Appendix A

RF Test Data for 2.4G (Conducted Measurement)

Product Name: Clever Cats

Test Model: EY06338

Environmental Conditions

Temperature:	24.2° C
Relative Humidity:	57.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Wunder. Wu
Supervised by:	Lihu

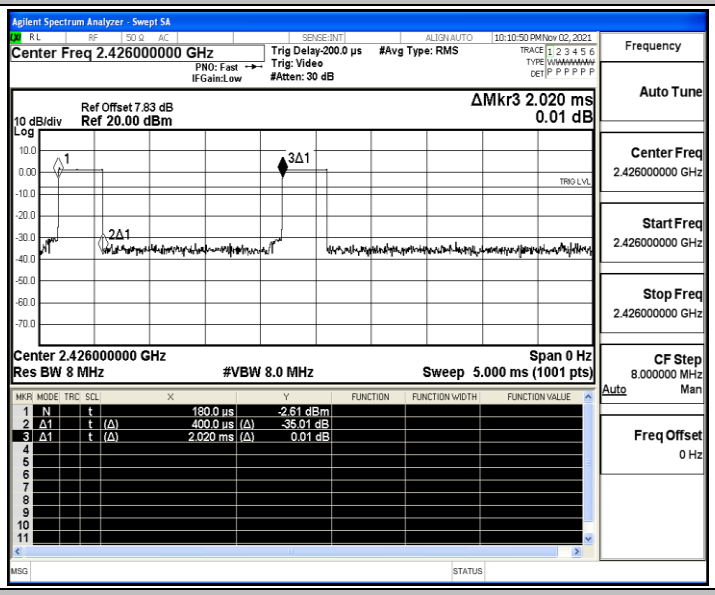
A.1 Duty Cycle

Test Result

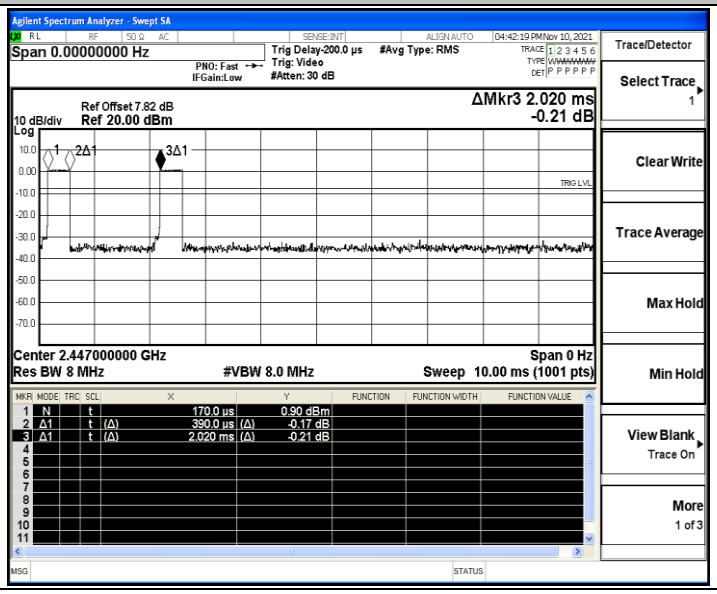
TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
GFSK	Ant1	2426	0.40	2.02	0.1980	19.80	7.03	---	PASS
		2447	0.39	2.02	0.1931	19.31	7.14	---	PASS
		2468	0.39	2.02	0.1931	19.31	7.14	---	PASS

Test Graphs

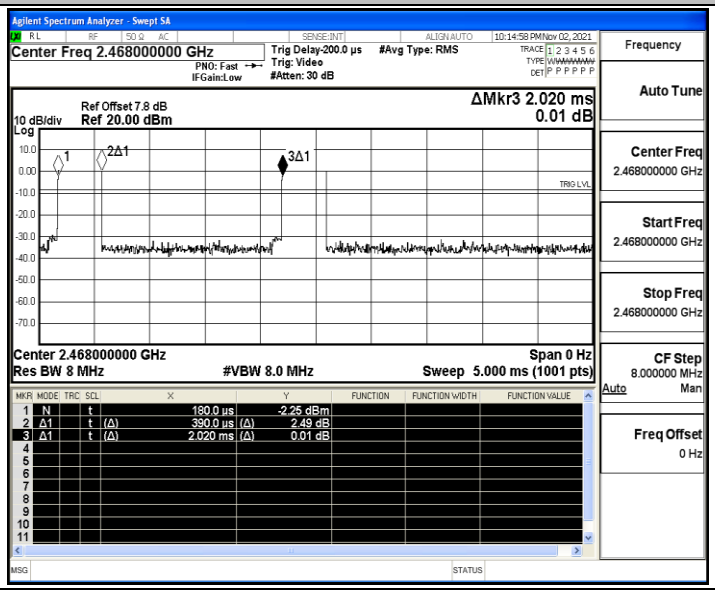
GFSK_Ant1_2426



GFSK_Ant1_2447



GFSK_Ant1_2468



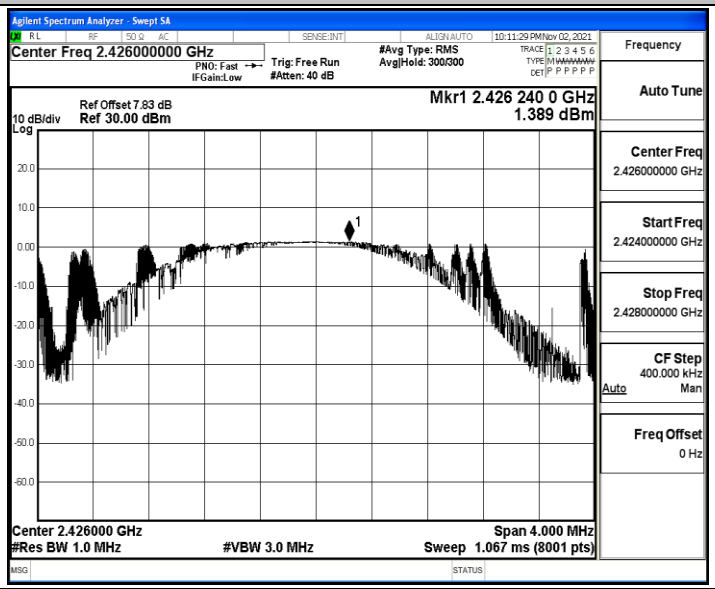
A.2 Maximum conducted output power

Test Result

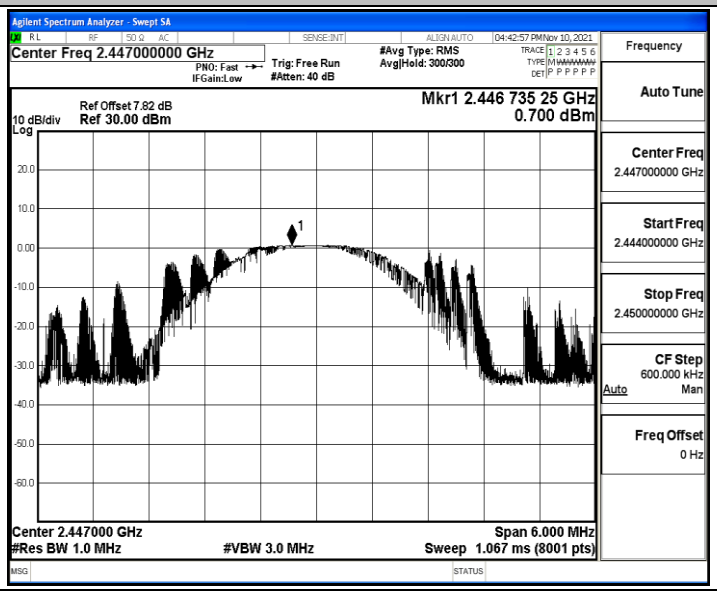
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
GFSK	Ant1	2426	1.39	≤30	PASS
		2447	0.70	≤30	PASS
		2468	0.28	≤30	PASS

Test Graphs

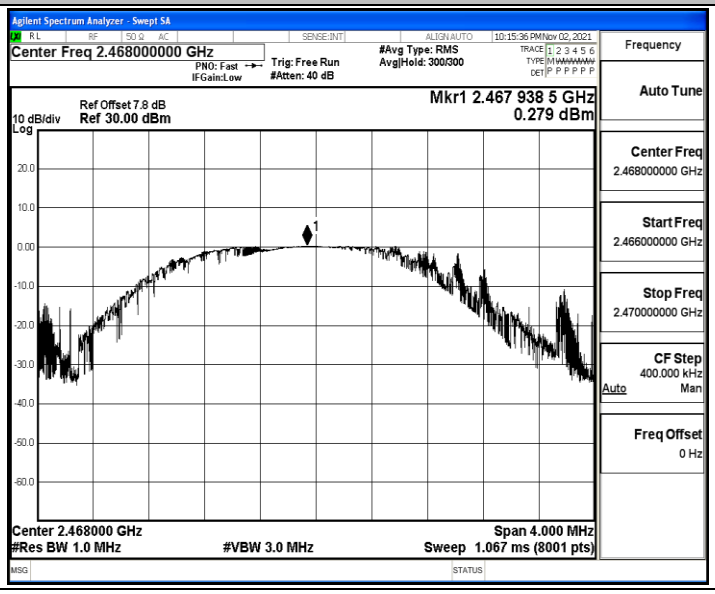
GFSK_Ant1_2426



GFSK_Ant1_2447



GFSK_Ant1_2468



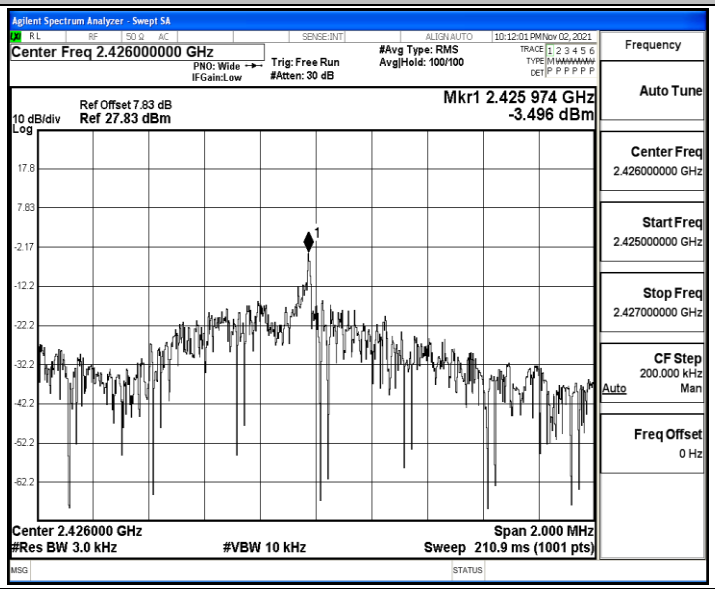
A.3 Maximum power spectral density

Test Result

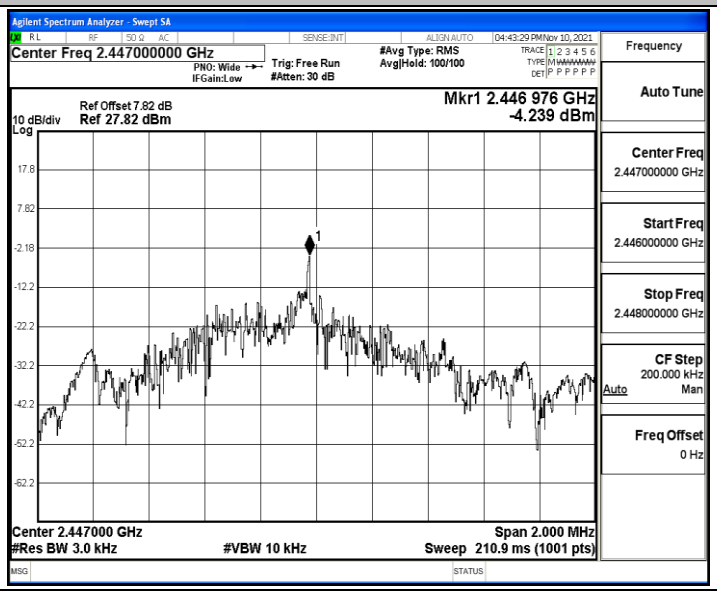
TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
GFSK	Ant1	2426	-3.5	≤8	PASS
		2447	-4.24	≤8	PASS
		2468	-5.5	≤8	PASS

Test Graphs

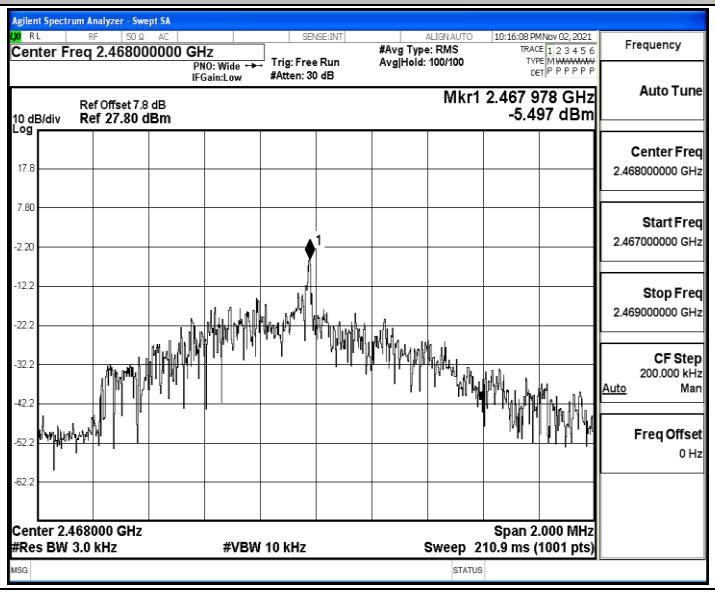
GFSK_Ant1_2426



GFSK_Ant1_2447



GFSK_Ant1_2468



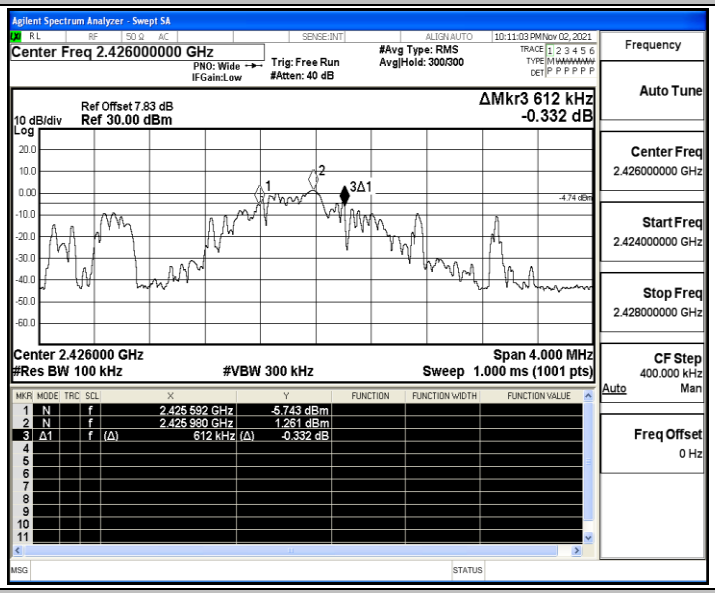
A.4 DTS Bandwidth

Test Result

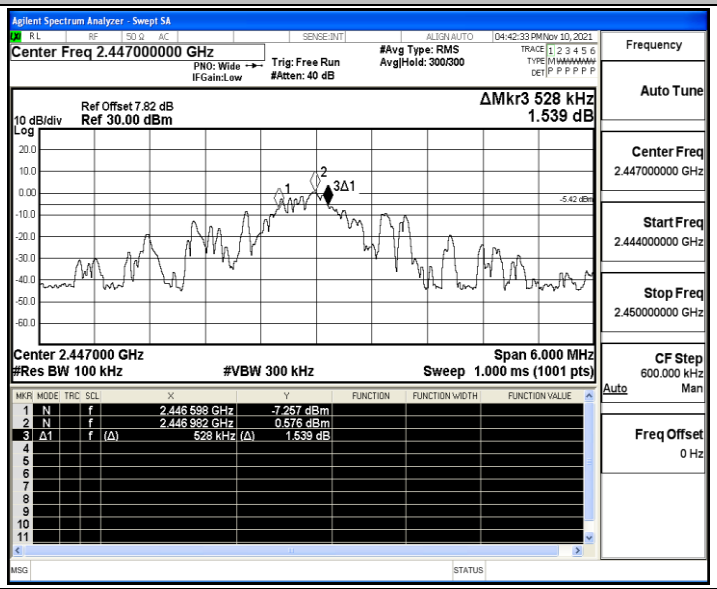
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
GFSK	Ant1	2426	0.612	2425.592	2426.204	≥0.5	PASS
		2447	0.528	2446.598	2447.126	≥0.5	PASS
		2468	0.852	2467.580	2468.432	≥0.5	PASS

Test Graphs

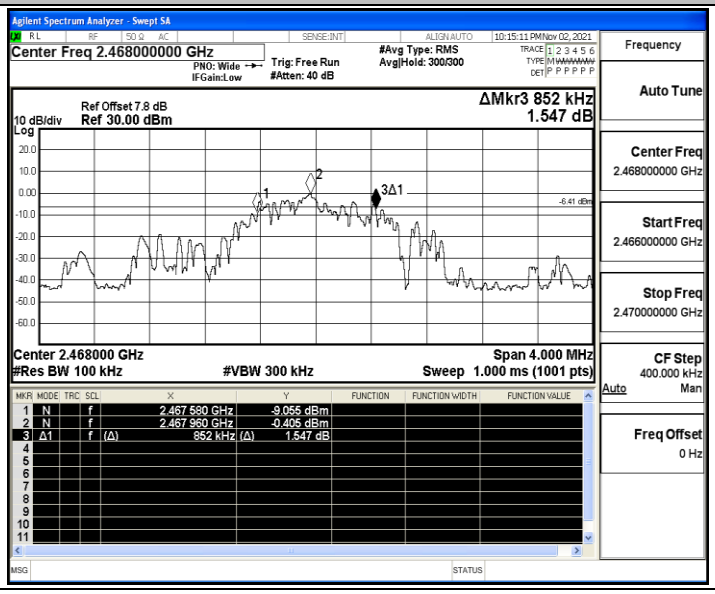
GFSK_Ant1_2426



GFSK_Ant1_2447



GFSK_Ant1_2468



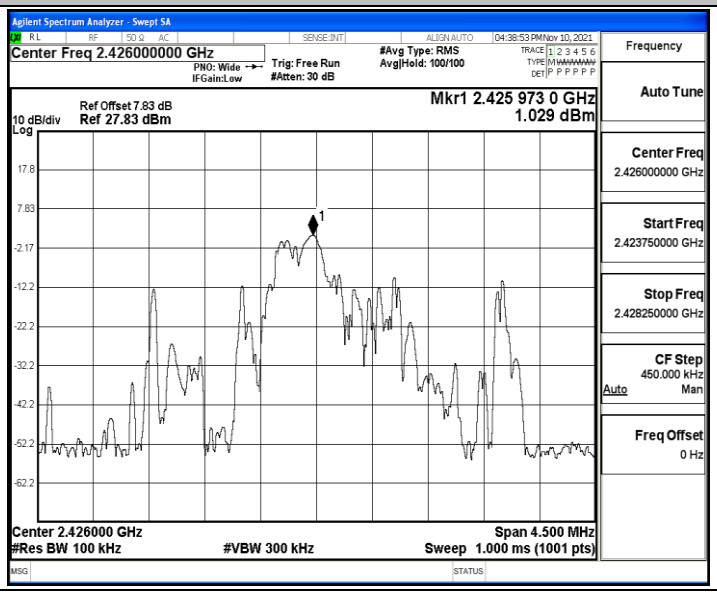
A.5 Conducted Spurious Emission

Test Result

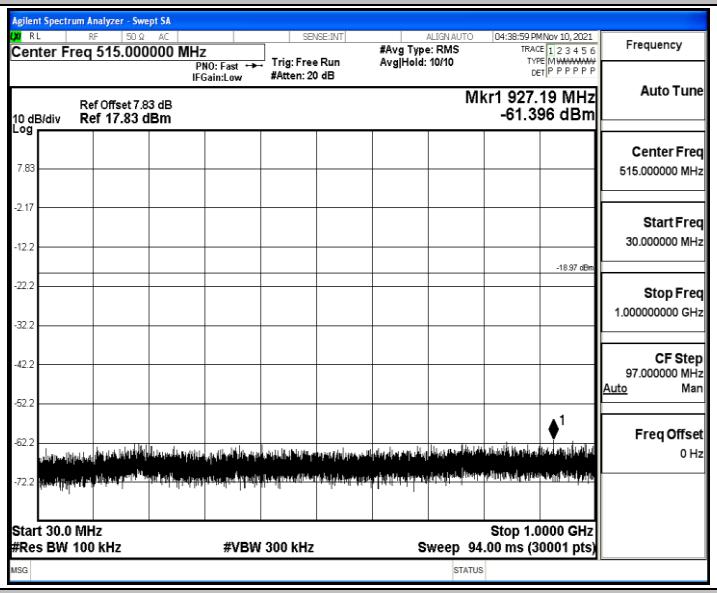
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
GFSK	Ant1	2426	Reference	1.03	1.03	---	PASS
			30~1000	1.03	-61.40	≤-18.97	PASS
			1000~26500	1.03	-42.64	≤-18.97	PASS
		2447	Reference	0.61	0.09	---	PASS
			30~1000	0.61	-61.40	≤-19.39	PASS
			1000~26500	0.61	-42.75	≤-19.39	PASS
		2468	Reference	-2.90	-2.90	---	PASS
			30~1000	-2.90	-61.22	≤-22.90	PASS
			1000~26500	-2.90	-41.08	≤-22.90	PASS

Test Graphs

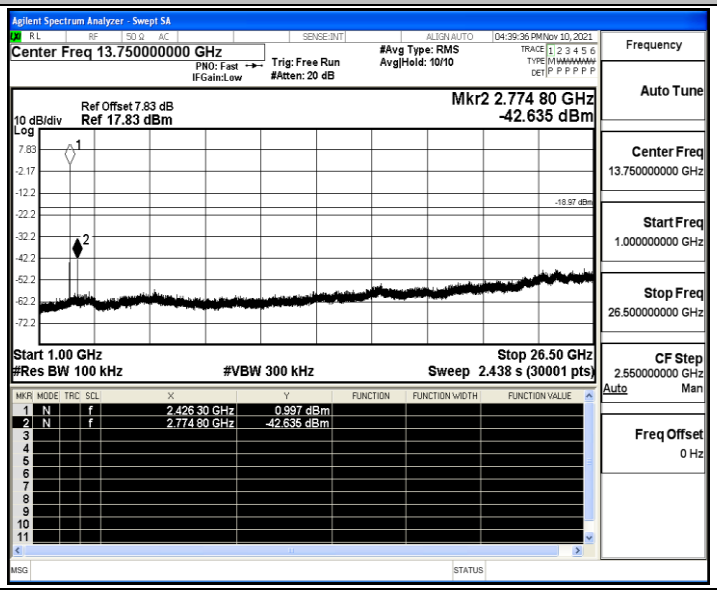
GFSK_Ant1_2426_0~Reference



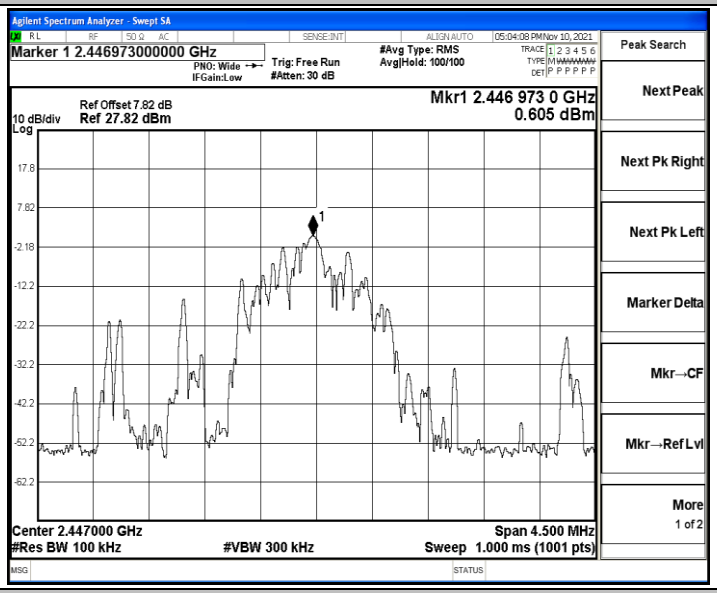
GFSK_Ant1_2426_30~1000



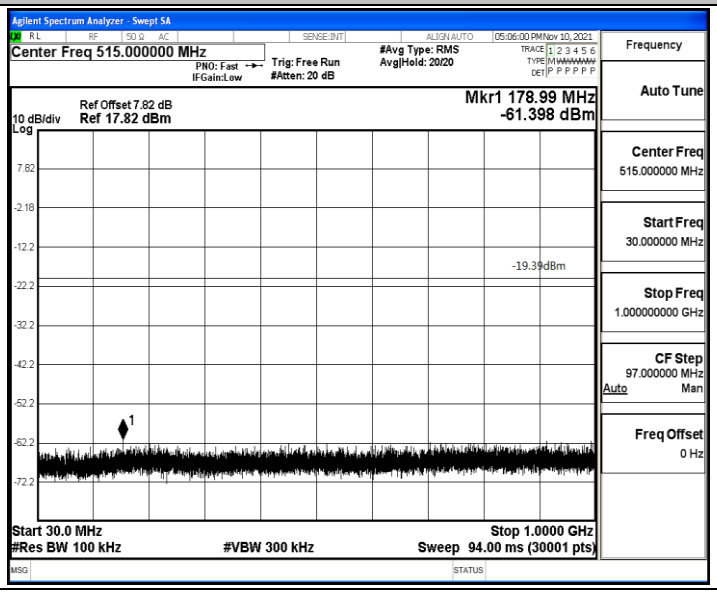
GFSK_Ant1_2426_1000~26500



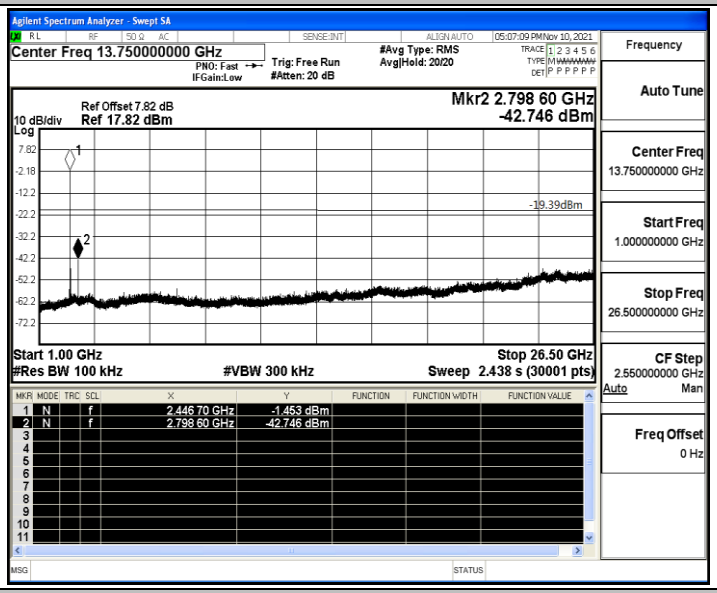
GFSK_Ant1_2447_0~Reference



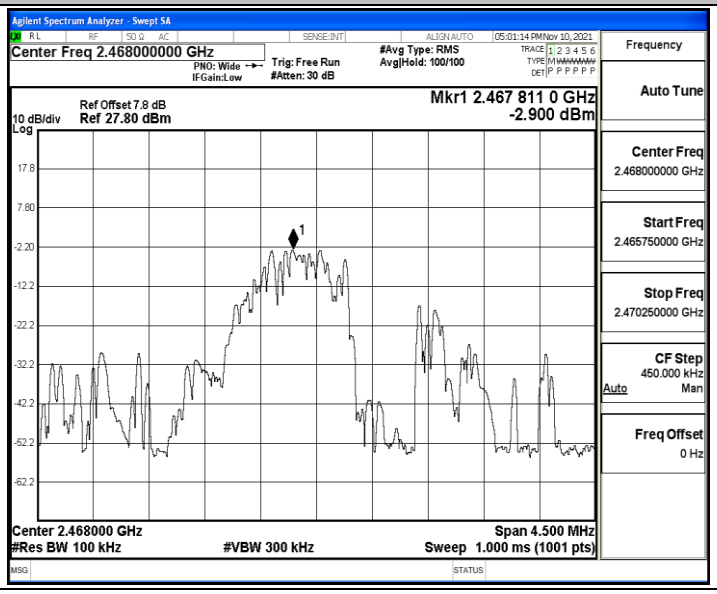
GFSK_Ant1_2447_30~1000



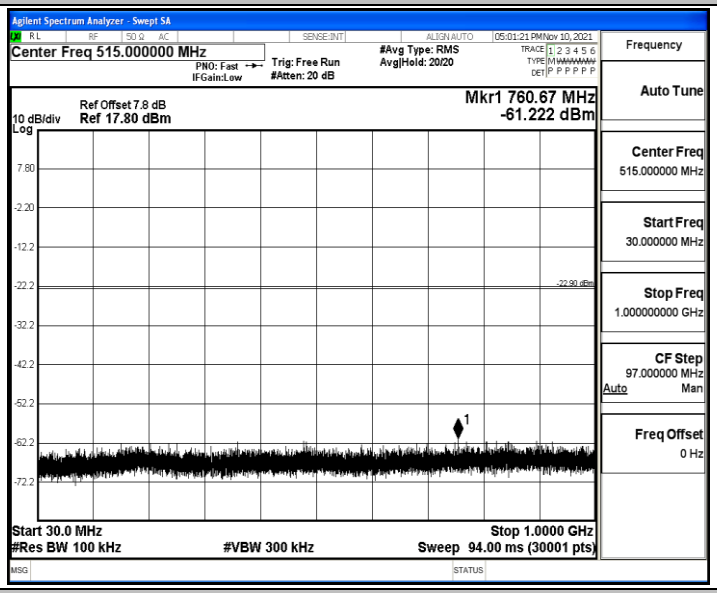
GFSK_Ant1_2447_1000~26500



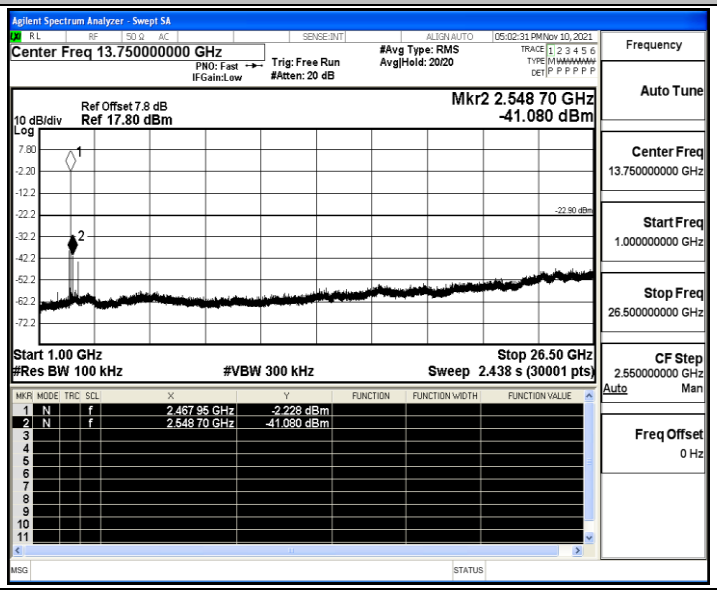
GFSK_Ant1_2468_0~Reference



GFSK_Ant1_2468_30~1000



GFSK_Ant1_2468_1000~26500



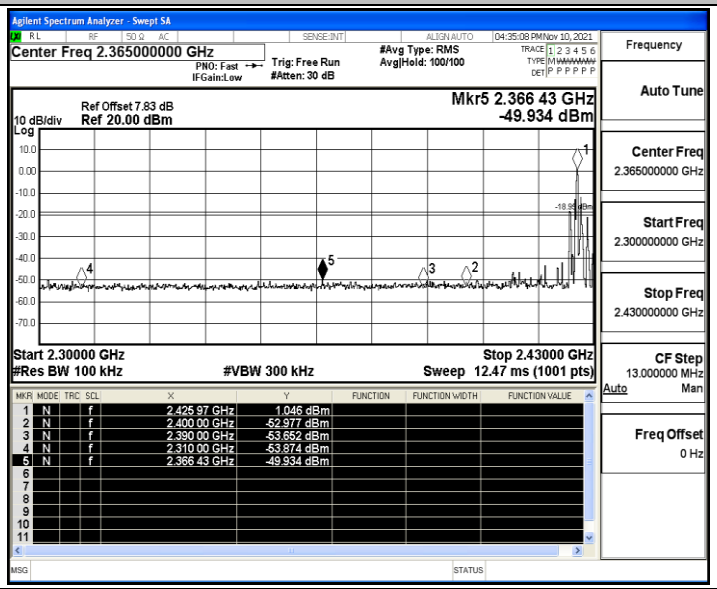
A.6 Band edge measurements

Test Result

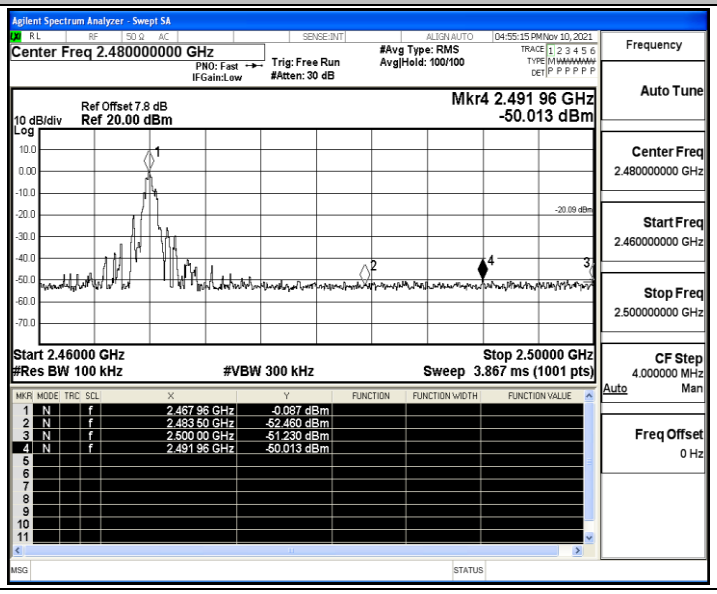
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
GFSK	Ant1	Low	2426	-52.98	-52.98	≤-18.95	Pass
		High	2468	-50.01	-50.01	≤-20.09	Pass

Test Graphs

GFSK_Ant1_Low_2426



GFSK_Ant1_High_2468



A.7 Emissions in Restricted Bands

Test Result

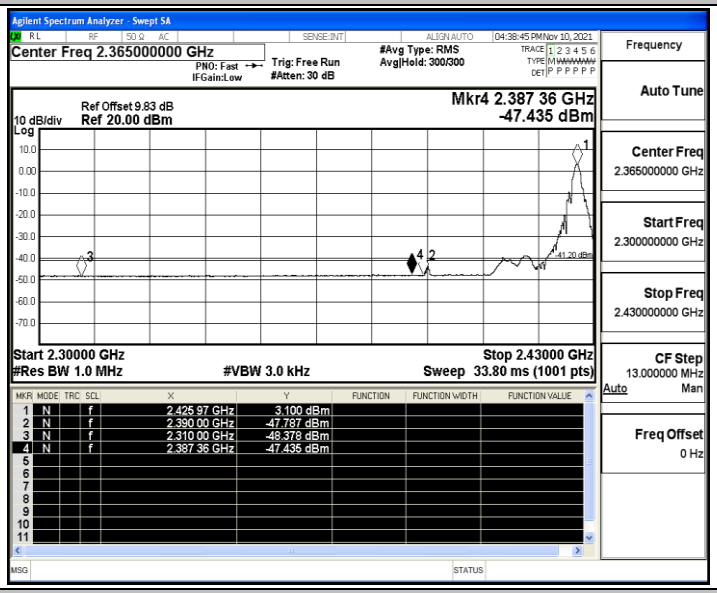
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
GFSK	Ant1	Low	2426	AV	2310.000	-48.379	≤-41.20	46.85	≤54	PASS
				AV	2381.585	-47.435	≤-41.20	47.80	≤54	PASS
				AV	2390.000	-47.787	≤-41.20	47.44	≤54	PASS
				Peak	2310.000	-41.567	≤-21.20	53.66	≤74	PASS
				Peak	2381.060	-38.619	≤-21.20	56.61	≤74	PASS
				Peak	2390.000	-39.648	≤-21.20	55.58	≤74	PASS
		High	2468	AV	2483.500	-47.231	≤-41.20	48.00	≤54	PASS
				AV	2495.360	-43.725	≤-41.20	51.51	≤54	PASS
				AV	2500.000	-46.821	≤-41.20	48.41	≤54	PASS
				Peak	2483.500	-40.735	≤-21.20	54.50	≤74	PASS
				Peak	2483.600	-35.862	≤-21.20	59.37	≤74	PASS
				Peak	2500.000	-39.113	≤-21.20	56.12	≤74	PASS

Note：

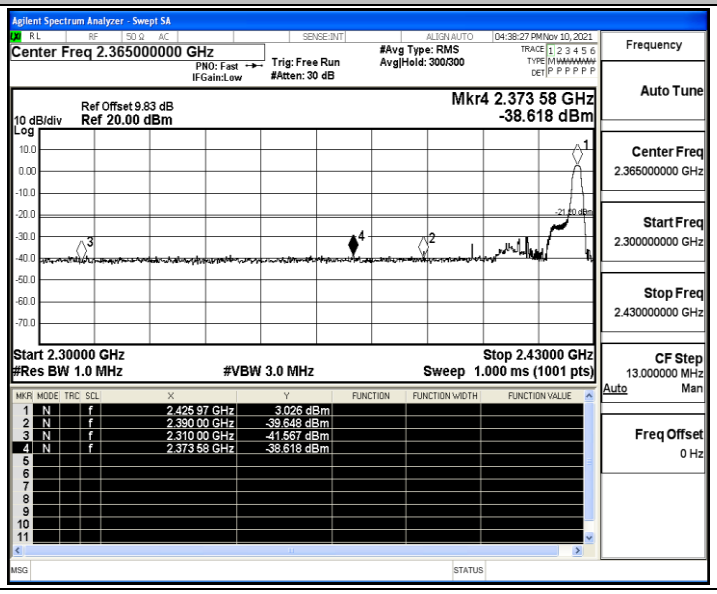
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

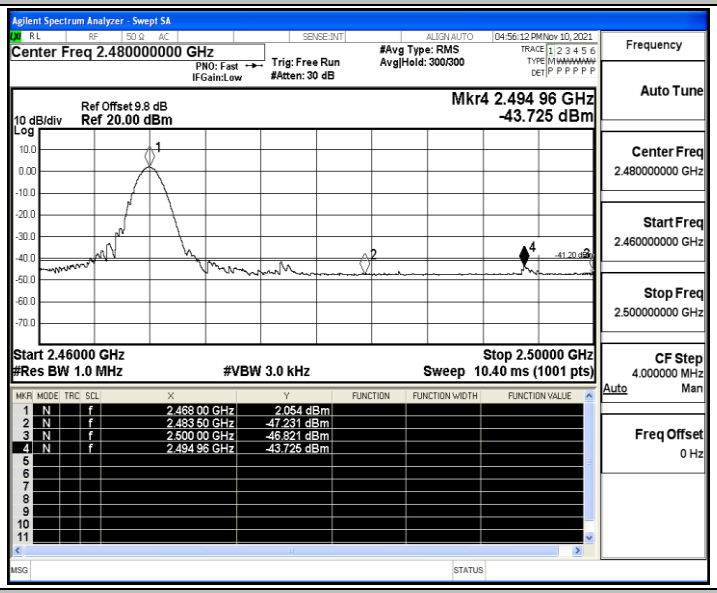
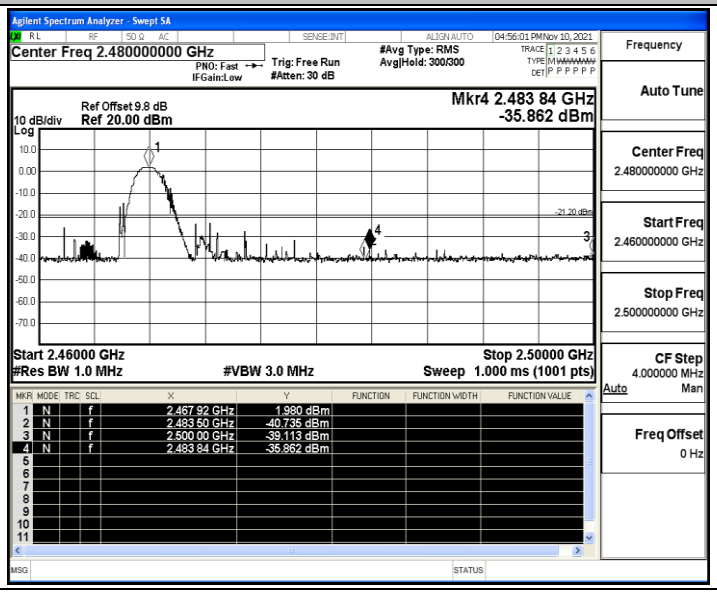
GFSK_Ant1_Low_2426_AV



GFSK_Ant1_Low_2426_Peak



GFSK_Ant1_High_2468_AV



GFSK_Ant1_High_2468_Peak