

RF Test Data for BT(BDR/EDR) (Conducted Measurement)**Product Name: Bluetooth mechanical keyboard****Trade Mark: Keychron****Test Model: Keychron K5****FCC ID: 2ASF4-K5****Environmental Conditions**

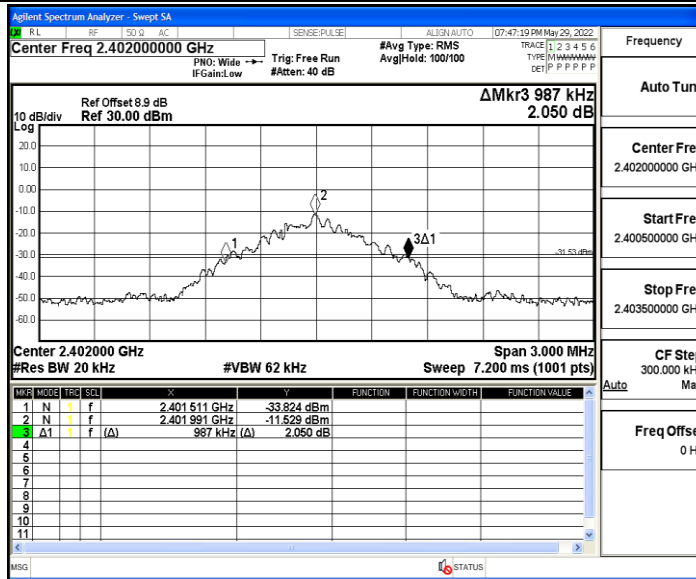
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: 20dB Emission Bandwidth**Test Result**

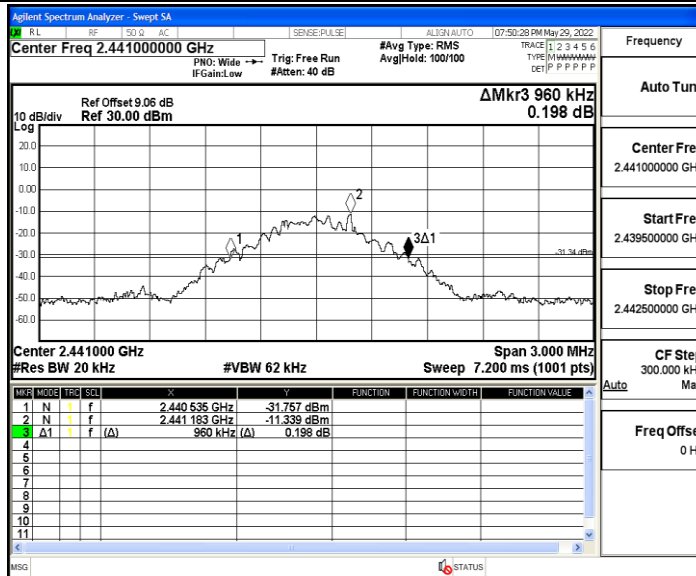
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.987	2401.511	2402.498	---	---
		2441	0.960	2440.535	2441.495	---	---
		2480	0.987	2479.514	2480.501	---	---

Test Graphs

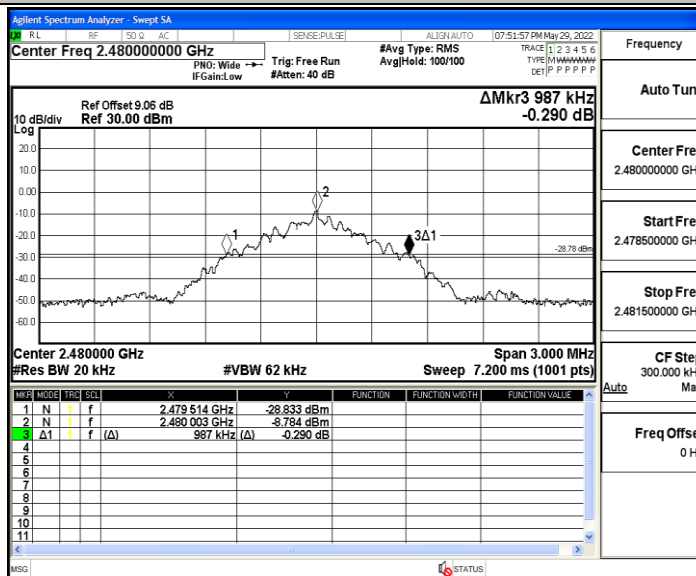
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



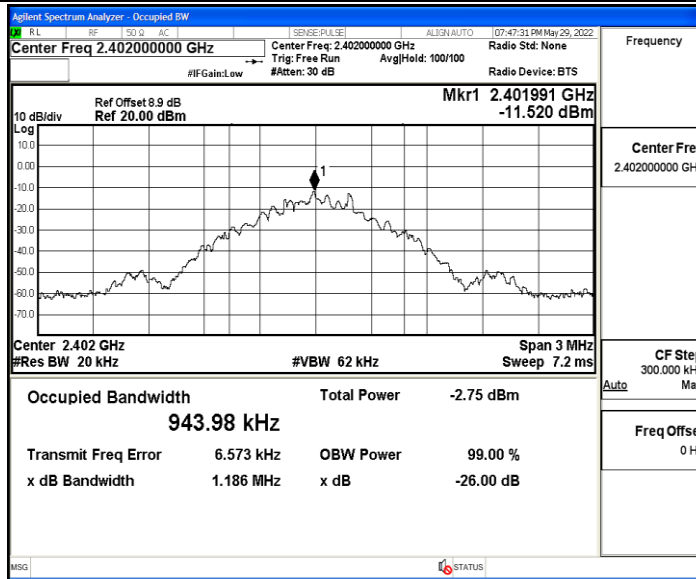
Appendix B: Occupied Channel Bandwidth

Test Result

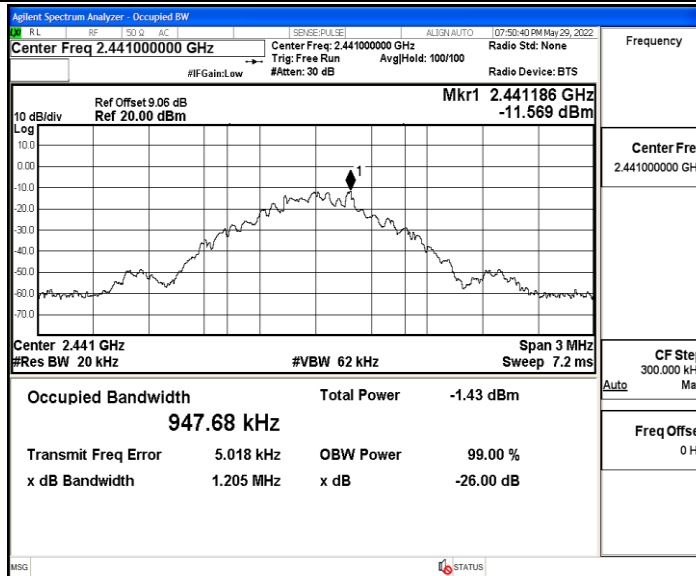
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.94398	2401.535	2402.479	---	---
		2441	0.94768	2440.531	2441.479	---	---
		2480	0.92749	2479.550	2480.478	---	---

Test Graphs

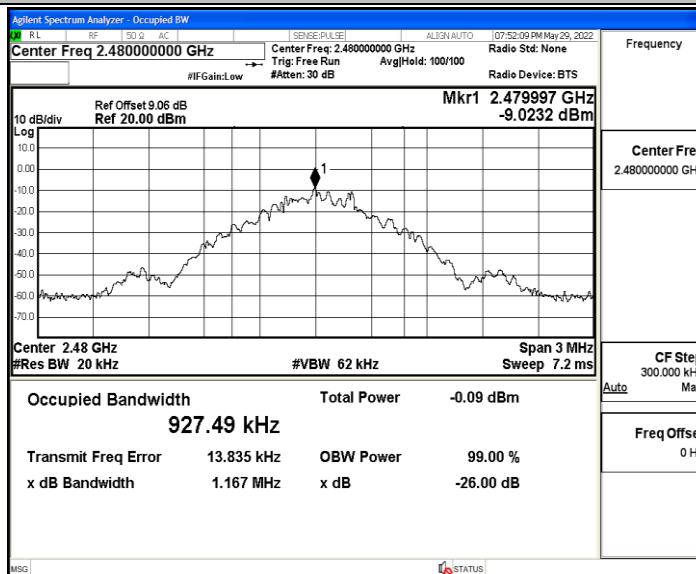
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



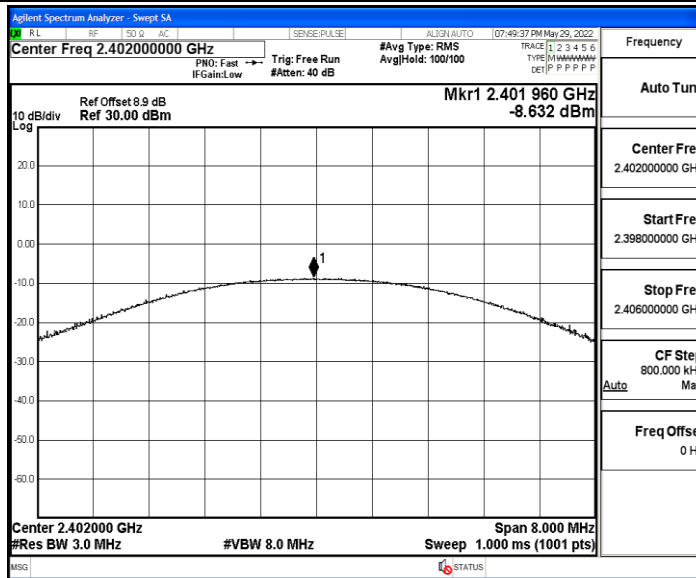
Appendix C: Maximum conducted output power

Test Result

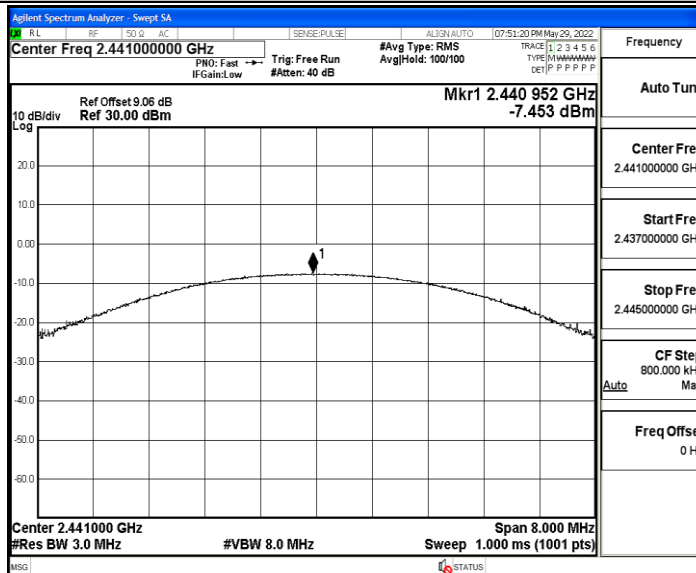
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-8.63	≤20.97	PASS
		2441	-7.45	≤20.97	PASS
		2480	-6.35	≤20.97	PASS

Test Graphs

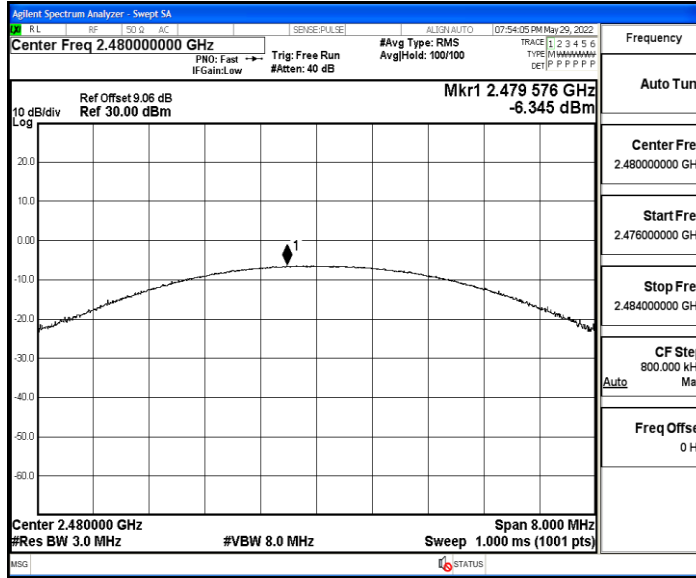
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



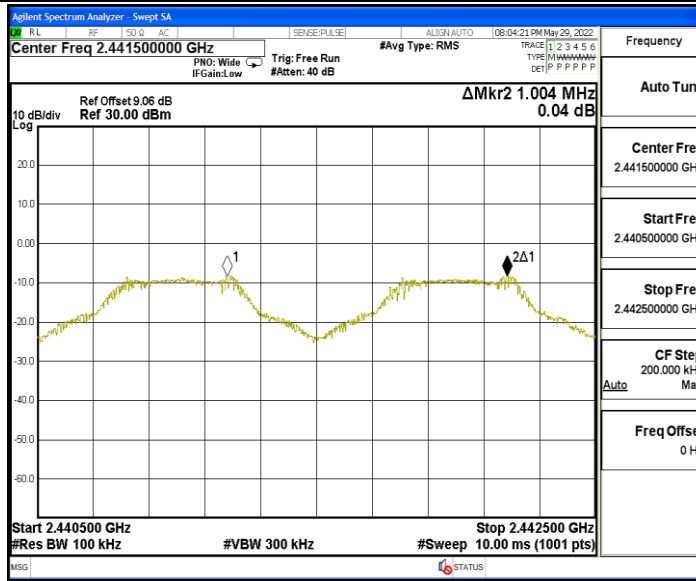
Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.004	≥0.987	PASS

Test Graphs

DH5_Ant1_Hop



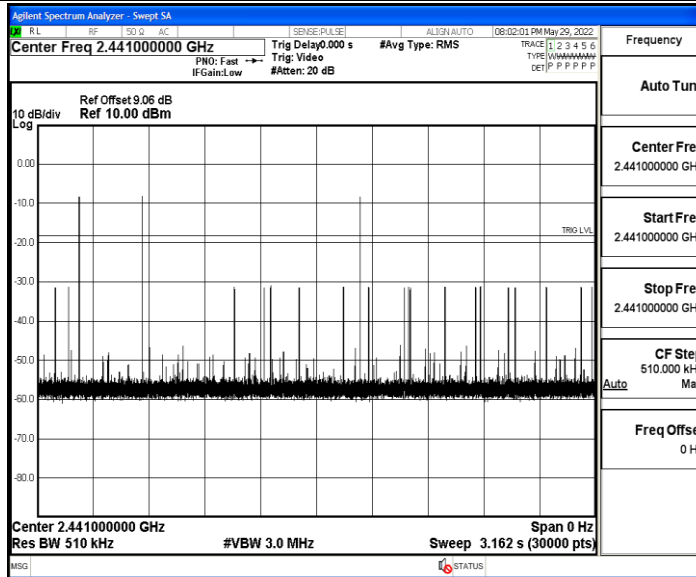
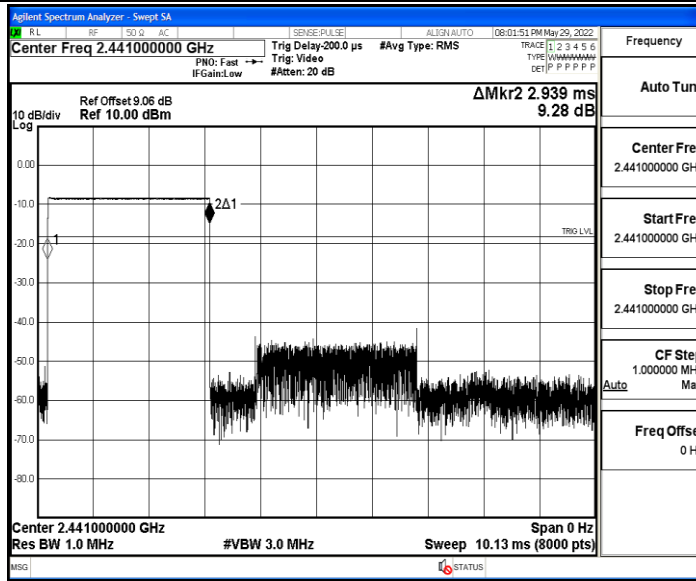
Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.94	40	0.118	≤0.4	PASS

Test Graphs

DH5_Ant1_Hop

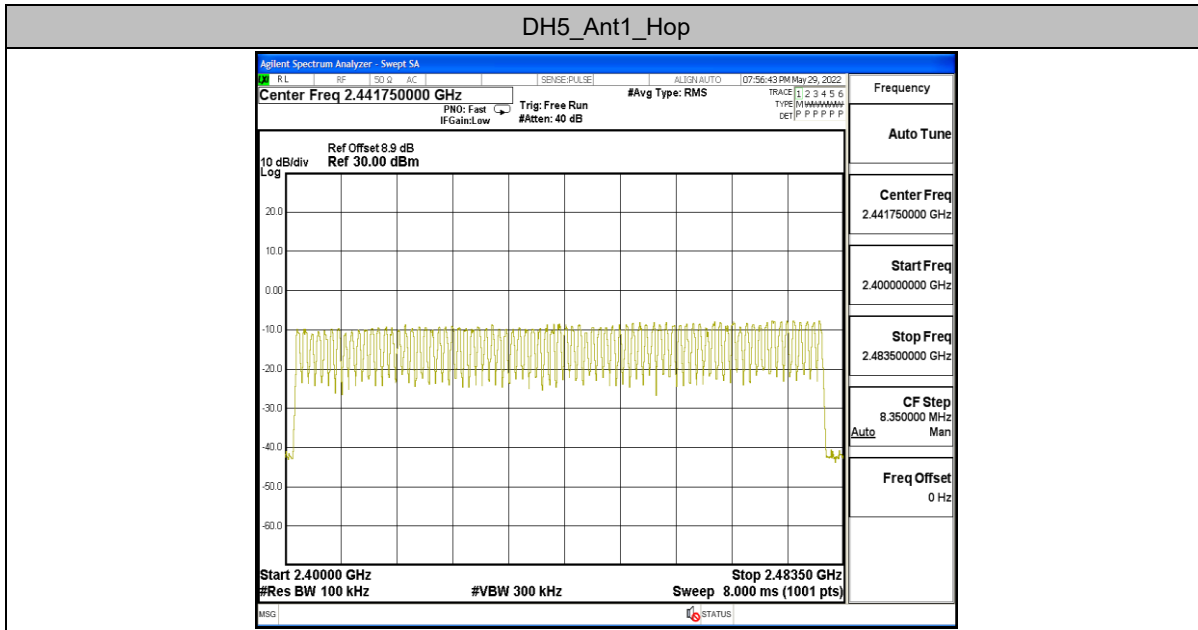


Appendix F: Number of hopping channels

Test Result

TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS

Test Graphs



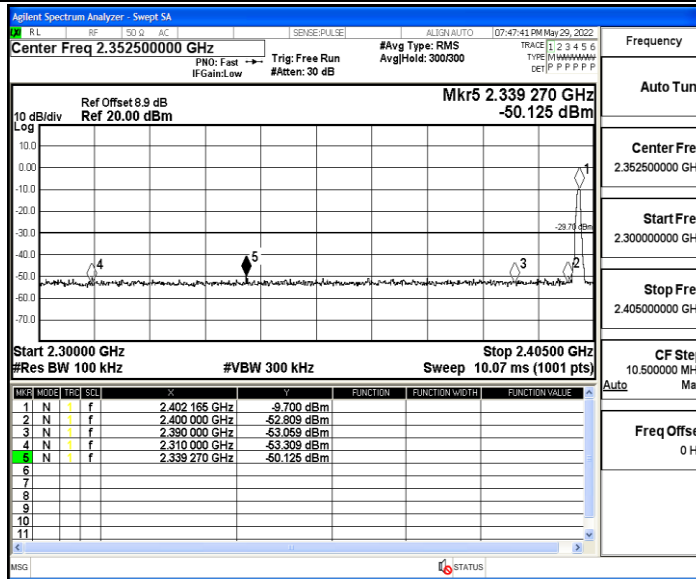
Appendix G: Band edge measurements

Test Result

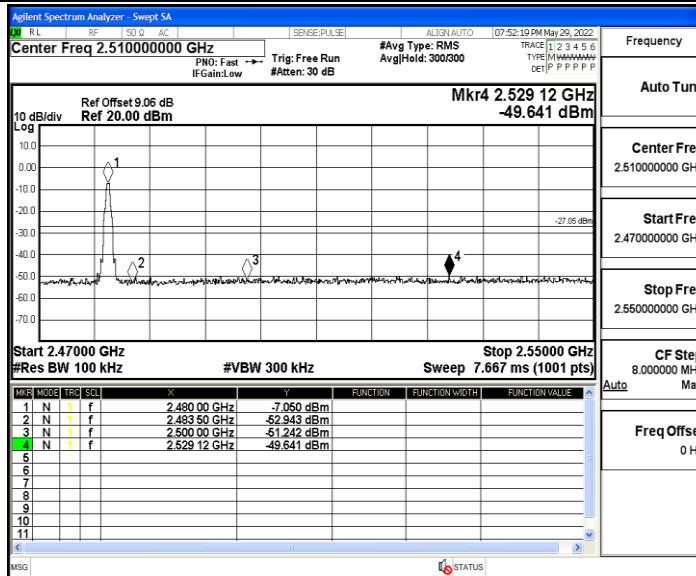
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-9.70	-50.13	≤-29.7	PASS
		High	2480	-7.05	-49.64	≤-27.05	PASS
		Low	Hop_2402	-10.20	-50.21	≤-30.2	PASS
		High	Hop_2480	-7.36	-49.29	≤-27.36	PASS

Test Graphs

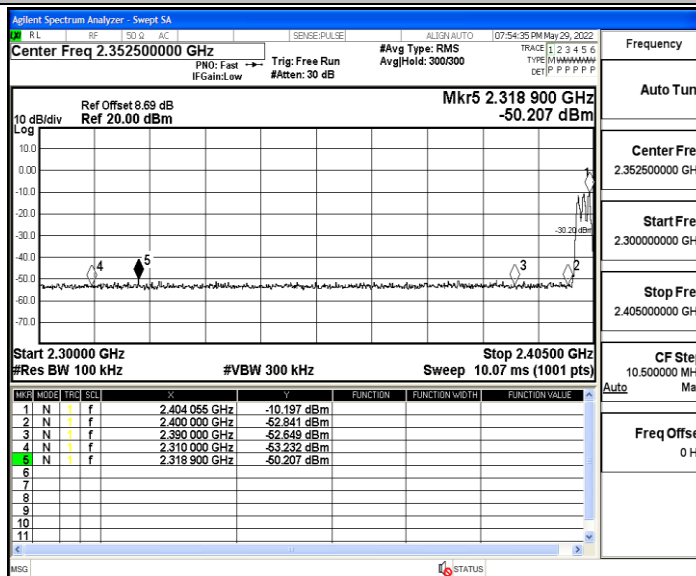
DH5_Ant1_Low_2402



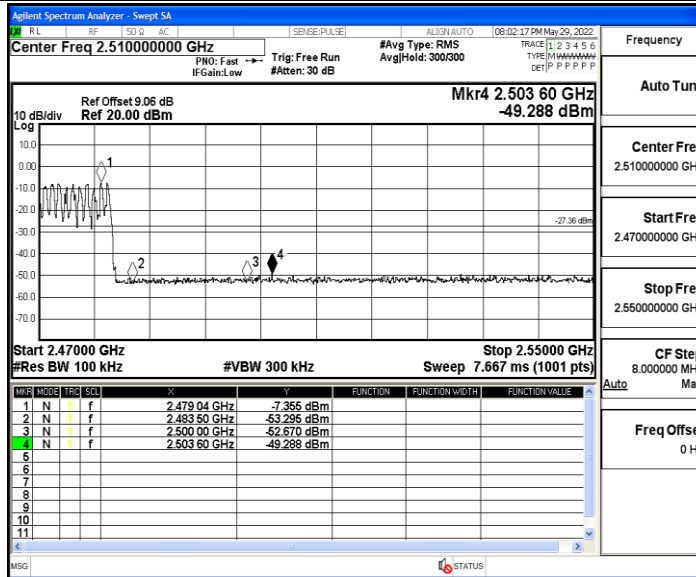
DH5_Ant1_High_2480



DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480



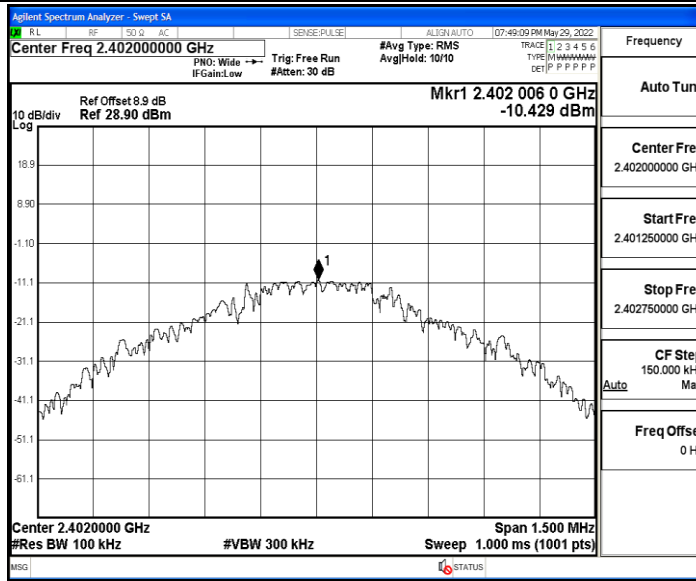
Appendix H: Conducted Spurious Emission

Test Result

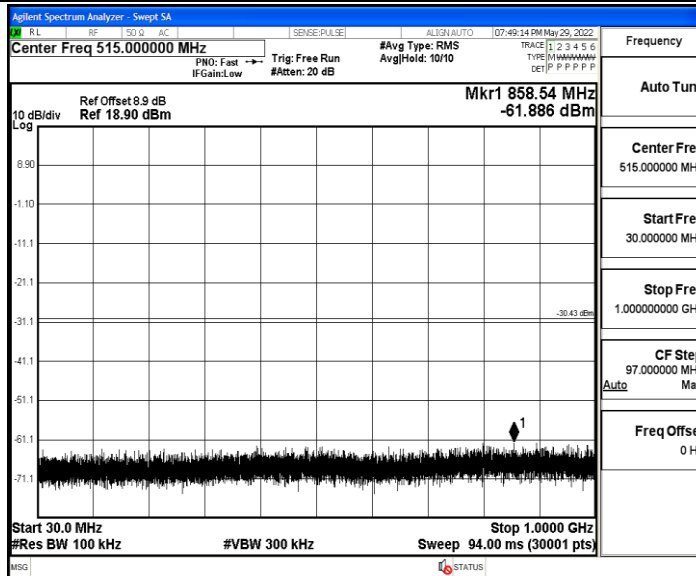
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-10.43	-10.43	---	PASS
			30~1000	-10.43	-61.89	≤-30.43	PASS
			1000~26500	-10.43	-51.73	≤-30.43	PASS
		2441	Reference	-8.63	-8.63	---	PASS
			30~1000	-8.63	-61.72	≤-28.63	PASS
			1000~26500	-8.63	-51.75	≤-28.63	PASS
		2480	Reference	-7.98	-7.98	---	PASS
			30~1000	-7.98	-61.38	≤-27.98	PASS
			1000~26500	-7.98	-50.76	≤-27.98	PASS

Test Graphs

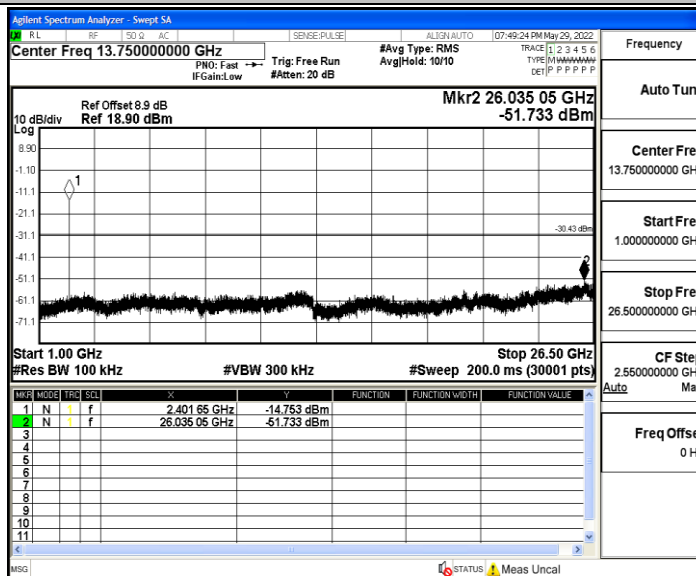
DH5_Ant1_2402_0~Reference



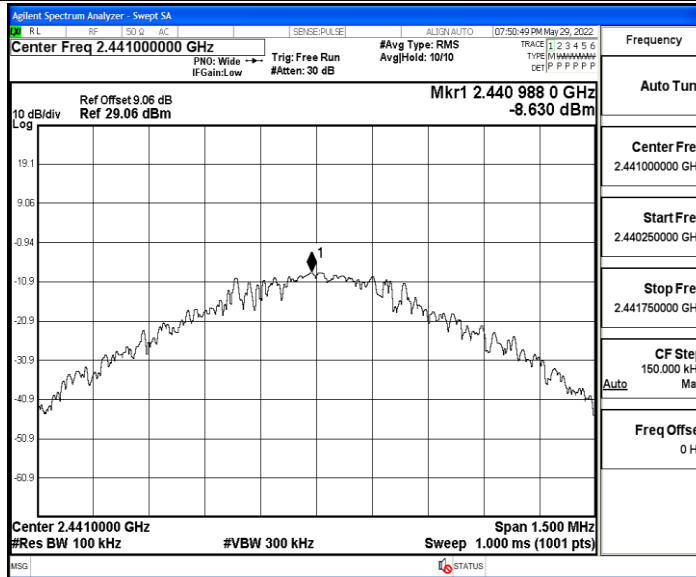
DH5_Ant1_2402_30~1000



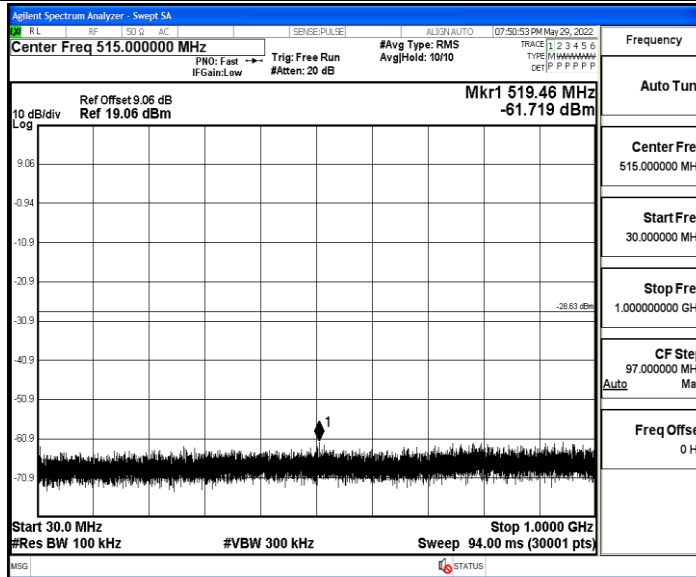
DH5_Ant1_2402_1000~26500



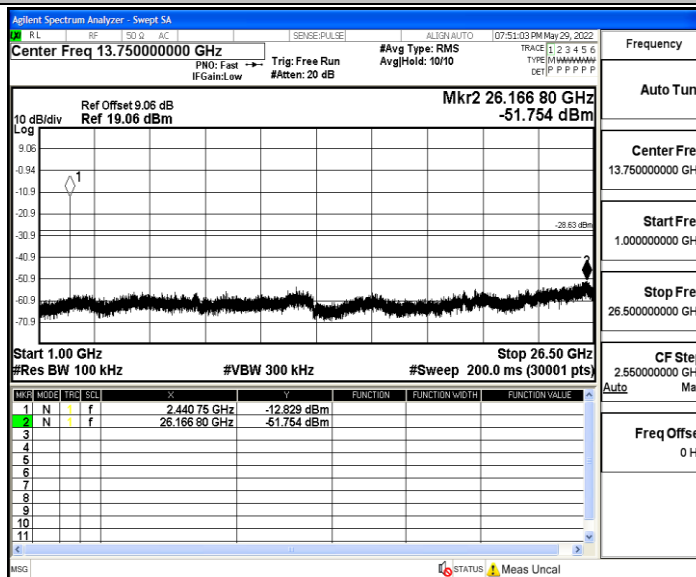
DH5_Ant1_2441_0~Reference



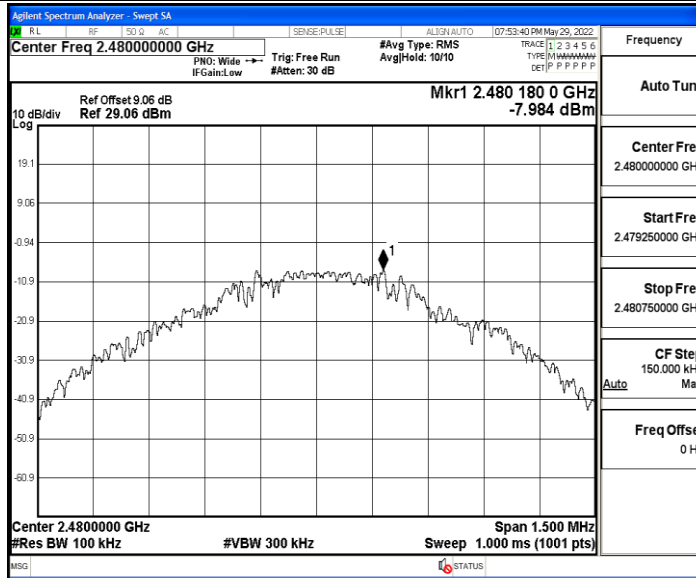
DH5_Ant1_2441_30~1000



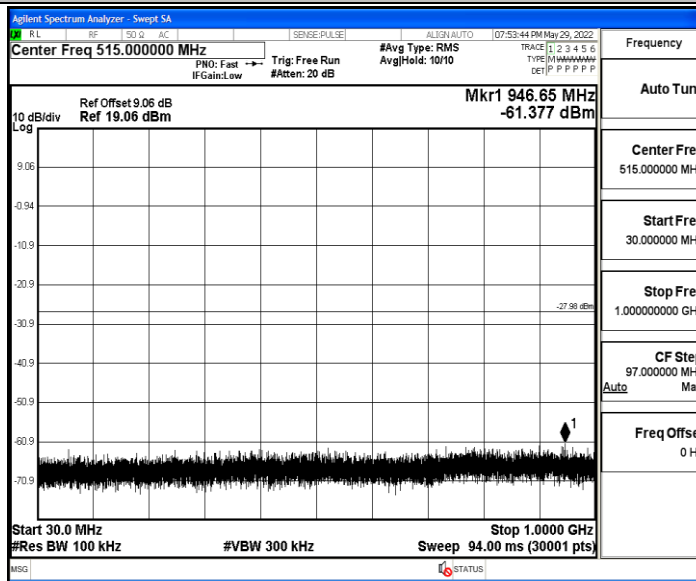
DH5_Ant1_2441_1000~26500



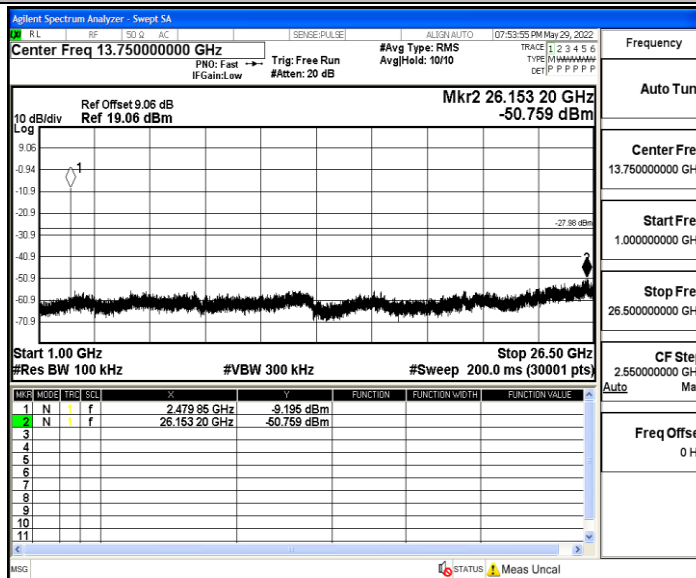
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500



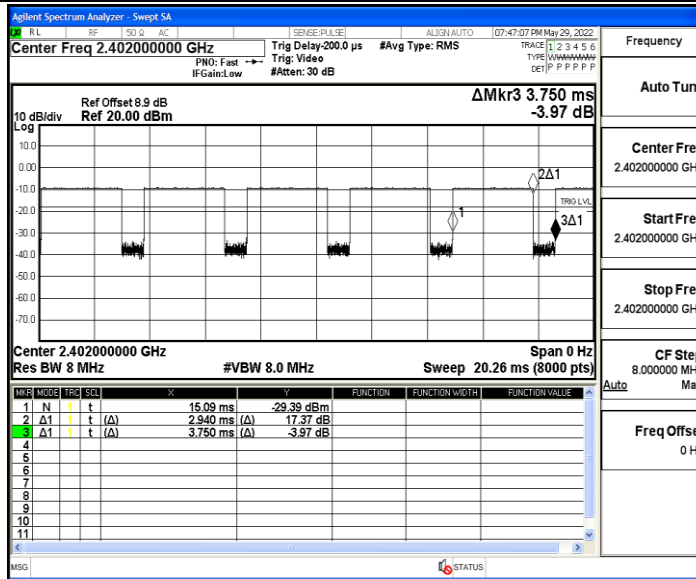
Appendix I: Duty Cycle

Test Result

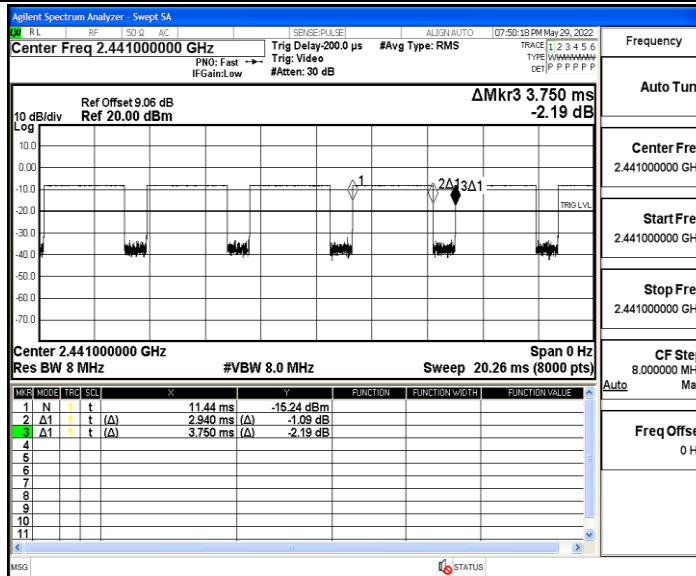
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
DH5	Ant1	2402	2.94	3.75	78.40	0.34
		2441	2.94	3.75	78.40	0.34
		2480	2.94	3.75	78.40	0.34

Test Graphs

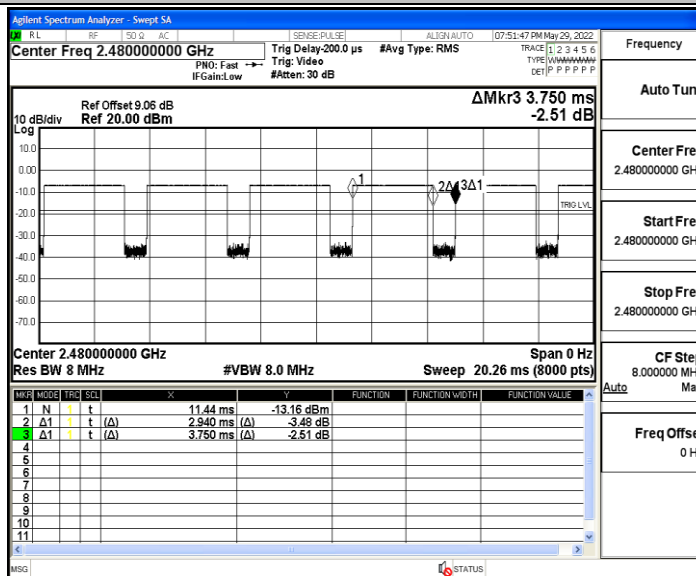
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



Appendix J: Emissions in Restricted Bands

Test Result

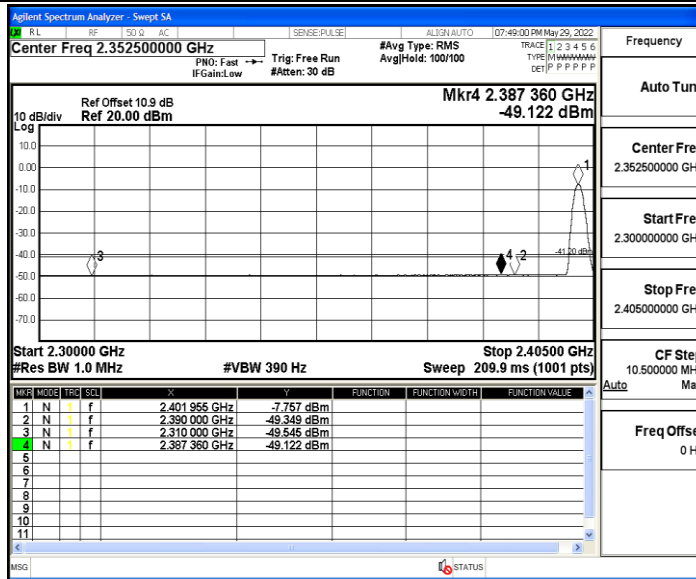
TestMode	Antenna	ChName	Channel	Detector	Freq(MHz)	Result(dBm)	Limit(dBm)	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-49.55	≤-41.20	PASS
				AV	2387.360	-49.12	≤-41.20	PASS
				AV	2390.000	-49.35	≤-41.20	PASS
				Peak	2310.000	-42.41	≤-21.20	PASS
				Peak	2352.290	-39.1	≤-21.20	PASS
				Peak	2390.000	-41.78	≤-21.20	PASS
		High	2480	AV	2483.500	-48.76	≤-41.20	PASS
				AV	2498.880	-48.44	≤-41.20	PASS
				AV	2500.000	-48.62	≤-41.20	PASS
				Peak	2483.500	-42.97	≤-21.20	PASS
				Peak	2495.280	-38.95	≤-21.20	PASS
				Peak	2500.000	-40.24	≤-21.20	PASS

Note:

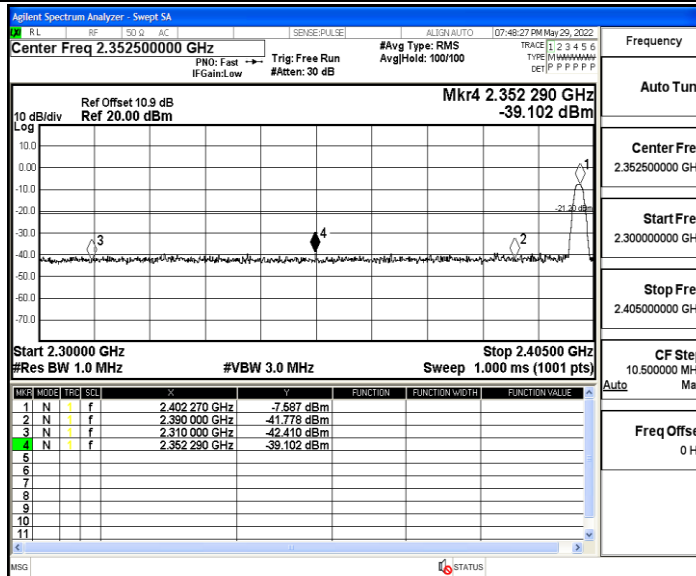
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

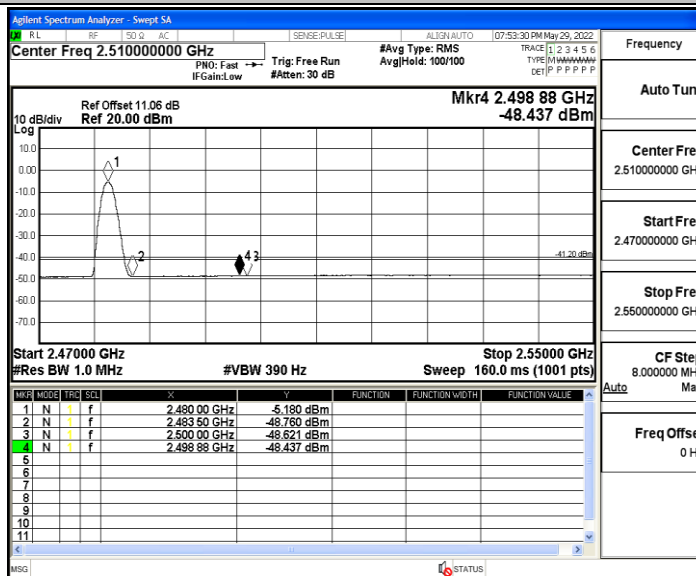
DH5_Ant1_Low_2402_AV



DH5_Ant1_Low_2402_Peak



DH5_Ant1_High_2480_AV



DH5_Ant1_High_2480_Peak

