TESTING LABORATORY
CERTIFICATE #4820.01

FCC PART 22H, PART 24E,PART 27
MEASUREMENT AND TEST REPORT

For

MAXWEST COMMUNICATION LIMITED

ROOM 1802B FORTRESS TOWER, 250 KING'S ROAD, NORTH POINT, HONG KONG

FCC ID: 2ASP8MXHUB

Report Type:	**Product Type:**
Original Report	MIFI

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

EUT Name:	MIFI
EUT Model:	MX-HUB
Operation modes:	WCDMA(R99 (Data), HSDPA/HSUPA/HSPA+) FDD-LTE
Operation Frequency:	WCDMA Band 2: 1850-1910 MHz(TX); 1930-1990 MHz(RX) WCDMA Band 4: 1710-1755 MHz(TX);2110-2155 MHz(RX) WCDMA Band 5: 824-849 MHz(TX); 869-894 MHz(RX) LTE Band 2:1850-1910 MHz(TX), 1930-1990 MHz(RX) LTE Band 4: 1710-1755 MHz(TX);2110-2155 MHz(RX) LTE Band 5:824-849 MHz(TX), 869-894 MHz(RX) LTE Band 12:699-716 MHz(TX), 729-746 MHz(RX) LTE Band 17:704-716 MHz(TX), *734*-746 MHz(RX) LTE Band 66: 1710-1780 MHz(TX);2110-2180 MHz(RX)
Modulation Type:	BPSK, QPSK, 16QAM
Rated Input Voltage:	DC 3.8 V from battery or DC 5V from USB port
Serial Number:	RDG200916001-RF-S1
EUT Received Date:	2020.09.17
EUT Status:	Good

Objective

This report is prepared on behalf of ***MAXWEST COMMUNICATION LIMITED*** in accordance with: Part 2-Subpart J, Part 22-Subpart H, Part 24-Subpart E, Part 27 of the Federal Communications Commission's rules.

The objective is to determine compliance with FCC Rules for output power, modulation characteristic, occupied bandwidth, spurious emissions at antenna terminal, spurious radiated emission, frequency stability and band edge.

Related Submittal(s)/Grant(s)

FCC Part 15C DTS submissions with FCC ID: 2ASP8MXHUB

Test Methodology

All tests and measurements indicated in this document were performed in accordance with:

the Code of federal Regulations Title 47, Part 2, Part 22H, Part 24E, Part 27

ANSI C63.26-2015, American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Dongguan). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement Uncertainty

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±0.61dB
Unwanted Emissions, radiated	30MHz ~ 1GHz:5.85 dB 1G~26.5GHz: 5.23 dB
Unwanted Emissions, conducted	±1.5 dB
Temperature	±1℃
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%

Note: Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.69 Pulongcun, Puxinhu Industry Area, Tangxia, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 897218, the FCC Designation No. : CN1220.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0022.

Declarations

BACL is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol “△”. Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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SYSTEM TEST CONFIGURATION

Justification

The EUT was configured for testing according to ANSI C63.26-2015.

The test items were performed with the EUT operating at testing mode. The device operates on WCDMA Band 2/4/5, and LTE band 2/4/5/12/17/66, test was performed with channels as below table:

Frequency Bands	Bandwidth (MHz)	Test Frequency(MHz)		
		Low	Middle	High
WCDMA Band 2	4.2	1852.4	1880	1907.6
WCDMA Band 4	4.2	1712.4	1732.6	1752.6
WCDMA Band 5	4.2	826.4	836.6	846.6
LTE Band 2	1.4	1850.7	1880	1909.3
	3	1851.5	1880	1908.5
	5	1852.5	1880	1907.5
	10	1855	1880	1905
	15	1857.5	1880	1902.5
	20	1860	1880	1900
LTE Band 4	1.4	1710.7	1732.5	1754.3
	3	1711.5	1732.5	1753.5
	5	1712.5	1732.5	1752.5
	10	1715	1732.5	1750
	15	1717.5	1732.5	1747.5
	20	1720	1732.5	1745
LTE Band 5	1.4	824.7	836.5	848.3
	3	825.5	836.5	847.5
	5	826.5	836.5	846.5
	10	829	836.5	844
LTE Band 12	1.4	699.7	707.5	715.3
	3	700.5	707.5	714.5
	5	701.5	707.5	713.5
	10	704	707.5	711
LTE Band 17	5	706.5	710	713.5
	10	709	710	711
LTE Band 66	1.4	1710.7	1745	1779.3
	3	1711.5	1745	1778.5
	5	1712.5	1745	1777.5
	10	1715	1745	1775
	15	1717.5	1745	1772.5
	20	1720	1745	1770

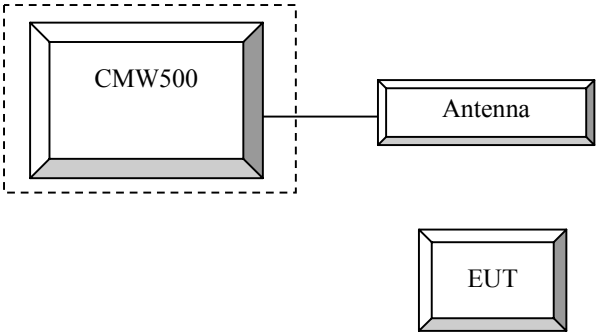
Equipment Modifications

No modification was made to the EUT.

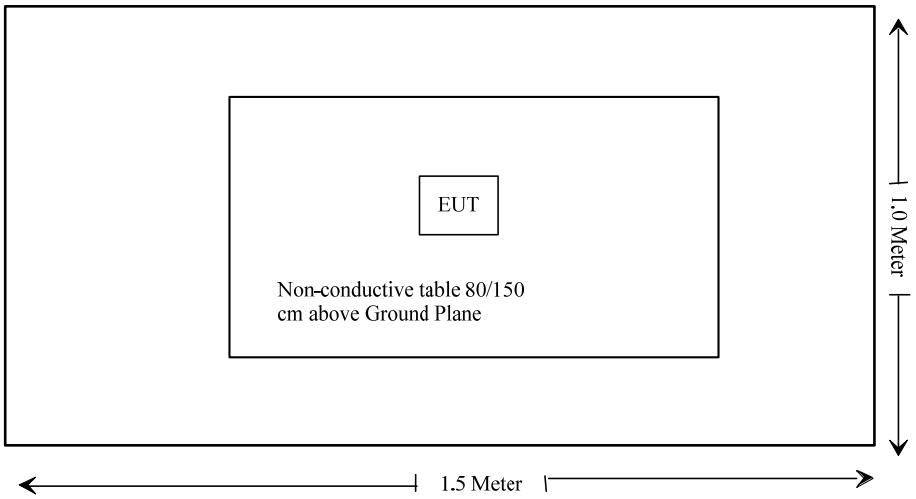
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
R&S	Wideband Radio Communication Tester	CMW500	147473
Unknown	ANTENNA	Unknown	/

Configuration of Test Setup



Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

Rules	Description of Test	Result
FCC§1.1310, §2.1093	RF Exposure	Compliance
FCC§2.1046;§ 22.913 (a); § 24.232 (c);§27.50	RF Output Power	Compliance
FCC§ 2.1047	Modulation Characteristics	Not Applicable
FCC§ 2.1049; § 22.905; § 22.917; § 24.238; §27.53	Occupied Bandwidth	Compliance
FCC§ 2.1051, § 22.917 (a); § 24.238 (a); §27.53	Spurious Emissions at Antenna Terminal	Compliance
FCC§ 2.1053 § 22.917 (a); § 24.238 (a); §27.53	Field Strength of Spurious Radiation	Compliance
FCC§ 22.917 (a); § 24.238 (a); §27.53	Out of band emission, Band Edge	Compliance
FCC§ 2.1055;§ 22.355; § 24.235; §27.54	Frequency stability vs. temperature Frequency stability vs. voltage	Compliance

FCC §1.1310 & §2.1093- RF EXPOSURE

Applicable Standard

FCC§1.1310 and §2.1093.

Test Result

Compliance, please refer to the SAR report: RDG200916001-20A.

FCC §2.1047 - MODULATION CHARACTERISTIC

According to FCC § 2.1047(d), Part 22H & 24E,27, there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

FCC § 2.1046, § 22.913 (a) & § 24.232 (c) & § 27.50 - RF OUTPUT POWER

Applicable Standard

According to FCC §2.1046 and §22.913 (a), the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC §2.1046 and §24.232 (C), mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

According to §24.232 (d) Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of §24.51. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

According to §27.50

(a) The following power limits and related requirements apply to stations transmitting in the 2305-2320 MHz band or the 2345-2360 MHz band.

(3) Mobile and portable stations. (i) For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

(ii) Mobile and portable stations are not permitted to transmit in the 2315-2320 MHz and 2345-2350 MHz bands.

(iii) Automatic transmit power control. Mobile and portable stations transmitting in the 2305-2315 MHz band or in the 2350-2360 MHz band must employ automatic transmit power control when operating so the stations operate with the minimum power necessary for successful communications.

(iv) Prohibition on external vehicle-mounted antennas. The use of external vehicle-mounted antennas for mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band is prohibited.

(b)(10) Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

(c) (10) Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

(d), (4) Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

(h),(2) Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

Test Procedure

WCDMA-Release 99

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification. The EUT has a nominal maximum output power of 24dBm (+1.7/-3.7).

WCDMA General Settings	Loopback Mode	Test Mode 1
	Rel99 RMC	12.2kbps RMC
	Power Control Algorithm	Algorithm2
	βc / βd	8/15

WCDMA HSDPA

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification.

	Mode	HSDPA	HSDPA	HSDPA	HSDPA
	Subset	1	2	3	4
WCDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set1			
	Power Control Algorithm	Algorithm2			
	βc	2/15	12/15	15/15	15/15
	βd	15/15	15/15	8/15	4/15
	βd (SF)	64			
	βc/ βd	2/15	12/15	15/8	15/4
	βhs	4/15	24/15	30/15	30/15
	MPR(dB)	0	0	0.5	0.5
HSDPA Specific Settings	DACK	8			
	DNAK	8			
	DCQI	8			
	Ack-Nack repetition factor	3			
	CQI Feedback	4ms			
	CQI Repetition Factor	2			
	Ahs=βhs/ βc	30/15			

WCDMA HSUPA

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification.

	Mode	HSUPA	HSUPA	HSUPA	HSUPA	HSUPA
	Subset	1	2	3	4	5
WCDMA General Settings	Loopback Mode	Test Mode 1				
	Rel99 RMC	12.2kbps RMC				
	HSDPA FRC	H-Set1				
	HSUPA Test	HSUPA Loopback				
	Power Control Algorithm	Algorithm2				
	βc	11/15	6/15	15/15	2/15	15/15
	βd	15/15	15/15	9/15	15/15	0
	βec	209/225	12/15	30/15	2/15	5/15
	βc/ βd	11/15	6/15	15/9	2/15	-
	βhs	22/15	12/15	30/15	4/15	5/15
	CM(dB)	1.0	3.0	2.0	3.0	1.0
	MPR(dB)	0	2	1	2	0
HSDPA Specific Settings	DACK	8				
	DNAK	8				
	DCQI	8				
	Ack-Nack repetition factor	3				
	CQI Feedback	4ms				
	CQI Repetition Factor	2				
	Ahs=βhs/ βc	30/15				
HSUPA Specific Settings	DE-DPCCH	6	8	8	5	7
	DHARQ	0	0	0	0	0
	AG Index	20	12	15	17	21
	ETFCI	75	67	92	71	81
	Associated Max UL Data Rate kbps	242.1	174.9	482.8	205.8	308.9
	Reference E_FCIs	E-TFCI 11 E E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27		E-TFCI 11 E-TFCI PO4 E-TFCI 92 E-TFCI PO 18	E-TFCI 11 E E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27	

HSPA+

The following tests were conducted according to the test requirements in Table C.11.1.4 of 3GPP TS 34.121-1

Sub-test	β_c (Note3)	β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed}1: 30/15 β_{ed}2: 30/15	β_{ed}3: 24/15 β_{ed}4: 24/15	3.5	2.5	14	105	105

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_c .
Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).
Note 3: DPDCH is not configured, therefore the β_c is set to 1 and β_d = 0 by default.
Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.
Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signalled to use the extrapolation algorithm.

DC-HSDPA

The following tests were conducted according to the test requirements in Table C.8.1.12 of 3GPP TS 34.121-1

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Processes	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK

Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.
Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.

LTE (FDD):

The following tests were conducted according to the test requirements in 3GPP TS36.101

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3

Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

The allowed A-MPR values specified below in Table 6.2.4.-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS_01".

Table 6.2.4-1: Additional Maximum Power Reduction (A-MPR)

Network Signalling value	Requirements (sub-clause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	NA
NS_03	6.6.2.2.1	2, 4,10, 23, 25, 35, 36	3	>5	≤ 1
			5	>6	≤ 1
			10	>6	≤ 1
			15	>8	≤ 1
			20	>10	≤ 1
NS_04	6.6.2.2.2	41	5	>6	≤ 1
			10, 15, 20	See Table 6.2.4-4	
NS_05	6.6.3.3.1	1	10,15,20	≥ 50	≤ 1
NS_06	6.6.2.2.3	12, 13, 14, 17	1.4, 3, 5, 10	Table 5.6-1	n/a
NS_07	6.6.2.2.3 6.6.3.3.2	13	10	Table 6.2.4-2	Table 6.2.4-2
NS_08	6.6.3.3.3	19	10, 15	> 44	≤ 3
NS_09	6.6.3.3.4	21	10, 15	> 40	≤ 1
				> 55	≤ 2
NS_10		20	15, 20	Table 6.2.4-3	Table 6.2.4-3
NS_11	6.6.2.2.1	23[1]	1.4, 3, 5, 10	Table 6.2.4-5	Table 6.2.4-5
..					
NS_32	-	-	-	-	-

Note 1: Applies to the lower block of Band 23, i.e. a carrier placed in the 2000-2010 MHz region.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
ERP/EIRP Test					
Sunol Sciences	Antenna	JB3	A060611-2	2020-08-25	2023-08-25
R&S	EMI Test Receiver	ESCI	100224	2020-09-12	2021-09-12
Unknown	Coaxial Cable	C-NJNJ-50	C-1000-01	2020-09-05	2021-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-02	2020-09-05	2021-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-0530-01	2020-09-24	2021-09-24
EMCO	Adjustable Dipole Antenna	3121C	9109-753	N/A	N/A
Agilent	Signal Generator	E8247C	MY43321350	2019-12-10	2020-12-10
ETS-Lindgren	Horn Antenna	3115	000 527 35	2018-10-12	2021-10-12
TDK RF	Horn Antenna	HRN-0118	130 084	2018-10-12	2021-10-12
Agilent	Spectrum Analyzer	E4440A	SG43360054	2020-07-07	2021-07-07
Unknown	Coaxial Cable	C-SJSJ-50	C-0800-01	2020-09-05	2021-09-05
Unknown	Coaxial Cable	C-2.4J2.4J-50	C-0700-02	2020-06-27	2021-06-27
Conducted Output Power Test					
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each time	N/A
E-Microwave	Blocking Control	EMDCB-00036	0E01201047	Each time	N/A
E-Microwave	Coaxial Attenuators	EMCA10-5RN-6	OE01203239	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	149216	2020-09-12	2021-09-12

**** Statement of Traceability:*** *Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data

Environmental Conditions

Test Items:	Radiation Below 1GHz	Radiation Above 1GHz	Conducted Output Power
Temperature:	26.1～27.8°C	26.0～30.0°C	25.3～27.5°C
Relative Humidity:	35～46%	36～46%	49～58%
ATM Pressure:	100.6～101.2 kPa	100.6～101.2 kPa	100.8～101.0 kPa
Tester:	Jalon Liu, Hanson Li	Joker Chen, Hanson Li	Chris Mo, Billy Li
Test Date:	2020-09-19～2020-10-20	2020-09-19～2020-10-20	2020-09-22～2020-10-20

Test Result: Compliance

Conducted Output Power

WCDMA Band 2

Mode	3GPP Sub Test	Low Channel		Middle Channel		High Channel	
		Ave. Power (dBm)	PAR (dB)	Ave. Power (dBm)	PAR (dB)	Ave. Power (dBm)	PAR (dB)
Rel 99	1	23.02	2.88	22.75	3.12	21.33	3.04
HSDPA	1	22.06	3.92	21.08	3.40	20.75	3.36
	2	22.04	3.84	21.06	3.32	20.74	3.41
	3	22.05	3.69	21.04	3.51	20.71	3.51
	4	22.01	3.75	21.03	3.19	20.68	3.41
HSUPA	1	21.61	3.64	21.25	3.48	20.46	3.88
	2	21.59	3.62	21.23	3.45	20.45	3.75
	3	21.61	3.61	21.21	3.42	20.41	3.64
	4	21.54	3.72	21.19	3.46	20.38	3.51
	5	21.51	3.71	21.18	3.48	20.35	3.52
DC-HSDPA	1	21.54	3.64	21.21	3.29	20.34	3.54
	2	21.52	3.69	21.19	3.31	20.32	3.51
	3	21.51	3.58	21.18	3.35	20.31	3.58
	4	21.49	3.64	21.17	3.19	20.29	3.48
HSPA+ (16QAM)	1	21.49	3.58	21.18	3.18	20.27	3.47

WCDMA Band 4

Mode	3GPP Sub Test	Low Channel		Middle Channel		High Channel	
		Ave. Power (dBm)	PAR (dB)	Ave. Power (dBm)	PAR (dB)	Ave. Power (dBm)	PAR (dB)
Rel 99	1	23.16	3.04	23.16	3.16	23.18	2.96
HSDPA	1	21.99	3.32	22.19	3.40	22.57	3.88
	2	21.91	3.16	22.18	3.48	22.54	3.76
	3	21.88	3.51	22.16	3.61	22.51	3.51
	4	21.86	3.14	22.11	3.15	22.49	3.59
HSUPA	1	21.47	3.68	21.71	3.52	21.82	3.68
	2	21.45	3.64	21.64	3.51	21.81	3.65
	3	21.41	3.15	21.61	3.49	21.79	3.71
	4	21.38	3.65	21.51	3.18	21.76	3.68
	5	21.36	3.15	21.57	3.15	21.74	3.45
DC-HSDPA	1	21.46	3.49	21.35	3.51	20.92	3.31
	2	21.42	3.46	21.21	3.02	20.91	3.39
	3	21.39	3.52	21.31	3.56	20.86	3.38
	4	21.41	3.42	21.28	3.52	20.84	3.31
HSPA+ (16QAM)	1	21.40	3.41	21.26	3.53	20.83	3.32

WCDMA Band 5

Mode	3GPP Sub Test	Low Channel		Middle Channel		High Channel	
		Ave. Power (dBm)	PAR (dB)	Ave. Power (dBm)	PAR (dB)	Ave. Power (dBm)	PAR (dB)
Rel 99	1	23.26	2.52	23.19	3.00	23.12	2.84
HSDPA	1	22.04	2.96	22.12	3.40	22.46	3.52
	2	22.02	2.81	22.09	3.35	22.45	3.14
	3	22.05	2.18	22.11	3.38	22.39	3.51
	4	21.91	2.65	22.08	3.39	22.38	3.09
HSUPA	1	21.45	3.16	21.47	3.32	21.68	3.40
	2	21.42	3.15	21.46	3.42	21.69	3.15
	3	21.41	3.18	21.44	3.48	21.64	3.18
	4	21.39	3.16	21.43	3.42	21.62	3.29
	5	21.38	3.14	21.41	3.38	21.59	3.15
DC-HSDPA	1	21.42	3.12	21.38	3.21	21.58	3.62
	2	21.41	3.11	21.29	3.51	21.54	2.94
	3	21.38	3.04	21.32	3.14	21.53	2.94
	4	21.35	2.98	21.28	3.15	21.51	3.16
HSPA+ (16QAM)	1	21.15	2.99	21.42	3.15	21.49	3.18

LTE Band 2

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4MHz	QPSK	RB1#0	22.96	22.66	22.39
		RB1#3	23.15	22.81	22.38
		RB1#5	23.01	22.63	22.31
		RB3#0	22.94	22.76	22.20
		RB3#3	22.96	22.72	22.23
		RB6#0	21.99	21.85	21.56
	16QAM	RB1#0	22.21	22.07	21.12
		RB1#3	22.30	22.20	21.35
		RB1#5	22.06	22.06	21.23
		RB3#0	22.15	21.80	21.34
		RB3#3	22.17	21.72	21.34
		RB6#0	21.14	20.50	20.67
3MHz	QPSK	RB1#0	22.71	22.94	22.19
		RB1#8	22.69	22.68	22.10
		RB1#14	22.73	22.96	22.06
		RB6#0	21.91	21.64	21.41
		RB6#9	21.86	21.47	21.40
		RB15#0	21.77	21.26	21.39
	16QAM	RB1#0	22.07	22.19	21.03
		RB1#8	22.05	22.18	20.99
		RB1#14	22.04	22.46	21.05
		RB6#0	20.80	20.91	20.32
		RB6#9	20.85	21.01	20.29
		RB15#0	20.97	20.91	20.52
5MHz	QPSK	RB1#0	23.01	22.55	22.42
		RB1#13	23.14	22.53	22.19
		RB1#24	23.11	22.50	22.07
		RB15#0	21.79	21.32	21.44
		RB15#10	21.70	21.65	21.46
		RB25#0	21.76	21.44	21.52
	16QAM	RB1#0	21.30	21.79	21.26
		RB1#13	21.39	21.84	21.05
		RB1#24	21.16	22.01	21.19
		RB15#0	20.84	20.24	20.48
		RB15#10	20.75	20.53	20.42
		RB25#0	20.84	20.59	20.52

10MHz	QPSK	RB1#0	22.89	22.61	22.42
		RB1#25	23.00	22.85	22.63
		RB1#49	22.63	22.64	21.41
		RB25#0	21.86	21.59	21.62
		RB25#25	21.82	21.36	21.46
		RB50#0	21.94	21.69	21.52
	16QAM	RB1#0	21.96	21.84	21.81
		RB1#25	22.11	22.57	21.42
		RB1#49	21.77	22.16	20.53
		RB25#0	20.90	20.71	20.70
		RB25#25	20.89	20.71	20.52
		RB50#0	20.83	20.82	20.55
15MHz	QPSK	RB1#0	22.73	22.51	22.29
		RB1#38	23.01	22.62	22.33
		RB1#74	22.65	22.53	21.34
		RB36#0	21.84	21.54	21.51
		RB36#39	21.80	21.45	21.34
		RB75#0	21.90	21.67	21.59
	16QAM	RB1#0	22.07	22.10	21.47
		RB1#38	22.84	22.61	21.32
		RB1#74	21.96	22.34	20.86
		RB36#0	20.83	20.62	20.56
		RB36#39	20.71	20.47	20.41
		RB75#0	20.80	20.59	20.52
20MHz	QPSK	RB1#0	22.93	22.52	22.61
		RB1#50	22.61	22.88	22.85
		RB1#99	22.64	22.84	21.32
		RB50#0	21.99	21.56	21.66
		RB50#50	21.77	21.82	21.41
		RB100#0	21.92	21.79	21.63
	16QAM	RB1#0	22.64	22.44	22.11
		RB1#50	22.77	22.78	22.27
		RB1#99	22.27	22.74	20.62
		RB50#0	20.68	20.46	20.53
		RB50#50	20.70	20.47	20.46
		RB100#0	20.90	20.80	20.66

LTE Band 4

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4MHz	QPSK	RB1#0	22.50	22.75	21.52
		RB1#3	22.62	22.63	22.24
		RB1#5	22.59	22.32	22.10
		RB3#0	22.44	21.90	21.98
		RB3#3	22.41	22.51	22.22
		RB6#0	21.56	21.18	21.28
	16QAM	RB1#0	21.05	21.58	21.87
		RB1#3	21.22	21.94	21.85
		RB1#5	21.15	21.36	21.81
		RB3#0	21.38	21.22	21.50
		RB3#3	21.42	21.67	21.53
		RB6#0	20.58	20.38	20.21
3MHz	QPSK	RB1#0	22.53	22.40	22.30
		RB1#8	22.14	22.32	22.21
		RB1#14	22.16	22.53	22.50
		RB6#0	21.28	21.35	21.12
		RB6#9	21.37	21.30	21.22
		RB15#0	21.43	21.31	21.35
	16QAM	RB1#0	21.56	21.97	20.74
		RB1#8	21.55	21.78	20.68
		RB1#14	21.43	22.03	20.95
		RB6#0	20.32	20.28	20.01
		RB6#9	20.44	20.17	20.12
		RB15#0	20.50	20.43	20.44
5MHz	QPSK	RB1#0	22.23	22.18	22.81
		RB1#13	22.26	22.44	22.15
		RB1#24	22.27	22.22	21.94
		RB15#0	21.36	21.31	21.32
		RB15#10	21.31	21.28	21.31
		RB25#0	21.36	21.26	21.30
	16QAM	RB1#0	20.96	21.81	20.84
		RB1#13	20.55	21.01	20.91
		RB1#24	20.63	21.14	20.62
		RB15#0	20.47	20.31	20.26
		RB15#10	20.62	20.38	20.38
		RB25#0	20.61	20.27	20.54

10MHz	QPSK	RB1#0	22.40	22.28	22.40
		RB1#25	22.27	22.38	22.44
		RB1#49	22.42	22.11	22.30
		RB25#0	21.37	21.33	21.30
		RB25#25	21.43	21.25	21.24
		RB50#0	21.38	21.18	21.31
	16QAM	RB1#0	21.59	21.99	21.49
		RB1#25	21.85	22.37	21.06
		RB1#49	21.95	21.87	21.04
		RB25#0	20.39	20.35	20.50
		RB25#25	20.57	20.41	20.46
		RB50#0	20.47	20.36	20.47
15MHz	QPSK	RB1#0	22.15	22.36	22.59
		RB1#38	22.26	22.31	22.24
		RB1#74	22.62	22.49	22.36
		RB36#0	21.53	21.39	21.35
		RB36#39	21.58	21.35	21.21
		RB75#0	21.55	21.34	21.32
	16QAM	RB1#0	20.89	21.75	21.76
		RB1#38	21.21	21.65	22.00
		RB1#74	20.65	20.89	22.06
		RB36#0	20.32	20.45	20.61
		RB36#39	20.28	20.31	20.24
		RB75#0	20.38	20.26	20.37
20MHz	QPSK	RB1#0	22.49	22.57	23.59
		RB1#50	22.68	22.66	23.47
		RB1#99	22.41	22.54	23.55
		RB50#0	21.66	22.44	22.46
		RB50#50	21.66	22.38	22.34
		RB100#0	21.58	22.37	22.43
	16QAM	RB1#0	21.95	23.13	22.48
		RB1#50	22.10	22.60	22.35
		RB1#99	22.07	23.21	22.21
		RB50#0	20.60	21.67	21.49
		RB50#50	20.62	21.40	21.37
		RB100#0	20.47	21.41	21.52

LTE Band 5

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4MHz	QPSK	RB1#0	23.76	23.91	23.96
		RB1#3	23.68	24.11	24.04
		RB1#5	23.80	24.04	24.27
		RB3#0	23.85	24.02	23.96
		RB3#3	23.97	23.90	23.91
		RB6#0	22.91	22.87	23.02
	16QAM	RB1#0	23.14	23.00	23.12
		RB1#3	23.37	22.86	23.28
		RB1#5	23.31	22.77	23.07
		RB3#0	23.01	22.94	22.96
		RB3#3	23.09	22.95	22.90
		RB6#0	21.70	21.90	22.08
3MHz	QPSK	RB1#0	23.80	23.76	23.89
		RB1#8	23.99	23.87	23.87
		RB1#14	24.00	23.90	24.01
		RB6#0	22.97	22.95	23.05
		RB6#9	23.03	22.96	23.07
		RB15#0	23.00	22.95	23.15
	16QAM	RB1#0	23.56	22.71	23.31
		RB1#8	23.79	22.84	23.28
		RB1#14	23.70	22.61	23.27
		RB6#0	22.18	21.87	22.11
		RB6#9	22.23	22.01	22.02
		RB15#0	21.93	21.97	22.10
5MHz	QPSK	RB1#0	24.21	24.19	24.38
		RB1#13	24.37	24.54	24.53
		RB1#24	24.64	24.43	24.58
		RB15#0	23.55	23.42	23.61
		RB15#10	23.57	23.56	23.57
		RB25#0	23.50	23.43	23.57
	16QAM	RB1#0	23.70	23.20	23.18
		RB1#13	24.08	23.23	23.17
		RB1#24	23.89	23.29	22.91
		RB15#0	22.68	22.47	22.28
		RB15#10	22.28	22.51	22.26
		RB25#0	22.43	22.43	22.85
10MHz	QPSK	RB1#0	24.22	24.39	24.54
		RB1#25	24.78	24.58	24.61
		RB1#49	24.37	24.78	24.41
		RB25#0	23.64	23.63	23.65
		RB25#25	23.52	23.68	23.66
		RB50#0	23.56	23.58	23.62
	16QAM	RB1#0	24.14	23.45	23.88
		RB1#25	24.60	23.34	24.19
		RB1#49	24.17	23.42	23.62
		RB25#0	22.70	22.67	22.67
		RB25#25	22.41	22.84	22.65
		RB50#0	22.52	22.31	22.56

LTE Band 12

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4MHz	QPSK	RB1#0	24.19	24.10	24.28
		RB1#3	24.34	23.99	23.91
		RB1#5	24.37	24.13	23.95
		RB3#0	24.04	23.86	23.97
		RB3#3	24.16	24.13	23.92
		RB6#0	23.13	23.14	23.09
	16QAM	RB1#0	23.15	23.25	23.40
		RB1#3	23.45	23.60	23.00
		RB1#5	23.43	23.44	22.73
		RB3#0	23.07	22.86	23.26
		RB3#3	23.20	22.96	22.90
		RB6#0	22.21	22.09	22.09
3MHz	QPSK	RB1#0	23.96	24.05	23.91
		RB1#8	23.85	23.92	23.97
		RB1#14	24.04	23.84	23.88
		RB6#0	22.99	22.97	23.08
		RB6#9	22.92	23.01	23.10
		RB15#0	22.92	23.10	23.16
	16QAM	RB1#0	23.19	23.31	23.00
		RB1#8	23.24	23.53	22.98
		RB1#14	23.21	23.38	22.67
		RB6#0	21.86	22.28	22.01
		RB6#9	21.94	21.78	21.91
		RB15#0	21.88	21.89	22.22
5MHz	QPSK	RB1#0	23.92	23.88	24.09
		RB1#13	23.91	23.96	24.13
		RB1#24	23.90	23.81	23.97
		RB15#0	22.83	23.02	23.03
		RB15#10	22.85	22.91	23.05
		RB25#0	22.91	23.06	23.00
	16QAM	RB1#0	22.43	23.32	23.04
		RB1#13	22.49	23.18	22.92
		RB1#24	22.35	23.24	22.66
		RB15#0	21.95	21.99	21.93
		RB15#10	21.71	21.71	21.97
		RB25#0	21.95	21.87	21.93
10MHz	QPSK	RB1#0	23.76	23.90	23.69
		RB1#25	24.00	23.90	24.25
		RB1#49	24.00	23.97	23.94
		RB25#0	22.92	22.95	22.85
		RB25#25	23.08	22.96	23.05
		RB50#0	23.01	23.09	22.94
	16QAM	RB1#0	23.19	22.99	22.47
		RB1#25	23.54	23.51	22.87
		RB1#49	22.87	23.48	22.47
		RB25#0	21.96	22.05	21.99
		RB25#25	22.04	21.99	22.27
		RB50#0	21.83	21.99	22.08

LTE Band 17

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
5 MHz	QPSK	RB1#0	23.01	23.22	23.36
		RB1#13	23.98	23.18	22.83
		RB1#24	23.43	24.27	23.16
		RB15#0	23.37	23.59	22.63
		RB15#10	21.92	23.29	22.13
		RB25#0	23.31	22.51	21.59
	16QAM	RB1#0	22.63	22.78	22.13
		RB1#13	21.63	21.91	22.82
		RB1#24	22.08	23.00	21.42
		RB15#0	20.77	22.16	21.31
		RB15#10	21.55	21.33	22.02
		RB25#0	20.76	21.80	21.05
10 MHz	QPSK	RB1#0	23.40	23.92	23.17
		RB1#25	23.25	23.37	22.96
		RB1#49	22.76	22.74	23.03
		RB25#0	23.22	22.64	22.49
		RB25#25	21.56	23.45	22.80
		RB50#0	22.59	22.58	22.74
	16QAM	RB1#0	23.05	21.71	21.73
		RB1#25	22.74	22.10	22.83
		RB1#49	21.65	22.18	21.41
		RB25#0	21.17	22.53	21.83
		RB25#25	21.38	21.74	22.50
		RB50#0	22.34	20.69	21.17

LTE Band 66

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4MHz	QPSK	RB1#0	22.33	22.25	21.86
		RB1#3	22.53	22.30	22.37
		RB1#5	22.52	22.15	22.12
		RB3#0	22.28	22.33	22.20
		RB3#3	22.38	22.39	22.12
		RB6#0	21.34	21.24	21.14
	16QAM	RB1#0	21.46	21.63	20.82
		RB1#3	21.65	21.83	20.68
		RB1#5	21.39	21.64	20.71
		RB3#0	21.28	21.31	21.39
		RB3#3	21.54	21.32	21.29
		RB6#0	20.14	20.37	20.14
3MHz	QPSK	RB1#0	22.18	22.51	21.90
		RB1#8	22.15	22.46	21.92
		RB1#14	22.22	22.51	22.23
		RB6#0	21.12	21.40	21.10
		RB6#9	21.27	21.41	21.05
		RB15#0	21.20	21.32	21.17
	16QAM	RB1#0	21.49	21.48	21.07
		RB1#8	21.43	21.50	20.75
		RB1#14	21.45	21.45	20.55
		RB6#0	20.14	19.98	20.01
		RB6#9	20.30	20.16	20.01
		RB15#0	20.44	20.17	20.24
5MHz	QPSK	RB1#0	21.98	22.23	21.97
		RB1#13	22.17	22.34	21.97
		RB1#24	22.03	21.95	22.05
		RB15#0	21.26	21.26	21.19
		RB15#10	21.25	21.29	21.08
		RB25#0	21.14	21.26	21.15
	16QAM	RB1#0	20.74	21.67	20.98
		RB1#13	20.86	21.70	20.83
		RB1#24	20.63	21.43	21.09
		RB15#0	20.39	20.26	20.16
		RB15#10	20.40	20.14	20.17
		RB25#0	20.24	20.31	20.16

10MHz	QPSK	RB1#0	22.88	23.02	22.65
		RB1#25	22.95	23.03	22.91
		RB1#49	22.90	22.74	22.95
		RB25#0	21.92	21.93	21.48
		RB25#25	22.02	21.76	21.60
		RB50#0	21.95	21.85	21.63
	16QAM	RB1#0	22.02	22.21	21.55
		RB1#25	22.61	22.94	22.19
		RB1#49	21.81	22.04	21.03
		RB25#0	20.80	21.11	20.94
		RB25#25	21.06	21.00	20.76
		RB50#0	20.96	21.01	20.76
15MHz	QPSK	RB1#0	22.94	22.98	22.81
		RB1#38	22.79	22.71	22.80
		RB1#74	23.00	22.69	22.49
		RB36#0	21.89	21.93	21.71
		RB36#39	21.88	21.62	21.63
		RB75#0	21.85	21.80	21.77
	16QAM	RB1#0	21.91	21.91	22.24
		RB1#38	21.93	22.23	22.70
		RB1#74	21.98	22.21	22.25
		RB36#0	20.81	21.09	20.86
		RB36#39	20.82	20.81	20.83
		RB75#0	20.80	21.02	20.79
20MHz	QPSK	RB1#0	22.86	22.96	22.76
		RB1#50	23.02	23.37	22.69
		RB1#99	23.03	22.82	22.53
		RB50#0	21.76	22.05	21.69
		RB50#50	21.88	21.83	21.42
		RB100#0	21.83	21.96	21.63
	16QAM	RB1#0	21.83	22.71	22.15
		RB1#50	21.75	22.96	22.26
		RB1#99	21.79	22.33	22.12
		RB50#0	20.96	20.92	20.72
		RB50#50	20.96	20.86	20.79
		RB100#0	20.92	20.93	20.75

PAR, Band 2

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	20 MHz	4.26	4.55	3.77	13
	100 RB		4.52	4.87	4.61	13
16QAM	1 RB	20 MHz	5.30	5.48	4.93	13
	100 RB		5.68	5.83	5.59	13

PAR, Band 4

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	20 MHz	4.35	4.90	4.43	13
	100 RB		4.58	4.96	4.75	13
16QAM	1 RB	20 MHz	5.39	5.39	5.01	13
	100 RB		5.65	5.88	5.77	13

PAR, Band 5

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	10 MHz	2.87	4.12	3.65	13
	50 RB		4.26	4.67	4.20	13
16QAM	1 RB	10 MHz	3.62	5.16	4.70	13
	50 RB		5.30	5.71	5.25	13

PAR, Band 12

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	10 MHz	4.55	4.03	4.49	13
	50 RB		4.72	5.01	5.07	13
16QAM	1 RB	10 MHz	5.57	4.99	5.54	13
	50 RB		5.86	5.97	6.09	13

PAR, Band 17

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	10 MHz	3.91	3.74	3.71	13
	50 RB		4.61	4.84	4.81	13
16QAM	1 RB	10 MHz	4.35	4.72	4.67	13
	50 RB		5.77	6.06	5.86	13

PAR, Band 66

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	20 MHz	4.49	4.52	4.61	13
	100 RB		4.70	4.84	4.87	13
16QAM	1 RB	20 MHz	5.42	5.45	5.51	13
	100 RB		5.74	5.88	5.86	13

Note: peak-to-average ratio (PAR) <13 dB.

ERP & EIRP

Part 22H

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA R99 Band 5 Low channel								
826.40	H	93.20	18.20	0.00	0.96	17.24	38.45	21.21
826.40	V	88.56	16.66	0.00	0.96	15.70	38.45	22.75
WCDMA R99 Band 5 middle channel								
836.60	H	91.93	17.01	0.00	0.97	16.04	38.45	22.41
836.60	V	89.93	18.14	0.00	0.97	17.17	38.45	21.28
WCDMA R99 Band 5 High channel								
846.60	H	96.16	21.31	0.00	0.99	20.32	38.45	18.13
846.60	V	90.00	18.31	0.00	0.99	17.32	38.45	21.13

Part 24E

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA R99 Band 2 low channel								
1852.40	H	81.43	6.22	11.06	1.19	16.09	33.00	16.91
1852.40	V	90.22	14.79	11.06	1.19	24.66	33.00	8.34
WCDMA R99 Band 2 middle channel								
1880.00	H	79.58	4.43	11.14	1.18	14.39	33.00	18.61
1880.00	V	89.43	14.08	11.14	1.18	24.04	33.00	8.96
WCDMA R99 Band 2 high channel								
1907.60	H	79.10	4.01	11.22	1.17	14.06	33.00	18.94
1907.60	V	89.74	14.47	11.22	1.17	24.52	33.00	8.48

Part 27

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA R99 Band 4 low channel								
1712.40	H	83.32	7.80	10.64	1.26	17.18	30.00	12.82
1712.40	V	89.78	13.95	10.64	1.26	23.33	30.00	6.67
WCDMA R99 Band 4 middle channel								
1732.60	H	84.17	8.69	10.70	1.25	18.14	30.00	11.86
1732.60	V	90.44	14.66	10.70	1.25	24.11	30.00	5.89
WCDMA R99 Band 4 high channel								
1752.60	H	84.20	8.76	10.76	1.24	18.28	30.00	11.72
1752.60	V	90.90	15.18	10.76	1.24	24.70	30.00	5.30

Note:
1) The unit of Antenna Gain is dBd for frequency below 1GHz, and the unit of Antenna Gain is dBi for frequency above 1GHz.
2) Absolute Level = Substituted Level - Cable loss + Antenna Gain
3) Margin = Limit-Absolute Level

LTE Band 2:

BW (MHz)	Modulation	Test Channel	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
					Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
1.40	QPSK	Low	H	80.63	5.41	11.05	1.20	15.26	33.00	17.74
		Low	V	84.61	9.17	11.05	1.20	19.02	33.00	13.98
		Middle	H	82.12	6.97	11.14	1.18	16.93	33.00	16.07
		Middle	V	86.37	11.02	11.14	1.18	20.98	33.00	12.02
		High	H	80.38	5.29	11.23	1.17	15.35	33.00	17.65
		High	V	84.41	9.14	11.23	1.17	19.20	33.00	13.80
	16QAM	Low	H	79.30	4.08	11.05	1.20	13.93	33.00	19.07
		Low	V	83.28	7.84	11.05	1.20	17.69	33.00	15.31
		Middle	H	80.79	5.64	11.14	1.18	15.60	33.00	17.40
		Middle	V	85.04	9.69	11.14	1.18	19.65	33.00	13.35
		High	H	79.34	4.25	11.23	1.17	14.31	33.00	18.69
		High	V	83.37	8.10	11.23	1.17	18.16	33.00	14.84
3.00	QPSK	Low	H	80.45	5.23	11.05	1.20	15.08	33.00	17.92
		Low	V	84.43	9.00	11.05	1.20	18.85	33.00	14.15
		Middle	H	81.94	6.79	11.14	1.18	16.75	33.00	16.25
		Middle	V	86.19	10.84	11.14	1.18	20.80	33.00	12.20
		High	H	80.20	5.11	11.23	1.17	15.17	33.00	17.83
		High	V	84.23	8.96	11.23	1.17	19.02	33.00	13.98
	16QAM	Low	H	79.12	3.90	11.05	1.20	13.75	33.00	19.25
		Low	V	83.10	7.67	11.05	1.20	17.52	33.00	15.48
		Middle	H	80.61	5.46	11.14	1.18	15.42	33.00	17.58
		Middle	V	84.86	9.51	11.14	1.18	19.47	33.00	13.53
		High	H	79.16	4.07	11.23	1.17	14.13	33.00	18.87
		High	V	83.19	7.92	11.23	1.17	17.98	33.00	15.02
5.00	QPSK	Low	H	80.19	4.98	11.06	1.19	14.85	33.00	18.15
		Low	V	84.17	8.74	11.06	1.19	18.61	33.00	14.39
		Middle	H	81.68	6.53	11.14	1.18	16.49	33.00	16.51
		Middle	V	85.93	10.58	11.14	1.18	20.54	33.00	12.46
		High	H	79.94	4.85	11.22	1.17	14.90	33.00	18.10
		High	V	83.97	8.70	11.22	1.17	18.75	33.00	14.25
	16QAM	Low	H	78.86	3.65	11.06	1.19	13.52	33.00	19.48
		Low	V	82.84	7.41	11.06	1.19	17.28	33.00	15.72
		Middle	H	80.35	5.20	11.14	1.18	15.16	33.00	17.84
		Middle	V	84.60	9.25	11.14	1.18	19.21	33.00	13.79
		High	H	78.90	3.81	11.22	1.17	13.86	33.00	19.14
		High	V	82.93	7.66	11.22	1.17	17.71	33.00	15.29
10.0	QPSK	Low	H	79.88	4.67	11.07	1.19	14.55	33.00	18.45
		Low	V	83.86	8.44	11.07	1.19	18.32	33.00	14.68
		Middle	H	81.37	6.22	11.14	1.18	16.18	33.00	16.82
		Middle	V	85.62	10.27	11.14	1.18	20.23	33.00	12.77
		High	H	79.63	4.53	11.22	1.17	14.58	33.00	18.42
		High	V	83.66	8.38	11.22	1.17	18.43	33.00	14.57
	16QAM	Low	H	78.55	3.34	11.07	1.19	13.22	33.00	19.78
		Low	V	82.53	7.11	11.07	1.19	16.99	33.00	16.01
		Middle	H	80.04	4.89	11.14	1.18	14.85	33.00	18.15
		Middle	V	84.29	8.94	11.14	1.18	18.90	33.00	14.10
		High	H	78.59	3.49	11.22	1.17	13.54	33.00	19.46
		High	V	82.62	7.34	11.22	1.17	17.39	33.00	15.61

BW (MHz)	Modulation	Test Channel	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
					Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
15.0	QPSK	Low	H	80.77	5.57	11.07	1.19	15.45	33.00	17.55
		Low	V	84.75	9.33	11.07	1.19	19.21	33.00	13.79
		Middle	H	82.26	7.11	11.14	1.18	17.07	33.00	15.93
		Middle	V	86.51	11.16	11.14	1.18	21.12	33.00	11.88
		High	H	80.52	5.42	11.21	1.17	15.46	33.00	17.54
		High	V	84.55	9.26	11.21	1.17	19.30	33.00	13.70
	16QAM	Low	H	79.44	4.24	11.07	1.19	14.12	33.00	18.88
		Low	V	83.42	8.00	11.07	1.19	17.88	33.00	15.12
		Middle	H	80.93	5.78	11.14	1.18	15.74	33.00	17.26
		Middle	V	85.18	9.83	11.14	1.18	19.79	33.00	13.21
		High	H	79.48	4.38	11.21	1.17	14.42	33.00	18.58
		High	V	83.51	8.22	11.21	1.17	18.26	33.00	14.74
20.0	QPSK	Low	H	80.94	5.74	11.08	1.19	15.63	33.00	17.37
		Low	V	84.92	9.51	11.08	1.19	19.40	33.00	13.60
		Middle	H	82.43	7.28	11.14	1.18	17.24	33.00	15.76
		Middle	V	86.68	11.33	11.14	1.18	21.29	33.00	11.71
		High	H	80.69	5.58	11.20	1.17	15.61	33.00	17.39
		High	V	84.72	9.43	11.20	1.17	19.46	33.00	13.54
	16QAM	Low	H	79.61	4.41	11.08	1.19	14.30	33.00	18.70
		Low	V	83.59	8.18	11.08	1.19	18.07	33.00	14.93
		Middle	H	81.10	5.95	11.14	1.18	15.91	33.00	17.09
		Middle	V	85.35	10.00	11.14	1.18	19.96	33.00	13.04
		High	H	79.65	4.54	11.20	1.17	14.57	33.00	18.43
		High	V	83.68	8.39	11.20	1.17	18.42	33.00	14.58

LTE Band 4:

BW (MHz)	Modulation	Test Channel	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
					Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
1.40	QPSK	Low	H	83.08	7.55	10.63	1.26	16.92	30.00	13.08
		Low	V	88.09	12.25	10.63	1.26	21.62	30.00	8.38
		Middle	H	82.43	6.95	10.70	1.25	16.40	30.00	13.60
		Middle	V	87.40	11.62	10.70	1.25	21.07	30.00	8.93
		High	H	83.17	7.74	10.76	1.24	17.26	30.00	12.74
		High	V	88.20	12.49	10.76	1.24	22.01	30.00	7.99
	16QAM	Low	H	82.23	6.70	10.63	1.26	16.07	30.00	13.93
		Low	V	87.24	11.40	10.63	1.26	20.77	30.00	9.23
		Middle	H	81.71	6.23	10.70	1.25	15.68	30.00	14.32
		Middle	V	86.68	10.90	10.70	1.25	20.35	30.00	9.65
		High	H	82.20	6.77	10.76	1.24	16.29	30.00	13.71
		High	V	87.23	11.52	10.76	1.24	21.04	30.00	8.96
3.00	QPSK	Low	H	82.98	7.45	10.63	1.26	16.82	30.00	13.18
		Low	V	87.99	12.15	10.63	1.26	21.52	30.00	8.48
		Middle	H	82.33	6.85	10.70	1.25	16.30	30.00	13.70
		Middle	V	87.30	11.52	10.70	1.25	20.97	30.00	9.03
		High	H	81.47	6.04	10.76	1.24	15.56	30.00	14.44
		High	V	86.50	10.78	10.76	1.24	20.30	30.00	9.70
	16QAM	Low	H	82.13	6.60	10.63	1.26	15.97	30.00	14.03
		Low	V	87.14	11.30	10.63	1.26	20.67	30.00	9.33
		Middle	H	81.61	6.13	10.70	1.25	15.58	30.00	14.42
		Middle	V	86.58	10.80	10.70	1.25	20.25	30.00	9.75
		High	H	81.00	5.57	10.76	1.24	15.09	30.00	14.91
		High	V	86.03	10.31	10.76	1.24	19.83	30.00	10.17
5.00	QPSK	Low	H	82.83	7.31	10.64	1.26	16.69	30.00	13.31
		Low	V	87.84	12.01	10.64	1.26	21.39	30.00	8.61
		Middle	H	82.18	6.70	10.70	1.25	16.15	30.00	13.85
		Middle	V	87.15	11.37	10.70	1.25	20.82	30.00	9.18
		High	H	81.32	5.88	10.76	1.24	15.40	30.00	14.60
		High	V	86.35	10.63	10.76	1.24	20.15	30.00	9.85
	16QAM	Low	H	81.98	6.46	10.64	1.26	15.84	30.00	14.16
		Low	V	86.99	11.16	10.64	1.26	20.54	30.00	9.46
		Middle	H	81.46	5.98	10.70	1.25	15.43	30.00	14.57
		Middle	V	86.43	10.65	10.70	1.25	20.10	30.00	9.90
		High	H	80.85	5.41	10.76	1.24	14.93	30.00	15.07
		High	V	85.88	10.16	10.76	1.24	19.68	30.00	10.32
10.0	QPSK	Low	H	82.29	6.77	10.65	1.26	16.16	30.00	13.84
		Low	V	87.30	11.47	10.65	1.26	20.86	30.00	9.14
		Middle	H	81.64	6.16	10.70	1.25	15.61	30.00	14.39
		Middle	V	86.61	10.83	10.70	1.25	20.28	30.00	9.72
		High	H	80.78	5.34	10.75	1.24	14.85	30.00	15.15
		High	V	85.81	10.08	10.75	1.24	19.59	30.00	10.41
	16QAM	Low	H	81.44	5.92	10.65	1.26	15.31	30.00	14.69
		Low	V	86.45	10.62	10.65	1.26	20.01	30.00	9.99
		Middle	H	80.92	5.44	10.70	1.25	14.89	30.00	15.11
		Middle	V	85.89	10.11	10.70	1.25	19.56	30.00	10.44
		High	H	80.31	4.87	10.75	1.24	14.38	30.00	15.62
		High	V	85.34	9.61	10.75	1.24	19.12	30.00	10.88

BW (MHz)	Modulation	Test Channel	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
					Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
15.0	QPSK	Low	H	81.38	5.87	10.65	1.25	15.27	30.00	14.73
		Low	V	86.39	10.57	10.65	1.25	19.97	30.00	10.03
		Middle	H	80.73	5.25	10.70	1.25	14.70	30.00	15.30
		Middle	V	85.70	9.92	10.70	1.25	19.37	30.00	10.63
		High	H	79.87	4.42	10.74	1.24	13.92	30.00	16.08
		High	V	84.90	9.17	10.74	1.24	18.67	30.00	11.33
	16QAM	Low	H	80.53	5.02	10.65	1.25	14.42	30.00	15.58
		Low	V	85.54	9.72	10.65	1.25	19.12	30.00	10.88
		Middle	H	80.01	4.53	10.70	1.25	13.98	30.00	16.02
		Middle	V	84.98	9.20	10.70	1.25	18.65	30.00	11.35
		High	H	79.40	3.95	10.74	1.24	13.45	30.00	16.55
		High	V	84.43	8.70	10.74	1.24	18.20	30.00	11.80
20.0	QPSK	Low	H	80.68	5.17	10.66	1.25	14.58	30.00	15.42
		Low	V	85.69	9.88	10.66	1.25	19.29	30.00	10.71
		Middle	H	80.03	4.55	10.70	1.25	14.00	30.00	16.00
		Middle	V	85.00	9.22	10.70	1.25	18.67	30.00	11.33
		High	H	79.17	3.72	10.74	1.24	13.22	30.00	16.78
		High	V	84.20	8.46	10.74	1.24	17.96	30.00	12.04
	16QAM	Low	H	79.83	4.32	10.66	1.25	13.73	30.00	16.27
		Low	V	84.84	9.03	10.66	1.25	18.44	30.00	11.56
		Middle	H	79.31	3.83	10.70	1.25	13.28	30.00	16.72
		Middle	V	84.28	8.50	10.70	1.25	17.95	30.00	12.05
		High	H	79.80	4.35	10.74	1.24	13.85	30.00	16.15
		High	V	84.83	9.09	10.74	1.24	18.59	30.00	11.41

LTE Band 5:

BW (MHz)	Modulation	Test Channel	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
					Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
1.40	QPSK	Low	H	97.18	22.16	0.00	0.96	21.20	38.45	17.25
		Low	V	91.27	19.35	0.00	0.96	18.39	38.45	20.06
		Middle	H	97.52	22.59	0.00	0.97	21.62	38.45	16.83
		Middle	V	91.66	19.87	0.00	0.97	18.90	38.45	19.55
		High	H	97.35	22.52	0.00	0.99	21.53	38.45	16.92
		High	V	91.41	19.74	0.00	0.99	18.75	38.45	19.70
	16QAM	Low	H	97.15	22.13	0.00	0.96	21.17	38.45	17.28
		Low	V	91.11	19.19	0.00	0.96	18.23	38.45	20.22
		Middle	H	97.38	22.45	0.00	0.97	21.48	38.45	16.97
		Middle	V	91.49	19.70	0.00	0.97	18.73	38.45	19.72
		High	H	97.21	22.38	0.00	0.99	21.39	38.45	17.06
		High	V	91.22	19.55	0.00	0.99	18.56	38.45	19.89
3.00	QPSK	Low	H	95.97	20.96	0.00	0.96	20.00	38.45	18.45
		Low	V	90.38	18.47	0.00	0.96	17.51	38.45	20.94
		Middle	H	96.27	21.34	0.00	0.97	20.37	38.45	18.08
		Middle	V	90.71	18.92	0.00	0.97	17.95	38.45	20.50
		High	H	96.49	21.65	0.00	0.99	20.66	38.45	17.79
		High	V	90.30	18.62	0.00	0.99	17.63	38.45	20.82
	16QAM	Low	H	95.81	20.80	0.00	0.96	19.84	38.45	18.61
		Low	V	90.23	18.32	0.00	0.96	17.36	38.45	21.09
		Middle	H	96.51	21.58	0.00	0.97	20.61	38.45	17.84
		Middle	V	90.30	18.51	0.00	0.97	17.54	38.45	20.91
		High	H	96.45	21.61	0.00	0.99	20.62	38.45	17.83
		High	V	90.19	18.51	0.00	0.99	17.52	38.45	20.93
5.00	QPSK	Low	H	95.17	20.17	0.00	0.96	19.21	38.45	19.24
		Low	V	88.97	17.07	0.00	0.96	16.11	38.45	22.34
		Middle	H	95.70	20.77	0.00	0.97	19.80	38.45	18.65
		Middle	V	89.56	17.77	0.00	0.97	16.80	38.45	21.65
		High	H	95.67	20.82	0.00	0.99	19.83	38.45	18.62
		High	V	89.28	17.59	0.00	0.99	16.60	38.45	21.85
	16QAM	Low	H	95.05	20.05	0.00	0.96	19.09	38.45	19.36
		Low	V	88.78	16.88	0.00	0.96	15.92	38.45	22.53
		Middle	H	95.46	20.53	0.00	0.97	19.56	38.45	18.89
		Middle	V	89.26	17.47	0.00	0.97	16.50	38.45	21.95
		High	H	95.52	20.67	0.00	0.99	19.68	38.45	18.77
		High	V	89.12	17.43	0.00	0.99	16.44	38.45	22.01
10.0	QPSK	Low	H	94.22	19.24	0.00	0.96	18.28	38.45	20.17
		Low	V	88.02	16.15	0.00	0.96	15.19	38.45	23.26
		Middle	H	94.69	19.76	0.00	0.97	18.79	38.45	19.66
		Middle	V	88.60	16.81	0.00	0.97	15.84	38.45	22.61
		High	H	94.28	19.41	0.00	0.98	18.43	38.45	20.02
		High	V	88.20	16.48	0.00	0.98	15.50	38.45	22.95
	16QAM	Low	H	94.13	19.15	0.00	0.96	18.19	38.45	20.26
		Low	V	87.95	16.08	0.00	0.96	15.12	38.45	23.33
		Middle	H	94.30	19.37	0.00	0.97	18.40	38.45	20.05
		Middle	V	88.17	16.38	0.00	0.97	15.41	38.45	23.04
		High	H	94.16	19.29	0.00	0.98	18.31	38.45	20.14
		High	V	88.01	16.29	0.00	0.98	15.31	38.45	23.14

LTE Band 12:

BW (MHz)	Modulation	Test Channel	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
					Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
1.40	QPSK	Low	H	95.43	18.43	0.00	0.94	17.49	34.77	17.28
		Low	V	89.40	14.79	0.00	0.94	13.85	34.77	20.92
		Middle	H	95.91	19.05	0.00	0.94	18.11	34.77	16.66
		Middle	V	90.02	15.60	0.00	0.94	14.66	34.77	20.11
		High	H	95.32	18.60	0.00	0.94	17.66	34.77	17.11
		High	V	89.38	15.15	0.00	0.94	14.21	34.77	20.56
	16QAM	Low	H	95.38	18.38	0.00	0.94	17.44	34.77	17.33
		Low	V	89.32	14.71	0.00	0.94	13.77	34.77	21.00
		Middle	H	95.76	18.90	0.00	0.94	17.96	34.77	16.81
		Middle	V	89.86	15.44	0.00	0.94	14.50	34.77	20.27
		High	H	95.25	18.53	0.00	0.94	17.59	34.77	17.18
		High	V	89.31	15.08	0.00	0.94	14.14	34.77	20.63
3.00	QPSK	Low	H	94.33	17.35	0.00	0.94	16.41	34.77	18.36
		Low	V	88.31	13.72	0.00	0.94	12.78	34.77	21.99
		Middle	H	94.42	17.56	0.00	0.94	16.62	34.77	18.15
		Middle	V	89.36	14.94	0.00	0.94	14.00	34.77	20.77
		High	H	94.47	17.74	0.00	0.94	16.80	34.77	17.97
		High	V	88.75	14.50	0.00	0.94	13.56	34.77	21.21
	16QAM	Low	H	94.26	17.28	0.00	0.94	16.34	34.77	18.43
		Low	V	88.15	13.56	0.00	0.94	12.62	34.77	22.15
		Middle	H	94.33	17.47	0.00	0.94	16.53	34.77	18.24
		Middle	V	88.71	14.29	0.00	0.94	13.35	34.77	21.42
		High	H	94.35	17.62	0.00	0.94	16.68	34.77	18.09
		High	V	88.43	14.18	0.00	0.94	13.24	34.77	21.53
5.00	QPSK	Low	H	93.39	16.43	0.00	0.94	15.49	34.77	19.28
		Low	V	87.09	12.53	0.00	0.94	11.59	34.77	23.18
		Middle	H	93.51	16.65	0.00	0.94	15.71	34.77	19.06
		Middle	V	88.27	13.85	0.00	0.94	12.91	34.77	21.86
		High	H	93.50	16.75	0.00	0.94	15.81	34.77	18.96
		High	V	87.66	13.39	0.00	0.94	12.45	34.77	22.32
	16QAM	Low	H	93.18	16.22	0.00	0.94	15.28	34.77	19.49
		Low	V	87.03	12.47	0.00	0.94	11.53	34.77	23.24
		Middle	H	93.29	16.43	0.00	0.94	15.49	34.77	19.28
		Middle	V	88.06	13.64	0.00	0.94	12.70	34.77	22.07
		High	H	93.41	16.66	0.00	0.94	15.72	34.77	19.05
		High	V	87.52	13.25	0.00	0.94	12.31	34.77	22.46
10.0	QPSK	Low	H	95.30	18.38	0.00	0.94	17.44	34.77	17.33
		Low	V	93.60	19.10	0.00	0.94	18.16	34.77	16.61
		Middle	H	95.19	18.33	0.00	0.94	17.39	34.77	17.38
		Middle	V	93.77	19.35	0.00	0.94	18.41	34.77	16.36
		High	H	95.71	18.92	0.00	0.94	17.98	34.77	16.79
		High	V	94.19	19.86	0.00	0.94	18.92	34.77	15.85
	16QAM	Low	H	96.43	19.51	0.00	0.94	18.57	34.77	16.20
		Low	V	94.61	20.11	0.00	0.94	19.17	34.77	15.60
		Middle	H	95.98	19.12	0.00	0.94	18.18	34.77	16.59
		Middle	V	94.49	20.07	0.00	0.94	19.13	34.77	15.64
		High	H	95.24	18.45	0.00	0.94	17.51	34.77	17.26
		High	V	93.73	19.40	0.00	0.94	18.46	34.77	16.31

LTE Band 17

BW (MHz)	Modulation	Test Channel	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
					Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
5.00	QPSK	Low	H	95.52	18.65	0.00	0.94	17.71	34.77	17.06
		Low	V	89.83	15.39	0.00	0.94	14.45	34.77	20.32
		Middle	H	95.38	18.57	0.00	0.94	17.63	34.77	17.14
		Middle	V	89.71	15.35	0.00	0.94	14.41	34.77	20.36
		High	H	93.69	16.94	0.00	0.94	16.00	34.77	18.77
		High	V	87.88	13.61	0.00	0.94	12.67	34.77	22.10
	16QAM	Low	H	95.47	18.60	0.00	0.94	17.66	34.77	17.11
		Low	V	89.76	15.32	0.00	0.94	14.38	34.77	20.39
		Middle	H	95.31	18.50	0.00	0.94	17.56	34.77	17.21
		Middle	V	89.67	15.31	0.00	0.94	14.37	34.77	20.40
		High	H	93.52	16.77	0.00	0.94	15.83	34.77	18.94
		High	V	87.81	13.54	0.00	0.94	12.60	34.77	22.17
10.0	QPSK	Low	H	95.49	18.66	0.00	0.94	17.72	34.77	17.05
		Low	V	89.74	15.36	0.00	0.94	14.42	34.77	20.35
		Middle	H	95.52	18.71	0.00	0.94	17.77	34.77	17.00
		Middle	V	89.87	15.51	0.00	0.94	14.57	34.77	20.20
		High	H	95.64	18.85	0.00	0.94	17.91	34.77	16.86
		High	V	90.14	15.81	0.00	0.94	14.87	34.77	19.90
	16QAM	Low	H	95.36	18.53	0.00	0.94	17.59	34.77	17.18
		Low	V	89.69	15.31	0.00	0.94	14.37	34.77	20.40
		Middle	H	95.39	18.58	0.00	0.94	17.64	34.77	17.13
		Middle	V	89.73	15.37	0.00	0.94	14.43	34.77	20.34
		High	H	95.49	18.70	0.00	0.94	17.76	34.77	17.01
		High	V	89.97	15.64	0.00	0.94	14.70	34.77	20.07

LTE Band 66:

BW (MHz)	Modulation	Test Channel	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
					Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
1.40	QPSK	Low	H	83.12	7.59	10.63	1.26	16.96	30.00	13.04
		Low	V	88.08	12.24	10.63	1.26	21.61	30.00	8.39
		Middle	H	82.64	7.19	10.74	1.24	16.69	30.00	13.31
		Middle	V	87.66	11.92	10.74	1.24	21.42	30.00	8.58
		High	H	80.99	5.61	10.84	1.23	15.22	30.00	14.78
		High	V	86.00	10.36	10.84	1.23	19.97	30.00	10.03
	16QAM	Low	H	82.14	6.61	10.63	1.26	15.98	30.00	14.02
		Low	V	87.11	11.27	10.63	1.26	20.64	30.00	9.36
		Middle	H	81.66	6.21	10.74	1.24	15.71	30.00	14.29
		Middle	V	86.69	10.95	10.74	1.24	20.45	30.00	9.55
		High	H	80.05	4.67	10.84	1.23	14.28	30.00	15.72
		High	V	85.03	9.39	10.84	1.23	19.00	30.00	11.00
3.00	QPSK	Low	H	83.01	7.48	10.63	1.26	16.85	30.00	13.15
		Low	V	87.98	12.14	10.63	1.26	21.51	30.00	8.49
		Middle	H	82.53	7.08	10.74	1.24	16.58	30.00	13.42
		Middle	V	87.56	11.82	10.74	1.24	21.32	30.00	8.68
		High	H	80.92	5.54	10.84	1.23	15.15	30.00	14.85
		High	V	85.90	10.26	10.84	1.23	19.87	30.00	10.13
	16QAM	Low	H	82.04	6.51	10.63	1.26	15.88	30.00	14.12
		Low	V	87.01	11.17	10.63	1.26	20.54	30.00	9.46
		Middle	H	81.56	6.11	10.74	1.24	15.61	30.00	14.39
		Middle	V	86.59	10.85	10.74	1.24	20.35	30.00	9.65
		High	H	79.95	4.57	10.84	1.23	14.18	30.00	15.82
		High	V	84.93	9.29	10.84	1.23	18.90	30.00	11.10
5.00	QPSK	Low	H	82.86	7.34	10.64	1.26	16.72	30.00	13.28
		Low	V	87.83	12.00	10.64	1.26	21.38	30.00	8.62
		Middle	H	82.38	6.93	10.74	1.24	16.43	30.00	13.57
		Middle	V	87.41	11.67	10.74	1.24	21.17	30.00	8.83
		High	H	80.77	5.39	10.83	1.23	14.99	30.00	15.01
		High	V	85.75	10.10	10.83	1.23	19.70	30.00	10.30
	16QAM	Low	H	81.89	6.37	10.64	1.26	15.75	30.00	14.25
		Low	V	86.86	11.03	10.64	1.26	20.41	30.00	9.59
		Middle	H	81.41	5.96	10.74	1.24	15.46	30.00	14.54
		Middle	V	86.44	10.70	10.74	1.24	20.20	30.00	9.80
		High	H	79.80	4.42	10.83	1.23	14.02	30.00	15.98
		High	V	84.78	9.13	10.83	1.23	18.73	30.00	11.27
10.0	QPSK	Low	H	82.32	6.80	10.65	1.26	16.19	30.00	13.81
		Low	V	87.29	11.46	10.65	1.26	20.85	30.00	9.15
		Middle	H	81.84	6.39	10.74	1.24	15.89	30.00	14.11
		Middle	V	86.87	11.13	10.74	1.24	20.63	30.00	9.37
		High	H	80.23	4.84	10.83	1.23	14.44	30.00	15.56
		High	V	85.21	9.56	10.83	1.23	19.16	30.00	10.84
	16QAM	Low	H	81.35	5.83	10.65	1.26	15.22	30.00	14.78
		Low	V	86.32	10.49	10.65	1.26	19.88	30.00	10.12
		Middle	H	80.87	5.42	10.74	1.24	14.92	30.00	15.08
		Middle	V	85.90	10.16	10.74	1.24	19.66	30.00	10.34
		High	H	79.26	3.87	10.83	1.23	13.47	30.00	16.53
		High	V	84.24	8.59	10.83	1.23	18.19	30.00	11.81

15.0	QPSK	Low	H	81.41	5.90	10.65	1.25	15.30	30.00	14.70
		Low	V	86.38	10.56	10.65	1.25	19.96	30.00	10.04
		Middle	H	80.93	5.48	10.74	1.24	14.98	30.00	15.02
		Middle	V	85.96	10.22	10.74	1.24	19.72	30.00	10.28
		High	H	79.32	3.93	10.82	1.23	13.52	30.00	16.48
		High	V	84.30	8.64	10.82	1.23	18.23	30.00	11.77
	16QAM	Low	H	80.44	4.93	10.65	1.25	14.33	30.00	15.67
		Low	V	85.41	9.59	10.65	1.25	18.99	30.00	11.01
		Middle	H	79.96	4.51	10.74	1.24	14.01	30.00	15.99
		Middle	V	84.99	9.25	10.74	1.24	18.75	30.00	11.25
		High	H	78.35	2.96	10.82	1.23	12.55	30.00	17.45
		High	V	83.33	7.67	10.82	1.23	17.26	30.00	12.74
20.0	QPSK	Low	H	80.71	5.20	10.66	1.25	14.61	30.00	15.39
		Low	V	85.68	9.87	10.66	1.25	19.28	30.00	10.72
		Middle	H	80.23	4.78	10.74	1.24	14.28	30.00	15.72
		Middle	V	85.26	9.52	10.74	1.24	19.02	30.00	10.98
		High	H	78.62	3.22	10.81	1.23	12.80	30.00	17.20
		High	V	83.60	7.93	10.81	1.23	17.51	30.00	12.49
	16QAM	Low	H	79.74	4.23	10.66	1.25	13.64	30.00	16.36
		Low	V	84.71	8.90	10.66	1.25	18.31	30.00	11.69
		Middle	H	79.26	3.81	10.74	1.24	13.31	30.00	16.69
		Middle	V	84.29	8.55	10.74	1.24	18.05	30.00	11.95
		High	H	77.65	2.25	10.81	1.23	11.83	30.00	18.17
		High	V	82.63	6.96	10.81	1.23	16.54	30.00	13.46

Note:
1) The unit of Antenna Gain is dBd for frequency below 1GHz, and the unit of Antenna Gain is dBi for frequency above 1GHz.
2) Absolute Level = Substituted Level - Cable loss + Antenna Gain
3) Margin = Limit-Absolute Level

FCC §2.1049, §22.917, §22.905 & §24.238 & §27.53- OCCUPIED BANDWIDTH

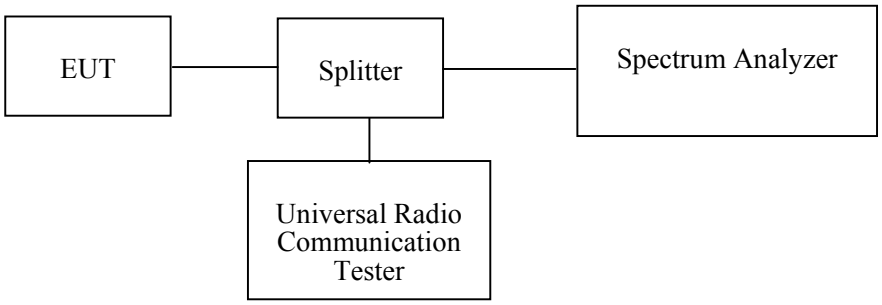
Applicable Standard

FCC §2.1049, §22.917, §22.905, §24.238, §27.53

Test Procedure

The RF output of the transmitter was connected to the simulator and the spectrum analyzer through sufficient attenuation.

The 26 dB & 99% bandwidth was recorded.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU 26	200256	2020-05-09	2021-05-09
R&S	Spectrum Analyzer	FSV40	101474	2020-07-07	2021-07-07
yzjingcheng	Coaxial Cable	KTRFBU-141-50	41005011	Each time	/
yzjingcheng	Coaxial Cable	KTRFBU-141-50	41002201	Each Time	/
E-Microwave	Two-way Spliter	ODP-1-6-2S	OE0120142	Each Time	/

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	26.3～27.5°C
Relative Humidity:	50～58%
ATM Pressure:	100.5～101.0 kPa
Tester:	Chris Mo, Billy Li
Test Date:	2020-09-22～2020-10-20

Test Mode: Transmitting

Test Result: Compliance. Please refer to the following table and plots.

WCDMA:

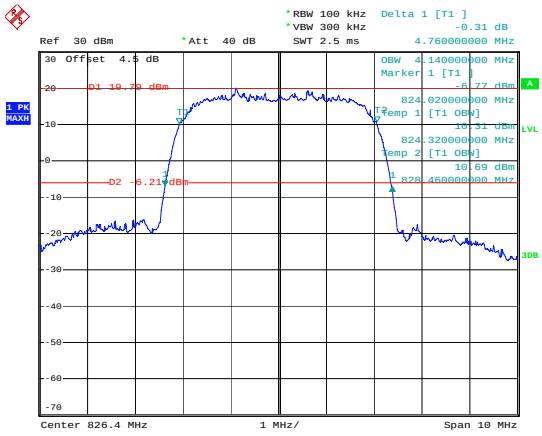
Band	Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
		Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
PCS	Rel 99	4.160	4.140	4.120	4.780	4.760	4.760
	HSDPA	4.140	4.160	4.160	4.760	4.740	4.760
	HSUPA	4.140	4.140	4.140	4.760	4.760	4.760
AWS	Rel 99	4.140	4.140	4.160	4.740	4.760	5.140
	HSDPA	4.240	4.200	4.220	5.440	5.660	5.680
	HSUPA	4.200	4.180	4.220	5.640	5.480	5.760
Cellular	Rel 99	4.140	4.140	4.140	4.760	4.760	4.760
	HSDPA	4.220	4.180	4.160	5.920	5.520	4.760
	HSUPA	4.240	4.260	4.140	6.080	6.500	4.760

LTE Bands:

Band	Bandwidth (MHz)	Modulation mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
			Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
LTE Band 2	1.4 MHz	QPSK	1.102	1.251	1.108	1.297	1.866	1.331
		16QAM	1.102	1.108	1.102	1.319	1.332	1.325
	3 MHz	QPSK	2.683	2.695	2.695	2.958	2.952	2.947
		16QAM	2.683	2.695	2.683	2.958	2.940	2.953
	5 MHz	QPSK	4.501	4.531	4.515	4.964	5.060	5.011
		16QAM	4.530	4.511	4.515	5.036	5.020	5.011
	10 MHz	QPSK	8.944	8.942	8.944	9.700	9.760	9.754
		16QAM	8.944	8.942	8.944	9.700	9.720	9.580
	15 MHz	QPSK	13.459	13.473	13.459	14.805	15.000	14.779
		16QAM	13.459	13.473	13.502	14.805	14.820	14.779
	20 MHz	QPSK	17.829	17.964	17.829	19.508	19.360	19.219
		16QAM	17.771	17.964	17.945	19.334	19.520	19.276
LTE Band 4	1.4 MHz	QPSK	1.102	1.102	1.098	1.301	1.314	1.303
		16QAM	1.102	1.162	1.103	1.315	1.728	1.320
	3 MHz	QPSK	2.695	2.707	2.692	2.956	3.264	2.953
		16QAM	2.695	2.707	2.683	2.954	3.264	2.945
	5 MHz	QPSK	4.486	4.511	4.501	5.022	5.060	5.007
		16QAM	4.515	4.511	4.515	5.036	5.020	5.051
	10 MHz	QPSK	8.944	8.942	8.915	9.667	9.800	9.707
		16QAM	8.915	8.942	8.944	9.696	9.680	9.707
	15 MHz	QPSK	13.415	13.533	13.415	14.761	14.880	14.620
		16QAM	13.372	13.473	13.459	14.674	14.760	14.664
	20 MHz	QPSK	17.771	17.884	17.887	19.392	19.360	19.450
		16QAM	17.713	17.964	17.829	19.161	19.440	19.161

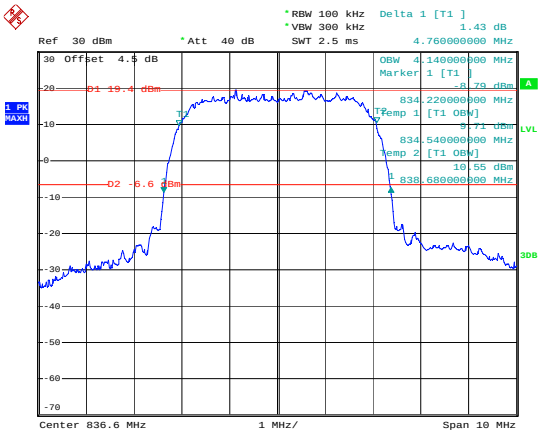
Band	Bandwidth (MHz)	Modulation mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
			Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
LTE Band 5	1.4 MHz	QPSK	1.108	1.102	1.108	1.421	1.302	1.300
		16QAM	1.103	1.102	1.098	1.318	1.320	1.328
	3 MHz	QPSK	2.696	2.695	2.696	2.934	2.952	2.942
		16QAM	2.696	2.695	2.686	2.952	2.964	2.953
	5 MHz	QPSK	4.515	4.531	4.530	5.036	5.020	5.022
		16QAM	4.530	4.511	4.515	5.007	5.000	5.022
	10 MHz	QPSK	8.944	8.942	8.944	9.812	9.800	9.747
		16QAM	8.915	8.942	8.915	9.696	9.680	9.660
LTE Band 12	1.4 MHz	QPSK	1.103	1.096	1.103	1.320	1.296	1.300
		16QAM	1.103	1.108	1.098	1.292	1.314	1.298
	3 MHz	QPSK	2.686	2.683	2.686	2.937	2.940	2.950
		16QAM	2.686	2.683	2.686	2.956	2.964	2.951
	5 MHz	QPSK	4.515	4.511	4.515	4.978	5.040	4.978
		16QAM	4.515	4.491	4.501	4.993	5.000	4.993
	10 MHz	QPSK	8.915	8.942	8.944	9.696	9.760	9.747
		16QAM	8.915	8.942	8.944	9.580	9.680	9.660
LTE Band 17	5 MHz	QPSK	4.511	4.531	4.511	4.990	5.040	5.031
		16QAM	4.531	4.511	4.531	5.012	5.000	5.069
	10 MHz	QPSK	8.942	8.942	8.942	9.796	9.720	9.778
		16QAM	8.942	8.942	8.942	9.658	9.640	9.731
LTE Band 66	1.4 MHz	QPSK	1.103	1.102	1.103	1.328	1.314	1.326
		16QAM	1.098	1.108	1.098	1.308	1.320	1.311
	3 MHz	QPSK	2.686	2.695	2.696	2.934	2.940	2.943
		16QAM	2.686	2.695	2.686	2.964	2.952	2.961
	5 MHz	QPSK	4.515	4.511	4.501	5.022	5.020	5.007
		16QAM	4.501	4.511	4.515	4.993	5.020	5.022
	10 MHz	QPSK	8.944	8.942	8.915	9.754	9.760	9.667
		16QAM	8.944	8.942	8.944	9.667	9.640	9.609
	15 MHz	QPSK	13.459	13.473	13.372	14.805	14.880	14.721
		16QAM	13.415	13.473	13.459	14.674	14.820	14.721
	20 MHz	QPSK	17.829	17.884	17.887	19.276	19.280	19.566
		16QAM	17.887	17.884	17.887	19.334	19.360	19.566

WCDMA Band V, Rel99, Low Channel



Date: 21.SEP.2020 14:48:41

WCDMA Band V, Rel99, Middle Channel



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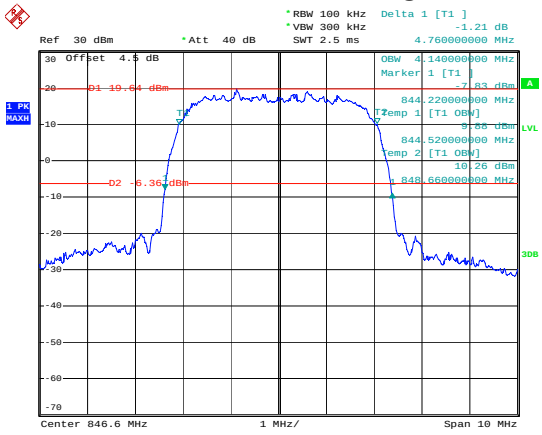
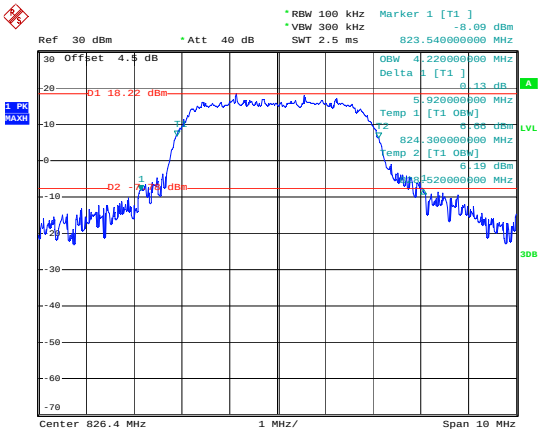
WCDMA Band V, Rel99, High Channel



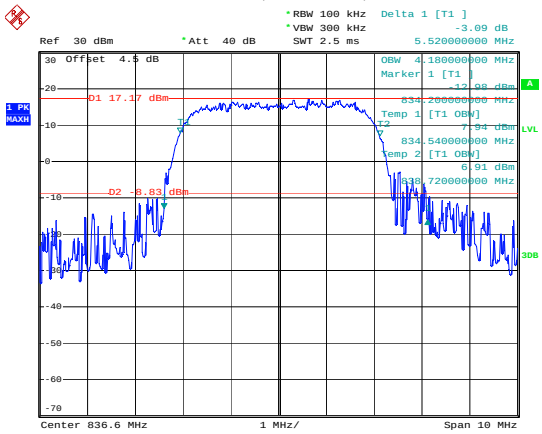
Date: 21.SEP.2020 14:52:22

WCDMA Band V, HSDPA, Low Channel



Date: 21.SEP.2020 15:23:16

WCDMA Band V, HSDPA, Middle Channel



Date: 21.SEP.2020 15:25:14

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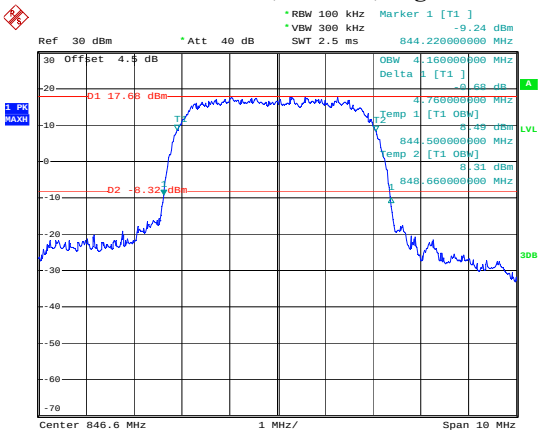

Date: 22.SEP.2020 09:46:49

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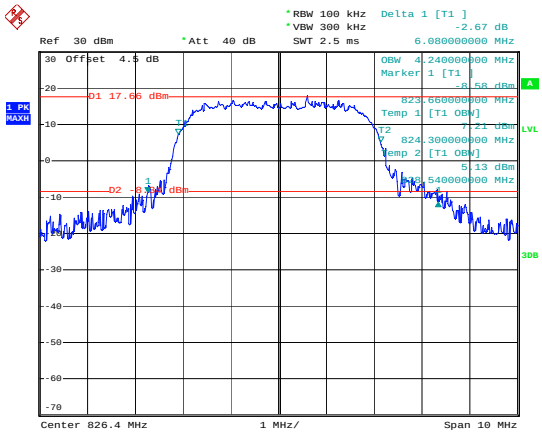
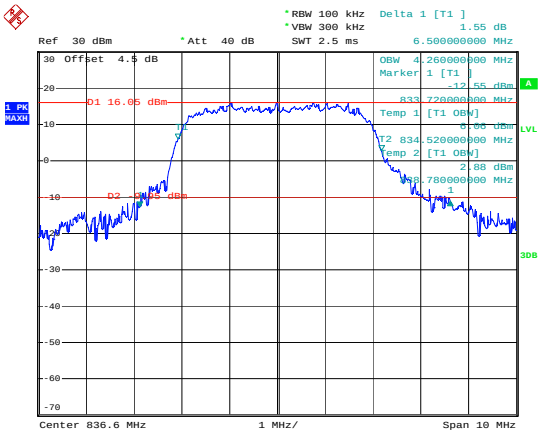


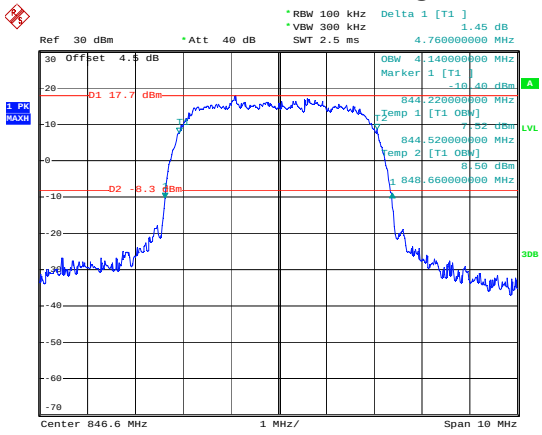
Date: 22.SEP.2020 09:35:59

WCDMA Band V, HSUPA, Middle Channel



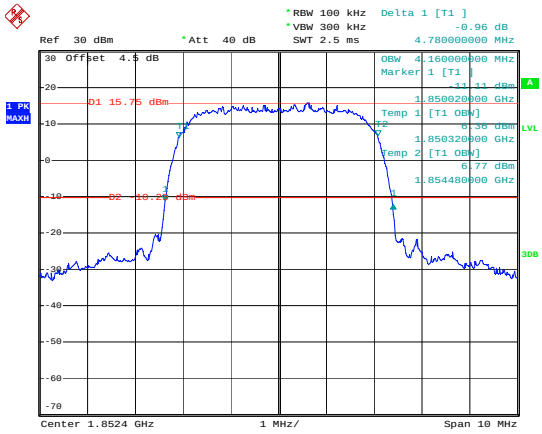
Date: 21.SEP.2020 15:45:38

WCDMA Band V, HSUPA, High Channel



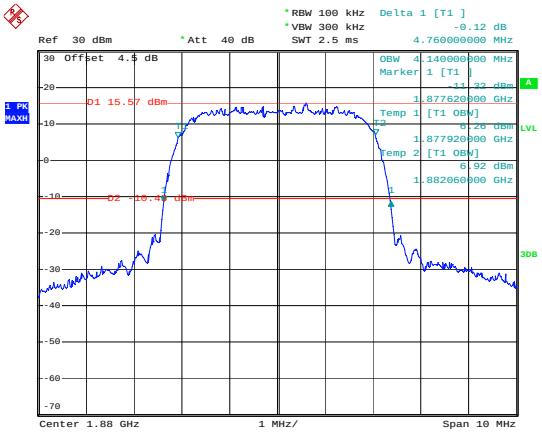
Date: 22.SEP.2020 09:39:03

WCDMA Band II, Rel99, Low Channel



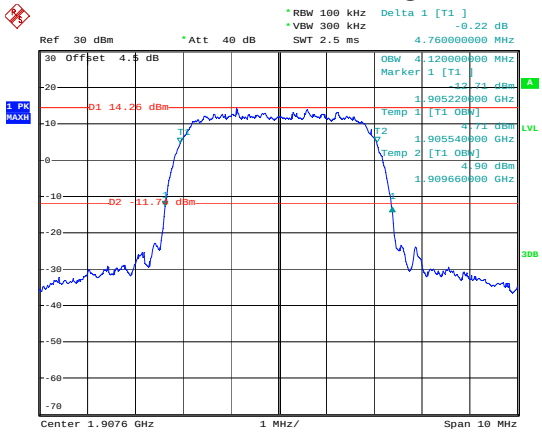
Date: 21.SEP.2020 15:02:21

WCDMA Band II, Rel99, Middle Channel



Date: 21.SEP.2020 15:03:38

WCDMA Band II, Rel99, High Channel



Date: 21.SEP.2020 15:05:41

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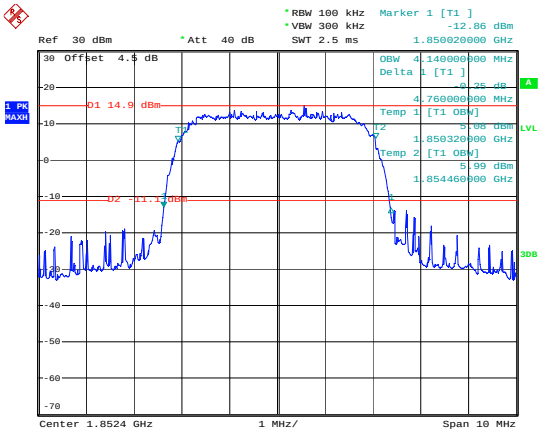
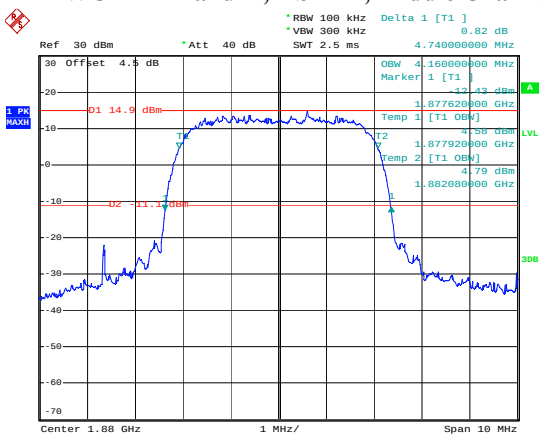


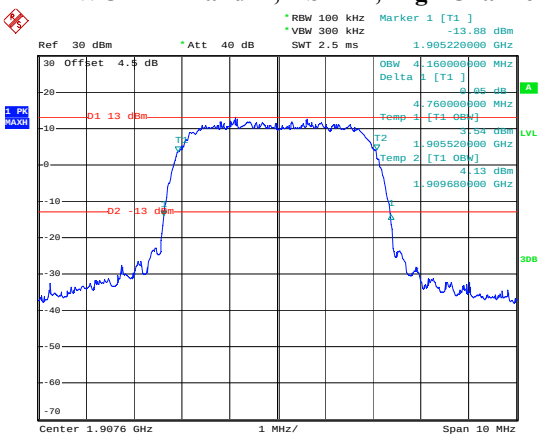
Date: 21.SEP.2020 15:10:25

WCDMA Band II, HSDPA, Middle Channel



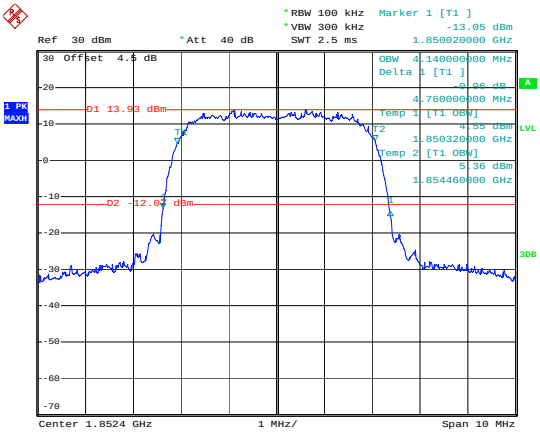
Date: 21.SEP.2020 15:09:29

WCDMA Band II, HSDPA, High Channel



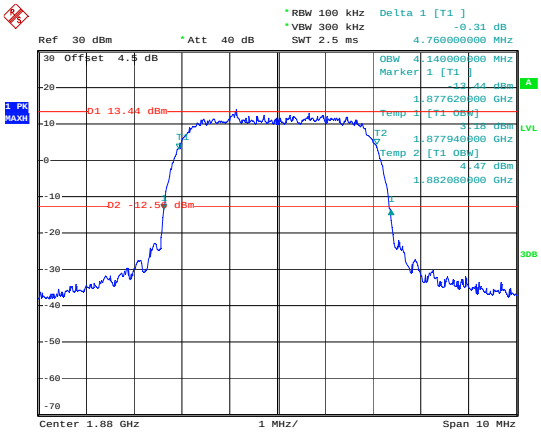
Date: 21.SEP.2020 15:07:29

WCDMA Band II, HSUPA, Low Channel



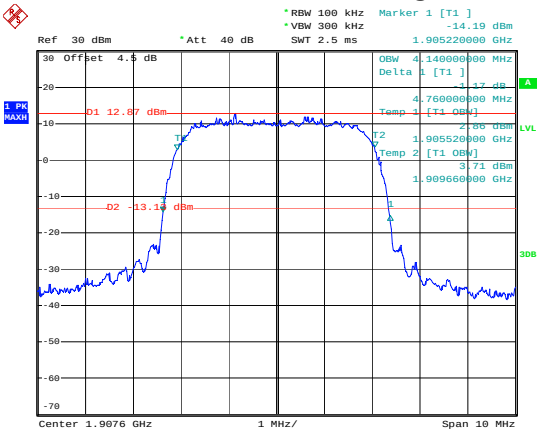
Date: 22.SEP.2020 09:25:23

WCDMA Band II, HSUPA, Middle Channel



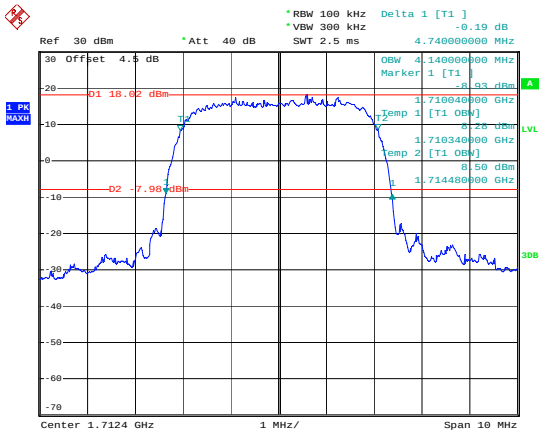
Date: 22.SEP.2020 09:23:26

WCDMA Band II, HSUPA, High Channel



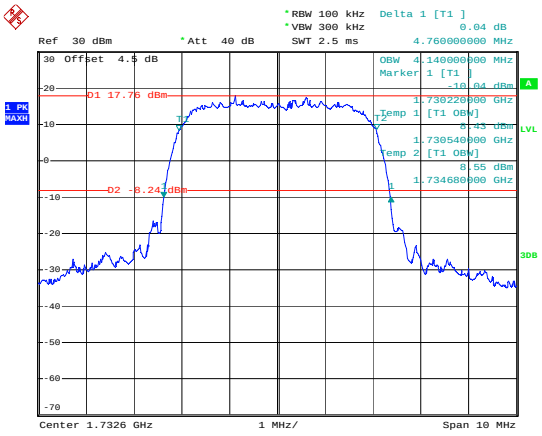
Date: 22.SEP.2020 09:22:10

WCDMA Band IV, Rel99, Low Channel



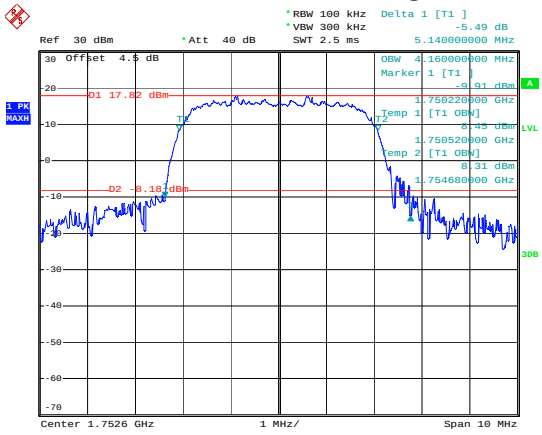
Date: 21.SEP.2020 14:54:09

WCDMA Band IV, Rel99, Middle Channel



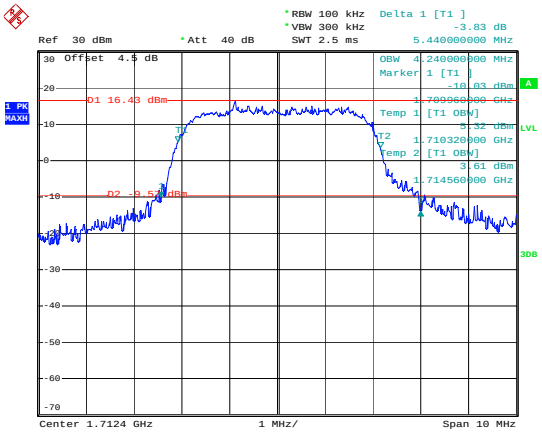
Date: 21.SEP.2020 14:55:38

WCDMA Band IV, Rel99, High Channel



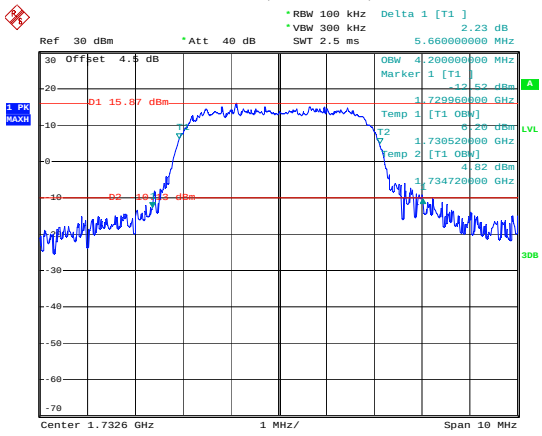
Date: 21.SEP.2020 15:00:16

WCDMA Band IV, HSDPA, Low Channel



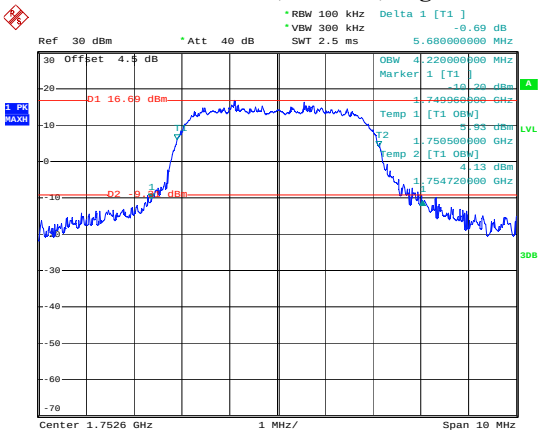
Date: 21.SEP.2020 15:16:09

WCDMA Band IV, HSDPA, Middle Channel



Date: 21.SEP.2020 15:18:45

WCDMA Band IV, HSDPA, High Channel



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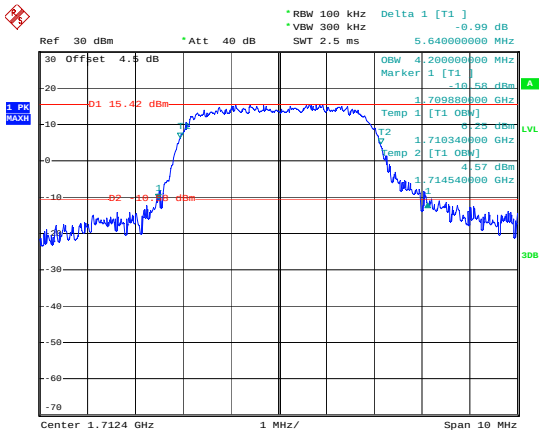
WCDMA Band IV, HSUPA, Low Channel



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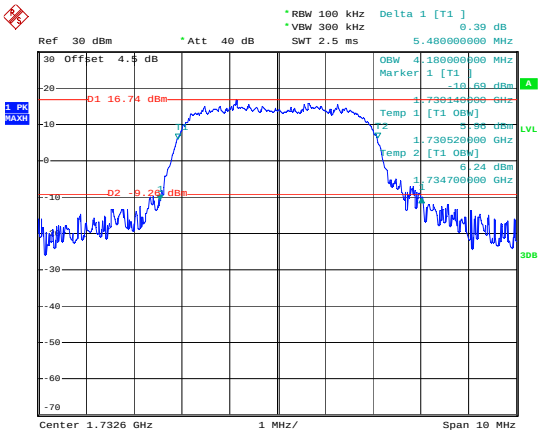
WCDMA Band IV, HSUPA, Middle Channel



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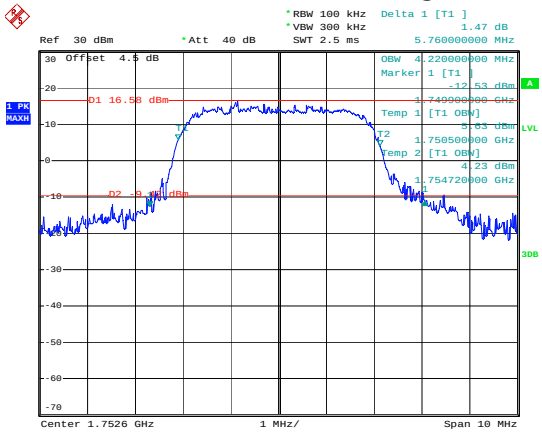
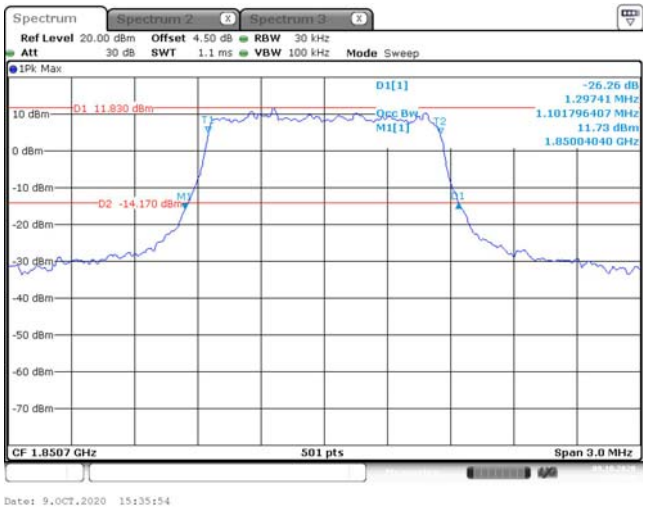
WCDMA Band IV, HSUPA, High Channel



Date: 22.SEP.2020 09:27:00

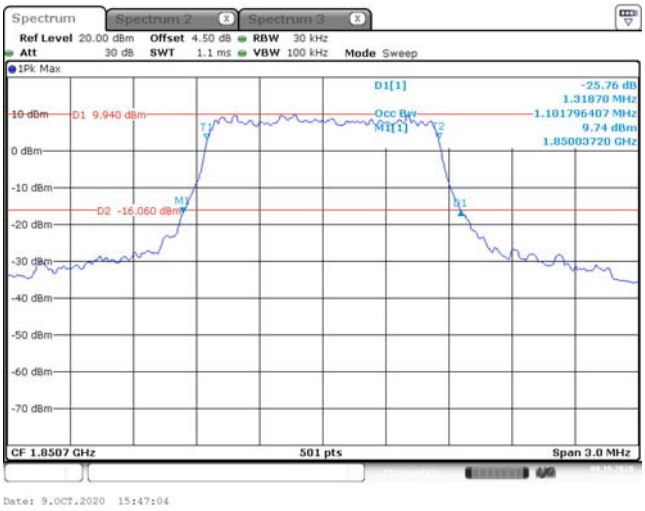
LTE Band 2

1.4M, QPSK, Low Channel



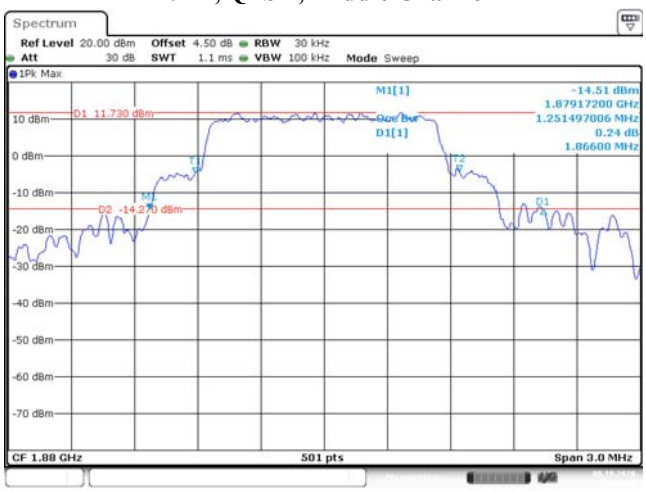
Date: 9.OCT.2020 15:35:54

1.4M, 16QAM, Low Channel



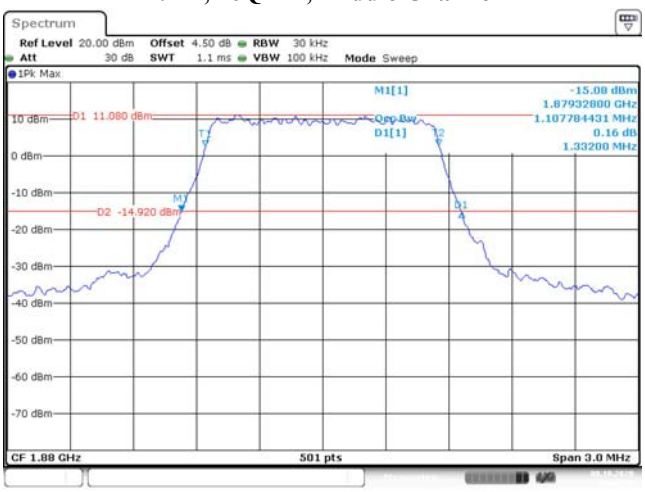
Date: 9.OCT.2020 15:47:04

1.4M, QPSK, Middle Channel



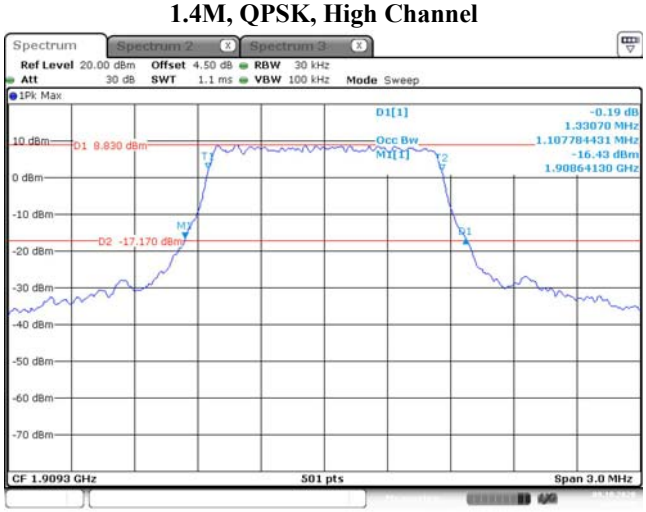
Date: 8.OCT.2020 14:16:57

1.4M, 16QAM, Middle Channel



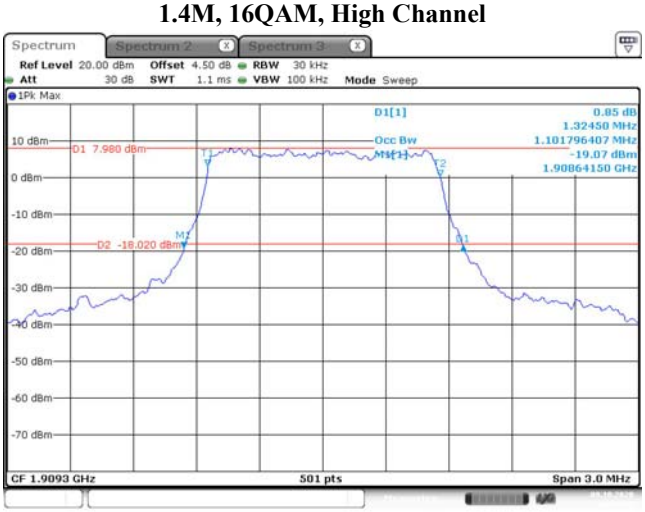
Date: 8.OCT.2020 14:17:16

1.4M, QPSK, High Channel



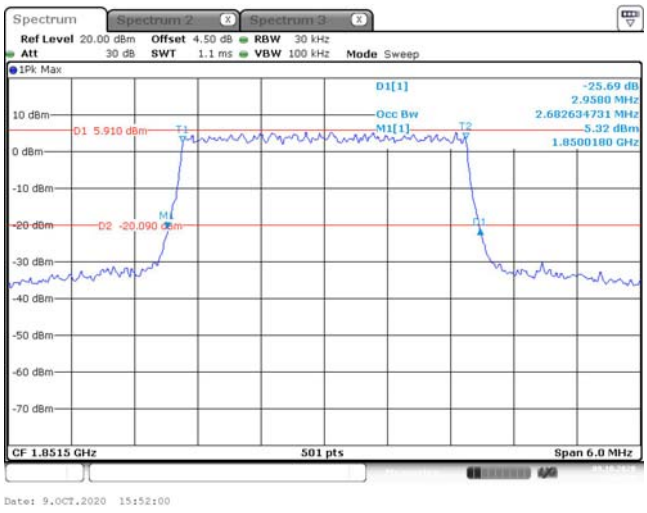
Date: 9.OCT.2020 16:39:17

1.4M, 16QAM, High Channel

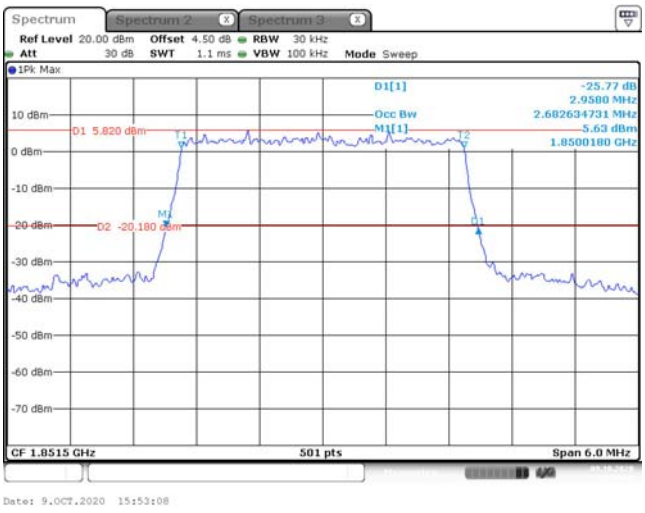


Date: 9.OCT.2020 16:38:14

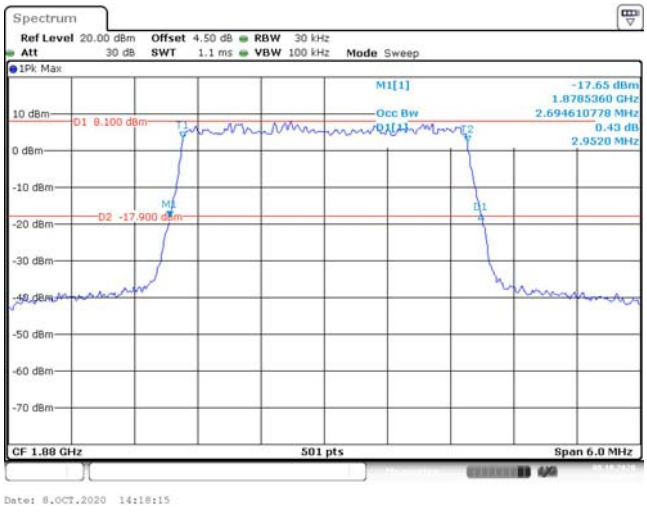
3M, QPSK, Low Channel



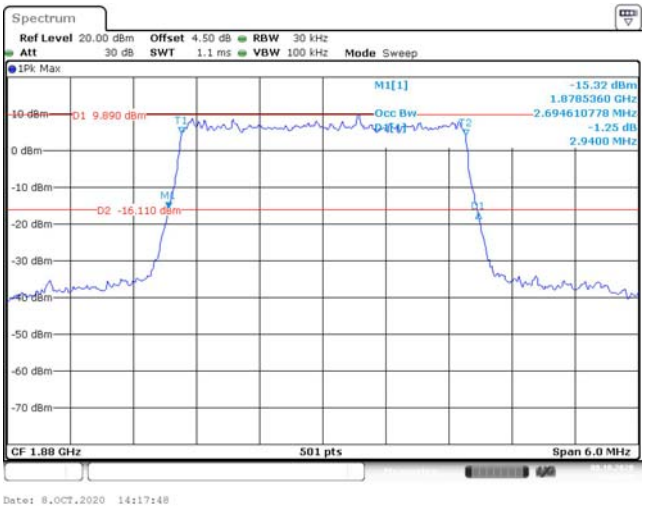
3M, 16QAM, Low Channel



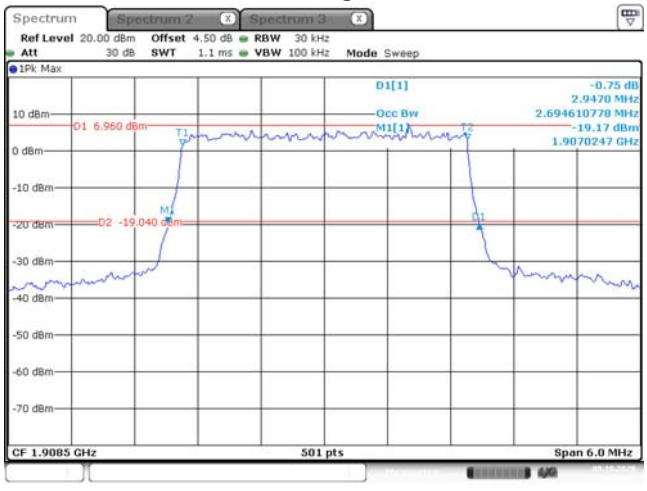
3M, QPSK, Middle Channel



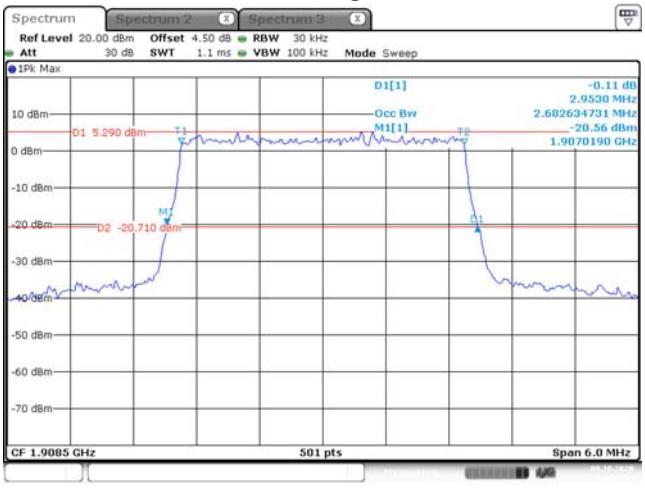
3M, 16QAM, Middle Channel



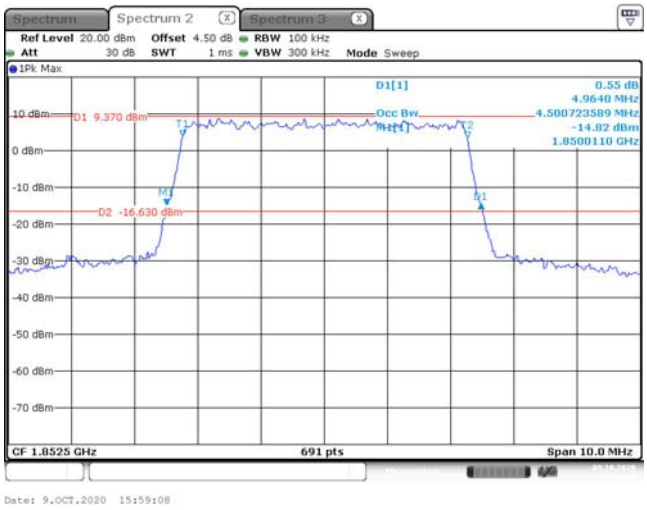
3M, QPSK, High Channel



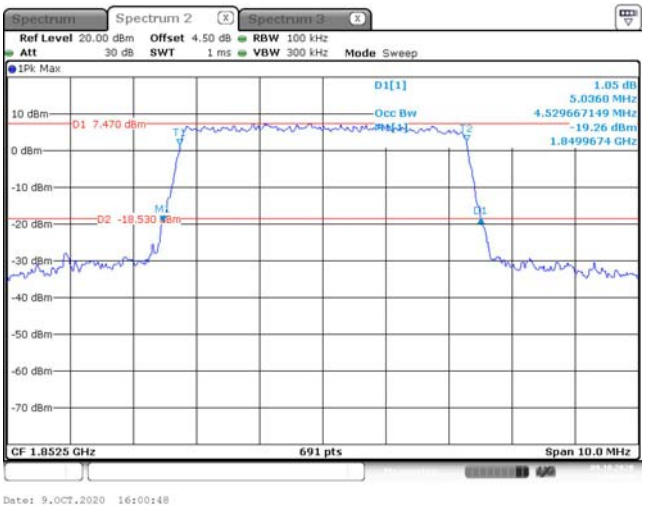
3M, 16QAM, High Channel



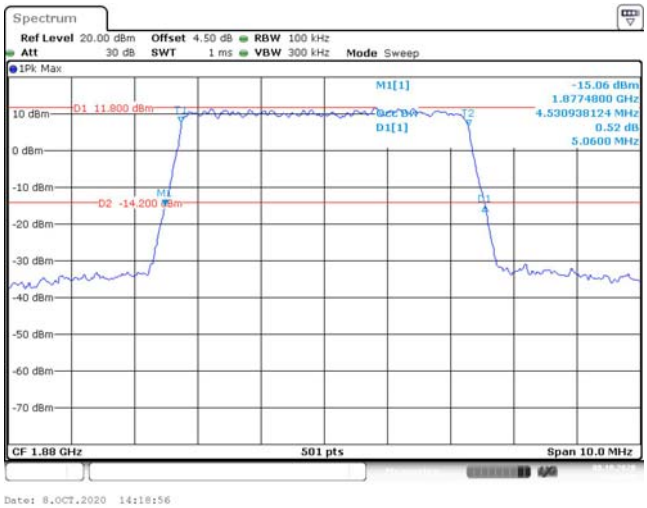
5M, QPSK, Low Channel



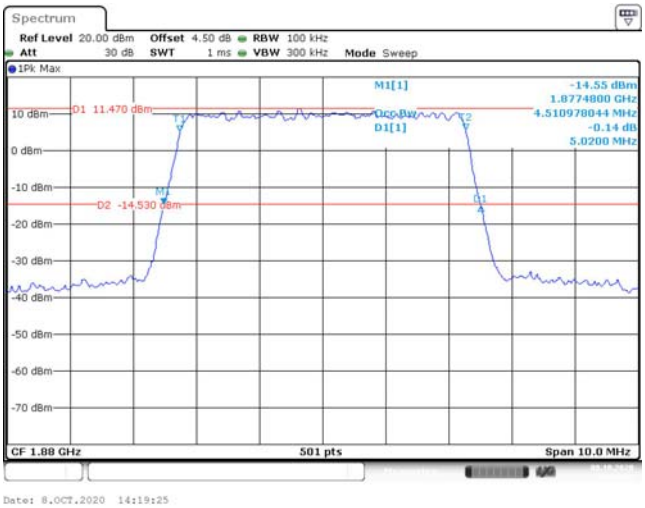
5M, 16QAM, Low Channel



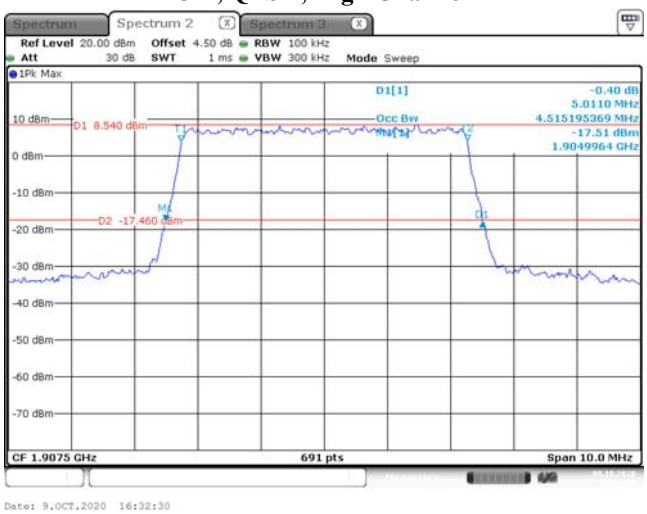
5M, QPSK, Middle Channel



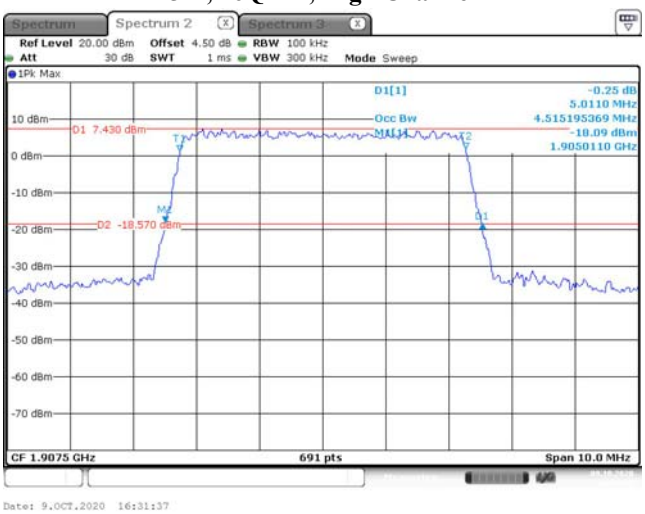
5M, 16QAM, Middle Channel



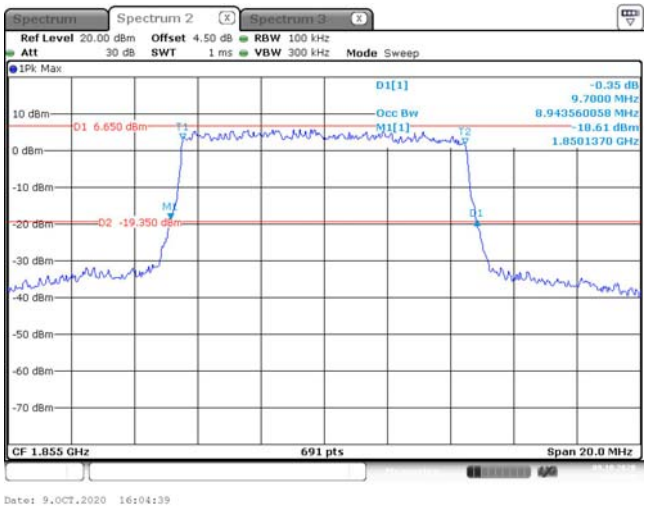
5M, QPSK, High Channel



5M, 16QAM, High Channel



10M, QPSK, Low Channel



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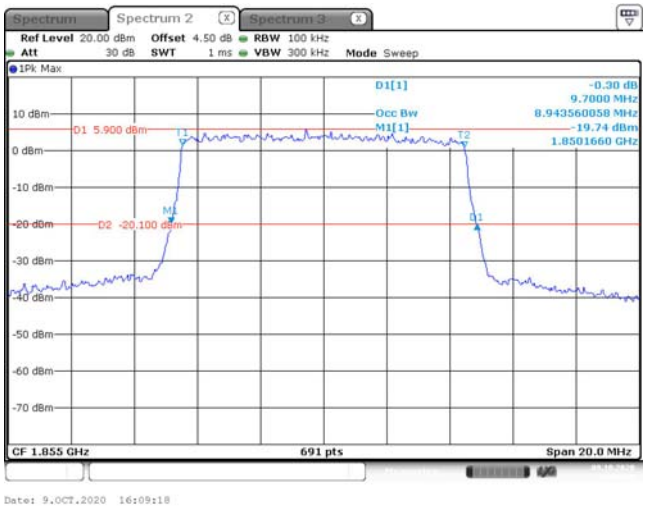
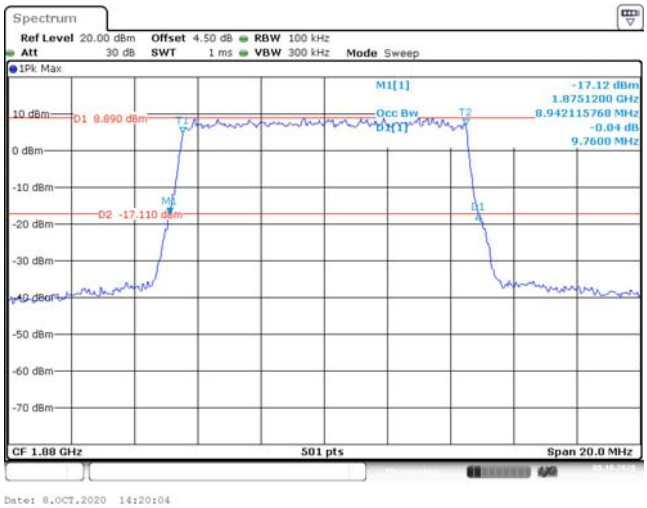


10M, QPSK, Middle Channel



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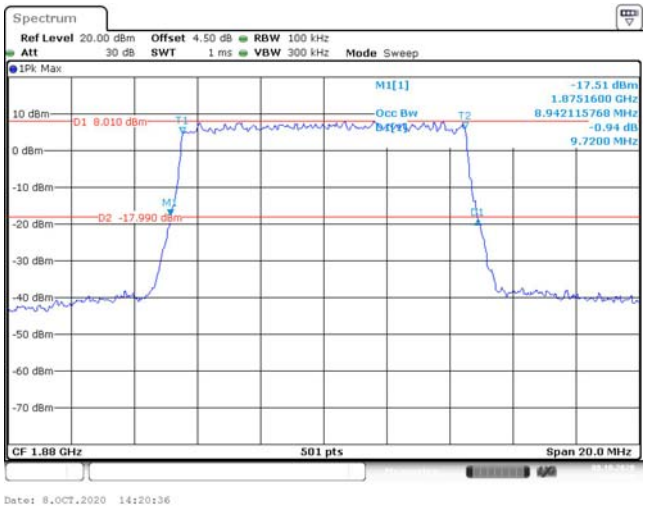
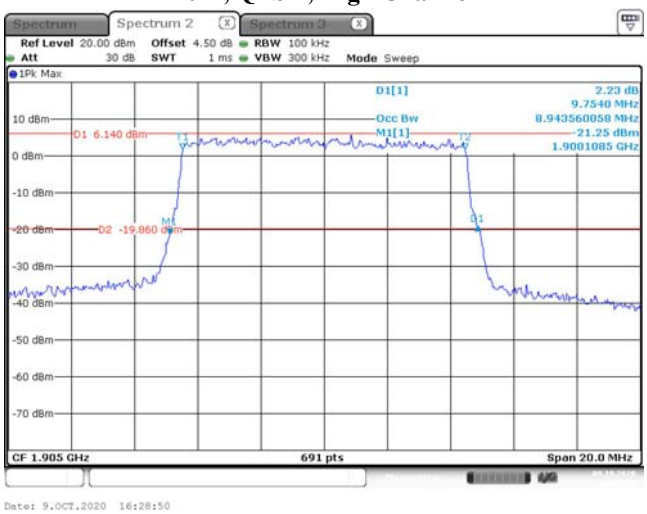
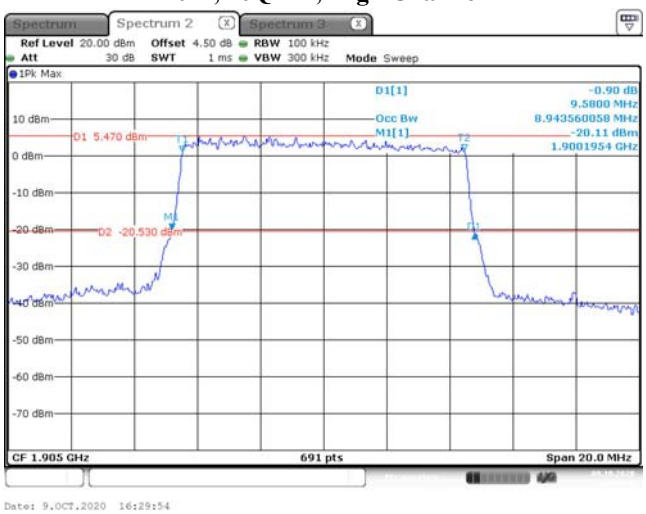


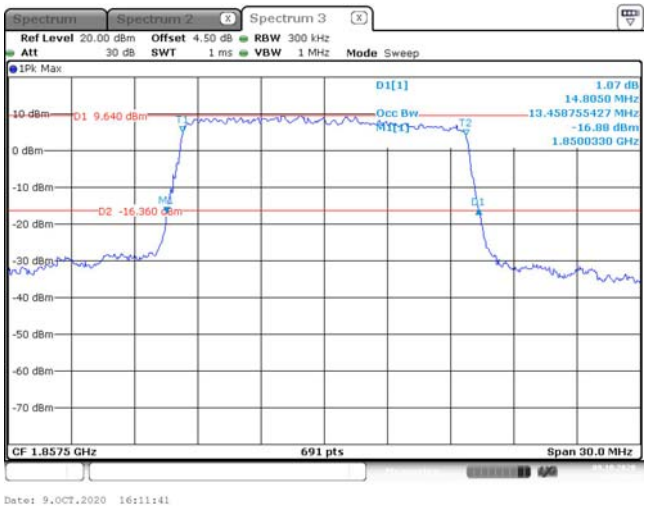
10M, QPSK, High Channel



10M, 16QAM, High Channel



15M, QPSK, Low Channel



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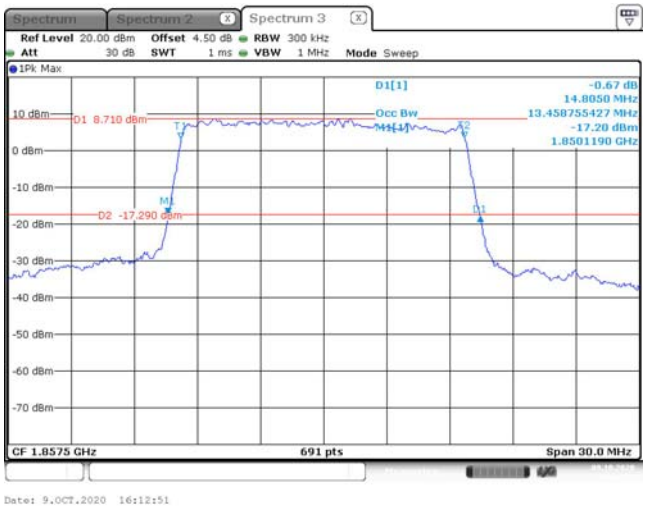
15M, 16QAM, Low Channel



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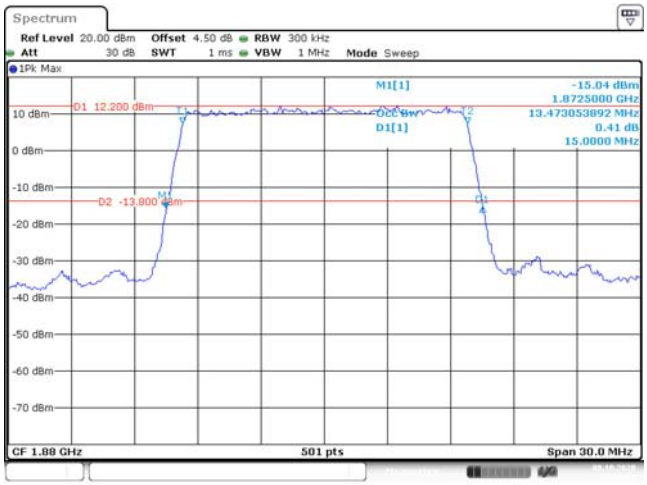
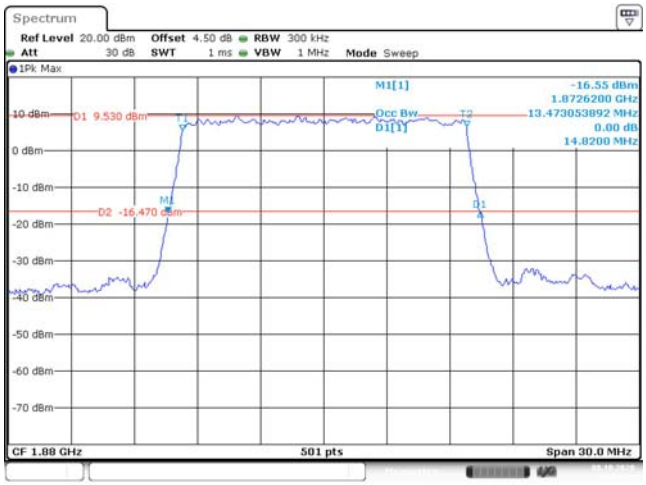
15M, QPSK, Middle Channel



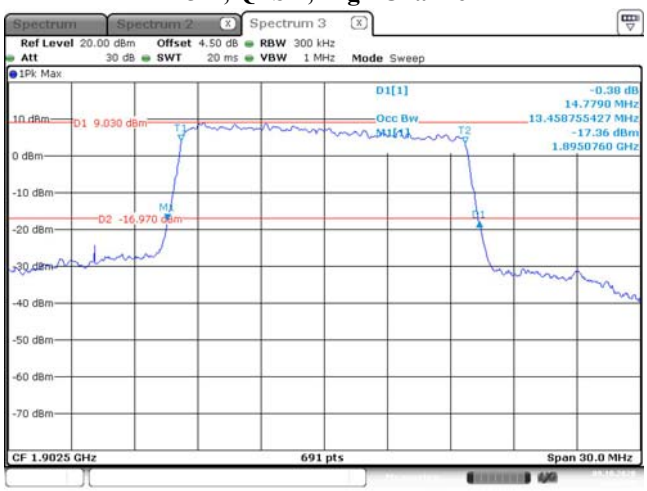
Date: 8.OCT.2020 14:21:05

15M, 16QAM, Middle Channel



Date: 8.OCT.2020 14:24:01

15M, QPSK, High Channel



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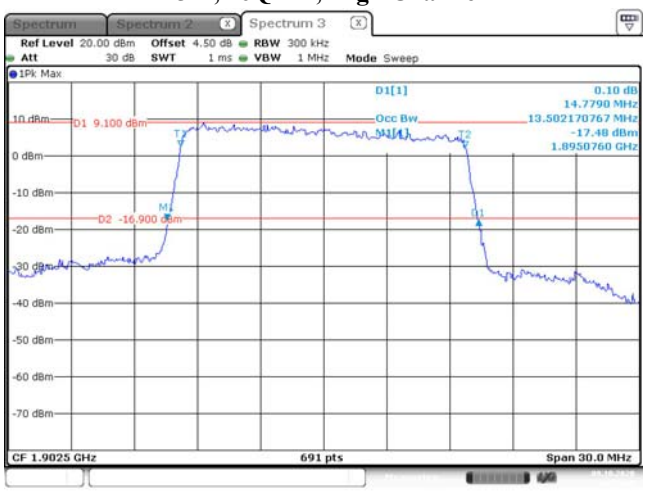
15M, 16QAM, High Channel



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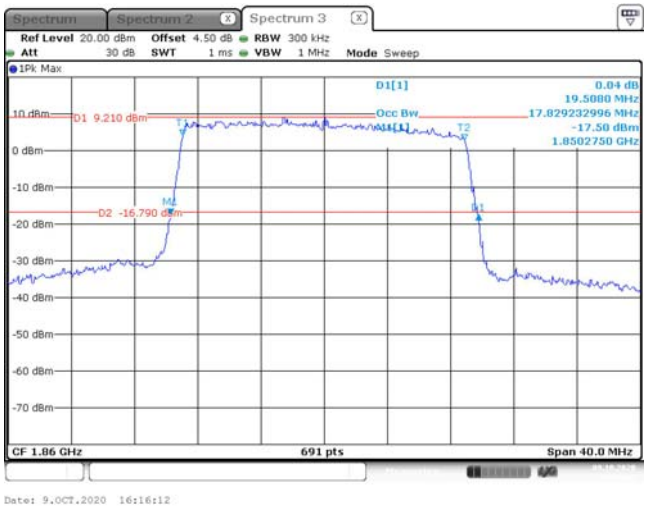
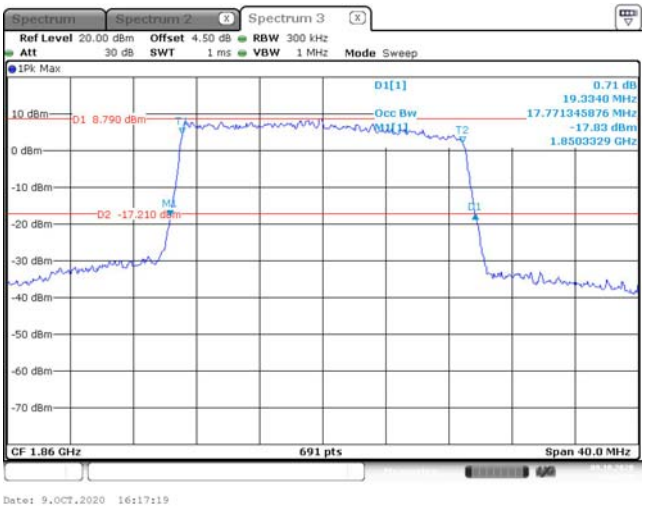
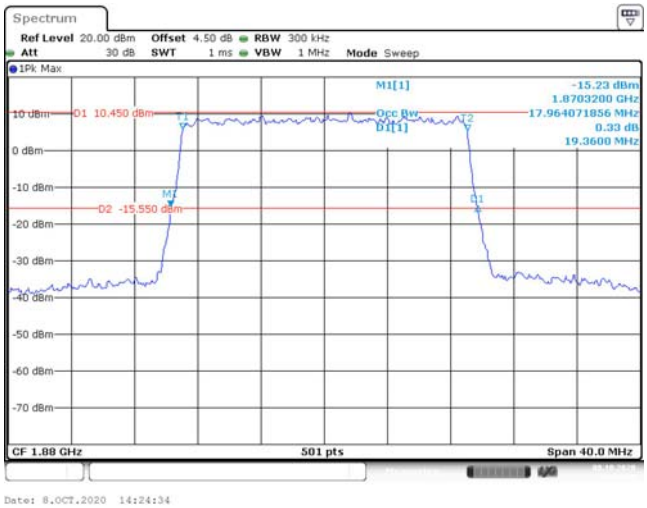
20M, QPSK, Low Channel



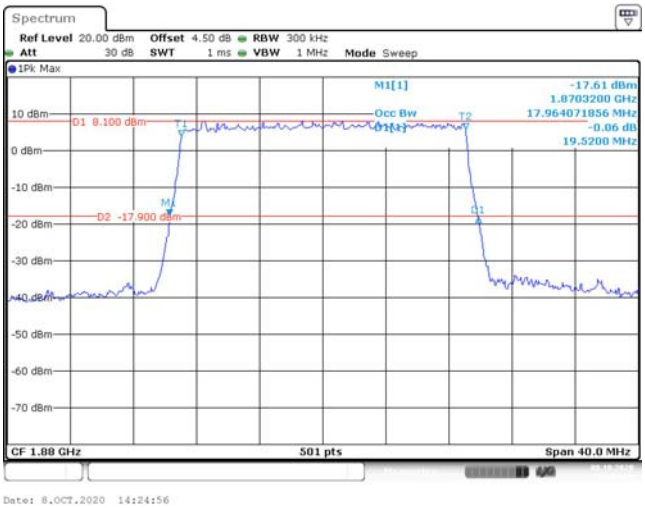
20M, 16QAM, Low Channel



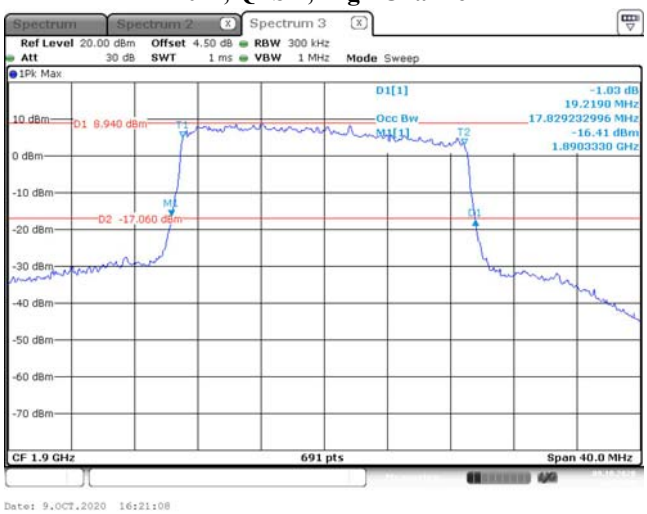
20M, QPSK, Middle Channel



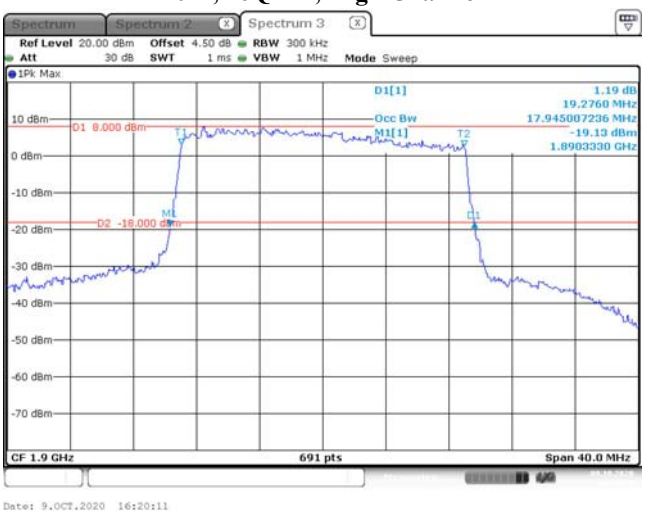
20M, 16QAM, Middle Channel



20M, QPSK, High Channel

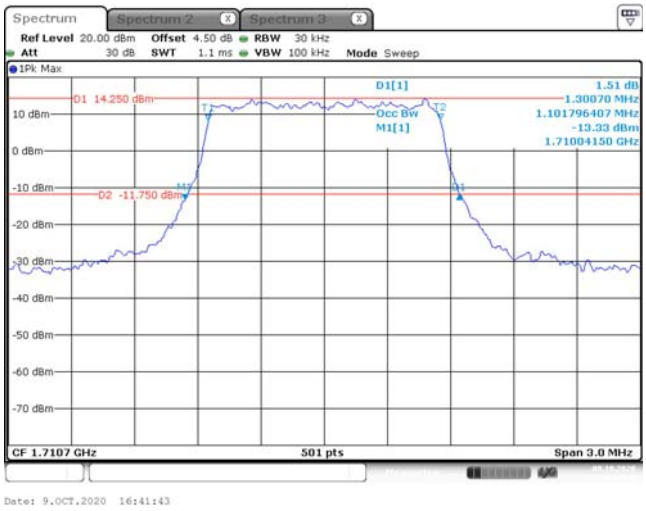


20M, 16QAM, High Channel

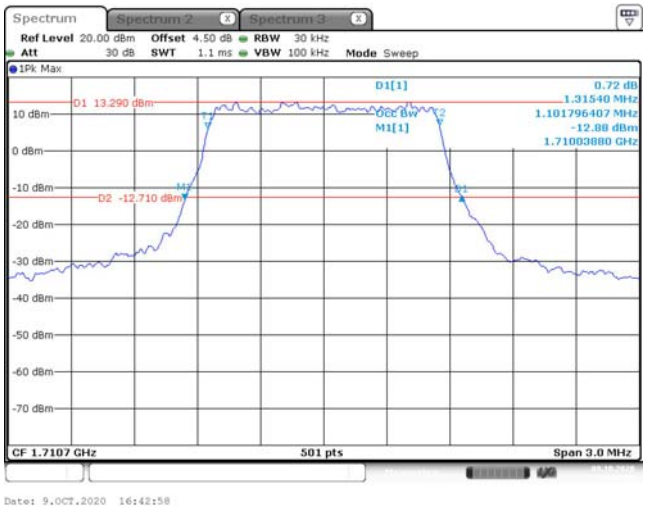


LTE Band 4:

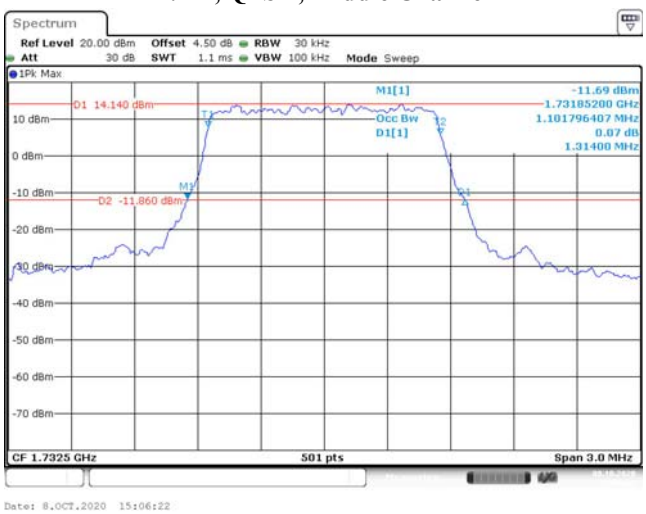
1.4M, QPSK, Low Channel



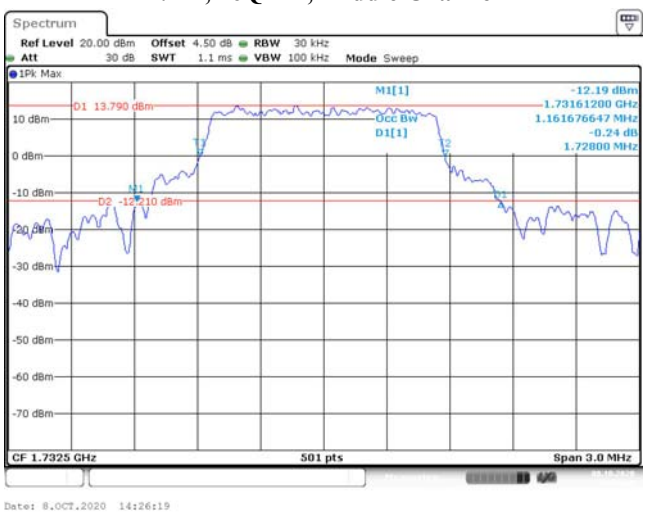
1.4M, 16QAM, Low Channel



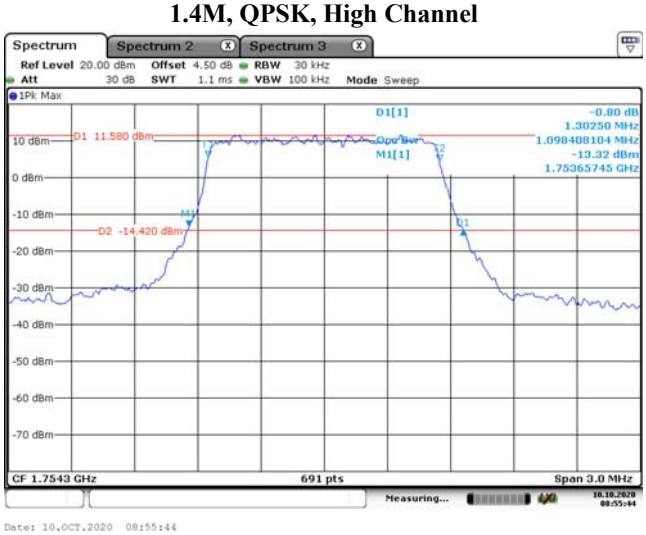
1.4M, QPSK, Middle Channel



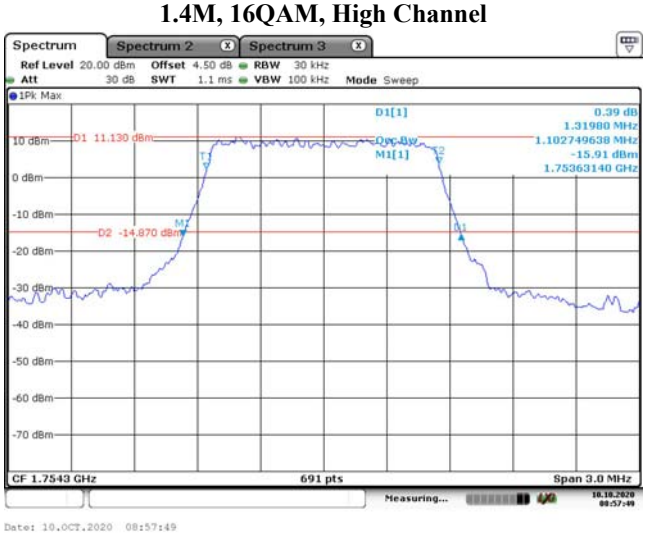
1.4M, 16QAM, Middle Channel



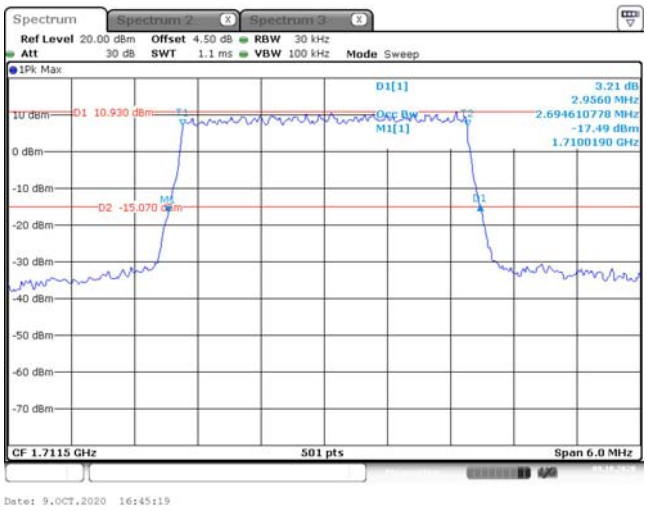
1.4M, QPSK, High Channel



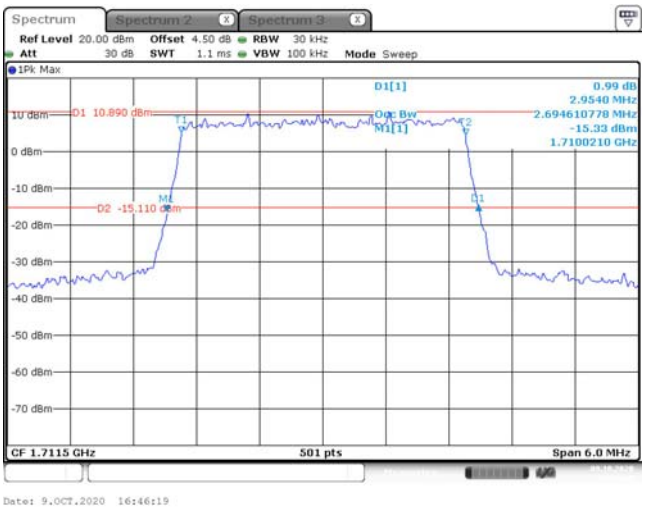
1.4M, 16QAM, High Channel



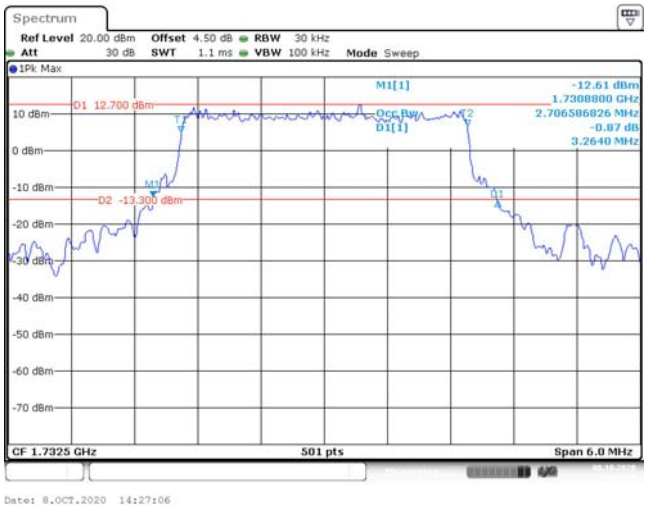
3M, QPSK, Low Channel



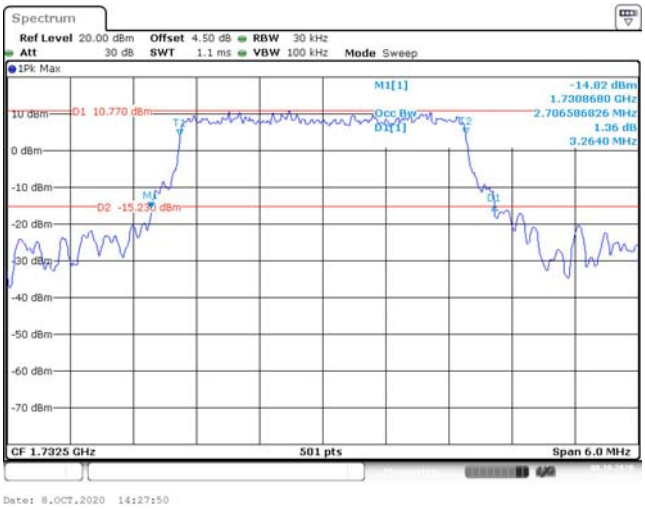
3M, 16QAM, Low Channel



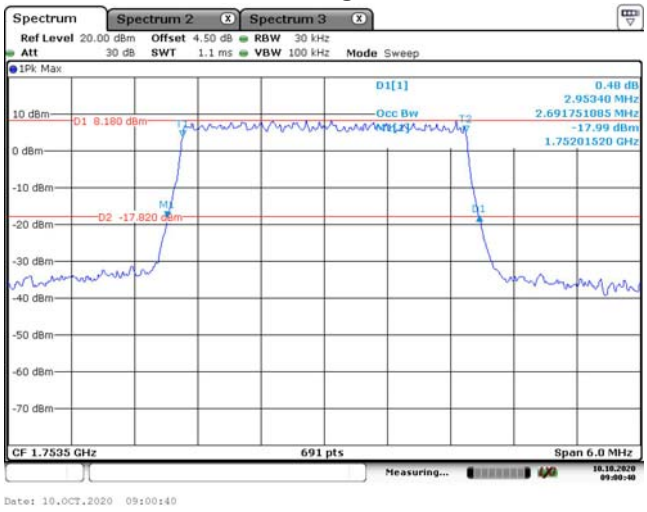
3M, QPSK, Middle Channel



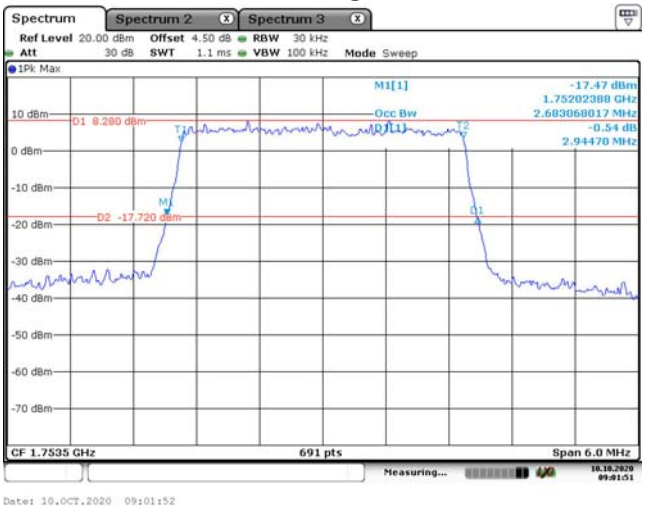
3M, 16QAM, Middle Channel



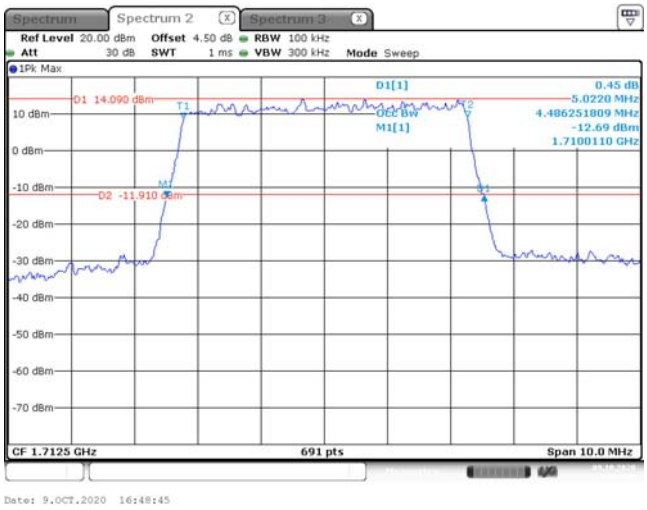
3M, QPSK, High Channel



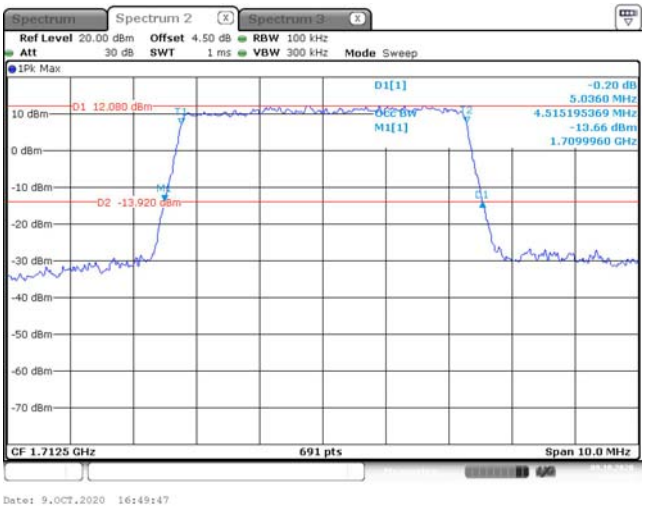
3M, 16QAM, High Channel



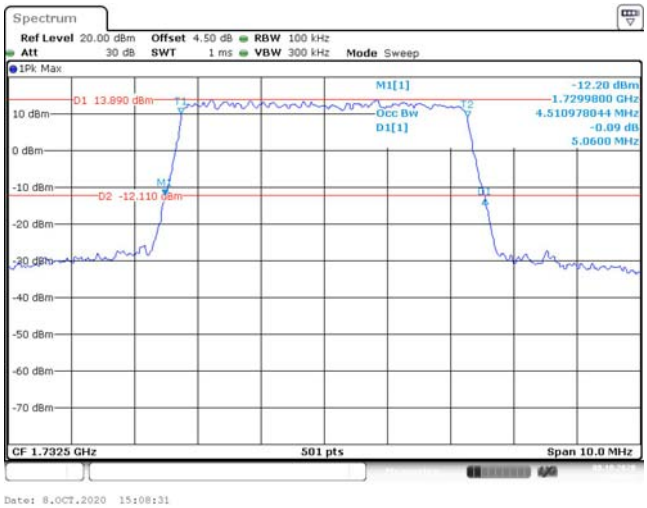
5M, QPSK, Low Channel



5M, 16QAM, Low Channel



5M, QPSK, Middle Channel



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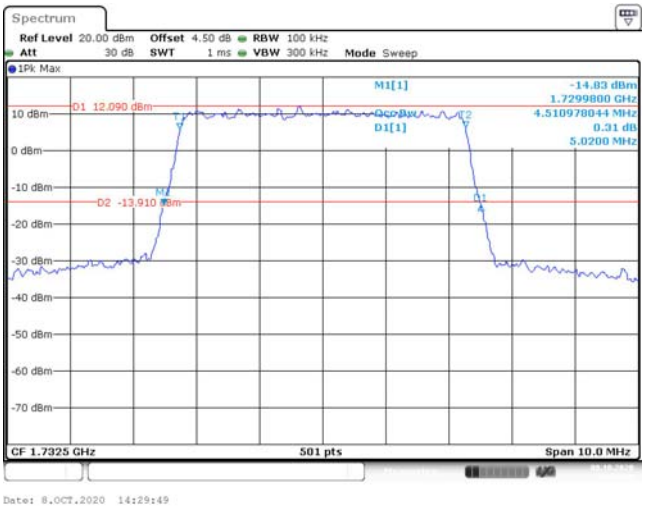
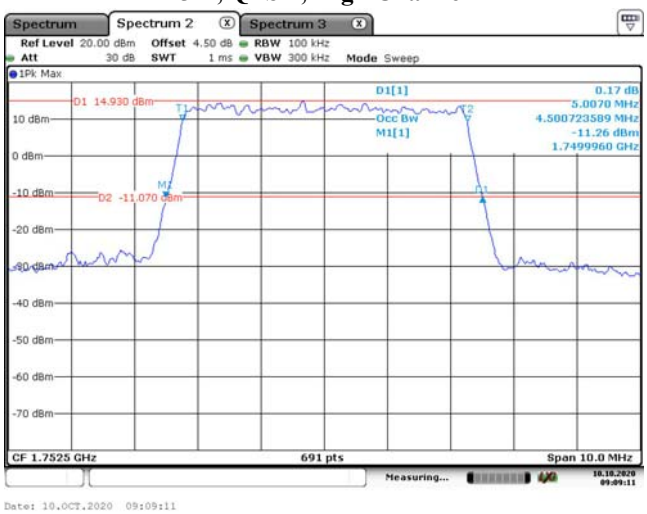
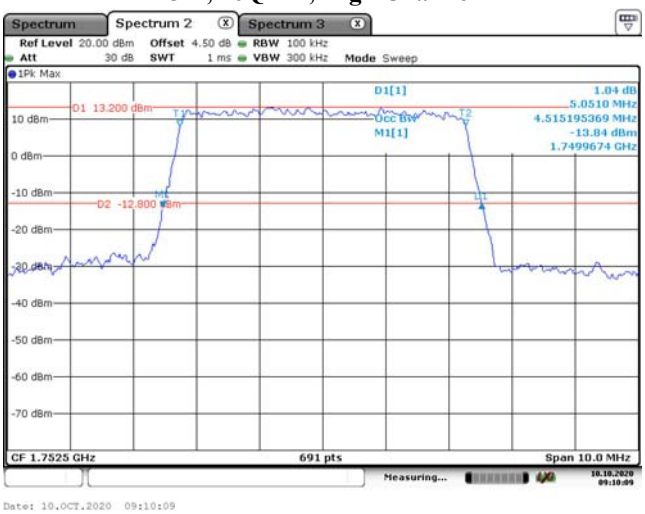


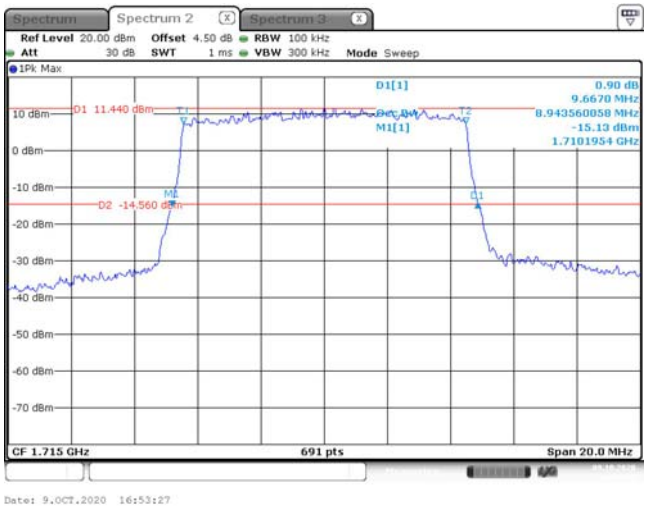
5M, QPSK, High Channel



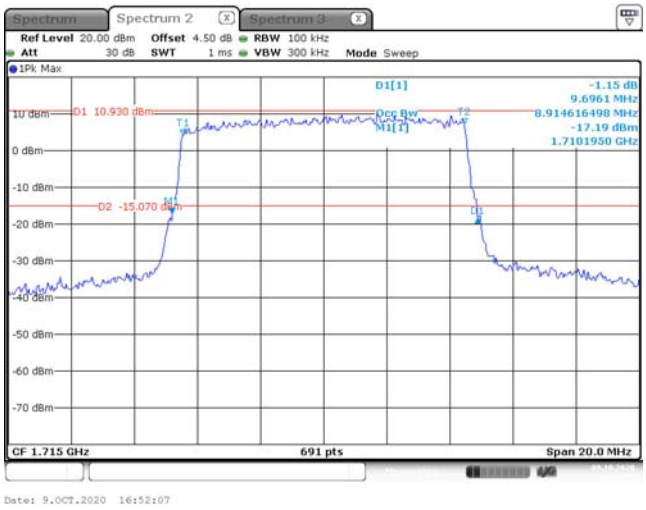
5M, 16QAM, High Channel



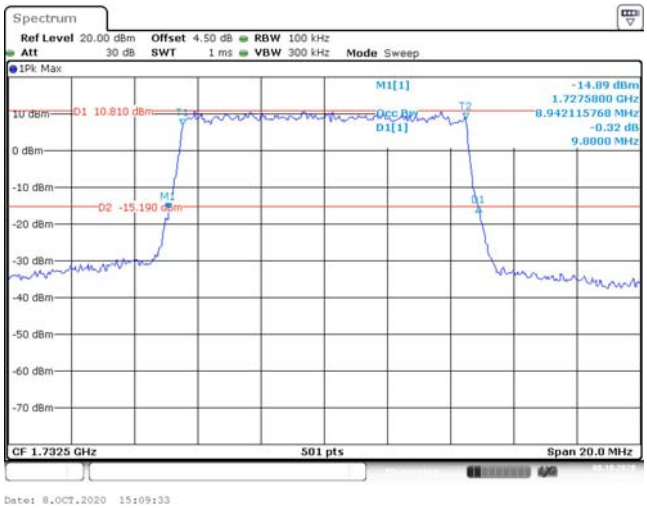
10M, QPSK, Low Channel



10M, 16QAM, Low Channel



10M, QPSK, Middle Channel



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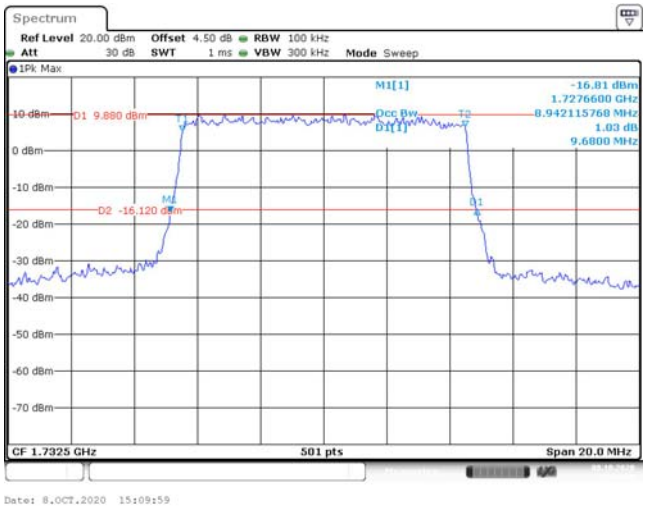
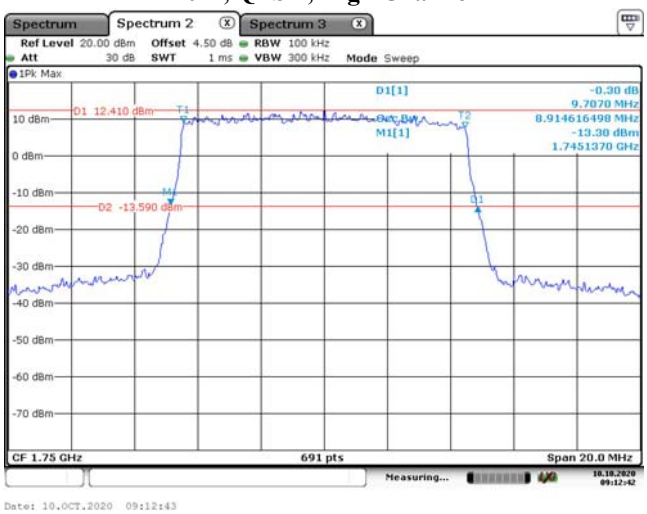
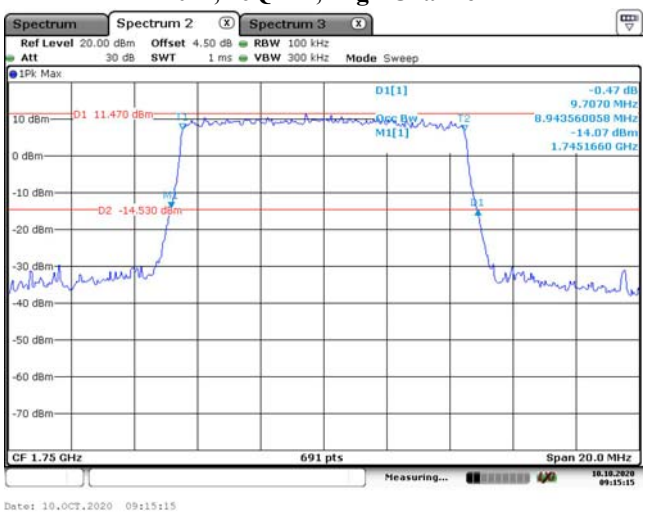


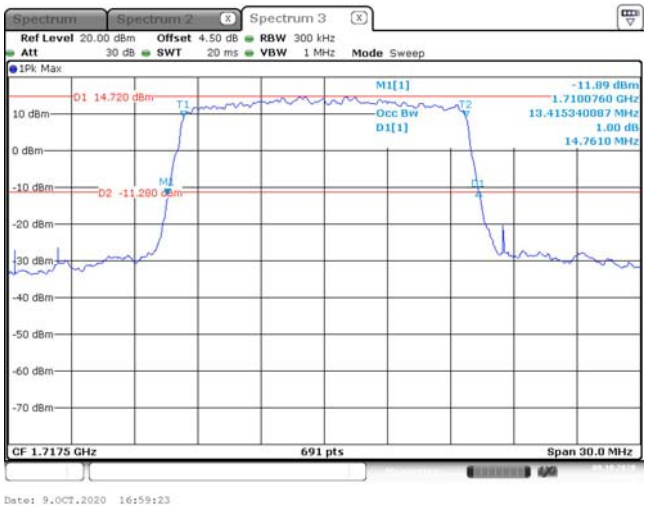
10M, QPSK, High Channel



10M, 16QAM, High Channel



15M, QPSK, Low Channel



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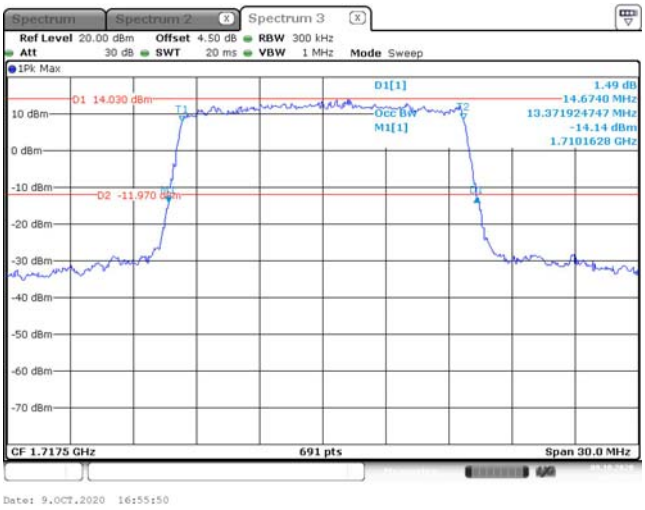
15M, 16QAM, Low Channel



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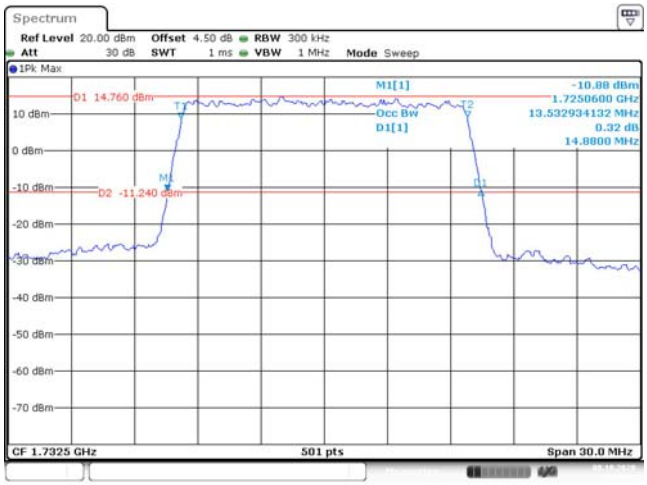
15M, QPSK, Middle Channel



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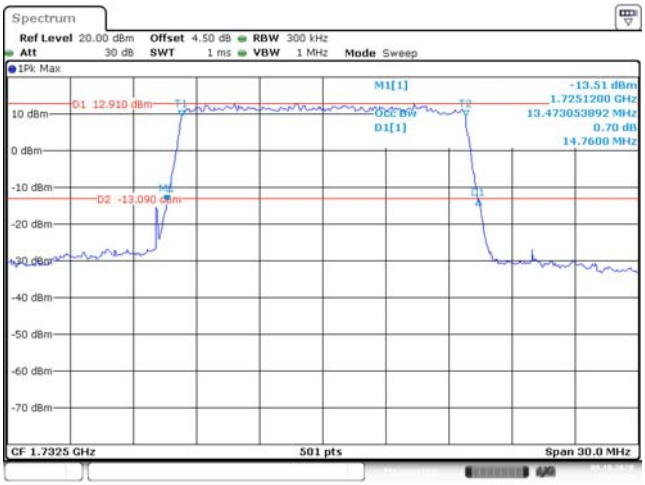
15M, 16QAM, Middle Channel



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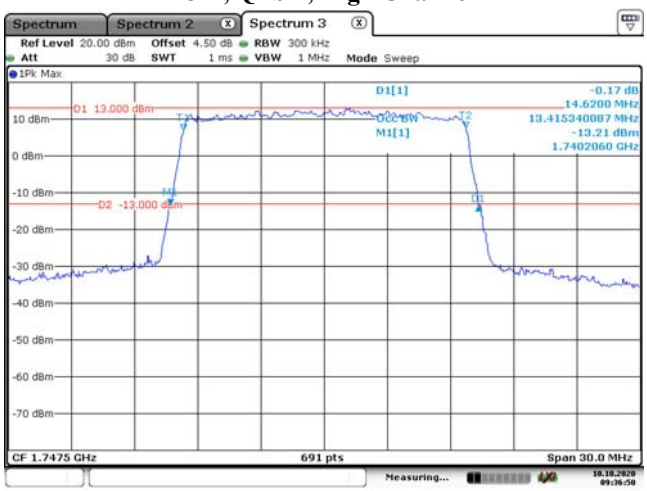
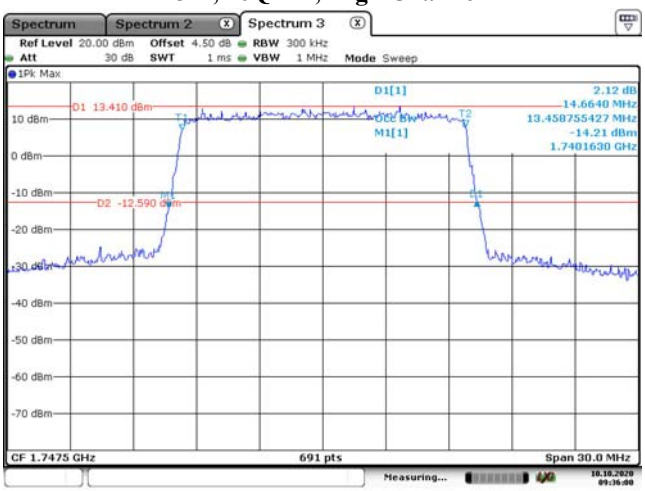
15M, QPSK, High Channel



Date: 10.OCT.2020 09:36:50

15M, 16QAM, High Channel



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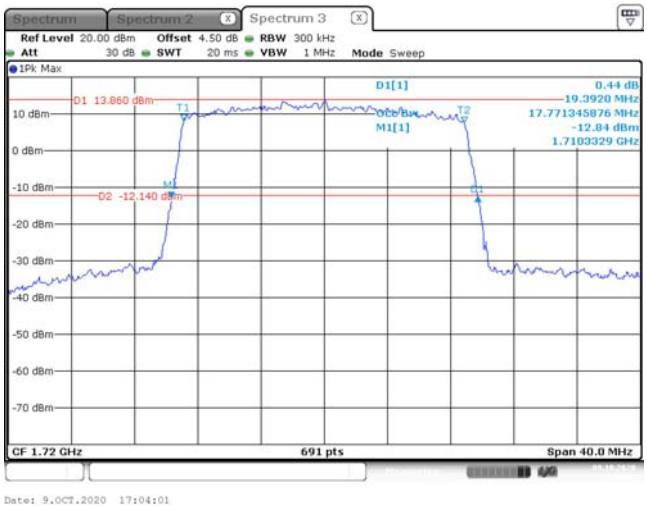
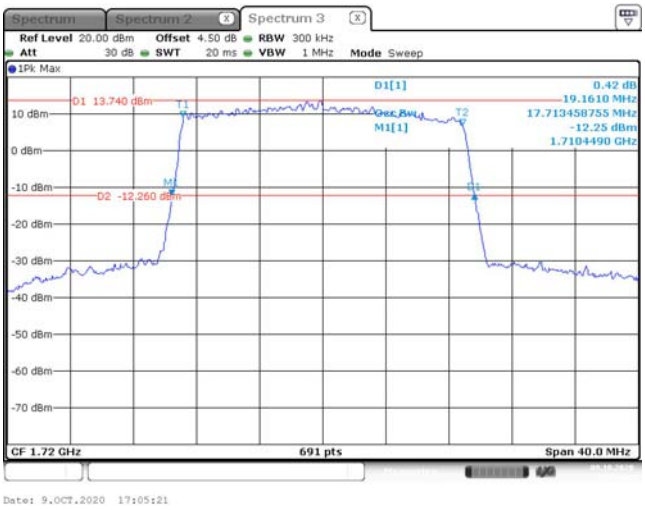
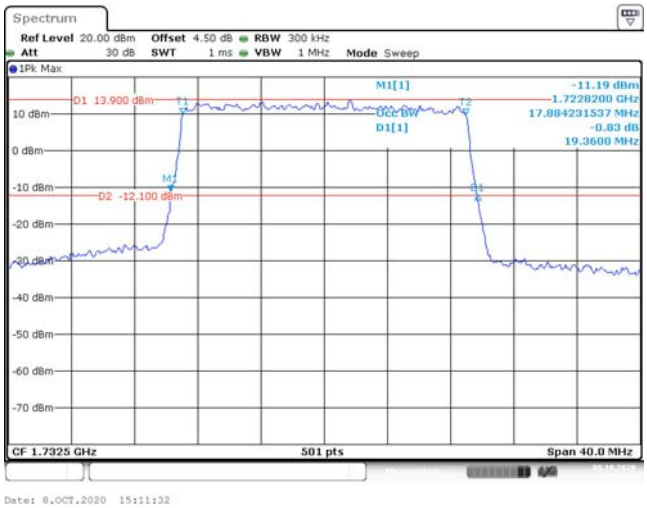
20M, QPSK, Low Channel



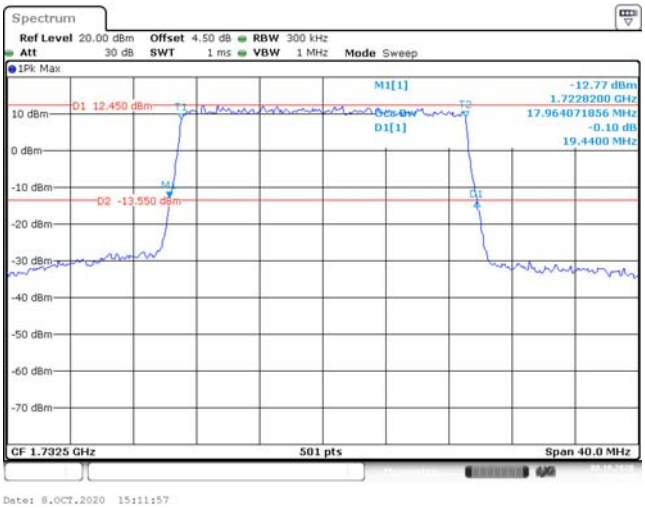
20M, 16QAM, Low Channel



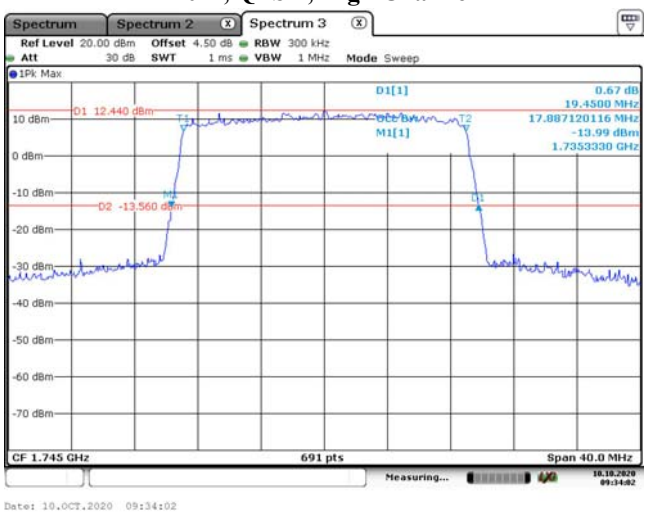
20M, QPSK, Middle Channel



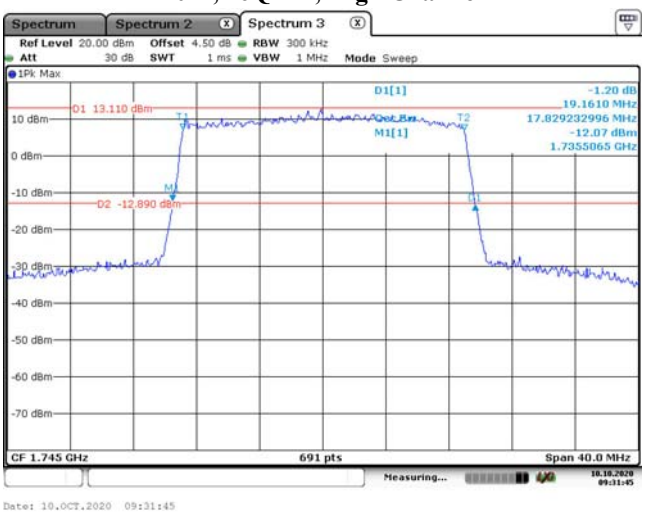
20M, 16QAM, Middle Channel



20M, QPSK, High Channel

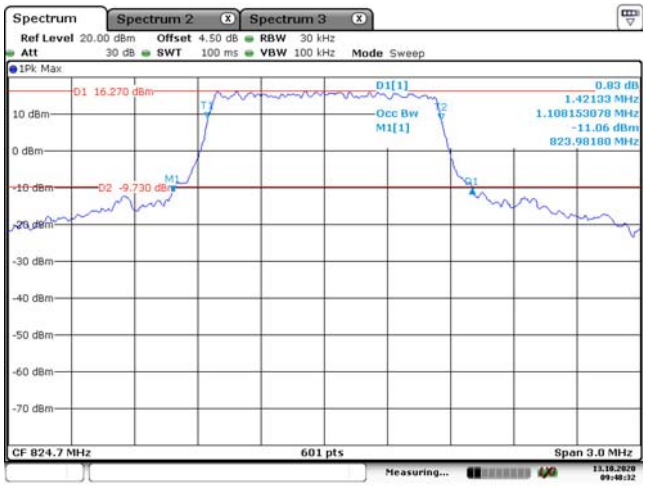


20M, 16QAM, High Channel

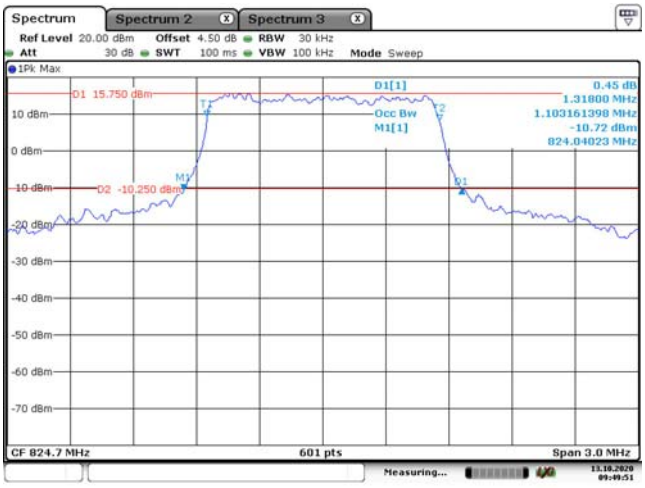


LTE Band 5:

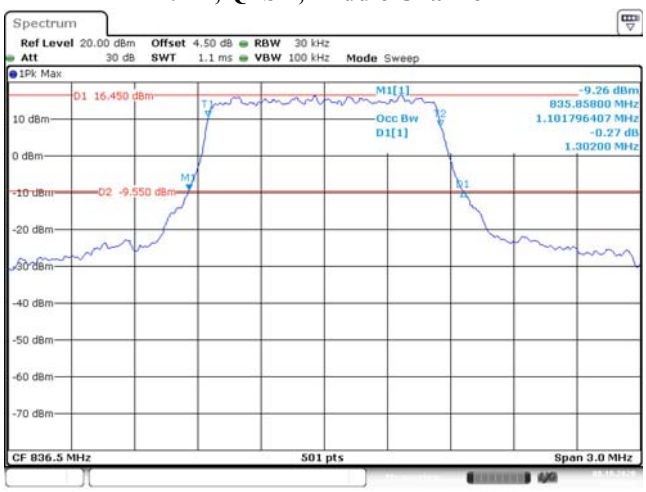
1.4M, QPSK, Low Channel



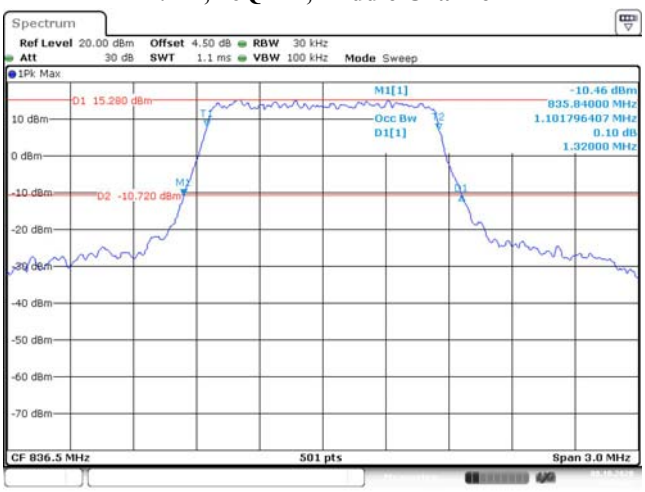
1.4M, 16QAM, Low Channel



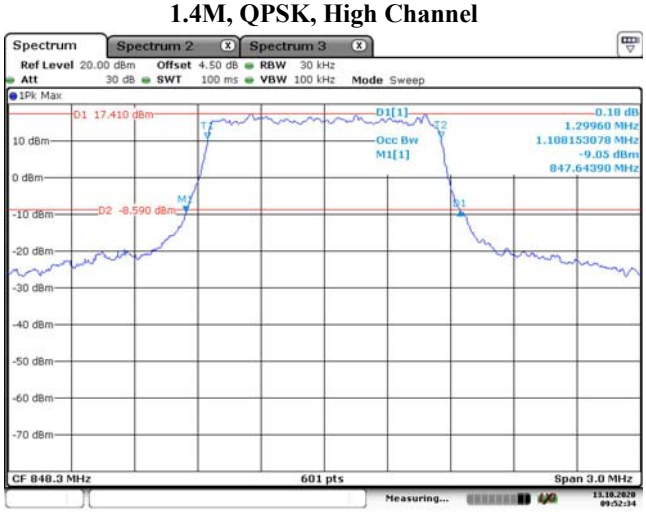
1.4M, QPSK, Middle Channel



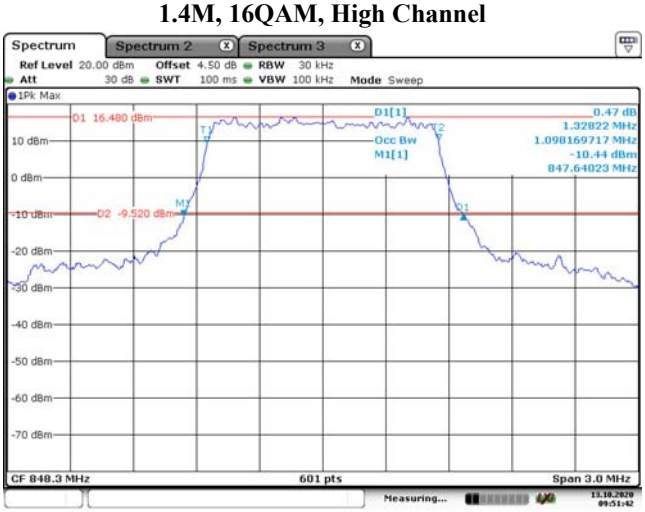
1.4M, 16QAM, Middle Channel



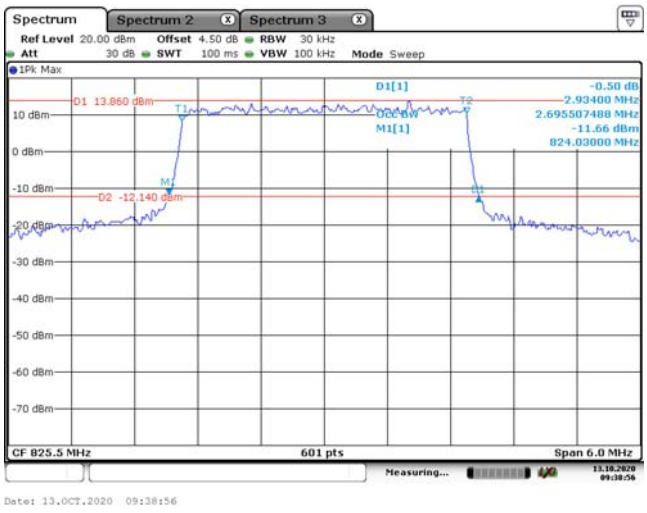
1.4M, QPSK, High Channel



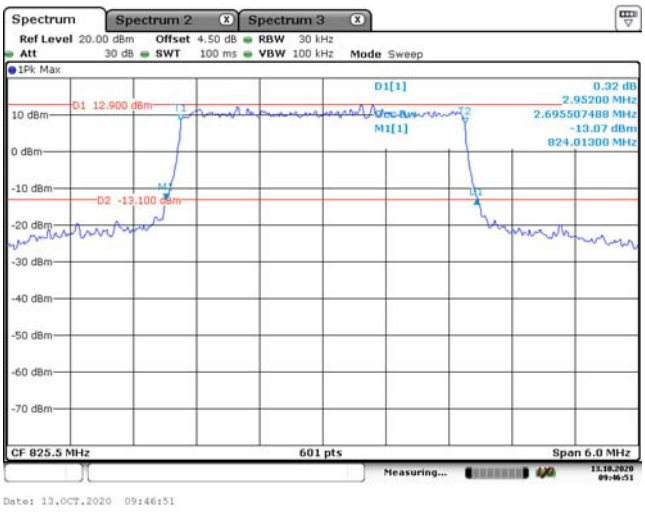
1.4M, 16QAM, High Channel



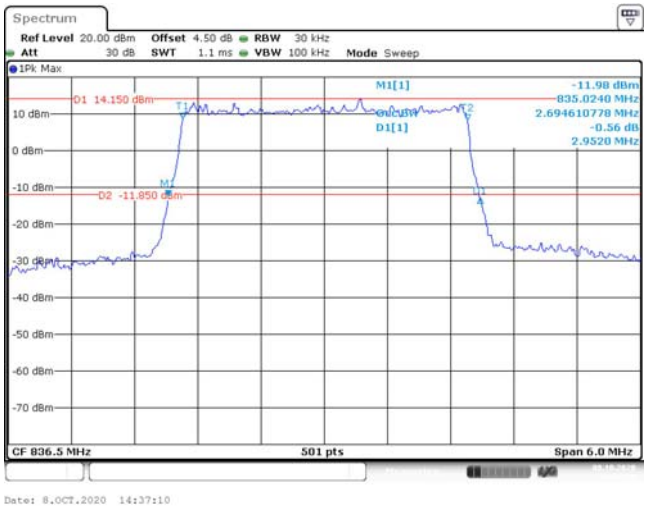
3M, QPSK, Low Channel



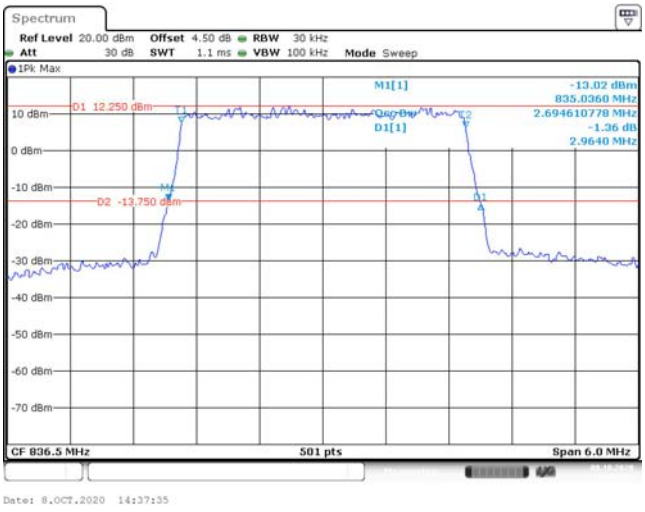
3M, 16QAM, Low Channel



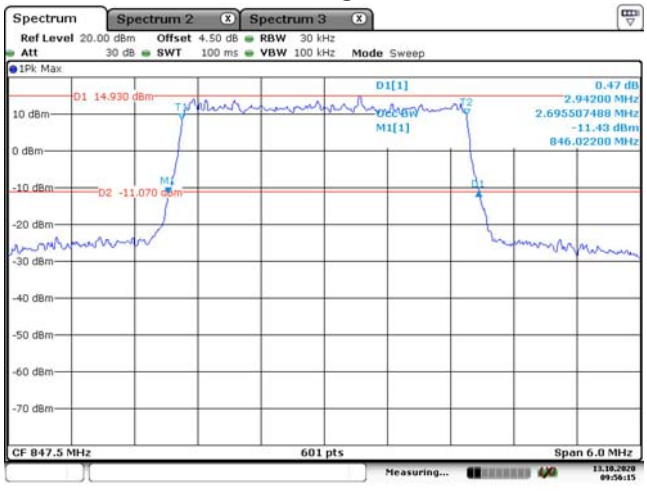
3M, QPSK, Middle Channel



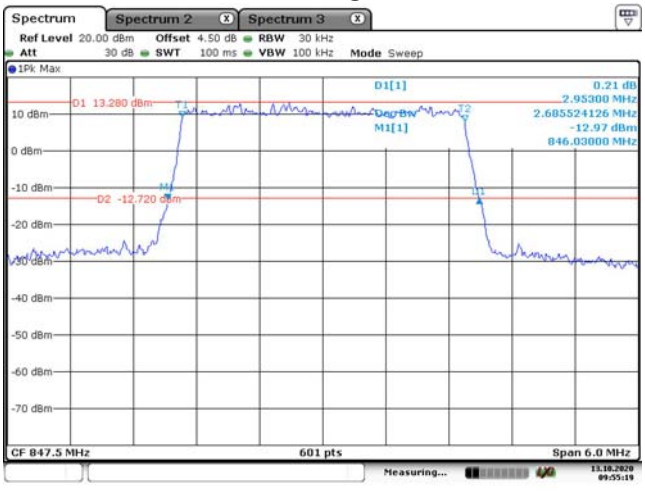
3M, 16QAM, Middle Channel



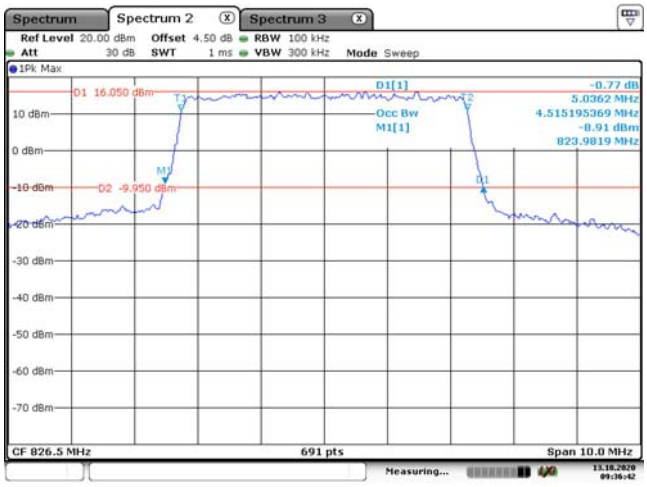
3M, QPSK, High Channel



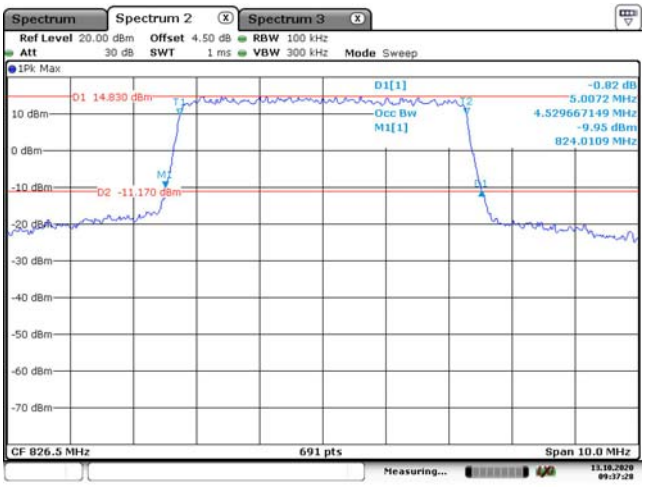
3M, 16QAM, High Channel



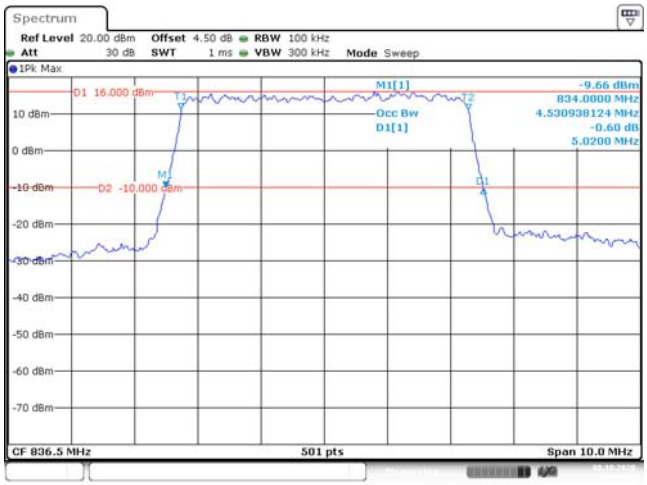
5M, QPSK, Low Channel



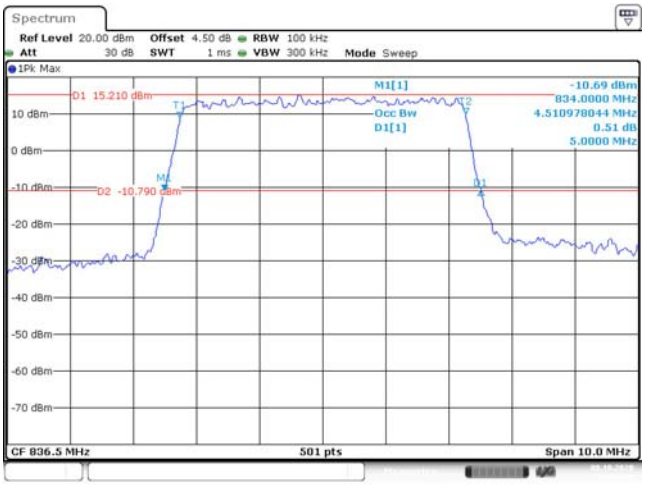
5M, 16QAM, Low Channel



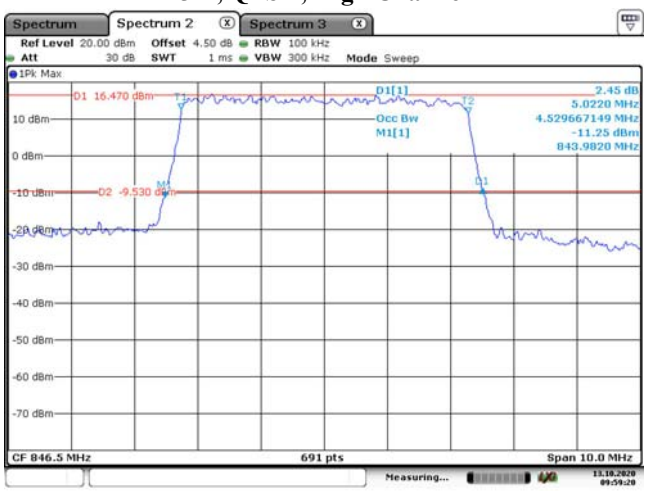
5M, QPSK, Middle Channel



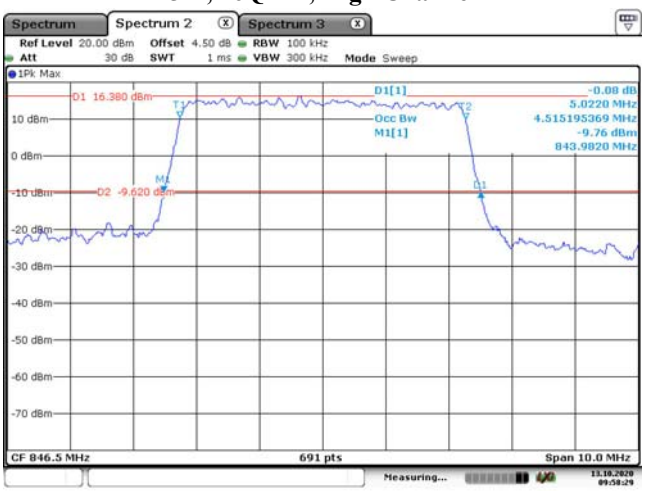
5M, 16QAM, Middle Channel



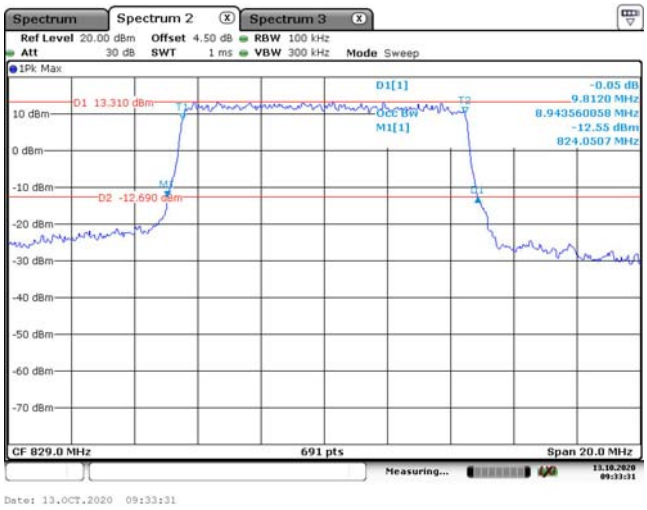
5M, QPSK, High Channel



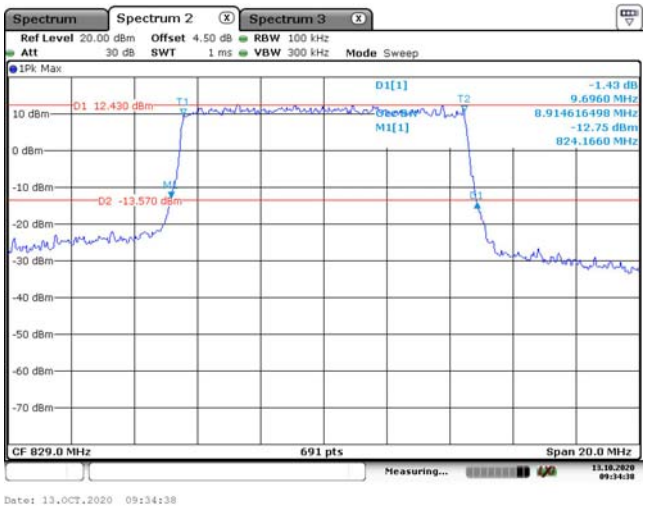
5M, 16QAM, High Channel



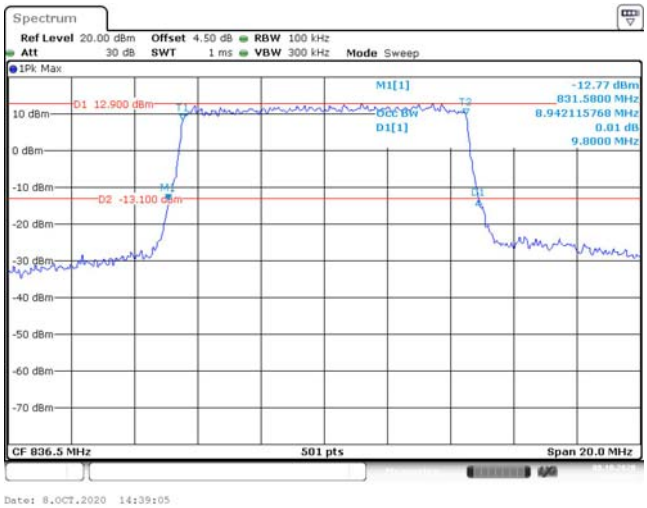
10M, QPSK, Low Channel



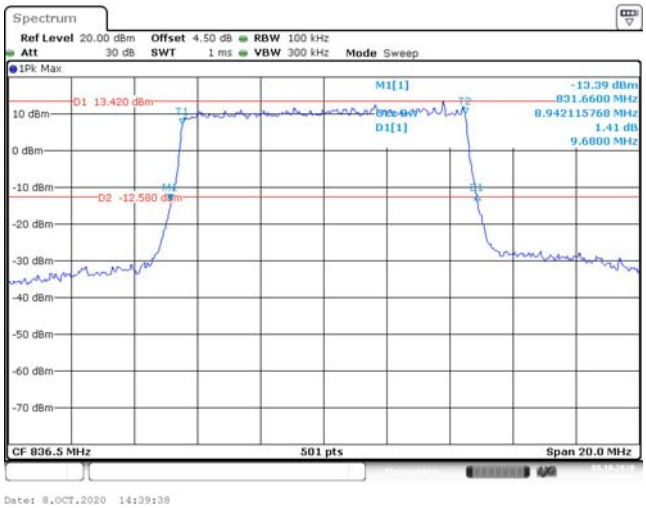
10M, 16QAM, Low Channel



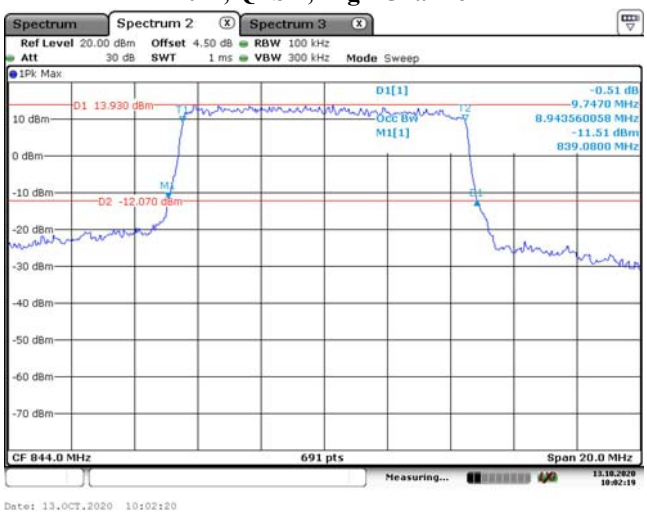
10M, QPSK, Middle Channel



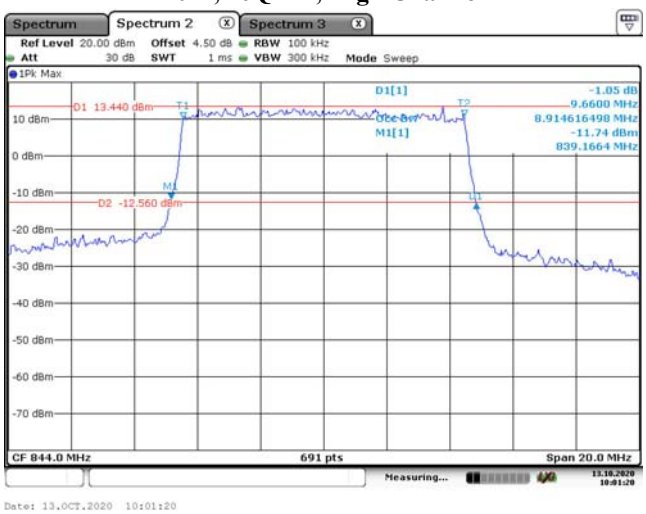
10M, 16QAM, Middle Channel



10M, QPSK, High Channel

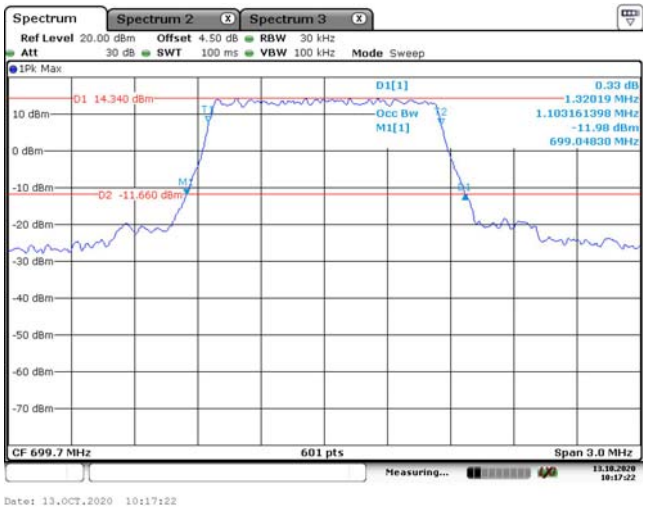


10M, 16QAM, High Channel



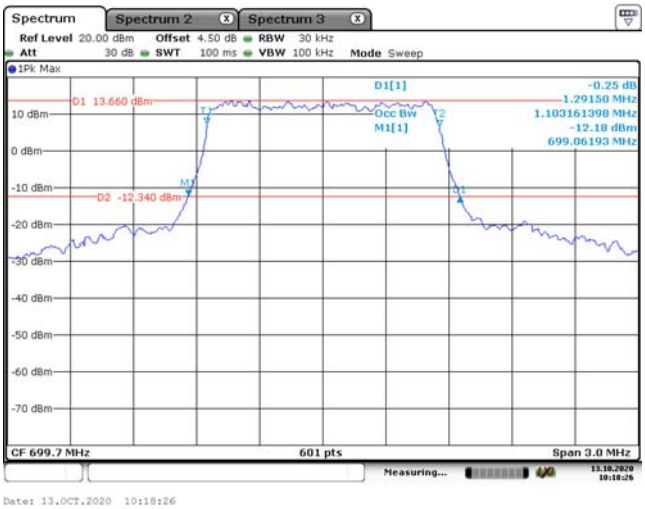
LTE Band 12:

1.4M, QPSK, Low Channel



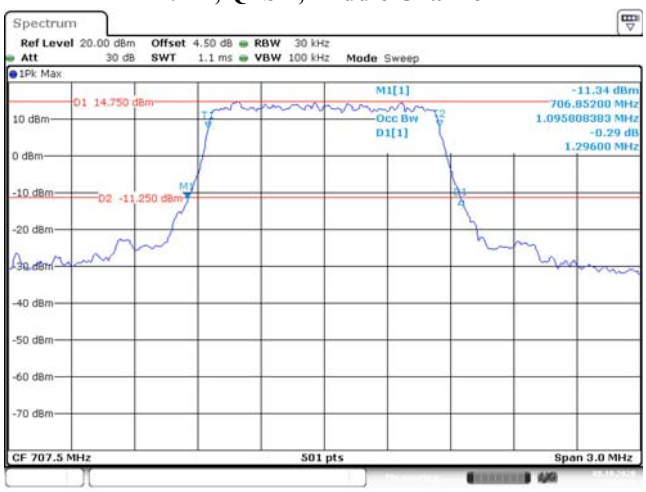
Date: 13.OCT.2020 10:17:22

1.4M, 16QAM, Low Channel



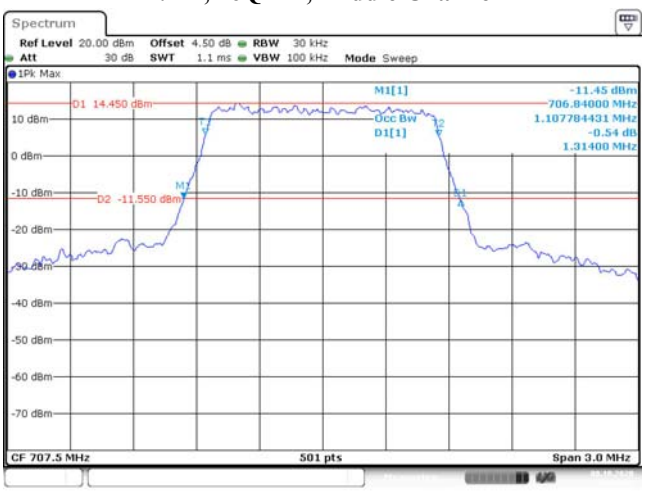
Date: 13.OCT.2020 10:18:26

1.4M, QPSK, Middle Channel



Date: 8.OCT.2020 14:40:10

1.4M, 16QAM, Middle Channel



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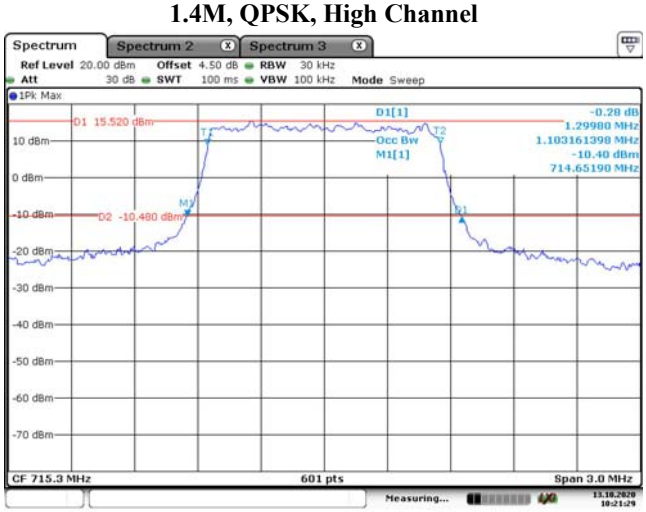
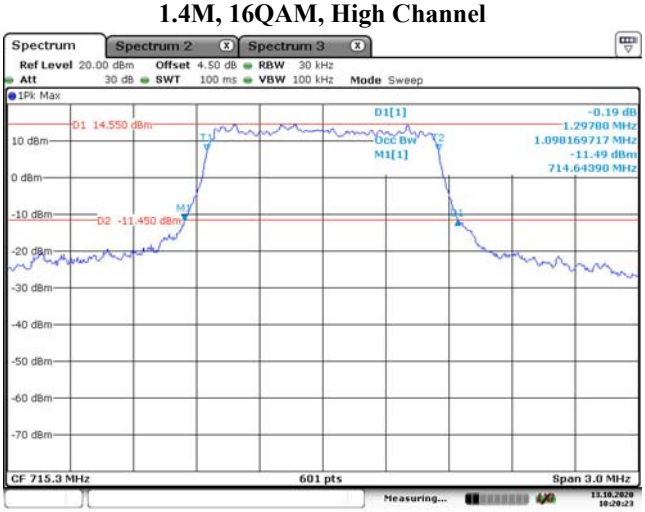
1.4M, QPSK, High Channel



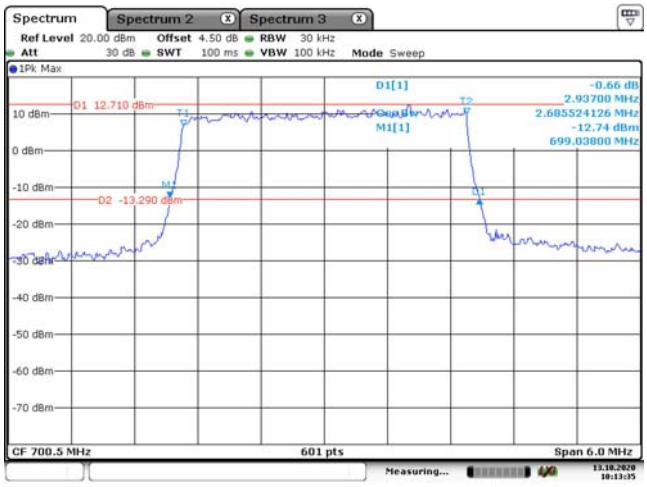
Date: 13.OCT.2020 10:21:29

1.4M, 16QAM, High Channel

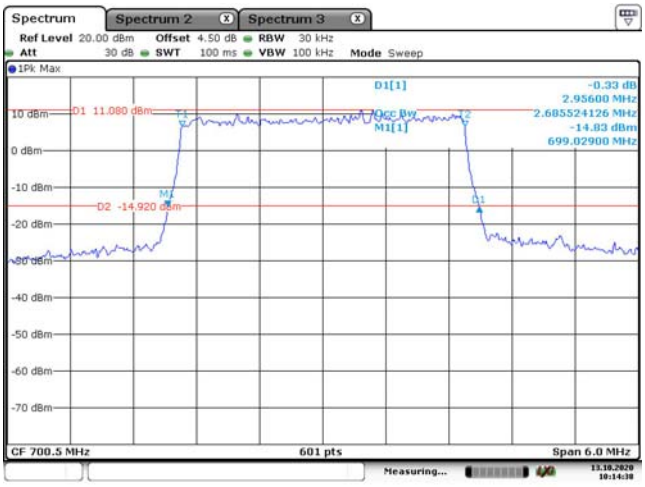


Date: 13.OCT.2020 10:20:23

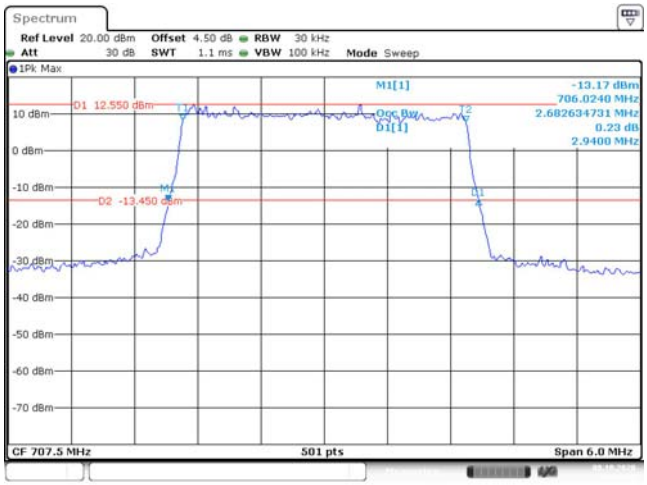
3M, QPSK, Low Channel



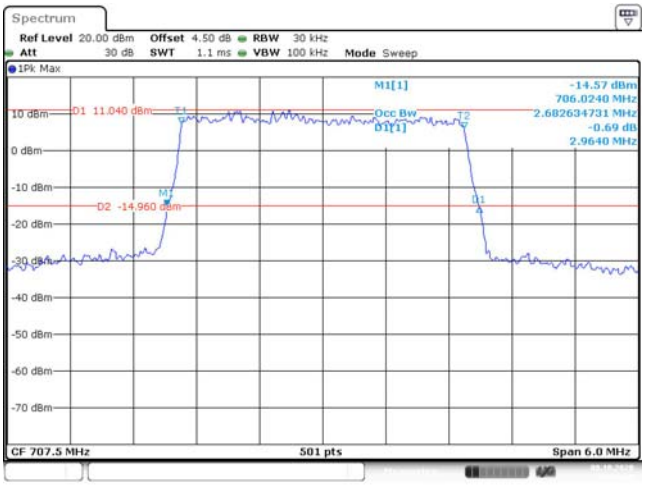
3M, 16QAM, Low Channel



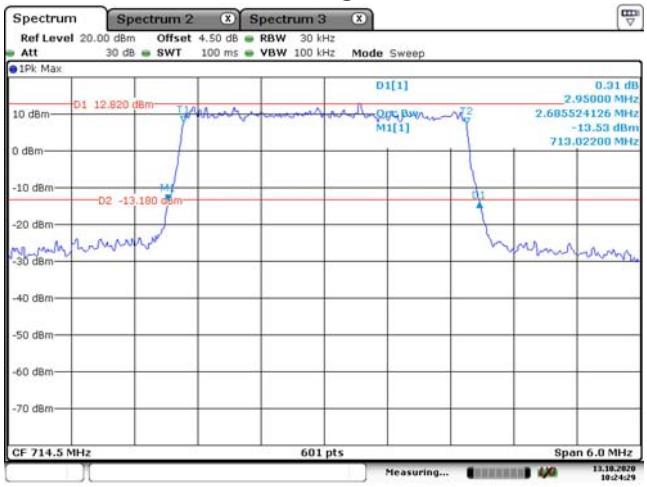
3M, QPSK, Middle Channel



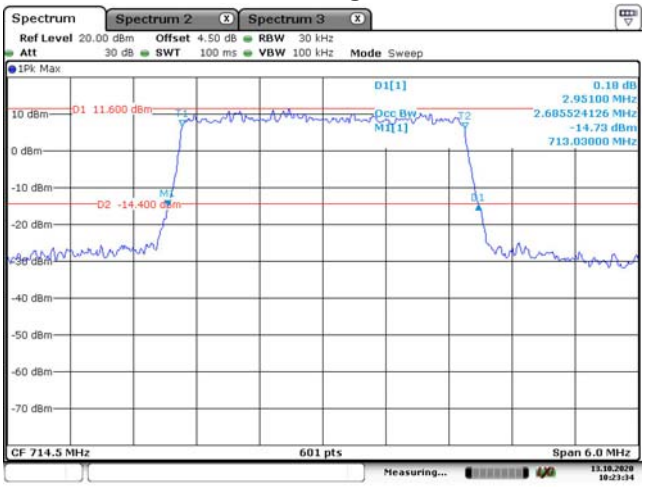
3M, 16QAM, Middle Channel



3M, QPSK, High Channel



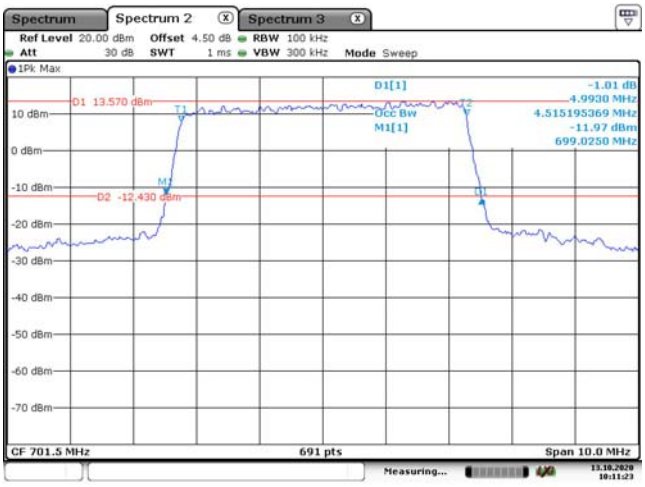
3M, 16QAM, High Channel



5M, QPSK, Low Channel

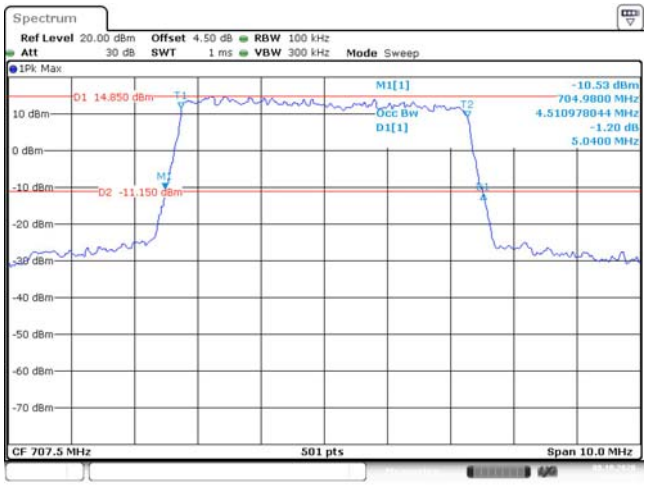
Date: 13.OCT.2020 10:09:52

5M, 16QAM, Low Channel



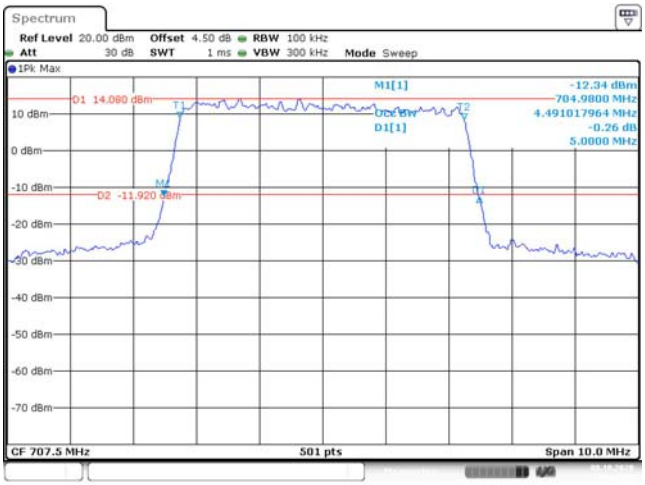
Date: 13.OCT.2020 10:11:23

5M, QPSK, Middle Channel



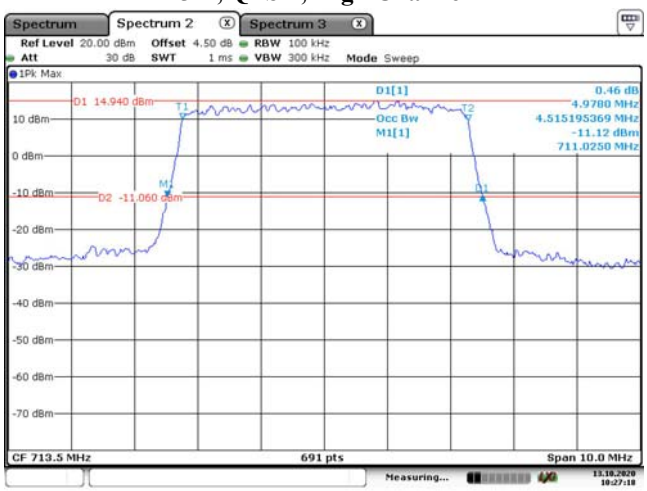
Date: 8.OCT.2020 14:41:57

5M, 16QAM, Middle Channel



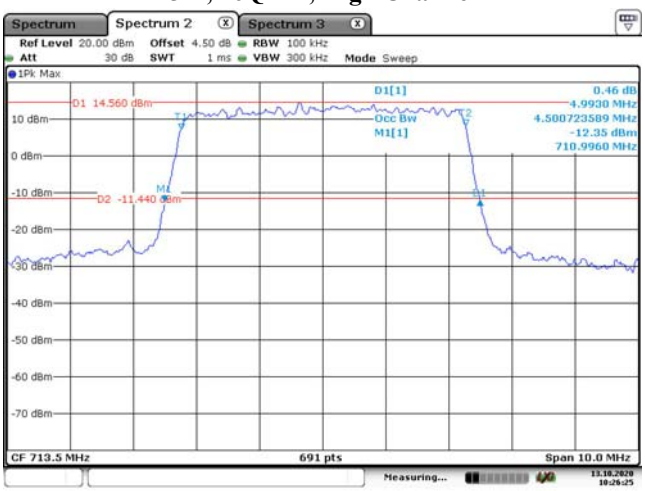
Date: 8.OCT.2020 14:42:23

5M, QPSK, High Channel



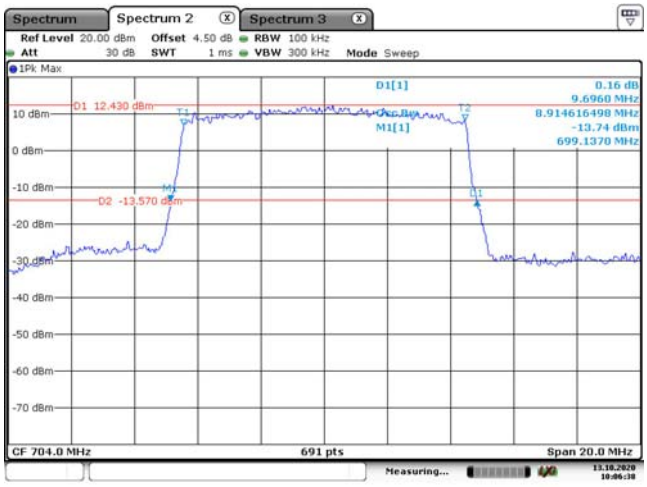
Date: 13.OCT.2020 10:27:18

5M, 16QAM, High Channel

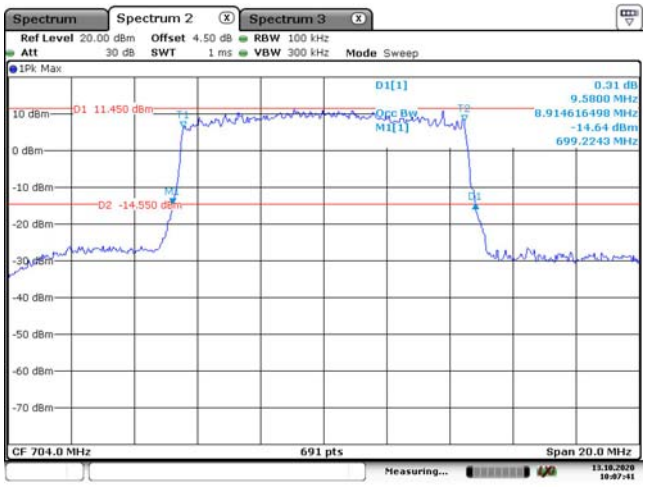


Date: 13.OCT.2020 10:26:25

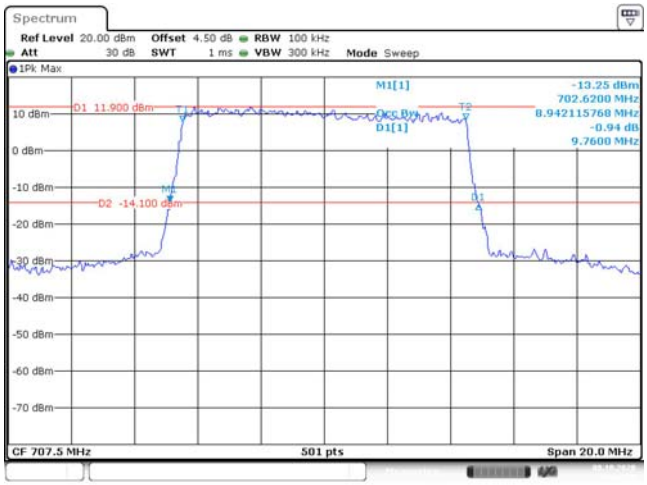
10M, QPSK, Low Channel



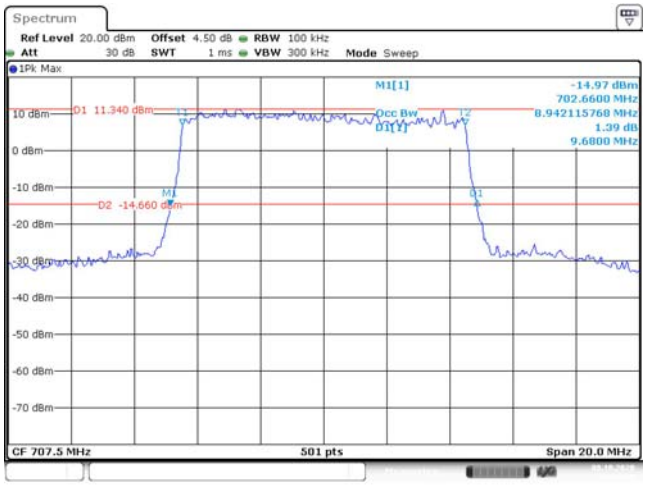
10M, 16QAM, Low Channel



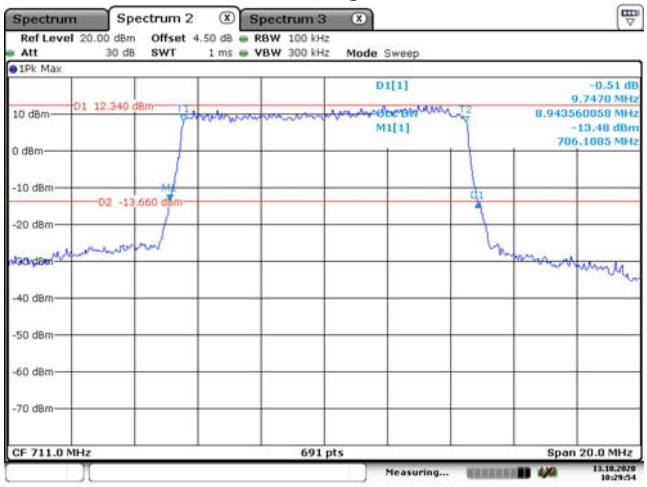
10M, QPSK, Middle Channel



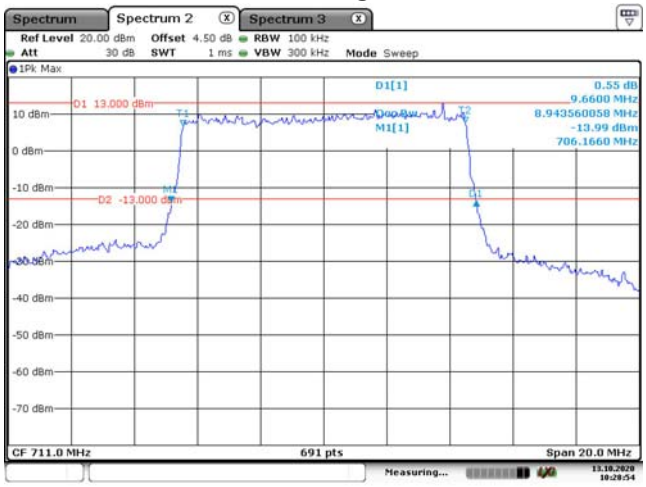
10M, 16QAM, Middle Channel



10M, QPSK, High Channel

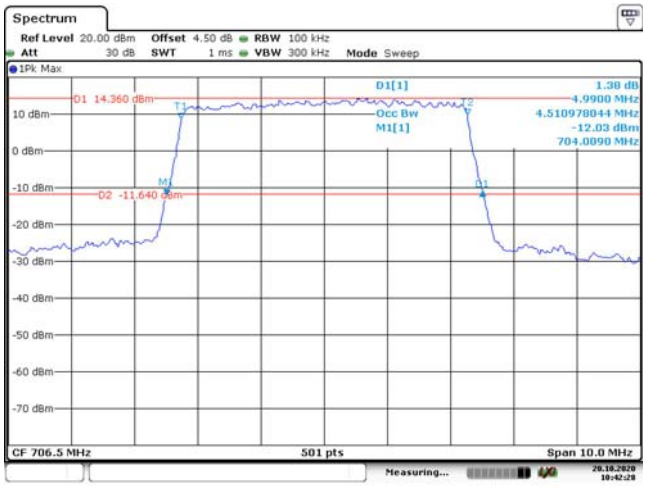


10M, 16QAM, High Channel

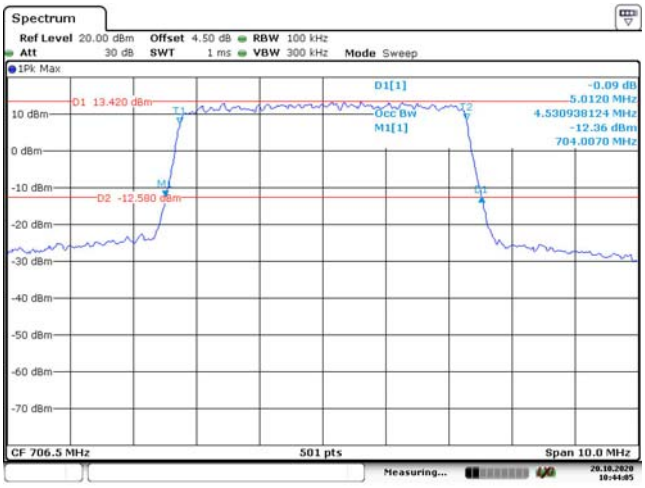


LTE Band 17:

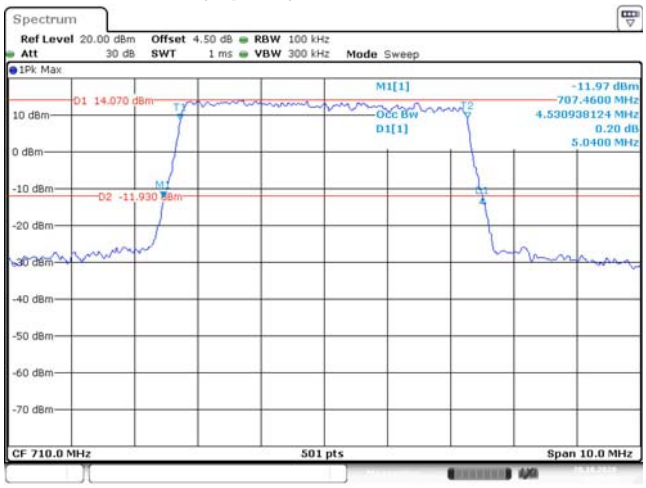
5M, QPSK, Low Channel



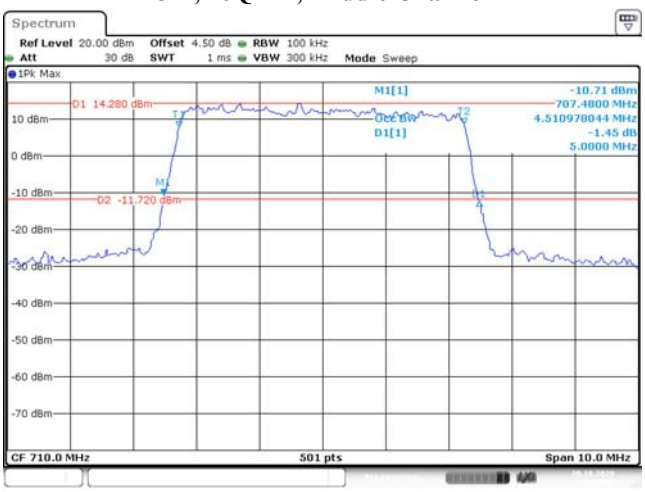
5M, 16QAM, Low Channel



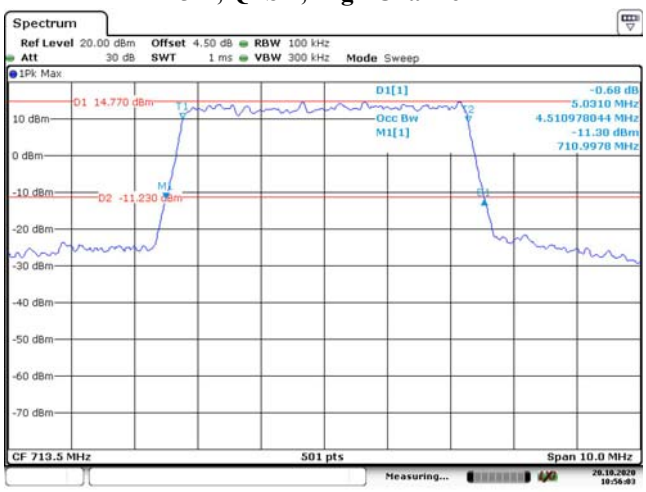
5M, QPSK, Middle Channel



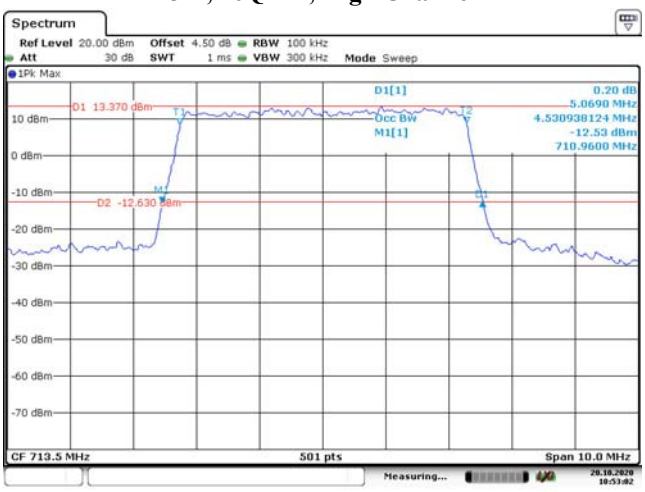
5M, 16QAM, Middle Channel



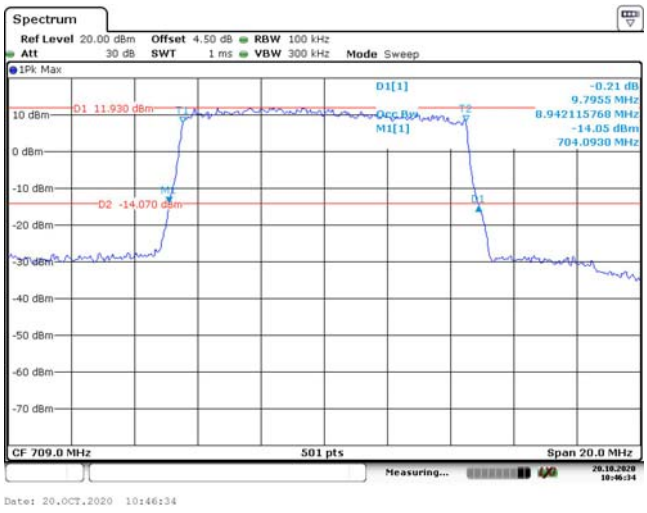
5M, QPSK, High Channel



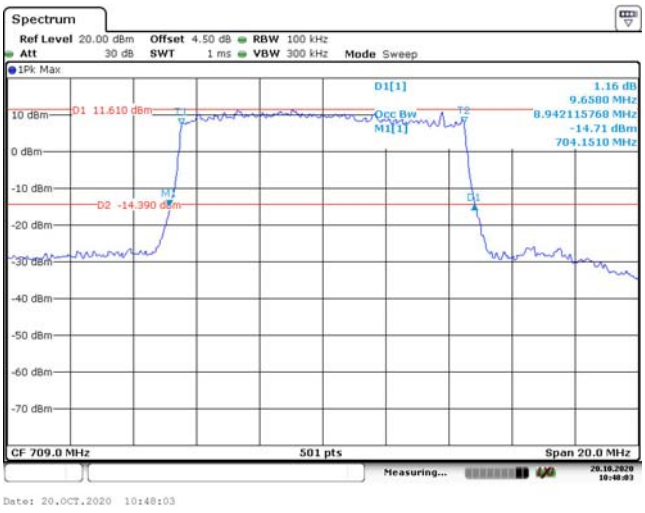
5M, 16QAM, High Channel



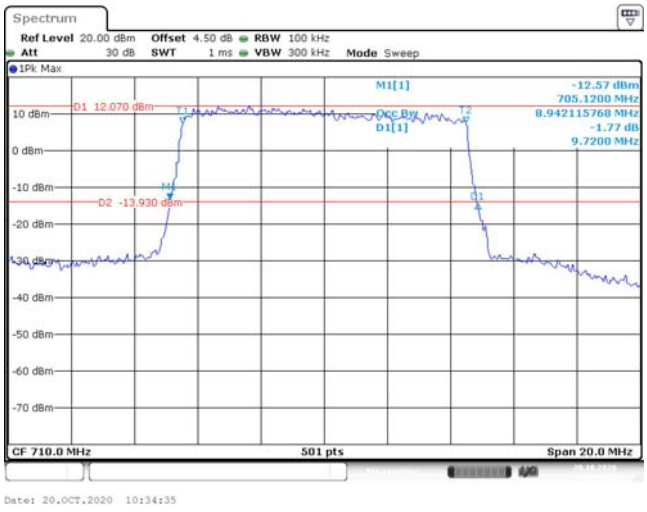
10M, QPSK, Low Channel



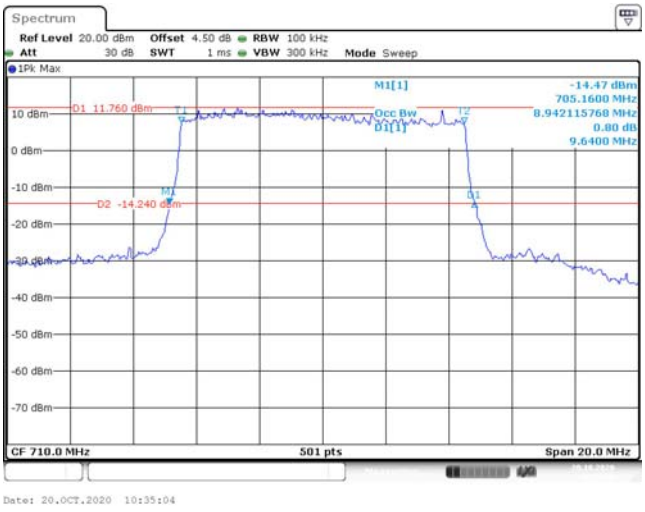
10M, 16QAM, Low Channel



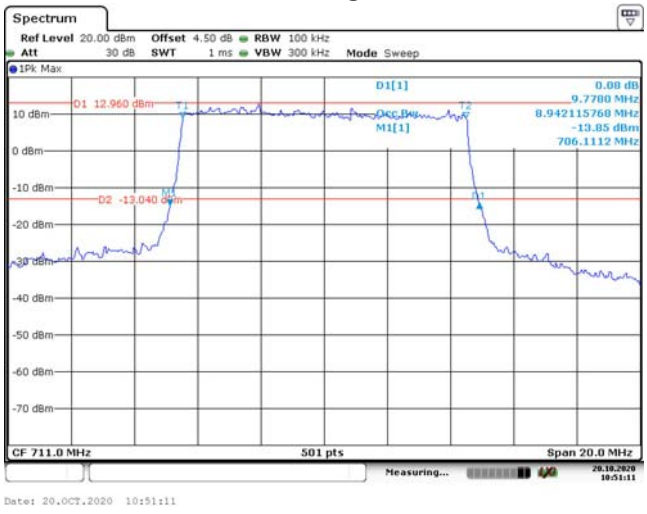
10M, QPSK, Middle Channel



10M, 16QAM, Middle Channel



10M, QPSK, High Channel



10M, 16QAM, High Channel