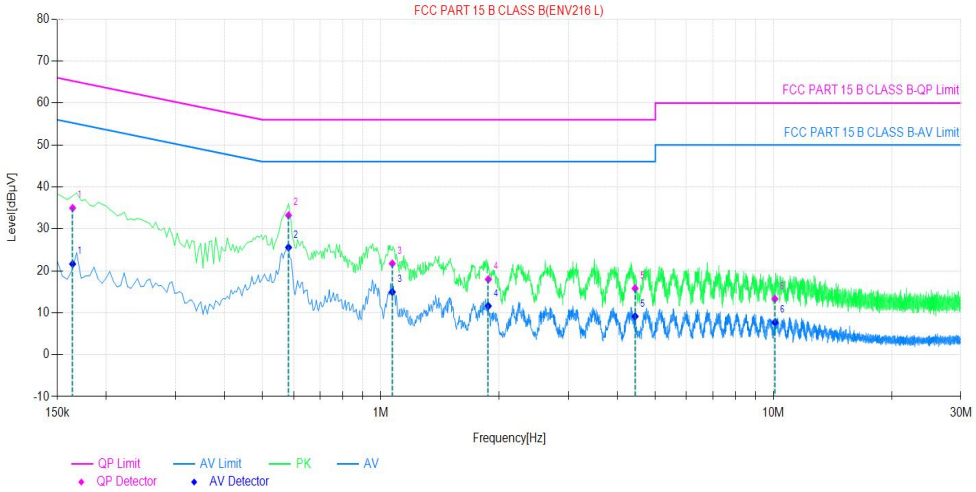
Measurement Data

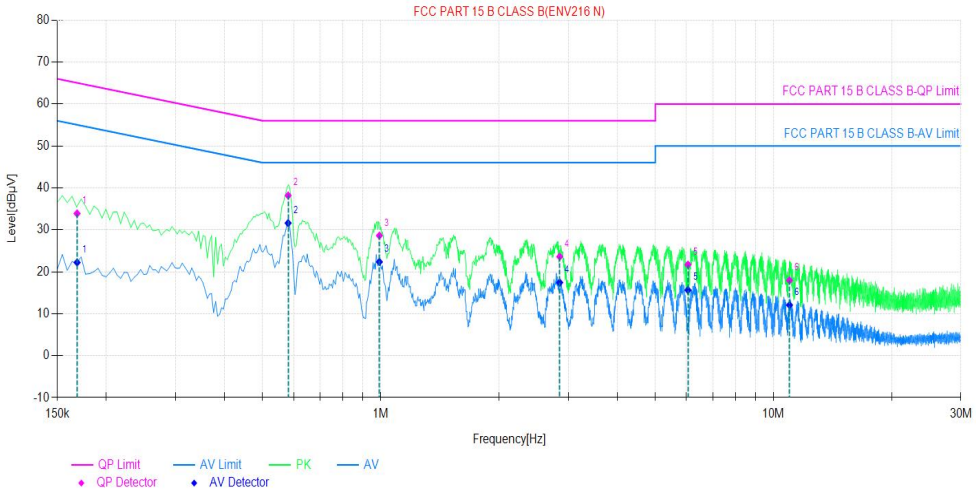
An initial pre-scan was performed on the live and neutral lines with peak detector.
Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live Line:



NO.	Freq. [MHz]	Correct Factor [dB]	QP Reading Level	QP Result Level	QP Limit [dBµV]	QP Margin [dB]	AV Reading Level	AV Result Level	AV Limit [dBµV]	AV Margin [dB]
1	0.16	9.90	25.06	34.96	65.26	30.30	11.71	21.61	55.26	33.65
2	0.58	9.83	23.39	33.22	56.00	22.78	15.73	25.56	46.00	20.44
3	1.06	9.72	12	21.72	56.00	34.28	5.21	14.93	46.00	31.07
4	1.87	9.73	8.22	17.95	56.00	38.05	1.87	11.60	46.00	34.40
5	4.44	9.77	6.02	15.79	56.00	40.21	-0.65	9.12	46.00	36.88
6	10.08	9.86	3.44	13.30	60.00	46.70	-2.2	7.66	50.00	42.34

Neutral Line:



NO.	Freq. [MHz]	Correct Factor [dB]	QP Reading Level	QP Result Level	QP Limit [dBµV]	QP Margin [dB]	AV Reading Level	AV Result Level	AV Limit [dBµV]	AV Margin [dB]
1	0.16	9.82	24.07	33.89	65.03	31.14	12.39	22.21	55.03	32.82
2	0.58	9.77	28.41	38.18	56.00	17.82	21.84	31.61	46.00	14.39
3	0.99	9.69	18.92	28.61	56.00	27.39	12.66	22.35	46.00	23.65
4	2.85	9.86	13.74	23.60	56.00	32.40	7.57	17.43	46.00	28.57
5	6.05	9.98	11.7	21.68	60.00	38.32	5.66	15.64	50.00	34.36
6	10.98	9.82	8.12	17.94	60.00	42.06	2.24	12.06	50.00	37.94

Remark:

1. The BLE 1M is the worse case.
2. The following Quasi-Peak and Average measurements were performed on the EUT:
3. The Measurement (Result Level) is calculated by Reading Level adding the Correct Factor(maybe including LISN Factor and the Cable Factor etc.), The basic equation is as follows:

Result Level= Reading Level + Correct Factor(including LISN Factor, Cable Factor etc.)

4 Appendix

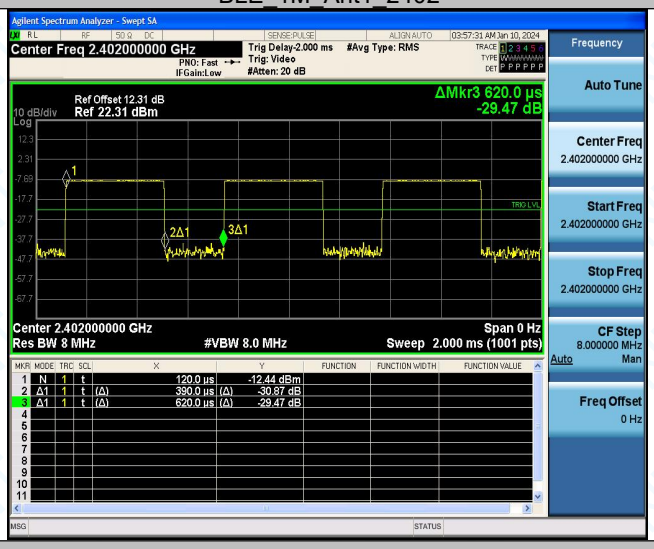
Appendix A: Duty Cycle

Test Result

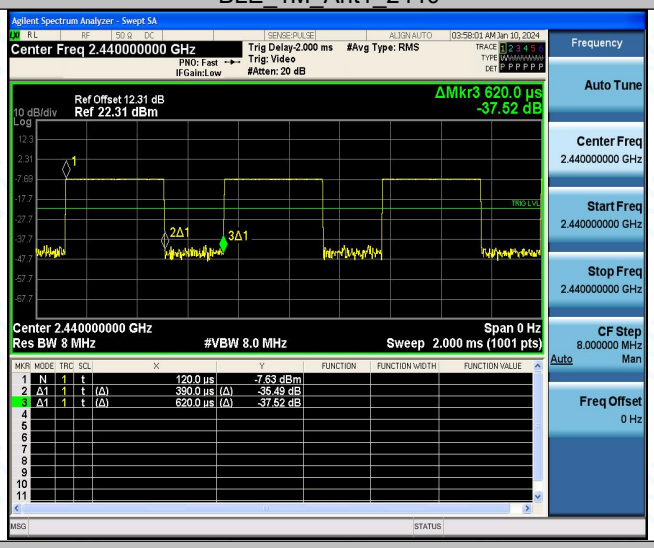
Test Mode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor
BLE_1M	Ant1	2402	0.39	0.62	62.90	2.01
		2440	0.39	0.62	62.90	2.01
		2480	0.39	0.62	62.90	2.01

Test Graphs

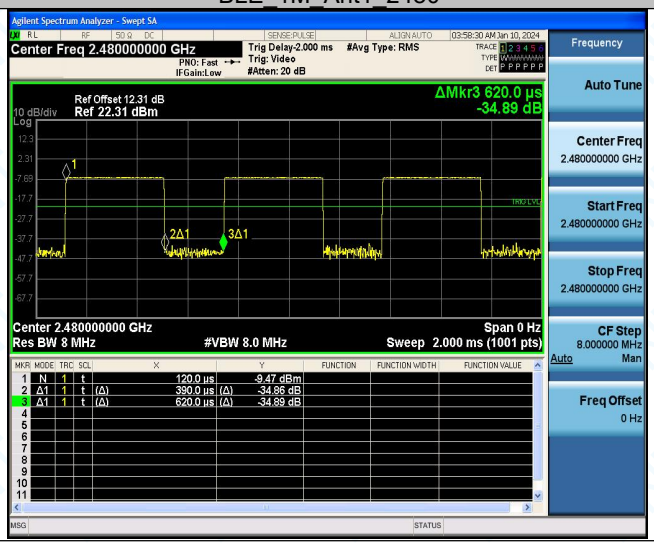
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



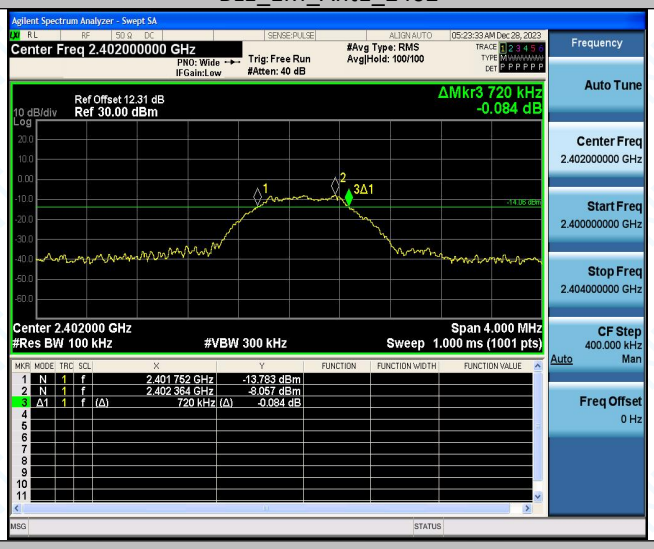
Appendix B: DTS Bandwidth

Test Result

Test Mode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.720	2401.752	2402.472	0.5	PASS
		2440	0.720	2439.748	2440.468	0.5	PASS
		2480	0.768	2479.736	2480.504	0.5	PASS

Test Graphs

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440

BLE_1M_Ant1_2480

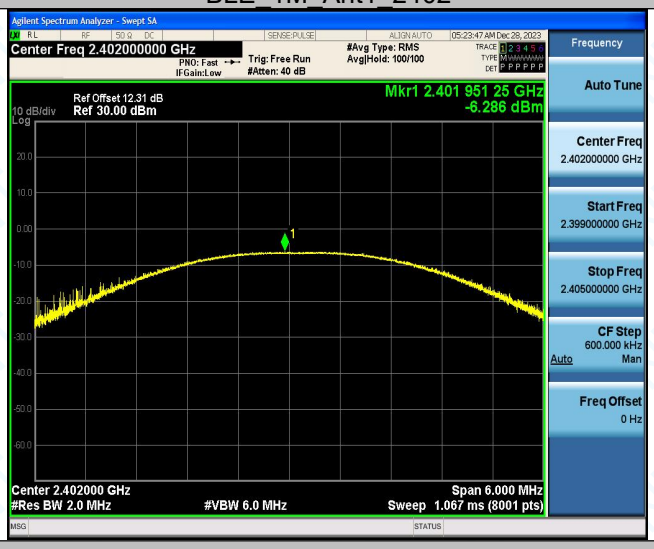
Appendix C: Maximum conducted output power

Test Result

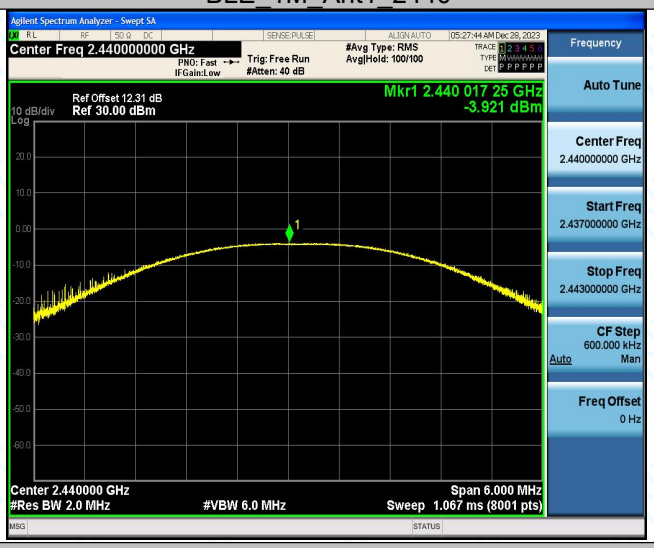
Test Mode	Antenna	Freq(MHz)	Power [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	2402	-6.29	≤30	PASS
		2440	-3.92	≤30	PASS
		2480	-3.09	≤30	PASS

Test Graphs

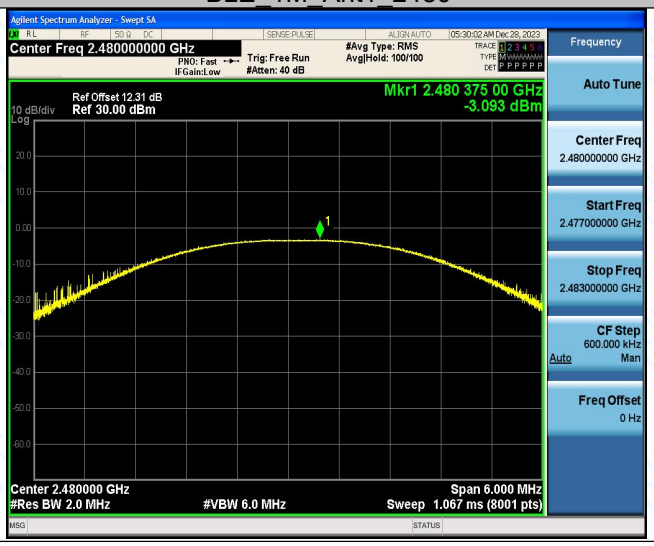
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



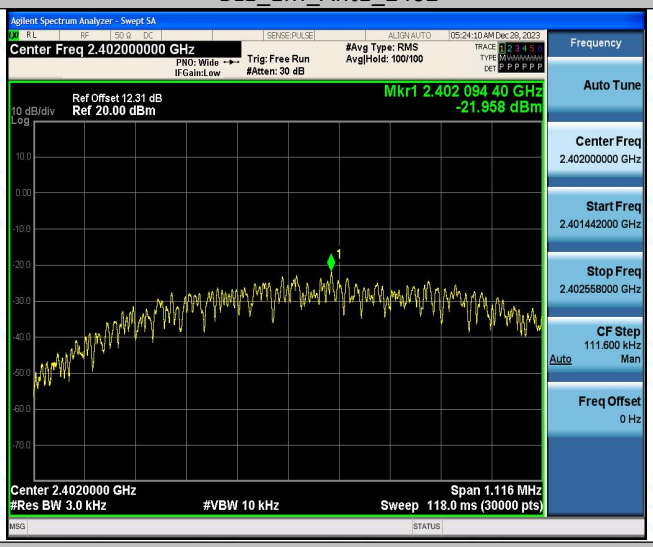
Appendix D: Maximum power spectral density

Test Result

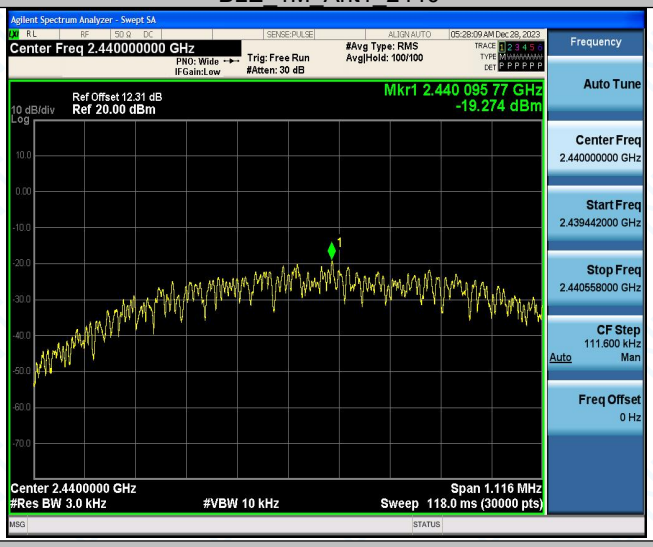
Test Mode	Antenna	Freq(MHz)	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-21.96	≤8.00	PASS
		2440	-19.27	≤8.00	PASS
		2480	-18.51	≤8.00	PASS

Test Graphs

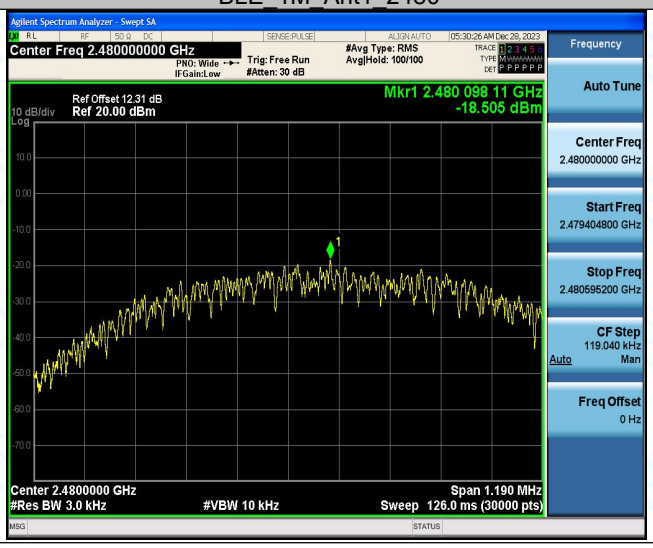
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



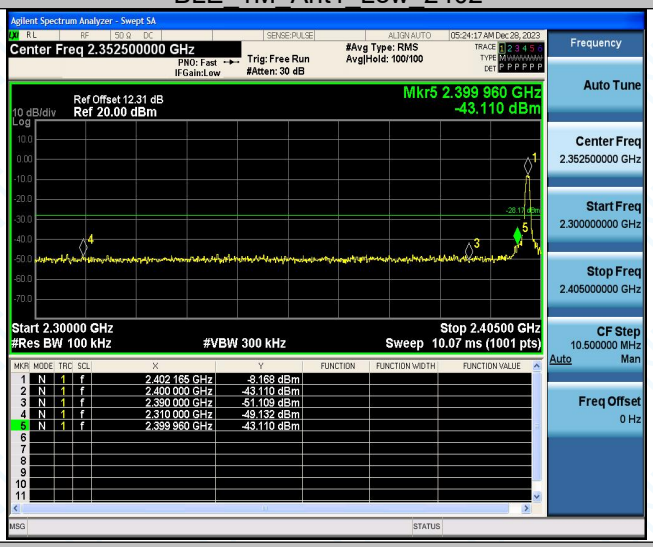
Appendix E: Band edge measurements

Test Result

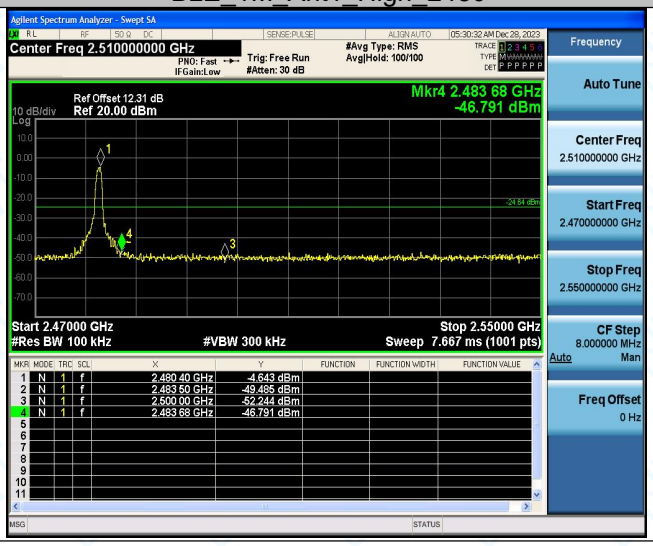
Test Mode	Antenna	ChName	Freq (MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-8.17	-43.11	≤-28.17	PASS
		High	2480	-4.64	-46.79	≤-24.64	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480



Appendix F: Conducted Spurious Emission

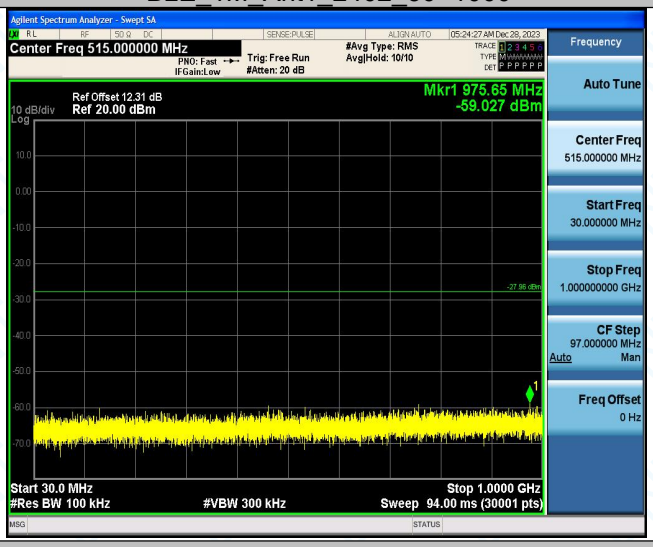
Test Result

Test Mode	Antenna	Freq(MHz)	Freq Range [Mhz]	Ref Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-7.96	-7.96	---	PASS
			30~1000	-7.96	-59.03	≤-27.96	PASS
			1000~26500	-7.96	-47.48	≤-27.96	PASS
		2440	Reference	-5.32	-5.32	---	PASS
			30~1000	-5.32	-58.75	≤-25.32	PASS
			1000~26500	-5.32	-47.71	≤-25.32	PASS
		2480	Reference	-4.63	-4.63	---	PASS
			30~1000	-4.63	-59.48	≤-24.63	PASS
			1000~26500	-4.63	-47.14	≤-24.63	PASS

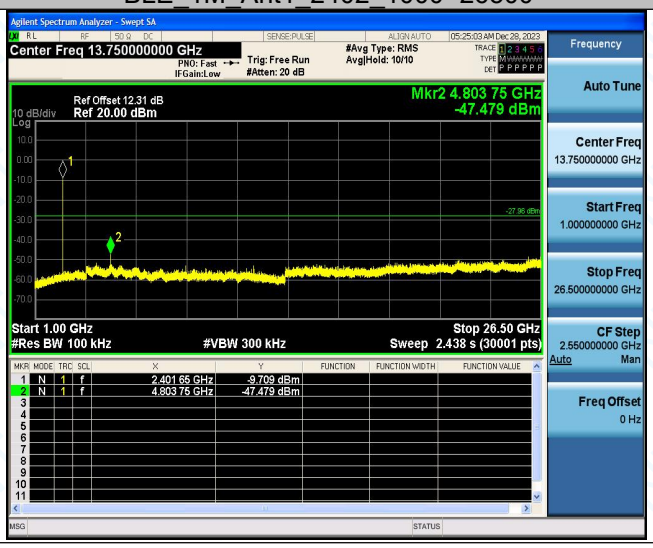
Test Graphs

BLE_1M_Ant1_2402_0~Reference

BLE_1M_Ant1_2402_30~1000

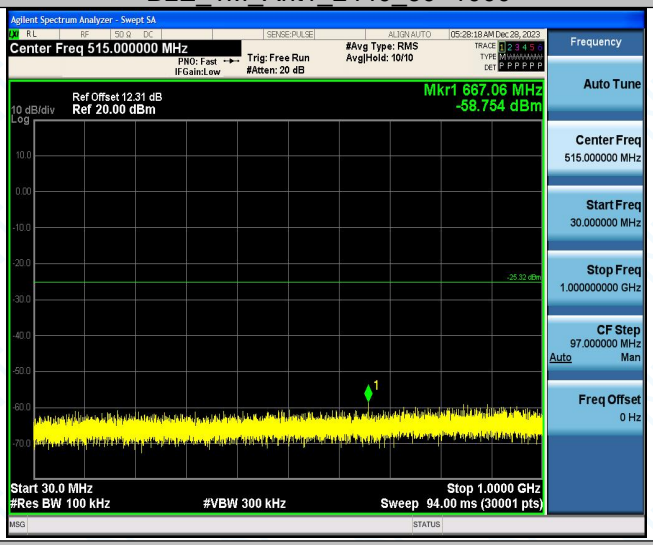


BLE_1M_Ant1_2402_1000~26500

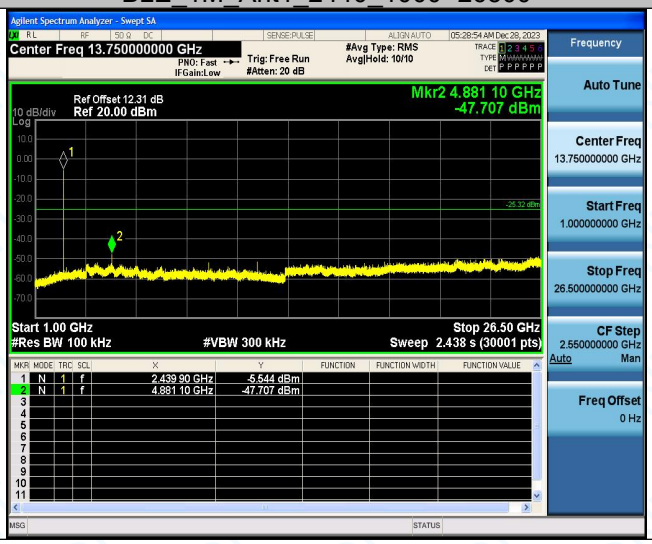


BLE_1M_Ant1_2440_0~Reference

BLE_1M_Ant1_2440_30~1000

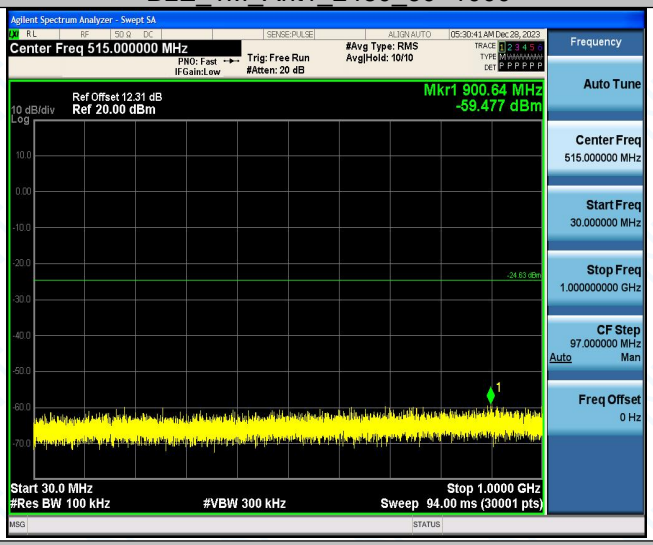


BLE_1M_Ant1_2440_1000~26500

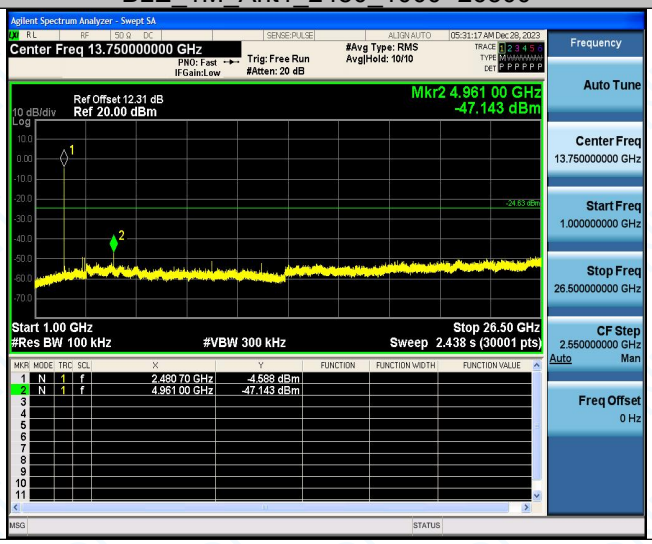


BLE_1M_Ant1_2480_0~Reference

BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



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