

Case No. : <u>GTS20231024007-1-7</u>
Ambient Condition: <u>23</u> °C, <u>48</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.11.10</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	0.652	2401.680	2402.332	0.5	PASS
		2440	0.504	2439.680	2440.184	0.5	PASS
		2480	0.620	2479.676	2480.296	0.5	PASS

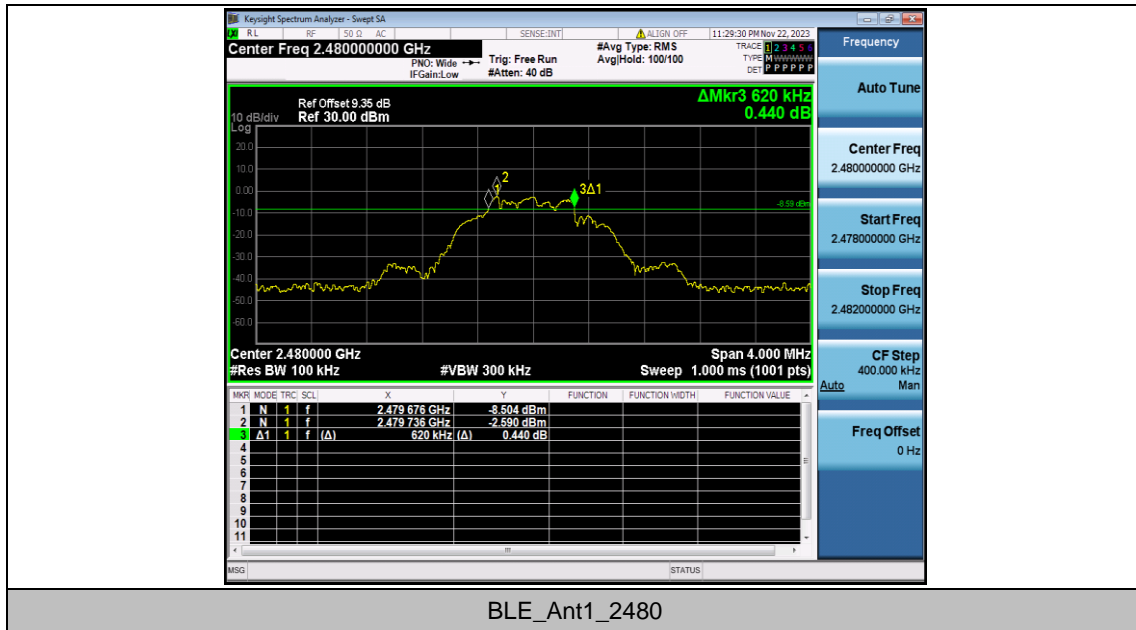
Test Graphs



BLE_Ant1_2402



BLE_Ant1_2440



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	1.0378	2401.486	2402.524	---	---
		2440	1.0488	2439.488	2440.537	---	---
		2480	1.0474	2479.493	2480.540	---	---

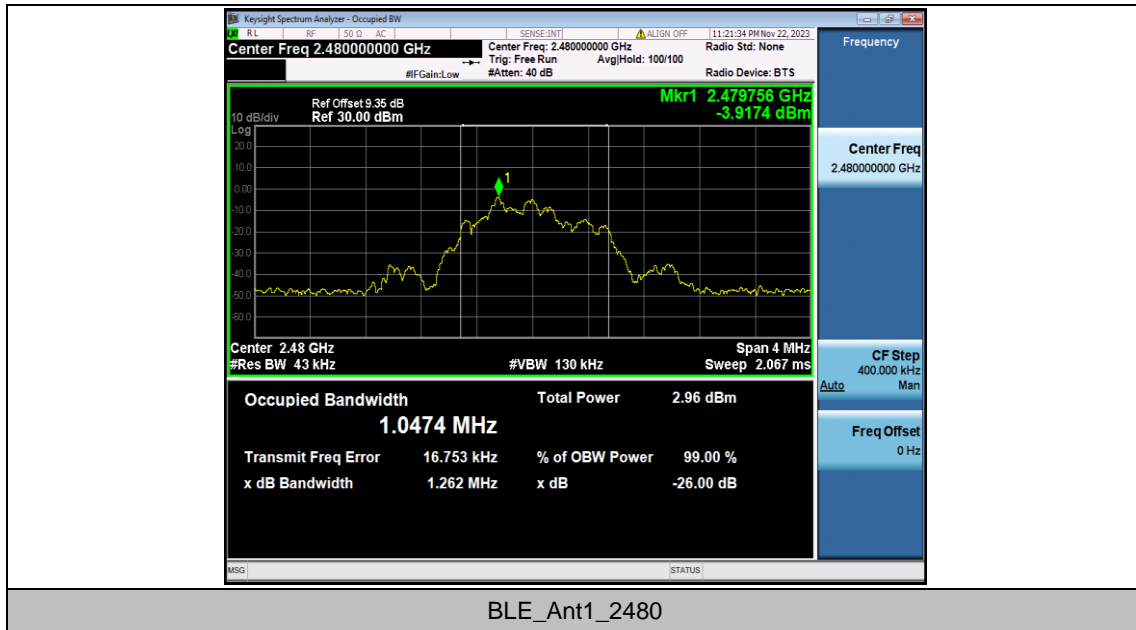
Test Graphs



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	-3.87	≤30	PASS
		2440	-1.9	≤30	PASS
		2480	-1.81	≤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	-23.05	≤8.00	PASS
		2440	-20.92	≤8.00	PASS
		2480	-20.93	≤8.00	PASS

Test Graphs



BLE_Ant1_2402



BLE_Ant1_2440

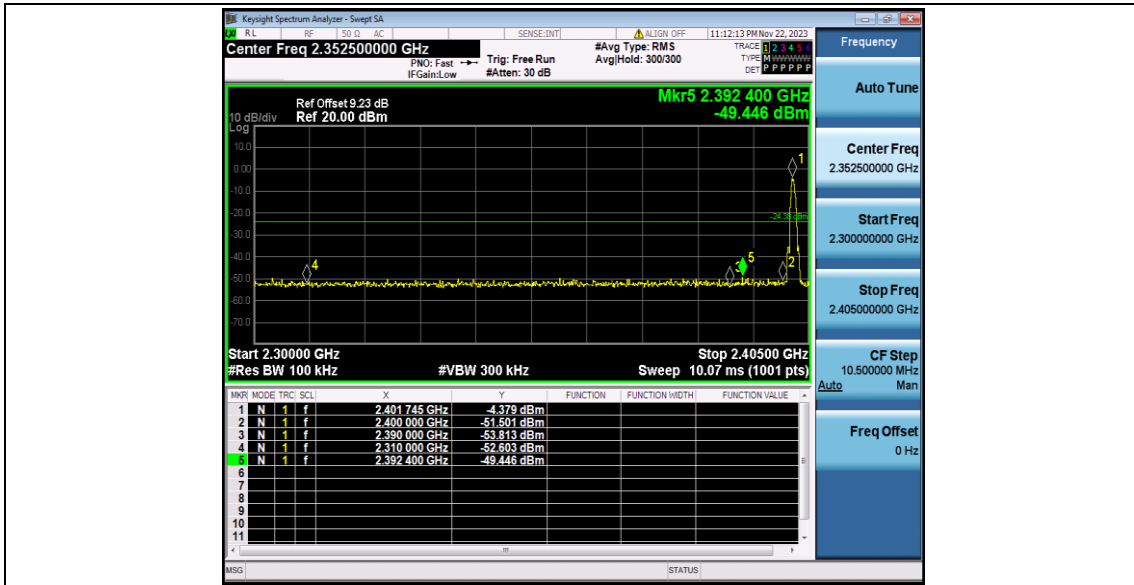


Appendix A.5: Band edge measurements

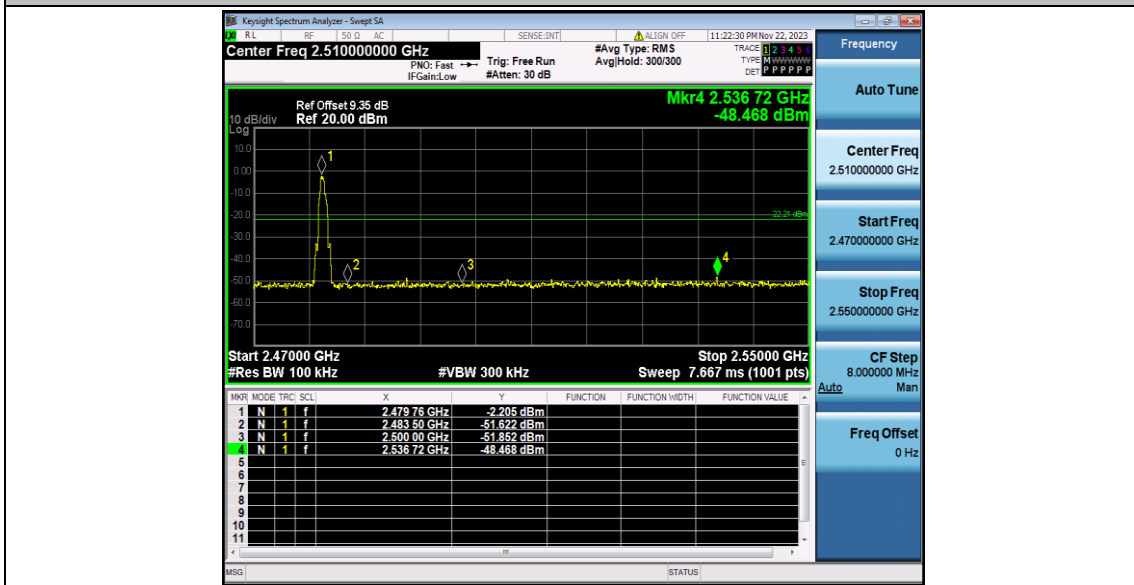
Test Result

Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	Low	2402	-4.38	-49.45	≤-24.38	PASS
		High	2480	-2.21	-48.47	≤-22.21	PASS

Test Graphs



BLE_Ant1_Low_2402



BLE_Ant1_High_2480

Appendix A.6: Conducted Spurious Emission

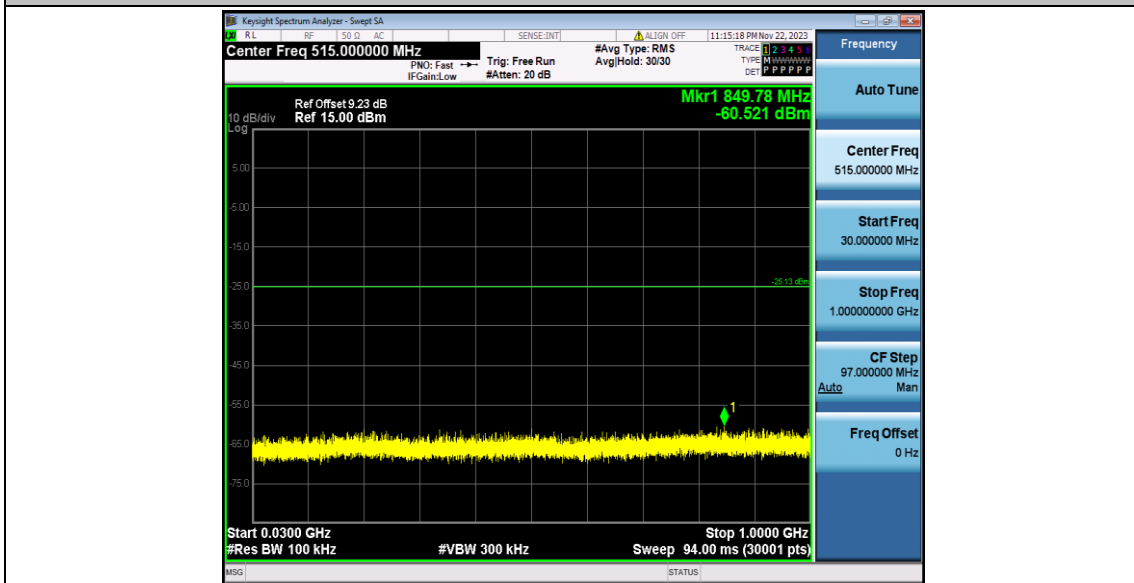
Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	2402	Reference	-5.13	-5.13	---	PASS
			30~1000	-5.13	-60.52	≤ -25.13	PASS
			1000~26500	-5.13	-47.22	≤ -25.13	PASS
		2440	Reference	-2.37	-2.37	---	PASS
			30~1000	-2.37	-60.39	≤ -22.37	PASS
			1000~26500	-2.37	-47.4	≤ -22.37	PASS
		2480	Reference	-2.81	-2.81	---	PASS
			30~1000	-2.81	-60.15	≤ -22.81	PASS
			1000~26500	-2.81	-47.39	≤ -22.81	PASS

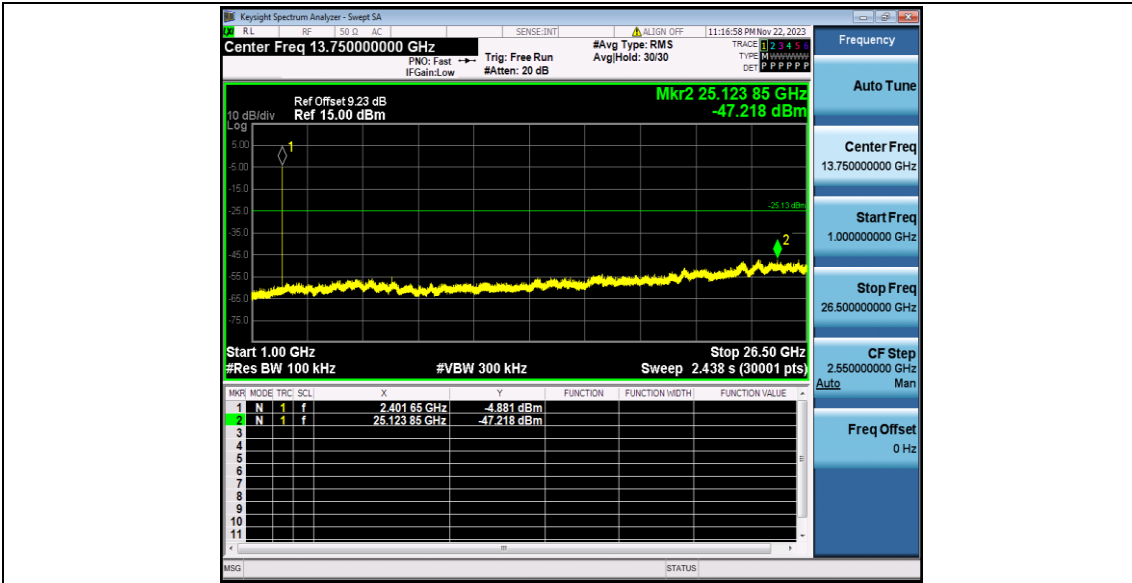
Test Graphs



BLE_Ant1_2402_0~Reference



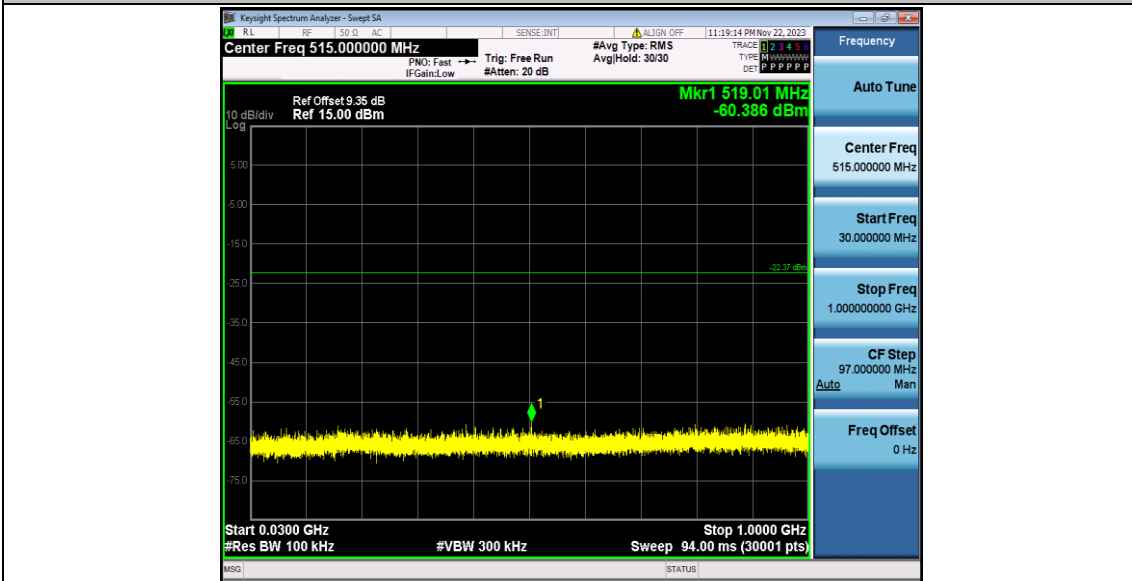
BLE_Ant1_2402_30~1000



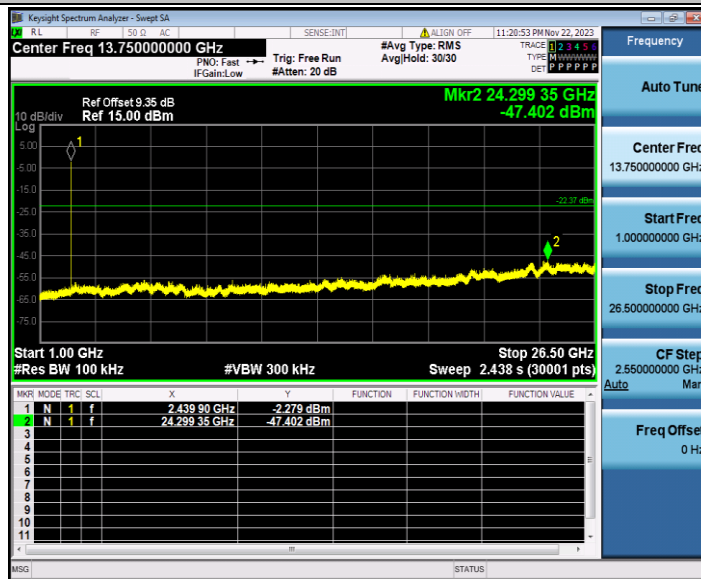
BLE_Ant1_2402_1000~26500



BLE_Ant1_2440_0~Reference



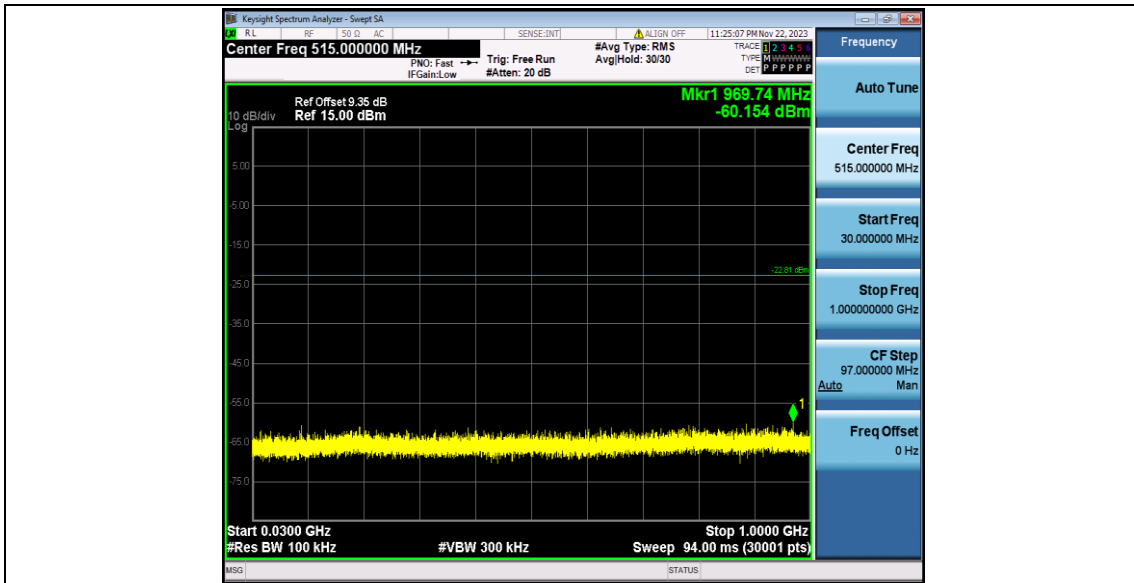
BLE_Ant1_2440_30~1000



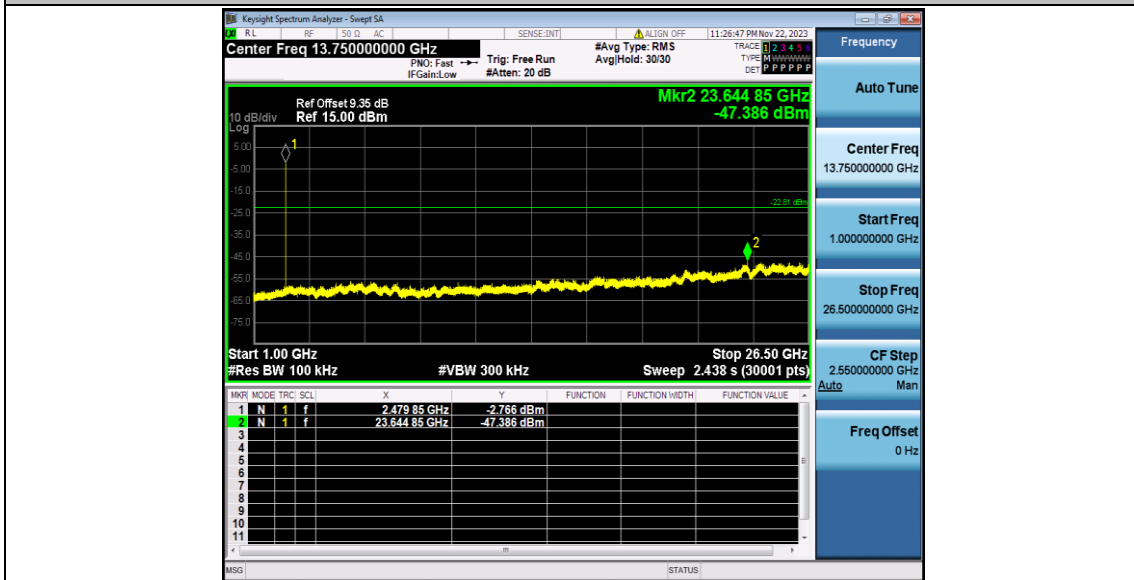
BLE_Ant1_2440_1000~26500



BLE_Ant1_2480_0~Reference



BLE_Ant1_2480_30~1000



BLE_Ant1_2480_1000~26500

Appendix A.7: Emissions in Restricted Bands

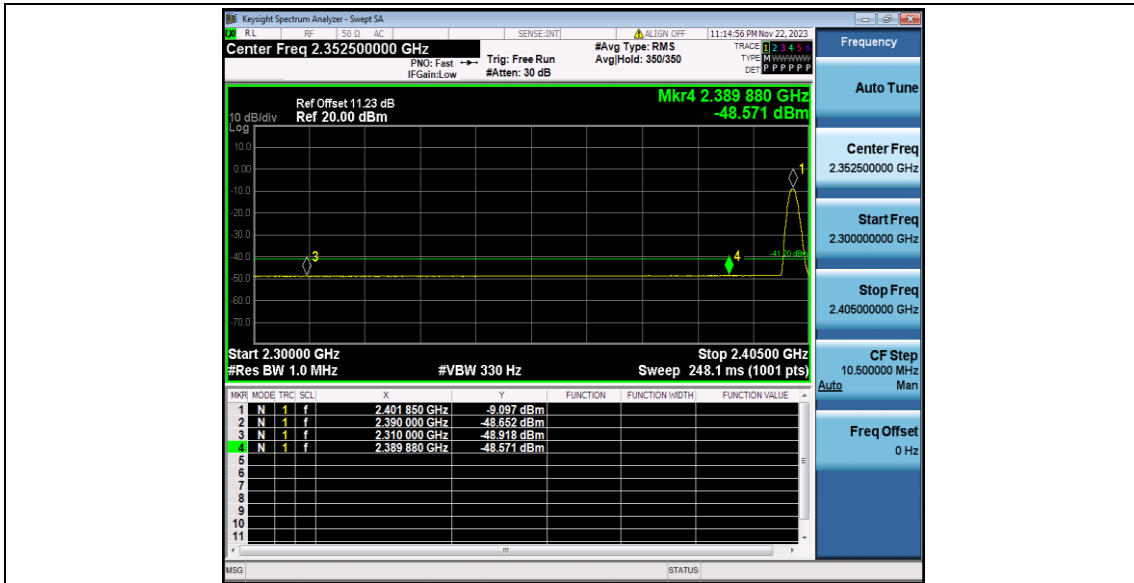
Test Result

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	-48.92	≤-41.20	46.28	≤54	PASS
				AV	2389.880	-48.57	≤-41.20	46.63	≤54	PASS
				AV	2390.000	-48.65	≤-41.20	46.55	≤54	PASS
				Peak	2310.000	-41.82	≤-21.20	53.38	≤74	PASS
				Peak	2385.470	-38.46	≤-21.20	56.74	≤74	PASS
				Peak	2390.000	-41.19	≤-21.20	54.01	≤74	PASS
		High	2480	AV	2483.500	-48.48	≤-41.20	46.72	≤54	PASS
				AV	2498.560	-48.14	≤-41.20	47.06	≤54	PASS
				AV	2500.000	-48.31	≤-41.20	46.89	≤54	PASS
				Peak	2483.500	-40.71	≤-21.20	54.49	≤74	PASS
				Peak	2485.520	-37.81	≤-21.20	57.39	≤74	PASS
				Peak	2500.000	-41.17	≤-21.20	54.03	≤74	PASS

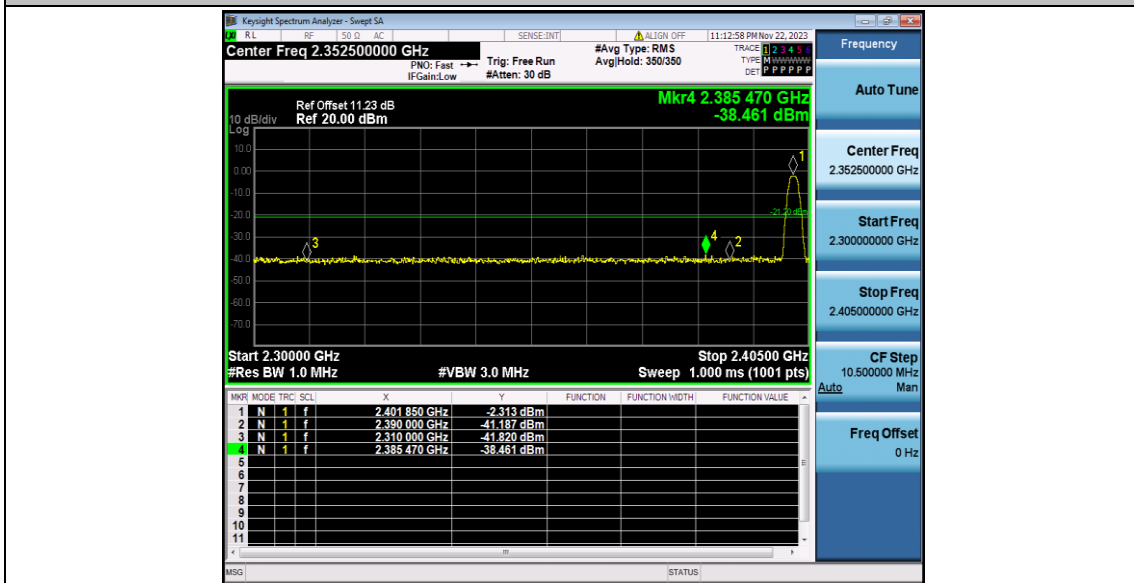
Note:

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



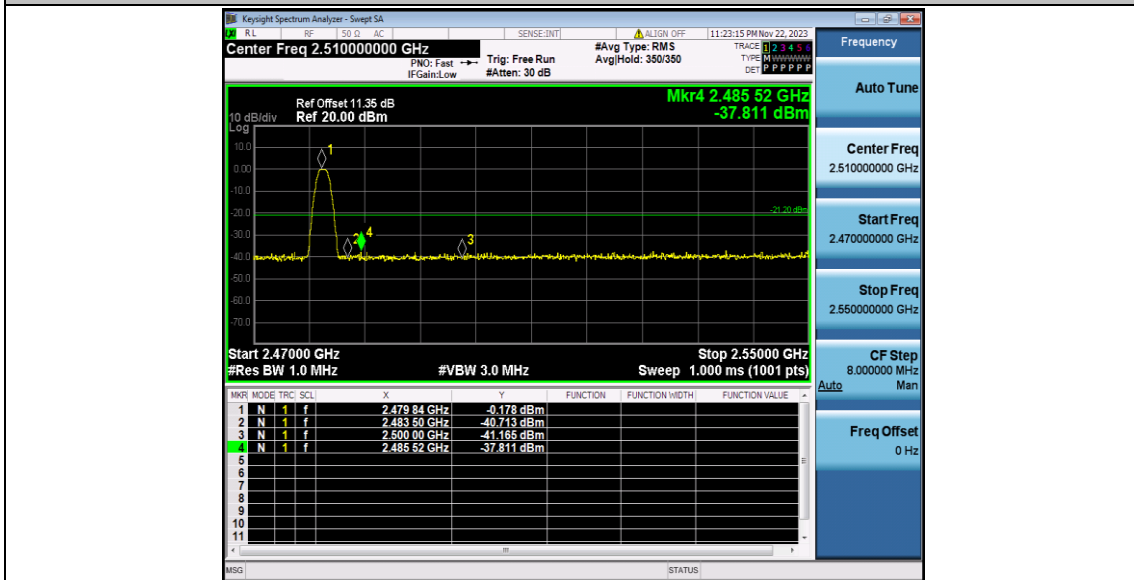
BLE_Ant1_Low_2402_AV



BLE_Ant1_Low_2402_Peak



BLE_Ant1_High_2480_AV



BLE_Ant1_High_2480_Peak