

Appendix A: Test Results of BDR&EDR

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Appendix A.1 Test Results of Conducted Emission on AC Mains

Note: All modes have been tested, and the report only reflects the worst mode.

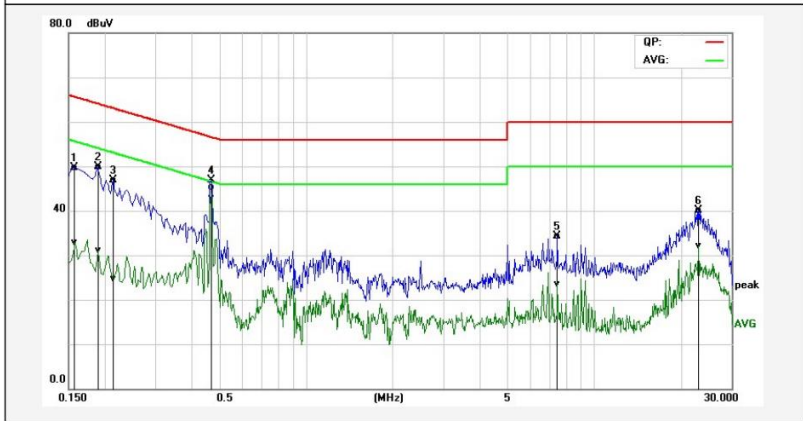
Test Mode :

Working

Test Voltage :

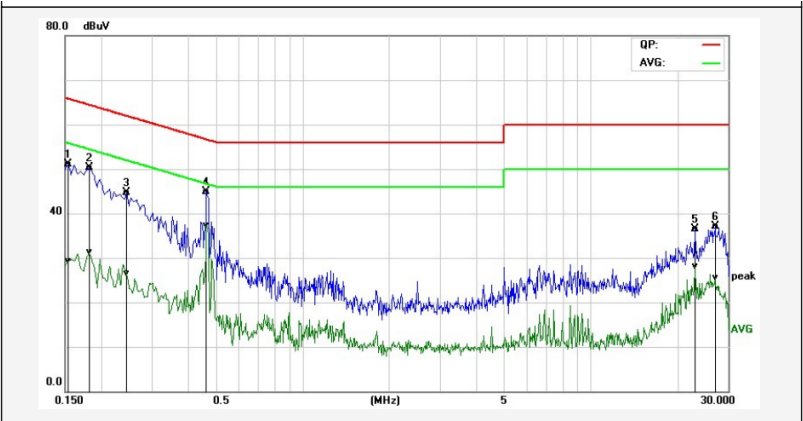
AC 110V/60Hz

L



No.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
1P	0.1580	40.01	23.18	9.74	49.75	32.92	65.56	55.57	-15.81	-22.65	Pass
2P	0.1900	40.23	21.43	9.74	49.97	31.17	64.03	54.04	-14.06	-22.87	Pass
3P	0.2140	37.11	14.94	9.74	46.85	24.68	63.04	53.05	-16.19	-28.37	Pass
4*	0.4700	35.63	33.23	9.73	45.36	42.96	56.51	46.51	-11.15	-3.55	Pass
5P	7.4580	24.47	13.78	9.82	34.29	23.60	60.00	50.00	-25.71	-26.40	Pass
6P	23.1259	29.85	21.85	10.16	40.01	32.01	60.00	50.00	-19.99	-17.99	Pass

N



No.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
1P	0.1539	41.43	19.52	9.74	51.17	29.26	65.78	55.79	-14.61	-26.53	Pass
2P	0.1819	40.52	21.57	9.74	50.26	31.31	64.39	54.40	-14.13	-23.09	Pass
3P	0.2460	34.94	16.66	9.76	44.70	26.42	61.89	51.89	-17.19	-25.47	Pass
4*	0.4660	35.01	27.54	9.82	44.83	37.36	56.58	46.58	-11.75	-9.22	Pass
5P	23.1299	25.71	17.37	10.71	36.42	28.08	60.00	50.00	-23.58	-21.92	Pass
6P	27.0020	26.33	14.78	10.75	37.08	25.53	60.00	50.00	-22.92	-24.47	Pass

Correction Factor = insertion loss of LISN + cable loss;
Reading = Reading Amplitude in the instrument;
Result = Correction Factor + Reading;
Margin = Result – Limit

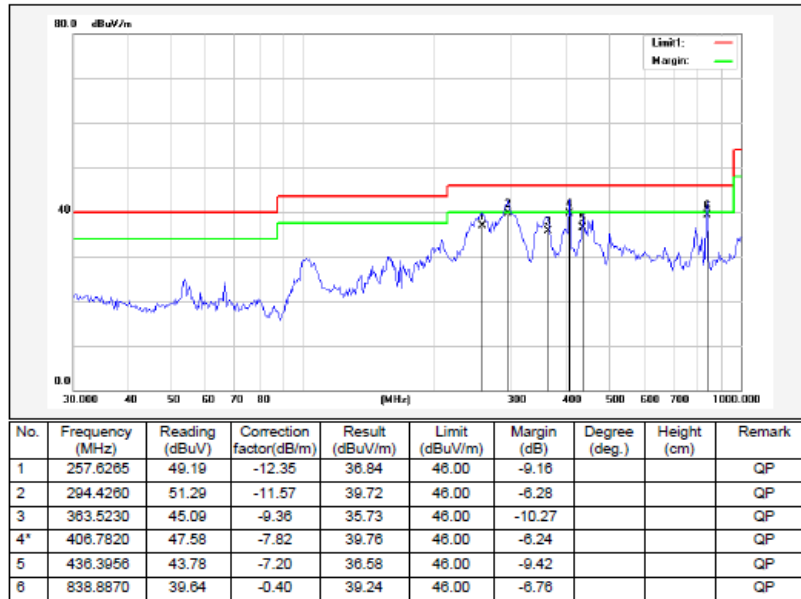
Appendix A.2 Test Results of Radiated Spurious Emission

Below 1G:

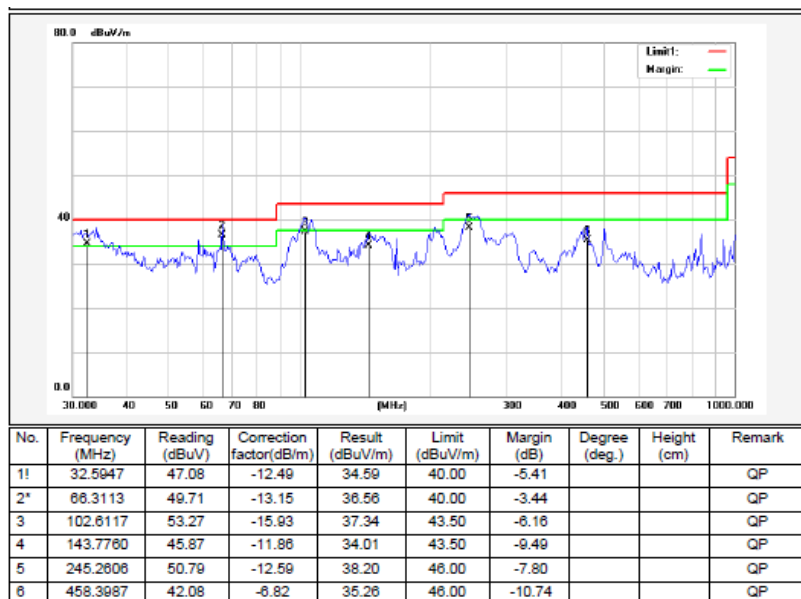
Note: All modes have been tested, and the report only reflects the worst mode.

Test Mode : Working Test Voltage : AC 110V/60Hz

Horizontal



Vertical



Correction Factor = antenna factor + cable loss – amplifier gain;

Reading = Reading Amplitude in the instrument;

Result = Correction Factor + Reading;

Margin = Result – Limit.

Above 1GHz:
GFSK - Low (worst mode) Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3890	59.21	-16.11	43.1	74	-30.9	peak
2	4910	57.51	-13.94	43.57	74	-30.43	peak
3	5658	57.22	-12.61	44.61	61.42	-16.81	peak
4	6916	56.43	-9.9	46.53	61.42	-14.89	peak
5	8854	56.42	-6.88	49.54	61.42	-11.88	peak
6	9874	55.77	-4.95	50.82	61.42	-10.6	peak

GFSK - Low (worst mode) Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3346	59.63	-18.1	41.53	74	-32.47	peak
2	4230	58.53	-15.95	42.58	74	-31.42	peak
3	5080	57.99	-13.71	44.28	74	-29.72	peak
4	7188	57.19	-9.25	47.94	61.42	-13.48	peak
5	9024	55.48	-6.46	49.02	74	-24.98	peak
6	10112	55.28	-4.44	50.84	61.42	-10.58	peak

GFSK - Middle (worst mode) Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3992	59.35	-15.82	43.53	74	-30.47	peak
2	4264	58.88	-15.45	43.43	74	-30.57	peak
3	4876	58.89	-14.14	44.75	74	-29.25	peak
4	6134	56.72	-11.19	45.53	61.42	-15.89	peak
5	6950	56.74	-9.82	46.92	61.42	-14.5	peak
6	8106	56.77	-9.03	47.74	74	-26.26	peak

GFSK - Middle (worst mode) Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3210	62.13	-18.67	43.46	61.42	-17.96	peak
2	4774	57.94	-14.87	43.07	74	-30.93	peak
3	5318	57.71	-13.52	44.19	61.42	-17.23	peak
4	6950	56.7	-9.82	46.88	61.42	-14.54	peak
5	9024	56.52	-6.46	50.06	74	-23.94	peak
6	10146	55.73	-4.4	51.33	61.42	-10.09	peak

GFSK - High (worst mode) Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3822	58.91	-16.01	42.9	74	-31.1	peak
2	5046	57.77	-13.86	43.91	74	-30.09	peak
3	6984	56.6	-9.74	46.86	61.42	-14.56	peak
4	7800	56.56	-9.11	47.45	61.42	-13.97	peak
5	8990	55.79	-6.5	49.29	61.42	-12.13	peak
6	10452	55.77	-3.97	51.8	61.42	-9.62	peak

GFSK - High (worst mode) Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	3210	60.89	-18.67	42.22	61.42	-19.2	peak
2	4264	58.25	-15.45	42.8	74	-31.2	peak
3	4672	58	-14.98	43.02	74	-30.98	peak
4	6916	56.79	-9.9	46.89	61.42	-14.53	peak
5	7698	55.99	-8.91	47.08	74	-26.92	peak
6	8854	57.67	-6.88	50.79	61.42	-10.63	peak

 $\pi/4$ DQPSK - Low (worst mode) Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	3074	59.82	-19.45	40.37	61.42	-21.05	peak
2	3992	58.57	-15.82	42.75	74	-31.25	peak
3	4298	57.72	-14.95	42.77	74	-31.23	peak
4	5046.062	56.95	-13.86	43.09	74	-30.91	peak
5	6100	56.62	-11.28	45.34	61.42	-16.08	peak
6	6916	56.49	-9.9	46.59	61.42	-14.83	peak

 $\pi/4$ DQPSK - Low (worst mode) Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2938	60.22	-20.1	40.12	61.42	-21.3	peak
2	3210	59.51	-18.67	40.84	61.42	-20.58	peak
3	5318	57.44	-13.52	43.92	61.42	-17.5	peak
4	6542	56.38	-10.58	45.8	61.42	-15.62	peak
5	7188	55.94	-9.25	46.69	61.42	-14.73	peak
6	7800	56.44	-9.11	47.33	61.42	-14.09	peak

 $\pi/4$ DQPSK - Middle (worst mode) Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	3210	60.4	-18.67	41.73	61.42	-19.69	peak
2	3856	59.23	-16.07	43.16	74	-30.84	peak
3	4264	58.33	-15.45	42.88	74	-31.12	peak
4	5692	57.2	-12.54	44.66	61.42	-16.76	peak
5	6916	56.71	-9.9	46.81	61.42	-14.61	peak
6	7800	57.02	-9.11	47.91	61.42	-13.51	peak

$\pi/4$ DQPSK - Middle (worst mode) Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	3210	61.24	-18.67	42.57	61.42	-18.85	peak
2	4264	58.45	-15.45	43	74	-31	peak
3	4944	57.78	-13.98	43.8	74	-30.2	peak
4	6134	56.59	-11.19	45.4	61.42	-16.02	peak
5	6610	56.85	-10.51	46.34	61.42	-15.08	peak
6	7528	56.63	-8.8	47.83	74	-26.17	peak

 $\pi/4$ DQPSK - High (worst mode) Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	3890	58.47	-16.11	42.36	74	-31.64	peak
2	5590	56.76	-12.72	44.04	61.42	-17.38	peak
3	6916	56.32	-9.9	46.42	61.42	-15	peak
4	7460	55.61	-8.8	46.81	74	-27.19	peak
5	9024	56.12	-6.46	49.66	74	-24.34	peak
6	10010	55.11	-4.65	50.46	61.42	-10.96	peak

 $\pi/4$ DQPSK - High (worst mode) Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	3992	60.12	-15.82	44.3	74	-29.7	peak
2	4400	58.58	-15.69	42.89	74	-31.11	peak
3	6814	56.17	-10.13	46.04	61.42	-15.38	peak
4	7528	55.79	-8.8	46.99	74	-27.01	peak
5	8888	56.04	-6.79	49.25	61.42	-12.17	peak
6	10112	54.98	-4.44	50.54	61.42	-10.88	peak

8DPSK - Low (worst mode) Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3992	58.21	-15.82	42.39	74	-31.61	peak
2	5148	57.52	-13.62	43.9	74	-30.1	peak
3	5896	56.11	-11.84	44.27	61.42	-17.15	peak
4	6950	56.4	-9.82	46.58	61.42	-14.84	peak
5	7562	56.14	-8.8	47.34	74	-26.66	peak
6	9330	56	-6.32	49.68	74	-24.32	peak

8DPSK - Low (worst mode) Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2938	60.8	-20.1	40.7	61.42	-20.72	peak
2	4672	57.61	-14.98	42.63	74	-31.37	peak
3	5318	57.82	-13.52	44.3	61.42	-17.12	peak
4	7188	56.74	-9.25	47.49	61.42	-13.93	peak
5	8956	55.61	-6.6	49.01	61.42	-12.41	peak
6	9840	55.2	-5.06	50.14	61.42	-11.28	peak

8DPSK - Middle (worst mode) Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4808	57.61	-14.84	42.77	74	-31.23	peak
2	5862	56.89	-12.14	44.75	61.42	-16.67	peak
3	6950	56.52	-9.82	46.7	61.42	-14.72	peak
4	7392	55.83	-8.9	46.93	74	-27.07	peak
5	8208	57.11	-8.73	48.38	74	-25.62	peak
6	9092	56.08	-6.48	49.6	74	-24.4	peak

8DPSK - Middle (worst mode) Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3210	60.72	-18.67	42.05	61.42	-19.37	peak
2	3958	61.13	-15.93	45.2	74	-28.8	peak
3	4910	56.77	-13.94	42.83	74	-31.17	peak
4	6950	56.68	-9.82	46.86	61.42	-14.56	peak
5	8140	55.81	-8.93	46.88	74	-27.12	peak
6	8820	56.34	-6.97	49.37	61.42	-12.05	peak

8DPSK - High (worst mode) Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3924	58.35	-16.04	42.31	74	-31.69	peak
2	4298	57.61	-14.95	42.66	74	-31.34	peak
3	4944	57.21	-13.98	43.23	74	-30.77	peak
4	5692	56.71	-12.54	44.17	61.42	-17.25	peak
5	7018	55.92	-9.66	46.26	61.42	-15.16	peak
6	7460	55.98	-8.8	47.18	74	-26.82	peak

8DPSK - High (worst mode) Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3210	61.74	-18.67	43.07	61.42	-18.35	peak
2	3856	59.88	-16.07	43.81	74	-30.19	peak
3	4808	57.82	-14.84	42.98	74	-31.02	peak
4	6780	56.06	-10.17	45.89	61.42	-15.53	peak
5	7630	56.04	-8.86	47.18	74	-26.82	peak
6	9194	55.53	-6.43	49.1	74	-24.9	peak

Node:

1. Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported..
2. Radiated emissions measured in frequency above 1GHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. According to section part 15.247(d), frequencies other than those required by part 15.205(a) are limited to the level of the intended emission (min.81.42) minus 20dB.
5. Result formula:

Correction Factor = antenna factor + cable loss – amplifier gain;

Reading = Reading Amplitude in the instrument;

Result = Correction Factor + Reading;

Margin (dB) = result in dBuV/m – limit in dBuV/m.

Restricted band Requirements							
GFSK - Low (worst mode)							
Horizontal							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2352.56	63.45	-21.94	41.51	74	-32.49	peak
2	2352.56	59.22	-21.94	37.28	54	-16.72	AVG
3	2390	58.94	-21.89	37.05	74	-36.95	peak
4	2390	56	-21.89	34.11	54	-19.89	AVG
5	2402.15	115.1	-21.87	93.23	116.2	-22.97	peak
Vertical							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2383.72	65.96	-21.9	44.06	74	-29.94	peak
2	2383.72	61.91	-21.9	40.01	54	-13.99	AVG
3	2390	63.52	-21.89	41.63	74	-32.37	peak
4	2390	59.13	-21.89	37.24	54	-16.76	AVG
5	2401.96	104.77	-21.87	82.9	116.2	-33.3	peak
GFSK - High (worst mode)							
Horizontal							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2480.1	115.25	-21.53	93.72	116.2	-22.48	peak
2	2483.5	60.59	-21.52	39.07	74	-34.93	peak
3	2483.5	58	-21.52	36.48	54	-17.52	AVG
4	2499.1	63.7	-21.47	42.23	74	-31.77	peak
5	2499.1	59.53	-21.47	38.06	54	-15.94	AVG
Vertical							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2480.15	102.95	-21.53	81.42	116.2	-34.78	peak
2	2483.5	63.07	-21.52	41.55	74	-32.45	peak
3	2483.5	59.16	-21.52	37.64	54	-16.36	AVG
4	2492.6	67.4	-21.49	45.91	74	-28.09	peak
5	2492.6	60.48	-21.49	38.99	54	-15.01	AVG

Correction Factor = antenna factor + cable loss – amplifier gain;

Reading = Reading Amplitude in the instrument;

Result = Correction Factor + Reading;

Margin = Result – Limit

$\pi/4$ DQPSK - Low (worst mode)							
Horizontal							
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2352.37	68.06	-21.95	46.11	74	-27.89	peak
2	2352.37	61.19	-21.95	39.24	54	-14.76	AVG
3	2390	59.07	-21.89	37.18	74	-36.82	peak
4	2390	56.46	-21.89	34.57	54	-19.43	AVG
5	2402.15	116.43	-21.87	94.56	116.2	-21.64	peak
Vertical							
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2352.37	67.27	-21.95	45.32	74	-28.68	peak
2	2352.37	62.58	-21.95	40.63	54	-13.37	AVG
3	2390	65.61	-21.89	43.72	74	-30.28	peak
4	2390	60.35	-21.89	38.46	54	-15.54	AVG
5	2401.96	106.79	-21.87	84.92	116.2	-31.28	peak
$\pi/4$ DQPSK - High (worst mode)							
Horizontal							
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2480.2	116.64	-21.53	95.11	116.2	-21.09	peak
2	2483.5	62.82	-21.52	41.3	74	-32.7	peak
3	2483.5	59.75	-21.52	38.23	54	-15.77	AVG
4	2498.85	64.34	-21.47	42.87	74	-31.13	peak
5	2498.85	60.49	-21.47	39.02	54	-14.98	AVG
Vertical							
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.85	104.15	-21.53	82.62	116.2	-33.58	peak
2	2483.5	62.35	-21.52	40.83	74	-33.17	peak
3	2483.5	57.19	-21.52	35.67	54	-18.33	AVG
4	2498.7	69.05	-21.47	47.58	74	-26.42	peak
5	2498.7	60.71	-21.47	39.24	54	-14.76	AVG

Correction Factor = antenna factor + cable loss – amplifier gain;

Reading = Reading Amplitude in the instrument;

Result = Correction Factor + Reading;

Margin = Result – Limit

8DPSK - Low (worst mode)							
Horizontal							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2352.37	69.46	-21.95	47.51	74	-26.49	peak
2	2352.37	61.8	-21.95	39.85	54	-14.15	AVG
3	2390	58.6	-21.89	36.71	74	-37.29	peak
4	2390	57.02	-21.89	35.13	54	-18.87	AVG
5	2402.34	116.71	-21.87	94.84	116.2	-21.36	peak
Vertical							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2353.7	66.45	-21.94	44.51	74	-29.49	peak
2	2353.7	61.36	-21.94	39.42	54	-14.58	AVG
3	2390	62.94	-21.89	41.05	74	-32.95	peak
4	2390	60.5	-21.89	38.61	54	-15.39	AVG
5	2402.34	106.28	-21.87	84.41	116.2	-31.79	peak
8DPSK - High (worst mode)							
Horizontal							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2480	117.01	-21.53	95.48	116.2	-20.72	peak
2	2483.5	63.84	-21.52	42.32	74	-31.68	peak
3	2483.5	59.68	-21.52	38.16	54	-15.84	AVG
4	2498.95	63.86	-21.47	42.39	74	-31.61	peak
5	2498.95	59.45	-21.47	37.98	54	-16.02	AVG
Vertical							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2479.95	104.8	-21.53	83.27	116.2	-32.93	peak
2	2483.5	61.8	-21.52	40.28	74	-33.72	peak
3	2483.5	58.33	-21.52	36.81	54	-17.19	AVG
4	2492.25	64.84	-21.49	43.35	74	-30.65	peak
5	2492.25	61.14	-21.49	39.65	54	-14.35	AVG

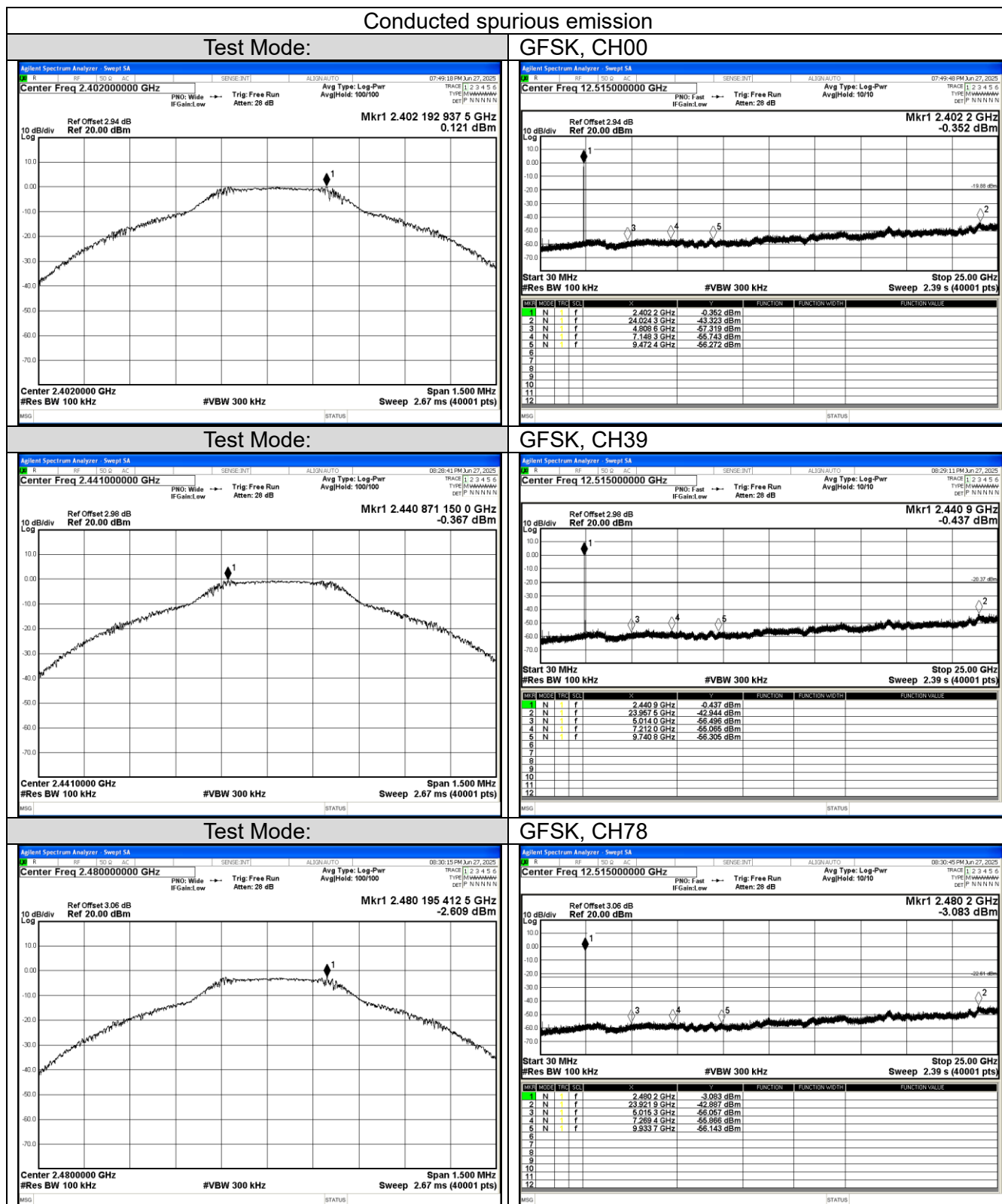
Correction Factor = antenna factor + cable loss – amplifier gain;

Reading = Reading Amplitude in the instrument;

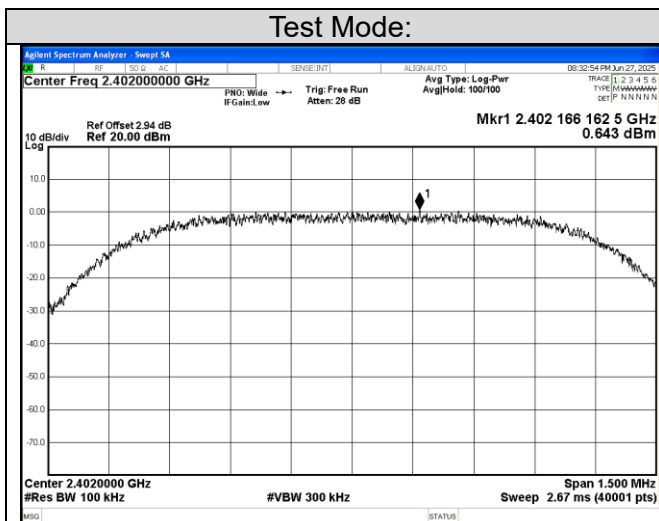
Result = Correction Factor + Reading;

Margin = Result – Limit

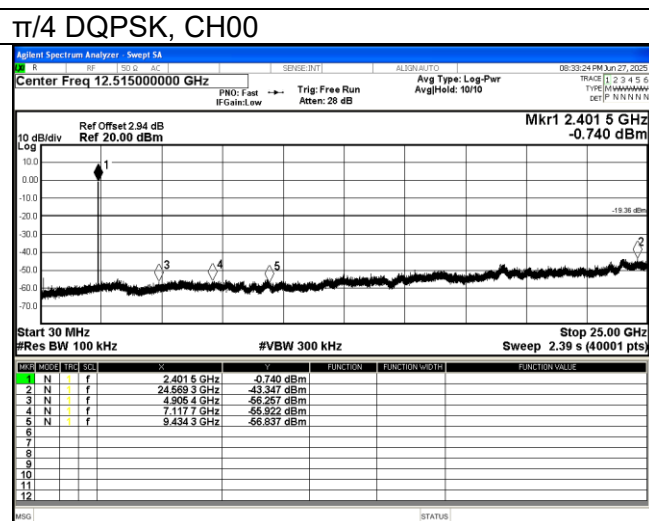
Appendix A.3 Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth



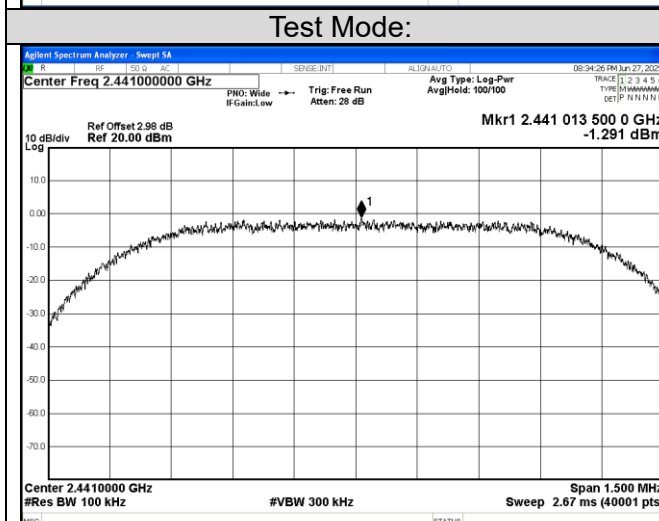
Test Mode:



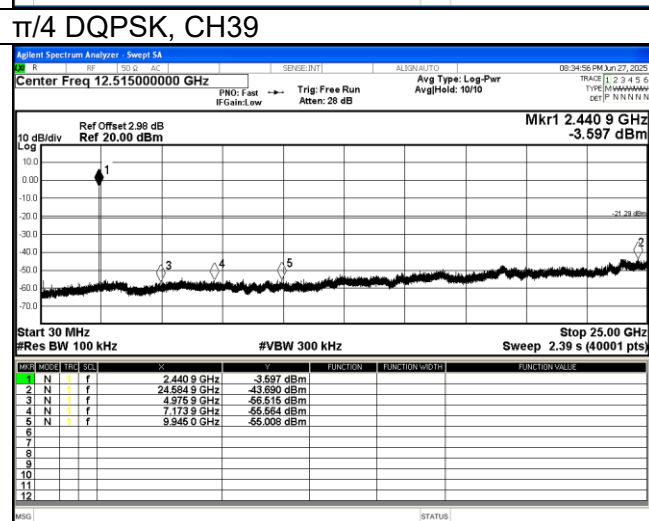
$\pi/4$ DQPSK, CH00



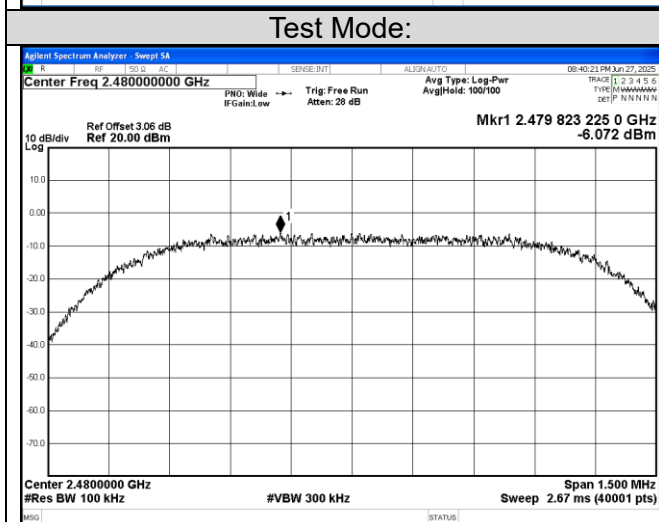
Test Mode:



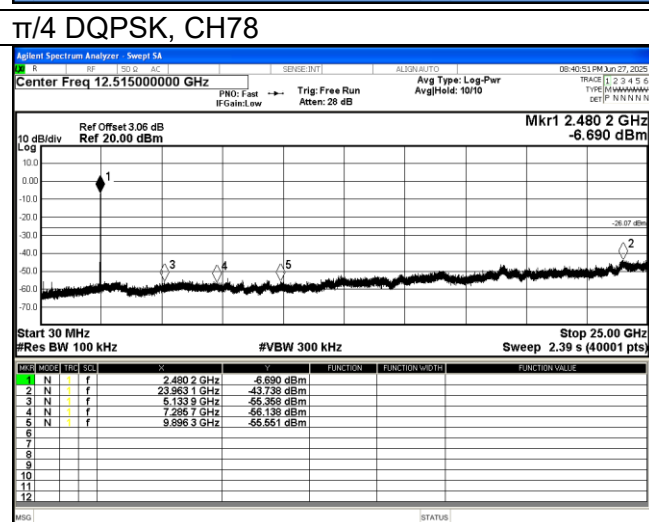
$\pi/4$ DQPSK, CH39



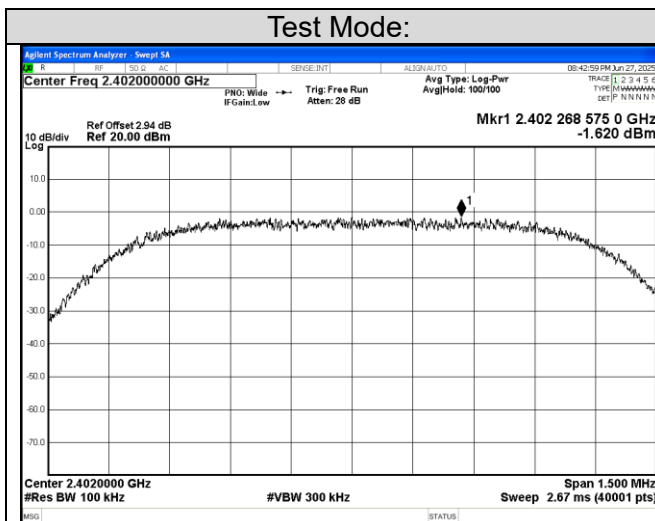
Test Mode:



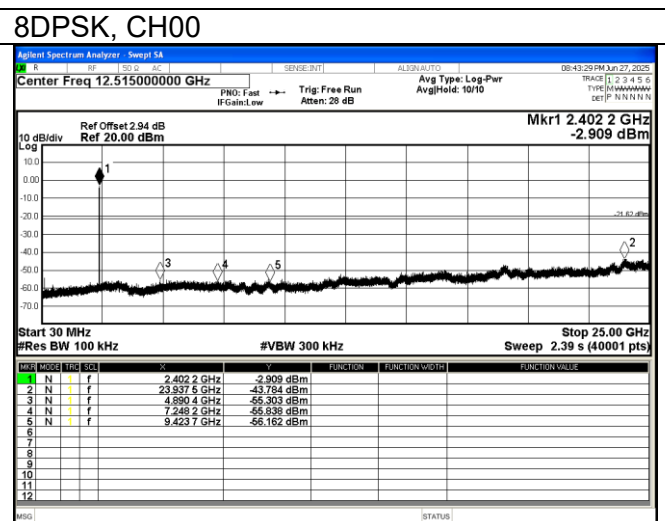
$\pi/4$ DQPSK, CH78



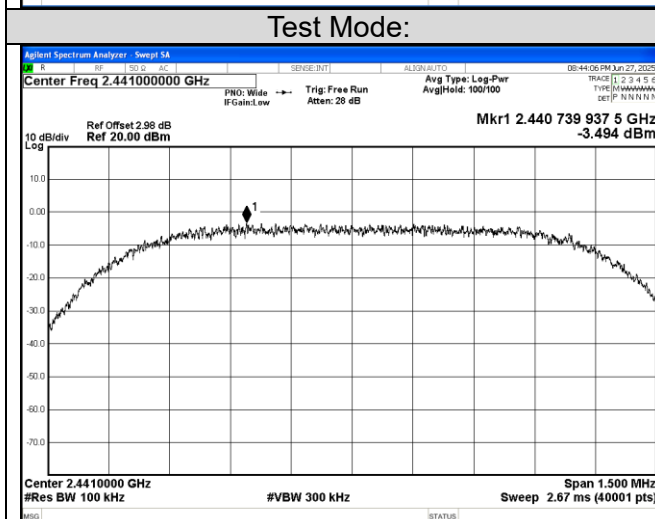
Test Mode:



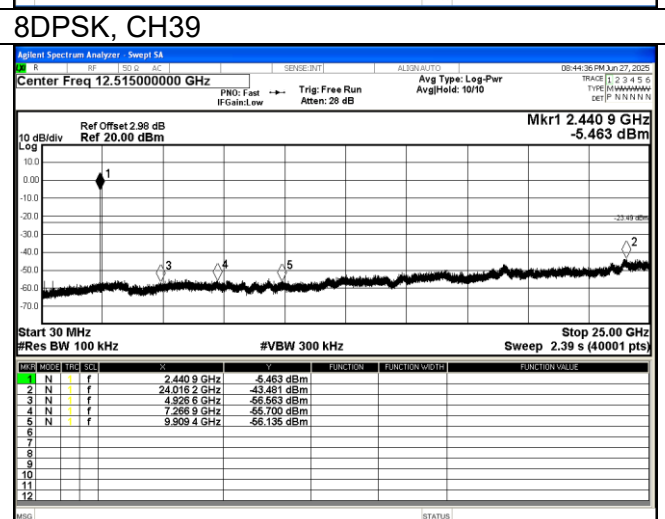
8DPSK, CH00



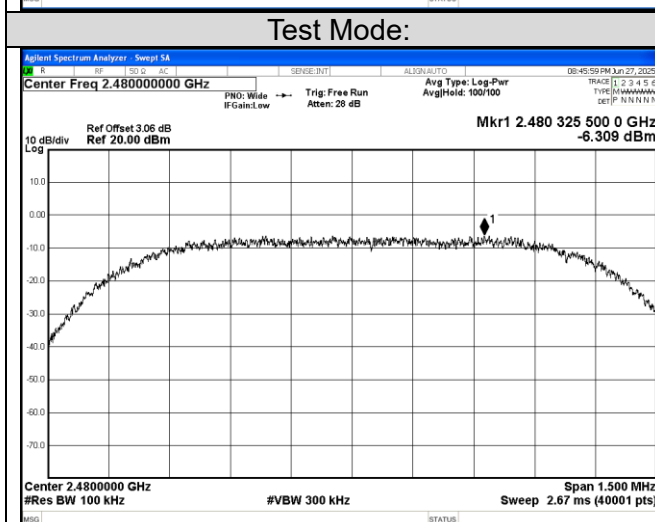
Test Mode:



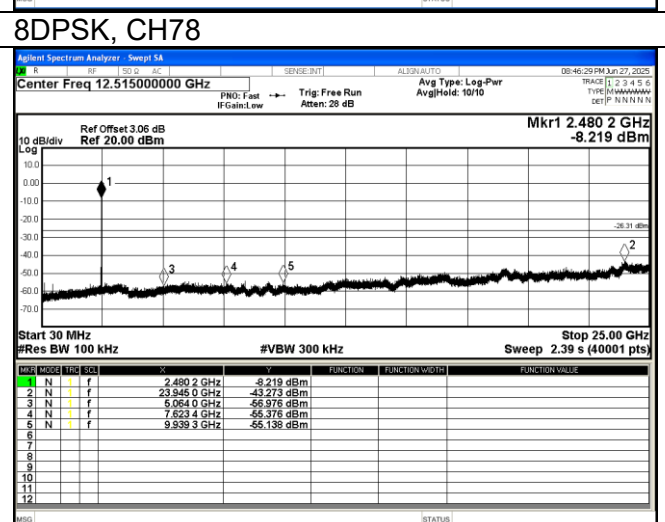
8DPSK, CH39



Test Mode:



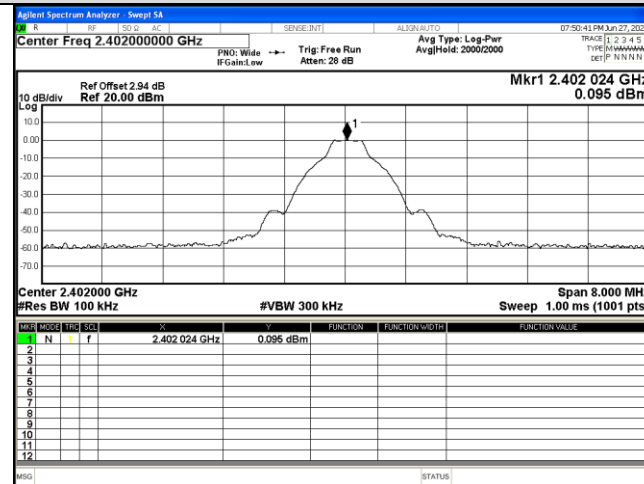
8DPSK, CH78



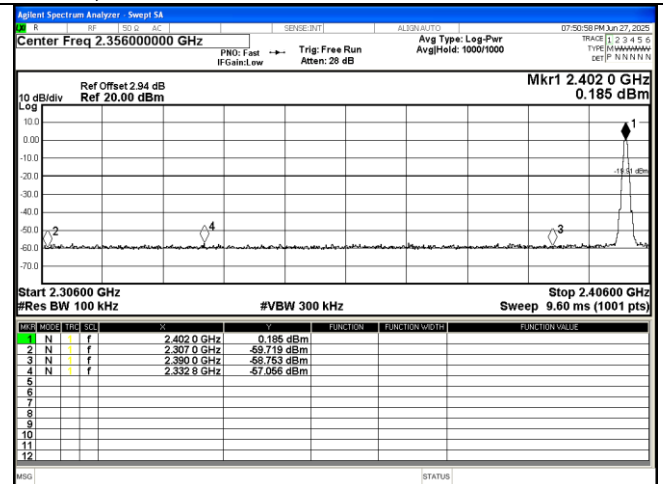


For Band edge (it's also the reference level for conducted spurious emission)

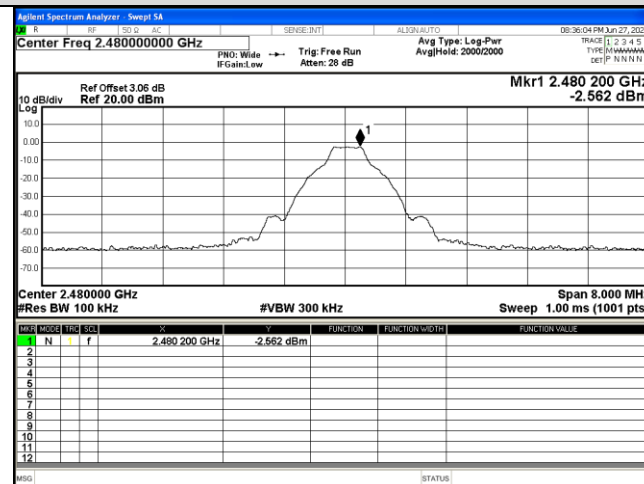
Test Mode:



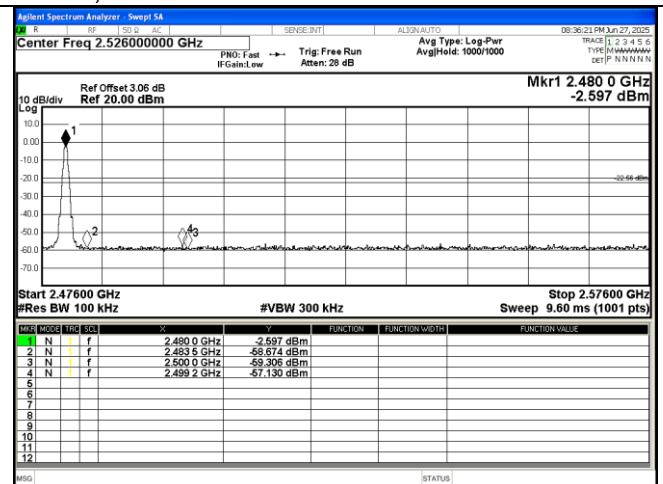
GFSK, CH00



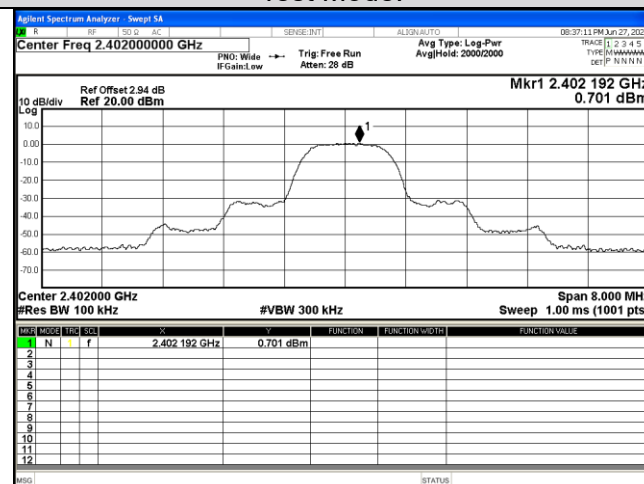
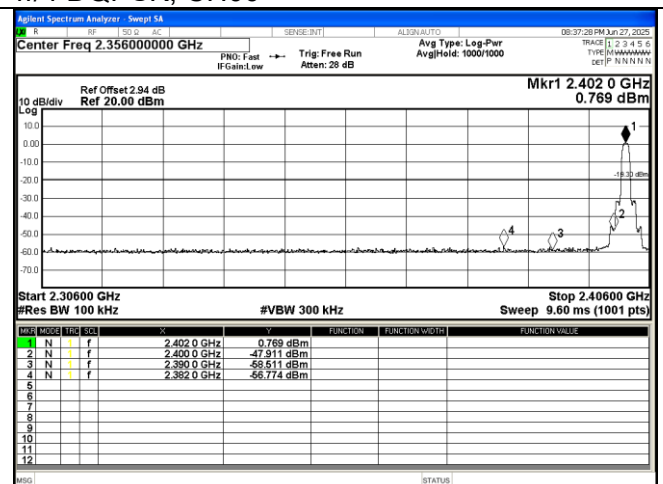
Test Mode:



GFSK, CH78

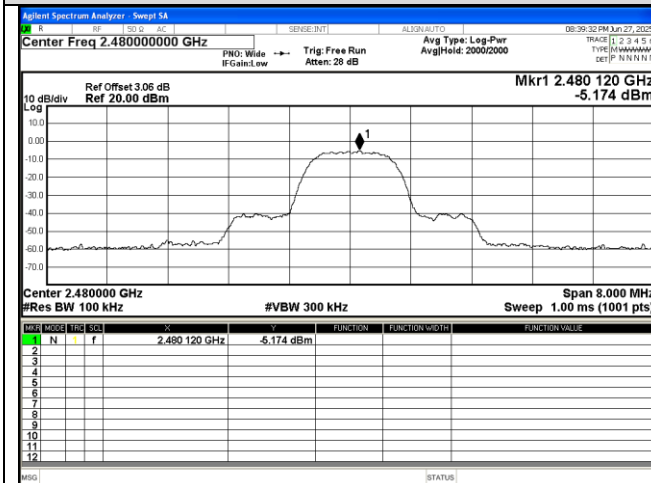
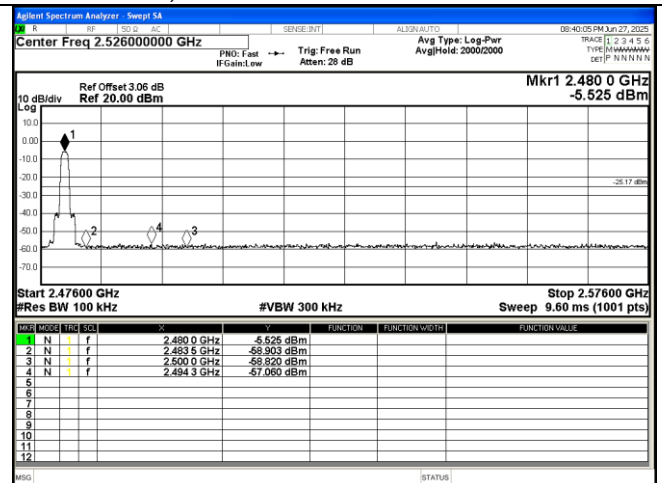


Test Mode:

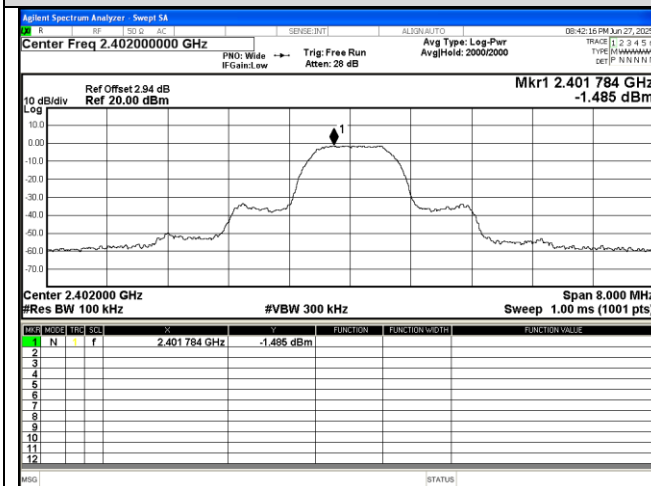
 $\pi/4$ DQPSK, CH00



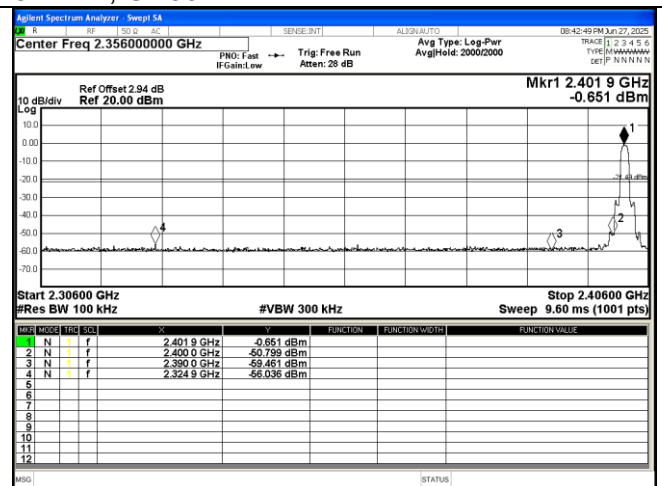
Test Mode:

 $\pi/4$ DQPSK, CH78

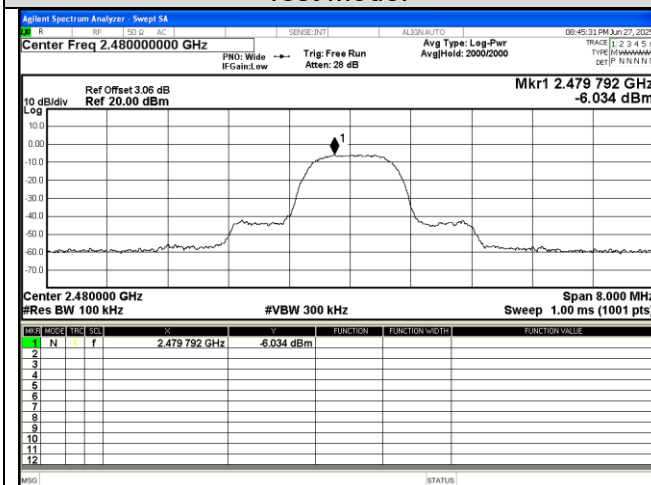
Test Mode:



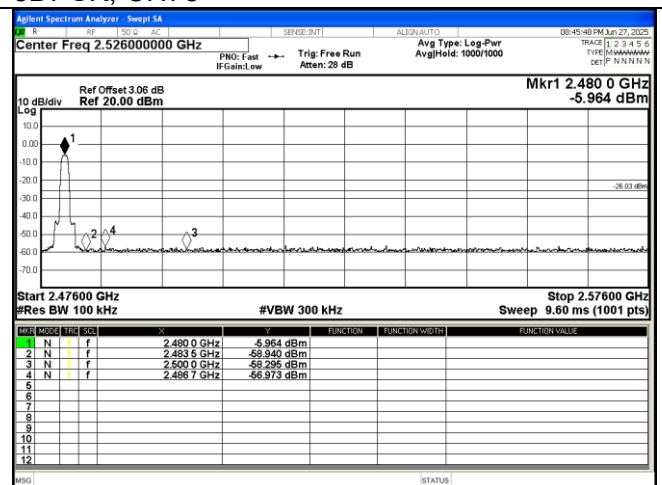
8DPSK, CH00



Test Mode:

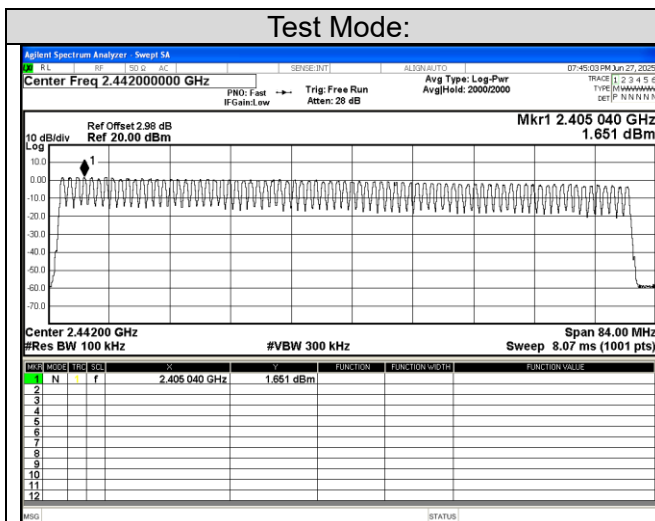


8DPSK, CH78

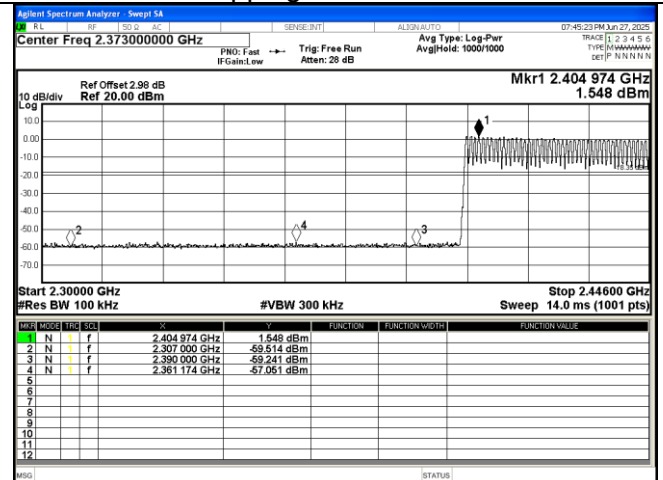




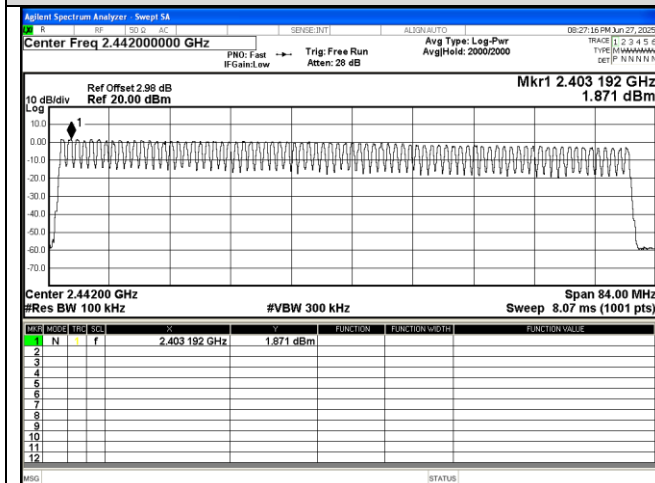
Test Mode:



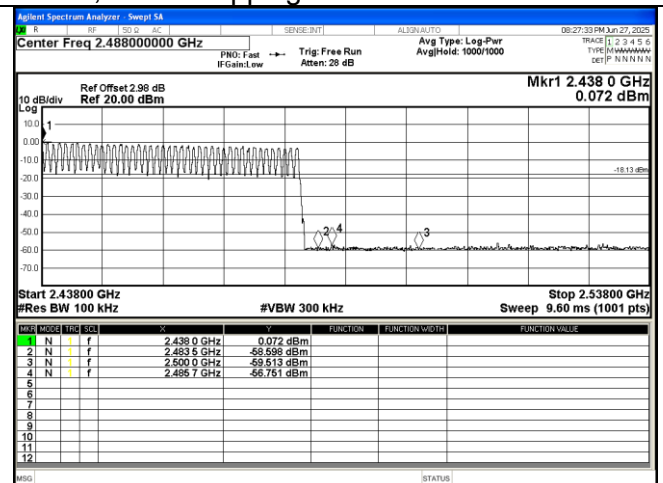
GFSK, CH00 Hopping



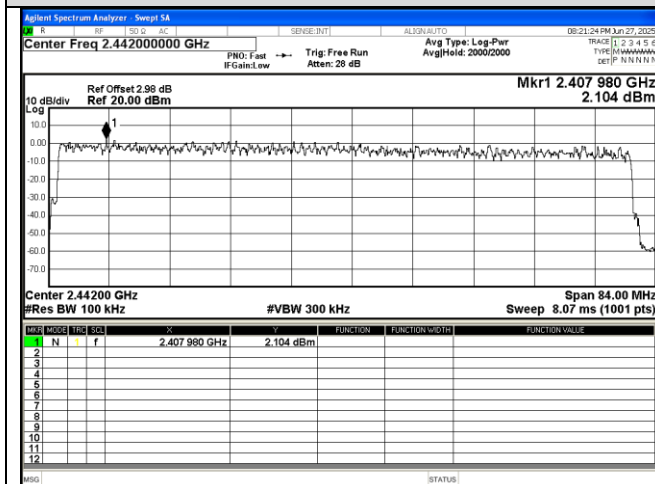
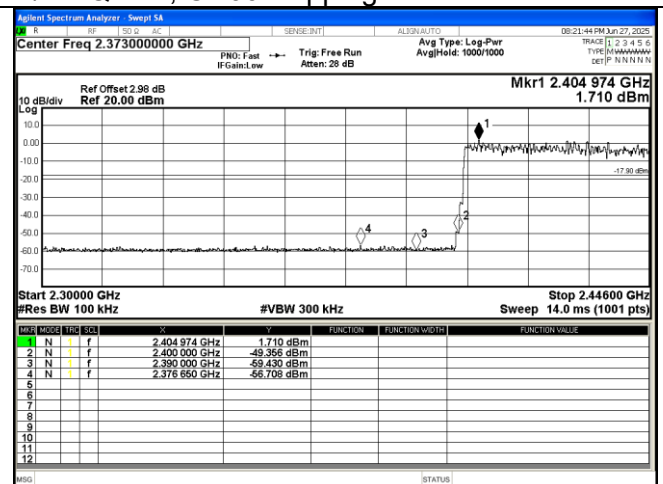
Test Mode:



GFSK, CH78 Hopping

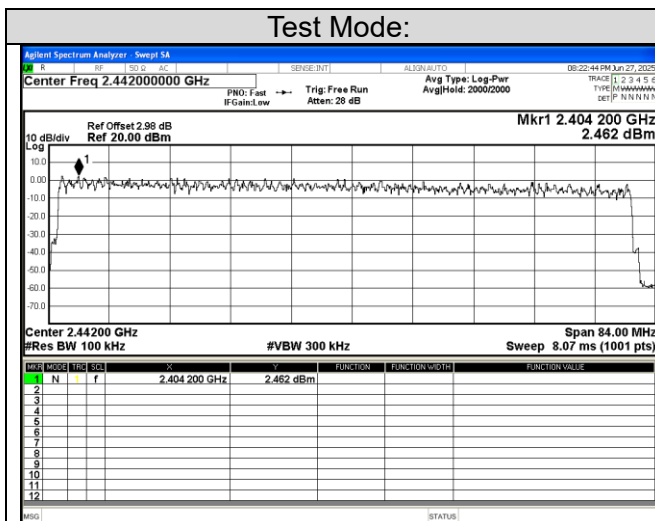
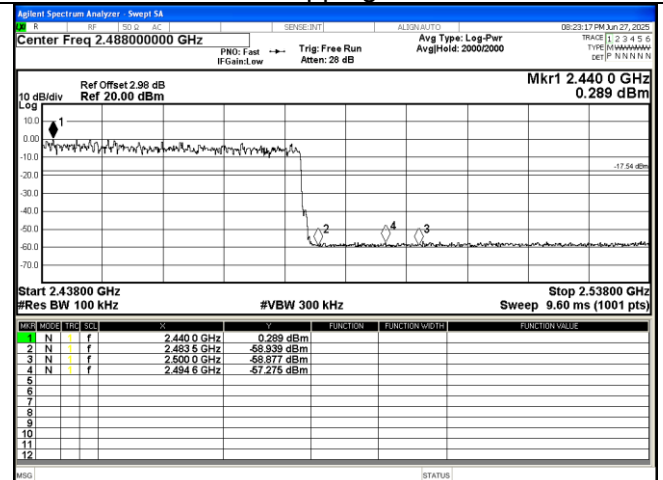


Test Mode:

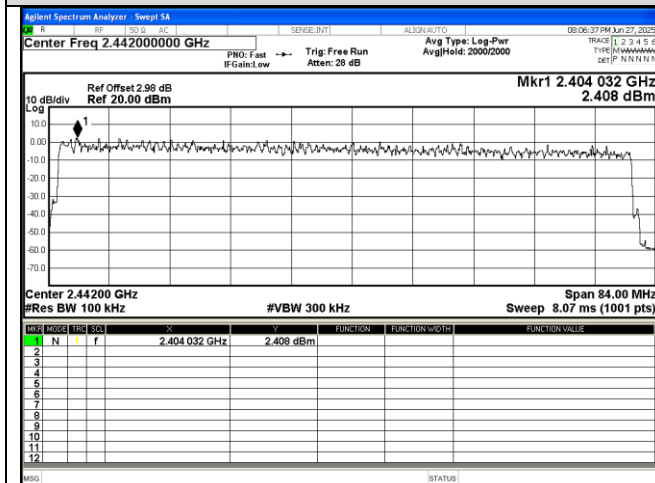
 $\pi/4$ DQPSK, CH00 Hopping



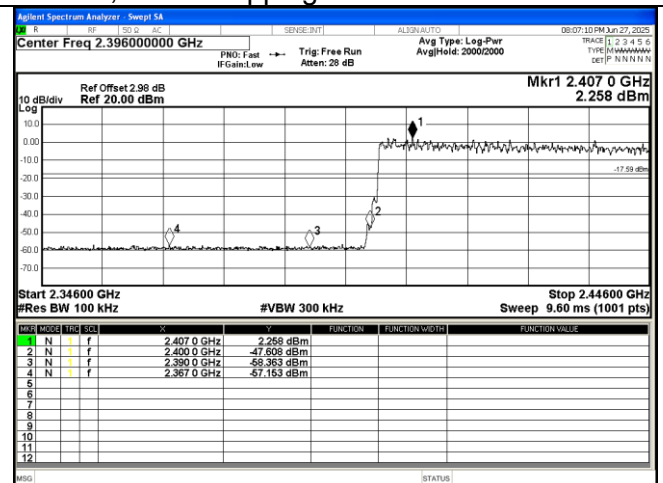
Test Mode:

 $\pi/4$ DQPSK, CH78 Hopping

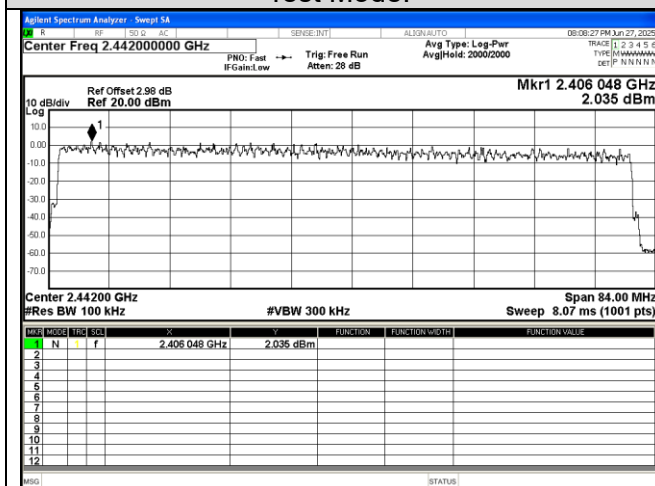
Test Mode:



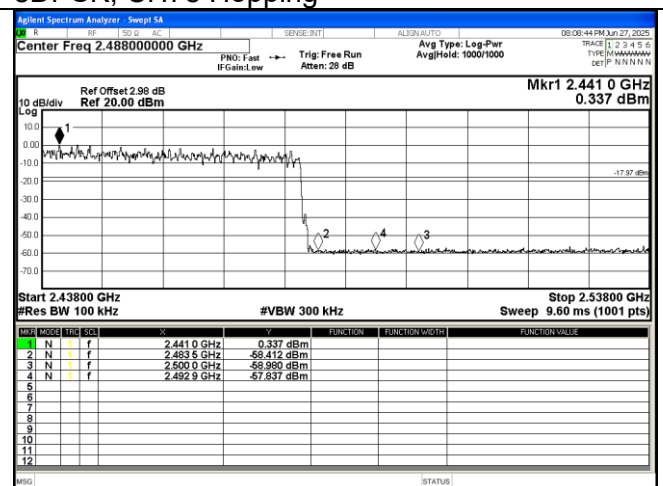
8DPSK, CH00 Hopping



Test Mode:

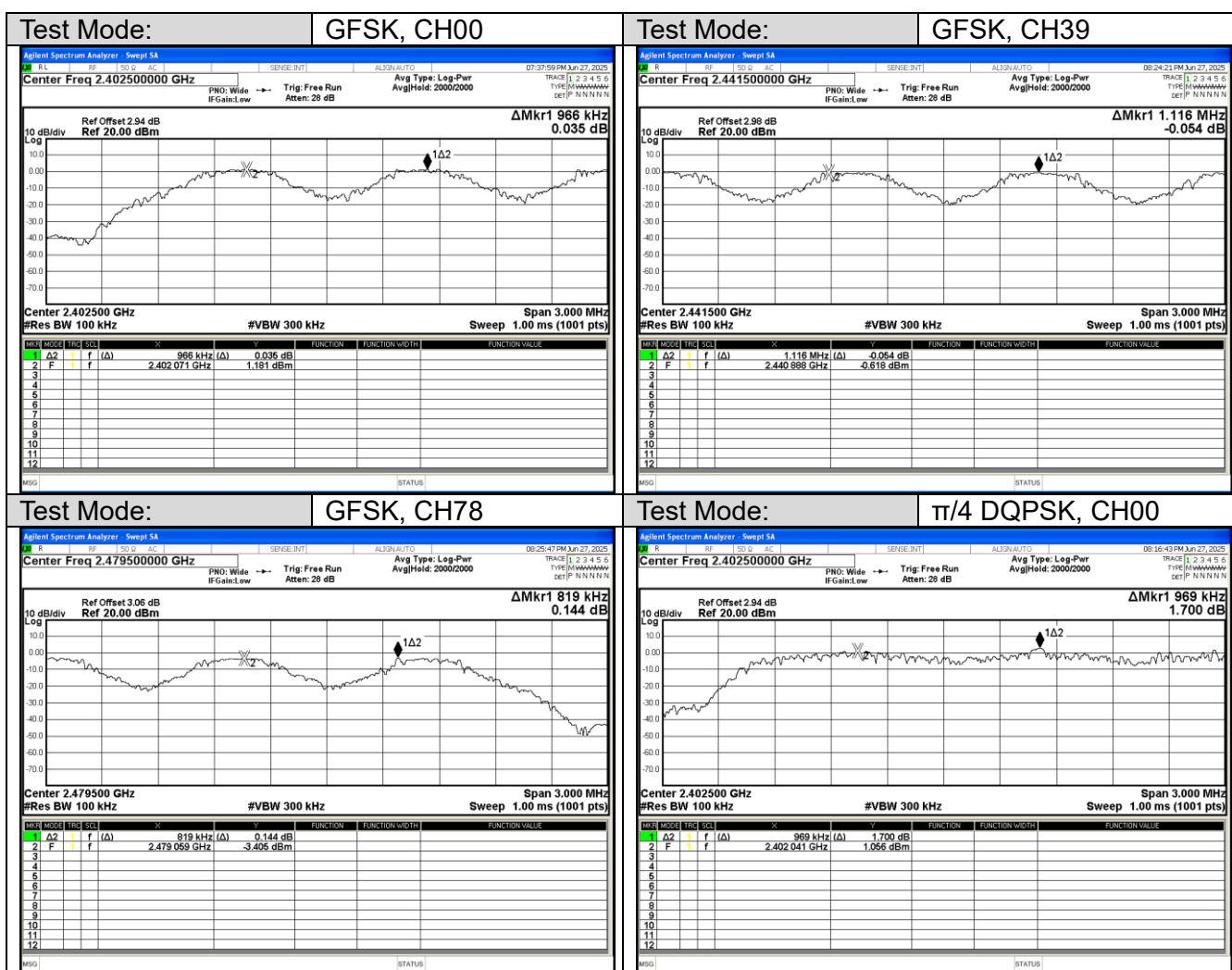


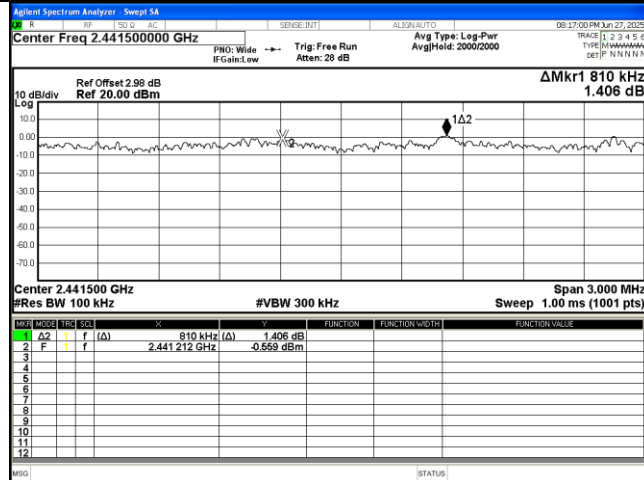
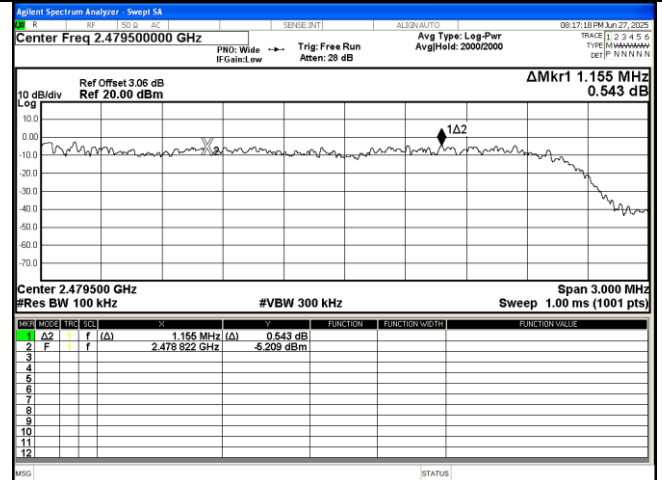
8DPSK, CH78 Hopping



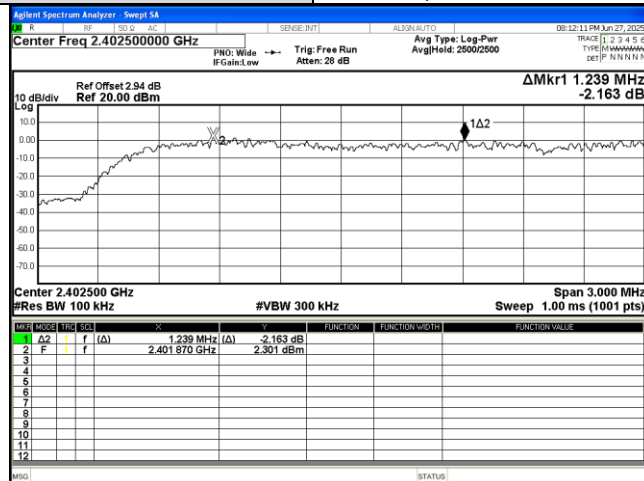
Appendix A.4 Test Results of Carrier Frequency Separation

Mode	HFS (MHz)	Limit (MHz)	Verdict
GFSK, CH00	0.966	0.685	Pass
GFSK, CH39	1.116	0.616	Pass
GFSK, CH78	0.819	0.616	Pass
$\pi/4$ DQPSK, CH00	0.969	0.616	Pass
$\pi/4$ DQPSK, CH39	0.81	0.616	Pass
$\pi/4$ DQPSK, CH78	1.155	0.616	Pass
8DPSK, CH00	1.239	0.616	Pass
8DPSK, CH39	1.023	0.616	Pass
8DPSK, CH78	1.38	0.616	Pass

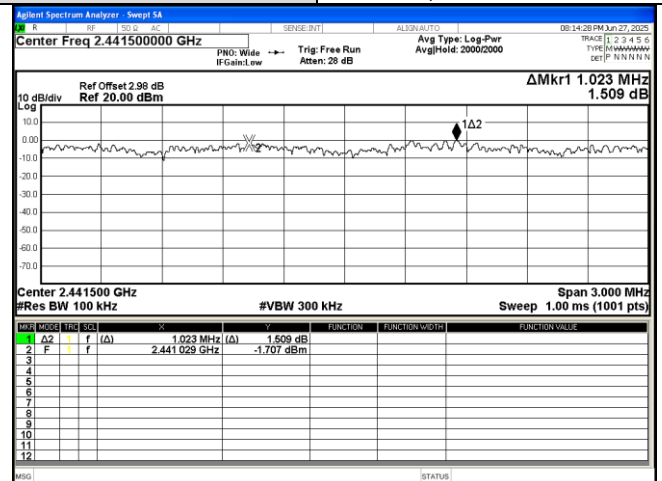


Test Mode: $\pi/4$ DQPSK, CH39Test Mode: $\pi/4$ DQPSK, CH78

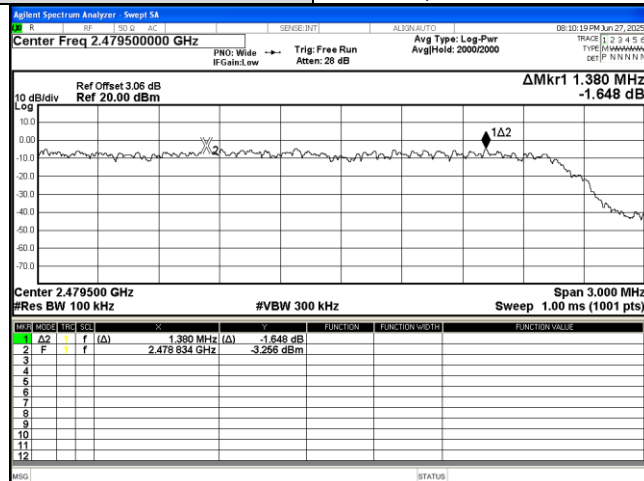
Test Mode: 8DPSK, CH00



Test Mode: 8DPSK, CH39

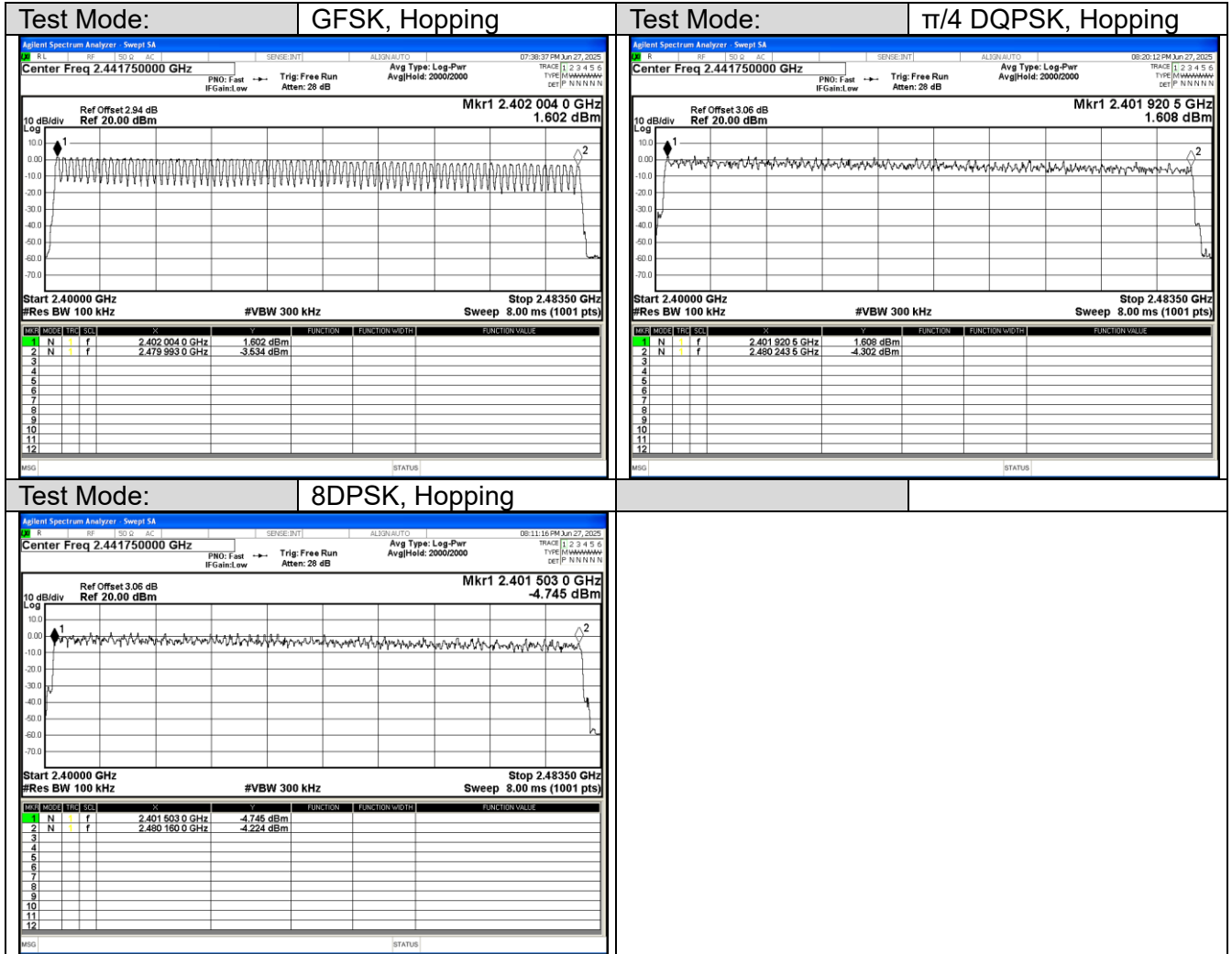


Test Mode: 8DPSK, CH78



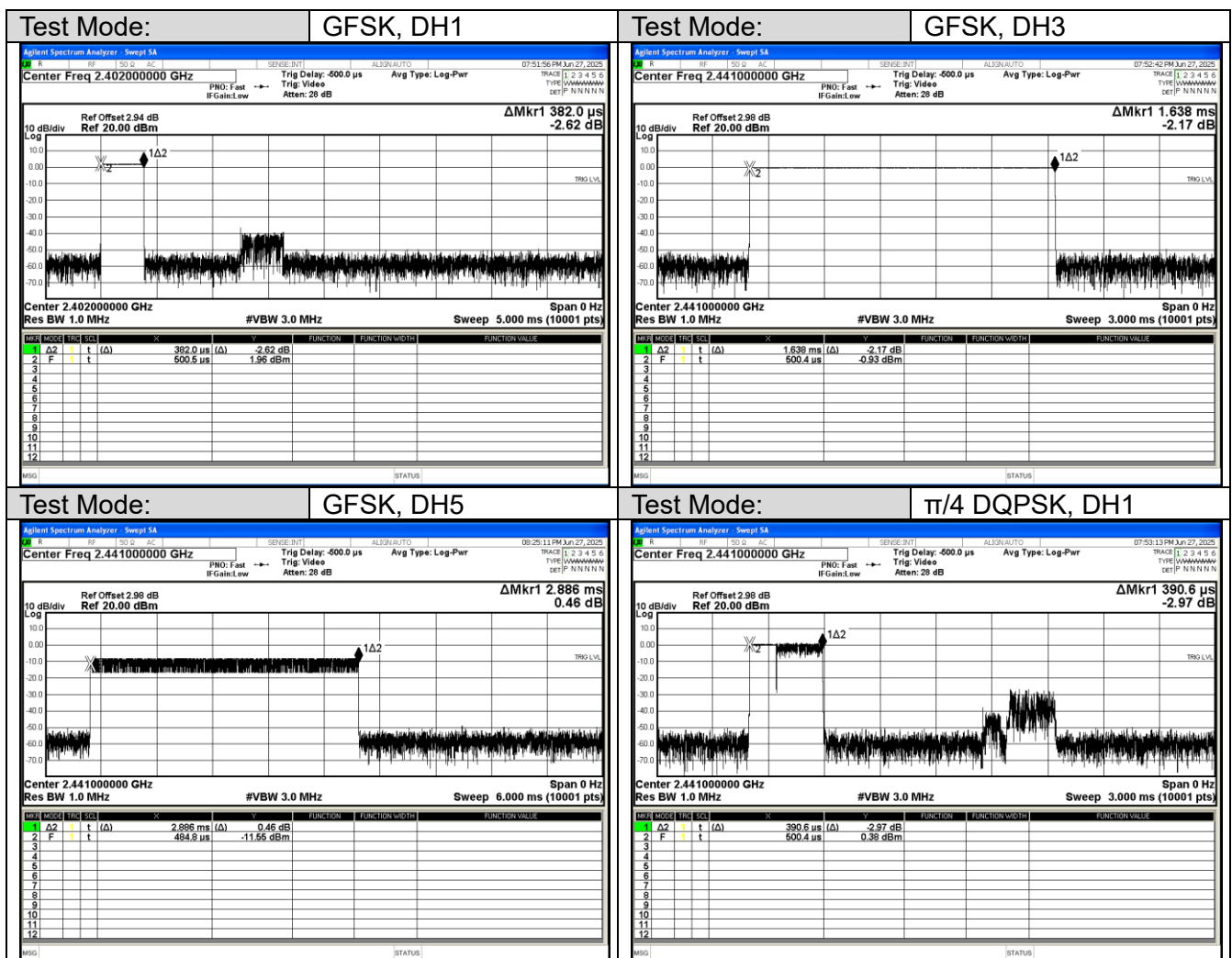
Appendix A.5 Test Results of Number of Hopping Frequency

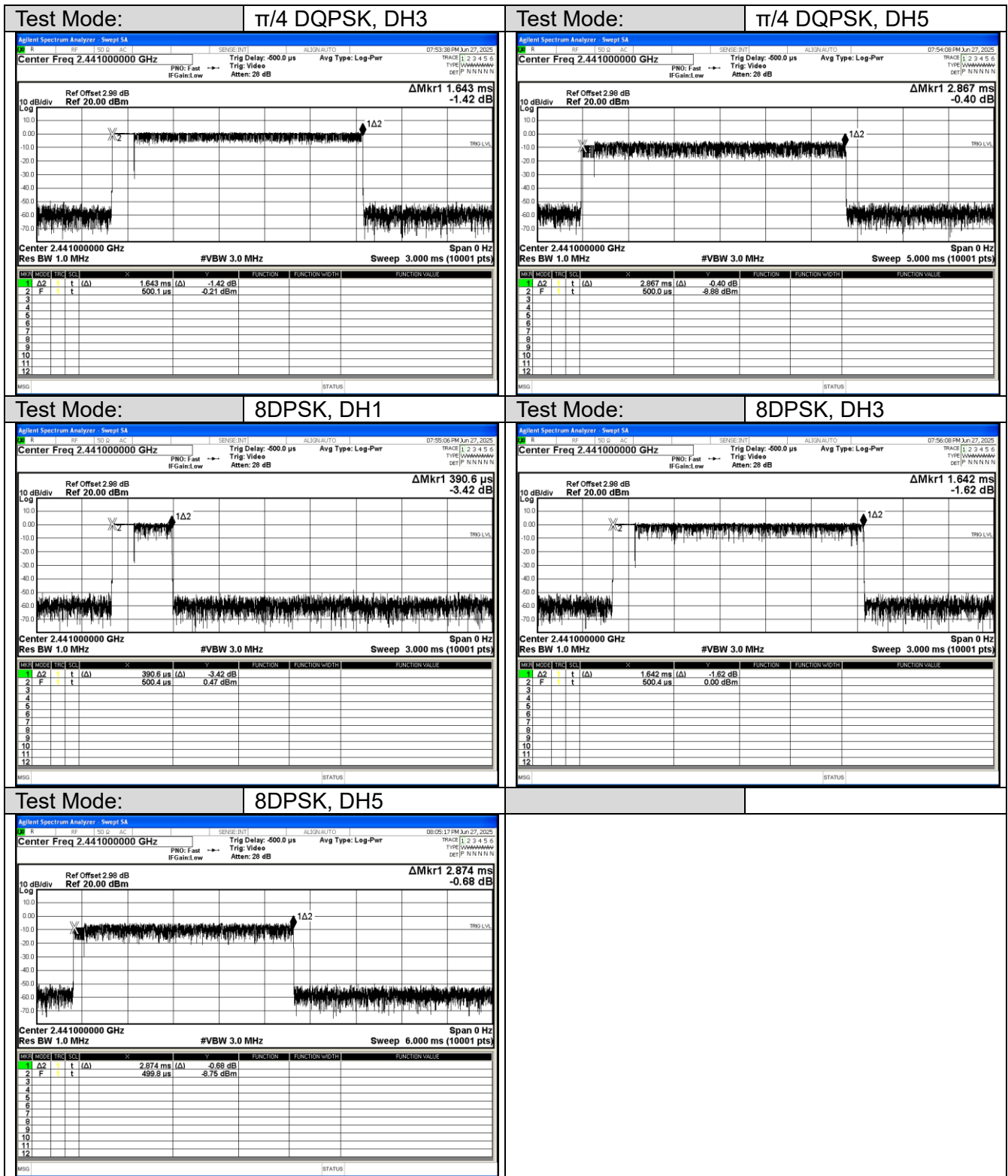
Mode	Hopping Number	Limit	Verdict
GFSK, Hopping	79	15	Pass
$\pi/4$ DQPSK, Hopping	79	15	Pass
8DPSK, Hopping	79	15	Pass



Appendix A.6 Test Results of Time of Occupancy

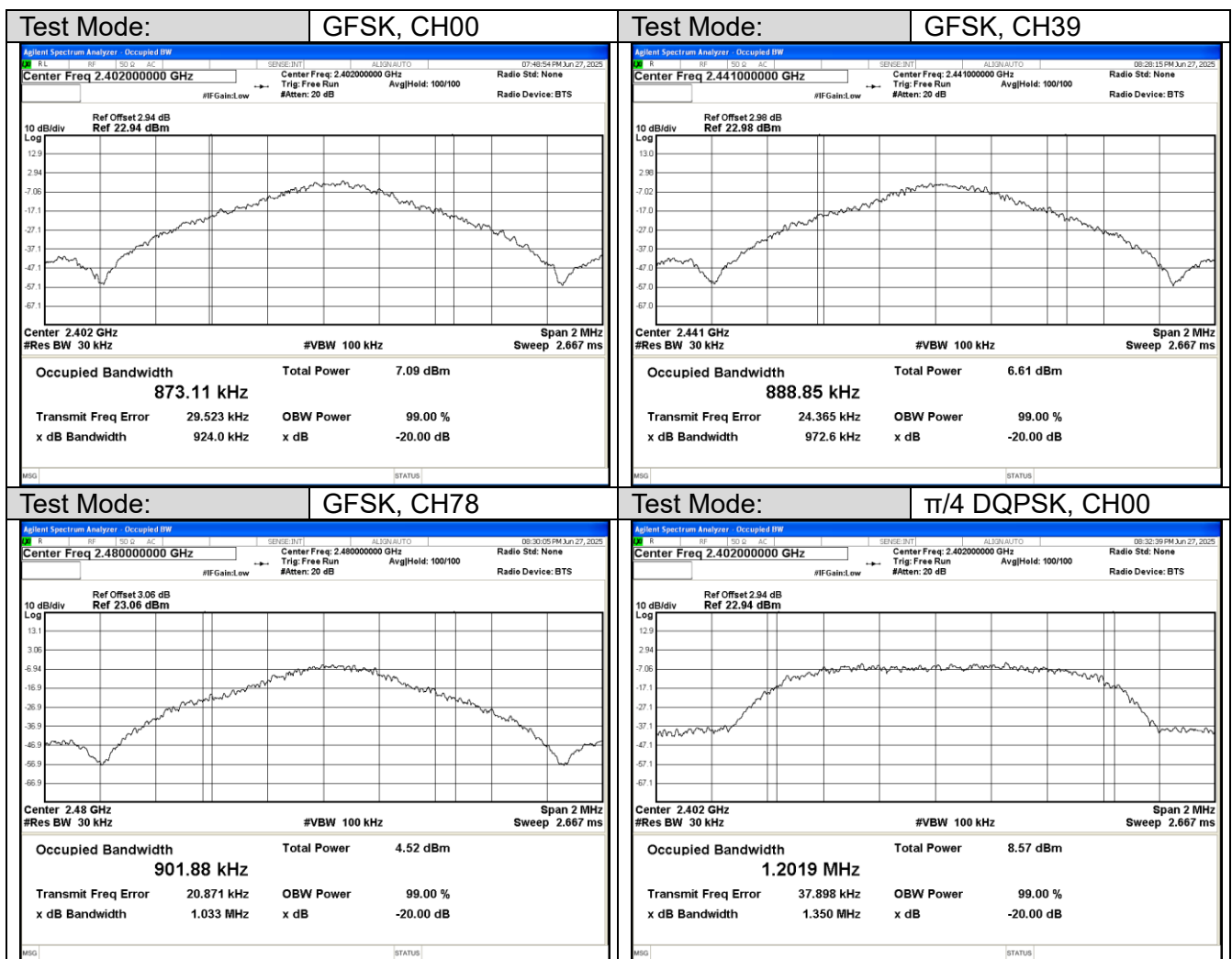
Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
GFSK, DH1	2441	0.382	120.712	31600	400	Pass
GFSK, DH3	2441	1.638	258.851	31600	400	Pass
GFSK, DH5	2441	2.886	273.593	31600	400	Pass
$\pi/4$ DQPSK, DH1	2441	0.391	123.43	31600	400	Pass
$\pi/4$ DQPSK, DH3	2441	1.643	259.562	31600	400	Pass
$\pi/4$ DQPSK, DH5	2441	2.867	271.792	31600	400	Pass
8DPSK, DH1	2441	0.391	123.43	31600	400	Pass
8DPSK, DH3	2441	1.642	259.373	31600	400	Pass
8DPSK, DH5	2441	2.874	272.455	31600	400	Pass

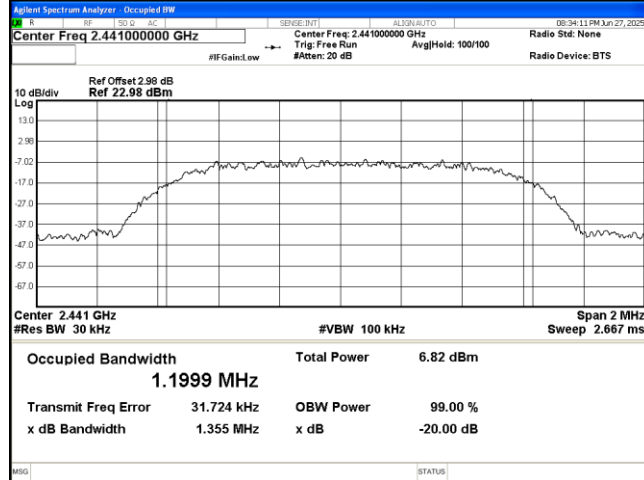
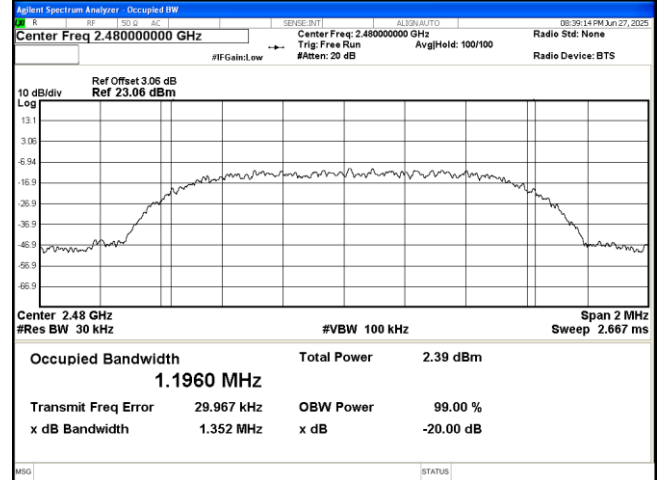




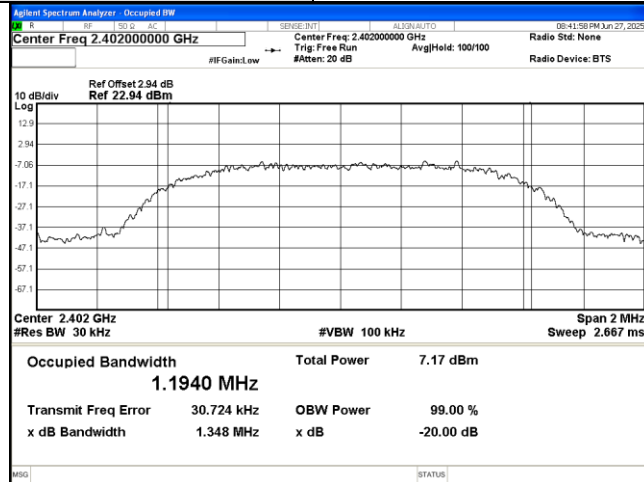
Appendix A.7 Test Results of 20dB & 99% Bandwidth

Mode	Frequency [MHz]	99% Bandwidth [MHz]	20dB Bandwidth [MHz]
GFSK	2402	0.8731	0.924
GFSK	2441	0.8889	0.9726
GFSK	2480	0.9019	1.0326
$\pi/4$ DQPSK	2402	1.2019	1.3496
$\pi/4$ DQPSK	2441	1.1999	1.3549
$\pi/4$ DQPSK	2480	1.196	1.3517
8DPSK	2402	1.194	1.3481
8DPSK	2441	1.1996	1.3553
8DPSK	2480	1.1889	1.3504

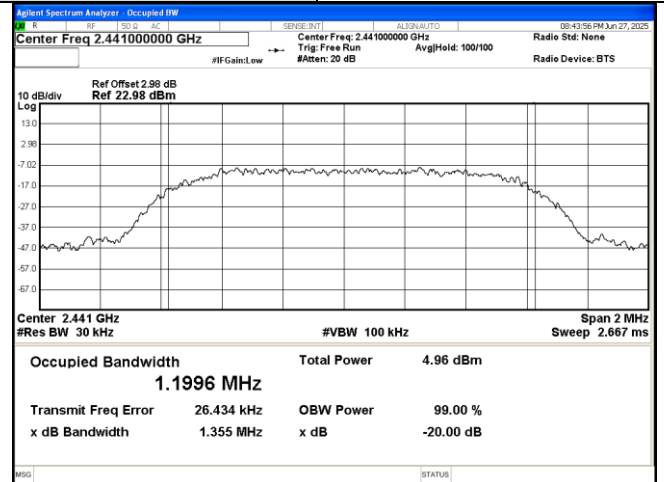


Test Mode: $\pi/4$ DQPSK, CH39Test Mode: $\pi/4$ DQPSK, CH78

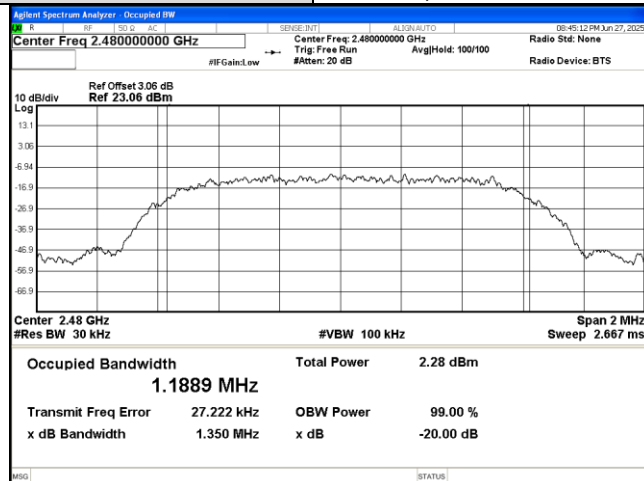
Test Mode: 8DPSK, CH00



Test Mode: 8DPSK, CH39



Test Mode: 8DPSK, CH78



Appendix A.8 Test Results of Maximum Conducted Output Power

Mode	Frequency [MHz]	Measured of Conducted Power		Limit [W]
		dBm	W	
GFSK	2402	2.236	0.0017	< 0.125
	2441	-0.076	0.0009	< 0.125
	2480	-2.341	0.0006	< 0.125
$\pi/4$ DQPSK	2402	3.57	0.0023	< 0.125
	2441	1.682	0.0015	< 0.125
	2480	-2.429	0.0006	< 0.125
8DPSK	2402	2.644	0.0018	< 0.125
	2441	0.912	0.0012	< 0.125
	2480	-2.06	0.0006	< 0.125

Note:

- 1) The cable loss is taken into account in results.
 - 2) Antenna gain(G) of Bluetooth: 2.00 dBi
- e.i.r.p.=P(Peak power)+ G, which is far below the 4 W