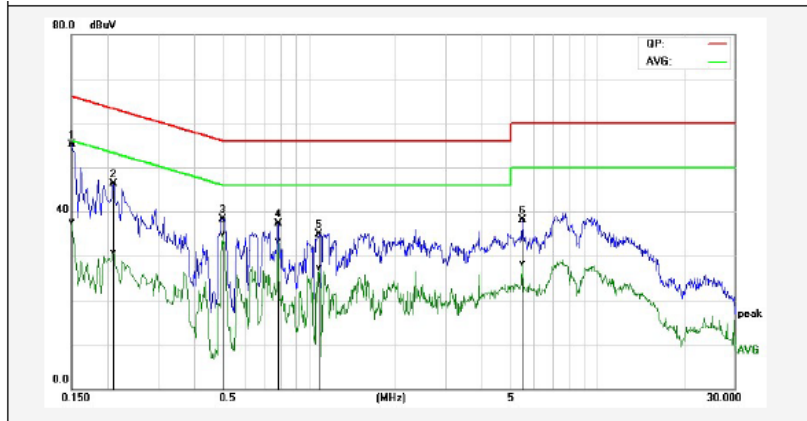
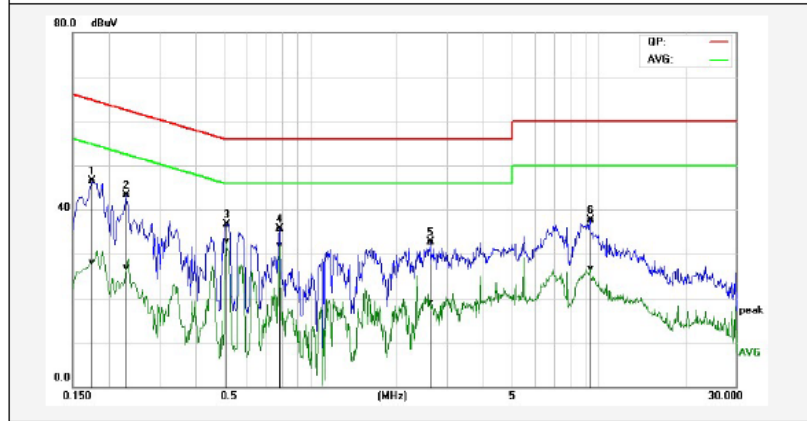


Appendix A: Test Results of BDR&EDR

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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:	Mode 10	Test Voltage :	AC 110V/60Hz																																																																																				
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 <table><tr><th>No.</th><th>Frequency (MHz)</th><th>QuasiPeak reading (dBuV)</th><th>Average reading (dBuV)</th><th>Correction factor (dB)</th><th>QuasiPeak result (dBuV)</th><th>Average result (dBuV)</th><th>QuasiPeak limit (dBuV)</th><th>Average limit (dBuV)</th><th>QuasiPeak margin (dB)</th><th>Average margin (dB)</th><th>Remark</th></tr><tr><td>1*</td><td>0.1500</td><td>45.57</td><td>28.11</td><td>9.50</td><td>55.07</td><td>37.61</td><td>65.99</td><td>56.00</td><td>-10.92</td><td>-18.39</td><td>Pass</td></tr><tr><td>2P</td><td>0.2100</td><td>36.90</td><td>21.29</td><td>9.50</td><td>46.40</td><td>30.79</td><td>63.20</td><td>53.21</td><td>-16.80</td><td>-22.42</td><td>Pass</td></tr><tr><td>3P</td><td>0.5020</td><td>28.90</td><td>25.39</td><td>9.50</td><td>38.40</td><td>34.89</td><td>56.00</td><td>46.00</td><td>-17.60</td><td>-11.11</td><td>Pass</td></tr><tr><td>4P</td><td>0.7860</td><td>27.82</td><td>23.81</td><td>9.47</td><td>37.29</td><td>33.28</td><td>56.00</td><td>46.00</td><td>-18.71</td><td>-12.72</td><td>Pass</td></tr><tr><td>5P</td><td>1.0900</td><td>25.58</td><td>17.89</td><td>9.39</td><td>34.97</td><td>27.28</td><td>56.00</td><td>46.00</td><td>-21.03</td><td>-18.72</td><td>Pass</td></tr><tr><td>6P</td><td>5.4980</td><td>29.06</td><td>19.29</td><td>9.05</td><td>38.11</td><td>28.34</td><td>60.00</td><td>50.00</td><td>-21.89</td><td>-21.66</td><td>Pass</td></tr></table>				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	1*	0.1500	45.57	28.11	9.50	55.07	37.61	65.99	56.00	-10.92	-18.39	Pass	2P	0.2100	36.90	21.29	9.50	46.40	30.79	63.20	53.21	-16.80	-22.42	Pass	3P	0.5020	28.90	25.39	9.50	38.40	34.89	56.00	46.00	-17.60	-11.11	Pass	4P	0.7860	27.82	23.81	9.47	37.29	33.28	56.00	46.00	-18.71	-12.72	Pass	5P	1.0900	25.58	17.89	9.39	34.97	27.28	56.00	46.00	-21.03	-18.72	Pass	6P	5.4980	29.06	19.29	9.05	38.11	28.34	60.00	50.00	-21.89	-21.66	Pass
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																																																																												
1*	0.1500	45.57	28.11	9.50	55.07	37.61	65.99	56.00	-10.92	-18.39	Pass																																																																												
2P	0.2100	36.90	21.29	9.50	46.40	30.79	63.20	53.21	-16.80	-22.42	Pass																																																																												
3P	0.5020	28.90	25.39	9.50	38.40	34.89	56.00	46.00	-17.60	-11.11	Pass																																																																												
4P	0.7860	27.82	23.81	9.47	37.29	33.28	56.00	46.00	-18.71	-12.72	Pass																																																																												
5P	1.0900	25.58	17.89	9.39	34.97	27.28	56.00	46.00	-21.03	-18.72	Pass																																																																												
6P	5.4980	29.06	19.29	9.05	38.11	28.34	60.00	50.00	-21.89	-21.66	Pass																																																																												
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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	37.14	18.71	9.40	46.54	28.11	64.76	54.77	-18.22	-26.66	Pass																																																																												
2P	0.2300	33.94	17.59	9.40	43.34	26.99	62.45	52.45	-19.11	-25.46	Pass																																																																												
3*	0.5140	27.26	23.52	9.40	36.66	32.92	56.00	46.00	-19.34	-13.08	Pass																																																																												
4P	0.7860	26.33	22.55	9.37	35.70	31.92	56.00	46.00	-20.30	-14.08	Pass																																																																												
5P	2.6260	23.55	9.71	9.14	32.69	18.85	56.00	46.00	-23.31	-27.15	Pass																																																																												
6P	9.3700	28.54	17.58	9.08	37.62	26.66	60.00	50.00	-22.38	-23.34	Pass																																																																												

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

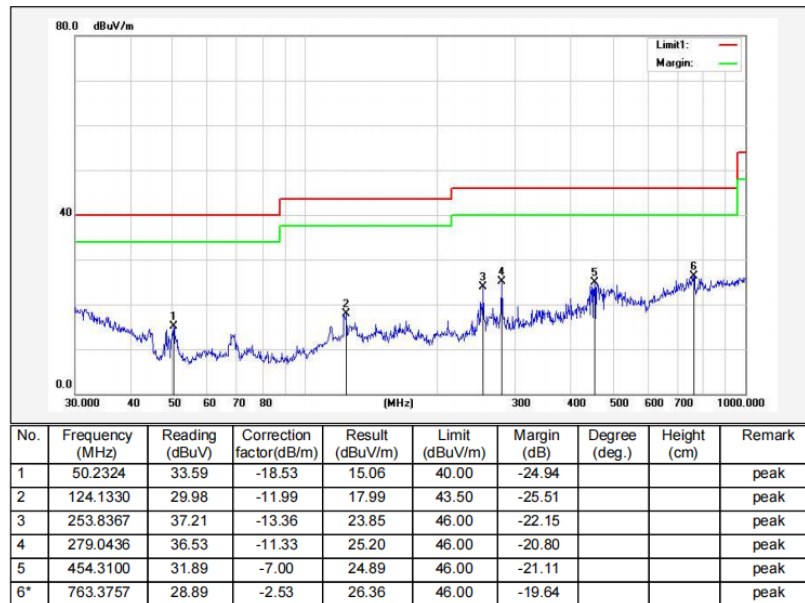
Appendix A.2 Test Results of Radiated Spurious Emission

Below 1G:

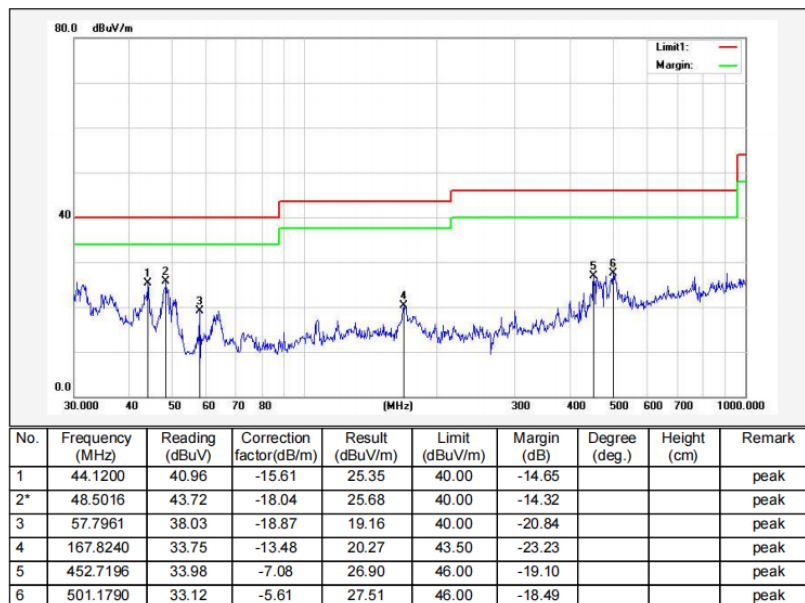
Note: All modes have been tested, and the report only reflects the worst mode.

Test Mode : Mode 10 Test Voltage : DC 5V

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	3992	59.5	-15.01	44.49	74	-29.51	peak
2	4808	59.56	-13.33	46.23	74	-27.77	peak
3	6066	56.13	-10.07	46.06	57	-10.94	peak
4	6916	56.49	-8.8	47.69	57	-9.31	peak
5	7562	56.07	-7.22	48.85	74	-25.15	peak
6	8242	56.18	-7.48	48.7	74	-25.3	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	3992	60.2	-15.01	45.19	74	-28.81	peak
2	6134	56.37	-9.98	46.39	57	-10.61	peak
3	6916	57.03	-8.8	48.23	57	-8.77	peak
4	7698	56.64	-7.74	48.9	74	-25.1	peak
5	8276	56.19	-7.36	48.83	74	-25.17	peak
6	8820	56.96	-7.83	49.13	57	-7.87	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	4876	62.67	-13	49.67	74	-24.33	peak
2	4876	58.24	-13	45.24	54	-8.76	AVG
3	6134	56.75	-9.98	46.77	57	-10.23	peak
4	6950	56.3	-8.79	47.51	57	-9.49	peak
5	7596	55.82	-7.26	48.56	74	-25.44	peak
6	8378	56.08	-7.1	48.98	74	-25.02	peak
7	8854	56.36	-7.88	48.48	57	-8.52	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	3992	58.83	-15.01	43.82	74	-30.18	peak
2	4876	57.57	-13	44.57	74	-29.43	peak
3	5964	58.18	-10.23	47.95	57	-9.05	peak
4	6916	56.64	-8.8	47.84	57	-9.16	peak
5	7426	55.46	-7.09	48.37	74	-25.63	peak
6	8378	56.24	-7.1	49.14	74	-24.86	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	3992	60.16	-15.01	45.15	74	-28.85	peak
2	4944	62.53	-12.85	49.68	74	-24.32	peak
3	6916	57	-8.8	48.2	57	-8.8	peak
4	7562	55.48	-7.22	48.26	74	-25.74	peak
5	8378	55.41	-7.1	48.31	74	-25.69	peak
6	8820	56.48	-7.83	48.65	57	-8.35	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	3958	60.29	-15.09	45.2	74	-28.8	peak
2	6168	56.57	-9.92	46.65	57	-10.35	peak
3	6916	56.6	-8.8	47.8	57	-9.2	peak
4	7596	56.68	-7.26	49.42	74	-24.58	peak
5	8378	55.3	-7.1	48.2	74	-25.8	peak
6	8650	56.84	-8.29	48.55	57	-8.45	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	4094	59.61	-15.06	44.55	74	-29.45	peak
2	4808	60.93	-13.33	47.6	74	-26.4	peak
3	6168	56.58	-9.92	46.66	57	-10.34	peak
4	6950	56.46	-8.79	47.67	57	-9.33	peak
5	7562	55.56	-7.22	48.34	74	-25.66	peak
6	8242	56.43	-7.48	48.95	74	-25.05	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	4944	57.66	-12.85	44.81	74	-29.19	peak
2	5998	57.07	-10.12	46.95	57	-10.05	peak
3	6950	56.2	-8.79	47.41	57	-9.59	peak
4	7562	56.3	-7.22	49.08	74	-24.92	peak
5	8208	56.37	-7.62	48.75	74	-25.25	peak
6	8854	56.56	-7.88	48.68	57	-8.32	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	4876	62.53	-13	49.53	74	-24.47	peak
2	5964	56.86	-10.23	46.63	57	-10.37	peak
3	6916	56.22	-8.8	47.42	57	-9.58	peak
4	7562	55.43	-7.22	48.21	74	-25.79	peak
5	8208	55.8	-7.62	48.18	74	-25.82	peak
6	8820	56.61	-7.83	48.78	57	-8.22	peak

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

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5998	56.56	-10.12	46.44	57	-10.56	peak
2	6202	56.47	-9.91	46.56	57	-10.44	peak
3	6712	56.48	-9.49	46.99	57	-10.01	peak
4	7562	55.66	-7.22	48.44	74	-25.56	peak
5	8378	55.94	-7.1	48.84	74	-25.16	peak
6	8820	56.02	-7.83	48.19	57	-8.81	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	4944	63.75	-12.85	50.9	74	-23.1	peak
2	5658	56.98	-11.88	45.1	57	-11.9	peak
3	6168	56.82	-9.92	46.9	57	-10.1	peak
4	6746	56.91	-9.21	47.7	57	-9.3	peak
5	7426	55.78	-7.09	48.69	74	-25.31	peak
6	8242	56.12	-7.48	48.64	74	-25.36	peak

 $\pi/4$ 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	59.72	-15.09	44.63	74	-29.37	peak
2	5692	56.79	-11.75	45.04	57	-11.96	peak
3	5998	56.45	-10.12	46.33	57	-10.67	peak
4	6780	56.59	-8.99	47.6	57	-9.4	peak
5	7392	56.36	-7.13	49.23	74	-24.77	peak
6	8242	56.42	-7.48	48.94	74	-25.06	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	4808	60.44	-13.33	47.11	74	-26.89	peak
2	5998	56.52	-10.12	46.4	57	-10.6	peak
3	6916	58.25	-8.8	49.45	57	-7.55	peak
4	7562	56.27	-7.22	49.05	74	-24.95	peak
5	8446	56.36	-7.38	48.98	74	-25.02	peak
6	8854	56.87	-7.88	48.99	57	-8.01	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	4332	58.87	-14.54	44.33	74	-29.67	peak
2	4842	57.59	-13.14	44.45	74	-29.55	peak
3	5964	56.68	-10.23	46.45	57	-10.55	peak
4	6882	56.03	-8.82	47.21	57	-9.79	peak
5	7596	55.87	-7.26	48.61	74	-25.39	peak
6	8344	56.42	-7.2	49.22	74	-24.78	peak

8DPSK - Middle (worst mode) Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4876	63.77	-13	50.77	74	-23.23	peak
2	5998	56.86	-10.12	46.74	57	-10.26	peak
3	6950	55.97	-8.79	47.18	57	-9.82	peak
4	7358	55.96	-7.23	48.73	74	-25.27	peak
5	8412	55.52	-7.14	48.38	74	-25.62	peak
6	8854	57.16	-7.88	49.28	57	-7.72	peak

8DPSK - Middle (worst mode) Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5726	57.42	-11.86	45.56	57	-11.44	peak
2	6134	56.51	-9.98	46.53	57	-10.47	peak
3	6848	55.98	-8.84	47.14	57	-9.86	peak
4	7426	56.3	-7.09	49.21	74	-24.79	peak
5	8344	55.91	-7.2	48.71	74	-25.29	peak
6	8854	56.26	-7.88	48.38	57	-8.62	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	4944	62.95	-12.85	50.10	74	-23.9	peak
2	6168	56.58	-9.92	46.66	57	-10.34	peak
3	6916	57.22	-8.8	48.42	57	-8.58	peak
4	7698	56.64	-7.74	48.9	74	-25.1	peak
5	8208	56.21	-7.62	48.59	74	-25.41	peak
6	8854	56.1	-7.88	48.22	57	-8.78	peak

8DPSK - High (worst mode) Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	3992	61.66	-15.01	46.65	74	-27.35	peak
2	6134	56.57	-9.98	46.59	57	-10.41	peak
3	6746	56.98	-9.21	47.77	57	-9.23	peak
4	7596	56.39	-7.26	49.13	74	-24.87	peak
5	8208	56.27	-7.62	48.65	74	-25.35	peak
6	8854	55.56	-7.88	47.68	57	-9.32	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. 77.00) 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	2378.142	62.96	-21.07	41.89	74	-32.11	peak
2	2378.142	49.48	-21.07	28.41	54	-25.59	AVG
3	2390	60.71	-21.03	39.68	74	-34.32	peak
4	2390	46.89	-21.03	25.86	54	-28.14	AVG
5	2402.047	114.25	-20.99	93.26	116.2	-22.94	peak
Vertical							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2355.474	59.04	-21.17	37.87	74	-36.13	peak
2	2355.474	47.31	-21.17	26.14	54	-27.86	AVG
3	2390	57.37	-21.03	36.34	74	-37.66	peak
4	2390	45.66	-21.03	24.63	54	-29.37	AVG
5	2401.843	106.15	-20.99	85.16	116.2	-31.04	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	2479.8	110.47	-20.91	89.56	116.2	-26.64	peak
2	2483.5	67.35	-20.91	46.44	74	-27.56	peak
3	2483.5	56.88	-20.91	35.97	54	-18.03	AVG
4	2491.96	62.72	-20.92	41.8	74	-32.2	peak
5	2491.96	49.06	-20.92	28.14	54	-25.86	AVG
Vertical							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2479.8	103.17	-20.91	82.26	116.2	-33.94	peak
2	2483.5	59.41	-20.91	38.5	74	-35.5	peak
3	2483.5	46.05	-20.91	25.14	54	-28.86	AVG
4	2490.22	60.18	-20.92	39.26	74	-34.74	peak
5	2490.22	48.57	-20.92	27.65	54	-26.35	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	2361.471	61.92	-21.15	40.77	74	-33.23	peak
2	2361.6	47.39	-21.15	26.24	54	-27.76	AVG
3	2390	62.93	-21.03	41.9	74	-32.1	peak
4	2390	47.5	-21.03	26.47	54	-27.53	AVG
5	2401.843	112	-20.99	91.01	116.2	-25.19	peak
Vertical							
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2318.827	60.78	-21.26	39.52	74	-34.48	peak
2	2318.827	48	-21.26	26.74	54	-27.26	AVG
3	2390	58.17	-21.03	37.14	74	-36.86	peak
4	2390	47.6	-21.03	26.57	54	-27.43	AVG
5	2402.25	104.32	-20.99	83.33	116.2	-32.87	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	2479.86	106.93	-20.91	86.02	116.2	-30.18	peak
2	2483.5	63.94	-20.91	43.03	74	-30.97	peak
3	2483.5	51.77	-20.91	30.86	54	-23.14	AVG
4	2484.475	62.59	-20.91	41.68	74	-32.32	peak
5	2484.475	47.38	-20.91	26.47	54	-27.53	AVG
Vertical							
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.86	97.91	-20.91	77	116.2	-39.2	peak
2	2483.5	58.07	-20.91	37.16	74	-36.84	peak
3	2483.5	45.59	-20.91	24.68	54	-29.32	AVG
4	2486.155	60.38	-20.91	39.47	74	-34.53	peak
5	2486.155	47.22	-20.91	26.31	54	-27.69	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	2387.028	63.32	-21.04	42.28	74	-31.72	peak
2	2387.028	49.18	-21.04	28.14	54	-25.86	AVG
3	2390	59	-21.03	37.97	74	-36.03	peak
4	2390	47.37	-21.03	26.34	54	-27.66	AVG
5	2401.843	112.24	-20.99	91.25	116.2	-24.95	peak
Vertical							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2383.389	60.43	-21.05	39.38	74	-34.62	peak
2	2383.389	47.83	-21.05	26.78	54	-27.22	AVG
3	2390	59.3	-21.03	38.27	74	-35.73	peak
4	2390	46.81	-21.03	25.78	54	-28.22	AVG
5	2402.047	104.98	-20.99	83.99	116.2	-32.21	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	2479.98	107.44	-20.91	86.53	116.2	-29.67	peak
2	2483.5	63.63	-20.91	42.72	74	-31.28	peak
3	2483.5	49.35	-20.91	28.44	54	-25.56	AVG
4	2491.985	63.28	-20.92	42.36	74	-31.64	peak
5	2491.985	51.78	-20.92	30.86	54	-23.14	AVG
Vertical							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2480.04	98.49	-20.91	77.58	116.2	-38.62	peak
2	2483.5	58.63	-20.91	37.72	74	-36.28	peak
3	2483.5	46.08	-20.91	25.17	54	-28.83	AVG
4	2487.116	60.05	-20.91	39.14	74	-34.86	peak
5	2487.116	42.76	-20.91	21.85	54	-32.15	AVG

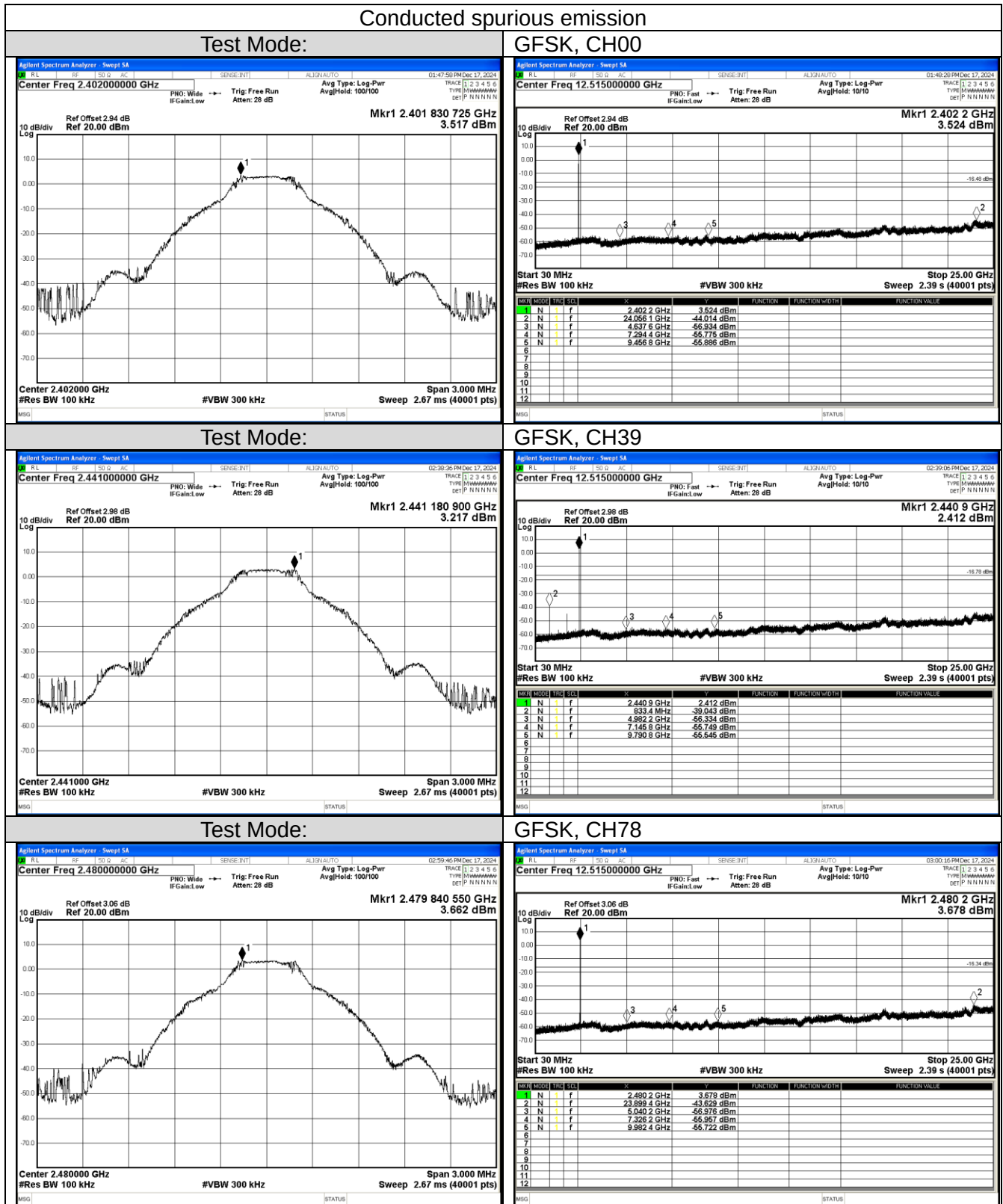
Correction Factor = antenna factor + cable loss – amplifier gain;

Reading = Reading Amplitude in the instrument;

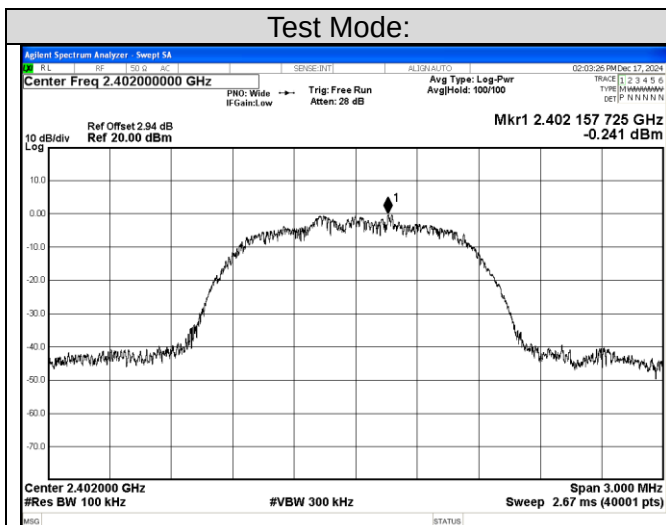
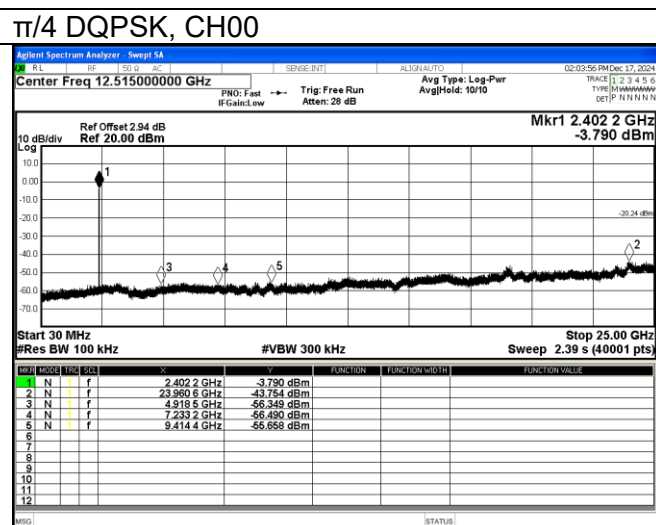
Result = Correction Factor + Reading;

Margin = Result – Limit

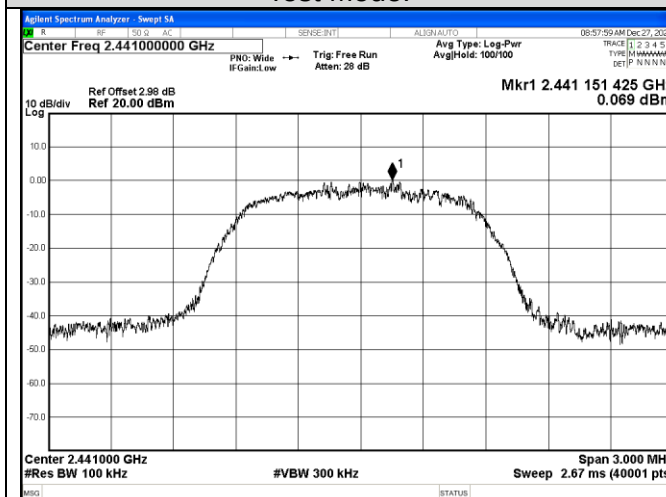
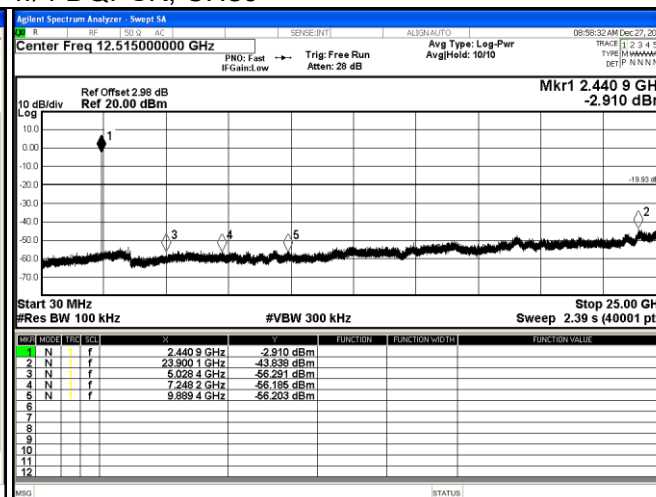
Appendix A.3 Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth



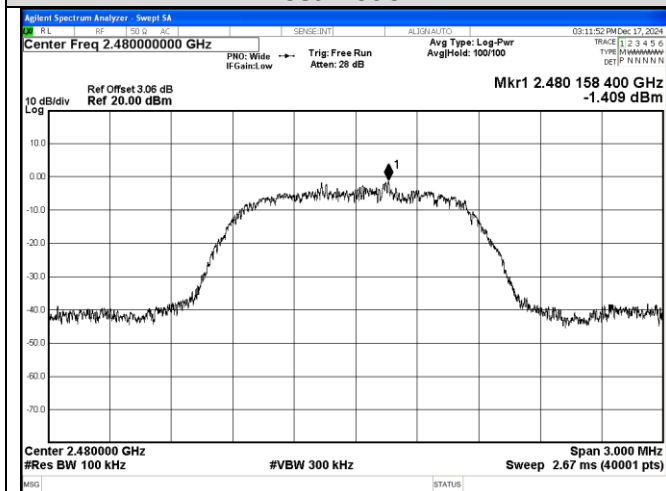
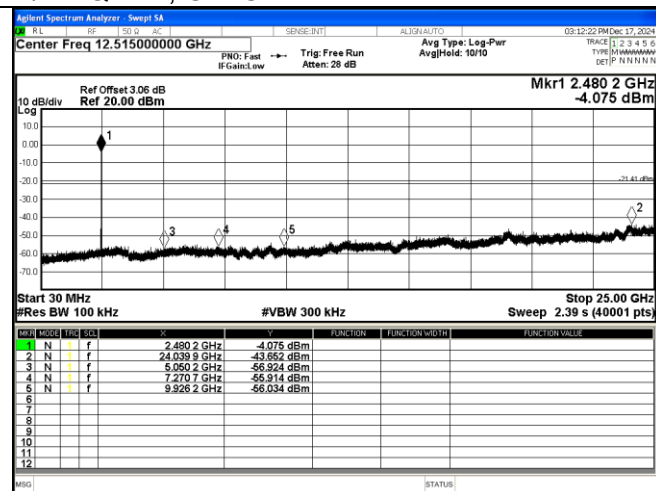
Test Mode:


 $\pi/4$ DQPSK, CH00


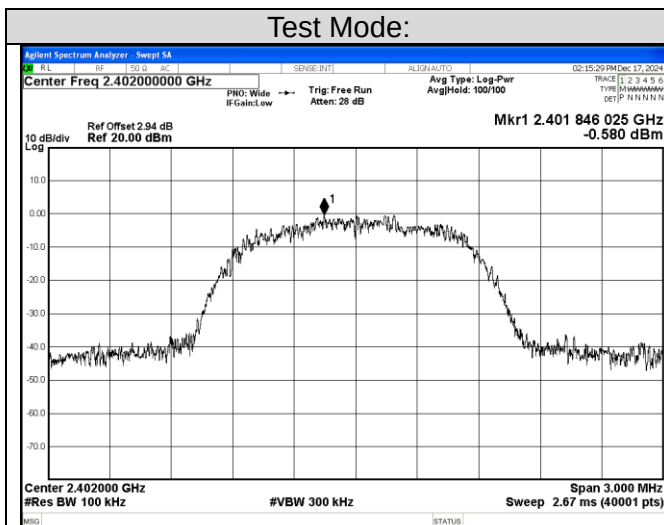
Test Mode:


 $\pi/4$ DQPSK, CH39


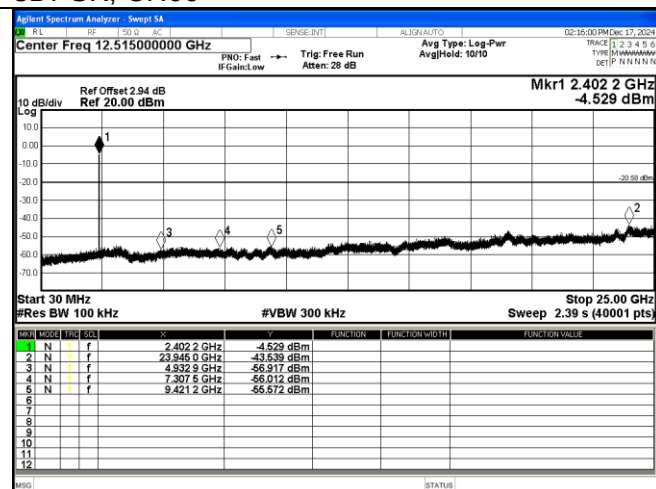
Test Mode:


 $\pi/4$ DQPSK, CH78


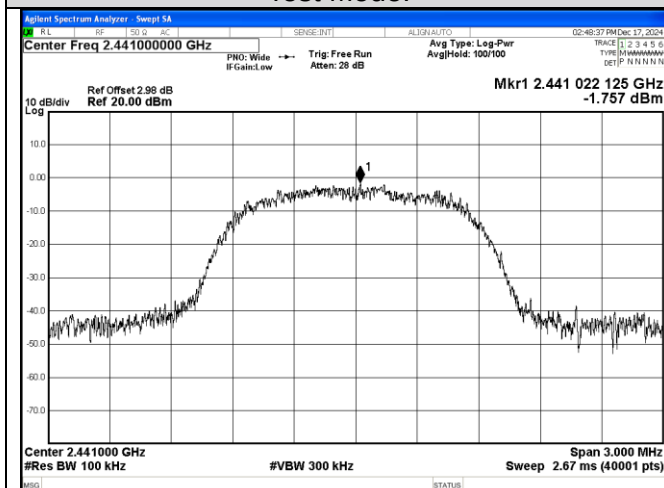
Test Mode:



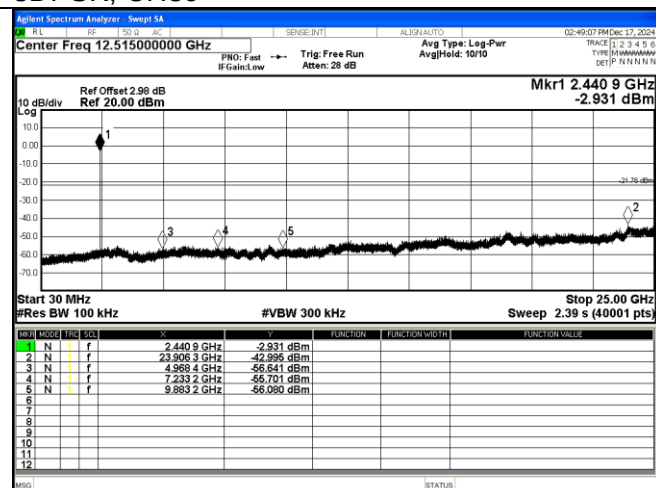
8DPSK, CH00



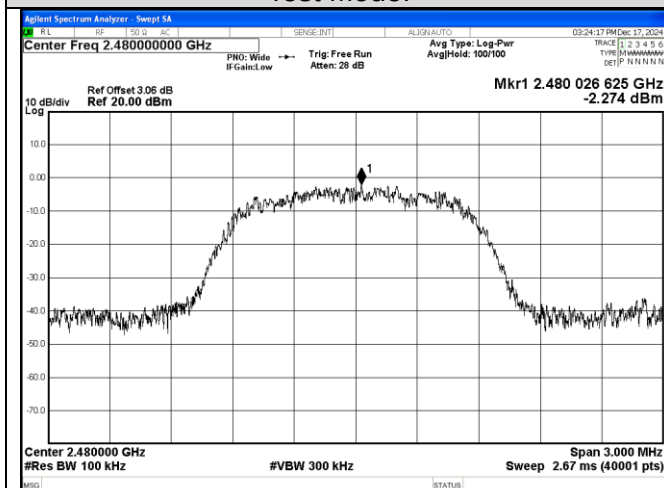
Test Mode:



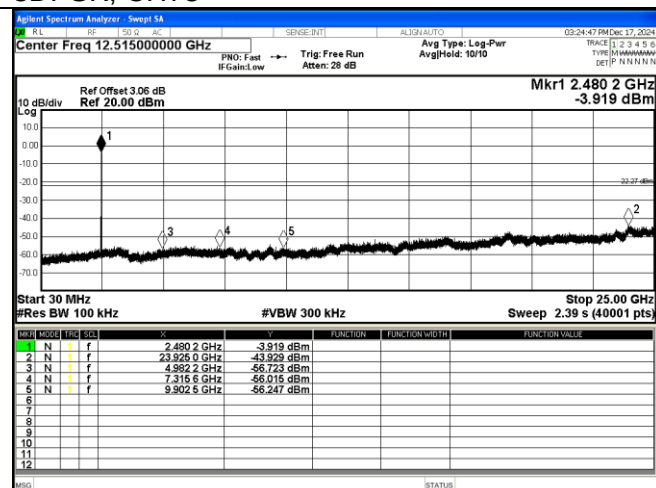
8DPSK, CH39



Test Mode:



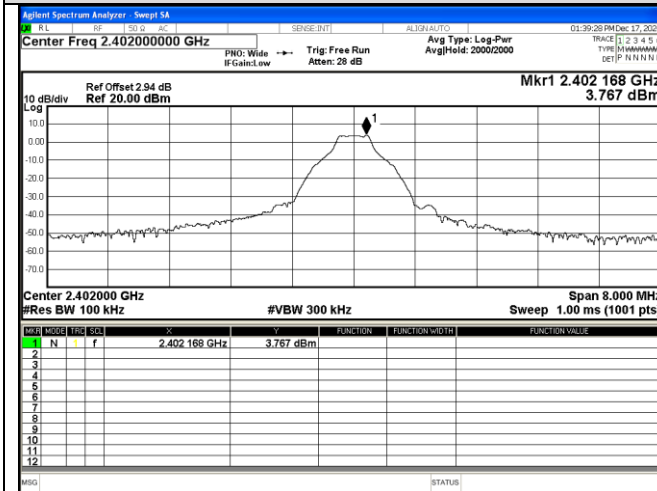
8DPSK, CH78



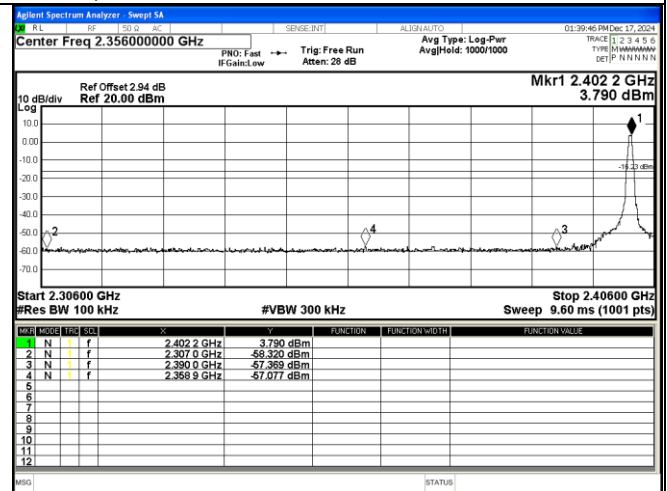


For Band edge (it's also the reference level for conducted spurious emission)

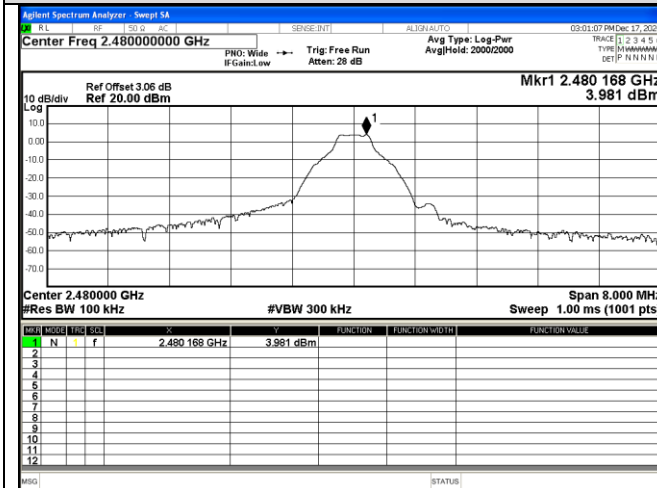
Test Mode:



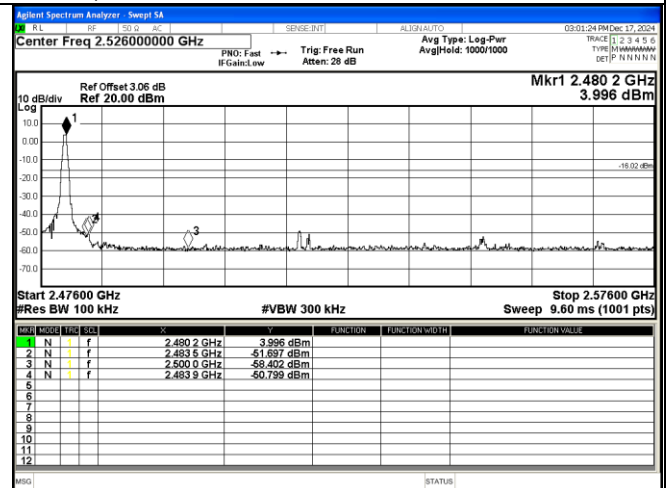
GFSK, CH00



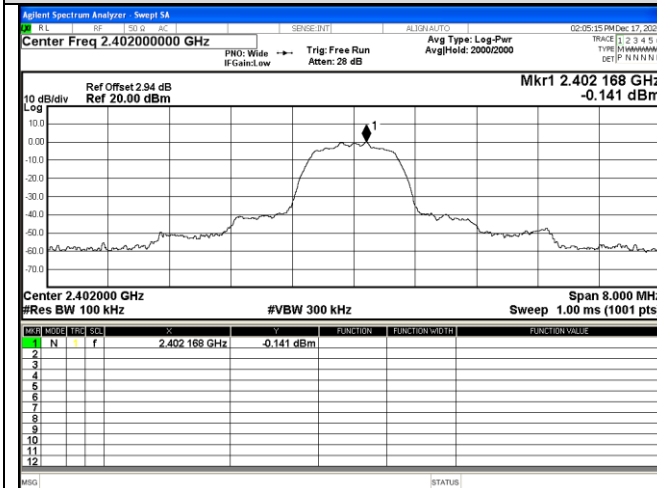
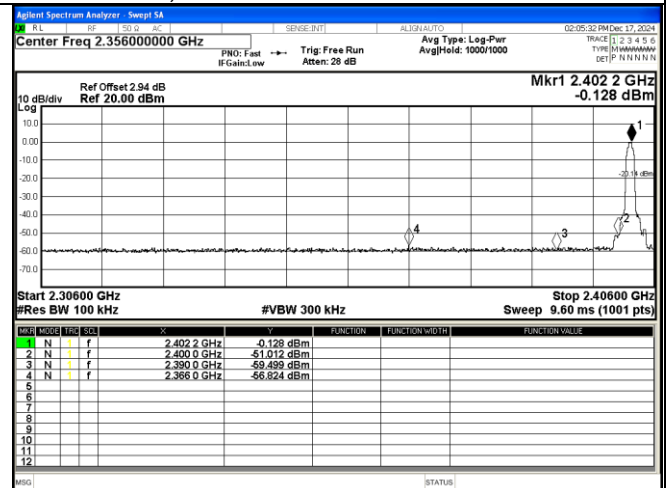
Test Mode:



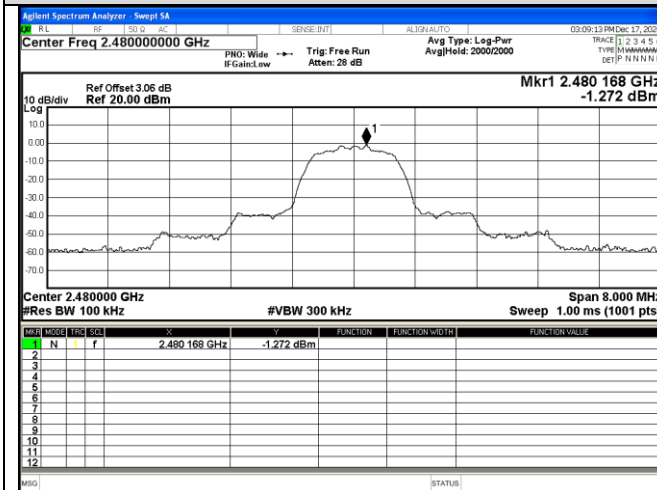
GFSK, CH78



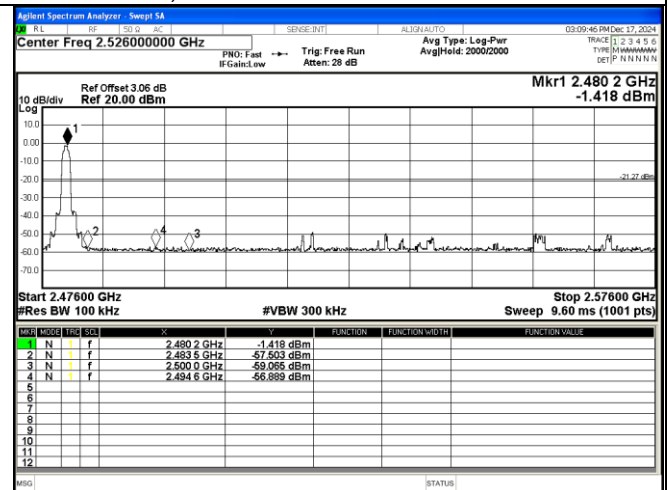
Test Mode:

 $\pi/4$ DQPSK, CH00

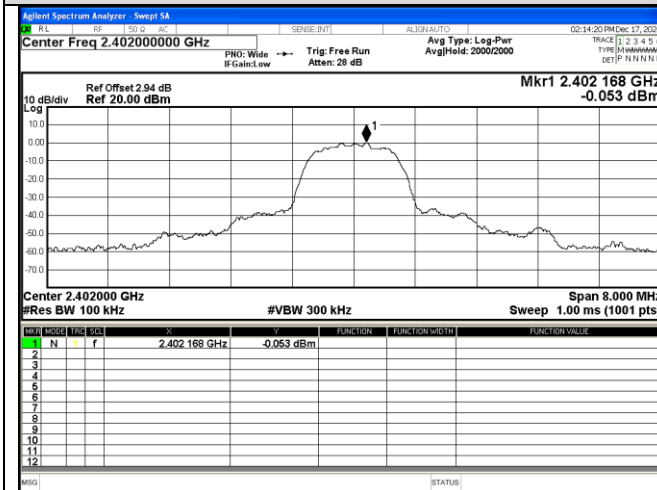
Test Mode:



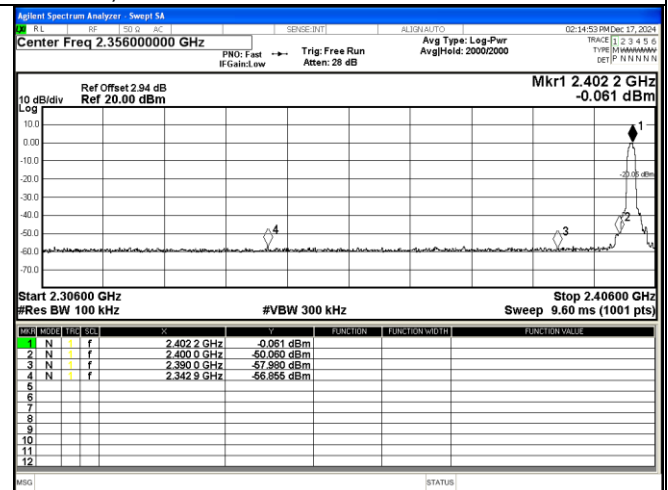
$\pi/4$ DQPSK, CH78



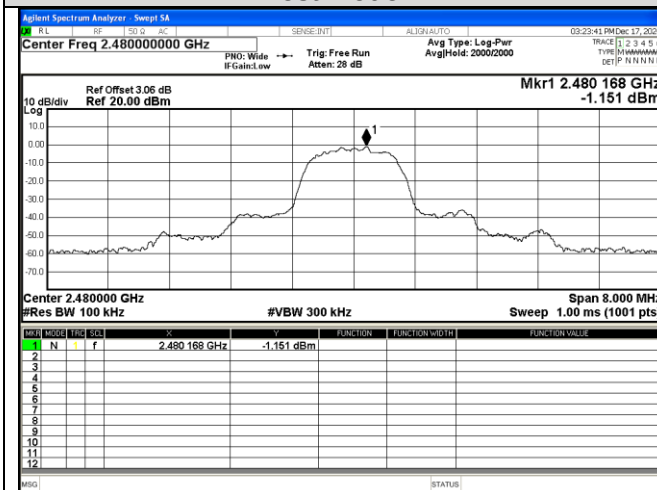
Test Mode:



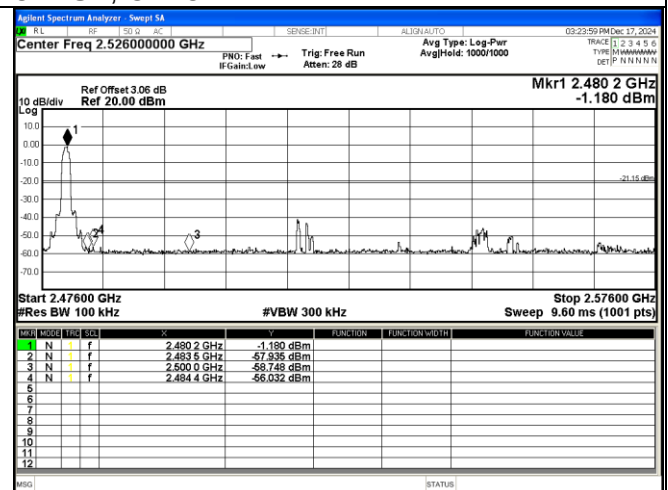
8DPSK, CH00



Test Mode:

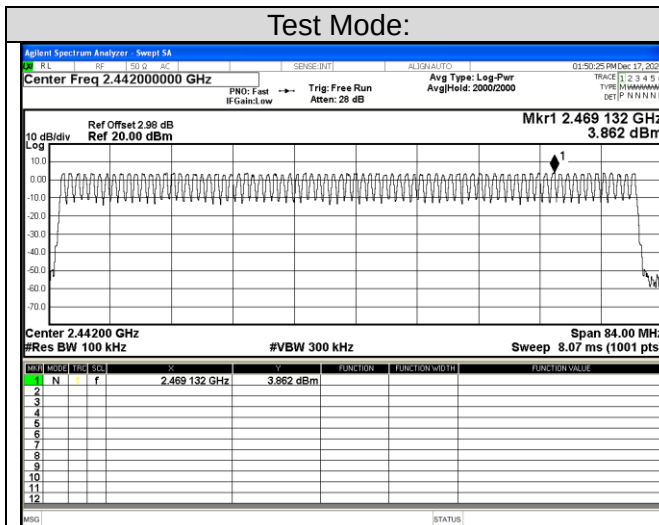


8DPSK, CH78

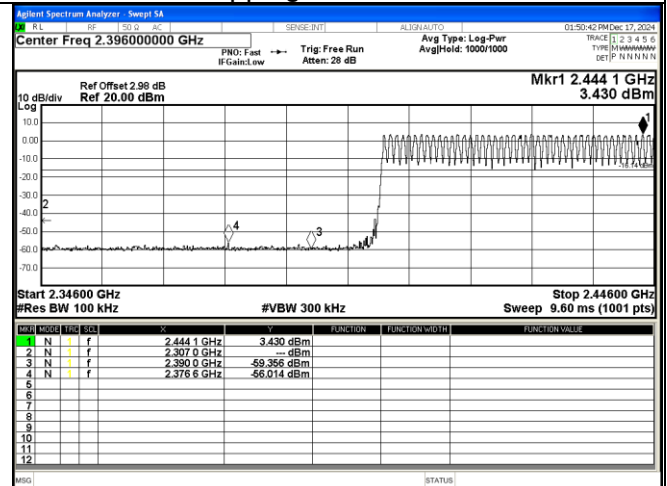




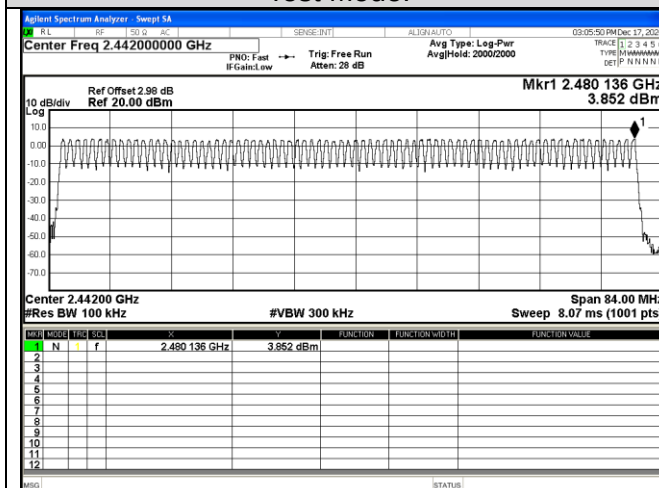
Test Mode:



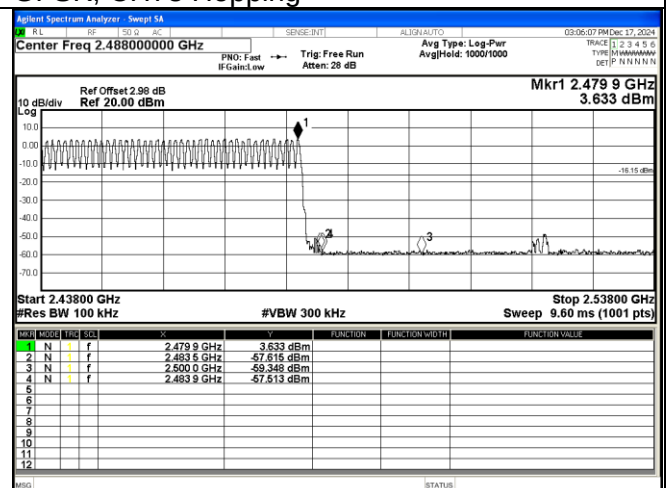
GFSK, CH00 Hopping



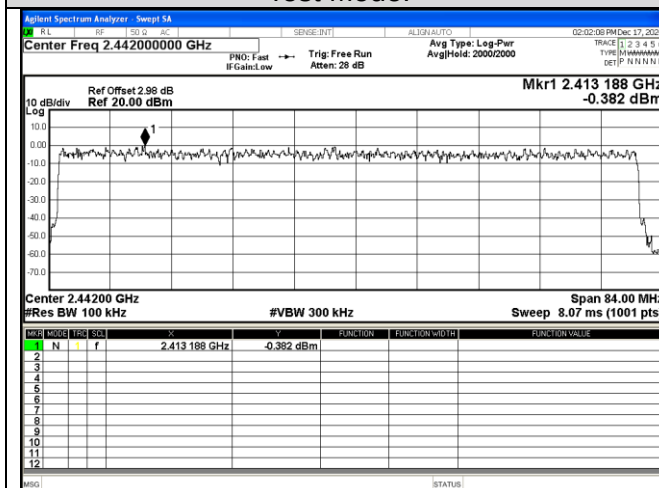
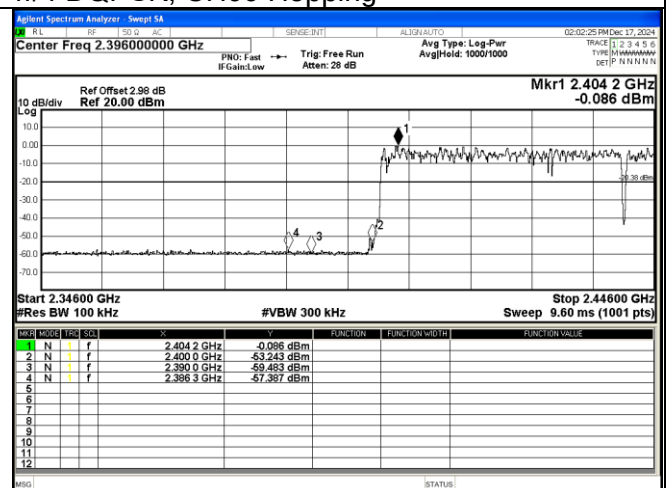
Test Mode:



GFSK, CH78 Hopping

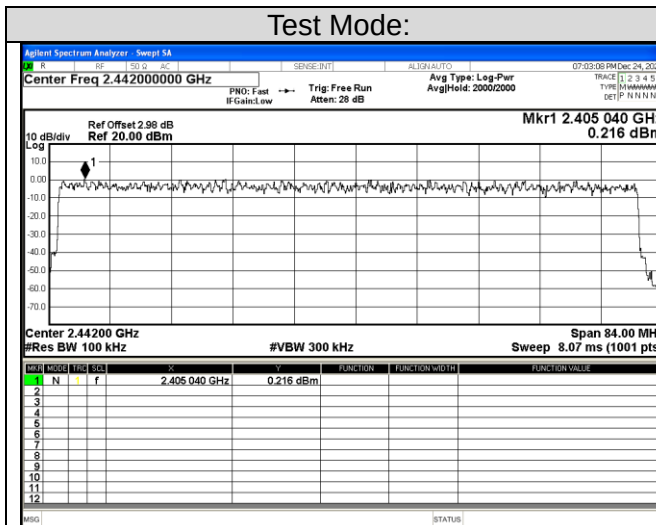
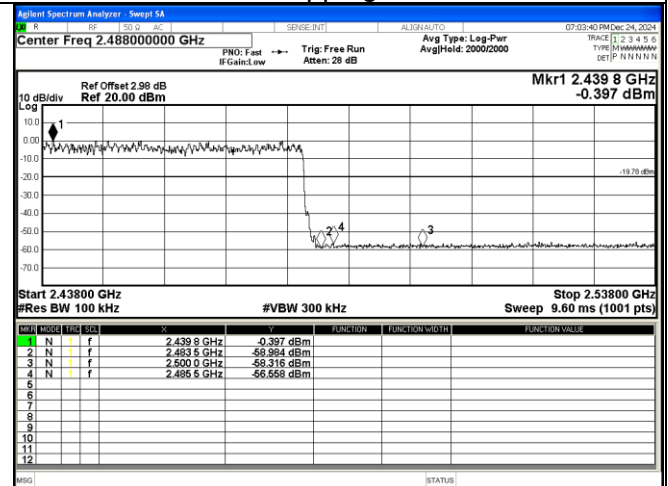


Test Mode:

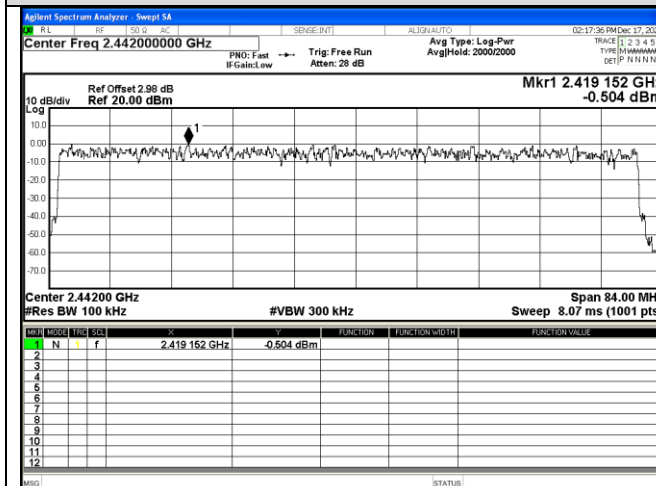
 $\pi/4$ DQPSK, CH00 Hopping



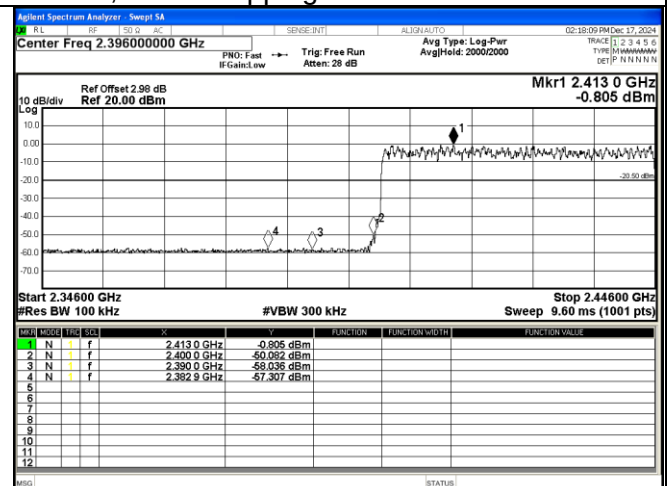
Test Mode:

 $\pi/4$ DQPSK, CH78 Hopping

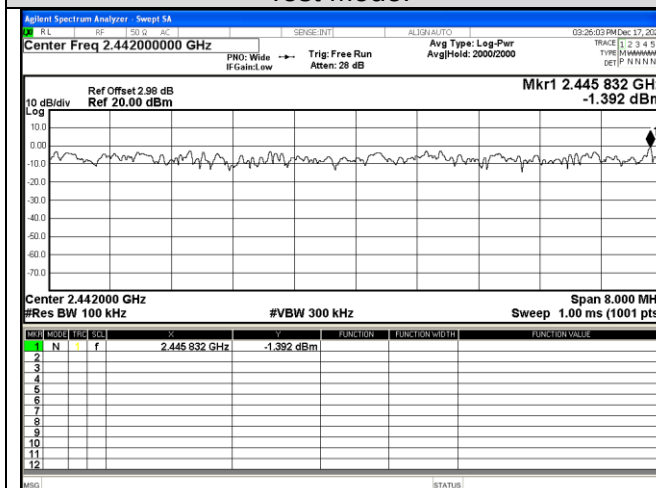
Test Mode:



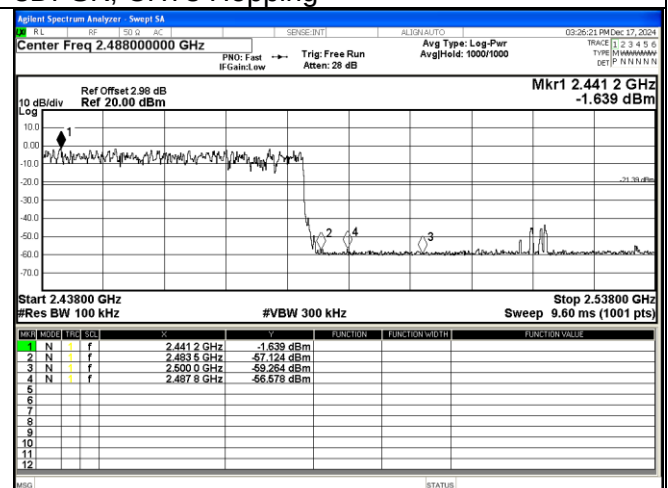
8DPSK, CH00 Hopping



Test Mode:

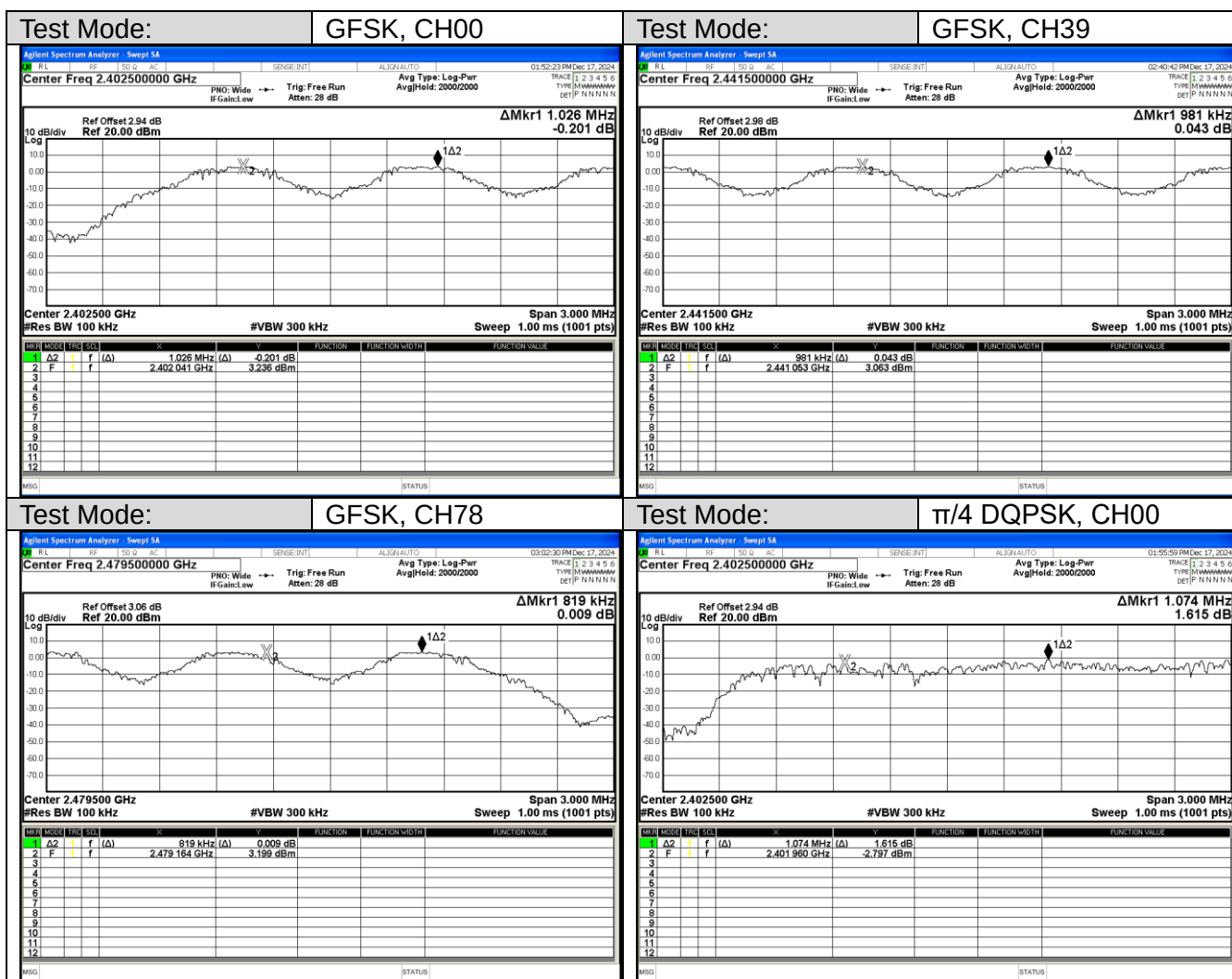


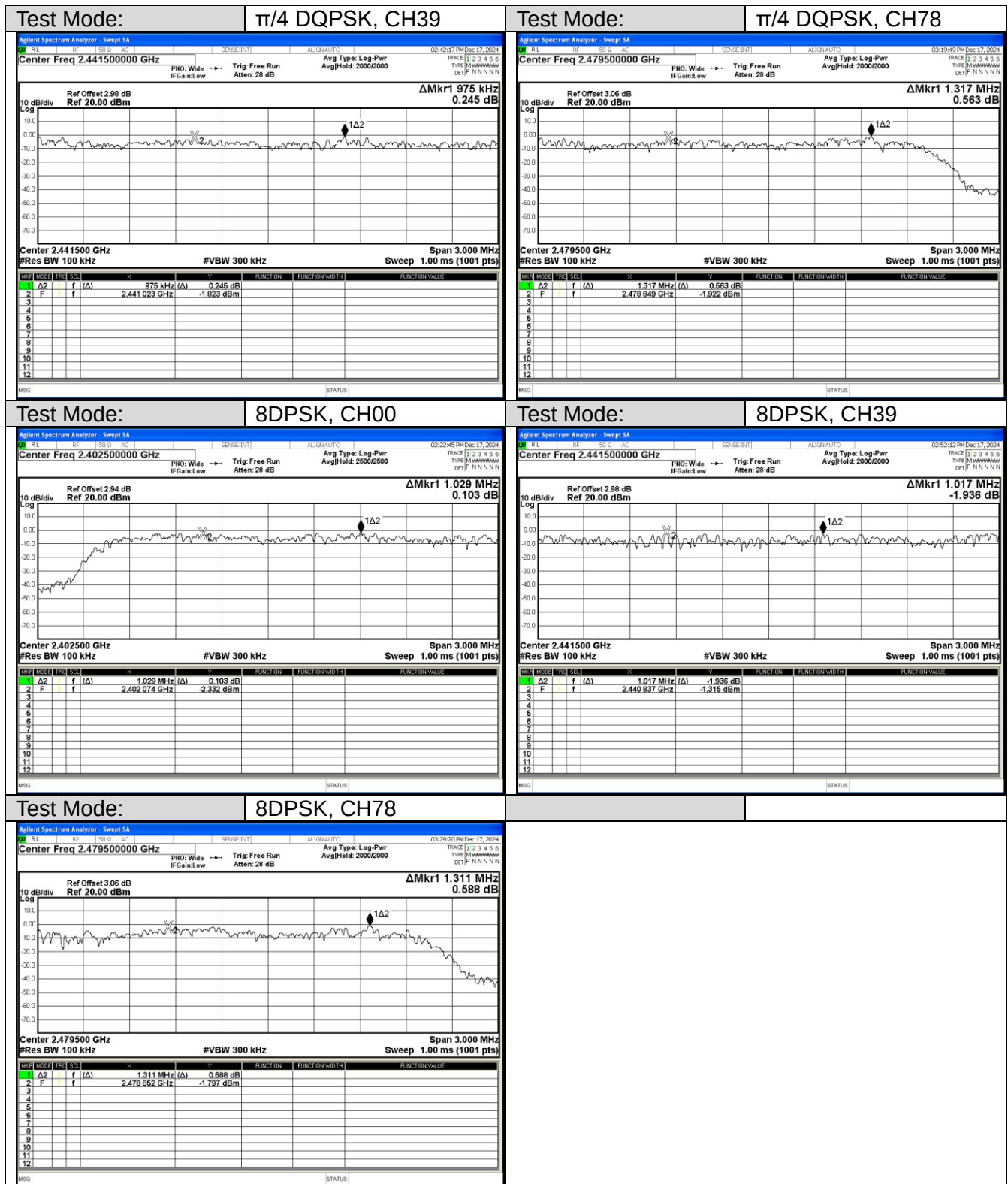
8DPSK, CH78 Hopping



Appendix A.4 Test Results of Carrier Frequency Separation

Mode	HFS (MHz)	Limit (MHz)	Verdict
GFSK, CH00	1.026	0.633	Pass
GFSK, CH39	0.981	0.641	Pass
GFSK, CH78	0.819	0.635	Pass
$\pi/4$ DQPSK, CH00	1.074	0.633	Pass
$\pi/4$ DQPSK, CH39	0.975	0.641	Pass
$\pi/4$ DQPSK, CH78	1.317	0.884	Pass
8DPSK, CH00	1.029	0.871	Pass
8DPSK, CH39	1.017	0.891	Pass
8DPSK, CH78	1.311	0.889	Pass

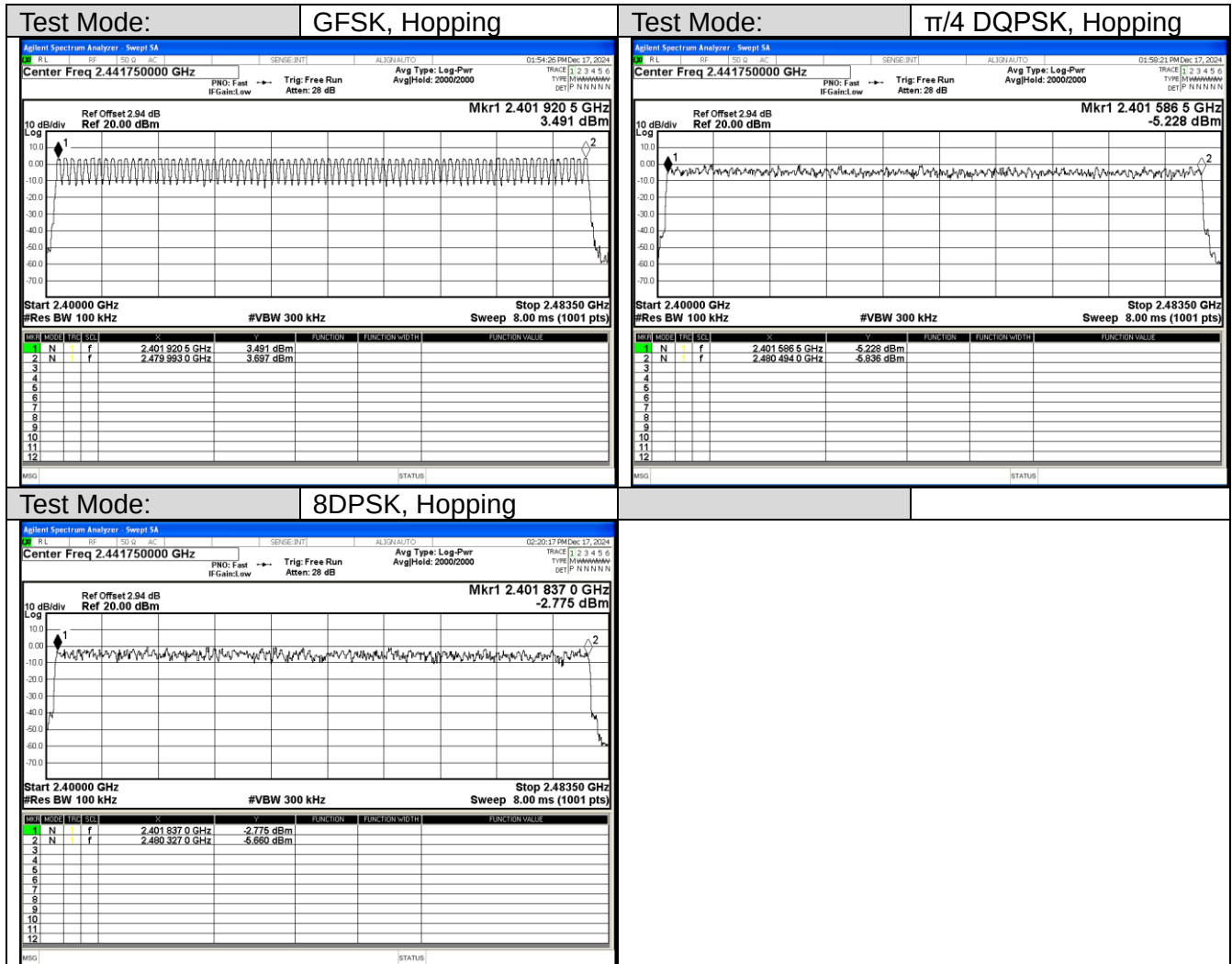






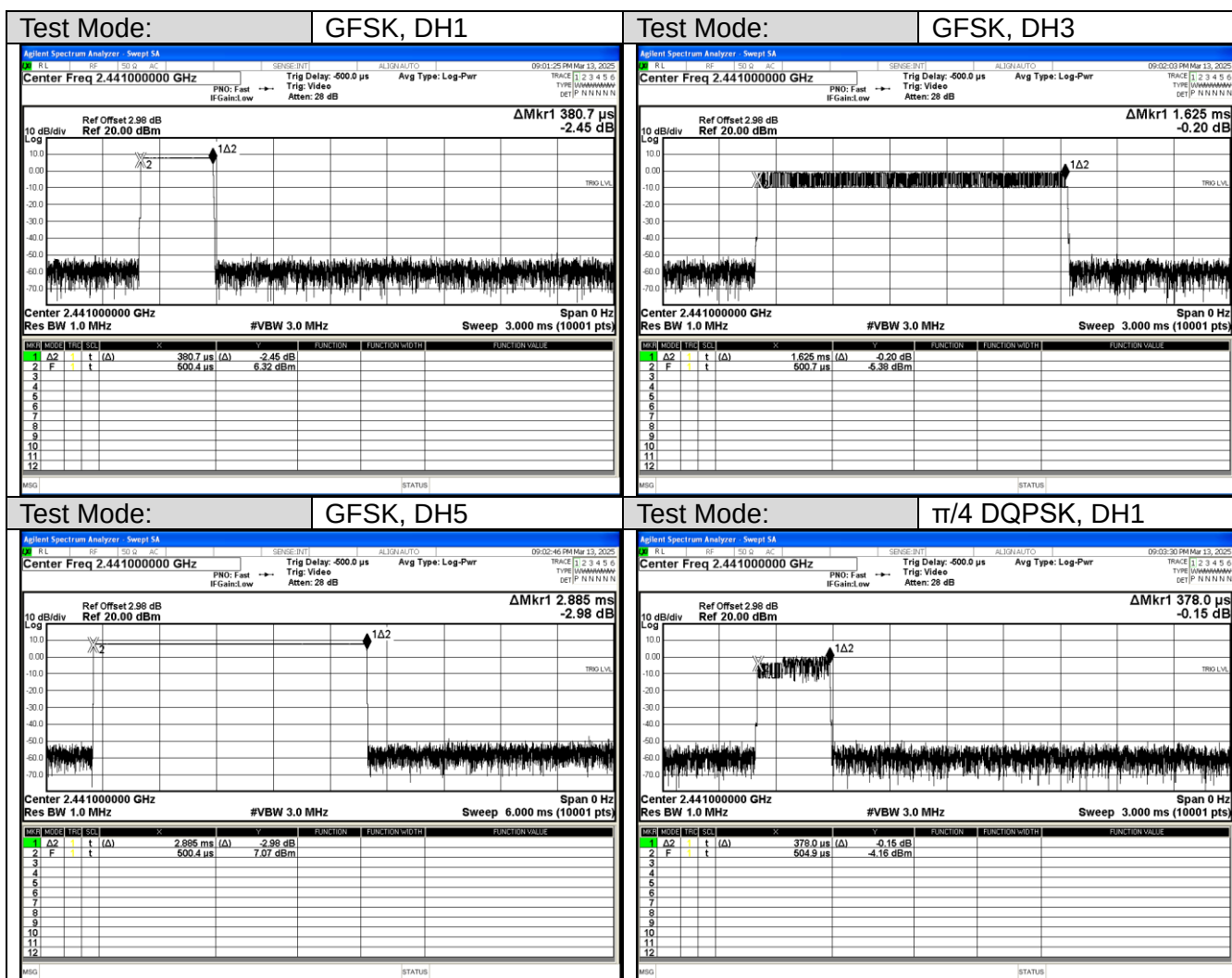
Appendix A.5 Test Results of Number of Hopping Frequency

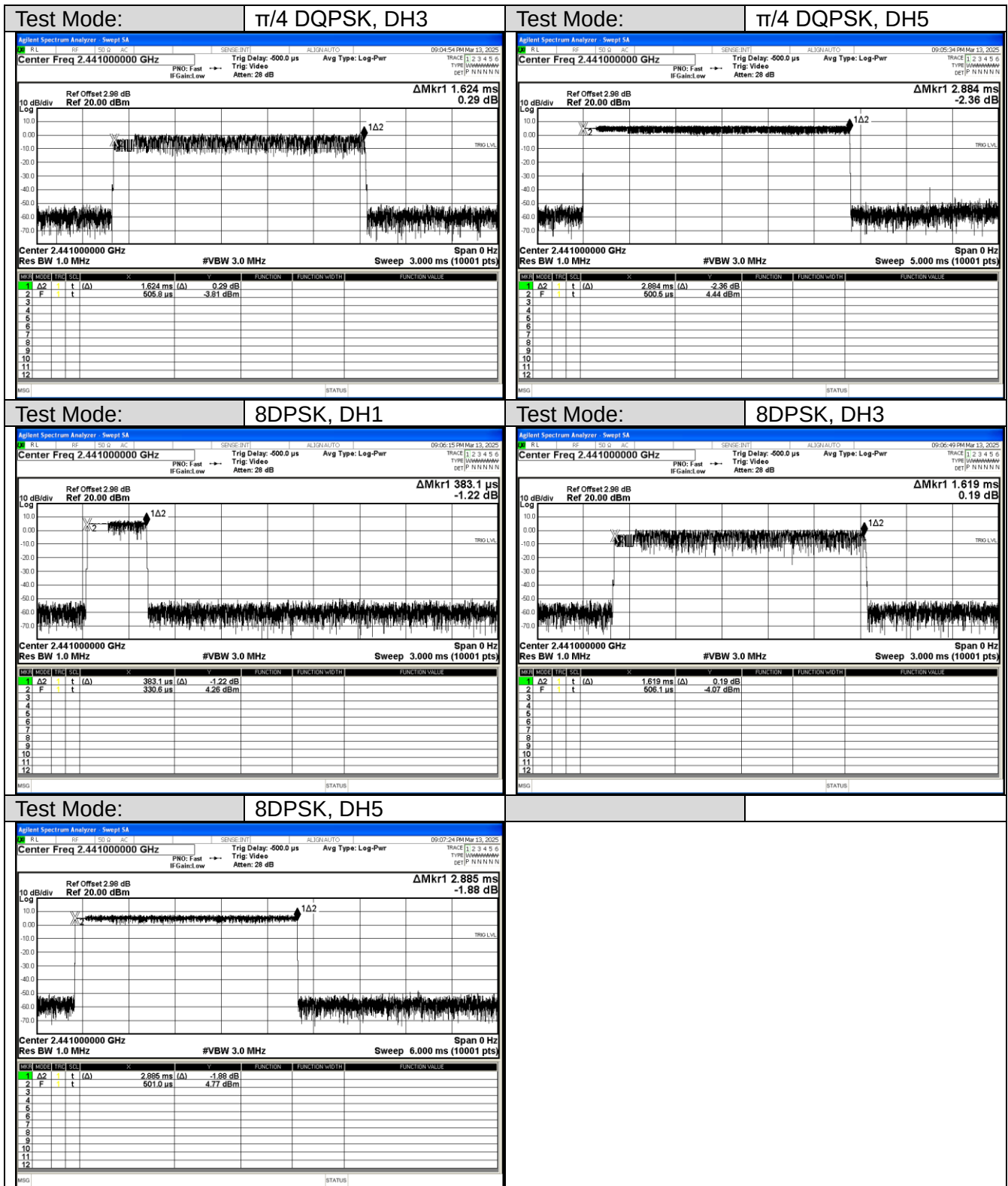
Mode	Hopping Number	Limit	Verdict
GFSK, Hopping	79	15	Pass
$\pi/4$ DQPSK, Hopping	79	15	Pass
8DPSK, Hopping	79	15	Pass



Appendix A.6 Test Results of Time of Occupancy

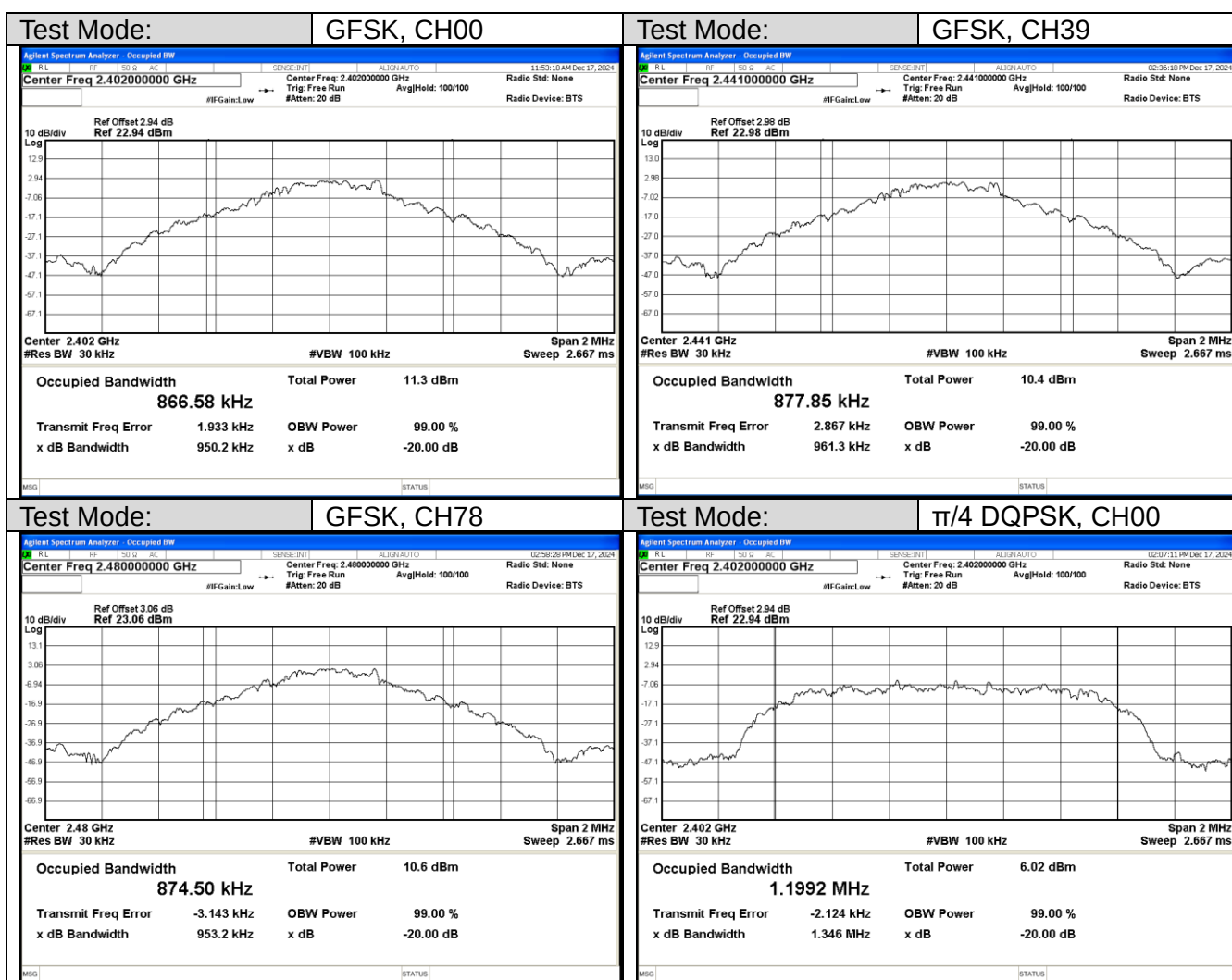
Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
GFSK, DH1	2441	0.381	120.301	31600	400	Pass
GFSK, DH3	2441	1.625	256.766	31600	400	Pass
GFSK, DH5	2441	2.885	273.479	31600	400	Pass
$\pi/4$ DQPSK, DH1	2441	0.378	119.448	31600	400	Pass
$\pi/4$ DQPSK, DH3	2441	1.624	256.576	31600	400	Pass
$\pi/4$ DQPSK, DH5	2441	2.883	273.356	31600	400	Pass
8DPSK, DH1	2441	0.383	121.06	31600	400	Pass
8DPSK, DH3	2441	1.619	255.723	31600	400	Pass
8DPSK, DH5	2441	2.885	273.479	31600	400	Pass

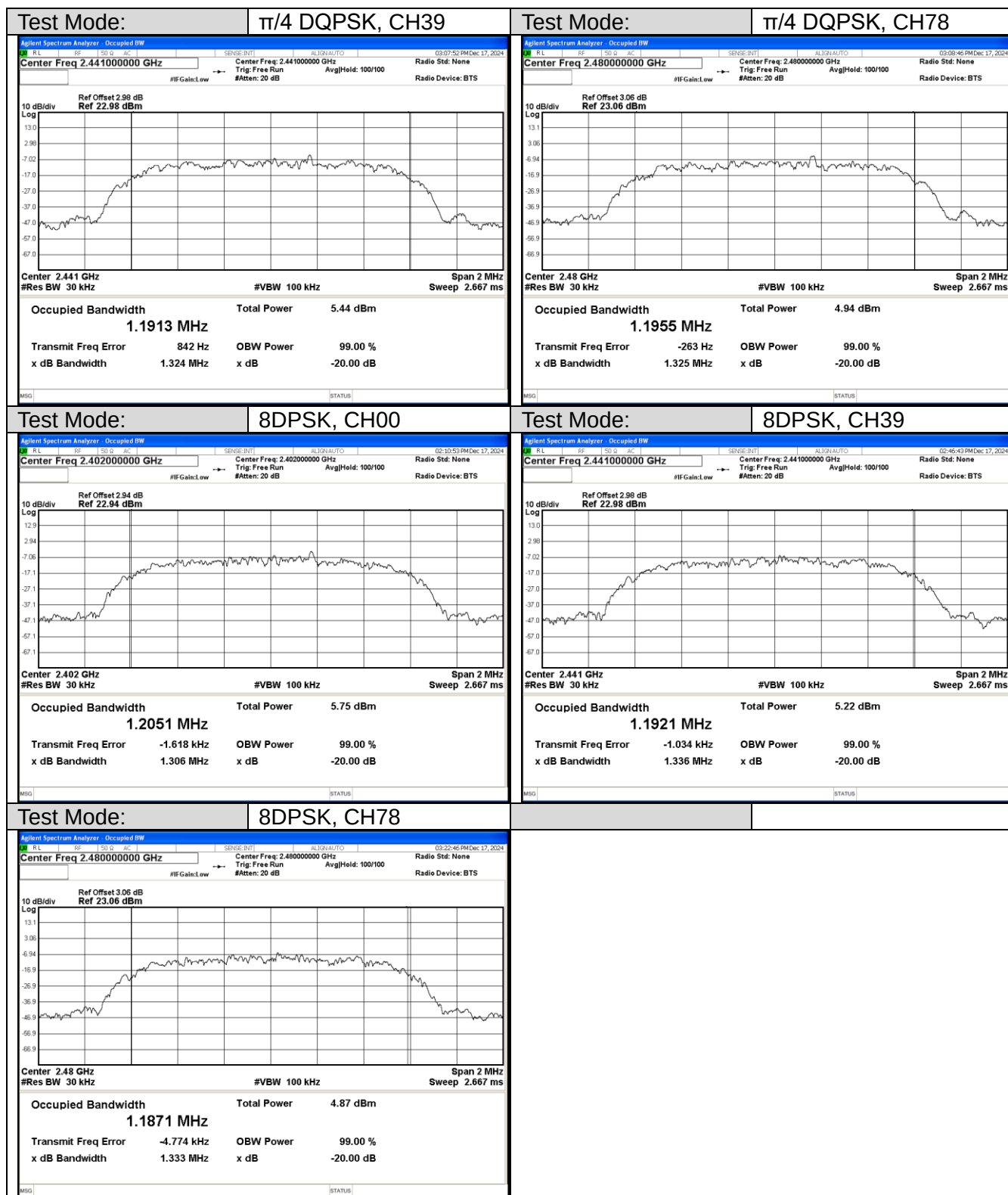




Appendix A.7 Test Results of 20dB & 99% Bandwidth

Mode	Frequency [MHz]	99% Bandwidth [MHz]	20dB Bandwidth [MHz]
GFSK	2402	0.8666	0.9502
GFSK	2441	0.8778	0.9613
GFSK	2480	0.8745	0.9532
$\pi/4$ DQPSK	2402	1.1992	1.3456
$\pi/4$ DQPSK	2441	1.1913	1.3245
$\pi/4$ DQPSK	2480	1.1955	1.3254
8DPSK	2402	1.2051	1.3063
8DPSK	2441	1.1921	1.3359
8DPSK	2480	1.1871	1.3329





Appendix A.8 Test Results of Maximum Conducted Output Power

Mode	Frequency [MHz]	Measured of Conducted Power		Limit [W]
		dBm	W	
GFSK	2402	4.455	0.0028	< 0.125
	2441	3.736	0.0024	< 0.125
	2480	4.031	0.0025	< 0.125
$\pi/4$ DQPSK	2402	2.185	0.0017	< 0.125
	2441	1.633	0.0015	< 0.125
	2480	1.464	0.0014	< 0.125
8DPSK	2402	2.752	0.0019	< 0.125
	2441	2.204	0.0017	< 0.125
	2480	2.158	0.0016	< 0.125

Note:

- 1) The cable loss is taken into account in results.
- 2) Antenna gain(G) of Bluetooth: 2.67 dBi