

Appendix Test Data for SRD (Conducted Measurement)

Product Name: Wireless Mechanical Keyboard

Trade Mark: Keychron

Test Model: K3 Max

FCC ID: 2ASF4-K3MAX

Environmental Conditions

Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

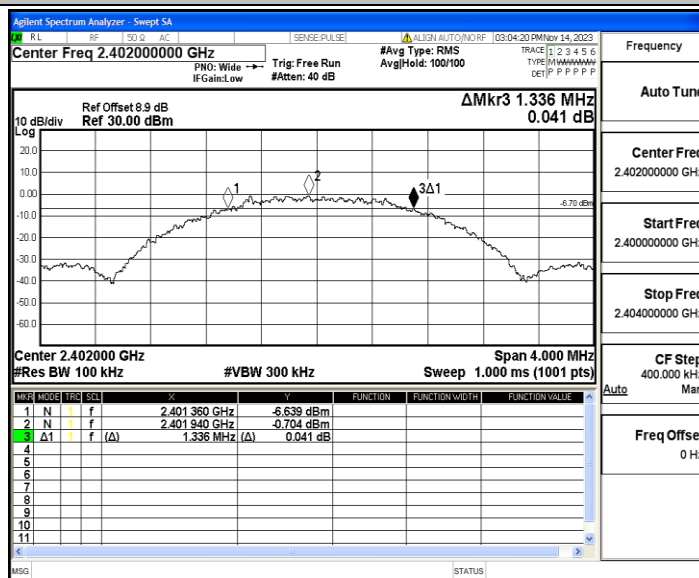
Appendix A: DTS Bandwidth

Test Result

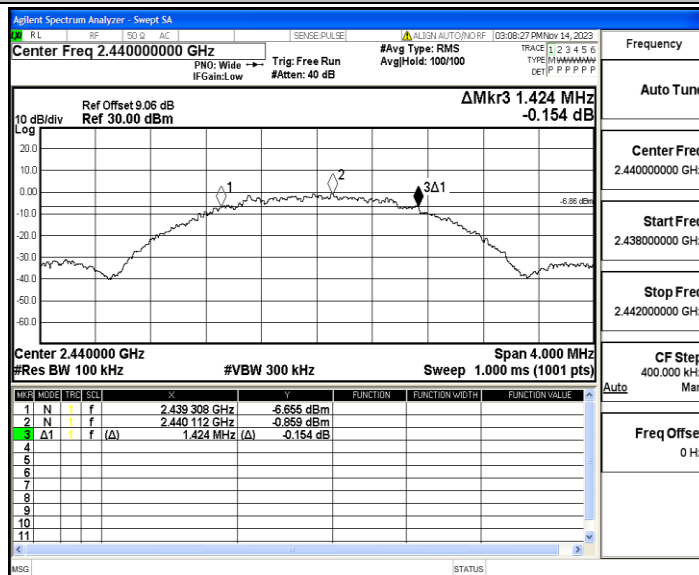
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
SRD	Ant1	2402	1.336	2401.360	2402.696	0.5	PASS
		2440	1.424	2439.308	2440.732	0.5	PASS
		2480	1.256	2479.380	2480.636	0.5	PASS

Test Graphs

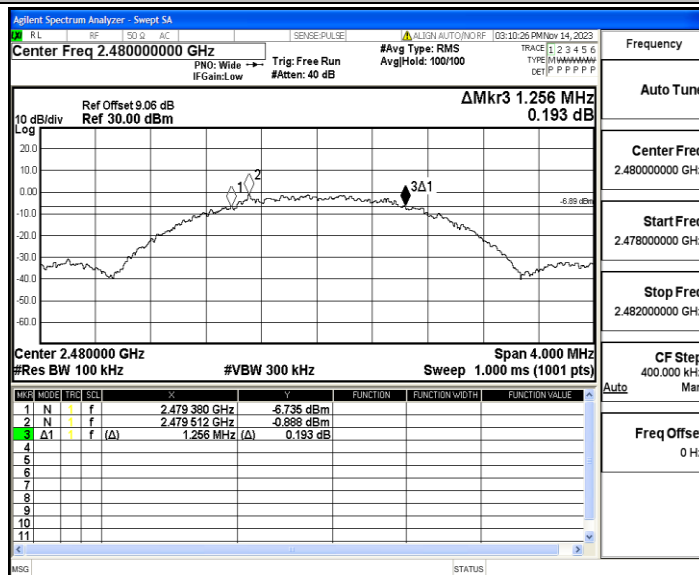
SRD_Ant1_2402



SRD_Ant1_2440



SRD_Ant1_2480



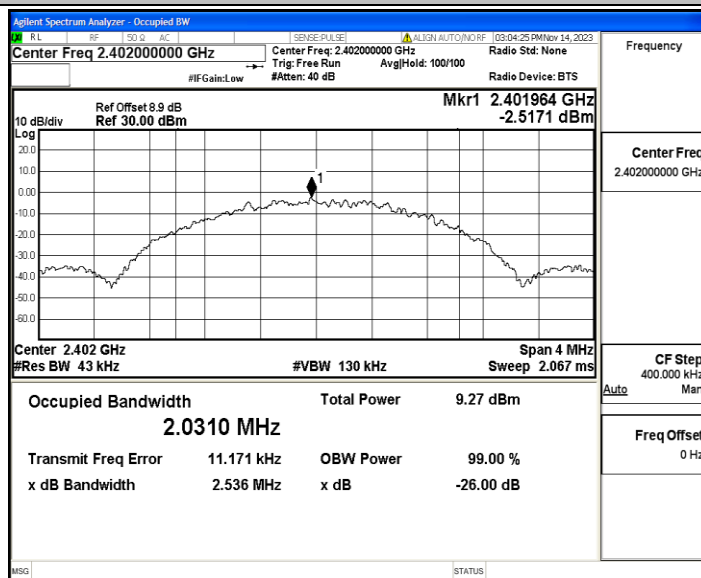
Appendix B: Occupied Channel Bandwidth

Test Result

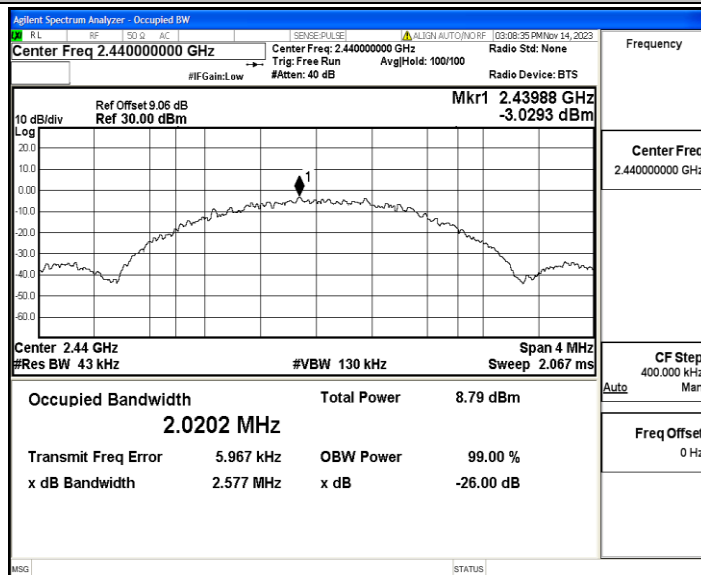
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
SRD	Ant1	2402	2.0310	2400.9957	2403.0267	---	---
		2440	2.0202	2438.9959	2441.0161	---	---
		2480	2.0378	2478.9929	2481.0307	---	---

Test Graphs

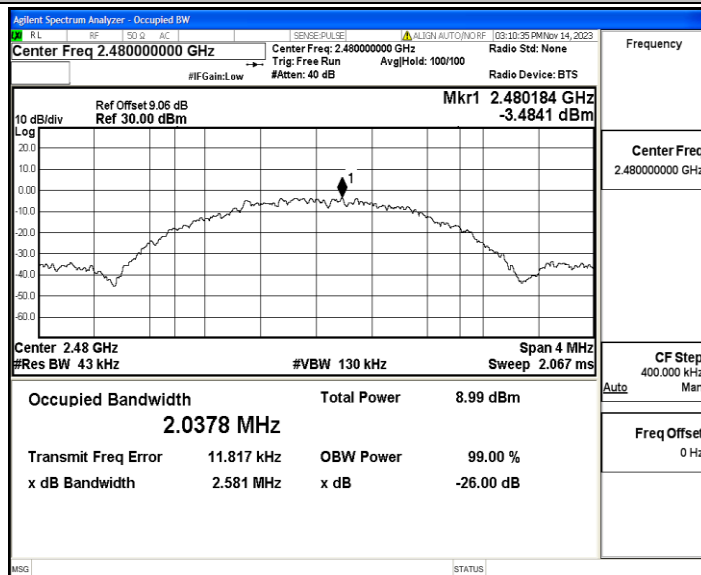
SRD_Ant1_2402



SRD_Ant1_2440



SRD_Ant1_2480

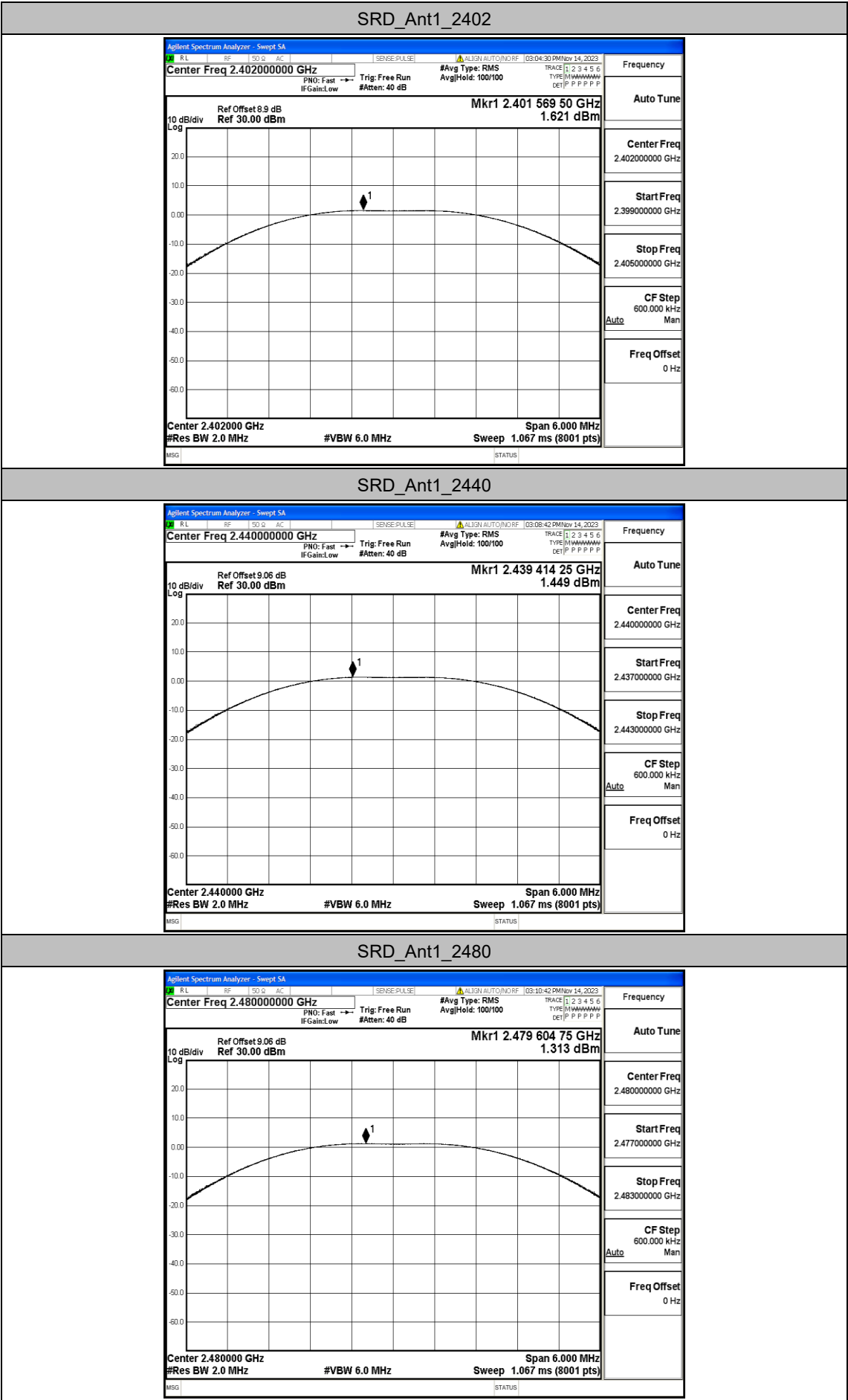


Appendix C: Maximum Peak conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
SRD	Ant1	2402	1.62	≤30	PASS
		2440	1.45	≤30	PASS
		2480	1.31	≤30	PASS

Test Graphs



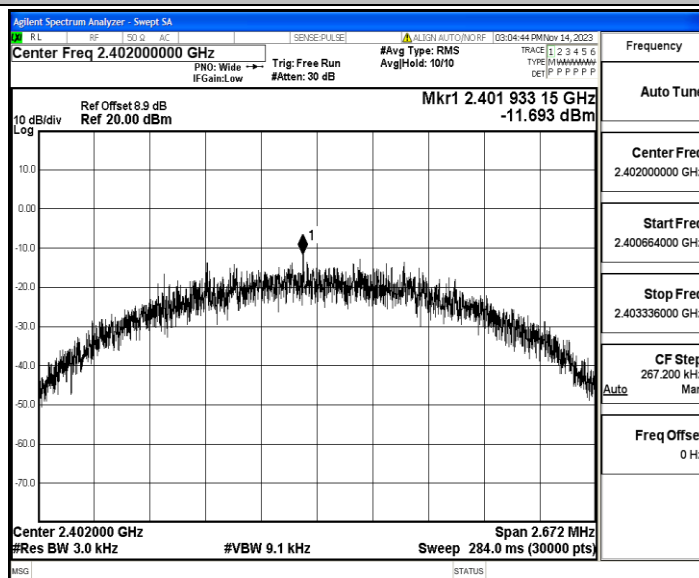
Appendix D: Maximum power spectral density

Test Result

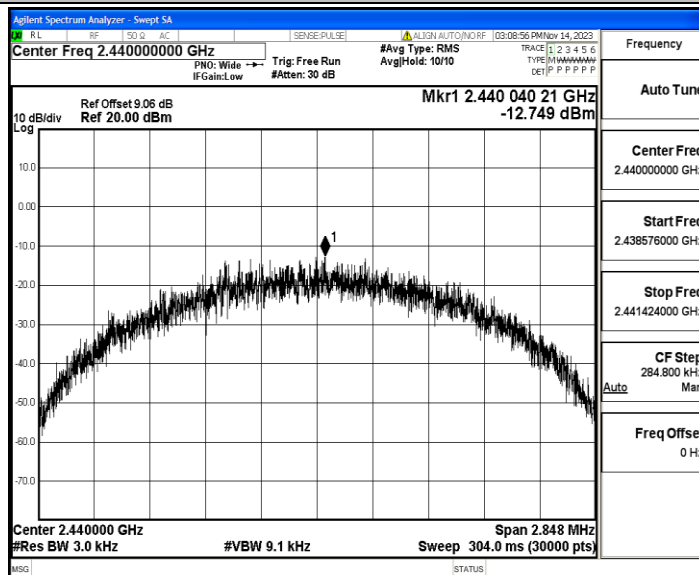
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
SRD	Ant1	2402	-11.69	≤8.00	PASS
		2440	-12.75	≤8.00	PASS
		2480	-12.24	≤8.00	PASS

Test Graphs

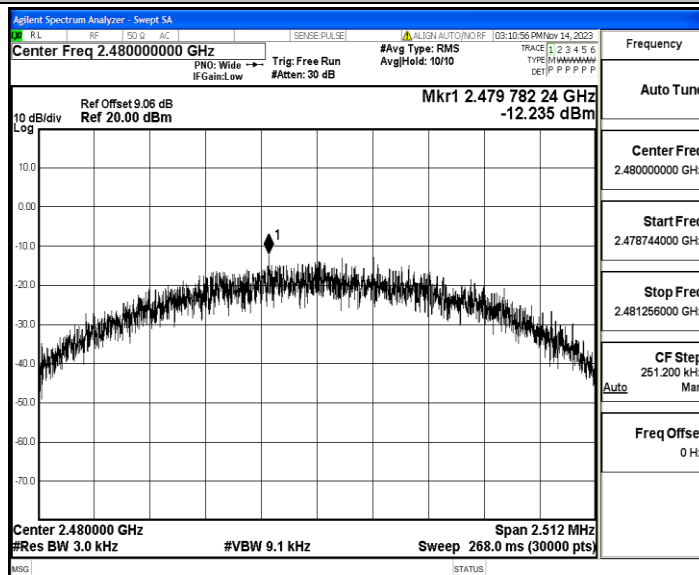
SRD_Ant1_2402



SRD_Ant1_2440



SRD_Ant1_2480

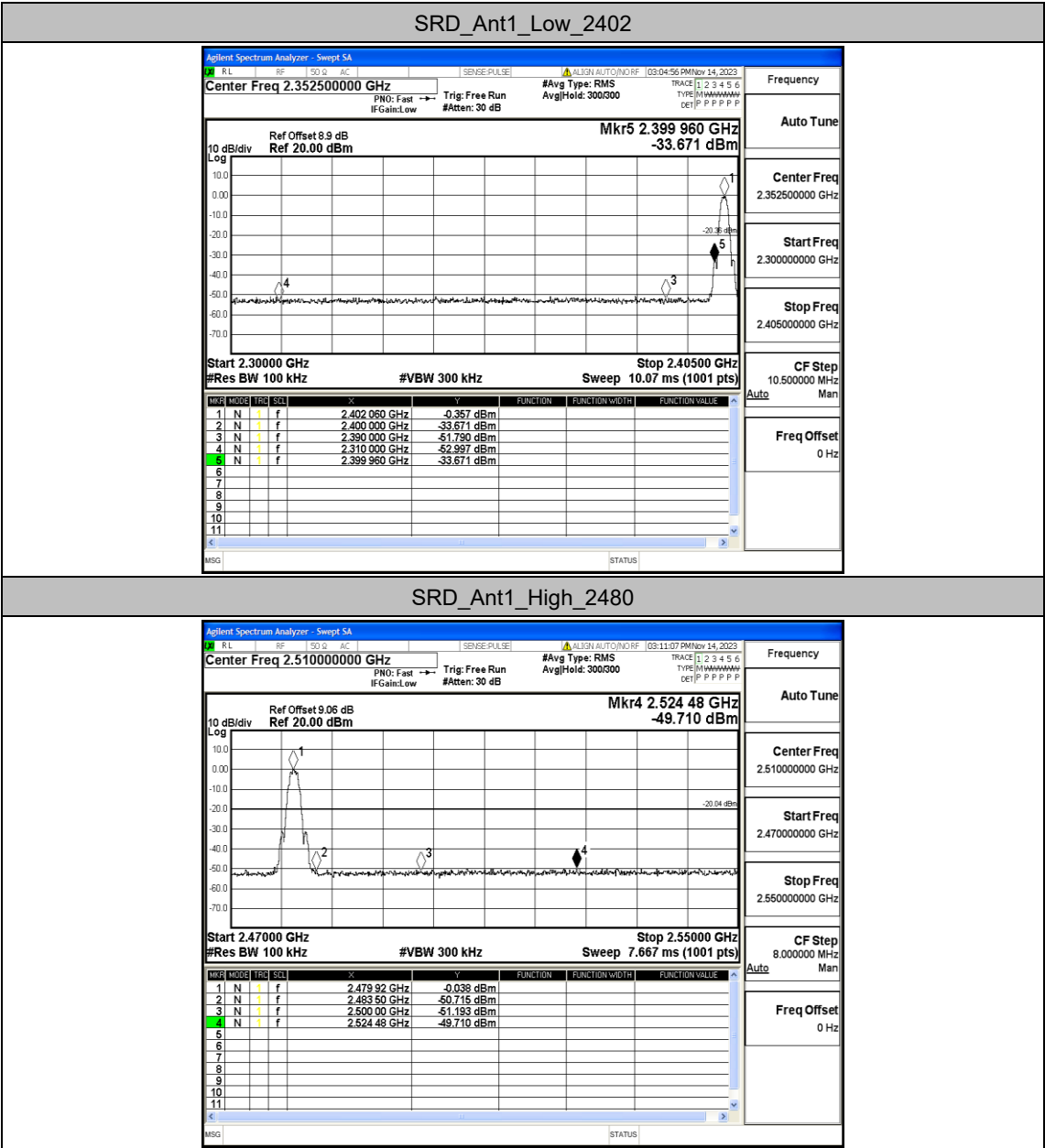


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
SRD	Ant1	Low	2402	-0.36	-33.67	≤-20.36	PASS
		High	2480	-0.04	-49.71	≤-20.04	PASS

Test Graphs



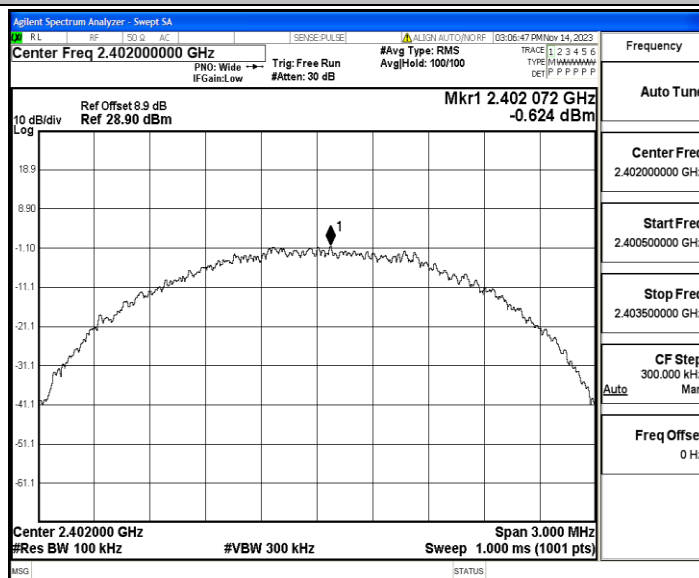
Appendix F: Conducted Spurious Emission

Test Result

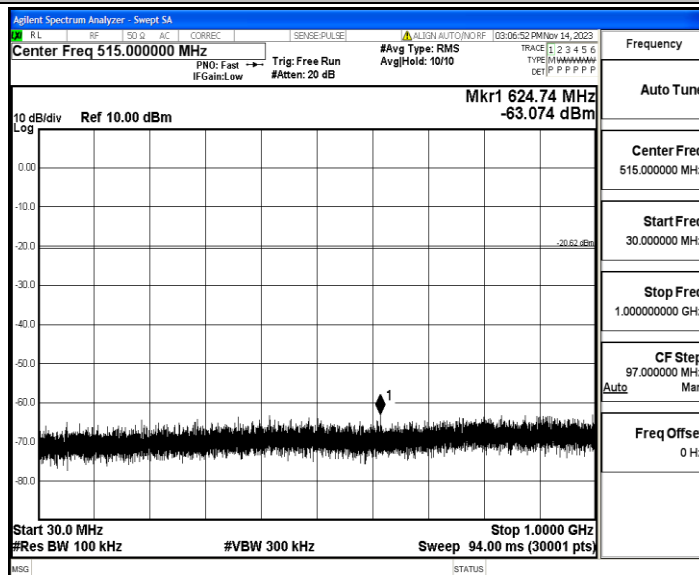
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
SRD	Ant1	2402	Reference	-0.62	-0.62	---	PASS
			30~1000	-0.62	-63.07	≤-20.62	PASS
			1000~26500	-0.62	-44.19	≤-20.62	PASS
		2440	Reference	-1.51	-1.51	---	PASS
			30~1000	-1.51	-61.97	≤-21.51	PASS
			1000~26500	-1.51	-43.25	≤-21.51	PASS
		2480	Reference	-1.16	-1.16	---	PASS
			30~1000	-1.16	-62.78	≤-21.16	PASS
			1000~26500	-1.16	-46.13	≤-21.16	PASS

Test Graphs

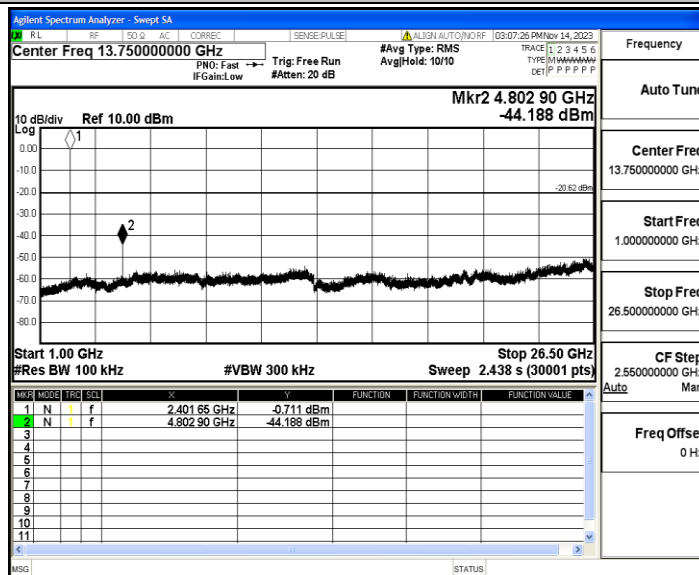
SRD_Ant1_2402_0~Reference



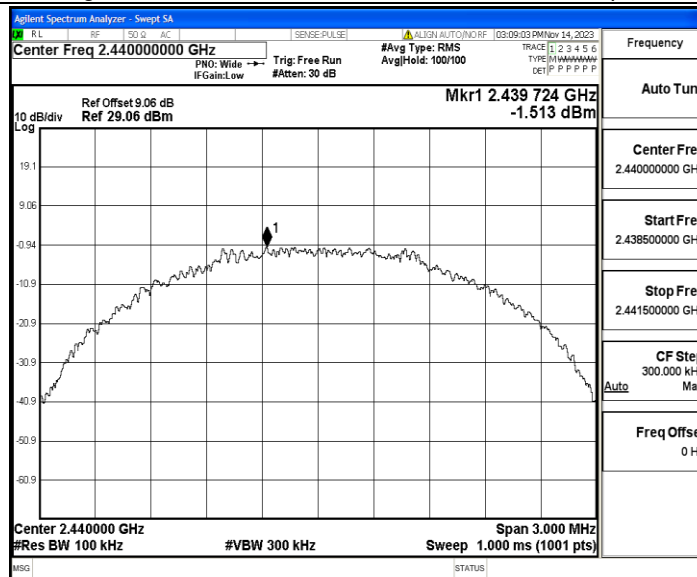
SRD_Ant1_2402_30~1000



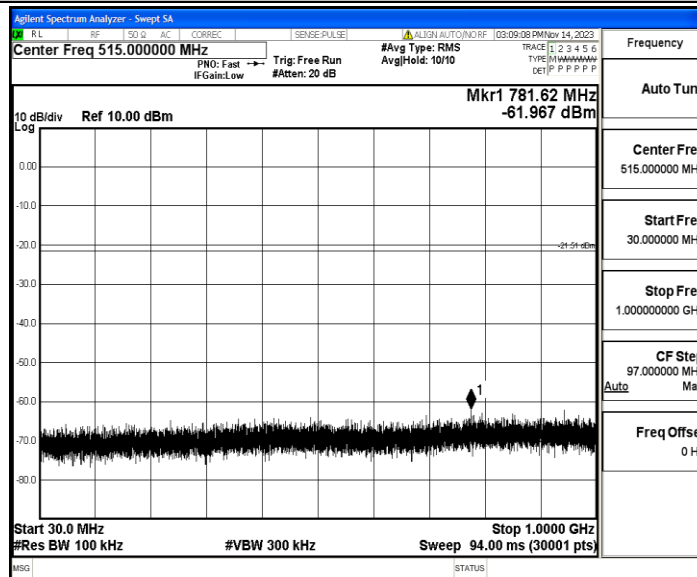
SRD_Ant1_2402_1000~26500



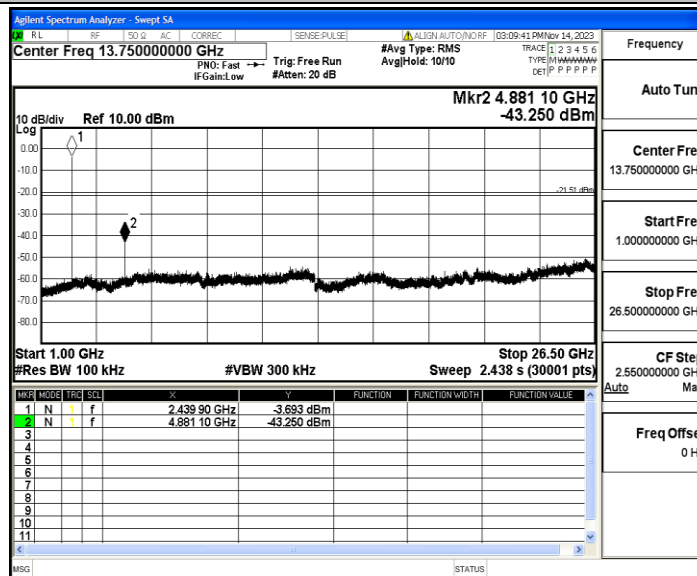
SRD_Ant1_2440_0~Reference



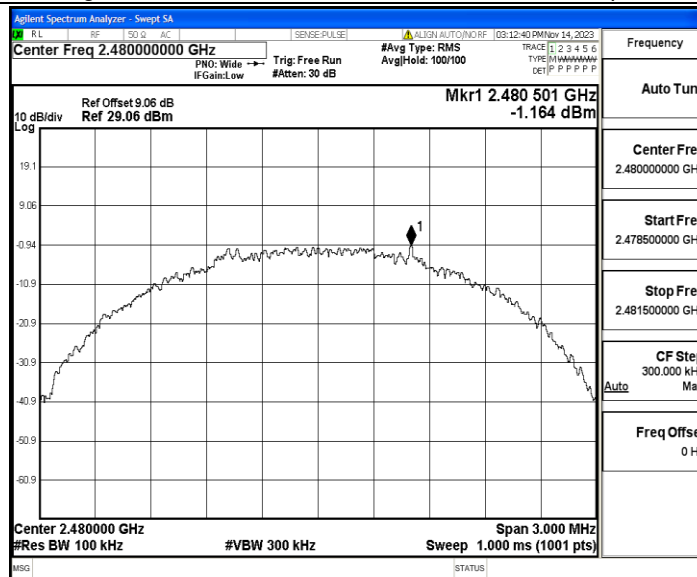
SRD_Ant1_2440_30~1000



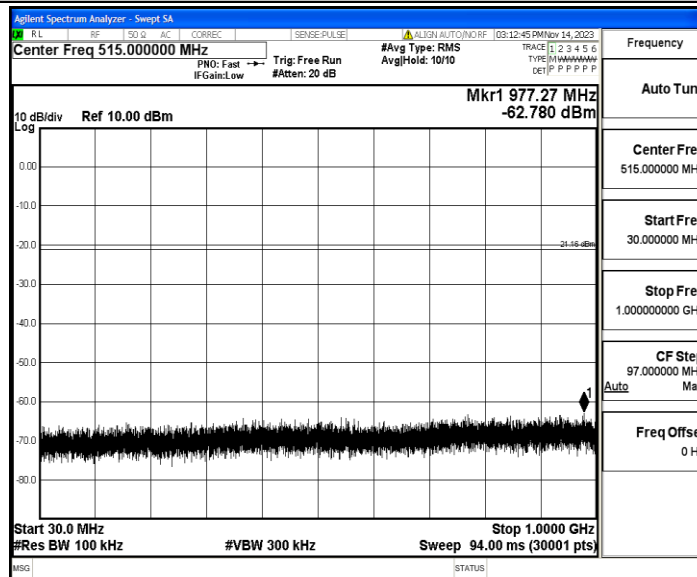
SRD_Ant1_2440_1000~26500



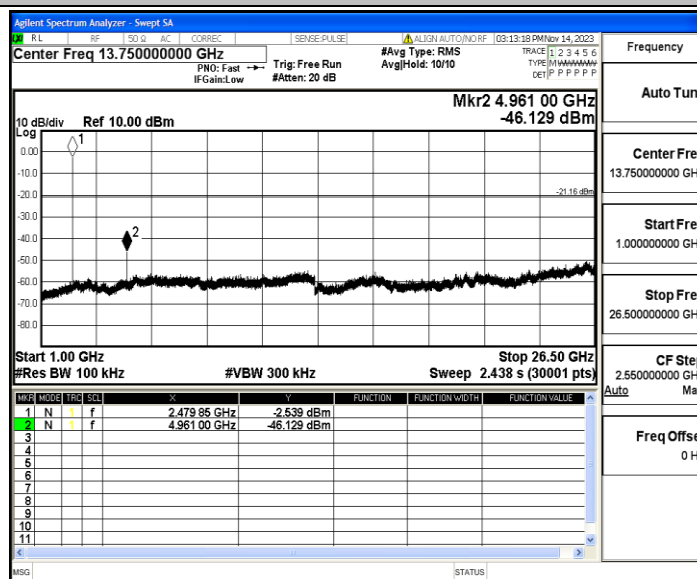
SRD_Ant1_2480_0~Reference



SRD_Ant1_2480_30~1000



SRD_Ant1_2480_1000~26500



Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
SRD	Ant1	2402	0.00	0.00	100	0.01
		2440	0.00	0.00	100	0.01
		2480	0.00	0.00	100	0.01

Test Graphs



Appendix H: Emissions in Restricted Bands

Test Result

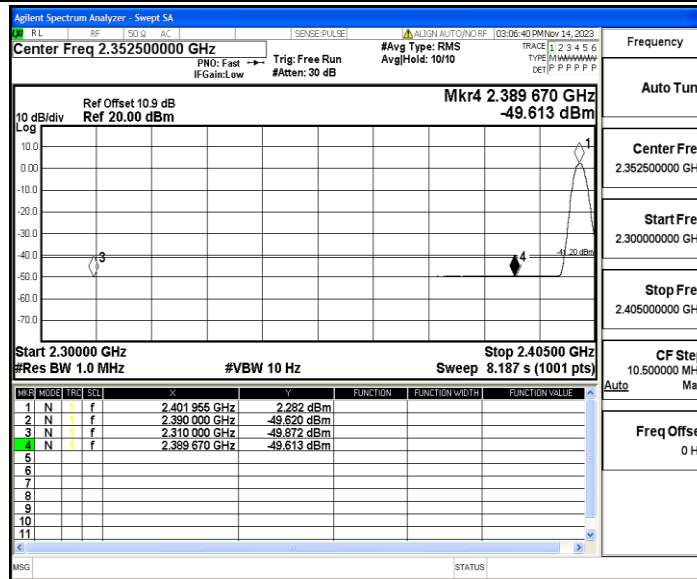
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
SRD	Ant1	Low	2402	AV	2310.000	-49.87	≤-41.20	PASS
				AV	2389.670	-49.61	≤-41.20	PASS
				AV	2390.000	-49.62	≤-41.20	PASS
				Peak	2310.000	-42.66	≤-21.20	PASS
				Peak	2348.405	-40.09	≤-21.20	PASS
				Peak	2390.000	-43.81	≤-21.20	PASS
		High	2480	AV	2483.500	-45.23	≤-41.20	PASS
				AV	2483.520	-45.23	≤-41.20	PASS
				AV	2500.000	-48.89	≤-41.20	PASS
				Peak	2483.500	-40.8	≤-21.20	PASS
				Peak	2491.200	-40.31	≤-21.20	PASS
				Peak	2500.000	-42.52	≤-21.20	PASS

Note:

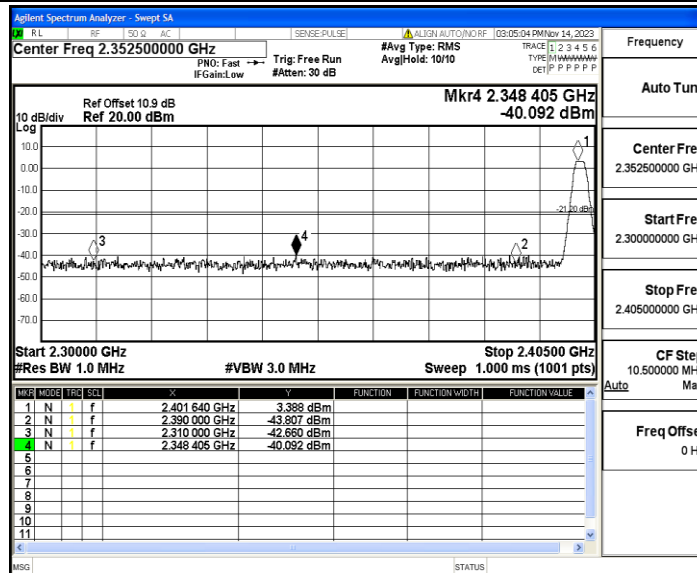
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

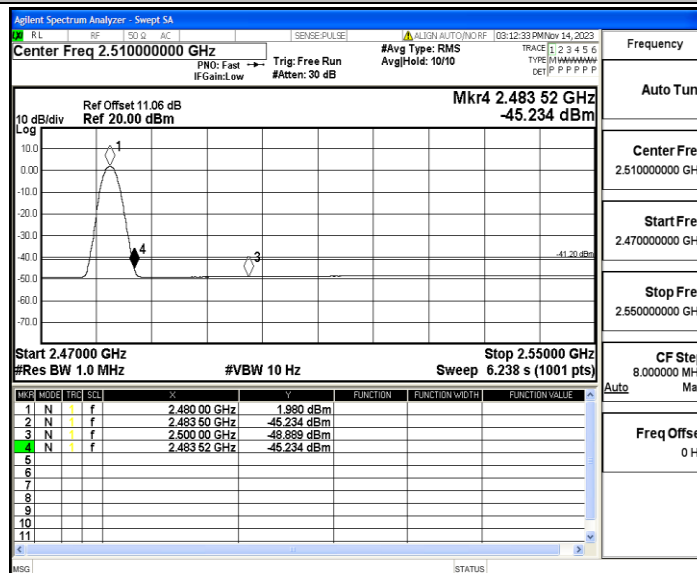
SRD_Ant1_Low_2402_AV



SRD_Ant1_Low_2402_Peak



SRD_Ant1_High_2480_AV



SRD_Ant1_High_2480_Peak

