

Appendix Test Data for BT(BDR/EDR) (Conducted Measurement)**Product Name: Wanbo Projector****Trade Mark: wanbo****Test Model: T4****FCC ID:2A7PIT4****Environmental Conditions**

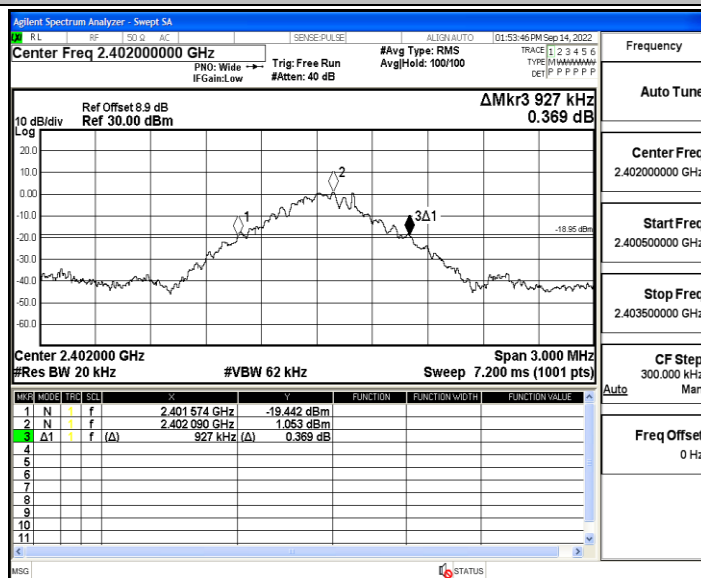
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

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

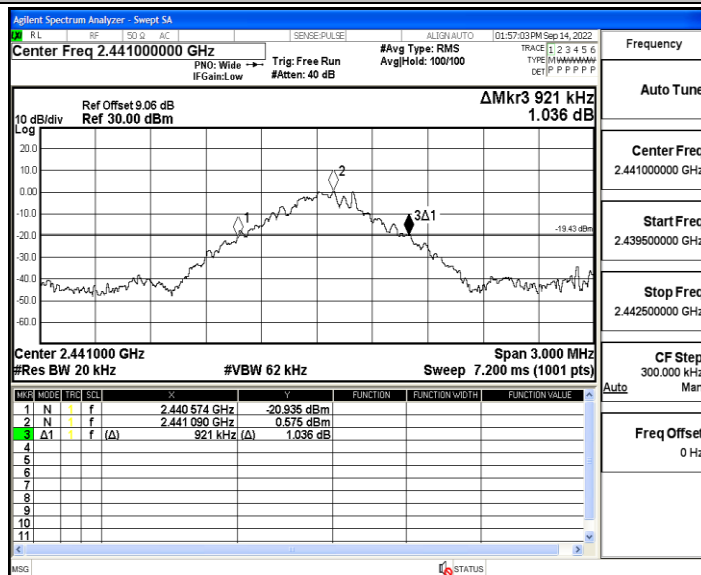
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant0	2402	0.927	2401.574	2402.501	---	---
		2441	0.921	2440.574	2441.495	---	---
		2480	0.879	2479.586	2480.465	---	---
2DH5	Ant0	2402	1.263	2401.388	2402.651	---	---
		2441	1.266	2440.391	2441.657	---	---
		2480	1.269	2479.385	2480.654	---	---
3DH5	Ant0	2402	1.281	2401.382	2402.663	---	---
		2441	1.326	2440.361	2441.687	---	---
		2480	1.302	2479.382	2480.684	---	---

Test Graphs

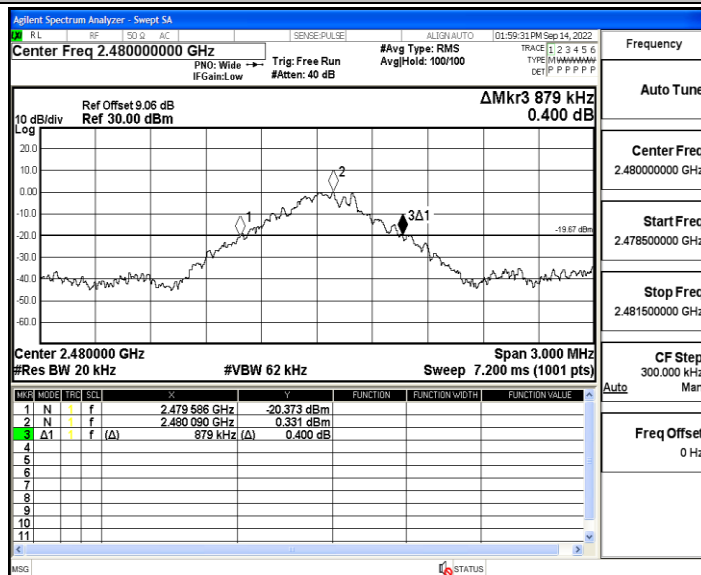
DH5_Ant0_2402



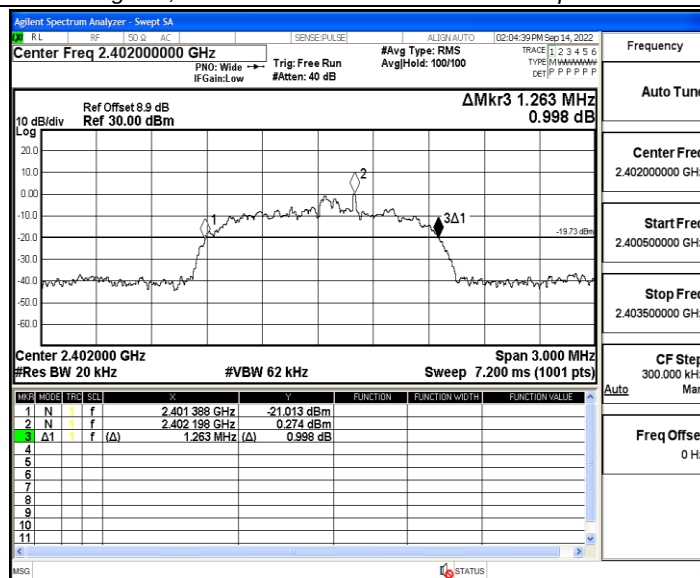
DH5_Ant0_2441



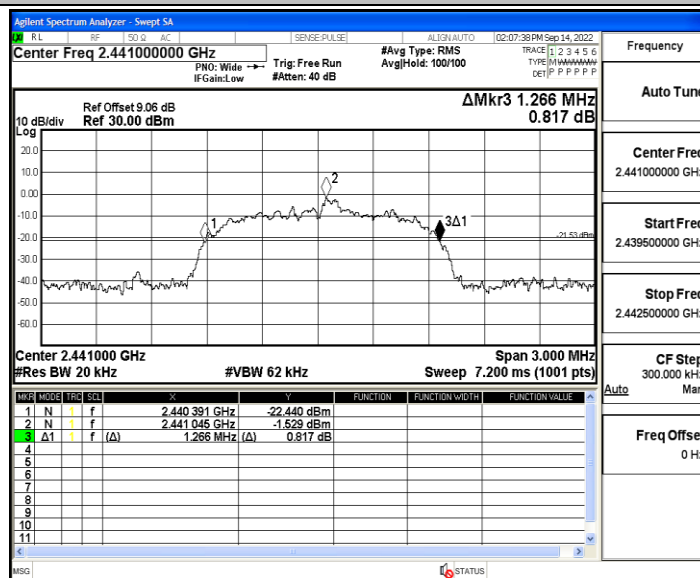
DH5_Ant0_2480



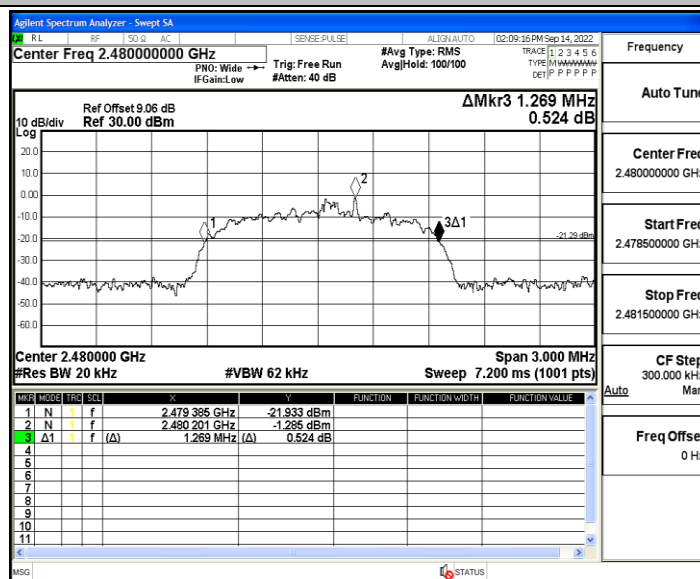
2DH5_Ant0_2402



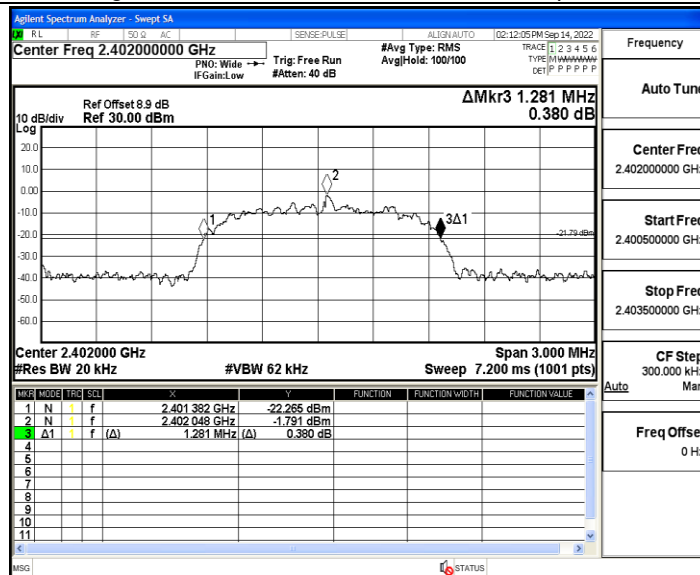
2DH5_Ant0_2441



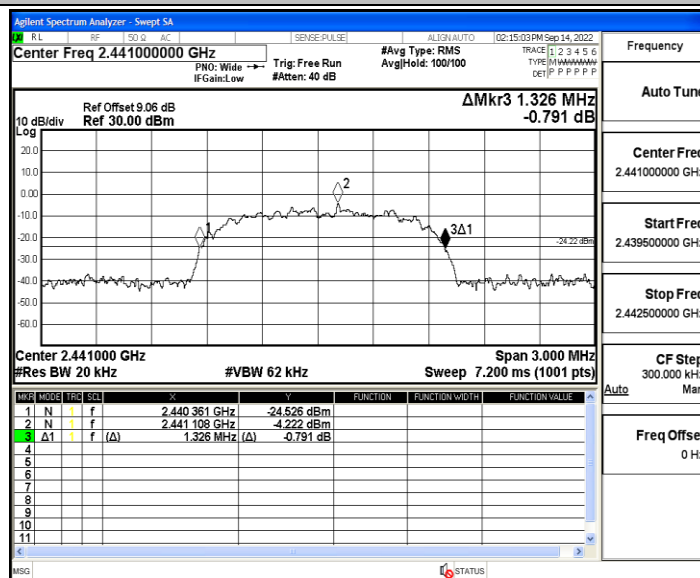
2DH5_Ant0_2480



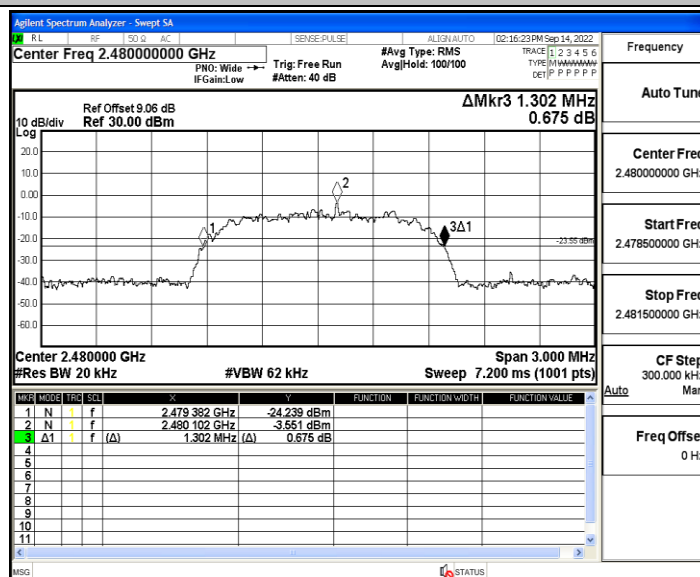
3DH5_Ant0_2402



3DH5_Ant0_2441



3DH5_Ant0_2480



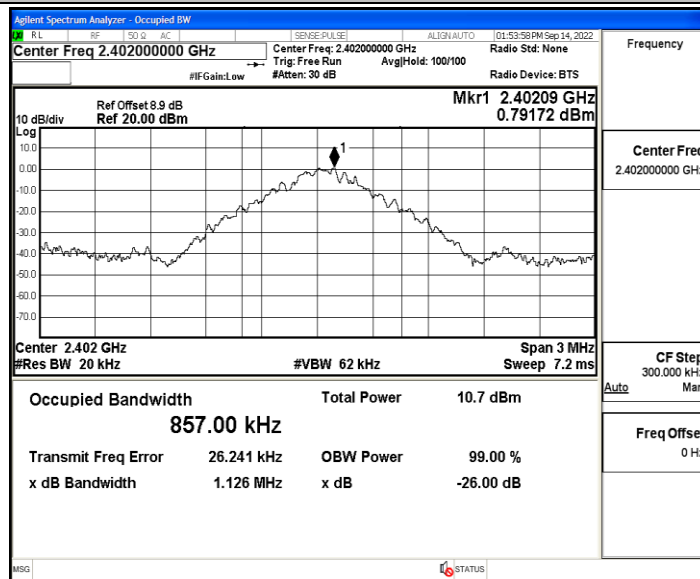
Appendix B: Occupied Channel Bandwidth

Test Result

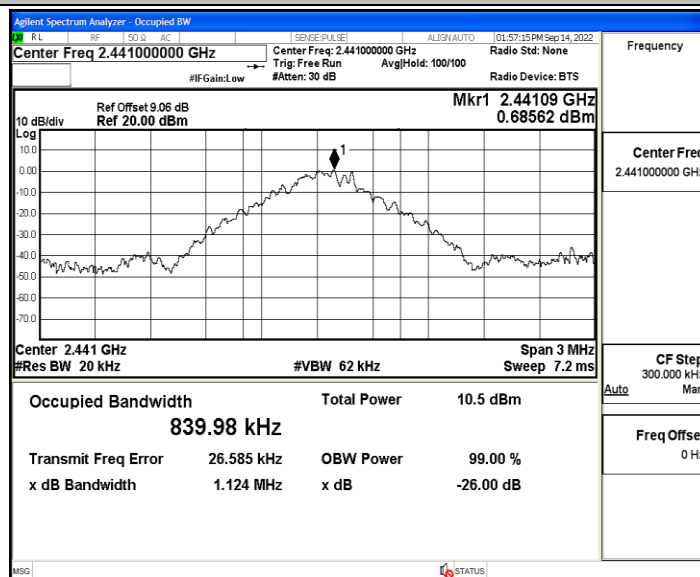
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant0	2402	0.85700	2401.598	2402.455	---	---
		2441	0.83998	2440.607	2441.447	---	---
		2480	0.86415	2479.601	2480.465	---	---
2DH5	Ant0	2402	1.1889	2401.429	2402.618	---	---
		2441	1.1685	2440.445	2441.614	---	---
		2480	1.1816	2479.436	2480.618	---	---
3DH5	Ant0	2402	1.1783	2401.437	2402.615	---	---
		2441	1.1846	2440.434	2441.618	---	---
		2480	1.1893	2479.430	2480.619	---	---

Test Graphs

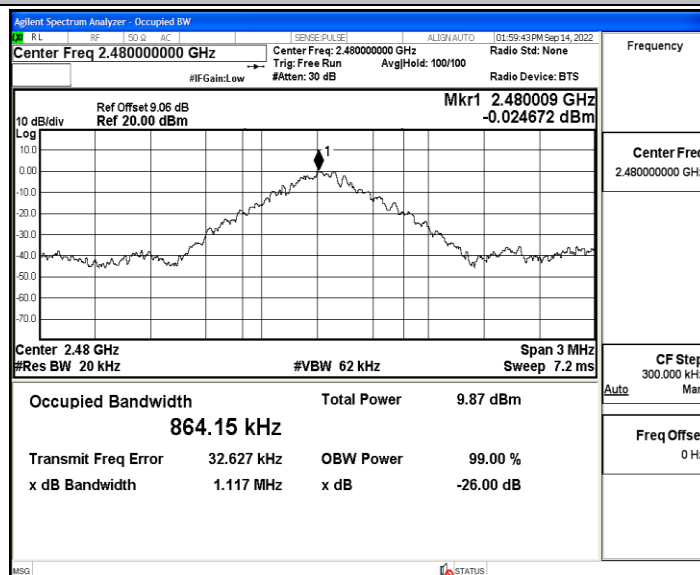
DH5_Ant0_2402



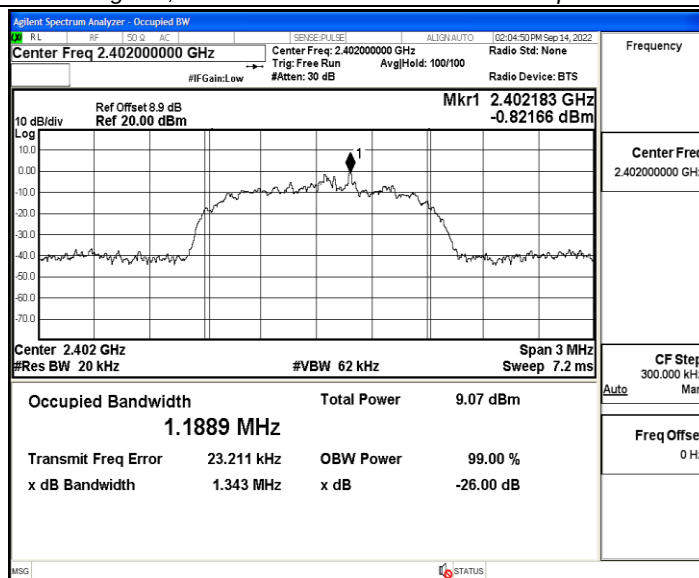
DH5_Ant0_2441



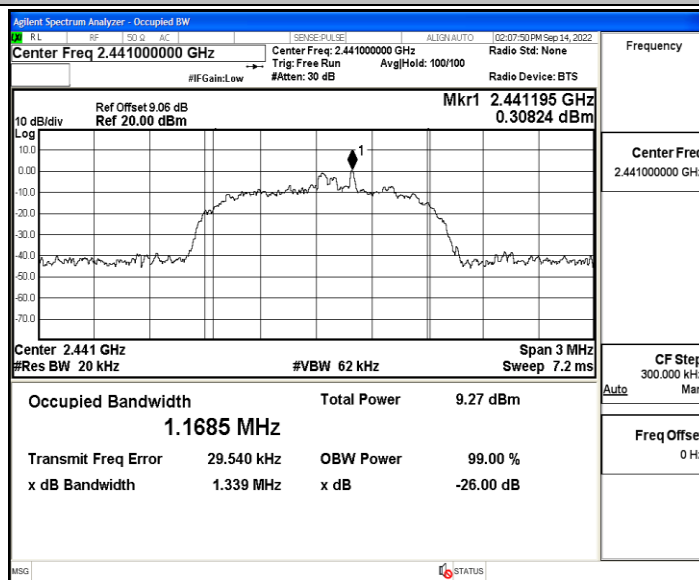
DH5_Ant0_2480



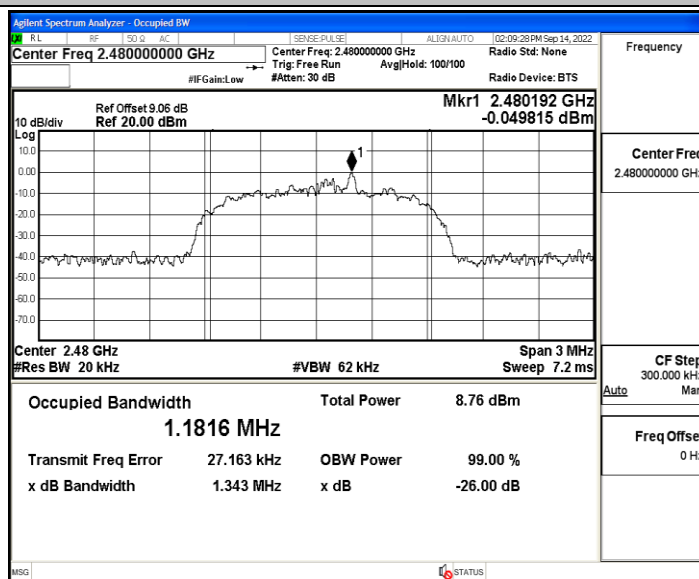
2DH5_Ant0_2402



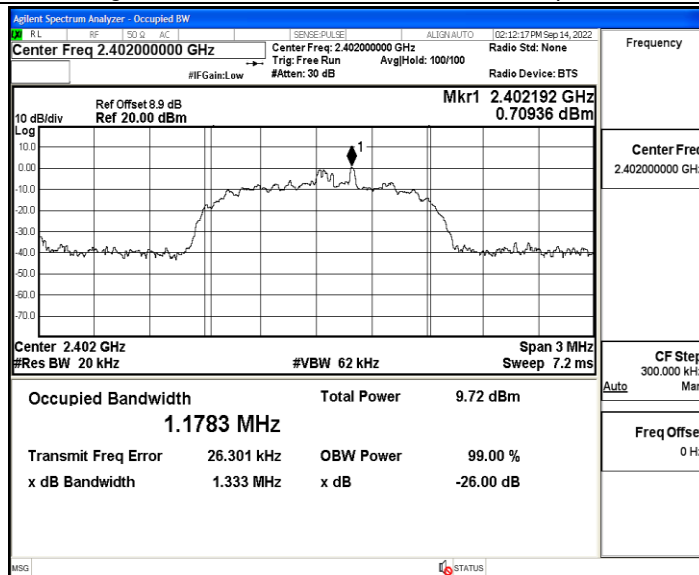
2DH5_Ant0_2441



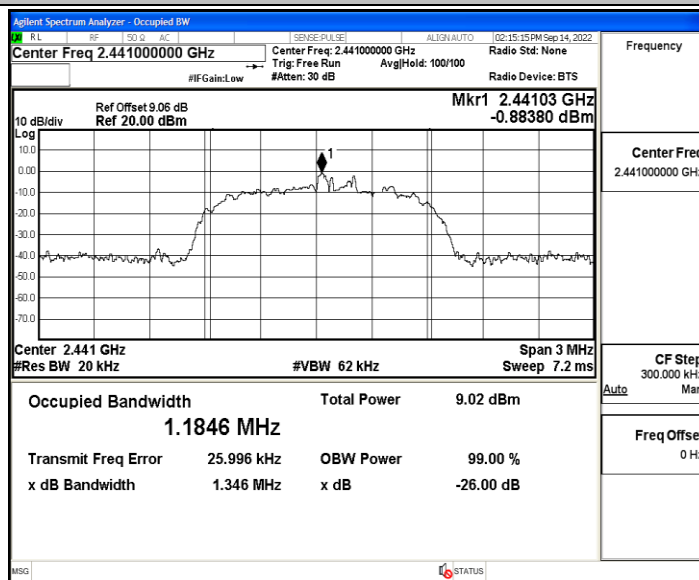
2DH5_Ant0_2480



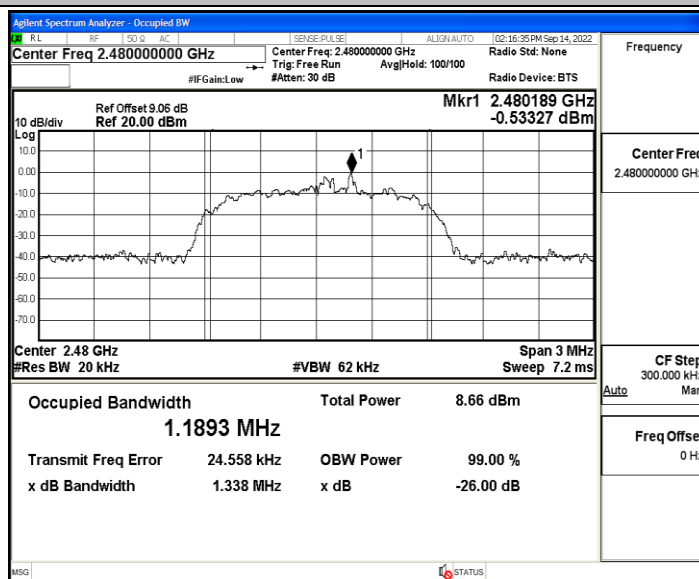
3DH5_Ant0_2402



3DH5_Ant0_2441



3DH5_Ant0_2480



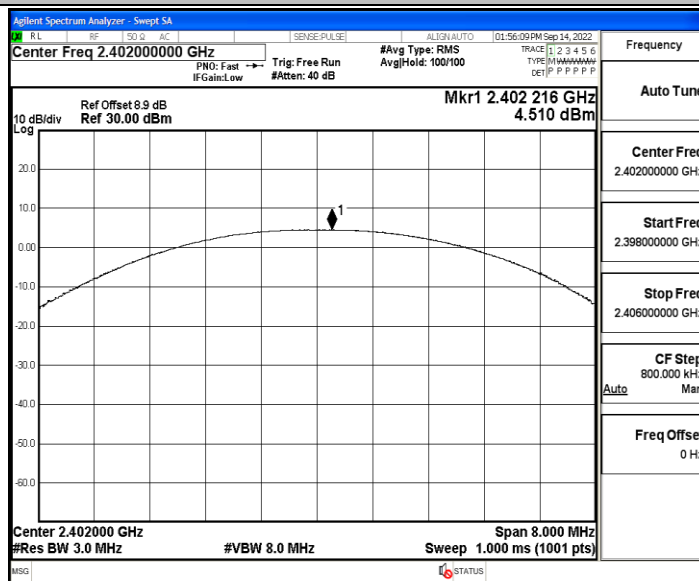
Appendix C: Maximum Peak conducted output power

Test Result

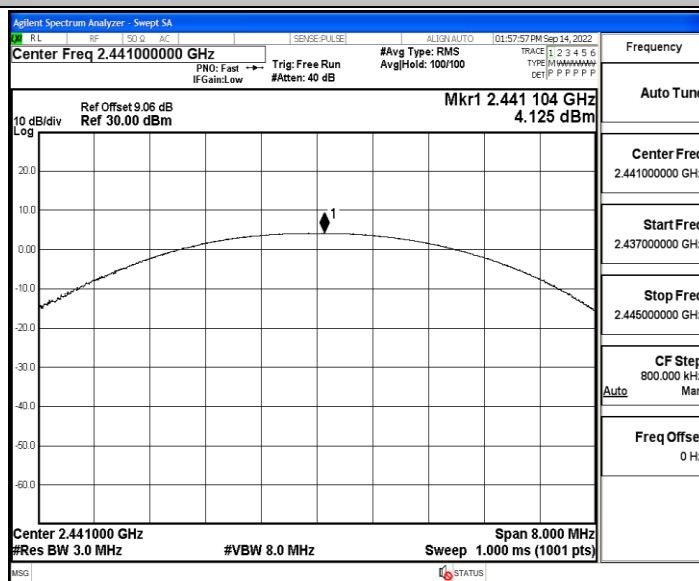
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant0	2402	4.51	≤20.97	PASS
		2441	4.13	≤20.97	PASS
		2480	3.83	≤20.97	PASS
2DH5	Ant0	2402	4.63	≤20.97	PASS
		2441	4.2	≤20.97	PASS
		2480	3.95	≤20.97	PASS
3DH5	Ant0	2402	4.69	≤20.97	PASS
		2441	4.22	≤20.97	PASS
		2480	3.93	≤20.97	PASS

Test Graphs

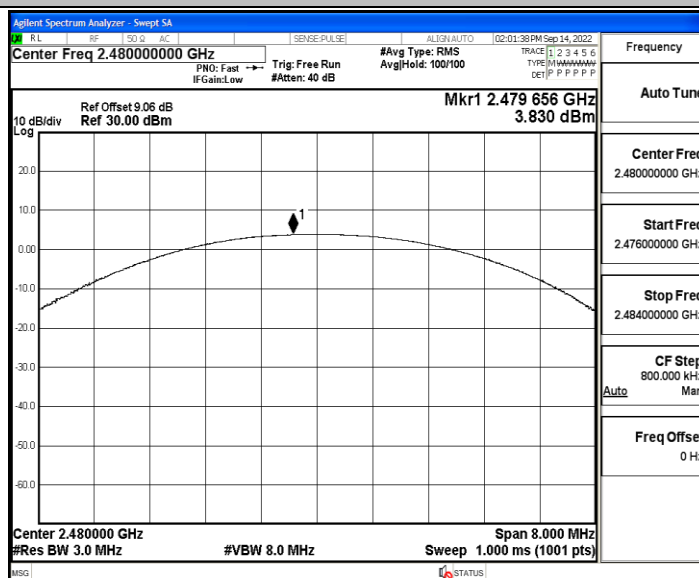
DH5_Ant0_2402



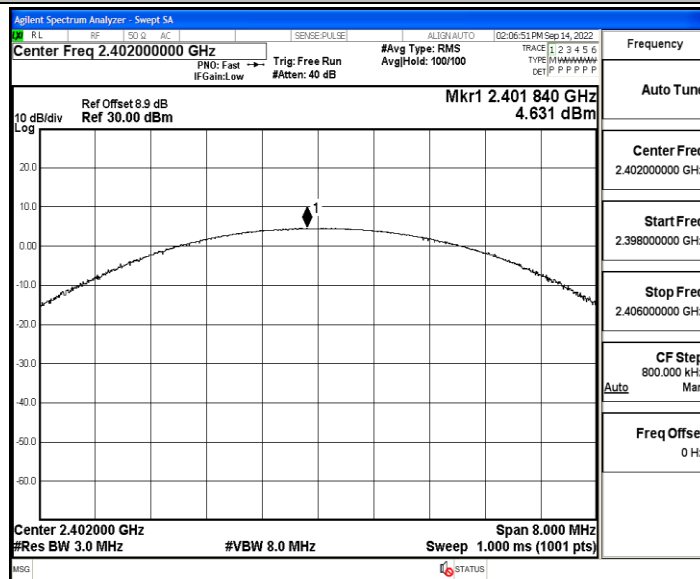
DH5_Ant0_2441



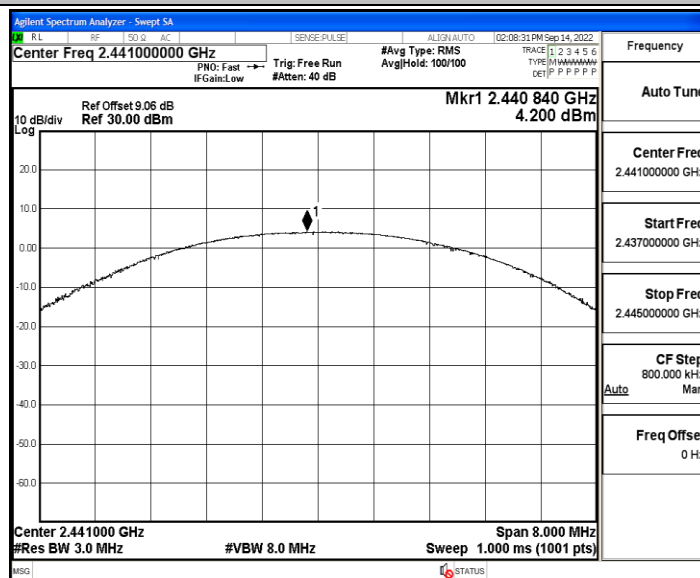
DH5_Ant0_2480



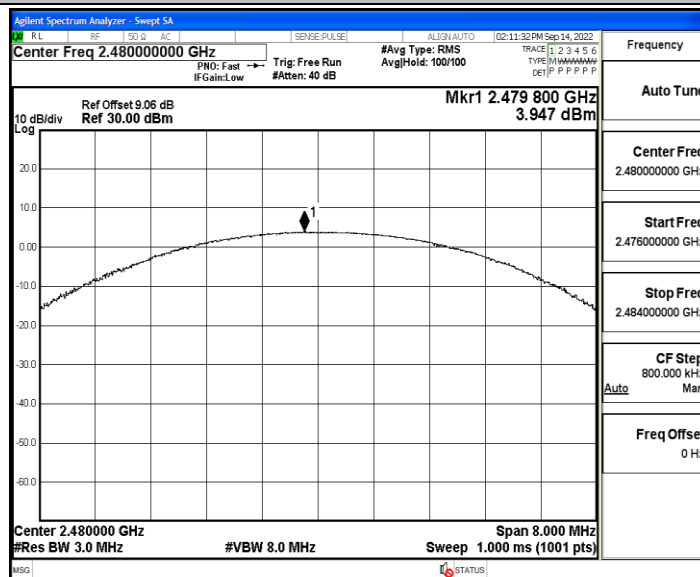
2DH5_Ant0_2402



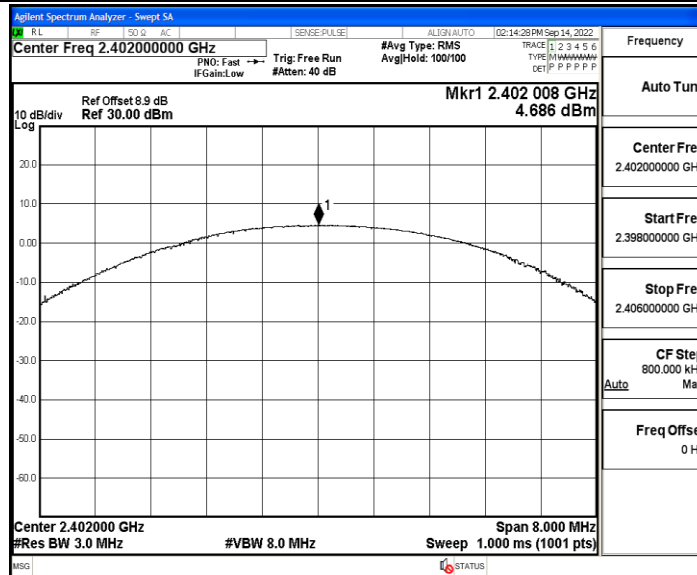
2DH5_Ant0_2441



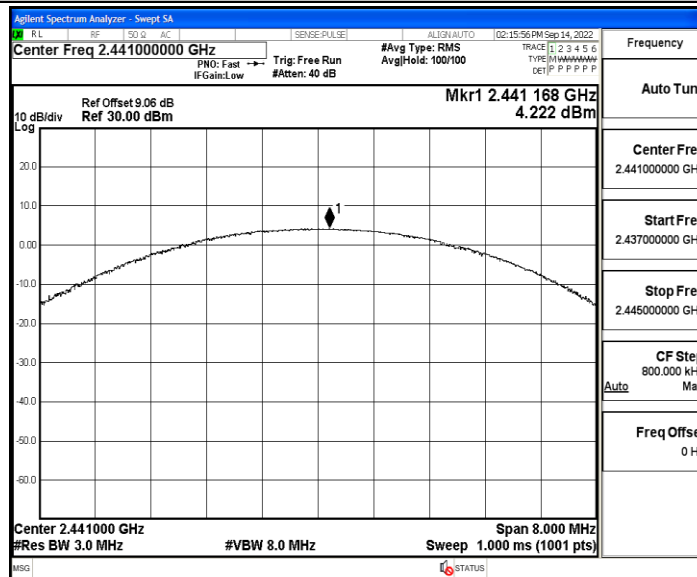
2DH5_Ant0_2480



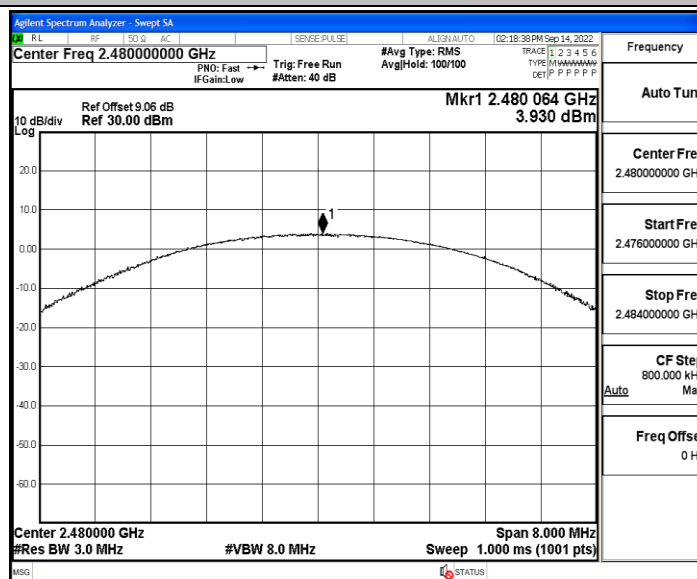
3DH5_Ant0_2402



3DH5_Ant0_2441



3DH5_Ant0_2480

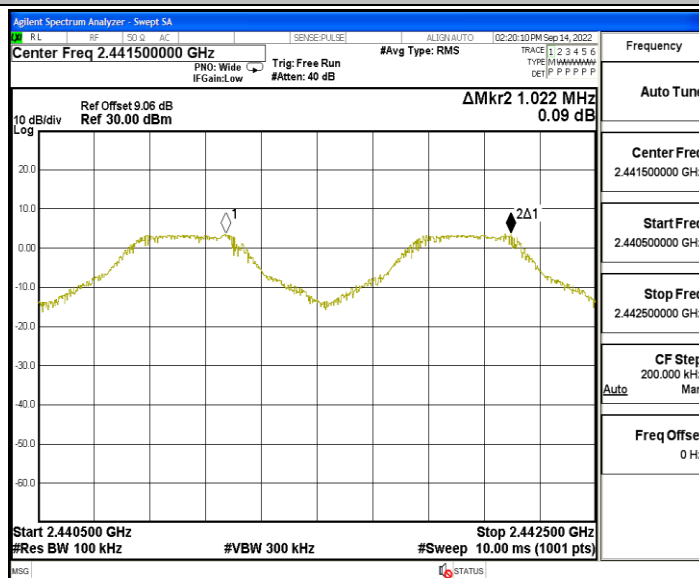


Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant0	Hop	1.022	≥ 0.927	PASS
2DH5	Ant0	Hop	1.004	≥ 0.846	PASS
3DH5	Ant0	Hop	1.008	≥ 0.884	PASS

DH5_Ant0_Hop



Agilent Spectrum Analyzer - Swept SA

RF L 50 G AC SENSE:PLUSE ALIGN: AUTO 02:25:05 PM Sep 14, 2022

Center Freq 2.441500000 GHz #Avg Type: RMS

PRO: Wide IF Gain: Low Trig: Free Run #Atten: 40 dB

TRACE 1 2 3 4 5 6
TYPE: HAWAIIAN
DET: P P P P P P

Frequency Auto Tun

Ref Offset 9.06 dB Δ Mkr2 1.004 MHz
Ref 30.00 dBm -0.37 dB

10 dB/div Log

Start 2.440500 GHz Stop 2.442500 GHz
#Res BW 100 kHz #VBW 300 kHz #Sweep 10.00 ms (1001 pts)

CF Step 200.000 kHz
Auto Max

Freq Offset 0 Hz

Agilent Spectrum Analyzer - Sweep SA

GHz R L RF SO G AC SENSE-PULSE ALIGN/AUTO 02:30:26 PM Sep 14, 2022
 Center Freq 2.441500000 GHz #Avg Type: RMS TRAC 1 2 3 4 5 6
 PRO: Wide IF Gain: Low TYPE: HAWAIIAN DET: P P P P P P
 Trig: Free Run #Atten: 40 dB

Ref Offset 9.06 dB Δ Mkr2 1.008 MHz
 Ref 30.00 dBm -0.01 dB

10 dB/div
 Log

Start 2.440500 GHz #Res BW 100 kHz #VBW 300 kHz
 Stop 2.442500 GHz #Sweep 10.00 ms (1001 pts)

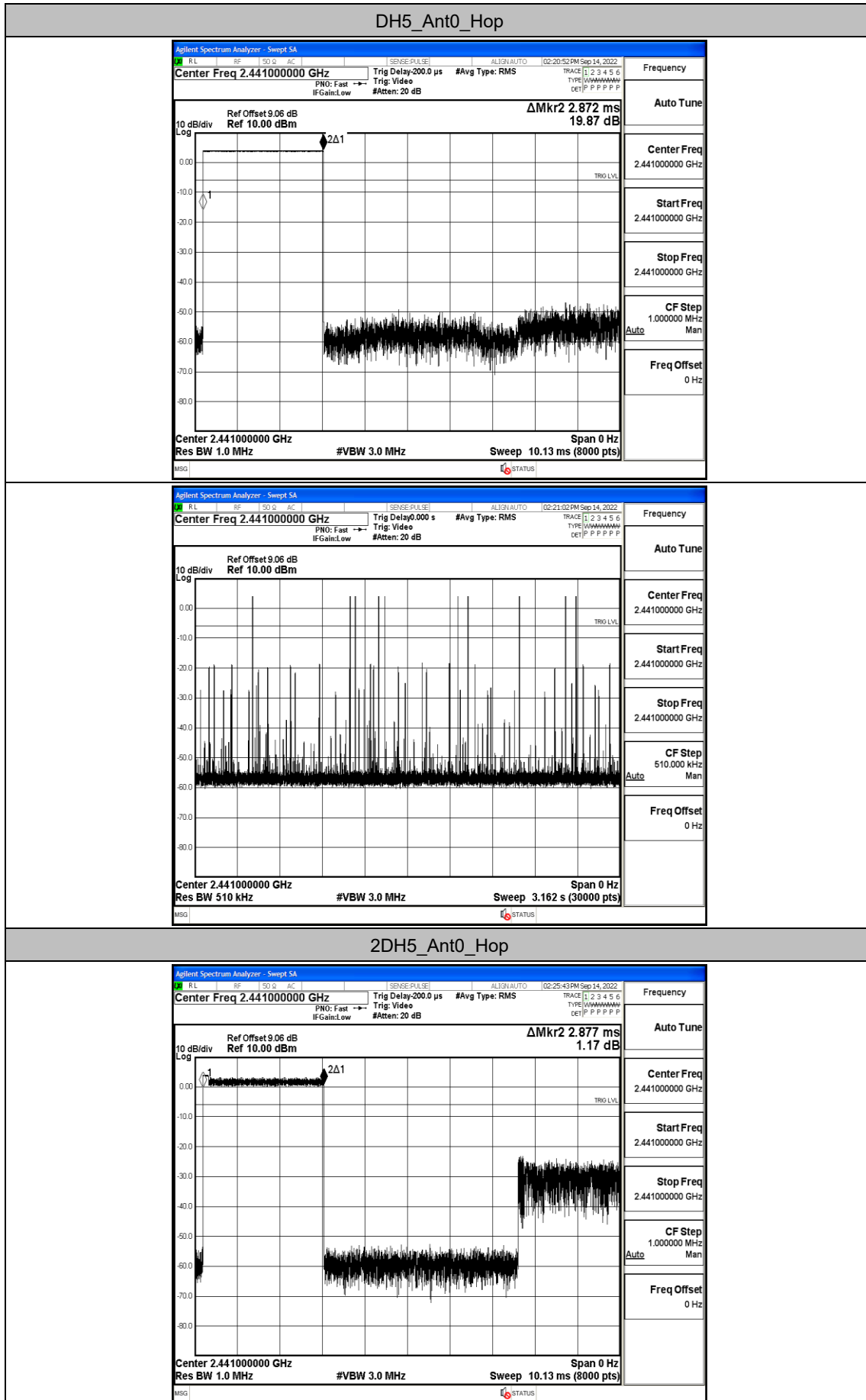
Frequency Auto Tune
 Center Freq 2.441500000 GHz
 Start Freq 2.440500000 GHz
 Stop Freq 2.442500000 GHz
 CF Step 200.000 kHz
 Auto Max
 Freq Offset 0 Hz

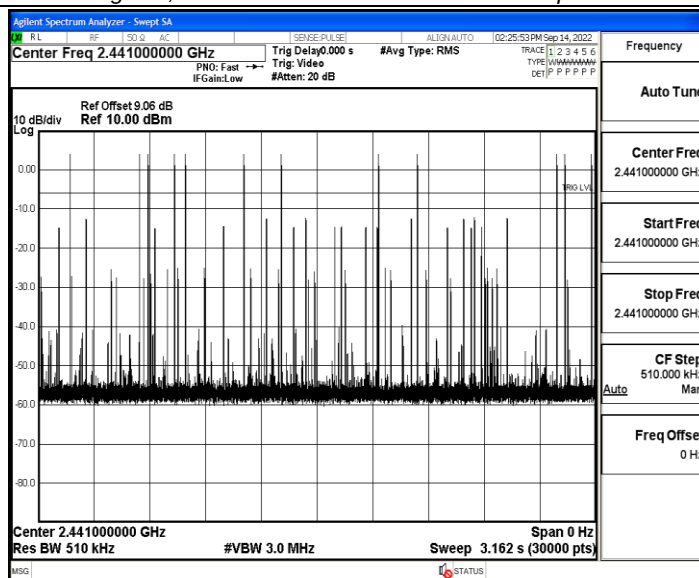
Appendix E: Time of occupancy

Test Result

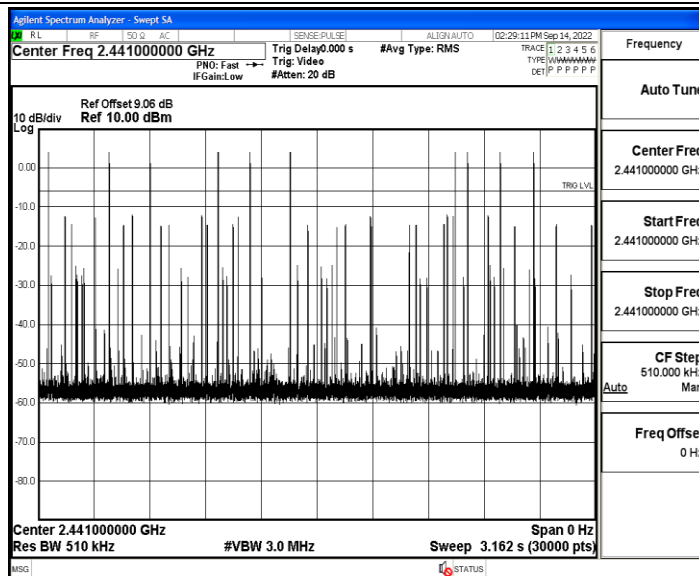
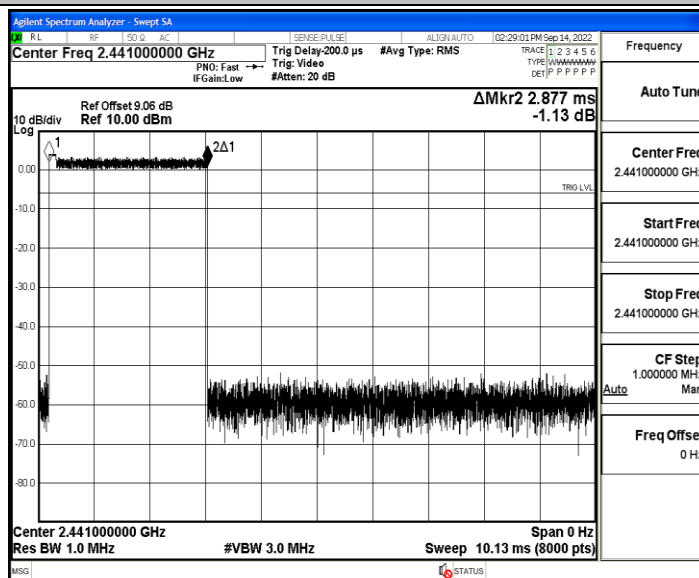
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant0	Hop	2.87	110	0.316	≤0.4	PASS
2DH5	Ant0	Hop	2.88	130	0.374	≤0.4	PASS
3DH5	Ant0	Hop	2.88	110	0.316	≤0.4	PASS

Test Graphs





3DH5_Ant0_Hop



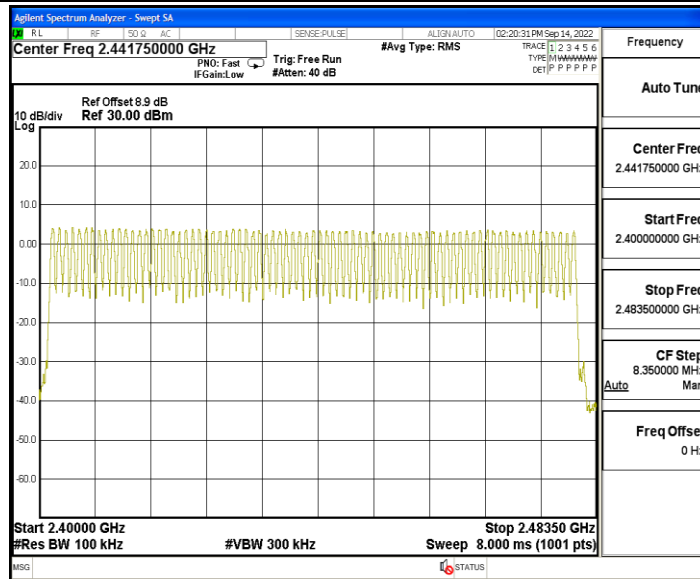
Appendix F: Number of hopping channels

Test Result

TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant0	Hop	79	≥15	PASS
2DH5	Ant0	Hop	79	≥15	PASS
3DH5	Ant0	Hop	79	≥15	PASS

Test Graphs

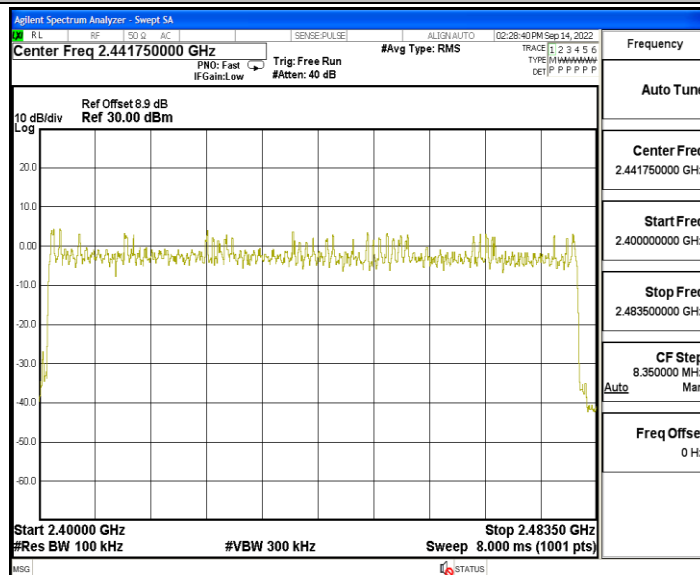
DH5_Ant0_Hop



2DH5_Ant0_Hop



3DH5_Ant0_Hop



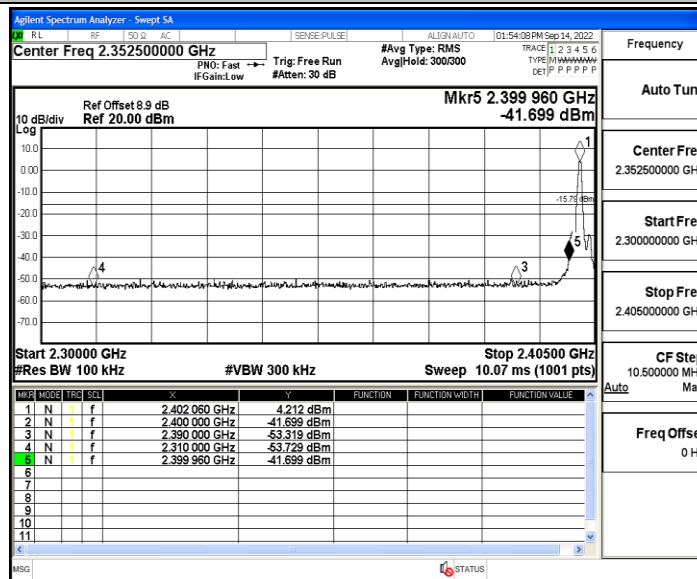
Appendix G: Band edge measurements

Test Result

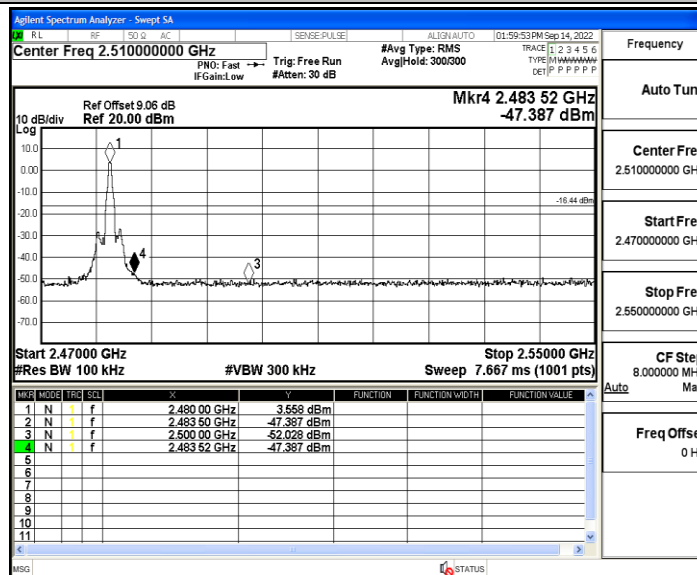
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant0	Low	2402	4.21	-41.7	≤-15.79	PASS
		High	2480	3.56	-47.39	≤-16.44	PASS
		Low	Hop_2402	3.92	-50.38	≤-16.09	PASS
		High	Hop_2480	3.42	-48.97	≤-16.58	PASS
2DH5	Ant0	Low	2402	4.22	-40.35	≤-15.78	PASS
		High	2480	3.65	-48.03	≤-16.35	PASS
		Low	Hop_2402	-1.54	-50.68	≤-21.54	PASS
		High	Hop_2480	3.36	-49.13	≤-16.64	PASS
3DH5	Ant0	Low	2402	3.47	-37.6	≤-16.53	PASS
		High	2480	3.70	-49.1	≤-16.3	PASS
		Low	Hop_2402	1.25	-49.76	≤-18.75	PASS
		High	Hop_2480	2.11	-49.73	≤-17.89	PASS

Test Graphs

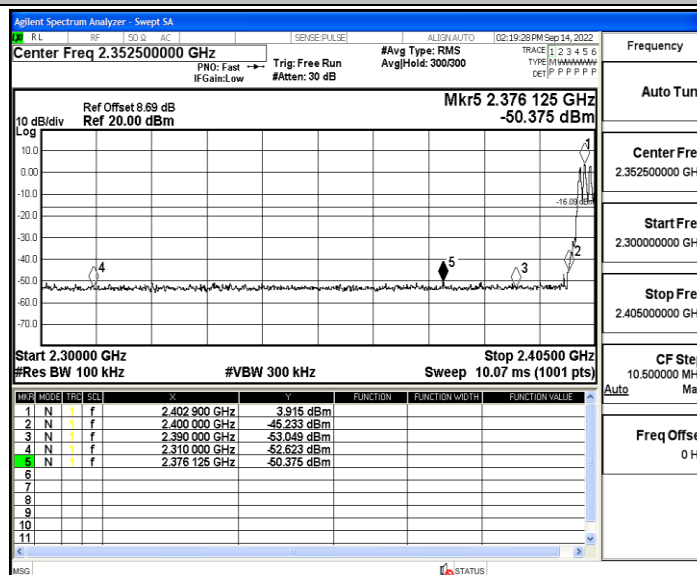
DH5_Ant0_Low_2402



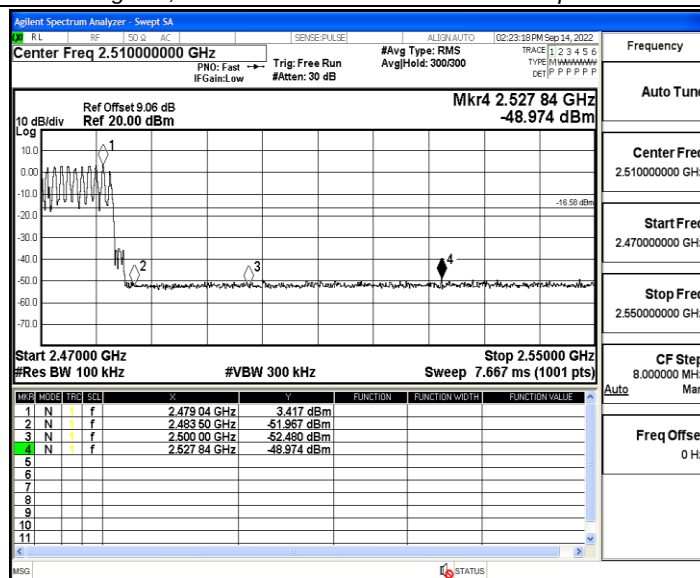
DH5_Ant0_High_2480



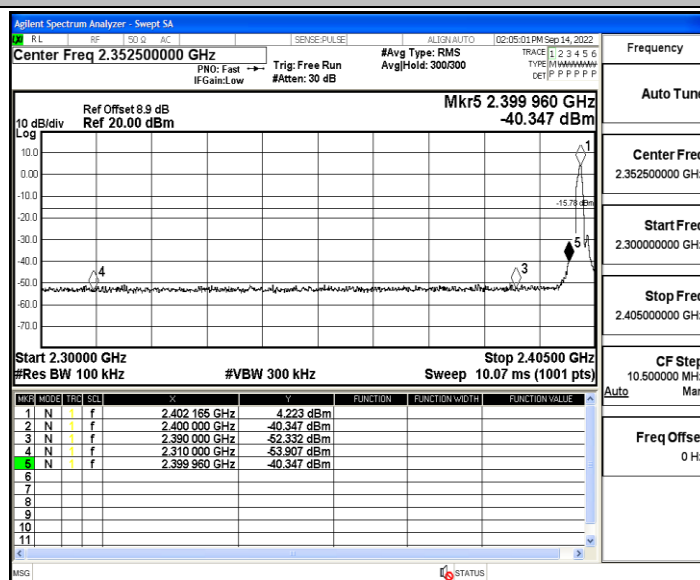
DH5_Ant0_Low_Hop_2402



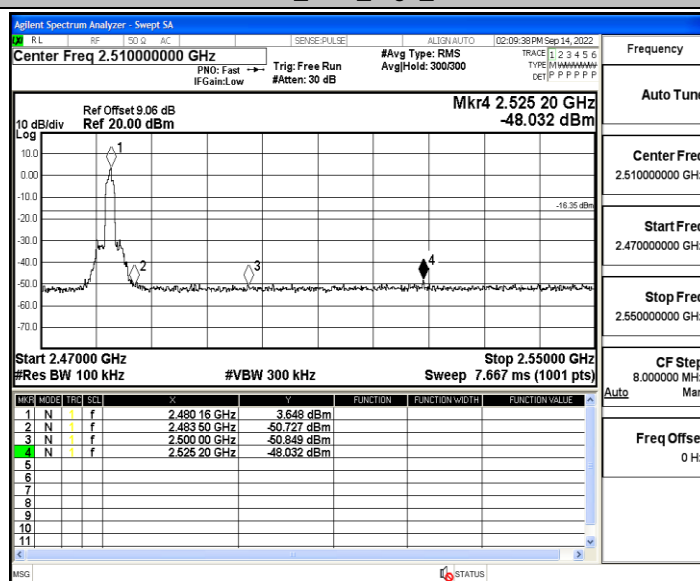
DH5_Ant0_High_Hop_2480



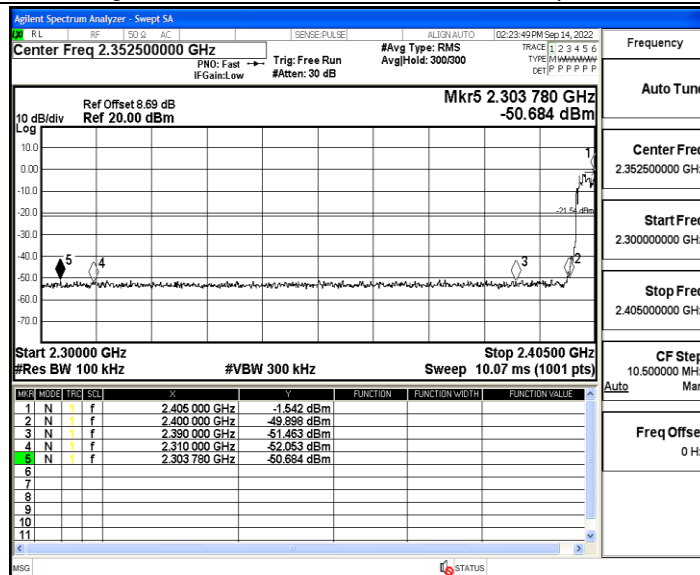
2DH5_Ant0_Low_2402



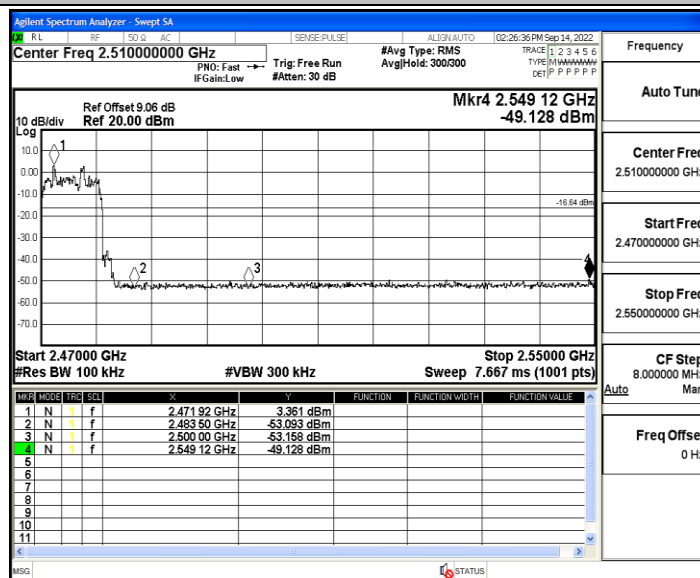
2DH5_Ant0_High_2480



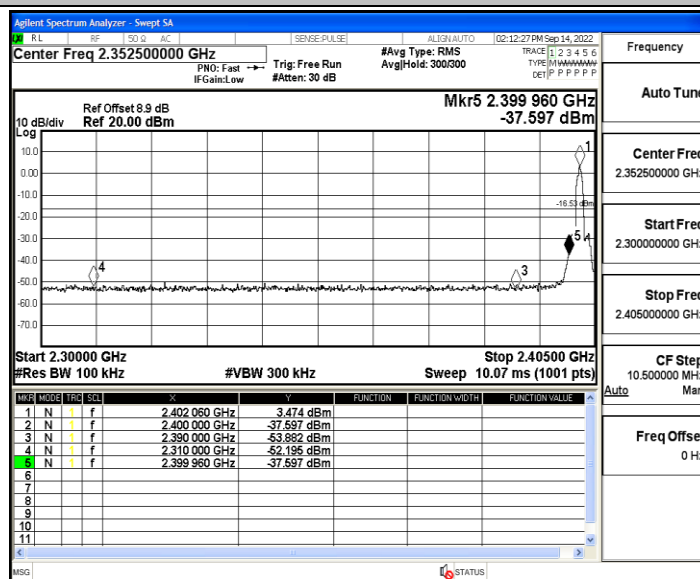
2DH5_Ant0_Low_Hop_2402



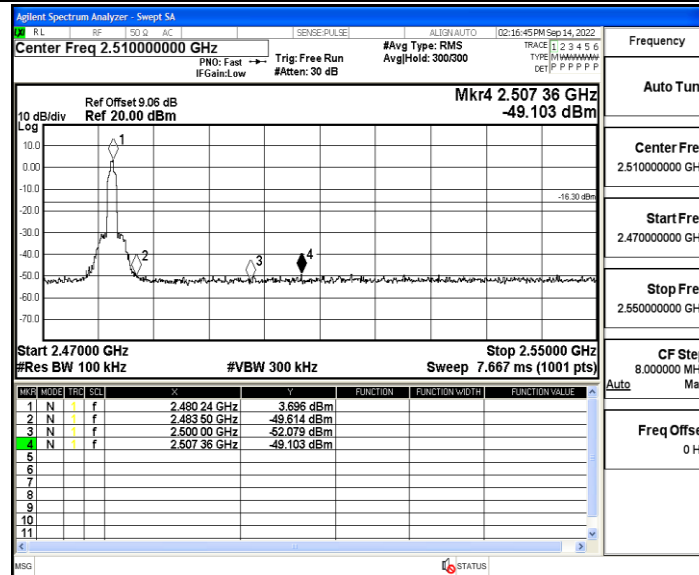
2DH5_Ant0_High_Hop_2480



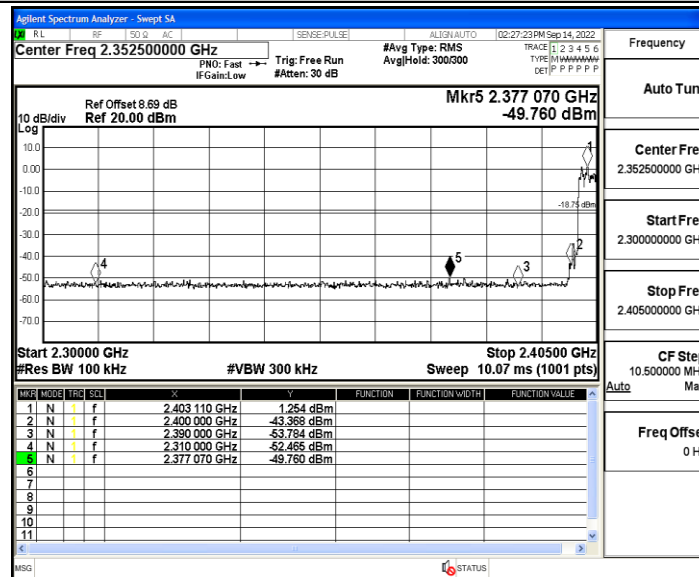
3DH5_Ant0_Low_2402



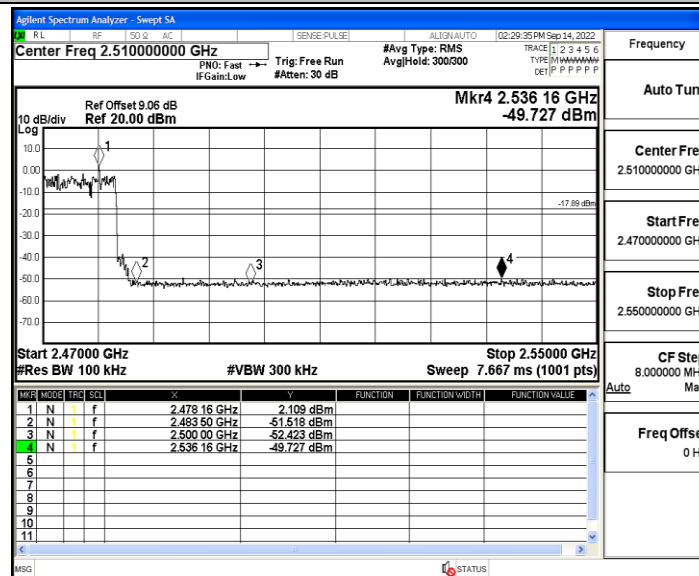
3DH5_Ant0_High_2480



3DH5_Ant0_Low_Hop_2402



3DH5_Ant0_High_Hop_2480



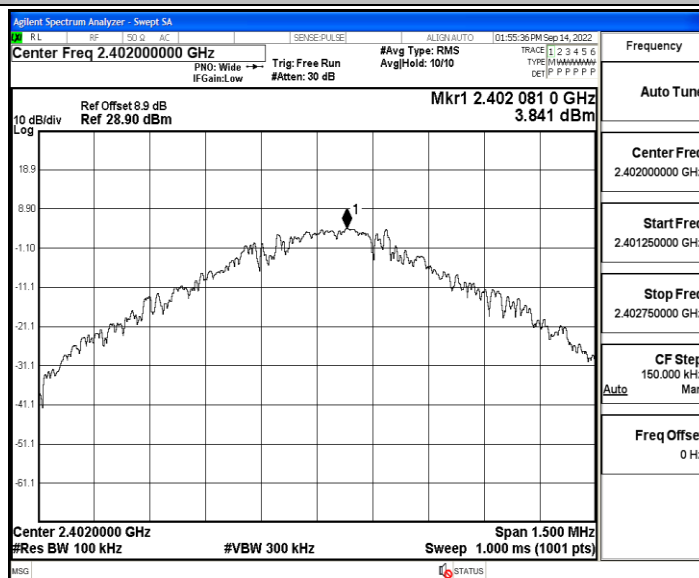
Appendix H: Conducted Spurious Emission

Test Result

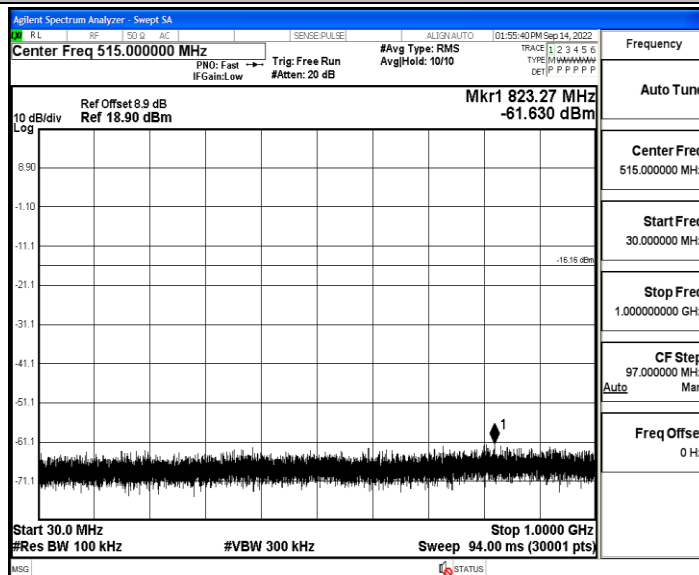
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant0	2402	Reference	3.84	3.84	---	PASS
			30~1000	3.84	-61.63	≤-16.16	PASS
			1000~26500	3.84	-48.68	≤-16.16	PASS
		2441	Reference	3.22	3.22	---	PASS
			30~1000	3.22	-61.68	≤-16.78	PASS
			1000~26500	3.22	-48.01	≤-16.78	PASS
		2480	Reference	3.00	3.00	---	PASS
			30~1000	3.00	-61.19	≤-17	PASS
			1000~26500	3.00	-51.28	≤-17	PASS
2DH5	Ant0	2402	Reference	3.04	3.04	---	PASS
			30~1000	3.04	-61.92	≤-16.96	PASS
			1000~26500	3.04	-51.37	≤-16.96	PASS
		2441	Reference	-1.92	-1.92	---	PASS
			30~1000	-1.92	-61.68	≤-21.92	PASS
			1000~26500	-1.92	-51.14	≤-21.92	PASS
		2480	Reference	2.07	2.07	---	PASS
			30~1000	2.07	-61.62	≤-17.93	PASS
			1000~26500	2.07	-50.67	≤-17.93	PASS
3DH5	Ant0	2402	Reference	2.05	2.05	---	PASS
			30~1000	2.05	-61.2	≤-17.95	PASS
			1000~26500	2.05	-51.34	≤-17.95	PASS
		2441	Reference	0.96	0.96	---	PASS
			30~1000	0.96	-61.44	≤-19.04	PASS
			1000~26500	0.96	-51.39	≤-19.04	PASS
		2480	Reference	-1.30	-1.30	---	PASS
			30~1000	-1.30	-60.97	≤-21.3	PASS
			1000~26500	-1.30	-51.12	≤-21.3	PASS

Test Graphs

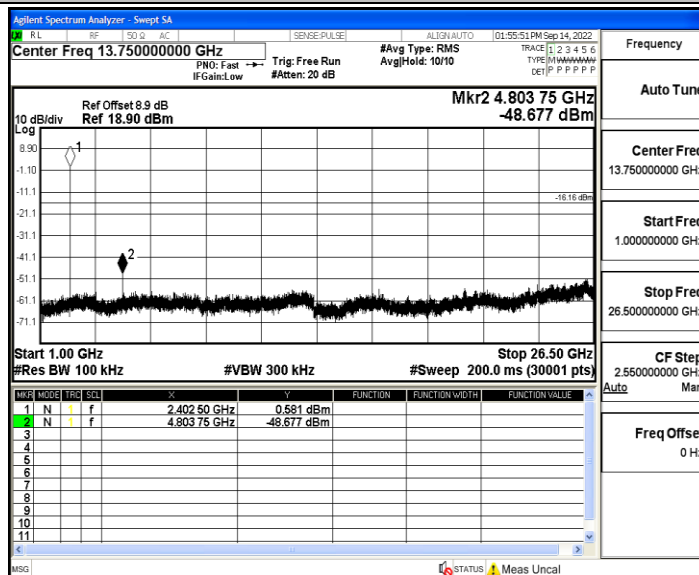
DH5_Ant0_2402_0~Reference



DH5_Ant0_2402_30~1000



DH5_Ant0_2402_1000~26500



DH5_Ant0_2441_0~Reference