

Case No. : <u>CTA24081600102</u>	
Ambient Condition: <u>23</u> °C, <u>51</u> %RH	
According Standard: ■Part15C	
Test Date: <u>2024.8.14</u>	Test Engineer: <u>Lushan Kong</u>

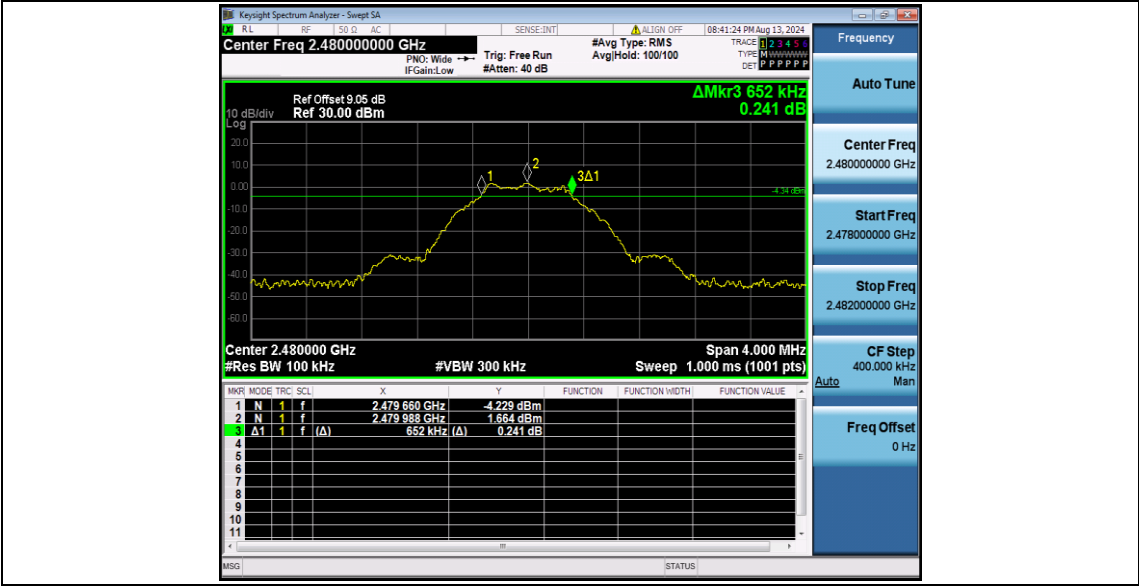
Appendix B.1: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	0.644	2401.672	2402.316	0.5	PASS
		2440	0.644	2439.664	2440.308	0.5	PASS
		2480	0.652	2479.660	2480.312	0.5	PASS

Test Graphs





Appendix B.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	1.0021	2401.4965	2402.4986	---	---
		2440	1.0035	2439.4961	2440.4996	---	---
		2480	0.99876	2479.4927	2480.4914	---	---

Test Graphs





Appendix B.3: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE	Ant1	2402	3.45	≤30	PASS
		2440	3.82	≤30	PASS
		2480	2.09	≤30	PASS

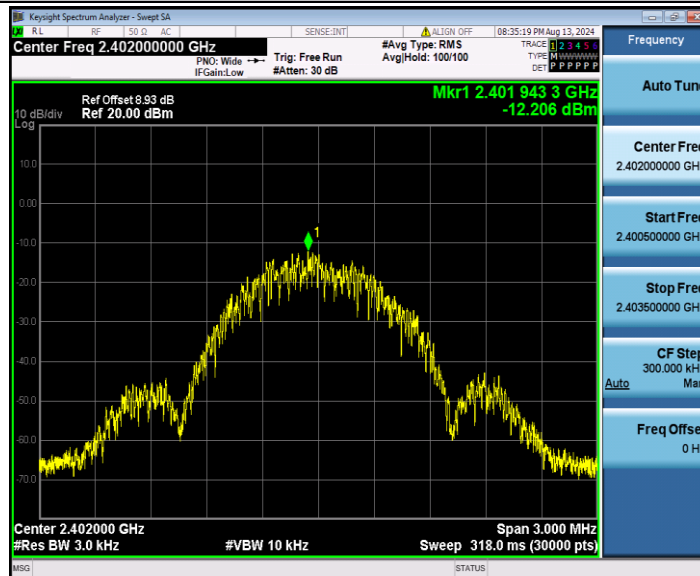
Appendix B.4: Maximum power spectral density

Test Result

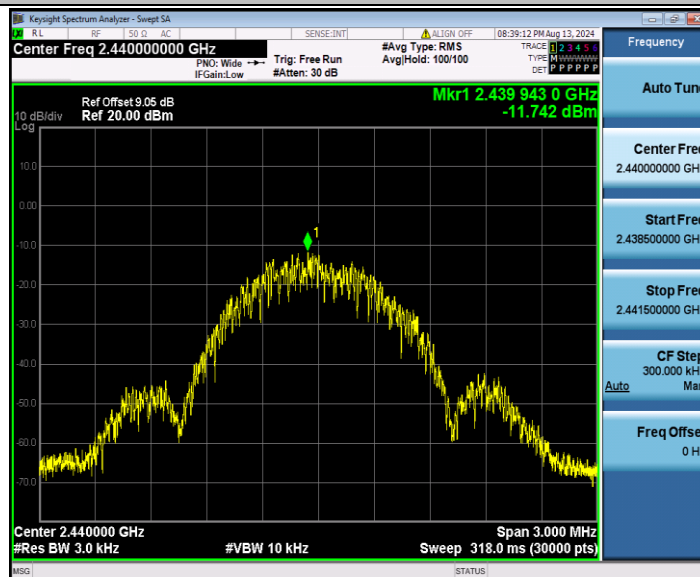
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE	Ant1	2402	-12.21	≤8.00	PASS
		2440	-11.74	≤8.00	PASS
		2480	-13.48	≤8.00	PASS

Test Graphs

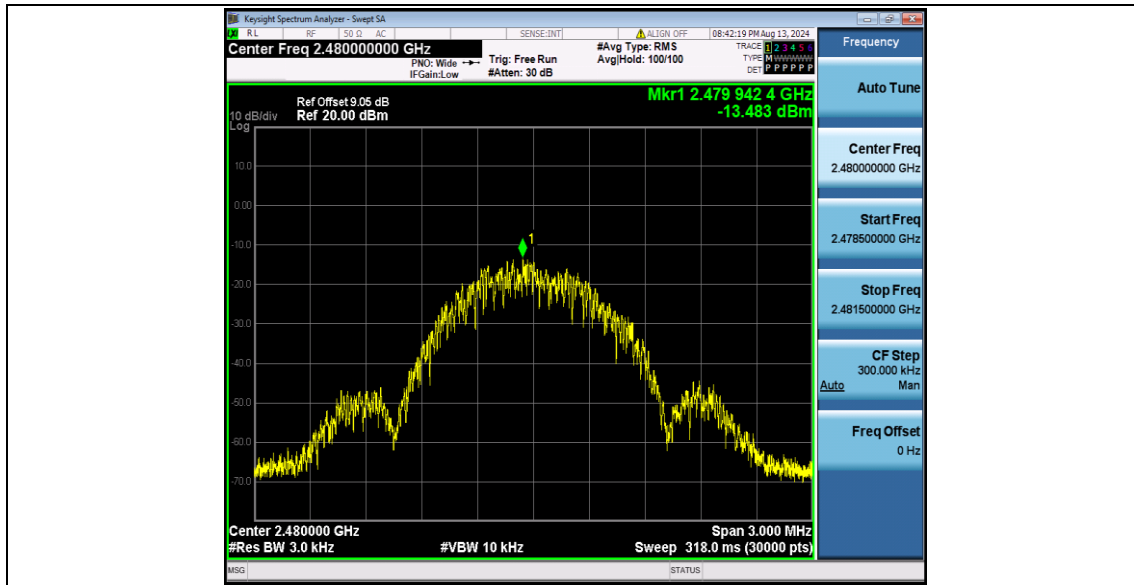
BLE_Ant1_2402



BLE_Ant1_2440



BLE_Ant1_2480

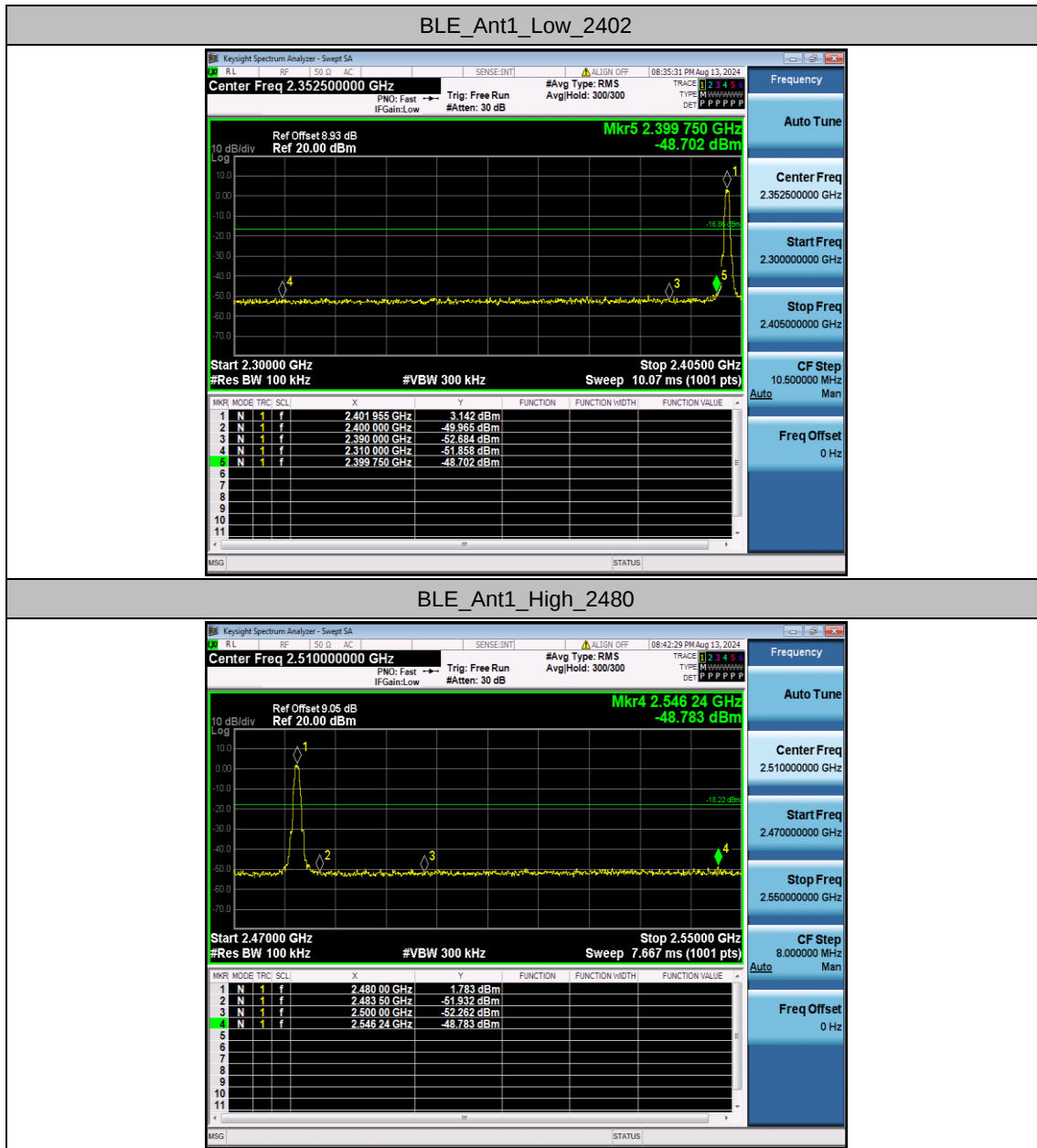


Appendix B.5: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	Low	2402	3.14	-48.7	≤-16.86	PASS
		High	2480	1.78	-48.78	≤-18.22	PASS

Test Graphs

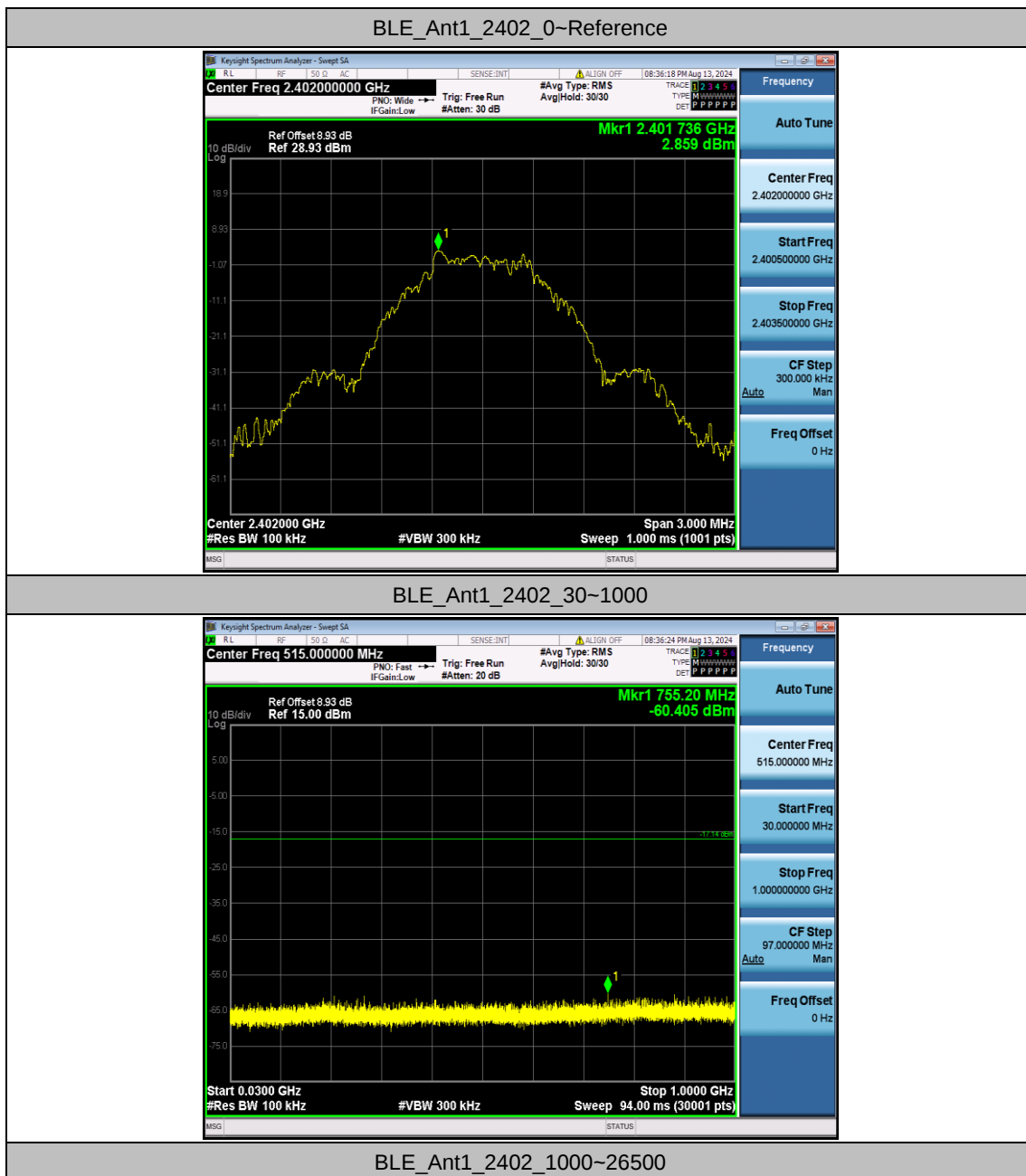


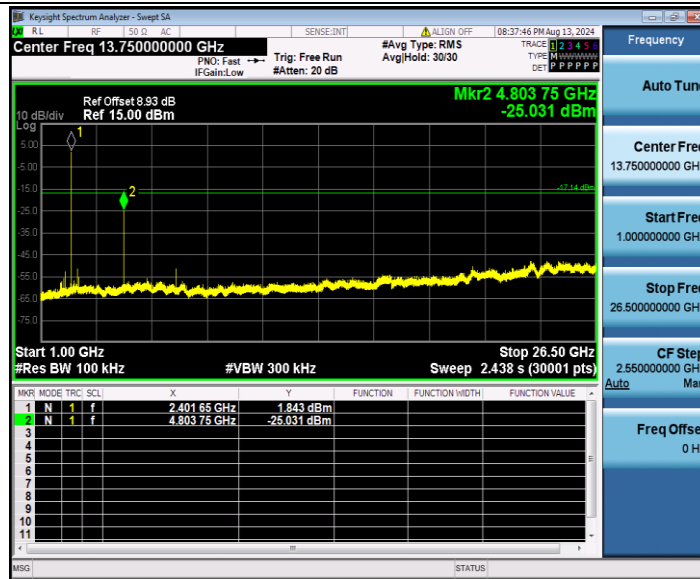
Appendix B.6: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	2402	Reference	2.86	2.86	---	PASS
			30~1000	2.86	-60.41	≤ -17.14	PASS
			1000~26500	2.86	-25.03	≤ -17.14	PASS
		2440	Reference	3.15	3.15	---	PASS
			30~1000	3.15	-60.63	≤ -16.85	PASS
			1000~26500	3.15	-27.44	≤ -16.85	PASS
		2480	Reference	1.69	1.69	---	PASS
			30~1000	1.69	-60.48	≤ -18.31	PASS
			1000~26500	1.69	-30.13	≤ -18.31	PASS

Test Graphs

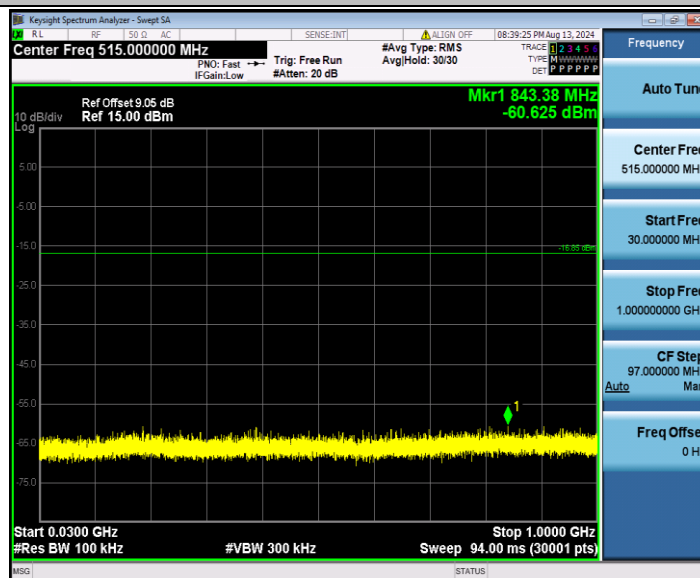


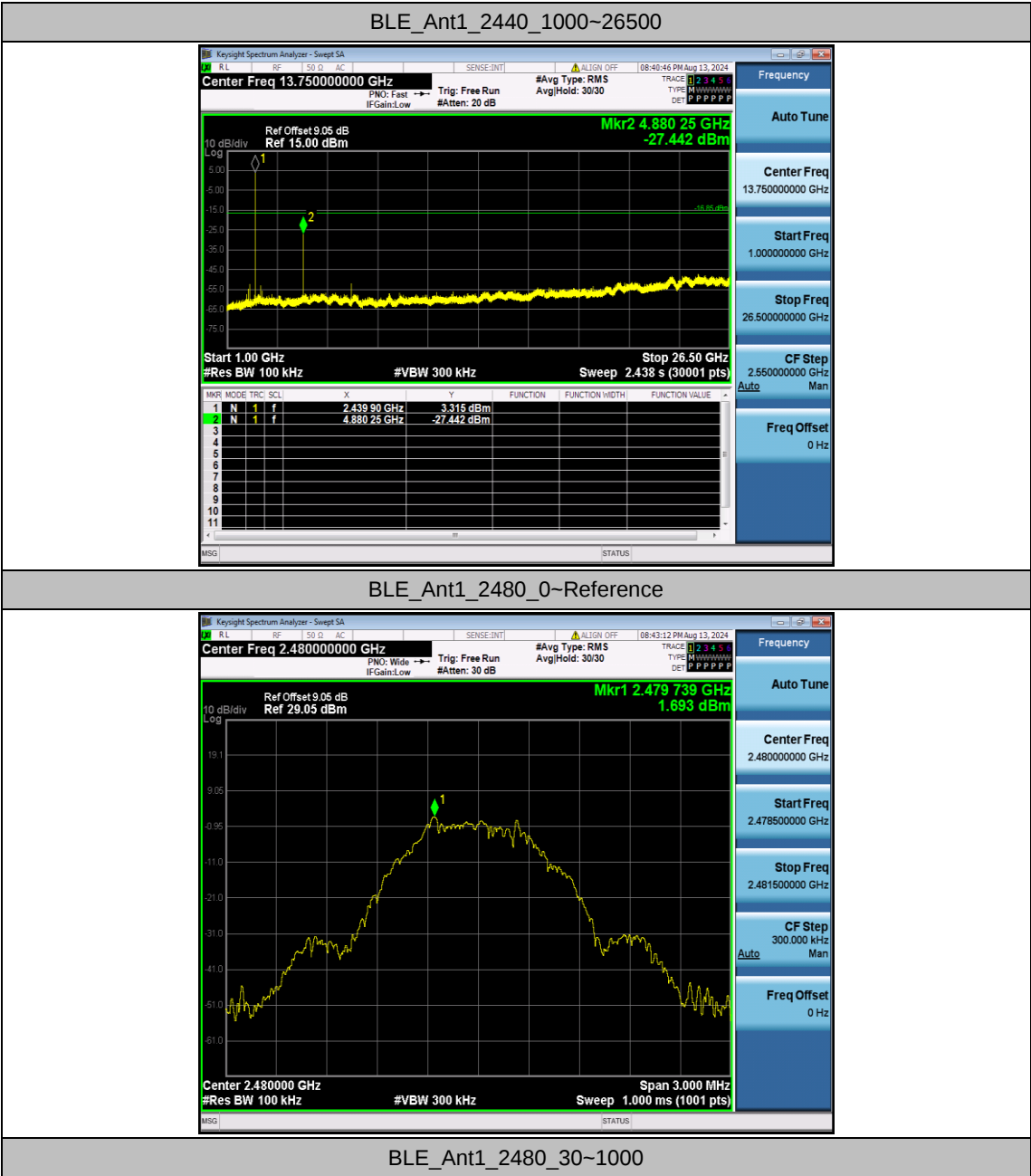


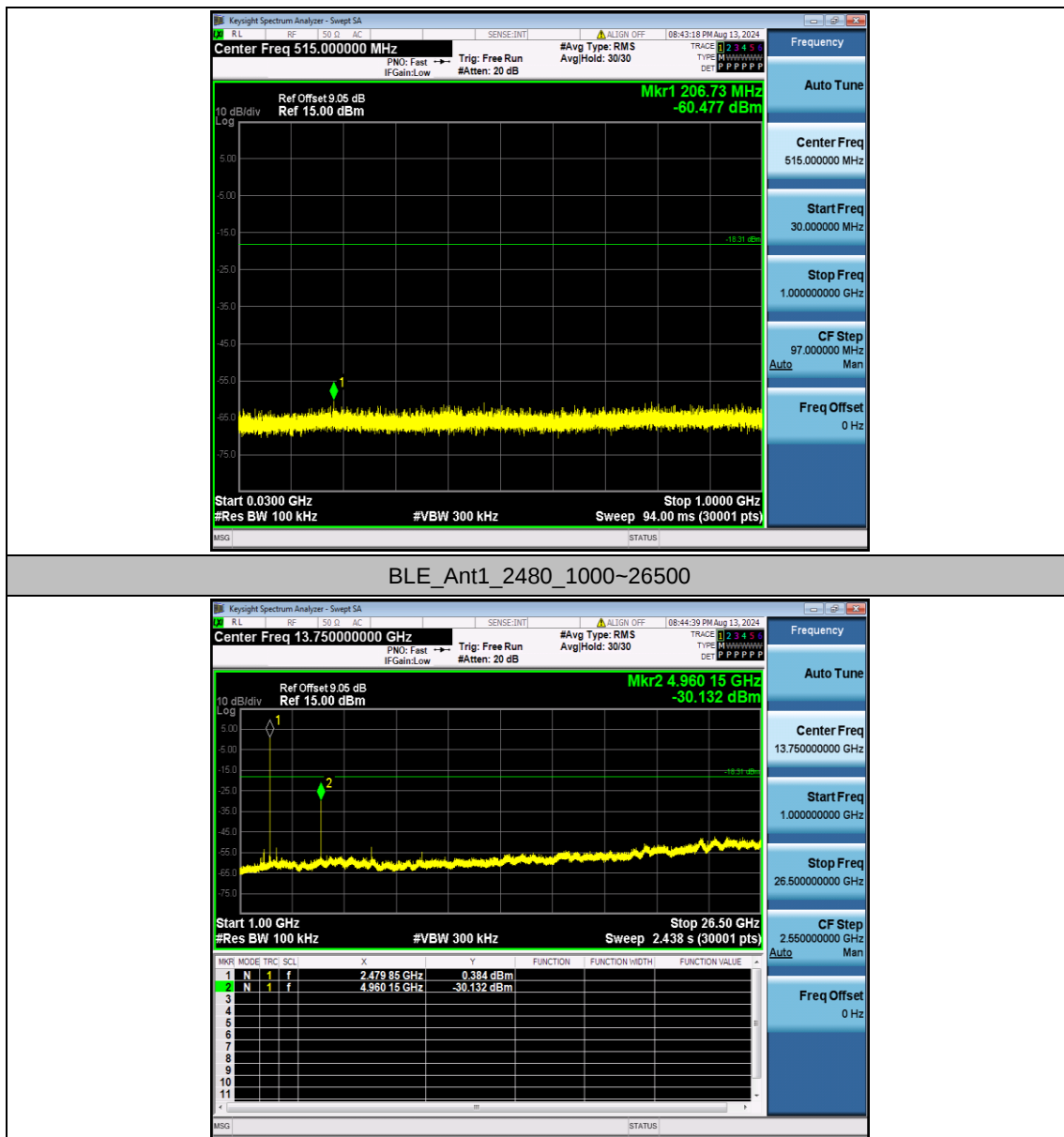
BLE_Ant1_2440_0-Reference



BLE_Ant1_2440_30~1000







Appendix B.7: Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE	Ant1	Low	2402	AV	2310.000	-49.18	≤-41.20	46.02	≤54	PASS
				AV	2389.985	-48.82	≤-41.20	46.38	≤54	PASS
				AV	2390.000	-48.82	≤-41.20	46.38	≤54	PASS
				Peak	2310.000	-42.76	≤-21.20	52.44	≤74	PASS
				Peak	2386.940	-39.09	≤-21.20	56.11	≤74	PASS
				Peak	2390.000	-41.07	≤-21.20	54.13	≤74	PASS
		High	2480	AV	2483.500	-47.95	≤-41.20	47.25	≤54	PASS
				AV	2483.520	-47.95	≤-41.20	47.25	≤54	PASS
				AV	2500.000	-48.57	≤-41.20	46.63	≤54	PASS
				Peak	2483.500	-41.99	≤-21.20	53.21	≤74	PASS
				Peak	2483.600	-36.63	≤-21.20	58.57	≤74	PASS
				Peak	2500.000	-42.47	≤-21.20	52.73	≤74	PASS

Note:

1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. 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

