RF Conducted Test Data of Bluetooth LE

Contents

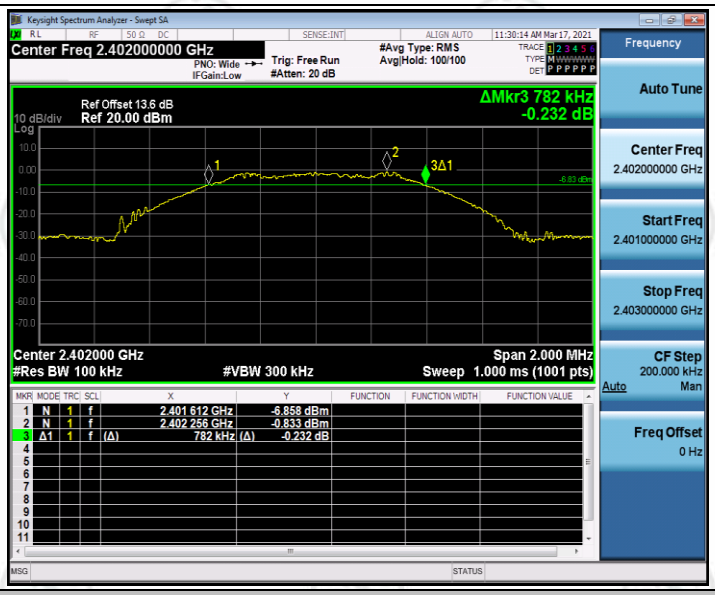
Appendix A: DTS Bandwidth 3
Test Result 3
Test Graphs 4
Appendix B: Occupied Channel Bandwidth 6
Test Result 6
Test Graphs 7
Appendix C: Maximum conducted output power 9
Test Result 9
Test Graphs 10
Appendix D: Maximum power spectral density 12
Test Result 12
Test Graphs 13
Appendix E: Band edge measurements 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

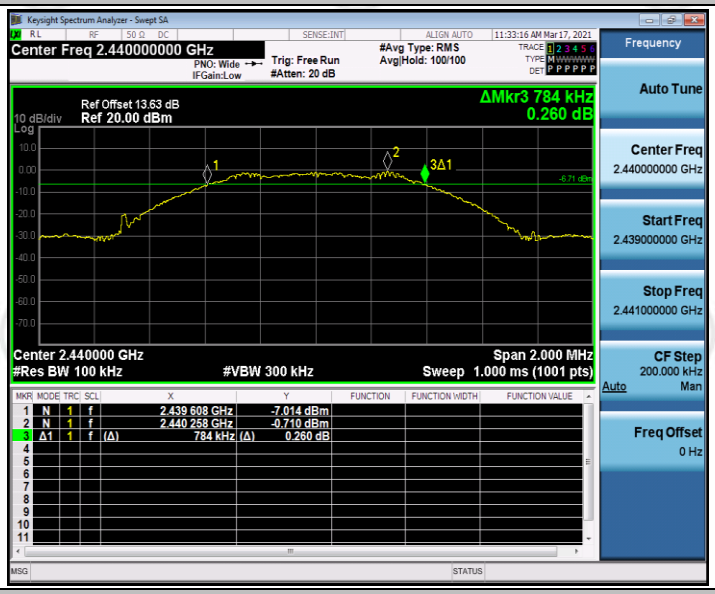
Test Result

Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	0.782	2401.612	2402.394	0.5	PASS
		2440	0.784	2439.608	2440.392	0.5	PASS
		2480	0.784	2479.608	2480.392	0.5	PASS

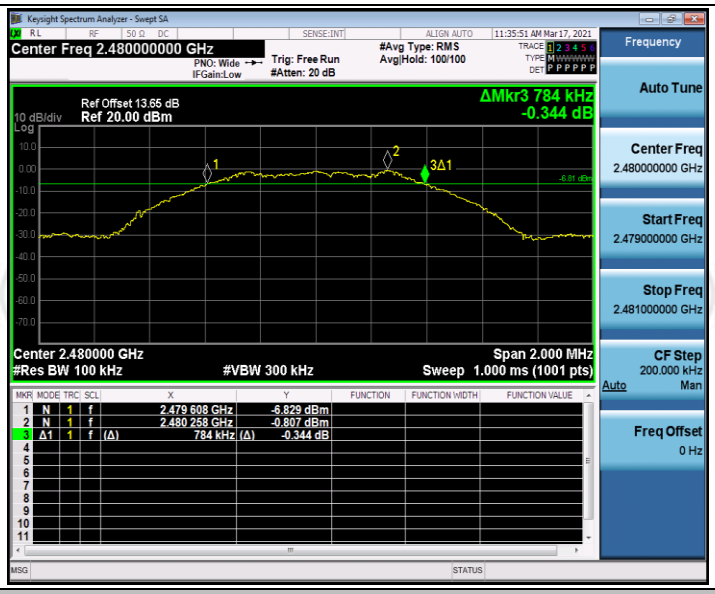
Test Graphs



BLE _Ant1_2402



BLE _Ant1_2440



BLE _Ant1_2480

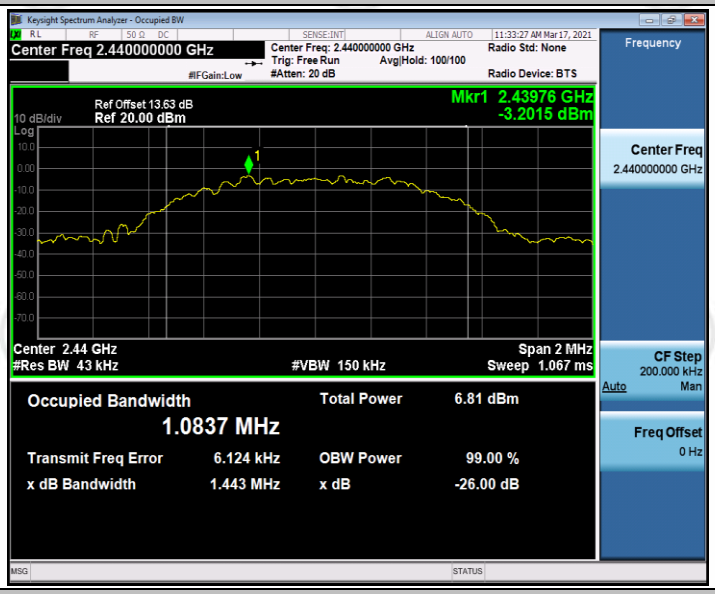
Appendix B: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	1.0794	2401.466	2402.545	---	PASS
		2440	1.0837	2439.464	2440.548	---	PASS
		2480	1.0834	2479.463	2480.547	---	PASS

Test Graphs

BLE _Ant1_2402



BLE _Ant1_2440

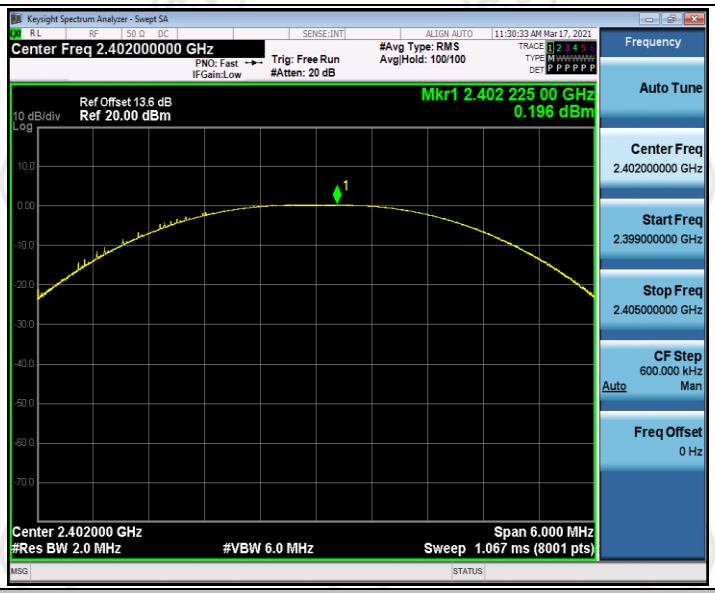
BLE _Ant1_2480

Appendix C: Maximum conducted output power

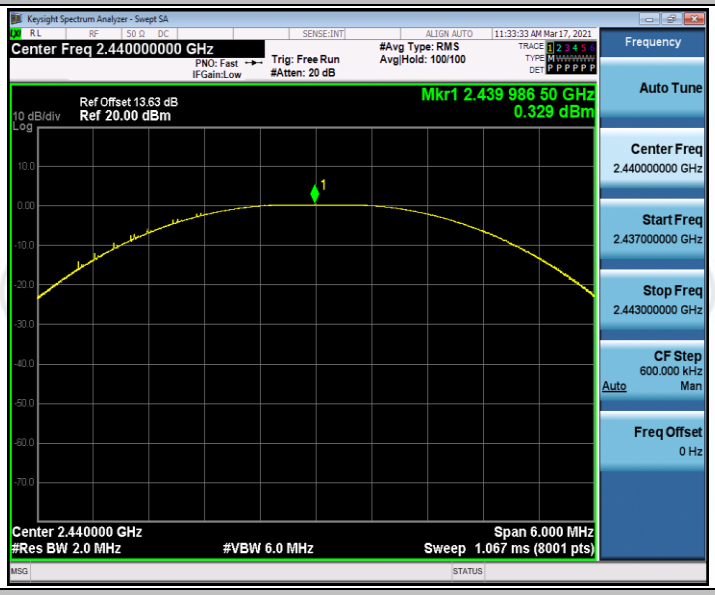
Test Result

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	2402	0.2	<=30	PASS
		2440	0.33	<=30	PASS
		2480	0.21	<=30	PASS

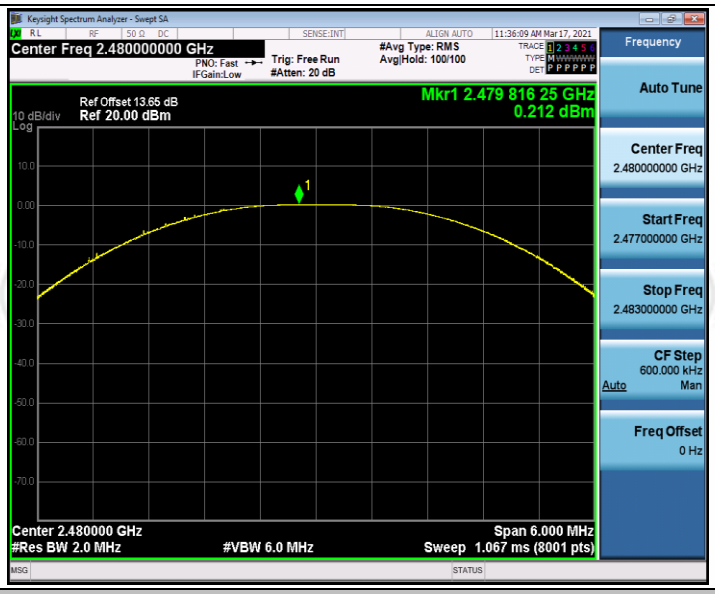
Test Graphs



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	-10.28	<=8	PASS
		2440	-10.21	<=8	PASS
		2480	-10.65	<=8	PASS

Test Graphs

BLE _Ant1_2402

BLE _Ant1_2440

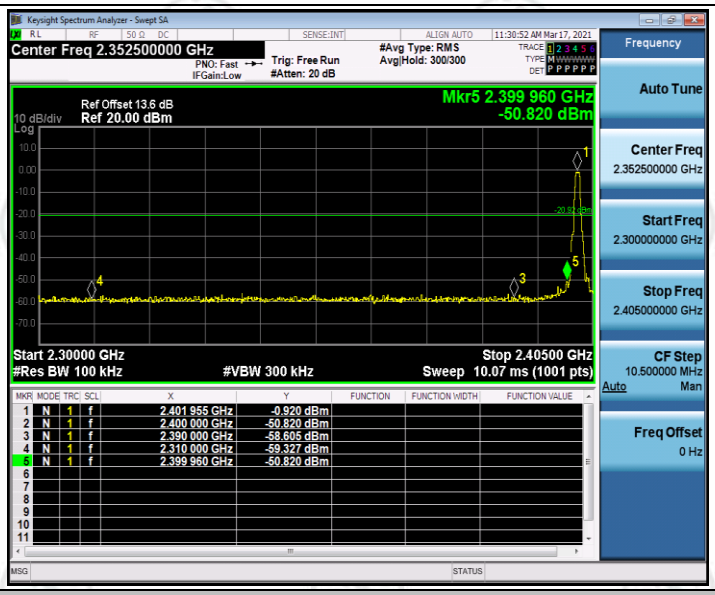
BLE _Ant1_2480

Appendix E: Band edge measurements

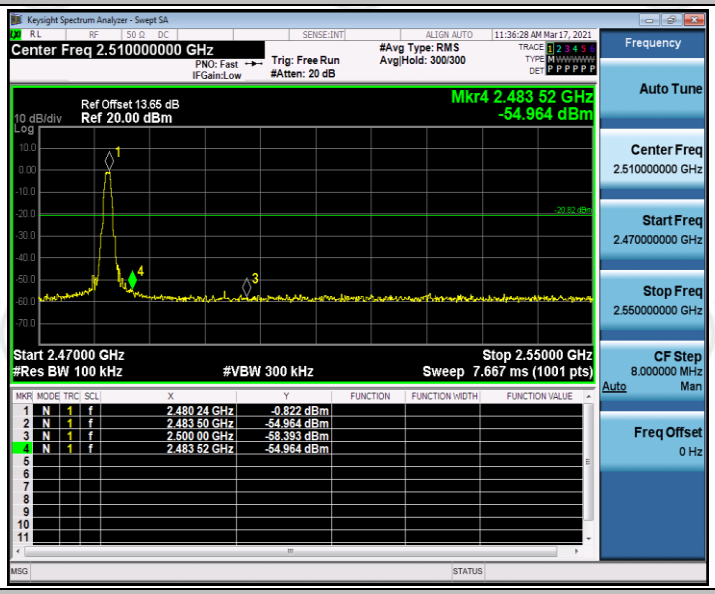
Test Result

Test Mode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	Low	2402	-0.92	-50.82	<=-20.92	PASS
		High	2480	-0.82	-54.96	<=-20.82	PASS

Test Graphs



BLE _Ant1_Low_2402



BLE _Ant1_High_2480

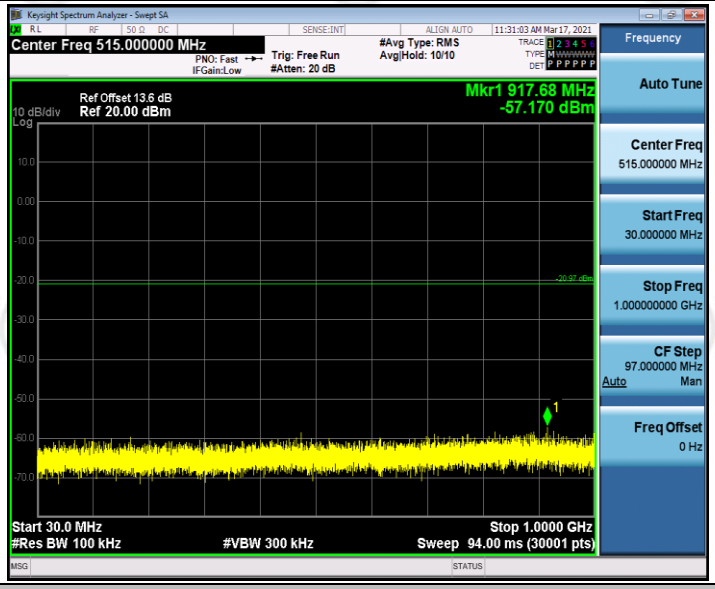
Appendix F: Conducted Spurious Emission

Test Result

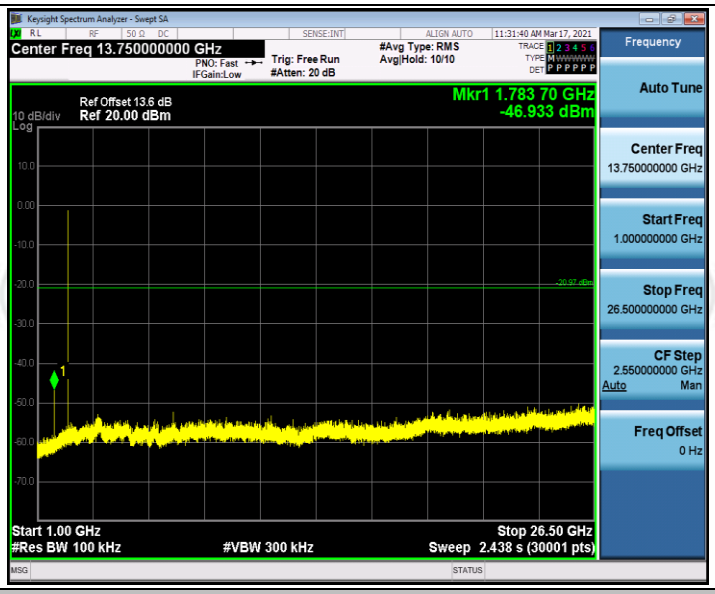
Test Mode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	2402	Reference	-0.97	-0.97	---	PASS
			30~1000	30~1000	-57.17	<=-20.968	PASS
			1000~26500	1000~26500	-46.933	<=-20.968	PASS
		2440	Reference	-0.69	-0.69	---	PASS
			30~1000	30~1000	-58.608	<=-20.693	PASS
			1000~26500	1000~26500	-50.496	<=-20.693	PASS
		2480	Reference	-0.86	-0.86	---	PASS
			30~1000	30~1000	-56.56	<=-20.855	PASS
			1000~26500	1000~26500	-49.403	<=-20.855	PASS

Test Graphs

BLE _Ant1_2402_0~Reference

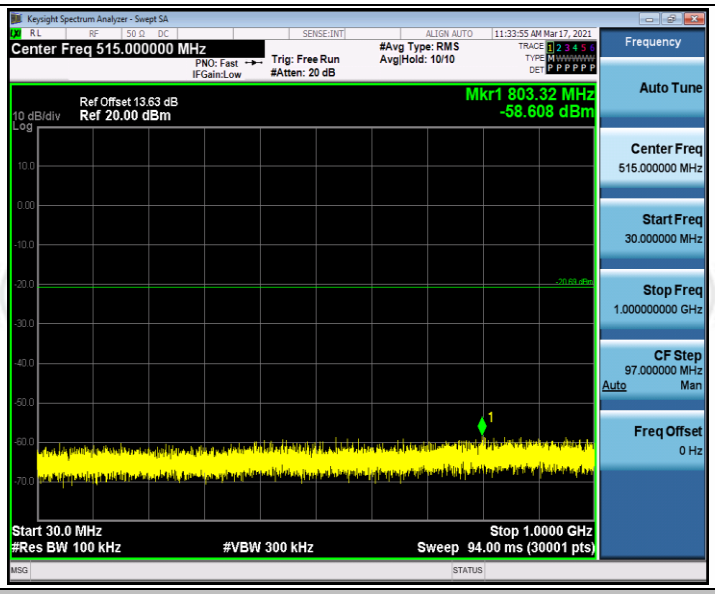


BLE _Ant1_2402_30~1000

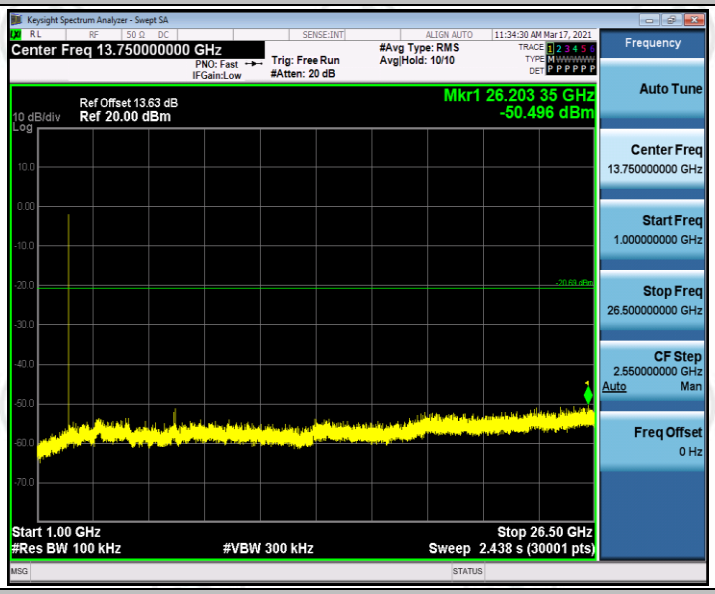


BLE _Ant1_2402_1000~26500

BLE _Ant1_2440_0~Reference

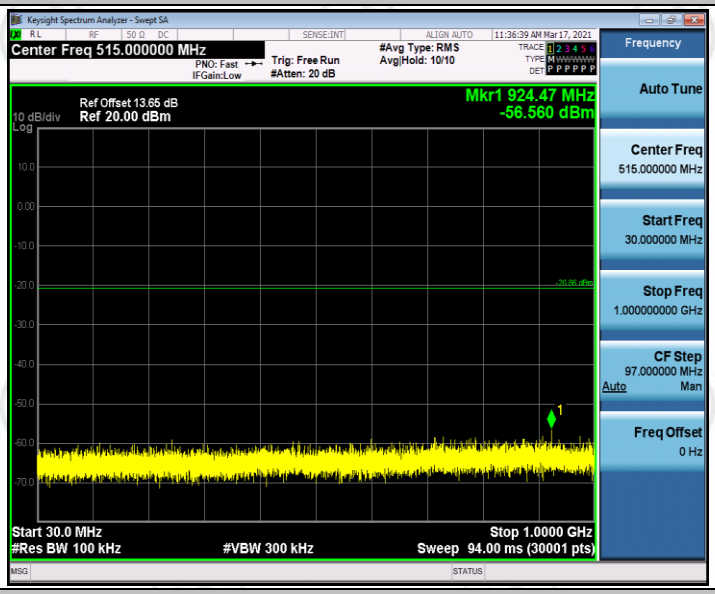


BLE _Ant1_2440_30~1000

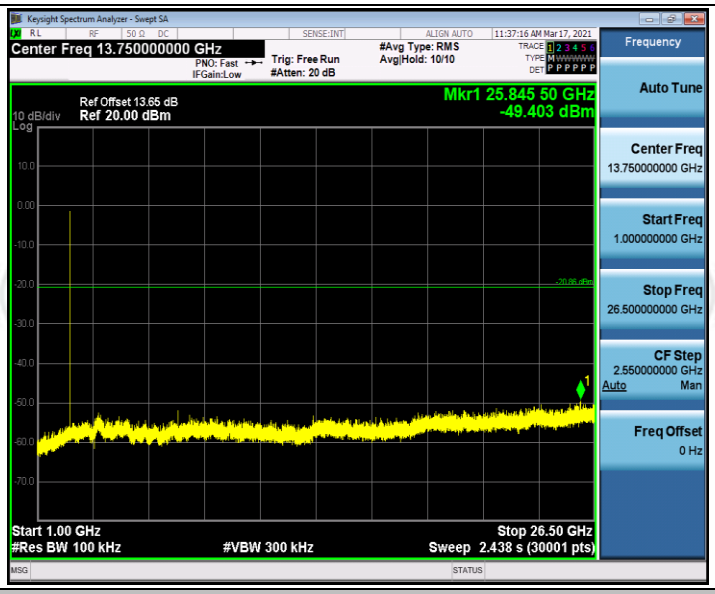


BLE _Ant1_2440_1000~26500

BLE _Ant1_2480_0~Reference



BLE _Ant1_2480_30~1000



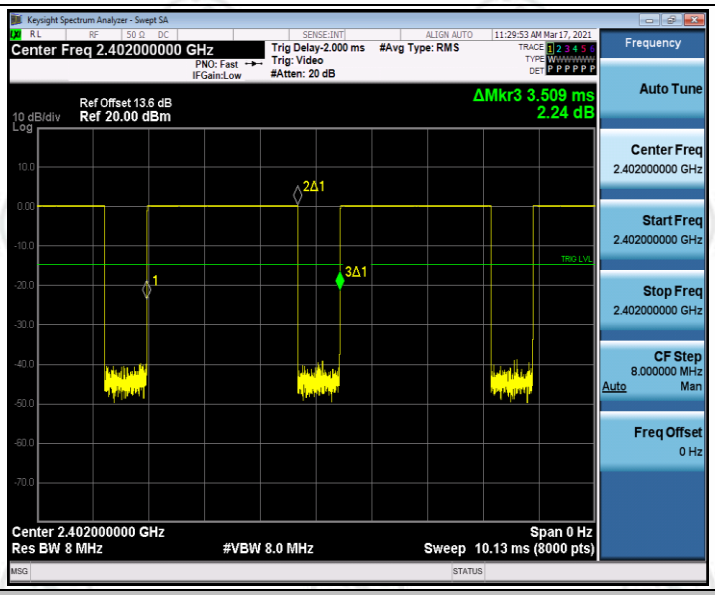
BLE _Ant1_2480_1000~26500

Appendix G: Duty Cycle

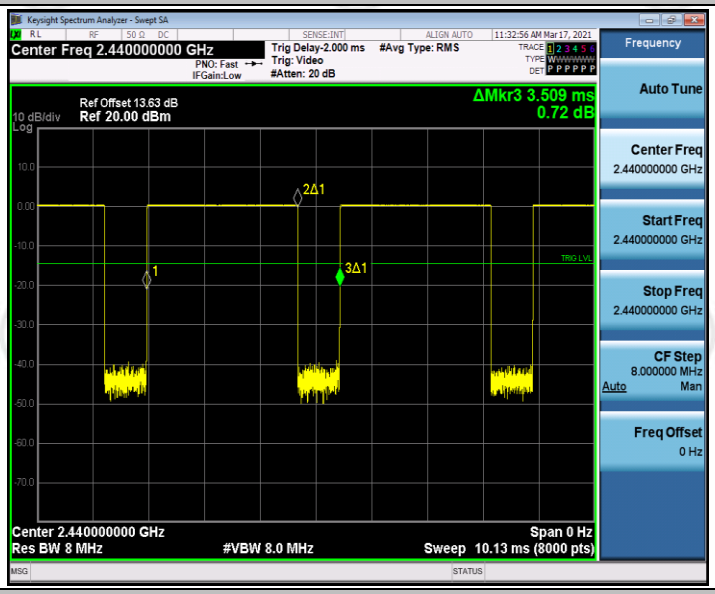
Test Result

Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
BLE	Ant1	2402	2.74	3.51	78.19	---	PASS
		2440	2.74	3.51	78.19	---	PASS
		2480	2.74	3.51	78.19	---	PASS

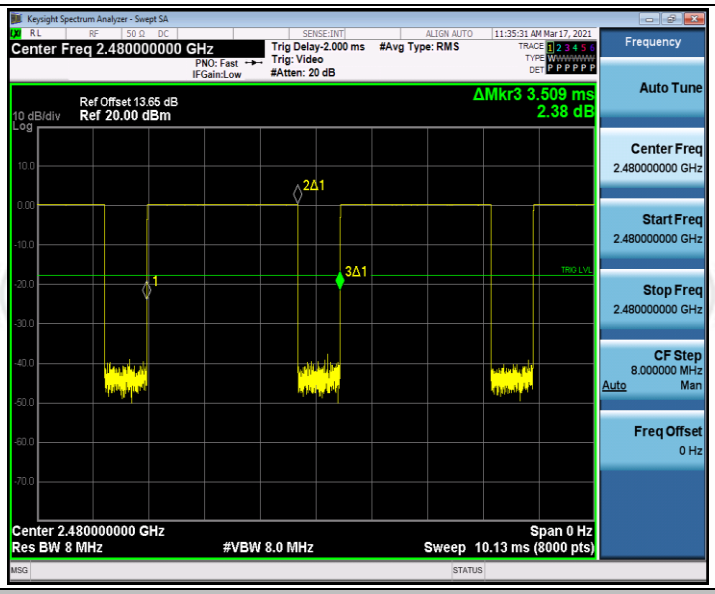
Test Graphs



BLE _Ant1_2402



BLE _Ant1_2440



BLE _Ant1_2480

*** End of Report ***