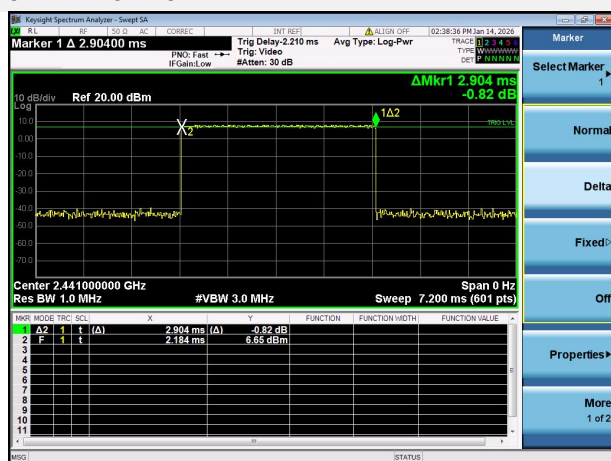
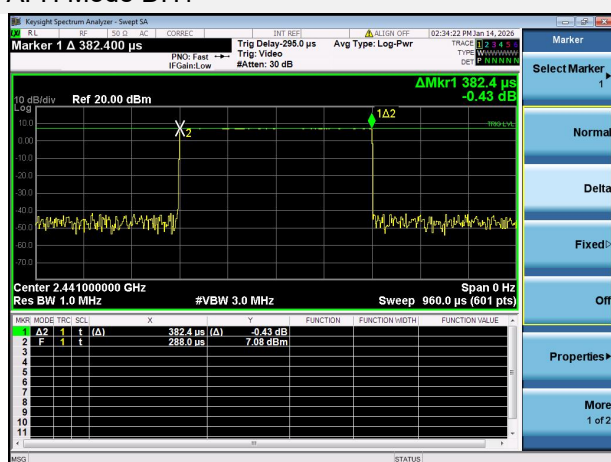


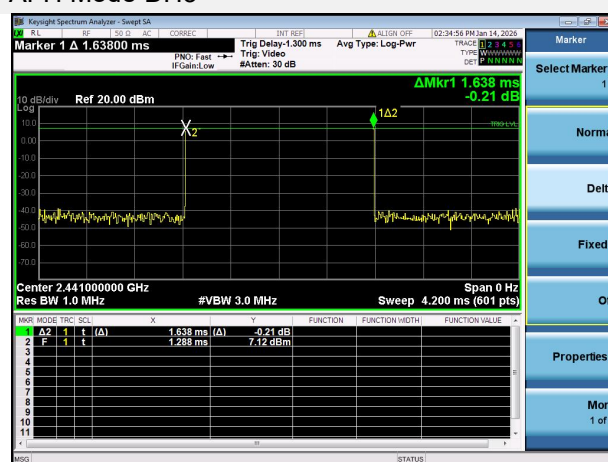
8-DPSK 3DH5



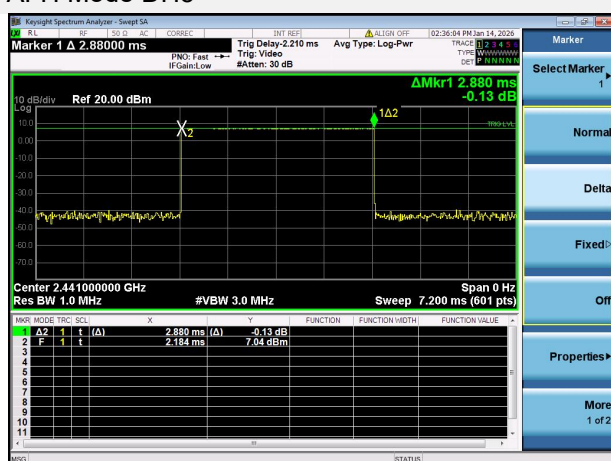
AFH Mode DH1



AFH Mode DH3



AFH Mode DH5



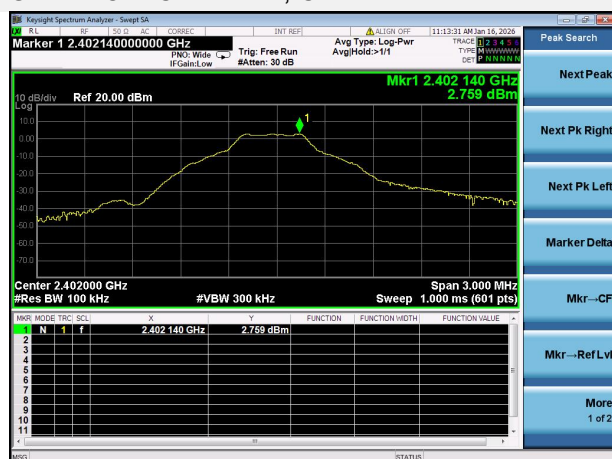
A.6 Conducted Spurious Emissions & Authorized-band band-edge

Test Data

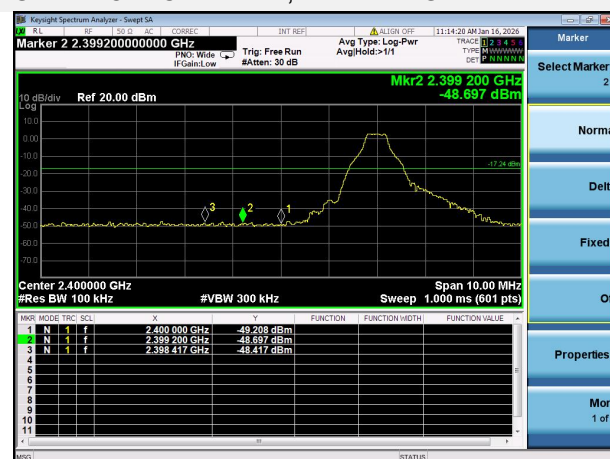
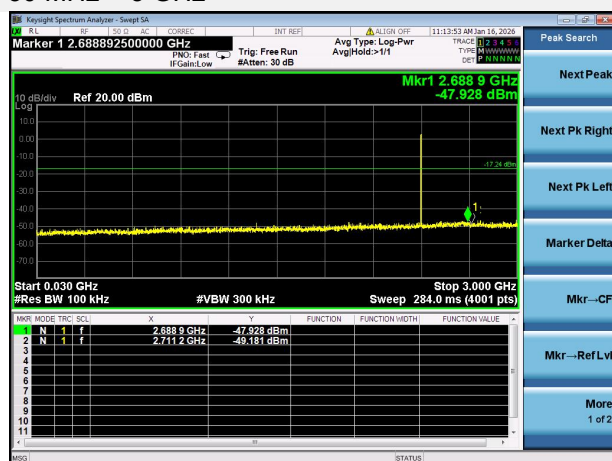
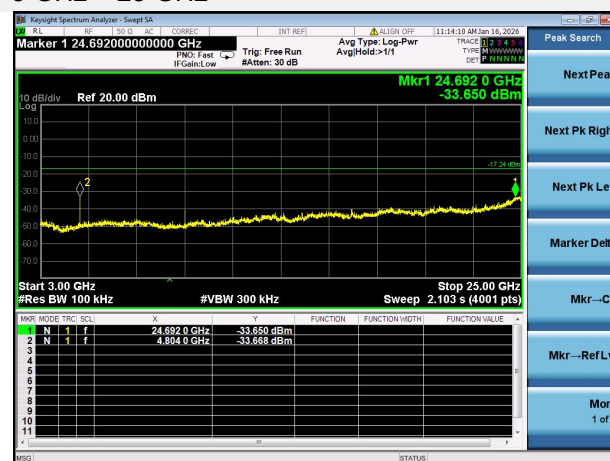
GFSK				
Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-33.65	2.76	-17.24	Pass
Middle	-31.57	3.02	-16.98	Pass
High	-30.53	2.90	-17.10	Pass
8-DPSK				
Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-32.03	2.77	-17.23	Pass
Middle	-35.68	3.04	-16.96	Pass
High	-36.67	2.92	-17.08	Pass
Hopping Mode				
Mode	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
GFSK	-30.63	3.50	-16.50	Pass
8-DPSK	-36.53	3.29	-16.71	Pass

Test Plots

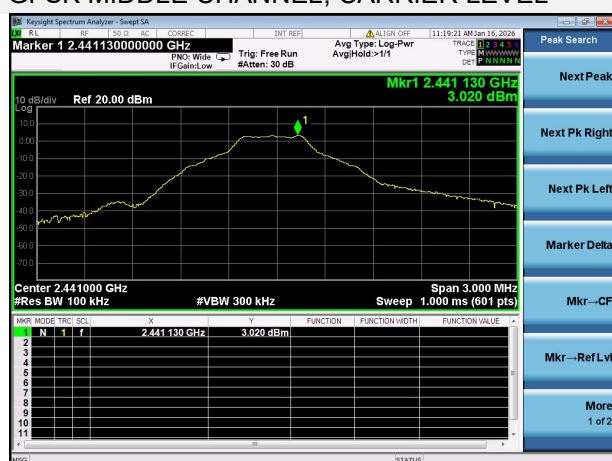
GFSK LOW CHANNEL, CARRIER LEVEL



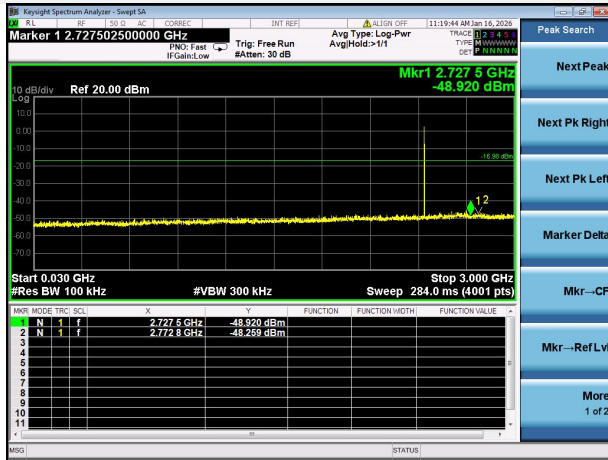
GFSK LOW CHANNEL, BAND EDGE

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

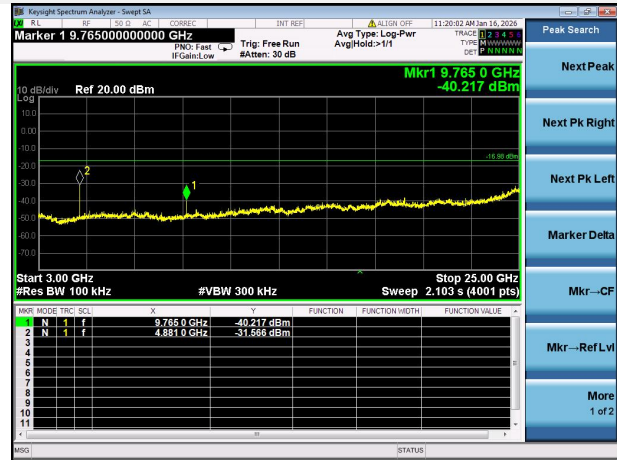
GFSK MIDDLE CHANNEL, CARRIER LEVEL



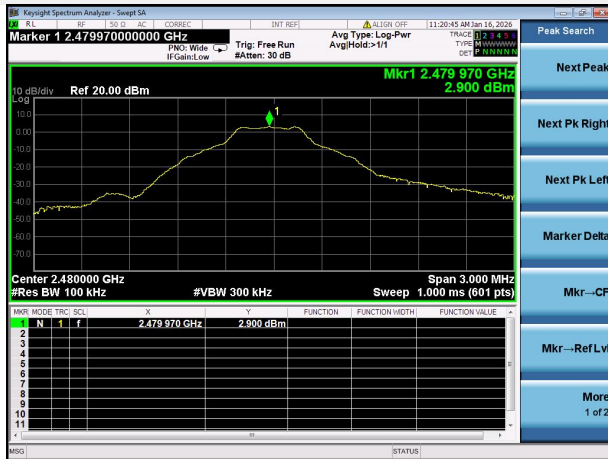
GFSK MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



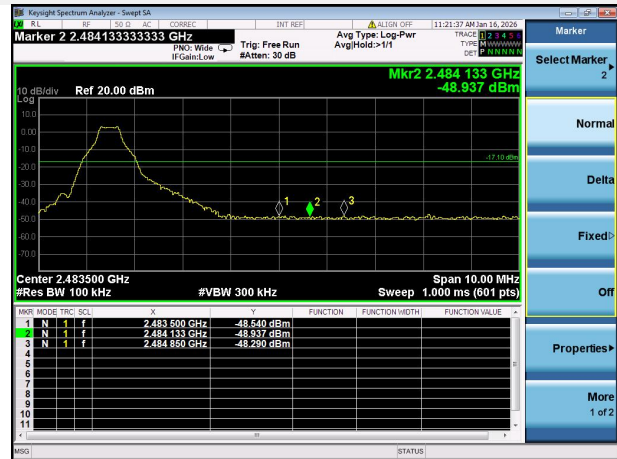
GFSK MIDDLE CHANNEL, SPURIOUS 3 GHz ~ 25 GHz



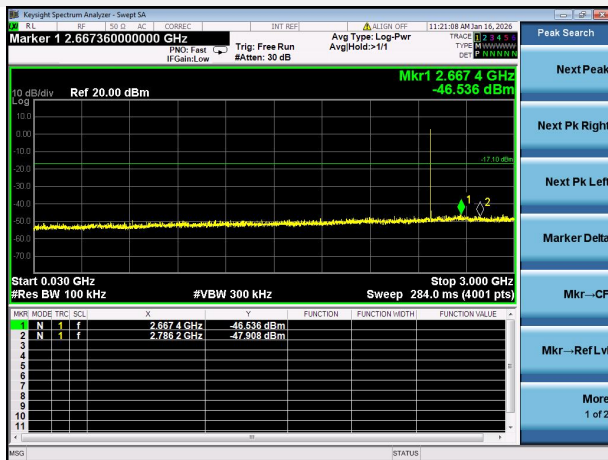
GFSK HIGH CHANNEL, CARRIER LEVEL



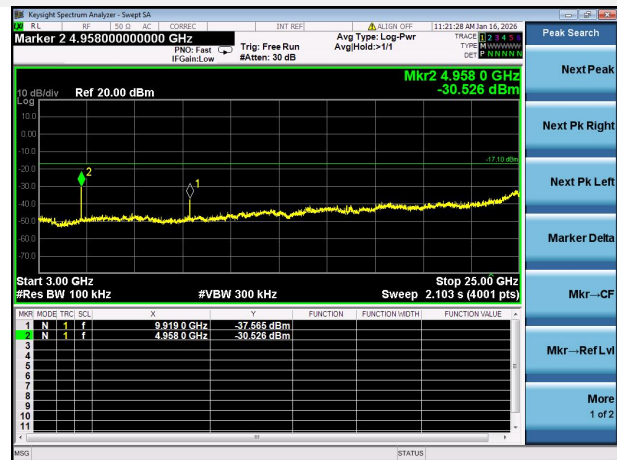
GFSK HIGH CHANNEL, BAND EDGE



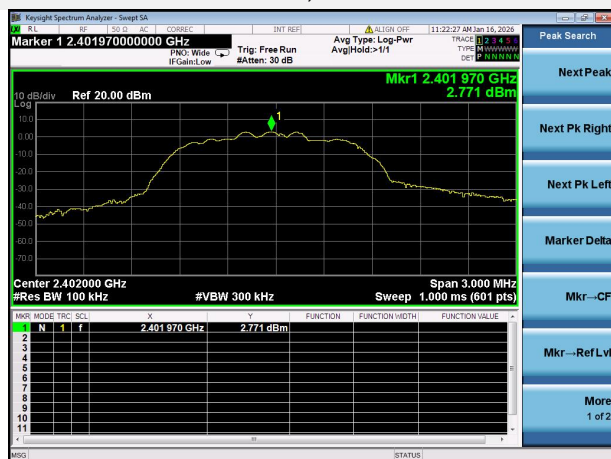
GFSK HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



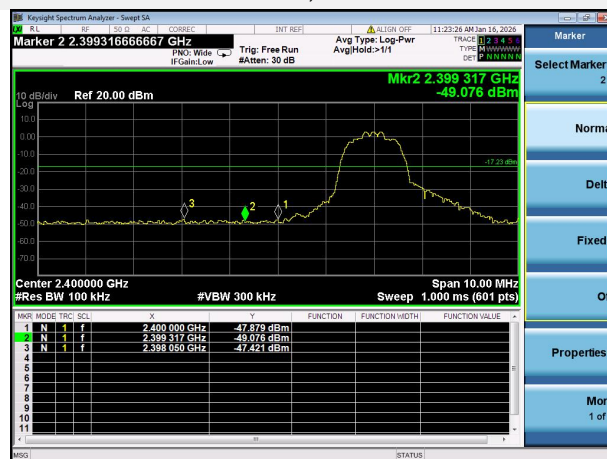
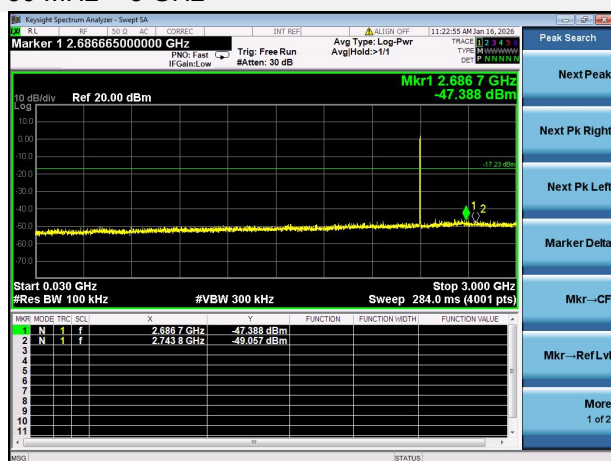
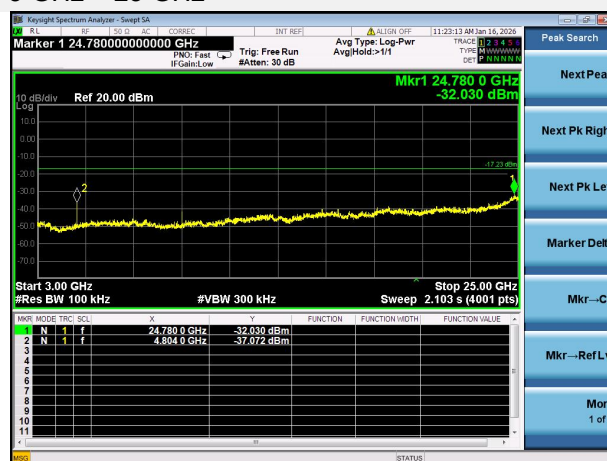
GFSK HIGH CHANNEL, SPURIOUS 3 GHz ~ 25 GHz



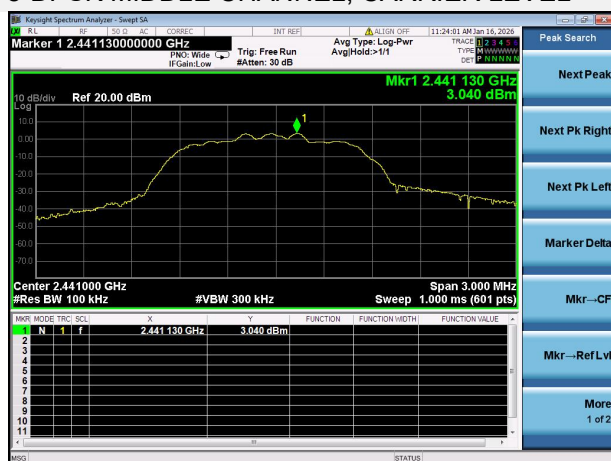
8-DPSK LOW CHANNEL, CARRIER LEVEL



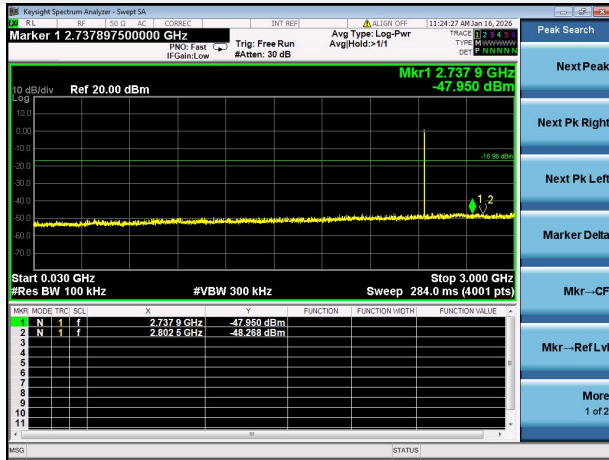
8-DPSK LOW CHANNEL, BAND EDGE

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

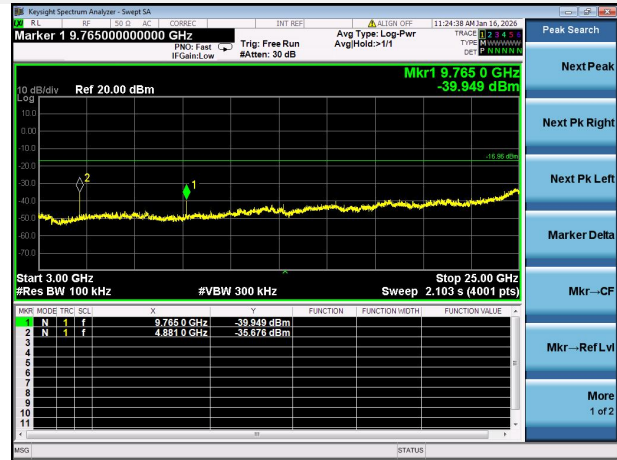
8-DPSK MIDDLE CHANNEL, CARRIER LEVEL



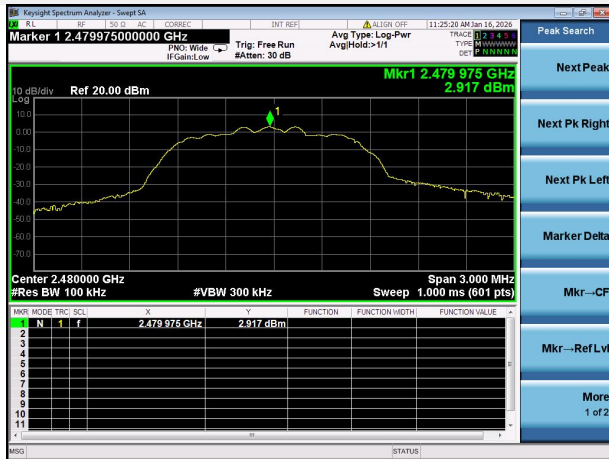
8-DPSK MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



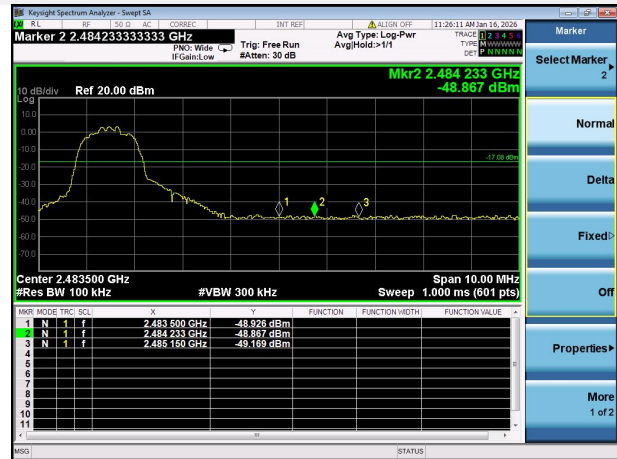
8-DPSK MIDDLE CHANNEL, SPURIOUS 3 GHz ~ 25 GHz



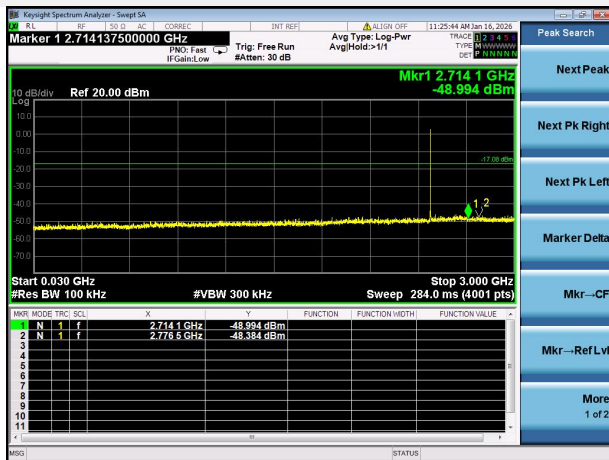
8-DPSK HIGH CHANNEL, CARRIER LEVEL



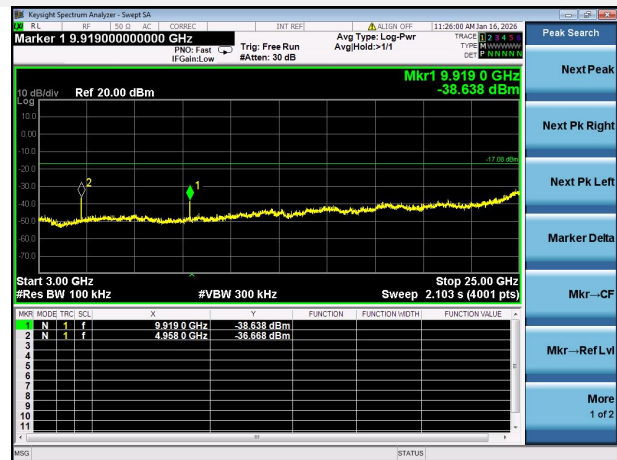
8-DPSK HIGH CHANNEL, BAND EDGE



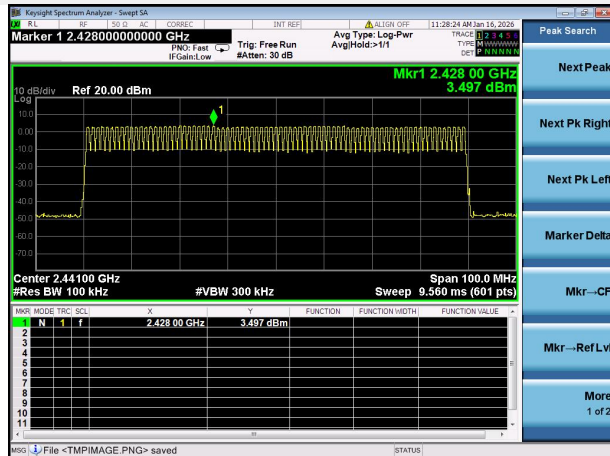
8-DPSK HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



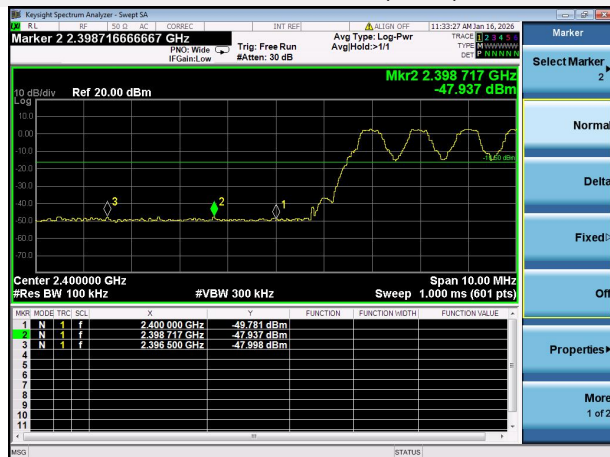
8-DPSK HIGH CHANNEL, SPURIOUS 3 GHz ~ 25 GHz



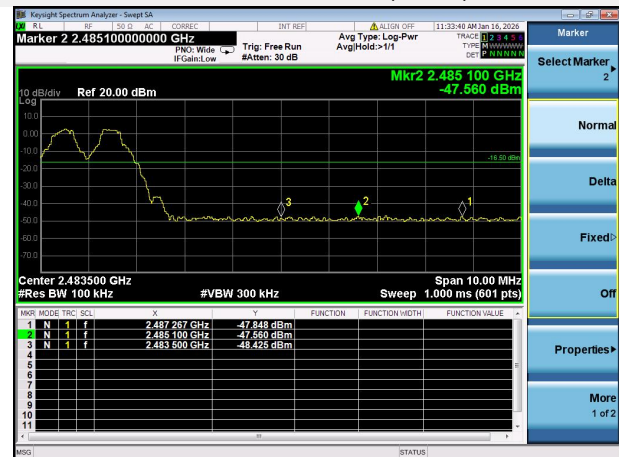
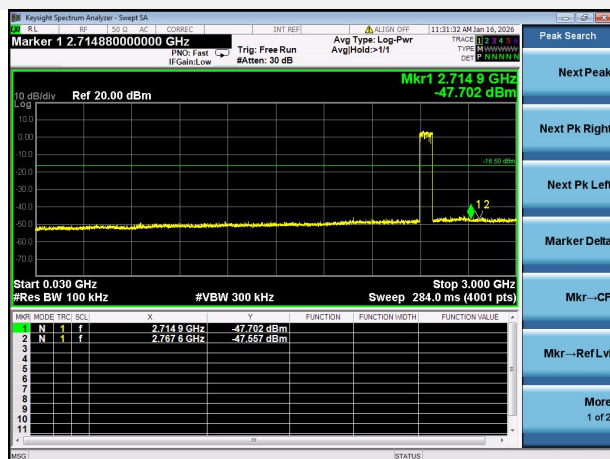
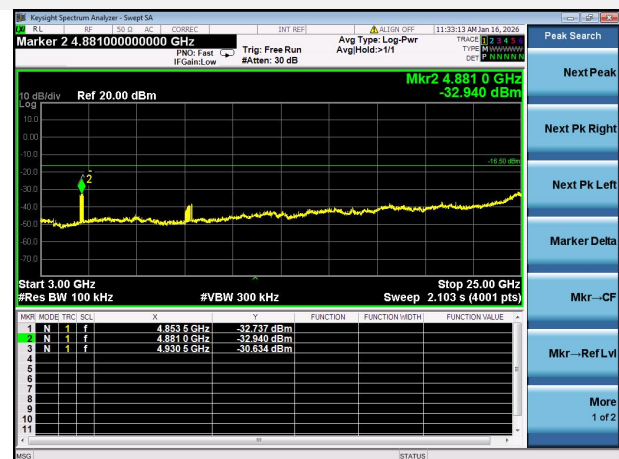
GFSK HOPPING, CARRIER LEVEL



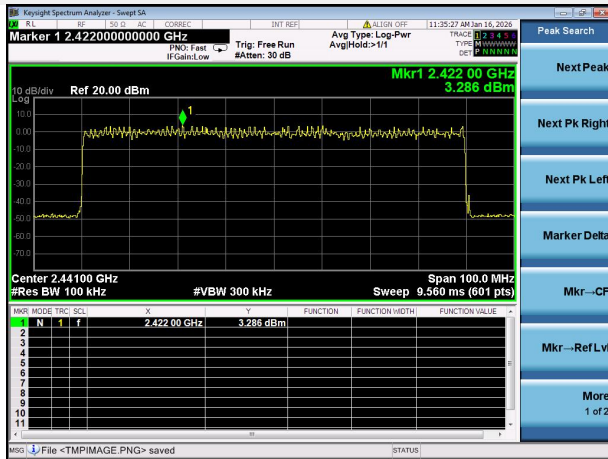
GFSK HOPPING BAND EDGE (LOW)



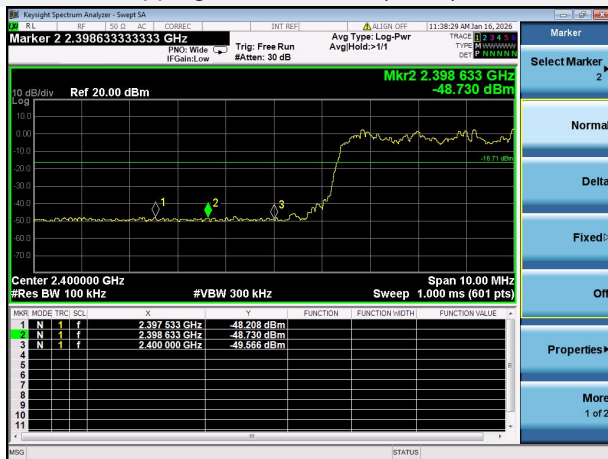
GFSK HOPPING BAND EDGE (HIGH)

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

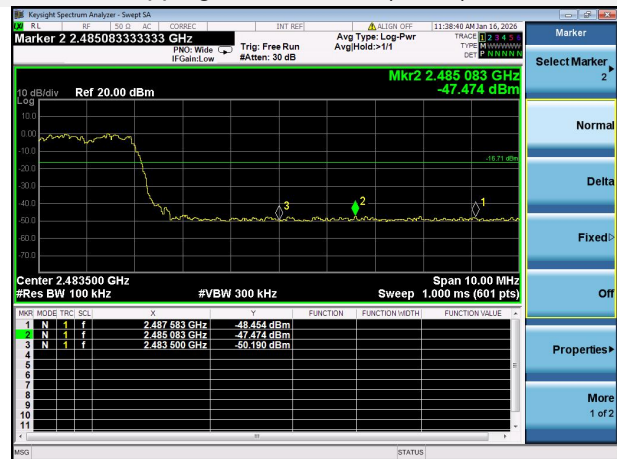
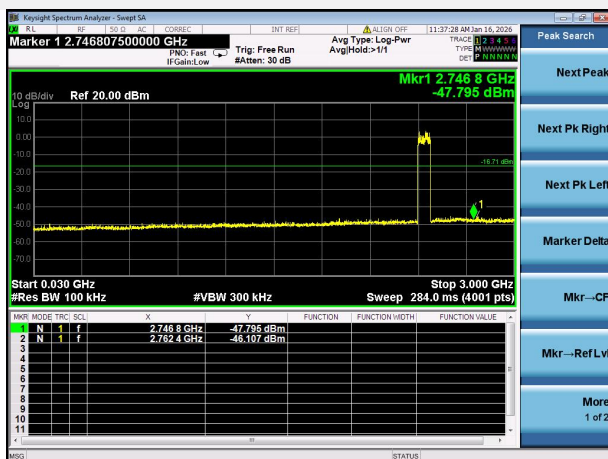
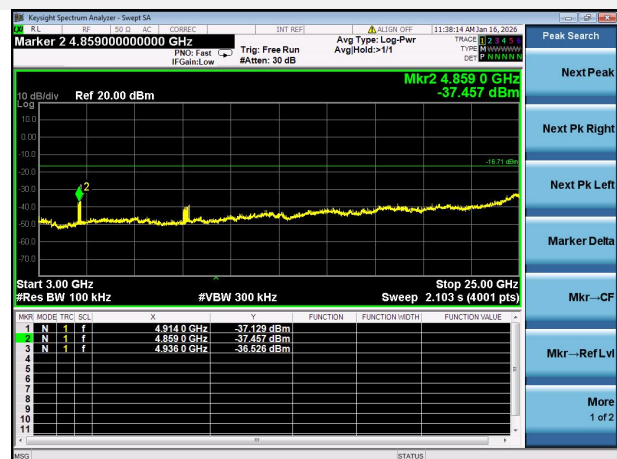
8-DPSK HOPPING, CARRIER LEVEL



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 Emissions

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

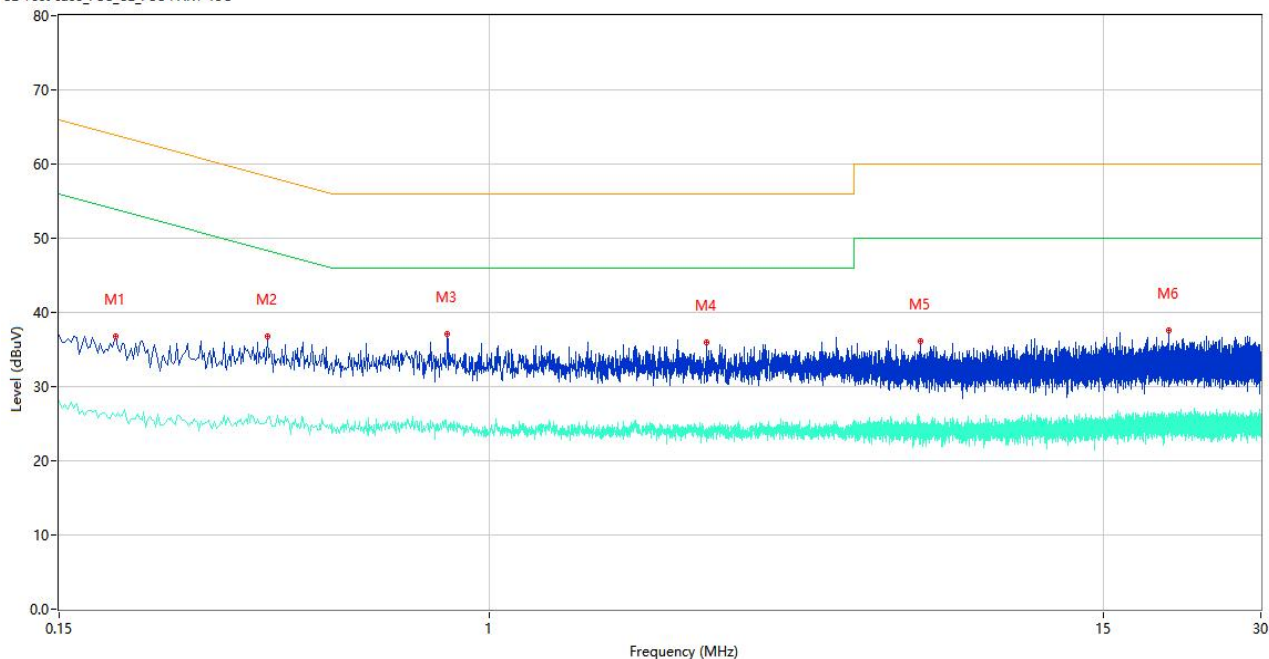
Note ²: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration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

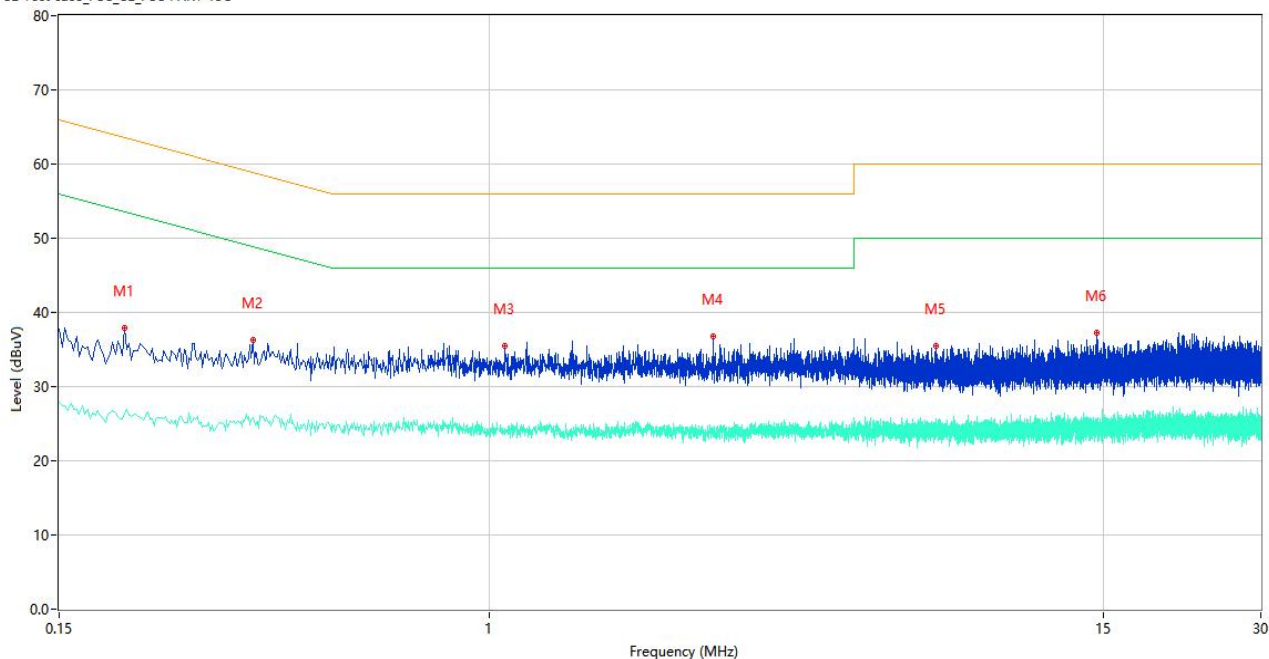
CE Test case_FCC_CE_FCC PART 15C



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.192	36.70	9.84	63.95	27.25	Peak	L	Pass
1**	0.192	26.03	9.84	53.95	27.92	AV	L	Pass
2	0.376	36.73	10.71	58.37	21.64	Peak	L	Pass
2**	0.376	25.78	10.71	48.37	22.59	AV	L	Pass
3	0.830	37.09	10.64	56.00	18.91	Peak	L	Pass
3**	0.830	24.57	10.64	46.00	21.43	AV	L	Pass
4	2.610	35.94	9.87	56.00	20.06	Peak	L	Pass
4**	2.610	24.33	9.87	46.00	21.67	AV	L	Pass
5	6.702	36.19	10.44	60.00	23.81	Peak	L	Pass
5**	6.702	24.73	10.44	50.00	25.27	AV	L	Pass
6	19.976	37.59	11.32	60.00	22.41	Peak	L	Pass
6**	19.976	26.42	11.32	50.00	23.58	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	0.200	37.94	9.84	63.61	25.67	Peak	N	Pass
1**	0.200	26.24	9.84	53.61	27.37	AV	N	Pass
2	0.352	36.22	10.81	58.92	22.70	Peak	N	Pass
2**	0.352	25.79	10.81	48.92	23.13	AV	N	Pass
3	1.070	35.47	10.15	56.00	20.53	Peak	N	Pass
3**	1.070	24.29	10.15	46.00	21.71	AV	N	Pass
4	2.676	36.76	10.16	56.00	19.24	Peak	N	Pass
4**	2.676	23.43	10.16	46.00	22.57	AV	N	Pass
5	7.160	35.47	10.34	60.00	24.53	Peak	N	Pass
5**	7.160	24.58	10.34	50.00	25.42	AV	N	Pass
6	14.576	37.28	10.60	60.00	22.72	Peak	N	Pass
6**	14.576	25.41	10.60	50.00	24.59	AV	N	Pass

A.8 Radiated Spurious Emission

Note¹: The symbol of “--” in the table which means not application.

Note²: 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.

Note³: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and DH5-Hopping mode is the worst.

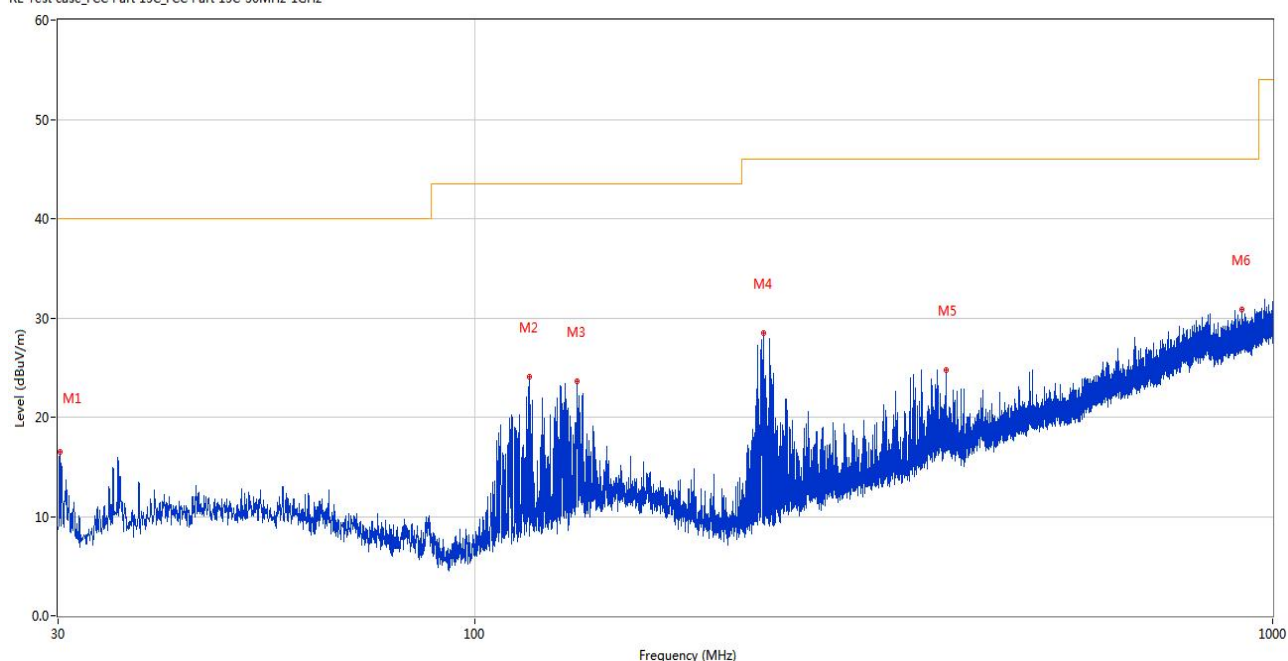
Note⁴: Results (dBuV/m) = Original reading level of Spectrum Analyzer (dBuV/m) + Factor (dB)

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

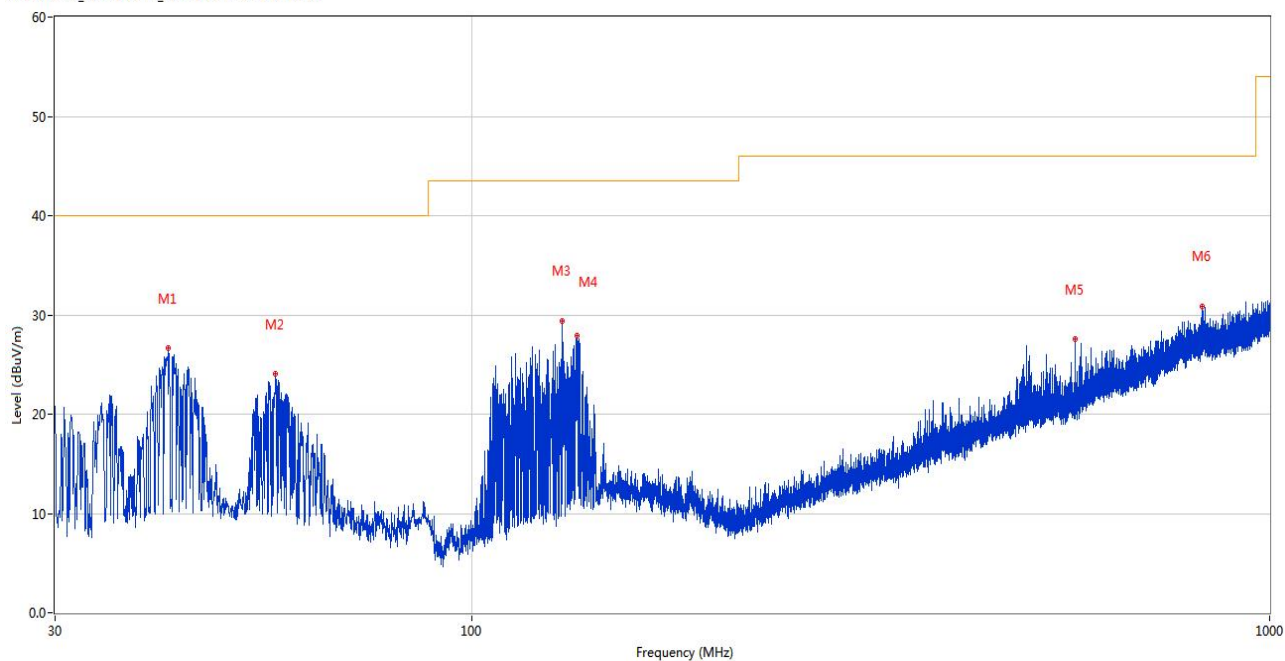
RE Test case_FCC Part 15C_FCC Part 15C-30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	30.145	16.54	-27.08	40.0	23.46	Peak	358.00	100	Horizontal	Pass
2	116.815	24.05	-27.29	43.5	19.45	Peak	114.00	100	Horizontal	Pass
3	134.178	23.57	-25.40	43.5	19.93	Peak	87.00	100	Horizontal	Pass
4	230.208	28.43	-26.41	46.0	17.57	Peak	243.00	100	Horizontal	Pass
5	389.870	24.78	-19.94	46.0	21.22	Peak	251.00	100	Horizontal	Pass
6	914.591	30.83	-8.74	46.0	15.17	Peak	87.00	100	Horizontal	Pass

30 MHz to 1 GHz, ANT V

RE Test case_FCC Part 15C_FCC Part 15C-30MHz-1GHz



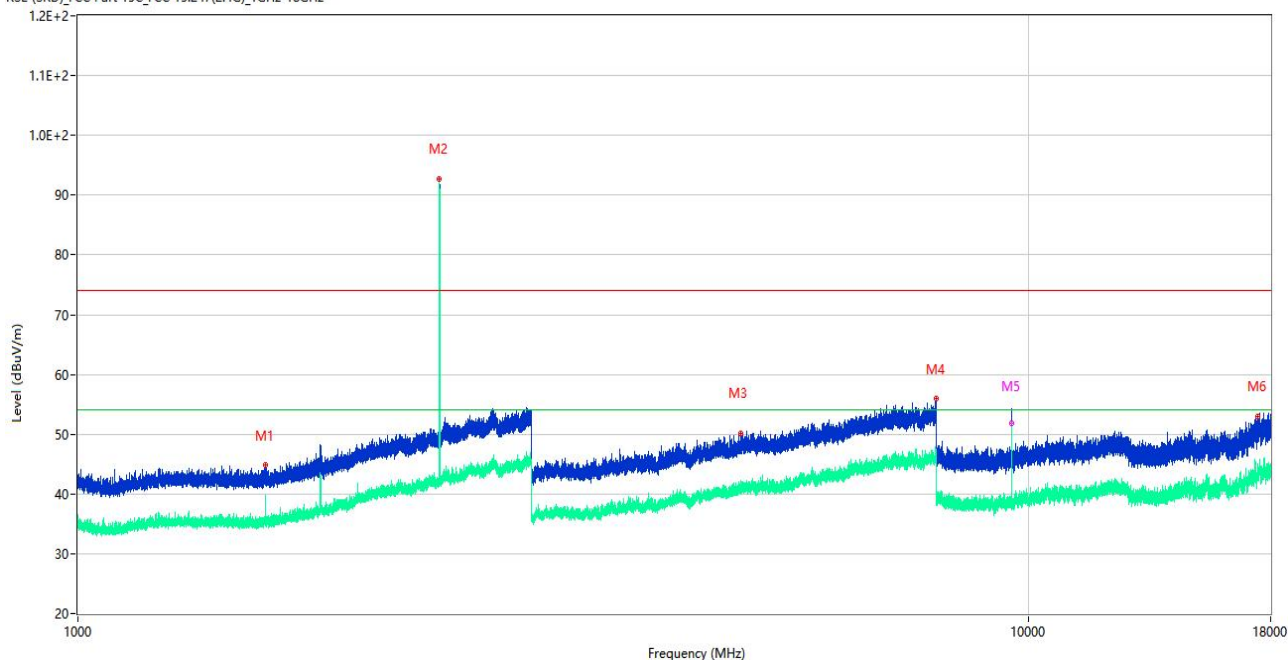
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	41.592	26.62	-25.46	40.0	13.38	Peak	80.00	100	Vertical	Pass
2	56.724	24.05	-25.39	40.0	15.95	Peak	347.00	100	Vertical	Pass
3	129.764	29.41	-26.15	43.5	14.09	Peak	219.00	100	Vertical	Pass
4	135.294	27.90	-25.32	43.5	15.60	Peak	355.00	100	Vertical	Pass
5	569.708	27.57	-15.43	46.0	18.43	Peak	72.00	100	Vertical	Pass
6	824.139	30.89	-9.44	46.0	15.11	Peak	2.00	100	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 LOW CHANNEL 1 GHz to 18 GHz, ANT H

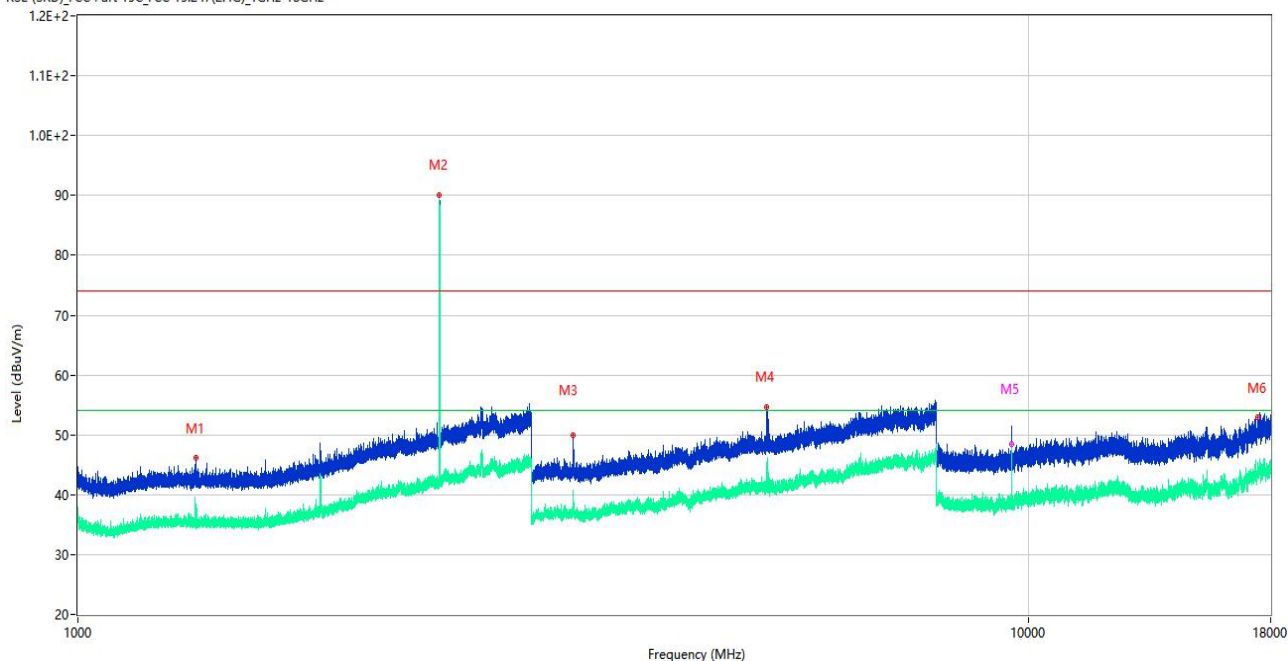
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1574.500	44.83	74.0	29.17	Peak	6.00	400	Horizontal	Pass
1**	1574.500	37.03	54.0	16.97	AV	6.00	400	Horizontal	Pass
2	2401.900	92.69	74.0	-18.69	Peak	16.00	100	Horizontal	N/A
2**	2401.900	92.21	54.0	-38.21	AV	16.00	100	Horizontal	N/A
3	4981.000	50.22	74.0	23.78	Peak	318.00	150	Horizontal	Pass
3**	4981.000	41.71	54.0	12.29	AV	318.00	150	Horizontal	Pass
4	7996.000	55.95	74.0	18.05	Peak	328.00	100	Horizontal	Pass
4**	7996.000	46.65	54.0	7.35	AV	328.00	100	Horizontal	Pass
5	9608.112	53.51	74.0	20.49	Peak	81.00	150	Horizontal	Pass
5**	9608.112	51.74	54.0	2.26	AV	81.00	150	Horizontal	Pass
6	17445.599	52.97	74.0	21.03	Peak	109.00	400	Horizontal	Pass
6**	17445.599	43.41	54.0	10.59	AV	109.00	400	Horizontal	Pass

GFSK LOW CHANNEL 1 GHz to 18 GHz, ANT V

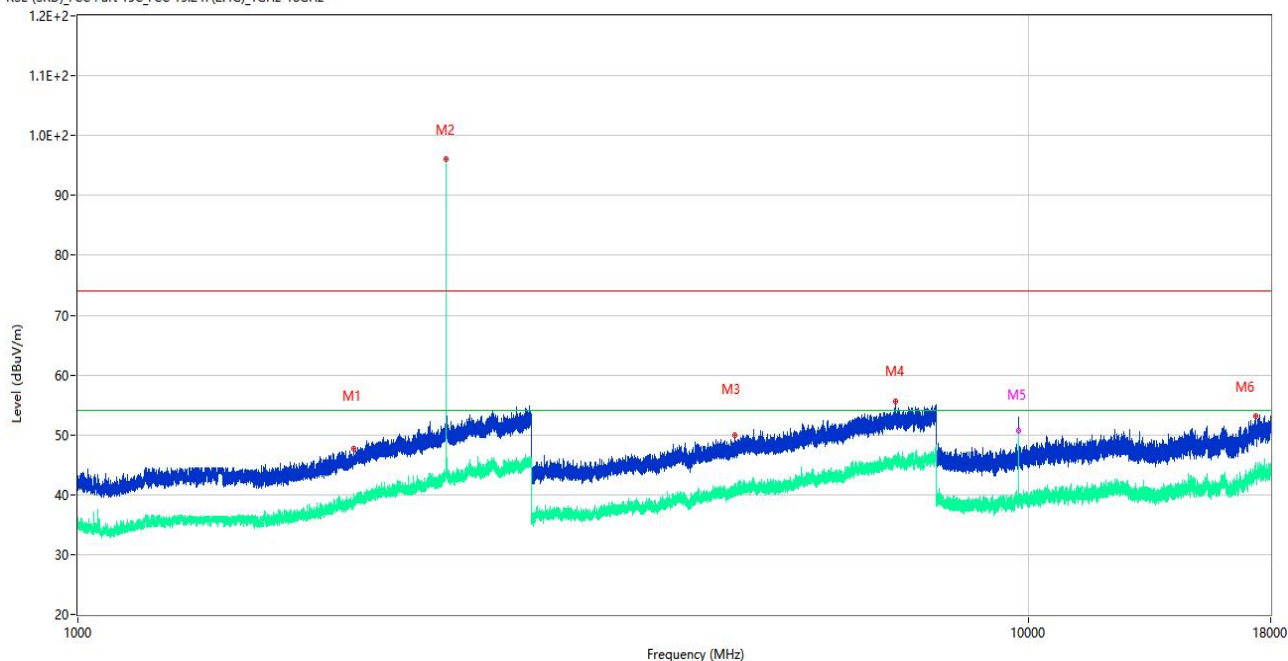
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1332.500	46.11	74.0	27.89	Peak	161.00	300	Vertical	Pass
1**	1332.500	38.41	54.0	15.59	AV	161.00	300	Vertical	Pass
2	2402.100	90.09	74.0	-16.09	Peak	81.00	150	Vertical	N/A
2**	2402.100	89.87	54.0	-35.87	AV	81.00	150	Vertical	N/A
3	3319.500	49.96	74.0	24.04	Peak	188.00	150	Vertical	Pass
3**	3319.500	37.69	54.0	16.31	AV	188.00	150	Vertical	Pass
4	5308.750	54.66	74.0	19.34	Peak	85.00	150	Vertical	Pass
4**	5308.750	43.69	54.0	10.31	AV	85.00	150	Vertical	Pass
5	9608.112	51.33	74.0	22.67	Peak	315.00	150	Vertical	Pass
5**	9608.112	48.49	54.0	5.51	AV	315.00	150	Vertical	Pass
6	17463.714	52.94	74.0	21.06	Peak	63.00	200	Vertical	Pass
6**	17463.714	44.04	54.0	9.96	AV	63.00	200	Vertical	Pass

GFSK MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H

RSE (SRD) FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1950.100	47.64	74.0	26.36	Peak	256.00	150	Horizontal	Pass
1**	1950.100	39.34	54.0	14.66	AV	256.00	150	Horizontal	Pass
2	2441.200	96.03	74.0	-22.03	Peak	4.00	150	Horizontal	N/A
2**	2441.200	95.71	54.0	-41.71	AV	4.00	150	Horizontal	N/A
3	4909.250	49.85	74.0	24.15	Peak	315.00	100	Horizontal	Pass
3**	4909.250	40.39	54.0	13.61	AV	315.00	100	Horizontal	Pass
4	7245.250	55.68	74.0	18.32	Peak	5.00	100	Horizontal	Pass
4**	7245.250	45.45	54.0	8.55	AV	5.00	100	Horizontal	Pass
5	9764.150	53.04	74.0	20.96	Peak	32.00	150	Horizontal	Pass
5**	9764.150	50.71	54.0	3.29	AV	32.00	150	Horizontal	Pass
6	17358.975	53.17	74.0	20.83	Peak	175.00	400	Horizontal	Pass
6**	17358.975	43.92	54.0	10.08	AV	175.00	400	Horizontal	Pass