

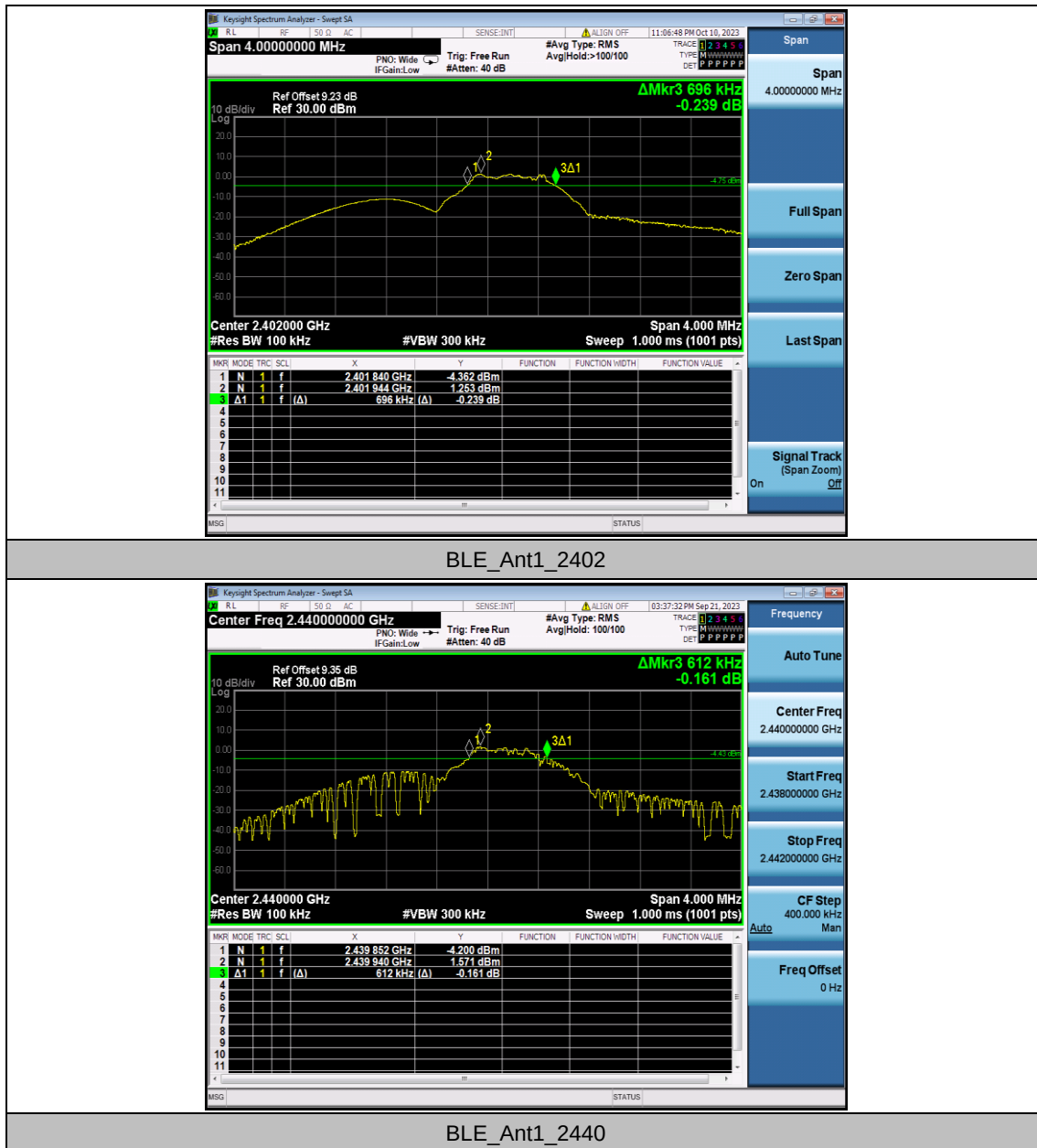
Case No. : <u>GTS20230904014-1-5</u>	
Ambient Condition: <u>24</u> °C, <u>51</u> %RH, Atmos100.1Kpa,	
Test Date: <u>2023.9.21</u>	Test Engineer: <u>Evan ouyang</u>

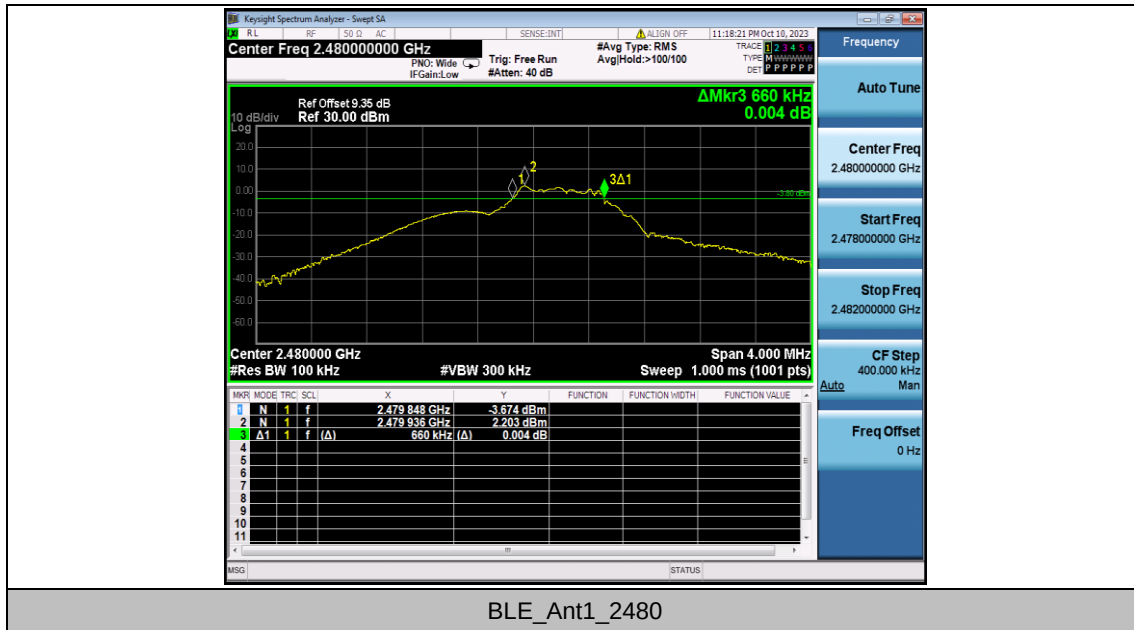
Appendix A.1: DTS Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	0.696	2401.840	2402.536	0.5	PASS
		2440	0.612	2439.852	2440.464	0.5	PASS
		2480	0.660	2479.848	2480.508	0.5	PASS

Test Graphs





Appendix A.2: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	1.8697	2400.890	2402.760	---	---
		2440	1.7291	2439.014	2440.743	---	---
		2480	1.5664	2479.163	2480.729	---	---

Test Graphs



BLE_Ant1_2402



BLE_Ant1_2440



BLE_Ant1_2480

Appendix A.3: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE	Ant1	2402	2.05	≤30	PASS
		2440	2.71	≤30	PASS
		2480	2.51	≤30	PASS

Appendix A.4: Maximum power spectral density

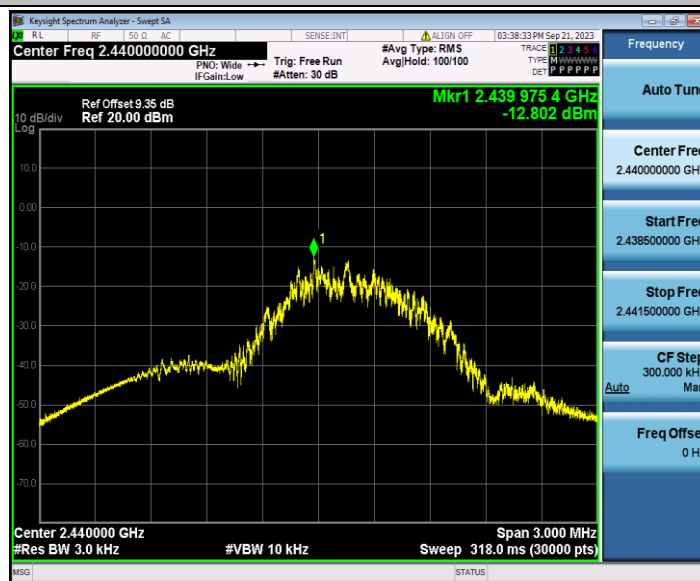
Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE	Ant1	2402	-13.51	≤8.00	PASS
		2440	-12.8	≤8.00	PASS
		2480	-12.8	≤8.00	PASS

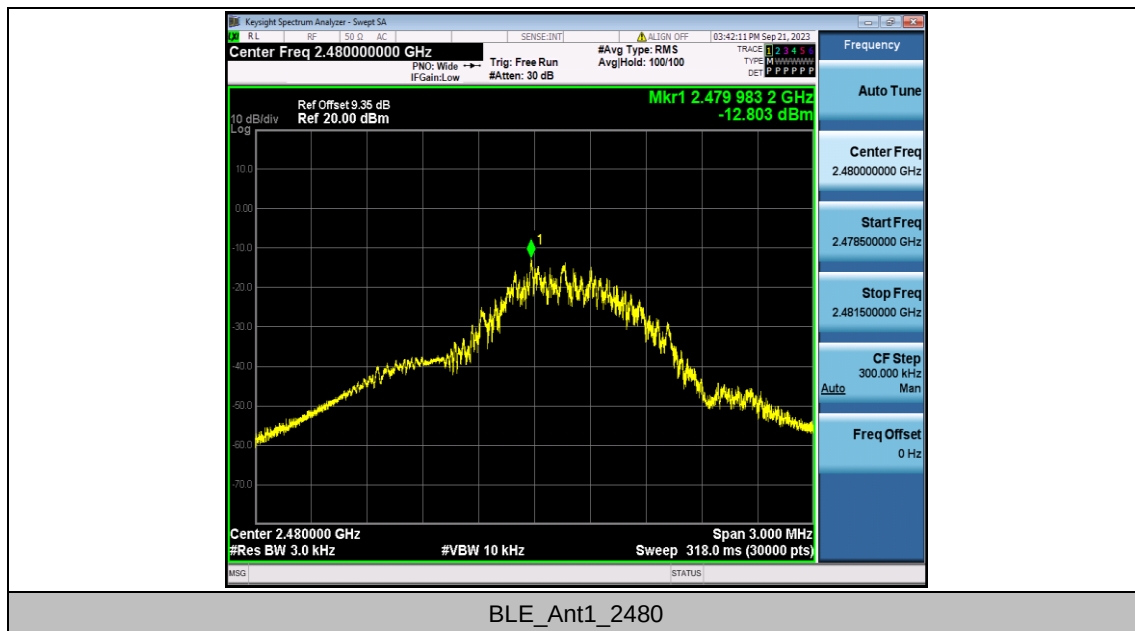
Test Graphs



BLE_Ant1_2402



BLE_Ant1_2440

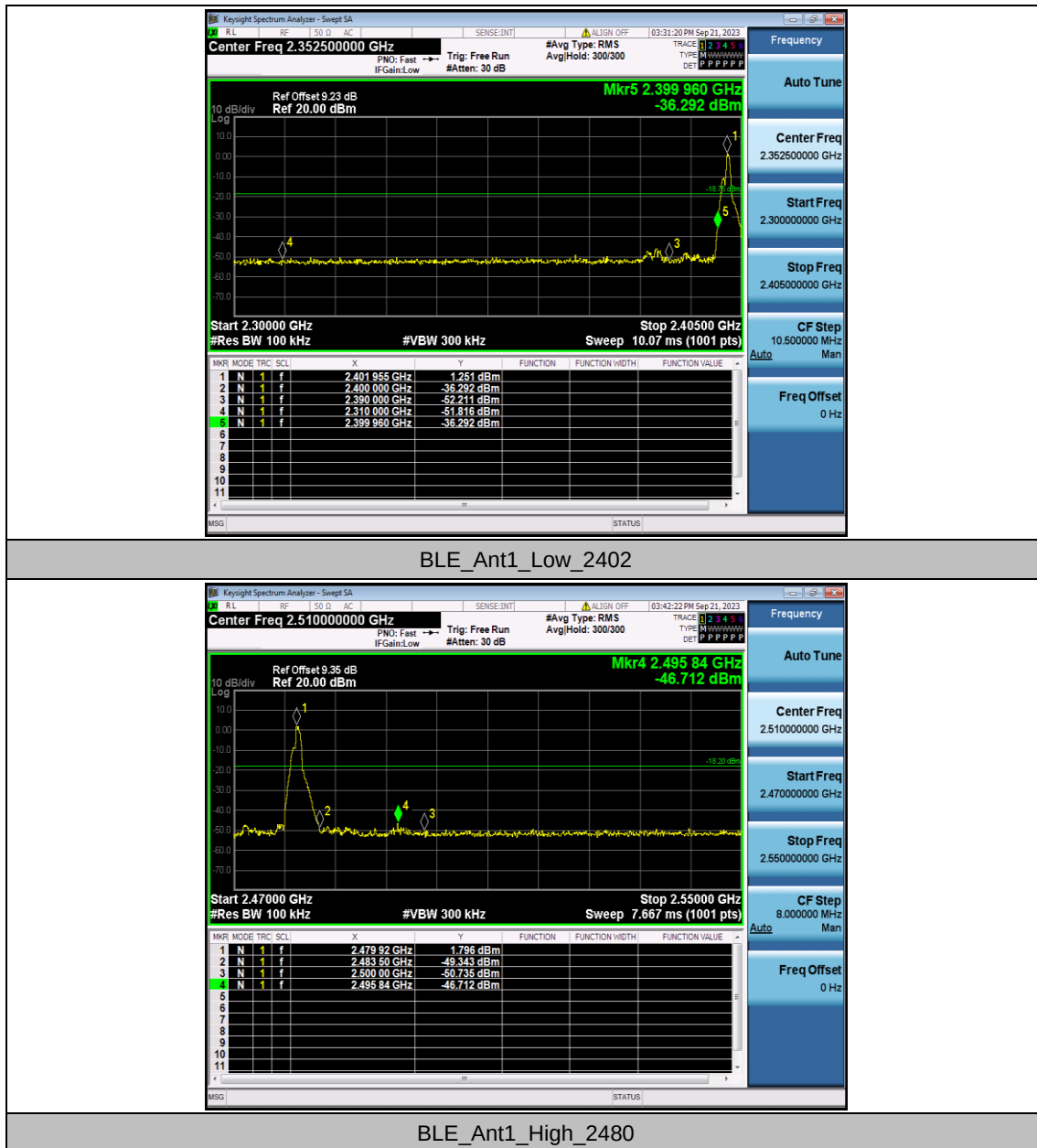


Appendix A.5: Band edge measurements

Test Result

Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	Low	2402	1.25	-36.29	≤-18.75	PASS
		High	2480	1.80	-46.71	≤-18.2	PASS

Test Graphs

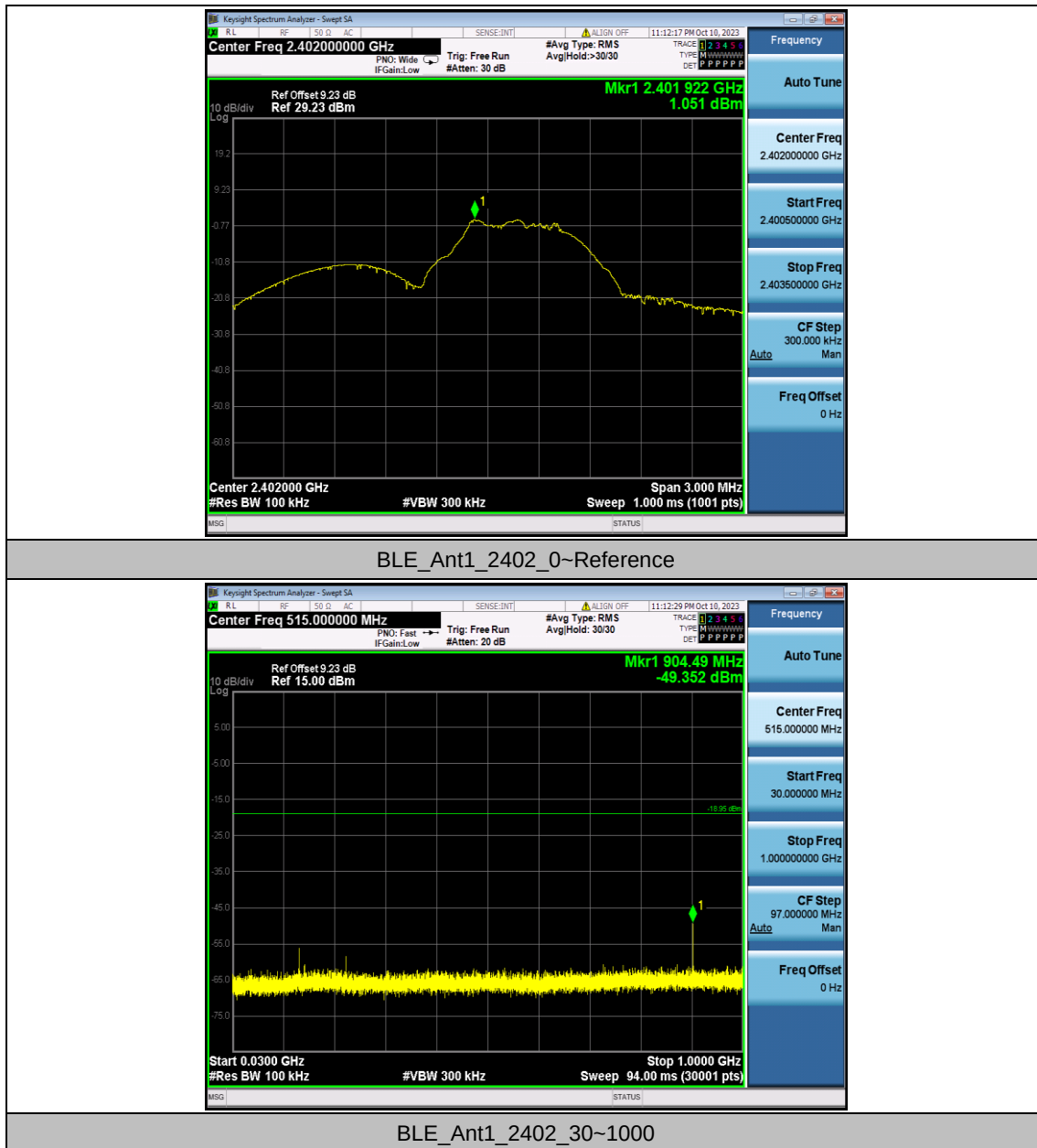


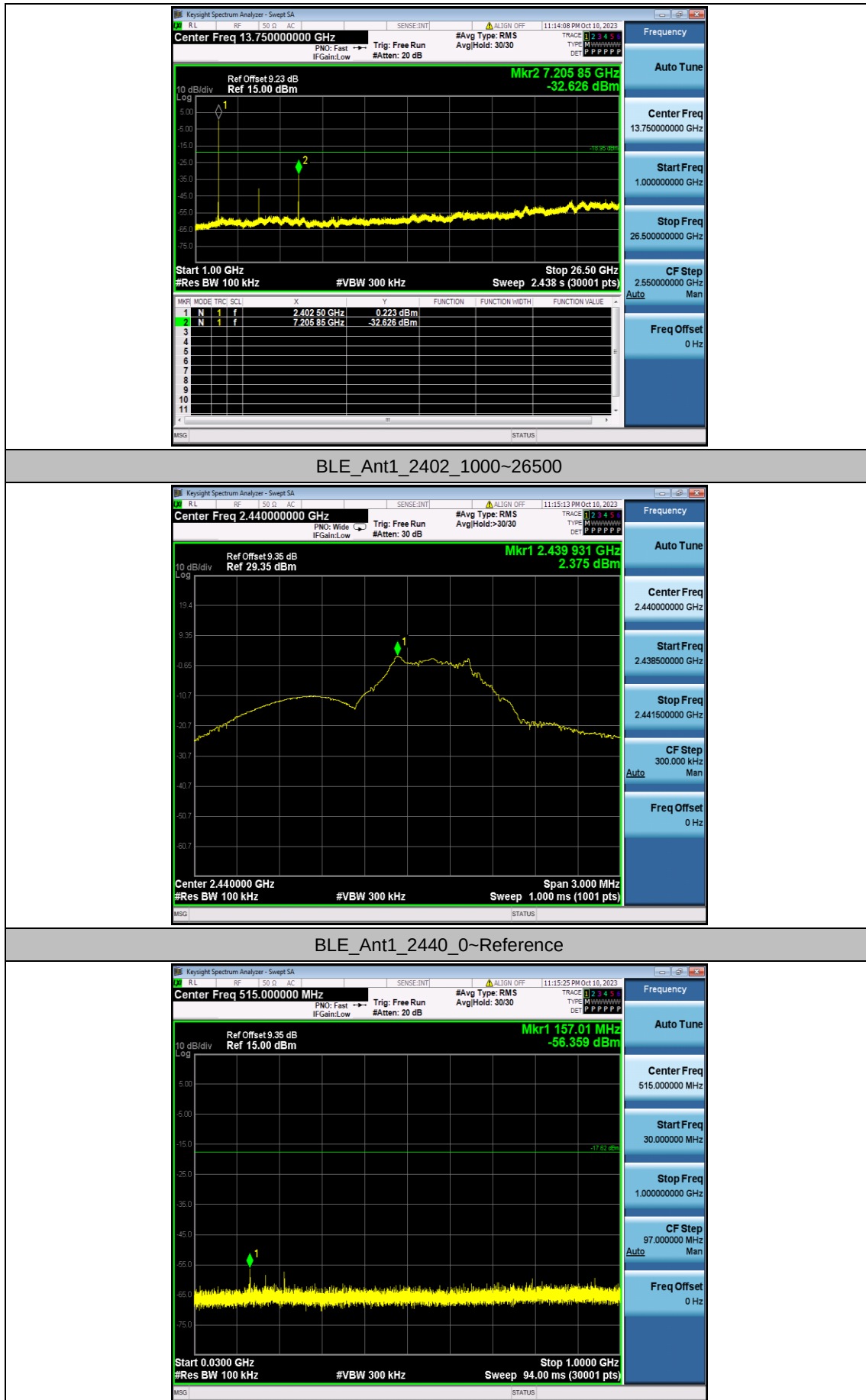
Appendix A.6: Conducted Spurious Emission

Test Result

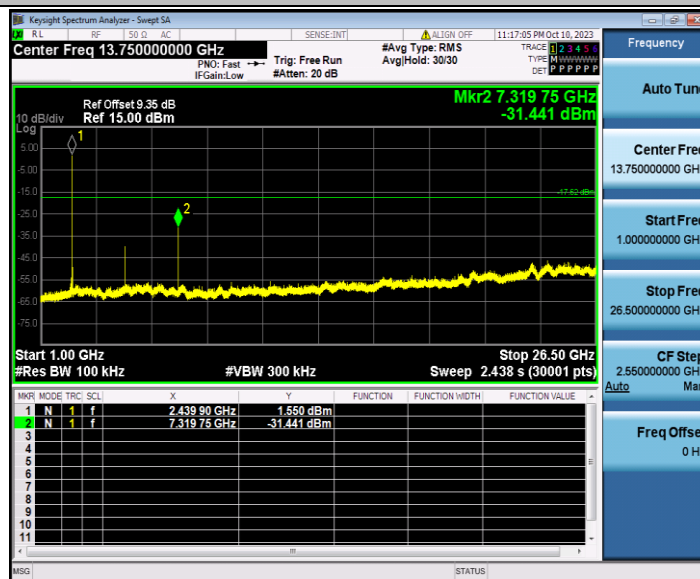
Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	2402	Reference	1.05	1.05	---	PASS
			30~1000	1.05	-49.35	≤ -18.95	PASS
			1000~26500	1.05	-32.63	≤ -18.95	PASS
		2440	Reference	2.38	2.38	---	PASS
			30~1000	2.38	-56.36	≤ -17.62	PASS
			1000~26500	2.38	-31.44	≤ -17.62	PASS
		2480	Reference	2.19	2.19	---	PASS
			30~1000	2.19	-57.52	≤ -17.81	PASS
			1000~26500	2.19	-32.32	≤ -17.81	PASS

Test Graphs





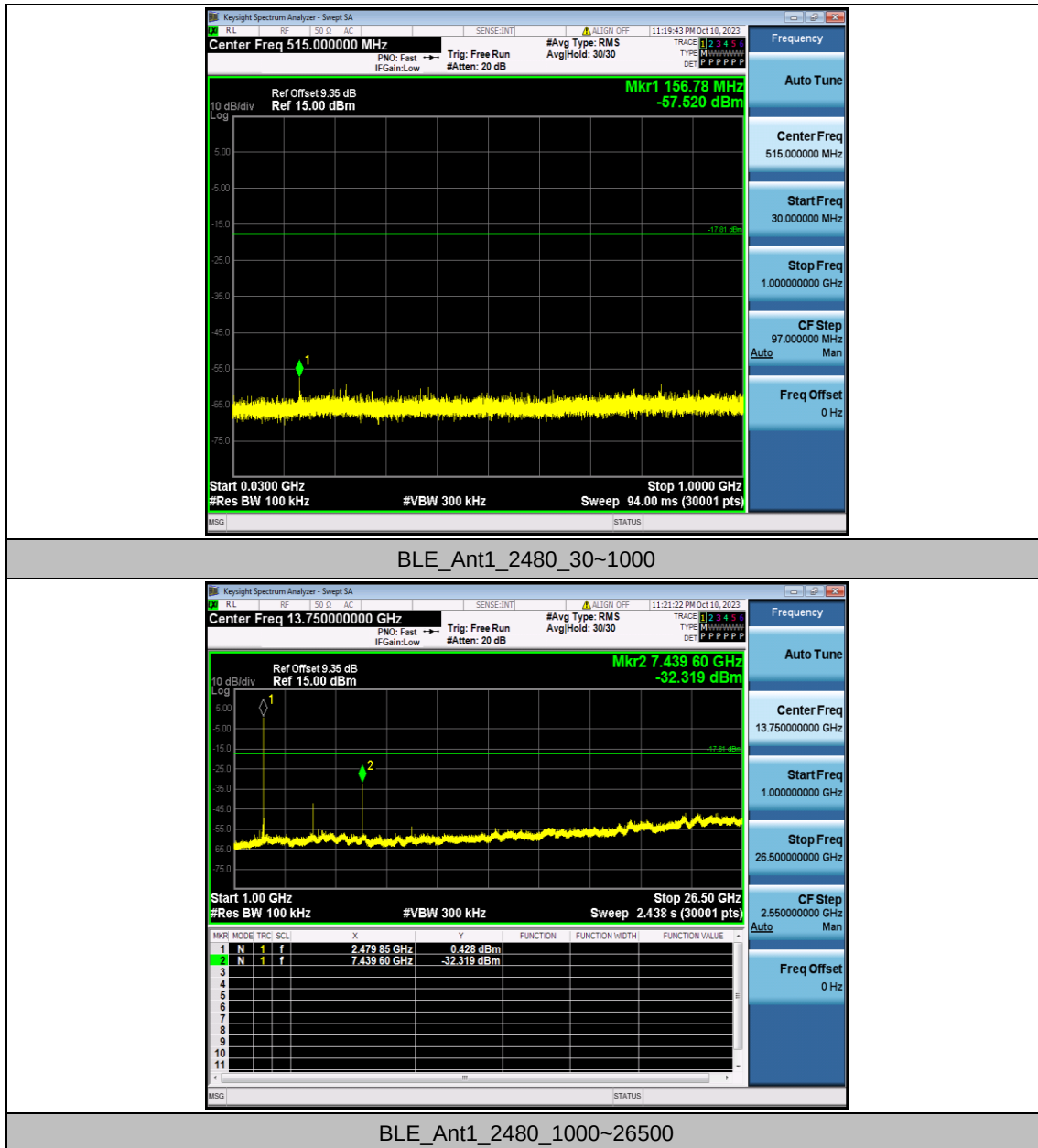
BLE_Ant1_2440_30~1000



BLE_Ant1_2440_1000~26500



BLE_Ant1_2480_0~Reference



Appendix A.7: Emissions in Restricted Bands

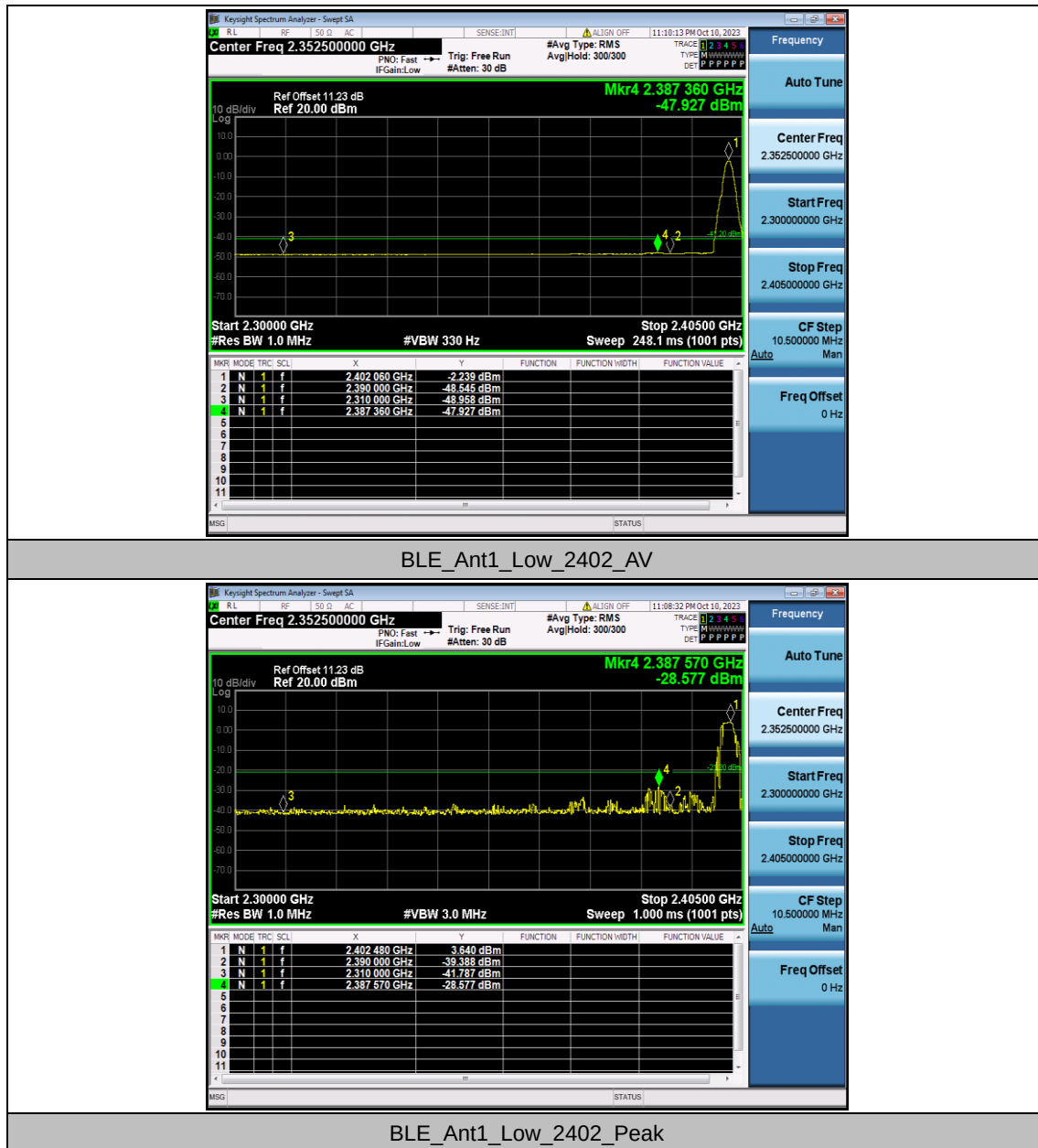
Test Result

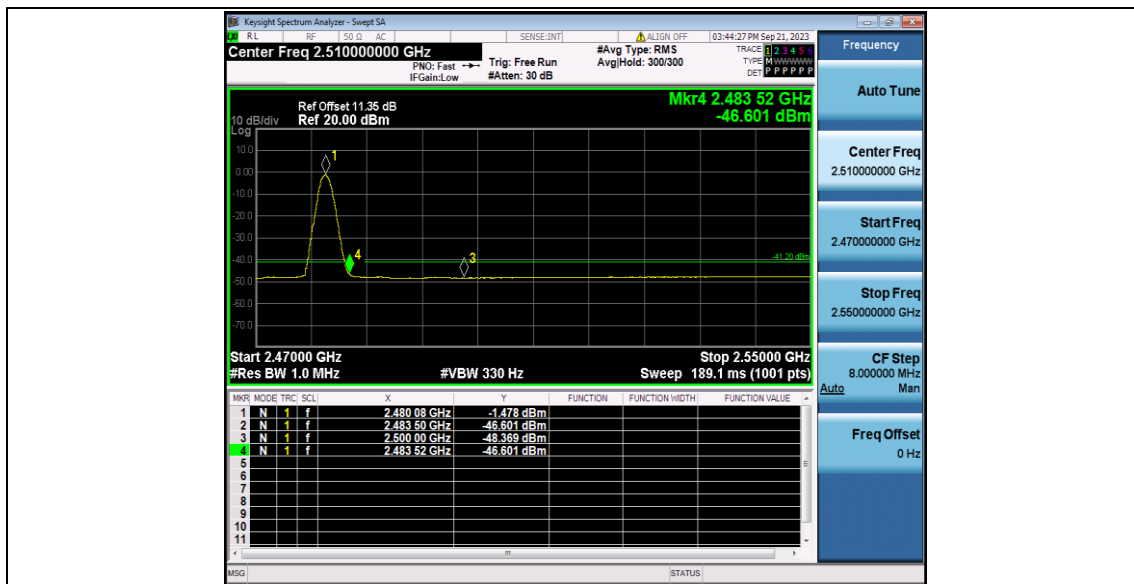
Test Mode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE	Ant1	Low	2402	AV	2310.000	-48.96	≤-41.20	46.24	≤54	PASS
				AV	2387.360	-47.93	≤-41.20	47.27	≤54	PASS
				AV	2390.000	-48.55	≤-41.20	46.65	≤54	PASS
				Peak	2310.000	-41.79	≤-21.20	53.41	≤74	PASS
				Peak	2387.570	-28.58	≤-21.20	66.62	≤74	PASS
				Peak	2390.000	-39.39	≤-21.20	55.81	≤74	PASS
		High	2480	AV	2483.500	-46.6	≤-41.20	48.60	≤54	PASS
				AV	2483.520	-46.6	≤-41.20	48.60	≤54	PASS
				AV	2500.000	-48.37	≤-41.20	46.83	≤54	PASS
				Peak	2483.500	-37.81	≤-21.20	57.39	≤74	PASS
				Peak	2483.760	-29.19	≤-21.20	66.01	≤74	PASS
				Peak	2500.000	-40.37	≤-21.20	54.83	≤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_Ant1_High_2480_AV



BLE_Ant1_High_2480_Peak