Appendix A

RF Test Data for 2.4G BT (Conducted Measurement)

Product Name: TWS Bluetooth headset

Trade Mark: AIHOOR

Test Model: AIHOOR A5

Environmental Conditions

Temperature:	21.2 ° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

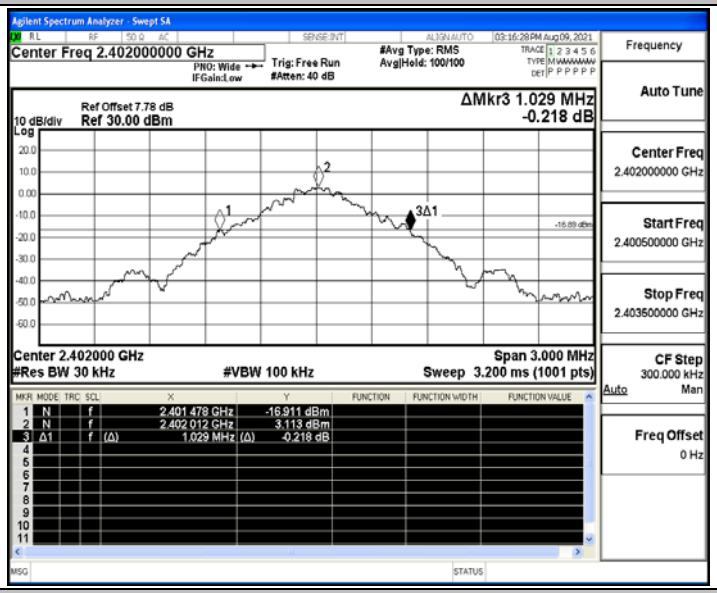
Appendix A.1: 20dB Emission Bandwidth

Test Result

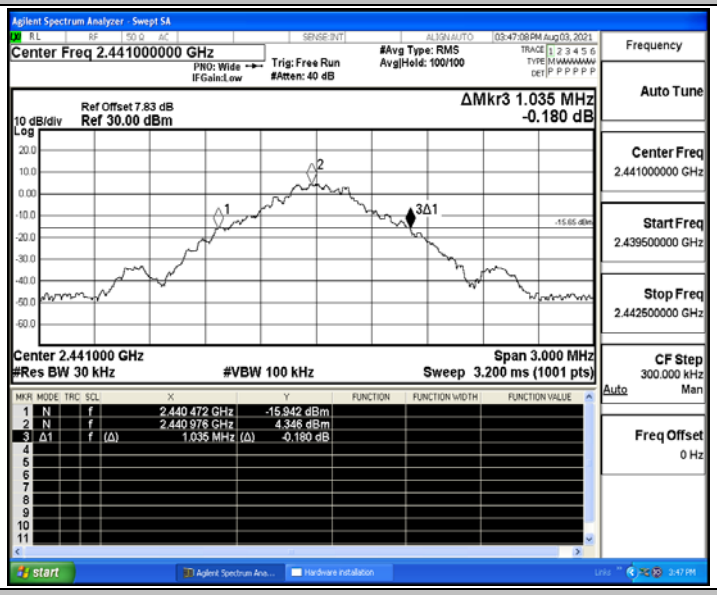
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.029	2401.478	2402.507	---	PASS
		2441	1.035	2440.472	2441.507	---	PASS
		2480	1.032	2479.460	2480.492	---	PASS
2DH5	Ant1	2402	1.320	2401.337	2402.657	---	PASS
		2441	1.335	2440.331	2441.666	---	PASS
		2480	1.329	2479.334	2480.663	---	PASS
3DH5	Ant1	2402	1.320	2401.343	2402.663	---	PASS
		2441	1.344	2440.325	2441.669	---	PASS
		2480	1.299	2479.349	2480.648	---	PASS

Test Graphs

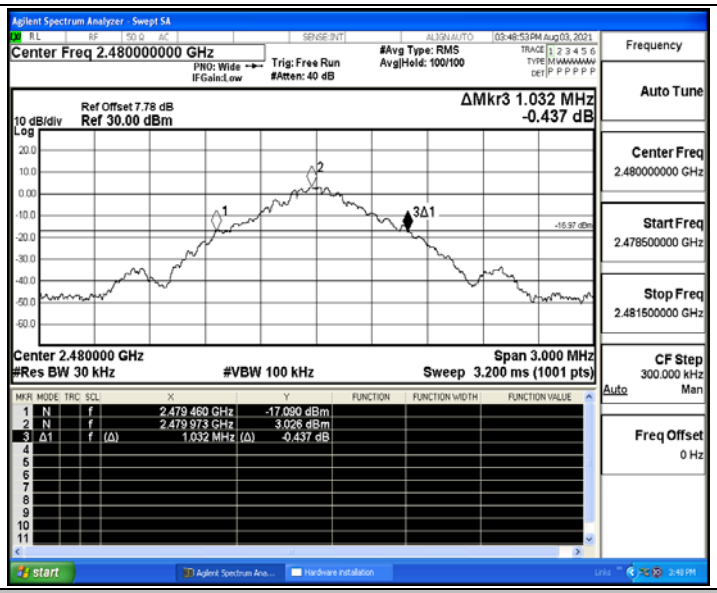
DH5_Ant1_2402



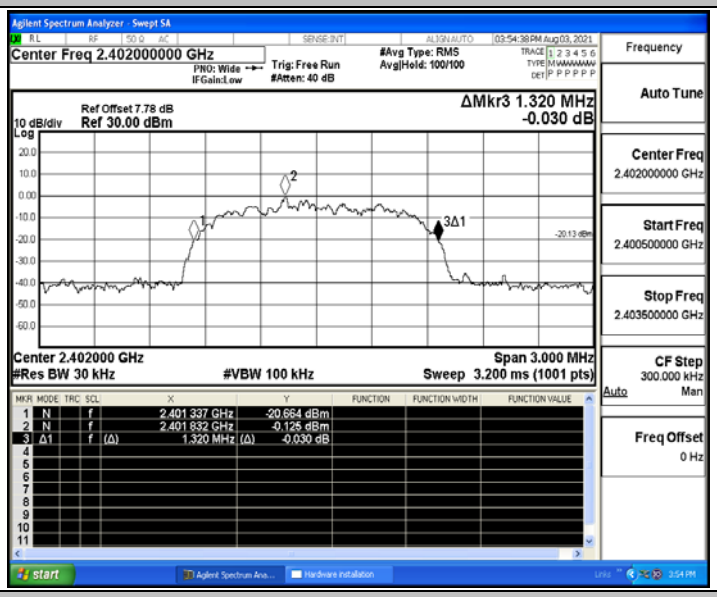
DH5_Ant1_2441



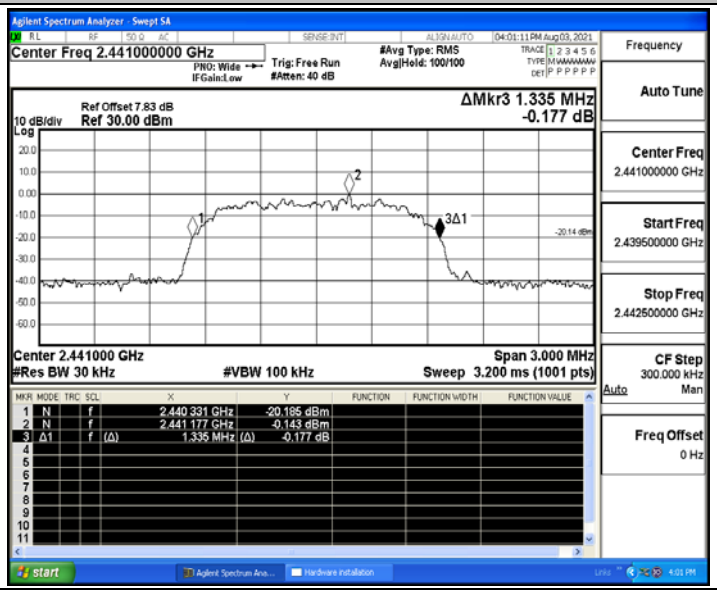
DH5_Ant1_2480



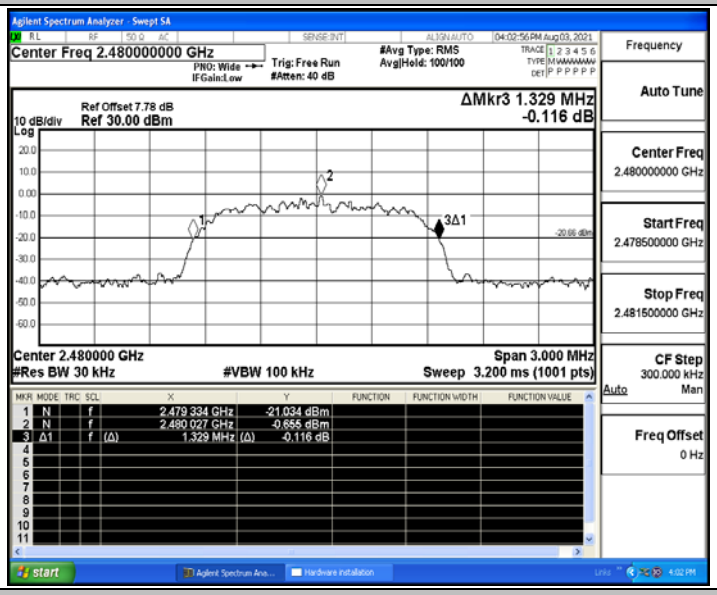
2DH5_Ant1_2402



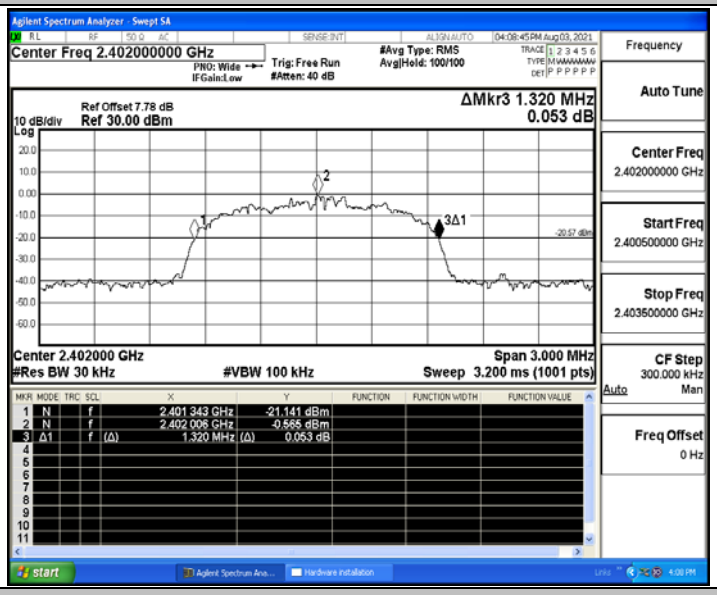
2DH5_Ant1_2441



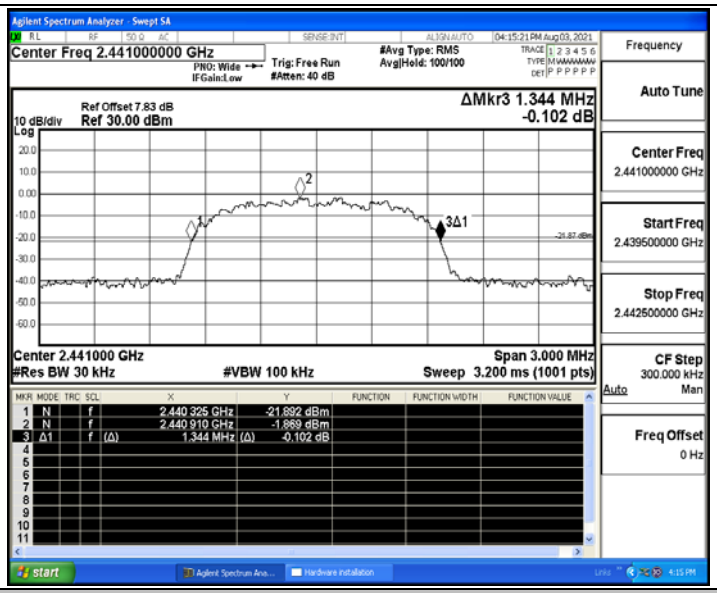
2DH5_Ant1_2480



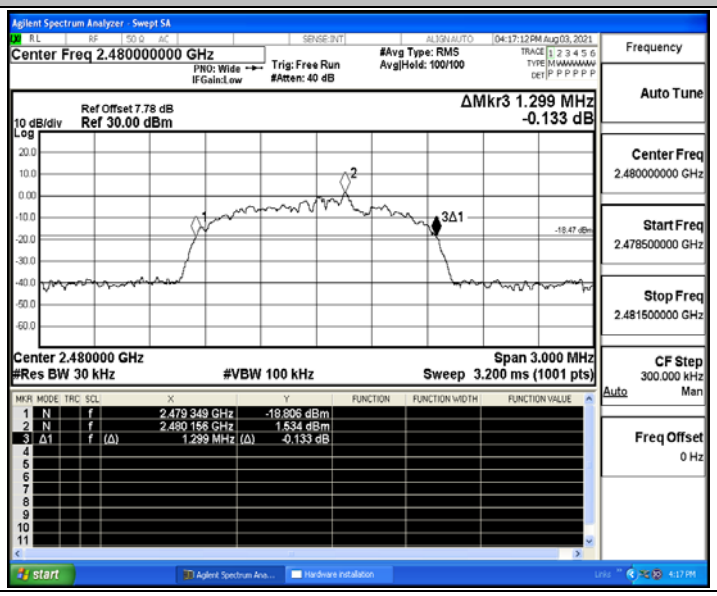
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



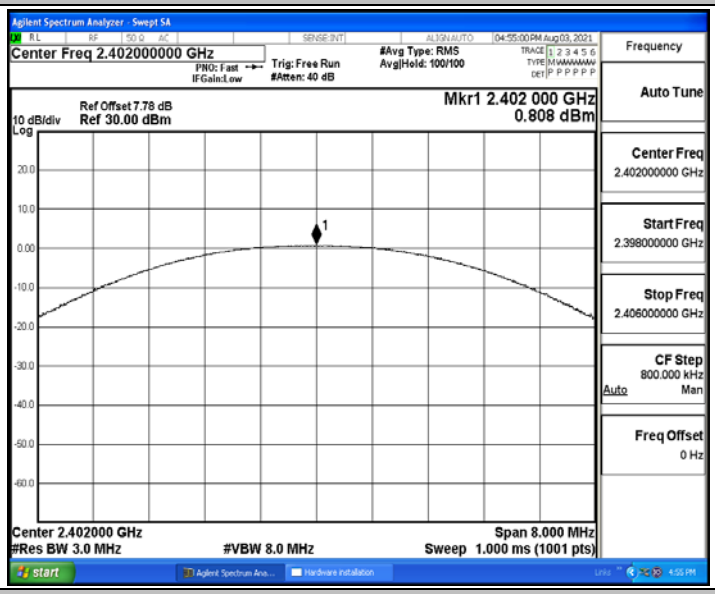
Appendix A.2: Maximum peak conducted output power

Test Result

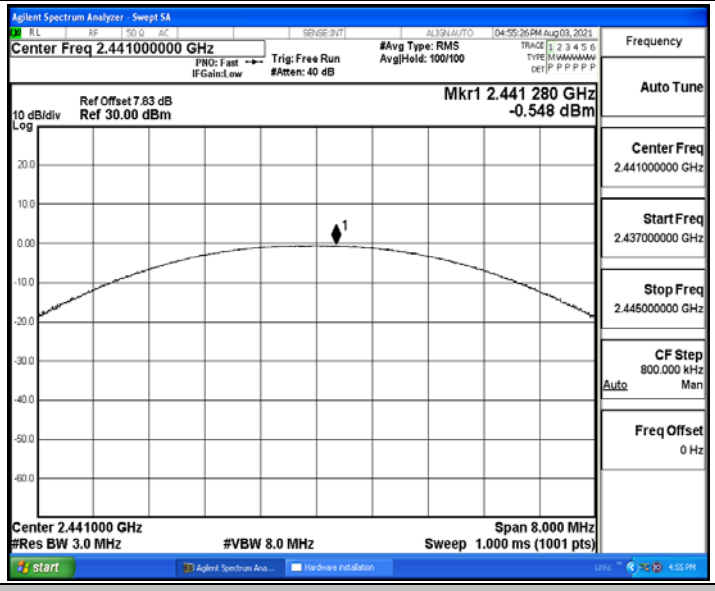
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	0.81	≤20.97	PASS
		2441	-0.55	≤20.97	PASS
		2480	0.52	≤20.97	PASS
2DH5	Ant1	2402	-0.05	≤20.97	PASS
		2441	-1.28	≤20.97	PASS
		2480	-0.41	≤20.97	PASS
3DH5	Ant1	2402	-0.02	≤20.97	PASS
		2441	-1.08	≤20.97	PASS
		2480	-0.29	≤20.97	PASS

Test Graphs

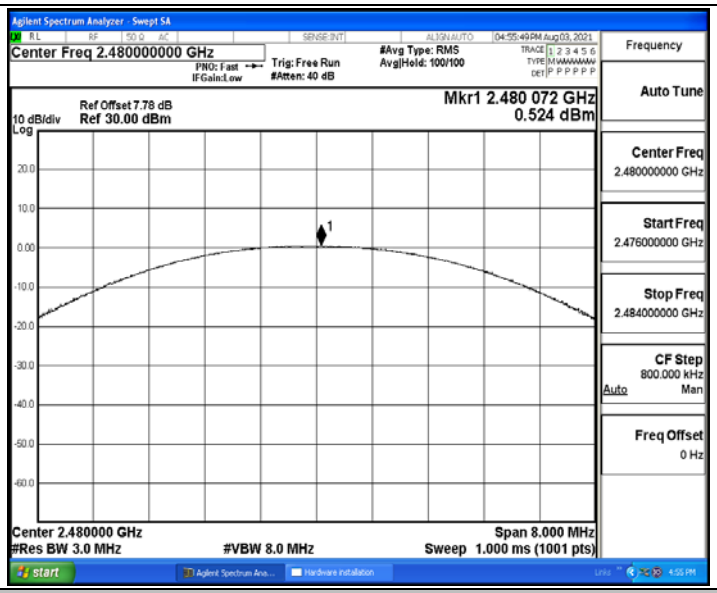
DH5_Ant1_2402



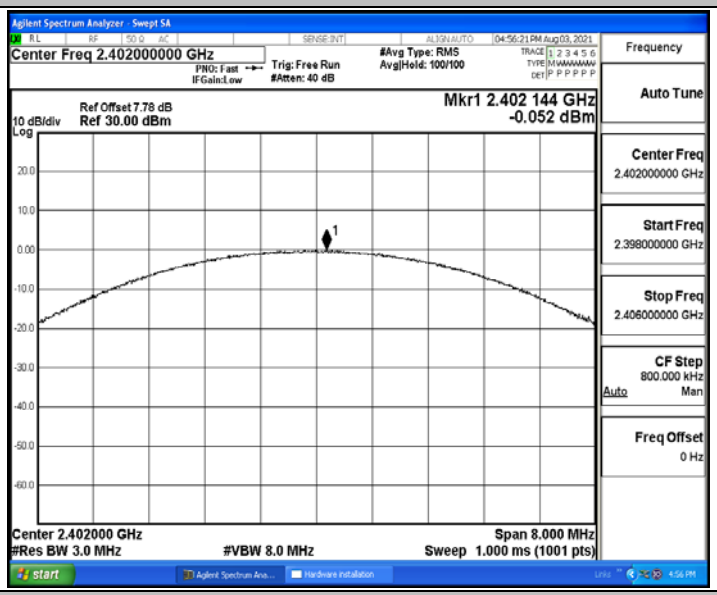
DH5_Ant1_2441



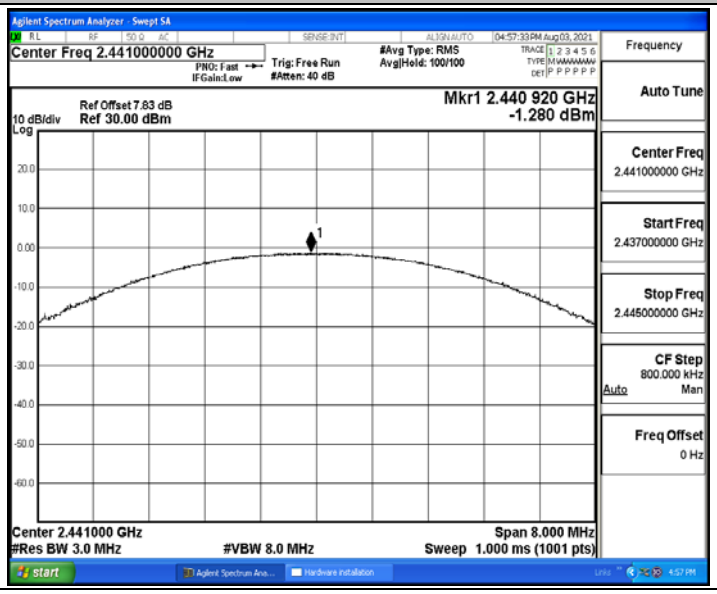
DH5_Ant1_2480



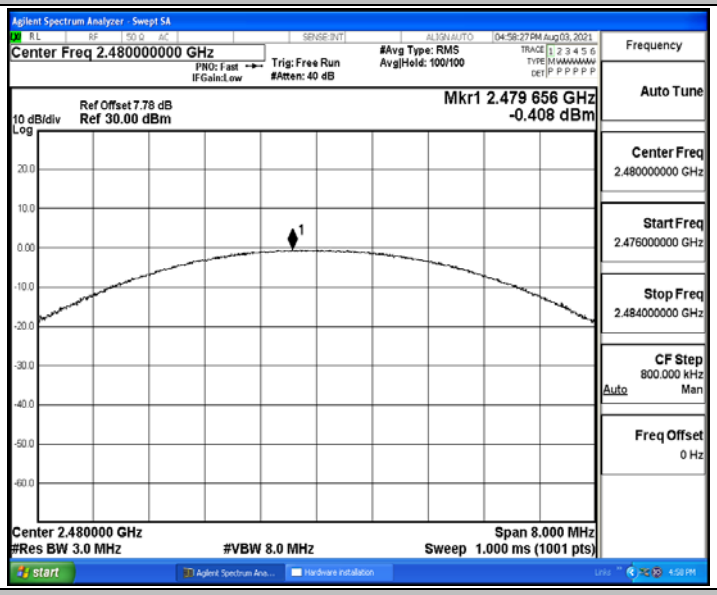
2DH5_Ant1_2402



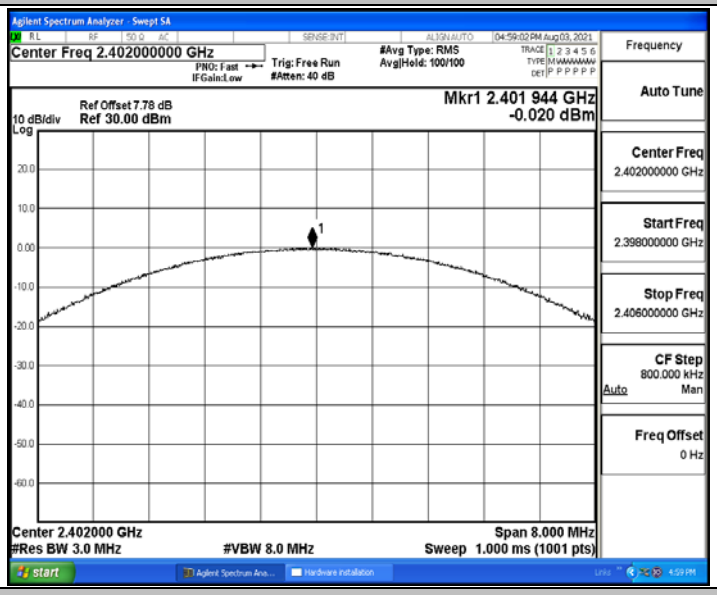
2DH5_Ant1_2441



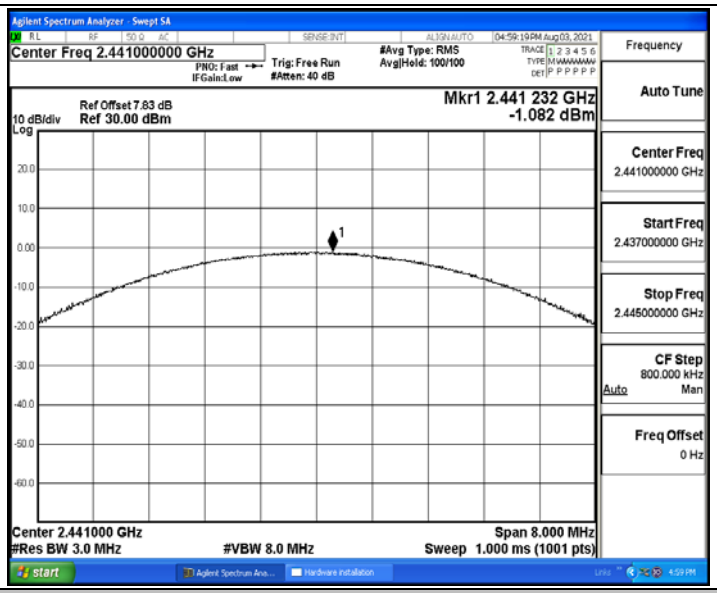
2DH5_Ant1_2480



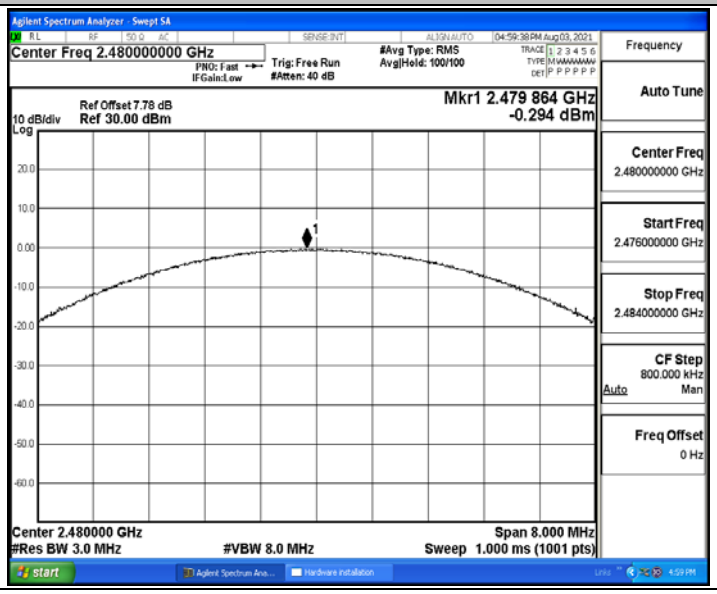
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

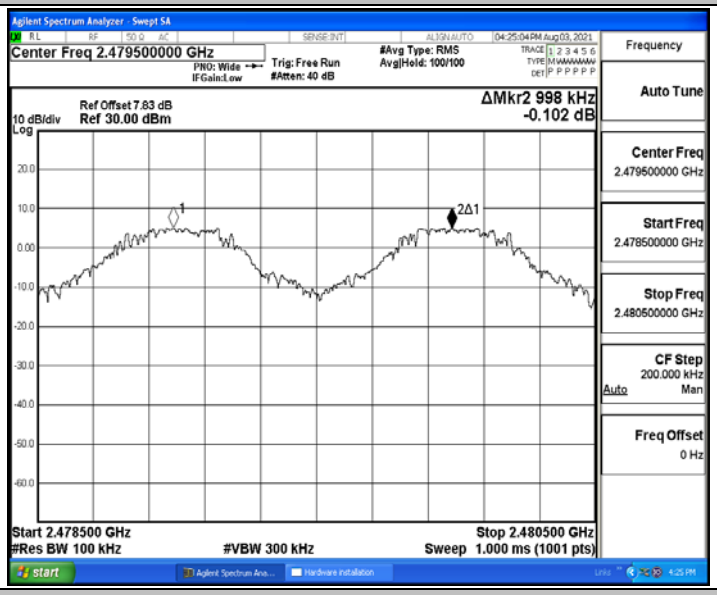
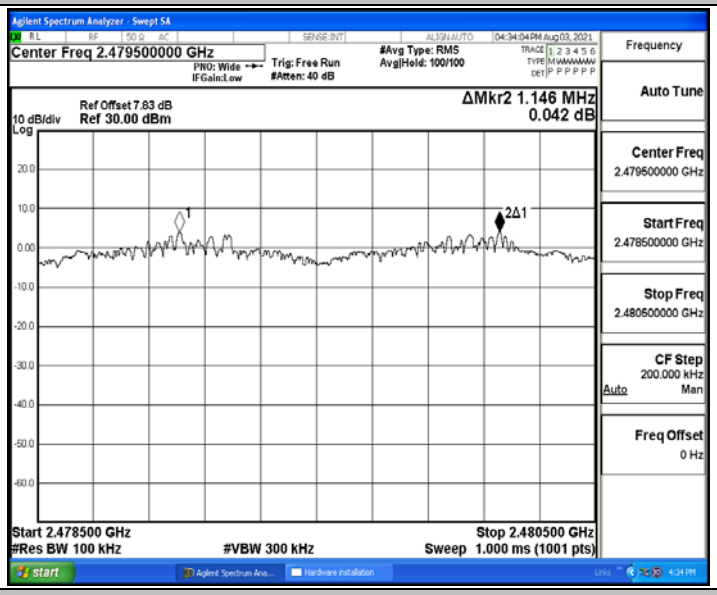


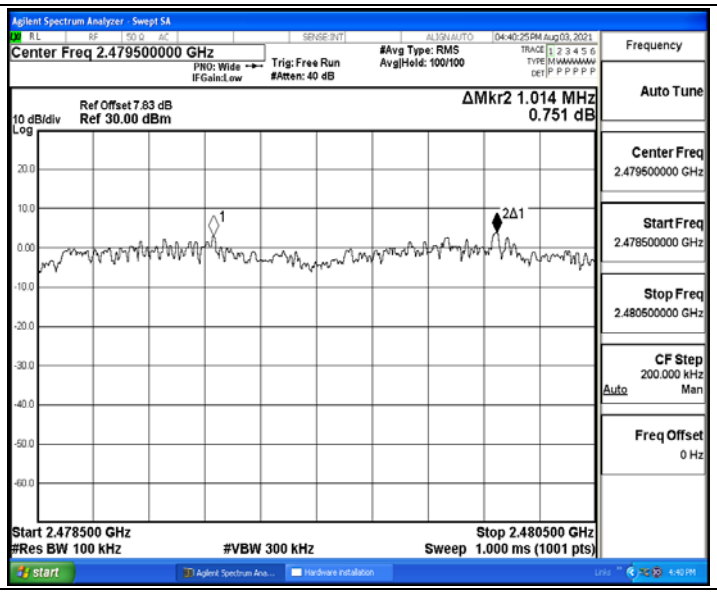
Appendix A.3: Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	Hop	0.998	≥0.690	PASS
2DH5	Ant1	Hop	1.146	≥0.890	PASS
3DH5	Ant1	Hop	1.014	≥0.896	PASS

Test Graphs

DH5_Ant1_Hop

2DH5_Ant1_Hop

3DH5_Ant1_Hop

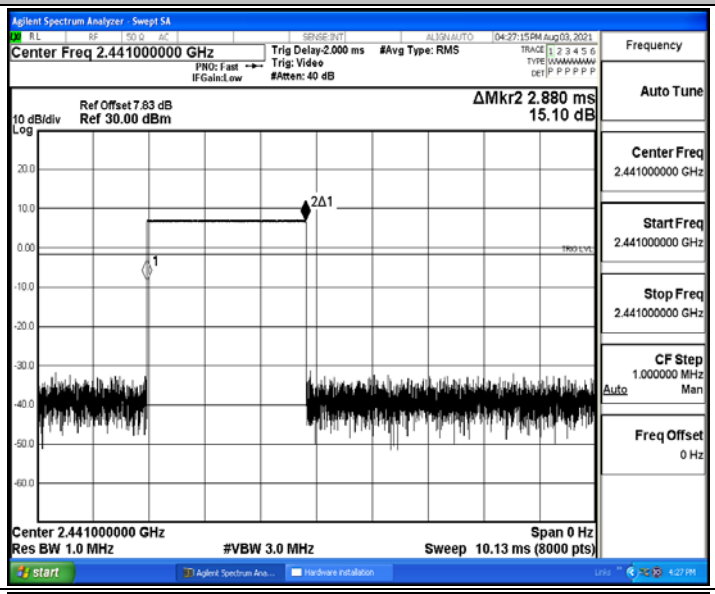
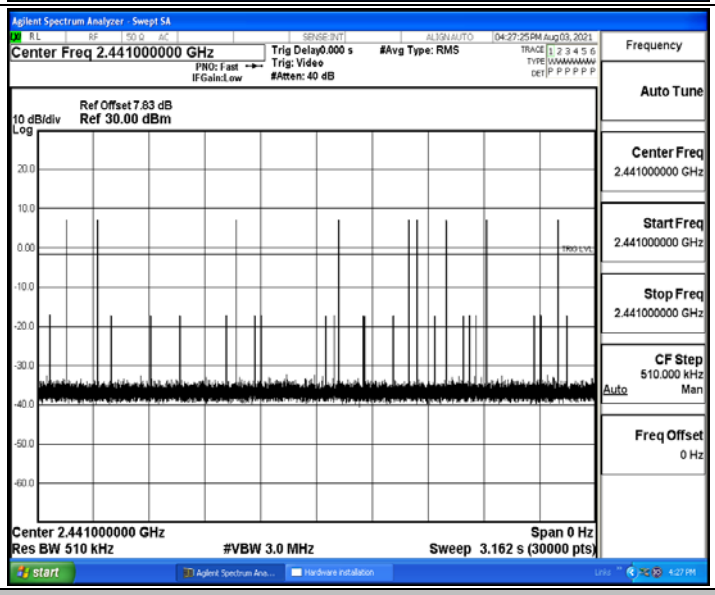

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.479500000 GHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
Avg|Hold: 100/100
04:40:25 PM Aug 03, 2021
Ref Offset 7.83 dB
10 dB/div Ref 30.00 dBm
Log
ΔMkr2 1.014 MHz
0.751 dB
Start 2.478500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.480500 GHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.479500000 GHz
Start Freq
2.478500000 GHz
Stop Freq
2.480500000 GHz
CF Step
200.000 kHz
Auto Man
Freq Offset
0 Hz

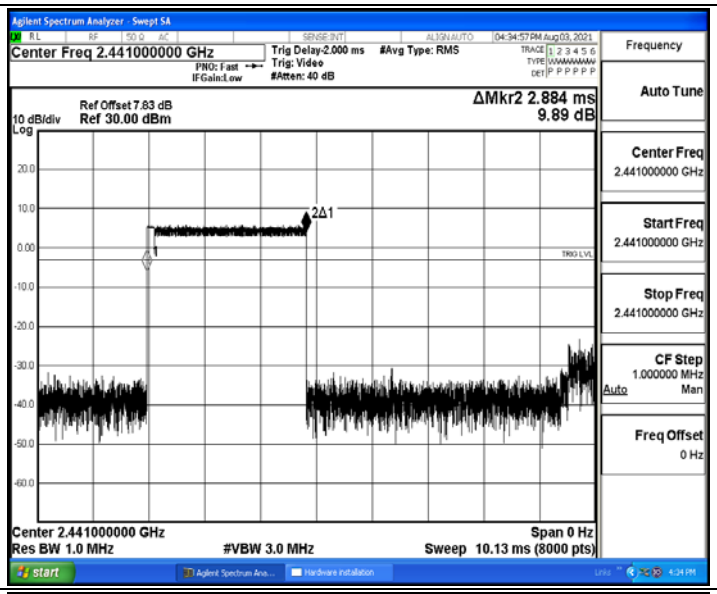
Appendix A.4: Time of occupancy

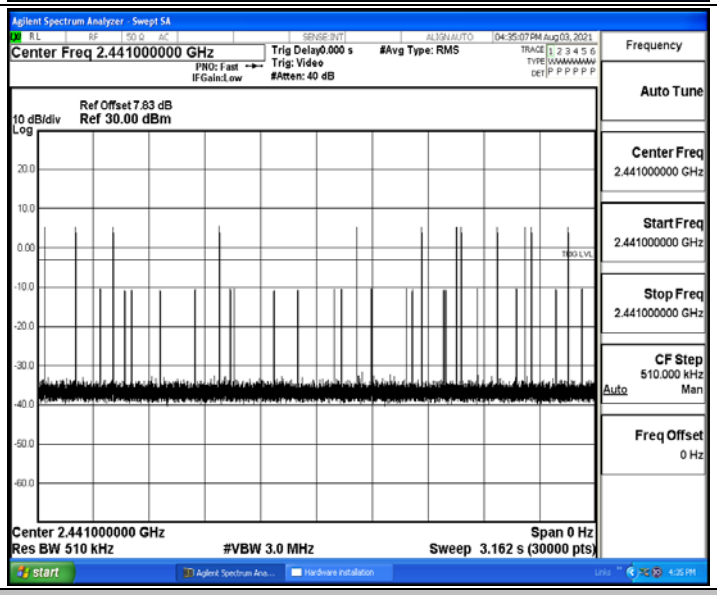
Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	100	0.288	≤0.4	PASS
2DH5	Ant1	Hop	2.88	130	0.375	≤0.4	PASS
3DH5	Ant1	Hop	2.89	90	0.26	≤0.4	PASS

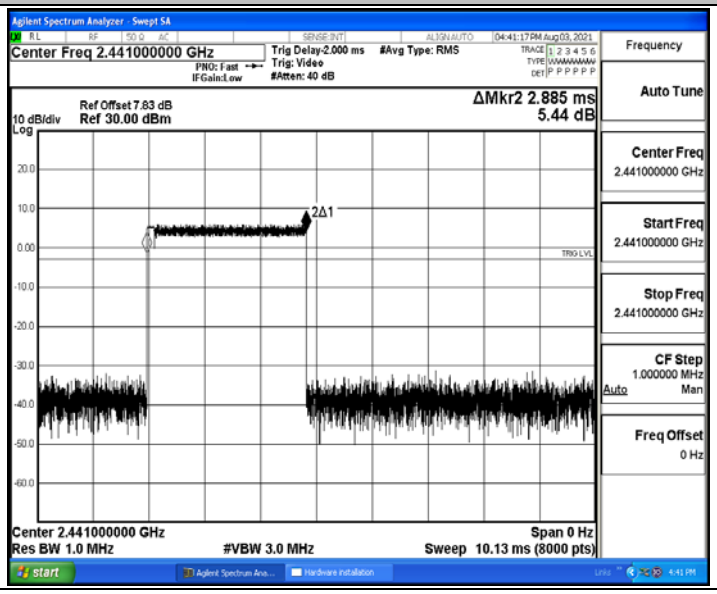
Test Graphs

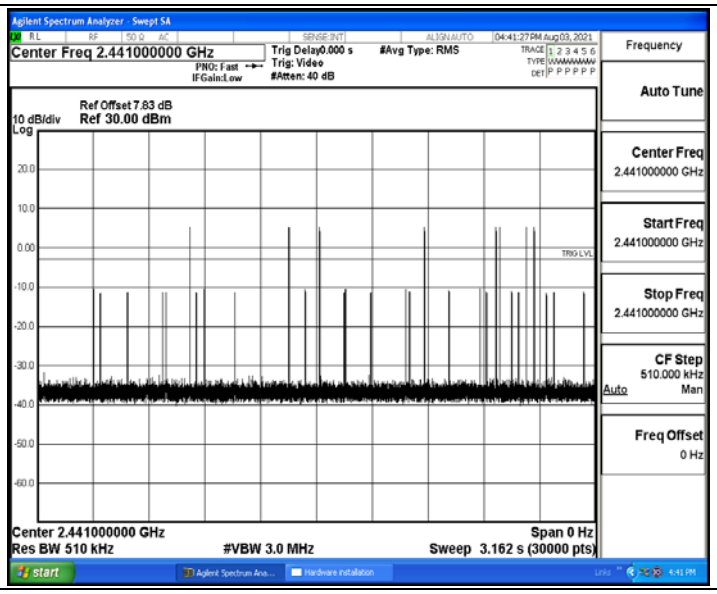
DH5_Ant1_Hop


2DH5_Ant1_Hop





3DH5_Ant1_Hop



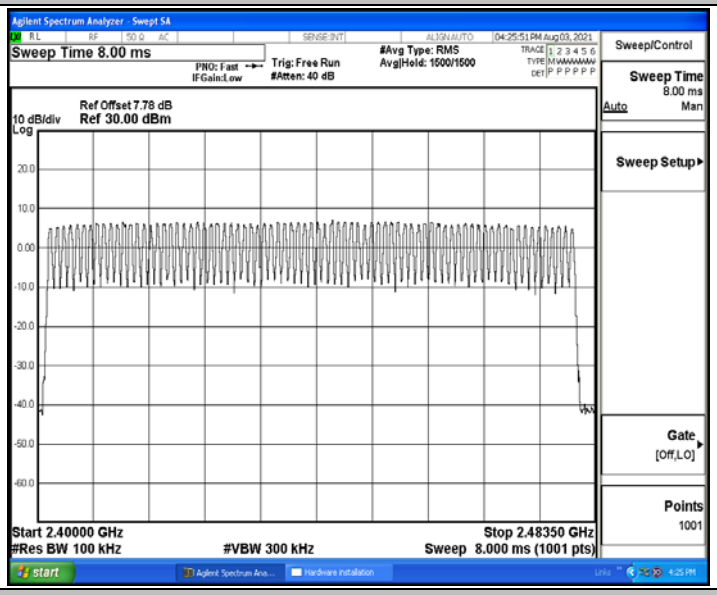
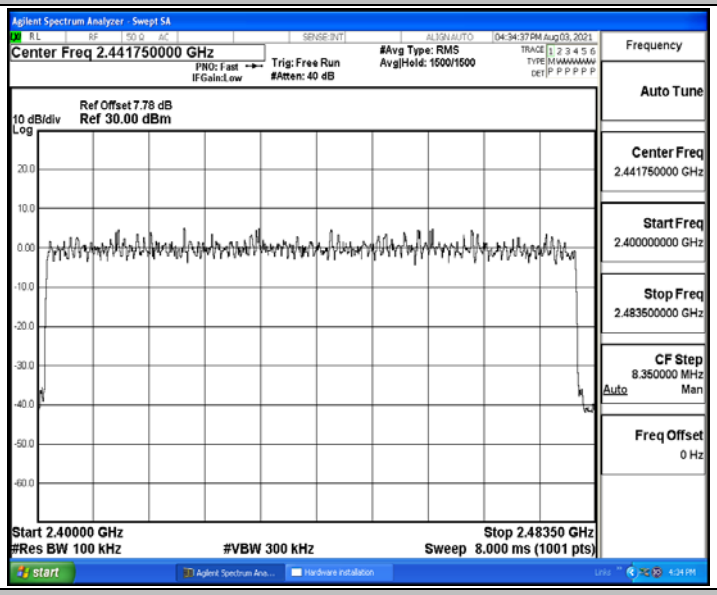

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
Trig Delay0.000 s
Trig: Video
#Atten: 40 dB
#Avg Type: RMS
04:41:27 PM Aug 03, 2021
Frequency
Auto Tune
Center Freq
2.441000000 GHz
Start Freq
2.441000000 GHz
Stop Freq
2.441000000 GHz
CF Step
510.000 kHz
Auto
Man
Freq Offset
0 Hz
Ref Offset 7.83 dB
10 dB/div
Ref 30.00 dBm
Log
Center 2.441000000 GHz
Span 0 Hz
Res BW 510 kHz
#VBW 3.0 MHz
Sweep 3.162 s (30000 pts)

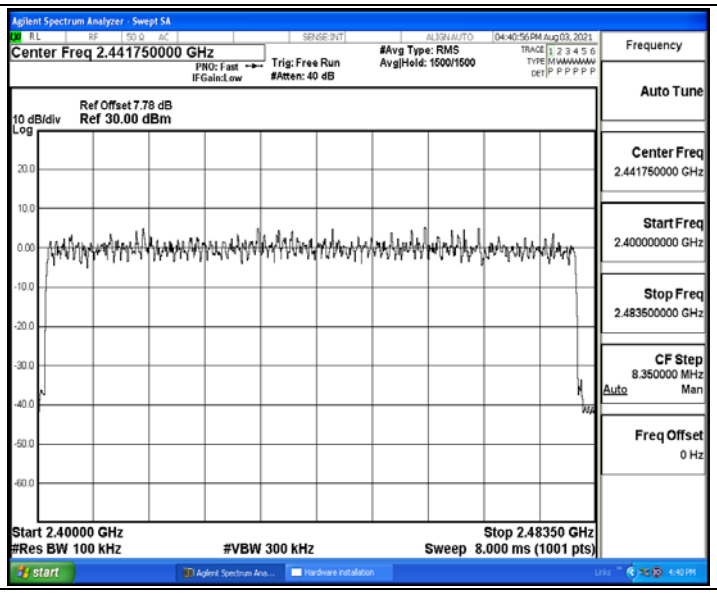
Appendix A.5: Number of hopping channels

Test Result

TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

DH5_Ant1_Hop

2DH5_Ant1_Hop

3DH5_Ant1_Hop


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441750000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
Avg|Hold: 1500/1500
04:40:56 PM Aug 03, 2021
Ref Offset 7.78 dB
10 dB/div
Ref 30.00 dBm
Log
Start 2.40000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.48350 GHz
Sweep 8.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.441750000 GHz
Start Freq
2.400000000 GHz
Stop Freq
2.483500000 GHz
CF Step
8.350000 MHz
Auto
Man
Freq Offset
0 Hz

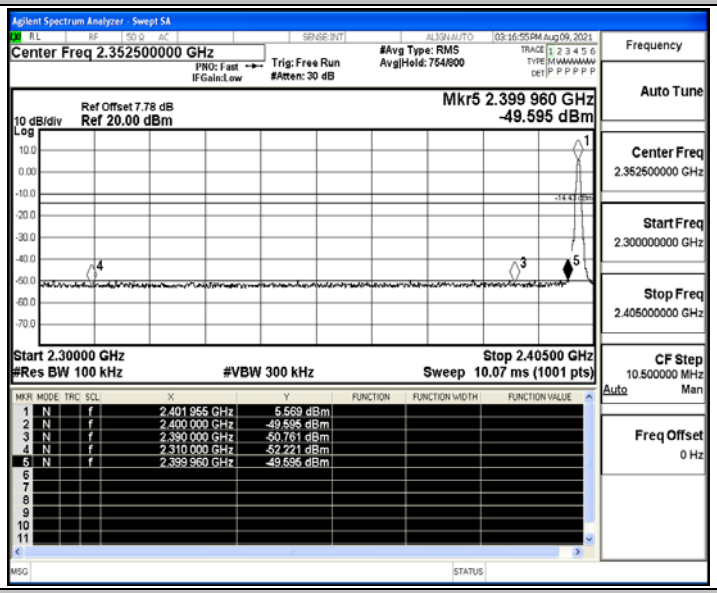
Appendix A.6: Band edge measurements

Test Result

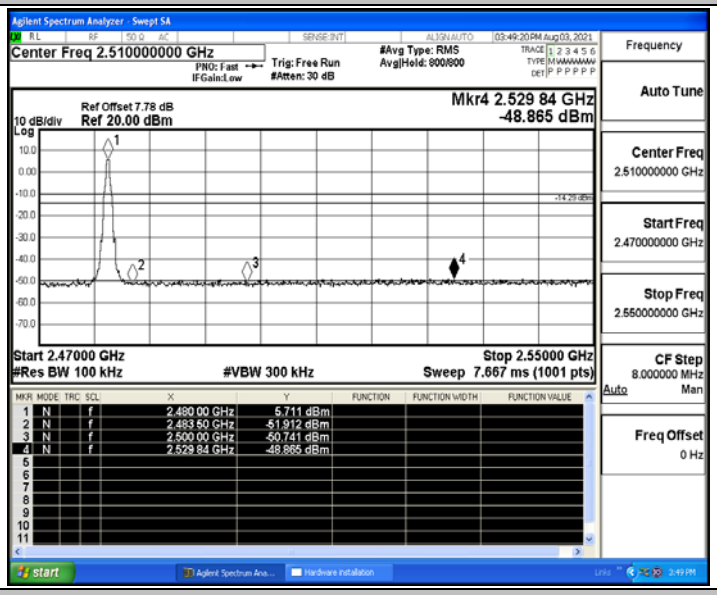
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	5.57	-49.6	≤-14.43	PASS
		High	2480	5.71	-48.87	≤-14.29	PASS
		Low	Hop_2402	5.61	-49.95	≤-14.39	PASS
		High	Hop_2480	5.87	-48.6	≤-14.13	PASS
2DH5	Ant1	Low	2402	4.25	-48.55	≤-15.75	PASS
		High	2480	4.27	-48.82	≤-15.73	PASS
		Low	Hop_2402	1.73	-50.03	≤-18.28	PASS
		High	Hop_2480	4.79	-48.42	≤-15.22	PASS
3DH5	Ant1	Low	2402	4.25	-48.76	≤-15.76	PASS
		High	2480	4.31	-48.49	≤-15.69	PASS
		Low	Hop_2402	0.26	-50.12	≤-19.74	PASS
		High	Hop_2480	3.98	-48.62	≤-16.02	PASS

Test Graphs

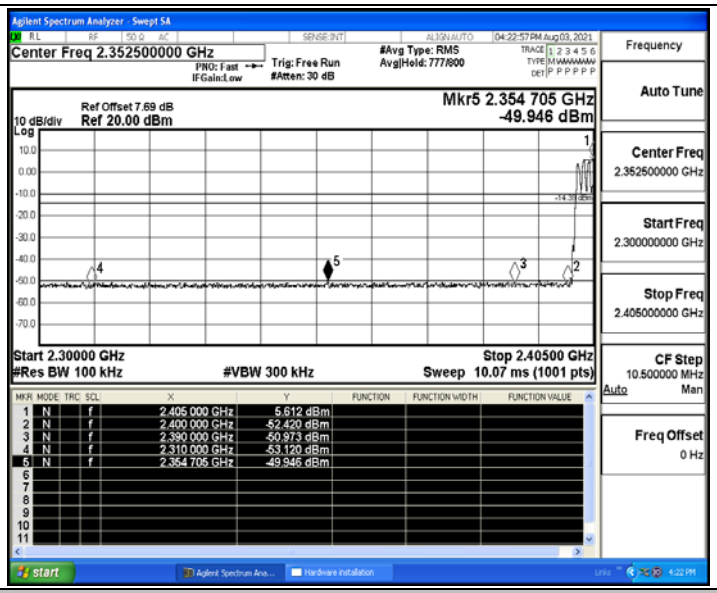
DH5_Ant1_Low_2402



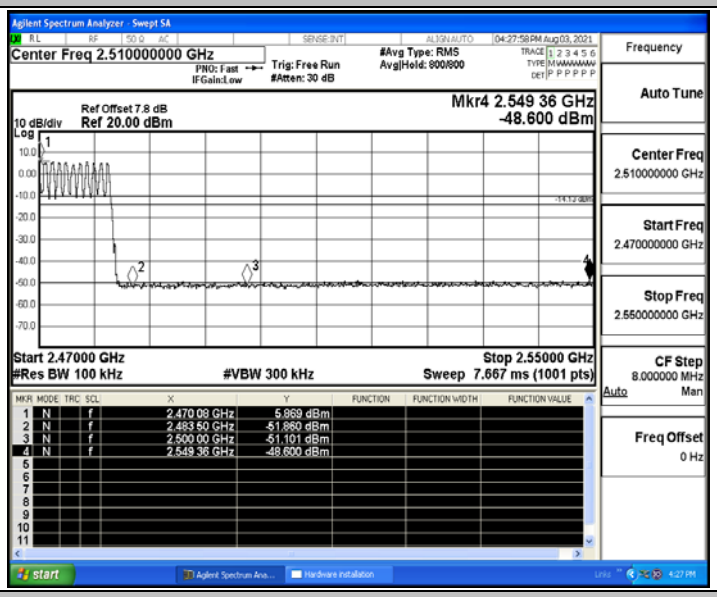
DH5_Ant1_High_2480



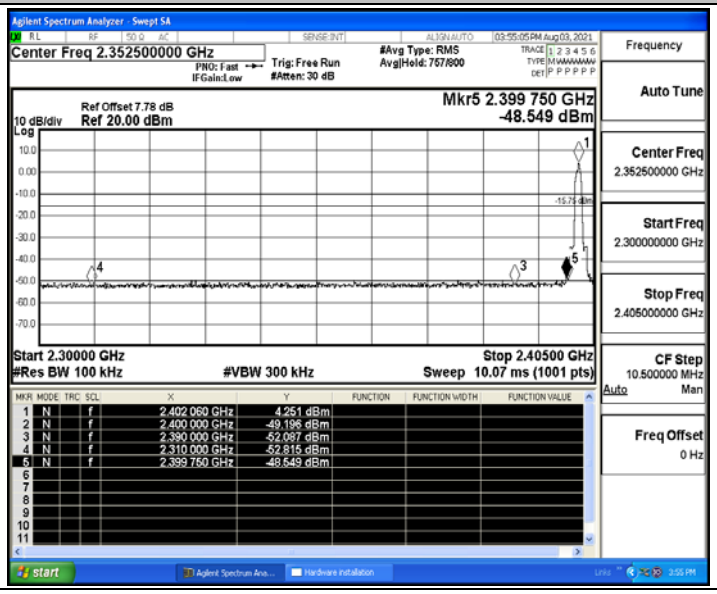
DH5_Ant1_Low_Hop_2402



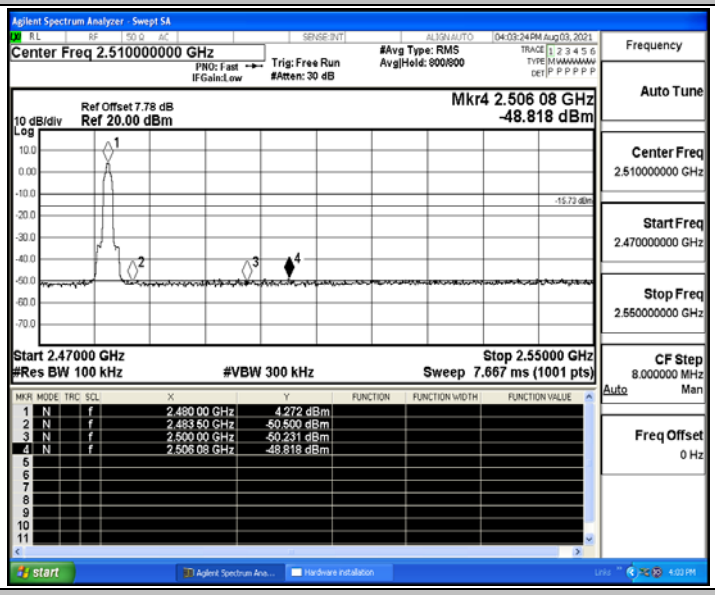
DH5_Ant1_High_Hop_2480



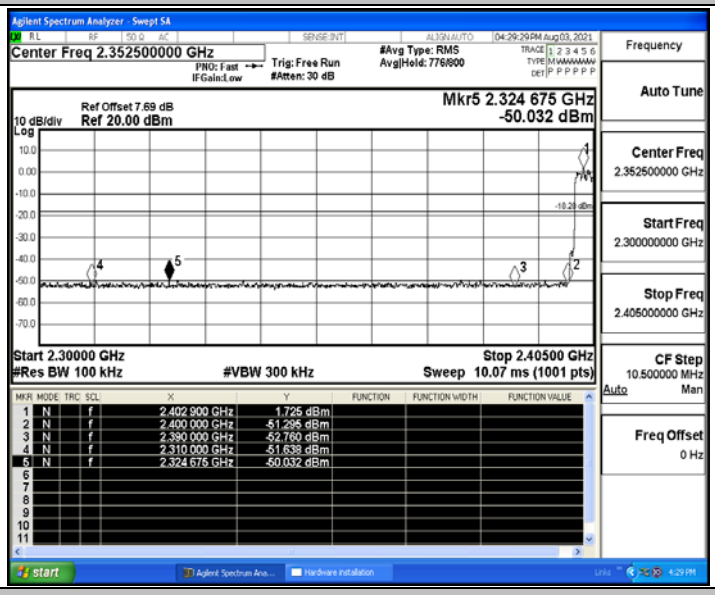
2DH5_Ant1_Low_2402



2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480