



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Bluetooth speaker

Test Model: BSSK1082

Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Mark Chen
Supervised by:	Li Huan



Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.972	2401.526	2402.498	---	PASS
		2441	0.963	2440.523	2441.486	---	PASS
		2480	1.011	2479.475	2480.486	---	PASS
2DH5	Ant1	2402	1.296	2401.355	2402.651	---	PASS
		2441	1.311	2440.340	2441.651	---	PASS
		2480	1.287	2479.358	2480.645	---	PASS
3DH5	Ant1	2402	1.299	2401.343	2402.642	---	PASS
		2441	1.308	2440.337	2441.645	---	PASS
		2480	1.296	2479.349	2480.645	---	PASS

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.402000000 GHz

Ref Offset 8.28 dB
Ref 30.00 dBm

ΔMkr3 972 kHz
0.057 dB

10 dB/div
Log

Span 3.000 MHz
Sweep 3.200 ms (1001 pts)

#Res BW 30 kHz
#VBW 100 kHz

MkR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f		2.401528 GHz	-23.913 dBm			
2	N	f		2.401967 GHz	-3.197 dBm			
3	Δ1	f	(Δ)	972 kHz (Δ)	0.057 dB			

Frequency

Auto Tune

Center Freq
2.402000000 GHz

Start Freq
2.400500000 GHz

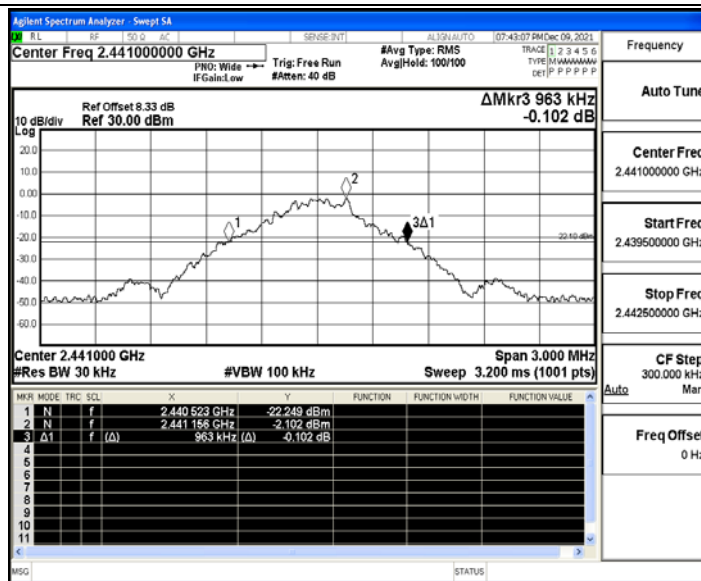
Stop Freq
2.403500000 GHz

CF Step
300.000 kHz
Man

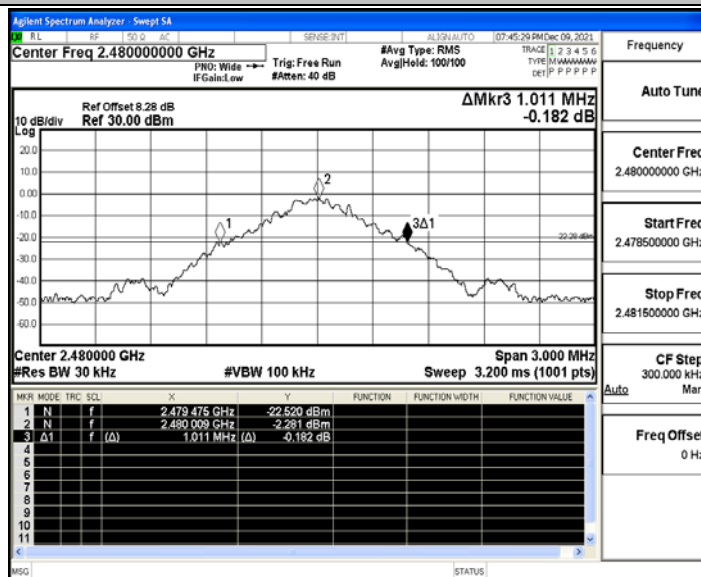
Freq Offset
0 Hz

MSG

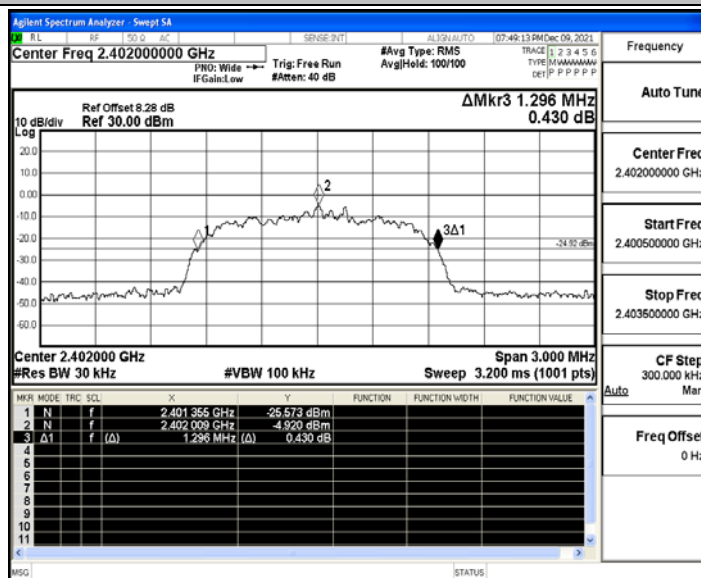
STATUS



DH5_Ant1_2480

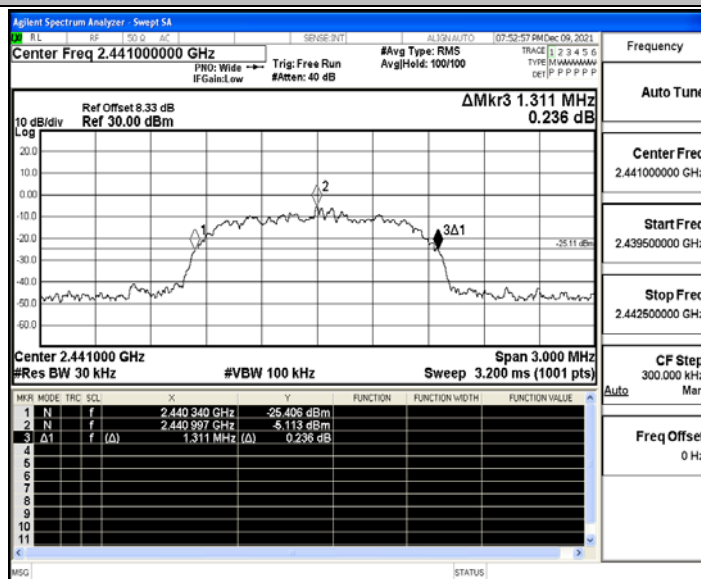


2DH5_Ant1_2402

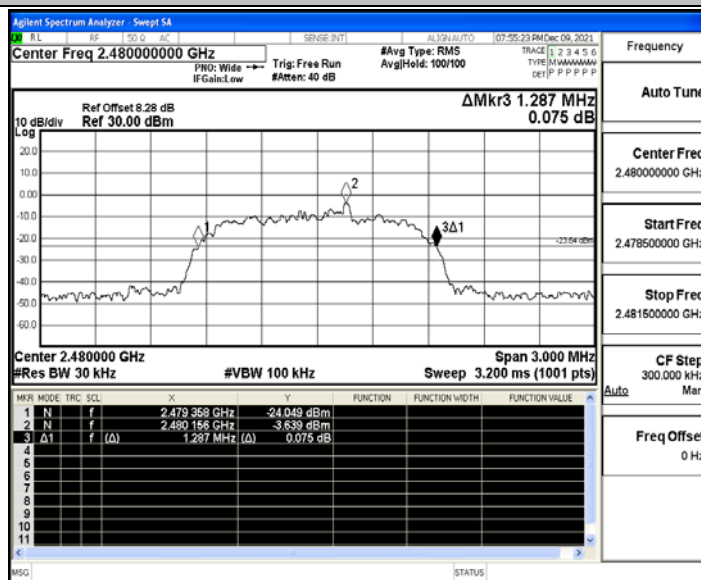




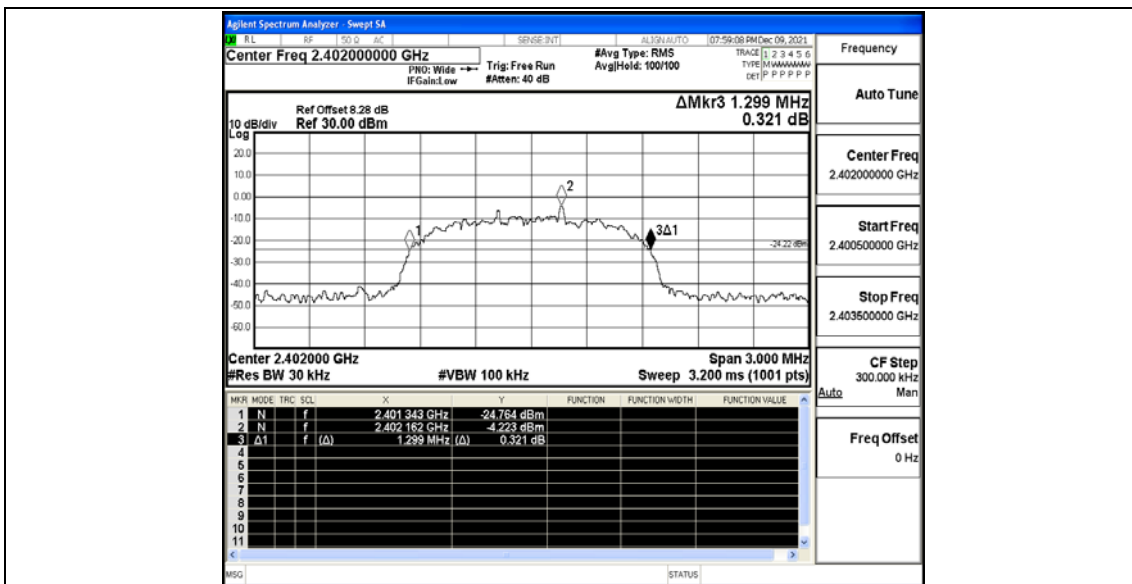
2DH5_Ant1_2441



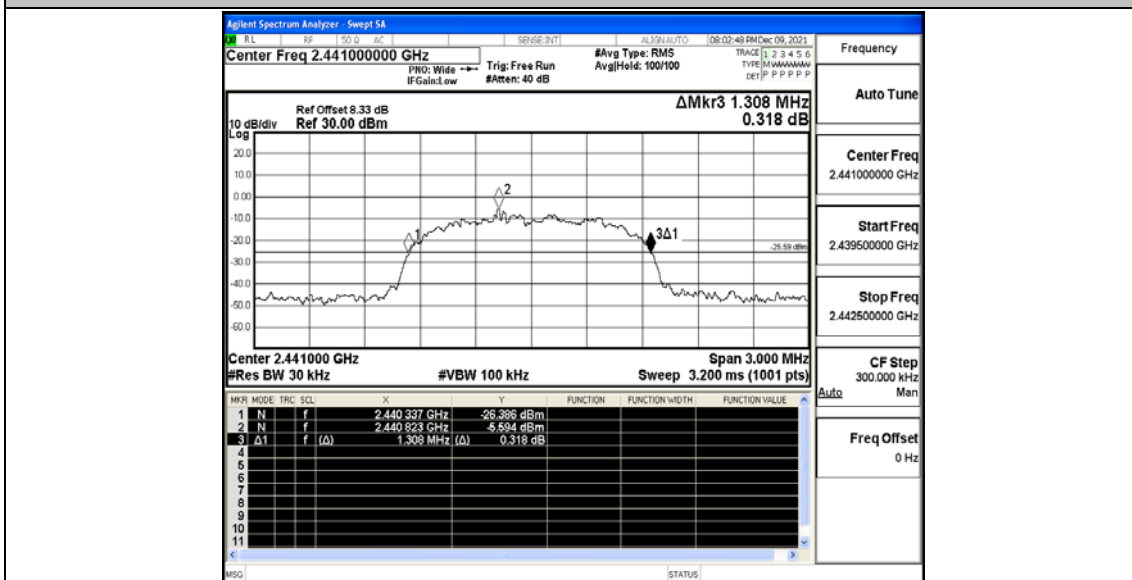
2DH5_Ant1_2480



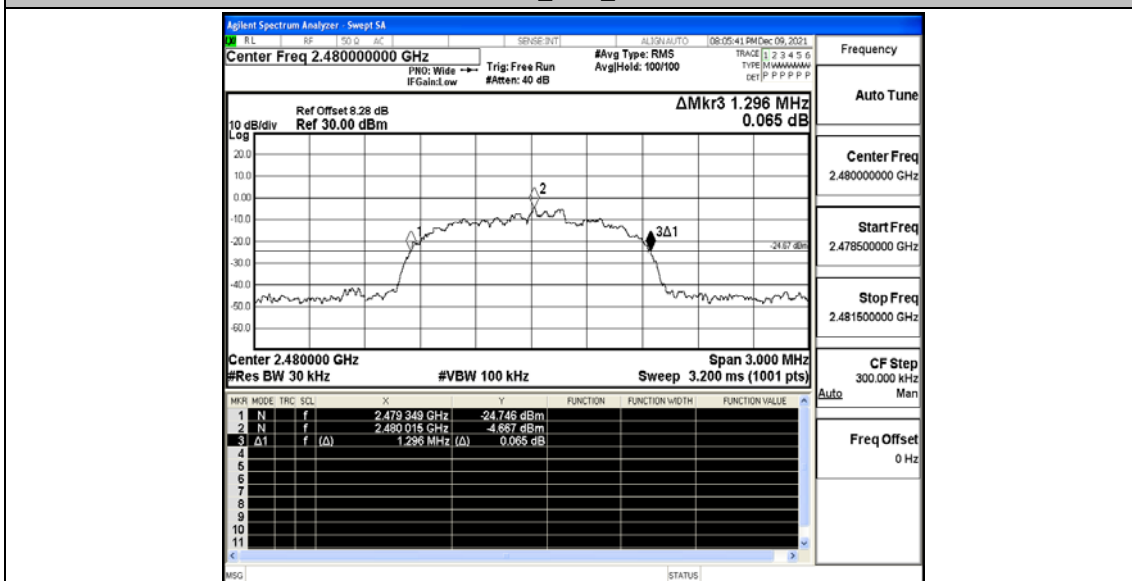
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



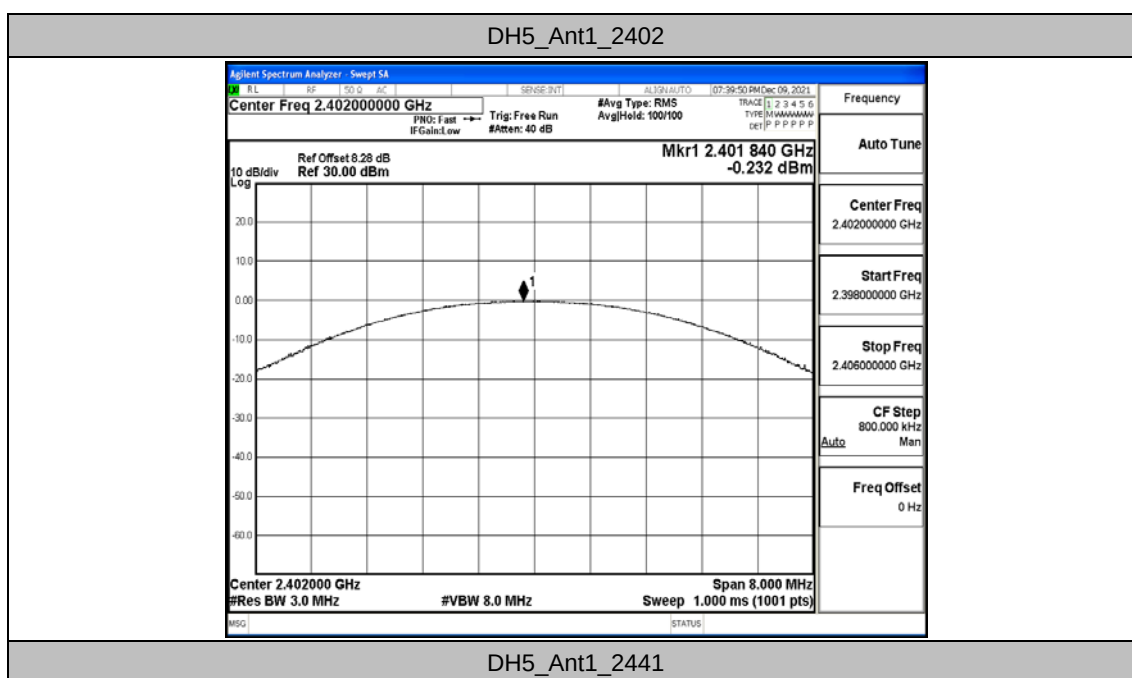


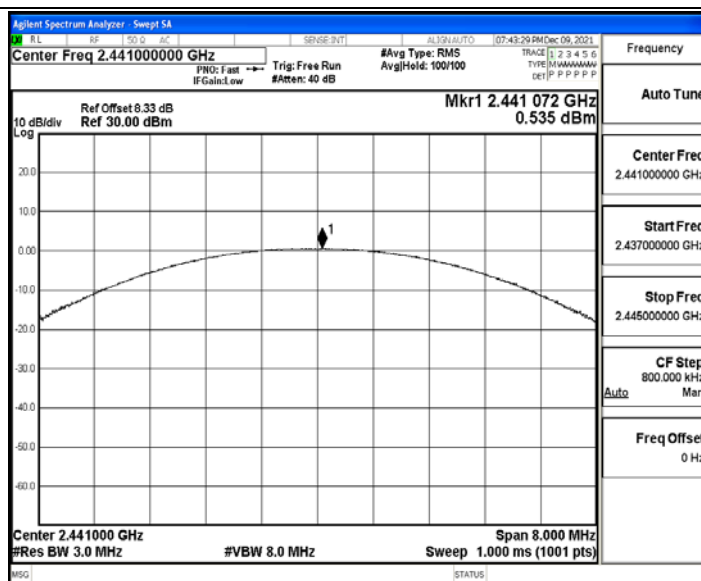
A.2 Maximum conducted output power

Test Result

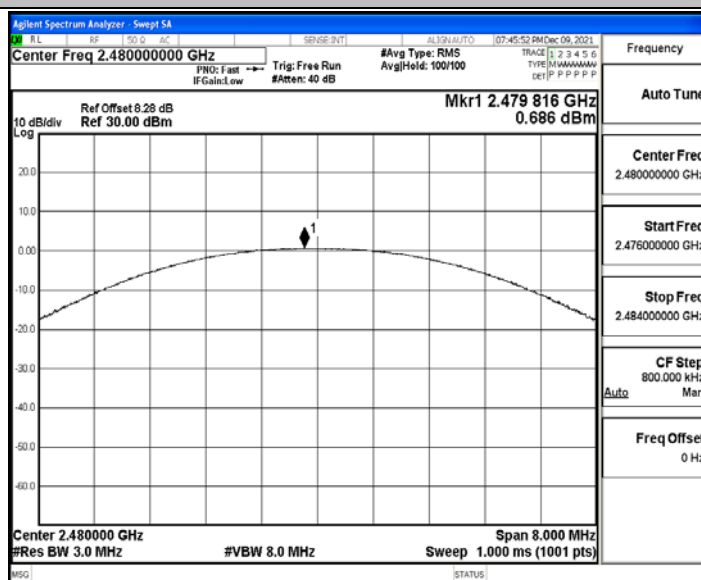
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-0.23	≤20.97	PASS
		2441	0.54	≤20.97	PASS
		2480	0.69	≤20.97	PASS
2DH5	Ant1	2402	-0.16	≤20.97	PASS
		2441	0.37	≤20.97	PASS
		2480	0.4	≤20.97	PASS
3DH5	Ant1	2402	-0.04	≤20.97	PASS
		2441	0.42	≤20.97	PASS
		2480	0.54	≤20.97	PASS

Test Graphs

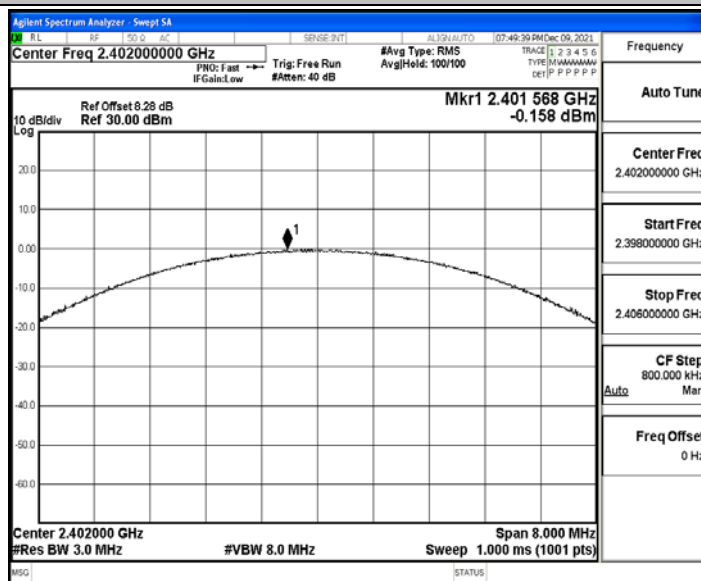




DH5_Ant1_2480

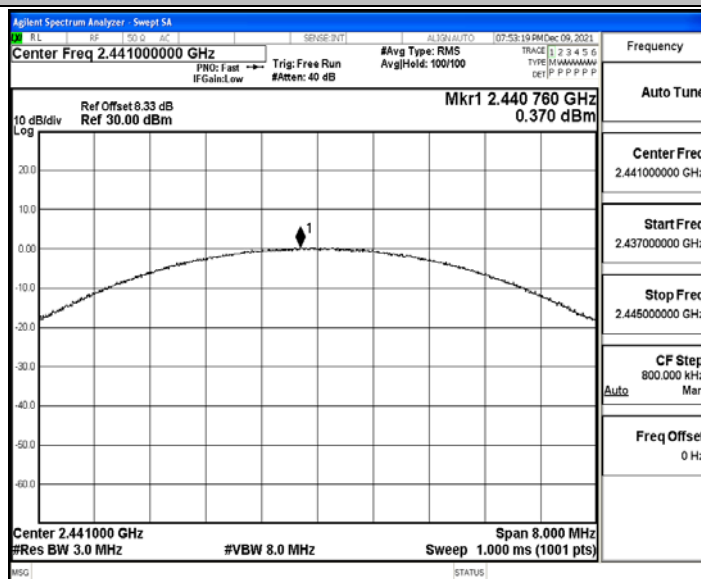


2DH5_Ant1_2402

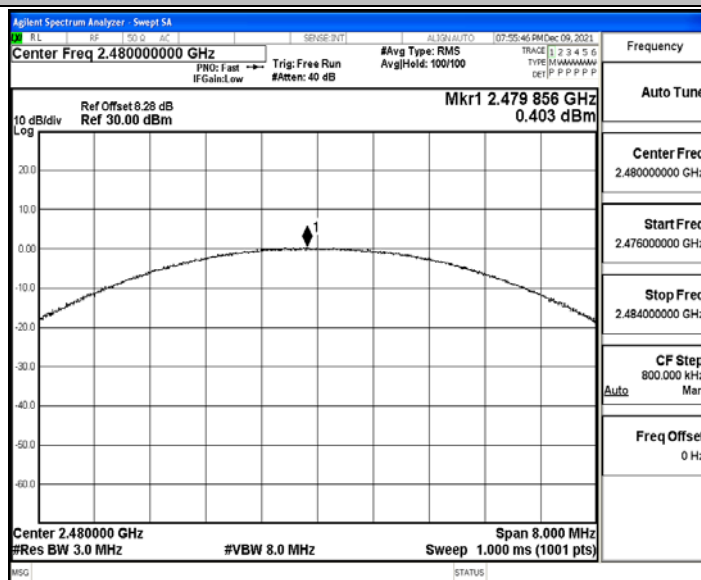




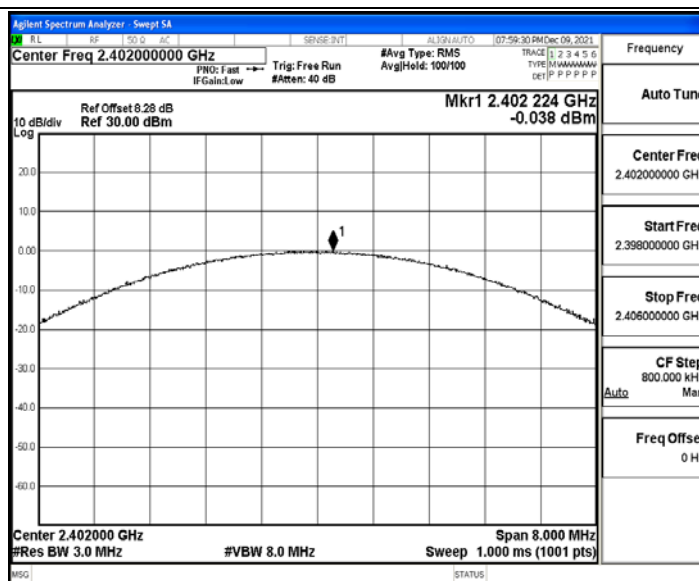
2DH5_Ant1_2441



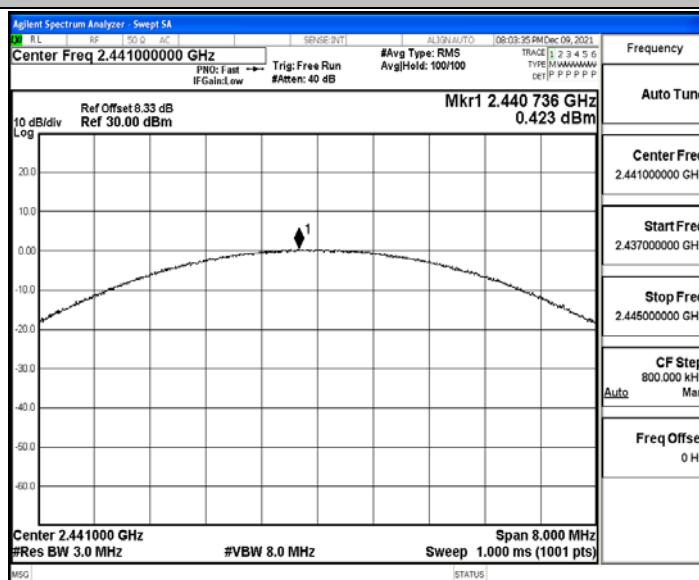
2DH5_Ant1_2480



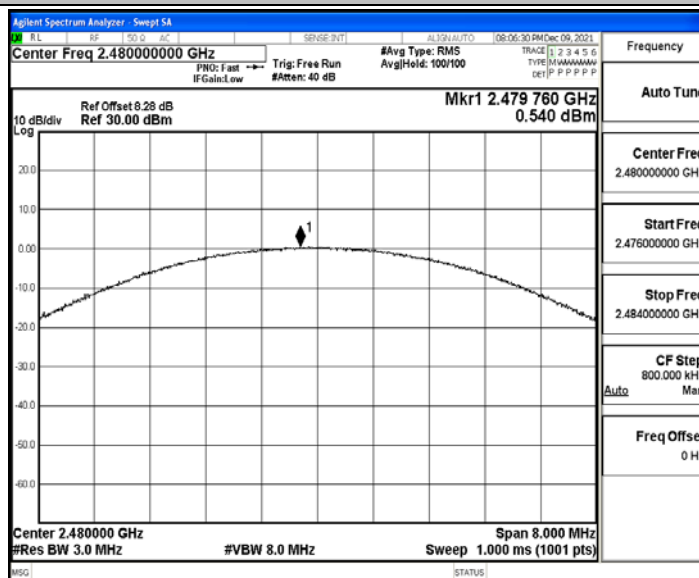
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



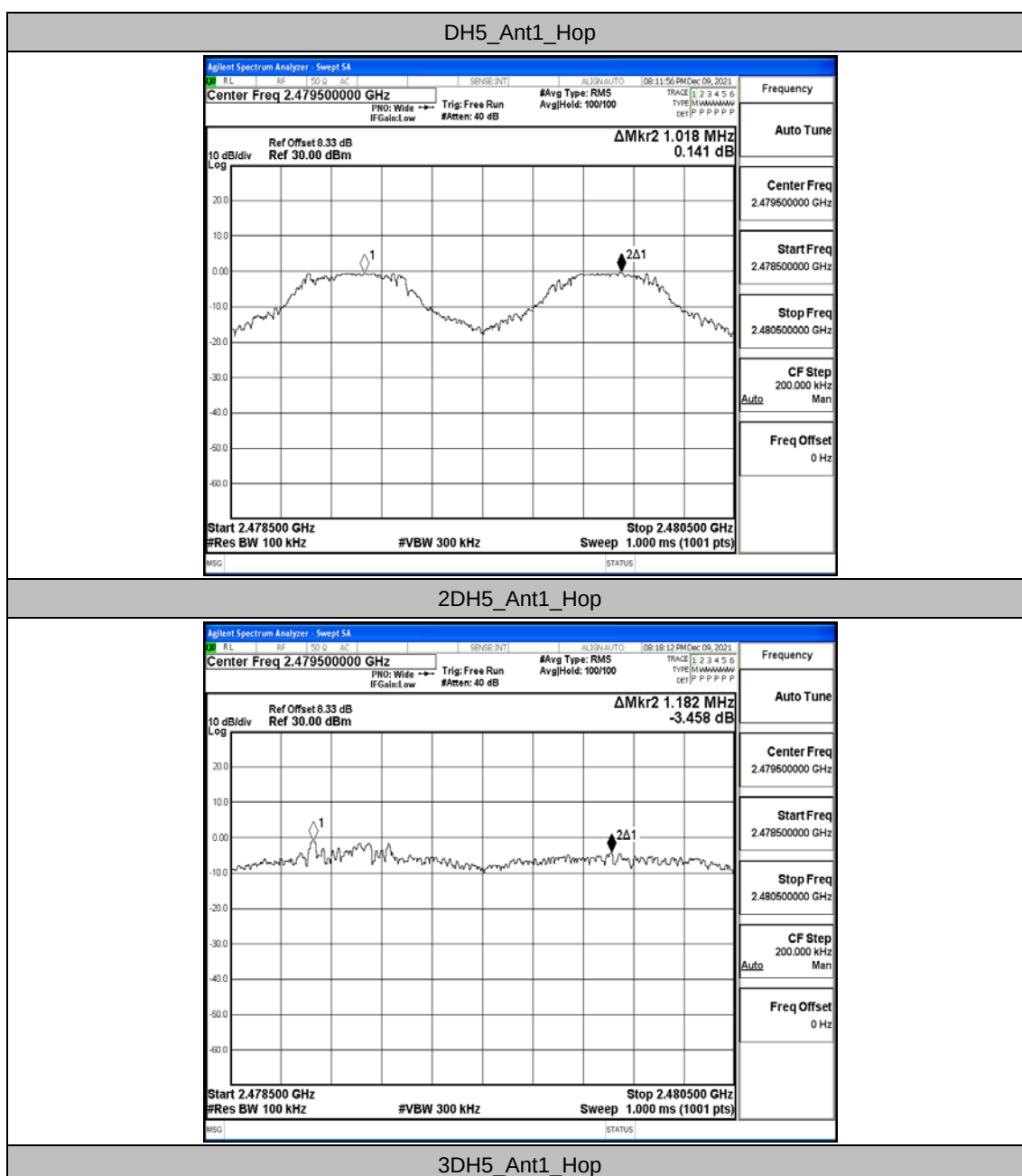


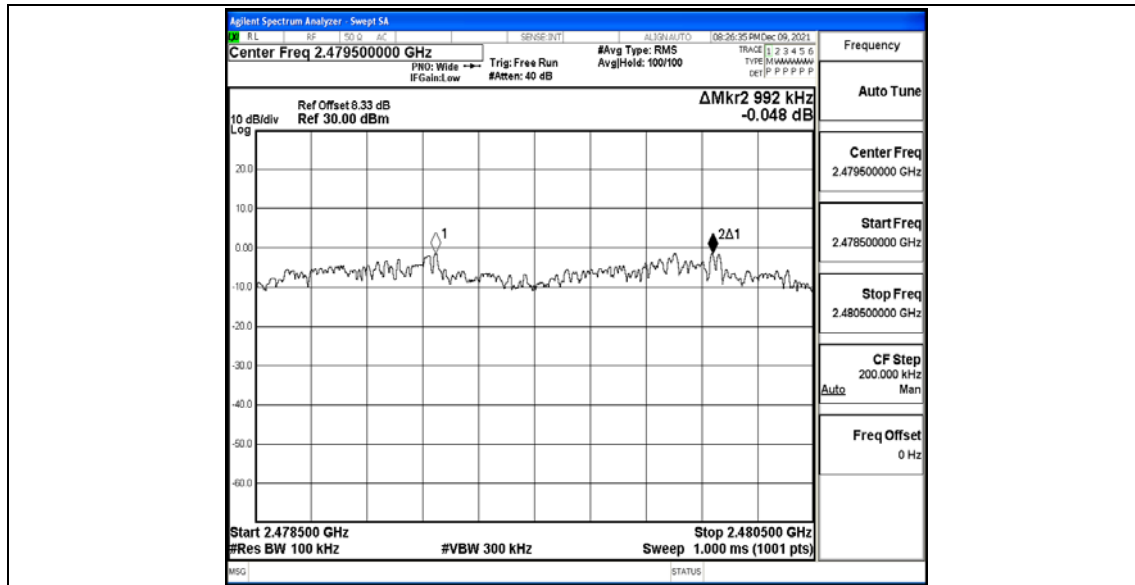
A.3 Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.018	≥ 0.674	PASS
2DH5	Ant1	Hop	1.182	≥ 0.874	PASS
3DH5	Ant1	Hop	0.992	≥ 0.872	PASS

Test Graphs





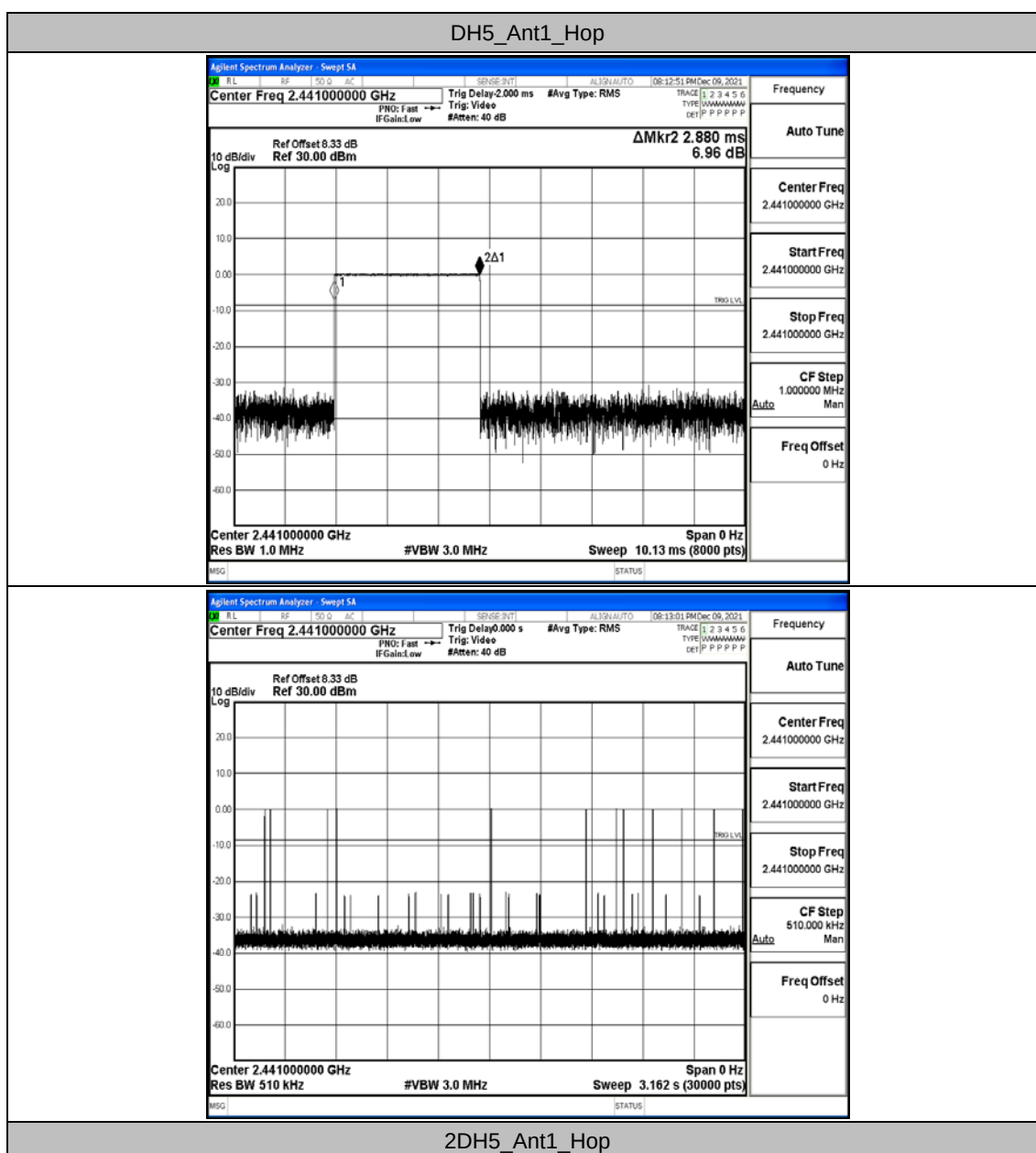


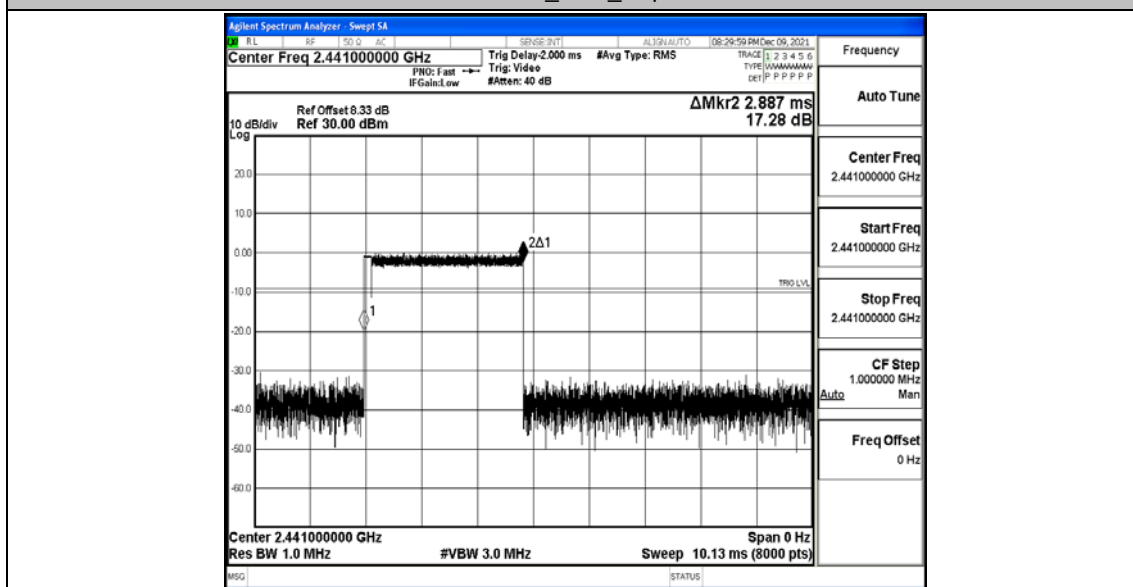
A.4 Time of occupancy

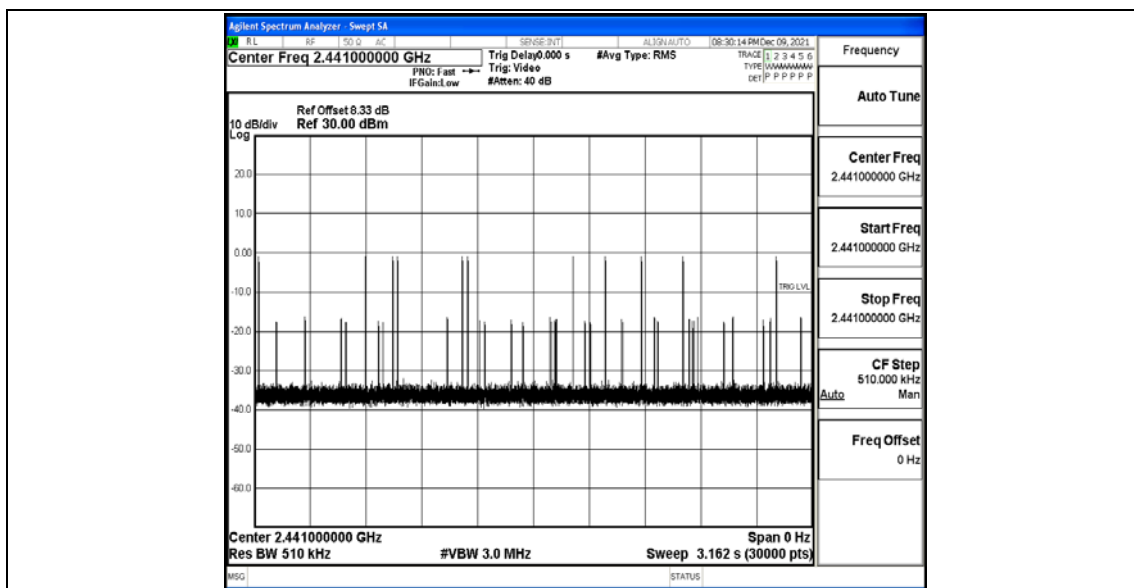
Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	130	0.374	≤0.4	PASS
2DH5	Ant1	Hop	2.88	90	0.26	≤0.4	PASS
3DH5	Ant1	Hop	2.89	120	0.346	≤0.4	PASS

Test Graphs







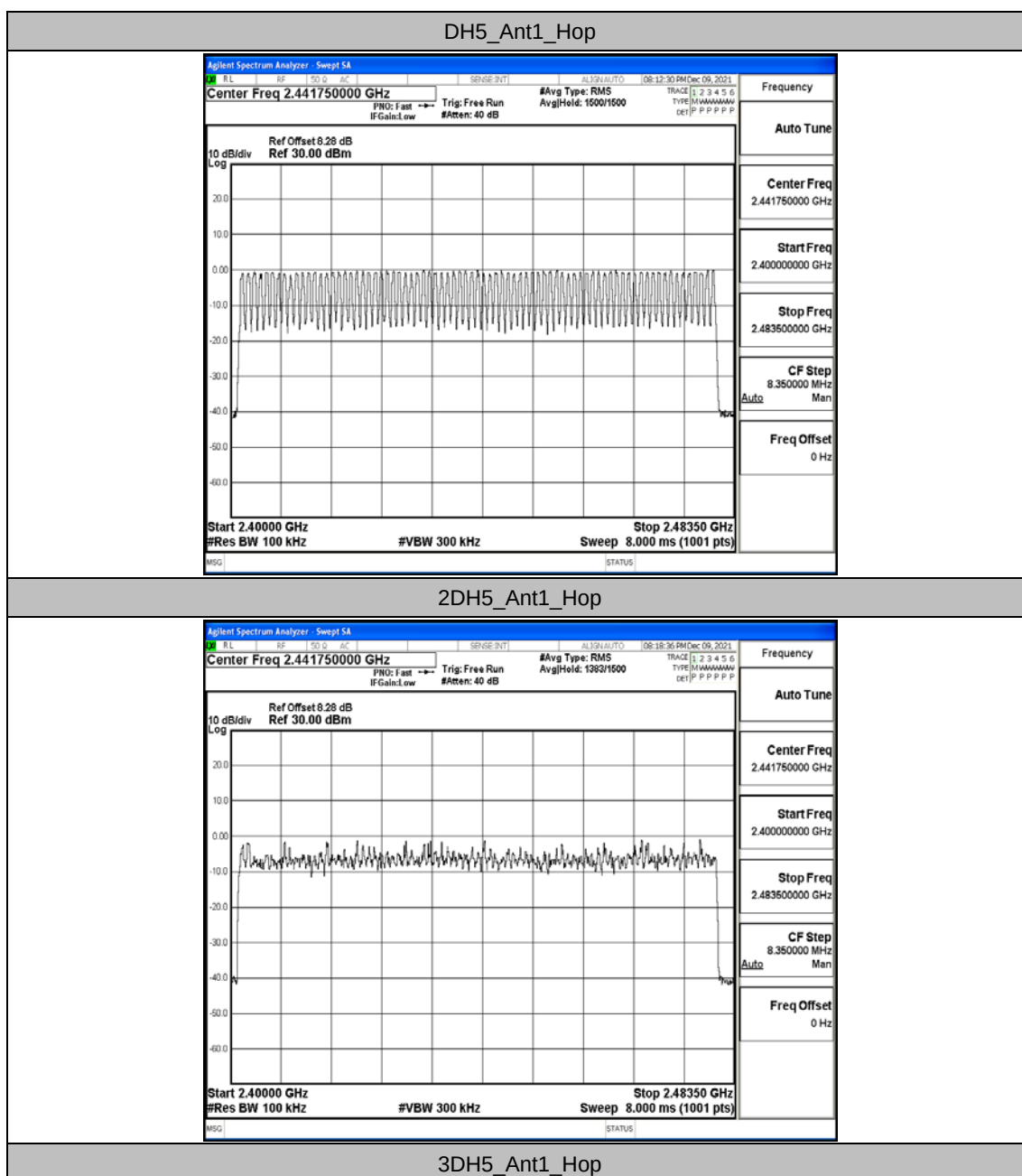


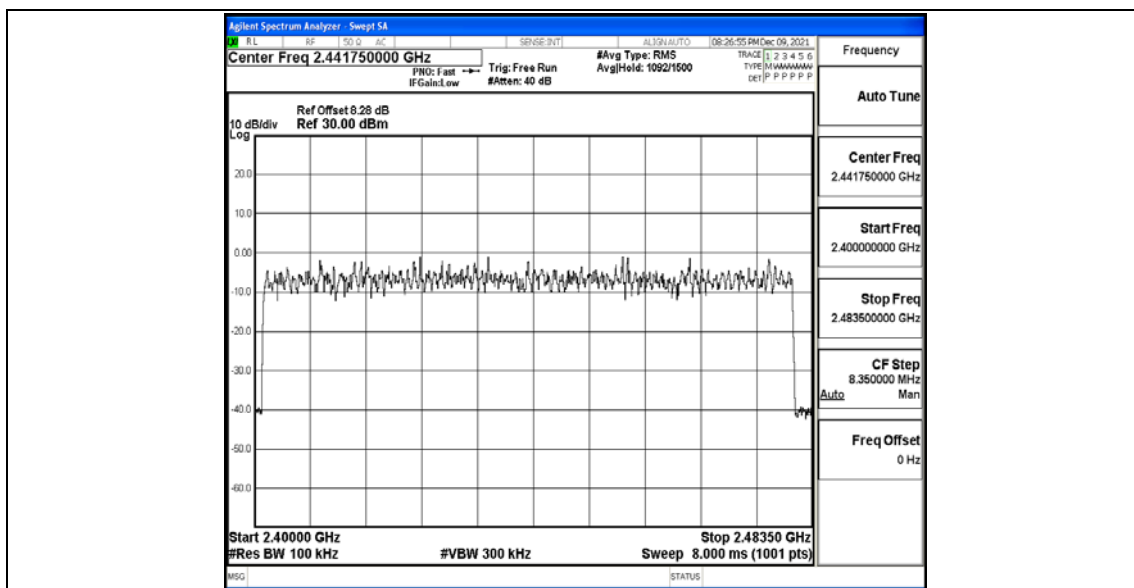
A.5 Number of hopping channels

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







A.6 Band edge measurements

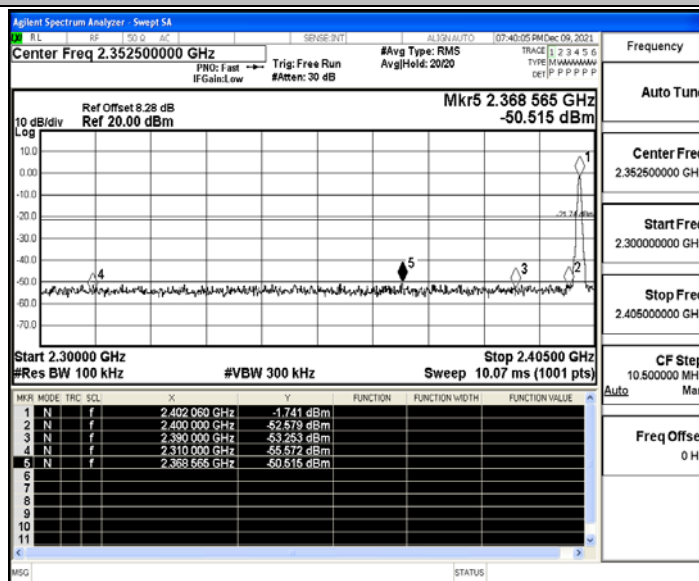
Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-1.74	-50.52	≤ -21.74	PASS
		High	2480	-0.09	-49.34	≤ -20.09	PASS
		Low	Hop_2402	-1.21	-49.66	≤ -21.21	PASS
		High	Hop_2480	0.11	-48.17	≤ -19.89	PASS
2DH5	Ant1	Low	2402	-3.17	-50.9	≤ -23.17	PASS
		High	2480	-4.97	-48.78	≤ -24.97	PASS
		Low	Hop_2402	-3.39	-49.52	≤ -23.39	PASS
		High	Hop_2480	-2.06	-47.93	≤ -22.06	PASS
3DH5	Ant1	Low	2402	-1.49	-49.31	≤ -21.49	PASS
		High	2480	-4.36	-49.52	≤ -24.36	PASS
		Low	Hop_2402	-1.58	-49.51	≤ -21.58	PASS
		High	Hop_2480	-1.94	-47.94	≤ -21.94	PASS

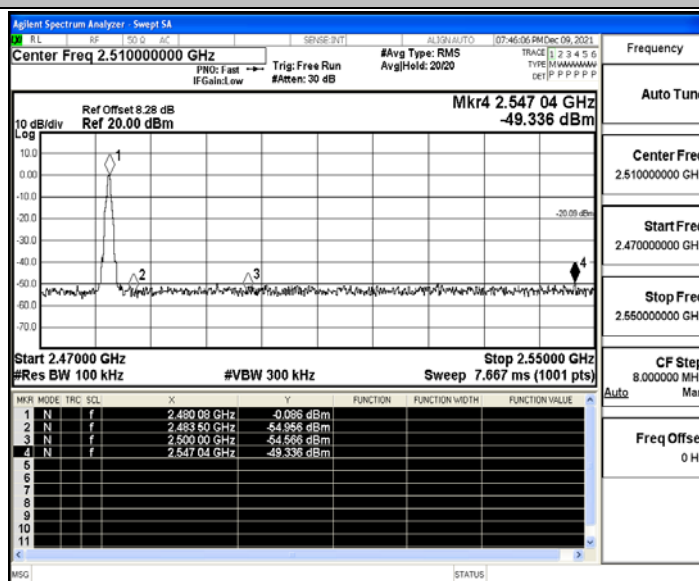


Test Graphs

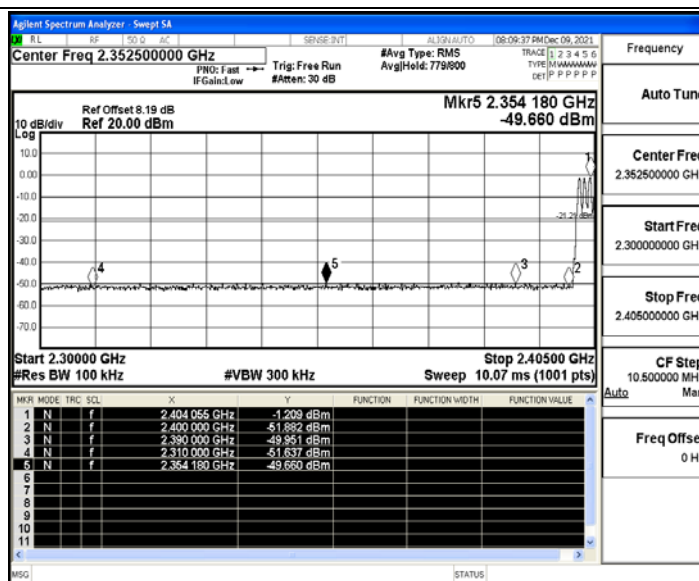
DH5_Ant1_Low_2402



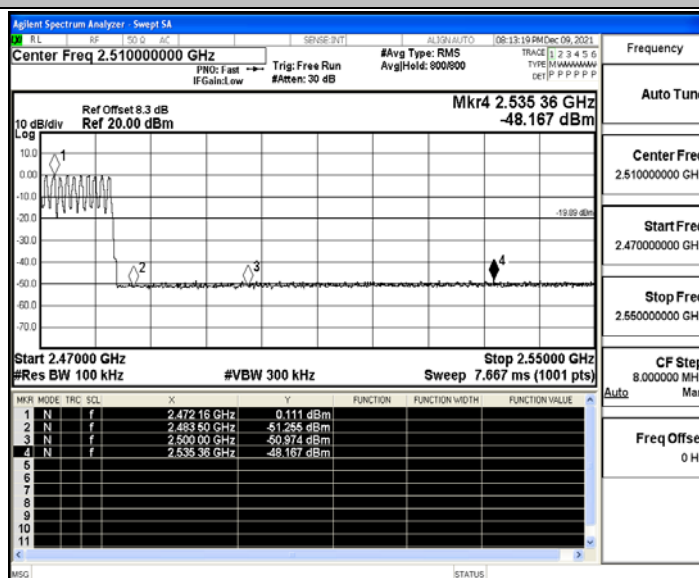
DH5_Ant1_High_2480



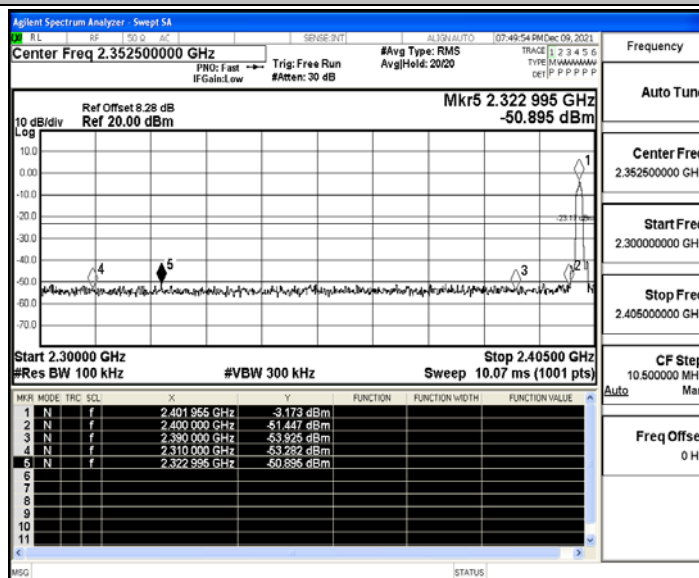
DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480

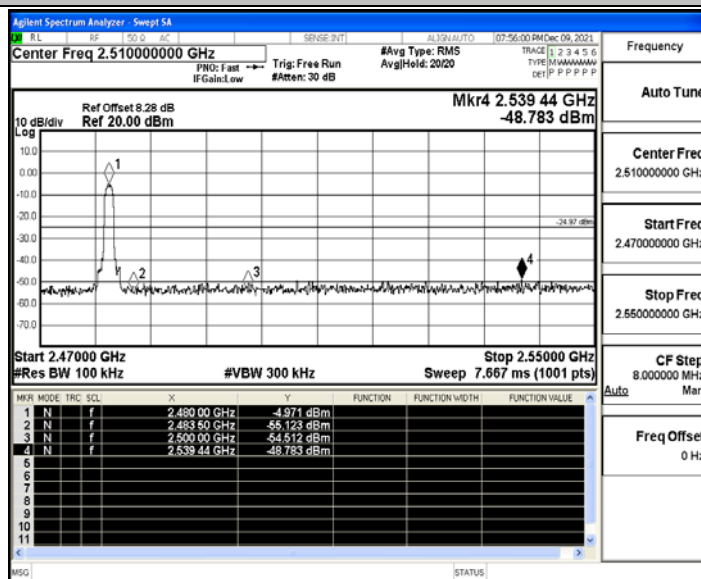


2DH5_Ant1_Low_2402

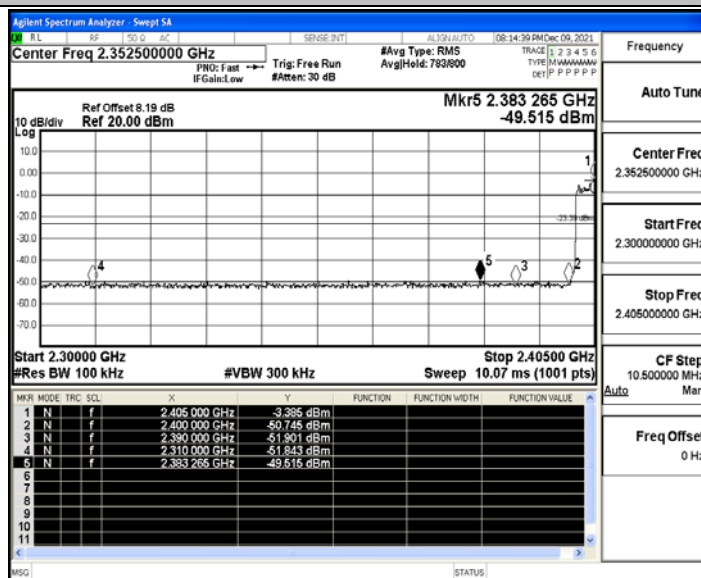




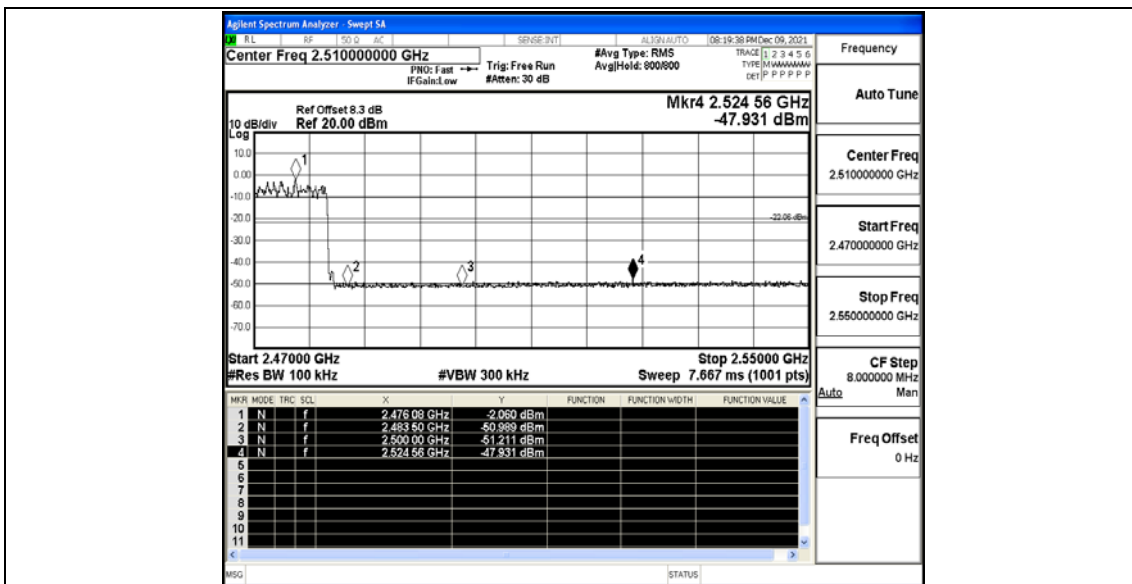
2DH5_Ant1_High_2480



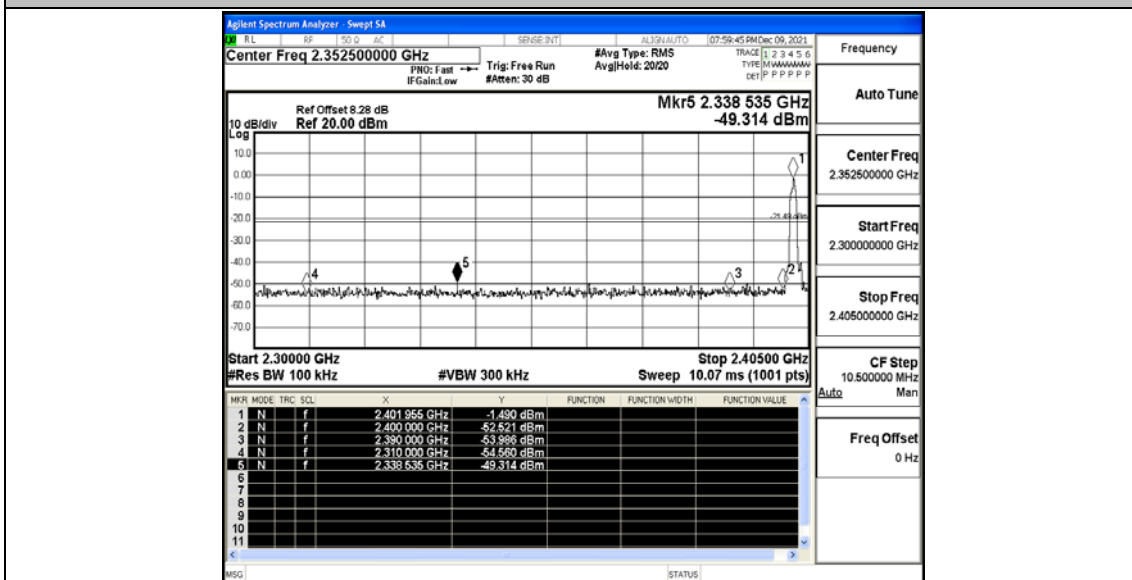
2DH5_Ant1_Low_Hop_2402



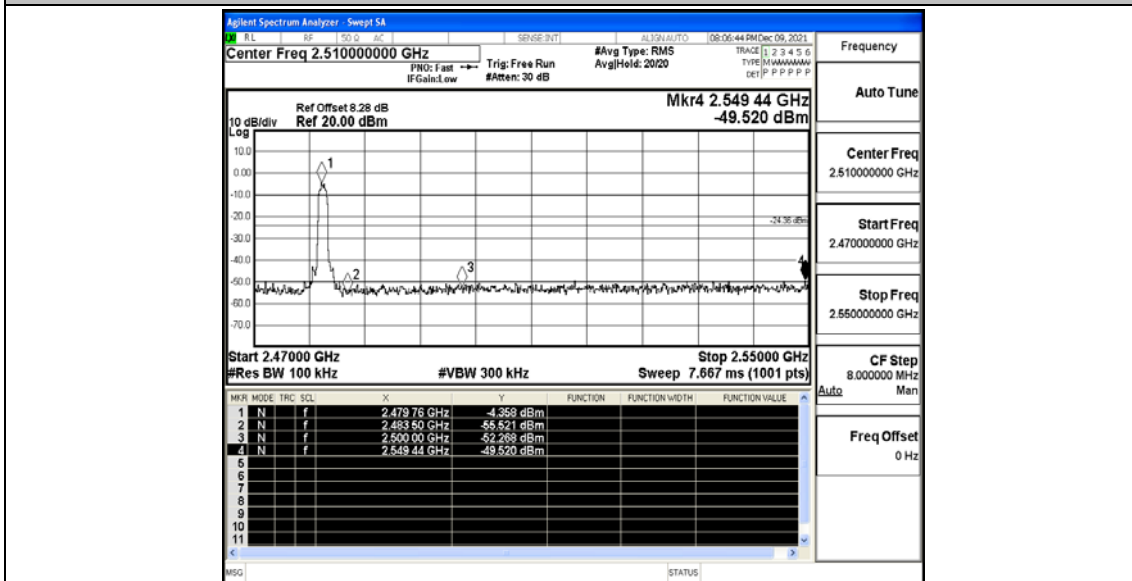
2DH5_Ant1_High_Hop_2480



3DH5_Ant1_Low_2402

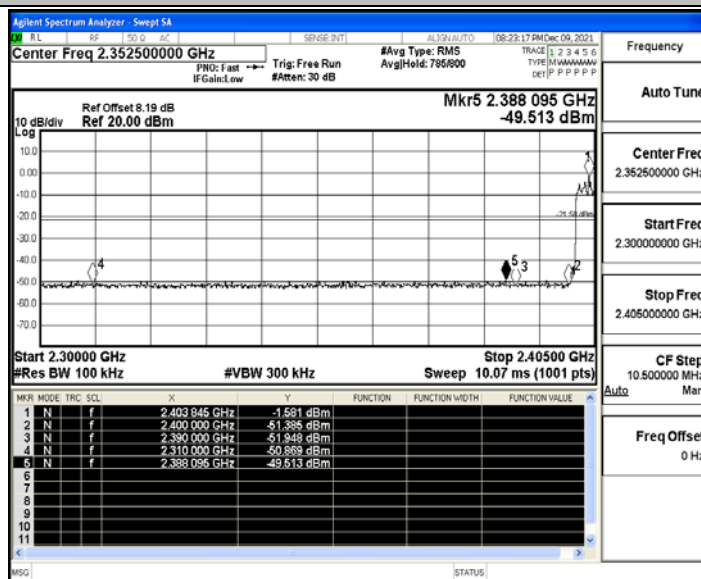


3DH5_Ant1_High_2480





3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

