Appendix A: Test Results of BDR&EDR

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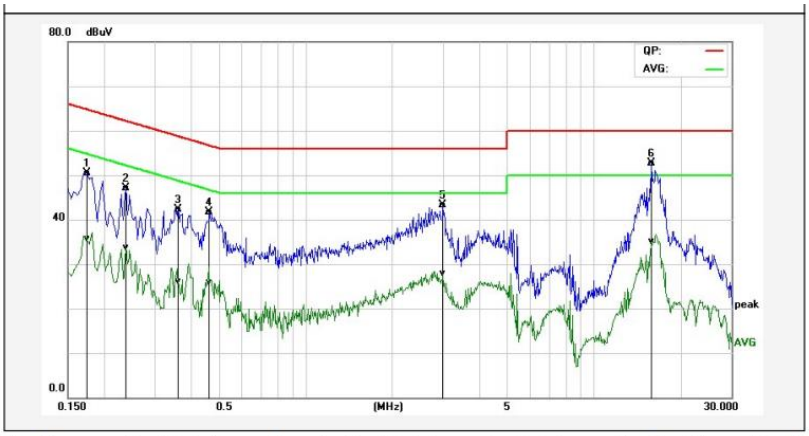
Appendix A.1 Test Results of Conducted Emission on AC Mains

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

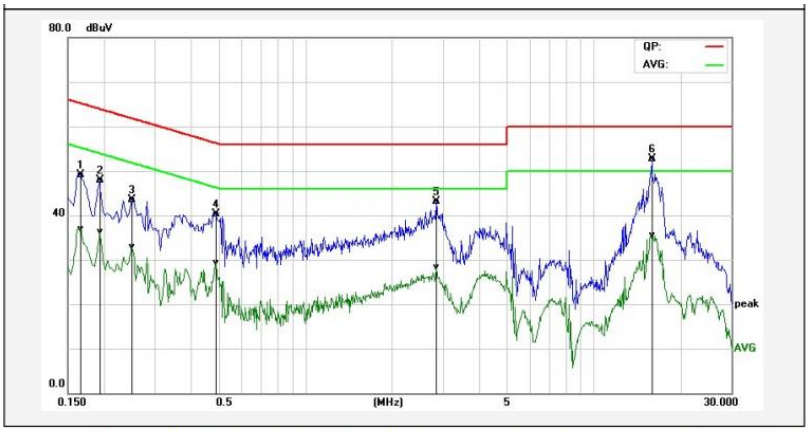
Test Mode：	Working	Test Voltage ：	AC 110V/60Hz

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	0.1740	41.10	26.30	9.50	50.60	35.80	64.76	54.77	-14.16	-18.97	Pass
2P	0.2380	37.65	24.15	9.50	47.15	33.65	62.16	52.17	-15.01	-18.52	Pass
3P	0.3620	32.75	16.68	9.50	42.25	26.18	58.68	48.68	-16.43	-22.50	Pass
4P	0.4660	32.13	16.36	9.50	41.63	25.86	56.58	46.58	-14.95	-20.72	Pass
5P	3.0020	34.10	18.62	9.20	43.30	27.82	56.00	46.00	-12.70	-18.18	Pass
6*	15.8780	43.22	25.76	9.42	52.64	35.18	60.00	50.00	-7.36	-14.82	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	0.1660	39.71	27.47	9.40	49.11	36.87	65.15	55.16	-16.04	-18.29	Pass
2P	0.1940	38.50	26.83	9.40	47.90	36.23	63.86	53.86	-15.96	-17.63	Pass
3P	0.2500	34.09	23.58	9.40	43.49	32.98	61.75	51.76	-18.26	-18.78	Pass
4P	0.4900	30.99	20.00	9.40	40.39	29.40	56.17	46.17	-15.78	-16.77	Pass
5P	2.8540	34.03	19.12	9.11	43.14	28.23	56.00	46.00	-12.86	-17.77	Pass
6*	15.9140	43.56	26.29	9.12	52.68	35.41	60.00	50.00	-7.32	-14.59	Pass

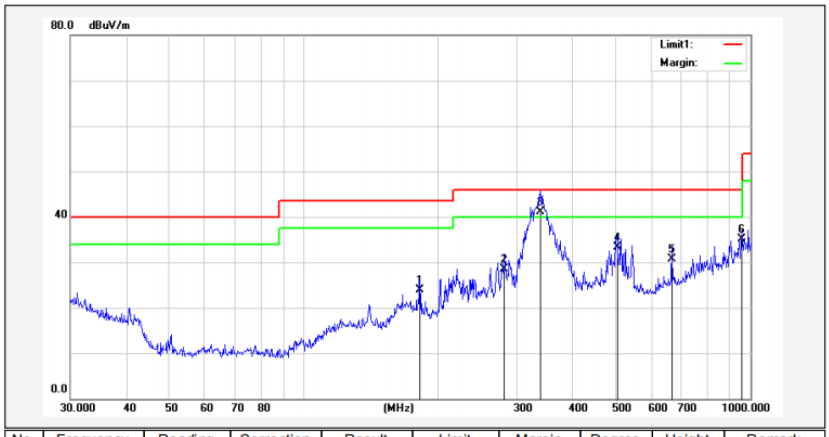
Correction Factor = insertion loss of LISN + cable loss;
Reading = Reading Amplitude in the instrument;
Result = Correction Factor + Reading;
Margin = Result – Limit.

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.

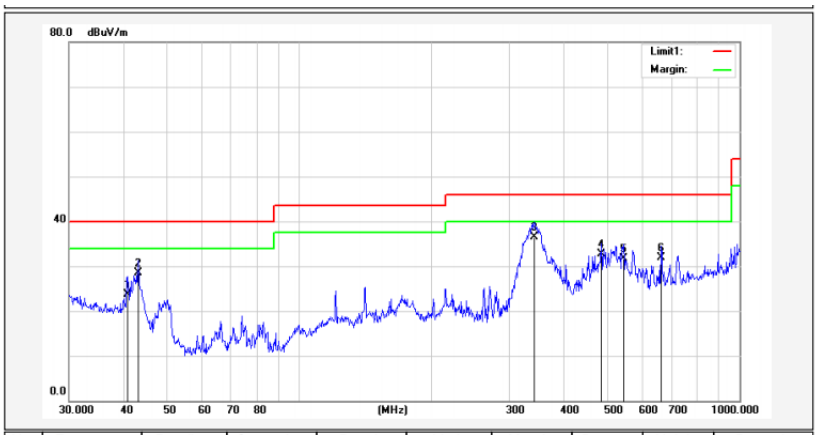
Test Mode：	Working	Test Voltage ：	DC 3.3V

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (deg.)	Height (cm)	Remark
1	181.9202	38.04	-14.18	23.86	43.50	-19.64			QP
2	281.0075	39.81	-11.27	28.54	46.00	-17.46			QP
3*	338.9478	51.43	-10.31	41.12	46.00	-4.88			QP
4	502.9395	38.82	-5.61	33.21	46.00	-12.79			QP
5	665.8035	34.33	-3.59	30.74	46.00	-15.26			QP
6	955.4381	35.60	-0.43	35.17	46.00	-10.83			QP

Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (deg.)	Height (cm)	Remark
1	40.7016	36.88	-13.14	23.74	40.00	-16.26			QP
2	43.0505	43.51	-14.94	28.57	40.00	-11.43			QP
3*	341.9786	46.82	-10.24	36.58	46.00	-9.42			QP
4	485.6093	38.63	-5.95	32.68	46.00	-13.32			QP
5	545.1826	37.00	-5.32	31.68	46.00	-14.32			QP
6	663.4730	35.49	-3.62	31.87	46.00	-14.13			QP

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	3958	57.59	-15.09	42.5	74	-31.5	peak
2	4970	55.89	-12.91	42.98	74	-31.02	peak
3	6134	55.34	-9.98	45.36	78.64	-33.28	peak
4	7358	54.28	-7.23	47.05	74	-26.95	peak
5	8378	53.91	-7.1	46.81	74	-27.19	peak
6	8820	54.8	-7.83	46.97	78.64	-31.67	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	3958	59.45	-15.09	44.36	74	-29.64	peak
2	4970	56.77	-12.91	43.86	74	-30.14	peak
3	5998	54.82	-10.12	44.7	78.64	-33.94	peak
4	7052	53.88	-8.58	45.3	78.64	-33.34	peak
5	7562	54.59	-7.22	47.37	74	-26.63	peak
6	8378	55.16	-7.1	48.06	74	-25.94	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	57.8	-15.01	42.79	74	-31.21	peak
2	5216	55.81	-12.66	43.15	78.64	-35.49	peak
3	6134	54.95	-9.98	44.97	78.64	-33.67	peak
4	7562	53.85	-7.22	46.63	74	-27.37	peak
5	8378	54.45	-7.1	47.35	74	-26.65	peak
6	10656	51.88	-2.77	49.11	74	-24.89	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	3958	57.68	-15.09	42.59	74	-31.41	peak
2	5080	56.3	-12.5	43.8	74	-30.2	peak
3	5964	55	-10.23	44.77	78.64	-33.87	peak
4	7562	55.4	-7.22	48.18	74	-25.82	peak
5	8378	54.46	-7.1	47.36	74	-26.64	peak
6	10690	51.98	-2.89	49.09	74	-24.91	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	3958	56.88	-15.09	41.79	74	-32.21	peak
2	5114	55.69	-12.49	43.2	74	-30.8	peak
3	6168	54.35	-9.92	44.43	78.64	-34.21	peak
4	7562	54.17	-7.22	46.95	74	-27.05	peak
5	8276	54.4	-7.36	47.04	74	-26.96	peak
6	10520	52.24	-3.25	48.99	78.64	-29.65	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	5046	55.58	-12.62	42.96	74	-31.04	peak
2	5998	55.3	-10.12	45.18	78.64	-33.46	peak
3	7256	54.33	-7.7	46.63	74	-27.37	peak
4	7562	54.25	-7.22	47.03	74	-26.97	peak
5	8276	54.39	-7.36	47.03	74	-26.97	peak
6	9398	54.67	-7.29	47.38	74	-26.62	peak

π/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	3992	57.49	-15.01	42.48	74	-31.52	peak
2	4970	55.89	-12.91	42.98	74	-31.02	peak
3	6134	54.68	-9.98	44.7	78.64	-33.94	peak
4	7596	54.47	-7.26	47.21	74	-26.79	peak
5	8208	54.6	-7.62	46.98	74	-27.02	peak
6	9024	54.4	-8.12	46.28	74	-27.72	peak

π/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	3958	58.18	-15.09	43.09	74	-30.91	peak
2	5046	55.6	-12.62	42.98	74	-31.02	peak
3	5998	54.57	-10.12	44.45	78.64	-34.19	peak
4	7120	53.91	-8.35	45.56	78.64	-33.08	peak
5	7426	53.72	-7.09	46.63	74	-27.37	peak
6	8208	54.56	-7.62	46.94	74	-27.06	peak

π/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	4978	55.67	-12.84	42.83	74	-31.17	peak
2	6100	54.44	-10.06	44.38	78.64	-34.26	peak
3	7358	53.5	-7.23	46.27	74	-27.73	peak
4	8310	53.91	-7.28	46.63	74	-27.37	peak
5	9024	54.19	-8.12	46.07	74	-27.93	peak
6	9976	52.72	-4.98	47.74	78.64	-30.9	peak

π/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	3958	59.3	-15.09	44.21	74	-29.79	peak
2	4984	56.27	-12.85	43.42	74	-30.58	peak
3	5658	55	-11.88	43.12	78.64	-35.52	peak
4	5998	55.18	-10.12	45.06	78.64	-33.58	peak
5	6950	54.62	-8.79	45.83	78.64	-32.81	peak
6	7562	54.02	-7.22	46.8	74	-27.2	peak

π/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	5046	55.81	-12.62	43.19	74	-30.81	peak
2	5998	54.82	-10.12	44.7	78.64	-33.94	peak
3	6916	53.67	-8.8	44.87	78.64	-33.77	peak
4	7562	53.72	-7.22	46.5	74	-27.5	peak
5	8378	54.99	-7.1	47.89	74	-26.11	peak
6	8888	54.71	-7.95	46.76	78.64	-31.88	peak

π/4 DQPSK - High (worst mode) Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3958	57.54	-15.09	42.45	74	-31.55	peak
2	5046	56.04	-12.62	43.42	74	-30.58	peak
3	6032	54.64	-10.1	44.54	78.64	-34.1	peak
4	7426	54.1	-7.09	47.01	74	-26.99	peak
5	8242	54.19	-7.48	46.71	74	-27.29	peak
6	8854	54.66	-7.88	46.78	78.64	-31.86	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	5046	55.53	-12.62	42.91	74	-31.09	peak
2	5998	55.36	-10.12	45.24	78.64	-33.4	peak
3	6644	54.73	-10.04	44.69	78.64	-33.95	peak
4	7596	54.22	-7.26	46.96	74	-27.04	peak
5	8378	54.47	-7.1	47.37	74	-26.63	peak
6	8854	54.59	-7.88	46.71	78.64	-31.93	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	3992	58.56	-15.01	43.55	74	-30.45	peak
2	5046	55.94	-12.62	43.32	74	-30.68	peak
3	5964	55.09	-10.23	44.86	78.64	-33.78	peak
4	6814	54.2	-8.86	45.34	78.64	-33.3	peak
5	7358	54.52	-7.23	47.29	74	-26.71	peak
6	8378	53.67	-7.1	46.57	74	-27.43	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	4978	55.78	-12.84	42.94	74	-31.06	peak
2	5998	55.13	-10.12	45.01	78.64	-33.63	peak
3	6780	54.13	-8.99	45.14	78.64	-33.5	peak
4	7562	55.55	-7.22	48.33	74	-25.67	peak
5	8242	54.43	-7.48	46.95	74	-27.05	peak
6	10248	52.65	-3.89	48.76	78.64	-29.88	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	5080	55.73	-12.5	43.23	74	-30.77	peak
2	5998	55.62	-10.12	45.5	78.64	-33.14	peak
3	6644	54.92	-10.04	44.88	78.64	-33.76	peak
4	7460	54.63	-7.09	47.54	74	-26.46	peak
5	8174	55.16	-7.68	47.48	74	-26.52	peak
6	8854	54.83	-7.88	46.95	78.64	-31.69	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	3992	57.19	-15.01	42.18	74	-31.82	peak
2	4970	56.22	-12.91	43.31	74	-30.69	peak
3	5998	55.26	-10.12	45.14	78.64	-33.5	peak
4	6916	54.48	-8.8	45.68	78.64	-32.96	peak
5	7562	54.14	-7.22	46.92	74	-27.08	peak
6	8208	54.27	-7.62	46.65	74	-27.35	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	4332	55.81	-14.54	41.27	74	-32.73	peak
2	4984	55.46	-12.85	42.61	74	-31.39	peak
3	5658	55.1	-11.88	43.22	78.64	-35.42	peak
4	6134	54.61	-9.98	44.63	78.64	-34.01	peak
5	7528	54.28	-7.17	47.11	74	-26.89	peak
6	8208	54.75	-7.62	47.13	74	-26.87	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. 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.

5. 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. 98.64) minus 20dB.

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	2385	61.55	-21.05	40.5	74	-33.5	peak
2	2385	53.96	-21.05	32.91	54	-21.09	AVG
3	2390	61.39	-21.03	40.36	74	-33.64	peak
4	2390	54.48	-21.03	33.45	54	-20.55	AVG
5	2402.2	121.71	-20.99	100.72	116.2	-15.48	peak
Vertical							
No.	**Frequency**	**Reading**	**Correct**	**Result**	**Limit**	**Margin**	**Remark**
	(MHz)	**(dBuV)**	**Factor(dB/m)**	**(dBuV/m)**	**(dBuV/m)**	**(dB)**	
1	2382	62.47	-21.06	41.41	74	-32.59	peak
2	2382	55.63	-21.06	34.57	54	-19.43	AVG
3	2390	60.45	-21.03	39.42	74	-34.58	peak
4	2390	52.11	-21.03	31.08	54	-22.92	AVG
5	2402	119.71	-20.99	98.72	116.2	-17.48	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	2479.96	122.4	-20.91	101.49	116.2	-14.71	peak
2	2483.5	64.93	-20.91	44.02	74	-29.98	peak
3	2483.5	58.55	-20.91	37.64	54	-16.36	AVG
4	2488.12	64.64	-20.91	43.73	74	-30.27	peak
5	2488.12	56.9	-20.91	35.99	54	-18.01	AVG
Vertical							
No.	**Frequency**	**Reading**	**Correct**	**Result**	**Limit**	**Margin**	**Remark**
	(MHz)	**(dBuV)**	**Factor(dB/m)**	**(dBuV/m)**	**(dBuV/m)**	**(dB)**	
1	2480.02	121.97	-20.91	101.06	116.2	-15.14	peak
2	2483.5	66.62	-20.91	45.71	74	-28.29	peak
3	2483.5	58.13	-20.91	37.22	54	-16.78	AVG
4	2485.18	67.39	-20.91	46.48	74	-27.52	peak
5	2485.18	58.92	-20.91	38.01	54	-15.99	AVG

Correction Factor = antenna factor + cable loss – amplifier gain;
Reading = Reading Amplitude in the instrument;
Result = Correction Factor + Reading;
Margin = Result – Limit

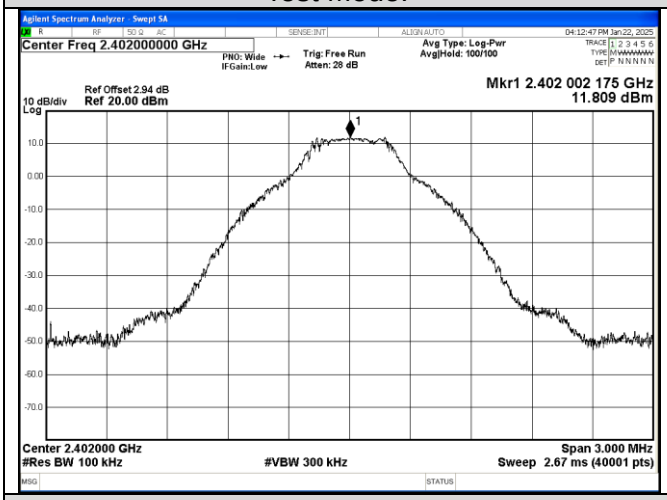
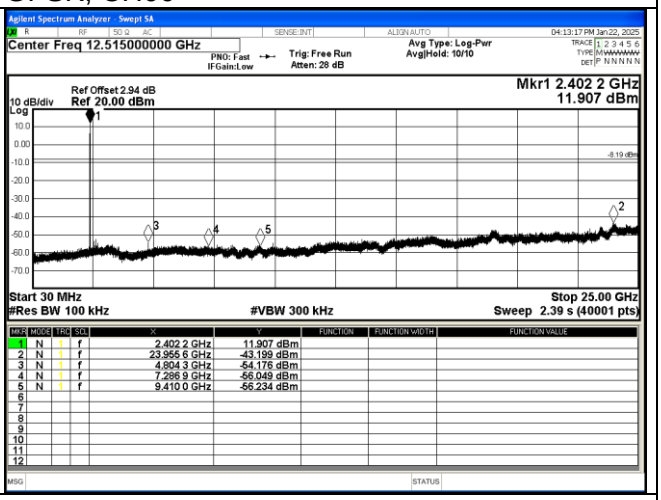
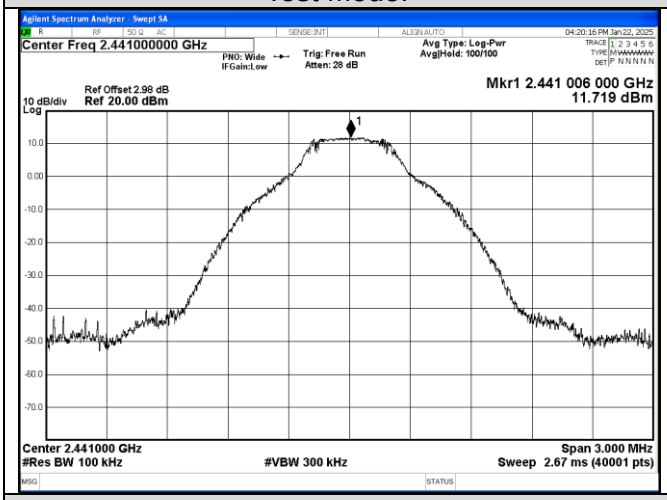
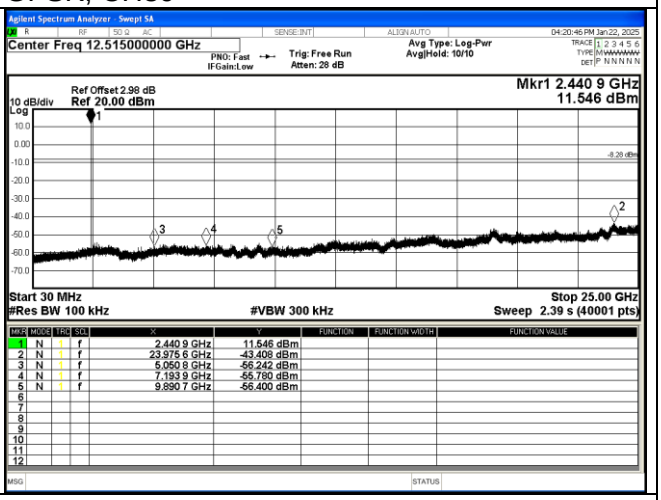
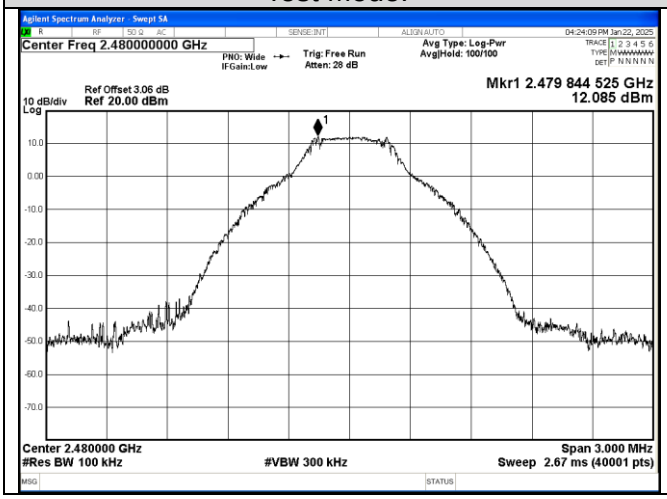
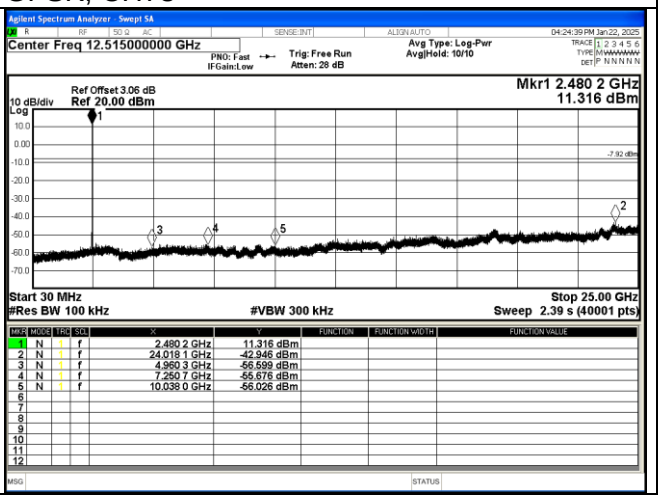
π/4 DQPSK - Low (worst mode)							
Horizontal							
No.	**Frequency**	**Reading**	**Correct**	**Result**	**Limit**	**Margin**	**Remark**
	(MHz)	**(dBuV)**	**Factor(dB/m)**	**(dBuV/m)**	**(dBuV/m)**	**(dB)**	
1	2388.2	59.76	-21.03	38.73	74	-35.27	peak
2	2388.2	53.52	-21.03	32.49	54	-21.51	AVG
3	2390	57.13	-21.03	36.1	74	-37.9	peak
4	2390	51.01	-21.03	29.98	54	-24.02	AVG
5	2402.2	121.65	-20.99	100.66	116.2	-15.54	peak
Vertical							
No.	**Frequency**	**Reading**	**Correct**	**Result**	**Limit**	**Margin**	**Remark**
	(MHz)	**(dBuV)**	**Factor(dB/m)**	**(dBuV/m)**	**(dBuV/m)**	**(dB)**	
1	2364.6	60.3	-21.14	39.16	74	-34.84	peak
2	2364.6	54.11	-21.14	32.97	54	-21.03	AVG
3	2390	57	-21.03	35.97	74	-38.03	peak
4	2390	52.04	-21.03	31.01	54	-22.99	AVG
5	2402	119.63	-20.99	98.64	116.2	-17.56	peak
π/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	2479.96	122.46	-20.91	101.55	116.2	-14.65	peak
2	2483.5	69.51	-20.91	48.6	74	-25.4	peak
3	2483.5	60.15	-20.91	39.24	54	-14.76	AVG
4	2484.04	70.82	-20.91	49.91	74	-24.09	peak
5	2484.04	61.02	-20.91	40.11	54	-13.89	AVG
Vertical							
No.	**Frequency**	**Reading**	**Correct**	**Result**	**Limit**	**Margin**	**Remark**
	(MHz)	**(dBuV)**	**Factor(dB/m)**	**(dBuV/m)**	**(dBuV/m)**	**(dB)**	
1	2479.96	121.23	-20.91	100.32	116.2	-15.88	peak
2	2483.5	65.52	-20.91	44.61	74	-29.39	peak
3	2483.5	58.84	-20.91	37.93	54	-16.07	AVG
4	2484.4	64.33	-20.91	43.42	74	-30.58	peak
5	2484.4	56.79	-20.91	35.88	54	-18.12	AVG

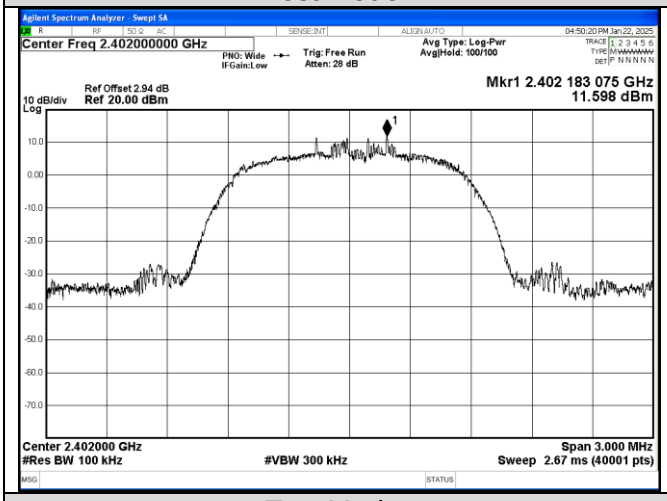
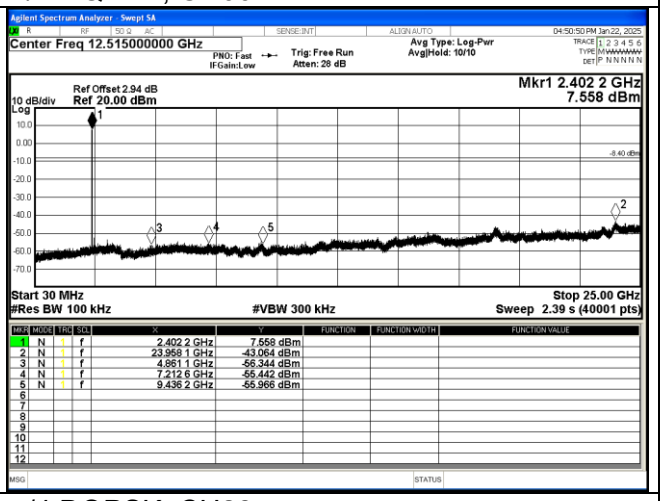
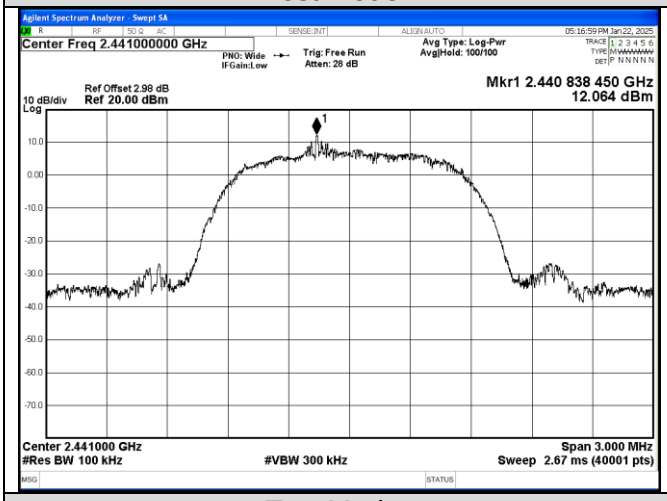
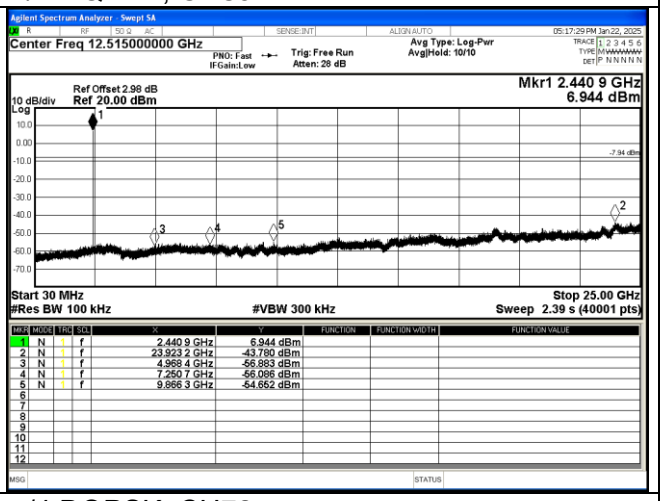
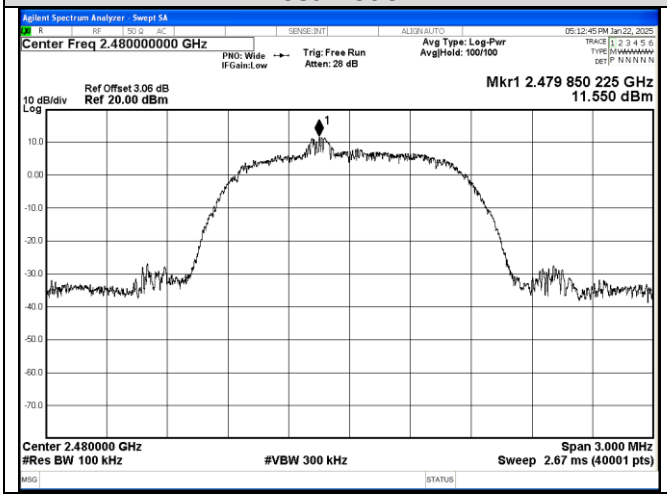
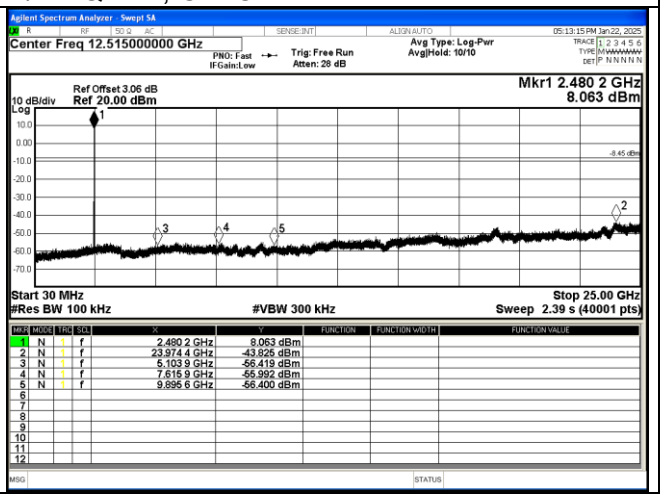
Correction Factor = antenna factor + cable loss – amplifier gain;
Reading = Reading Amplitude in the instrument;
Result = Correction Factor + Reading;
Margin = Result – Limit

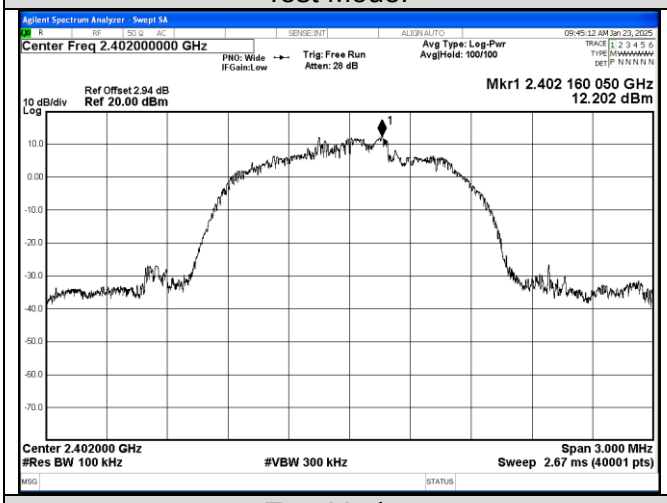
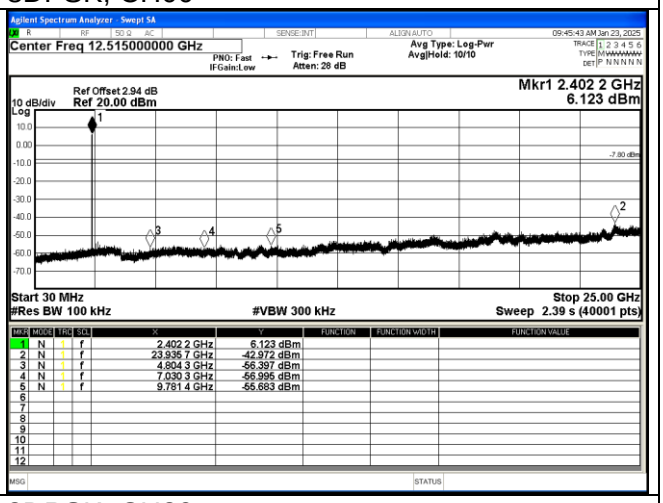
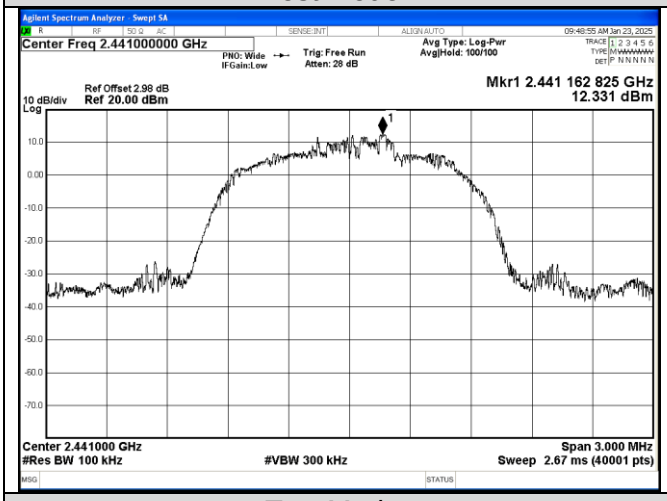
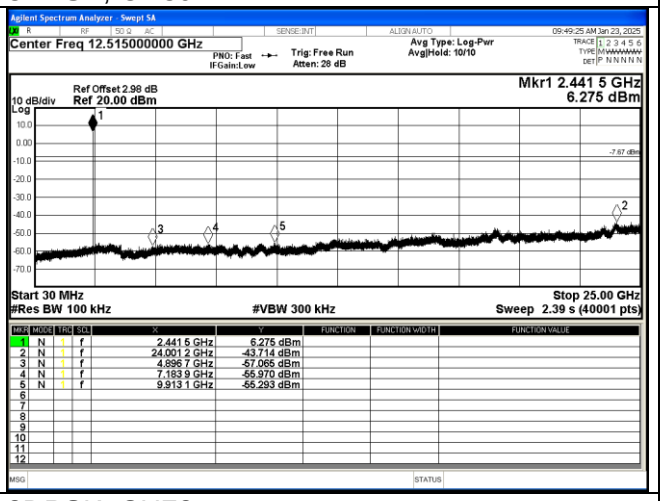
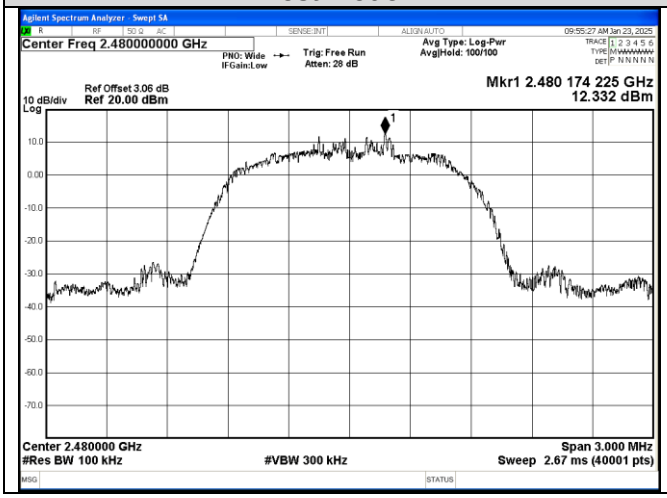
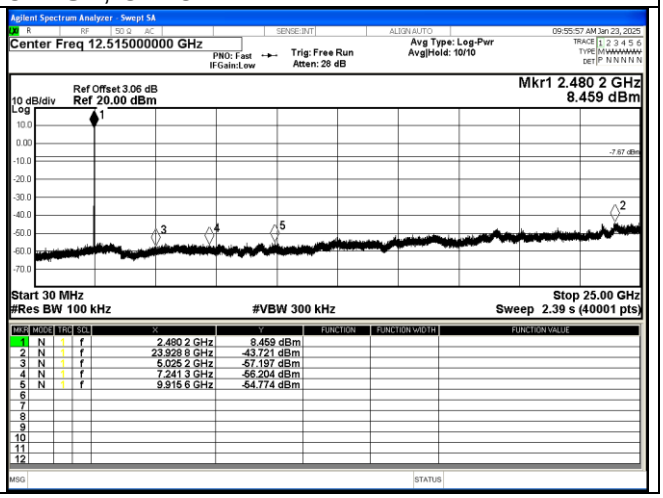
8DPSK - Low (worst mode)							
Horizontal							
No.	**Frequency (MHz)**	**Reading (dBuV)**	**Correct Factor(dB/m)**	**Result (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Remark**
1	2387	59.65	-21.04	38.61	74	-35.39	peak
2	2387	52.09	-21.04	31.05	54	-22.95	AVG
3	2390	60.41	-21.03	39.38	74	-34.62	peak
4	2390	53.6	-21.03	32.57	54	-21.43	AVG
5	2402.2	121.66	-20.99	100.67	116.2	-15.53	peak
Vertical							
No.	**Frequency (MHz)**	**Reading (dBuV)**	**Correct Factor(dB/m)**	**Result (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Remark**
1	2381.4	60.75	-21.07	39.68	74	-34.32	peak
2	2381.4	54.69	-21.07	33.62	54	-20.38	AVG
3	2390	61.57	-21.03	40.54	74	-33.46	peak
4	2390	55.12	-21.03	34.09	54	-19.91	AVG
5	2402.2	119.79	-20.99	98.8	116.2	-17.40	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	2480.08	122.15	-20.91	101.24	116.2	-14.96	peak
2	2483.5	70.24	-20.91	49.33	74	-24.67	peak
3	2483.5	61.43	-20.91	40.52	54	-13.48	AVG
4	2484.22	65.86	-20.91	44.95	74	-29.05	peak
5	2484.22	58.59	-20.91	37.68	54	-16.32	AVG
Vertical							
No.	**Frequency (MHz)**	**Reading (dBuV)**	**Correct Factor(dB/m)**	**Result (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Remark**
1	2479.9	121.16	-20.91	100.25	116.2	-15.95	peak
2	2483.5	65.72	-20.91	44.81	74	-29.19	peak
3	2483.5	58.9	-20.91	37.99	54	-16.01	AVG
4	2486.02	65.83	-20.91	44.92	74	-29.08	peak
5	2486.02	59.25	-20.91	38.34	54	-15.66	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

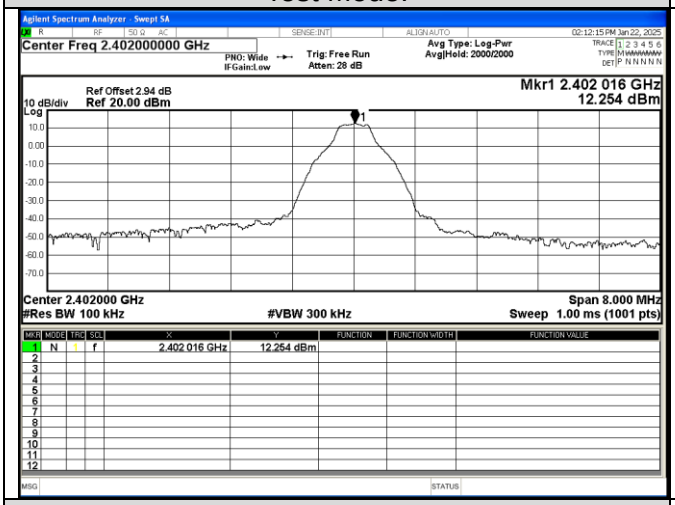
Conducted spurious emission	
Test Mode:	GFSK, CH00
	
Test Mode:	GFSK, CH39
	
Test Mode:	GFSK, CH78
	

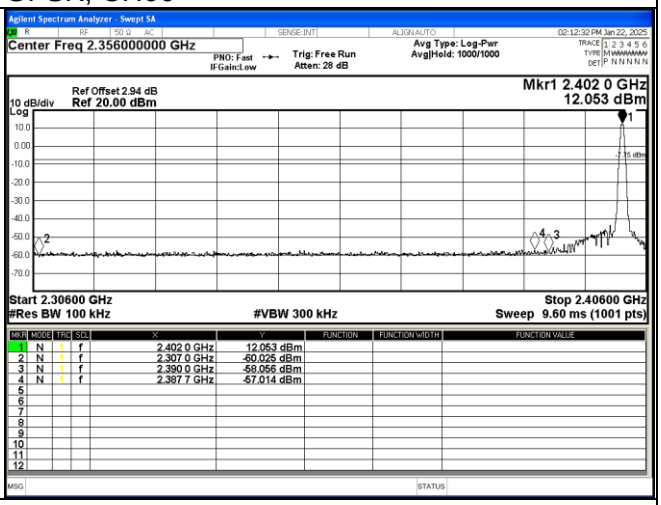
Test Mode:	π/4 DQPSK, CH00
	
Test Mode:	π/4 DQPSK, CH39
	
Test Mode:	π/4 DQPSK, CH78
	

Test Mode:	8DPSK, CH00
	
Test Mode:	8DPSK, CH39
	
Test Mode:	8DPSK, CH78
	

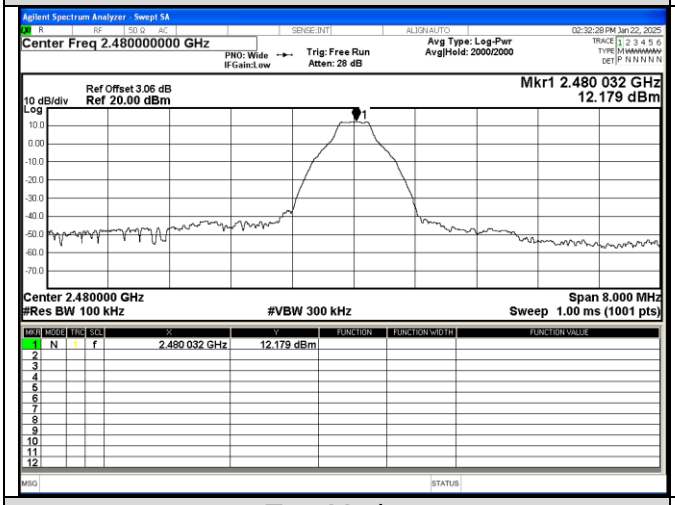
For Band edge (it's also the reference level for conducted spurious emission)

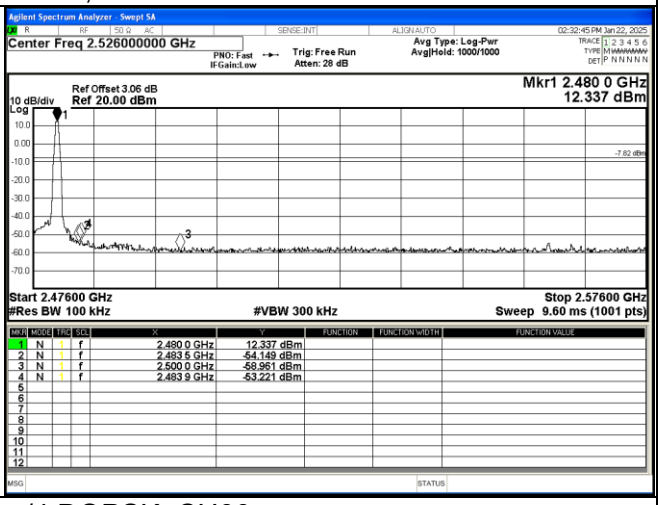
Test Mode: GFSK, CH00



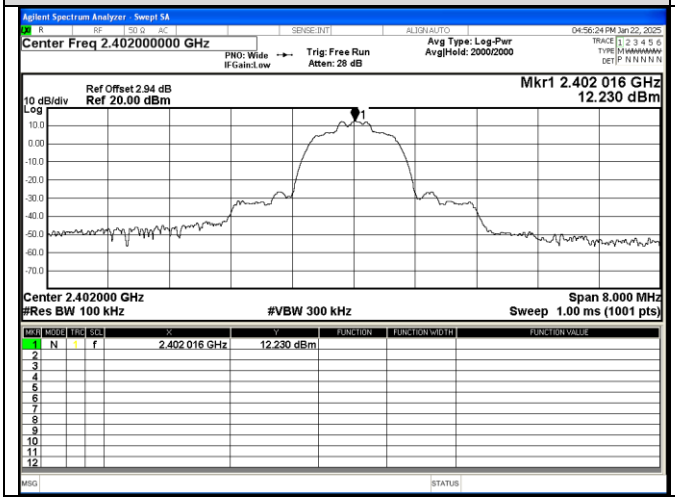


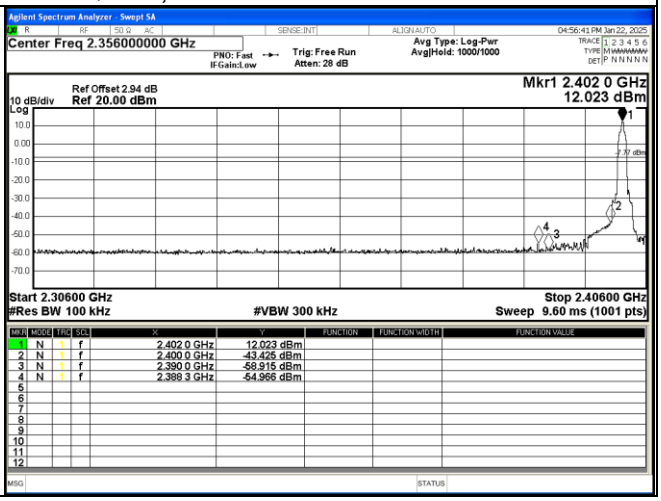
Test Mode: GFSK, CH78

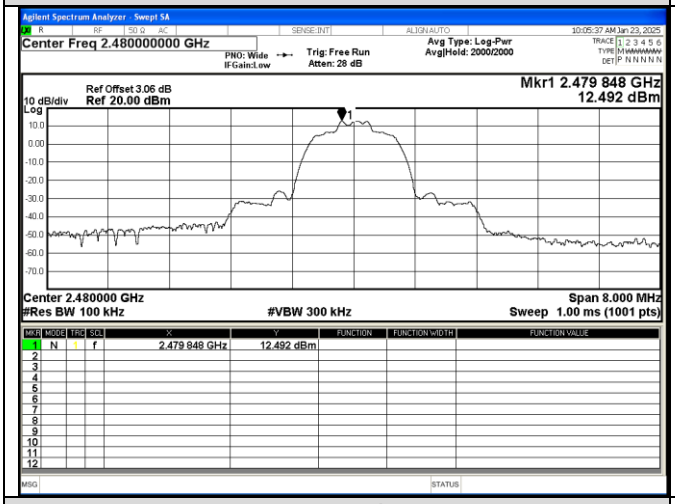
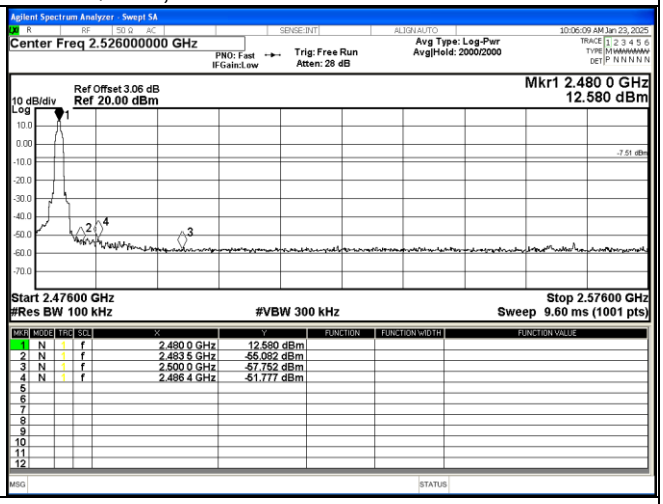
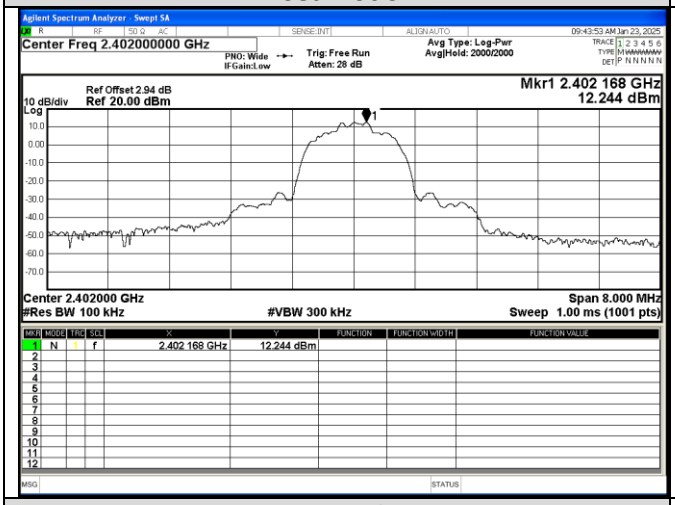
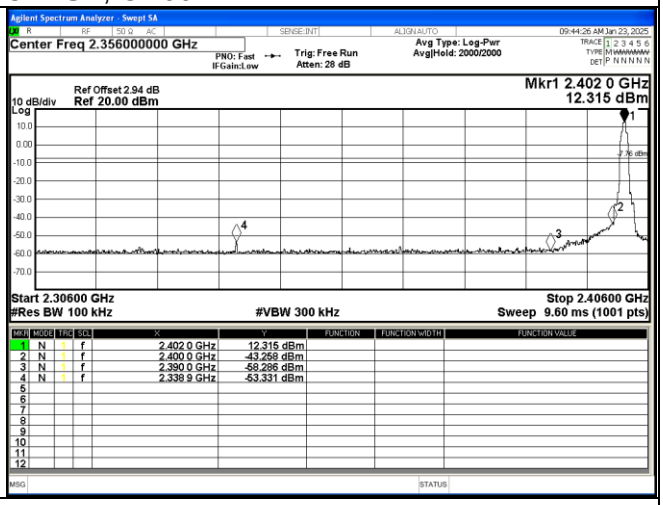
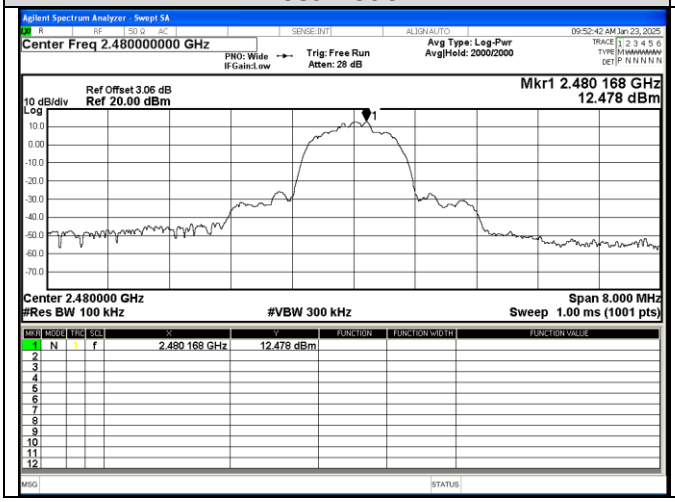
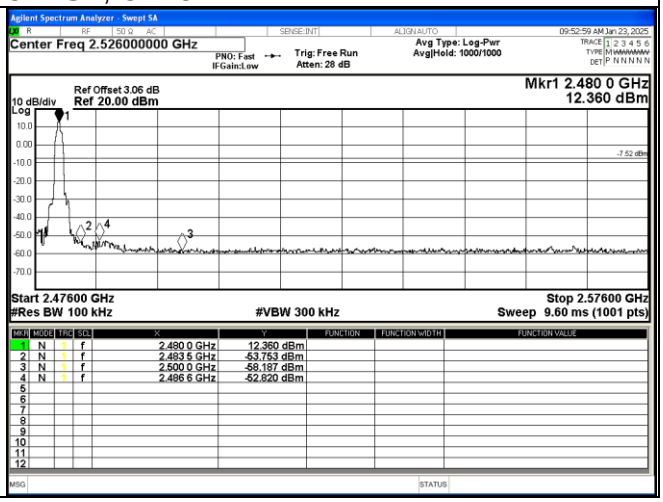


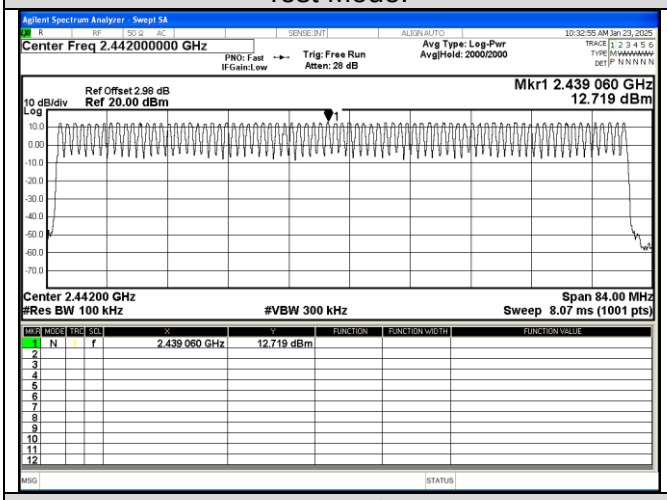
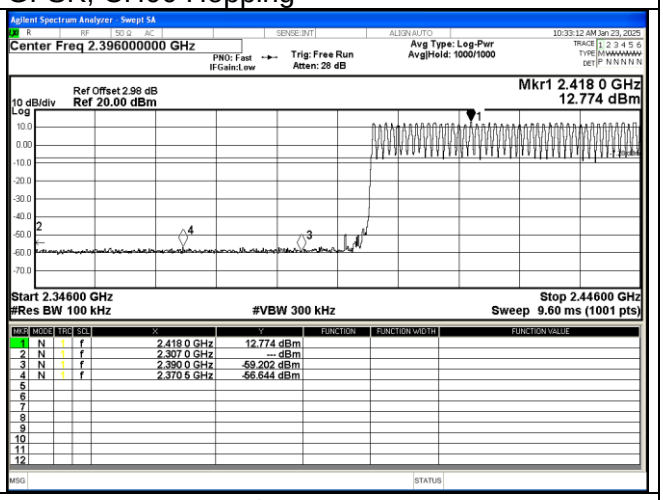
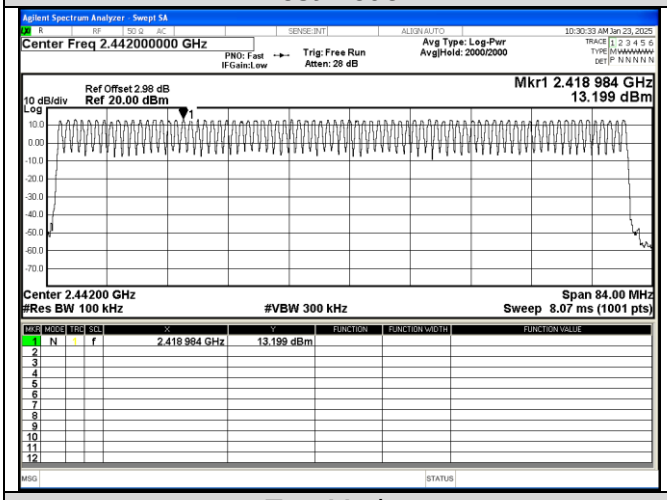
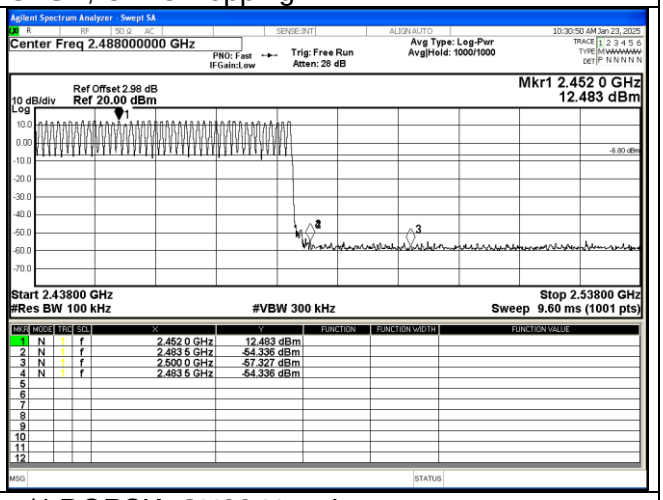
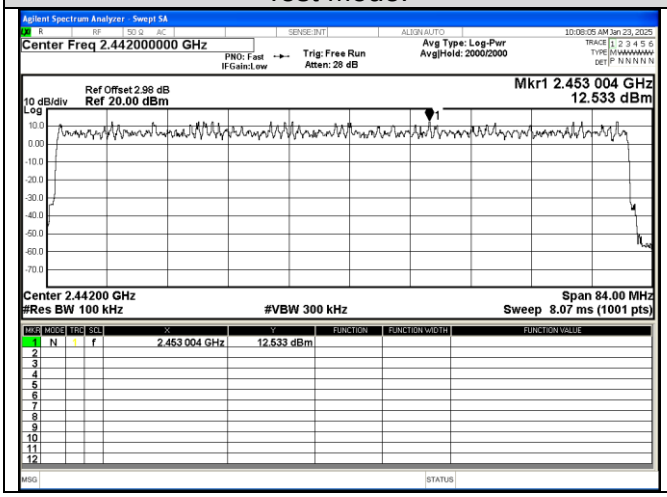
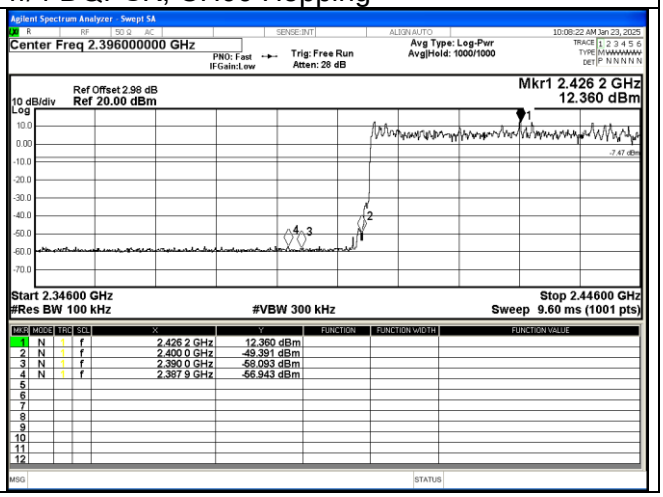


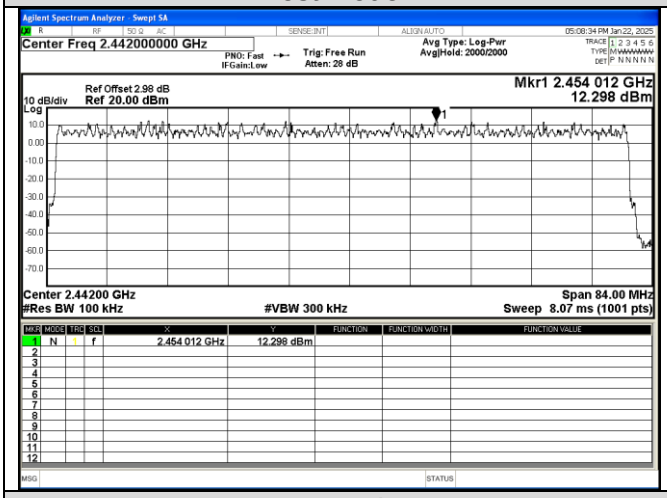
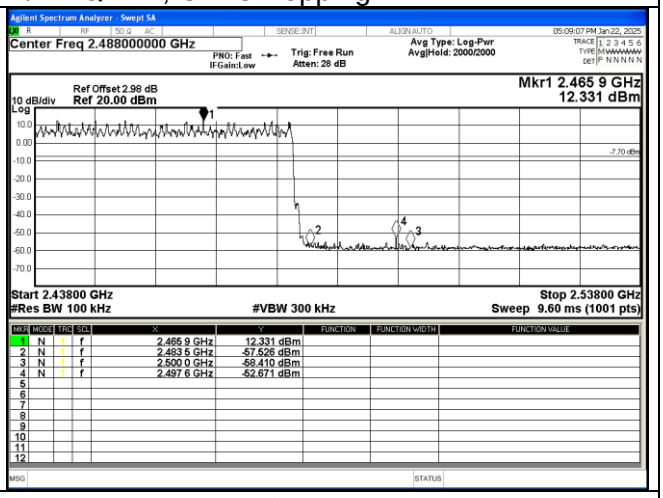
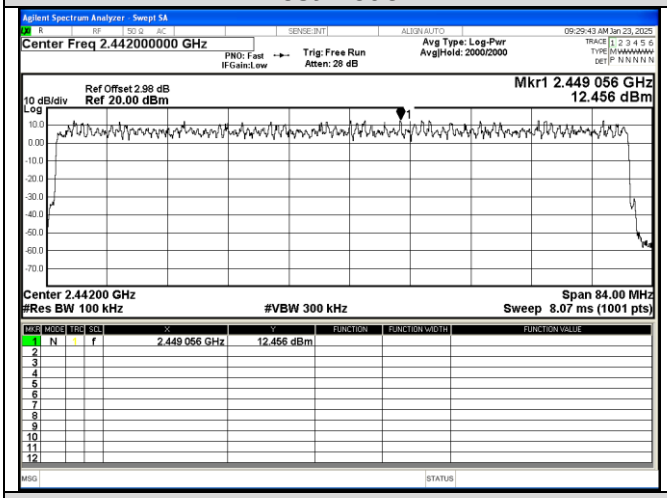
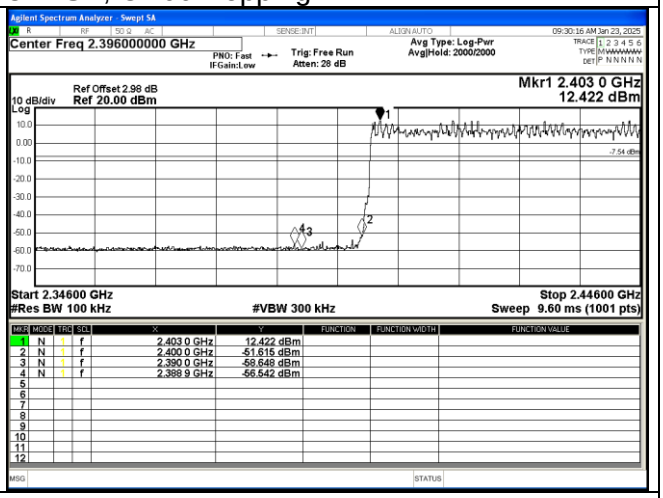
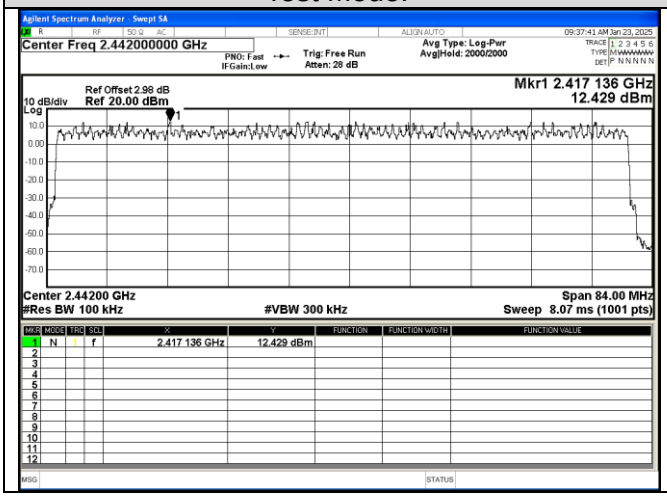
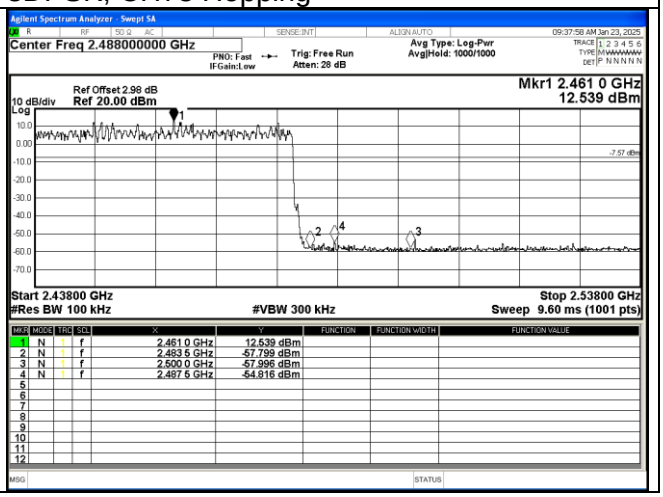
Test Mode: π/4 DQPSK, CH00





Test Mode:	π/4 DQPSK, CH78
	
Test Mode:	8DPSK, CH00
	
Test Mode:	8DPSK, CH78
	

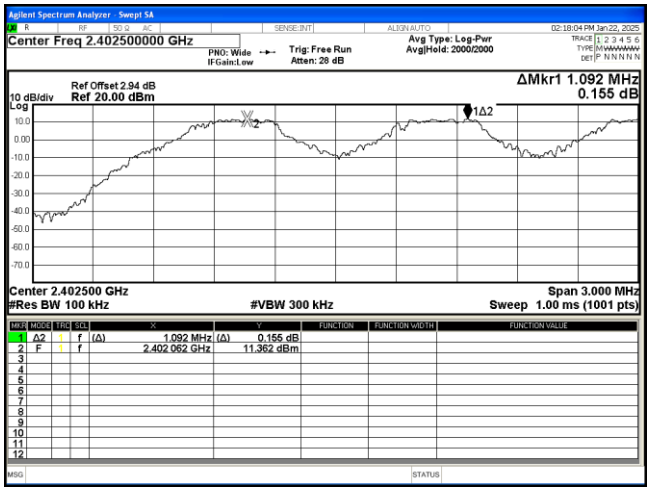
Test Mode:	GFSK, CH00 Hopping
	
Test Mode:	GFSK, CH78 Hopping
	
Test Mode:	π/4 DQPSK, CH00 Hopping
	

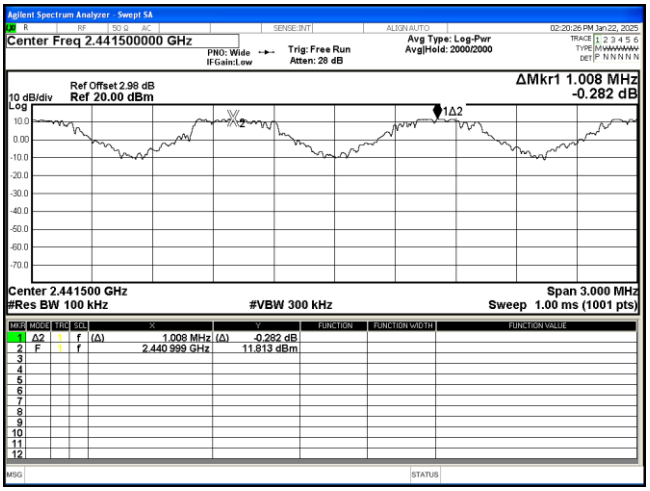
Test Mode:	π/4 DQPSK, CH78 Hopping
	
Test Mode:	8DPSK, CH00 Hopping
	
Test Mode:	8DPSK, CH78 Hopping
	

Appendix A.4 Test Results of Carrier Frequency Separation

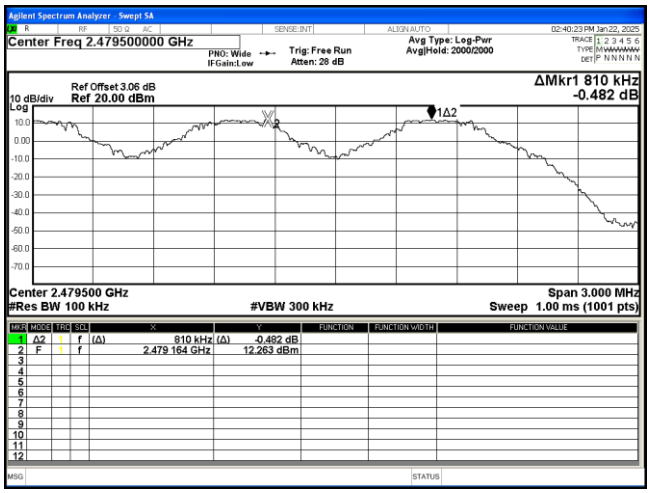
Mode	HFS (MHz)	Limit (MHz)	Verdict
GFSK, CH00	1.092	0.543	Pass
GFSK, CH39	1.008	0.542	Pass
GFSK, CH78	0.81	0.557	Pass
π/4 DQPSK, CH00	1.083	0.852	Pass
π/4 DQPSK, CH39	1.164	0.849	Pass
π/4 DQPSK, CH78	1.164	0.876	Pass
8DPSK, CH00	0.906	0.853	Pass
8DPSK, CH39	1.122	0.857	Pass
8DPSK, CH78	1.146	0.836	Pass

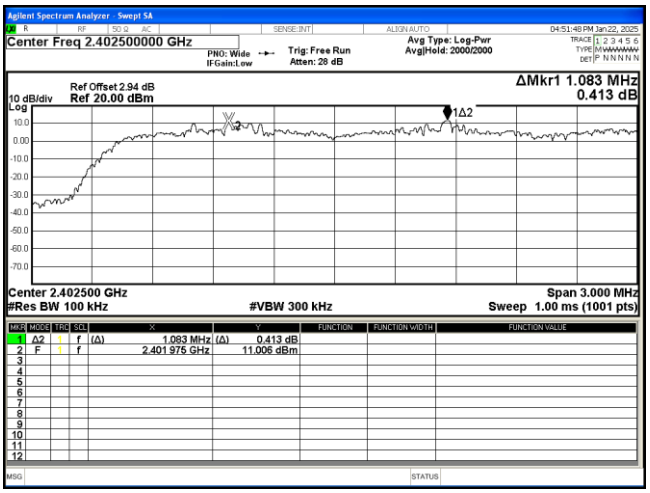
Test Mode:	GFSK, CH00	Test Mode:	GFSK, CH39



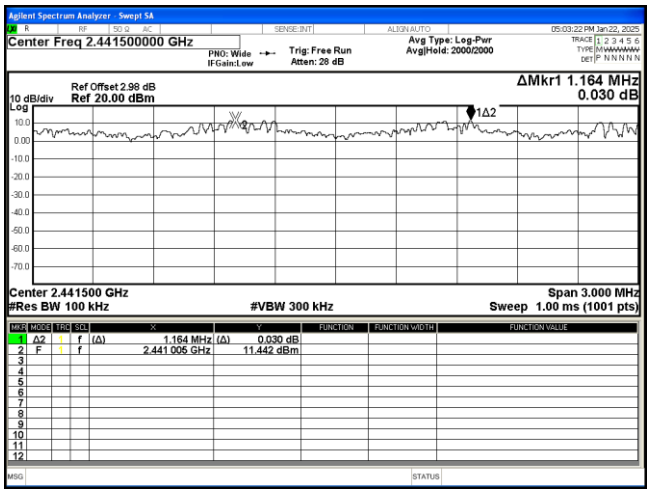


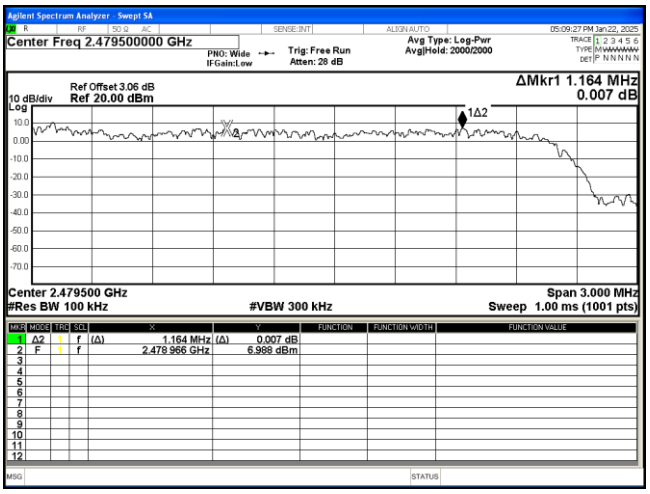
Test Mode:	GFSK, CH78	Test Mode:	π/4 DQPSK, CH00



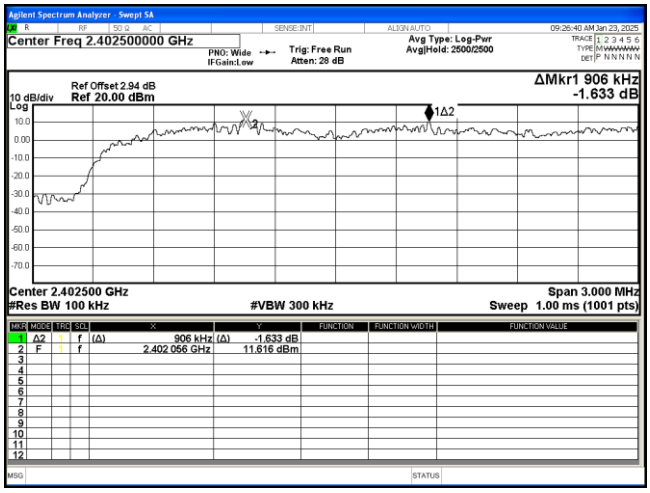


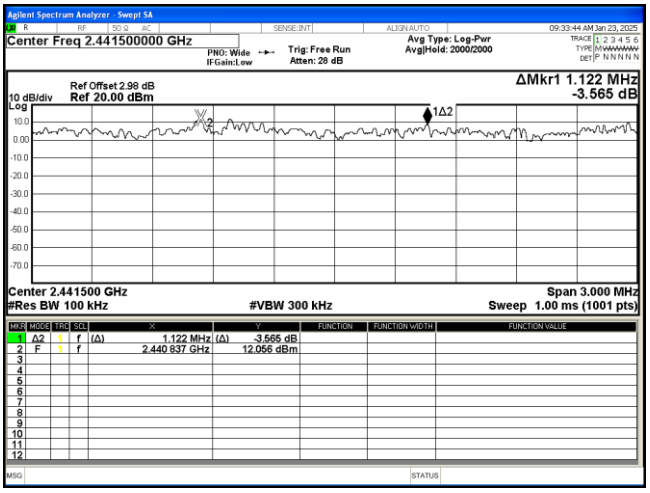
Test Mode:	π/4 DQPSK, CH39	Test Mode:	π/4 DQPSK, CH78



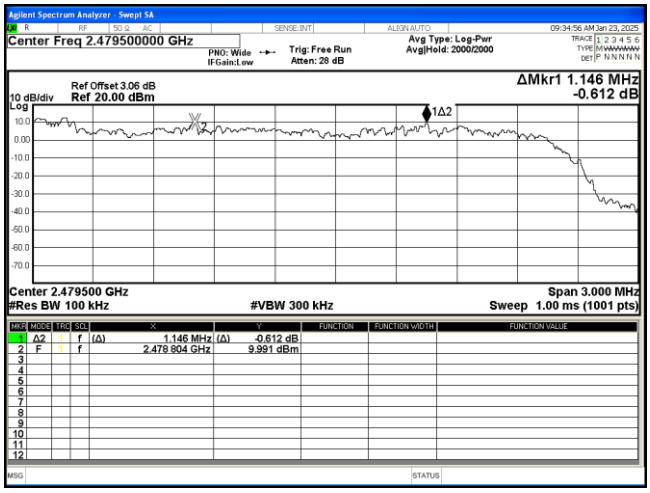


Test Mode:	8DPSK, CH00	Test Mode:	8DPSK, CH39





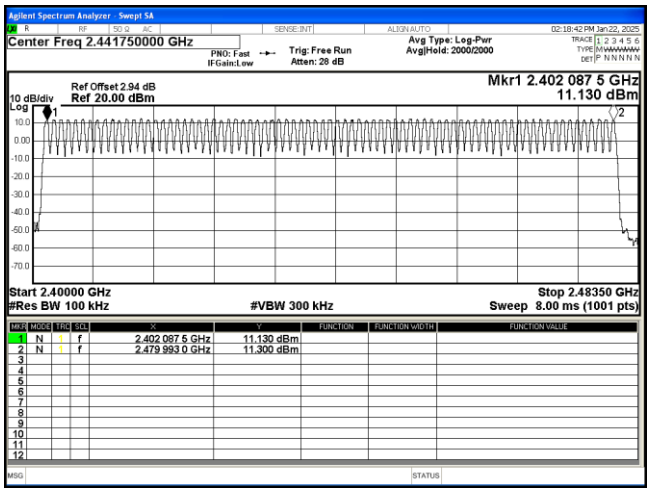
Test Mode:	8DPSK, CH78		

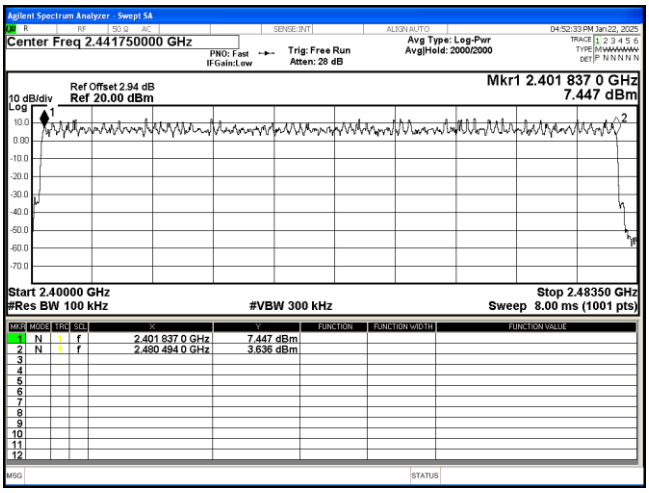


Appendix A.5 Test Results of Number of Hopping Frequency

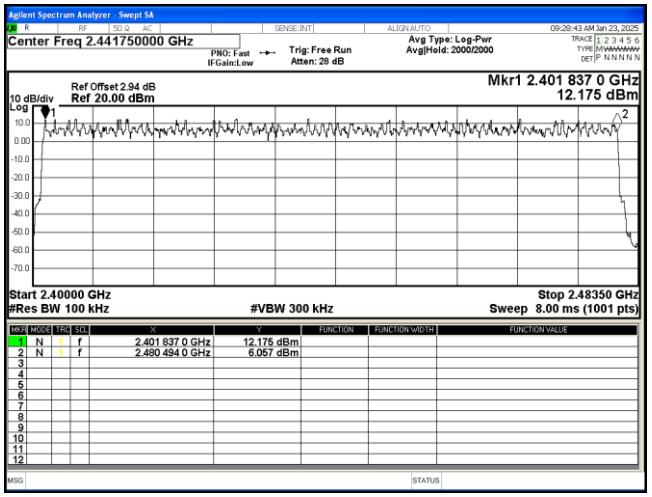
Mode	Hopping Number	Limit	Verdict
GFSK, Hopping	79	15	Pass
π/4 DQPSK, Hopping	79	15	Pass
8DPSK, Hopping	79	15	Pass

Test Mode:	GFSK, Hopping	Test Mode:	π/4 DQPSK, Hopping





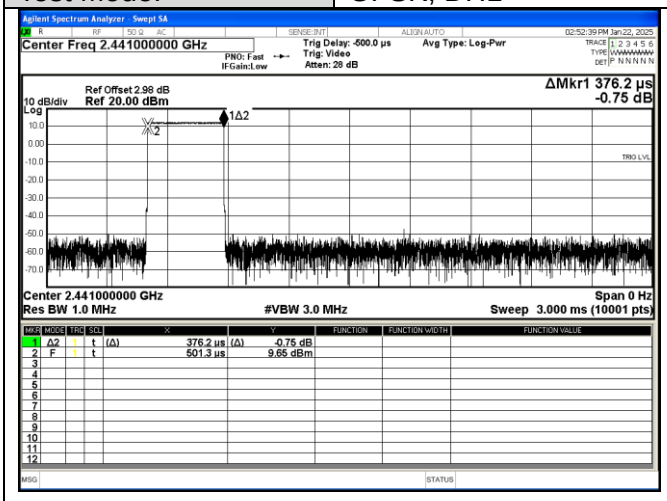
Test Mode:	8DPSK, Hopping		

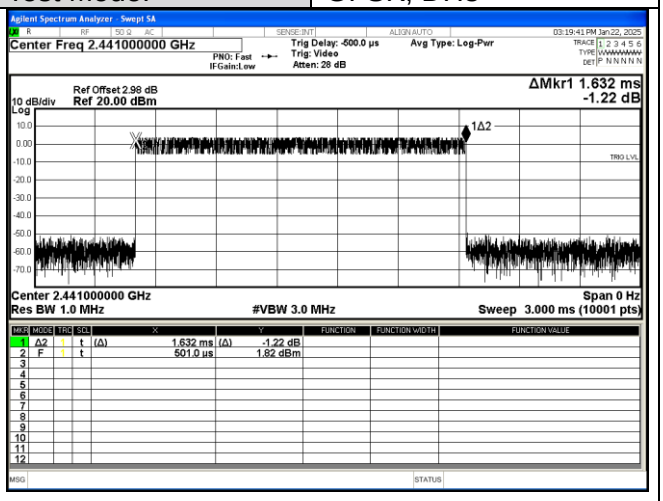


Appendix A.6 Test Results of Time of Occupancy

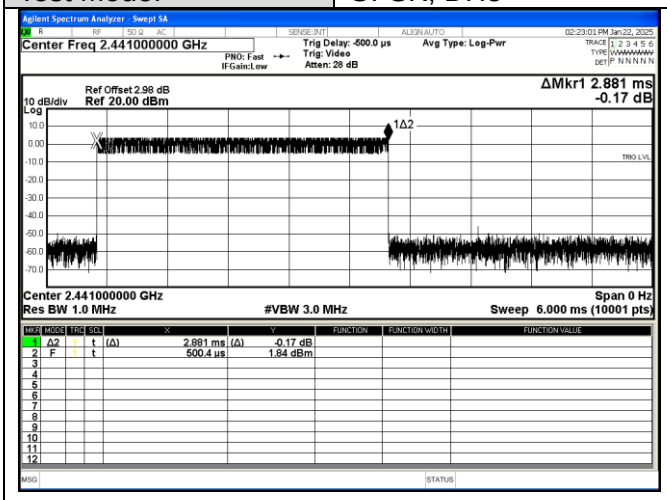
Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
GFSK, DH1	2441	0.376	118.879	31600	400	Pass
GFSK, DH3	2441	1.632	257.903	31600	400	Pass
GFSK, DH5	2441	2.881	273.081	31600	400	Pass
π/4 DQPSK, DH1	2441	0.383	121.154	31600	400	Pass
π/4 DQPSK, DH3	2441	1.634	258.093	31600	400	Pass
π/4 DQPSK, DH5	2441	2.882	273.166	31600	400	Pass
8DPSK, DH1	2441	0.385	121.534	31600	400	Pass
8DPSK, DH3	2441	1.63	257.477	31600	400	Pass
8DPSK, DH5	2441	2.878	272.796	31600	400	Pass

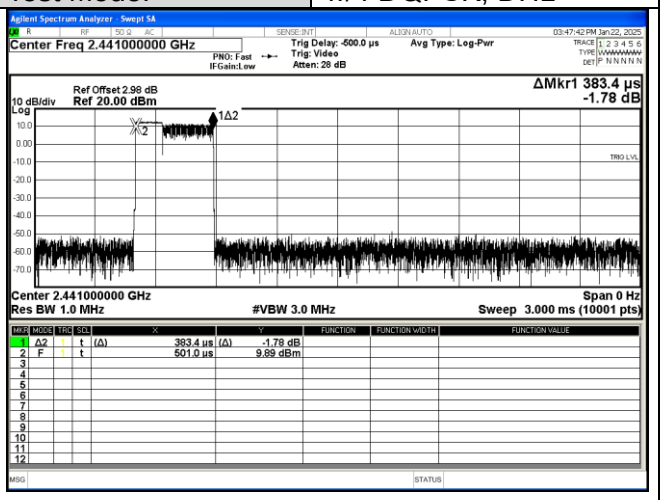
Test Mode:	GFSK, DH1	Test Mode:	GFSK, DH3



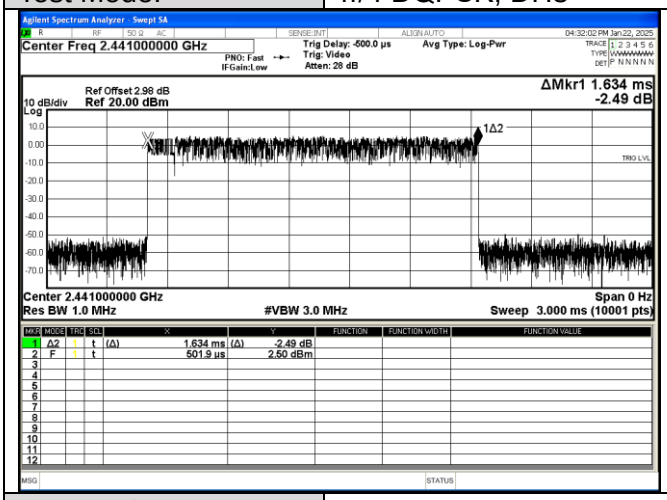


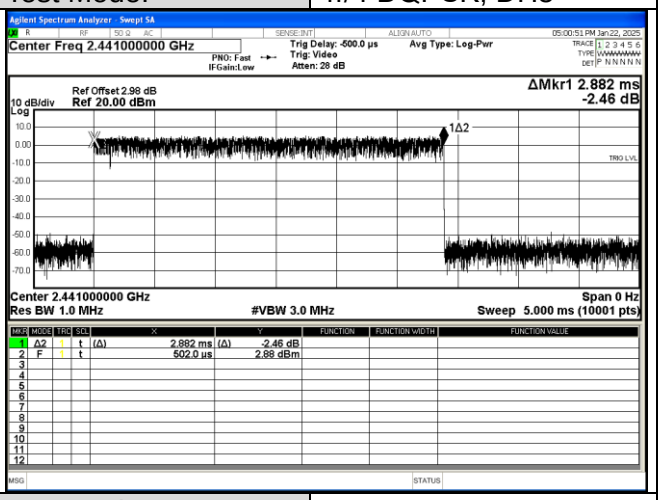
Test Mode:	GFSK, DH5	Test Mode:	π/4 DQPSK, DH1



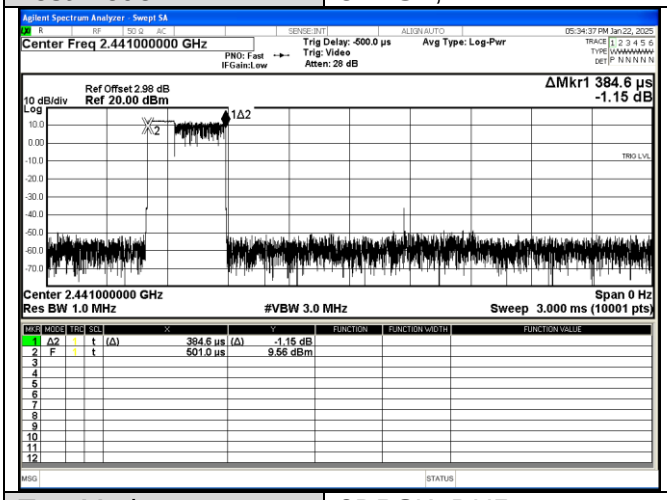


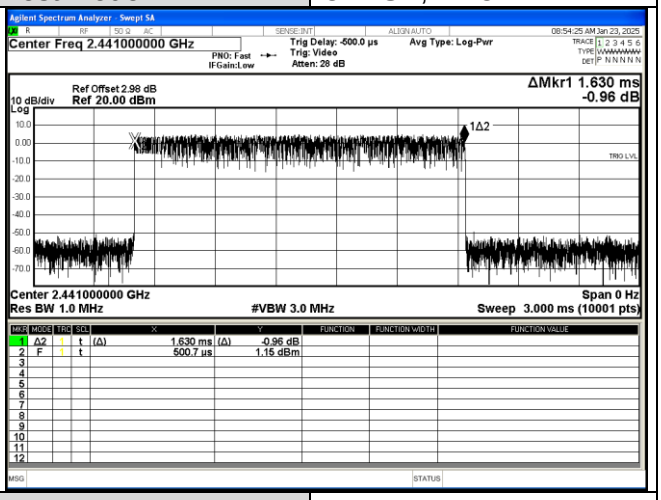
Test Mode:	π/4 DQPSK, DH3	Test Mode:	π/4 DQPSK, DH5



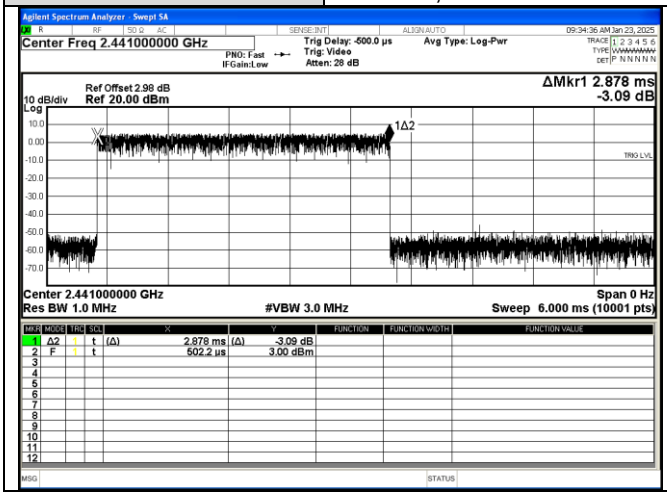


Test Mode:	8DPSK, DH1	Test Mode:	8DPSK, DH3





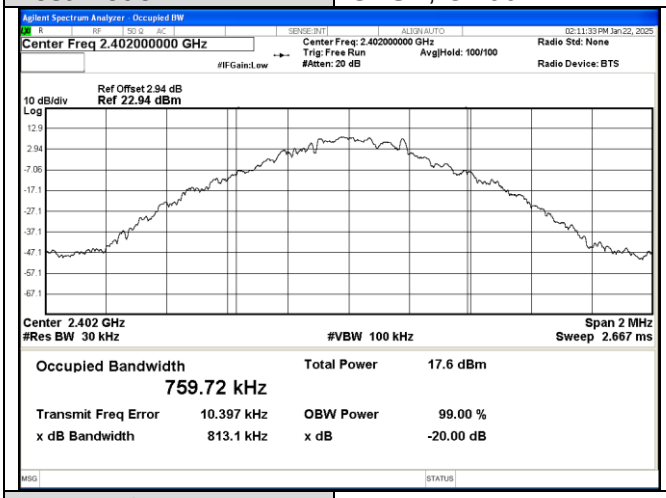
Test Mode:	8DPSK, DH5		

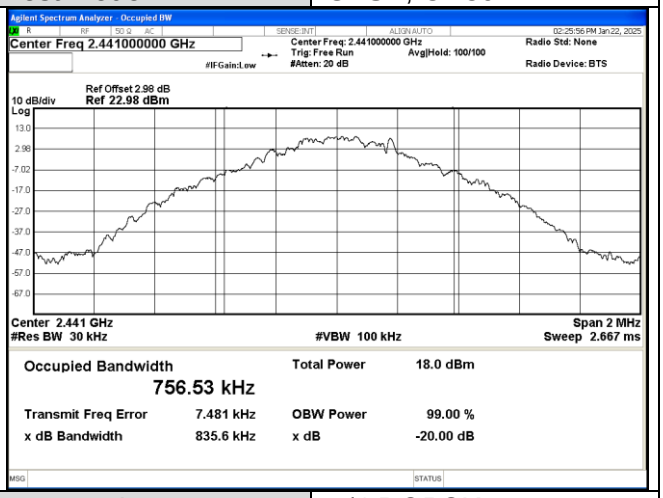


Appendix A.7 Test Results of 20dB & 99% BANDWIDTH

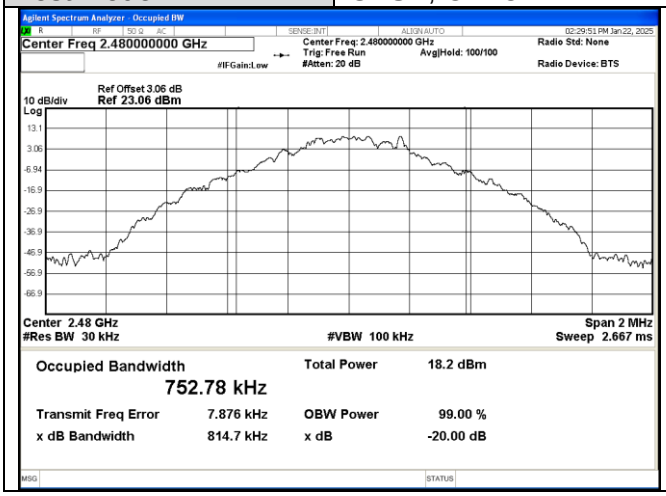
Mode	Frequency [MHz]	99% Bandwidth [MHz]	20dB Bandwidth [MHz]
GFSK	2402	0.7528	0.8147
GFSK	2441	0.7597	0.8131
GFSK	2480	0.7565	0.8356
π/4 DQPSK	2402	1.1672	1.2784
π/4 DQPSK	2441	1.1772	1.2739
π/4 DQPSK	2480	1.1702	1.3141
8DPSK	2402	1.1652	1.2801
8DPSK	2441	1.1666	1.2862
8DPSK	2480	1.1573	1.2534

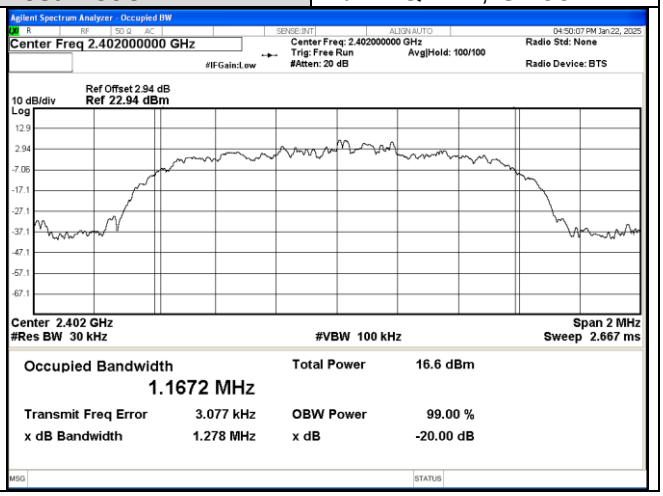
Test Mode:	GFSK, CH00	Test Mode:	GFSK, CH39



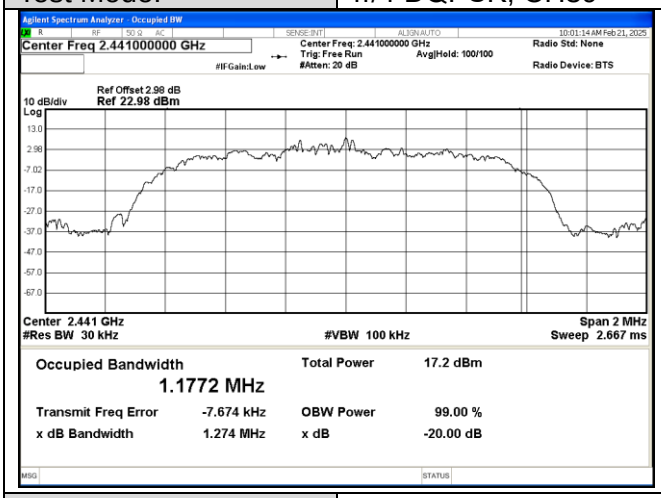


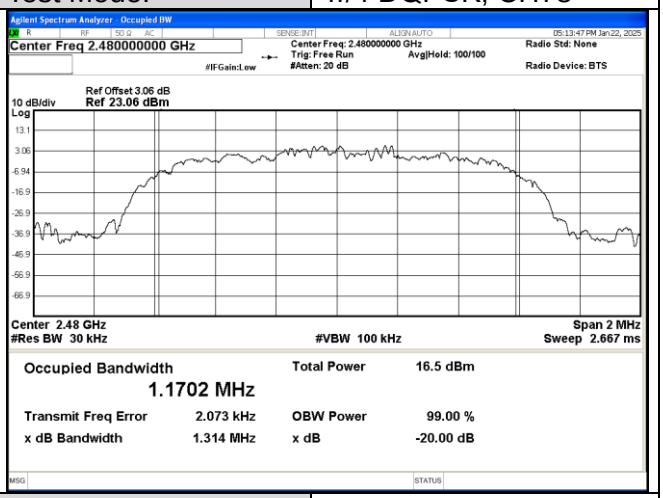
Test Mode:	GFSK, CH78	Test Mode:	π/4 DQPSK, CH00



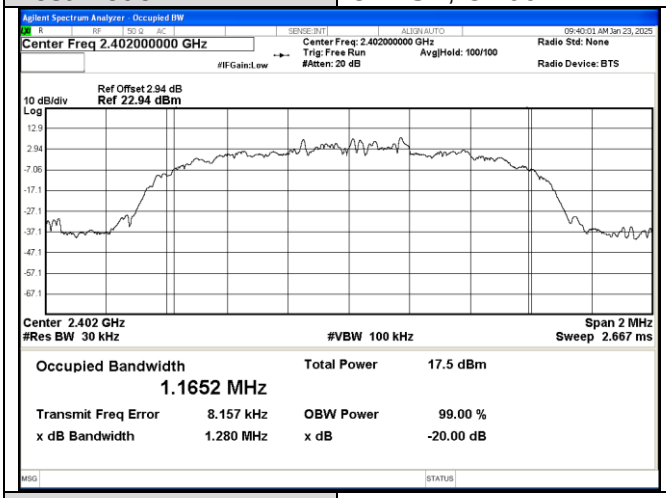


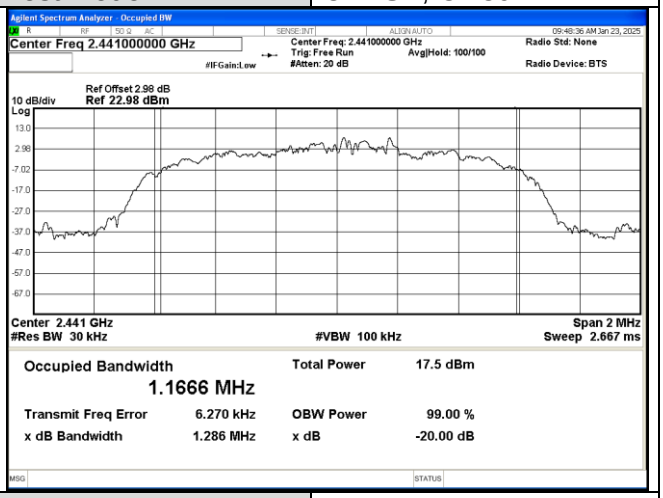
Test Mode:	π/4 DQPSK, CH39	Test Mode:	π/4 DQPSK, CH78



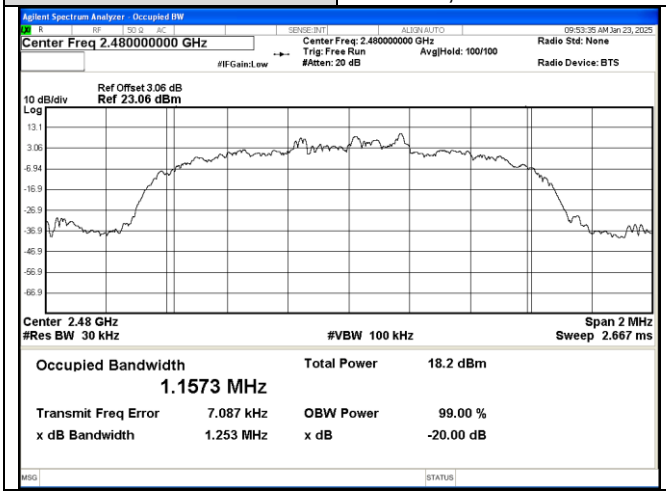


Test Mode:	8DPSK, CH00	Test Mode:	8DPSK, CH39





Test Mode:	8DPSK, CH78		



Appendix A.8 Test Results of Maximum Conducted Output Power

For FCC:

Mode	Frequency [MHz]	Measured of Conducted Power		Limit [W]
		dBm	W	
GFSK	2402	12.112	0.0163	< 0.125
	2441	12.293	0.0170	< 0.125
	2480	12.395	0.0174	< 0.125
π/4 DQPSK	2402	12.338	0.0171	< 0.125
	2441	12.235	0.0167	< 0.125
	2480	12.393	0.0174	< 0.125
8DPSK	2402	12.622	0.0183	< 0.125
	2441	12.615	0.0183	< 0.125
	2480	12.779	0.0190	< 0.125

Note:
1) The cable loss is taken into account in results.
2) Antenna gain(G) of Bluetooth: 4.30 dBi

For ISED:

Mode	Frequency [MHz]	Conducted Power	EIRP	Limit [dBm]
		dBm	dBm	
GFSK	2402	12.112	16.412	< 21
	2441	12.293	16.593	< 21
	2480	12.395	16.695	< 21
π/4 DQPSK	2402	12.338	16.638	< 21
	2441	12.235	16.535	< 21
	2480	12.393	16.693	< 21
8DPSK	2402	12.622	16.922	< 21
	2441	12.615	16.915	< 21
	2480	12.779	17.079	< 21

Note:
1) The cable loss is taken into account in results.
2) Antenna gain(G) of Bluetooth: 4.30 dBi
e.i.r.p.=P(Peak power)+ G, which is far below the 0.125 W