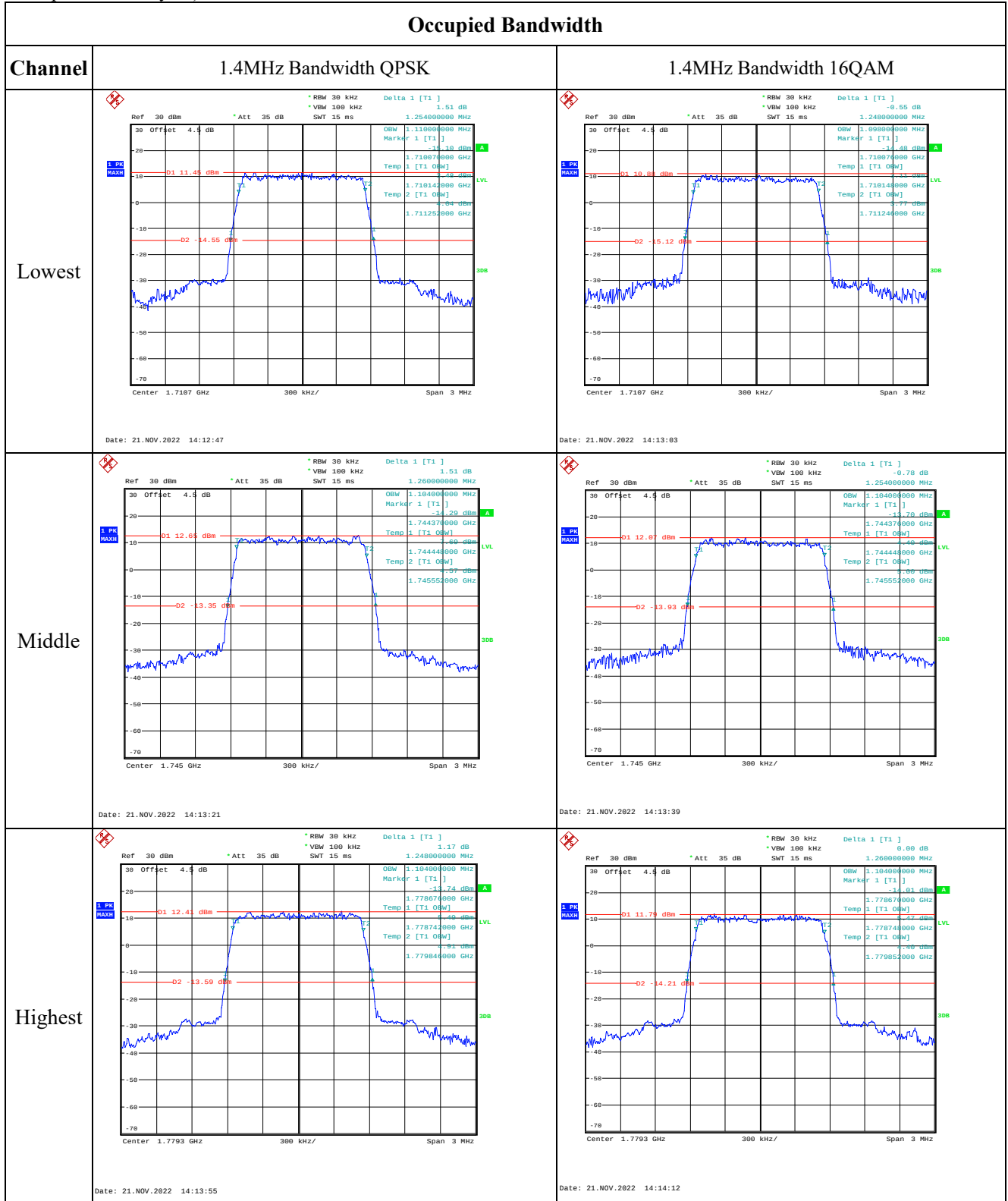
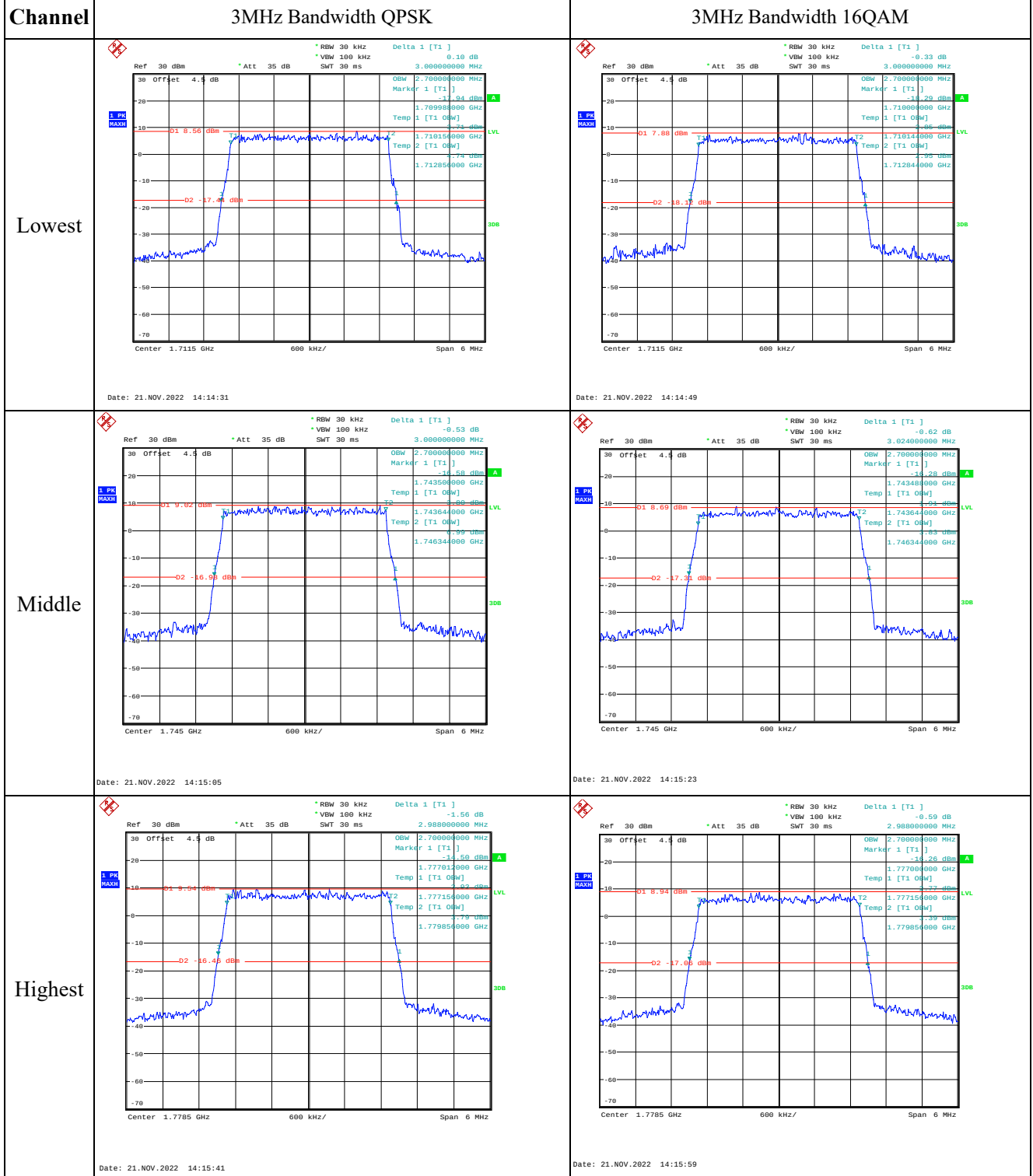


Test Plots(Note: The 4.5dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):



Occupied Bandwidth



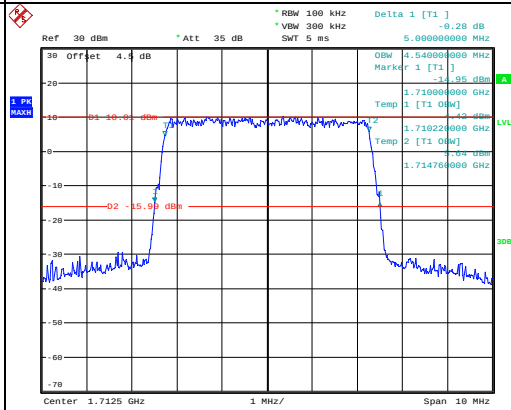
Occupied Bandwidth

Channel

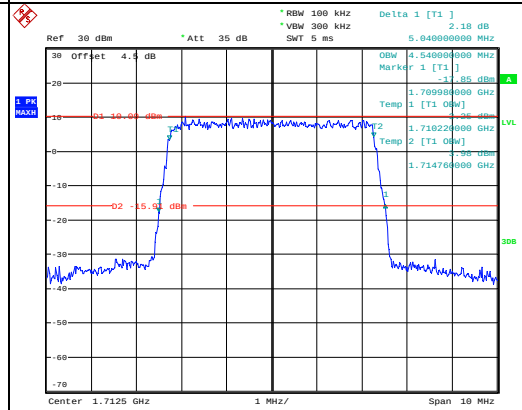
5MHz Bandwidth QPSK

5MHz Bandwidth 16QAM

Lowest

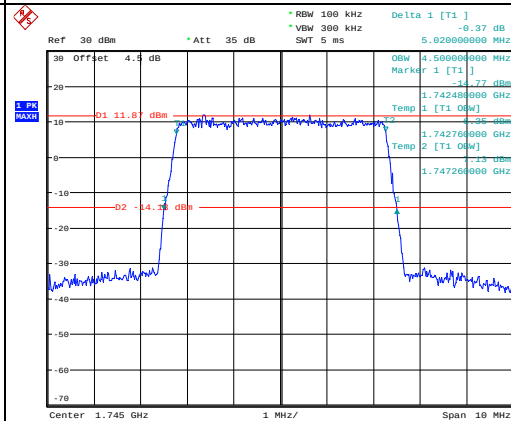


Date: 21.NOV.2022 14:16:18

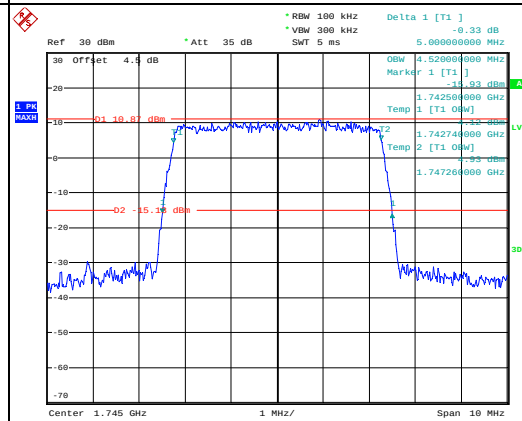


Date: 21.NOV.2022 14:16:36

Middle

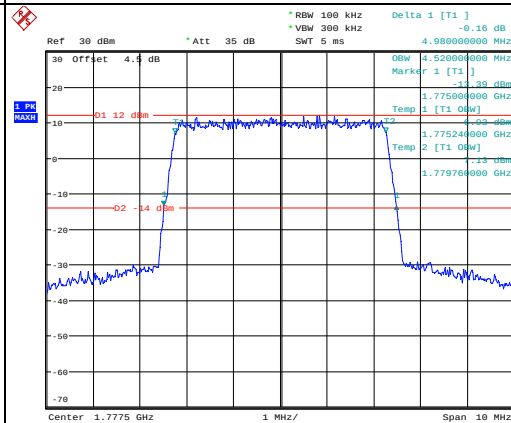


Date: 21.NOV.2022 14:16:55

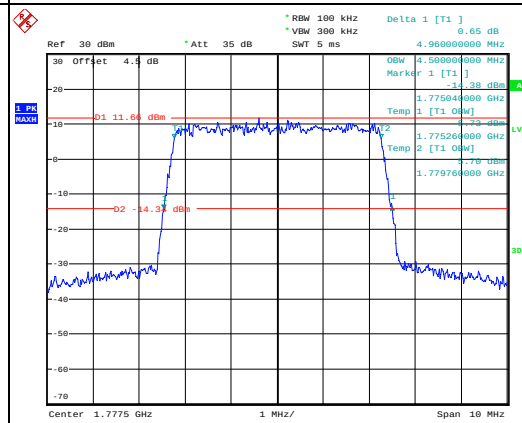


Date: 21.NOV.2022 14:17:14

Highest



Date: 21.NOV.2022 14:17:32



Date: 21.NOV.2022 14:17:50

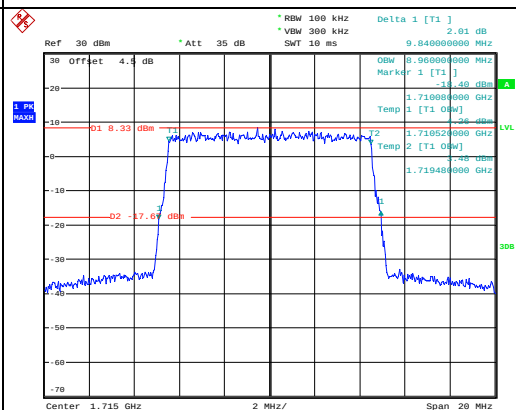
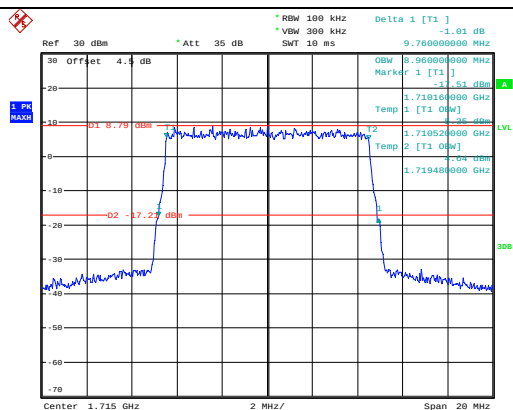
Occupied Bandwidth

Channel

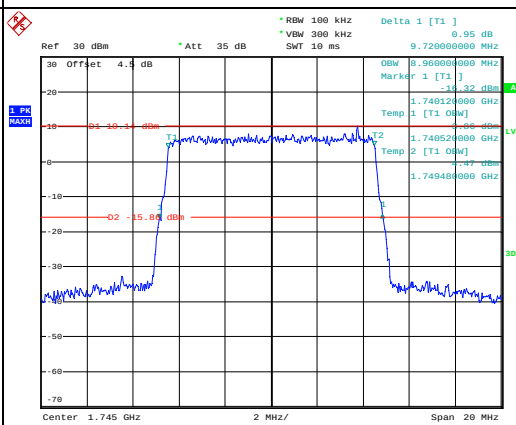
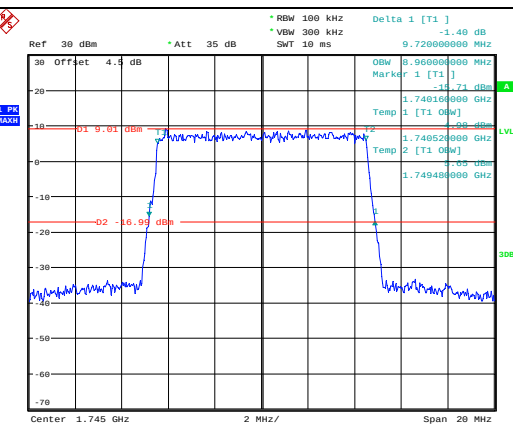
10MHz Bandwidth QPSK

10MHz Bandwidth 16QAM

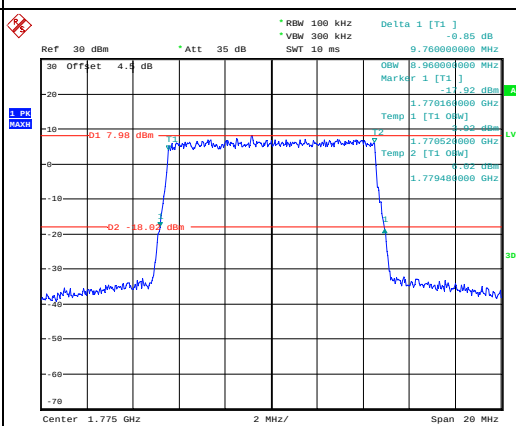
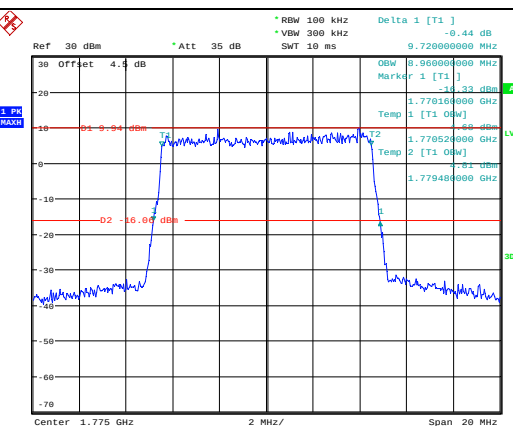
Lowest



Middle



Highest



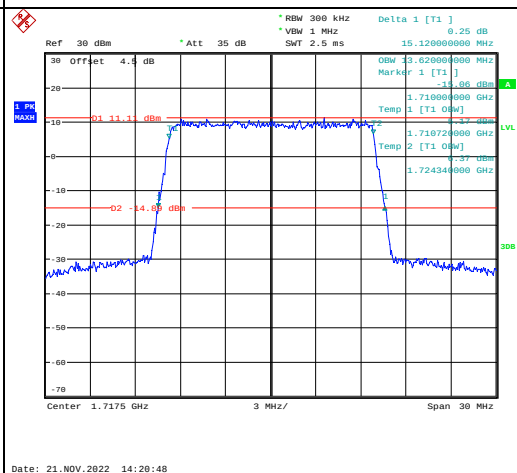
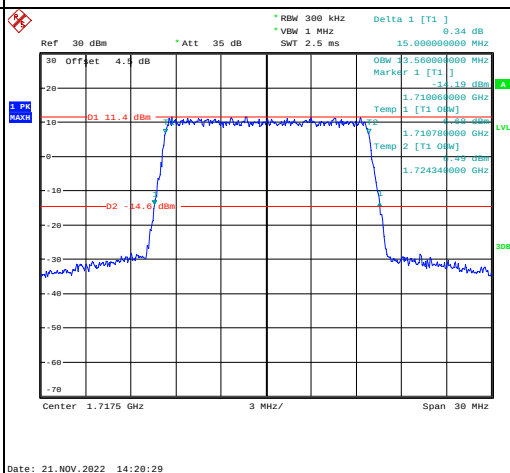
Occupied Bandwidth

Channel

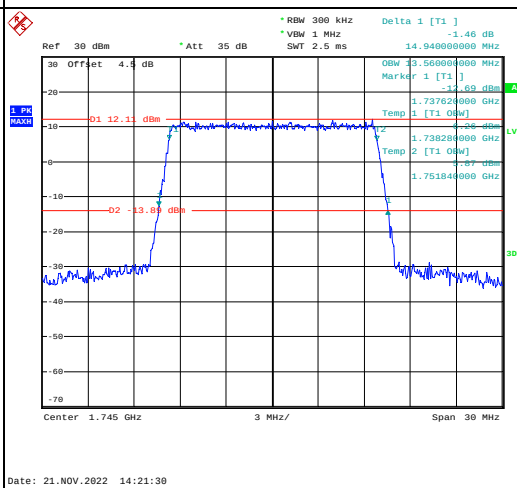
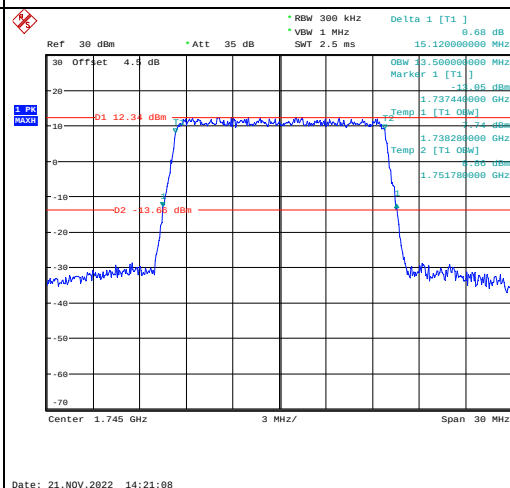
15MHz Bandwidth QPSK

15MHz Bandwidth 16QAM

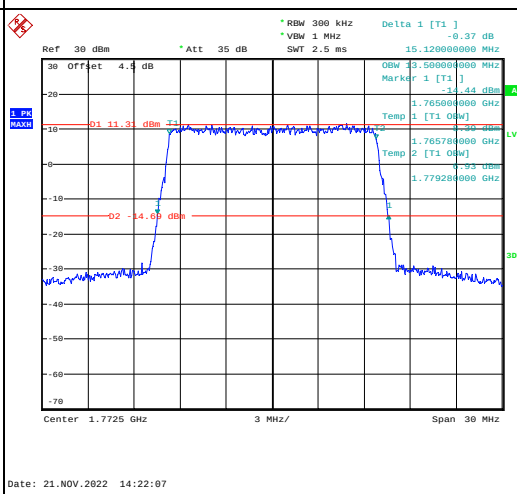
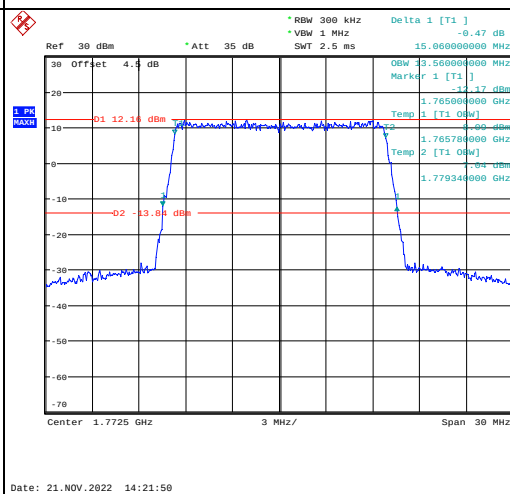
Lowest



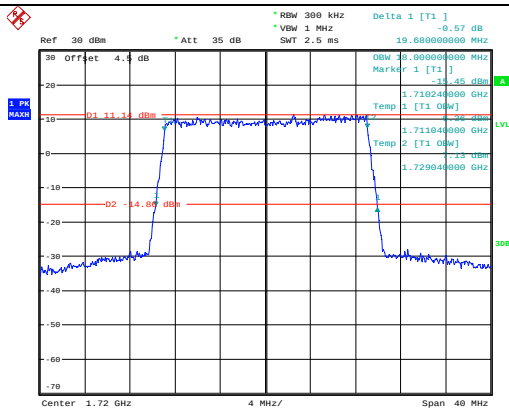
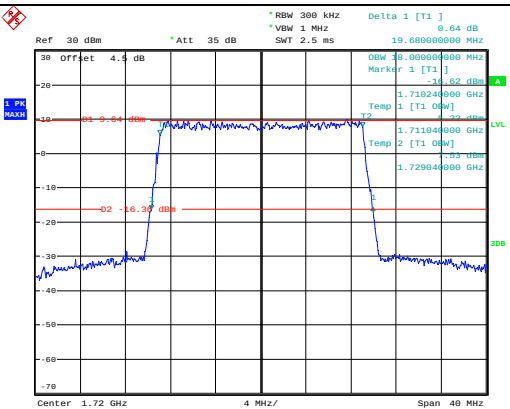
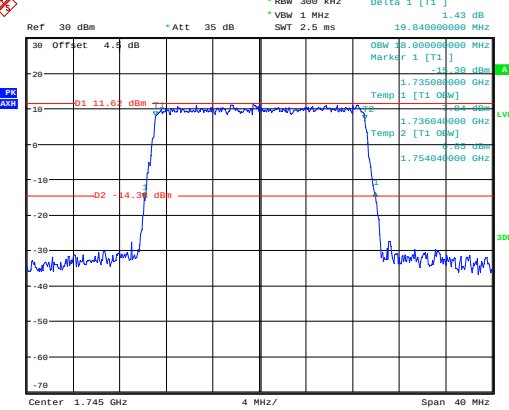
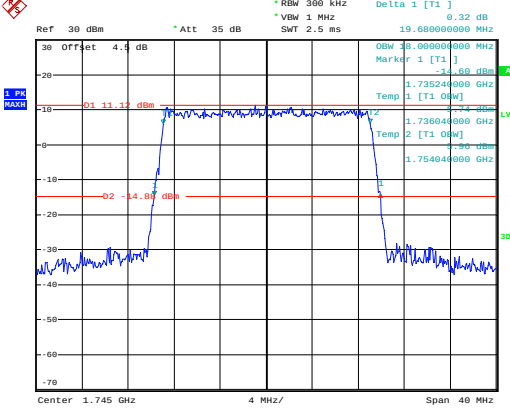
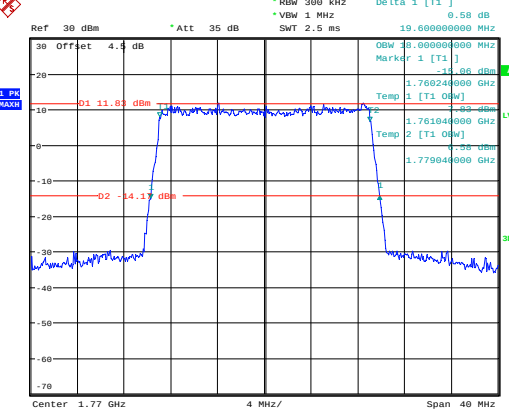
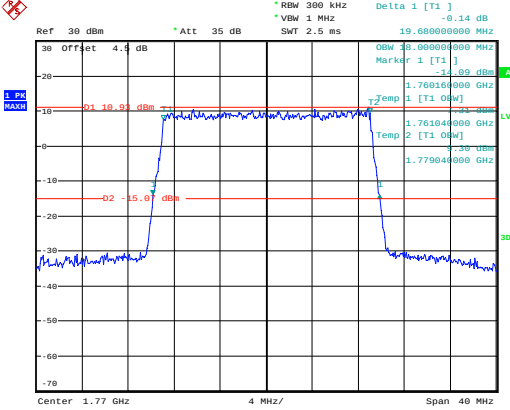
Middle



Highest



Occupied Bandwidth

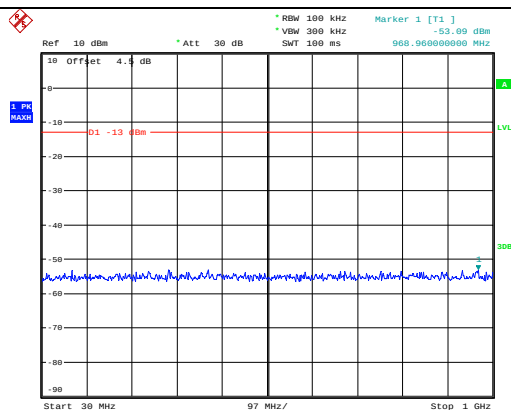
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm *Att 35 dB *RBW 300 kHz Delta 1 [T1] 1.43 dB *VBW 1 MHz SWT 2.5 ms 19.680000000 MHz 30 Offset 4.1 dB Marker 1 [T1] 11.11 dBm 1 PK MAXV -10 -11.11 dBm -20 -14.87 dBm -30 -40 -50 -60 -70 Center 1.72 GHz 4 MHz/ Span 40 MHz Date: 21.NOV.2022 14:22:30	 Ref 30 dBm *Att 35 dB *RBW 300 kHz Delta 1 [T1] 0.64 dB *VBW 1 MHz SWT 2.5 ms 19.680000000 MHz 30 Offset 4.1 dB Marker 1 [T1] 11.12 dBm 1 PK MAXV -10 -11.12 dBm -20 -16.37 dBm -30 -40 -50 -60 -70 Center 1.72 GHz 4 MHz/ Span 40 MHz Date: 21.NOV.2022 14:22:46
Middle	 Ref 30 dBm *Att 35 dB *RBW 300 kHz Delta 1 [T1] 1.43 dB *VBW 1 MHz SWT 2.5 ms 19.680000000 MHz 30 Offset 4.1 dB Marker 1 [T1] 11.62 dBm 1 PK MAXV -10 -11.62 dBm -20 -14.98 dBm -30 -40 -50 -60 -70 Center 1.745 GHz 4 MHz/ Span 40 MHz Date: 21.NOV.2022 14:23:09	 Ref 30 dBm *Att 35 dB *RBW 300 kHz Delta 1 [T1] 0.32 dB *VBW 1 MHz SWT 2.5 ms 19.680000000 MHz 30 Offset 4.1 dB Marker 1 [T1] 11.12 dBm 1 PK MAXV -10 -11.12 dBm -20 -14.88 dBm -30 -40 -50 -60 -70 Center 1.745 GHz 4 MHz/ Span 40 MHz Date: 21.NOV.2022 14:23:29
Highest	 Ref 30 dBm *Att 35 dB *RBW 300 kHz Delta 1 [T1] 0.58 dB *VBW 1 MHz SWT 2.5 ms 19.680000000 MHz 30 Offset 4.1 dB Marker 1 [T1] 11.83 dBm 1 PK MAXV -10 -11.83 dBm -20 -14.17 dBm -30 -40 -50 -60 -70 Center 1.77 GHz 4 MHz/ Span 40 MHz Date: 21.NOV.2022 14:23:49	 Ref 30 dBm *Att 35 dB *RBW 300 kHz Delta 1 [T1] 0.14 dB *VBW 1 MHz SWT 2.5 ms 19.680000000 MHz 30 Offset 4.1 dB Marker 1 [T1] 10.93 dBm 1 PK MAXV -10 -10.93 dBm -20 -15.07 dBm -30 -40 -50 -60 -70 Center 1.77 GHz 4 MHz/ Span 40 MHz Date: 21.NOV.2022 14:24:08

Spurious Emissions at Antenna Terminal

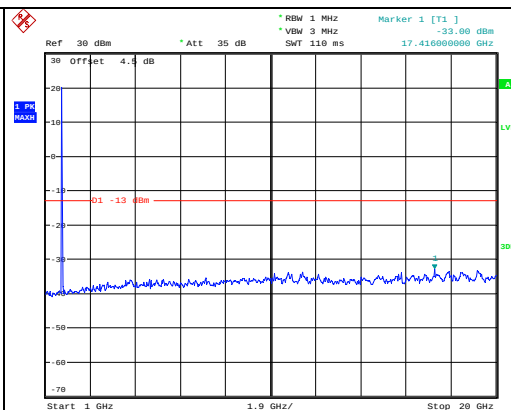
Channel

1.4MHz Bandwidth QPSK

Lowest

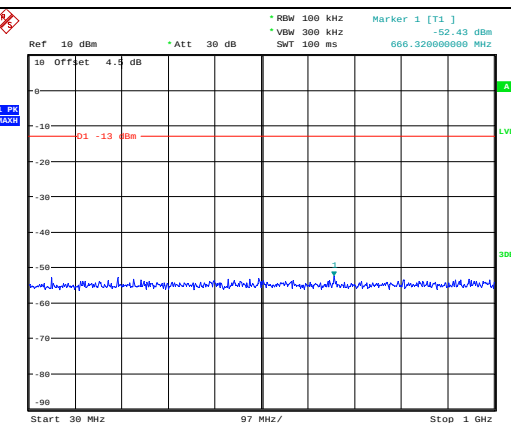


Date: 21.NOV.2022 14:32:55

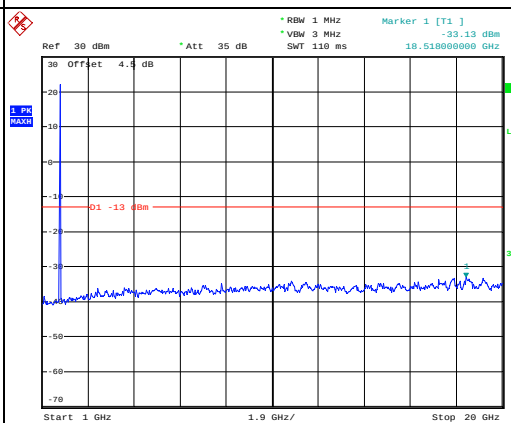


Date: 21.NOV.2022 14:33:07

Middle

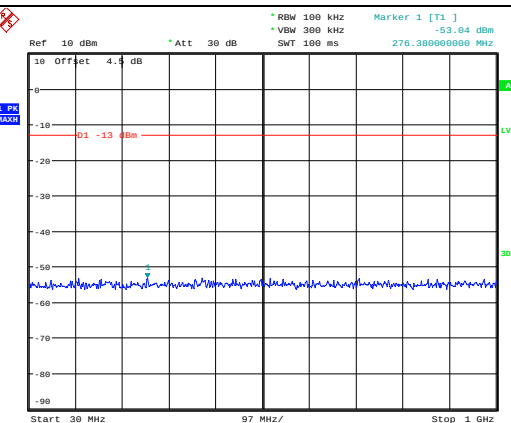


Date: 21.NOV.2022 14:33:24

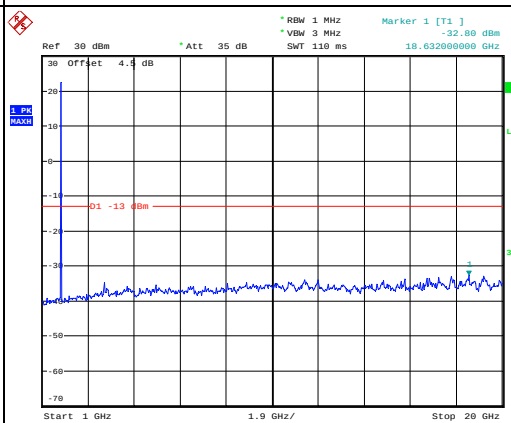


Date: 21.NOV.2022 14:33:35

Highest



Date: 21.NOV.2022 14:33:52



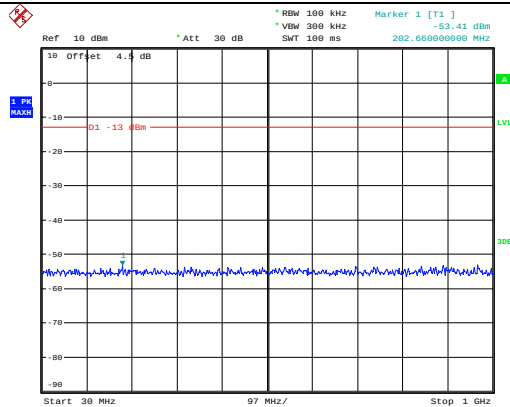
Date: 21.NOV.2022 14:34:03

Spurious Emissions at Antenna Terminal

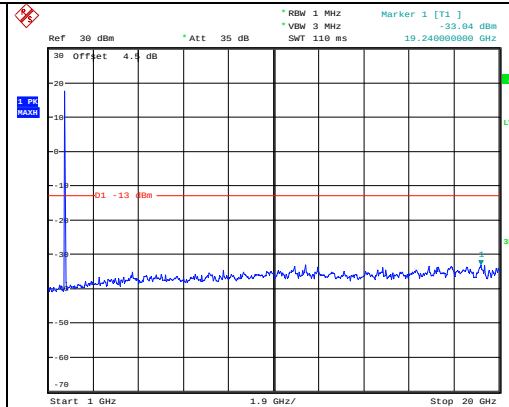
Channel

3MHz Bandwidth QPSK

Lowest

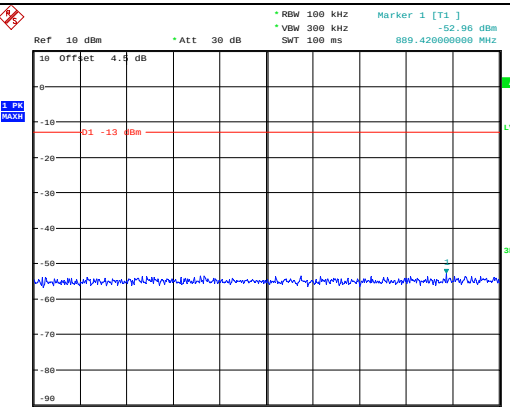


Date: 21.NOV.2022 14:34:21

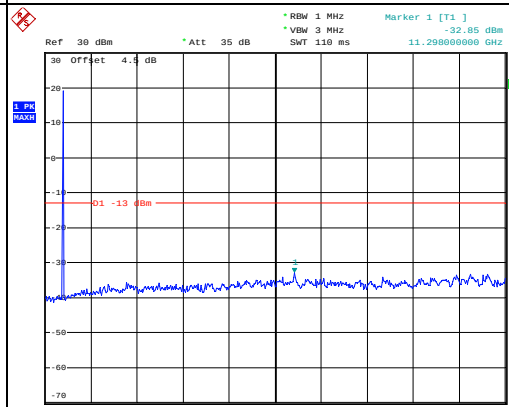


Date: 21.NOV.2022 14:34:32

Middle

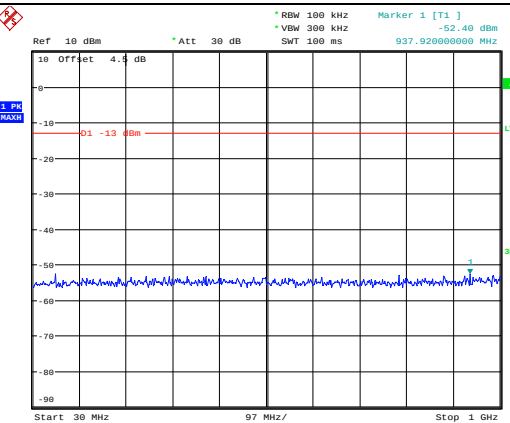


Date: 21.NOV.2022 14:34:49

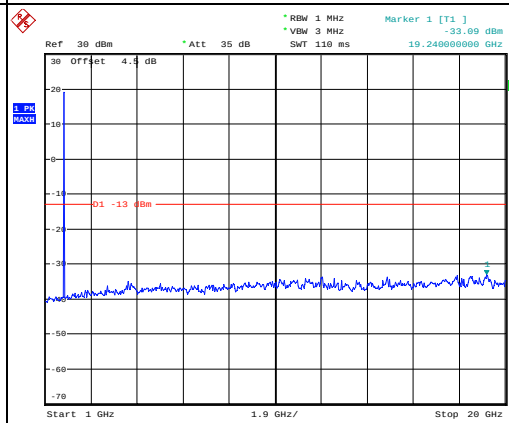


Date: 21.NOV.2022 14:35:01

Highest



Date: 21.NOV.2022 14:35:18



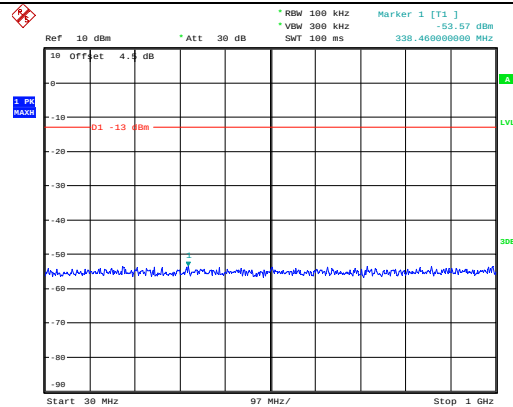
Date: 21.NOV.2022 14:35:29

Spurious Emissions at Antenna Terminal

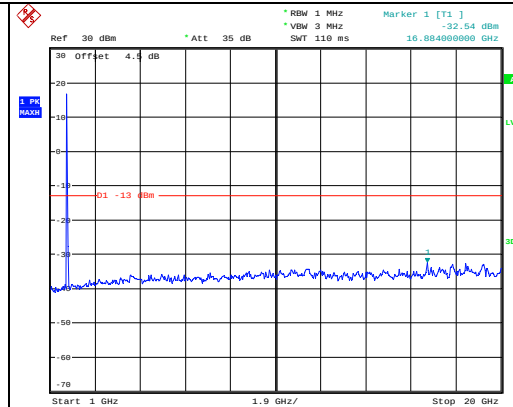
Channel

5MHz Bandwidth QPSK

Lowest

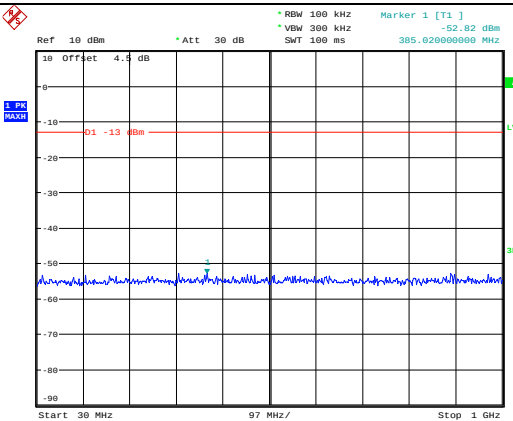


Date: 21.NOV.2022 14:35:47

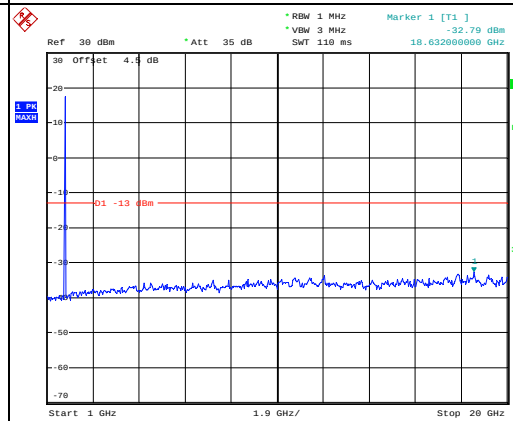


Date: 21.NOV.2022 14:35:58

Middle

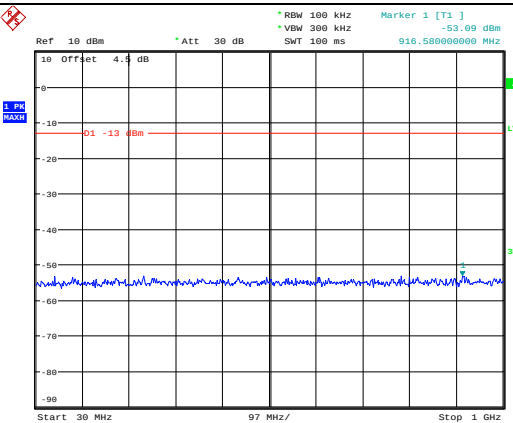


Date: 21.NOV.2022 14:36:15

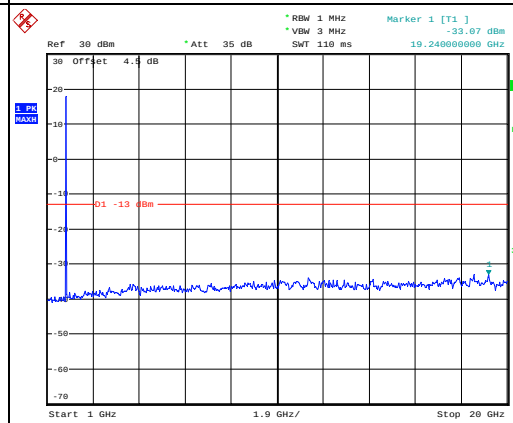


Date: 21.NOV.2022 14:36:27

Highest



Date: 21.NOV.2022 14:36:44



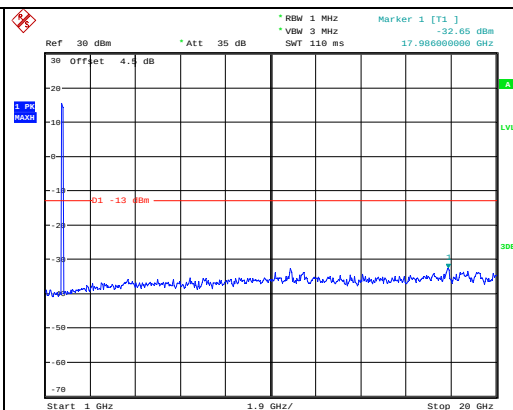
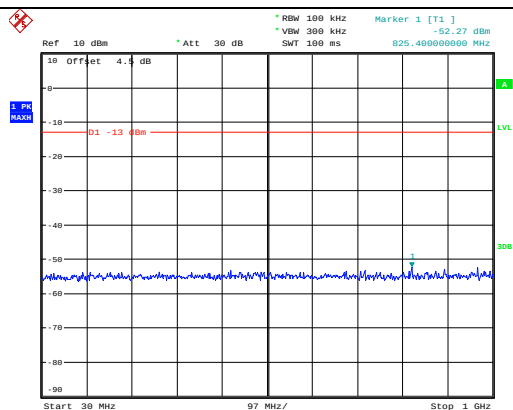
Date: 21.NOV.2022 14:36:55

Spurious Emissions at Antenna Terminal

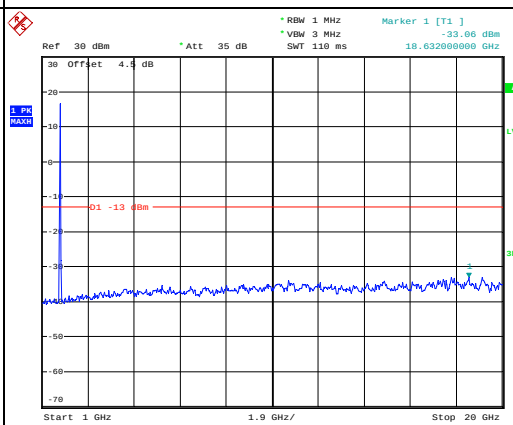
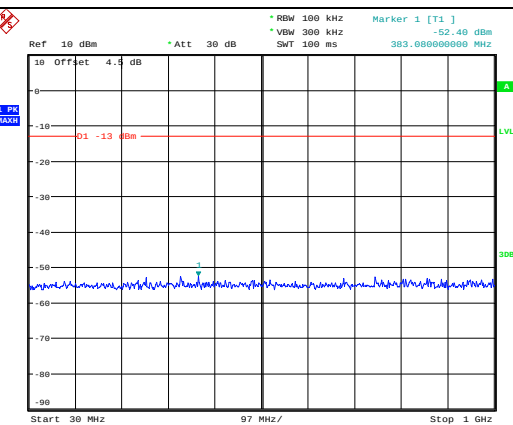
Channel

10MHz Bandwidth QPSK

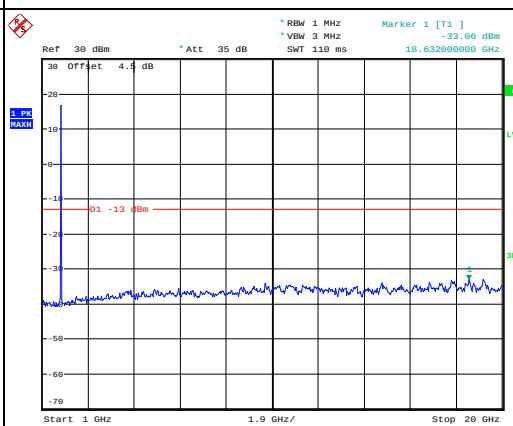
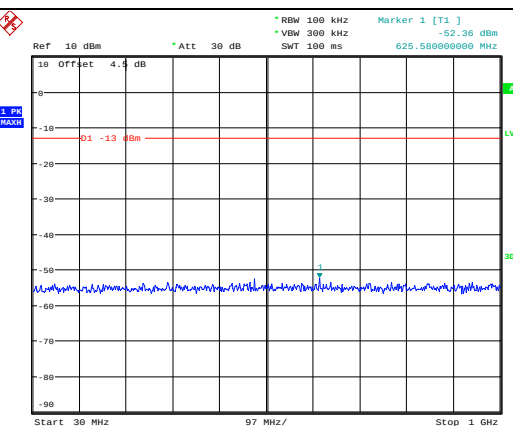
Lowest



Middle



Highest

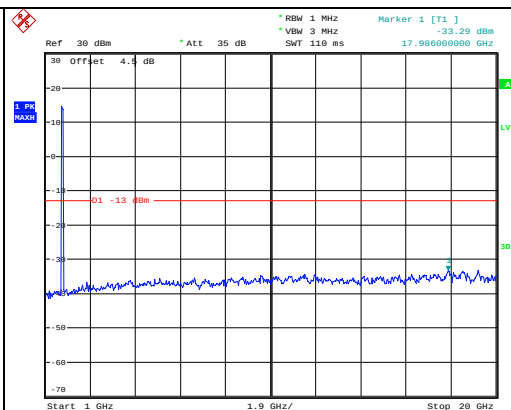
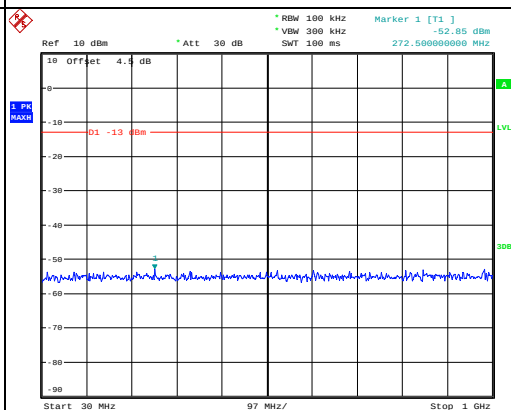


Spurious Emissions at Antenna Terminal

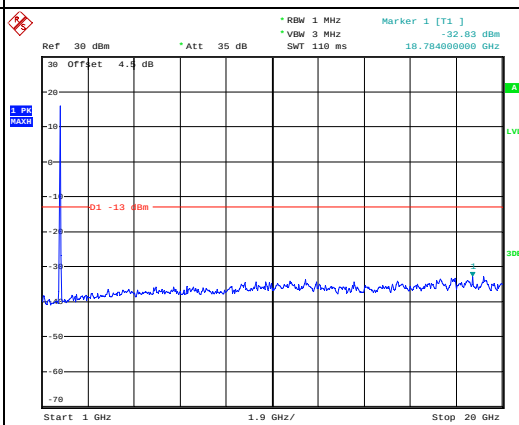
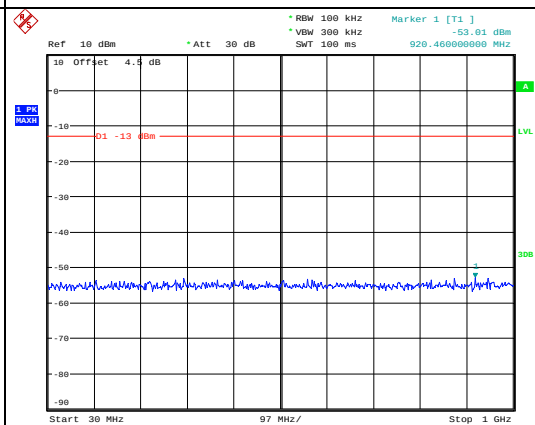
Channel

15MHz Bandwidth QPSK

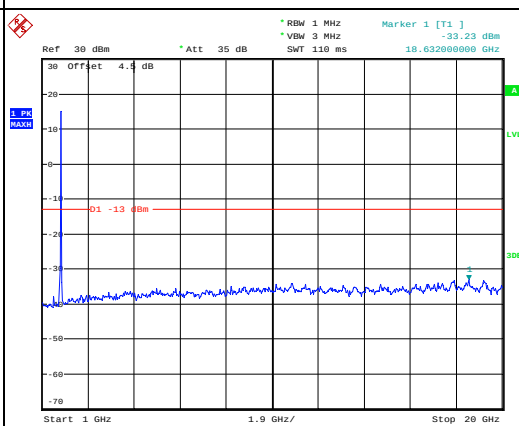
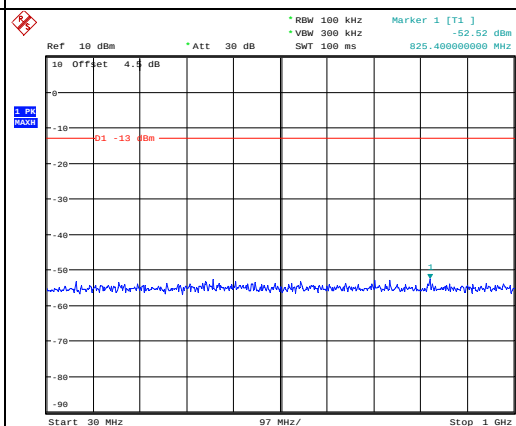
Lowest



Middle



Highest

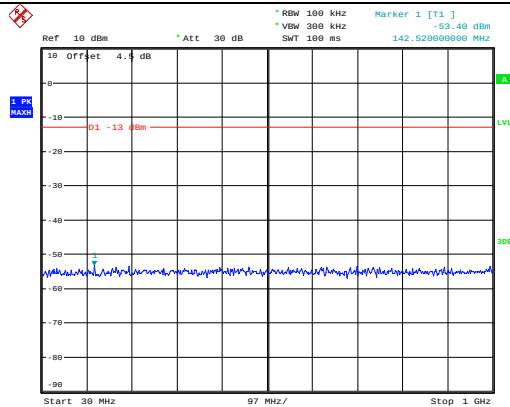


Spurious Emissions at Antenna Terminal

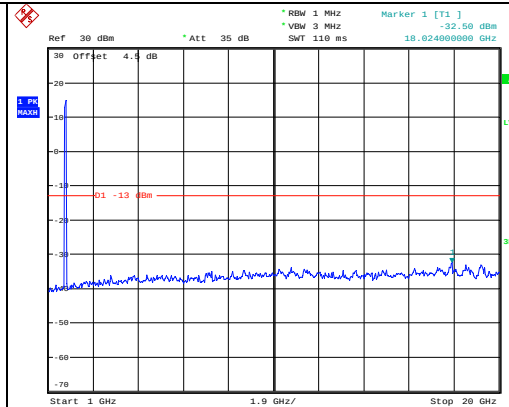
Channel

20MHz Bandwidth QPSK

Lowest

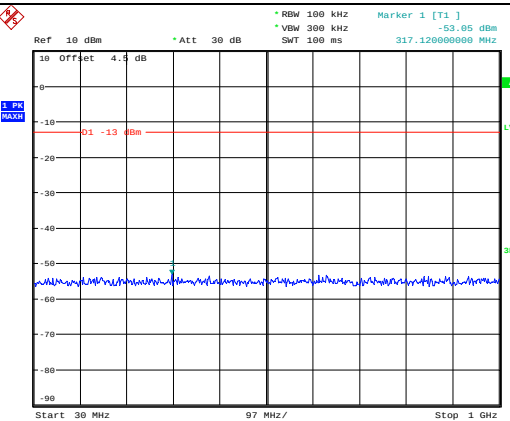


Date: 21.NOV.2022 14:40:03

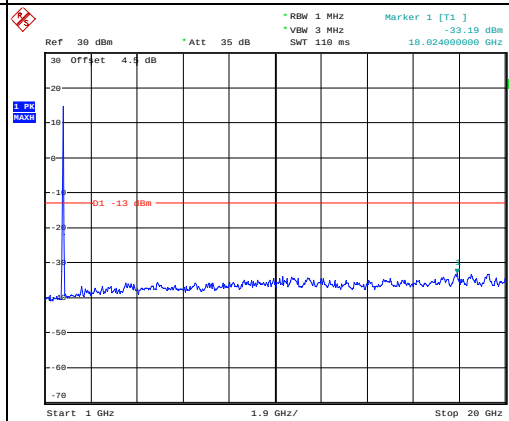


Date: 21.NOV.2022 14:40:15

Middle

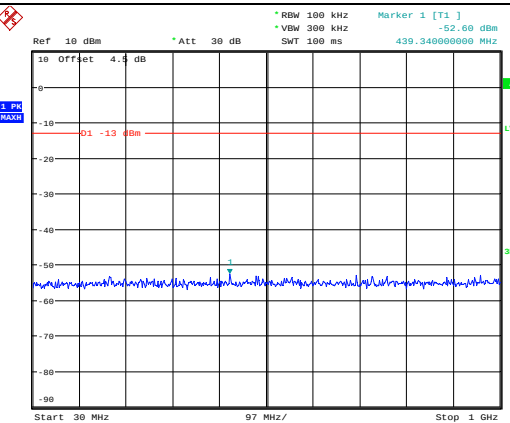


Date: 21.NOV.2022 14:40:29

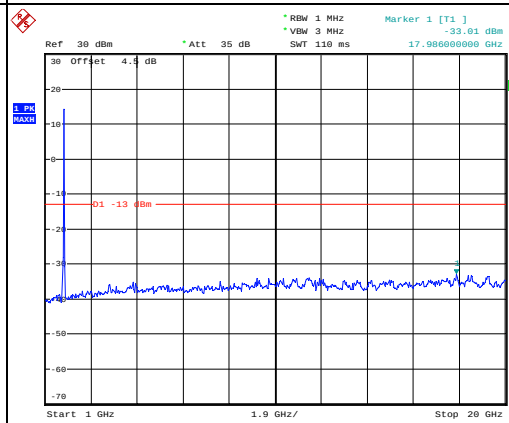


Date: 21.NOV.2022 14:40:41

Highest

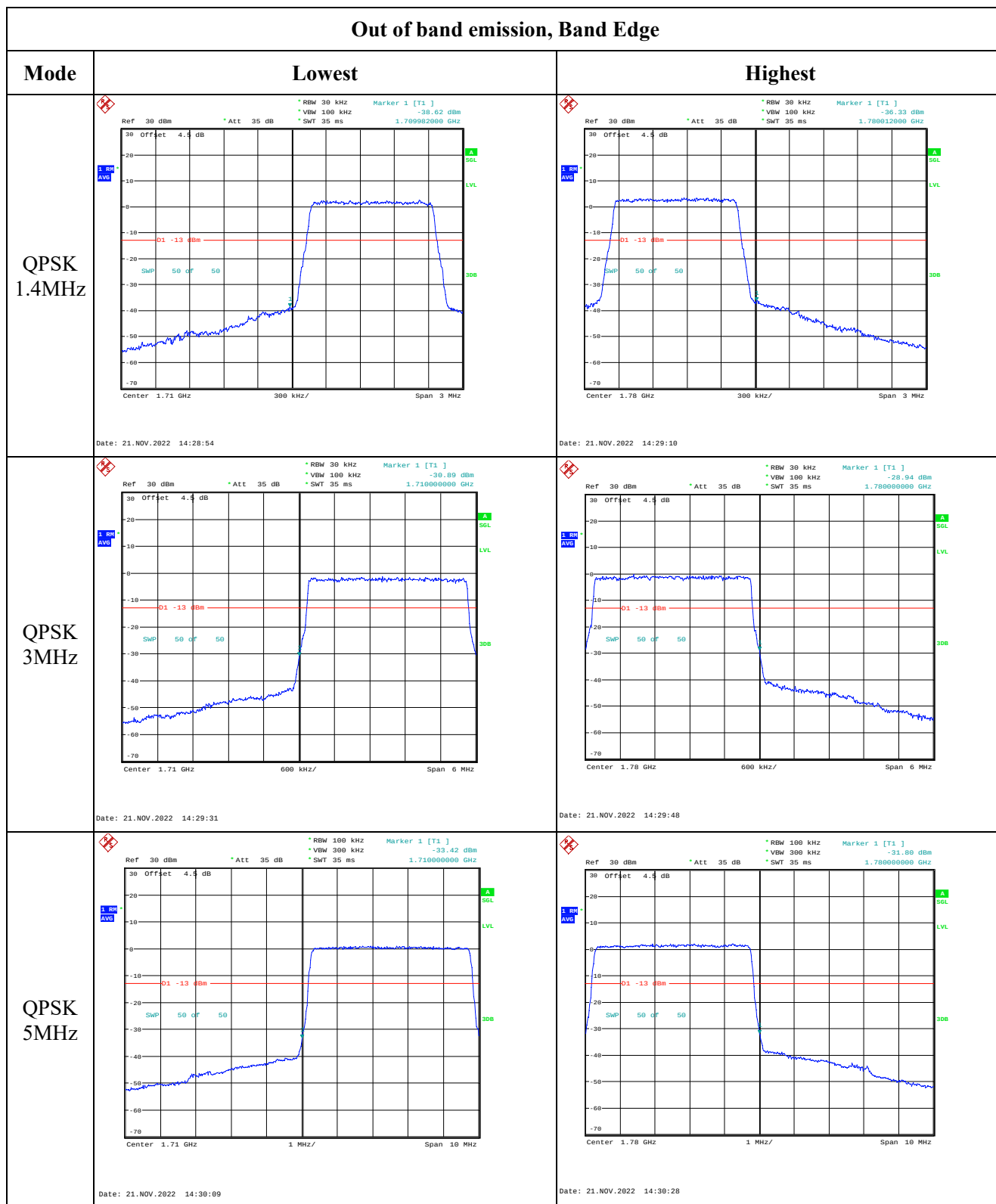


Date: 21.NOV.2022 14:40:56

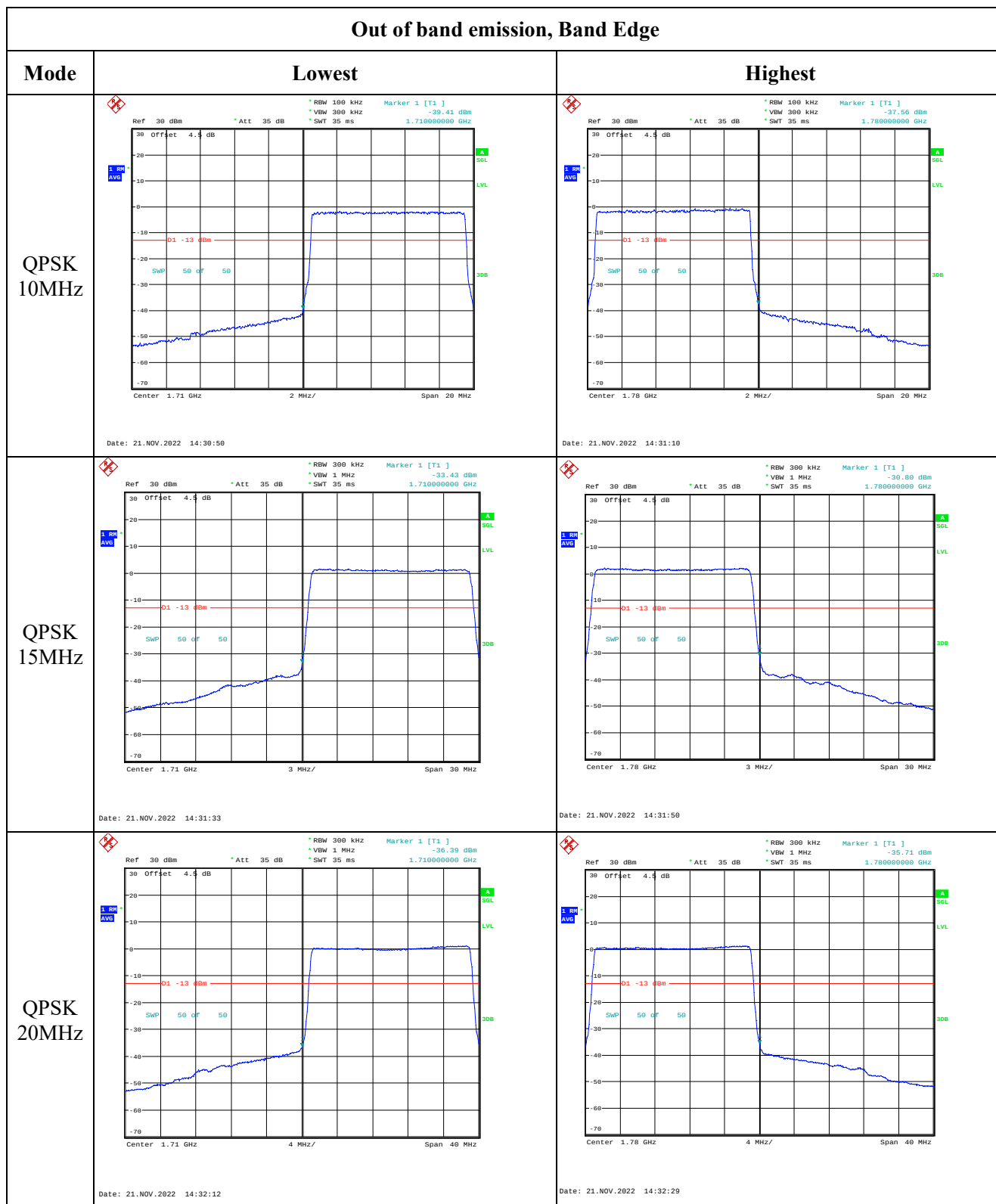


Date: 21.NOV.2022 14:41:07

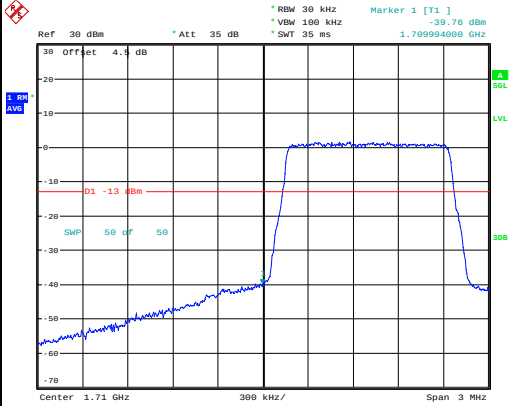
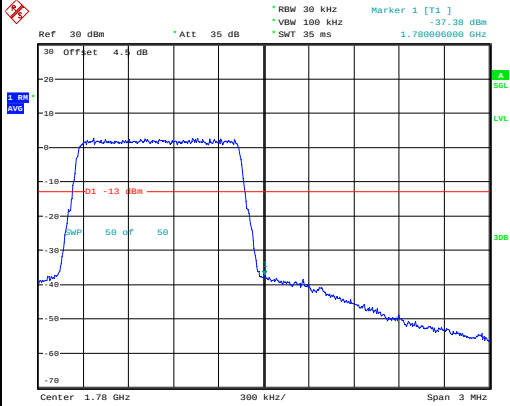
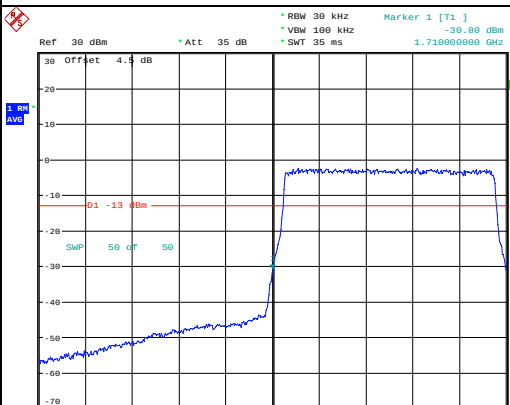
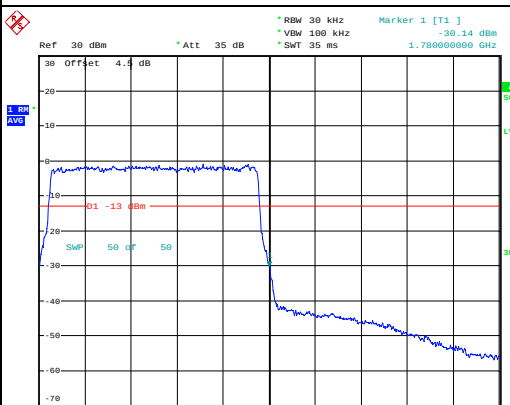
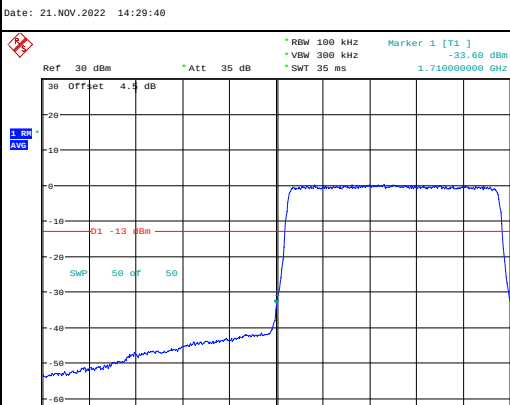
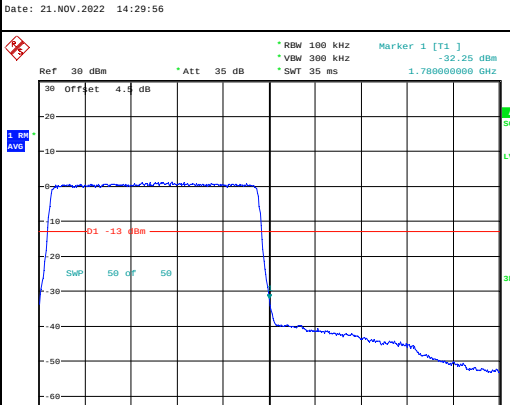
Out of band emission, Band Edge



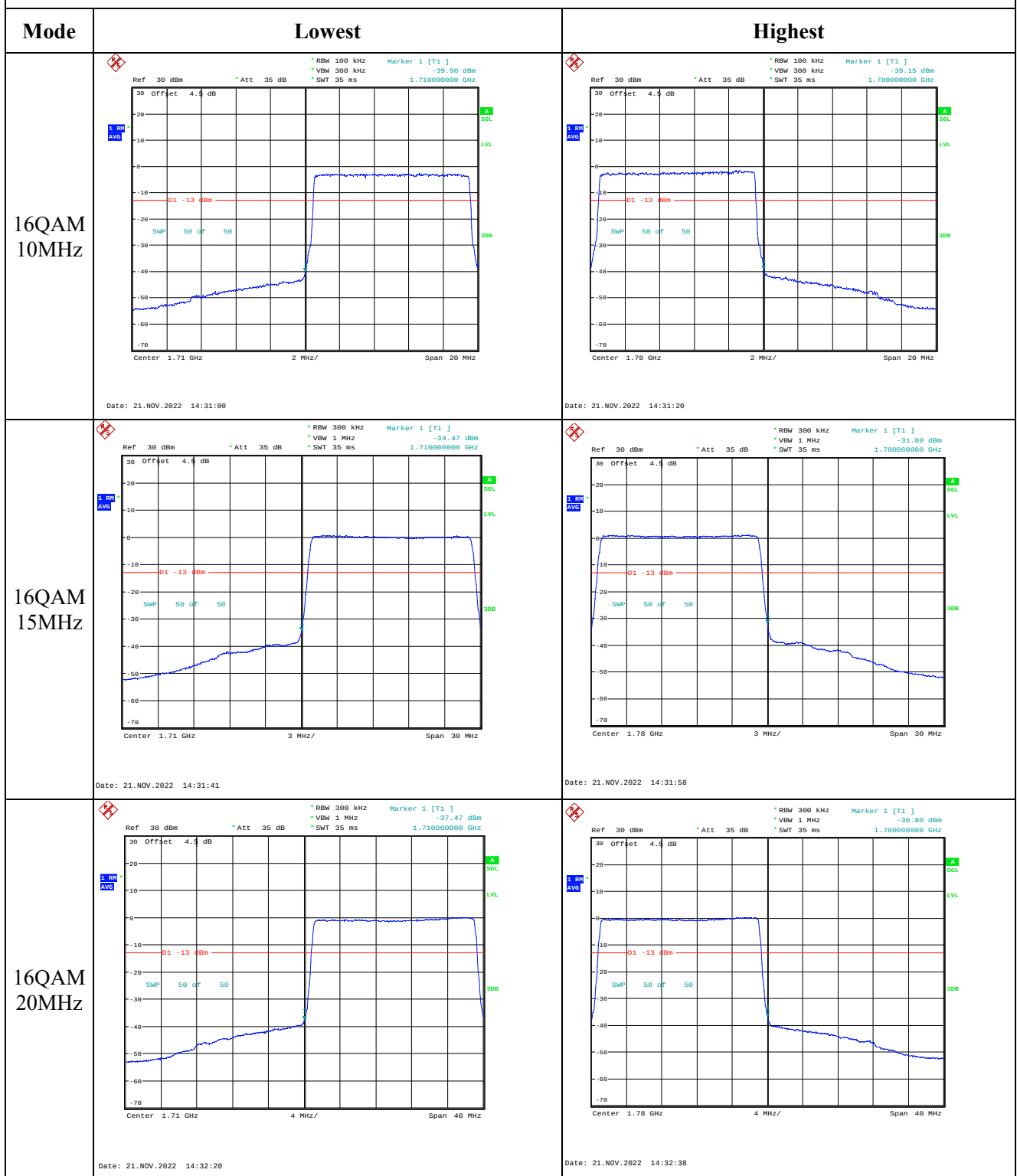
Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 1.4MHz	 Ref 30 dBm *Att 35 dB *RBW 30 kHz *VBW 100 kHz *SWT 35 ms Marker 1 [T1] -30.76 dBm 1.709994000 GHz 30 Offset 4.3 dB 01 -13 dBm SWP 50 OF 50 Center 1.71 GHz 300 kHz/ Span 3 MHz Date: 21.NOV.2022 14:29:02	 Ref 30 dBm *Att 35 dB *RBW 30 kHz *VBW 100 kHz *SWT 35 ms Marker 1 [T1] -37.30 dBm 1.780006000 GHz 30 Offset 4.3 dB 01 -13 dBm SWP 50 OF 50 Center 1.78 GHz 300 kHz/ Span 3 MHz Date: 21.NOV.2022 14:29:18
16QAM 3MHz	 Ref 30 dBm *Att 35 dB *RBW 30 kHz *VBW 100 kHz *SWT 35 ms Marker 1 [T1] -30.80 dBm 1.710000000 GHz 30 Offset 4.3 dB 01 -13 dBm SWP 50 OF 50 Center 1.71 GHz 600 kHz/ Span 6 MHz Date: 21.NOV.2022 14:29:40	 Ref 30 dBm *Att 35 dB *RBW 30 kHz *VBW 100 kHz *SWT 35 ms Marker 1 [T1] -30.14 dBm 1.780000000 GHz 30 Offset 4.3 dB 01 -13 dBm SWP 50 OF 50 Center 1.78 GHz 600 kHz/ Span 6 MHz Date: 21.NOV.2022 14:29:56
16QAM 5MHz	 Ref 30 dBm *Att 35 dB *RBW 100 kHz *VBW 300 kHz *SWT 35 ms Marker 1 [T1] -33.00 dBm 1.710000000 GHz 30 Offset 4.3 dB 01 -13 dBm SWP 50 OF 50 Center 1.71 GHz 1 MHz/ Span 10 MHz Date: 21.NOV.2022 14:30:18	 Ref 30 dBm *Att 35 dB *RBW 100 kHz *VBW 300 kHz *SWT 35 ms Marker 1 [T1] -32.25 dBm 1.780000000 GHz 30 Offset 4.3 dB 01 -13 dBm SWP 50 OF 50 Center 1.78 GHz 1 MHz/ Span 10 MHz Date: 21.NOV.2022 14:30:36

Out of band emission, Band Edge



4.13 Antenna Port Test Data and Results for LTE Band 71

Serial Number:	1O3D-1	Test Date:	2022/11/5~2022/11/25
Test Site:	RF	Test Mode:	Transmitting
Tester:	Arthur	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.3~25.1	Relative Humidity: (%)	58	ATM Pressure: (kPa)	100.5~101
----------------------	-----------	---------------------------	----	------------------------	-----------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200445	2022/04/05	2023/04/04
R&S	Wideband Radio Communication Tester	CMW500	149218	2022/07/15	2023/07/14
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
Weinschel	Power Splitter	1515	RA914	Each time	N/A
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2022/04/06	2023/04/05
UNI-T	Multimeter	UT39A+	C210582554	2022/09/29	2023/09/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	N/A

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Frequency For Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
5MHz	665.5	680.5	695.5
10MHz	668	680.5	693
15MHz	670.5	680.5	690.5
20MHz	673	680.5	688

Test Data:**FCC§2.1046;§ 27.50(c) (10)****RF Output Power:**

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	23.03	22.97	22.85	20.55	34.77
	RB1#13	22.92	22.79	22.65		
	RB1#24	22.89	22.9	22.9		
	RB15#0	22.17	22.05	21.95		
	RB15#10	22.18	22.03	22.07		
	RB25#0	22.21	21.98	22.05		
5MHz 16QAM	RB1#0	21.26	21.4	21.26	18.92	34.77
	RB1#13	21.31	21.14	21.26		
	RB1#24	21.27	21.2	20.99		
	RB15#0	21.01	21.11	21.2		
	RB15#10	21.06	21.2	21.24		
	RB25#0	21.15	21.09	21.31		
10MHz QPSK	RB1#0	22.97	22.71	22.77	20.49	34.77
	RB1#25	22.81	22.71	22.66		
	RB1#49	22.78	22.79	22.89		
	RB25#0	22.13	22.31	22.03		
	RB25#25	22.08	22.05	22.06		
	RB50#0	22.23	21.97	21.99		
10MHz 16QAM	RB1#0	22.1	22.13	22.2	19.72	34.77
	RB1#25	22.19	21.95	21.99		
	RB1#49	22.08	21.87	21.89		
	RB25#0	20.98	21.11	21.16		
	RB25#25	21.18	21.09	21.25		
	RB50#0	21.17	21.06	21.13		
15MHz QPSK	RB1#0	22.92	23.07	22.7	20.59	34.77
	RB1#38	22.72	22.79	22.68		
	RB1#74	22.92	22.96	22.94		
	RB36#0	22.29	22.32	22.13		
	RB36#39	22.07	21.85	22.09		
	RB75#0	22.1	22.05	21.94		
15MHz 16QAM	RB1#0	22.08	22.22	21.89	19.84	34.77
	RB1#38	22.08	22.1	22.27		
	RB1#74	22.23	22.32	22.22		
	RB36#0	21.26	21.18	21.15		
	RB36#39	21.3	20.86	21.14		
	RB75#0	21.38	21.07	21.09		

20MHz QPSK	RB1#0	23.02	22.85	23.03	20.55	34.77
	RB1#50	22.85	22.85	23		
	RB1#99	22.97	22.82	22.79		
	RB50#0	22.22	22.06	22.02		
	RB50#50	22.31	21.87	21.89		
	RB100#0	22.15	21.94	22.06		
20MHz 16QAM	RB1#0	22.23	22.61	22.69	20.28	34.77
	RB1#50	22.09	22.49	22.76		
	RB1#99	21.96	22.56	22.54		
	RB50#0	21.28	21.18	20.83		
	RB50#50	21.22	20.81	21.12		
	RB100#0	20.94	21.13	21.35		
Note: ERP=Conducted Power(dBm) - Cable loss(dB) + Antenna Gain(dBd)						
					Result:	Pass

Peak-to-average Ratio(PAR)					
Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
20MHz QPSK	RB1#0	6.09	6.22	5.93	13
	RB100#0	5.64	5.87	5.8	13
20MHz 16QAM	RB1#0	7.21	7.31	7.15	13
	RB100#0	6.44	6.63	6.54	13
Result:					Pass

FCC §2.1049, §27.53:Occupied Bandwidth						
Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
5MHz QPSK	4.52	4.54	4.52	4.96	4.98	4.98
5MHz 16QAM	4.5	4.52	4.52	4.96	5	5
10MHz QPSK	8.96	8.96	8.96	9.68	9.76	9.8
10MHz 16QAM	8.92	9	9	9.72	9.6	9.72
15MHz QPSK	13.5	13.62	13.5	15.12	15	14.82
15MHz 16QAM	13.5	13.62	13.5	14.94	15	15
20MHz QPSK	18	18.08	17.92	19.44	19.6	19.52
20MHz 16QAM	17.92	18.08	18	19.52	19.68	19.68
Note: The test plots please refer to the Plots of Occupied Bandwidth						

FCC §2.1051, §27.53:Spurious Emissions at Antenna Terminal

Result:	Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.
----------------	--

FCC §2.1051, §27.53:Out of band emission, Band Edge

Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.
----------------	---

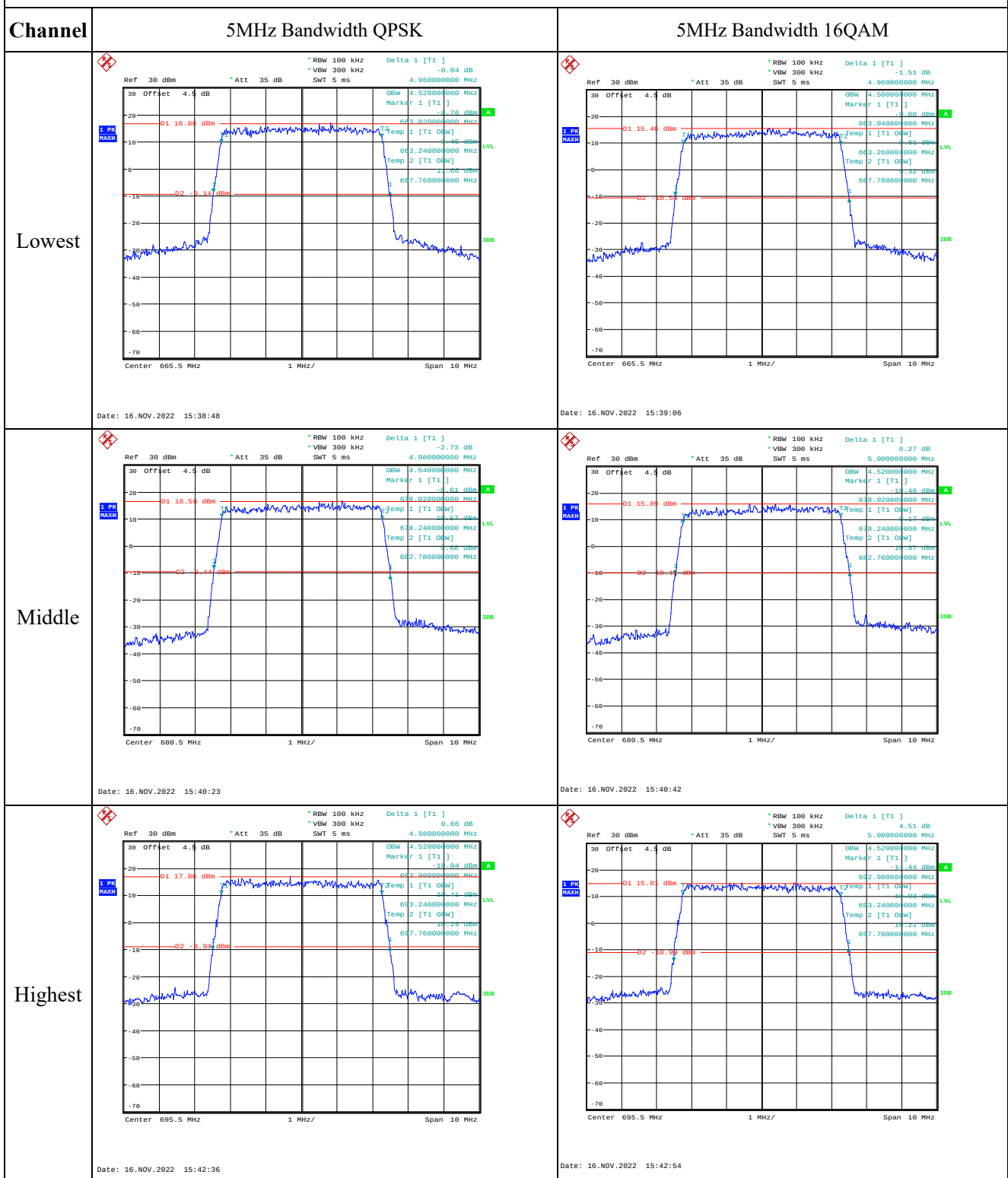
FCC §2.1055, §27.54: Frequency Stability

Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.85	664.016	663.00	697.170	698.00
	-20	3.85	664.058	663.00	697.136	698.00
	-10	3.85	664.071	663.00	697.130	698.00
	0	3.85	664.084	663.00	697.153	698.00
	10	3.85	664.075	663.00	697.096	698.00
	20	3.85	664.040	663.00	697.040	698.00
	30	3.85	664.067	663.00	697.107	698.00
	40	3.85	664.051	663.00	697.122	698.00
	50	3.85	664.022	663.00	697.112	698.00
Frequency Stability vs. Voltage	20	3.6	664.012	663.00	697.161	698.00
	20	4.35	664.046	663.00	697.104	698.00
Result:					Pass	

Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.85	664.097	663.00	697.100	698.00
	-20	3.85	664.015	663.00	697.129	698.00
	-10	3.85	664.055	663.00	697.107	698.00
	0	3.85	664.017	663.00	697.092	698.00
	10	3.85	664.022	663.00	697.108	698.00
	20	3.85	664.120	663.00	697.120	698.00
	30	3.85	664.085	663.00	697.092	698.00
	40	3.85	664.044	663.00	697.136	698.00
	50	3.85	664.041	663.00	697.107	698.00
Frequency Stability vs. Voltage	20	3.6	664.003	663.00	697.102	698.00
	20	4.35	664.055	663.00	697.103	698.00
Result:					Pass	

Test Plots(Note: The 4.5dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):

Occupied Bandwidth



Channel	10MHz Bandwidth QPSK	10MHz Bandwidth 16QAM
Lowest	Date: 16.NOV.2022 15:45:48	Date: 16.NOV.2022 15:46:06
Middle	Date: 16.NOV.2022 15:47:39	Date: 16.NOV.2022 15:47:57
Highest	Date: 16.NOV.2022 15:49:14	Date: 16.NOV.2022 15:49:32

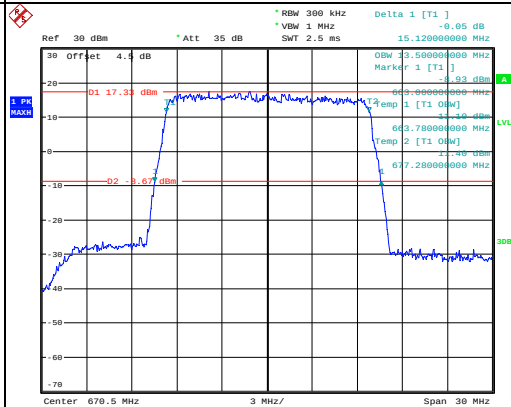
Occupied Bandwidth

Channel

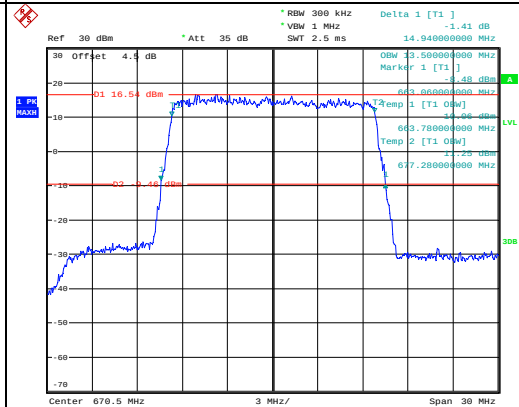
15MHz Bandwidth QPSK

15MHz Bandwidth 16QAM

Lowest

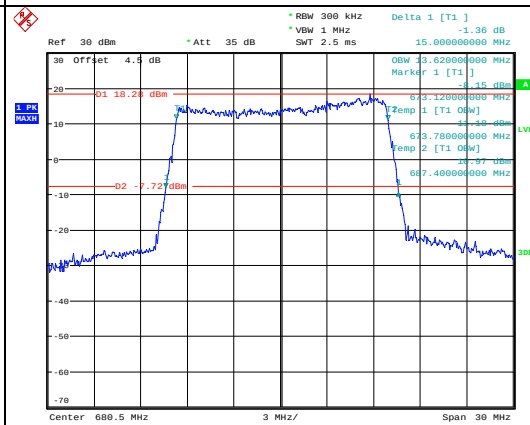


Date: 16.NOV.2022 15:50:21

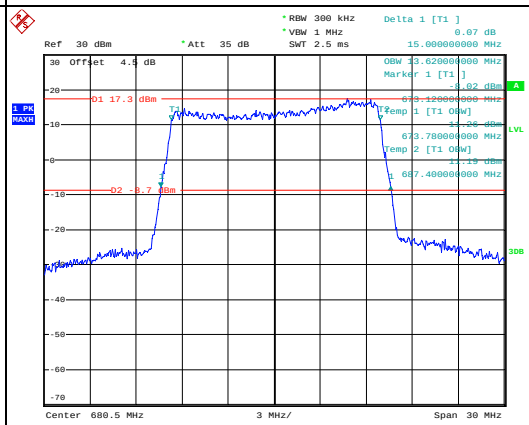


Date: 16.NOV.2022 15:50:37

Middle

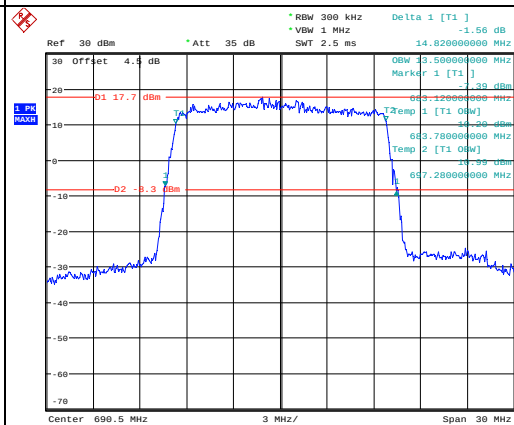


Date: 16.NOV.2022 15:51:33

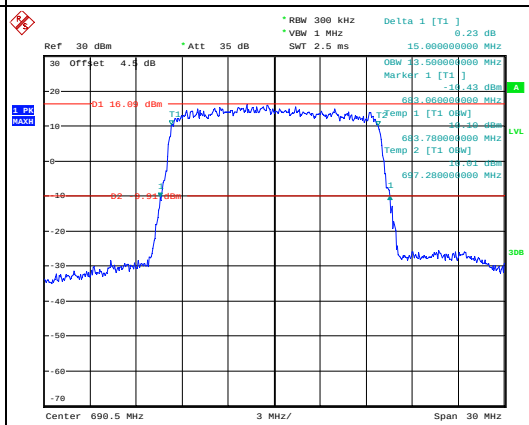


Date: 16.NOV.2022 15:51:52

Highest

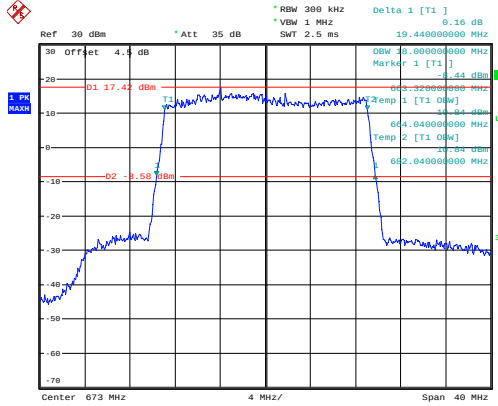
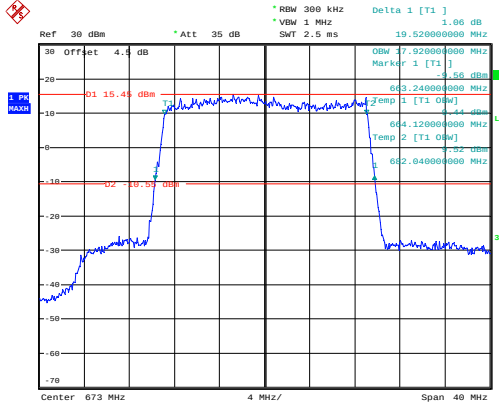
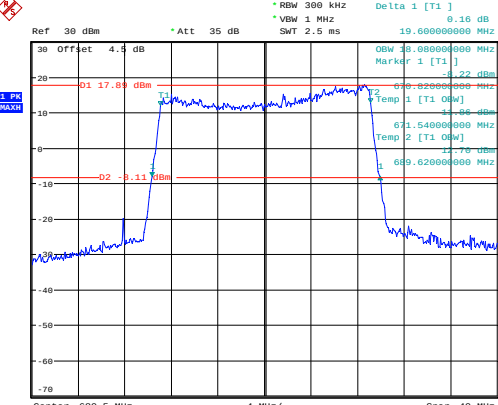
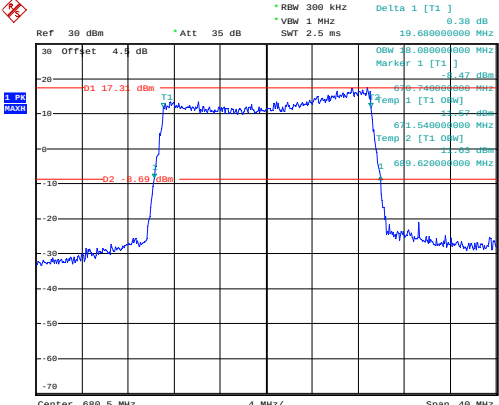
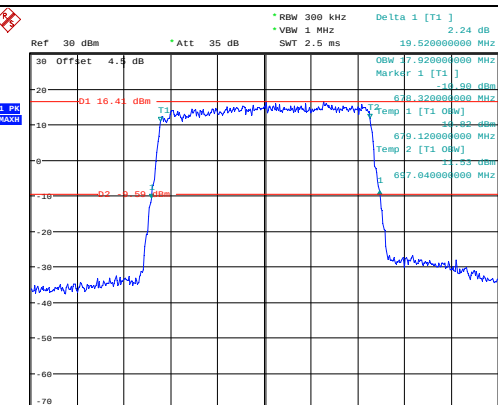
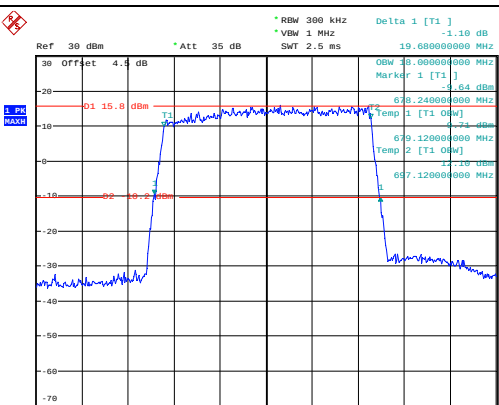


Date: 16.NOV.2022 15:52:34



Date: 16.NOV.2022 15:52:51

Occupied Bandwidth

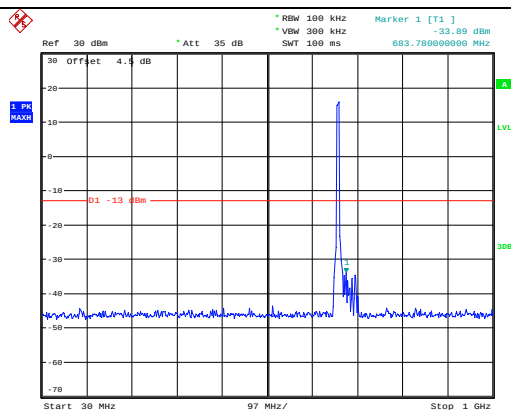
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm Offset 4.4 dB Att 35 dB RBW 300 kHz Delta 1 [T1] 0.16 dB VBW 1 MHz SWT 2.5 ms 19.440000000 MHz Marker 1 [T1] -10.44 dBm OBW 30.000000000 MHz Temp 1 [T1 0dB] -10.44 dBm Temp 2 [T1 0dB] -10.44 dBm Center 673 MHz 4 MHz/ Span 40 MHz Date: 16.NOV.2022 15:57:23	 Ref 30 dBm Offset 4.4 dB Att 35 dB RBW 300 kHz Delta 1 [T1] 0.06 dB VBW 1 MHz SWT 2.5 ms 19.520000000 MHz Marker 1 [T1] -10.56 dBm OBW 30.000000000 MHz Temp 1 [T1 0dB] -10.56 dBm Temp 2 [T1 0dB] -10.56 dBm Center 673 MHz 4 MHz/ Span 40 MHz Date: 16.NOV.2022 15:57:39
Middle	 Ref 30 dBm Offset 4.4 dB Att 35 dB RBW 300 kHz Delta 1 [T1] 0.16 dB VBW 1 MHz SWT 2.5 ms 19.600000000 MHz Marker 1 [T1] -10.22 dBm OBW 30.000000000 MHz Temp 1 [T1 0dB] -10.22 dBm Temp 2 [T1 0dB] -10.22 dBm Center 688.5 MHz 4 MHz/ Span 40 MHz Date: 16.NOV.2022 15:59:19	 Ref 30 dBm Offset 4.4 dB Att 35 dB RBW 300 kHz Delta 1 [T1] 0.38 dB VBW 1 MHz SWT 2.5 ms 19.680000000 MHz Marker 1 [T1] -10.47 dBm OBW 30.000000000 MHz Temp 1 [T1 0dB] -10.47 dBm Temp 2 [T1 0dB] -10.47 dBm Center 688.5 MHz 4 MHz/ Span 40 MHz Date: 16.NOV.2022 15:59:39
Highest	 Ref 30 dBm Offset 4.4 dB Att 35 dB RBW 300 kHz Delta 1 [T1] 2.24 dB VBW 1 MHz SWT 2.5 ms 19.520000000 MHz Marker 1 [T1] -10.64 dBm OBW 30.000000000 MHz Temp 1 [T1 0dB] -10.64 dBm Temp 2 [T1 0dB] -10.64 dBm Center 688 MHz 4 MHz/ Span 40 MHz Date: 16.NOV.2022 16:01:16	 Ref 30 dBm Offset 4.4 dB Att 35 dB RBW 300 kHz Delta 1 [T1] 1.10 dB VBW 1 MHz SWT 2.5 ms 19.680000000 MHz Marker 1 [T1] -10.64 dBm OBW 30.000000000 MHz Temp 1 [T1 0dB] -10.64 dBm Temp 2 [T1 0dB] -10.64 dBm Center 688 MHz 4 MHz/ Span 40 MHz Date: 16.NOV.2022 16:01:35

Spurious Emissions at Antenna Terminal

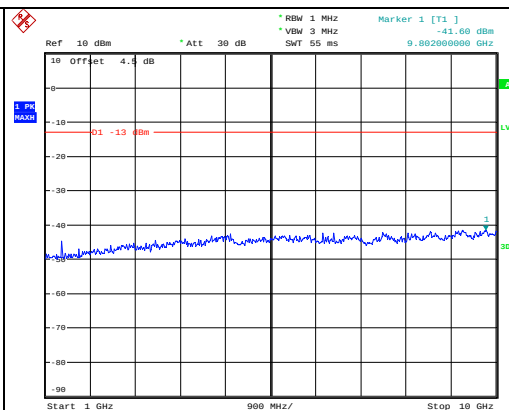
Channel

5MHz Bandwidth QPSK

Lowest

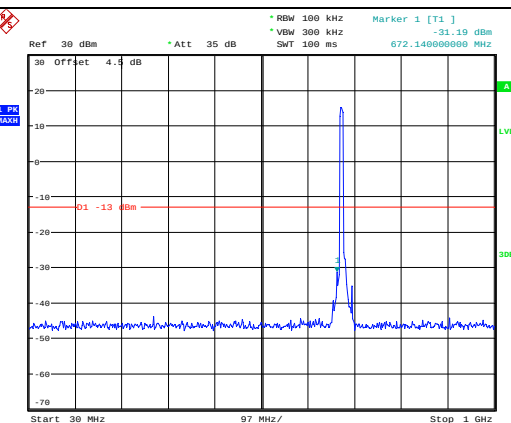


Date: 17.NOV.2022 09:44:16

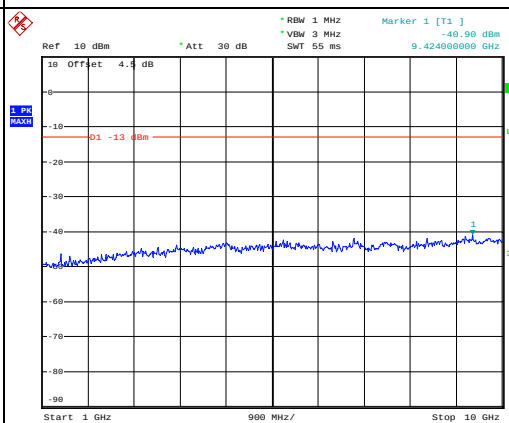


Date: 17.NOV.2022 09:44:28

Middle

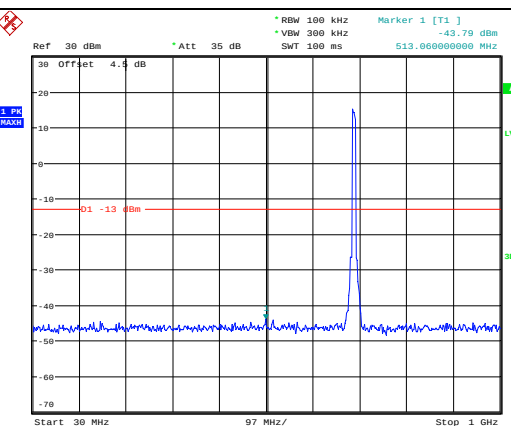


Date: 17.NOV.2022 09:45:48

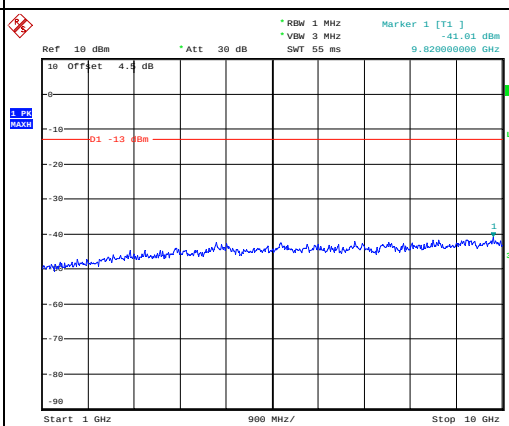


Date: 17.NOV.2022 09:45:59

Highest



Date: 17.NOV.2022 09:47:11



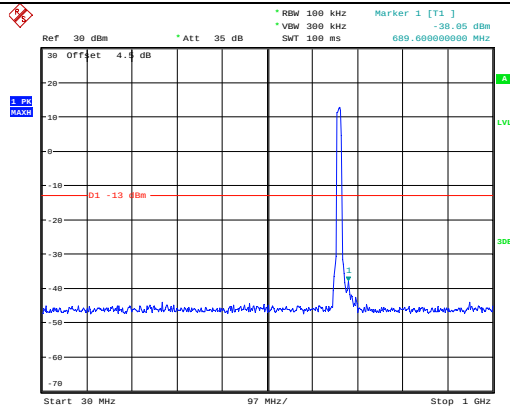
Date: 17.NOV.2022 09:47:23

Spurious Emissions at Antenna Terminal

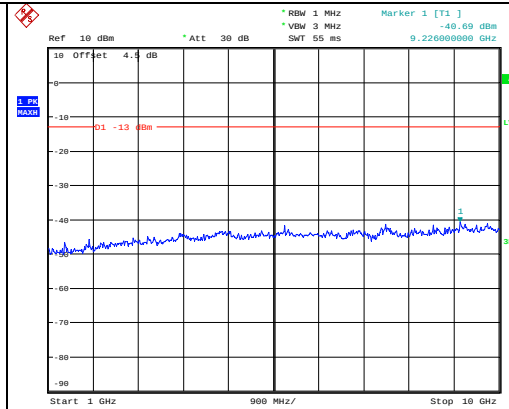
Channel

10MHz Bandwidth QPSK

Lowest

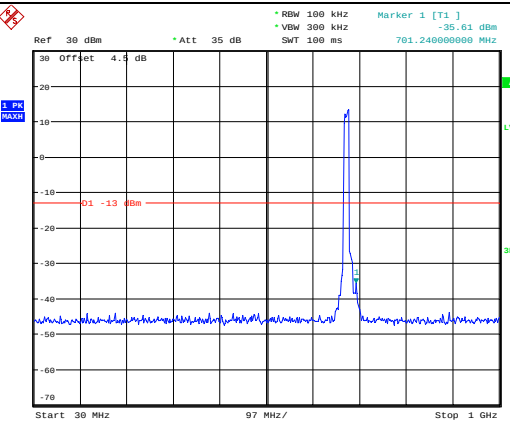


Date: 17.NOV.2022 09:53:45

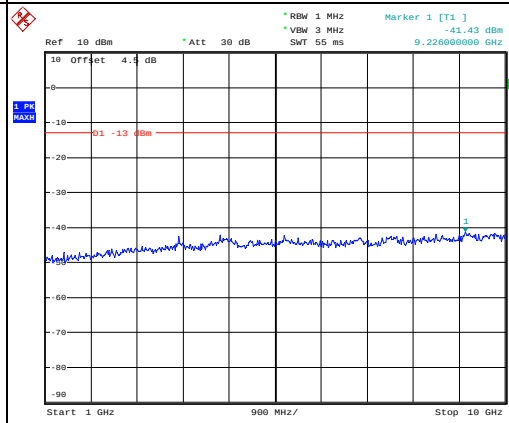


Date: 17.NOV.2022 09:53:56

Middle

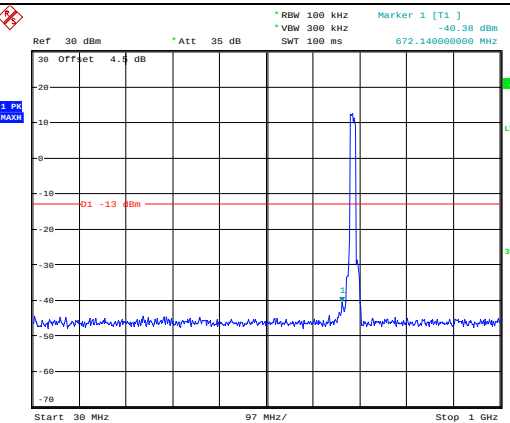


Date: 17.NOV.2022 09:56:27

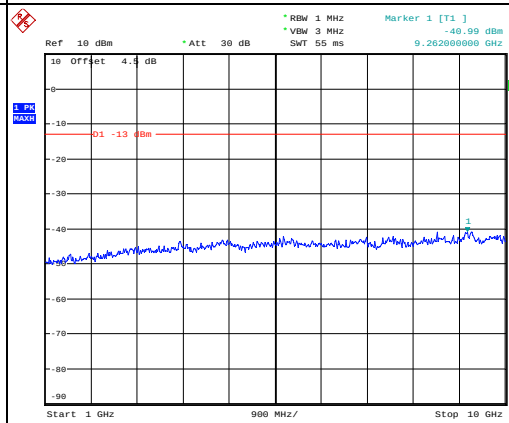


Date: 17.NOV.2022 09:56:38

Highest



Date: 17.NOV.2022 09:58:12



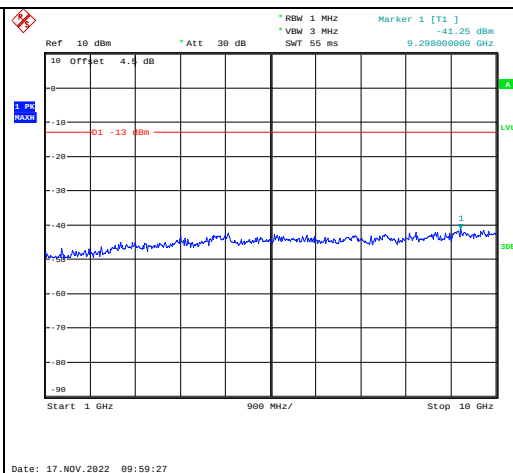
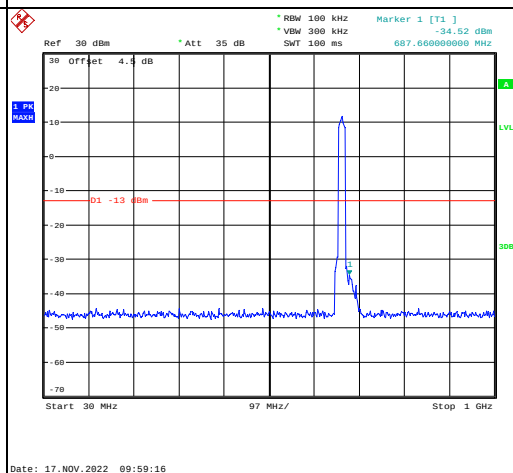
Date: 17.NOV.2022 09:58:24

Spurious Emissions at Antenna Terminal

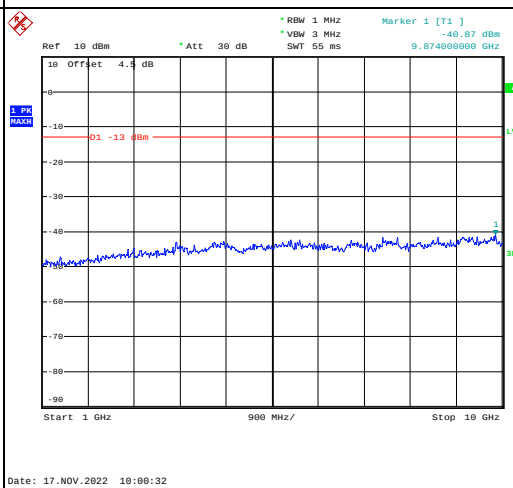
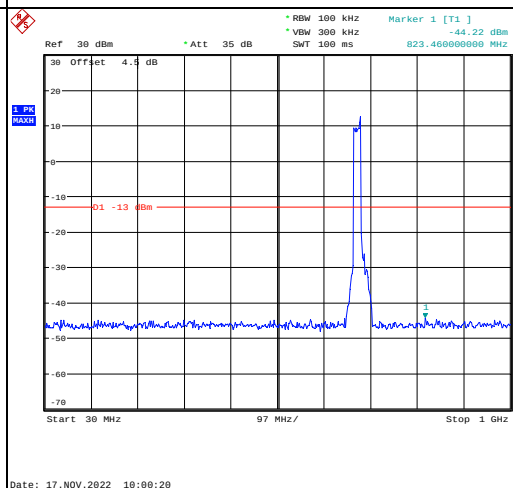
Channel

15MHz Bandwidth QPSK

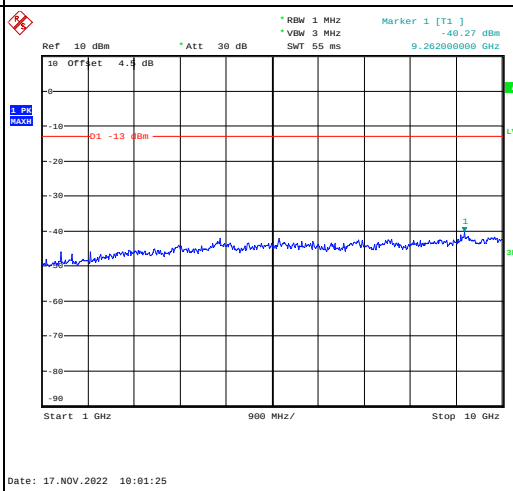
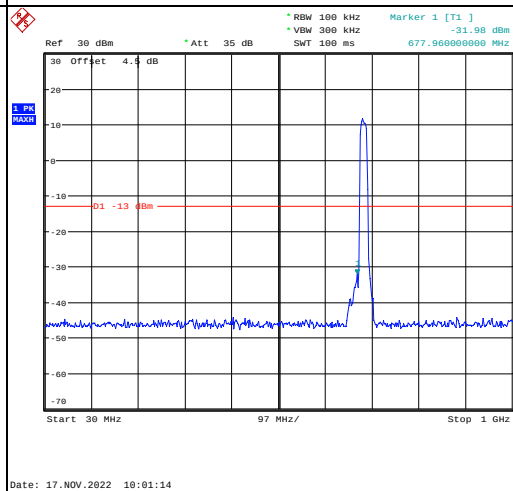
Lowest



Middle



Highest

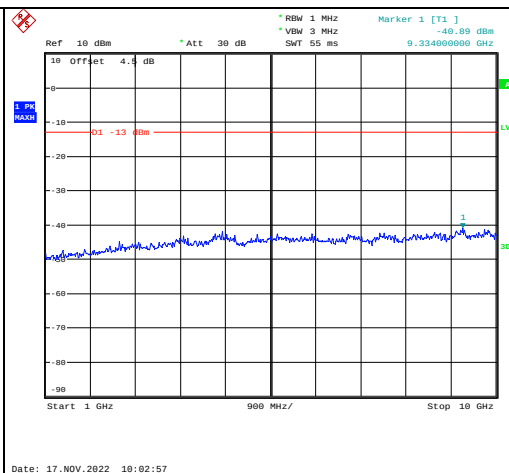
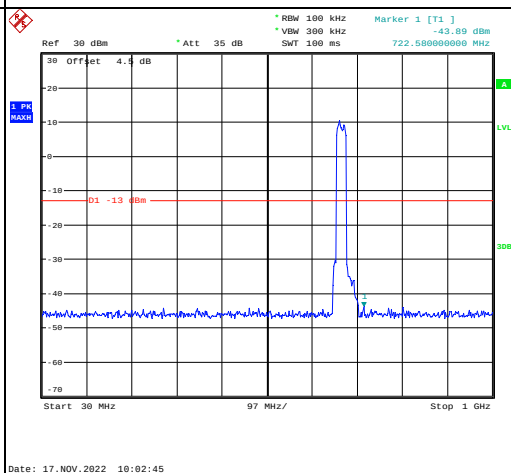


Spurious Emissions at Antenna Terminal

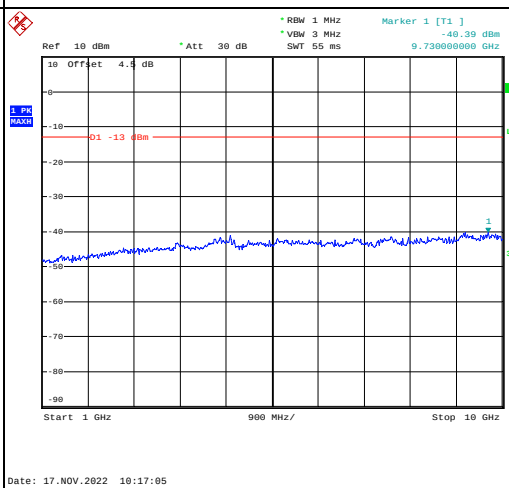
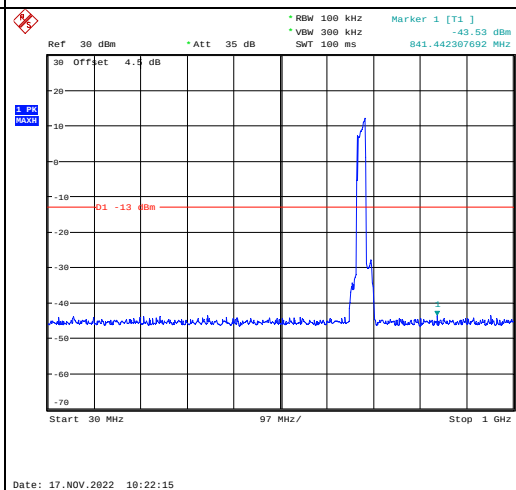
Channel

20MHz Bandwidth QPSK

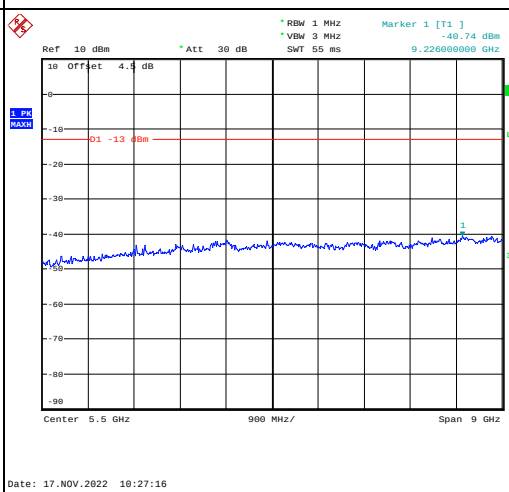
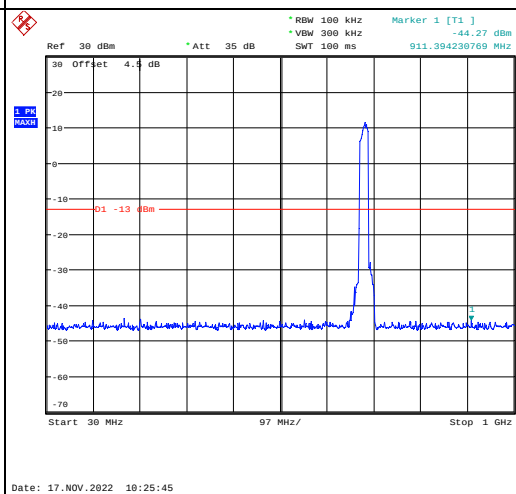
Lowest



Middle



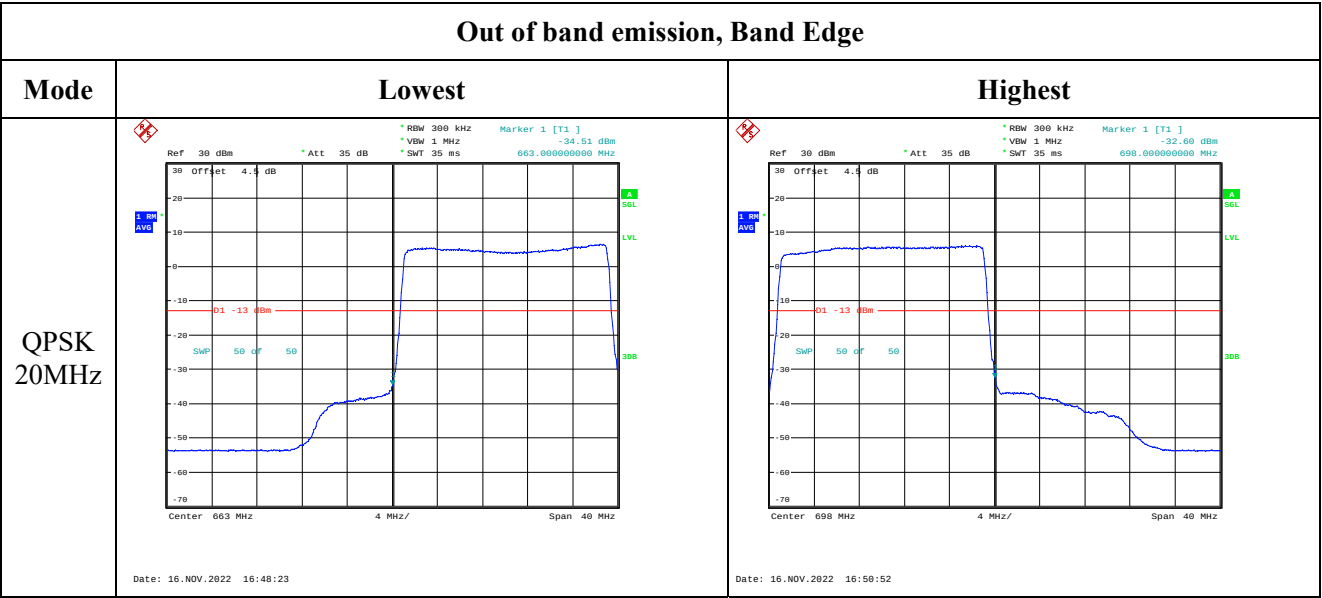
Highest



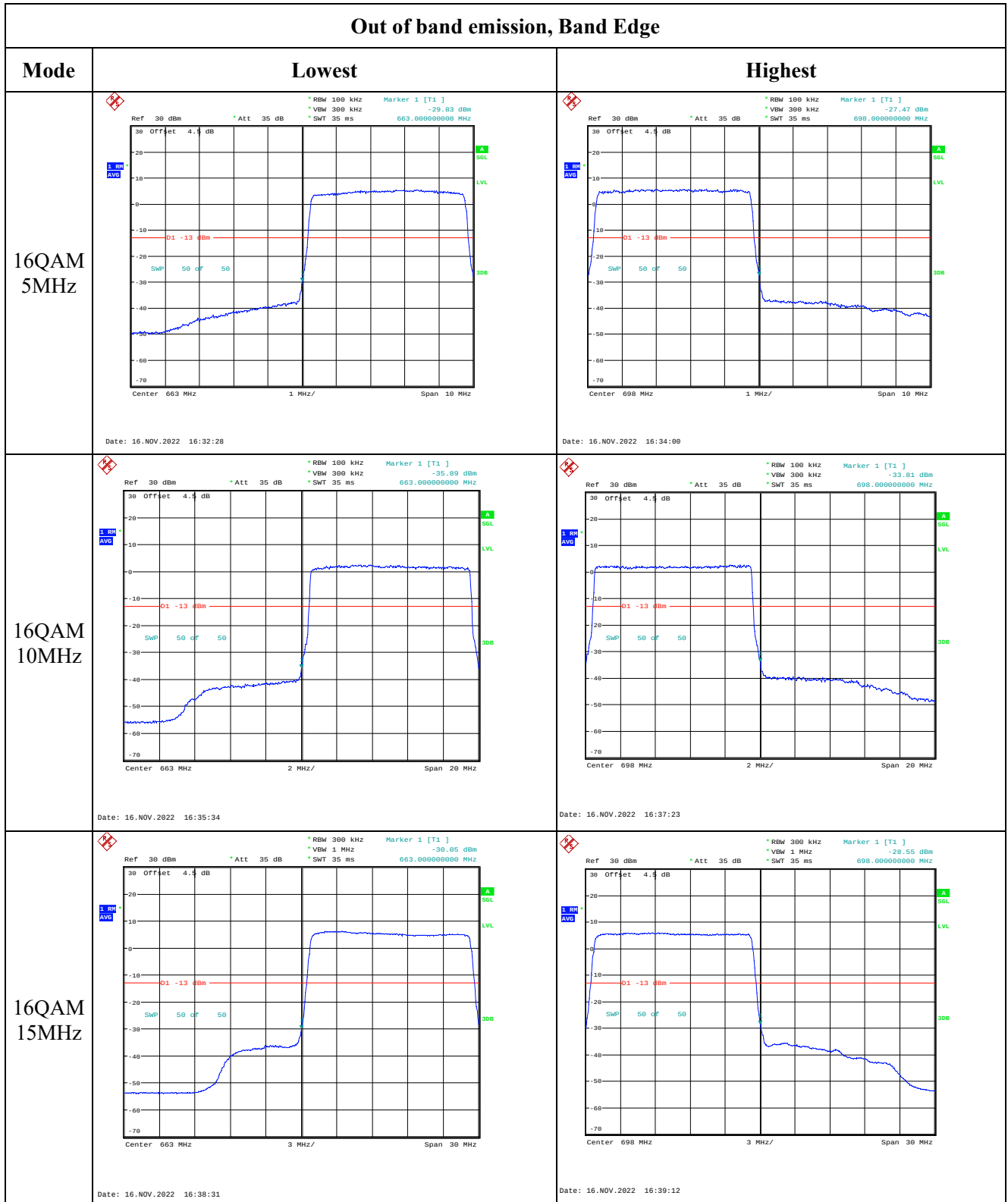
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 5MHz	Ref: 30 dBm, Att: 35 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -29.10 dBm, 663.000000000 MHz 30 Offset: 4.5 dB, 1 BW, AVG, 56L, LVL, 30B Center: 663 MHz, 1 MHz/, Span: 10 MHz Date: 16.NOV.2022 16:32:20	Ref: 30 dBm, Att: 35 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -28.02 dBm, 698.000000000 MHz 30 Offset: 4.5 dB, 1 BW, AVG, 56L, LVL, 30B Center: 698 MHz, 1 MHz/, Span: 10 MHz Date: 16.NOV.2022 16:33:51
QPSK 10MHz	Ref: 30 dBm, Att: 35 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -35.40 dBm, 663.000000000 MHz 30 Offset: 4.5 dB, 1 BW, AVG, 56L, LVL, 30B Center: 663 MHz, 2 MHz/, Span: 20 MHz Date: 16.NOV.2022 16:35:25	Ref: 30 dBm, Att: 35 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 35 ms, Marker 1 [T1]: -34.01 dBm, 698.000000000 MHz 30 Offset: 4.5 dB, 1 BW, AVG, 56L, LVL, 30B Center: 698 MHz, 2 MHz/, Span: 20 MHz Date: 16.NOV.2022 16:37:13
QPSK 15MHz	Ref: 30 dBm, Att: 35 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -29.08 dBm, 663.000000000 MHz 30 Offset: 4.5 dB, 1 BW, AVG, 56L, LVL, 30B Center: 663 MHz, 3 MHz/, Span: 30 MHz Date: 16.NOV.2022 16:38:22	Ref: 30 dBm, Att: 35 dB, RBW: 300 kHz, VBW: 1 MHz, SWT: 35 ms, Marker 1 [T1]: -28.98 dBm, 698.000000000 MHz 30 Offset: 4.5 dB, 1 BW, AVG, 56L, LVL, 30B Center: 698 MHz, 3 MHz/, Span: 30 MHz Date: 16.NOV.2022 16:39:03

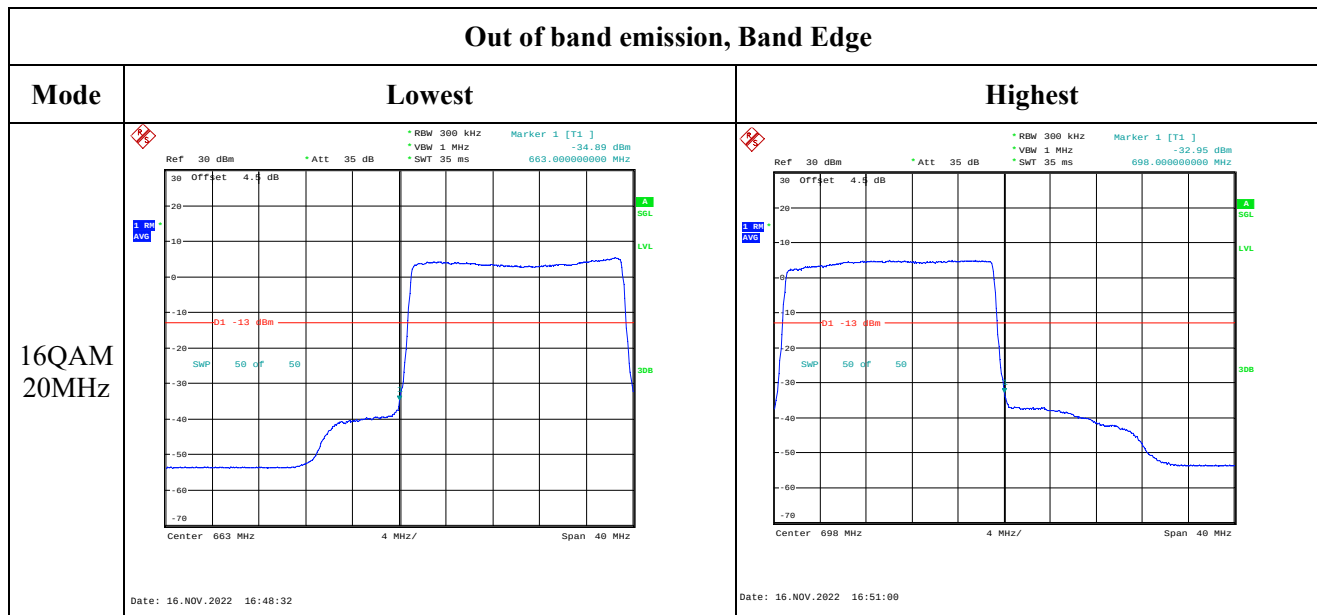
Out of band emission, Band Edge



Out of band emission, Band Edge



Out of band emission, Band Edge



4.14 Radiated Spurious Emissions

Serial Number:	1O3D-1	Test Date:	2022/11/6~2022/11/9
Test Site:	996-1, 966-2	Test Mode:	Transmitting
Tester:	Carl Xue,coco	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24~25.6	Relative Humidity: (%)	52~62	ATM Pressure: (kPa)	100.9~101.4
----------------------	---------	---------------------------	-------	---------------------------	-------------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2020/10/19	2023/10/18
R&S	EMI Test Receiver	ESR3	102724	2022/07/15	2023/07/14
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2022/07/17	2023/07/16
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2022/07/17	2023/07/16
EMCO	Adjustable Dipole Antenna	3121C	9109-756	N/A	N/A
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2022/07/17	2023/07/16
ETS-Lindgren	Horn Antenna	3115	9912-5985	2020/10/13	2023/10/12
R&S	Spectrum Analyzer	FSV40	101591	2022/07/15	2023/07/14
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2022/08/07	2023/08/06
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2022/08/07	2023/08/06
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2021/11/10	2022/11/09
AH	Double Ridge Guide Horn Antenna	SAS-571	1396	2021/10/18	2024/10/17
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2022/07/17	2023/07/16
Agilent	Signal Generator	E8247C	MY43321352	2022/04/01	2023/03/31
PASTERNAK	Horn Antenna	PE9852/2F-20	112002	2021/02/05	2024/02/04
PASTERNAK	Horn Antenna	PE9852/2F-20	112001	2021/02/05	2024/02/04
AH	Preamplifier	PAM-1840VH	190	2021/11/19	2022/11/18
PASTERNAK	Horn Antenna	PE9850/2F-20	072001	2021/02/05	2024/02/04
PASTERNAK	Horn Antenna	PE9850/2F-20	072002	2021/02/05	2024/02/04
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2022/08/07	2023/08/06

*** Statement of Traceability:** China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data(Adapter 1# was the worst):

Please refer to the below table and plots.

Note: The device can be mounted in multiple orientations, test was performed with X,Y, Z Axis according to C63.26 figure 5, the worst orientation was photographed and it's data was recorded.

Cellular Band (PART 22H)**30 MHz-10 GHz:**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
GSM 850 Frequency:824.2MHz								
701.87	H	20.91	-52.37	0.00	0.55	-52.92	-13.00	39.92
714.27	V	21.03	-48.58	0.00	0.50	-49.08	-13.00	36.08
1648.400	H	39.32	-65.01	8.68	0.80	-57.13	-13.00	44.13
1648.400	V	42.85	-61.56	8.68	0.80	-53.68	-13.00	40.68
2472.600	H	38.23	-62.55	9.38	1.00	-54.17	-13.00	41.17
2472.600	V	46.60	-54.13	9.38	1.00	-45.75	-13.00	32.75
3296.800	H	39.02	-57.66	10.32	1.15	-48.49	-13.00	35.49
3296.800	V	37.57	-58.87	10.32	1.15	-49.70	-13.00	36.70
GSM 850 Frequency:836.6MHz								
724.36	H	21.81	-51.02	0.00	0.51	-51.53	-13.00	38.53
661.30	V	20.79	-49.83	0.00	0.51	-50.34	-13.00	37.34
1673.200	H	39.07	-65.24	8.71	0.85	-57.38	-13.00	44.38
1673.200	V	45.16	-59.25	8.71	0.85	-51.39	-13.00	38.39
2509.800	H	38.69	-61.92	9.42	1.01	-53.51	-13.00	40.51
2509.800	V	23.68	-76.94	9.42	1.01	-68.53	-13.00	55.53
3346.400	H	38.24	-58.93	10.34	1.16	-49.75	-13.00	36.75
3346.400	V	38.90	-58.13	10.34	1.16	-48.95	-13.00	35.95
GSM 850 Frequency:848.8MHz								
467.51	H	21.07	-55.42	0.00	0.43	-55.85	-13.00	42.85
574.85	V	20.80	-50.89	0.00	0.46	-51.35	-13.00	38.35
1697.600	H	42.64	-61.65	8.74	0.90	-53.81	-13.00	40.81
1697.600	V	50.72	-53.70	8.74	0.90	-45.86	-13.00	32.86
2546.400	H	38.99	-61.34	9.47	1.01	-52.88	-13.00	39.88
2546.400	V	46.42	-53.86	9.47	1.01	-45.40	-13.00	32.40
3395.200	H	39.86	-57.83	10.36	1.19	-48.66	-13.00	35.66
3395.200	V	40.31	-57.35	10.36	1.19	-48.18	-13.00	35.18

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA Band 5 Frequency:826.4 MHz								
160.33	H	21.17	-59.09	0.00	0.23	-59.32	-13.00	46.32
655.51	V	21.25	-49.48	0.00	0.52	-50.00	-13.00	37.00
1652.800	H	37.84	-66.49	8.68	0.81	-58.62	-13.00	45.62
1652.800	V	40.68	-63.73	8.68	0.81	-55.86	-13.00	42.86
2479.200	H	35.07	-65.69	9.39	1.01	-57.31	-13.00	44.31
2479.200	V	34.81	-65.92	9.39	1.01	-57.54	-13.00	44.54
3305.600	H	40.47	-56.26	10.32	1.15	-47.09	-13.00	34.09
3305.600	V	40.01	-56.49	10.32	1.15	-47.32	-13.00	34.32
WCDMA Band 5 Frequency:836.6MHz								
726.25	H	21.10	-51.69	0.00	0.52	-52.21	-13.00	39.21
911.33	V	21.53	-44.38	0.00	0.55	-44.93	-13.00	31.93
1673.200	H	36.81	-67.50	8.71	0.85	-59.64	-13.00	46.64
1673.200	V	38.29	-66.12	8.71	0.85	-58.26	-13.00	45.26
2509.800	H	35.84	-64.77	9.42	1.01	-56.36	-13.00	43.36
2509.800	V	36.44	-64.18	9.42	1.01	-55.77	-13.00	42.77
3346.400	H	41.09	-56.08	10.34	1.16	-46.90	-13.00	33.90
3346.400	V	40.85	-56.18	10.34	1.16	-47.00	-13.00	34.00
WCDMA Band 5 Frequency:846.6MHz								
721.40	H	21.02	-51.87	0.00	0.50	-52.37	-13.00	39.37
564.42	V	20.70	-50.98	0.00	0.46	-51.44	-13.00	38.44
1693.200	H	36.45	-67.85	8.73	0.89	-60.01	-13.00	47.01
1693.200	V	36.89	-67.53	8.73	0.89	-59.69	-13.00	46.69
2539.800	H	36.43	-63.95	9.46	1.01	-55.50	-13.00	42.50
2539.800	V	35.87	-64.47	9.46	1.01	-56.02	-13.00	43.02
3386.400	H	43.05	-54.54	10.35	1.18	-45.37	-13.00	32.37
3386.400	V	42.14	-55.40	10.35	1.18	-46.23	-13.00	33.23

PCS Band (PART 24E)**30 MHz-20 GHz:**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
GSM 1900 Frequency:1850.2MHz								
549.01	H	21.34	-53.52	0.00	0.47	-53.99	-13.00	40.99
719.31	V	20.78	-48.72	0.00	0.49	-49.21	-13.00	36.21
3700.400	H	35.96	-61.36	10.60	1.25	-52.01	-13.00	39.01
3700.400	V	35.54	-61.76	10.60	1.25	-52.41	-13.00	39.41
5550.600	H	35.54	-57.72	11.44	1.49	-47.77	-13.00	34.77
5550.600	V	34.25	-58.85	11.44	1.49	-48.90	-13.00	35.90
GSM 1900 Frequency:1880MHz								
721.72	H	21.37	-51.51	0.00	0.50	-52.01	-13.00	39.01
547.42	V	20.80	-50.85	0.00	0.47	-51.32	-13.00	38.32
3760.000	H	37.15	-59.26	10.66	1.24	-49.84	-13.00	36.84
3760.000	V	36.80	-59.49	10.66	1.24	-50.07	-13.00	37.07
5640.000	H	35.64	-57.81	11.33	1.54	-48.02	-13.00	35.02
5640.000	V	34.27	-59.06	11.33	1.54	-49.27	-13.00	36.27
GSM 1900 Frequency:1909.8MHz								
719.37	H	21.64	-51.29	0.00	0.49	-51.78	-13.00	38.78
729.35	V	21.25	-48.03	0.00	0.53	-48.56	-13.00	35.56
3819.600	H	41.26	-54.60	10.72	1.29	-45.17	-13.00	32.17
3819.600	V	40.15	-55.57	10.72	1.29	-46.14	-13.00	33.14
5729.400	H	35.77	-57.71	11.22	1.59	-48.08	-13.00	35.08
5729.400	V	34.13	-59.23	11.22	1.59	-49.60	-13.00	36.60

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA Band II, Frequency:1852.4 MHz								
703.96	H	21.75	-51.49	0.00	0.55	-52.04	-13.00	39.04
705.90	V	20.96	-48.83	0.00	0.54	-49.37	-13.00	36.37
3704.800	H	42.89	-54.37	10.60	1.25	-45.02	-13.00	32.02
3704.800	V	42.15	-55.08	10.60	1.25	-45.73	-13.00	32.73
5557.200	H	33.20	-60.08	11.43	1.49	-50.14	-13.00	37.14
5557.200	V	33.58	-59.55	11.43	1.49	-49.61	-13.00	36.61
WCDMA Band II, Frequency:1880 MHz								
726.25	H	21.39	-51.40	0.00	0.52	-51.92	-13.00	38.92
717.53	V	20.82	-48.72	0.00	0.49	-49.21	-13.00	36.21
3760.000	H	43.37	-53.04	10.66	1.24	-43.62	-13.00	30.62
3760.000	V	42.16	-54.13	10.66	1.24	-44.71	-13.00	31.71
5640.000	H	33.89	-59.56	11.33	1.54	-49.77	-13.00	36.77
5640.000	V	34.27	-59.06	11.33	1.54	-49.27	-13.00	36.27
WCDMA Band II, Frequency:1907.6MHz								
562.48	H	21.02	-53.58	0.00	0.47	-54.05	-13.00	41.05
730.12	V	21.04	-48.22	0.00	0.53	-48.75	-13.00	35.75
3815.200	H	44.27	-51.58	10.72	1.29	-42.15	-13.00	29.15
3815.200	V	42.17	-53.52	10.72	1.29	-44.09	-13.00	31.09
5722.800	H	34.76	-58.73	11.23	1.58	-49.08	-13.00	36.08
5722.800	V	34.43	-58.92	11.23	1.58	-49.27	-13.00	36.27

AWS Band(Part 27)**30 MHz-20 GHz:**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA Band IV, Frequency:1712.4 MHz								
582.83	H	21.07	-53.13	0.00	0.46	-53.59	-13.00	40.59
726.25	V	21.53	-47.82	0.00	0.52	-48.34	-13.00	35.34
3424.800	H	37.18	-60.59	10.37	1.17	-51.39	-13.00	38.39
3424.800	V	36.12	-61.62	10.37	1.17	-52.42	-13.00	39.42
5137.200	H	34.21	-59.41	11.28	1.46	-49.59	-13.00	36.59
5137.200	V	34.37	-59.13	11.28	1.46	-49.31	-13.00	36.31
WCDMA Band IV, Frequency:1732.6 MHz								
714.62	H	20.95	-52.07	0.00	0.50	-52.57	-13.00	39.57
725.28	V	21.25	-48.12	0.00	0.51	-48.63	-13.00	35.63
3465.200	H	37.64	-60.17	10.39	1.15	-50.93	-13.00	37.93
3465.200	V	35.89	-61.88	10.39	1.15	-52.64	-13.00	39.64
5197.800	H	34.72	-59.41	11.32	1.44	-49.53	-13.00	36.53
5197.800	V	34.26	-59.72	11.32	1.44	-49.84	-13.00	36.84
WCDMA Band IV, Frequency:1752.6MHz								
724.31	H	20.81	-52.02	0.00	0.51	-52.53	-13.00	39.53
721.40	V	20.92	-48.53	0.00	0.50	-49.03	-13.00	36.03
3505.200	H	40.19	-57.64	10.41	1.18	-48.41	-13.00	35.41
3505.200	V	38.42	-59.35	10.41	1.18	-50.12	-13.00	37.12
5257.800	H	35.07	-58.66	11.35	1.47	-48.78	-13.00	35.78
5257.800	V	34.64	-58.87	11.35	1.47	-48.99	-13.00	35.99

LTE Bands:

(The Worst modulation and bandwidth was below)

LTE Band 2 (30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK,Frequency:1850.7 MHz								
160.34	H	22.36	-57.90	0.00	0.23	-58.13	-13.00	45.13
875.24	V	20.90	-45.63	0.00	0.60	-46.23	-13.00	33.23
3701.400	H	49.99	-47.32	10.60	1.25	-37.97	-13.00	24.97
3701.400	V	49.06	-48.23	10.60	1.25	-38.88	-13.00	25.88
5552.100	H	33.81	-59.46	11.44	1.49	-49.51	-13.00	36.51
5552.100	V	34.02	-59.08	11.44	1.49	-49.13	-13.00	36.13
QPSK,Frequency:1880 MHz								
721.72	H	21.81	-51.07	0.00	0.50	-51.57	-13.00	38.57
731.92	V	21.48	-47.74	0.00	0.53	-48.27	-13.00	35.27
3760.000	H	47.27	-49.14	10.66	1.24	-39.72	-13.00	26.72
3760.000	V	48.72	-47.57	10.66	1.24	-38.15	-13.00	25.15
5640.000	H	34.75	-58.70	11.33	1.54	-48.91	-13.00	35.91
5640.000	V	34.26	-59.07	11.33	1.54	-49.28	-13.00	36.28
QPSK,Frequency:1909.3 MHz								
162.30	H	21.73	-58.61	0.00	0.24	-58.85	-13.00	45.85
729.58	V	21.66	-47.62	0.00	0.53	-48.15	-13.00	35.15
3818.600	H	50.59	-45.27	10.72	1.29	-35.84	-13.00	22.84
3818.600	V	48.43	-47.28	10.72	1.29	-37.85	-13.00	24.85
5727.900	H	35.57	-57.91	11.23	1.59	-48.27	-13.00	35.27
5727.900	V	35.33	-58.03	11.23	1.59	-48.39	-13.00	35.39

LTE Band 4 (30MHz-20GHz):

EME Band 1 (160-5400 MHz)								
Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK,Frequency:1710.7 MHz								
160.04	H	22.70	-57.55	0.00	0.23	-57.78	-13.00	44.78
729.45	V	21.18	-48.10	0.00	0.53	-48.63	-13.00	35.63
3421.400	H	39.26	-58.50	10.37	1.17	-49.30	-13.00	36.30
3421.400	V	37.96	-59.77	10.37	1.17	-50.57	-13.00	37.57
5132.100	H	33.94	-59.63	11.28	1.47	-49.82	-13.00	36.82
5132.100	V	33.57	-59.89	11.28	1.47	-50.08	-13.00	37.08
QPSK,Frequency:1732.5 MHz								
159.48	H	21.52	-58.74	0.00	0.23	-58.97	-13.00	45.97
719.28	V	21.15	-48.35	0.00	0.49	-48.84	-13.00	35.84
3465.000	H	39.64	-58.17	10.39	1.15	-48.93	-13.00	35.93
3465.000	V	38.41	-59.36	10.39	1.15	-50.12	-13.00	37.12
5197.500	H	34.37	-59.76	11.32	1.44	-49.88	-13.00	36.88
5197.500	V	34.68	-59.30	11.32	1.44	-49.42	-13.00	36.42
QPSK,Frequency:1754.3MHz								
161.73	H	21.52	-58.80	0.00	0.24	-59.04	-13.00	46.04
510.28	V	21.28	-50.32	0.00	0.45	-50.77	-13.00	37.77
3505.200	H	41.14	-56.69	10.41	1.18	-47.46	-13.00	34.46
3505.200	V	39.64	-58.13	10.41	1.18	-48.90	-13.00	35.90
5257.800	H	34.94	-58.79	11.35	1.47	-48.91	-13.00	35.91
5257.800	V	35.09	-58.42	11.35	1.47	-48.54	-13.00	35.54

LTE Band 5(30MHz-10GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 824.7 MHz								
157.82	H	21.63	-58.68	0.00	0.23	-58.91	-13.00	45.91
580.92	V	21.02	-50.68	0.00	0.46	-51.14	-13.00	38.14
1649.400	H	38.81	-65.52	8.68	0.80	-57.64	-13.00	44.64
1649.400	V	40.77	-63.64	8.68	0.80	-55.76	-13.00	42.76
2474.100	H	37.66	-63.12	9.38	1.00	-54.74	-13.00	41.74
2474.100	V	37.31	-63.42	9.38	1.00	-55.04	-13.00	42.04
3298.800	H	43.53	-53.15	10.32	1.15	-43.98	-13.00	30.98
3298.800	V	42.54	-53.90	10.32	1.15	-44.73	-13.00	31.73
QPSK, Frequency: 836.5 MHz								
161.17	H	22.75	-57.55	0.00	0.24	-57.79	-13.00	44.79
551.17	V	21.13	-50.53	0.00	0.47	-51.00	-13.00	38.00
1673.000	H	37.45	-66.86	8.71	0.85	-59.00	-13.00	46.00
1673.000	V	39.17	-65.24	8.71	0.85	-57.38	-13.00	44.38
2509.500	H	38.46	-62.15	9.42	1.01	-53.74	-13.00	40.74
2509.500	V	38.71	-61.91	9.42	1.01	-53.50	-13.00	40.50
3346.000	H	46.47	-50.69	10.34	1.16	-41.51	-13.00	28.51
3346.000	V	43.23	-53.79	10.34	1.16	-44.61	-13.00	31.61
QPSK, Frequency: 848.3 MHz								
161.74	H	22.09	-58.23	0.00	0.24	-58.47	-13.00	45.47
638.55	V	21.13	-49.90	0.00	0.52	-50.42	-13.00	37.42
1696.600	H	37.40	-66.89	8.74	0.89	-59.04	-13.00	46.04
1696.600	V	39.80	-64.62	8.74	0.89	-56.77	-13.00	43.77
2544.900	H	39.52	-60.82	9.47	1.01	-52.36	-13.00	39.36
2544.900	V	39.33	-60.97	9.47	1.01	-52.51	-13.00	39.51
3393.200	H	50.59	-47.08	10.36	1.19	-37.91	-13.00	24.91
3393.200	V	48.52	-49.11	10.36	1.19	-39.94	-13.00	26.94

LTE Band 12 (30MHz-10GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 699.7 MHz								
160.02	H	21.71	-58.54	0.00	0.23	-58.77	-13.00	45.77
438.86	V	20.59	-53.42	0.00	0.42	-53.84	-13.00	40.84
1399.400	H	40.03	-63.67	8.22	0.71	-56.16	-13.00	43.16
1399.400	V	39.10	-64.65	8.22	0.71	-57.14	-13.00	44.14
2099.100	H	37.51	-64.37	9.16	0.91	-56.12	-13.00	43.12
2099.100	V	38.93	-62.90	9.16	0.91	-54.65	-13.00	41.65
2798.800	H	35.69	-64.24	9.88	1.04	-55.40	-13.00	42.40
2798.800	V	36.16	-63.64	9.88	1.04	-54.80	-13.00	41.80
QPSK, Frequency: 707.5 MHz								
159.46	H	21.87	-58.39	0.00	0.23	-58.62	-13.00	45.62
497.84	V	20.34	-51.33	0.00	0.45	-51.78	-13.00	38.78
1415.000	H	39.16	-64.51	8.26	0.72	-56.97	-13.00	43.97
1415.000	V	38.75	-64.97	8.26	0.72	-57.43	-13.00	44.43
2122.500	H	37.36	-64.63	9.17	0.92	-56.38	-13.00	43.38
2122.500	V	38.12	-63.85	9.17	0.92	-55.60	-13.00	42.60
2830.000	H	35.92	-63.88	9.93	1.06	-55.01	-13.00	42.01
2830.000	V	36.44	-63.29	9.93	1.06	-54.42	-13.00	41.42
QPSK, Frequency: 715.3 MHz								
160.12	H	22.48	-57.77	0.00	0.23	-58.00	-13.00	45.00
214.77	V	20.79	-57.79	0.00	0.27	-58.06	-13.00	45.06
1430.600	H	37.79	-65.84	8.31	0.73	-58.26	-13.00	45.26
1430.600	V	38.44	-65.25	8.31	0.73	-57.67	-13.00	44.67
2145.900	H	37.20	-64.90	9.19	0.93	-56.64	-13.00	43.64
2145.900	V	37.57	-64.54	9.19	0.93	-56.28	-13.00	43.28
2861.200	H	36.16	-63.49	9.98	1.07	-54.58	-13.00	41.58
2861.200	V	36.64	-63.03	9.98	1.07	-54.12	-13.00	41.12

LTE Band 17 (30MHz-10GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 706.5 MHz								
159.46	H	22.49	-57.77	0.00	0.23	-58.00	-13.00	45.00
656.57	V	21.94	-48.77	0.00	0.52	-49.29	-13.00	36.29
1413.000	H	37.94	-65.73	8.26	0.72	-58.19	-13.00	45.19
1413.000	V	38.23	-65.49	8.26	0.72	-57.95	-13.00	44.95
2119.500	H	37.09	-64.88	9.17	0.92	-56.63	-13.00	43.63
2119.500	V	37.20	-64.75	9.17	0.92	-56.50	-13.00	43.50
2826.000	H	35.64	-64.17	9.92	1.06	-55.31	-13.00	42.31
2826.000	V	35.64	-64.10	9.92	1.06	-55.24	-13.00	42.24
QPSK, Frequency: 710 MHz								
160.58	H	22.54	-57.73	0.00	0.24	-57.97	-13.00	44.97
584.90	V	20.93	-50.78	0.00	0.46	-51.24	-13.00	38.24
1420.000	H	38.21	-65.45	8.28	0.73	-57.90	-13.00	44.90
1420.000	V	38.46	-65.25	8.28	0.73	-57.70	-13.00	44.70
2130.000	H	37.58	-64.44	9.18	0.92	-56.18	-13.00	43.18
2130.000	V	38.15	-63.86	9.18	0.92	-55.60	-13.00	42.60
2840.000	H	35.34	-64.41	9.94	1.06	-55.53	-13.00	42.53
2840.000	V	35.51	-64.20	9.94	1.06	-55.32	-13.00	42.32
QPSK, Frequency: 713.5 MHz								
158.90	H	22.78	-57.50	0.00	0.23	-57.73	-13.00	44.73
469.06	V	21.18	-51.63	0.00	0.43	-52.06	-13.00	39.06
1427.000	H	39.24	-64.40	8.30	0.73	-56.83	-13.00	43.83
1427.000	V	38.79	-64.90	8.30	0.73	-57.33	-13.00	44.33
2140.500	H	38.65	-63.42	9.18	0.93	-55.17	-13.00	42.17
2140.500	V	38.98	-63.10	9.18	0.93	-54.85	-13.00	41.85
2854.000	H	35.10	-64.59	9.97	1.07	-55.69	-13.00	42.69
2854.000	V	35.49	-64.19	9.97	1.07	-55.29	-13.00	42.29

LTE Band 41 (30MHz-26.5GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 2537.5 MHz								
160.63	H	22.45	-57.83	0.00	0.24	-58.07	-25.00	33.07
566.94	V	21.31	-50.37	0.00	0.46	-50.83	-25.00	25.83
5075.000	H	34.10	-59.11	11.25	1.48	-49.34	-25.00	24.34
5075.000	V	33.65	-59.46	11.25	1.48	-49.69	-25.00	24.69
7612.500	H	34.27	-55.21	10.88	2.02	-46.35	-25.00	21.35
7612.500	V	34.37	-55.82	10.88	2.02	-46.96	-25.00	21.96
QPSK, Frequency: 2595 MHz								
161.17	H	21.95	-58.35	0.00	0.24	-58.59	-25.00	33.59
714.28	V	20.95	-48.66	0.00	0.50	-49.16	-25.00	24.16
5190.000	H	35.64	-58.43	11.31	1.44	-48.56	-25.00	23.56
5190.000	V	35.16	-58.76	11.31	1.44	-48.89	-25.00	23.89
7785.000	H	34.84	-54.65	10.84	1.99	-45.80	-25.00	20.80
7785.000	V	34.53	-55.39	10.84	1.99	-46.54	-25.00	21.54
QPSK, Frequency: 2652.5 MHz								
162.30	H	22.02	-58.32	0.00	0.24	-58.56	-25.00	33.56
727.03	V	21.56	-47.77	0.00	0.52	-48.29	-25.00	23.29
5305.000	H	41.28	-52.16	11.38	1.46	-42.24	-25.00	17.24
5305.000	V	36.54	-56.64	11.38	1.46	-46.72	-25.00	21.72
7957.500	H	41.98	-46.44	10.81	2.09	-37.72	-25.00	12.72
7957.500	V	41.12	-47.75	10.81	2.09	-39.03	-25.00	14.03

LTE Band 66(30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 1710.7 MHz								
160.07	H	22.29	-57.96	0.00	0.23	-58.19	-13.00	45.19
726.90	V	21.02	-48.31	0.00	0.52	-48.83	-13.00	35.83
3421.400	H	35.46	-62.30	10.37	1.17	-53.10	-13.00	40.10
3421.400	V	36.12	-61.61	10.37	1.17	-52.41	-13.00	39.41
5132.100	H	34.01	-59.56	11.28	1.47	-49.75	-13.00	36.75
5132.100	V	33.97	-59.49	11.28	1.47	-49.68	-13.00	36.68
QPSK, Frequency:1745 MHz								
162.82	H	21.44	-58.93	0.00	0.24	-59.17	-13.00	46.17
729.24	V	21.15	-48.13	0.00	0.53	-48.66	-13.00	35.66
3490.000	H	35.46	-62.38	10.40	1.17	-53.15	-13.00	40.15
3490.000	V	34.28	-63.50	10.40	1.17	-54.27	-13.00	41.27
5235.000	H	33.92	-59.98	11.34	1.46	-50.10	-13.00	37.10
5235.000	V	33.74	-59.97	11.34	1.46	-50.09	-13.00	37.09
QPSK, Frequency: 1779.3 MHz								
160.34	H	22.09	-58.17	0.00	0.23	-58.40	-13.00	45.40
709.18	V	21.50	-48.22	0.00	0.52	-48.74	-13.00	35.74
3558.600	H	37.70	-59.97	10.46	1.22	-50.73	-13.00	37.73
3558.600	V	39.70	-57.87	10.46	1.22	-48.63	-13.00	35.63
5337.900	H	33.85	-59.62	11.40	1.47	-49.69	-13.00	36.69
5337.900	V	33.59	-59.74	11.40	1.47	-49.81	-13.00	36.81

LTE Band 71 (30MHz-10GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 665.5 MHz								
160.33	H	21.35	-58.91	0.00	0.23	-59.14	-13.00	46.14
572.17	V	20.58	-51.11	0.00	0.46	-51.57	-13.00	38.57
1331.000	H	36.42	-66.61	8.03	0.76	-59.34	-13.00	46.34
1331.000	V	35.80	-67.56	8.03	0.76	-60.29	-13.00	47.29
1996.500	H	35.80	-66.36	9.10	0.89	-58.15	-13.00	45.15
1996.500	V	35.12	-66.42	9.10	0.89	-58.21	-13.00	45.21
2662.000	H	36.10	-63.86	9.66	1.06	-55.26	-13.00	42.26
2662.000	V	35.42	-64.46	9.66	1.06	-55.86	-13.00	42.86
QPSK, Frequency:680.5 MHz								
160.71	H	21.63	-58.65	0.00	0.24	-58.89	-13.00	45.89
583.80	V	20.82	-50.89	0.00	0.46	-51.35	-13.00	38.35
1361.000	H	36.04	-67.29	8.11	0.77	-59.95	-13.00	46.95
1361.000	V	35.43	-68.10	8.11	0.77	-60.76	-13.00	47.76
2041.500	H	35.47	-66.56	9.12	0.91	-58.35	-13.00	45.35
2041.500	V	34.74	-66.90	9.12	0.91	-58.69	-13.00	45.69
2722.000	H	35.71	-64.26	9.76	1.05	-55.55	-13.00	42.55
2722.000	V	35.09	-64.82	9.76	1.05	-56.11	-13.00	43.11
QPSK, Frequency: 695.5 MHz								
161.12	H	21.55	-58.75	0.00	0.24	-58.99	-13.00	45.99
504.34	V	20.86	-50.73	0.00	0.45	-51.18	-13.00	38.18
1391.000	H	35.90	-67.72	8.19	0.72	-60.25	-13.00	47.25
1391.000	V	35.45	-68.25	8.19	0.72	-60.78	-13.00	47.78
2086.500	H	35.34	-66.57	9.15	0.91	-58.33	-13.00	45.33
2086.500	V	34.66	-67.13	9.15	0.91	-58.89	-13.00	45.89
2782.000	H	35.43	-64.51	9.85	1.05	-55.71	-13.00	42.71
2782.000	V	34.46	-65.37	9.85	1.05	-56.57	-13.00	43.57

Note:

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

==== END OF REPORT =====