

APPENDIX B: TEST RESULTS OF BLUETOOTH (LOW ENERGY)

APPENDIX B: TEST RESULTS OF BLUETOOTH (LOW ENERGY)	1
APPENDIX B.1: CONDUCTED POWER SPECTRAL DENSITY	2
APPENDIX B.2: 6dB BANDWIDTH	7
APPENDIX B.3: 99% BANDWIDTH	12
APPENDIX B.4: CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 kHz BANDWIDTH	17
APPENDIX B.5: RADIATED SPURIOUS EMISSIONS	28
APPENDIX B.6: RADIATED EMISSIONS IN RESTRICTED BANDS	42
APPENDIX B.7: CONDUCTED EMISSION ON AC MAINS	50

APPENDIX B.1: CONDUCTED POWER SPECTRAL DENSITY

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_125K	Ant1	2402	2.63	≤8.00	PASS
		2440	3.18	≤8.00	PASS
		2480	3.03	≤8.00	PASS
BLE_500K	Ant1	2402	2.72	≤8.00	PASS
		2440	3.02	≤8.00	PASS
		2480	2.90	≤8.00	PASS
BLE_1M	Ant1	2402	-7.39	≤8.00	PASS
		2440	-7.4	≤8.00	PASS
		2480	-7.39	≤8.00	PASS
BLE_2M	Ant1	2402	-9.32	≤8.00	PASS
		2440	-9.29	≤8.00	PASS
		2480	-9.13	≤8.00	PASS

Test Graphs



Appendix B

CN23CNS7 001

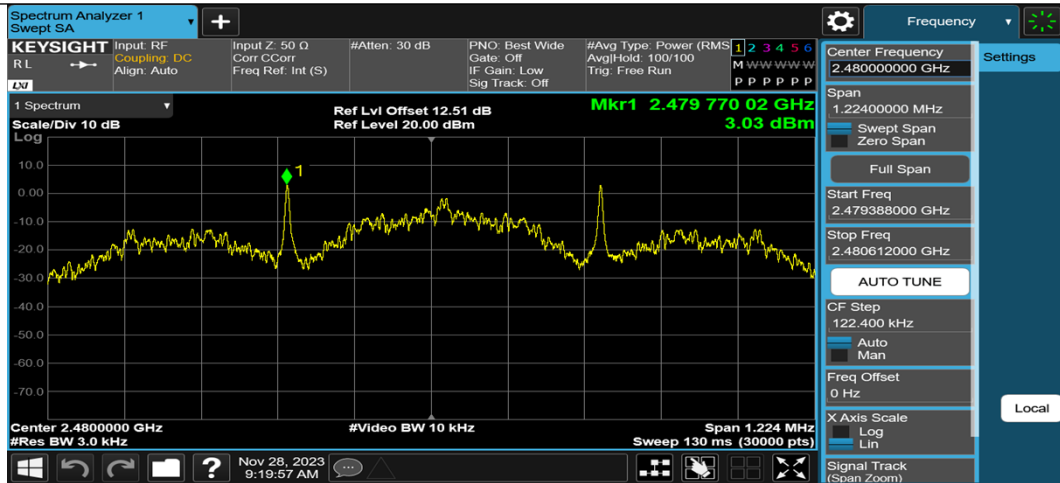
Page 3 of 51



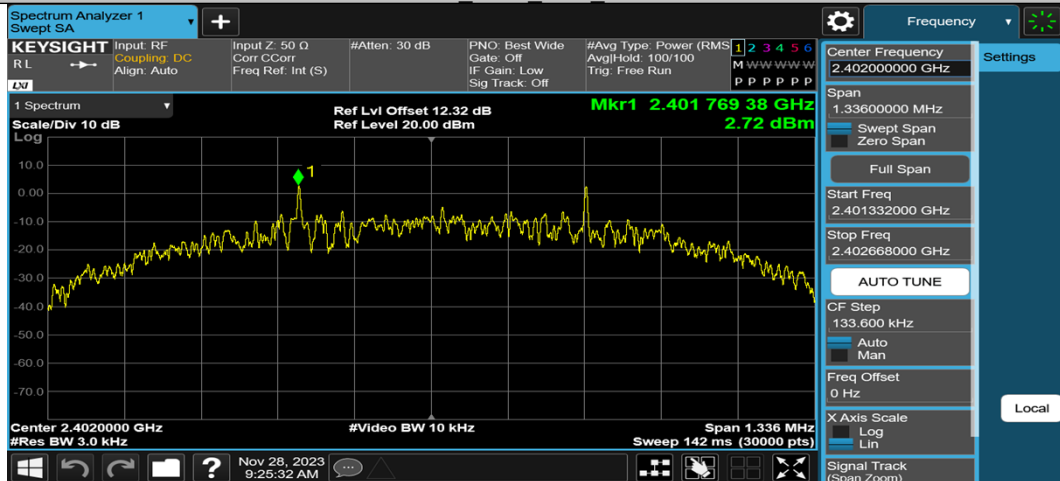
TÜVRheinland®

Prüfbericht - Produkte

Test Report - Products



BLE 500K Ant1 2402



BLE 500K Ant1 2440



BLE 500K Ant1 2480

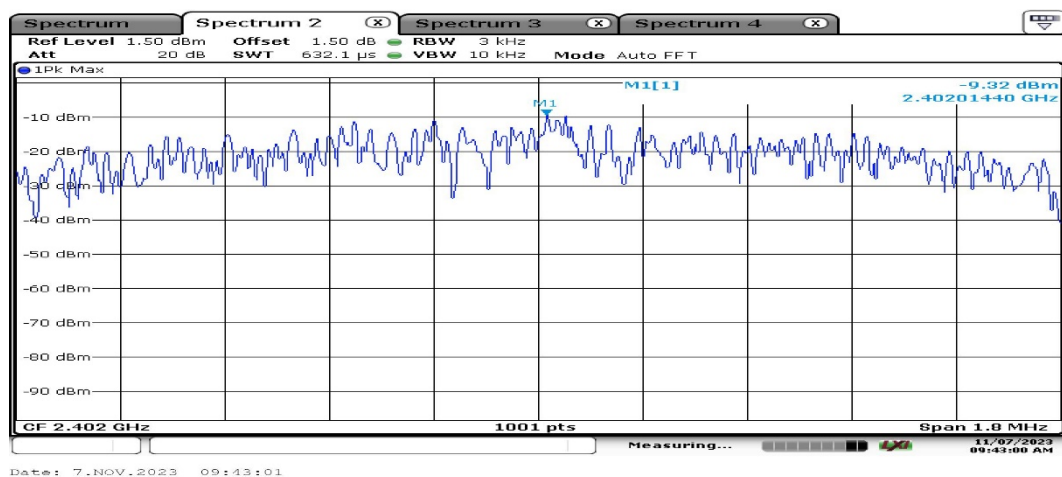
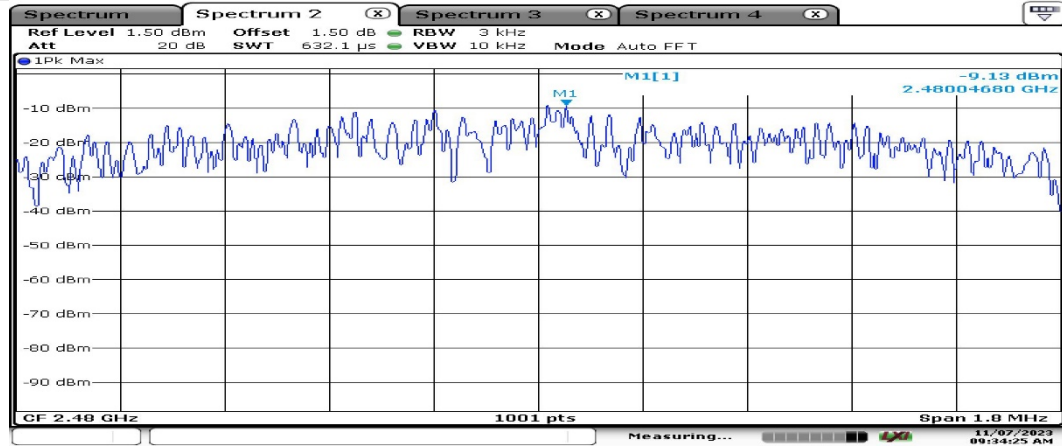
Appendix B

CN23CNS7 001

Page 4 of 51

Prüfbericht - Produkte

Test Report - Products



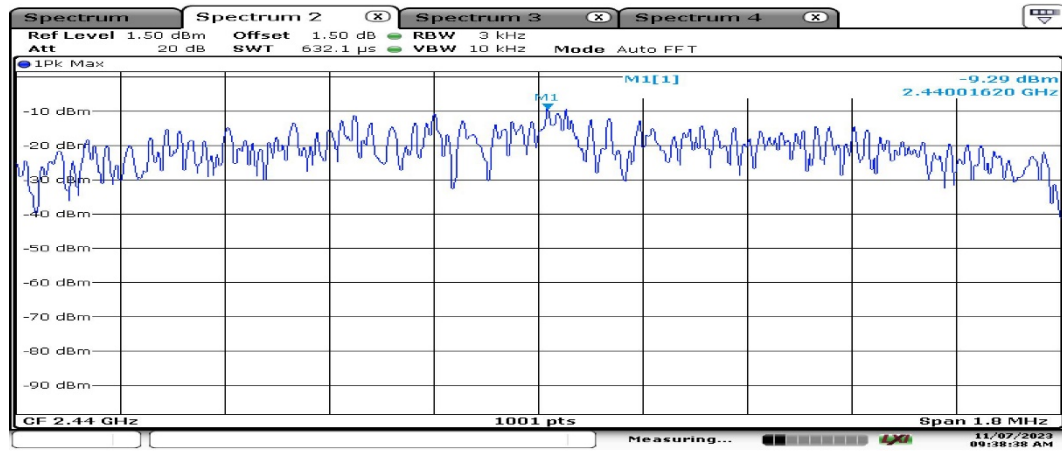
Appendix B

CN23CNS7 001

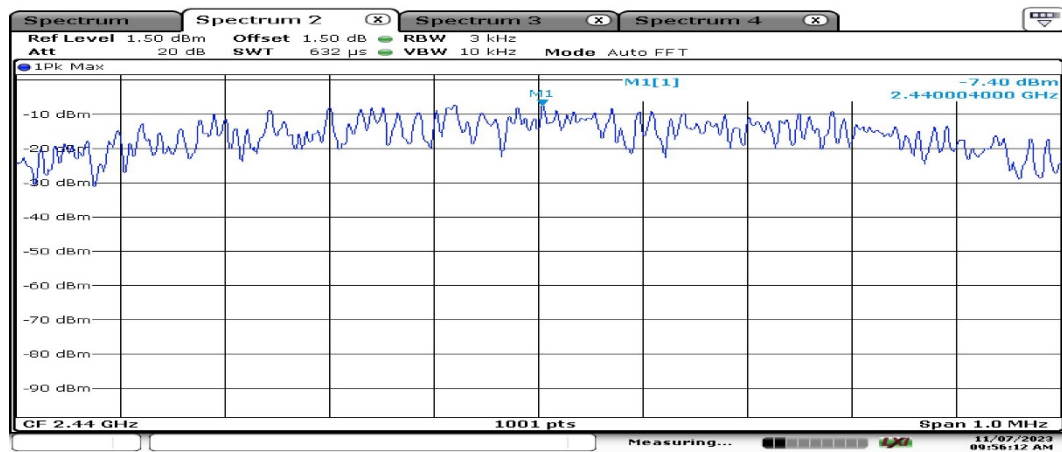
Page 5 of 51

Prüfbericht - Produkte

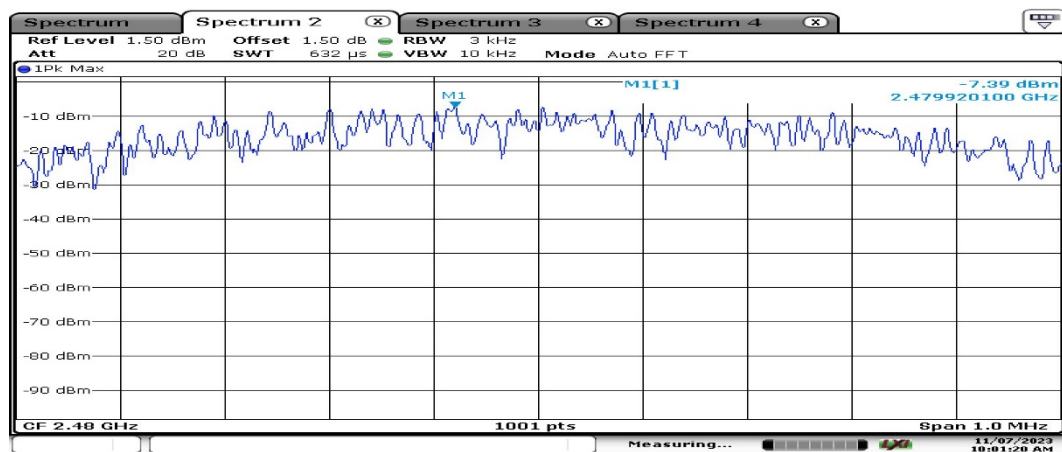
Test Report - Products



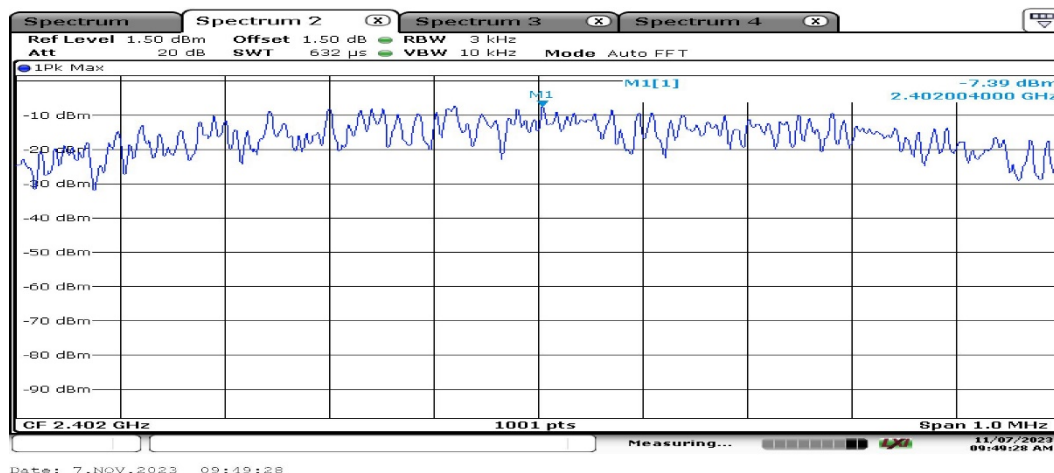
Date: 7.NOV.2023 09:38:39



Date: 7.NOV.2023 09:56:13



Date: 7.NOV.2023 10:01:21



APPENDIX B.2: 6dB BANDWIDTH

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_125K	Ant1	2402	0.628	2401.708	2402.336	0.5	PASS
		2440	0.700	2439.676	2440.376	0.5	PASS
		2480	0.612	2479.716	2480.328	0.5	PASS
BLE_500K	Ant1	2402	0.668	2401.688	2402.356	0.5	PASS
		2440	0.680	2439.688	2440.368	0.5	PASS
		2480	0.700	2479.676	2480.376	0.5	PASS
BLE_1M	Ant1	2402	0.713	2401.663	2402.376	0.5	PASS
		2440	0.713	2439.663	2440.376	0.5	PASS
		2480	0.752	2479.644	2480.396	0.5	PASS
BLE_2M	Ant1	2402	1.228	2401.406	2402.634	0.5	PASS
		2440	1.228	2439.406	2440.634	0.5	PASS
		2480	1.228	2479.406	2480.634	0.5	PASS

Test Graphs



Appendix B

CN23CNS7 001

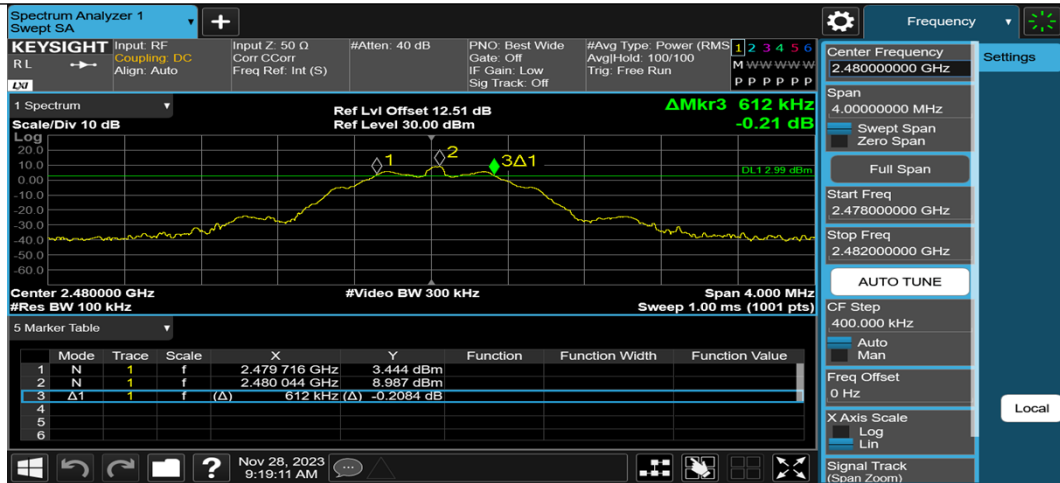
Page 8 of 51



TÜVRheinland®

Prüfbericht - Produkte

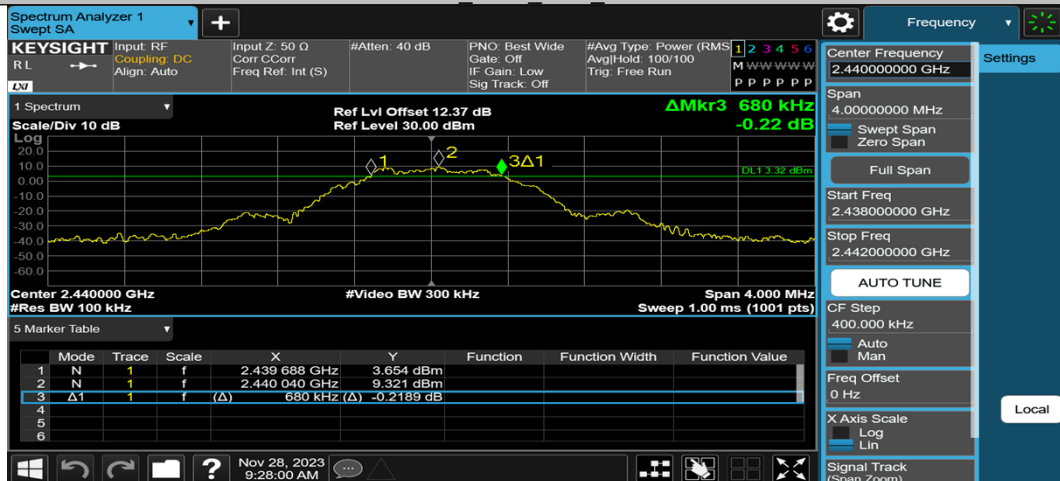
Test Report - Products



BLE 500K Ant1 2402



BLE 500K Ant1 2440



BLE 500K Ant1 2480

Appendix B

CN23CNS7 001

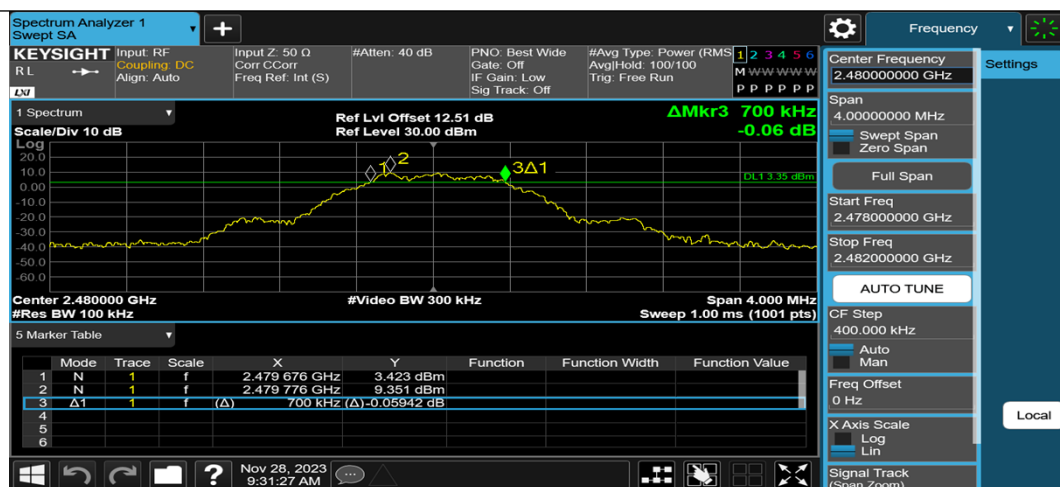
Page 9 of 51



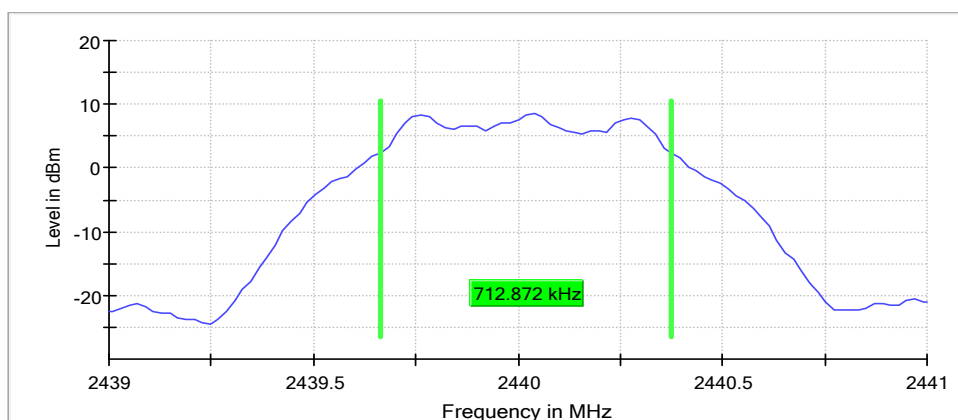
TÜVRheinland®

Prüfbericht - Produkte

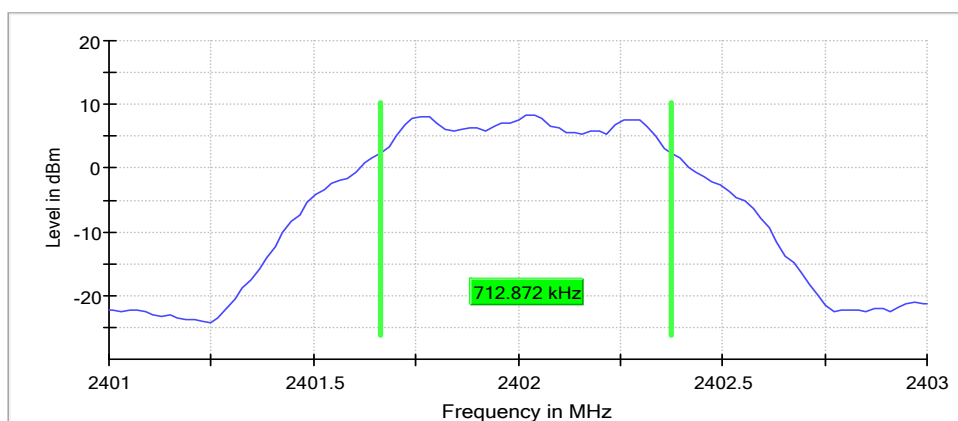
Test Report - Products



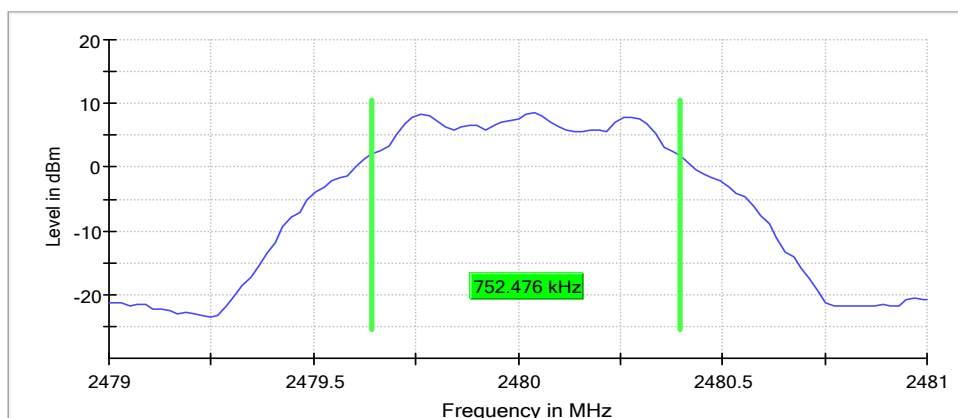
6 dB Bandwidth



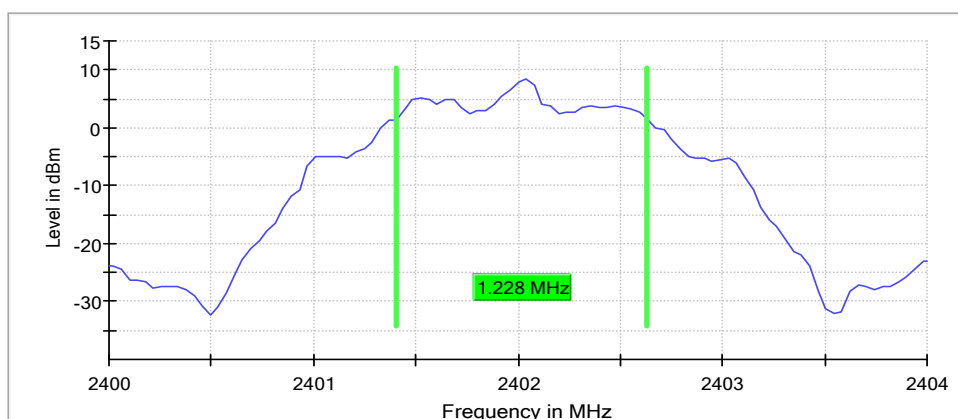
6 dB Bandwidth



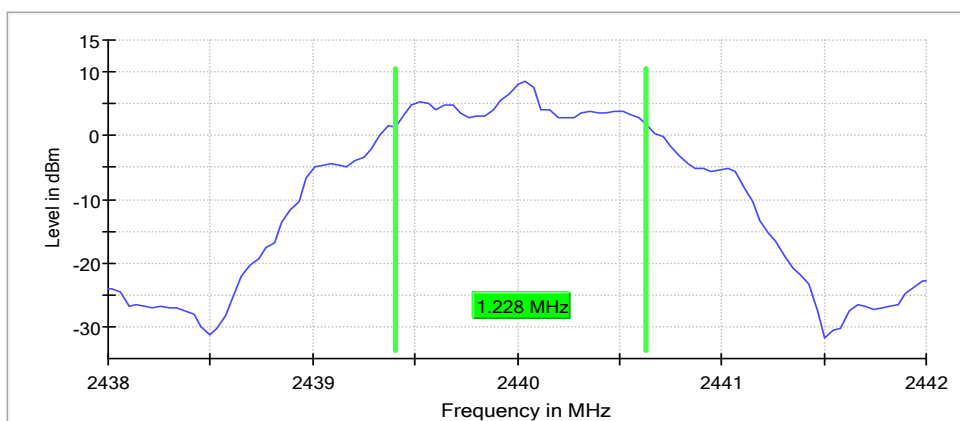
6 dB Bandwidth

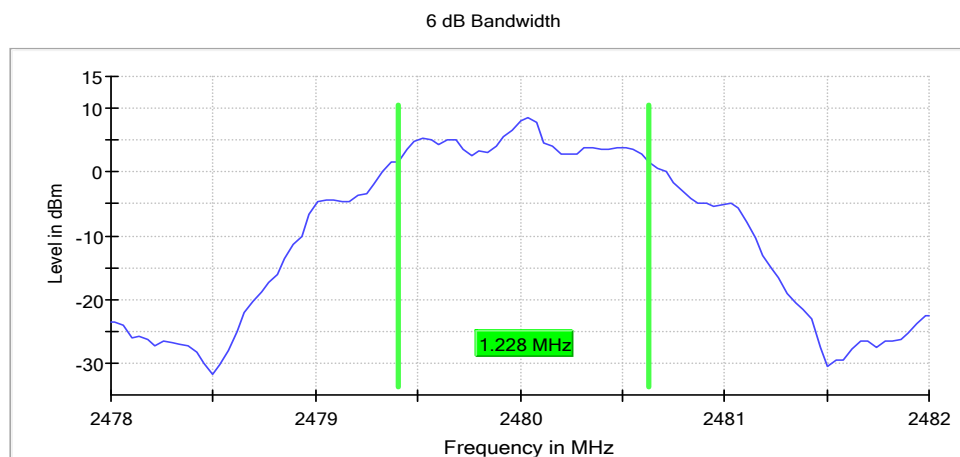


6 dB Bandwidth



6 dB Bandwidth





APPENDIX B.3: 99% BANDWIDTH

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_125K	Ant1	2402	1.0732	2401.4860	2402.5592	---	---
		2440	1.0662	2439.4873	2440.5535	---	---
		2480	1.0702	2479.4869	2480.5571	---	---
BLE_500K	Ant1	2402	1.0336	2401.5068	2402.5404	---	---
		2440	1.0459	2439.5023	2440.5482	---	---
		2480	1.0487	2479.4988	2480.5475	---	---
BLE_1M	Ant1	2402	1.0400	2401.5125	2402.5525	---	---
		2440	1.0400	2439.5125	2440.5525	---	---
		2480	1.0450	2479.5125	2480.5575	---	---
BLE_2M	Ant1	2402	2.0200	2401.0450	2403.0650	---	---
		2440	2.0300	2439.0350	2441.0650	---	---
		2480	2.0300	2479.0350	2481.0650	---	---

Test Graphs



Appendix B

CN23CNS7 001

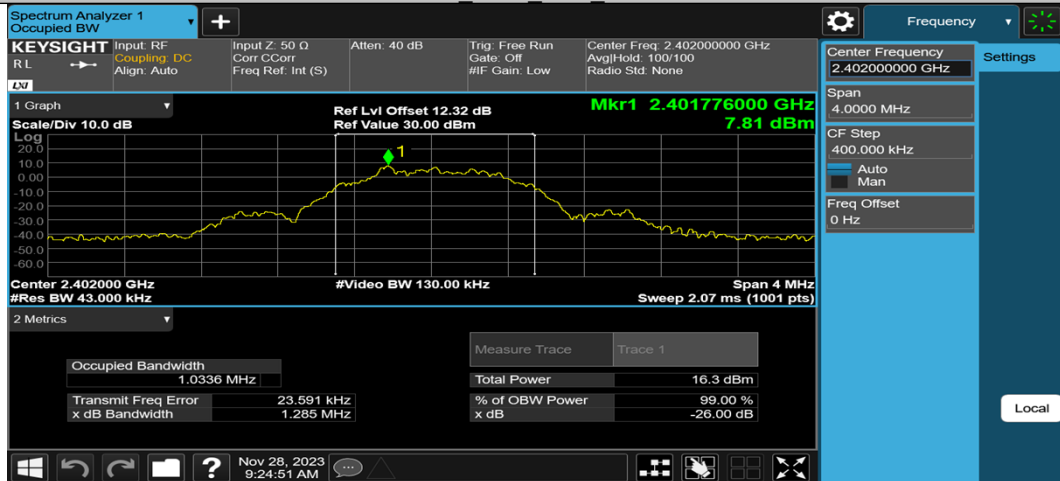
Page 13 of 51

Prüfbericht - Produkte

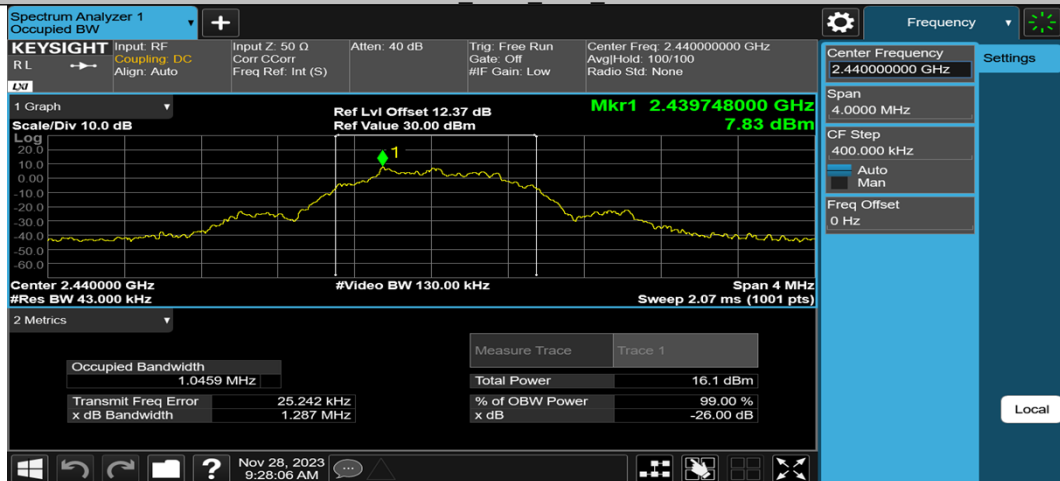
Test Report - Products



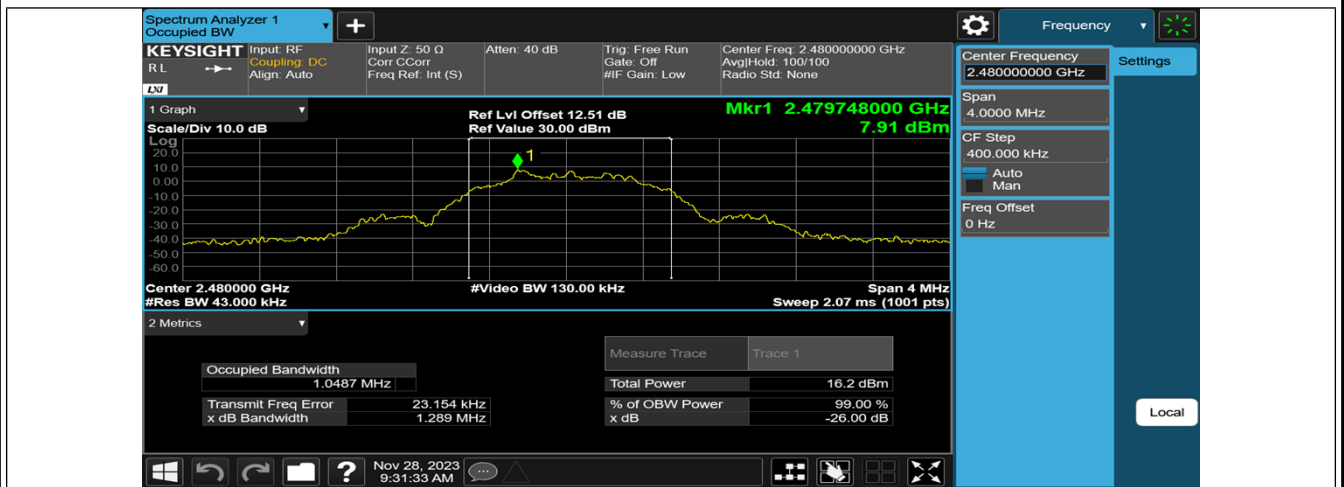
BLE 500K Ant1 2402



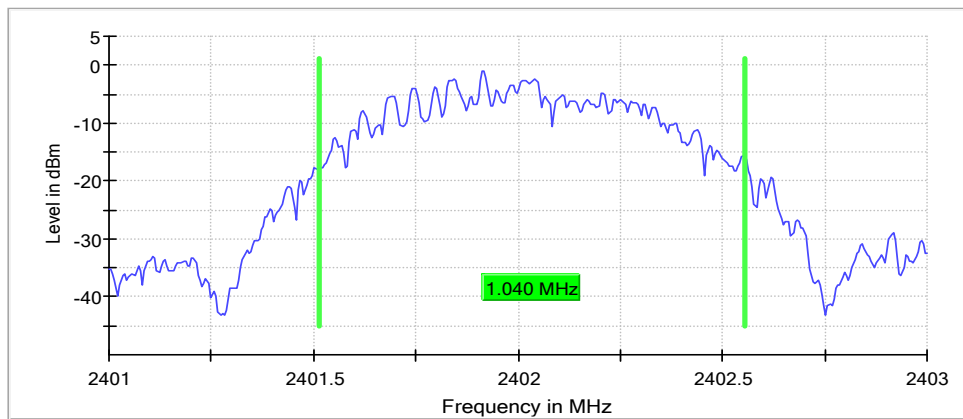
BLE 500K Ant1 2440



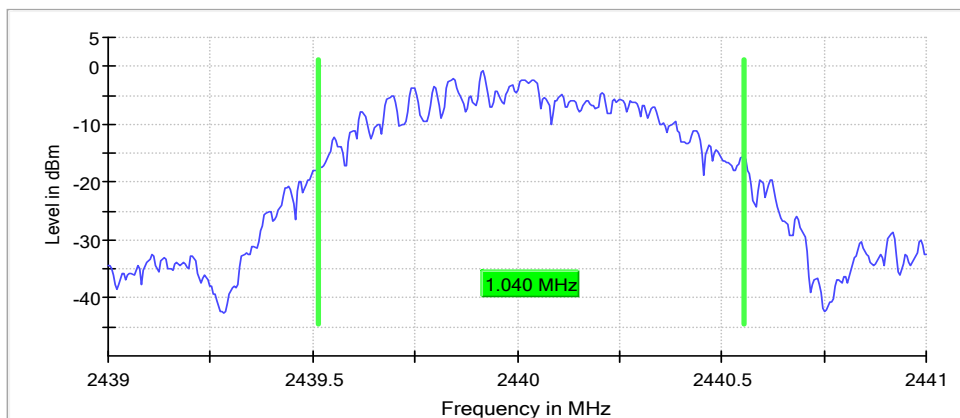
BLE 500K Ant1 2480



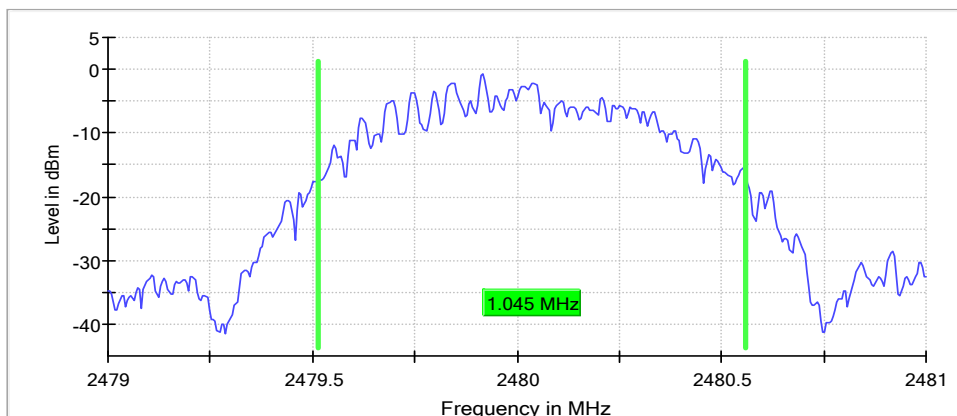
99 % Bandwidth



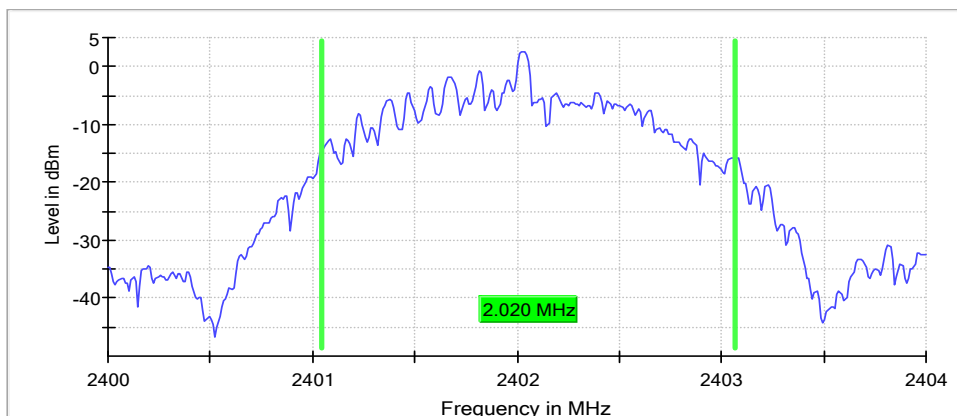
99 % Bandwidth



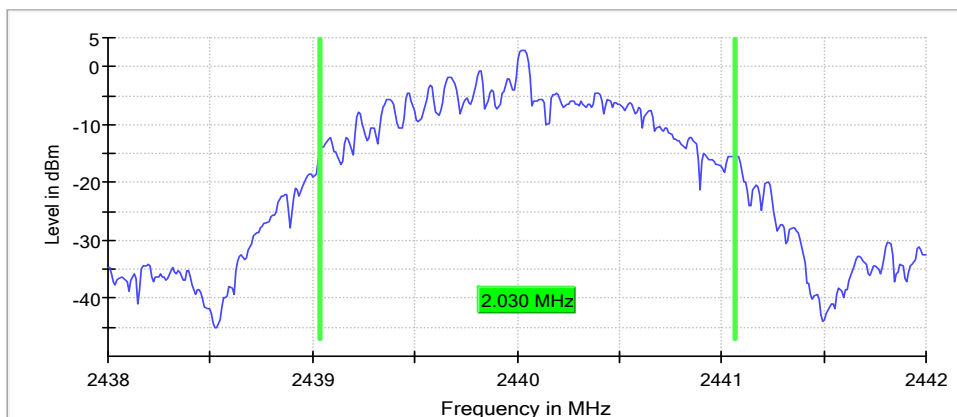
99 % Bandwidth

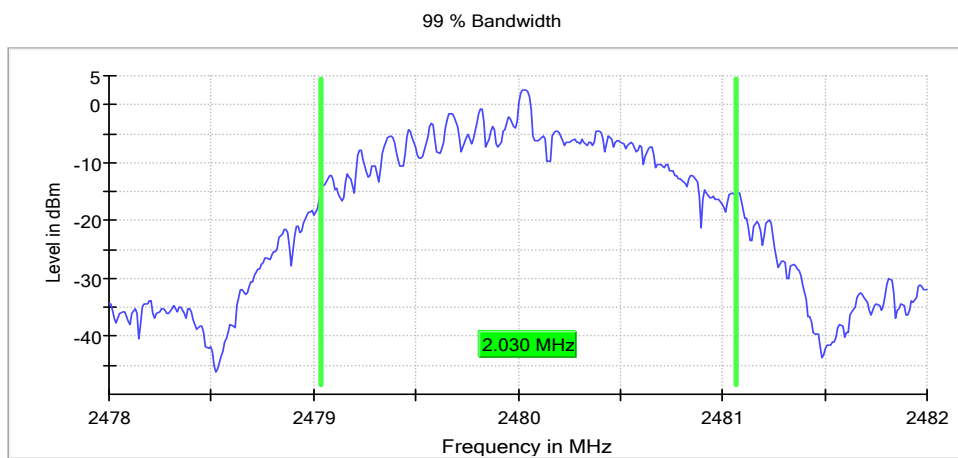


99 % Bandwidth



99 % Bandwidth





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

BLE_125K

