



Appendix A

RF Test Data for BLE (Conducted Measurement)

Product Name: AIR PURIFIER

Test Model: Y1000

Environmental Conditions

Temperature:	22.4° C
Relative Humidity:	53.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Li huan

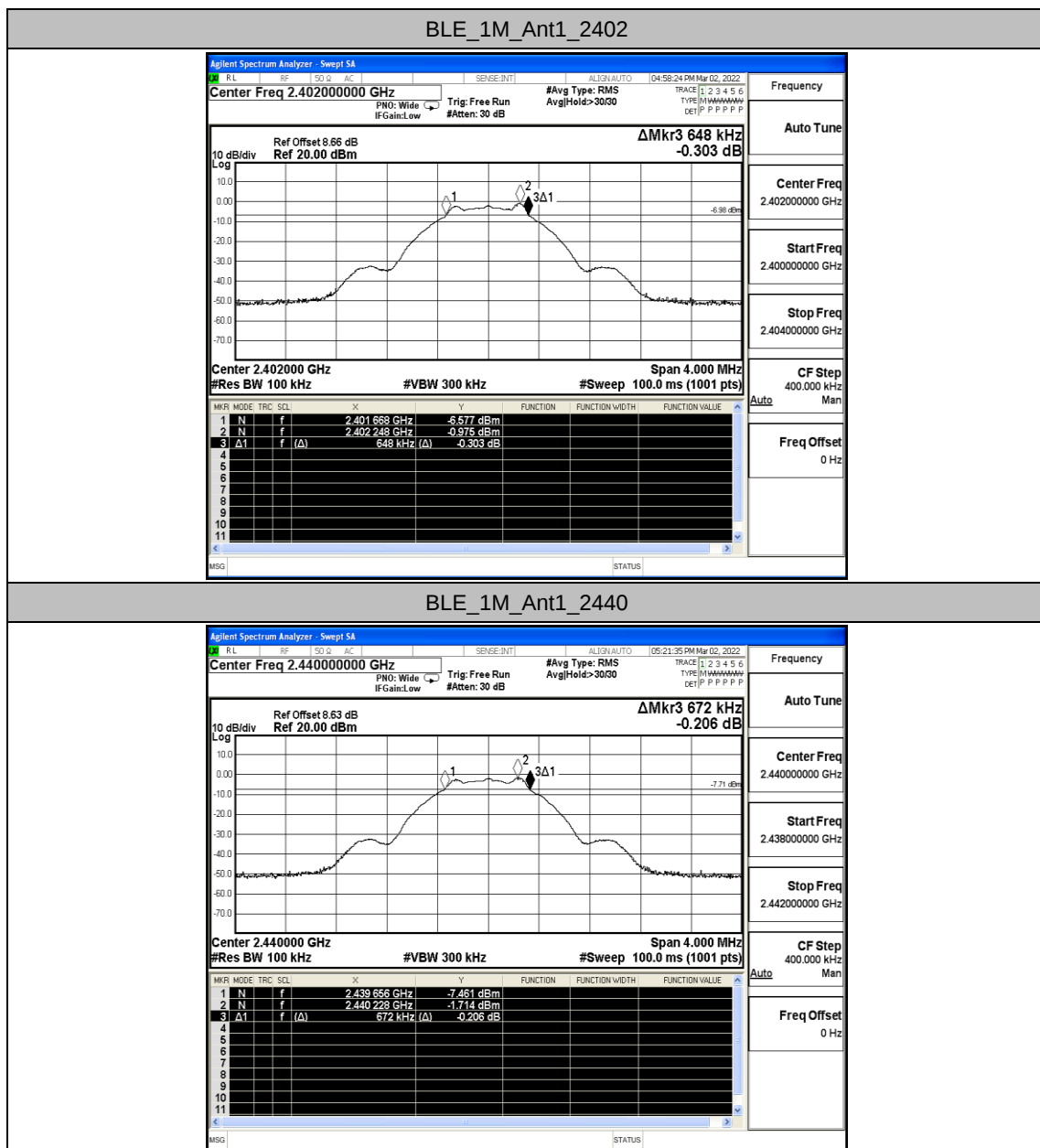


A.1 6dB Bandwidth

Test Result

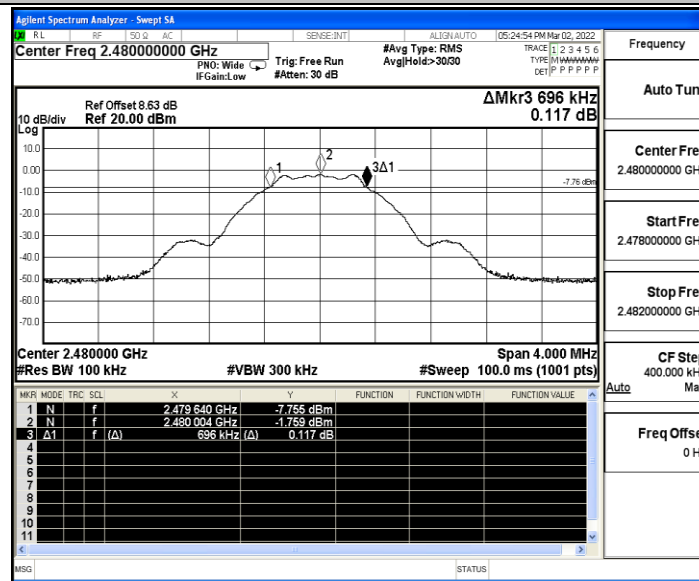
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.648	2401.668	2402.316	0.5	PASS
		2440	0.672	2439.656	2440.328	0.5	PASS
		2480	0.696	2479.640	2480.336	0.5	PASS

Test Graphs





BLE_1M_Ant1_2480



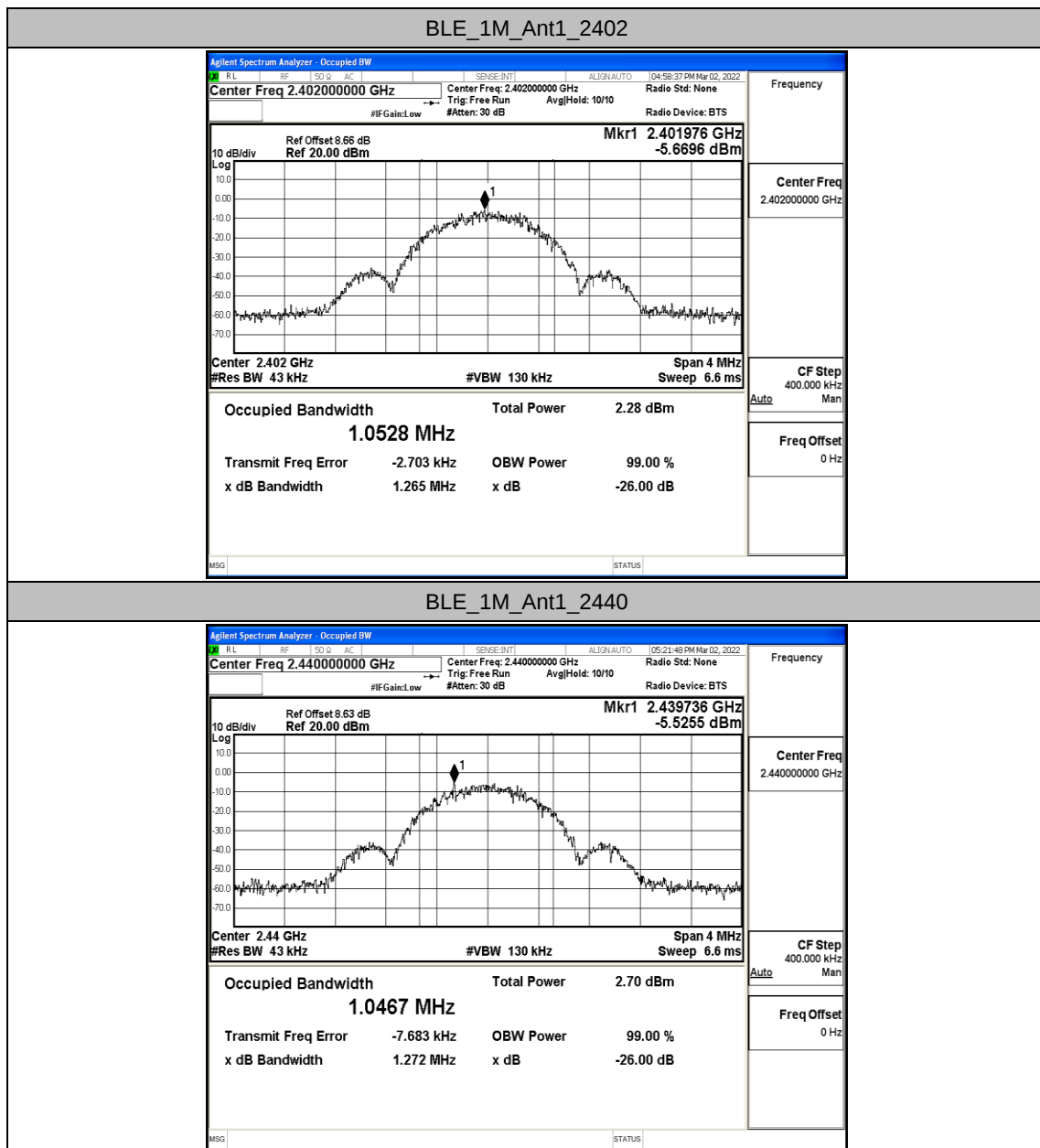


A.2 Occupied Channel Bandwidth

Test Result

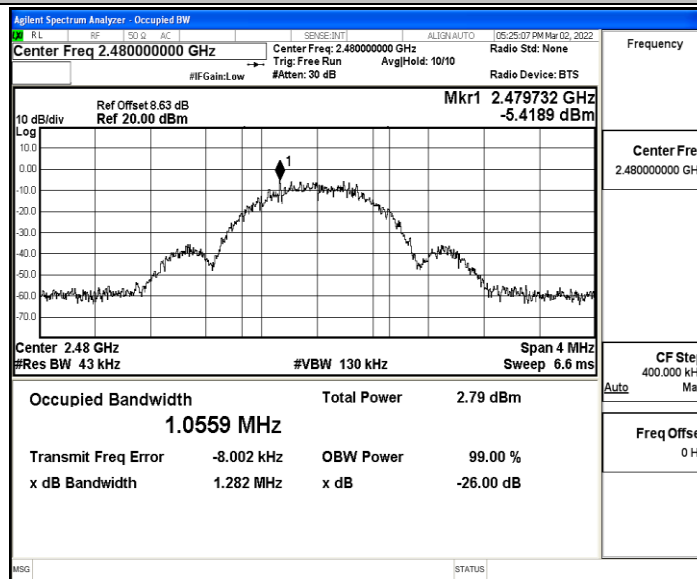
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0528	2401.471	2402.524	---	---
		2440	1.0467	2439.469	2440.516	---	---
		2480	1.0559	2479.464	2480.520	---	---

Test Graphs





BLE_1M_Ant1_2480



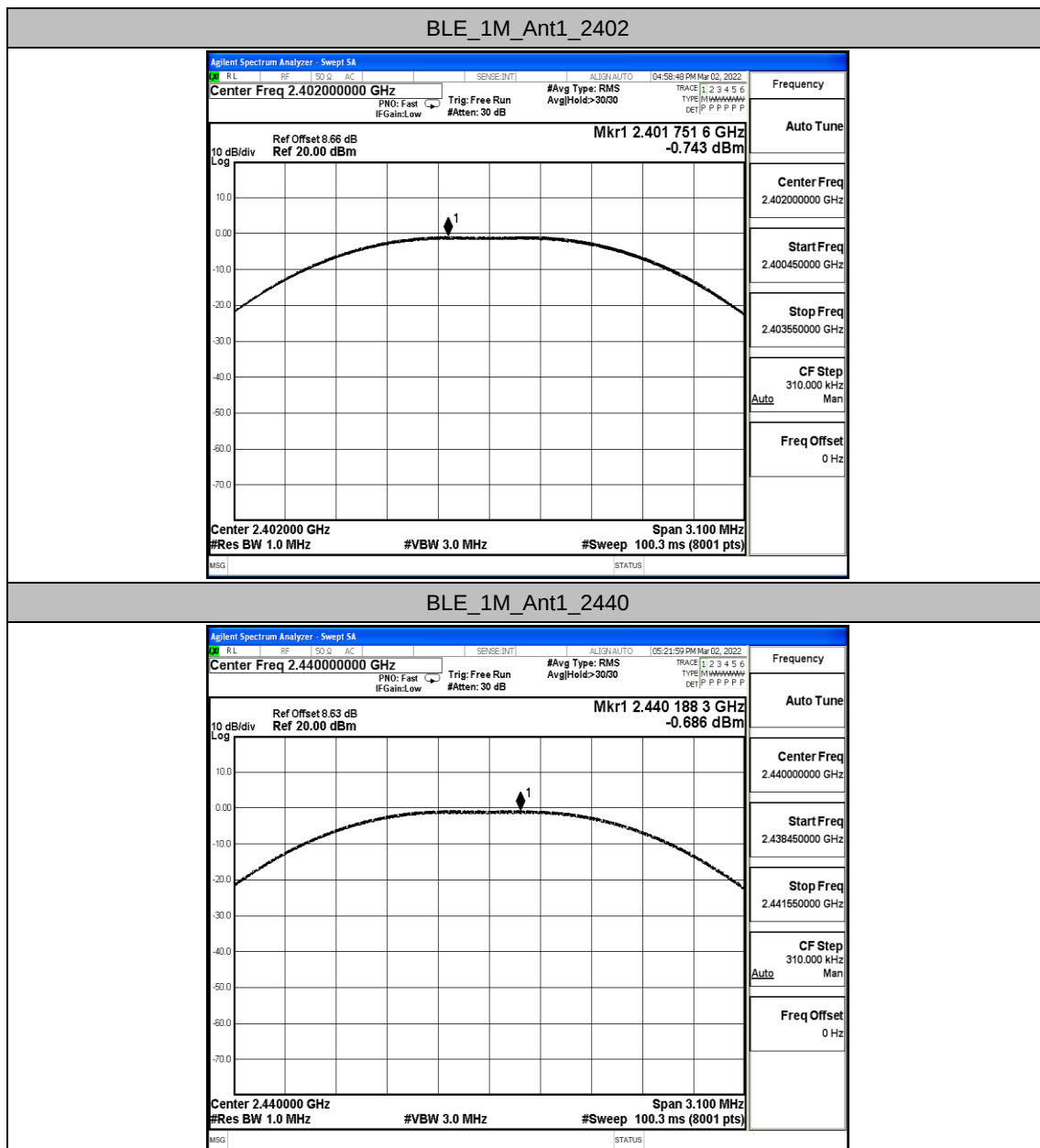


A.3 Maximum conducted output power

Test Result

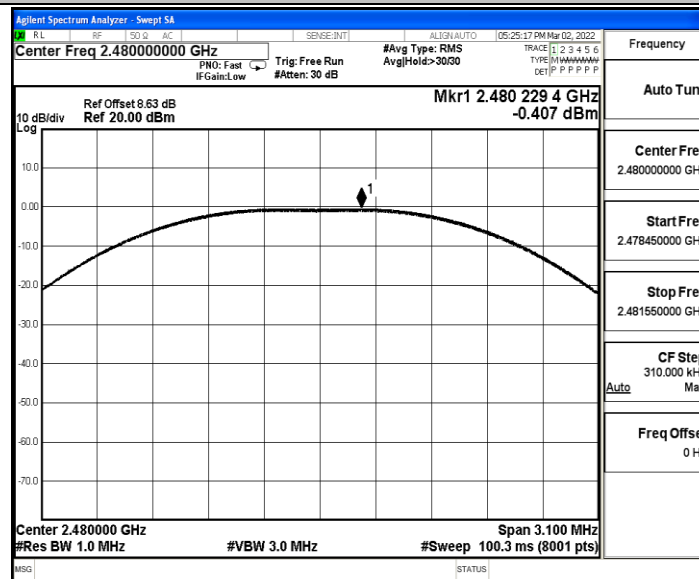
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.74	≤30	PASS
		2440	-0.69	≤30	PASS
		2480	-0.41	≤30	PASS

Test Graphs





BLE_1M_Ant1_2480



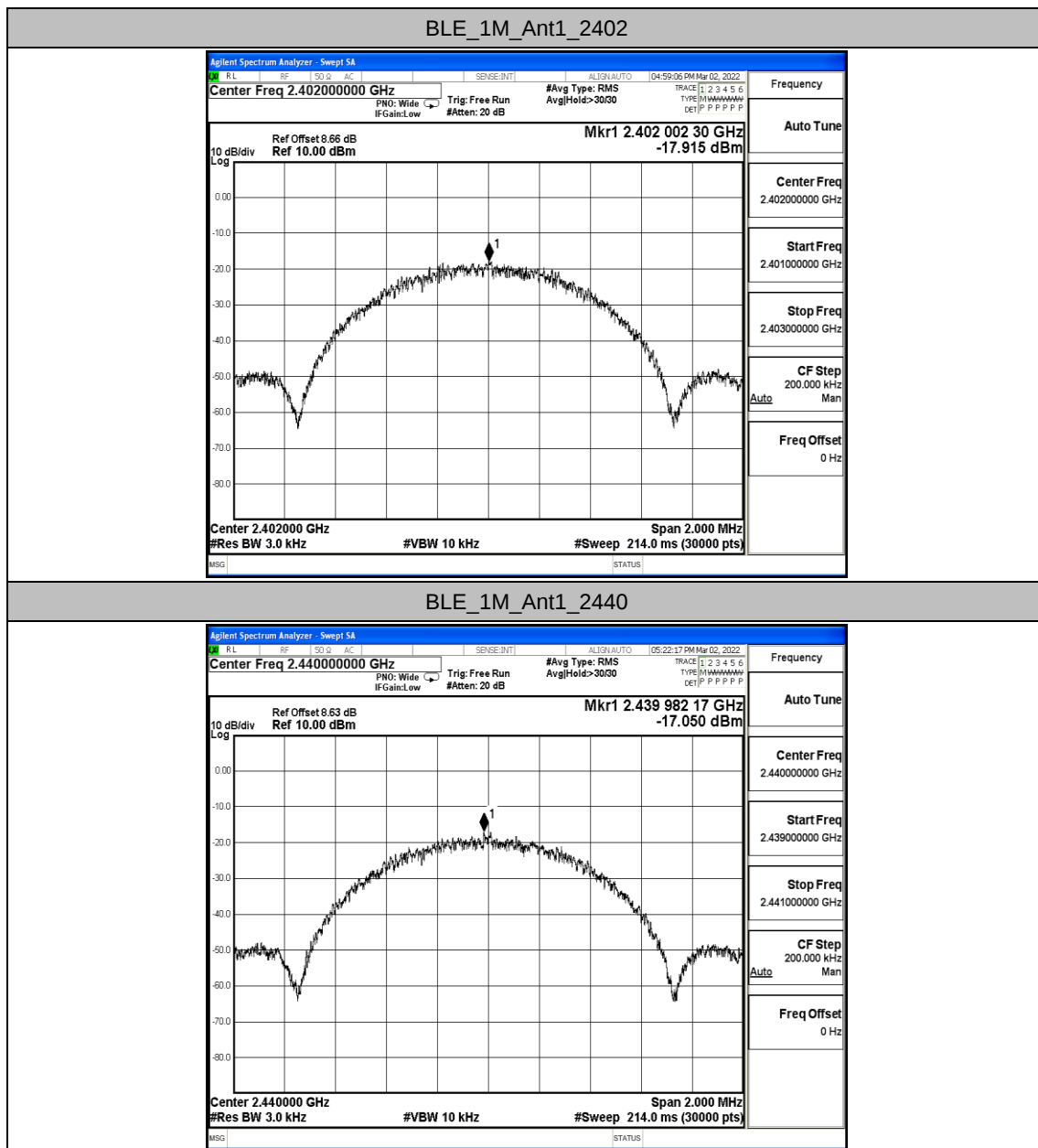


A.4 Maximum power spectral density

Test Result

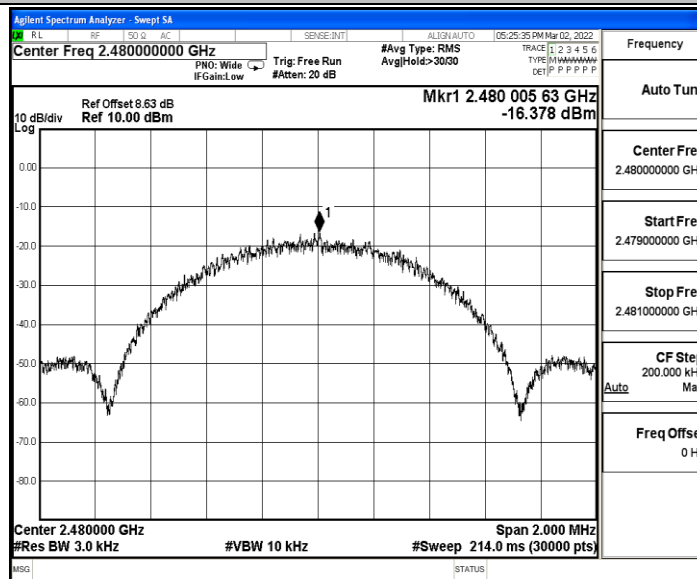
TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-17.92	≤8.00	PASS
		2440	-17.05	≤8.00	PASS
		2480	-16.38	≤8.00	PASS

Test Graphs





BLE_1M_Ant1_2480



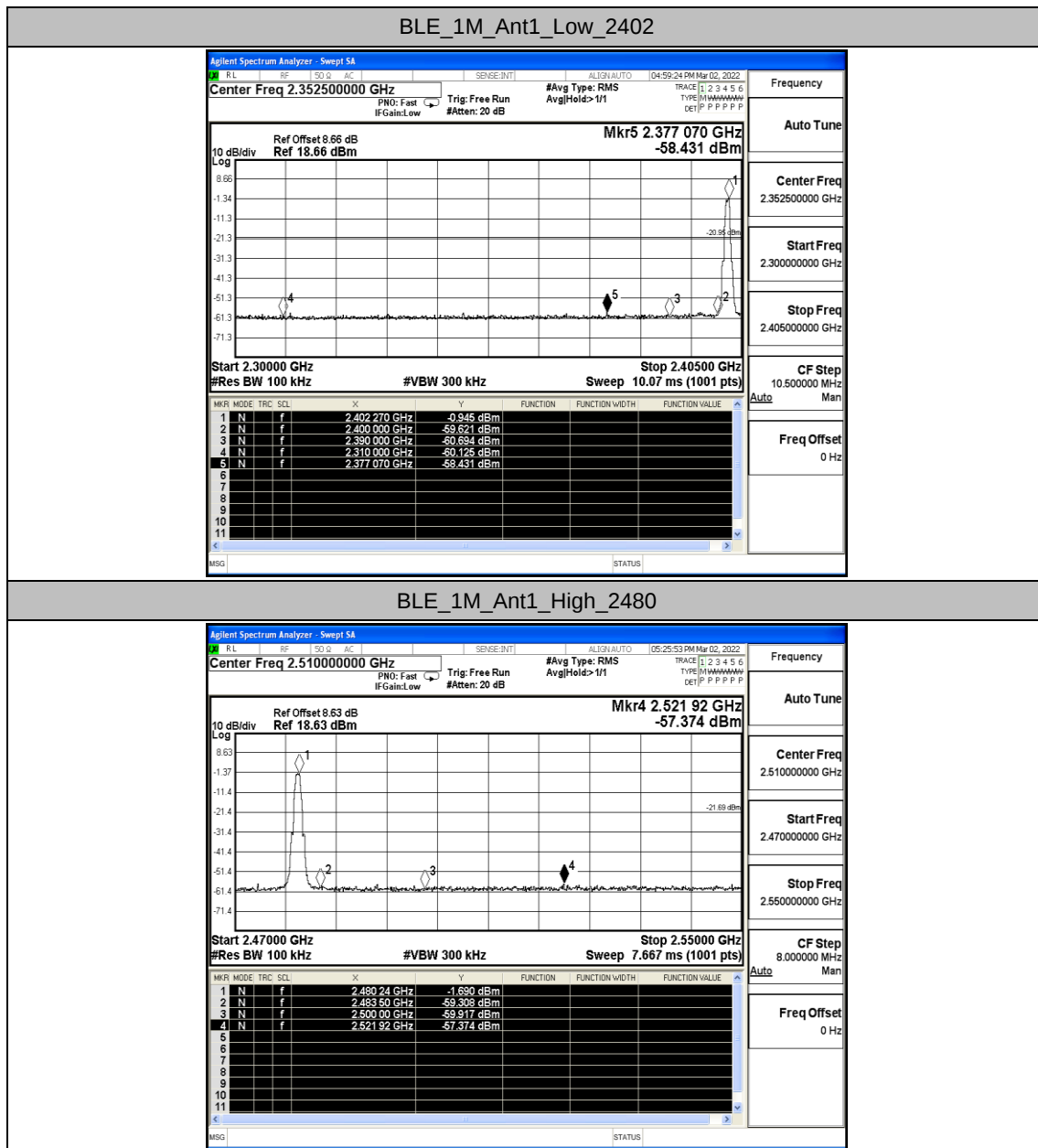


A.5 Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.95	-58.43	≤-20.95	PASS
		High	2480	-1.69	-57.37	≤-21.69	PASS

Test Graphs





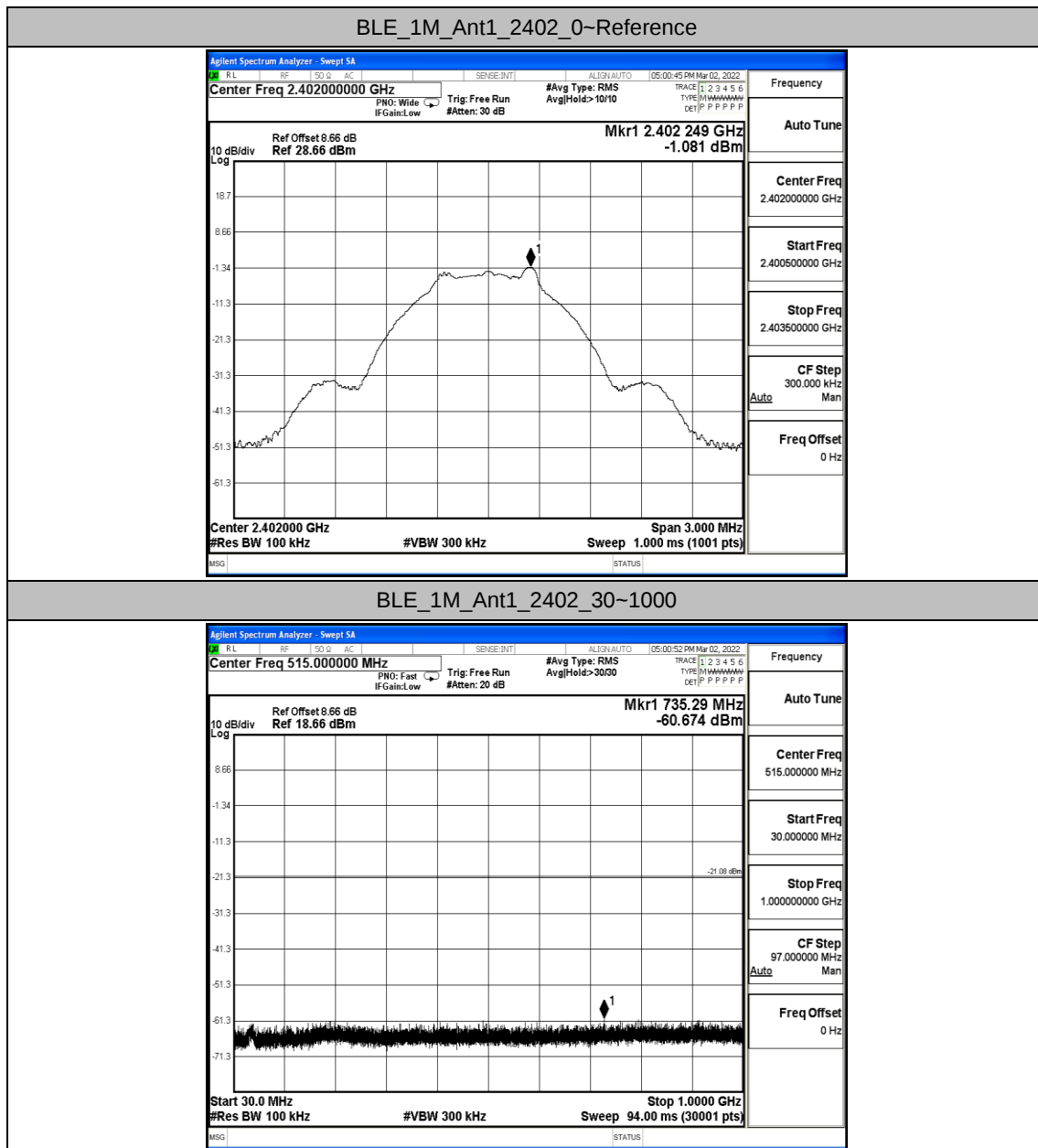
A.6 Conducted Spurious Emission

Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.08	-1.08	---	PASS
			30~1000	-1.08	-60.67	≤ -21.08	PASS
			1000~26500	-1.08	-45.7	≤ -21.08	PASS
		2440	Reference	-1.66	-1.66	---	PASS
			30~1000	-1.66	-60.23	≤ -21.66	PASS
			1000~26500	-1.66	-39.29	≤ -21.66	PASS
		2480	Reference	-1.98	-1.98	---	PASS
			30~1000	-1.98	-60.31	≤ -21.98	PASS
			1000~26500	-1.98	-44	≤ -21.98	PASS

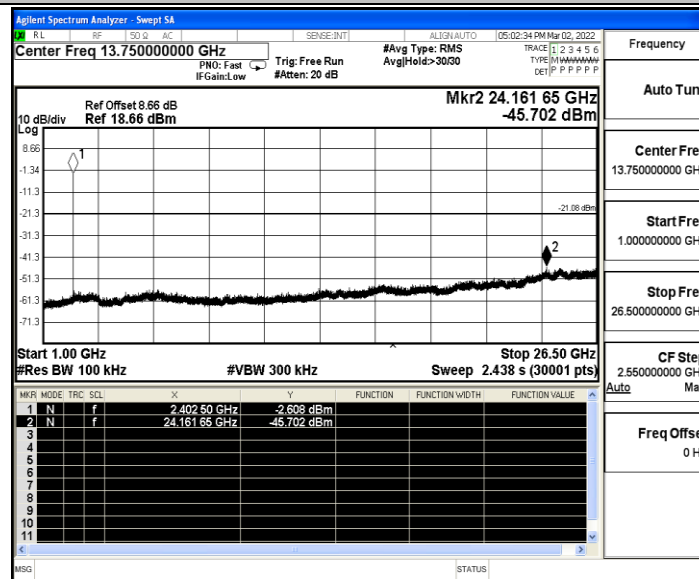


Test Graphs

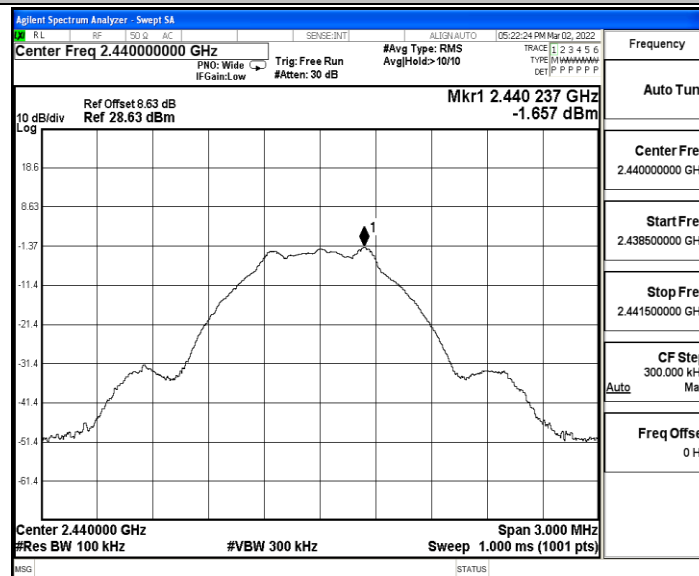




BLE_1M_Ant1_2402_1000-26500

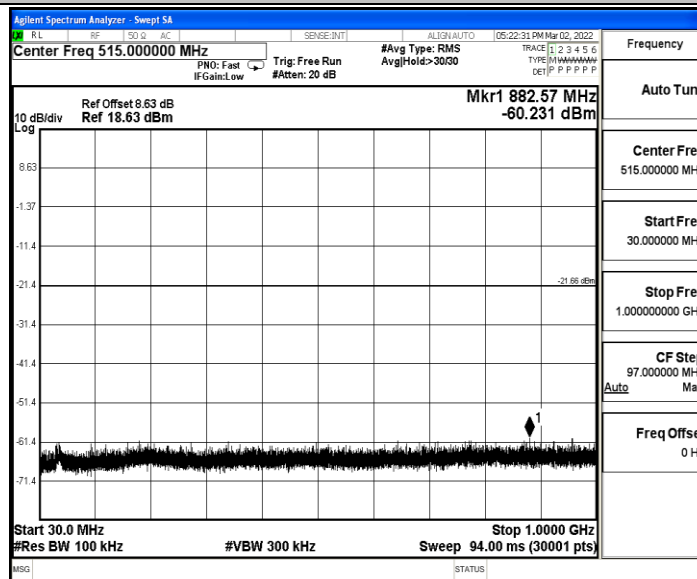


BLE_1M_Ant1_2440_0~Reference

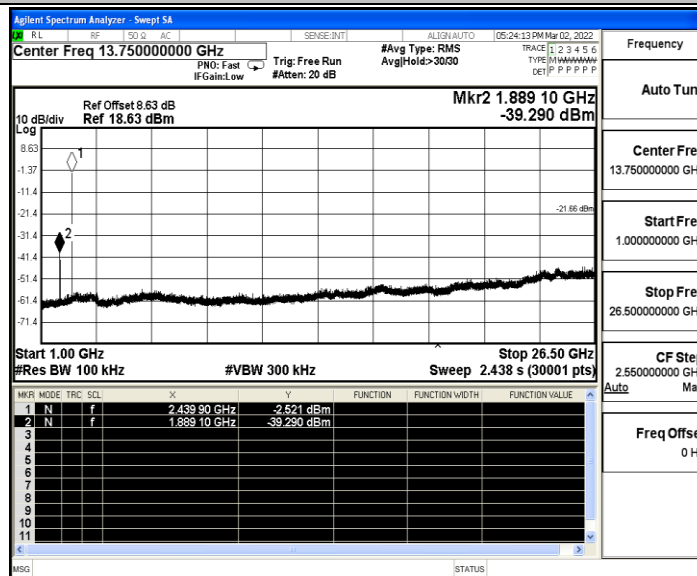




BLE_1M_Ant1_2440_30~1000

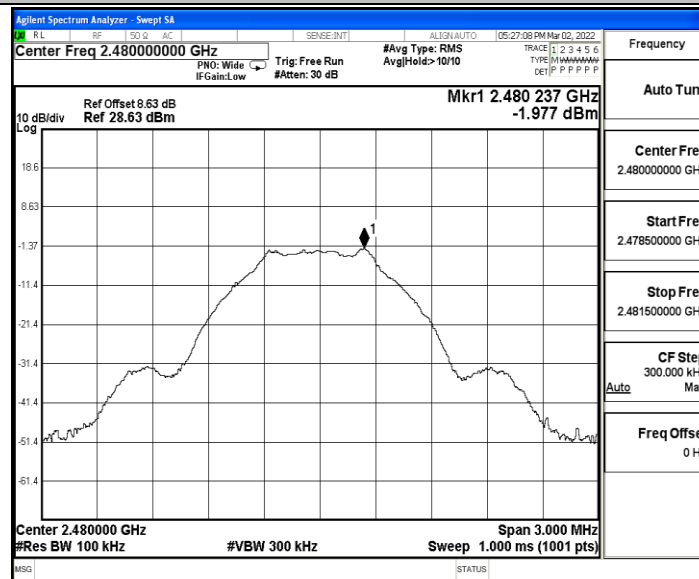


BLE_1M_Ant1_2440_1000~26500

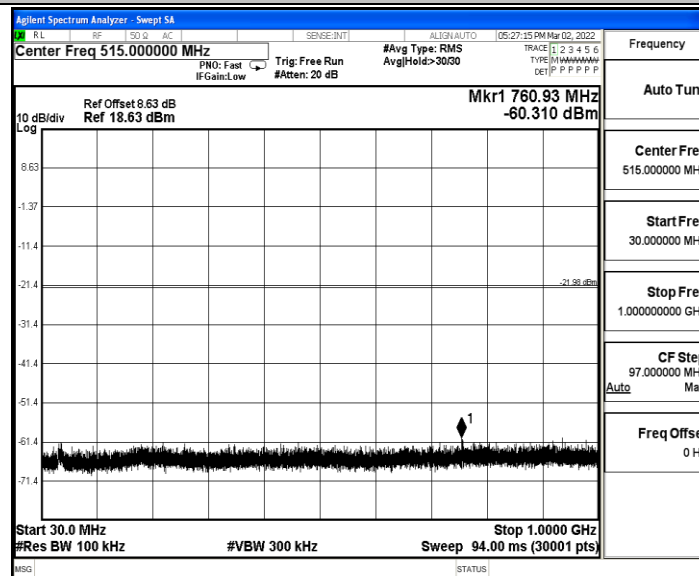




BLE_1M_Ant1_2480_0~Reference

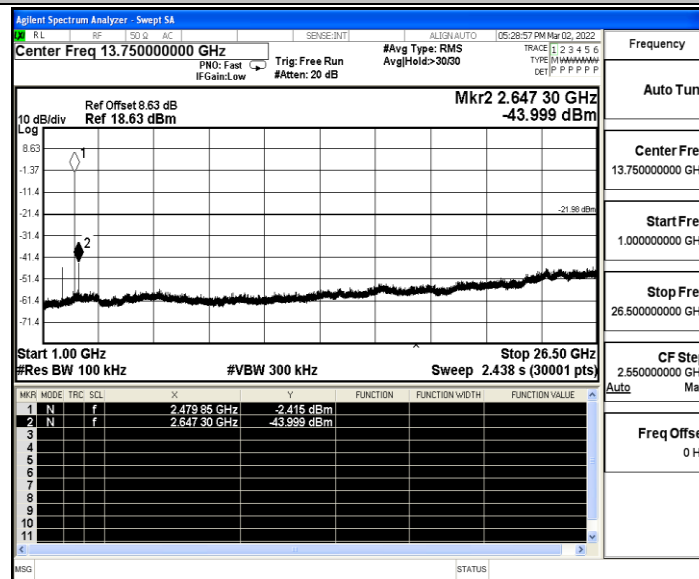


BLE_1M_Ant1_2480_30~1000





BLE_1M_Ant1_2480_1000-26500



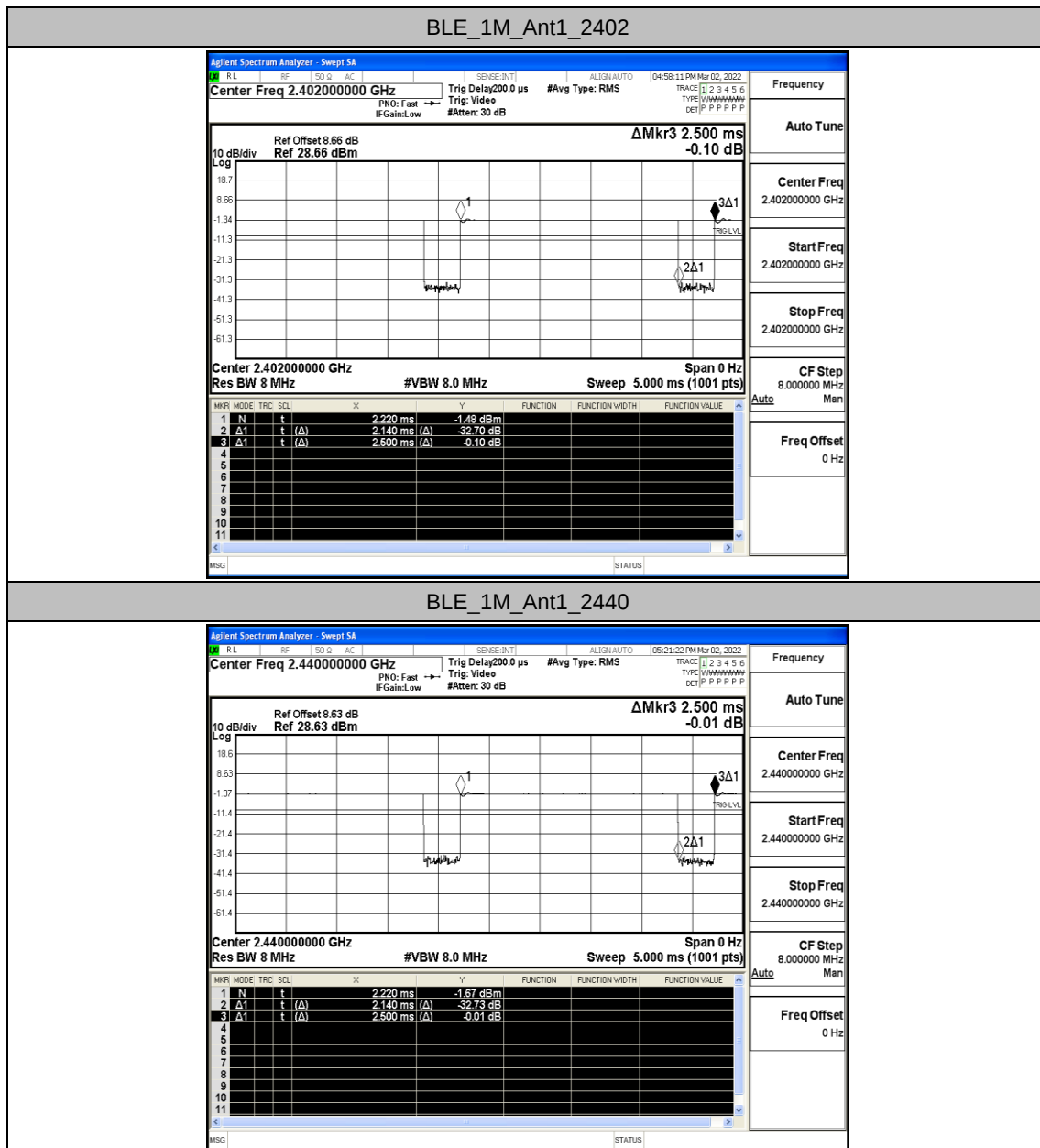


A.7 Duty Cycle

Test Result

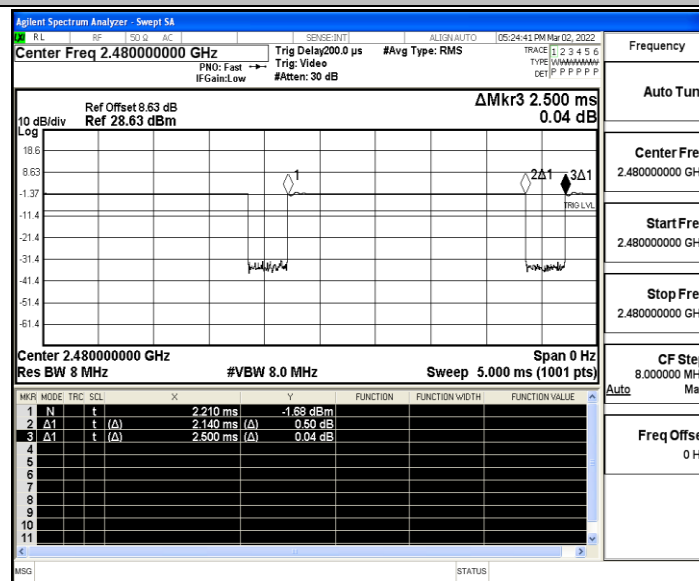
TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	2.14	2.50	0.8560	85.60	0.68	---	---
		2440	2.14	2.50	0.8560	85.60	0.68	---	---
		2480	2.14	2.50	0.8560	85.60	0.68	---	---

Test Graphs





BLE_1M_Ant1_2480





A.8 Emissions in Restricted Bands

Test Result

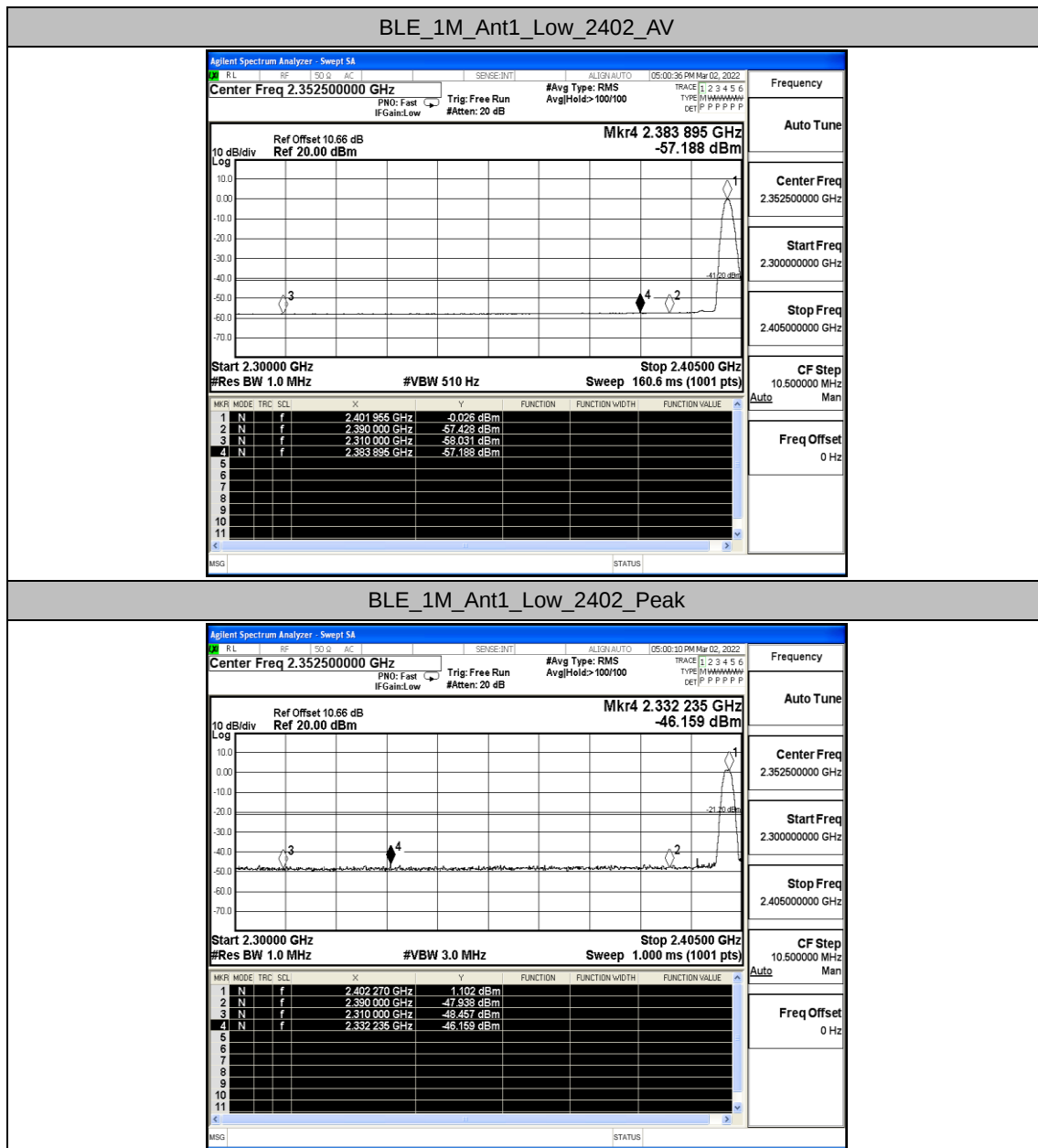
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-58.03	≤-41.20	37.17	≤54	PASS
				AV	2383.895	-57.19	≤-41.20	38.01	≤54	PASS
				AV	2390.000	-57.43	≤-41.20	37.77	≤54	PASS
				Peak	2310.000	-48.46	≤-21.20	46.74	≤74	PASS
				Peak	2332.235	-46.16	≤-21.20	49.04	≤74	PASS
				Peak	2390.000	-47.94	≤-21.20	47.26	≤74	PASS
		High	2480	AV	2483.500	-54.68	≤-41.20	40.52	≤54	PASS
				AV	2483.520	-54.68	≤-41.20	40.52	≤54	PASS
				AV	2500.000	-56.99	≤-41.20	38.21	≤54	PASS
				Peak	2483.500	-47.12	≤-21.20	48.08	≤74	PASS
				Peak	2483.680	-44.39	≤-21.20	50.81	≤74	PASS
				Peak	2500.000	-48.07	≤-21.20	47.13	≤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.

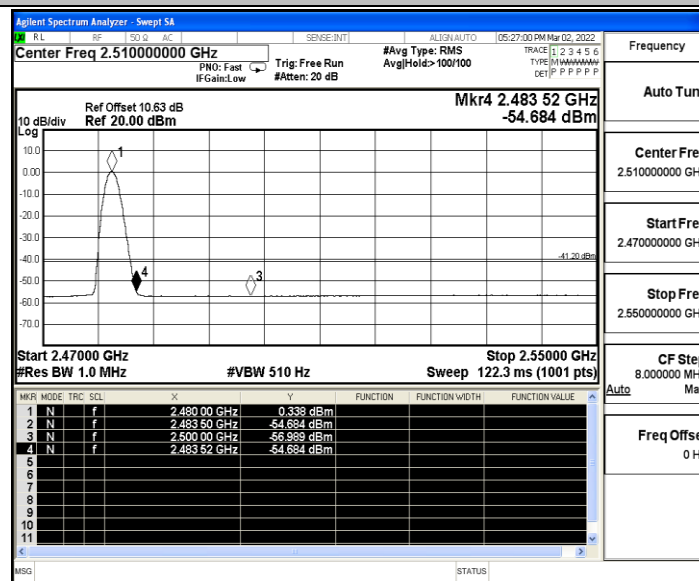


Test Graphs





BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

