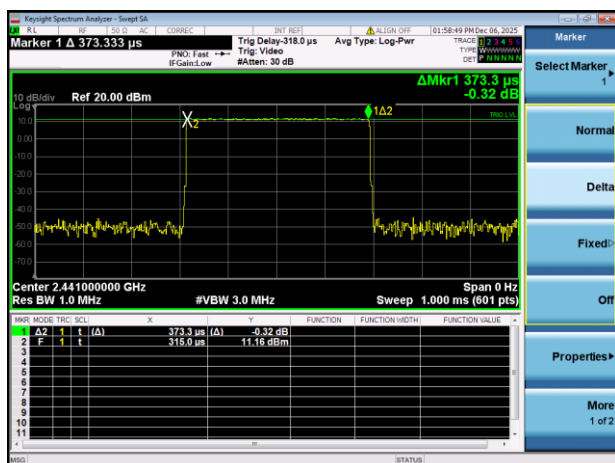
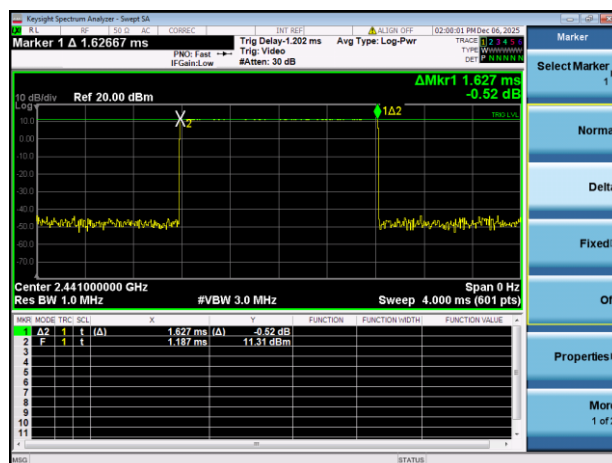


Test Plots

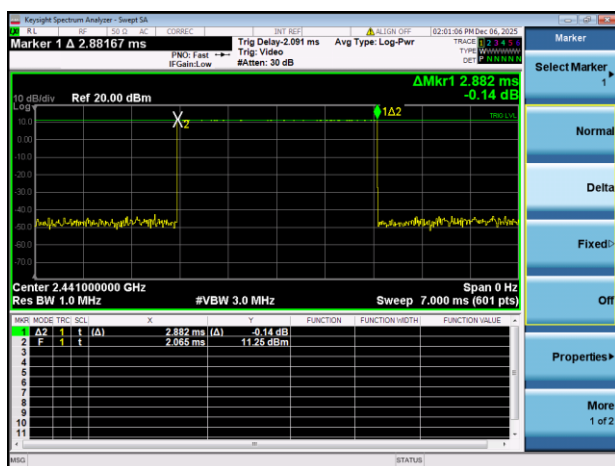
GFSK DH1



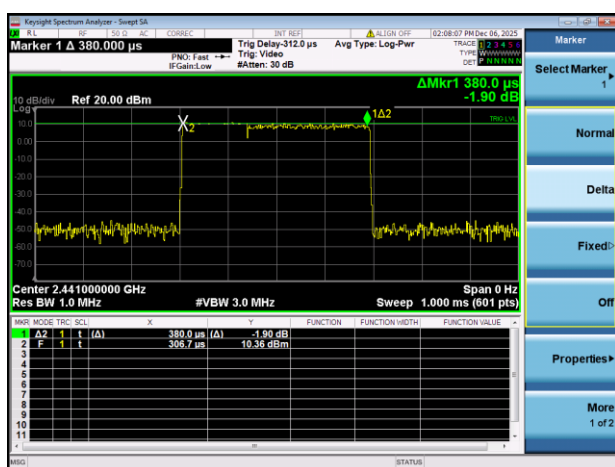
GFSK DH3



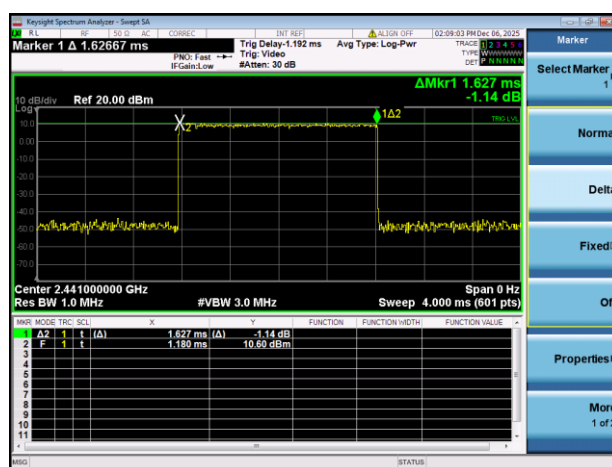
GFSK DH5



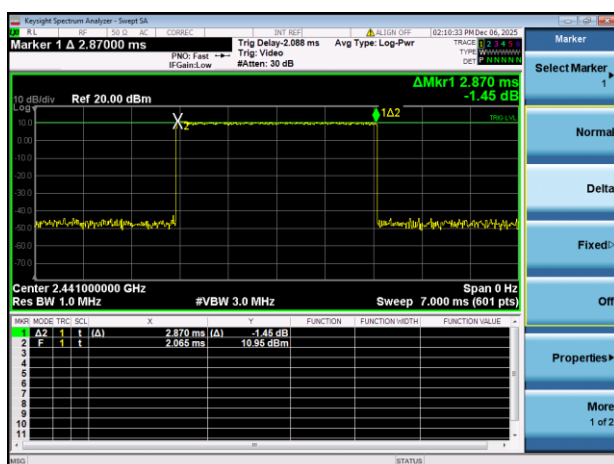
8-DPSK DH1



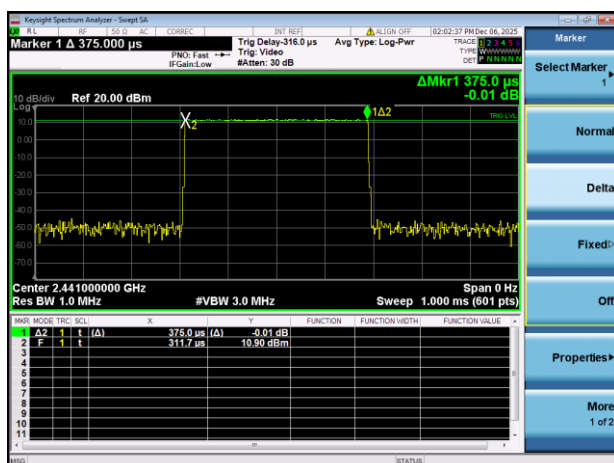
8-DPSK DH3



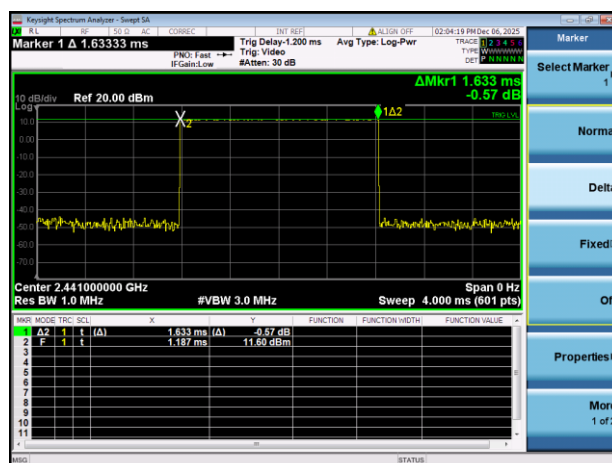
8-DPSK DH5



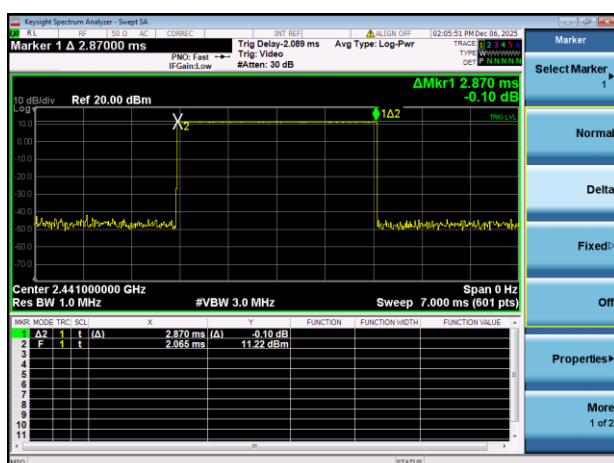
AFH Mode DH1



AFH Mode DH3



AFH Mode DH5



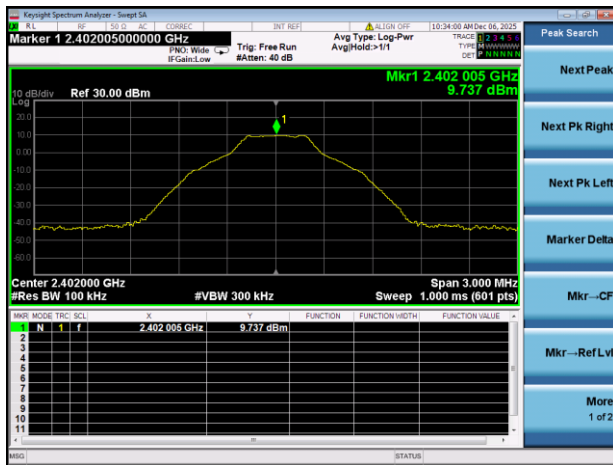
A.6 Conducted Spurious Emissions & Authorized-band band-edge

Test Data

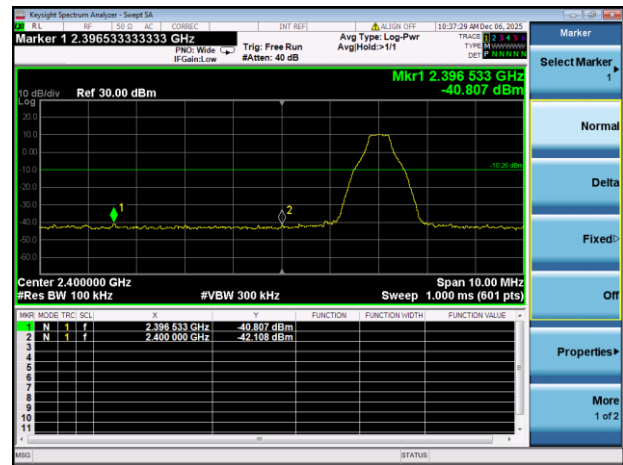
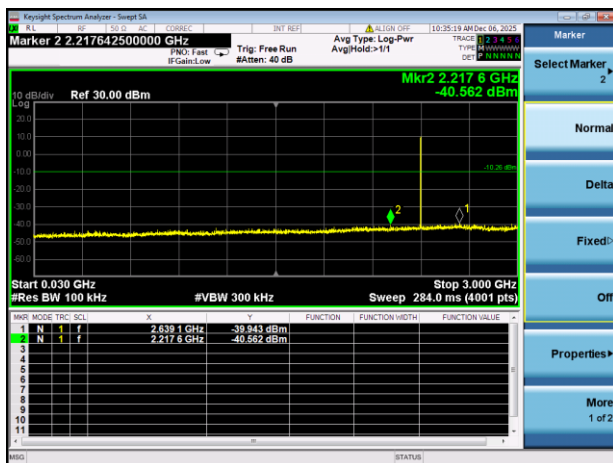
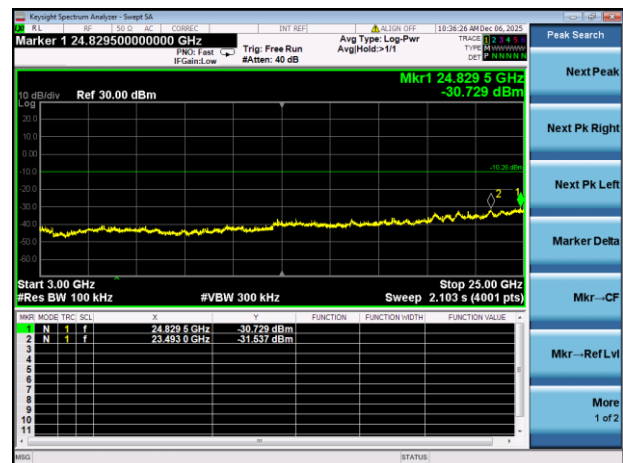
GFSK				
Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-30.73	9.74	-10.26	Pass
Middle	-30.68	10.72	-9.28	Pass
High	-30.22	12.85	-7.15	Pass
8-DPSK				
Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-31.88	8.69	-11.31	Pass
Middle	-31.49	10.71	-9.29	Pass
High	-30.97	12.91	-7.09	Pass
Hopping Mode				
Mode	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
GFSK	-31.18	13.93	-6.07	Pass
8-DPSK	-31.34	14.24	-5.76	Pass

Test Plots

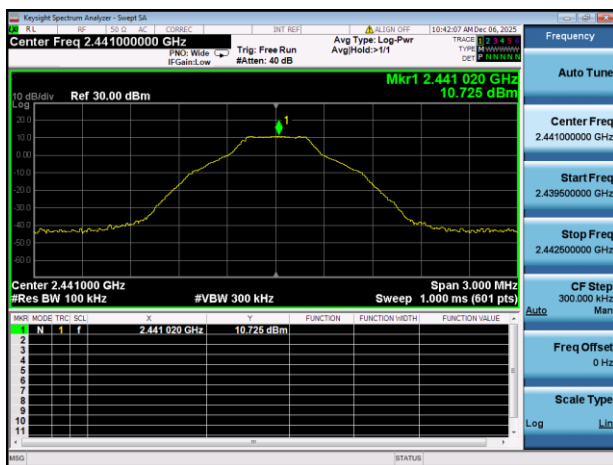
GFSK LOW CHANNEL, CARRIER LEVEL



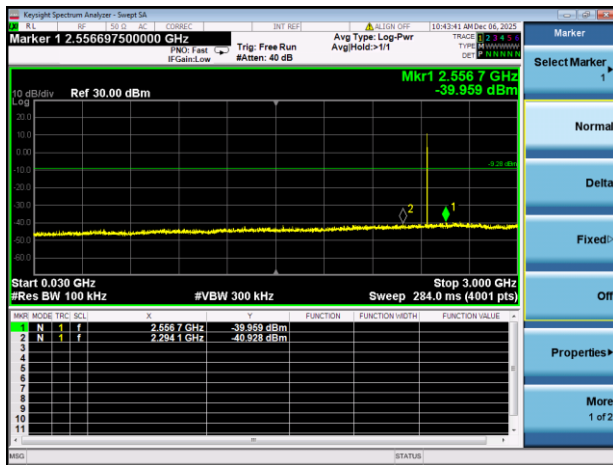
GFSK LOW CHANNEL, BAND EDGE

GFSK LOW CHANNEL, SPURIOUS
30 MHz ~ 3 GHzGFSK LOW CHANNEL, SPURIOUS
3 GHz ~ 25 GHz

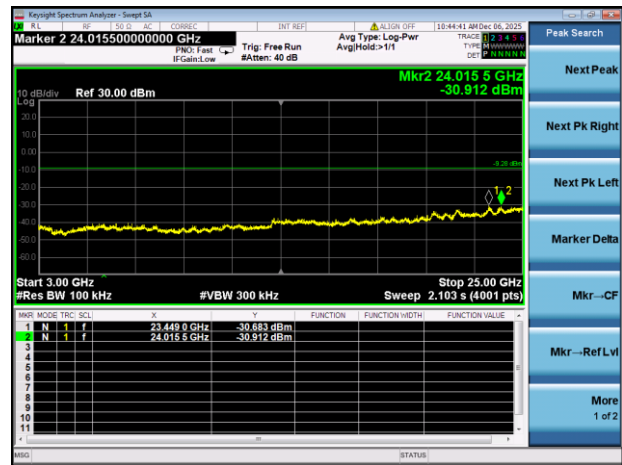
GFSK MIDDLE CHANNEL, CARRIER LEVEL



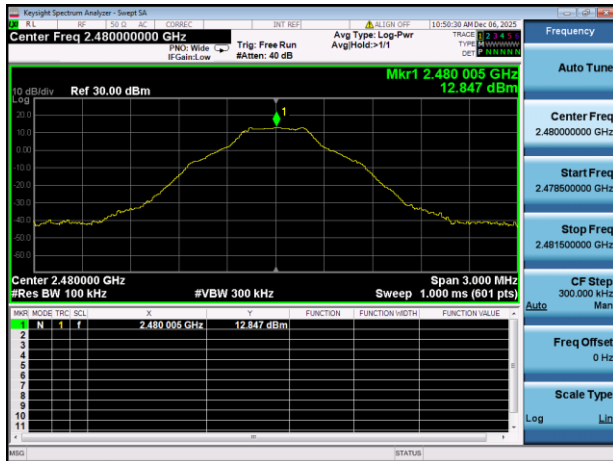
GFSK MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



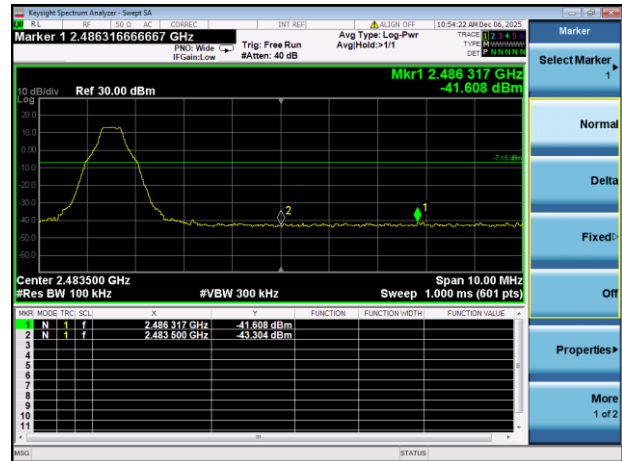
GFSK MIDDLE CHANNEL, SPURIOUS 3 GHz ~ 25 GHz



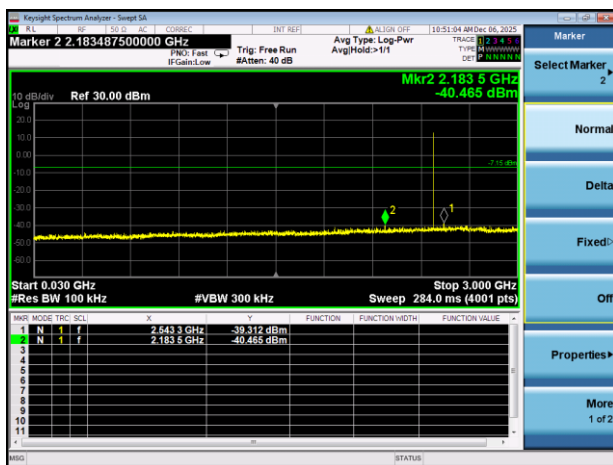
GFSK HIGH CHANNEL, CARRIER LEVEL



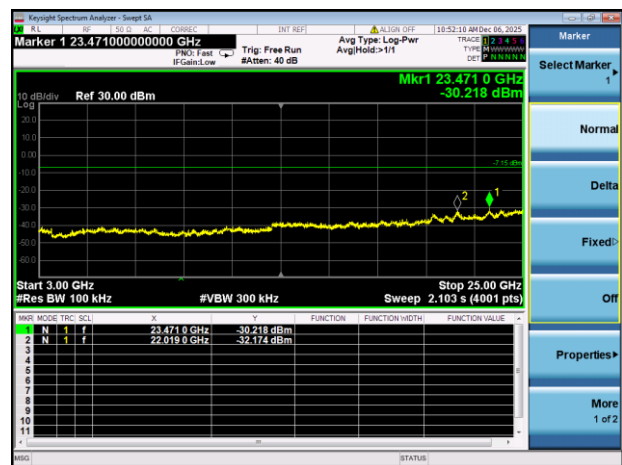
GFSK HIGH CHANNEL, BAND EDGE



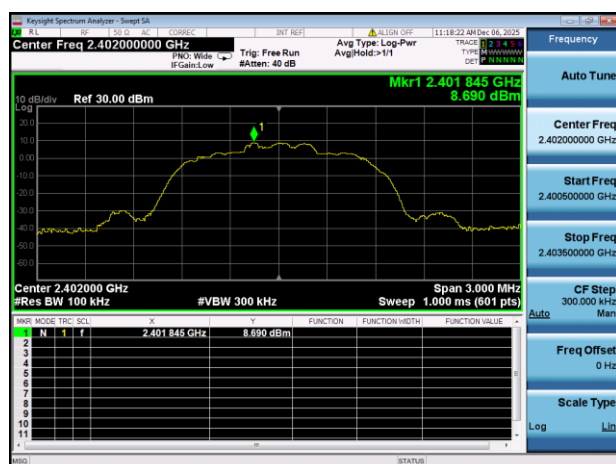
GFSK HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



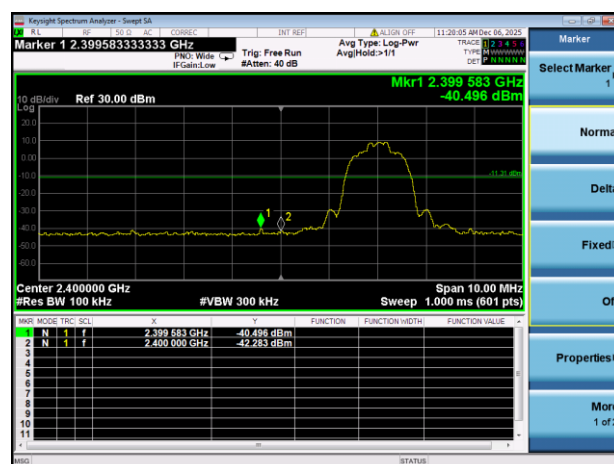
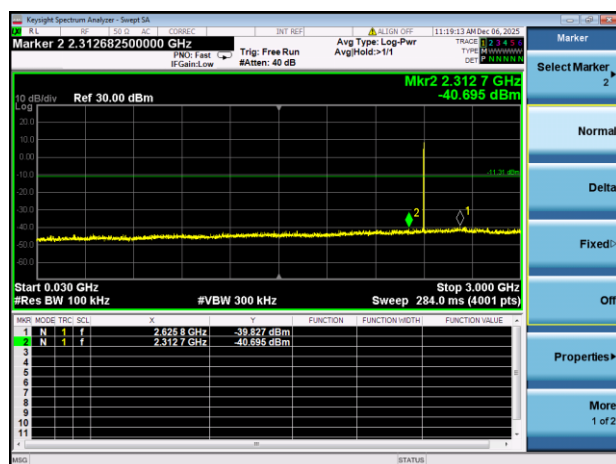
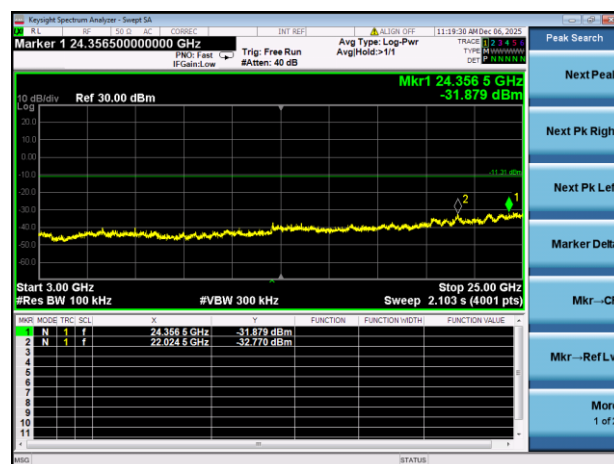
GFSK HIGH CHANNEL, SPURIOUS 3 GHz ~ 25 GHz



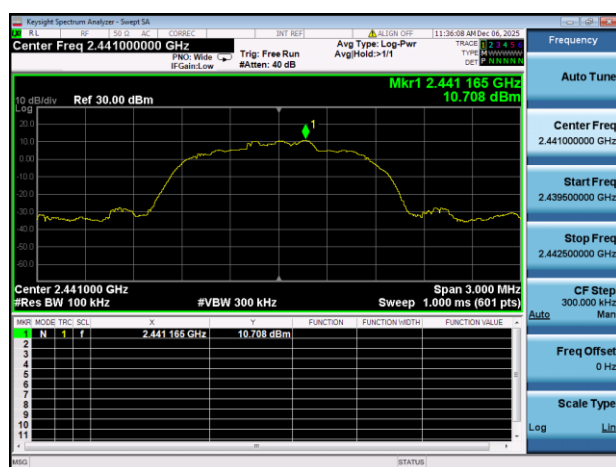
8-DPSK LOW CHANNEL, CARRIER LEVEL



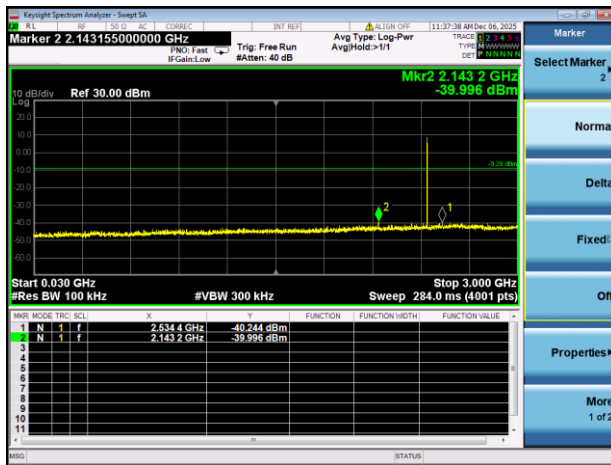
8-DPSK LOW CHANNEL, BAND EDGE

8-DPSK LOW CHANNEL, SPURIOUS
30 MHz ~ 3 GHz8-DPSK LOW CHANNEL, SPURIOUS
3 GHz ~ 25 GHz

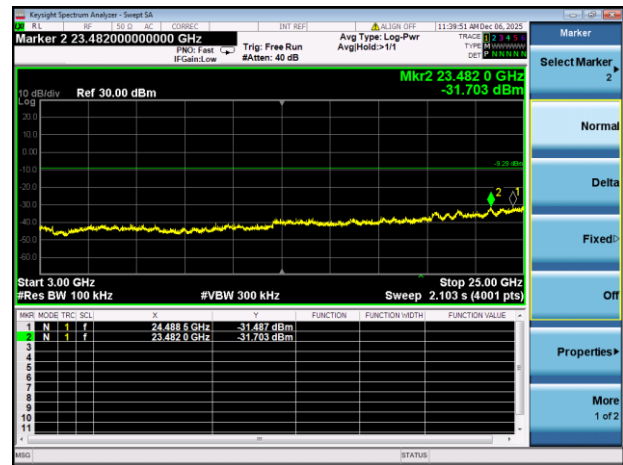
8-DPSK MIDDLE CHANNEL, CARRIER LEVEL



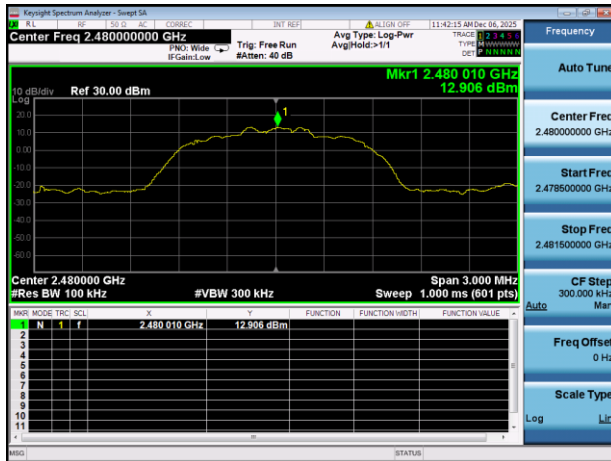
8-DPSK MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



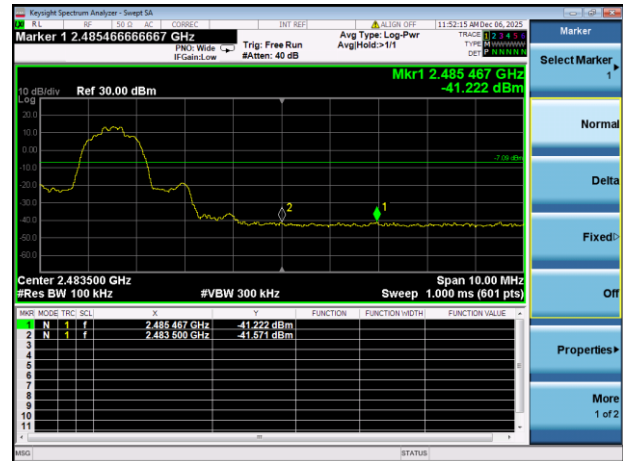
8-DPSK MIDDLE CHANNEL, SPURIOUS 3 GHz ~ 25 GHz



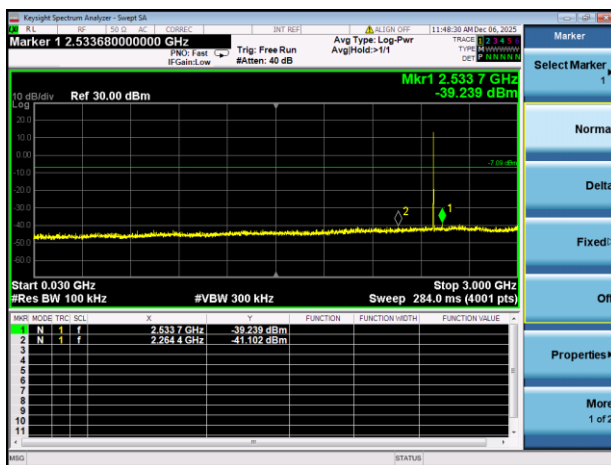
8-DPSK HIGH CHANNEL, CARRIER LEVEL



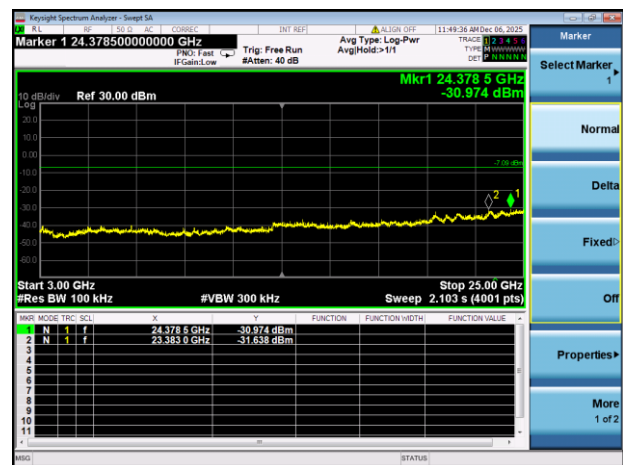
8-DPSK HIGH CHANNEL, BAND EDGE



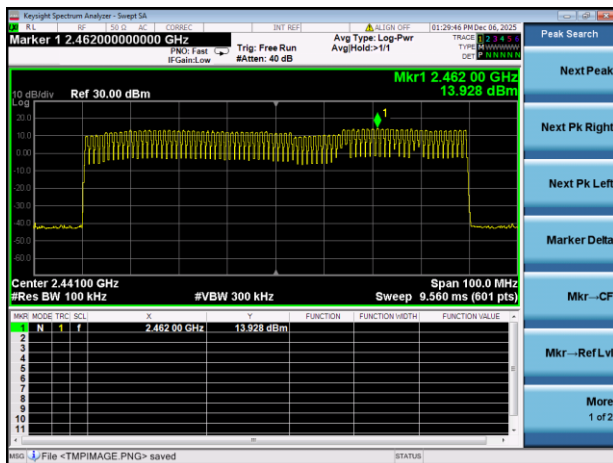
8-DPSK HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



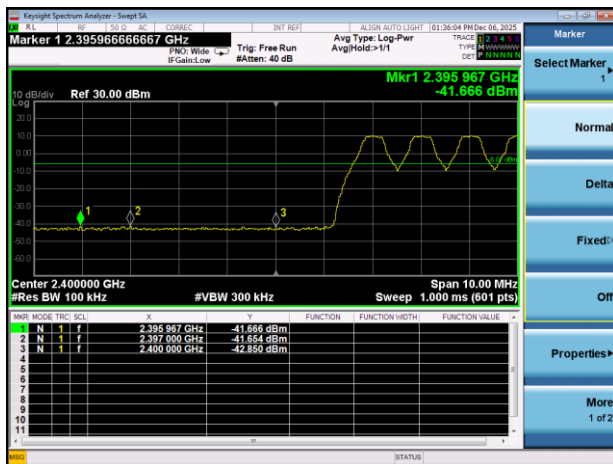
8-DPSK HIGH CHANNEL, SPURIOUS 3 GHz ~ 25 GHz



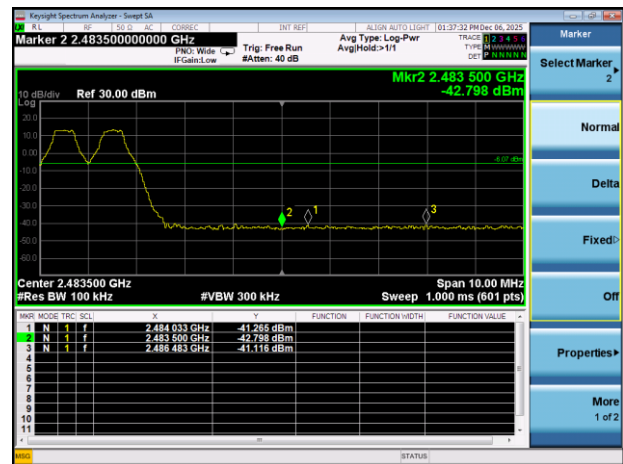
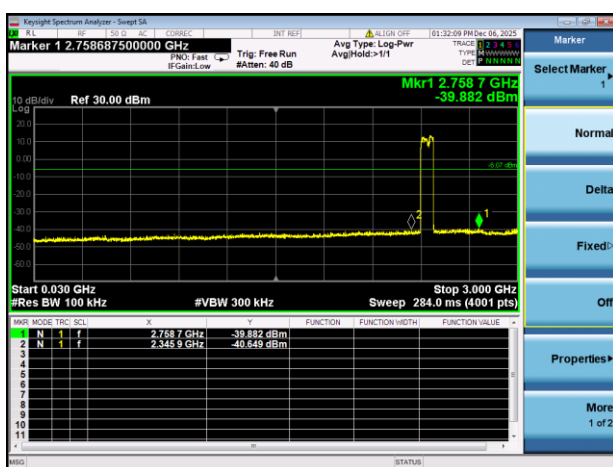
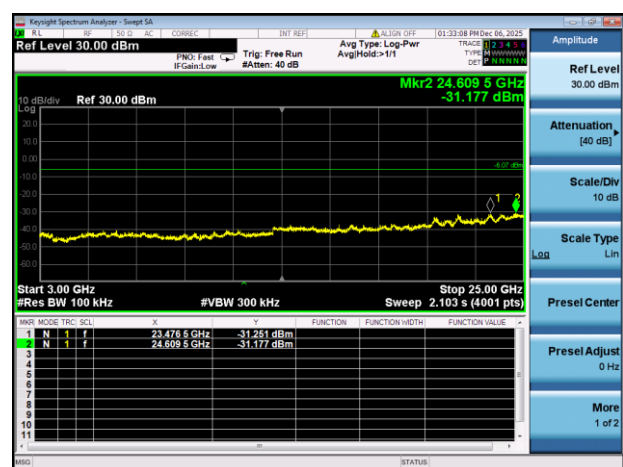
GFSK HOPPING, CARRIER LEVEL



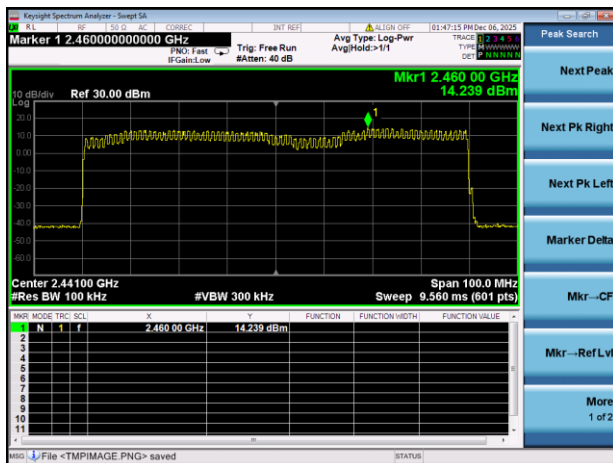
GFSK HOPPING BAND EDGE (LOW)



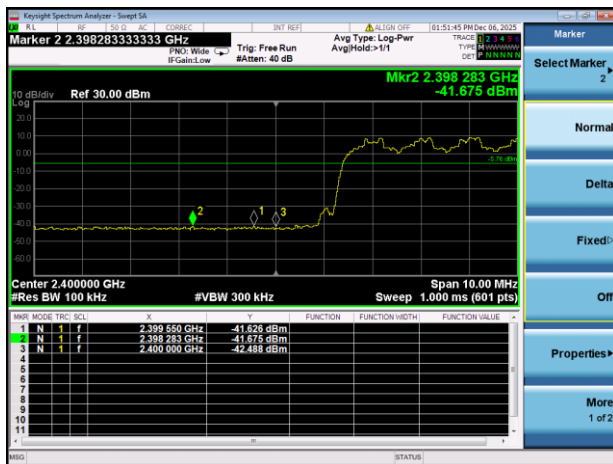
GFSK HOPPING BAND EDGE (HIGH)

GFSK Hopping Mode, SPURIOUS
30 MHz ~ 3 GHzGFSK Hopping Mode, SPURIOUS
3GHz ~ 25 GHz

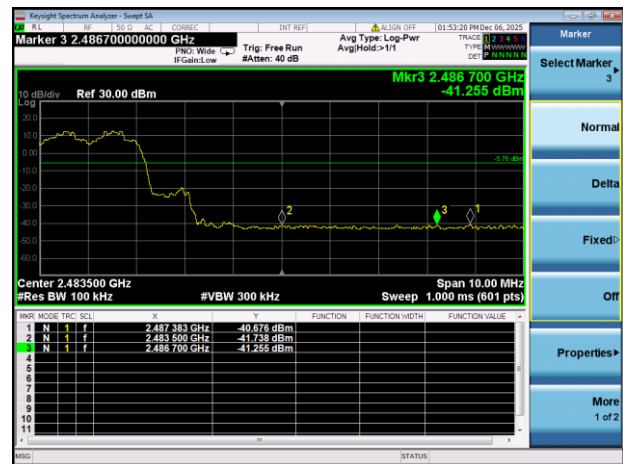
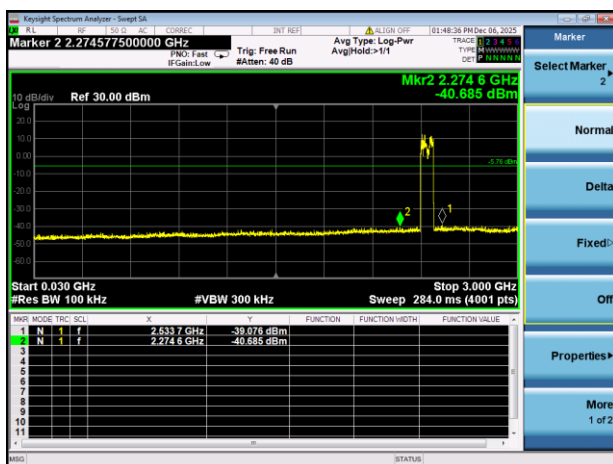
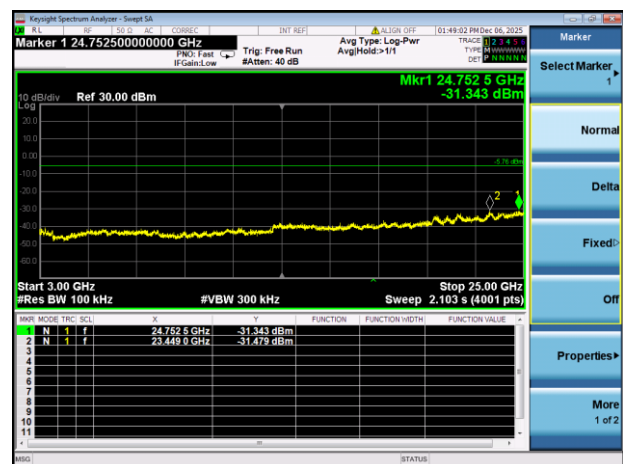
8-DPSK HOPPING, CARRIER LEVEL



8-DPSK Hopping BAND EDGE (LOW)



8-DPSK Hopping BAND EDGE (HIGH)

8-DPSK Hopping Mode, SPURIOUS
30 MHz ~ 3 GHz8-DPSK Hopping Mode, SPURIOUS
3GHz ~ 25 GHz

A.7 Conducted Emission

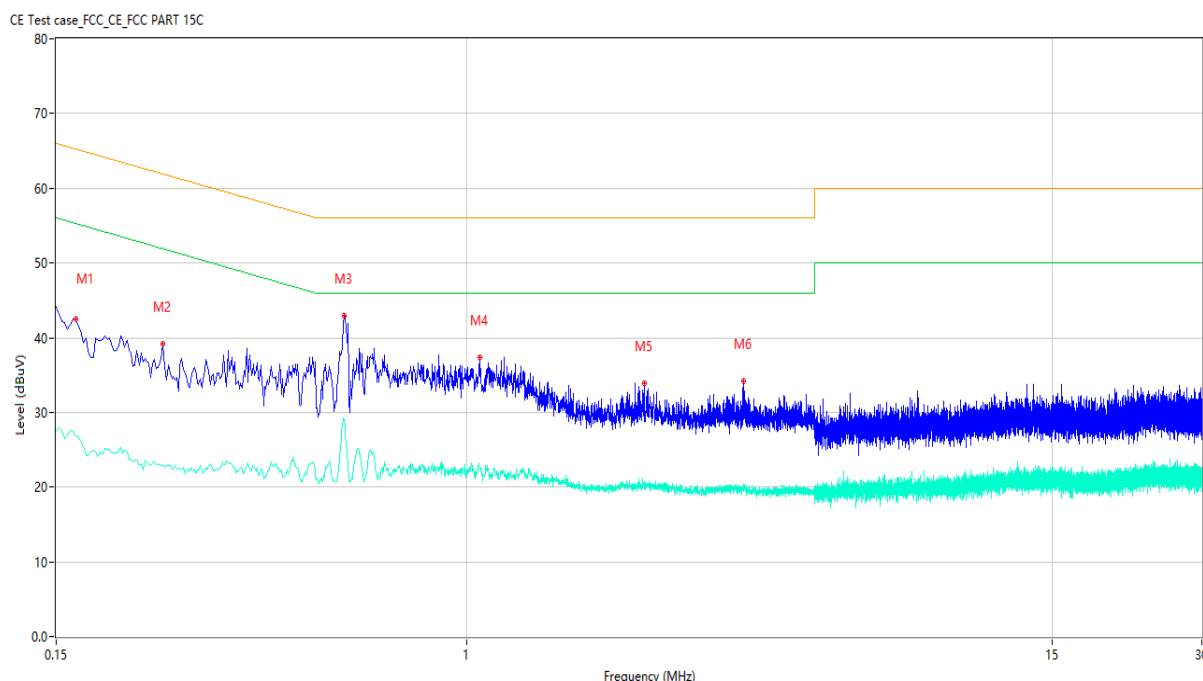
Note 1: The EUT is working in the Normal link mode. All modes have been tested and normal link mode is worst.

Note 2: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (120 VAC, 60 Hz) shown here.

Note 3: Results (dBuV) = Original reading level of Spectrum Analyzer (dBuV) + Factor (dB)

Test Data and Plots

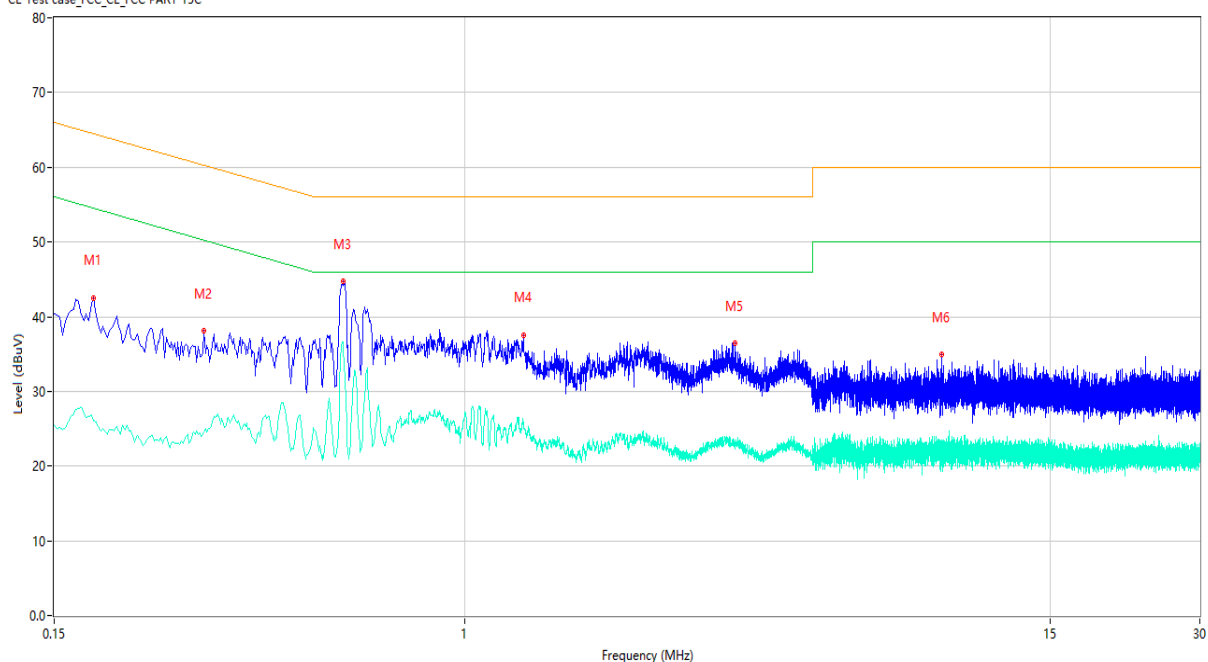
PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.164	42.54	10.07	65.26	22.72	Peak	L	Pass
1**	0.164	26.82	10.07	55.26	28.44	AV	L	Pass
2	0.246	39.15	10.12	61.89	22.74	Peak	L	Pass
2**	0.246	22.88	10.12	51.89	29.01	AV	L	Pass
3	0.568	42.91	10.18	56.00	13.09	Peak	L	Pass
3**	0.568	29.13	10.18	46.00	16.87	AV	L	Pass
4	1.066	37.29	10.20	56.00	18.71	Peak	L	Pass
4**	1.066	22.42	10.20	46.00	23.58	AV	L	Pass
5	2.278	33.85	10.36	56.00	22.15	Peak	L	Pass
5**	2.278	20.38	10.36	46.00	25.62	AV	L	Pass
6	3.610	34.18	10.40	56.00	21.82	Peak	L	Pass
6**	3.610	20.34	10.40	46.00	25.66	AV	L	Pass

PHASE N

CE Test case_FCC_CE_FCC PART 15C



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.180	42.54	10.15	64.49	21.95	Peak	N	Pass
1**	0.180	26.09	10.15	54.49	28.40	AV	N	Pass
2	0.300	38.09	10.15	60.24	22.15	Peak	N	Pass
2**	0.300	24.61	10.15	50.24	25.63	AV	N	Pass
3	0.572	44.75	10.19	56.00	11.25	Peak	N	Pass
3**	0.572	35.37	10.19	46.00	10.63	AV	N	Pass
4	1.314	37.56	10.24	56.00	18.44	Peak	N	Pass
4**	1.314	25.71	10.24	46.00	20.29	AV	N	Pass
5	3.502	36.47	10.34	56.00	19.53	Peak	N	Pass
5**	3.502	22.80	10.34	46.00	23.20	AV	N	Pass
6	9.074	34.99	10.84	60.00	25.01	Peak	N	Pass
6**	9.074	21.31	10.84	50.00	28.69	AV	N	Pass

A.8 Radiated Spurious Emission

Note 1: The symbol of "--" in the table which means not application.

Note 2: For the test data above 1 GHz, according the ANSI C63.10-2020, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note 3: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested.

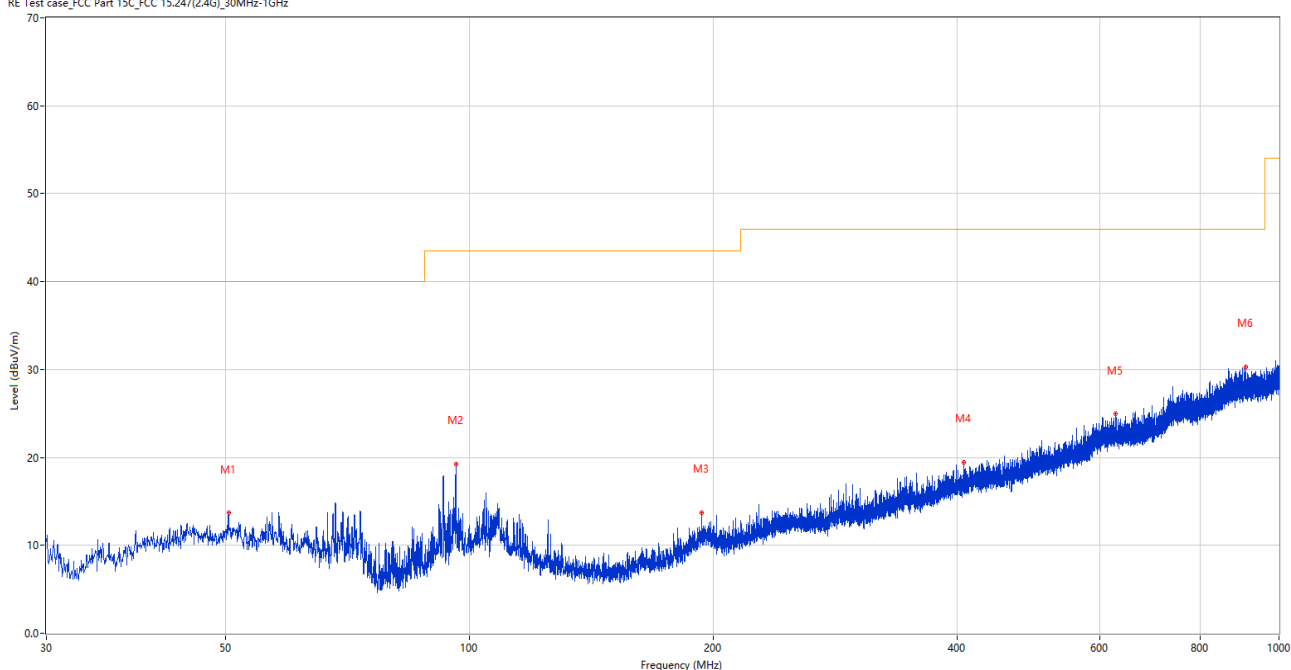
Note 4: Results (dBuV/m) = Original reading level of Spectrum Analyzer (dBuV) + Factor (dB)

Note 5: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Test Data and Plots

30 MHz to 1 GHz, ANT H

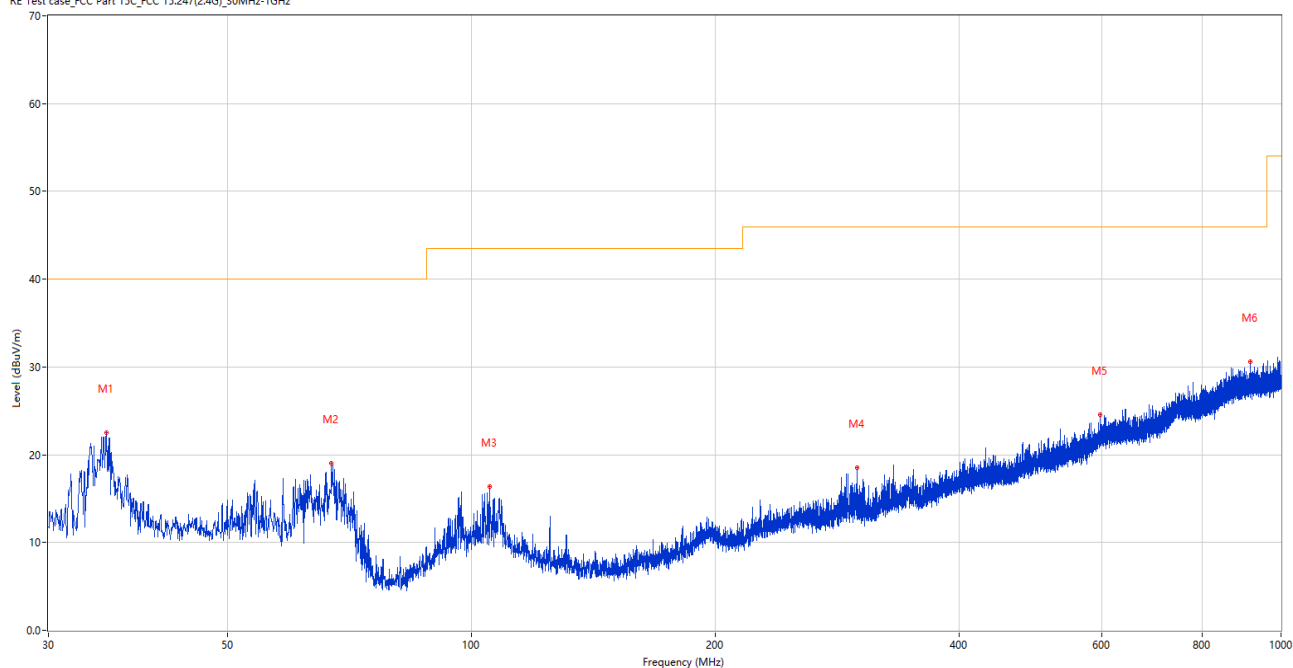
RE Test case_FCC Part 15C_FCC 15.247(2.4G)_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	50.370	13.67	-24.53	40.0	26.33	Peak	320.00	200	Horizontal	Pass
2	96.202	19.26	-26.49	43.5	24.24	Peak	261.00	200	Horizontal	Pass
3	193.688	13.74	-25.73	43.5	29.76	Peak	96.00	100	Horizontal	Pass
4	407.766	19.46	-20.23	46.0	26.54	Peak	54.00	200	Horizontal	Pass
5	628.054	24.93	-14.60	46.0	21.07	Peak	155.00	100	Horizontal	Pass
6	910.954	30.31	-9.24	46.0	15.69	Peak	280.00	100	Horizontal	Pass

30 MHz to 1 GHz, ANT V

RE Test case_FCC Part 15C_FCC 15.247(2.4G)_30MHz-1GHz

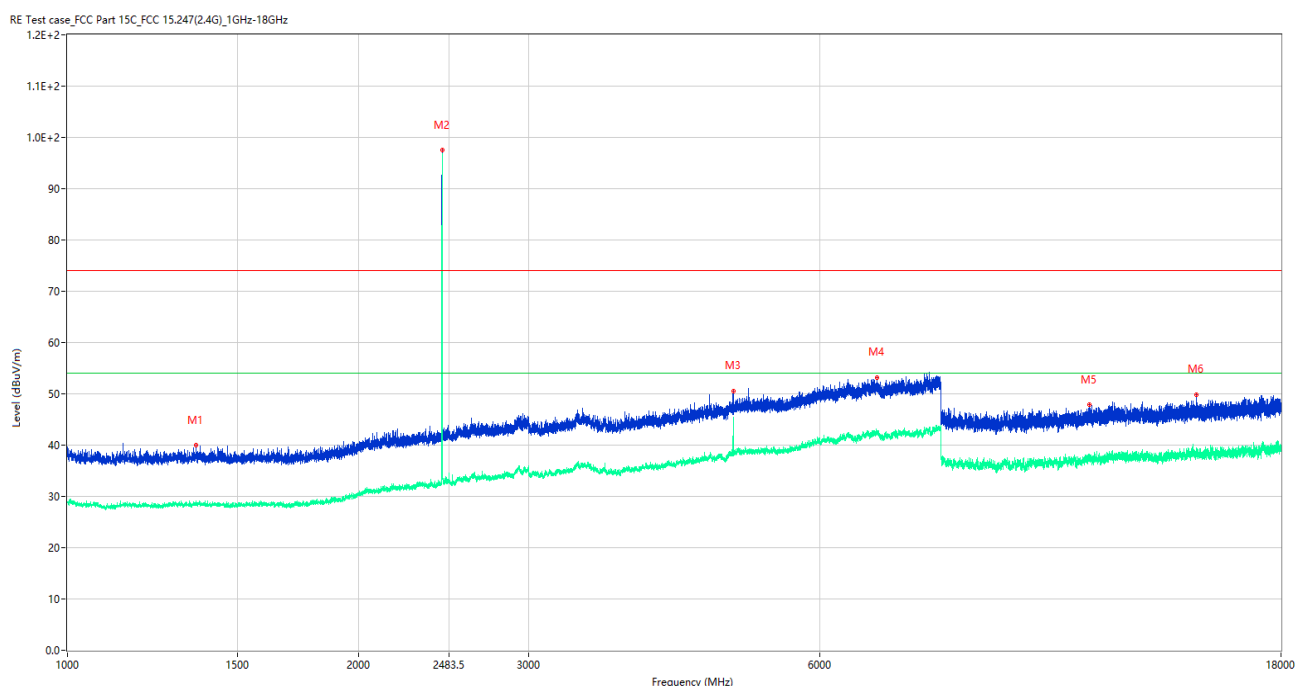


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	35.383	22.53	-27.61	40.0	17.47	Peak	259.00	100	Vertical	Pass
2	67.151	19.02	-28.05	40.0	20.98	Peak	74.00	100	Vertical	Pass
3	105.321	16.36	-26.23	43.5	27.14	Peak	332.00	100	Vertical	Pass
4	299.612	18.52	-23.23	46.0	27.48	Peak	216.00	100	Vertical	Pass
5	597.450	24.54	-15.01	46.0	21.46	Peak	193.00	100	Vertical	Pass
6	916.143	30.64	-9.22	46.0	15.36	Peak	326.00	200	Vertical	Pass

Note 1: The marked spikes near 2400 MHz with circle should be ignored because they are Fundamental signal.

Note 2: The spurious from 18GHz-25GHz is noise only, do not show on the report.

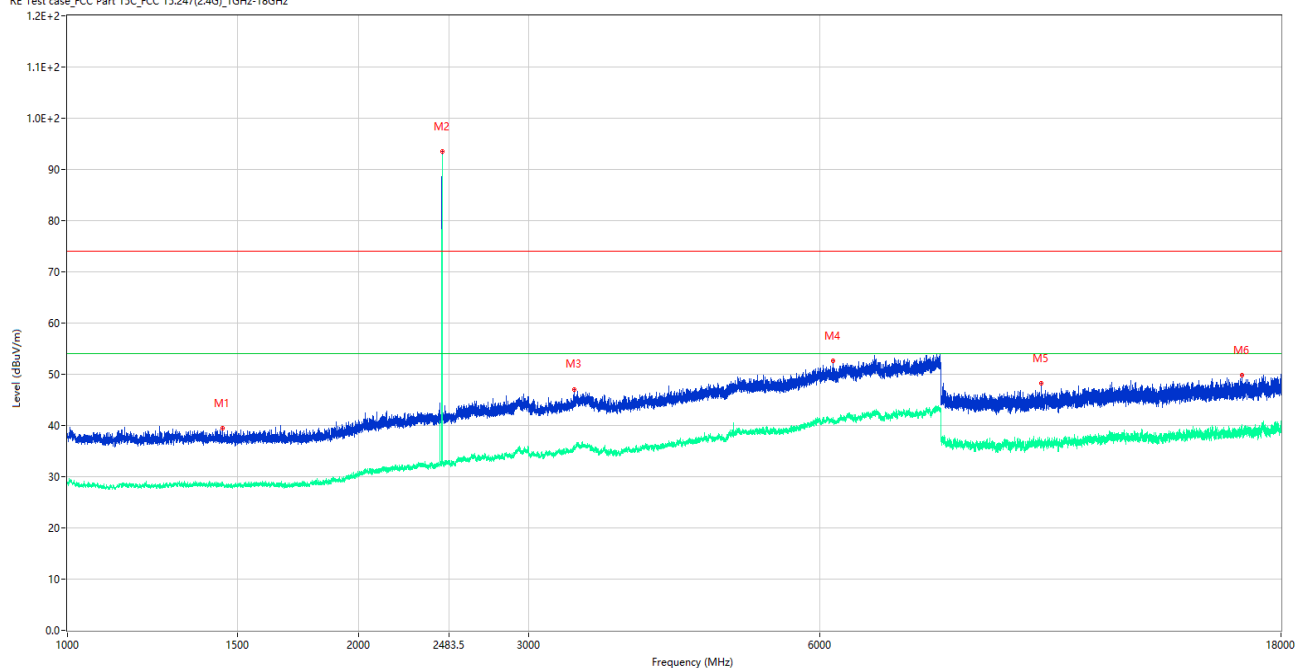
GFSK MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1357.750	39.92	-15.83	74.0	34.08	Peak	19.00	150	Horizontal	Pass
1**	1357.750	28.67	-15.83	54.0	25.33	AV	19.00	150	Horizontal	Pass
2	2441.000	97.46	-12.39	74.0	-23.46	Peak	158.00	150	Horizontal	N/A
2**	2441.000	96.23	-12.39	54.0	-42.23	AV	158.00	150	Horizontal	N/A
3	4882.000	50.60	-2.31	74.0	23.40	Peak	31.00	150	Horizontal	Pass
3**	4882.000	43.69	-2.31	54.0	10.31	AV	31.00	150	Horizontal	Pass
4	6878.000	53.22	0.59	74.0	20.78	Peak	358.00	150	Horizontal	Pass
4**	6878.000	42.47	0.59	54.0	11.53	AV	358.00	150	Horizontal	Pass
5	11414.000	47.84	-3.47	74.0	26.16	Peak	350.00	150	Horizontal	Pass
5**	11414.000	37.45	-3.47	54.0	16.55	AV	350.00	150	Horizontal	Pass
6	14727.999	49.86	-1.48	74.0	24.14	Peak	294.00	150	Horizontal	Pass
6**	14727.999	38.81	-1.48	54.0	15.19	AV	294.00	150	Horizontal	Pass

GFSK MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V

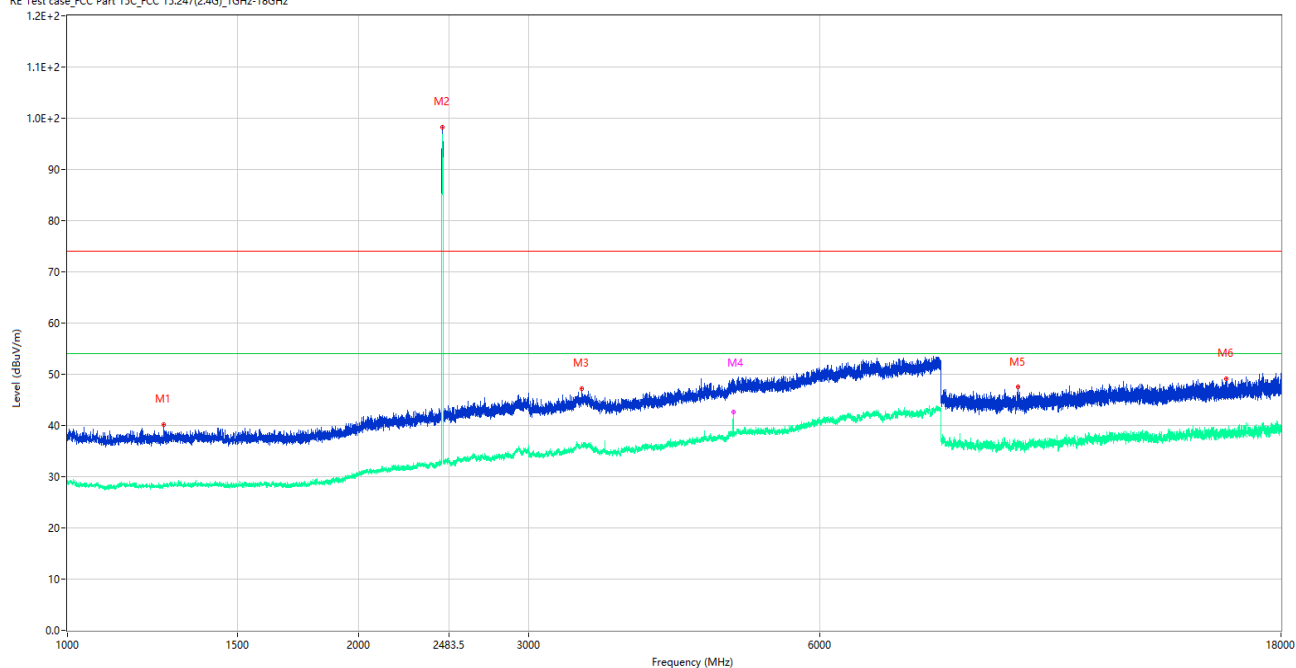
RE Test case_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1446.750	39.49	-15.95	74.0	34.51	Peak	344.00	150	Vertical	Pass
1**	1446.750	28.19	-15.95	54.0	25.81	AV	344.00	150	Vertical	Pass
2	2441.000	93.48	-12.39	74.0	-19.48	Peak	123.00	150	Vertical	N/A
2**	2441.000	92.17	-12.39	54.0	-38.17	AV	123.00	150	Vertical	N/A
3	3343.000	47.07	-6.05	74.0	26.93	Peak	172.00	150	Vertical	Pass
3**	3343.000	35.33	-6.05	54.0	18.67	AV	172.00	150	Vertical	Pass
4	6189.000	52.56	-0.66	74.0	21.44	Peak	181.00	150	Vertical	Pass
4**	6189.000	41.01	-0.66	54.0	12.99	AV	181.00	150	Vertical	Pass
5	10163.000	48.20	-3.89	74.0	25.80	Peak	327.00	150	Vertical	Pass
5**	10163.000	36.86	-3.89	54.0	17.14	AV	327.00	150	Vertical	Pass
6	16394.500	49.78	-1.15	74.0	24.22	Peak	125.00	150	Vertical	Pass
6**	16394.500	39.54	-1.15	54.0	14.46	AV	125.00	150	Vertical	Pass

8-DPSK MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H

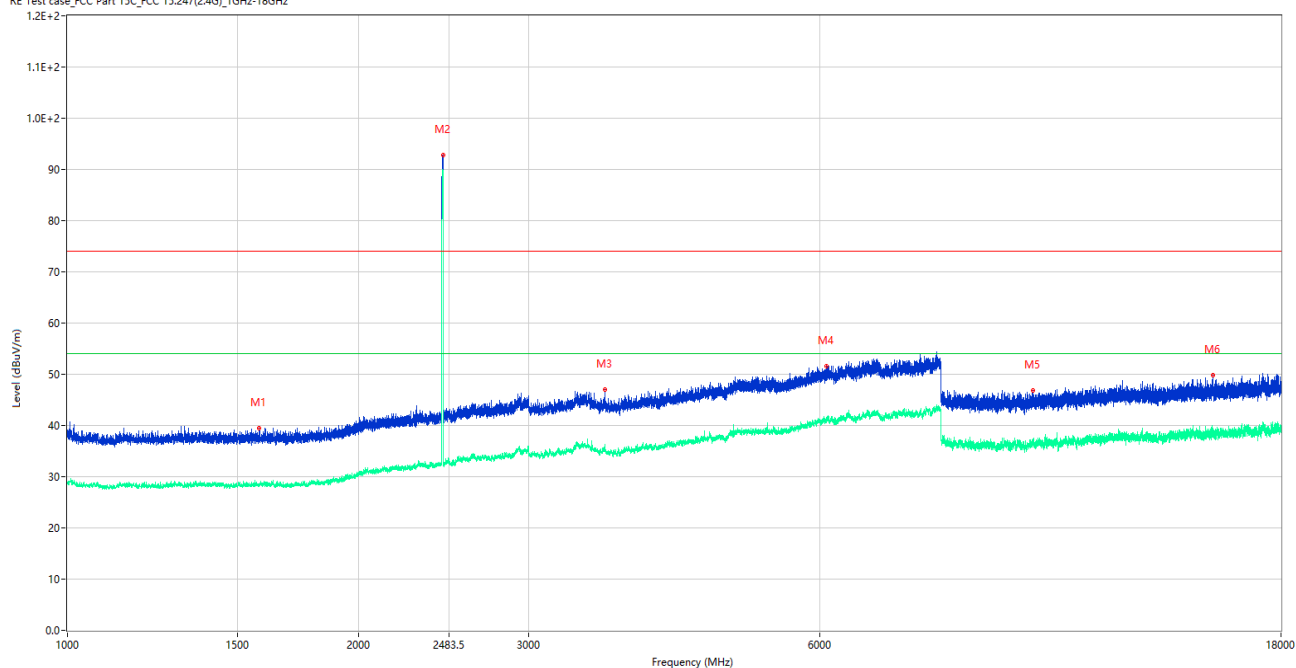
RE Test case_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1257.750	40.26	-16.05	74.0	33.74	Peak	104.00	150	Horizontal	Pass
1**	1257.750	28.10	-16.05	54.0	25.90	AV	104.00	150	Horizontal	Pass
2	2440.750	98.31	-12.38	74.0	-24.31	Peak	152.00	150	Horizontal	N/A
2**	2440.750	95.12	-12.38	54.0	-41.12	AV	152.00	150	Horizontal	N/A
3	3405.000	47.25	-5.45	74.0	26.75	Peak	82.00	150	Horizontal	Pass
3**	3405.000	36.35	-5.45	54.0	17.65	AV	82.00	150	Horizontal	Pass
4	4882.000	48.91	-2.31	74.0	25.09	Peak	51.00	150	Horizontal	Pass
4**	4882.000	42.64	-2.31	54.0	11.36	AV	51.00	150	Horizontal	Pass
5	9619.500	47.47	-3.67	74.0	26.53	Peak	34.00	150	Horizontal	Pass
5**	9619.500	36.68	-3.67	54.0	17.32	AV	34.00	150	Horizontal	Pass
6	15792.500	49.19	-1.72	74.0	24.81	Peak	178.00	150	Horizontal	Pass
6**	15792.500	38.46	-1.72	54.0	15.54	AV	178.00	150	Horizontal	Pass

8-DPSK MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1579.750	39.41	-16.11	74.0	34.59	Peak	127.00	150	Vertical	Pass
1**	1579.750	28.29	-16.11	54.0	25.71	AV	127.00	150	Vertical	Pass
2	2447.000	92.83	-12.53	74.0	-18.83	Peak	216.00	150	Vertical	N/A
2**	2447.000	88.36	-12.53	54.0	-34.36	AV	216.00	150	Vertical	N/A
3	3597.500	47.09	-5.10	74.0	26.91	Peak	249.00	150	Vertical	Pass
3**	3597.500	36.11	-5.10	54.0	17.89	AV	249.00	150	Vertical	Pass
4	6099.500	51.67	-0.42	74.0	22.33	Peak	142.00	150	Vertical	Pass
4**	6099.500	41.23	-0.42	54.0	12.77	AV	142.00	150	Vertical	Pass
5	9961.000	46.85	-3.98	74.0	27.15	Peak	151.00	150	Vertical	Pass
5**	9961.000	36.18	-3.98	54.0	17.82	AV	151.00	150	Vertical	Pass
6	15302.000	49.78	-1.93	74.0	24.22	Peak	360.00	150	Vertical	Pass
6**	15302.000	38.91	-1.93	54.0	15.09	AV	360.00	150	Vertical	Pass

A.9 Band Edge (Restricted-band band-edge)

Note 1: The lowest and highest channels are tested to verify the band edge emissions. Please refer to the following the plots for emissions values.

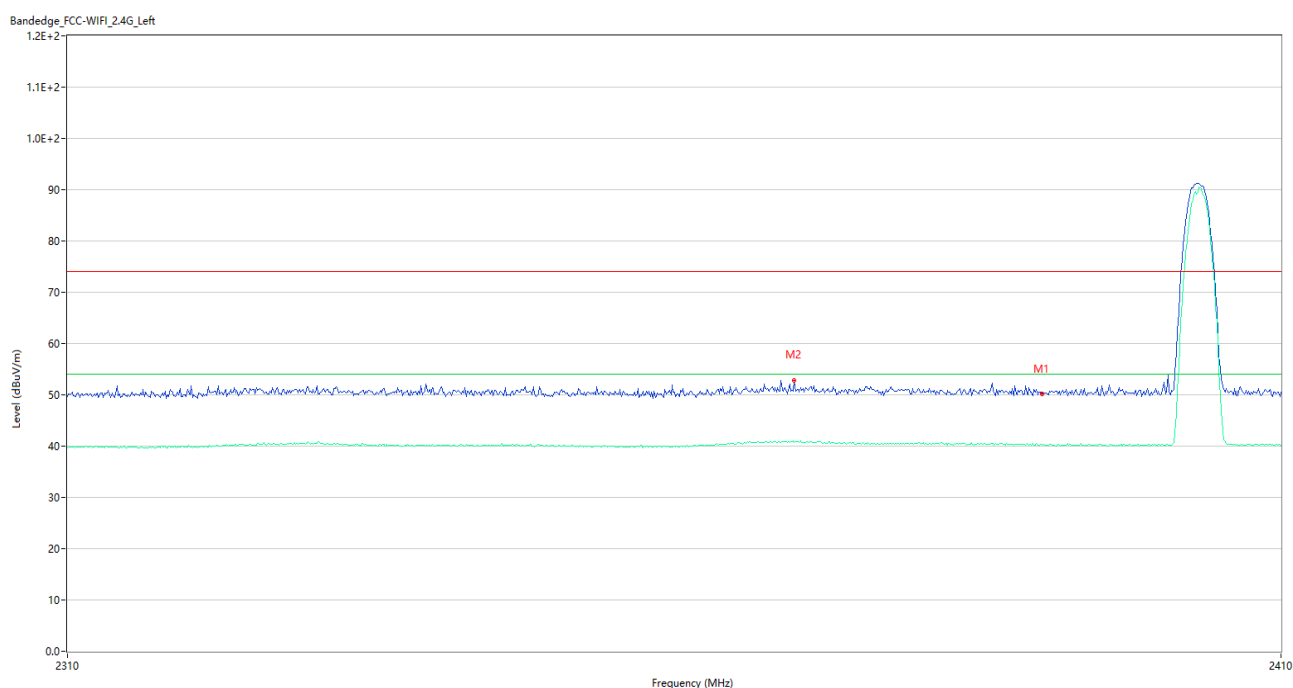
Note 2: The test data all are tested in the vertical and horizontal antenna which the trace is max hold. So these plots have shown the worst case.

Note 3: According the ANSI C63.10-2020, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note 4: The Level (dBuV/m) has been corrected by factor.

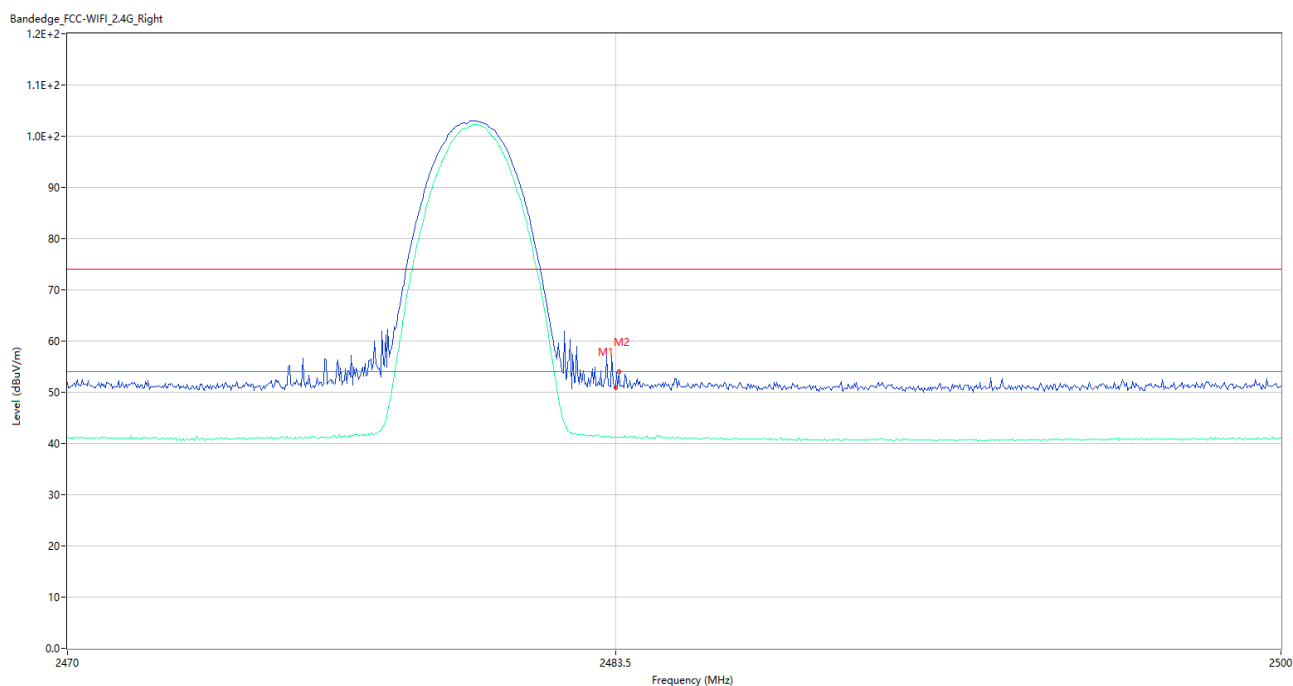
Test Data and Plots

GFSK LOW CHANNEL



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2390.000	50.16	-4.87	74.0	23.84	Peak	359.72	150	Horizontal	Pass
1**	2390.000	40.17	-4.87	54.0	13.83	AV	359.72	150	Horizontal	Pass
2	2369.400	52.77	-4.07	74.0	21.23	Peak	71.00	150	Horizontal	Pass
2**	2369.400	40.79	-4.07	54.0	13.21	AV	71.00	150	Horizontal	Pass

GFSK HIGH CHANNEL



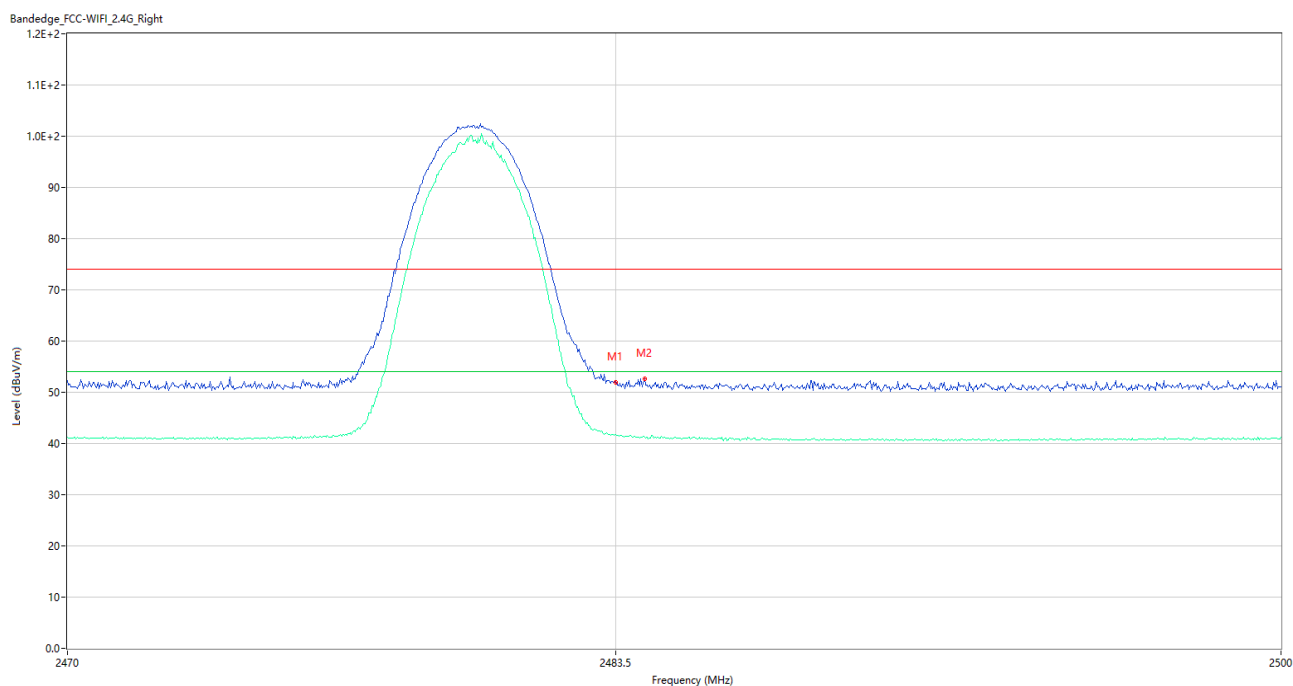
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	50.90	-3.78	74.0	23.10	Peak	0.00	150	Horizontal	Pass
1**	2483.500	41.15	-3.78	54.0	12.85	AV	0.00	150	Horizontal	Pass
2	2483.590	54.03	-3.78	74.0	19.97	Peak	0.00	150	Horizontal	Pass
2**	2483.590	41.18	-3.78	54.0	12.82	AV	0.00	150	Horizontal	Pass

8-DPSK LOW CHANNEL



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2390.000	50.53	-4.87	74.0	23.47	Peak	115.05	150	Horizontal	Pass
1**	2390.000	40.15	-4.87	54.0	13.85	AV	115.05	150	Horizontal	Pass
2	2379.200	51.74	-4.29	74.0	22.26	Peak	82.00	150	Horizontal	Pass
2**	2379.200	40.26	-4.29	54.0	13.74	AV	82.00	150	Horizontal	Pass

8-DPSK HIGH CHANNEL



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	51.87	-3.78	74.0	22.13	Peak	163.00	150	Horizontal	Pass
1**	2483.500	41.72	-3.78	54.0	12.28	AV	163.00	150	Horizontal	Pass
2	2484.220	52.55	-3.78	74.0	21.45	Peak	47.00	150	Horizontal	Pass
2**	2484.220	41.17	-3.78	54.0	12.83	AV	47.00	150	Horizontal	Pass

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SH25B1335-AR-1.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SH25B1335-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SH25B1335-AI.PDF”.

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--END OF REPORT--