

Appendix A

RF Test Data for 2.4G (Conducted Measurement)

Product Name: Wireless Transmitter
Test Model: T01

Environmental Conditions

Temperature:	23.8°C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang Hai
Supervised by:	Yan Chen

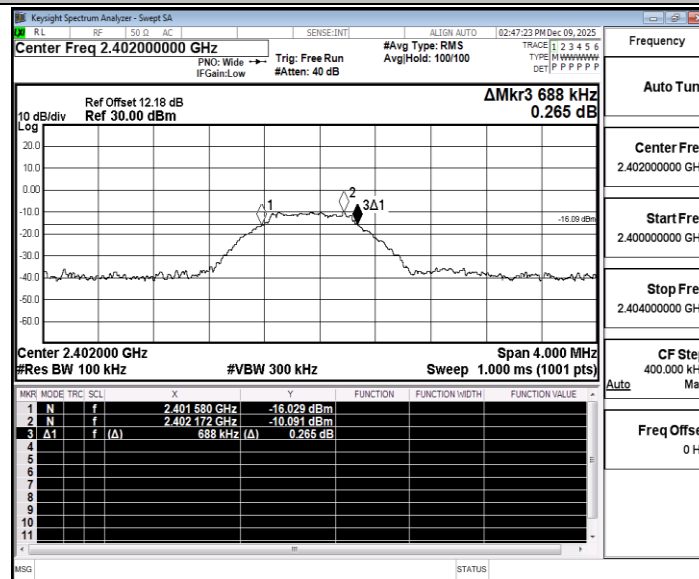
A.1 DTS Bandwidth

Test Result

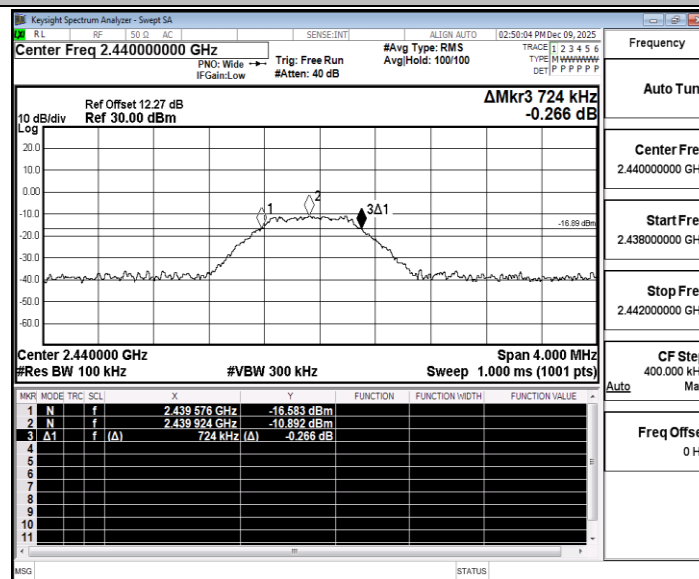
TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
2.4G	Ant1	2402	0.688	2401.580	2402.268	0.5	PASS
		2440	0.724	2439.576	2440.300	0.5	PASS
		2480	0.732	2479.572	2480.304	0.5	PASS

Test Graphs

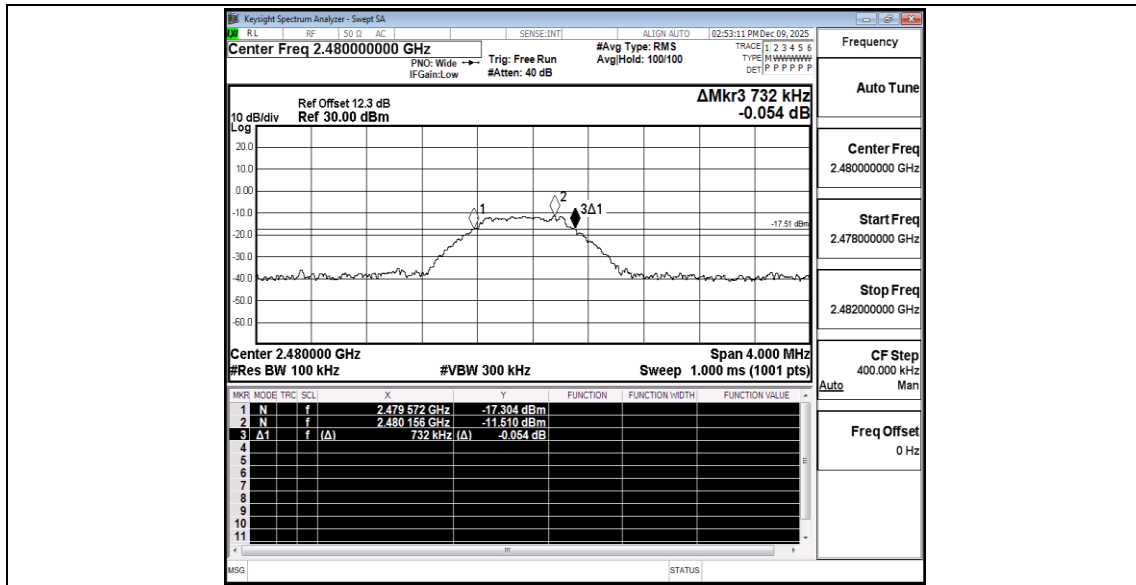
2.4G_Ant1_2402



2.4G_Ant1_2440



2.4G_Ant1_2480



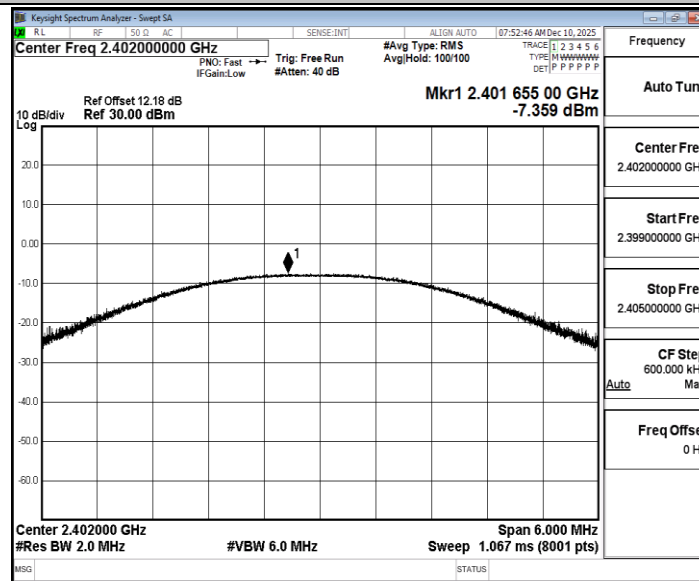
A.2 Maximum peak conducted output power

Test Result Peak

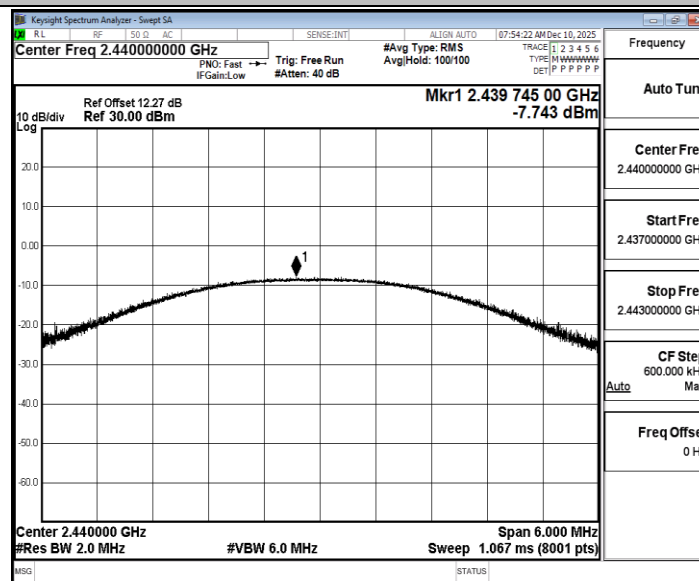
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
2.4G	Ant1	2402	-7.36	≤30	PASS
		2440	-7.74	≤30	PASS
		2480	-8.48	≤30	PASS

Test Graphs Peak

2.4G_Ant1_2402



2.4G_Ant1_2440



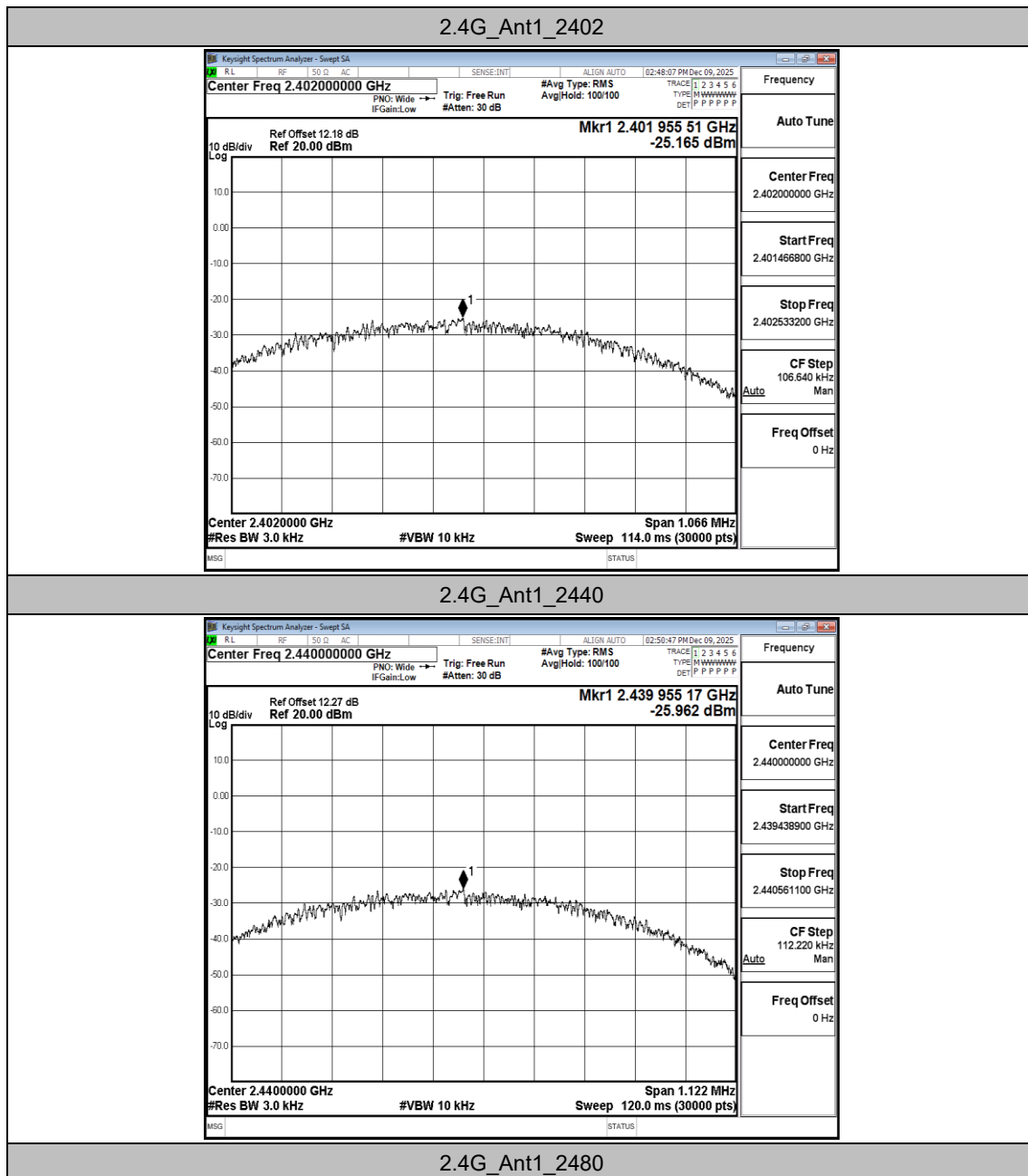
2.4G_Ant1_2480

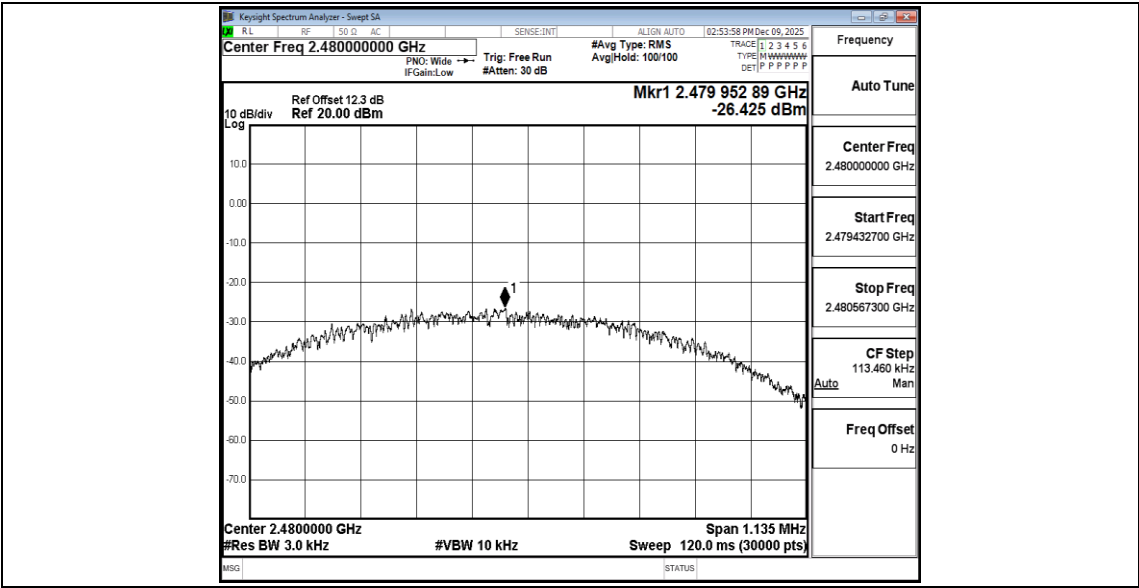
A.3 Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
2.4G	Ant1	2402	-25.17	≤8.00	PASS
		2440	-25.96	≤8.00	PASS
		2480	-26.43	≤8.00	PASS

Test Graphs



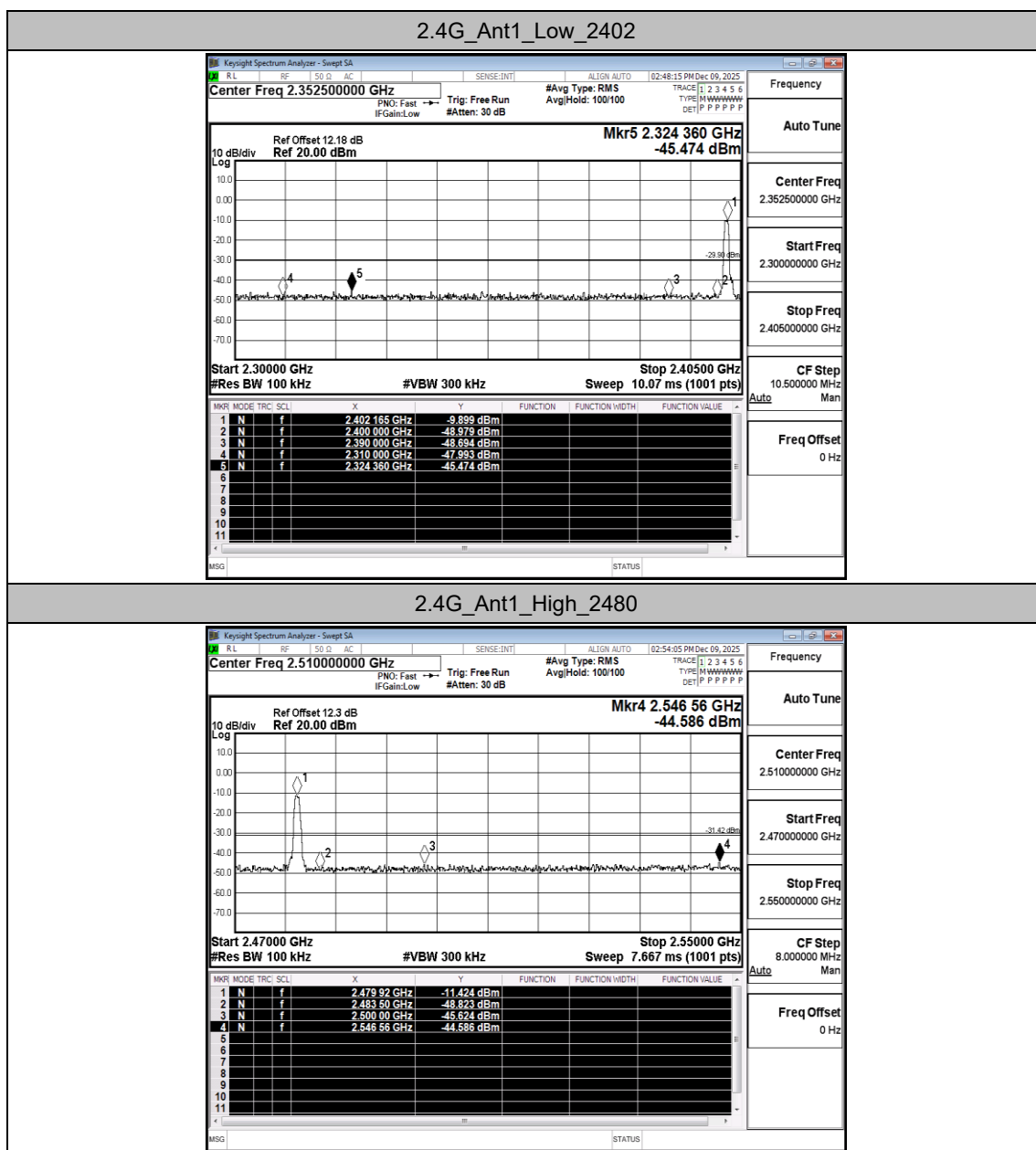


A.4 Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
2.4G	Ant1	Low	2402	-9.90	-45.47	≤-29.9	PASS
		High	2480	-11.42	-44.59	≤-31.42	PASS

Test Graphs

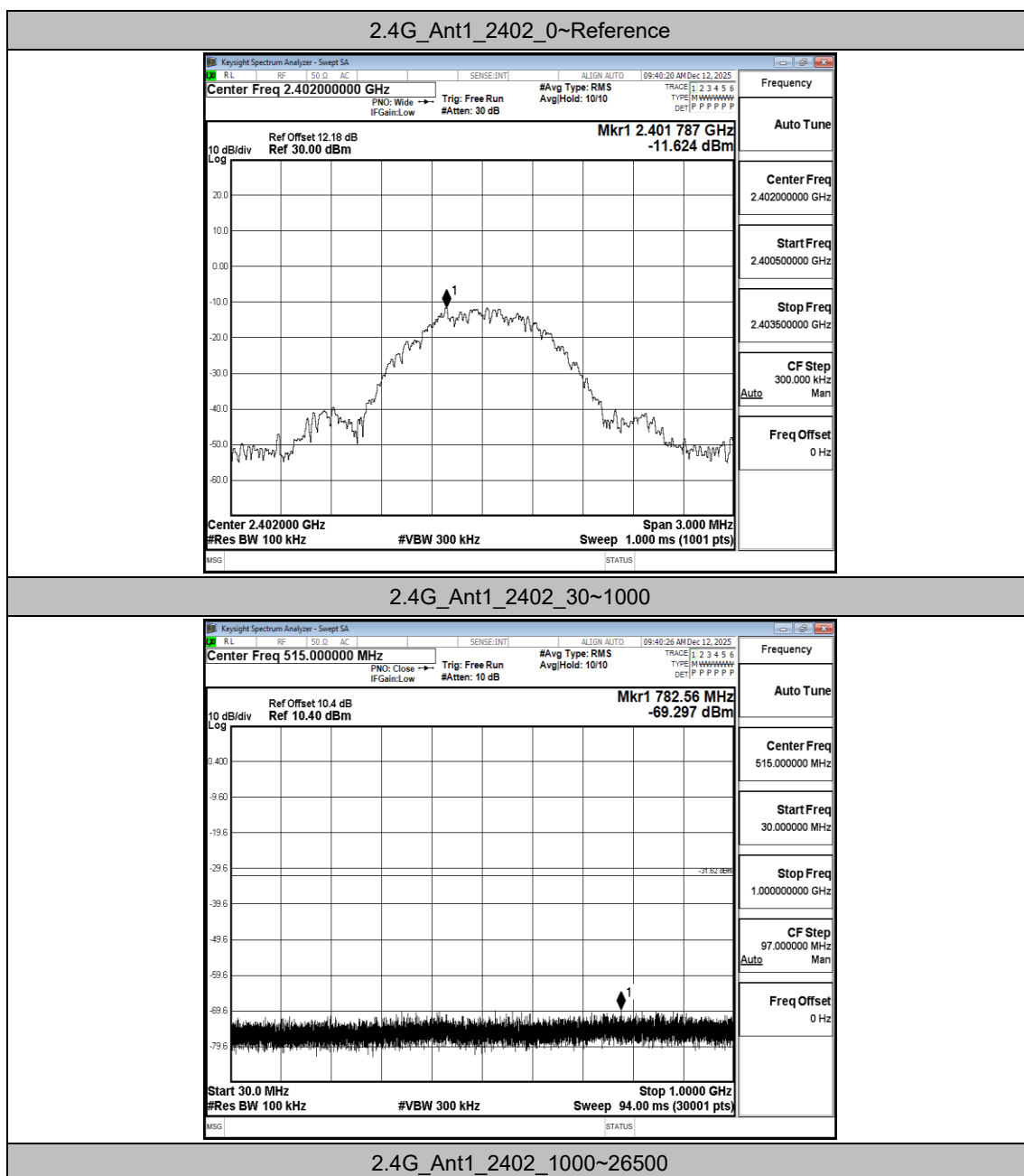


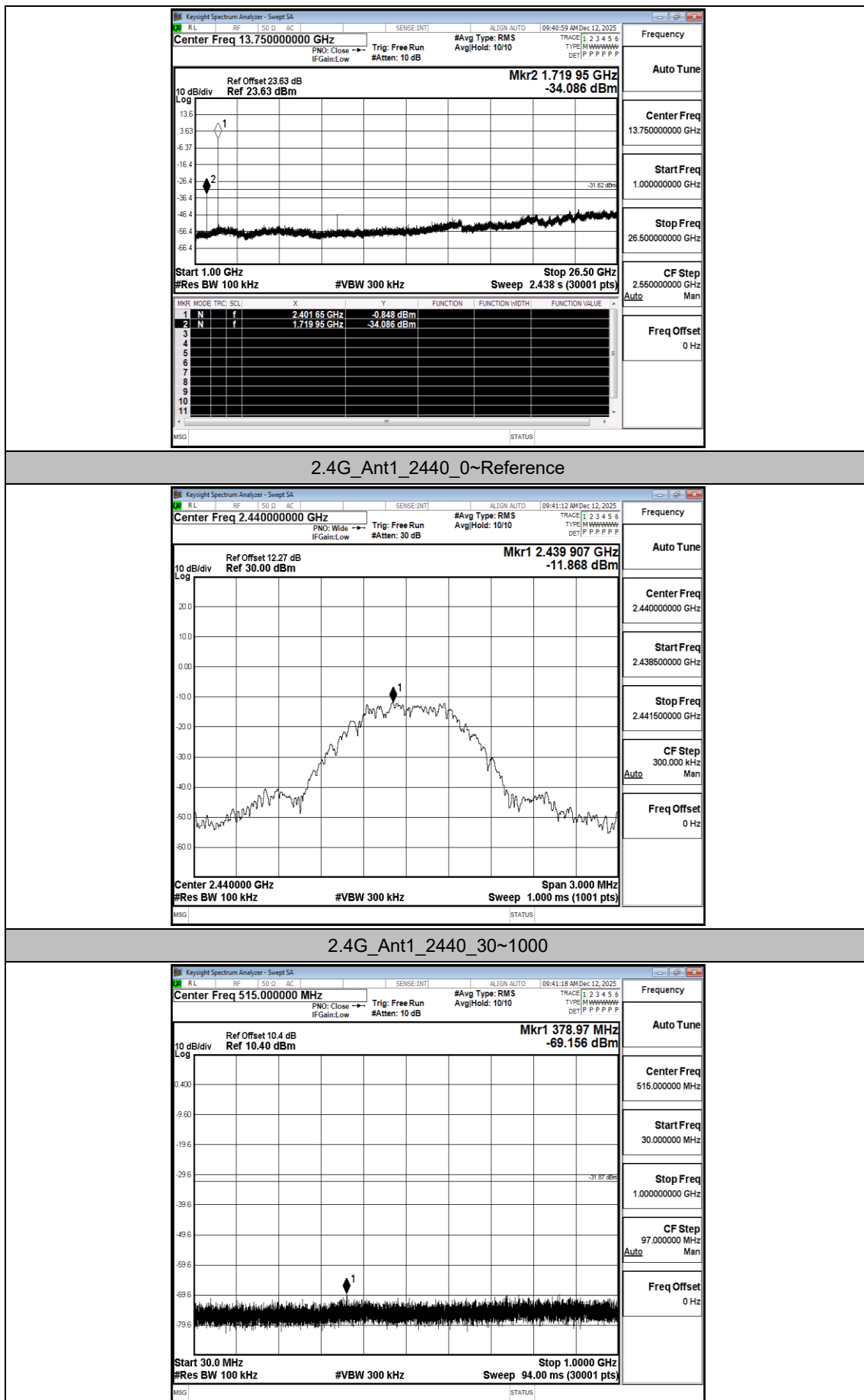
A.5 Conducted Spurious Emission

Test Result

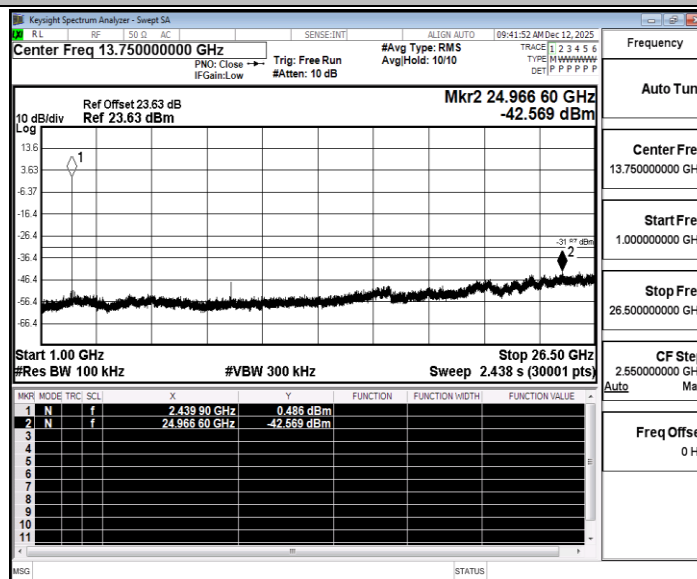
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
2.4G	Ant1	2402	Reference	-11.62	-11.62	---	PASS
			30~1000	-11.62	-69.3	≤-31.62	PASS
			1000~26500	-11.62	-34.09	≤-31.62	PASS
		2440	Reference	-11.87	-11.87	---	PASS
			30~1000	-11.87	-69.16	≤-31.87	PASS
			1000~26500	-11.87	-42.57	≤-31.87	PASS
		2480	Reference	-11.19	-11.19	---	PASS
			30~1000	-11.19	-68.96	≤-31.19	PASS
			1000~26500	-11.19	-42.3	≤-31.19	PASS

Test Graphs

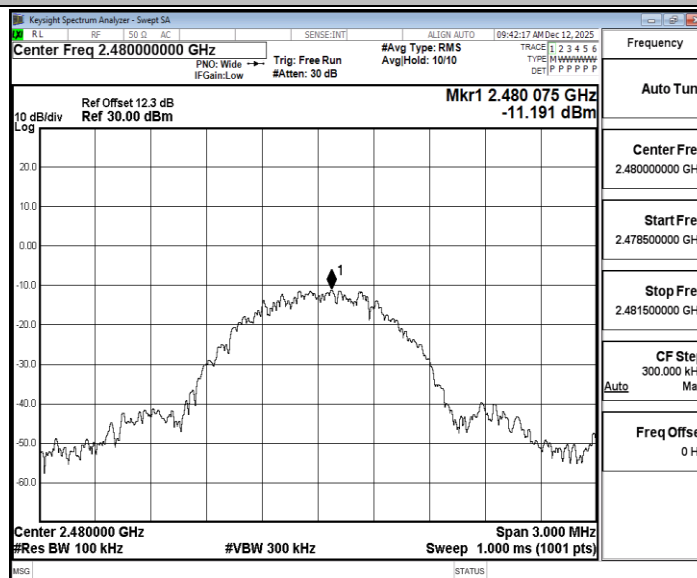




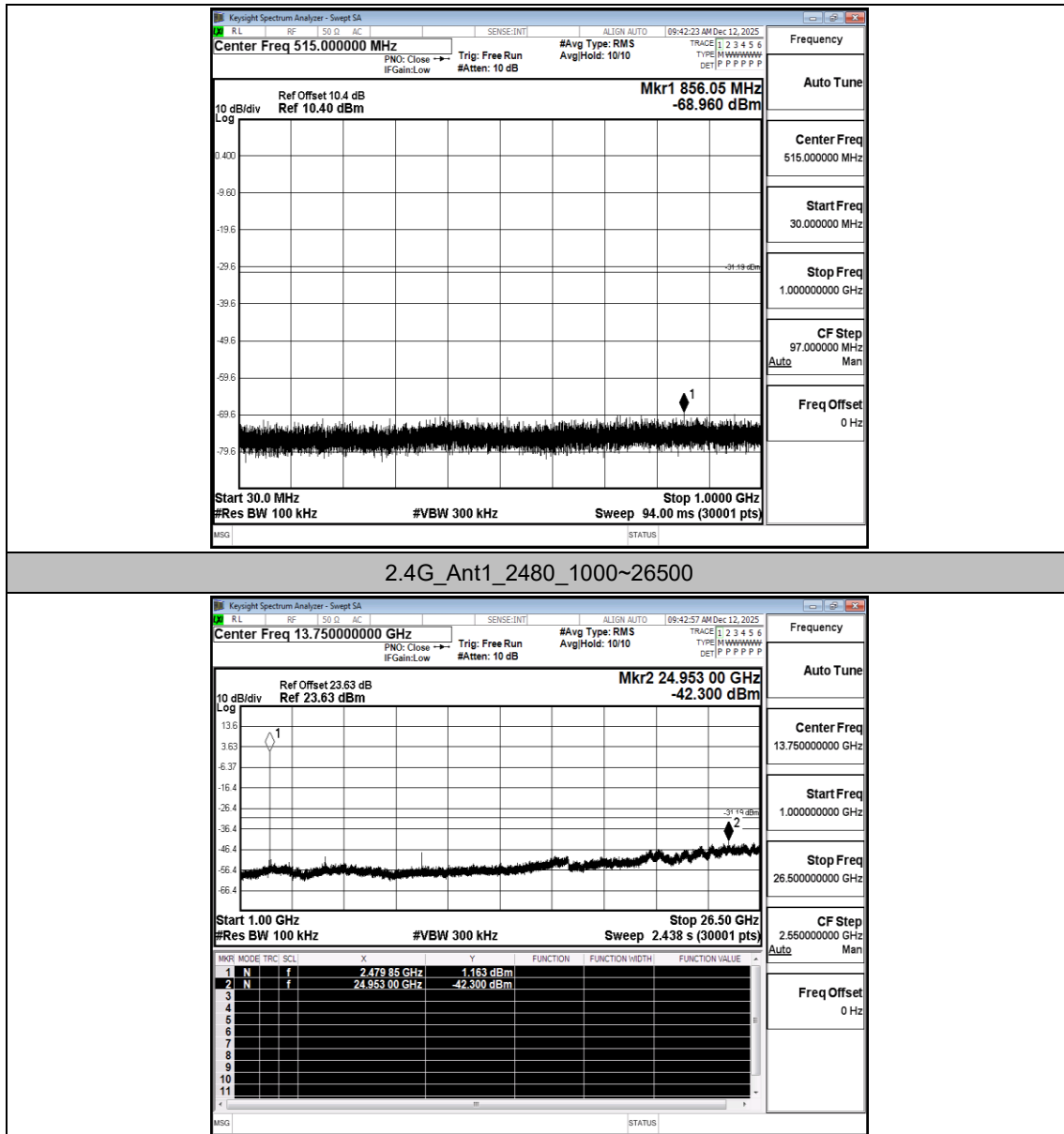
2.4G_Ant1_2440_1000~26500



2.4G_Ant1_2480_0~Reference



2.4G_Ant1_2480_30~1000

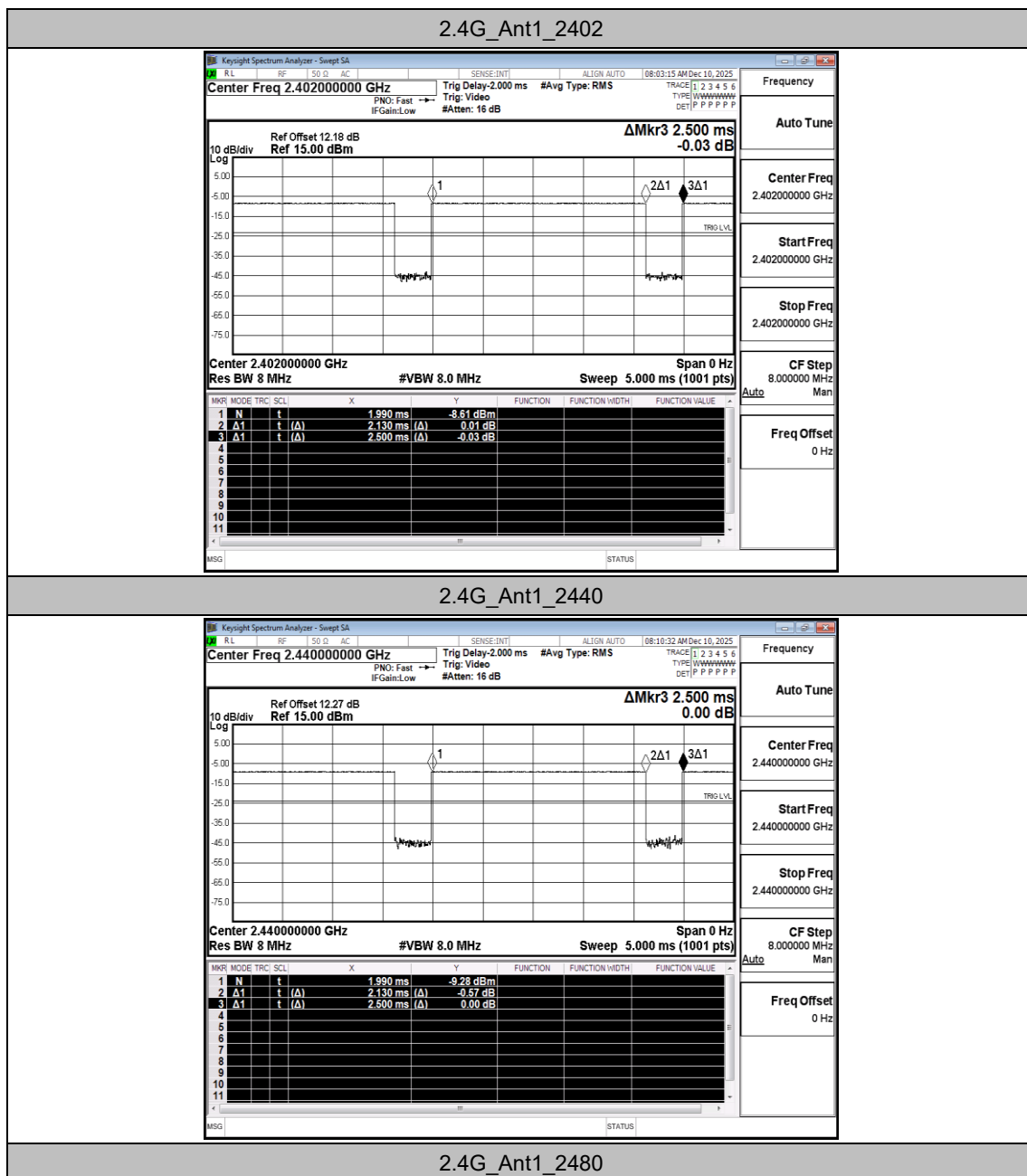


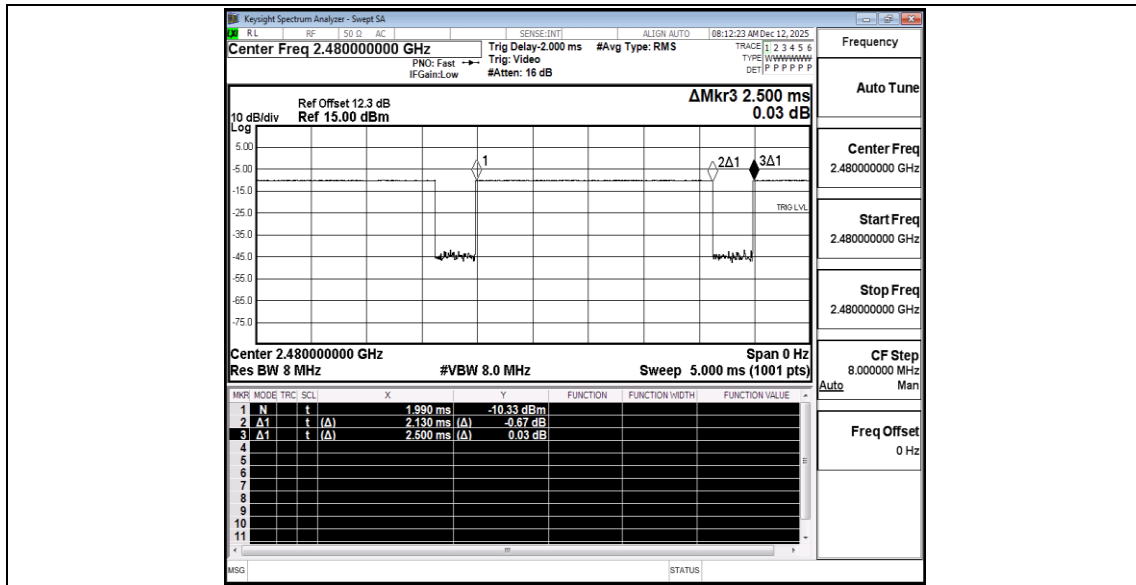
A.6 Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
2.4G	Ant1	2402	2.13	2.50	0.8520	85.20	0.70	---	---
		2440	2.13	2.50	0.8520	85.20	0.70	---	---
		2480	2.13	2.50	0.8520	85.20	0.70	---	---

Test Graphs





A.7 Emissions in Restricted Bands

Test Result

Test Mode	Antenna	Channel Name	Freq (MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
2.4G	Ant1	Low	2402	AV	2310.000	-56.82	≤-43.90	2.00	0.70	41.08	≤54	PASS
				AV	2389.880	-56.08	≤-43.90	2.00	0.70	41.82	≤54	PASS
				AV	2390.000	-56.7	≤-43.90	2.00	0.70	41.20	≤54	PASS
				Peak	2310.000	-47.25	≤-23.20	2.00	0.00	49.95	≤74	PASS
				Peak	2356.595	-45.66	≤-23.20	2.00	0.00	51.54	≤74	PASS
				Peak	2390.000	-47.62	≤-23.20	2.00	0.00	49.58	≤74	PASS
		High	2480	AV	2483.500	-56.8	≤-43.90	2.00	0.70	41.10	≤54	PASS
				AV	2490.160	-55.92	≤-43.90	2.00	0.70	41.98	≤54	PASS
				AV	2500.000	-56.46	≤-43.90	2.00	0.70	41.44	≤54	PASS
				Peak	2483.500	-47.98	≤-23.20	2.00	0.00	49.22	≤74	PASS
				Peak	2491.200	-45.46	≤-23.20	2.00	0.00	51.74	≤74	PASS
				Peak	2500.000	-48.09	≤-23.20	2.00	0.00	49.11	≤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

