

Appendix RF Test Data for BLE

FCC ID : 2BRSK-J02

Company : Fujian Jingxin Micro Technology Co., Ltd

EUT : Smart watch

Model Number : J02

Report No. : CTA25073001001

Reviewed By : Eric Wang

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.65	2401.68	2402.34	0.5	PASS
		2440	0.64	2439.69	2440.33	0.5	PASS
		2480	0.64	2479.69	2480.33	0.5	PASS

BLE_1M_Ant1_2402

Ref 20 dBm Att 30 dB SWT 5 ms Delta 3 [T1] -0.13 dB
*RBW 100 kHz *VBW 300 kHz

20 Offset 10.5 dB

Marker 1 [T1] -1.57 dBm 2.40169000 GHz
Marker 2 [T1] -4.71 dBm 2.400000000 GHz

SWP 100 cf 100

Center 2.402 GHz 400 kHz/ Span 4 MHz

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BLE_1M_Ant1_2440

Ref 20 dBm Att 30 dB SWT 5 ms Delta 3 [T1] 0.09 dB
*RBW 100 kHz *VBW 300 kHz

20 Offset 10.6 dB

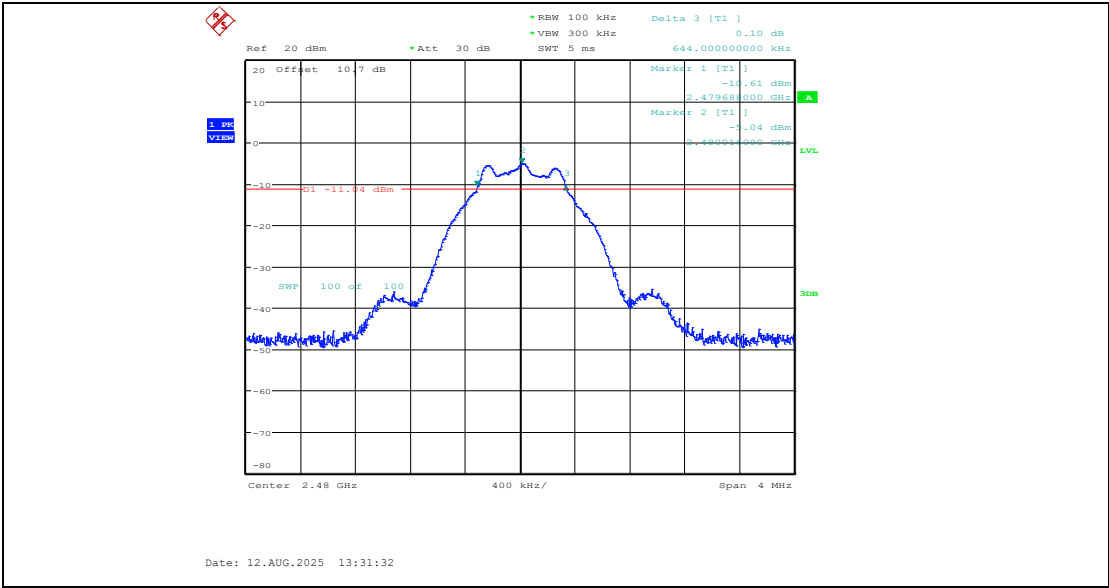
Marker 1 [T1] -10.50 dBm 2.43968000 GHz
Marker 2 [T1] -9.94 dBm 2.440000000 GHz

SWP 100 cf 100

Center 2.44 GHz 400 kHz/ Span 4 MHz

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BLE_1M_Ant1_2480



Appendix B: Occupied Channel Bandwidth

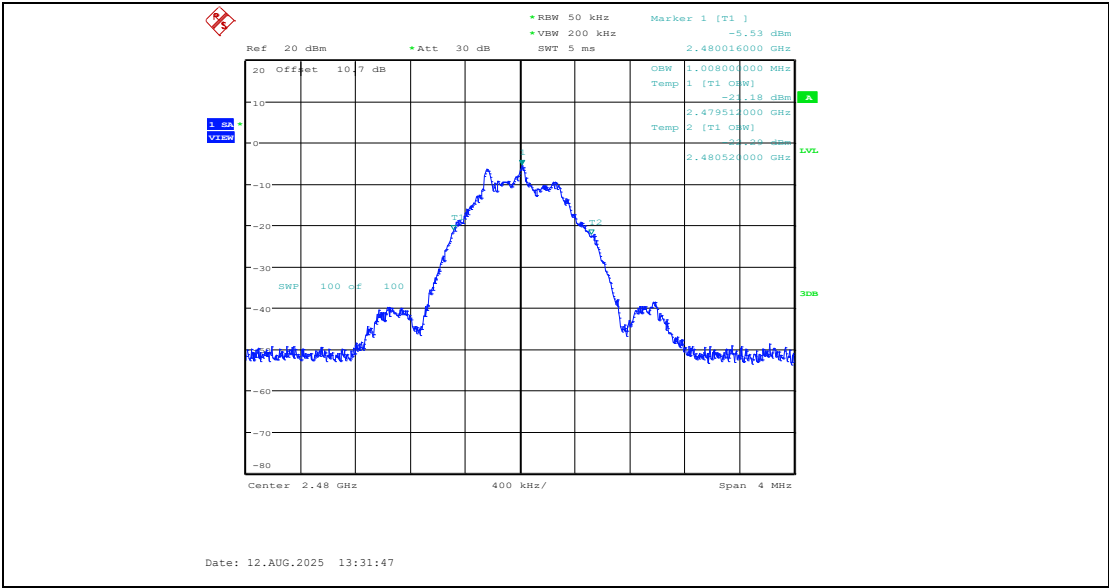
Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.012	2401.5120	2402.5240	---	---
		2440	1.012	2439.5120	2440.5240	---	---
		2480	1.008	2479.5120	2480.5200	---	---

Figure 10 shows the power spectrum of the BLE_1M_Ant1_2402 signal. The plot displays the power spectral density (PSD) in dBm versus frequency in kHz. The center frequency is 2.402 GHz, and the span is 4 MHz. The plot shows a main peak at 2.402 GHz with a power level of approximately -5.20 dBm. The 3dB bandwidth is indicated as 1.012 MHz. The plot also shows the 1dB and 3dB bandwidths, which are 1.012 MHz and 1.012 MHz, respectively. The plot includes a 1 dB scale bar and a 1 MHz scale bar. The plot is titled "BLE_1M_Ant1_2402".

Figure 11 shows the power spectrum of the BLE_1M_Ant1_2440 signal. The plot displays the power spectral density (PSD) in dBm versus frequency in kHz. The center frequency is 2.44 GHz, and the span is 4 MHz. The plot shows a main peak at 2.44 GHz with a power level of approximately -5.51 dBm. The 3dB bandwidth is indicated as 1.012 MHz. The plot also shows the 1dB and 3dB bandwidths, which are 1.012 MHz and 1.012 MHz, respectively. The plot includes a 1 dB scale bar and a 1 MHz scale bar. The plot is titled "BLE_1M_Ant1_2440".

Figure 12 shows the power spectrum of the BLE_1M_Ant1_2480 signal. The plot displays the power spectral density (PSD) in dBm versus frequency in kHz. The center frequency is 2.48 GHz, and the span is 4 MHz. The plot shows a main peak at 2.48 GHz with a power level of approximately -5.51 dBm. The 3dB bandwidth is indicated as 1.012 MHz. The plot also shows the 1dB and 3dB bandwidths, which are 1.012 MHz and 1.012 MHz, respectively. The plot includes a 1 dB scale bar and a 1 MHz scale bar. The plot is titled "BLE_1M_Ant1_2480".



Appendix C: Maximum conducted output power

Test Result Peak

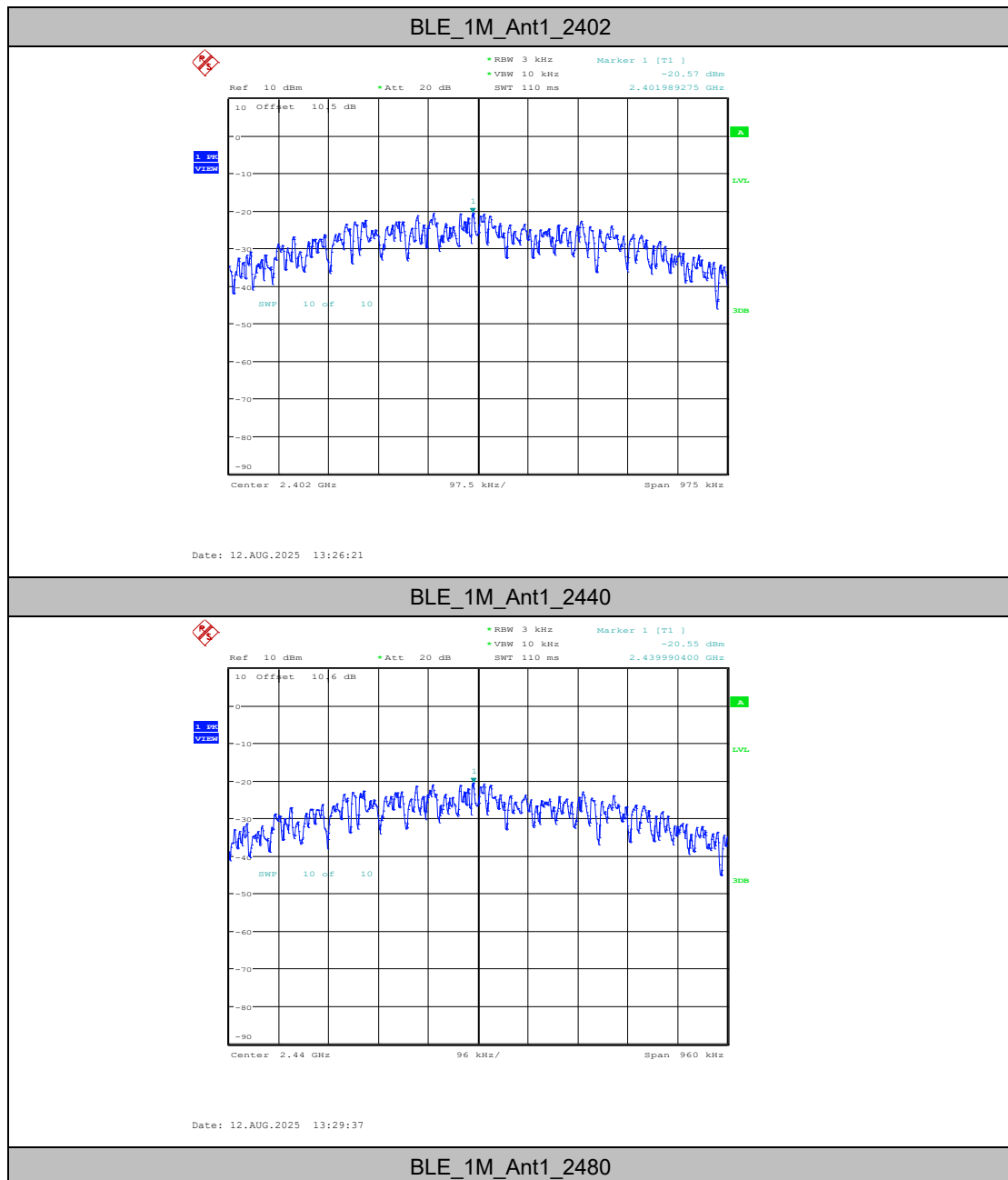
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-4.27	≤30	PASS
		2440	-4.56	≤30	PASS
		2480	-4.59	≤30	PASS

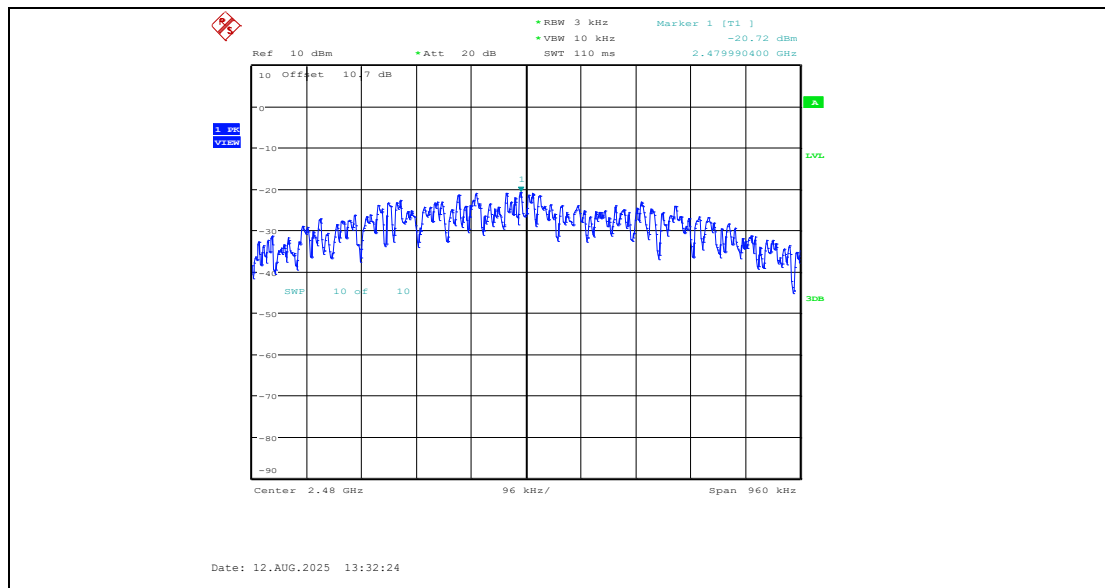
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-20.57	≤8.00	PASS
		2440	-20.55	≤8.00	PASS
		2480	-20.72	≤8.00	PASS

Test Graphs



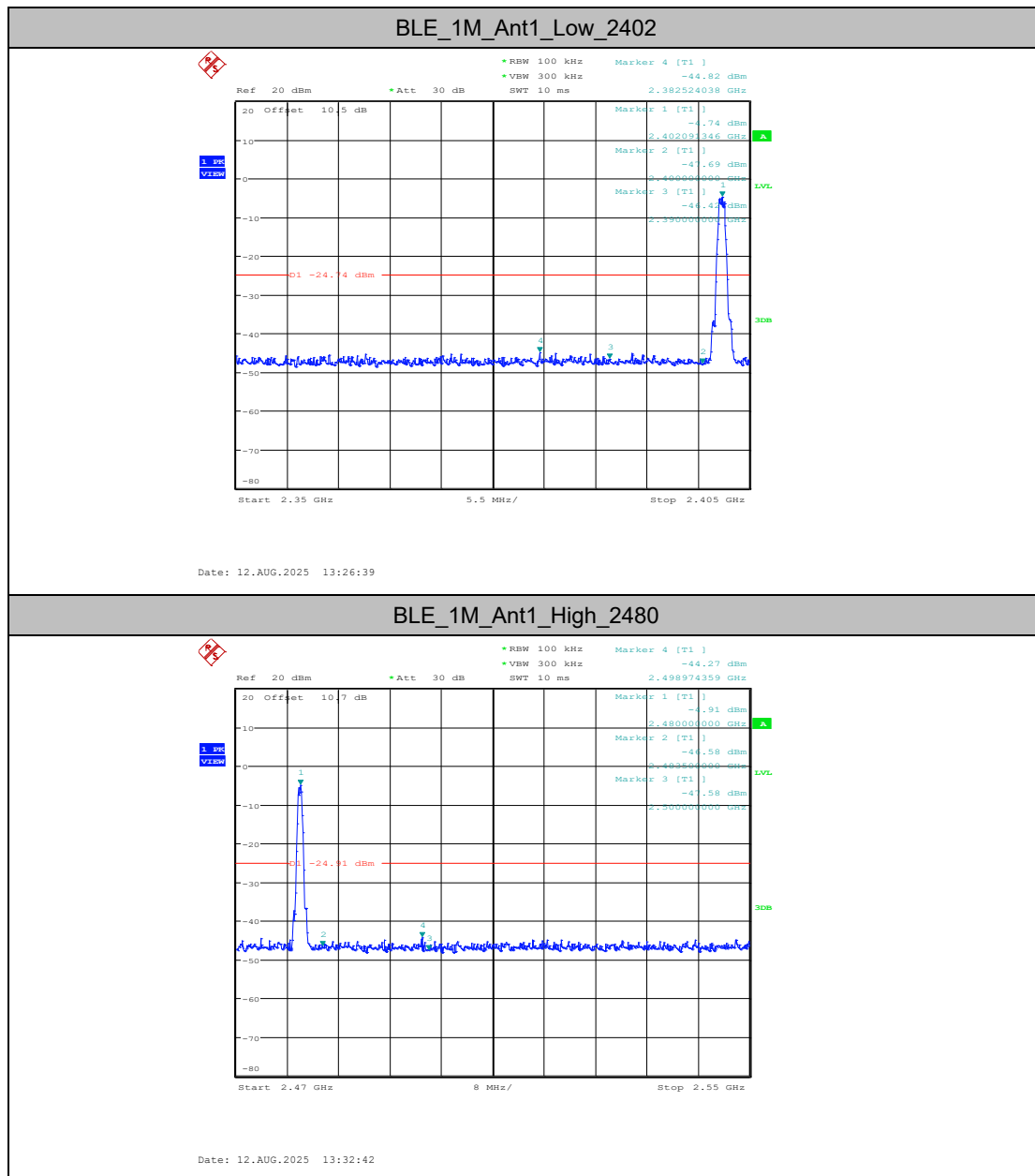


Appendix E: Band edge measurements

Test Result

TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	-4.74	-44.82	≤-24.74	PASS
		High	2480	-4.91	-44.27	≤-24.91	PASS

Test Graphs

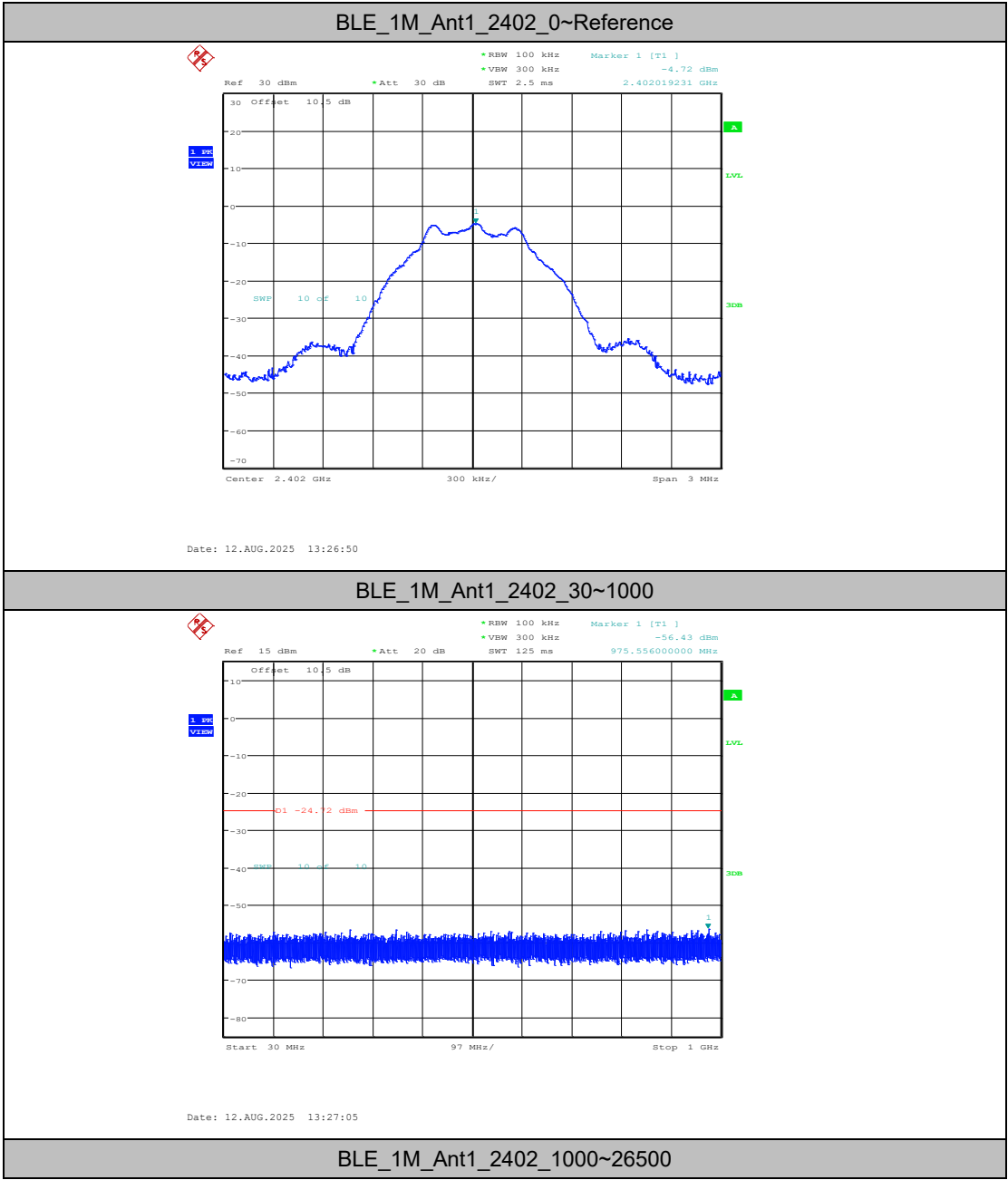


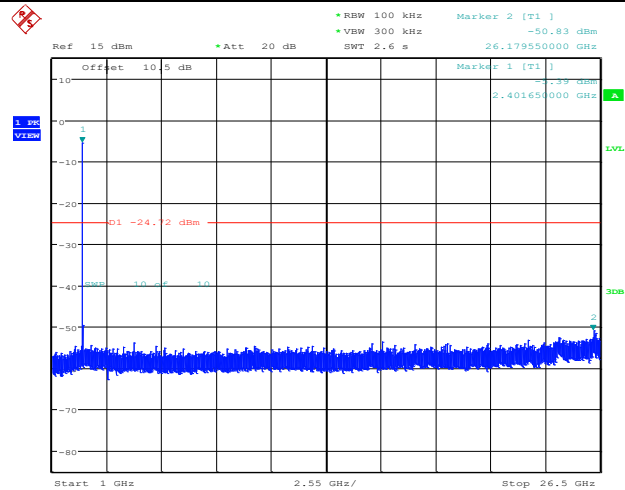
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-4.72	-4.72	---	PASS
			30~1000	-4.72	-56.43	≤-24.72	PASS
			1000~26500	-4.72	-50.83	≤-24.72	PASS
		2440	Reference	-4.95	-4.95	---	PASS
			30~1000	-4.95	-56.43	≤-24.95	PASS
			1000~26500	-4.95	-51.49	≤-24.95	PASS
		2480	Reference	-5.04	-5.04	---	PASS
			30~1000	-5.04	-56.66	≤-25.04	PASS
			1000~26500	-5.04	-51.56	≤-25.04	PASS

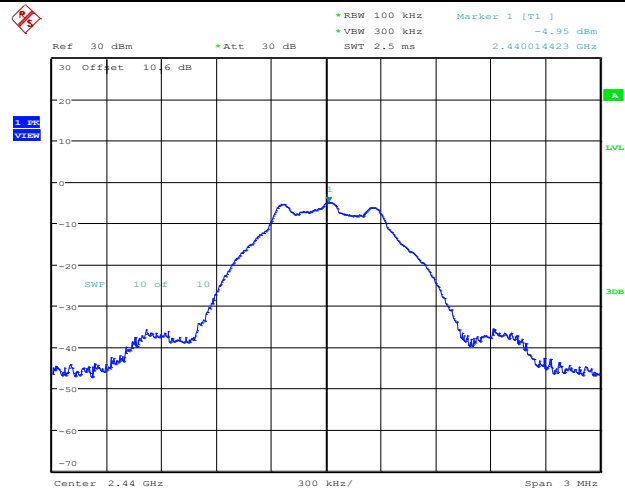
Test Graphs





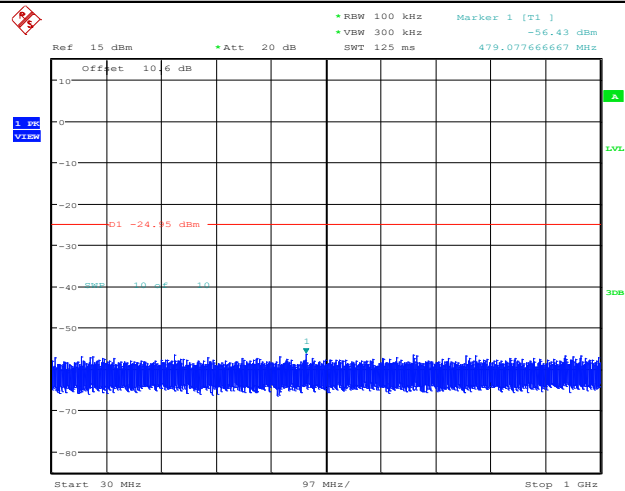
Date: 12.AUG.2025 13:27:46

BLE_1M_Ant1_2440_0~Reference



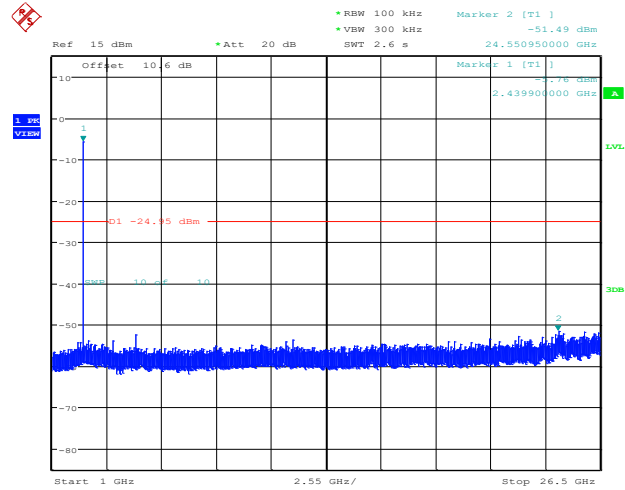
Date: 12.AUG.2025 13:29:47

BLE_1M_Ant1_2440_30~1000



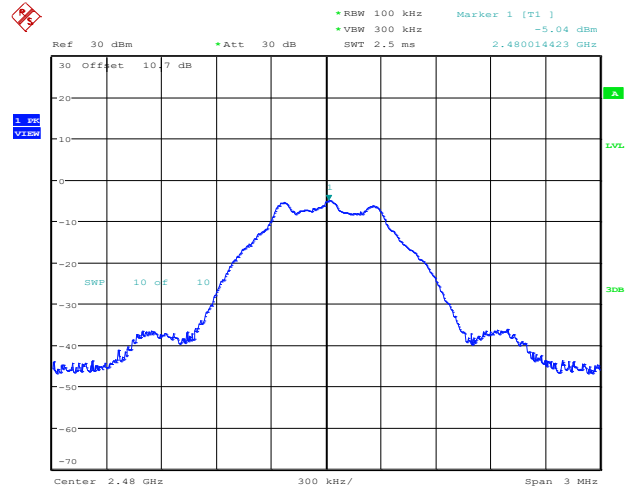
Date: 12.AUG.2025 13:30:02

BLE_1M_Ant1_2440_1000~26500



Date: 12.AUG.2025 13:30:43

BLE_1M_Ant1_2480_0~Reference



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BLE_1M_Ant1_2480_30~1000

Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.41	0.63	0.6508	65.08	1.87	---	---
		2440	0.41	0.63	0.6508	65.08	1.87	---	---
		2480	0.41	0.63	0.6508	65.08	1.87	---	---

Test Graphs

