

Appendix RF Test Data for BLE

FCC ID : 2BRQ2-RUYILIGHT

Company : Zhongshan Minghui Electronic Technology Co., Ltd.

EUT : Led strip light

Model Number : RUYI LIGHT

Report No. : CTA25080700101

Reviewed By : Eric Wang

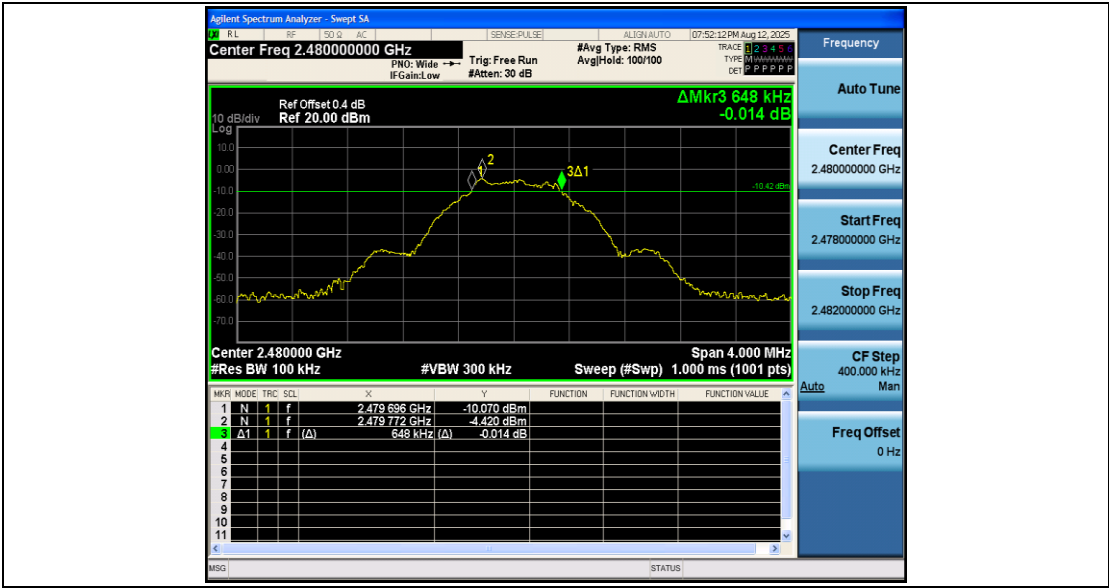
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.644	2401.696	2402.340	0.5	PASS
		2440	0.640	2439.696	2440.336	0.5	PASS
		2480	0.648	2479.696	2480.344	0.5	PASS

Test Graphs





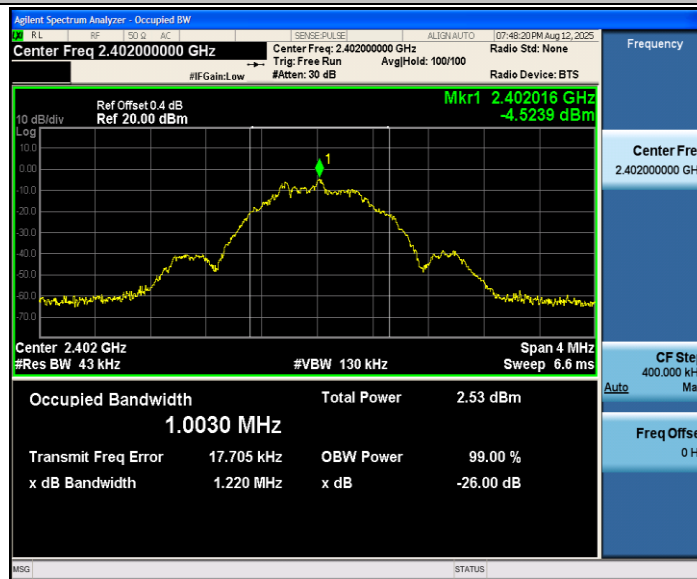
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0030	2401.5162	2402.5192	---	---
		2440	1.0004	2439.5197	2440.5201	---	---
		2480	1.0038	2479.5193	2480.5231	---	---

Test Graphs

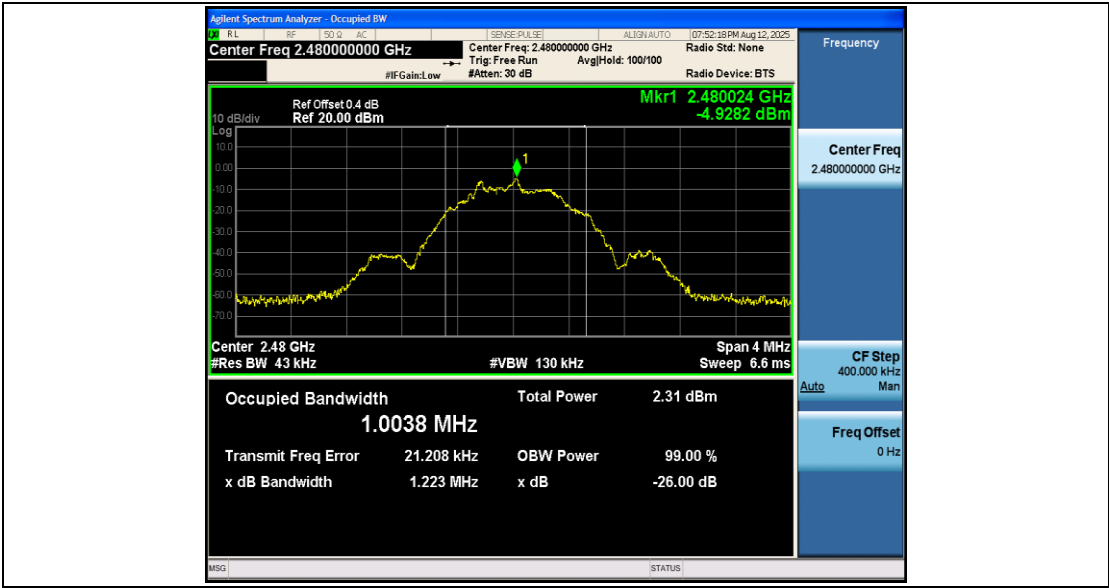
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

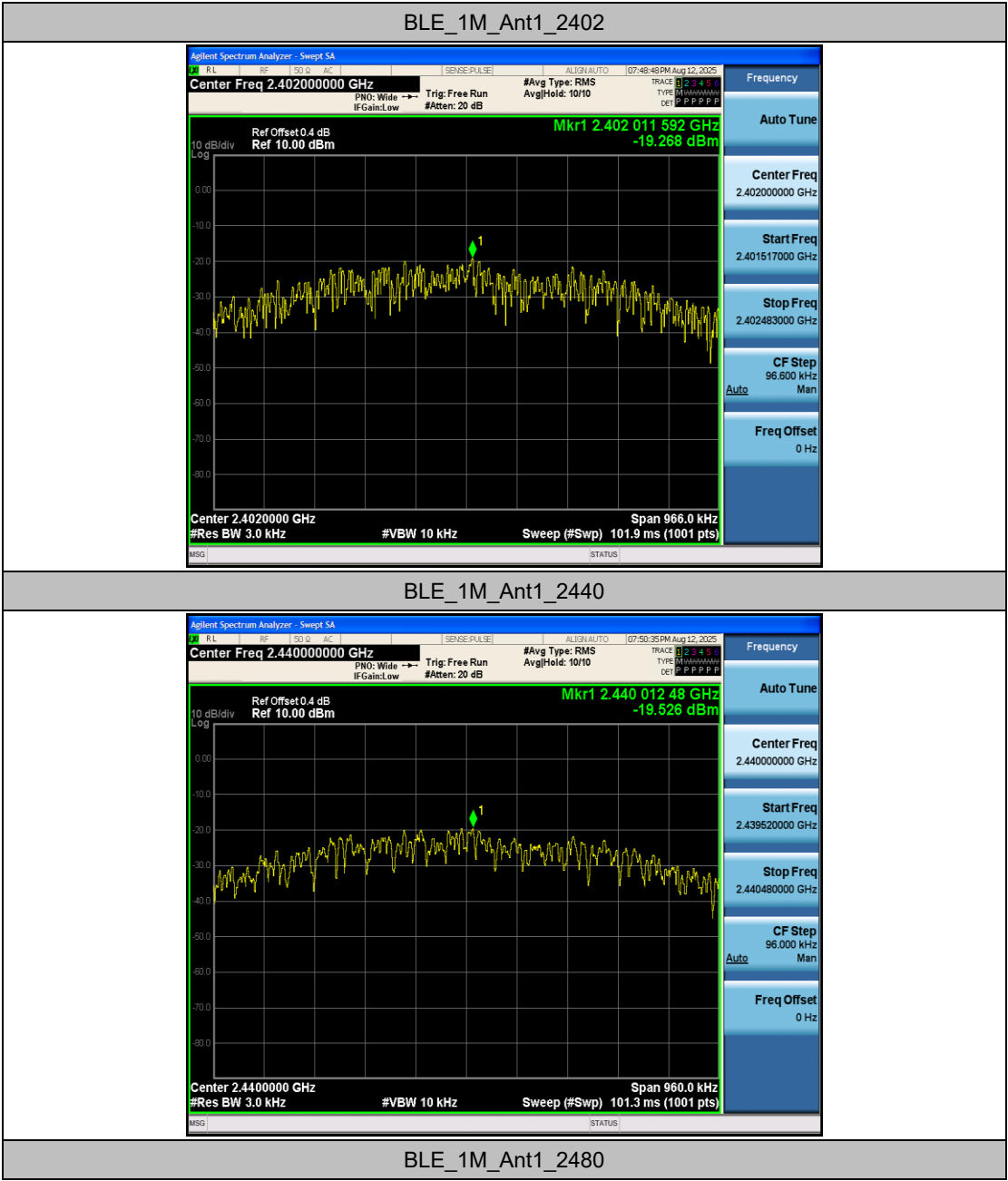
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.45	≤30	PASS
		2440	-3.76	≤30	PASS
		2480	-3.81	≤30	PASS

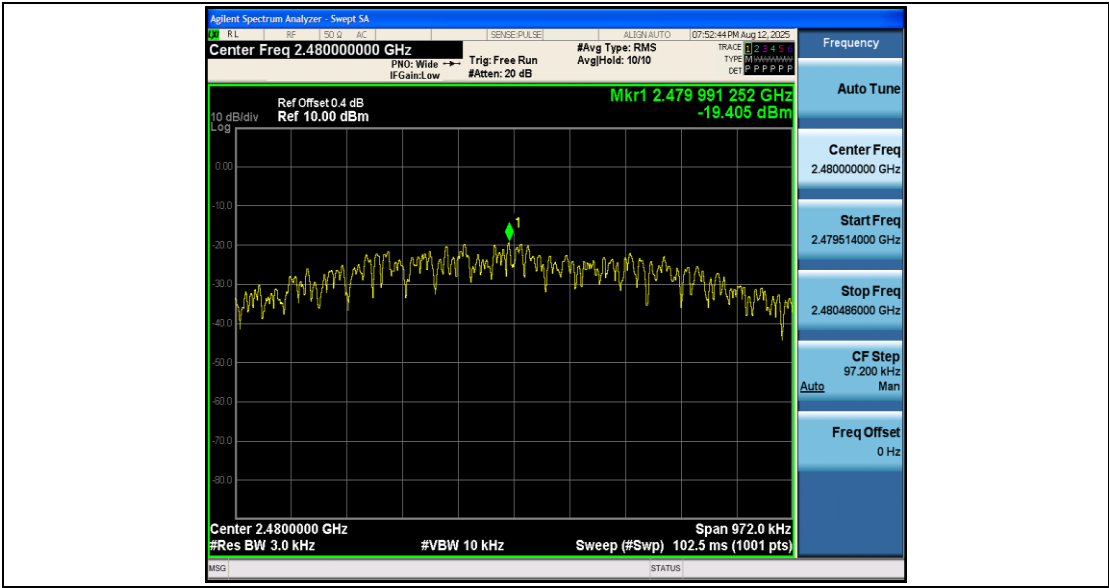
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.27	≤8.00	PASS
		2440	-19.53	≤8.00	PASS
		2480	-19.41	≤8.00	PASS

Test Graphs





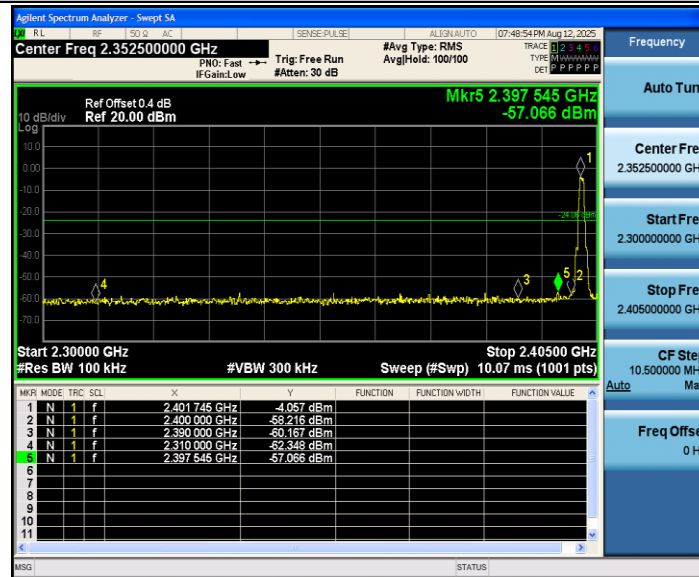
Appendix E: Band edge measurements

Test Result

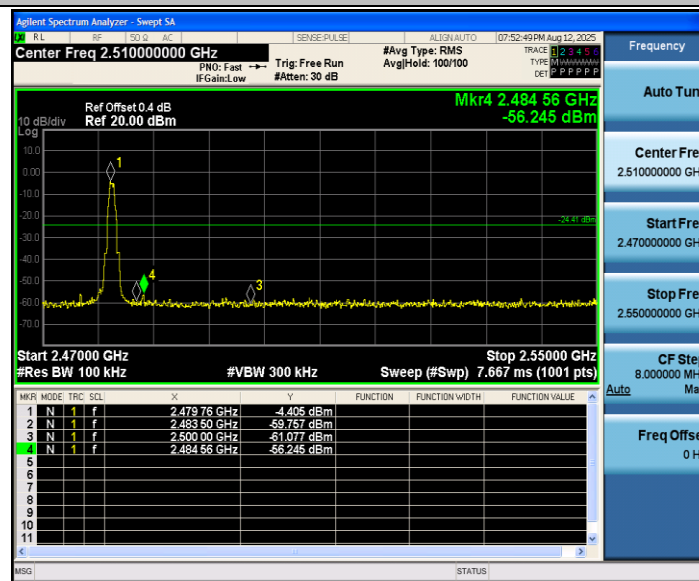
TestMode	Antenna	Channel	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-4.06	-57.07	≤-24.06	PASS
		High	2480	-4.41	-56.25	≤-24.41	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480

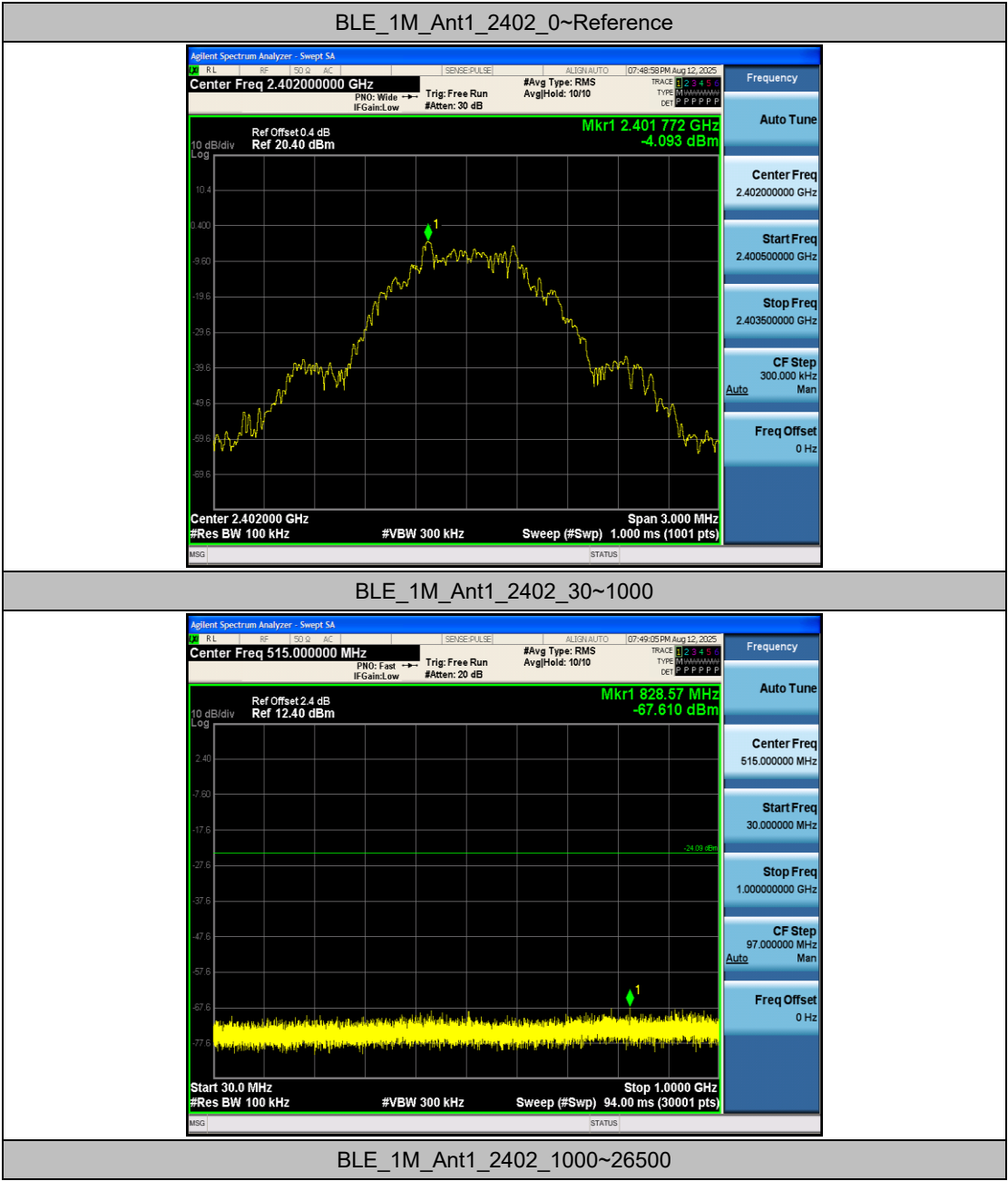


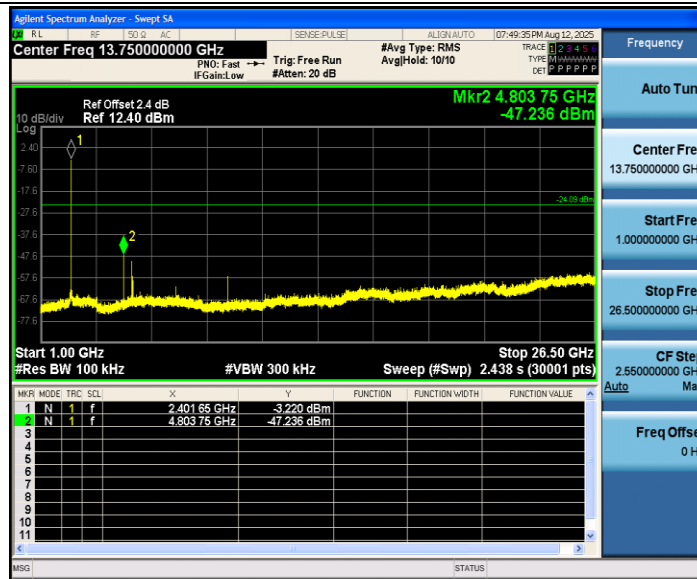
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-4.09	-4.09	---	PASS
			30~1000	-4.09	-67.61	≤-24.09	PASS
			1000~26500	-4.09	-47.24	≤-24.09	PASS
		2440	Reference	-5.83	-5.83	---	PASS
			30~1000	-5.83	-67.45	≤-25.83	PASS
			1000~26500	-5.83	-46.99	≤-25.83	PASS
		2480	Reference	-4.50	-4.50	---	PASS
			30~1000	-4.50	-67.19	≤-24.5	PASS
			1000~26500	-4.50	-49.41	≤-24.5	PASS

Test Graphs

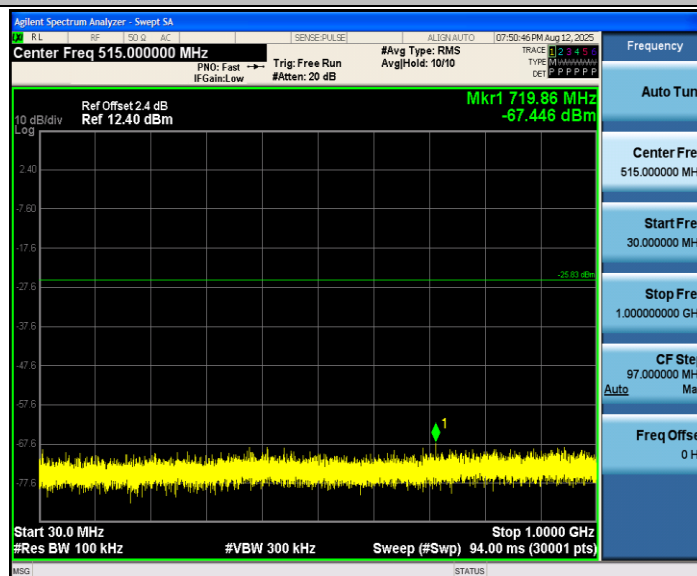




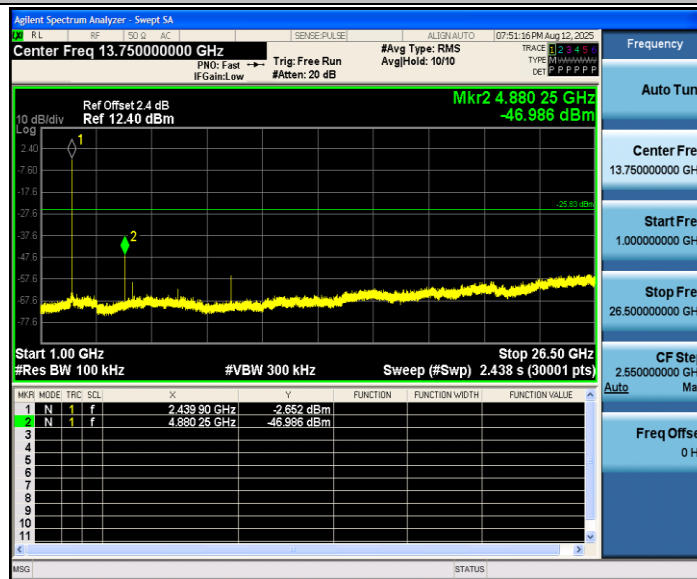
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



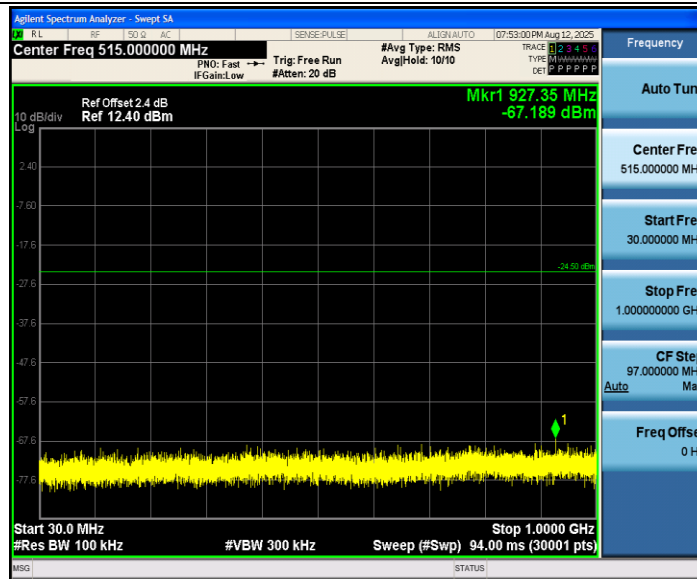
BLE_1M_Ant1_2440_1000~26500



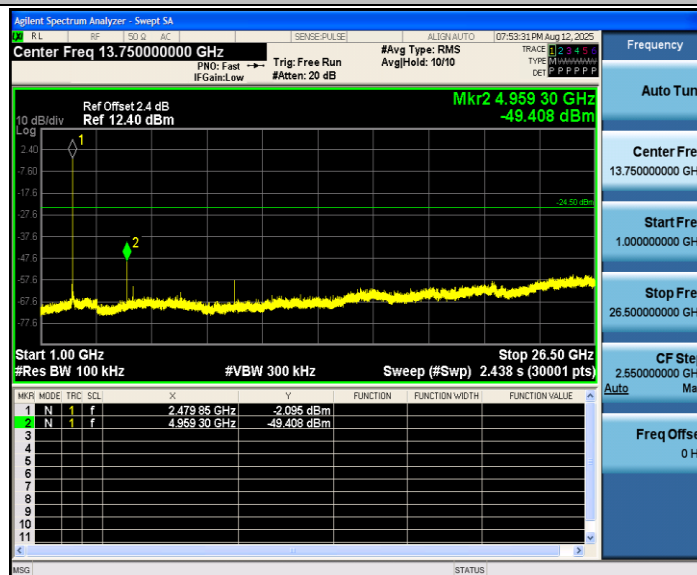
BLE_1M_Ant1_2480_0~Reference



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

