Appendix: Bluetooth LE

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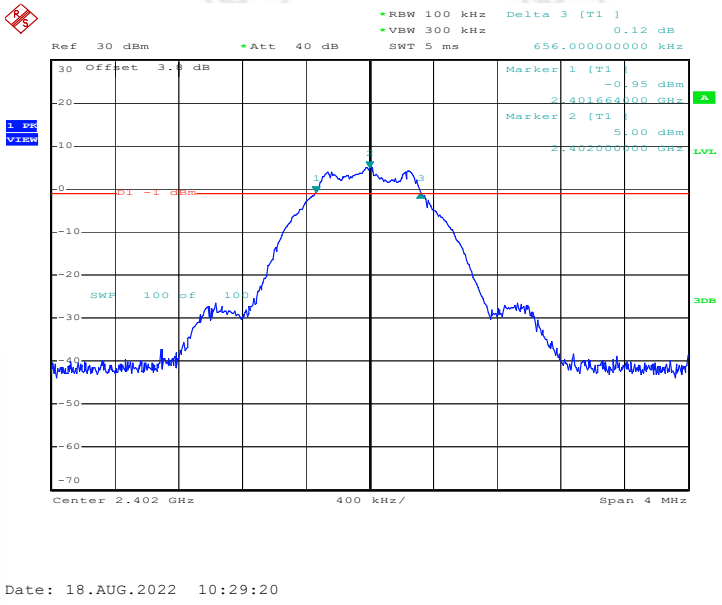
Appendix A: DTS Bandwidth

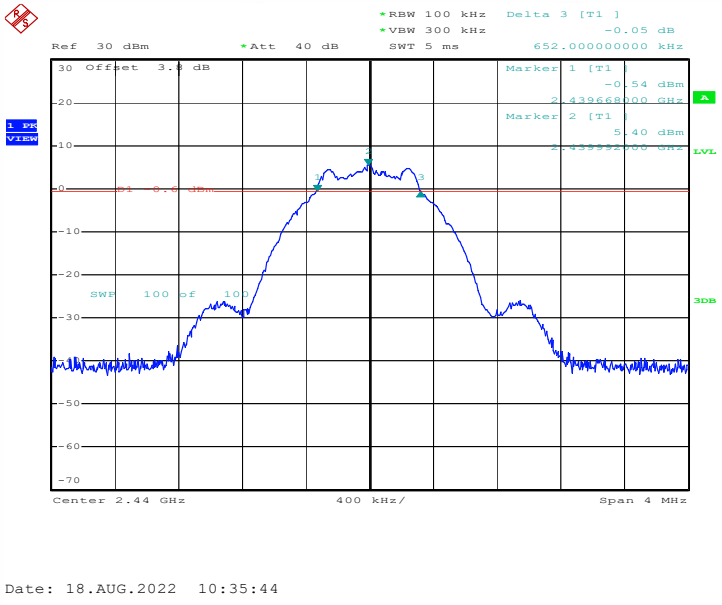
Test Result

Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.66	2401.66	2402.32	0.5	PASS
		2440	0.65	2439.67	2440.32	0.5	PASS
		2480	0.64	2479.67	2480.31	0.5	PASS

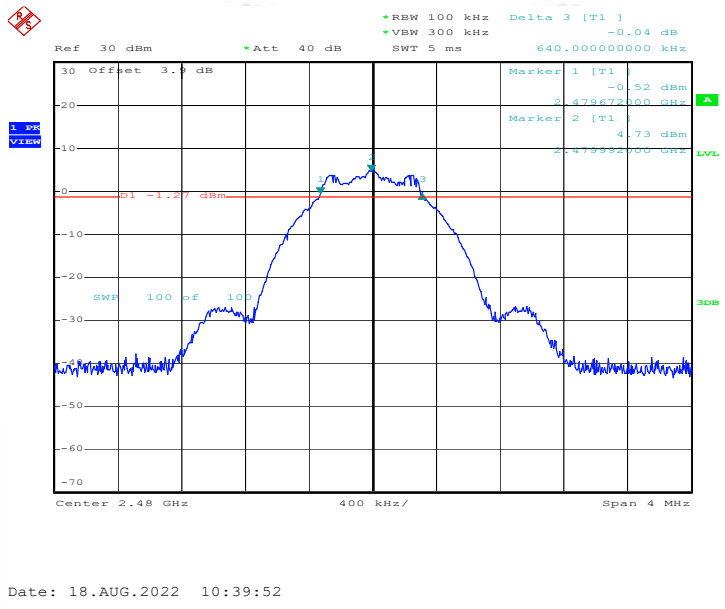
Test Graphs



BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



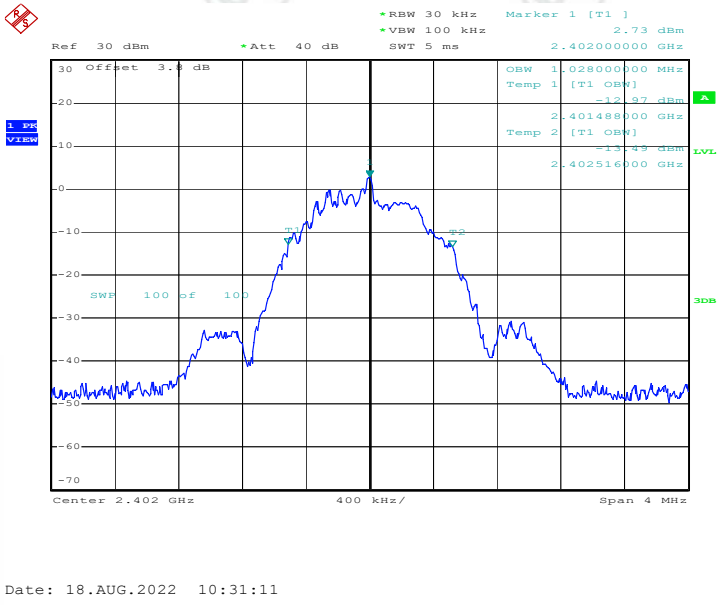
BLE_1M_Ant1_2480

Appendix B: Occupied Channel Bandwidth

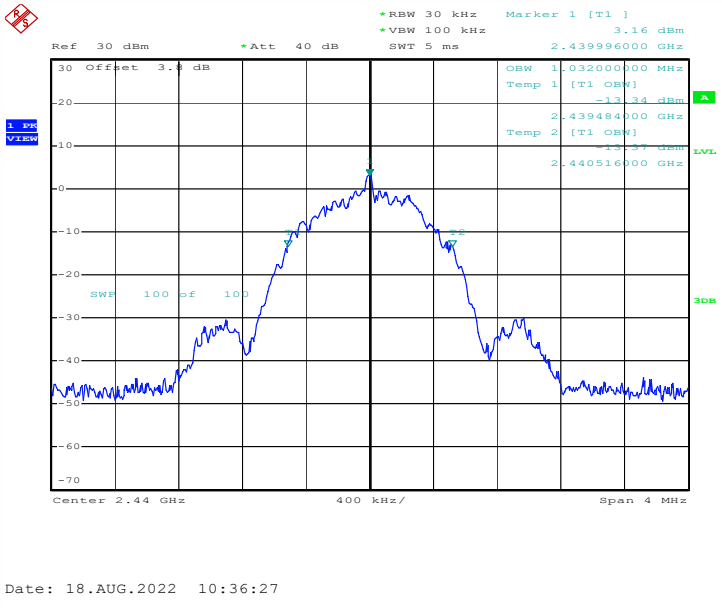
Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.028	0.000	0.000	---	---
		2440	1.032	0.000	0.000	---	---
		2480	1.036	0.000	0.000	---	---

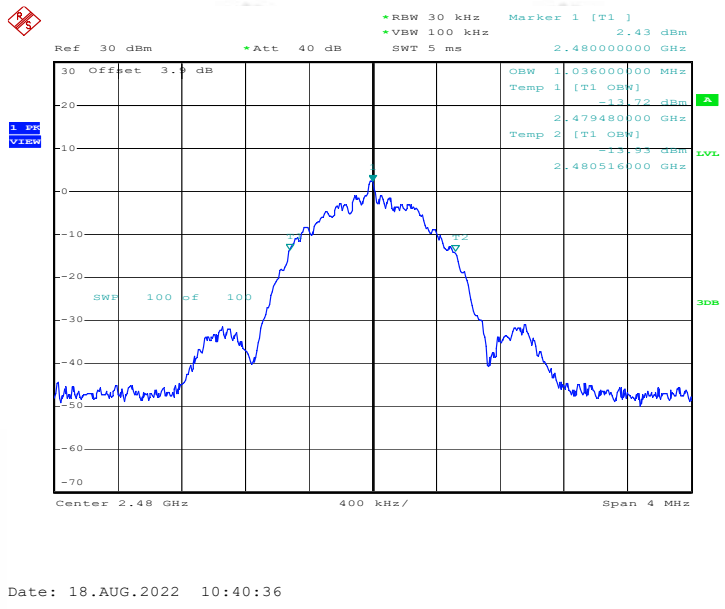
Test Graphs



BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



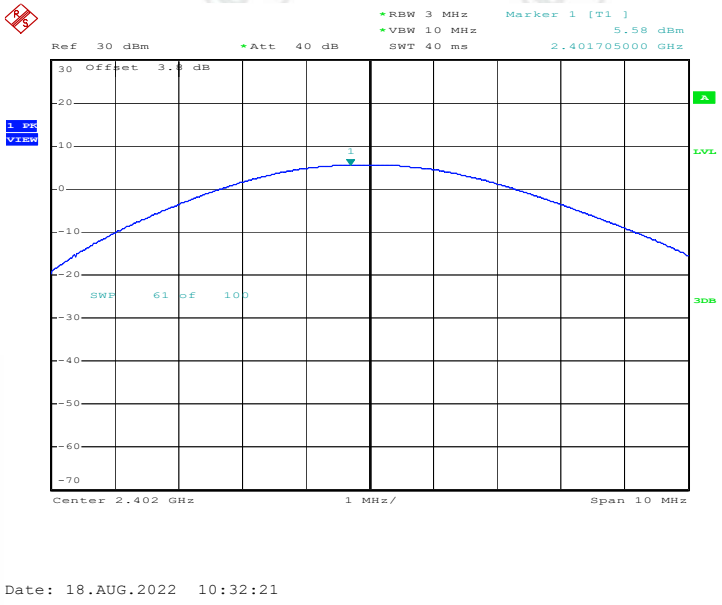
BLE_1M_Ant1_2480

Appendix C: Maximum conducted output power

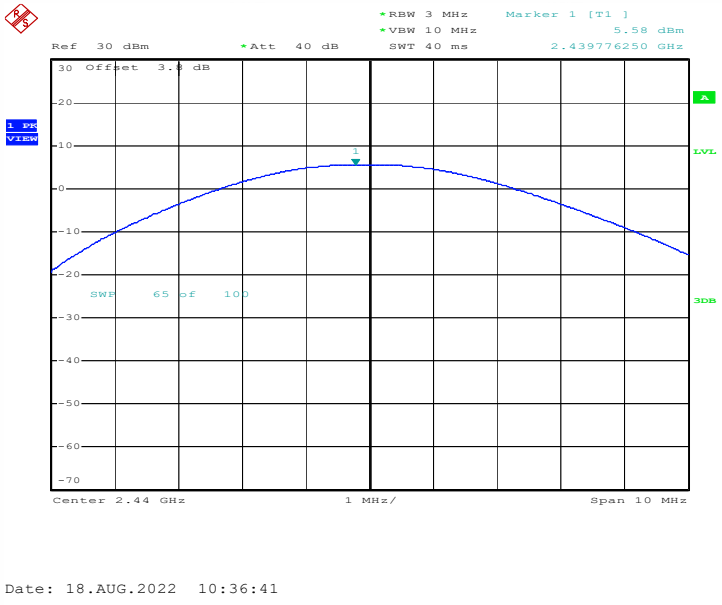
Test Result

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	**5.58**	≤30	PASS
		2440	**5.58**	≤30	PASS
		2480	4.88	≤30	PASS

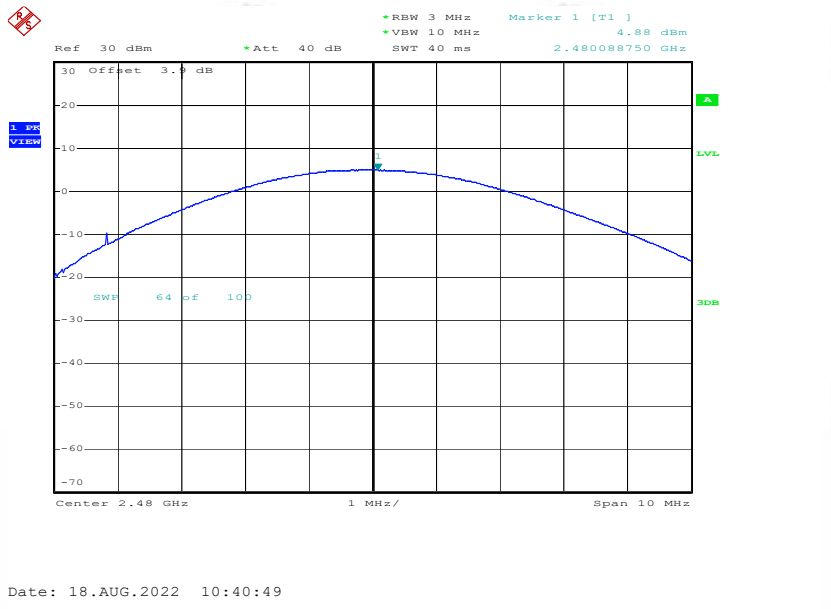
Test Graphs



BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



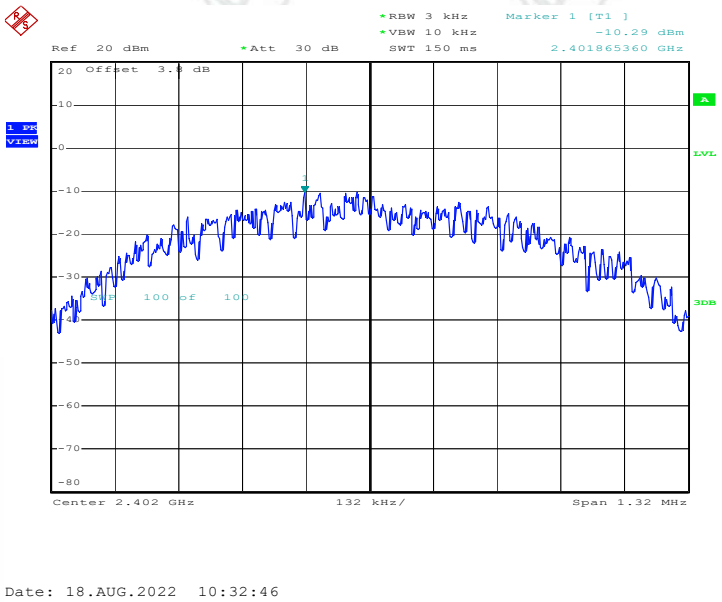
BLE_1M_Ant1_2480

Appendix D: Maximum power spectral density

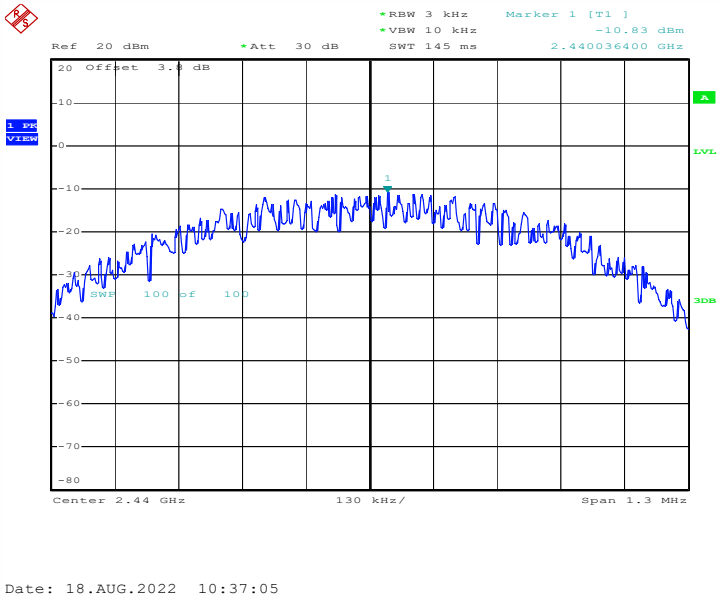
Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-10.29	≤8.00	PASS
		2440	-10.83	≤8.00	PASS
		2480	-10.33	≤8.00	PASS

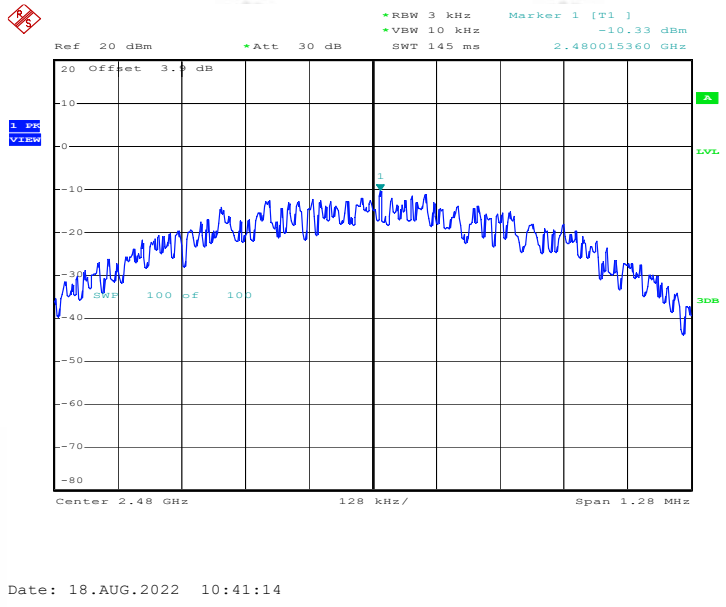
Test Graphs



BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



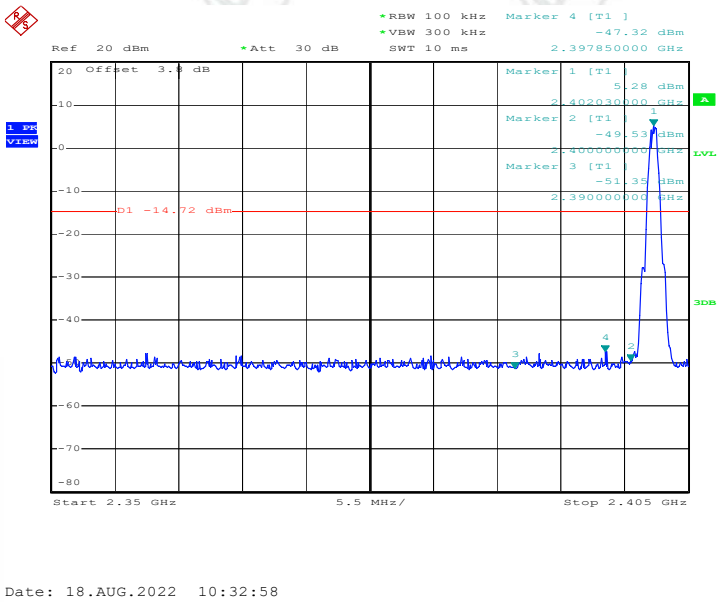
BLE_1M_Ant1_2480

Appendix E: Band edge measurements

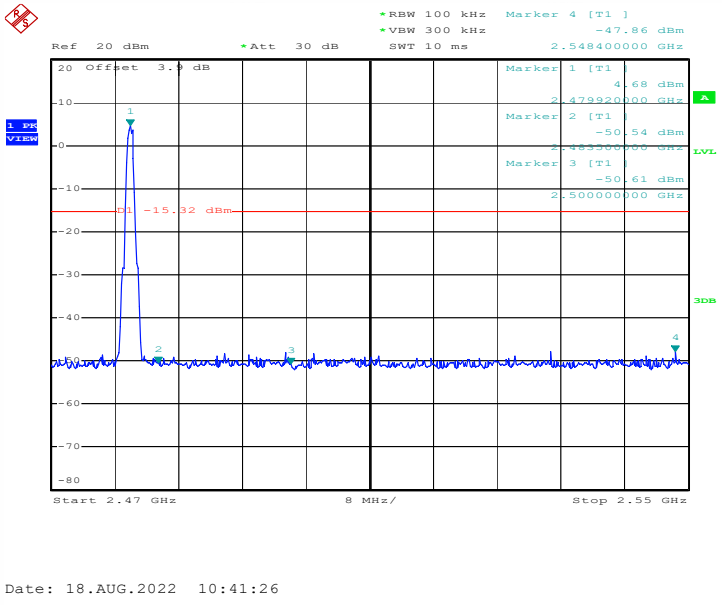
Test Result

Test Mode	Antenna	ChName	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	5.28	-47.32	≤-14.72	PASS
		High	2480	4.68	-47.86	≤-15.32	PASS

Test Graphs



BLE_1M_Ant1_Low_2402



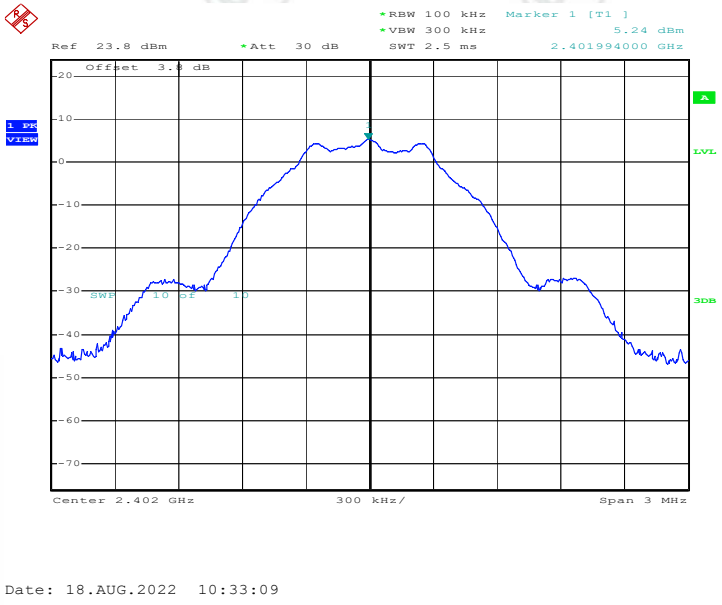
BLE_1M_Ant1_High_2480

Appendix F: Conducted Spurious Emission

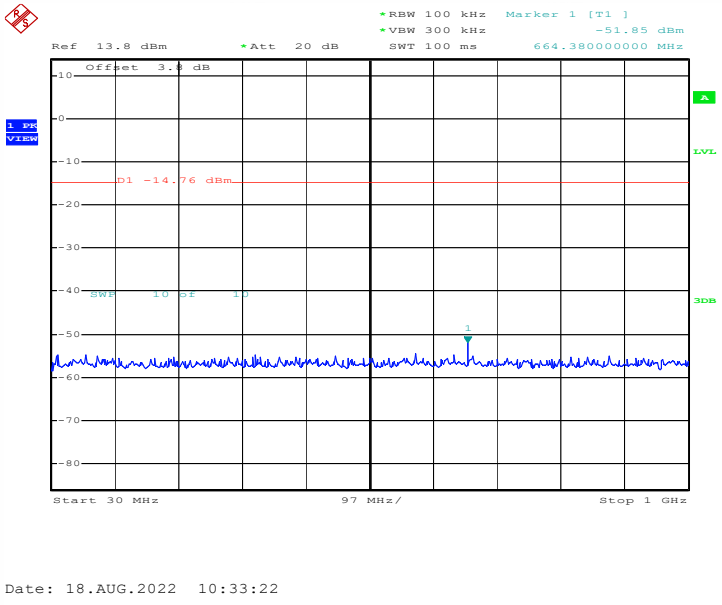
Test Result

Test Mode	Antenna	Frequency [MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	5.24	5.24	---	PASS
			30~1000	5.24	-51.85	≤-14.76	PASS
			1000~26500	5.24	-45.84	≤-14.76	PASS
		2440	Reference	5.33	5.33	---	PASS
			30~1000	5.33	-54.25	≤-14.67	PASS
			1000~26500	5.33	-46.75	≤-14.67	PASS
		2480	Reference	4.61	4.61	---	PASS
			30~1000	4.61	-53.69	≤-15.39	PASS
			1000~26500	4.61	-47.06	≤-15.39	PASS

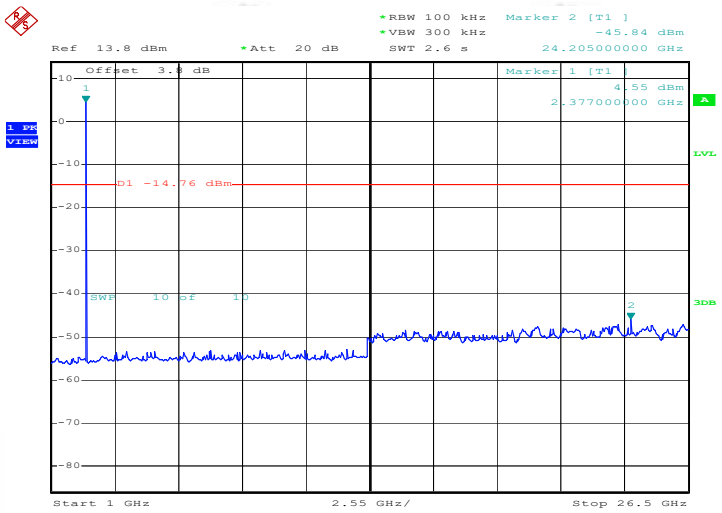
Test Graphs



BLE_1M_Ant1_2402_0~Reference

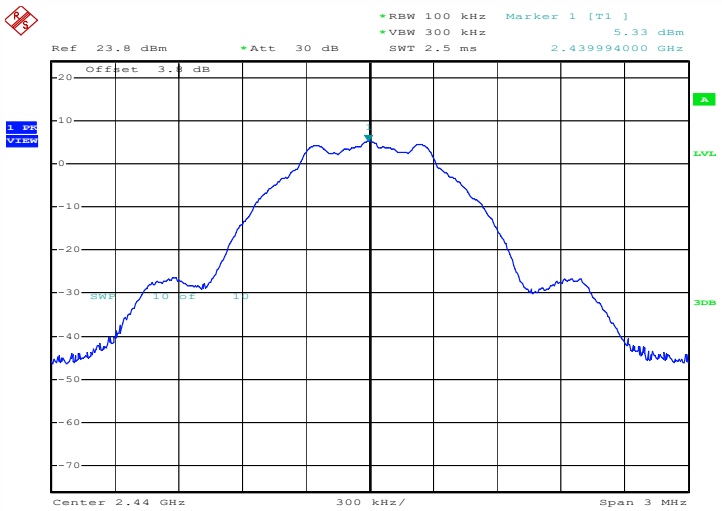


BLE_1M_Ant1_2402_30~1000



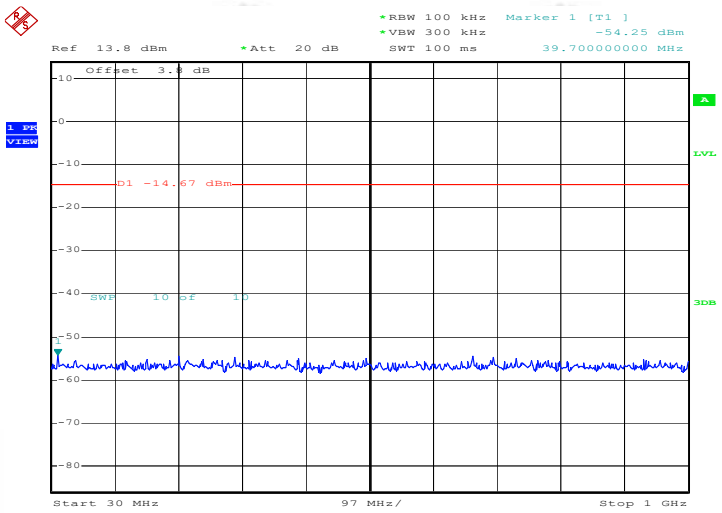
Date: 18.AUG.2022 10:35:07

BLE_1M_Ant1_2402_1000~26500



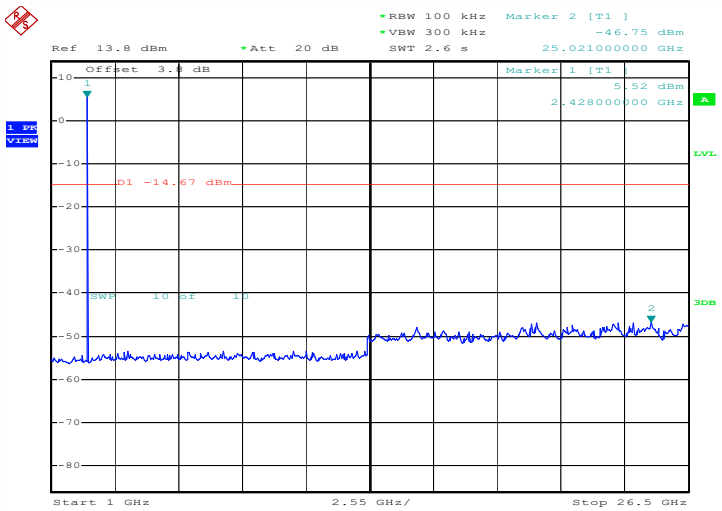
Date: 18.AUG.2022 10:37:16

BLE_1M_Ant1_2440_0~Reference



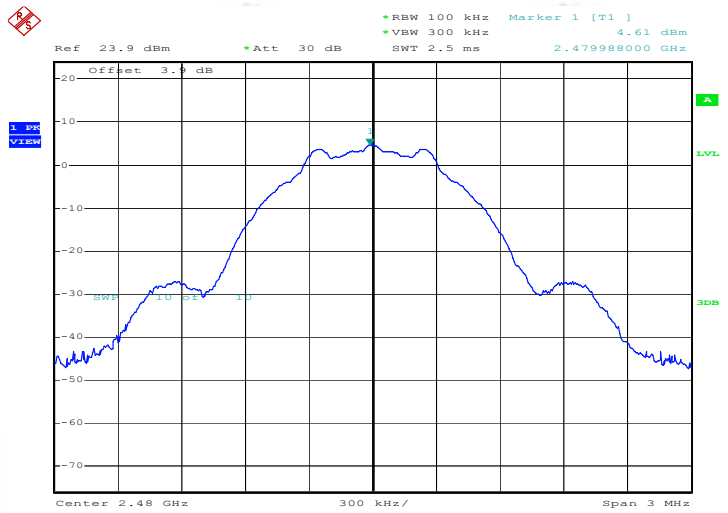
Date: 18.AUG.2022 10:37:29

BLE_1M_Ant1_2440_30~1000

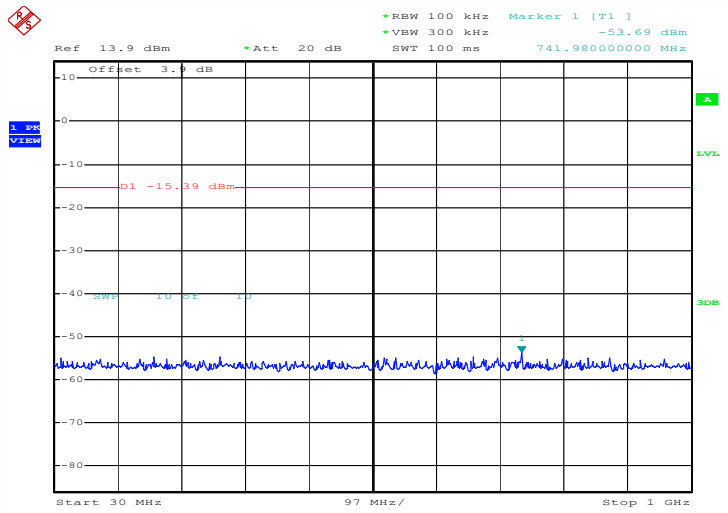


Date: 18.AUG.2022 10:39:14

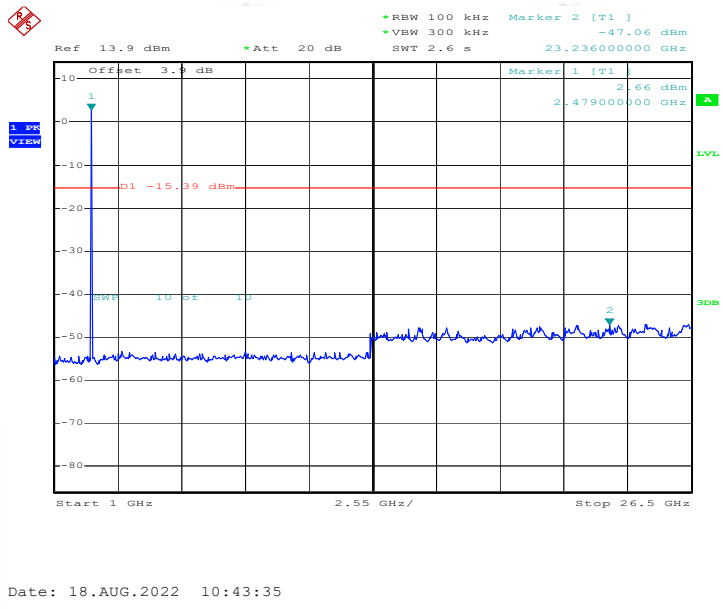
BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



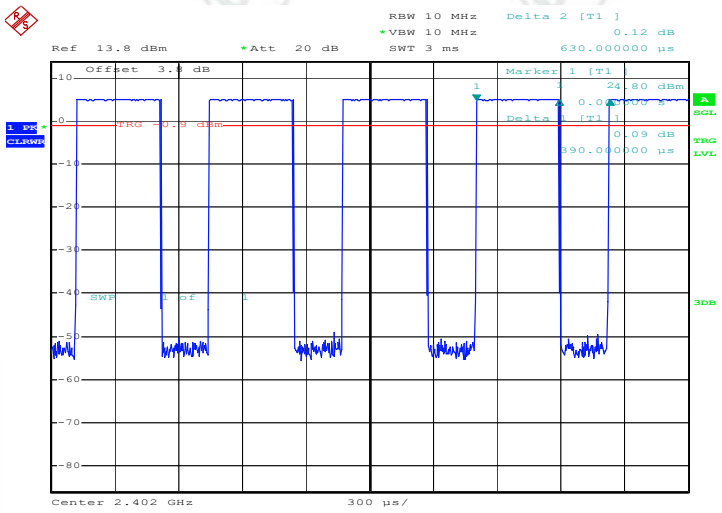
BLE_1M_Ant1_2480_1000~26500

Appendix G: Duty Cycle

Test Result

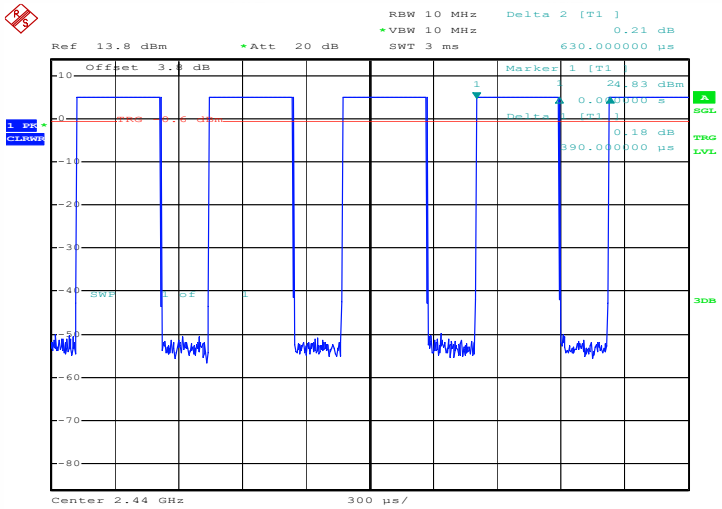
Test Mode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	0.39	0.63	61.90	2.08
		2440	0.39	0.63	61.90	2.08
		2480	0.39	0.63	63.49	2.01

Test Graphs



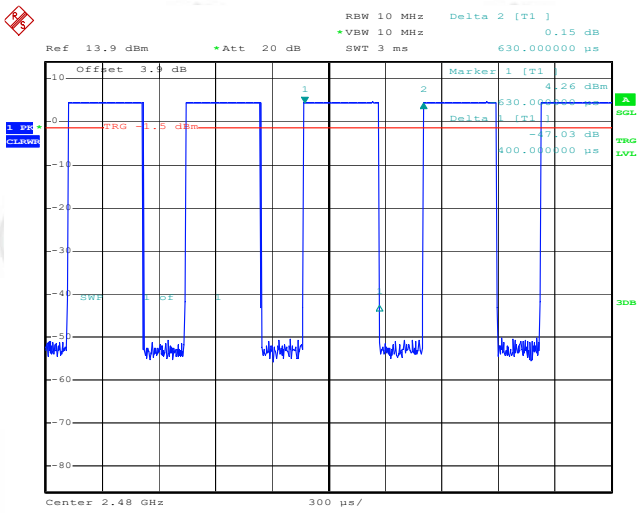
Date: 18.AUG.2022 10:29:09

BLE_1M_Ant1_2402



Date: 18.AUG.2022 10:35:33

BLE_1M_Ant1_2440



Date: 18.AUG.2022 10:47:14

BLE_1M_Ant1_2480

*** End of Report ***