Appendix: Bluetooth LE

Contents

Appendix A: DTS Bandwidth 3
Test Result 3
Test Graphs 4
Appendix B: Occupied Channel Bandwidth 6
Test Result 6
Test Graphs 7
Appendix C: Maximum conducted output power 9
Test Result 9
Test Graphs 10
Appendix D: Maximum power spectral density 12
Test Result 12
Test Graphs 13
Appendix E: Band edge measurements 15
Test Result 15
Test Graphs 16
Appendix F: Conducted Spurious Emission 17
Test Result 17
Test Graphs 18
Appendix G: Duty Cycle 23
Test Result 23
Test Graphs 24

Appendix A: DTS Bandwidth

Test Result

Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	0.654	2401.672	2402.326	0.5	PASS
		2440	0.666	2439.664	2440.330	0.5	PASS
		2480	0.672	2479.660	2480.332	0.5	PASS

Test Graphs

BLE_Ant1_2402

BLE_Ant1_2440

BLE_Ant1_2480

Appendix B: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	1.0434	2401.493	2402.536	---	PASS
		2440	1.0364	2439.488	2440.525	---	PASS
		2480	1.0361	2479.485	2480.521	---	PASS

Test Graphs

BLE_Ant1_2402

BLE_Ant1_2440

BLE_Ant1_2480

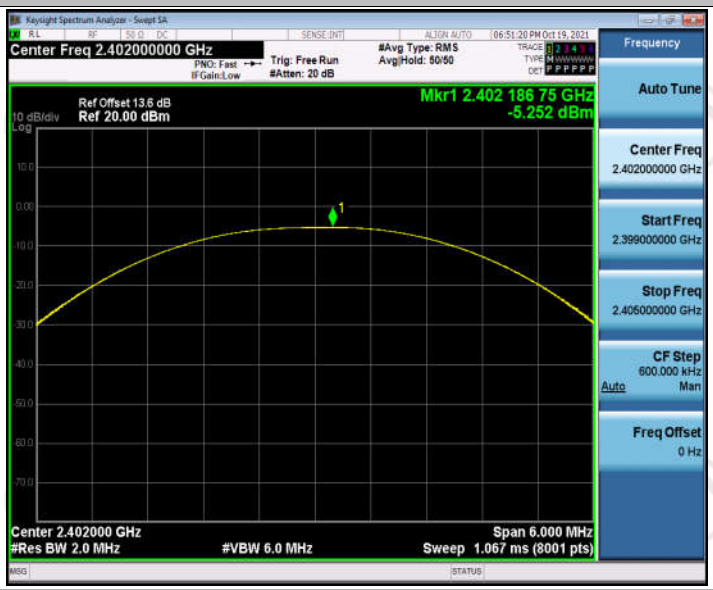
Appendix C: Maximum conducted output power

Test Result

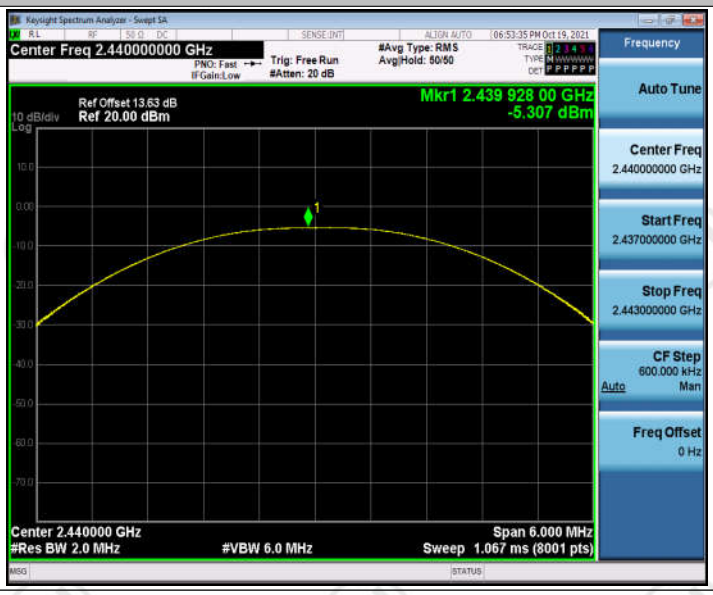
Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	2402	-5.25	<=30	PASS
		2440	-5.31	<=30	PASS
		2480	-6.84	<=30	PASS

Test Graphs

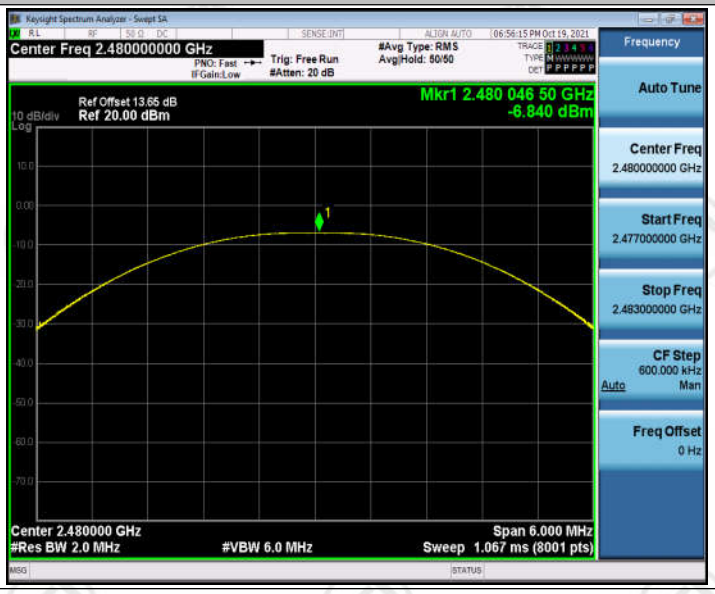
BLE_Ant1_2402



BLE_Ant1_2440



BLE_Ant1_2480



Appendix D: Maximum power spectral density

Test Result

Test Mode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE	Ant1	2402	-15.3	<=8	PASS
		2440	-15.39	<=8	PASS
		2480	-16.88	<=8	PASS

Test Graphs

BLE_Ant1_2402

BLE_Ant1_2440

BLE_Ant1_2480

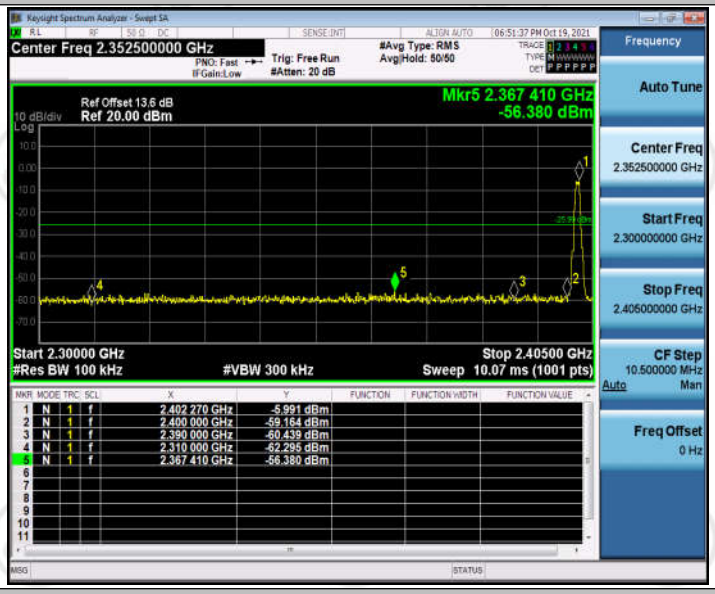
Appendix E: Band edge measurements

Test Result

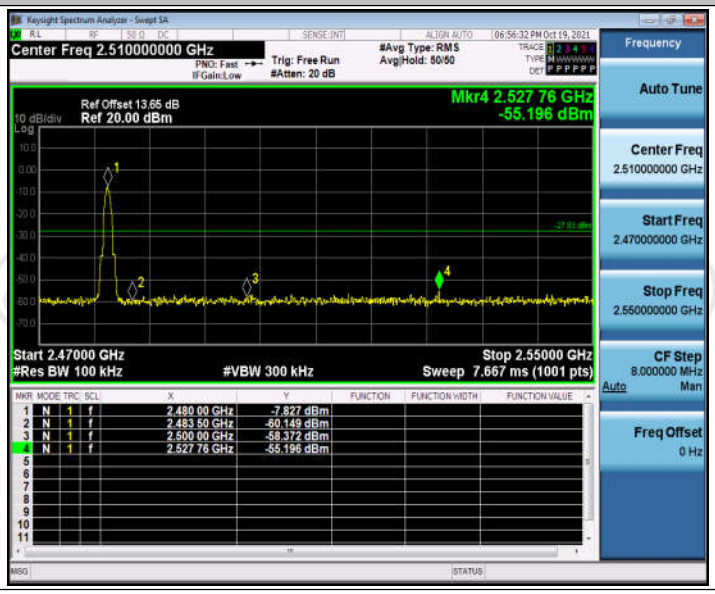
Test Mode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	Low	2402	-5.99	-56.38	<=-25.99	PASS
		High	2480	-7.83	-55.2	<=-27.83	PASS

Test Graphs

BLE_Ant1_Low_2402



BLE_Ant1_High_2480



Appendix F: Conducted Spurious Emission

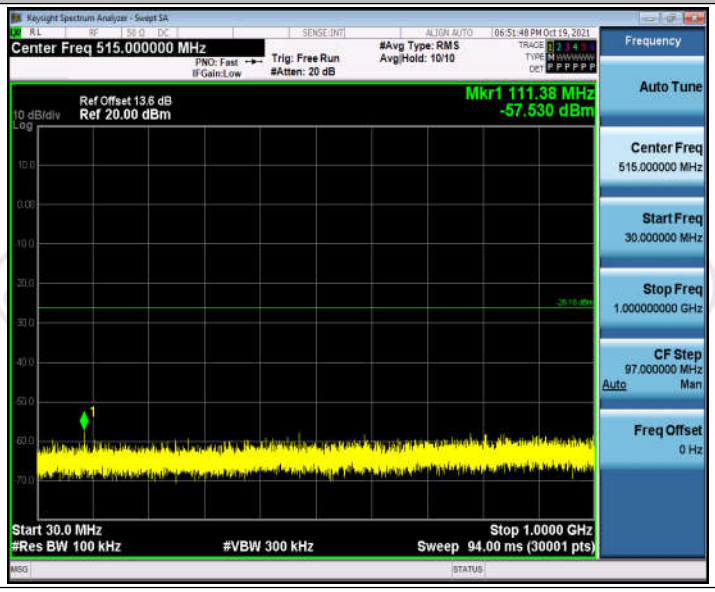
Test Result

Test Mode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	2402	Reference	-6.18	-6.18	---	PASS
			30~1000	---	-57.53	<=-26.176	PASS
			1000~26500	---	-49.161	<=-26.176	PASS
		2440	Reference	-6.03	-6.03	---	PASS
			30~1000	---	-57.557	<=-26.027	PASS
			1000~26500	---	-48.752	<=-26.027	PASS
		2480	Reference	-7.55	-7.55	---	PASS
			30~1000	---	-57.51	<=-27.551	PASS
			1000~26500	---	-46.976	<=-27.551	PASS

Test Graphs

BLE_Ant1_2402_0~Reference

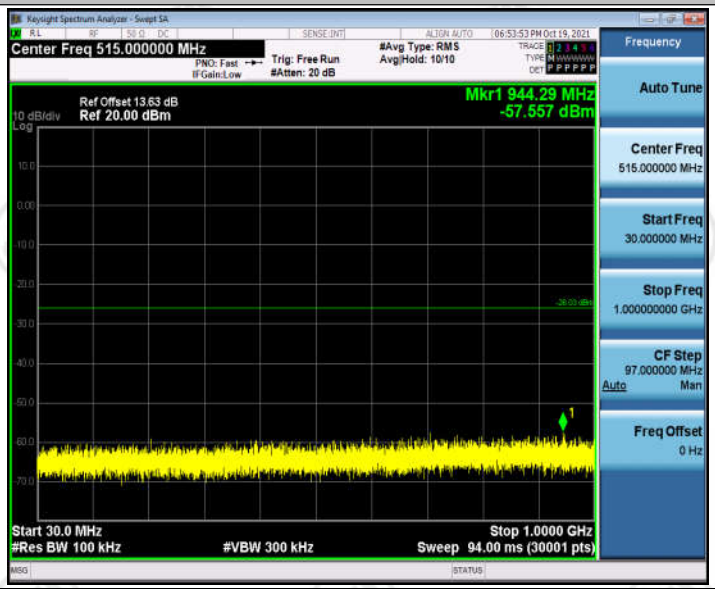
BLE_Ant1_2402_30~1000



BLE_Ant1_2402_1000~26500

BLE_Ant1_2440_0~Reference

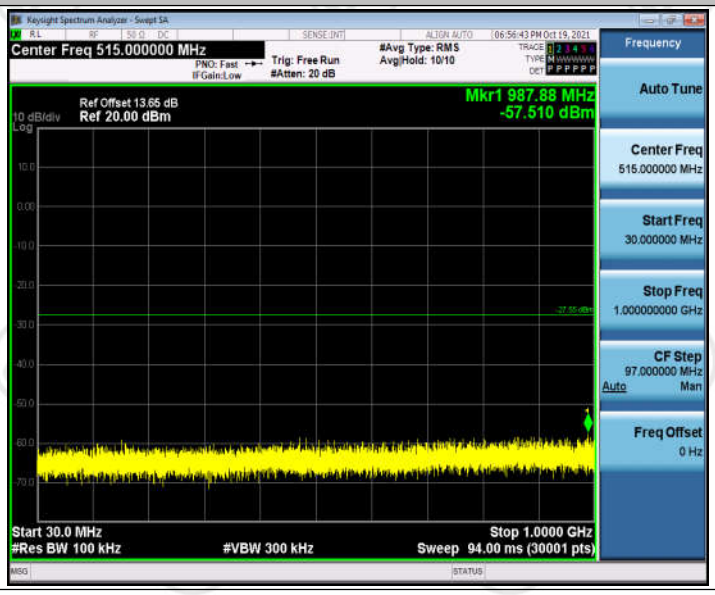
BLE_Ant1_2440_30~1000



BLE_Ant1_2440_1000~26500

BLE_Ant1_2480_0~Reference

BLE_Ant1_2480_30~1000



BLE_Ant1_2480_1000~26500

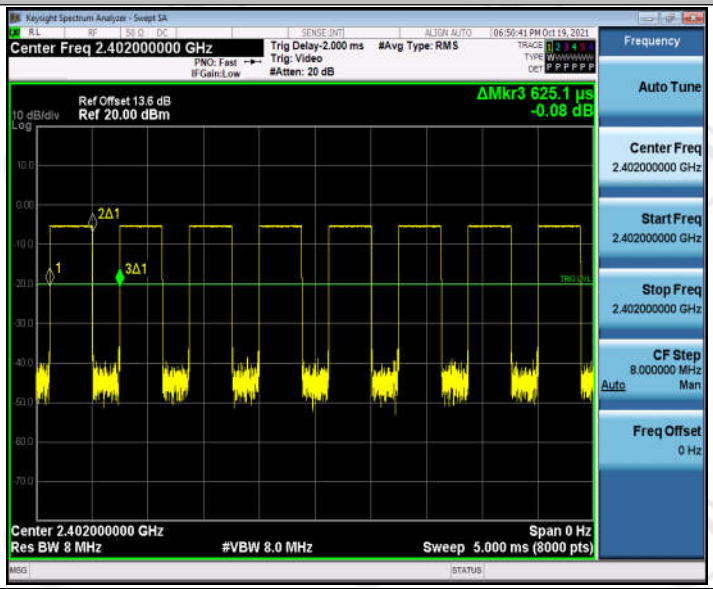
Appendix G: Duty Cycle

Test Result

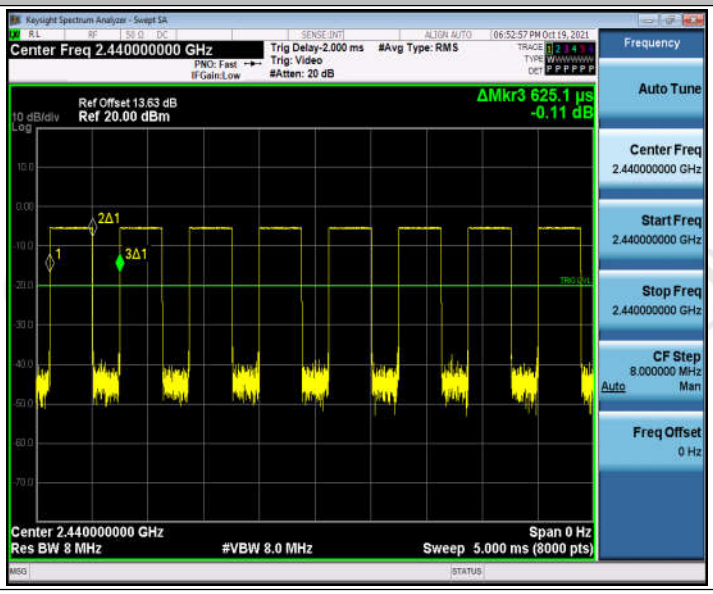
Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
BLE	Ant1	2402	0.38	0.63	61.20	---	PASS
		2440	0.38	0.63	61.20	---	PASS
		2480	0.38	0.63	61.14	---	PASS

Test Graphs

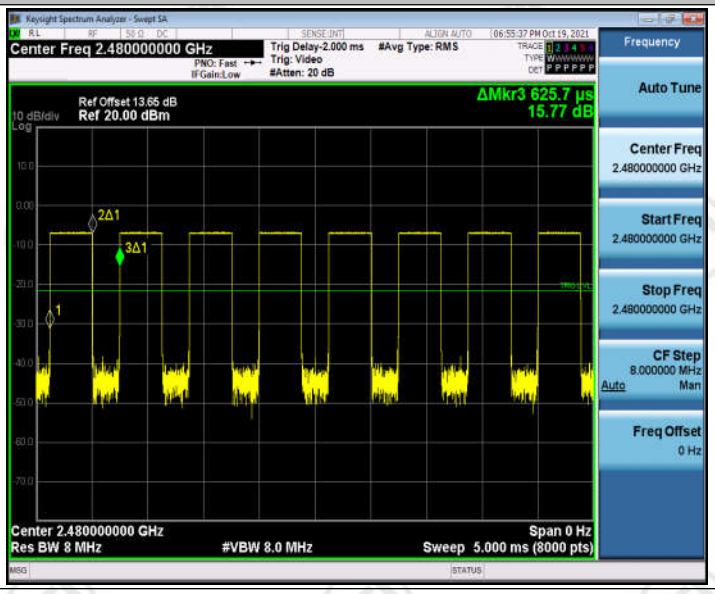
BLE_Ant1_2402



BLE_Ant1_2440



BLE_Ant1_2480



*** End of Report ***