

Appendix A: Test Results of U-NII Device

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Appendix A.1 Test Results of Radiated Spurious Emission

Note: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz 40 GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18G Hz were reported.

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

Below 1G:

Test Mode :	Mode 1	Test Voltage :	DC 14.4V
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Horizontal

The graph displays the radiated spurious emission in dBuV/m versus frequency in MHz for the horizontal mode. The y-axis ranges from 0.0 to 80.0 dBuV/m, and the x-axis ranges from 30.000 to 1000.000 MHz. A red line represents the limit, and a green line represents the margin. The blue line shows the measured signal. Peaks are labeled with numbers 1 through 6.

No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (deg.)	Height (cm)	Remark
1	39.1824	37.27	-13.06	24.21	40.00	-15.79			QP
2	67.7856	39.98	-13.81	26.17	40.00	-13.83			QP
3*	216.0000	54.68	-14.31	40.37	43.50	-3.13			QP
4	294.4260	50.07	-12.02	38.05	46.00	-7.95			QP
5	376.5227	48.51	-9.52	38.99	46.00	-7.01			QP
6	875.0131	32.86	-0.61	32.25	46.00	-13.75			QP

Vertical

The graph displays the radiated spurious emission in dBuV/m versus frequency in MHz for the vertical mode. The y-axis ranges from 0.0 to 80.0 dBuV/m, and the x-axis ranges from 30.000 to 1000.000 MHz. A red line represents the limit, and a green line represents the margin. The blue line shows the measured signal. Peaks are labeled with numbers 1 through 6.

No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (deg.)	Height (cm)	Remark
1*	45.0951	44.89	-12.42	32.47	40.00	-7.53			QP
2	100.4711	42.40	-16.97	25.43	43.50	-18.07			QP
3	216.1194	47.76	-14.31	33.45	46.00	-12.55			QP
4	406.7820	41.71	-8.66	33.05	46.00	-12.95			QP
5	461.6313	41.79	-7.35	34.44	46.00	-11.56			QP
6	628.8935	37.07	-4.01	33.06	46.00	-12.94			QP

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

Reading = Reading Amplitude in the instrument;

Result = Correction Factor + Reading;

Margin = Result – Limit

Above 1GHz:

Note: All modes and antenna have been tested, and the report only reflects the worst mode(SISO ANT1).

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.

Band I:

5MHz Bandwidth -Low Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3597.016	39.02	7.36	46.38	68.2	-21.82	peak
2	3597.016	29.62	7.36	36.98	54	-17.02	AVG
3	6128.798	37.09	12.26	49.35	68.2	-18.85	peak
4	6128.798	24.04	12.26	36.3	54	-17.7	AVG
5	7002.185	37.98	13.67	51.65	68.2	-16.55	peak
6	7002.185	26.91	13.67	40.58	54	-13.42	AVG
7	8428.146	34.49	16.19	50.68	68.2	-17.52	peak
8	8428.146	24.04	16.19	40.23	54	-13.77	AVG
9	9912.157	33.32	18.77	52.09	68.2	-16.11	peak
10	9912.157	20.76	18.77	39.53	54	-14.47	AVG
11	10564.27	33.73	19.32	53.05	68.2	-15.15	peak
12	10564.27	22.06	19.32	41.38	54	-12.62	AVG

5MHz Bandwidth -Low Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6345.543	37.84	12.51	50.35	68.2	-17.85	peak
2	6345.543	26.64	12.51	39.15	54	-14.85	AVG
3	7002.185	36.77	13.67	50.44	68.2	-17.76	peak
4	7002.185	27.69	13.67	41.36	54	-12.64	AVG
5	7816.81	34.63	15.37	50	68.2	-18.2	peak
6	7816.81	23.12	15.37	38.49	54	-15.51	AVG
7	8428.146	34.69	16.19	50.88	68.2	-17.32	peak
8	8428.146	24.51	16.19	40.7	54	-13.3	AVG
9	10203.43	33.23	18.89	52.12	68.2	-16.08	peak
10	10203.43	22.92	18.89	41.81	54	-12.19	AVG
11	12000.03	34.73	20.45	55.18	68.2	-13.02	peak
12	12000.03	23.42	20.45	43.87	54	-10.13	AVG



5MHz Bandwidth -Middle Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5004.148	39.3	9.6	48.9	68.2	-19.3	peak
2	5004.148	26.98	9.6	36.58	54	-17.42	AVG
3	6236.229	37.88	12.19	50.07	68.2	-18.13	peak
4	6236.229	26.96	12.19	39.15	54	-14.85	AVG
5	7002.185	36.26	13.67	49.93	68.2	-18.27	peak
6	7002.185	24.12	13.67	37.79	54	-16.21	AVG
7	9463.32	34.05	18.12	52.17	68.2	-16.03	peak
8	9463.32	22.29	18.12	40.41	54	-13.59	AVG
9	11259.29	34.84	18.67	53.51	68.2	-14.69	peak
10	11259.29	24.52	18.67	43.19	54	-10.81	AVG
11	12569.18	34.28	21.14	55.42	68.2	-12.78	peak
12	12569.18	23.5	21.14	44.64	54	-9.36	AVG

5MHz Bandwidth -Middle Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5004.148	37.91	9.6	47.51	68.2	-20.69	peak
2	5004.148	24.68	9.6	34.28	54	-19.72	AVG
3	6058.208	37.41	12	49.41	68.2	-18.79	peak
4	6058.208	24.25	12	36.25	54	-17.75	AVG
5	6881.559	35.94	13.53	49.47	68.2	-18.73	peak
6	6881.559	24.83	13.53	38.36	54	-15.64	AVG
7	7953.829	33.12	16.37	49.49	68.2	-18.71	peak
8	7953.829	19.18	16.37	35.55	54	-18.45	AVG
9	8982.627	34.15	16.81	50.96	68.2	-17.24	peak
10	8982.627	21.88	16.81	38.69	54	-15.31	AVG
11	10564.27	33.09	19.32	52.41	68.2	-15.79	peak
12	10564.27	19.6	19.32	38.92	54	-15.08	AVG

5MHz Bandwidth -High Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3576.241	38.07	7.03	45.1	68.2	-23.1	peak
2	3576.241	27.46	7.03	34.49	54	-19.51	AVG
3	5004.148	39.32	9.6	48.92	68.2	-19.28	peak
4	5004.148	28.56	9.6	38.16	54	-15.84	AVG
5	6272.456	38.75	12.26	51.01	68.2	-17.19	peak
6	6272.456	29.05	12.26	41.31	54	-12.69	AVG
7	7726.777	35.46	15.43	50.89	68.2	-17.31	peak
8	7726.777	24.04	15.43	39.47	54	-14.53	AVG
9	9408.664	33.98	18.33	52.31	68.2	-15.89	peak
10	9408.664	23.5	18.33	41.83	54	-12.17	AVG
11	10503.26	35.7	19.07	54.77	68.2	-13.43	peak
12	10503.26	26.64	19.07	45.71	54	-8.29	AVG

5MHz Bandwidth -High Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3597.016	37.6	7.36	44.96	68.2	-23.24	peak
2	3597.016	24.61	7.36	31.97	54	-22.03	AVG
3	5004.148	38.77	9.6	48.37	68.2	-19.83	peak
4	5004.148	24.85	9.6	34.45	54	-19.55	AVG
5	6128.798	36.96	12.26	49.22	68.2	-18.98	peak
6	6128.798	26.06	12.26	38.32	54	-15.68	AVG
7	6961.743	36.22	13.54	49.76	68.2	-18.44	peak
8	6961.743	26.22	13.54	39.76	54	-14.24	AVG
9	7593.669	34.44	15.17	49.61	68.2	-18.59	peak
10	7593.669	20.62	15.17	35.79	54	-18.21	AVG
11	10503.26	36.02	19.07	55.09	68.2	-13.11	peak
12	10503.26	25.14	19.07	44.21	54	-9.79	AVG

20MHz Bandwidth -Low Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3923.521	39.03	6.78	45.81	68.2	-22.39	peak
2	3923.521	27.91	6.78	34.69	54	-19.31	AVG
3	6164.401	38.2	12.19	50.39	68.2	-17.81	peak
4	6164.401	27.21	12.19	39.4	54	-14.6	AVG
5	6961.743	37.1	13.54	50.64	68.2	-17.56	peak
6	6961.743	27.98	13.54	41.52	54	-12.48	AVG
7	7816.81	35.27	15.37	50.64	68.2	-17.56	peak
8	7816.81	25.97	15.37	41.34	54	-12.66	AVG
9	9969.738	33.57	18.83	52.4	68.2	-15.8	peak
10	9969.738	22.62	18.83	41.45	54	-12.55	AVG
11	12569.18	32.09	21.14	53.23	68.2	-14.97	peak
12	12569.18	18.87	21.14	40.01	54	-13.99	AVG

20MHz Bandwidth -Low Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2555.779	40.69	3.55	44.24	68.2	-23.96	peak
2	2555.779	30.94	3.55	34.49	54	-19.51	AVG
3	3638.928	39.39	7.17	46.56	68.2	-21.64	peak
4	3638.928	25.46	7.17	32.63	54	-21.37	AVG
5	6164.401	38.73	12.19	50.92	68.2	-17.28	peak
6	6164.401	26.41	12.19	38.6	54	-15.4	AVG
7	6961.743	37.44	13.54	50.98	68.2	-17.22	peak
8	6961.743	25.26	13.54	38.8	54	-15.2	AVG
9	7816.81	35.18	15.37	50.55	68.2	-17.65	peak
10	7816.81	25.17	15.37	40.54	54	-13.46	AVG
11	8930.747	34.17	16.94	51.11	68.2	-17.09	peak
12	8930.747	20.62	16.94	37.56	54	-16.44	AVG



20MHz Bandwidth -Middle Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4181.646	37.07	6.86	43.93	68.2	-24.27	peak
2	4181.646	26.67	6.86	33.53	54	-20.47	AVG
3	4749.96	36.78	9.15	45.93	68.2	-22.27	peak
4	4749.96	25.01	9.15	34.16	54	-19.84	AVG
5	6058.208	37.88	12	49.88	68.2	-18.32	peak
6	6058.208	24.06	12	36.06	54	-17.94	AVG
7	6961.743	36.9	13.54	50.44	68.2	-17.76	peak
8	6961.743	25.73	13.54	39.27	54	-14.73	AVG
9	12069.74	34.18	20.37	54.55	68.2	-13.65	peak
10	12069.74	23.69	20.37	44.06	54	-9.94	AVG
11	12642.19	34.19	21.24	55.43	68.2	-12.77	peak
12	12642.19	24.33	21.24	45.57	54	-8.43	AVG

20MHz Bandwidth -Middle Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4431.014	36.74	7.78	44.52	68.2	-23.68	peak
2	4431.014	26.26	7.78	34.04	54	-19.96	AVG
3	6164.401	37.14	12.19	49.33	68.2	-18.87	peak
4	6164.401	28.01	12.19	40.2	54	-13.8	AVG
5	6961.743	36.14	13.54	49.68	68.2	-18.52	peak
6	6961.743	27.08	13.54	40.62	54	-13.38	AVG
7	8827.884	33.94	16.82	50.76	68.2	-17.44	peak
8	8827.884	24.8	16.82	41.62	54	-12.38	AVG
9	10442.59	32.85	18.77	51.62	68.2	-16.58	peak
10	10442.59	20.07	18.77	38.84	54	-15.16	AVG
11	12000.03	33.79	20.45	54.24	68.2	-13.96	peak
12	12000.03	22.83	20.45	43.28	54	-10.72	AVG

20MHz Bandwidth -High Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5004.148	38.51	9.6	48.11	68.2	-20.09	peak
2	5004.148	24.85	9.6	34.45	54	-19.55	AVG
3	5618.776	36.81	10.98	47.79	68.2	-20.41	peak
4	5618.776	27.26	10.98	38.24	54	-15.76	AVG
5	7002.185	37.51	13.67	51.18	68.2	-17.02	peak
6	7002.185	25.14	13.67	38.81	54	-15.19	AVG
7	7593.669	35.34	15.17	50.51	68.2	-17.69	peak
8	7593.669	23.11	15.17	38.28	54	-15.72	AVG
9	9629.202	33.9	17.93	51.83	68.2	-16.37	peak
10	9629.202	20.72	17.93	38.65	54	-15.35	AVG
11	10503.26	33.14	19.07	52.21	68.2	-15.99	peak
12	10503.26	19.9	19.07	38.97	54	-15.03	AVG

20MHz Bandwidth -High Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5004.148	38.72	9.6	48.32	68.2	-19.88	peak
2	5004.148	26.56	9.6	36.16	54	-17.84	AVG
3	6128.798	37.79	12.26	50.05	68.2	-18.15	peak
4	6128.798	27.19	12.26	39.45	54	-14.55	AVG
5	6802.299	36.85	13.43	50.28	68.2	-17.92	peak
6	6802.299	26.27	13.43	39.7	54	-14.3	AVG
7	8331.072	34.24	15.78	50.02	68.2	-18.18	peak
8	8331.072	22.92	15.78	38.7	54	-15.3	AVG
9	9518.294	33.05	17.96	51.01	68.2	-17.19	peak
10	9518.294	21.36	17.96	39.32	54	-14.68	AVG
11	10503.26	34.33	19.07	53.4	68.2	-14.8	peak
12	10503.26	24.73	19.07	43.8	54	-10.2	AVG

Band IV:

Note: All modes and antenna have been tested, and the report only reflects the worst mode(SISO ANT1).

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.

5MHz Bandwidth -Low Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5004.148	40.53	9.6	50.13	68.2	-18.07	peak
2	5004.148	30.52	9.6	40.12	54	-13.88	AVG
3	6961.743	38	13.54	51.54	68.2	-16.66	peak
4	6961.743	28.24	13.54	41.78	54	-12.22	AVG
5	7862.219	35.42	15.59	51.01	68.2	-17.19	peak
6	7862.219	24.88	15.59	40.47	54	-13.53	AVG
7	8982.627	34.8	16.81	51.61	68.2	-16.59	peak
8	8982.627	21.02	16.81	37.83	54	-16.17	AVG
9	10144.5	33.81	18.81	52.62	68.2	-15.58	peak
10	10144.5	22.48	18.81	41.29	54	-12.71	AVG
11	11523.2	38.11	19.13	57.24	68.2	-10.96	peak
12	11523.2	24.56	19.13	43.69	54	-10.31	AVG

5MHz Bandwidth -Low Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5241.49	38.01	10.51	48.52	68.2	-19.68	peak
2	5241.49	26.48	10.51	36.99	54	-17.01	AVG
3	6532.007	37.37	12.74	50.11	68.2	-18.09	peak
4	6532.007	24.96	12.74	37.7	54	-16.3	AVG
5	7002.185	36.85	13.67	50.52	68.2	-17.68	peak
6	7002.185	22.91	13.67	36.58	54	-17.42	AVG
7	8930.747	33.96	16.94	50.9	68.2	-17.3	peak
8	8930.747	24.14	16.94	41.08	54	-12.92	AVG
9	9463.32	33.7	18.12	51.82	68.2	-16.38	peak
10	9463.32	21.23	18.12	39.35	54	-14.65	AVG
11	11456.65	36.48	19.15	55.63	68.2	-12.57	peak
12	11456.65	26.97	19.15	46.12	54	-7.88	AVG



5MHz Bandwidth -Middle Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3617.911	37.79	7.3	45.09	68.2	-23.11	peak
2	3617.911	27.05	7.3	34.35	54	-19.65	AVG
3	5004.148	38.95	9.6	48.55	68.2	-39.57	peak
4	5004.148	26.82	9.6	36.42	54	-17.58	AVG
5	6763.011	36.81	13.34	50.15	68.2	-38	peak
6	6763.011	24.92	13.34	38.26	54	-15.74	AVG
7	7726.777	35.49	15.43	50.92	68.2	-38.03	peak
8	7726.777	23.92	15.43	39.35	54	-14.65	AVG
9	9912.157	33.29	18.77	52.06	68.2	-16.14	peak
10	9912.157	24.1	18.77	42.87	54	-11.13	AVG
11	11590.14	38.41	19.03	57.44	68.2	-10.76	peak
12	11590.14	25.04	19.03	44.07	54	-9.93	AVG

5MHz Bandwidth -Middle Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3617.911	38.01	7.3	45.31	68.2	-22.89	peak
2	3617.911	28.62	7.3	35.92	54	-18.08	AVG
3	5004.148	38.47	9.6	48.07	68.2	-20.13	peak
4	5004.148	27.54	9.6	37.14	54	-16.86	AVG
5	7002.185	36.76	13.67	50.43	68.2	-17.77	peak
6	7002.185	26.95	13.67	40.62	54	-13.38	AVG
7	8827.884	34.08	16.82	50.9	68.2	-17.3	peak
8	8827.884	21.09	16.82	37.91	54	-16.09	AVG
9	10203.43	33.65	18.89	52.54	68.2	-15.66	peak
10	10203.43	20.1	18.89	38.99	54	-15.01	AVG
11	11590.14	37.04	19.03	56.07	68.2	-12.13	peak
12	11590.14	24.41	19.03	43.44	54	-10.56	AVG

5MHz Bandwidth -High Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5333.368	37.47	10.76	48.23	68.2	-19.97	peak
2	5333.368	26.01	10.76	36.77	54	-17.23	AVG
3	6961.743	36.73	13.54	50.27	68.2	-17.93	peak
4	6961.743	24	13.54	37.54	54	-16.46	AVG
5	7816.81	34.98	15.37	50.35	68.2	-17.85	peak
6	7816.81	23.92	15.37	39.29	54	-14.71	AVG
7	8827.884	33.89	16.82	50.71	68.2	-17.49	peak
8	8827.884	21.56	16.82	38.38	54	-15.62	AVG
9	9912.157	34.22	18.77	52.99	68.2	-15.21	peak
10	9912.157	21.56	18.77	40.33	54	-13.67	AVG
11	11657.47	37.72	19.25	56.97	68.2	-11.23	peak
12	11657.47	25.33	19.25	44.58	54	-9.42	AVG

5MHz Bandwidth -High Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4975.246	39.13	9.5	48.63	68.2	-19.57	peak
2	4975.246	29.55	9.5	39.05	54	-14.95	AVG
3	6961.743	36.59	13.54	50.13	68.2	-18.07	peak
4	6961.743	24.84	13.54	38.38	54	-15.62	AVG
5	8526.351	34.54	16.11	50.65	68.2	-17.55	peak
6	8526.351	21.18	16.11	37.29	54	-16.71	AVG
7	9408.664	33.23	18.33	51.56	68.2	-16.64	peak
8	9408.664	23.4	18.33	41.73	54	-12.27	AVG
9	10687.37	32.84	19.23	52.07	68.2	-16.13	peak
10	10687.37	20.99	19.23	40.22	54	-13.78	AVG
11	11657.47	36.99	19.25	56.24	68.2	-11.96	peak
12	11657.47	23.49	19.25	42.74	54	-11.26	AVG

20MHz Bandwidth -Low Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4975.246	38.97	9.5	48.47	68.2	-19.73	peak
2	4975.246	26.15	9.5	35.65	54	-18.35	AVG
3	7002.185	36.98	13.67	50.65	68.2	-17.55	peak
4	7002.185	26.76	13.67	40.43	54	-13.57	AVG
5	7953.829	33.69	16.37	50.06	68.2	-18.14	peak
6	7953.829	21.54	16.37	37.91	54	-16.09	AVG
7	9912.157	33.43	18.77	52.2	68.2	-16	peak
8	9912.157	20.48	18.77	39.25	54	-14.75	AVG
9	10625.64	33.59	19.38	52.97	68.2	-15.23	peak
10	10625.64	22.86	19.38	42.24	54	-11.76	AVG
11	11523.2	36.82	19.13	55.95	68.2	-12.25	peak
12	11523.2	25.41	19.13	44.54	54	-9.46	AVG

20MHz Bandwidth -Low Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3681.329	38.99	6.71	45.7	68.2	-22.5	peak
2	3681.329	26.67	6.71	33.38	54	-20.62	AVG
3	5004.148	39.39	9.6	48.99	68.2	-19.21	peak
4	5004.148	28.39	9.6	37.99	54	-16.01	AVG
5	7002.185	36.9	13.67	50.57	68.2	-17.63	peak
6	7002.185	22.92	13.67	36.59	54	-17.41	AVG
7	8000.034	33.53	16.74	50.27	68.2	-17.93	peak
8	8000.034	24.14	16.74	40.88	54	-13.12	AVG
9	10262.7	33.77	18.7	52.47	68.2	-15.73	peak
10	10262.7	21.91	18.7	40.61	54	-13.39	AVG
11	11523.2	35.14	19.13	54.27	68.2	-13.93	peak
12	11523.2	24.21	19.13	43.34	54	-10.66	AVG

20MHz Bandwidth -Middle Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5004.148	39.24	9.6	48.84	68.2	-19.36	peak
2	5004.148	26.37	9.6	35.97	54	-18.03	AVG
3	6961.743	38.71	13.54	52.25	68.2	-15.95	peak
4	6961.743	28.19	13.54	41.73	54	-12.27	AVG
5	8046.507	33.79	16.3	50.09	68.2	-18.11	peak
6	8046.507	22.73	16.3	39.03	54	-14.97	AVG
7	9573.587	33.75	17.96	51.71	68.2	-16.49	peak
8	9573.587	21.29	17.96	39.25	54	-14.75	AVG
9	10503.26	33.13	19.07	52.2	68.2	-16	peak
10	10503.26	22.6	19.07	41.67	54	-12.33	AVG
11	11590.14	36.52	19.03	55.55	68.2	-12.65	peak
12	11590.14	22.6	19.03	41.63	54	-12.37	AVG

20MHz Bandwidth -Middle Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4205.938	37.84	6.96	44.8	68.2	-23.4	peak
2	4205.938	24.25	6.96	31.21	54	-22.79	AVG
3	6961.743	37.16	13.54	50.7	68.2	-17.5	peak
4	6961.743	23.74	13.54	37.28	54	-16.72	AVG
5	7637.782	35.07	15.25	50.32	68.2	-17.88	peak
6	7637.782	24.31	15.25	39.56	54	-14.44	AVG
7	9034.808	34.63	16.79	51.42	68.2	-16.78	peak
8	9034.808	24.06	16.79	40.85	54	-13.15	AVG
9	9969.738	33.9	18.83	52.73	68.2	-15.47	peak
10	9969.738	24.61	18.83	43.44	54	-10.56	AVG
11	11590.14	38.79	19.03	57.82	68.2	-10.38	peak
12	11590.14	27.67	19.03	46.7	54	-7.3	AVG

20MHz Bandwidth -High Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5333.368	37.52	10.76	48.28	68.2	-19.92	peak
2	5333.368	24.88	10.76	35.64	54	-18.36	AVG
3	6841.814	37.4	13.48	50.88	68.2	-17.32	peak
4	6841.814	26.51	13.48	39.99	54	-14.01	AVG
5	7549.811	35.06	15.33	50.39	68.2	-17.81	peak
6	7549.811	25.5	15.33	40.83	54	-13.17	AVG
7	8930.747	33.89	16.94	50.83	68.2	-17.37	peak
8	8930.747	20.23	16.94	37.17	54	-16.83	AVG
9	9969.738	32.61	18.83	51.44	68.2	-16.76	peak
10	9969.738	19.52	18.83	38.35	54	-15.65	AVG
11	11725.19	37.36	19.52	56.88	68.2	-11.32	peak
12	11725.19	26.05	19.52	45.57	54	-8.43	AVG

20MHz Bandwidth -High Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5004.148	39	9.6	48.6	68.2	-19.6	peak
2	5004.148	25.27	9.6	34.87	54	-19.13	AVG
3	5333.368	37.84	10.76	48.6	68.2	-19.6	peak
4	5333.368	24.28	10.76	35.04	54	-18.96	AVG
5	7002.185	36.69	13.67	50.36	68.2	-17.84	peak
6	7002.185	25.51	13.67	39.18	54	-14.82	AVG
7	9408.664	33.61	18.33	51.94	68.2	-16.26	peak
8	9408.664	20.69	18.33	39.02	54	-14.98	AVG
9	10203.43	33.01	18.89	51.9	68.2	-16.3	peak
10	10203.43	22.74	18.89	41.63	54	-12.37	AVG
11	11657.47	37.61	19.25	56.86	68.2	-11.34	peak
12	11657.47	26.44	19.25	45.69	54	-8.31	AVG

Node:

1. Radiated emissions measured in frequency above 1GHz were made with an instrument using peak/average detector mode.
2. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
3. Margin (dB), result in dBuV/m – limit in dBuV/m.

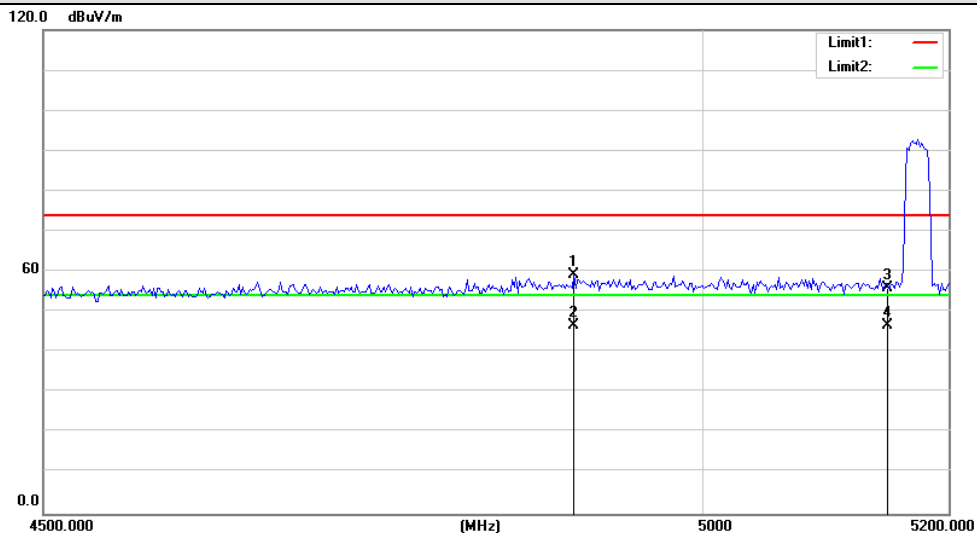
Restricted band Requirements

Band I

Note: Since the distance of band IV exceeds 200 MHz and the distance limit is greater than 20 dB, only band I to band III data is reflected in this document All antennas and bandwidths are tested, and only the worst data (SISO ANT1) is reported in the report.

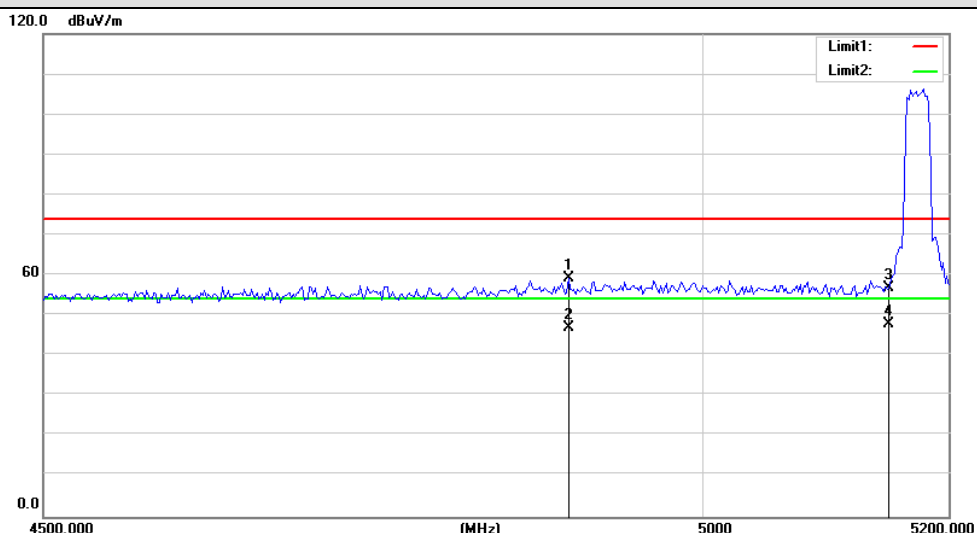
20MHz Bandwidth -Low (worst mode)

Horizontal

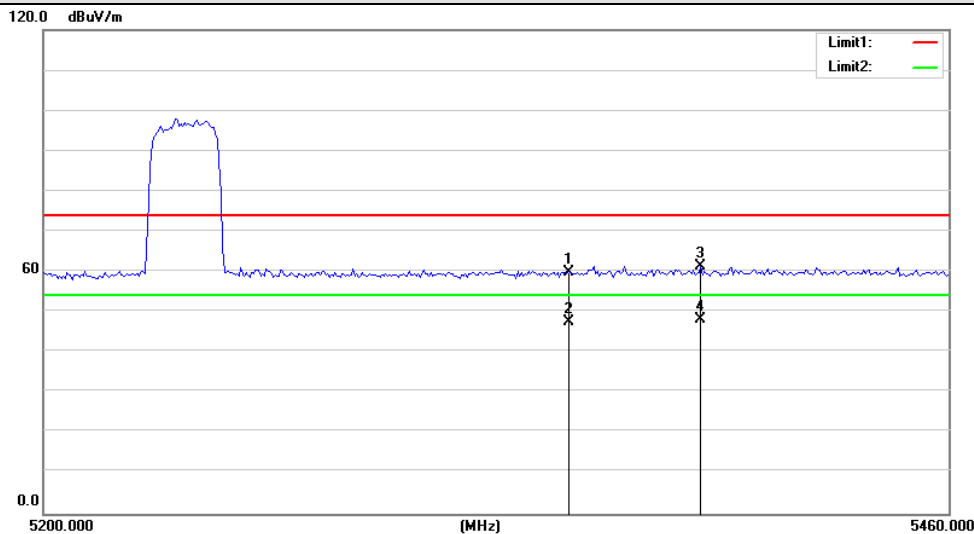


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4899	71.1	-11.8	59.3	74	-14.7	peak
2	4899	58.58	-11.8	46.78	54	-7.22	AVG
3	5150	68.16	-12.19	55.97	74	-18.03	peak
4	5150	58.88	-12.19	46.69	54	-7.31	AVG

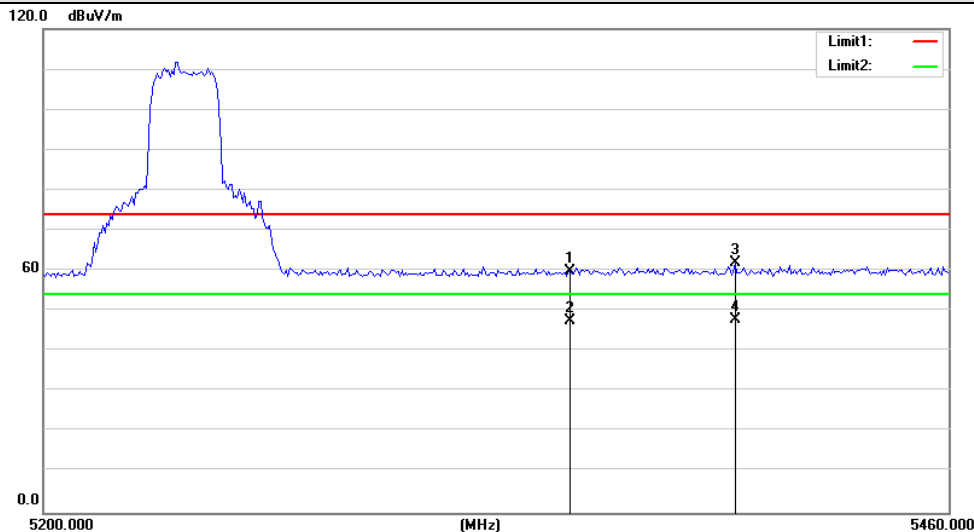
Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4894.8	71.04	-11.85	59.19	74	-14.81	peak
2	4894.8	58.76	-11.85	46.91	54	-7.09	AVG
3	5150	68.98	-12.19	56.79	74	-17.21	peak
4	5150	60.06	-12.19	47.87	54	-6.13	AVG

20MHz Bandwidth -High (worst mode)
Horizontal


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350	71.59	-11.63	59.96	74	-14.04	peak
2	5350	59.15	-11.63	47.52	54	-6.48	AVG
3	5387.72	72.9	-11.45	61.45	74	-12.55	peak
4	5387.72	59.68	-11.45	48.23	54	-5.77	AVG

Vertical


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350	71.54	-11.63	59.91	74	-14.09	peak
2	5350	59.11	-11.63	47.48	54	-6.52	AVG
3	5397.6	73.44	-11.39	62.05	74	-11.95	peak
4	5397.6	59.2	-11.39	47.81	54	-6.19	AVG

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

Reading = Reading Amplitude in the instrument;

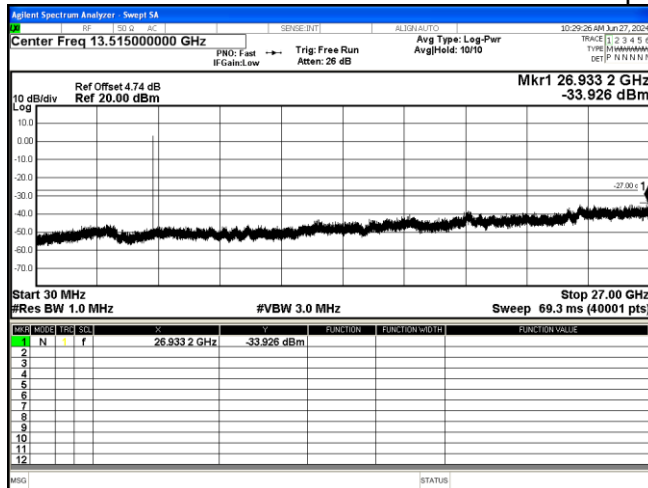
Result = Correction Factor + Reading;

Margin = Result – Limit

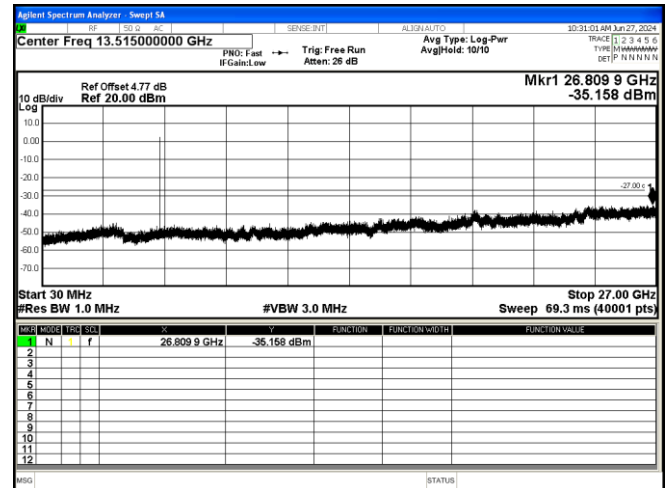
Appendix A.2 Test Results of Conducted Spurious Emissions and Band Edge

All the data rate and antenna configurations have been tested and only the worst-case mode(SISO ANT1) reported.

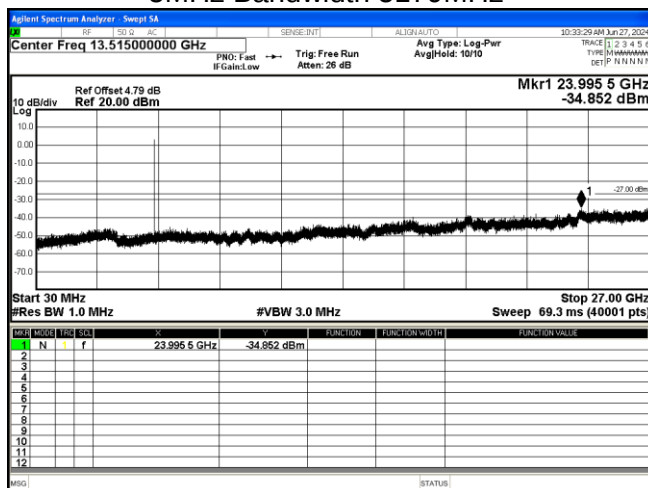
Conducted Spurious Emissions



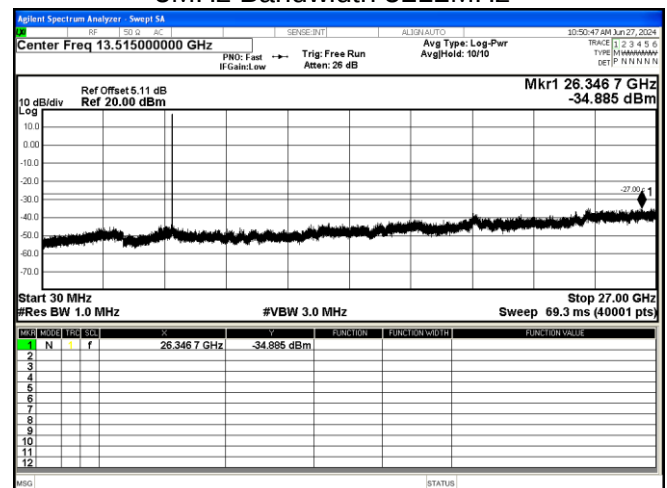
5MHz Bandwidth 5179MHz



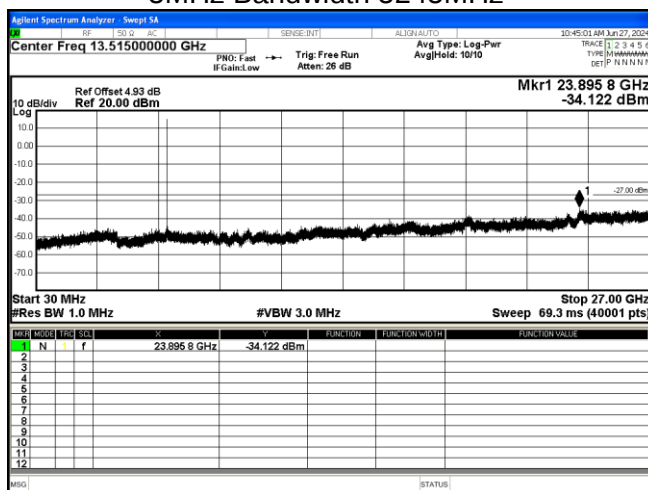
5MHz Bandwidth 5212MHz



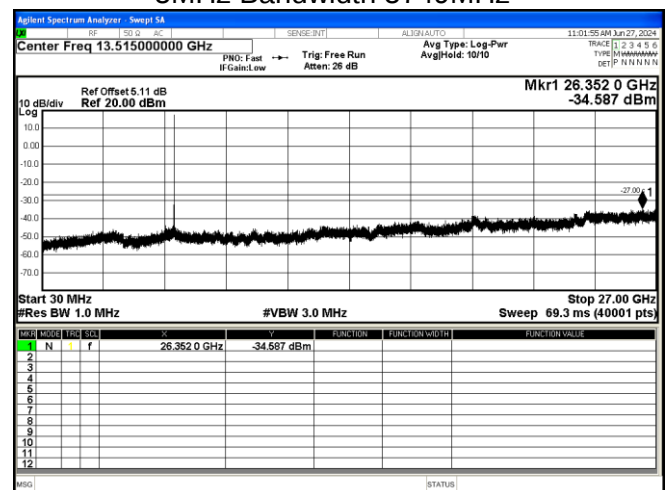
5MHz Bandwidth 5245MHz



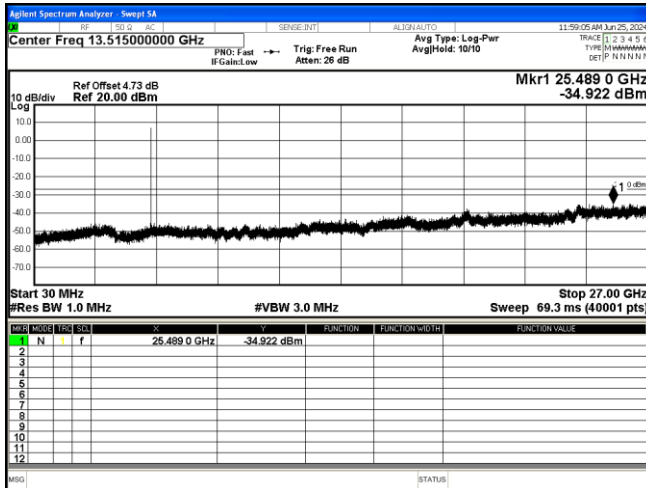
5MHz Bandwidth 5749MHz



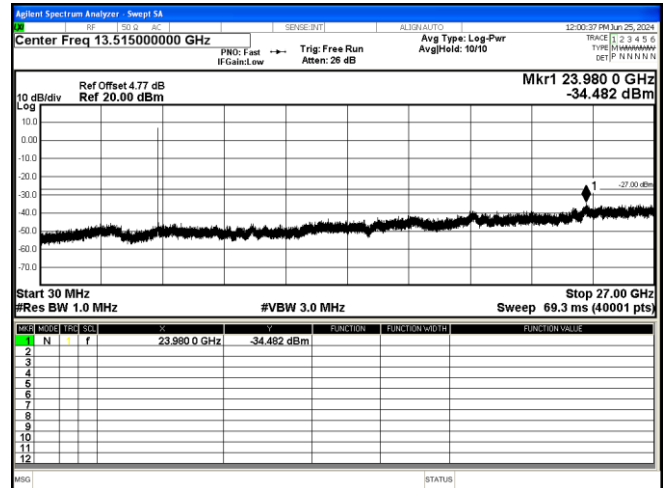
5MHz Bandwidth 5793MHz



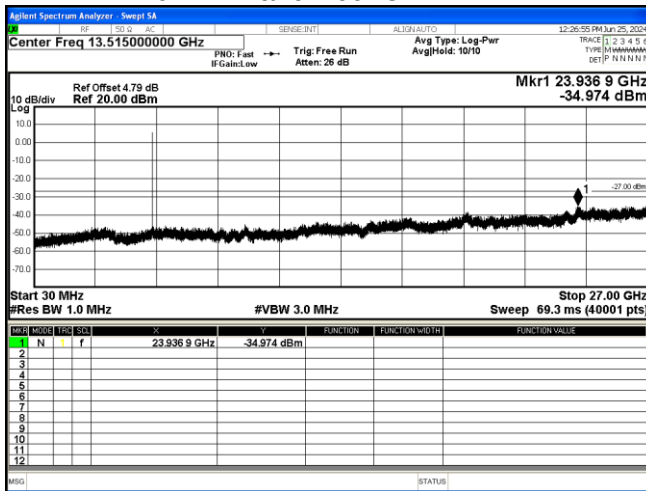
5MHz Bandwidth 5837MHz



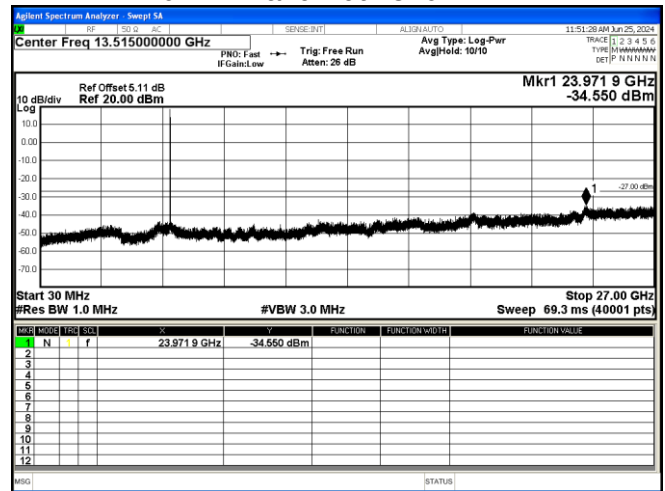
10MHz Bandwidth 5174MHz



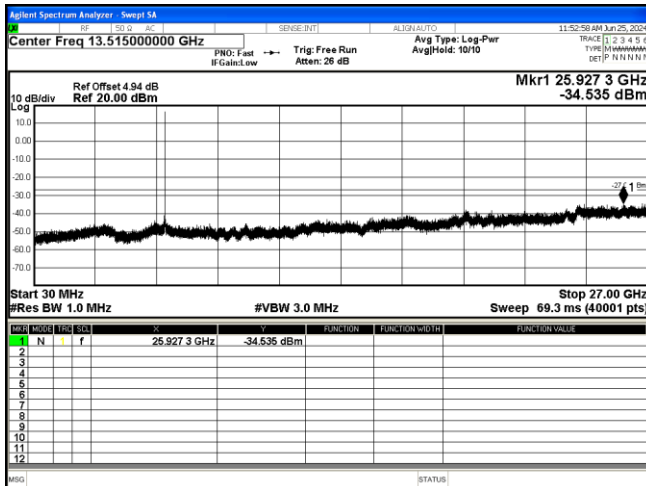
10MHz Bandwidth 5207MHz



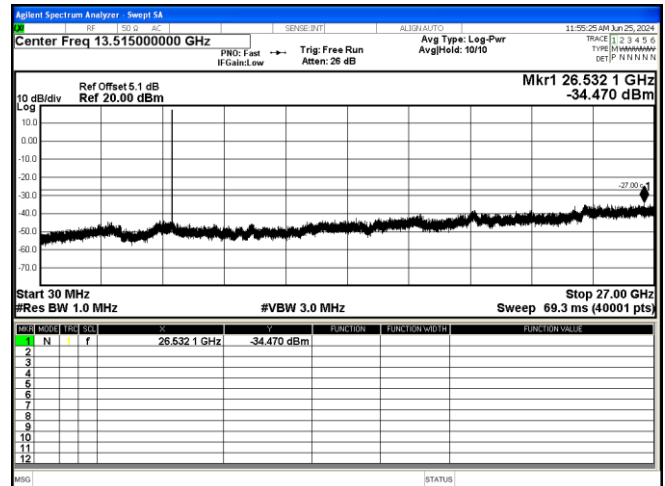
10MHz Bandwidth 5240MHz



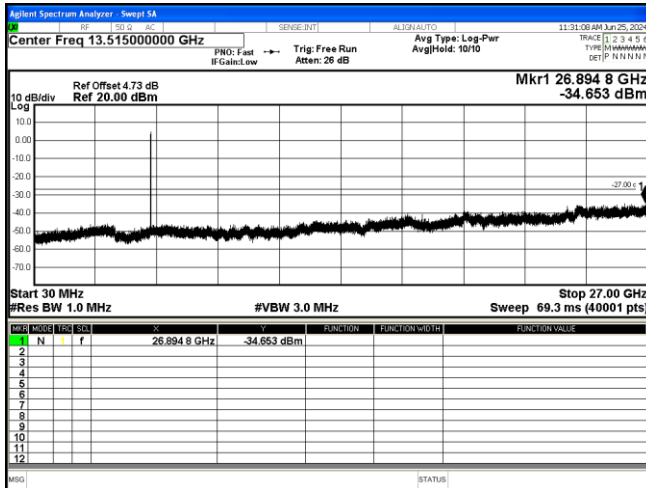
10MHz Bandwidth 5744MHz



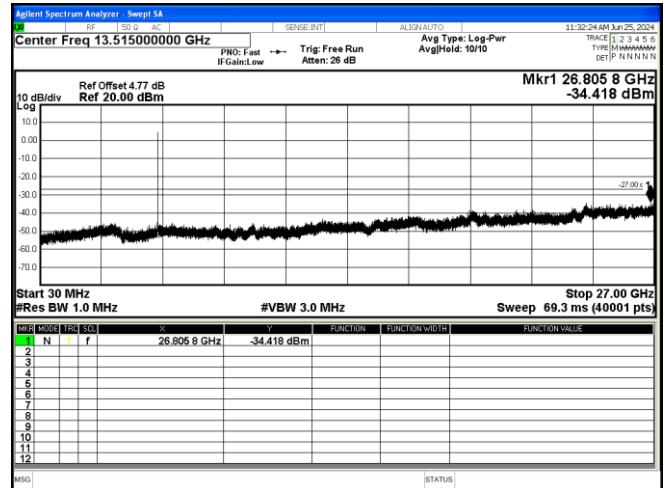
10MHz Bandwidth 5788MHz



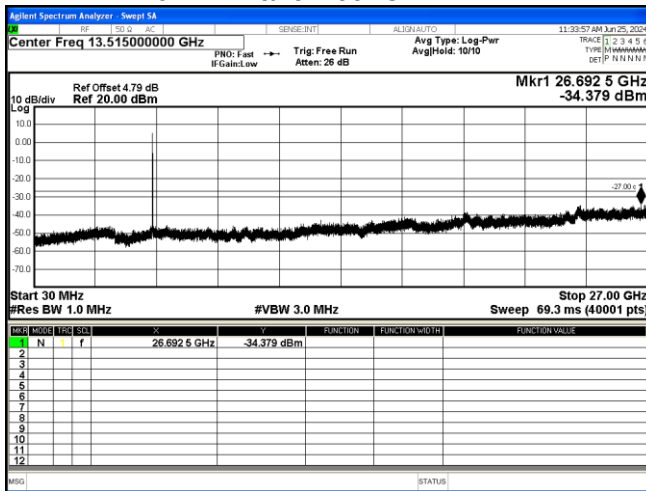
10MHz Bandwidth 5832MHz



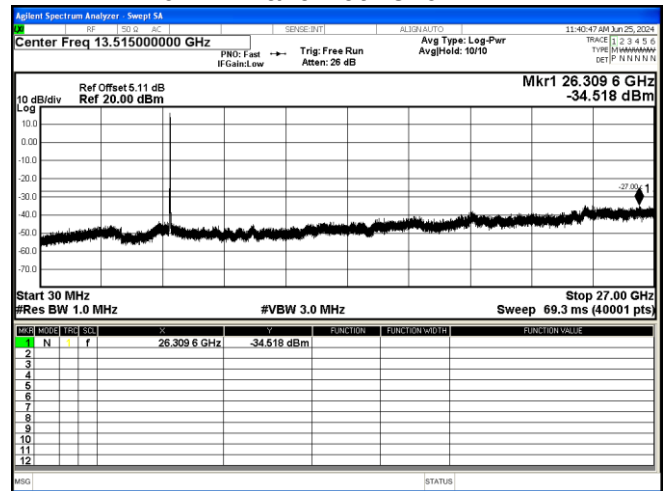
20MHz Bandwidth 5174MHz



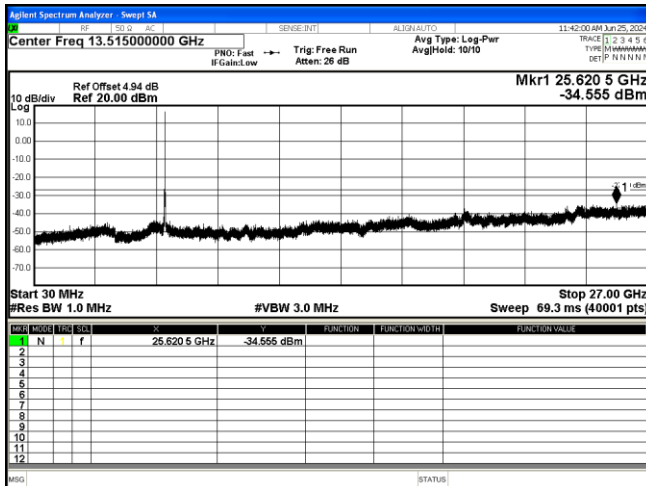
20MHz Bandwidth 5207MHz



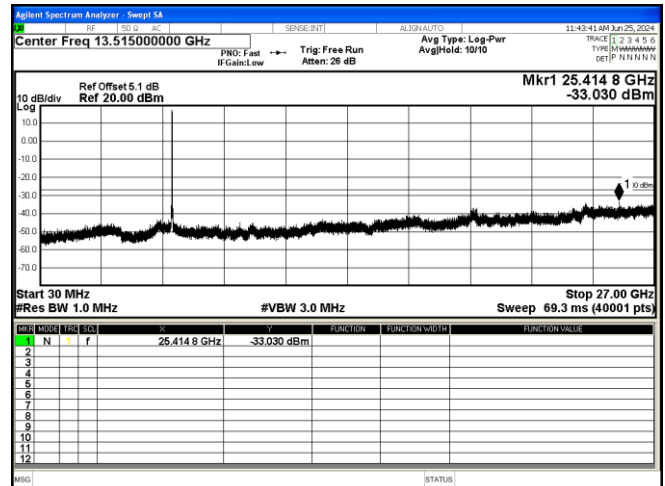
20MHz Bandwidth 5240MHz



20MHz Bandwidth 5207MHz

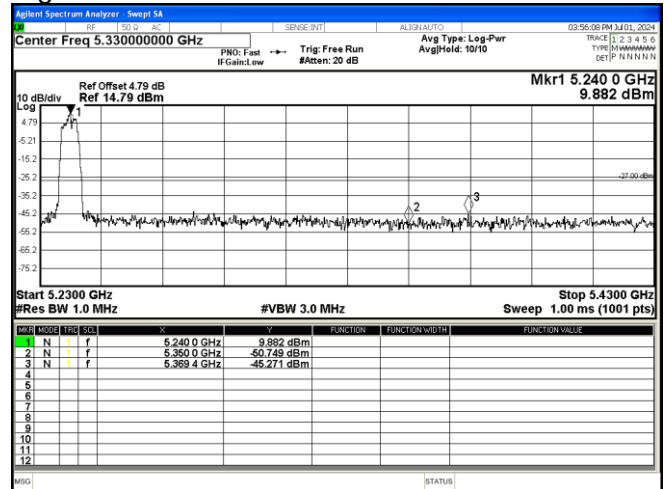
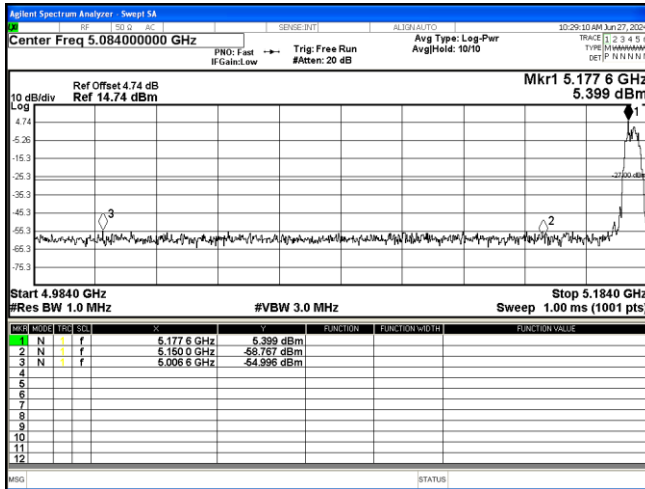


20MHz Bandwidth 5240MHz



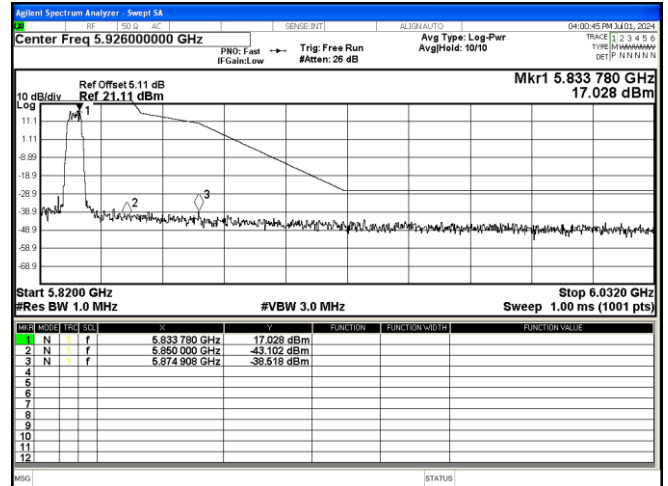
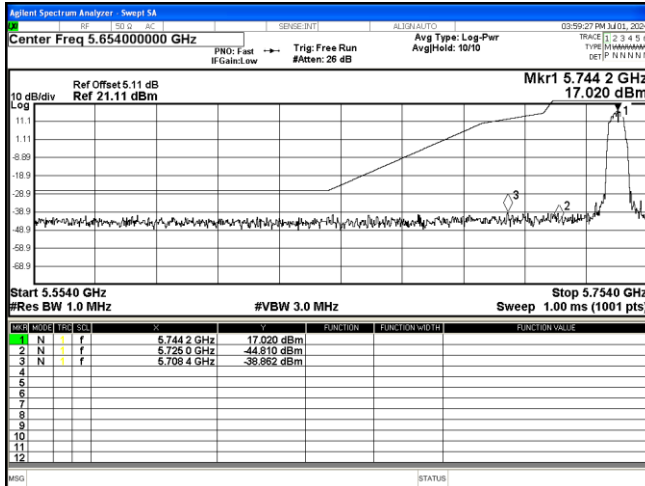
20MHz Bandwidth 5744MHz

Band Edge



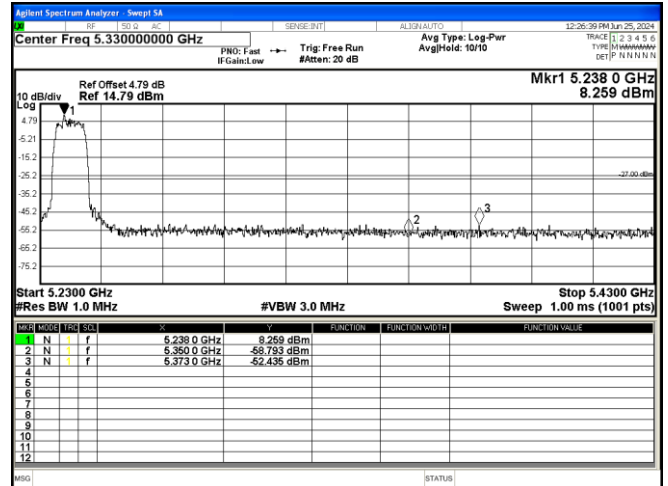
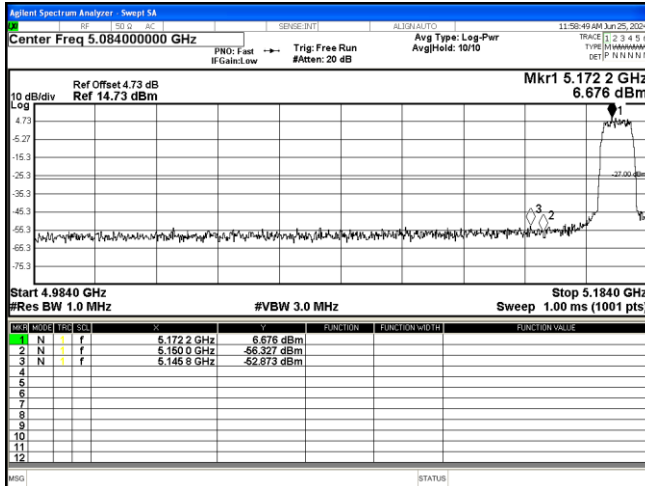
5MHz Bandwidth 5179MHz

5MHz Bandwidth 5245MHz



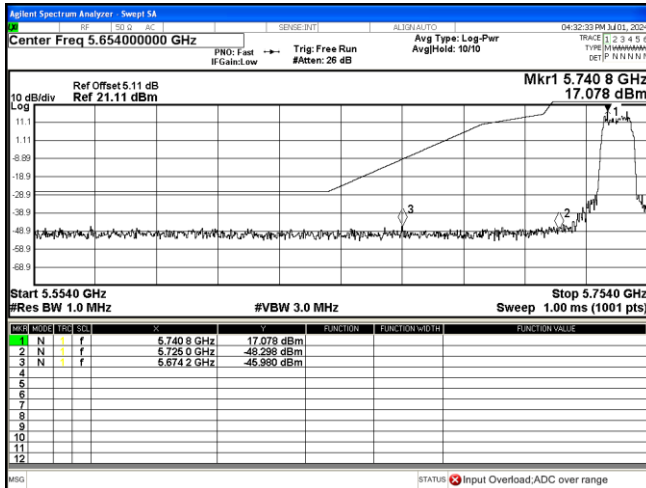
5MHz Bandwidth 5749MHz

5MHz Bandwidth 5837MHz

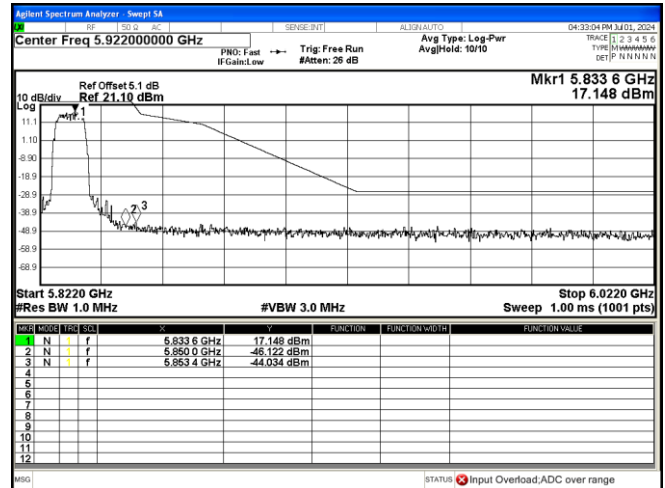


10MHz Bandwidth 5174MHz

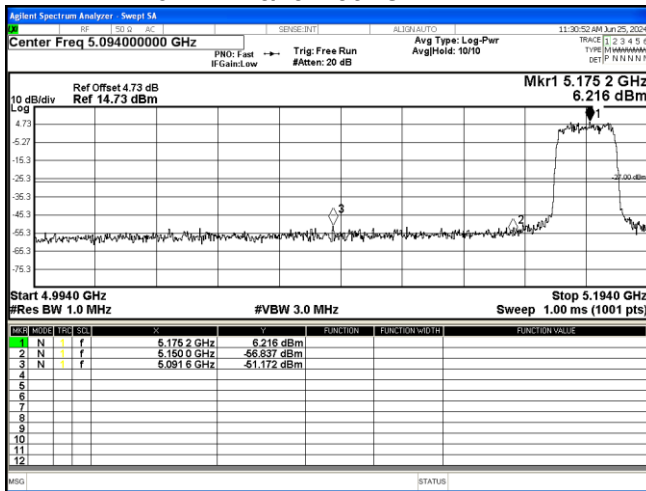
10MHz Bandwidth 5240MHz



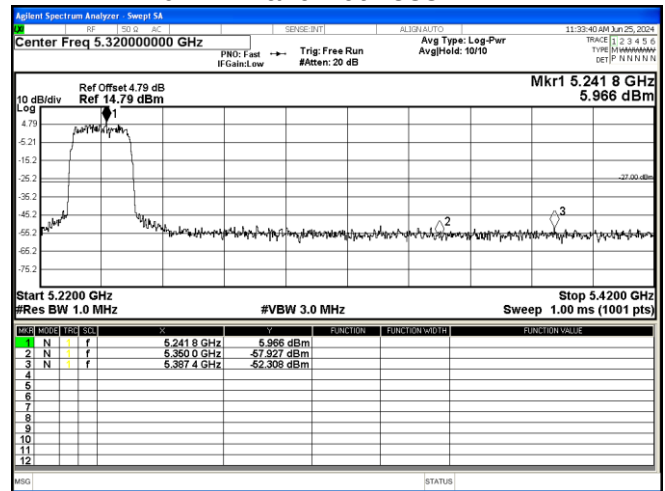
10MHz Bandwidth 5744MHz



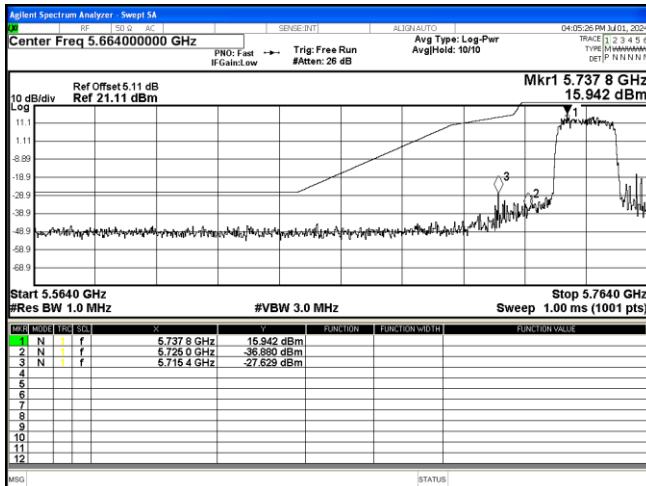
10MHz Bandwidth 5832MHz



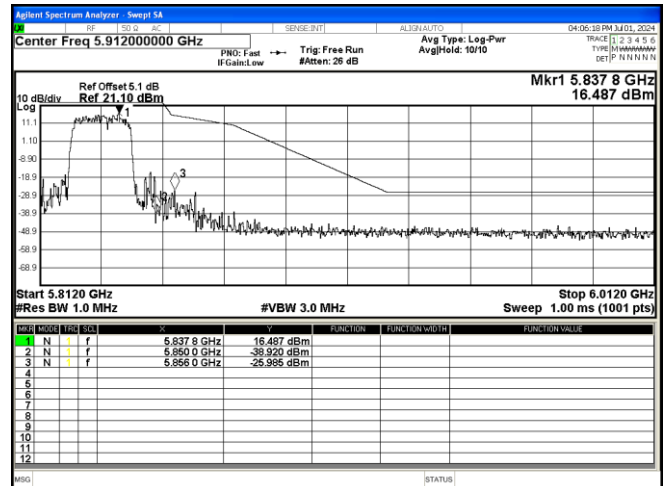
20MHz Bandwidth 5174MHz



20MHz Bandwidth 5240MHz



20MHz Bandwidth 5744MHz

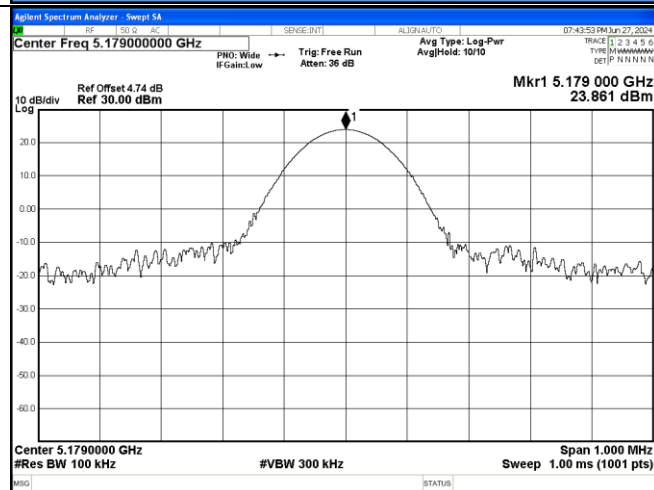
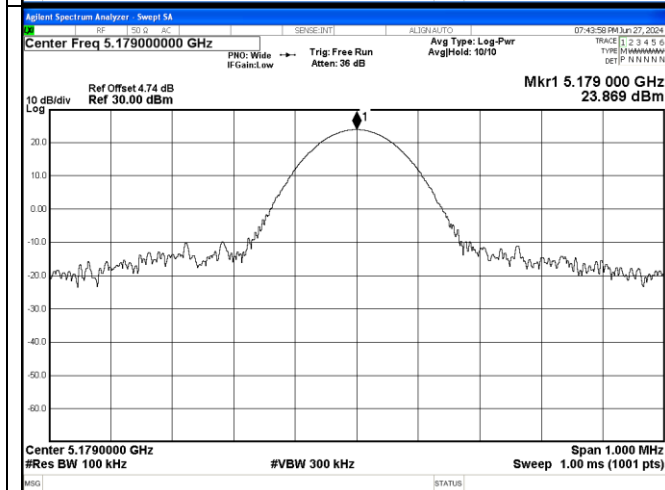
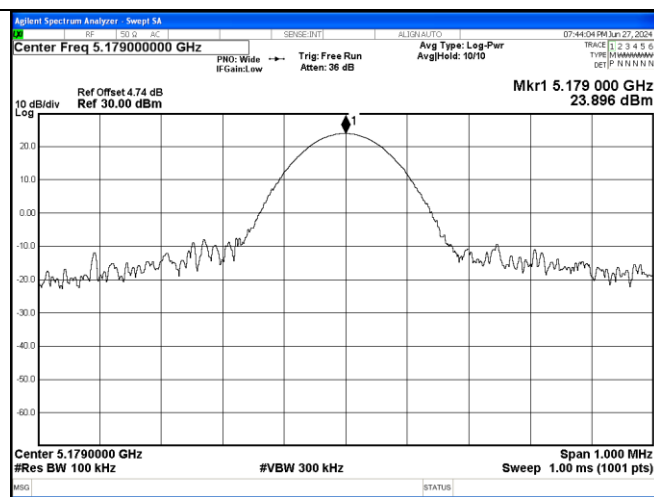
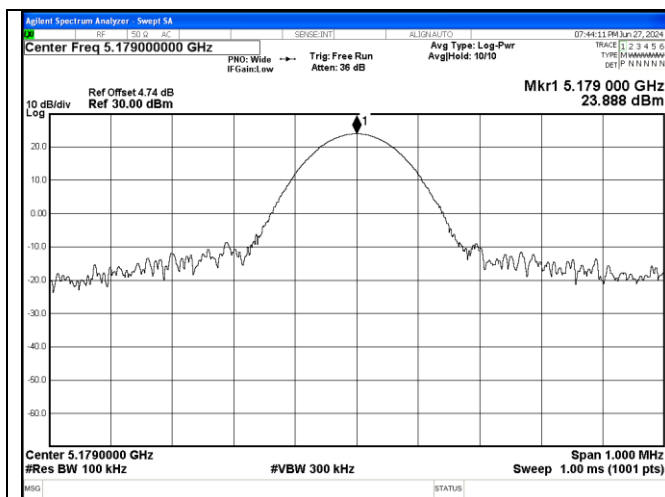


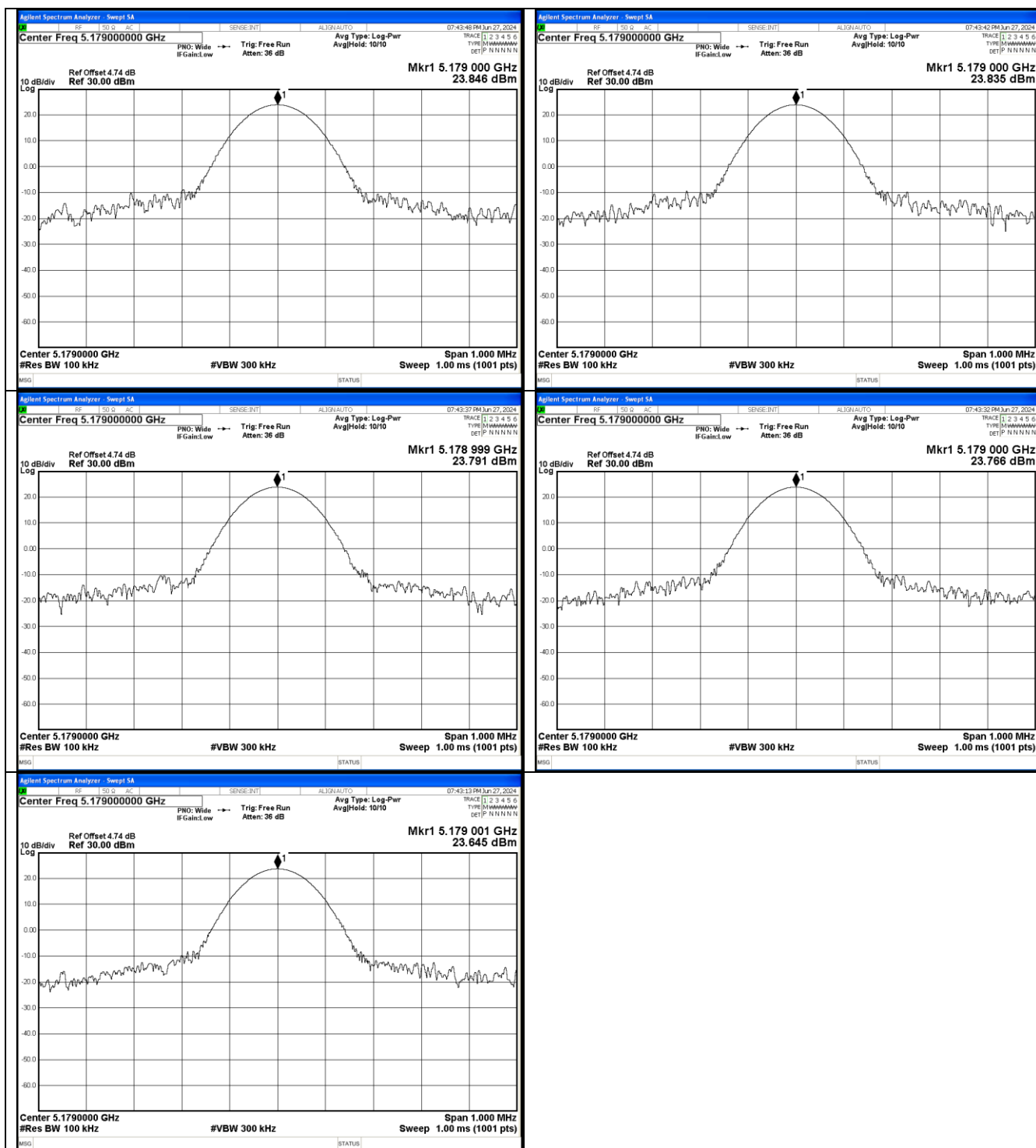
20MHz Bandwidth 5832MHz

Appendix A.3 Test Results of Frequency Stability

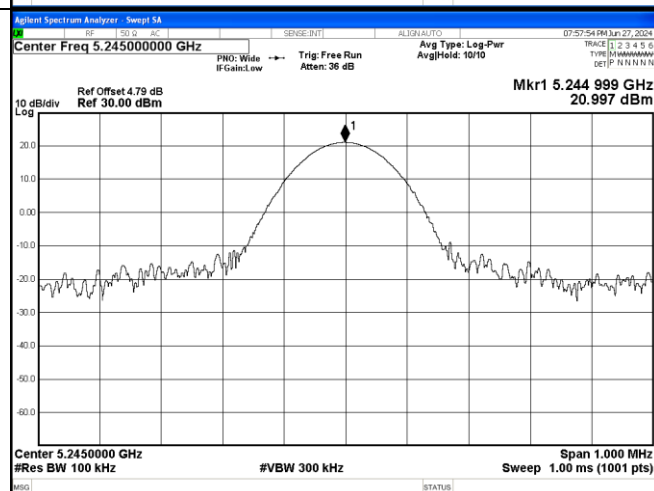
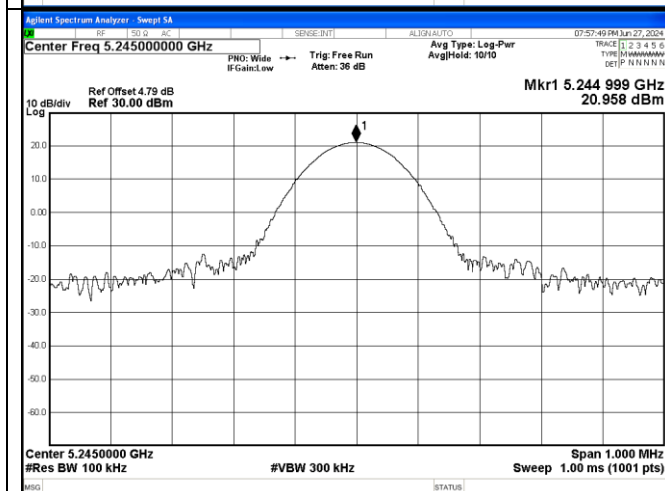
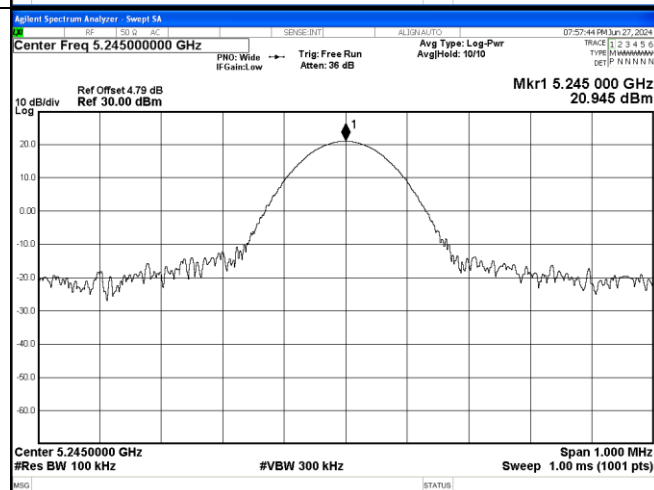
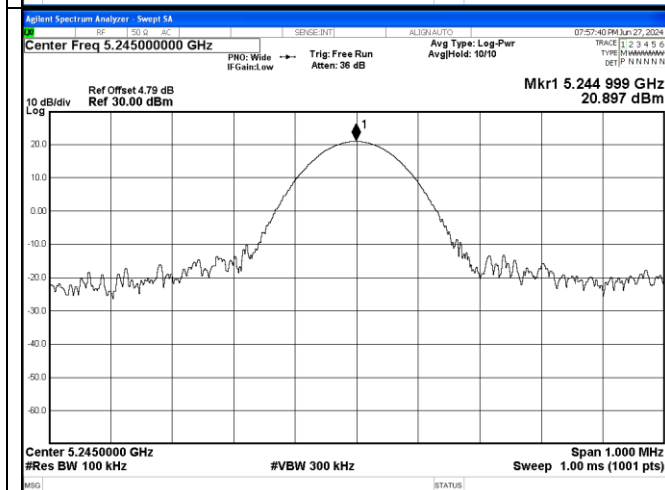
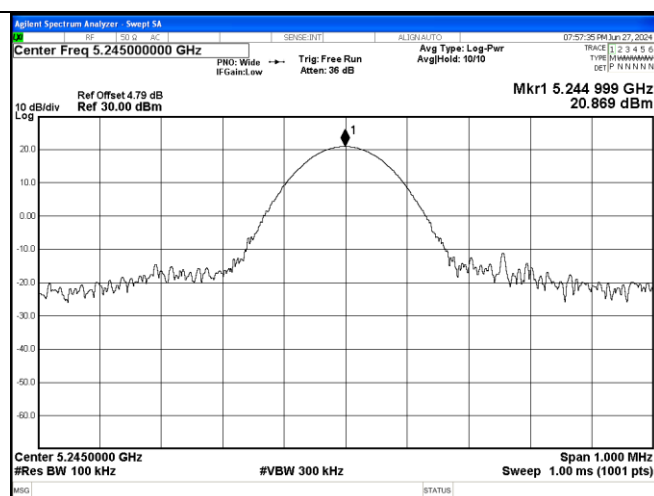
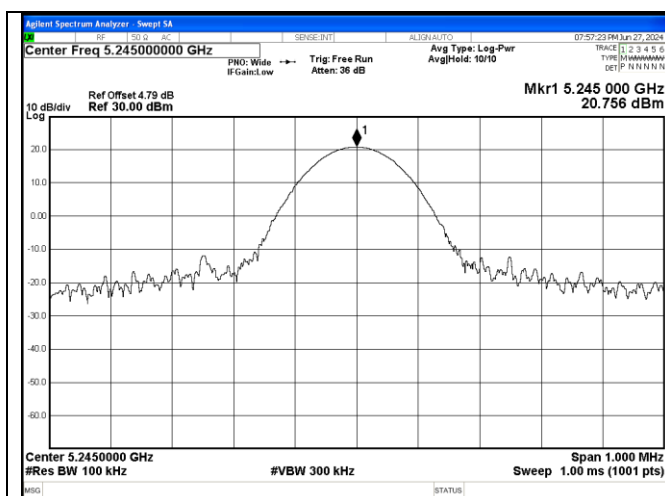
5MHz Bandwidth mode:

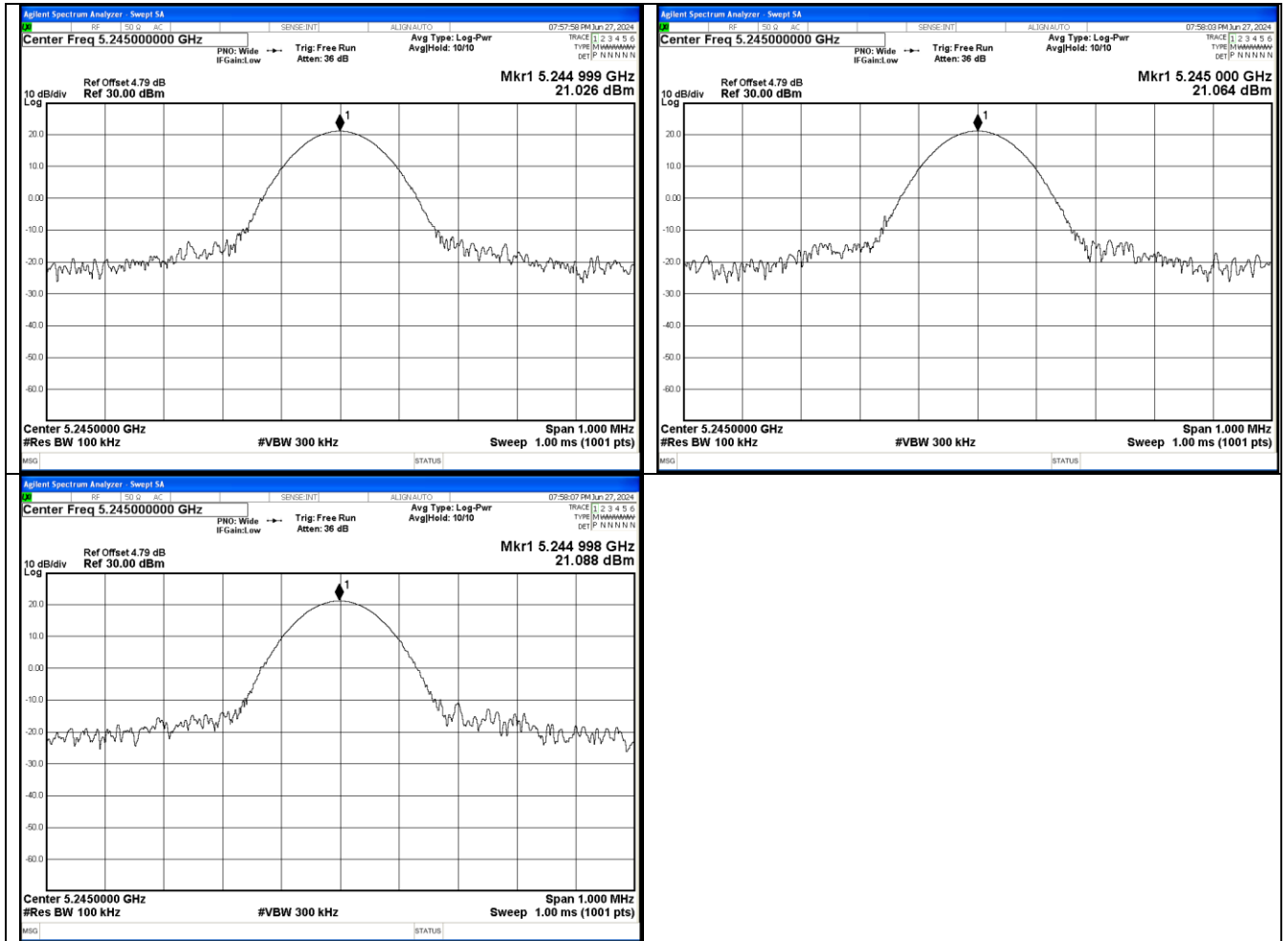
Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Result
5179	14.4Vdc	-20	5179	0	25	Pass
		0	5178.9995	0.1	25	Pass
		10	5178.9995	0.1	25	Pass
		20	5178.9995	0.1	25	Pass
		30	5179	0	25	Pass
		40	5178.9995	0.1	25	Pass
		50	5178.999	0.19	25	Pass
	12Vdc	25	5178.9995	0.1	25	Pass
	17Vdc	25	5179.0005	0.1	25	Pass



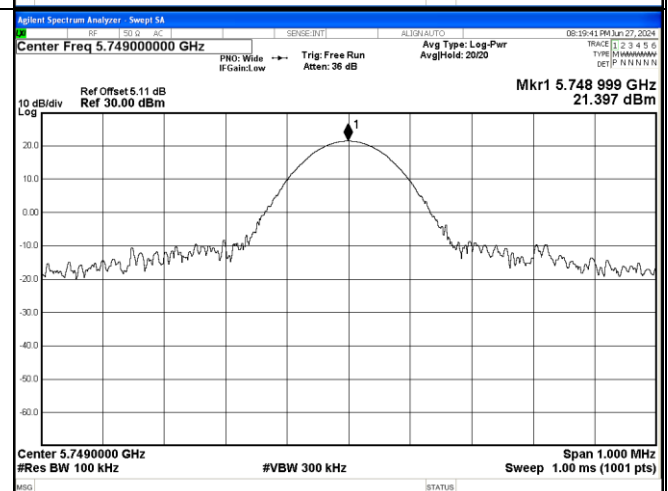
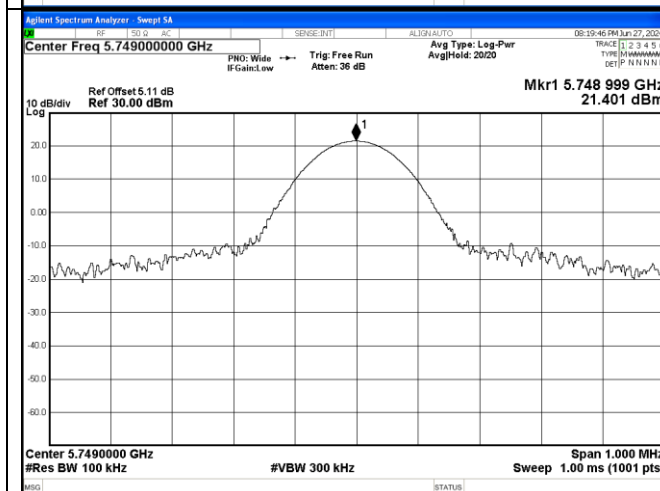
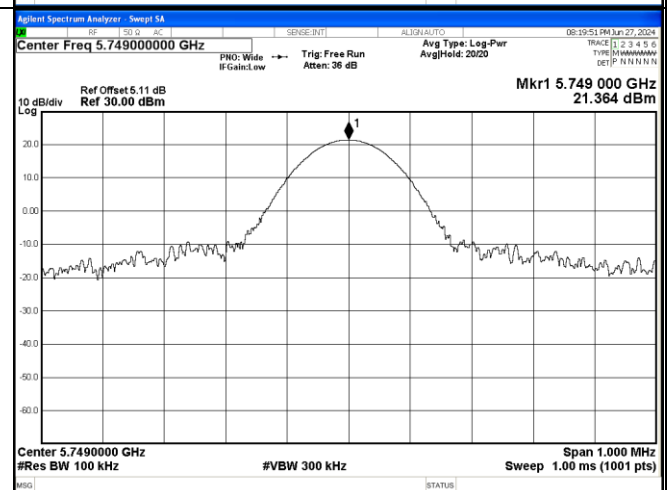
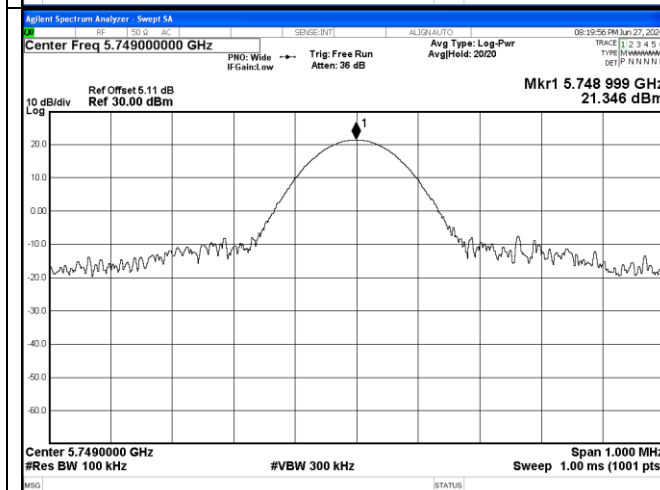
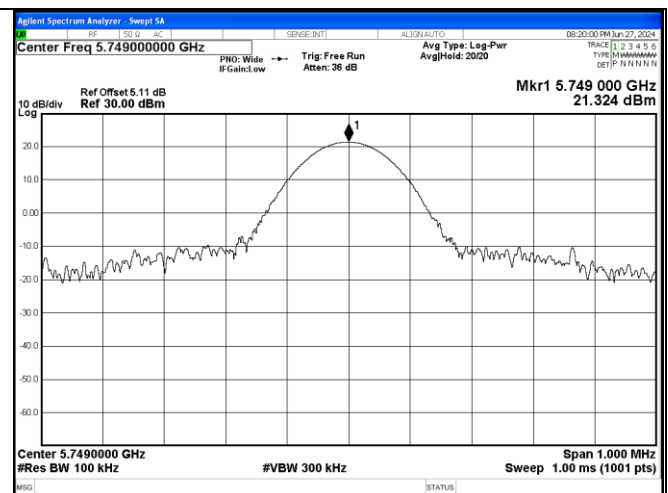
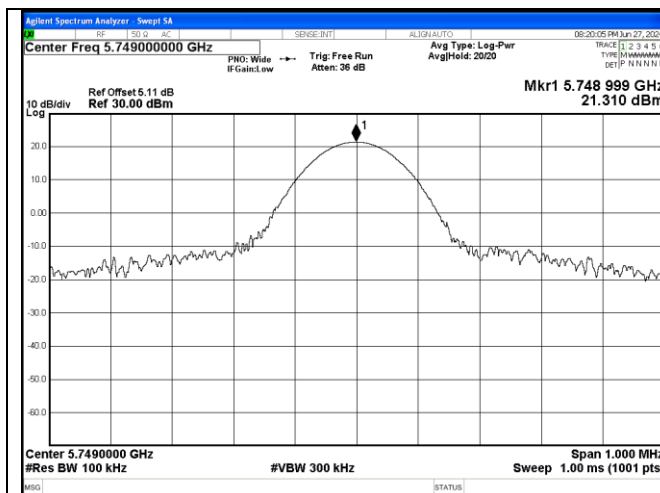


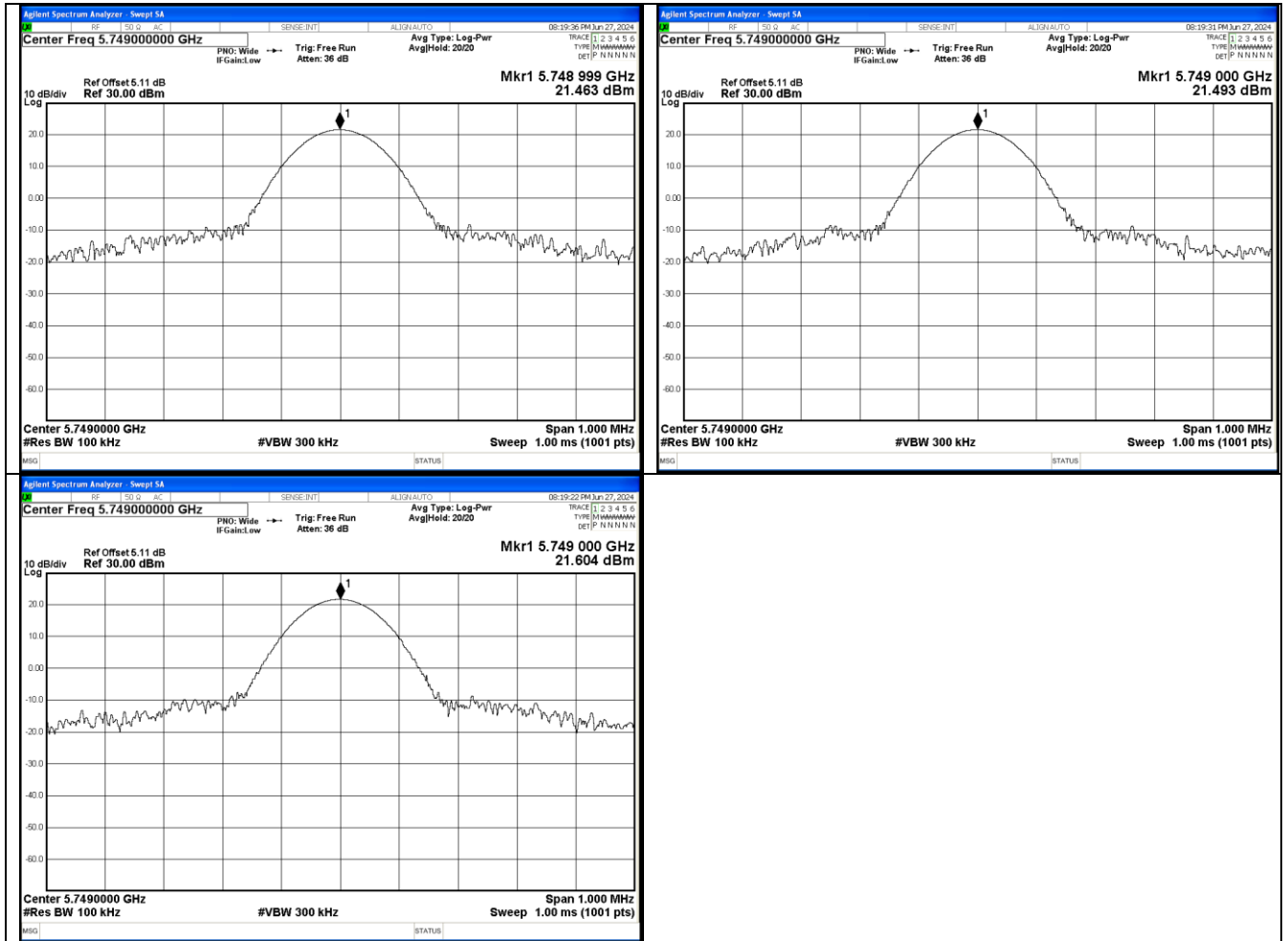
Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Result
5245	14.4Vdc	-20	5244.9995	0.1	25	Pass
		0	5244.9985	0.29	25	Pass
		10	5244.9985	0.29	25	Pass
		20	5244.9995	0.1	25	Pass
		30	5244.9985	0.29	25	Pass
		40	5244.9985	0.29	25	Pass
		50	5244.999	0.19	25	Pass
	12Vdc	25	5244.9995	0.1	25	Pass
	17Vdc	25	5244.998	0.38	25	Pass





Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Result
5749	14.4Vdc	-20	5748.999	0.17	25	Pass
		0	5748.9995	0.09	25	Pass
		10	5748.999	0.17	25	Pass
		20	5749	0	25	Pass
		30	5748.9985	0.26	25	Pass
		40	5748.999	0.17	25	Pass
		50	5748.999	0.17	25	Pass
	12Vdc	25	5748.9995	0.09	25	Pass
	17Vdc	25	5748.9995	0.09	25	Pass





Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Result
5837	14.4Vdc	-20	5836.999	0.17	25	Pass
		0	5836.999	0.17	25	Pass
		10	5836.999	0.17	25	Pass
		20	5836.9995	0.09	25	Pass
		30	5836.999	0.17	25	Pass
		40	5836.9995	0.09	25	Pass
	12Vdc	25	5836.999	0.17	25	Pass
	17Vdc	25	5836.9995	0.09	25	Pass

