Appendix Test Data

Report No.:	18220WC30258801	Test Sample No.:	1-2-2
Start Test Date:	2023.12.14	Finish Test Date:	2023.12.15
Test Engineer:	Hayman Chen	Auditor:	Rick Luo
Temperature:	25.5℃	Relative Humidity:	48%
Pressure:	101kPa		

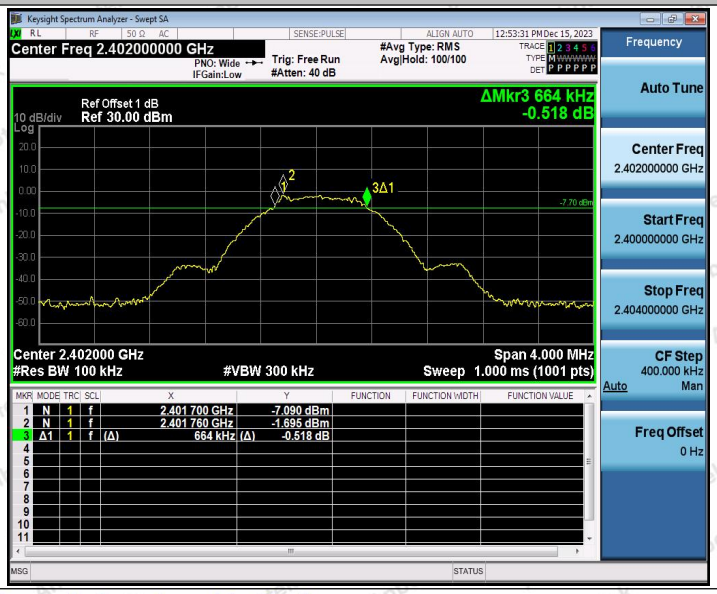
Appendix A: DTS Bandwidth

Test Result

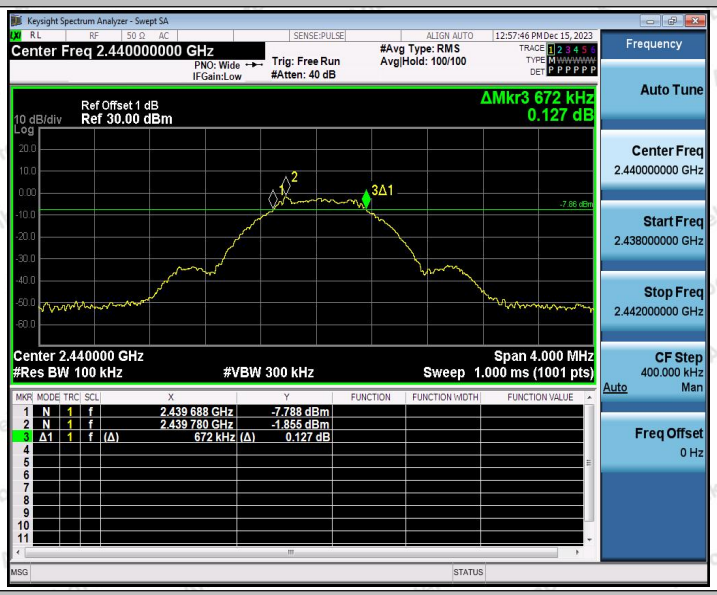
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.664	2401.700	2402.364	0.5	PASS
		2440	0.672	2439.688	2440.360	0.5	PASS
		2480	0.664	2479.692	2480.356	0.5	PASS

Test Graphs

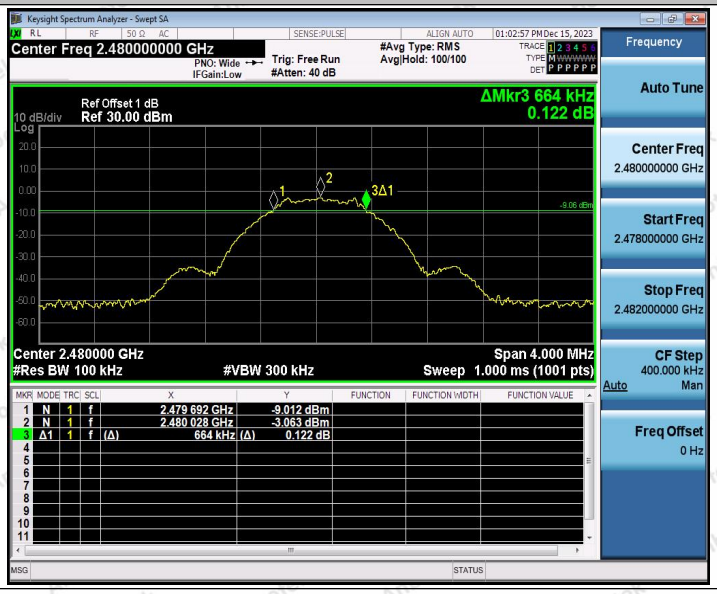
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
BLE_1M	Ant1	2402	1.0331	2401.5074	2402.5405
		2440	1.0374	2439.5065	2440.5439
		2480	1.0171	2479.5144	2480.5315

Test Graphs

BLE_1M_Ant1_2402

BLE_1M_Ant1_2440

BLE_1M_Ant1_2480

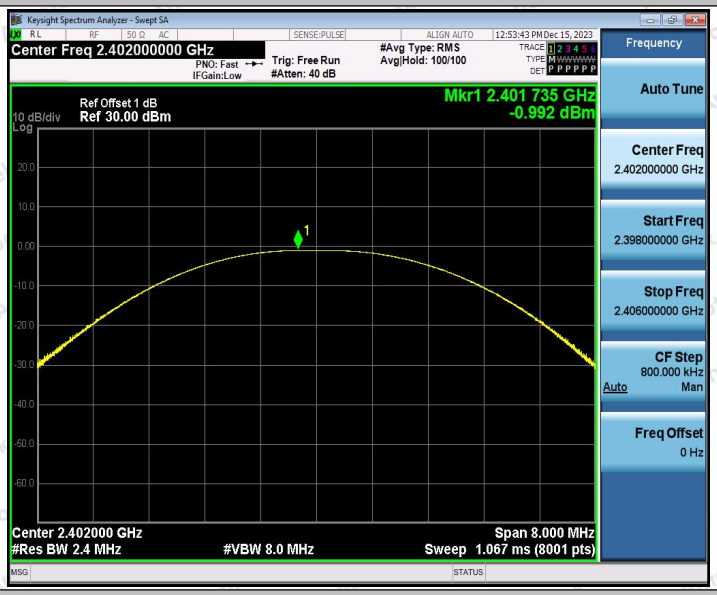
Appendix C: Maximum conducted output power

Test Result Peak

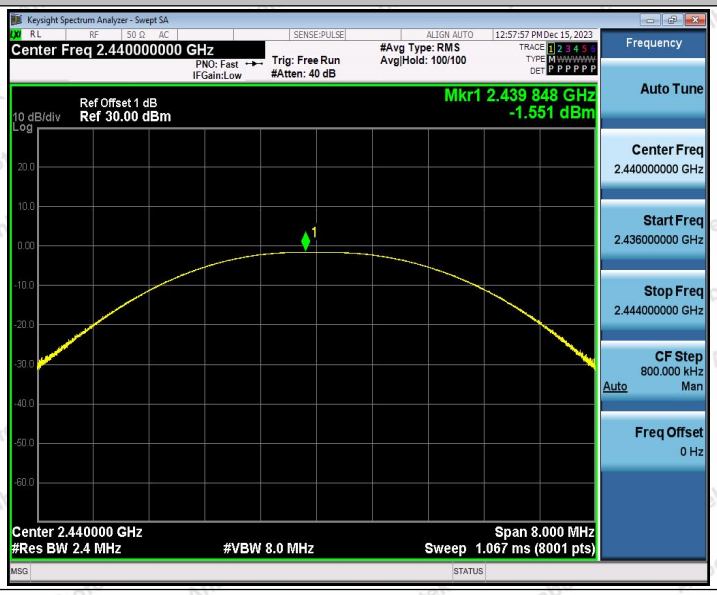
TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.99	≤30	PASS
		2440	-1.55	≤30	PASS
		2480	-2.36	≤30	PASS

Test Graphs Peak

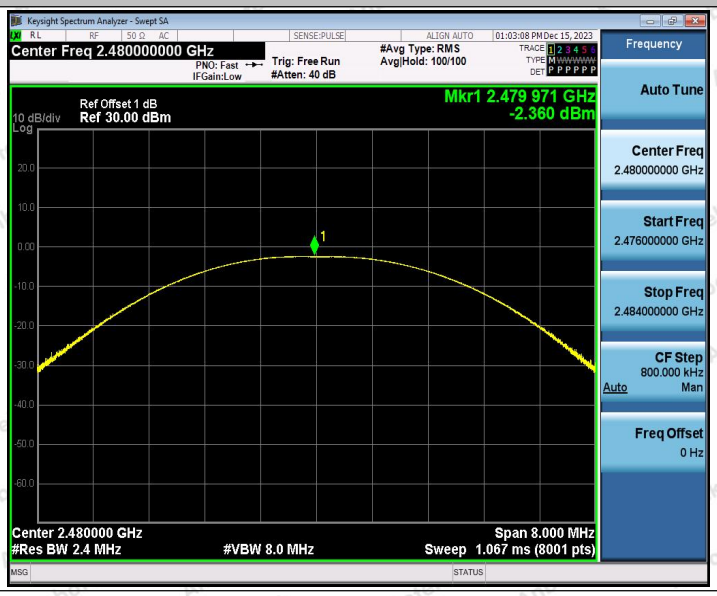
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix D: Maximum power spectral density

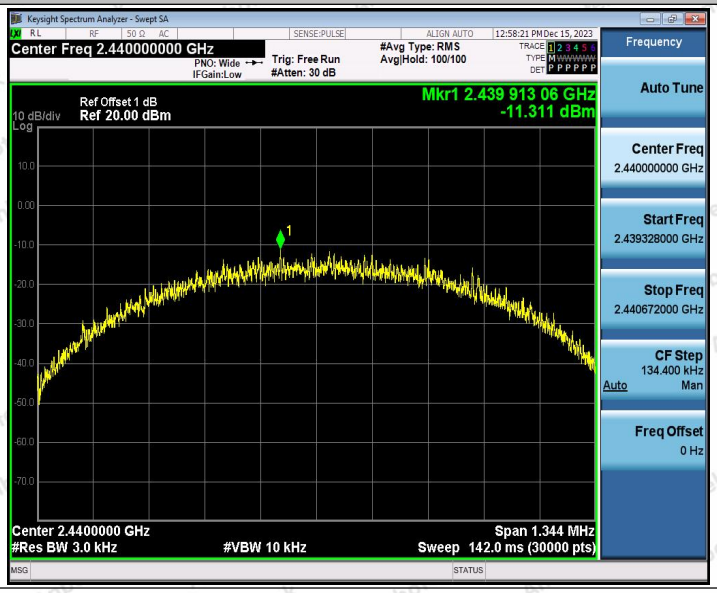
Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-10.37	≤8.00	PASS
		2440	-11.31	≤8.00	PASS
		2480	-12.49	≤8.00	PASS

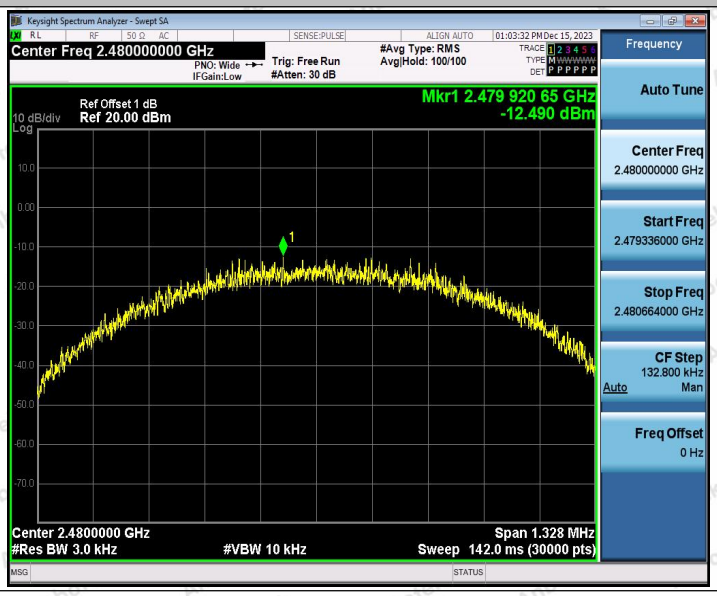
Test Graphs

BLE_1M_Ant1_2402

BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



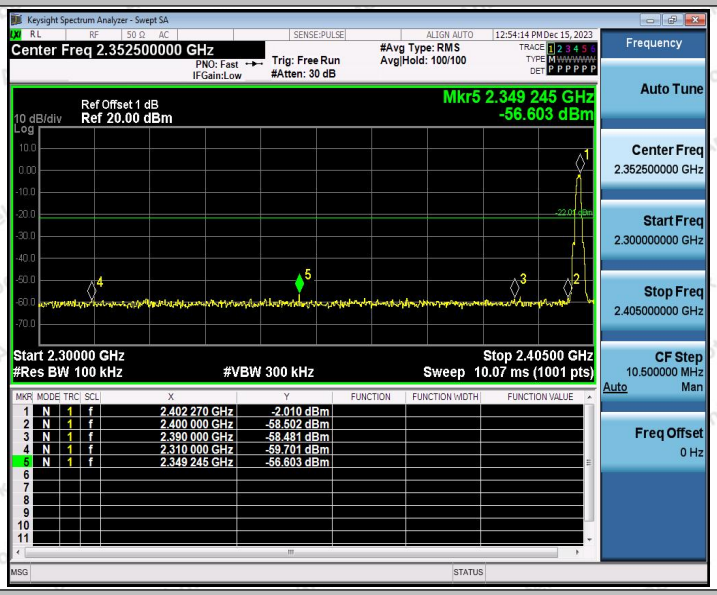
Appendix E: Band edge measurements

Test Result

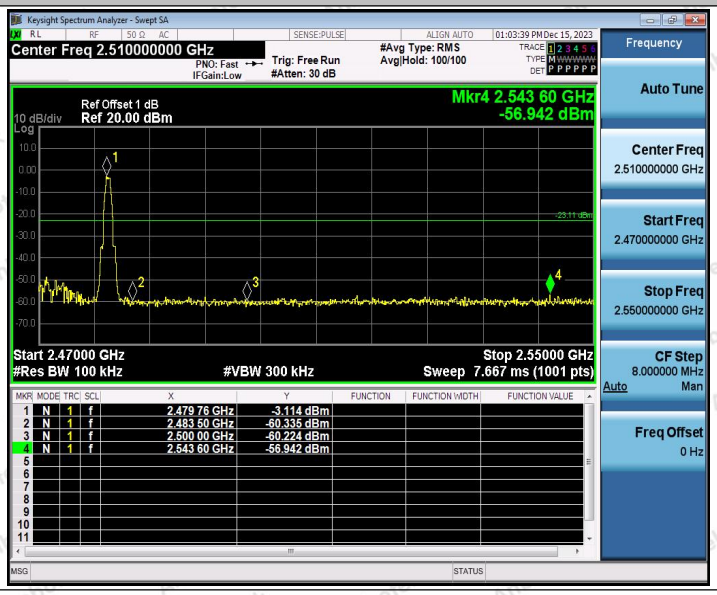
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-2.01	-56.6	≤-22.01	PASS
		High	2480	-3.11	-56.94	≤-23.11	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480



Appendix F: Conducted Spurious Emission

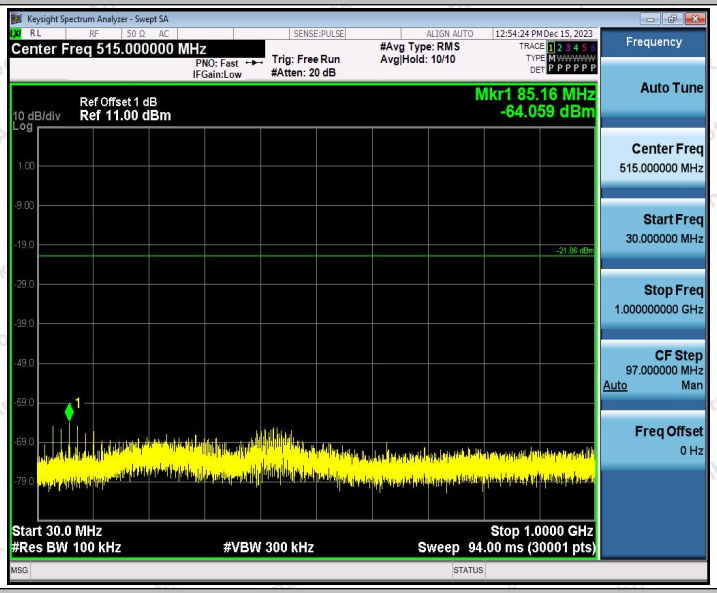
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.86	-1.86	---	PASS
			30~1000	-1.86	-64.06	≤-21.86	PASS
			1000~26500	-1.86	-30.66	≤-21.86	PASS
		2440	Reference	-3.12	-3.12	---	PASS
			30~1000	-3.12	-65.05	≤-23.12	PASS
			1000~26500	-3.12	-29.11	≤-23.12	PASS
		2480	Reference	-3.65	-3.65	---	PASS
			30~1000	-3.65	-64.4	≤-23.65	PASS
			1000~26500	-3.65	-27.44	≤-23.65	PASS

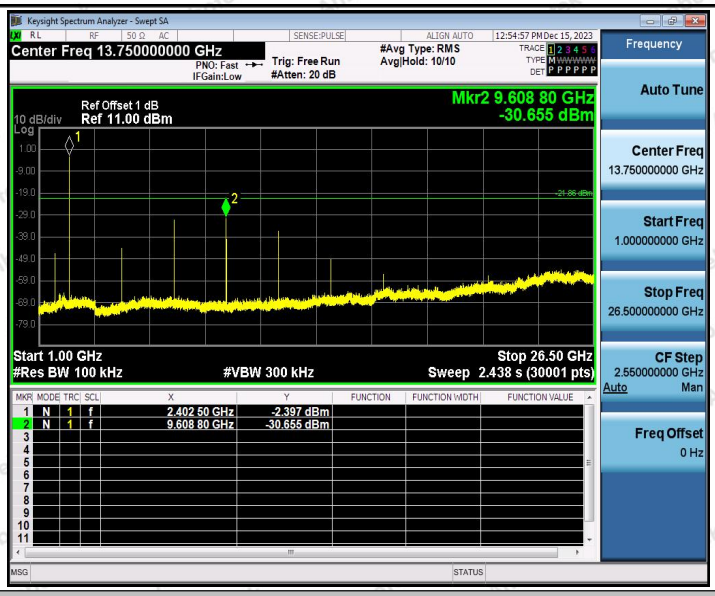
Test Graphs

BLE_1M_Ant1_2402_0~Reference

BLE_1M_Ant1_2402_30~1000

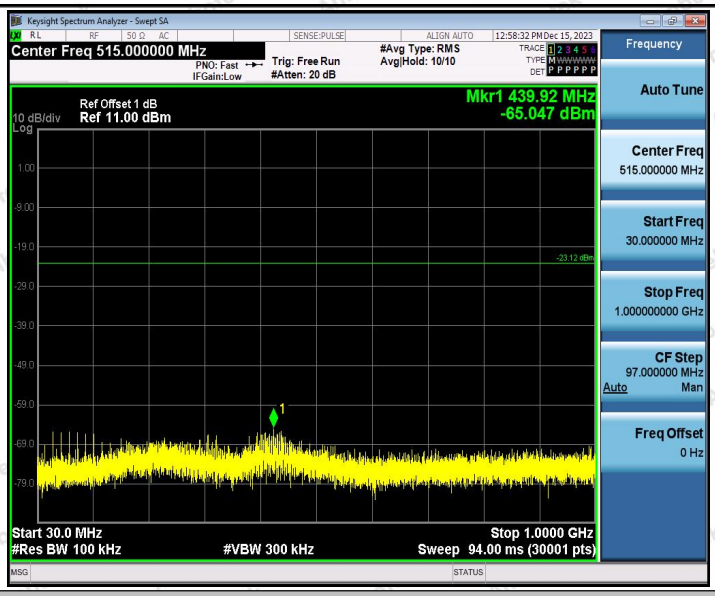


BLE_1M_Ant1_2402_1000~26500

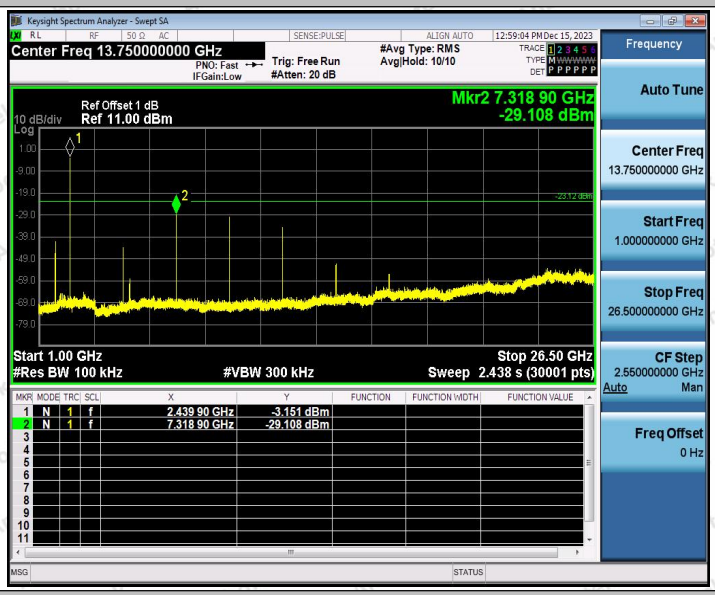


BLE_1M_Ant1_2440_0~Reference

BLE_1M_Ant1_2440_30~1000

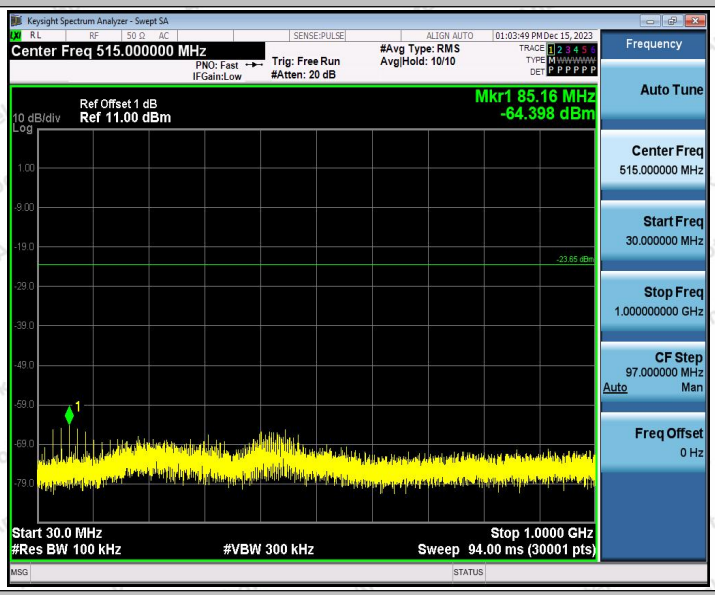


BLE_1M_Ant1_2440_1000~26500

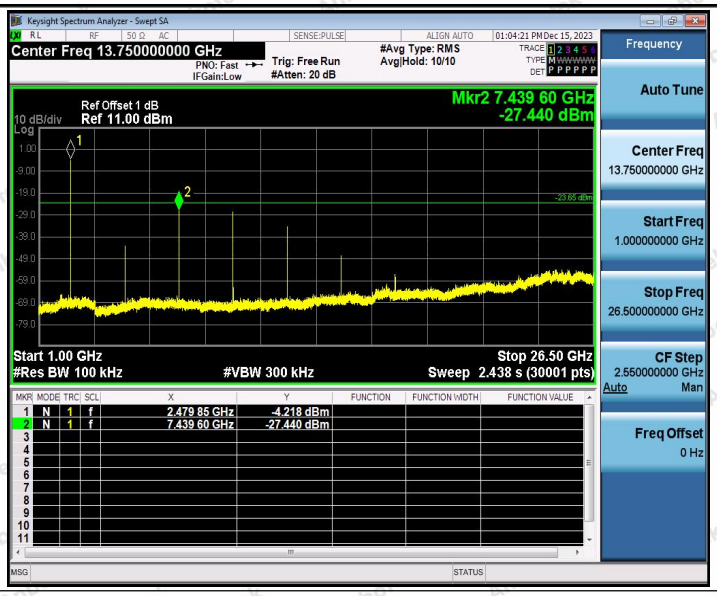


BLE_1M_Ant1_2480_0~Reference

BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500


Keysight Spectrum Analyzer - Swept SA
Center Freq 13.750000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
#Avg Type: RMS
Avg|Hold: 10/10
01:04:21 PM Dec 15, 2023
Ref Offset 1 dB
10 dB/div
Ref 11.00 dBm
Mkr2 7.439 60 GHz
-27.440 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.438 s (30001 pts)
1 N 1 f 2.479 85 GHz -4.218 dBm
2 N 1 f 7.439 60 GHz -27.440 dBm
Frequency
Auto Tune
Center Freq
13.750000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.550000000 GHz
Auto Man
Freq Offset
0 Hz

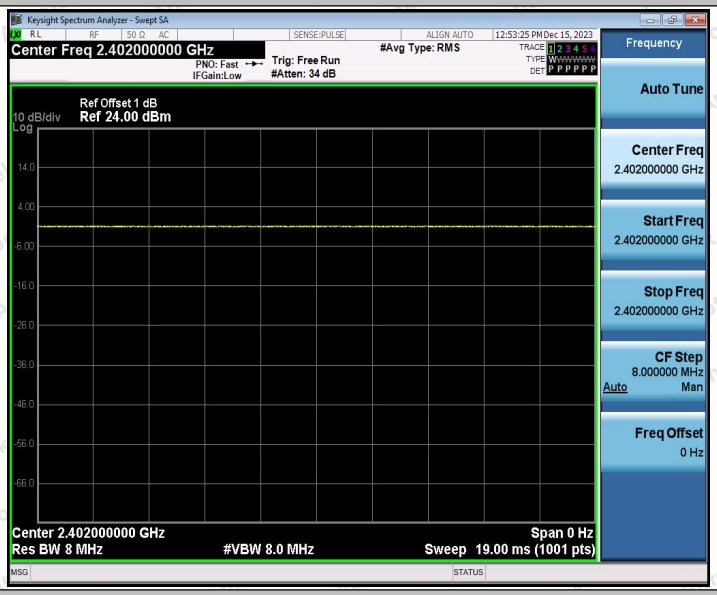
Appendix G: Duty Cycle

Test Result

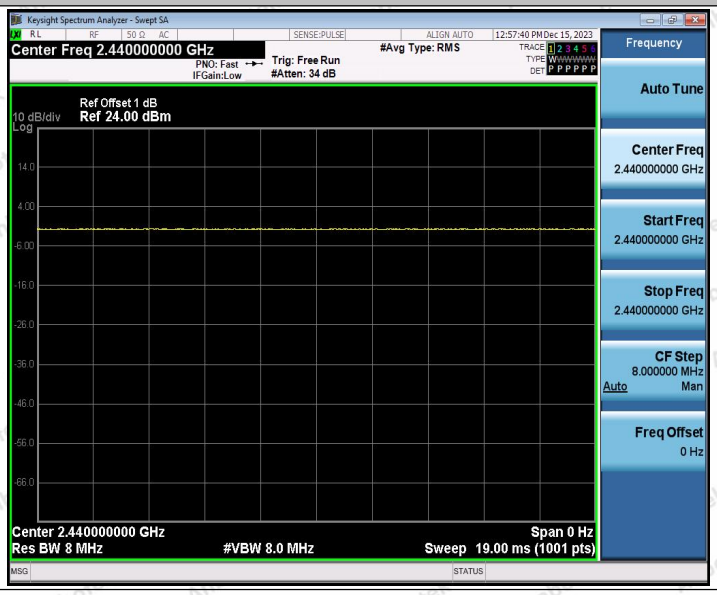
TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	19.00	19.00	100	0.00
		2440	19.00	19.00	100	0.00
		2480	19.00	19.00	100	0.00

Test Graphs

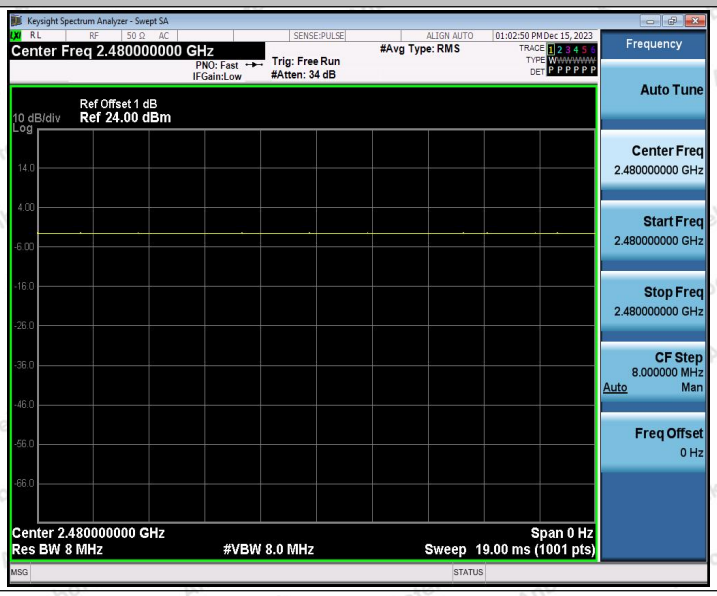
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



---End---