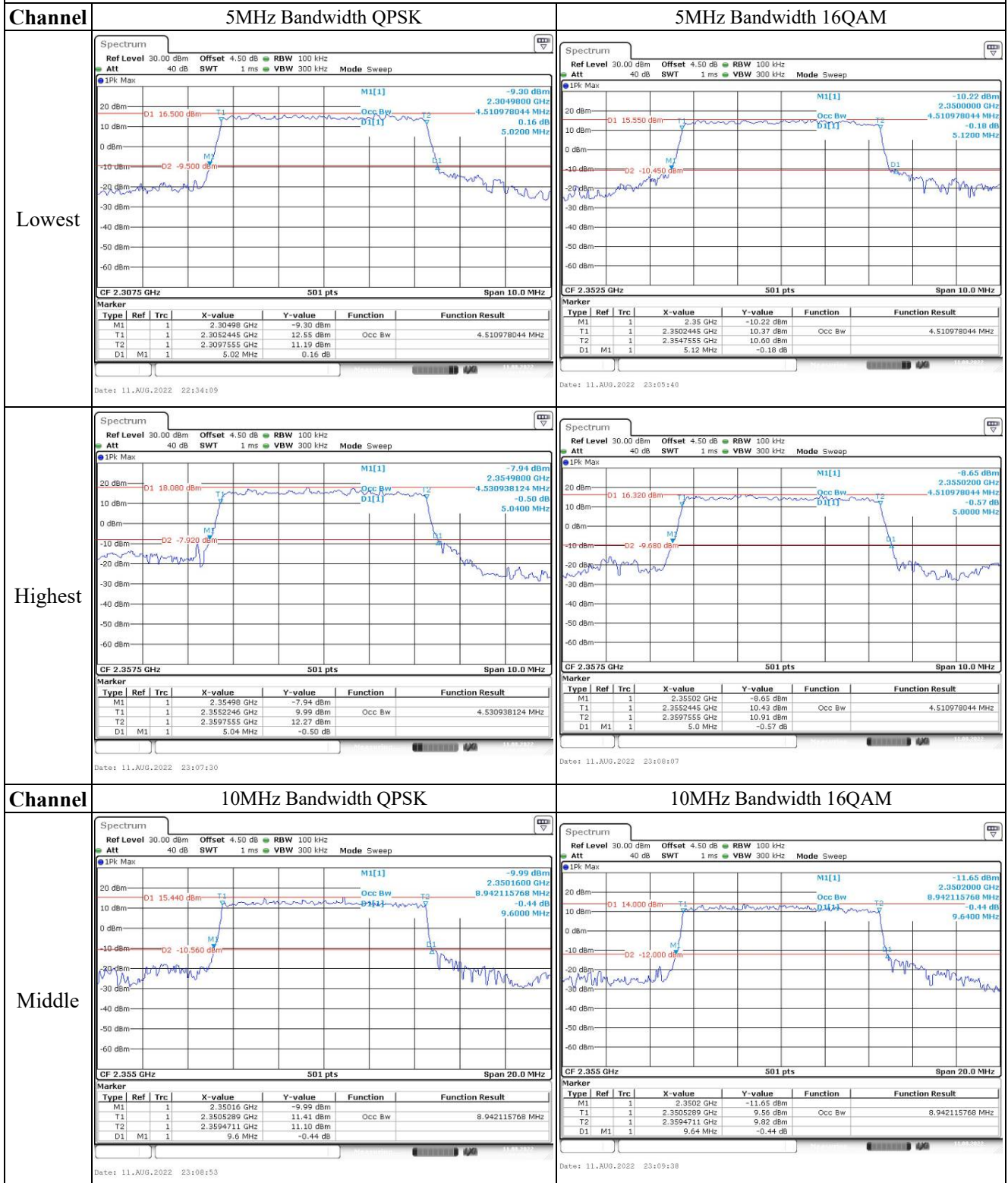


Occupied Bandwidth (2350~2360)

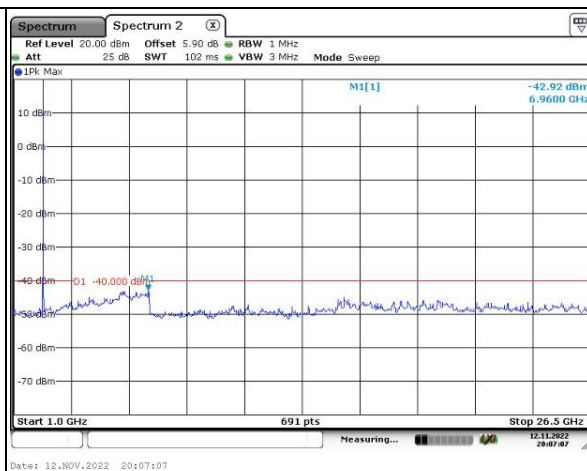
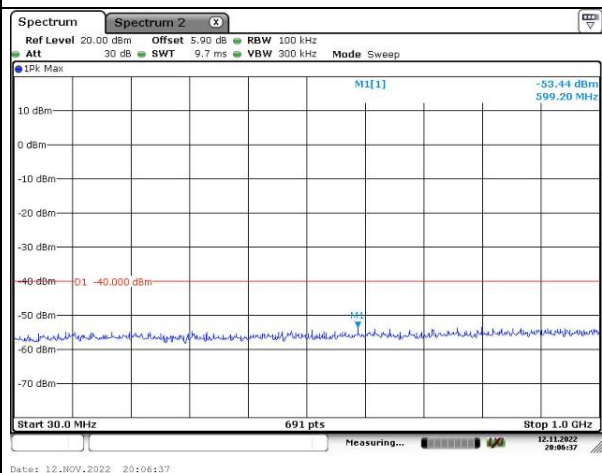


Spurious Emissions at Antenna Terminal

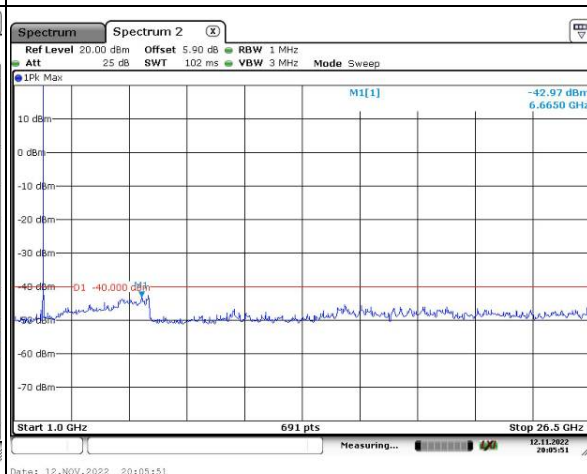
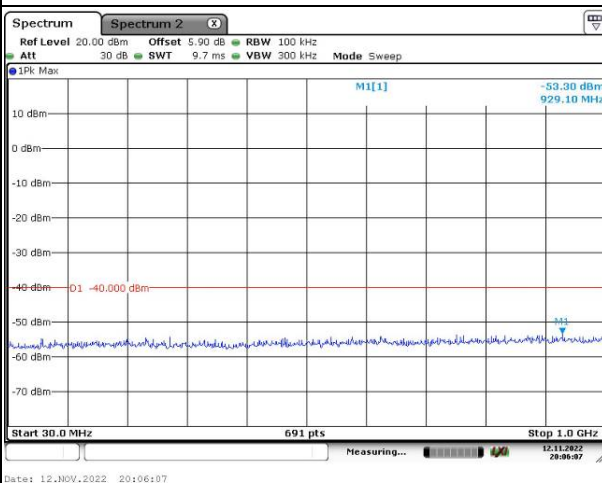
Channel

5MHz Bandwidth QPSK (2305~2315)

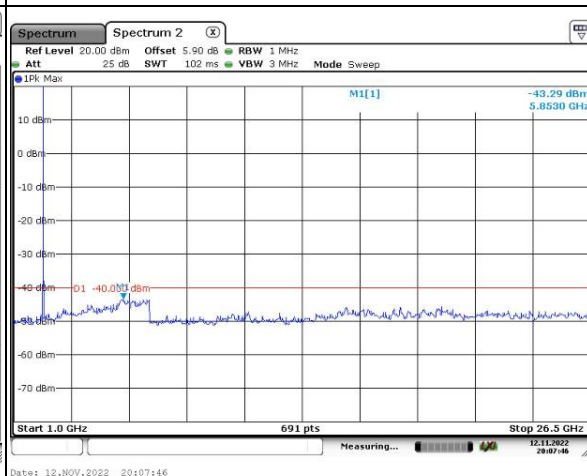
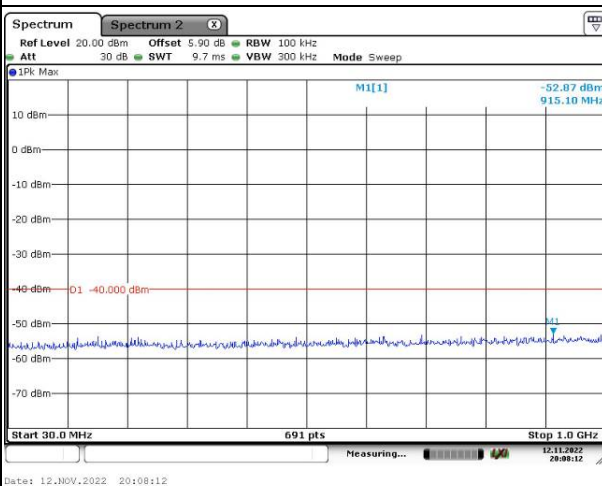
Lowest



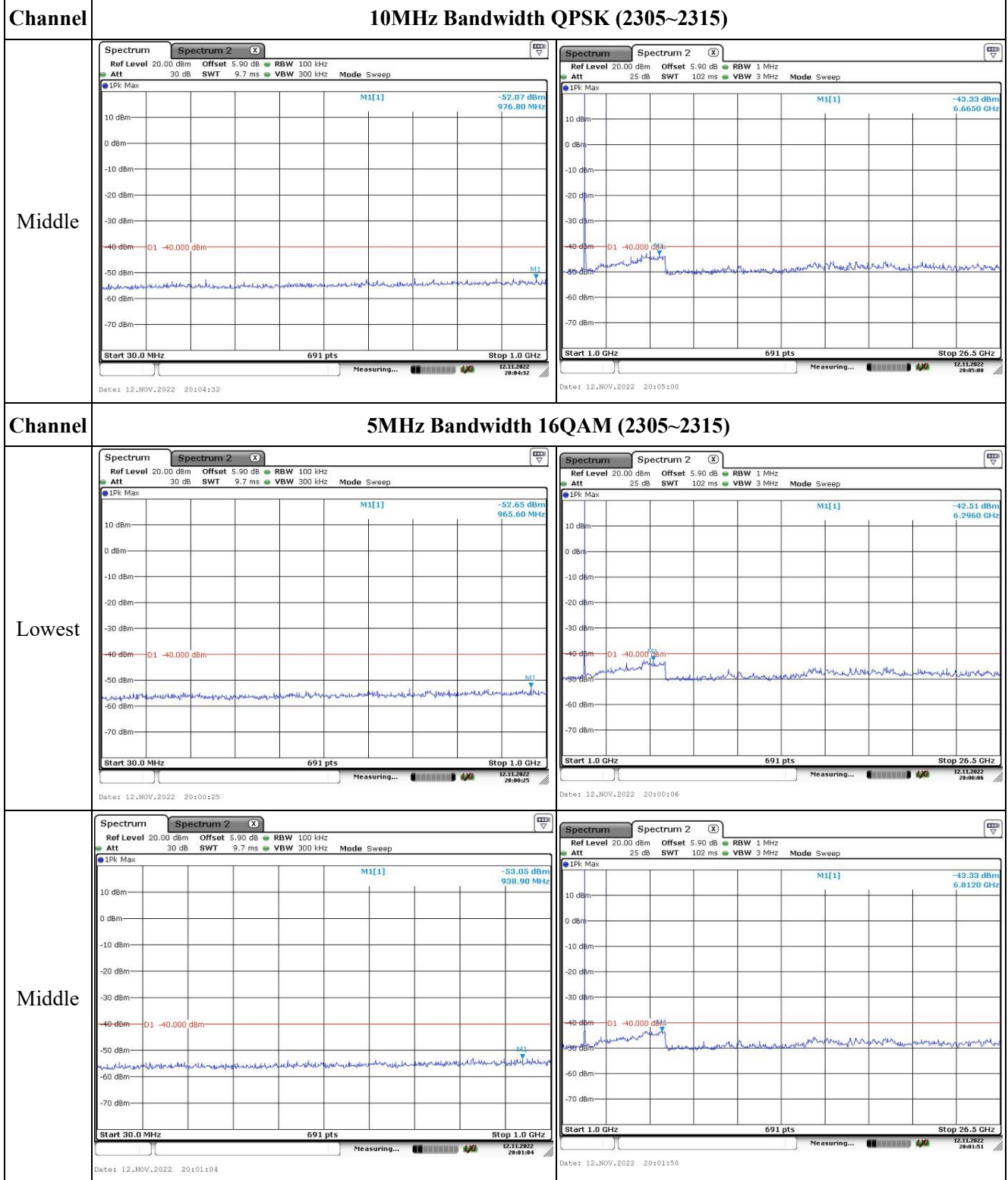
Middle



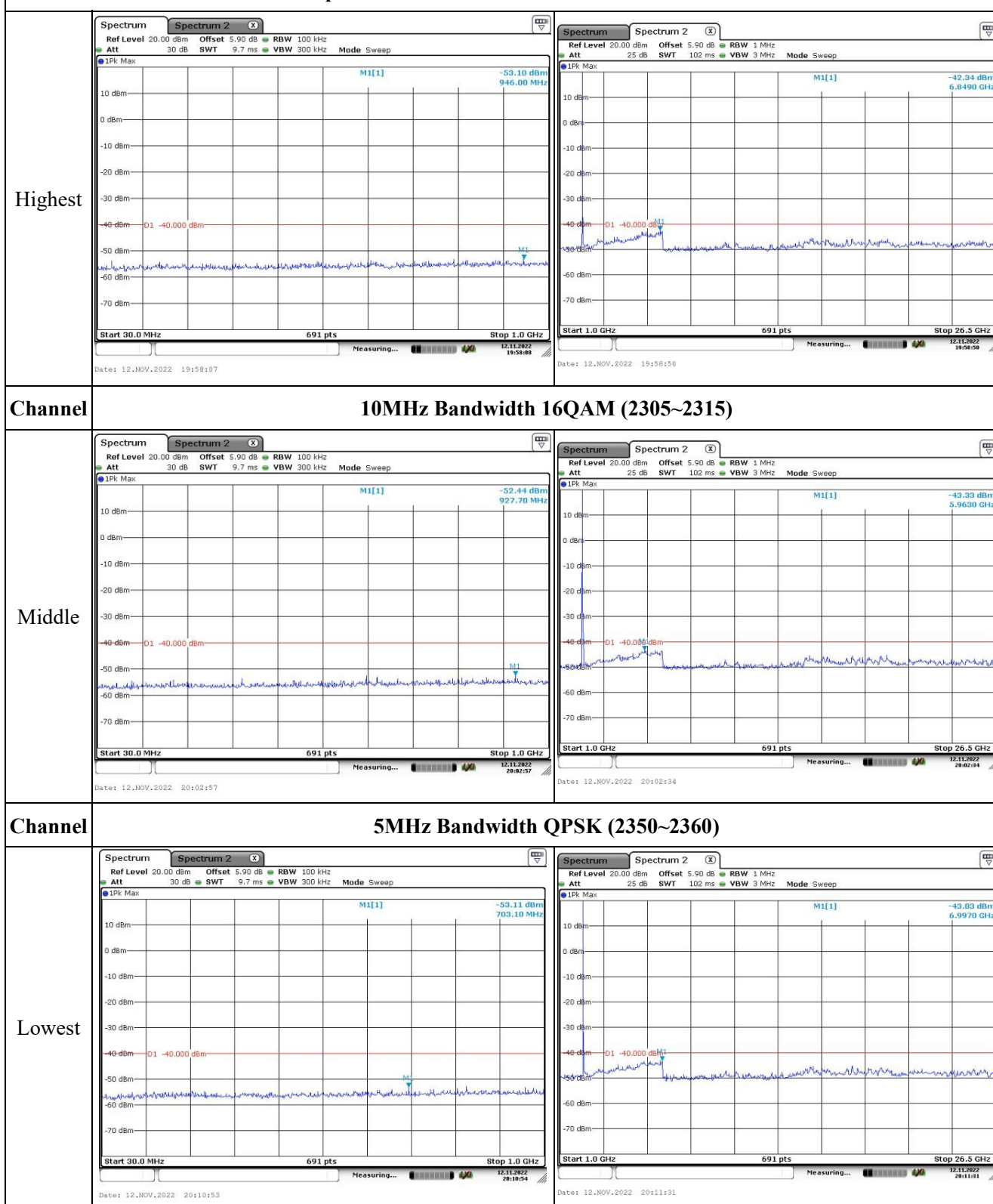
Highest



Spurious Emissions at Antenna Terminal

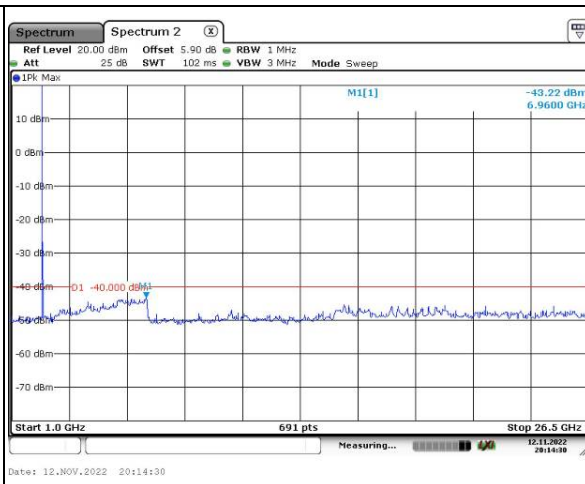
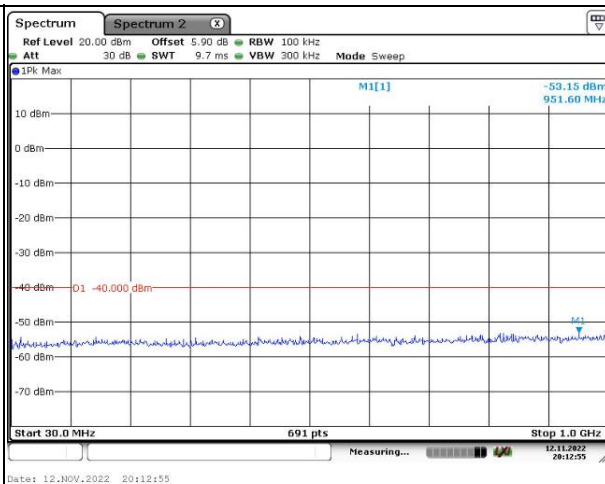


Spurious Emissions at Antenna Terminal

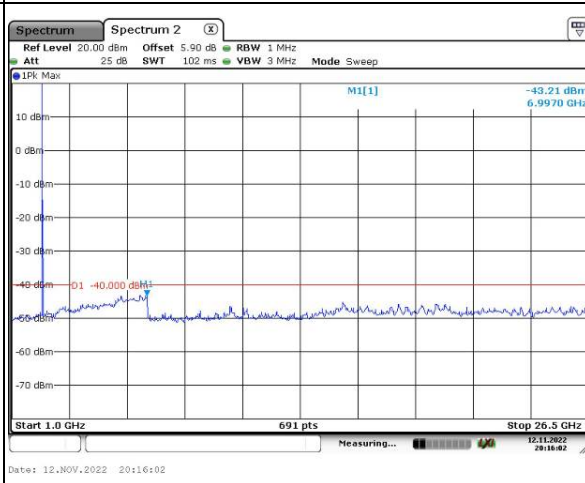
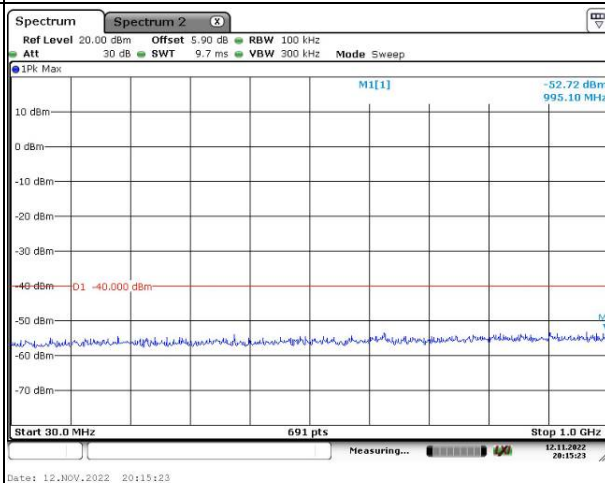


Spurious Emissions at Antenna Terminal

Middle



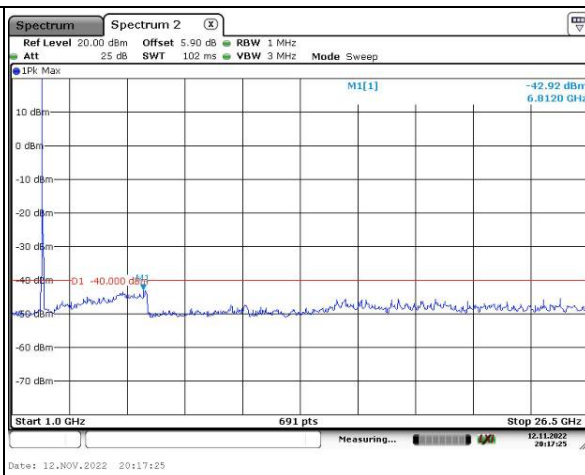
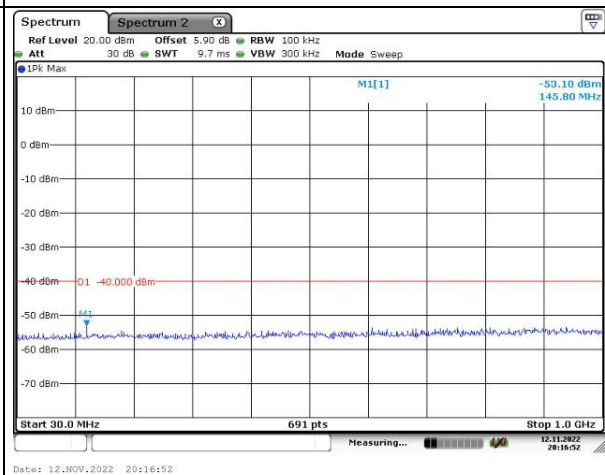
Highest



Channel

10MHz Bandwidth QPSK (2350~2360)

Middle

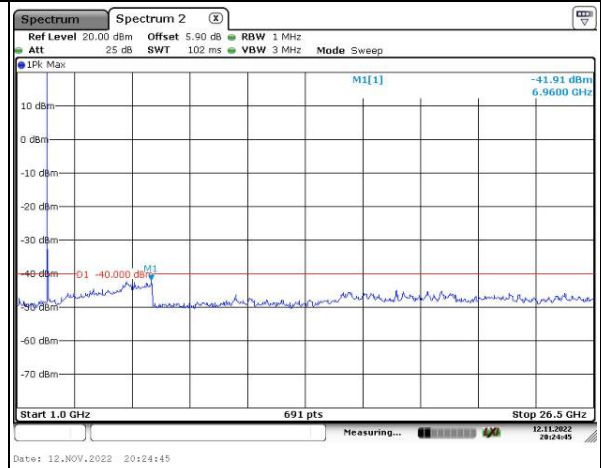
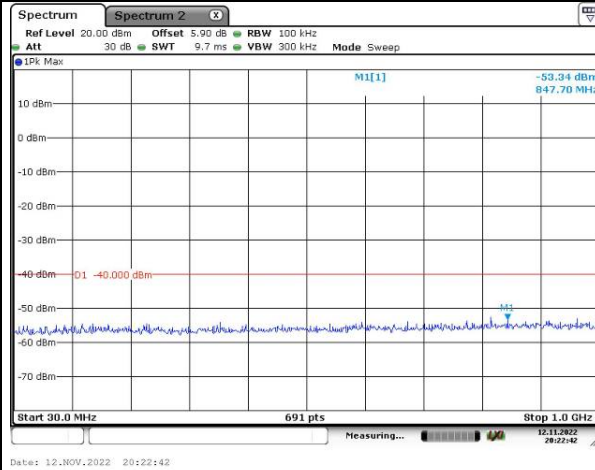


Spurious Emissions at Antenna Terminal

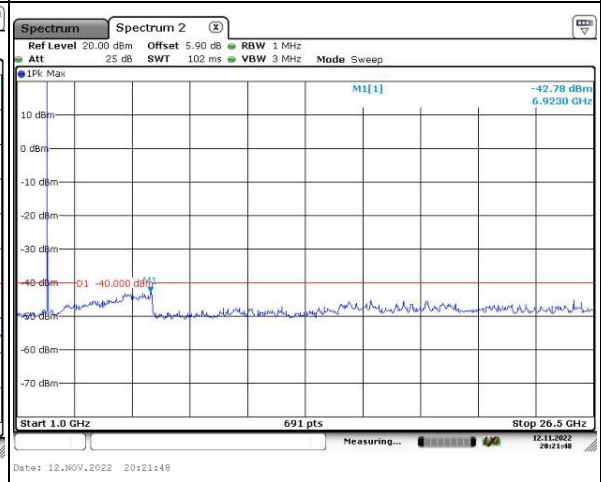
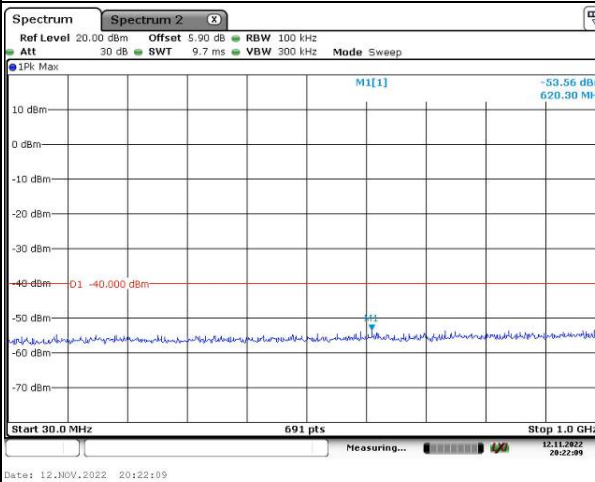
Channel

5MHz Bandwidth 16QAM (2350~2360)

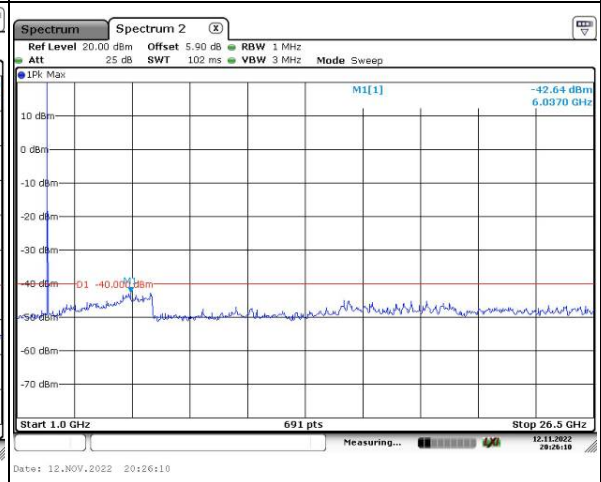
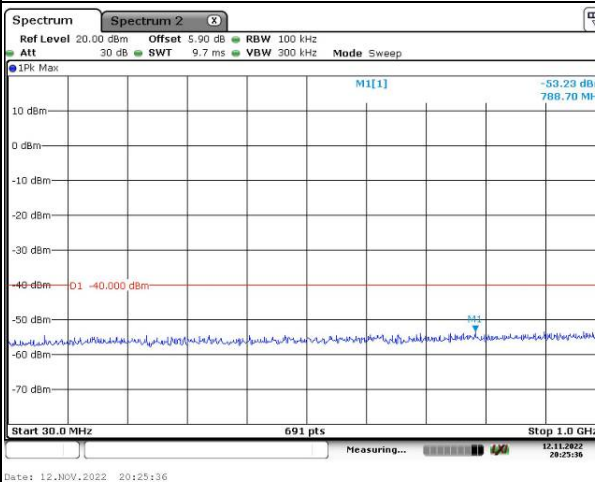
Lowest



Middle



Highest

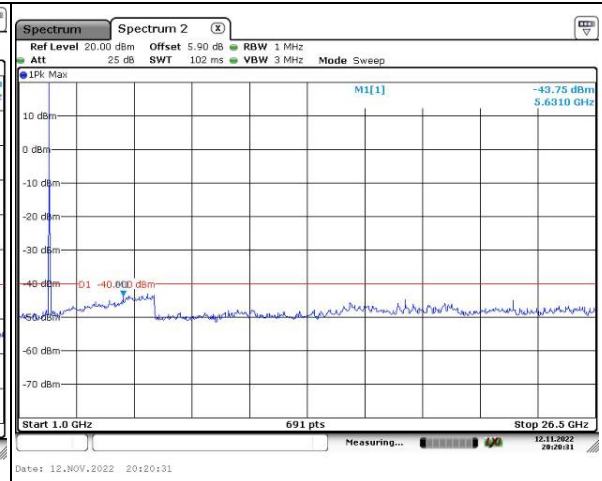
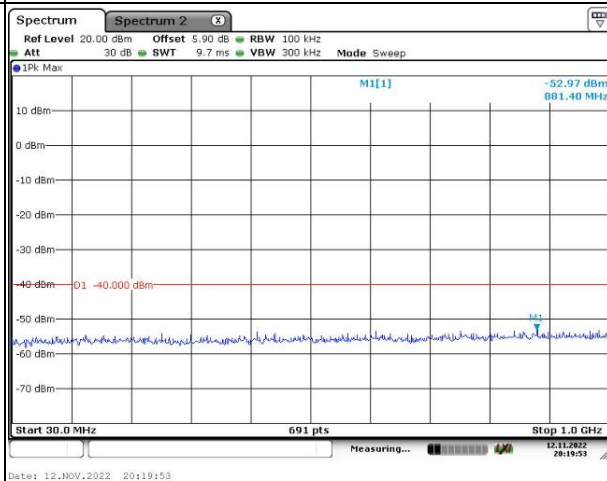


Spurious Emissions at Antenna Terminal

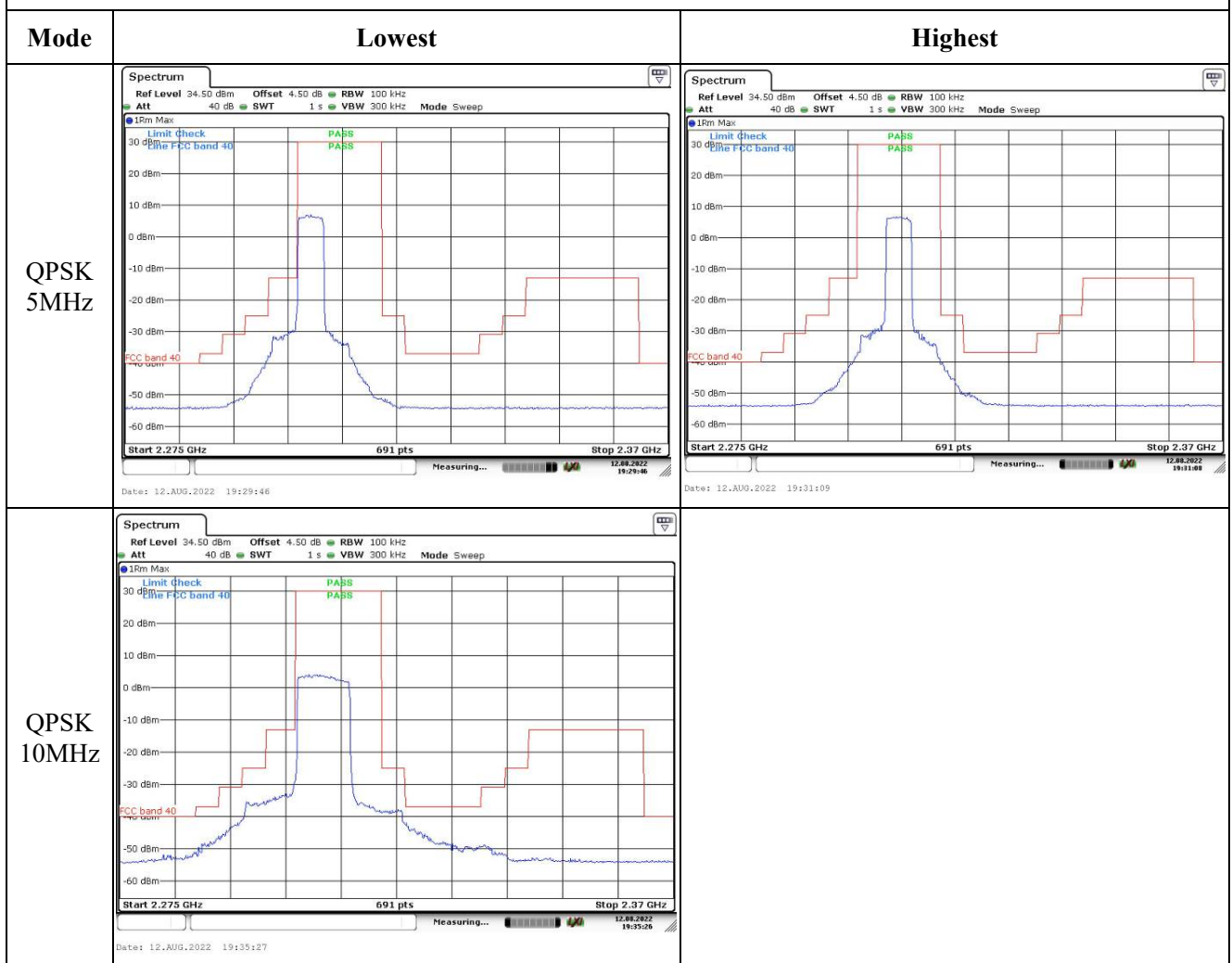
Channel

10MHz Bandwidth 16QAM (2350~2360)

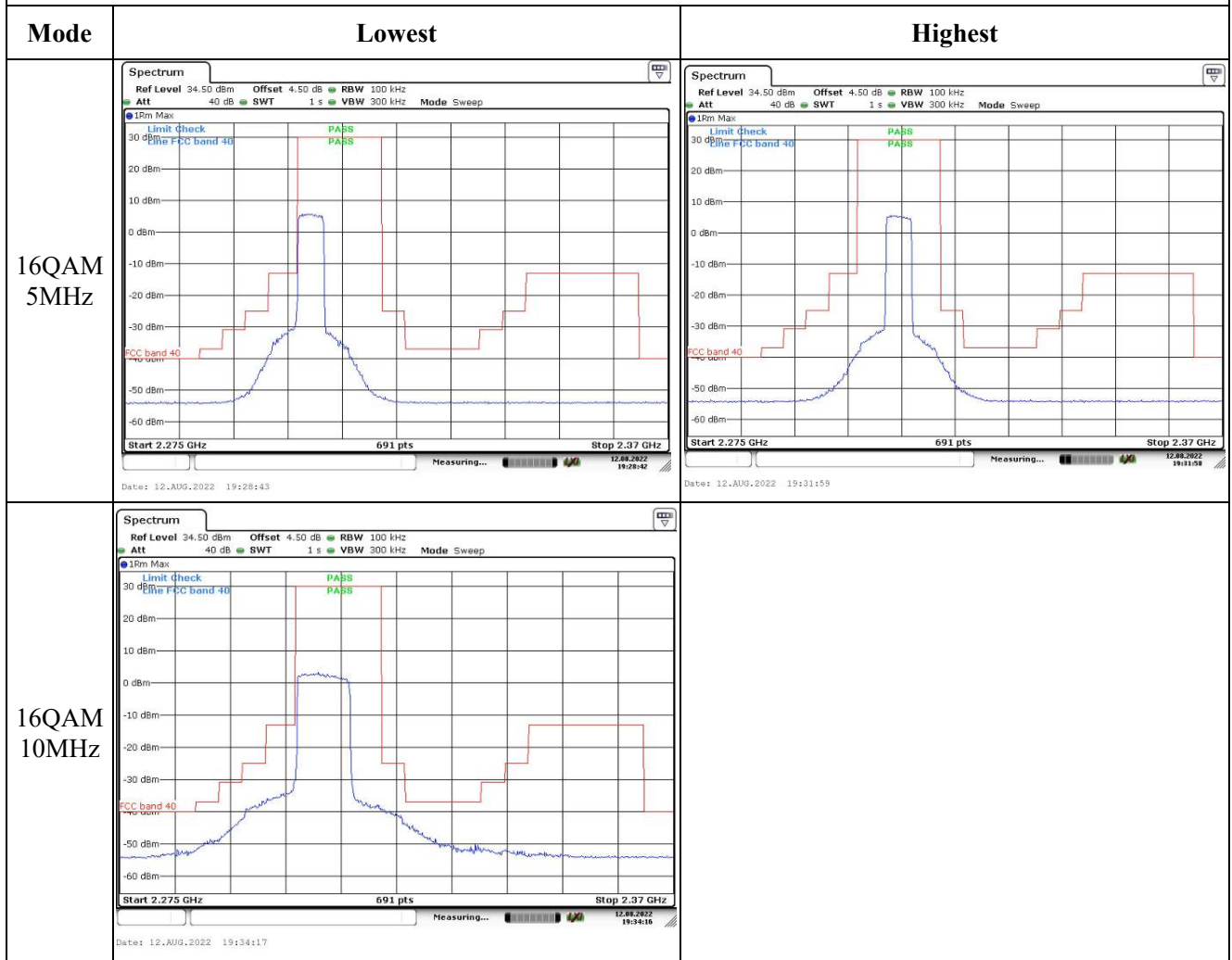
Middle



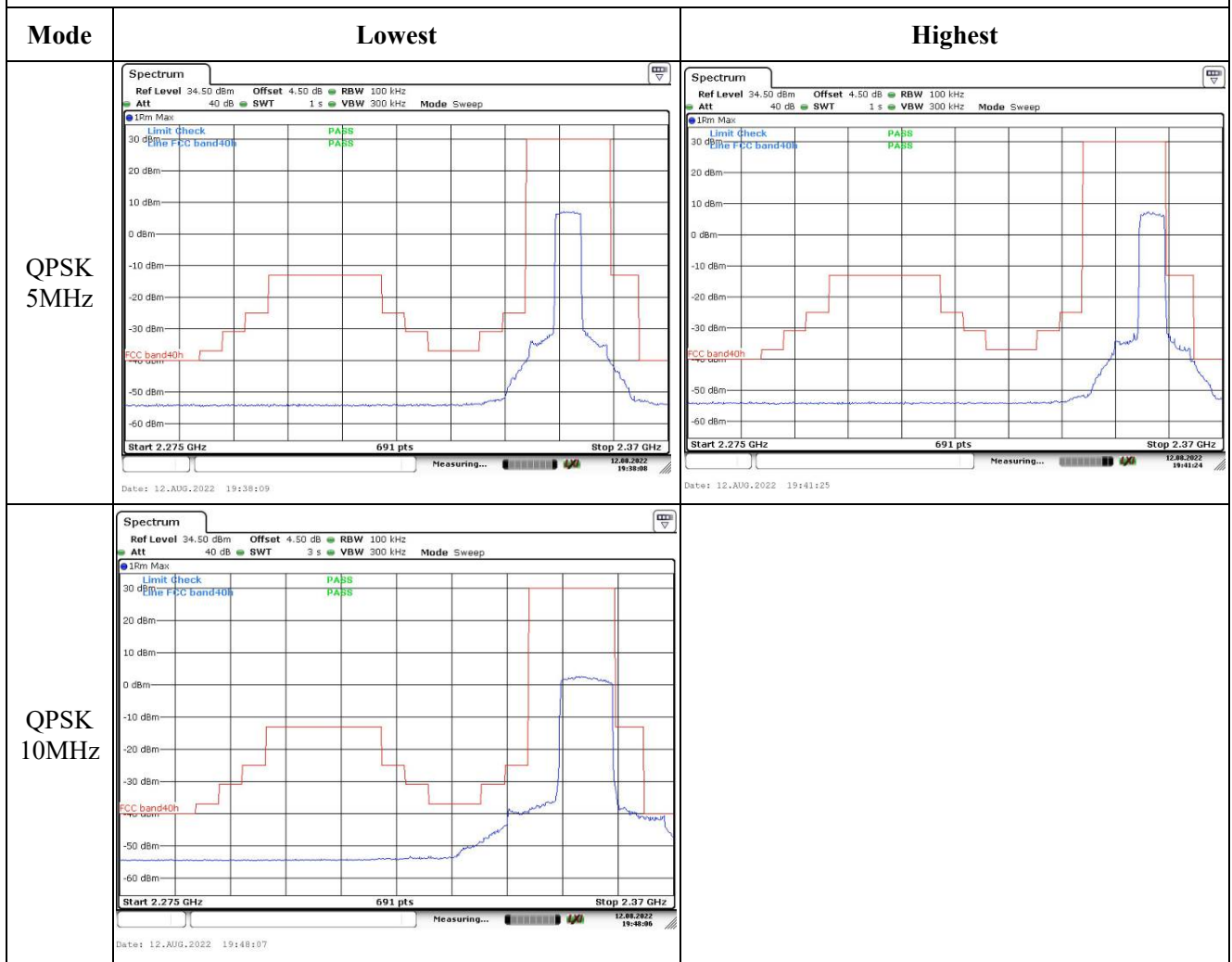
Out of band emission, Band Edge (2305-2315)



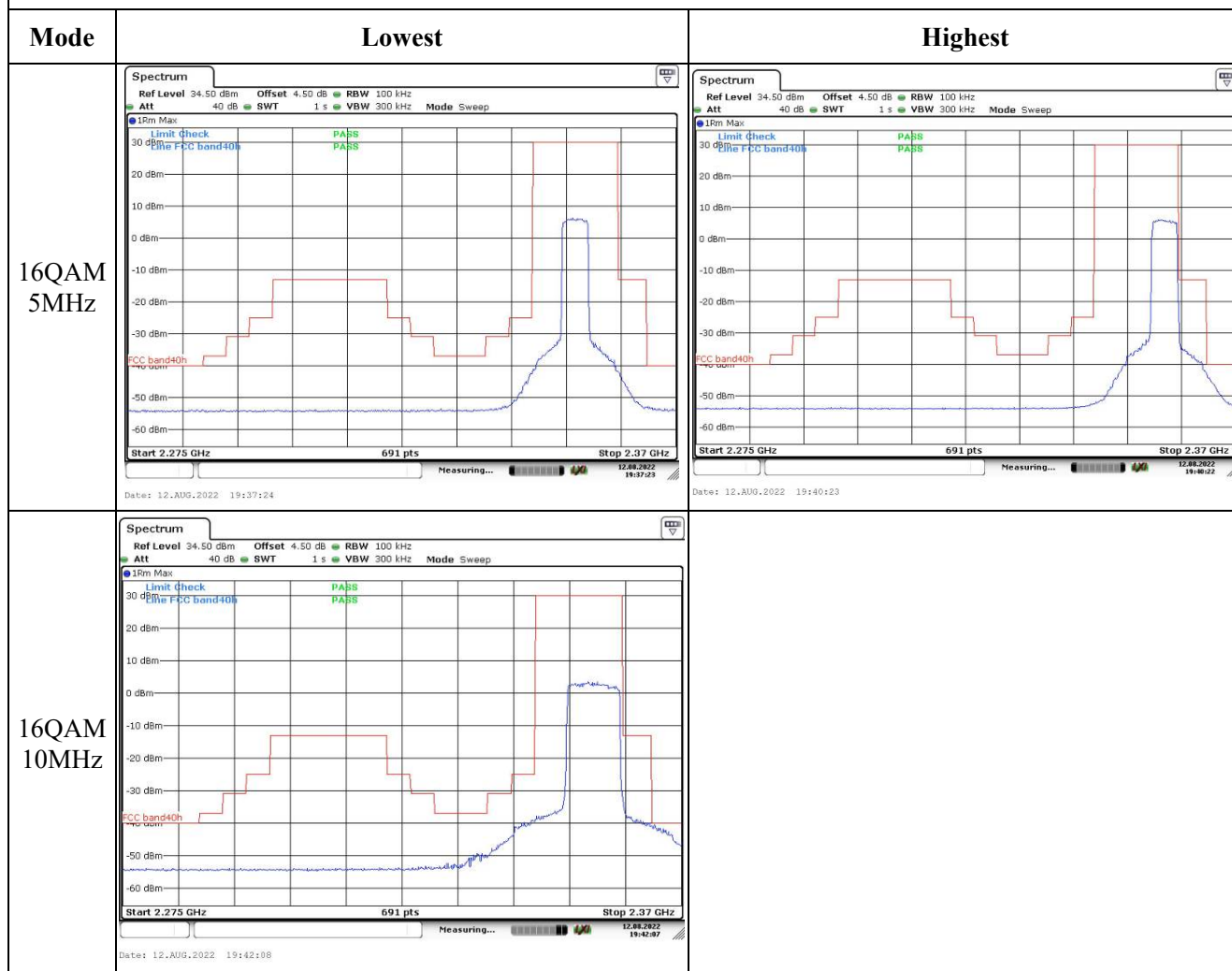
Out of band emission, Band Edge (2305-2315)



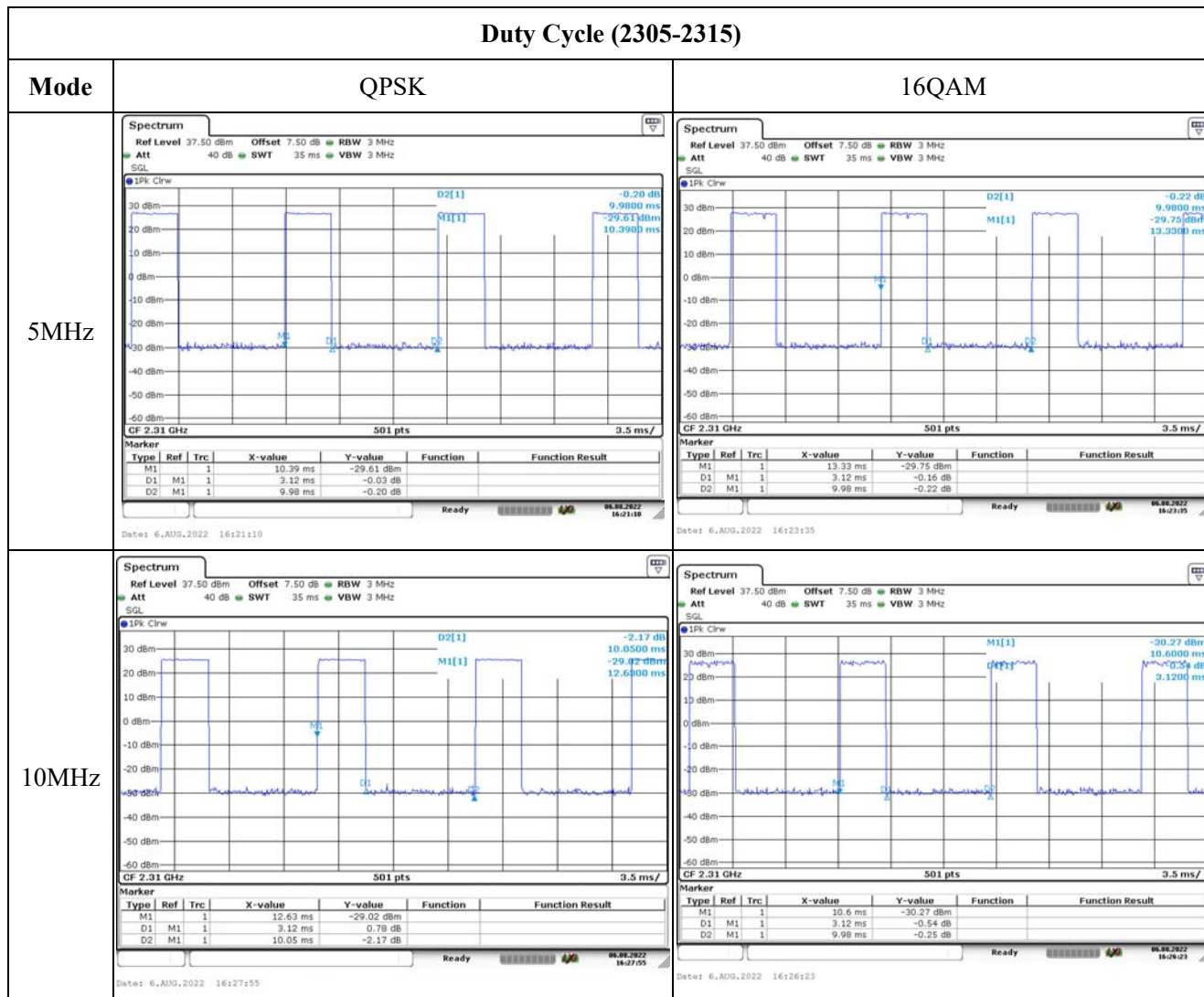
Out of band emission, Band Edge (2350-2360)



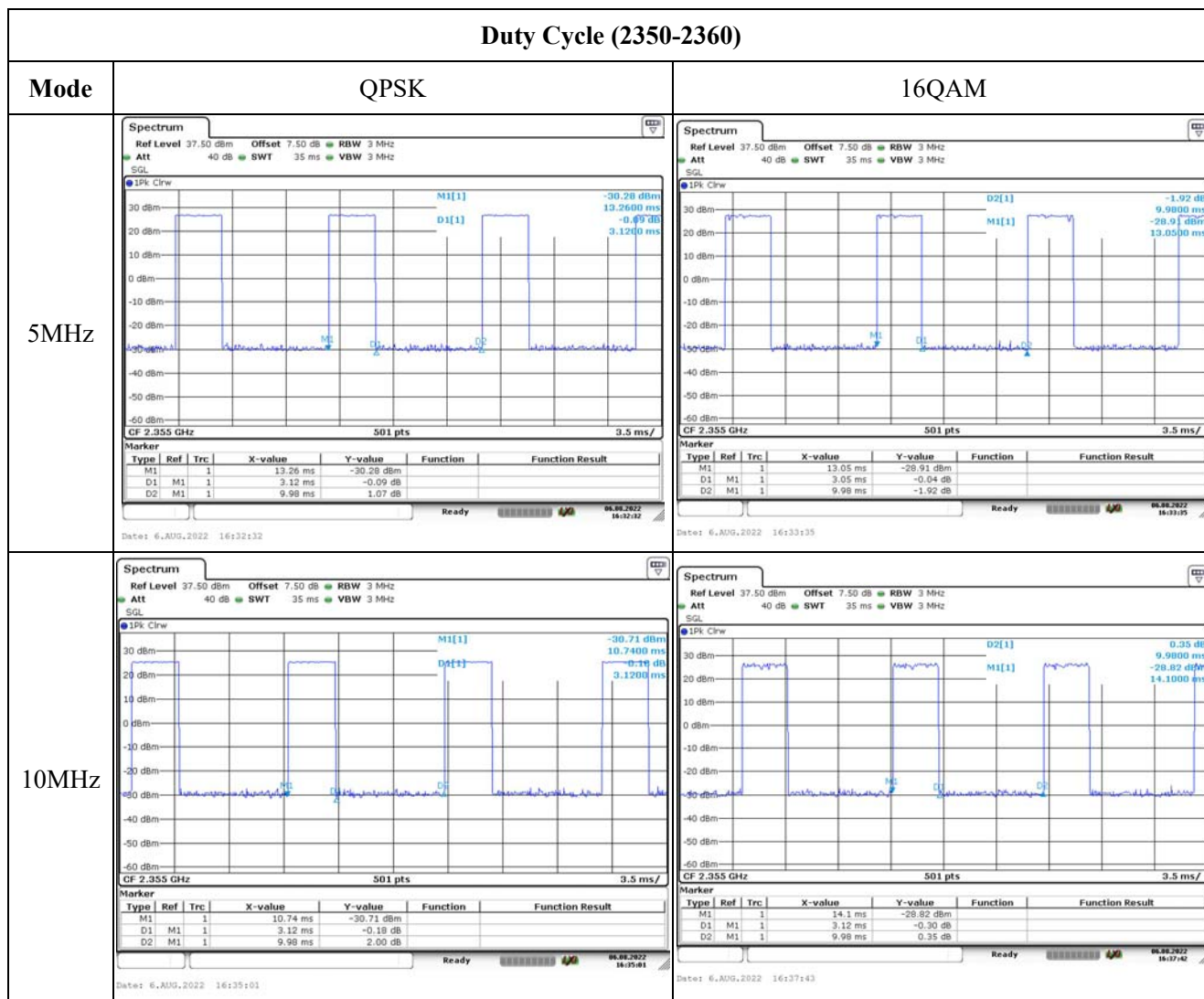
Out of band emission, Band Edge (2350-2360)



Duty Cycle (2305-2315)



Duty Cycle (2350-2360)



4.7 Antenna Port Test Data and Results for LTE Band 41

Serial Number:	CR22010034-RF-S1	Test Date:	2022-08-06
Test Site:	RF	Test Mode:	Transmitting
Tester:	George Chen	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26.2	Relative Humidity: (%)	69	ATM Pressure: (kPa)	99.9
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2022-07-15	2023-07-14
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
Unknown	Coaxial tee connector	Unknown	2204004	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100003	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554404	2021-08-08	2022-08-07
R&S	Wideband Radio Communication Tester	CMW500	149218	2022-07-15	2023-07-14
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2022-04-06	2023-04-05
UNI-T	Multimeter	UT39A+	C210582554	2021-09-30	2022-09-29
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	2557.5	2605	2652.5
10MHz	2560	2605	2650
15MHz	2562.5	2605	2647.5
20MHz	2565	2605	2645

Test Data:**FCC§2.1046;§ 27.50(h)(2)****RF Output Power:**

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	22.43	22.11	21.4	23.51	33
	RB1#13	22.34	21.84	21.65		
	RB1#24	22.27	21.75	21.41		
	RB15#0	21.35	21.14	20.57		
	RB15#10	21.35	21.08	20.57		
	RB25#0	21.41	21.01	20.48		
5MHz 16QAM	RB1#0	20.83	20.76	20.52	22.27	33
	RB1#13	20.88	21.19	20.42		
	RB1#24	20.75	21.16	20.21		
	RB15#0	20.41	20.07	19.43		
	RB15#10	20.49	20.01	19.42		
	RB25#0	20.63	20.07	19.48		
10MHz QPSK	RB1#0	22.73	22.16	21.55	23.94	33
	RB1#25	22.86	22.26	21.74		
	RB1#49	22.54	21.89	21.48		
	RB25#0	21.43	21.16	20.57		
	RB25#25	21.46	21.06	20.57		
	RB50#0	21.4	21.11	20.58		
10MHz 16QAM	RB1#0	21.41	21.62	20.07	23.47	33
	RB1#25	21.63	22.39	20.1		
	RB1#49	21.35	21.38	19.77		
	RB25#0	20.66	20.19	19.56		
	RB25#25	20.79	20.1	19.57		
	RB50#0	20.51	20.14	19.46		
15MHz QPSK	RB1#0	22.69	22.15	21.71	23.77	33
	RB1#38	22.66	21.97	21.62		
	RB1#74	22.64	21.83	21.61		
	RB36#0	21.47	21.16	20.64		
	RB36#39	21.4	21.02	20.55		
	RB75#0	21.39	21.04	20.61		
15MHz 16QAM	RB1#0	21.41	21.2	20.01	22.68	33
	RB1#38	21.6	21.01	19.97		
	RB1#74	21.31	20.92	19.86		
	RB36#0	20.6	20.04	19.54		
	RB36#39	20.69	20.07	19.55		
	RB75#0	20.5	20.16	19.58		

Peak-to-average Ratio(PAR)

FCC §2.1049, §27.53:Occupied Bandwidth

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.
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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	3.8	2556.172	2555.00	2653.998	2655
	-20	3.8	2556.176	2555.00	2654.006	2655
	-10	3.8	2556.155	2555.00	2654.040	2655
	0	3.8	2556.114	2555.00	2653.999	2655
	10	3.8	2556.137	2555.00	2654.015	2655
	20	3.8	2556.138	2555.00	2654.022	2655
	30	3.8	2556.179	2555.00	2654.005	2655
	40	3.8	2556.104	2555.00	2654.063	2655
	50	3.8	2556.189	2555.00	2654.044	2655
Frequency Stability vs. Voltage	20	3.5	2556.151	2555.00	2654.001	2655
	20	4.35	2556.176	2555.00	2654.006	2655
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	3.8	2556.104	2555.00	2653.936	2655
	-20	3.8	2556.094	2555.00	2653.973	2655
	-10	3.8	2556.103	2555.00	2653.987	2655
	0	3.8	2556.074	2555.00	2653.992	2655
	10	3.8	2556.107	2555.00	2653.908	2655
	20	3.8	2556.058	2555.00	2653.942	2655
	30	3.8	2556.065	2555.00	2653.982	2655
	40	3.8	2556.107	2555.00	2653.927	2655
	50	3.8	2556.035	2555.00	2653.969	2655
Frequency Stability vs. Voltage	20	3.5	2556.018	2555.00	2653.936	2655
	20	4.35	2556.107	2555.00	2653.969	2655
Result:					Pass	

Test Plots(Note: The 4.5dB is the Insertion loss of the RF cable, Coaxial tee connector and DC Block, which was offset into the Spectrum Analyzer):

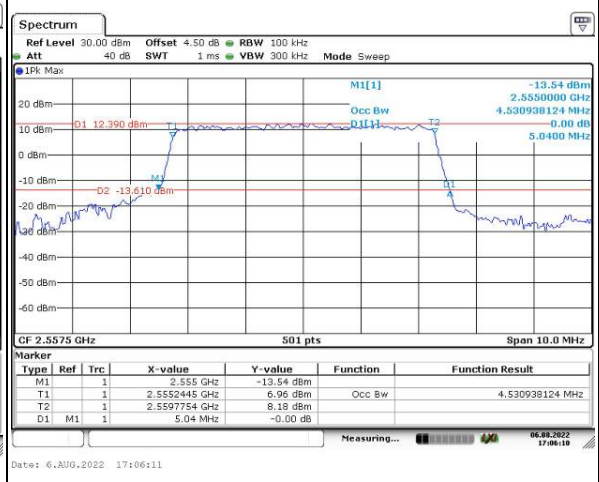
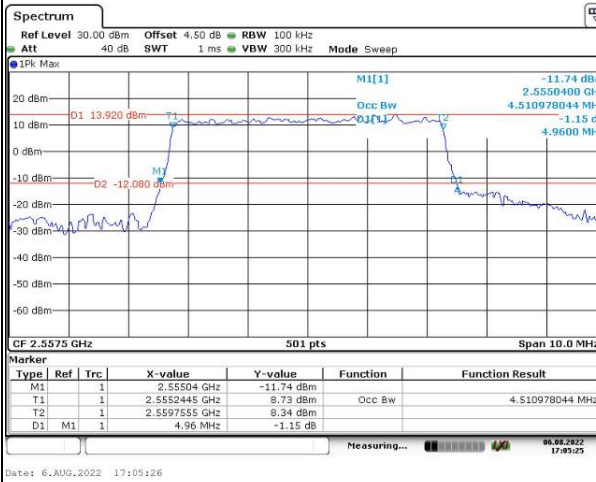
Occupied Bandwidth

Channel

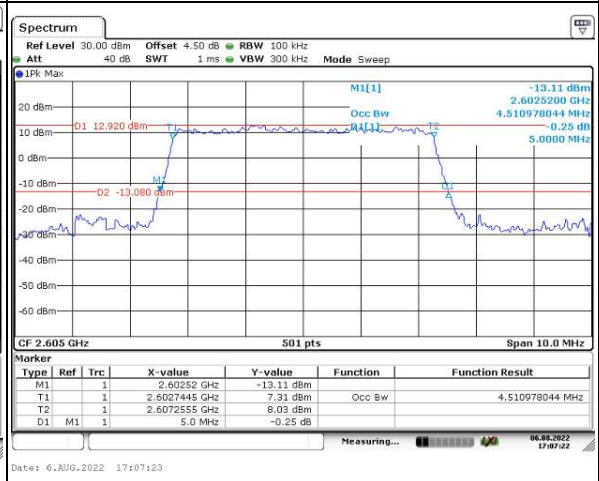
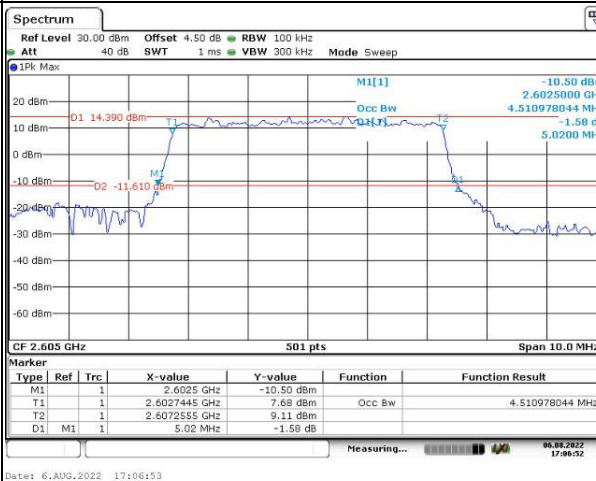
5MHz Bandwidth QPSK

5MHz Bandwidth 16QAM

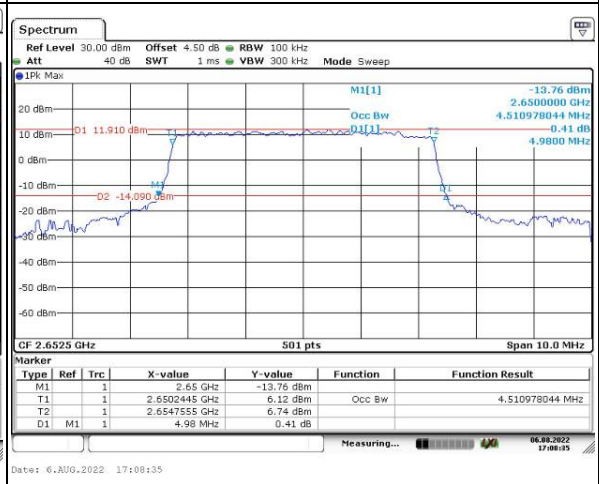
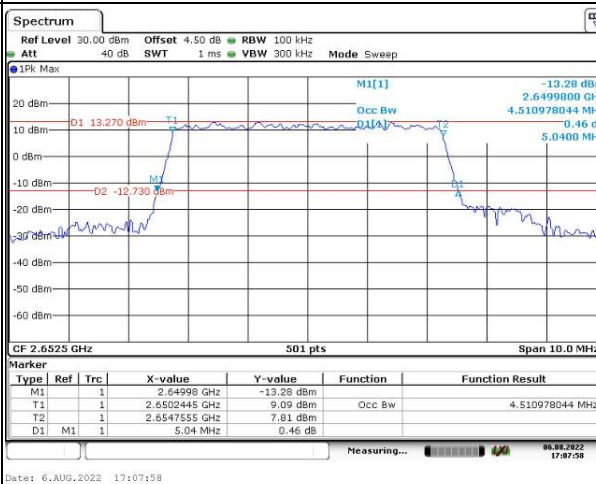
Lowest



Middle



Highest



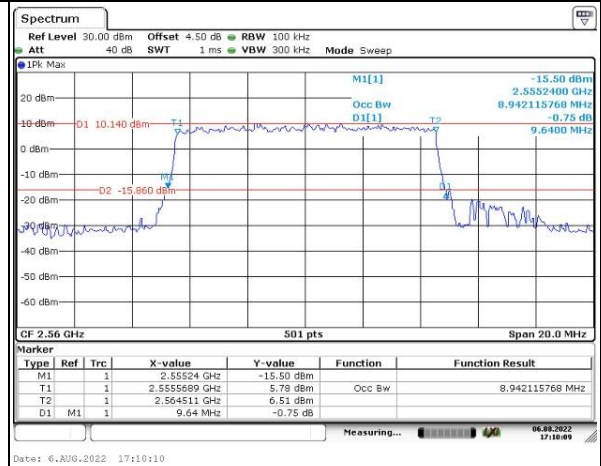
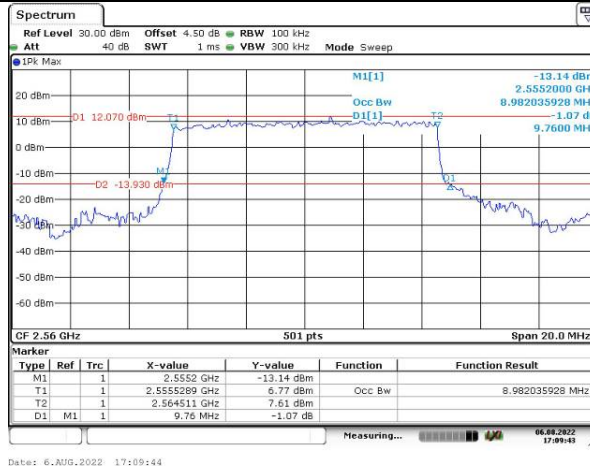
Occupied Bandwidth

Channel

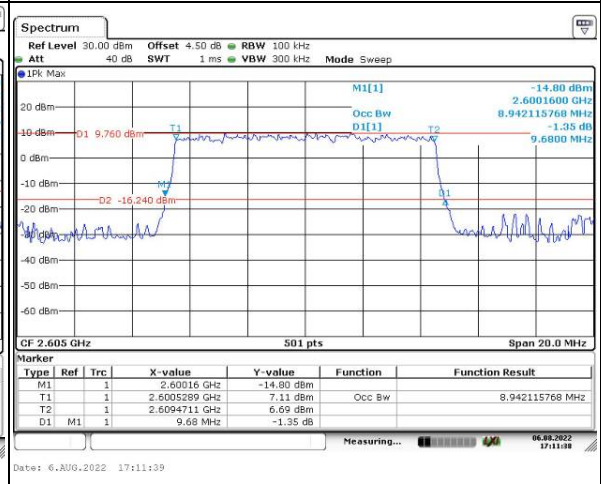
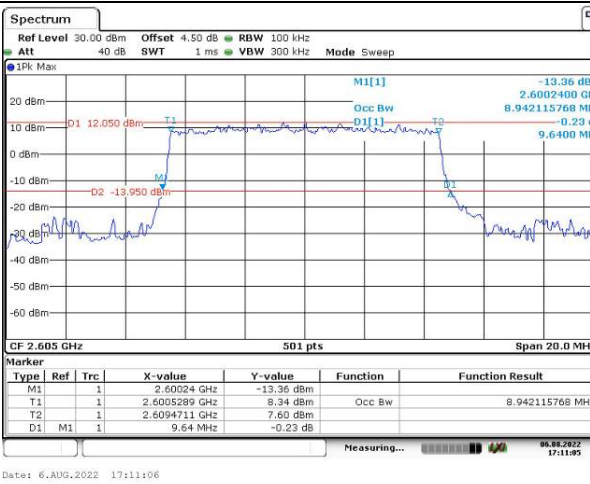
10MHz Bandwidth QPSK

10MHz Bandwidth 16QAM

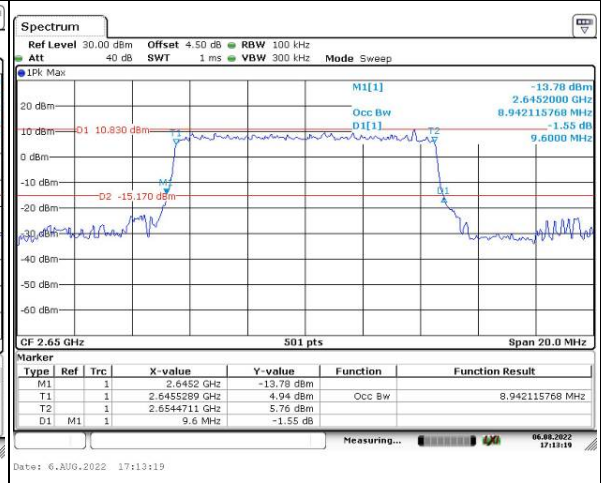
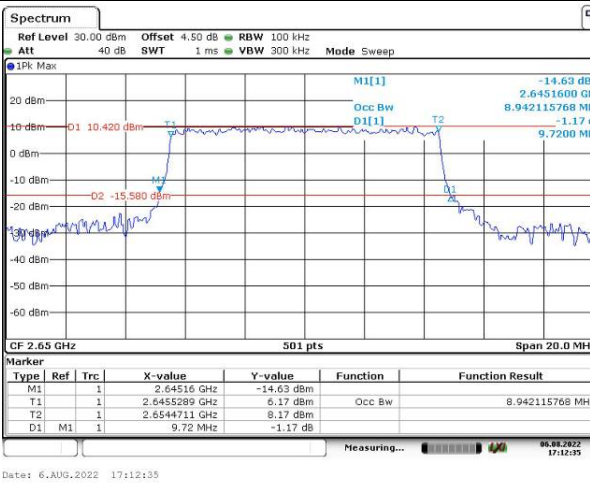
Lowest



Middle



Highest



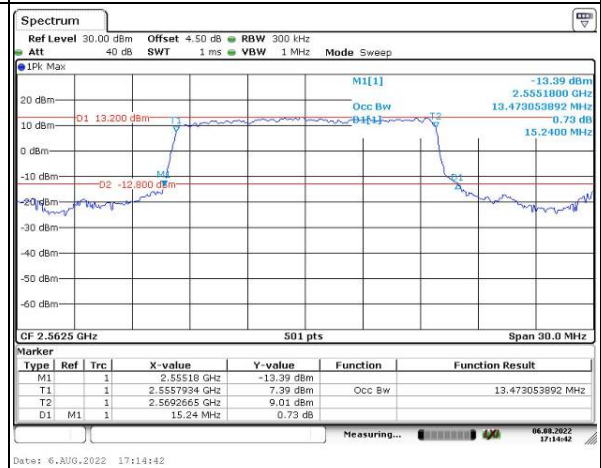
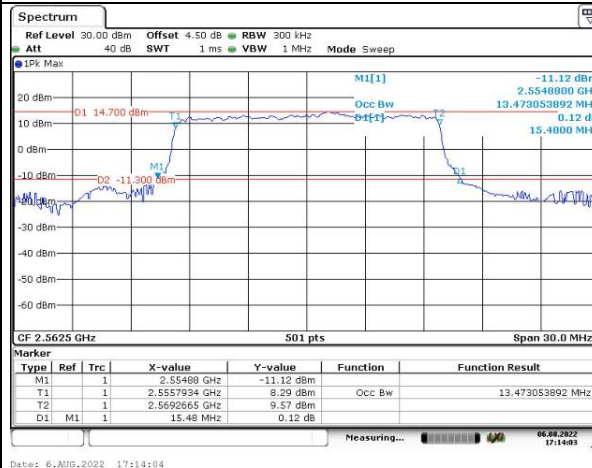
Occupied Bandwidth

Channel

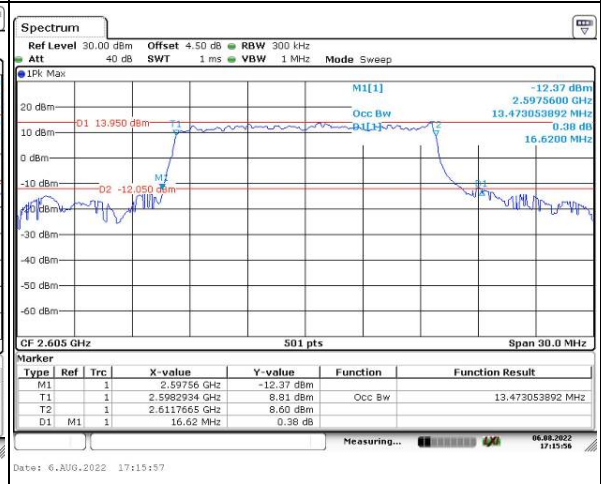
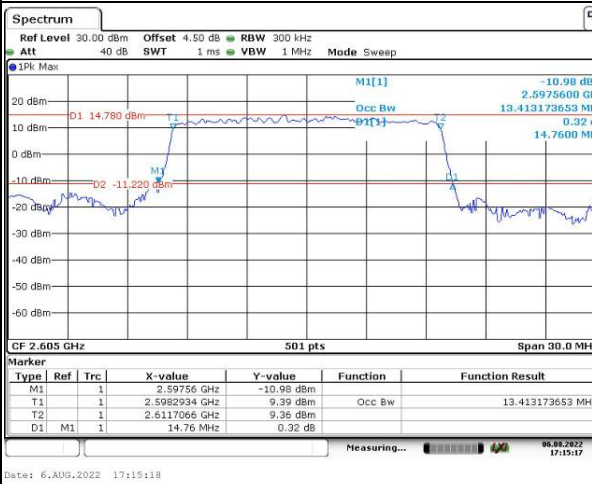
15MHz Bandwidth QPSK

15MHz Bandwidth 16QAM

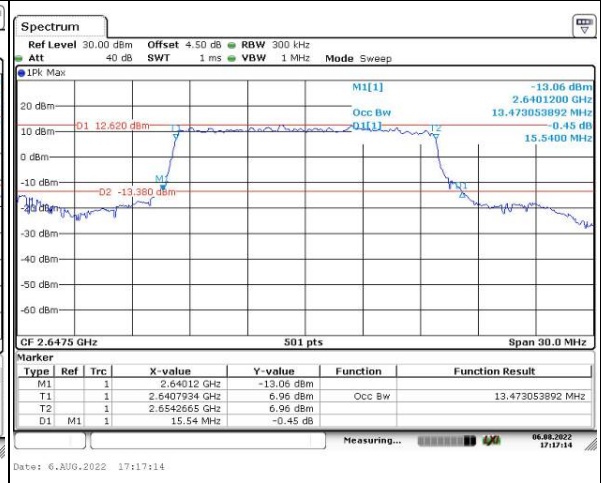
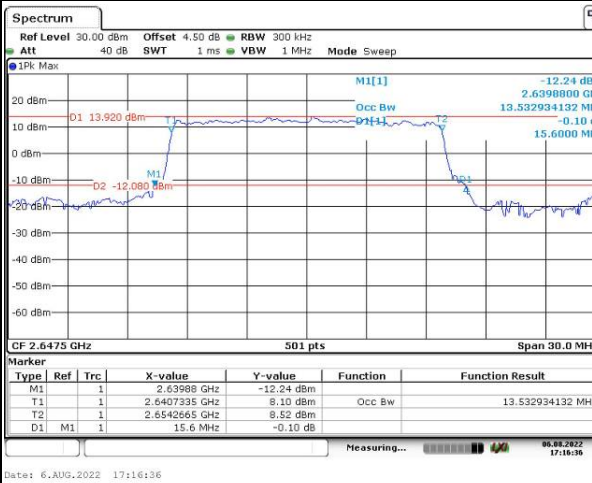
Lowest



Middle



Highest



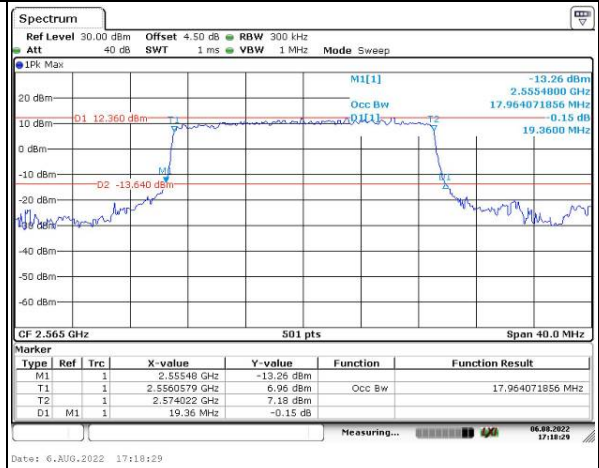
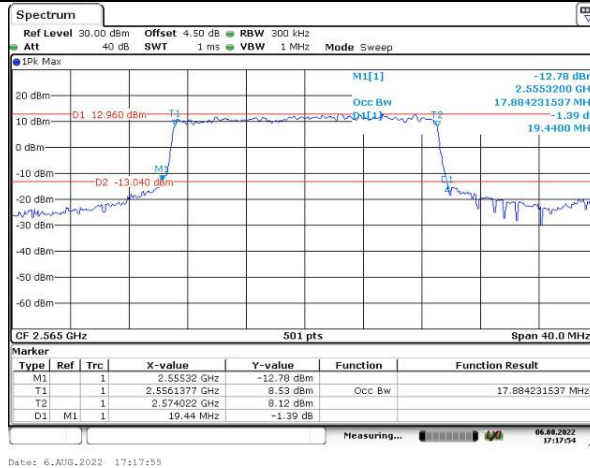
Occupied Bandwidth

Channel

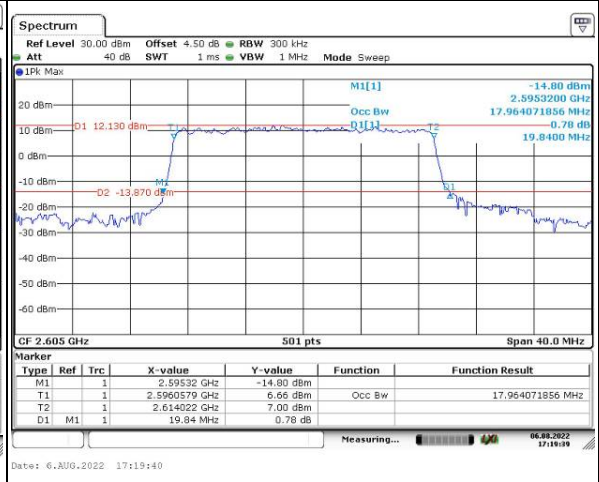
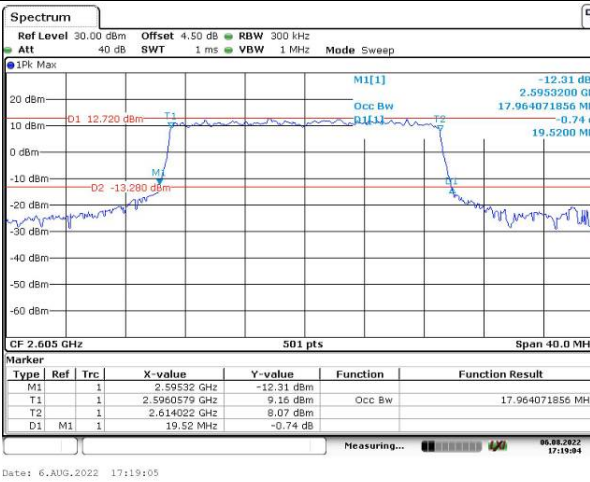
20MHz Bandwidth QPSK

20MHz Bandwidth 16QAM

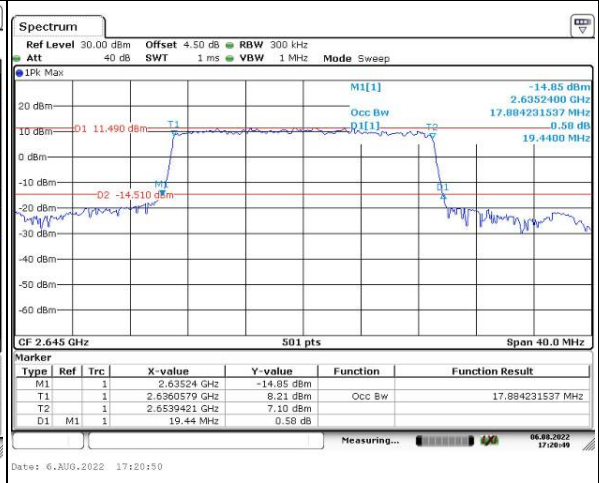
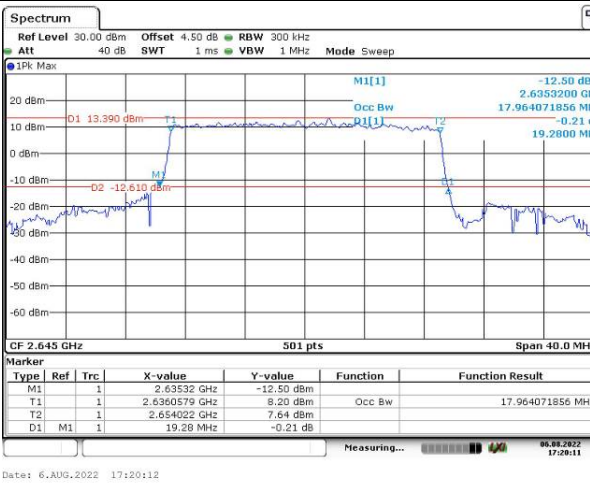
Lowest



Middle



Highest

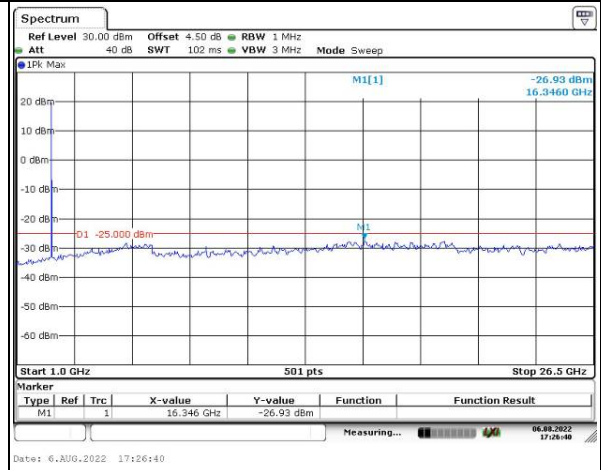
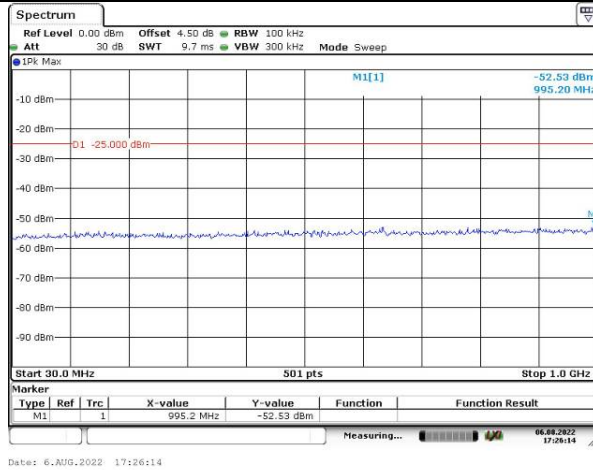


Spurious Emissions at Antenna Terminal

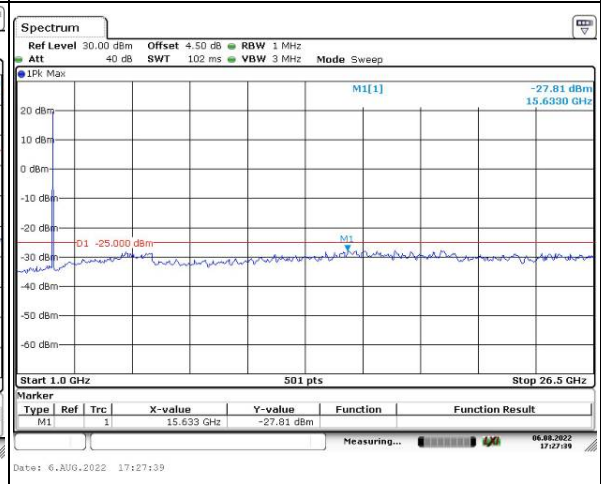
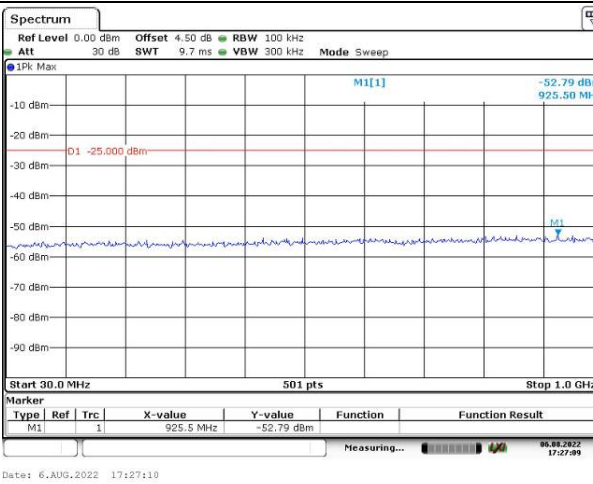
Channel

5MHz Bandwidth QPSK

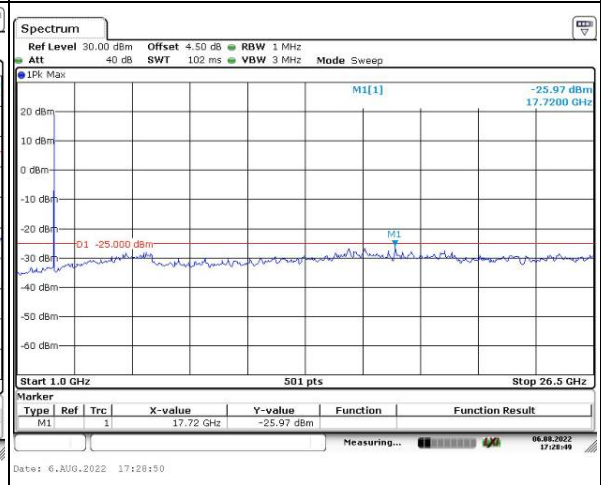
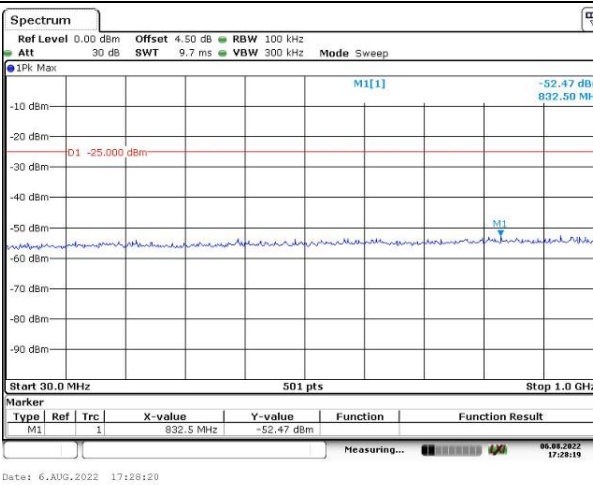
Lowest



Middle



Highest

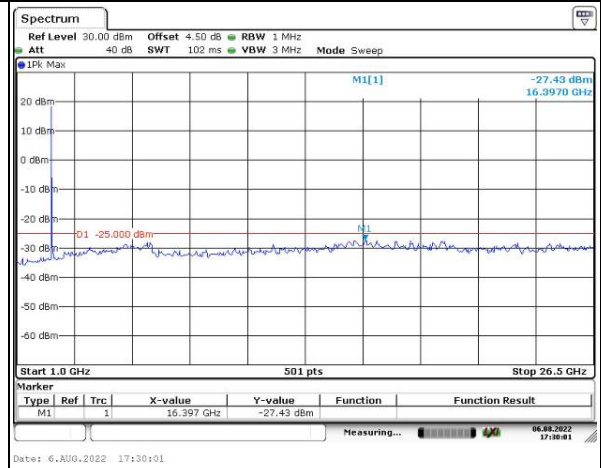
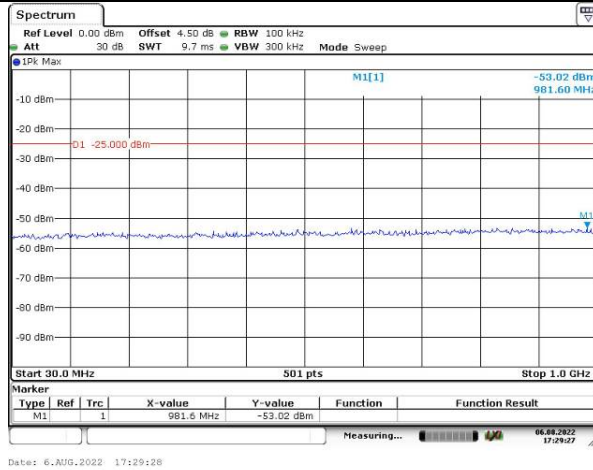


Spurious Emissions at Antenna Terminal

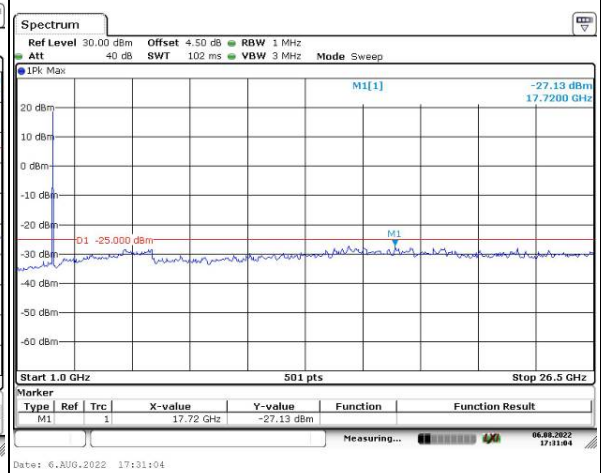
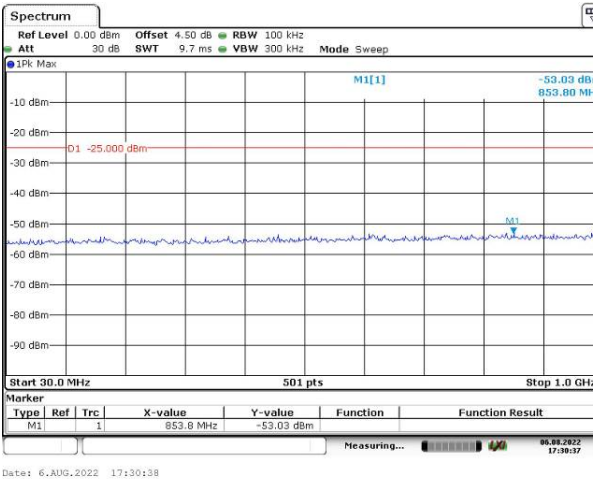
Channel

10MHz Bandwidth QPSK

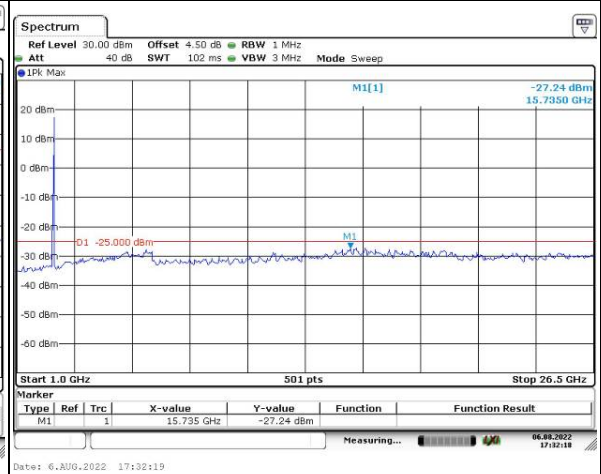
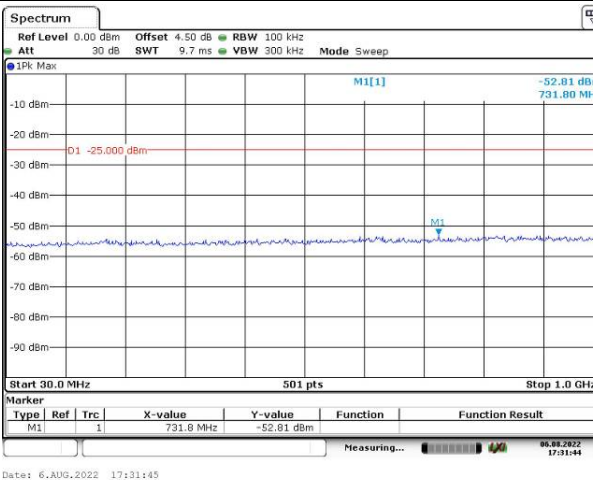
Lowest



Middle



Highest

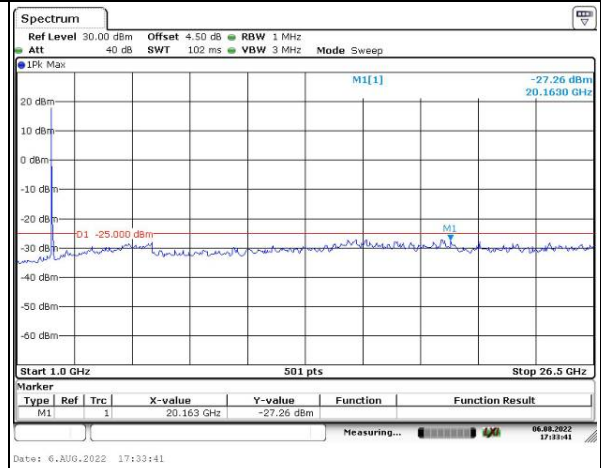
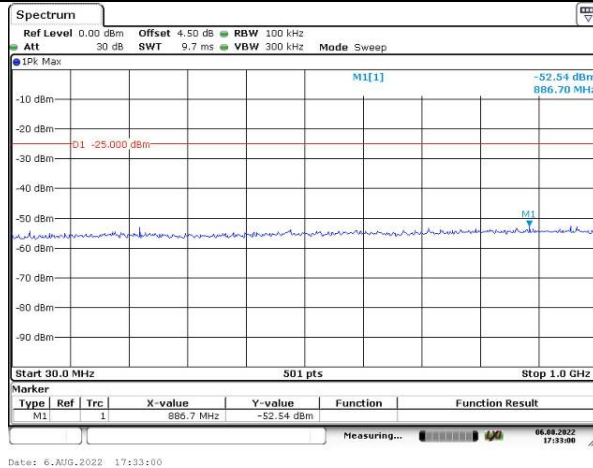


Spurious Emissions at Antenna Terminal

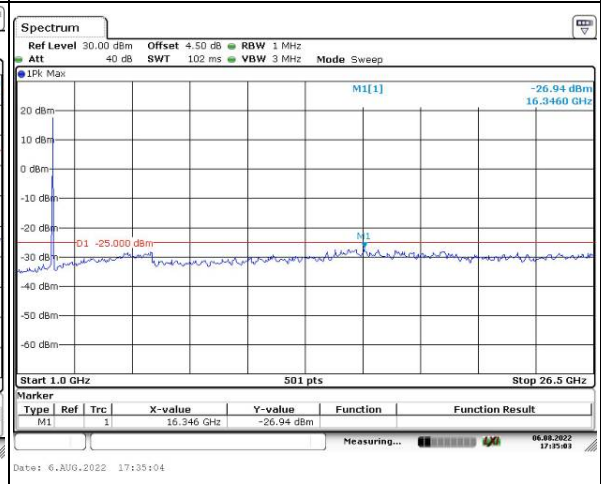
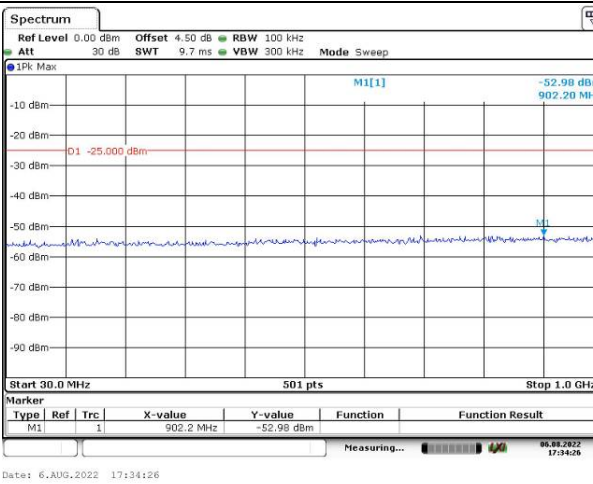
Channel

15MHz Bandwidth QPSK

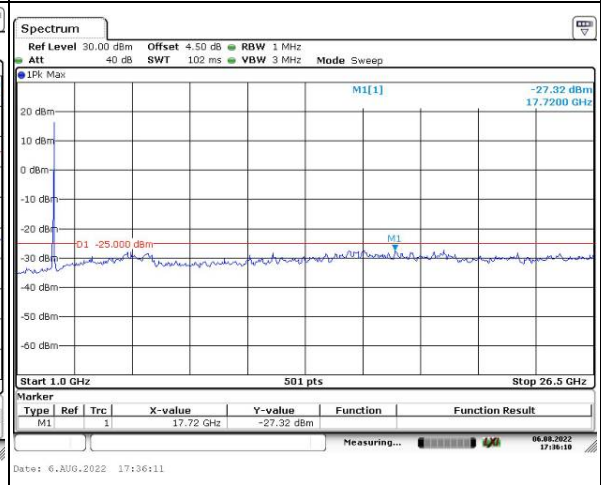
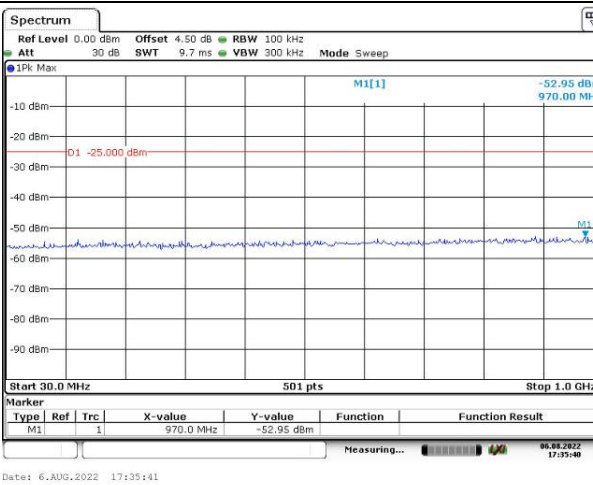
Lowest



Middle



Highest

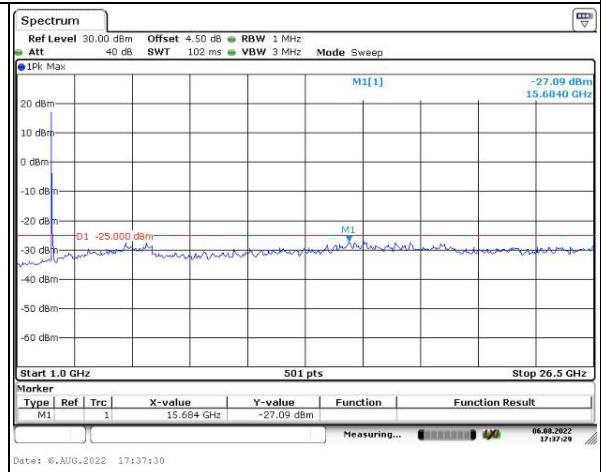
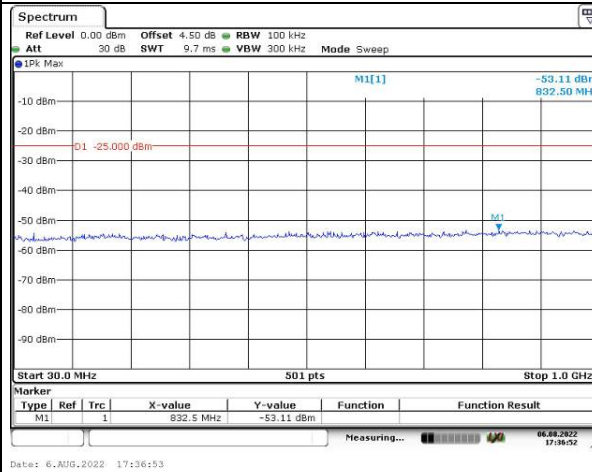


Spurious Emissions at Antenna Terminal

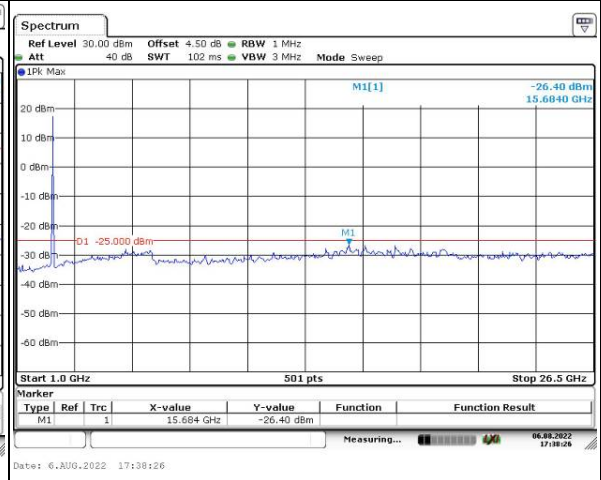
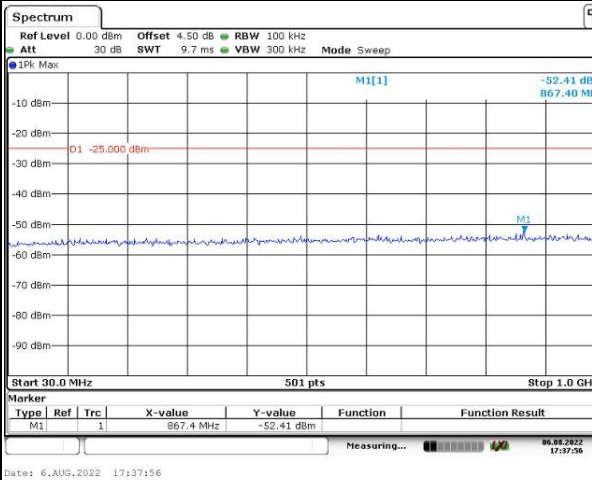
Channel

20MHz Bandwidth QPSK

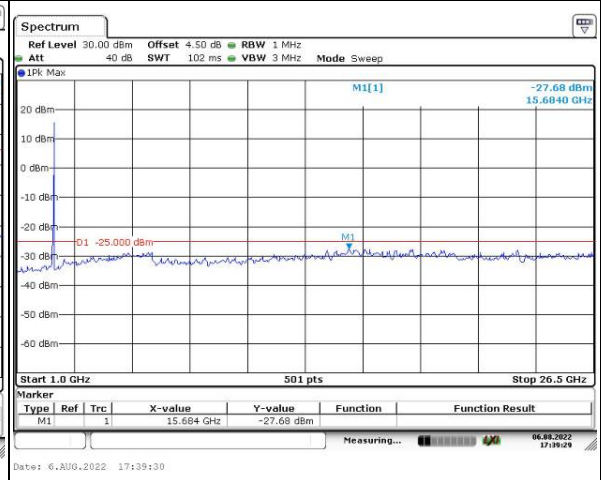
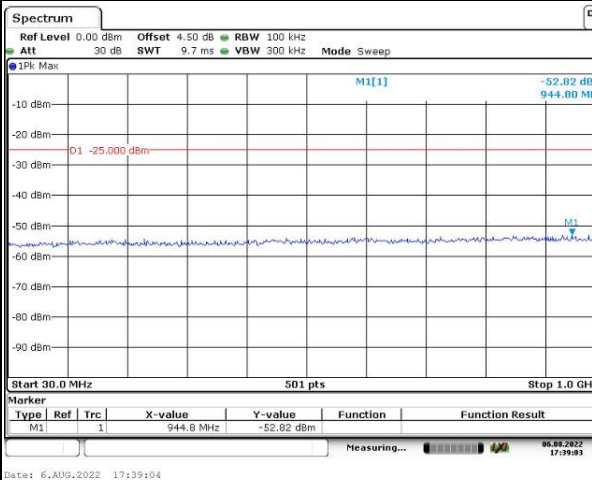
Lowest



Middle



Highest



Out of band emission, Band Edge

