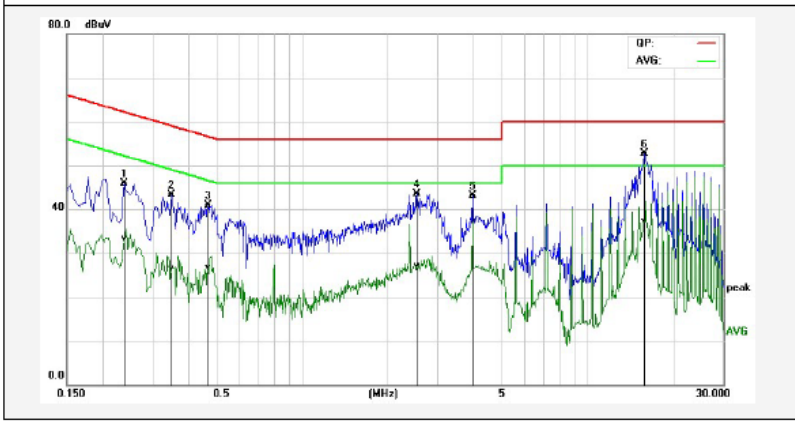
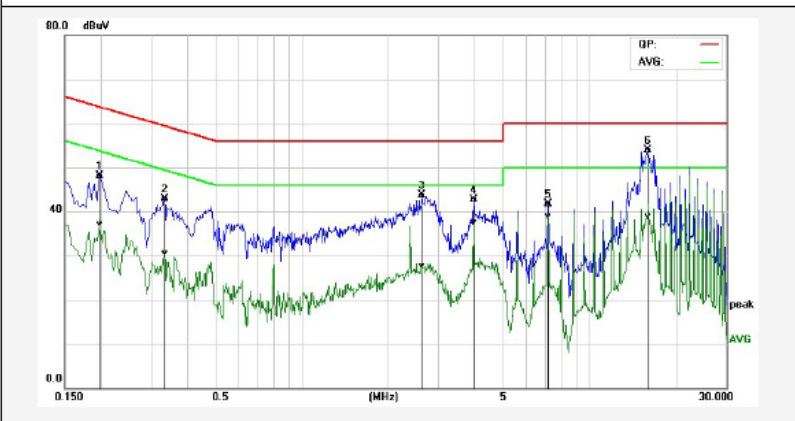


Appendix A: Test Results of BDR&EDR

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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>1P</td><td>0.2380</td><td>36.34</td><td>23.80</td><td>9.53</td><td>45.87</td><td>33.33</td><td>62.16</td><td>52.17</td><td>-16.29</td><td>-18.84</td><td>Pass</td></tr><tr><td>2P</td><td>0.3500</td><td>33.74</td><td>16.95</td><td>9.52</td><td>43.26</td><td>26.47</td><td>58.96</td><td>48.96</td><td>-15.70</td><td>-22.49</td><td>Pass</td></tr><tr><td>3P</td><td>0.4700</td><td>31.48</td><td>17.19</td><td>9.52</td><td>41.00</td><td>26.71</td><td>56.51</td><td>46.51</td><td>-15.51</td><td>-19.80</td><td>Pass</td></tr><tr><td>4P</td><td>2.5460</td><td>34.31</td><td>17.81</td><td>9.29</td><td>43.60</td><td>27.10</td><td>56.00</td><td>46.00</td><td>-12.40</td><td>-18.90</td><td>Pass</td></tr><tr><td>5P</td><td>3.9980</td><td>34.05</td><td>28.24</td><td>9.15</td><td>43.20</td><td>37.39</td><td>56.00</td><td>46.00</td><td>-12.80</td><td>-8.61</td><td>Pass</td></tr><tr><td>6*</td><td>15.8580</td><td>43.27</td><td>27.83</td><td>9.50</td><td>52.77</td><td>37.33</td><td>60.00</td><td>50.00</td><td>-7.23</td><td>-12.67</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	1P	0.2380	36.34	23.80	9.53	45.87	33.33	62.16	52.17	-16.29	-18.84	Pass	2P	0.3500	33.74	16.95	9.52	43.26	26.47	58.96	48.96	-15.70	-22.49	Pass	3P	0.4700	31.48	17.19	9.52	41.00	26.71	56.51	46.51	-15.51	-19.80	Pass	4P	2.5460	34.31	17.81	9.29	43.60	27.10	56.00	46.00	-12.40	-18.90	Pass	5P	3.9980	34.05	28.24	9.15	43.20	37.39	56.00	46.00	-12.80	-8.61	Pass	6*	15.8580	43.27	27.83	9.50	52.77	37.33	60.00	50.00	-7.23	-12.67	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																																																																												
1P	0.2380	36.34	23.80	9.53	45.87	33.33	62.16	52.17	-16.29	-18.84	Pass																																																																												
2P	0.3500	33.74	16.95	9.52	43.26	26.47	58.96	48.96	-15.70	-22.49	Pass																																																																												
3P	0.4700	31.48	17.19	9.52	41.00	26.71	56.51	46.51	-15.51	-19.80	Pass																																																																												
4P	2.5460	34.31	17.81	9.29	43.60	27.10	56.00	46.00	-12.40	-18.90	Pass																																																																												
5P	3.9980	34.05	28.24	9.15	43.20	37.39	56.00	46.00	-12.80	-8.61	Pass																																																																												
6*	15.8580	43.27	27.83	9.50	52.77	37.33	60.00	50.00	-7.23	-12.67	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	0.1980	38.59	27.76	9.43	48.02	37.19	63.69	53.69	-15.67	-16.50	Pass																																																																												
2P	0.3339	33.46	21.08	9.42	42.88	30.50	59.35	49.35	-16.47	-18.85	Pass																																																																												
3P	2.6460	34.54	18.25	9.18	43.72	27.43	56.00	46.00	-12.28	-18.57	Pass																																																																												
4P	4.0020	33.73	28.43	9.05	42.78	37.48	56.00	46.00	-13.22	-8.52	Pass																																																																												
5P	7.2020	32.60	29.91	9.07	41.67	38.98	60.00	50.00	-18.33	-11.02	Pass																																																																												
6*	15.9620	44.61	29.71	9.20	53.81	38.91	60.00	50.00	-6.19	-11.09	Pass																																																																												

Correction Factor = insertion loss of LISN + cable loss;

Reading = Reading Amplitude in the instrument;

Result = Correction Factor + Reading;

Margin = Result – Limit

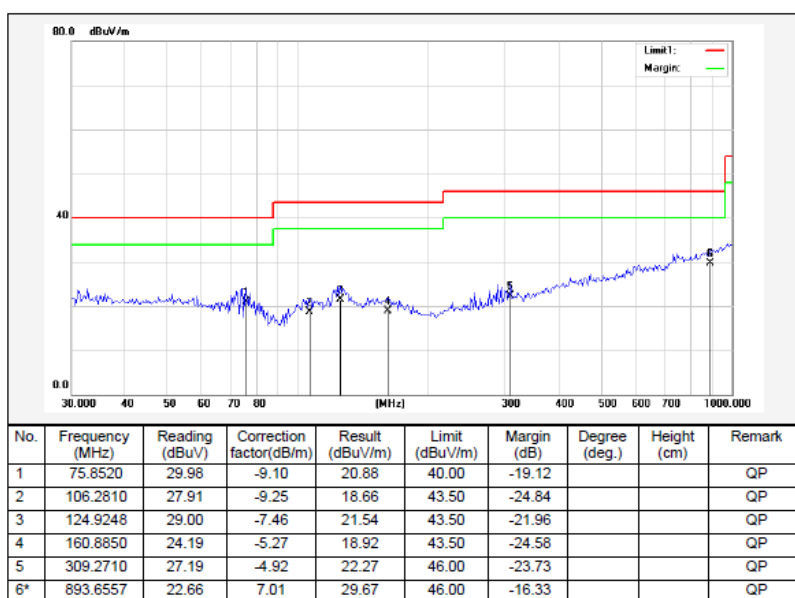
Appendix A.2 Test Results of Radiated Spurious Emission

Below 1G:

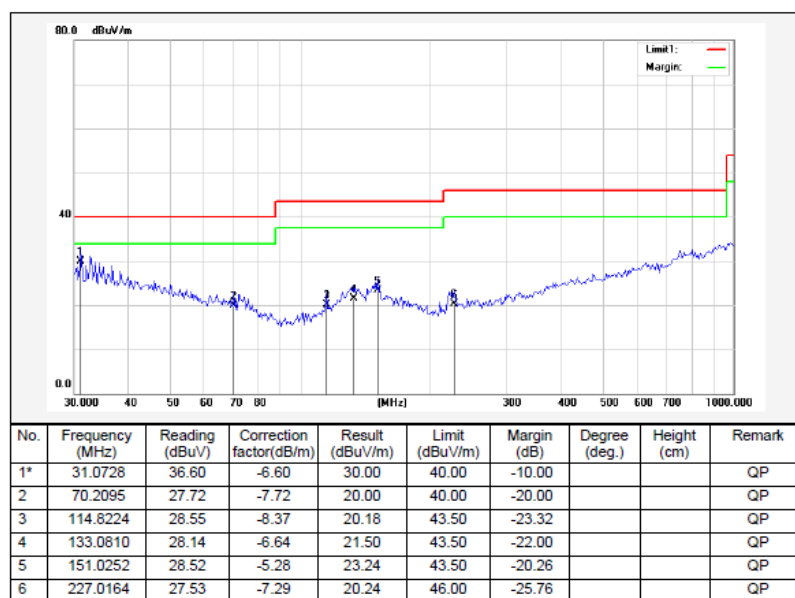
Note: All modes have been tested, and the report only reflects the worst mode.

Test Mode : Mode 8 Test Voltage : DC 3.7V

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	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	3210	64.88	-18.98	45.9	74	-28.1	peak
2	3210	49.36	-18.98	30.38	54	-23.62	AVG
3	3992	65.49	-15.01	50.48	74	-23.52	peak
4	3992	52.55	-15.01	37.54	54	-16.46	AVG
5	6134	57.13	-9.98	47.15	74	-26.85	peak
6	6134	43.22	-9.98	33.24	54	-20.76	AVG
7	6916	56.71	-8.8	47.91	74	-26.09	peak
8	6916	40.69	-8.8	31.89	54	-22.11	AVG
9	7562	55.98	-7.22	48.76	74	-25.24	peak
10	7562	42.46	-7.22	35.24	54	-18.76	AVG
11	8820	56.73	-7.83	48.9	74	-25.1	peak
12	8820	42.15	-7.83	34.32	54	-19.68	AVG

GFSK - Low (worst mode) Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5318	59.72	-12.64	47.08	74	-26.92	peak
2	5318	45.02	-12.64	32.38	54	-21.62	AVG
3	5930	57.44	-10.34	47.1	74	-26.9	peak
4	5930	43.91	-10.34	33.57	54	-20.43	AVG
5	6644	57.06	-10.04	47.02	74	-26.98	peak
6	6644	44.57	-10.04	34.53	54	-19.47	AVG
7	6950	56.63	-8.79	47.84	74	-26.16	peak
8	6950	42.48	-8.79	33.69	54	-20.31	AVG
9	7562	56.18	-7.22	48.96	74	-25.04	peak
10	7562	42.85	-7.22	35.63	54	-18.37	AVG
11	8378	56.18	-7.1	49.08	74	-24.92	peak
12	8378	40.34	-7.1	33.24	54	-20.76	AVG

GFSK - Middle (worst mode) Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	3958.309	63.3	-15.09	48.21	74	-25.79	peak
2	3958.309	47.54	-15.09	32.45	54	-21.55	AVG
3	5862	57.94	-11.12	46.82	74	-27.18	peak
4	5862	41.89	-11.12	30.77	54	-23.23	AVG
5	7562	55.98	-7.22	48.76	74	-25.24	peak
6	7562	40.38	-7.22	33.16	54	-20.84	AVG
7	8820	56.73	-7.83	48.9	74	-25.1	peak
8	8820	40.72	-7.83	32.89	54	-21.11	AVG
9	10418	55.15	-4.09	51.06	74	-22.94	peak
10	10418	39.29	-4.09	35.2	54	-18.8	AVG
11	11064	55.63	-2.65	52.98	74	-21.02	peak
12	11064	38.75	-2.65	36.1	54	-17.9	AVG

GFSK - Middle (worst mode) Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3823.371	61.52	-16.02	45.5	74	-28.5	peak
2	3823.371	46.16	-16.02	30.14	54	-23.86	AVG
3	5318	59.72	-12.64	47.08	74	-26.92	peak
4	5318	46.29	-12.64	33.65	54	-20.35	AVG
5	7562	56.18	-7.22	48.96	74	-25.04	peak
6	7562	40.97	-7.22	33.75	54	-20.25	AVG
7	8378	56.18	-7.1	49.08	74	-24.92	peak
8	8378	40.79	-7.1	33.69	54	-20.31	AVG
9	9024	56.43	-8.12	48.31	74	-25.69	peak
10	9024	40.57	-8.12	32.45	54	-21.55	AVG
11	11472	55.32	-2.21	53.11	74	-20.89	peak
12	11472	39.82	-2.21	37.61	54	-16.39	AVG

GFSK - High (worst mode) Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4944	58.44	-12.85	45.59	74	-28.41	peak
2	4944	44.1	-12.85	31.25	54	-22.75	AVG
3	6168	58.54	-9.92	48.62	74	-25.38	peak
4	6168	46.79	-9.92	36.87	54	-17.13	AVG
5	6950	56.72	-8.79	47.93	74	-26.07	peak
6	6950	42.36	-8.79	33.57	54	-20.43	AVG
7	7426	56	-7.09	48.91	74	-25.09	peak
8	7426	38.67	-7.09	31.58	54	-22.42	AVG
9	7902	57.35	-8.06	49.29	74	-24.71	peak
10	7902	40.93	-8.06	32.87	54	-21.13	AVG
11	8820	57.14	-7.83	49.31	74	-24.69	peak
12	8820	43.07	-7.83	35.24	54	-18.76	AVG

GFSK - High (worst mode) Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3958	59.32	-15.09	44.23	74	-29.77	peak
2	3958	46.77	-15.09	31.68	54	-22.32	AVG
3	4876	60.08	-13	47.08	74	-26.92	peak
4	4876	45.54	-13	32.54	54	-21.46	AVG
5	5998	57.61	-10.12	47.49	74	-26.51	peak
6	5998	45.36	-10.12	35.24	54	-18.76	AVG
7	6814	56.71	-8.86	47.85	74	-26.15	peak
8	6814	41.73	-8.86	32.87	54	-21.13	AVG
9	7392	56.14	-7.13	49.01	74	-24.99	peak
10	7392	42.37	-7.13	35.24	54	-18.76	AVG
11	8276	55.99	-7.36	48.63	74	-25.37	peak
12	8276	41.57	-7.36	34.21	54	-19.79	AVG

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

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	3958	63.64	-15.09	48.55	74	-25.45	peak
2	3958	47.67	-15.09	32.58	54	-21.42	AVG
3	6304	57.55	-9.91	47.64	74	-26.36	peak
4	6304	45.12	-9.91	35.21	54	-18.79	AVG
5	6814	57.31	-8.86	48.45	74	-25.55	peak
6	6814	43.38	-8.86	34.52	54	-19.48	AVG
7	7460	55.58	-7.09	48.49	74	-25.51	peak
8	7460	43.33	-7.09	36.24	54	-17.76	AVG
9	8378	55.99	-7.1	48.89	74	-25.11	peak
10	8378	43.34	-7.1	36.24	54	-17.76	AVG
11	8854	56.28	-7.88	48.4	74	-25.6	peak
12	8854	41.45	-7.88	33.57	54	-20.43	AVG

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

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5114	58.63	-12.49	46.14	74	-27.86	peak
2	5114	43.77	-12.49	31.28	54	-22.72	AVG
3	5964	57.35	-10.23	47.12	74	-26.88	peak
4	5964	44.86	-10.23	34.63	54	-19.37	AVG
5	6372	56.6	-9.94	46.66	74	-27.34	peak
6	6372	45.26	-9.94	35.32	54	-18.68	AVG
7	6950	56.53	-8.79	47.74	74	-26.26	peak
8	6950	44	-8.79	35.21	54	-18.79	AVG
9	7562	56.33	-7.22	49.11	74	-24.89	peak
10	7562	43.46	-7.22	36.24	54	-17.76	AVG
11	8378	56.24	-7.1	49.14	74	-24.86	peak
12	8378	40.34	-7.1	33.24	54	-20.76	AVG

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

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	3992	61.2	-15.01	46.19	74	-27.81	peak
2	3992	45.12	-15.01	30.11	54	-23.89	AVG
3	4876	58.33	-13	45.33	74	-28.67	peak
4	4876	42.34	-13	29.34	54	-24.66	AVG
5	6304	57.55	-9.91	47.64	74	-26.36	peak
6	6304	42.42	-9.91	32.51	54	-21.49	AVG
7	7460	55.58	-7.09	48.49	74	-25.51	peak
8	7460	39.55	-7.09	32.46	54	-21.54	AVG
9	8854	56.28	-7.88	48.4	74	-25.6	peak
10	8854	40.35	-7.88	32.47	54	-21.53	AVG
11	11404	54.78	-1.87	52.91	74	-21.09	peak
12	11404	37.83	-1.87	35.96	54	-18.04	AVG

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

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4468	59.17	-14.75	44.42	74	-29.58	peak
2	4468	44.05	-14.75	29.3	54	-24.7	AVG
3	5114	58.63	-12.49	46.14	74	-27.86	peak
4	5114	42.77	-12.49	30.28	54	-23.72	AVG
5	5964	57.35	-10.23	47.12	74	-26.88	peak
6	5964	41.36	-10.23	31.13	54	-22.87	AVG
7	7562	56.33	-7.22	49.11	74	-24.89	peak
8	7562	41.77	-7.22	34.55	54	-19.45	AVG
9	8378	56.24	-7.1	49.14	74	-24.86	peak
10	8378	42.22	-7.1	35.12	54	-18.88	AVG
11	11370	54.48	-1.94	52.54	74	-21.46	peak
12	11370	38.85	-1.94	36.91	54	-17.09	AVG

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

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5182	58.99	-12.66	46.33	74	-27.67	peak
2	5182	43.24	-12.66	30.58	54	-23.42	AVG
3	5998	57.29	-10.12	47.17	74	-26.83	peak
4	5998	40.81	-10.12	30.69	54	-23.31	AVG
5	6474	57.82	-10.11	47.71	74	-26.29	peak
6	6474	42.69	-10.11	32.58	54	-21.42	AVG
7	6814	56.48	-8.86	47.62	74	-26.38	peak
8	6814	40.52	-8.86	31.66	54	-22.34	AVG
9	7426	56.05	-7.09	48.96	74	-25.04	peak
10	7426	39.67	-7.09	32.58	54	-21.42	AVG
11	8378	55.84	-7.1	48.74	74	-25.26	peak
12	8378	41.79	-7.1	34.69	54	-19.31	AVG

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

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4332	58.74	-14.54	44.2	74	-29.8	peak
2	4332	45.22	-14.54	30.68	54	-23.32	AVG
3	5046	58.39	-12.62	45.77	74	-28.23	peak
4	5046	46.16	-12.62	33.54	54	-20.46	AVG
5	5658	58.02	-11.88	46.14	74	-27.86	peak
6	5658	42.75	-11.88	30.87	54	-23.13	AVG
7	5998	56.85	-10.12	46.73	74	-27.27	peak
8	5998	44.33	-10.12	34.21	54	-19.79	AVG
9	7052	56.63	-8.58	48.05	74	-25.95	peak
10	7052	41.16	-8.58	32.58	54	-21.42	AVG
11	7392	55.82	-7.13	48.69	74	-25.31	peak
12	7392	40.34	-7.13	33.21	54	-20.79	AVG

8DPSK - Low (worst mode) Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5216	58.05	-12.66	45.39	74	-28.61	peak
2	5216	42.91	-12.66	30.25	54	-23.75	AVG
3	5998	57.68	-10.12	47.56	74	-26.44	peak
4	5998	41.98	-10.12	31.86	54	-22.14	AVG
5	6746	56.39	-9.21	47.18	74	-26.82	peak
6	6746	42.8	-9.21	33.59	54	-20.41	AVG
7	6984	56.79	-8.76	48.03	74	-25.97	peak
8	6984	41.35	-8.76	32.59	54	-21.41	AVG
9	7596	55.63	-7.26	48.37	74	-25.63	peak
10	7596	43.47	-7.26	36.21	54	-17.79	AVG
11	8378	56.31	-7.1	49.21	74	-24.79	peak
12	8378	42.97	-7.1	35.87	54	-18.13	AVG

8DPSK - Low (worst mode) Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	3958	64.07	-15.09	48.98	74	-25.02	peak
2	3958	50.3	-15.09	35.21	54	-18.79	AVG
3	5318	59.34	-12.64	46.7	74	-27.3	peak
4	5318	44.91	-12.64	32.27	54	-21.73	AVG
5	6168	57.24	-9.92	47.32	74	-26.68	peak
6	6168	46.13	-9.92	36.21	54	-17.79	AVG
7	6950	56.43	-8.79	47.64	74	-26.36	peak
8	6950	42.03	-8.79	33.24	54	-20.76	AVG
9	7562	55.61	-7.22	48.39	74	-25.61	peak
10	7562	43.18	-7.22	35.96	54	-18.04	AVG
11	8208	56.67	-7.62	49.05	74	-24.95	peak
12	8208	40.3	-7.62	32.68	54	-21.32	AVG

8DPSK - Middle (worst mode) Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	3584	59.57	-16.33	43.24	74	-30.76	peak
2	3584	44.19	-16.33	27.86	54	-26.14	AVG
3	3856	60.01	-15.7	44.31	74	-29.69	peak
4	3856	44.94	-15.7	29.24	54	-24.76	AVG
5	5216	58.05	-12.66	45.39	74	-28.61	peak
6	5216	42.52	-12.66	29.86	54	-24.14	AVG
7	5998	57.68	-10.12	47.56	74	-26.44	peak
8	5998	42.76	-10.12	32.64	54	-21.36	AVG
9	6984	56.79	-8.76	48.03	74	-25.97	peak
10	6984	42.23	-8.76	33.47	54	-20.53	AVG
11	7596	55.63	-7.26	48.37	74	-25.63	peak
12	7596	39.95	-7.26	32.69	54	-21.31	AVG

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	63.61	-18.98	44.63	74	-29.37	peak
2	3210	48.99	-18.98	30.01	54	-23.99	AVG
3	3958	61.07	-15.09	45.98	74	-28.02	peak
4	3958	44.84	-15.09	29.75	54	-24.25	AVG
5	5318	59.34	-12.64	46.7	74	-27.3	peak
6	5318	43.06	-12.64	30.42	54	-23.58	AVG
7	6168	57.24	-9.92	47.32	74	-26.68	peak
8	6168	41.6	-9.92	31.68	54	-22.32	AVG
9	7562	55.61	-7.22	48.39	74	-25.61	peak
10	7562	40.64	-7.22	33.42	54	-20.58	AVG
11	9398	56.57	-7.29	49.28	74	-24.72	peak
12	9398	42.55	-7.29	35.26	54	-18.74	AVG

8DPSK - High (worst mode) Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4332	58.74	-14.54	44.2	74	-29.8	peak
2	4332	45.22	-14.54	30.68	54	-23.32	AVG
3	5046	58.39	-12.62	45.77	74	-28.23	peak
4	5046	46.16	-12.62	33.54	54	-20.46	AVG
5	5658	58.02	-11.88	46.14	74	-27.86	peak
6	5658	42.75	-11.88	30.87	54	-23.13	AVG
7	5998	56.85	-10.12	46.73	74	-27.27	peak
8	5998	44.33	-10.12	34.21	54	-19.79	AVG
9	7052	56.63	-8.58	48.05	74	-25.95	peak
10	7052	41.16	-8.58	32.58	54	-21.42	AVG
11	7392	55.82	-7.13	48.69	74	-25.31	peak
12	7392	40.34	-7.13	33.21	54	-20.79	AVG

8DPSK - High (worst mode) Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5046	58.03	-12.62	45.41	74	-28.59	peak
2	5046	45.37	-12.62	32.75	54	-21.25	AVG
3	5352	59.33	-12.58	46.75	74	-27.25	peak
4	5352	44.72	-12.58	32.14	54	-21.86	AVG
5	5998	57.64	-10.12	47.52	74	-26.48	peak
6	5998	45.33	-10.12	35.21	54	-18.79	AVG
7	6882	56.95	-8.82	48.13	74	-25.87	peak
8	6882	45.06	-8.82	36.24	54	-17.76	AVG
9	7562	55.87	-7.22	48.65	74	-25.35	peak
10	7562	41.09	-7.22	33.87	54	-20.13	AVG
11	8378	55.77	-7.1	48.67	74	-25.33	peak
12	8378	42.34	-7.1	35.24	54	-18.76	AVG

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.

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	2384.6	68.32	-21.05	47.27	74	-26.73	peak
2	2384.6	62.64	-21.05	41.59	54	-12.41	AVG
3	2390	66.58	-21.03	45.55	74	-28.45	peak
4	2390	61.28	-21.03	40.25	54	-13.75	AVG
Vertical							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2332	66.51	-21.23	45.28	74	-28.72	peak
2	2332	53.09	-21.23	31.86	54	-22.14	AVG
3	2390	61.83	-21.03	40.8	74	-33.2	peak
4	2390	49.66	-21.03	28.63	54	-25.37	AVG
GFSK - High (worst mode)							
Horizontal							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5	79.66	-20.91	58.75	74	-15.25	peak
2	2483.5	71.26	-20.91	50.35	54	-3.65	AVG
3	2484.22	78.24	-20.91	57.33	74	-16.67	peak
4	2484.22	70.69	-20.91	49.78	54	-4.22	AVG
Vertical							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5	73.87	-20.91	52.96	74	-21.04	peak
2	2483.5	68.14	-20.91	47.23	54	-6.77	AVG
3	2485.36	74.12	-20.91	53.21	74	-20.79	peak
4	2485.36	65.77	-20.91	44.86	54	-9.14	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	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2387.8	70.09	-21.03	49.06	74	-24.94	peak
2	2387.8	64.24	-21.03	43.21	54	-10.79	AVG
3	2390	68.38	-21.03	47.35	74	-26.65	peak
4	2390	62.71	-21.03	41.68	54	-12.32	AVG
Vertical							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2388	65.18	-21.03	44.15	74	-29.85	peak
2	2388	59.9	-21.03	38.87	54	-15.13	AVG
3	2390	64.69	-21.03	43.66	74	-30.34	peak
4	2390	58.87	-21.03	37.84	54	-16.16	AVG
$\pi/4$ DQPSK - High (worst mode)							
Horizontal							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5	78.66	-20.91	57.75	74	-16.25	peak
2	2483.5	71.14	-20.91	50.23	54	-3.77	AVG
3	2485.12	75.5	-20.91	54.59	74	-19.41	peak
4	2485.12	68.16	-20.91	47.25	54	-6.75	AVG
Vertical							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5	70.63	-20.91	49.72	74	-24.28	peak
2	2483.5	64.14	-20.91	43.23	54	-10.77	AVG
3	2484.22	70.72	-20.91	49.81	74	-24.19	peak
4	2484.22	64.78	-20.91	43.87	54	-10.13	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	2388.4	68.18	-21.03	47.15	74	-26.85	peak
2	2388.4	63.04	-21.03	42.01	54	-11.99	AVG
3	2390	67.78	-21.03	46.75	74	-27.25	peak
4	2390	62.26	-21.03	41.23	54	-12.77	AVG
Vertical							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2330.2	66.77	-21.23	45.54	74	-28.46	peak
2	2330.2	60.68	-21.23	39.45	54	-14.55	AVG
3	2390	64.95	-21.03	43.92	74	-30.08	peak
4	2390	58.15	-21.03	37.12	54	-16.88	AVG
8DPSK - High (worst mode)							
Horizontal							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5	73.96	-20.91	53.05	74	-20.95	peak
2	2483.5	66.76	-20.91	45.85	54	-8.15	AVG
3	2484.04	72.99	-20.91	52.08	74	-21.92	peak
4	2484.04	65.28	-20.91	44.37	54	-9.63	AVG
Vertical							
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5	68.92	-20.91	48.01	74	-25.99	peak
2	2483.5	63.03	-20.91	42.12	54	-11.88	AVG
3	2484.52	69.61	-20.91	48.7	74	-25.3	peak
4	2484.52	62.29	-20.91	41.38	54	-12.62	AVG

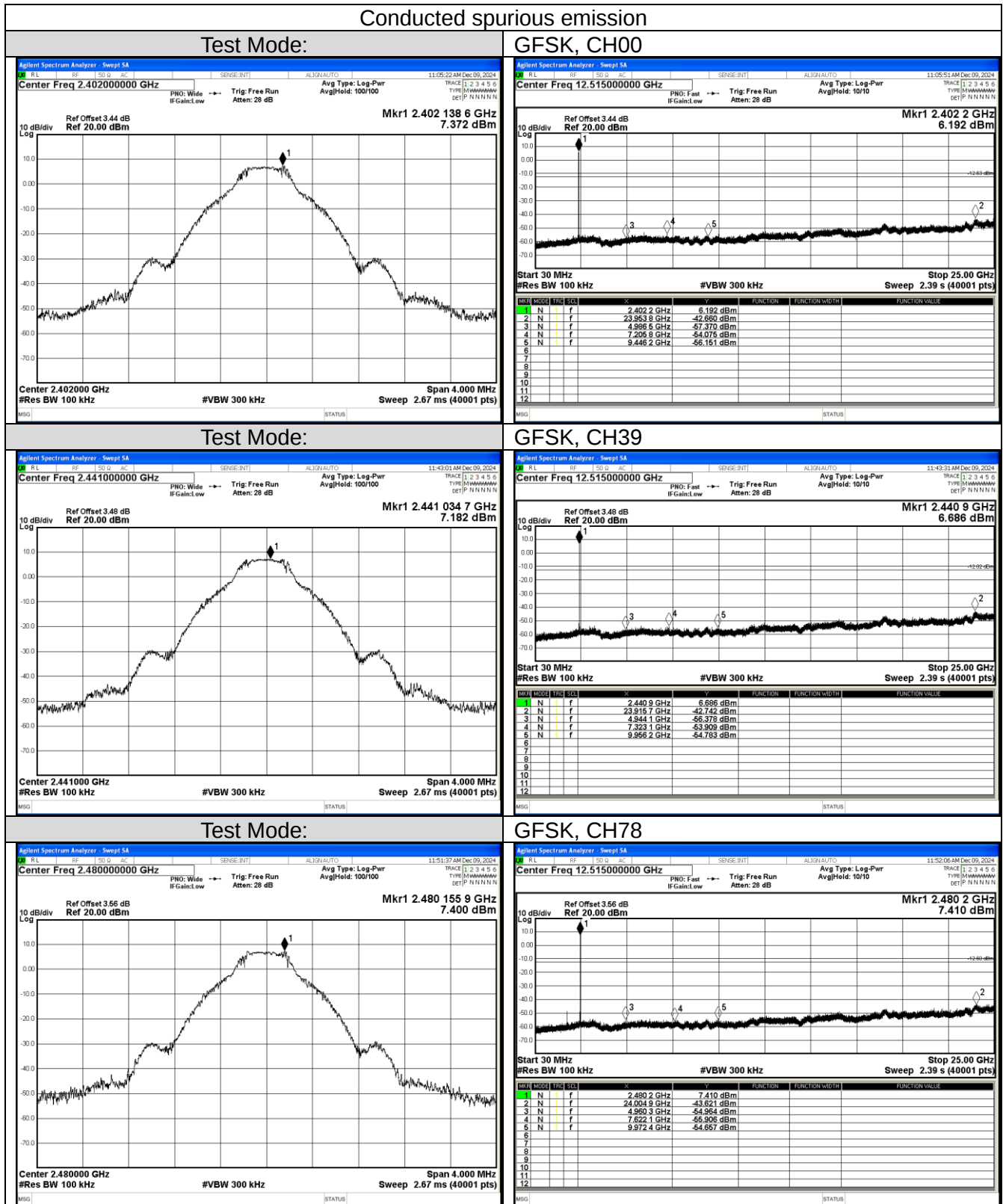
Correction Factor = antenna factor + cable loss – amplifier gain;

Reading = Reading Amplitude in the instrument;

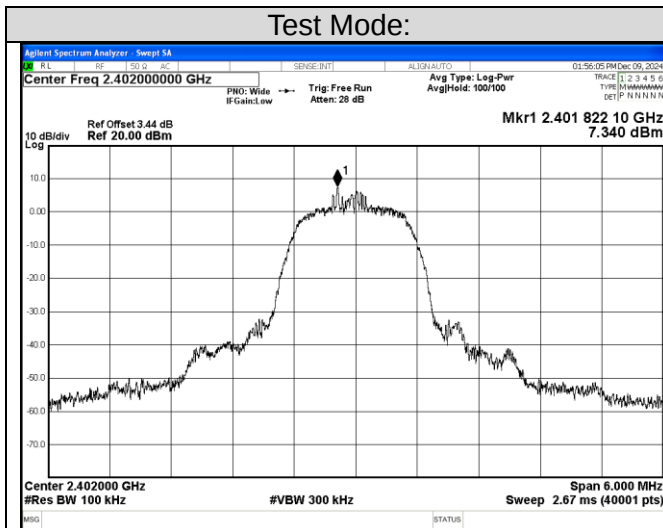
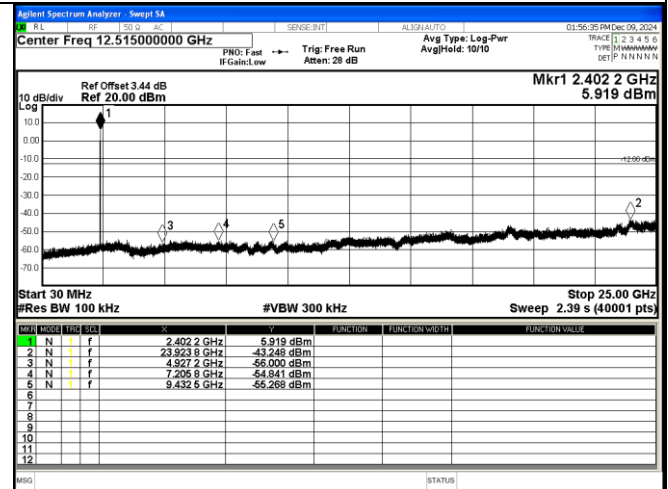
Result = Correction Factor + Reading;

Margin = Result – Limit

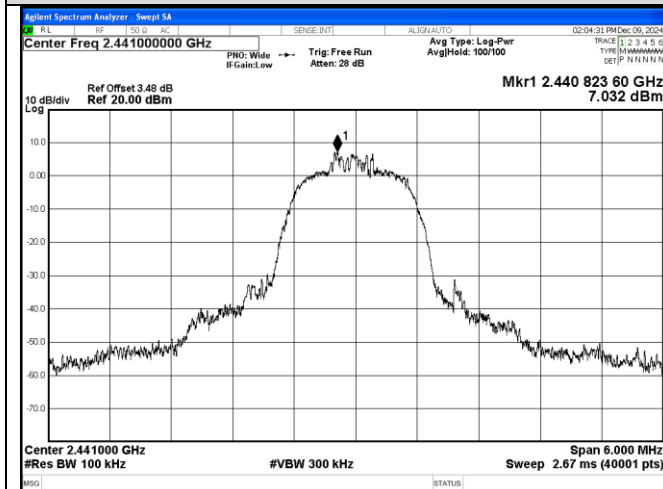
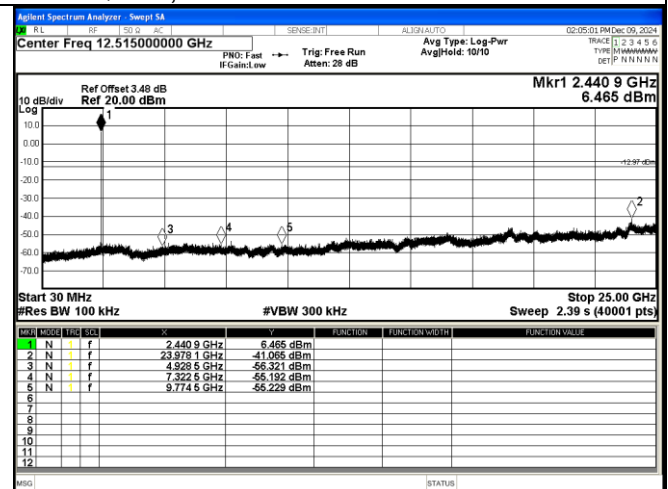
Appendix A.3 Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth



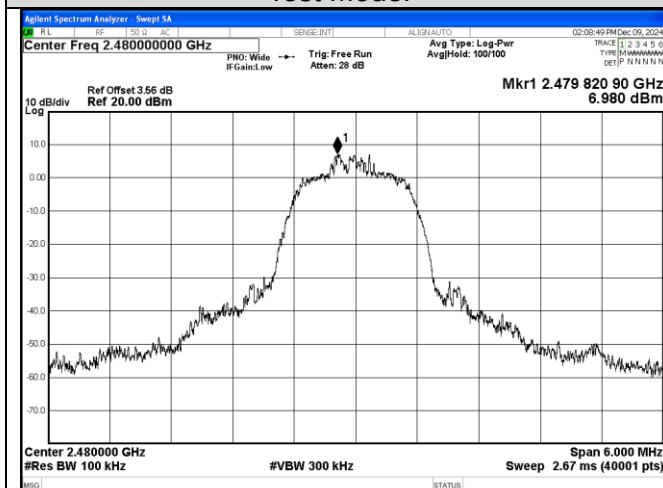
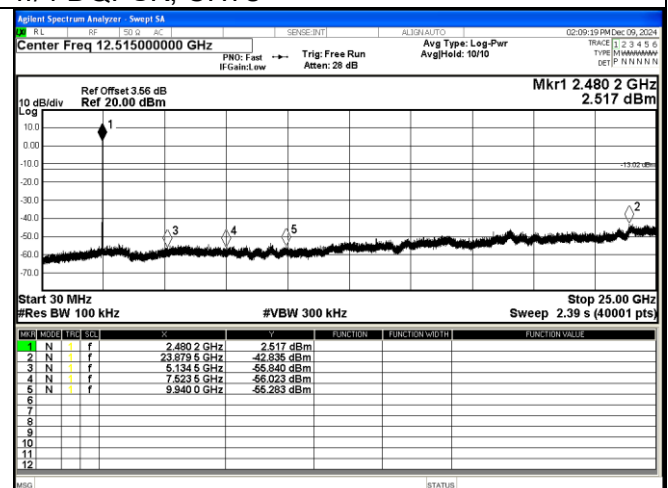
Test Mode:

 $\pi/4$ DQPSK, CH00

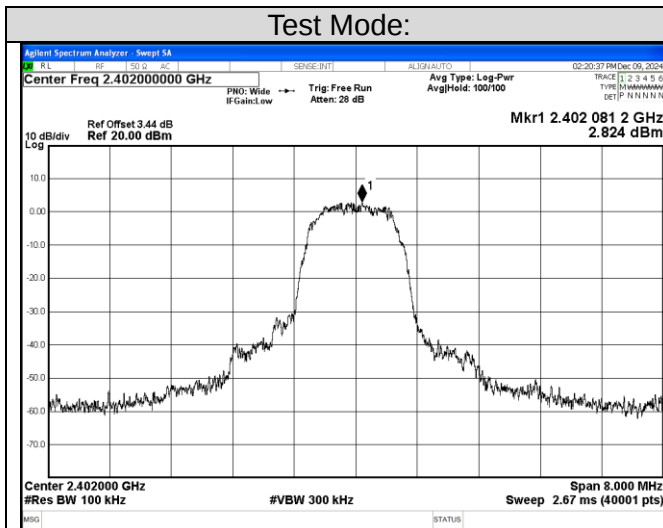
Test Mode:

 $\pi/4$ DQPSK, CH39

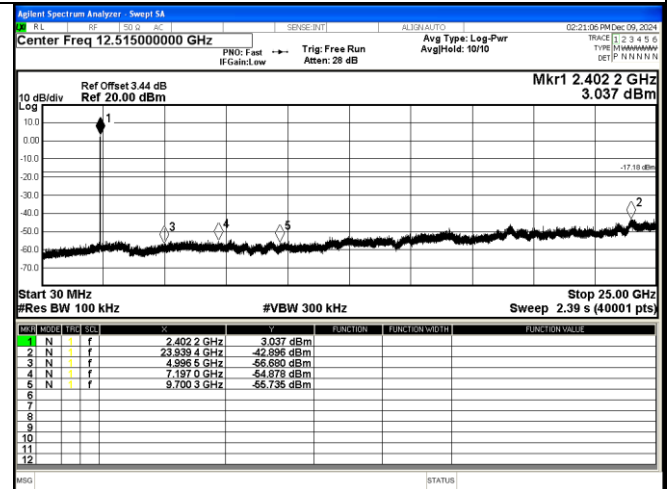
Test Mode:

 $\pi/4$ DQPSK, CH78

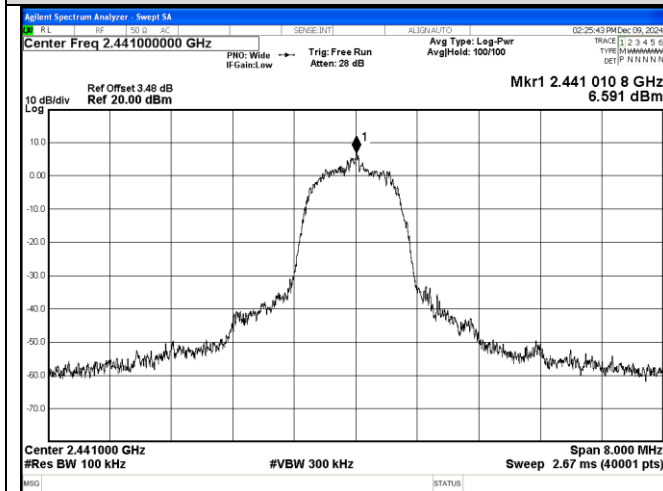
Test Mode:



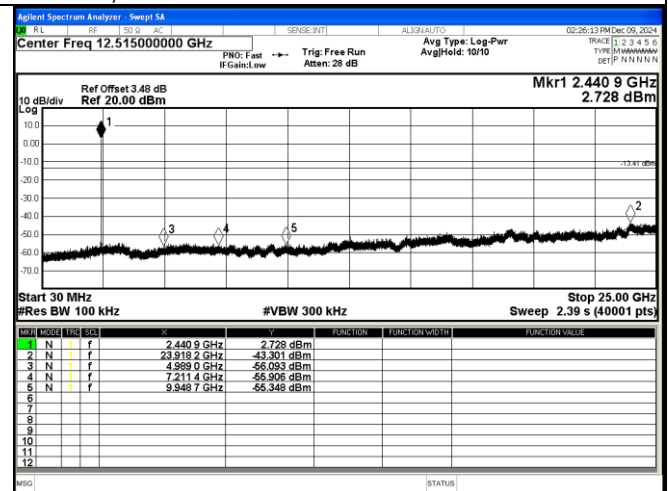
8DPSK, CH00



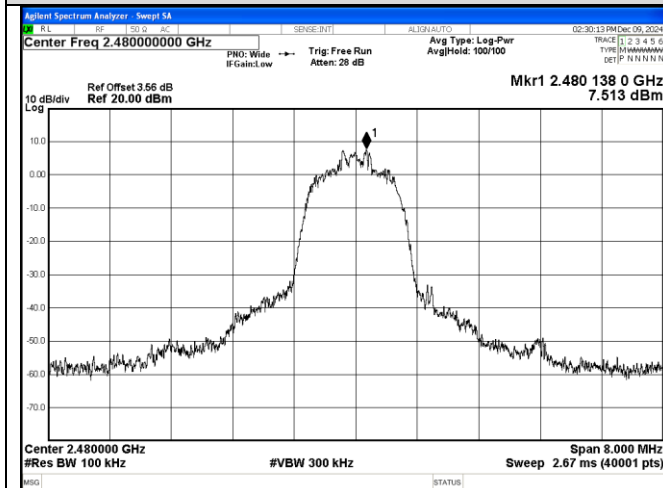
Test Mode:



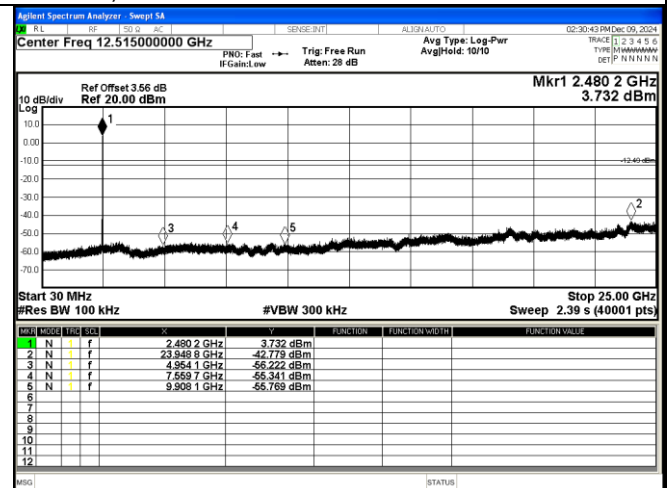
8DPSK, CH39



Test Mode:



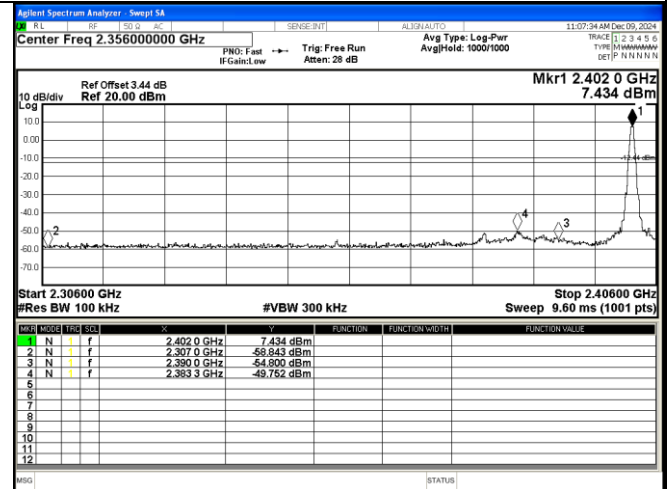
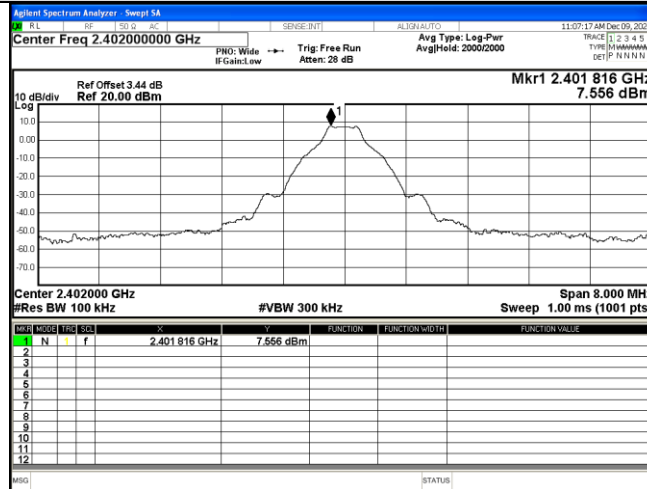
8DPSK, CH78



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

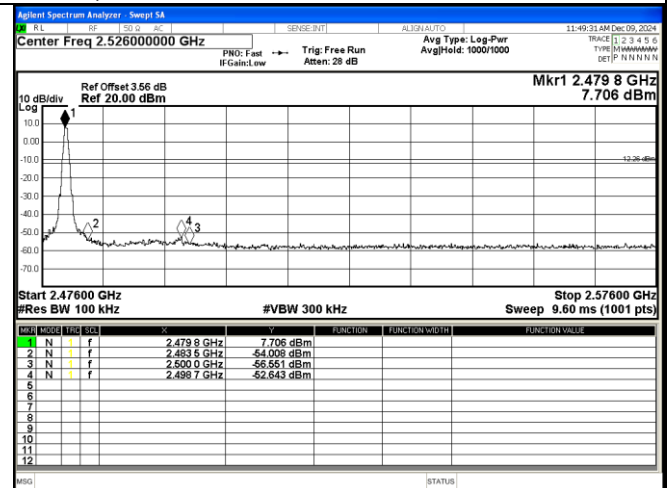
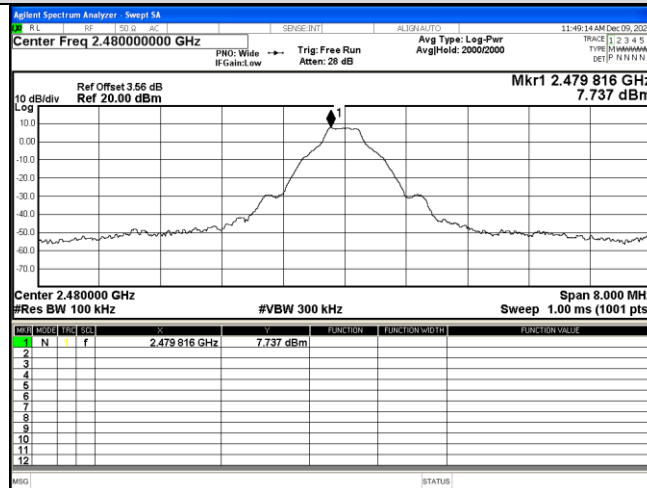
Test Mode:

GFSK, CH00



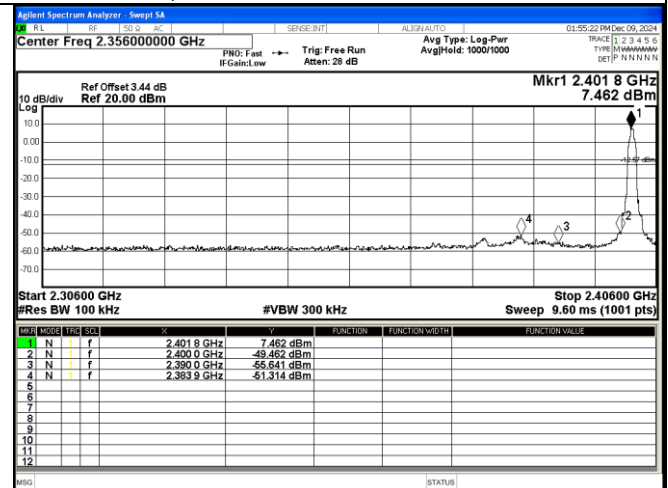
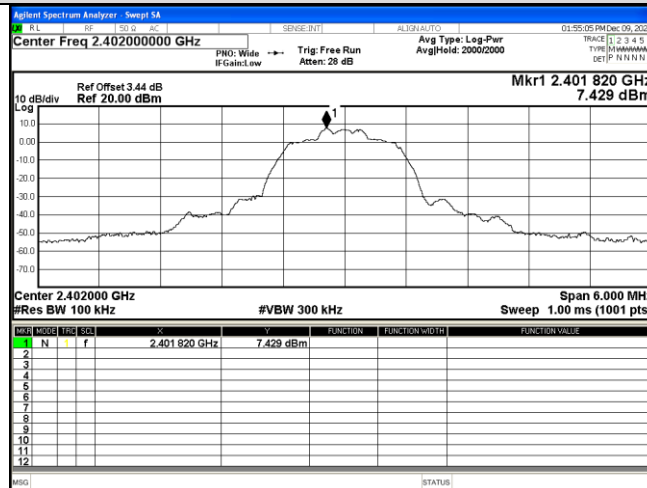
Test Mode:

GFSK, CH78

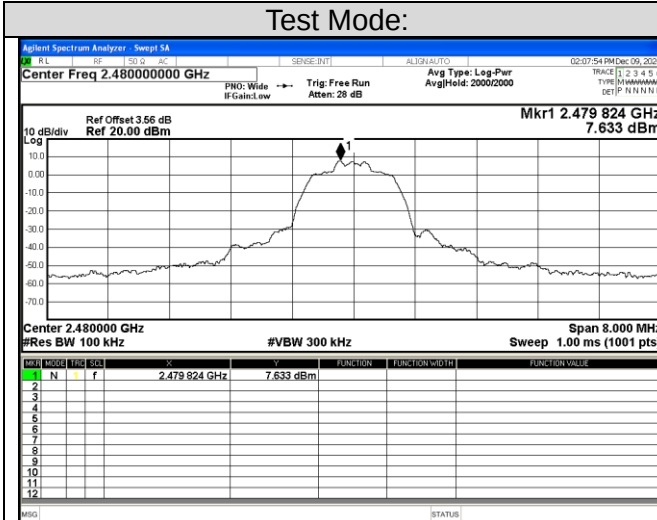
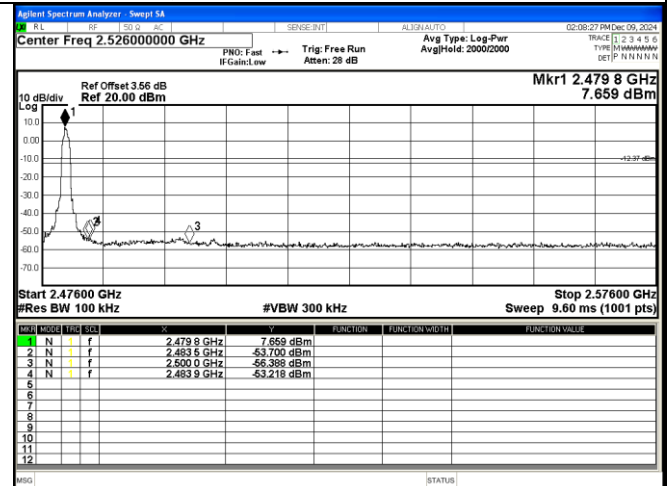


Test Mode:

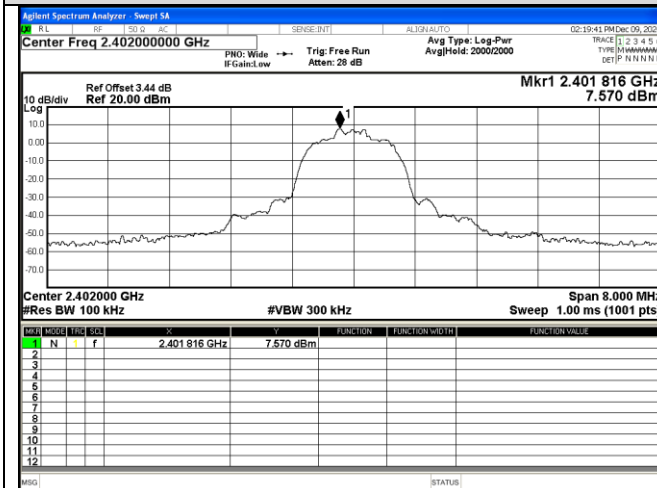
$\pi/4$ DQPSK, CH00



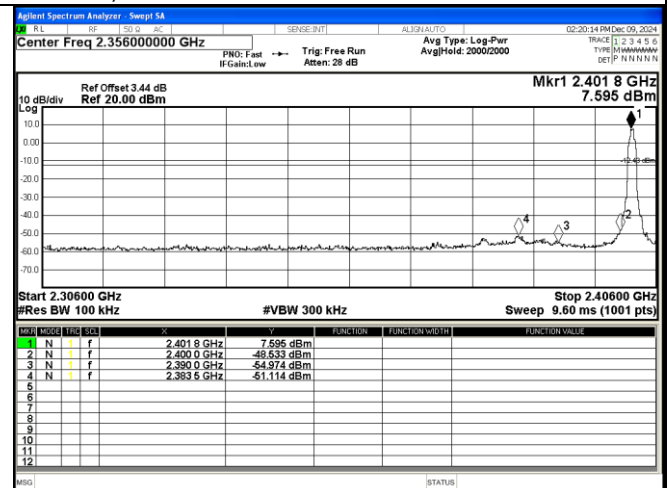
Test Mode:

 $\pi/4$ DQPSK, CH78

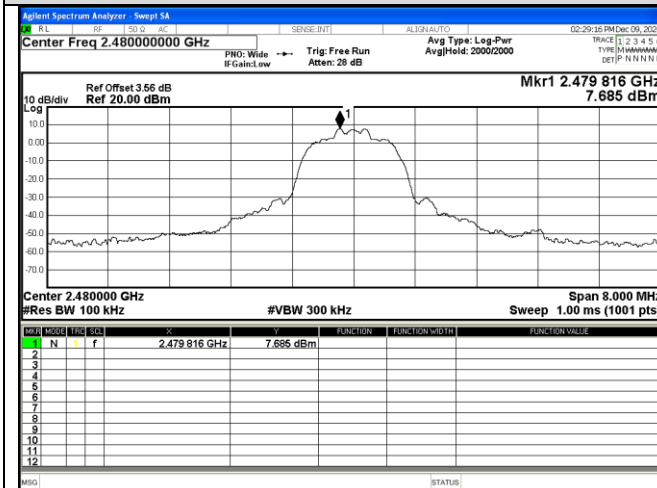
Test Mode:



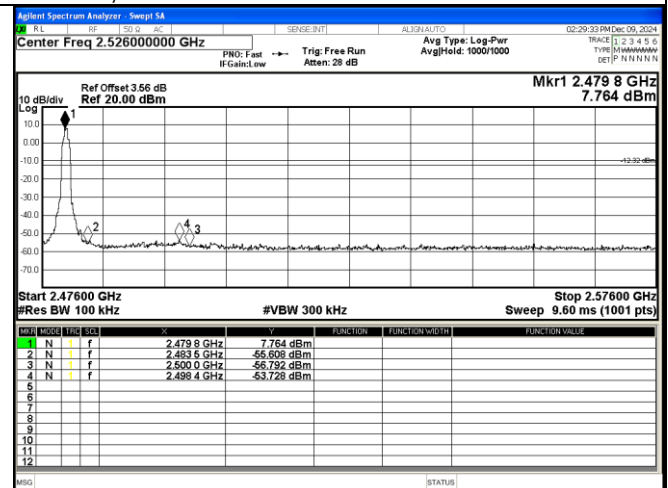
8DPSK, CH00



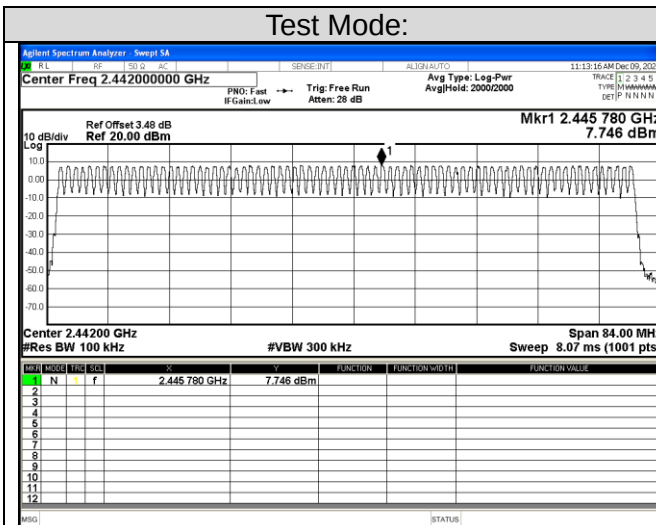
Test Mode:



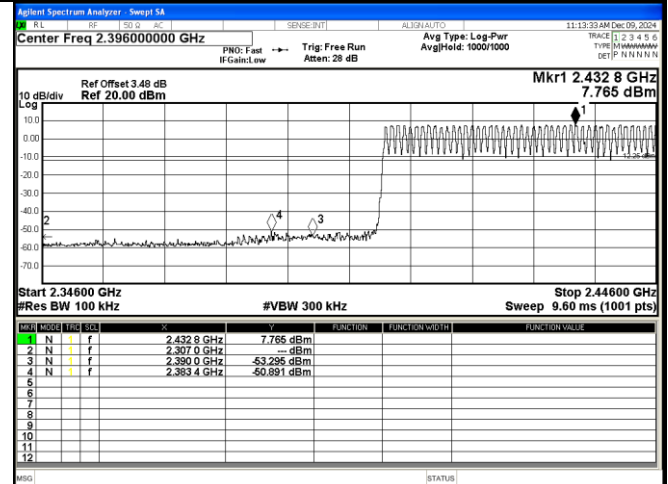
8DPSK, CH78



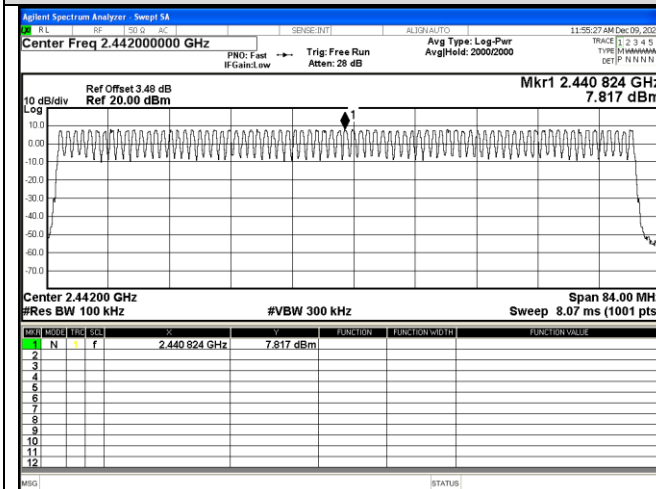
Test Mode:



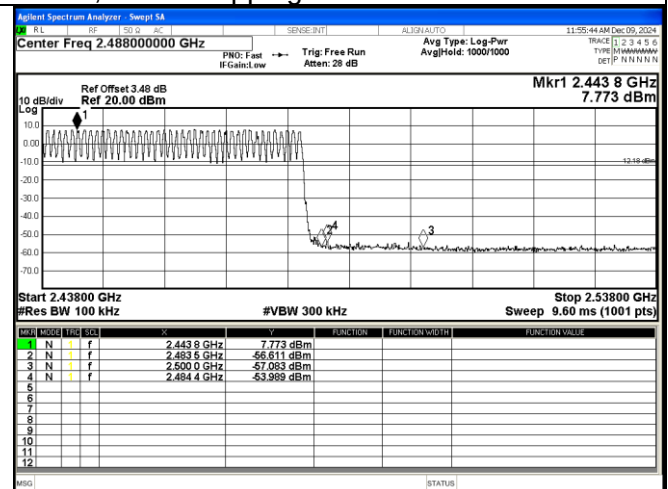
GFSK, CH00 Hopping



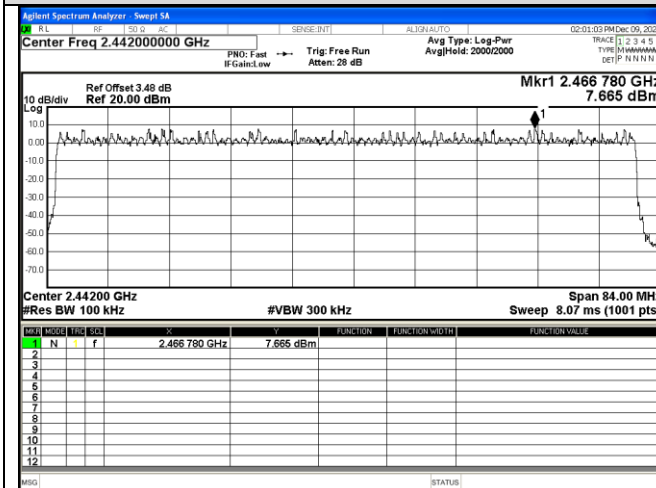
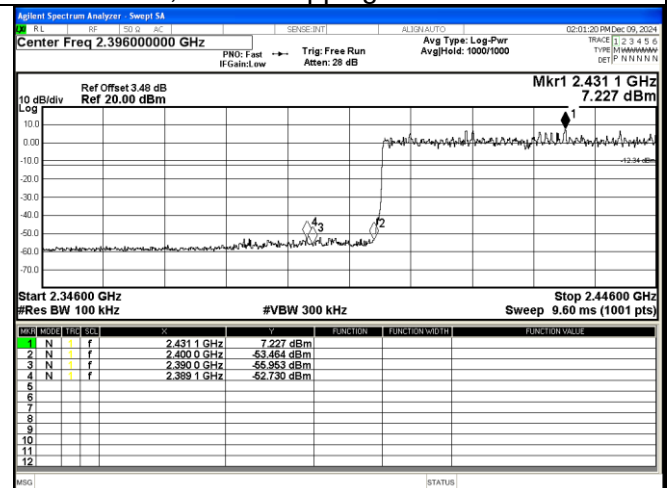
Test Mode:



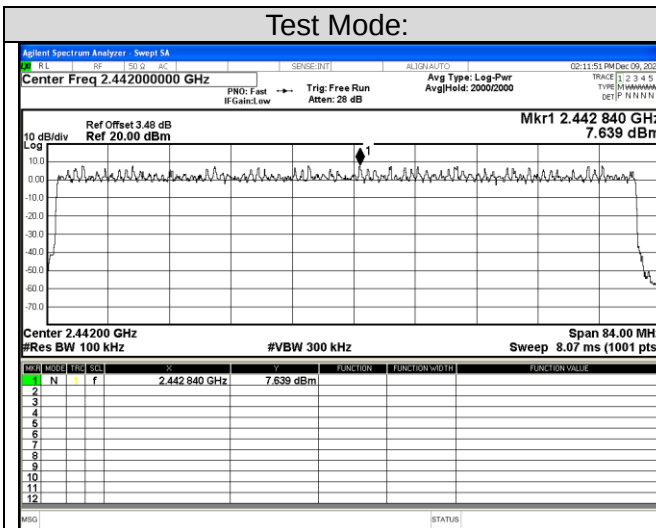
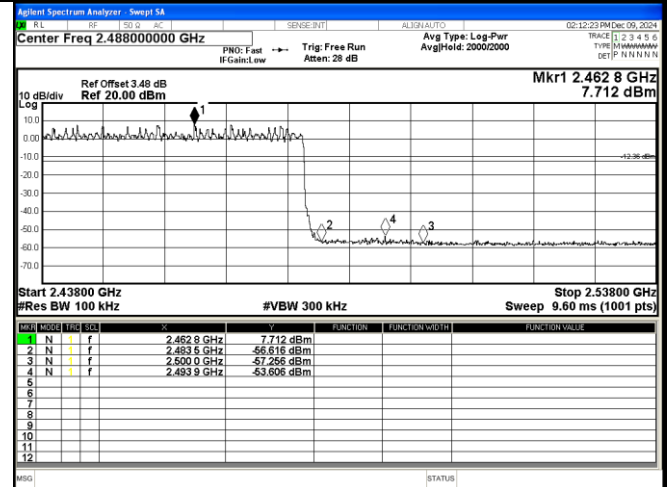
GFSK, CH78 Hopping



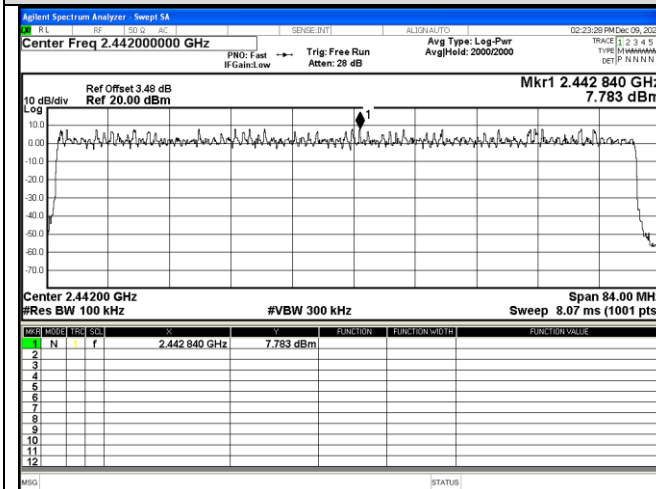
Test Mode:

 $\pi/4$ DQPSK, CH00 Hopping

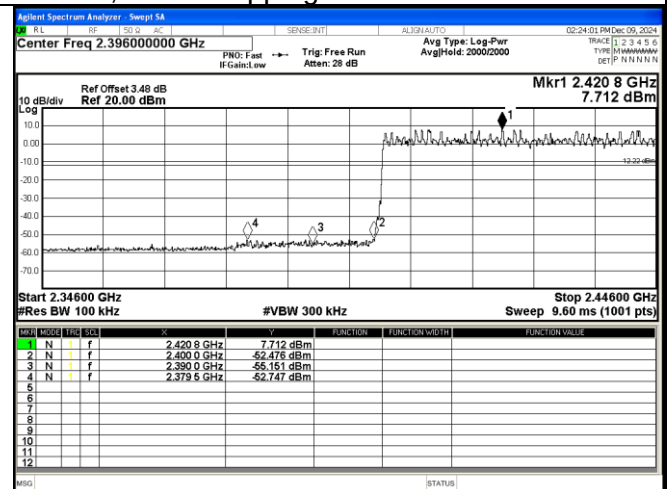
Test Mode:

 $\pi/4$ DQPSK, CH78 Hopping

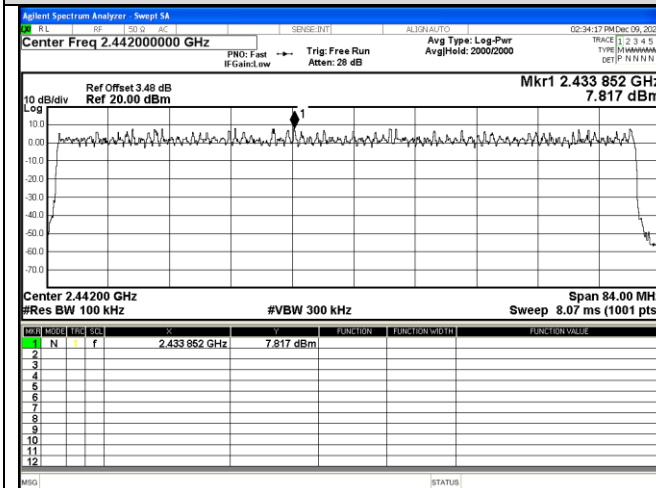
Test Mode:



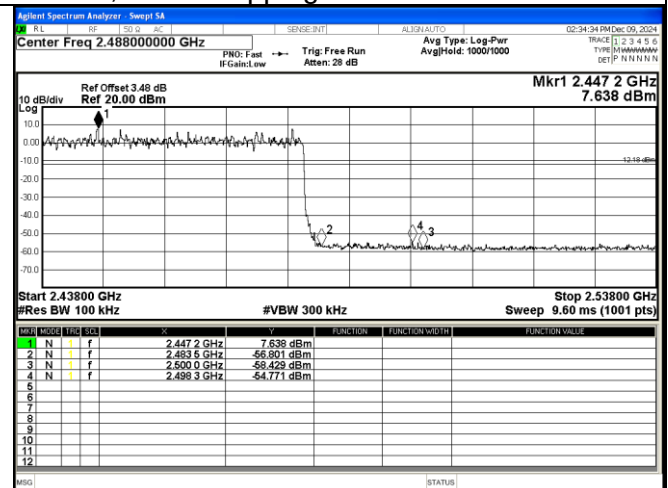
8DPSK, CH00 Hopping



Test Mode:

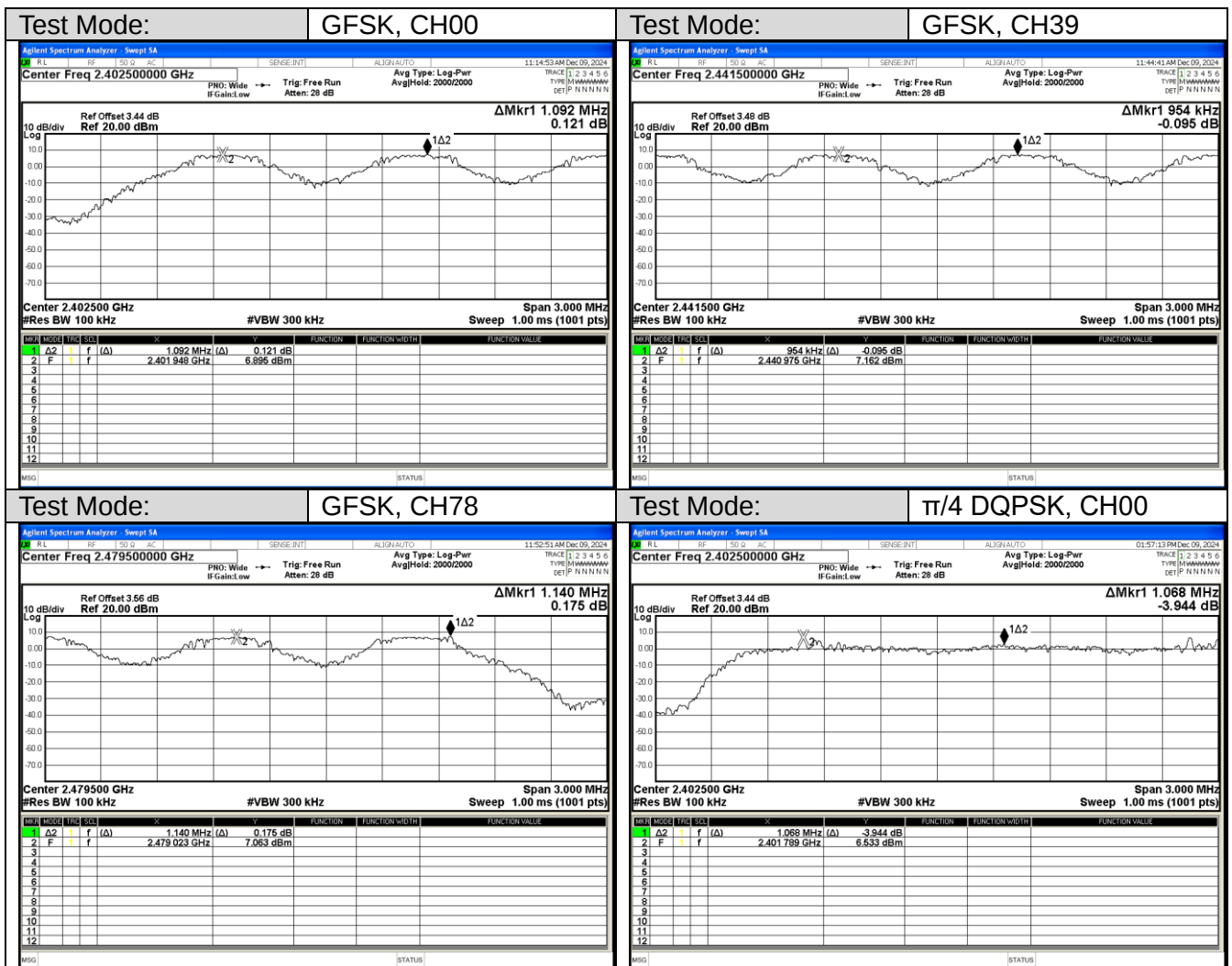


8DPSK, CH78 Hopping



Appendix A.4 Test Results of Carrier Frequency Separation

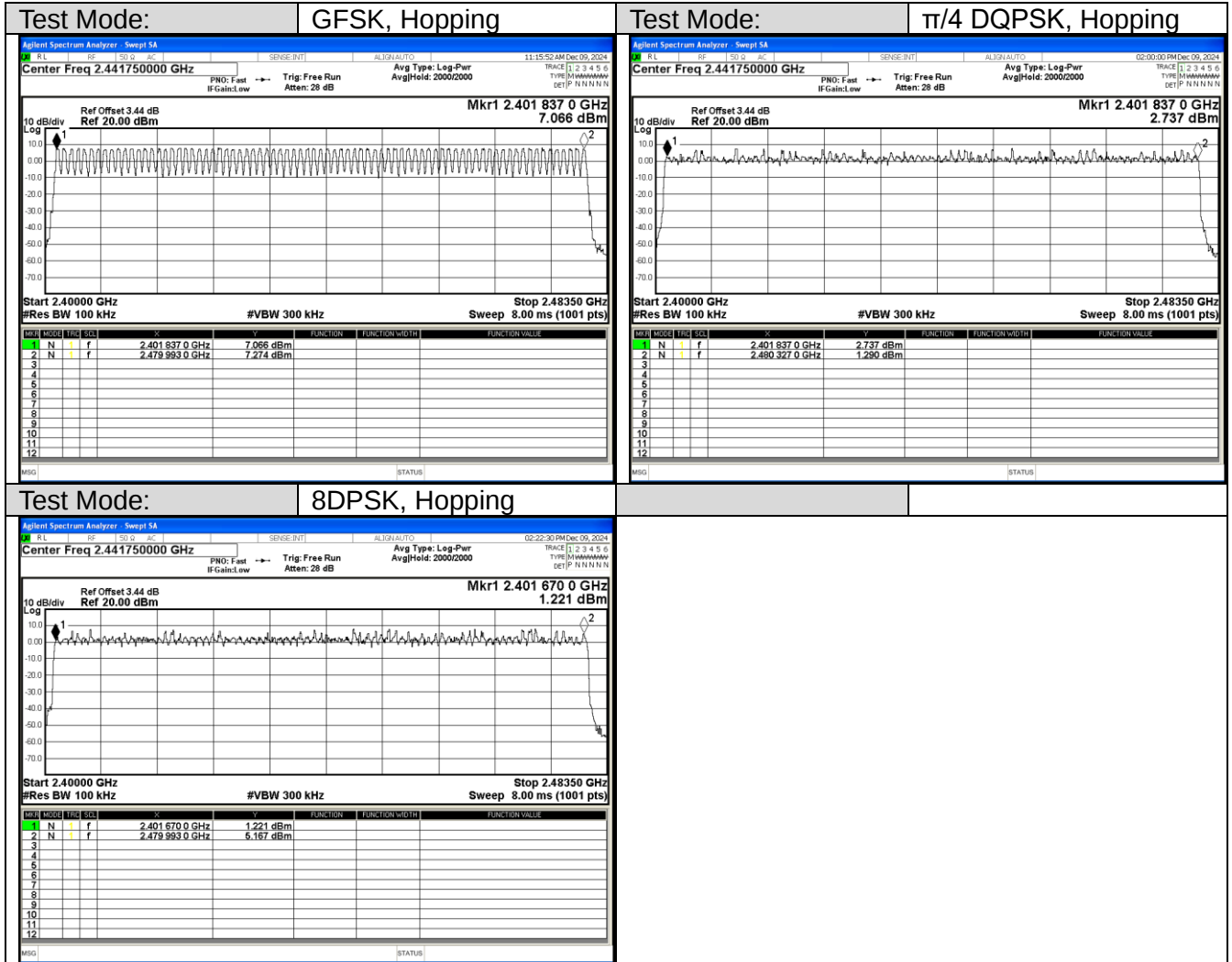
Mode	HFS (MHz)	Limit (MHz)	Verdict
GFSK, CH00	1.092	0.626	Pass
GFSK, CH39	0.954	0.633	Pass
GFSK, CH78	1.14	0.625	Pass
$\pi/4$ DQPSK, CH00	1.068	0.846	Pass
$\pi/4$ DQPSK, CH39	1.011	0.855	Pass
$\pi/4$ DQPSK, CH78	1.371	0.857	Pass
8DPSK, CH00	1.155	0.833	Pass
8DPSK, CH39	1.014	0.796	Pass
8DPSK, CH78	0.942	0.799	Pass





Appendix A.5 Test Results of Number of Hopping Frequency

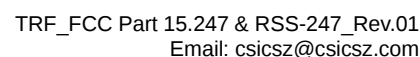
Mode	Hopping Number	Limit	Verdict
GFSK, Hopping	79	15	Pass
$\pi/4$ DQPSK, Hopping	79	15	Pass
8DPSK, Hopping	79	15	Pass



Appendix A.6 Test Results of Time of Occupancy

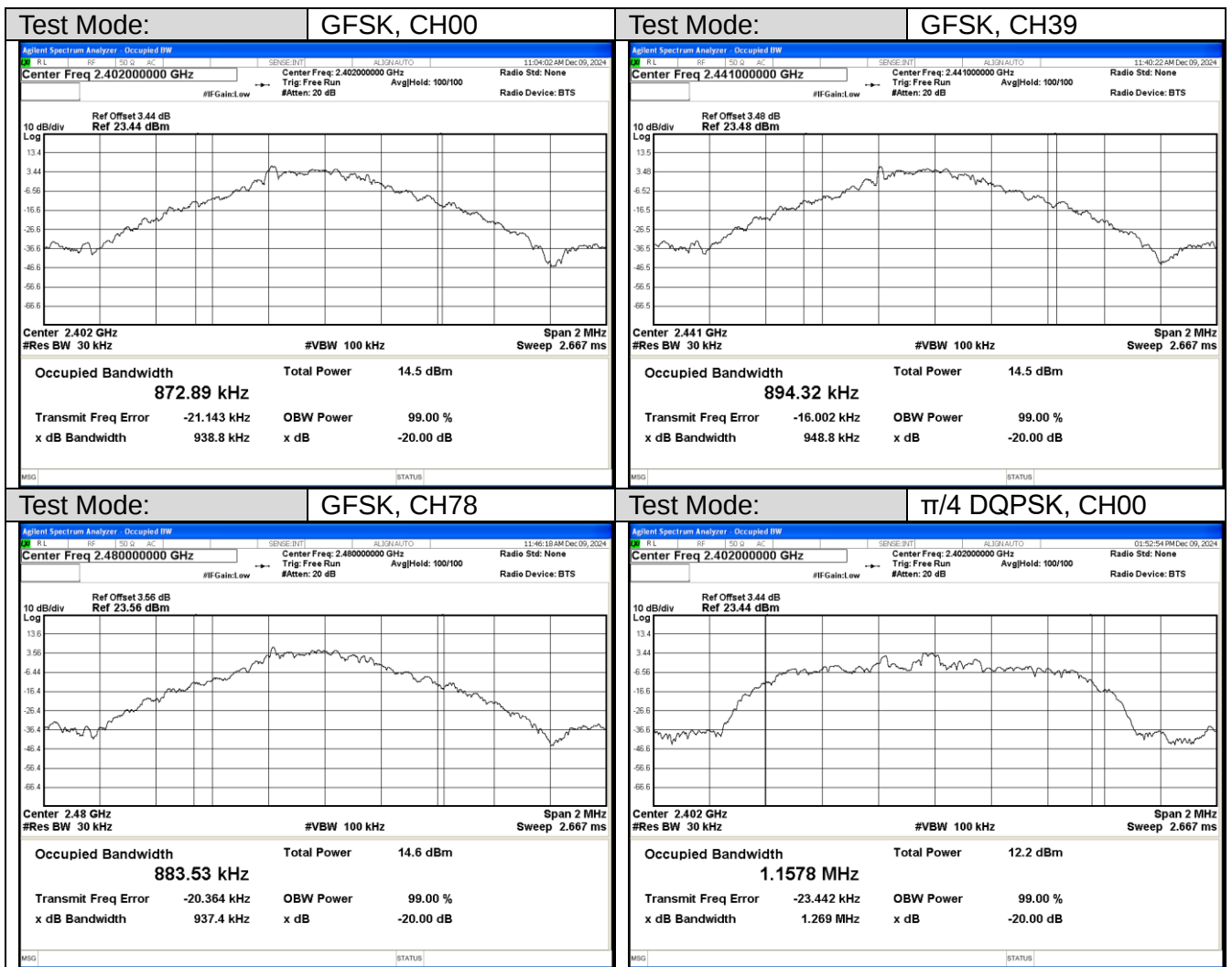
Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
GFSK, DH1	2441	0.371	117.315	31600	400	Pass
GFSK, DH3	2441	1.619	255.818	31600	400	Pass
GFSK, DH5	2441	2.868	271.848	31600	400	Pass
$\pi/4$ DQPSK, DH1	2441	0.379	119.732	31600	400	Pass
$\pi/4$ DQPSK, DH3	2441	1.631	257.666	31600	400	Pass
$\pi/4$ DQPSK, DH5	2441	2.879	272.91	31600	400	Pass
8DPSK, DH1	2441	0.379	119.732	31600	400	Pass
8DPSK, DH3	2441	1.629	257.36	31600	400	Pass
8DPSK, DH5	2441	2.88	273.024	31600	400	Pass

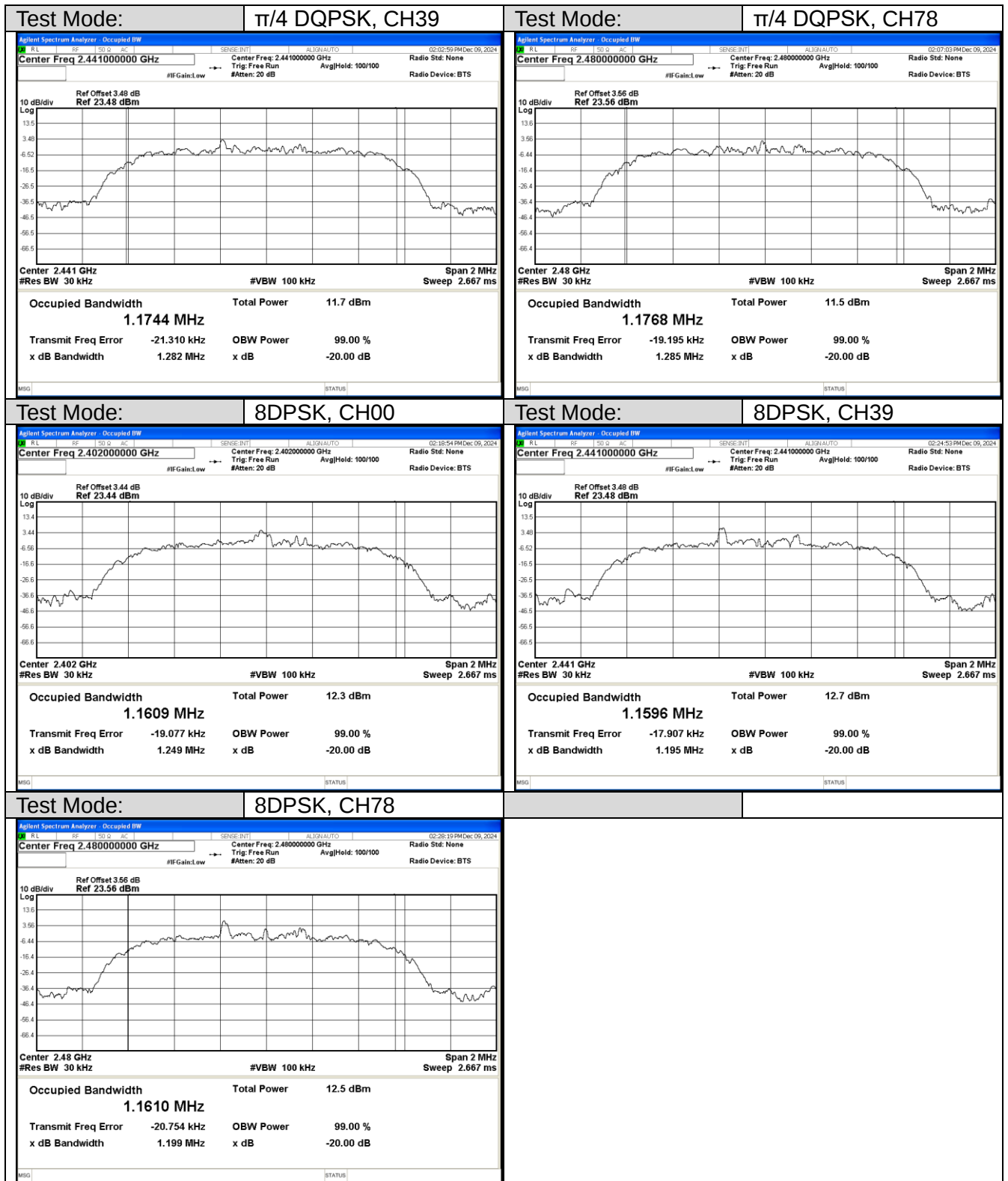




Appendix A.7 Test Results of 20dB & 99% Bandwidth

Mode	Frequency [MHz]	99% Bandwidth [MHz]	20dB Bandwidth [MHz]
GFSK	2402	0.8729	0.9388
GFSK	2441	0.8943	0.9488
GFSK	2480	0.8835	0.9374
$\pi/4$ DQPSK	2402	1.1578	1.2688
$\pi/4$ DQPSK	2441	1.1744	1.2818
$\pi/4$ DQPSK	2480	1.1768	1.2848
8DPSK	2402	1.1609	1.2489
8DPSK	2441	1.1596	1.1947
8DPSK	2480	1.161	1.1992





Appendix A.8 Test Results of Maximum Conducted Output Power

Mode	Frequency [MHz]	Measured of Conducted Power		Limit [W]
		dBm	W	
GFSK	2402	7.807	0.0060	< 0.125
	2441	8.093	0.0064	< 0.125
	2480	8.037	0.0064	< 0.125
$\pi/4$ DQPSK	2402	7.874	0.0061	< 0.125
	2441	8.108	0.0065	< 0.125
	2480	7.977	0.0063	< 0.125
8DPSK	2402	8.177	0.0066	< 0.125
	2441	8.393	0.0069	< 0.125
	2480	8.313	0.0068	< 0.125

Note:

- 1) The cable loss is taken into account in results.
 - 2) Antenna gain(G) of Bluetooth: 2.67 dBi
- e.i.r.p.=P(Peak power)+ G, which is far below the 4 W