

Appendix RF Test Data for BLE

FCC ID : 2A8W5-S7MAX

Company : BAODE INTERNATIONAL LIMITED

EUT : Smart Media Player

Model Number : S7 Max

Report No. : CTA25080501101

Reviewed By : Eric Wang

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.628	2401.704	2402.332	0.5	PASS
		2440	0.652	2439.688	2440.340	0.5	PASS
		2480	0.632	2479.700	2480.332	0.5	PASS

BLE_1M_Ant1_2402

Agilent Spectrum Analyzer - Sweep SA

Center Freq 2.402000000 GHz

Ref Offset 0.4 dB
Ref 20.00 dBm

Trig: Free Run
#Atten: 30 dB

#Avg Type: RMS
Avg/Hold: 100/100

Span 4.000 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep (#Swp) 1.000 ms (1001 pts)

ΔMkr3 628 kHz
-0.356 dB

MKR	MODE	TRIG	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.401704 GHz	-8.733 dBm			
2	N	1	f	2.402024 GHz	-3.557 dBm			
3	Δ	1	f (Δ)	628 kHz (Δ)	-0.356 dB			

BLE_1M_Ant1_2440

Agilent Spectrum Analyzer - Sweep SA

Center Freq 2.440000000 GHz

Ref Offset 0.4 dB
Ref 20.00 dBm

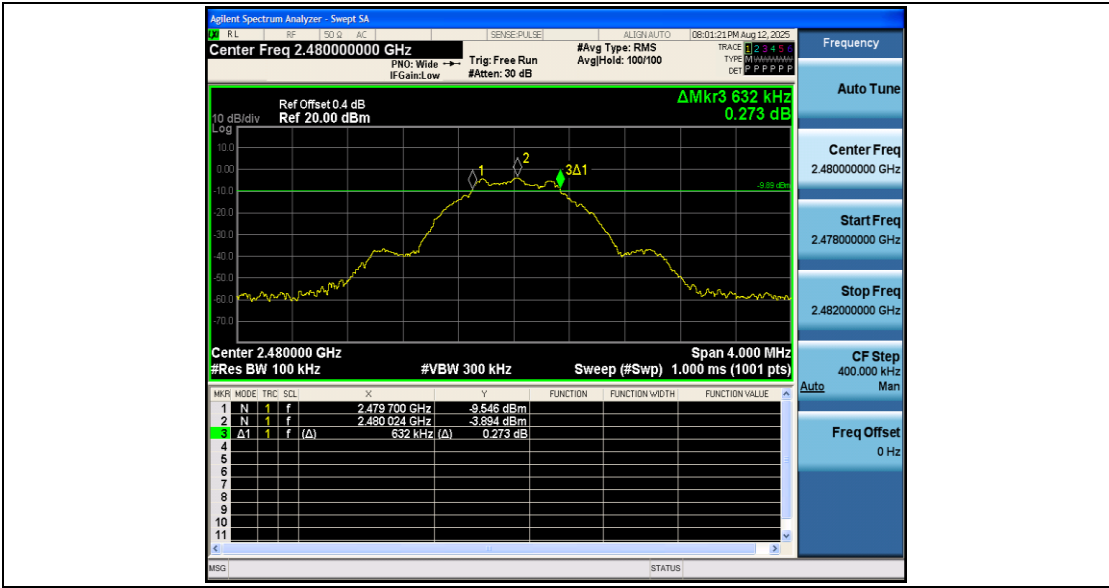
Trig: Free Run
#Atten: 30 dB

#Avg Type: RMS
Avg/Hold: 100/100

Span 4.000 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep (#Swp) 1.000 ms (1001 pts)

ΔMkr3 652 kHz
0.169 dB

MKR	MODE	TRIG	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.439688 GHz	-10.102 dBm			
2	N	1	f	2.439768 GHz	-4.359 dBm			
3	Δ	1	f (Δ)	652 kHz (Δ)	0.169 dB			



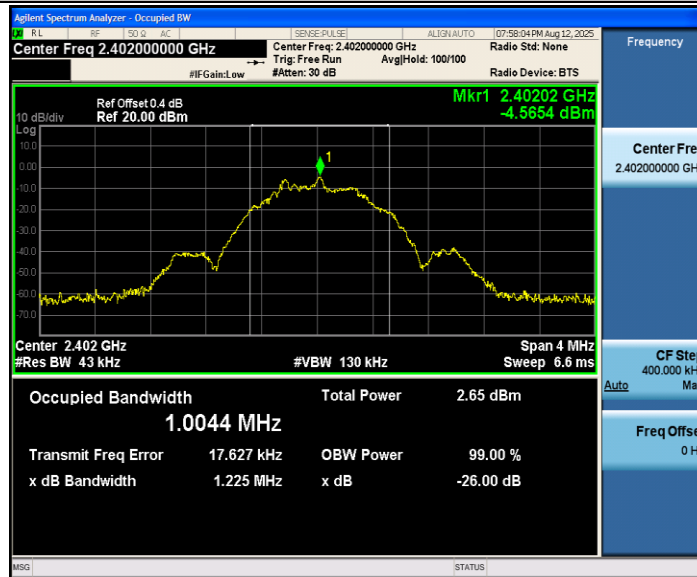
Appendix B: Occupied Channel Bandwidth

Test Result

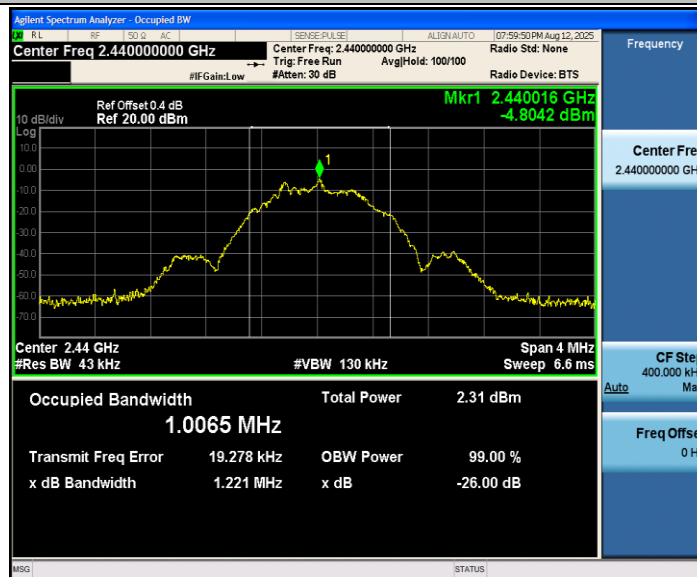
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0044	2401.5154	2402.5198	---	---
		2440	1.0065	2439.5160	2440.5225	---	---
		2480	0.99971	2479.5200	2480.5197	---	---

Test Graphs

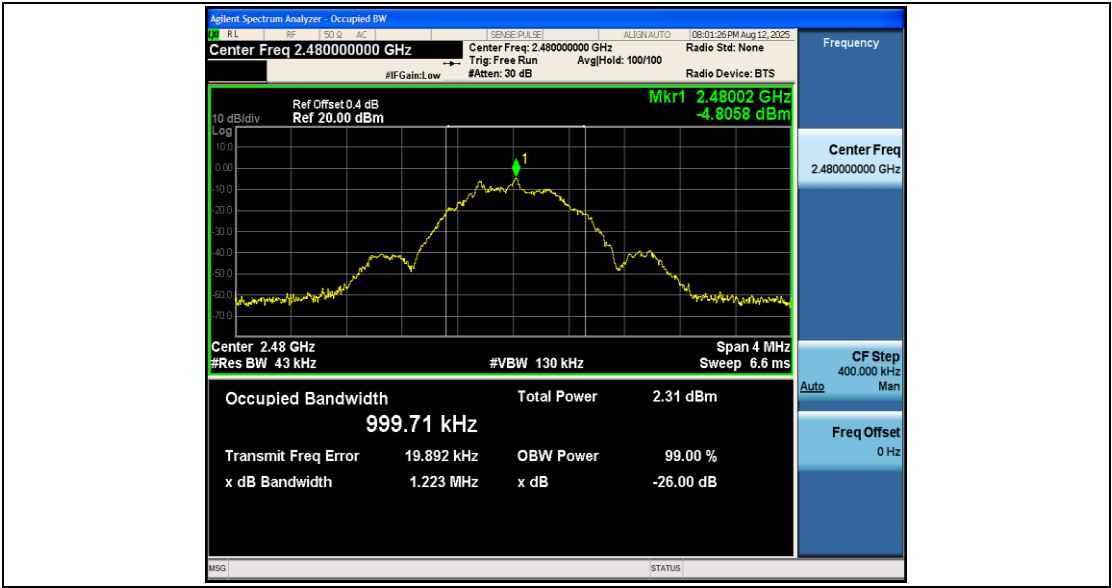
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.44	≤30	PASS
		2440	-3.77	≤30	PASS
		2480	-3.82	≤30	PASS

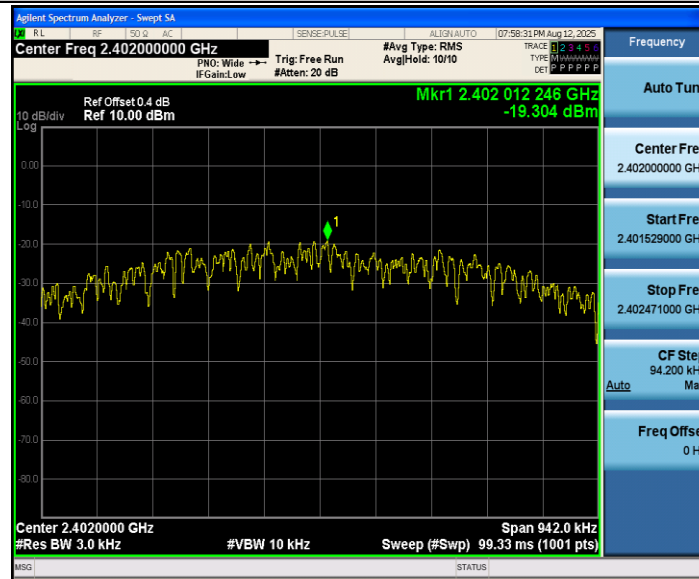
Appendix D: Maximum power spectral density

Test Result

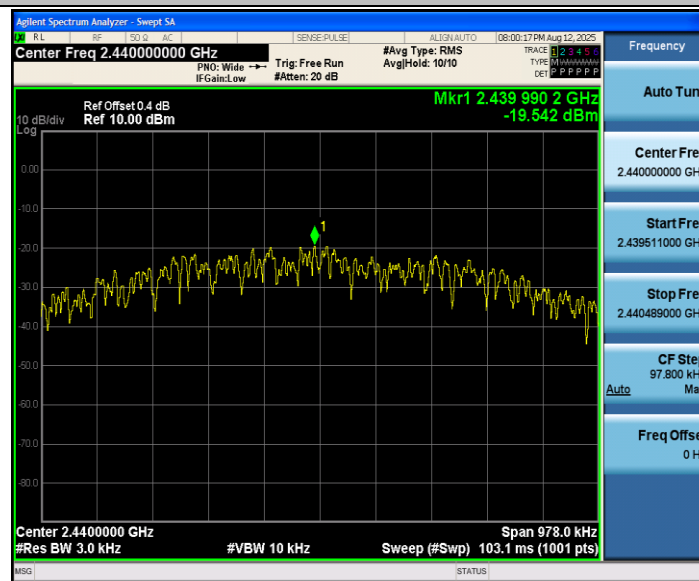
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.30	≤8.00	PASS
		2440	-19.54	≤8.00	PASS
		2480	-19.52	≤8.00	PASS

Test Graphs

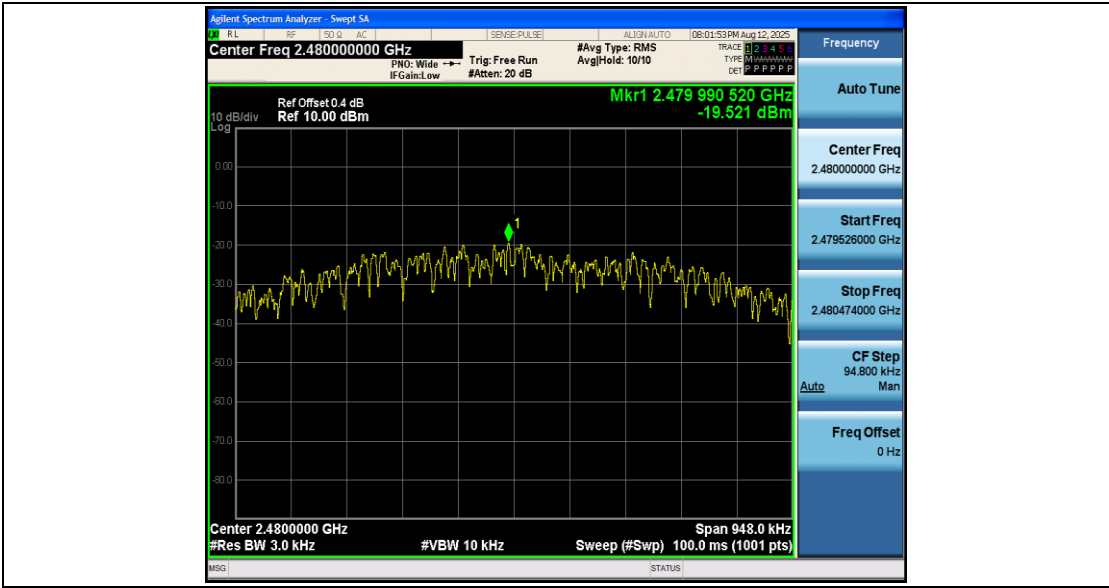
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

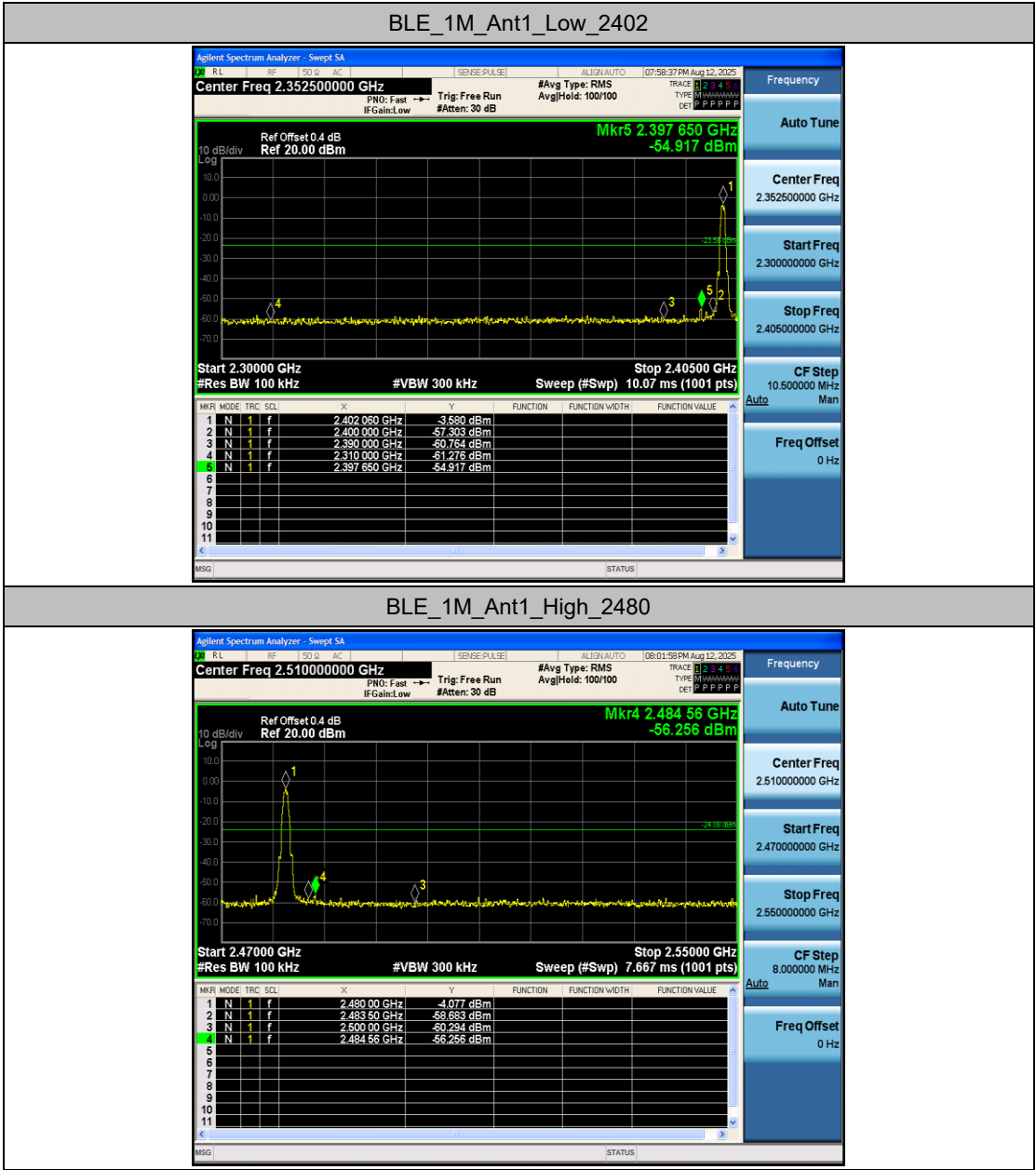


Appendix E: Band edge measurements

Test Result

TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	-3.58	-54.92	≤-23.58	PASS
		High	2480	-4.08	-56.26	≤-24.08	PASS

Test Graphs

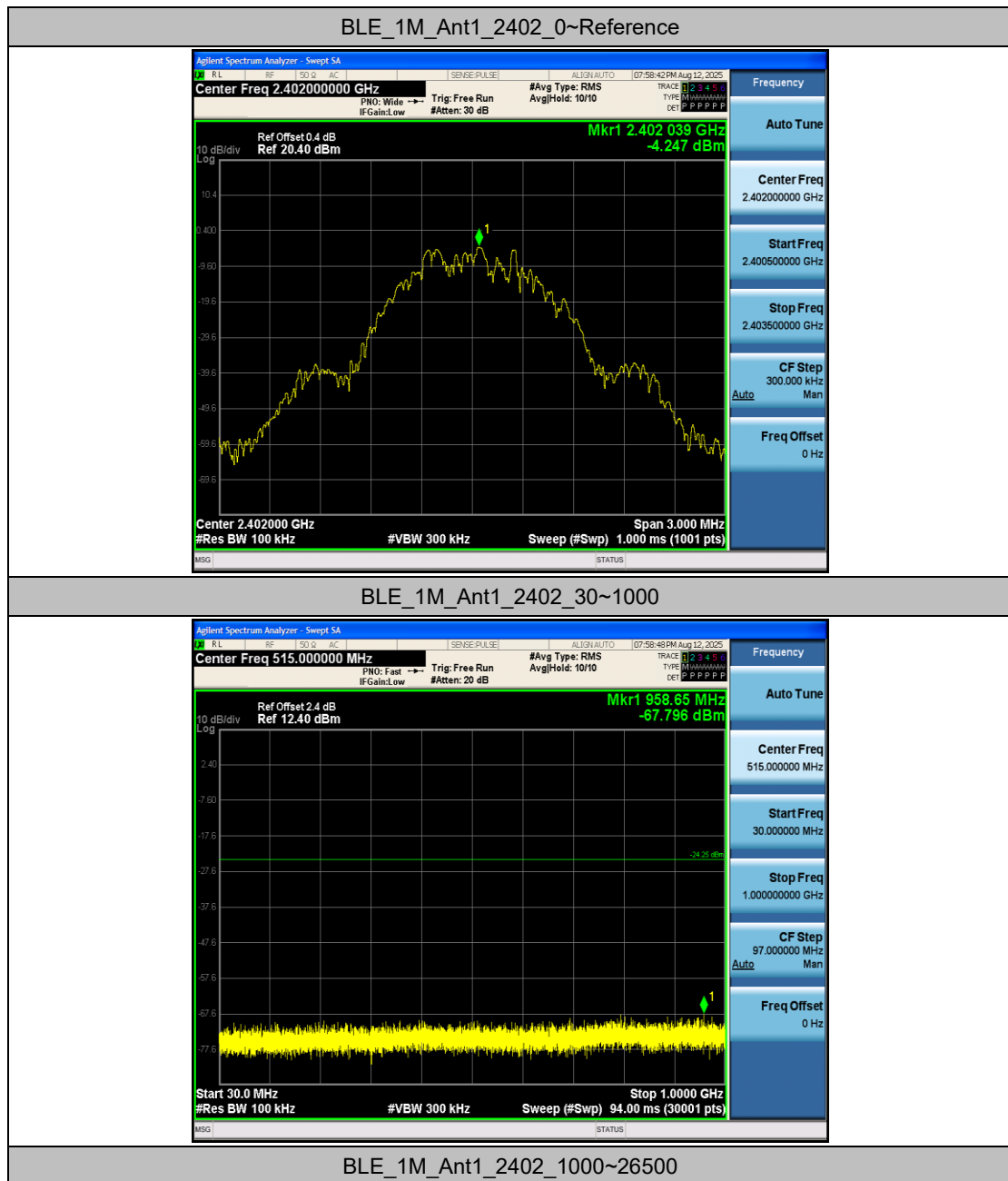


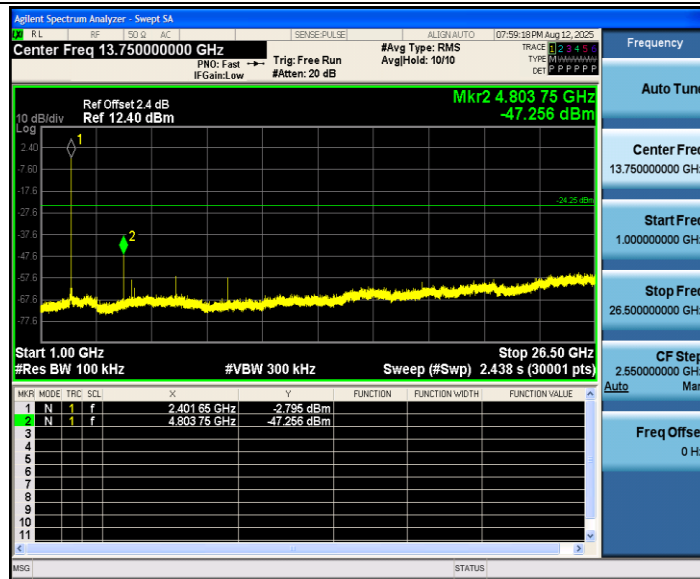
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-4.25	-4.25	---	PASS
			30~1000	-4.25	-67.8	≤-24.25	PASS
			1000~26500	-4.25	-47.26	≤-24.25	PASS
		2440	Reference	-5.18	-5.18	---	PASS
			30~1000	-5.18	-67.42	≤-25.18	PASS
			1000~26500	-5.18	-49.2	≤-25.18	PASS
		2480	Reference	-4.51	-4.51	---	PASS
			30~1000	-4.51	-67.68	≤-24.51	PASS
			1000~26500	-4.51	-46.65	≤-24.51	PASS

Test Graphs

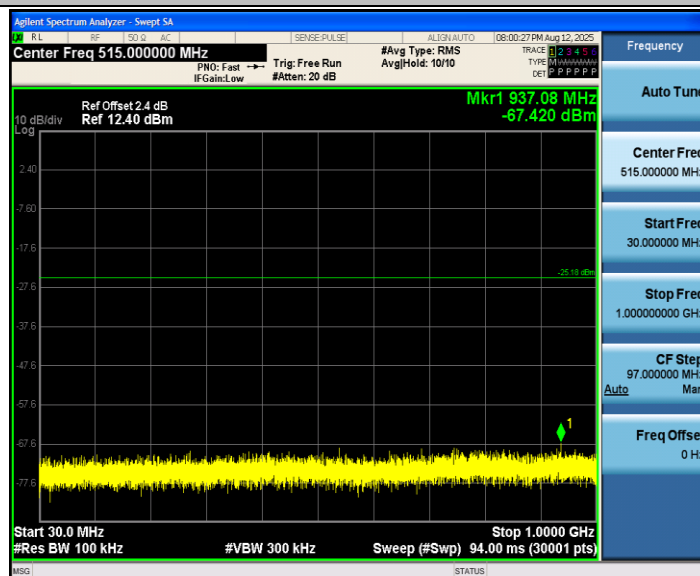




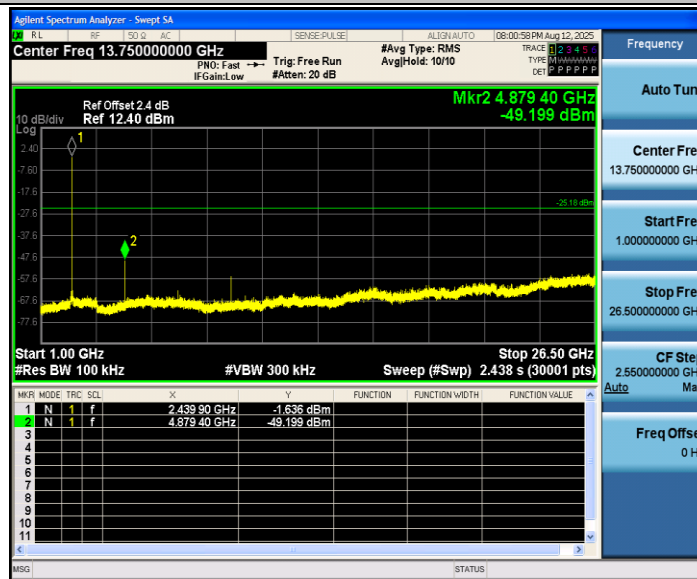
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



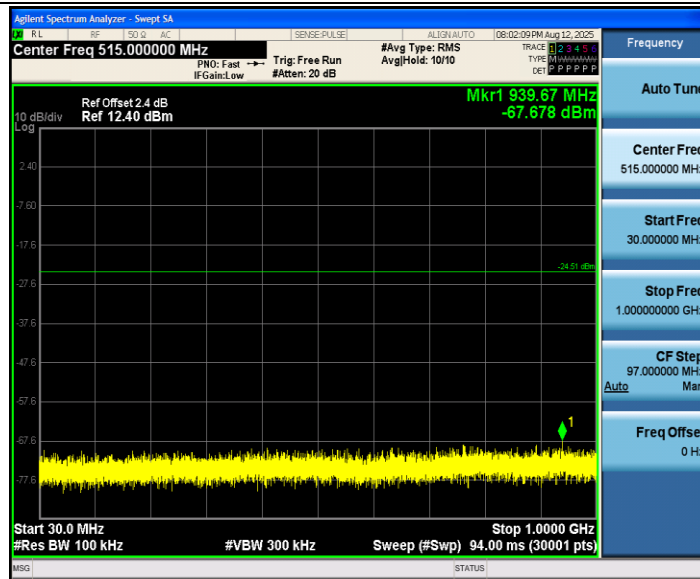
BLE_1M_Ant1_2440_1000~26500



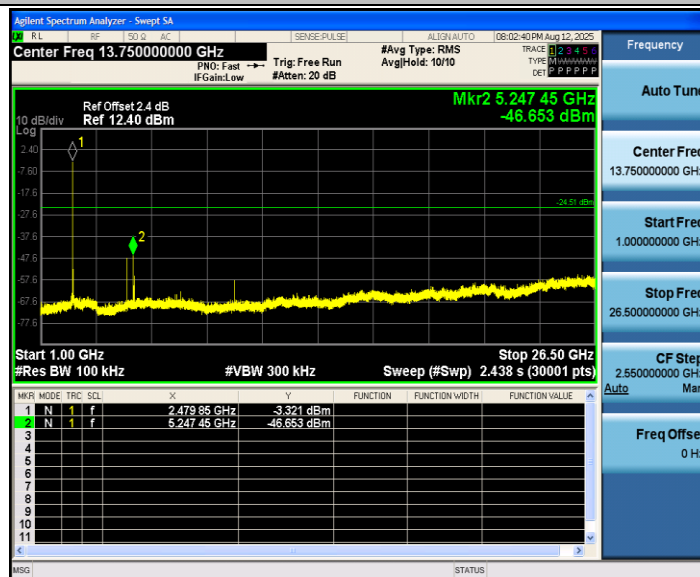
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.41	0.63	0.6508	65.08	1.87	---	---
		2440	0.41	0.63	0.6508	65.08	1.87	---	---
		2480	0.41	0.63	0.6508	65.08	1.87	---	---

Test Graphs

