



Appendix F

RF Test Data for BT LE (Conducted Measurement)

Product Name: Android Mobile Scanning Device

Test Model: DRS-50

Environmental Conditions

Temperature:	22.6° C
Relative Humidity:	53.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Mart Chen
Supervised by:	Li Huan

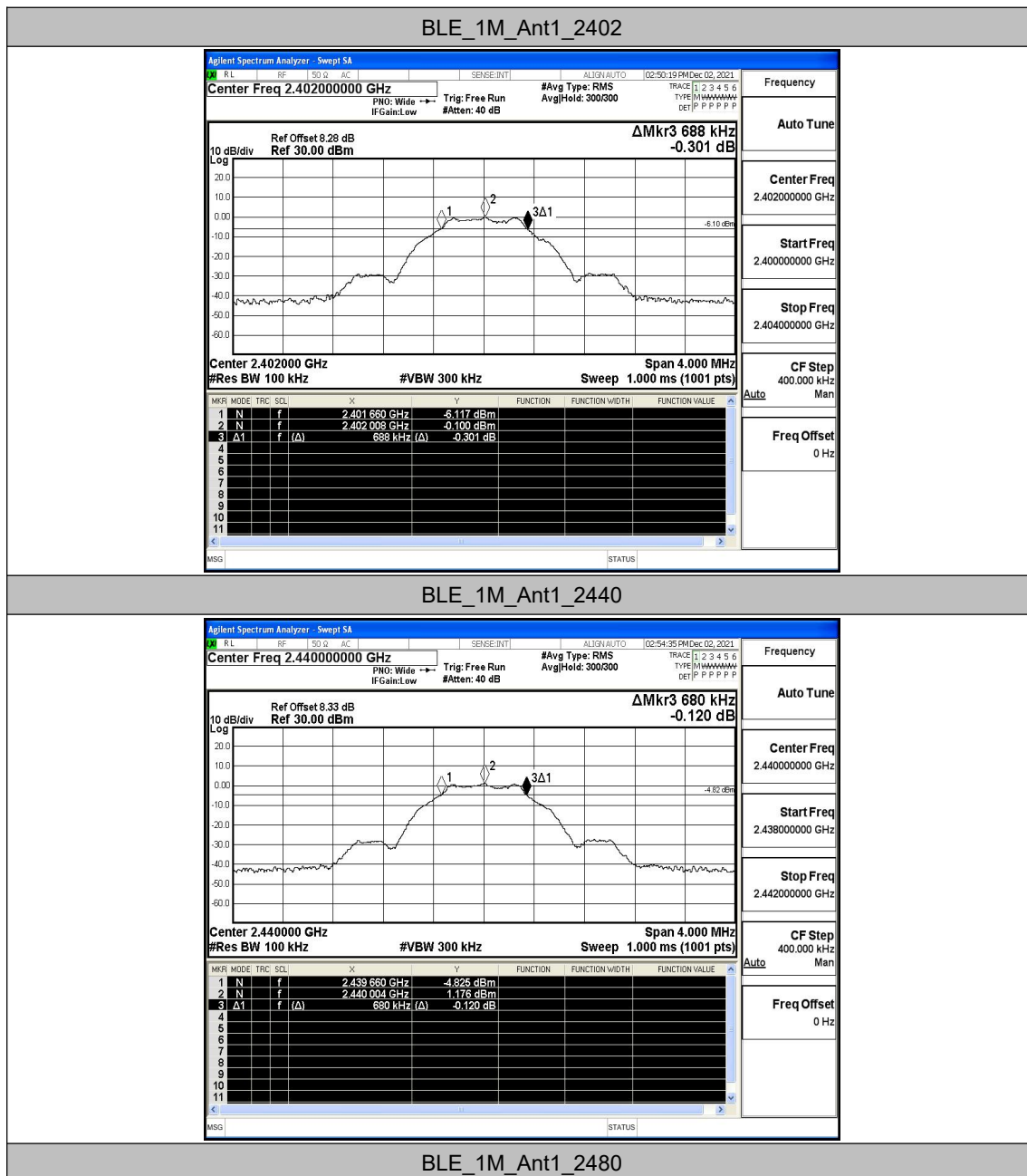


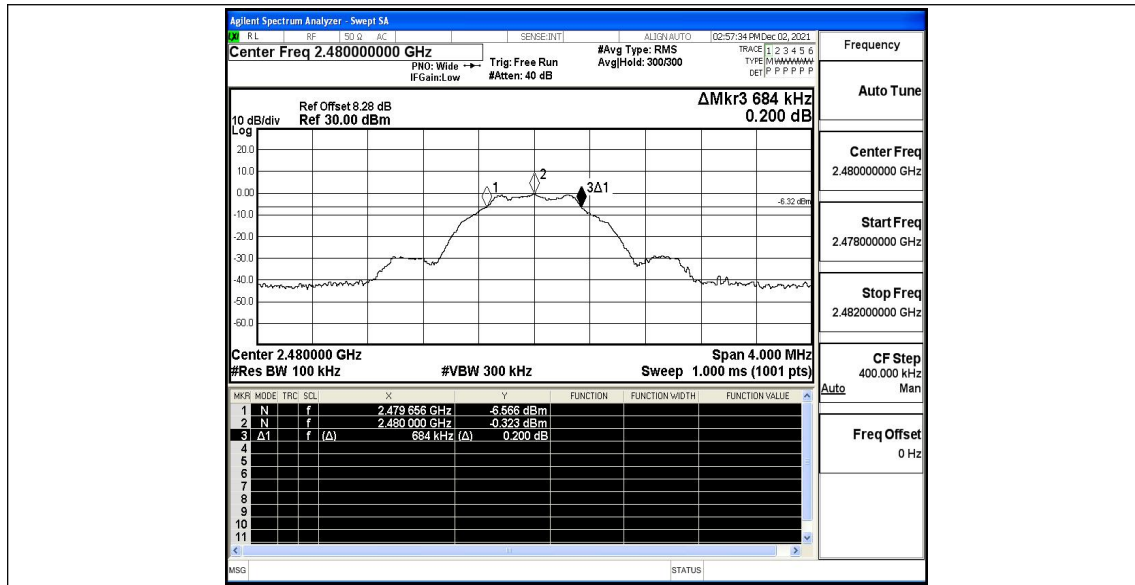
F.1 6dB Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.688	2401.660	2402.348	≥0.5	PASS
		2440	0.680	2439.660	2440.340	≥0.5	PASS
		2480	0.684	2479.656	2480.340	≥0.5	PASS

Test Graphs





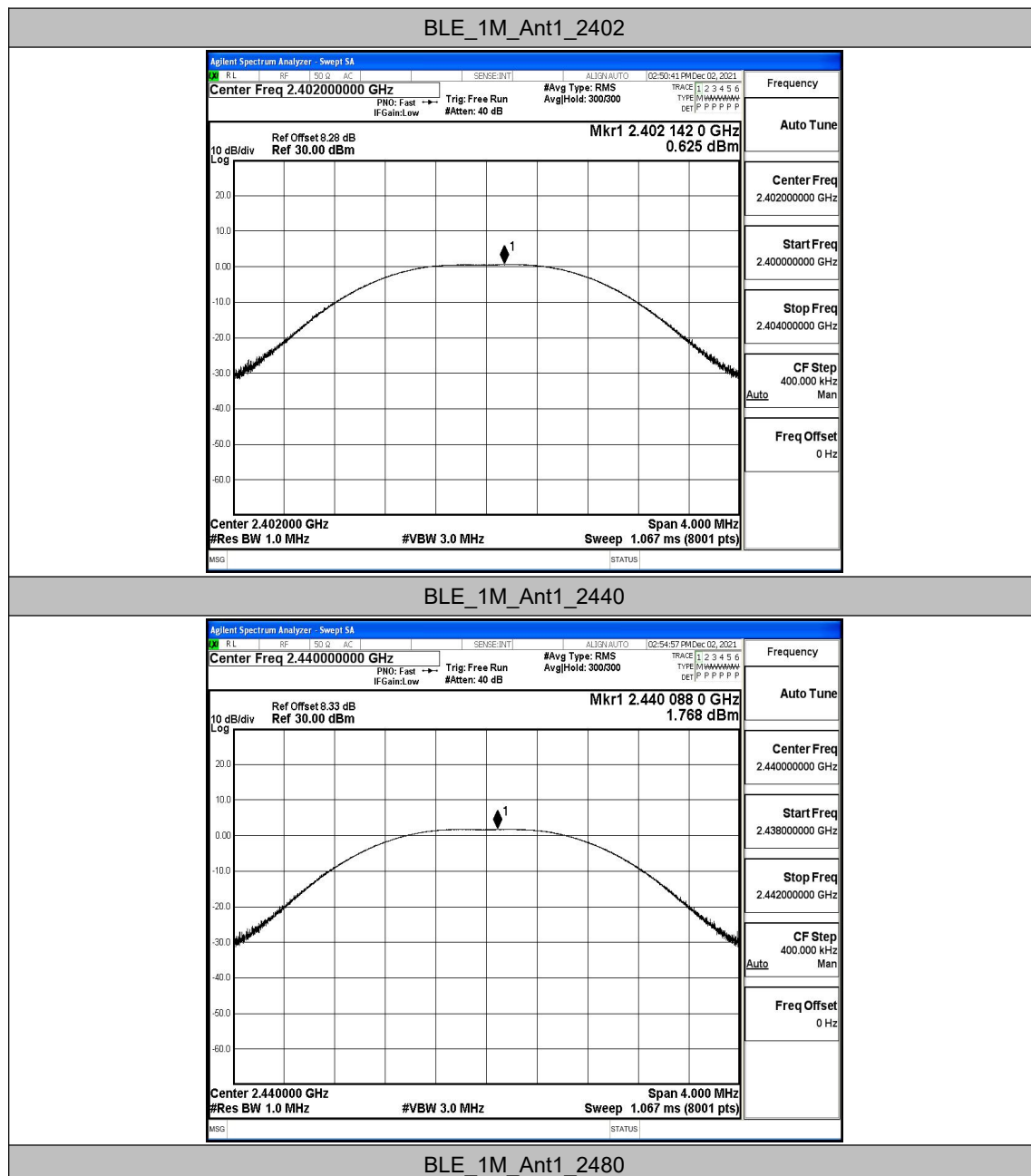


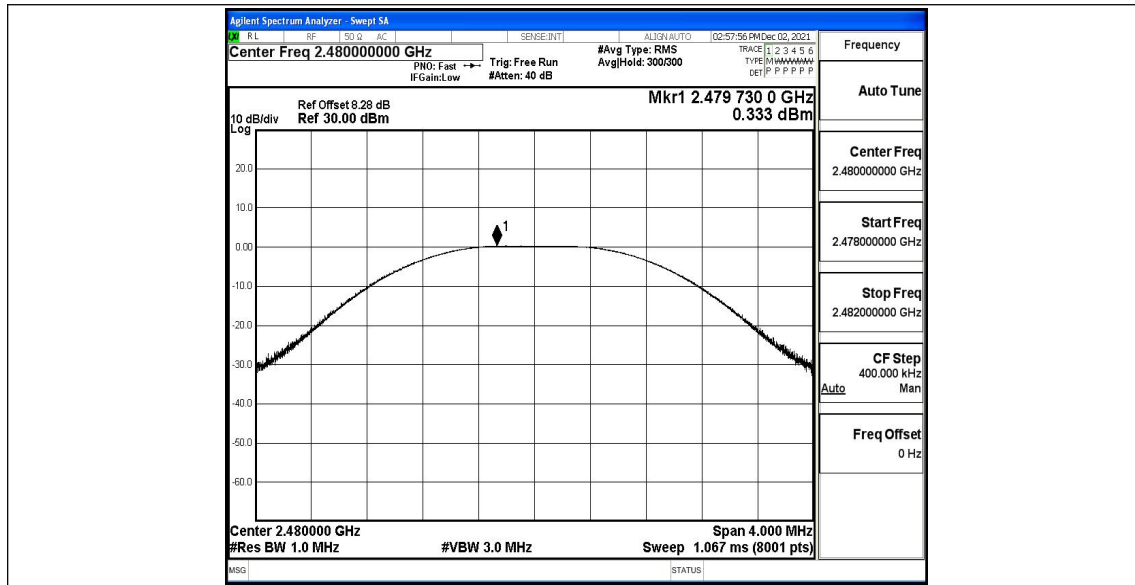
F.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.63	≤30	PASS
		2440	1.77	≤30	PASS
		2480	0.33	≤30	PASS

Test Graphs





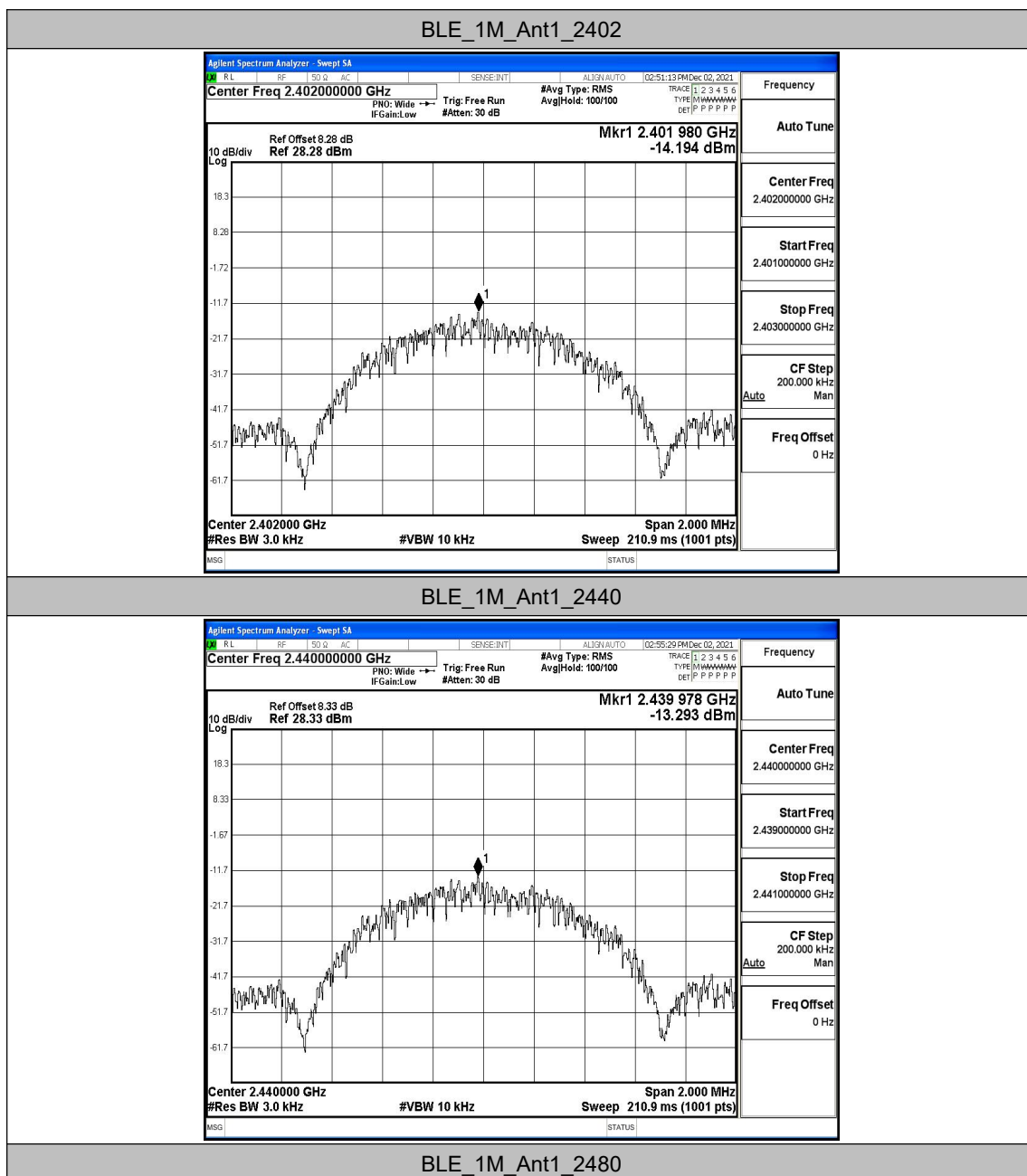


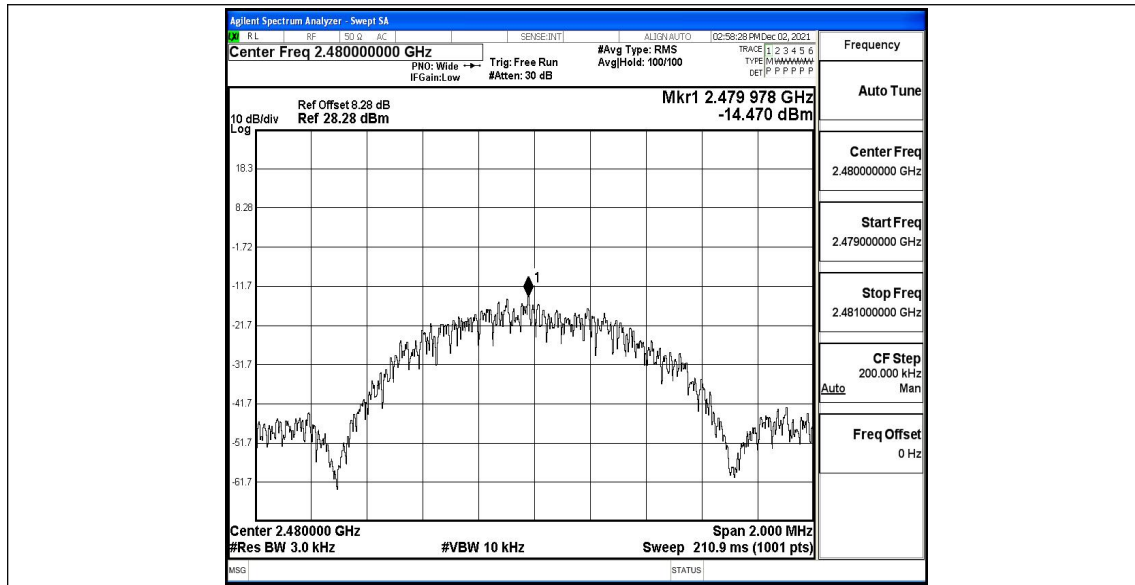
F.3 Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-14.19	≤8	PASS
		2440	-13.29	≤8	PASS
		2480	-14.47	≤8	PASS

Test Graphs





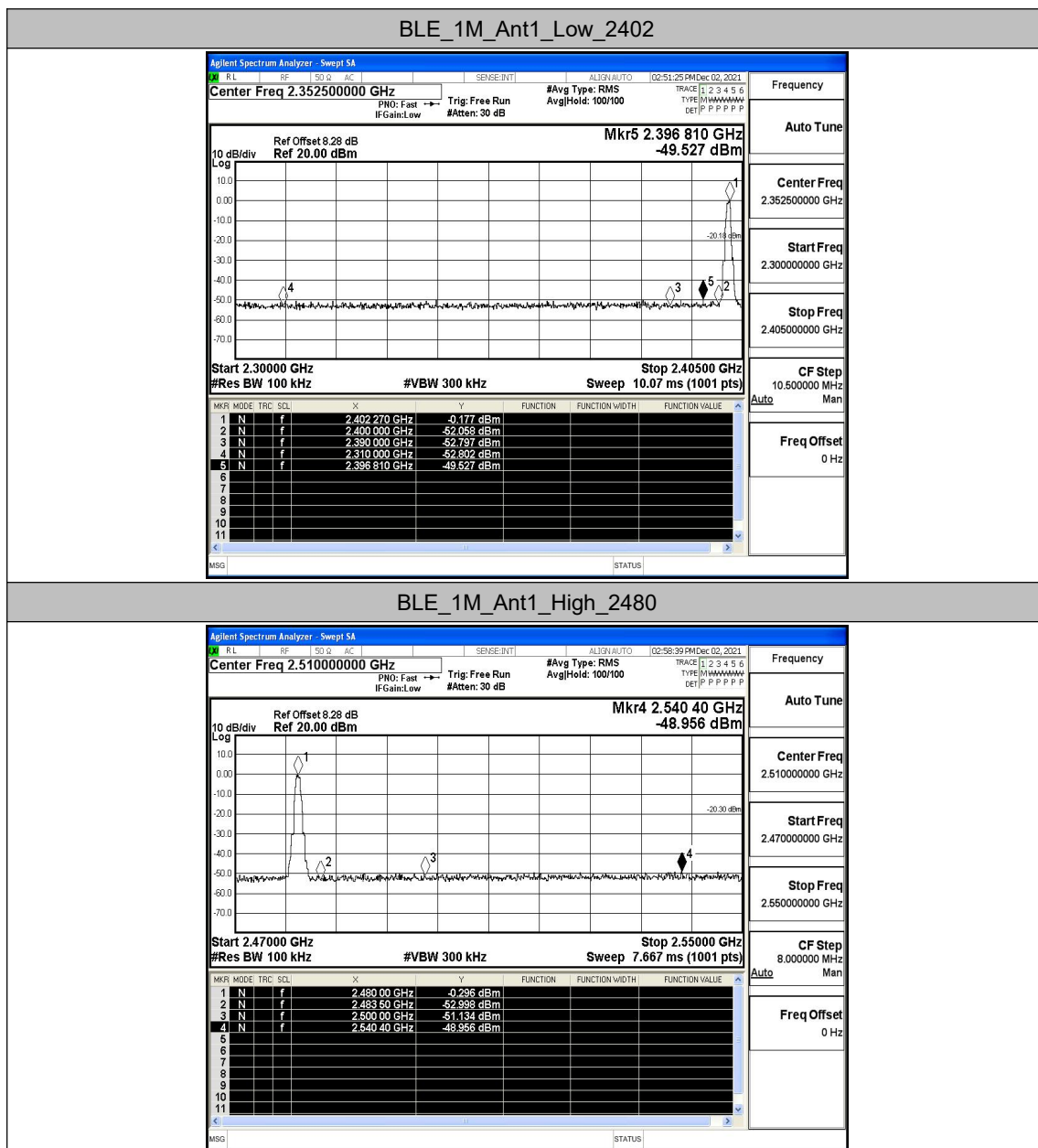


F.4 Band edge measurements

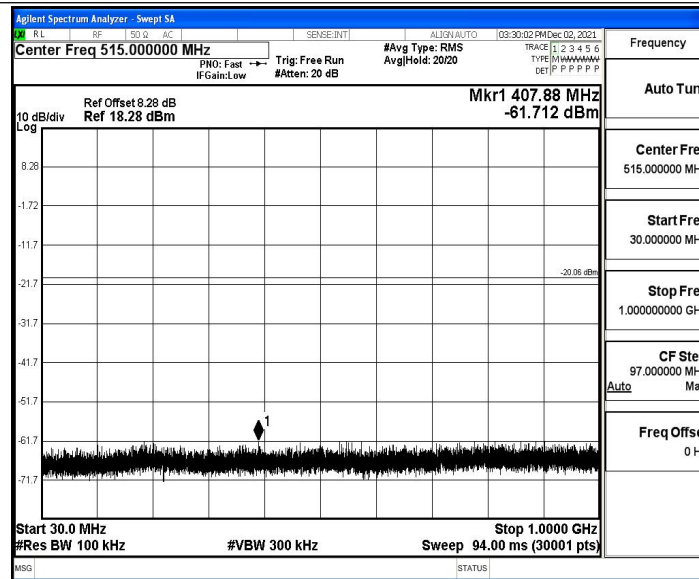
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.18	-49.53	≤-20.18	PASS
		High	2480	-0.30	-48.96	≤-20.3	PASS

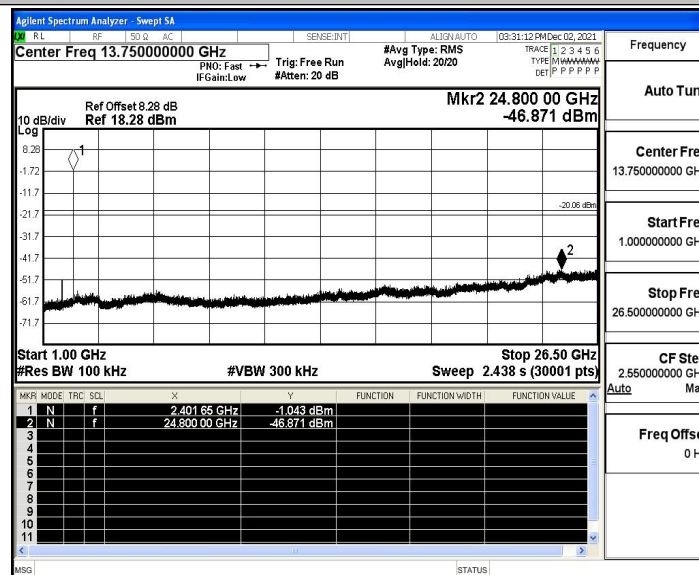
Test Graphs



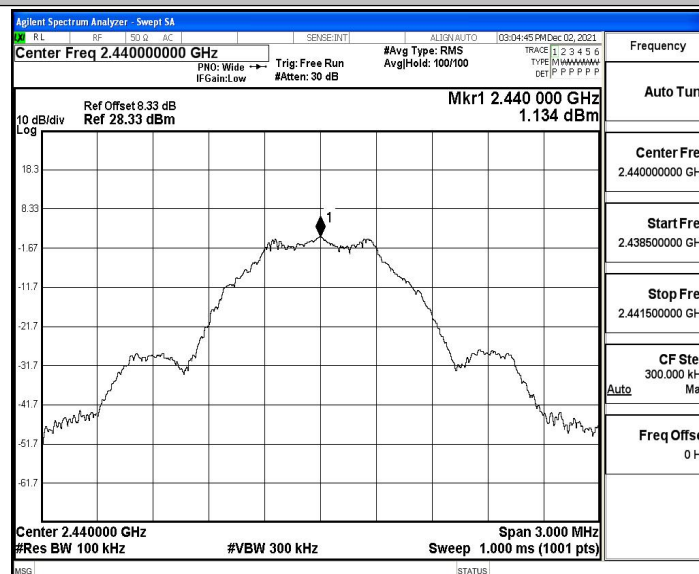




BLE_1M_Ant1_2402_1000~26500

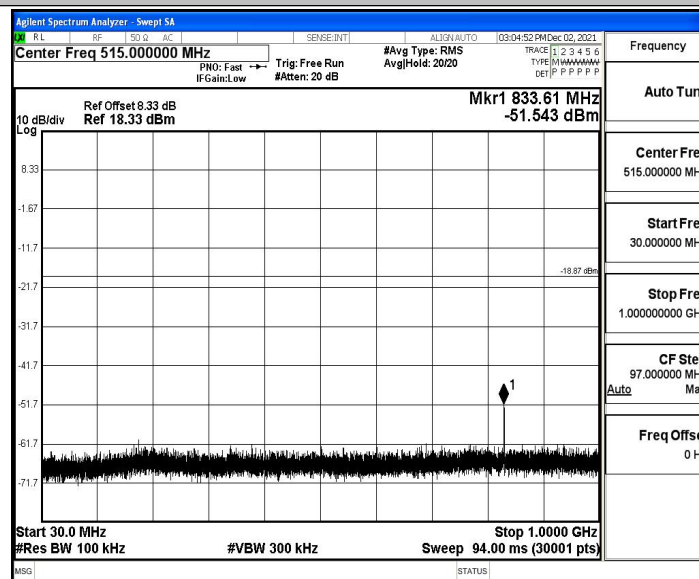


BLE_1M_Ant1_2440_0~Reference

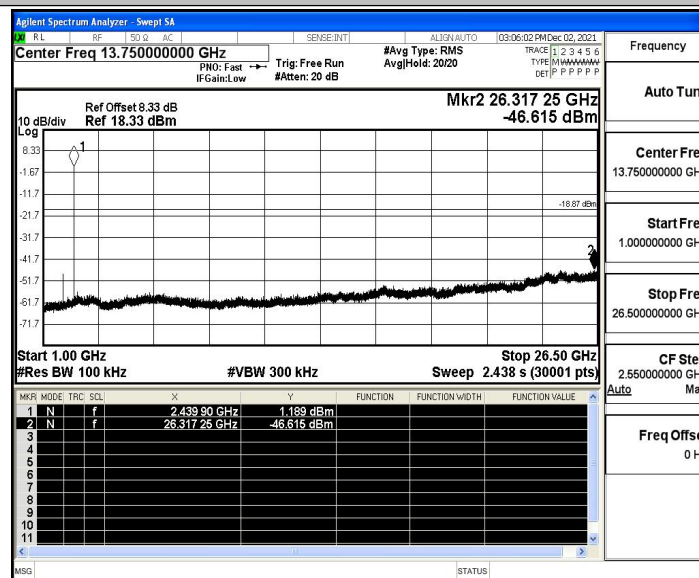




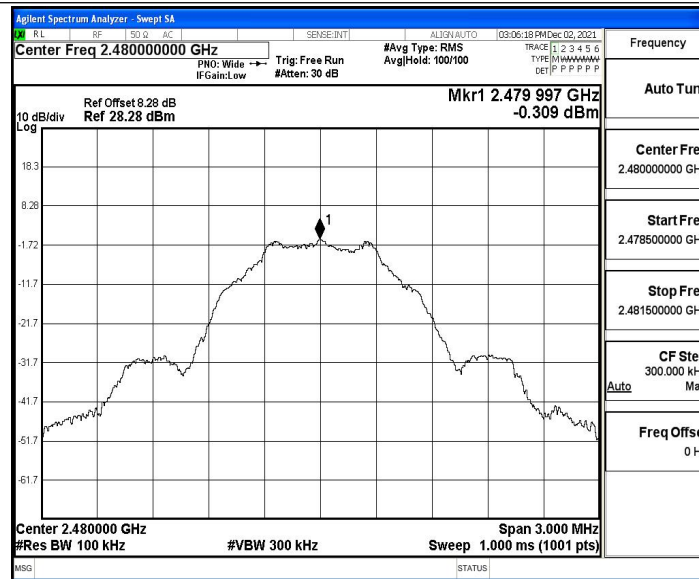
BLE_1M_Ant1_2440_30~1000



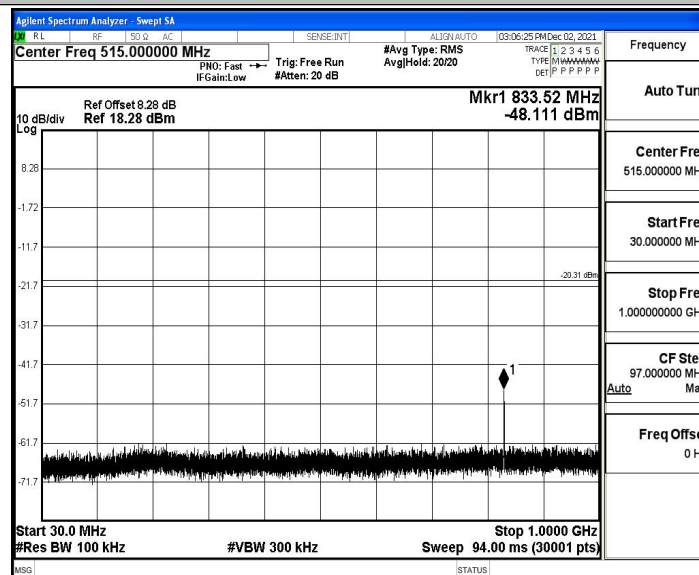
BLE_1M_Ant1_2440_1000~26500



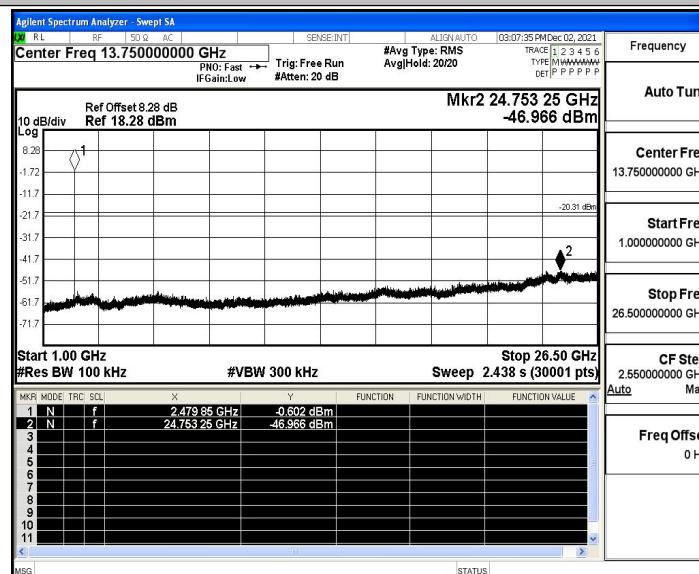
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



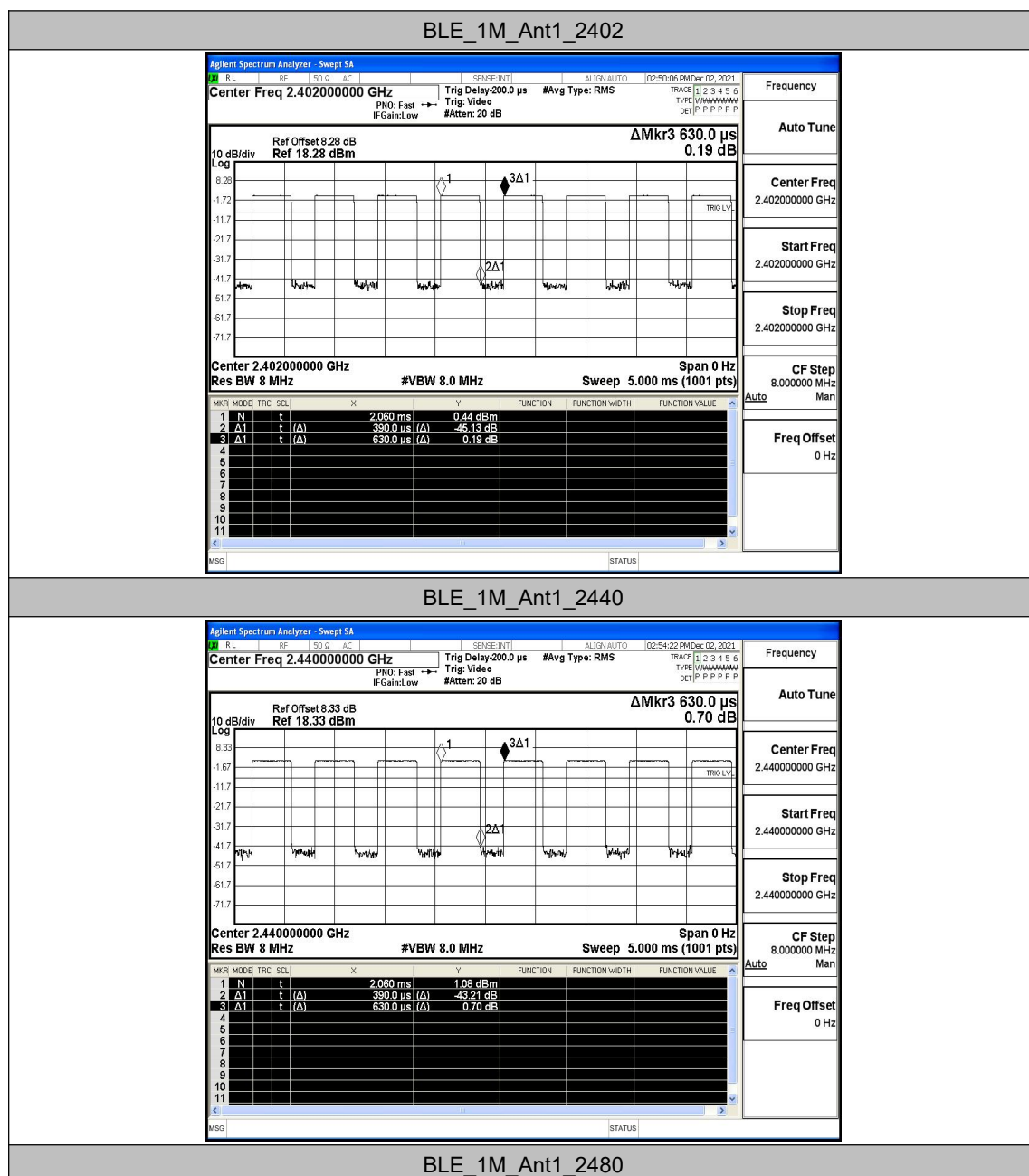


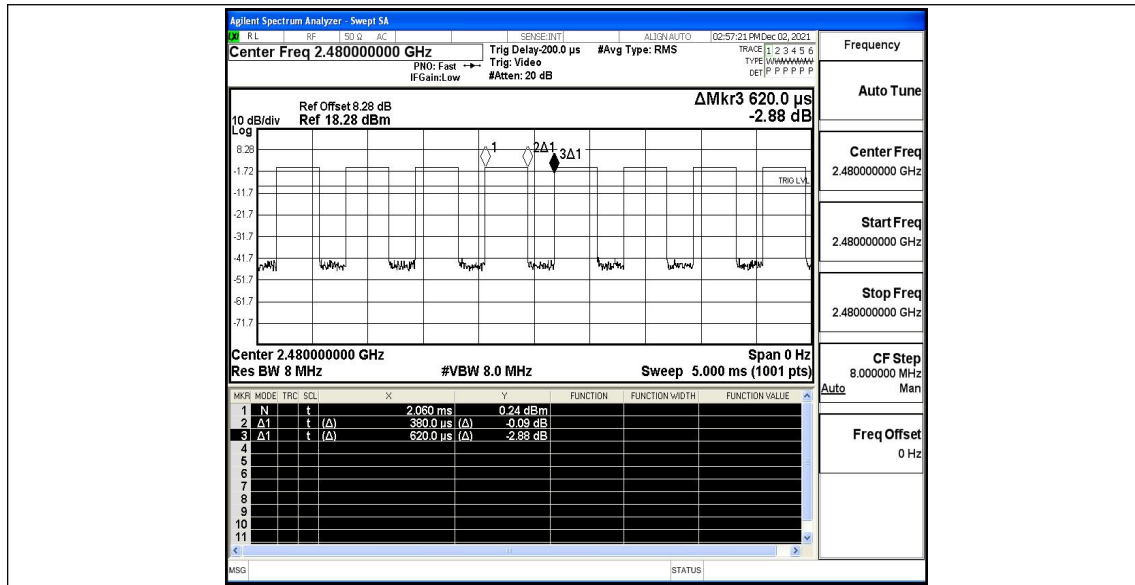
F.6 Duty Cycle

Test Result

TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.39	0.63	0.6190	61.90	2.08	---	PASS
		2440	0.39	0.63	0.6190	61.90	2.08	---	PASS
		2480	0.38	0.62	0.6129	61.29	2.13	---	PASS

Test Graphs







F.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
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.07	≤-41.20	47.13	≤54	PASS
				AV	2383.895	-46.86	≤-41.20	48.34	≤54	PASS
				AV	2390.000	-47.72	≤-41.20	47.48	≤54	PASS
				Peak	2310.000	-41.62	≤-21.20	53.58	≤74	PASS
				Peak	2322.365	-38.46	≤-21.20	56.74	≤74	PASS
				Peak	2390.000	-38.95	≤-21.20	56.25	≤74	PASS
		High	2480	AV	2483.500	-47.05	≤-41.20	48.15	≤54	PASS
				AV	2483.760	-46.72	≤-41.20	48.48	≤54	PASS
				AV	2500.000	-47.02	≤-41.20	48.18	≤54	PASS
				Peak	2483.500	-39.67	≤-21.20	55.53	≤74	PASS
				Peak	2488.560	-38.33	≤-21.20	56.87	≤74	PASS
				Peak	2500.000	-41.17	≤-21.20	54.03	≤74	PASS

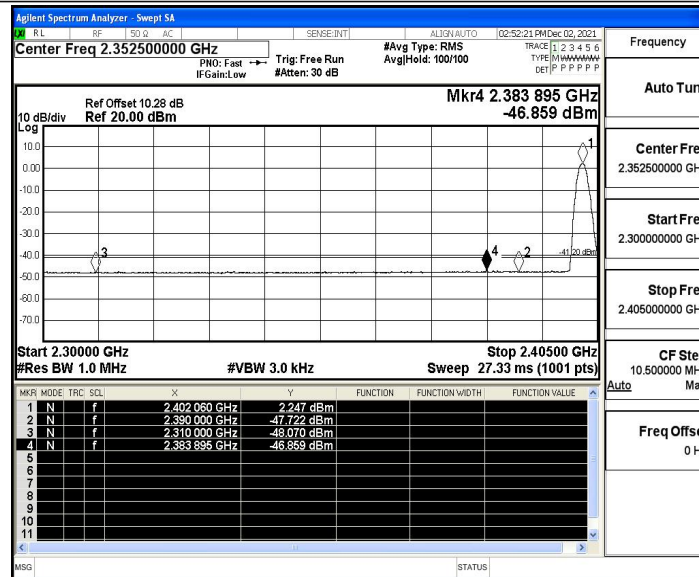
Note:

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.

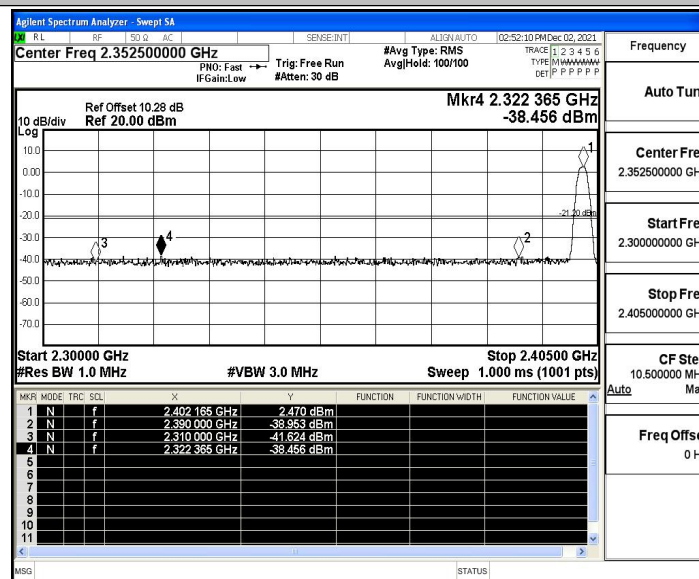


Test Graphs

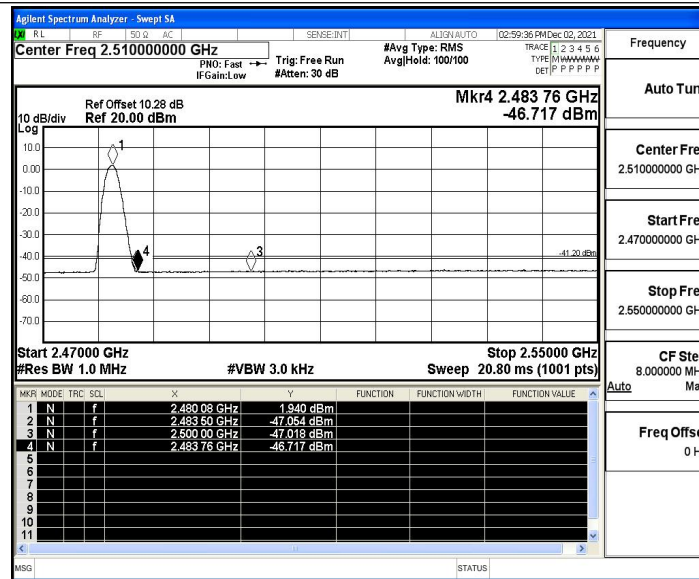
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

