



7. Test of Spurious Emission (Conducted)

7.1 Test Limit

According to the methods defined in ANSI C63.10-2020 Section 7.8.7

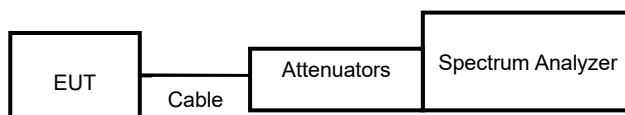
Below -20dB of the highest emission level of operating band (In 100 kHz Resolution Bandwidth)

7.2 Test Procedure

According to the methods defined in ANSI C63.10-2020

- The transmitter output was connected to the spectrum analyzer via a low loss cable.
- Set RBW of spectrum analyzer to 100 kHz and VBW of spectrum analyzer to 300 kHz with convenient frequency span including 100 kHz bandwidth from band edge.
- Peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20dB relative to the maximum measured in-band peak PSD level.
- The band edges was measured and recorded.

7.3 Test Setup Layout

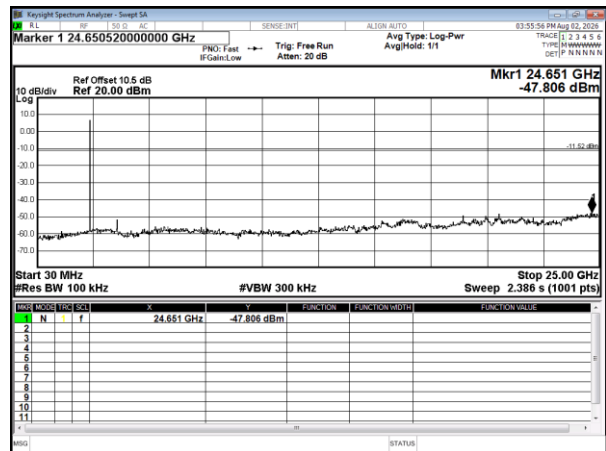
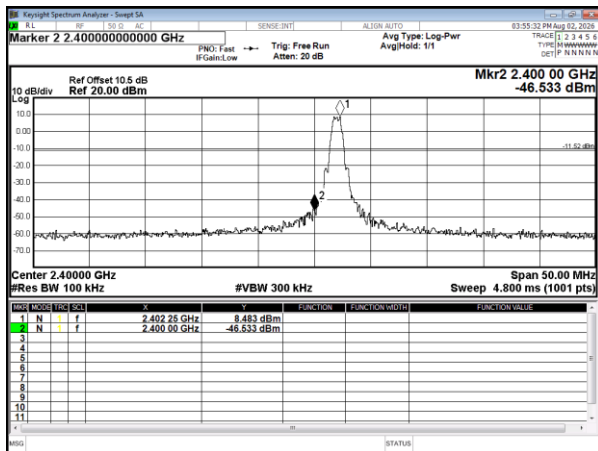


7.4 Test Result and Data

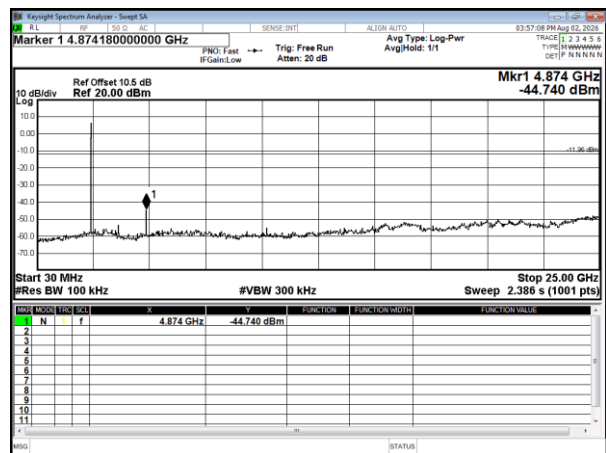
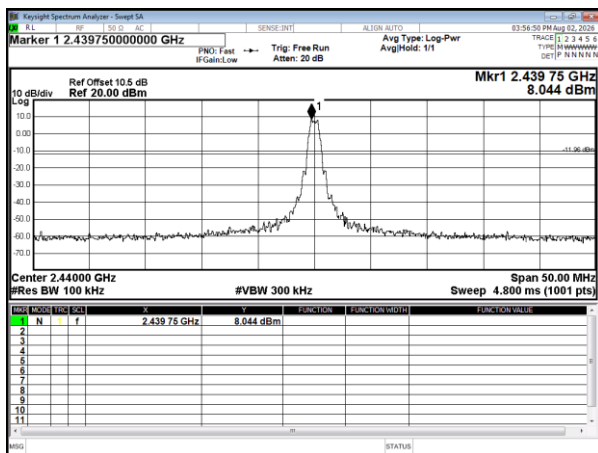
Note: Test plots refer to the following pages.



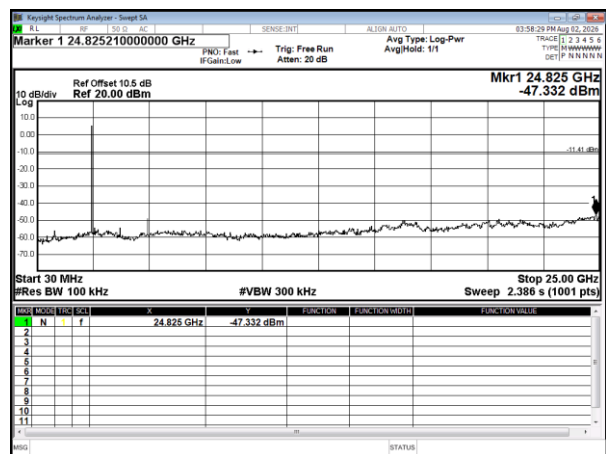
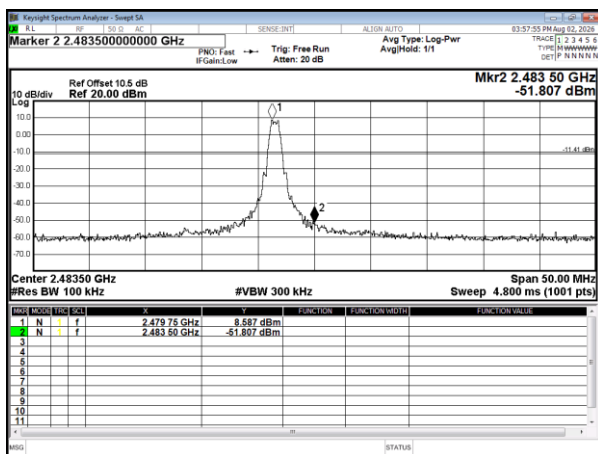
Modulation Type: GFSK (1Mbps)
CH00



Modulation Type: GFSK (1Mbps)
CH19

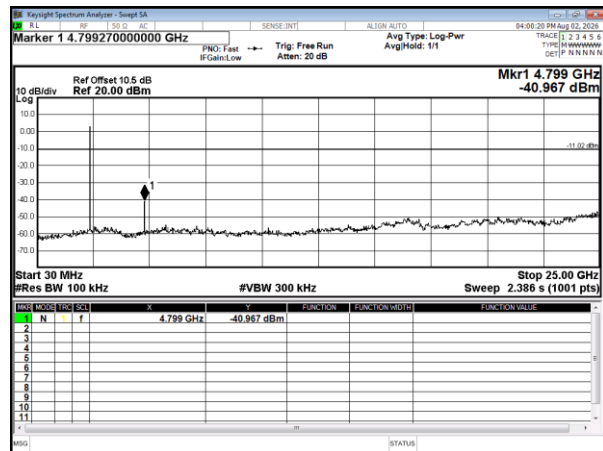
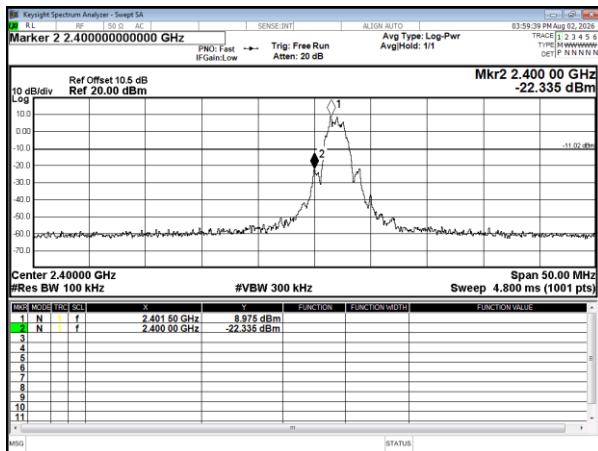


Modulation Type: GFSK (1Mbps)
CH39

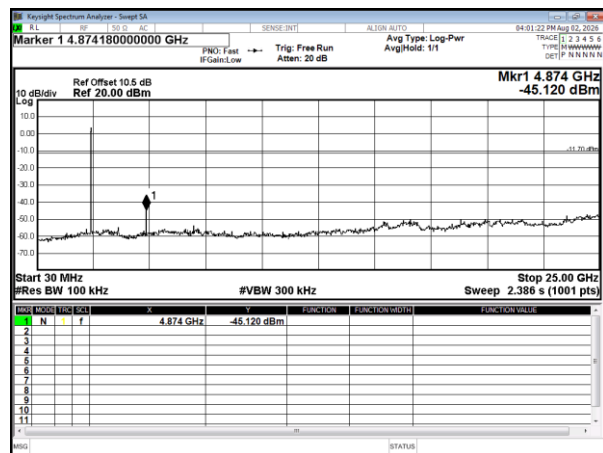
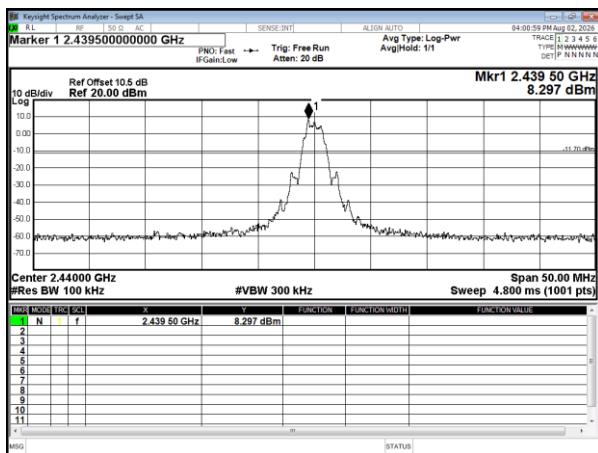




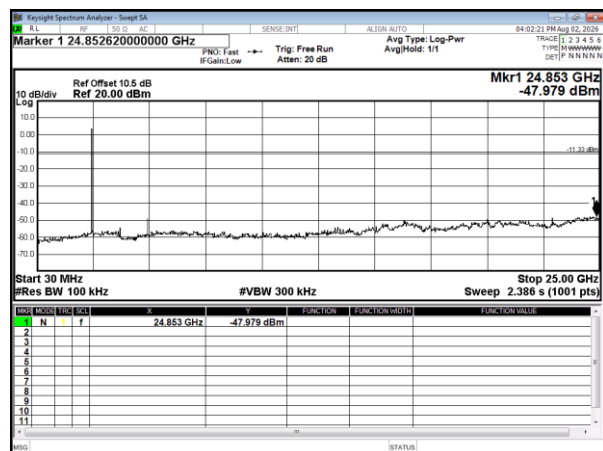
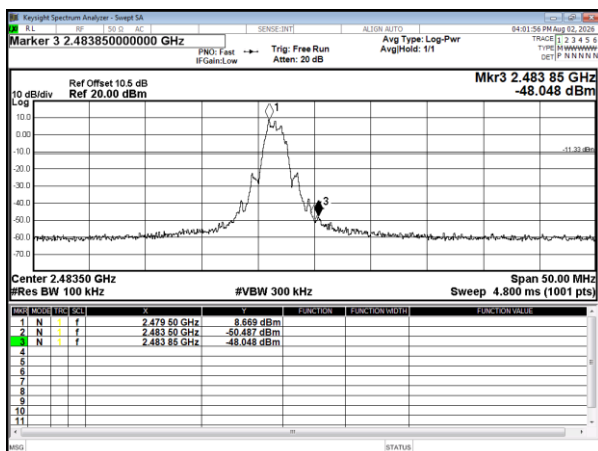
Modulation Type: GFSK (2Mbps)
CH00



Modulation Type: GFSK (2Mbps)
CH19



Modulation Type: GFSK (2Mbps)
CH39





8. On Time, Duty Cycle and Measurement methods

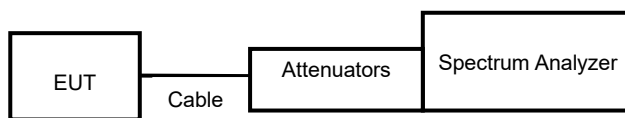
8.1 Test Limit

None; for reporting purposes only.

8.2 Test Procedure

According to the methods defined in ANSI C63.10-2020 Section 11.6
Zero-Span Spectrum Analyzer Method.

8.3 Test Setup Layout

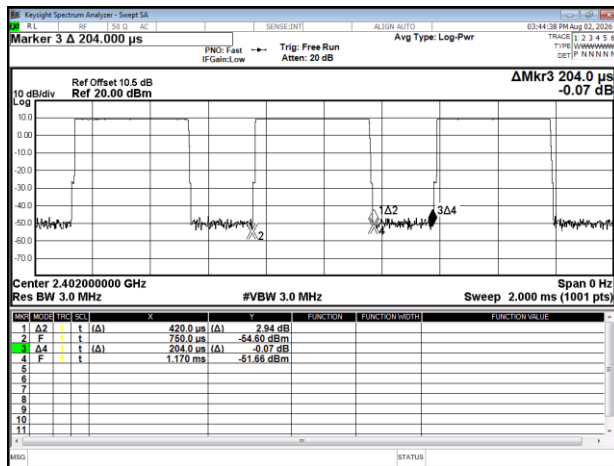




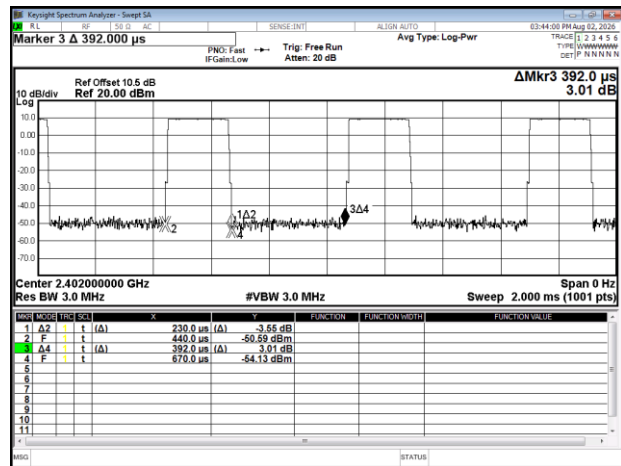
8.4 Test Result and Data

Modulation Type	On Time (msec)	Period Time (msec)	Duty Cycle (%)
GFSK (1Mbps)	0.420	0.624	67.31%
GFSK (2Mbps)	0.230	0.622	36.98%

Modulation Type: GFSK 1Mbps



Modulation Type: GFSK 2Mbps





9. 6dB Bandwidth Measurement Data

9.1 Test Limit

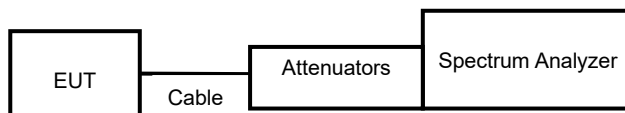
The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

9.2 Test Procedures

According to the methods defined in ANSI C63.10-2020 Section 11.8

- The transmitter output was connected to the spectrum analyzer.
- Set RBW of spectrum analyzer to 1~5% of the emission bandwidth and VBW $\geq 3 \times$ RBW.
- The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB.
- The 6dB Bandwidth was measured and recorded.

9.3 Test Setup Layout

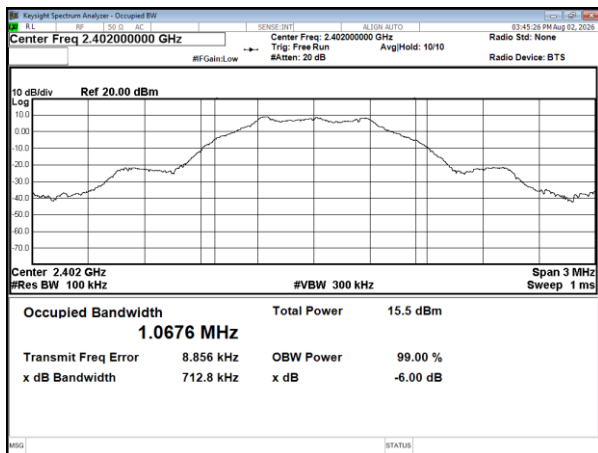


9.4 Test Result and Data

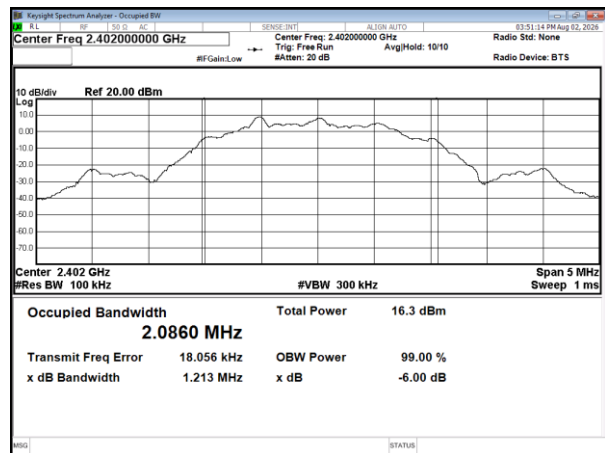
Modulation Type	Channel	Frequency (MHz)	6dB Bandwidth (kHz)	Limit (kHz)
GFSK (1Mbps)	00	2402	712.80	500
	19	2440	706.70	500
	39	2480	708.40	500
GFSK (2Mbps)	00	2402	1213.00	500
	19	2440	1197.00	500
	39	2480	1188.00	500



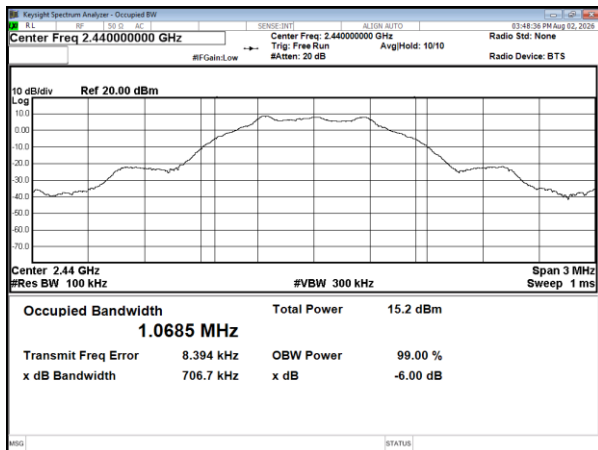
Modulation Type: GFSK (1Mbps)
CH00



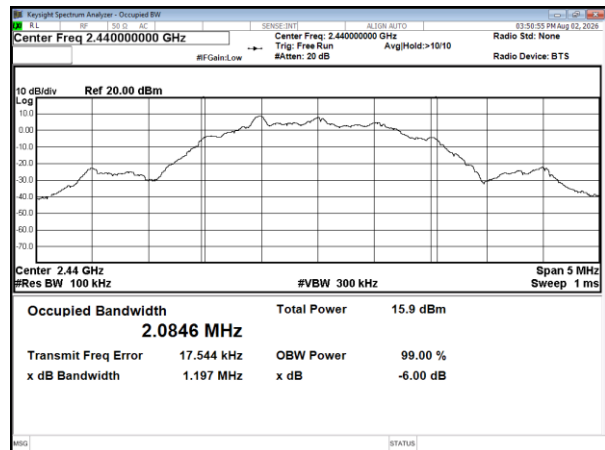
Modulation Type: GFSK (2Mbps)
CH00



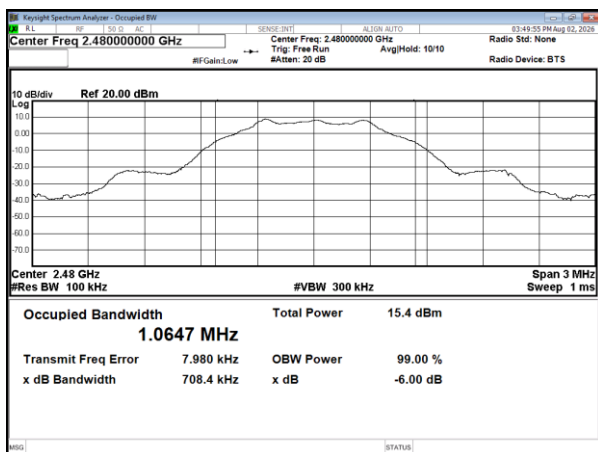
Modulation Type: GFSK (1Mbps)
CH19



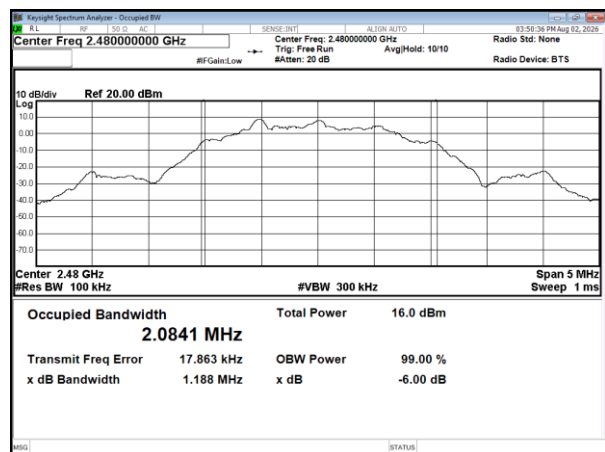
Modulation Type: GFSK (2Mbps)
CH19



Modulation Type: GFSK (1Mbps)
CH39



Modulation Type: GFSK (2Mbps)
CH39





10. Maximum Peak Output Power

10.1 Test Limit

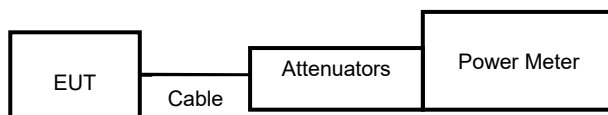
The Maximum Peak Output Power Measurement is 30dBm.

10.2 Test Procedures

According to the methods defined in ANSI C63.10-2020 Section 11.9.1.2

The antenna port (RF output) of the EUT was connected to the input (RF input) of a power meter. Power was read directly from the meter and cable loss connection was added to the reading to obtain power at the EUT antenna terminal. The EUT Output Power was set to maximum to produce the worse case test result.

10.3 Test Setup Layout



10.4 Test Result and Data

Power Set	Modulation Standard	Channel	Frequency (MHz)	Peak Power Output (dBm)	Peak Power Output (mW)
Default	GFSK (1Mbps)	00	2402	10.820	12.078
Default		19	2440	10.450	11.092
9		39	2480	9.330	8.570
Default	GFSK (2Mbps)	00	2402	10.850	12.162
Default		19	2440	10.490	11.194
9		39	2480	9.570	9.057



11. Power Spectral Density

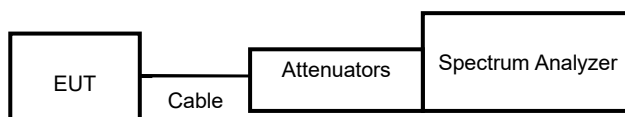
11.1 Test Limit

The Maximum of Power Spectral Density Measurement is 8dBm.

11.2 Test Procedures

According to the methods defined in ANSI C63.10-2020 Section 11.10.1

11.3 Test Setup Layout



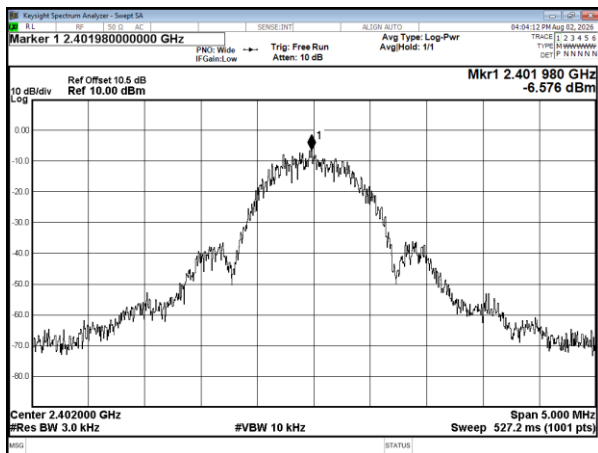
11.4 Test Result and Data

Modulation Standard	Channel	Frequency (MHz)	Maximum Power Density of 3 kHz Bandwidth (dBm)	Limit
GFSK (1Mbps)	00	2402	-6.576	8.00
	19	2440	-6.866	8.00
	39	2480	-6.788	8.00
GFSK (2Mbps)	00	2402	-10.079	8.00
	19	2440	-10.464	8.00
	39	2480	-10.402	8.00

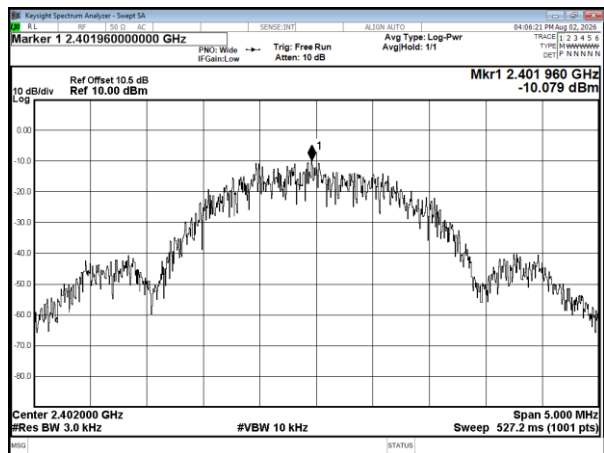
Note: Test plots refer to the following pages.



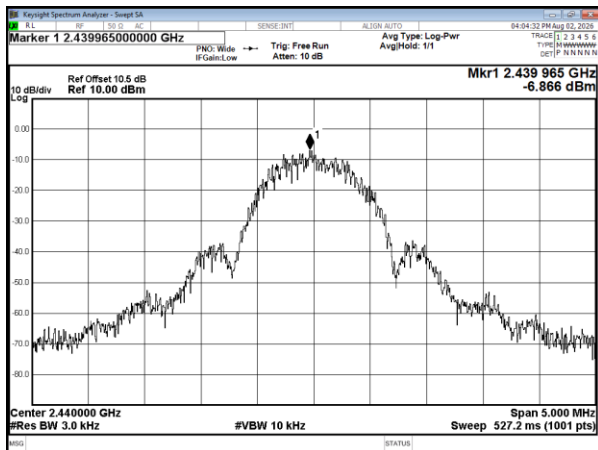
Modulation Type: GFSK (1Mbps)
CH00



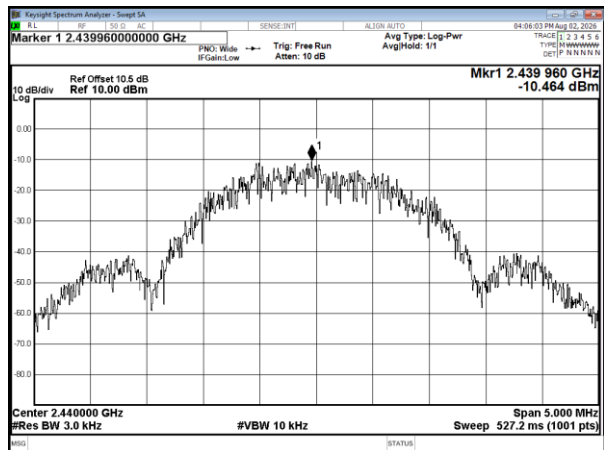
Modulation Type: GFSK (2Mbps)
CH00



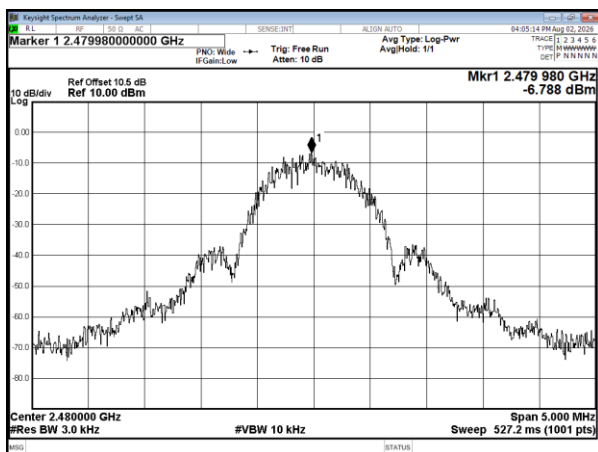
Modulation Type: GFSK (1Mbps)
CH19



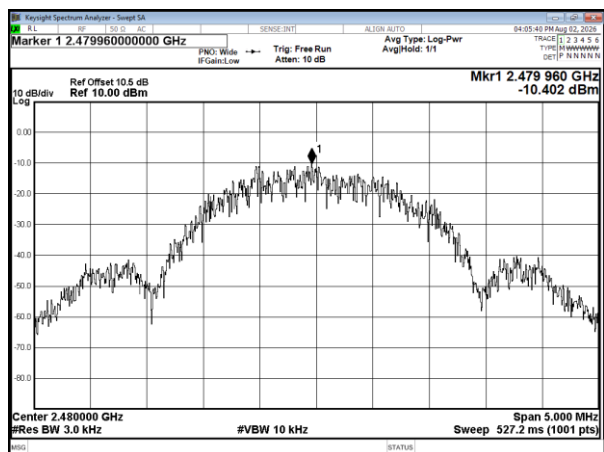
Modulation Type: GFSK (2Mbps)
CH19



Modulation Type: GFSK (1Mbps)
CH39



Modulation Type: GFSK (2Mbps)
CH39



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