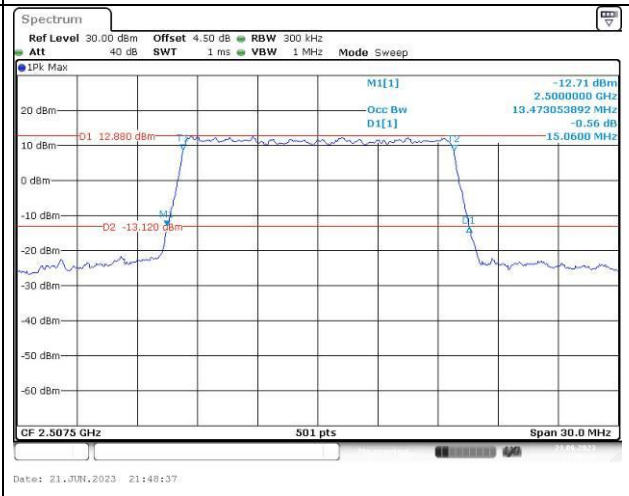
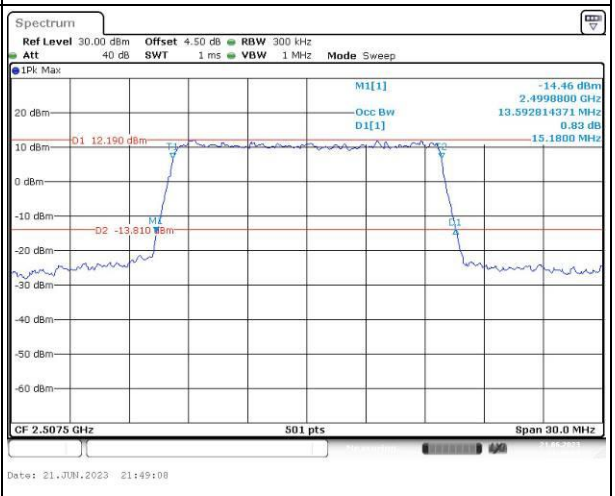
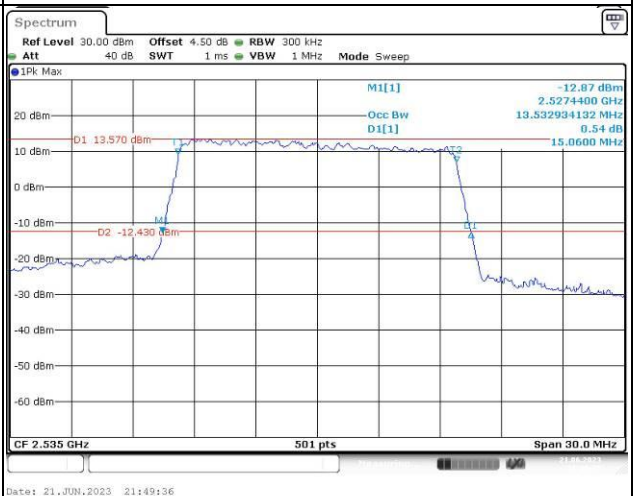
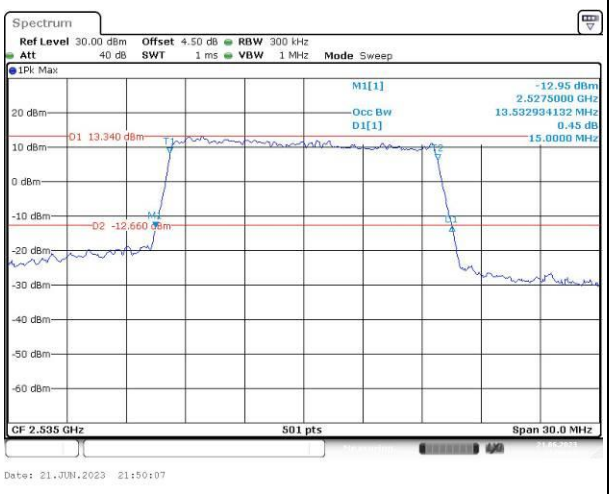
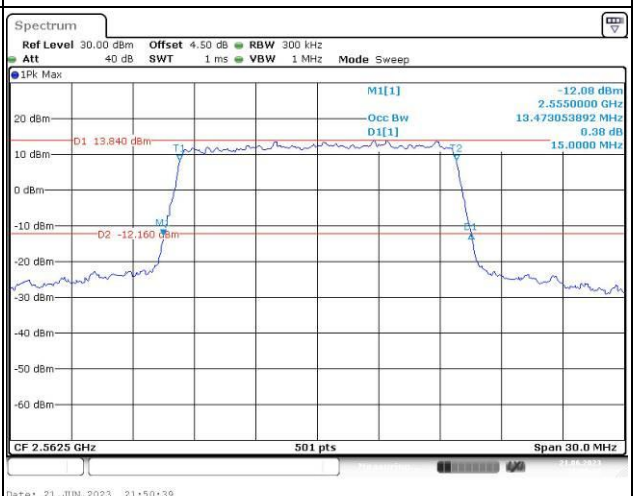
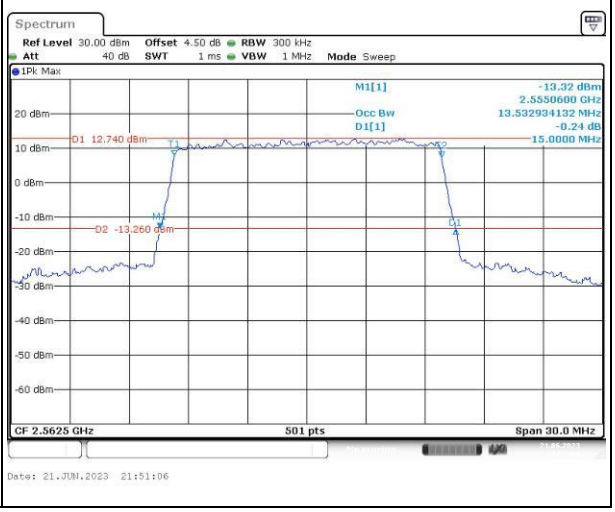
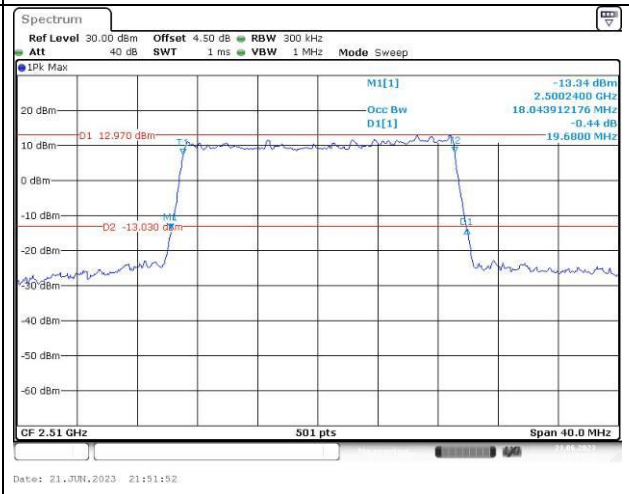
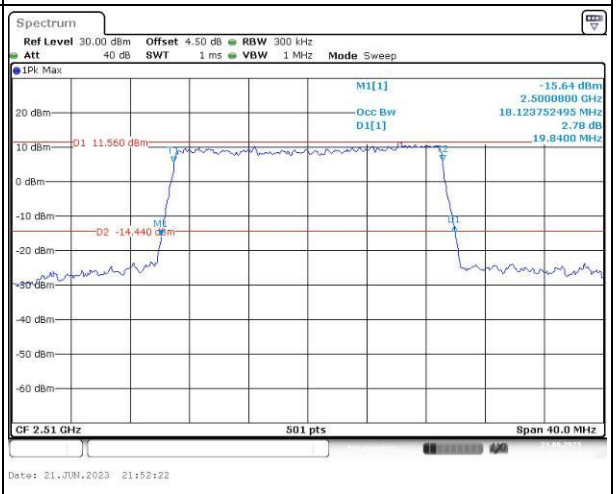
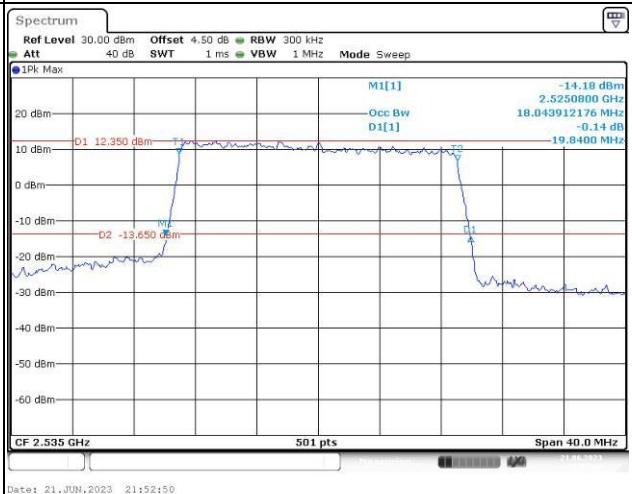
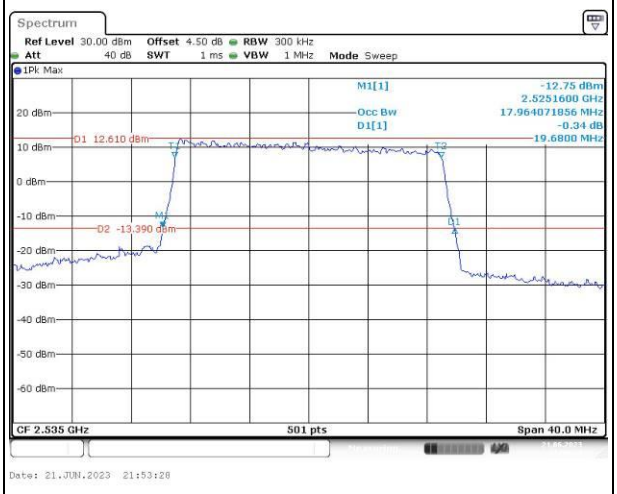
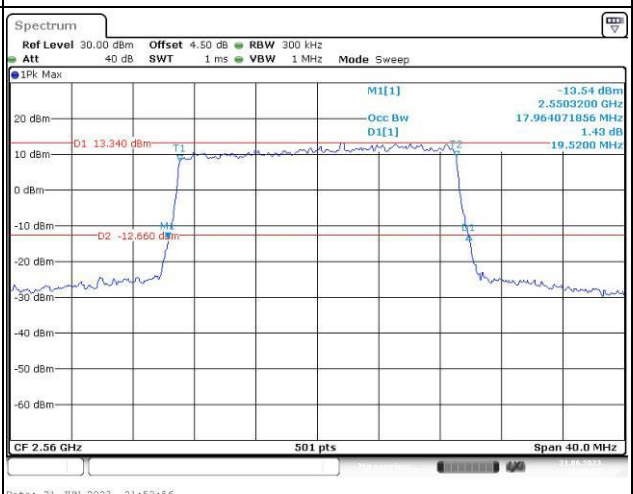
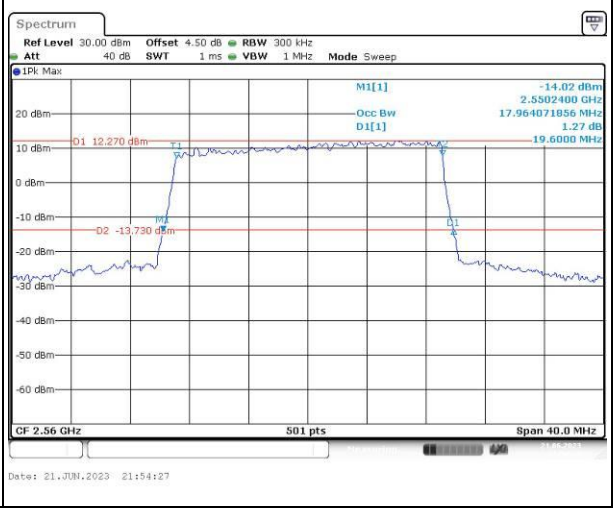
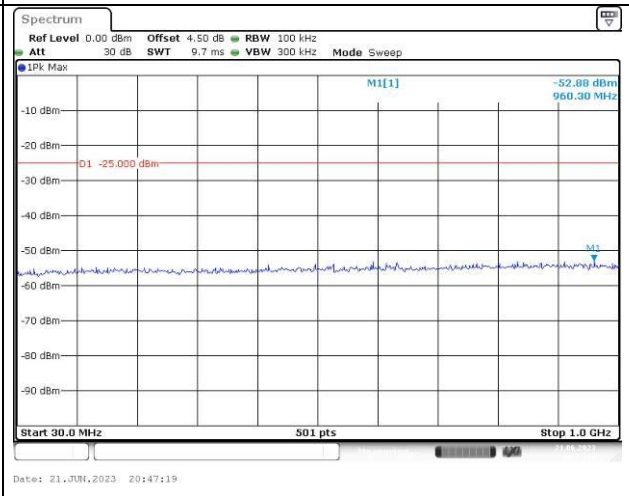
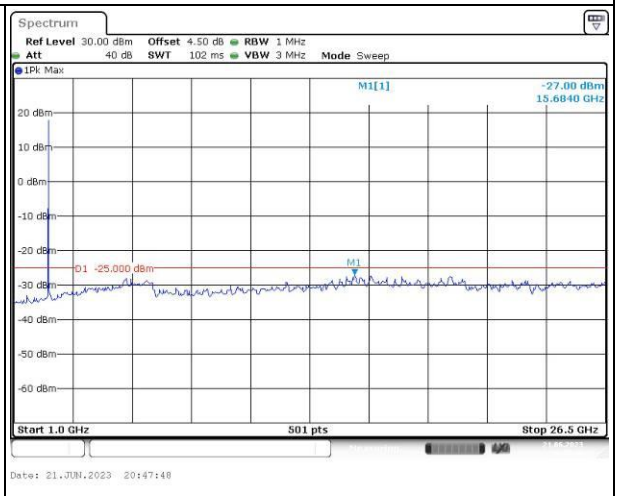
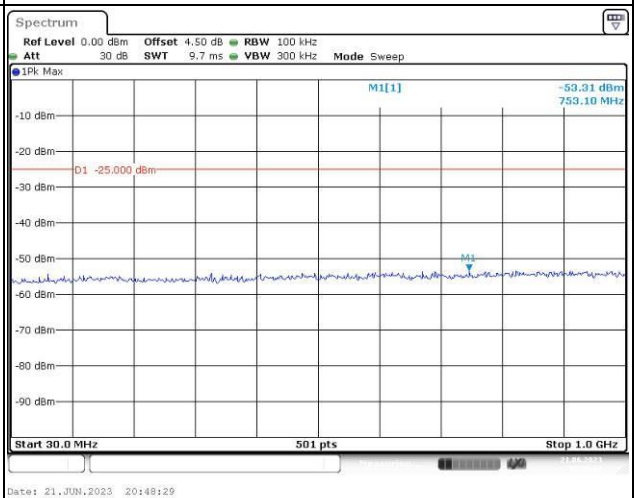
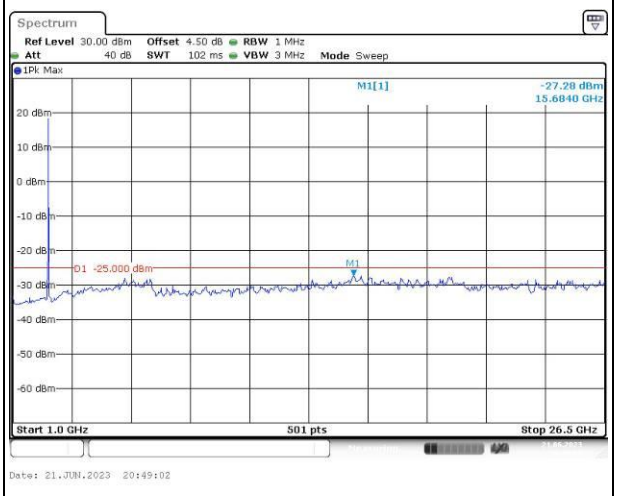
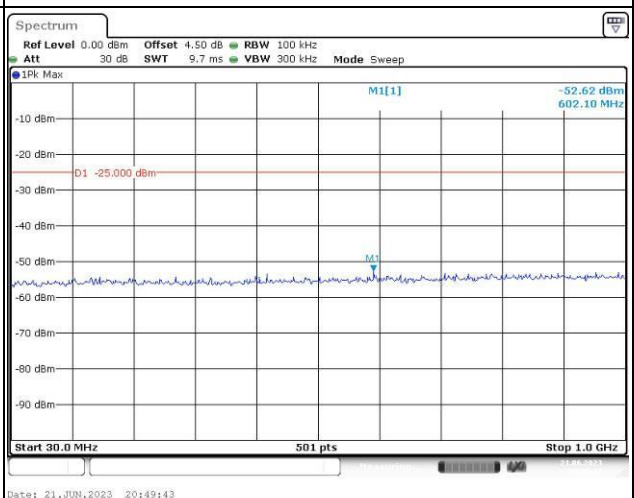
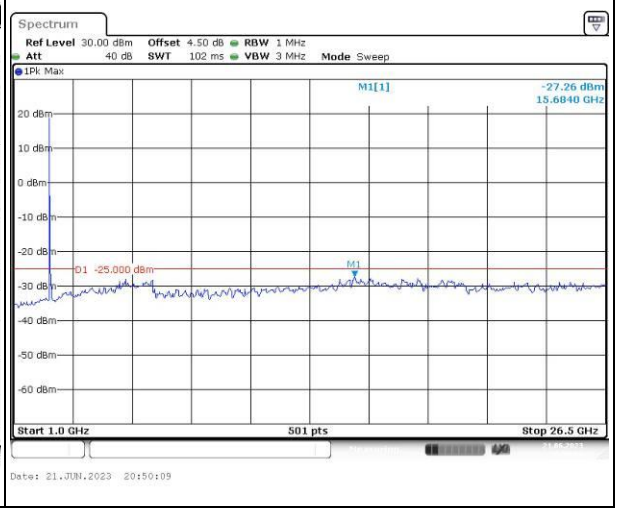
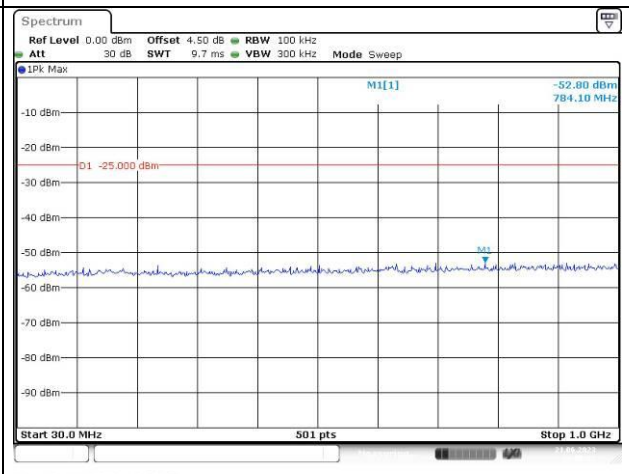
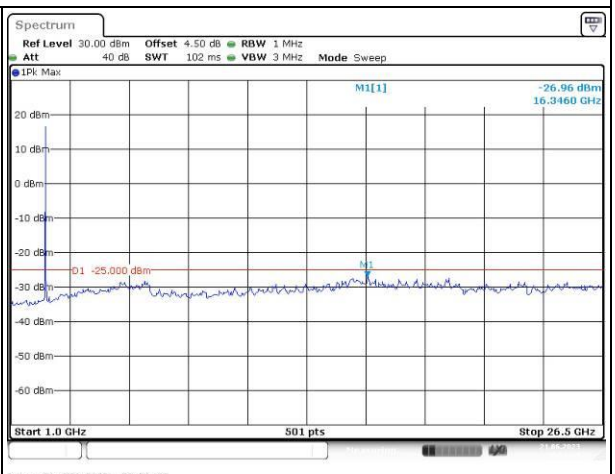
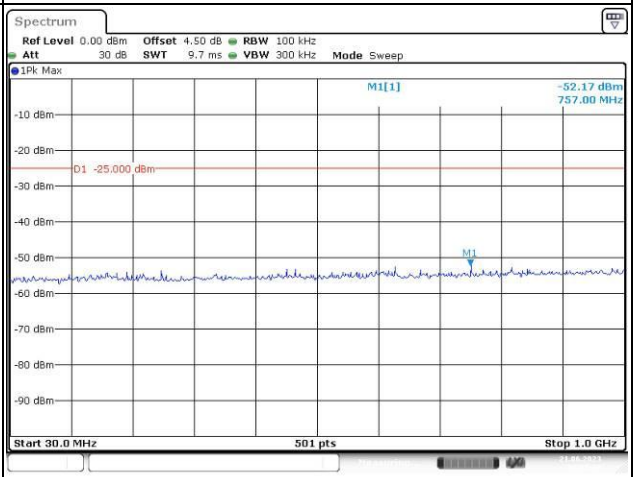
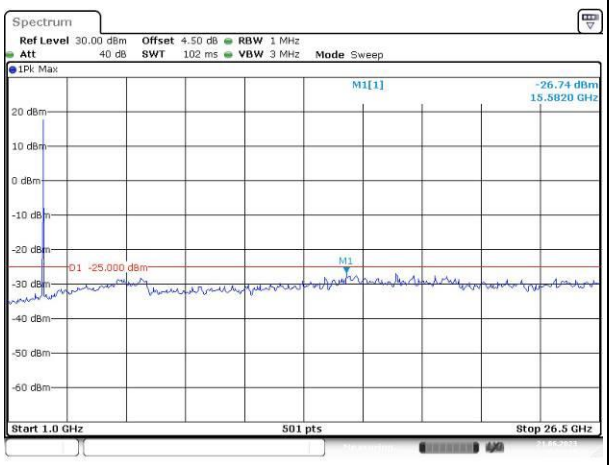
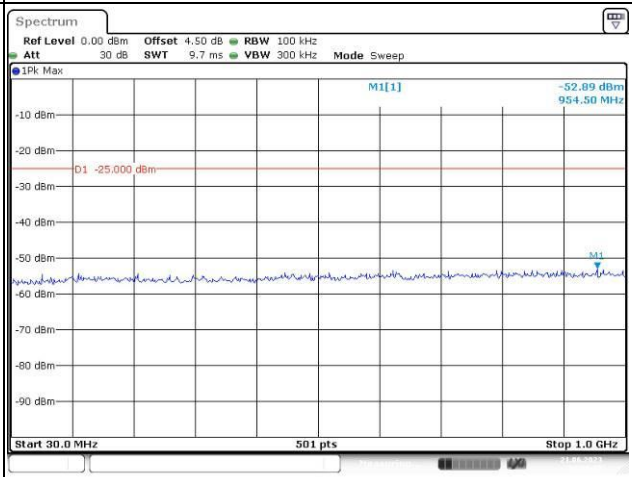
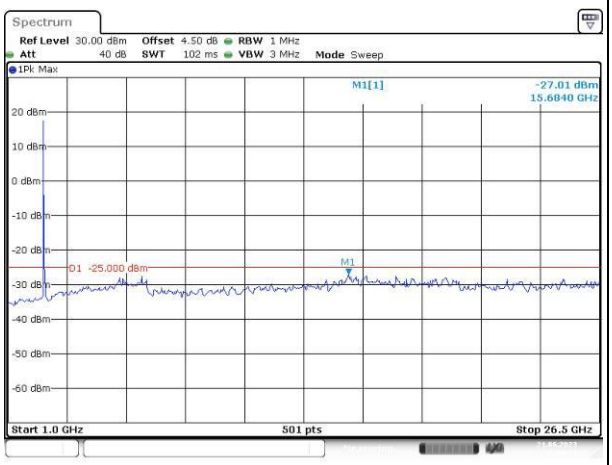
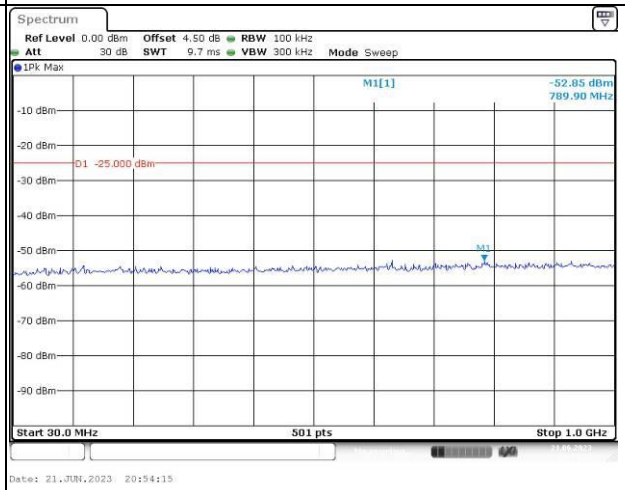
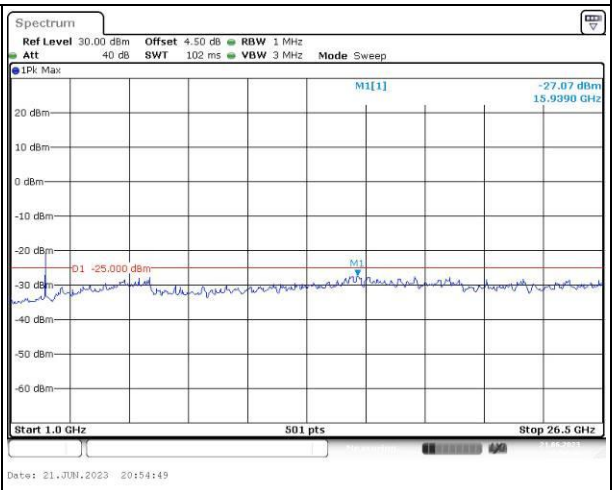
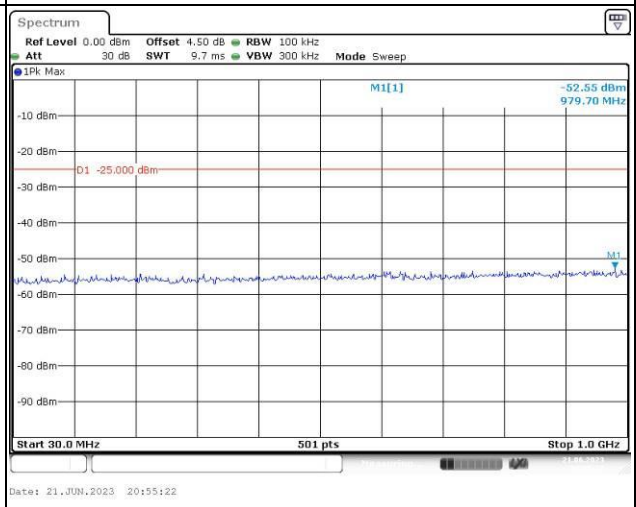
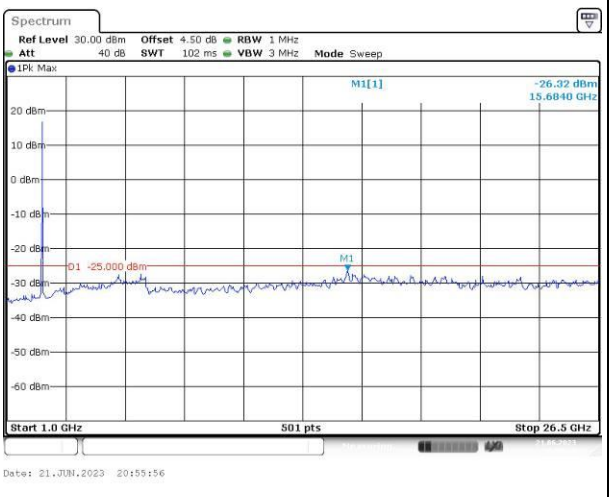
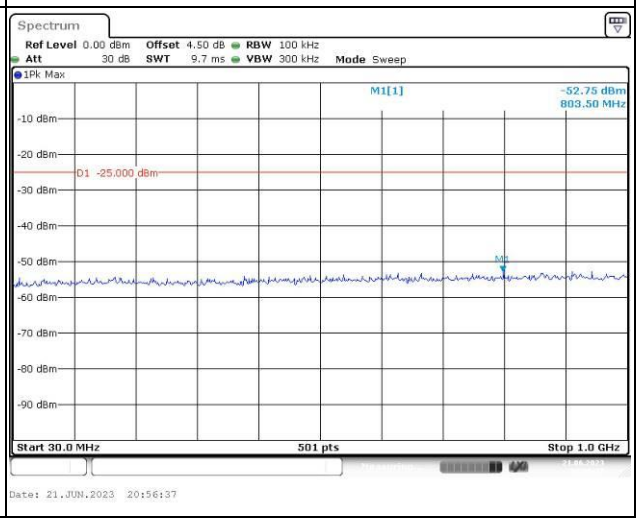
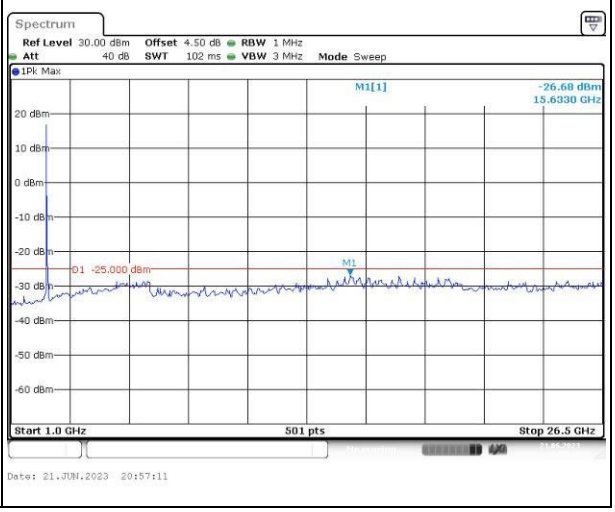
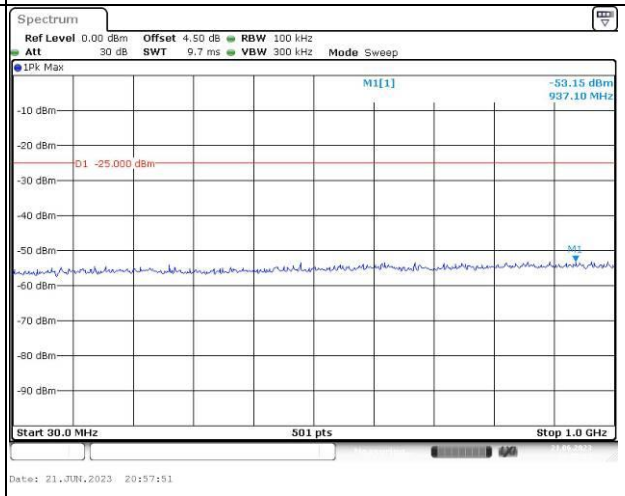
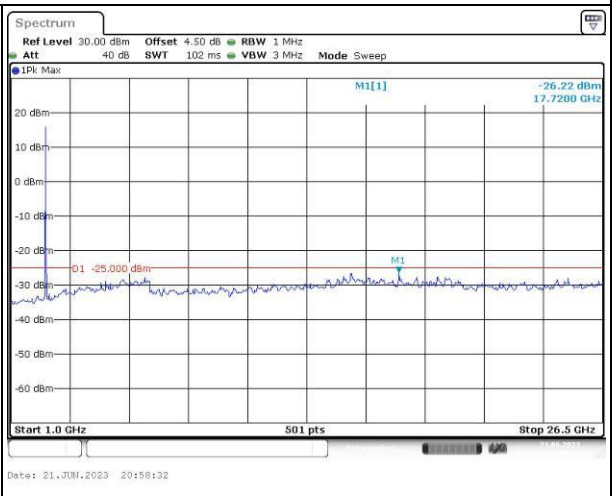
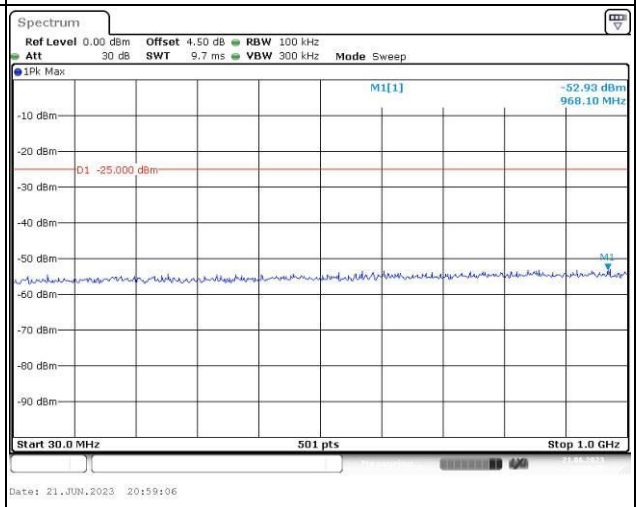
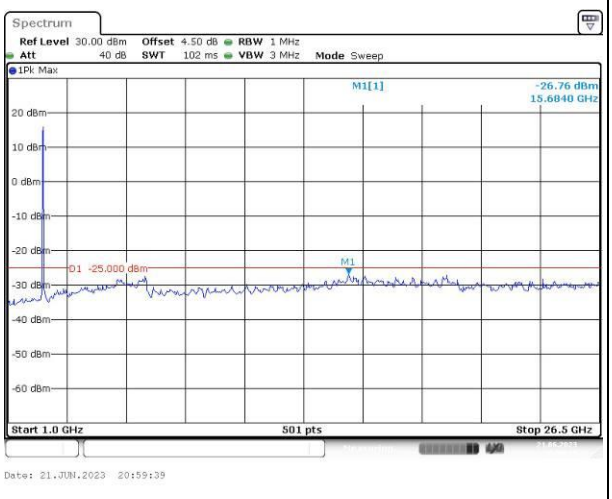
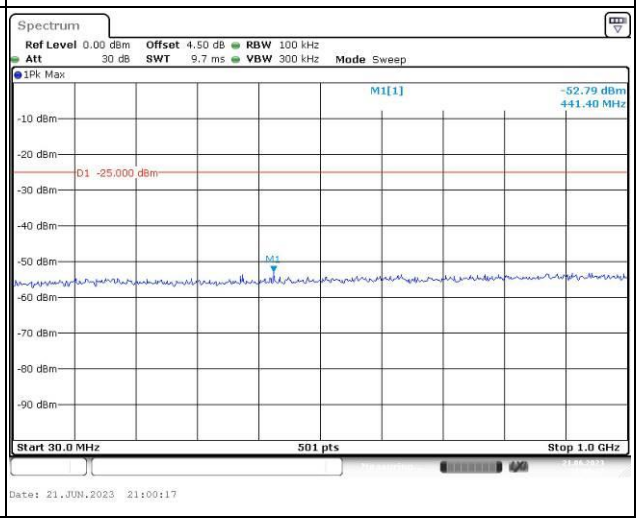
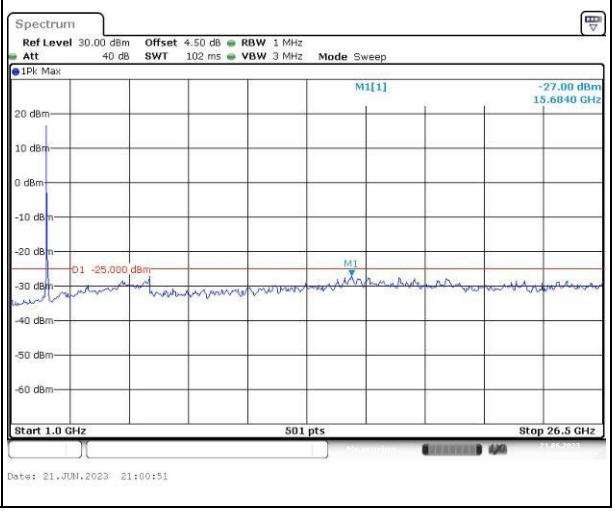
Occupied Bandwidth		
Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

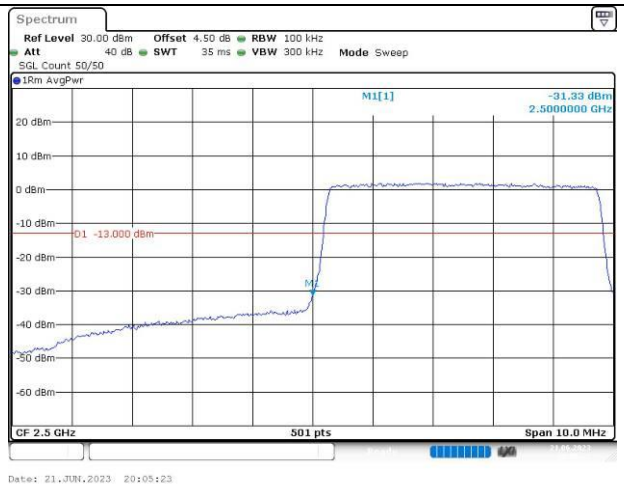
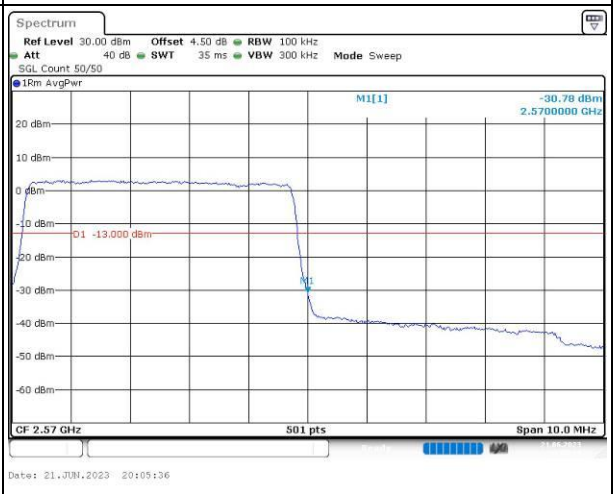
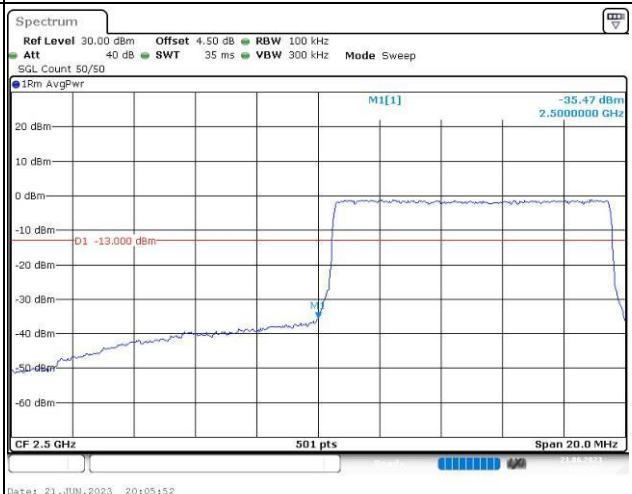
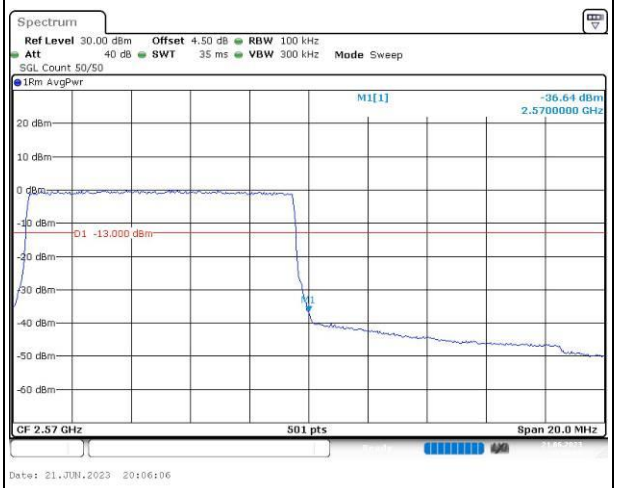
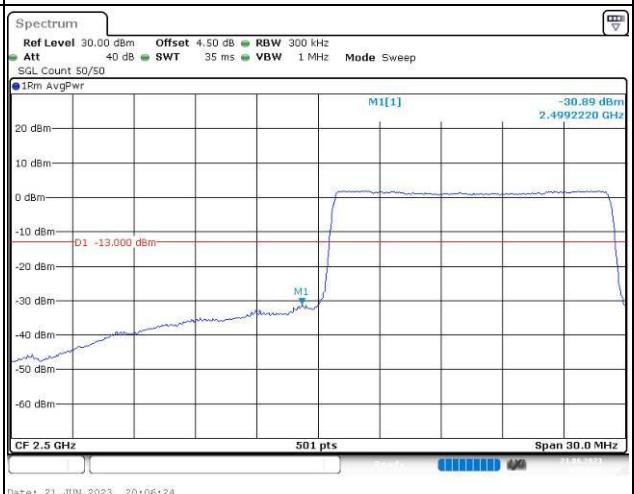
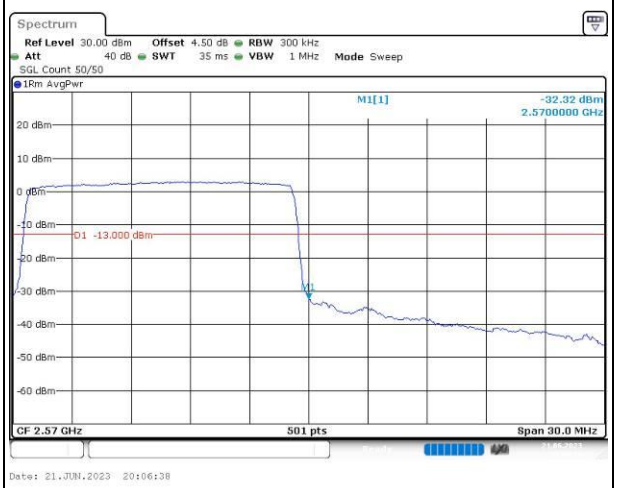
Occupied Bandwidth		
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest		
Middle		
Highest		

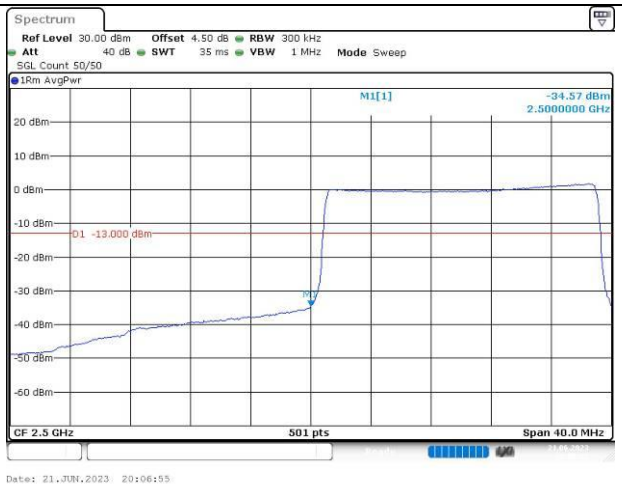
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

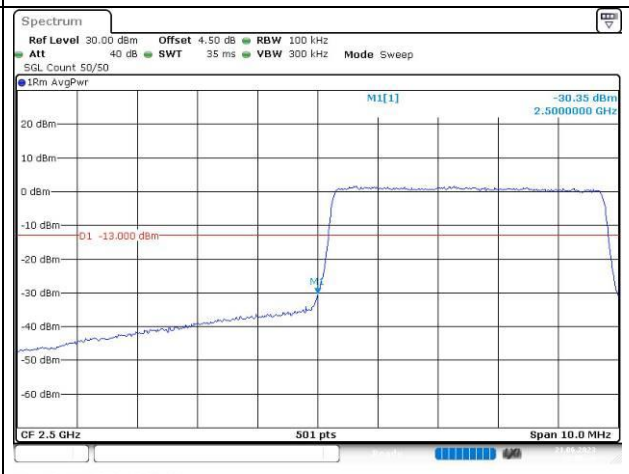
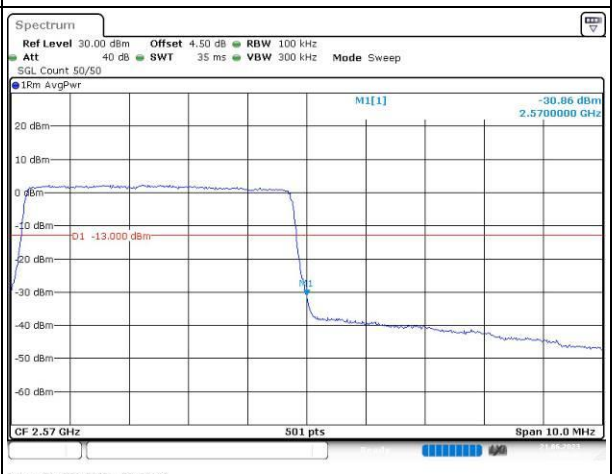
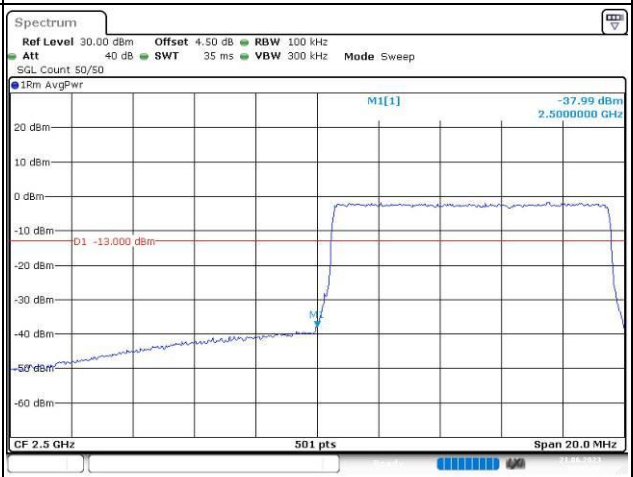
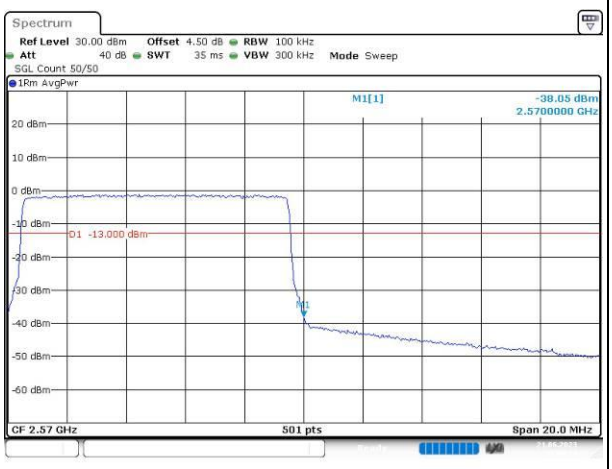
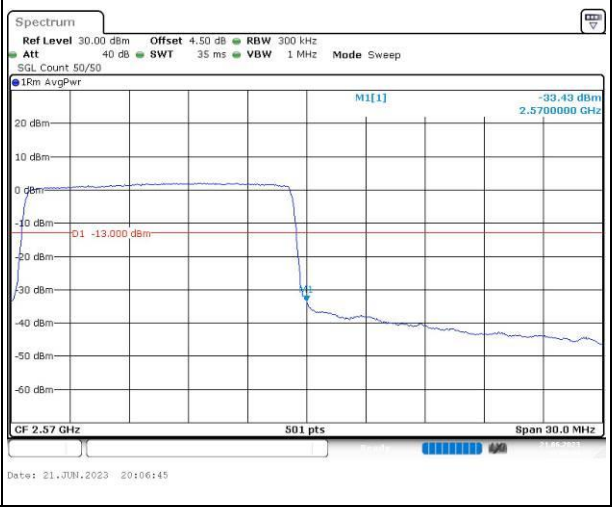
Spurious Emissions at Antenna Terminal		
Channel	**10MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

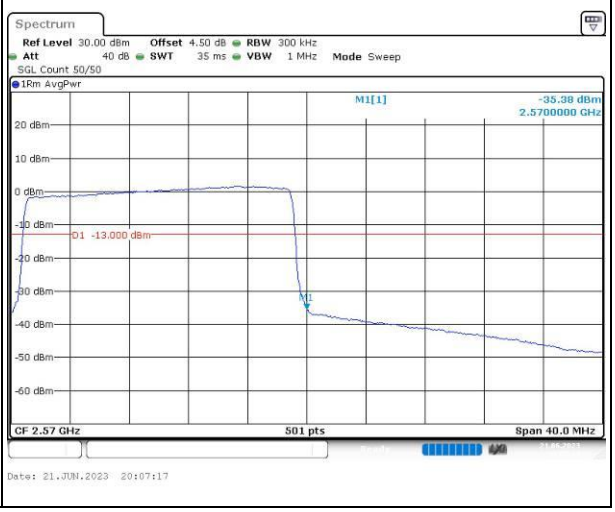
Spurious Emissions at Antenna Terminal		
Channel	**15MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

Spurious Emissions at Antenna Terminal		
Channel	**20MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 5MHz		
QPSK 10MHz		
QPSK 15MHz		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
QPSK 20MHz		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 5MHz		
16QAM 10MHz		
16QAM 15MHz		

Out of band emission, Band Edge		
Mode	**Lowest**	**Highest**
16QAM 20MHz		

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: (℃)	24.9~27.3	Relative Humidity: (%)	59~65	ATM Pressure: (kPa)	100~100.5

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
PASTERNACK	Horn Antenna	PE9852/2F-20	112002	2021/02/05	2024/02/04
PASTERNACK	Horn Antenna	PE9852/2F-20	112001	2021/02/05	2024/02/04
Quinstar	Preamplifier	QLW-18405536-JO	15964001005	2022/09/16	2023/09/15
PASTERNACK	Horn Antenna	PE9850/2F-20	072001	2021/02/05	2024/02/04
PASTERNACK	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):

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 =====