FCC Part 22H, Part 24E

FCC Part 27, Part 90

TEST REPORT

For

eSky wireless Inc.

A311#,258,Road Ren'ai Suzhou china 215021

FCC ID: YR8ES810CM

Report Type:	**Product Type:**
Original Report	GPS Tracker

Report Producer : Kaylee Chiang

Report Number : RXZ1805044-00

Report Date : 2018-07-14

Reviewed By: Jerry Chang

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Revision History

Revision	No.	Report Number	Issue Date	Description	Author/ Revised by
1.0	RXZ1805044	RXZ1805044-00	2018.07.14	Original Report	Kaylee

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General Information

Product Description for Equipment under Test (EUT)

Applicant	eSky wireless Inc.			
	A311#,258,Road Ren'ai Suzhou china 215021			
Manufacturer	eSky wireless Inc.			
	A311#,258,Road Ren'ai Suzhou china 215021			
Brand(Trade) Name	N/A			
Product (Equipment)	GPS Tracker			
Model Name	ES810-CM			
Frequency Range	Mode	Transmit	Receive	
	Band 2	1850-1910MHz	1930-1990MHz	
	Band 4	1710-1755MHz	2110-2155MHz	
	Band 5	824-849MHz	869-894MHz	
	Band 12	699-716MHz	726-746MHz	
	Band 13	777-787MHz	746-756MHz	
	Band 26	814-849MHz	859-894MHz	
Transmit Power	Mode	Modulation	Maximum EIRP (W)	Emission Designator
	LTE Band 2 CB:1.4MHz	QPSK	0.4355	1M11G7D
	LTE Band 2 CB:1.4MHz	16QAM	0.4345	952KD7W
	LTE Band 2 CB:3MHz	QPSK	0.4436	1M14G7D
	LTE Band 2 CB:3MHz	16QAM	0.4325	966KD7W
	LTE Band 2 CB:5MHz	QPSK	0.4365	1M14G7D
	LTE Band 2 CB:5MHz	16QAM	0.4539	966KD7W
	LTE Band 2 CB:10MHz	QPSK	0.4130	1M14G7D
	LTE Band 2 CB:10MHz	16QAM	0.4335	1M01D7W
	LTE Band 2 CB:15MHz	QPSK	0.4198	1M14G7D
	LTE Band 2 CB:15MHz	16QAM	0.4550	976KD7W
	LTE Band 2 CB:20MHz	QPSK	0.4150	1M05G7D
	LTE Band 2 CB:20MHz	16QAM	0.3954	1M05D7W
	LTE Band 4 CB:1.4MHz	QPSK	0.4550	1M10G7D
	LTE Band 4 CB:1.4MHz	16QAM	0.4487	947KD7W
	LTE Band 4 CB:3MHz	QPSK	0.4603	1M13G7D
	LTE Band 4 CB:3MHz	16QAM	0.4529	966KD7W
	LTE Band 4 CB:5MHz	QPSK	0.4539	1M11G7D
	LTE Band 4 CB:5MHz	16QAM	0.4613	966KD7W
	LTE Band 4 CB:10MHz	QPSK	0.4395	1M15G7D
	LTE Band 4 CB:10MHz	16QAM	0.4313	1M00D7W
	LTE Band 4 CB:15MHz	QPSK	0.4345	1M15G7D
	LTE Band 4 CB:15MHz	16QAM	0.4487	1M00D7W
	LTE Band 4 CB:20MHz	QPSK	0.4246	1M14G7D
	LTE Band 4 CB:20MHz	16QAM	0.4529	1M00D7W
	Mode	Modulation	Maximum ERP (W)	Emission Designator

	LTE Band 5 CB:1.4MHz	QPSK	0.2249	1M10G7D
	LTE Band 5 CB:1.4MHz	16QAM	0.2244	942KD7W
	LTE Band 5 CB:3MHz	QPSK	0.2312	1M14G7D
	LTE Band 5 CB:3MHz	16QAM	0.2280	961KD7W
	LTE Band 5 CB:5MHz	QPSK	0.2249	1M12G7D
	LTE Band 5 CB:5MHz	16QAM	0.2178	952KD7W
	LTE Band 5 CB:10MHz	QPSK	0.2249	1M13G7D
	LTE Band 5 CB:10MHz	16QAM	0.2178	976KD7W
	LTE Band 12 CB:1.4MHz	QPSK	0.1652	1M10G7D
	LTE Band 12 CB:1.4MHz	16QAM	0.1629	942KD7W
	LTE Band 12 CB:3MHz	QPSK	0.1694	1M13G7D
	LTE Band 12 CB:3MHz	16QAM	0.1663	961KD7W
	LTE Band 12 CB:5MHz	QPSK	0.1656	1M11G7D
	LTE Band 12 CB:5MHz	16QAM	0.1618	952KD7W
	LTE Band 12 CB:10MHz	QPSK	0.1663	1M14G7D
	LTE Band 12 CB:10MHz	16QAM	0.1626	981KD7W
	LTE Band 13 CB:5MHz	QPSK	0.1439	1M12G7D
	LTE Band 13 CB:5MHz	16QAM	0.1452	952KD7W
	LTE Band 13 CB:10MHz	QPSK	0.1396	1M15G7D
	LTE Band 13 CB:10MHz	16QAM	0.1368	995KD7W
	LTE Band 26 CB:1.4MHz	QPSK	0.1439	1M11G7D
	LTE Band 26 CB:1.4MHz	16QAM	0.1439	942KD7W
	LTE Band 26 CB:3MHz	QPSK	0.2158	1M14G7D
	LTE Band 26 CB:3MHz	16QAM	0.2075	962KD7W
	LTE Band 26 CB:5MHz	QPSK	0.2046	1M11G7D
	LTE Band 26 CB:5MHz	16QAM	0.1941	957KD7W
	LTE Band 26 CB:10MHz	QPSK	0.1977	1M14G7D
	LTE Band 26 CB:10MHz	16QAM	0.1901	995KD7W
	LTE Band 26 CB:15MHz	QPSK	0.2037	1M14G7D
	LTE Band 26 CB:15MHz	16QAM	0.1986	971KD7W

Modulation Technique	QPSK, 16QAM		
Antenna Specification	Mode	Type	Gain(dBi)
	Band 2	FPC	5.50
	Band 4	FPC	5.22
	Band 5	FPC	2.66
	Band 12	FPC	1.65
	Band 13	FPC	1.09
	Band 26	FPC	2.66
Output Voltage	3.7V from Battery D_C :12V		
Received Date	May 31, 2018		
Date of Test	June 08, 2018 ~ June 14, 2018		

**All measurement and test data in this report was gathered from production sample serial number: 1805044 (Assigned by BACL, Taiwan).*

Objective

This report is prepared on behalf of *eSky wireless Inc.* in accordance with Subpart 27 of the Federal Communication Commissions rules.

Related Submittal(s)/Grant(s)

N/A.

Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47 Part 2-Subpart J as well as the following parts:

Part 22 Subpart H –Public Mobile Services

Part 24 Subpart E – Personal Communications Services

Part 27 – Miscellaneous wireless communications services

Part 90 – Private Land Mobile Radio Services

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

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Taiwan) to collect test data is located on

☒70, Lane 169, Sec. 2, Datong Road, Xizhi Dist., New Taipei City 22183, Taiwan, R.O.C.

☐68-3, Lane 169, Sec. 2, Datong Road, Xizhi Dist., New Taipei City 22183, Taiwan, R.O.C.

Bay Area Compliance Laboratories Corp. (Taiwan) Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 3180) and the FCC designation No.TW3180 under the Mutual Recognition Agreement (MRA) in FCC Test. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.10.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 974454. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

System Test Configuration

Description of Test Configuration

The EUT was configured for testing according to TIA/EIA-603-E.

The final qualification test was performed with the EUT operating at normal mode.

eMTC Auto Mode: Narrowband and resource blocks per cell BW

Test Item	LTE Band	Bandwidth(MHz)						Modulation		RB setting	TBS	Test
		1.4	3	5	10	15	20	QPSK	16QAM	NB	Idx	channel
RF Output Power**	2	✓	✓	✓	✓	✓	✓	✓	✓	0	10	L/M/H
	4	✓	✓	✓	✓	✓	✓	✓	✓	0	10	L/M/H
	5	✓	✓	✓	✓	×	×	✓	✓	0	10	L/M/H
	12	✓	✓	✓	✓	×	×	✓	✓	0	10	L/M/H
	13	×	×	✓	✓	×	×	✓	✓	0	10	L/M/H*
	26	✓	✓	✓	✓	✓	×	✓	✓	0	10	L/M/H*
Peak-toaverage ratio	2	✓	✓	✓	✓	✓	✓	✓	✓	0	10	L/M/H
	4	✓	✓	✓	✓	✓	✓	✓	✓	0	10	L/M/H
	5	✓	✓	✓	✓	×	×	✓	✓	0	10	L/M/H
	12	✓	✓	✓	✓	×	×	✓	✓	0	10	L/M/H
	13	×	×	✓	✓	×	×	✓	✓	0	10	L/M/H*
	26	✓	✓	✓	✓	✓	×	✓	✓	0	10	L/M/H*
Radiated power	2	✓	✓	✓	✓	✓	✓	✓	✓	0	10	M
	4	✓	✓	✓	✓	✓	✓	✓	✓	0	10	M
	5	✓	✓	✓	✓	×	×	✓	✓	0	10	M
	12	✓	✓	✓	✓	×	×	✓	✓	0	10	M
	13	×	×	✓	✓	×	×	✓	✓	0	10	M
	26	✓	✓	✓	✓	✓	×	✓	✓	0	10	M
Occupied Bandwidth	2	✓	✓	✓	✓	✓	✓	✓	✓	0	10	M
	4	✓	✓	✓	✓	✓	✓	✓	✓	0	10	M
	5	✓	✓	✓	✓	×	×	✓	✓	0	10	M
	12	✓	✓	✓	✓	×	×	✓	✓	0	10	M
	13	×	×	✓	✓	×	×	✓	✓	0	10	M
	26	✓	✓	✓	✓	✓	×	✓	✓	0	10	M
Spurious Emissions at Antenna Terminal	2	✓	✓	✓	✓	✓	✓	✓	✓	0	10	M
	4	✓	✓	✓	✓	✓	✓	✓	✓	0	10	M
	5	✓	✓	✓	✓	×	×	✓	✓	0	10	M
	12	✓	✓	✓	✓	×	×	✓	✓	0	10	M
	13	×	×	✓	✓	×	×	✓	✓	0	10	M
	26	✓	✓	✓	✓	✓	×	✓	✓	0	10	M
Field Strength of Spurious Radiation	2	✓	✓	✓	✓	✓	✓	✓	✓	0	10	M
	4	✓	✓	✓	✓	✓	✓	✓	✓	0	10	M
	5	✓	✓	✓	✓	×	×	✓	✓	0	10	M
	12	✓	✓	✓	✓	×	×	✓	✓	0	10	M
	13	×	×	✓	✓	×	×	✓	✓	0	10	M
	26	✓	✓	✓	✓	✓	×	✓	✓	0	10	M
Band Edge**	2	✓	✓	✓	✓	✓	✓	✓	✓	0/0@1.4MHz BW 0/1@3MHz BW 0/3@5MHz BW 0/7@10MHz BW 0/11@15MHz BW 0/15@20MHz BW	10	L/H

	4	✓	✓	✓	✓	✓	✓	✓	✓	0/0@1.4MHz BW 0/1@3MHz BW 0/3@5MHz BW 0/7@10MHz BW 0/11@15MHz BW 0/15@20MHz BW	10	L/H
	5	✓	✓	✓	✓	×	×	✓	✓	0/0@1.4MHz BW 0/1@3MHz BW 0/3@5MHz BW 0/7@10MHz BW	10	L/H
	12	✓	✓	✓	✓	×	×	✓	✓	0/0@1.4MHz BW 0/1@3MHz BW 0/3@5MHz BW 0/7@10MHz BW	10	L/H
	13	×	×	✓	✓	×	×	✓	✓	0/3@5MHz BW 0/7@10MHz BW	10	M*
	26	✓	✓	✓	✓	✓	×	✓	✓	0/0@1.4MHz BW 0/1@3MHz BW 0/3@5MHz BW 0/7@10MHz BW 0/11@15MHz BW	10	L/H
Frequency stability	2	✓	✓	✓	✓	✓	✓	✓	✓	0	10	M
	4	✓	✓	✓	✓	✓	✓	✓	✓	0	10	M
	5	✓	✓	✓	✓	×	×	✓	✓	0	10	M
	12	✓	✓	✓	✓	×	×	✓	✓	0	10	M
	13	×	×	✓	✓	×	×	✓	✓	0	10	M
	26	✓	✓	✓	✓	✓	×	✓	✓	0	10	M

Note *: only middle channel with LTE band 13 @10MHz bandwidth.

Note**: Both RB 0 and RB 6 were test for QPSK, both RB 0 and RB 5 were test for 16QAM.other item only test RB 6 with QPSK and RB 5 with 16QAM.

LTE band 26 overlaps the entire frequency range of LTE band 5, therefore, the test data provided in this report covers band 5 and the portion of band 26 subject to part 22

Equipment Modifications

No modification was made to the EUT.

EUT Exercise Software

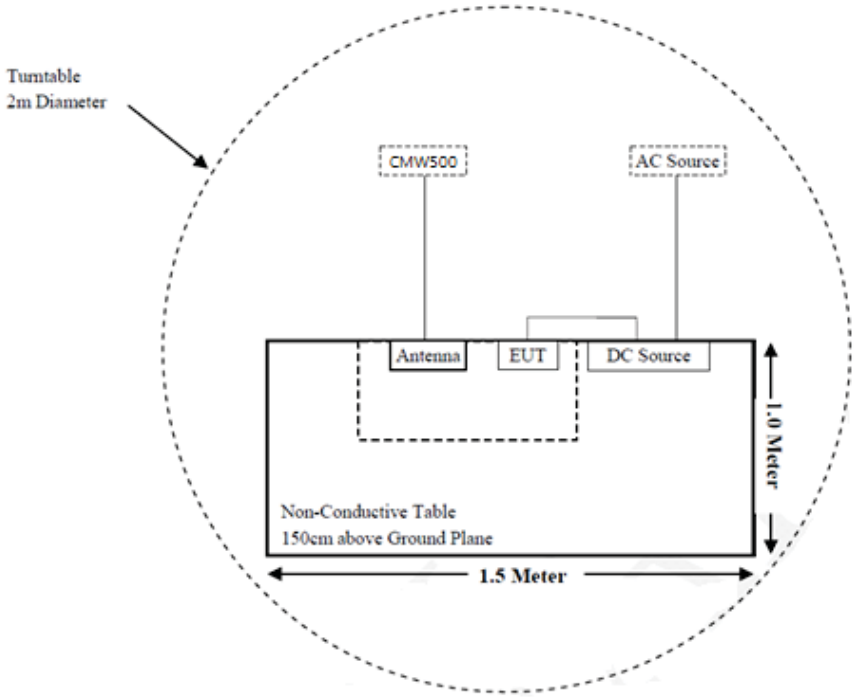
N/A.

Support Equipment List and Details

Description	Manufacturer	Model Number	S/N
Wideband Radio Communcation Tester	Rohde & Schwarz	CMW500	149170

Block Diagram of Test Setup

For Radiated Emissions (Below & Above 1GHz).



Summary of Test Results

FCC Rules	Description of Test	Result
§1.1310 ,§ 2.1091	Maximum Permissible Exposure (MPE)	Compliance
§2.1046; §22.913 (a); §24.232(c) ;§27.50; §90.635	RF Output Power	Compliance
§ 2.1047	Modulation Characteristics	Not Applicable
§ 2.1049; §22.905; §22.917; §24.238 ;§27.53; §90.209	Occupied Bandwidth	Compliance
§ 2.1051; §22.917(a); §24.238(a) ;§27.53; §90.691	Spurious Emissions at Antenna Terminal	Compliance
§ 2.1053; §22.917(a); §24.238(a) ;§27.53; §90.691	Field Strength of Spurious Radiation	Compliance
§22.917(a); §24.238(a) ;§27.53; §90.691	Band Edge	Compliance
§ 2.1055; §22.355; §24.235 ;§27.54; §90.691	Frequency stability	Compliance

Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Room (966-A)					
Bilog Antenna with 6 dB Attenuator	Sunol & Mini-Circuits	JB6/UNAT-6+	A050115/15542_01	2017/12/20	2018/12/19
Bilog Antenna with 6 dB Attenuator	Sunol Sciences & EMEC	JB3 &EM-ATT18-6-NN	A061204 /ATT-09-003	2017/11/17	2018/11/16
Horn Antenna	EMCO	3115	2171	2017/07/17	2018/07/16
Horn Antenna	EMCO	3115	9311-4158	2018/04/20	2019/04/19
Horn Antenna	ETS-Lindgren	3116	62638	2017/09/13	2018/09/12
Preamplifier	Sonoma	310N	130602	2017/07/03	2018/07/02
Preamplifier	Sonoma	310N	130602	2018/07/03	2019/07/02
Preamplifier	EM Electronics Corp.	EM01G18G	060698	2018/04/13	2019/04/12
Microware Preamplifier	EM Electronics Corporatino	EM18G40G	060656	2018/01/15	2019/01/14
Sweep Signal Generator	Agilent	83650B	3420A00581	2017/06/29	2018/06/28
EMI Test Receiver	Rohde & Schwarz	ESR7	101419	2017/11/06	2018/11/05
Spectrum Analyzer	Rohde & Schwarz	FSEK30	825084/006	2017/12/15	2018/12/14
Microflex Cable	ROSNOL	K1K50-UP0264-K1K50-80CM	160309-2	2018/01/17	2019/01/16
Microflex Cable	ROSNOL	K1K50-UP0264-K1K50-450CM	160309-1	2018/03/05	2019/03/04
Microflex Cable	UTIFLEX	UFB311A-Q-1440-300300	220490-006	2017/10/31	2018/10/30
Mircoflex Cable	UTIFLEX	UFB197C-1-2362-70U-70U	225757-001	2017/07/10	2018/07/09
Mircoflex Cable	UTIFLEX	UFB197C-1-2362-70U-70U	225757-001	2018/07/10	2019/07/09
Microflex Cable	UTIFLEX	UFA210A-1-3149-300300	MFR64639 226389-001	2017/11/10	2018/11/09
Turn Table	Champro	TT-2000	060772-T	N.C.R	N.C.R
Antenna Tower	Champro	AM-BS-4500-B	060772-A	N.C.R	N.C.R
Controller	Champro	EM1000	60772	N.C.R	N.C.R
Software	Farad	EZ_EMC	BACL-03A1	N.C.R	N.C.R

Conducted Room					
Spectrum Analyzer	Rohde & Schwarz	FSU26	200268	2018/05/04	2019/05/03
Attenuator	MINI-CIRCUITS	BW-S10W5+	N/A	2018/03/08	2019/03/07
Cable	WOKEN	SFL402	S02-160323-07	2018/02/12	2019/02/11

***Statement of Traceability:** BACL Corp. attests that all of the calibrations on the equipment items listed above were traceable to the SI System of Units via the R.O.C. Center for Measurement Standards of the Electronics Testing Center, Taiwan (ETC) or to another internationally recognized National Metrology Institute (NMI), and were compliant with the current Taiwan Accreditation Foundation (TAF) requirements*

FCC §1.1310, § 2.1091 - Maximum Permissible Exposure (MPE)

Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mW/cm^2)**	**Averaging Time (minutes)**
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*($180/f^2$)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Calculated Formulary:

Predication of MPE limit at a given distance
$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm^2);
P = power input to the antenna (in appropriate units, e.g., mW);
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

RF Exposure Evaluation Result

MPE evaluation for single transmission:

Mode	Frequency (MHz)	Antenna Gain		Target Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		(dBi)	(numeric)	(dBm)	(mW)			
Band 2	1850-1910	5.50	3.548	21.50	141.254	20	0.100	1
Band 4	1710-1755	5.22	3.327	21.50	141.254	20	0.093	1
Band 5	824-849	2.66	1.845	23.50	223.872	20	0.082	0.55
Band 12	699-716	1.65	1.462	23.00	199.526	20	0.058	0.47
Band 13	777-787	1.09	1.285	23.00	199.526	20	0.051	0.52
Band 26	814-849	2.66	1.845	23.00	199.526	20	0.073	0.54

Result: MPE evaluation of single transmission meet 20cm the requirement of standard.

FCC §2.1047 - MODULATION CHARACTERISTIC

According to FCC § 2.1047(d), Part 22H & 24E, Part 27 , Part 90 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&§90.635 - 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 FCC §2.1046 and §27.50 (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 bandsmust employ a means for limiting power to the minimum necessary for successful communications.

According to §27.50
(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.

According to §90.635

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

Test Procedure

For Conducted method:

The RF output of the transmitter was connected to the CMW500 through sufficient attenuation

For ERP measurement:

ERP can be calculated by below formula from KDB 412172 D01.

$EIRP=P_T + G_T - L_C$

P_T = transmitter output power, in dBm.

G_T = gain of the transmitting antenna, in dBi (EIRP).

L_C = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

ERP = EIRP – 2.15 dB.

Environmental Conditions

Temperature:	25 ℃
Relative Humidity:	55 %
ATM Pressure:	1010 hPa

The testing was performed by Tom Hsu on 2018-06-08 ~ 2018-07-13.

Maximum Output Power

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	EIRP Power (dBm)	EIRP Limit
2	1.4	QPSK	Low	RB Size=0, Index=10	20.84	5.5	26.34	33
			Middle	RB Size=0, Index=10	20.89	5.5	26.39	33
			High	RB Size=0, Index=10	20.61	5.5	26.11	33
			Low	RB Size=6, Index=10	19.66	5.5	25.16	33
			Middle	RB Size=6, Index=10	20.00	5.5	25.5	33
			High	RB Size=6, Index=10	19.71	5.5	25.21	33
		16QAM	Low	RB Size=0, Index=10	20.56	5.5	26.06	33
			Middle	RB Size=0, Index=10	20.88	5.5	26.38	33
			High	RB Size=0, Index=10	20.53	5.5	26.03	33
			Low	RB Size=5, Index=10	19.51	5.5	25.01	33
			Middle	RB Size=5, Index=10	19.63	5.5	25.13	33
			High	RB Size=5, Index=10	19.61	5.5	25.11	33

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	EIRP Power (dBm)	EIRP Limit
2	3	QPSK	Low	RB Size=0, Index=10	20.84	5.5	26.34	33
			Middle	RB Size=0, Index=10	20.97	5.5	26.47	33
			High	RB Size=0, Index=10	20.68	5.5	26.18	33
			Low	RB Size=6, Index=10	19.68	5.5	25.18	33
			Middle	RB Size=6, Index=10	19.92	5.5	25.42	33
			High	RB Size=6, Index=10	19.73	5.5	25.23	33
		16QAM	Low	RB Size=0, Index=10	20.72	5.5	26.22	33
			Middle	RB Size=0, Index=10	20.86	5.5	26.36	33
			High	RB Size=0, Index=10	20.82	5.5	26.32	33
			Low	RB Size=5, Index=10	19.72	5.5	25.22	33
			Middle	RB Size=5, Index=10	19.79	5.5	25.29	33
			High	RB Size=5, Index=10	19.79	5.5	25.29	33

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	EIRP Power (dBm)	EIRP Limit
2	5	QPSK	Low	RB Size=0, Index=10	20.9	5.5	26.4	33
			Middle	RB Size=0, Index=10	20.15	5.5	25.65	33
			High	RB Size=0, Index=10	20.6	5.5	26.1	33
			Low	RB Size=6, Index=10	20.88	5.5	26.38	33
			Middle	RB Size=6, Index=10	20.56	5.5	26.06	33
			High	RB Size=6, Index=10	20.35	5.5	25.85	33
		16QAM	Low	RB Size=0, Index=10	20.85	5.5	26.35	33
			Middle	RB Size=0, Index=10	21.07	5.5	26.57	33
			High	RB Size=0, Index=10	19.95	5.5	25.45	33
			Low	RB Size=5, Index=10	20.03	5.5	25.53	33
			Middle	RB Size=5, Index=10	19.89	5.5	25.39	33
			High	RB Size=5, Index=10	21.03	5.5	26.53	33

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	EIRP Power (dBm)	EIRP Limit
2	10	QPSK	Low	RB Size=0, Index=10	20.61	5.5	26.11	33
			Middle	RB Size=0, Index=10	20	5.5	25.5	33
			High	RB Size=0, Index=10	20.66	5.5	26.16	33
			Low	RB Size=6, Index=10	20.19	5.5	25.69	33
			Middle	RB Size=6, Index=10	20.17	5.5	25.67	33
			High	RB Size=6, Index=10	20.22	5.5	25.72	33
		16QAM	Low	RB Size=0, Index=10	20.72	5.5	26.22	33
			Middle	RB Size=0, Index=10	20.55	5.5	26.05	33
			High	RB Size=0, Index=10	20.87	5.5	26.37	33
			Low	RB Size=5, Index=10	20.26	5.5	25.76	33
			Middle	RB Size=5, Index=10	20.07	5.5	25.57	33
			High	RB Size=5, Index=10	20.26	5.5	25.76	33

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	EIRP Power (dBm)	EIRP Limit
2	15	QPSK	Low	RB Size=0, Index=10	20.57	5.5	26.07	33
			Middle	RB Size=0, Index=10	20.55	5.5	26.05	33
			High	RB Size=0, Index=10	20.7	5.5	26.2	33
			Low	RB Size=6, Index=10	20.19	5.5	25.69	33
			Middle	RB Size=6, Index=10	20.49	5.5	25.99	33
			High	RB Size=6, Index=10	20.73	5.5	26.23	33
		16QAM	Low	RB Size=0, Index=10	20.72	5.5	26.22	33
			Middle	RB Size=0, Index=10	20.63	5.5	26.13	33
			High	RB Size=0, Index=10	21.08	5.5	26.58	33
			Low	RB Size=5, Index=10	20.52	5.5	26.02	33
			Middle	RB Size=5, Index=10	20.34	5.5	25.84	33
			High	RB Size=5, Index=10	20.78	5.5	26.28	33

Band	Bandwidth (MHz)	Modulation	channel	RB size/ NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	EIRP Power (dBm)	EIRP Limit
2	20	QPSK	Low	RB Size=0, Index=10	20.47	5.5	25.97	33
			Middle	RB Size=0, Index=10	20.57	5.5	26.07	33
			High	RB Size=0, Index=10	20.68	5.5	26.18	33
			Low	RB Size=6, Index=10	20.55	5.5	26.05	33
			Middle	RB Size=6, Index=10	20.64	5.5	26.14	33
			High	RB Size=6, Index=10	20.59	5.5	26.09	33
		16QAM	Low	RB Size=0, Index=10	20.4	5.5	25.9	33
			Middle	RB Size=0, Index=10	20.37	5.5	25.87	33
			High	RB Size=0, Index=10	20.44	5.5	25.94	33
			Low	RB Size=5, Index=10	20.43	5.5	25.93	33
			Middle	RB Size=5, Index=10	20.41	5.5	25.91	33
			High	RB Size=5, Index=10	20.47	5.5	25.97	33

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	EIRP Power (dBm)	EIRP Limit
4	1.4	QPSK	Low	RB Size=0, Index=10	21.24	5.22	26.46	30
			Middle	RB Size=0, Index=10	21.36	5.22	26.58	30
			High	RB Size=0, Index=10	21.34	5.22	26.56	30
			Low	RB Size=6, Index=10	20.32	5.22	25.54	30
			Middle	RB Size=6, Index=10	20.49	5.22	25.71	30
			High	RB Size=6, Index=10	20.3	5.22	25.52	30
		16QAM	Low	RB Size=0, Index=10	21.14	5.22	26.36	30
			Middle	RB Size=0, Index=10	21.3	5.22	26.52	30
			High	RB Size=0, Index=10	21.27	5.22	26.49	30
			Low	RB Size=5, Index=10	20.25	5.22	25.47	30
			Middle	RB Size=5, Index=10	20.33	5.22	25.55	30
			High	RB Size=5, Index=10	20.12	5.22	25.34	30

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	EIRP Power (dBm)	EIRP Limit
4	3	QPSK	Low	RB Size=0, Index=10	21.35	5.22	26.57	30
			Middle	RB Size=0, Index=10	21.41	5.22	26.63	30
			High	RB Size=0, Index=10	21.17	5.22	26.39	30
			Low	RB Size=6, Index=10	20.34	5.22	25.56	30
			Middle	RB Size=6, Index=10	20.37	5.22	25.59	30
			High	RB Size=6, Index=10	20.13	5.22	25.35	30
		16QAM	Low	RB Size=0, Index=10	21.07	5.22	26.29	30
			Middle	RB Size=0, Index=10	21.34	5.22	26.56	30
			High	RB Size=0, Index=10	21.16	5.22	26.38	30
			Low	RB Size=5, Index=10	20.26	5.22	25.48	30
			Middle	RB Size=5, Index=10	20.23	5.22	25.45	30
			High	RB Size=5, Index=10	20.22	5.22	25.44	30

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	EIRP Power (dBm)	EIRP Limit
4	5	QPSK	Low	RB Size=0, Index=10	21.16	5.22	26.38	30
			Middle	RB Size=0, Index=10	21.13	5.22	26.35	30
			High	RB Size=0, Index=10	21.35	5.22	26.57	30
			Low	RB Size=6, Index=10	20.47	5.22	25.69	30
			Middle	RB Size=6, Index=10	20.66	5.22	25.88	30
			High	RB Size=6, Index=10	20.68	5.22	25.9	30
		16QAM	Low	RB Size=0, Index=10	21.33	5.22	26.55	30
			Middle	RB Size=0, Index=10	20.24	5.22	25.46	30
			High	RB Size=0, Index=10	20.21	5.22	25.43	30
			Low	RB Size=5, Index=10	20.25	5.22	25.47	30
			Middle	RB Size=5, Index=10	21.36	5.22	26.58	30
			High	RB Size=5, Index=10	21.42	5.22	26.64	30

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
4	10	QPSK	Low	RB Size=0, Index=10	21.12	5.22	26.34	30
			Middle	RB Size=0, Index=10	20.85	5.22	26.07	30
			High	RB Size=0, Index=10	21.21	5.22	26.43	30
			Low	RB Size=6, Index=10	20.68	5.22	25.9	30
			Middle	RB Size=6, Index=10	20.56	5.22	25.78	30
			High	RB Size=6, Index=10	20.83	5.22	26.05	30
		16QAM	Low	RB Size=0, Index=10	21.12	5.22	26.34	30
			Middle	RB Size=0, Index=10	20.66	5.22	25.88	30
			High	RB Size=0, Index=10	21.42	5.22	26.64	30
			Low	RB Size=5, Index=10	20.63	5.22	25.85	30
			Middle	RB Size=5, Index=10	20.48	5.22	25.7	30
			High	RB Size=5, Index=10	20.79	5.22	26.01	30

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
4	15	QPSK	Low	RB Size=0, Index=10	21.01	5.22	26.23	30
			Middle	RB Size=0, Index=10	20.93	5.22	26.15	30
			High	RB Size=0, Index=10	21.16	5.22	26.38	30
			Low	RB Size=6, Index=10	20.83	5.22	26.05	30
			Middle	RB Size=6, Index=10	20.89	5.22	26.11	30
			High	RB Size=6, Index=10	21.05	5.22	26.27	30
		16QAM	Low	RB Size=0, Index=10	21.05	5.22	26.27	30
			Middle	RB Size=0, Index=10	20.92	5.22	26.14	30
			High	RB Size=0, Index=10	20.96	5.22	26.18	30
			Low	RB Size=5, Index=10	20.89	5.22	26.11	30
			Middle	RB Size=5, Index=10	20.94	5.22	26.16	30
			High	RB Size=5, Index=10	21.3	5.22	26.52	30

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
4	20	QPSK	Low	RB Size=0, Index=10	21.01	5.22	26.23	30
			Middle	RB Size=0, Index=10	20.92	5.22	26.14	30
			High	RB Size=0, Index=10	21.02	5.22	26.24	30
			Low	RB Size=6, Index=10	21.01	5.22	26.23	30
			Middle	RB Size=6, Index=10	20.96	5.22	26.18	30
			High	RB Size=6, Index=10	21.06	5.22	26.28	30
		16QAM	Low	RB Size=0, Index=10	21.33	5.22	26.55	30
			Middle	RB Size=0, Index=10	21.25	5.22	26.47	30
			High	RB Size=0, Index=10	21.34	5.22	26.56	30
			Low	RB Size=5, Index=10	21.2	5.22	26.42	30
			Middle	RB Size=5, Index=10	21.08	5.22	26.3	30
			High	RB Size=5, Index=10	21.18	5.22	26.4	30

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
5	1.4	QPSK	Low	RB Size=0, Index=10	22.94	2.66	23.45	38.5
			Middle	RB Size=0, Index=10	23.01	2.66	23.52	38.5
			High	RB Size=0, Index=10	22.85	2.66	23.36	38.5
			Low	RB Size=6, Index=10	21.79	2.66	22.3	38.5
			Middle	RB Size=6, Index=10	21.97	2.66	22.48	38.5
			High	RB Size=6, Index=10	21.81	2.66	22.32	38.5
		16QAM	Low	RB Size=0, Index=10	22.72	2.66	23.23	38.5
			Middle	RB Size=0, Index=10	22.94	2.66	23.45	38.5
			High	RB Size=0, Index=10	23	2.66	23.51	38.5
			Low	RB Size=5, Index=10	21.86	2.66	22.37	38.5
			Middle	RB Size=5, Index=10	21.91	2.66	22.42	38.5
			High	RB Size=5, Index=10	21.77	2.66	22.28	38.5

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
5	3	QPSK	Low	RB Size=0, Index=10	22.93	2.66	23.44	38.5
			Middle	RB Size=0, Index=10	23.13	2.66	23.64	38.5
			High	RB Size=0, Index=10	23	2.66	23.51	38.5
			Low	RB Size=6, Index=10	22.05	2.66	22.56	38.5
			Middle	RB Size=6, Index=10	22.1	2.66	22.61	38.5
			High	RB Size=6, Index=10	21.89	2.66	22.4	38.5
		16QAM	Low	RB Size=0, Index=10	23.07	2.66	23.58	38.5
			Middle	RB Size=0, Index=10	23	2.66	23.51	38.5
			High	RB Size=0, Index=10	22.89	2.66	23.4	38.5
			Low	RB Size=5, Index=10	21.85	2.66	22.36	38.5
			Middle	RB Size=5, Index=10	22.12	2.66	22.63	38.5
			High	RB Size=5, Index=10	21.94	2.66	22.45	38.5

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
5	5	QPSK	Low	RB Size=0, Index=10	22.87	2.66	23.38	38.5
			Middle	RB Size=0, Index=10	22.96	2.66	23.47	38.5
			High	RB Size=0, Index=10	23.01	2.66	23.52	38.5
			Low	RB Size=6, Index=10	22.33	2.66	22.84	38.5
			Middle	RB Size=6, Index=10	22.32	2.66	22.83	38.5
			High	RB Size=6, Index=10	22.4	2.66	22.91	38.5
		16QAM	Low	RB Size=0, Index=10	22.74	2.66	23.25	38.5
			Middle	RB Size=0, Index=10	22.85	2.66	23.36	38.5
			High	RB Size=0, Index=10	22.87	2.66	23.38	38.5
			Low	RB Size=5, Index=10	21.62	2.66	22.13	38.5
			Middle	RB Size=5, Index=10	21.66	2.66	22.17	38.5
			High	RB Size=5, Index=10	21.73	2.66	22.24	38.5

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
5	10	QPSK	Low	RB Size=0, Index=10	23	2.66	23.51	38.5
			Middle	RB Size=0, Index=10	22.93	2.66	23.44	38.5
			High	RB Size=0, Index=10	23.01	2.66	23.52	38.5
			Low	RB Size=6, Index=10	21.97	2.66	22.48	38.5
			Middle	RB Size=6, Index=10	21.91	2.66	22.42	38.5
			High	RB Size=6, Index=10	22.05	2.66	22.56	38.5
		16QAM	Low	RB Size=0, Index=10	22.87	2.66	23.38	38.5
			Middle	RB Size=0, Index=10	22.86	2.66	23.37	38.5
			High	RB Size=0, Index=10	22.82	2.66	23.33	38.5
			Low	RB Size=5, Index=10	22.48	2.66	22.99	38.5
			Middle	RB Size=5, Index=10	21.85	2.66	22.36	38.5
			High	RB Size=5, Index=10	21.93	2.66	22.44	38.5

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
12	1.4	QPSK	Low	RB Size=0, Index=10	22.52	1.65	22.02	34.77
			Middle	RB Size=0, Index=10	22.68	1.65	22.18	34.77
			High	RB Size=0, Index=10	22.39	1.65	21.89	34.77
			Low	RB Size=6, Index=10	21.52	1.65	21.02	34.77
			Middle	RB Size=6, Index=10	21.66	1.65	21.16	34.77
			High	RB Size=6, Index=10	21.61	1.65	21.11	34.77
		16QAM	Low	RB Size=0, Index=10	22.54	1.65	22.04	34.77
			Middle	RB Size=0, Index=10	22.62	1.65	22.12	34.77
			High	RB Size=0, Index=10	22.37	1.65	21.87	34.77
			Low	RB Size=5, Index=10	21.26	1.65	20.76	34.77
			Middle	RB Size=5, Index=10	21.59	1.65	21.09	34.77
			High	RB Size=5, Index=10	21.44	1.65	20.94	34.77

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
12	3	QPSK	Low	RB Size=0, Index=10	22.74	1.65	22.24	34.77
			Middle	RB Size=0, Index=10	22.79	1.65	22.29	34.77
			High	RB Size=0, Index=10	22.59	1.65	22.09	34.77
			Low	RB Size=6, Index=10	21.72	1.65	21.22	34.77
			Middle	RB Size=6, Index=10	21.88	1.65	21.38	34.77
			High	RB Size=6, Index=10	21.58	1.65	21.08	34.77
		16QAM	Low	RB Size=0, Index=10	22.43	1.65	21.93	34.77
			Middle	RB Size=0, Index=10	22.71	1.65	22.21	34.77
			High	RB Size=0, Index=10	22.63	1.65	22.13	34.77
			Low	RB Size=5, Index=10	21.37	1.65	20.87	34.77
			Middle	RB Size=5, Index=10	21.73	1.65	21.23	34.77
			High	RB Size=5, Index=10	21.43	1.65	20.93	34.77

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
12	5	QPSK	Low	RB Size=0, Index=10	22.63	1.65	22.13	34.77
			Middle	RB Size=0, Index=10	22.55	1.65	22.05	34.77
			High	RB Size=0, Index=10	22.69	1.65	22.19	34.77
			Low	RB Size=6, Index=10	21.55	1.65	21.05	34.77
			Middle	RB Size=6, Index=10	22.47	1.65	21.97	34.77
			High	RB Size=6, Index=10	21.49	1.65	20.99	34.77
		16QAM	Low	RB Size=0, Index=10	22.59	1.65	22.09	34.77
			Middle	RB Size=0, Index=10	22.48	1.65	21.98	34.77
			High	RB Size=0, Index=10	22.59	1.65	22.09	34.77
			Low	RB Size=5, Index=10	20.38	1.65	19.88	34.77
			Middle	RB Size=5, Index=10	20.28	1.65	19.78	34.77
			High	RB Size=5, Index=10	20.4	1.65	19.9	34.77

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
12	10	QPSK	Low	RB Size=0, Index=10	22.71	1.65	22.21	34.77
			Middle	RB Size=0, Index=10	22.63	1.65	22.13	34.77
			High	RB Size=0, Index=10	22.63	1.65	22.13	34.77
			Low	RB Size=6, Index=10	21.64	1.65	21.14	34.77
			Middle	RB Size=6, Index=10	21.44	1.65	20.94	34.77
			High	RB Size=6, Index=10	21.44	1.65	20.94	34.77
		16QAM	Low	RB Size=0, Index=10	22.61	1.65	22.11	34.77
			Middle	RB Size=0, Index=10	22.55	1.65	22.05	34.77
			High	RB Size=0, Index=10	22.53	1.65	22.03	34.77
			Low	RB Size=5, Index=10	21.62	1.65	21.12	34.77
			Middle	RB Size=5, Index=10	21.36	1.65	20.86	34.77
			High	RB Size=5, Index=10	21.41	1.65	20.91	34.77

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
13	5	QPSK	Low	RB Size=0, Index=10	22.64	1.09	21.58	34.77
			Middle	RB Size=0, Index=10	22.55	1.09	21.49	34.77
			High	RB Size=0, Index=10	22.61	1.09	21.55	34.77
			Low	RB Size=6, Index=10	21.74	1.09	20.68	34.77
			Middle	RB Size=6, Index=10	21.74	1.09	20.68	34.77
			High	RB Size=6, Index=10	21.74	1.09	20.68	34.77
		16QAM	Low	RB Size=0, Index=10	22.68	1.09	21.62	34.77
			Middle	RB Size=0, Index=10	22.45	1.09	21.39	34.77
			High	RB Size=0, Index=10	22.68	1.09	21.62	34.77
			Low	RB Size=5, Index=10	20.58	1.09	19.52	34.77
			Middle	RB Size=5, Index=10	20.46	1.09	19.4	34.77
			High	RB Size=5, Index=10	20.57	1.09	19.51	34.77

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
13	10	QPSK	Low	RB Size=0, Index=10	N/A	1.09	N/A	34.77
			Middle	RB Size=0, Index=10	22.51	1.09	21.45	34.77
			High	RB Size=0, Index=10	N/A	1.09	N/A	34.77
			Low	RB Size=6, Index=10	N/A	1.09	N/A	34.77
			Middle	RB Size=6, Index=10	21.6	1.09	20.54	34.77
			High	RB Size=6, Index=10	N/A	1.09	N/A	34.77
		16QAM	Low	RB Size=0, Index=10	N/A	1.09	N/A	34.77
			Middle	RB Size=0, Index=10	22.42	1.09	21.36	34.77
			High	RB Size=0, Index=10	N/A	1.09	N/A	34.77
			Low	RB Size=5, Index=10	N/A	1.09	N/A	34.77
			Middle	RB Size=5, Index=10	21.42	1.09	20.36	34.77
			High	RB Size=5, Index=10	N/A	1.09	N/A	34.77

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
26	1.4	QPSK	Low	RB Size=0, Index=10	20.86	2.66	21.37	38.5
			Middle	RB Size=0, Index=10	21.07	2.66	21.58	38.5
			High	RB Size=0, Index=10	20.99	2.66	21.5	38.5
			Low	RB Size=6, Index=10	19.91	2.66	20.42	38.5
			Middle	RB Size=6, Index=10	20.27	2.66	20.78	38.5
			High	RB Size=6, Index=10	20.02	2.66	20.53	38.5
		16QAM	Low	RB Size=0, Index=10	21.07	2.66	21.58	38.5
			Middle	RB Size=0, Index=10	20.93	2.66	21.44	38.5
			High	RB Size=0, Index=10	20.91	2.66	21.42	38.5
			Low	RB Size=5, Index=10	19.8	2.66	20.31	38.5
			Middle	RB Size=5, Index=10	19.95	2.66	20.46	38.5
			High	RB Size=5, Index=10	19.61	2.66	20.12	38.5

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
26	3	QPSK	Low	RB Size=0, Index=10	22.74	2.66	23.25	38.5
			Middle	RB Size=0, Index=10	22.83	2.66	23.34	38.5
			High	RB Size=0, Index=10	22.78	2.66	23.29	38.5
			Low	RB Size=6, Index=10	21.32	2.66	21.83	38.5
			Middle	RB Size=6, Index=10	21.48	2.66	21.99	38.5
			High	RB Size=6, Index=10	21.34	2.66	21.85	38.5
		16QAM	Low	RB Size=0, Index=10	22.52	2.66	23.03	38.5
			Middle	RB Size=0, Index=10	22.66	2.66	23.17	38.5
			High	RB Size=0, Index=10	22.57	2.66	23.08	38.5
			Low	RB Size=5, Index=10	20.96	2.66	21.47	38.5
			Middle	RB Size=5, Index=10	21.08	2.66	21.59	38.5
			High	RB Size=5, Index=10	20.93	2.66	21.44	38.5

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
26	5	QPSK	Low	RB Size=0, Index=10	22.55	2.66	23.06	38.5
			Middle	RB Size=0, Index=10	22.6	2.66	23.11	38.5
			High	RB Size=0, Index=10	22.58	2.66	23.09	38.5
			Low	RB Size=6, Index=10	21.6	2.66	22.11	38.5
			Middle	RB Size=6, Index=10	21.51	2.66	22.02	38.5
			High	RB Size=6, Index=10	21.62	2.66	22.13	38.5
		16QAM	Low	RB Size=0, Index=10	22.37	2.66	22.88	38.5
			Middle	RB Size=0, Index=10	22.36	2.66	22.87	38.5
			High	RB Size=0, Index=10	22.37	2.66	22.88	38.5
			Low	RB Size=5, Index=10	20.66	2.66	21.17	38.5
			Middle	RB Size=5, Index=10	20.41	2.66	20.92	38.5
			High	RB Size=5, Index=10	22.33	2.66	22.84	38.5

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
26	10	QPSK	Low	RB Size=0, Index=10	22.4	2.66	22.91	38.5
			Middle	RB Size=0, Index=10	22.43	2.66	22.94	38.5
			High	RB Size=0, Index=10	22.45	2.66	22.96	38.5
			Low	RB Size=6, Index=10	21.46	2.66	21.97	38.5
			Middle	RB Size=6, Index=10	21.36	2.66	21.87	38.5
			High	RB Size=6, Index=10	21.43	2.66	21.94	38.5
		16QAM	Low	RB Size=0, Index=10	22.28	2.66	22.79	38.5
			Middle	RB Size=0, Index=10	22.23	2.66	22.74	38.5
			High	RB Size=0, Index=10	22.22	2.66	22.73	38.5
			Low	RB Size=5, Index=10	21.3	2.66	21.81	38.5
			Middle	RB Size=5, Index=10	21.36	2.66	21.87	38.5
			High	RB Size=5, Index=10	21.35	2.66	21.86	38.5

Band	Bandwidth (MHz)	Modulation	channel	RB size / NB Index	Conducted Average Power (dBm)	Ant Gain (dBi)	ERP Power (dBm)	ERP Limit
26	15	QPSK	Low	RB Size=0, Index=10	22.33	2.66	22.84	38.5
			Middle	RB Size=0, Index=10	22.43	2.66	22.94	38.5
			High	RB Size=0, Index=10	22.55	2.66	23.06	38.5
			Low	RB Size=6, Index=10	22.36	2.66	22.87	38.5
			Middle	RB Size=6, Index=10	22.42	2.66	22.93	38.5
			High	RB Size=6, Index=10	22.58	2.66	23.09	38.5
		16QAM	Low	RB Size=0, Index=10	22.17	2.66	22.68	38.5
			Middle	RB Size=0, Index=10	22.19	2.66	22.7	38.5
			High	RB Size=0, Index=10	22.47	2.66	22.98	38.5
			Low	RB Size=5, Index=10	22.28	2.66	22.79	38.5
			Middle	RB Size=5, Index=10	22.45	2.66	22.96	38.5
			High	RB Size=5, Index=10	22.45	2.66	22.96	38.5

Peak-to-average ratio (PAR)

Band	Bandwidth	Modulation	Low Channel (dB)	Middle Channel (dB)	High Channel (dB)	PAR Limit (dB)	Result
2	1.4	QPSK	8.08	8.24	8.26	13	PASS
		16QAM	8.33	8.2	7.86	13	PASS
	3	QPSK	8.55	8.16	7.87	13	PASS
		16QAM	8.35	8.35	7.83	13	PASS
	5	QPSK	8.35	8.49	8.55	13	PASS
		16QAM	8.28	8.45	8.53	13	PASS
	10	QPSK	8.48	8.07	7.95	13	PASS
		16QAM	8.23	8.46	7.96	13	PASS
	15	QPSK	8.00	8.36	8.15	13	PASS
		16QAM	7.93	8.57	8.19	13	PASS
	20	QPSK	8.39	8.02	8.23	13	PASS
		16QAM	8.37	8.37	7.84	13	PASS
4	1.4	QPSK	8.56	8.06	8.18	13	PASS
		16QAM	8.1	8.31	8.17	13	PASS
	3	QPSK	8.41	8.28	8.57	13	PASS
		16QAM	7.93	8.47	8.02	13	PASS
	5	QPSK	8.06	8.55	7.85	13	PASS
		16QAM	8.35	7.86	7.94	13	PASS
	10	QPSK	8.04	8.29	8.04	13	PASS
		16QAM	8.11	8.19	7.88	13	PASS
	15	QPSK	8.45	8.52	8.26	13	PASS
		16QAM	8.25	8.46	8.21	13	PASS
	20	QPSK	8.31	8.22	8.28	13	PASS
		16QAM	8.57	8.57	8.29	13	PASS
5	1.4	QPSK	7.80	7.95	7.90	13	PASS
		16QAM	8.51	8.52	8.46	13	PASS
	3	QPSK	8.26	8.42	8.41	13	PASS
		16QAM	8.43	8.42	8.14	13	PASS
	5	QPSK	8.11	7.95	8.58	13	PASS
		16QAM	7.99	7.93	8.13	13	PASS
	10	QPSK	8.2	8.49	8.32	13	PASS
		16QAM	8.22	8.14	8.44	13	PASS

Band	Bandwidth	Modulation	Low Channel (dB)	Middle Channel (dB)	High Channel (dB)	PAR Limit (dB)	Result
12	1.4	QPSK	8.49	8.57	7.99	13	PASS
		16QAM	8.32	8.38	8.01	13	PASS
	3	QPSK	8.50	8.13	8.45	13	PASS
		16QAM	8.34	8.15	8.52	13	PASS
	5	QPSK	8.34	8.19	8.05	13	PASS
		16QAM	8.29	8.08	7.8	13	PASS
	10	QPSK	7.90	7.92	8.57	13	PASS
		16QAM	8.06	8.44	8.11	13	PASS
13	5	QPSK	7.98	7.93	8.49	13	PASS
		16QAM	7.93	8.15	8.31	13	PASS
	10	QPSK	8.22	8.52	8.55	13	PASS
		16QAM	8.39	7.84	8.26	13	PASS
26	1.4	QPSK	7.87	7.89	7.92	13	PASS
		16QAM	8.58	8.42	8.40	13	PASS
	3	QPSK	8.26	7.91	8.08	13	PASS
		16QAM	7.98	8.07	8.27	13	PASS
	5	QPSK	8.16	8.55	8.17	13	PASS
		16QAM	8.17	8.58	8.21	13	PASS
	10	QPSK	7.85	8.55	8.57	13	PASS
		16QAM	8.04	8.26	8.03	13	PASS
	15	QPSK	7.81	8.20	7.93	13	PASS
		16QAM	8.38	8.26	8.00	13	PASS

FCC §2.1049, §22.917, §22.905 & §24.238 & §27.53&§90.209–Occupied Bandwidth

Applicable Standard

FCC §2.1049, §22.917, §22.905, §24.238, §27.53, §90.209

Test Procedure

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

The resolution bandwidth of the spectrum analyzer was set at 1% to 5% of the anticipated emission bandwidth and the 26 dB & 99% bandwidth was recorded.

Environmental Conditions

Temperature:	25 ℃
Relative Humidity:	55 %
ATM Pressure:	1010 hPa

The testing was performed by Tom Hsu on 2018-06-07 ~ 2018-07-13.

Test Mode: Transmitting

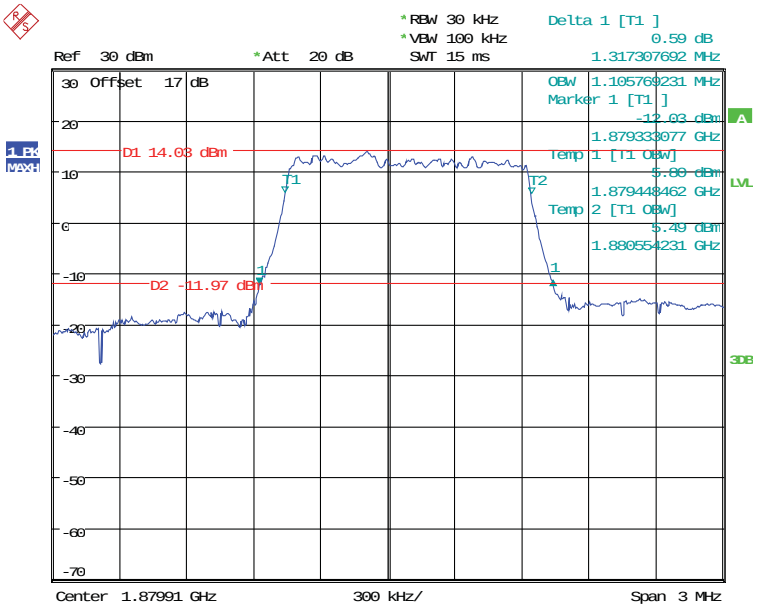
Test Result: Compliant. Please refer to the following table and plots.

Band	Bandwidth	Modulation	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
2	1.4	QPSK	1.106	1.317
		16QAM	0.952	1.183
	3	QPSK	1.144	1.655
		16QAM	0.966	1.308
	5	QPSK	1.135	1.466
		16QAM	0.966	1.245
	10	QPSK	1.144	1.615
		16QAM	1.005	1.402
	15	QPSK	1.135	1.595
		16QAM	0.976	1.553
	20	QPSK	1.053	1.625
		16QAM	1.048	1.635
4	1.4	QPSK	1.101	1.303
		16QAM	0.947	1.190
	3	QPSK	1.125	1.499
		16QAM	0.966	1.301
	5	QPSK	1.111	1.447
		16QAM	0.966	1.268
	10	QPSK	1.149	1.611
		16QAM	1.005	1.413
	15	QPSK	1.154	1.655
		16QAM	1.000	1.490
	20	QPSK	1.144	1.635
		16QAM	1.000	1.552
5	1.4	QPSK	1.101	1.299
		16QAM	0.942	1.178
	3	QPSK	1.135	1.636
		16QAM	0.961	1.298
	5	QPSK	1.115	1.381
		16QAM	0.952	1.212
	10	QPSK	1.130	1.606
		16QAM	0.976	1.455

Band	Bandwidth	Modulation	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
12	1.4	QPSK	1.101	1.293
		16QAM	0.942	1.181
	3	QPSK	1.130	1.572
		16QAM	0.961	1.293
	5	QPSK	1.111	1.381
		16QAM	0.952	1.245
	10	QPSK	1.144	1.524
		16QAM	0.981	1.403
13	5	QPSK	1.115	1.394
		16QAM	0.952	1.240
	10	QPSK	1.149	1.581
		16QAM	0.995	1.446
26	1.4	QPSK	1.106	1.293
		16QAM	0.942	1.157
	3	QPSK	1.135	1.654
		16QAM	0.962	1.311
	5	QPSK	1.111	1.428
		16QAM	0.957	1.303
	10	QPSK	1.139	1.598
		16QAM	0.995	1.524
	15	QPSK	1.135	1.617
		16QAM	0.971	1.510

LTE Band 2

QPSK_1.4MHz



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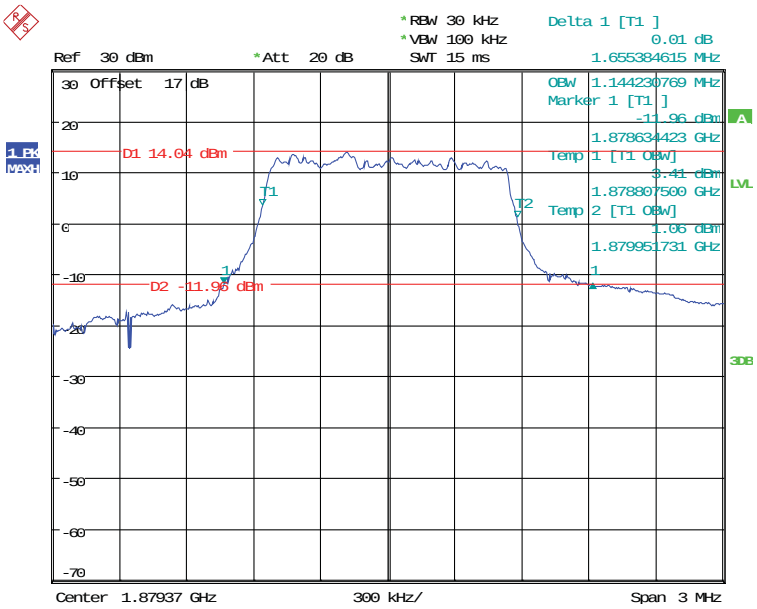
QPSK_3MHz



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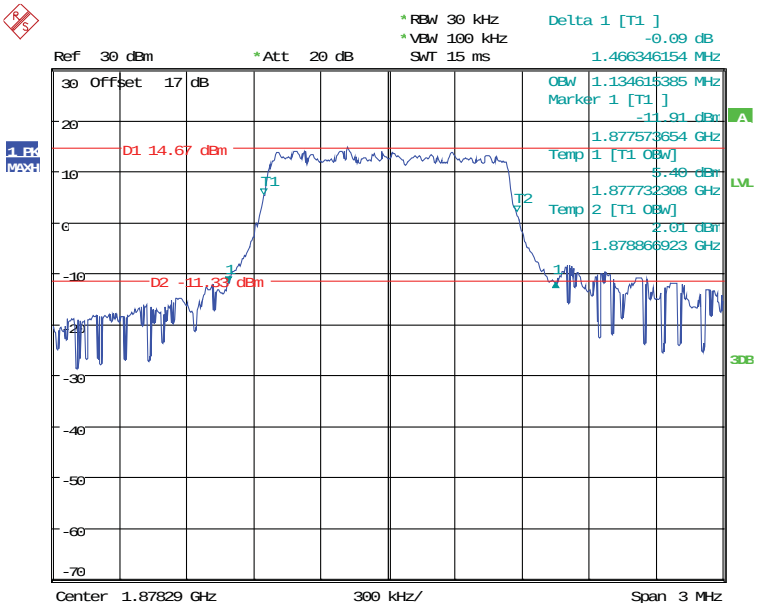
QPSK_5MHz



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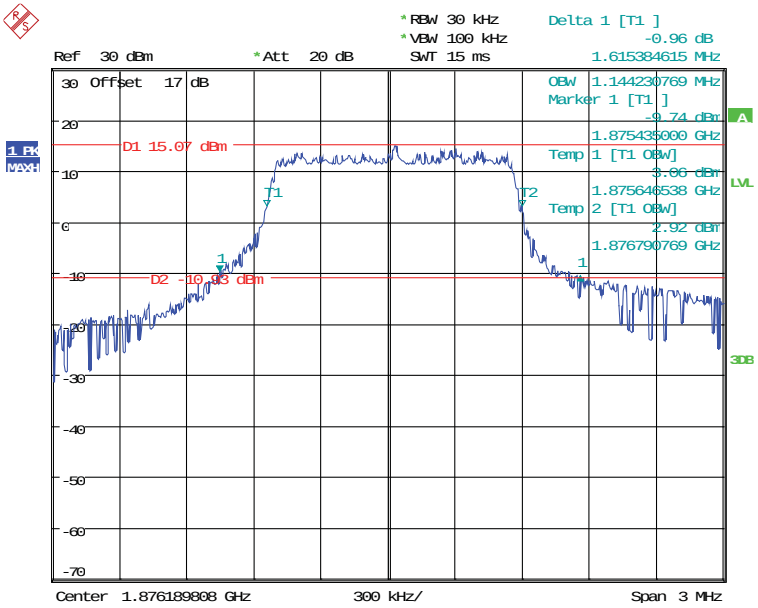
QPSK_10MHz



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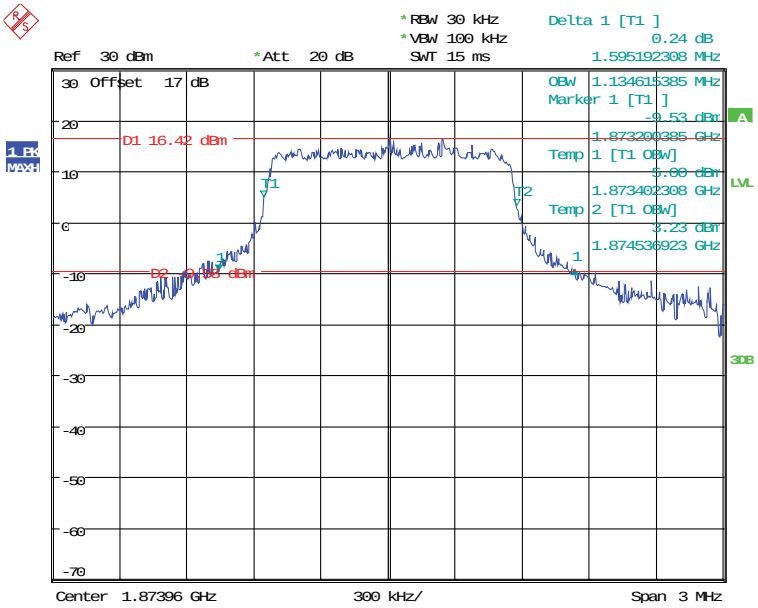
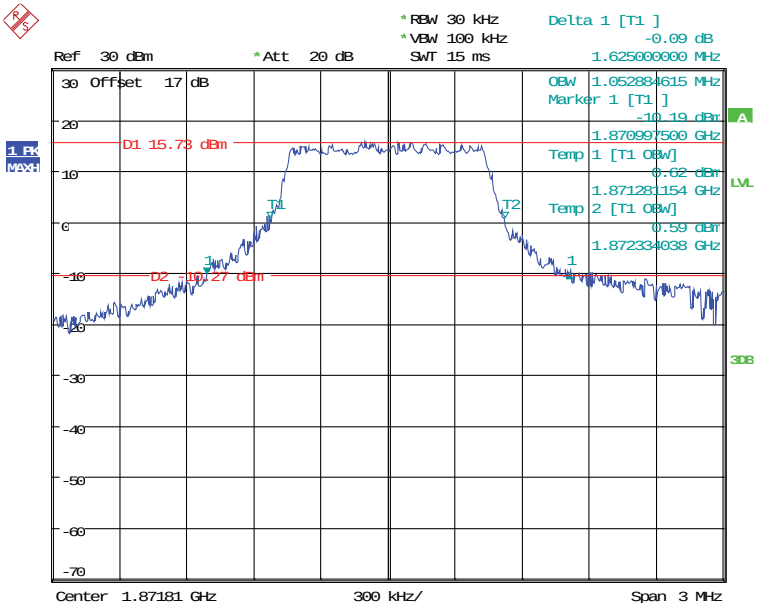
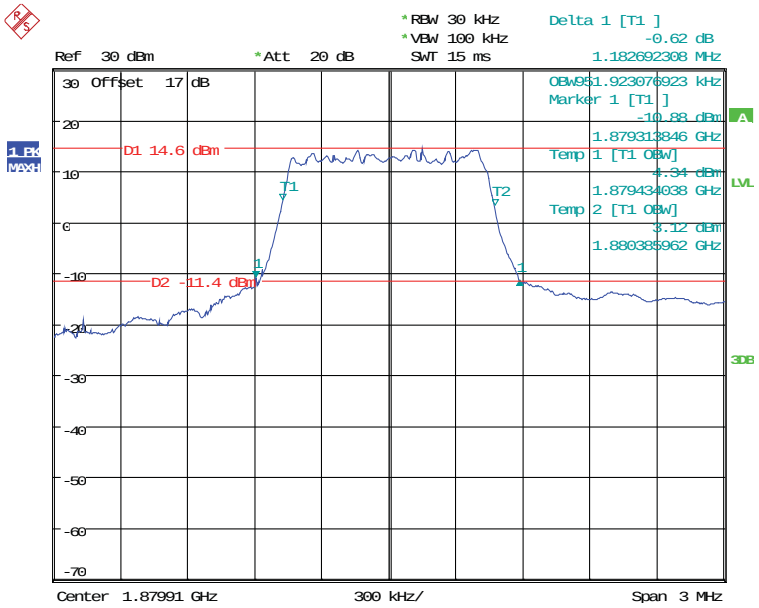
QPSK_15MHz



QPSK_20MHz



16QAM_1.4MHz



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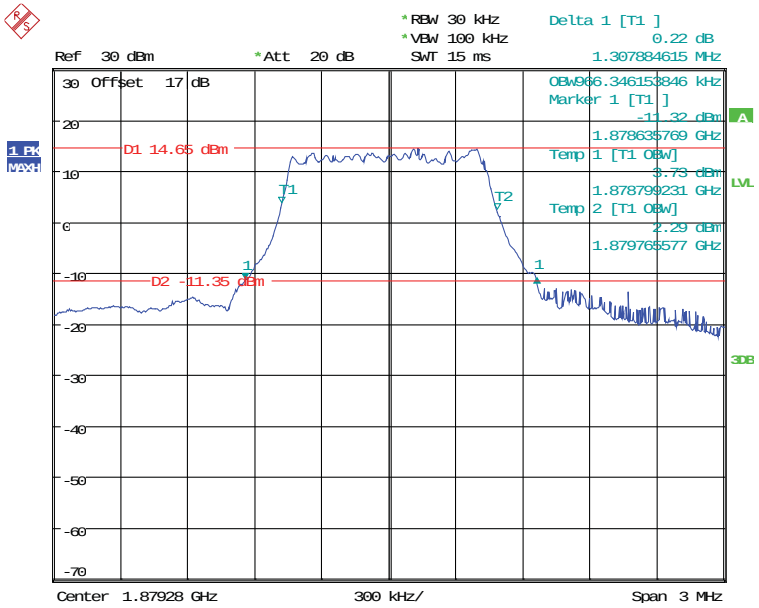
16QAM_3MHz



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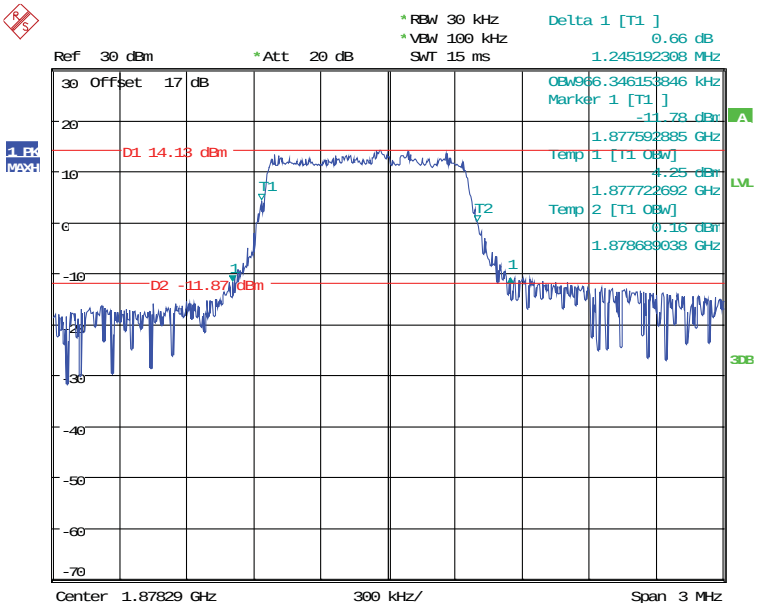
16QAM_5MHz



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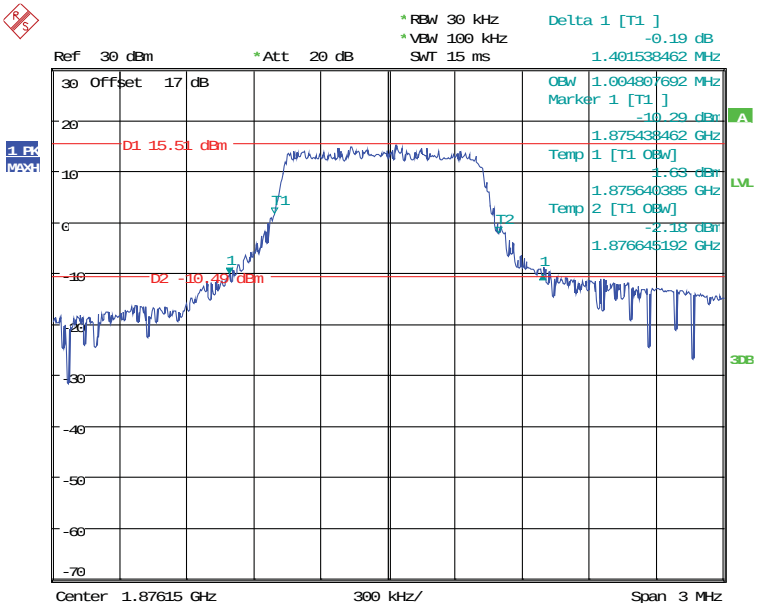
16QAM _10MHz



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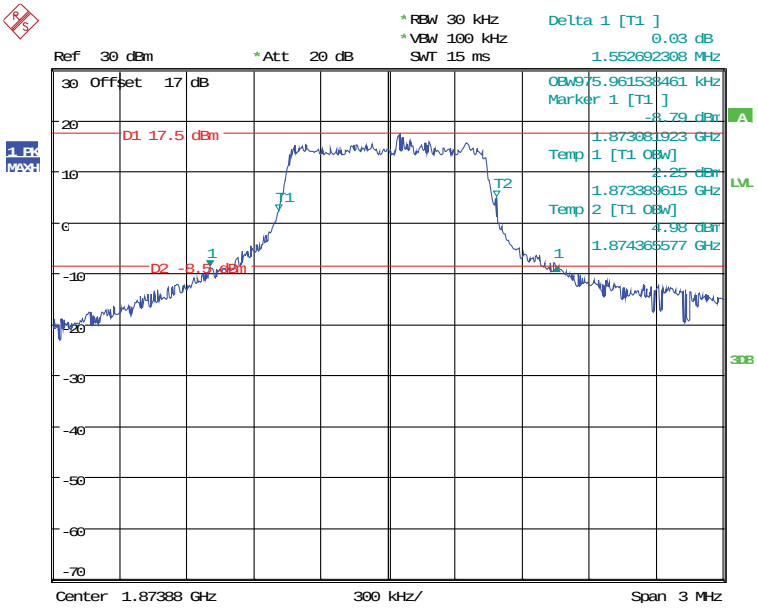
16QAM _15MHz



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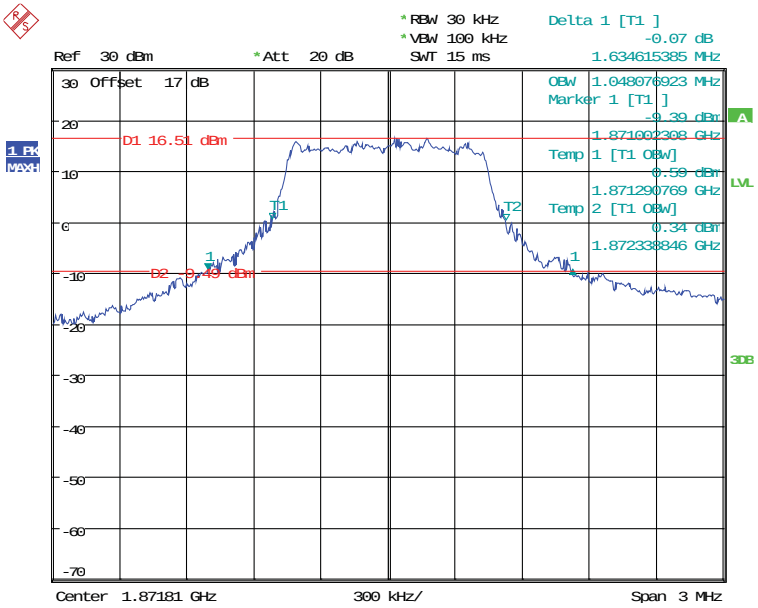
16QAM _20MHz



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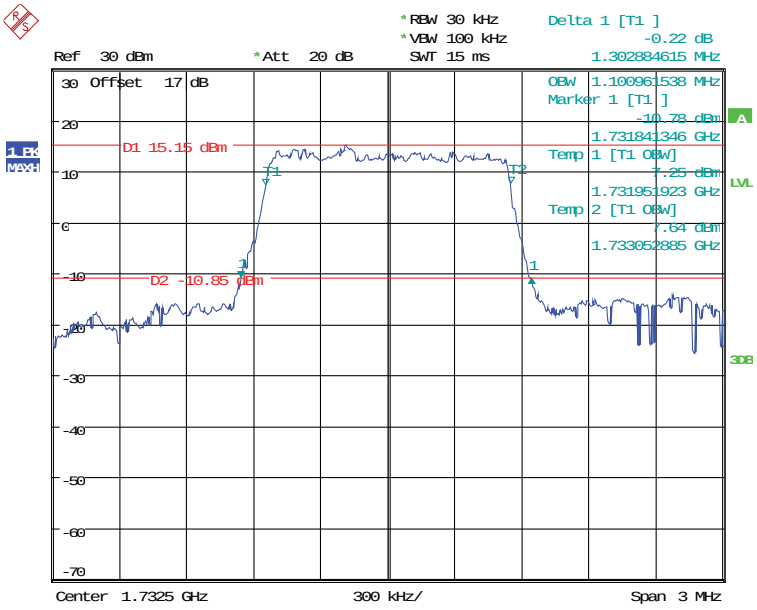
LTE Band 4

QPSK_1.4MHz



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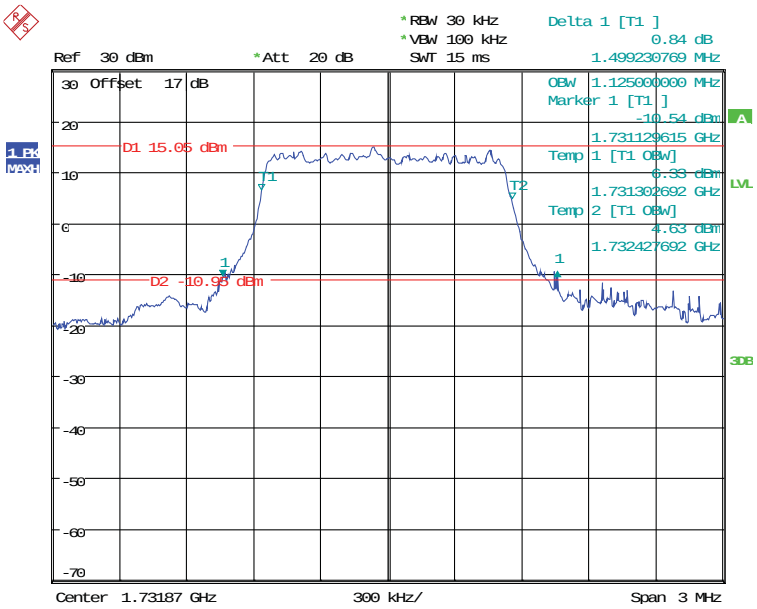
QPSK_3MHz



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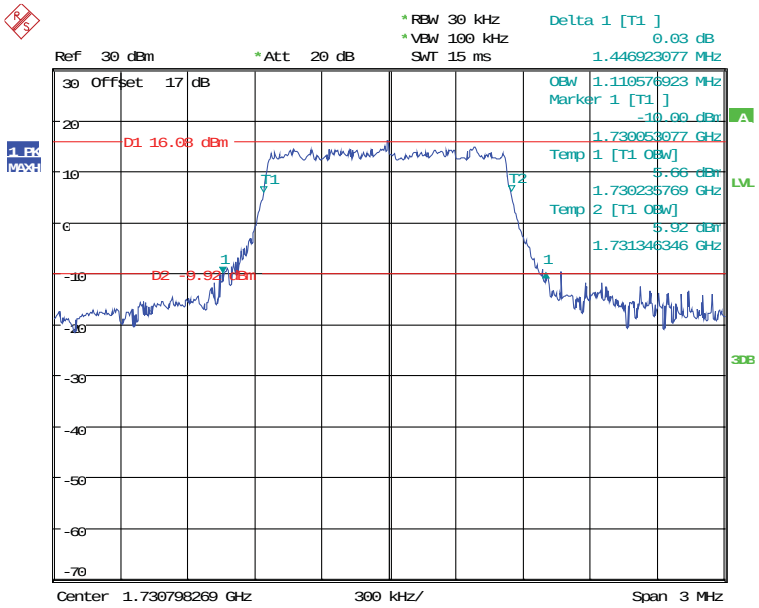
QPSK_5MHz



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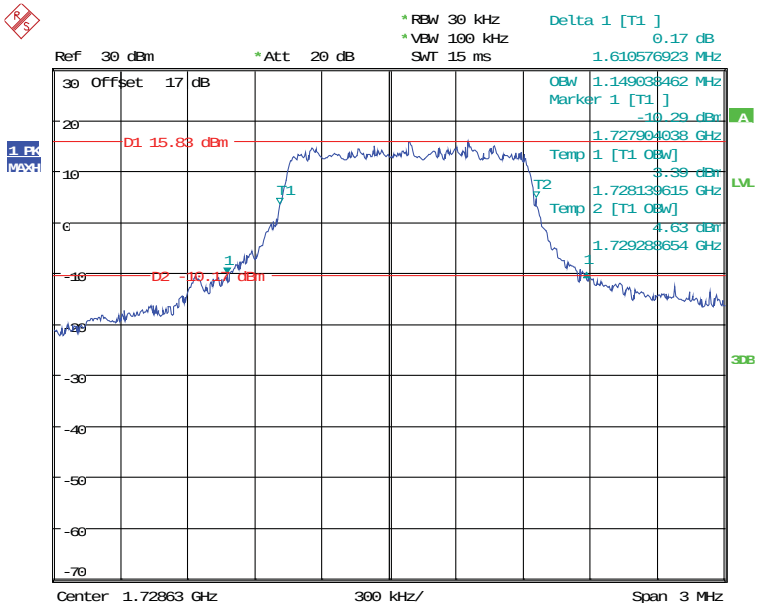
QPSK_10MHz



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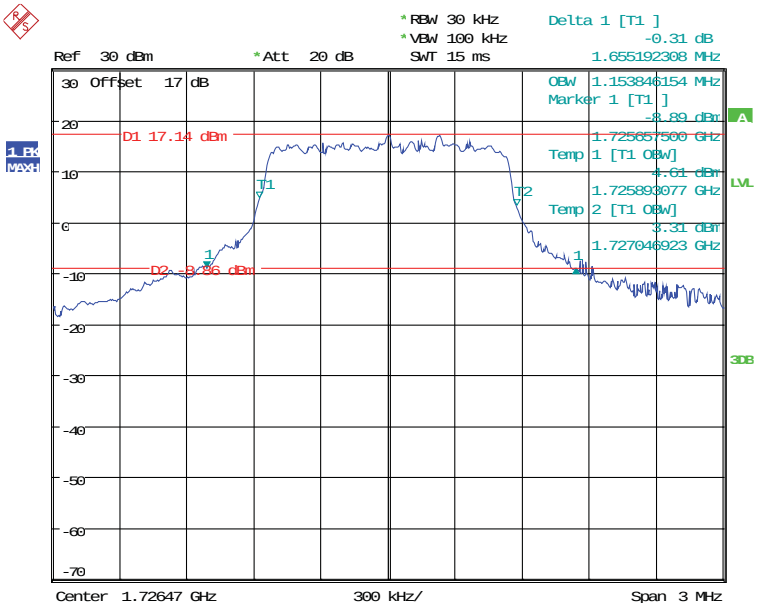
QPSK_15MHz



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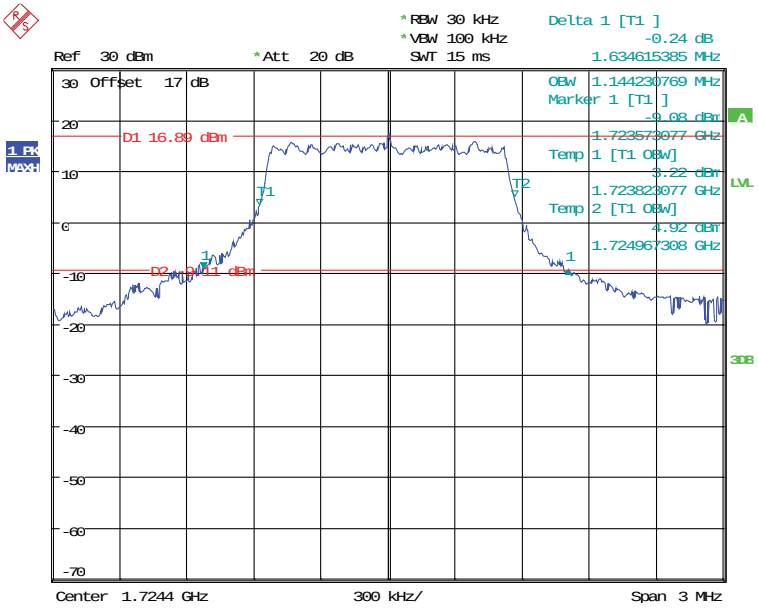
QPSK_20MHz



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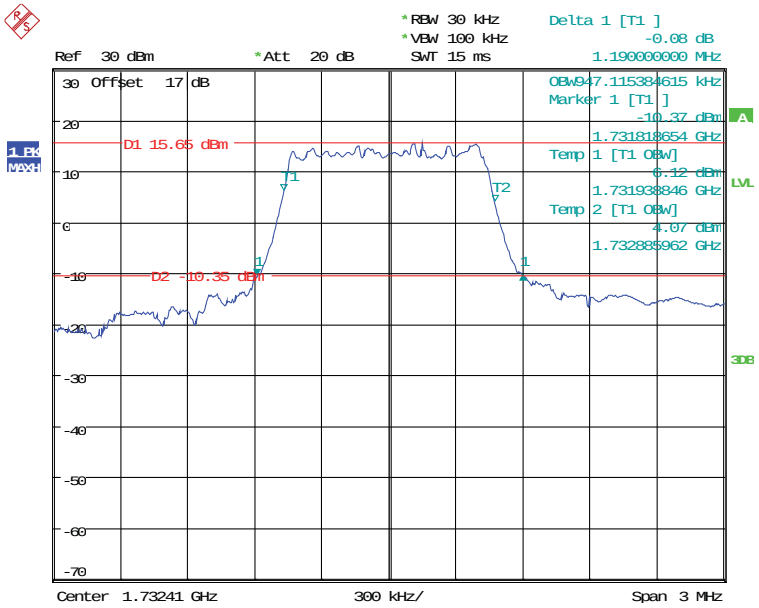
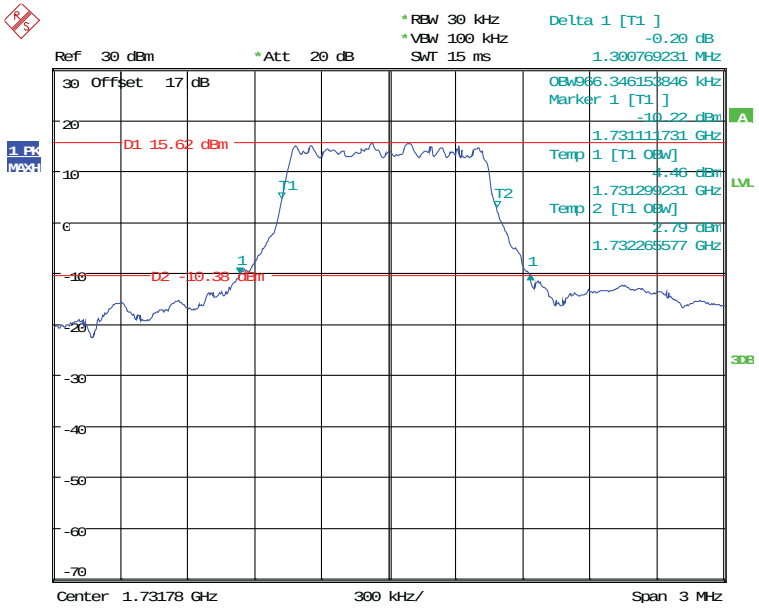
16QAM_1.4MHz



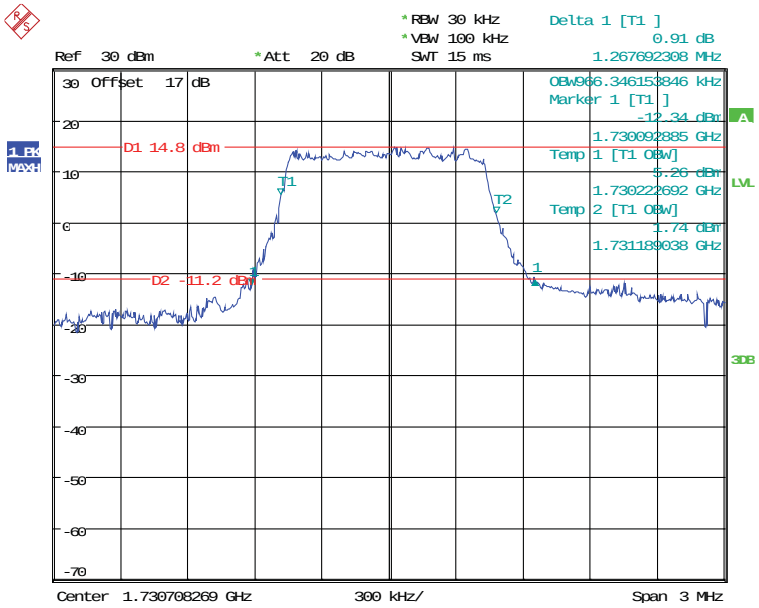
Date: 12.JUL.2018 11:23:11

16QAM_3MHz



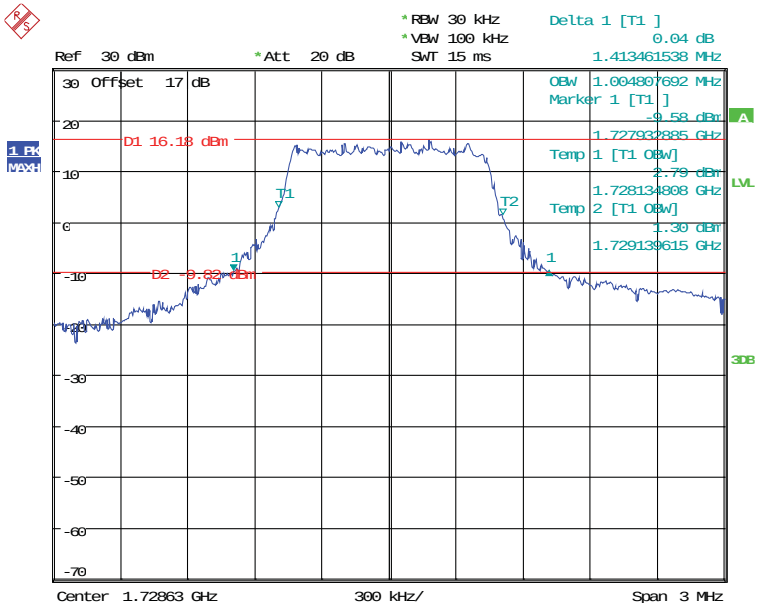
Date: 12.JUL.2018 11:14:43

16QAM_5MHz



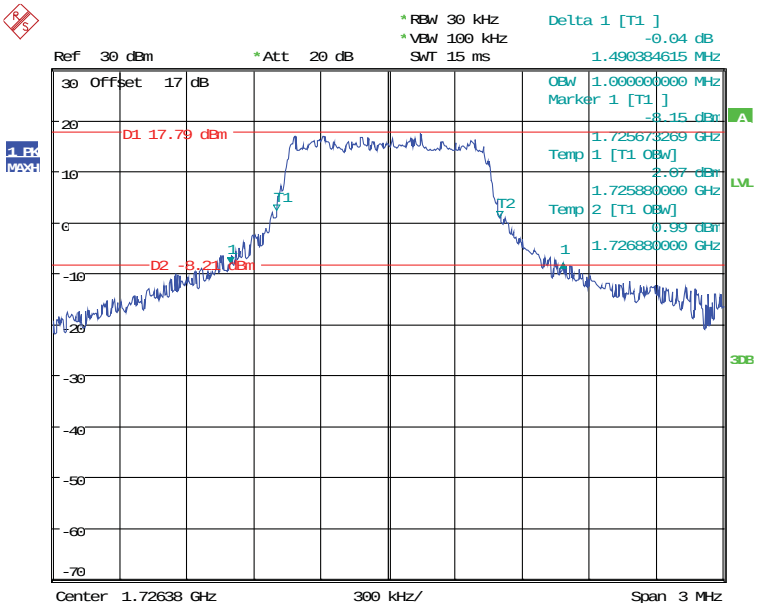
Date: 7.JUN.2018 14:19:50

16QAM _10MHz



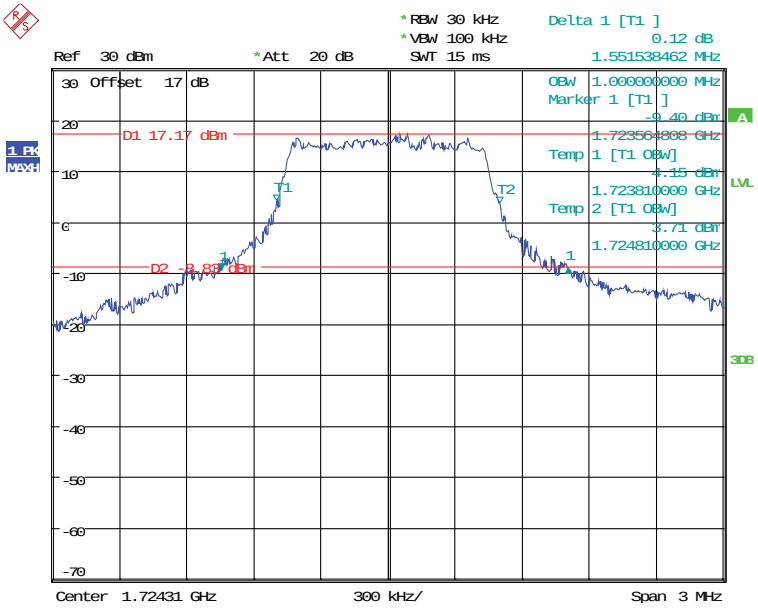
Date: 7.JUN.2018 14:24:57

16QAM _15MHz



Date: 7.JUN.2018 14:58:52

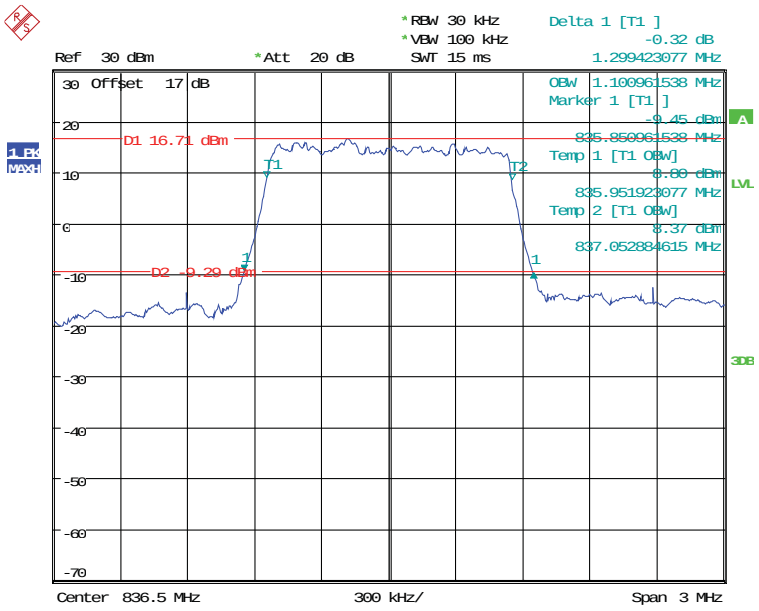
16QAM _20MHz



Date: 7.JUN.2018 15:21:05

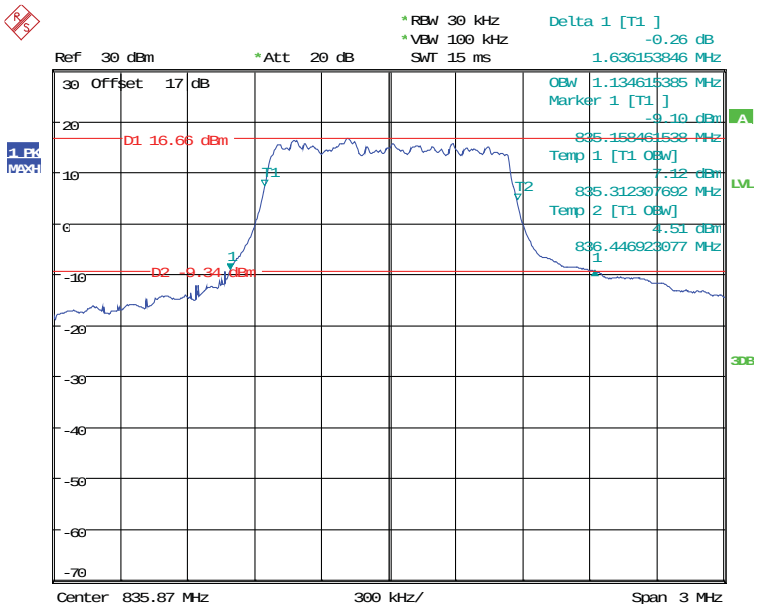
LTE Band 5

QPSK_1.4MHz



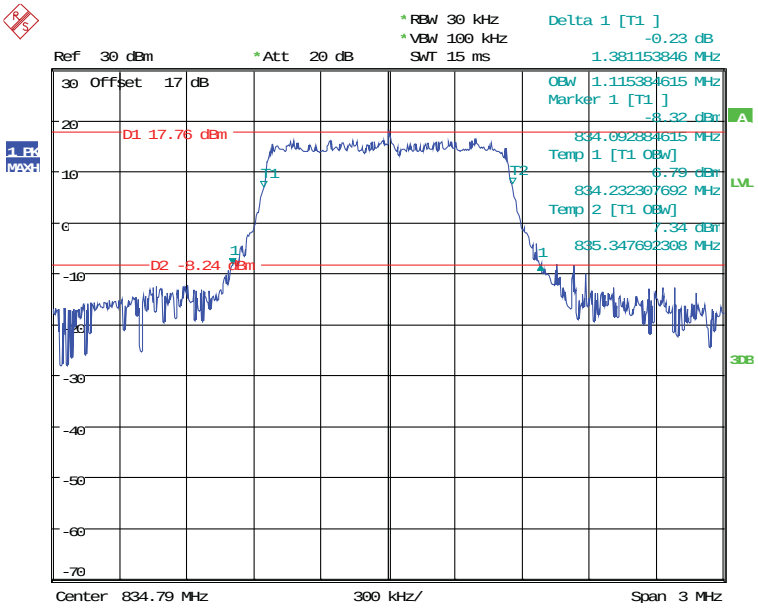
Date: 12.JUL.2018 11:32:37

QPSK_3MHz



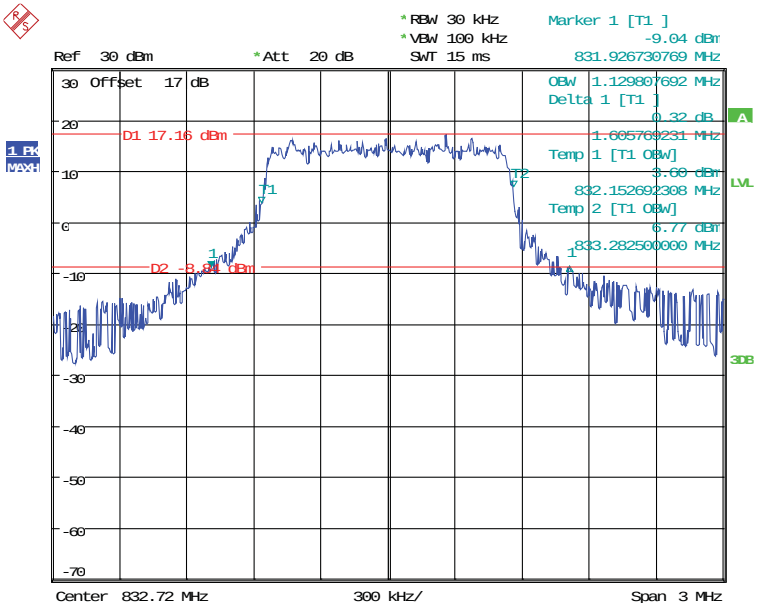
Date: 12.JUL.2018 11:41:54

QPSK_5MHz



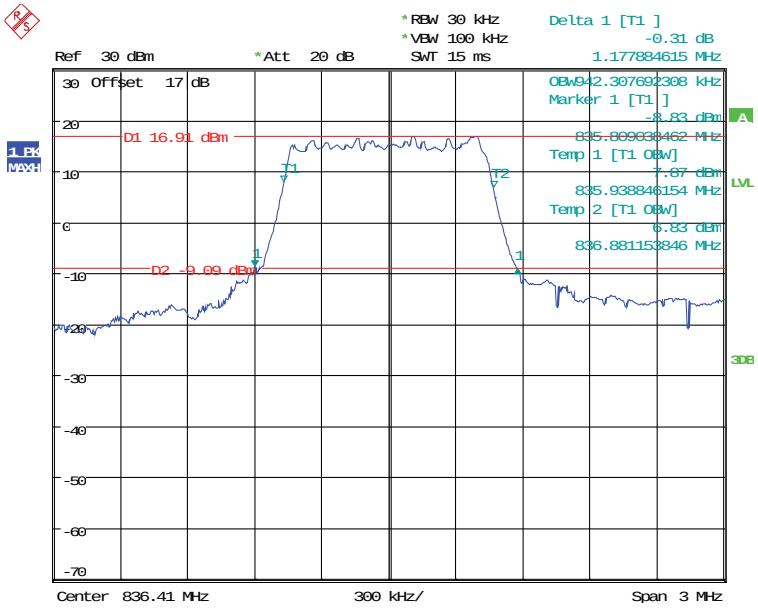
Date: 7.JUN.2018 15:27:47

QPSK_10MHz



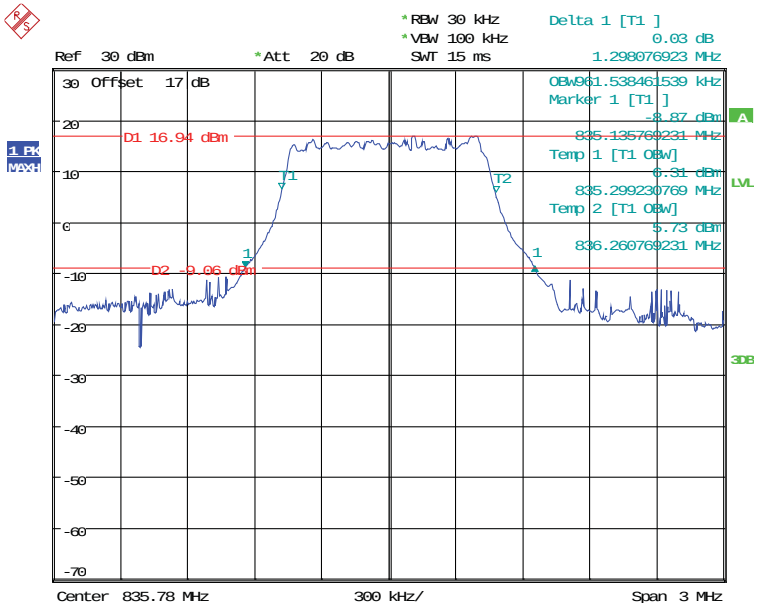
Date: 7.JUN.2018 15:30:51

16QAM_1.4MHz



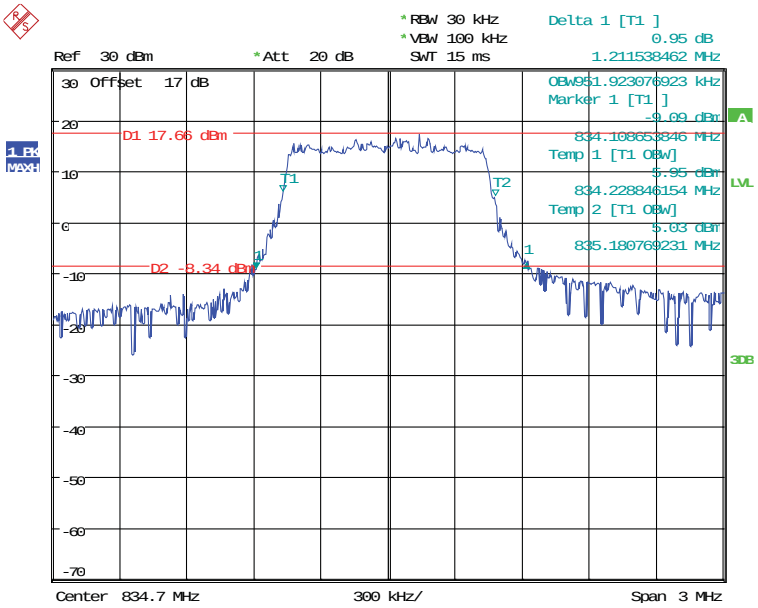
Date: 12.JUL.2018 11:37:11

16QAM_3MHz



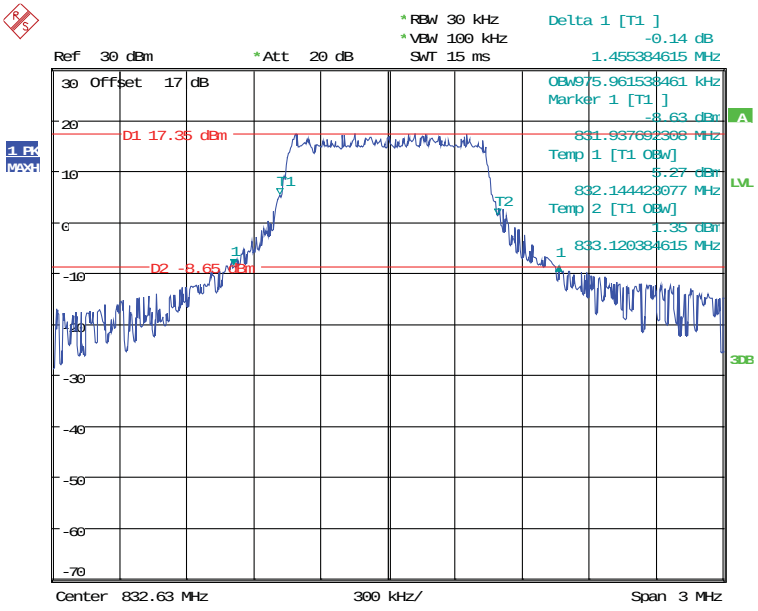
Date: 12.JUL.2018 11:46:35

16QAM_5MHz



Date: 7.JUN.2018 15:25:26

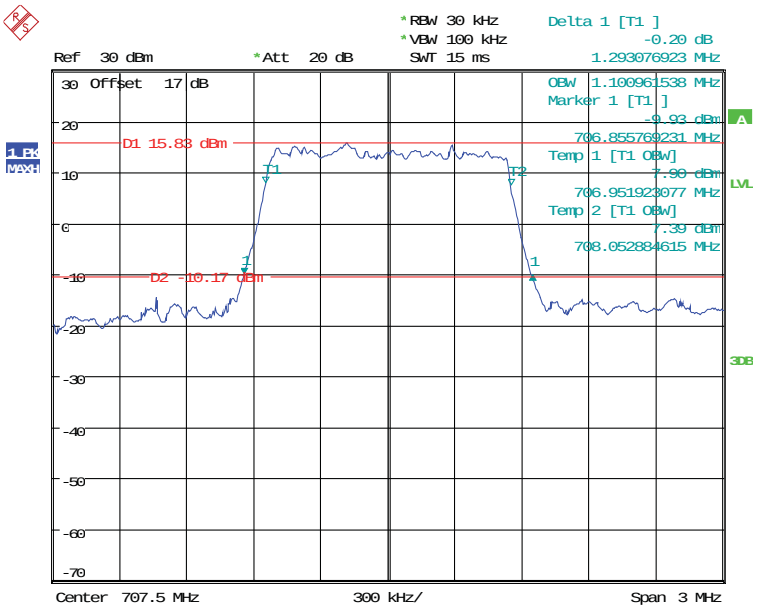
16QAM _10MHz



Date: 7.JUN.2018 15:32:55

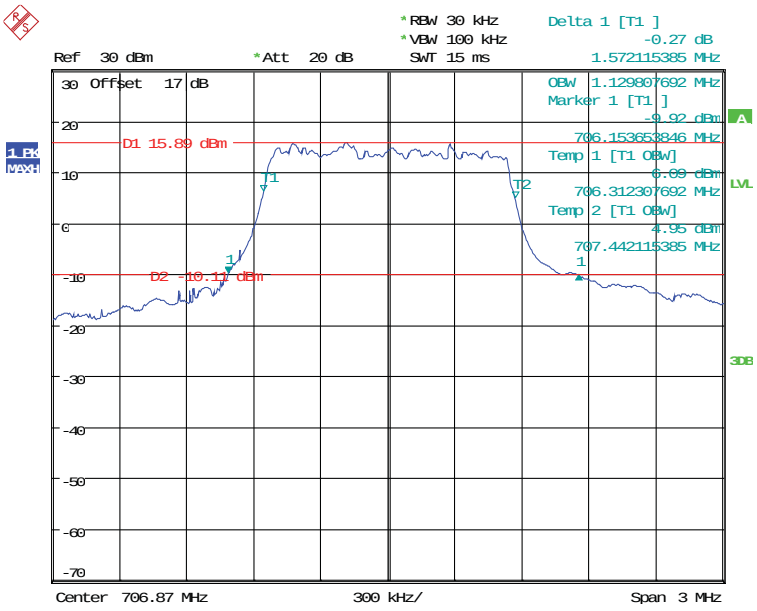
LTE Band 12

QPSK_1.4MHz



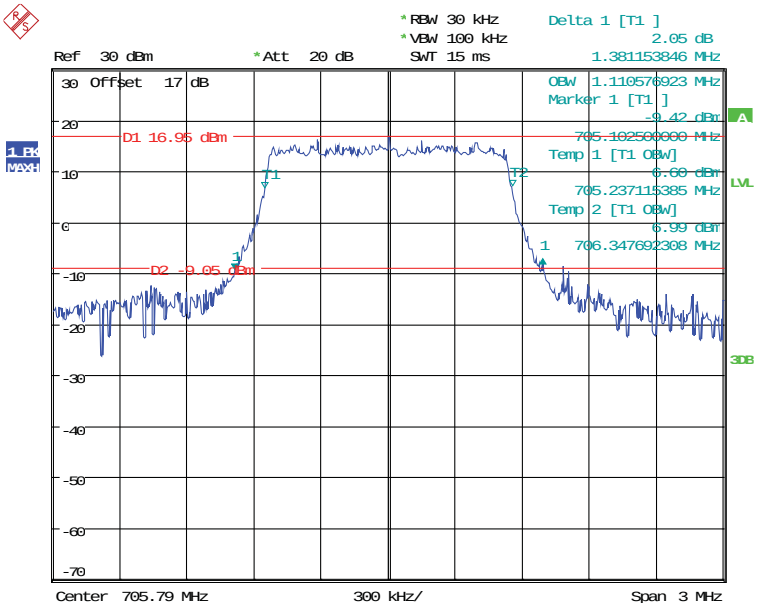
Date: 12.JUL.2018 13:16:59

QPSK_3MHz



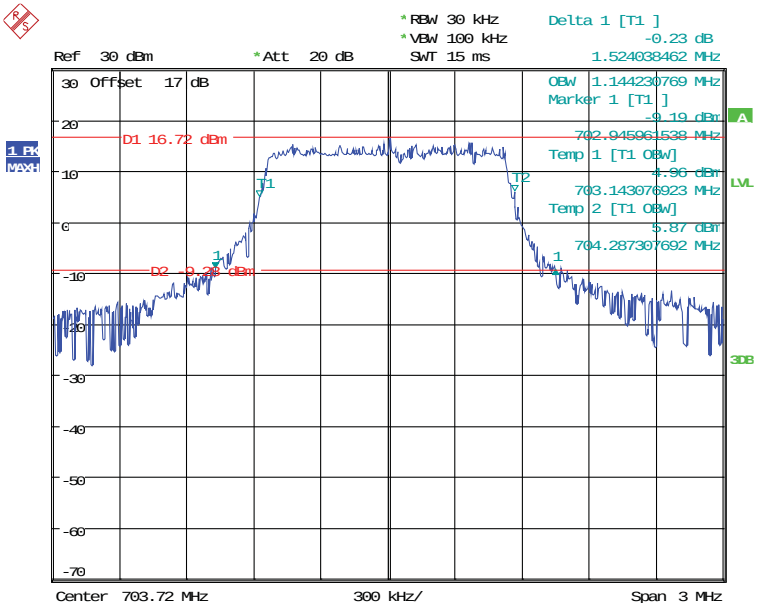
Date: 12.JUL.2018 11:56:29

QPSK_5MHz



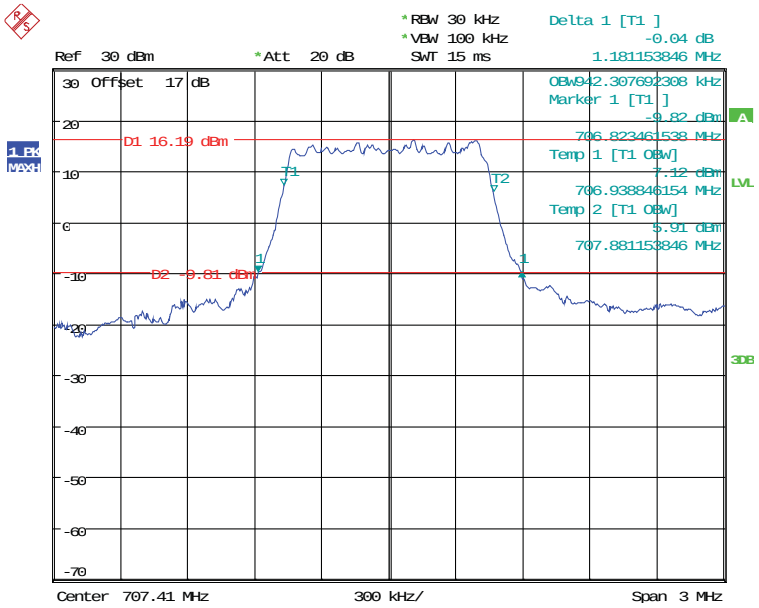
Date: 7.JUN.2018 15:37:41

QPSK_10MHz



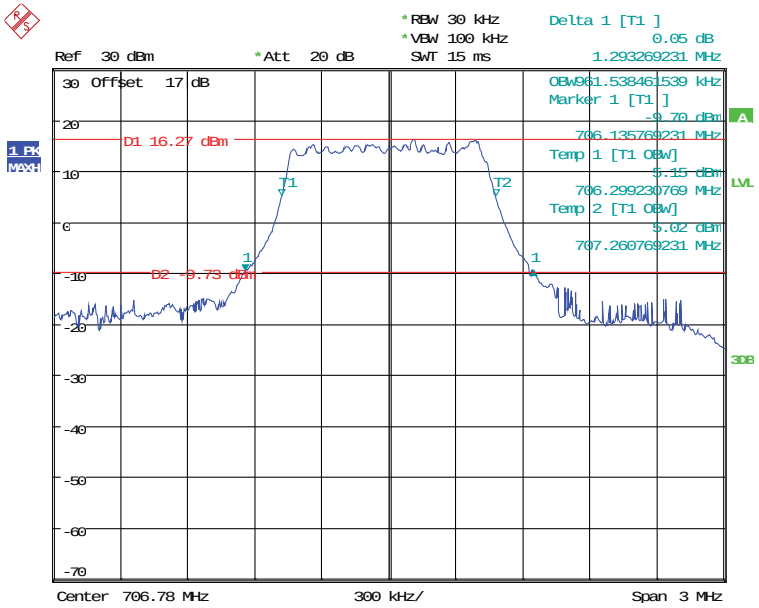
Date: 7.JUN.2018 15:40:02

16QAM_1.4MHz



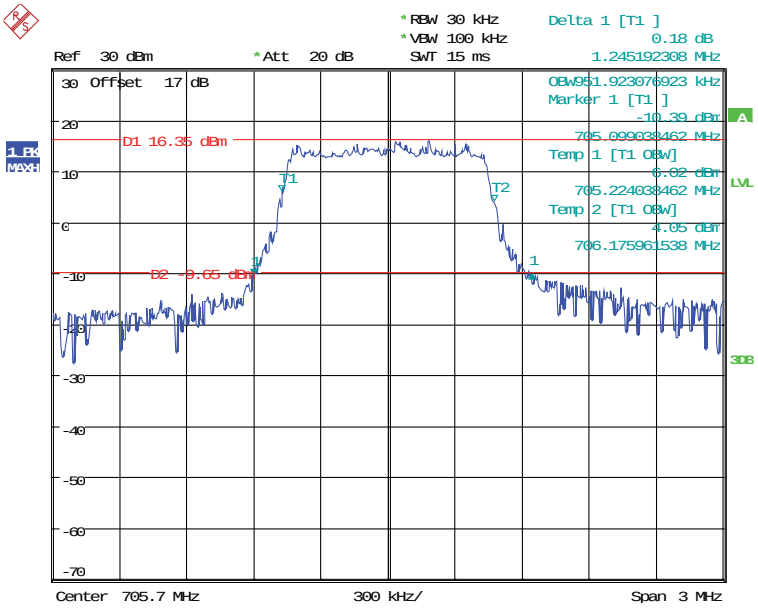
Date: 12.JUL.2018 13:14:42

16QAM_3MHz

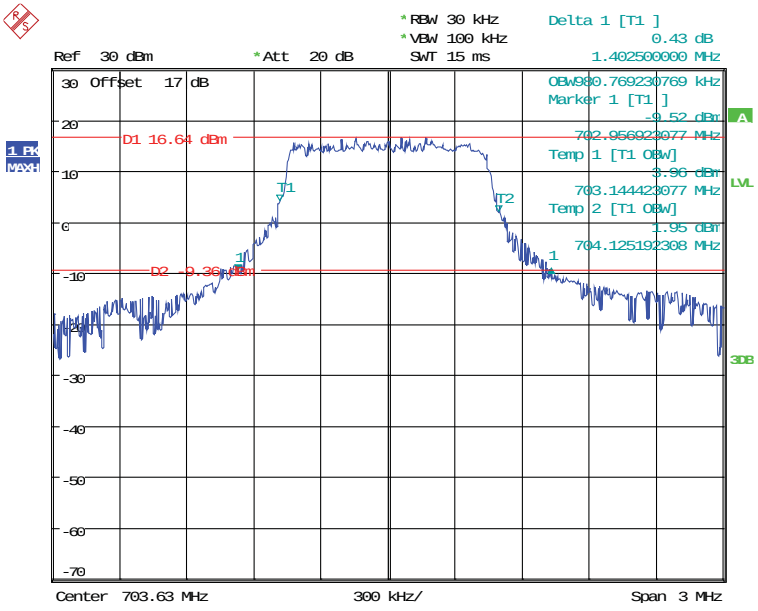


Date: 12.JUL.2018 11:53:13

16QAM_5MHz

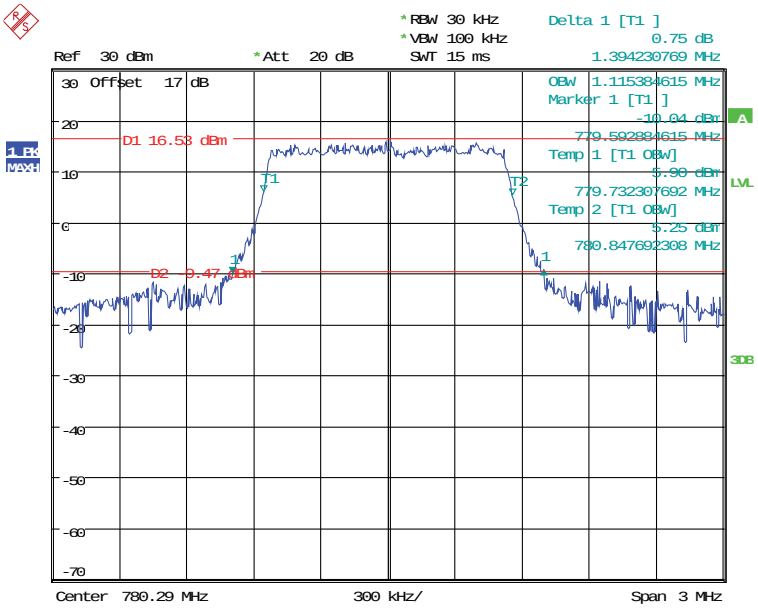


16QAM _10MHz



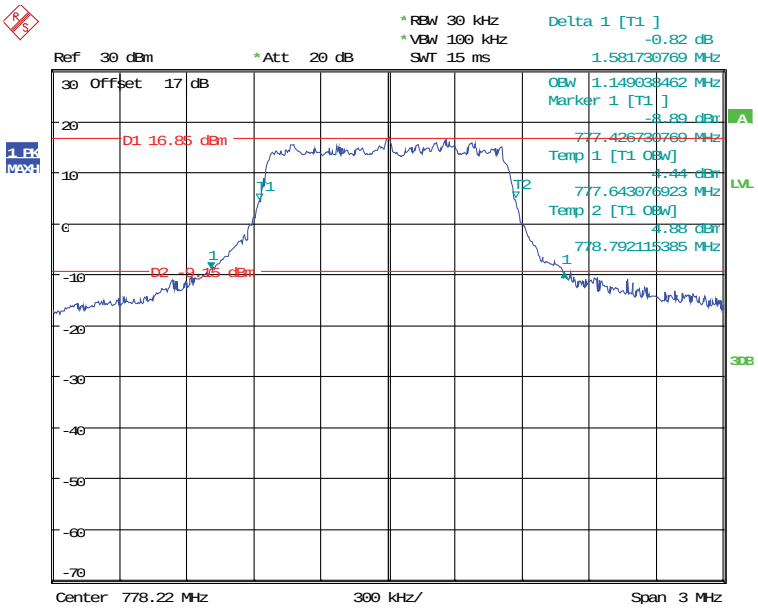
LTE Band 13

QPSK_5MHz



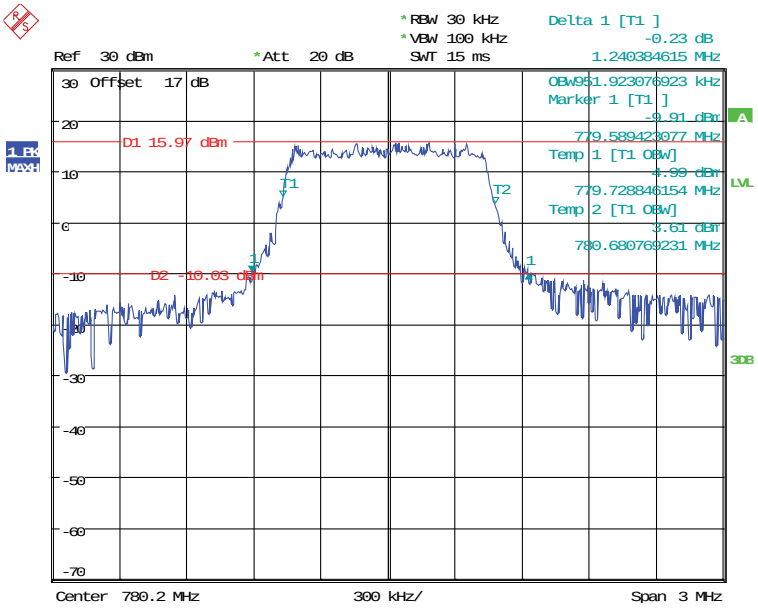
Date: 7.JUN.2018 15:48:58

QPSK_10MHz



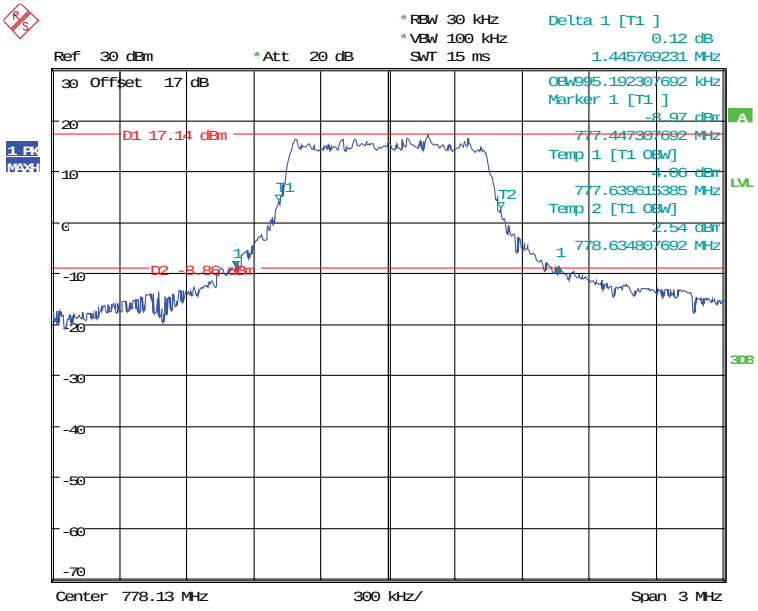
Date: 7.JUN.2018 15:52:34

16QAM_5MHz



Date: 7.JUN.2018 15:46:21

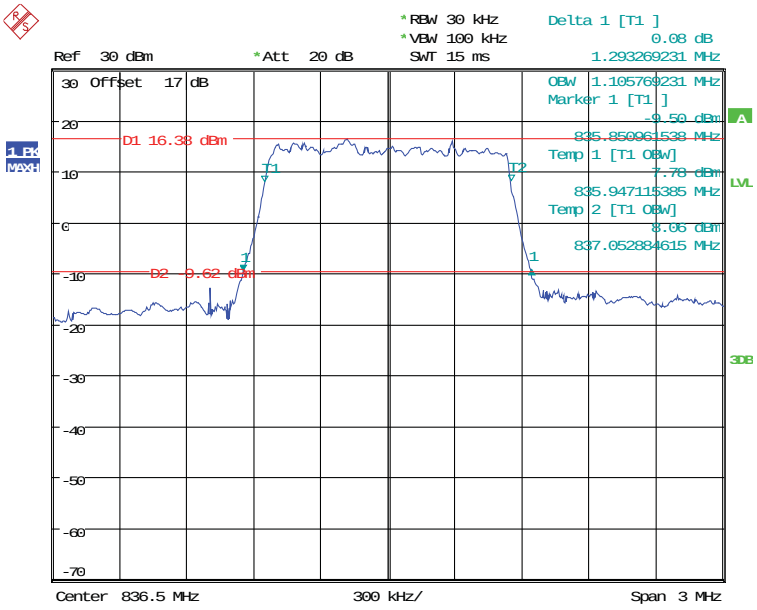
16QAM _10MHz



Date: 7.JUN.2018 15:56:52

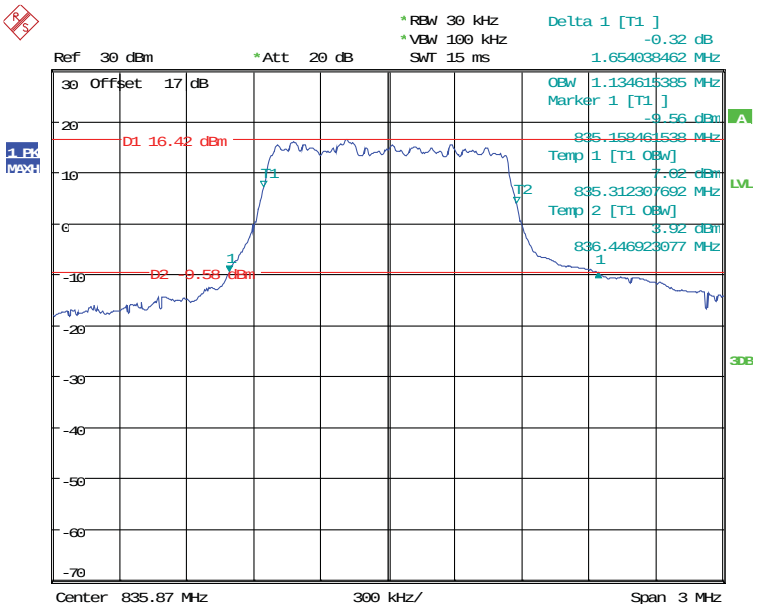
LTE Band 26

QPSK_1.4MHz



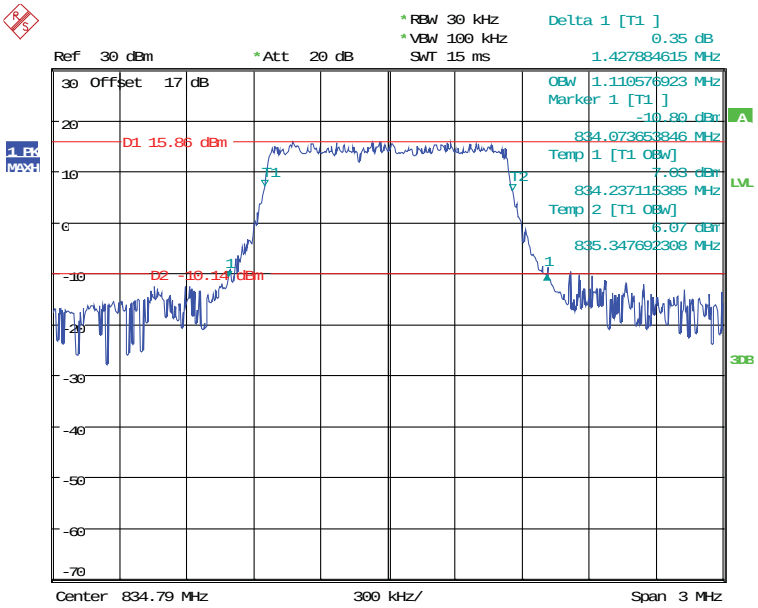
Date: 12.JUL.2018 13:26:18

QPSK_3MHz



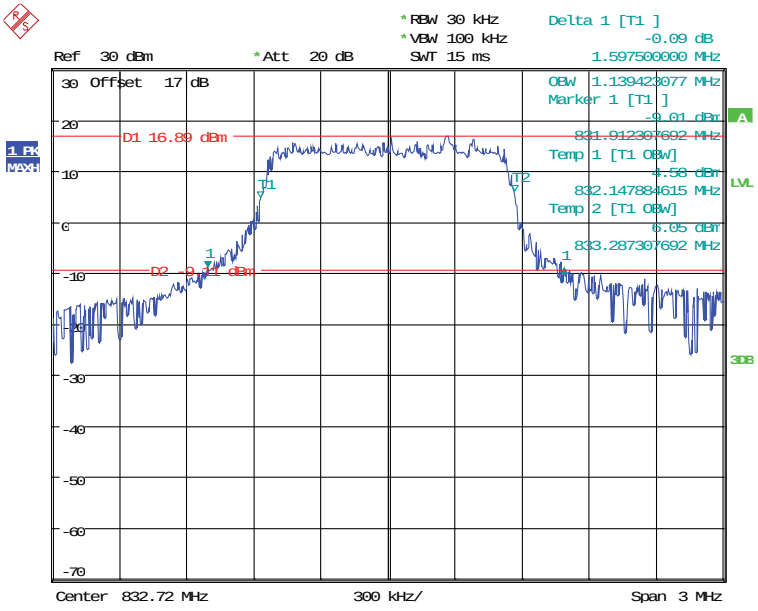
Date: 12.JUL.2018 13:35:58

QPSK_5MHz



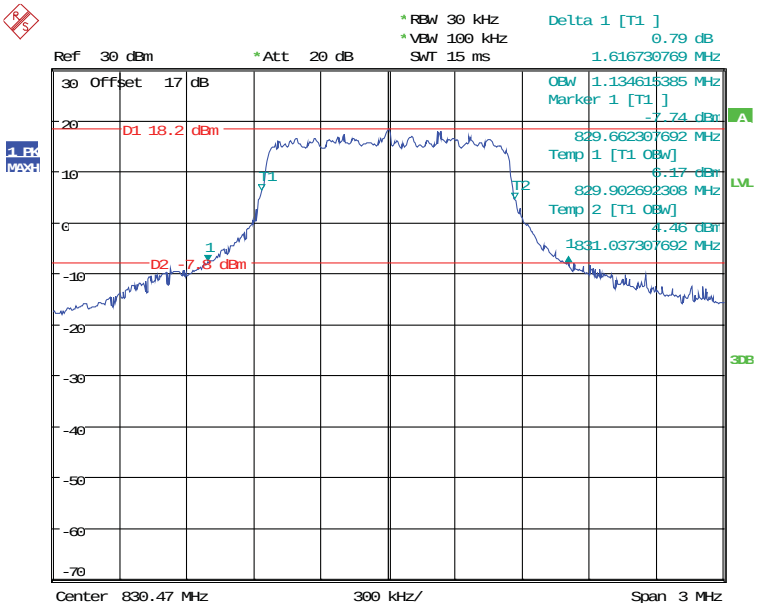
Date: 7.JUN.2018 17:24:53

QPSK_10MHz



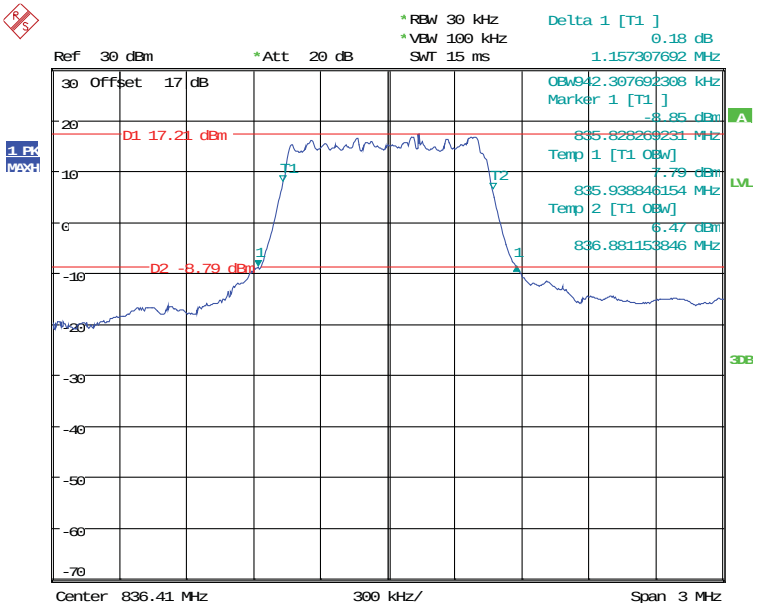
Date: 7.JUN.2018 17:14:50

QPSK_15MHz



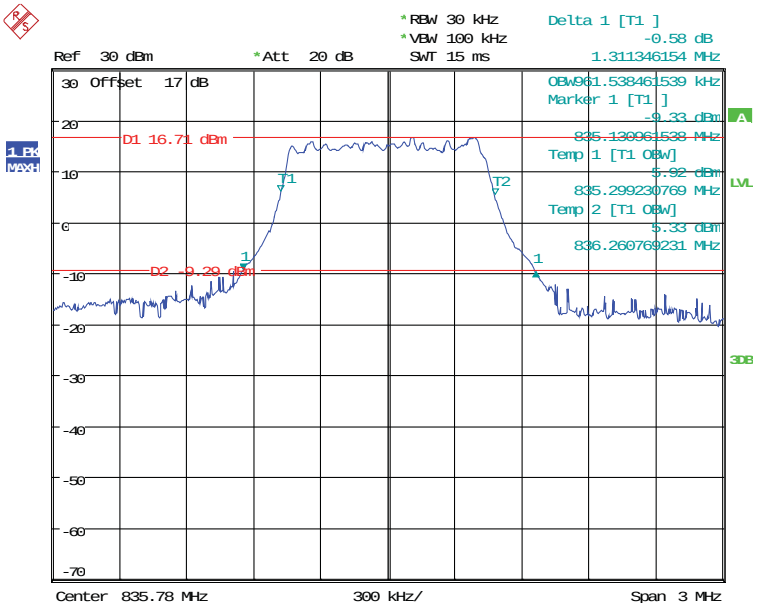
Date: 7.JUN.2018 17:09:39

16QAM_1.4MHz



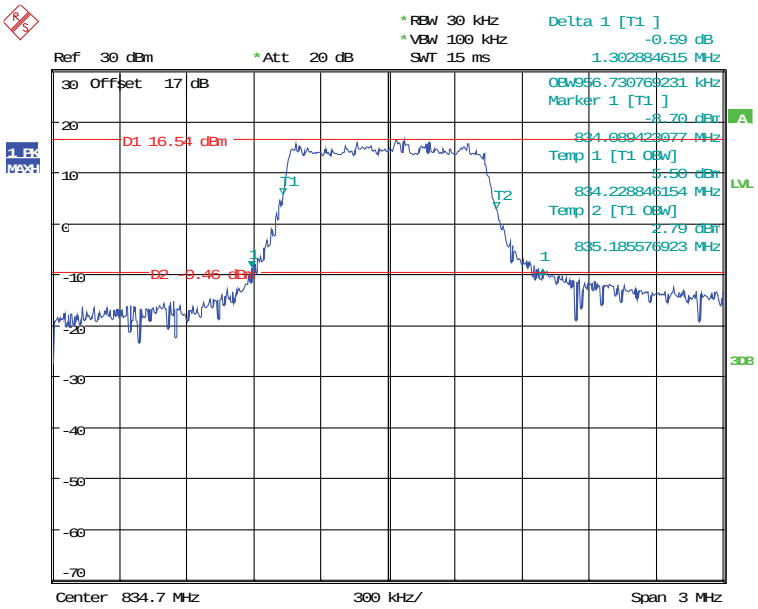
Date: 12.JUL.2018 13:31:00

16QAM_3MHz



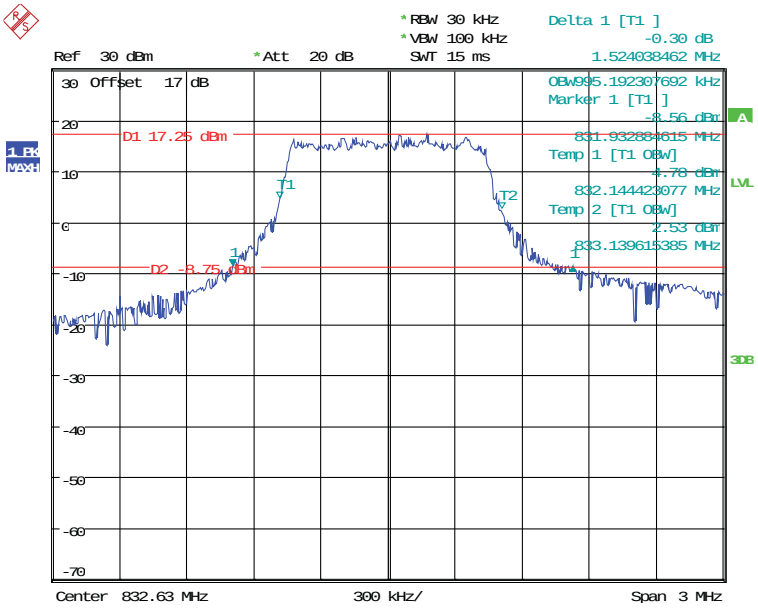
Date: 12.JUL.2018 13:38:17

16QAM_5MHz



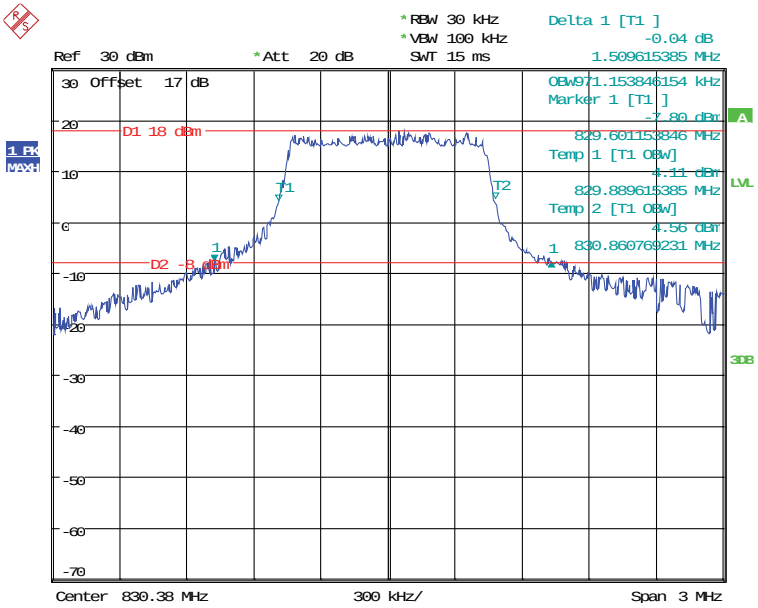
Date: 7.JUN.2018 17:22:02

16QAM _10MHz



Date: 7.JUN.2018 17:18:09

16QAM _15MHz



Date: 7.JUN.2018 17:05:22

FCC§2.1051, §22.917(a) & §24.238(a) & §27.53& §90.691 – Spurious Emissions At Antenna Terminals

Applicable Standard

FCC § 2.1051, §22.917, § 24.238, § 27.53, §90.691

Test Procedure

The RF output of the transceiver was connected to a spectrum analyzer and simulator through appropriate attenuation. Sufficient scans were taken to show any out of band emissions up to 10th harmonic.

Environmental Conditions

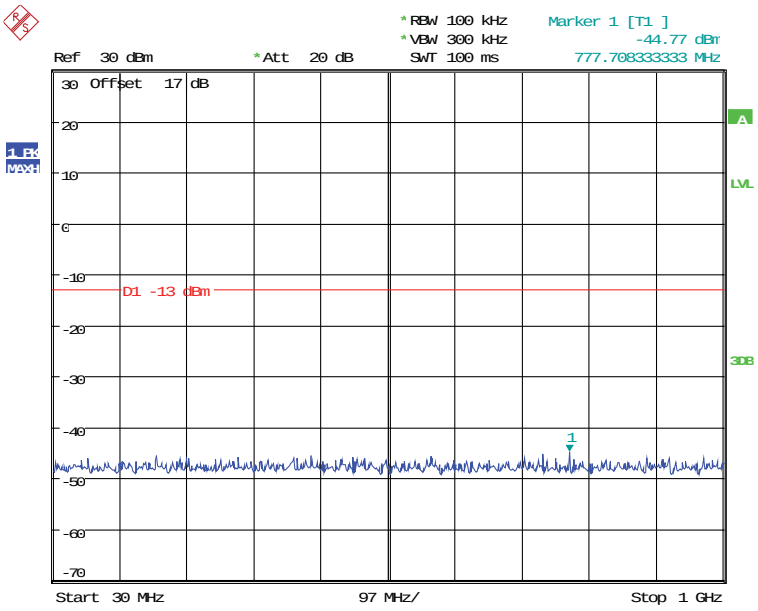
Temperature:	25 ℃
Relative Humidity:	55 %
ATM Pressure:	1010 hPa

The testing was performed by Tom Hsu on 2018-06-07 ~ 2018-07-12.

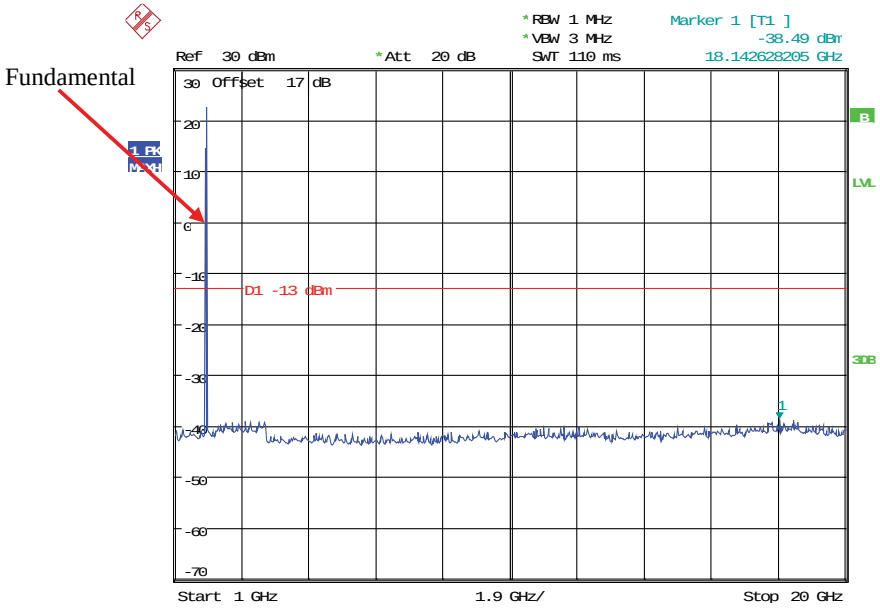
Pre-scan with all the bandwidth and modulation, worse case as below:
(Pre-scan with Low, Middle and High channel, the worst case as below)

LTE Band 2 (Middle Channel)

QPSK_1.4MHz

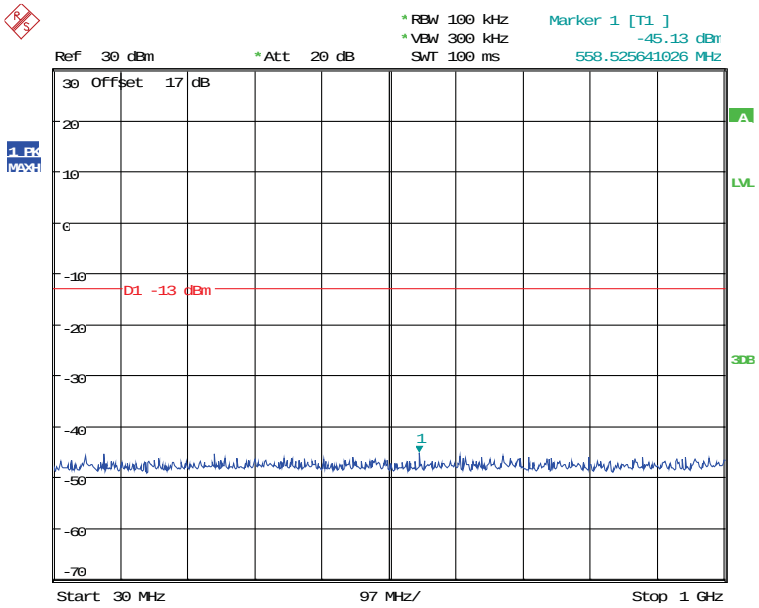


Date: 12.JUL.2018 14:17:20

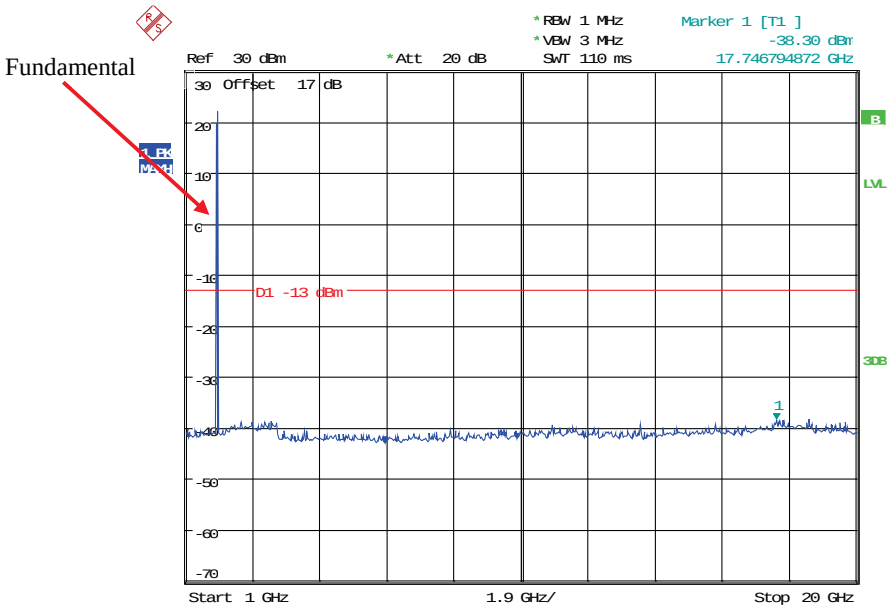


Date: 12.JUL.2018 14:17:46

QPSK_3MHz

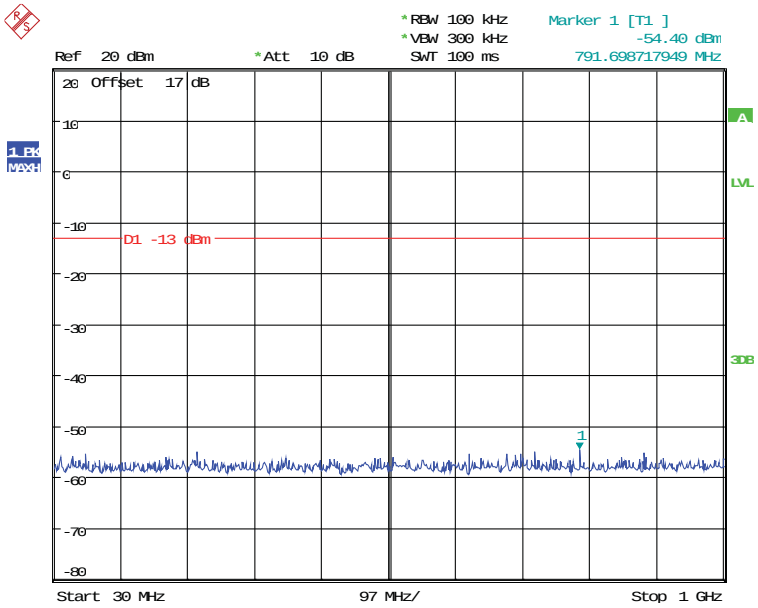


Date: 12.JUL.2018 14:19:32

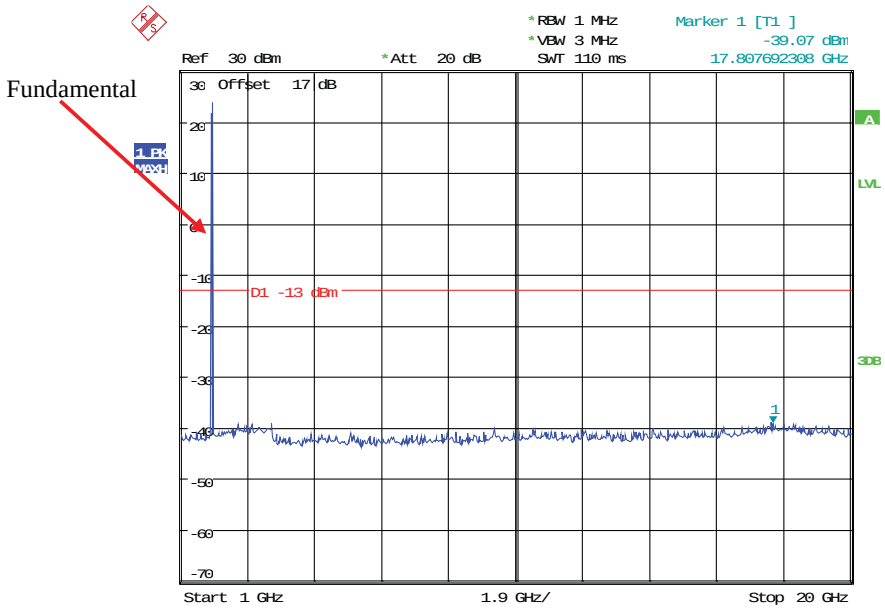


Date: 12.JUL.2018 14:19:06

QPSK_5MHz

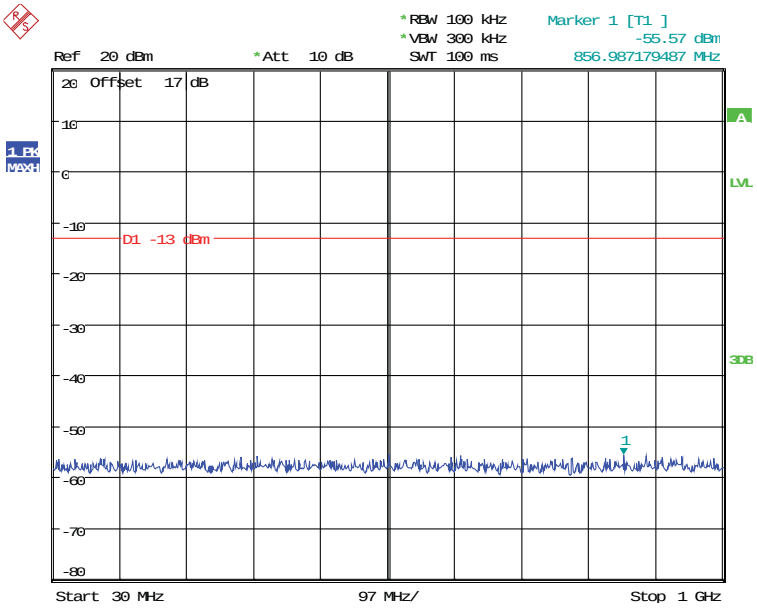


Date: 7.JUN.2018 17:51:34



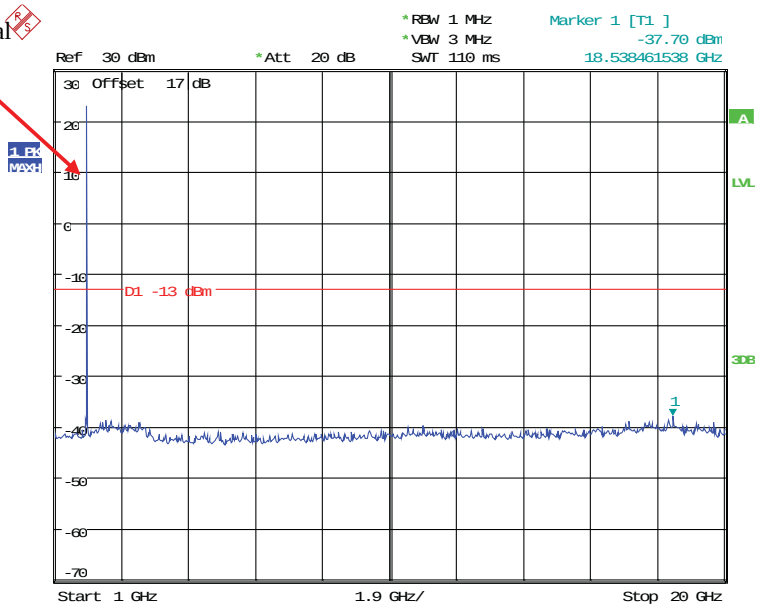
Date: 7.JUN.2018 18:22:40

QPSK_10MHz



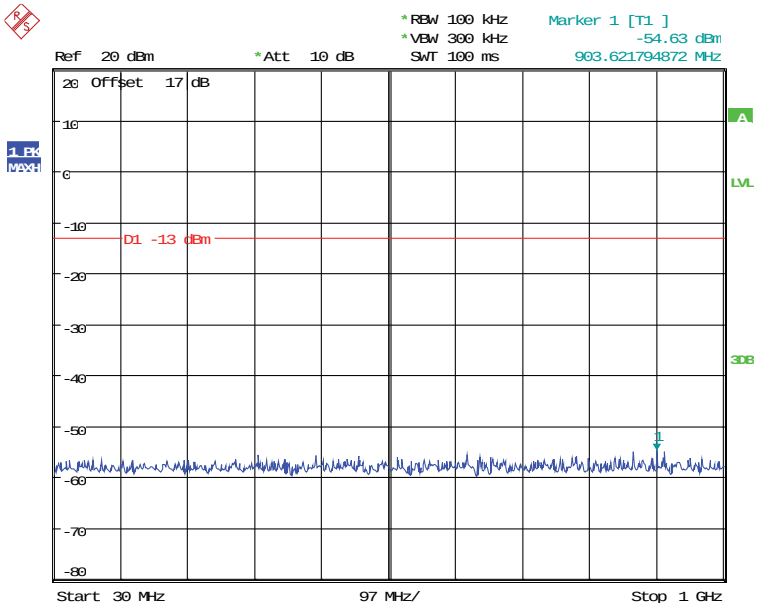
Date: 7.JUN.2018 17:51:47

Fundamental

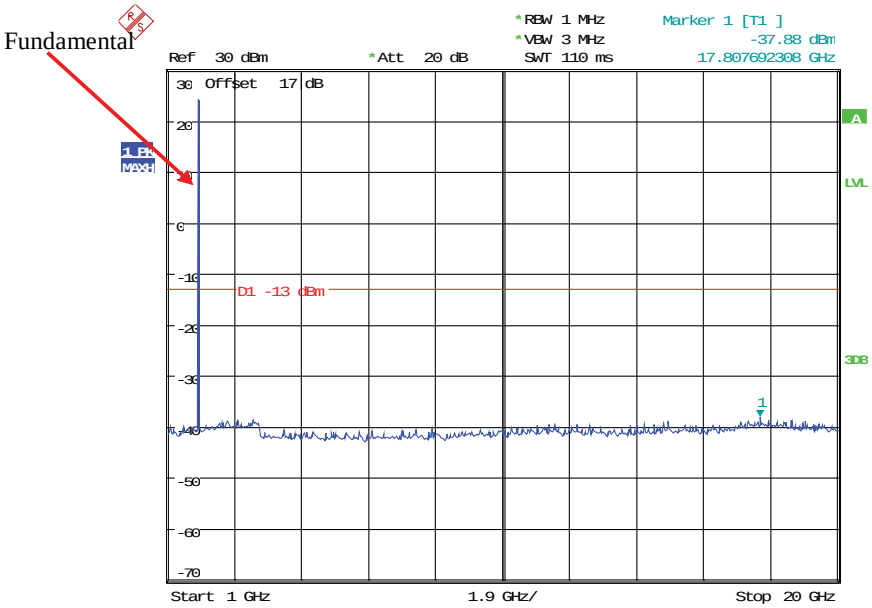


Date: 7.JUN.2018 18:17:52

QPSK_15MHz

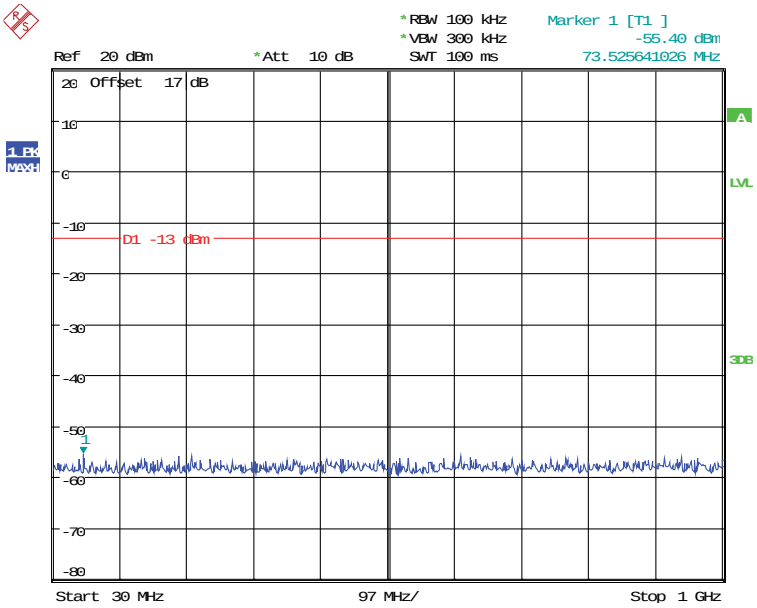


Date: 7.JUN.2018 17:52:00

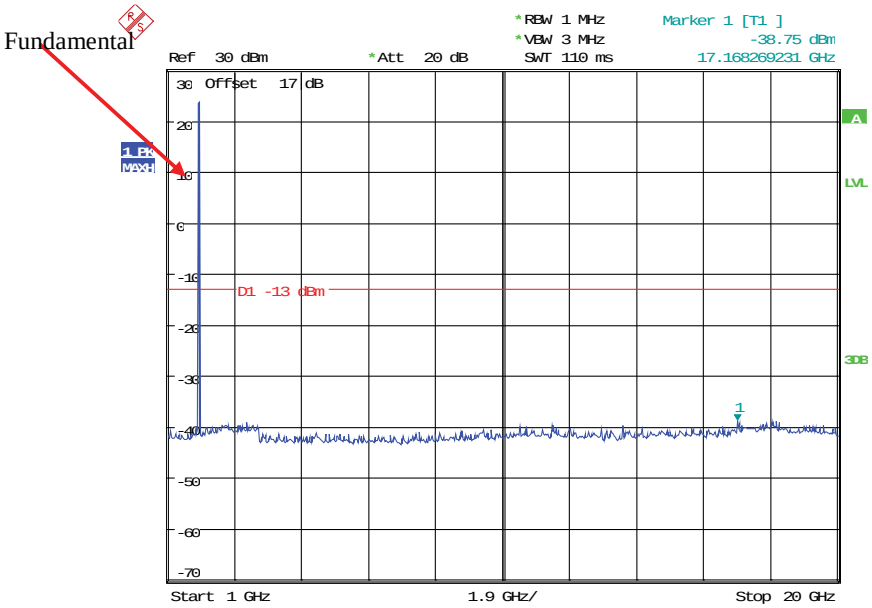


Date: 7.JUN.2018 18:15:44

QPSK_20MHz



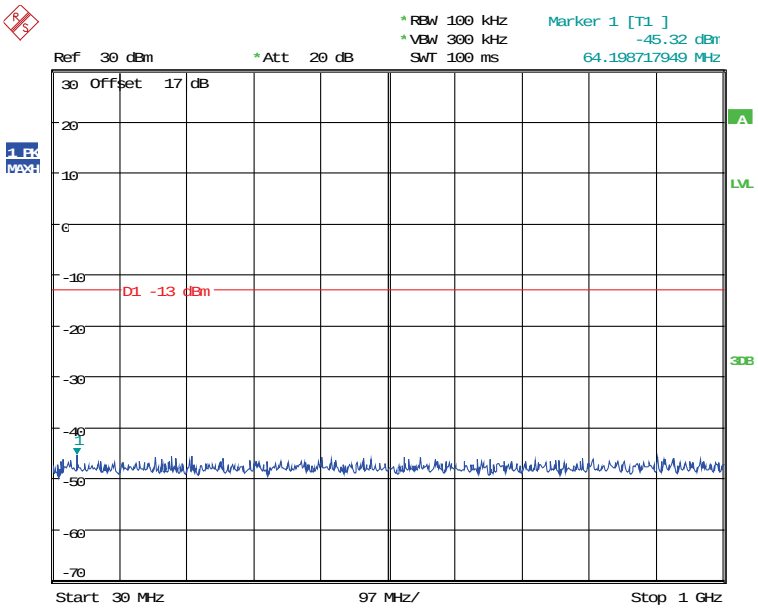
Date: 7.JUN.2018 17:52:16



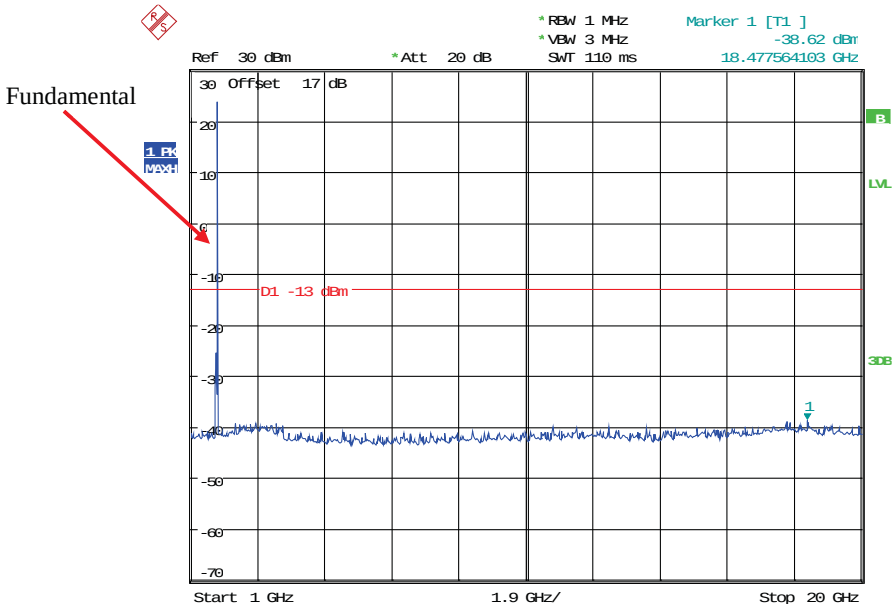
Date: 7.JUN.2018 18:27:17

LTE Band 4 (Middle Channel)

QPSK_1.4MHz

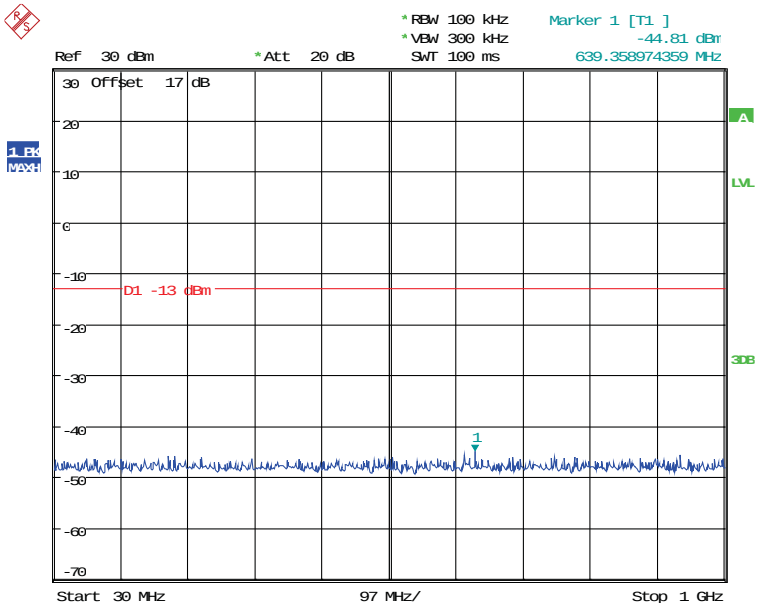


Date: 12.JUL.2018 14:11:46

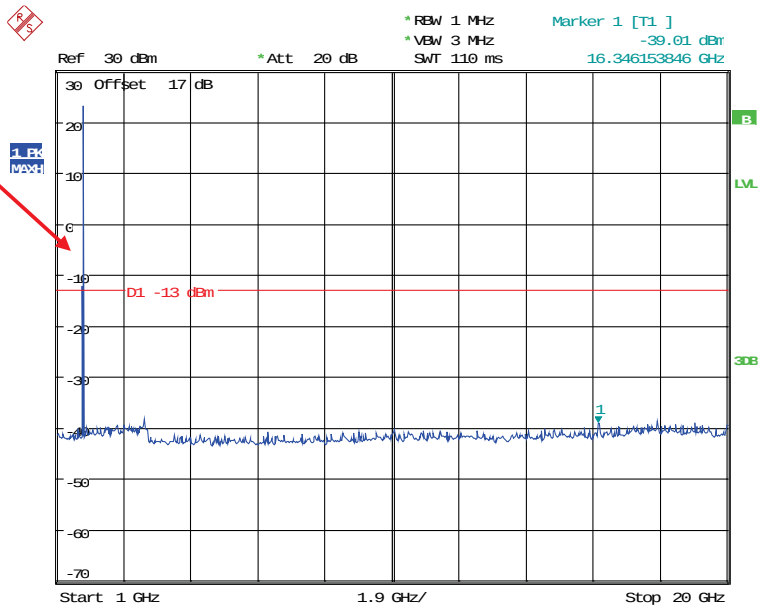


Date: 12.JUL.2018 14:12:22

QPSK_3MHz



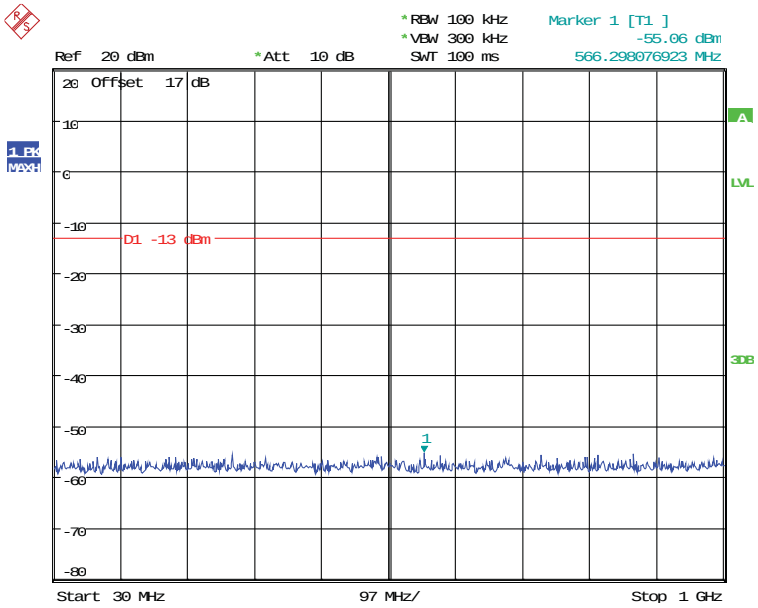
Date: 12.JUL.2018 14:15:42



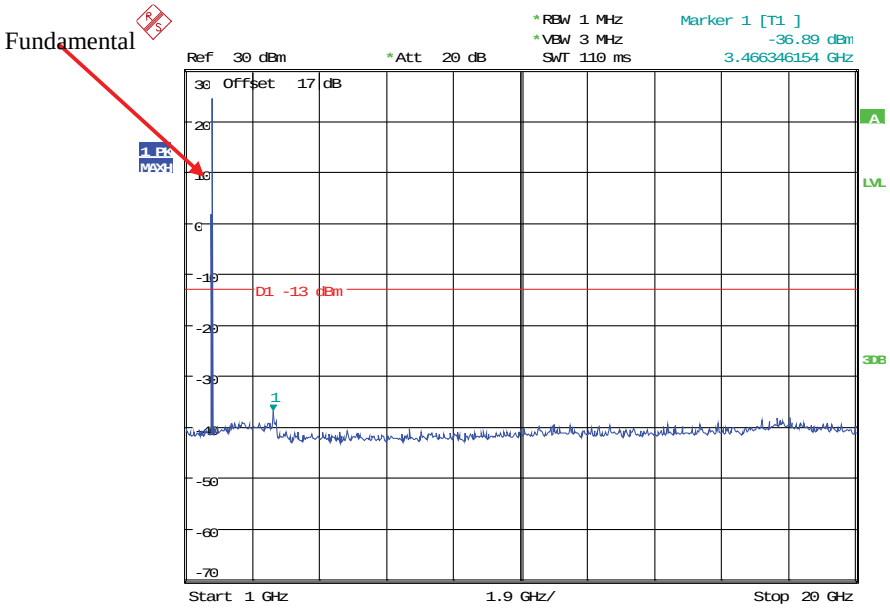
Fundamental

Date: 12.JUL.2018 14:15:25

QPSK_5MHz

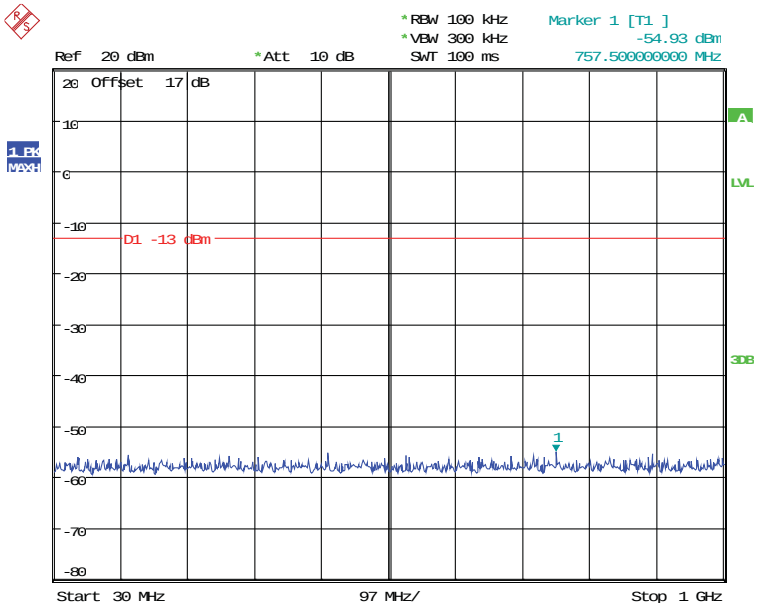


Date: 7.JUN.2018 17:51:08

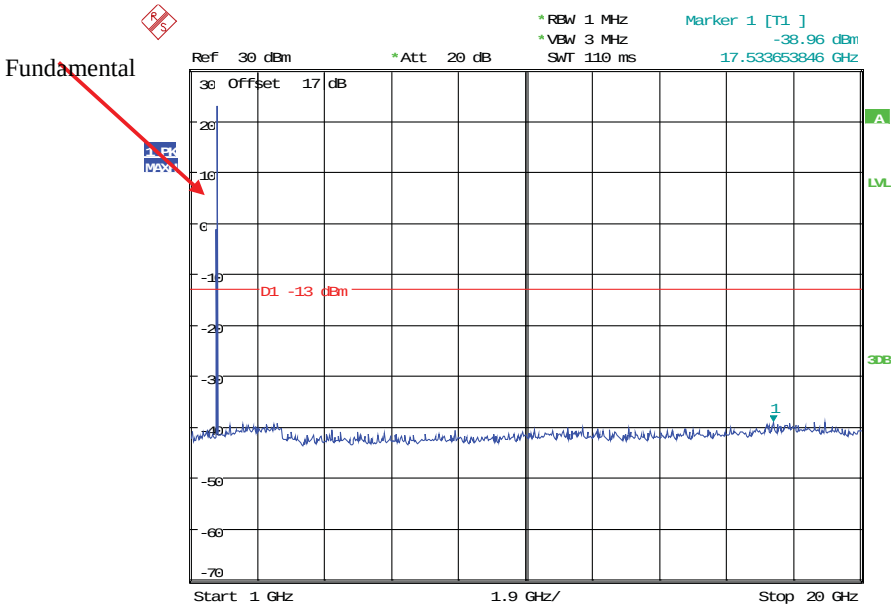


Date: 7.JUN.2018 18:37:21

QPSK_10MHz

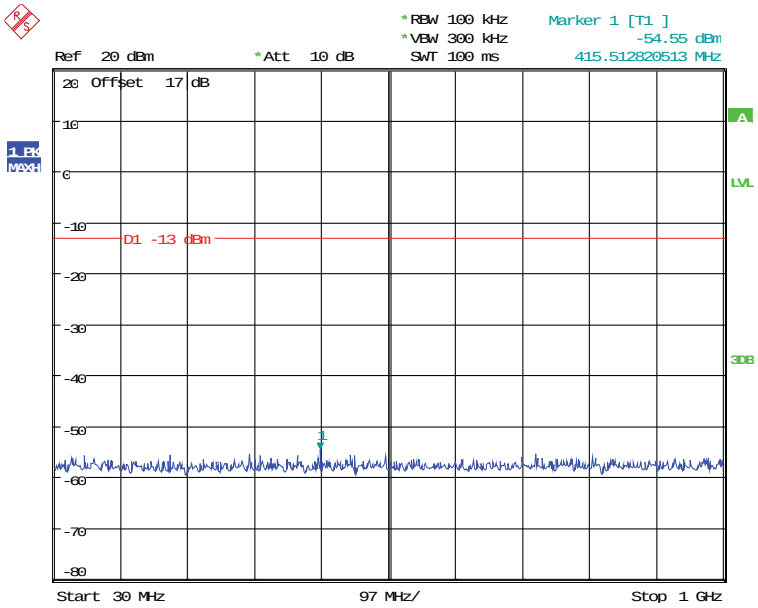


Date: 7.JUN.2018 17:50:54



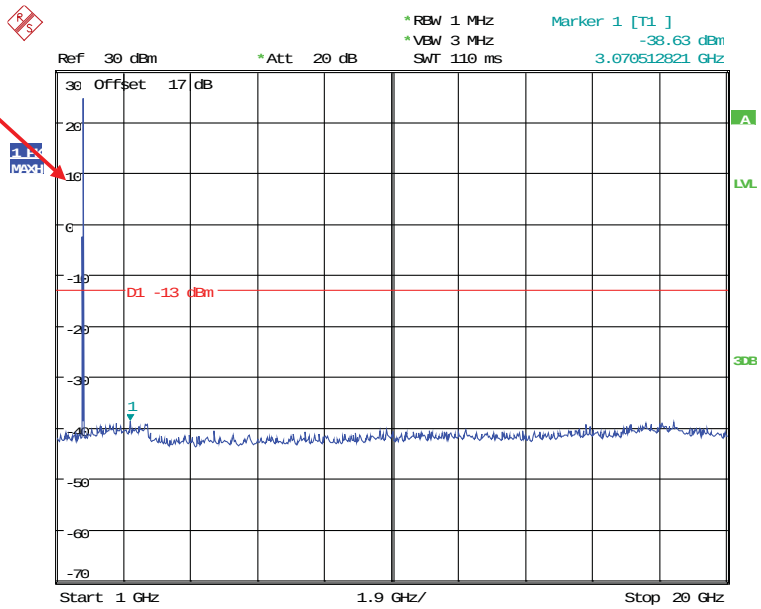
Date: 7.JUN.2018 18:37:49

QPSK_15MHz



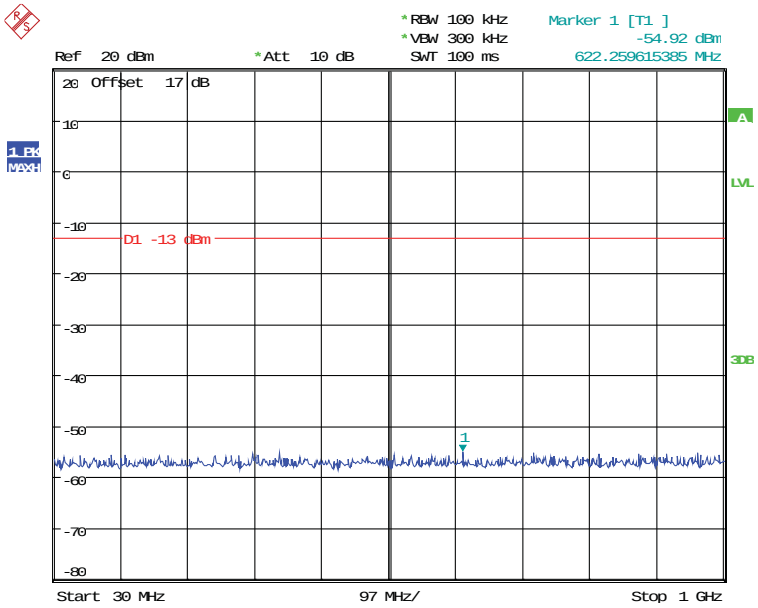
Date: 7.JUN.2018 17:50:41

Fundamental



Date: 7.JUN.2018 18:38:22

QPSK_20MHz



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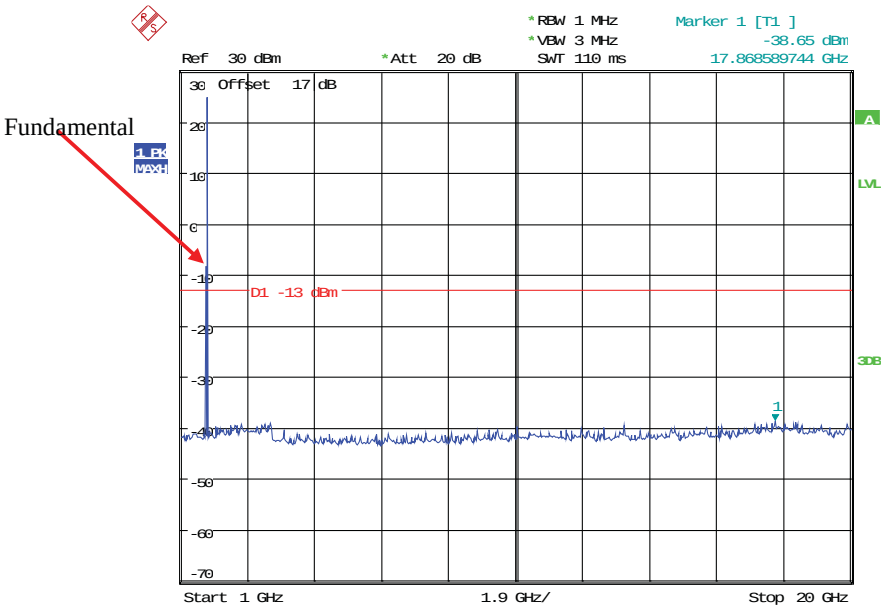
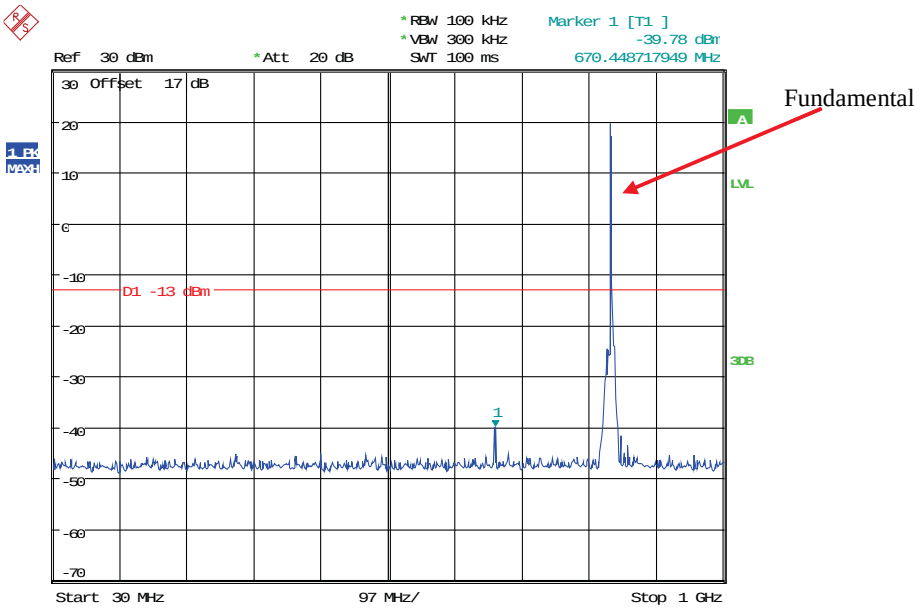


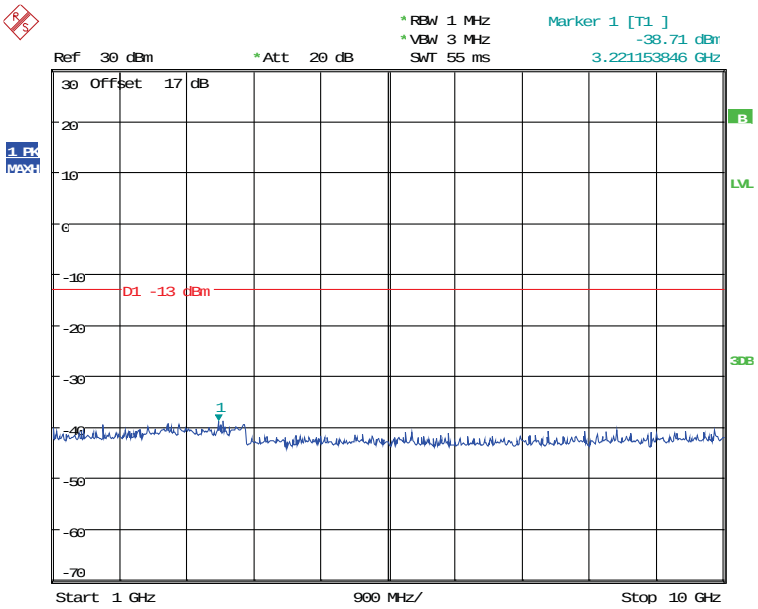
Date: 7.JUN.2018 18:29:28

LTE Band 5 (Middle Channel)

QPSK_1.4MHz

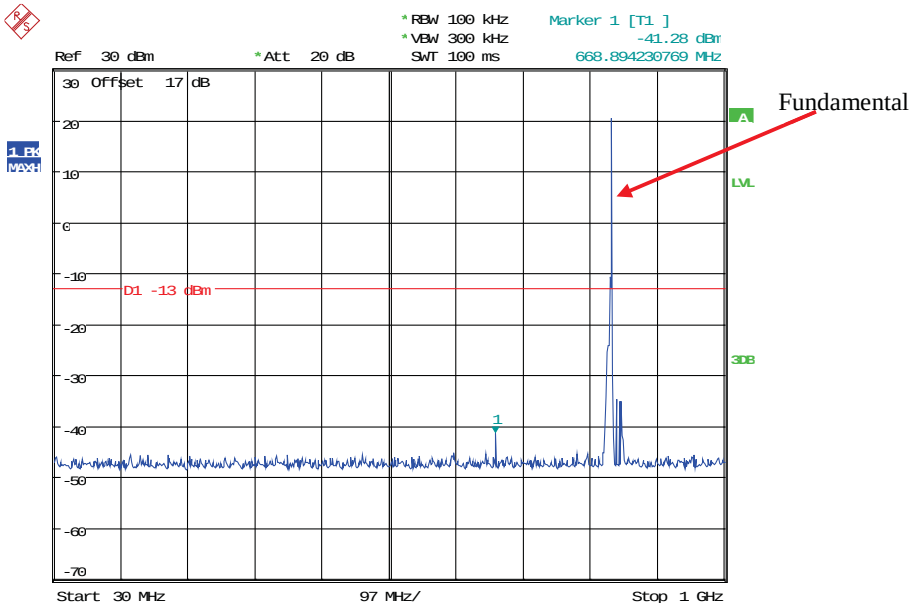


Date: 12.JUL.2018 14:07:37

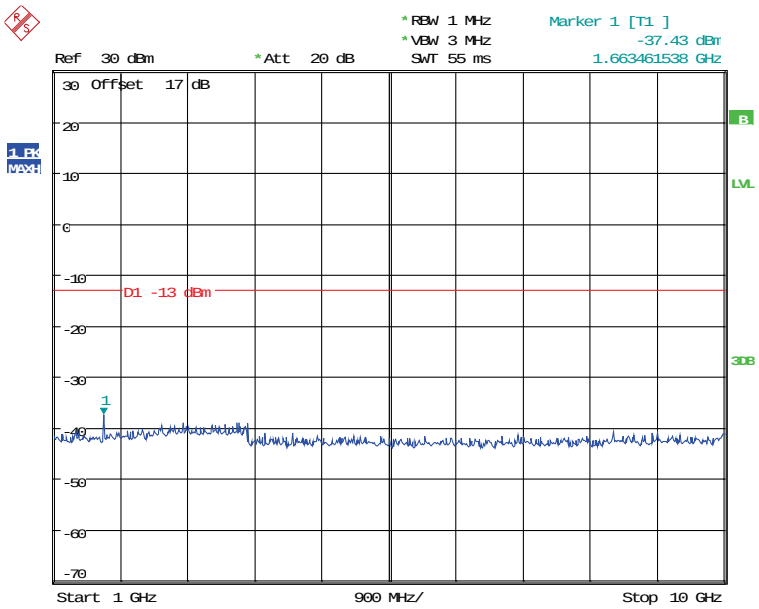


Date: 12.JUL.2018 14:08:08

QPSK_3MHz

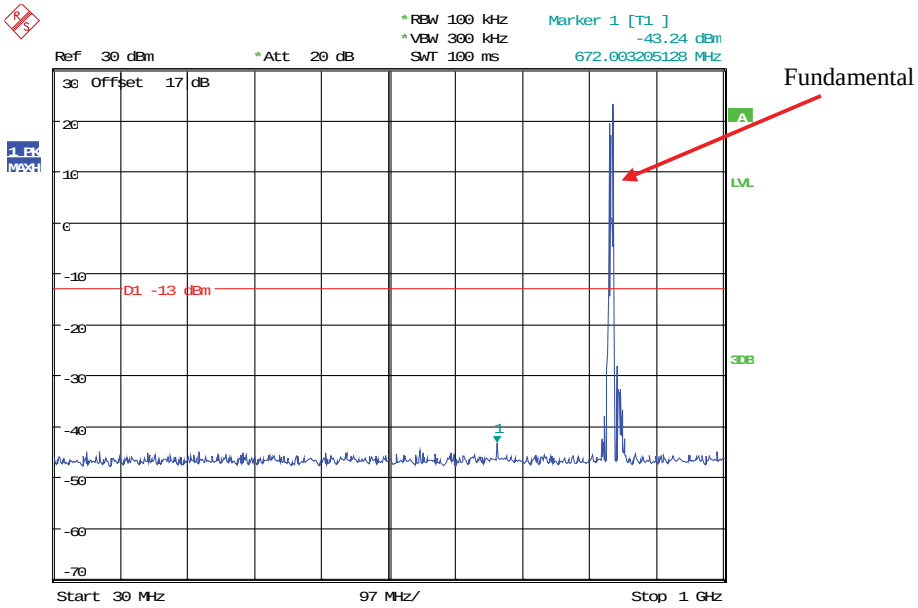


Date: 12.JUL.2018 14:09:47

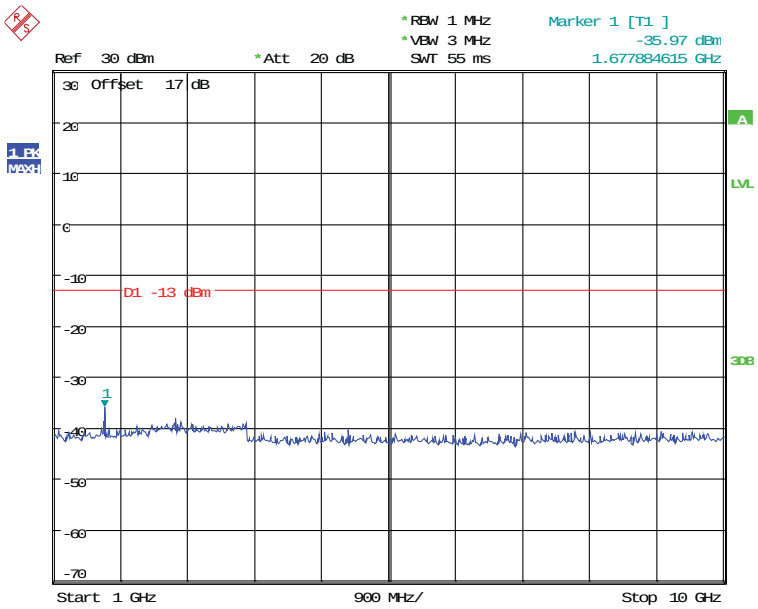


Date: 12.JUL.2018 14:09:21

QPSK_5MHz

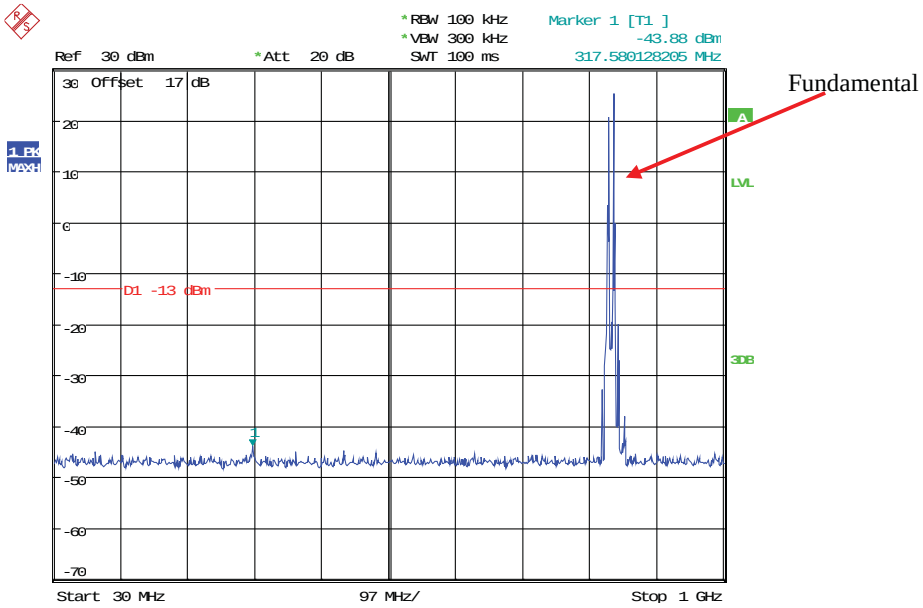


Date: 7.JUN.2018 17:59:02

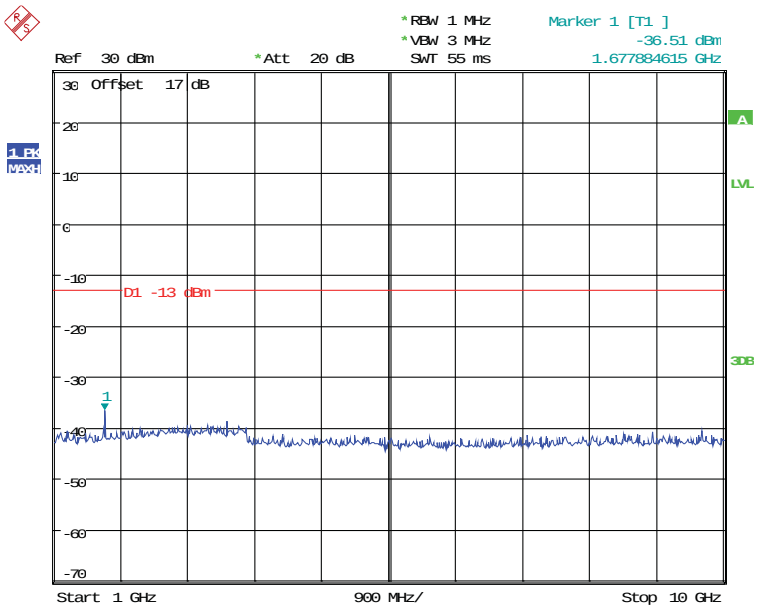


Date: 7.JUN.2018 18:45:47

QPSK_10MHz



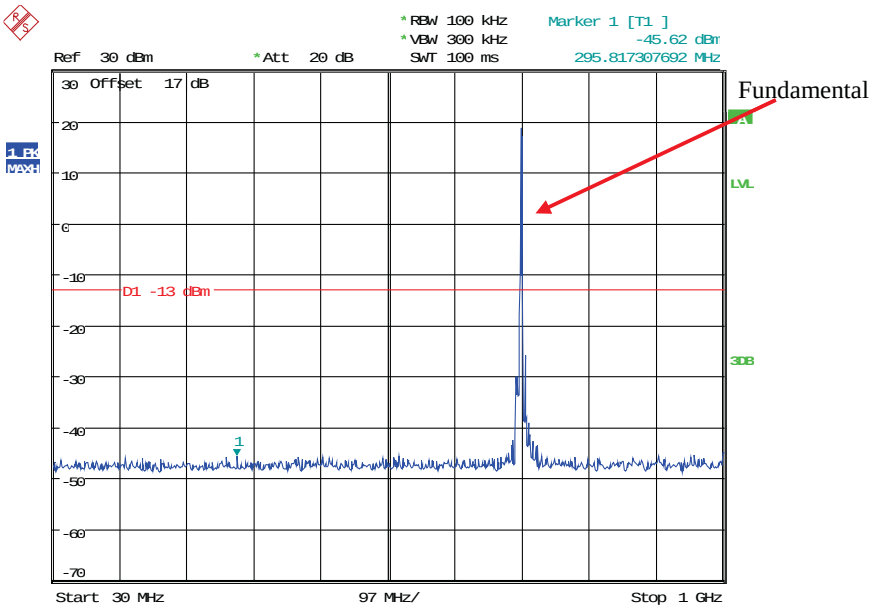
Date: 7.JUN.2018 18:00:03



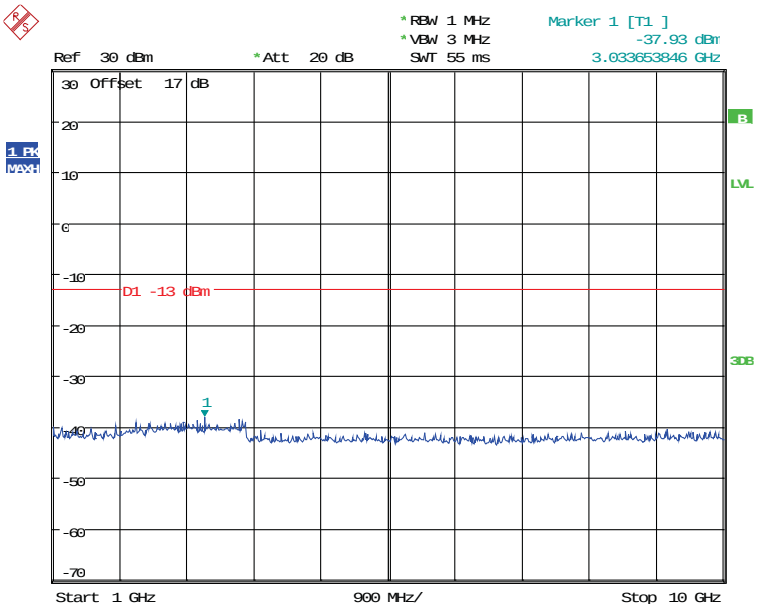
Date: 7.JUN.2018 18:46:14

LTE Band 12 (Middle Channel)

QPSK_1.4MHz

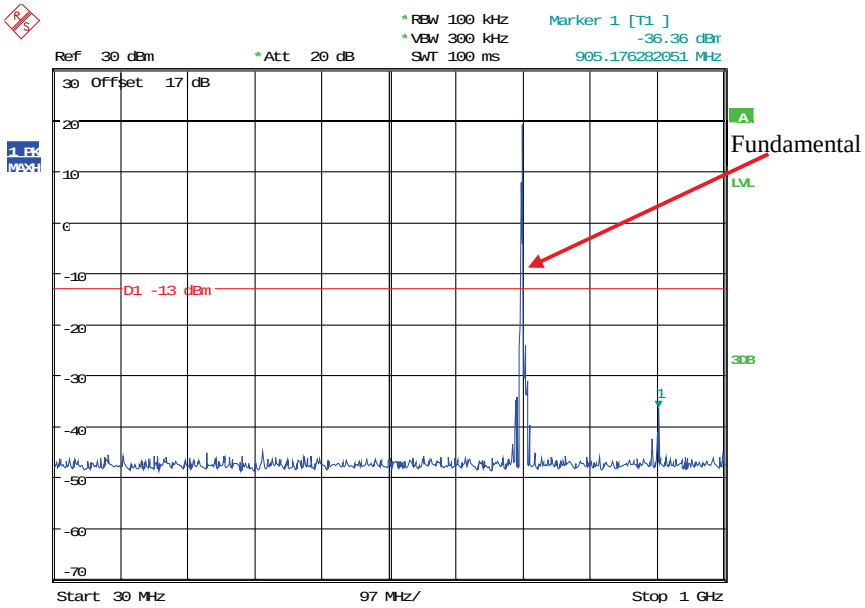


Date: 12.JUL.2018 14:02:04

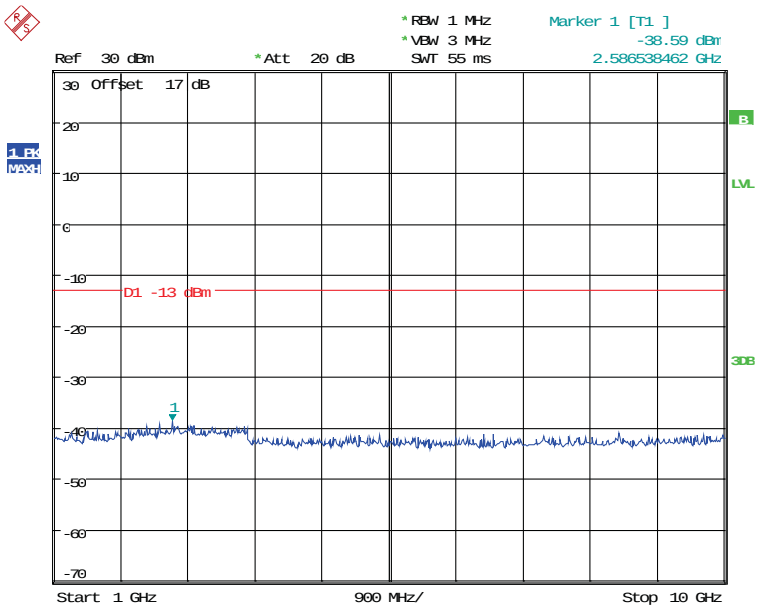


Date: 12.JUL.2018 14:02:55

QPSK_3MHz

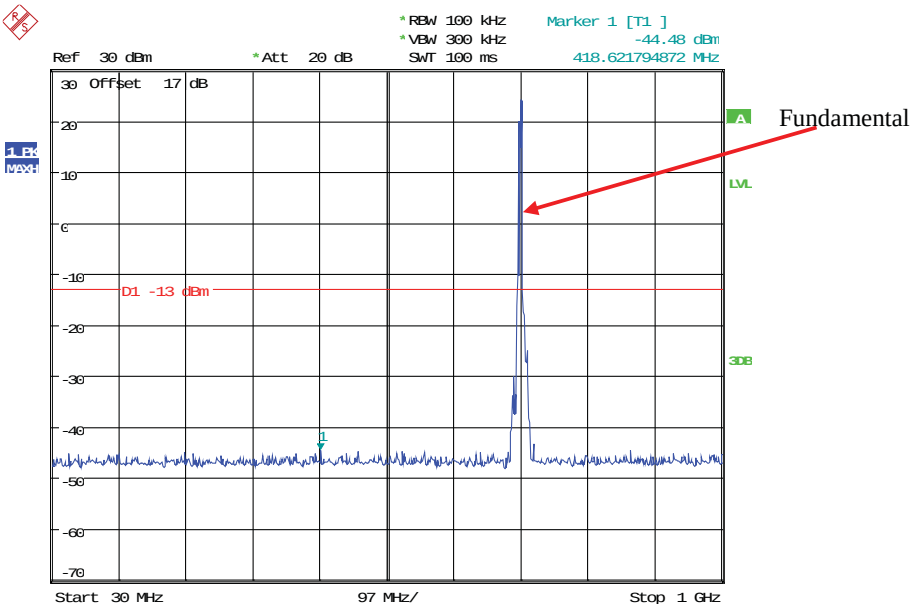


Date: 12.JUL.2018 14:05:32



Date: 12.JUL.2018 14:05:00

QPSK_5MHz



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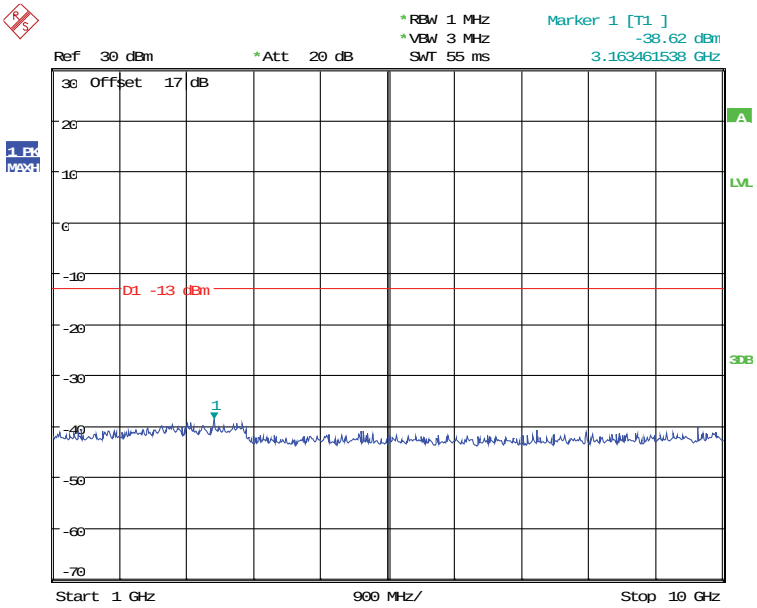
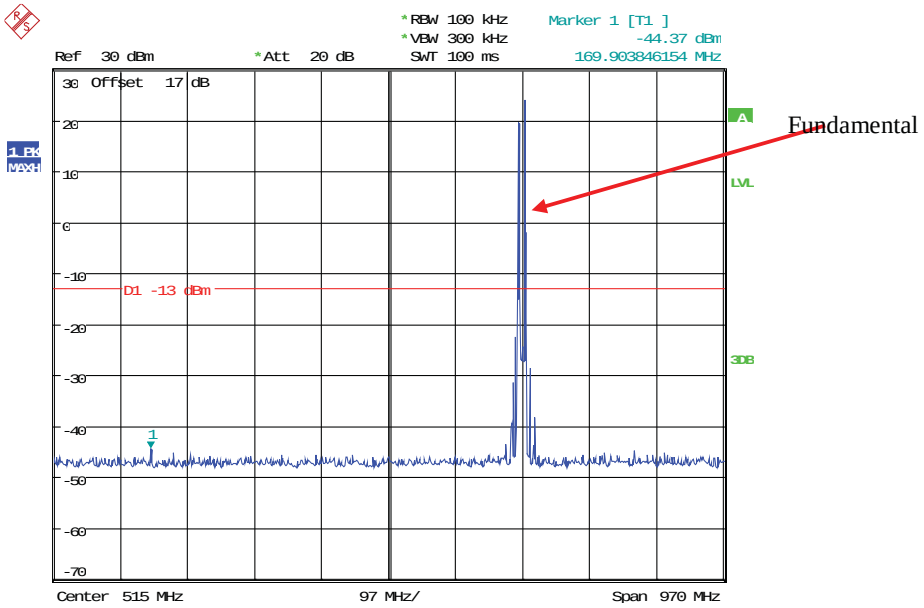
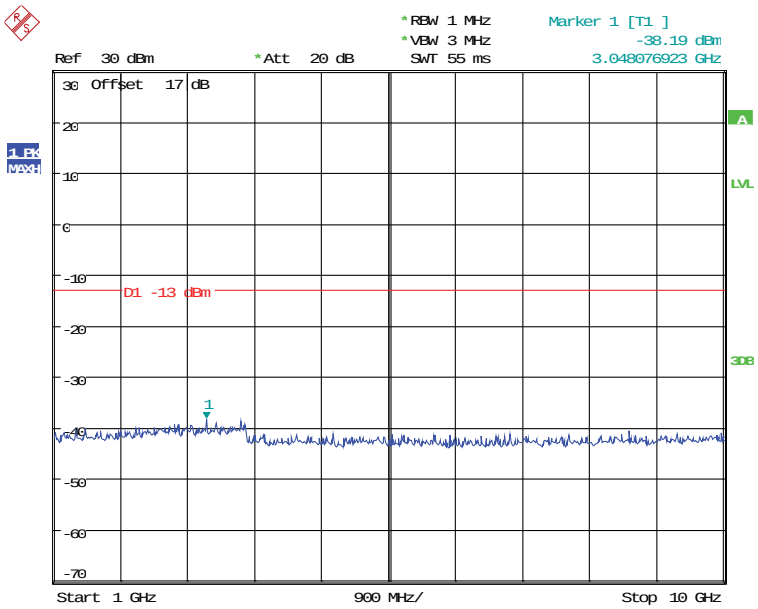


Date: 7.JUN.2018 18:47:43

QPSK_10MHz



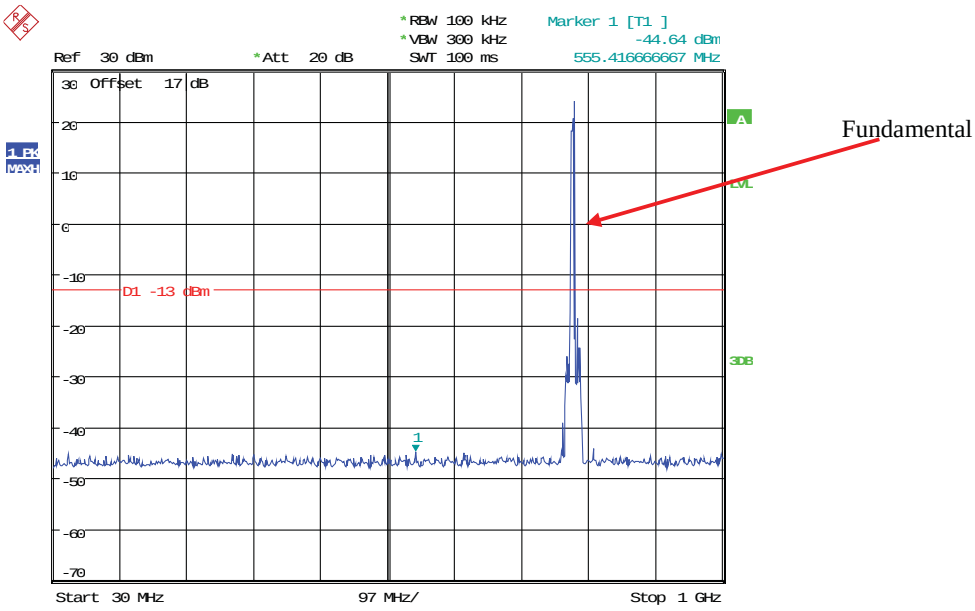
Date: 7.JUN.2018 18:03:52



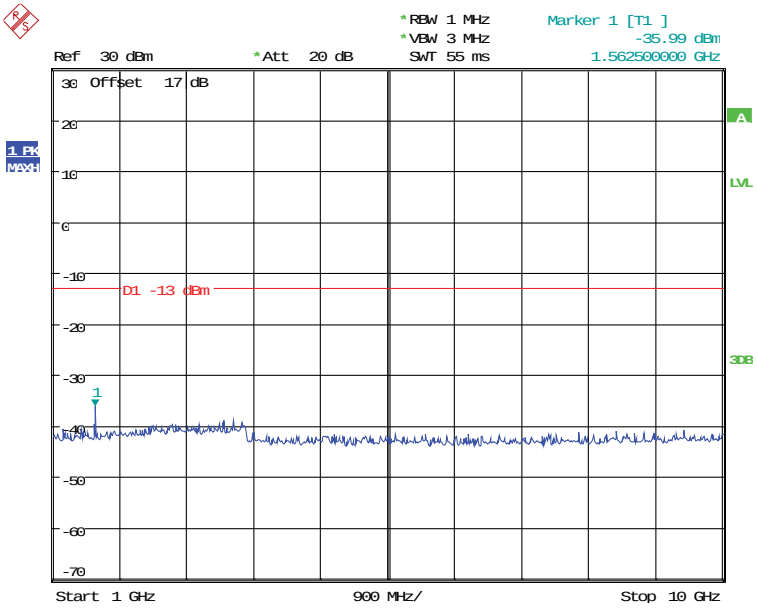
Date: 7.JUN.2018 18:48:15

LTE Band 13 (Middle Channel)

QPSK_5MHz

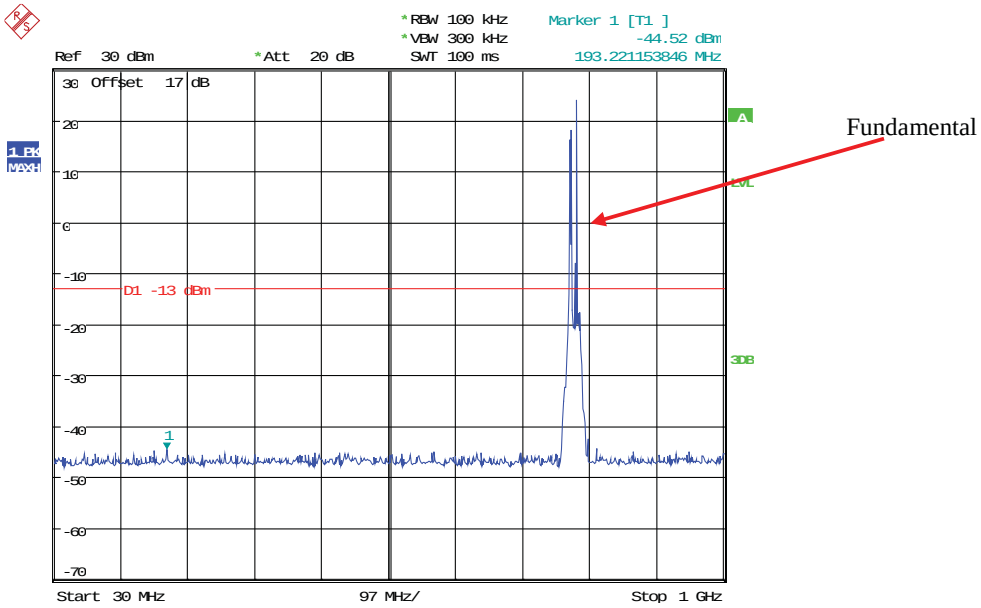


Date: 7.JUN.2018 18:07:33

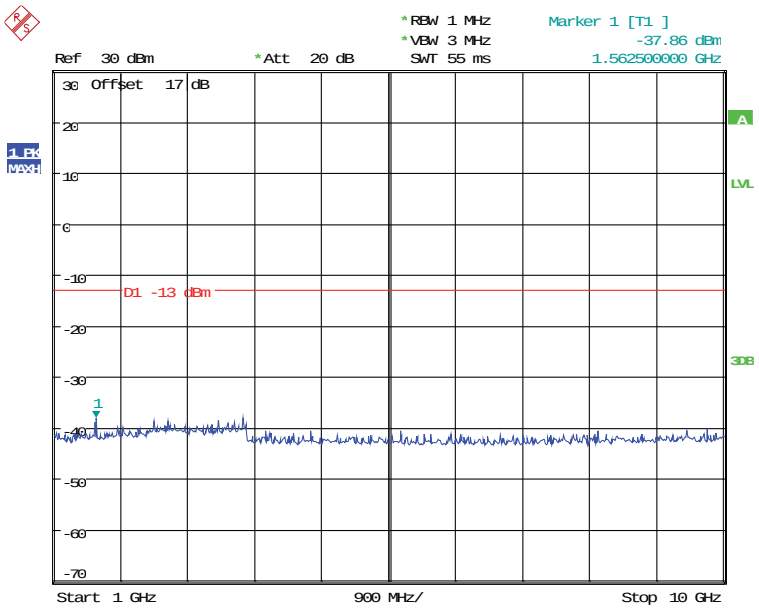


Date: 7.JUN.2018 18:49:30

QPSK_10MHz

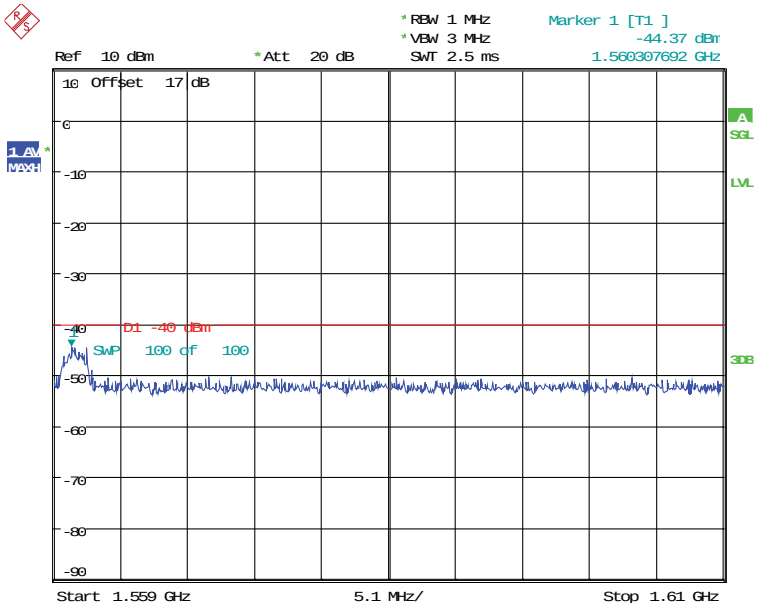


Date: 7.JUN.2018 18:09:01



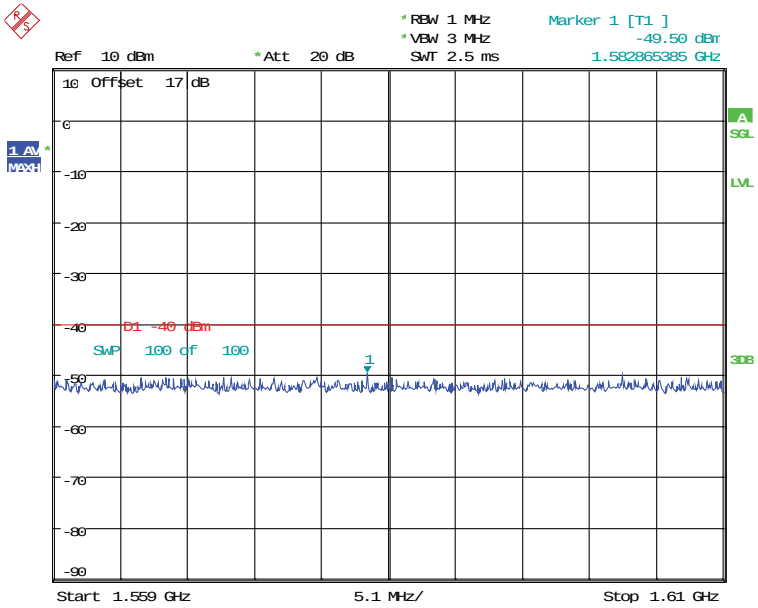
Date: 7.JUN.2018 18:50:01

1.599-1.610GHz (5MHz, Middle Channel)



Date: 12.JUN.2018 16:52:48

1.599-1.610GHz (10MHz, Middle Channel)

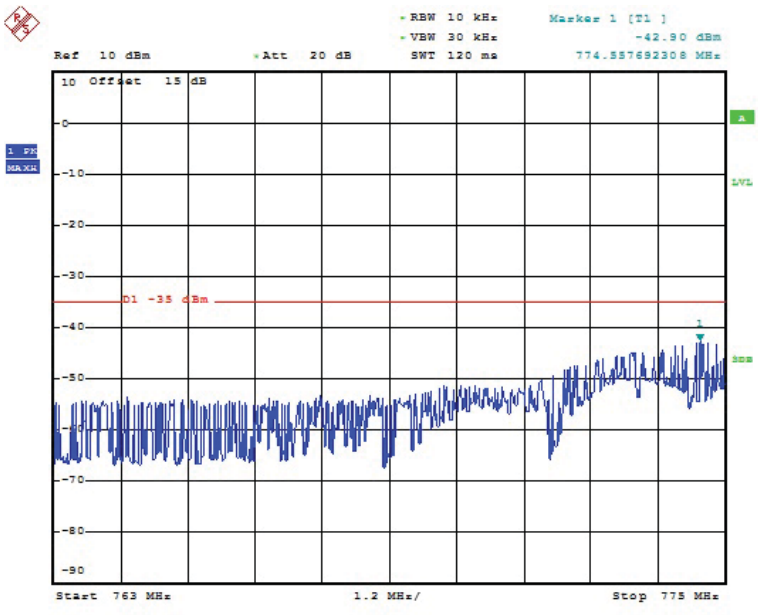


Date: 12.JUN.2018 16:51:22

Additional Conducted Spurious Emissions Evaluations in accordance with FCC §27.53 (c)

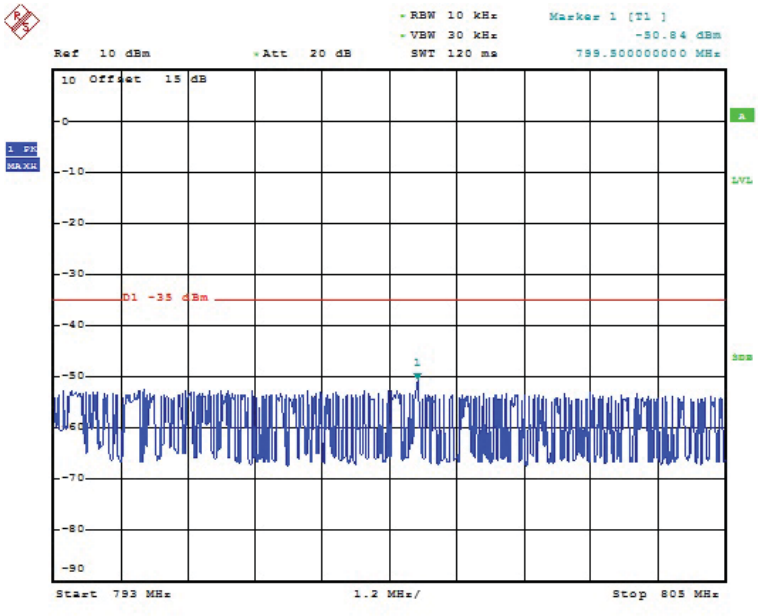
Note: because of RBW 10kHz convert to 6.25 kHz, 10*log (10/6.25) =2, offset added with more 2dB.

763-775MHz_5MHz



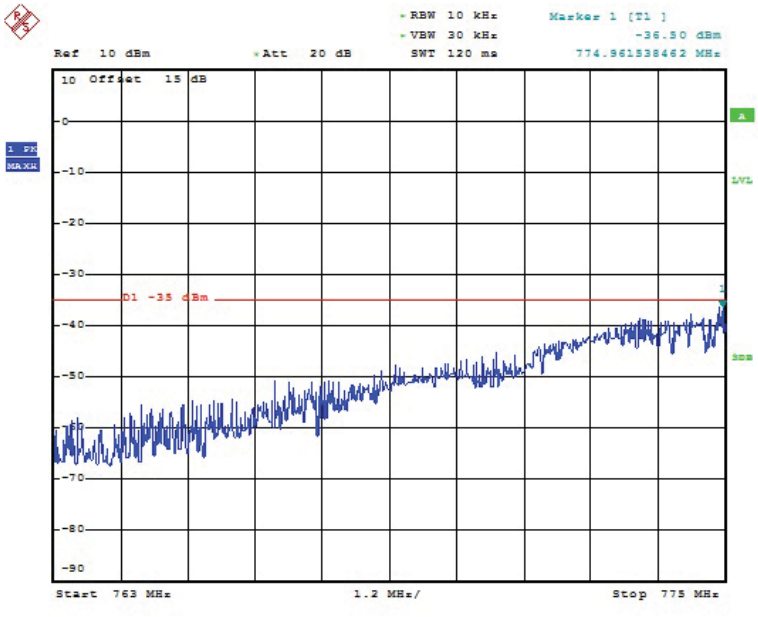
Date: 12.JUN.2018 17:09:55

793-805MHz_5MHz



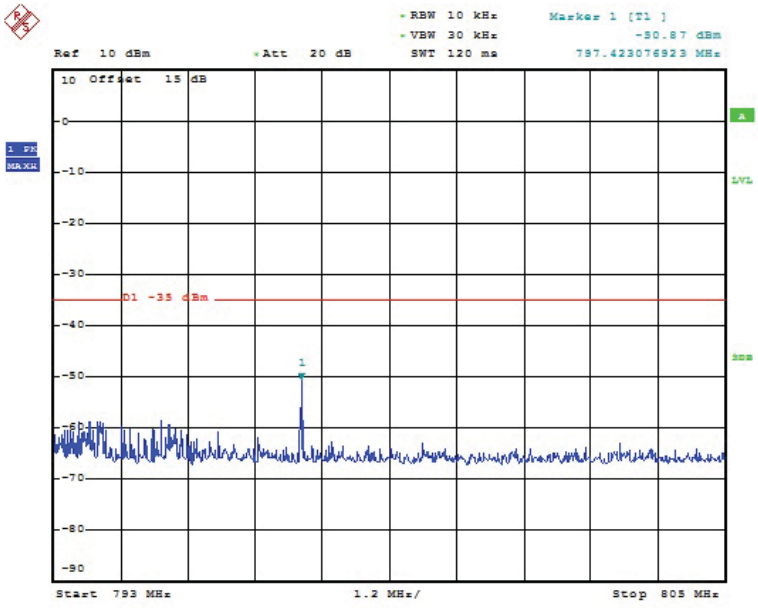
Date: 12.JUN.2018 17:12:04

763-775MHz_10MHz



Date: 12.JUN.2018 17:07:29

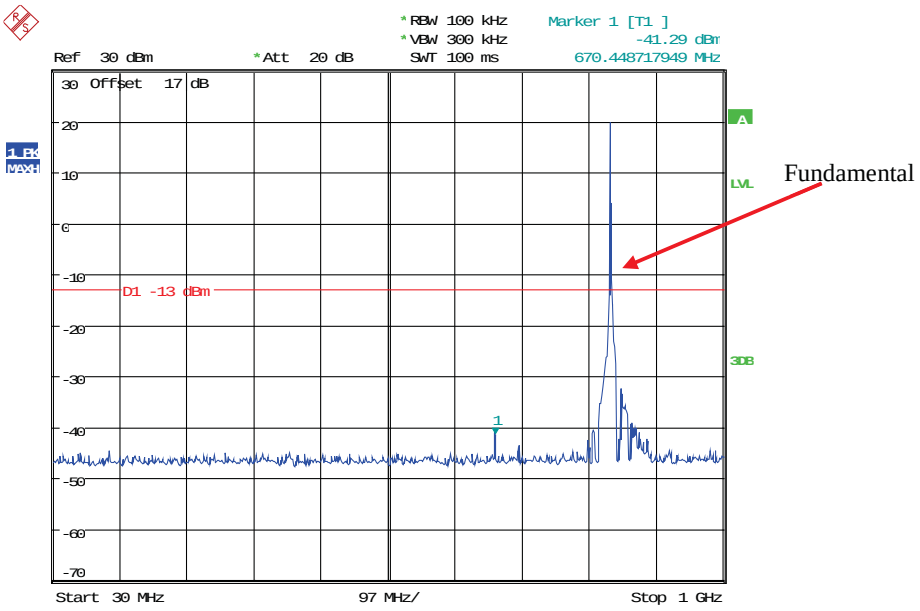
793-805MHz_10MHz



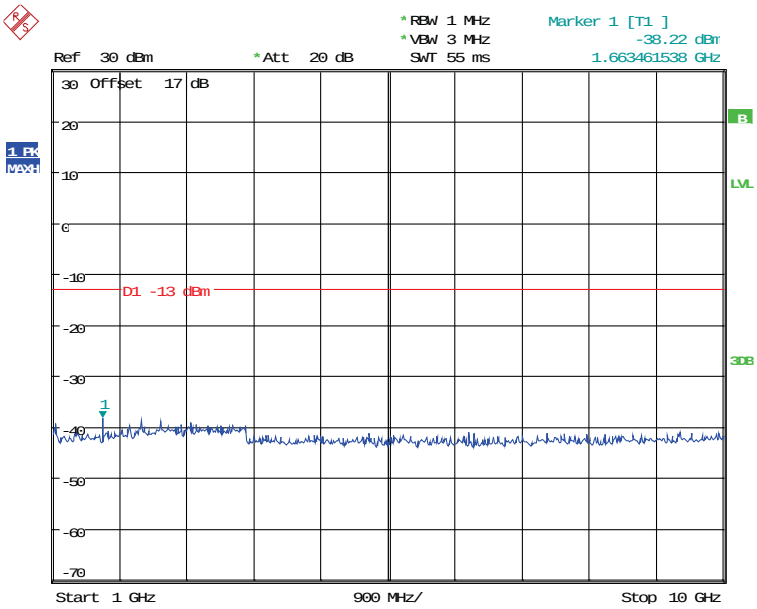
Date: 12.JUN.2018 17:14:45

LTE Band 26 (Middle Channel)

QPSK_1.4MHz

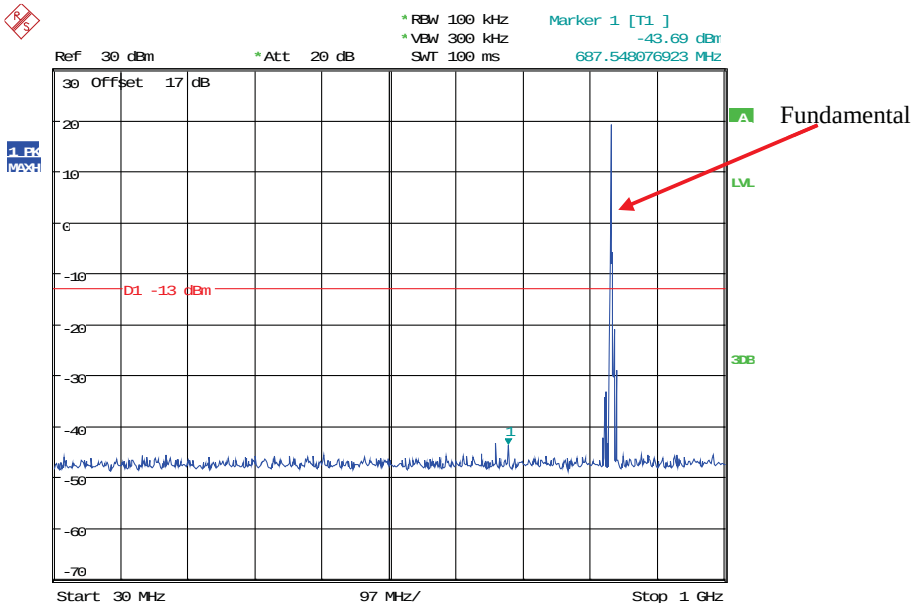


Date: 12.JUL.2018 13:55:46

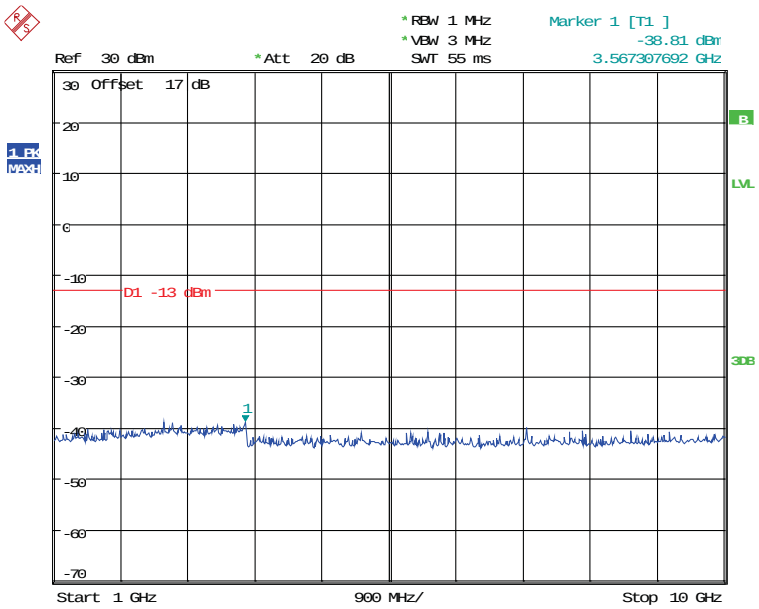


Date: 12.JUL.2018 13:56:32

QPSK_3MHz

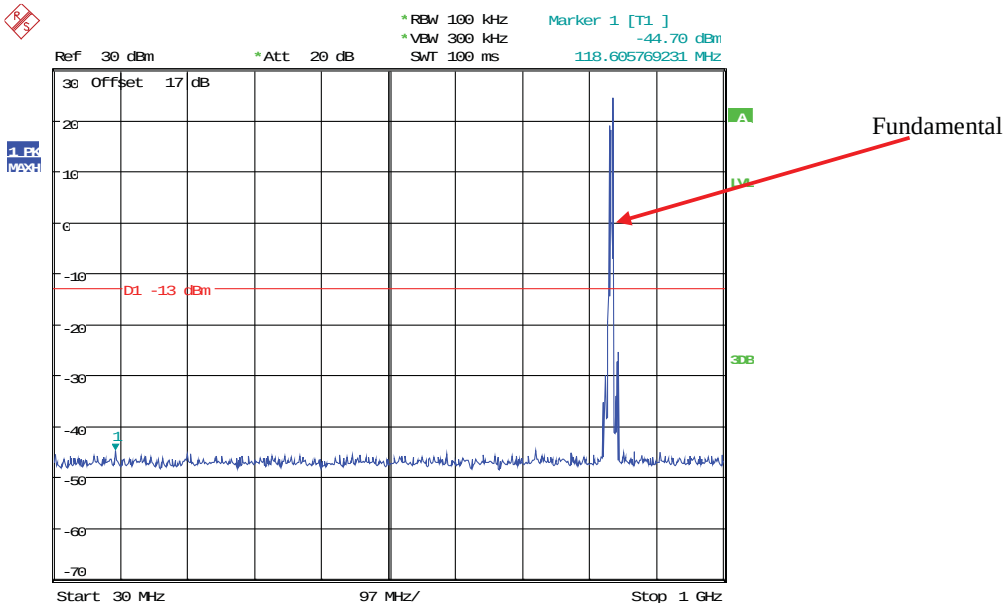


Date: 12.JUL.2018 14:00:20

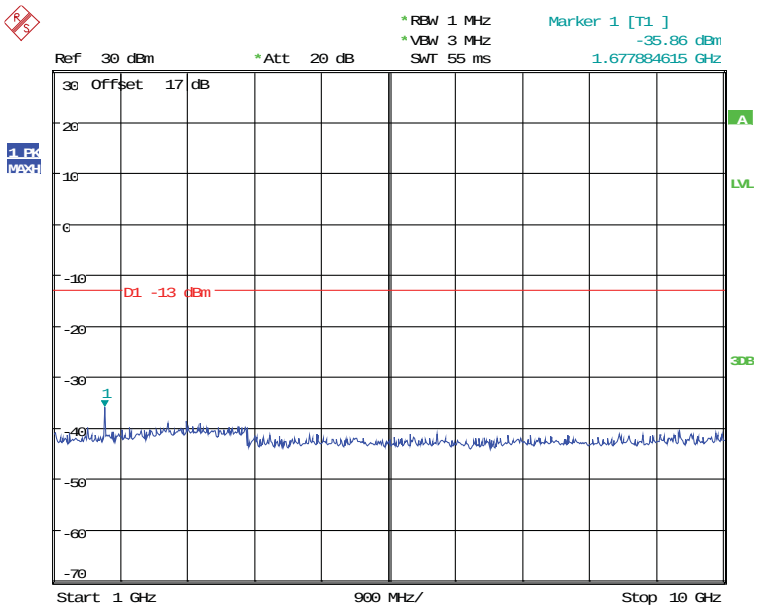


Date: 12.JUL.2018 14:26:08

QPSK_5MHz

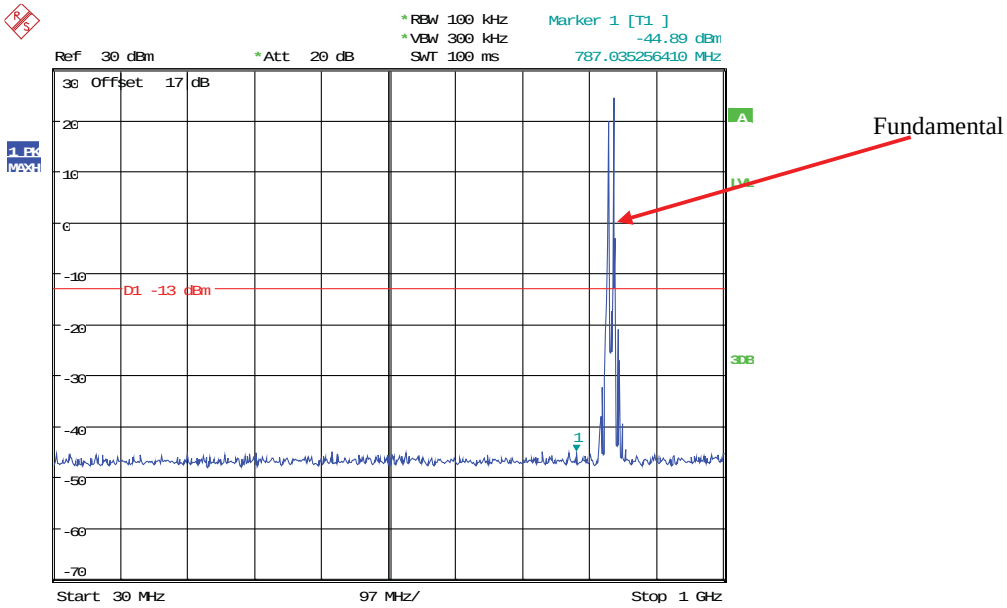


Date: 7.JUN.2018 18:10:52

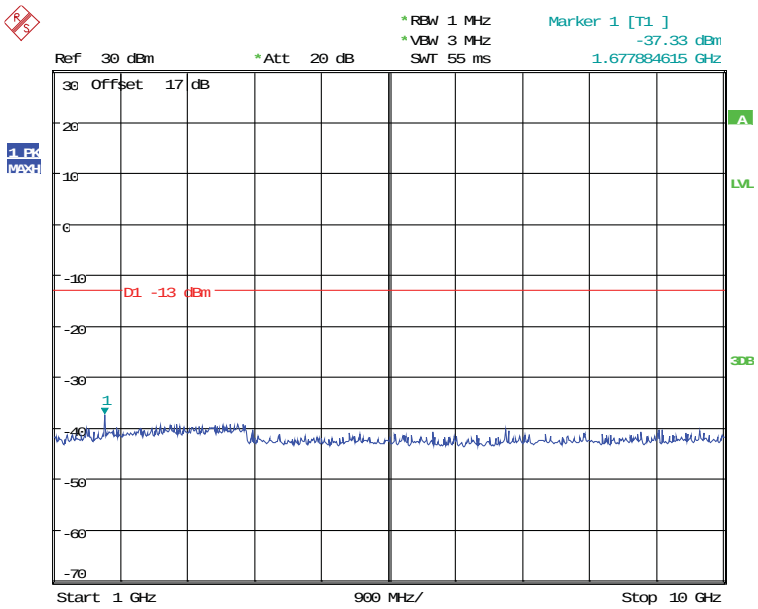


Date: 7.JUN.2018 18:51:02

QPSK_10MHz

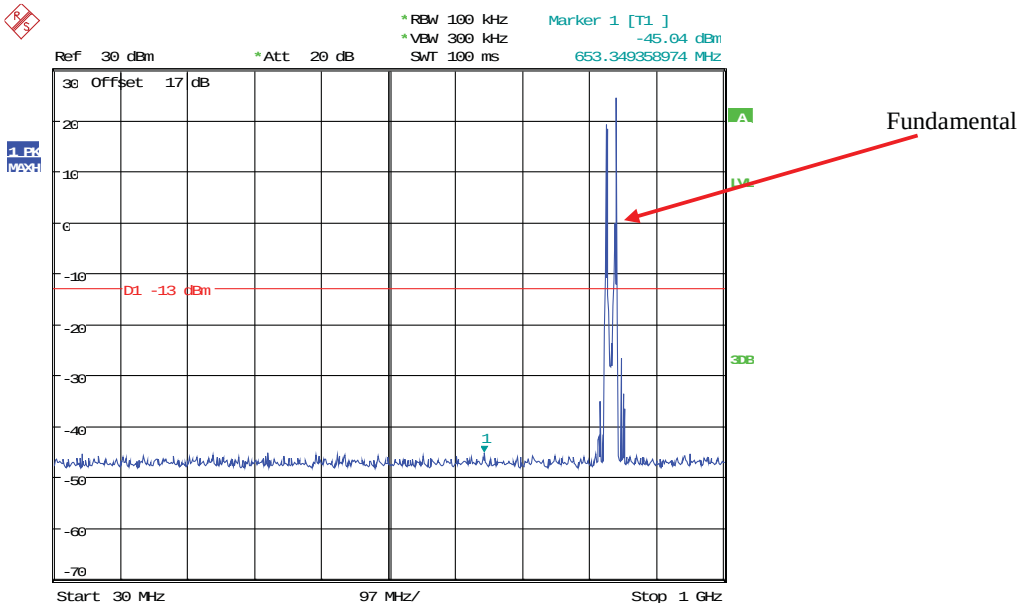


Date: 7.JUN.2018 18:12:03

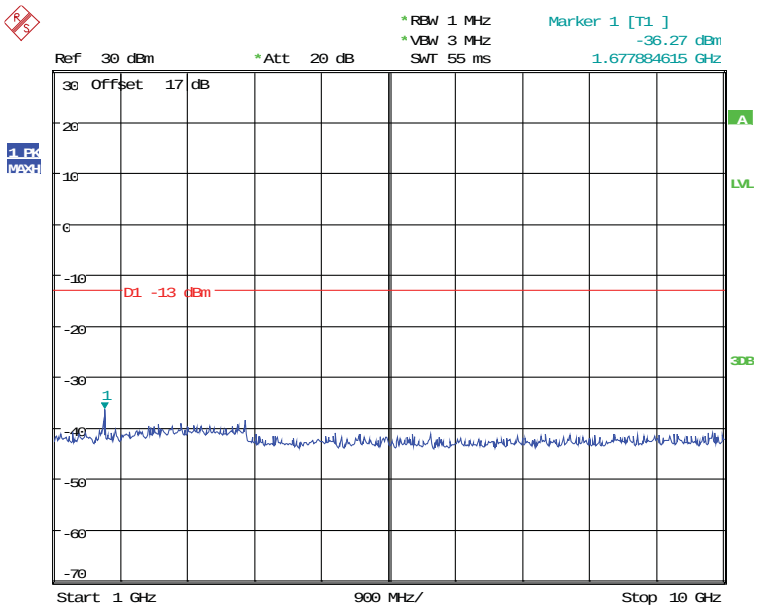


Date: 7.JUN.2018 18:54:44

QPSK_15MHz



Date: 7.JUN.2018 18:13:08



Date: 7.JUN.2018 18:55:19

FCC§2.1053, §22.917 & §24.238 & §27.53& §90.691 – Spurious Radiated Emissions

Applicable Standard

FCC § 2.1053, §22.917, § 24.238 and § 27.53 &§90.691

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious emissions in dB = 10 lg (TXpwr in Watts/0.001) – the absolute level

Spurious attenuation limit in dB = 43 + 10 Log10 (power out in Watts)

Environmental Conditions

Temperature:	25 ℃
Relative Humidity:	55 %
ATM Pressure:	1010 hPa

The testing was performed by Tom Hsu on 2018-06-08.

Test Mode: Transmitting

Pre-scan with Low, Middle and High channel, the worst case as below:

LTE Band: *(Pre-scan with all the bandwidth, worse case as below)*

Horizontal

Frequency (MHz)	S.G. (dBm)	Cable loss(dB)	Ant.Gain (dBd/dBi)	Result (dBm)	Limit (dBm)	Margin (dB)	Heigh (cm)	Degree (°)
LTE Band 2 (30MHz-20GHz)								
36.7900	-51.98	0.85	-15.35	-68.18	-13.00	-55.18	100	46
140.5800	-69.42	1.61	-0.15	-71.18	-13.00	-58.18	100	41
186.1700	-62.98	1.85	4.16	-60.67	-13.00	-47.67	100	62
259.8900	-75.82	2.19	5.96	-72.05	-13.00	-59.05	100	118
800.1800	-72.55	3.91	6.82	-69.64	-13.00	-56.64	100	211
1000.000	-73.28	4.40	6.26	-71.42	-13.00	-58.42	100	335
3760.000	-53.16	5.72	9.25	-49.63	-13.00	-36.63	150	20
5640.000	-55.66	7.39	10.51	-52.54	-13.00	-39.54	150	359
7520.000	-55.17	8.2	10.51	-52.86	-13.00	-39.86	150	101
LTE Band 4 (30MHz-20GHz)								
36.7900	-53.27	0.85	-15.35	-69.47	-13.00	-56.47	100	296
140.5800	-69.33	1.61	-0.15	-71.09	-13.00	-58.09	100	22
185.2000	-63.14	1.85	4.15	-60.84	-13.00	-47.84	100	70
259.8900	-75.64	2.19	5.96	-71.87	-13.00	-58.87	100	128
800.1800	-73.91	3.91	6.82	-71.00	-13.00	-58.00	100	177
960.2300	-72.00	4.30	6.38	-69.92	-13.00	-56.92	100	235
3465.000	-42.77	5.35	9.19	-38.93	-13.00	-25.93	150	80
5197.500	-52.47	7.92	10.22	-50.17	-13.00	-37.17	150	89
6930.000	-55.13	7.81	10.88	-52.06	-13.00	-39.06	150	333
LTE Band 5 (30MHz-10GHz)								
30.0000	-46.52	0.76	-22.3	-69.58	-13.00	-56.58	100	129
140.5800	-65.63	1.61	-0.15	-67.39	-13.00	-54.39	100	32
185.2000	-60.81	1.85	4.15	-58.51	-13.00	-45.51	100	58
259.8900	-72.95	2.19	5.96	-69.18	-13.00	-56.18	100	112
666.3200	-52.92	3.56	6.66	-49.82	-13.00	-36.82	100	335
1000.000	-62.06	4.4	6.26	-60.20	-13.00	-47.20	100	342
1673.000	-54.02	3.67	8.23	-49.46	-13.00	-36.46	150	308
2509.500	-56.36	4.56	9.49	-51.43	-13.00	-38.43	150	277
3346.000	-60.15	5.24	9.17	-56.22	-13.00	-43.22	150	230
LTE Band 12 (30MHz-10GHz)								
35.8200	-49.74	0.84	-16.33	-66.91	-13.00	-53.91	150	280
174.5300	-60.29	1.78	3.41	-58.66	-13.00	-45.66	150	325
188.1100	-67	1.86	4.20	-64.66	-13.00	-51.66	150	322
256.9800	-66.21	2.18	6.04	-62.35	-13.00	-49.35	150	33
306.4500	-72.79	2.39	5.93	-69.25	-13.00	-56.25	150	1
964.1100	-73.8	4.31	6.37	-71.74	-13.00	-58.74	150	348
1415.000	-46.68	3.36	7.77	-42.27	-13.00	-29.27	150	296
2122.500	-59.28	4.16	8.59	-54.85	-13.00	-41.85	150	1
2830.000	-63.83	4.79	9.24	-59.38	-13.00	-46.38	150	340

Result = Reading + Correct Factor
Margin = Result – Limit
Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain
Spurious emissions more than 20 dB below the limit were not reported.

Frequency (MHz)	S.G. (dBm)	Cable loss(dB)	Ant.Gain (dBd/dBi)	Result (dBm)	Limit (dBm)	Margin (dB)	Heigh (cm)	Degree (°)
LTE Band 13 (30MHz-10GHz)								
30.9700	-44.56	0.77	-21.3	-66.63	-13.00	-53.63	150	185
174.5300	-60.33	1.78	3.41	-58.70	-13.00	-45.70	150	326
204.6000	-68.63	1.94	4.29	-66.28	-13.00	-53.28	150	19
258.9200	-65.7	2.19	5.99	-61.90	-13.00	-48.90	150	31
308.3900	-74.32	2.4	5.93	-70.79	-13.00	-57.79	150	2
967.9900	-74.1	4.32	6.36	-72.06	-13.00	-59.06	150	150
1564.000	-44.33	3.55	8.21	-39.67	-13.00	-26.67	150	179
2346.000	-54.73	4.39	9.13	-49.99	-13.00	-36.99	150	355
3128.000	-62.68	5.04	9.13	-58.59	-13.00	-45.59	150	283
LTE Band 26 (30MHz-10GHz)								
30.0000	-46.76	0.76	-22.3	-69.82	-13.00	-56.82	100	15
140.5800	-64.37	1.61	-0.15	-66.13	-13.00	-53.13	100	55
184.2300	-56.82	1.84	4.13	-54.53	-13.00	-41.53	100	72
254.0700	-73.11	2.17	6.11	-69.17	-13.00	-56.17	100	44
662.4400	-54.85	3.55	6.63	-51.77	-13.00	-38.77	100	352
994.1800	-69.07	4.39	6.28	-67.18	-13.00	-54.18	100	250
1663.000	-50.2	3.66	8.23	-45.63	-13.00	-32.63	150	336
2494.500	-62.38	4.54	9.49	-57.43	-13.00	-44.43	150	291
3326.000	-60.92	5.22	9.17	-56.97	-13.00	-43.97	150	27

Result = Reading + Correct Factor
Margin = Result – Limit
Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain
Spurious emissions more than 20 dB below the limit were not reported.

Vertical

Frequency (MHz)	S.G. (dBm)	Cable loss(dB)	Ant.Gain (dBd/dBi)	Result (dBm)	Limit (dBm)	Margin (dB)	Heigh (cm)	Degree (°)
LTE Band 2 (30MHz-20GHz)								
45.5200	-57.29	0.93	-7.25	-65.47	-13.00	-52.47	100	220
140.5800	-60.12	1.61	-0.15	-61.88	-13.00	-48.88	100	273
185.2000	-50.85	1.85	4.15	-48.55	-13.00	-35.55	100	79
259.8900	-67.04	2.19	5.96	-63.27	-13.00	-50.27	100	258
700.2700	-70.19	3.66	6.96	-66.89	-13.00	-53.89	100	227
1000.000	-67.23	4.4	6.26	-65.37	-13.00	-52.37	100	344
3760.000	-59.62	5.72	9.25	-56.09	-13.00	-43.09	150	338
5640.000	-56.52	7.39	10.51	-53.40	-13.00	-40.40	150	138
7520.000	-57.15	8.2	10.51	-54.84	-13.00	-41.84	150	183
LTE Band 4 (30MHz-20GHz)								
141.5500	-59.65	1.62	-0.03	-61.30	-13.00	-48.30	100	0
187.1400	-50.88	1.86	4.18	-48.56	-13.00	-35.56	100	84
199.7500	-63.8	1.91	3.21	-62.50	-13.00	-49.50	100	164
259.8900	-69.35	2.19	5.96	-65.58	-13.00	-52.58	100	5
800.1800	-70.24	3.91	6.82	-67.33	-13.00	-54.33	100	120
1000.000	-67.32	4.4	6.26	-65.46	-13.00	-52.46	100	212
3465.000	-50.03	5.35	9.19	-46.19	-13.00	-33.19	150	9
5197.500	-54.59	7.92	10.22	-52.29	-13.00	-39.29	150	18
6930.000	-55.43	7.81	10.88	-52.36	-13.00	-39.36	150	112
LTE Band 5 (30MHz-10GHz)								
141.5500	-54.76	1.62	-0.03	-56.41	-13.00	-43.41	100	333
184.2300	-49.11	1.84	4.13	-46.82	-13.00	-33.82	100	86
259.8900	-64.98	2.19	5.96	-61.21	-13.00	-48.21	100	311
500.4500	-66.53	3.04	6.44	-63.13	-13.00	-50.13	100	175
666.3200	-54.98	3.56	6.66	-51.88	-13.00	-38.88	100	329
978.6600	-59.94	4.35	6.33	-57.96	-13.00	-44.96	100	175
1673.000	-61.69	3.67	8.23	-57.13	-13.00	-44.13	150	313
2509.500	-56.13	4.56	9.49	-51.20	-13.00	-38.20	150	345
3346.000	-59.92	5.24	9.17	-55.99	-13.00	-42.99	150	224
LTE Band 12 (30MHz-10GHz)								
84.3200	-64.13	1.25	0.93	-64.45	-13.00	-51.45	150	326
177.4400	-55.95	1.8	3.76	-53.99	-13.00	-40.99	150	187
259.8900	-68.07	2.19	5.96	-64.30	-13.00	-51.30	150	172
485.9000	-74.48	3.01	6.41	-71.08	-13.00	-58.08	150	112
800.1800	-69.65	3.91	6.82	-66.74	-13.00	-53.74	150	31
993.2100	-68.94	4.38	6.28	-67.04	-13.00	-54.04	150	214
1415.000	-54.26	3.36	7.77	-49.85	-13.00	-36.85	150	30
2122.500	-65.22	4.16	8.59	-60.79	-13.00	-47.79	150	8
2830.000	-63.2	4.79	9.24	-58.75	-13.00	-45.75	150	231

Result = Reading + Correct Factor
Margin = Result – Limit
Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain
Spurious emissions more than 20 dB below the limit were not reported.

Frequency (MHz)	S.G. (dBm)	Cable loss(dB)	Ant.Gain (dBd/dBi)	Result (dBm)	Limit (dBm)	Margin (dB)	Heigh (cm)	Degree (°)
LTE Band 13 (30MHz-10GHz)								
86.2600	-64.35	1.26	1.21	-64.40	-13.00	-51.40	150	338
156.1000	-59.53	1.69	1.38	-59.84	-13.00	-46.84	150	180
172.5900	-54.91	1.77	3.18	-53.50	-13.00	-40.50	150	196
258.9200	-66.77	2.19	5.99	-62.97	-13.00	-49.97	150	149
450.0100	-75.03	2.9	6.32	-71.61	-13.00	-58.61	150	151
979.6300	-70.32	4.35	6.33	-68.34	-13.00	-55.34	150	84
1564.000	-57.1	3.55	8.21	-52.44	-13.00	-39.44	150	244
2346.000	-59.13	4.39	9.13	-54.39	-13.00	-41.39	150	32
3128.000	-62.9	5.04	9.13	-58.81	-13.00	-45.81	150	86
LTE Band 26 (30MHz-10GHz)								
140.5800	-53.18	1.61	-0.15	-54.94	-13.00	-41.94	100	316
182.2900	-45.55	1.83	4.10	-43.28	-13.00	-30.28	100	70
256.0100	-62.88	2.17	6.06	-58.99	-13.00	-45.99	100	318
480.0800	-72.19	2.99	6.40	-68.78	-13.00	-55.78	100	93
662.4400	-51.33	3.55	6.63	-48.25	-13.00	-35.25	100	36
994.1800	-57.5	4.39	6.28	-55.61	-13.00	-42.61	100	83
1663.000	-52.47	3.66	8.23	-47.90	-13.00	-34.90	150	301
2494.500	-57.29	4.54	9.49	-52.34	-13.00	-39.34	150	344
3326.000	-60.97	5.22	9.17	-57.02	-13.00	-44.02	150	297

Result = Reading + Correct Factor
Margin = Result – Limit
Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain
Spurious emissions more than 20 dB below the limit were not reported.

FCC§22.917(a) & §24.238(a) & §27.53§90.691 – Band Edges

Applicable Standard

FCC §22.917, § 24.238, § 27.53 and §90.691

Test Procedure

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

The center of the spectrum analyzer was set to block edge frequency.

Environmental Conditions

Temperature:	25 ℃
Relative Humidity:	55 %
ATM Pressure:	1010 hPa

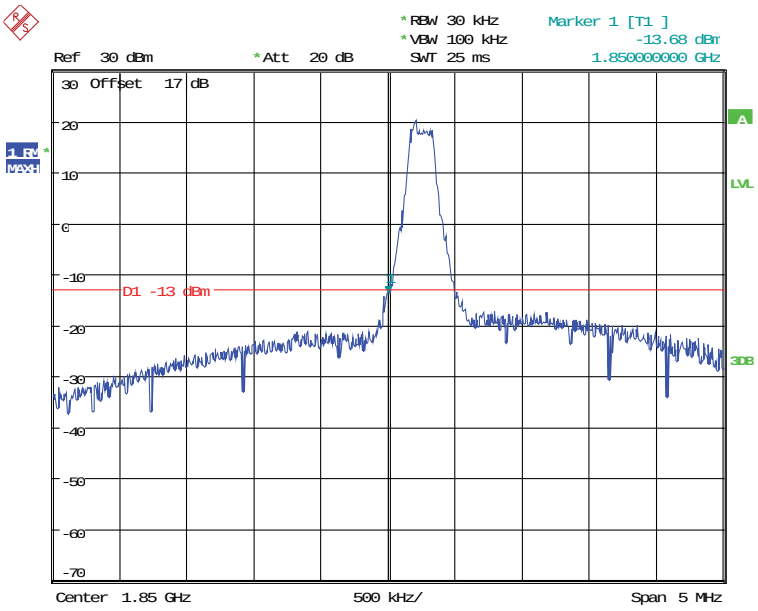
The testing was performed by Tom Hsu on 2018-06-08 ~ 2018-07-12.

Test Results

Please refer to the following plots

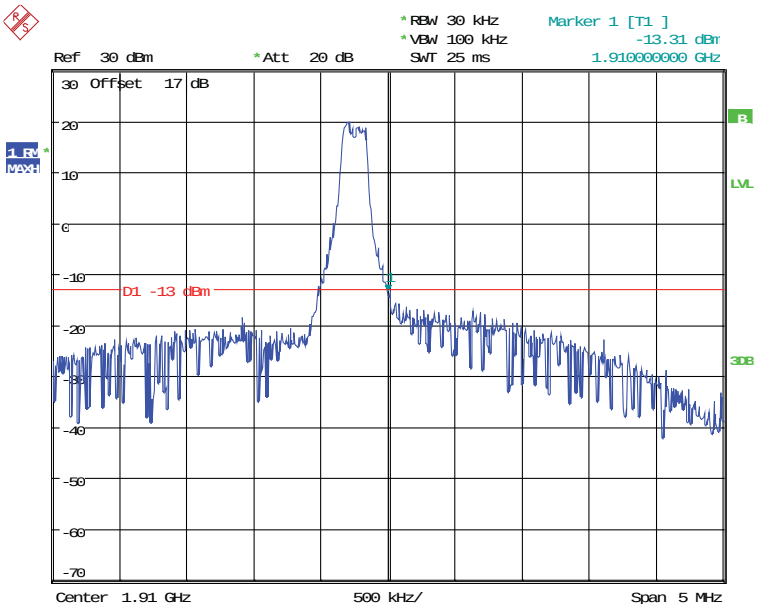
LTE Band 2

QPSK (1.4MHz, RB0) – Left Band Edge



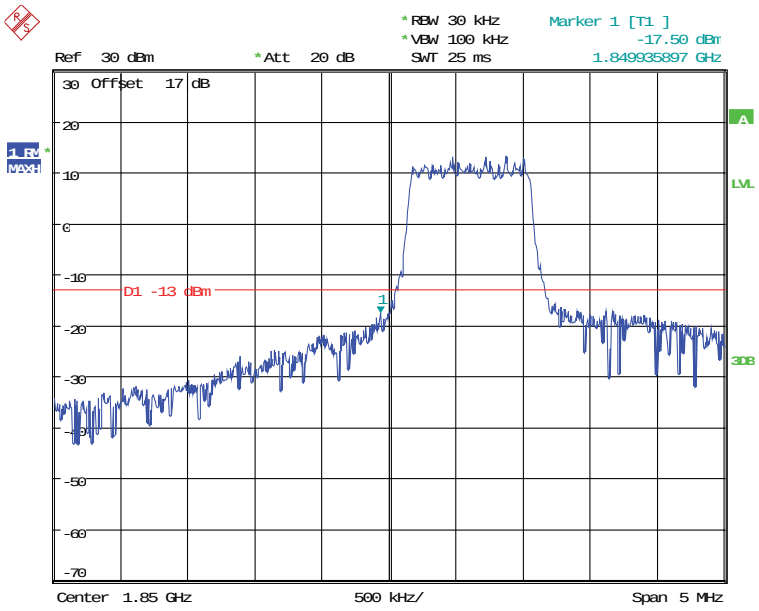
Date: 12.JUL.2018 14:46:56

QPSK (1.4MHz, RB0) – Right Band Edge



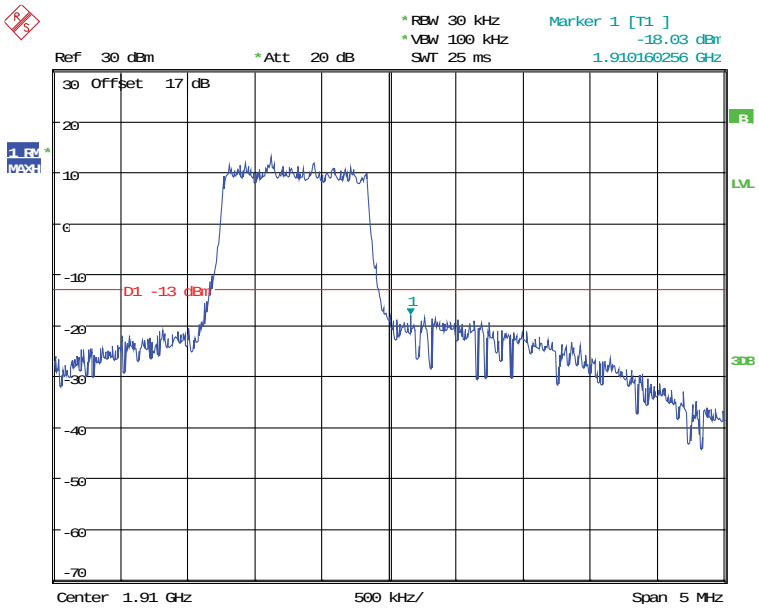
Date: 12.JUL.2018 15:02:13

QPSK (1.4MHz, RB6) – Left Band Edge



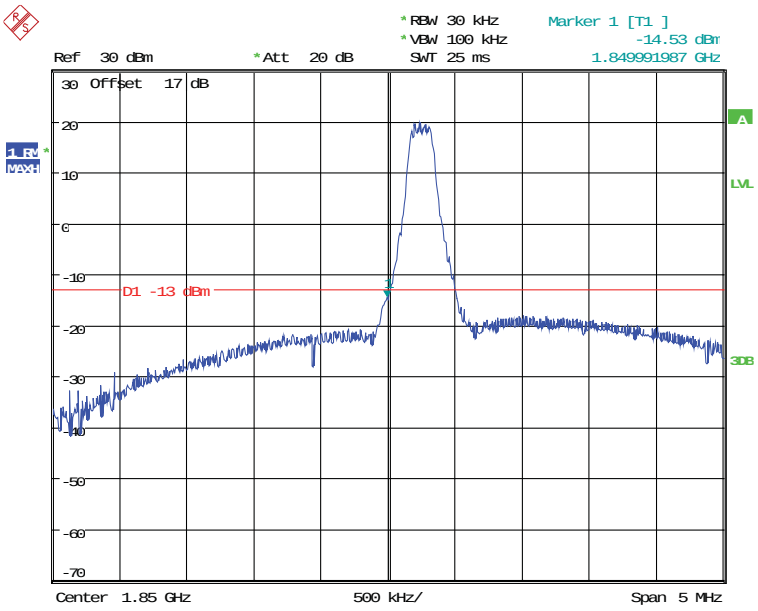
Date: 12.JUL.2018 14:44:15

QPSK (1.4MHz, RB6) – Right Band Edge



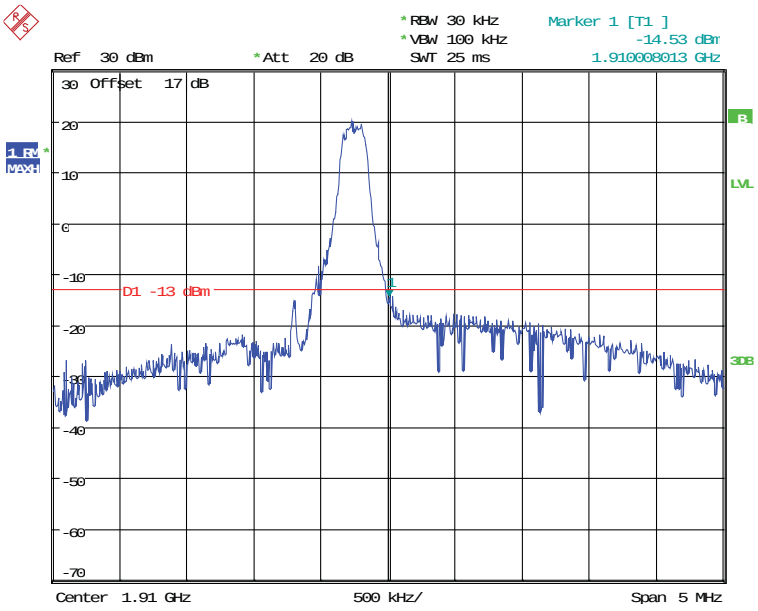
Date: 12.JUL.2018 15:06:38

16QAM (1.4MHz, RB0) – Left Band Edge



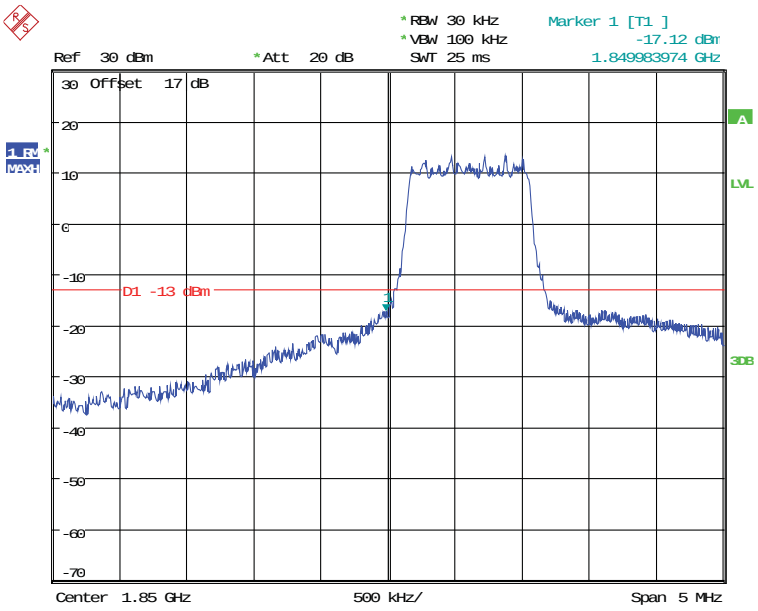
Date: 12.JUL.2018 14:48:46

16QAM (1.4MHz, RB0) – Right Band Edge



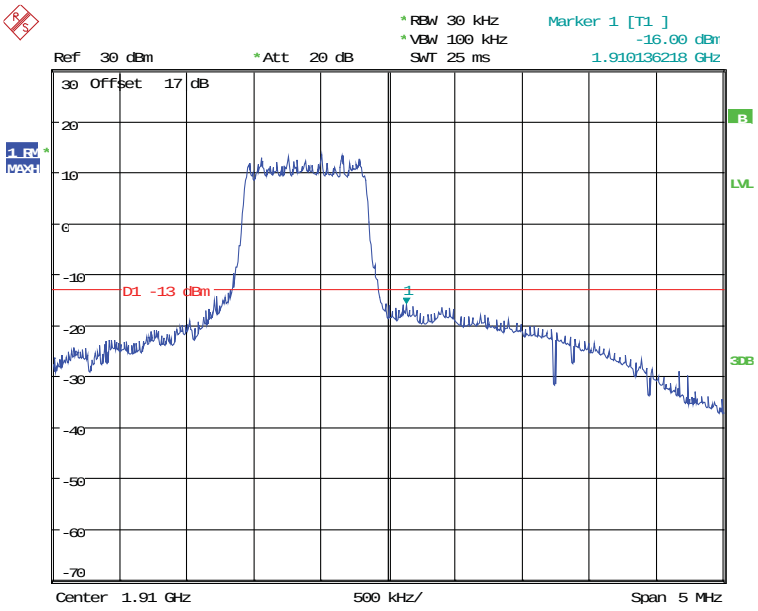
Date: 12.JUL.2018 15:05:15

16QAM (1.4MHz, RB5) – Left Band Edge



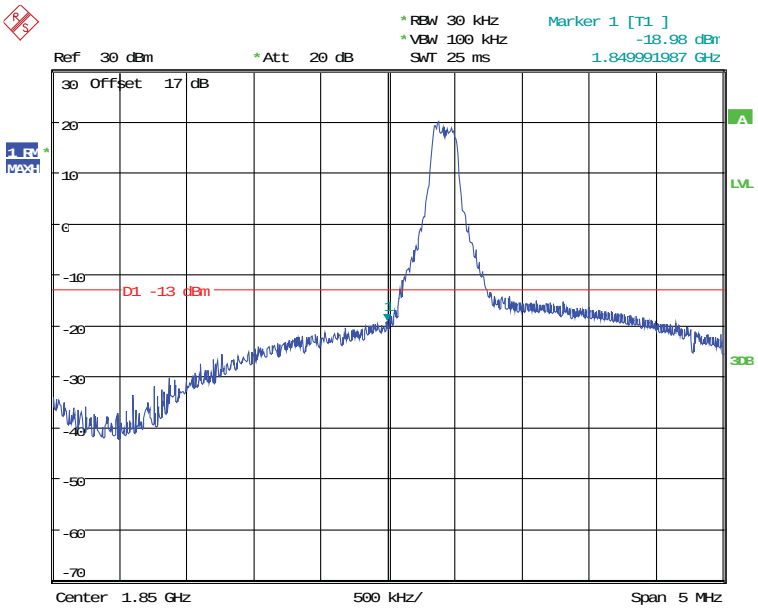
Date: 12.JUL.2018 14:49:59

16QAM (1.4MHz, RB5) – Right Band Edge



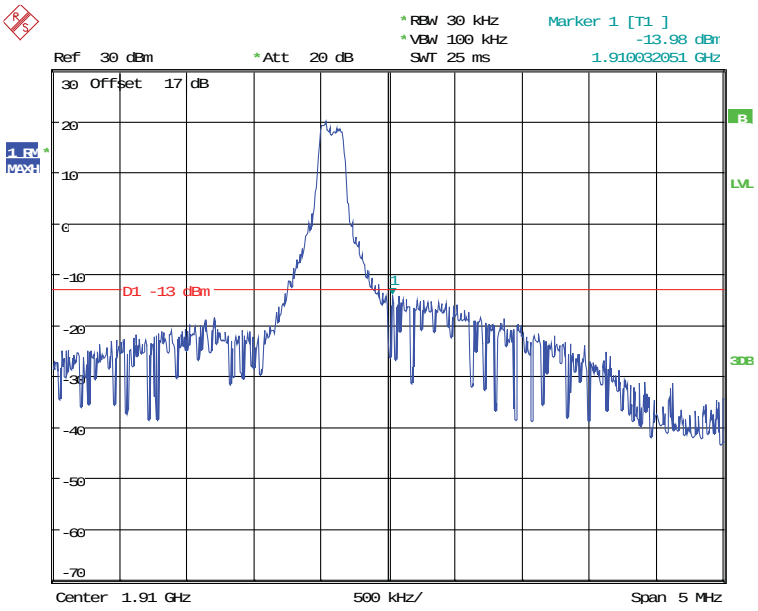
Date: 12.JUL.2018 14:55:06

QPSK (3MHz, RB0) – Left Band Edge



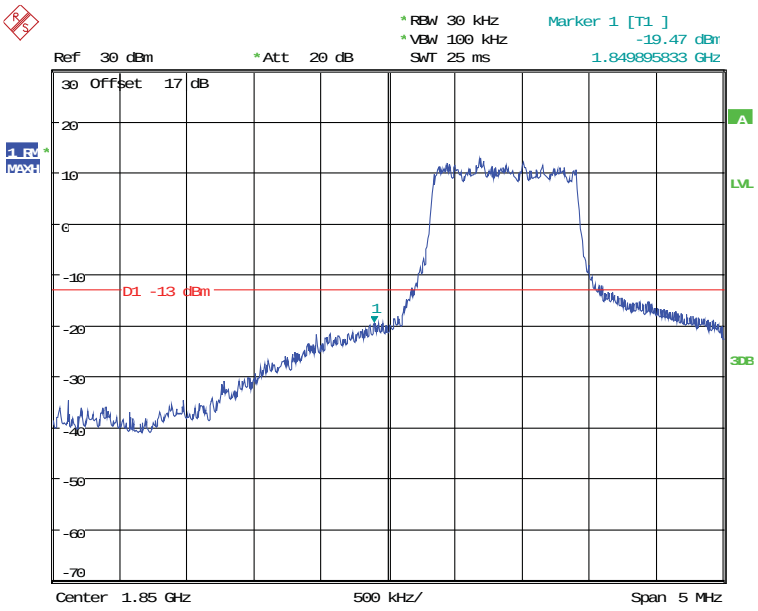
Date: 12.JUL.2018 15:19:52

QPSK (3MHz, RB0) – Right Band Edge



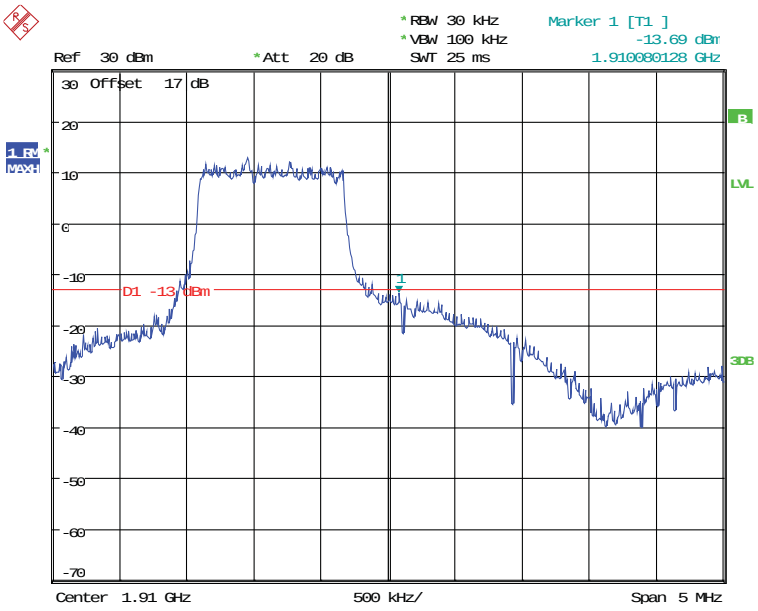
Date: 12.JUL.2018 15:12:01

QPSK (3MHz, RB6) – Left Band Edge



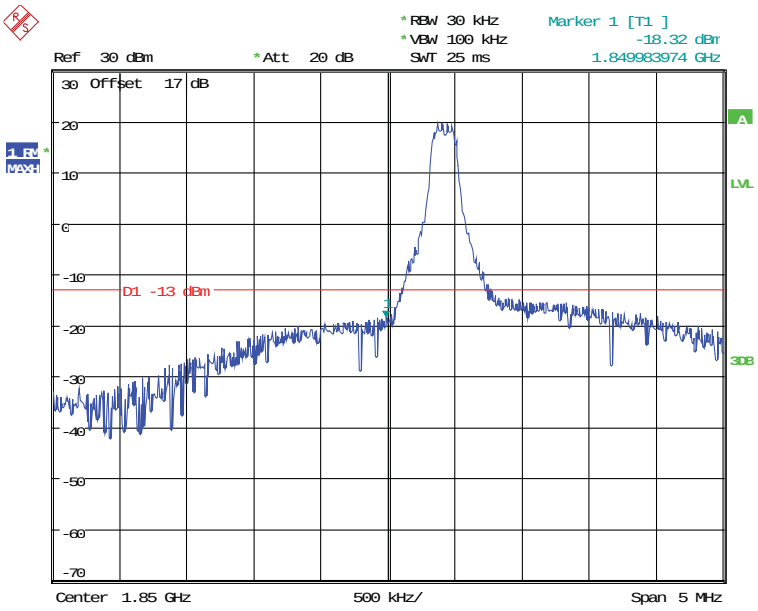
Date: 12.JUL.2018 15:21:53

QPSK (3MHz, RB6) – Right Band Edge



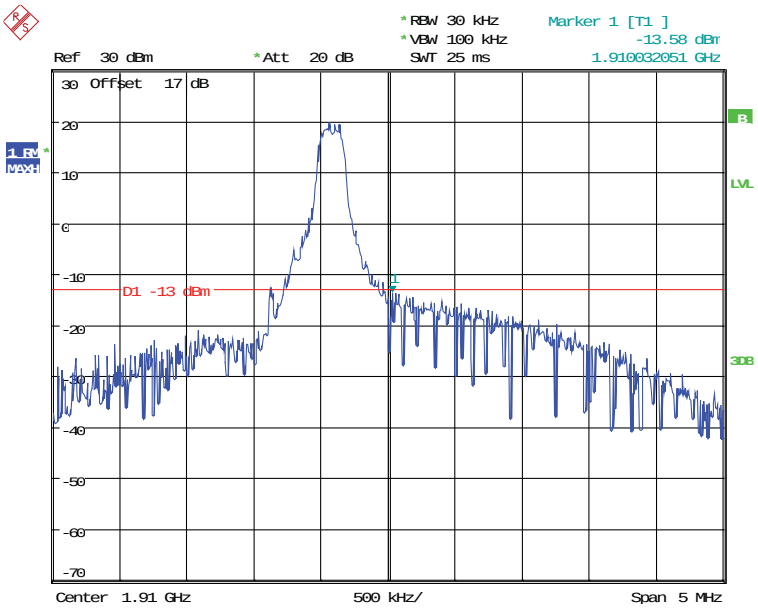
Date: 12.JUL.2018 15:10:59

16QAM (3MHz, RB0) – Left Band Edge



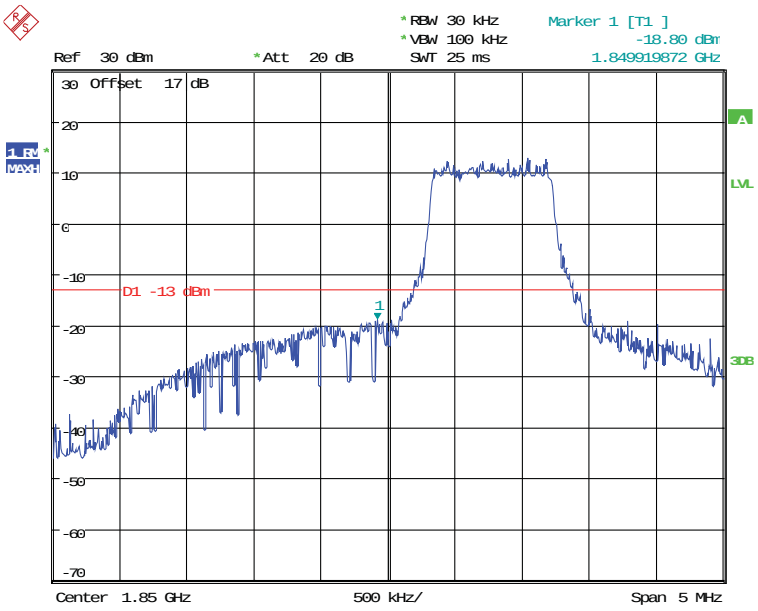
Date: 12.JUL.2018 15:18:31

16QAM (3MHz, RB0) – Right Band Edge



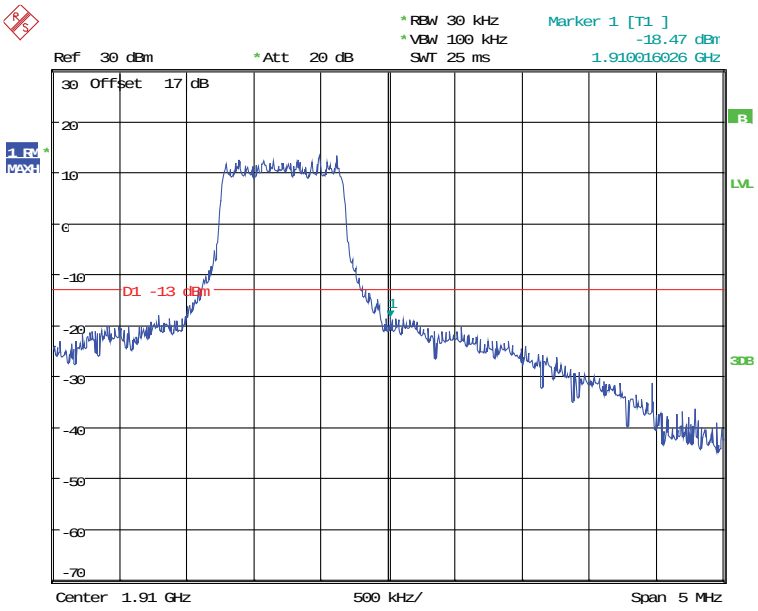
Date: 12.JUL.2018 15:14:01

16QAM (3MHz, RB5) – Left Band Edge



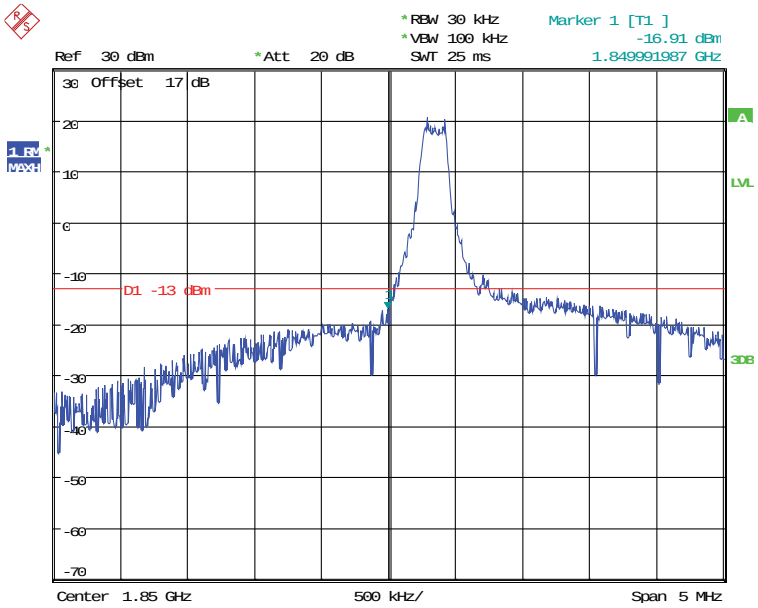
Date: 12.JUL.2018 15:17:23

16QAM (3MHz, RB5) – Right Band Edge



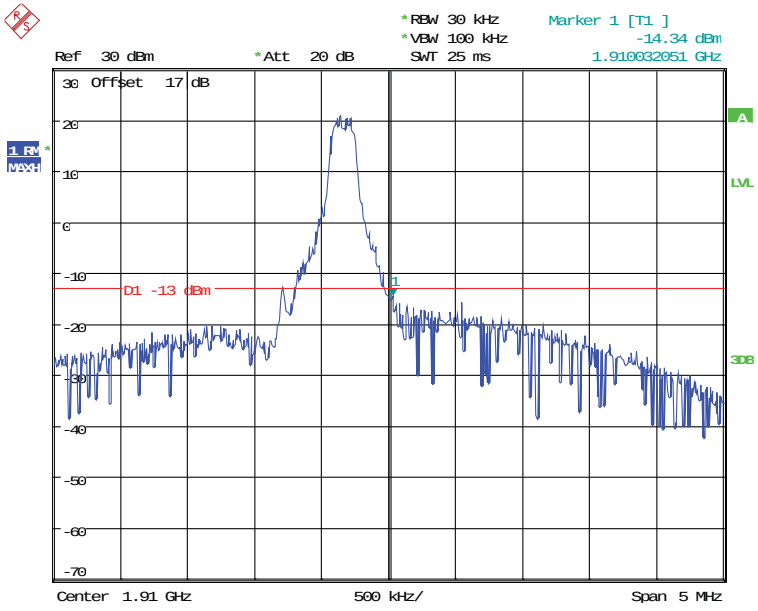
Date: 12.JUL.2018 15:15:18

QPSK (5MHz, RB0) – Left Band Edge



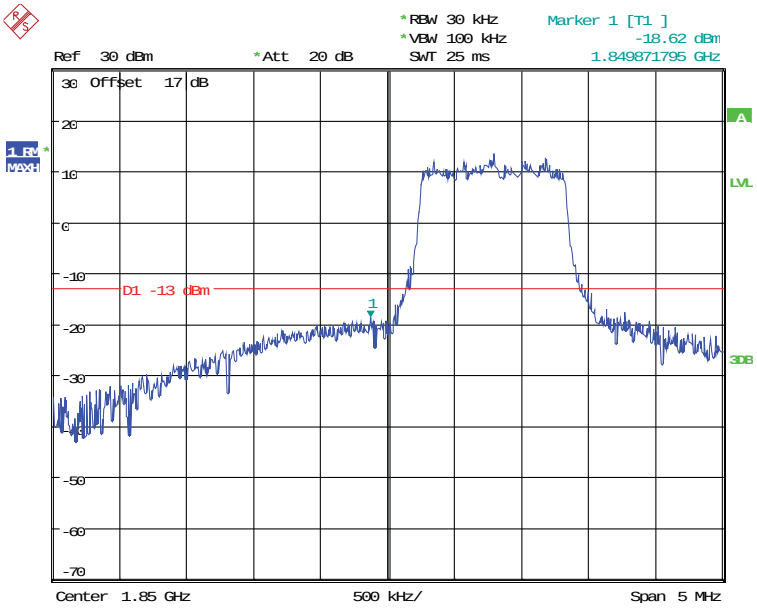
Date: 8.JUN.2018 11:21:56

QPSK (5MHz, RB0) – Right Band Edge



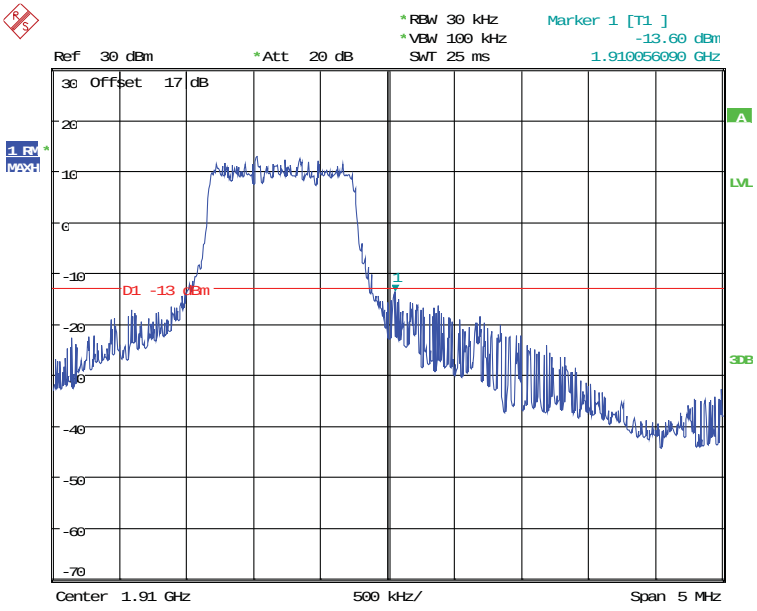
Date: 8.JUN.2018 15:07:22

QPSK (5MHz, RB6) – Left Band Edge



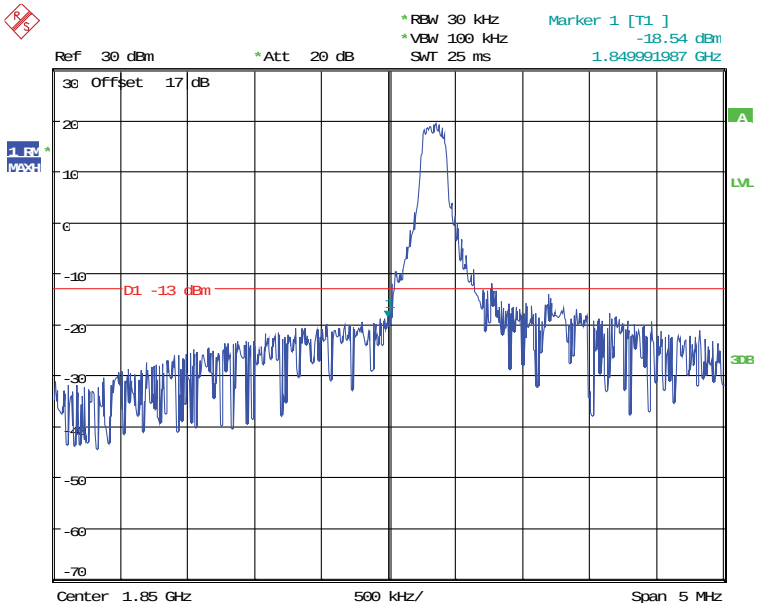
Date: 8.JUN.2018 11:27:47

QPSK (5MHz, RB6) – Right Band Edge



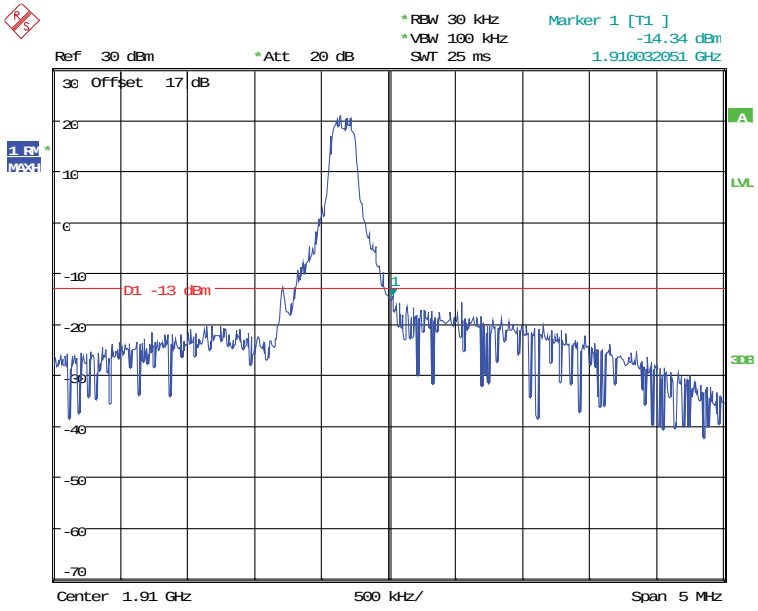
Date: 8.JUN.2018 15:09:33

16QAM (5MHz, RB0) – Left Band Edge



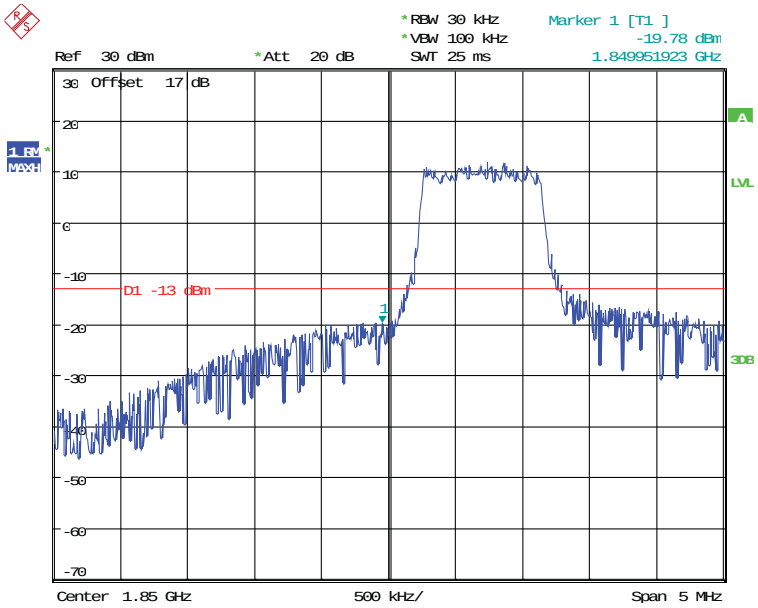
Date: 8.JUN.2018 11:22:55

16QAM (5MHz, RB0) – Right Band Edge



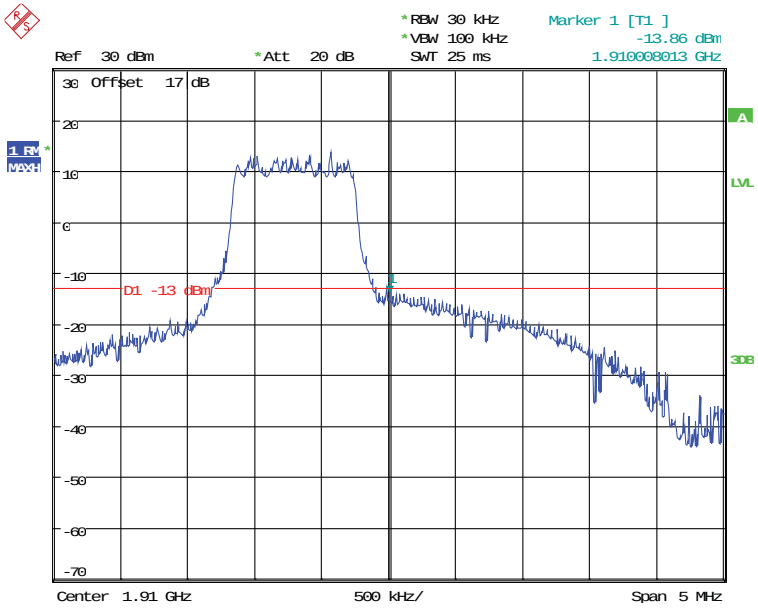
Date: 8.JUN.2018 15:07:22

16QAM (5MHz, RB5) – Left Band Edge



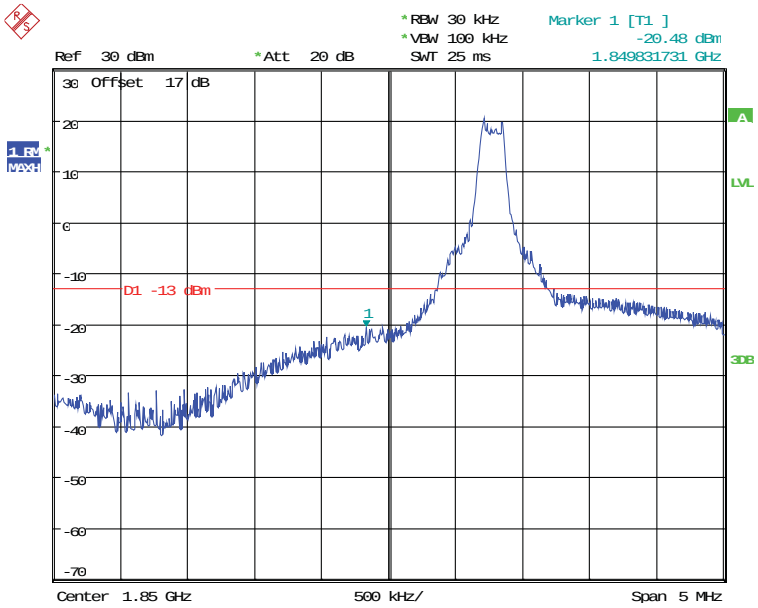
Date: 8.JUN.2018 11:25:46

16QAM (5MHz, RB5) – Right Band Edge



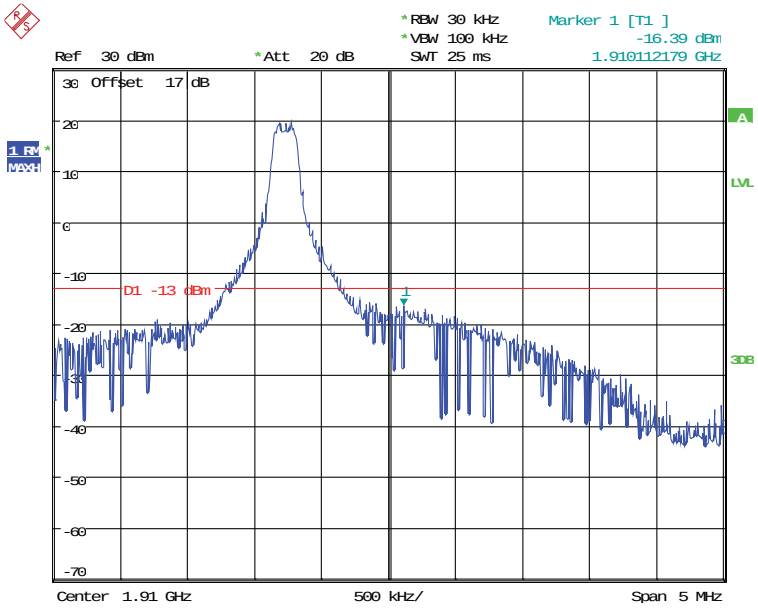
Date: 8.JUN.2018 15:02:58

QPSK (10MHz, RB0) – Left Band Edge



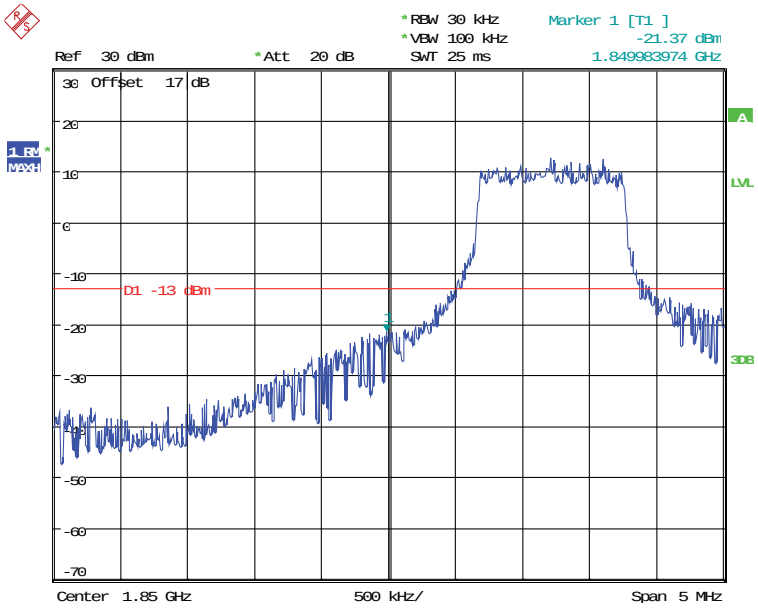
Date: 8.JUN.2018 11:38:06

QPSK (10MHz, RB0) – Right Band Edge



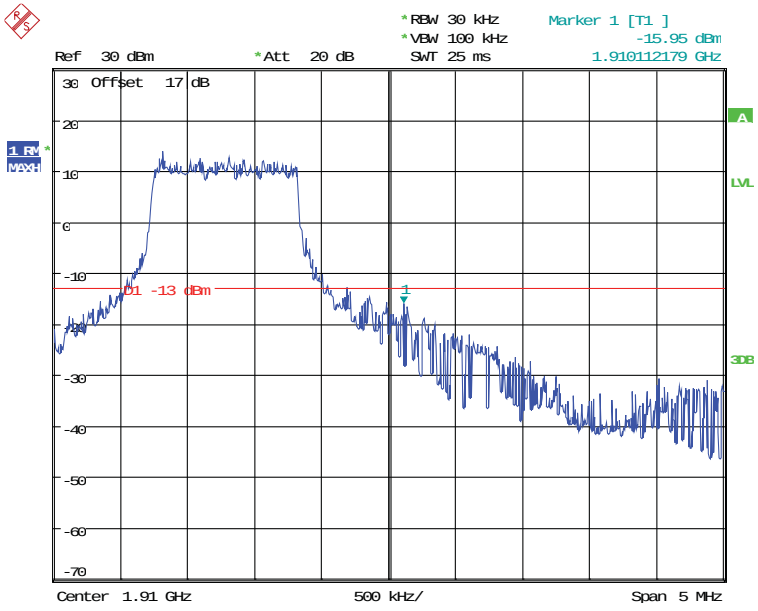
Date: 8.JUN.2018 15:11:53

QPSK (10MHz, RB6) – Left Band Edge



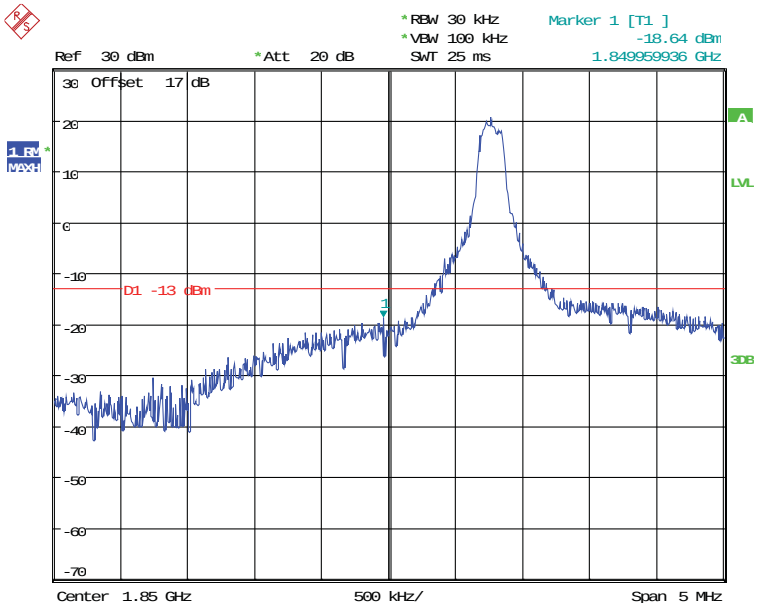
Date: 8.JUN.2018 11:33:07

QPSK (10MHz, RB6) – Right Band Edge



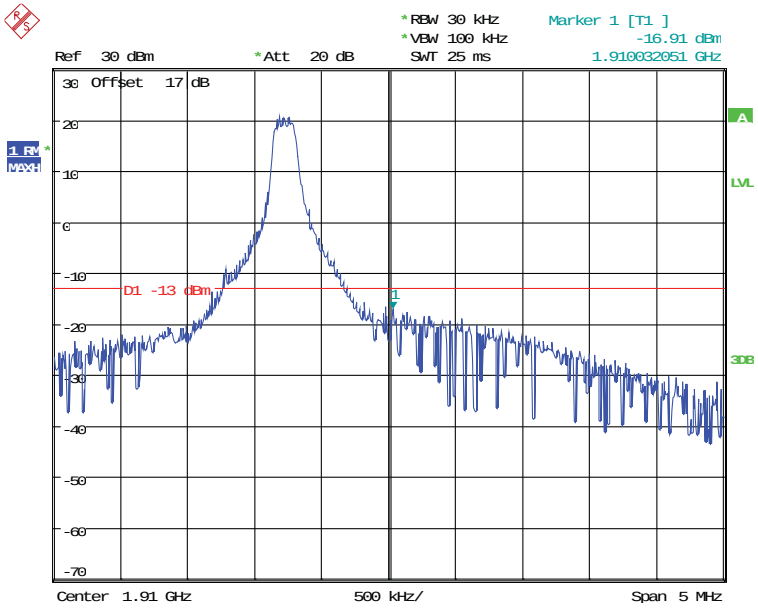
Date: 8.JUN.2018 15:11:04

16QAM (10MHz, RB0) – Left Band Edge



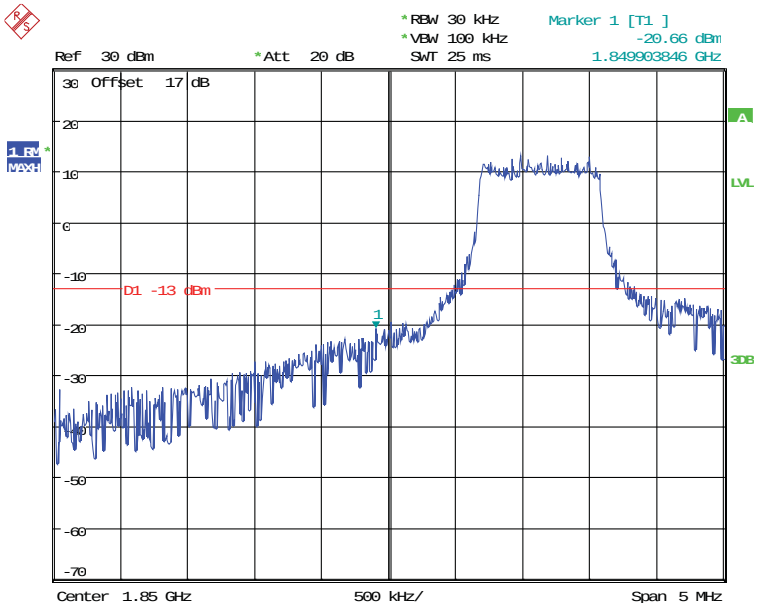
Date: 8.JUN.2018 11:36:03

16QAM (10MHz, RB0) – Right Band Edge



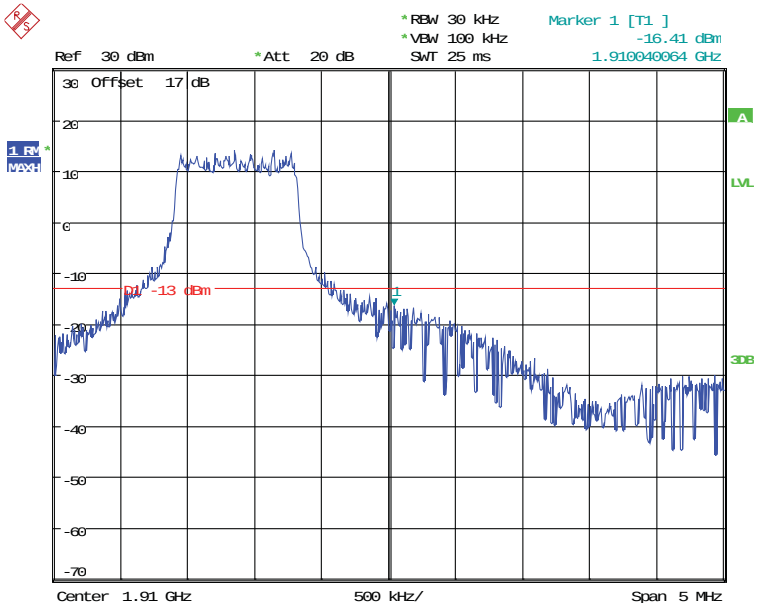
Date: 8.JUN.2018 15:12:54

16QAM (10MHz, RB5) – Left Band Edge



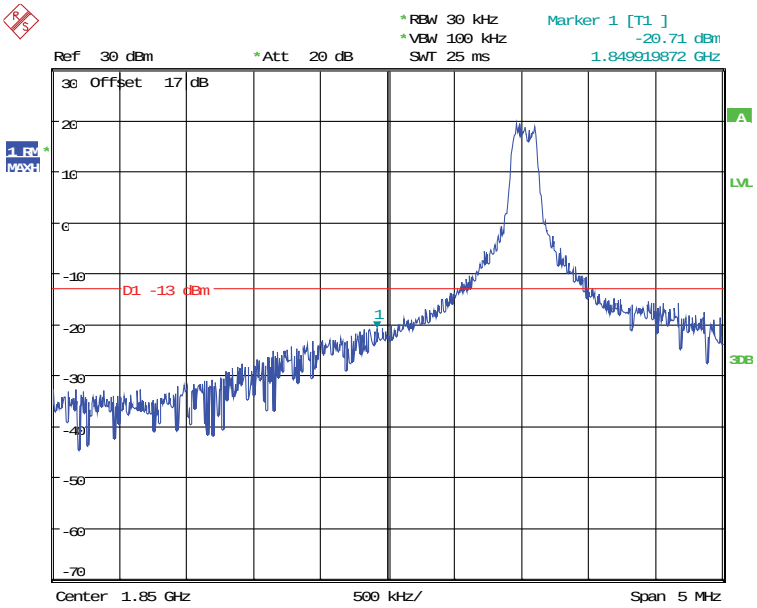
Date: 8.JUN.2018 11:34:16

16QAM (10MHz, RB5) – Right Band Edge



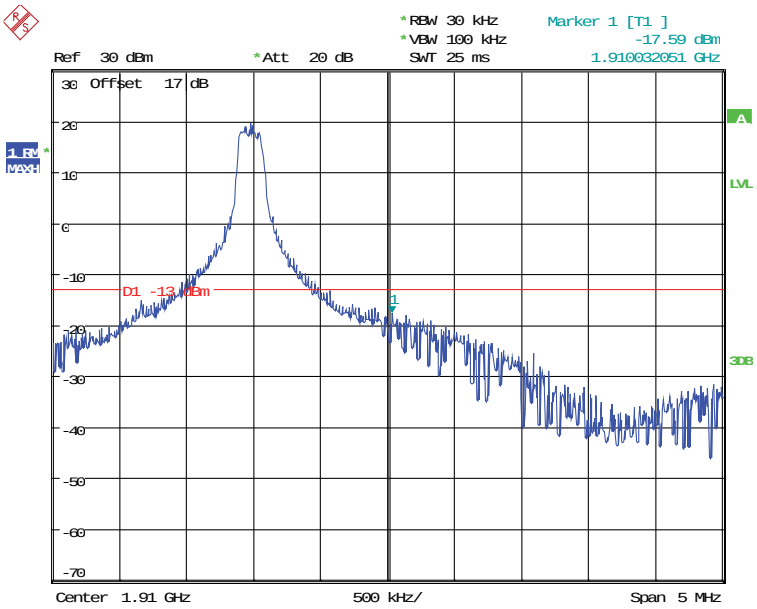
Date: 8.JUN.2018 15:13:39

QPSK (15MHz, RB0) – Left Band Edge



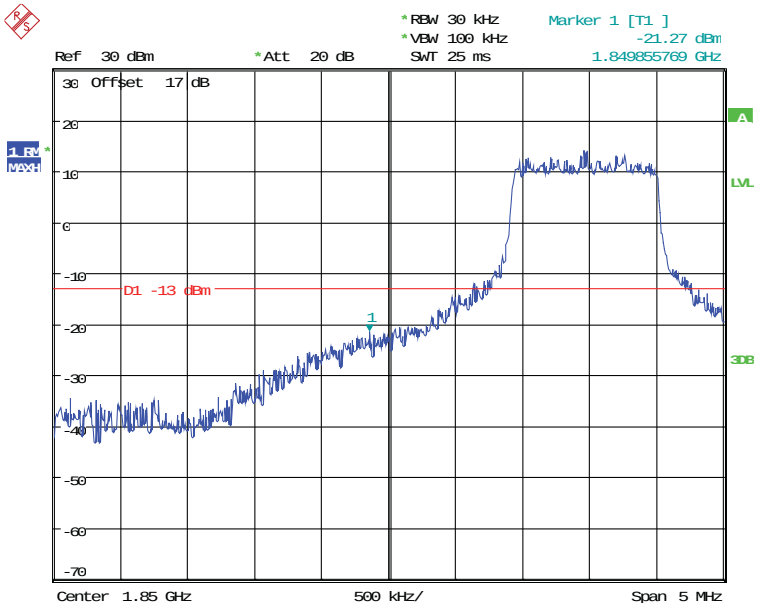
Date: 8.JUN.2018 11:41:06

QPSK (15MHz, RB0) – Right Band Edge



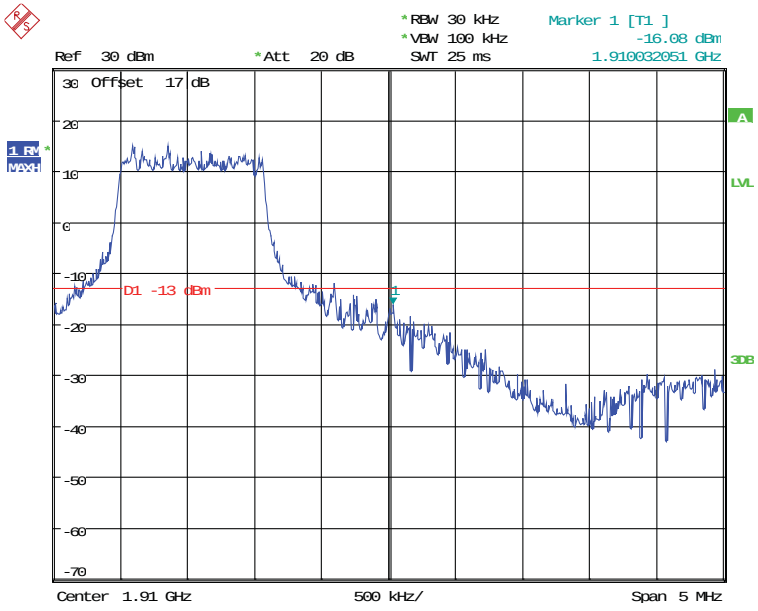
Date: 8.JUN.2018 15:17:04

QPSK (15MHz, RB6) – Left Band Edge



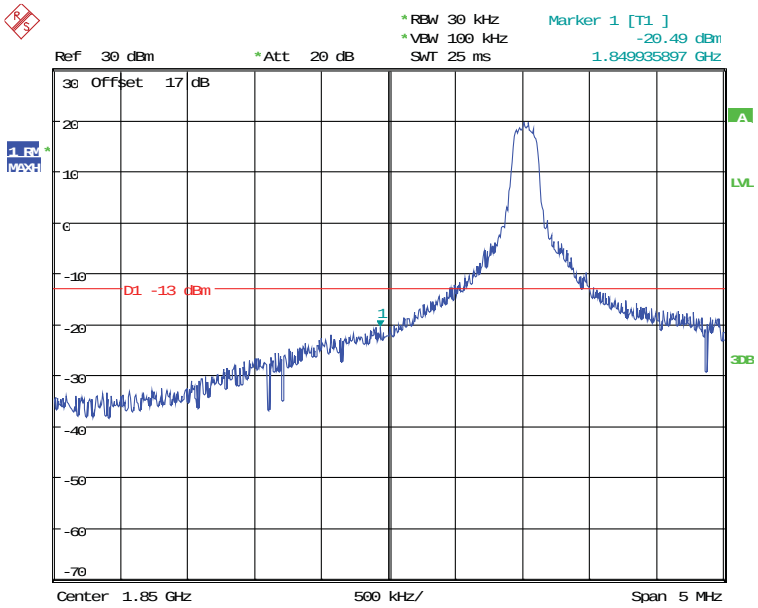
Date: 8.JUN.2018 11:47:13

QPSK (15MHz, RB6) – Right Band Edge



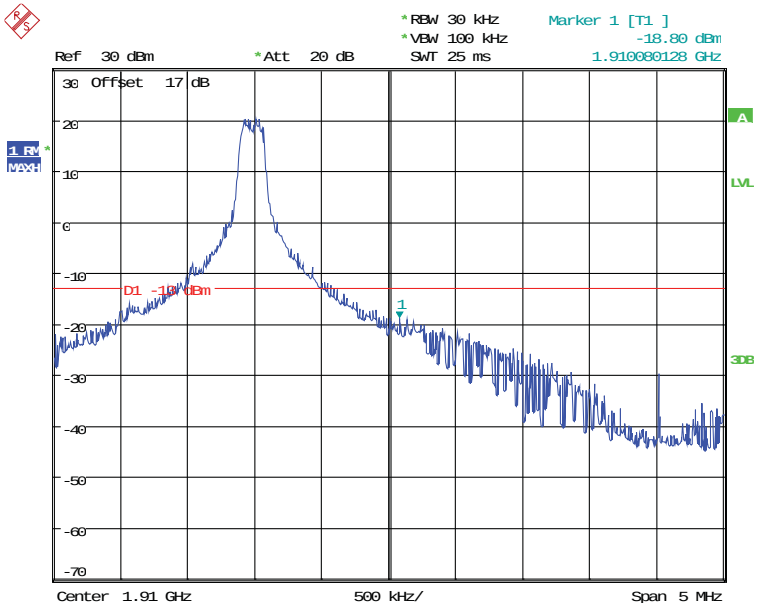
Date: 8.JUN.2018 15:16:18

16QAM (15MHz, RB0) – Left Band Edge



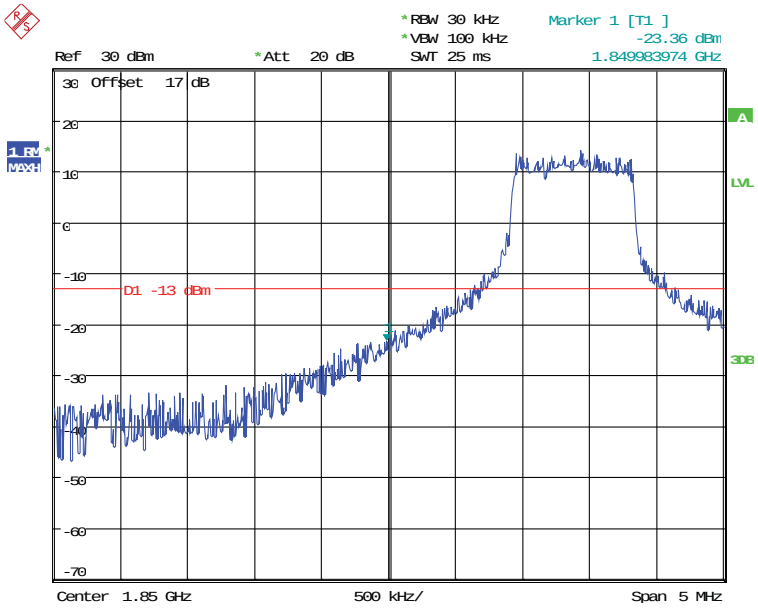
Date: 8.JUN.2018 11:43:17

16QAM (15MHz, RB0) – Right Band Edge



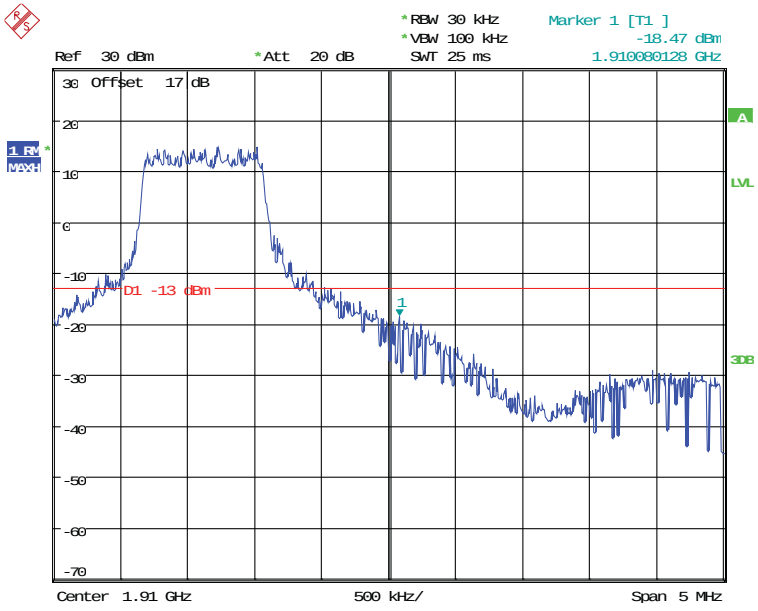
Date: 8.JUN.2018 15:17:50

16QAM (15MHz, RB5) – Left Band Edge



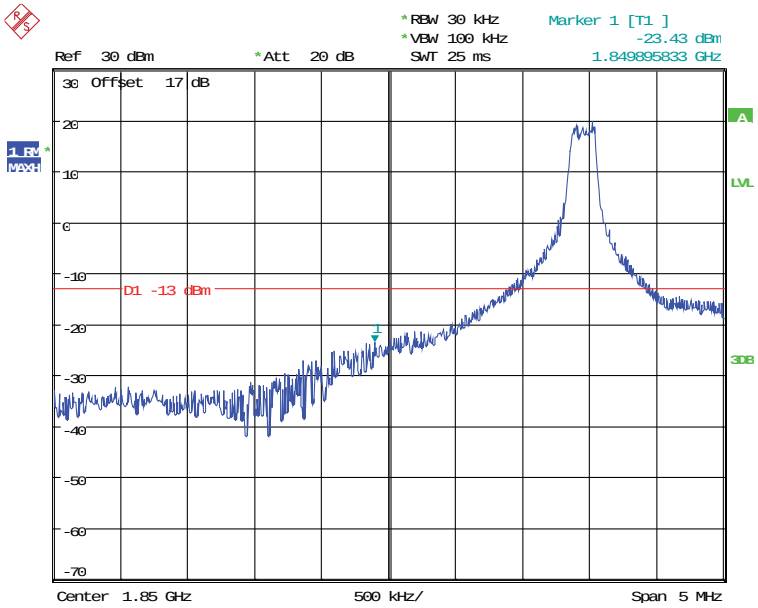
Date: 8.JUN.2018 11:45:48

16QAM (15MHz, RB5) – Right Band Edge



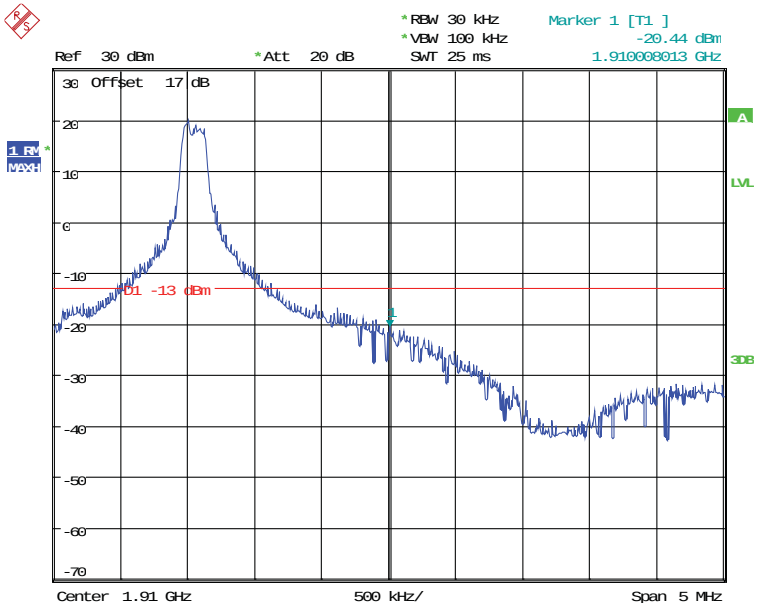
Date: 8.JUN.2018 15:18:42

QPSK (20MHz, RB0) – Left Band Edge



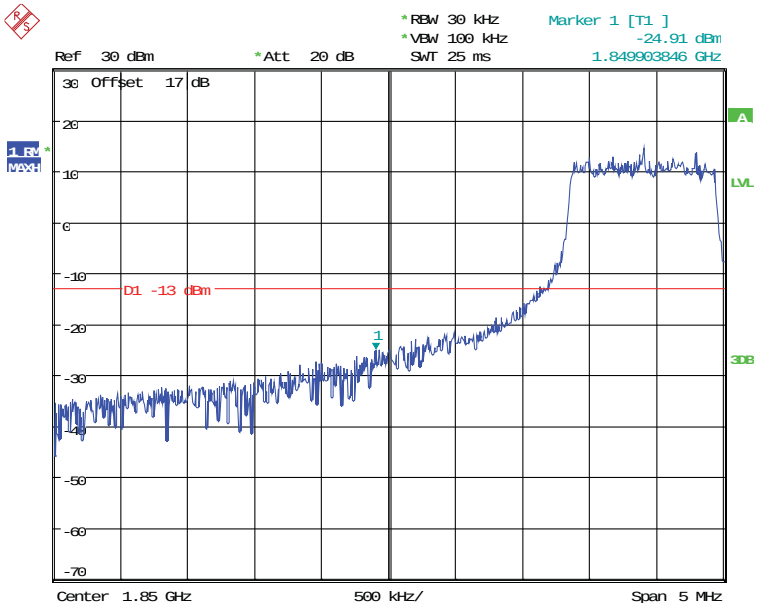
Date: 8.JUN.2018 11:57:43

QPSK (20MHz, RB0) – Right Band Edge



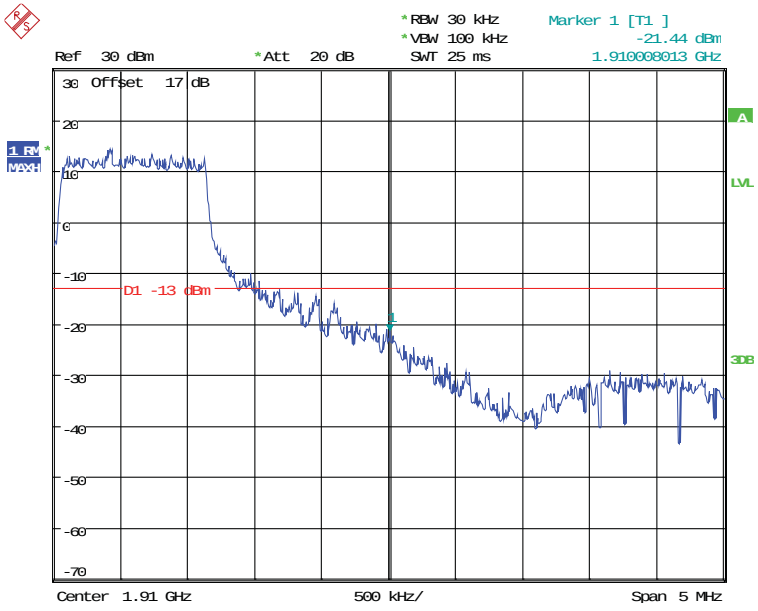
Date: 8.JUN.2018 15:26:44

QPSK (20MHz, RB6) – Left Band Edge



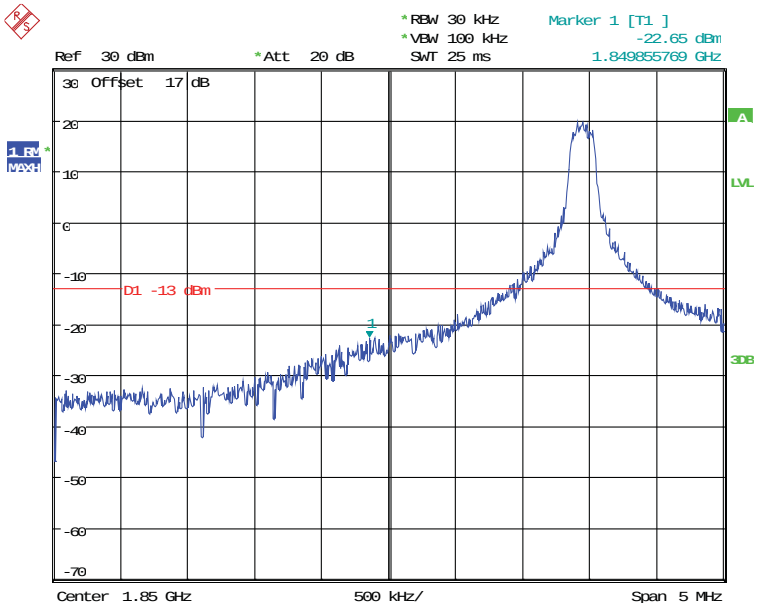
Date: 8.JUN.2018 11:52:18

QPSK (20MHz, RB6) – Right Band Edge



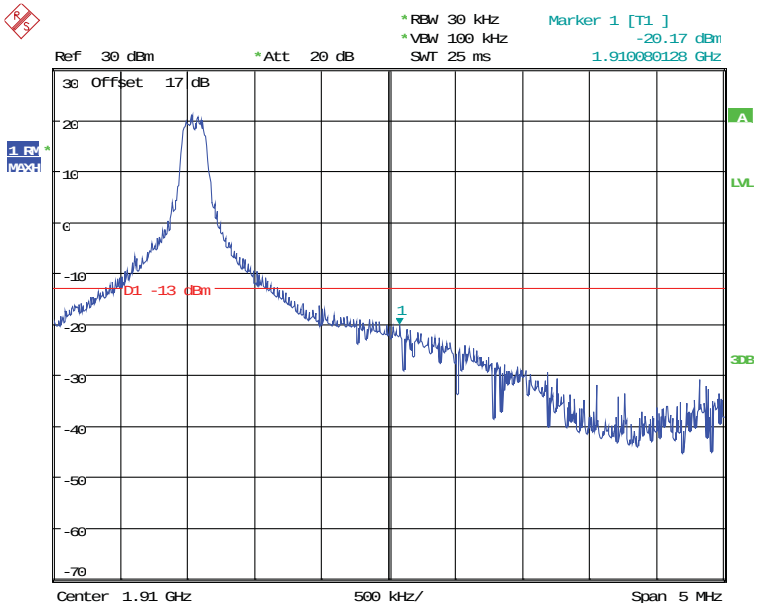
Date: 8.JUN.2018 15:25:34

16QAM (20MHz, RB0) – Left Band Edge



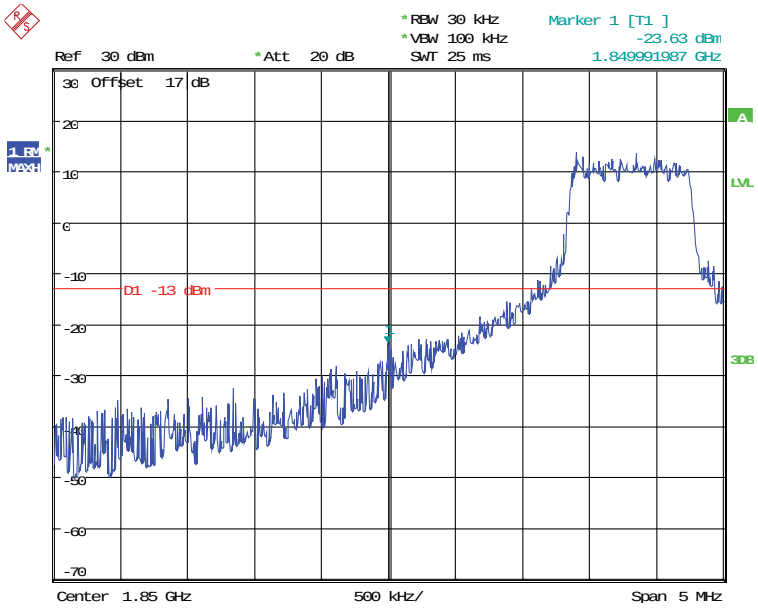
Date: 8.JUN.2018 11:55:35

16QAM (20MHz, RB0) – Right Band Edge



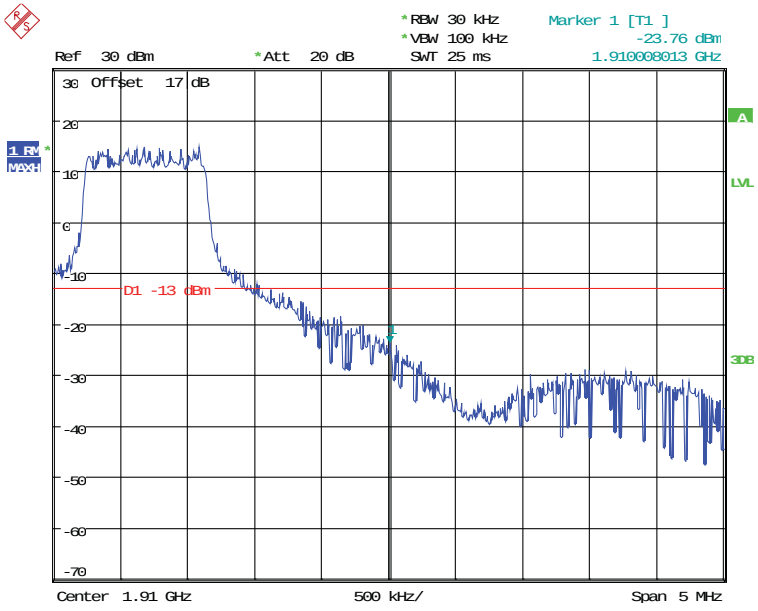
Date: 8.JUN.2018 15:28:06

16QAM (20MHz, RB5) – Left Band Edge



Date: 8.JUN.2018 11:53:42

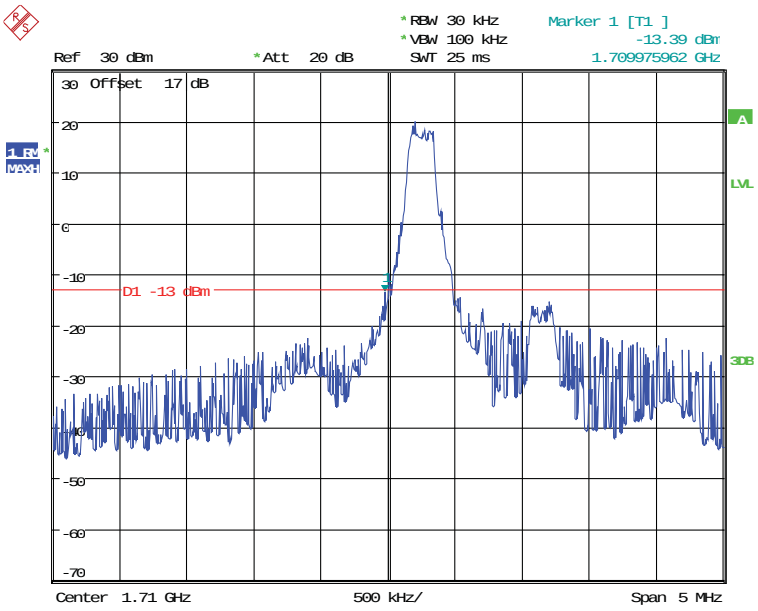
16QAM (20MHz, RB5) – Right Band Edge



Date: 8.JUN.2018 15:29:23

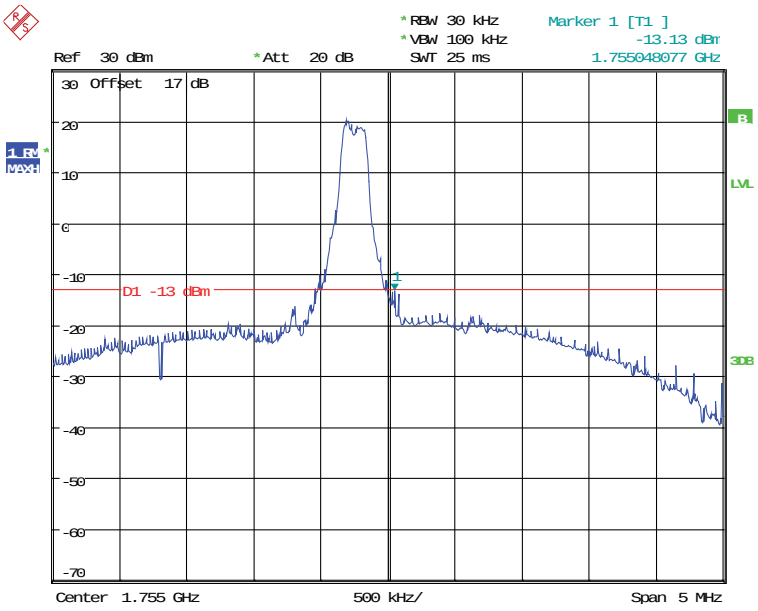
LTE Band 4

QPSK (1.4MHz, RB0) – Left Band Edge



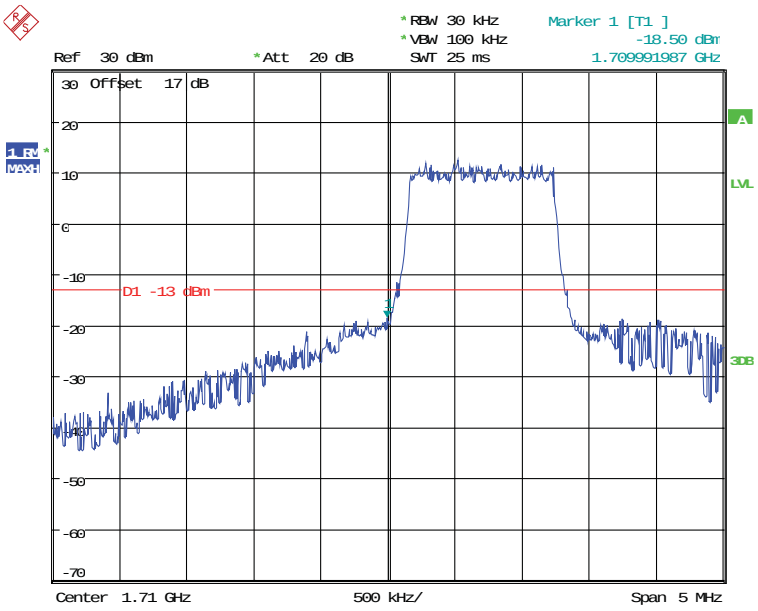
Date: 12.JUL.2018 15:53:58

QPSK (1.4MHz, RB0) – Right Band Edge



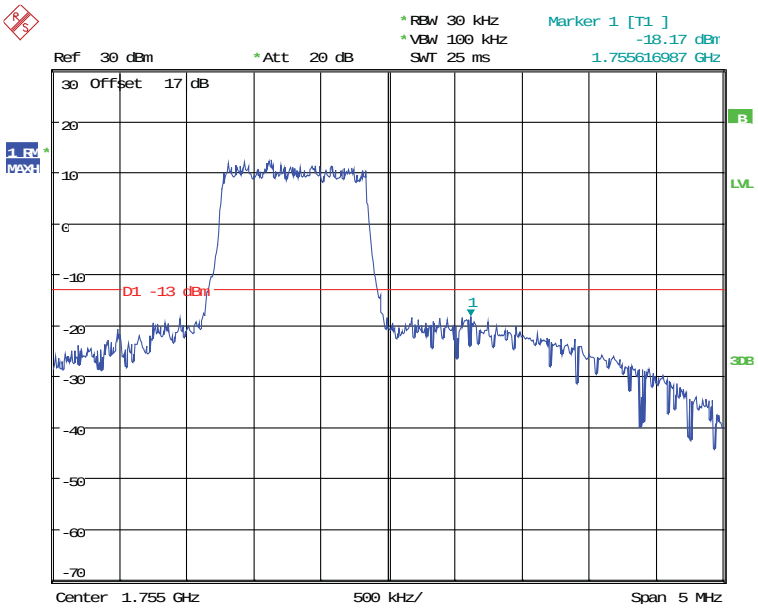
Date: 12.JUL.2018 15:47:09

QPSK (1.4MHz, RB6) – Left Band Edge



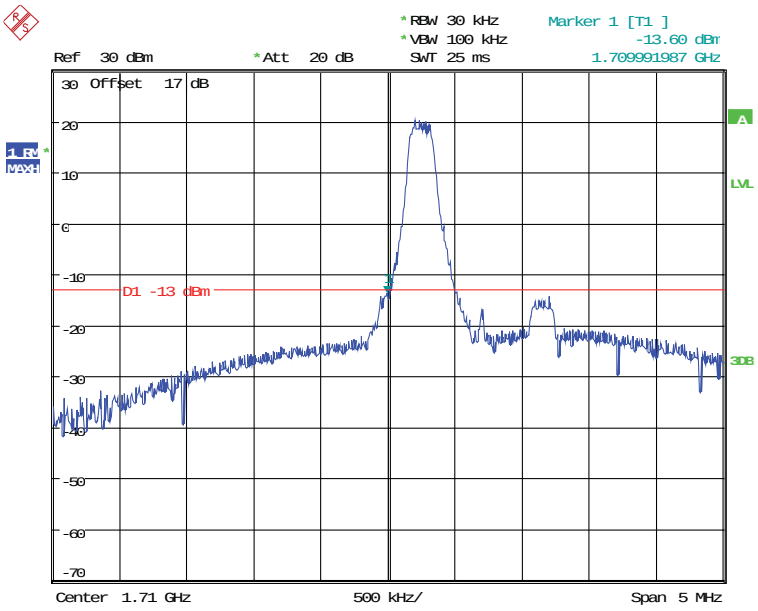
Date: 12.JUL.2018 15:54:53

QPSK (1.4MHz, RB6) – Right Band Edge



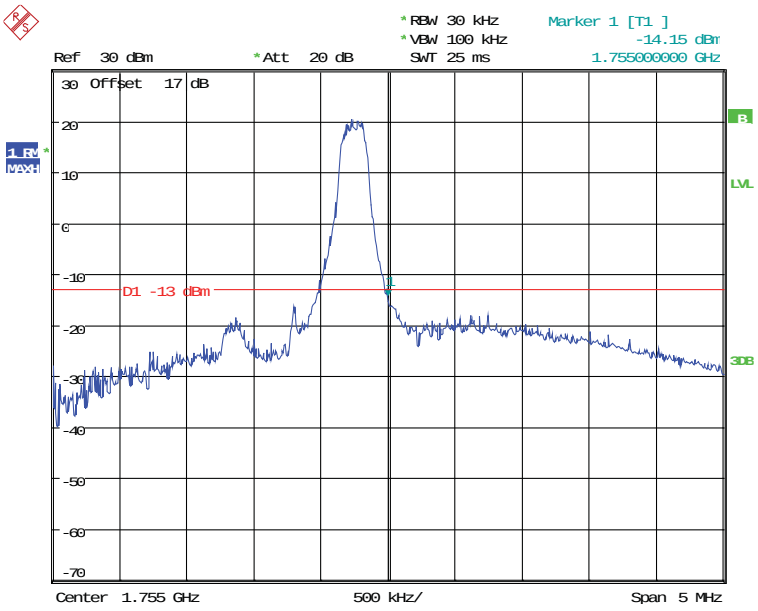
Date: 12.JUL.2018 15:45:35

16QAM (1.4MHz, RB0) – Left Band Edge



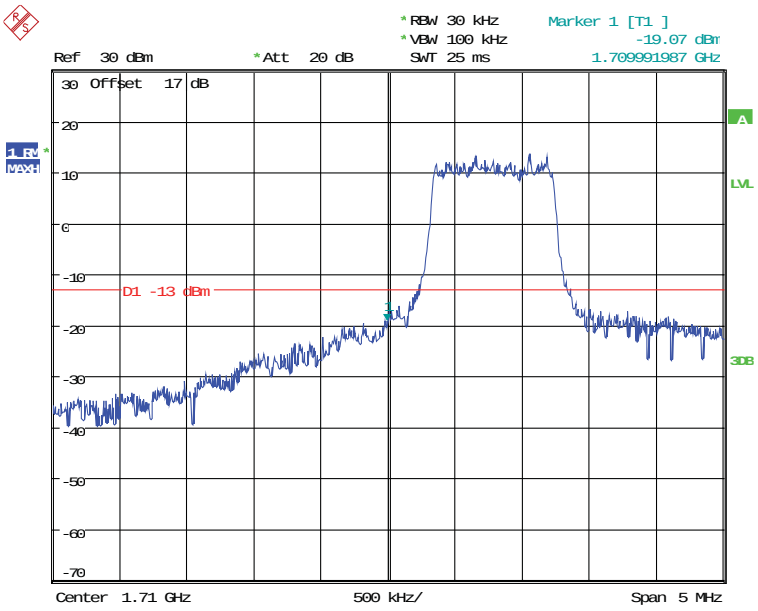
Date: 12.JUL.2018 15:52:46

16QAM (1.4MHz, RB0) – Right Band Edge



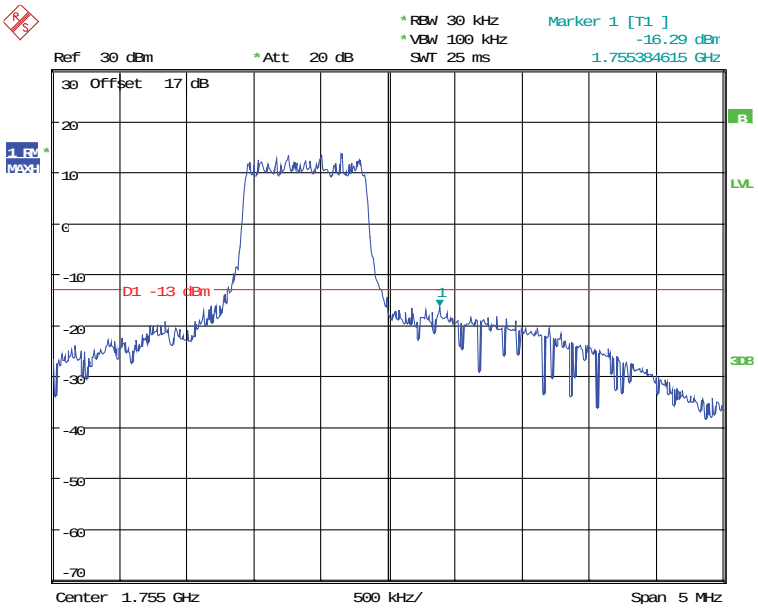
Date: 12.JUL.2018 15:48:10

16QAM (1.4MHz, RB5) – Left Band Edge



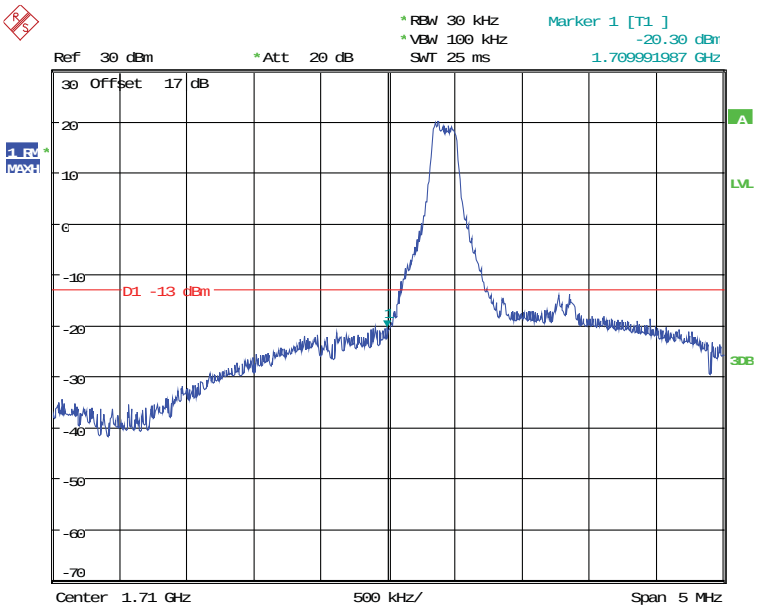
Date: 12.JUL.2018 15:51:15

16QAM (1.4MHz, RB5) – Right Band Edge



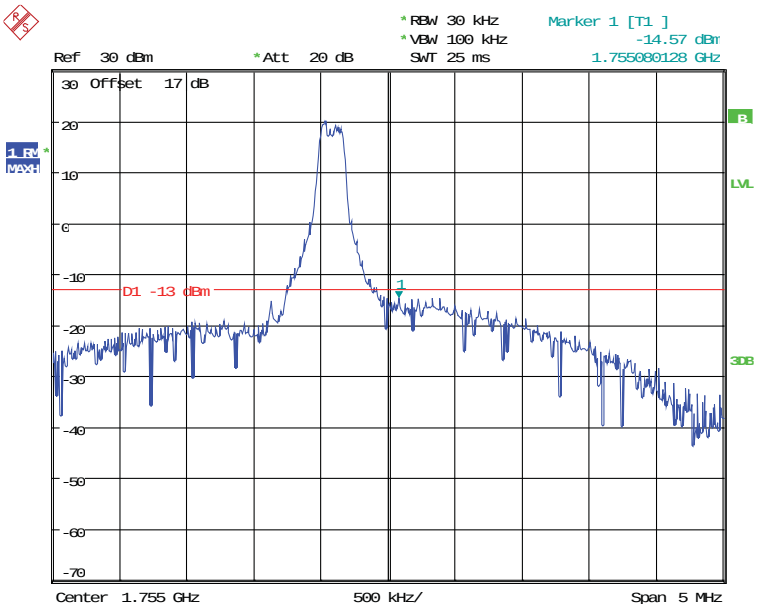
Date: 12.JUL.2018 15:48:59

QPSK (3MHz, RB0) – Left Band Edge



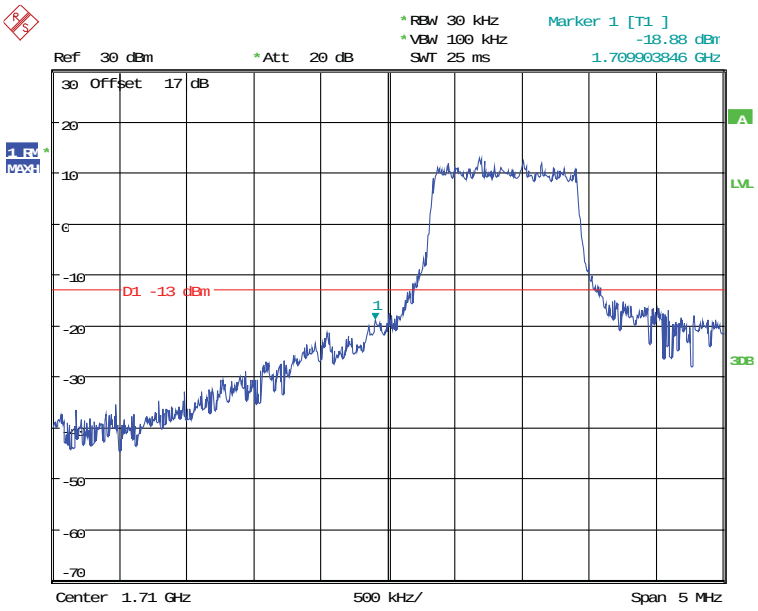
Date: 12.JUL.2018 15:34:00

QPSK (3MHz, RB0) – Right Band Edge



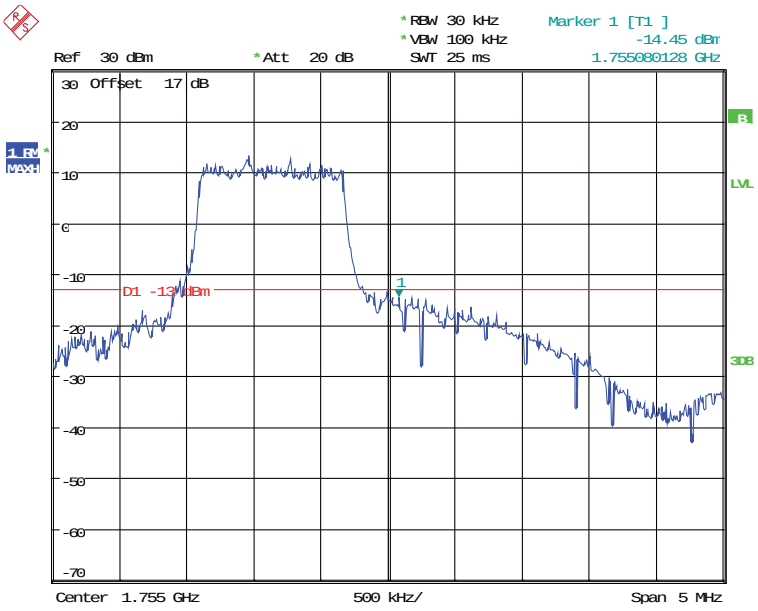
Date: 12.JUL.2018 15:41:20

QPSK (3MHz, RB6) – Left Band Edge



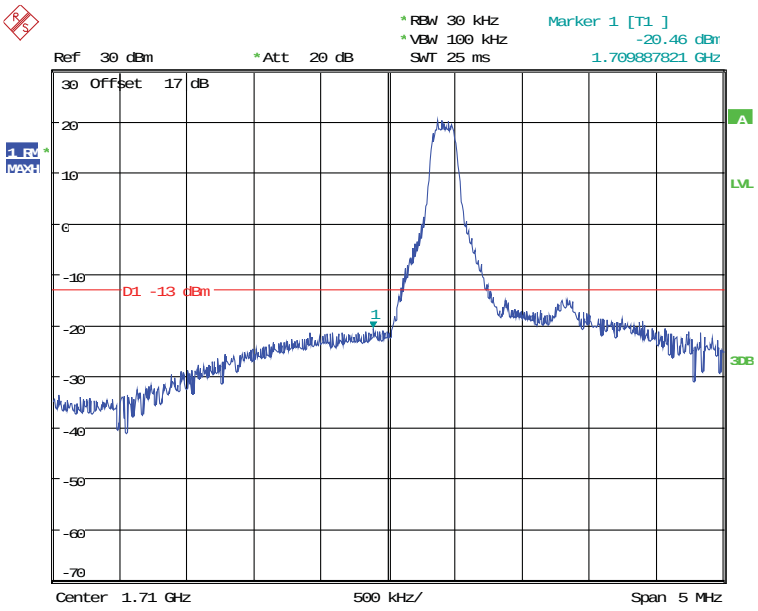
Date: 12.JUL.2018 15:31:50

QPSK (3MHz, RB6) – Right Band Edge



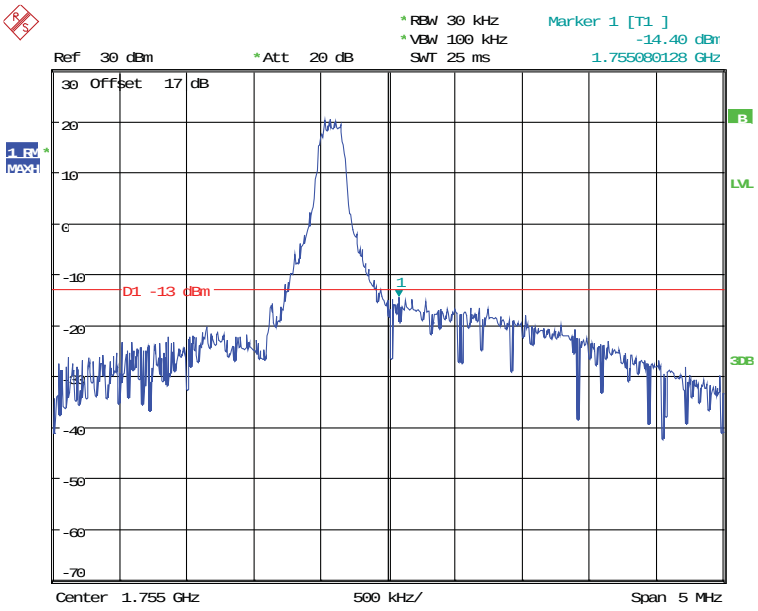
Date: 12.JUL.2018 15:42:07

16QAM (3MHz, RB0) – Left Band Edge



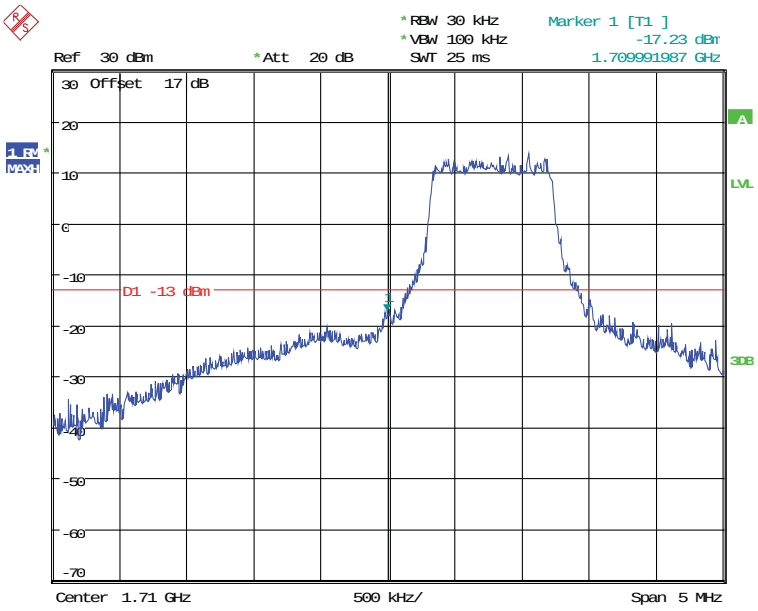
Date: 12.JUL.2018 15:35:37

16QAM (3MHz, RB0) – Right Band Edge



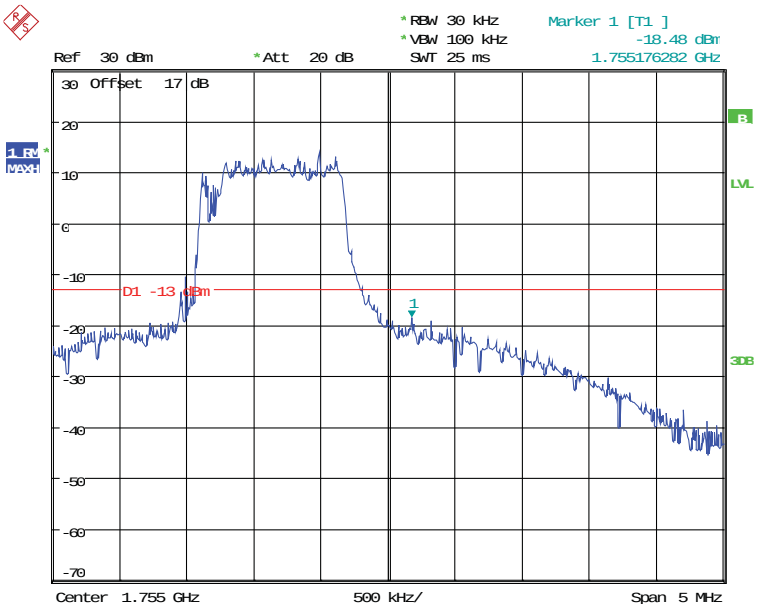
Date: 12.JUL.2018 15:40:30

16QAM (3MHz, RB5) – Left Band Edge



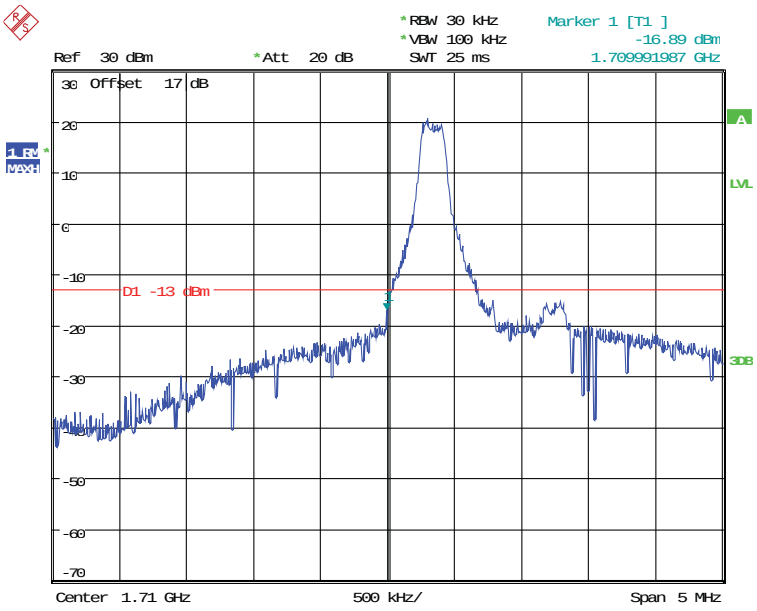
Date: 12.JUL.2018 15:37:23

16QAM (3MHz, RB5) – Right Band Edge



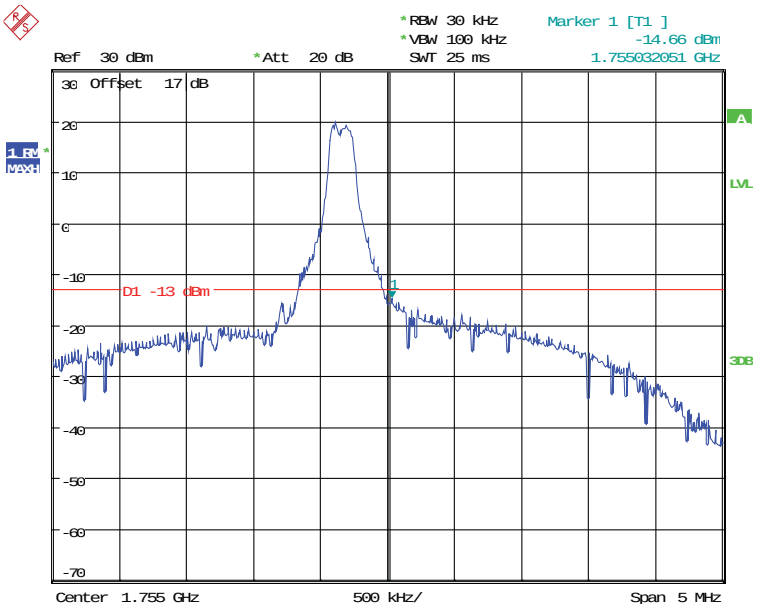
Date: 12.JUL.2018 15:39:39

QPSK (5MHz, RB0) – Left Band Edge



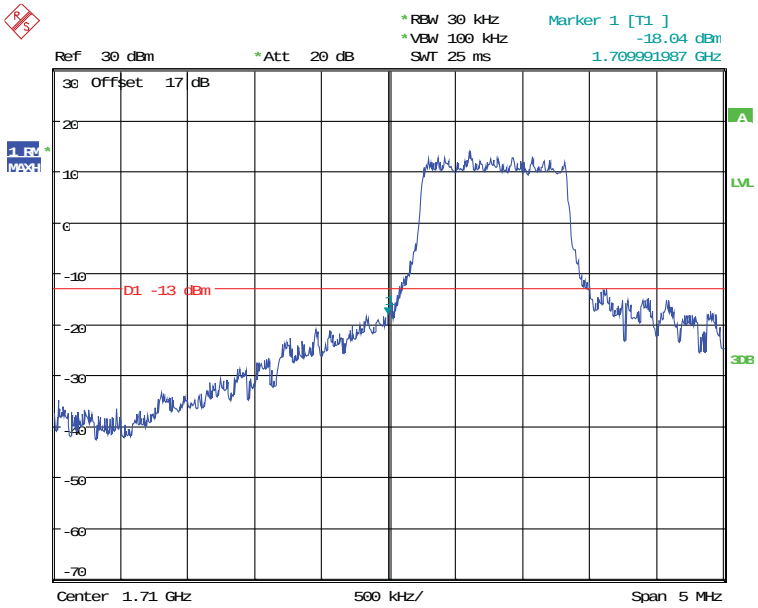
Date: 8.JUN.2018 15:33:18

QPSK (5MHz, RB0) – Right Band Edge



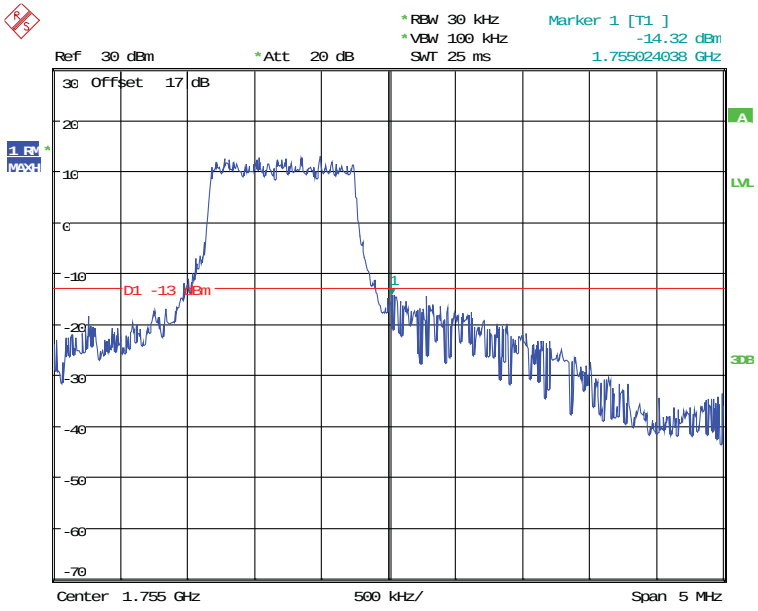
Date: 8.JUN.2018 14:28:59

QPSK (5MHz, RB6) – Left Band Edge



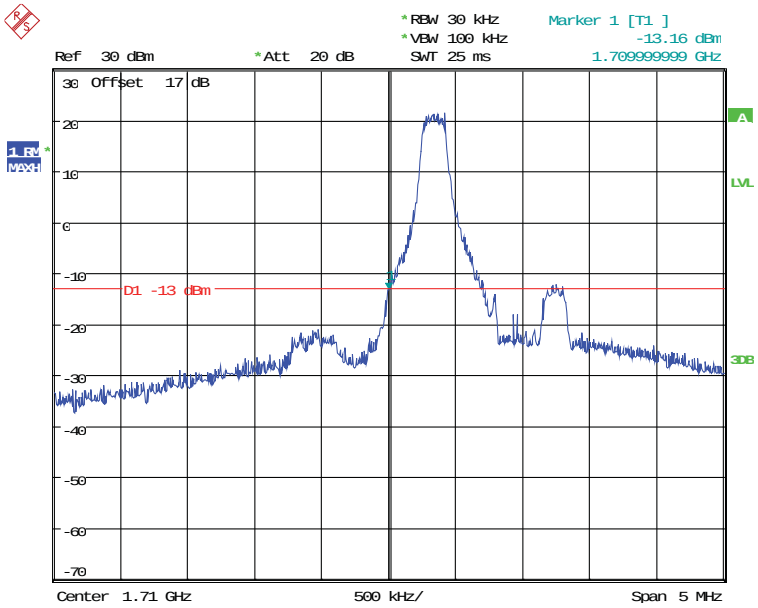
Date: 8.JUN.2018 15:31:51

QPSK (5MHz, RB6) – Right Band Edge



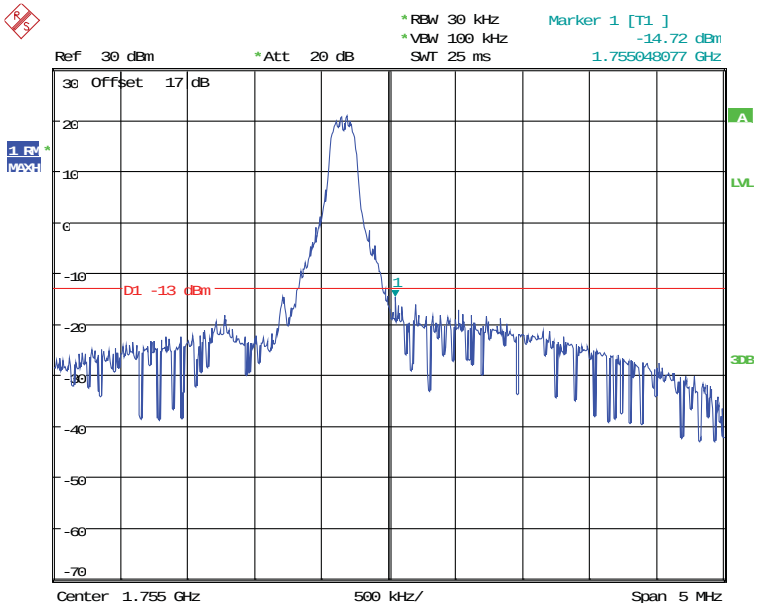
Date: 8.JUN.2018 14:27:23

16QAM (5MHz, RB0) – Left Band Edge



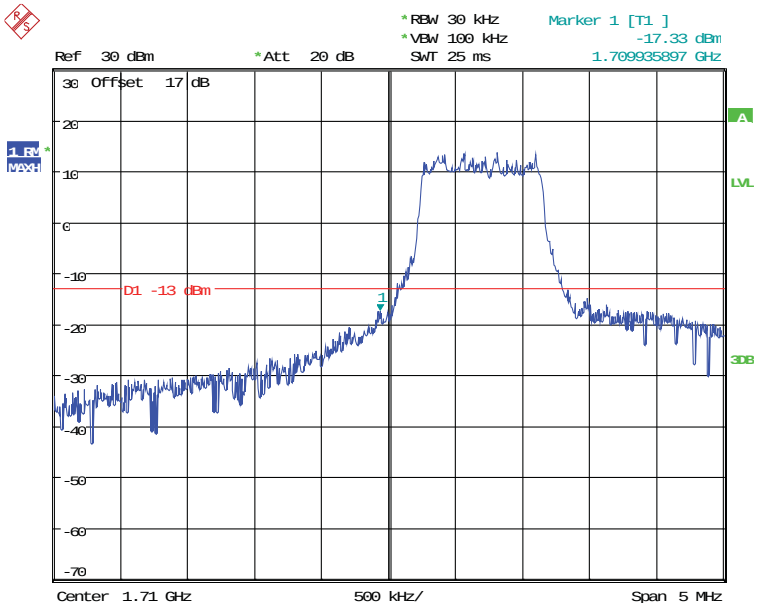
Date: 8.JUN.2018 15:35:04

16QAM (5MHz, RB0) – Right Band Edge



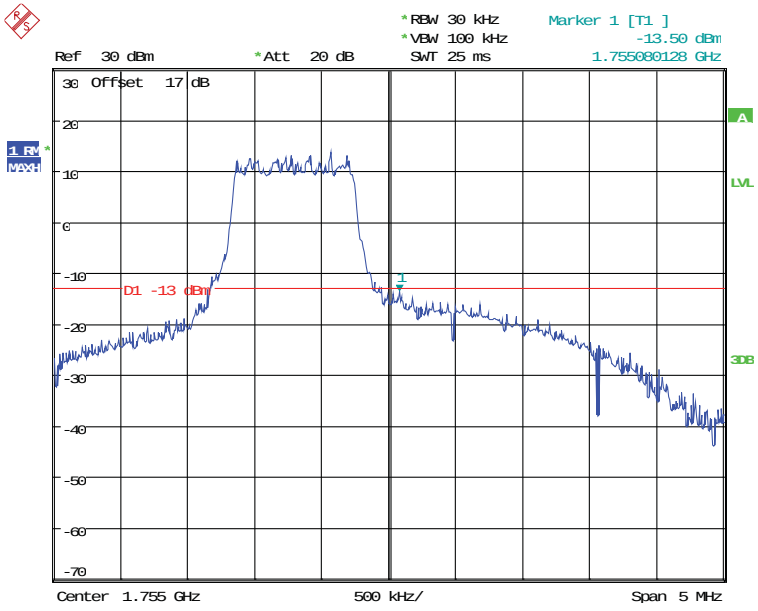
Date: 8.JUN.2018 14:29:38

16QAM (5MHz, RB5) – Left Band Edge



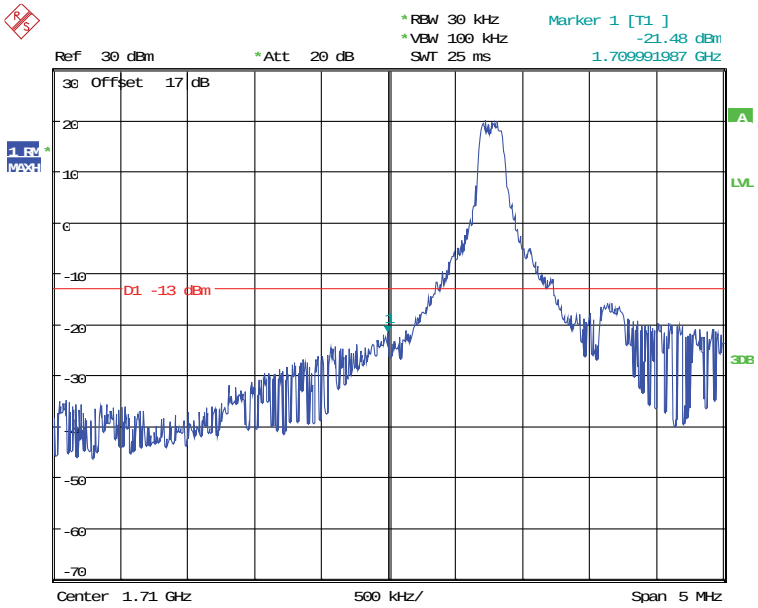
Date: 8.JUN.2018 15:37:25

16QAM (5MHz, RB5) – Right Band Edge



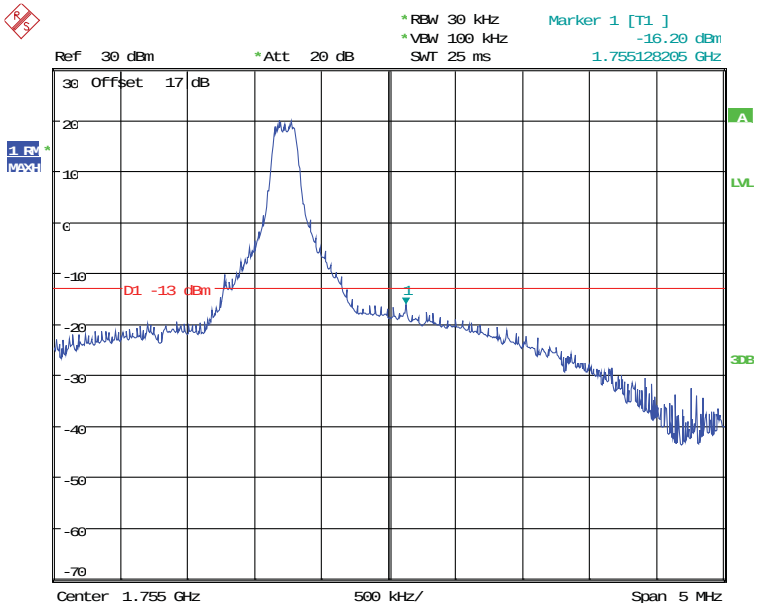
Date: 8.JUN.2018 14:30:38

QPSK (10MHz, RB0) – Left Band Edge



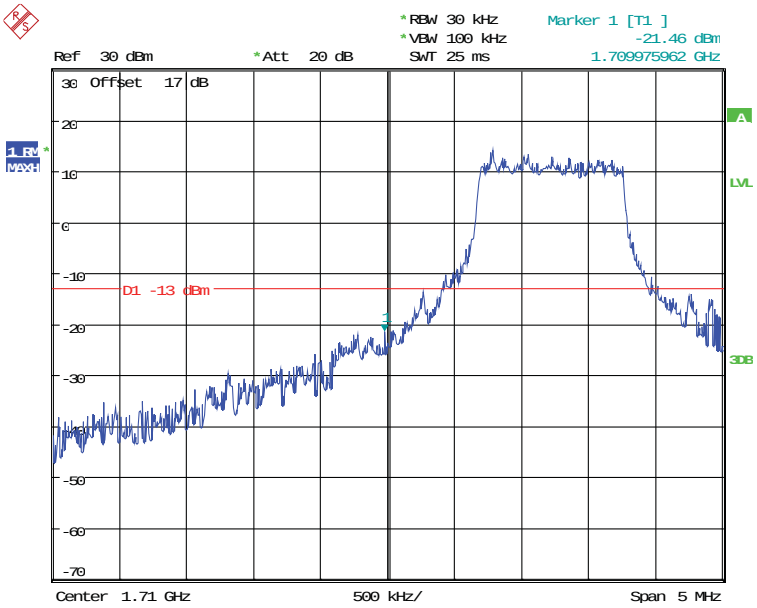
Date: 8.JUN.2018 15:41:24

QPSK (10MHz, RB0) – Right Band Edge



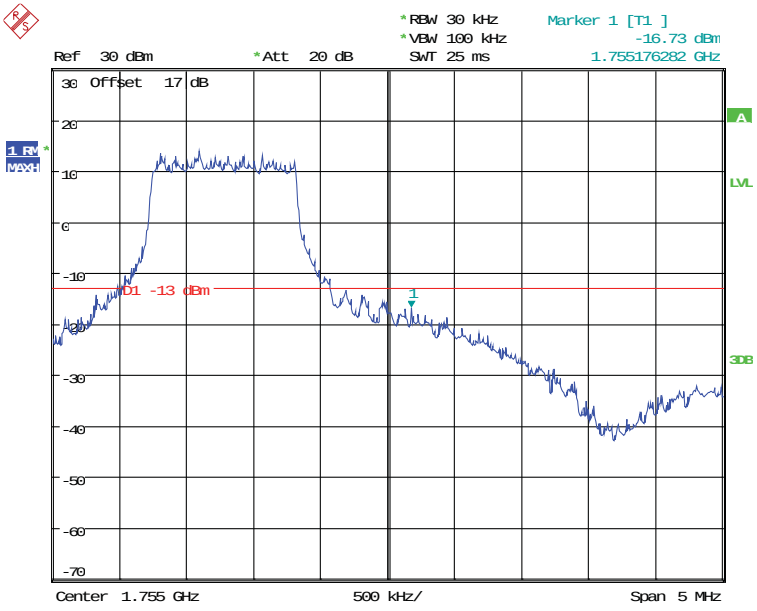
Date: 8.JUN.2018 14:42:44

QPSK (10MHz, RB6) – Left Band Edge



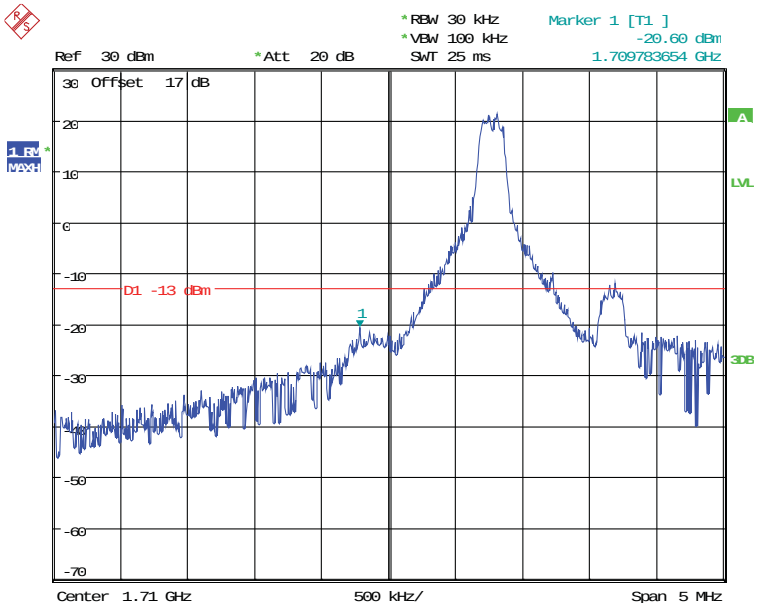
Date: 8.JUN.2018 15:42:13

QPSK (10MHz, RB6) – Right Band Edge



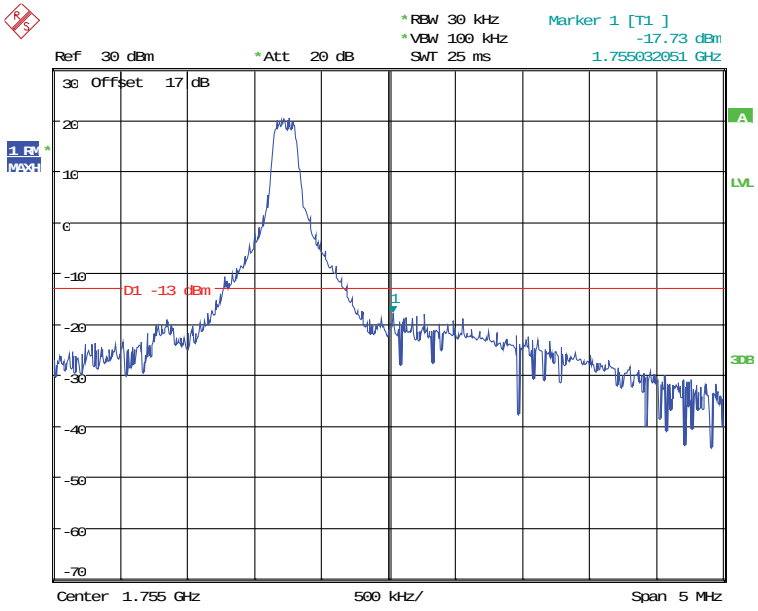
Date: 8.JUN.2018 14:45:14

16QAM (10MHz, RB0) – Left Band Edge



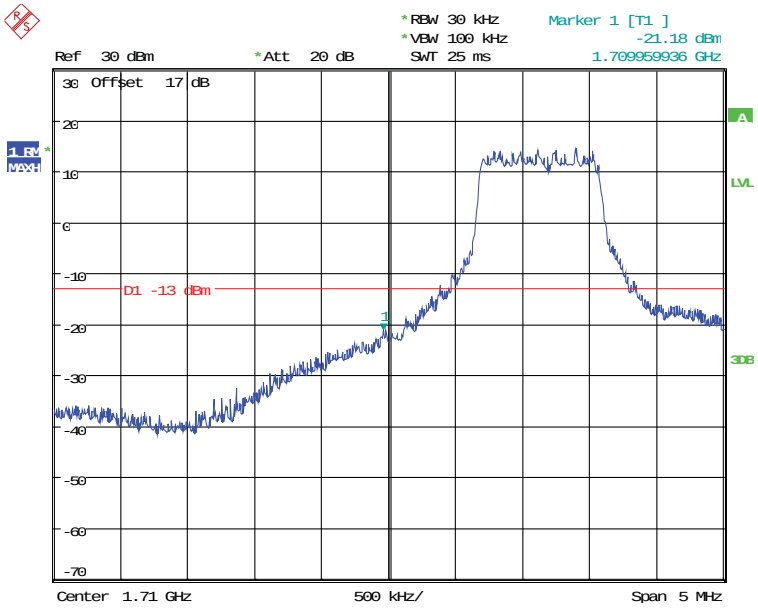
Date: 8.JUN.2018 15:40:51

16QAM (10MHz, RB0) – Right Band Edge



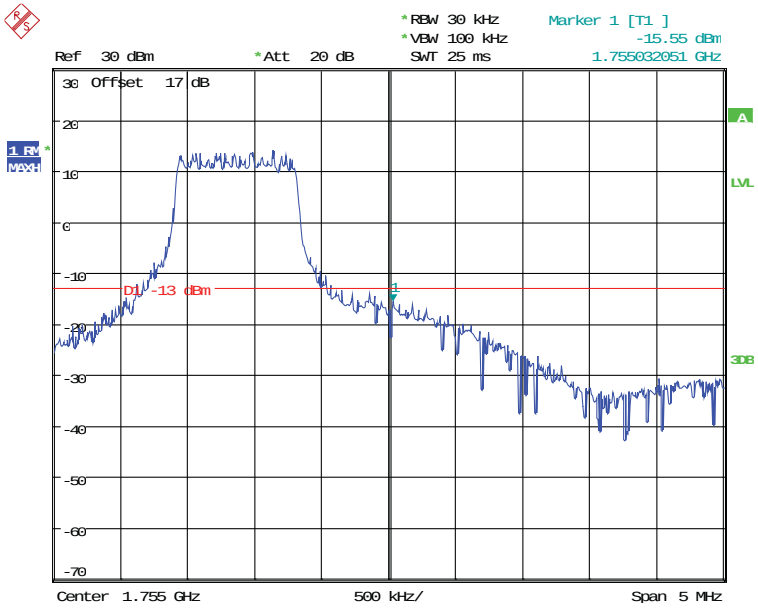
Date: 8.JUN.2018 14:41:39

16QAM (10MHz, RB5) – Left Band Edge



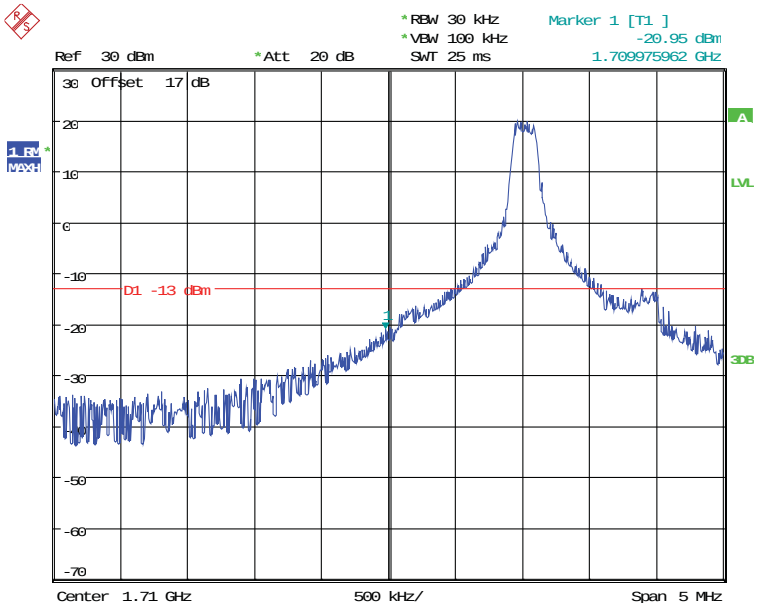
Date: 8.JUN.2018 15:39:56

16QAM (10MHz, RB5) – Right Band Edge



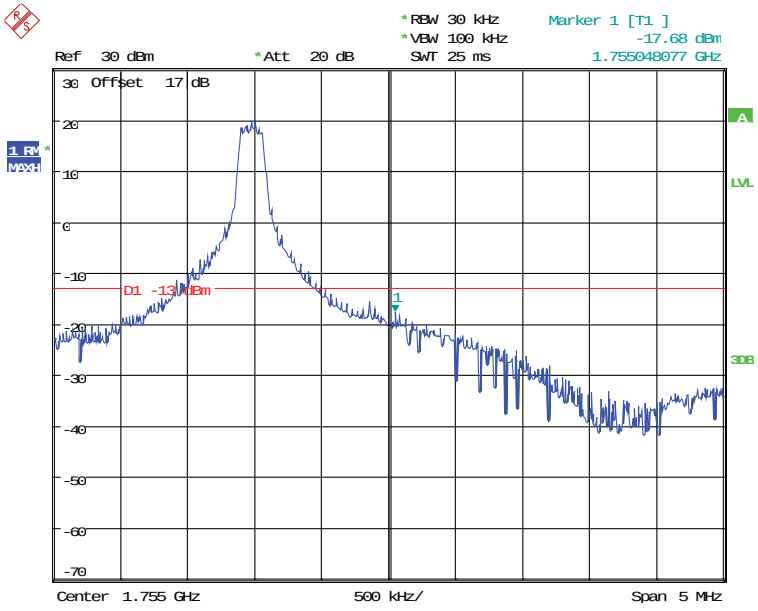
Date: 8.JUN.2018 14:32:18

QPSK (15MHz, RB0) – Left Band Edge



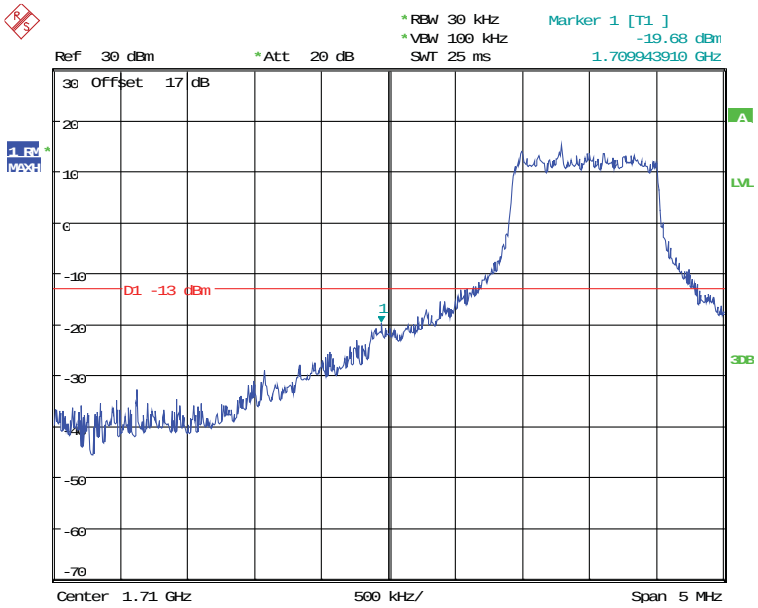
Date: 8.JUN.2018 15:47:42

QPSK (15MHz, RB0) – Right Band Edge



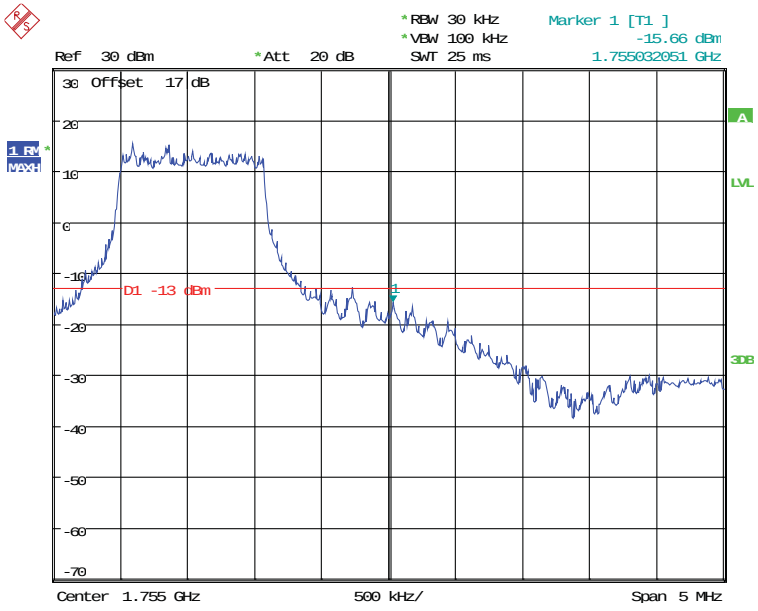
Date: 8.JUN.2018 14:48:20

QPSK (15MHz, RB6) – Left Band Edge



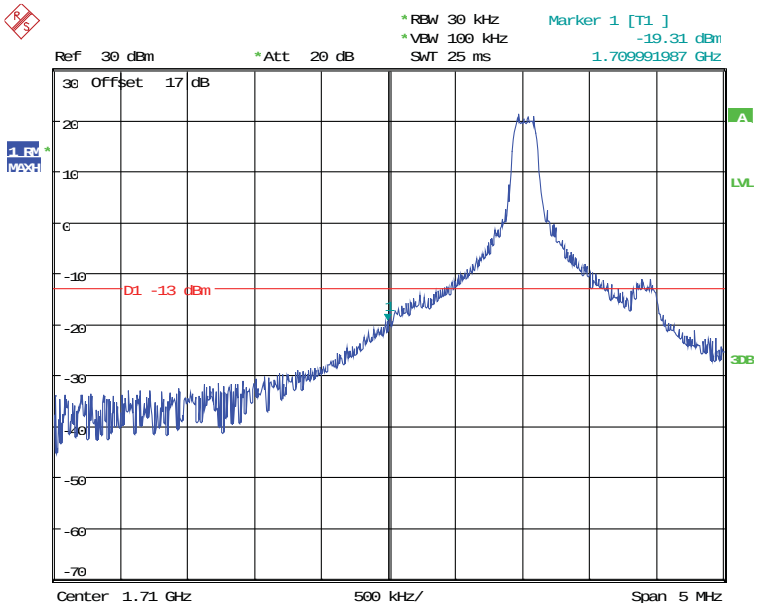
Date: 8.JUN.2018 15:48:24

QPSK (15MHz, RB6) – Right Band Edge



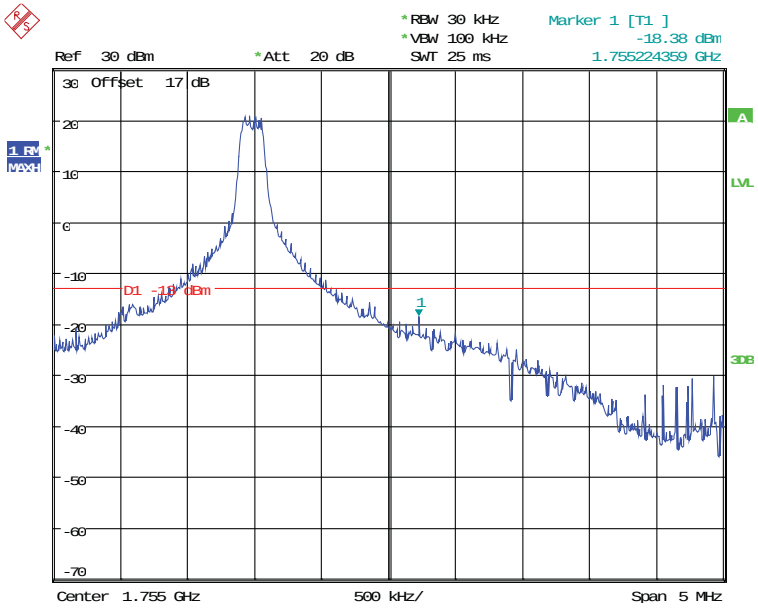
Date: 8.JUN.2018 14:50:02

16QAM (15MHz, RB0) – Left Band Edge



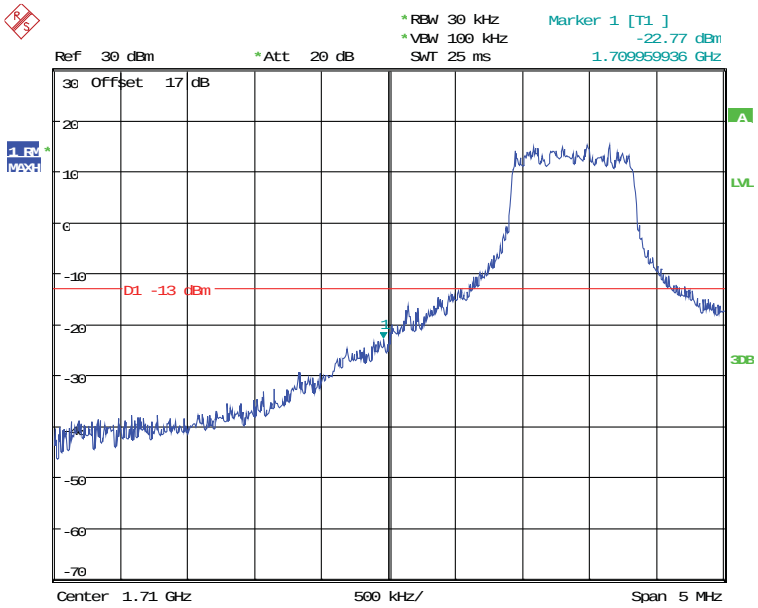
Date: 8.JUN.2018 15:46:59

16QAM (15MHz, RB0) – Right Band Edge



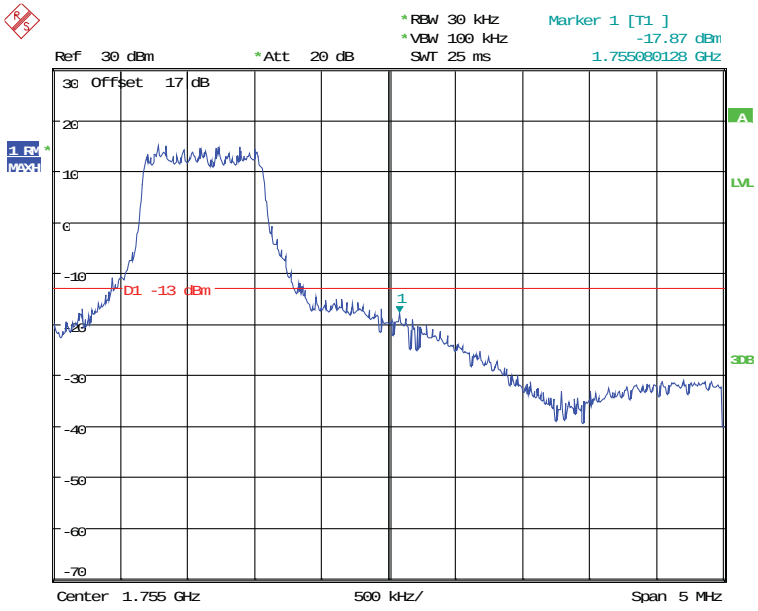
Date: 8.JUN.2018 14:47:36

16QAM (15MHz, RB5) – Left Band Edge



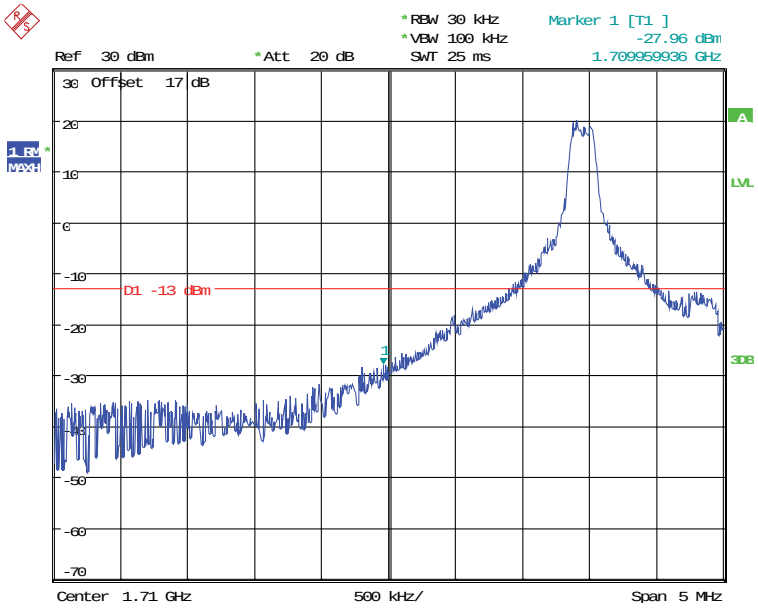
Date: 8.JUN.2018 15:46:10

16QAM (15MHz, RB5) – Right Band Edge



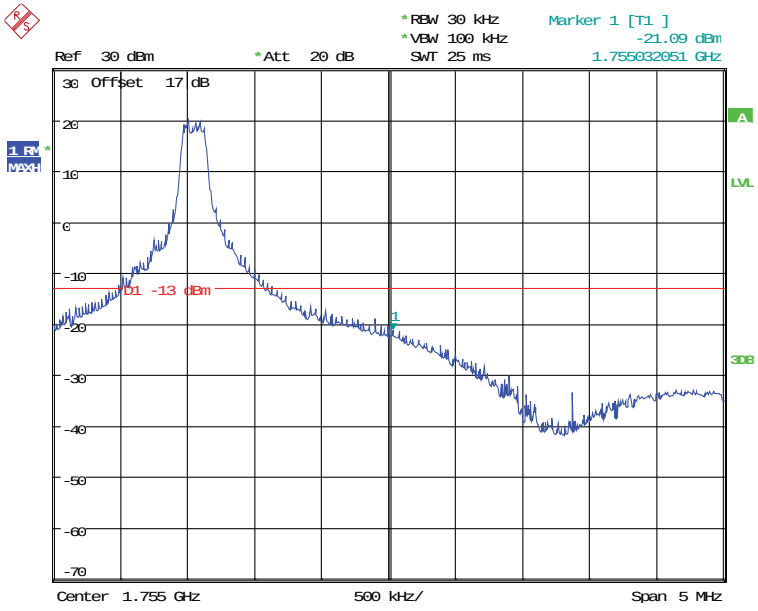
Date: 8.JUN.2018 14:46:56

QPSK (20MHz, RB0) – Left Band Edge



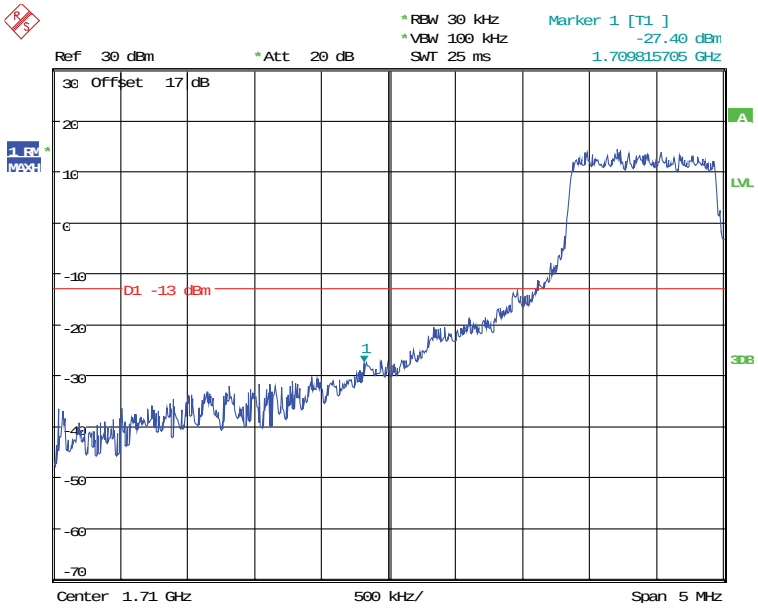
Date: 8.JUN.2018 15:51:02

QPSK (20MHz, RB0) – Right Band Edge



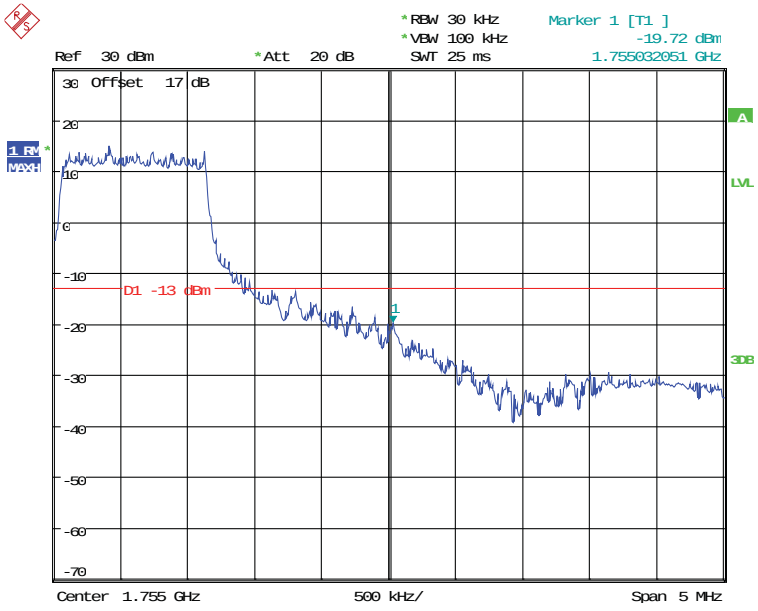
Date: 8.JUN.2018 14:56:09

QPSK (20MHz, RB6) – Left Band Edge



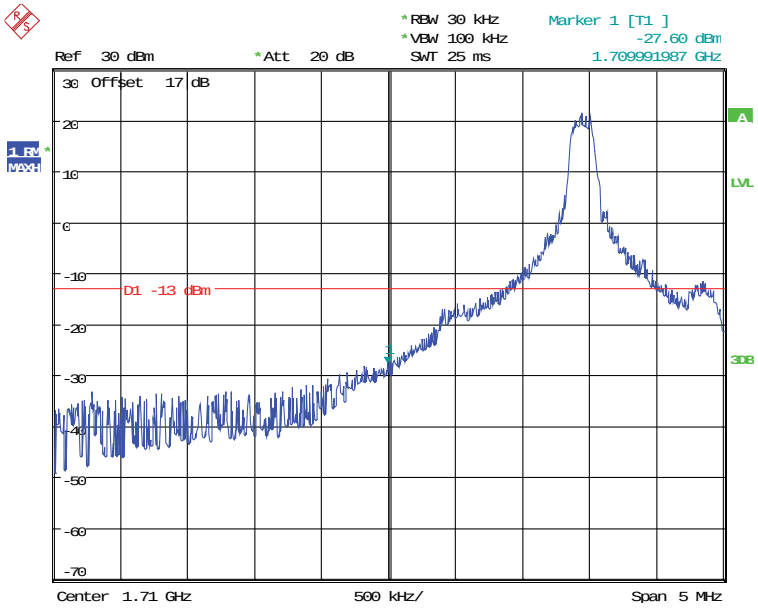
Date: 8.JUN.2018 15:51:58

QPSK (20MHz, RB6) – Right Band Edge



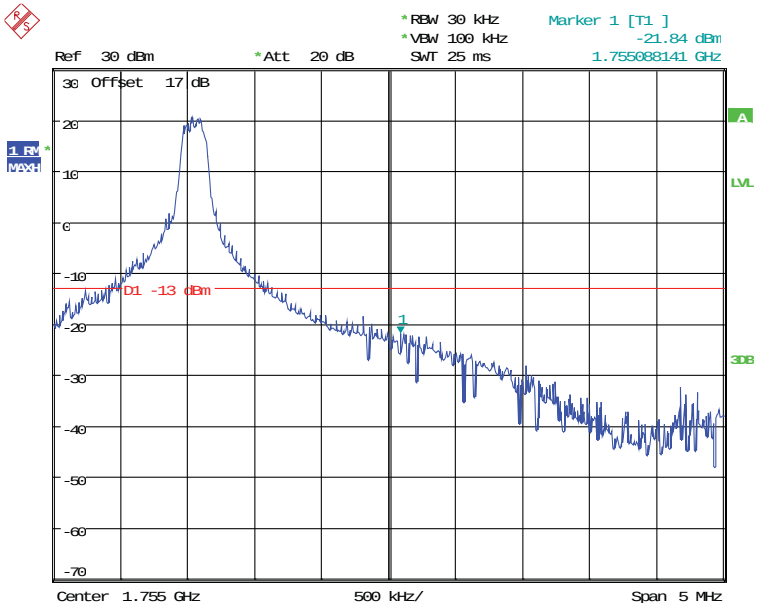
Date: 8.JUN.2018 14:57:11

16QAM (20MHz, RB0) – Left Band Edge



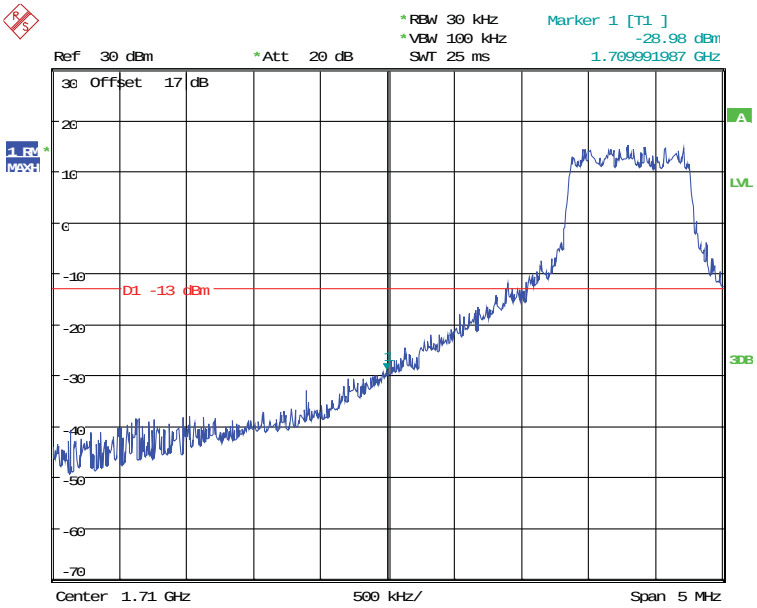
Date: 8.JUN.2018 15:50:33

16QAM (20MHz, RB0) – Right Band Edge



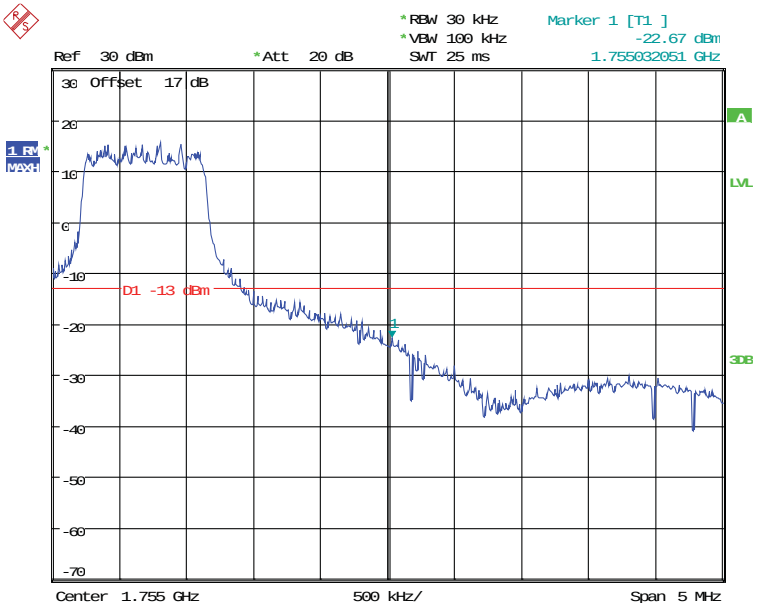
Date: 8.JUN.2018 14:54:17

16QAM (20MHz, RB5) – Left Band Edge



Date: 8.JUN.2018 15:50:02

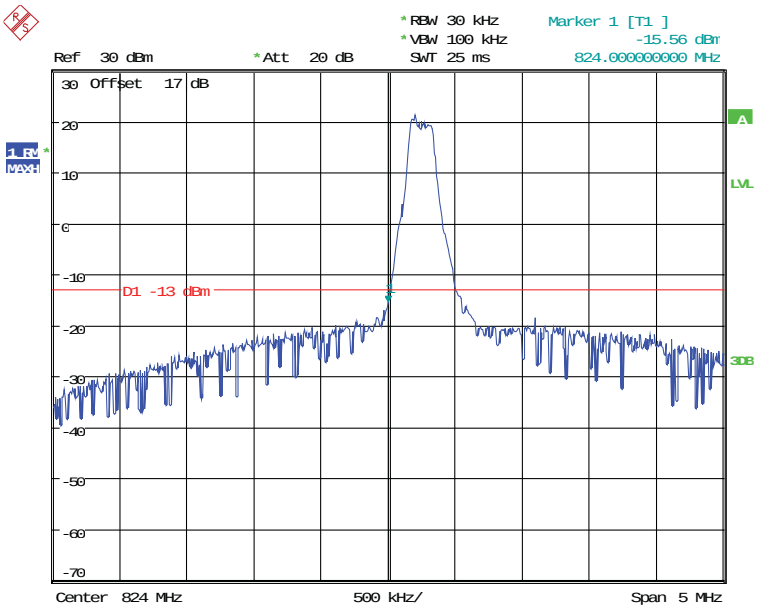
16QAM (20MHz, RB5) – Right Band Edge



Date: 8.JUN.2018 14:52:01

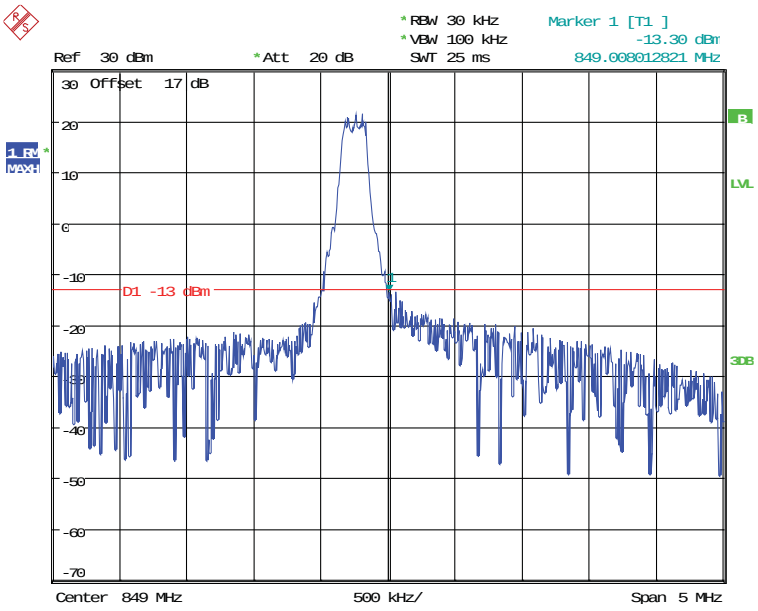
LTE Band 5

QPSK (1.4MHz, RB0) – Left Band Edge



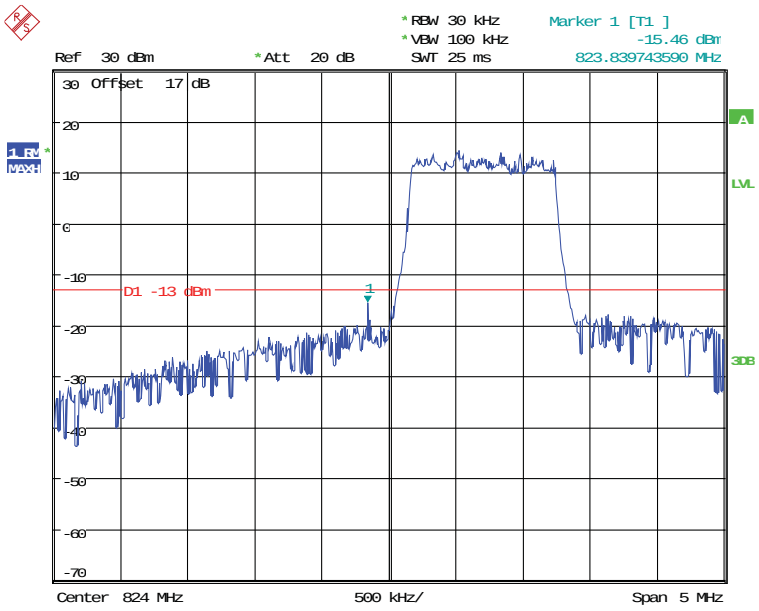
Date: 12.JUL.2018 15:58:33

QPSK (1.4MHz, RB0) – Right Band Edge



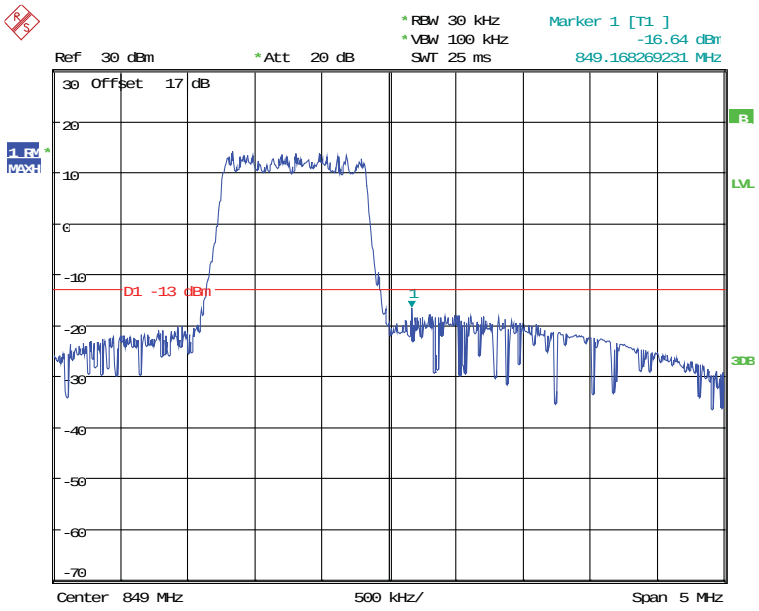
Date: 12.JUL.2018 16:05:15

QPSK (1.4MHz, RB6) – Left Band Edge



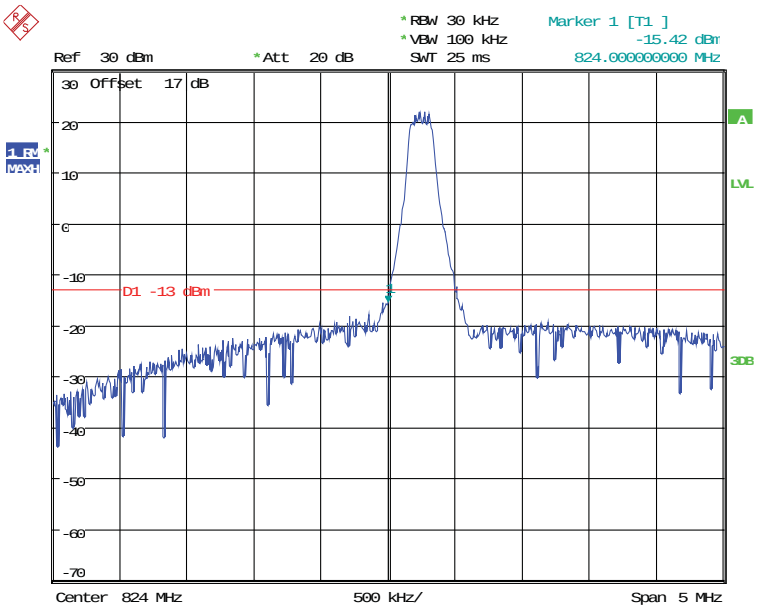
Date: 12.JUL.2018 15:57:37

QPSK (1.4MHz, RB6) – Right Band Edge



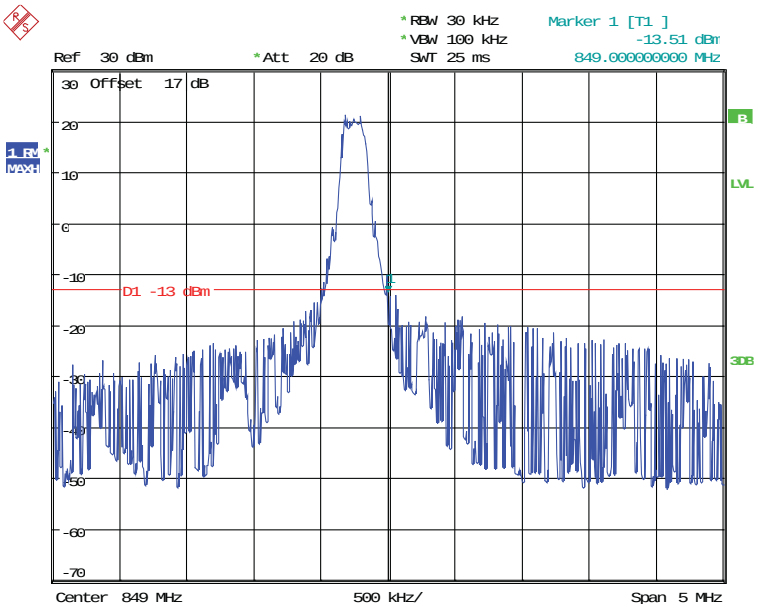
Date: 12.JUL.2018 16:09:36

16QAM (1.4MHz, RB0) – Left Band Edge



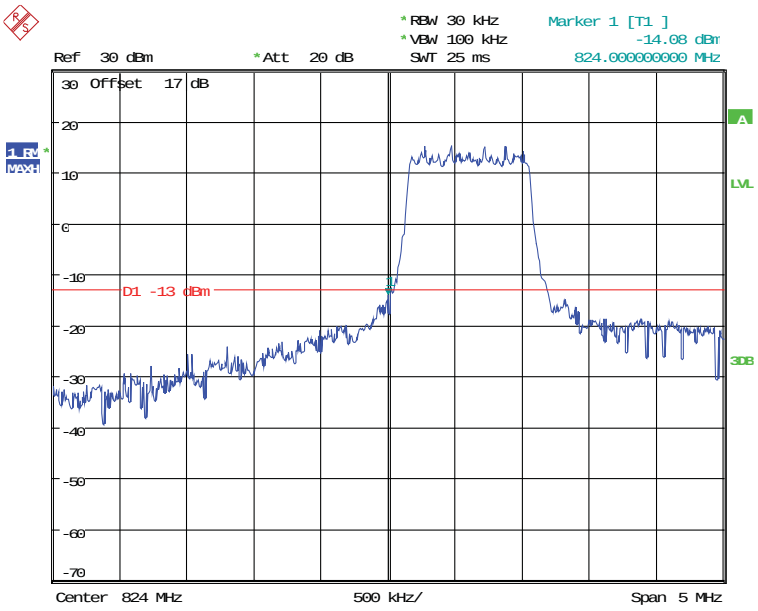
Date: 12.JUL.2018 15:59:20

16QAM (1.4MHz, RB0) – Right Band Edge



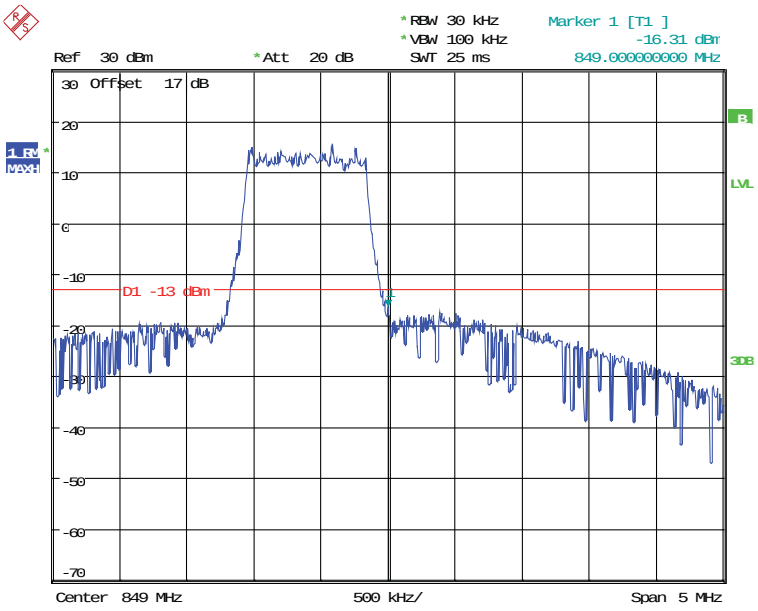
Date: 12.JUL.2018 16:07:18

16QAM (1.4MHz, RB5) – Left Band Edge



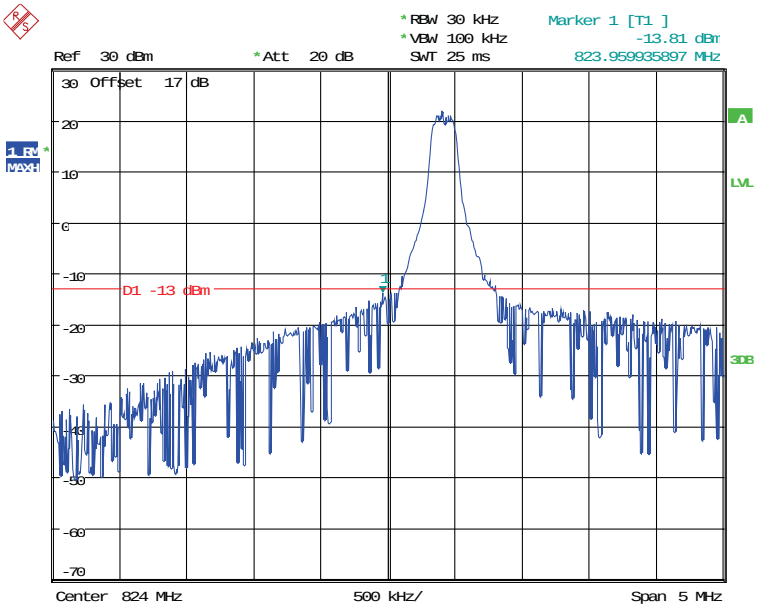
Date: 12.JUL.2018 15:59:57

16QAM (1.4MHz, RB5) – Right Band Edge



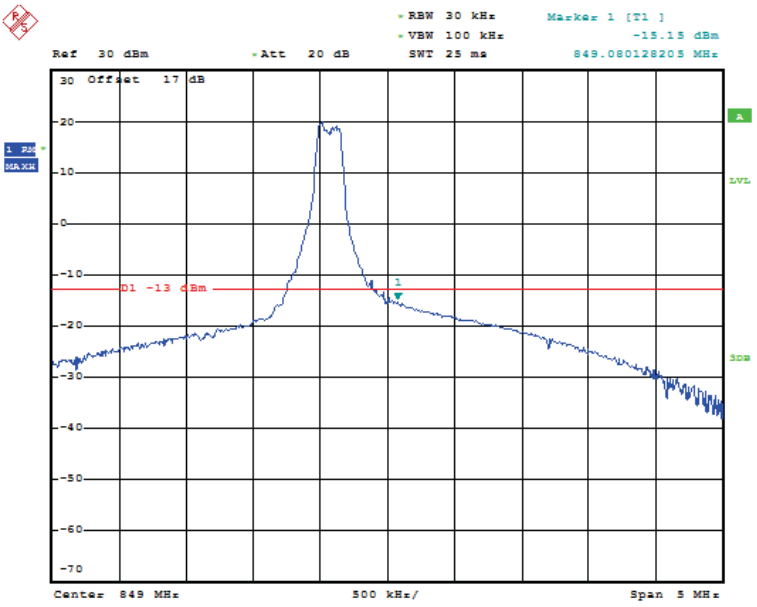
Date: 12.JUL.2018 16:08:50

QPSK (3MHz, RB0) – Left Band Edge



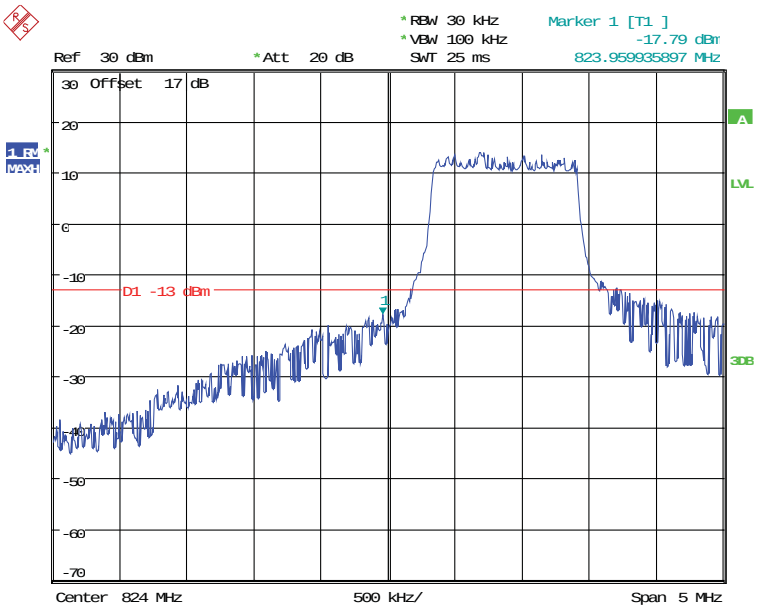
Date: 12.JUL.2018 16:25:25

QPSK (3MHz, RB0) – Right Band Edge



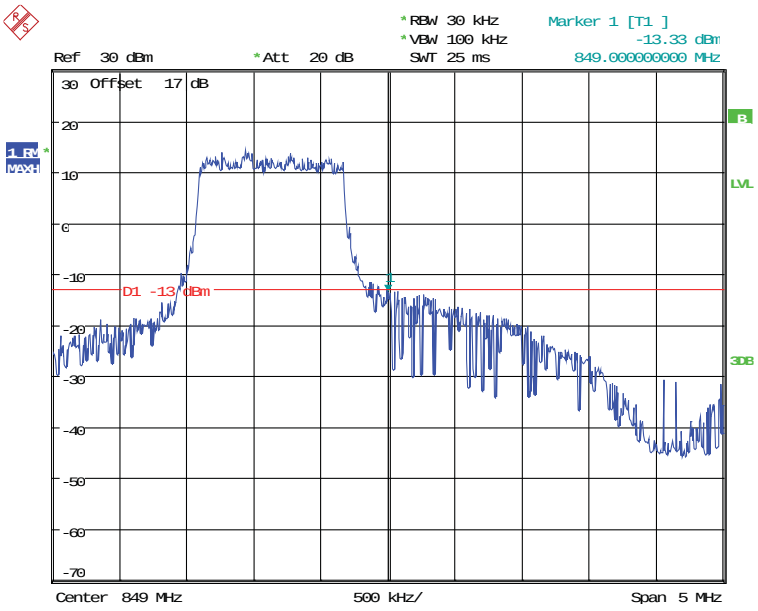
Date: 14.JUL.2018 11:32:31

QPSK (3MHz, RB6) – Left Band Edge



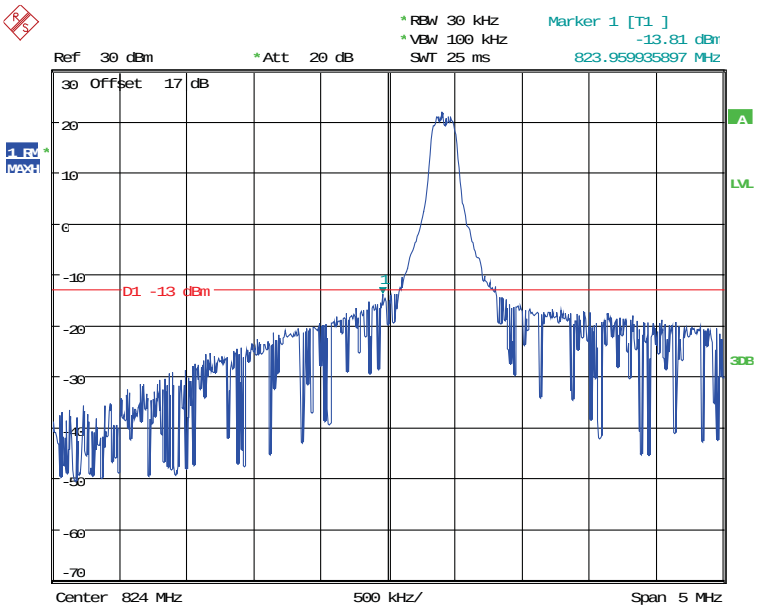
Date: 12.JUL.2018 16:26:26

QPSK (3MHz, RB6) – Right Band Edge



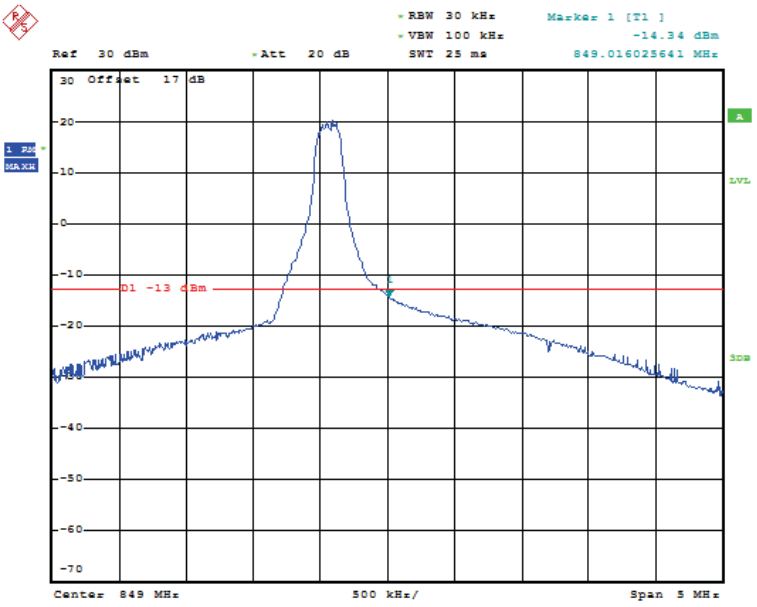
Date: 12.JUL.2018 16:12:03

16QAM (3MHz, RB0) – Left Band Edge



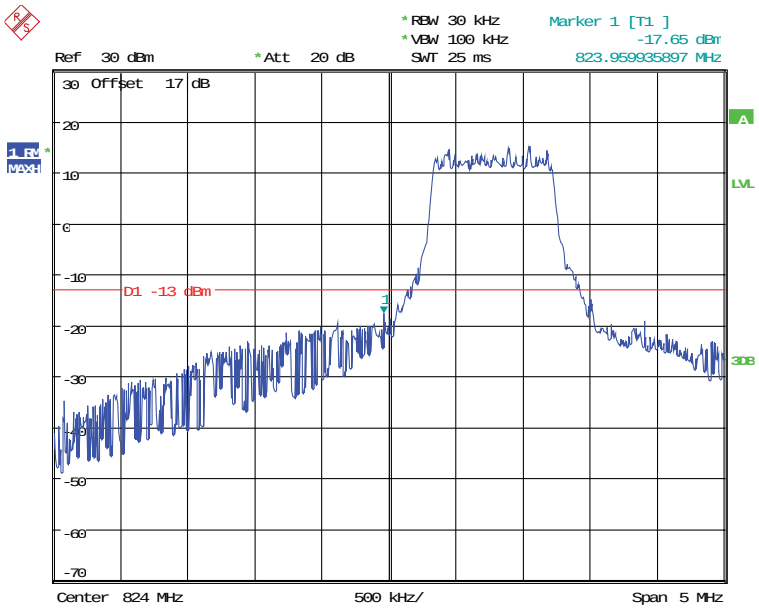
Date: 12.JUL.2018 16:25:25

16QAM (3MHz, RB0) – Right Band Edge



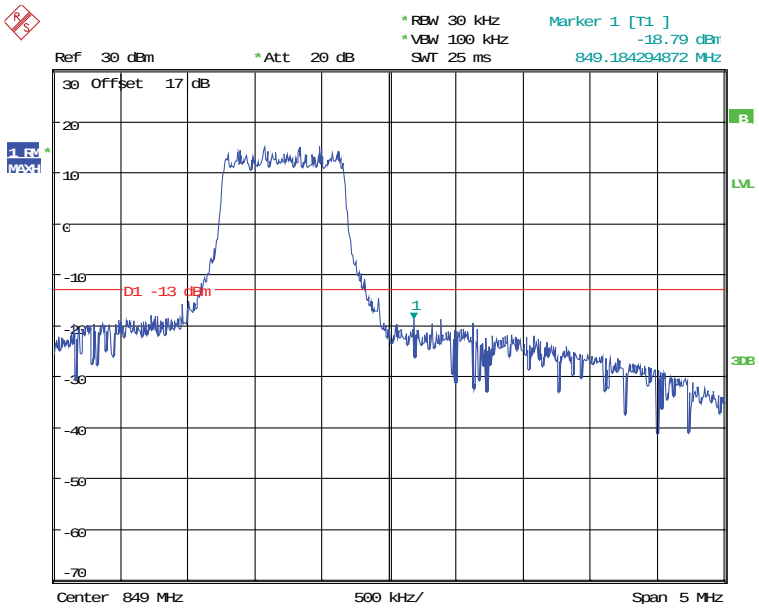
Date: 14.JUL.2018 11:36:24

16QAM (3MHz, RB5) – Left Band Edge



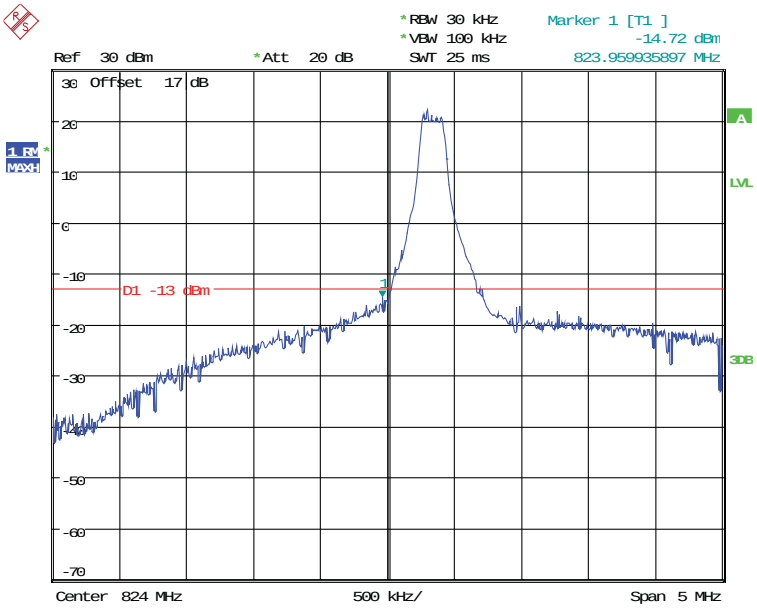
Date: 12.JUL.2018 16:25:55

16QAM (3MHz, RB5) – Right Band Edge



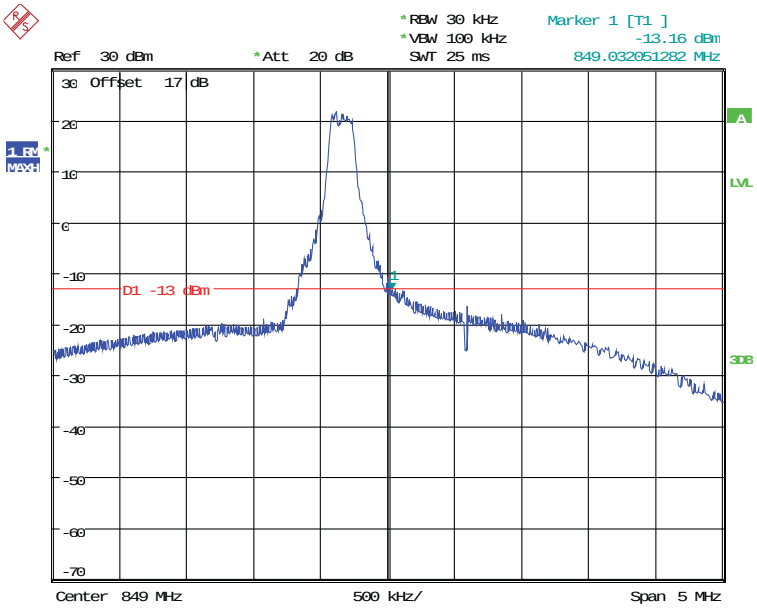
Date: 12.JUL.2018 16:13:39

QPSK (5MHz, RB0) – Left Band Edge



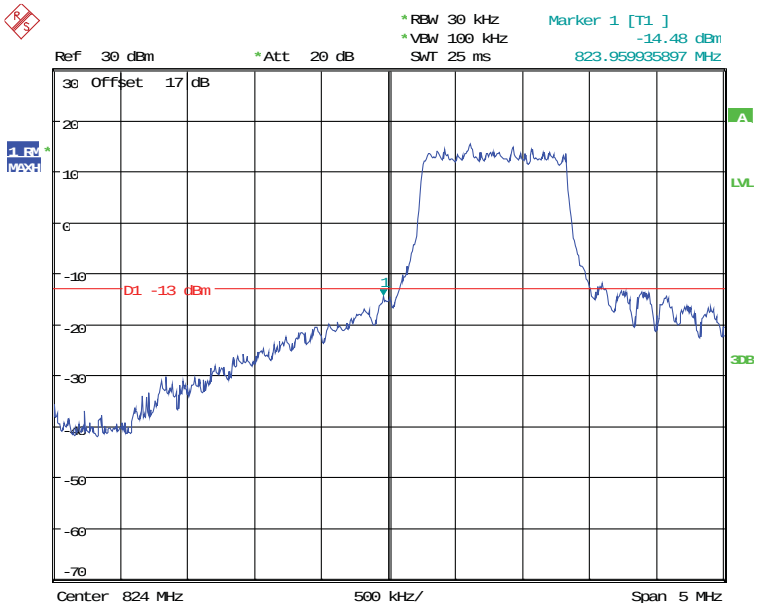
Date: 8.JUN.2018 15:56:06

QPSK (5MHz, RB0) – Right Band Edge



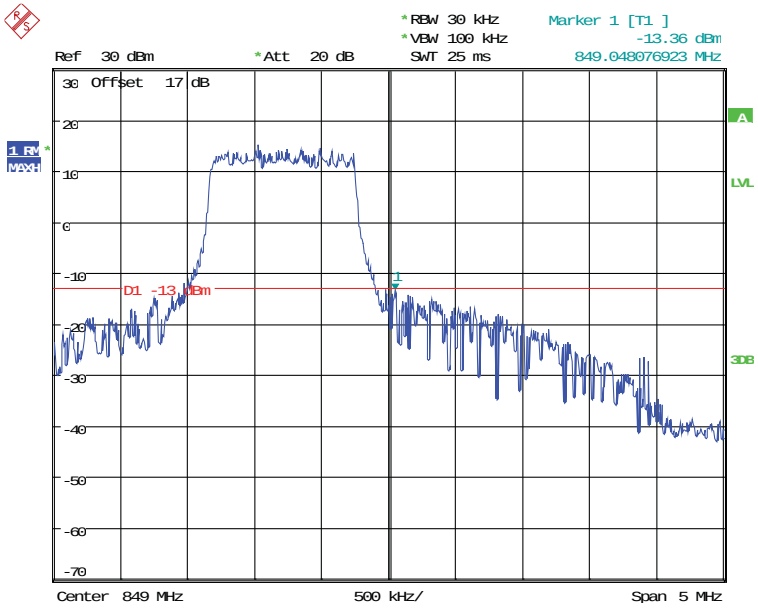
Date: 8.JUN.2018 16:10:19

QPSK (5MHz, RB6) – Left Band Edge



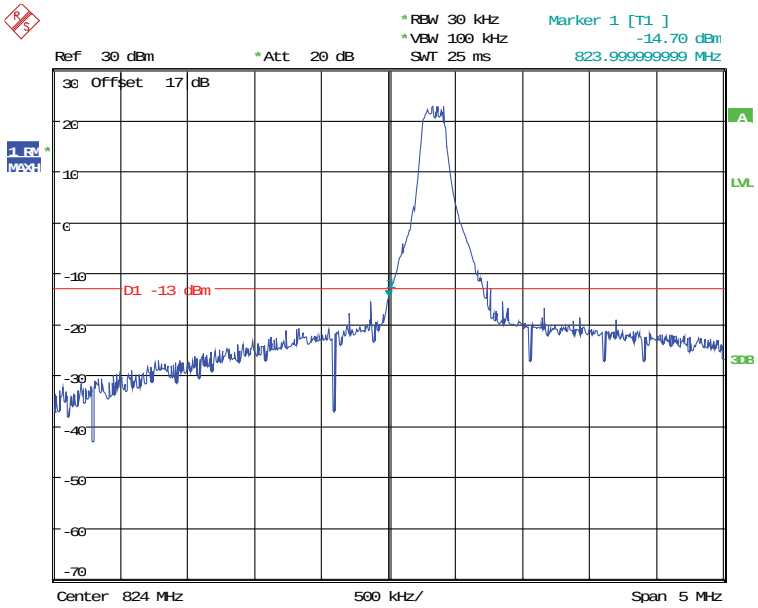
Date: 8.JUN.2018 15:57:35

QPSK (5MHz, RB6) – Right Band Edge



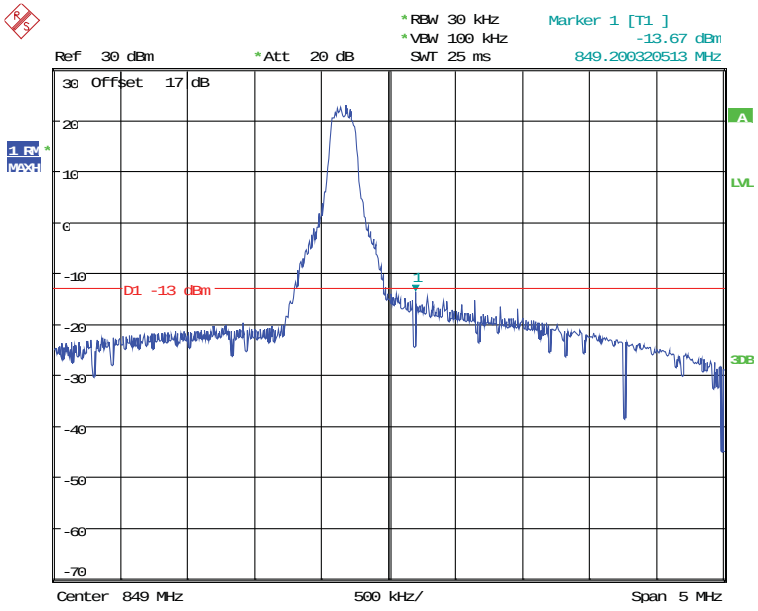
Date: 8.JUN.2018 16:06:27

16QAM (5MHz, RB0) – Left Band Edge



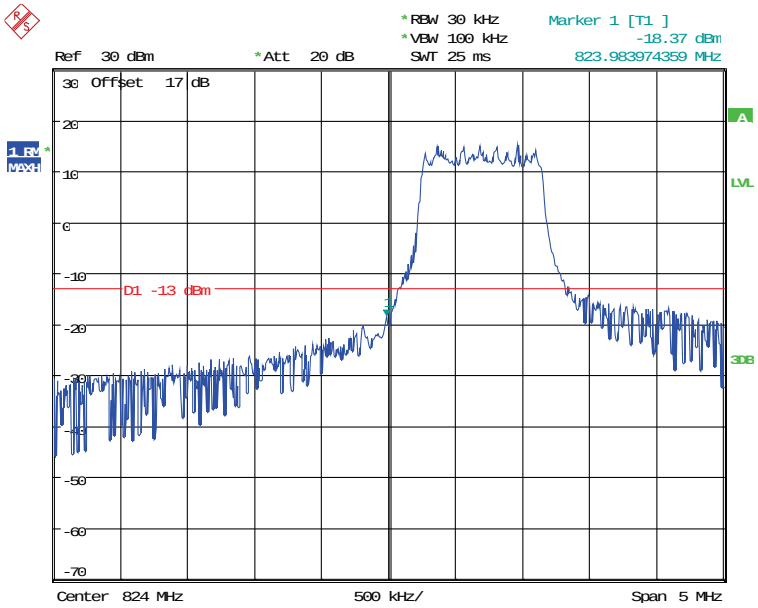
Date: 8.JUN.2018 15:55:08

16QAM (5MHz, RB0) – Right Band Edge



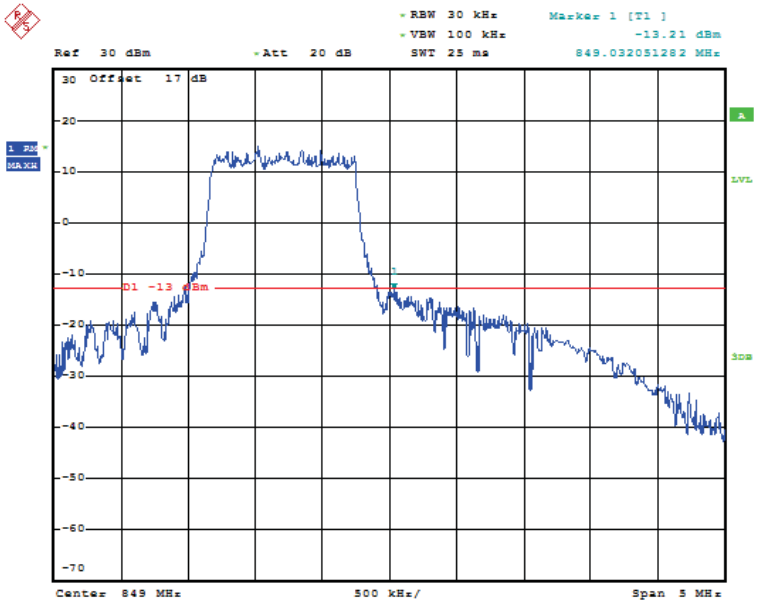
Date: 8.JUN.2018 16:12:30

16QAM (5MHz, RB5) – Left Band Edge



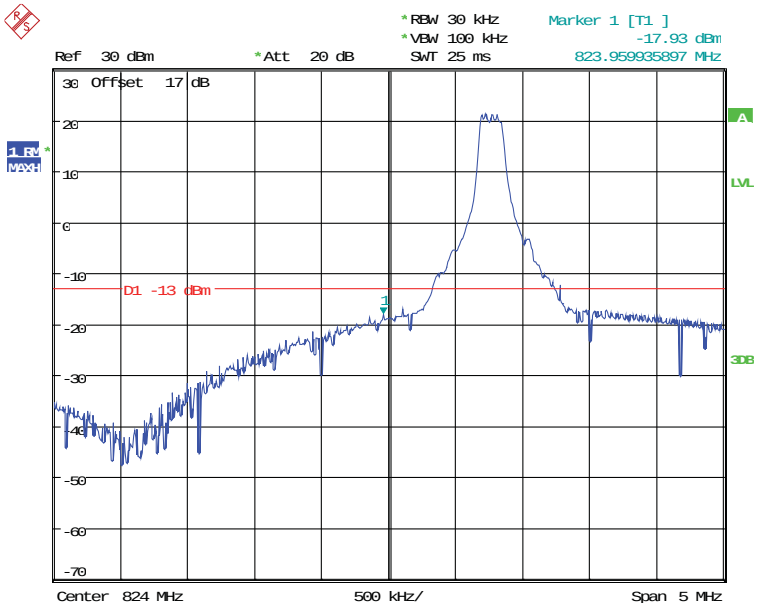
Date: 8.JUN.2018 15:53:47

16QAM (5MHz, RB5) – Right Band Edge



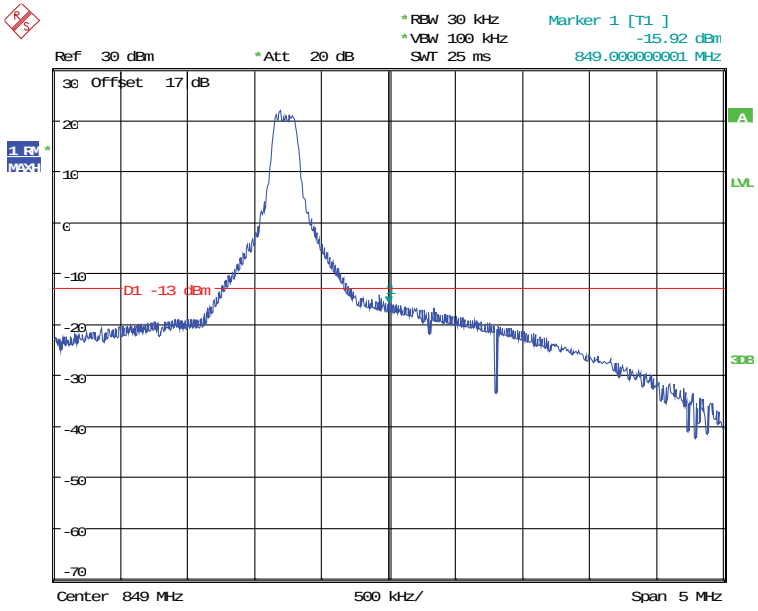
Date: 11.JUN.2018 13:31:20

QPSK (10MHz, RB0) – Left Band Edge



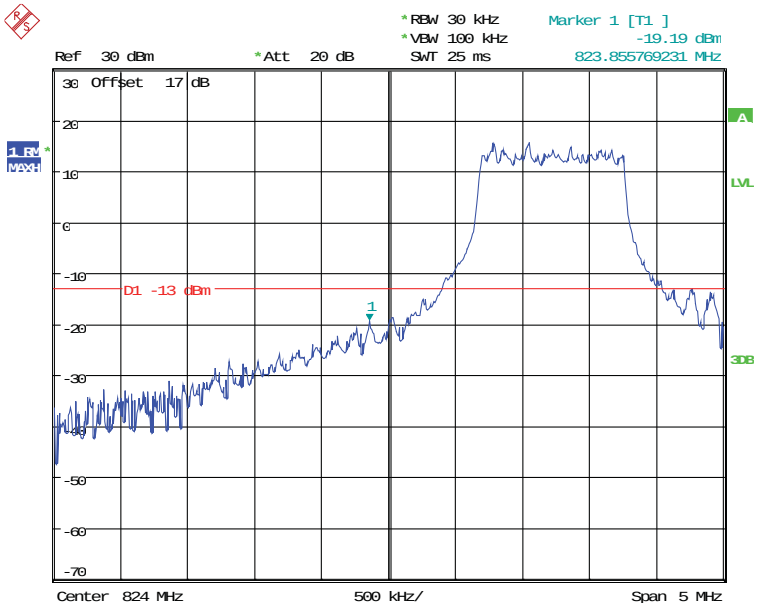
Date: 8.JUN.2018 16:01:03

QPSK (10MHz, RB0) – Right Band Edge



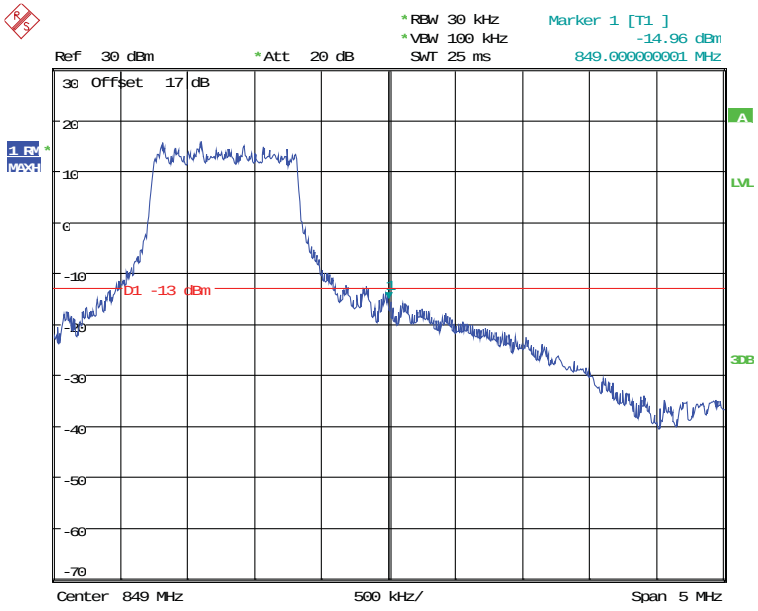
Date: 8.JUN.2018 16:23:39

QPSK (10MHz, RB6) – Left Band Edge



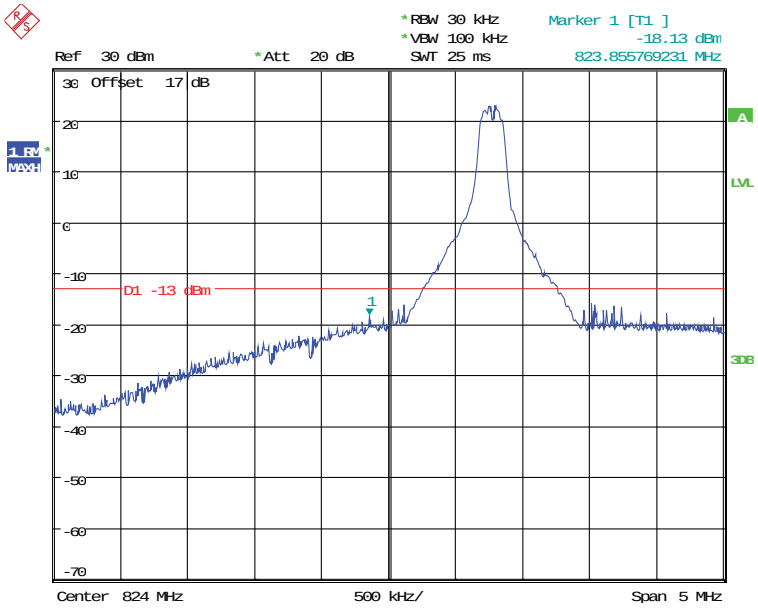
Date: 8.JUN.2018 15:59:40

QPSK (10MHz, RB6) – Right Band Edge



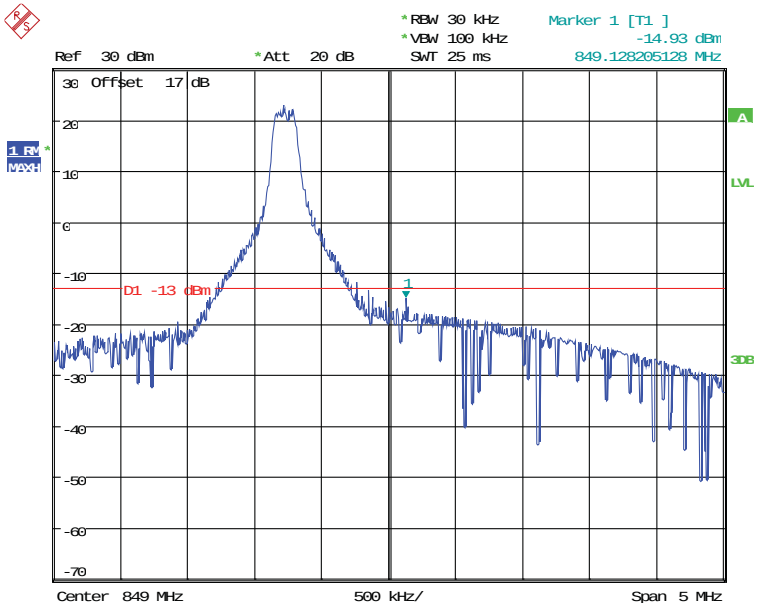
Date: 8.JUN.2018 16:26:23

16QAM (10MHz, RB0) – Left Band Edge



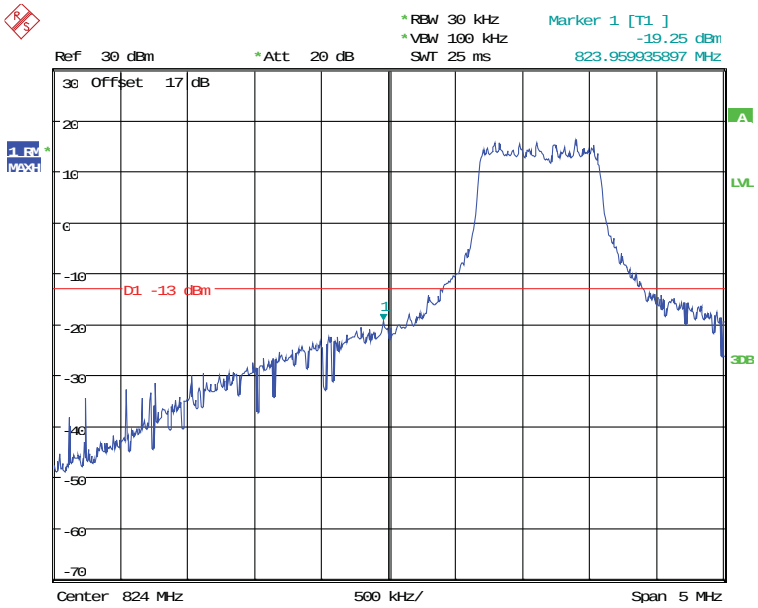
Date: 8.JUN.2018 16:02:35

16QAM (10MHz, RB0) – Right Band Edge



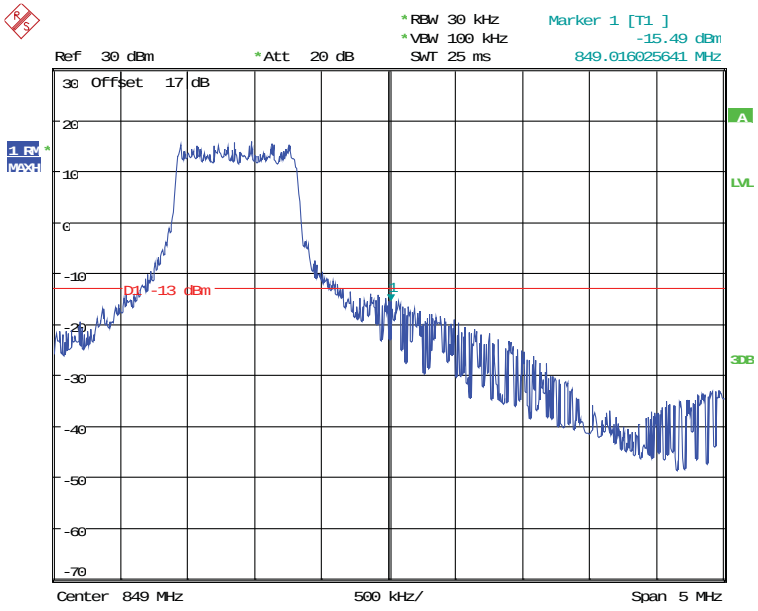
Date: 8.JUN.2018 16:22:07

16QAM (10MHz, RB5) – Left Band Edge



Date: 8.JUN.2018 16:03:18

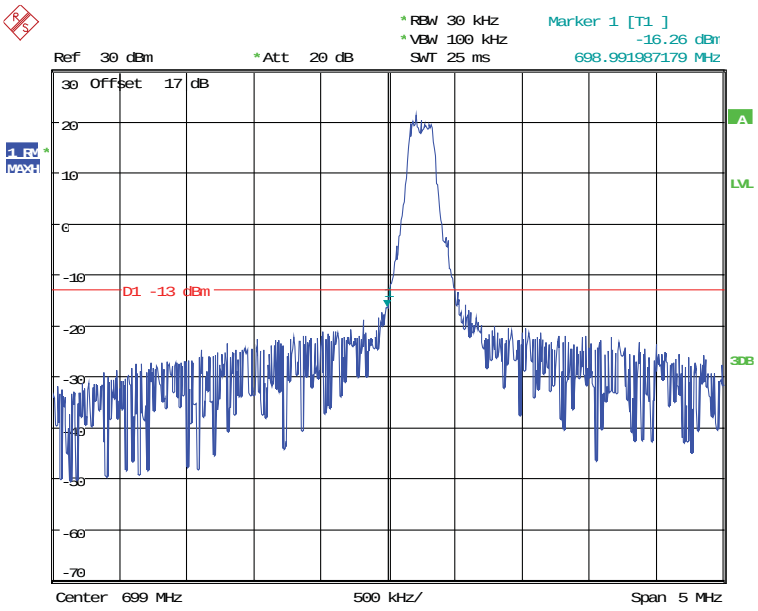
16QAM (10MHz, RB5) – Right Band Edge



Date: 8.JUN.2018 16:21:10

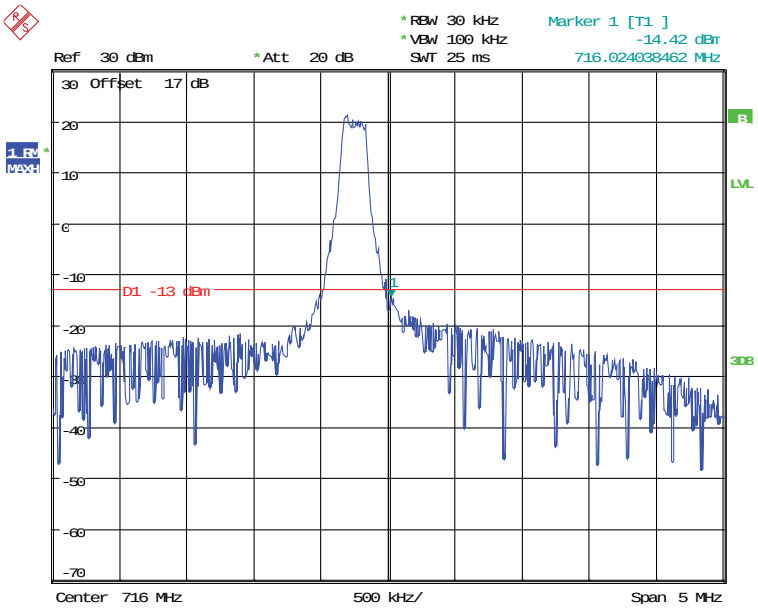
LTE Band 12

QPSK (1.4MHz, RB0) – Left Band Edge



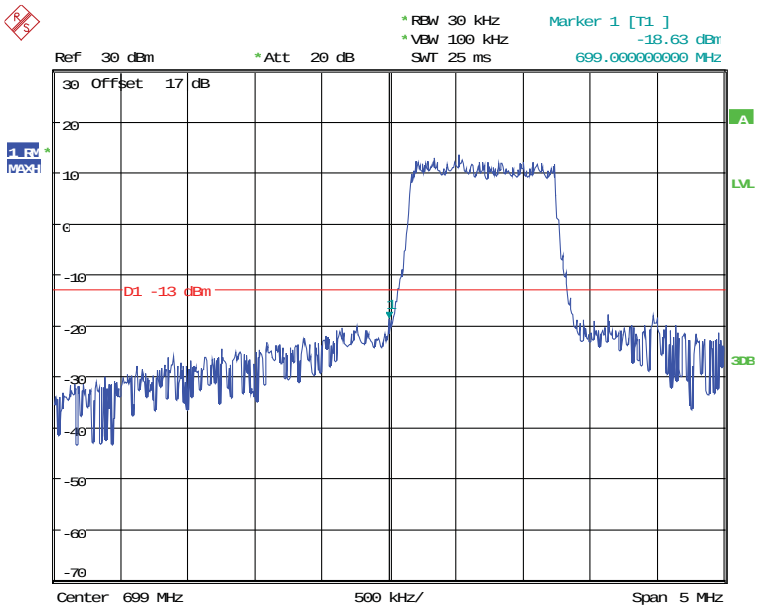
Date: 12.JUL.2018 16:33:13

QPSK (1.4MHz, RB0) – Right Band Edge



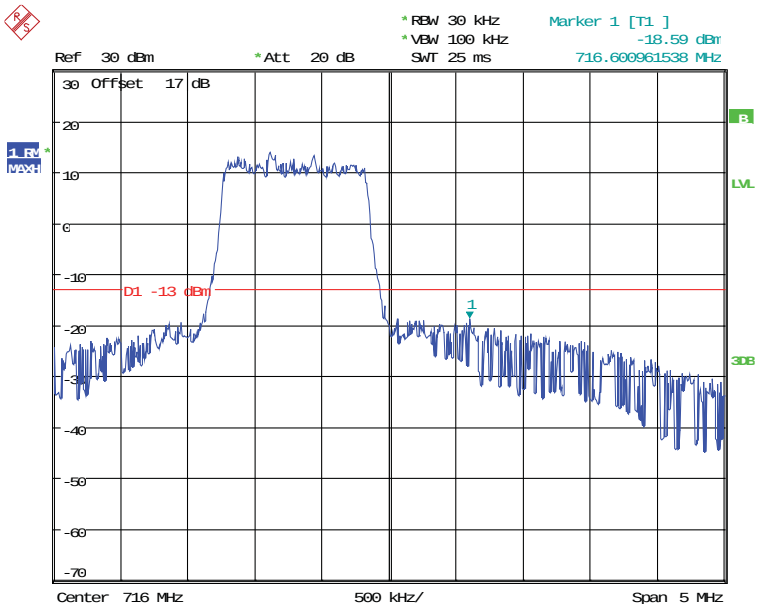
Date: 12.JUL.2018 16:35:26

QPSK (1.4MHz, RB6) – Left Band Edge



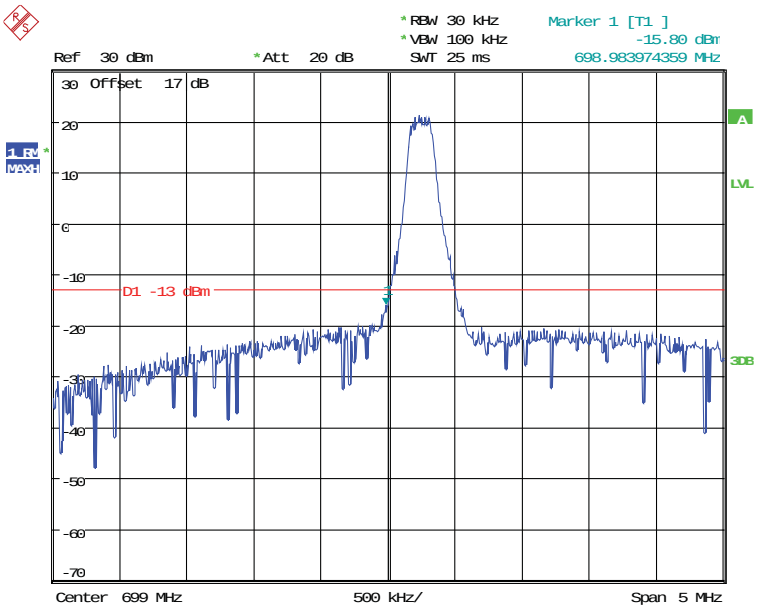
Date: 12.JUL.2018 16:31:05

QPSK (1.4MHz, RB6) – Right Band Edge



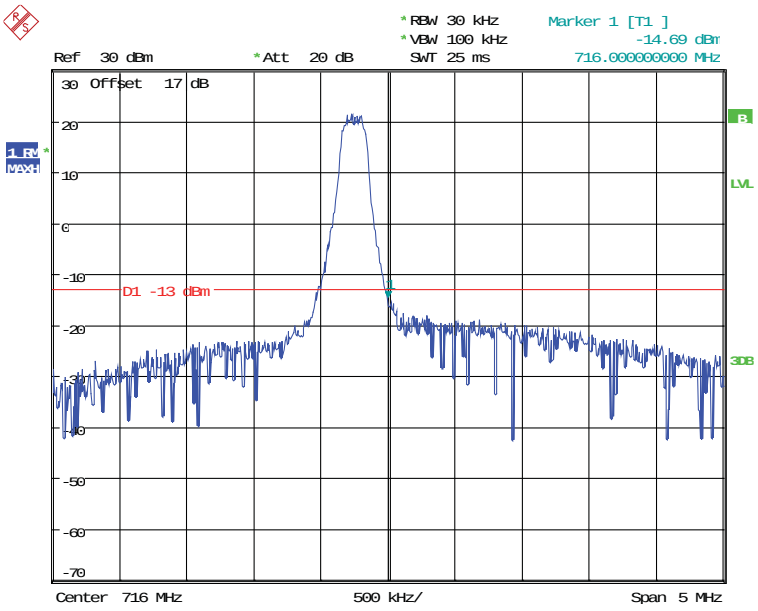
Date: 12.JUL.2018 16:37:11

16QAM (1.4MHz, RB0) – Left Band Edge



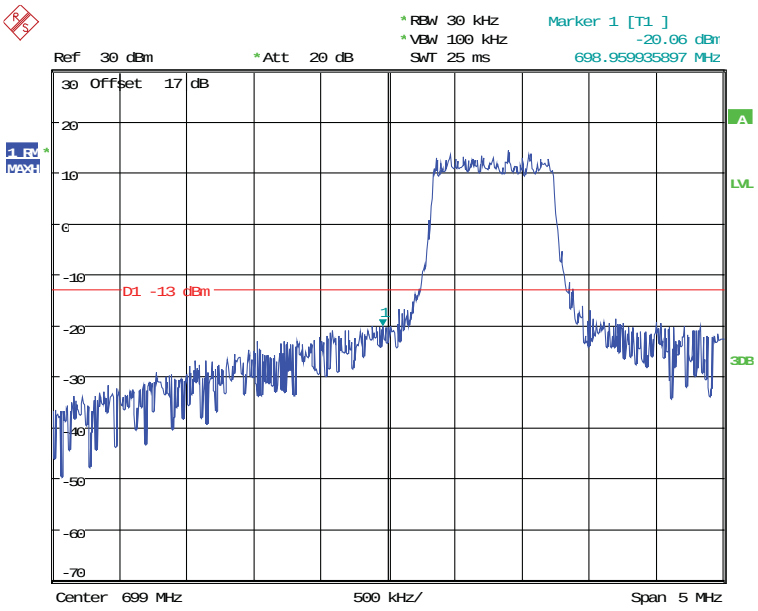
Date: 12.JUL.2018 16:32:50

16QAM (1.4MHz, RB0) – Right Band Edge



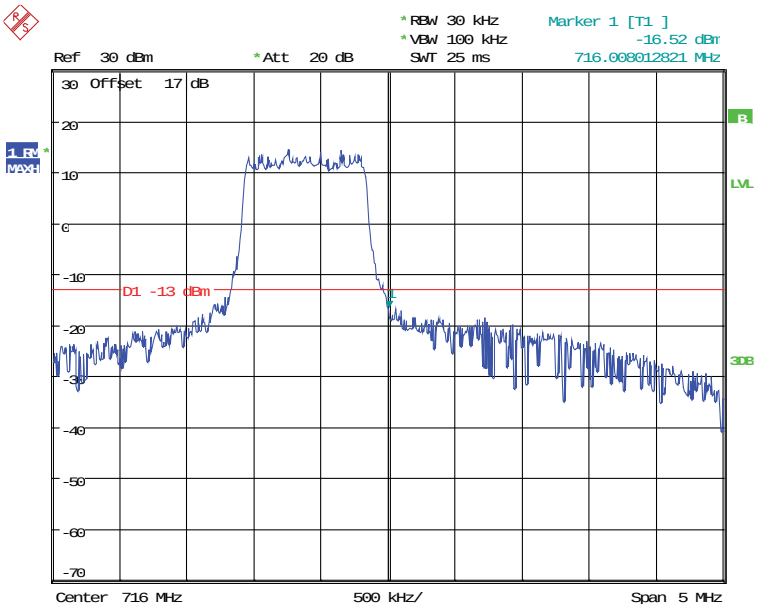
Date: 12.JUL.2018 16:36:09

16QAM (1.4MHz, RB5) – Left Band Edge



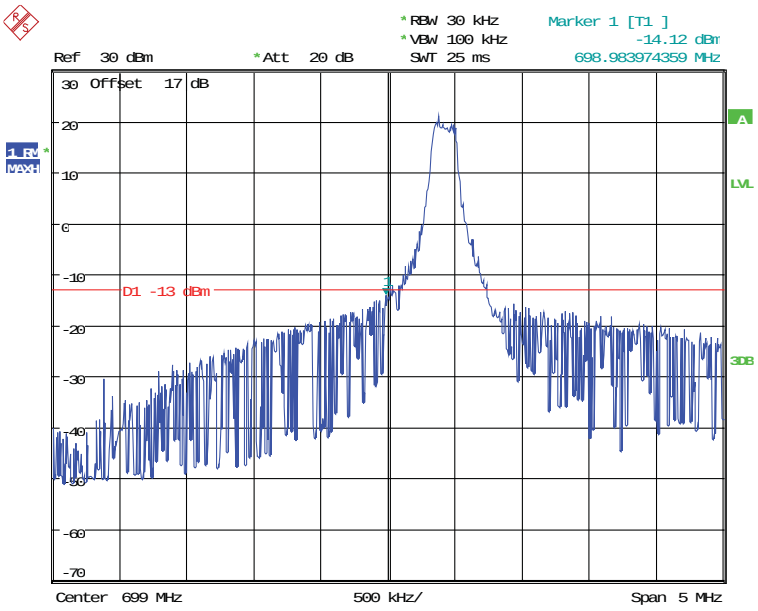
Date: 12.JUL.2018 16:31:53

16QAM (1.4MHz, RB5) – Right Band Edge



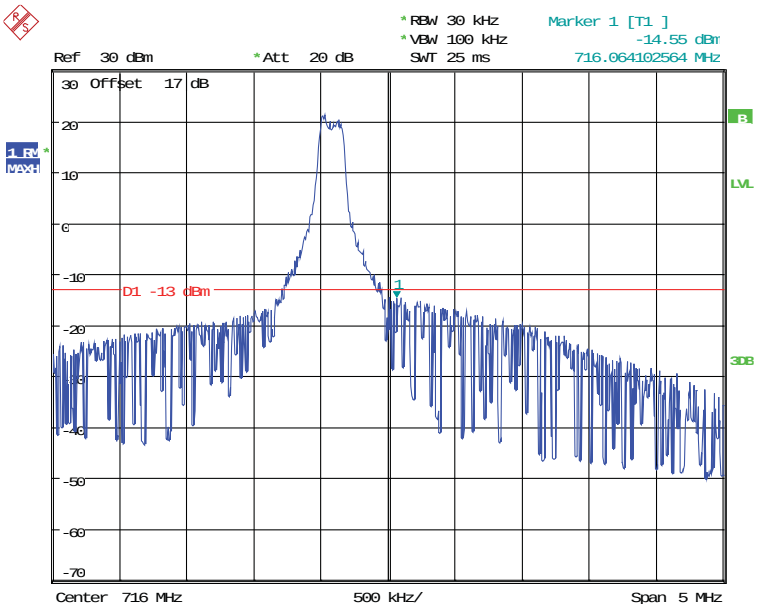
Date: 12.JUL.2018 16:36:41

QPSK (3MHz, RB0) – Left Band Edge



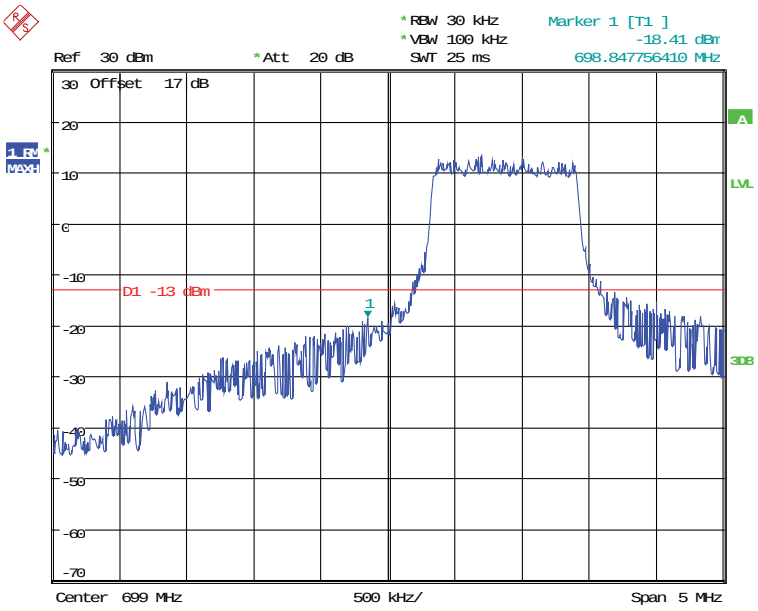
Date: 12.JUL.2018 16:44:42

QPSK (3MHz, RB0) – Right Band Edge



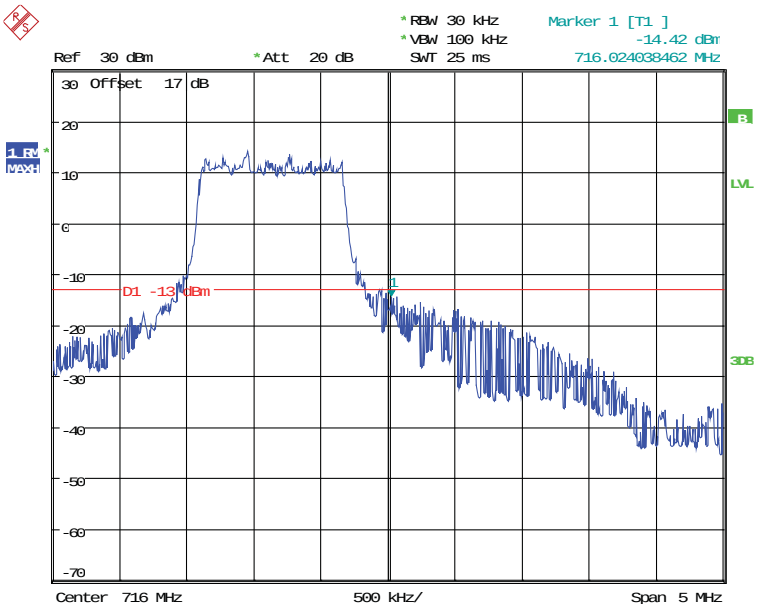
Date: 12.JUL.2018 16:42:05

QPSK (3MHz, RB6) – Left Band Edge



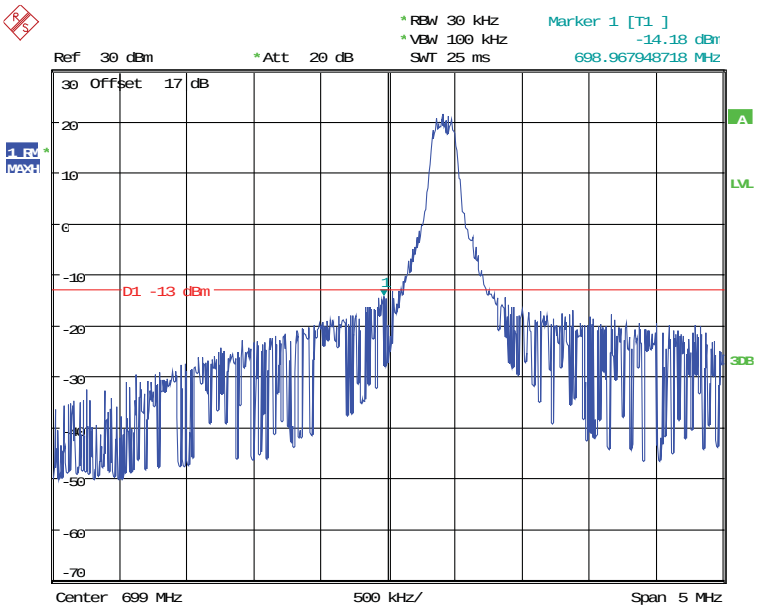
Date: 12.JUL.2018 16:46:20

QPSK (3MHz, RB6) – Right Band Edge



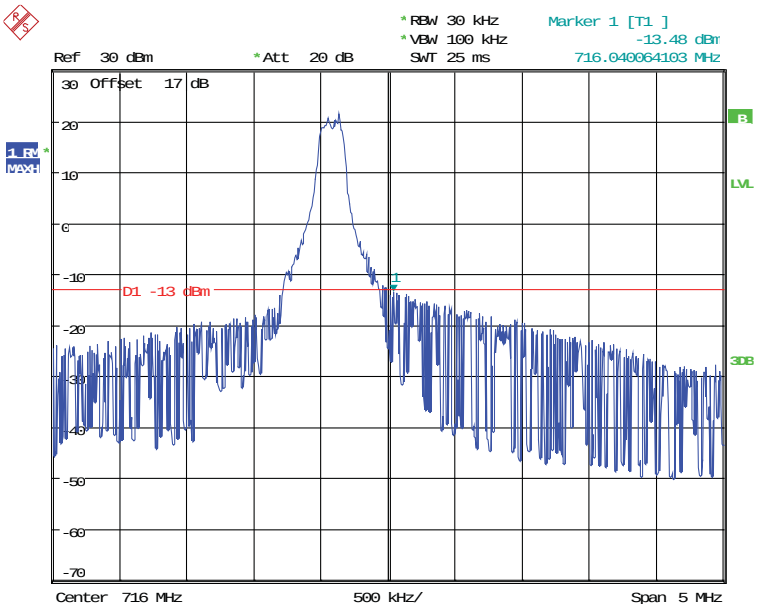
Date: 12.JUL.2018 16:38:59

16QAM (3MHz, RB0) – Left Band Edge



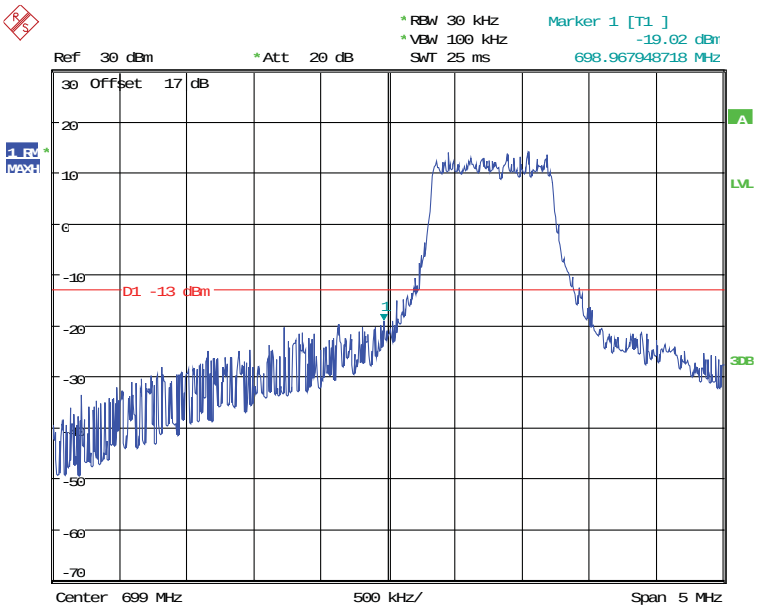
Date: 12.JUL.2018 16:45:17

16QAM (3MHz, RB0) – Right Band Edge



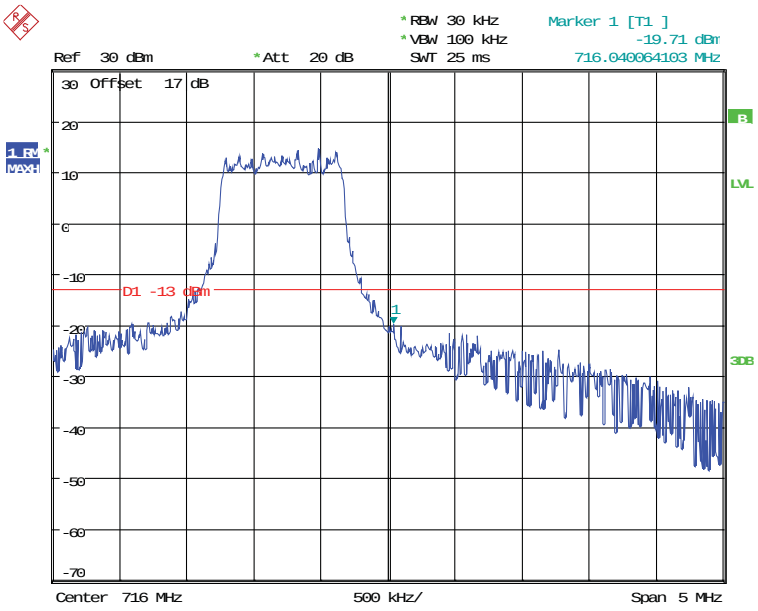
Date: 12.JUL.2018 16:41:33

16QAM (3MHz, RB5) – Left Band Edge



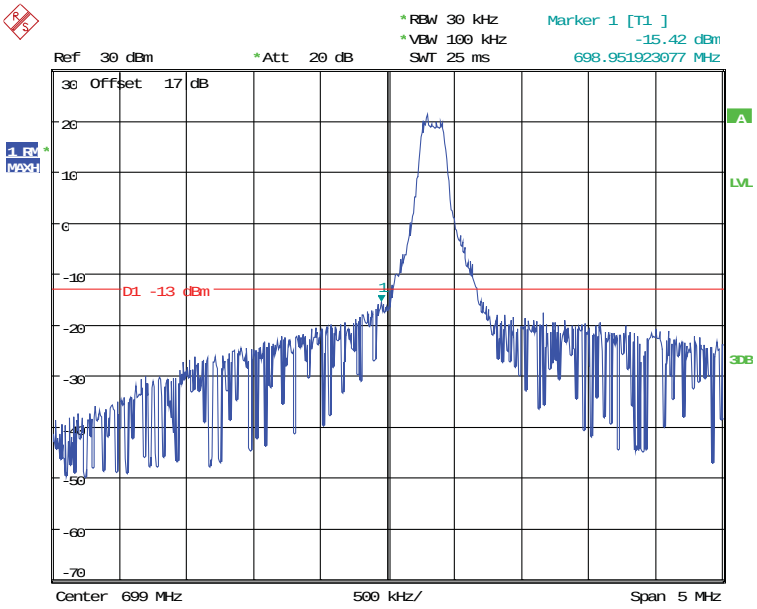
Date: 12.JUL.2018 16:45:46

16QAM (3MHz, RB5) – Right Band Edge



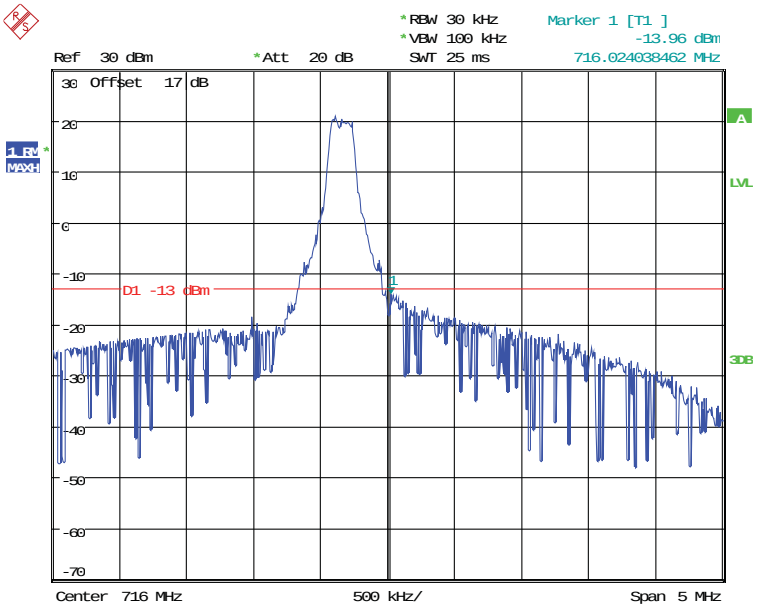
Date: 12.JUL.2018 16:39:48

QPSK (5MHz, RB0) – Left Band Edge



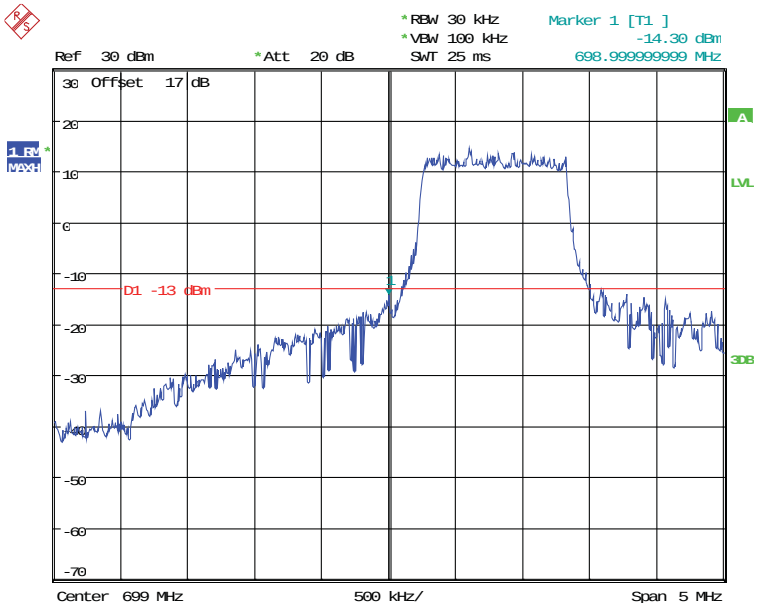
Date: 8.JUN.2018 16:33:48

QPSK (5MHz, RB0) – Right Band Edge



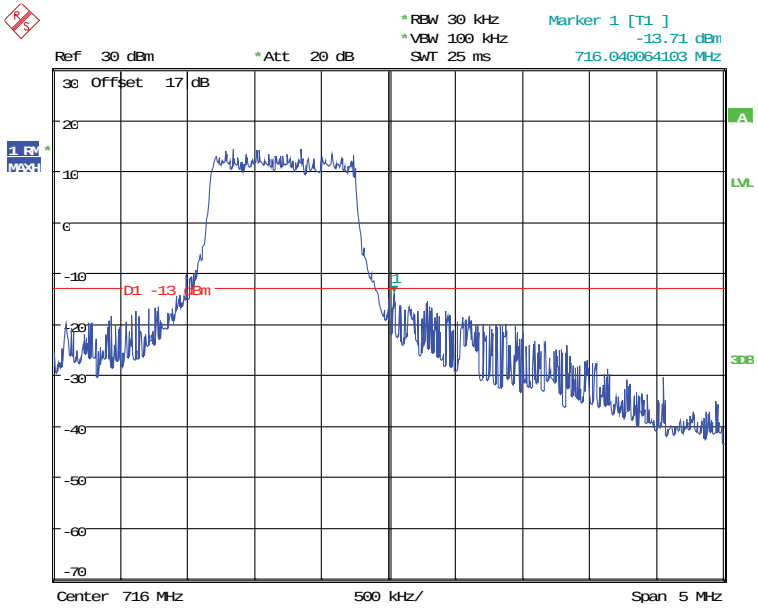
Date: 8.JUN.2018 16:49:31

QPSK (5MHz, RB6) – Left Band Edge



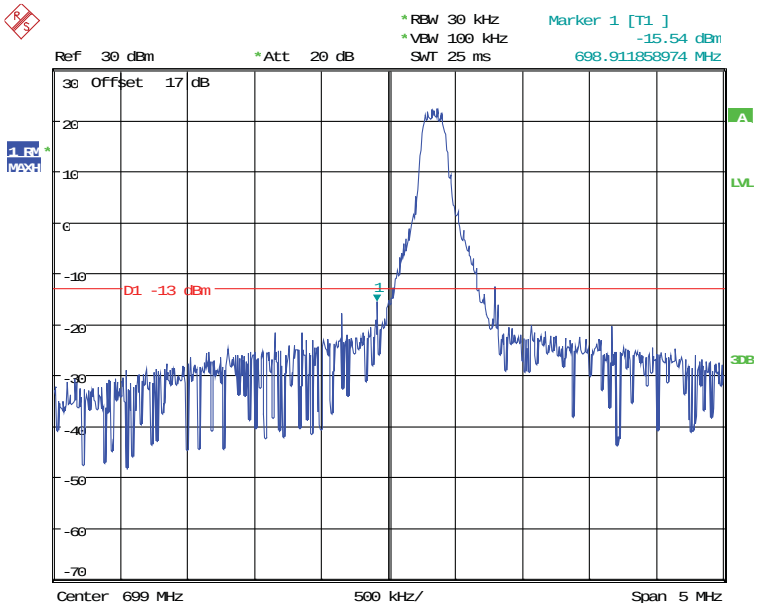
Date: 8.JUN.2018 16:34:43

QPSK (5MHz, RB6) – Right Band Edge



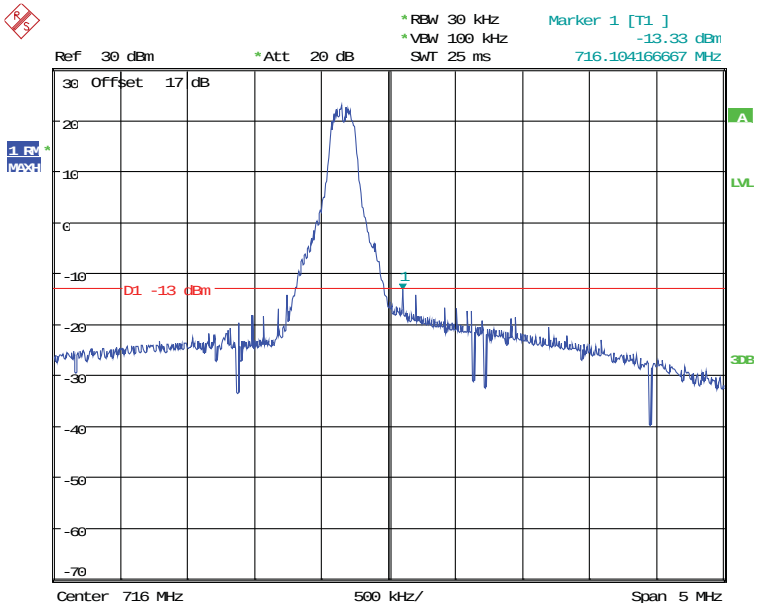
Date: 8.JUN.2018 16:48:02

16QAM (5MHz, RB0) – Left Band Edge



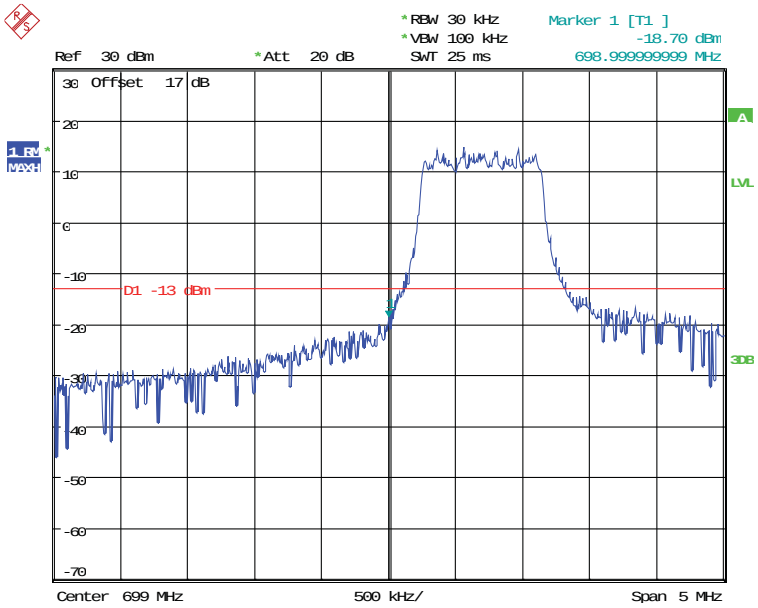
Date: 8.JUN.2018 16:33:07

16QAM (5MHz, RB0) – Right Band Edge



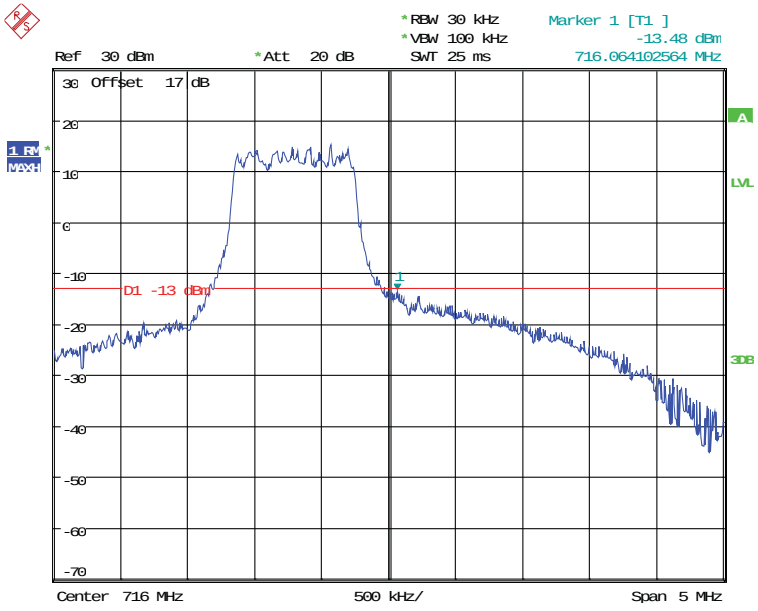
Date: 8.JUN.2018 16:50:54

16QAM (5MHz, RB5) – Left Band Edge



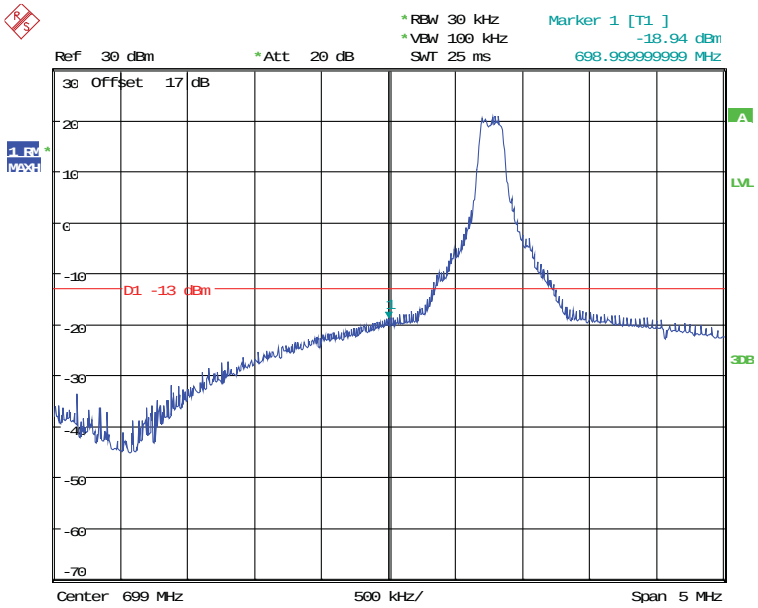
Date: 8.JUN.2018 16:30:58

16QAM (5MHz, RB5) – Right Band Edge



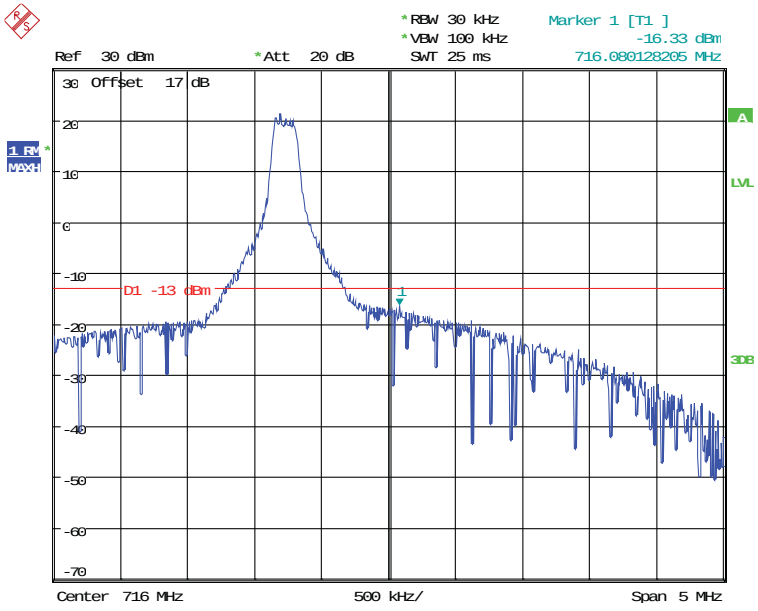
Date: 8.JUN.2018 16:52:06

QPSK (10MHz, RB0) – Left Band Edge



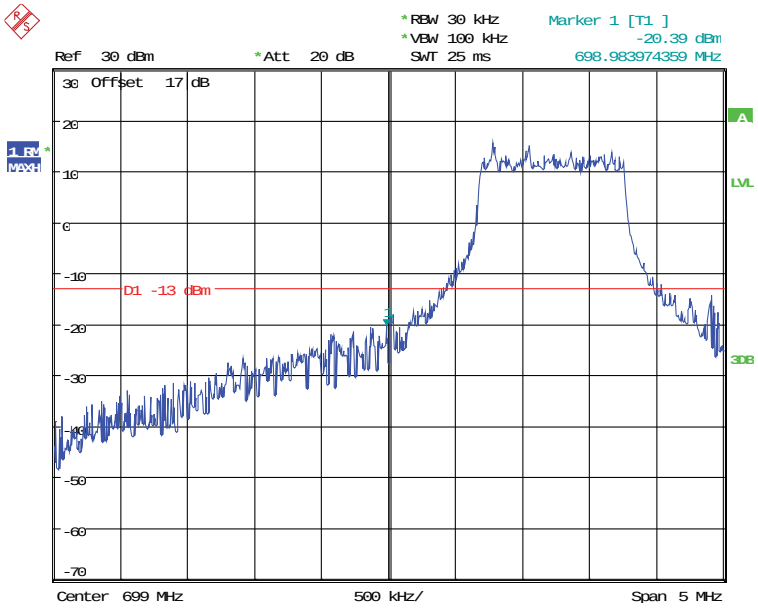
Date: 8.JUN.2018 16:38:09

QPSK (10MHz, RB0) – Right Band Edge



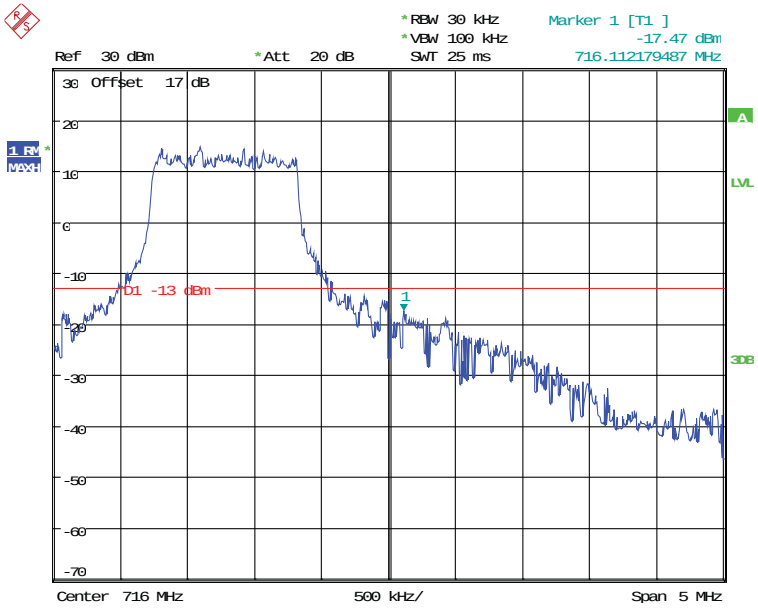
Date: 8.JUN.2018 16:55:48

QPSK (10MHz, RB6) – Left Band Edge



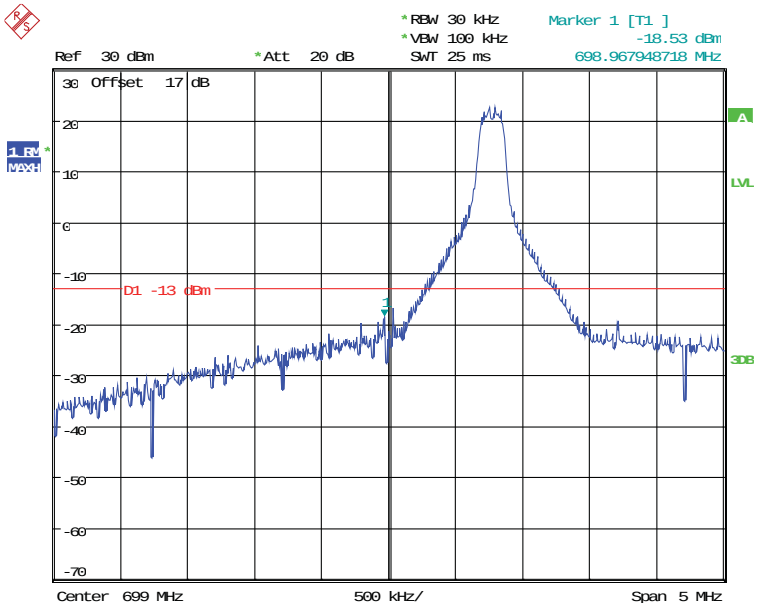
Date: 8.JUN.2018 16:36:30

QPSK (10MHz, RB6) – Right Band Edge



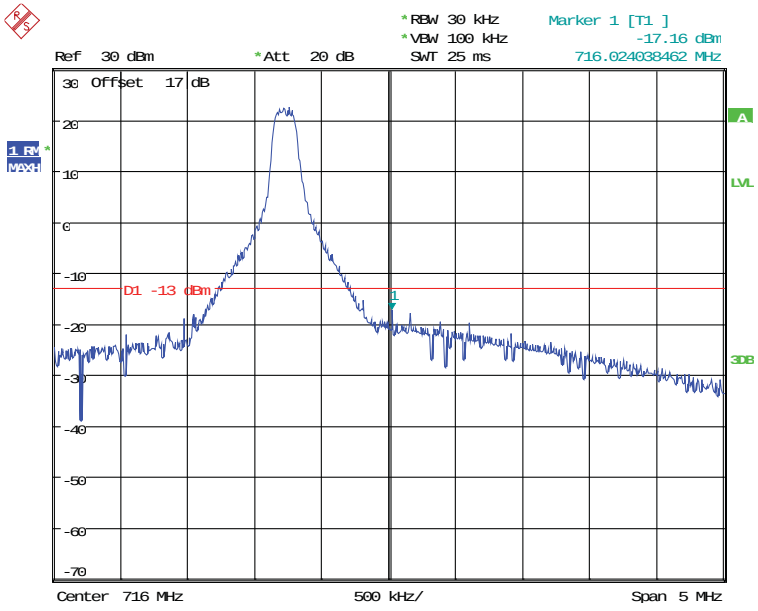
Date: 8.JUN.2018 16:56:35

16QAM (10MHz, RB0) – Left Band Edge



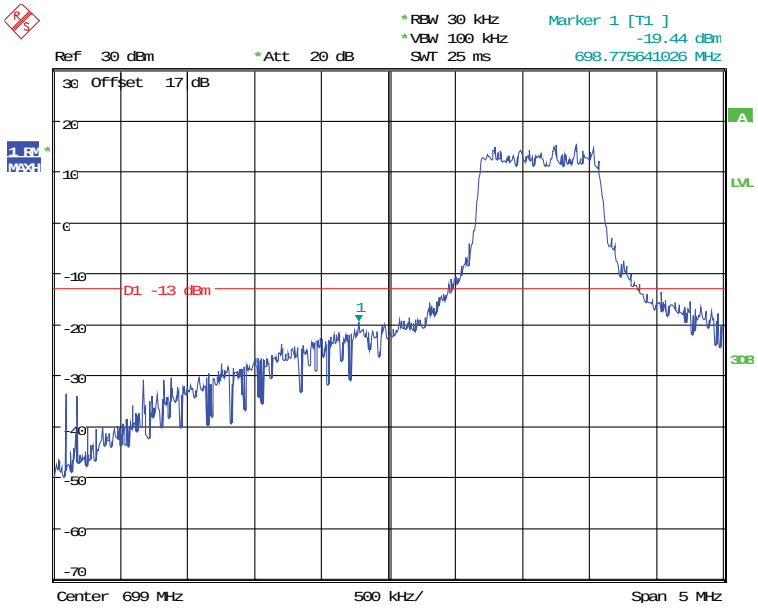
Date: 8.JUN.2018 16:39:30

16QAM (10MHz, RB0) – Right Band Edge



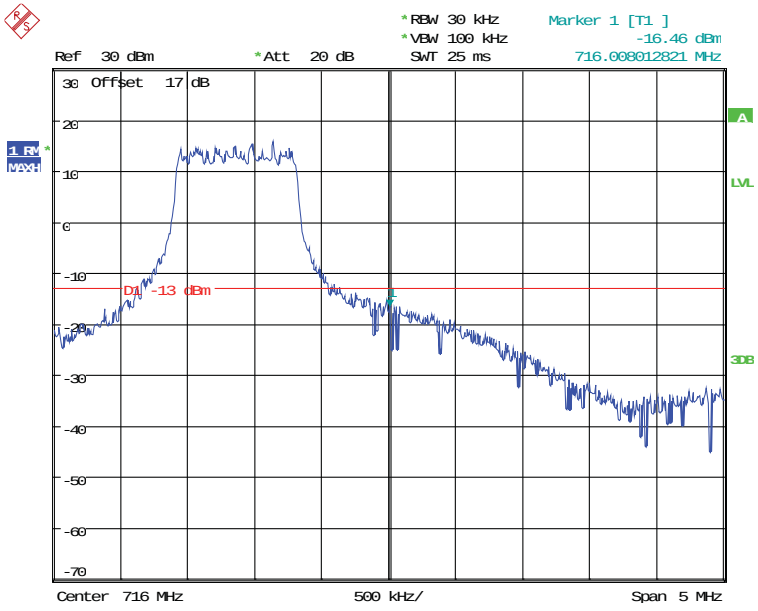
Date: 8.JUN.2018 16:55:07

16QAM (10MHz, RB5) – Left Band Edge



Date: 8.JUN.2018 16:42:20

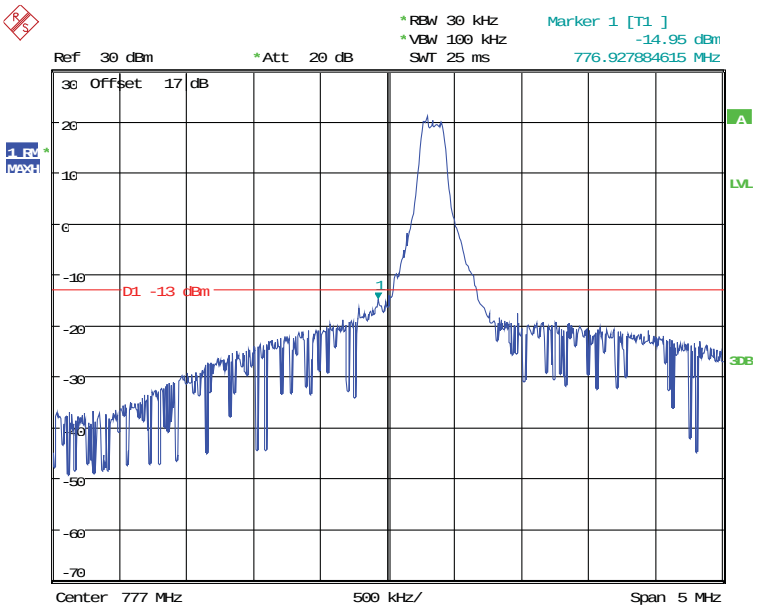
16QAM (10MHz, RB5) – Right Band Edge



Date: 8.JUN.2018 16:54:15

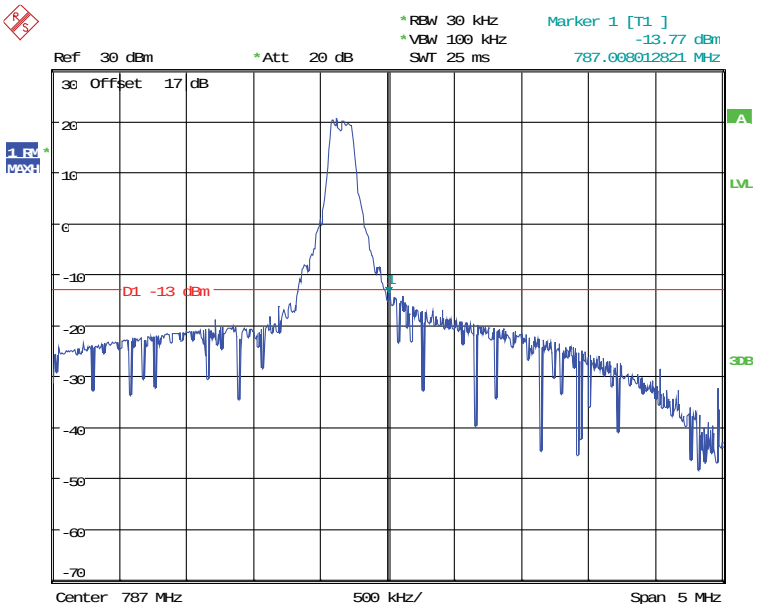
LTE Band 13

QPSK (5MHz, RB0) – Left Band Edge



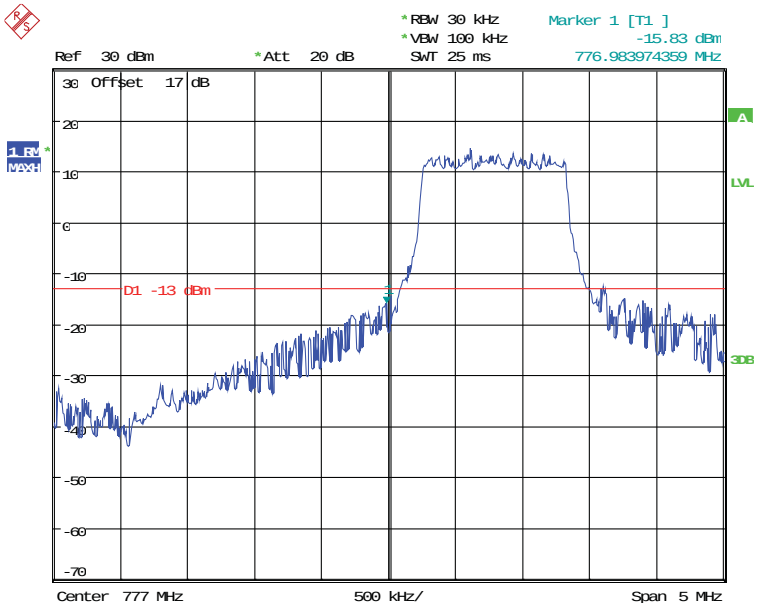
Date: 8.JUN.2018 17:02:01

QPSK (5MHz, RB0) – Right Band Edge



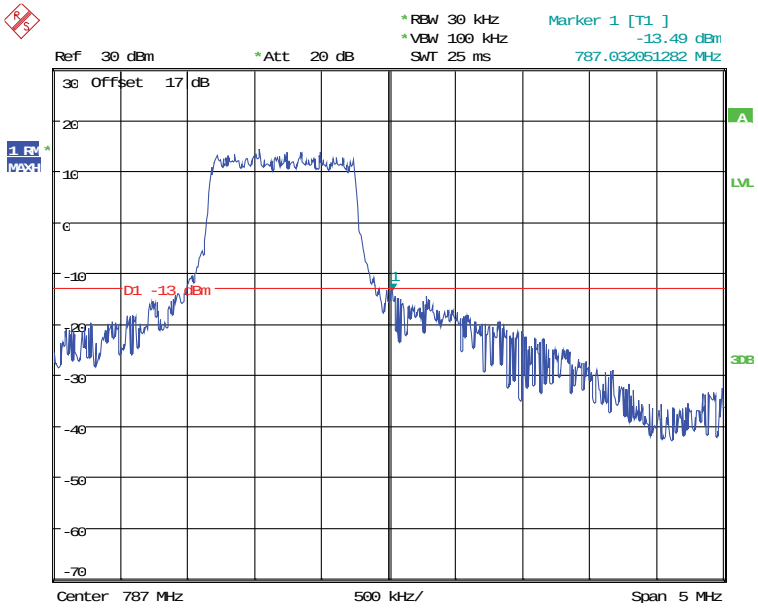
Date: 8.JUN.2018 17:20:09

QPSK (5MHz, RB6) – Left Band Edge



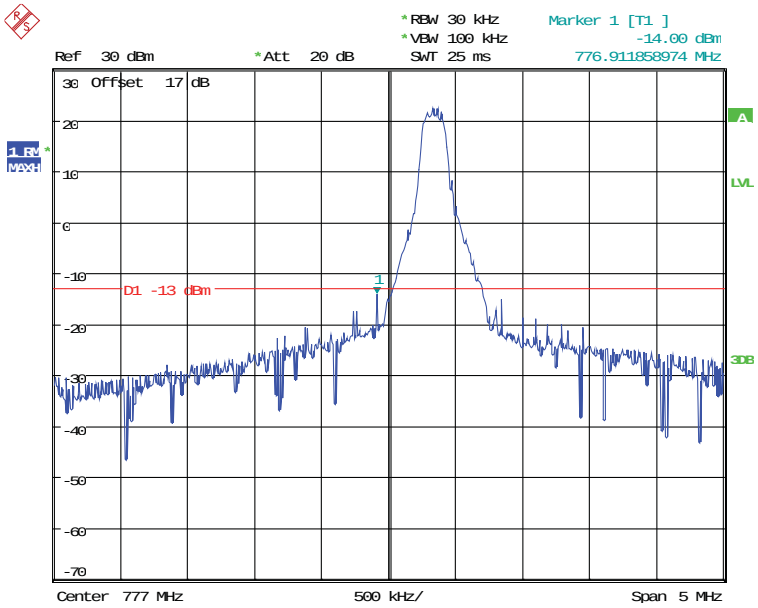
Date: 8.JUN.2018 17:02:37

QPSK (5MHz, RB6) – Right Band Edge



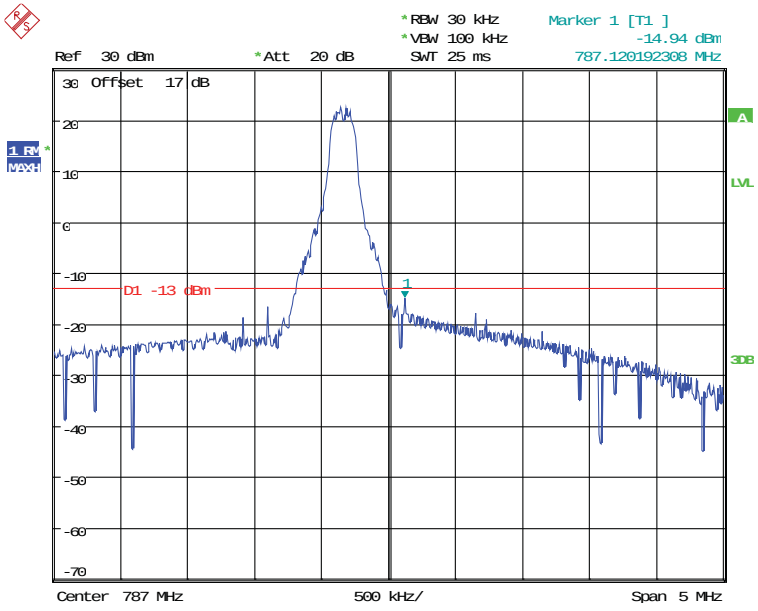
Date: 8.JUN.2018 17:19:01

16QAM (5MHz, RB0) – Left Band Edge



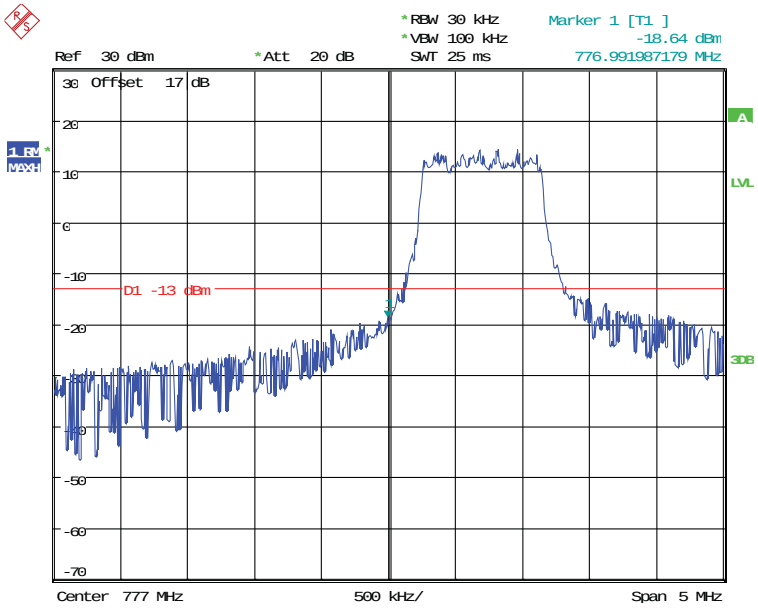
Date: 8.JUN.2018 17:01:30

16QAM (5MHz, RB0) – Right Band Edge



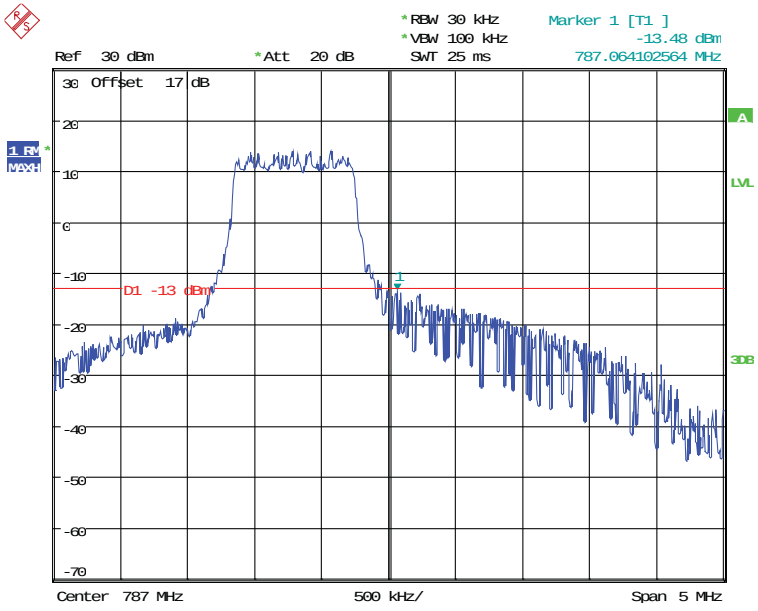
Date: 8.JUN.2018 17:21:37

16QAM (5MHz, RB5) – Left Band Edge



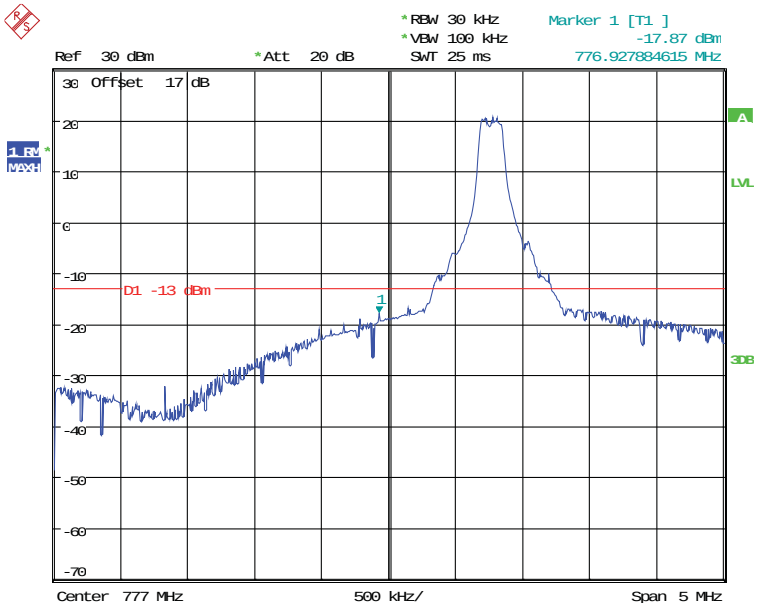
Date: 8.JUN.2018 17:00:31

16QAM (5MHz, RB5) – Right Band Edge



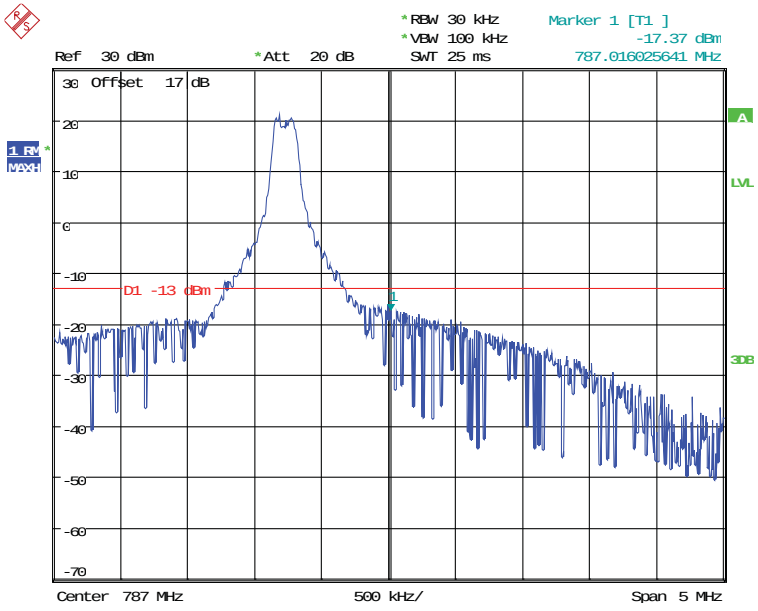
Date: 8.JUN.2018 17:23:39

QPSK (10MHz, RB0) – Left Band Edge



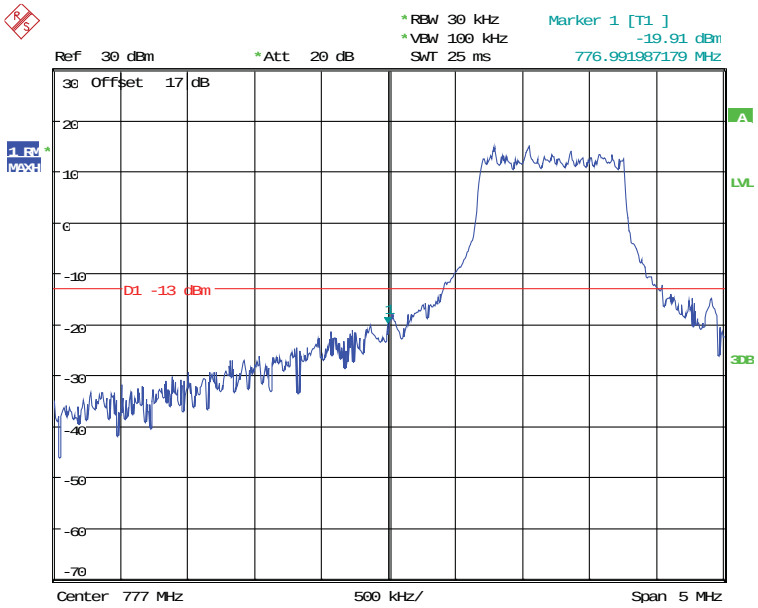
Date: 8.JUN.2018 17:06:22

QPSK (10MHz, RB0) – Right Band Edge



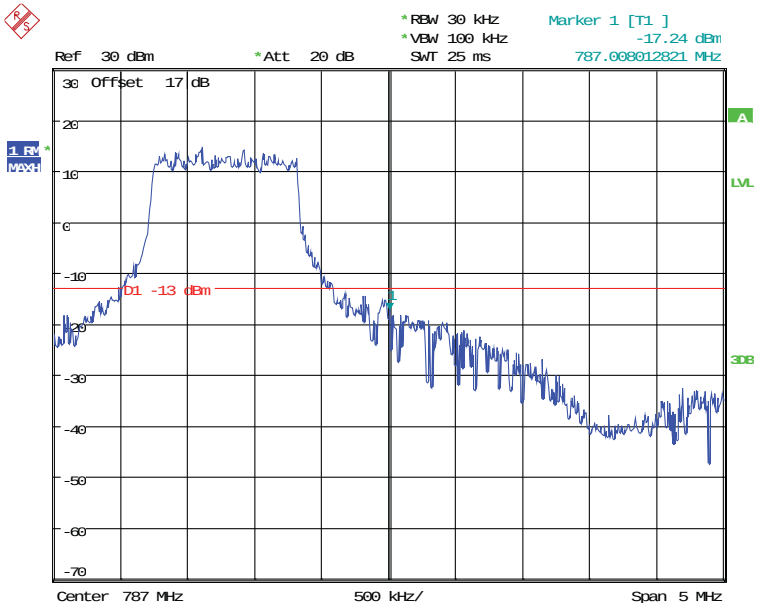
Date: 8.JUN.2018 17:16:21

QPSK (10MHz, RB6) – Left Band Edge



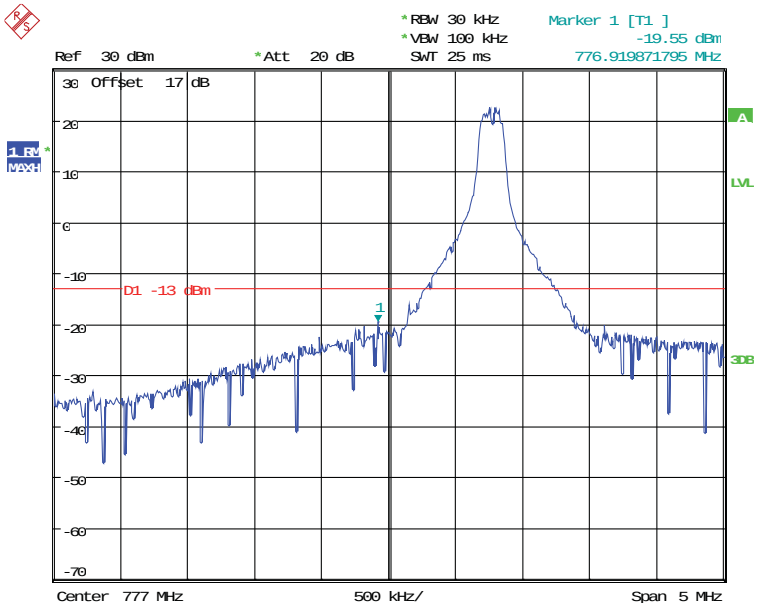
Date: 8.JUN.2018 17:05:14

QPSK (10MHz, RB6) – Right Band Edge



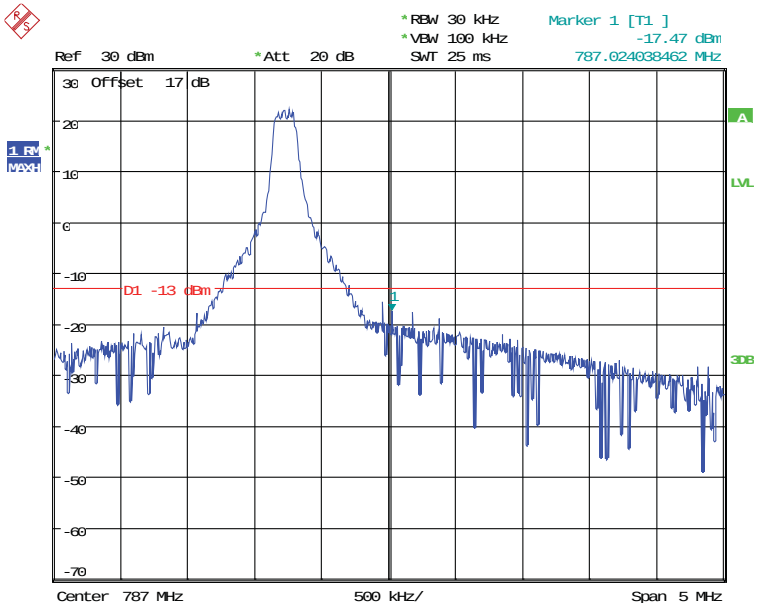
Date: 8.JUN.2018 17:17:02

16QAM (10MHz, RB0) – Left Band Edge



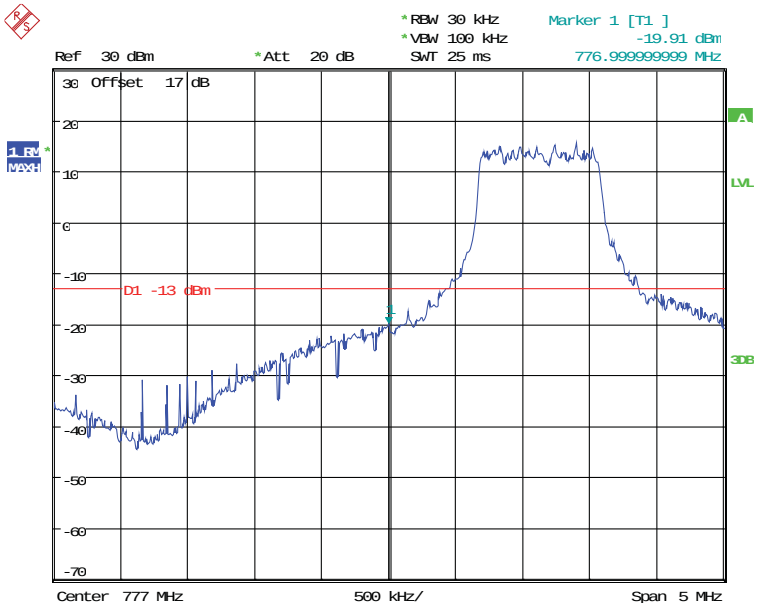
Date: 8.JUN.2018 17:07:08

16QAM (10MHz, RB0) – Right Band Edge



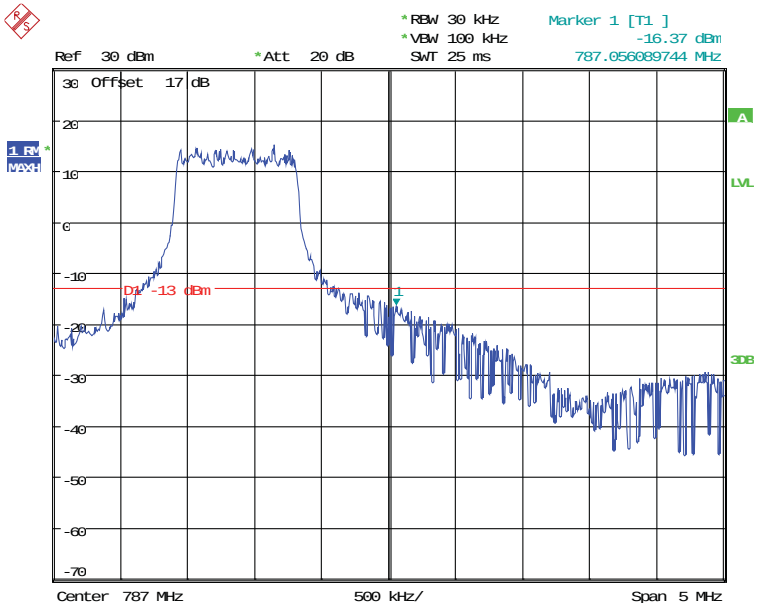
Date: 8.JUN.2018 17:15:31

16QAM (10MHz, RB5) – Left Band Edge



Date: 8.JUN.2018 17:08:04

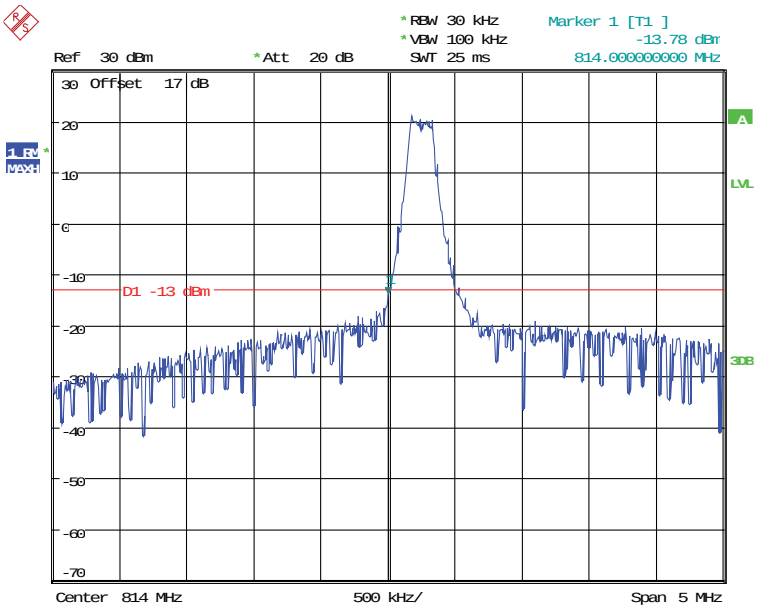
16QAM (10MHz, RB5) – Right Band Edge



Date: 8.JUN.2018 17:14:16

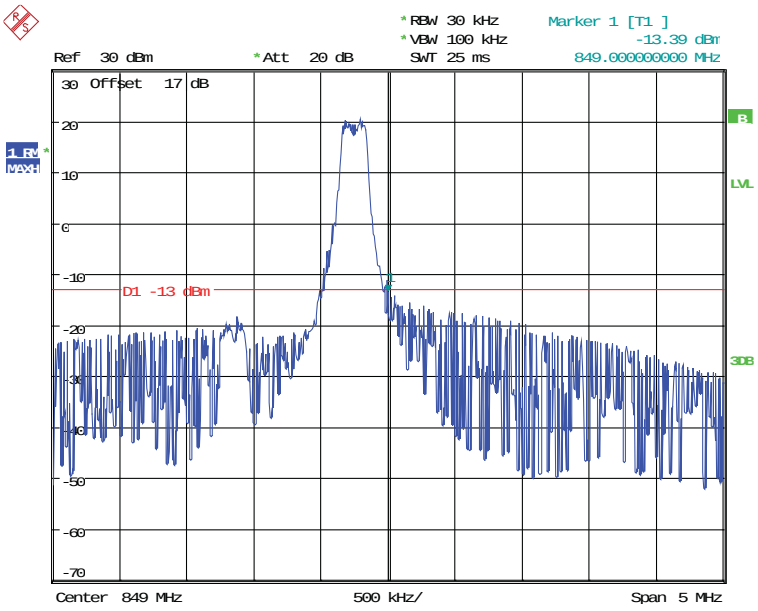
LTE Band 26

QPSK (1.4MHz, RB0) – Left Band Edge



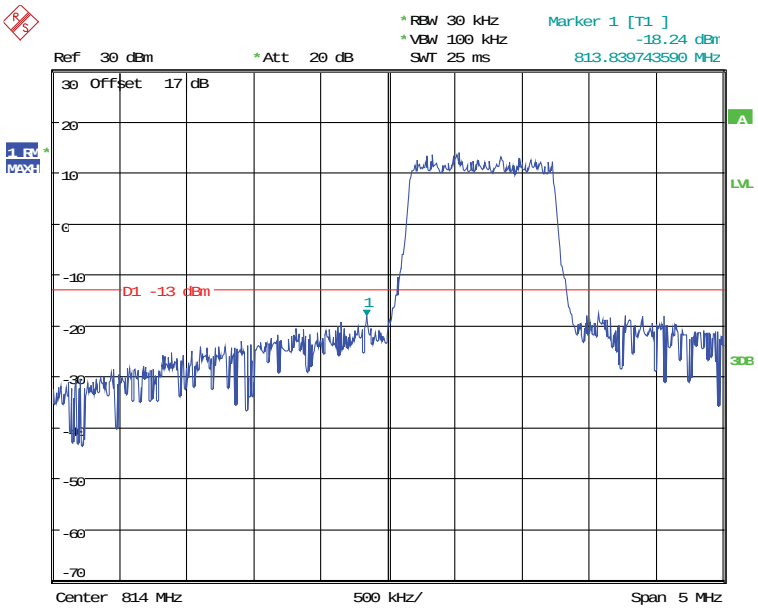
Date: 12.JUL.2018 16:51:21

QPSK (1.4MHz, RB0) – Right Band Edge



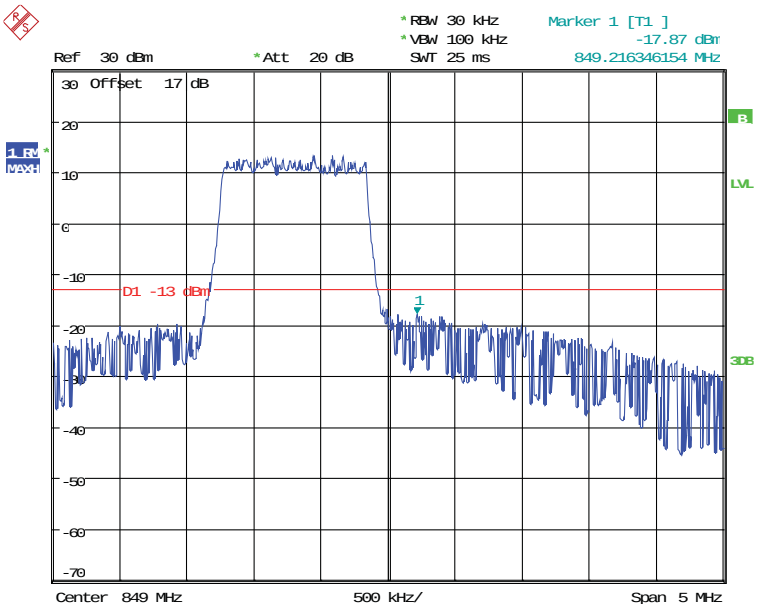
Date: 12.JUL.2018 16:52:55

QPSK (1.4MHz, RB6) – Left Band Edge



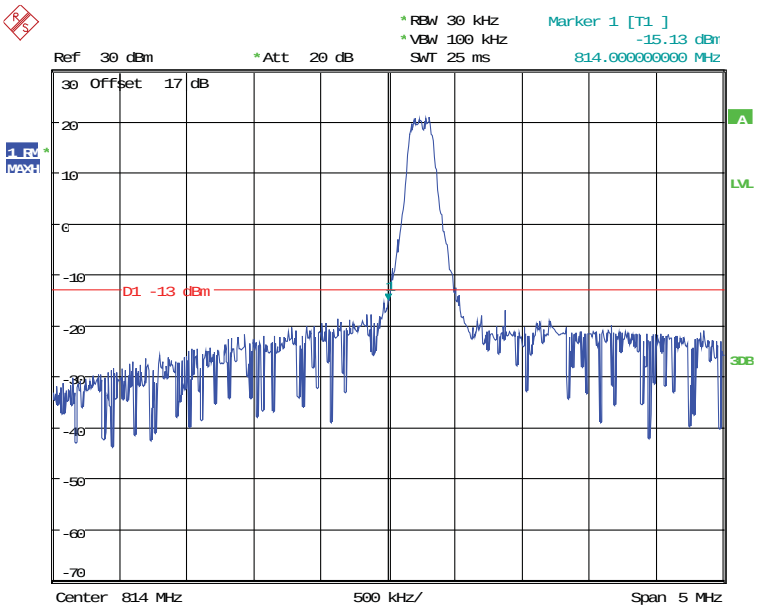
Date: 12.JUL.2018 16:49:08

QPSK (1.4MHz, RB6) – Right Band Edge



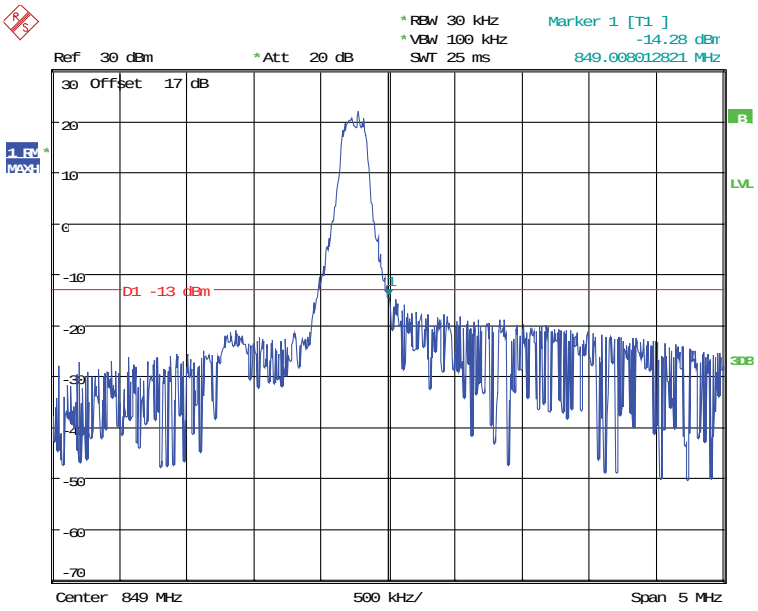
Date: 12.JUL.2018 16:54:58

16QAM (1.4MHz, RB0) – Left Band Edge



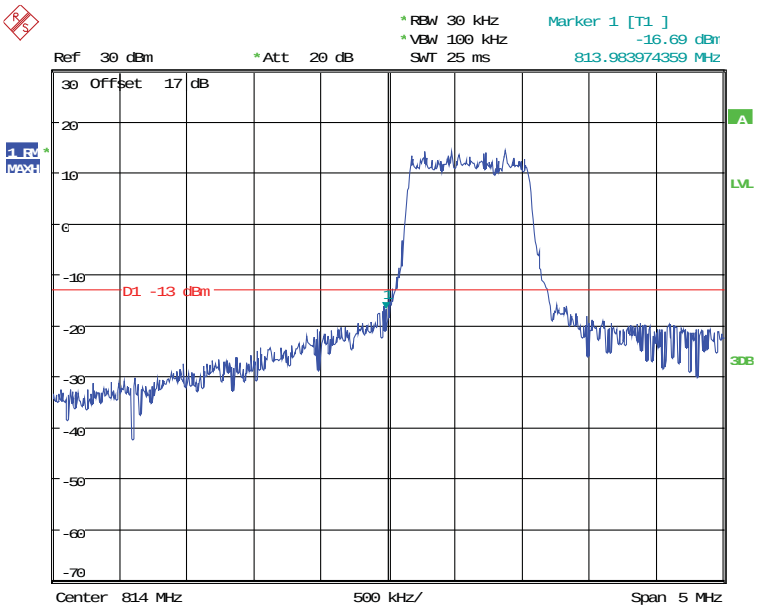
Date: 12.JUL.2018 16:50:34

16QAM (1.4MHz, RB0) – Right Band Edge



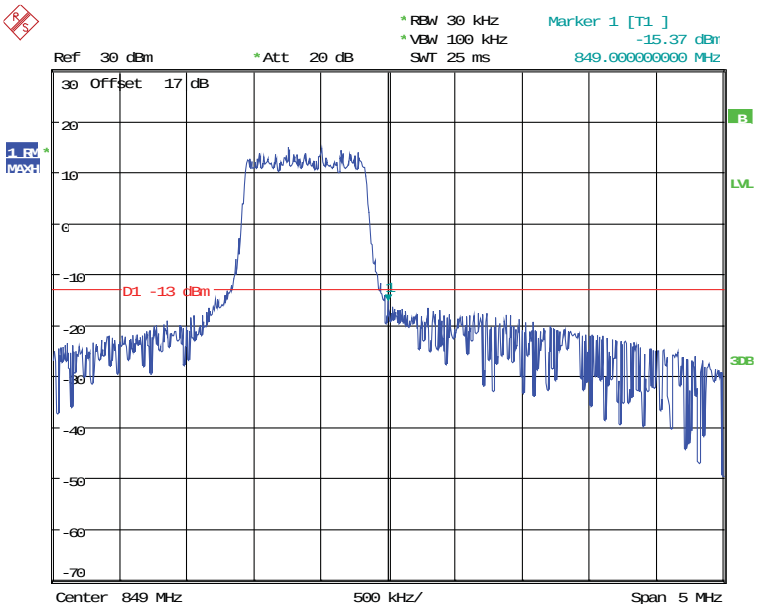
Date: 12.JUL.2018 16:53:56

16QAM (1.4MHz, RB5) – Left Band Edge



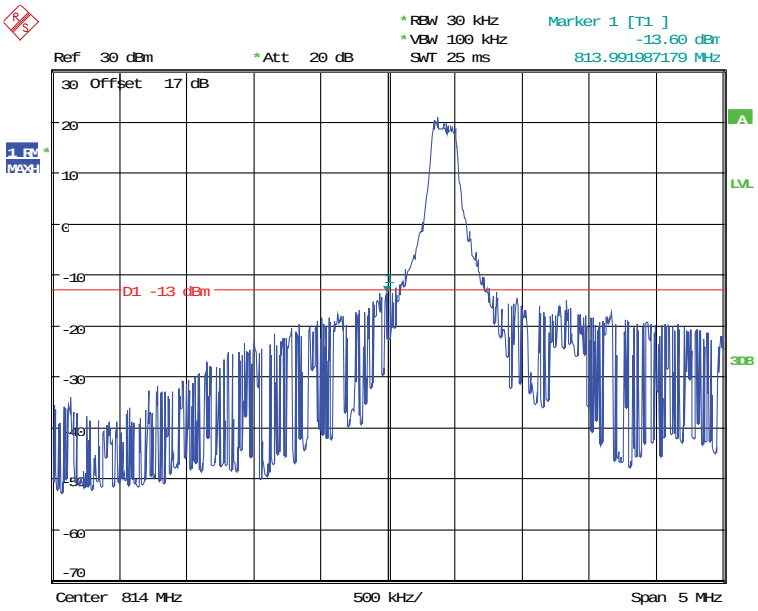
Date: 12.JUL.2018 16:49:55

16QAM (1.4MHz, RB5) – Right Band Edge



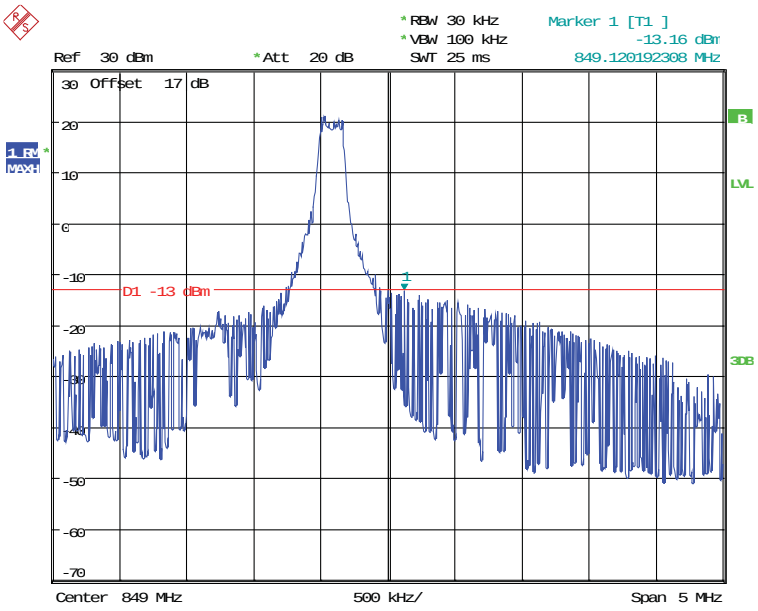
Date: 12.JUL.2018 16:54:28

QPSK (3MHz, RB0) – Left Band Edge



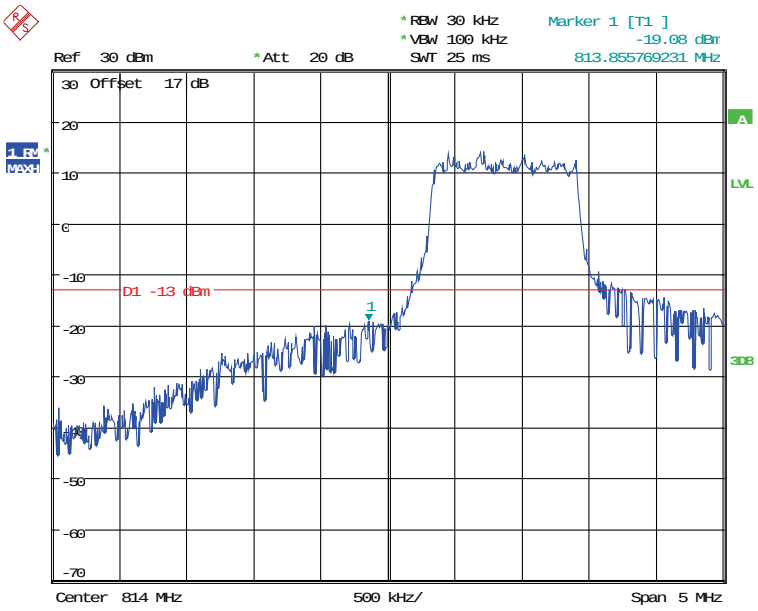
Date: 12.JUL.2018 17:06:52

QPSK (3MHz, RB0) – Right Band Edge



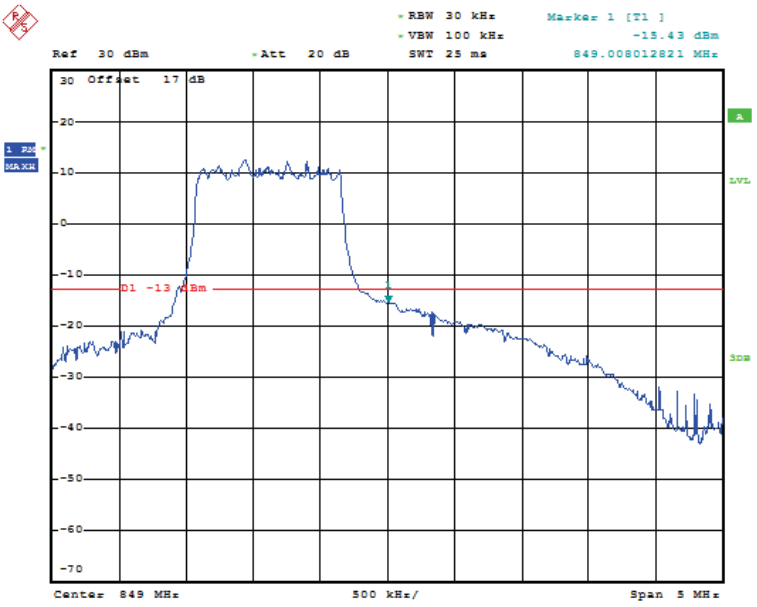
Date: 12.JUL.2018 17:03:25

QPSK (3MHz, RB6) – Left Band Edge



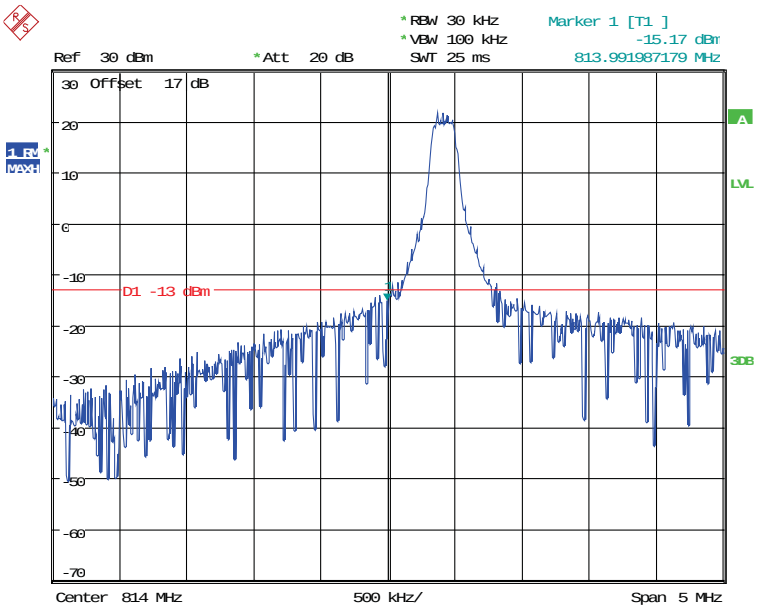
Date: 12.JUL.2018 17:09:00

QPSK (3MHz, RB6) – Right Band Edge



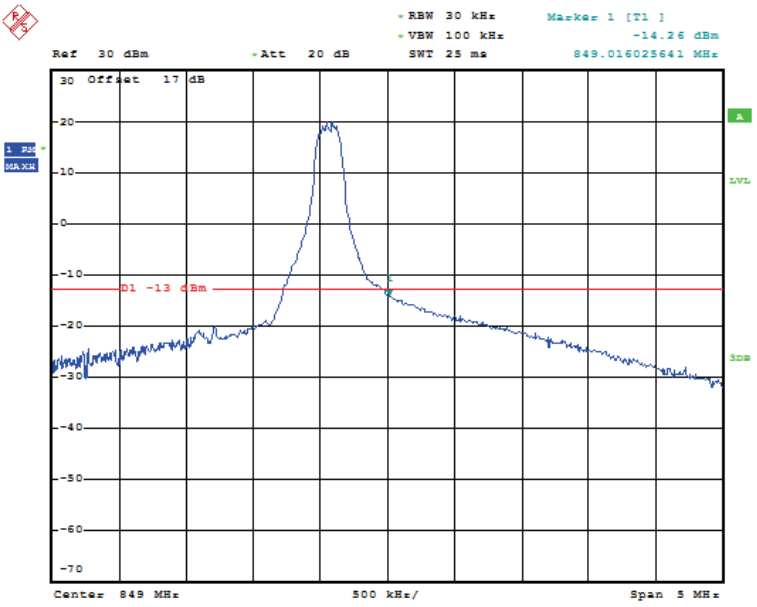
Date: 14.JUL.2018 12:41:41

16QAM (3MHz, RB0) – Left Band Edge



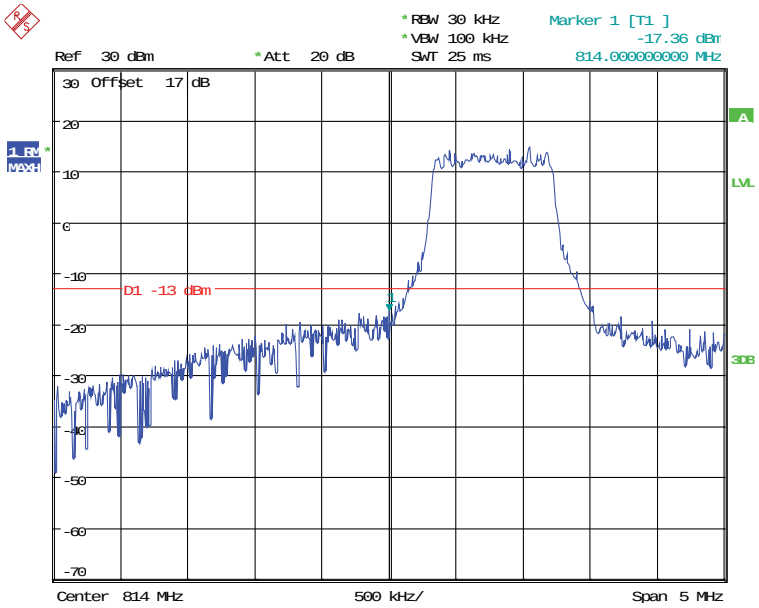
Date: 12.JUL.2018 17:07:43

16QAM (3MHz, RB0) – Right Band Edge



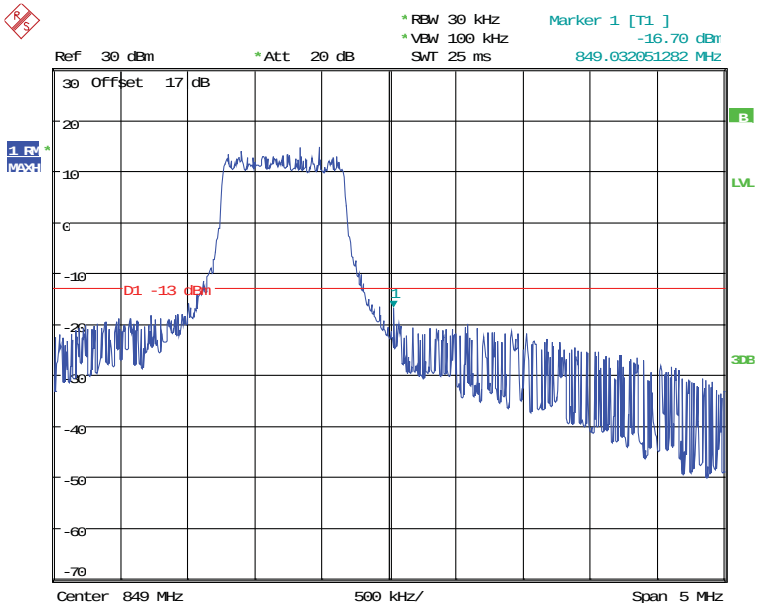
Date: 14.JUL.2018 11:42:27

16QAM (3MHz, RB5) – Left Band Edge



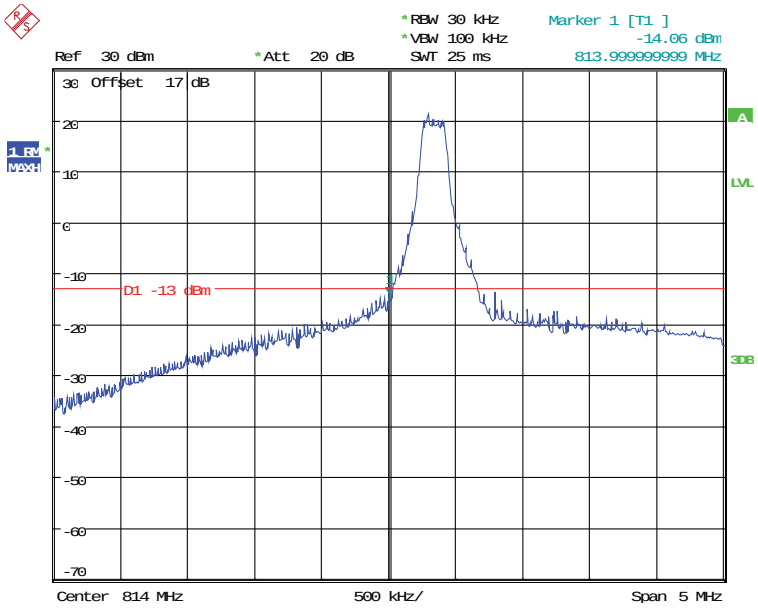
Date: 12.JUL.2018 17:08:26

16QAM (3MHz, RB5) – Right Band Edge



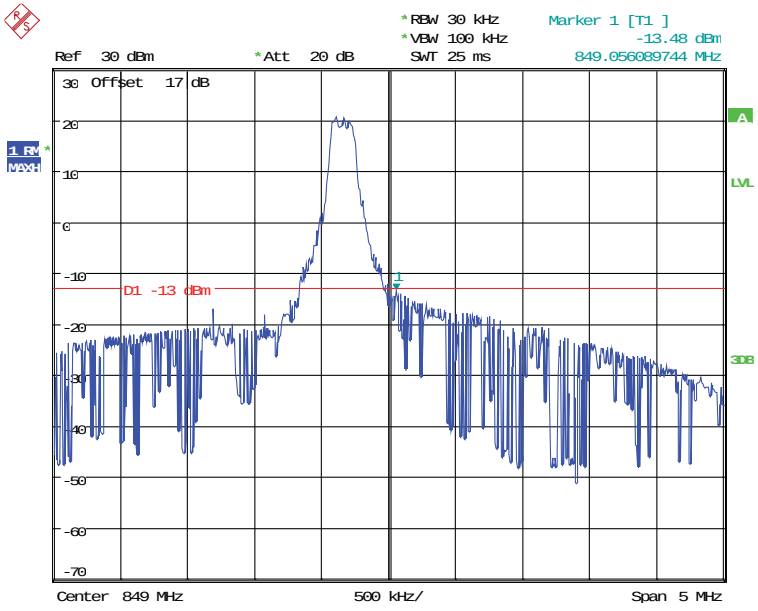
Date: 12.JUL.2018 16:58:39

QPSK (5MHz, RB0) – Left Band Edge



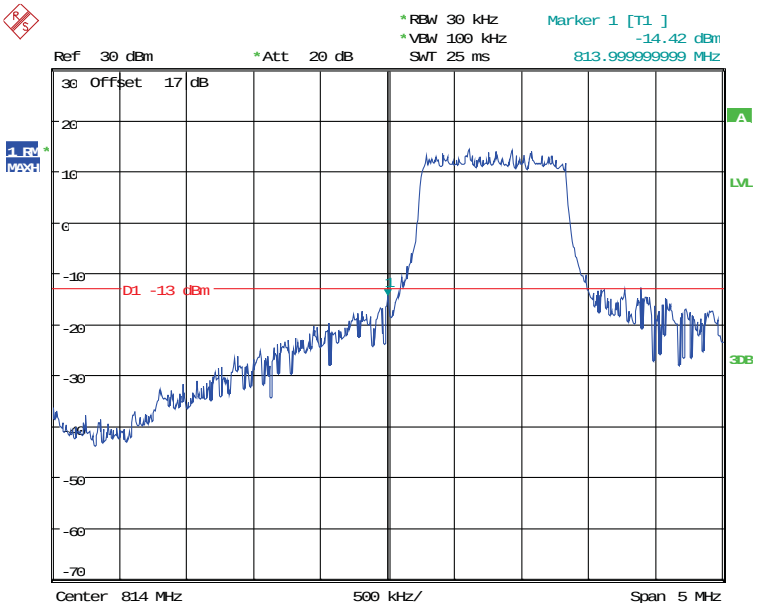
Date: 11.JUN.2018 11:40:01

QPSK (5MHz, RB0) – Right Band Edge



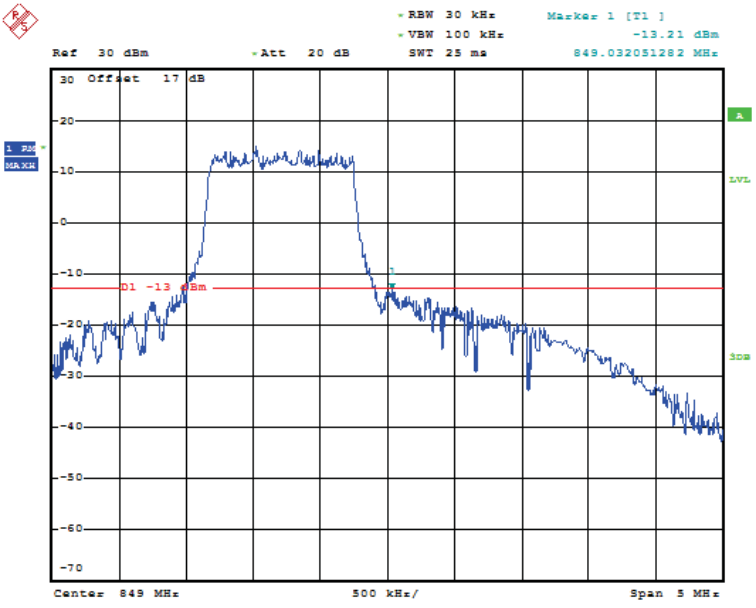
Date: 11.JUN.2018 13:33:20

QPSK (5MHz, RB6) – Left Band Edge



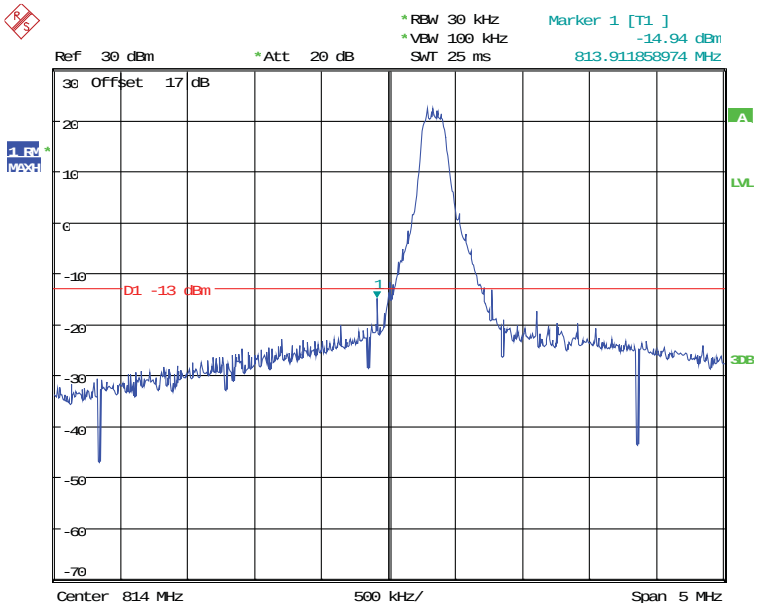
Date: 11.JUN.2018 11:41:21

QPSK (5MHz, RB6) – Right Band Edge



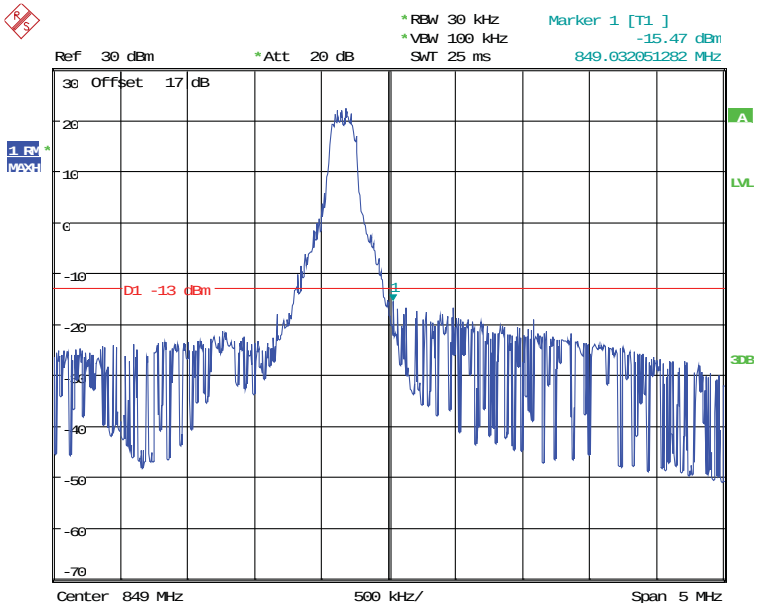
Date: 11.JUN.2018 13:31:20

16QAM (5MHz, RB0) – Left Band Edge



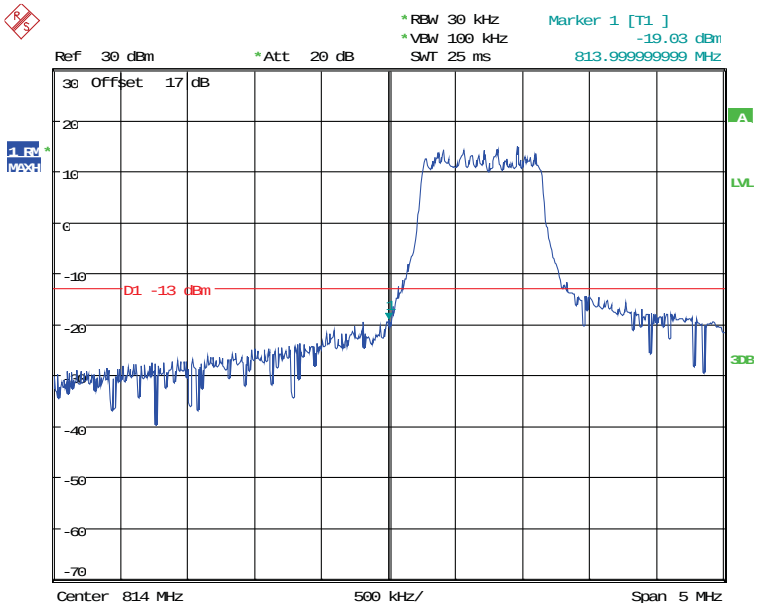
Date: 11.JUN.2018 11:42:57

16QAM (5MHz, RB0) – Right Band Edge



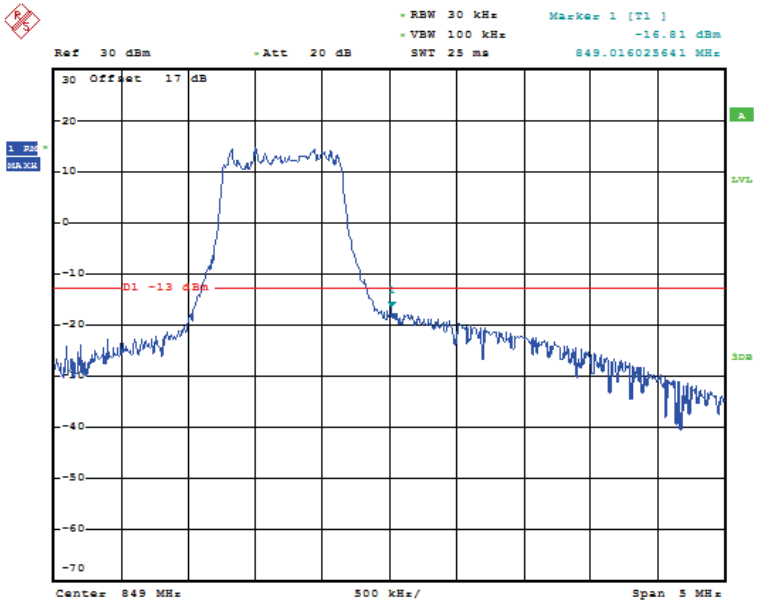
Date: 11.JUN.2018 13:26:53

16QAM (5MHz, RB5) – Left Band Edge



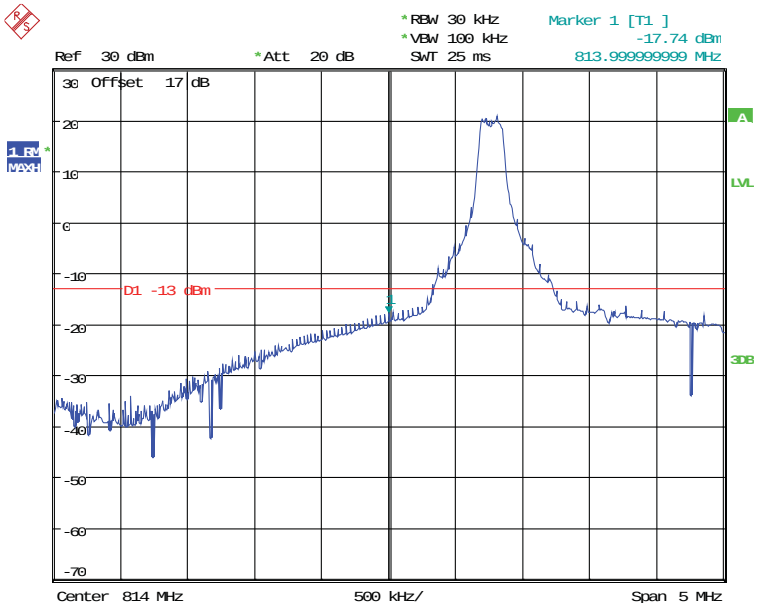
Date: 11.JUN.2018 11:41:58

16QAM (5MHz, RB5) – Right Band Edge



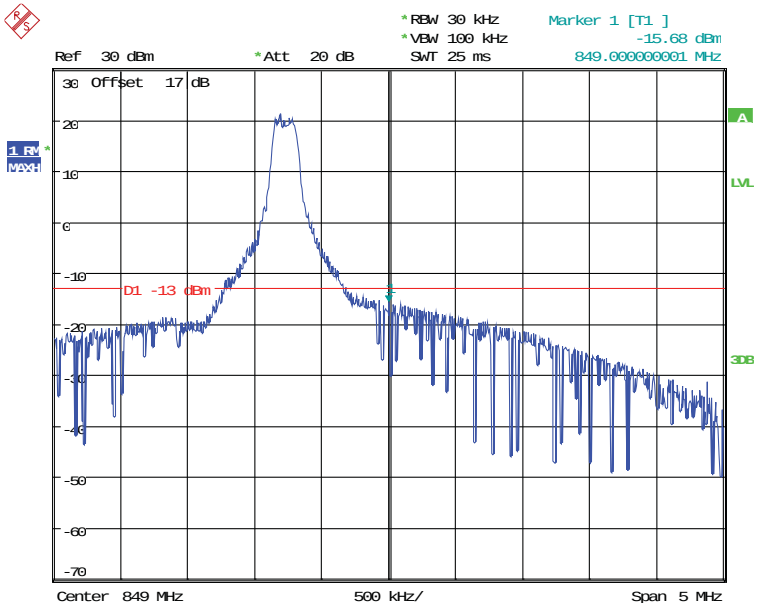
Date: 14.JUL.2018 13:08:13

QPSK (10MHz, RB0) – Left Band Edge



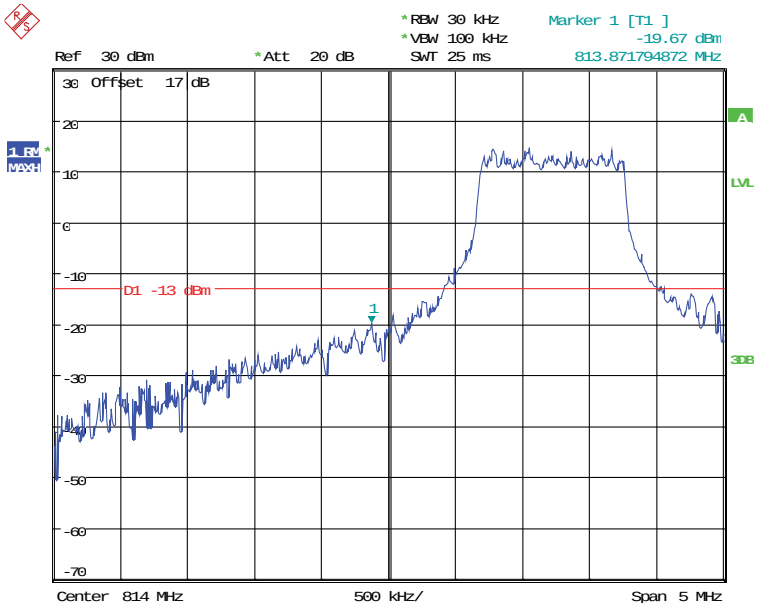
Date: 11.JUN.2018 13:09:00

QPSK (10MHz, RB0) – Right Band Edge



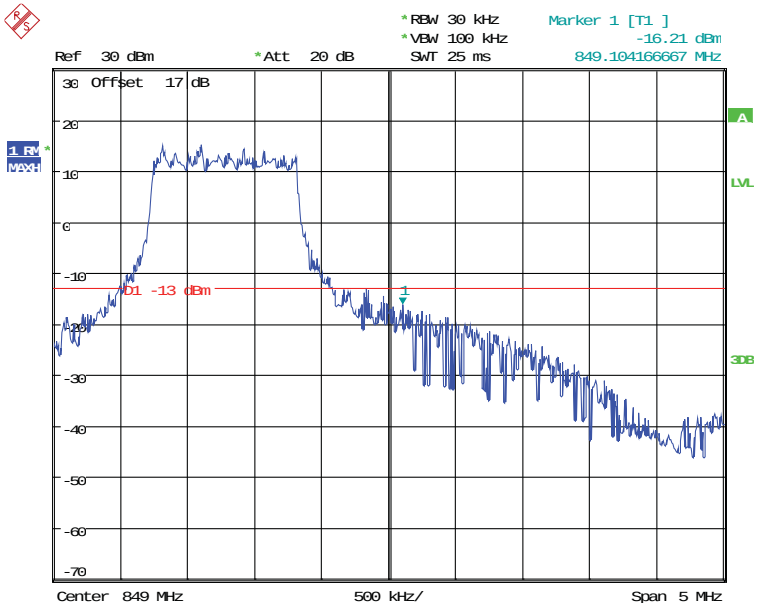
Date: 11.JUN.2018 13:23:38

QPSK (10MHz, RB6) – Left Band Edge



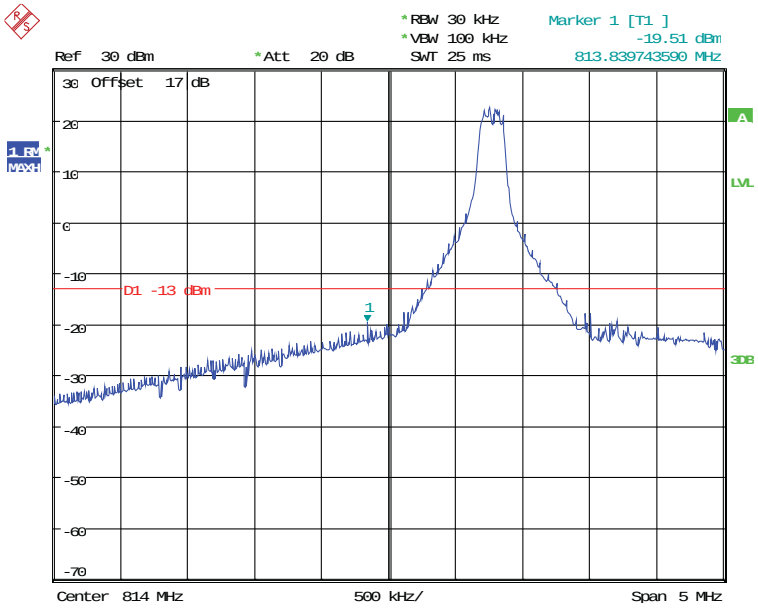
Date: 11.JUN.2018 13:07:48

QPSK (10MHz, RB6) – Right Band Edge



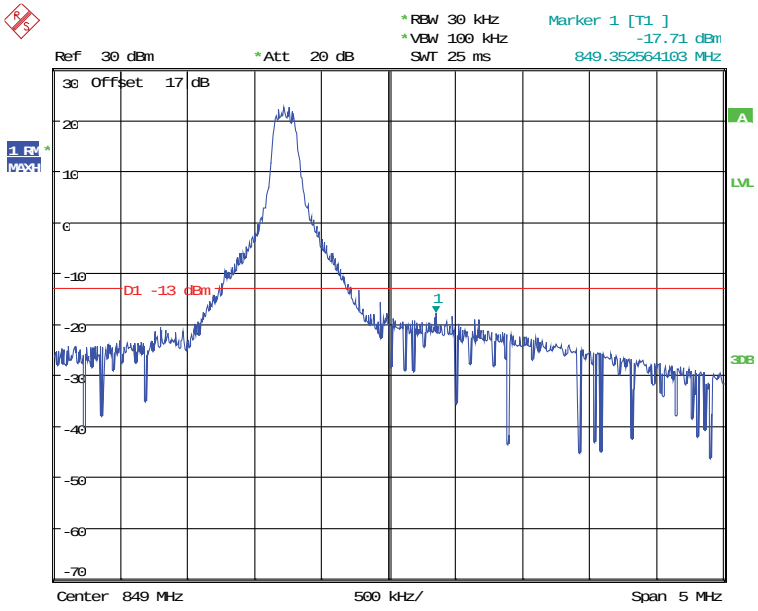
Date: 11.JUN.2018 13:24:24

16QAM (10MHz, RB0) – Left Band Edge



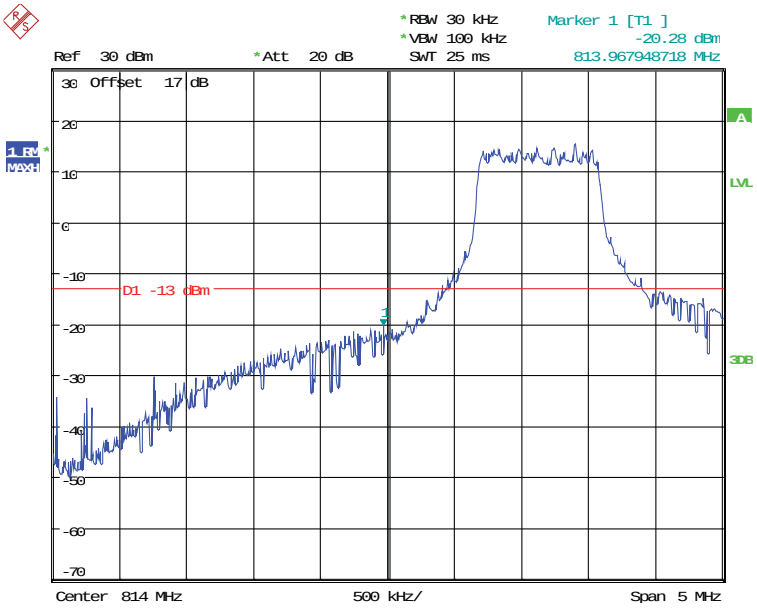
Date: 11.JUN.2018 13:10:05

16QAM (10MHz, RB0) – Right Band Edge



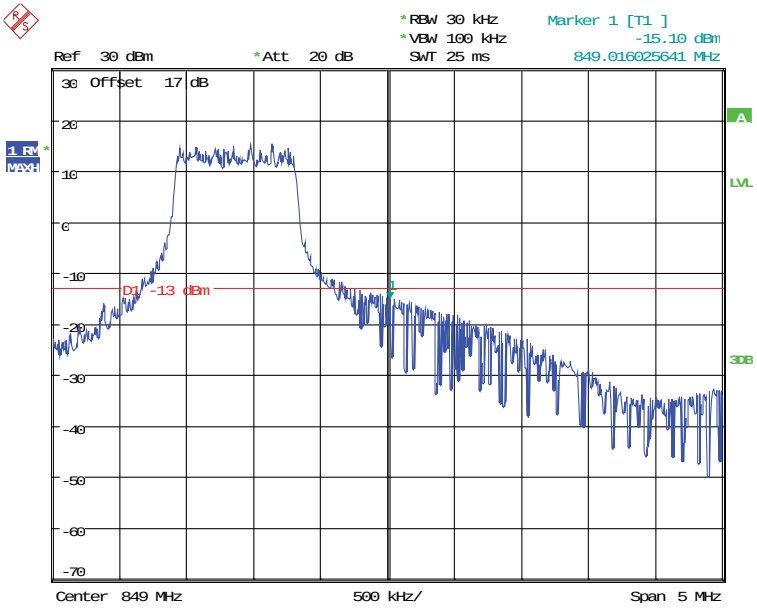
Date: 11.JUN.2018 13:22:58

16QAM (10MHz, RB5) – Left Band Edge



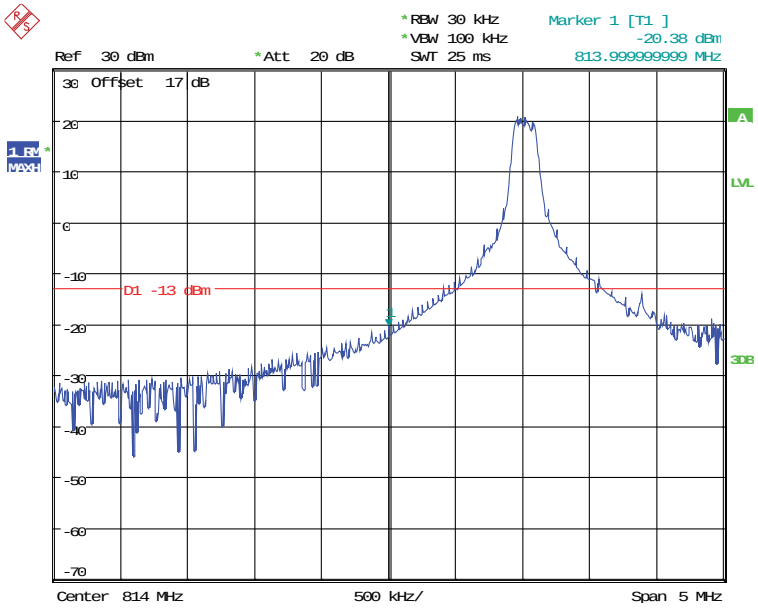
Date: 11.JUN.2018 13:10:43

16QAM (10MHz, RB5) – Right Band Edge



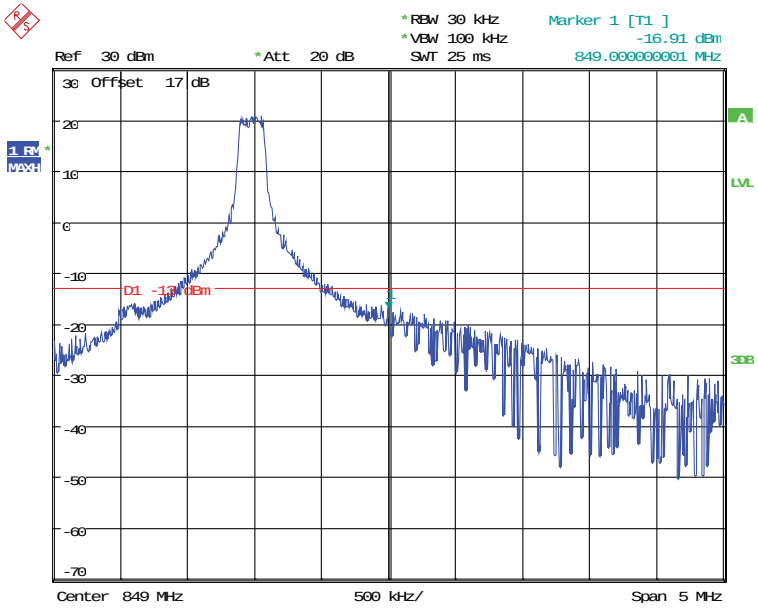
Date: 11.JUN.2018 13:22:10

QPSK (15MHz, RB0) – Left Band Edge



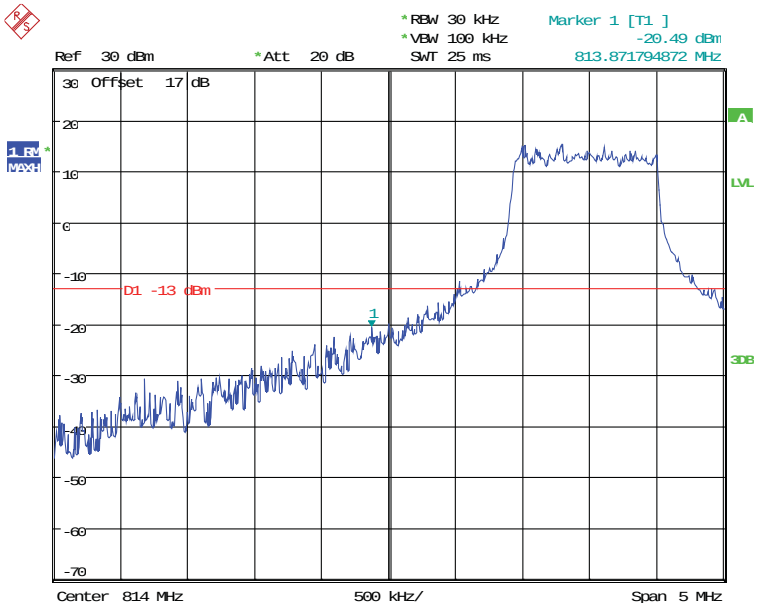
Date: 11.JUN.2018 13:14:19

QPSK (15MHz, RB0) – Right Band Edge



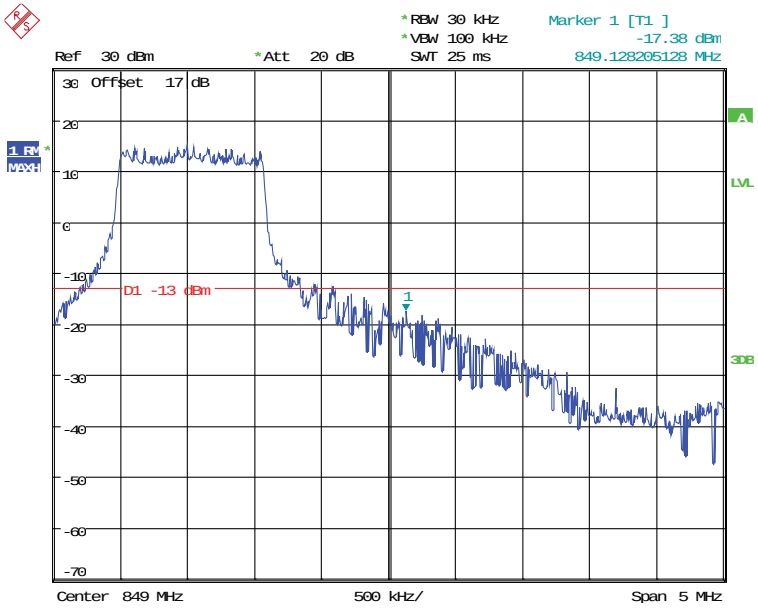
Date: 11.JUN.2018 13:19:31

QPSK (15MHz, RB6) – Left Band Edge



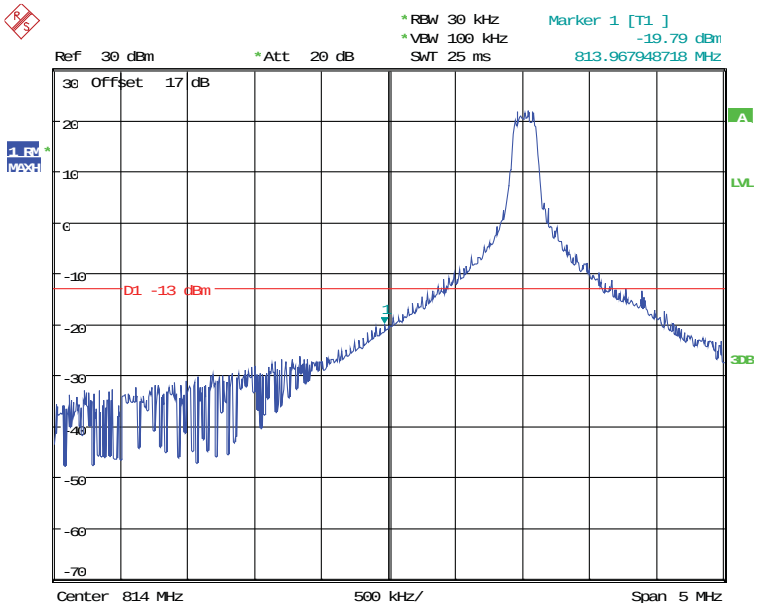
Date: 11.JUN.2018 13:13:33

QPSK (15MHz, RB6) – Right Band Edge



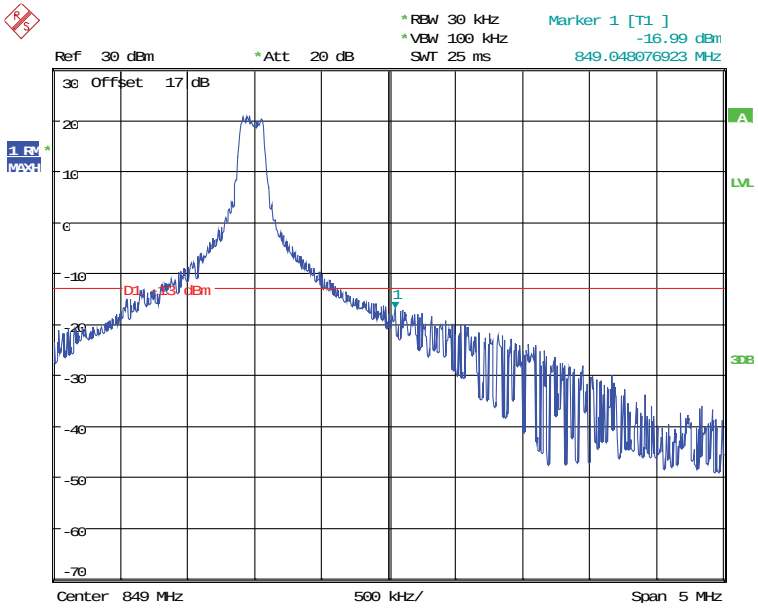
Date: 11.JUN.2018 13:20:11

16QAM (15MHz, RB0) – Left Band Edge



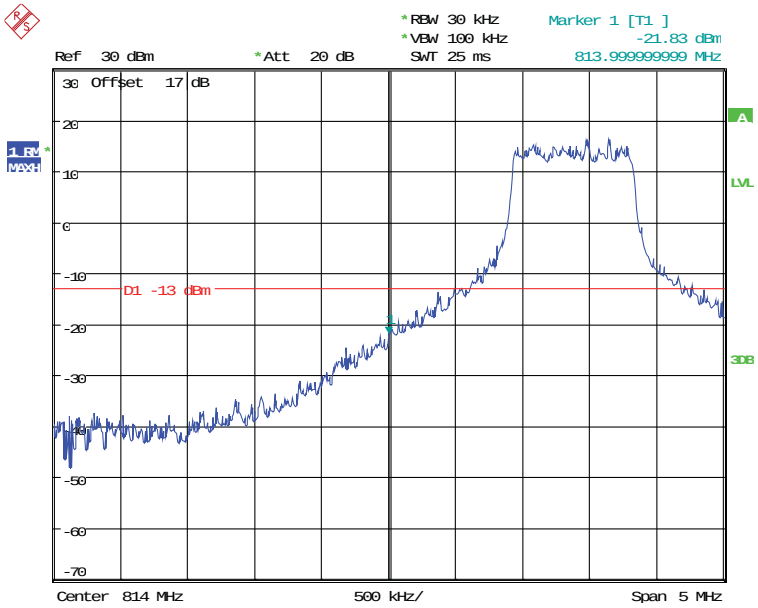
Date: 11.JUN.2018 13:14:46

16QAM (15MHz, RB0) – Right Band Edge



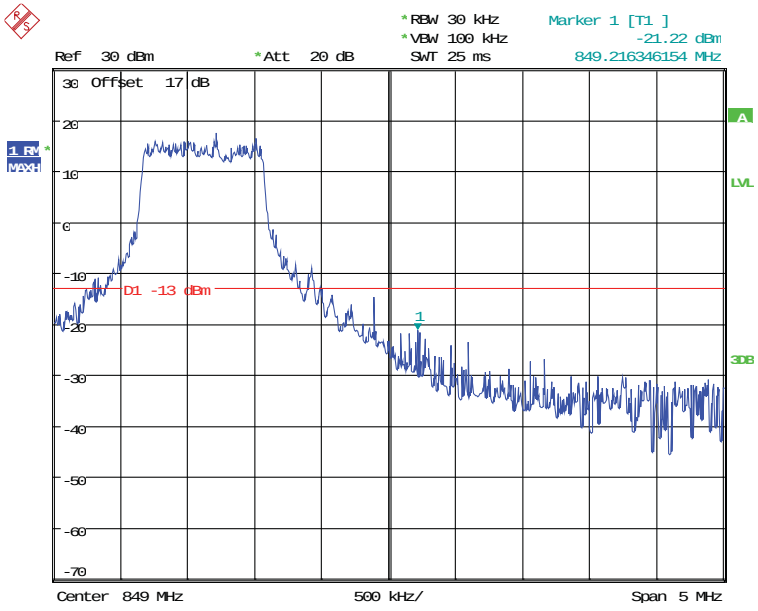
Date: 11.JUN.2018 13:18:58

16QAM (15MHz, RB5) – Left Band Edge



Date: 11.JUN.2018 13:15:17

16QAM (15MHz, RB5) – Right Band Edge



Date: 11.JUN.2018 13:18:15

FCC §2.1055, §22.355 & §24.235 & §27.54& §90.213 – FREQUENCY STABILITY

Applicable Standard

FCC § 2.1055 (a), § 2.1055 (d), §22.355, §24.235，§27.54, §90.213.

Test Procedure

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to communication test set via feed-through attenuators. The EUT was placed inside the temperature chamber. The DC leads and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the communication test set.

Frequency Stability vs. Voltage: An external variable DC power supply was connected to the battery terminals of the equipment under test. The voltage was set from 85% to 115% of the nominal value and was then decreased until the transmitter light no longer illuminated; i.e., the battery end point. The output frequency was recorded for each battery voltage.

Environmental Conditions

Temperature:	25 ℃
Relative Humidity:	55 %
ATM Pressure:	1010 hPa

The testing was performed by Tom Hsu on 2018-06-08.

Test Results

Band 2_QPSK

10.0 MHz Middle Channel, fo =1880 MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	12	17	0.009	PASS
-20	12	19	0.010	PASS
-10	12	21	0.011	PASS
0	12	22	0.012	PASS
10	12	18	0.010	PASS
20	12	16	0.009	PASS
30	12	27	0.014	PASS
40	12	23	0.012	PASS
50	12	25	0.013	PASS
25	10.2	18	0.010	PASS
25	13.8	24	0.013	PASS

Band 2_16QAM

10.0 MHz Middle Channel, fo =1880 MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	12	21	0.011	PASS
-20	12	17	0.009	PASS
-10	12	25	0.013	PASS
0	12	30	0.016	PASS
10	12	18	0.010	PASS
20	12	19	0.010	PASS
30	12	26	0.014	PASS
40	12	7	0.004	PASS
50	12	22	0.012	PASS
25	10.2	9	0.005	PASS
25	13.8	25	0.013	PASS

Band 4_QPSK

10.0 MHz Middle Channel, fo =1732.5 MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	12	32	0.018	PASS
-20	12	23	0.013	PASS
-10	12	18	0.010	PASS
0	12	15	0.009	PASS
10	12	19	0.011	PASS
20	12	22	0.013	PASS
30	12	24	0.014	PASS
40	12	2	0.001	PASS
50	12	21	0.012	PASS
25	10.2	22	0.013	PASS
25	13.8	17	0.010	PASS

Band 4_16QAM

10.0 MHz Middle Channel, fo =1732.5 MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	12	26	0.015	PASS
-20	12	4	0.002	PASS
-10	12	27	0.016	PASS
0	12	20	0.012	PASS
10	12	18	0.010	PASS
20	12	17	0.010	PASS
30	12	22	0.013	PASS
40	12	6	0.003	PASS
50	12	21	0.012	PASS
25	10.2	23	0.013	PASS
25	13.8	25	0.014	PASS

Band 5_QPSK

10.0 MHz Middle Channel, fo =836.5 MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	12	18	0.022	PASS
-20	12	6	0.007	PASS
-10	12	23	0.027	PASS
0	12	20	0.024	PASS
10	12	29	0.035	PASS
20	12	24	0.029	PASS
30	12	22	0.026	PASS
40	12	17	0.020	PASS
50	12	31	0.037	PASS
25	10.2	21	0.025	PASS
25	13.8	24	0.029	PASS

Band 5_16QAM

10.0 MHz Middle Channel, fo =836.5 MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	12	14	0.017	PASS
-20	12	17	0.020	PASS
-10	12	36	0.043	PASS
0	12	18	0.022	PASS
10	12	19	0.023	PASS
20	12	22	0.026	PASS
30	12	23	0.027	PASS
40	12	7	0.008	PASS
50	12	20	0.024	PASS
25	10.2	24	0.029	PASS
25	13.8	26	0.031	PASS

Band 12_QPSK

10.0 MHz Middle Channel, fo =707.5 MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	12	24	0.034	PASS
-20	12	20	0.028	PASS
-10	12	17	0.024	PASS
0	12	23	0.033	PASS
10	12	19	0.027	PASS
20	12	21	0.030	PASS
30	12	20	0.028	PASS
40	12	14	0.020	PASS
50	12	18	0.025	PASS
25	10.2	22	0.031	PASS
25	13.8	25	0.035	PASS

Band 12_16QAM

10.0 MHz Middle Channel, fo =707.5 MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	12	24	0.034	PASS
-20	12	20	0.028	PASS
-10	12	17	0.024	PASS
0	12	23	0.033	PASS
10	12	19	0.027	PASS
20	12	21	0.030	PASS
30	12	20	0.028	PASS
40	12	14	0.020	PASS
50	12	18	0.025	PASS
25	10.2	22	0.031	PASS
25	13.8	25	0.035	PASS

Band 13_QPSK

10.0 MHz Middle Channel, fo =782 MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	12	23	0.029	PASS
-20	12	17	0.022	PASS
-10	12	24	0.031	PASS
0	12	21	0.027	PASS
10	12	26	0.033	PASS
20	12	30	0.038	PASS
30	12	9	0.012	PASS
40	12	14	0.018	PASS
50	12	28	0.036	PASS
25	10.2	10	0.013	PASS
25	13.8	16	0.020	PASS

Band 13_16QAM

10.0 MHz Middle Channel, fo =782 MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	12	30	0.038	PASS
-20	12	28	0.036	PASS
-10	12	14	0.018	PASS
0	12	28	0.036	PASS
10	12	3	0.004	PASS
20	12	21	0.027	PASS
30	12	17	0.022	PASS
40	12	25	0.032	PASS
50	12	33	0.042	PASS
25	10.2	18	0.023	PASS
25	13.8	5	0.006	PASS

Band 26_QPSK

10.0 MHz Middle Channel, fo =836.5 MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	12	28	0.033	PASS
-20	12	21	0.025	PASS
-10	12	17	0.020	PASS
0	12	8	0.010	PASS
10	12	31	0.037	PASS
20	12	20	0.024	PASS
30	12	14	0.017	PASS
40	12	16	0.019	PASS
50	12	11	0.013	PASS
25	10.2	29	0.035	PASS
25	13.8	24	0.029	PASS

Band 26_16QAM

10.0 MHz Middle Channel, fo =836.5 MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	12	27	0.032	PASS
-20	12	21	0.025	PASS
-10	12	20	0.024	PASS
0	12	18	0.022	PASS
10	12	25	0.030	PASS
20	12	31	0.037	PASS
30	12	19	0.023	PASS
40	12	6	0.007	PASS
50	12	12	0.014	PASS
25	10.2	16	0.019	PASS
25	13.8	7	0.008	PASS

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