

FCC Appendix RF Test Data

FCC ID : 2BQNH-1024C

Company : CHONGQING AITE OPTICAL AND ELECTRONICS CO.,LTD.

EUT : Launch Monitor

Model Number : 1024C

Report No. : CTA25061101301

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	0.656	2401.688	2402.344	0.5	PASS
		2440	0.664	2439.676	2440.340	0.5	PASS
		2480	0.644	2479.696	2480.340	0.5	PASS

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.40200000 GHz

Ref Offset 0.4 dB
Ref 20.00 dBm

ΔMkr3 656 kHz
-0.090 dB

Center 2.402000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep (#Swp) 1.000 ms (1001 pts)

Span 4.000 MHz

MNR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.401 688 GHz	-6.925 dBm			
2	N	1	f	2.402 018 GHz	-0.107 dBm			
3	Δ1	1	f (Δ)	656 kHz (Δ)	-0.090 dB			

Frequency

Auto Tune

Center Freq
2.402000000 GHz

Start Freq
2.400000000 GHz

Stop Freq
2.404000000 GHz

CF Step
400.000 kHz
Man

Freq Offset
0 Hz

BLE_1M_Ant1_2402

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.440000000 GHz

Ref Offset 0.4 dB
Ref 20.00 dBm

ΔMkr3 664 kHz
0.231 dB

Center 2.440000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep (#Swp) 1.000 ms (1001 pts)

Span 4.000 MHz

MNR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.439 676 GHz	-6.726 dBm			
2	N	1	f	2.439 760 GHz	-0.854 dBm			
3	Δ1	1	f (Δ)	664 kHz (Δ)	0.231 dB			

Frequency

Auto Tune

Center Freq
2.440000000 GHz

Start Freq
2.438000000 GHz

Stop Freq
2.442000000 GHz

CF Step
400.000 kHz
Man

Freq Offset
0 Hz

BLE_1M_Ant1_2440

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.480000000 GHz

Ref Offset 0.4 dB
Ref 20.00 dBm

ΔMkr3 664 kHz
0.231 dB

Center 2.480000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep (#Swp) 1.000 ms (1001 pts)

Span 4.000 MHz

MNR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.479 676 GHz	-6.726 dBm			
2	N	1	f	2.479 760 GHz	-0.854 dBm			
3	Δ1	1	f (Δ)	664 kHz (Δ)	0.231 dB			

Frequency

Auto Tune

Center Freq
2.480000000 GHz

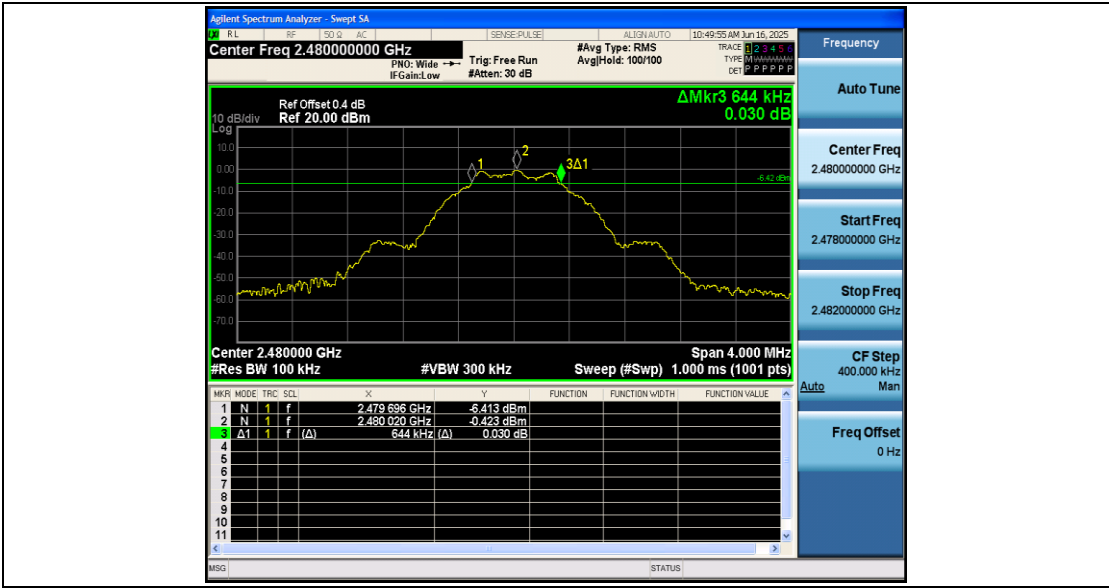
Start Freq
2.478000000 GHz

Stop Freq
2.482000000 GHz

CF Step
400.000 kHz
Man

Freq Offset
0 Hz

BLE_1M_Ant1_2480

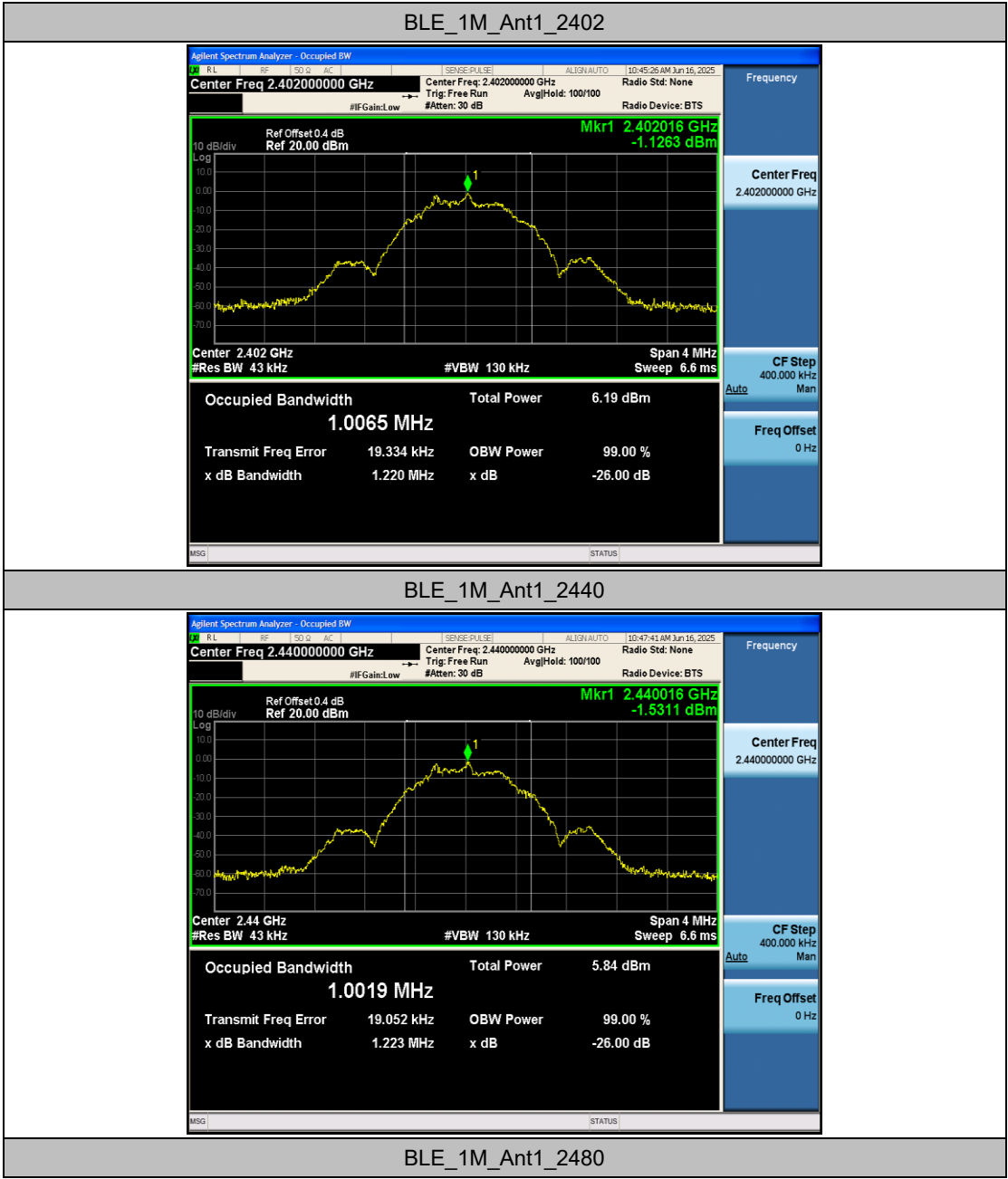


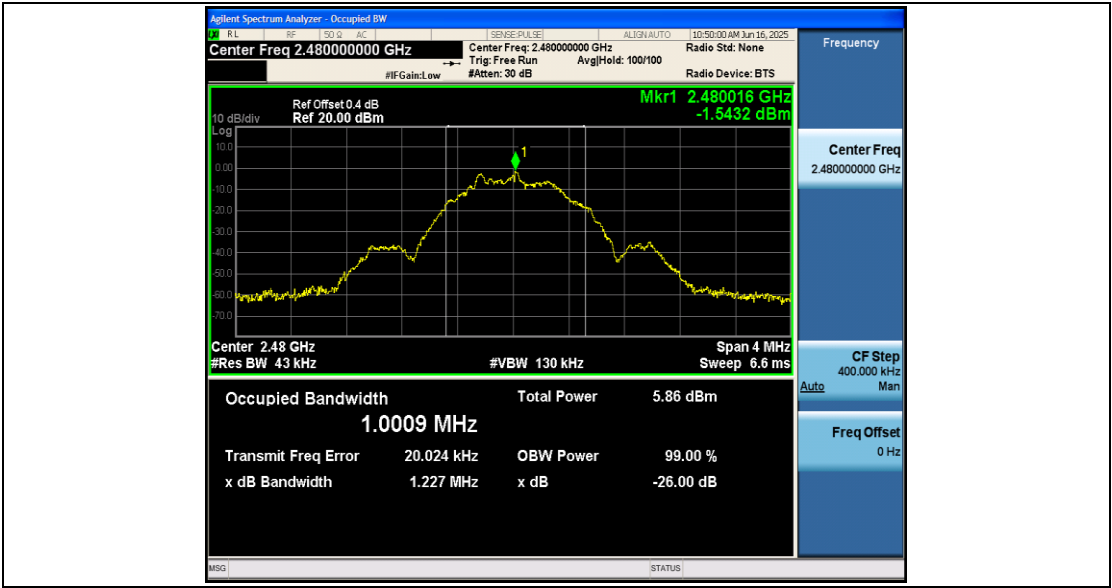
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0065	2401.5161	2402.5226	---	---
		2440	1.0019	2439.5181	2440.5200	---	---
		2480	1.0009	2479.5196	2480.5205	---	---

Test Graphs





Appendix C: Maximum conducted output power

Test Result Peak

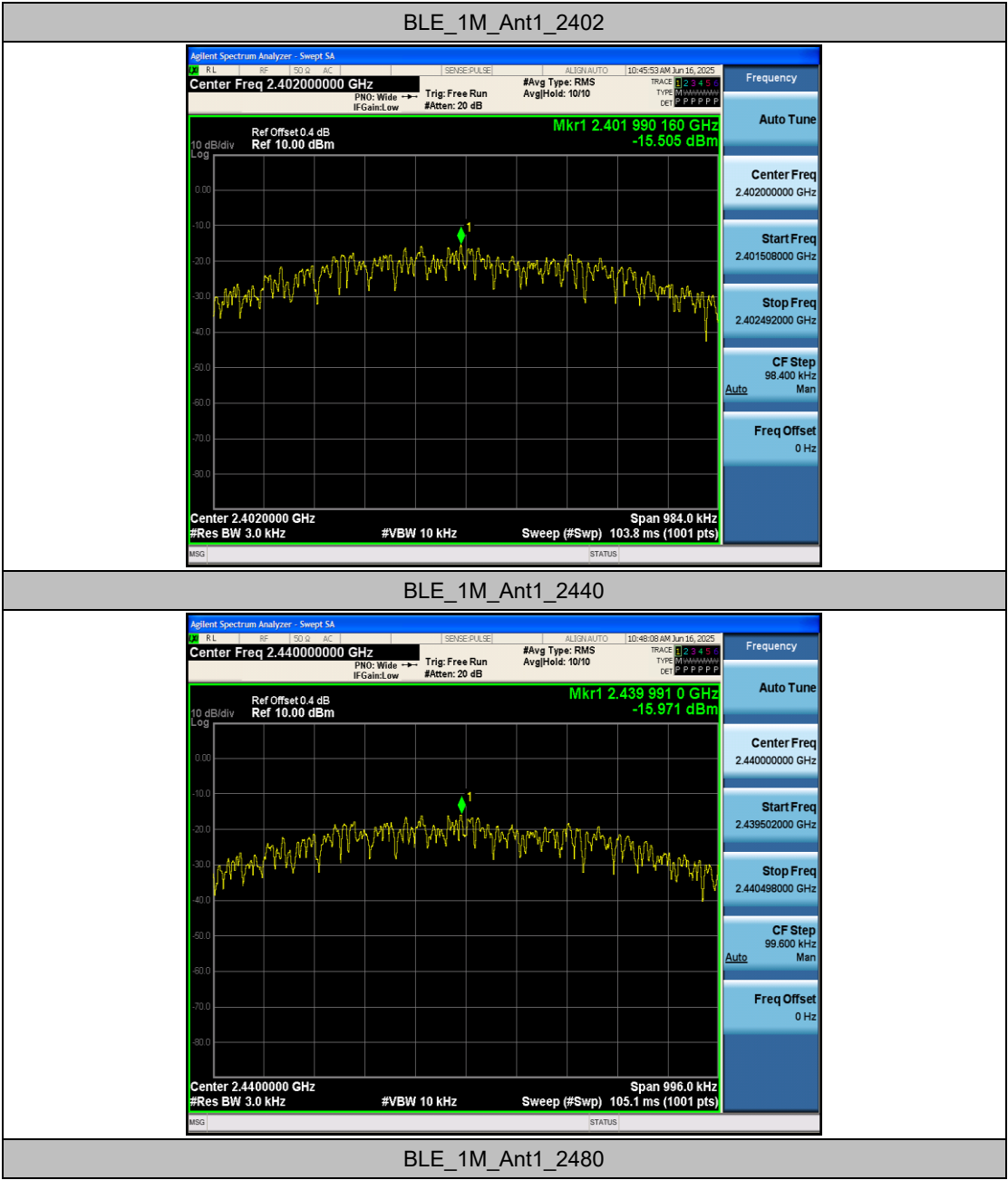
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.07	≤30	PASS
		2440	-0.31	≤30	PASS
		2480	-0.32	≤30	PASS

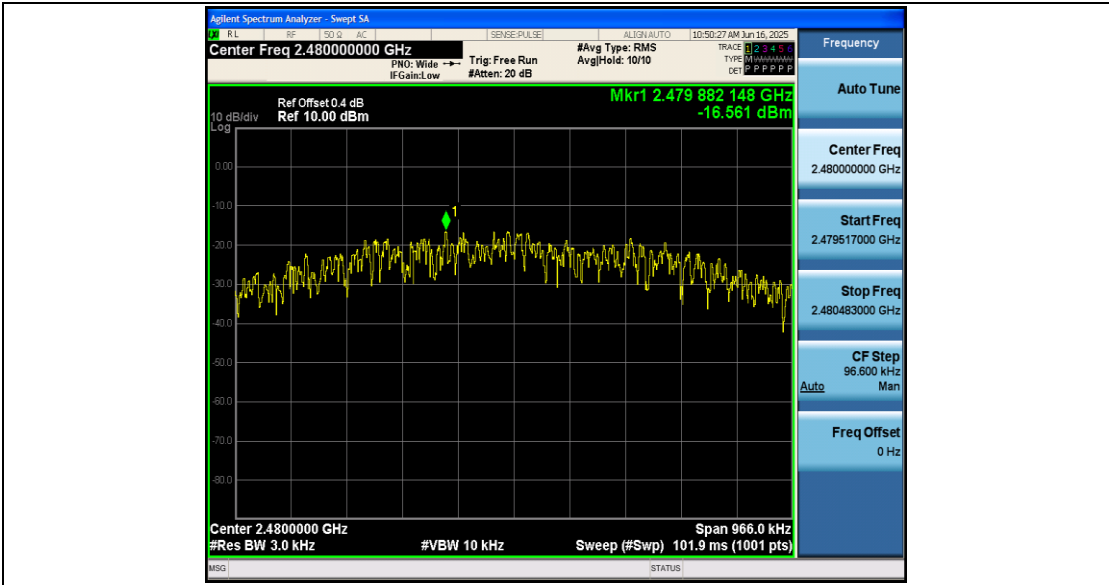
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.51	≤8.00	PASS
		2440	-15.97	≤8.00	PASS
		2480	-16.56	≤8.00	PASS

Test Graphs



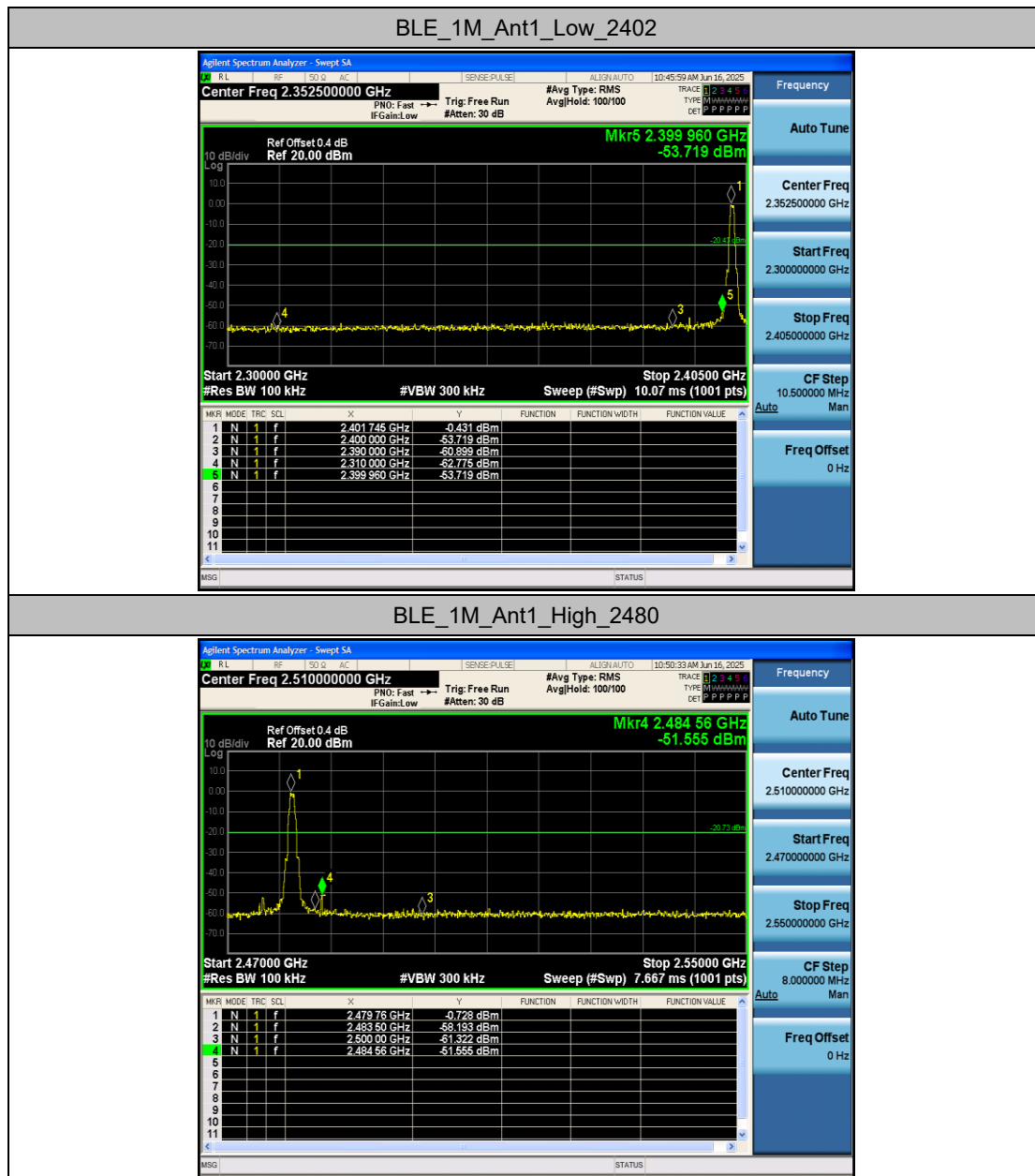


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	Channel	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.43	-53.72	≤-20.43	PASS
		High	2480	-0.73	-51.56	≤-20.73	PASS

Test Graphs

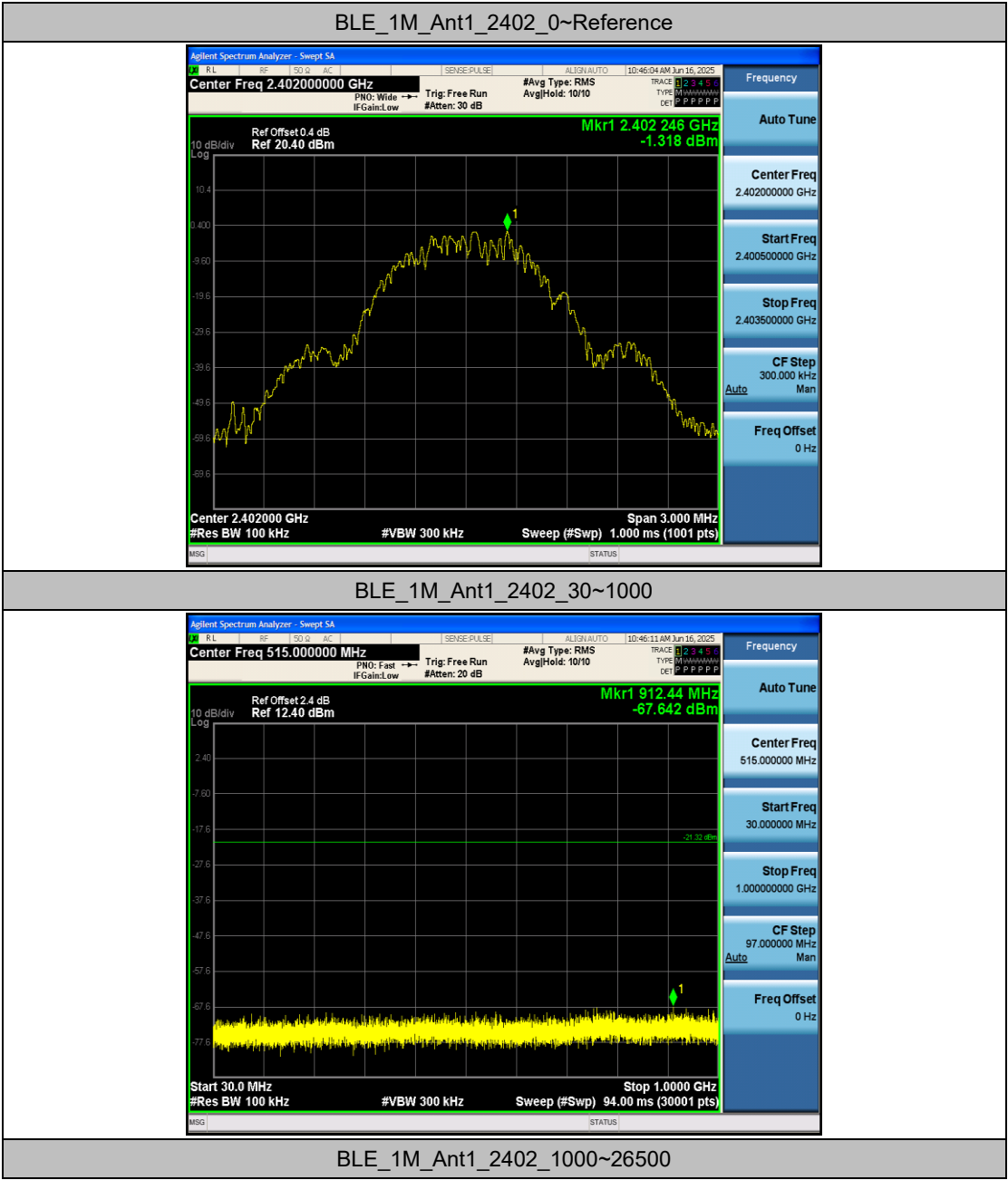


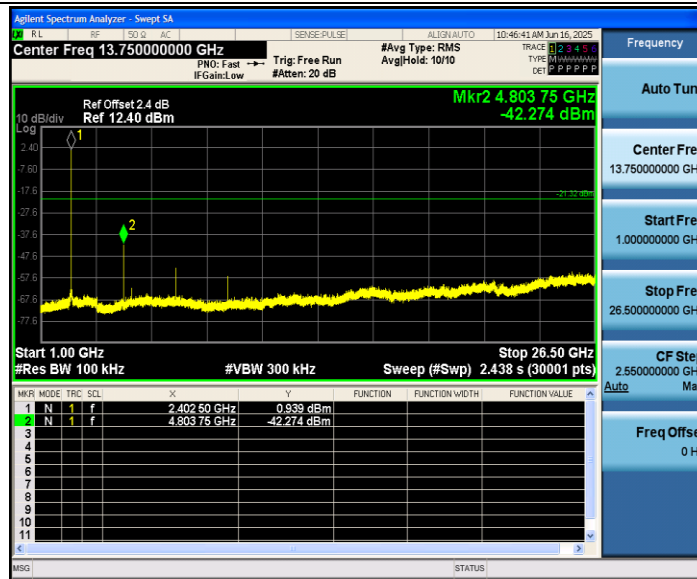
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.32	-1.32	---	PASS
			30~1000	-1.32	-67.64	≤-21.32	PASS
			1000~26500	-1.32	-42.27	≤-21.32	PASS
		2440	Reference	-1.59	-1.59	---	PASS
			30~1000	-1.59	-67.35	≤-21.59	PASS
			1000~26500	-1.59	-42.95	≤-21.59	PASS
		2480	Reference	-1.28	-1.28	---	PASS
			30~1000	-1.28	-68.05	≤-21.28	PASS
			1000~26500	-1.28	-43.46	≤-21.28	PASS

Test Graphs

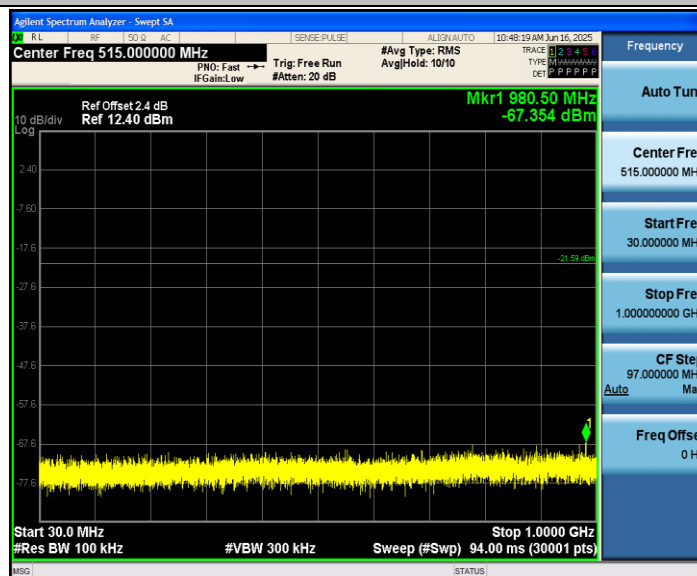




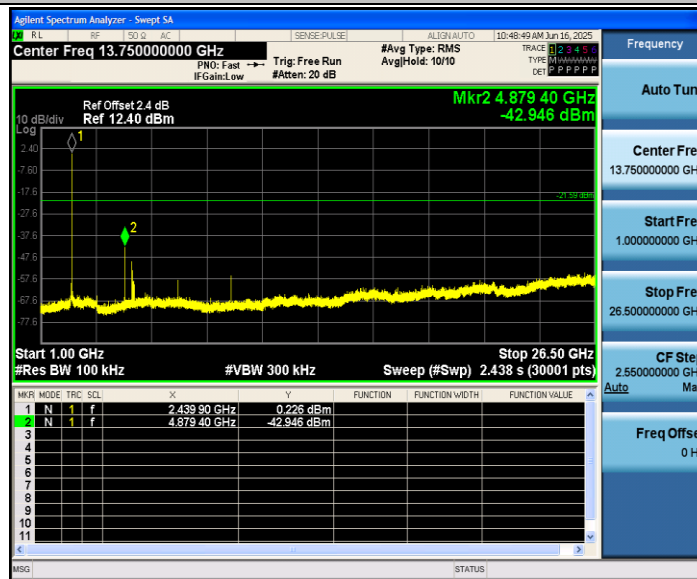
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



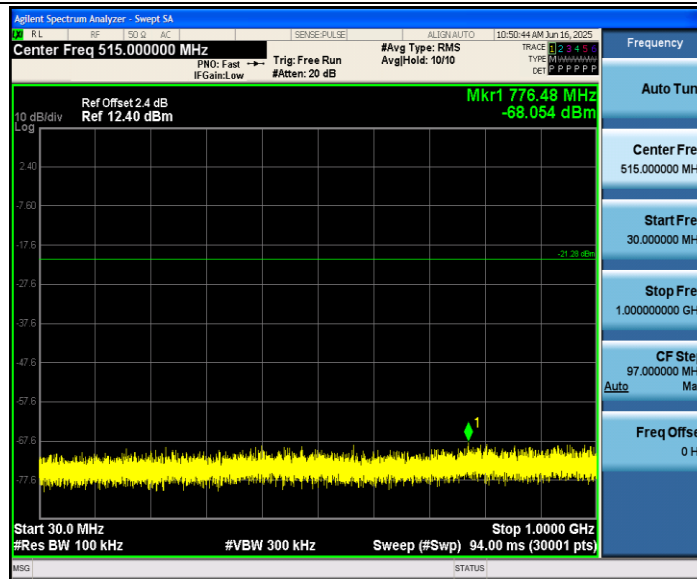
BLE_1M_Ant1_2440_1000~26500



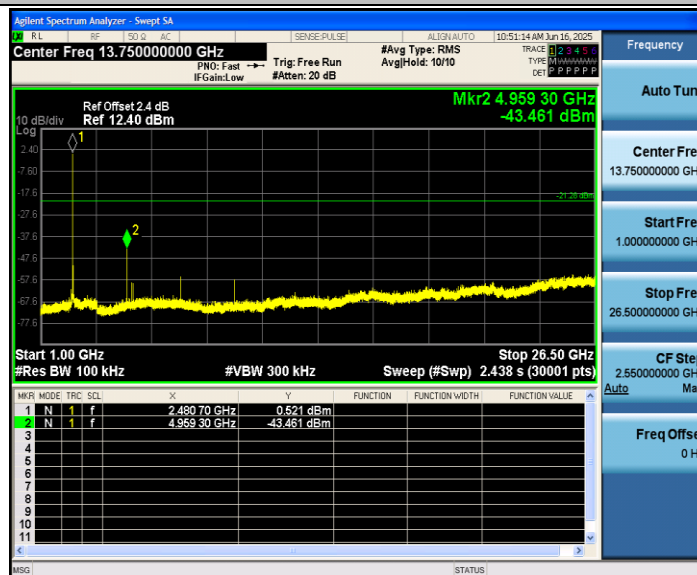
BLE_1M_Ant1_2480_0~Reference



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	0.62	0.6613	66.13	1.80	---	---
		2440	0.41	0.62	0.6613	66.13	1.80	---	---
		2480	0.41	0.62	0.6613	66.13	1.80	---	---

Test Graphs

