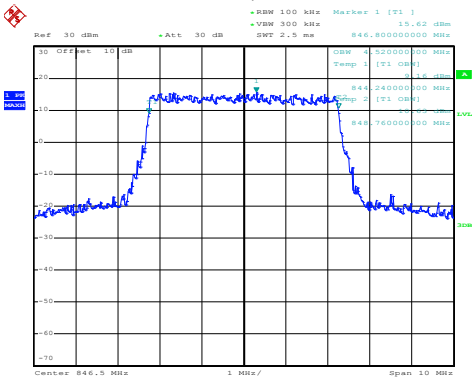
Middle channel

16QAM



Date: 21.AUG.2019 16:13:53

QPSK

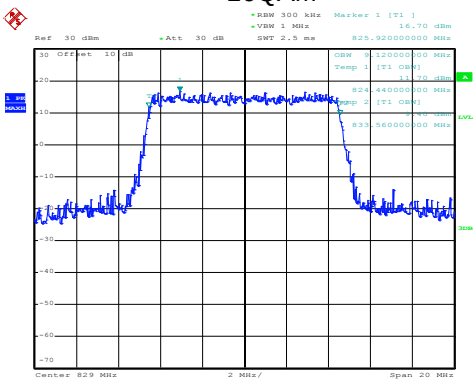


Date: 21.AUG.2019 16:13:49

Highest channel

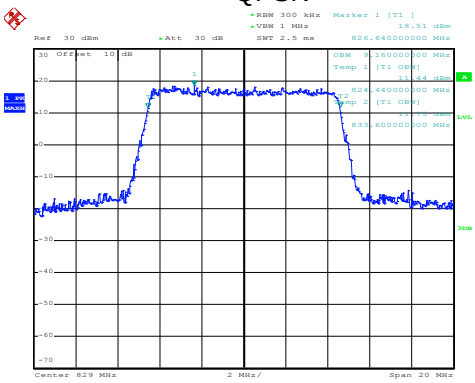
LTE Band 5&26(part 22H): 99% Occupy bandwidth
BW: 10MHz

16QAM



Date: 21.AUG.2019 16:15:15

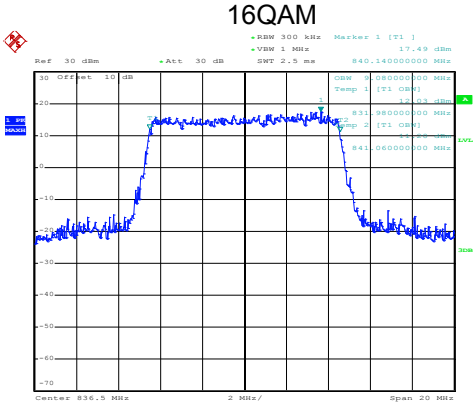
QPSK



Date: 21.AUG.2019 16:15:11

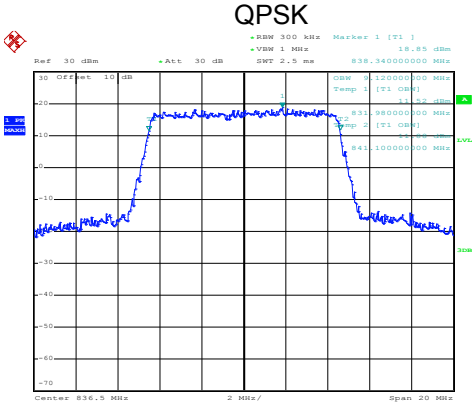
Lowest channel

16QAM



Date: 21.AUG.2019 16:16:08

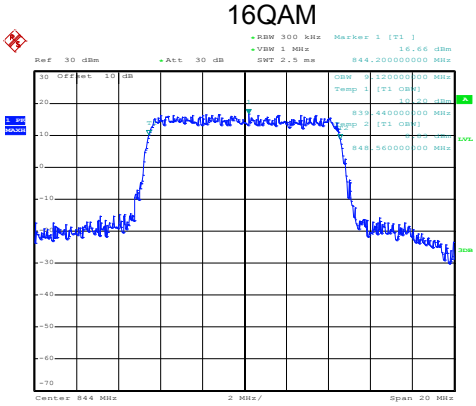
QPSK



Date: 21.AUG.2019 16:16:04

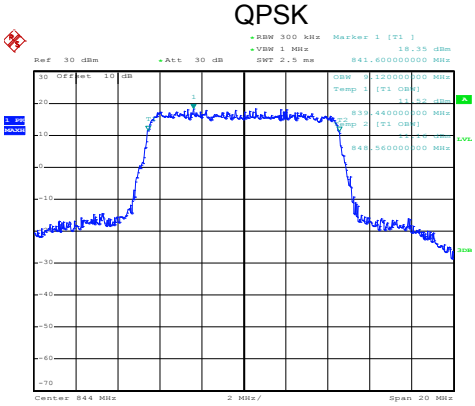
Middle channel

16QAM



Date: 21.AUG.2019 16:16:27

QPSK

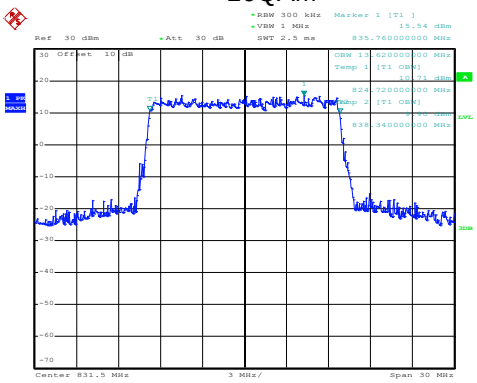


Date: 21.AUG.2019 16:16:23

Highest channel

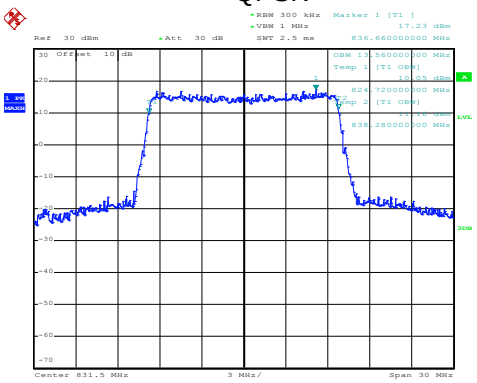
LTE Band 5&26(part 22H): 99% Occupy bandwidth
BW: 15MHz

16QAM



Date: 21.AUG.2019 16:17:41

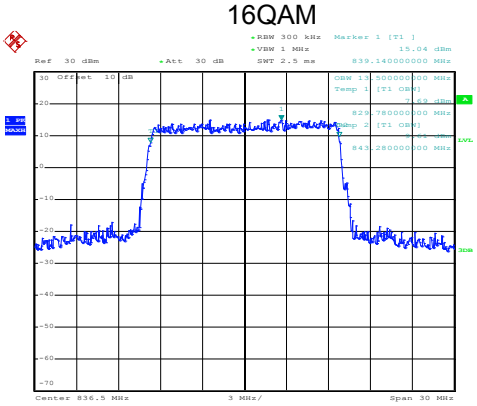
QPSK



Date: 21.AUG.2019 16:17:37

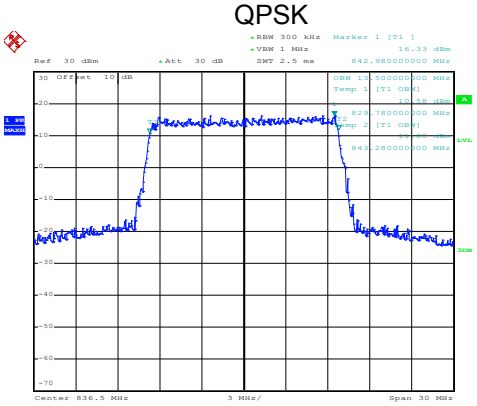
Lowest channel

16QAM



Date: 21.AUG.2019 16:17:59

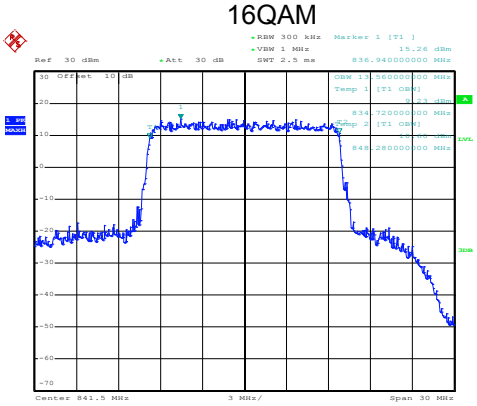
QPSK



Date: 21.AUG.2019 16:17:55

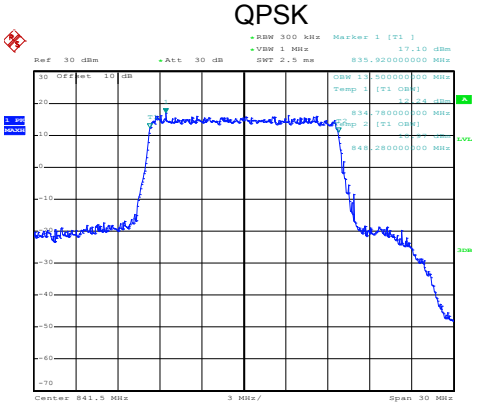
Middle channel

16QAM



Date: 21.AUG.2019 16:18:47

QPSK

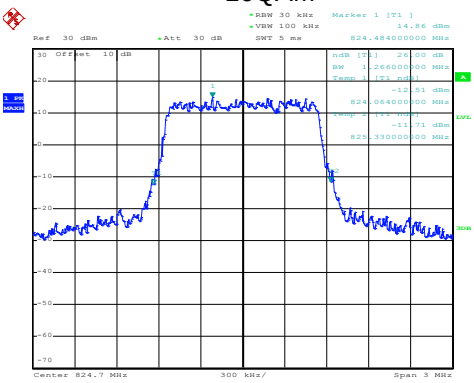


Date: 21.AUG.2019 16:18:43

Highest channel

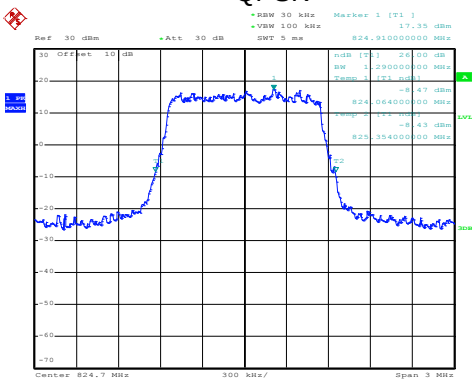
LTE Band 5&26(part 22H): -26dBc bandwidth
BW: 1.4MHz

16QAM



Date: 21.AUG.2019 16:06:48

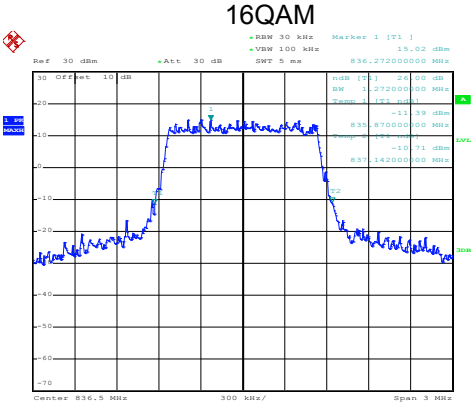
QPSK



Date: 21.AUG.2019 16:06:44

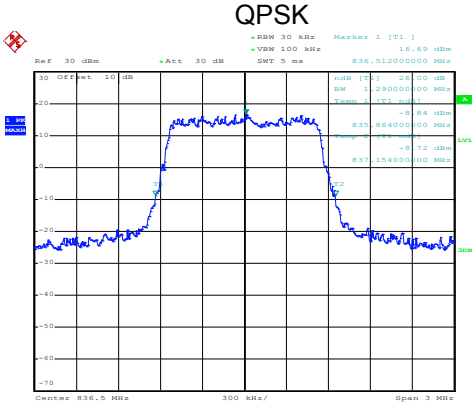
Lowest channel

16QAM



Date: 21.AUG.2019 16:07:12

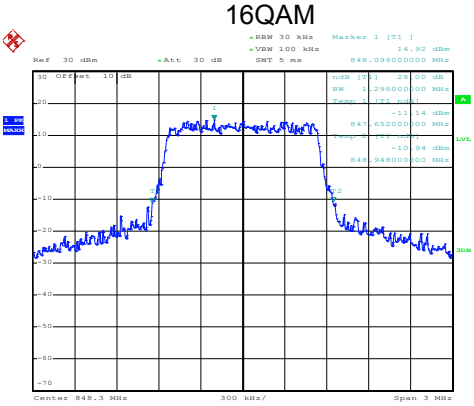
QPSK



Date: 21.AUG.2019 16:07:08

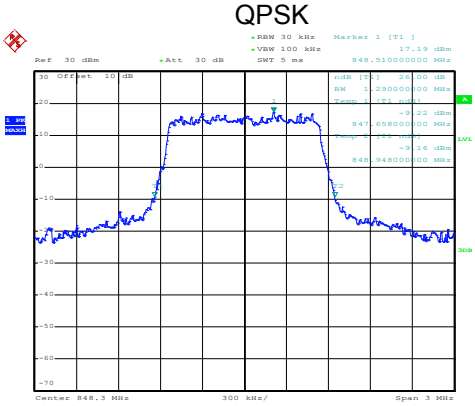
Middle channel

16QAM



Date: 21.AUG.2019 16:08:06

QPSK

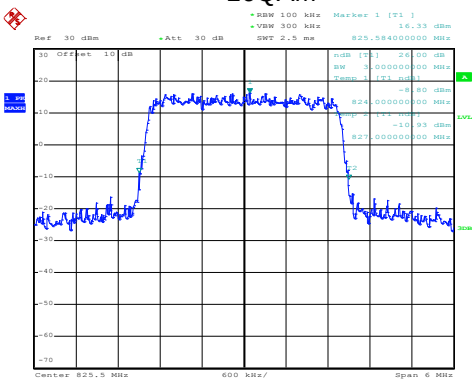


Date: 21.AUG.2019 16:08:02

Highest channel

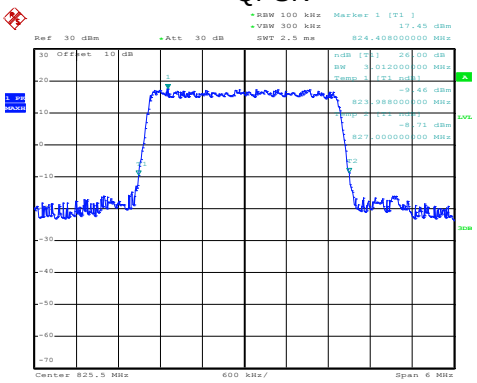
LTE Band 5&26(part 22H): -26dBc bandwidth
BW: 3MHz

16QAM



Date: 21.AUG.2019 16:08:55

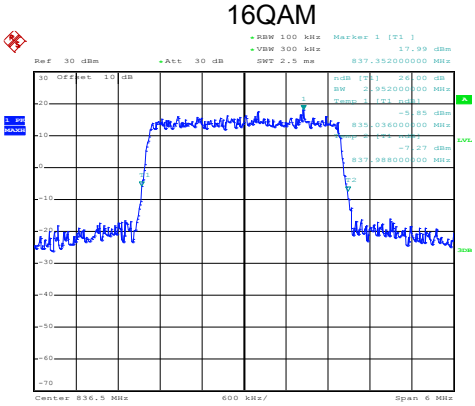
QPSK



Date: 21.AUG.2019 16:08:52

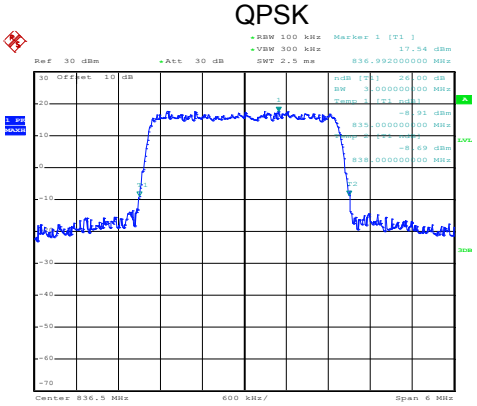
Lowest channel

16QAM



Date: 21.AUG.2019 16:09:43

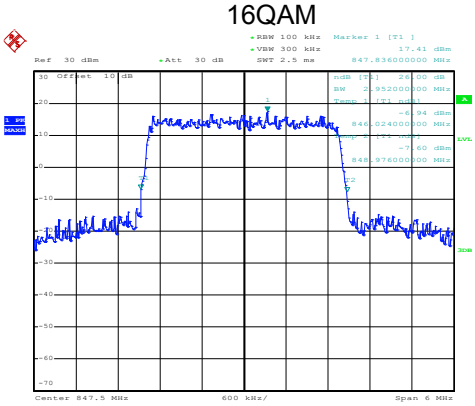
QPSK



Date: 21.AUG.2019 16:09:39

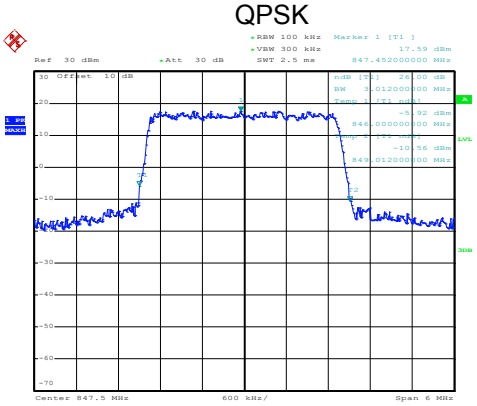
Middle channel

16QAM



Date: 21.AUG.2019 16:10:46

QPSK

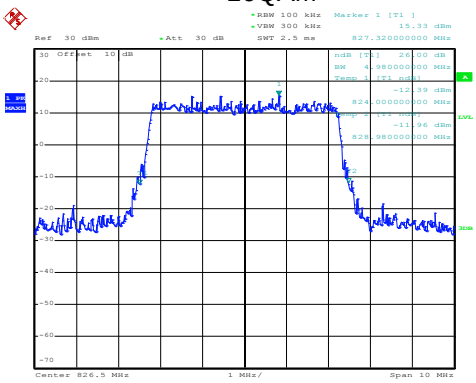


Date: 21.AUG.2019 16:10:42

Highest channel

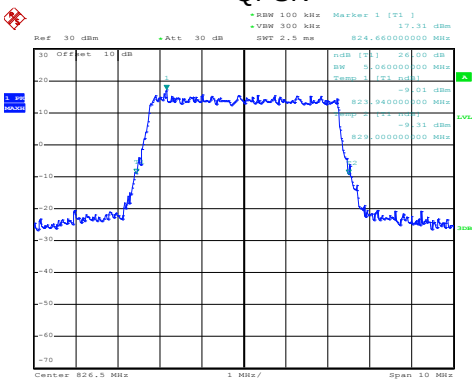
LTE Band 5&26(part 22H): -26dBc bandwidth
BW: 5MHz

16QAM



Date: 21.AUG.2019 16:12:13

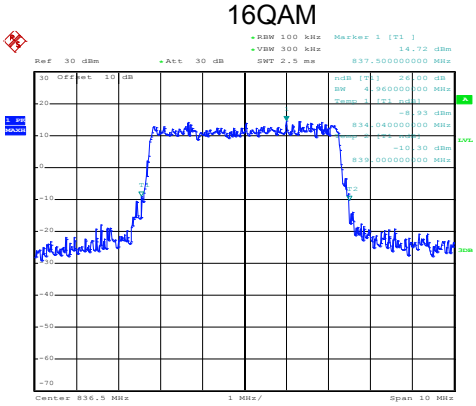
QPSK



Date: 21.AUG.2019 16:12:08

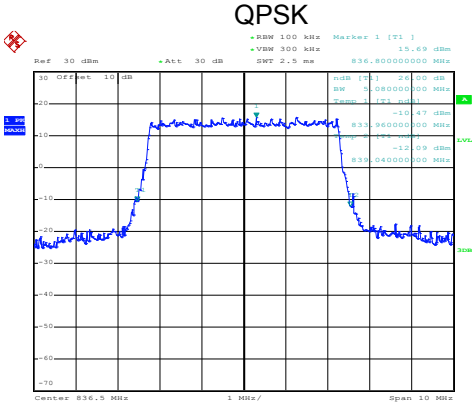
Lowest channel

16QAM



Date: 21.AUG.2019 16:13:09

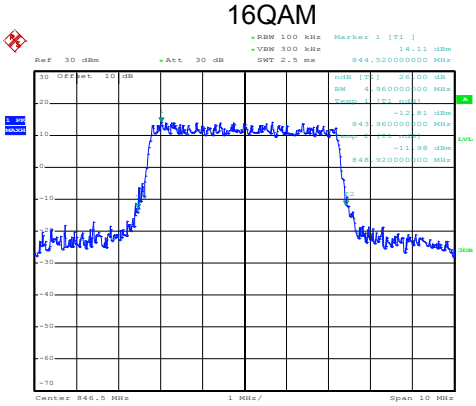
QPSK



Date: 21.AUG.2019 16:13:05

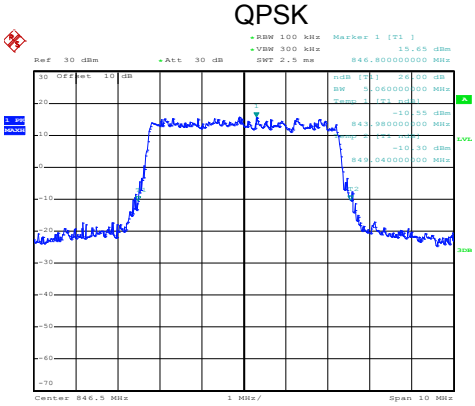
Middle channel

16QAM



Date: 21.AUG.2019 16:13:39

QPSK

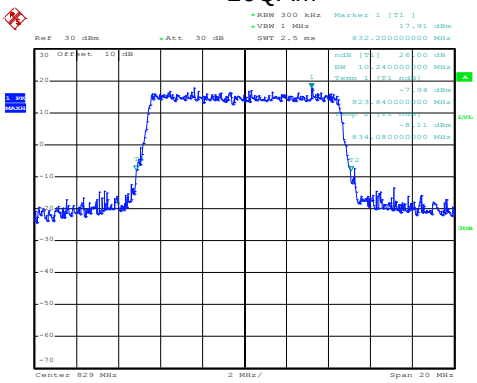


Date: 21.AUG.2019 16:13:35

Highest channel

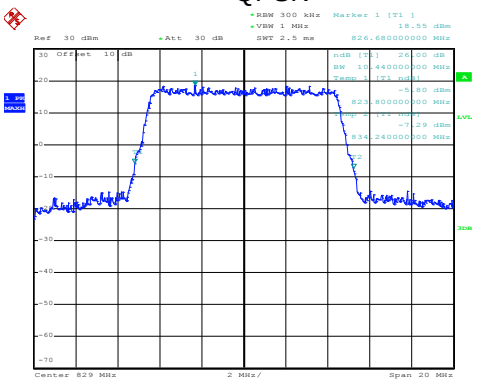
LTE Band 5&26(part 22H): -26dBc bandwidth
BW: 10MHz

16QAM



Date: 21.AUG.2019 16:15:32

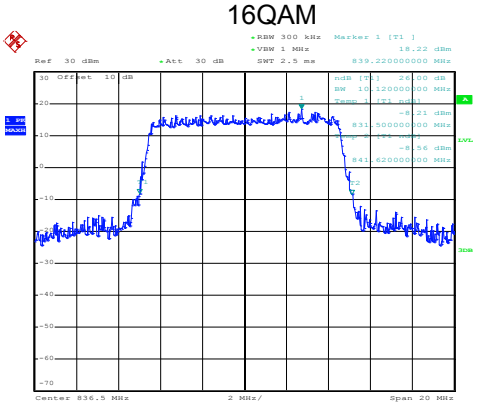
QPSK



Date: 21.AUG.2019 16:15:28

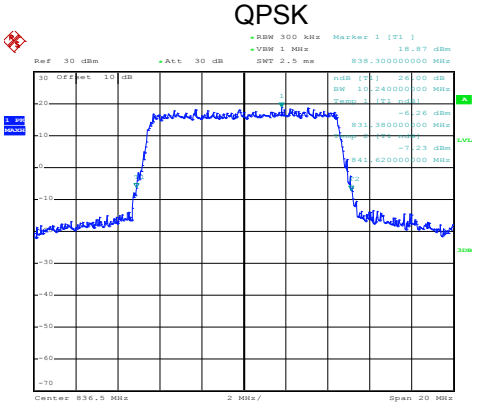
Lowest channel

16QAM



Date: 21.AUG.2019 16:15:54

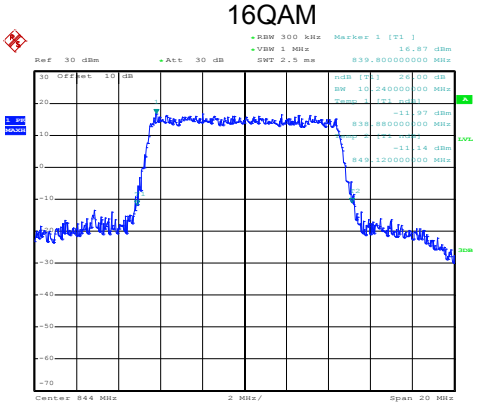
QPSK



Date: 21.AUG.2019 16:15:49

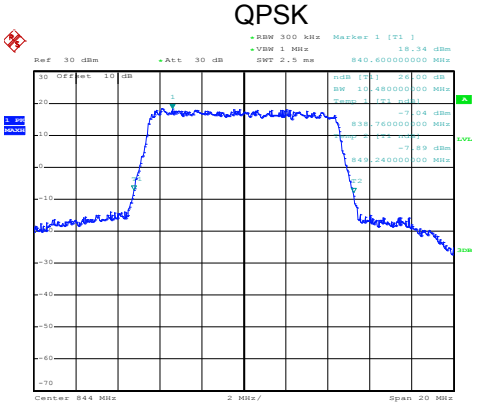
Middle channel

16QAM



Date: 21.AUG.2019 16:16:45

QPSK

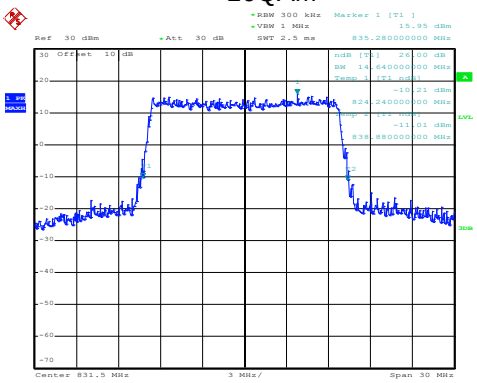


Date: 21.AUG.2019 16:16:41

Highest channel

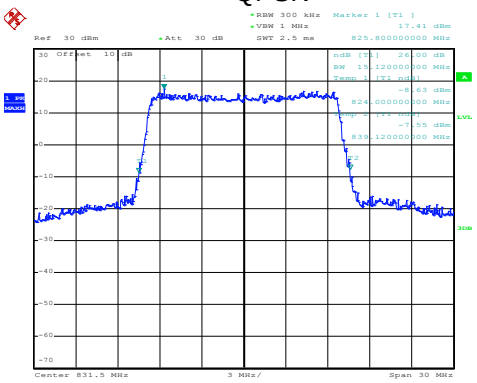
LTE Band 5&26(part 22H): -26dBc bandwidth
BW: 15MHz

16QAM



Date: 21.AUG.2019 16:17:28

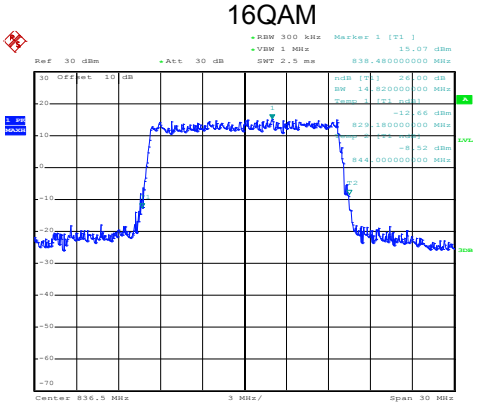
QPSK



Date: 21.AUG.2019 16:17:24

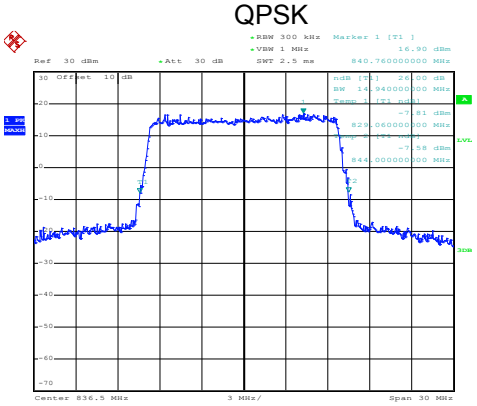
Lowest channel

16QAM



Date: 21.AUG.2019 16:18:12

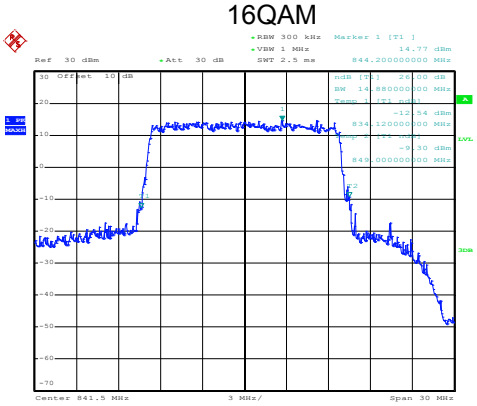
QPSK



Date: 21.AUG.2019 16:18:08

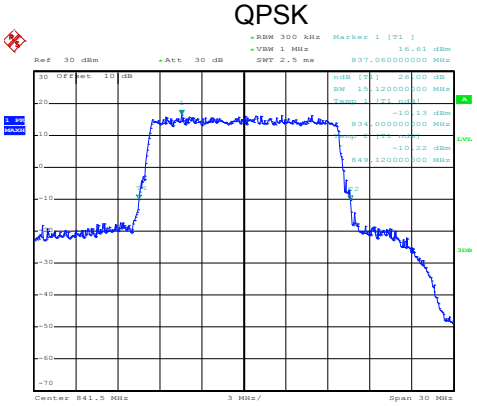
Middle channel

16QAM



Date: 21.AUG.2019 16:18:34

QPSK



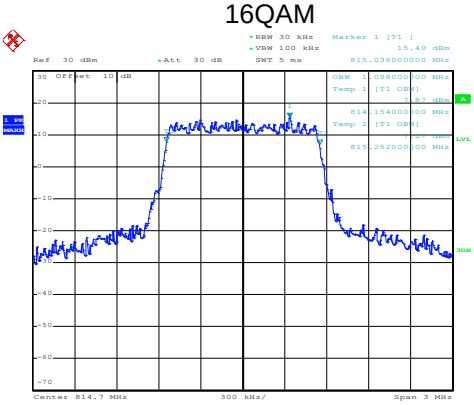
Date: 21.AUG.2019 16:18:30

Highest channel

LTE Band 26(part 90S):

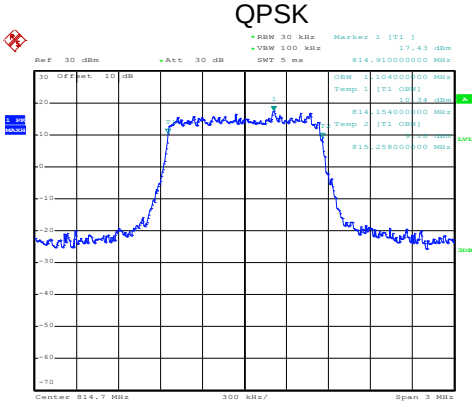
LTE Band 26(part 90S): 99% Occupy bandwidth
BW: 1.4MHz

16QAM



Date: 21.AUG.2019 16:26:59

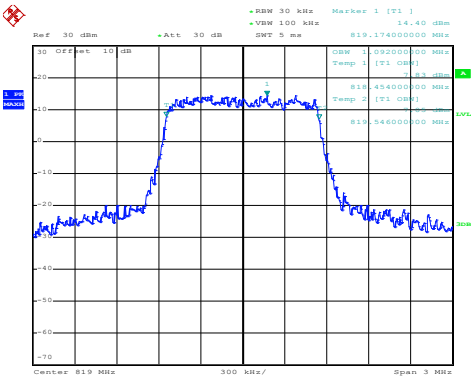
QPSK



Date: 21.AUG.2019 16:26:55

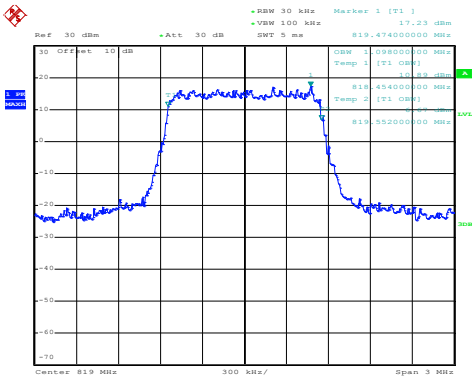
Lowest channel

16QAM



Date: 21.AUG.2019 16:26:34

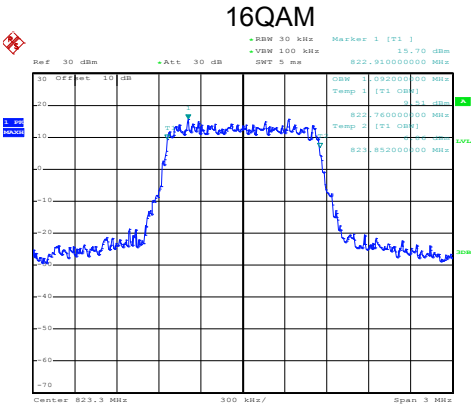
QPSK



Date: 21.AUG.2019 16:26:30

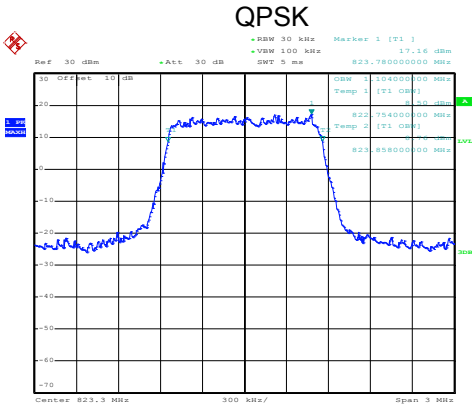
Middle channel

16QAM



Date: 21.AUG.2019 16:27:53

QPSK

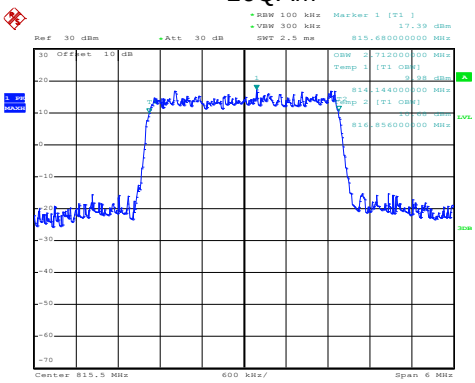


Date: 21.AUG.2019 16:27:49

Highest channel

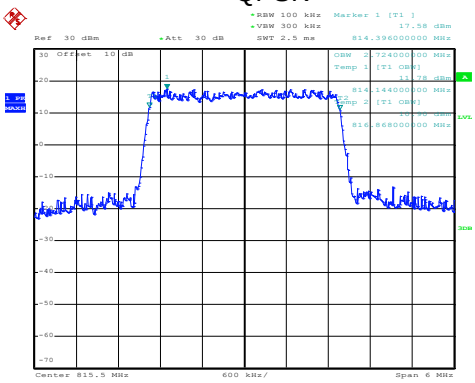
LTE Band 26(part 90S): 99% Occupy bandwidth
BW: 3MHz

16QAM



Date: 21.AUG.2019 16:24:24

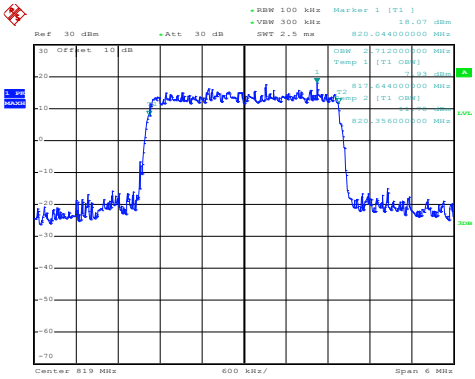
QPSK



Date: 21.AUG.2019 16:24:20

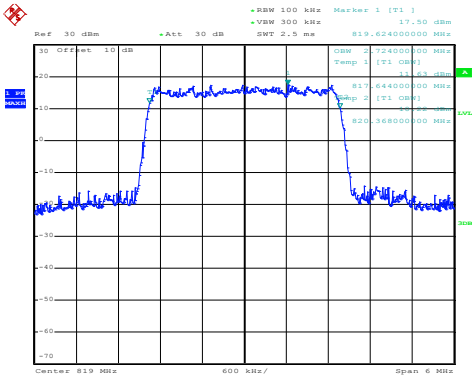
Lowest channel

16QAM



Date: 21.AUG.2019 16:25:36

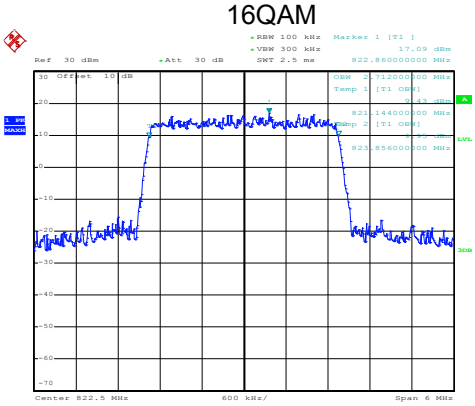
QPSK



Date: 21.AUG.2019 16:25:32

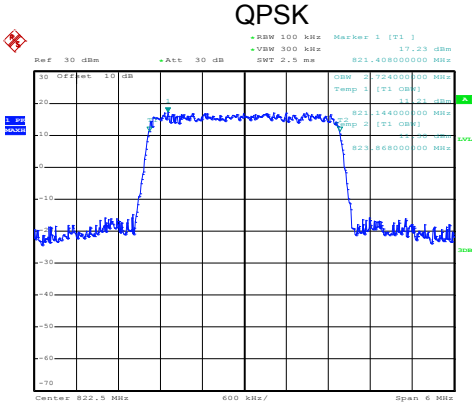
Middle channel

16QAM



Date: 21.AUG.2019 16:24:56

QPSK

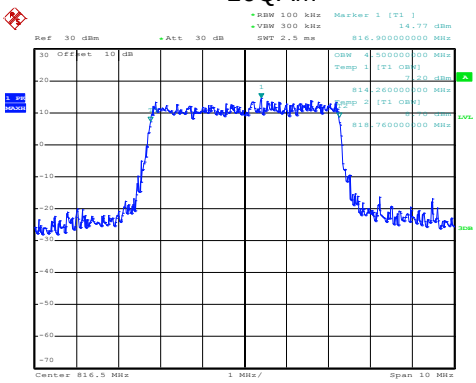


Date: 21.AUG.2019 16:25:19

Highest channel

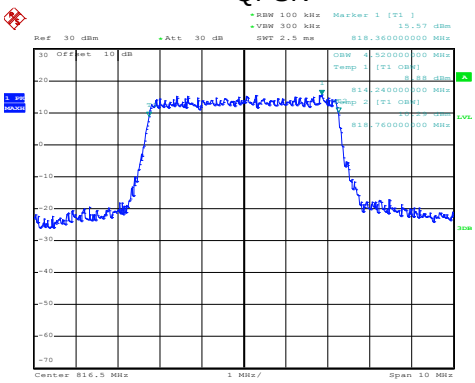
LTE Band 26(part 90S): 99% Occupy bandwidth
BW: 5MHz

16QAM



Date: 21.AUG.2019 16:22:49

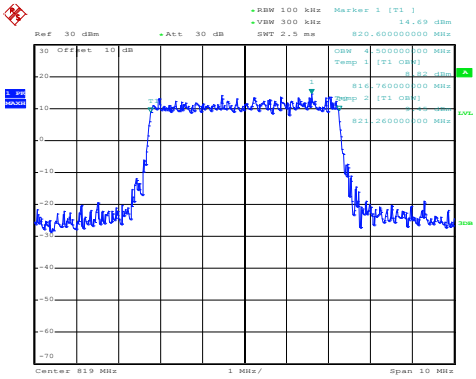
QPSK



Date: 21.AUG.2019 16:22:45

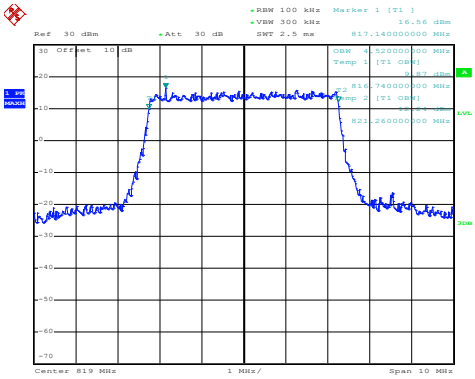
Lowest channel

16QAM



Date: 21.AUG.2019 16:21:52

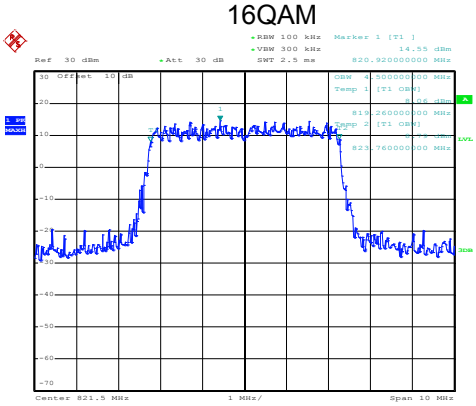
QPSK



Date: 21.AUG.2019 16:21:48

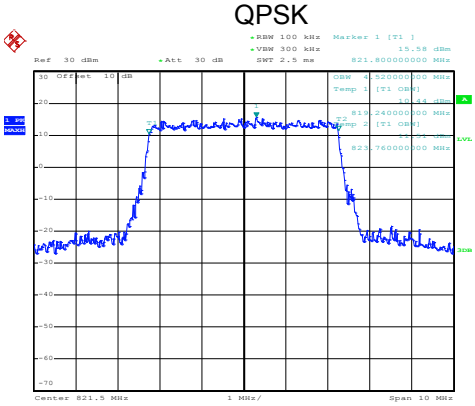
Middle channel

16QAM



Date: 21.AUG.2019 16:23:20

QPSK



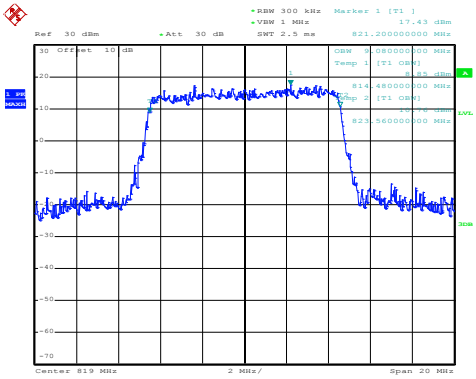
Date: 21.AUG.2019 16:23:16

Highest channel

LTE Band 26(part 90S): 99% Occupy bandwidth

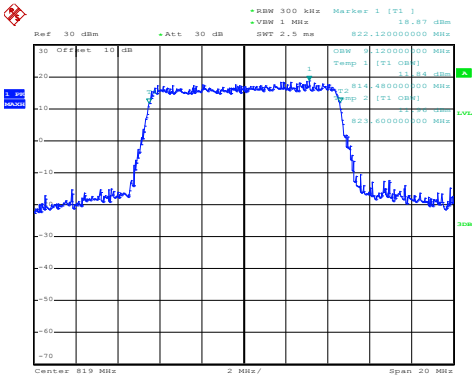
BW: 10MHz

16QAM



Date: 21.AUG.2019 16:21:17

QPSK

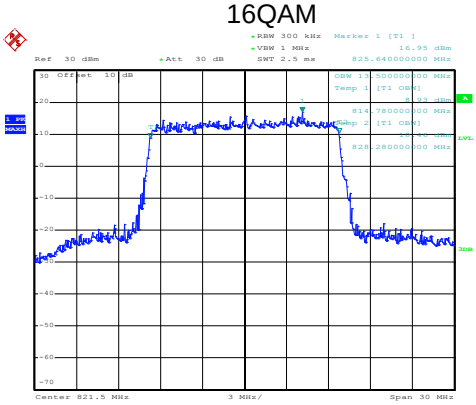


Date: 21.AUG.2019 16:21:11

Middle channel

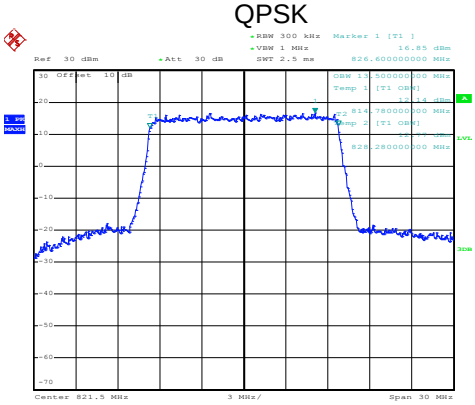
BW: 15MHz

16QAM



Date: 21.AUG.2019 16:20:03

QPSK

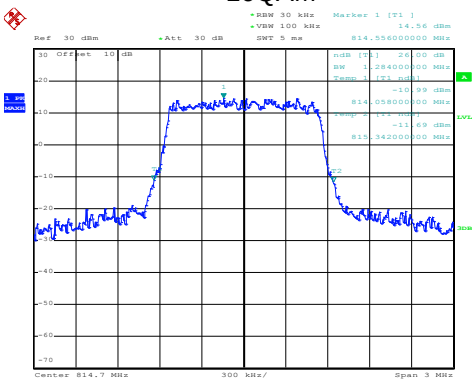


Date: 21.AUG.2019 16:19:58

Lowest channel

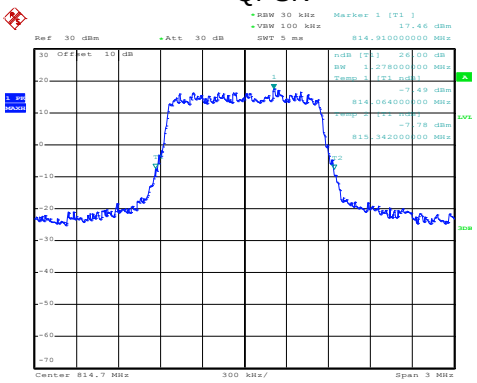
LTE Band 26(part 90S): -26dBc bandwidth
BW: 1.4MHz

16QAM



Date: 21.AUG.2019 16:27:12

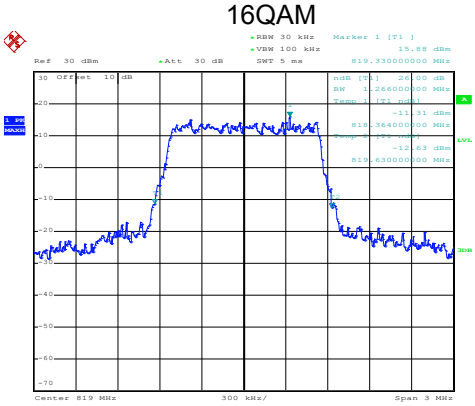
QPSK



Date: 21.AUG.2019 16:27:07

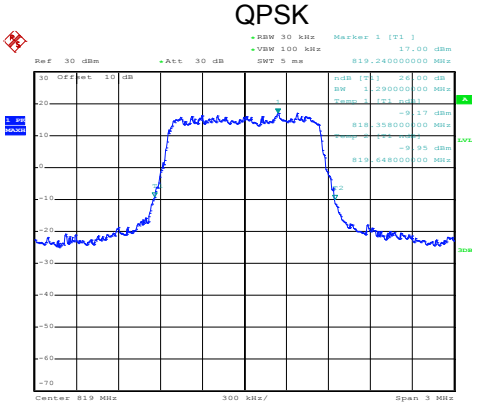
Lowest channel

16QAM



Date: 21.AUG.2019 16:26:18

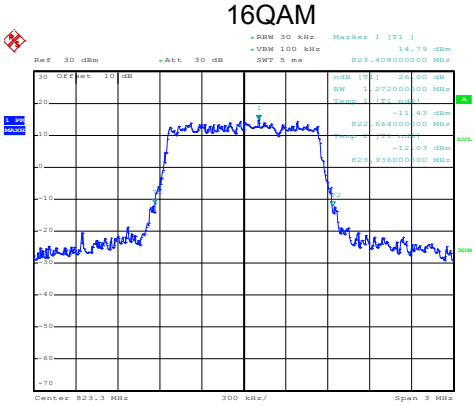
QPSK



Date: 21.AUG.2019 16:26:13

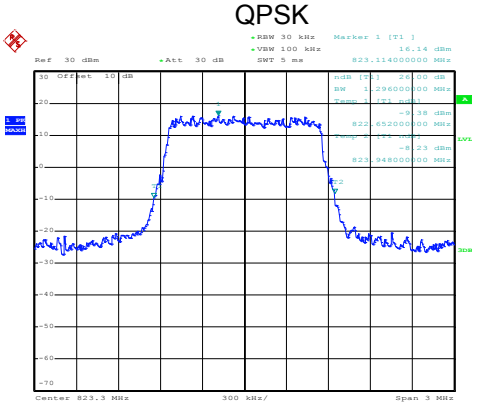
Middle channel

16QAM



Date: 21.AUG.2019 16:27:35

QPSK

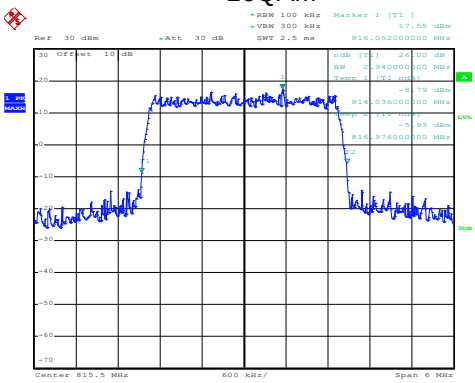


Date: 21.AUG.2019 16:27:31

Highest channel

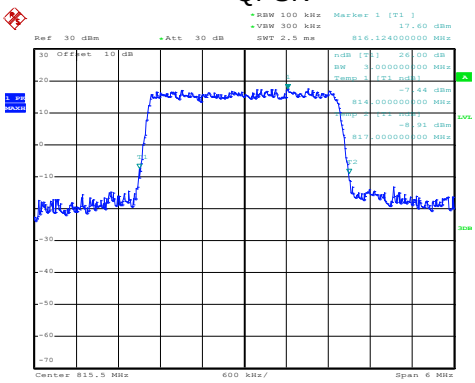
LTE Band 26(part 90S): -26dBc bandwidth
BW: 3MHz

16QAM



Date: 21.AUG.2019 16:24:12

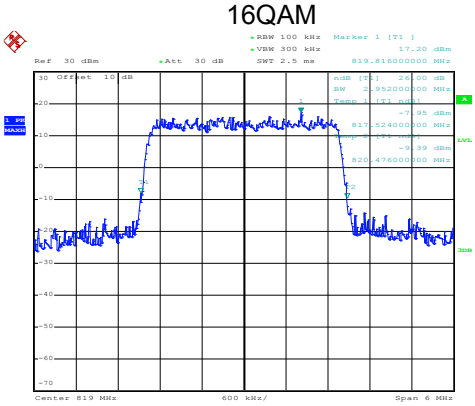
QPSK



Date: 21.AUG.2019 16:24:08

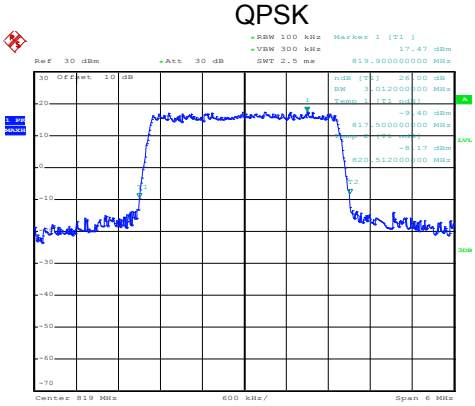
Lowest channel

16QAM



Date: 21.AUG.2019 16:25:52

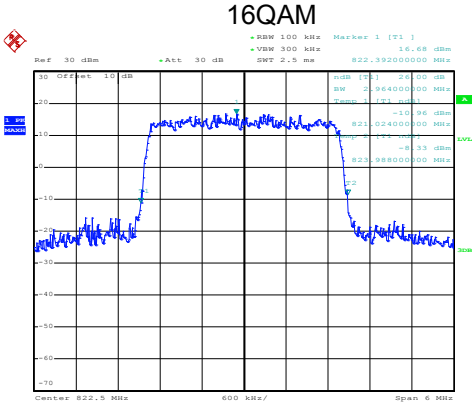
QPSK



Date: 21.AUG.2019 16:25:47

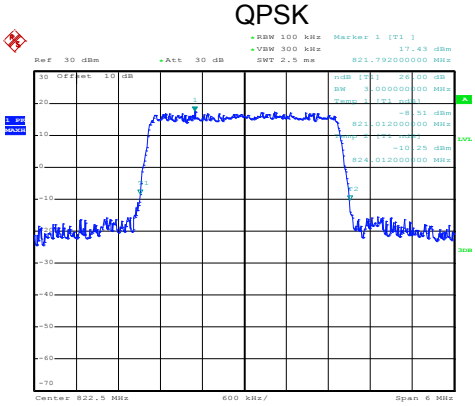
Middle channel

16QAM



Date: 21.AUG.2019 16:25:09

QPSK

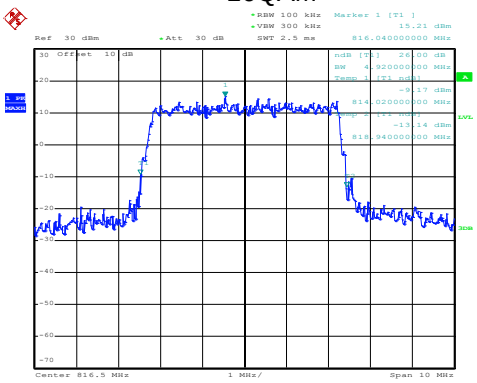


Date: 21.AUG.2019 16:25:04

Highest channel

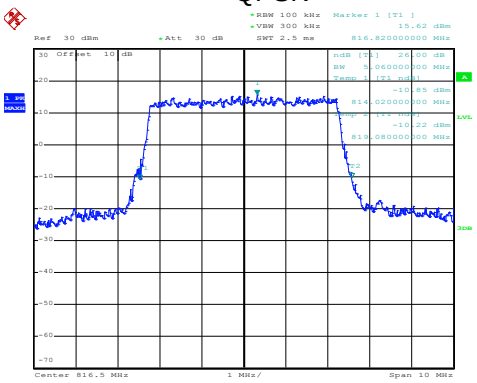
LTE Band 26(part 90S): -26dBc bandwidth
BW: 5MHz

16QAM



Date: 21.AUG.2019 16:22:36

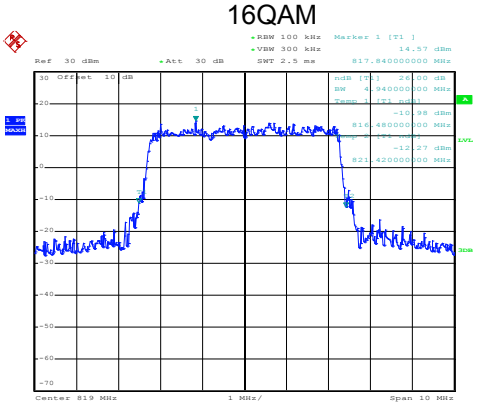
QPSK



Date: 21.AUG.2019 16:22:32

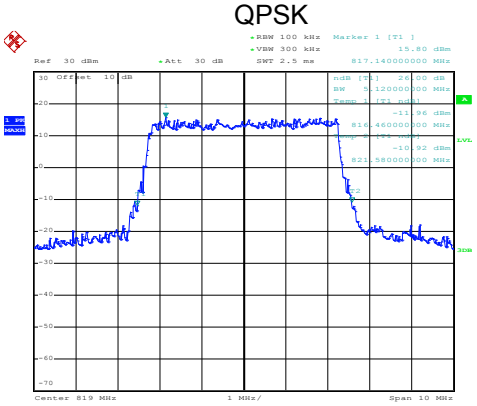
Lowest channel

16QAM



Date: 21.AUG.2019 16:22:06

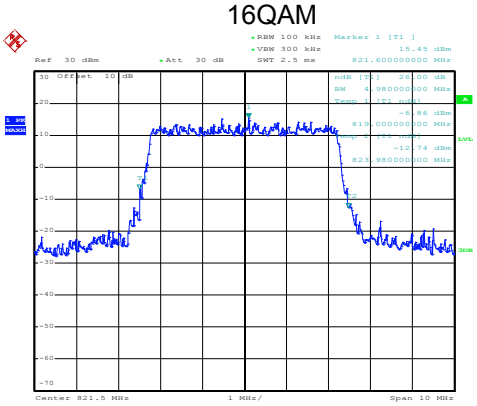
QPSK



Date: 21.AUG.2019 16:22:02

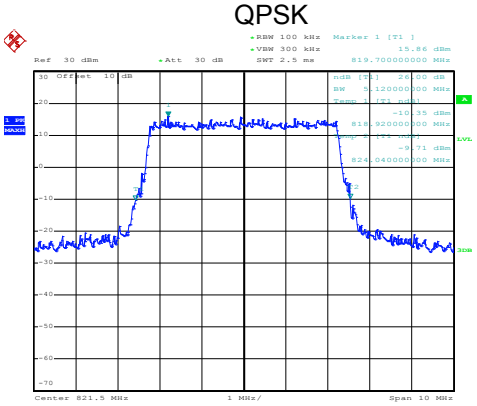
Middle channel

16QAM



Date: 21.AUG.2019 16:23:34

QPSK

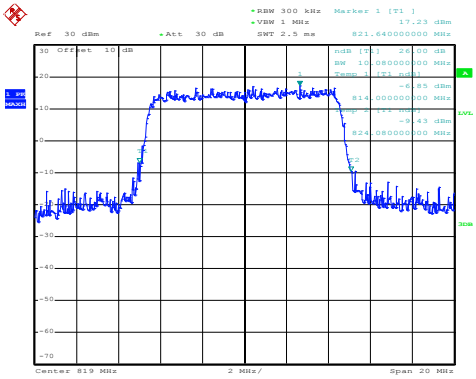


Date: 21.AUG.2019 16:23:29

Highest channel

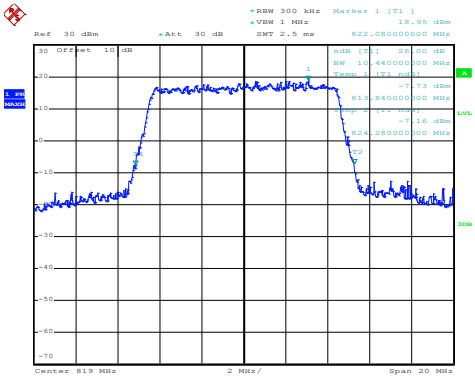
LTE Band 26(part 90S): -26dBc bandwidth
BW: 10MHz

16QAM



Date: 21.AUG.2019 16:21:01

QPSK

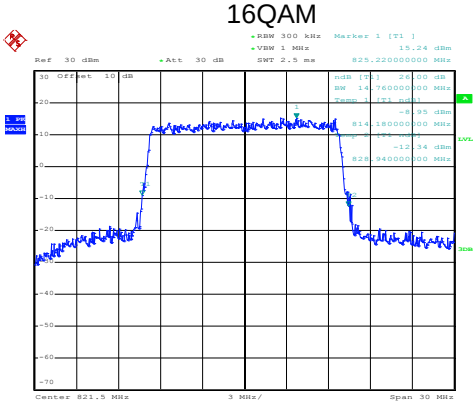


Date: 21.AUG.2019 16:20:57

Middle channel

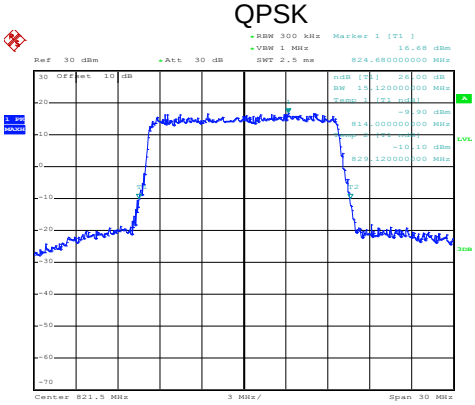
LTE Band 26(part 90S): -26dBc bandwidth
BW: 15MHz

16QAM



Date: 21.AUG.2019 16:20:18

QPSK



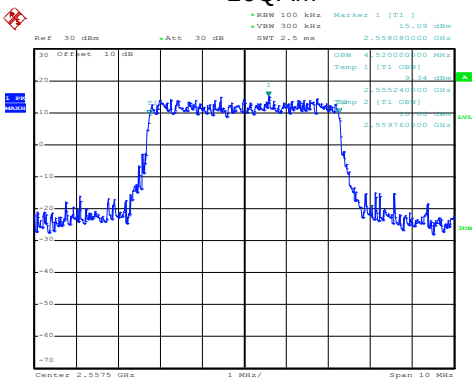
Date: 21.AUG.2019 16:20:14

Lowest channel

LTE-Band 41 part:

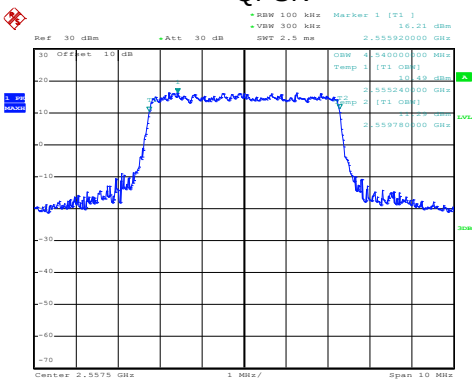
LTE Band 41: 99% Occupy bandwidth
BW: 5MHz

16QAM



Date: 22.AUG.2019 17:38:05

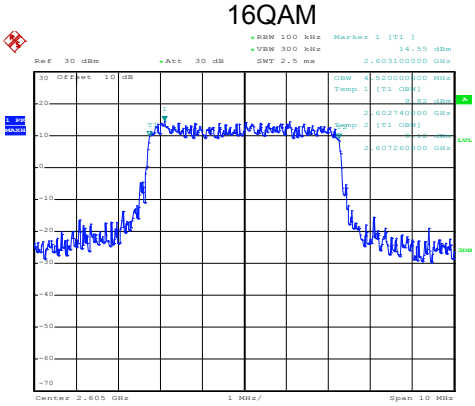
QPSK



Date: 22.AUG.2019 17:37:56

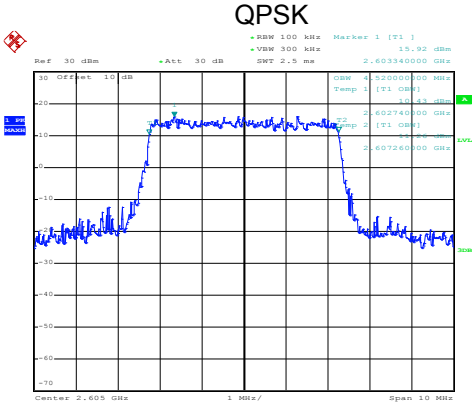
Lowest channel

16QAM



Date: 22.AUG.2019 17:39:55

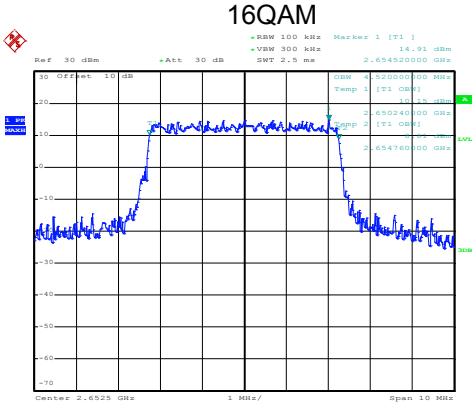
QPSK



Date: 22.AUG.2019 17:39:48

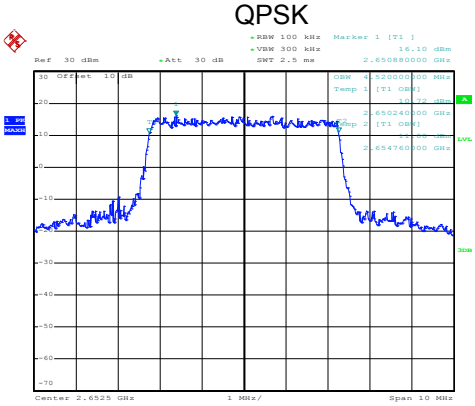
Middle channel

16QAM



Date: 22.AUG.2019 17:40:43

QPSK

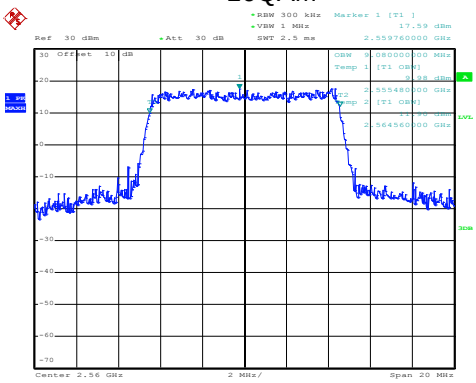


Date: 22.AUG.2019 17:40:32

Highest channel

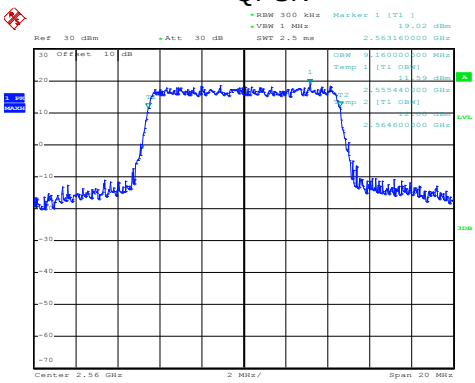
LTE Band 41: 99% Occupy bandwidth
BW: 10MHz

16QAM



Date: 22.AUG.2019 17:42:31

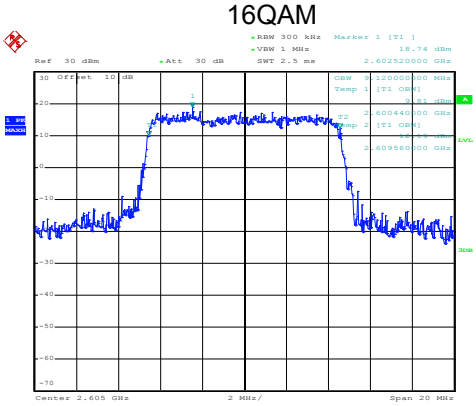
QPSK



Date: 22.AUG.2019 17:42:23

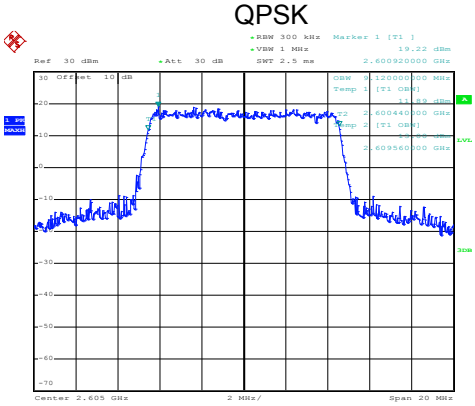
Lowest channel

16QAM



Date: 22.AUG.2019 17:42:57

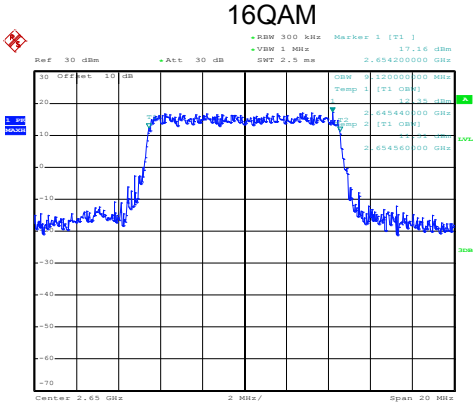
QPSK



Date: 22.AUG.2019 17:42:50

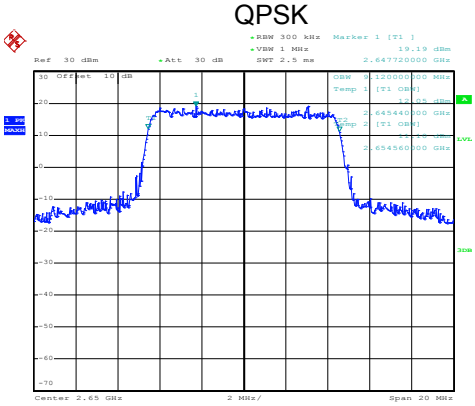
Middle channel

16QAM



Date: 22.AUG.2019 17:44:13

QPSK

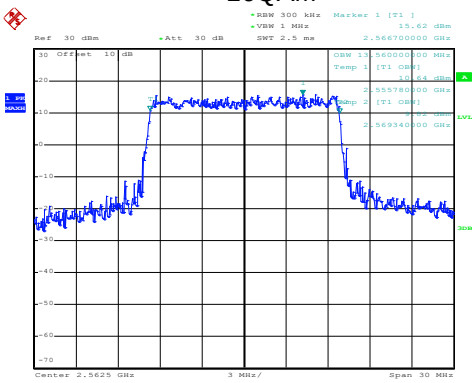


Date: 22.AUG.2019 17:44:05

Highest channel

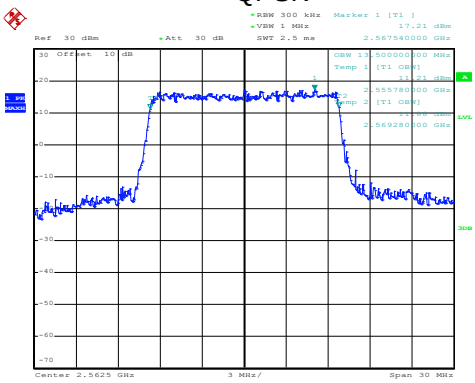
LTE Band 41: 99% Occupy bandwidth
BW: 15MHz

16QAM



Date: 22.AUG.2019 17:45:04

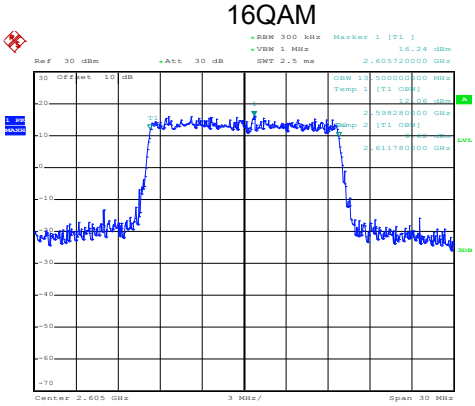
QPSK



Date: 22.AUG.2019 17:44:57

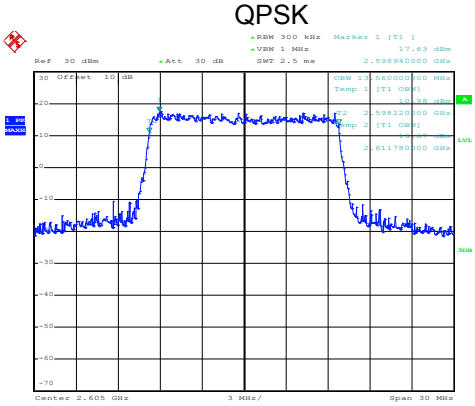
Lowest channel

16QAM



Date: 22.AUG.2019 17:46:07

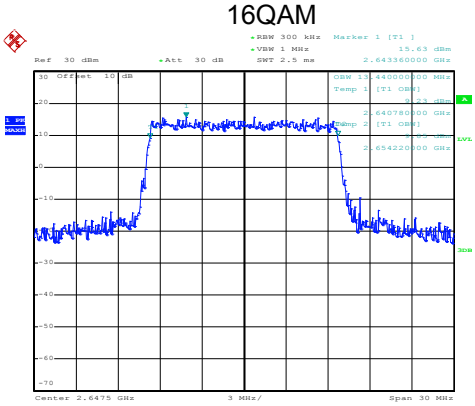
QPSK



Date: 22.AUG.2019 17:46:00

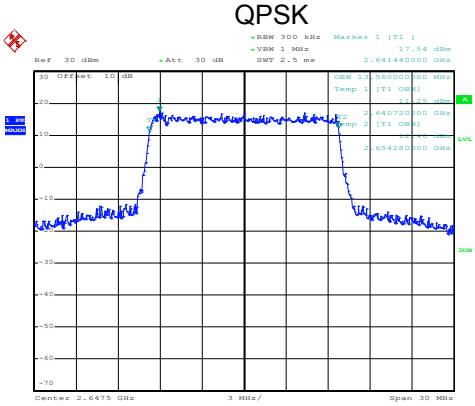
Middle channel

16QAM



Date: 22.AUG.2019 17:46:43

QPSK

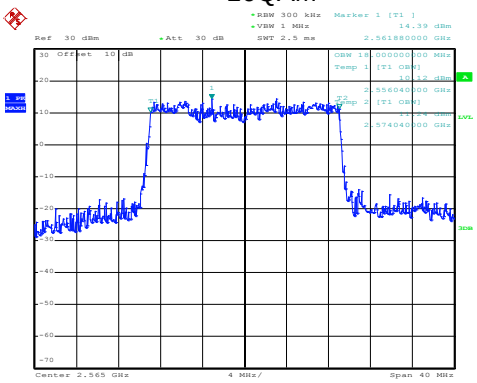


Date: 22.AUG.2019 17:46:37

Highest channel

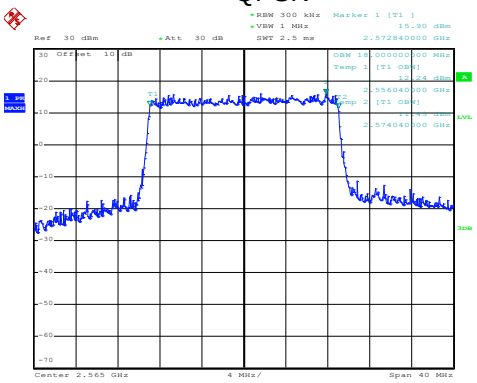
LTE Band 41: 99% Occupy bandwidth
BW: 20MHz

16QAM



Date: 22.AUG.2019 17:48:01

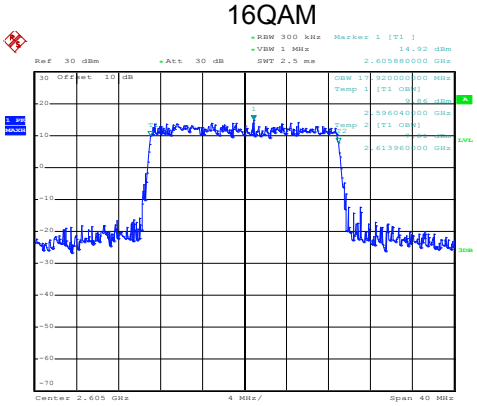
QPSK



Date: 22.AUG.2019 17:47:54

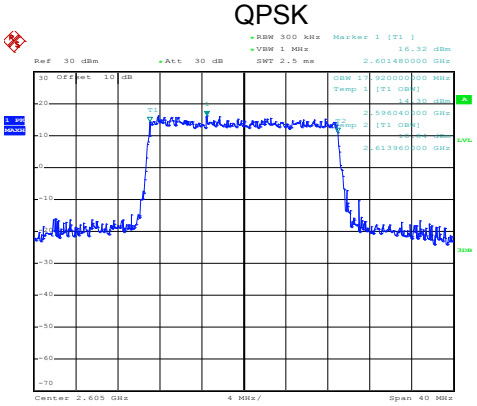
Lowest channel

16QAM



Date: 22.AUG.2019 17:48:26

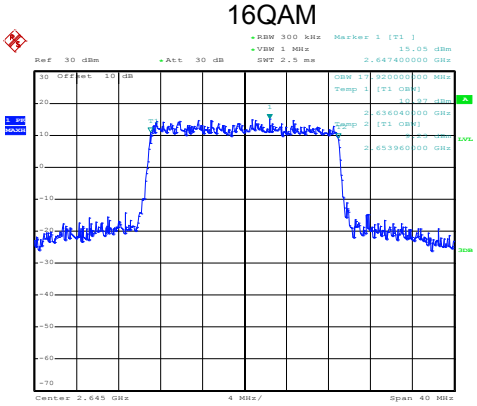
QPSK



Date: 22.AUG.2019 17:48:19

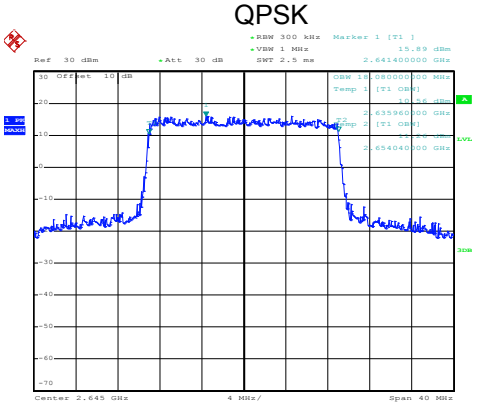
Middle channel

16QAM



Date: 22.AUG.2019 17:50:09

QPSK

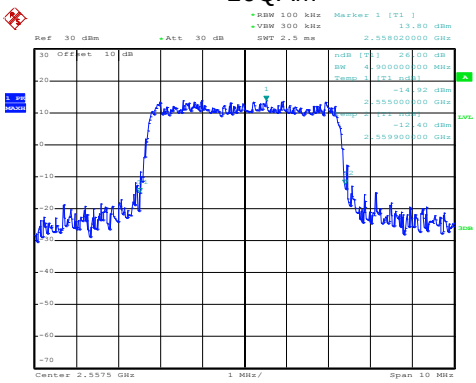


Date: 22.AUG.2019 17:50:01

Highest channel

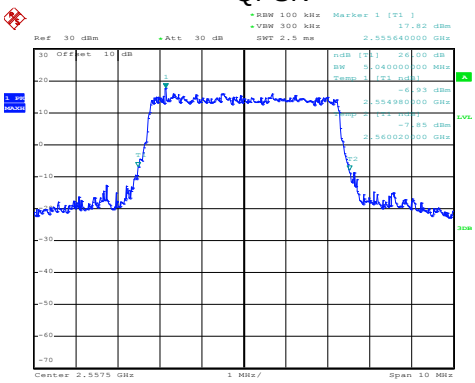
LTE Band 41: -26dBc bandwidth
BW: 5MHz

16QAM



Date: 22.AUG.2019 18:19:39

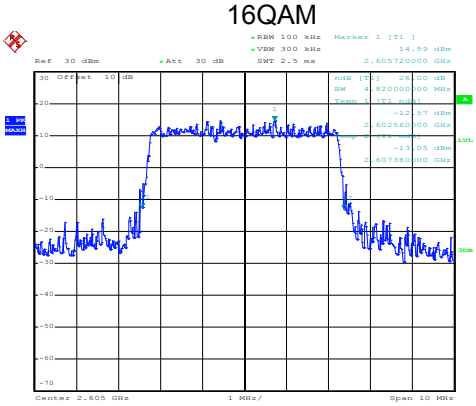
QPSK



Date: 22.AUG.2019 18:19:36

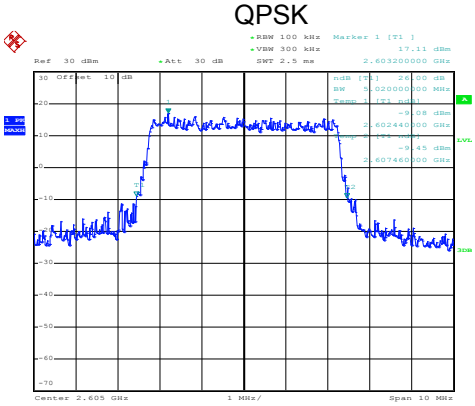
Lowest channel

16QAM



Date: 22.AUG.2019 18:19:54

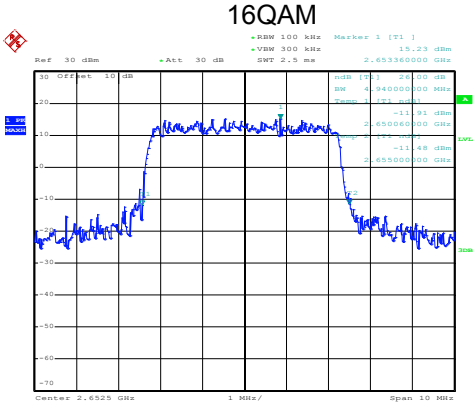
QPSK



Date: 22.AUG.2019 18:19:50

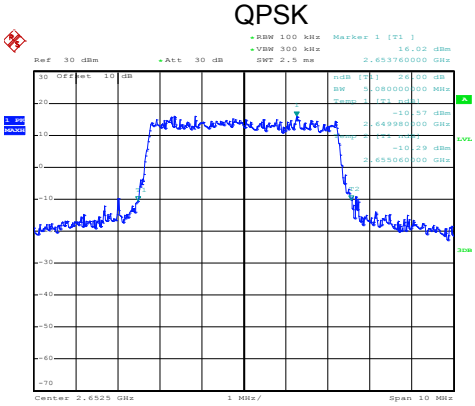
Middle channel

16QAM



Date: 22.AUG.2019 18:20:13

QPSK

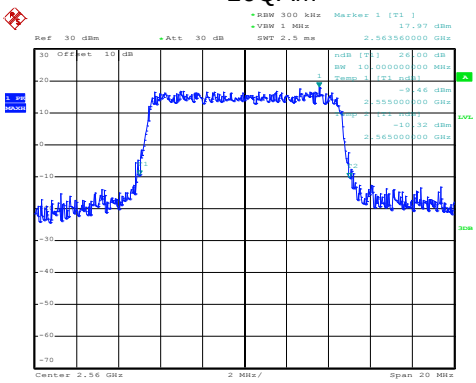


Date: 22.AUG.2019 18:20:08

Highest channel

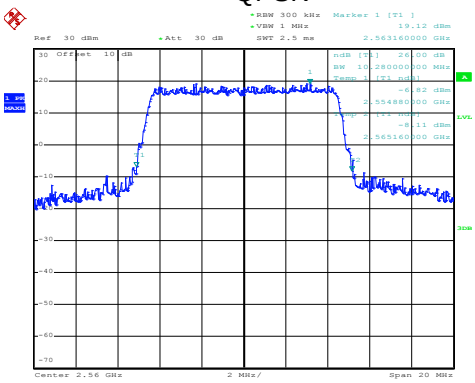
LTE Band 41: -26dBc bandwidth
BW: 10MHz

16QAM



Date: 22.AUG.2019 18:18:26

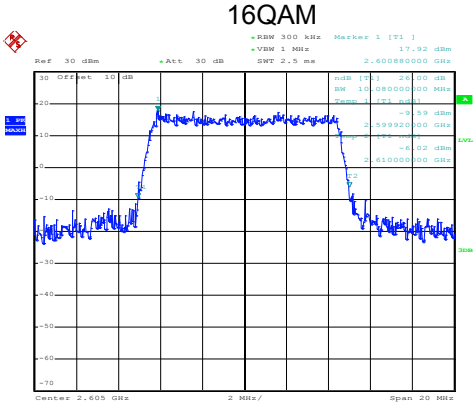
QPSK



Date: 22.AUG.2019 18:18:23

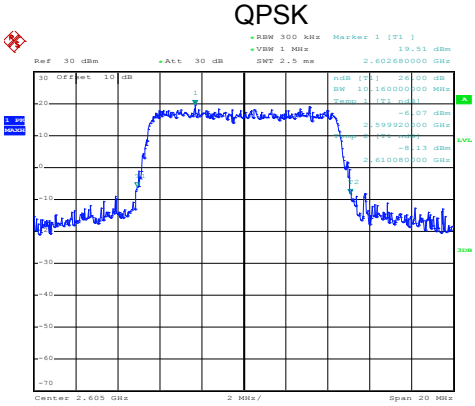
Lowest channel

16QAM



Date: 22.AUG.2019 18:18:40

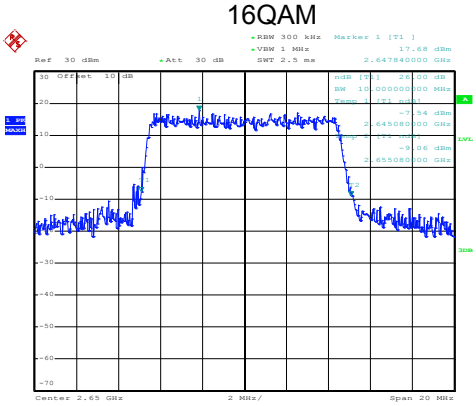
QPSK



Date: 22.AUG.2019 18:18:37

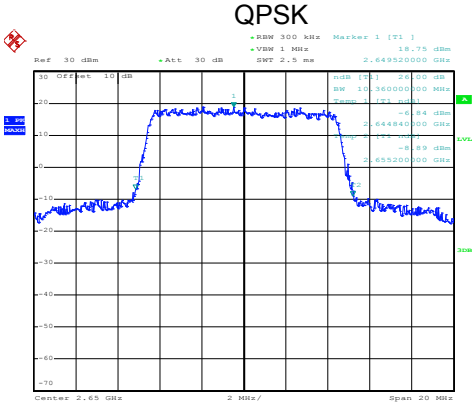
Middle channel

16QAM



Date: 22.AUG.2019 18:19:01

QPSK

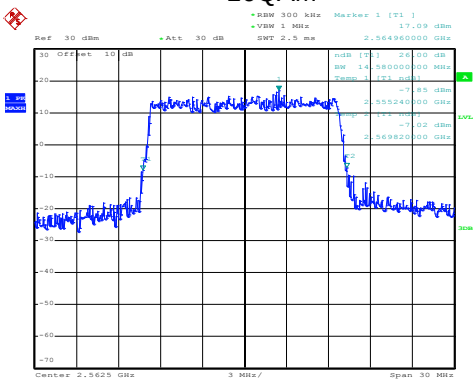


Date: 22.AUG.2019 18:18:57

Highest channel

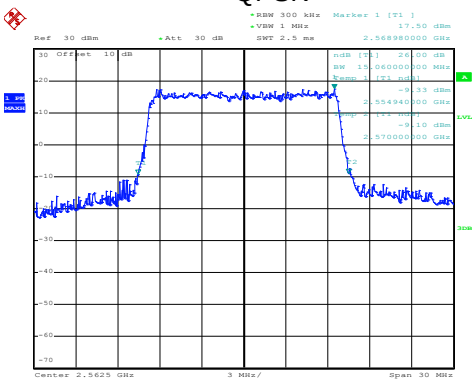
LTE Band 41: -26dBc bandwidth
BW: 15MHz

16QAM



Date: 22.AUG.2019 18:16:58

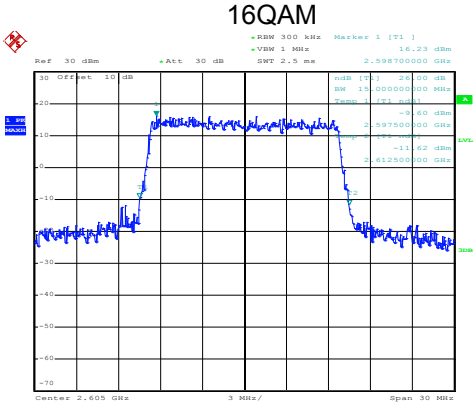
QPSK



Date: 22.AUG.2019 18:16:54

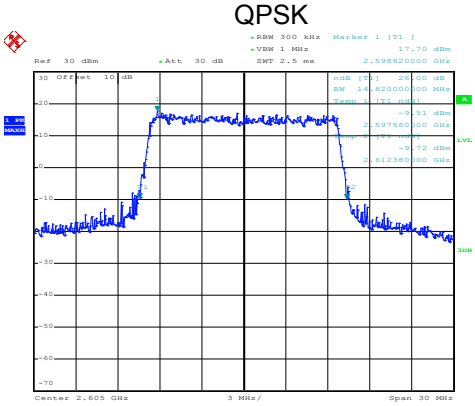
Lowest channel

16QAM



Date: 22.AUG.2019 18:17:16

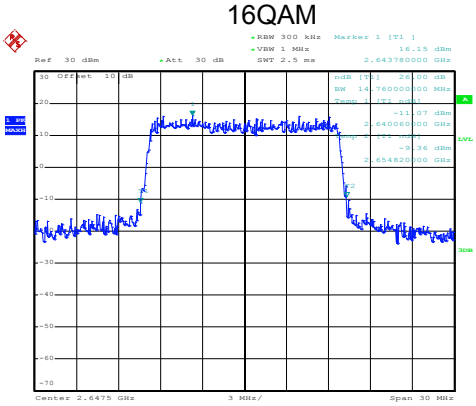
QPSK



Date: 22.AUG.2019 18:17:12

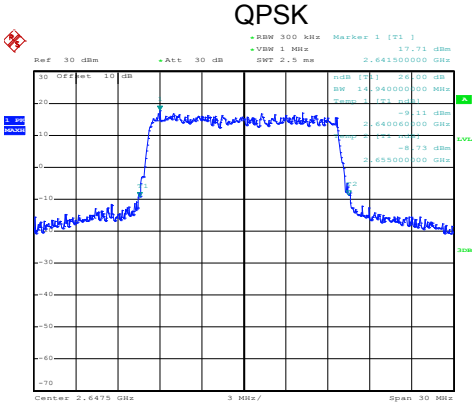
Middle channel

16QAM



Date: 22.AUG.2019 18:17:36

QPSK

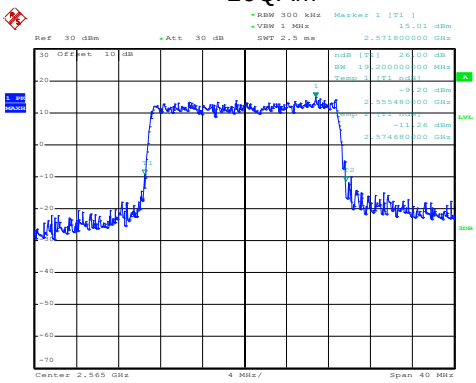


Date: 22.AUG.2019 18:17:32

Highest channel

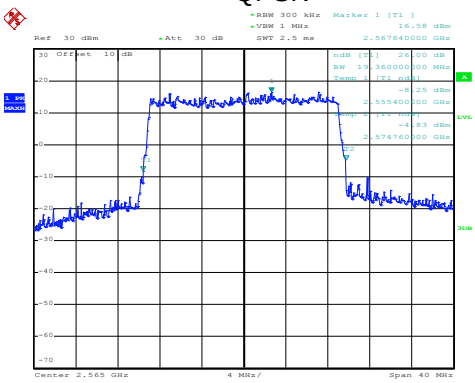
LTE Band 41: -26dBc bandwidth
BW: 20MHz

16QAM



Date: 22.AUG.2019 18:16:19

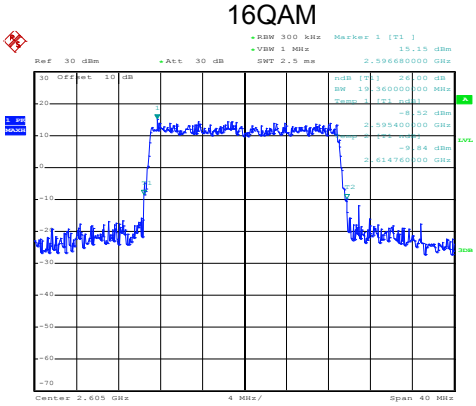
QPSK



Date: 22.AUG.2019 18:16:16

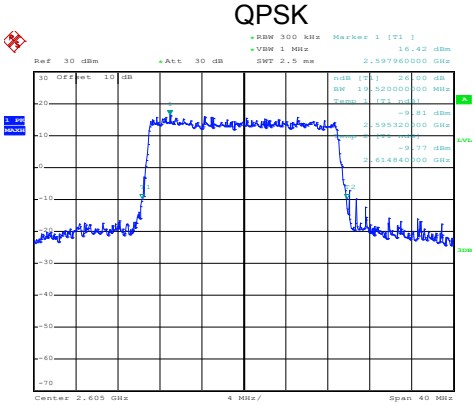
Lowest channel

16QAM



Date: 22.AUG.2019 18:16:00

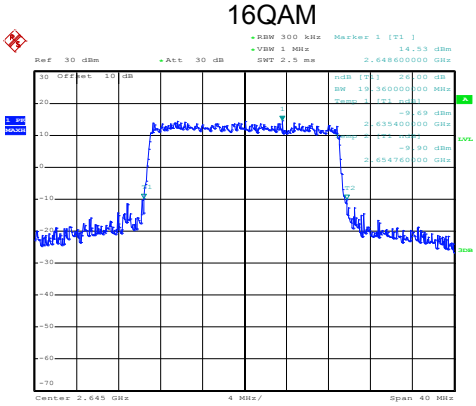
QPSK



Date: 22.AUG.2019 18:15:55

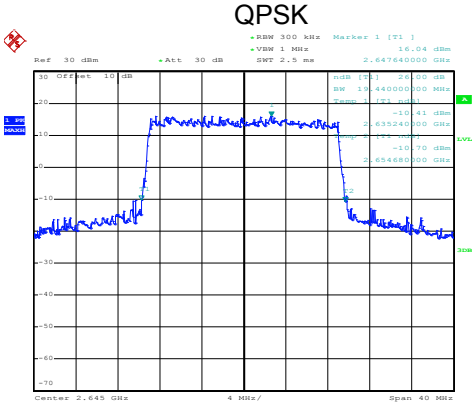
Middle channel

16QAM



Date: 22.AUG.2019 18:15:38

QPSK



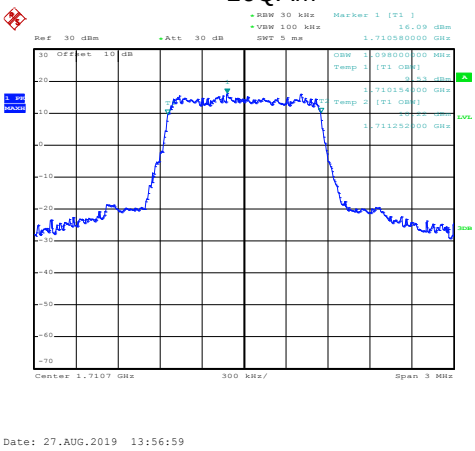
Date: 22.AUG.2019 18:15:33

Highest channel

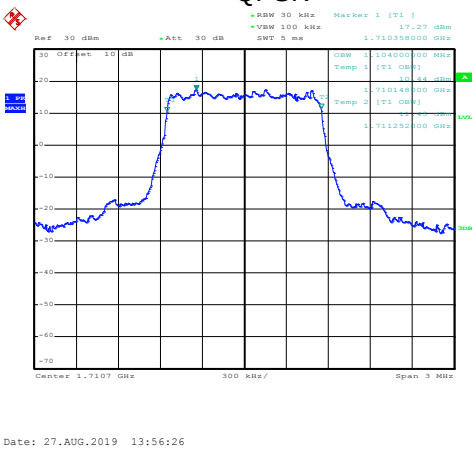
LTE Band 66 part:

LTE Band 66: 99% Occupy bandwidth
BW: 1.4MHz

16QAM

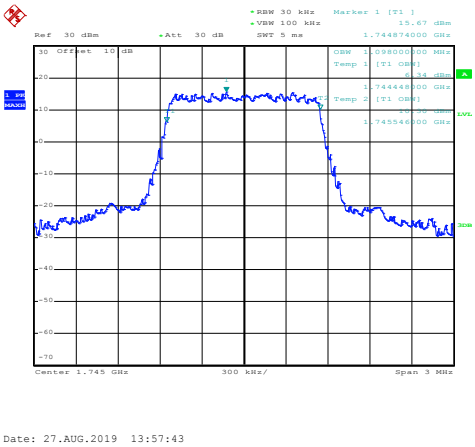


QPSK

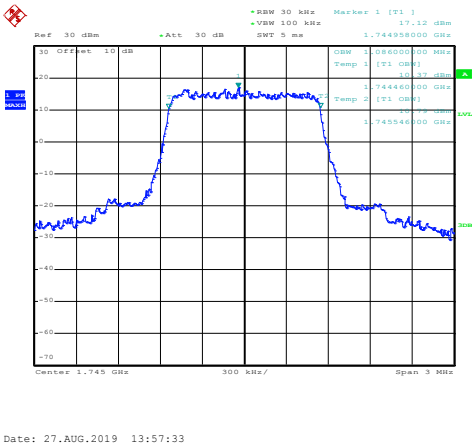


Lowest channel

16QAM

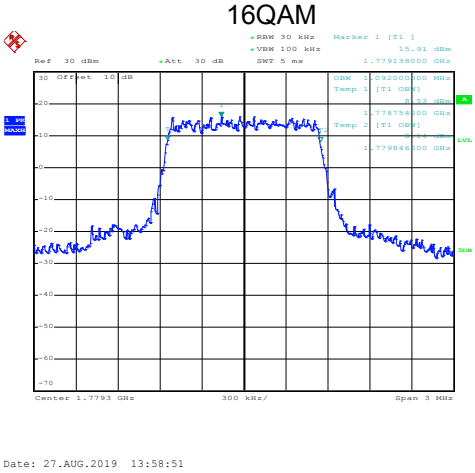


QPSK

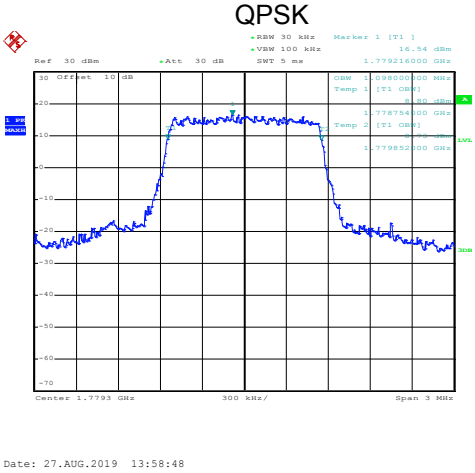


Middle channel

16QAM



QPSK



Highest channel