

FCC Appendix RF Test Data for BLE

FCC ID : 2BURB-D900PRO

Company : Zhongshan SunTop Audio Factory

EUT : Power amplifier board

Model Number : D800-D900Pro-D2000

Report No. : CTA26011700301

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	0.648	2401.696	2402.344	0.5	PASS
		2440	0.632	2439.696	2440.328	0.5	PASS
		2480	0.648	2479.692	2480.340	0.5	PASS

Test Graphs



BLE_1M_Ant1_2440

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.440000000 GHz

Ref Offset 0.2 dB
Ref 30.00 dBm

10 dB/div
Log

Span 4.000 MHz

Center 2.440000 GHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 1.000 ms (1001 pts)

Trig: Free Run

#Atten: 40 dB

#Avg Type: RMS

Avg/Hold: 100/100

11:19:24 AM Jan 27, 2026

Frequency

Auto Tune

Center Freq
2.440000000 GHz

Start Freq
2.438000000 GHz

Stop Freq
2.442000000 GHz

CF Step
400.000 kHz
Man

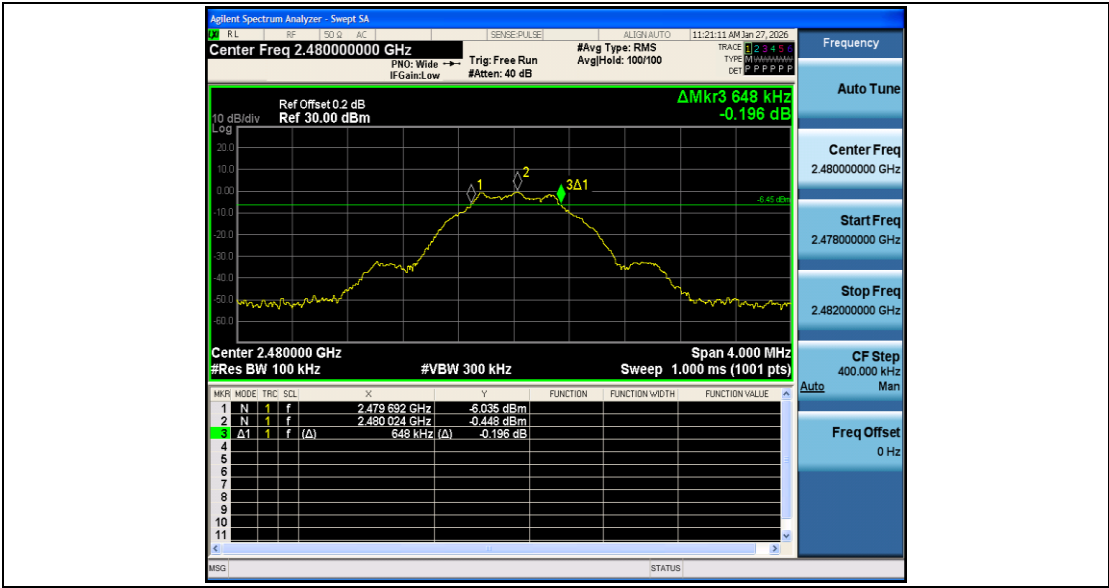
Freq Offset
0 Hz

MSG

STATUS

MARK	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.439636 GHz	-5.889 dBm			
2	N	1	f	2.440024 GHz	-0.438 dBm			
3	Δ	1	f (Δ)	632 kHz (Δ)	0.014 dB			

BLE_1M_Ant1_2480



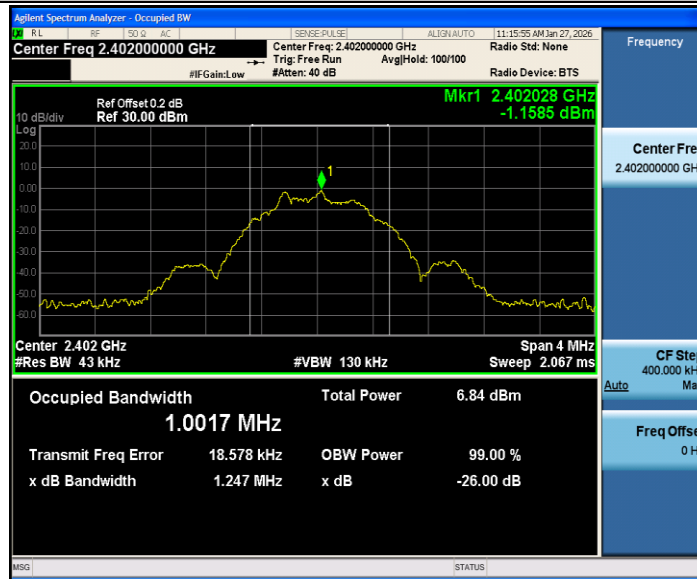
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0017	2401.5177	2402.5194	---	---
		2440	1.0095	2439.5192	2440.5287	---	---
		2480	1.0034	2479.5190	2480.5224	---	---

Test Graphs

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

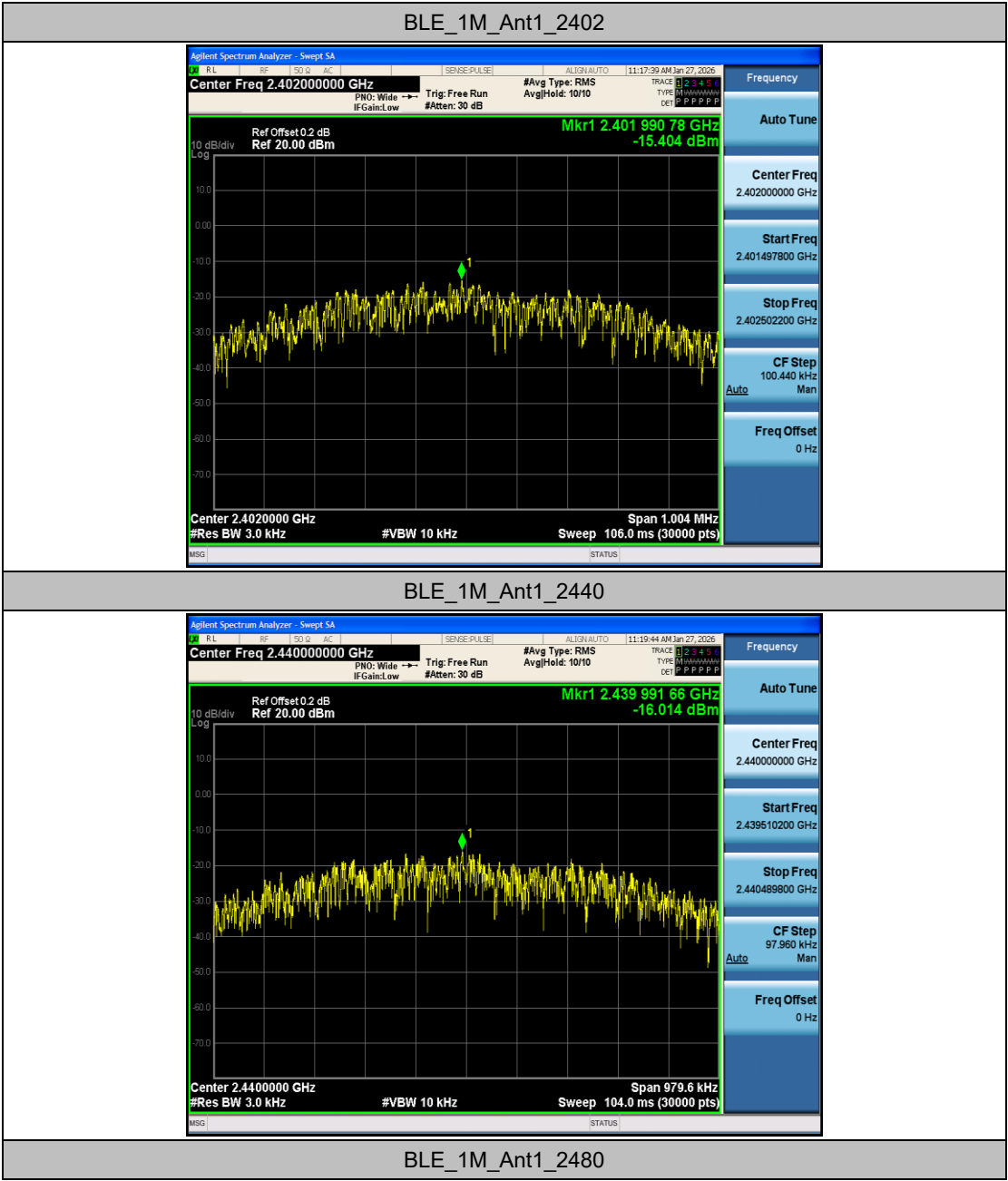
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.01	≤30	PASS
		2440	-0.30	≤30	PASS
		2480	-0.29	≤30	PASS

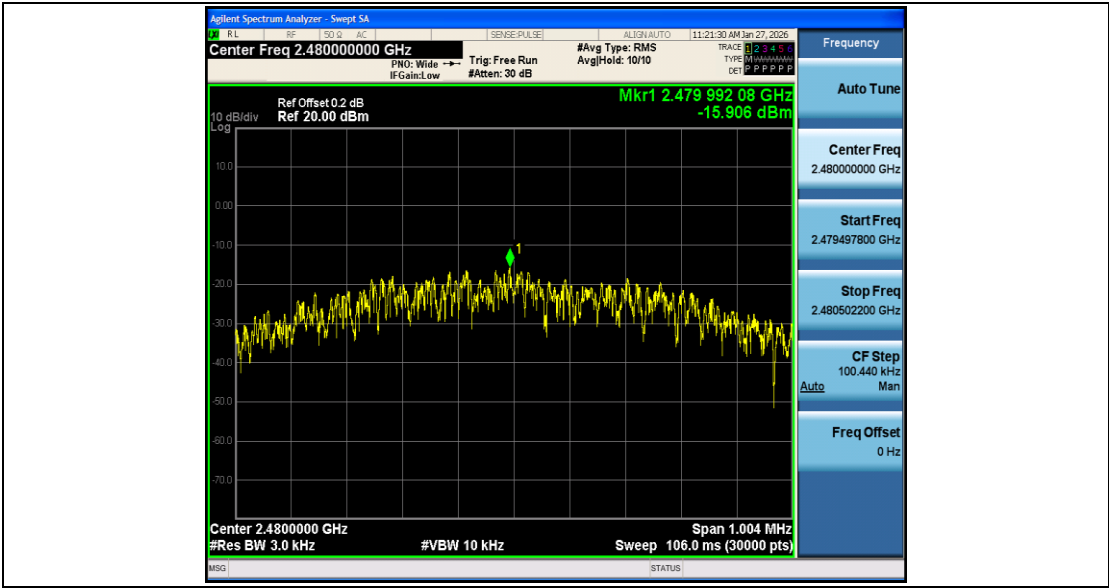
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.40	≤8.00	PASS
		2440	-16.01	≤8.00	PASS
		2480	-15.91	≤8.00	PASS

Test Graphs



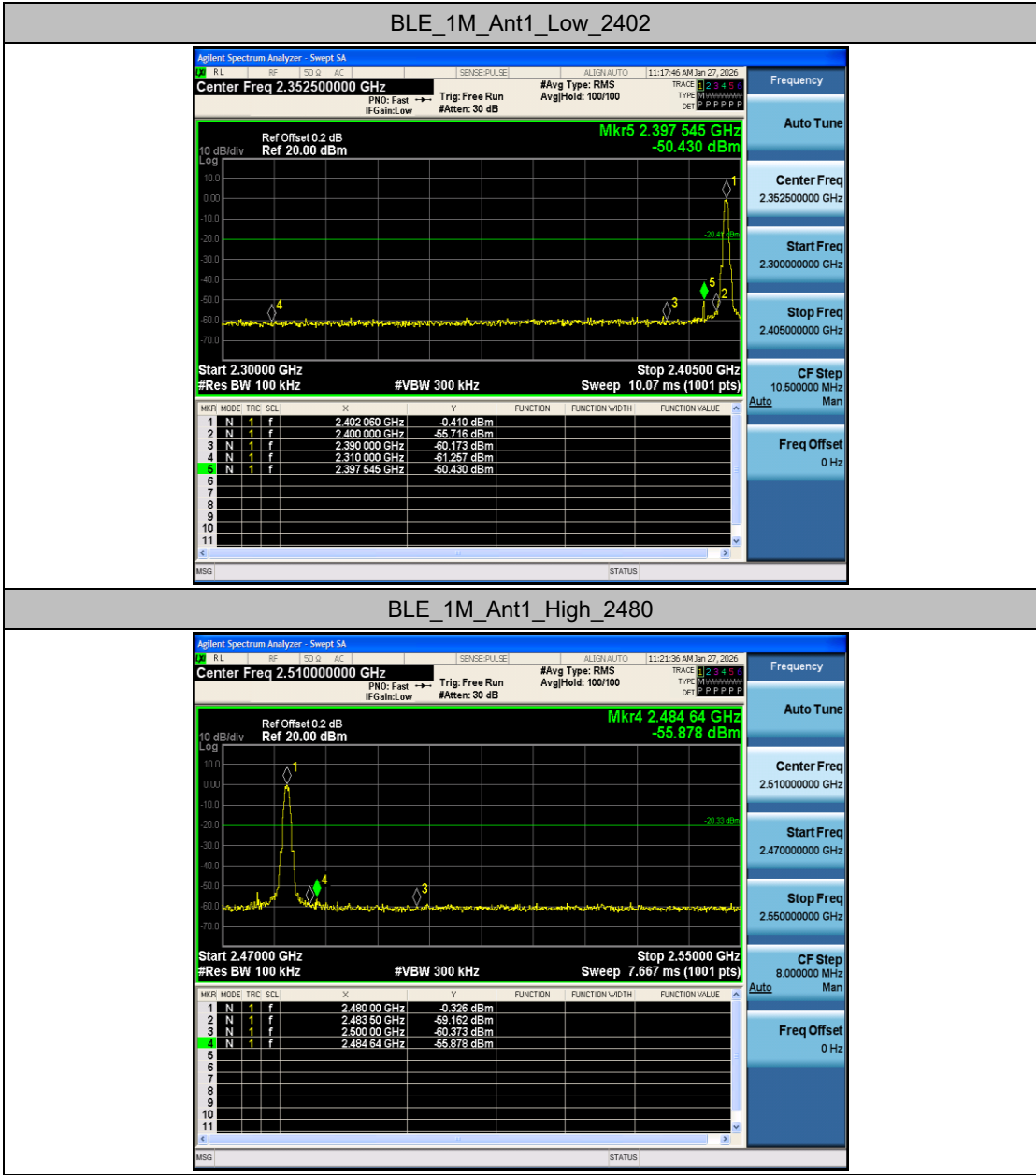


Appendix E: Band edge measurements

Test Result

TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	-0.41	-50.43	≤-20.41	PASS
		High	2480	-0.33	-55.88	≤-20.33	PASS

Test Graphs

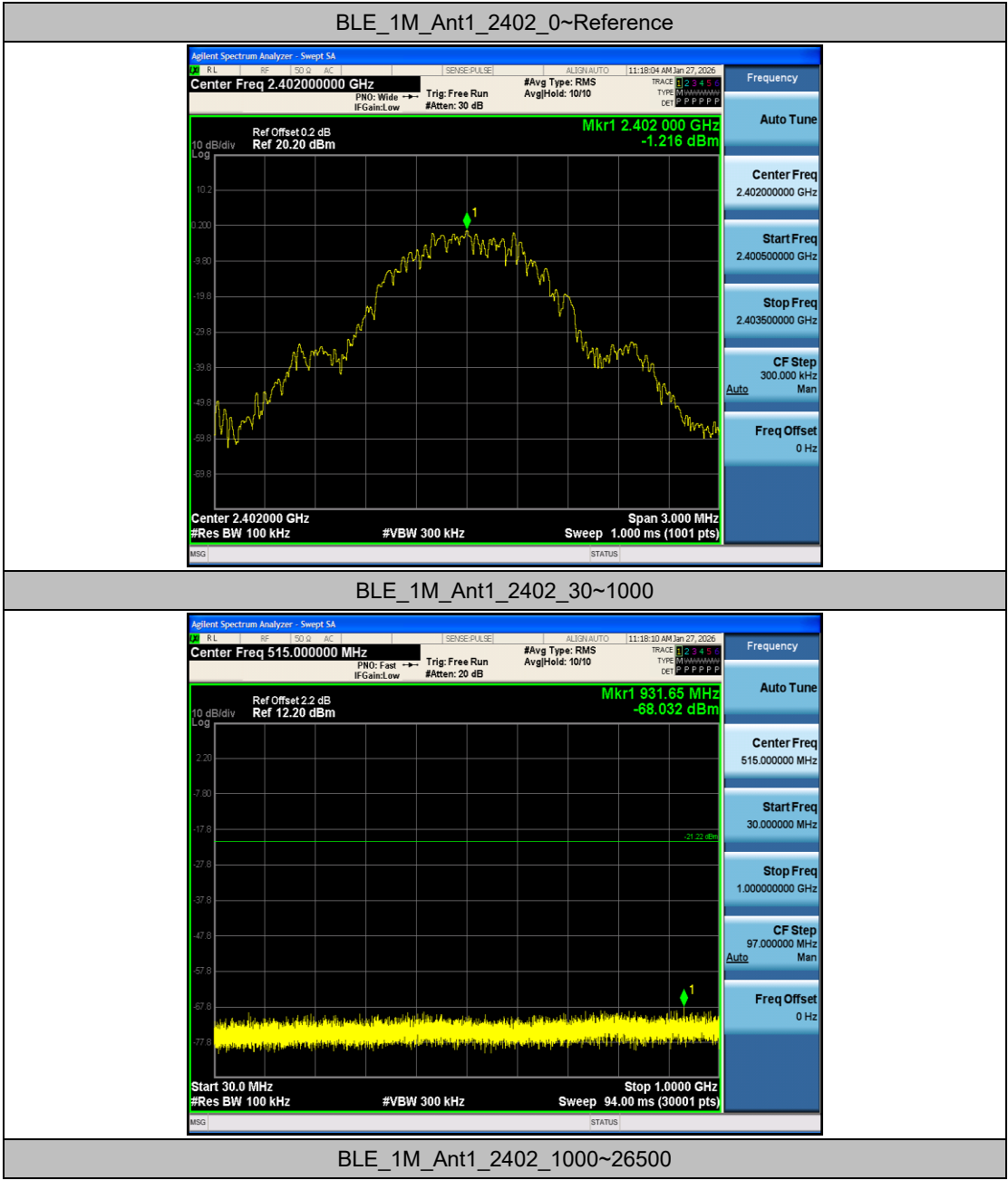


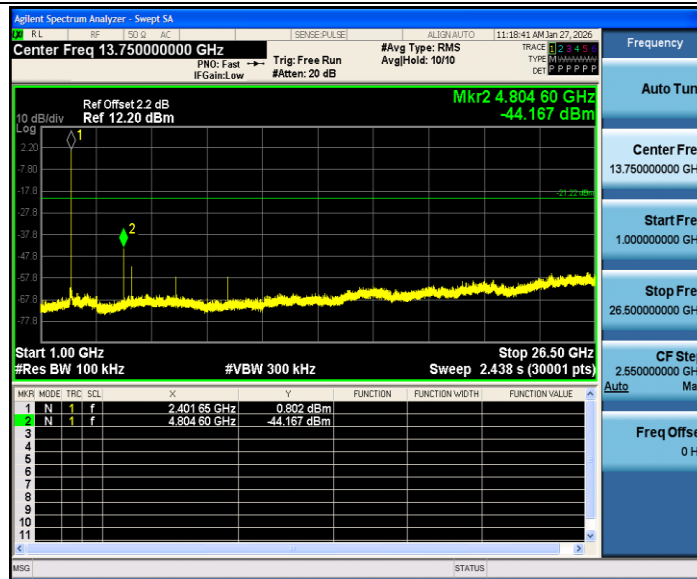
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.22	-1.22	---	PASS
			30~1000	-1.22	-68.03	≤-21.22	PASS
			1000~26500	-1.22	-44.17	≤-21.22	PASS
		2440	Reference	-1.14	-1.14	---	PASS
			30~1000	-1.14	-68.27	≤-21.14	PASS
			1000~26500	-1.14	-43.41	≤-21.14	PASS
		2480	Reference	-1.96	-1.96	---	PASS
			30~1000	-1.96	-68.04	≤-21.96	PASS
			1000~26500	-1.96	-44.43	≤-21.96	PASS

Test Graphs

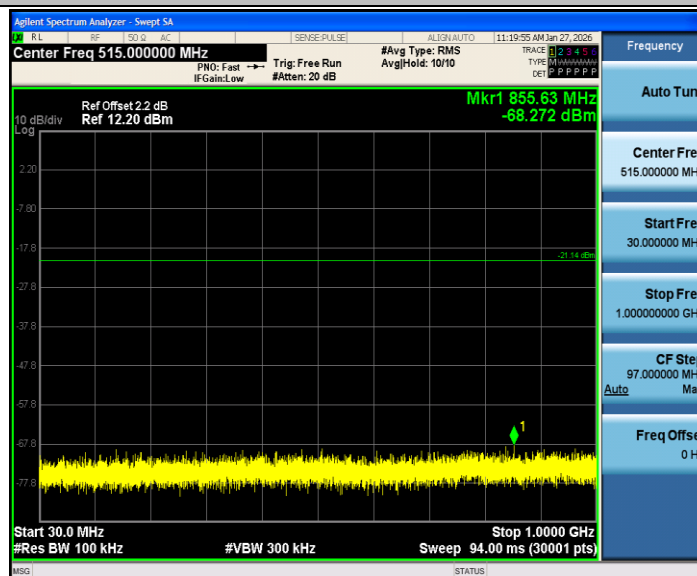




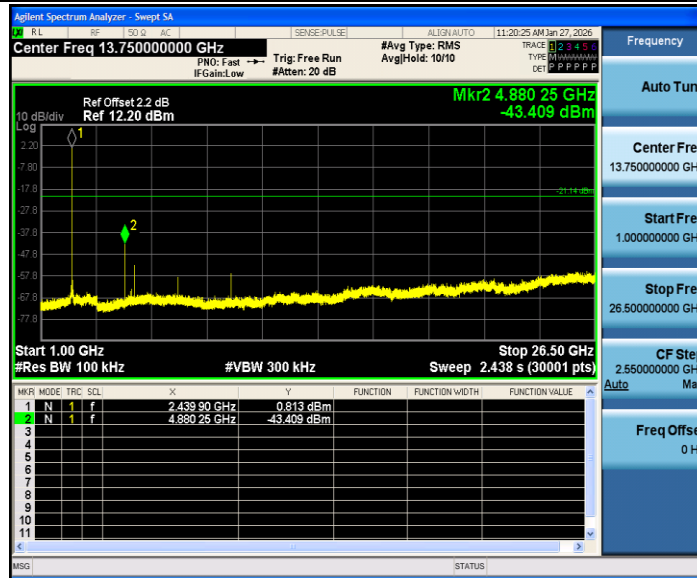
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



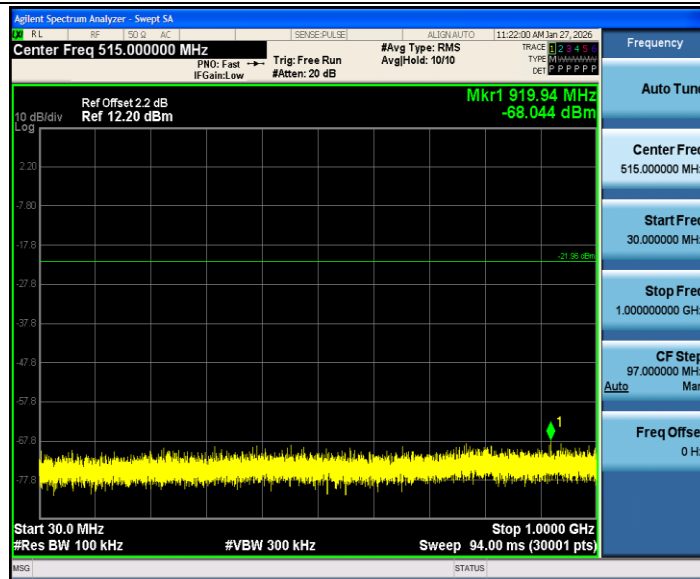
BLE_1M_Ant1_2440_1000~26500



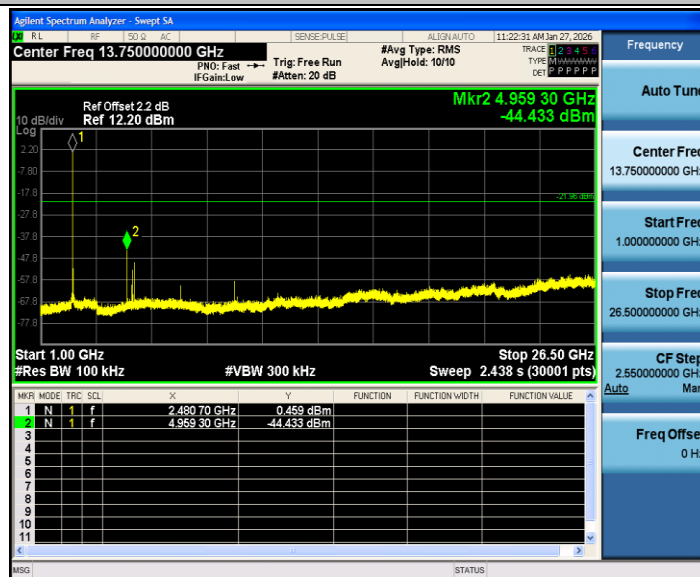
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

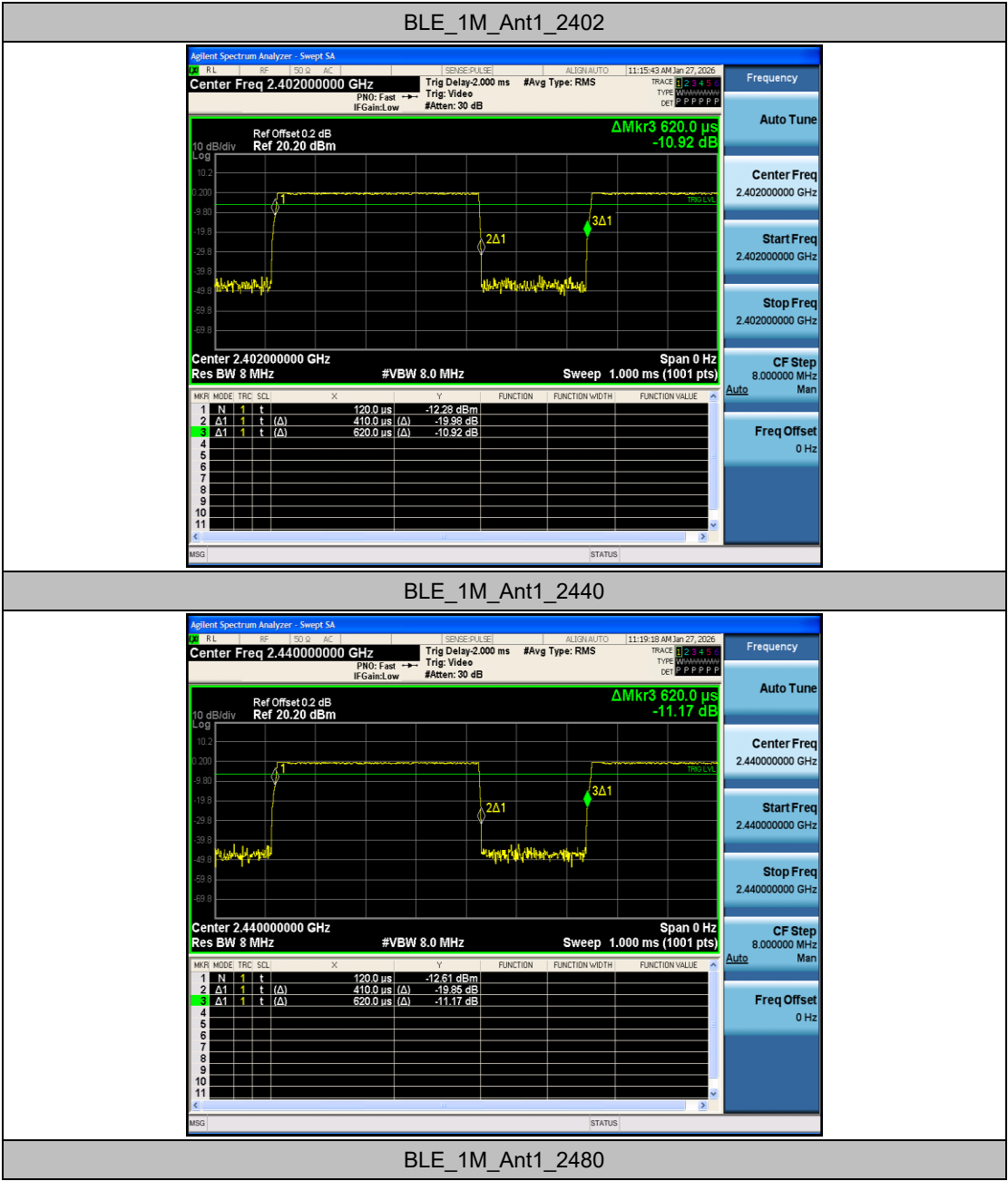


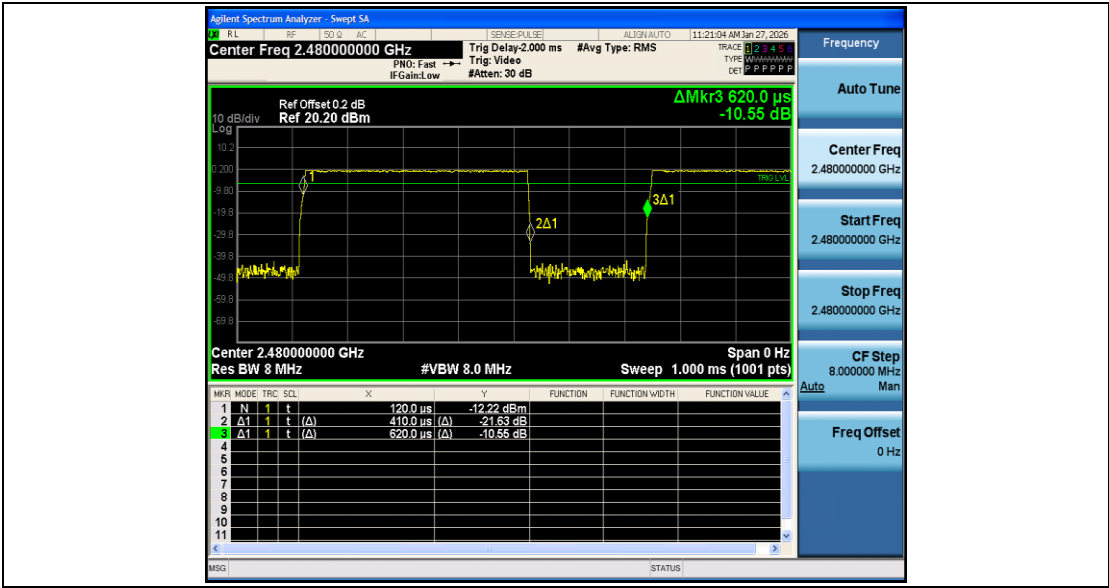
Appendix G: Duty Cycle

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





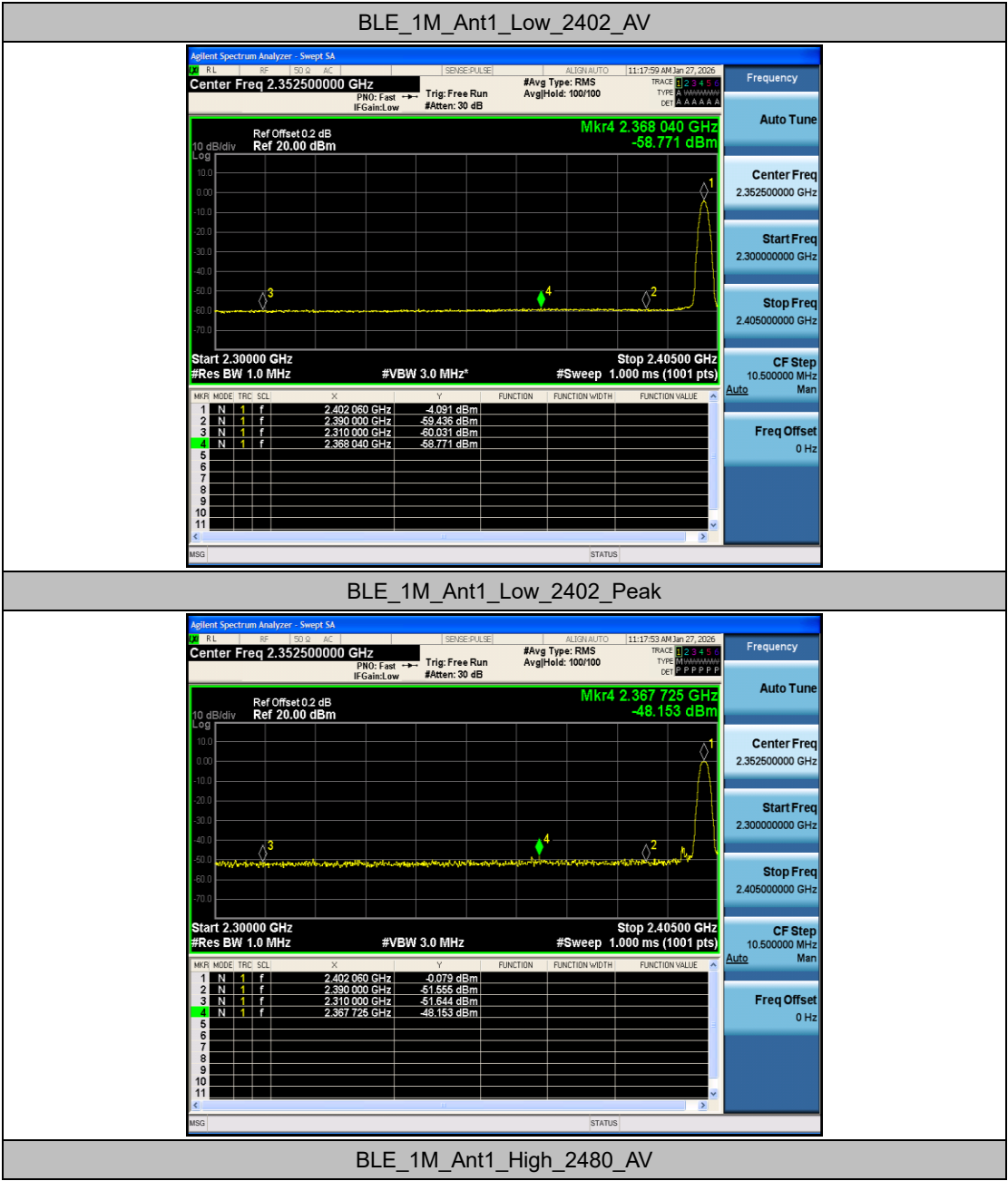
Appendix H: Emissions in Restricted Bands

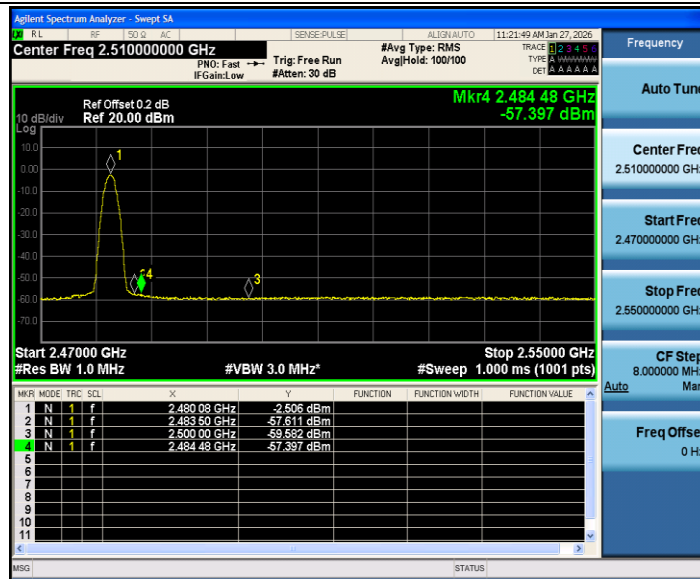
Test Result

TestMode	Antenna	Channel	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.03	2.00	1.80	38.97	≤54	PASS
				AV	2368.040	-58.77	2.00	1.80	40.23	≤54	PASS
				AV	2390.000	-59.44	2.00	1.80	39.56	≤54	PASS
				Peak	2310.000	-51.64	2.00	0.00	45.56	≤74	PASS
				Peak	2367.725	-48.15	2.00	0.00	49.05	≤74	PASS
				Peak	2390.000	-51.56	2.00	0.00	45.64	≤74	PASS
		High	2480	AV	2483.500	-57.61	2.00	1.80	41.39	≤54	PASS
				AV	2484.480	-57.4	2.00	1.80	41.60	≤54	PASS
				AV	2500.000	-59.58	2.00	1.80	39.42	≤54	PASS
				Peak	2483.500	-48.28	2.00	0.00	48.92	≤74	PASS
				Peak	2484.400	-44.72	2.00	0.00	52.48	≤74	PASS
				Peak	2500.000	-52.38	2.00	0.00	44.82	≤74	PASS

Note: 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_1M_Ant1_High_2480_Peak

