

FCC Appendix RF Test Data for BLE

FCC ID : 2AYZG-SO800E

Company : ShenZhen litian technology Co.,Ltd

EUT : Digital Wall Clock

Model Number : SO800E

Report No. : CTA25111000901

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	0.652	2401.684	2402.336	0.5	PASS
		2440	0.656	2439.684	2440.340	0.5	PASS
		2480	0.636	2479.692	2480.328	0.5	PASS

Test Graphs





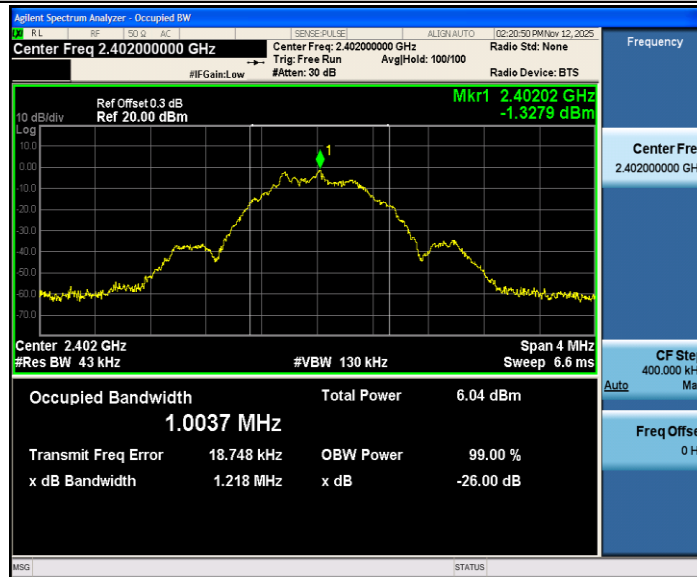
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0037	2401.5169	2402.5206	---	---
		2440	1.0045	2439.5183	2440.5228	---	---
		2480	1.0019	2479.5178	2480.5197	---	---

Test Graphs

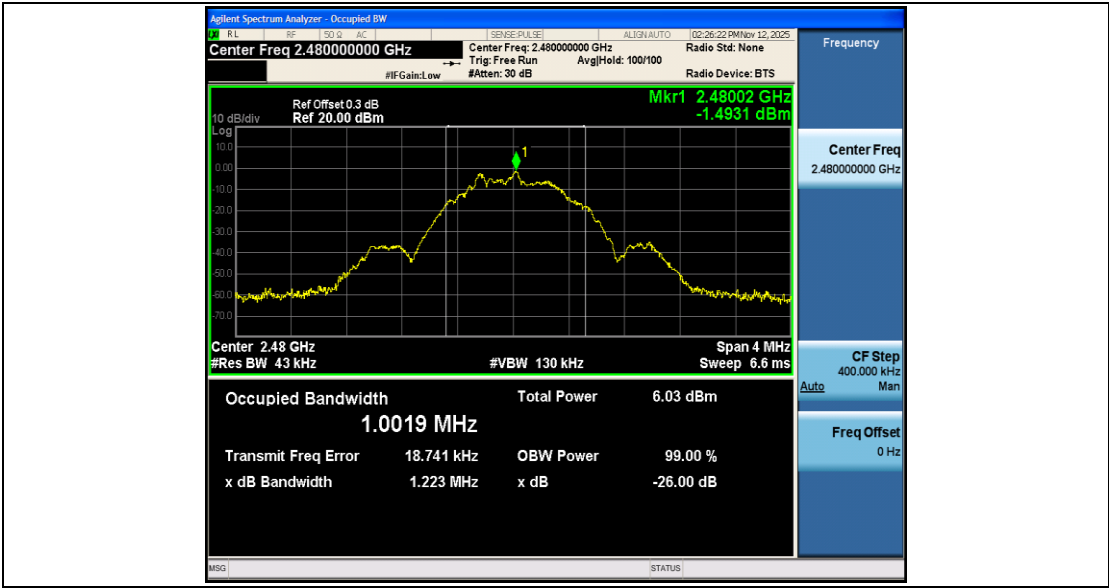
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

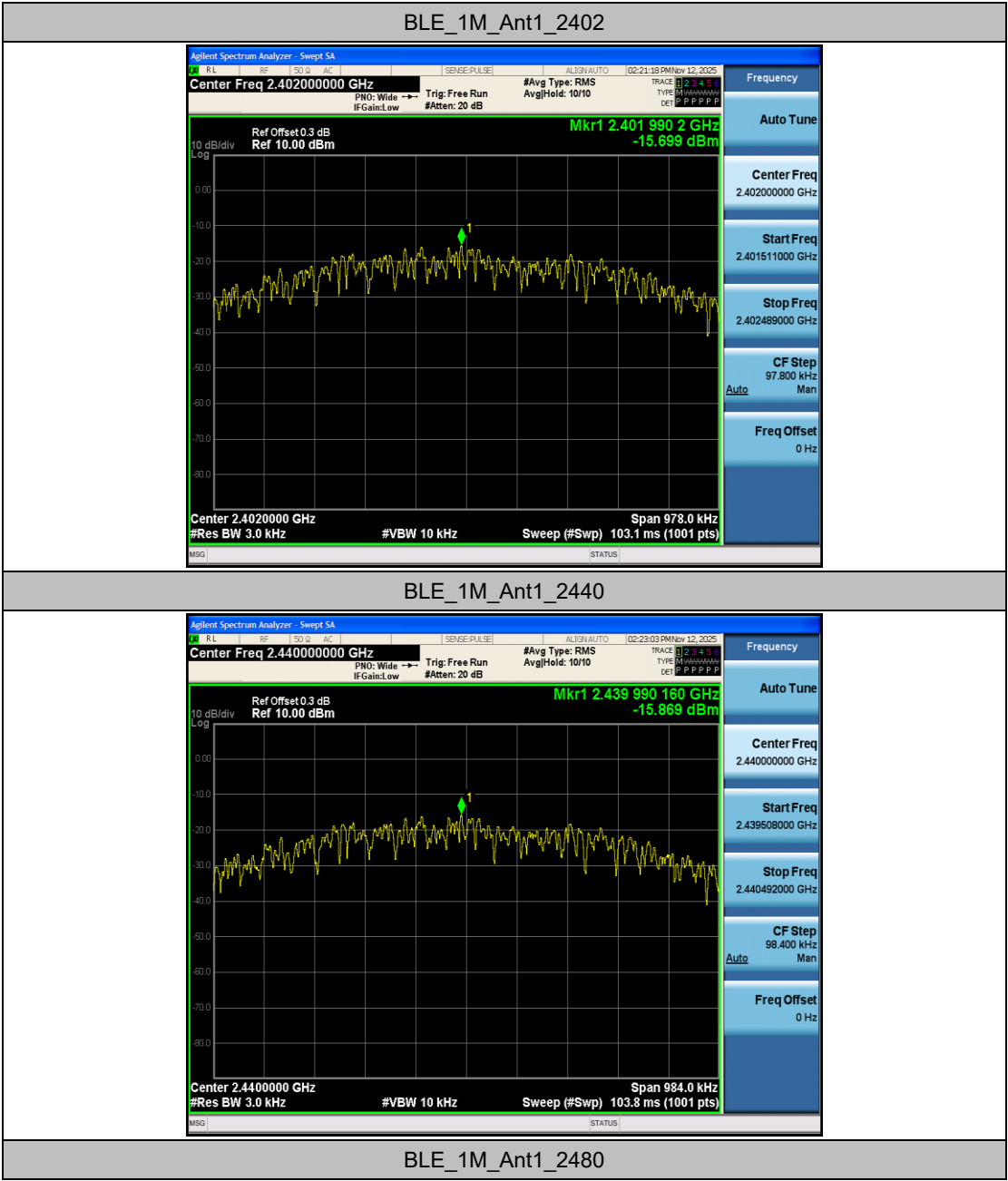
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.13	≤30	PASS
		2440	-0.35	≤30	PASS
		2480	-0.23	≤30	PASS

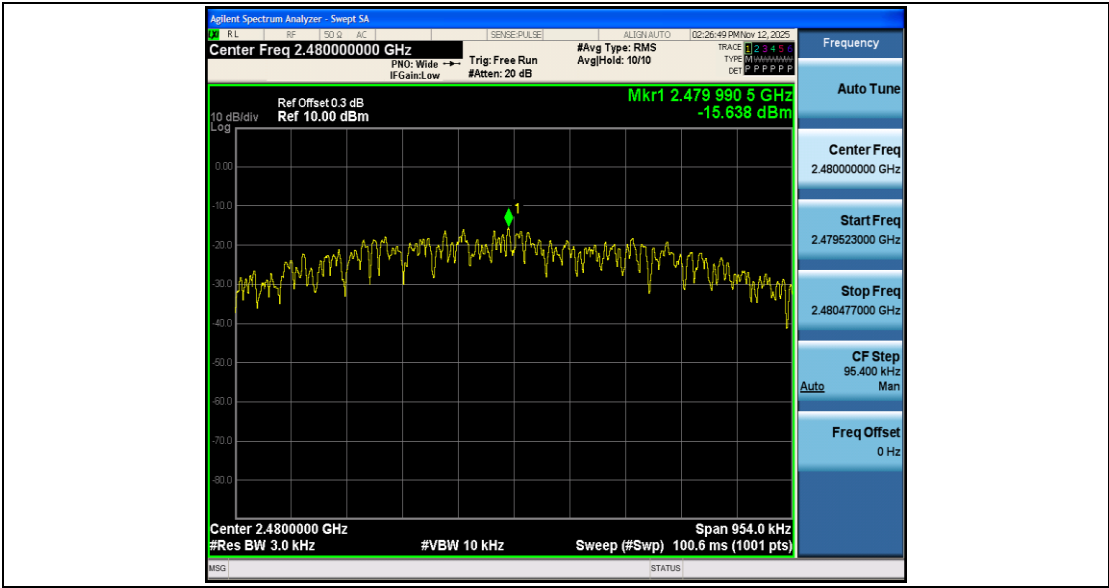
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.70	≤8.00	PASS
		2440	-15.87	≤8.00	PASS
		2480	-15.64	≤8.00	PASS

Test Graphs



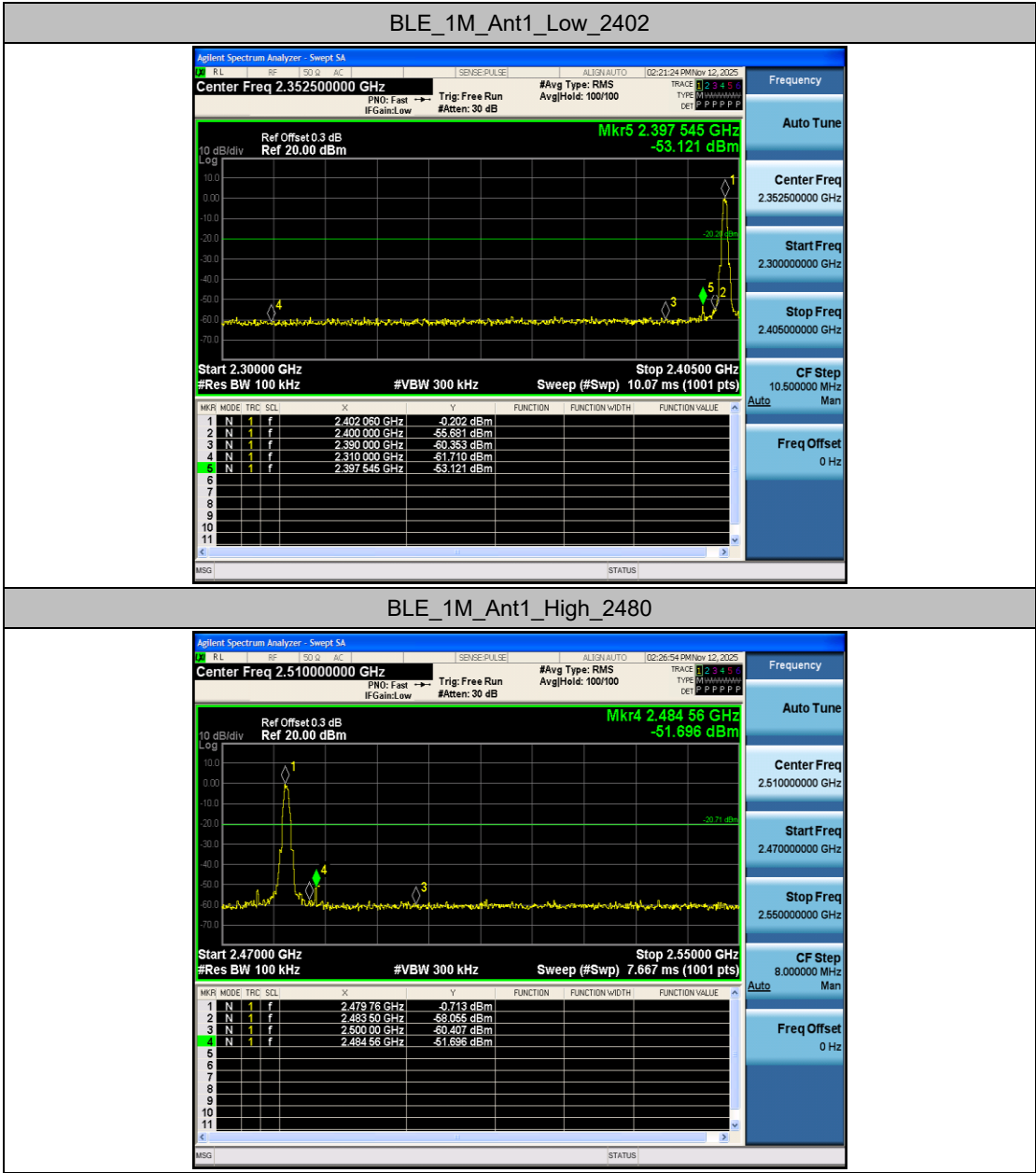


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.20	-53.12	≤-20.2	PASS
		High	2480	-0.71	-51.7	≤-20.71	PASS

Test Graphs

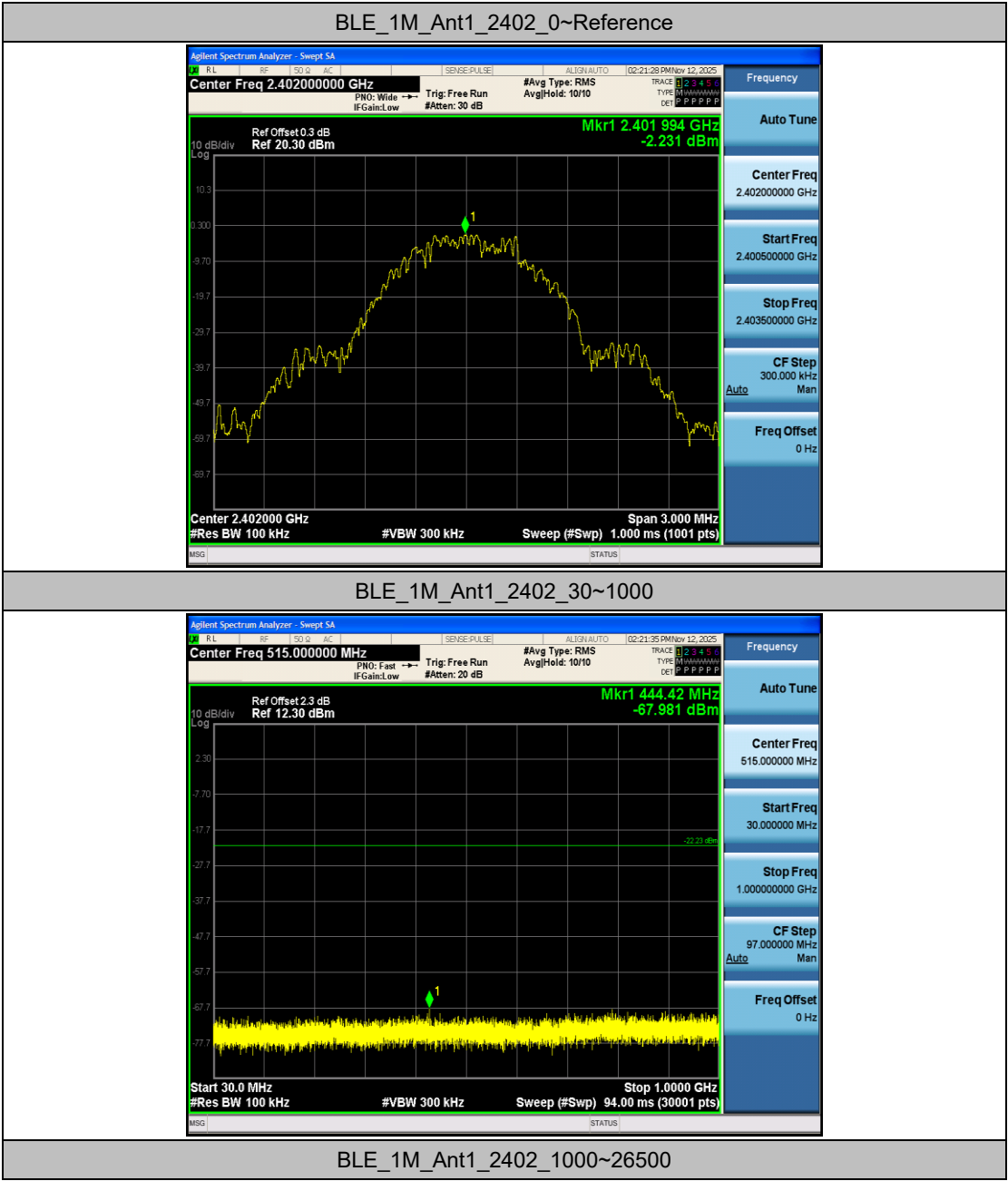


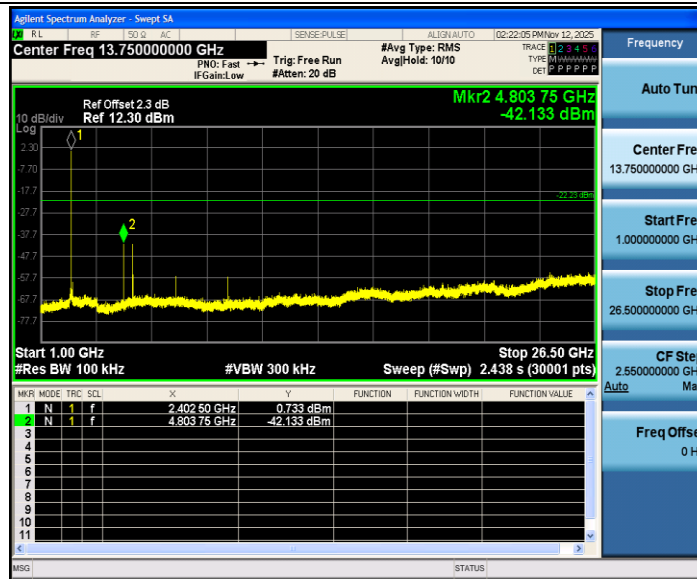
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-2.23	-2.23	---	PASS
			30~1000	-2.23	-67.98	≤-22.23	PASS
			1000~26500	-2.23	-42.13	≤-22.23	PASS
		2440	Reference	-0.82	-0.82	---	PASS
			30~1000	-0.82	-67.94	≤-20.82	PASS
			1000~26500	-0.82	-42.59	≤-20.82	PASS
		2480	Reference	-0.70	-0.70	---	PASS
			30~1000	-0.70	-68.34	≤-20.7	PASS
			1000~26500	-0.70	-41.96	≤-20.7	PASS

Test Graphs

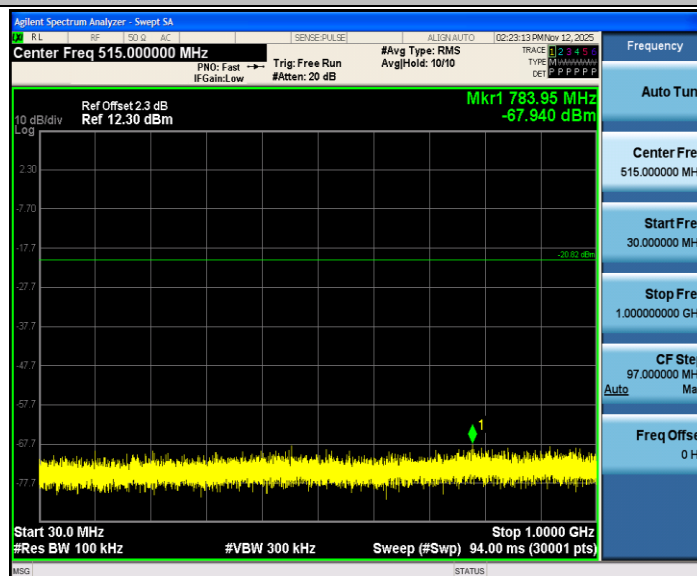




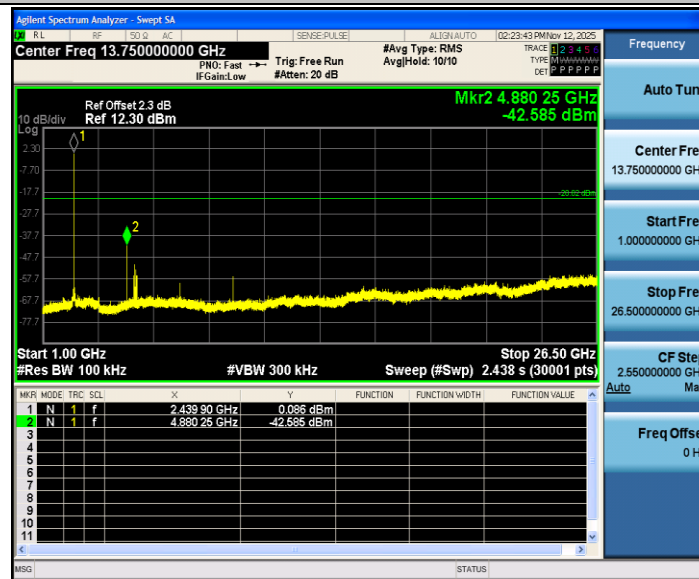
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



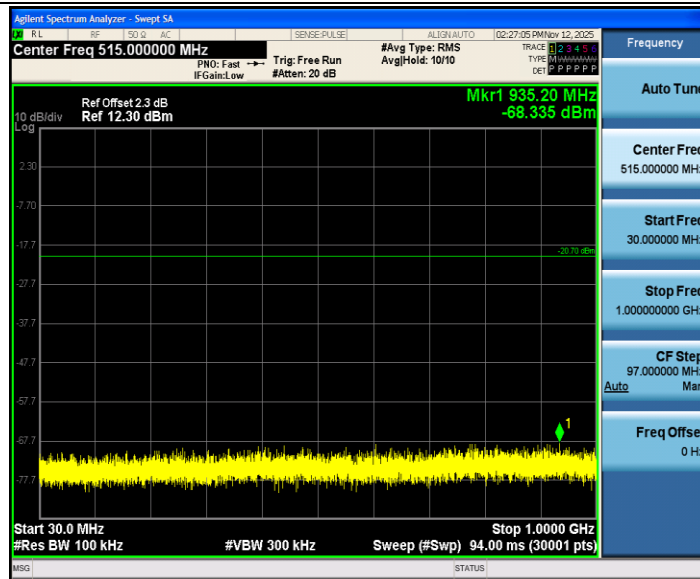
BLE_1M_Ant1_2440_1000~26500



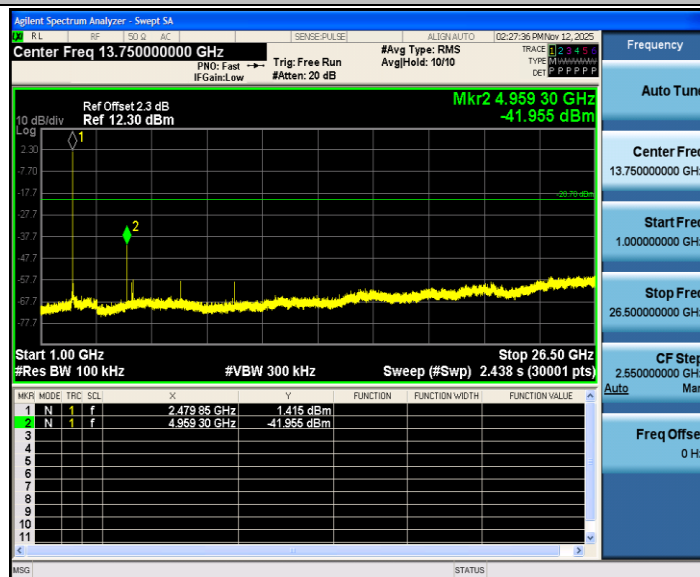
BLE_1M_Ant1_2480_0~Reference



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

