Appendix Test Data for BT(BDR/EDR) (Conducted Measurement)

Product Name: Bluetooth Keyboard

Trade Mark: Dexnor

Test Model: DK004

FCC ID: 2BA3T-DK004DK005

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

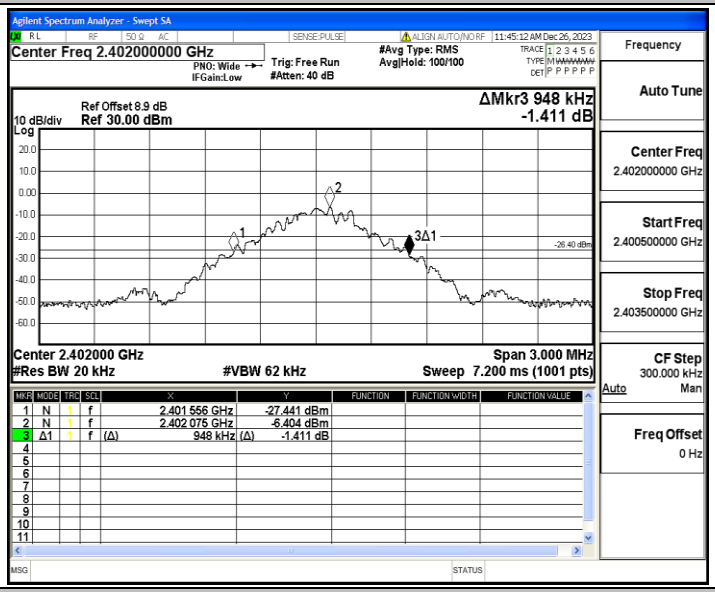
Appendix A: 20dB Emission Bandwidth

Test Result

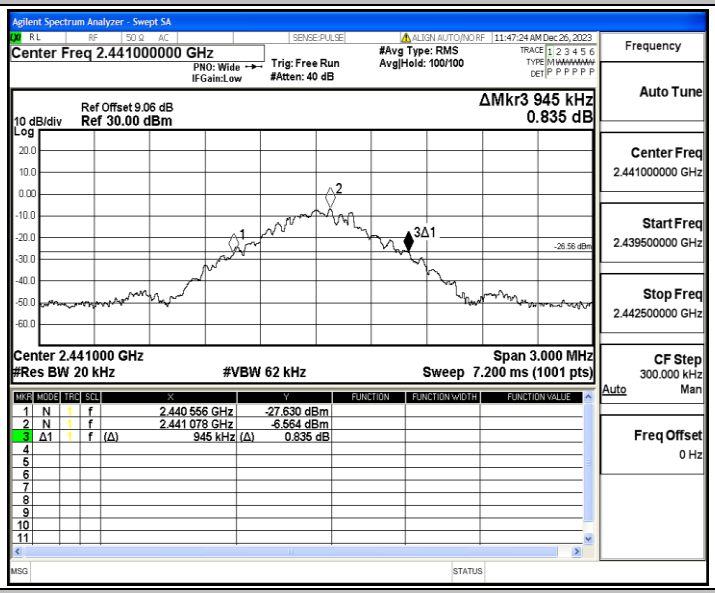
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.948	2401.556	2402.504	---	---
		2441	0.945	2440.556	2441.501	---	---
		2480	0.948	2479.556	2480.504	---	---

Test Graphs

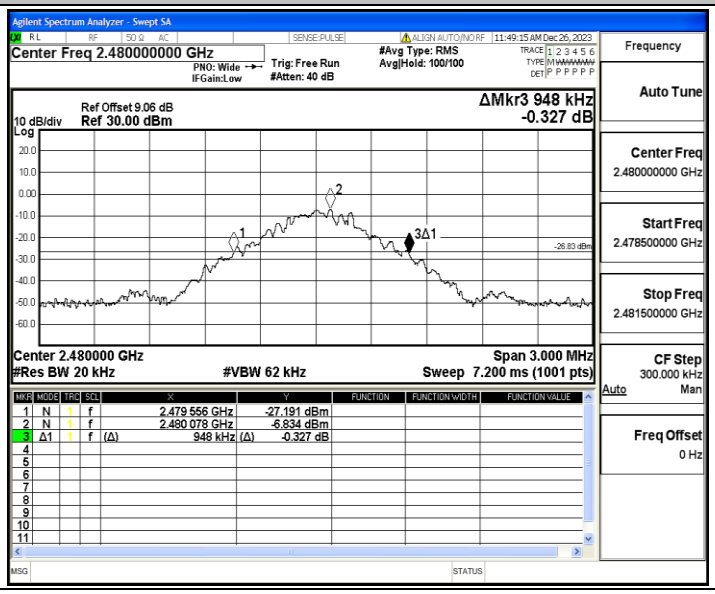
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



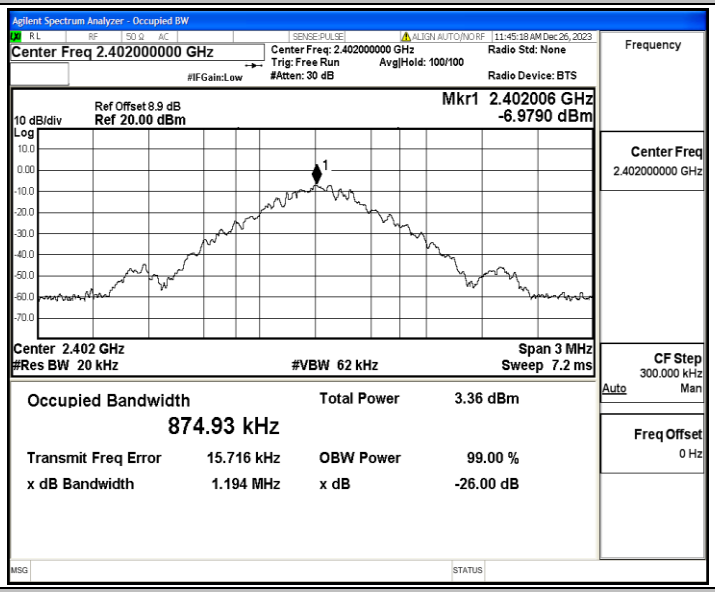
Appendix B: Occupied Channel Bandwidth

Test Result

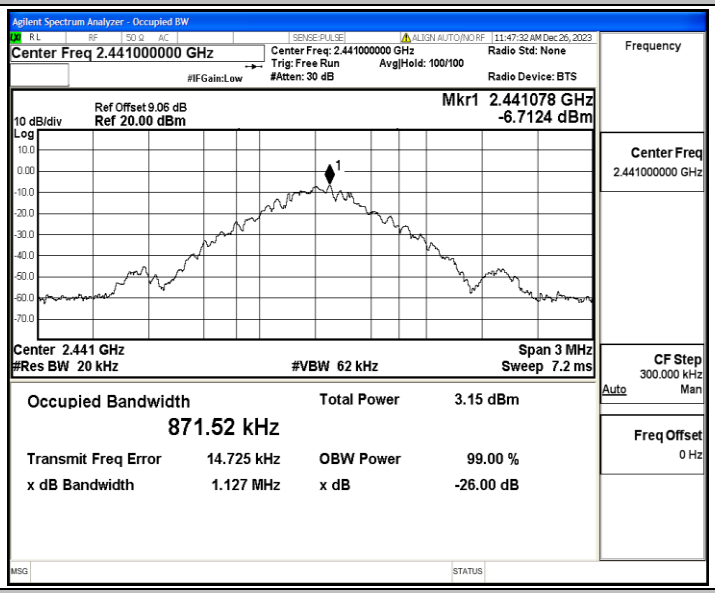
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87493	2401.5783	2402.4532	---	---
		2441	0.87152	2440.5790	2441.4505	---	---
		2480	0.87667	2479.5780	2480.4547	---	---

Test Graphs

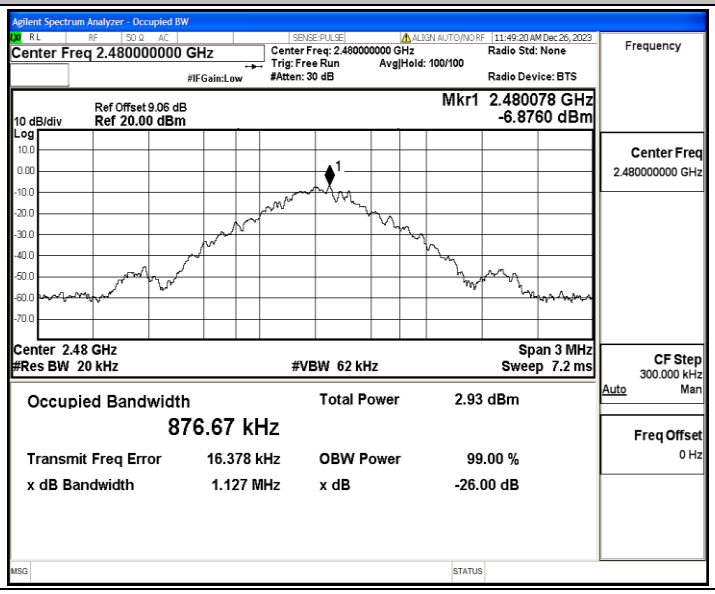
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



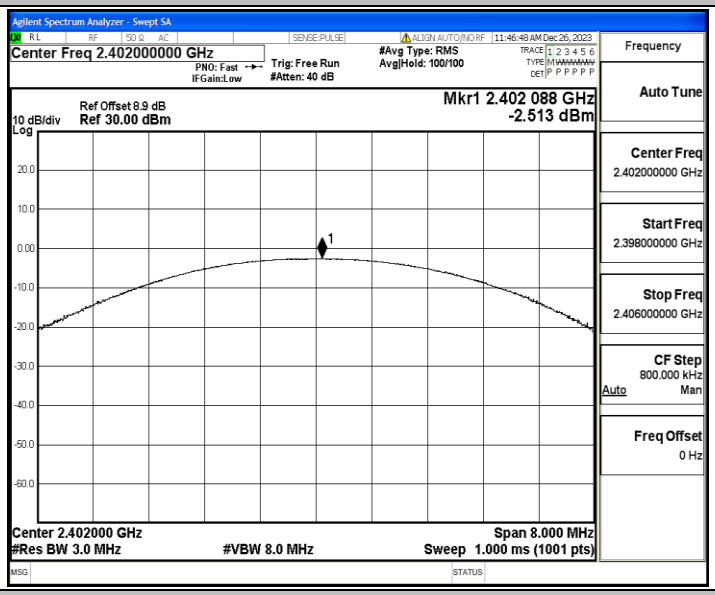
Appendix C: Maximum Peak conducted output power

Test Result

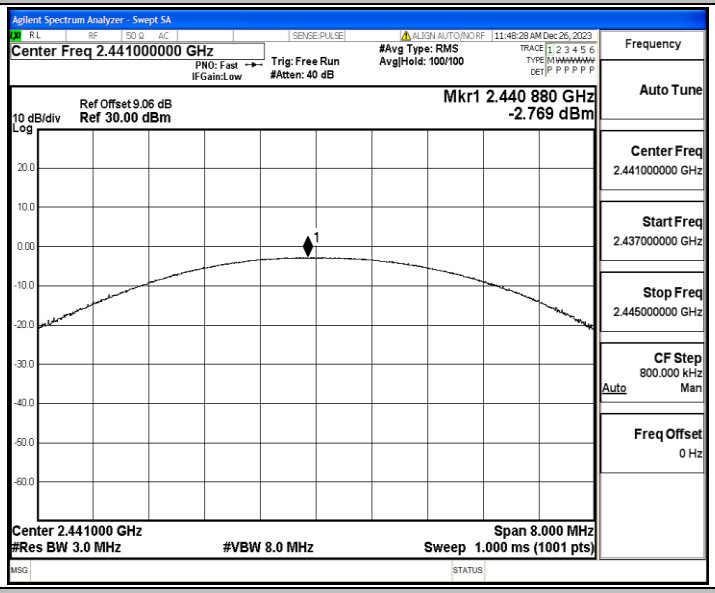
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-2.51	≤20.97	PASS
		2441	-2.77	≤20.97	PASS
		2480	-2.95	≤20.97	PASS

Test Graphs

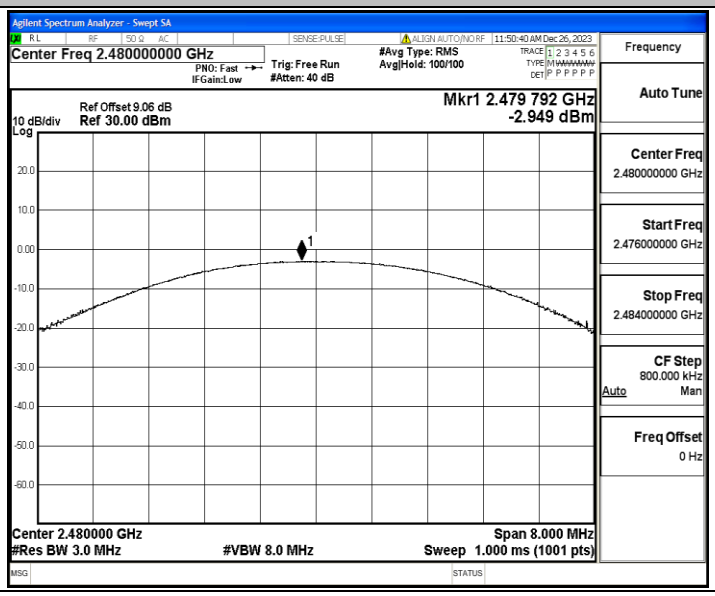
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480

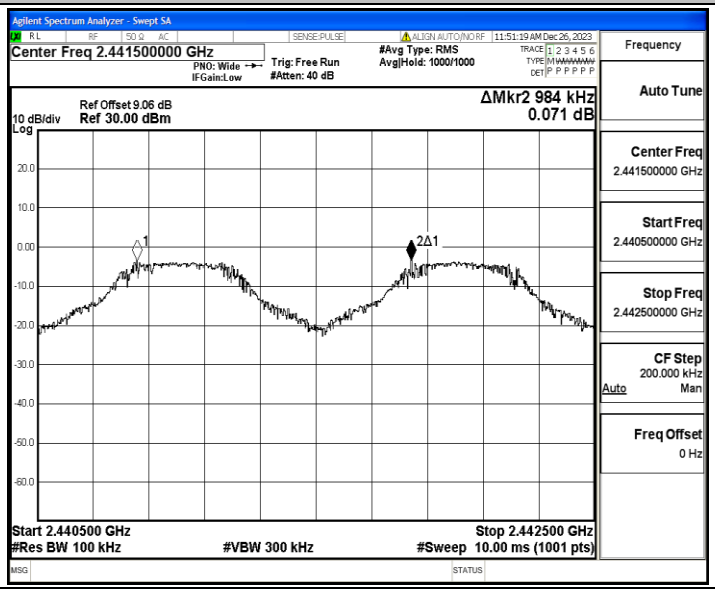


Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.984	≥0.948	PASS

Test Graphs

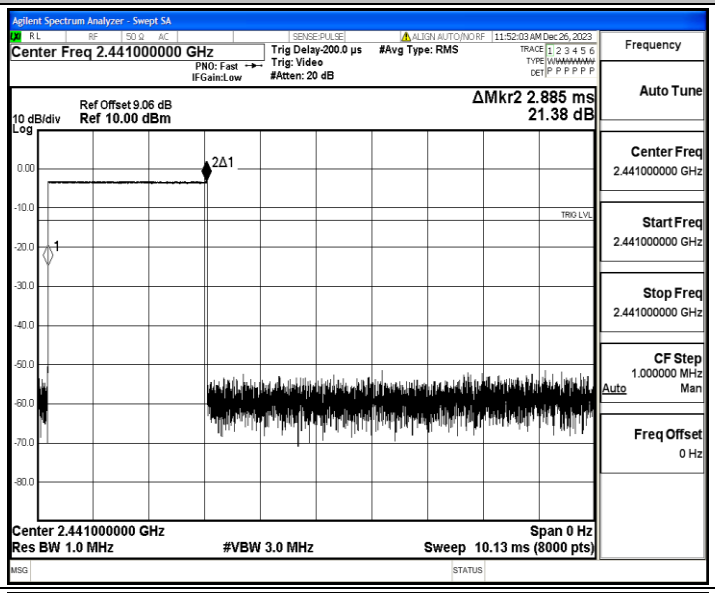
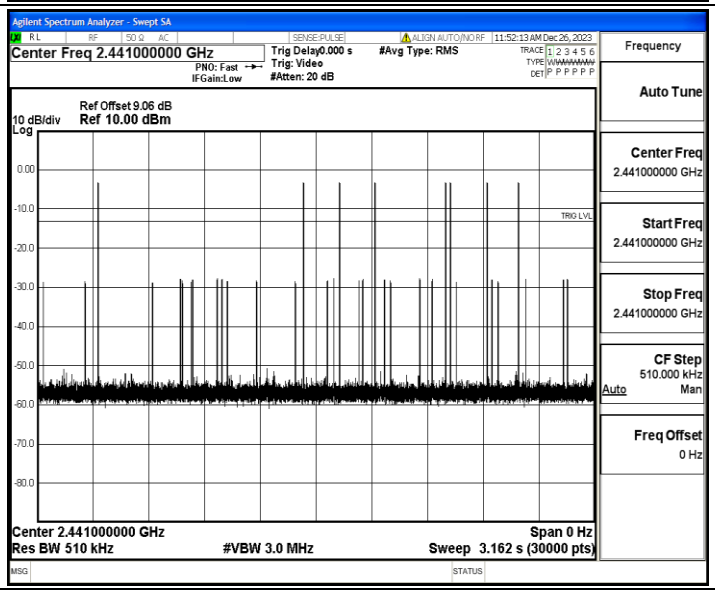
DH5_Ant1_Hop


Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.885	90	0.26	≤0.4	PASS

Test Graphs

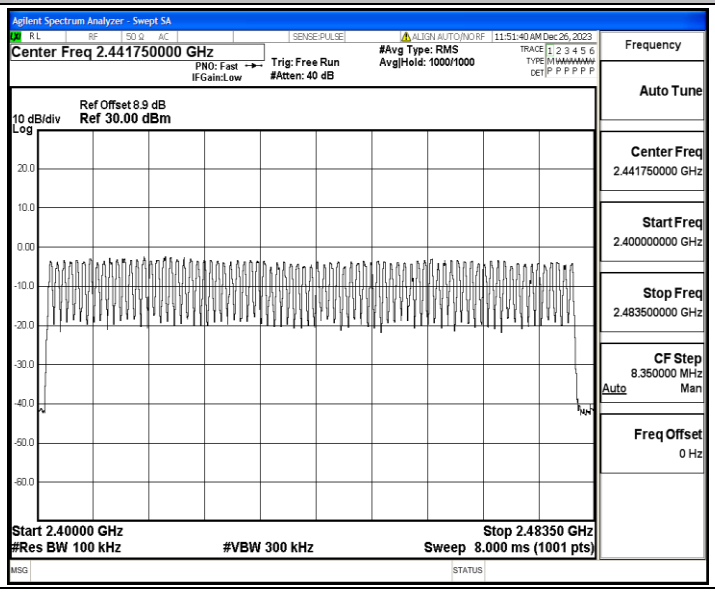
DH5_Ant1_Hop



Appendix F: Number of hopping channels

Test Result

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

Test Graphs

DH5_Ant1_Hop


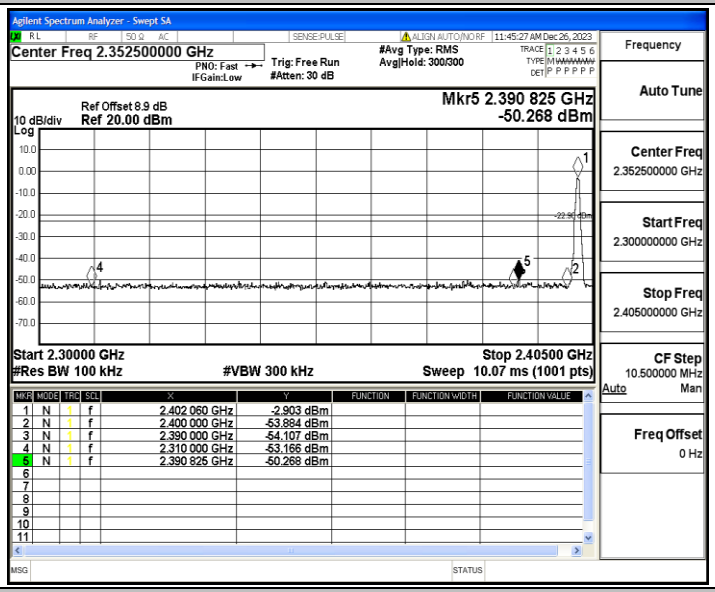
Appendix G: Band edge measurements

Test Result

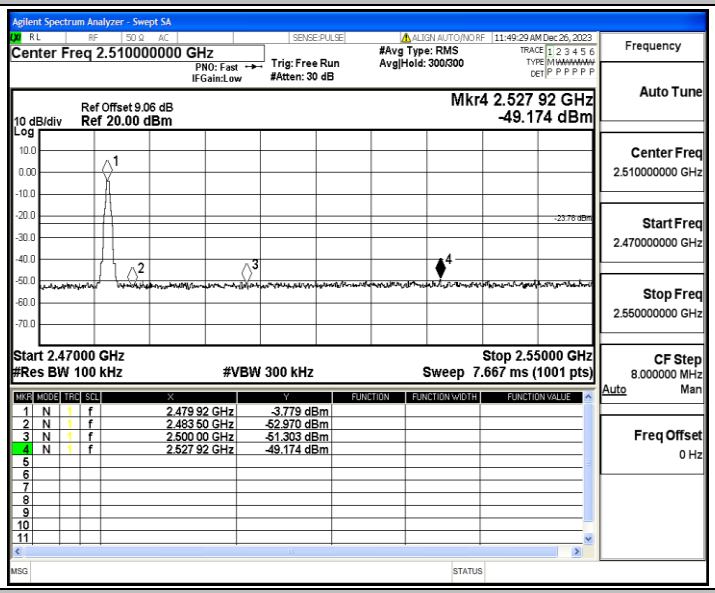
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-2.90	-50.27	≤-22.9	PASS
		High	2480	-3.78	-49.17	≤-23.78	PASS
		Low	Hop_2402	-3.38	-50.17	≤-23.38	PASS
		High	Hop_2480	-3.37	-49.17	≤-23.37	PASS

Test Graphs

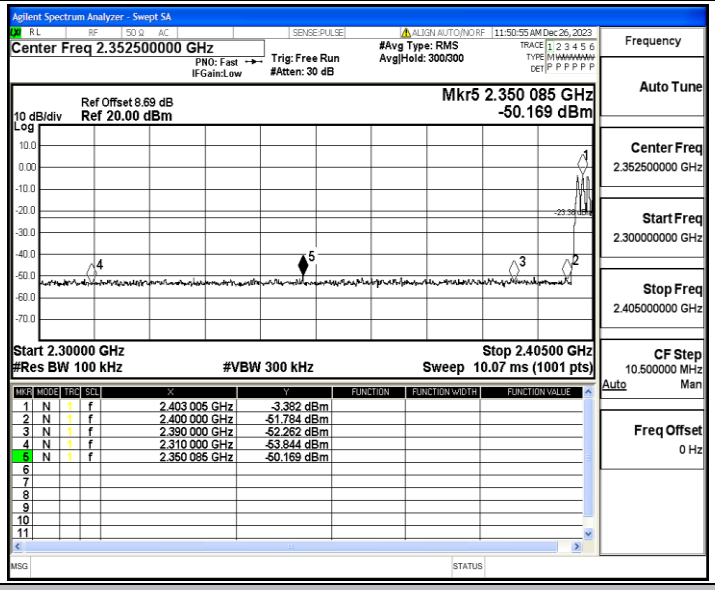
DH5_Ant1_Low_2402



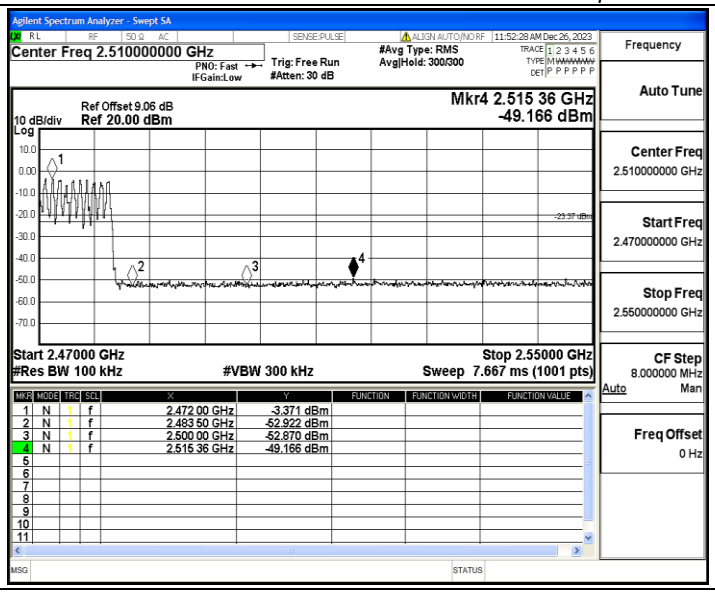
DH5_Ant1_High_2480



DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 300/300
11:52:28 AM Dec 26, 2023
Ref Offset 9.06 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr4 2.515 36 GHz
-49.166 dBm
-23.37 dBm
Start 2.47000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.55000 GHz
Sweep 7.667 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.472 00 GHz -3.371 dBm
2 N 1 f 2.483 50 GHz -52.922 dBm
3 N 1 f 2.500 00 GHz -52.870 dBm
4 N 1 f 2.515 36 GHz -49.166 dBm
Frequency
Auto Tune
Center Freq
2.510000000 GHz
Start Freq
2.470000000 GHz
Stop Freq
2.550000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

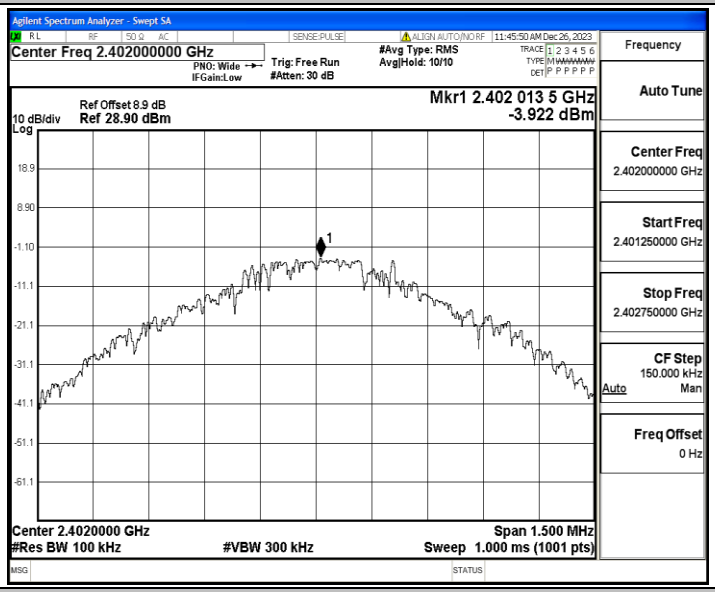
Appendix H: Conducted Spurious Emission

Test Result

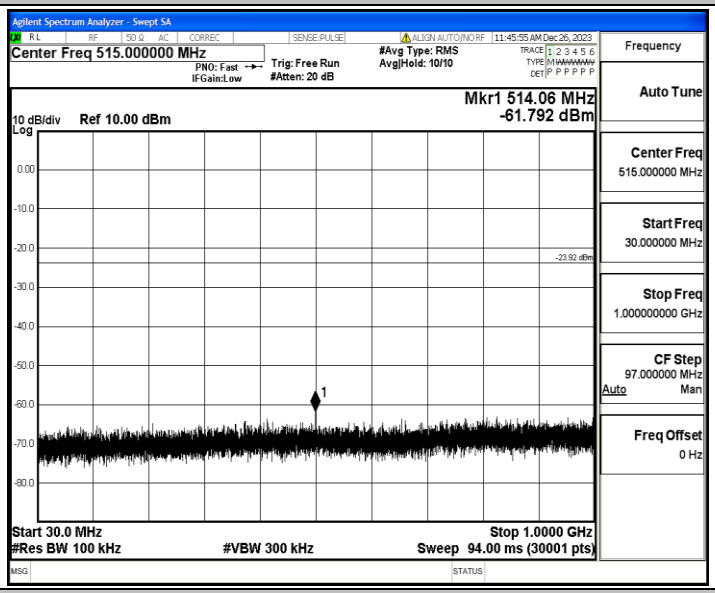
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-3.92	-3.92	---	PASS
			30~1000	-3.92	-61.79	≤-23.92	PASS
			1000~26500	-3.92	-50.7	≤-23.92	PASS
		2441	Reference	-4.10	-4.10	---	PASS
			30~1000	-4.10	-61.98	≤-24.1	PASS
			1000~26500	-4.10	-50.4	≤-24.1	PASS
		2480	Reference	-4.36	-4.36	---	PASS
			30~1000	-4.36	-62.3	≤-24.36	PASS
			1000~26500	-4.36	-50.83	≤-24.36	PASS

Test Graphs

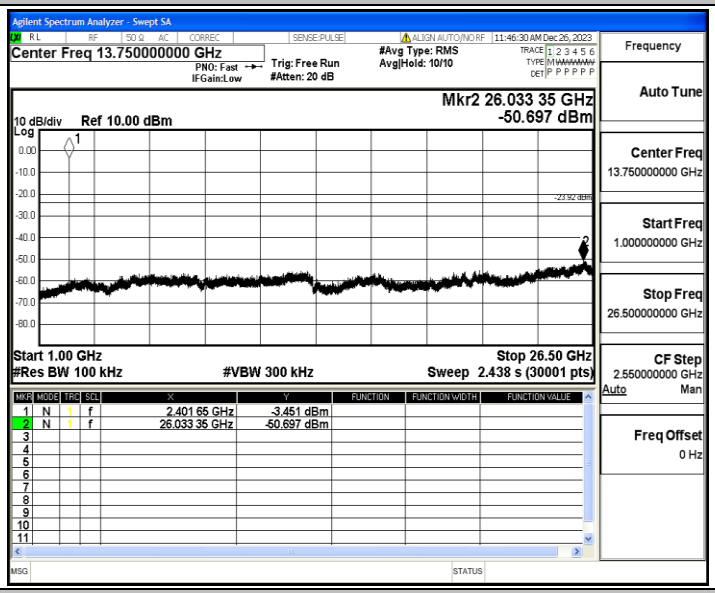
DH5_Ant1_2402_0~Reference



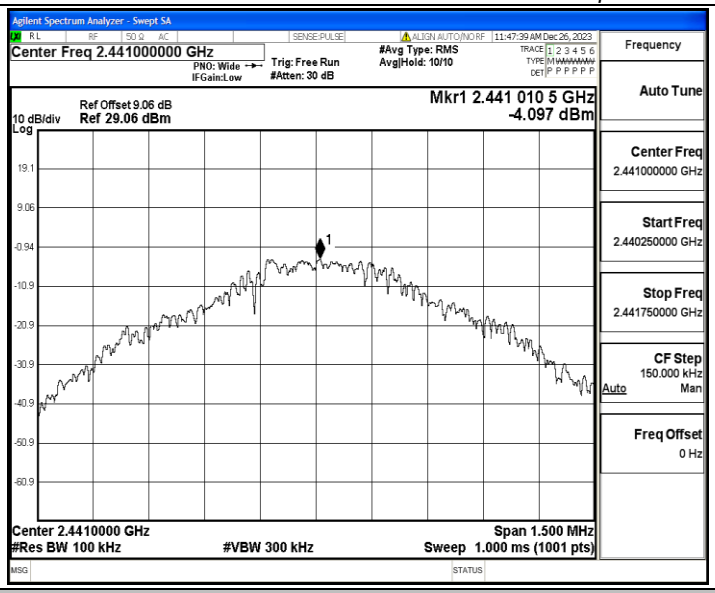
DH5_Ant1_2402_30~1000



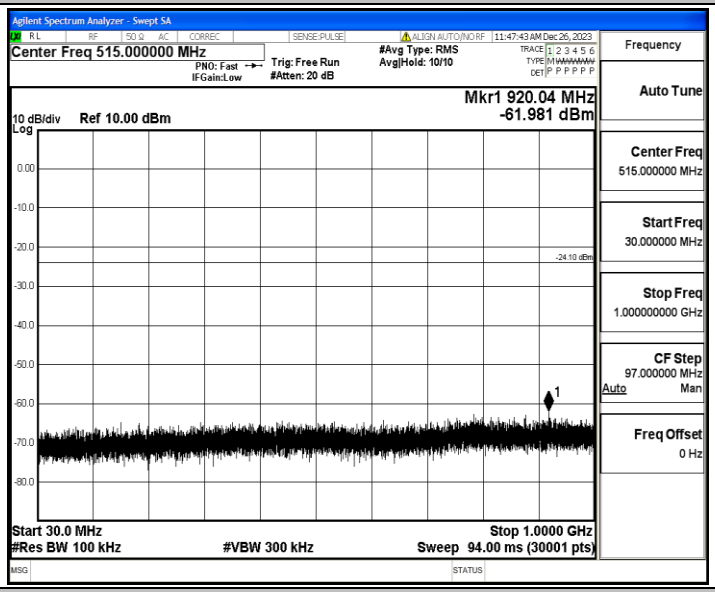
DH5_Ant1_2402_1000~26500



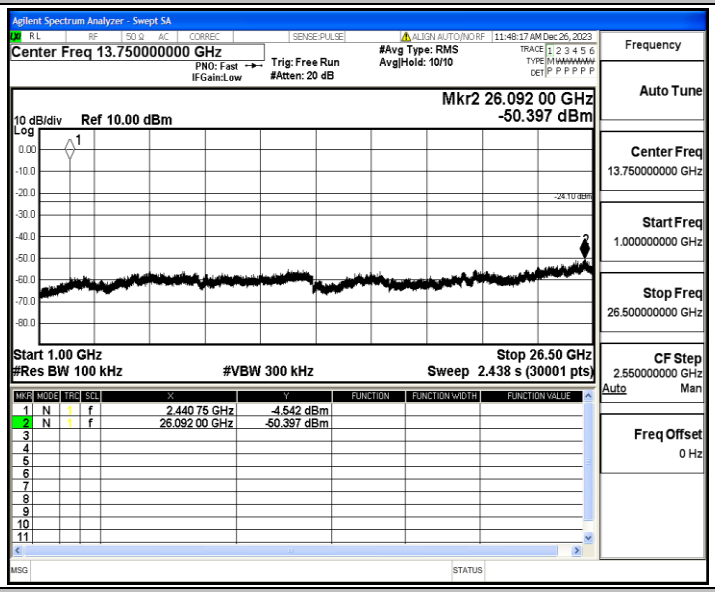
DH5_Ant1_2441_0~Reference



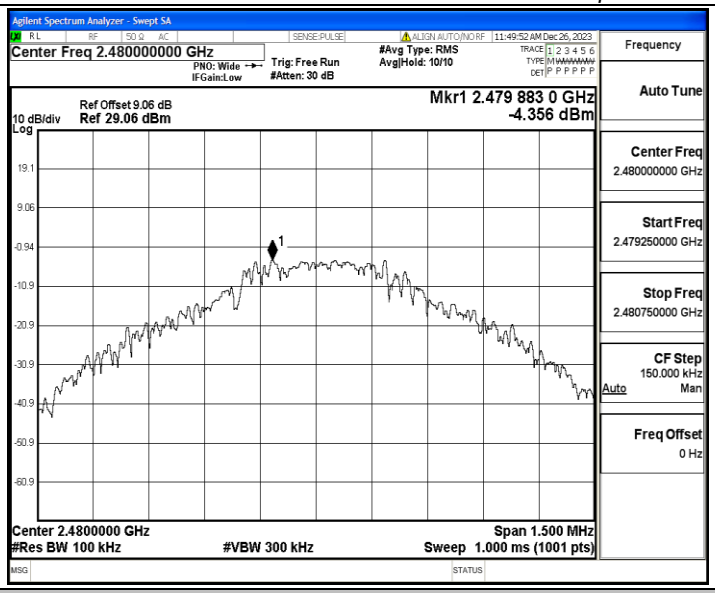
DH5_Ant1_2441_30~1000



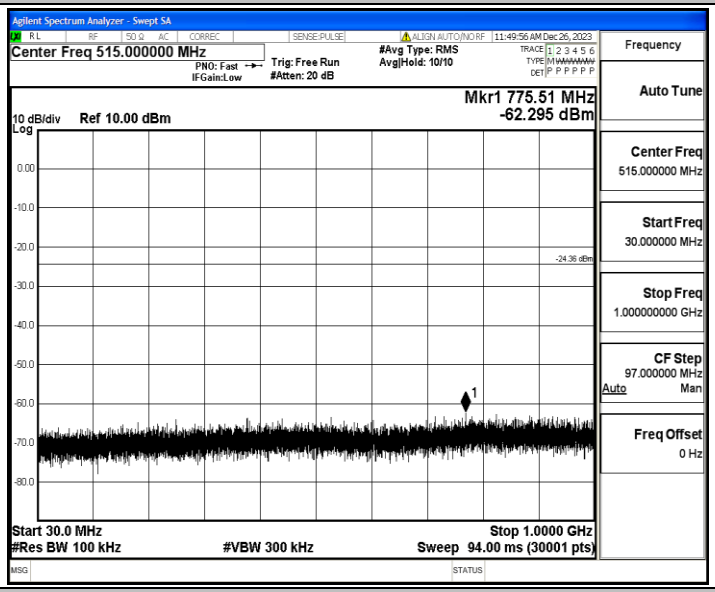
DH5_Ant1_2441_1000~26500



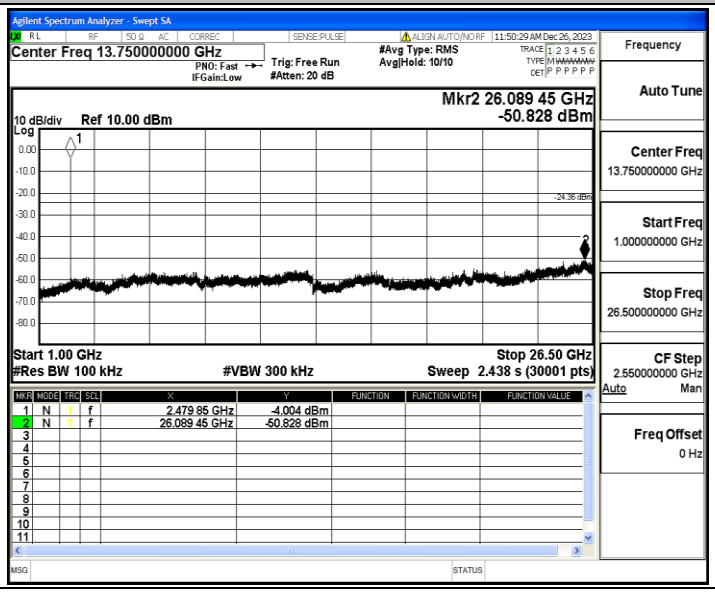
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500



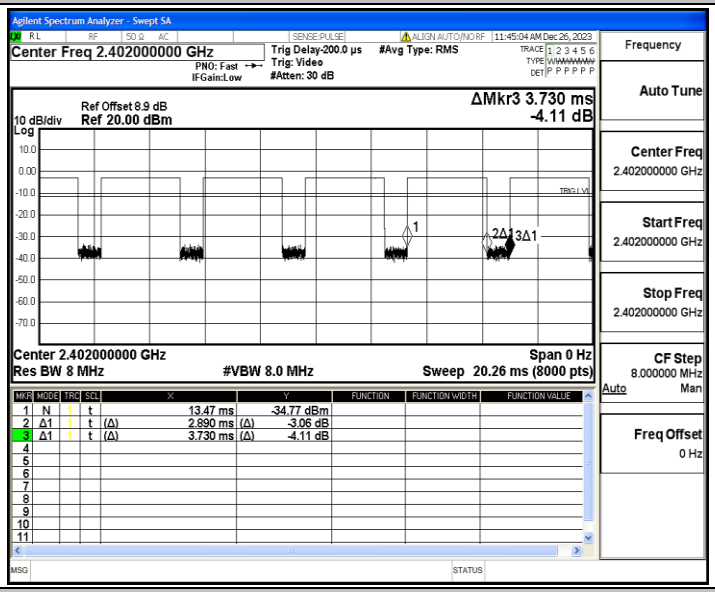
Appendix I: Duty Cycle

Test Result

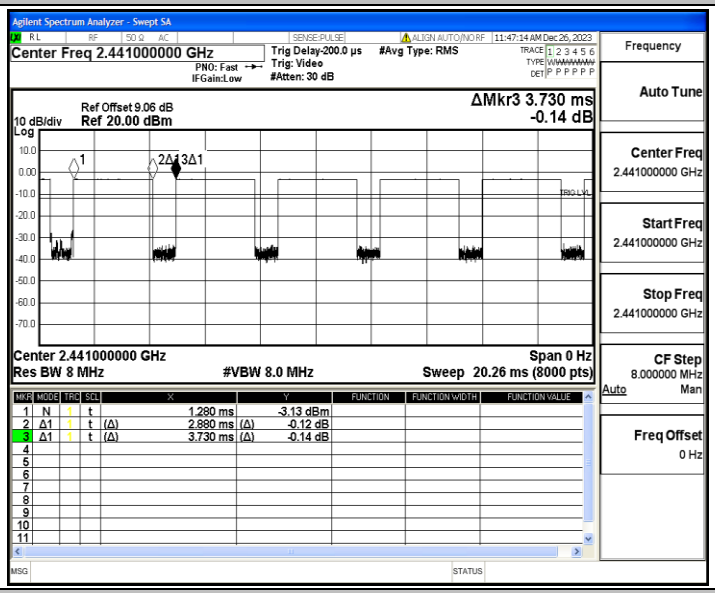
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
DH5	Ant1	2402	2.89	3.73	77.48	0.35
		2441	2.88	3.73	77.21	0.35
		2480	2.89	3.73	77.48	0.35

Test Graphs

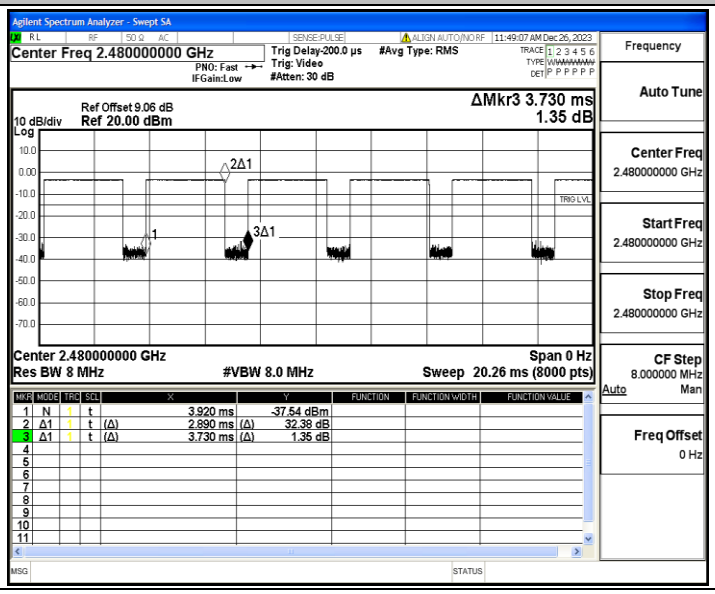
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



Appendix J: Emissions in Restricted Bands

Test Result

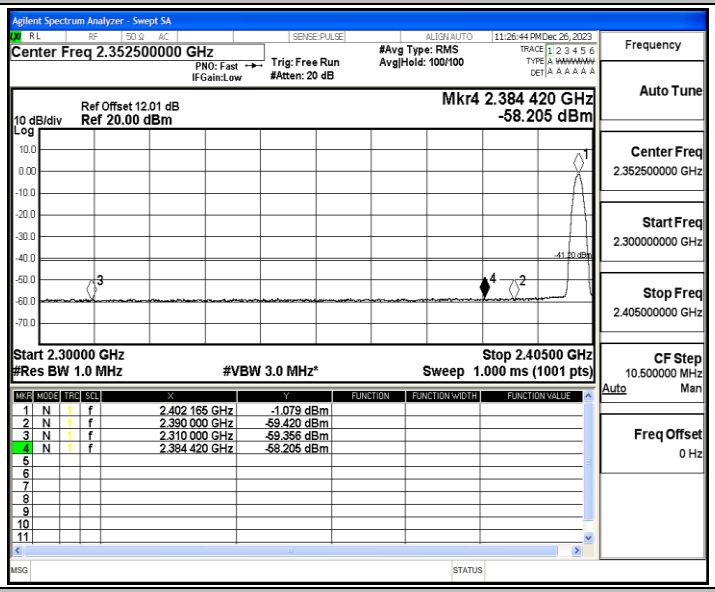
TestMode	Antenna	ChName	Channel	Detector	Freq(MHz)	Result(dBm)	Limit(dBm)	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-59.36	≤-41.20	PASS
				AV	2384.420	-58.2	≤-41.20	PASS
				AV	2390.000	-59.42	≤-41.20	PASS
				Peak	2310.000	-57.47	≤-21.20	PASS
				Peak	2385.470	-56.76	≤-21.20	PASS
				Peak	2390.000	-56.9	≤-21.20	PASS
		High	2480	AV	2483.500	-57.64	≤-41.20	PASS
				AV	2486.080	-57.63	≤-41.20	PASS
				AV	2500.000	-58.42	≤-41.20	PASS
				Peak	2483.500	-55.7	≤-21.20	PASS
				Peak	2483.520	-55.7	≤-21.20	PASS
				Peak	2500.000	-56.63	≤-21.20	PASS

Note：

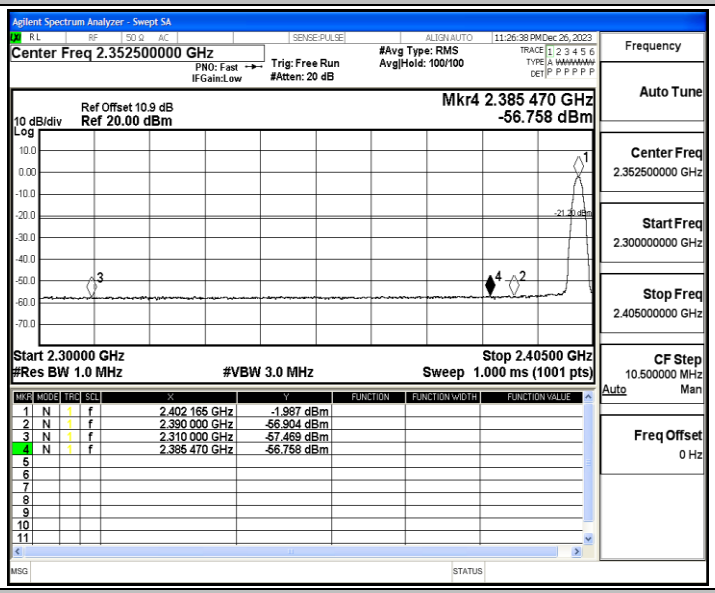
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

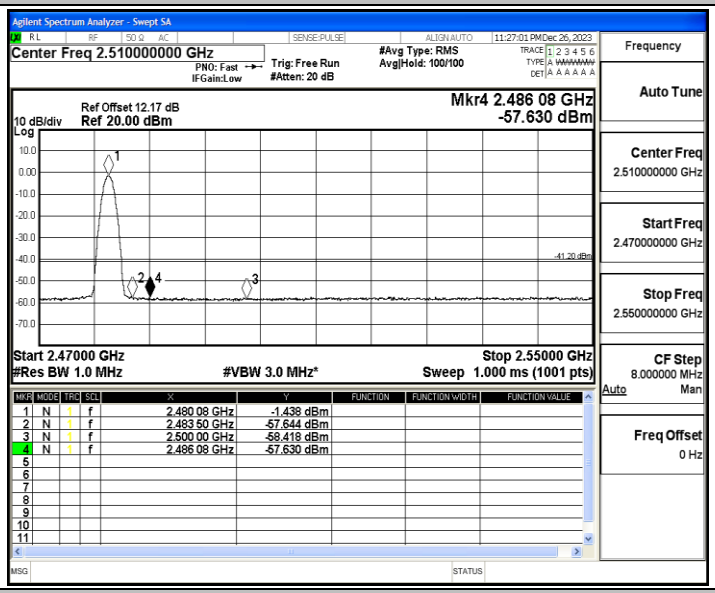
DH5_Ant1_Low_2402_AV



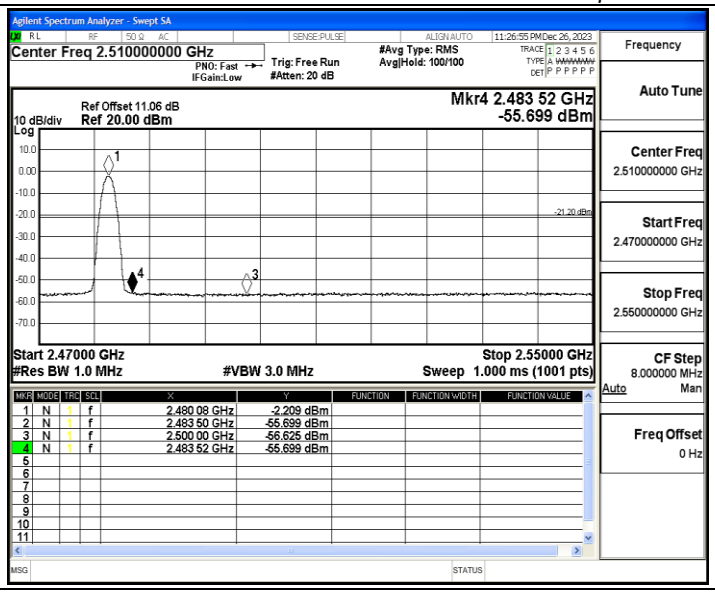
DH5_Ant1_Low_2402_Peak



DH5_Ant1_High_2480_AV



DH5_Ant1_High_2480_Peak


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
#Avg Type: RMS
Avg|Hold: 100/100
11:26:55 PM Dec 26, 2023
Ref Offset 11.06 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr4 2.483 52 GHz
-55.699 dBm
-21.20 dBm
Start 2.47000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 2.55000 GHz
Sweep 1.000 ms (1001 pts)
1 N 1 f 2.480 08 GHz -2.209 dBm
2 N 1 f 2.483 50 GHz -55.699 dBm
3 N 1 f 2.500 00 GHz -56.625 dBm
4 N 1 f 2.483 52 GHz -55.699 dBm
Frequency
Auto Tune
Center Freq
2.510000000 GHz
Start Freq
2.470000000 GHz
Stop Freq
2.550000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz