

Appendix Test Data for BLE (Conducted Measurement)

Product Name: R/C CAR

Trade Mark: /

Test Model: STR-RC102

FCC ID: 2BG8MSTR-RC102

Environmental Conditions

Temperature:	23.5°C
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

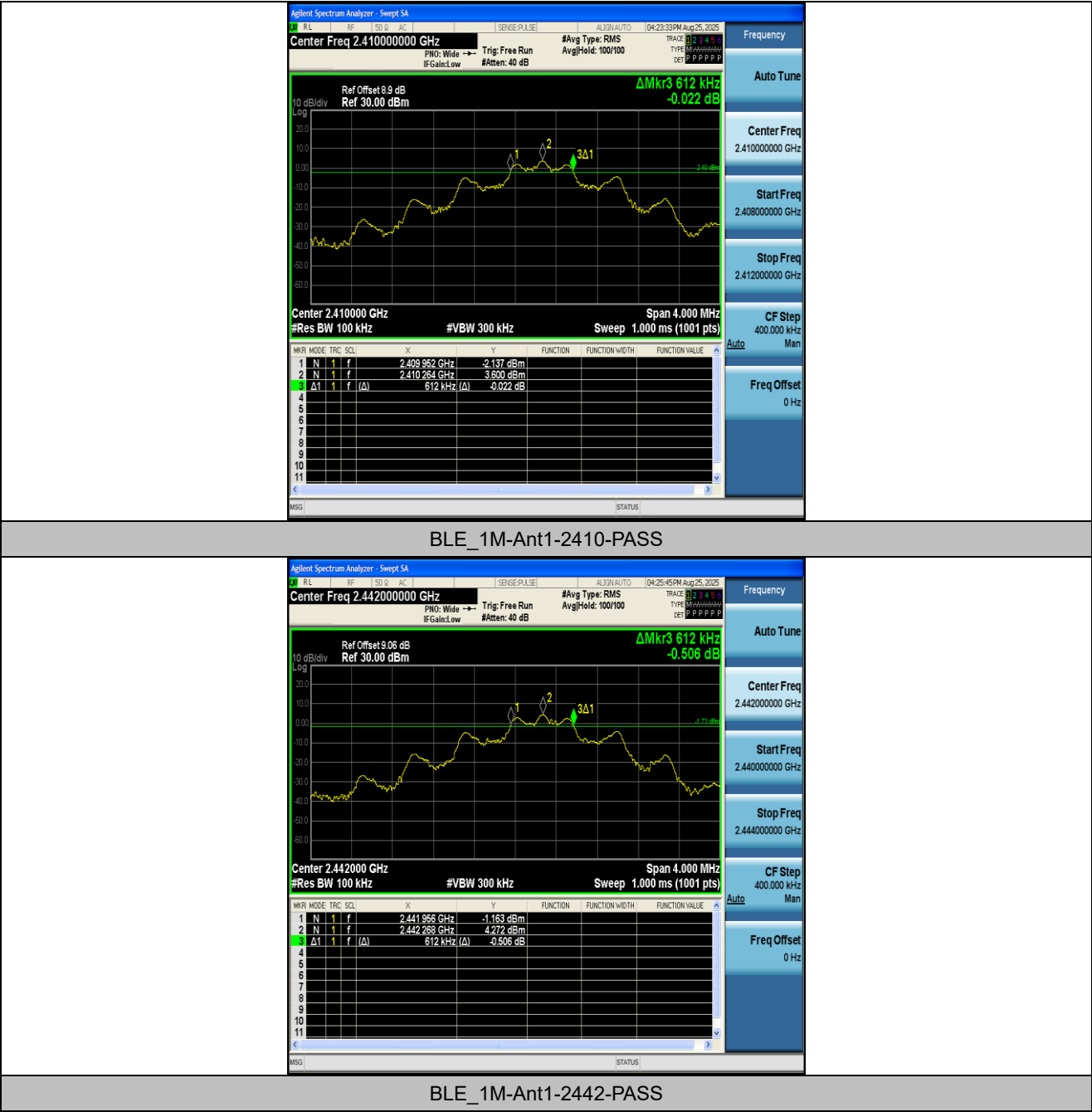
Appendix A: DTS Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2410	0.612	2409.952	2410.564	0.5	PASS
BLE_1M	Ant1	2442	0.612	2441.956	2442.568	0.5	PASS
BLE_1M	Ant1	2470	0.624	2469.952	2470.576	0.5	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





Appendix B: Occupied Channel Bandwidth

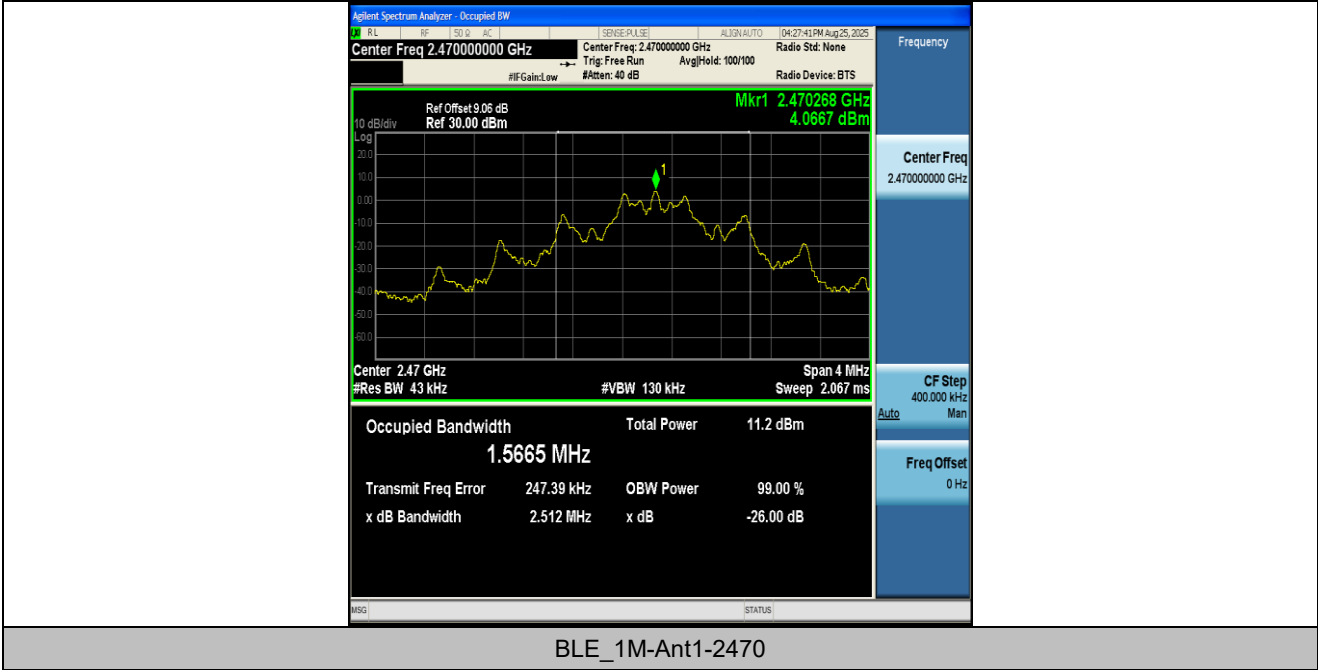
Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2410	1.7815	2409.3460	2411.1275	---	---
BLE_1M	Ant1	2442	1.6420	2441.3991	2443.0411	---	---
BLE_1M	Ant1	2470	1.5665	2469.4641	2471.0306	---	---

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





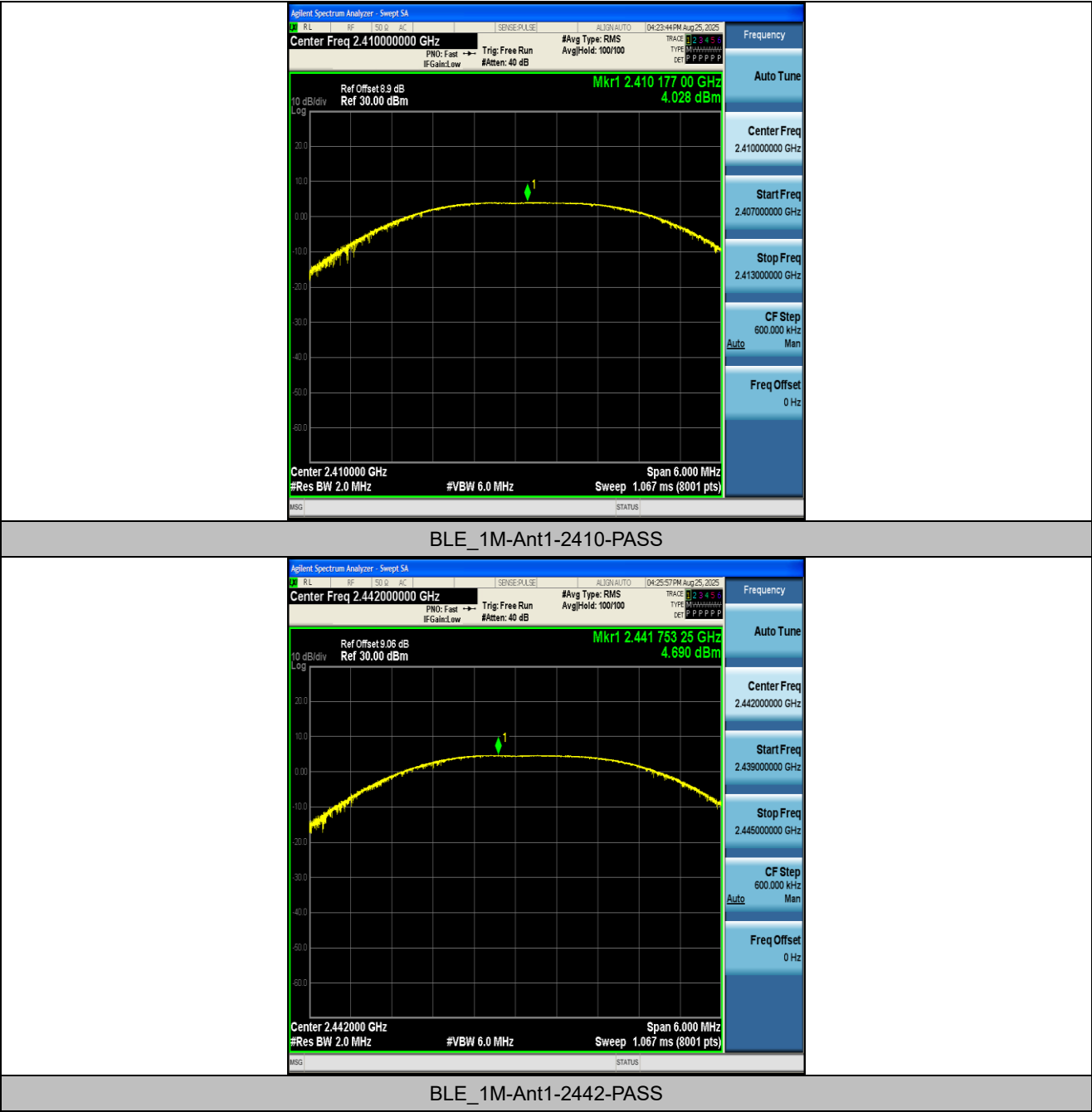
Appendix C: Maximum peak conducted output power

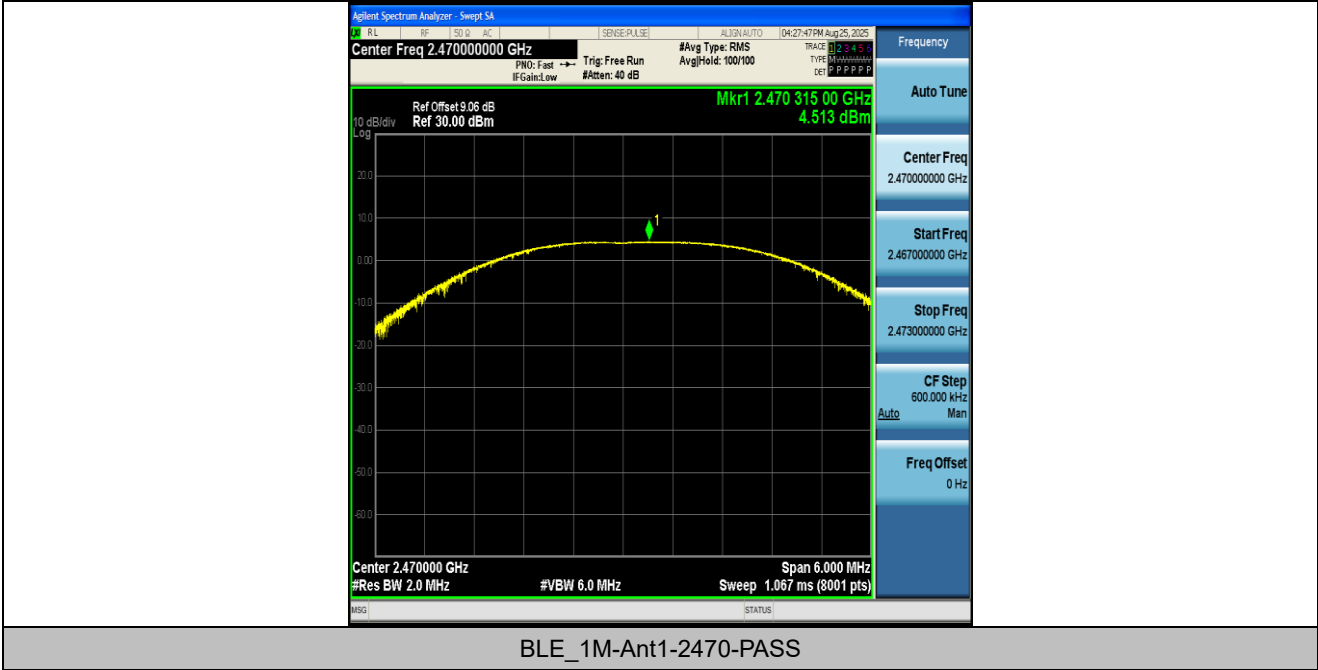
Test Result Peak

Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
BLE_1M	Ant1	2410	4.03	≤30	PASS
BLE_1M	Ant1	2442	4.69	≤30	PASS
BLE_1M	Ant1	2470	4.51	≤30	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs Peak





Appendix D: Maximum peak power spectral density

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
BLE_1M	Ant1	2410	-4.06	≤8.00	PASS
BLE_1M	Ant1	2442	-3.75	≤8.00	PASS
BLE_1M	Ant1	2470	-3.53	≤8.00	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





BLE_1M-Ant1-2470-PASS

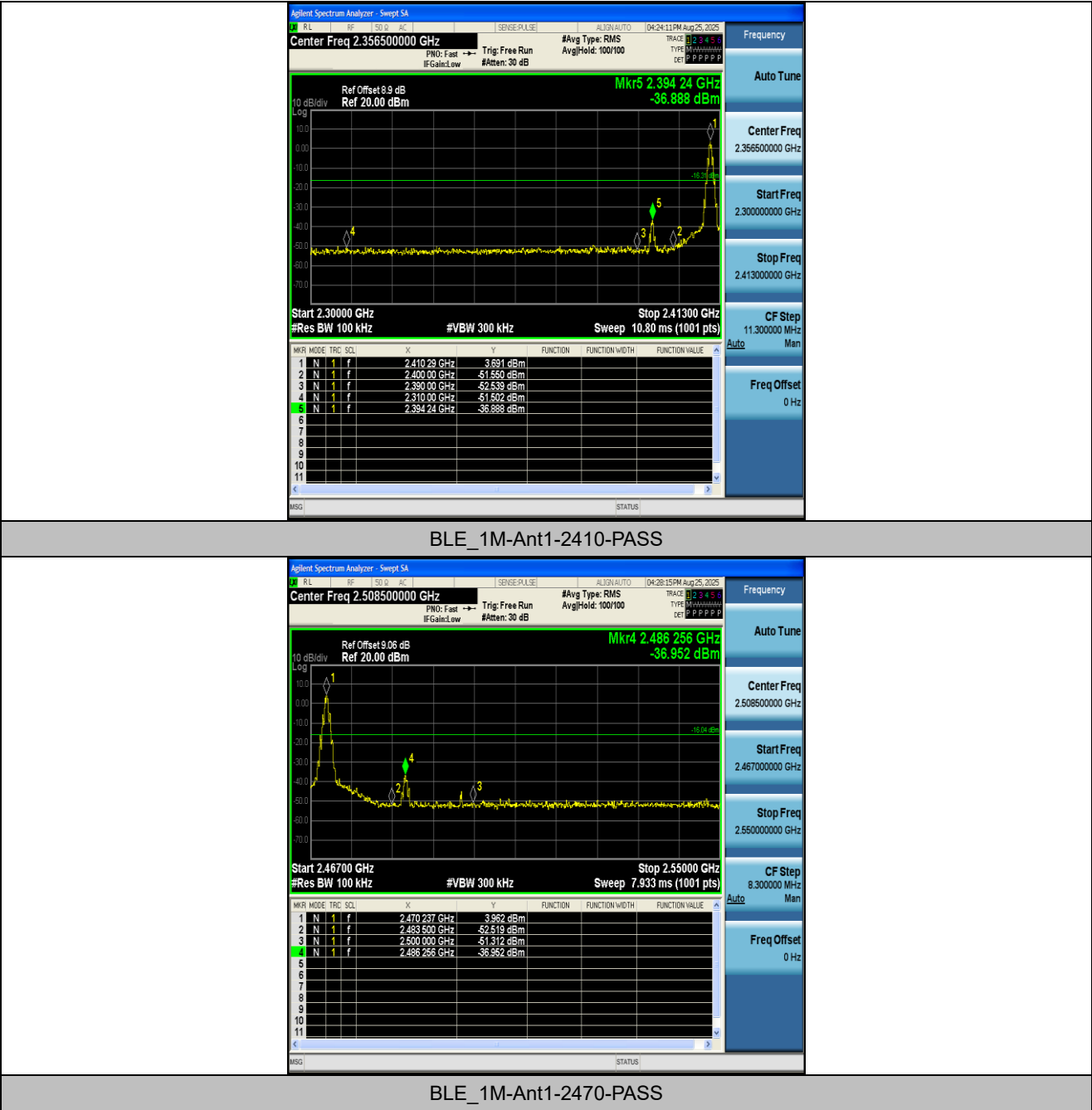
Appendix E: Band edge measurements

Test Result

Test Mode	Antenna	Ch. Name	Frequency [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2410	3.69	-36.89	≤-16.31	PASS
BLE_1M	Ant1	High	2470	3.96	-36.95	≤-16.04	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs



Appendix F: Conducted Spurious Emission

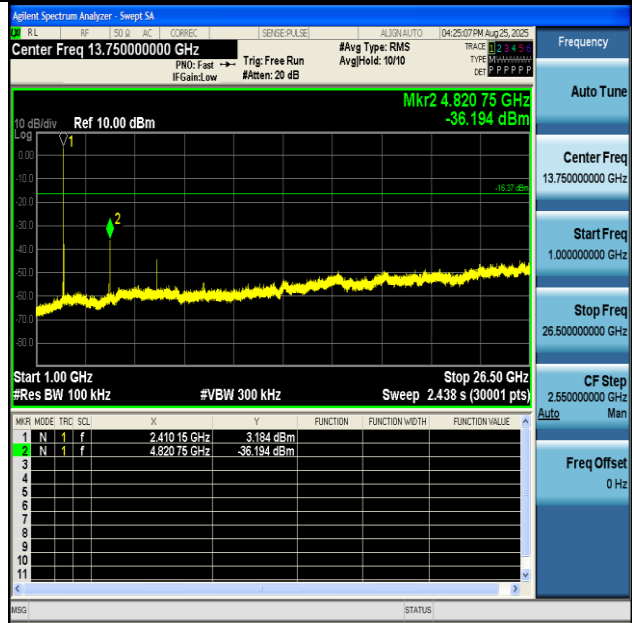
Test Result

Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	2410	0~Reference	3.63	3.63	---	PASS
BLE_1M	Ant1	2410	30~1000	3.63	-62.66	≤-16.37	PASS
BLE_1M	Ant1	2410	1000~26500	3.63	-36.19	≤-16.37	PASS
BLE_1M	Ant1	2442	0~Reference	4.14	4.14	---	PASS
BLE_1M	Ant1	2442	30~1000	4.14	-62.51	≤-15.86	PASS
BLE_1M	Ant1	2442	1000~26500	4.14	-36.98	≤-15.86	PASS
BLE_1M	Ant1	2470	0~Reference	4.21	4.21	---	PASS
BLE_1M	Ant1	2470	30~1000	4.21	-62.82	≤-15.79	PASS
BLE_1M	Ant1	2470	1000~26500	4.21	-36.97	≤-15.79	PASS

Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.

Test Graphs

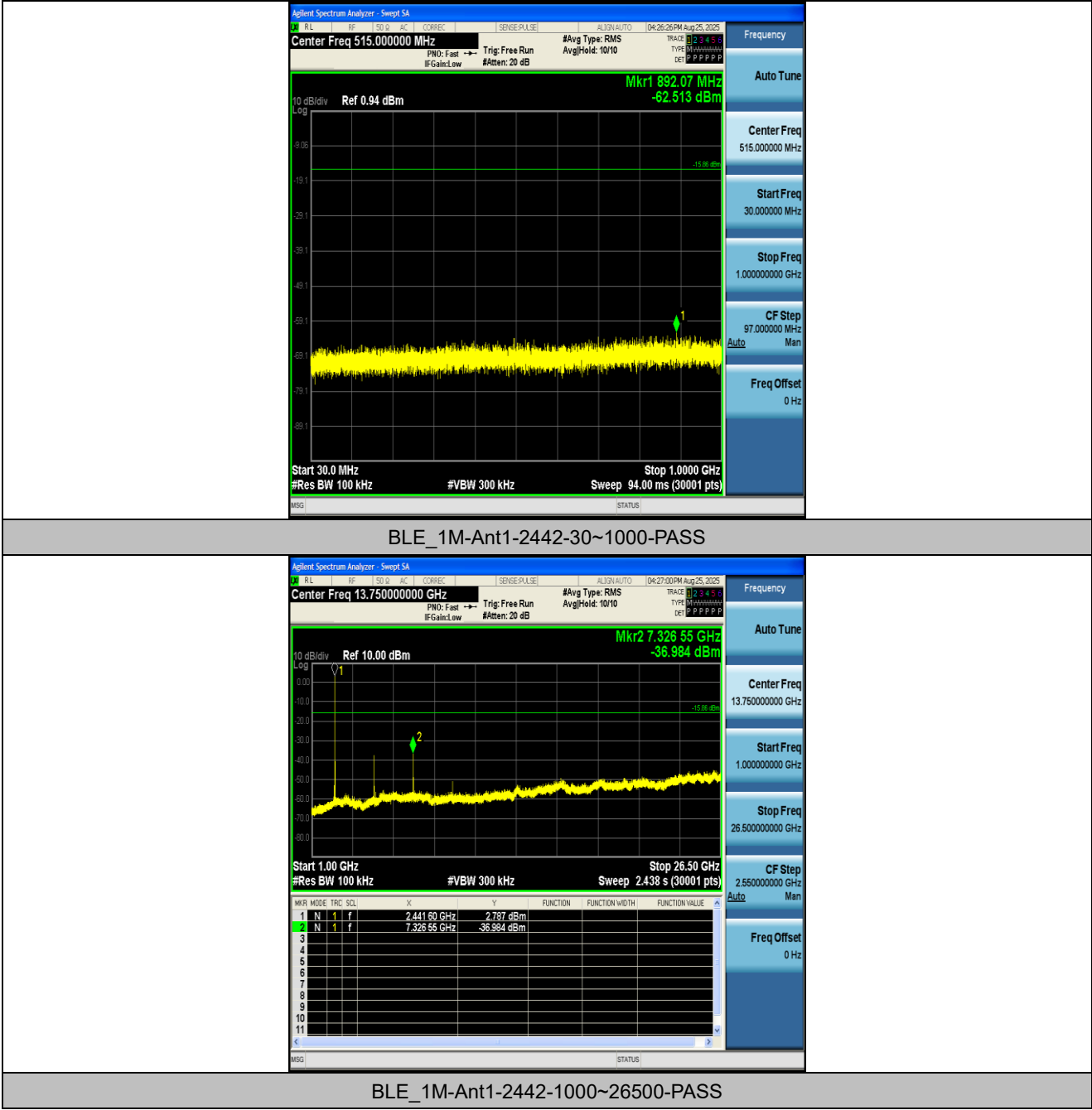




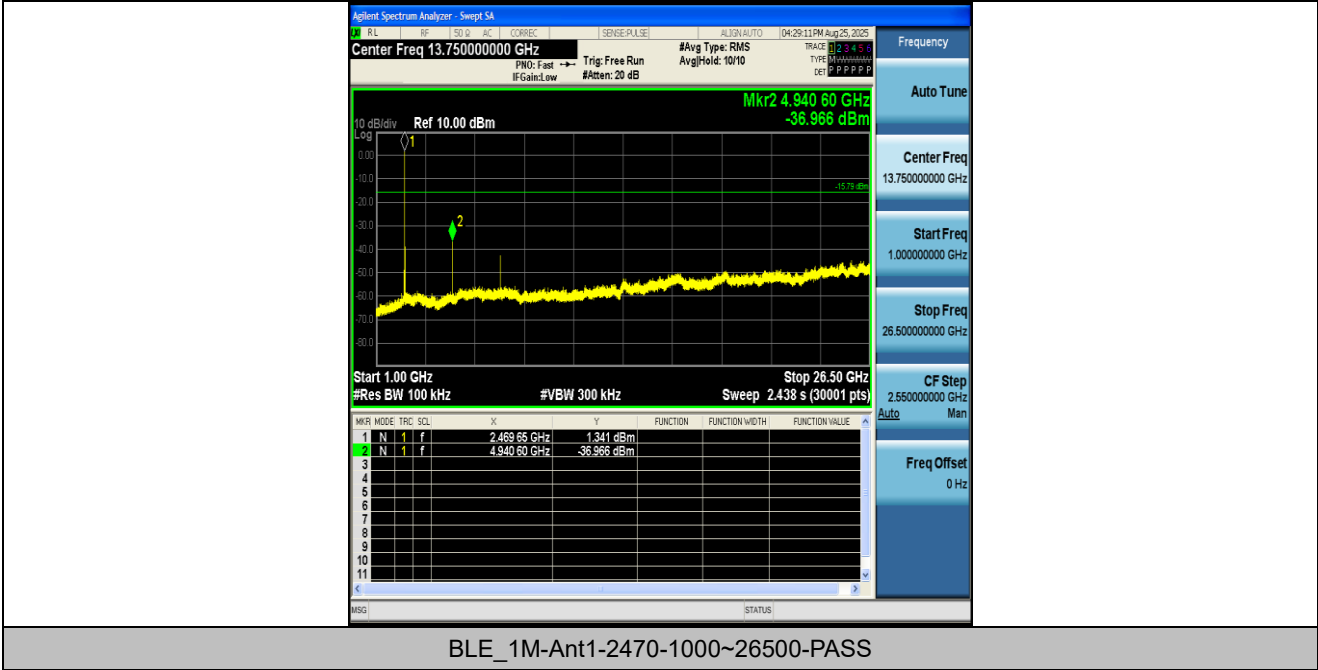
BLE_1M-Ant1-2410-1000~26500-PASS



BLE_1M-Ant1-2442-0~Reference-PASS







Appendix G: Duty Cycle

Test Result

Test Mode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor [dB]
BLE_1M	Ant1	2410	1.00	1.59	62.89	2.01
BLE_1M	Ant1	2442	1.00	1.59	62.89	2.01
BLE_1M	Ant1	2470	1.00	1.59	62.89	2.01

Note: $\text{offset(dB)} = \text{cable loss(dB)} + \text{attenuator factor(dB)}$

Test Graphs

