

Case No. : <u>CTA24092300202</u>	
Ambient Condition: <u>23</u> °C, <u>51</u> %RH	
According Standard: ■Part15C	
Test Date: <u>2024.8.28</u>	Test Engineer: <u>Lushan Kong</u>

Appendix A.1: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	0.788	2401.608	2402.396	0.5	PASS
		2440	0.752	2439.608	2440.360	0.5	PASS
		2480	0.804	2479.592	2480.396	0.5	PASS

Appendix A.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	1.1244	2401.4237	2402.5481	---	---
		2440	1.1241	2439.4318	2440.5559	---	---
		2480	1.0990	2479.4474	2480.5464	---	---

Test Graphs





Appendix A.3: Maximum conducted output power

Test Result Peak

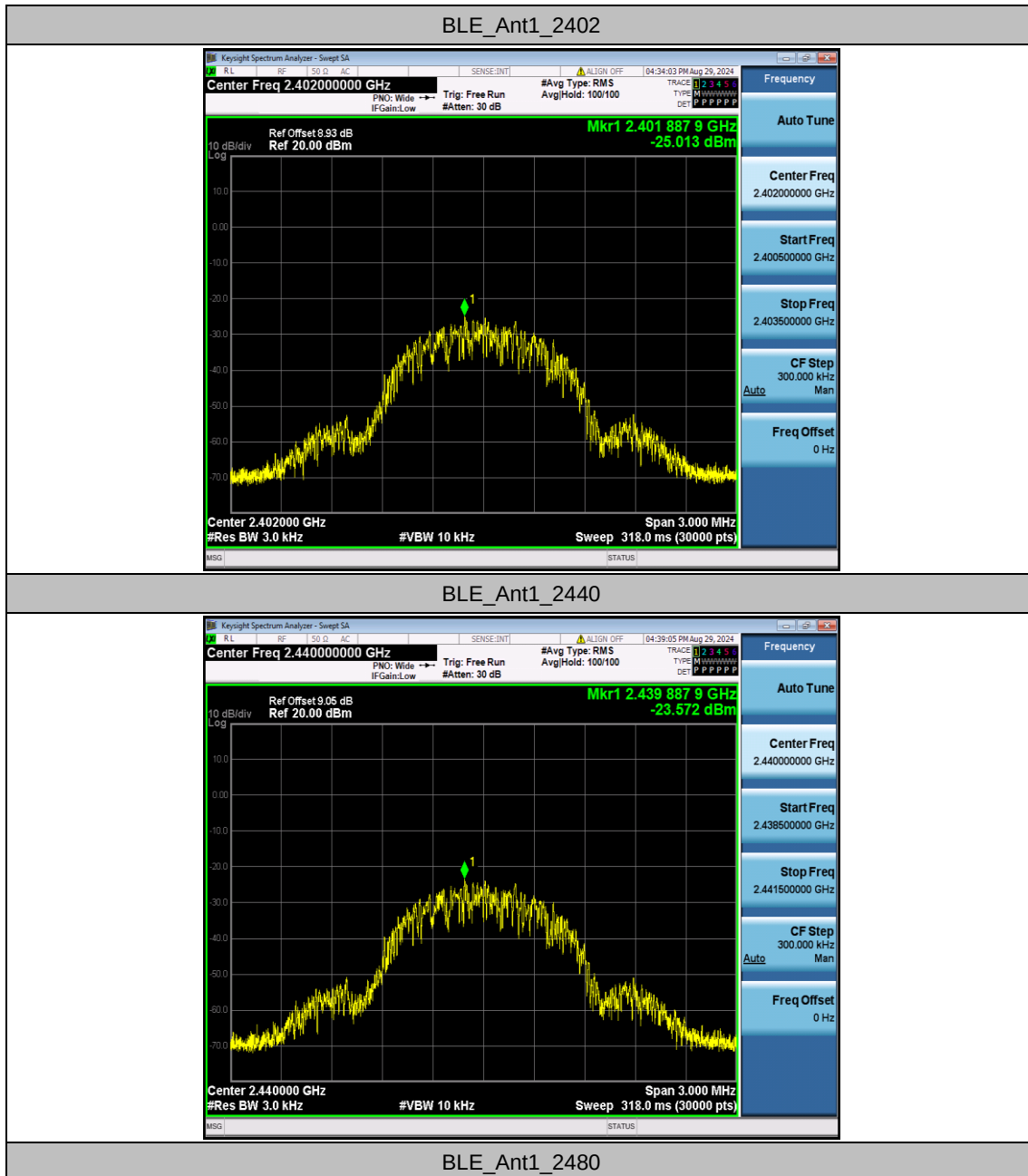
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE	Ant1	2402	-7.97	≤30	PASS
		2440	-6.60	≤30	PASS
		2480	-5.91	≤30	PASS

Appendix A.4: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE	Ant1	2402	-25.01	≤8.00	PASS
		2440	-23.57	≤8.00	PASS
		2480	-22.65	≤8.00	PASS

Test Graphs



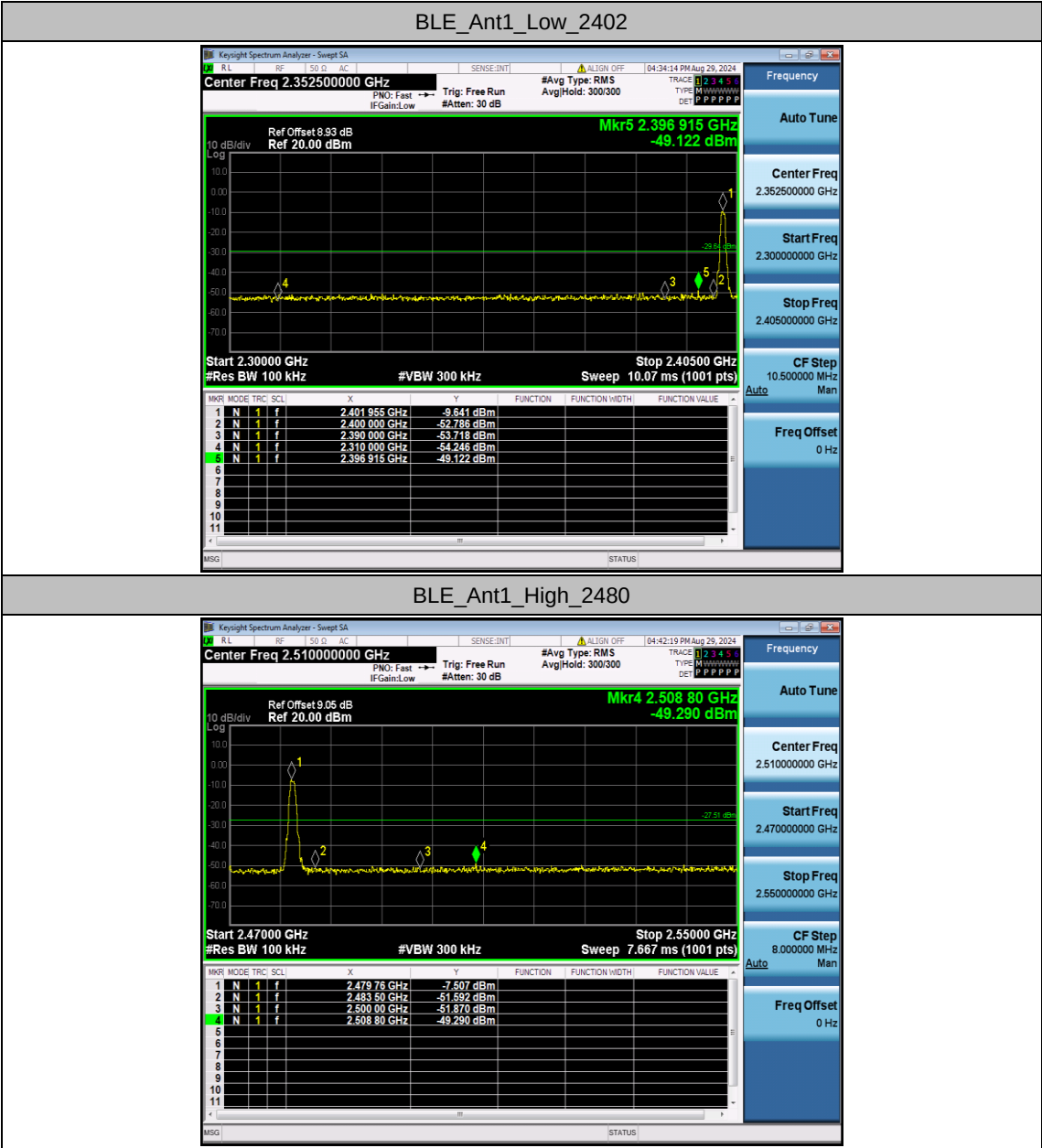


Appendix A.5: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	Low	2402	-9.64	-49.12	≤-29.64	PASS
		High	2480	-7.51	-49.29	≤-27.51	PASS

Test Graphs



BLE_Ant1_High_2480

Frequency

Auto Tune

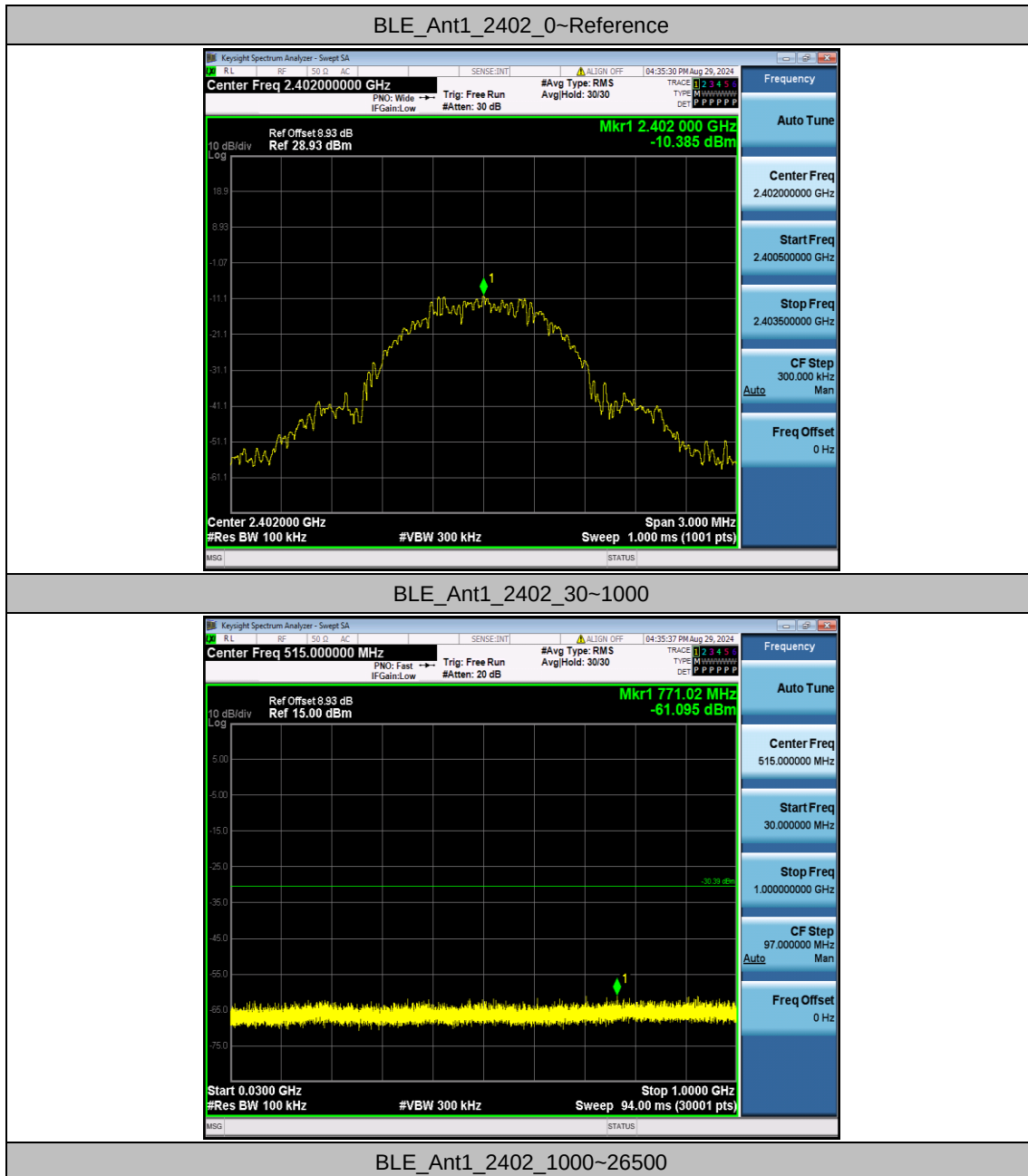
Center Freq
2.510000000 GHzStart Freq
2.470000000 GHzStop Freq
2.550000000 GHzCF Step
8.000000 MHz
Auto ManFreq Offset
0 Hz

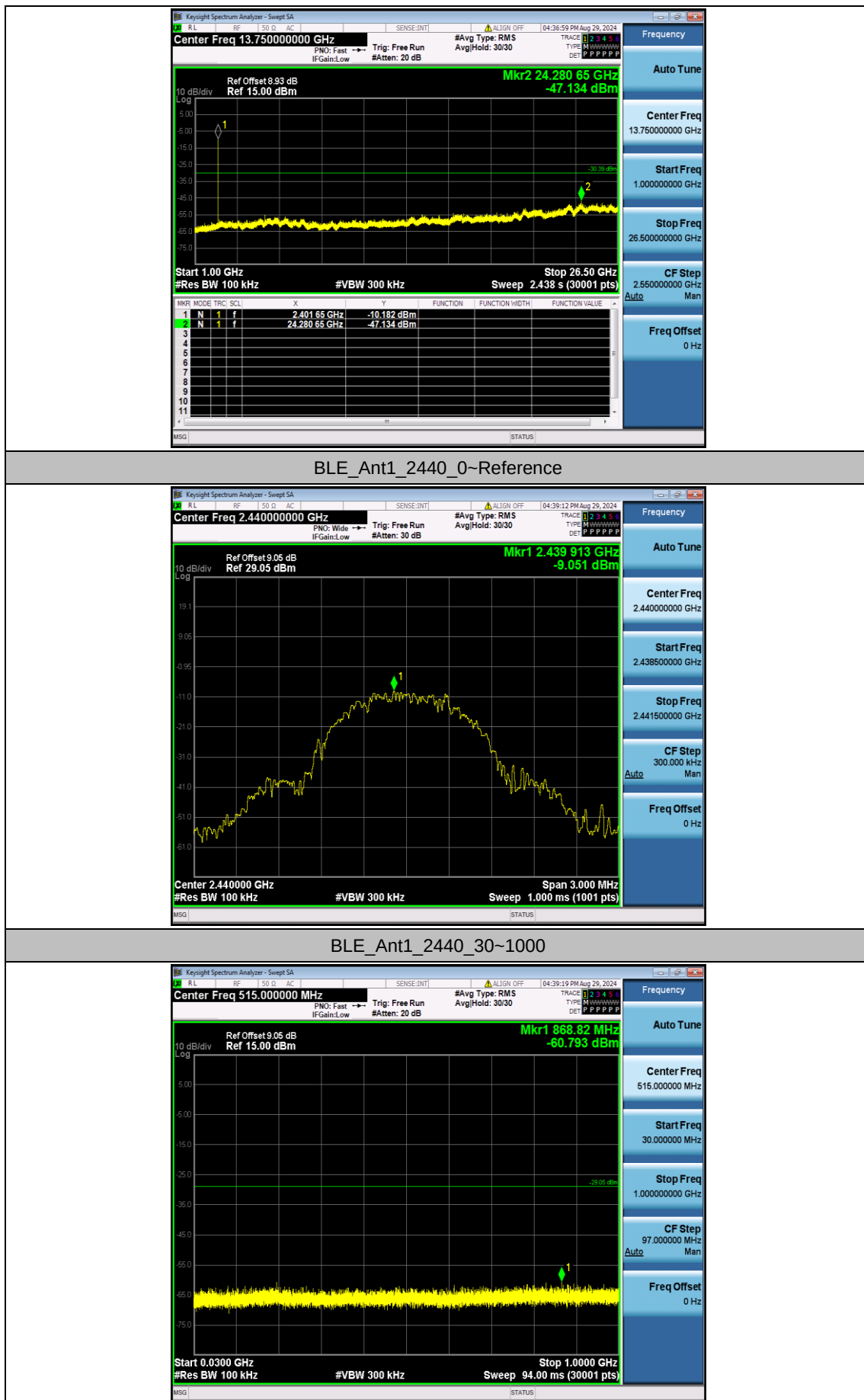
Appendix A.6: Conducted Spurious Emission

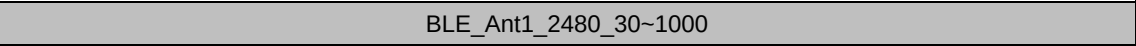
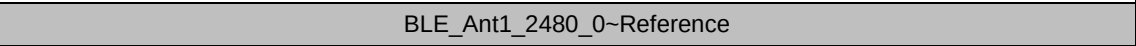
Test Result

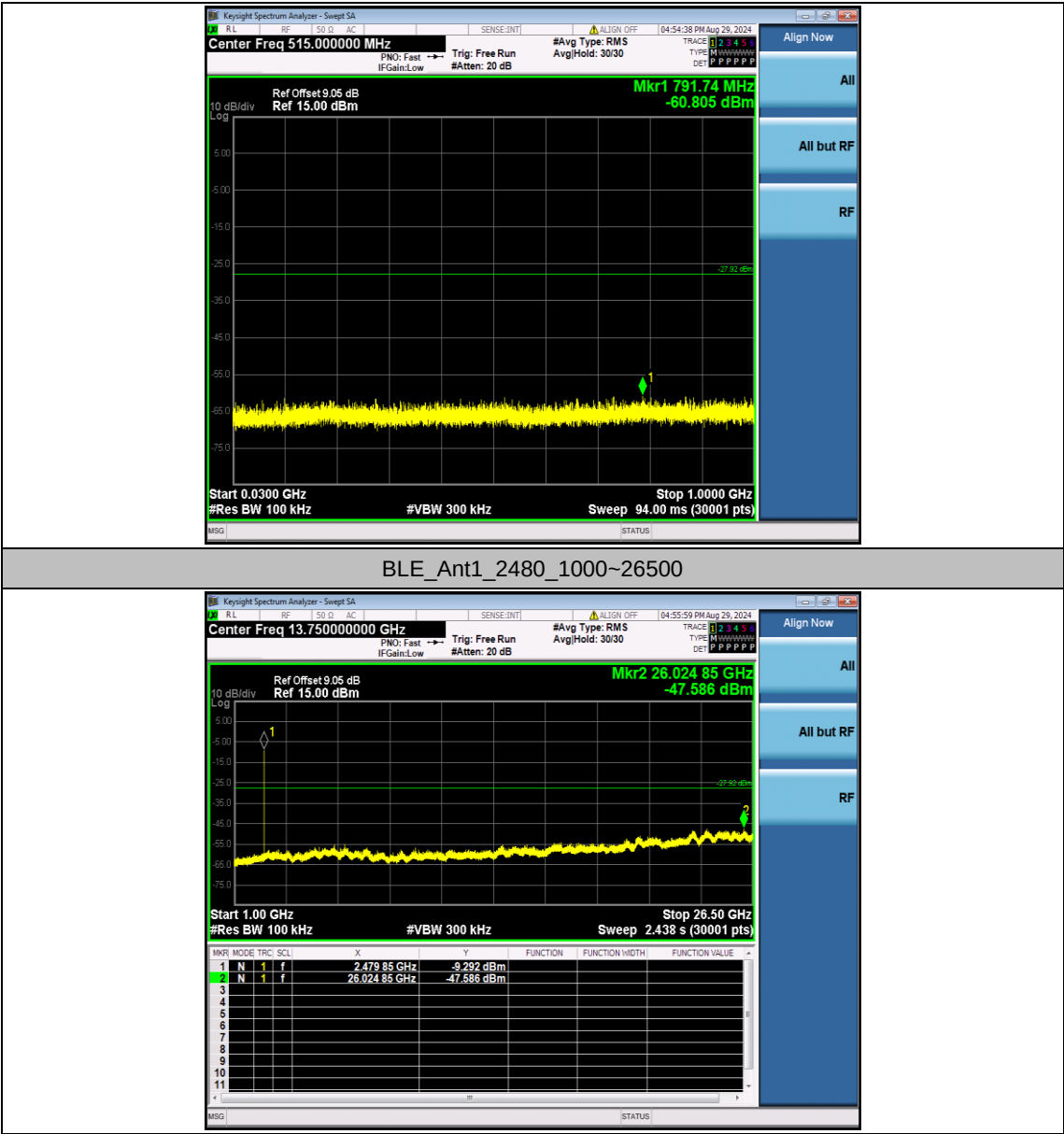
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	2402	Reference	-10.39	-10.39	---	PASS
			30~1000	-10.39	-61.1	≤ -30.39	PASS
			1000~26500	-10.39	-47.13	≤ -30.39	PASS
		2440	Reference	-9.05	-9.05	---	PASS
			30~1000	-9.05	-60.79	≤ -29.05	PASS
			1000~26500	-9.05	-48.31	≤ -29.05	PASS
		2480	Reference	-7.92	-7.92	---	PASS
			30~1000	-7.92	-60.81	≤ -27.92	PASS
			1000~26500	-7.92	-47.59	≤ -27.92	PASS

Test Graphs









Appendix A.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	-49.42	≤-41.20	45.78	≤54	PASS
				AV	2387.780	-48.97	≤-41.20	46.23	≤54	PASS
				AV	2390.000	-49.1	≤-41.20	46.10	≤54	PASS
				Peak	2310.000	-42.69	≤-21.20	52.51	≤74	PASS
				Peak	2368.565	-38.7	≤-21.20	56.50	≤74	PASS
				Peak	2390.000	-41.78	≤-21.20	53.42	≤74	PASS
		High	2480	AV	2483.500	-48.96	≤-41.20	46.24	≤54	PASS
				AV	2499.600	-48.68	≤-41.20	46.52	≤54	PASS
				AV	2500.000	-48.77	≤-41.20	46.43	≤54	PASS
				Peak	2483.500	-41.44	≤-21.20	53.76	≤74	PASS
				Peak	2499.200	-38.75	≤-21.20	56.45	≤74	PASS
				Peak	2500.000	-40.41	≤-21.20	54.79	≤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

