

ANNEX A TEST RESULT

A.1 Output Power, E.I.R.P

Peak Power Test Data

Channel	Measured Output Peak Power		Limit		Verdict
	GFSK (BLE 1Mbps)		dBm	mW	
	dBm	mW			
Low Channel	8.45	7.00	30	1000	Pass
Middle Channel	8.62	7.27			Pass
High Channel	9.21	8.34			Pass

Channel	Measured Output Peak Power		Limit		Verdict
	GFSK (BLE 2Mbps)		dBm	mW	
	dBm	mW			
Low Channel	8.65	7.33	30	1000	Pass
Middle Channel	8.73	7.47			Pass
High Channel	9.28	8.46			Pass

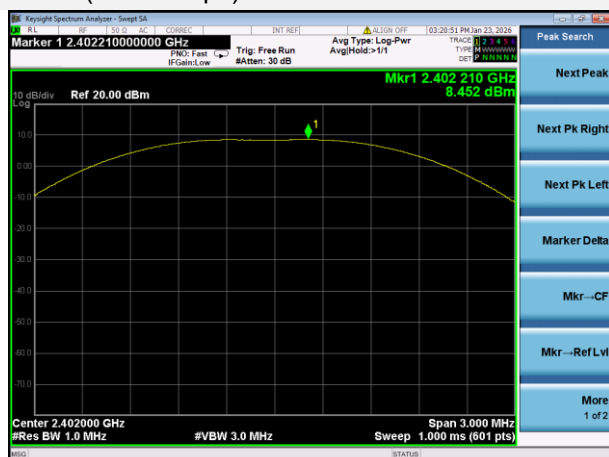
E.I.R.P Test Data (For ISCED)

Channel	E.I.R.P		Limit		Verdict
	GFSK (BLE 1Mbps)		dBm	mW	
	dBm	mW			
Low Channel	7.14	5.18	36	4000	Pass
Middle Channel	7.31	5.38			Pass
High Channel	7.90	6.17			Pass

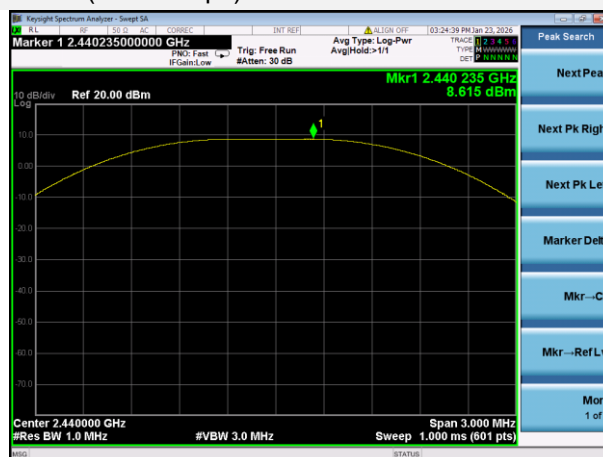
Channel	E.I.R.P		Limit		Verdict
	GFSK (BLE 2Mbps)		dBm	mW	
	dBm	mW			
Low Channel	7.34	5.42	36	4000	Pass
Middle Channel	7.42	5.52			Pass
High Channel	7.97	6.27			Pass

Test Plots

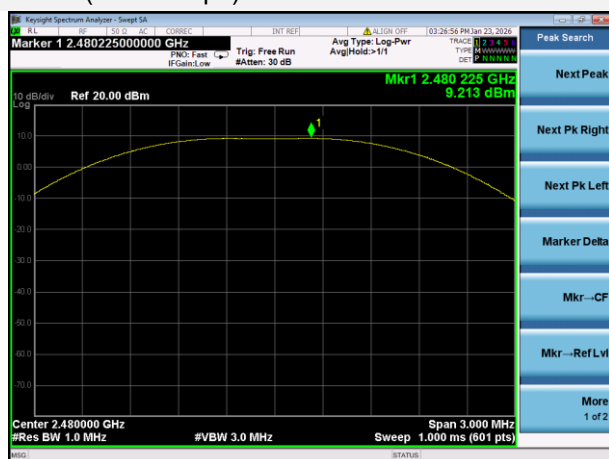
GFSK (BLE 1Mbps) LOW CHANNEL



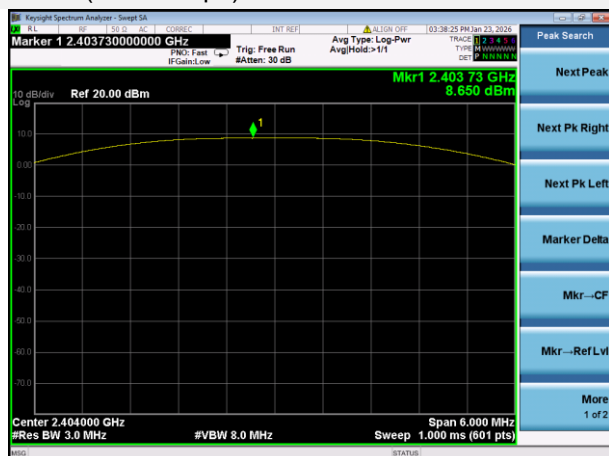
GFSK (BLE 1Mbps) MIDDLE CHANNEL



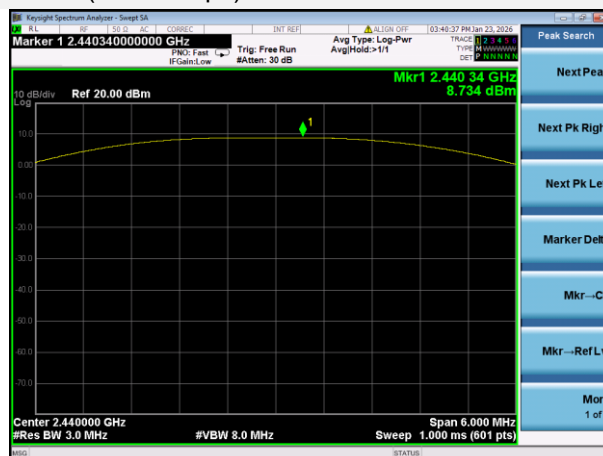
GFSK (BLE 1Mbps) HIGH CHANNEL



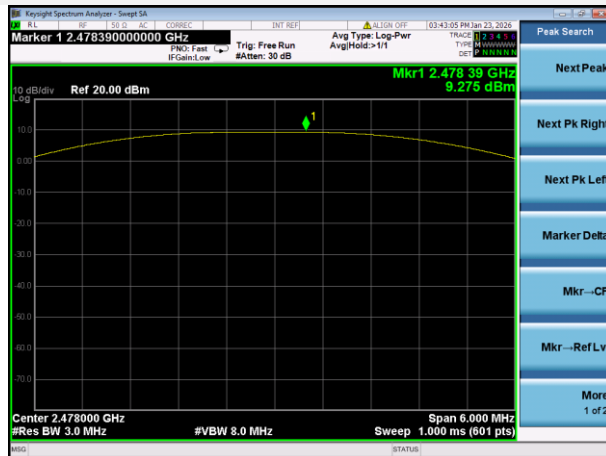
GFSK (BLE 2Mbps) LOW CHANNEL



GFSK (BLE 2Mbps) MIDDLE CHANNEL



GFSK (BLE 2Mbps) HIGH CHANNEL



A.2 Occupied Bandwidth

Test Data

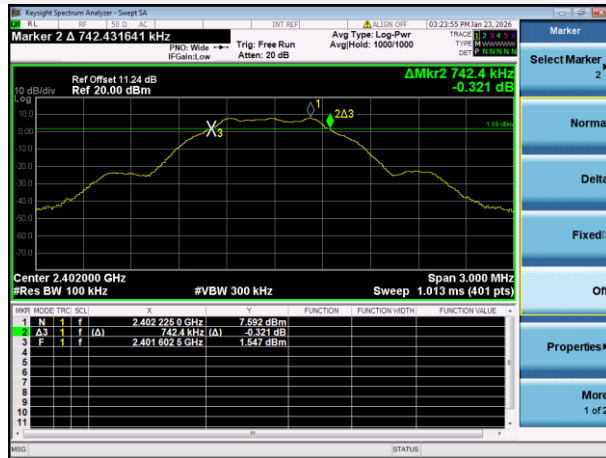
Test Mode	GFSK (BLE 1Mbps)		
Channel	6 dB Bandwidth (kHz)	99% Bandwidth (kHz)	6 dB Bandwidth Limits (kHz)
Low Channel	742.400	1049.600	≥500
Middle Channel	742.400	1051.700	≥500
High Channel	734.900	1042.100	≥500

Test Mode	GFSK (BLE 2Mbps)		
Channel	6 dB Bandwidth (kHz)	99% Bandwidth (kHz)	6 dB Bandwidth Limits (kHz)
Low Channel	1305.000	2040.600	≥500
Middle Channel	1305.000	2065.100	≥500
High Channel	1305.000	2056.900	≥500

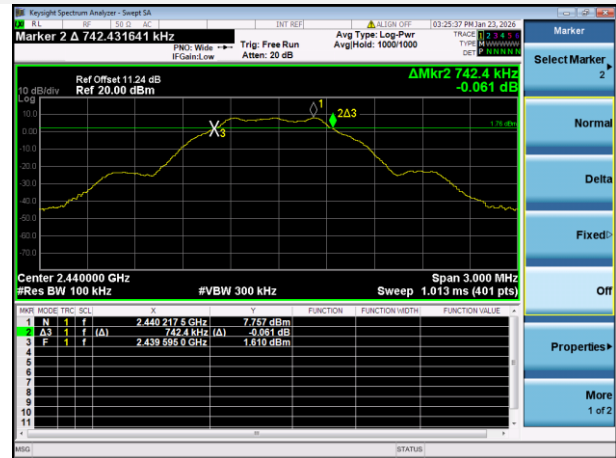
Test Plots

6 dB Bandwidth

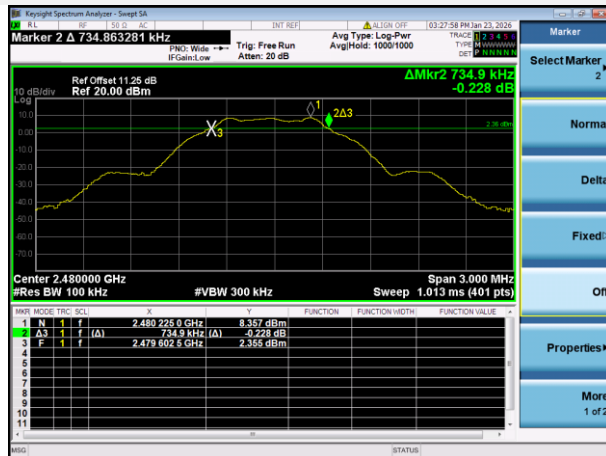
GFSK (BLE 1Mbps) LOW CHANNEL



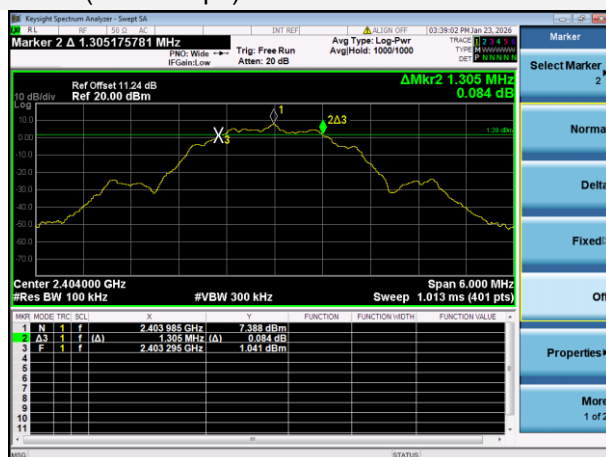
GFSK (BLE 1Mbps) MIDDLE CHANNEL



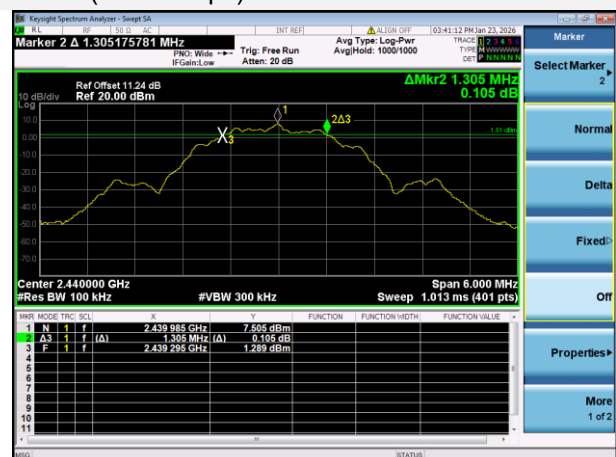
GFSK (BLE 1Mbps) HIGH CHANNEL



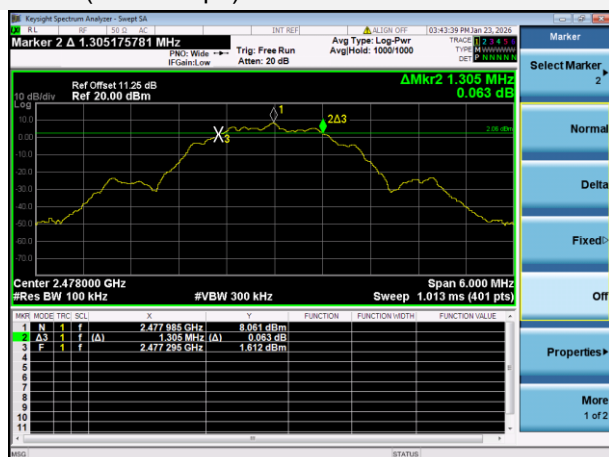
GFSK (BLE 2Mbps) LOW CHANNEL



GFSK (BLE 2Mbps) MIDDLE CHANNEL



GFSK (BLE 2Mbps) HIGH CHANNEL

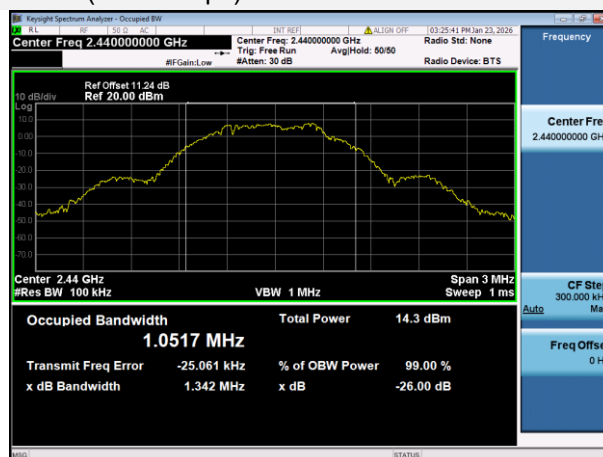


99% Bandwidth

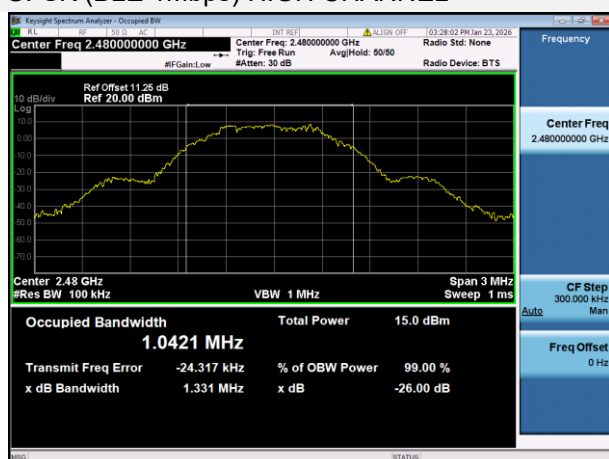
GFSK (BLE 1Mbps) LOW CHANNEL



GFSK (BLE 1Mbps) MIDDLE CHANNEL



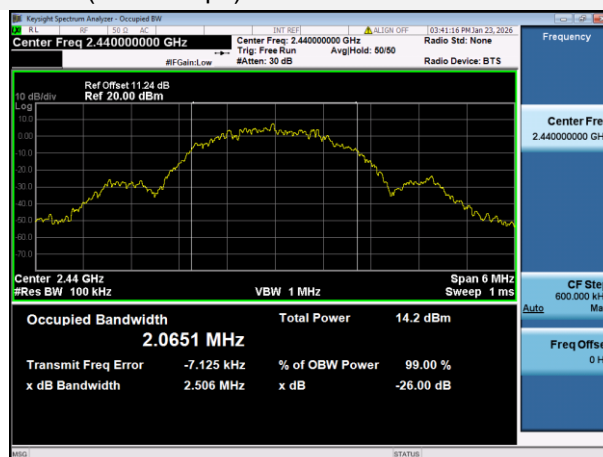
GFSK (BLE 1Mbps) HIGH CHANNEL



GFSK (BLE 2Mbps) LOW CHANNEL



GFSK (BLE 2Mbps) MIDDLE CHANNEL



GFSK (BLE 2Mbps) HIGH CHANNEL



A.3 Conducted Spurious Emissions

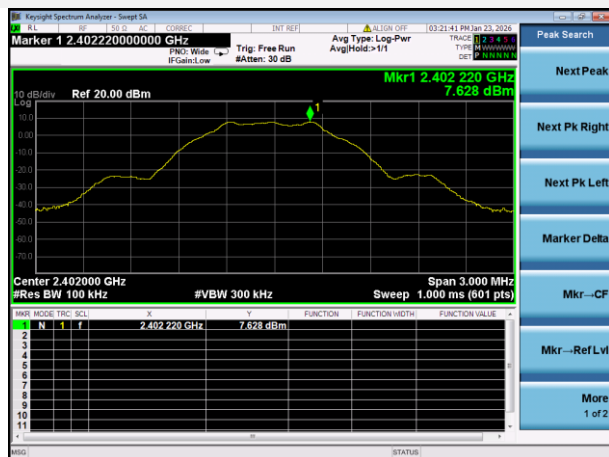
Test Data

GFSK (BLE 1Mbps)				
Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-33.67	7.63	-12.37	Pass
Middle Channel	-31.43	7.79	-12.21	Pass
High Channel	-32.94	8.37	-11.63	Pass

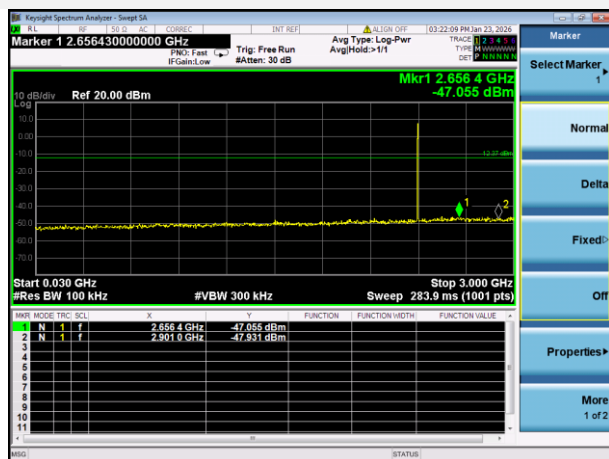
GFSK (BLE 2Mbps)				
Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-31.40	7.51	-12.49	Pass
Middle Channel	-34.66	7.64	-12.36	Pass
High Channel	-34.54	8.18	-11.82	Pass

Test Plots

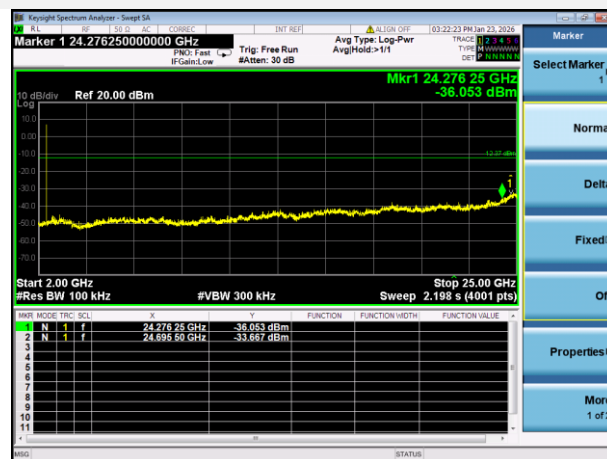
GFSK (BLE 1Mbps) LOW CHANNEL, CARRIER LEVEL



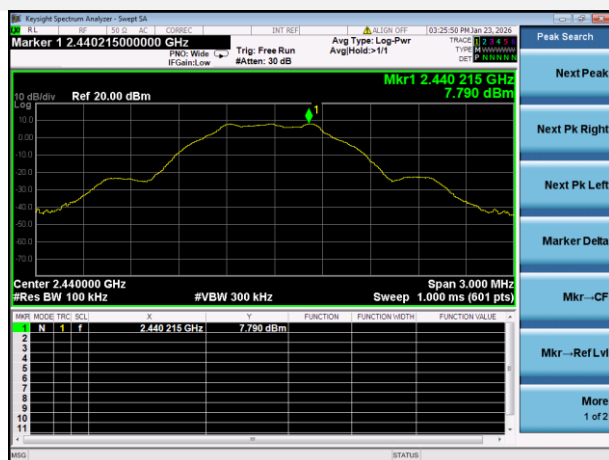
GFSK (BLE 1Mbps) LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



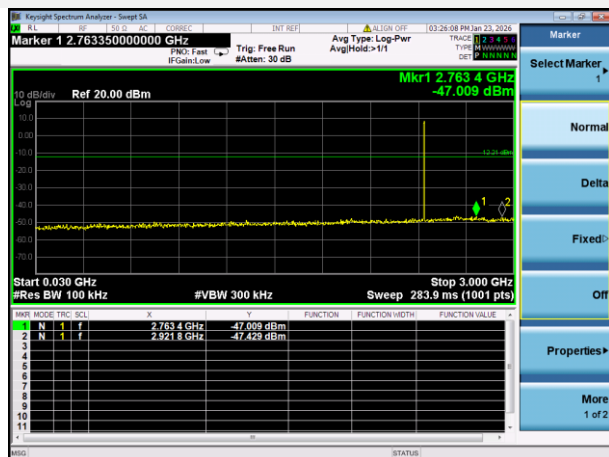
GFSK (BLE 1Mbps) LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



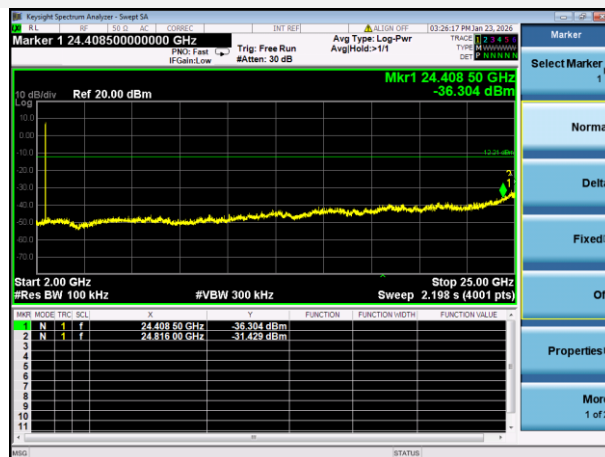
GFSK (BLE 1Mbps) MIDDLE CHANNEL, CARRIER LEVEL



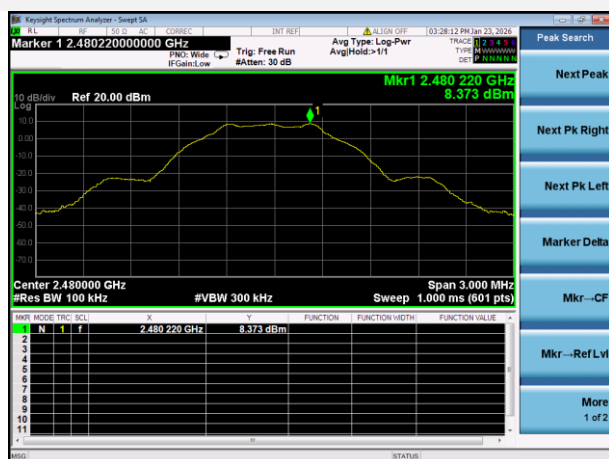
GFSK (BLE 1Mbps) MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



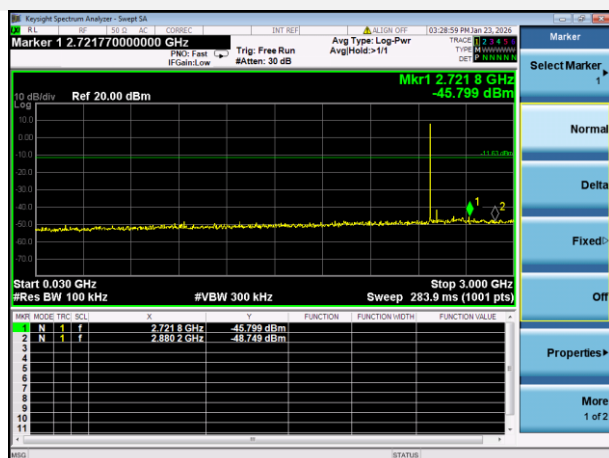
GFSK (BLE 1Mbps) MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



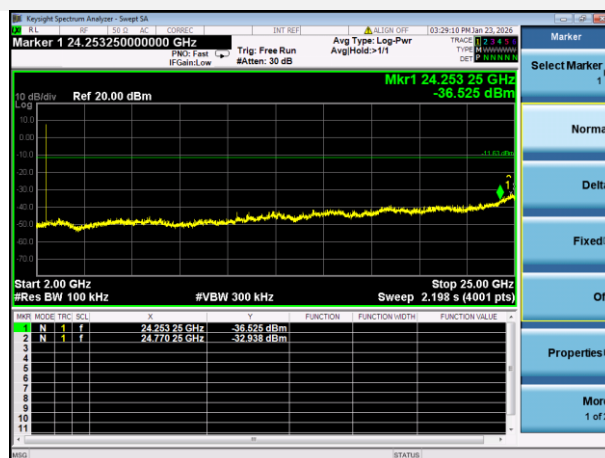
GFSK (BLE 1Mbps) HIGH CHANNEL, CARRIER LEVEL



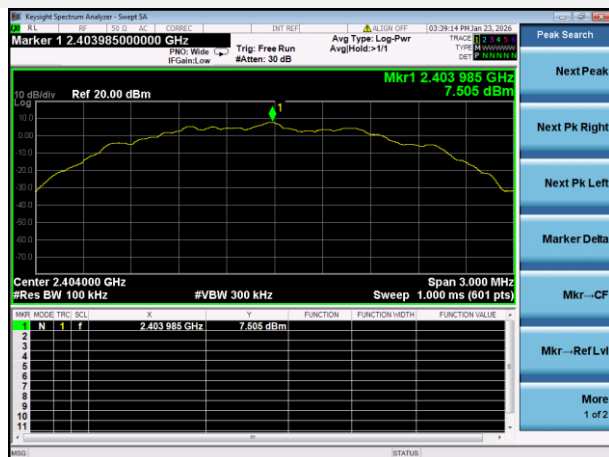
GFSK (BLE 1Mbps) HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



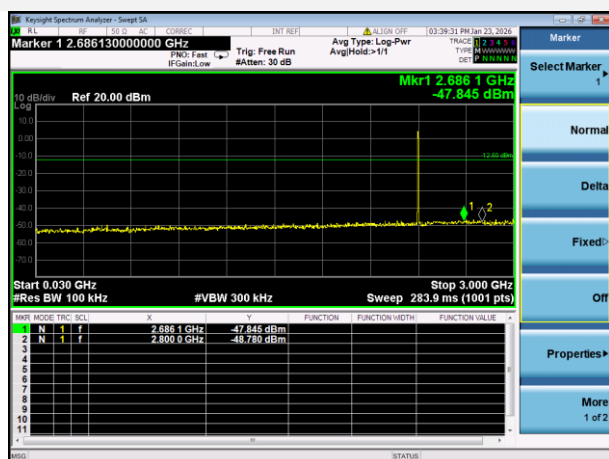
GFSK (BLE 1Mbps) HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



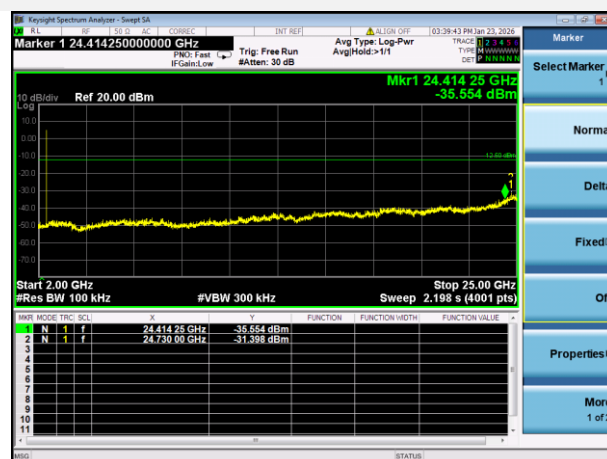
GFSK (BLE 2Mbps) LOW CHANNEL, CARRIER LEVEL



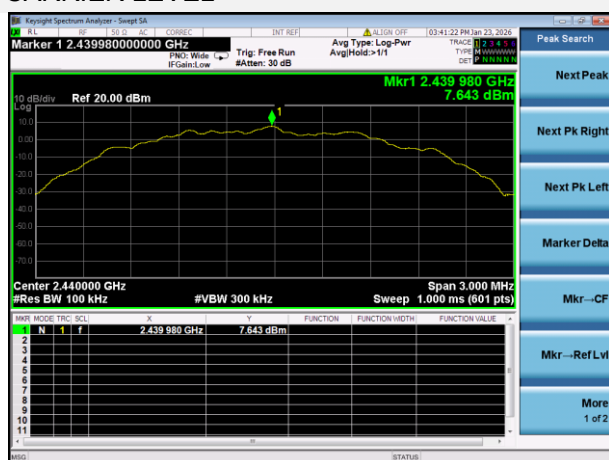
GFSK (BLE 2Mbps) LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



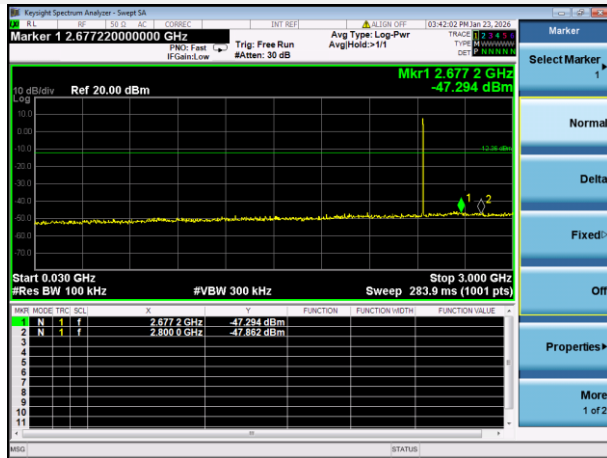
GFSK (BLE 2Mbps) LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



GFSK (BLE 2Mbps) MIDDLE CHANNEL, CARRIER LEVEL



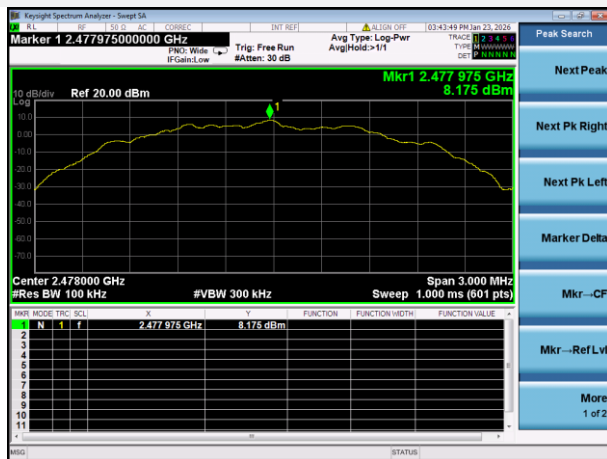
GFSK (BLE 2Mbps) MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



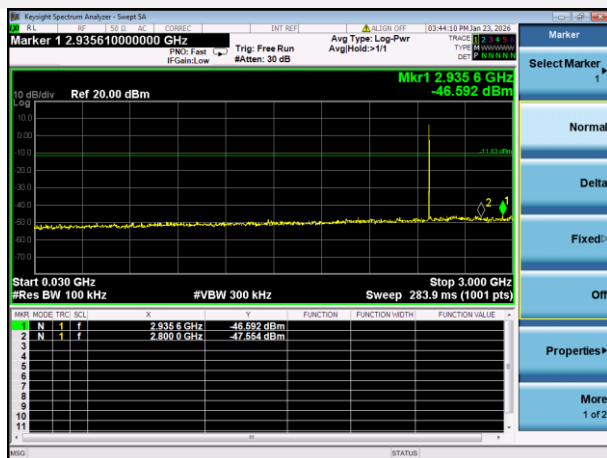
GFSK (BLE 2Mbps) MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



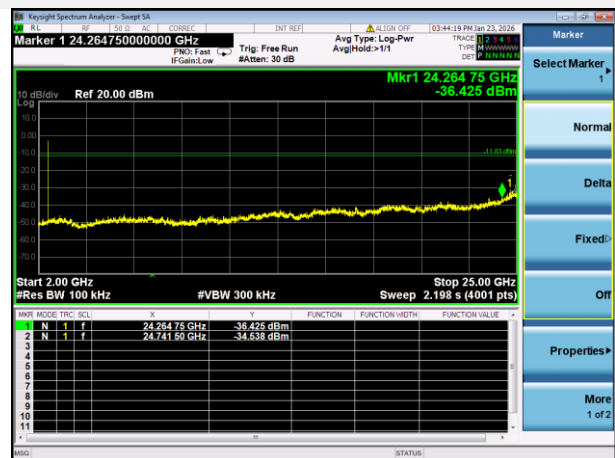
GFSK (BLE 2Mbps) HIGH CHANNEL, CARRIER LEVEL



GFSK (BLE 2Mbps) HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



GFSK (BLE 2Mbps) HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



A.4 Band Edge (Authorized-band band-edge)

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

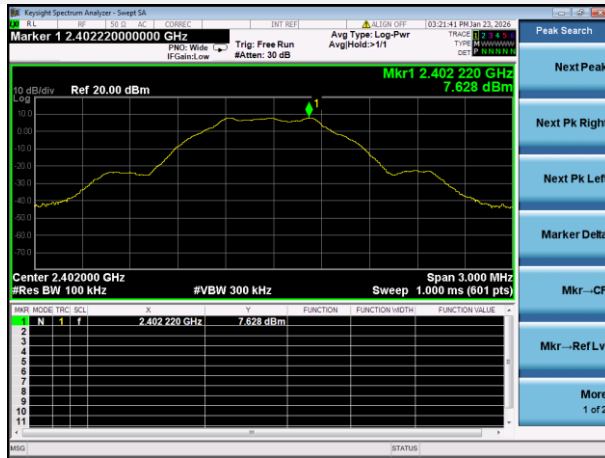
Test Data

GFSK (BLE 1Mbps)				
Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-46.14	7.63	-12.37	Pass
High Channel	-46.33	8.37	-11.63	Pass

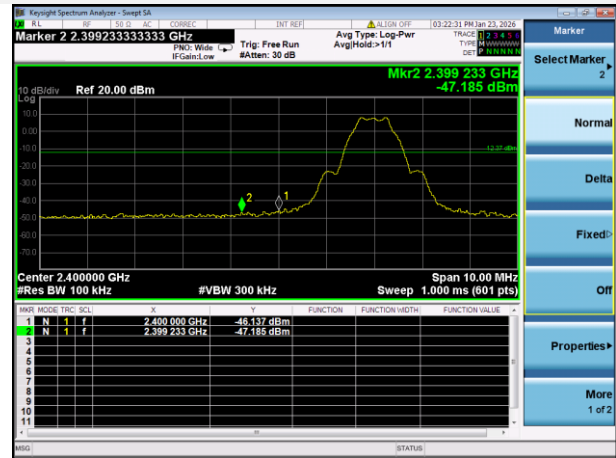
GFSK (BLE 2Mbps)				
Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-47.50	7.51	-12.49	Pass
High Channel	-46.94	8.18	-11.82	Pass

Test Plots

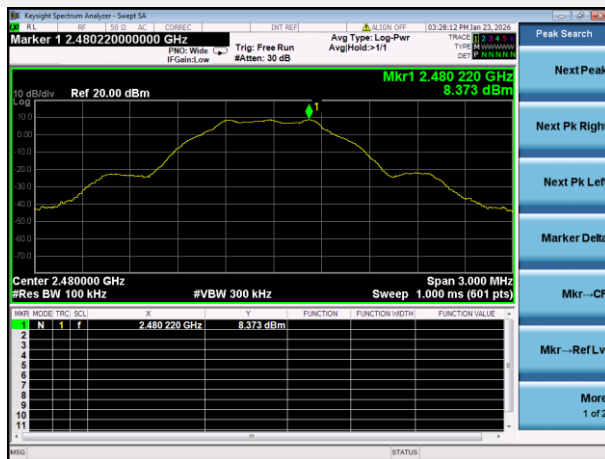
GFSK (BLE 1Mbps) LOW CHANNEL, CARRIER LEVEL



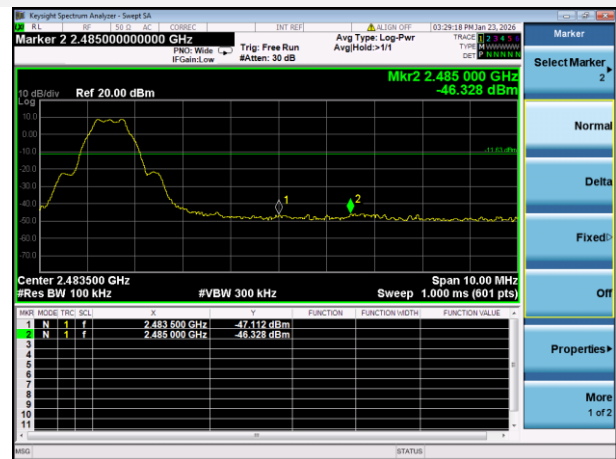
GFSK (BLE 1Mbps) LOW CHANNEL, BAND EDGE



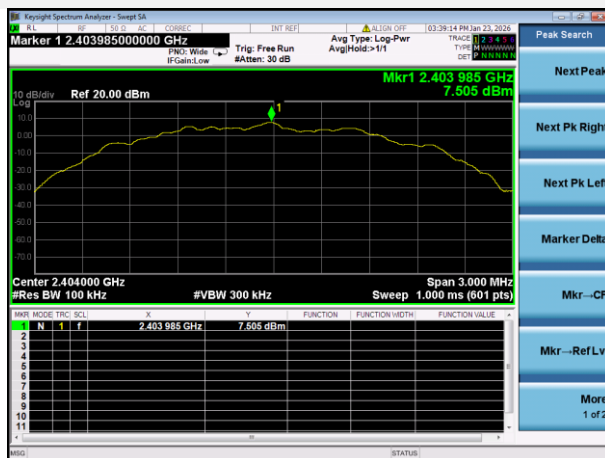
GFSK (BLE 1Mbps) HIGH CHANNEL, CARRIER LEVEL



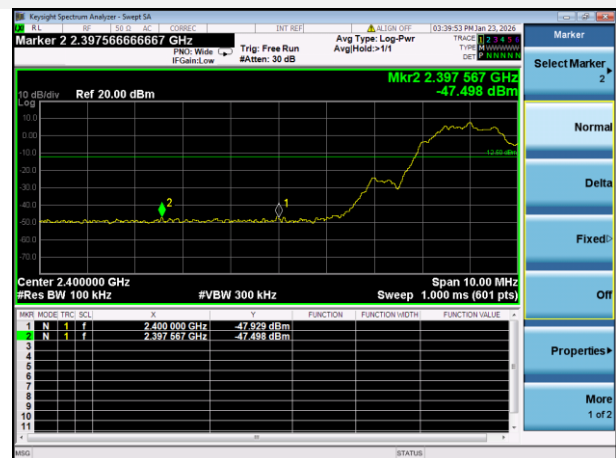
GFSK (BLE 1Mbps) HIGH CHANNEL, BAND EDGE



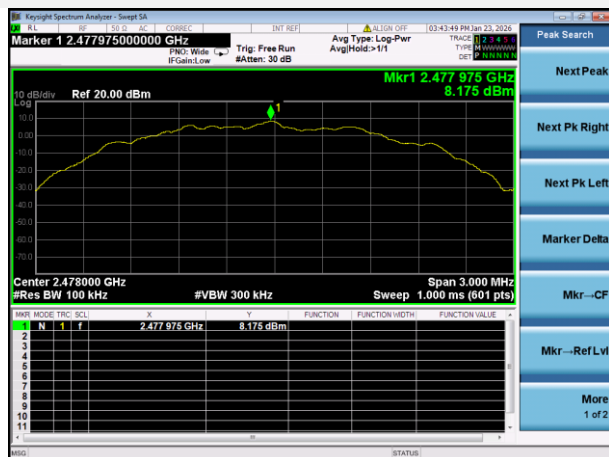
GFSK (BLE 2Mbps) LOW CHANNEL, CARRIER LEVEL



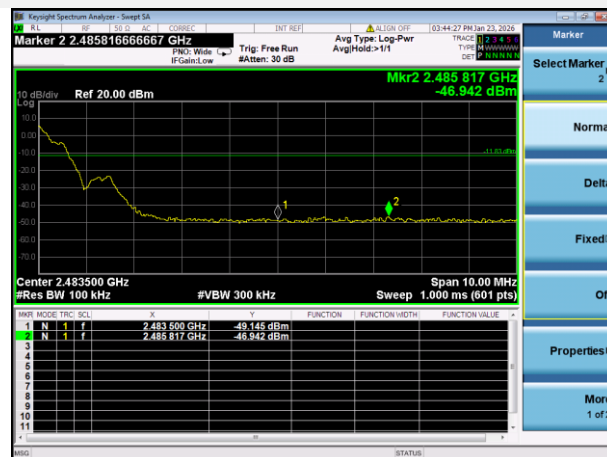
GFSK (BLE 2Mbps) LOW CHANNEL, BAND EDGE



GFSK (BLE 2Mbps) HIGH CHANNEL, CARRIER LEVEL



GFSK (BLE 2Mbps) HIGH CHANNEL, BAND EDGE



A.5 Conducted Emissions

Note¹: The EUT is working in the Normal link mode. All modes have been tested and normal link mode is worst.

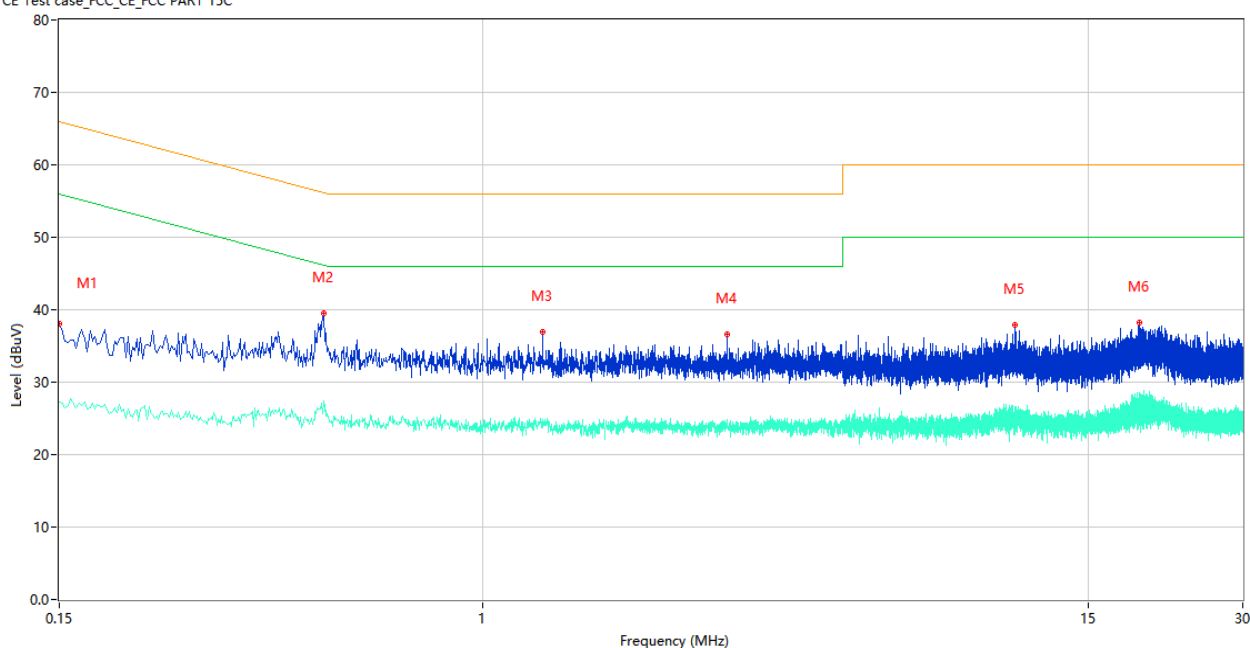
Note²: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (120 VAC, 60 Hz) shown here.

Note³: Results (dBuV) = Original reading level of Spectrum Analyzer (dBuV) + Factor (dB)

Test Data and Plots

PHASE L

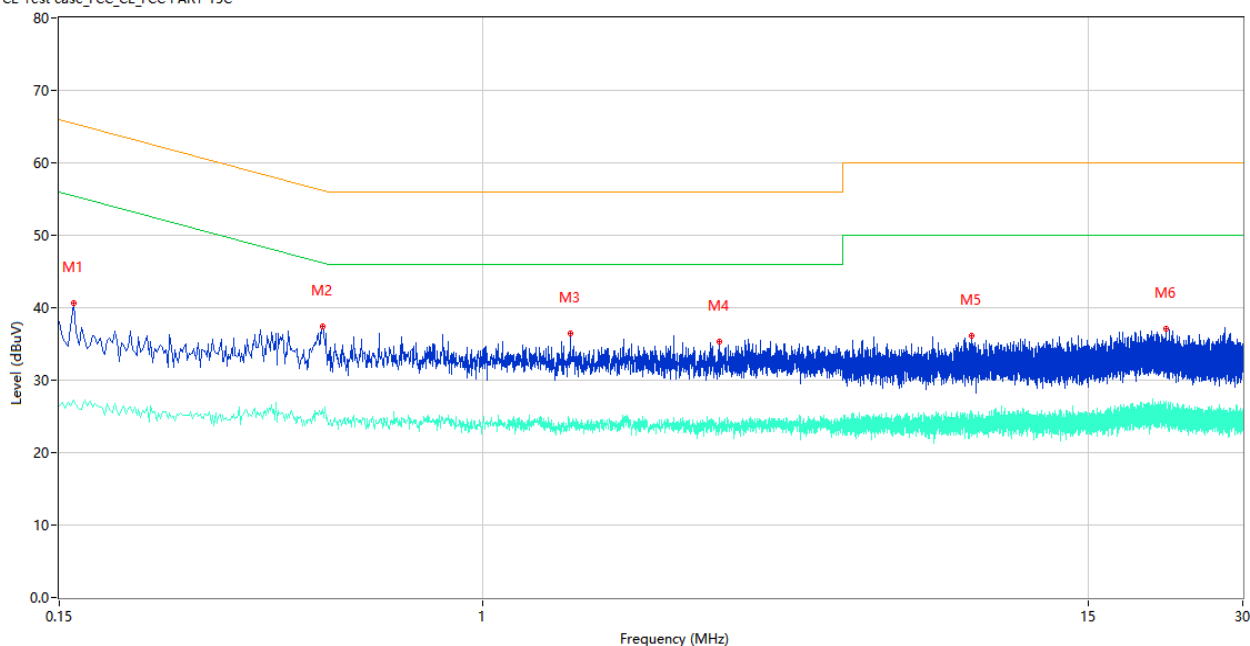
CE Test case_FCC_CE_FCC PART 15C



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.150	38.07	9.86	66.00	27.93	Peak	L	Pass
1**	0.150	27.28	9.86	56.00	28.72	AV	L	Pass
2	0.490	39.47	10.05	56.17	16.70	Peak	L	Pass
2**	0.490	27.39	10.05	46.17	18.78	AV	L	Pass
3	1.306	36.88	10.50	56.00	19.12	Peak	L	Pass
3**	1.306	24.59	10.50	46.00	21.41	AV	L	Pass
4	2.986	36.62	10.32	56.00	19.38	Peak	L	Pass
4**	2.986	23.71	10.32	46.00	22.29	AV	L	Pass
5	10.808	37.83	10.52	60.00	22.17	Peak	L	Pass
5**	10.808	26.04	10.52	50.00	23.96	AV	L	Pass
6	18.928	38.29	11.08	60.00	21.71	Peak	L	Pass
6**	18.928	24.00	11.08	50.00	26.00	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	0.160	40.70	9.85	65.46	24.76	Peak	N	Pass
1**	0.160	27.22	9.85	55.46	28.24	AV	N	Pass
2	0.488	37.39	10.05	56.20	18.81	Peak	N	Pass
2**	0.488	25.93	10.05	46.20	20.27	AV	N	Pass
3	1.478	36.47	10.24	56.00	19.53	Peak	N	Pass
3**	1.478	24.02	10.24	46.00	21.98	AV	N	Pass
4	2.874	35.24	9.94	56.00	20.76	Peak	N	Pass
4**	2.874	23.05	9.94	46.00	22.95	AV	N	Pass
5	8.890	36.10	10.32	60.00	23.90	Peak	N	Pass
5**	8.890	25.33	10.32	50.00	24.67	AV	N	Pass
6	21.258	37.09	11.30	60.00	22.91	Peak	N	Pass
6**	21.258	25.49	11.30	50.00	24.51	AV	N	Pass

A.6 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 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.

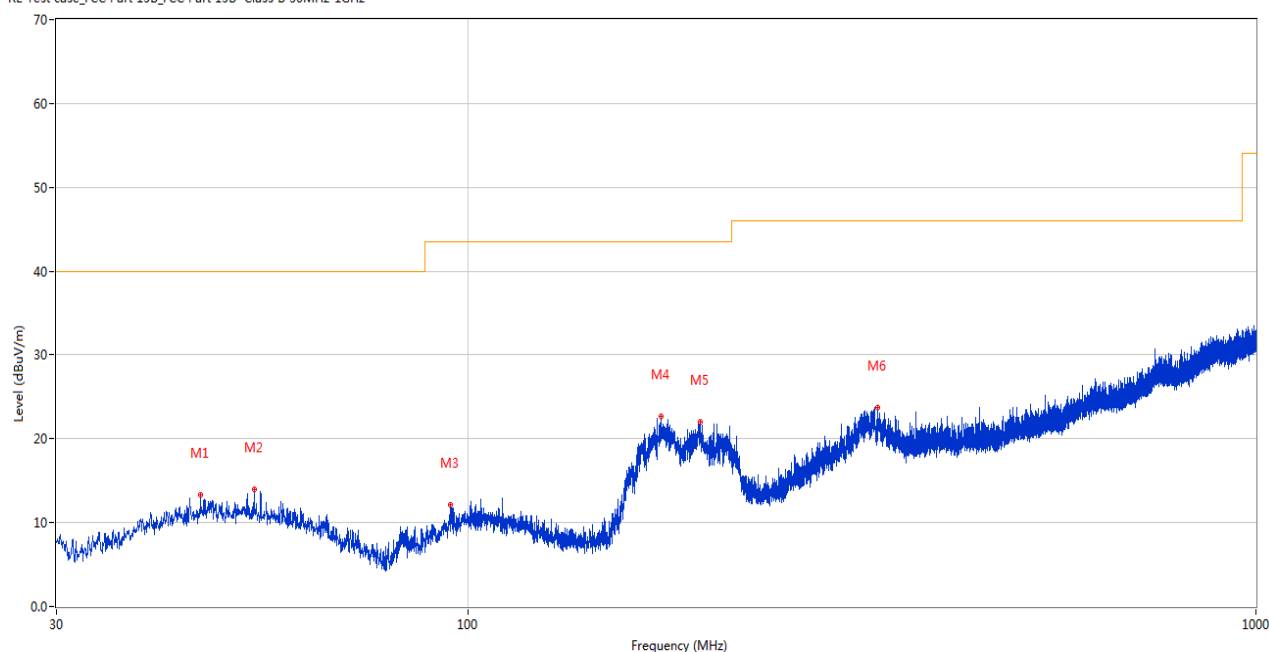
Note ⁴: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and BLE 2M-High channel mode is the worst.

Note ⁵: Results (dBuV/m) = Original reading level of Spectrum Analyzer (dBuV/m) + Factor (dB)

Test Data and Plots

30 MHz to 1 GHz, ANT H

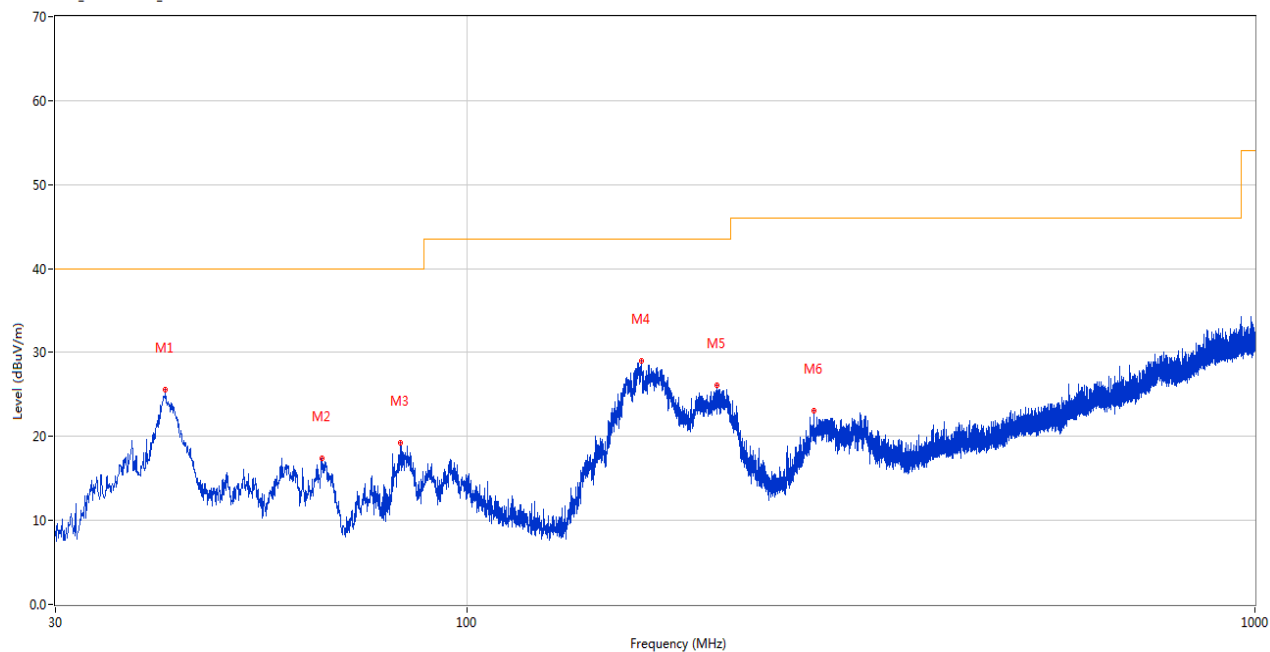
RE Test case_FCC Part 15B_FCC Part 15B Class B 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	45.714	13.37	-24.37	40.0	26.63	Peak	304.60	100	Horizontal	Pass
2	53.474	13.92	-24.15	40.0	26.08	Peak	51.70	100	Horizontal	Pass
3	94.893	12.11	-26.39	43.5	31.39	Peak	62.00	100	Horizontal	Pass
4	175.839	22.63	-26.85	43.5	20.87	Peak	296.30	100	Horizontal	Pass
5	196.889	22.04	-24.11	43.5	21.46	Peak	267.30	100	Horizontal	Pass
6	330.991	23.78	-20.41	46.0	22.22	Peak	267.30	100	Horizontal	Pass

30 MHz to 1 GHz, ANT V

RE Test case_FCC Part 15B_FCC Part 15B Class B 30MHz-1GHz



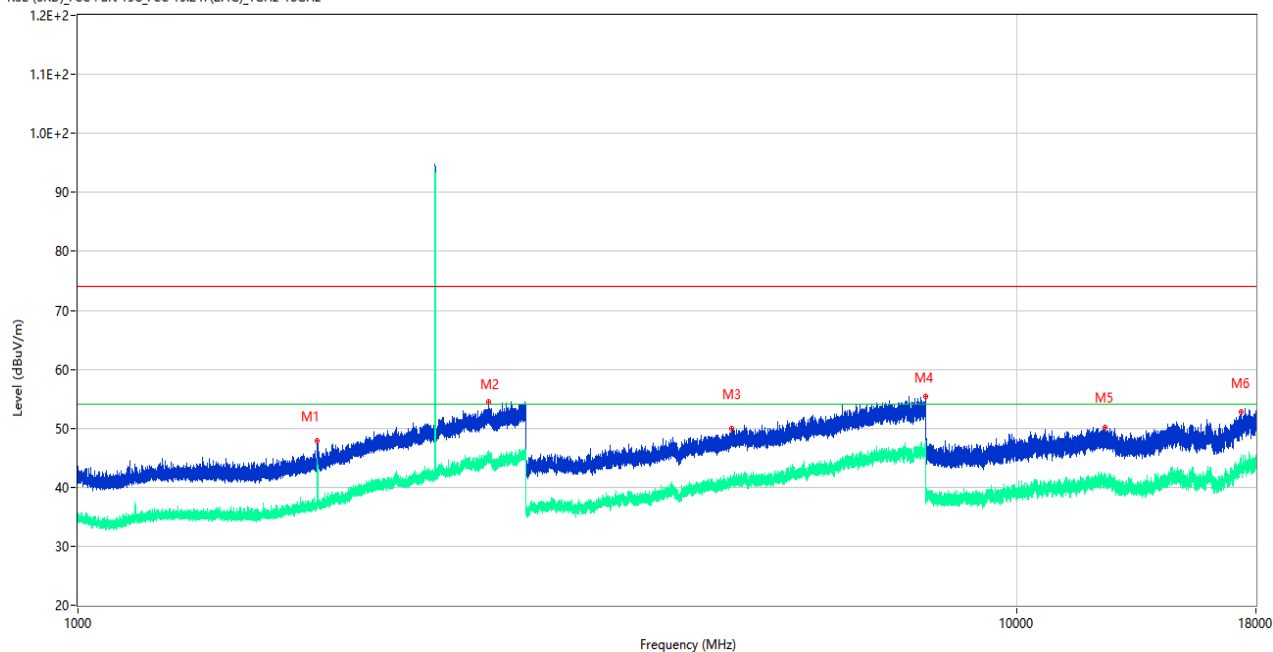
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	41.398	25.52	-25.20	40.0	14.48	Peak	153.10	100	Vertical	Pass
2	65.308	17.38	-26.71	40.0	22.62	Peak	89.40	100	Vertical	Pass
3	82.283	19.28	-30.20	40.0	20.72	Peak	70.10	100	Vertical	Pass
4	166.576	28.96	-27.26	43.5	14.54	Peak	349.40	100	Vertical	Pass
5	207.656	26.13	-24.77	43.5	17.37	Peak	255.40	100	Vertical	Pass
6	275.313	23.02	-22.15	46.0	22.98	Peak	308.20	100	Vertical	Pass

Note¹: The marked spikes near 2400 MHz with circle should be ignored because they are Fundamental signal.

Note²: The spurious from 18GHz-25GHz is noise only, do not show on the report.

GFSK (BLE 1Mbps) 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	1803.746	47.98	74.0	26.02	Peak	127.00	200	Horizontal	Pass
1**	1803.746	43.18	54.0	10.83	AV	127.00	200	Horizontal	Pass
2	2733.115	54.67	74.0	19.33	Peak	0.00	200	Horizontal	Pass
2**	2733.115	45.15	54.0	8.85	AV	0.00	200	Horizontal	Pass
3	4974.651	50.00	74.0	24.00	Peak	37.00	200	Horizontal	Pass
3**	4974.651	41.50	54.0	12.50	AV	37.00	200	Horizontal	Pass
4	7998.036	55.72	74.0	18.28	Peak	340.00	400	Horizontal	Pass
4**	7998.036	48.10	54.0	5.91	AV	340.00	400	Horizontal	Pass
5	12432.692	50.18	74.0	23.82	Peak	20.00	400	Horizontal	Pass
5**	12432.692	41.18	54.0	12.82	AV	20.00	400	Horizontal	Pass
6	17343.420	52.88	74.0	21.12	Peak	114.00	300	Horizontal	Pass
6**	17343.420	44.09	54.0	9.91	AV	114.00	300	Horizontal	Pass

GFSK (BLE 1Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1167.355	44.52	74.0	29.48	Peak	203.00	100	Vertical	Pass
1**	1167.355	32.65	54.0	21.35	AV	203.00	100	Vertical	Pass
2	2991.091	50.91	74.0	23.09	Peak	131.00	300	Vertical	Pass
2**	2991.091	39.68	54.0	14.32	AV	131.00	300	Vertical	Pass
3	6803.661	52.46	74.0	21.54	Peak	305.00	200	Vertical	Pass
3**	6803.661	43.32	54.0	10.68	AV	305.00	200	Vertical	Pass
4	7970.459	56.67	74.0	17.33	Peak	46.00	200	Vertical	Pass
4**	7970.459	43.76	54.0	10.25	AV	46.00	200	Vertical	Pass
5	12495.158	49.37	74.0	24.63	Peak	192.00	200	Vertical	Pass
5**	12495.158	40.45	54.0	13.55	AV	192.00	200	Vertical	Pass
6	17098.107	52.56	74.0	21.44	Peak	302.00	300	Vertical	Pass
6**	17098.107	43.47	54.0	10.54	AV	302.00	300	Vertical	Pass

GFSK (BLE 1Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1799.340	47.25	74.0	26.75	Peak	206.00	300	Horizontal	Pass
1**	1799.340	42.72	54.0	11.29	AV	206.00	300	Horizontal	Pass
2	2739.125	53.95	74.0	20.05	Peak	58.00	400	Horizontal	Pass
2**	2739.125	45.11	54.0	8.89	AV	58.00	400	Horizontal	Pass
3	4977.317	49.72	74.0	24.28	Peak	20.00	200	Horizontal	Pass
3**	4977.317	40.64	54.0	13.36	AV	20.00	200	Horizontal	Pass
4	7999.971	55.63	74.0	18.37	Peak	207.00	100	Horizontal	Pass
4**	7999.971	47.86	54.0	6.15	AV	207.00	100	Horizontal	Pass
5	12436.172	49.28	74.0	24.72	Peak	111.00	200	Horizontal	Pass
5**	12436.172	40.64	54.0	13.36	AV	111.00	200	Horizontal	Pass
6	17343.730	52.71	74.0	21.29	Peak	308.00	200	Horizontal	Pass
6**	17343.730	43.74	54.0	10.26	AV	308.00	200	Horizontal	Pass

GFSK (BLE 1Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1161.332	44.04	74.0	29.96	Peak	89.00	200	Vertical	Pass
1**	1161.332	32.16	54.0	21.84	AV	89.00	200	Vertical	Pass
2	2993.825	50.05	74.0	23.95	Peak	101.00	400	Vertical	Pass
2**	2993.825	39.36	54.0	14.64	AV	101.00	400	Vertical	Pass
3	6803.452	52.27	74.0	21.73	Peak	139.00	200	Vertical	Pass
3**	6803.452	43.22	54.0	10.78	AV	139.00	200	Vertical	Pass
4	7968.477	55.97	74.0	18.03	Peak	311.00	400	Vertical	Pass
4**	7968.477	43.75	54.0	10.26	AV	311.00	400	Vertical	Pass
5	12493.213	48.71	74.0	25.29	Peak	45.00	400	Vertical	Pass
5**	12493.213	39.62	54.0	14.38	AV	45.00	400	Vertical	Pass
6	17099.712	52.55	74.0	21.45	Peak	321.00	300	Vertical	Pass
6**	17099.712	43.22	54.0	10.79	AV	321.00	300	Vertical	Pass

GFSK (BLE 1Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT H

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1797.814	47.76	74.0	26.24	Peak	326.00	100	Horizontal	Pass
1**	1797.814	42.48	54.0	11.53	AV	326.00	100	Horizontal	Pass
2	2736.238	54.05	74.0	19.95	Peak	340.00	400	Horizontal	Pass
2**	2736.238	44.85	54.0	9.15	AV	340.00	400	Horizontal	Pass
3	4978.381	49.28	74.0	24.72	Peak	60.00	200	Horizontal	Pass
3**	4978.381	41.15	54.0	12.85	AV	60.00	200	Horizontal	Pass
4	7994.841	55.18	74.0	18.82	Peak	178.00	200	Horizontal	Pass
4**	7994.841	47.68	54.0	6.33	AV	178.00	200	Horizontal	Pass
5	12434.390	49.52	74.0	24.48	Peak	278.00	200	Horizontal	Pass
5**	12434.390	40.30	54.0	13.70	AV	278.00	200	Horizontal	Pass
6	17341.463	52.33	74.0	21.67	Peak	119.00	100	Horizontal	Pass
6**	17341.463	44.07	54.0	9.93	AV	119.00	100	Horizontal	Pass

GFSK (BLE 1Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1168.314	44.46	74.0	29.54	Peak	133.00	300	Vertical	Pass
1**	1168.314	32.63	54.0	21.37	AV	133.00	300	Vertical	Pass
2	2989.071	50.88	74.0	23.12	Peak	38.00	200	Vertical	Pass
2**	2989.071	39.63	54.0	14.37	AV	38.00	200	Vertical	Pass
3	6800.254	52.45	74.0	21.55	Peak	107.00	200	Vertical	Pass
3**	6800.254	43.27	54.0	10.73	AV	107.00	200	Vertical	Pass
4	7970.583	56.58	74.0	17.42	Peak	324.00	400	Vertical	Pass
4**	7970.583	43.70	54.0	10.30	AV	324.00	400	Vertical	Pass
5	12492.090	49.32	74.0	24.68	Peak	232.00	200	Vertical	Pass
5**	12492.090	40.45	54.0	13.55	AV	232.00	200	Vertical	Pass
6	17097.930	52.53	74.0	21.47	Peak	99.00	100	Vertical	Pass
6**	17097.930	43.37	54.0	10.64	AV	99.00	100	Vertical	Pass

GFSK (BLE 2Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT H

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1286.137	47.54	74.0	26.46	Peak	25.00	200	Horizontal	Pass
1**	1286.137	42.66	54.0	11.35	AV	25.00	200	Horizontal	Pass
2	2768.522	53.78	74.0	20.22	Peak	144.00	200	Horizontal	Pass
2**	2768.522	44.70	54.0	9.30	AV	144.00	200	Horizontal	Pass
3	5164.403	49.63	74.0	24.37	Peak	120.00	200	Horizontal	Pass
3**	5164.403	41.38	54.0	12.62	AV	120.00	200	Horizontal	Pass
4	6806.633	55.38	74.0	18.62	Peak	32.00	100	Horizontal	Pass
4**	6806.633	47.82	54.0	6.19	AV	32.00	100	Horizontal	Pass
5	13468.983	50.06	74.0	23.94	Peak	157.00	200	Horizontal	Pass
5**	13468.983	41.06	54.0	12.94	AV	157.00	200	Horizontal	Pass
6	17466.201	52.13	74.0	21.87	Peak	357.00	200	Horizontal	Pass
6**	17466.201	43.80	54.0	10.20	AV	357.00	200	Horizontal	Pass

GFSK (BLE 2Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1282.962	44.52	74.0	29.49	Peak	241.00	300	Vertical	Pass
1**	1282.962	32.56	54.0	21.44	AV	241.00	300	Vertical	Pass
2	2772.468	50.90	74.0	23.10	Peak	253.00	200	Vertical	Pass
2**	2772.468	39.67	54.0	14.33	AV	253.00	200	Vertical	Pass
3	5168.923	52.40	74.0	21.60	Peak	272.00	200	Vertical	Pass
3**	5168.923	43.30	54.0	10.70	AV	272.00	200	Vertical	Pass
4	6808.781	56.58	74.0	17.42	Peak	294.00	200	Vertical	Pass
4**	6808.781	43.66	54.0	10.34	AV	294.00	200	Vertical	Pass
5	13468.641	49.29	74.0	24.71	Peak	75.00	400	Vertical	Pass
5**	13468.641	40.41	54.0	13.59	AV	75.00	400	Vertical	Pass
6	17466.915	52.52	74.0	21.49	Peak	7.00	400	Vertical	Pass
6**	17466.915	43.44	54.0	10.57	AV	7.00	400	Vertical	Pass

GFSK (BLE 2Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1285.617	47.97	74.0	26.03	Peak	162.00	400	Horizontal	Pass
1**	1285.617	42.42	54.0	11.59	AV	162.00	400	Horizontal	Pass
2	2770.891	54.21	74.0	19.79	Peak	66.00	300	Horizontal	Pass
2**	2770.891	44.97	54.0	9.03	AV	66.00	300	Horizontal	Pass
3	5168.996	49.57	74.0	24.43	Peak	82.00	200	Horizontal	Pass
3**	5168.996	41.10	54.0	12.90	AV	82.00	200	Horizontal	Pass
4	6807.196	55.36	74.0	18.64	Peak	192.00	200	Horizontal	Pass
4**	6807.196	47.42	54.0	6.59	AV	192.00	200	Horizontal	Pass
5	13467.592	50.01	74.0	23.99	Peak	93.00	100	Horizontal	Pass
5**	13467.592	40.48	54.0	13.52	AV	93.00	100	Horizontal	Pass
6	17468.854	52.40	74.0	21.60	Peak	292.00	100	Horizontal	Pass
6**	17468.854	43.79	54.0	10.21	AV	292.00	100	Horizontal	Pass

GFSK (BLE 2Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1288.783	44.43	74.0	29.57	Peak	159.00	200	Vertical	Pass
1**	1288.783	32.59	54.0	21.41	AV	159.00	200	Vertical	Pass
2	2772.270	50.85	74.0	23.15	Peak	207.00	300	Vertical	Pass
2**	2772.270	39.67	54.0	14.33	AV	207.00	300	Vertical	Pass
3	5164.383	52.39	74.0	21.62	Peak	193.00	200	Vertical	Pass
3**	5164.383	43.24	54.0	10.76	AV	193.00	200	Vertical	Pass
4	6807.174	56.60	74.0	17.40	Peak	69.00	400	Vertical	Pass
4**	6807.174	43.67	54.0	10.33	AV	69.00	400	Vertical	Pass
5	13464.536	49.37	74.0	24.63	Peak	112.00	300	Vertical	Pass
5**	13464.536	40.40	54.0	13.60	AV	112.00	300	Vertical	Pass
6	17464.820	52.49	74.0	21.51	Peak	331.00	300	Vertical	Pass
6**	17464.820	43.38	54.0	10.62	AV	331.00	300	Vertical	Pass

GFSK (BLE 2Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT H

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1285.980	47.44	74.0	26.56	Peak	148.00	300	Horizontal	Pass
1**	1285.980	42.21	54.0	11.80	AV	148.00	300	Horizontal	Pass
2	2769.781	54.20	74.0	19.80	Peak	237.00	400	Horizontal	Pass
2**	2769.781	44.95	54.0	9.05	AV	237.00	400	Horizontal	Pass
3	5396.395	49.29	74.0	24.71	Peak	9.00	200	Horizontal	Pass
3**	5396.395	41.18	54.0	12.82	AV	9.00	200	Horizontal	Pass
4	6513.746	55.57	74.0	18.43	Peak	288.00	400	Horizontal	Pass
4**	6513.746	47.45	54.0	6.56	AV	288.00	400	Horizontal	Pass
5	13355.782	49.56	74.0	24.44	Peak	17.00	300	Horizontal	Pass
5**	13355.782	41.01	54.0	12.99	AV	17.00	300	Horizontal	Pass
6	17445.396	51.89	74.0	22.11	Peak	39.00	100	Horizontal	Pass
6**	17445.396	44.00	54.0	10.00	AV	39.00	100	Horizontal	Pass

GFSK (BLE 2Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1282.657	44.46	74.0	29.54	Peak	271.00	100	Vertical	Pass
1**	1282.657	32.63	54.0	21.37	AV	271.00	100	Vertical	Pass
2	2769.721	50.82	74.0	23.18	Peak	39.00	100	Vertical	Pass
2**	2769.721	39.68	54.0	14.32	AV	39.00	100	Vertical	Pass
3	5285.046	52.39	74.0	21.61	Peak	76.00	200	Vertical	Pass
3**	5285.046	43.31	54.0	10.69	AV	76.00	200	Vertical	Pass
4	6658.071	56.62	74.0	17.38	Peak	337.00	200	Vertical	Pass
4**	6658.071	43.66	54.0	10.34	AV	337.00	200	Vertical	Pass
5	13306.697	49.28	74.0	24.72	Peak	271.00	400	Vertical	Pass
5**	13306.697	40.40	54.0	13.60	AV	271.00	400	Vertical	Pass
6	17422.613	52.52	74.0	21.48	Peak	250.00	400	Vertical	Pass
6**	17422.613	43.45	54.0	10.55	AV	250.00	400	Vertical	Pass

A.7 Band Edge (Restricted-band band-edge)

Note¹: The lowest and highest channels are tested to verify the band edge emissions. Please refer to the following the plots for emissions values.

Note²: 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.

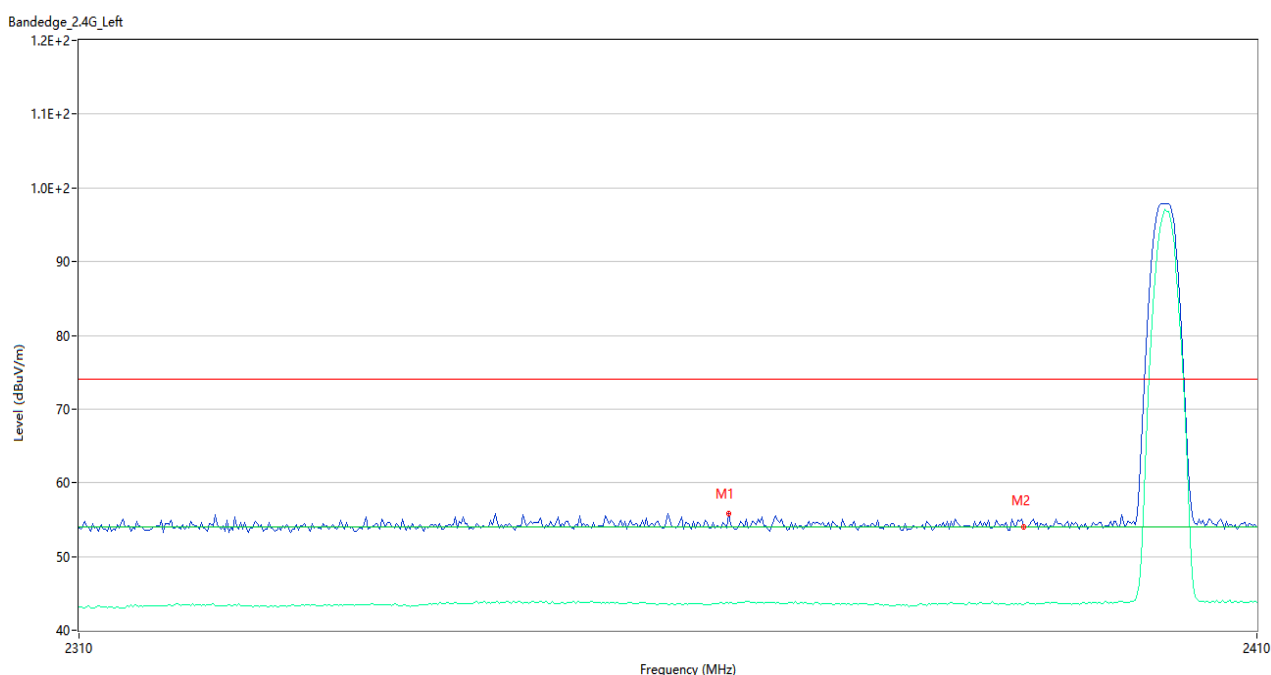
Note³: According the ANSI C63.10-2020, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note⁴: The Level (dBuV/m) has been corrected by factor.

Note⁵: Both horizontal and vertical directions were pre tested, only the worst configuration has been reported in this report.

Test Data and Plots

GFSK (BLE 1Mbps) LOW CHANNEL



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2364.373	53.01	74.0	20.99	Peak	79.00	300	Horizontal	Pass
1**	2364.373	43.69	54.0	10.31	AV	79.00	300	Horizontal	Pass
2	2390.000	53.9	74.0	20.10	Peak	272.00	100	Horizontal	Pass
2**	2390.000	44.52	54.0	9.48	AV	272.00	100	Horizontal	Pass

GFSK (BLE 1Mbps) HIGH CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	54.71	74.0	19.29	Peak	148.00	200	Horizontal	Pass
1**	2483.500	40.66	54.0	13.34	AV	148.00	200	Horizontal	Pass
2	2498.155	52.71	74.0	21.29	Peak	209.00	300	Horizontal	Pass
2**	2498.155	42.27	54.0	11.73	AV	209.00	300	Horizontal	Pass

GFSK (BLE 2Mbps) LOW CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2349.507	55.96	74.0	18.04	Peak	130.00	200	Horizontal	Pass
1**	2349.507	44.07	54.0	9.93	AV	130.00	200	Horizontal	Pass
2	2390.000	50.56	74.0	23.44	Peak	353.00	100	Horizontal	Pass
2**	2390.000	42.28	54.0	11.72	AV	353.00	100	Horizontal	Pass

GFSK (BLE 2Mbps) HIGH CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	54.69	74.0	19.31	Peak	74.00	200	Horizontal	Pass
1**	2483.500	43.66	54.0	10.34	AV	74.00	200	Horizontal	Pass
2	2491.915	55.51	74.0	18.49	Peak	154.00	300	Horizontal	Pass
2**	2491.915	43.65	54.0	10.35	AV	154.00	300	Horizontal	Pass

A.8 Power Spectral Density (PSD)

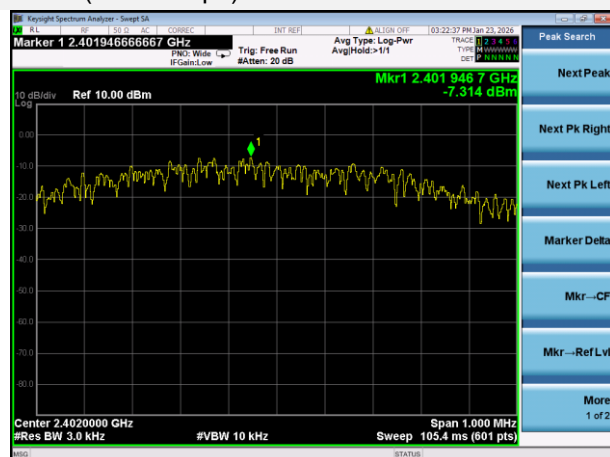
Test Data

GFSK (BLE 1Mbps)			
Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
Low Channel	-7.31	8	Pass
Middle Channel	-7.05	8	Pass
High Channel	-6.45	8	Pass

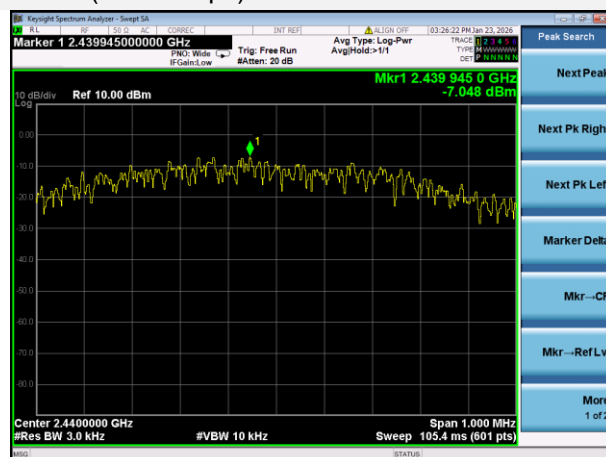
GFSK (BLE 2Mbps)			
Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
Low Channel	-9.59	8	Pass
Middle Channel	-9.76	8	Pass
High Channel	-9.15	8	Pass

Test Plots

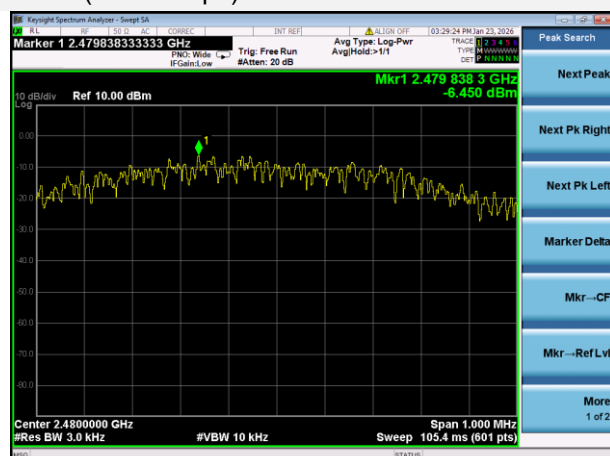
GFSK (BLE 1Mbps) LOW CHANNEL



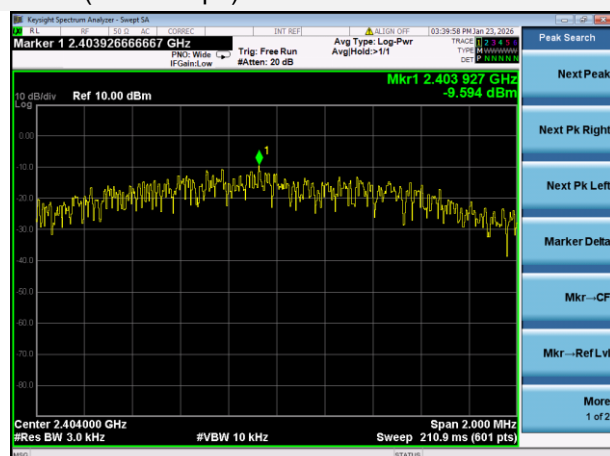
GFSK (BLE 1Mbps) MIDDLE CHANNEL



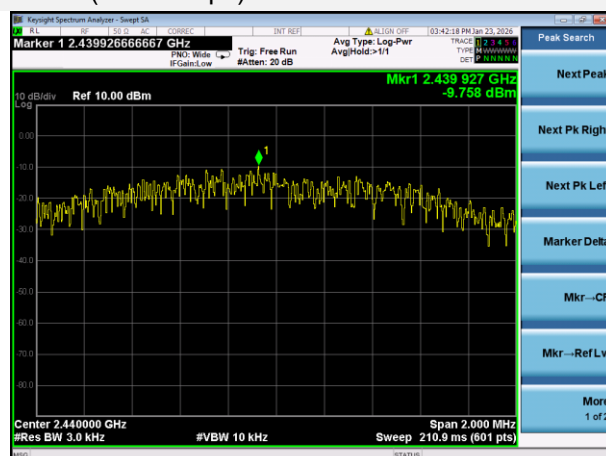
GFSK (BLE 1Mbps) HIGH CHANNEL



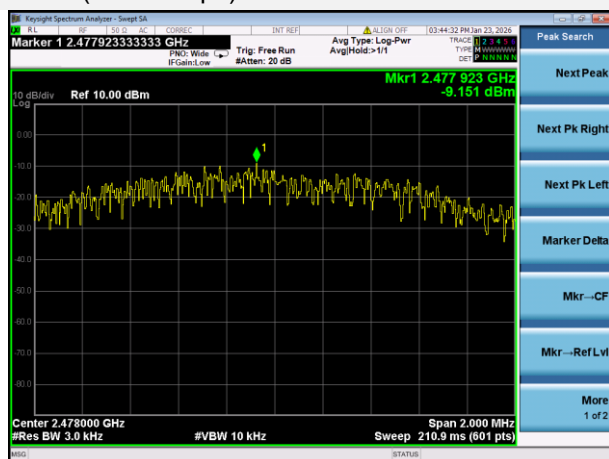
GFSK (BLE 2Mbps) LOW CHANNEL



GFSK (BLE 2Mbps) MIDDLE CHANNEL



GFSK (BLE 2Mbps) HIGH CHANNEL



ANNEX B TEST SETUP PHOTOS

Please refer the document “Ti-EE26010044-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “Ti-EE26010044-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “Ti-EE26010044-AI.PDF”.

Statement

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. The report without China inspection body and laboratory Mandatory Approval (CMA) mark has no effect of proving to the society.
3. For the report with CNAS mark or A2LA mark, the items marked with "☆" are not within the accredited scope.
4. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the "inspection and testing dedicated stamp" or test report stamp.
5. The test data and results are only valid for the tested samples provided by the customer.
6. This report shall not be partially reproduced without the written permission of the laboratory.
7. Any objection shall be raised to the laboratory within 30 days after receiving the report.

--END OF REPORT--