

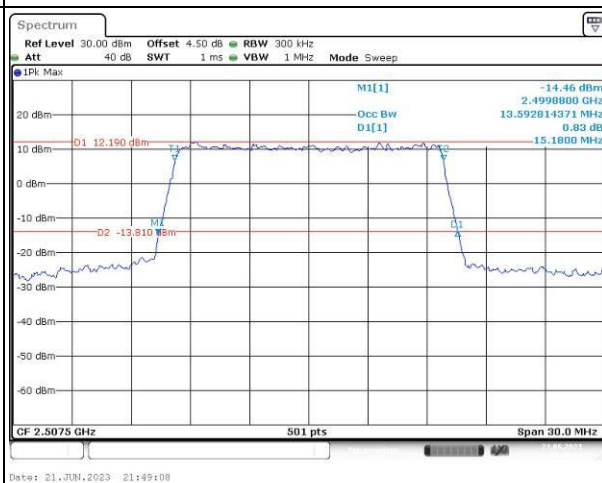
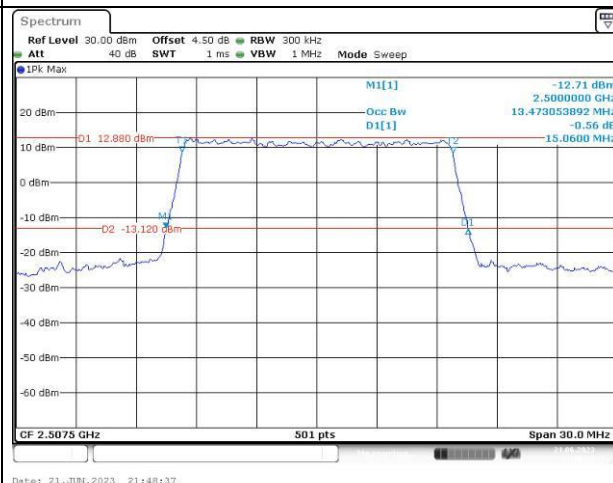
Occupied Bandwidth

Channel

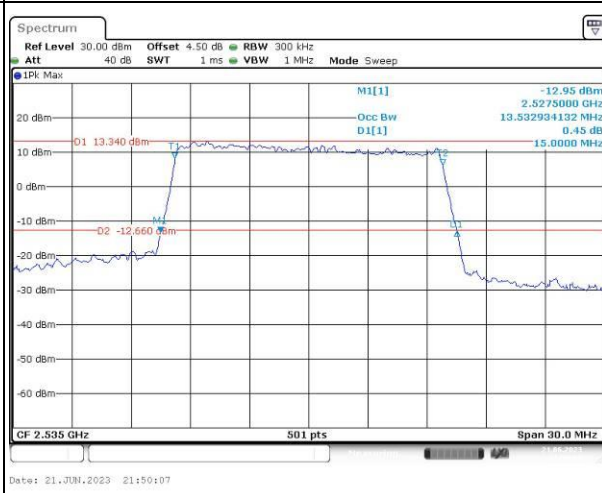
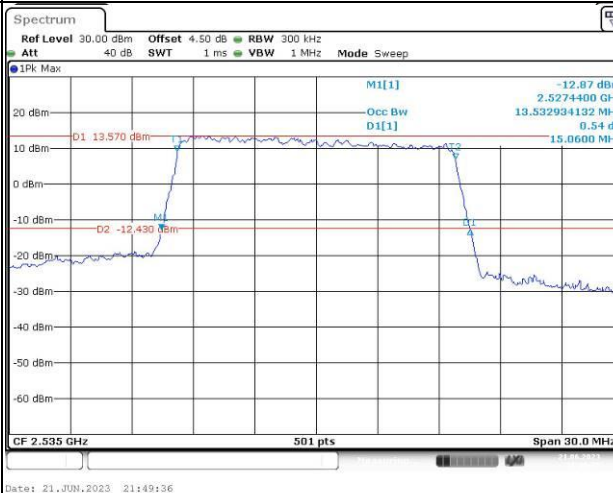
15MHz Bandwidth QPSK

15MHz Bandwidth 16QAM

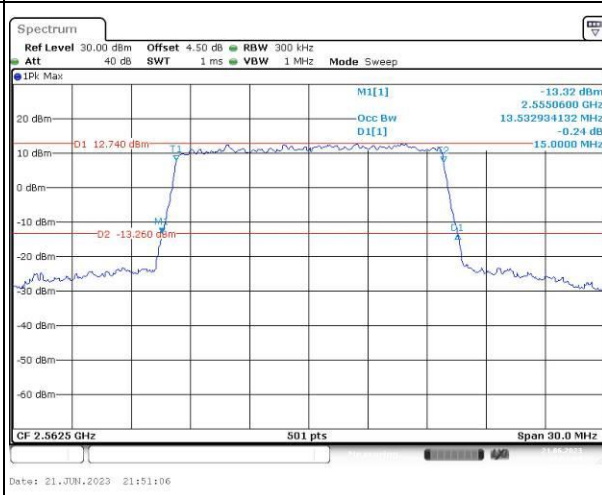
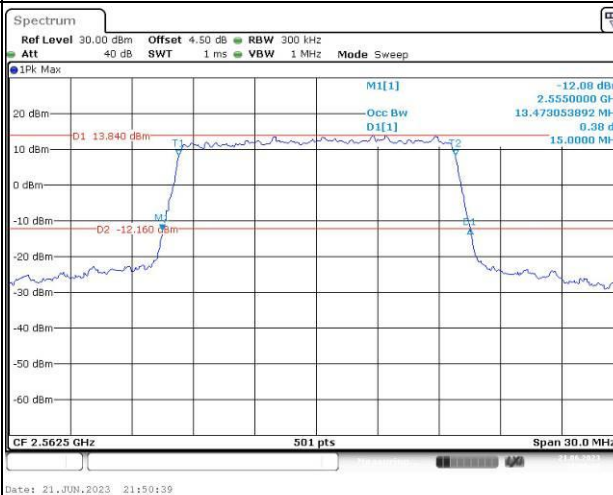
Lowest



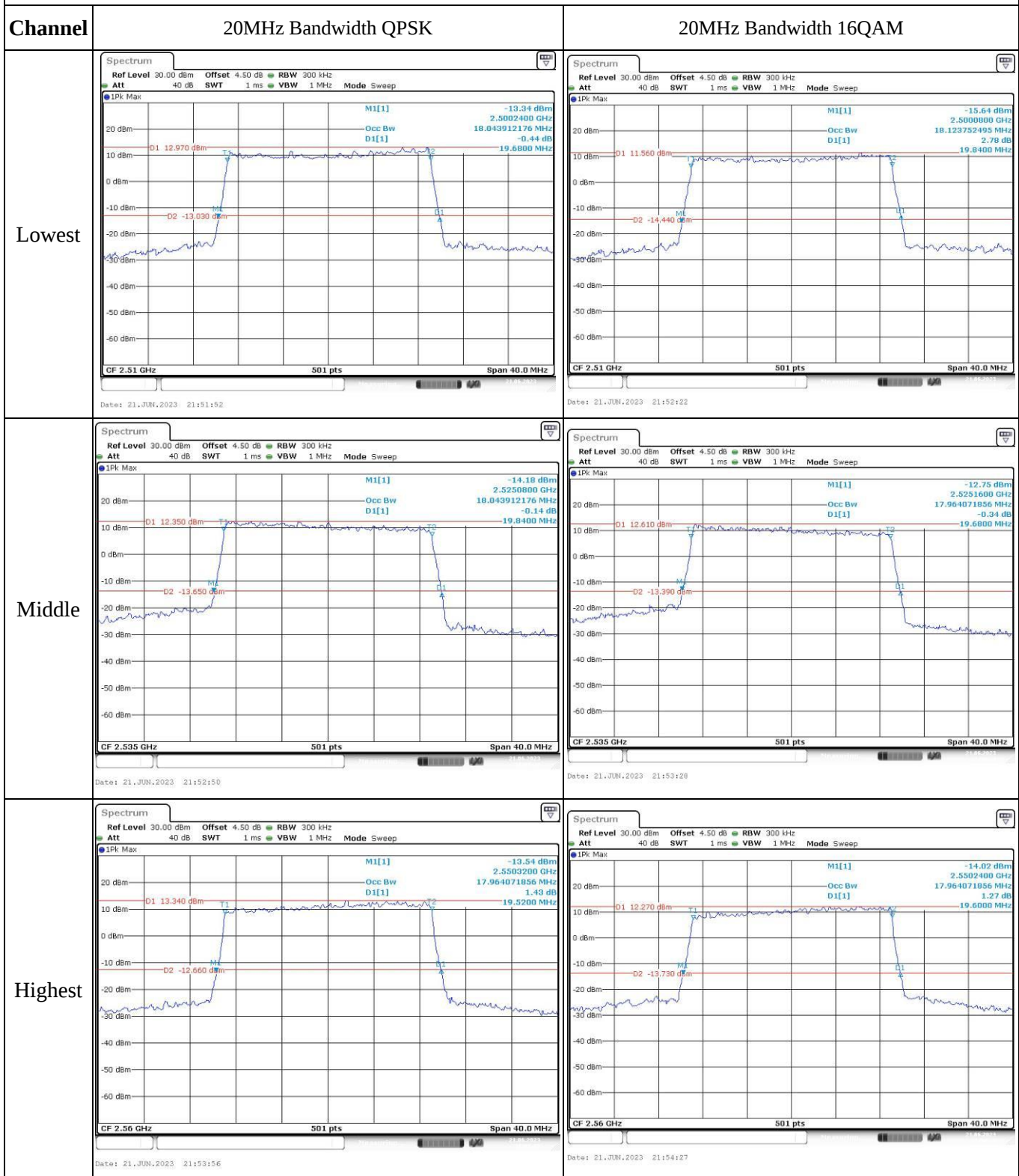
Middle



Highest



Occupied Bandwidth

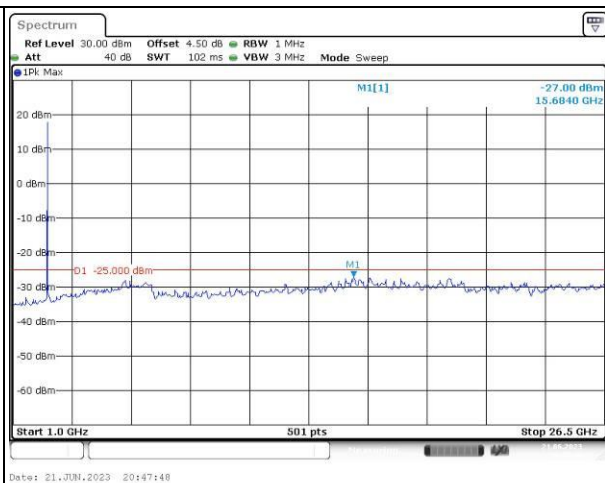
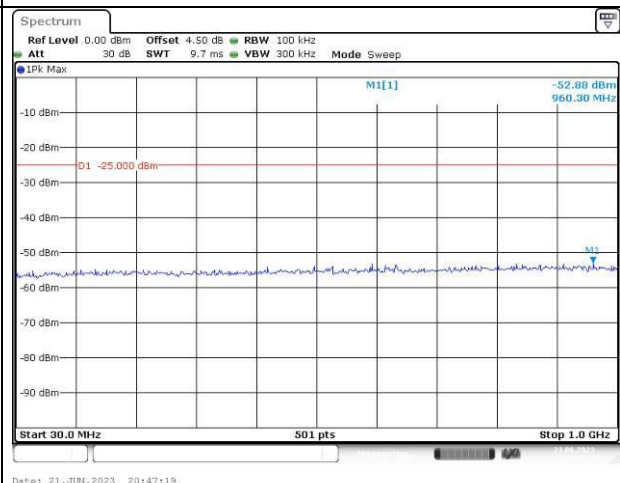


Spurious Emissions at Antenna Terminal

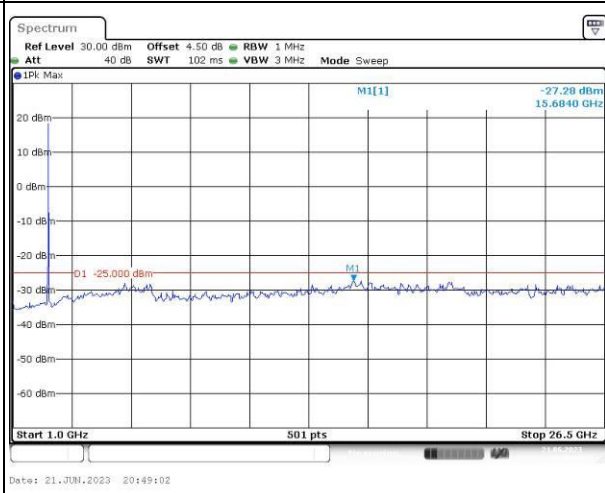
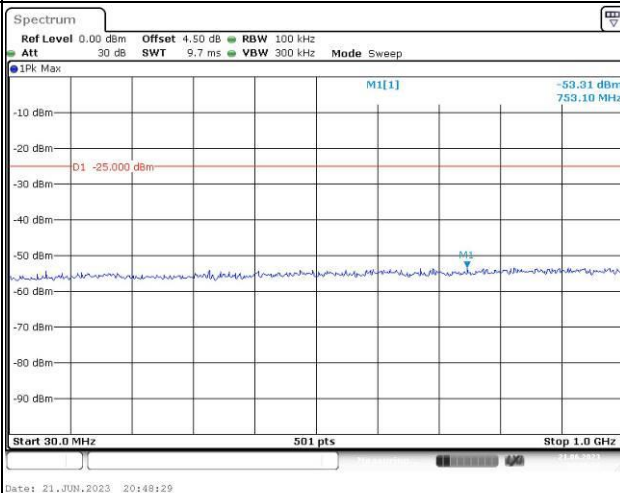
Channel

5MHz Bandwidth QPSK

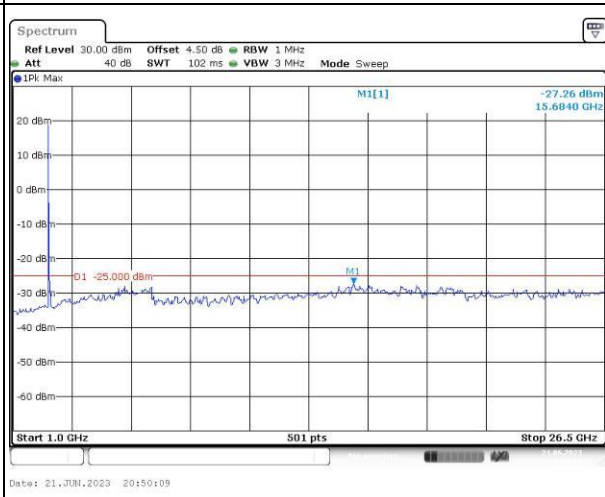
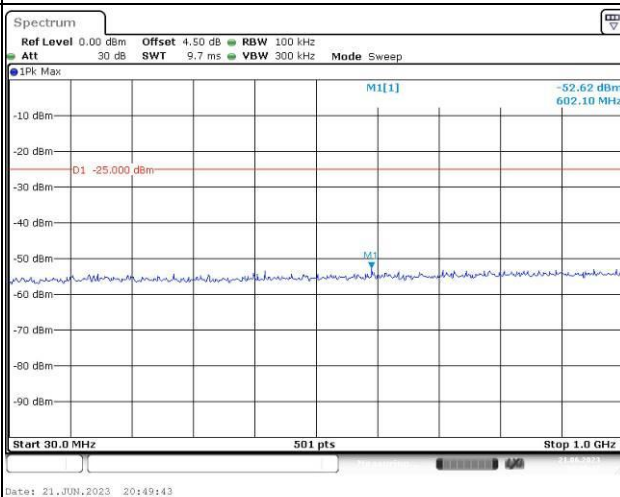
Lowest



Middle



Highest

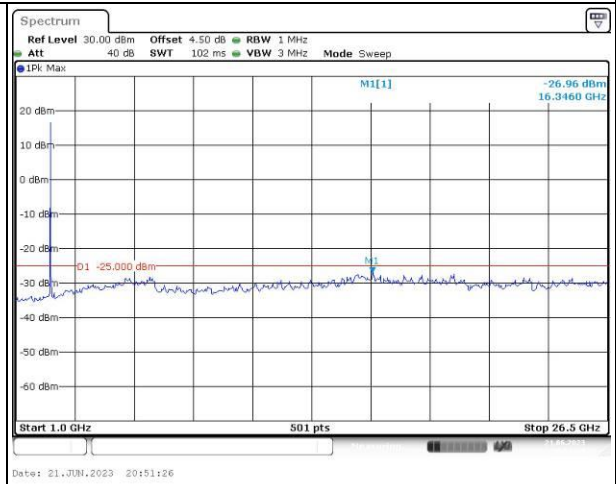
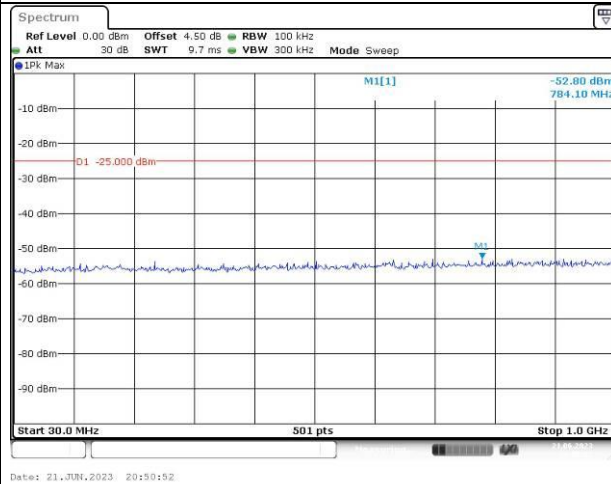


Spurious Emissions at Antenna Terminal

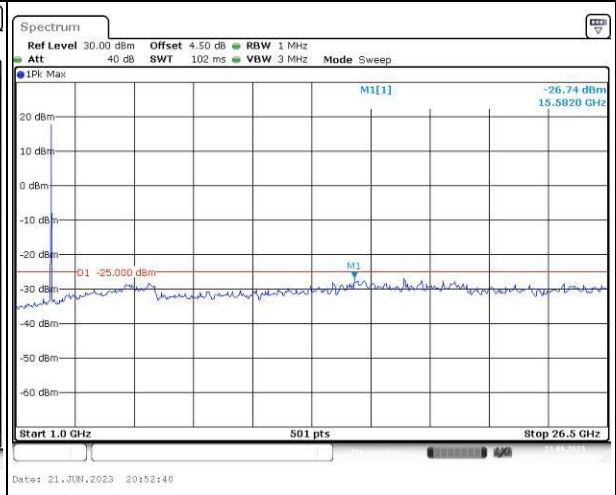
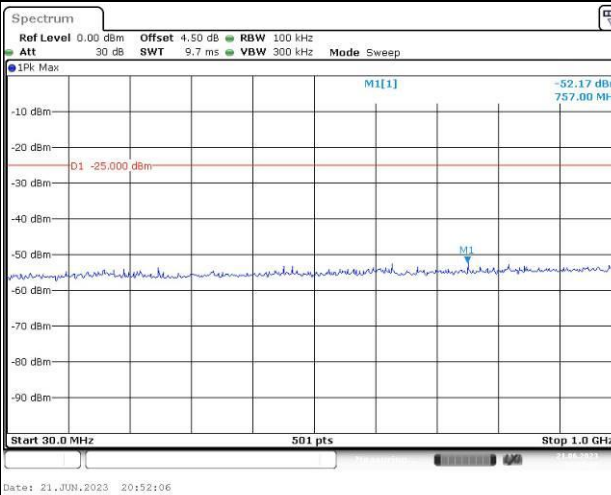
Channel

10MHz Bandwidth QPSK

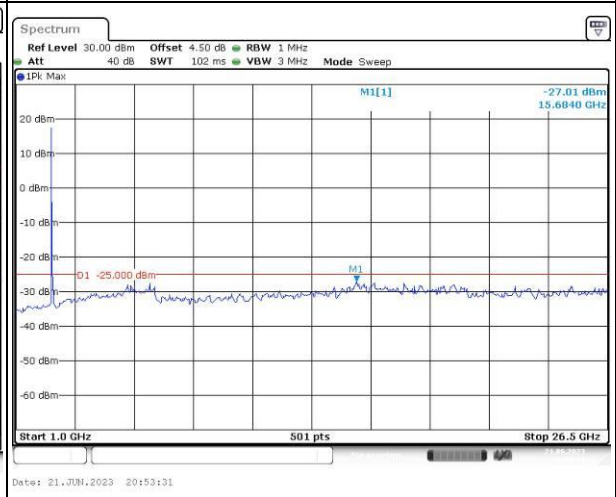
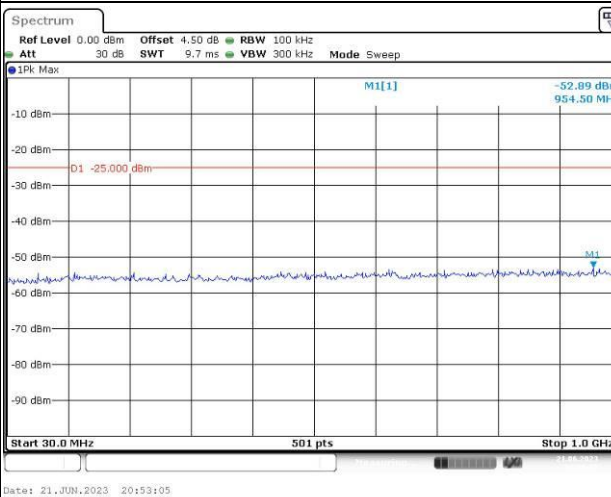
Lowest



Middle



Highest

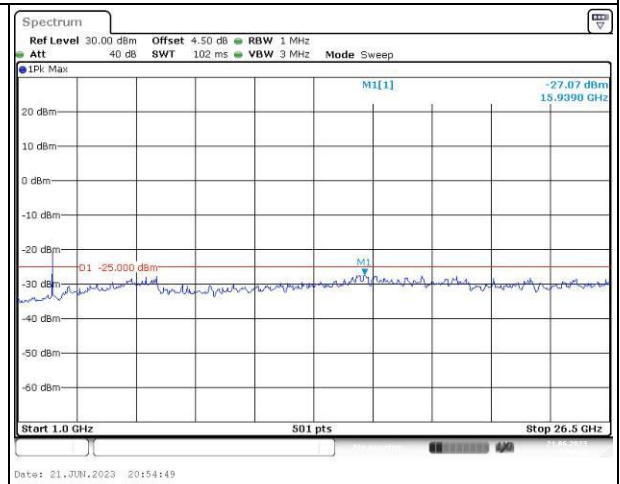
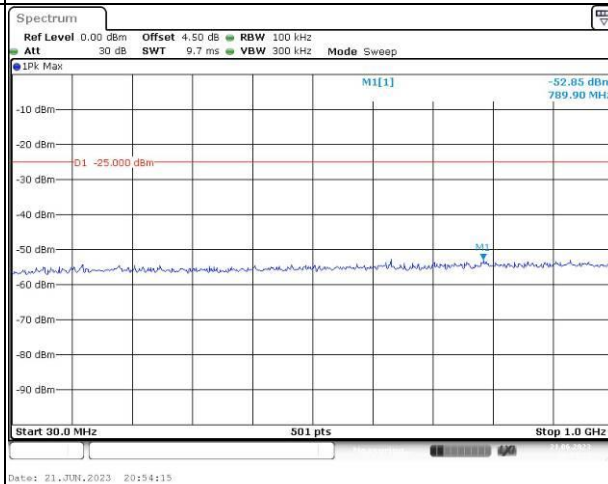


Spurious Emissions at Antenna Terminal

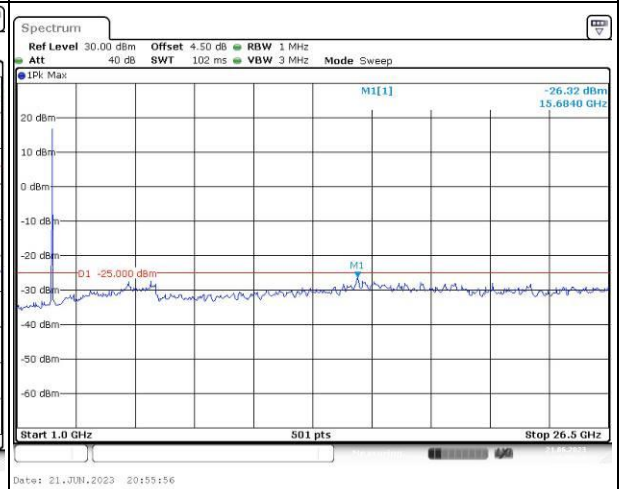
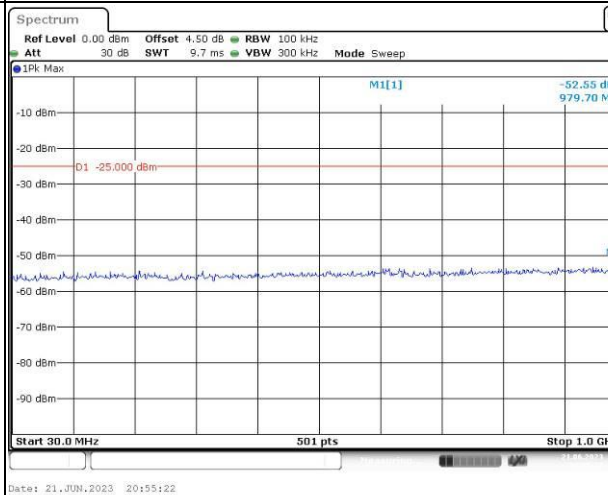
Channel

15MHz Bandwidth QPSK

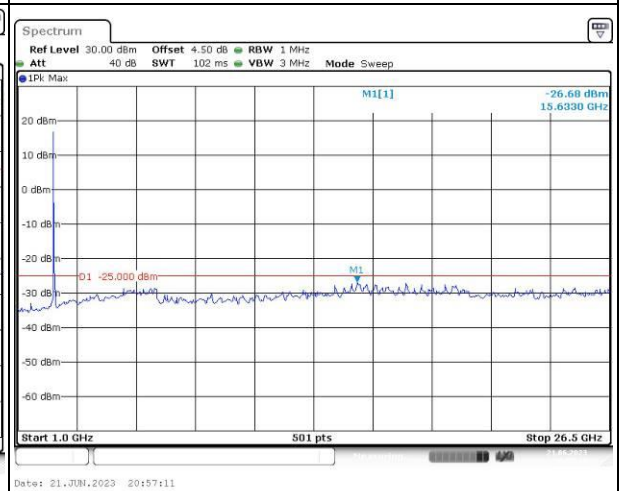
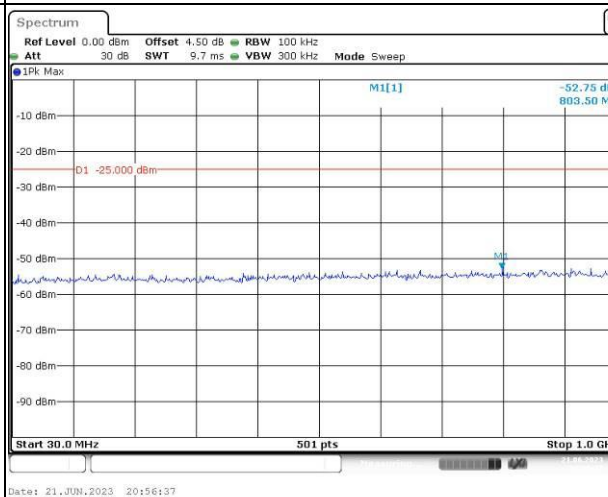
Lowest



Middle



Highest

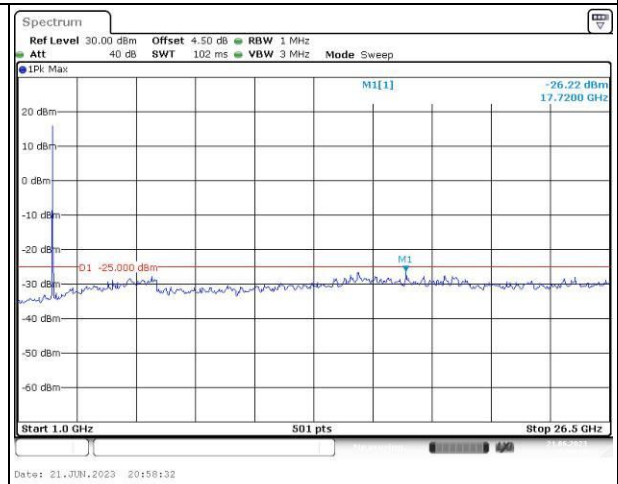
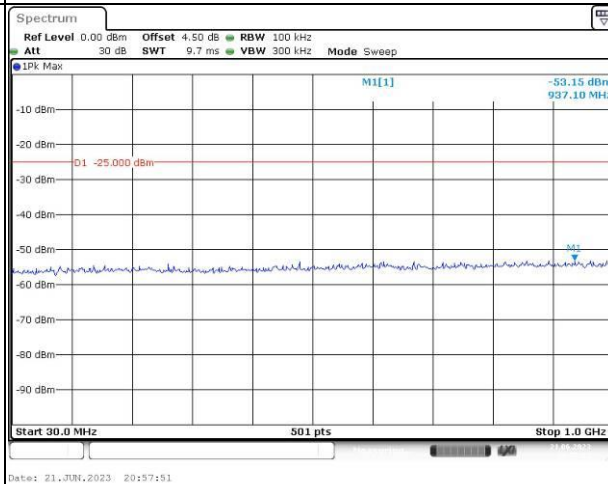


Spurious Emissions at Antenna Terminal

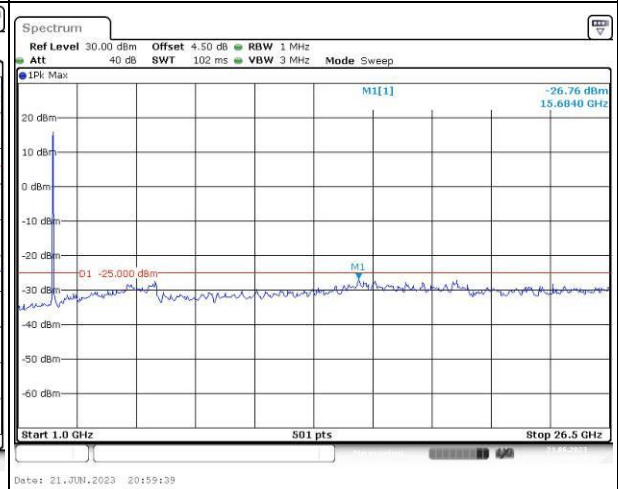
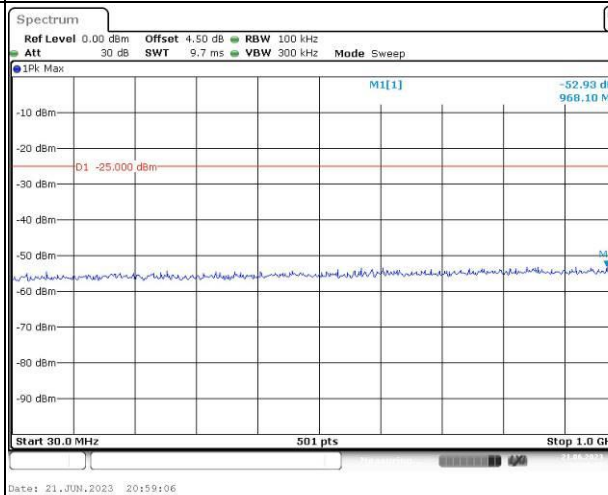
Channel

20MHz Bandwidth QPSK

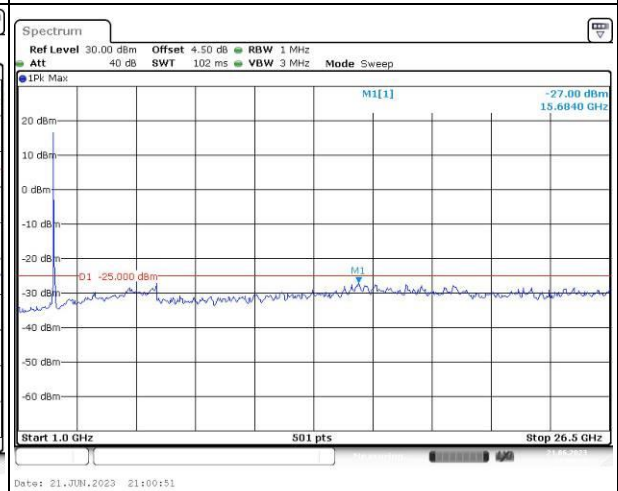
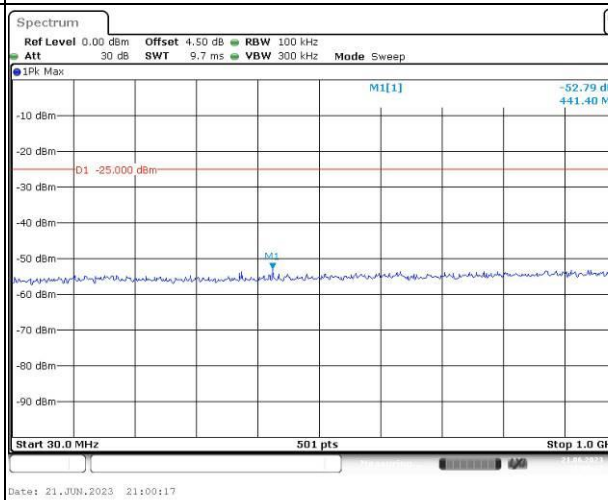
Lowest



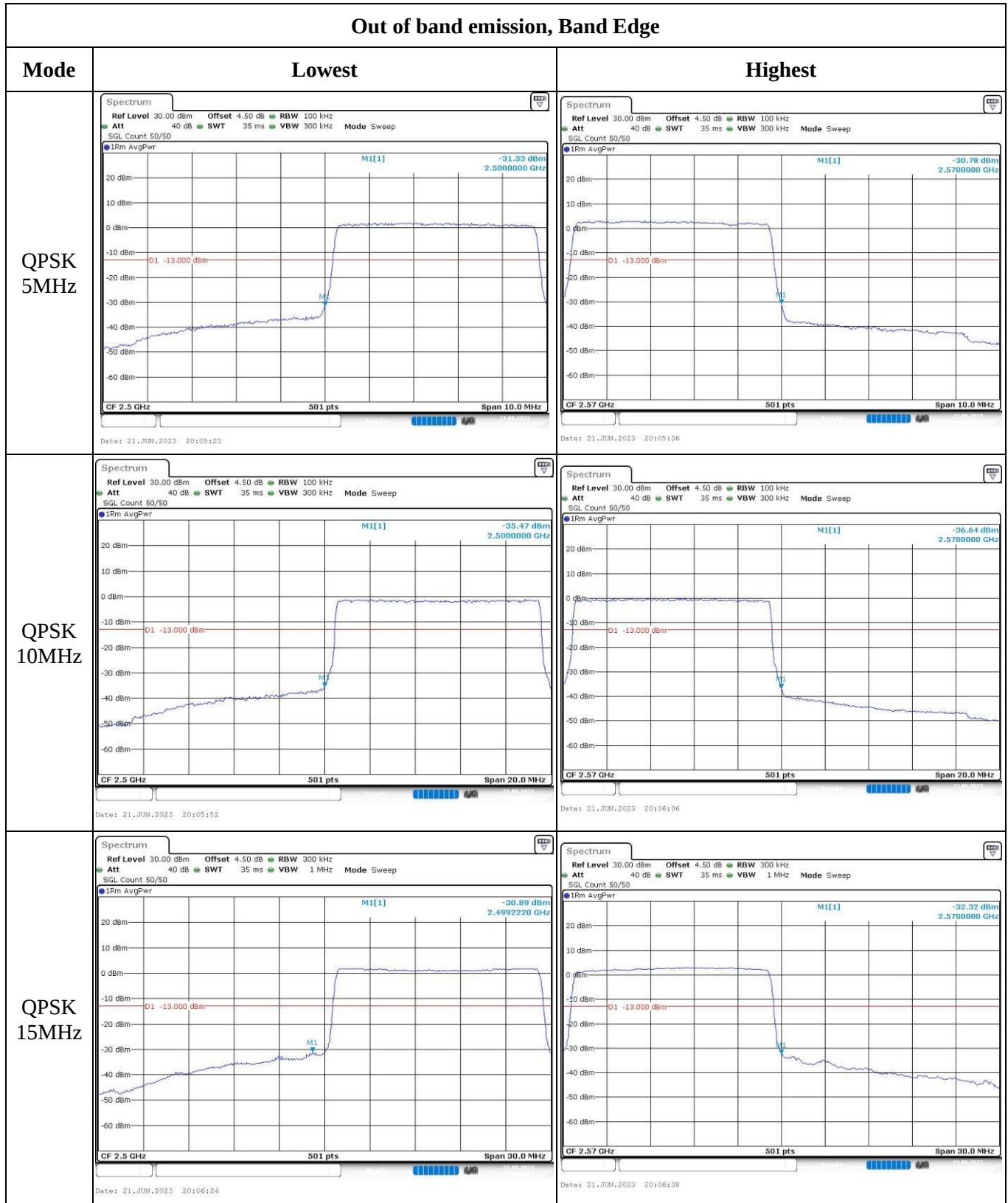
Middle



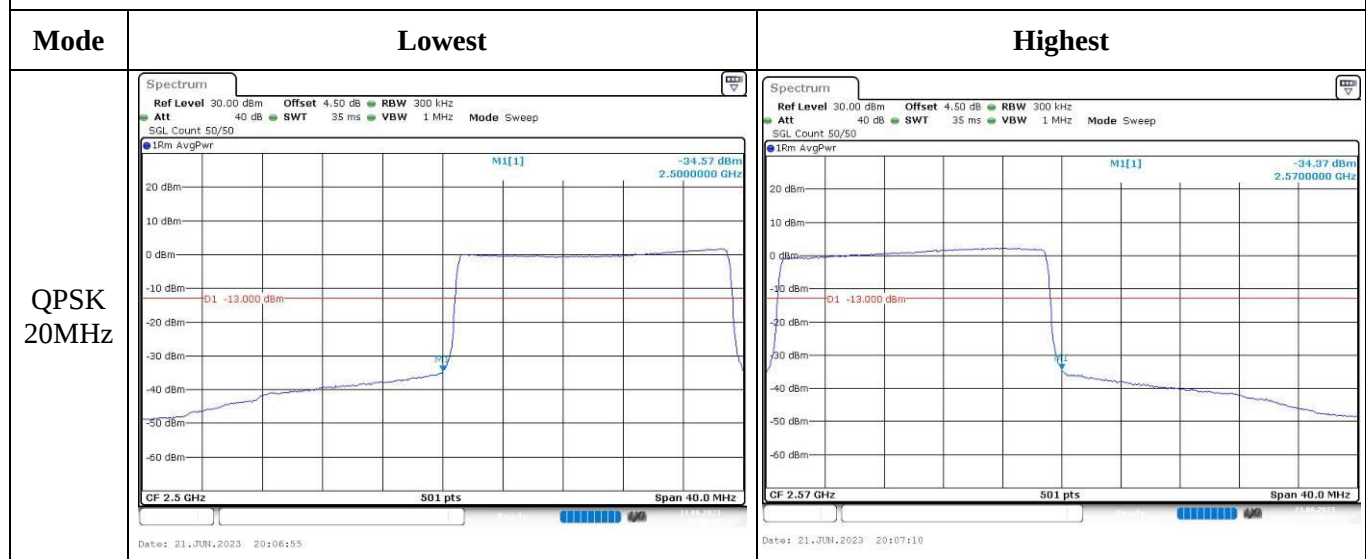
Highest



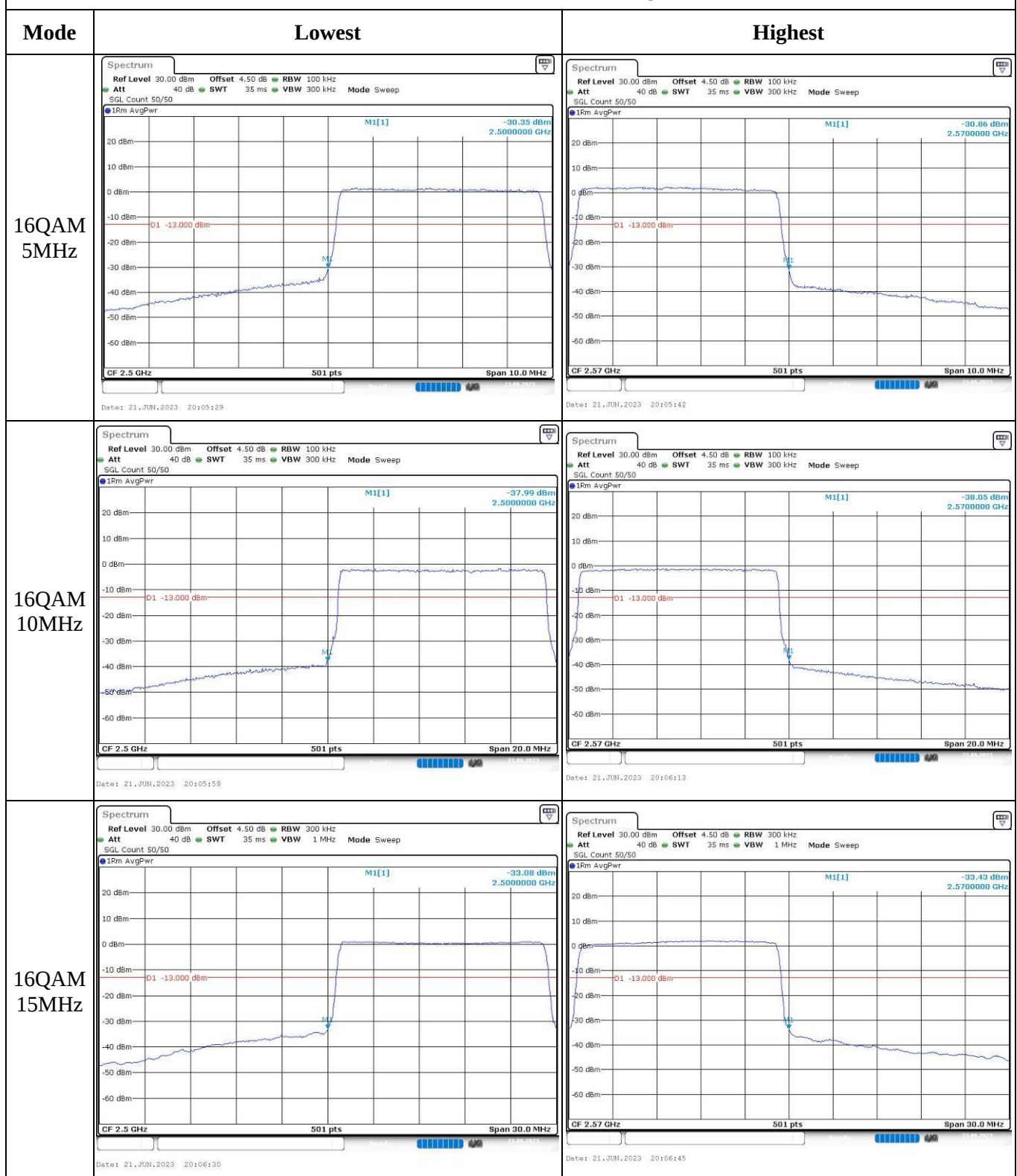
Out of band emission, Band Edge



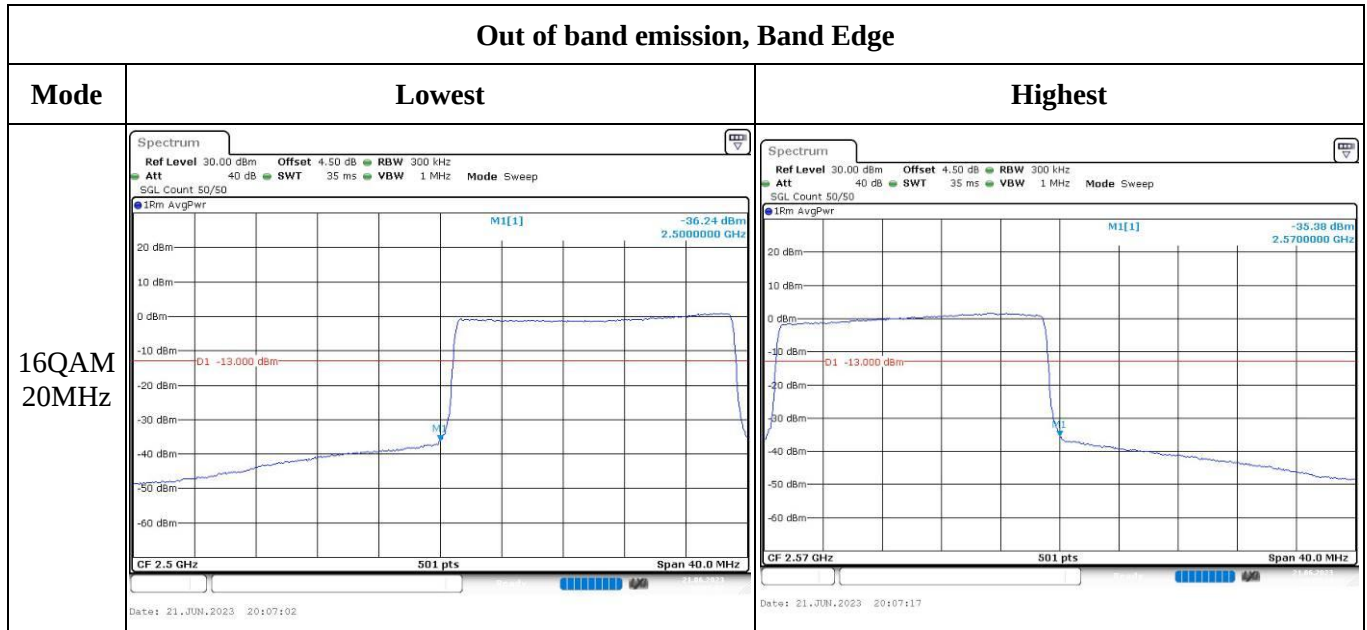
Out of band emission, Band Edge



Out of band emission, Band Edge



Out of band emission, Band Edge



4.8 Radiated Spurious Emissions

Serial Number:	271I-1	Test Date:	2023/06/24~2023/06/25
Test Site:	966-2,966-2	Test Mode:	Transmitting
Tester:	Carl Xue,coco Tian	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.9~27.3	Relative Humidity: (%)	59~65	ATM Pressure: (kPa)	100~100.5
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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	2022/7/15	2023/7/14
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2022/7/17	2023/7/16
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2022/7/17	2023/7/16
Sonoma	Amplifier	310N	186165	2022/7/17	2023/7/16
EMCO	Adjustable Dipole Antenna	3121C	9109-756	N/A	N/A
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2022/7/17	2023/7/16
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	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
Agilent	Signal Generator	E8247C	MY43321352	2022/11/18	2023/11/17
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
Quinstar	Preamplifier	QLW-18405536-JO	15964001005	2022/09/16	2023/09/15
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 (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								
729.35	H	21.48	-51.25	0.00	0.53	-51.78	-13.00	38.78
470.52	V	20.97	-51.78	0.00	0.43	-52.21	-13.00	39.21
1648.400	H	49.35	-54.98	8.68	0.80	-47.10	-13.00	34.10
1648.400	V	47.35	-57.06	8.68	0.80	-49.18	-13.00	36.18
2472.600	H	45.69	-55.09	9.38	1.00	-46.71	-13.00	33.71
2472.600	V	48.37	-52.36	9.38	1.00	-43.98	-13.00	30.98
3296.800	H	35.46	-61.22	10.32	1.15	-52.05	-13.00	39.05
3296.800	V	34.28	-62.16	10.32	1.15	-52.99	-13.00	39.99
GSM 850 Frequency:836.6MHz								
706.72	H	21.18	-52.00	0.00	0.54	-52.54	-13.00	39.54
729.03	V	20.75	-48.54	0.00	0.53	-49.07	-13.00	36.07
1673.200	H	50.02	-54.29	8.71	0.85	-46.43	-13.00	33.43
1673.200	V	48.64	-55.77	8.71	0.85	-47.91	-13.00	34.91
2509.800	H	44.75	-55.86	9.42	1.01	-47.45	-13.00	34.45
2509.800	V	52.45	-48.17	9.42	1.01	-39.76	-13.00	26.76
3346.400	H	34.25	-62.92	10.34	1.16	-53.74	-13.00	40.74
3346.400	V	34.37	-62.66	10.34	1.16	-53.48	-13.00	40.48
GSM 850 Frequency:848.8MHz								
584.91	H	21.06	-53.10	0.00	0.46	-53.56	-13.00	40.56
729.52	V	21.14	-48.14	0.00	0.53	-48.67	-13.00	35.67
1697.600	H	51.13	-53.16	8.74	0.90	-45.32	-13.00	32.32
1697.600	V	49.34	-55.08	8.74	0.90	-47.24	-13.00	34.24
2546.400	H	45.31	-55.02	9.47	1.01	-46.56	-13.00	33.56
2546.400	V	49.64	-50.64	9.47	1.01	-42.18	-13.00	29.18
3395.200	H	34.27	-63.42	10.36	1.19	-54.25	-13.00	41.25
3395.200	V	34.61	-63.05	10.36	1.19	-53.88	-13.00	40.88

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								
714.17	H	21.74	-51.29	0.00	0.50	-51.79	-13.00	38.79
721.89	V	20.98	-48.46	0.00	0.50	-48.96	-13.00	35.96
1652.800	H	37.52	-66.81	8.68	0.81	-58.94	-13.00	45.94
1652.800	V	38.03	-66.38	8.68	0.81	-58.51	-13.00	45.51
2479.200	H	39.76	-61.00	9.39	1.01	-52.62	-13.00	39.62
2479.200	V	40.84	-59.89	9.39	1.01	-51.51	-13.00	38.51
3305.600	H	34.52	-62.21	10.32	1.15	-53.04	-13.00	40.04
3305.600	V	34.16	-62.34	10.32	1.15	-53.17	-13.00	40.17
WCDMA Band 5 Frequency:836.6MHz								
701.78	H	20.86	-52.42	0.00	0.55	-52.97	-13.00	39.97
572.61	V	21.28	-50.41	0.00	0.46	-50.87	-13.00	37.87
1673.200	H	38.64	-65.67	8.71	0.85	-57.81	-13.00	44.81
1673.200	V	41.35	-63.06	8.71	0.85	-55.20	-13.00	42.20
2509.800	H	43.65	-56.96	9.42	1.01	-48.55	-13.00	35.55
2509.800	V	42.13	-58.49	9.42	1.01	-50.08	-13.00	37.08
3346.400	H	34.52	-62.65	10.34	1.16	-53.47	-13.00	40.47
3346.400	V	34.67	-62.36	10.34	1.16	-53.18	-13.00	40.18
WCDMA Band 5 Frequency:846.6MHz								
726.80	H	21.21	-51.57	0.00	0.52	-52.09	-13.00	39.09
711.51	V	21.03	-48.64	0.00	0.51	-49.15	-13.00	36.15
1693.200	H	36.79	-67.51	8.73	0.89	-59.67	-13.00	46.67
1693.200	V	37.64	-66.78	8.73	0.89	-58.94	-13.00	45.94
2539.800	H	39.45	-60.93	9.46	1.01	-52.48	-13.00	39.48
2539.800	V	40.12	-60.22	9.46	1.01	-51.77	-13.00	38.77
3386.400	H	34.23	-63.36	10.35	1.18	-54.19	-13.00	41.19
3386.400	V	34.69	-62.85	10.35	1.18	-53.68	-13.00	40.68

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								
524.55	H	29.61	-76.75	0.00	0.42	-77.17	-13.00	64.17
44.58	V	35.41	-60.35	-20.35	0.12	-80.82	-13.00	67.82
3700.400	H	34.69	-62.63	10.60	1.25	-53.28	-13.00	40.28
3700.400	V	34.15	-63.15	10.60	1.25	-53.80	-13.00	40.80
5550.600	H	34.73	-58.53	11.44	1.49	-48.58	-13.00	35.58
5550.600	V	35.02	-58.08	11.44	1.49	-48.13	-13.00	35.13
GSM 1900 Frequency:1880MHz								
638.24	H	29.20	-75.53	0.00	0.52	-76.05	-13.00	63.05
39.71	V	35.39	-54.15	-26.26	0.11	-80.52	-13.00	67.52
3760.000	H	34.67	-61.74	10.66	1.24	-52.32	-13.00	39.32
3760.000	V	35.68	-60.61	10.66	1.24	-51.19	-13.00	38.19
5640.000	H	34.27	-59.18	11.33	1.54	-49.39	-13.00	36.39
5640.000	V	34.86	-58.47	11.33	1.54	-48.68	-13.00	35.68
GSM 1900 Frequency:1909.8MHz								
156.45	H	29.31	-82.41	0.00	0.23	-82.64	-13.00	69.64
43.81	V	35.14	-59.62	-21.37	0.12	-81.11	-13.00	68.11
3819.600	H	34.37	-61.49	10.72	1.29	-52.06	-13.00	39.06
3819.600	V	34.29	-61.43	10.72	1.29	-52.00	-13.00	39.00
5729.400	H	34.67	-58.81	11.22	1.59	-49.18	-13.00	36.18
5729.400	V	35.12	-58.24	11.22	1.59	-48.61	-13.00	35.61

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								
74.91	H	29.87	-76.86	-2.55	0.16	-79.57	-13.00	66.57
43.81	V	35.47	-59.29	-21.37	0.12	-80.78	-13.00	67.78
3704.800	H	34.25	-63.01	10.60	1.25	-53.66	-13.00	40.66
3704.800	V	34.77	-62.46	10.60	1.25	-53.11	-13.00	40.11
5557.200	H	34.15	-59.13	11.43	1.49	-49.19	-13.00	36.19
5557.200	V	34.82	-58.31	11.43	1.49	-48.37	-13.00	35.37
WCDMA Band II, Frequency:1880 MHz								
700.19	H	29.77	-74.84	0.00	0.55	-75.39	-13.00	62.39
44.12	V	34.90	-60.26	-20.96	0.12	-81.34	-13.00	68.34
3760.000	H	34.71	-61.70	10.66	1.24	-52.28	-13.00	39.28
3760.000	V	35.26	-61.03	10.66	1.24	-51.61	-13.00	38.61
5640.000	H	34.38	-59.07	11.33	1.54	-49.28	-13.00	36.28
5640.000	V	34.86	-58.47	11.33	1.54	-48.68	-13.00	35.68
WCDMA Band II, Frequency:1907.6MHz								
104.17	H	28.86	-83.45	0.00	0.19	-83.64	-13.00	70.64
39.71	V	34.74	-54.80	-26.26	0.11	-81.17	-13.00	68.17
3815.200	H	34.38	-61.47	10.72	1.29	-52.04	-13.00	39.04
3815.200	V	34.95	-60.74	10.72	1.29	-51.31	-13.00	38.31
5722.800	H	34.57	-58.92	11.23	1.58	-49.27	-13.00	36.27
5722.800	V	35.03	-58.32	11.23	1.58	-48.67	-13.00	35.67

LTE Bands:
(The Worst modulation and bandwidth was below)

LTE Band 2 (30MHz-20GHz):

LTE Band 1 (SBCAR 1850.7 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:1850.7 MHz								
32.06	H	28.83	-45.00	-25.35	0.10	-70.45	-13.00	57.45
43.96	V	35.31	-59.64	-21.17	0.12	-80.93	-13.00	67.93
3701.400	H	34.62	-62.69	10.60	1.25	-53.34	-13.00	40.34
3701.400	V	35.02	-62.27	10.60	1.25	-52.92	-13.00	39.92
5552.100	H	34.27	-59.00	11.44	1.49	-49.05	-13.00	36.05
5552.100	V	34.87	-58.23	11.44	1.49	-48.28	-13.00	35.28
QPSK,Frequency:1880 MHz								
435.98	H	28.76	-79.60	0.00	0.41	-80.01	-13.00	67.01
39.71	V	34.84	-54.70	-26.26	0.11	-81.07	-13.00	68.07
3760.000	H	34.66	-61.75	10.66	1.24	-52.33	-13.00	39.33
3760.000	V	34.97	-61.32	10.66	1.24	-51.90	-13.00	38.90
5640.000	H	33.76	-59.69	11.33	1.54	-49.90	-13.00	36.90
5640.000	V	34.58	-58.75	11.33	1.54	-48.96	-13.00	35.96
QPSK,Frequency:1909.3 MHz								
83.73	H	29.03	-81.96	0.00	0.17	-82.13	-13.00	69.13
43.80	V	34.76	-59.98	-21.38	0.12	-81.48	-13.00	68.48
3818.600	H	34.34	-61.52	10.72	1.29	-52.09	-13.00	39.09
3818.600	V	35.12	-60.59	10.72	1.29	-51.16	-13.00	38.16
5727.900	H	34.49	-58.99	11.23	1.59	-49.35	-13.00	36.35
5727.900	V	34.92	-58.44	11.23	1.59	-48.80	-13.00	35.80

LTE Band 4 (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								
612.06	H	29.23	-75.56	0.00	0.47	-76.03	-13.00	63.03
45.05	V	33.94	-62.41	-19.75	0.12	-82.28	-13.00	69.28
3421.400	H	33.46	-64.30	10.37	1.17	-55.10	-13.00	42.10
3421.400	V	34.26	-63.47	10.37	1.17	-54.27	-13.00	41.27
5132.100	H	33.43	-60.14	11.28	1.47	-50.33	-13.00	37.33
5132.100	V	34.12	-59.34	11.28	1.47	-49.53	-13.00	36.53
QPSK,Frequency:1732.5 MHz								
533.90	H	28.97	-77.20	0.00	0.46	-77.66	-13.00	64.66
43.81	V	34.59	-60.17	-21.37	0.12	-81.66	-13.00	68.66
3465.000	H	33.46	-64.35	10.39	1.15	-55.11	-13.00	42.11
3465.000	V	34.21	-63.56	10.39	1.15	-54.32	-13.00	41.32
5197.500	H	33.82	-60.31	11.32	1.44	-50.43	-13.00	37.43
5197.500	V	34.38	-59.60	11.32	1.44	-49.72	-13.00	36.72
QPSK,Frequency:1754.3MHz								
508.25	H	29.66	-77.03	0.00	0.45	-77.48	-13.00	64.48
39.43	V	34.32	-54.94	-26.13	0.11	-81.18	-13.00	68.18
3508.600	H	33.38	-64.44	10.41	1.19	-55.22	-13.00	42.22
3508.600	V	34.26	-63.50	10.41	1.19	-54.28	-13.00	41.28
5262.900	H	33.26	-60.44	11.36	1.47	-50.55	-13.00	37.55
5262.900	V	34.17	-59.30	11.36	1.47	-49.41	-13.00	36.41

LTE Band 7 (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: 2502.5 MHz								
176.88	H	29.20	-83.15	0.00	0.25	-83.40	-25.00	58.40
43.34	V	34.10	-60.05	-21.99	0.12	-82.16	-25.00	57.16
5005.000	H	34.67	-58.29	11.20	1.47	-48.56	-25.00	23.56
5005.000	V	35.11	-57.71	11.20	1.47	-47.98	-25.00	22.98
7507.500	H	34.18	-55.61	10.90	1.95	-46.66	-25.00	21.66
7507.500	V	34.76	-55.53	10.90	1.95	-46.58	-25.00	21.58
QPSK, Frequency:2535 MHz								
336.98	H	28.89	-81.27	0.00	0.35	-81.62	-25.00	56.62
44.58	V	34.88	-60.88	-20.35	0.12	-81.35	-25.00	56.35
5070.000	H	34.26	-58.93	11.24	1.47	-49.16	-25.00	24.16
5070.000	V	35.41	-57.68	11.24	1.47	-47.91	-25.00	22.91
7605.000	H	34.16	-55.31	10.88	2.01	-46.44	-25.00	21.44
7605.000	V	34.84	-55.35	10.88	2.01	-46.48	-25.00	21.48
QPSK, Frequency: 2567.5 MHz								
724.26	H	29.34	-74.72	0.00	0.51	-75.23	-25.00	50.23
43.80	V	34.45	-60.29	-21.38	0.12	-81.79	-25.00	56.79
5135.000	H	34.38	-59.22	11.28	1.47	-49.41	-25.00	24.41
5135.000	V	34.76	-58.73	11.28	1.47	-48.92	-25.00	23.92
7702.500	H	34.56	-54.96	10.86	1.97	-46.07	-25.00	21.07
7702.500	V	35.07	-55.11	10.86	1.97	-46.22	-25.00	21.22

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 =====