

APPENDIX B: TEST RESULTS OF BLUETOOTH (LOW ENERGY)

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APPENDIX B.1: CONDUCTED POWER SPECTRAL DENSITY

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_125K	Ant1	2402	3.76	≤8.00	PASS
		2440	3.93	≤8.00	PASS
		2480	3.82	≤8.00	PASS
BLE_1M	Ant1	2402	-7.14	≤8.00	PASS
		2440	-6.95	≤8.00	PASS
		2480	-7.17	≤8.00	PASS
BLE_2M	Ant1	2402	-8.94	≤8.00	PASS
		2440	-8.55	≤8.00	PASS
		2480	-8.48	≤8.00	PASS
BLE_500K	Ant1	2402	3.62	≤8.00	PASS
		2440	3.75	≤8.00	PASS
		2480	3.64	≤8.00	PASS

Test Graphs



Appendix B

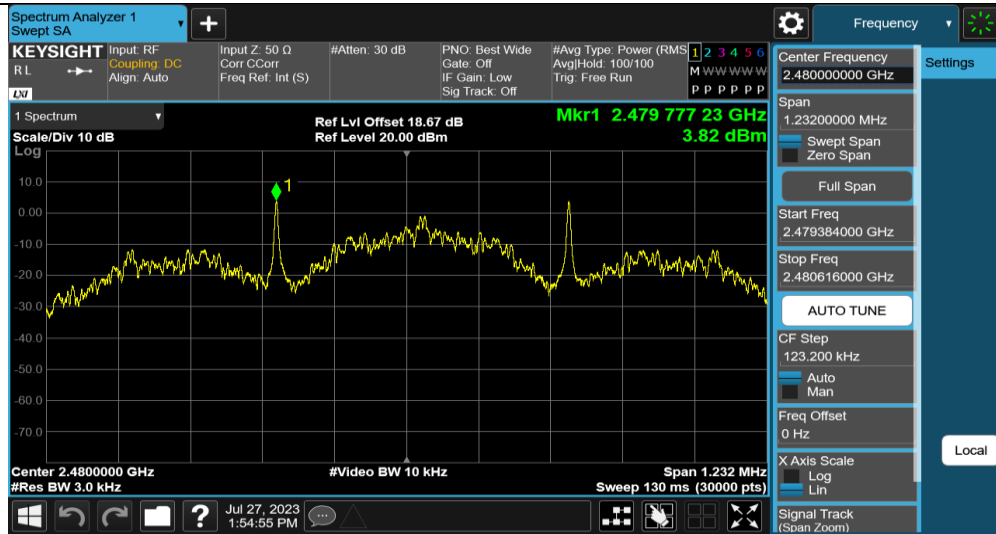
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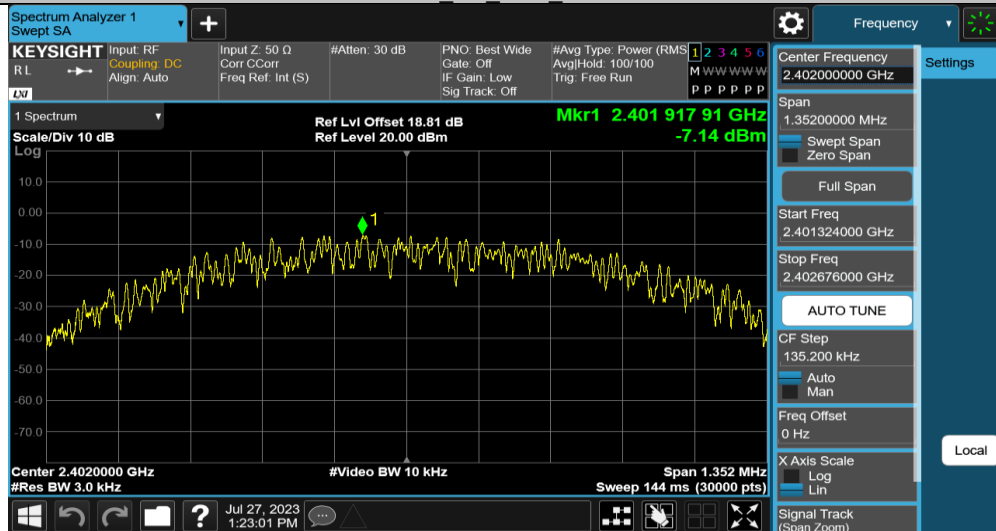


Prüfbericht - Produkte

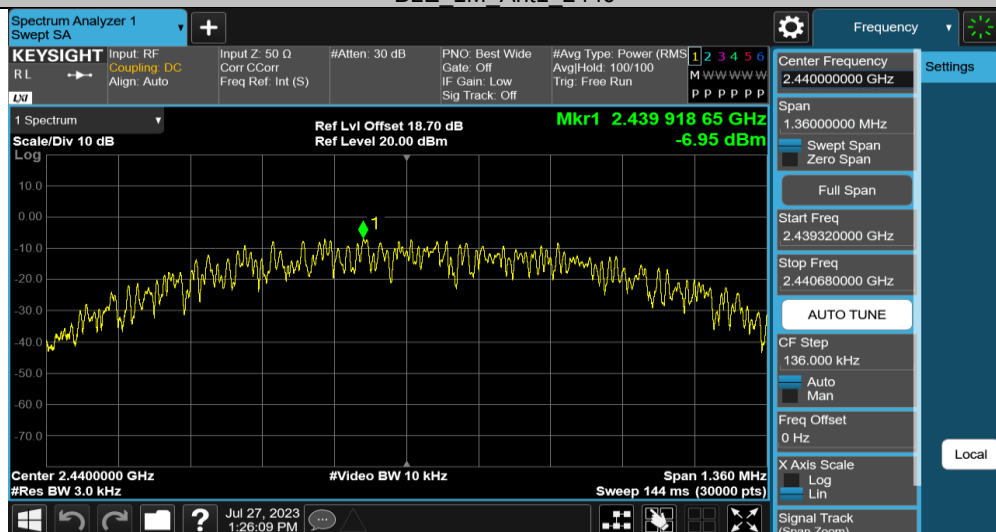
Test Report - Products



BLE 1M Ant1 2402



BLE 1M Ant1 2440



BLE 1M Ant1 2480

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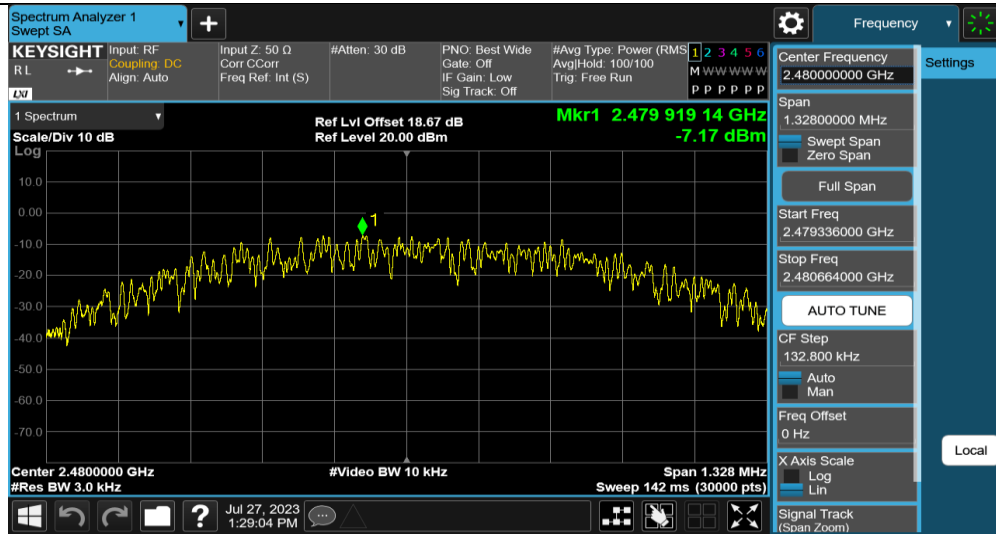
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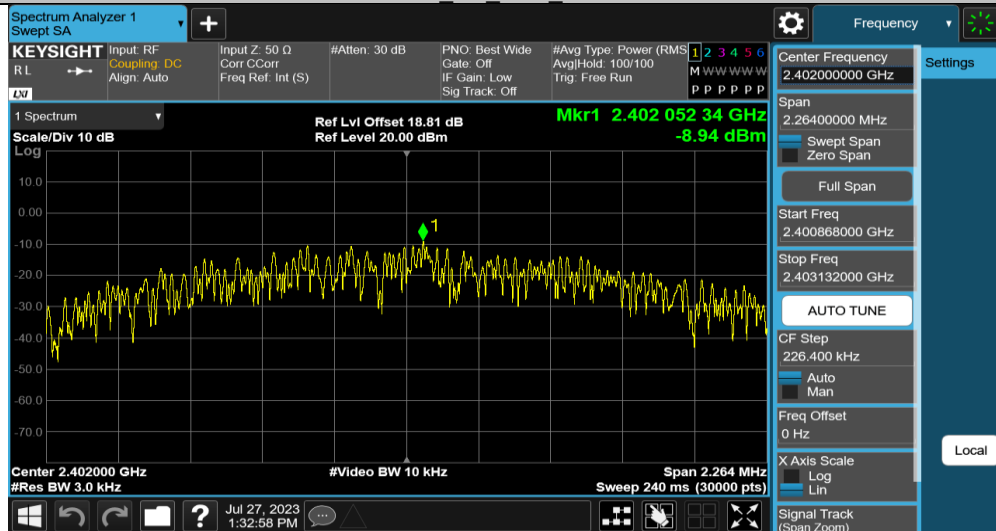


Prüfbericht - Produkte

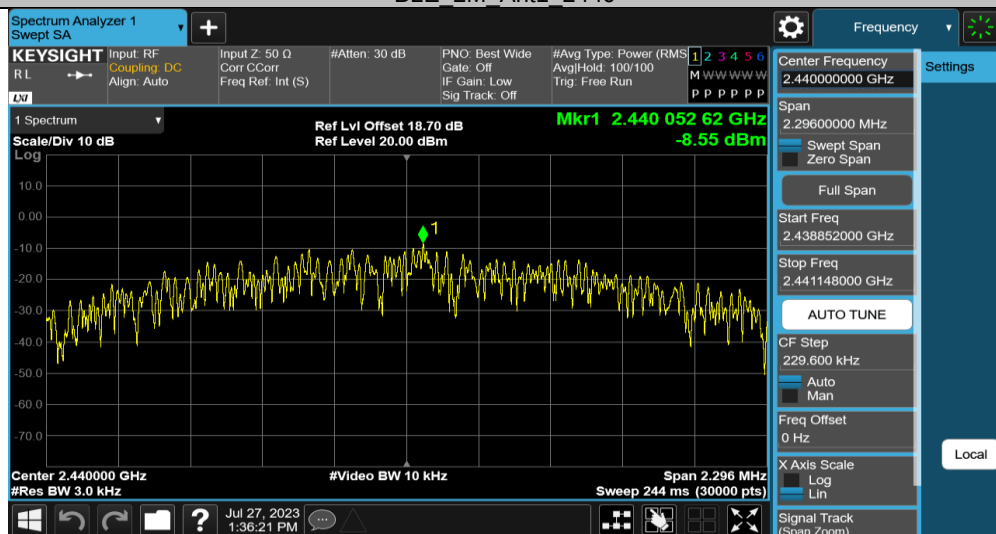
Test Report - Products



BLE 2M Ant1 2402



BLE 2M Ant1 2440



BLE 2M Ant1 2480

Appendix B

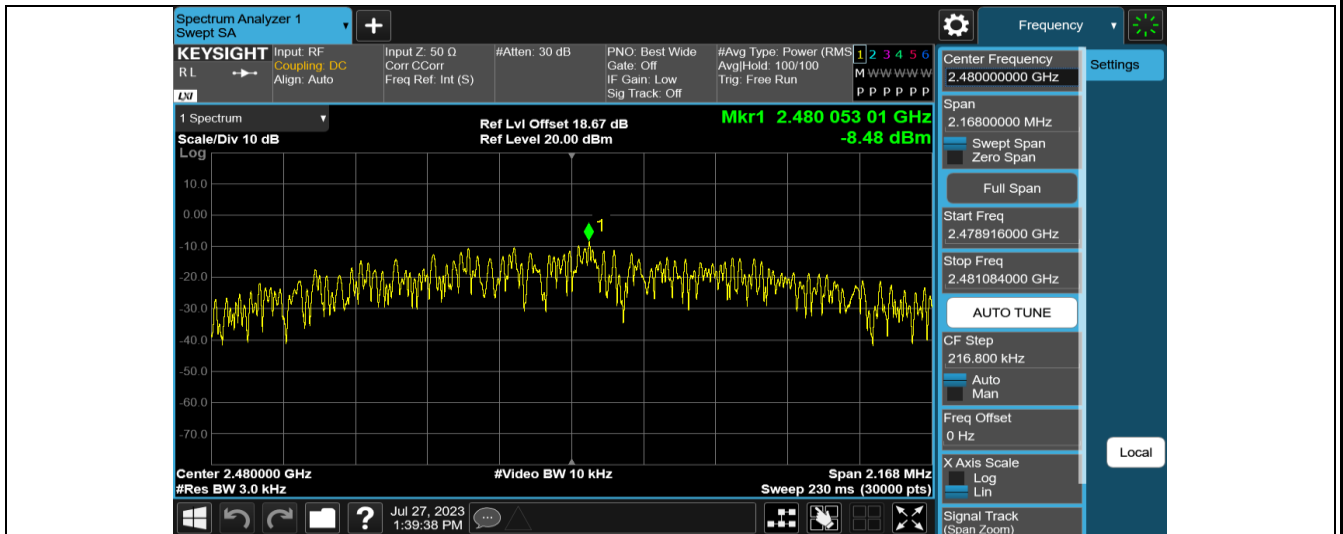
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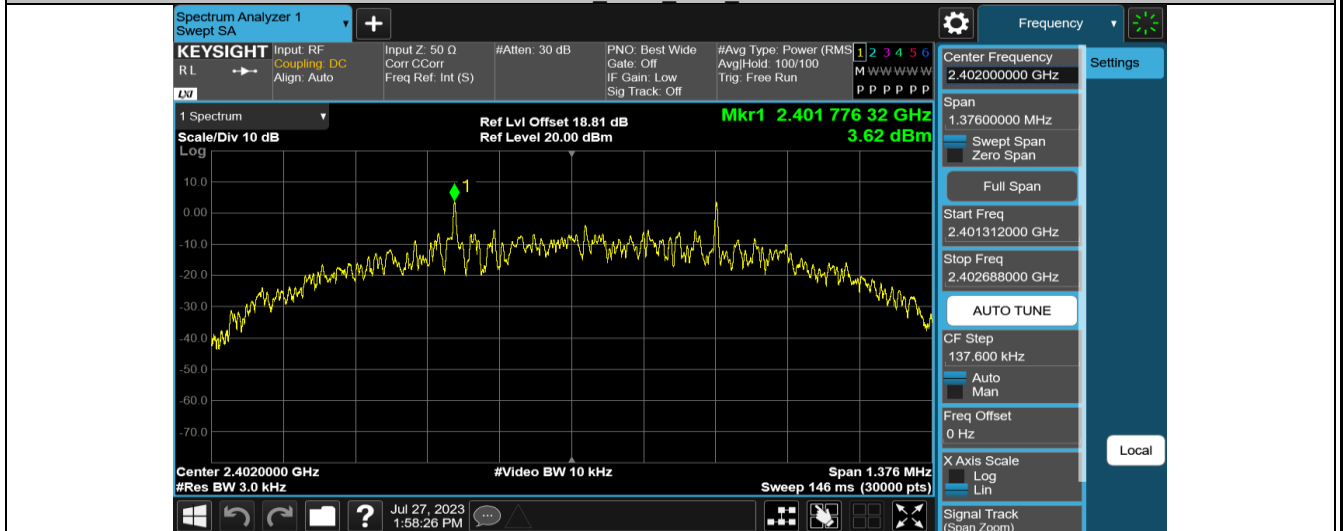


Prüfbericht - Produkte

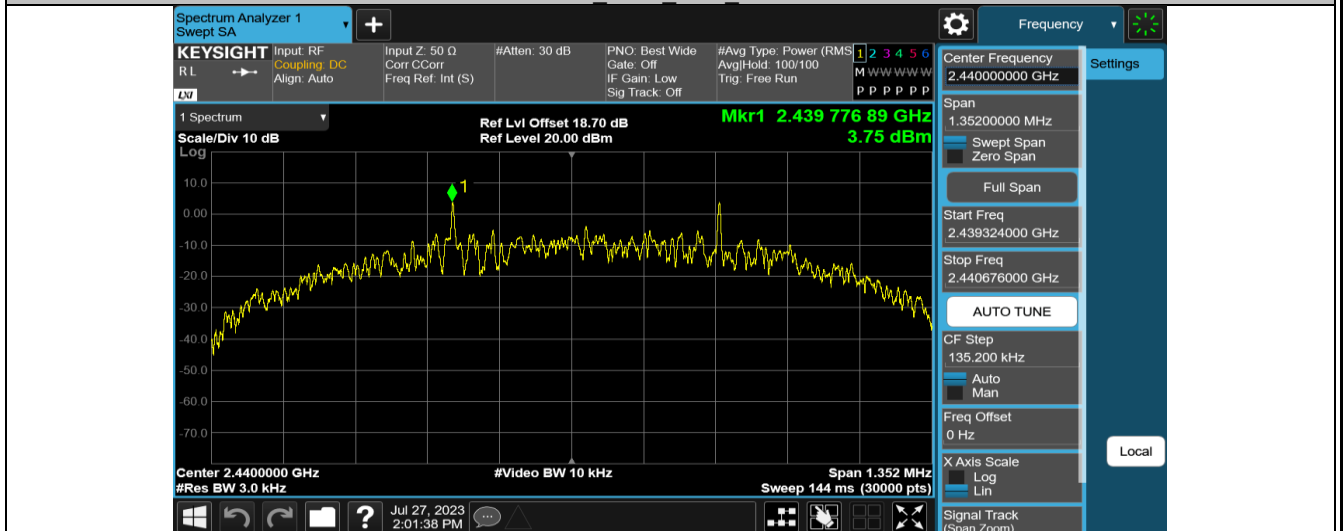
Test Report - Products



BLE 500K Ant1 2402



BLE 500K Ant1 2440



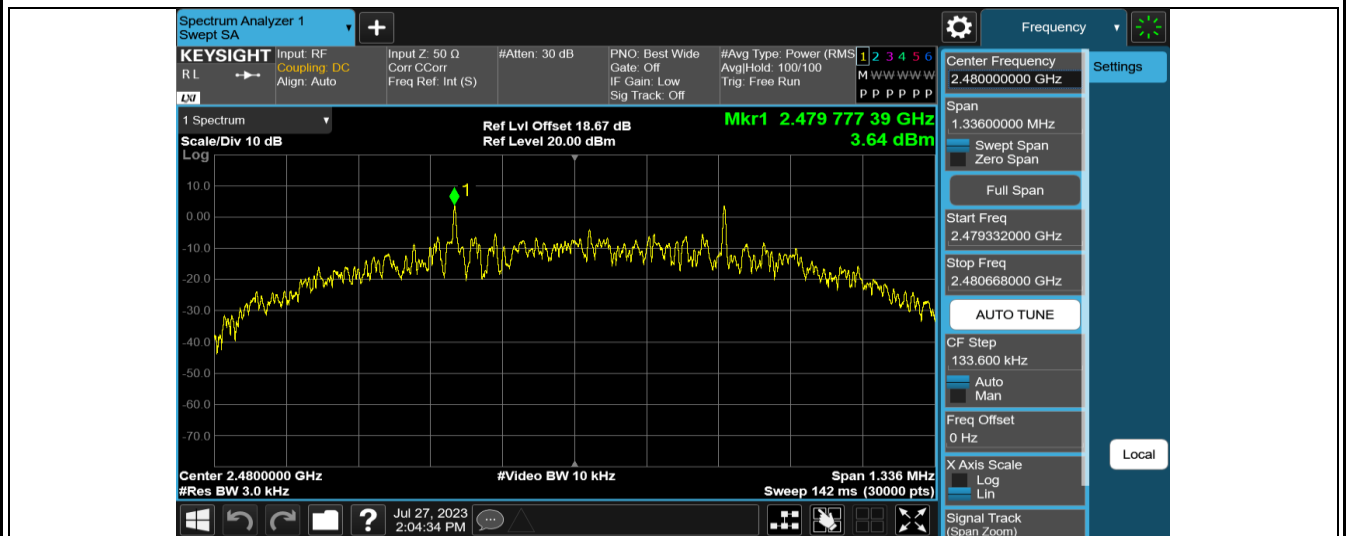
BLE 500K Ant1 2480

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APPENDIX B.2: 6dB BANDWIDTH

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_125K	Ant1	2402	0.632	2401.712	2402.344	0.5	PASS
		2440	0.624	2439.716	2440.340	0.5	PASS
		2480	0.616	2479.720	2480.336	0.5	PASS
BLE_1M	Ant1	2402	0.676	2401.676	2402.352	0.5	PASS
		2440	0.680	2439.688	2440.368	0.5	PASS
		2480	0.664	2479.688	2480.352	0.5	PASS
BLE_2M	Ant1	2402	1.132	2401.464	2402.596	0.5	PASS
		2440	1.148	2439.448	2440.596	0.5	PASS
		2480	1.084	2479.488	2480.572	0.5	PASS
BLE_500K	Ant1	2402	0.688	2401.700	2402.388	0.5	PASS
		2440	0.676	2439.692	2440.368	0.5	PASS
		2480	0.668	2479.708	2480.376	0.5	PASS

Test Graphs



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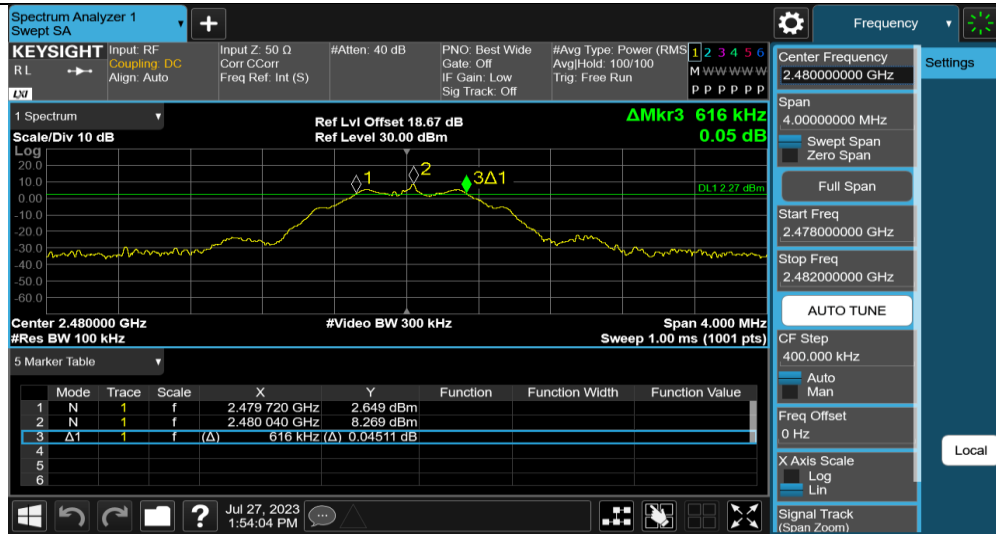
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BLE 1M Ant1 2402



BLE 1M Ant1 2440



BLE 1M Ant1 2480

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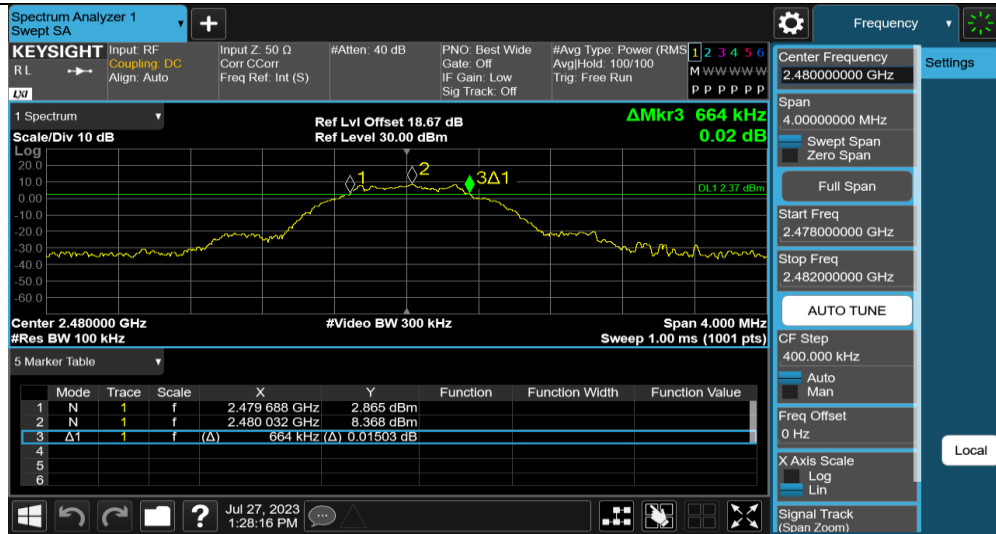
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BLE 2M Ant1 2402



BLE 2M Ant1 2440



BLE 2M Ant1 2480

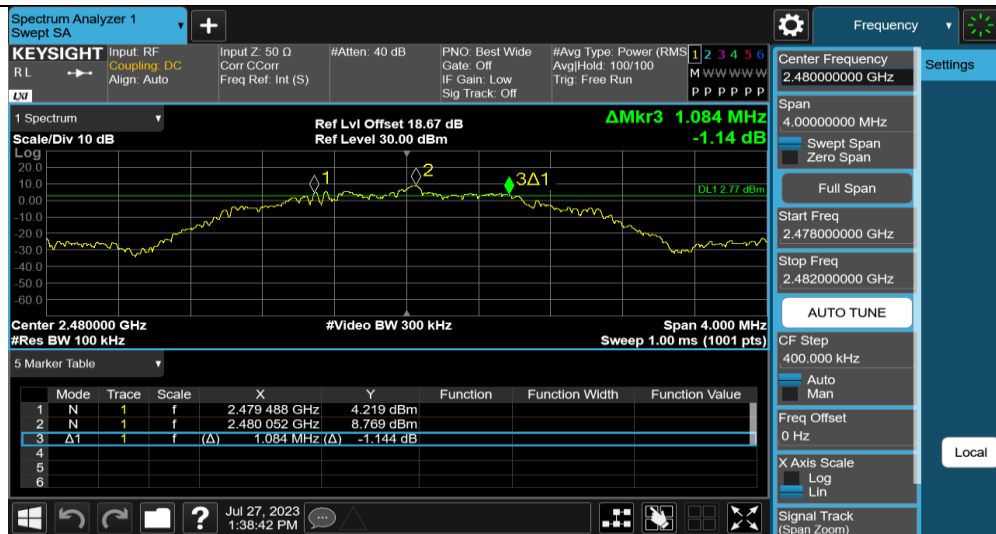
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BLE 500K Ant1 2402



BLE 500K Ant1 2440



BLE 500K Ant1 2480

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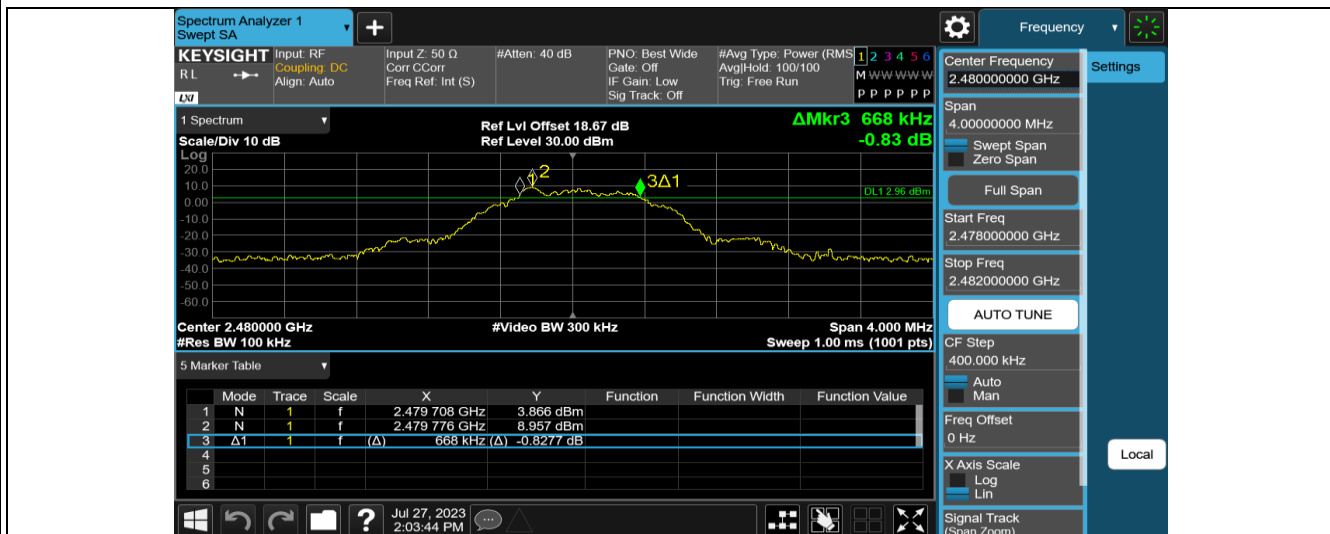
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Prüfbericht - Produkte

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APPENDIX B.3: 99% BANDWIDTH

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_125K	Ant1	2402	1.0740	2401.4910	2402.5650	---	---
		2440	1.0755	2439.4902	2440.5657	---	---
		2480	1.0818	2479.4881	2480.5699	---	---
BLE_1M	Ant1	2402	1.0465	2401.5139	2402.5604	---	---
		2440	1.0475	2439.5139	2440.5614	---	---
		2480	1.0483	2479.5149	2480.5632	---	---
BLE_2M	Ant1	2402	2.0434	2401.0356	2403.0790	---	---
		2440	2.0496	2439.0294	2441.0790	---	---
		2480	2.0527	2479.0311	2481.0838	---	---
BLE_500K	Ant1	2402	1.0566	2401.4990	2402.5556	---	---
		2440	1.0406	2439.5132	2440.5538	---	---
		2480	1.0452	2479.5087	2480.5539	---	---

Test Graphs



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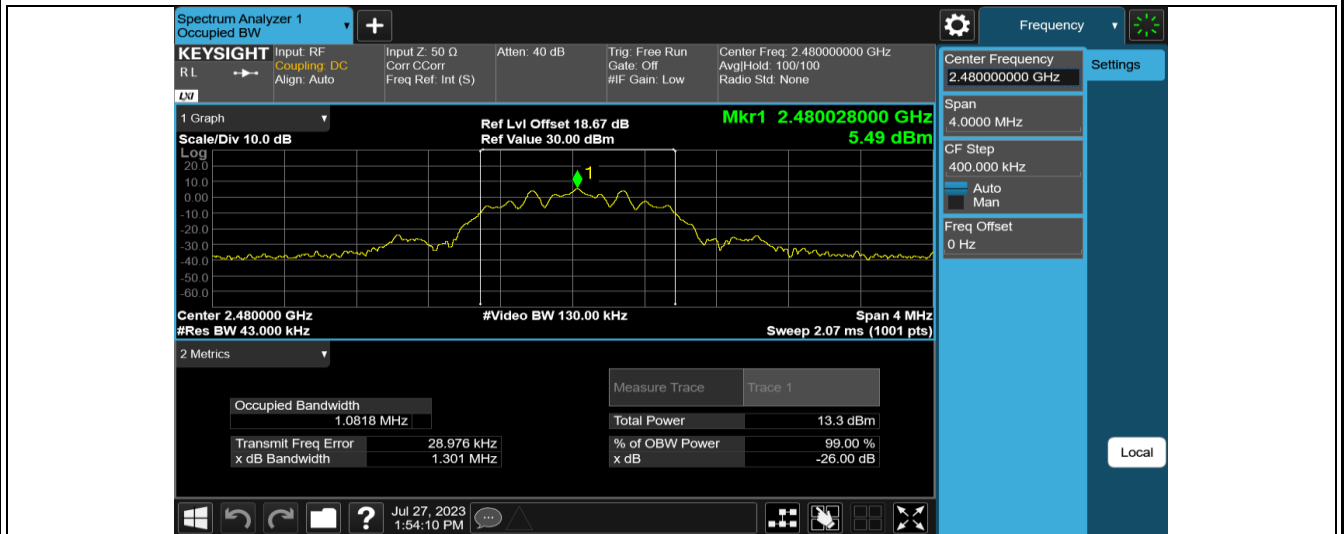
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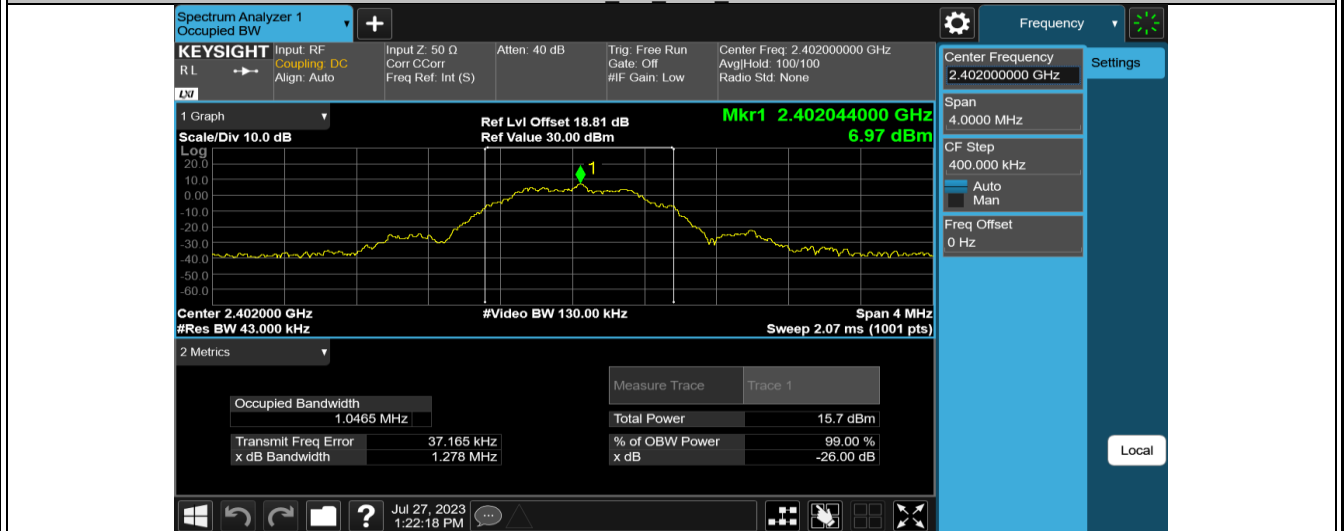


Prüfbericht - Produkte

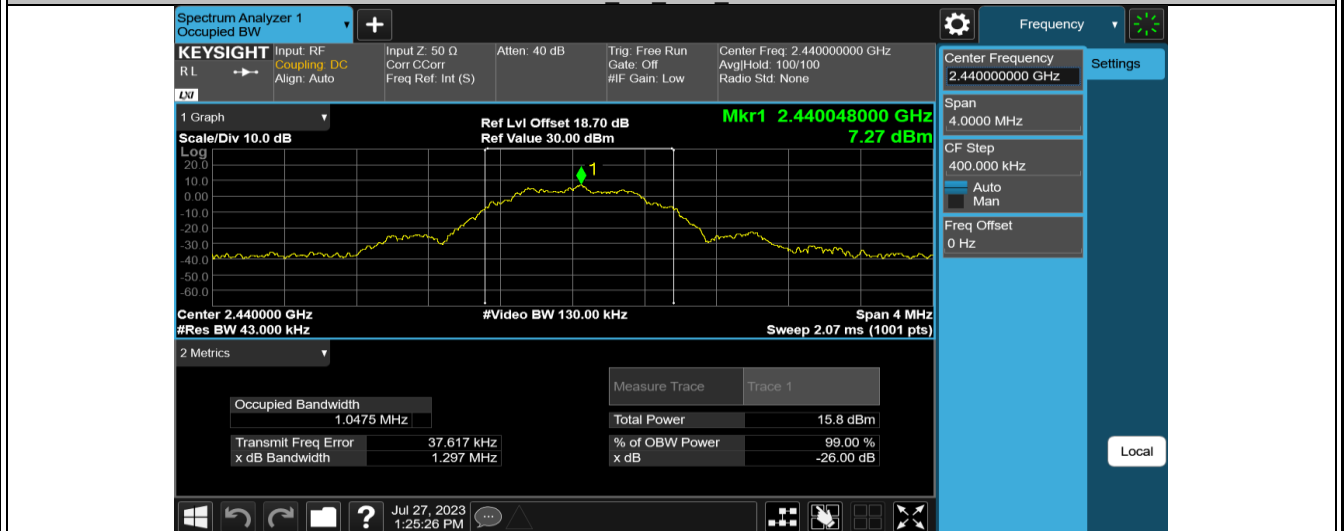
Test Report - Products



BLE 1M Ant1 2402



BLE 1M Ant1 2440



BLE 1M Ant1 2480

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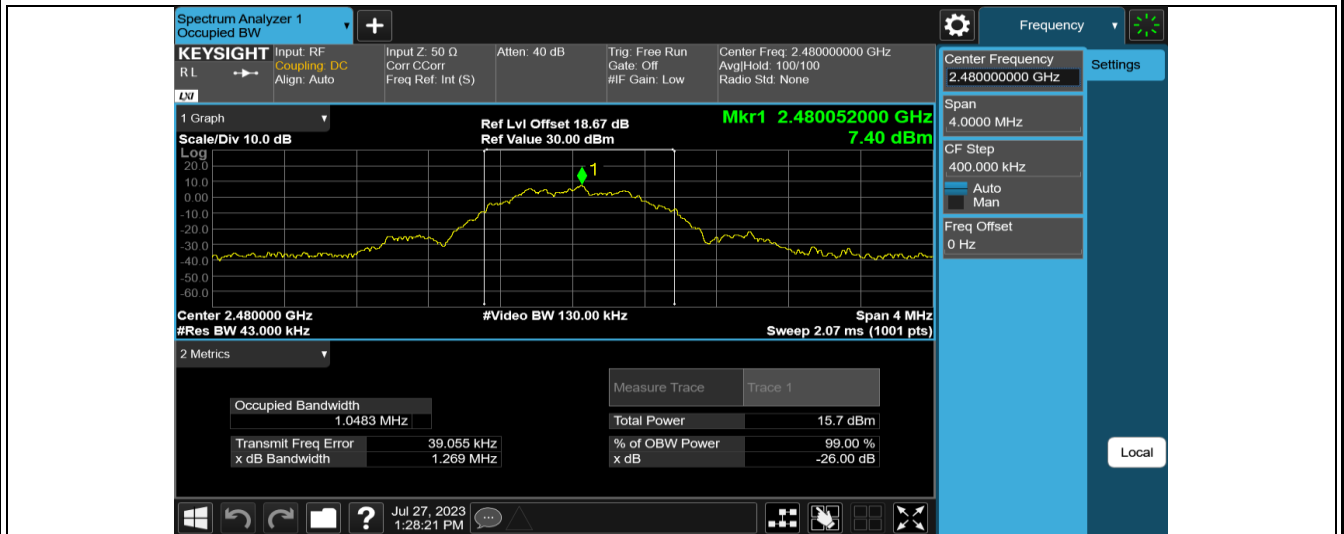
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BLE 2M Ant1 2402



BLE 2M Ant1 2440



BLE 2M Ant1 2480

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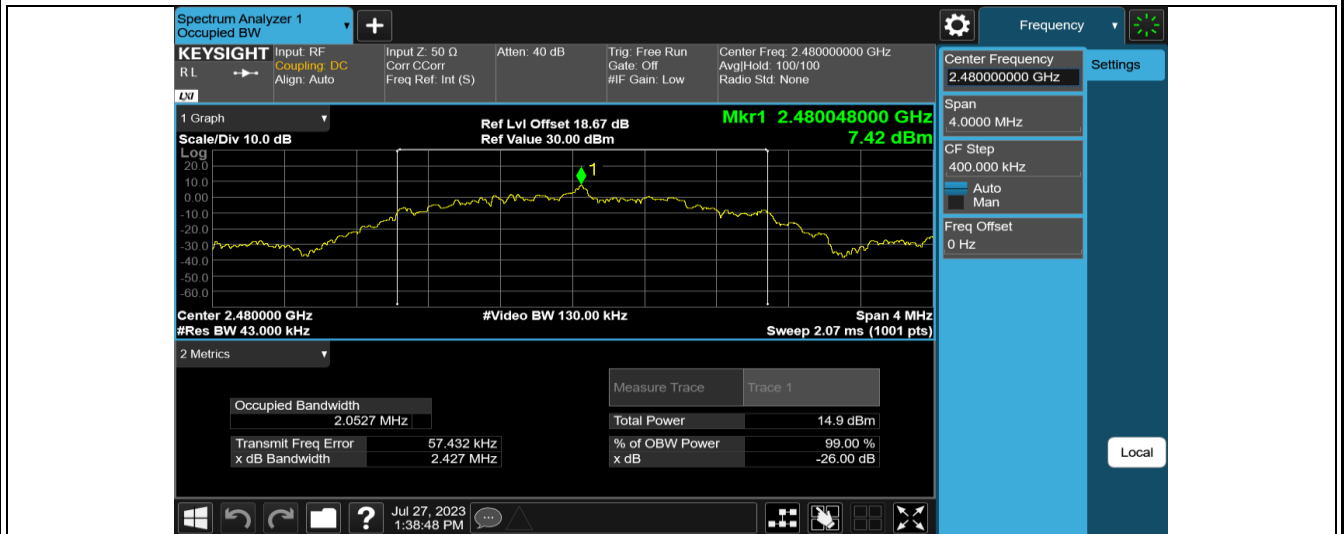
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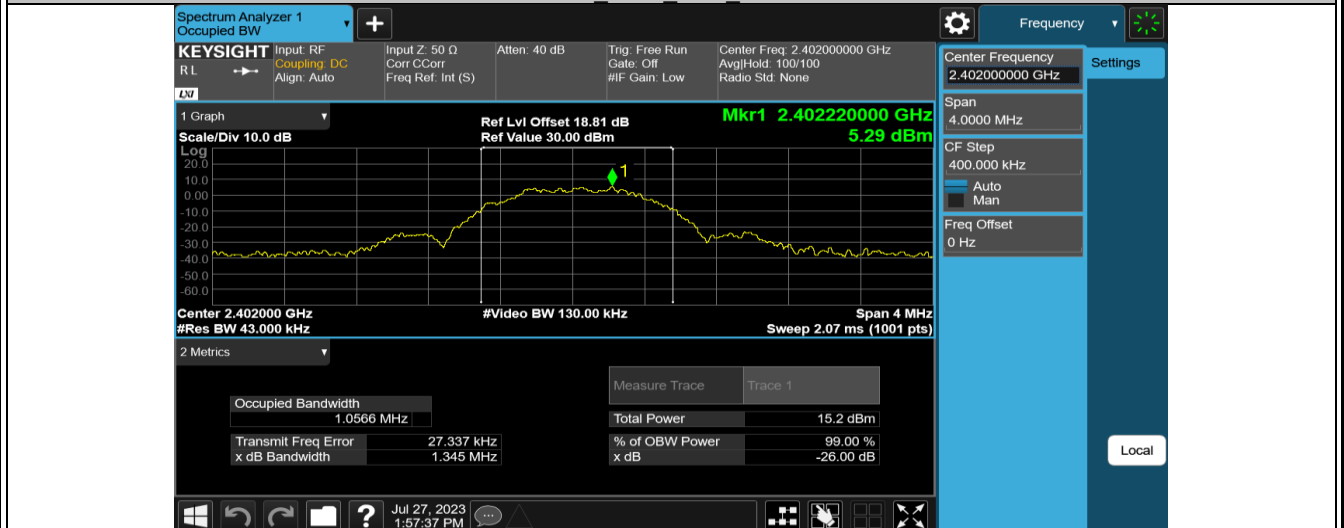


Prüfbericht - Produkte

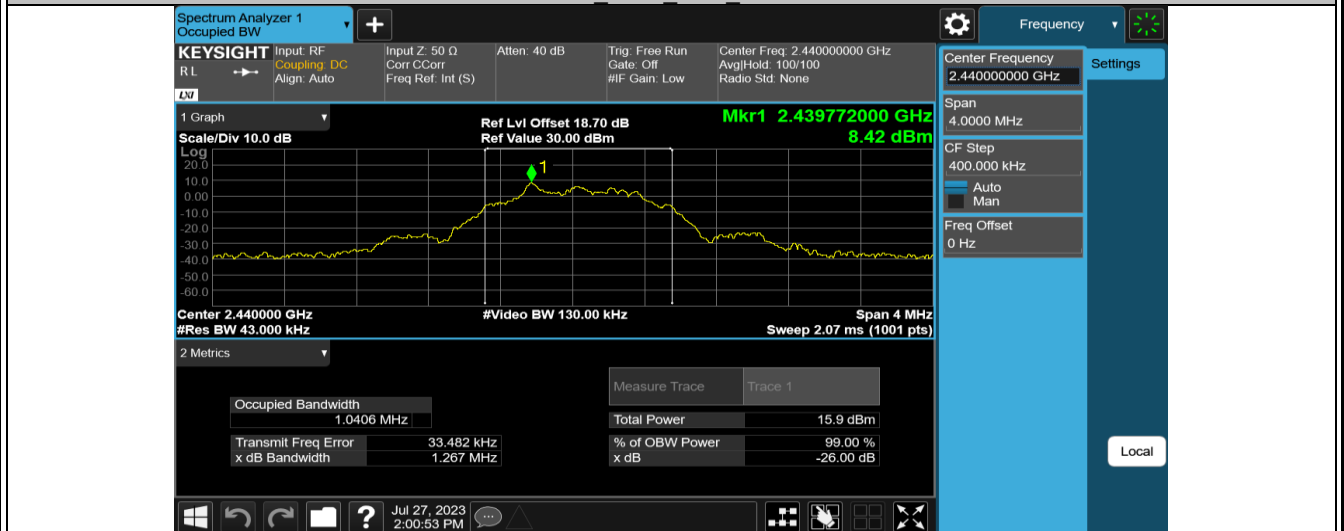
Test Report - Products



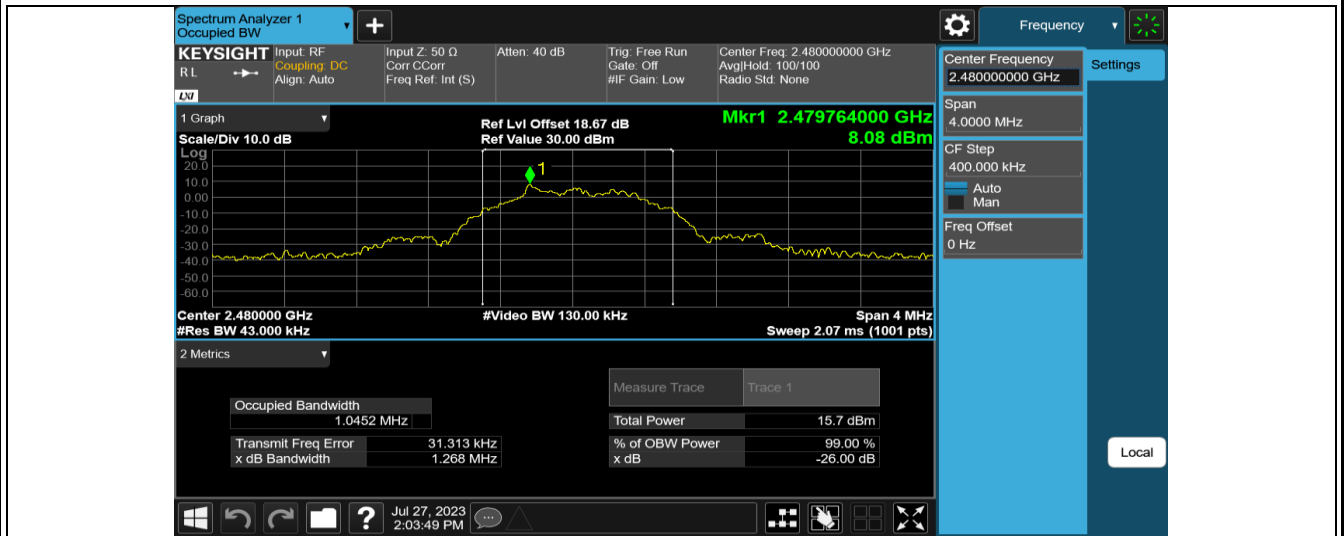
BLE 500K Ant1 2402



BLE 500K Ant1 2440



BLE 500K Ant1 2480



APPENDIX B.4: CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 kHz BANDWIDTH**Test Result**

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_125K	Ant1	2402	Reference	7.54	7.54	---	PASS
			30~1000	7.54	-40.26	≤-12.46	PASS
			1000~26500	7.54	-31.1	≤-12.46	PASS
		2440	Reference	9.19	9.19	---	PASS
			30~1000	9.19	-40.82	≤-10.81	PASS
			1000~26500	9.19	-31.46	≤-10.81	PASS
		2480	Reference	6.61	6.61	---	PASS
			30~1000	6.61	-40.96	≤-13.39	PASS
			1000~26500	6.61	-31.05	≤-13.39	PASS
BLE_1M	Ant1	2402	Reference	9.41	9.41	---	PASS
			30~1000	9.41	-40.69	≤-10.59	PASS
			1000~26500	9.41	-30.6	≤-10.59	PASS
		2440	Reference	9.62	9.62	---	PASS
			30~1000	9.62	-40	≤-10.38	PASS
			1000~26500	9.62	-31.45	≤-10.38	PASS
		2480	Reference	9.48	9.48	---	PASS
			30~1000	9.48	-39.76	≤-10.52	PASS
			1000~26500	9.48	-31.49	≤-10.52	PASS
BLE_2M	Ant1	2402	Reference	9.17	9.17	---	PASS
			30~1000	9.17	-40.51	≤-10.83	PASS
			1000~26500	9.17	-31.05	≤-10.83	PASS
		2440	Reference	9.48	9.48	---	PASS
			30~1000	9.48	-40.42	≤-10.52	PASS
			1000~26500	9.48	-31.8	≤-10.52	PASS
		2480	Reference	9.51	9.51	---	PASS
			30~1000	9.51	-39.72	≤-10.49	PASS
			1000~26500	9.51	-31.27	≤-10.49	PASS
BLE_500K	Ant1	2402	Reference	8.89	8.89	---	PASS
			30~1000	8.89	-40.76	≤-11.11	PASS
			1000~26500	8.89	-31.17	≤-11.11	PASS
		2440	Reference	9.24	9.24	---	PASS
			30~1000	9.24	-40.52	≤-10.76	PASS
			1000~26500	9.24	-31.45	≤-10.76	PASS
		2480	Reference	9.68	9.68	---	PASS
			30~1000	9.68	-40.95	≤-10.32	PASS
			1000~26500	9.68	-31.81	≤-10.32	PASS

Test Graphs



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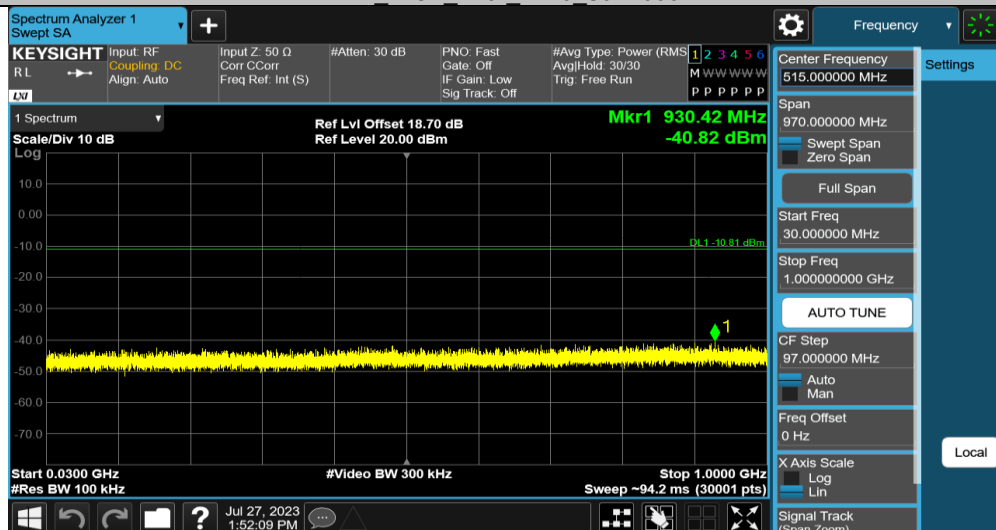
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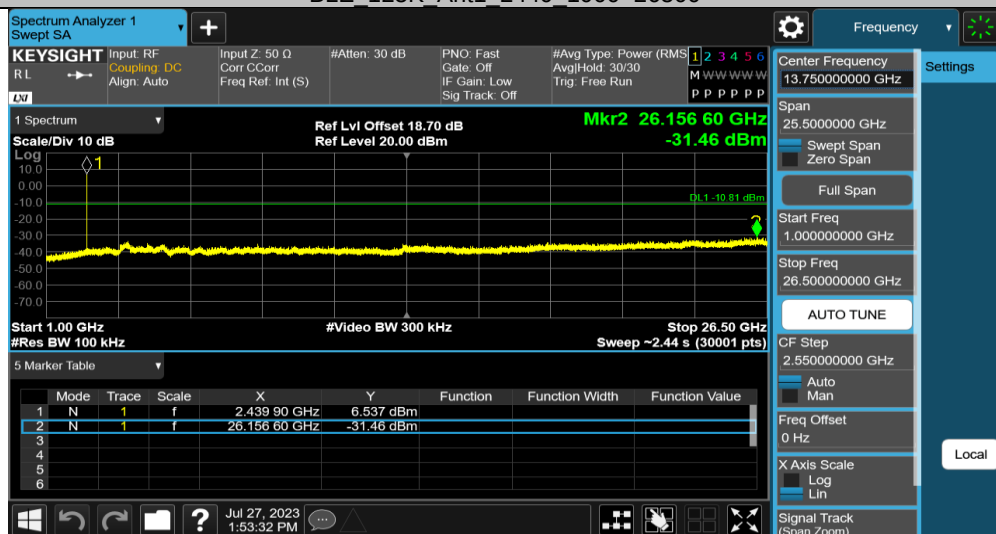
Test Report - Products



BLE_125K_Ant1_2440_30-1000



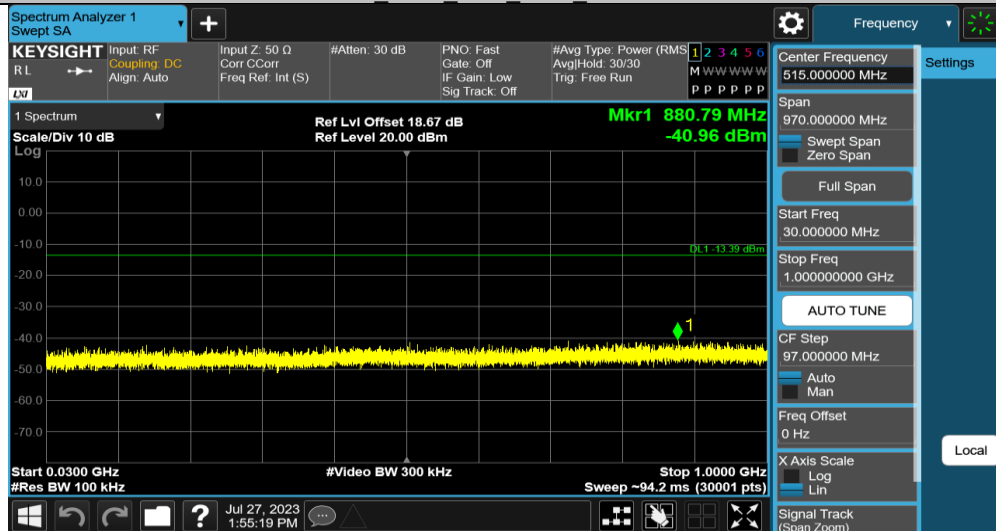
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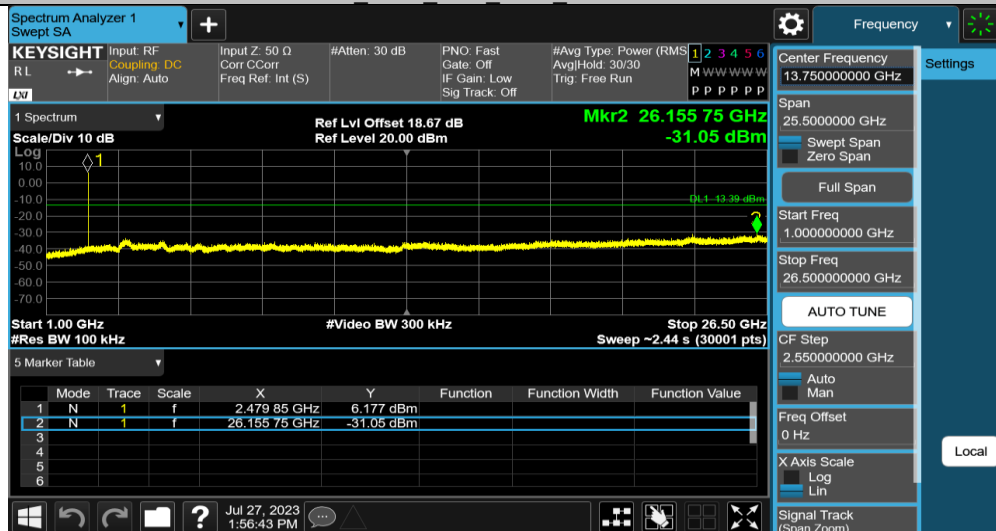
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BLE_125K_Ant1_2480_30-1000



BLE_125K_Ant1_2480_1000-26500



BLE_1M_Ant1_2402_0-Reference