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

Product Name: 7-in IPS Touch Screen Wireless CarPlay

Trade Mark: N/A

Test Model: CP701S

FCC ID: 2A5PH-CP701S

Environmental Conditions

Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Nancy Li
Supervised by:	Hugo Chen

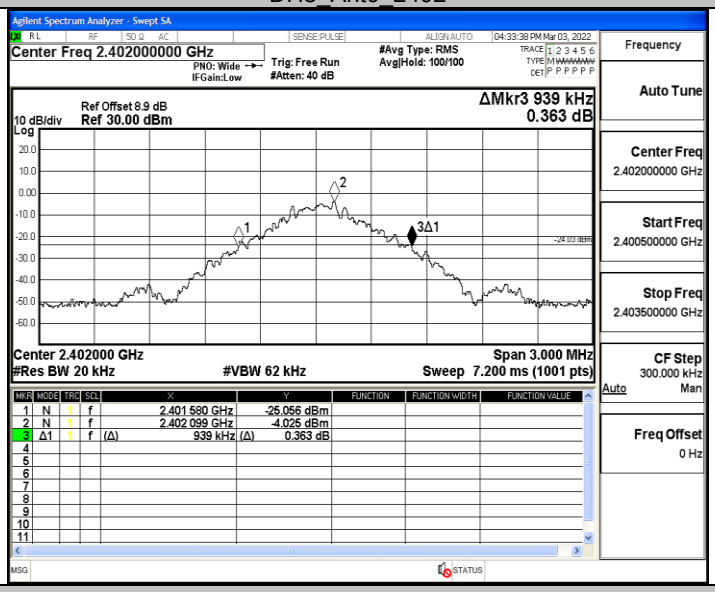
Appendix A: 20dB Emission Bandwidth

Test Result

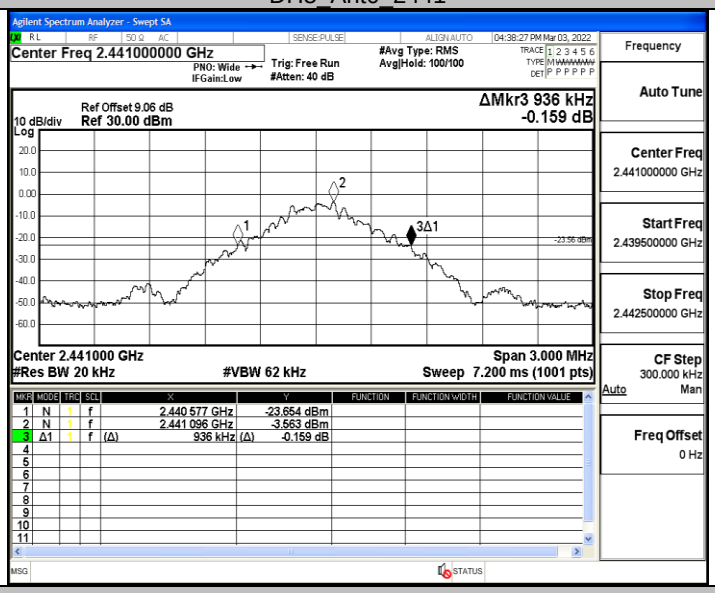
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant0	2402	0.939	2401.580	2402.519	---	PASS
		2441	0.936	2440.577	2441.513	---	PASS
		2480	0.942	2479.577	2480.519	---	PASS
2DH5	Ant0	2402	1.323	2401.376	2402.699	---	PASS
		2441	1.293	2440.379	2441.672	---	PASS
		2480	1.260	2479.406	2480.666	---	PASS

Test Graphs

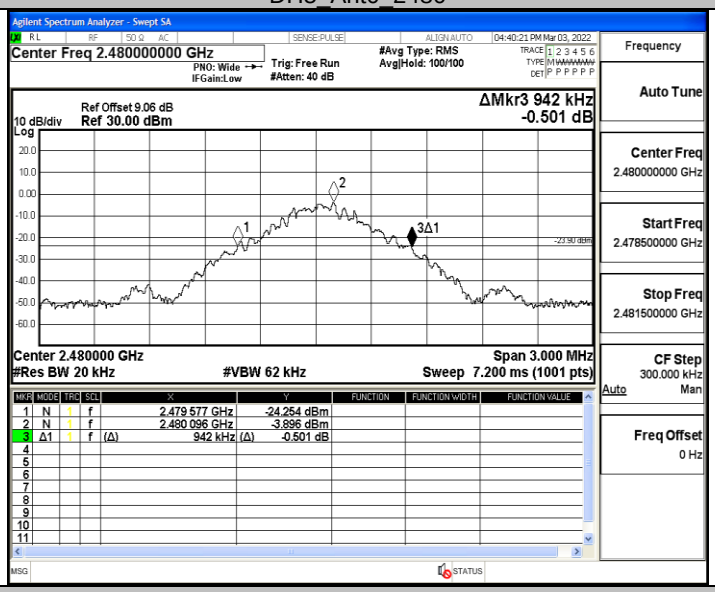
DH5_Ant0_2402



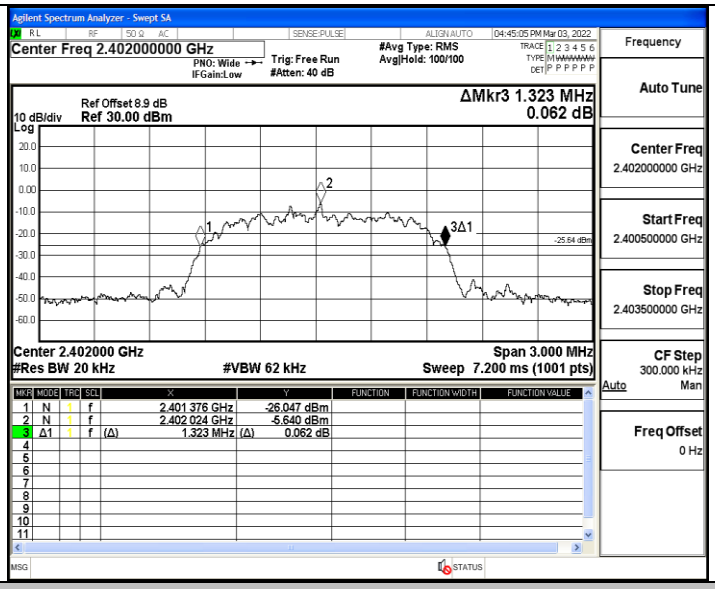
DH5_Ant0_2441



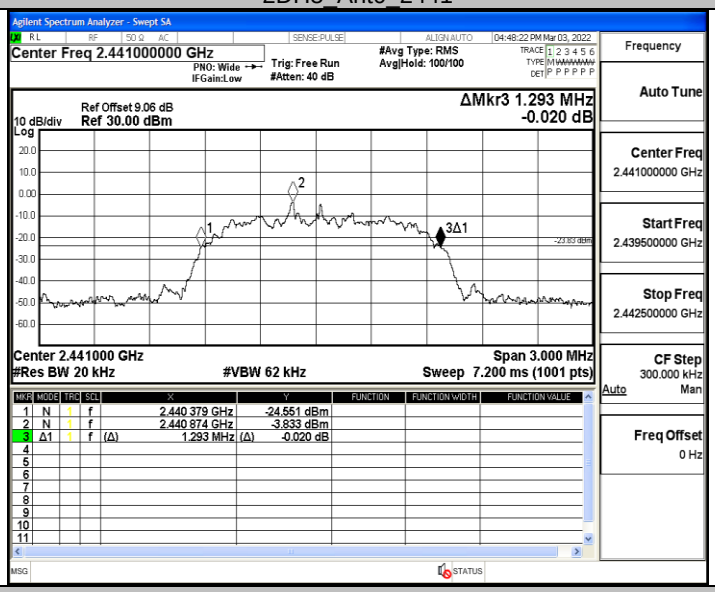
DH5_Ant0_2480



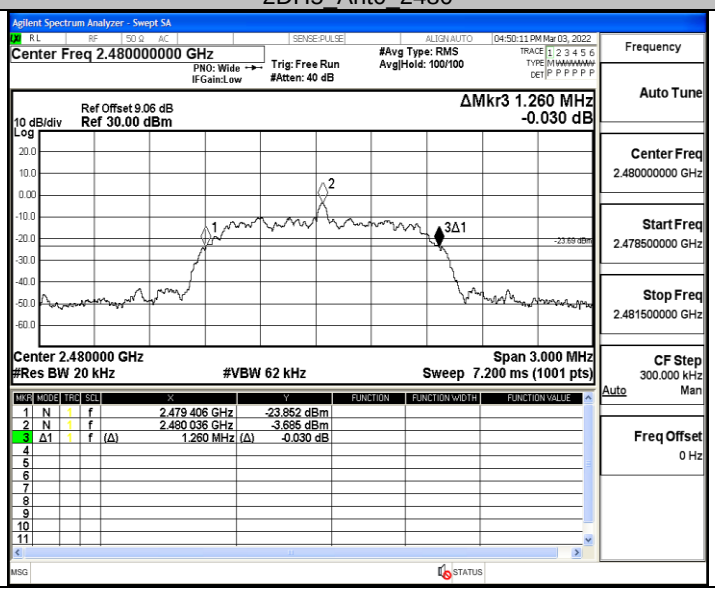
2DH5_Ant0_2402



2DH5_Ant0_2441



2DH5_Ant0_2480



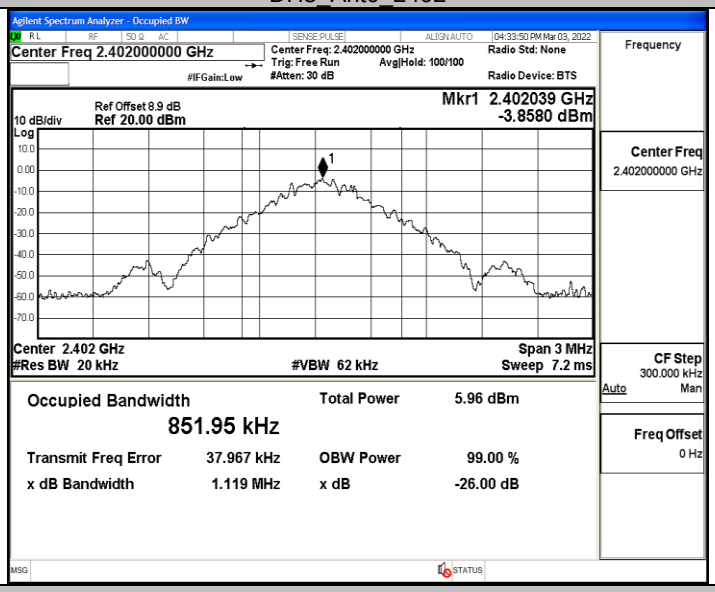
Appendix B: Occupied Channel Bandwidth

Test Result

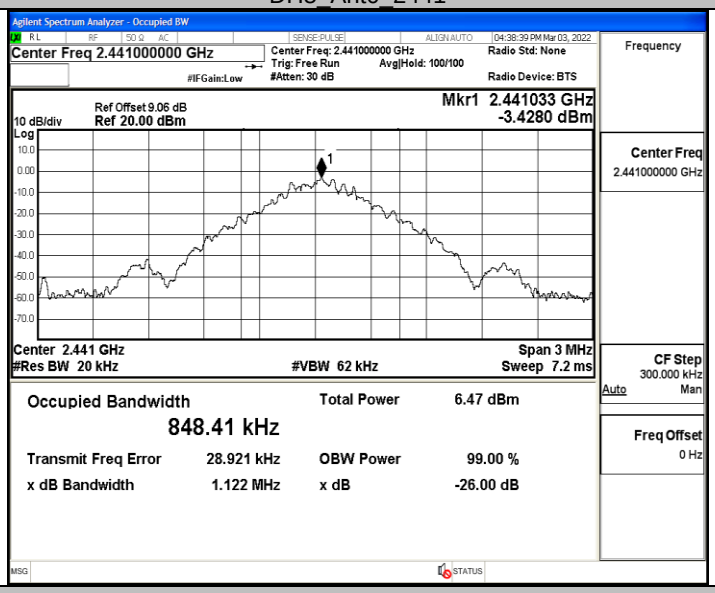
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant0	2402	0.85195	2401.612	2402.464	---	PASS
		2441	0.84841	2440.605	2441.453	---	PASS
		2480	0.85430	2479.604	2480.458	---	PASS
2DH5	Ant0	2402	1.1799	2401.448	2402.628	---	PASS
		2441	1.1948	2440.439	2441.634	---	PASS
		2480	1.1825	2479.445	2480.627	---	PASS

Test Graphs

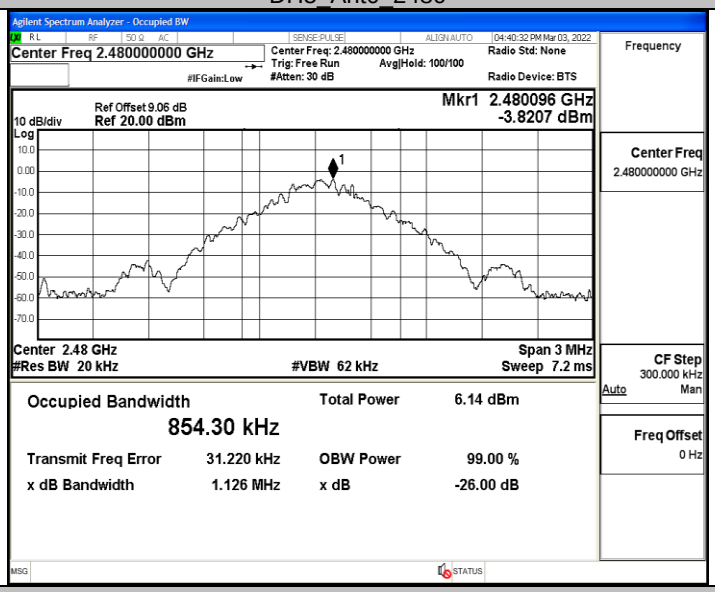
DH5_Ant0_2402



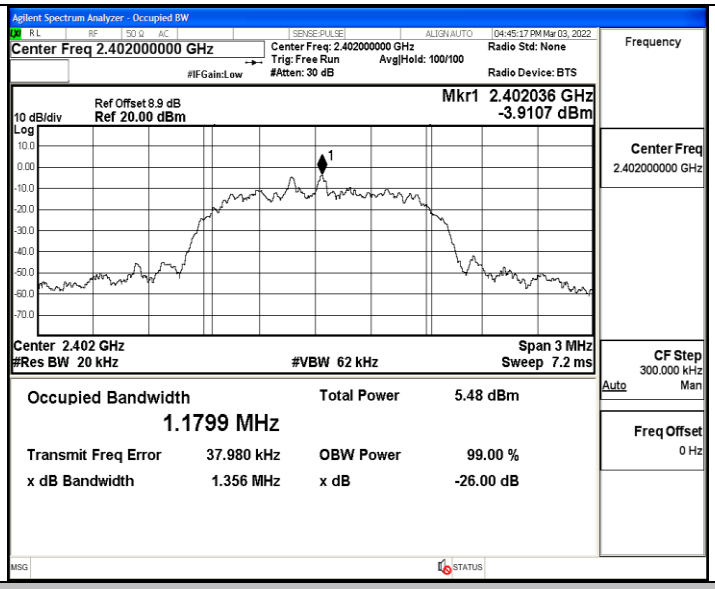
DH5_Ant0_2441



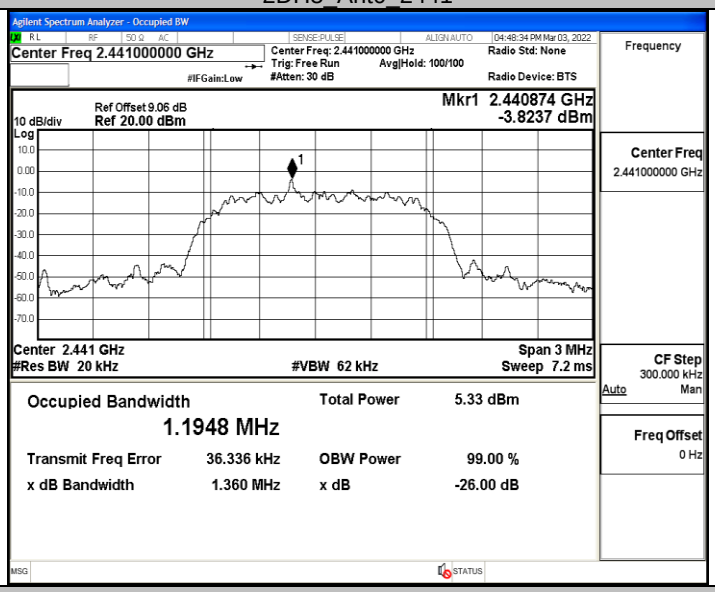
DH5_Ant0_2480



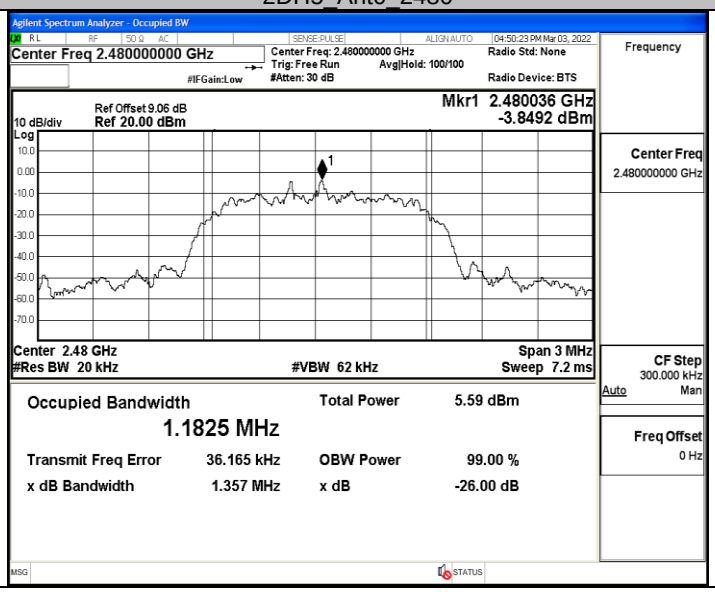
2DH5_Ant0_2402



2DH5_Ant0_2441



2DH5_Ant0_2480



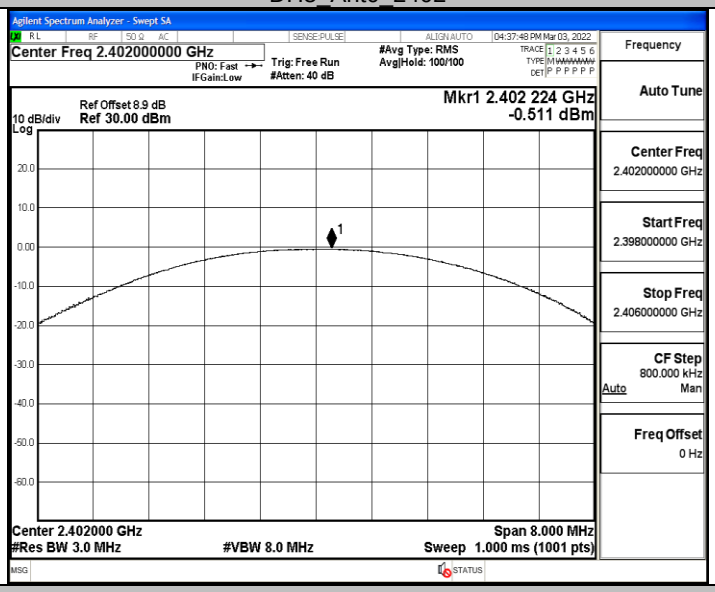
Appendix C: Maximum conducted output power

Test Result

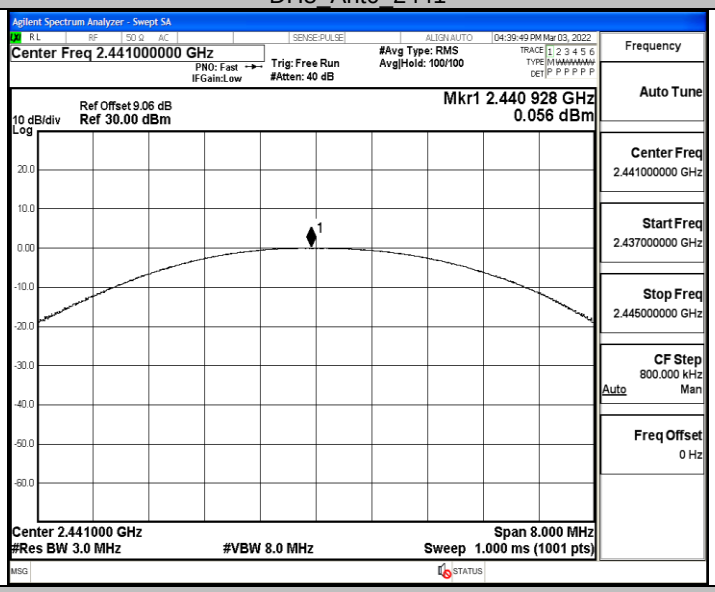
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant0	2402	-0.51	<=30.00	PASS
		2441	0.06	<=30.00	PASS
		2480	-0.21	<=30.00	PASS
2DH5	Ant0	2402	0.29	<=20.97	PASS
		2441	0.82	<=20.97	PASS
		2480	0.45	<=20.97	PASS

Test Graphs

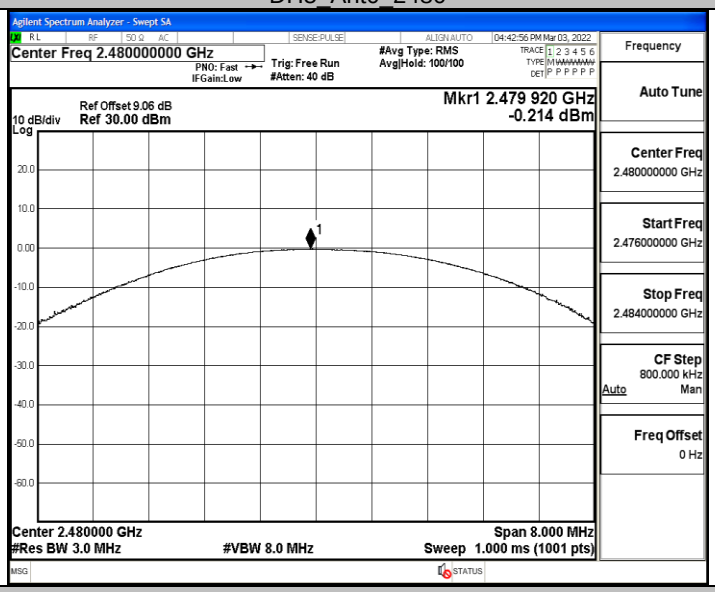
DH5_Ant0_2402



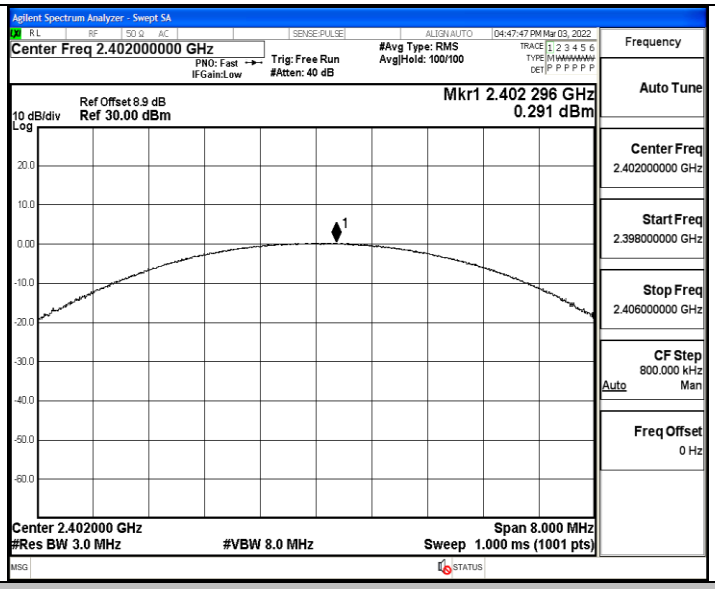
DH5_Ant0_2441



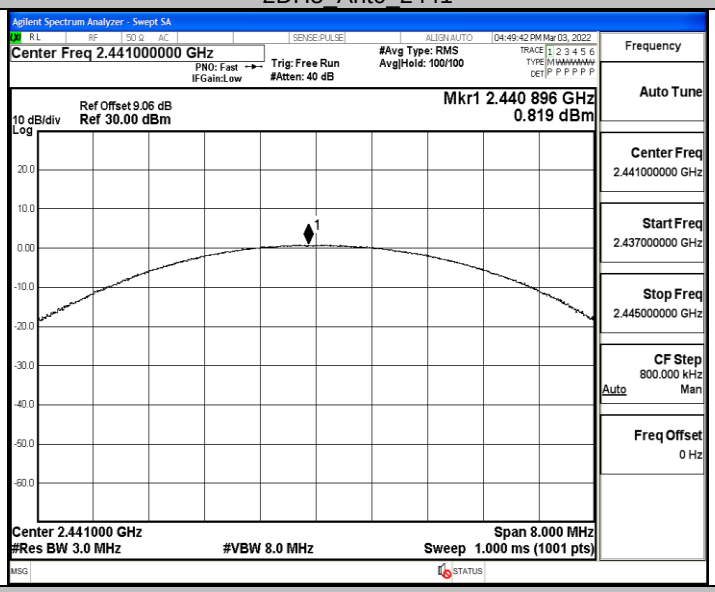
DH5_Ant0_2480



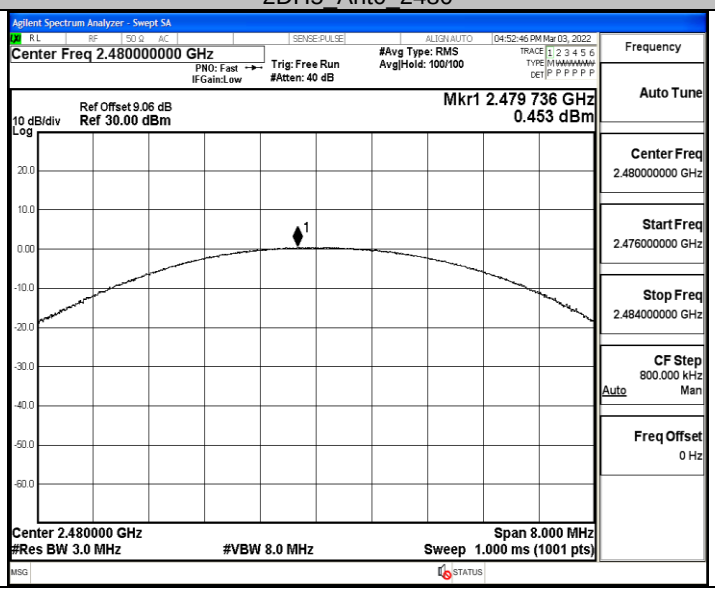
2DH5_Ant0_2402



2DH5_Ant0_2441



2DH5_Ant0_2480



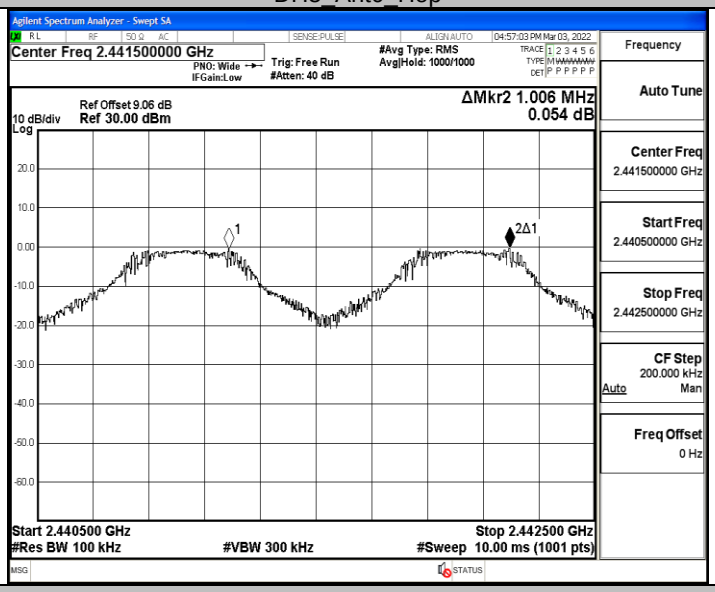
Appendix D: Carrier frequency separation

Test Result

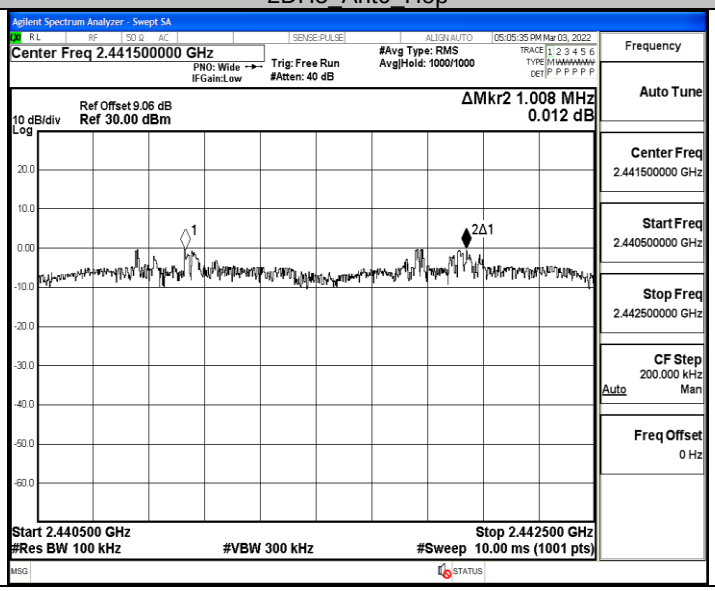
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant0	Hop	1.006	≥0.942	PASS
2DH5	Ant0	Hop	1.008	≥0.882	PASS

Test Graphs

DH5_Ant0_Hop



2DH5_Ant0_Hop



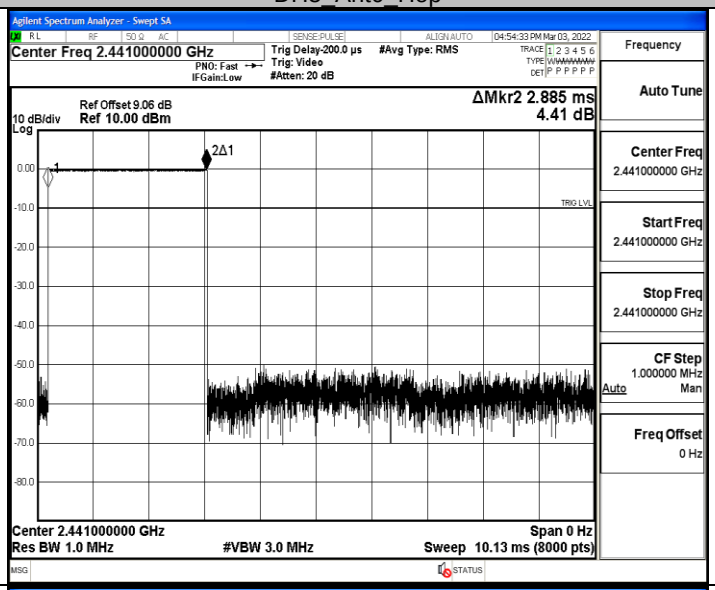
Appendix E: Time of occupancy

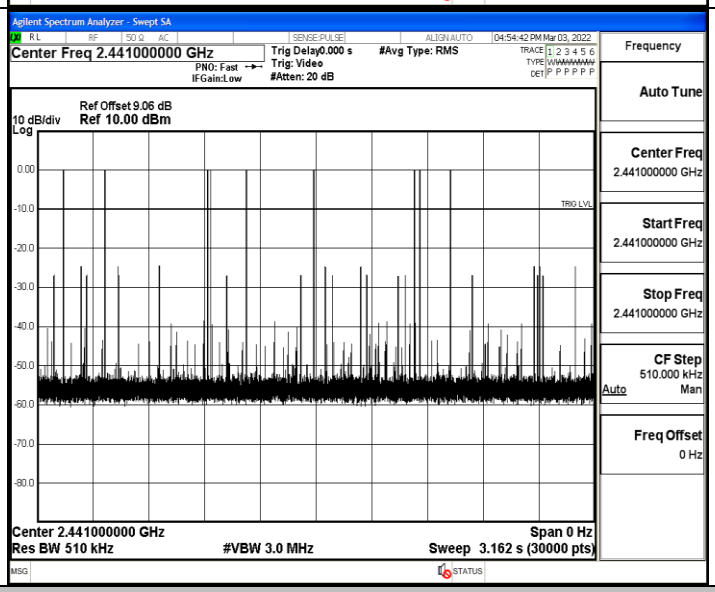
Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant0	Hop	2.89	100	0.289	<=0.4	PASS
2DH5	Ant0	Hop	2.89	130	0.376	<=0.4	PASS

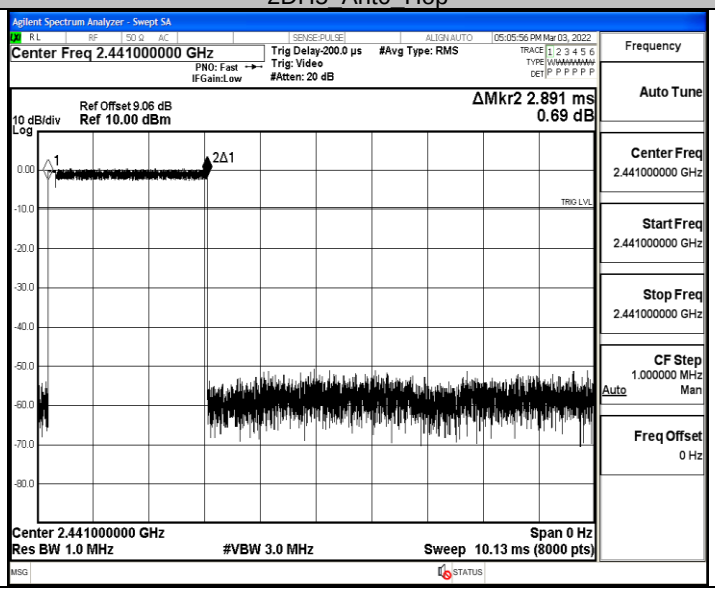
Test Graphs

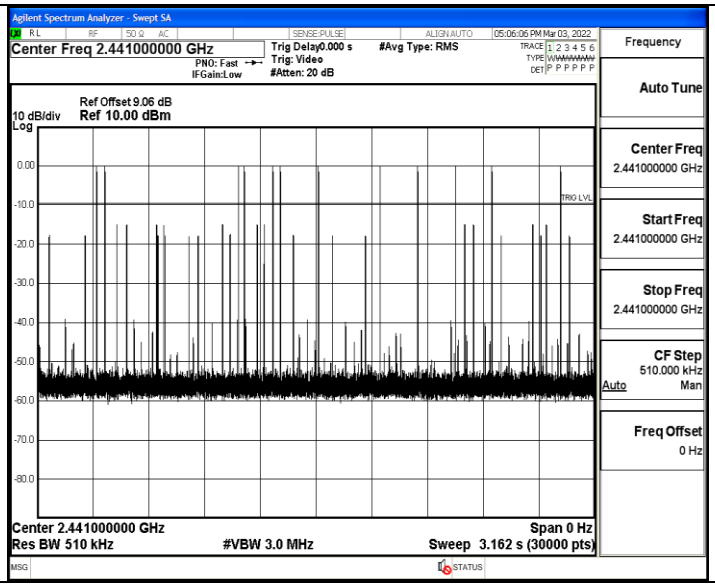
DH5_Ant0_Hop





2DH5_Ant0_Hop




Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
PNO: Fast
IFGain:Low
Trig Delay 0.000 s
Trig: Video
#Atten: 20 dB
#Avg Type: RMS
05:06:06 PM Mar 03, 2022
Ref Offset 9.06 dB
10 dB/div
Ref 10.00 dBm
Log
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
TRIG LVL
Center 2.441000000 GHz
Res BW 510 kHz
#VBW 3.0 MHz
Span 0 Hz
Sweep 3.162 s (30000 pts)
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

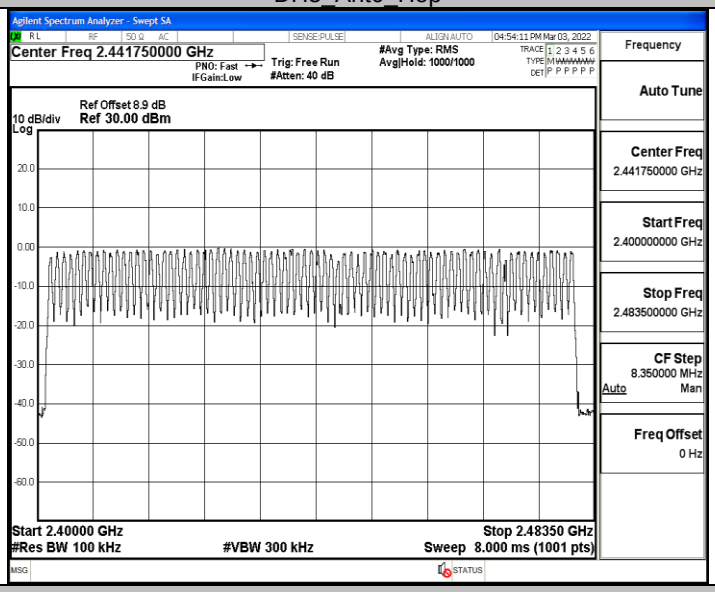
Appendix F: Number of hopping channels

Test Result

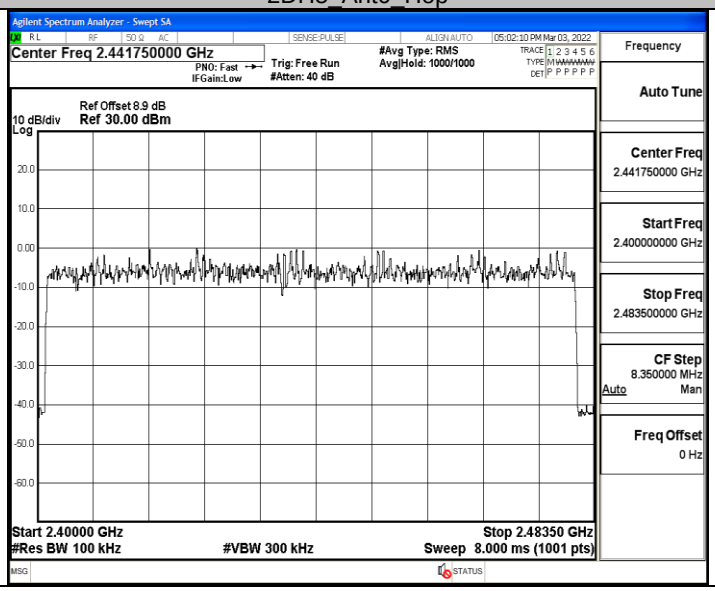
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant0	Hop	79	>=15	PASS
2DH5	Ant0	Hop	79	>=15	PASS

Test Graphs

DH5_Ant0_Hop



2DH5_Ant0_Hop



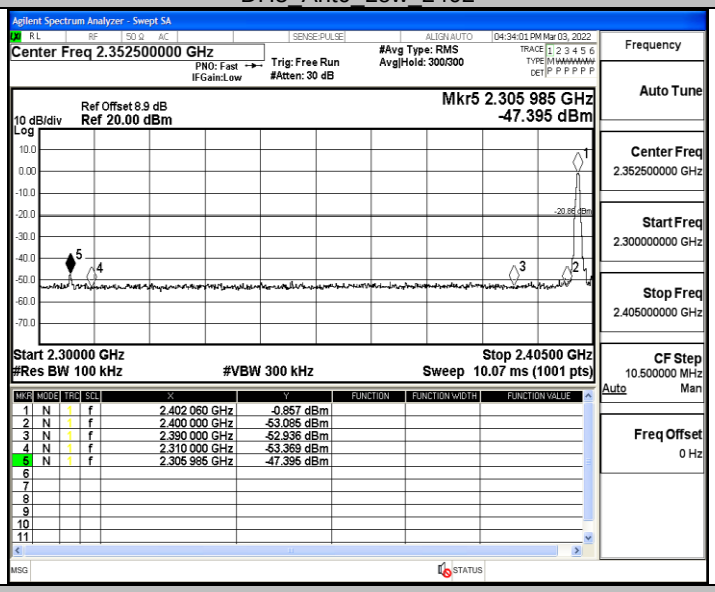
Appendix G: Band edge measurements

Test Result

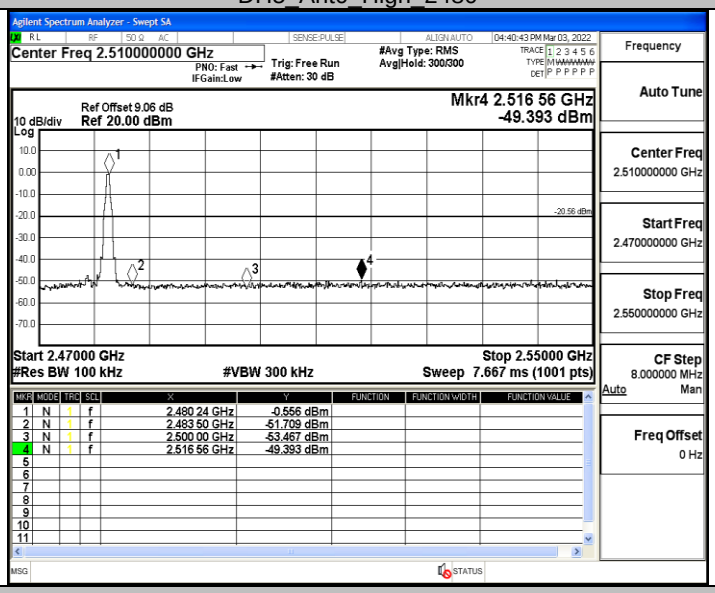
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant0	Low	2402	-0.86	-47.4	≤-20.86	PASS
		High	2480	-0.56	-49.39	≤-20.56	PASS
		Low	Hop_2402	-1.56	-47.72	≤-21.56	PASS
		High	Hop_2480	-0.51	-47.27	≤-20.51	PASS
2DH5	Ant0	Low	2402	-0.79	-48.78	≤-20.79	PASS
		High	2480	-0.64	-48.52	≤-20.64	PASS
		Low	Hop_2402	-2.75	-48.27	≤-22.75	PASS
		High	Hop_2480	-2.62	-47.87	≤-22.62	PASS

Test Graphs

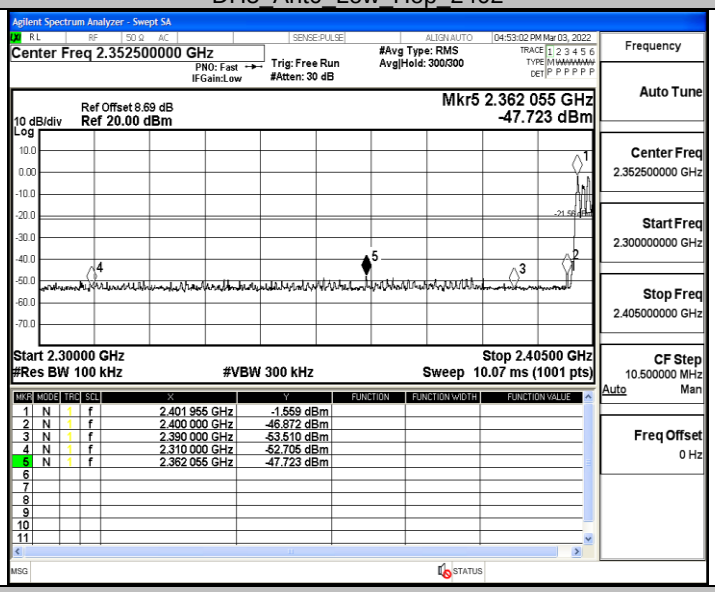
DH5_Ant0_Low_2402



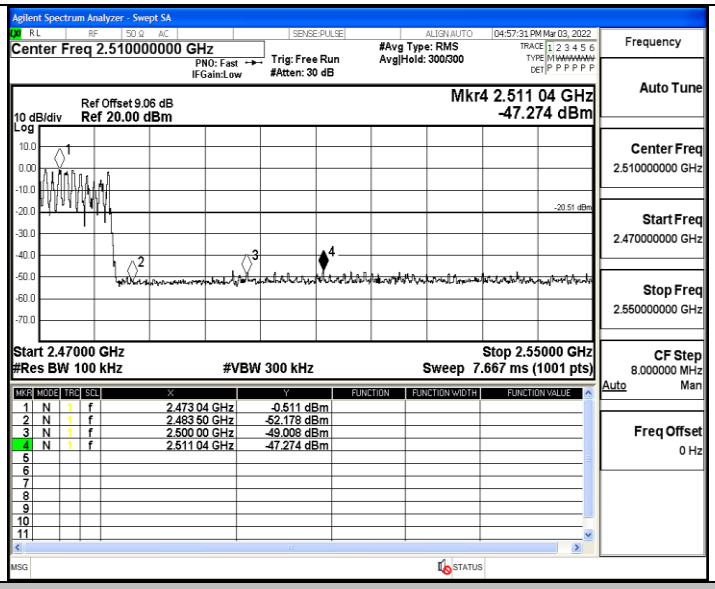
DH5_Ant0_High_2480



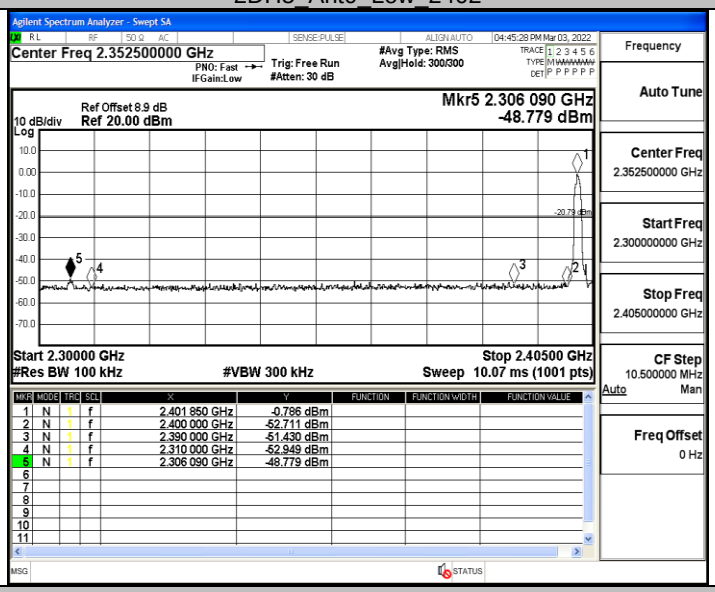
DH5_Ant0_Low_Hop_2402



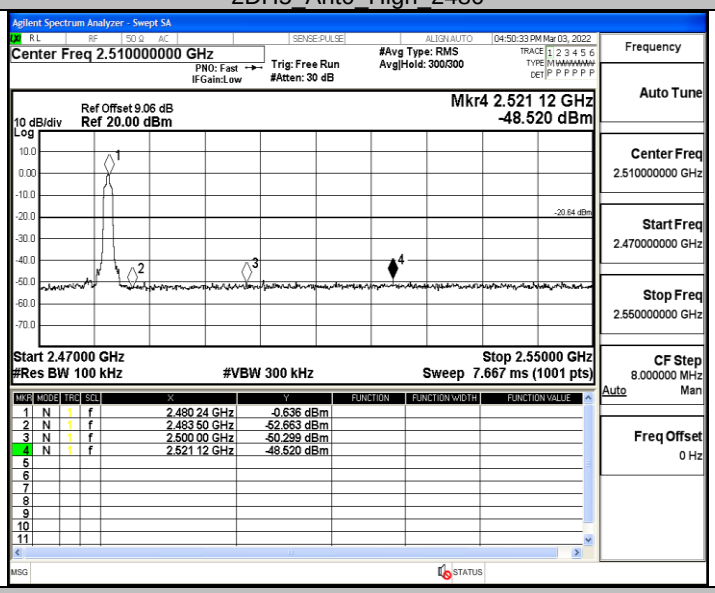
DH5_Ant0_High_Hop_2480



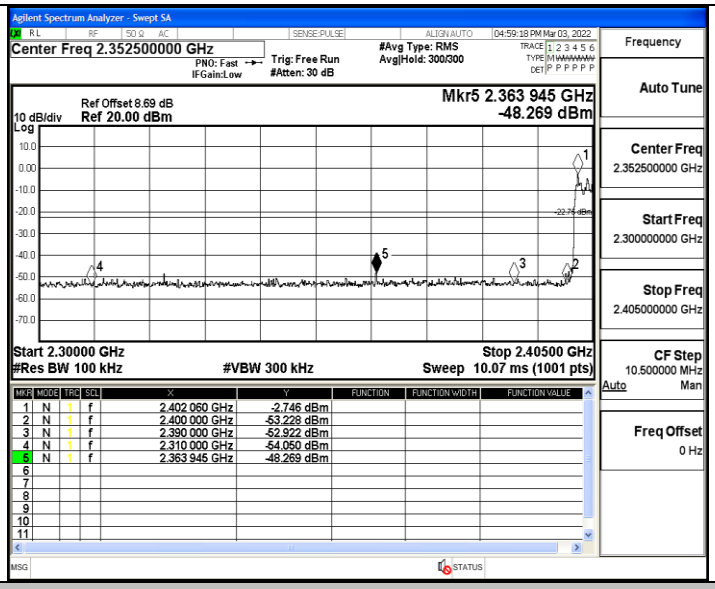
2DH5_Ant0_Low_2402



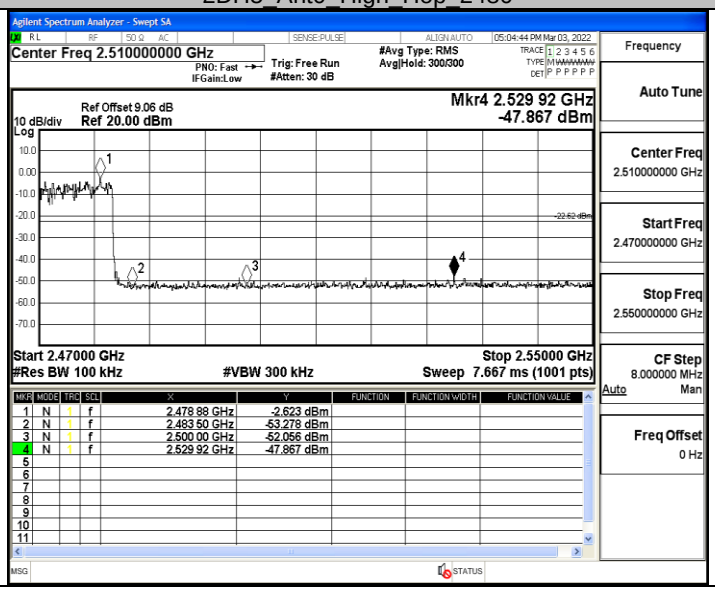
2DH5_Ant0_High_2480



2DH5_Ant0_Low_Hop_2402



2DH5_Ant0_High_Hop_2480



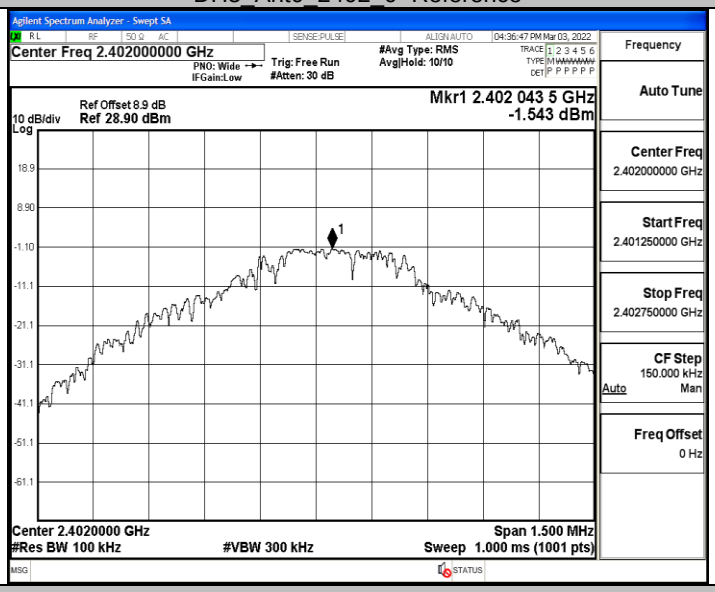
Appendix H: Conducted Spurious Emission

Test Result

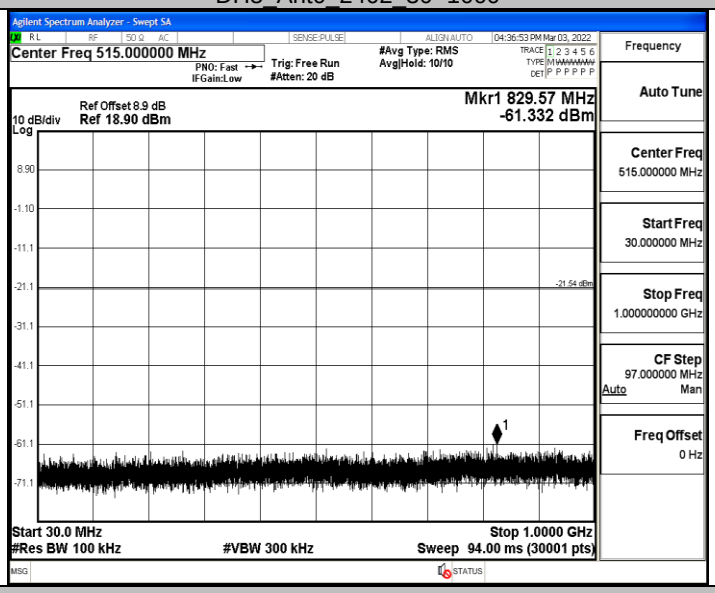
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant0	2402	Reference	-1.54	-1.54	---	PASS
			30~1000	-1.54	-61.33	≤-21.54	PASS
			1000~26500	-1.54	-47.73	≤-21.54	PASS
		2441	Reference	-1.16	-1.16	---	PASS
			30~1000	-1.16	-59.65	≤-21.16	PASS
			1000~26500	-1.16	-49.91	≤-21.16	PASS
		2480	Reference	-1.31	-1.31	---	PASS
			30~1000	-1.31	-61.57	≤-21.31	PASS
			1000~26500	-1.31	-47.97	≤-21.31	PASS
2DH5	Ant0	2402	Reference	-1.09	-1.09	---	PASS
			30~1000	-1.09	-61.44	≤-21.09	PASS
			1000~26500	-1.09	-50.63	≤-21.09	PASS
		2441	Reference	-2.01	-2.01	---	PASS
			30~1000	-2.01	-60.02	≤-22.01	PASS
			1000~26500	-2.01	-52.05	≤-22.01	PASS
		2480	Reference	-3.95	-3.95	---	PASS
			30~1000	-3.95	-61.1	≤-23.95	PASS
			1000~26500	-3.95	-50.33	≤-23.95	PASS

Test Graphs

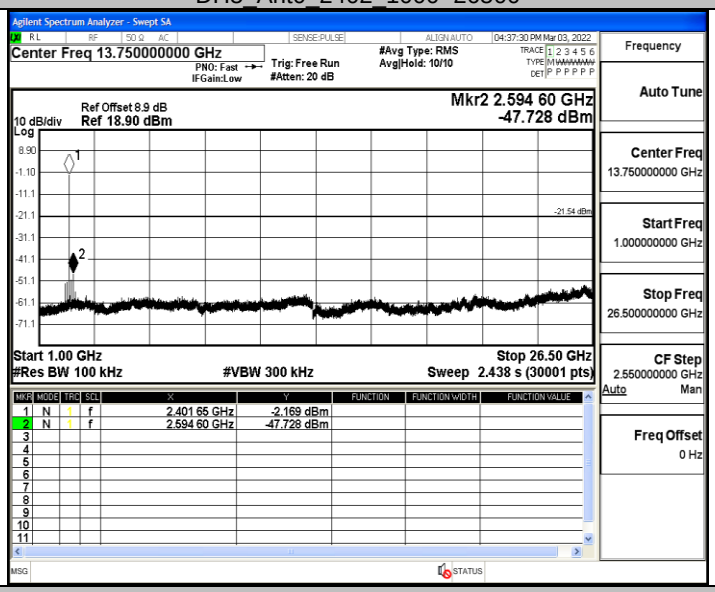
DH5_Ant0_2402_0~Reference



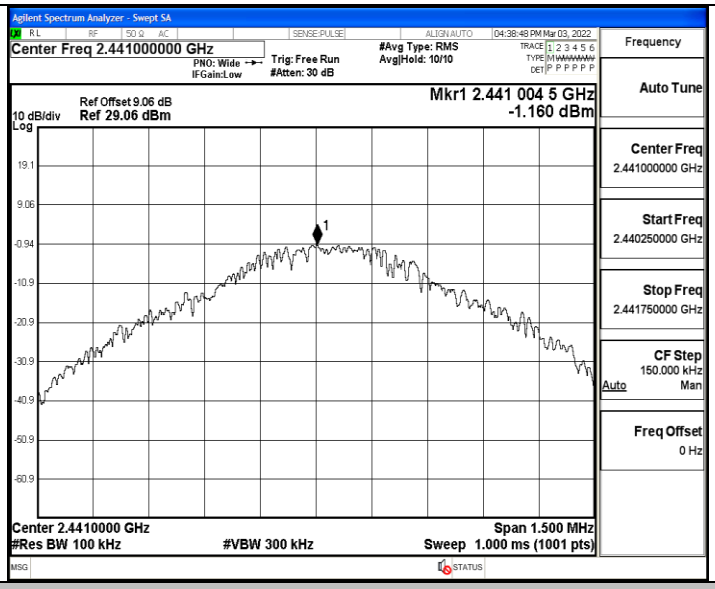
DH5_Ant0_2402_30~1000



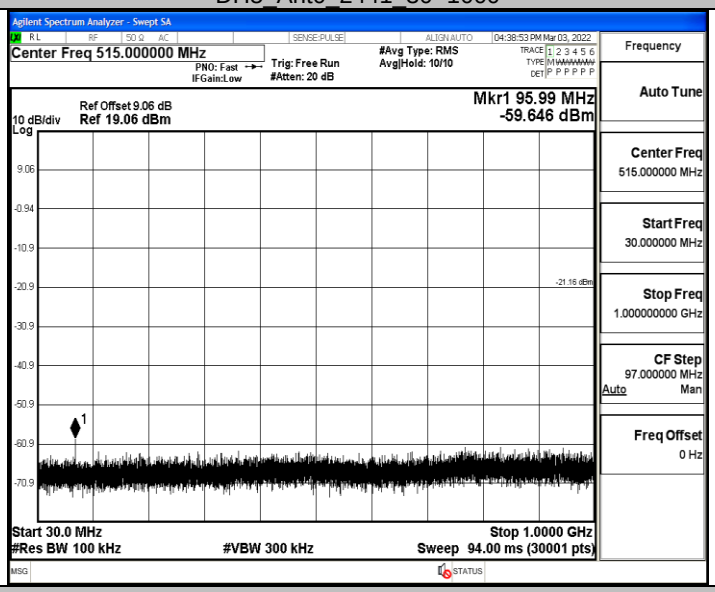
DH5_Ant0_2402_1000~26500



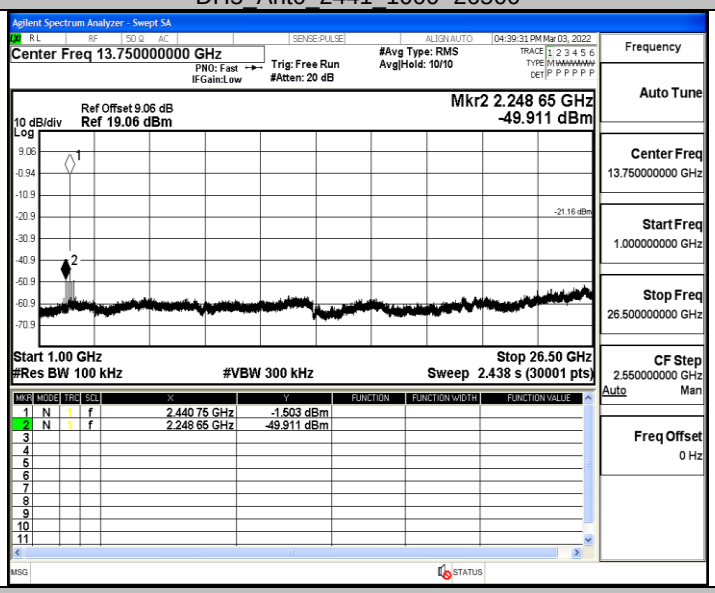
DH5_Ant0_2441_0~Reference



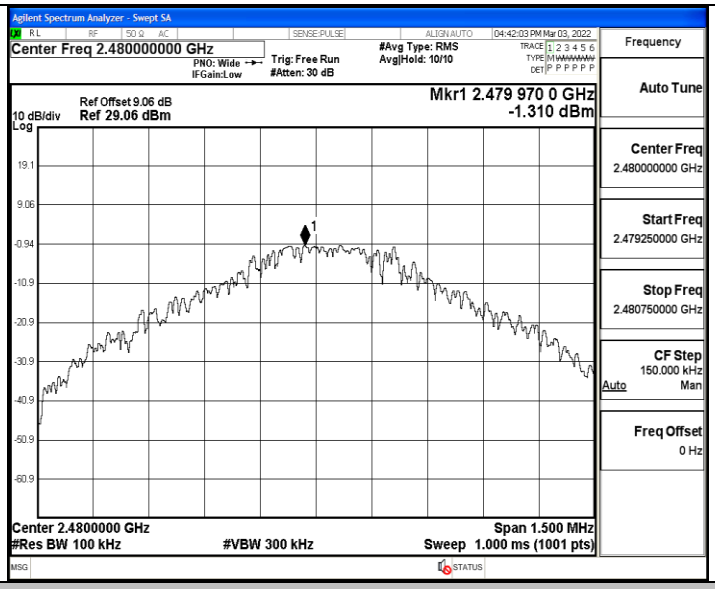
DH5_Ant0_2441_30~1000



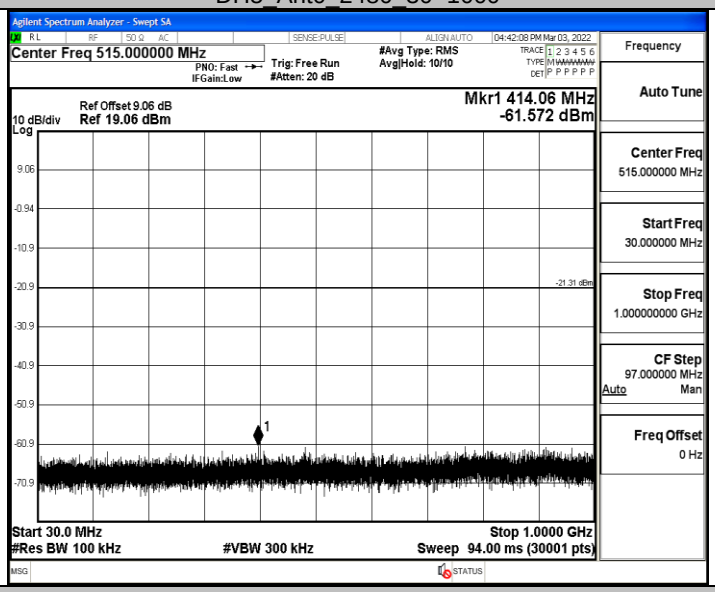
DH5_Ant0_2441_1000~26500



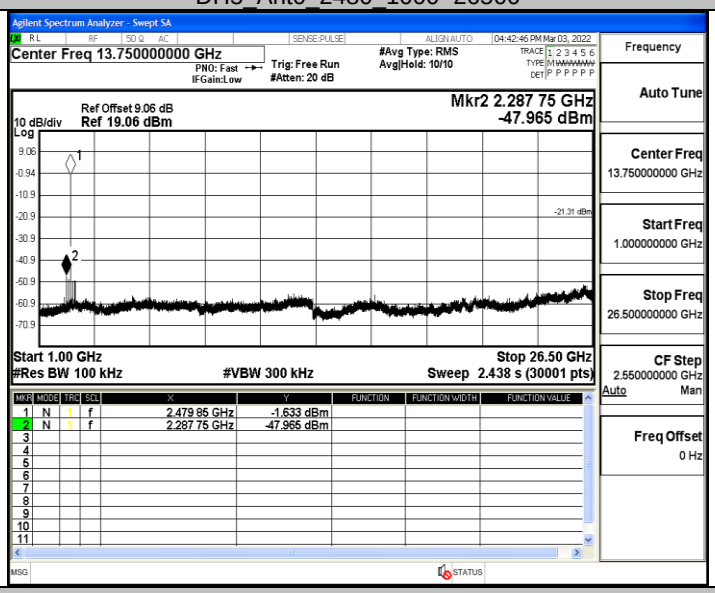
DH5_Ant0_2480_0~Reference



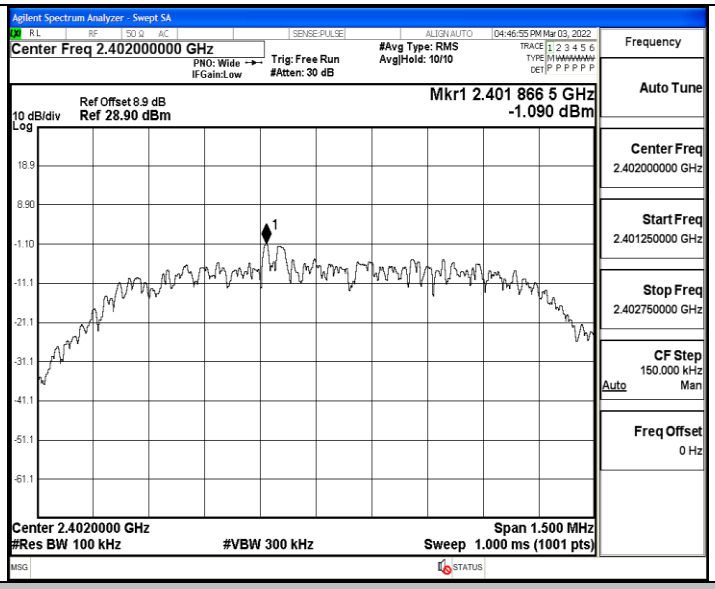
DH5_Ant0_2480_30~1000



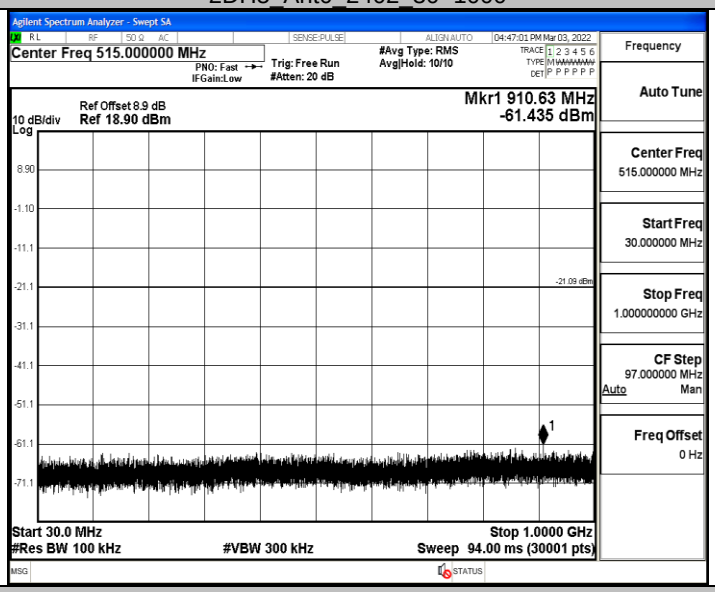
DH5_Ant0_2480_1000~26500



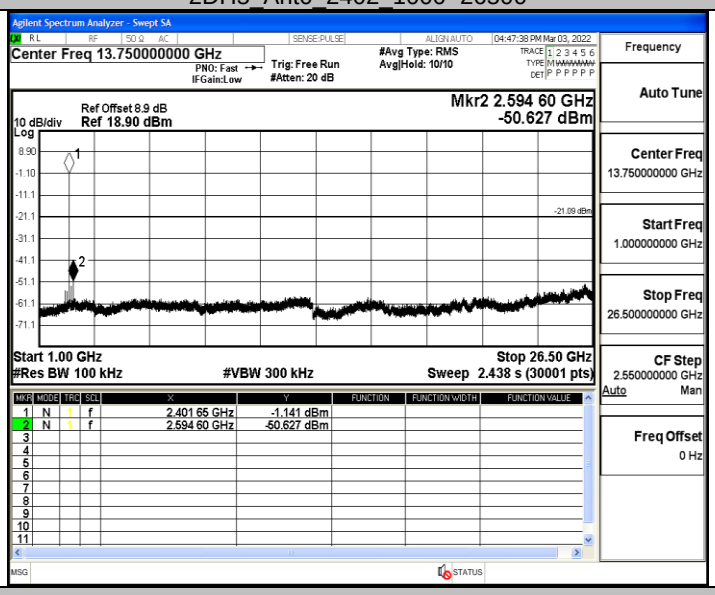
2DH5_Ant0_2402_0~Reference



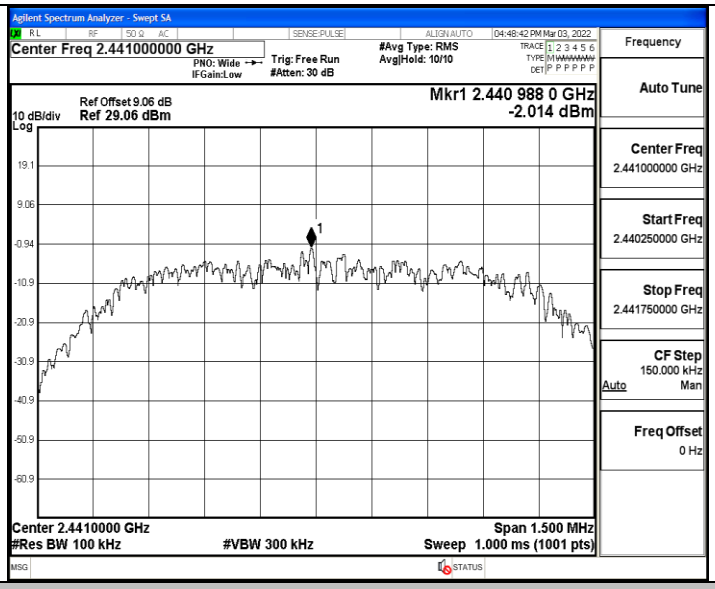
2DH5_Ant0_2402_30~1000



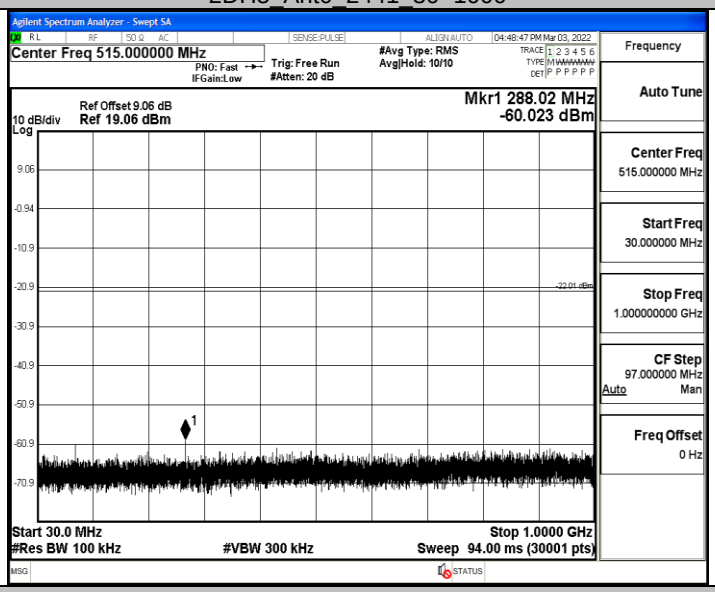
2DH5_Ant0_2402_1000~26500



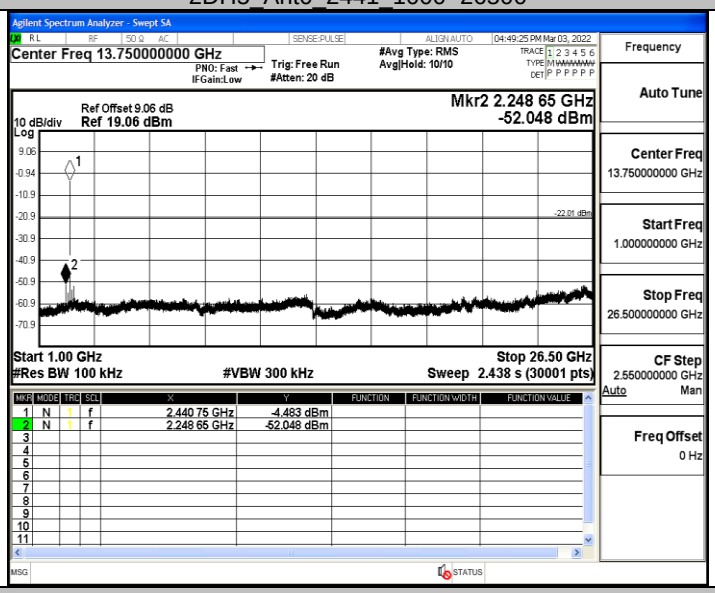
2DH5_Ant0_2441_0~Reference



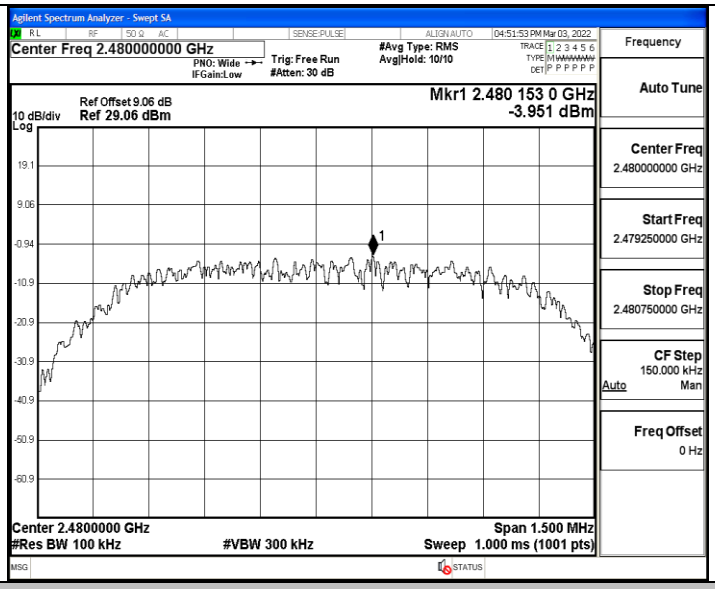
2DH5_Ant0_2441_30~1000



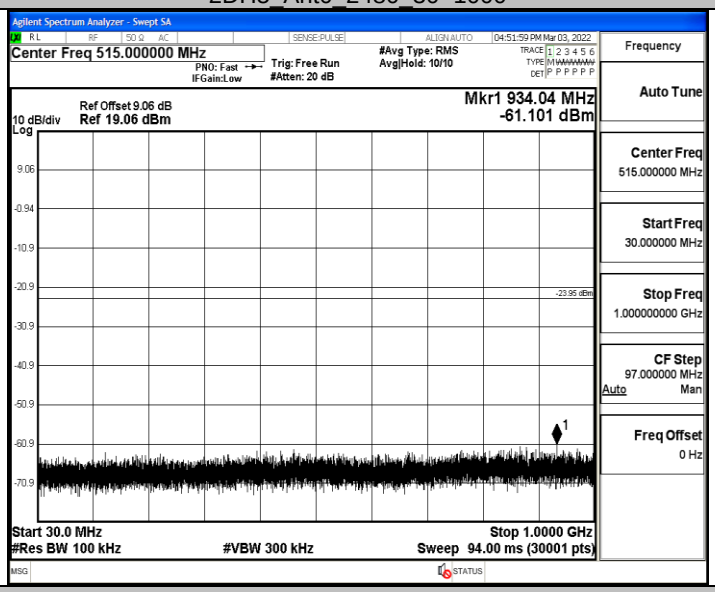
2DH5_Ant0_2441_1000~26500



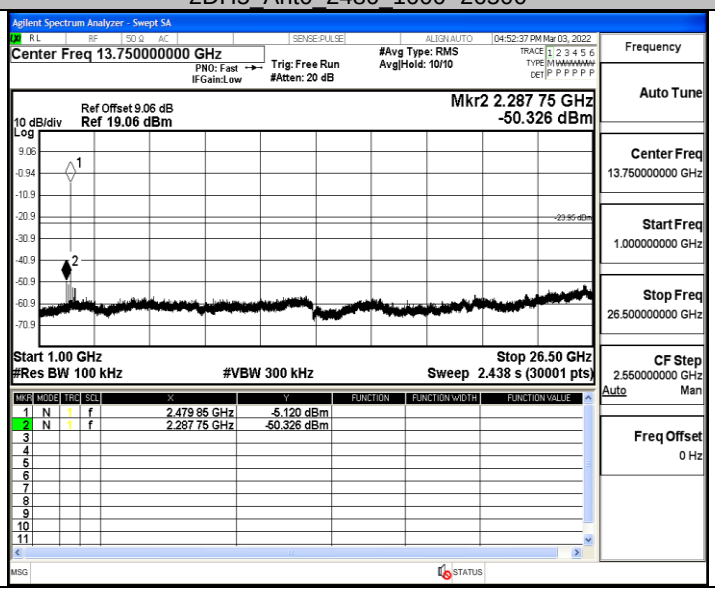
2DH5_Ant0_2480_0~Reference



2DH5_Ant0_2480_30~1000



2DH5_Ant0_2480_1000~26500



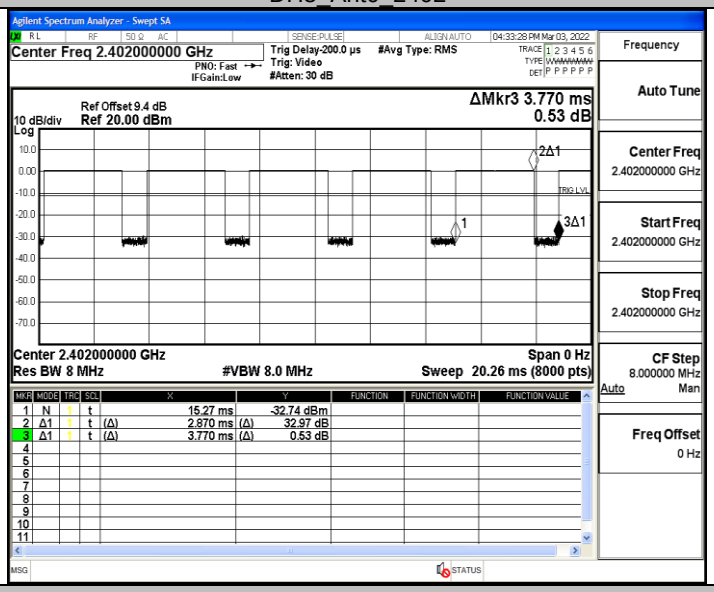
Appendix I: Duty Cycle

Test Result

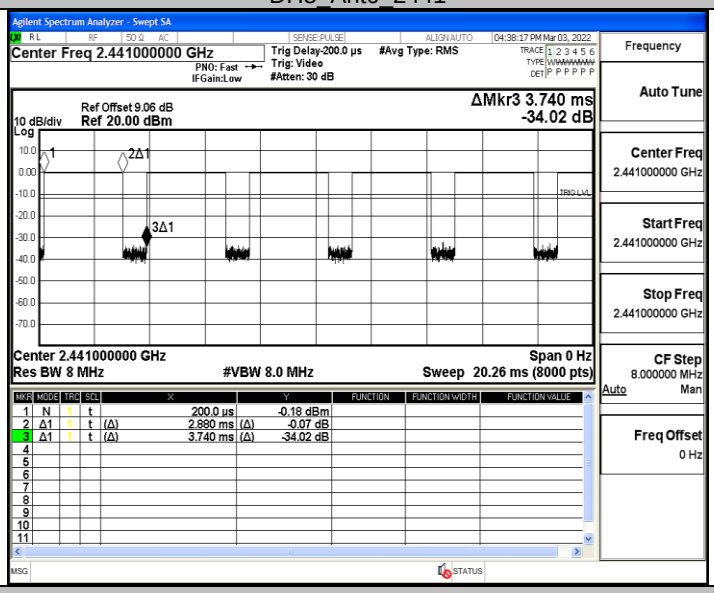
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/B(KHz)
DH5	Ant0	2402	2.87	3.77	76.13	0.35
		2441	2.88	3.74	77.01	0.35
		2480	2.89	3.75	77.07	0.35
2DH5	Ant0	2402	2.89	3.75	77.07	0.35
		2441	2.89	3.74	77.27	0.35
		2480	2.90	3.76	77.13	0.34

Test Graphs

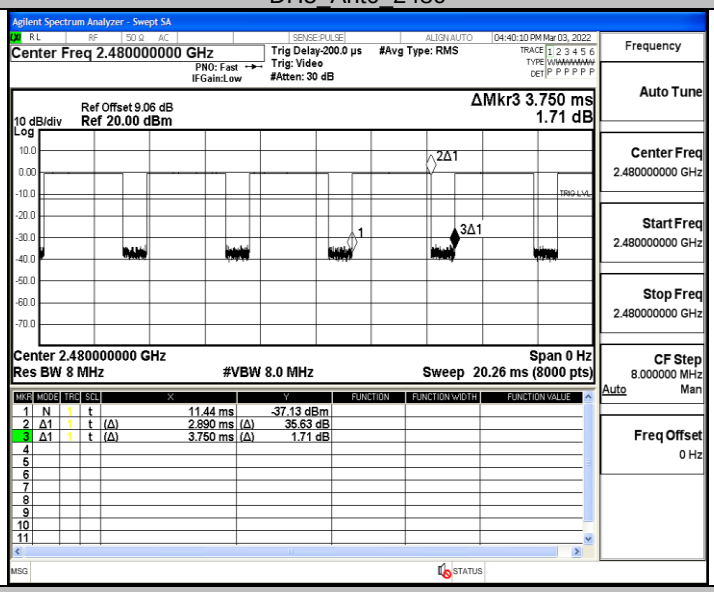
DH5_Ant0_2402



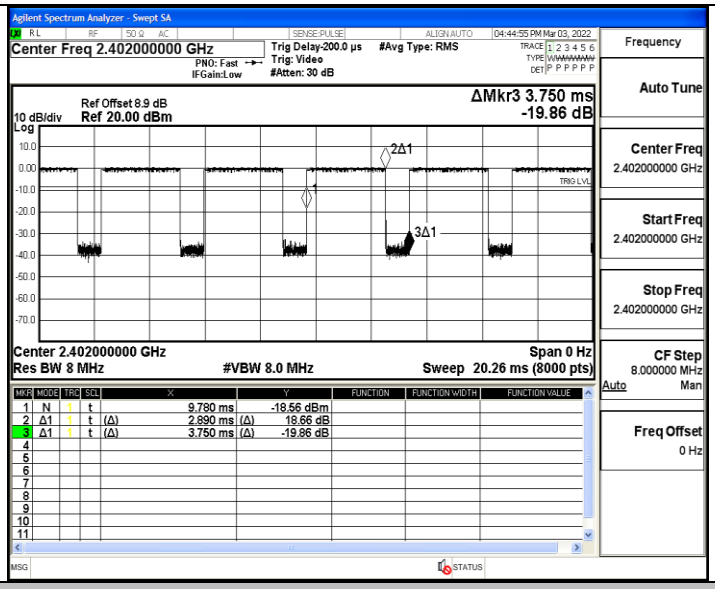
DH5_Ant0_2441



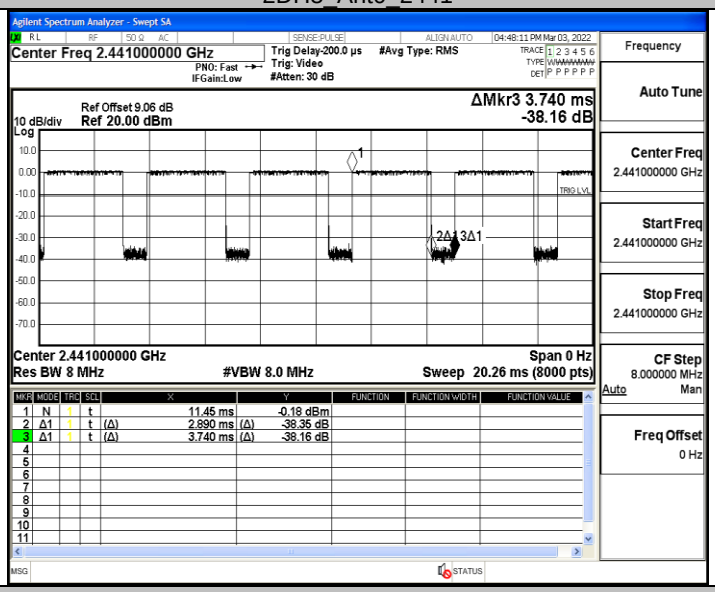
DH5_Ant0_2480



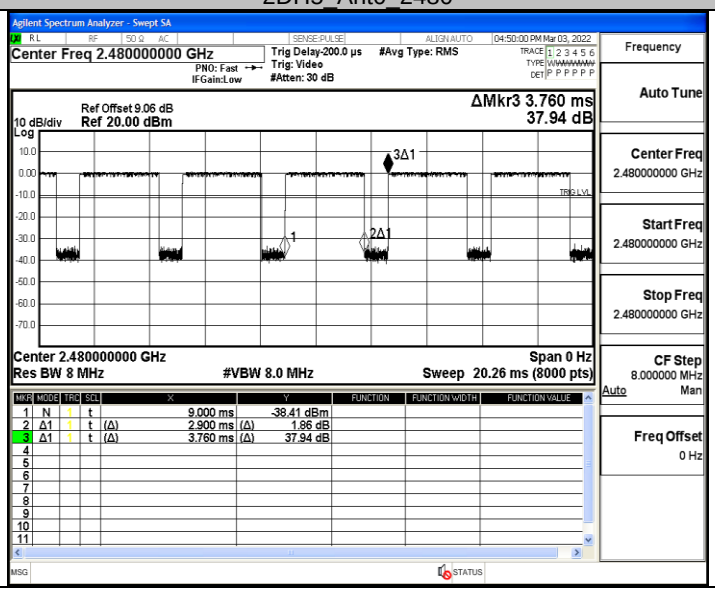
2DH5_Ant0_2402



2DH5_Ant0_2441



2DH5_Ant0_2480



Appendix J: Emissions in Restricted Bands

Test Result

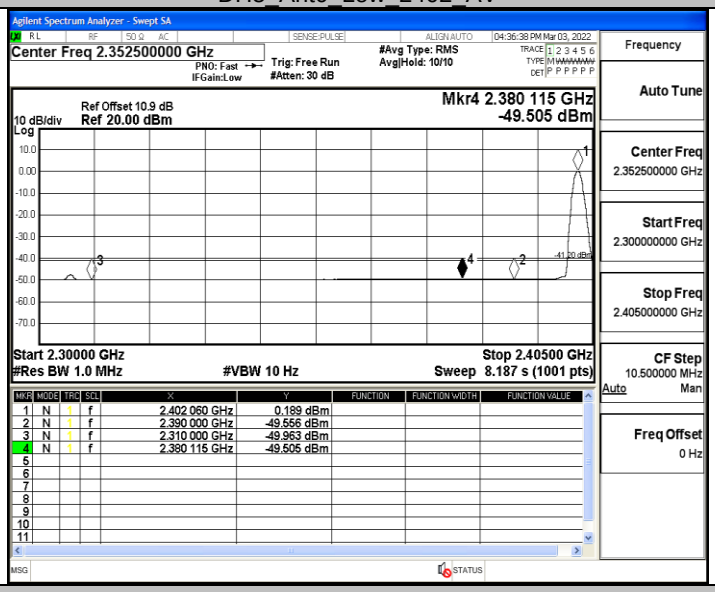
TestMode	Antenna	ChName	Channel	Detector	Freq(MHz)	Result(dBm)	Limit(dBm)	Verdict
DH5	Ant0	Low	2402	AV	2310.000	-49.96	≤-41.20	PASS
				AV	2380.115	-49.5	≤-41.20	PASS
				AV	2390.000	-49.56	≤-41.20	PASS
				Peak	2310.000	-43.95	≤-21.20	PASS
				Peak	2369.300	-40.75	≤-21.20	PASS
				Peak	2390.000	-45.28	≤-21.20	PASS
		High	2480	AV	2483.500	-48.15	≤-41.20	PASS
				AV	2483.520	-48.15	≤-41.20	PASS
				AV	2500.000	-48.48	≤-41.20	PASS
				Peak	2483.500	-39.74	≤-21.20	PASS
				Peak	2488.640	-38.77	≤-21.20	PASS
				Peak	2500.000	-42.15	≤-21.20	PASS
2DH5	Ant0	Low	2402	AV	2310.000	-49.58	≤-41.20	PASS
				AV	2378.645	-48.97	≤-41.20	PASS
				AV	2390.000	-49.16	≤-41.20	PASS
				Peak	2310.000	-40.3	≤-21.20	PASS
				Peak	2311.970	-39.85	≤-21.20	PASS
				Peak	2390.000	-41.76	≤-21.20	PASS
		High	2480	AV	2483.500	-48	≤-41.20	PASS
				AV	2483.520	-48	≤-41.20	PASS
				AV	2500.000	-48.42	≤-41.20	PASS
				Peak	2483.500	-39.23	≤-21.20	PASS
				Peak	2483.520	-39.23	≤-21.20	PASS
				Peak	2500.000	-39.99	≤-21.20	PASS

Note：

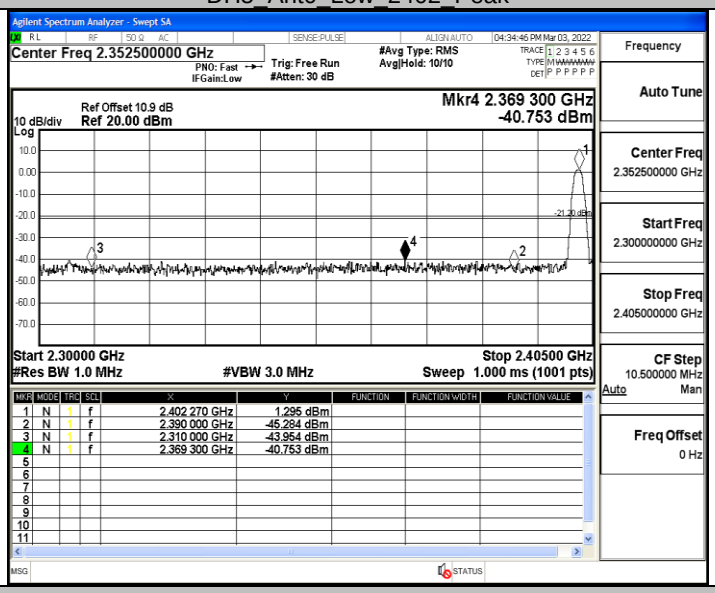
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

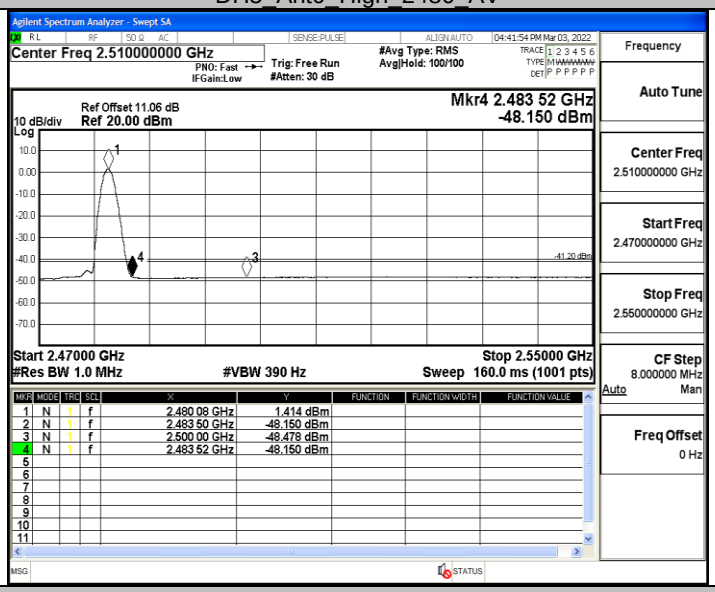
DH5_Ant0_Low_2402_AV



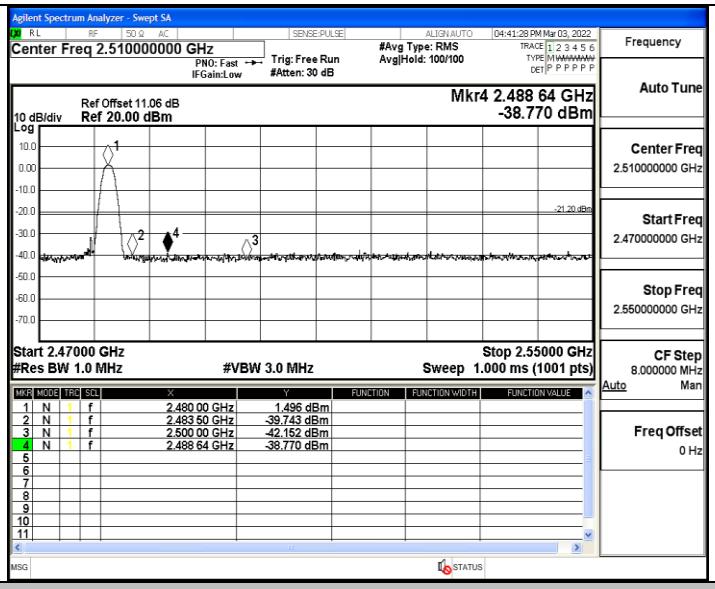
DH5_Ant0_Low_2402_Peak



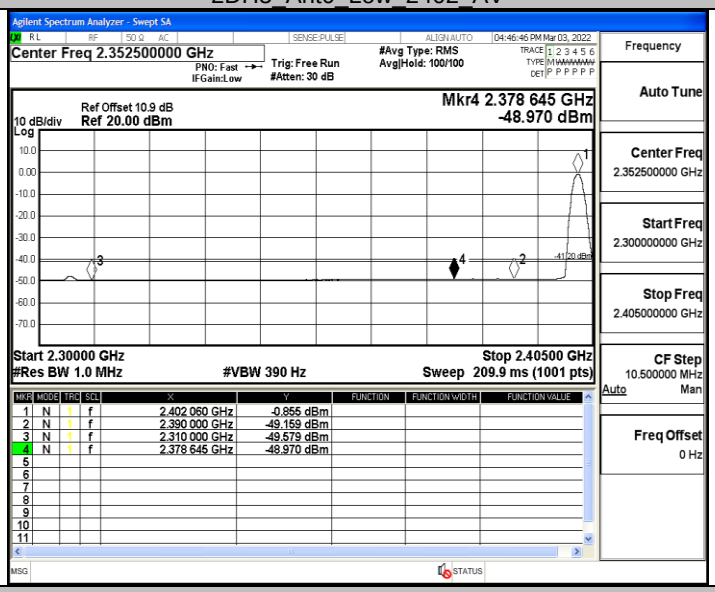
DH5_Ant0_High_2480_AV



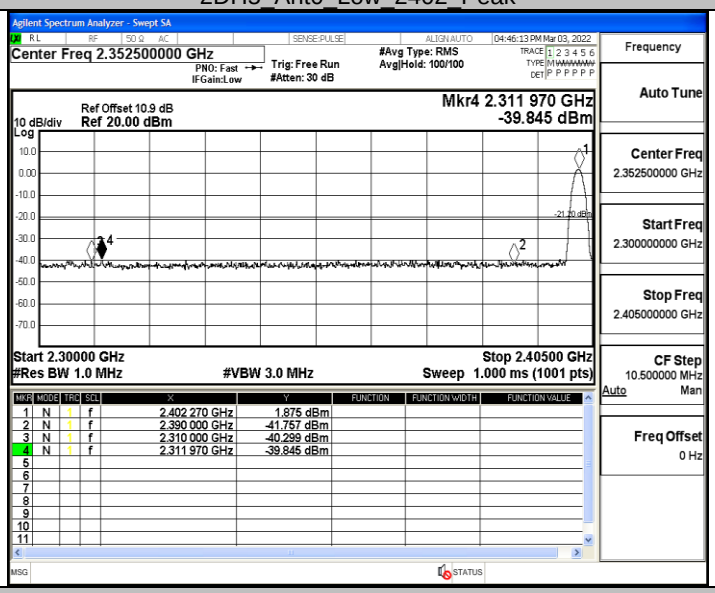
DH5_Ant0_High_2480_Peak



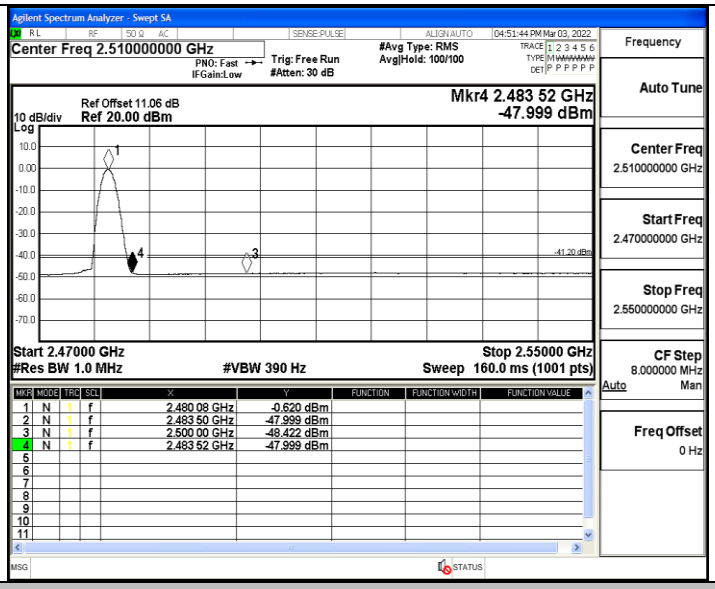
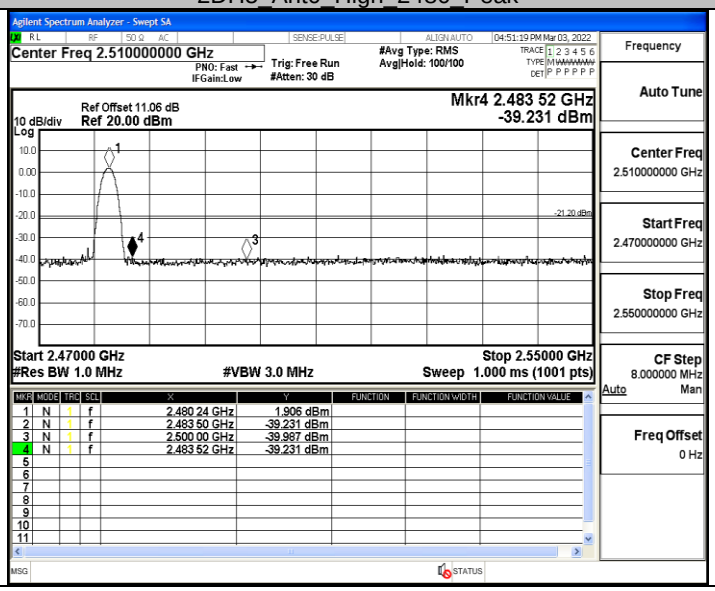
2DH5_Ant0_Low_2402_AV



2DH5_Ant0_Low_2402_Peak



2DH5_Ant0_High_2480_AV



2DH5_Ant0_High_2480_Peak