

Appendix A

RF Test Data for BT LE (Conducted Measurement)

Product Name: Digital Stethoscope

Test Model: HESS- I

Environmental Conditions

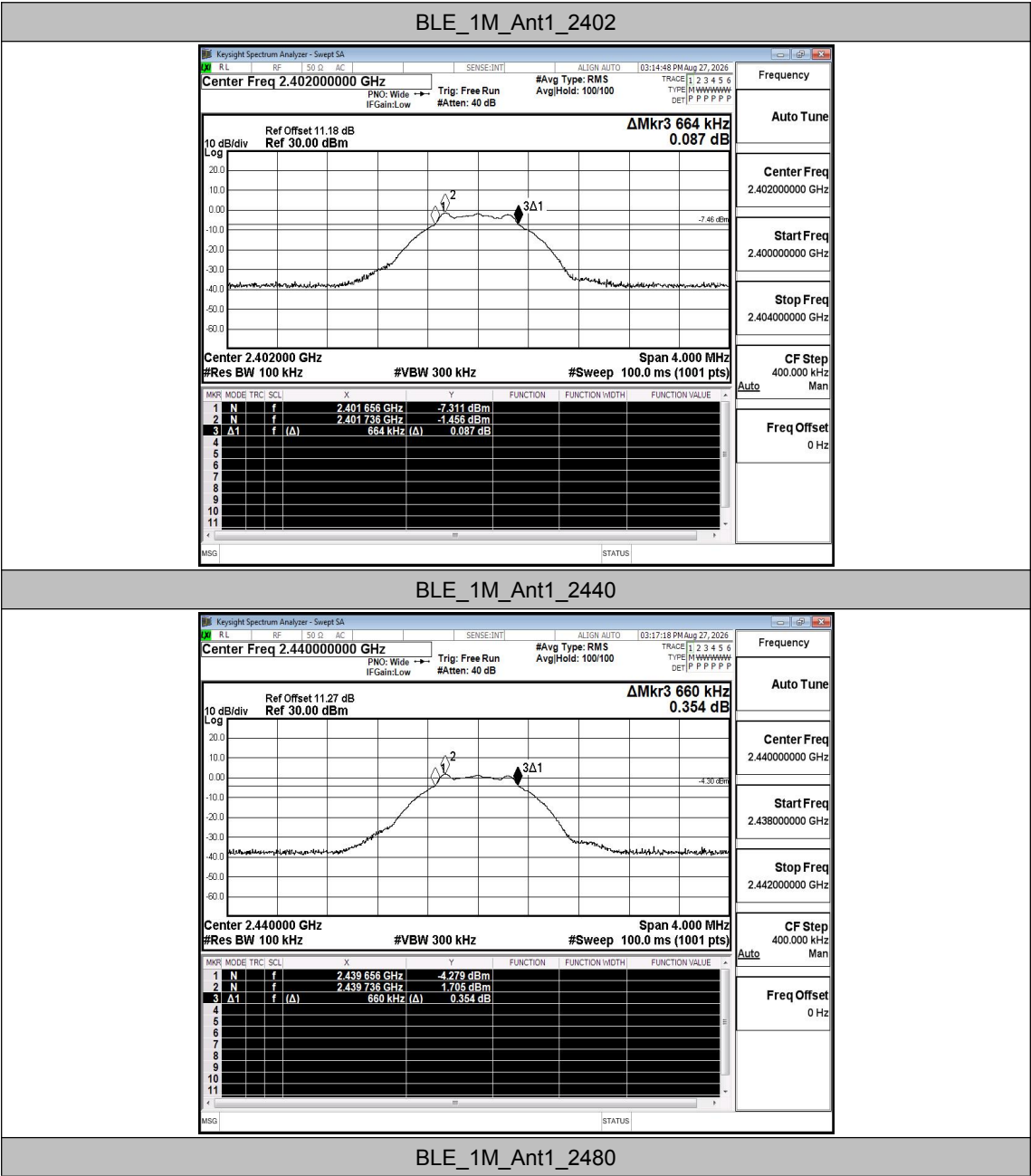
Temperature:	24.5°C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

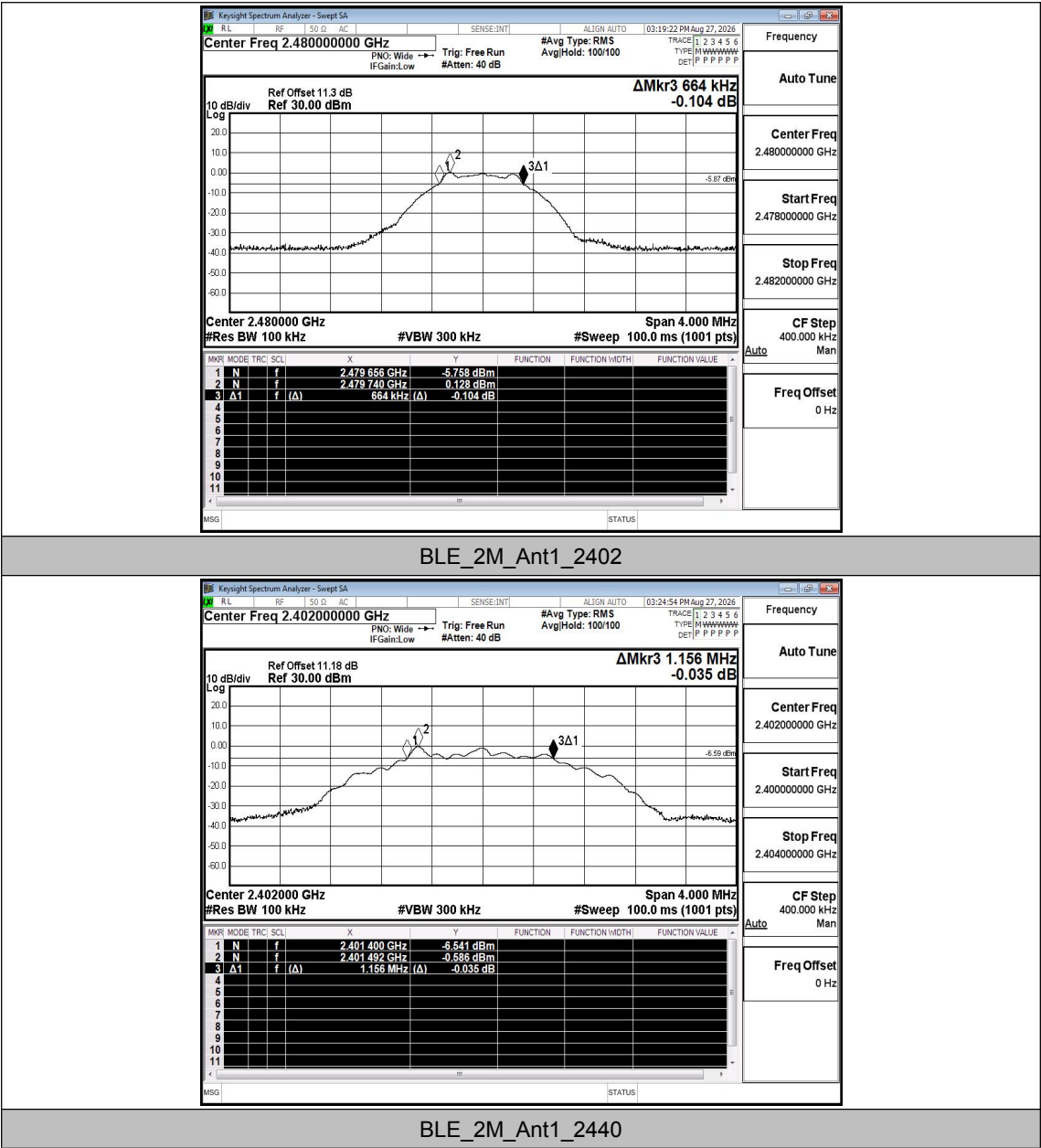
A.1 DTS Bandwidth

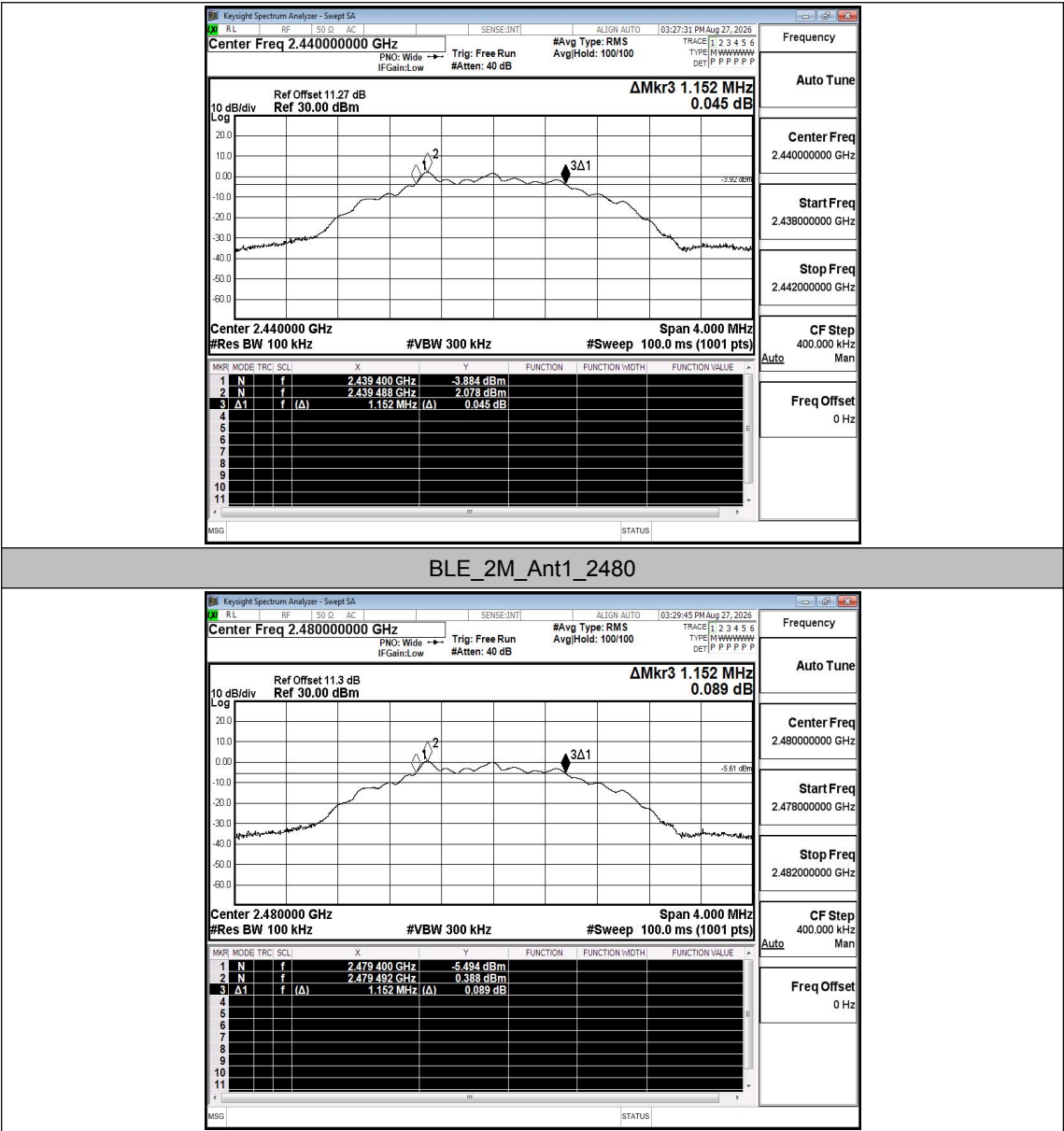
Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.664	2401.656	2402.320	0.5	PASS
		2440	0.660	2439.656	2440.316	0.5	PASS
		2480	0.664	2479.656	2480.320	0.5	PASS
BLE_2M	Ant1	2402	1.156	2401.400	2402.556	0.5	PASS
		2440	1.152	2439.400	2440.552	0.5	PASS
		2480	1.152	2479.400	2480.552	0.5	PASS

Test Graphs





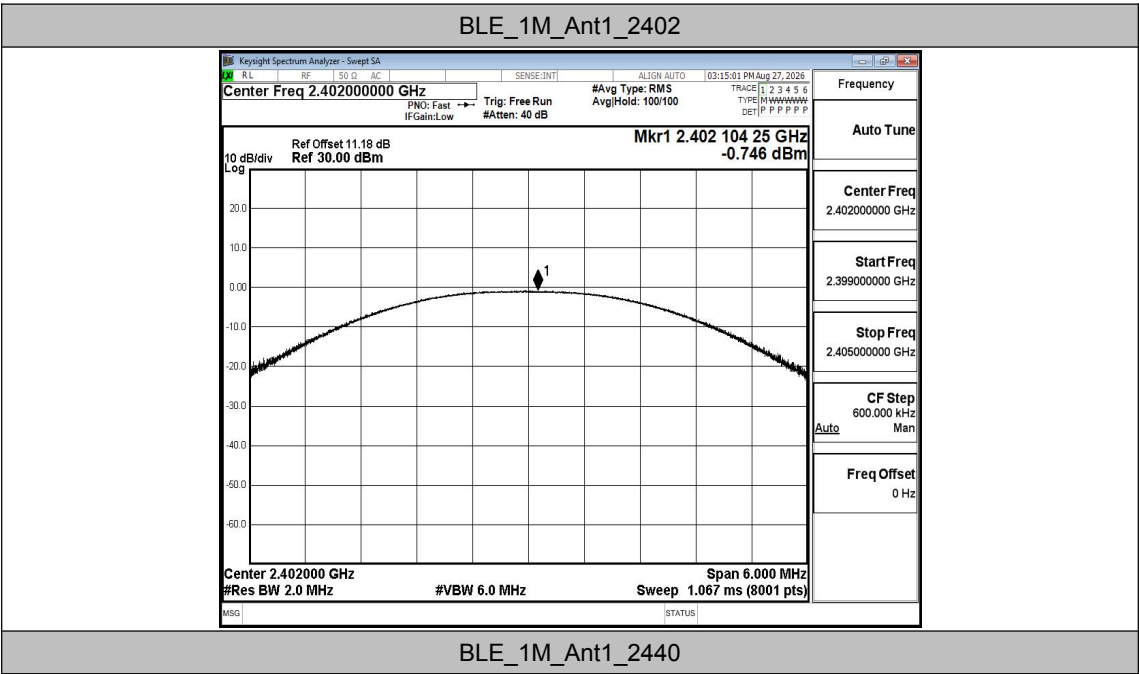


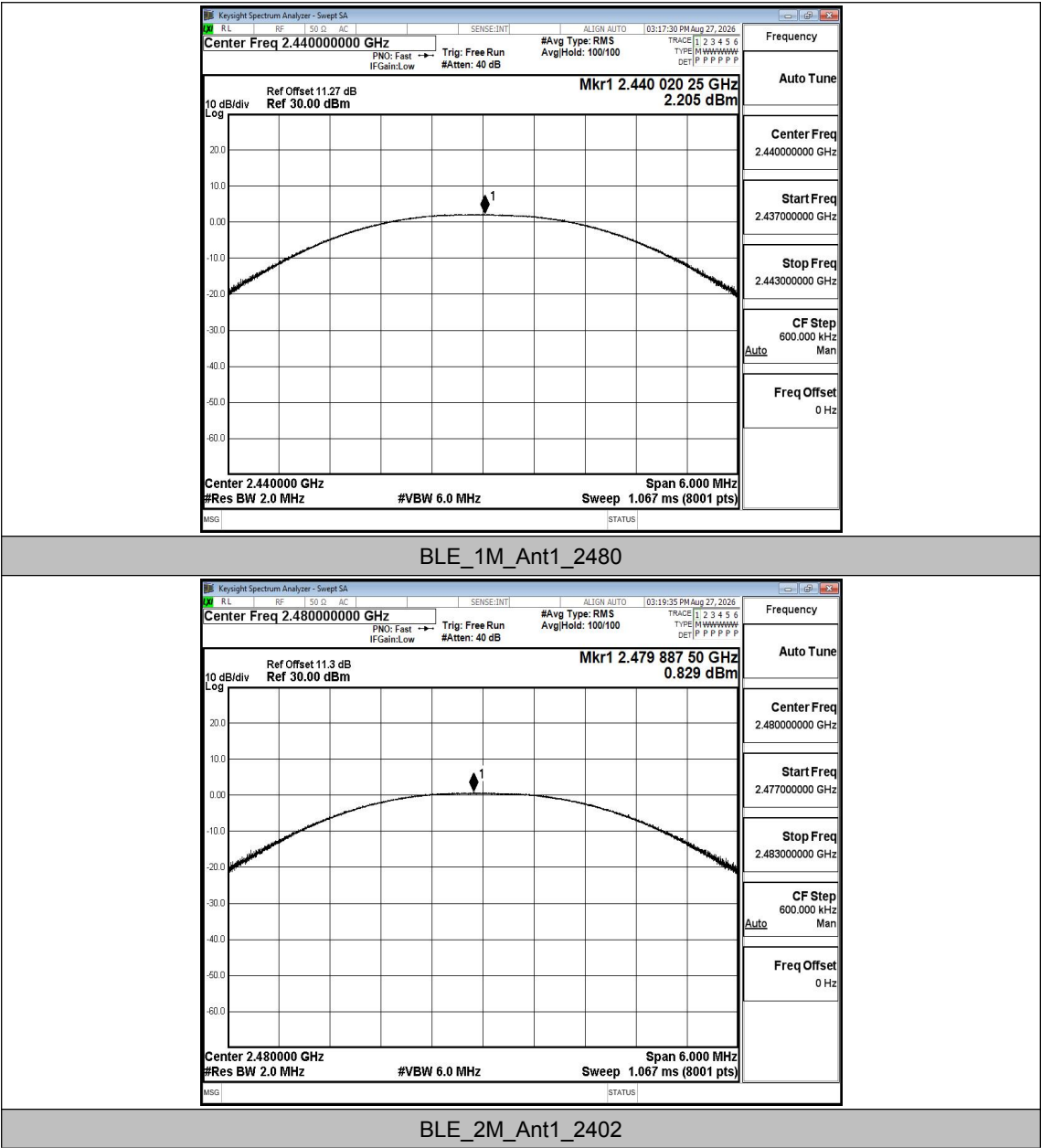
A.2 Maximum Peak conducted output power

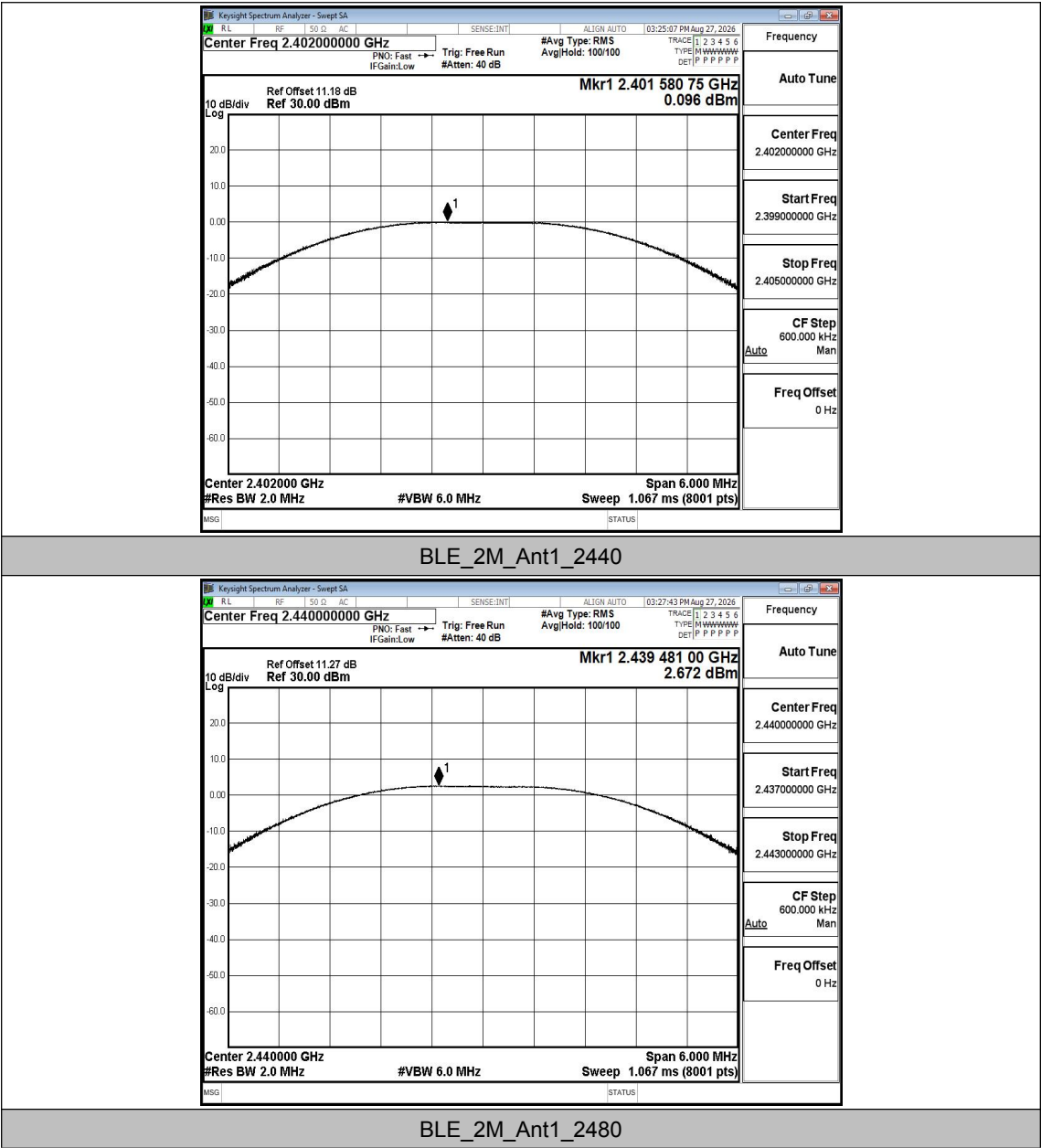
Test Result Peak

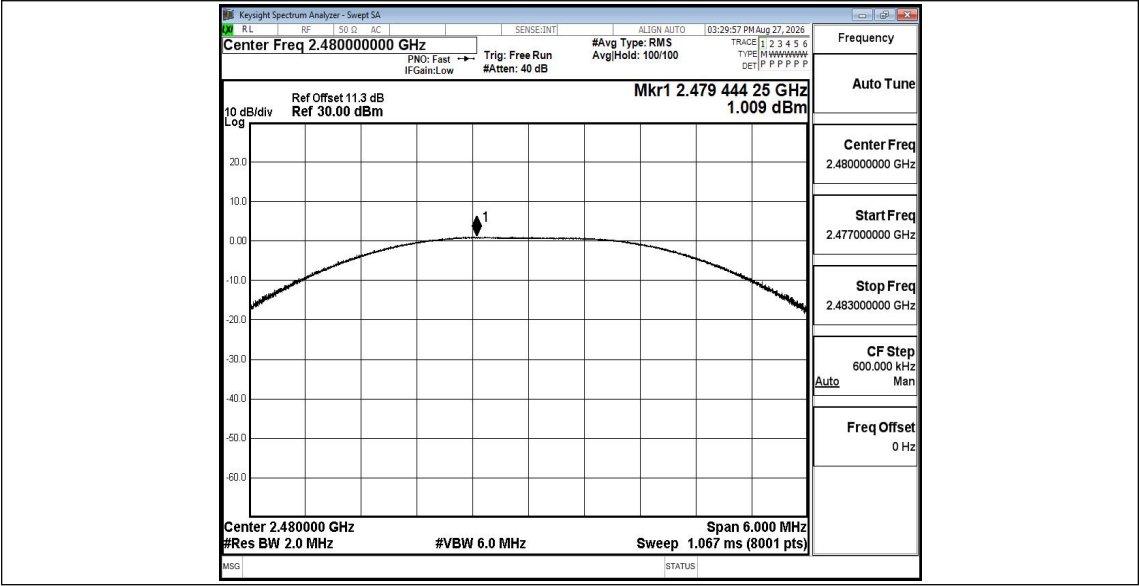
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.75	≤30	PASS
		2440	2.21	≤30	PASS
		2480	0.83	≤30	PASS
BLE_2M	Ant1	2402	0.10	≤30	PASS
		2440	2.67	≤30	PASS
		2480	1.01	≤30	PASS

Test Graphs Peak







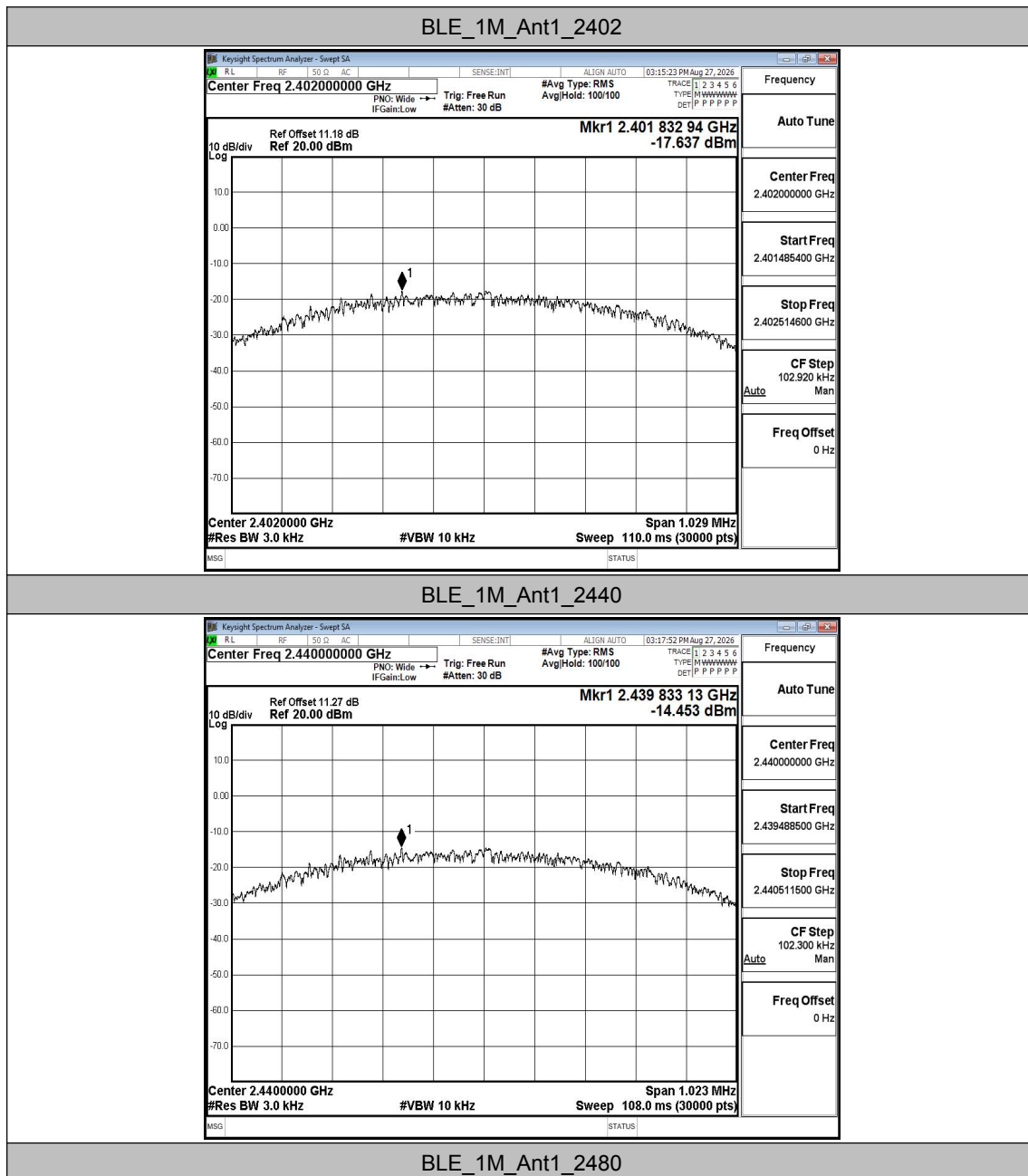


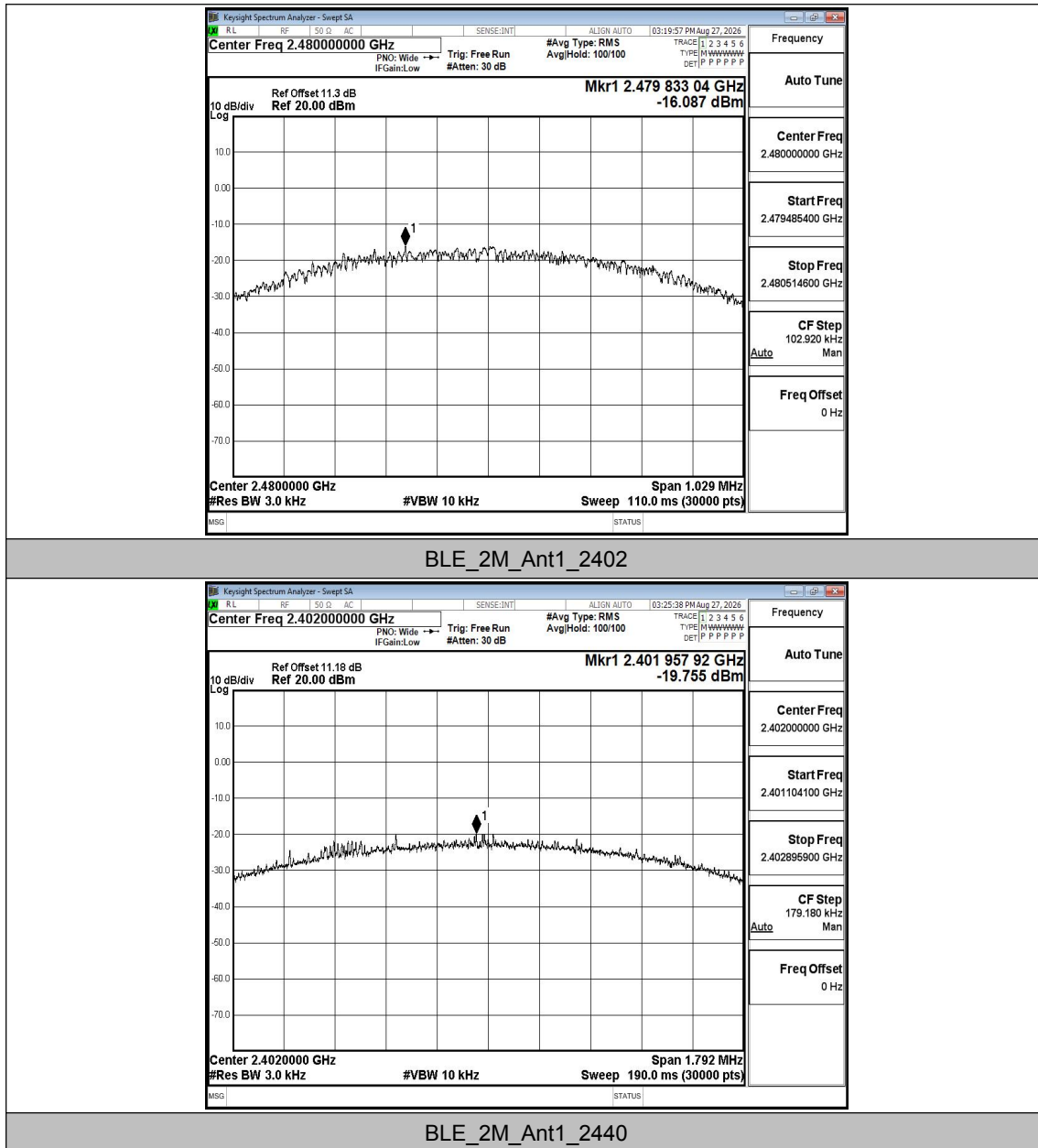
A.3 Maximum power spectral density

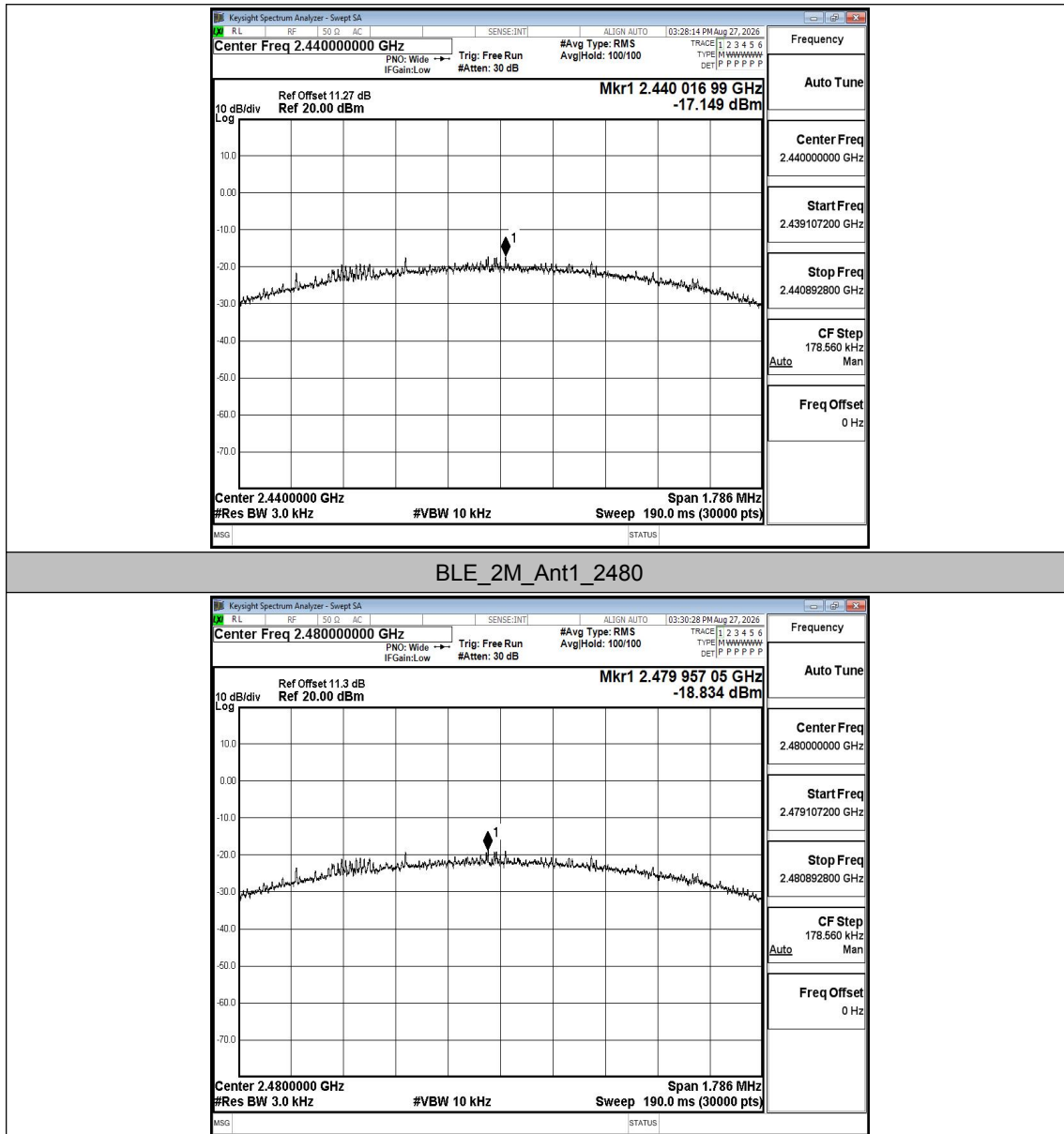
Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-17.64	≤8.00	PASS
		2440	-14.45	≤8.00	PASS
		2480	-16.09	≤8.00	PASS
BLE_2M	Ant1	2402	-19.76	≤8.00	PASS
		2440	-17.15	≤8.00	PASS
		2480	-18.83	≤8.00	PASS

Test Graphs





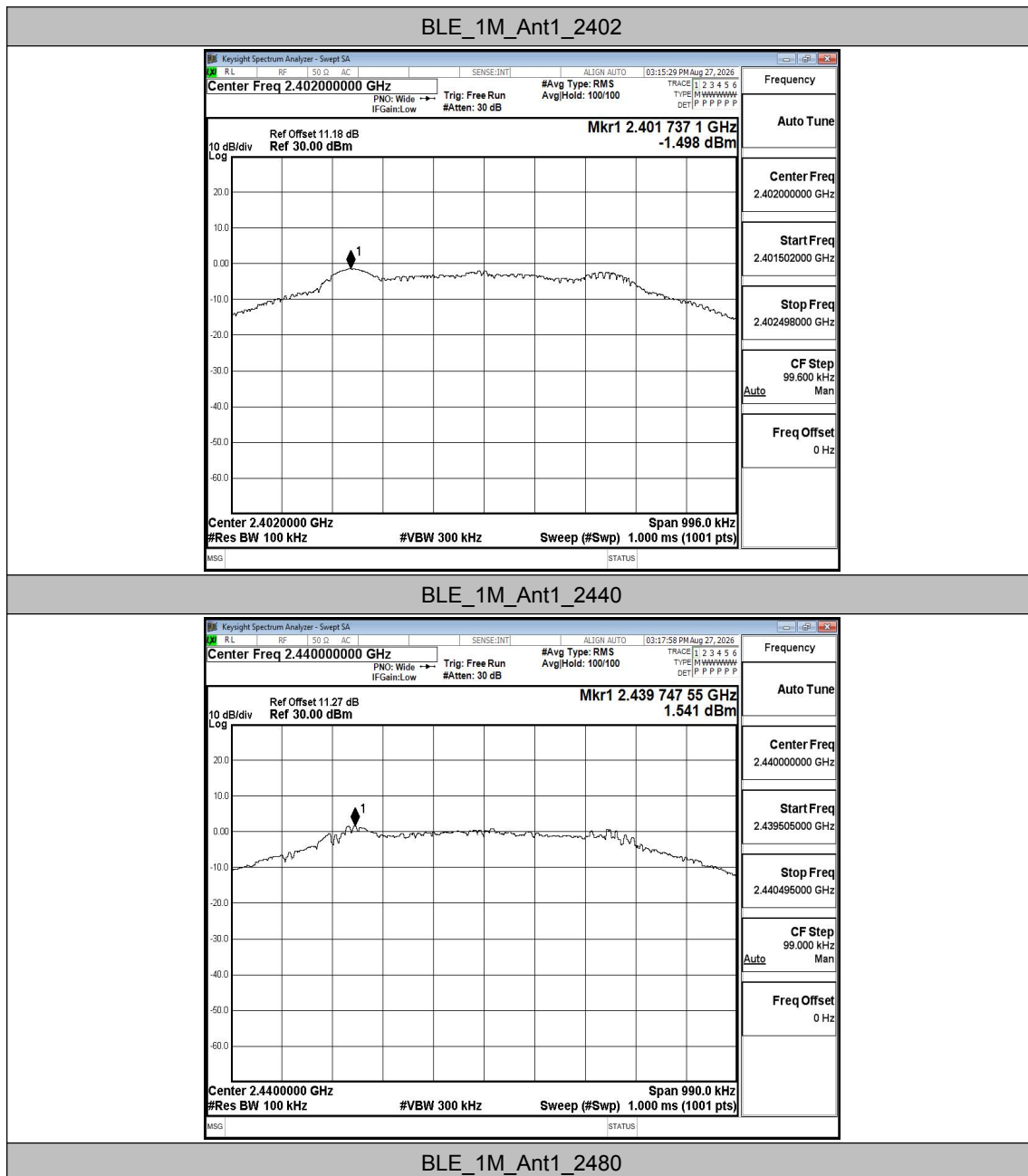


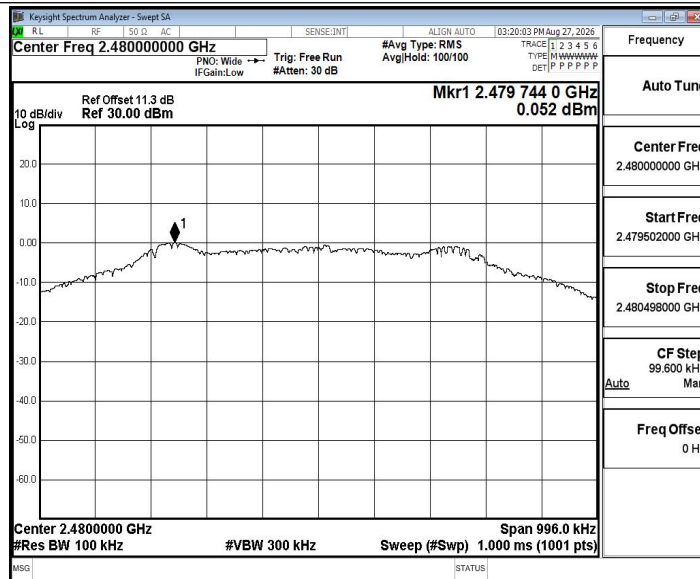
A.4 Band edge measurements

Reference level measurement

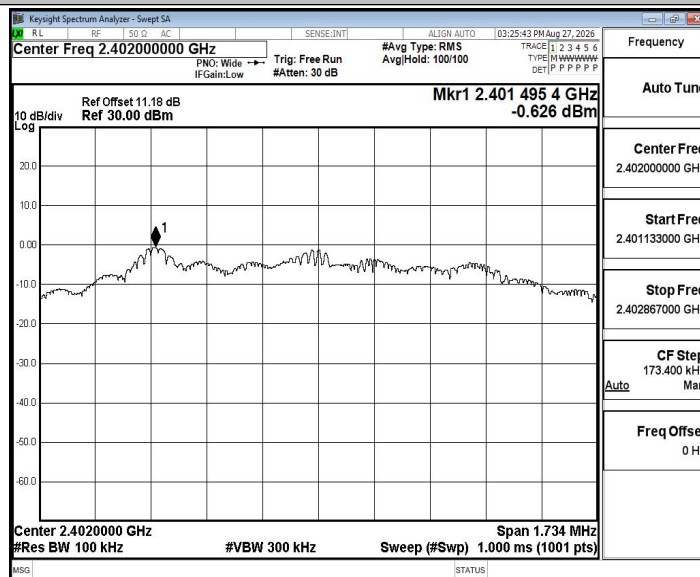
TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
BLE_1M	Ant1	2402	2401.74	-1.50
		2440	2439.75	1.54
		2480	2479.74	0.05
BLE_2M	Ant1	2402	2401.50	-0.63
		2440	2439.49	1.96
		2480	2479.50	0.32

Test Graphs

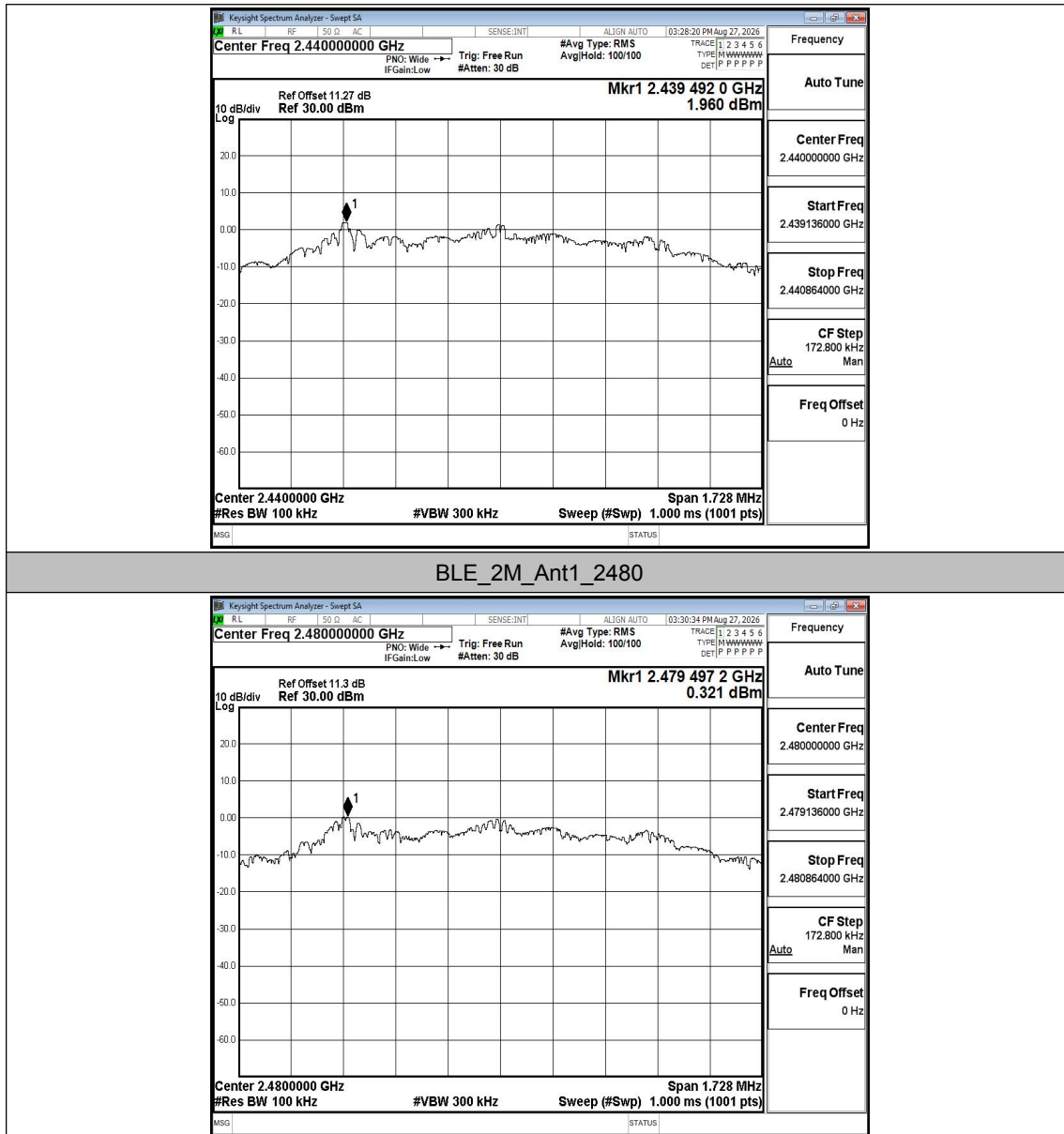




BLE_2M_Ant1_2402



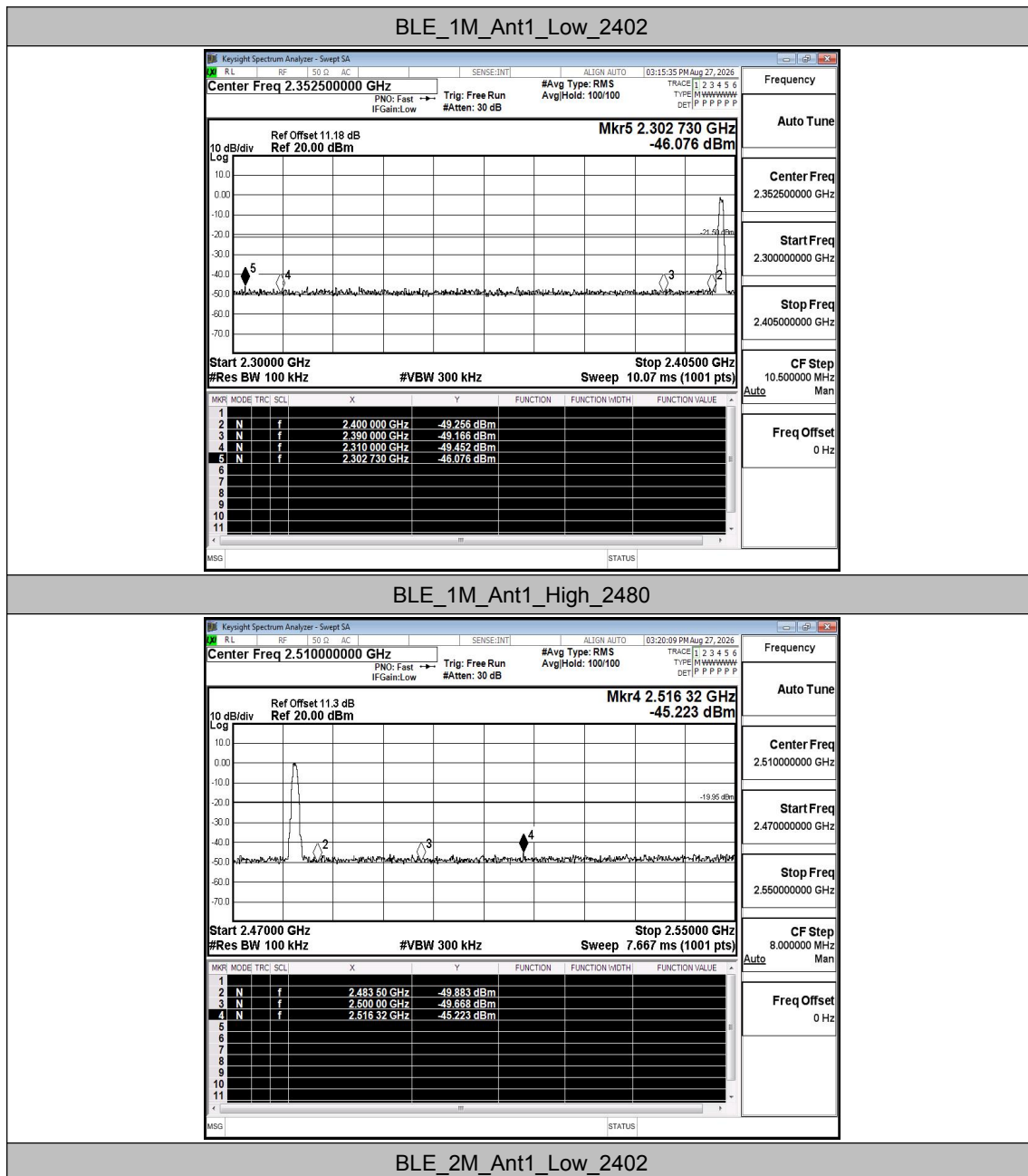
BLE_2M_Ant1_2440

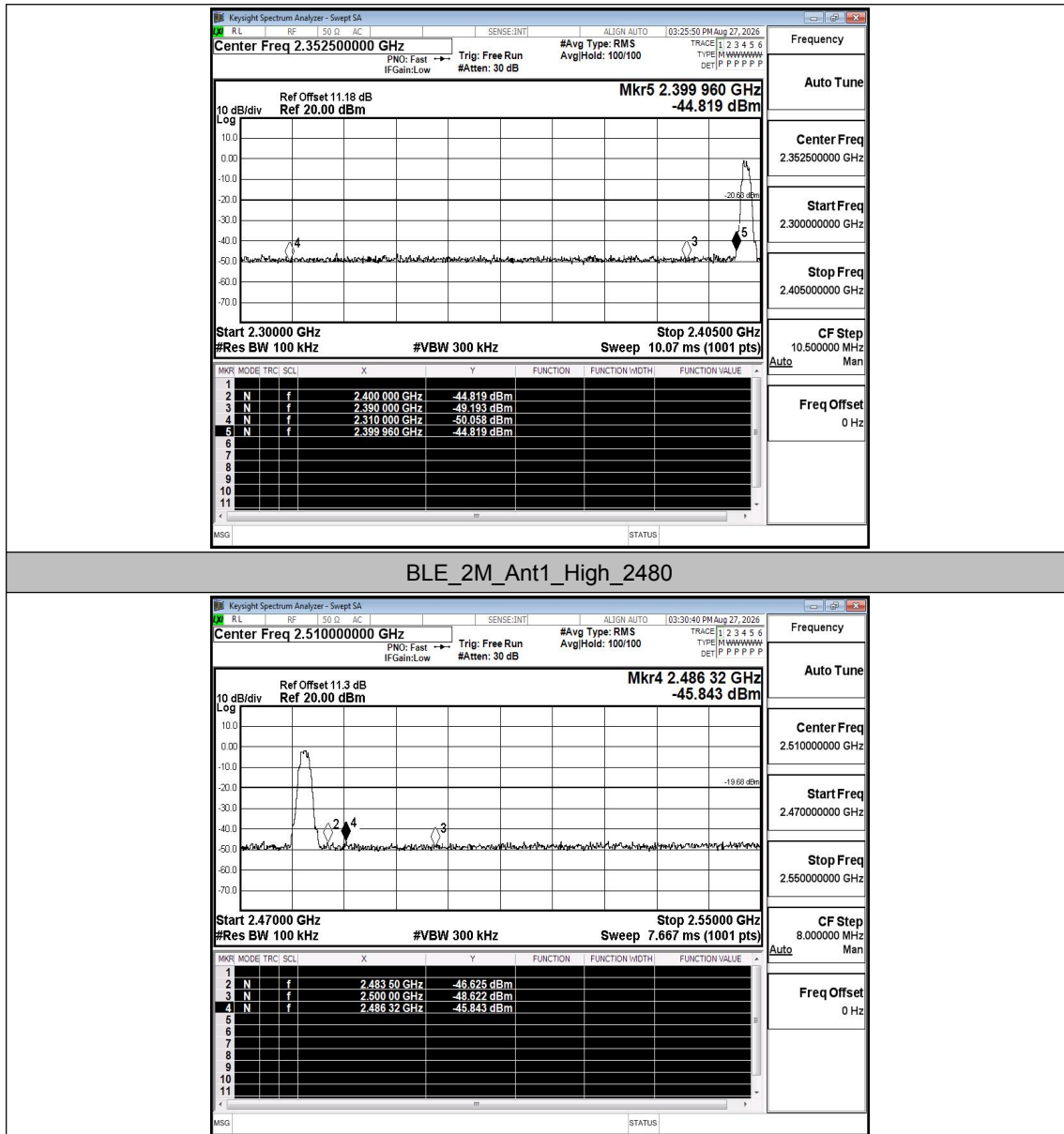


Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-1.50	-46.08	≤-21.5	PASS
		High	2480	0.05	-45.22	≤-19.95	PASS
BLE_2M	Ant1	Low	2402	-0.63	-44.82	≤-20.63	PASS
		High	2480	0.32	-45.84	≤-19.68	PASS

Test Graphs



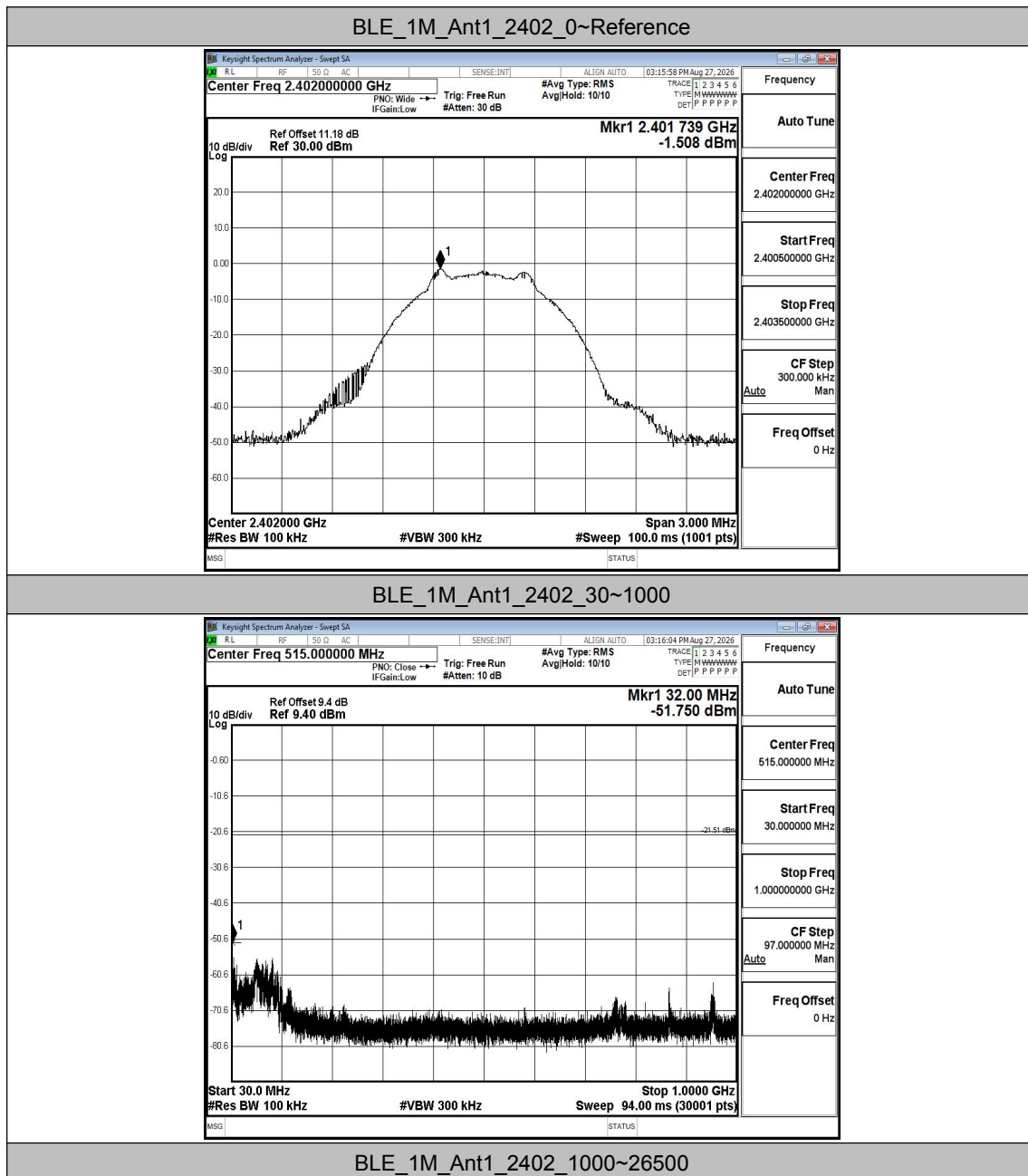


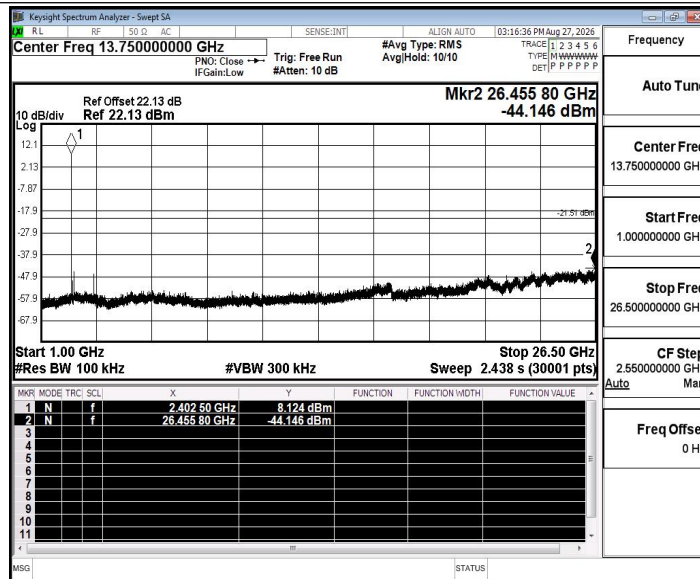
A.5 Conducted Spurious Emission

Test Result

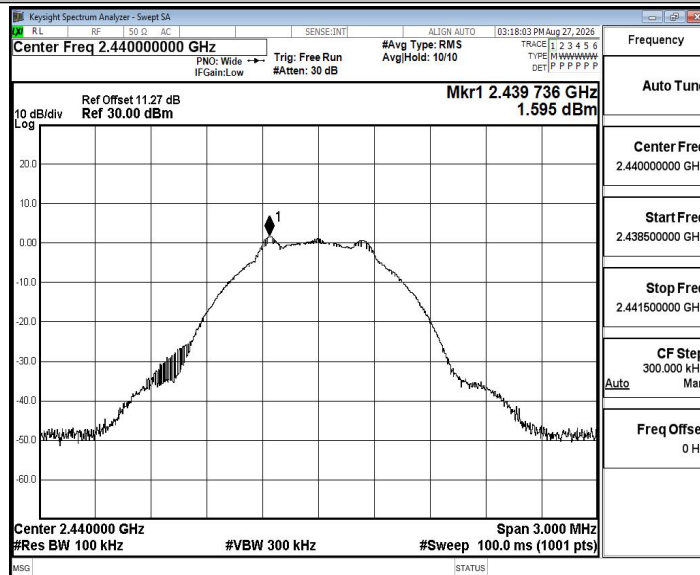
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.51	-1.51	---	PASS
			30~1000	-1.51	-51.75	≤-21.51	PASS
			1000~26500	-1.51	-44.15	≤-21.51	PASS
		2440	Reference	1.60	1.60	---	PASS
			30~1000	1.60	-51.94	≤-18.4	PASS
			1000~26500	1.60	-44.3	≤-18.4	PASS
		2480	Reference	0.26	0.26	---	PASS
			30~1000	0.26	-43.75	≤-19.74	PASS
			1000~26500	0.26	-44.99	≤-19.74	PASS
BLE_2M	Ant1	2402	Reference	-0.64	-0.64	---	PASS
			30~1000	-0.64	-47.96	≤-20.64	PASS
			1000~26500	-0.64	-44.34	≤-20.64	PASS
		2440	Reference	1.97	1.97	---	PASS
			30~1000	1.97	-53.86	≤-18.03	PASS
			1000~26500	1.97	-44.69	≤-18.03	PASS
		2480	Reference	0.32	0.32	---	PASS
			30~1000	0.32	-40.55	≤-19.68	PASS
			1000~26500	0.32	-27.78	≤-19.68	PASS

Test Graphs





BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000

