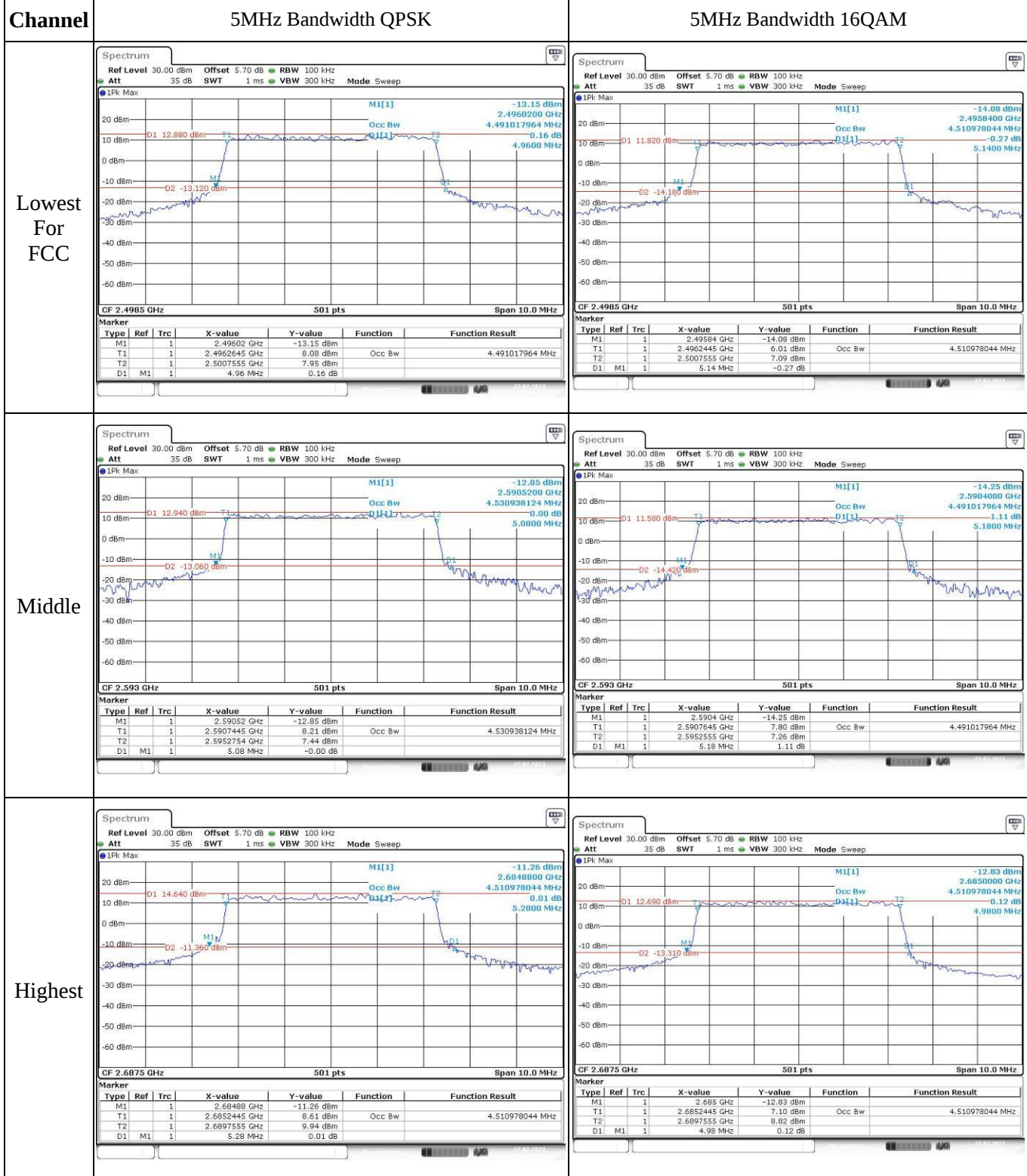


Test Plots(Note: The 5.7dB is the Insertion loss of the RF cable, Coaxial tee connector and DC Block, which was offset into the Spectrum Analyzer):

Occupied Bandwidth

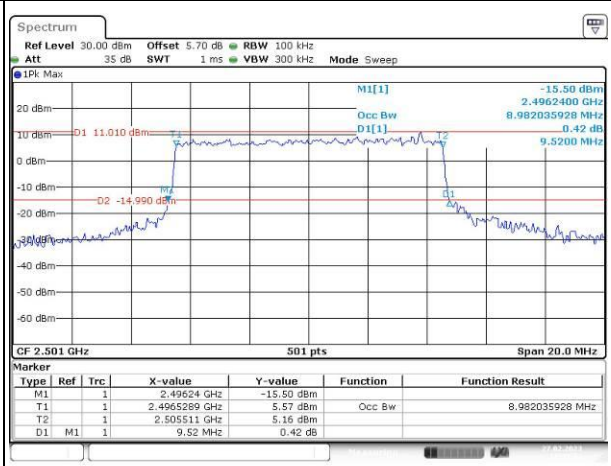
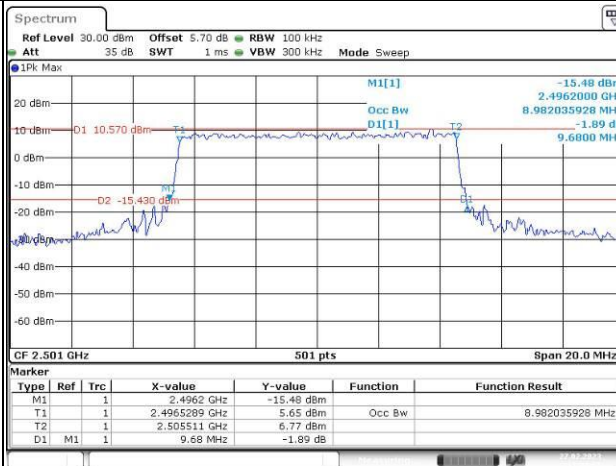


Occupied Bandwidth

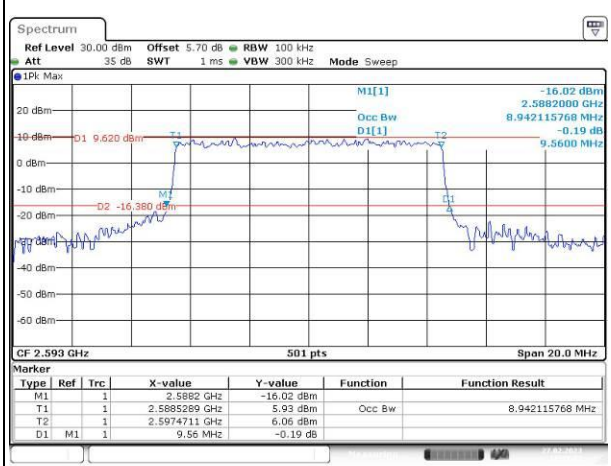
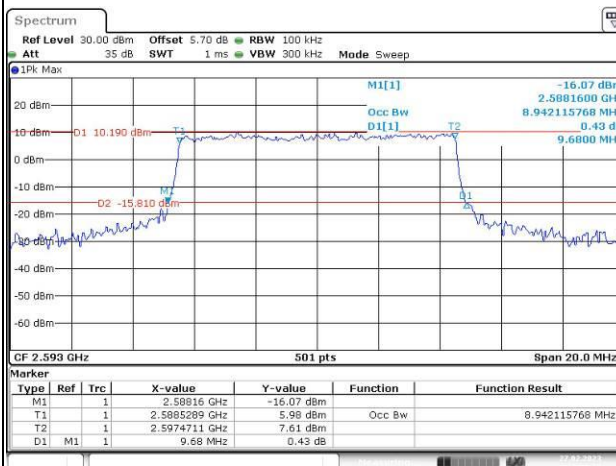
Channel

10MHz Bandwidth QPSK

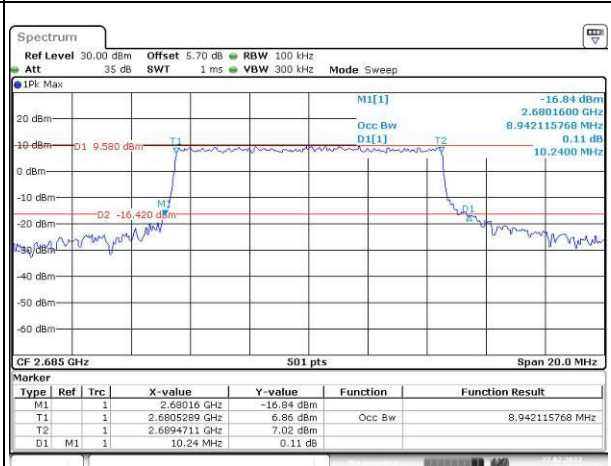
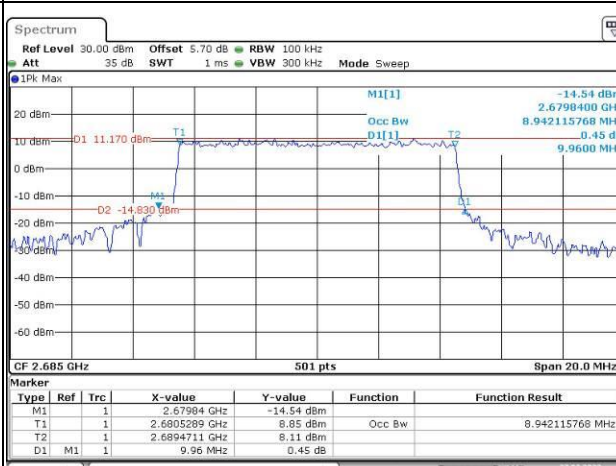
10MHz Bandwidth 16QAM

Lowest
For
FCC

Middle



Highest

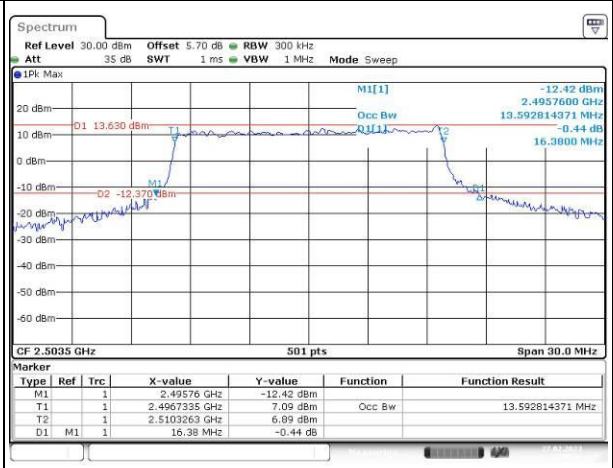
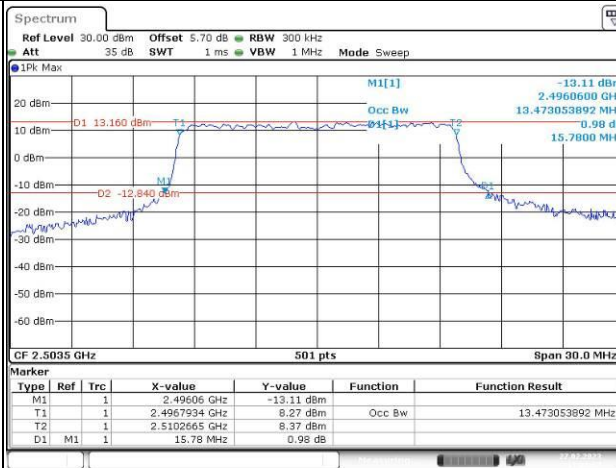


Occupied Bandwidth

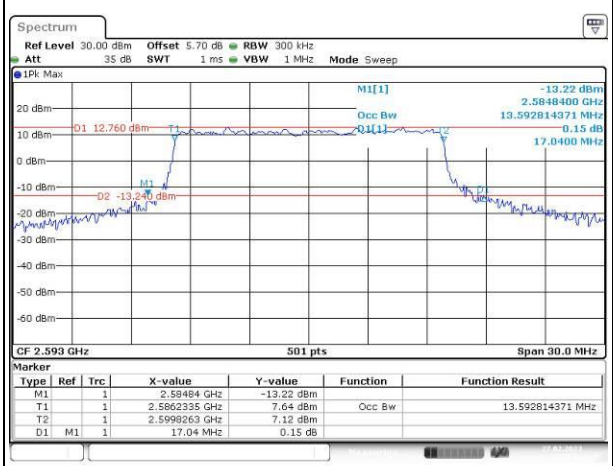
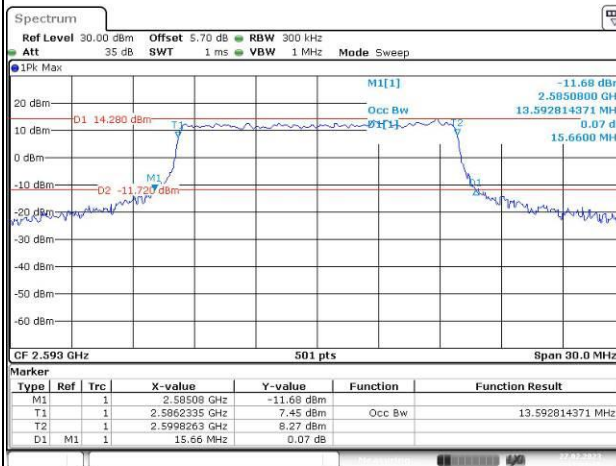
Channel

15MHz Bandwidth QPSK

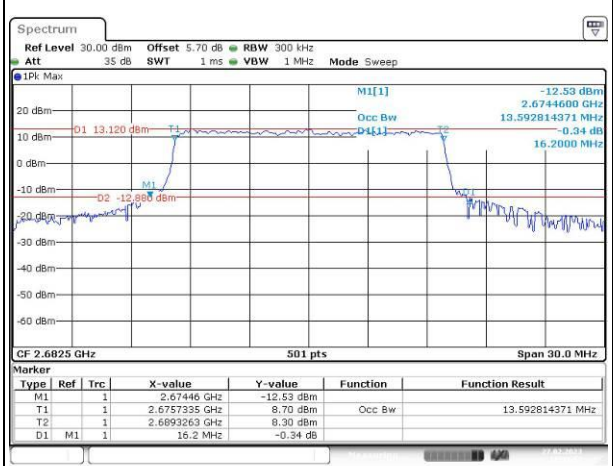
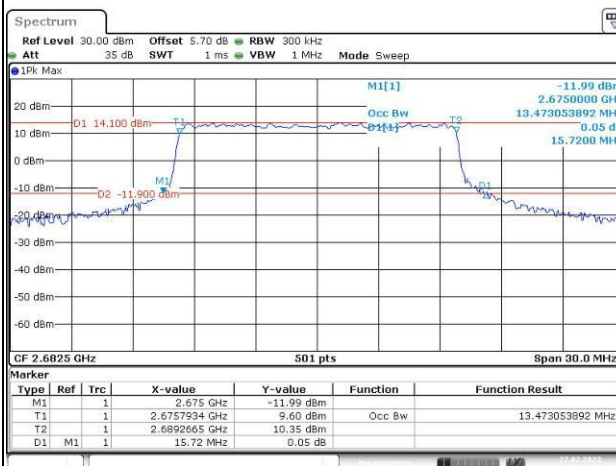
15MHz Bandwidth 16QAM

Lowest
For
FCC

Middle



Highest

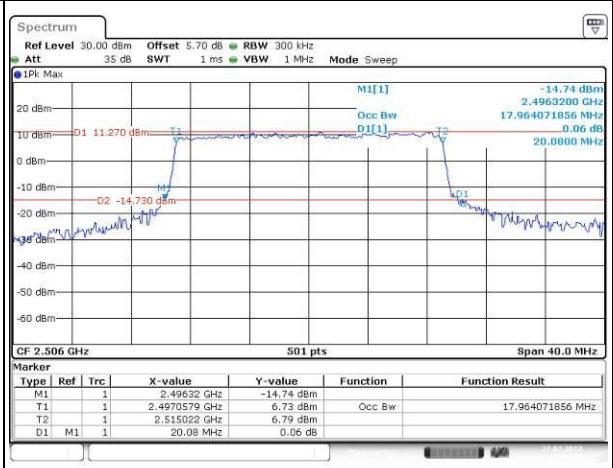
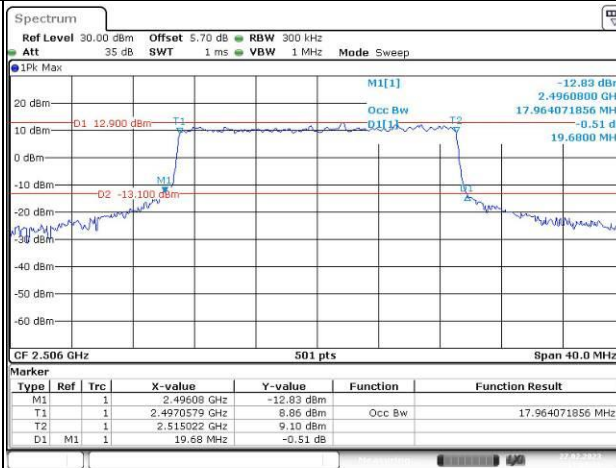


Occupied Bandwidth

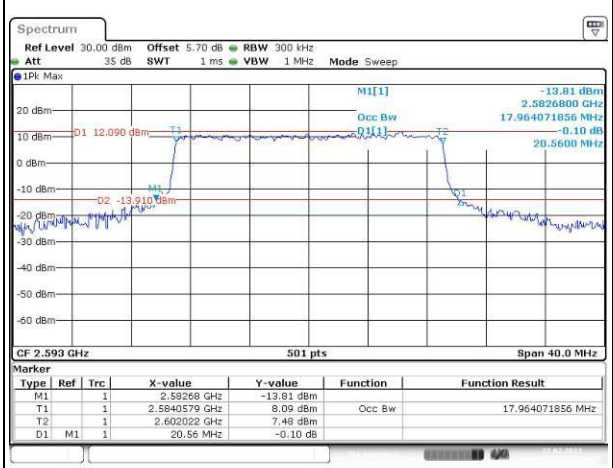
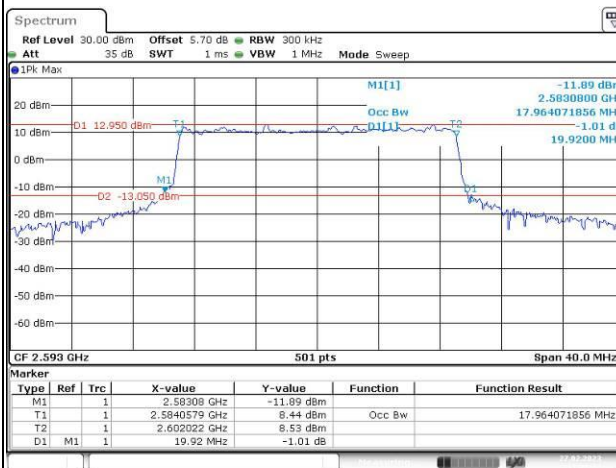
Channel

20MHz Bandwidth QPSK

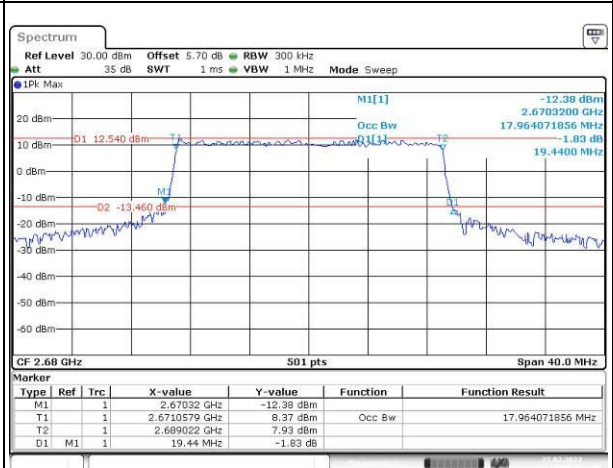
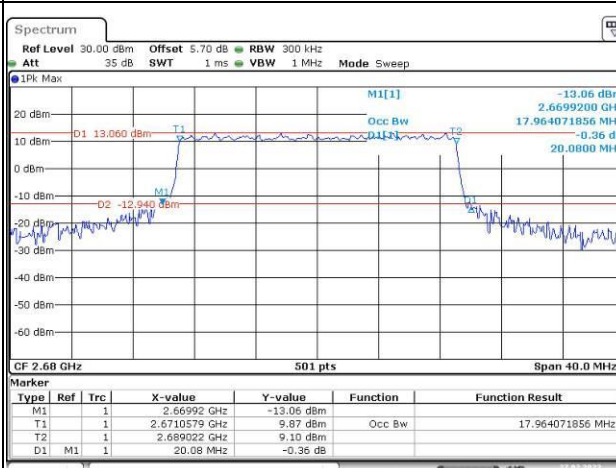
20MHz Bandwidth 16QAM

Lowest
For
FCC

Middle



Highest

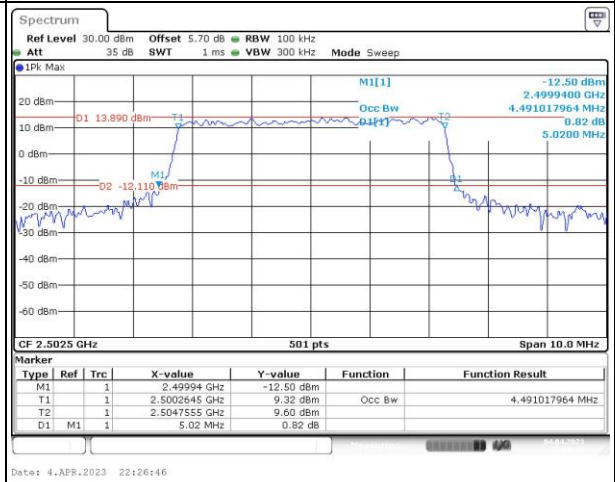
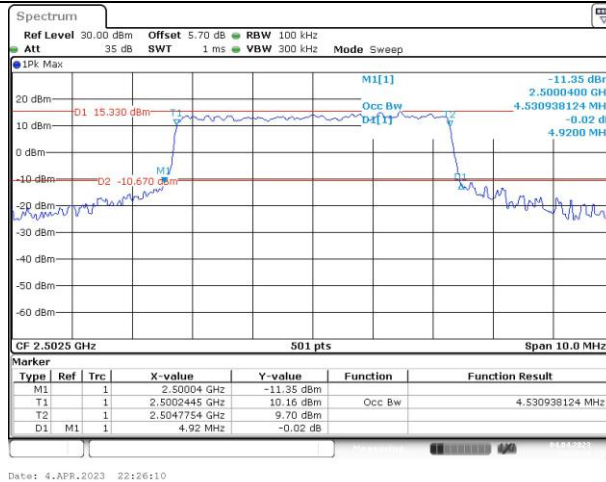


Occupied Bandwidth

Channel

5MHz Bandwidth QPSK

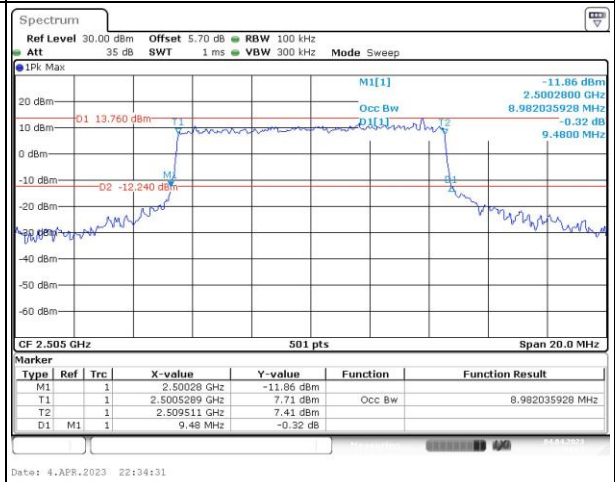
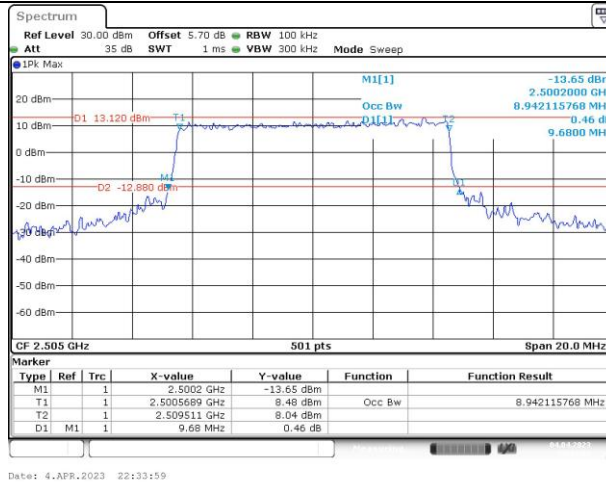
5MHz Bandwidth 16QAM

Lowest
For
RSS-199

Channel

10MHz Bandwidth QPSK

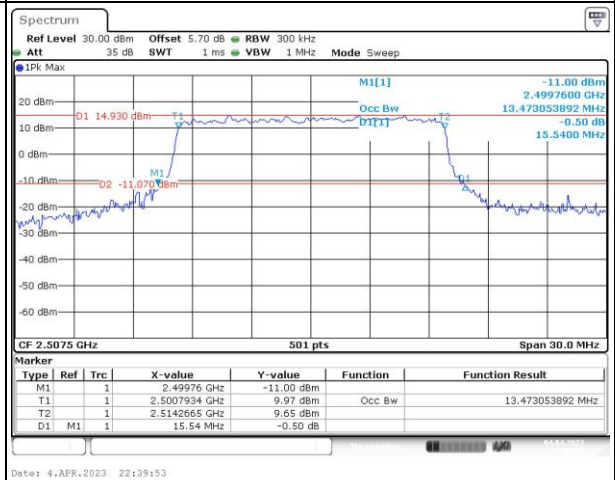
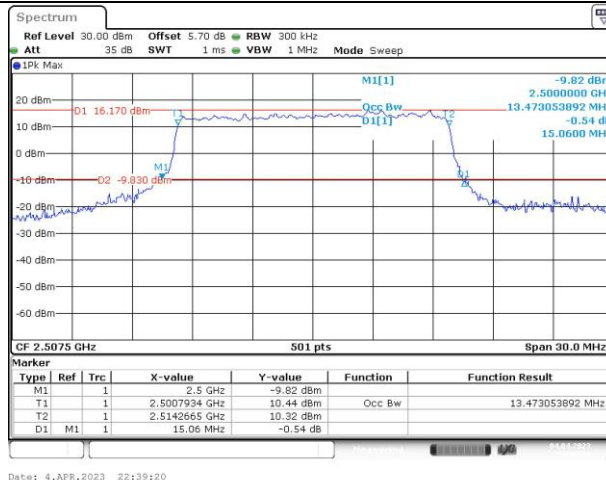
10MHz Bandwidth 16QAM

Lowest
For
RSS-199

Channel

15MHz Bandwidth QPSK

15MHz Bandwidth 16QAM

Lowest
For
RSS-199

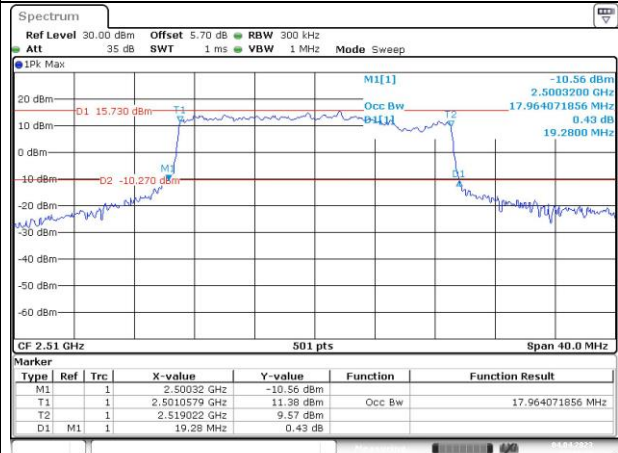
Occupied Bandwidth

Channel

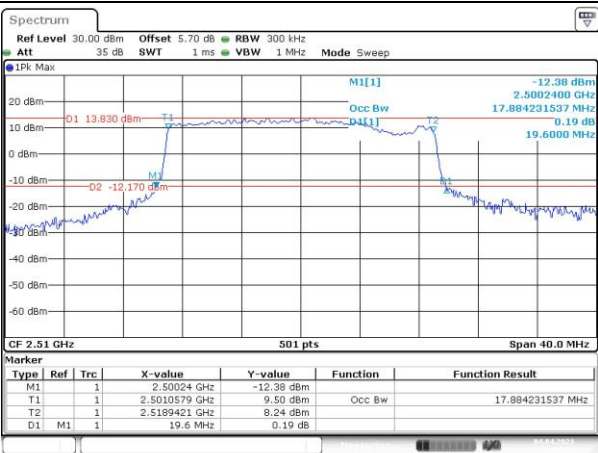
20MHz Bandwidth QPSK

20MHz Bandwidth 16QAM

Lowest
For
RSS-199



Date: 4.APR.2023 22:45:16

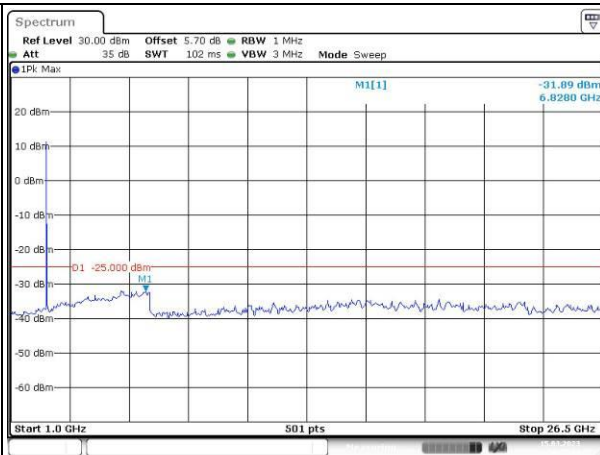
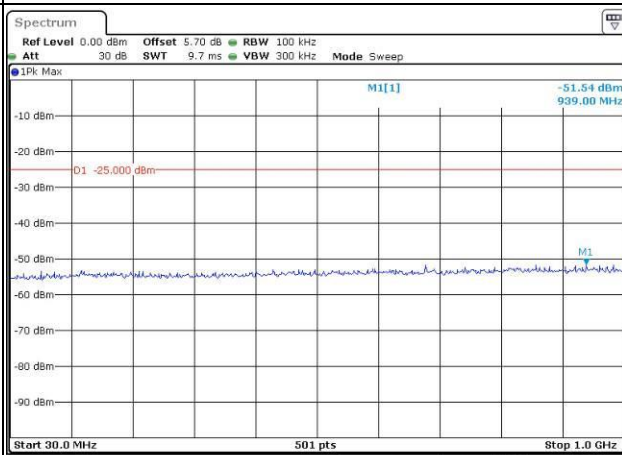


Date: 4.APR.2023 22:45:12

Spurious Emissions at Antenna Terminal

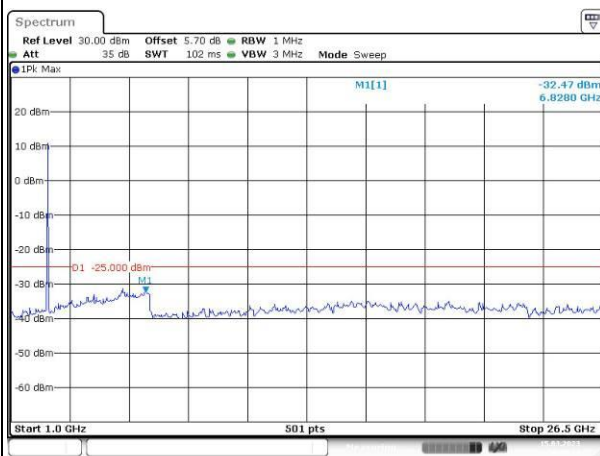
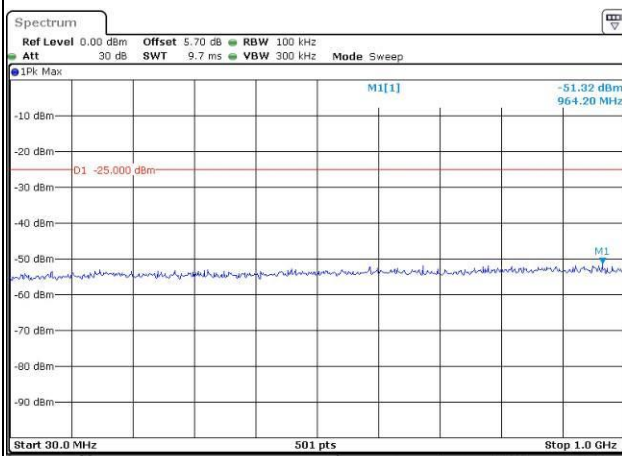
Channel

5MHz Bandwidth QPSK

Lowest
for FCC

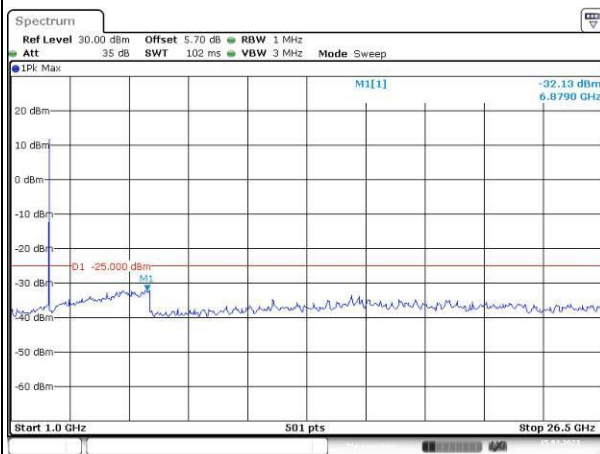
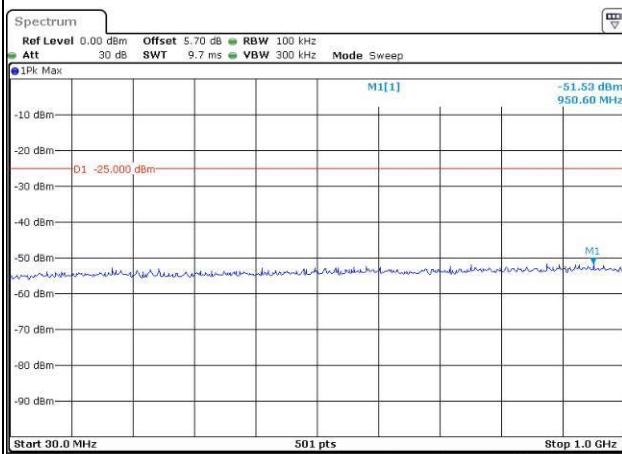
Date: 15.MAR.2023 20:23:25

Middle



Date: 15.MAR.2023 20:24:15

Highest

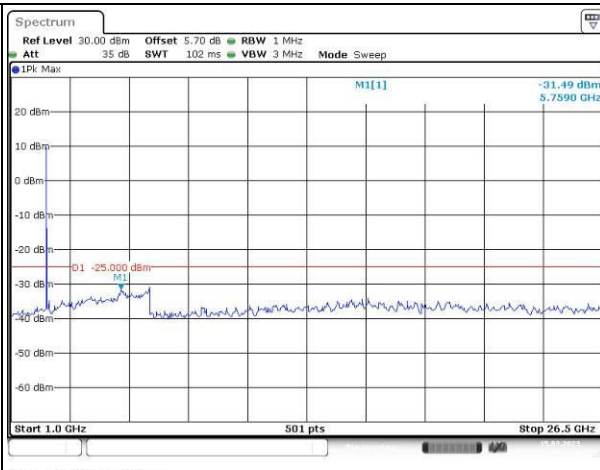
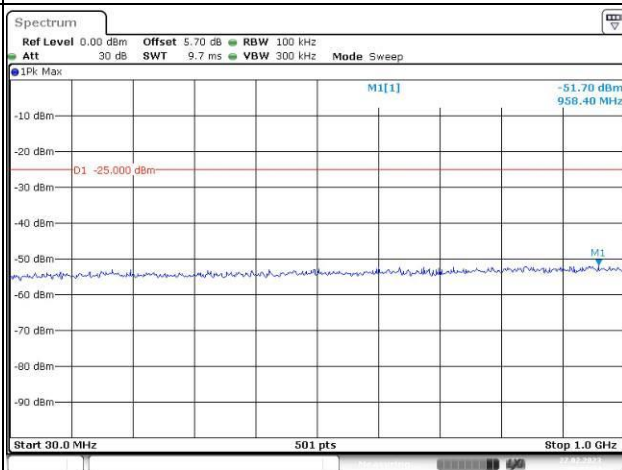


Date: 15.MAR.2023 20:25:38

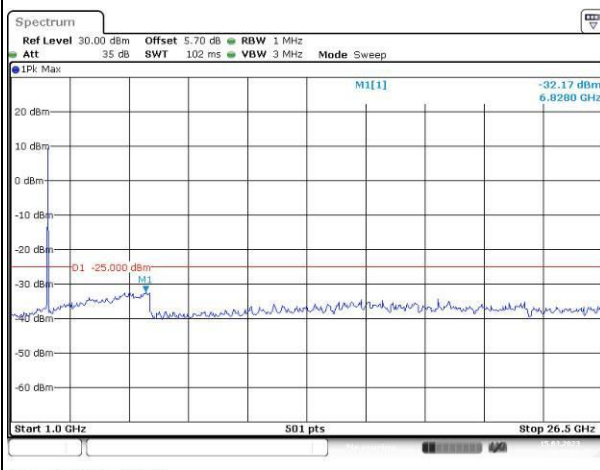
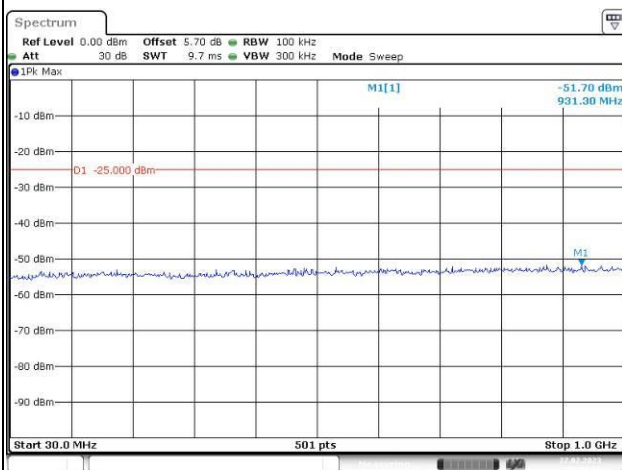
Spurious Emissions at Antenna Terminal

Channel

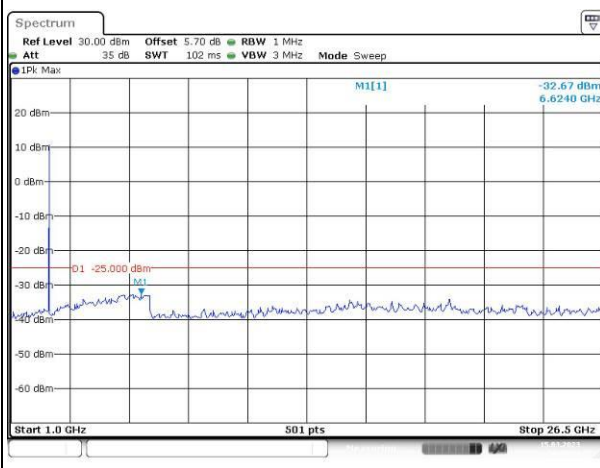
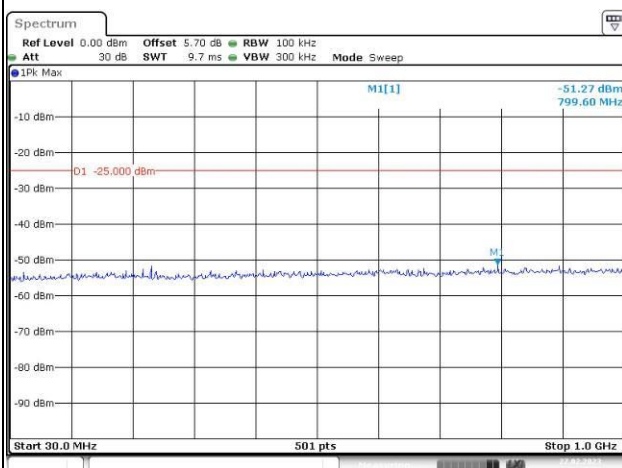
10MHz Bandwidth QPSK

Lowest
for FCC

Middle



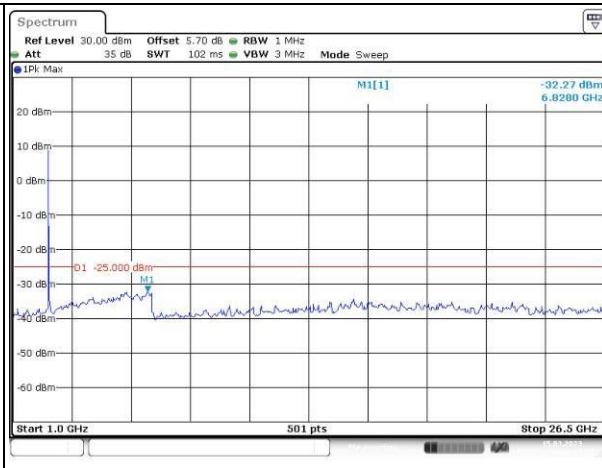
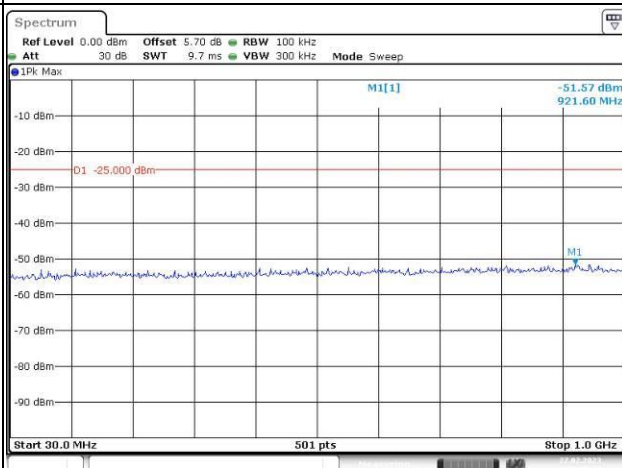
Highest



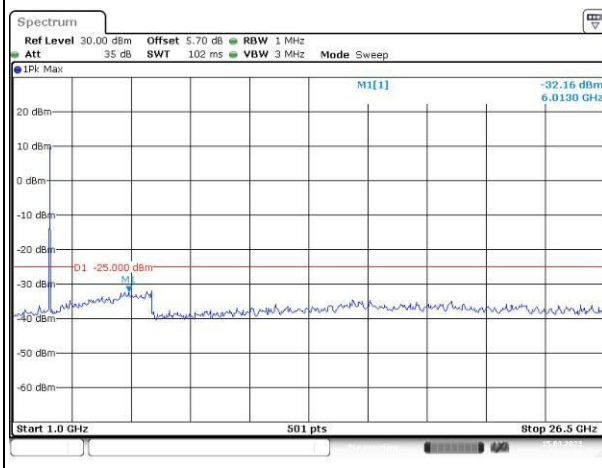
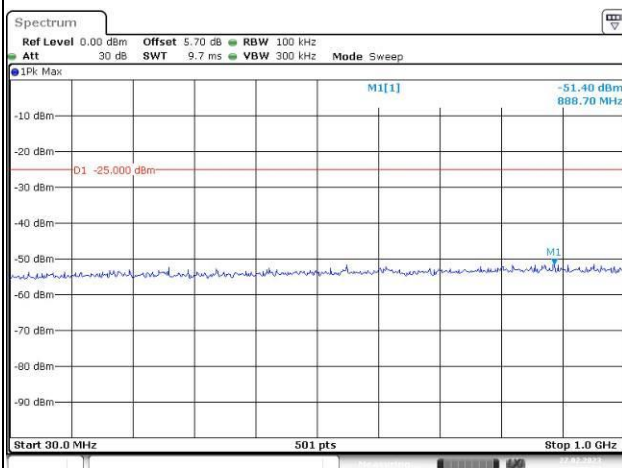
Spurious Emissions at Antenna Terminal

Channel

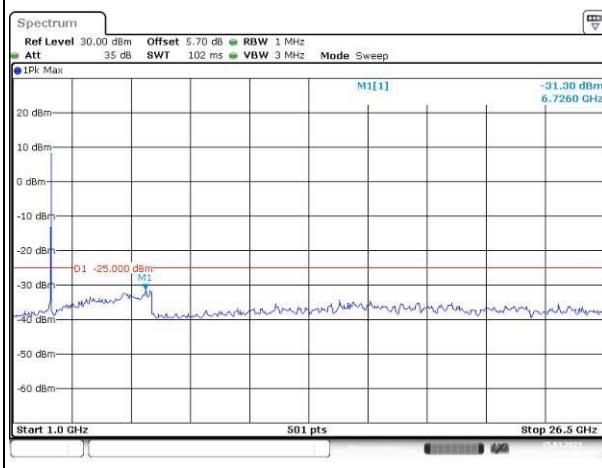
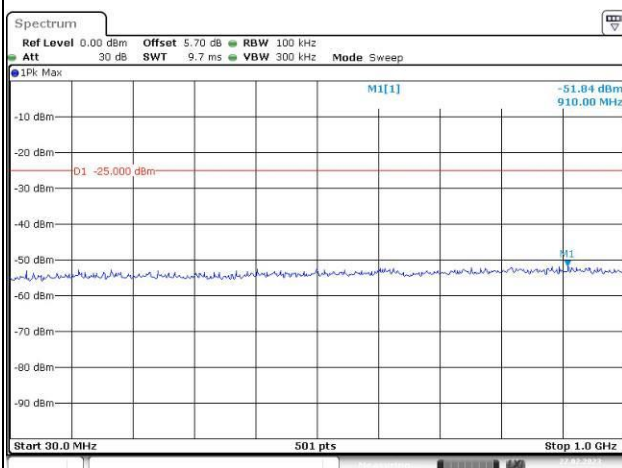
15MHz Bandwidth QPSK

Lowest
for FCC

Middle



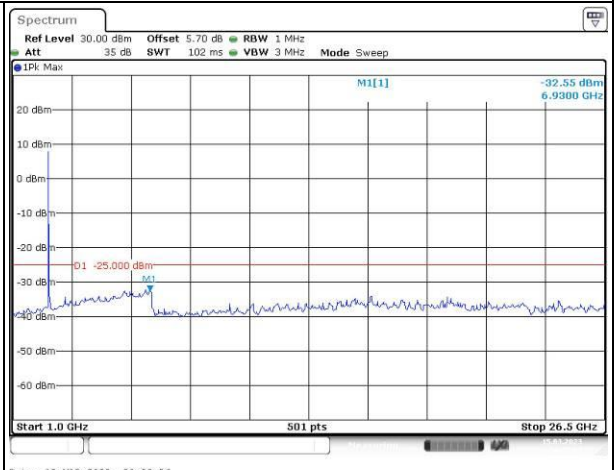
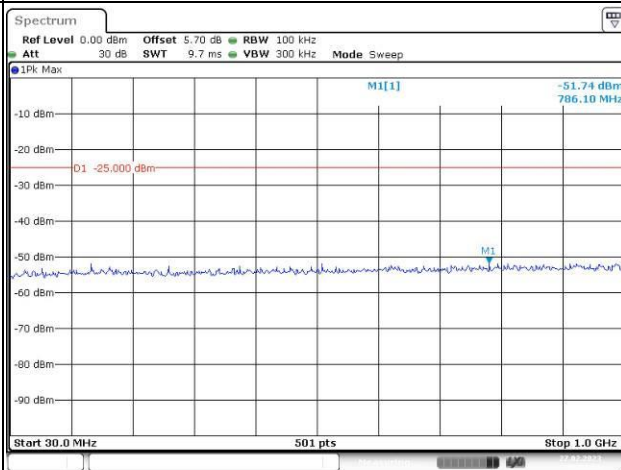
Highest



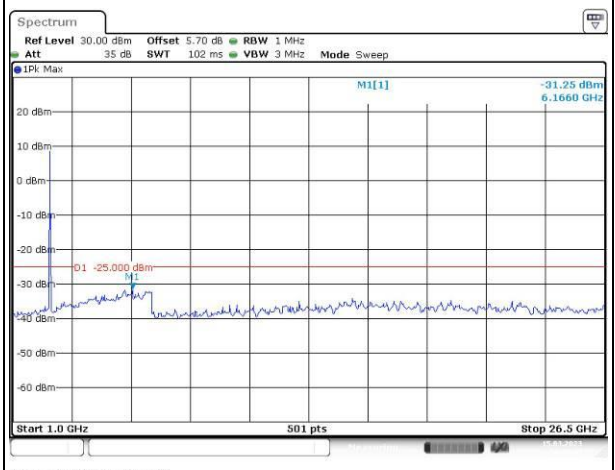
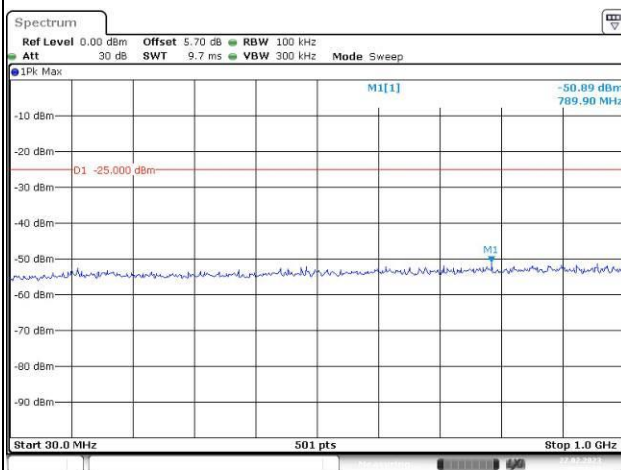
Spurious Emissions at Antenna Terminal

Channel

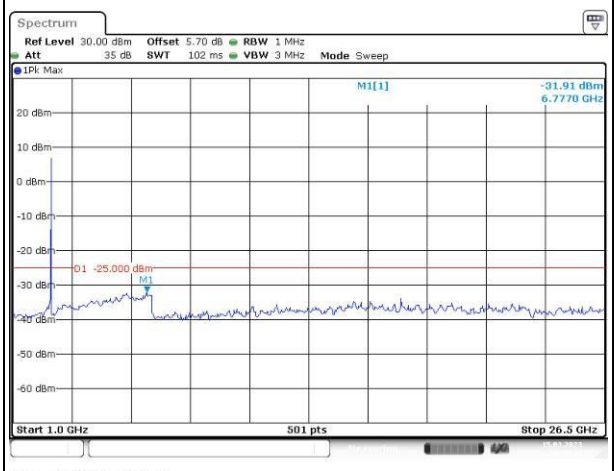
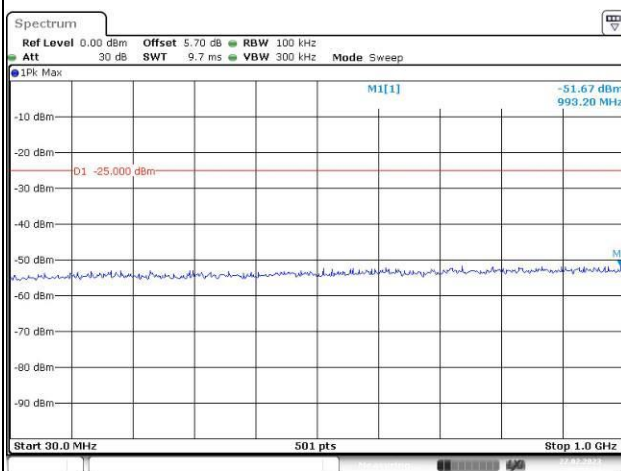
20MHz Bandwidth QPSK

Lowest
for FCC

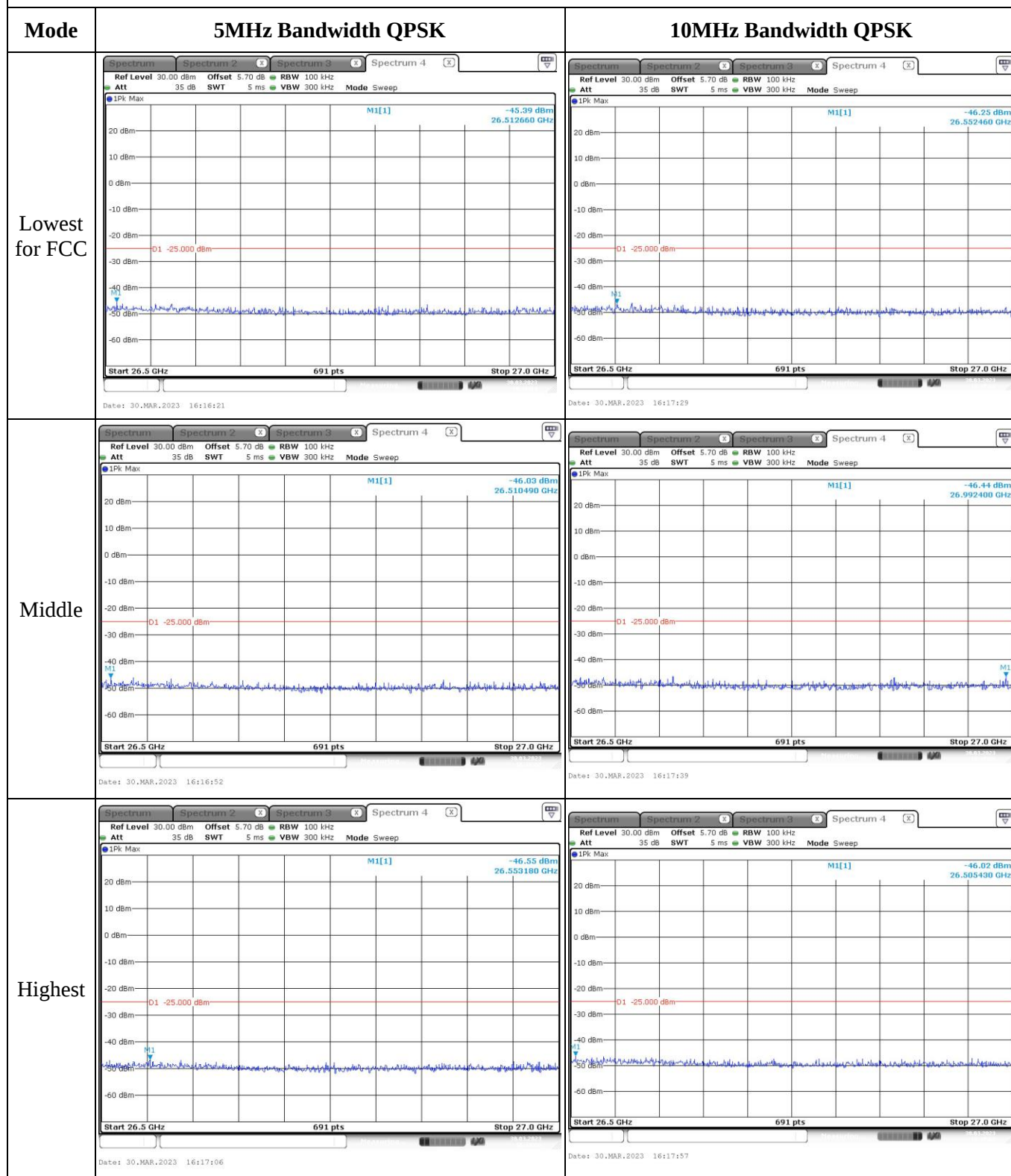
Middle



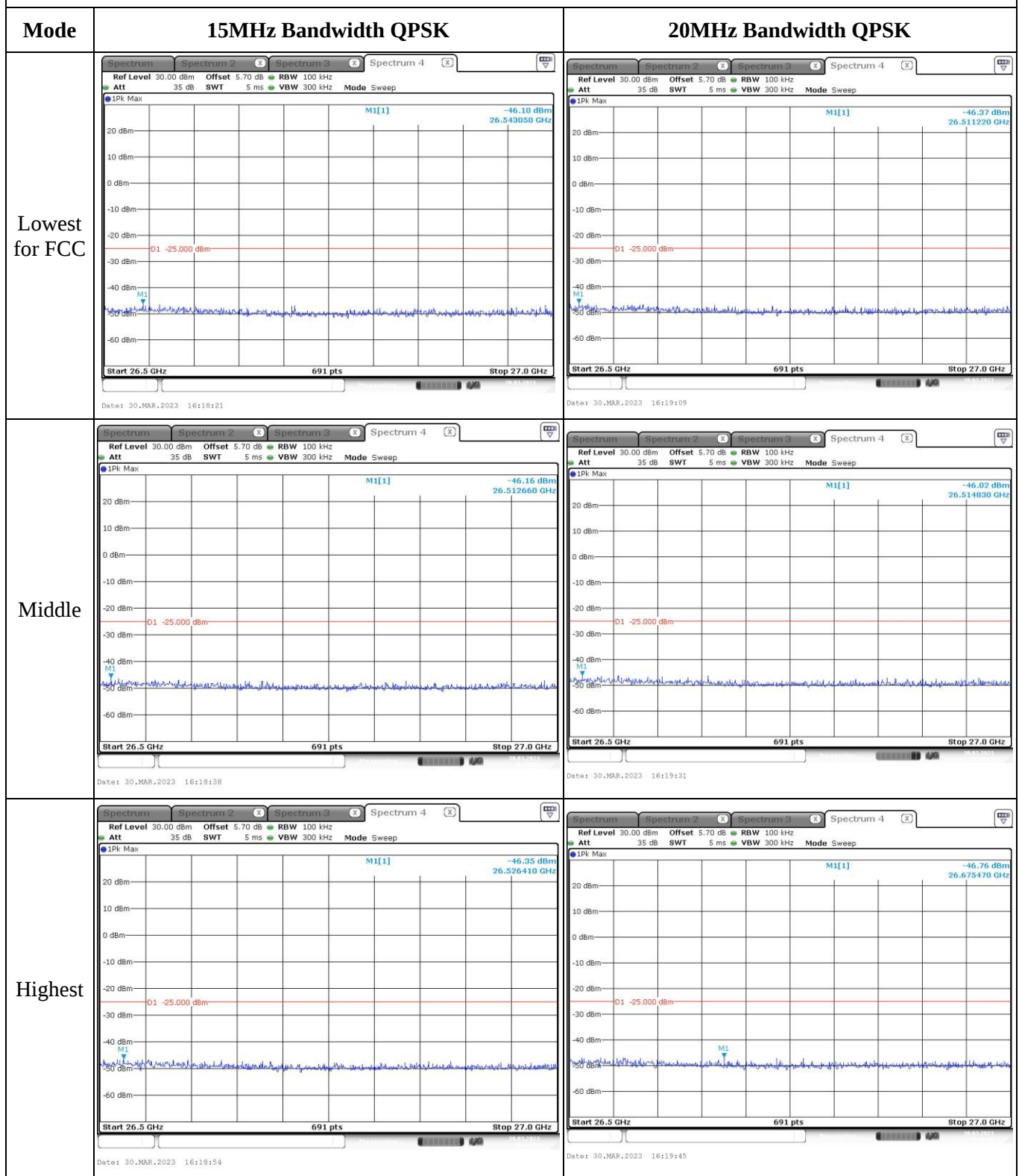
Highest



Spurious Emissions at Antenna Terminal:26.5-27GHz



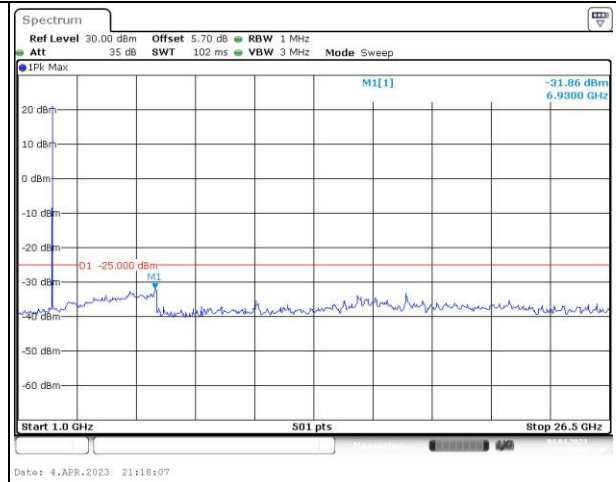
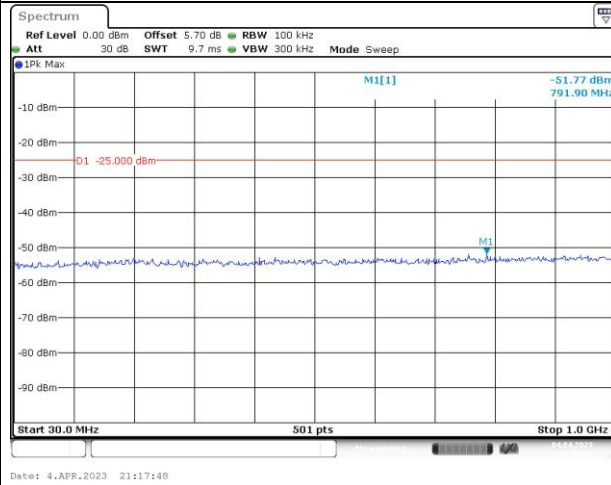
Spurious Emissions at Antenna Terminal:26.5-27GHz



Spurious Emissions at Antenna Terminal

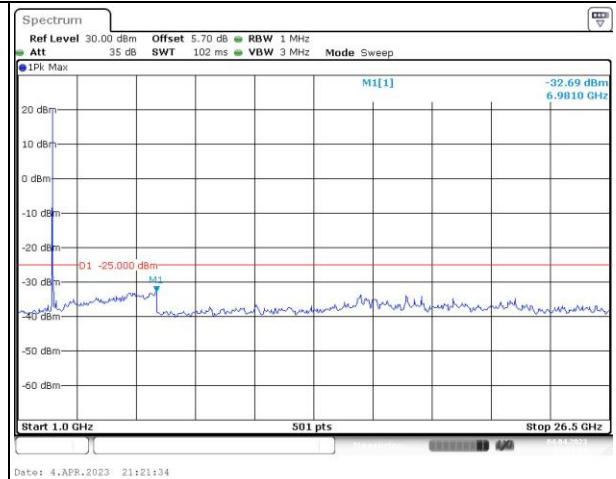
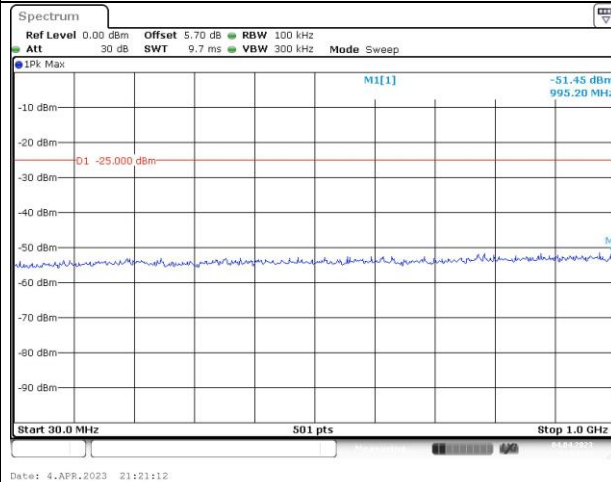
Channel

5MHz Bandwidth QPSK

Lowest
For
RSS-199

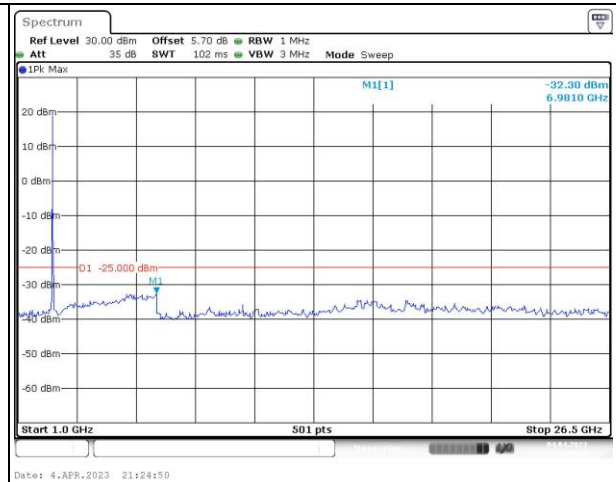
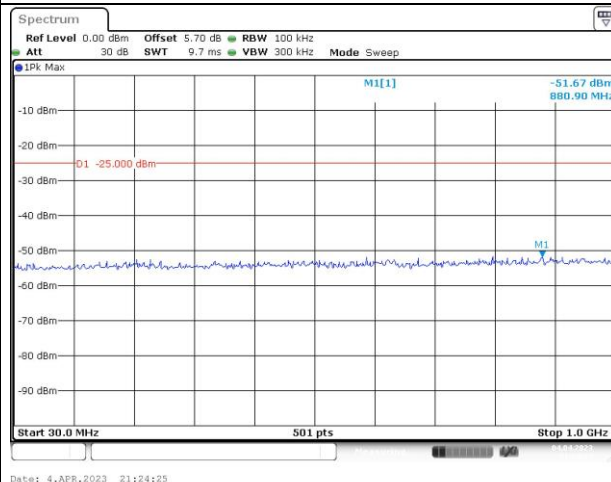
Channel

10MHz Bandwidth QPSK

Lowest
For
RSS-199

Channel

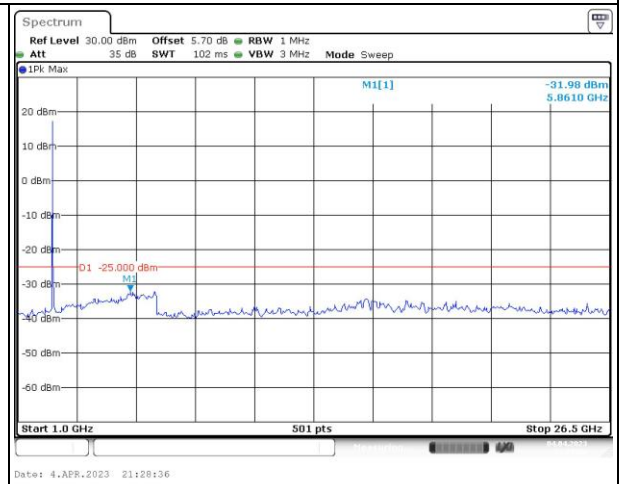
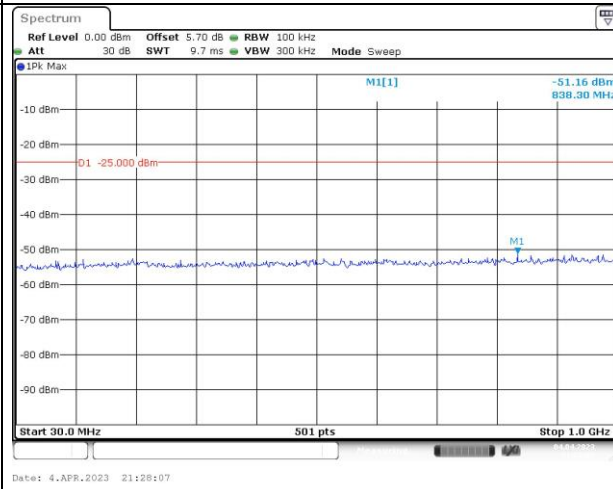
15MHz Bandwidth QPSK

Lowest
For
RSS-199

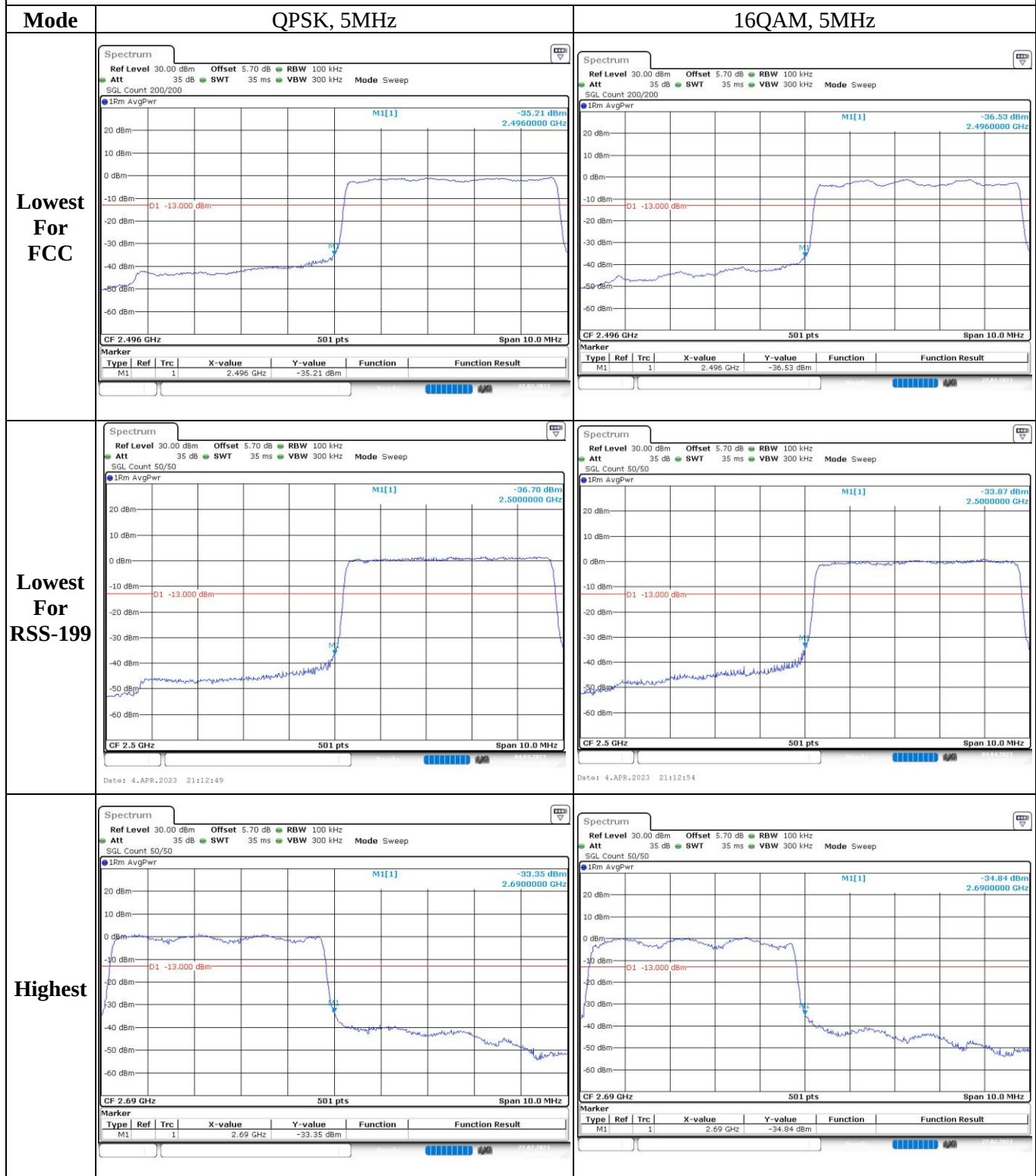
Spurious Emissions at Antenna Terminal

Channel

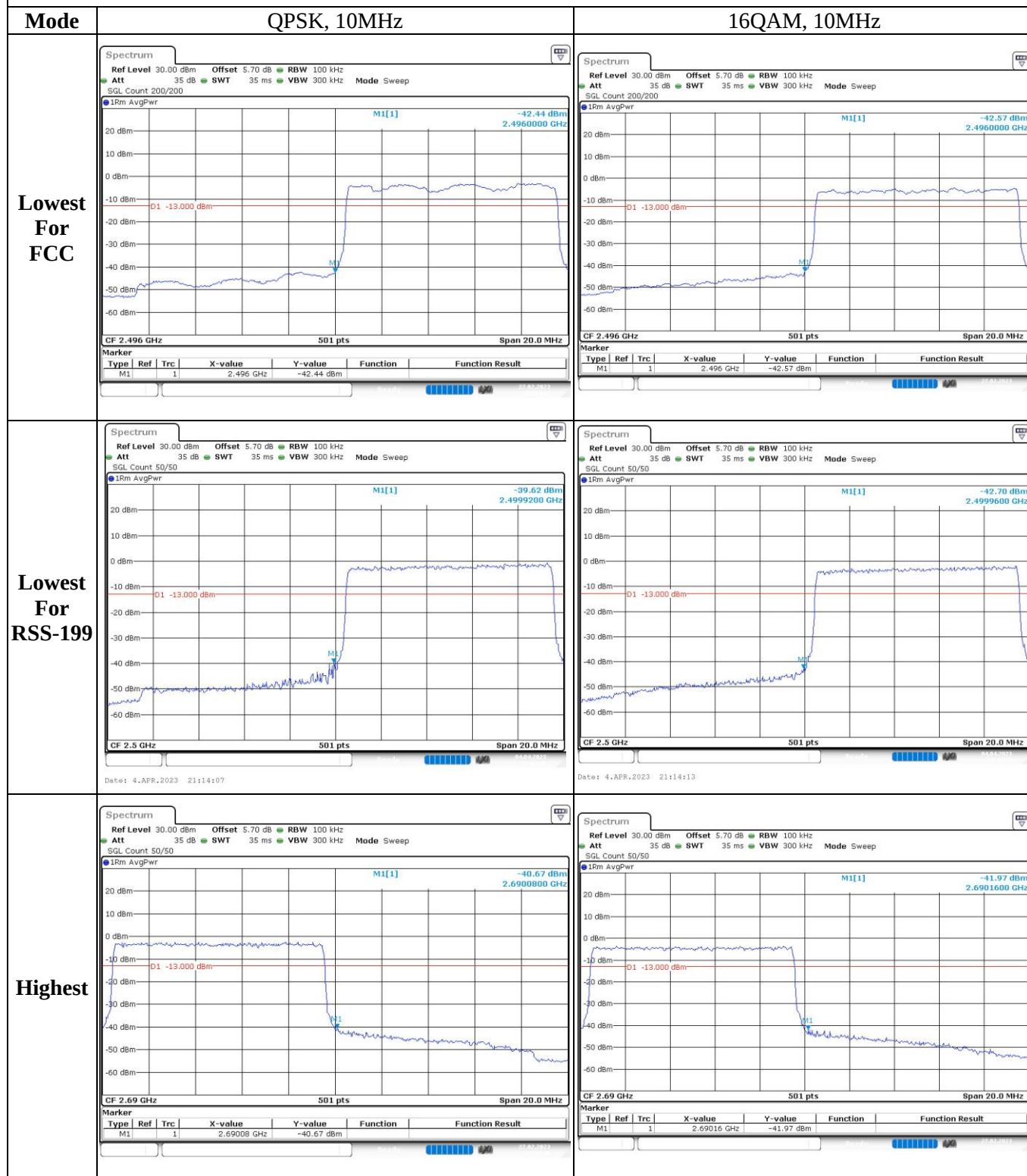
20MHz Bandwidth QPSK

Lowest
For
RSS-199

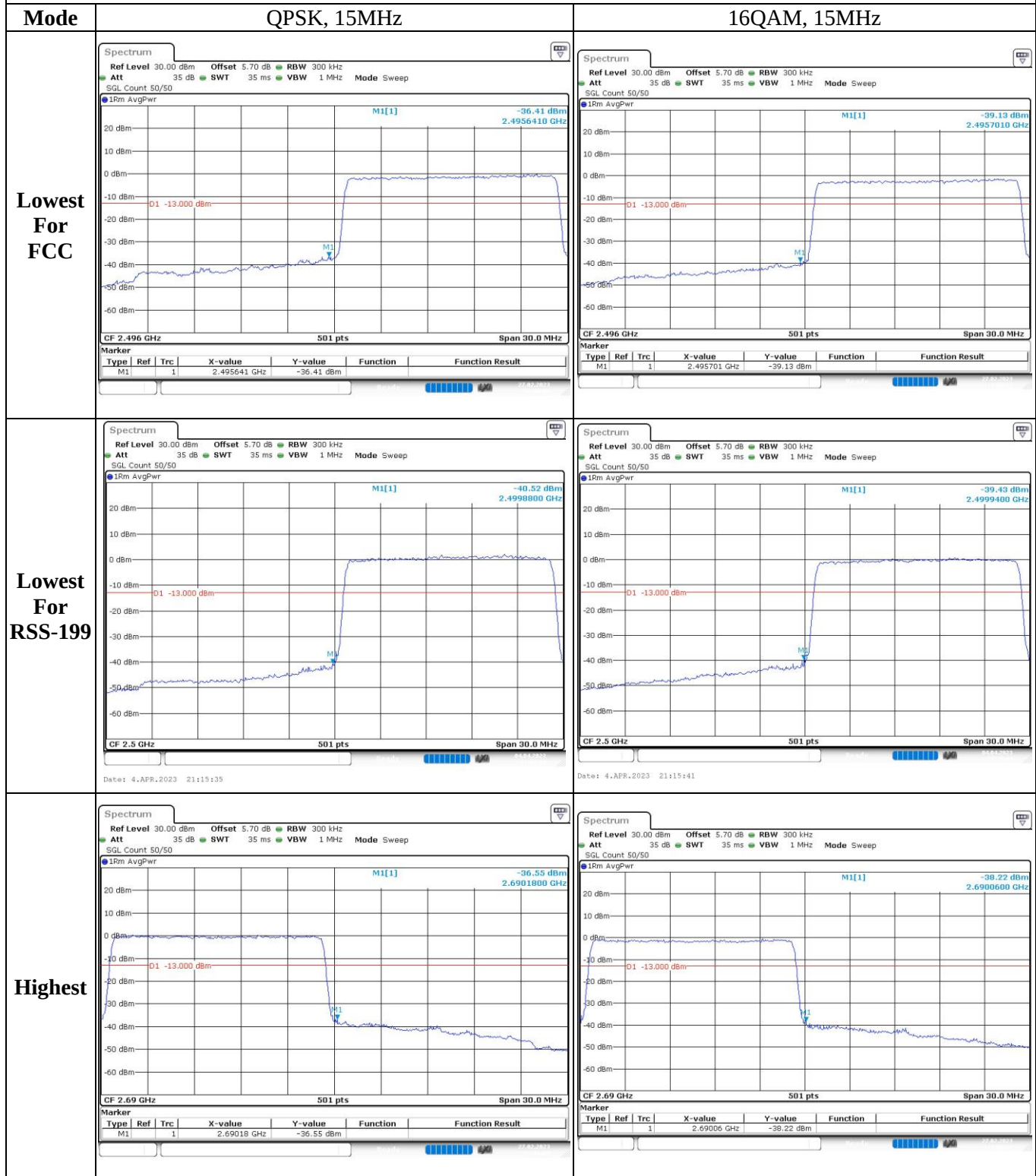
Out of band emission, Band Edge



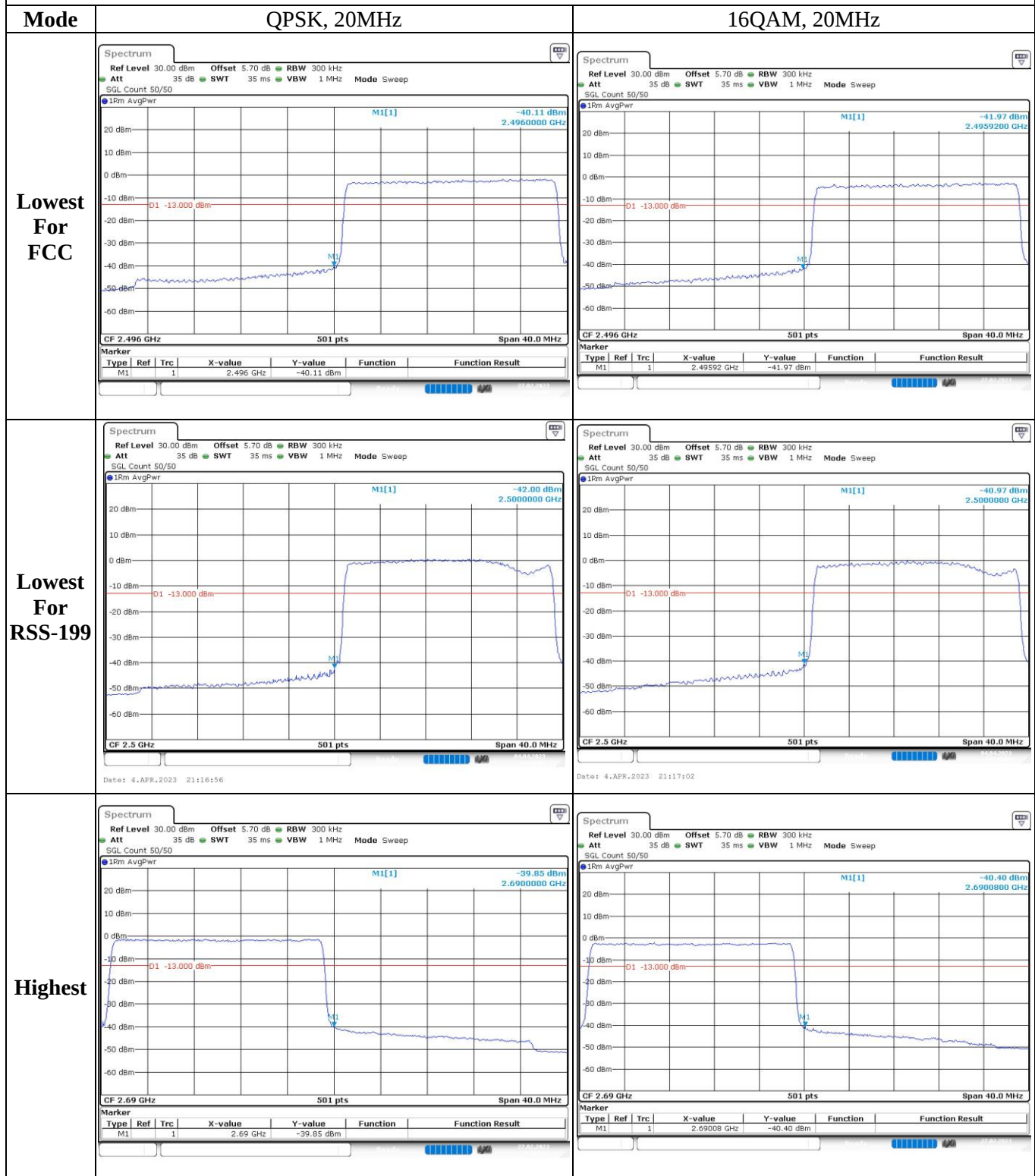
Out of band emission, Band Edge



Out of band emission, Band Edge



Out of band emission, Band Edge



4.10 Radiated Spurious Emissions

Serial Number:	2295	Test Date:	2023/03/09~2023/03/11
Test Site:	966-1/966-2	Test Mode:	Transmitting
Tester:	Vic Du, Mack Huang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	23.4~25.4	Relative Humidity: (%)	42~50	ATM Pressure: (kPa)	101.8
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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
Sonoma	Amplifier	310N	186165	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
Agilent	Signal Generator	E8247C	MY43321352	2022/04/01	2023/03/31
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	2022/11/09	2023/11/08
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
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	2022/11/09	2023/11/08
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:

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**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								
44.43	H	30.08	-30.28	-20.55	0.12	-50.95	-13.00	37.95
64.34	V	41.12	-31.85	-8.00	0.14	-39.99	-13.00	26.99
1648.400	H	50.58	-53.75	8.68	0.80	-45.87	-13.00	32.87
1648.400	V	57.86	-46.55	8.68	0.80	-38.67	-13.00	25.67
2472.600	H	55.84	-44.94	9.38	1.00	-36.56	-13.00	23.56
2472.600	V	61.08	-39.65	9.38	1.00	-31.27	-13.00	18.27
3296.800	H	34.11	-62.57	10.32	1.15	-53.40	-13.00	40.40
3296.800	V	34.87	-61.57	10.32	1.15	-52.40	-13.00	39.40
GSM 850 Frequency:836.6MHz								
46.42	H	32.59	-30.97	-18.41	0.12	-49.50	-13.00	36.50
135.59	V	40.57	-35.39	0.00	0.22	-35.61	-13.00	22.61
1673.200	H	49.95	-54.36	8.71	0.85	-46.50	-13.00	33.50
1673.200	V	56.89	-47.52	8.71	0.85	-39.66	-13.00	26.66
2509.800	H	57.34	-43.27	9.42	1.01	-34.86	-13.00	21.86
2509.800	V	54.52	-46.10	9.42	1.01	-37.69	-13.00	24.69
3346.400	H	33.23	-63.94	10.34	1.16	-54.76	-13.00	41.76
3346.400	V	34.57	-62.46	10.34	1.16	-53.28	-13.00	40.28
GSM 850 Frequency:848.8MHz								
45.28	H	31.74	-29.97	-19.53	0.12	-49.62	-13.00	36.62
140.24	V	40.56	-35.89	0.00	0.22	-36.11	-13.00	23.11
1697.600	H	49.46	-54.83	8.74	0.90	-46.99	-13.00	33.99
1697.600	V	53.46	-50.96	8.74	0.90	-43.12	-13.00	30.12
2546.400	H	56.56	-43.77	9.47	1.01	-35.31	-13.00	22.31
2546.400	V	54.88	-45.40	9.47	1.01	-36.94	-13.00	23.94
3395.200	H	34.37	-63.32	10.36	1.19	-54.15	-13.00	41.15
3395.200	V	34.26	-63.40	10.36	1.19	-54.23	-13.00	41.23

PCS Band

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								
523.91	H	44.25	-62.12	0.00	0.42	-62.54	-13.00	49.54
653.78	V	50.12	-52.28	0.00	0.52	-52.80	-13.00	39.80
3700.400	H	43.57	-53.75	10.60	1.25	-44.40	-13.00	31.40
3700.400	V	39.34	-57.96	10.60	1.25	-48.61	-13.00	35.61
5550.600	H	40.84	-52.42	11.44	1.49	-42.47	-13.00	29.47
5550.600	V	35.24	-57.86	11.44	1.49	-47.91	-13.00	34.91
GSM 1900 Frequency:1880MHz								
546.31	H	43.87	-62.04	0.00	0.47	-62.51	-13.00	49.51
648.73	V	51.47	-51.06	0.00	0.52	-51.58	-13.00	38.58
3760.000	H	43.63	-52.78	10.66	1.24	-43.36	-13.00	30.36
3760.000	V	38.84	-57.45	10.66	1.24	-48.03	-13.00	35.03
5640.000	H	40.16	-53.29	11.33	1.54	-43.50	-13.00	30.50
5640.000	V	38.20	-55.13	11.33	1.54	-45.34	-13.00	32.34
GSM 1900 Frequency:1909.8MHz								
622.98	H	40.58	-64.18	0.00	0.48	-64.66	-13.00	51.66
489.31	V	49.53	-53.54	0.00	0.44	-53.98	-13.00	40.98
3819.600	H	36.93	-58.93	10.72	1.29	-49.50	-13.00	36.50
3819.600	V	40.65	-55.07	10.72	1.29	-45.64	-13.00	32.64
5729.400	H	34.13	-59.35	11.22	1.59	-49.72	-13.00	36.72
5729.400	V	42.60	-50.76	11.22	1.59	-41.13	-13.00	28.13

WCDMA Band 2:

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								
184.84	H	38.57	-74.02	0.00	0.25	-74.27	-13.00	61.27
347.21	V	39.28	-68.30	0.00	0.37	-68.67	-13.00	55.67
3704.800	H	33.45	-63.81	10.60	1.25	-54.46	-13.00	41.46
3704.800	V	34.16	-63.07	10.60	1.25	-53.72	-13.00	40.72
5557.200	H	34.07	-59.21	11.43	1.49	-49.27	-13.00	36.27
5557.200	V	33.38	-59.75	11.43	1.49	-49.81	-13.00	36.81
WCDMA Band II, Frequency:1880 MHz								
205.86	H	37.56	-75.21	0.00	0.26	-75.47	-13.00	62.47
330.02	V	39.24	-68.79	0.00	0.34	-69.13	-13.00	56.13
3760.000	H	35.12	-61.29	10.66	1.24	-51.87	-13.00	38.87
3760.000	V	34.21	-62.08	10.66	1.24	-52.66	-13.00	39.66
5640.000	H	34.05	-59.40	11.33	1.54	-49.61	-13.00	36.61
5640.000	V	35.11	-58.22	11.33	1.54	-48.43	-13.00	35.43
WCDMA Band II, Frequency:1907.6MHz								
219.23	H	38.51	-74.00	0.00	0.27	-74.27	-13.00	61.27
392.10	V	40.07	-66.35	0.00	0.38	-66.73	-13.00	53.73
3815.200	H	34.02	-61.83	10.72	1.29	-52.40	-13.00	39.40
3815.200	V	33.78	-61.91	10.72	1.29	-52.48	-13.00	39.48
5722.800	H	35.13	-58.36	11.23	1.58	-48.71	-13.00	35.71
5722.800	V	34.03	-59.32	11.23	1.58	-49.67	-13.00	36.67

WCDMA Band 5:

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								
207.77	H	18.65	-62.62	0.00	0.26	-62.88	-13.00	49.88
340.52	V	19.03	-57.72	0.00	0.36	-58.08	-13.00	45.08
1652.800	H	36.45	-67.88	8.68	0.81	-60.01	-13.00	47.01
1652.800	V	41.48	-62.93	8.68	0.81	-55.06	-13.00	42.06
2479.200	H	52.89	-47.87	9.39	1.01	-39.49	-13.00	26.49
2479.200	V	44.46	-56.27	9.39	1.01	-47.89	-13.00	34.89
3305.600	H	33.44	-63.29	10.32	1.15	-54.12	-13.00	41.12
3305.600	V	34.04	-62.46	10.32	1.15	-53.29	-13.00	40.29
WCDMA Band 5 Frequency:836.6MHz								
266.03	H	17.28	-63.05	0.00	0.31	-63.36	-13.00	50.36
347.21	V	20.05	-56.56	0.00	0.37	-56.93	-13.00	43.93
1673.200	H	34.74	-69.57	8.71	0.85	-61.71	-13.00	48.71
1673.200	V	38.82	-65.59	8.71	0.85	-57.73	-13.00	44.73
2509.800	H	46.45	-54.16	9.42	1.01	-45.75	-13.00	32.75
2509.800	V	47.58	-53.04	9.42	1.01	-44.63	-13.00	31.63
3346.400	H	33.61	-63.56	10.34	1.16	-54.38	-13.00	41.38
3346.400	V	34.15	-62.88	10.34	1.16	-53.70	-13.00	40.70
WCDMA Band 5 Frequency:846.6MHz								
244.06	H	18.97	-61.87	0.00	0.30	-62.17	-13.00	49.17
402.60	V	19.63	-55.82	0.00	0.41	-56.23	-13.00	43.23
1693.200	H	35.17	-69.13	8.73	0.89	-61.29	-13.00	48.29
1693.200	V	34.04	-70.38	8.73	0.89	-62.54	-13.00	49.54
2539.800	H	48.12	-52.26	9.46	1.01	-43.81	-13.00	30.81
2539.800	V	49.65	-50.69	9.46	1.01	-42.24	-13.00	29.24
3386.400	H	34.23	-63.36	10.35	1.18	-54.19	-13.00	41.19
3386.400	V	33.77	-63.77	10.35	1.18	-54.60	-13.00	41.60

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, 1.4MHz, Frequency:1850.7 MHz								
293.73	H	38.54	-72.33	0.00	0.33	-72.66	-13.00	59.66
142.83	V	40.65	-67.39	0.00	0.22	-67.61	-13.00	54.61
3701.400	H	37.78	-59.53	10.60	1.25	-50.18	-13.00	37.18
3701.400	V	36.59	-60.70	10.60	1.25	-51.35	-13.00	38.35
5552.100	H	38.45	-54.82	11.44	1.49	-44.87	-13.00	31.87
5552.100	V	40.02	-53.08	11.44	1.49	-43.13	-13.00	30.13
QPSK, 1.4MHz,Frequency:1880 MHz								
321.42	H	39.56	-70.84	0.00	0.34	-71.18	-13.00	58.18
160.97	V	41.27	-67.15	0.00	0.24	-67.39	-13.00	54.39
3760.000	H	39.72	-56.69	10.66	1.24	-47.27	-13.00	34.27
3760.000	V	37.55	-58.74	10.66	1.24	-49.32	-13.00	36.32
5640.000	H	38.23	-55.22	11.33	1.54	-45.43	-13.00	32.43
5640.000	V	39.17	-54.16	11.33	1.54	-44.37	-13.00	31.37
QPSK, 1.4MHz,Frequency:1909.3 MHz								
339.57	H	38.53	-71.59	0.00	0.36	-71.95	-13.00	58.95
123.73	V	40.67	-65.48	0.00	0.21	-65.69	-13.00	52.69
3818.600	H	38.65	-57.21	10.72	1.29	-47.78	-13.00	34.78
3818.600	V	39.33	-56.38	10.72	1.29	-46.95	-13.00	33.95
5727.900	H	39.78	-53.70	11.23	1.59	-44.06	-13.00	31.06
5727.900	V	40.27	-53.09	11.23	1.59	-43.45	-13.00	30.45