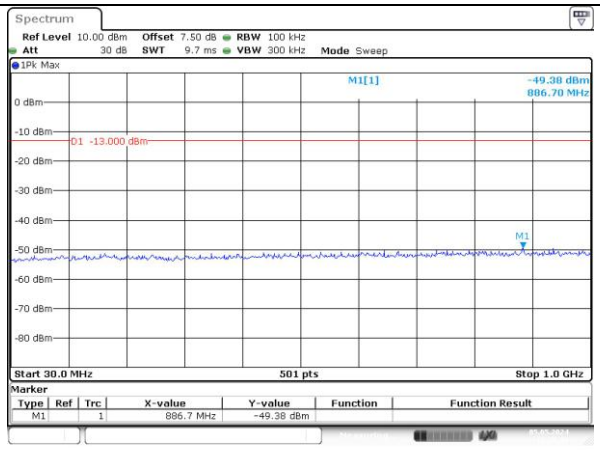
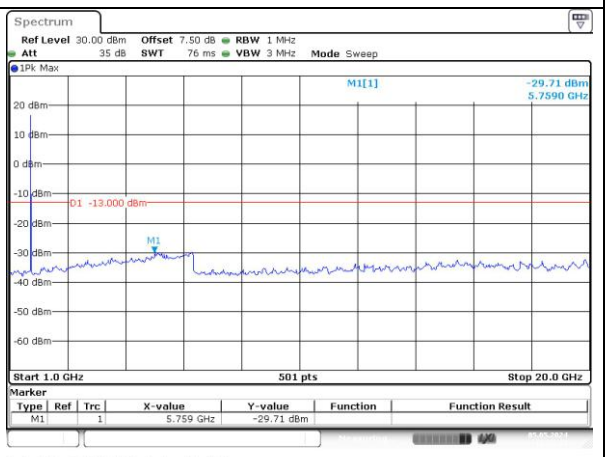
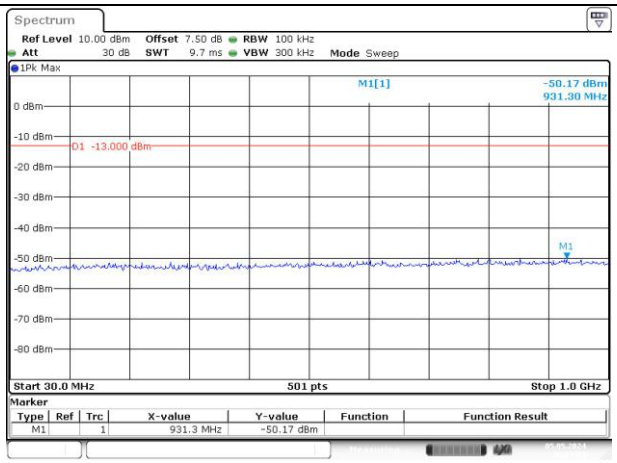
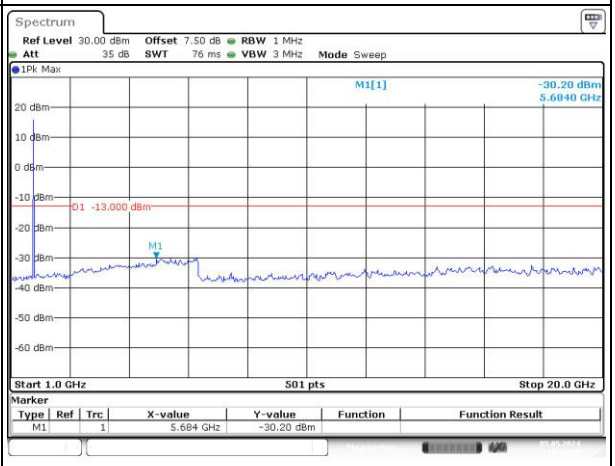
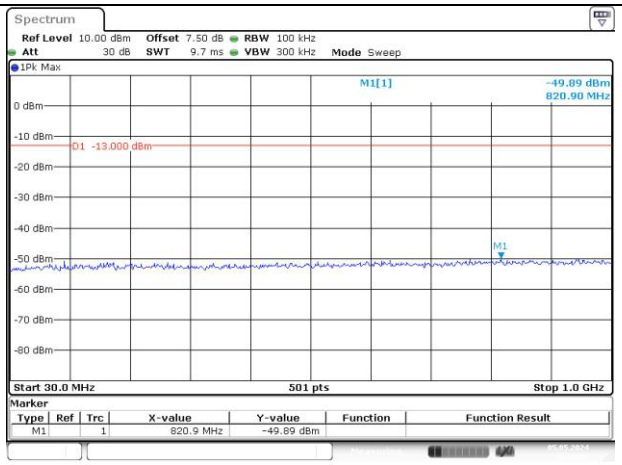
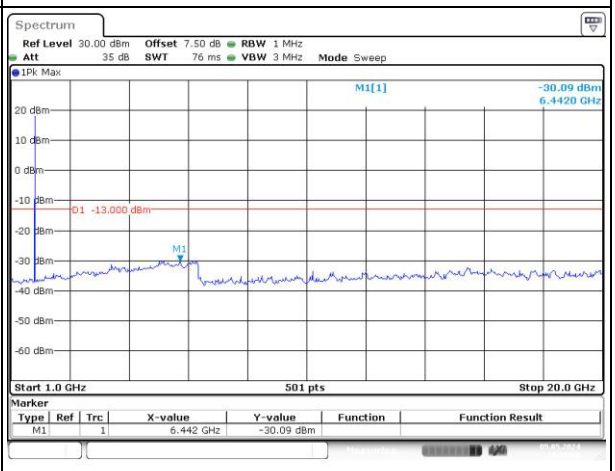
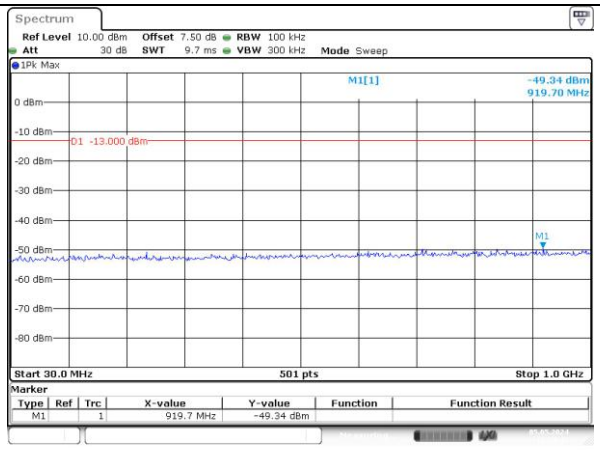
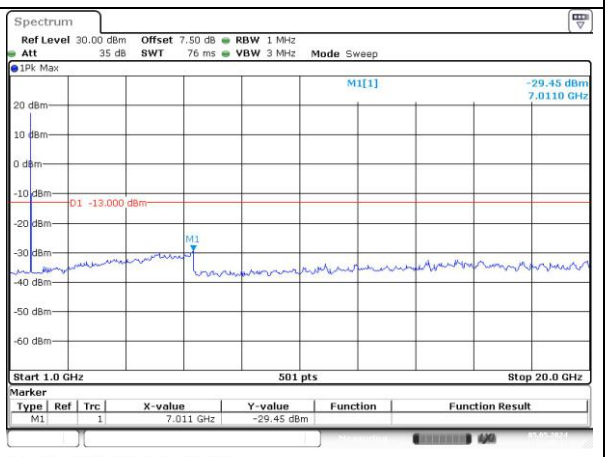
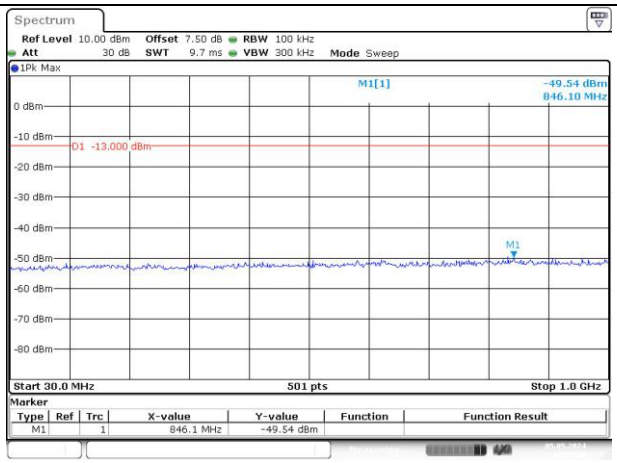
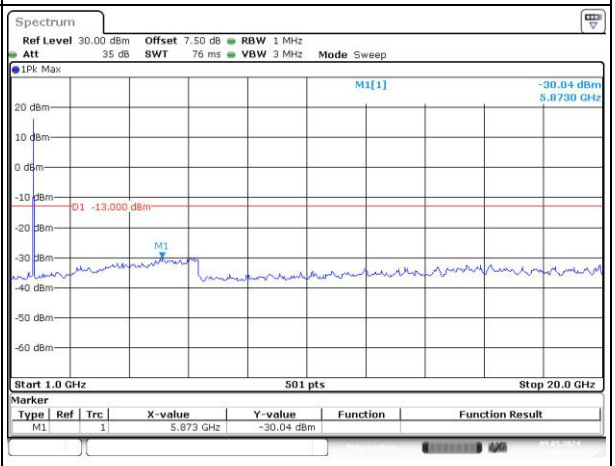
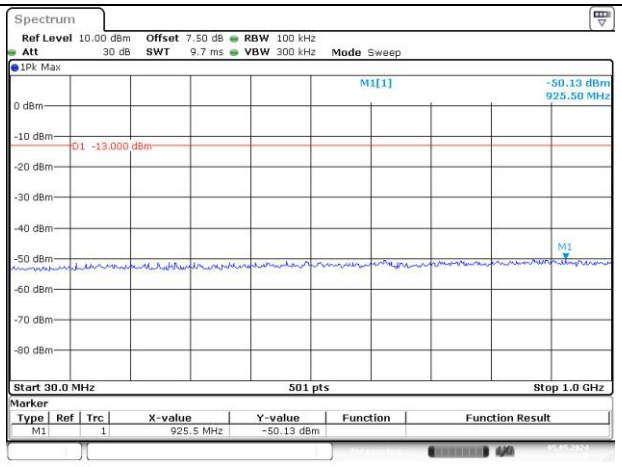
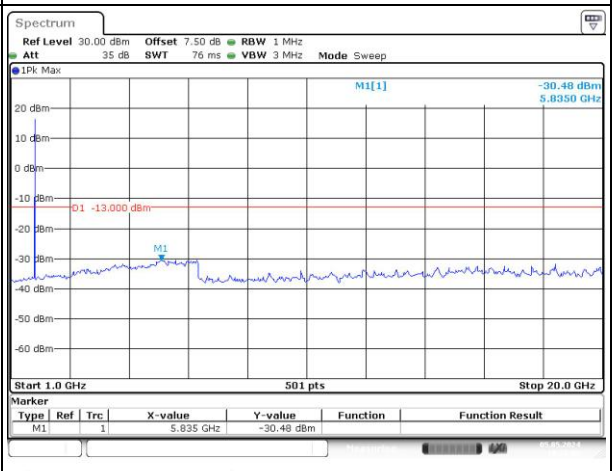
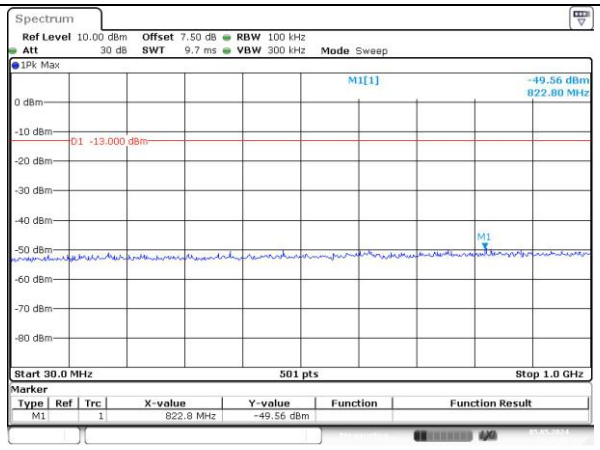
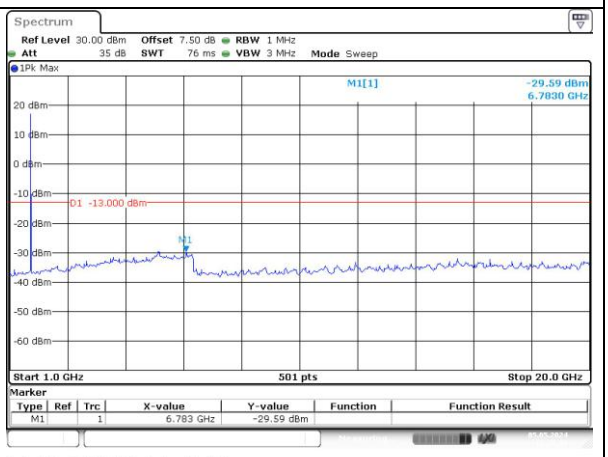
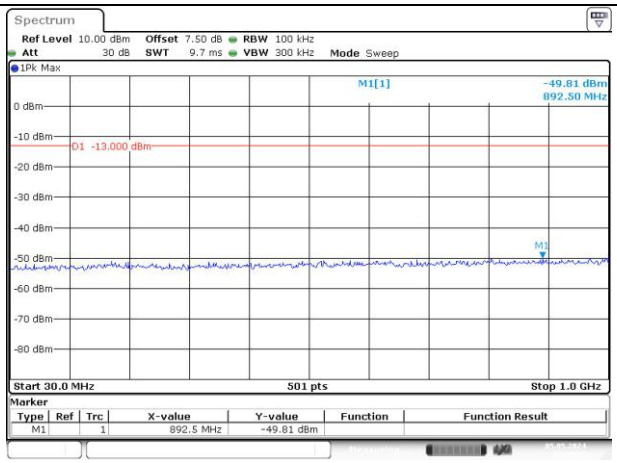
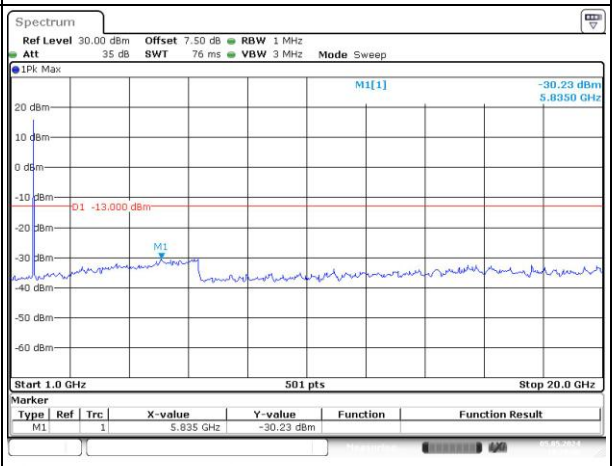
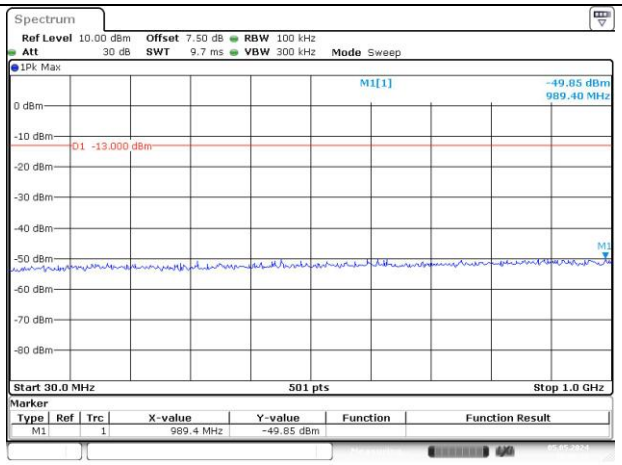
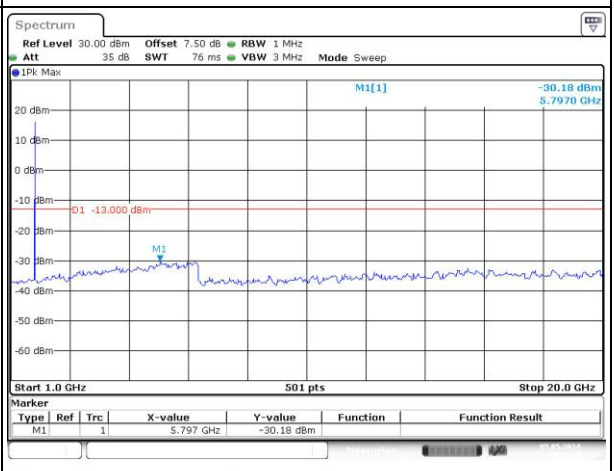
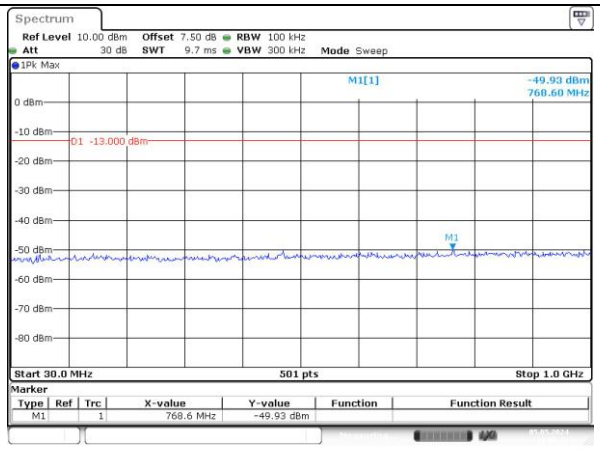
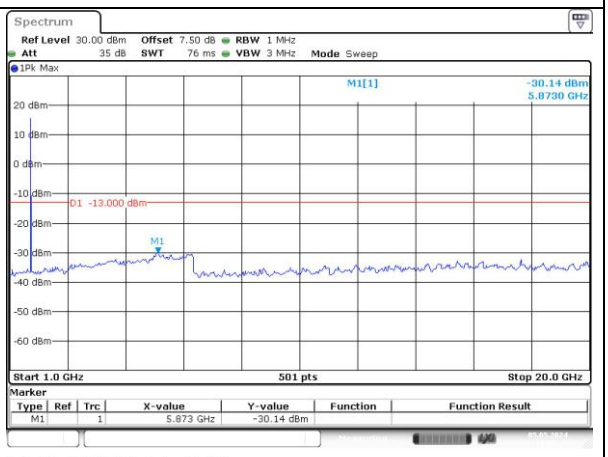
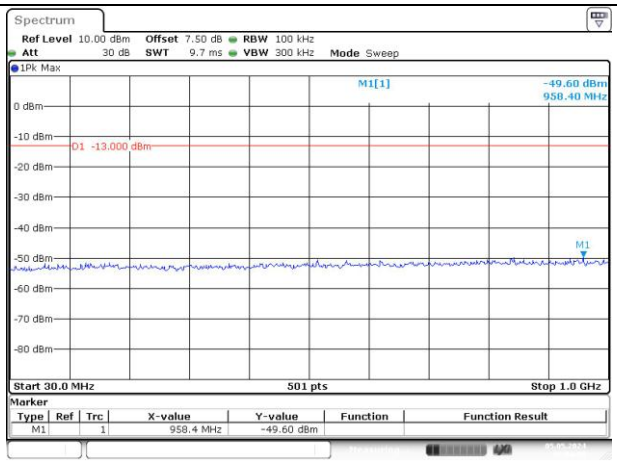
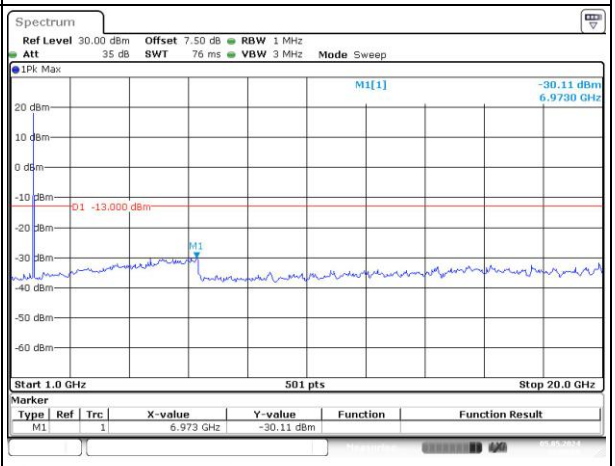
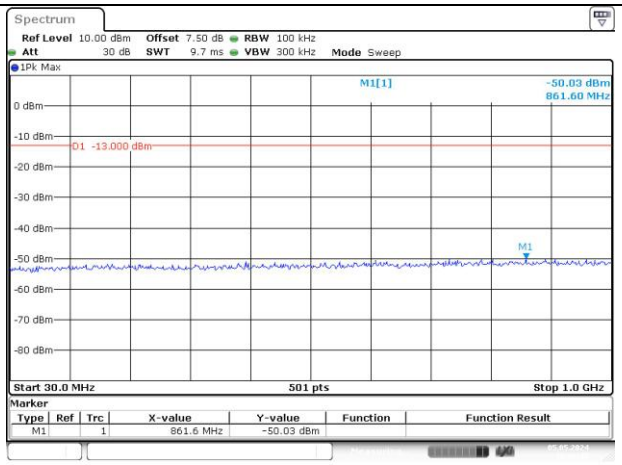
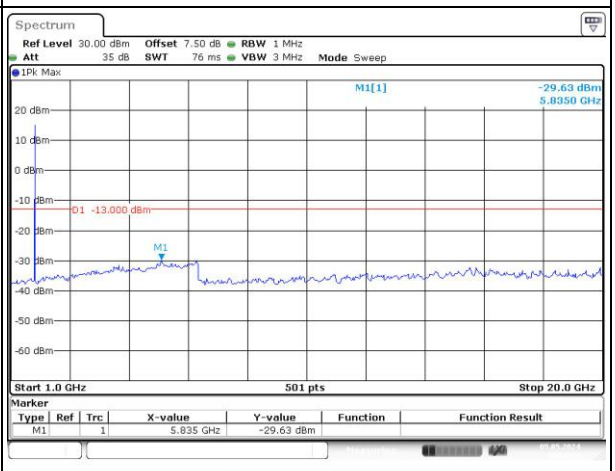
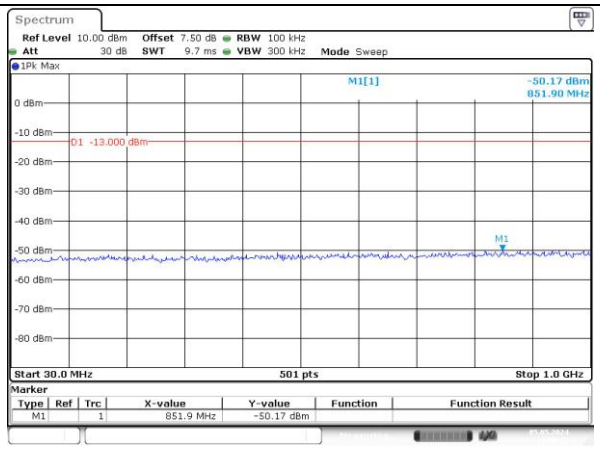
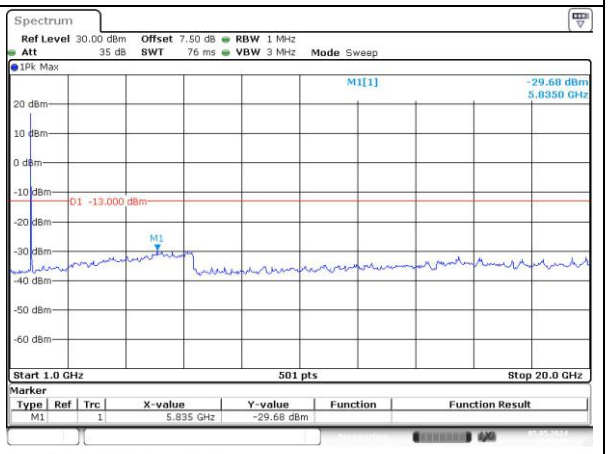
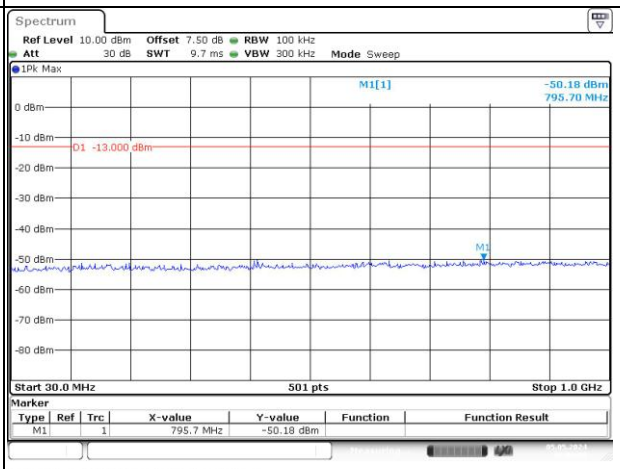
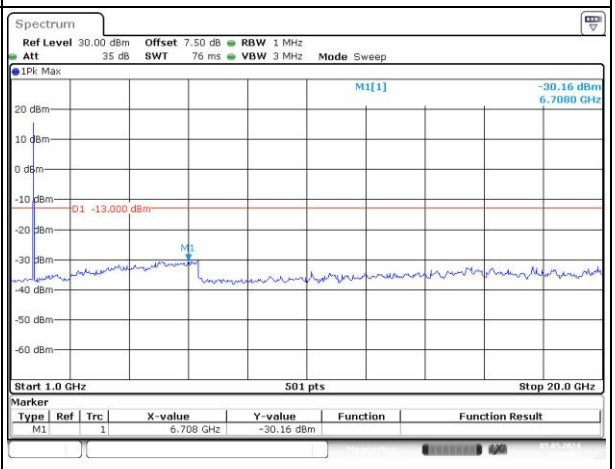
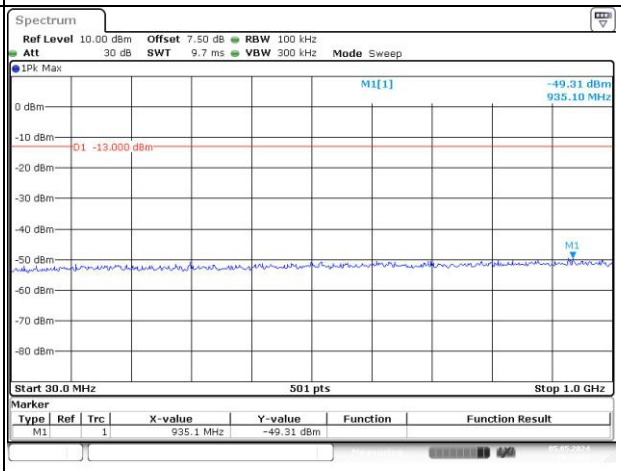
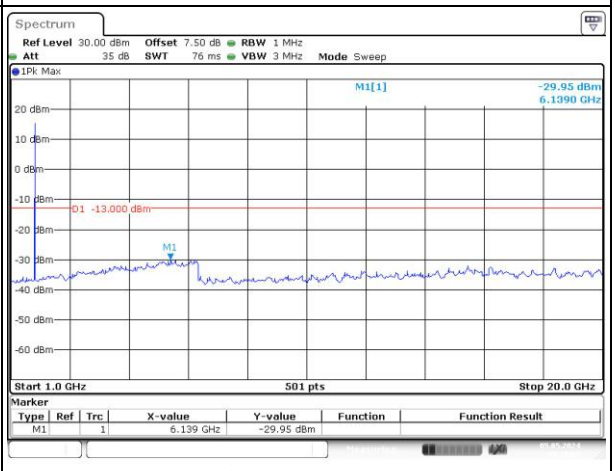
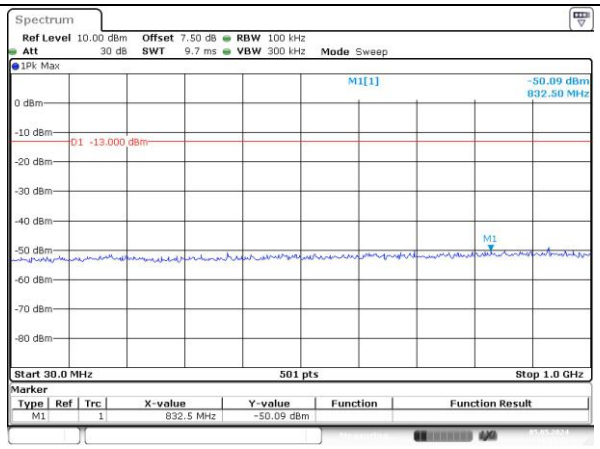
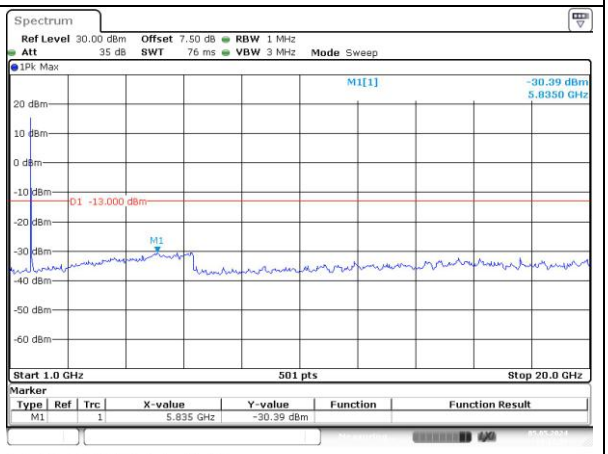
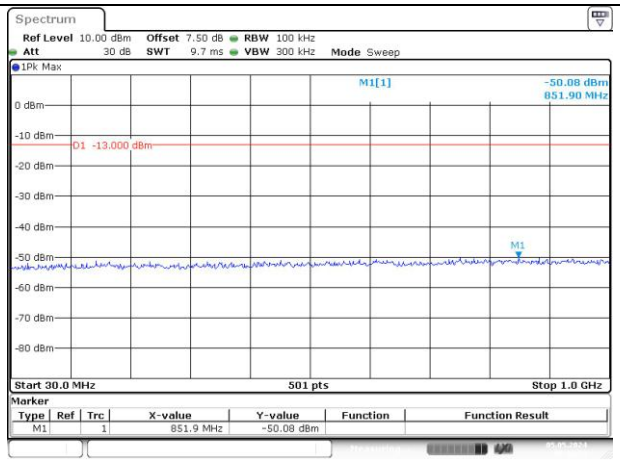
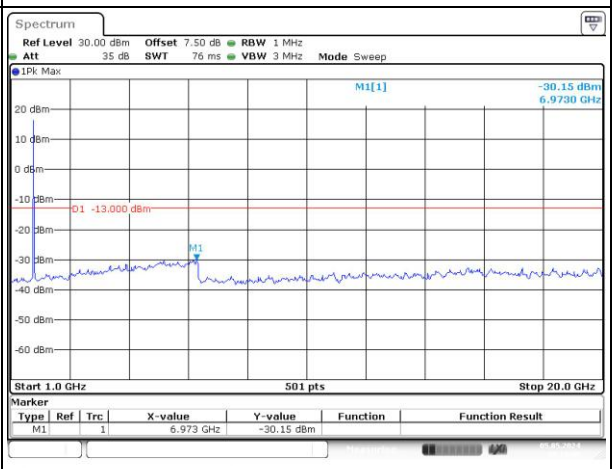
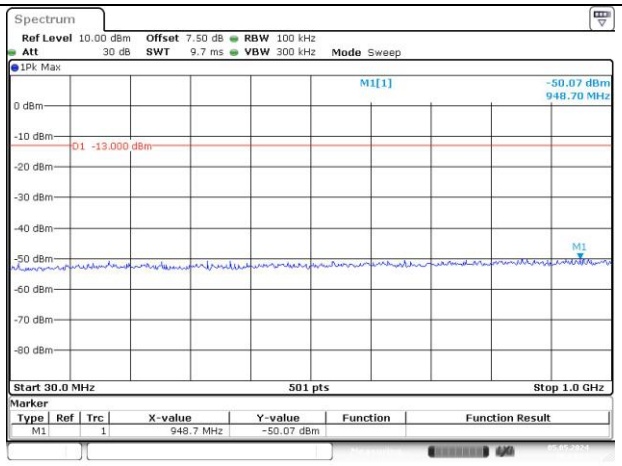
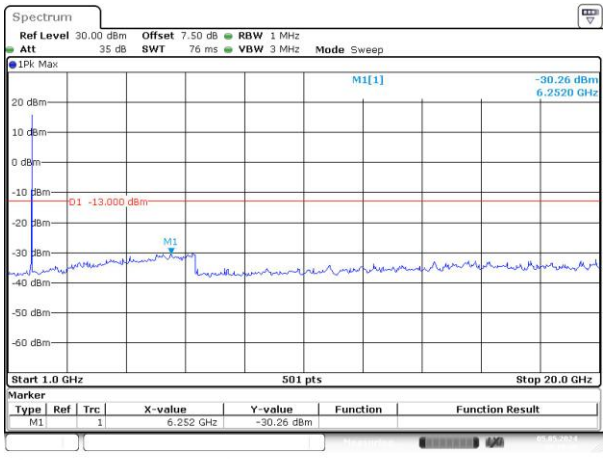
Spurious Emissions at Antenna Terminal		
Channel	**1.4MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

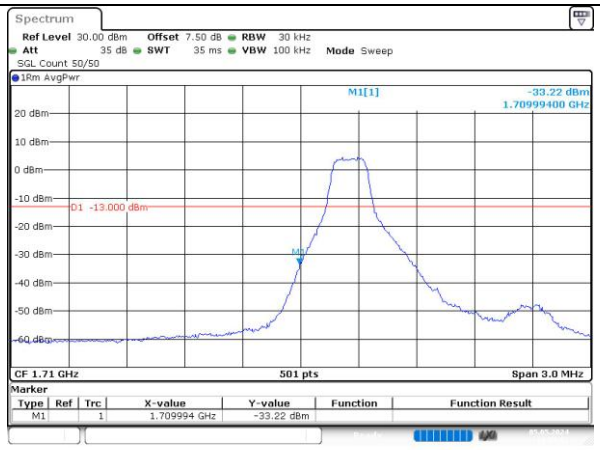
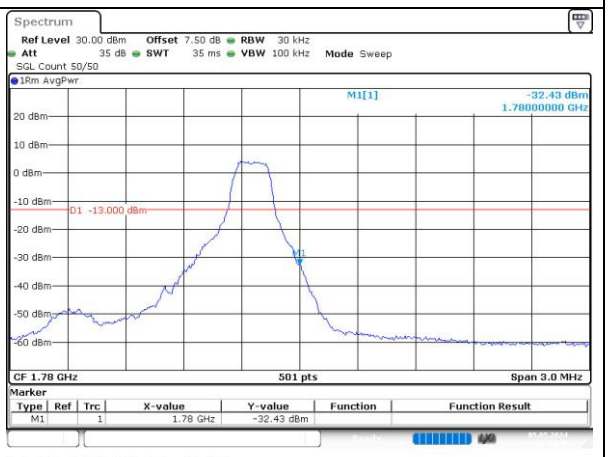
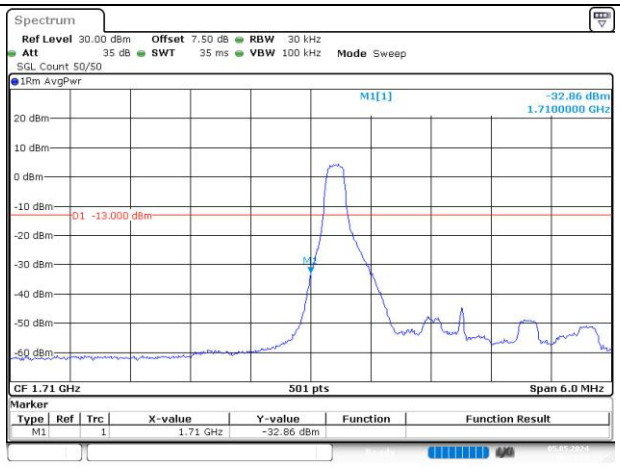
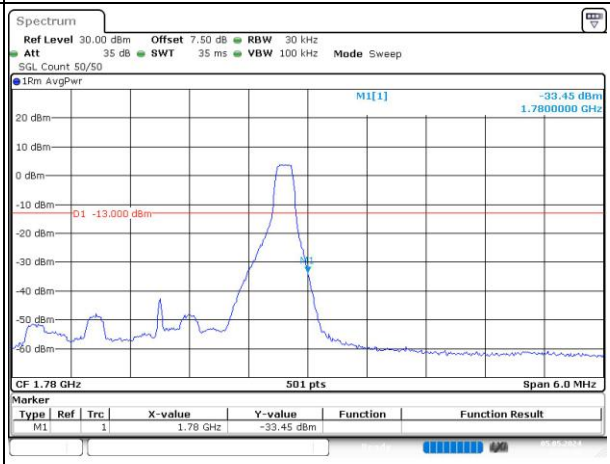
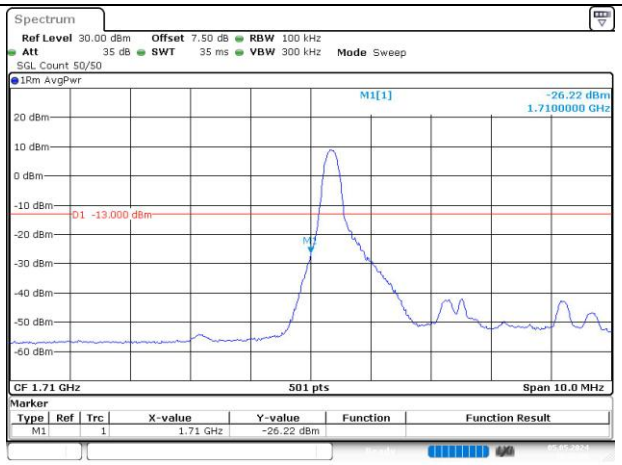
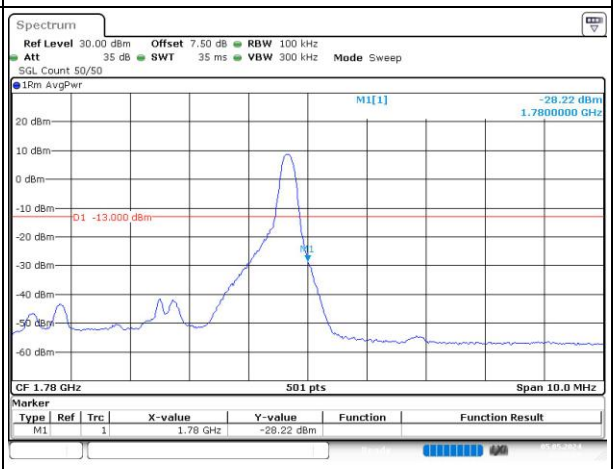
Spurious Emissions at Antenna Terminal		
Channel	**3MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

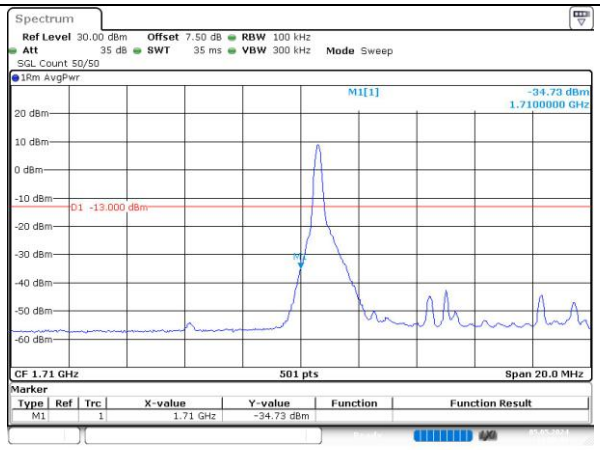
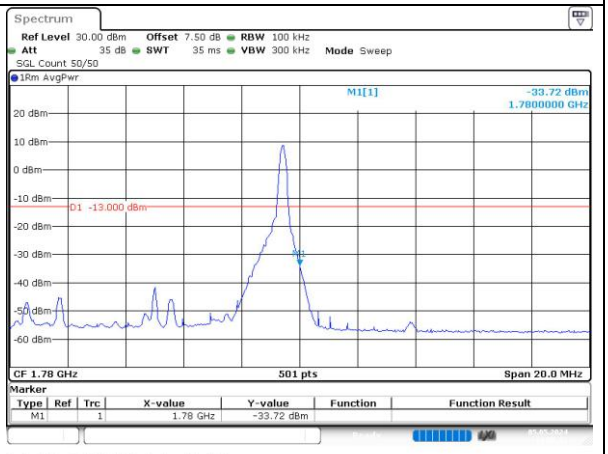
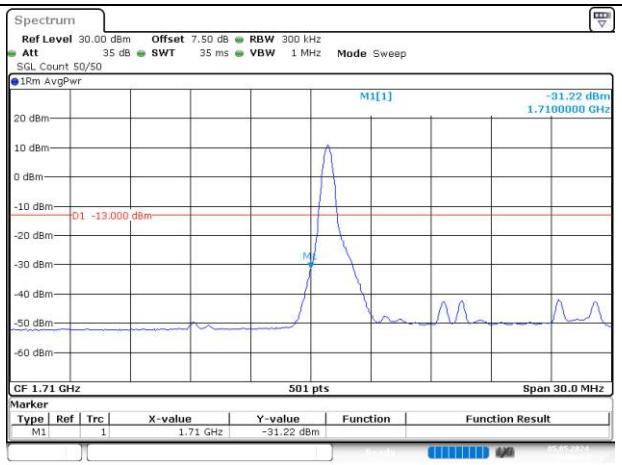
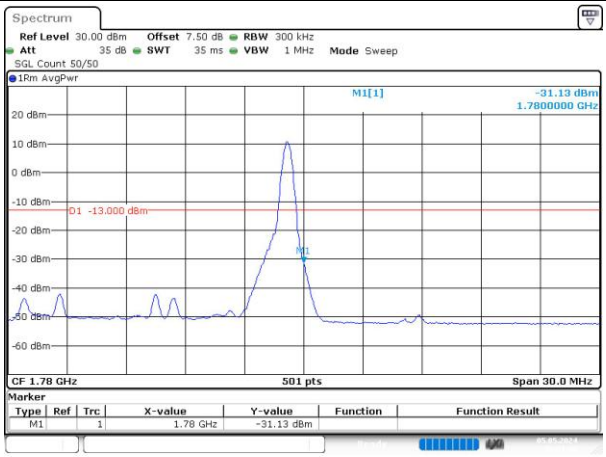
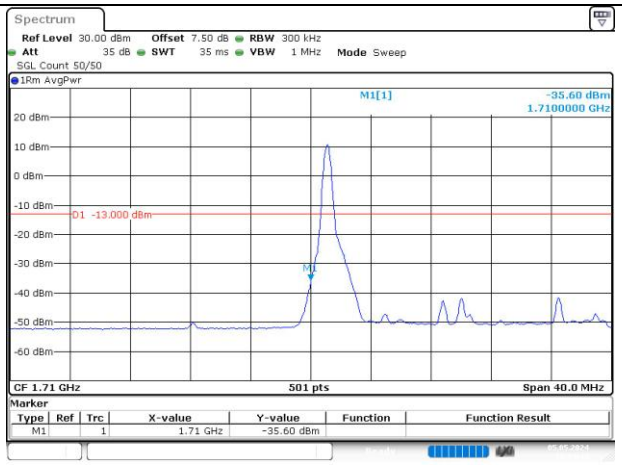
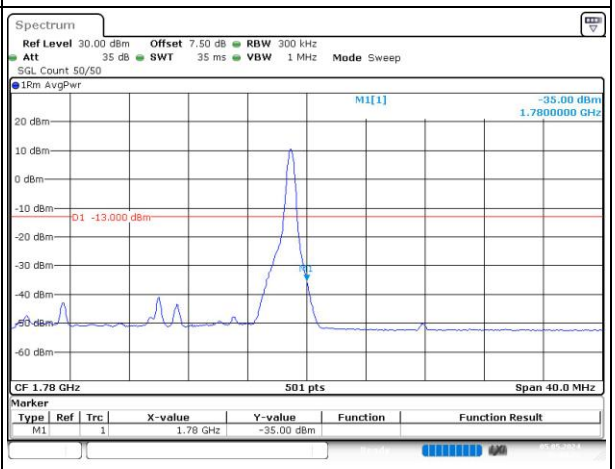
Spurious Emissions at Antenna Terminal		
Channel	**5MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

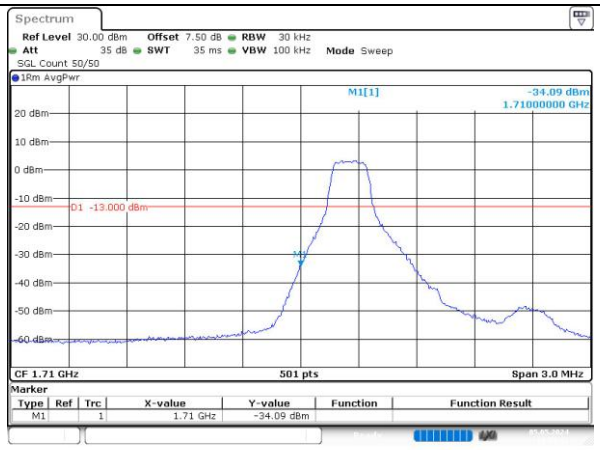
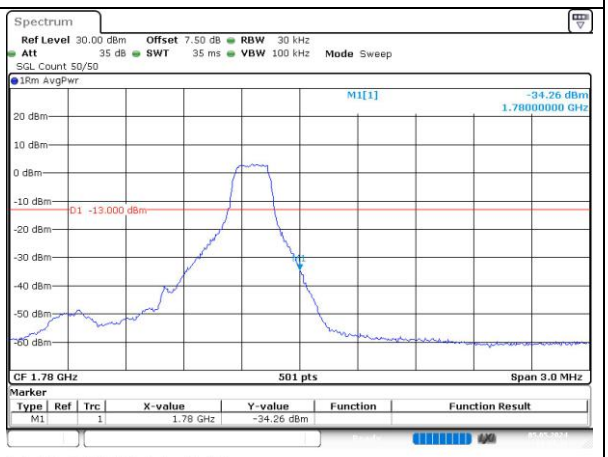
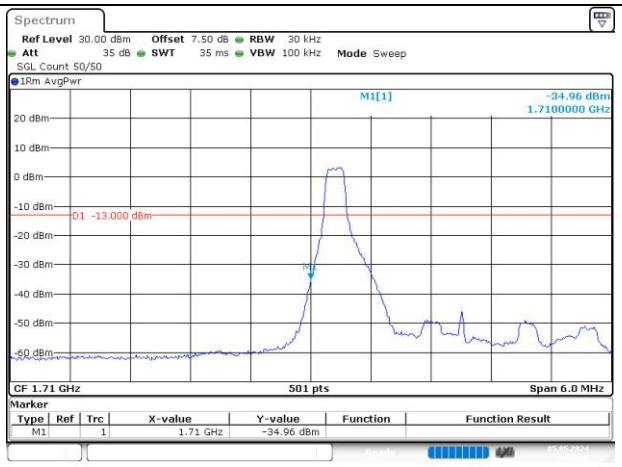
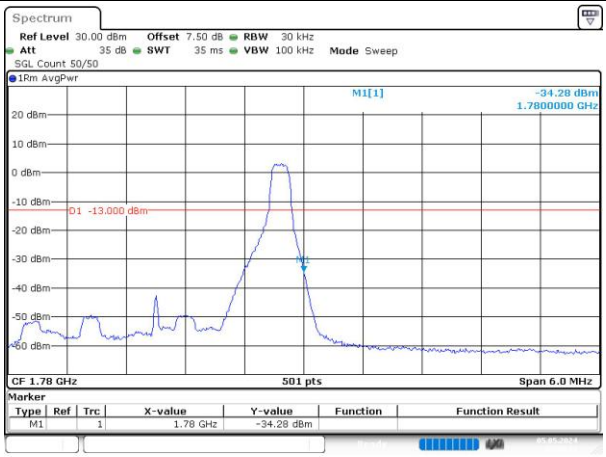
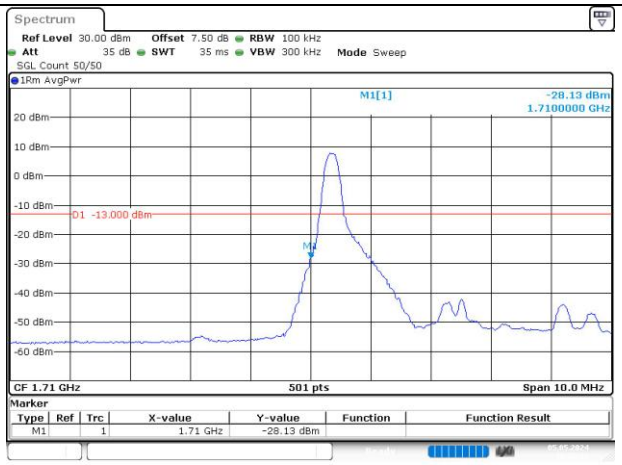
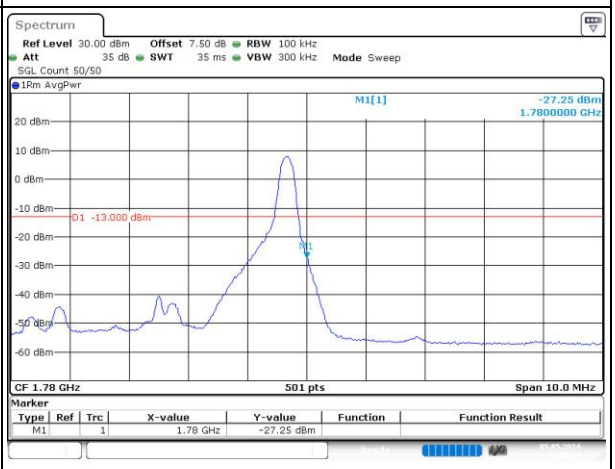
Spurious Emissions at Antenna Terminal		
Channel	**10MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

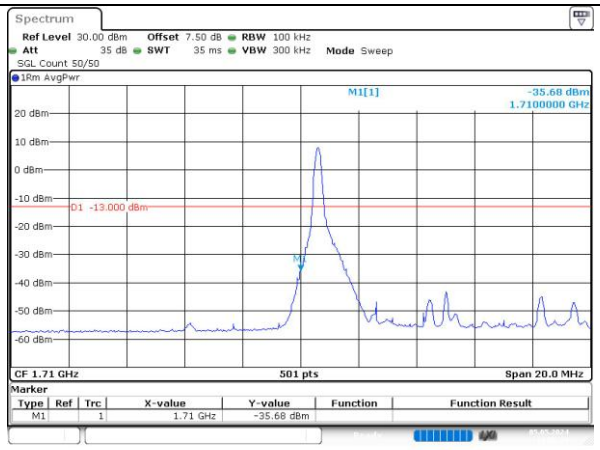
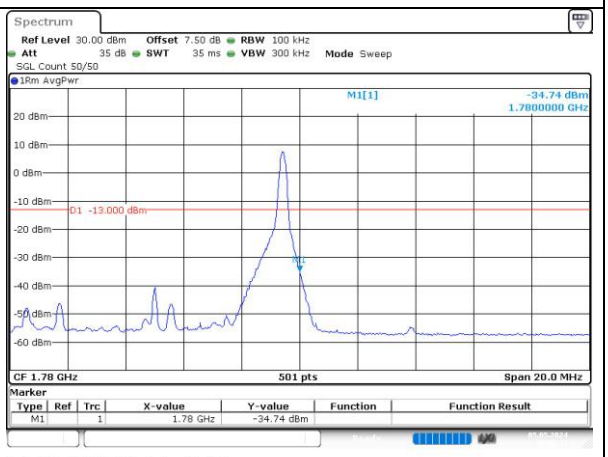
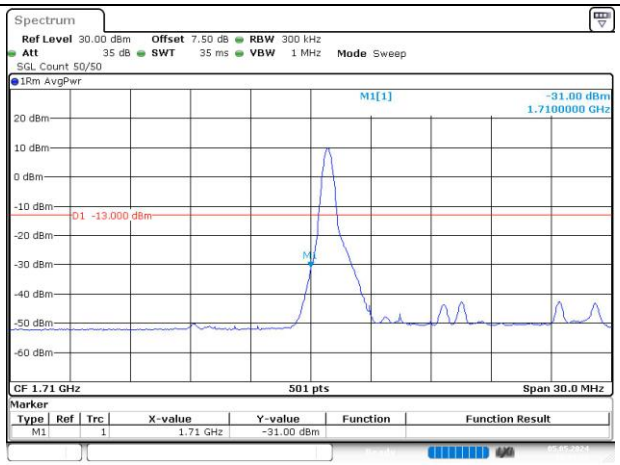
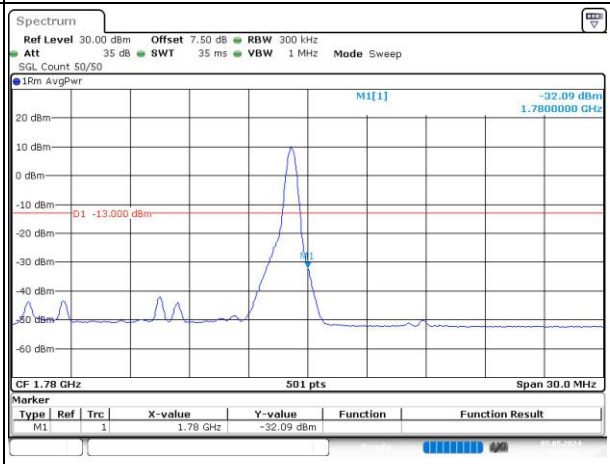
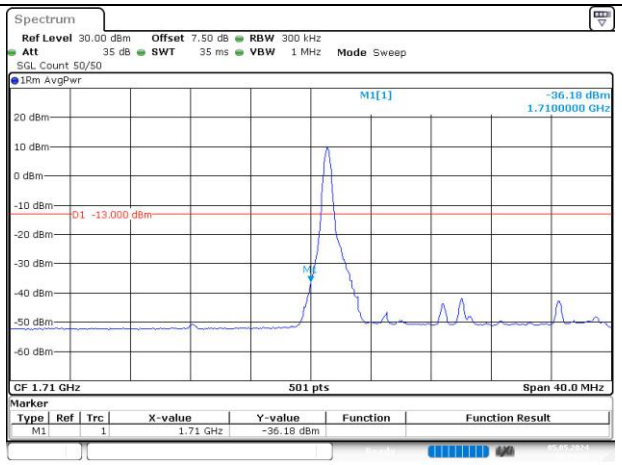
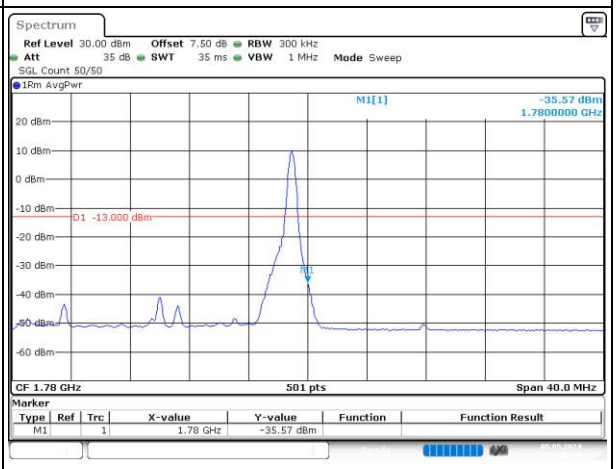
Spurious Emissions at Antenna Terminal		
Channel	**15MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

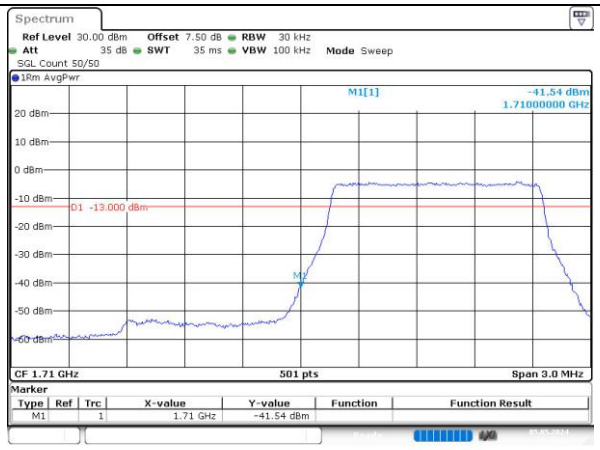
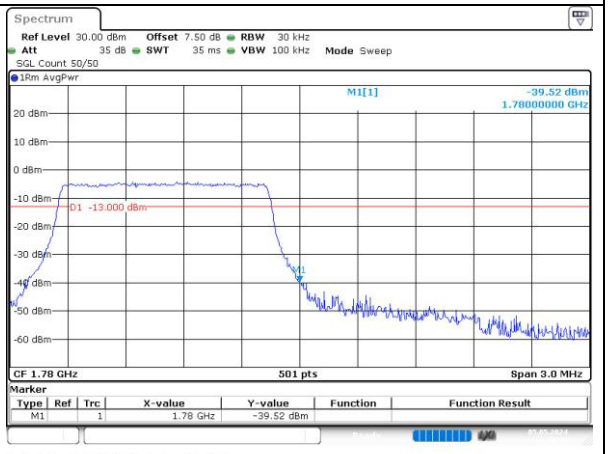
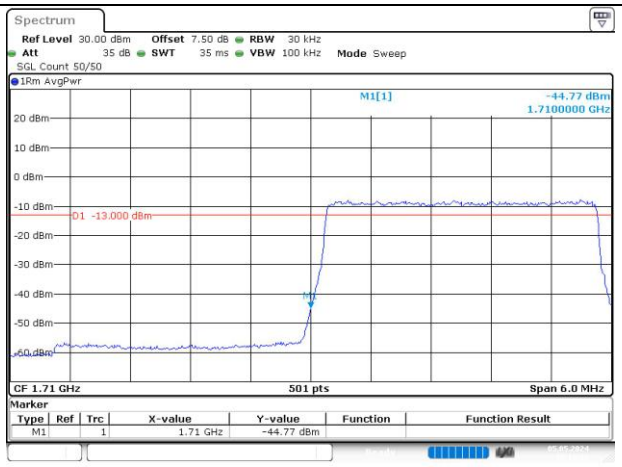
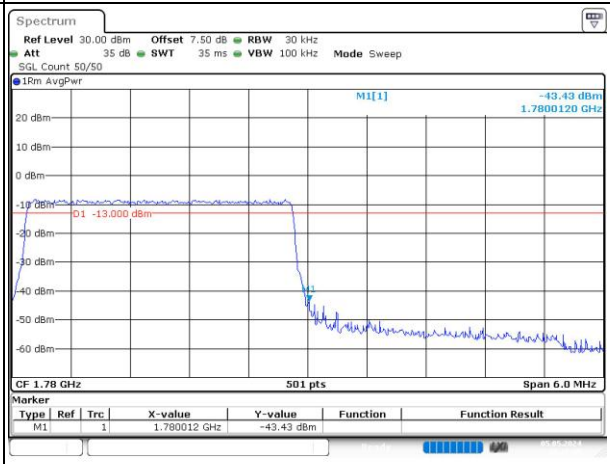
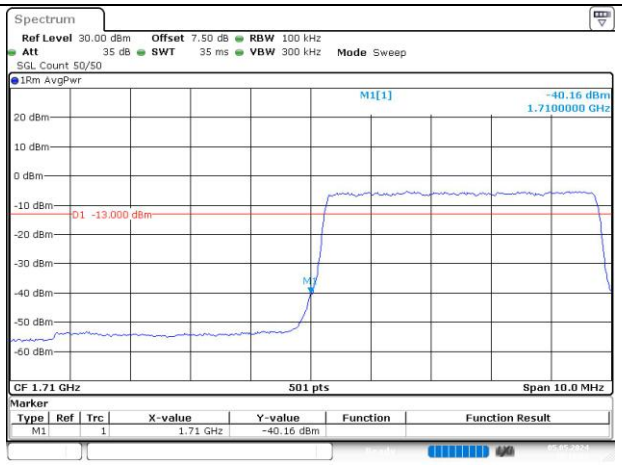
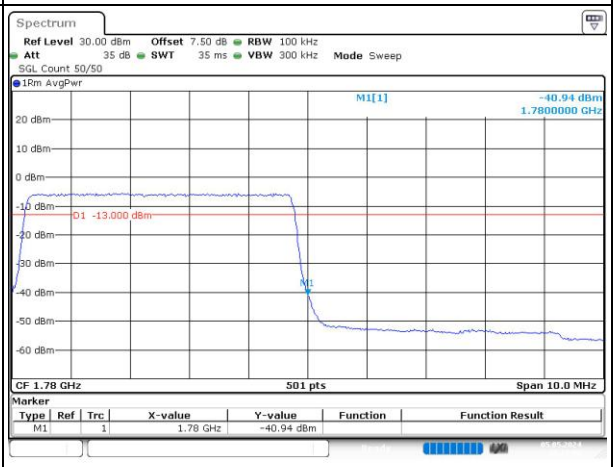
Spurious Emissions at Antenna Terminal		
Channel	**20MHz Bandwidth QPSK**	
Lowest		
Middle		
Highest		

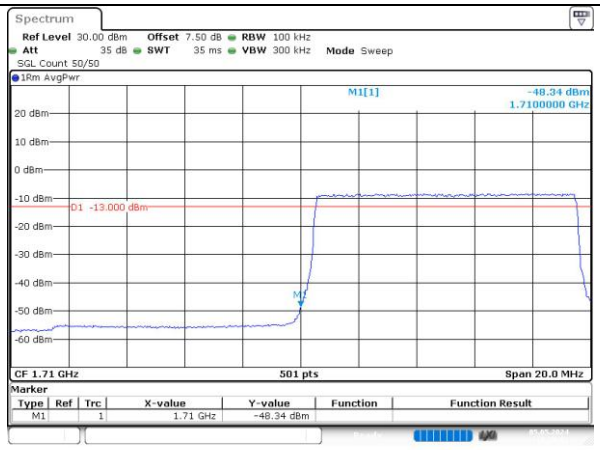
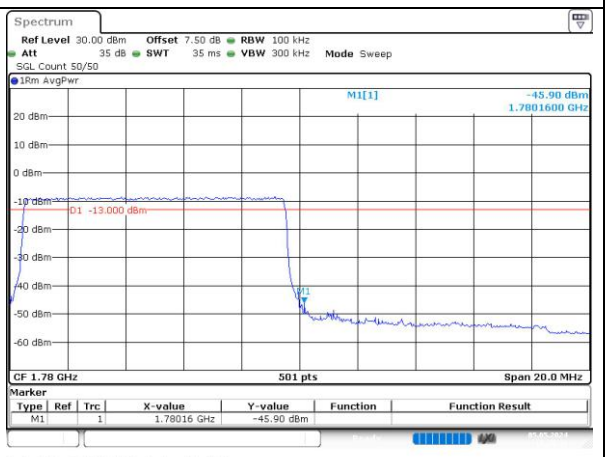
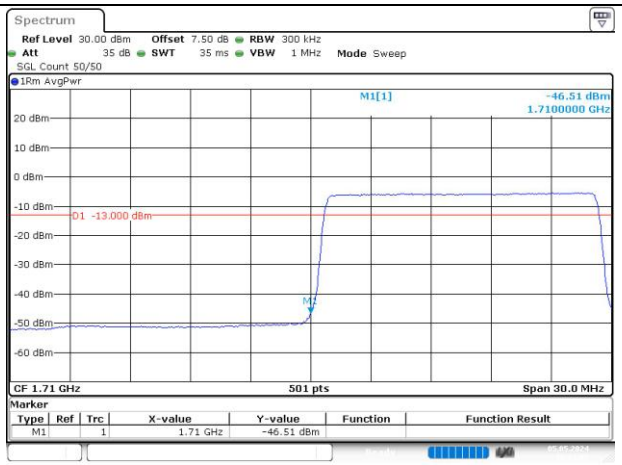
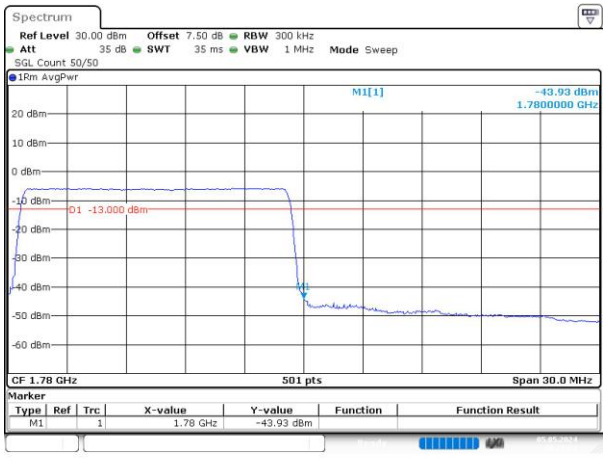
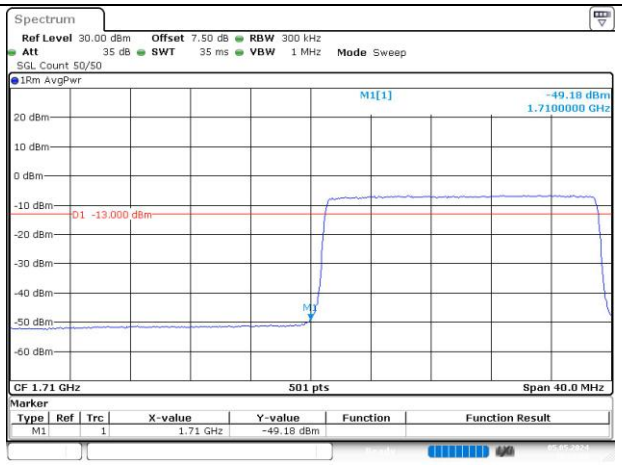
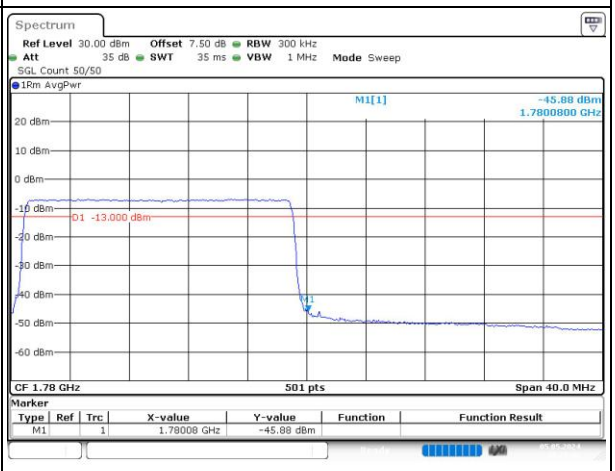
Out of band emission, Band Edge		
Mode	**Lowest-RB 1#0**	**Highest-RB 1#Max**
QPSK 1.4MHz		
QPSK 3MHz		
QPSK 5MHz		

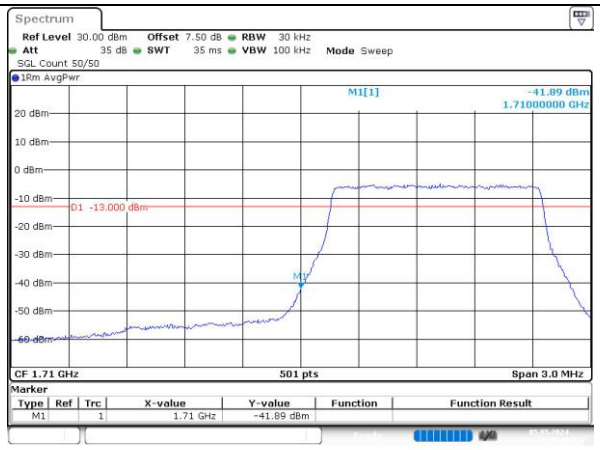
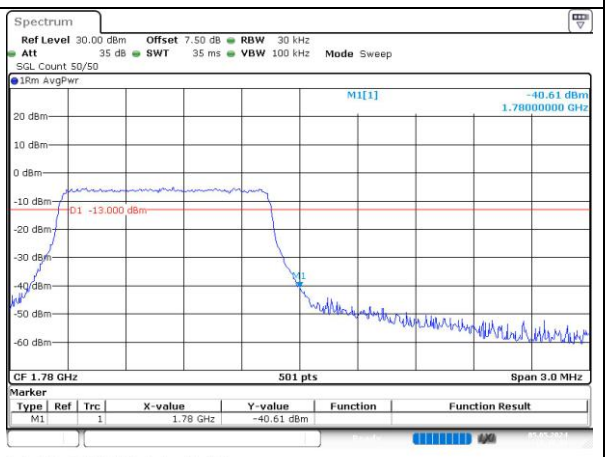
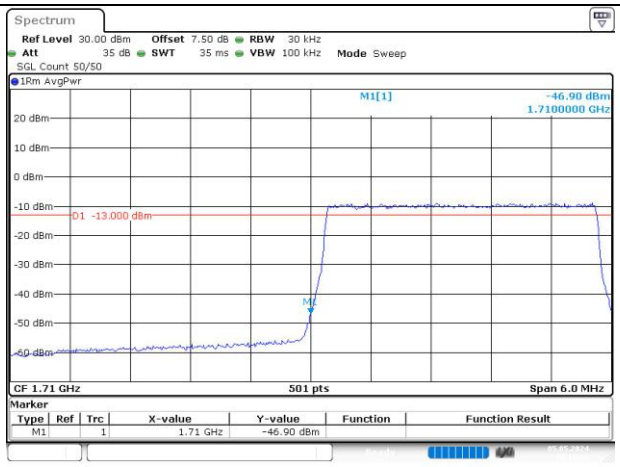
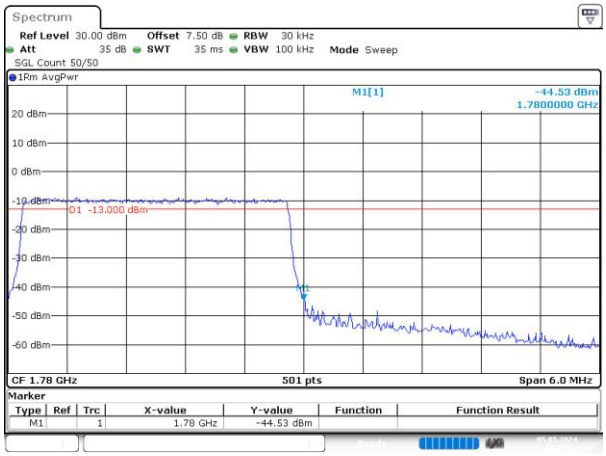
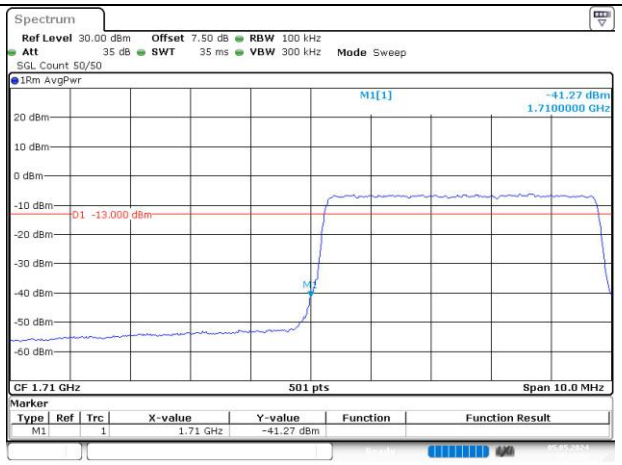
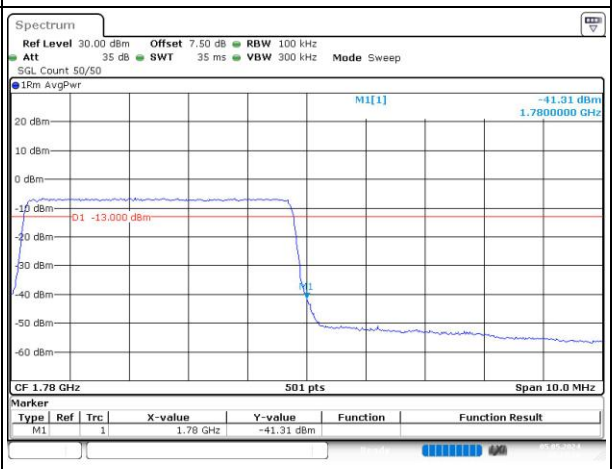
Out of band emission, Band Edge		
Mode	**Lowest-RB 1#0**	**Highest-RB 1#Max**
QPSK 10MHz		
QPSK 15MHz		
QPSK 20MHz		

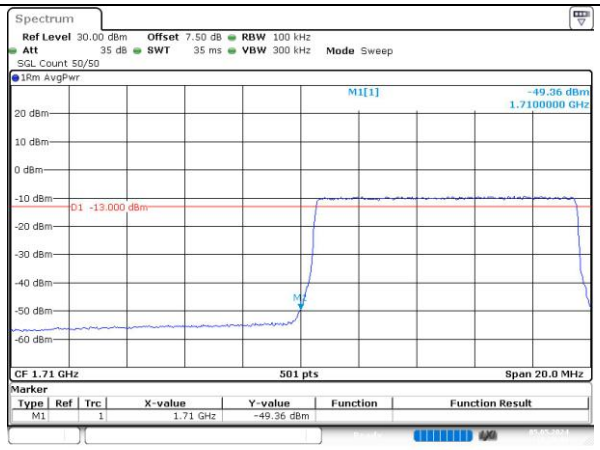
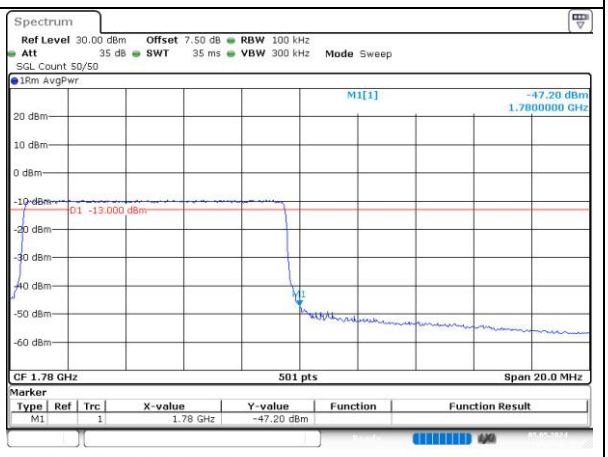
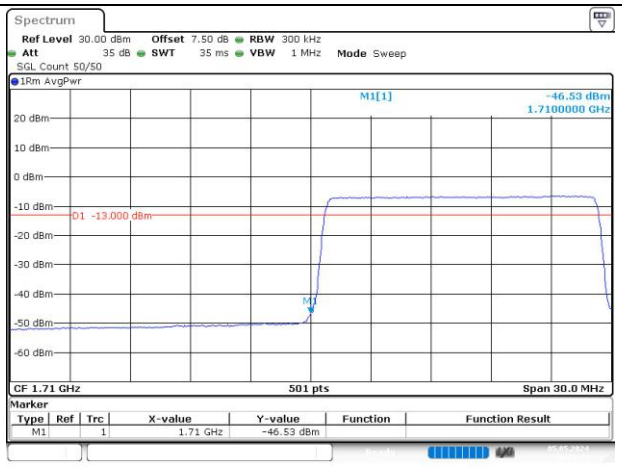
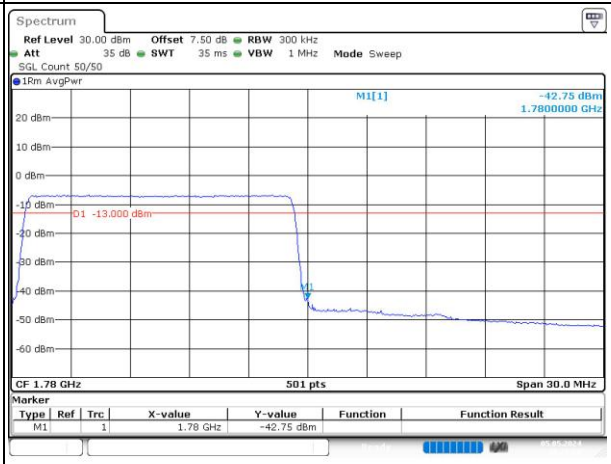
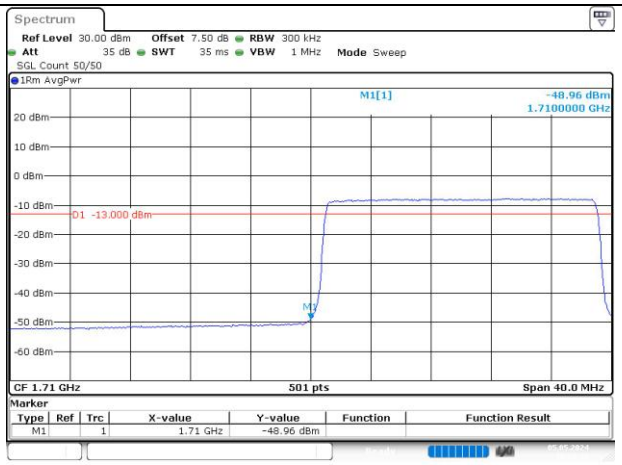
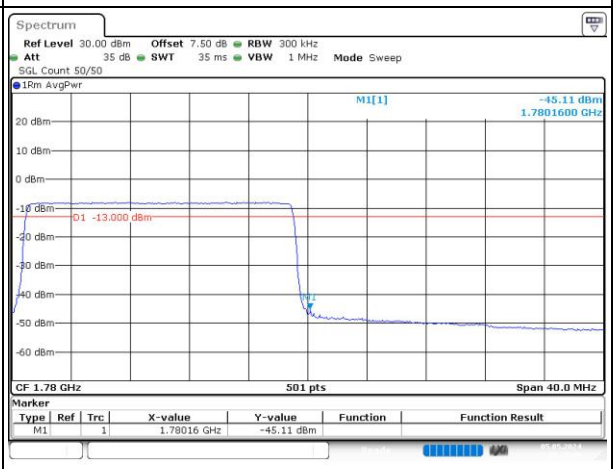
Out of band emission, Band Edge		
Mode	**Lowest-RB 1#0**	**Highest-RB 1#Max**
16QAM 1.4MHz		
16QAM 3MHz		
16QAM 5MHz		

Out of band emission, Band Edge		
Mode	**Lowest-RB 1#0**	**Highest-RB 1#Max**
16QAM 10MHz		
16QAM 15MHz		
16QAM 20MHz		

Out of band emission, Band Edge		
Mode	**Lowest-Full RB**	**Highest-Full RB**
QPSK 1.4MHz		
QPSK 3MHz		
QPSK 5MHz		

Out of band emission, Band Edge		
Mode	**Lowest-Full RB**	**Highest-Full RB**
QPSK 10MHz		
QPSK 15MHz		
QPSK 20MHz		

Out of band emission, Band Edge		
Mode	**Lowest-Full RB**	**Highest-Full RB**
16QAM 1.4MHz		
16QAM 3MHz		
16QAM 5MHz		

Out of band emission, Band Edge		
Mode	**Lowest-Full RB**	**Highest-Full RB**
16QAM 10MHz		
16QAM 15MHz		
16QAM 20MHz		

5.17 Radiated Spurious Emissions

Serial Number:	OSEB119574-1	Test Date:	Below 1GHz: 2024/4/23 Above 1GHz: 2024/4/28
Test Site:	Chamber A, Chamber B	Test Mode:	Transmitting
Tester:	Alan Xie, Colin Yang, Leo Xiao	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.5~25.8	Relative Humidity: (%)	51~67	ATM Pressure: (kPa)	100.0~100.1

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
30MHz~1000MHz					
Sunol Sciences	Hybrid Antenna	JB3	A060611-3	2024/1/12	2027/1/11
EMCO	Adjustable Dipole Antenna	3121C	9109-753	N/A	N/A
Wilson	Attenuator	859936	F-08-EM014	2023/7/1	2024/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0075-01	2023/7/1	2024/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-01	2023/7/1	2024/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-1400-01	2023/7/1	2024/6/30
Sonoma	Amplifier	310N	372193	2023/7/1	2024/6/30
R&S	EMI Test Receiver	ESR3	102453	2023/8/18	2024/8/17
Unknown	Coaxial Cable	C-NJNJ-50	C-0200-02	2023/9/4	2024/9/3
Agilent	Signal Generator	E8247C	MY43321350	2023/10/18	2024/10/17
All-sun	Clamp Meter	EM305A	8348897	2023/8/3	2024/8/2
Agilent	Wireless Communication Test Set	E5515C	MY50266471	2023/10/18	2024/10/17
R&S	Wideband Radio Communication Tester	CMW500	149216	2023/10/18	2024/10/17

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Above 1GHz					
ETS-Lindgren	Horn Antenna	3115	000 527 35	2023/9/7	2026/9/6
AH	Horn Antenna	SAS-571	1177	2023/2/22	2026/2/21
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-02 1304	2023/2/22	2026/2/21
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-03 1304	2023/2/22	2026/2/21
Ducommun Technologies	Horn Antenna	ARH-2823-02	1007726-01 1302	2023/2/22	2026/2/21
Ducommun Technologies	Horn Antenna	ARH-2823-02	1007726-02 1302	2023/2/22	2026/2/21
Xinhang Macrowave	Coaxial Cable	XH750A-N/J-SMA/J-10M	20231117004 #0001	2023/11/17	2024/11/16
Xinhang Macrowave	Coaxial Cable	XH360A-2.92/J-2.92/J-6M-A	20231208001 #0001	2023/12/11	2024/12/10
AH	Preamplifier	PAM-0118P	469	2023/8/19	2024/8/18
AH	Preamplifier	PAM-1840VH	191	2023/9/7	2024/9/6
R&S	Spectrum Analyzer	FSV40	101944	2023/10/18	2024/10/17
Agilent	Wireless Communication Test Set	E5515C	MY50266471	2023/10/18	2024/10/17
R&S	Wideband Radio Communication Tester	CMW500	149216	2023/10/18	2024/10/17
E-Microwave	Band Rejection Filter	OBF-ZP-703-748-SMAF	OE01902425	2023/6/16	2024/6/15
E-Microwave	Band Rejection Filter	BSF-ZP-777-787-SMAF	OE01902430	2023/6/16	2024/6/15
Sinoscite	Band Rejection Filter	BSF824-862MS	1438001	2023/6/16	2024/6/15
Sinoscite	Band Rejection Filter	BSF1710-1785MN	0383003	2023/6/16	2024/6/15
Sinoscite	Band Rejection Filter	BSF1850-1910MS	0935V2001	2023/6/16	2024/6/15
Sinoscite	Band Rejection Filter	BSF2300-2400MS	0777003	2023/6/16	2024/6/15
Sinoscite	Band Rejection Filter	BSF2500-2750MS	1439001	2023/6/16	2024/6/15
Mini-Circuits	High Pass Filter	VHF-1200+	31102	2023/8/1	2024/7/31
Mini-Circuits	High Pass Filter	VHF-6010+	31118	2023/12/1	2024/11/30

** Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

Cellular Band (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)			
GSM 850 Frequency:824.2MHz								
200.60	H	45.93	-69.21	0.00	0.18	-69.39	-13.00	56.39
232.80	V	47.92	-70.59	0.00	0.19	-70.78	-13.00	57.78
1648.40	H	62.15	-55.96	10.44	0.71	-46.23	-13.00	33.23
1648.40	V	58.01	-60.70	10.44	0.71	-50.97	-13.00	37.97
2472.60	H	61.32	-54.76	12.88	1.25	-43.13	-13.00	30.13
2472.60	V	58.49	-57.65	12.88	1.25	-46.02	-13.00	33.02
3296.80	H	55.16	-57.81	13.60	1.59	-45.80	-13.00	32.80
3296.80	V	55.39	-57.58	13.60	1.59	-45.57	-13.00	32.57
GSM 850 Frequency:836.6MHz								
251.10	H	45.57	-70.33	0.00	0.19	-70.52	-13.00	57.52
82.60	V	48.75	-73.80	0.00	0.10	-73.90	-13.00	60.90
1673.20	H	63.08	-54.66	10.61	0.73	-44.78	-13.00	31.78
1673.20	V	60.80	-57.54	10.61	0.73	-47.66	-13.00	34.66
2509.80	H	63.78	-52.49	13.11	1.25	-40.63	-13.00	27.63
2509.80	V	62.35	-53.95	13.11	1.25	-42.09	-13.00	29.09
3346.40	H	52.61	-60.24	13.83	1.61	-48.02	-13.00	35.02
3346.40	V	51.04	-61.86	13.83	1.61	-49.64	-13.00	36.64
GSM 850 Frequency:848.8MHz								
251.10	H	45.73	-70.17	0.00	0.19	-70.36	-13.00	57.36
225.80	V	47.01	-71.17	0.00	0.19	-71.36	-13.00	58.36
1697.60	H	64.49	-52.89	10.78	0.75	-42.86	-13.00	29.86
1697.60	V	62.51	-55.47	10.78	0.75	-45.44	-13.00	32.44
2546.40	H	63.98	-52.45	13.15	1.27	-40.57	-13.00	27.57
2546.40	V	61.10	-55.47	13.15	1.27	-43.59	-13.00	30.59
3395.20	H	53.17	-59.52	14.08	1.64	-47.08	-13.00	34.08
3395.20	V	50.76	-62.03	14.08	1.64	-49.59	-13.00	36.59

PCS Band (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)			
GSM 1900 Frequency:1850.2MHz								
270.70	H	44.17	-71.54	0.00	0.19	-71.73	-13.00	58.73
47.50	V	47.85	-55.19	-17.35	0.07	-72.61	-13.00	59.61
3700.40	H	51.49	-60.36	14.00	1.83	-48.19	-13.00	35.19
3700.40	V	48.13	-63.70	14.00	1.83	-51.53	-13.00	38.53
5550.60	H	66.10	-41.47	13.95	1.27	-28.79	-13.00	15.79
5550.60	V	58.74	-48.68	13.95	1.27	-36.00	-13.00	23.00
GSM 1900 Frequency:1880MHz								
401.30	H	44.31	-66.54	0.00	0.19	-66.73	-13.00	53.73
83.30	V	48.30	-73.91	0.00	0.10	-74.01	-13.00	61.01
3760.00	H	53.51	-57.83	13.76	1.63	-45.70	-13.00	32.70
3760.00	V	55.78	-55.43	13.76	1.63	-43.30	-13.00	30.30
5640.00	H	62.86	-44.46	14.02	1.31	-31.75	-13.00	18.75
5640.00	V	60.84	-46.36	14.02	1.31	-33.65	-13.00	20.65
GSM 1900 Frequency:1909.8MHz								
250.20	H	46.78	-69.13	0.00	0.19	-69.32	-13.00	56.32
234.20	V	45.15	-73.43	0.00	0.19	-73.62	-13.00	60.62
3819.60	H	55.25	-55.65	13.56	1.50	-43.59	-13.00	30.59
3819.60	V	55.18	-55.54	13.56	1.50	-43.48	-13.00	30.48
5729.40	H	60.08	-47.37	13.96	1.31	-34.72	-13.00	21.72
5729.40	V	57.81	-49.60	13.96	1.31	-36.95	-13.00	23.95

WCDMA 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)			
WCDMA Band 2 Frequency: 1852.4 MHz								
159.80	H	42.21	-71.16	0.00	0.16	-71.32	-13.00	58.32
43.30	V	54.89	-41.92	-22.04	0.07	-64.03	-13.00	51.03
3704.80	H	51.60	-60.22	13.98	1.81	-48.05	-13.00	35.05
3704.80	V	50.45	-61.34	13.98	1.81	-49.17	-13.00	36.17
5557.20	H	48.55	-58.97	13.97	1.27	-46.27	-13.00	33.27
5557.20	V	48.68	-58.69	13.97	1.27	-45.99	-13.00	32.99
WCDMA Band 2 Frequency: 1880MHz								
133.20	H	40.05	-71.17	0.00	0.15	-71.32	-13.00	58.32
49.00	V	54.03	-51.50	-15.88	0.07	-67.45	-13.00	54.45
3760.00	H	51.48	-59.86	13.76	1.63	-47.73	-13.00	34.73
3760.00	V	51.22	-59.99	13.76	1.63	-47.86	-13.00	34.86
5640.00	H	52.27	-55.05	14.02	1.31	-42.34	-13.00	29.34
5640.00	V	53.17	-54.03	14.02	1.31	-41.32	-13.00	28.32
WCDMA Band 2 Frequency: 1907.6MHz								
230.00	H	39.63	-75.97	0.00	0.19	-76.16	-13.00	63.16
88.30	V	53.16	-66.59	0.00	0.10	-66.69	-13.00	53.69
3815.20	H	48.99	-61.93	13.57	1.50	-49.86	-13.00	36.86
3815.20	V	47.67	-63.07	13.57	1.50	-51.00	-13.00	38.00
5722.80	H	47.97	-59.49	13.95	1.32	-46.86	-13.00	33.86
5722.80	V	48.05	-59.37	13.95	1.32	-46.74	-13.00	33.74

WCDMA 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)			
WCDMA Band 4 Frequency: 1712.4 MHz								
143.00	H	42.62	-69.70	0.00	0.15	-69.85	-13.00	56.85
44.62	V	54.97	-43.45	-20.30	0.07	-63.82	-13.00	50.82
3424.80	H	47.25	-65.34	14.03	1.63	-52.94	-13.00	39.94
3424.80	V	46.87	-65.79	14.03	1.63	-53.39	-13.00	40.39
5137.20	H	49.82	-58.20	13.94	1.39	-45.65	-13.00	32.65
5137.20	V	48.39	-59.56	13.94	1.39	-47.01	-13.00	34.01
WCDMA Band 4 Frequency: 1732.6MHz								
50.40	H	45.74	-64.92	-14.72	0.07	-79.71	-13.00	66.71
232.80	V	44.28	-74.23	0.00	0.19	-74.42	-13.00	61.42
3465.20	H	47.30	-65.14	13.90	1.62	-52.86	-13.00	39.86
3465.20	V	48.48	-64.00	13.90	1.62	-51.72	-13.00	38.72
5197.80	H	47.60	-59.92	14.00	1.52	-47.44	-13.00	34.44
5197.80	V	47.84	-59.76	14.00	1.52	-47.28	-13.00	34.28
WCDMA Band 4 Frequency: 1752.6MHz								
161.30	H	41.88	-71.69	0.00	0.16	-71.85	-13.00	58.85
224.40	V	43.96	-74.16	0.00	0.18	-74.34	-13.00	61.34
3505.20	H	47.04	-65.29	13.82	1.60	-53.07	-13.00	40.07
3505.20	V	47.53	-64.80	13.82	1.60	-52.58	-13.00	39.58
5257.80	H	48.68	-59.85	14.17	1.31	-46.99	-13.00	33.99
5257.80	V	47.67	-60.94	14.17	1.31	-48.08	-13.00	35.08

WCDMA 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)			
WCDMA Band 5 Frequency:826.4 MHz								
662.60	H	37.41	-69.82	0.00	0.27	-70.09	-13.00	57.09
241.30	V	43.23	-75.69	0.00	0.19	-75.88	-13.00	62.88
1652.80	H	49.09	-68.96	10.47	0.72	-59.21	-13.00	46.21
1652.80	V	50.32	-68.33	10.47	0.72	-58.58	-13.00	45.58
2479.20	H	53.55	-62.57	12.93	1.25	-50.89	-13.00	37.89
2479.20	V	52.36	-63.80	12.93	1.25	-52.12	-13.00	39.12
3305.60	H	48.45	-64.53	13.63	1.59	-52.49	-13.00	39.49
3305.60	V	47.88	-65.11	13.63	1.59	-53.07	-13.00	40.07
WCDMA Band 5 Frequency:836.6MHz								
700.30	H	39.19	-67.84	0.00	0.30	-68.14	-13.00	55.14
220.20	V	42.77	-75.15	0.00	0.18	-75.33	-13.00	62.33
1673.20	H	48.54	-69.20	10.61	0.73	-59.32	-13.00	46.32
1673.20	V	50.02	-68.32	10.61	0.73	-58.44	-13.00	45.44
2509.80	H	54.48	-61.79	13.11	1.25	-49.93	-13.00	36.93
2509.80	V	51.66	-64.64	13.11	1.25	-52.78	-13.00	39.78
3346.40	H	46.88	-65.97	13.83	1.61	-53.75	-13.00	40.75
3346.40	V	47.15	-65.75	13.83	1.61	-53.53	-13.00	40.53
WCDMA Band 5 Frequency:846.6MHz								
230.00	H	39.67	-75.93	0.00	0.19	-76.12	-13.00	63.12
160.36	V	41.81	-76.81	0.00	0.16	-76.97	-13.00	63.97
1693.20	H	48.97	-68.47	10.75	0.75	-58.47	-13.00	45.47
1693.20	V	46.41	-71.63	10.75	0.75	-61.63	-13.00	48.63
2539.80	H	49.83	-66.57	13.14	1.27	-54.70	-13.00	41.70
2539.80	V	50.22	-66.30	13.14	1.27	-54.43	-13.00	41.43
3386.40	H	47.01	-65.71	14.03	1.63	-53.31	-13.00	40.31
3386.40	V	47.12	-65.69	14.03	1.63	-53.29	-13.00	40.29

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)			
1RB, 1.4MHz, QPSK,Frequency:1850.7 MHz								
157.20	H	41.97	-71.24	0.00	0.16	-71.40	-13.00	58.40
248.32	V	42.13	-77.12	0.00	0.19	-77.31	-13.00	64.31
3701.40	H	58.36	-53.49	13.99	1.83	-41.33	-13.00	28.33
3701.40	V	57.29	-54.53	13.99	1.83	-42.37	-13.00	29.37
5552.10	H	50.48	-57.08	13.96	1.27	-44.39	-13.00	31.39
5552.10	V	52.93	-54.48	13.96	1.27	-41.79	-13.00	28.79
1RB, 1.4MHz, QPSK,Frequency:1880 MHz								
134.60	H	42.52	-68.88	0.00	0.15	-69.03	-13.00	56.03
258.10	V	41.18	-77.73	0.00	0.19	-77.92	-13.00	64.92
3760.00	H	56.33	-55.01	13.76	1.63	-42.88	-13.00	29.88
3760.00	V	55.79	-55.42	13.76	1.63	-43.29	-13.00	30.29
5640.00	H	54.82	-52.50	14.02	1.31	-39.79	-13.00	26.79
5640.00	V	56.27	-50.93	14.02	1.31	-38.22	-13.00	25.22
1RB, 1.4MHz, QPSK,Frequency:1909.3 MHz								
121.93	H	42.06	-67.64	0.00	0.14	-67.78	-13.00	54.78
193.50	V	40.70	-76.81	0.00	0.18	-76.99	-13.00	63.99
3818.60	H	55.84	-55.07	13.56	1.50	-43.01	-13.00	30.01
3818.60	V	54.20	-56.52	13.56	1.50	-44.46	-13.00	31.46
5727.90	H	55.65	-51.80	13.96	1.31	-39.15	-13.00	26.15
5727.90	V	58.64	-48.77	13.96	1.31	-36.12	-13.00	23.12

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)			
1RB, 1.4MHz, QPSK,Frequency:1710.7 MHz								
119.52	H	43.62	-65.89	0.00	0.14	-66.03	-13.00	53.03
223.40	V	42.90	-75.17	0.00	0.18	-75.35	-13.00	62.35
3421.40	H	48.40	-64.20	14.04	1.63	-51.79	-13.00	38.79
3421.40	V	48.24	-64.44	14.04	1.63	-52.03	-13.00	39.03
5132.10	H	53.04	-55.03	13.93	1.37	-42.47	-13.00	29.47
5132.10	V	56.96	-51.02	13.93	1.37	-38.46	-13.00	25.46
1RB, 1.4MHz, QPSK,Frequency:1732.5 MHz								
123.47	H	42.84	-67.07	0.00	0.14	-67.21	-13.00	54.21
270.70	V	40.56	-77.71	0.00	0.19	-77.90	-13.00	64.90
3465.00	H	48.44	-64.00	13.91	1.62	-51.71	-13.00	38.71
3465.00	V	48.61	-63.87	13.91	1.62	-51.58	-13.00	38.58
5197.50	H	54.75	-52.77	14.00	1.52	-40.29	-13.00	27.29
5197.50	V	56.59	-51.01	14.00	1.52	-38.53	-13.00	25.53
1RB, 1.4MHz, QPSK,Frequency:1754.3MHz								
103.66	H	40.17	-71.61	0.00	0.13	-71.74	-13.00	58.74
235.48	V	44.86	-73.78	0.00	0.19	-73.97	-13.00	60.97
3508.60	H	48.14	-64.20	13.83	1.60	-51.97	-13.00	38.97
3508.60	V	48.17	-64.17	13.83	1.60	-51.94	-13.00	38.94
5262.90	H	55.48	-53.14	14.19	1.29	-40.24	-13.00	27.24
5262.90	V	58.62	-50.08	14.19	1.29	-37.18	-13.00	24.18

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)			
1RB, 1.4MHz, QPSK, Frequency: 824.7 MHz								
121.40	H	41.15	-68.48	0.00	0.14	-68.62	-13.00	55.62
225.42	V	44.28	-73.88	0.00	0.19	-74.07	-13.00	61.07
1649.40	H	51.27	-66.83	10.45	0.71	-57.09	-13.00	44.09
1649.40	V	50.54	-68.16	10.45	0.71	-58.42	-13.00	45.42
2474.10	H	60.73	-55.36	12.89	1.25	-43.72	-13.00	30.72
2474.10	V	60.39	-55.75	12.89	1.25	-44.11	-13.00	31.11
3298.80	H	47.28	-65.71	13.60	1.59	-53.70	-13.00	40.70
3298.80	V	47.31	-65.68	13.60	1.59	-53.67	-13.00	40.67
1RB, 1.4MHz,QPSK, Frequency: 836.5 MHz								
154.30	H	42.03	-70.99	0.00	0.16	-71.15	-13.00	58.15
236.40	V	43.27	-75.42	0.00	0.19	-75.61	-13.00	62.61
1673.00	H	51.04	-66.71	10.61	0.73	-56.83	-13.00	43.83
1673.00	V	50.22	-68.13	10.61	0.73	-58.25	-13.00	45.25
2509.50	H	56.35	-59.92	13.11	1.25	-48.06	-13.00	35.06
2509.50	V	59.20	-57.10	13.11	1.25	-45.24	-13.00	32.24
3346.00	H	35.80	-77.05	13.83	1.61	-64.83	-13.00	51.83
3346.00	V	35.16	-77.74	13.83	1.61	-65.52	-13.00	52.52
1RB, 1.4MHz,QPSK, Frequency: 848.3 MHz								
161.30	H	42.24	-71.33	0.00	0.16	-71.49	-13.00	58.49
214.60	V	42.32	-75.33	0.00	0.18	-75.51	-13.00	62.51
1696.60	H	51.50	-65.89	10.78	0.75	-55.86	-13.00	42.86
1696.60	V	52.12	-65.87	10.78	0.75	-55.84	-13.00	42.84
2544.90	H	55.42	-61.01	13.14	1.27	-49.14	-13.00	36.14
2544.90	V	60.83	-55.73	13.14	1.27	-43.86	-13.00	30.86
3393.20	H	47.26	-65.44	14.07	1.64	-53.01	-13.00	40.01
3393.20	V	47.47	-65.32	14.07	1.64	-52.89	-13.00	39.89

LTE Band 7(30MHz-26GHz):

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)			
1RB, 1.4MHz, QPSK, Frequency: 2502.5 MHz								
158.24	H	39.82	-73.45	0.00	0.16	-73.61	-25.00	48.61
251.47	V	45.24	-74.01	0.00	0.19	-74.20	-25.00	49.20
5005.00	H	55.74	-54.02	14.00	1.43	-41.45	-25.00	16.45
5005.00	V	54.88	-54.64	14.00	1.43	-42.07	-25.00	17.07
7507.50	H	48.31	-53.71	13.20	1.33	-41.84	-25.00	16.84
7507.50	V	48.81	-53.69	13.20	1.33	-41.82	-25.00	16.82
1RB, 1.4MHz,QPSK, Frequency: 2535 MHz								
230.11	H	39.68	-75.92	0.00	0.19	-76.11	-25.00	51.11
168.56	V	40.25	-78.39	0.00	0.16	-78.55	-25.00	53.55
5070.00	H	58.41	-50.37	13.93	1.34	-37.78	-25.00	12.78
5070.00	V	57.60	-50.99	13.93	1.34	-38.40	-25.00	13.40
7605.00	H	49.30	-52.97	13.21	1.40	-41.16	-25.00	16.16
7605.00	V	48.56	-54.11	13.21	1.40	-42.30	-25.00	17.30
1RB, 1.4MHz,QPSK, Frequency: 2567.5 MHz								
171.10	H	38.57	-76.40	0.00	0.17	-76.57	-25.00	51.57
224.50	V	43.62	-74.50	0.00	0.18	-74.68	-25.00	49.68
5135.00	H	61.33	-46.71	13.94	1.38	-34.15	-25.00	9.15
5135.00	V	59.06	-48.90	13.94	1.38	-36.34	-25.00	11.34
7702.50	H	49.53	-52.99	13.40	1.47	-41.06	-25.00	16.06
7702.50	V	50.57	-52.27	13.40	1.47	-40.34	-25.00	15.34

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)			
1RB, 1.4MHz, QPSK, Frequency: 699.7 MHz								
131.80	H	38.78	-72.25	0.00	0.15	-72.40	-13.00	59.40
215.02	V	40.87	-76.80	0.00	0.18	-76.98	-13.00	63.98
1399.40	H	51.21	-65.93	9.00	1.20	-58.13	-13.00	45.13
1399.40	V	53.24	-64.50	9.00	1.20	-56.70	-13.00	43.70
2099.10	H	60.17	-56.26	11.41	1.10	-45.95	-13.00	32.95
2099.10	V	57.05	-59.38	11.41	1.10	-49.07	-13.00	36.07
2798.80	H	47.35	-68.40	13.10	1.36	-56.66	-13.00	43.66
2798.80	V	46.32	-69.62	13.10	1.36	-57.88	-13.00	44.88
1RB, 1.4MHz,QPSK, Frequency:707.5 MHz								
96.70	H	40.31	-73.39	0.00	0.12	-73.51	-13.00	60.51
106.30	V	47.62	-70.54	0.00	0.13	-70.67	-13.00	57.67
1415.00	H	52.61	-64.87	9.08	1.22	-57.01	-13.00	44.01
1415.00	V	50.71	-67.30	9.08	1.22	-59.44	-13.00	46.44
2122.50	H	59.76	-56.67	11.27	1.11	-46.51	-13.00	33.51
2122.50	V	56.06	-60.35	11.27	1.11	-50.19	-13.00	37.19
2830.00	H	48.68	-66.65	13.34	1.36	-54.67	-13.00	41.67
2830.00	V	46.87	-68.69	13.34	1.36	-56.71	-13.00	43.71
1RB, 1.4MHz,QPSK, Frequency: 715.3 MHz								
133.20	H	39.46	-71.76	0.00	0.15	-71.91	-13.00	58.91
116.40	V	46.92	-70.02	0.00	0.14	-70.16	-13.00	57.16
1430.60	H	53.73	-64.12	9.15	1.25	-56.22	-13.00	43.22
1430.60	V	54.98	-63.31	9.15	1.25	-55.41	-13.00	42.41
2145.90	H	63.06	-53.39	11.12	1.12	-43.39	-13.00	30.39
2145.90	V	58.20	-58.20	11.12	1.12	-48.20	-13.00	35.20
2861.20	H	48.33	-66.56	13.59	1.35	-54.32	-13.00	41.32
2861.20	V	46.32	-68.83	13.59	1.35	-56.59	-13.00	43.59

LTE Band 13 (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)			
1RB, 5MHz,QPSK, Frequency: 779.5 MHz								
234.20	H	38.68	-76.98	0.00	0.19	-77.17	-13.00	64.17
228.94	V	43.13	-75.20	0.00	0.19	-75.39	-13.00	62.39
1559.00	H	52.58	-66.51	9.85	0.95	-57.61	-13.00	44.61
1559.00	V	51.65	-67.84	9.85	0.95	-58.94	-13.00	45.94
2338.50	H	58.14	-57.49	11.62	1.25	-47.12	-13.00	34.12
2338.50	V	54.91	-60.73	11.62	1.25	-50.36	-13.00	37.36
3118.00	H	49.28	-64.07	13.27	1.78	-52.58	-13.00	39.58
3118.00	V	47.44	-65.92	13.27	1.78	-54.43	-13.00	41.43
1RB, 5MHz,QPSK, Frequency:784.5 MHz								
152.60	H	39.67	-73.25	0.00	0.16	-73.41	-13.00	60.41
188.44	V	44.62	-73.32	0.00	0.17	-73.49	-13.00	60.49
1569.00	H	51.42	-67.61	9.91	0.89	-58.59	-13.00	45.59
1569.00	V	49.97	-69.51	9.91	0.89	-60.49	-13.00	47.49
2353.50	H	57.95	-57.69	11.79	1.26	-47.16	-13.00	34.16
2353.50	V	54.92	-60.78	11.79	1.26	-50.25	-13.00	37.25
3138.00	H	47.54	-65.51	13.35	1.73	-53.89	-13.00	40.89
3138.00	V	48.21	-64.86	13.35	1.73	-53.24	-13.00	40.24

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)			
1RB, 5MHz,QPSK, Frequency: 706.5 MHz								
180.34	H	37.35	-78.88	0.00	0.17	-79.05	-13.00	66.05
230.42	V	45.20	-73.20	0.00	0.19	-73.39	-13.00	60.39
1413.00	H	49.15	-68.29	9.07	1.22	-60.44	-13.00	47.44
1413.00	V	48.72	-69.25	9.07	1.22	-61.40	-13.00	48.40
2119.50	H	53.90	-62.53	11.28	1.11	-52.36	-13.00	39.36
2119.50	V	56.43	-59.98	11.28	1.11	-49.81	-13.00	36.81
2826.00	H	47.21	-68.17	13.31	1.36	-56.22	-13.00	43.22
2826.00	V	45.94	-69.67	13.31	1.36	-57.72	-13.00	44.72
1RB, 5MHz,QPSK, Frequency:710 MHz								
173.90	H	37.12	-78.25	0.00	0.17	-78.42	-13.00	65.42
226.70	V	43.39	-74.84	0.00	0.19	-75.03	-13.00	62.03
1420.00	H	50.44	-67.16	9.10	1.23	-59.29	-13.00	46.29
1420.00	V	48.09	-70.01	9.10	1.23	-62.14	-13.00	49.14
2130.00	H	53.41	-63.03	11.22	1.11	-52.92	-13.00	39.92
2130.00	V	55.26	-61.15	11.22	1.11	-51.04	-13.00	38.04
2840.00	H	48.27	-66.92	13.42	1.36	-54.86	-13.00	41.86
2840.00	V	49.22	-66.21	13.42	1.36	-54.15	-13.00	41.15
1RB, 5MHz,QPSK, Frequency: 713.5 MHz								
123.40	H	39.03	-70.87	0.00	0.14	-71.01	-13.00	58.01
235.90	V	44.42	-74.24	0.00	0.19	-74.43	-13.00	61.43
1427.00	H	48.19	-69.57	9.14	1.24	-61.67	-13.00	48.67
1427.00	V	51.17	-67.06	9.14	1.24	-59.16	-13.00	46.16
2140.50	H	54.61	-61.84	11.16	1.12	-51.80	-13.00	38.80
2140.50	V	51.38	-65.03	11.16	1.12	-54.99	-13.00	41.99
2854.00	H	47.97	-67.02	13.53	1.35	-54.84	-13.00	41.84
2854.00	V	49.27	-65.97	13.53	1.35	-53.79	-13.00	40.79

LTE Band 38(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)			
1RB, 5MHz,QPSK, Frequency: 2572.5 MHz								
235.70	H	37.78	-77.91	0.00	0.19	-78.10	-25.00	53.10
142.87	V	46.53	-72.39	0.00	0.15	-72.54	-25.00	47.54
5145.00	H	53.54	-54.42	13.95	1.40	-41.87	-25.00	16.87
5145.00	V	60.77	-47.13	13.95	1.40	-34.58	-25.00	9.58
7717.50	H	47.85	-54.71	13.38	1.48	-42.81	-25.00	17.81
7717.50	V	50.81	-52.06	13.38	1.48	-40.16	-25.00	15.16
1RB, 5MHz,QPSK, Frequency: 2595 MHz								
298.80	H	35.15	-80.28	0.00	0.20	-80.48	-25.00	55.48
238.40	V	42.58	-76.20	0.00	0.19	-76.39	-25.00	51.39
5190.00	H	52.55	-55.04	13.99	1.51	-42.56	-25.00	17.56
5190.00	V	58.93	-48.71	13.99	1.51	-36.23	-25.00	11.23
7785.00	H	48.16	-54.58	13.32	1.53	-42.79	-25.00	17.79
7785.00	V	50.17	-52.82	13.32	1.53	-41.03	-25.00	16.03
1RB, 5MHz,QPSK, Frequency: 2617.5 MHz								
398.90	H	38.38	-72.53	0.00	0.19	-72.72	-25.00	47.72
224.50	V	44.27	-73.85	0.00	0.18	-74.03	-25.00	49.03
5235.00	H	53.77	-54.36	14.11	1.40	-41.65	-25.00	16.65
5235.00	V	60.75	-47.46	14.11	1.40	-34.75	-25.00	9.75
7852.50	H	47.51	-55.41	13.25	1.58	-43.74	-25.00	18.74
7852.50	V	49.29	-53.82	13.25	1.58	-42.15	-25.00	17.15

LTE Band 41(30MHz-27GHz):

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)			
1RB, 5MHz,QPSK, Frequency: 2498.5 MHz								
98.12	H	38.36	-74.74	0.00	0.12	-74.86	-25.00	49.86
186.70	V	41.67	-76.42	0.00	0.17	-76.59	-25.00	51.59
4997.00	H	63.23	-46.59	14.00	1.44	-34.03	-25.00	9.03
4997.00	V	65.88	-43.67	14.00	1.44	-31.11	-25.00	6.11
7495.50	H	52.84	-49.17	13.20	1.32	-37.29	-25.00	12.29
7495.50	V	51.90	-50.60	13.20	1.32	-38.72	-25.00	13.72
1RB, 5MHz,QPSK, Frequency: 2593 MHz								
192.10	H	38.09	-77.48	0.00	0.18	-77.66	-25.00	52.66
260.10	V	45.38	-73.43	0.00	0.19	-73.62	-25.00	48.62
5186.00	H	62.31	-45.31	13.99	1.50	-32.82	-25.00	7.82
5186.00	V	64.12	-43.55	13.99	1.50	-31.06	-25.00	6.06
7779.00	H	51.80	-50.92	13.32	1.53	-39.13	-25.00	14.13
7779.00	V	53.27	-49.71	13.32	1.53	-37.92	-25.00	12.92
1RB, 5MHz,QPSK, Frequency: 2687.5 MHz								
61.60	H	38.59	-75.33	-9.45	0.08	-84.86	-25.00	59.86
232.80	V	43.87	-74.64	0.00	0.19	-74.83	-25.00	49.83
5375.00	H	62.23	-45.60	14.15	1.38	-32.83	-25.00	7.83
5375.00	V	66.23	-41.59	14.15	1.38	-28.82	-25.00	3.82
8062.50	H	51.01	-52.11	13.34	1.72	-40.49	-25.00	15.49
8062.50	V	54.07	-49.12	13.34	1.72	-37.50	-25.00	12.50

LTE Band 42(30MHz-36GHz):

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)			
1RB, 5MHz,QPSK, Frequency: 3452.5 MHz								
42.65	H	42.65	-59.66	-22.90	0.07	-82.63	-13.00	69.63
148.29	V	44.87	-73.95	0.00	0.15	-74.10	-13.00	61.10
6905.00	H	49.65	-54.38	13.69	1.80	-42.49	-13.00	29.49
6905.00	V	50.10	-53.81	13.69	1.80	-41.92	-13.00	28.92
10357.50	H	48.62	-51.12	13.49	0.40	-38.03	-13.00	25.03
10357.50	V	49.62	-49.56	13.49	0.40	-36.47	-13.00	23.47
1RB, 5MHz,QPSK, Frequency: 3500MHz								
125.48	H	40.59	-69.59	0.00	0.14	-69.73	-13.00	56.73
134.95	V	42.35	-76.00	0.00	0.15	-76.15	-13.00	63.15
7000.00	H	48.26	-55.51	13.50	1.83	-43.84	-13.00	30.84
7000.00	V	49.62	-53.98	13.50	1.83	-42.31	-13.00	29.31
10500.00	H	48.74	-51.00	13.30	0.28	-37.98	-13.00	24.98
10500.00	V	49.26	-49.71	13.30	0.28	-36.69	-13.00	23.69
1RB, 5MHz,QPSK, Frequency: 3547.5 MHz								
133.01	H	40.65	-70.54	0.00	0.15	-70.69	-13.00	57.69
151.29	V	45.17	-73.60	0.00	0.16	-73.76	-13.00	60.76
7095.00	H	53.26	-50.17	13.22	1.73	-38.68	-13.00	25.68
7095.00	V	55.49	-47.90	13.22	1.73	-36.41	-13.00	23.41
10642.50	H	49.18	-50.22	13.04	0.43	-37.61	-13.00	24.61
10642.50	V	49.67	-49.00	13.04	0.43	-36.39	-13.00	23.39

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)			
1RB, 5MHz,QPSK, Frequency: 1710.7 MHz								
266.50	H	36.68	-79.07	0.00	0.19	-79.26	-13.00	66.26
224.46	V	43.95	-74.17	0.00	0.18	-74.35	-13.00	61.35
3421.40	H	48.02	-64.58	14.04	1.63	-52.17	-13.00	39.17
3421.40	V	50.37	-62.31	14.04	1.63	-49.90	-13.00	36.90
5132.10	H	53.70	-54.37	13.93	1.37	-41.81	-13.00	28.81
5132.10	V	58.19	-49.79	13.93	1.37	-37.23	-13.00	24.23
1RB, 5MHz,QPSK, Frequency: 1745 MHz								
280.60	H	36.75	-78.86	0.00	0.20	-79.06	-13.00	66.06
223.40	V	43.68	-74.39	0.00	0.18	-74.57	-13.00	61.57
3490.00	H	50.10	-62.25	13.83	1.61	-50.03	-13.00	37.03
3490.00	V	48.87	-63.49	13.83	1.61	-51.27	-13.00	38.27
5235.00	H	56.34	-51.79	14.11	1.40	-39.08	-13.00	26.08
5235.00	V	59.33	-48.88	14.11	1.40	-36.17	-13.00	23.17
1RB, 5MHz,QPSK, Frequency: 1779.3 MHz								
332.50	H	36.29	-77.65	0.00	0.20	-77.85	-13.00	64.85
169.30	V	39.92	-78.72	0.00	0.16	-78.88	-13.00	65.88
3558.60	H	49.31	-63.16	13.98	1.55	-50.73	-13.00	37.73
3558.60	V	48.51	-63.96	13.98	1.55	-51.53	-13.00	38.53
5337.90	H	57.75	-50.80	14.22	1.26	-37.84	-13.00	24.84
5337.90	V	60.91	-47.67	14.22	1.26	-34.71	-13.00	21.71

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

APPENDIX A - EUT PHOTOGRAPHS

Please refer to the attachment 2402S71481E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2402S71481E-RF-INP EUT INTERNAL PHOTOGRAPHS

APPENDIX B - TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2402S71481E-RF-00E-TSP TEST SETUP PHOTOGRAPHS.

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