



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Tablet PC

Trade Mark: Astro Tab

Test Model: DCG-P10

Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	100.0 kPa
Test Engineer:	Carl Fu
Supervised by:	Li Huan



Appendix A.1: Maximum conducted output power

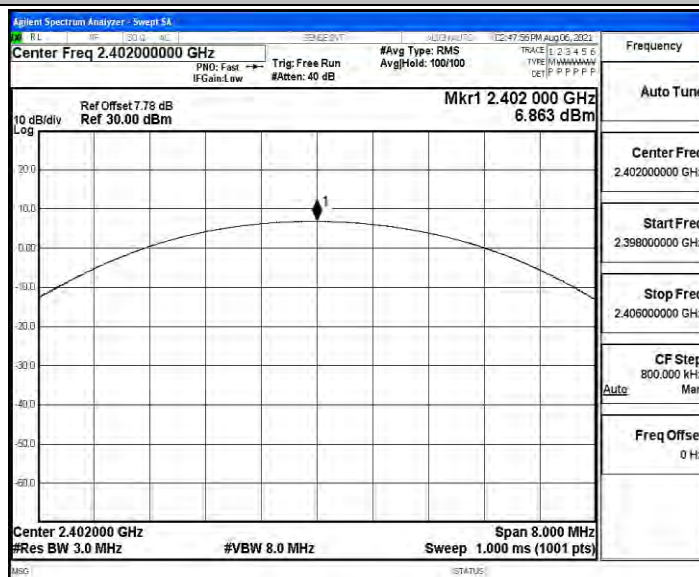
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	6.86	≤20.97	PASS
		2441	6.97	≤20.97	PASS
		2480	6.87	≤20.97	PASS
2DH5	Ant1	2402	6.10	≤20.97	PASS
		2441	6.26	≤20.97	PASS
		2480	6.14	≤20.97	PASS
3DH5	Ant1	2402	6.12	≤20.97	PASS
		2441	6.25	≤20.97	PASS
		2480	6.21	≤20.97	PASS

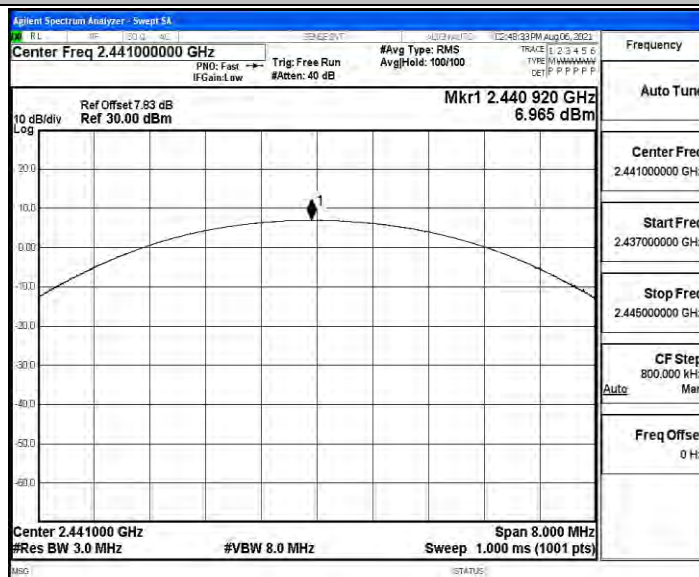


Test Graphs

DH5_Ant1_2402

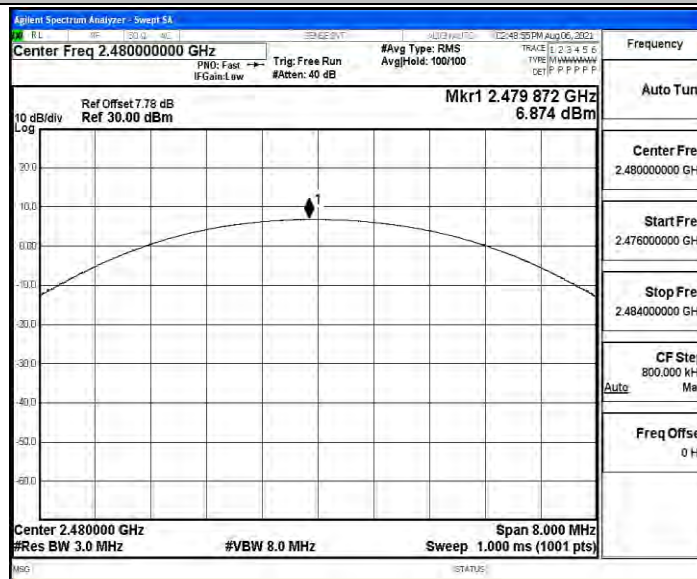


DH5_Ant1_2441

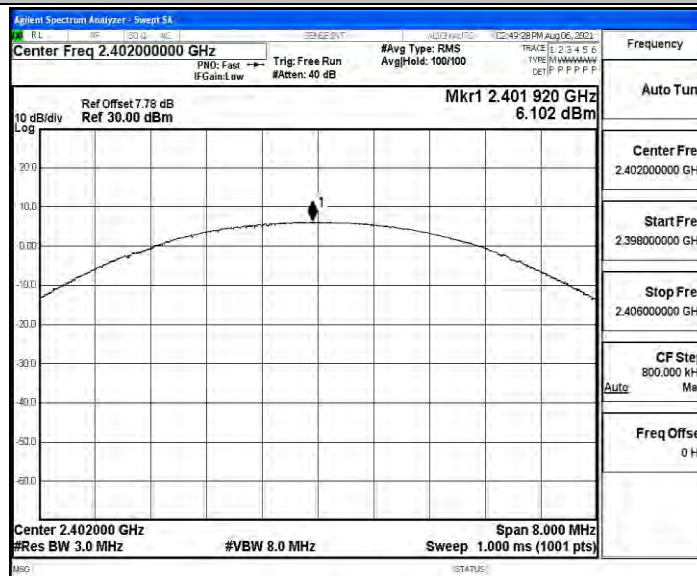




DH5_Ant1_2480

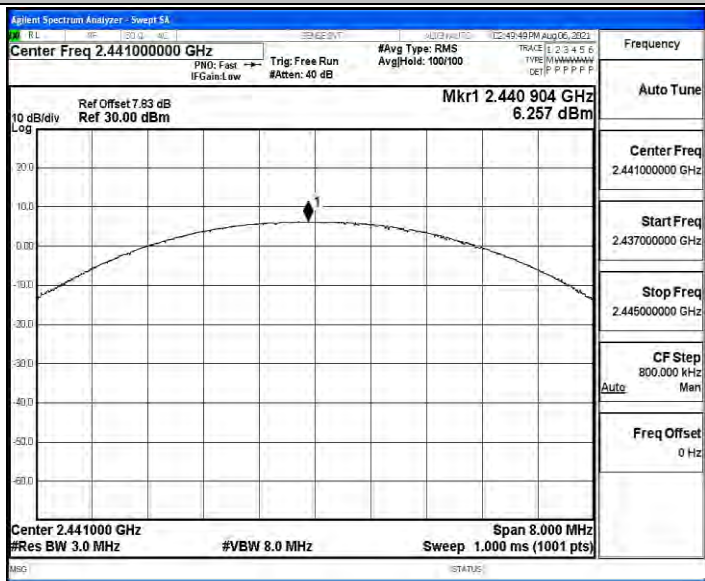


2DH5_Ant1_2402

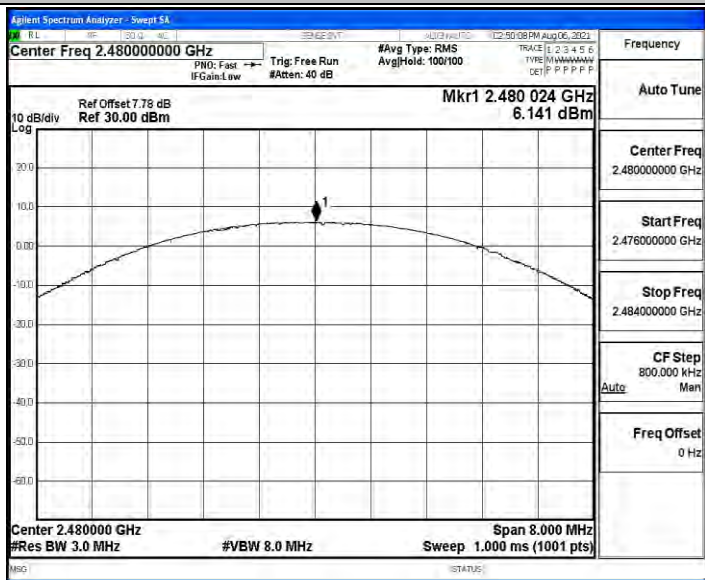




2DH5_Ant1_2441

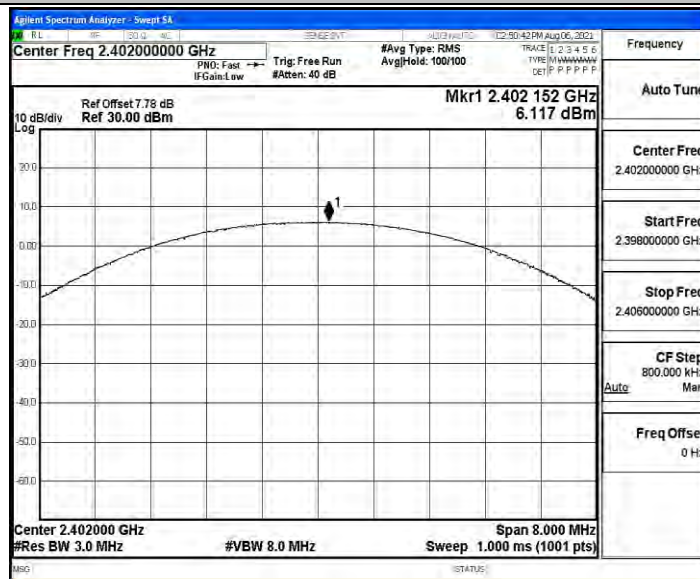


2DH5_Ant1_2480

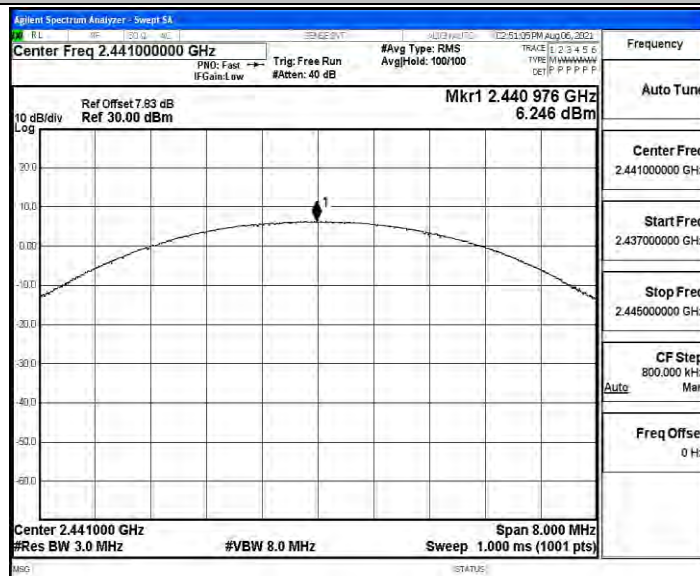




3DH5_Ant1_2402

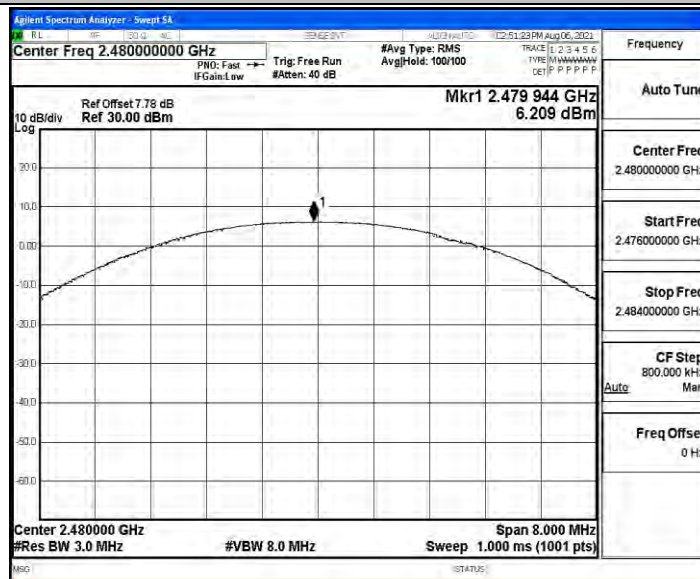


3DH5_Ant1_2441





3DH5_Ant1_2480





Appendix A.2.1: 20dB Emission Bandwidth

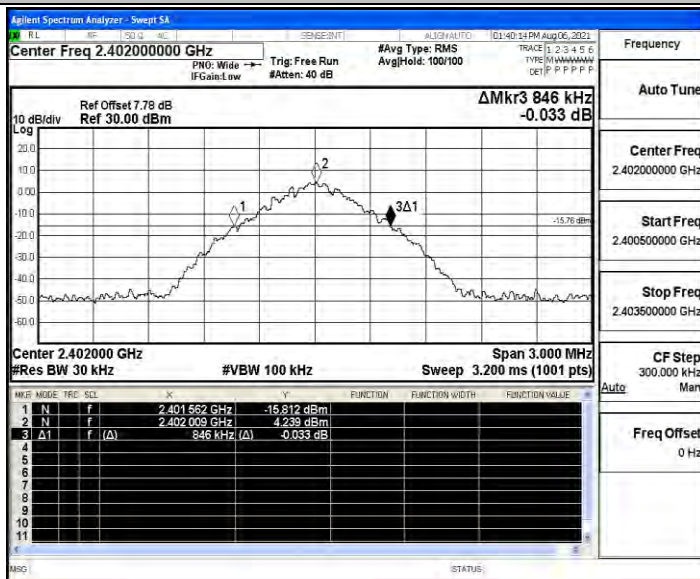
Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.846	2401.562	2402.408	---	PASS
		2441	0.849	2440.565	2441.414	---	PASS
		2480	0.831	2479.577	2480.408	---	PASS
2DH5	Ant1	2402	1.272	2401.370	2402.642	---	PASS
		2441	1.290	2440.361	2441.651	---	PASS
		2480	1.278	2479.364	2480.642	---	PASS
3DH5	Ant1	2402	1.290	2401.349	2402.639	---	PASS
		2441	1.266	2440.352	2441.618	---	PASS
		2480	1.296	2479.349	2480.645	---	PASS

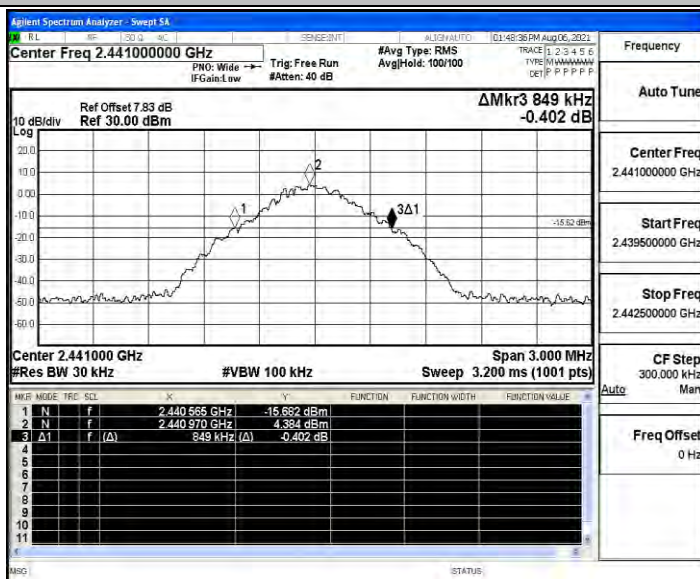


Test Graphs

DH5_Ant1_2402

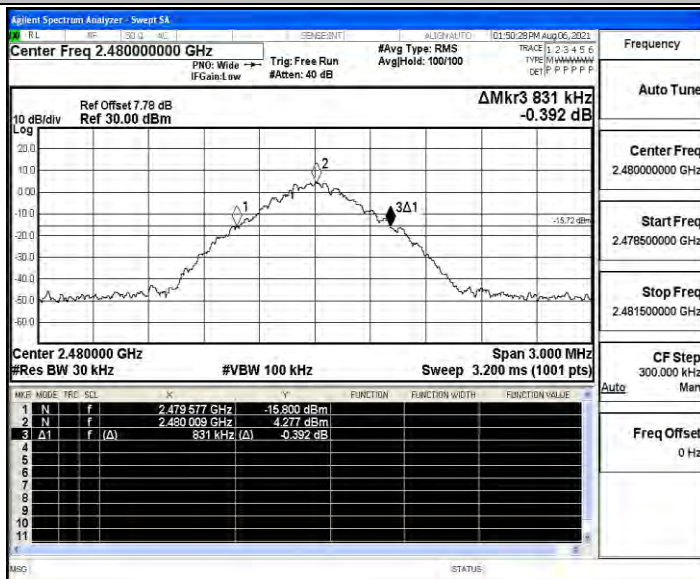


DH5_Ant1_2441

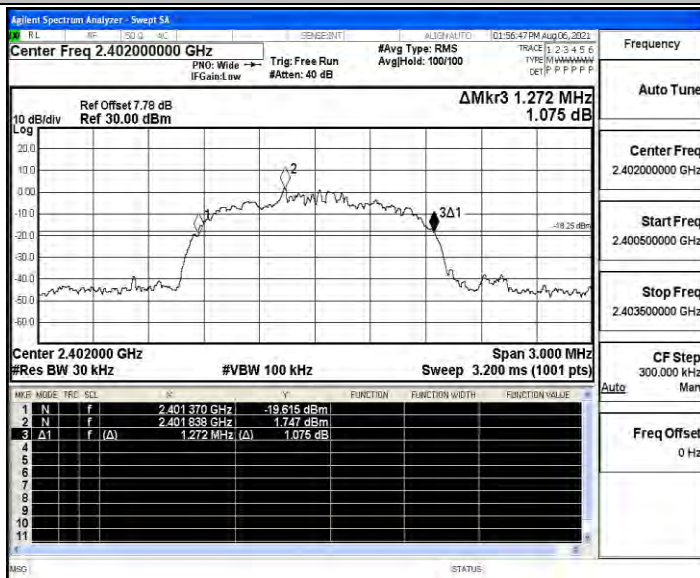




DH5_Ant1_2480

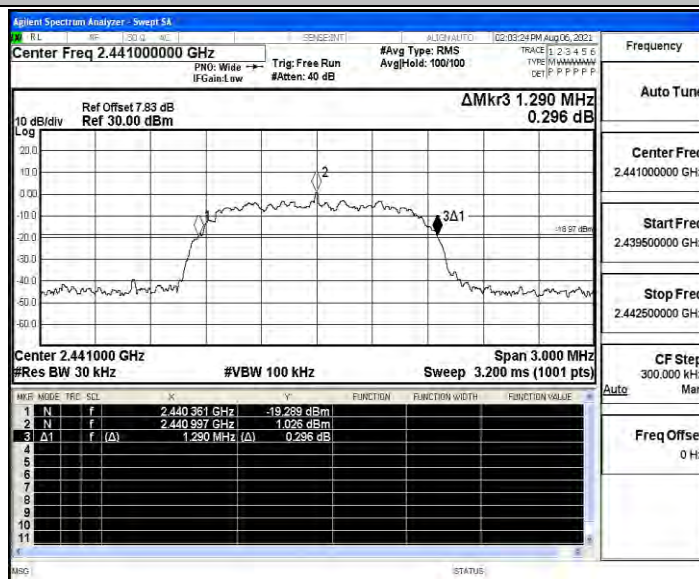


2DH5_Ant1_2402

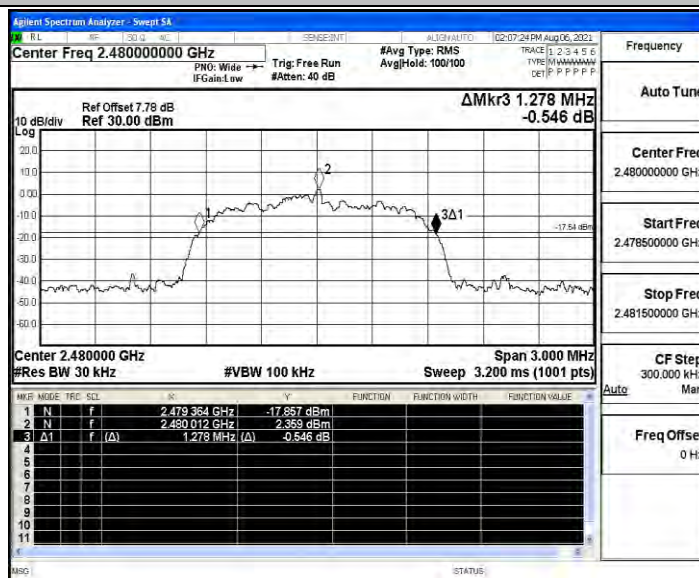




2DH5_Ant1_2441

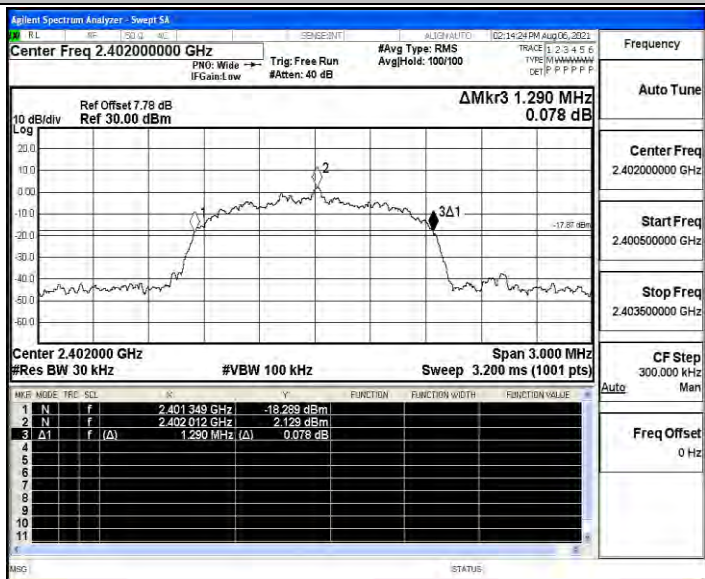


2DH5_Ant1_2480

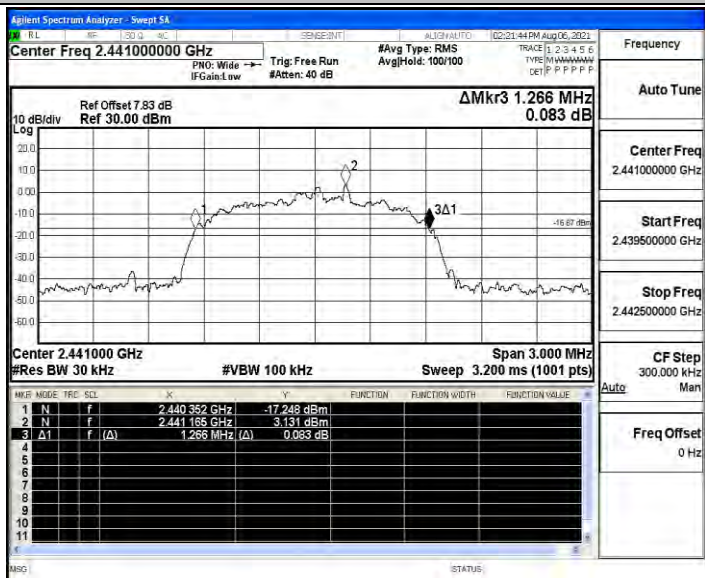




3DH5_Ant1_2402



3DH5_Ant1_2441





3DH5_Ant1_2480

Agilent Spectrum Analyzer - Sweep 5A

Center Freq **2.480000000 GHz** Span **3.000 MHz**
 #Res BW **30 kHz** #VBW **100 kHz** Sweep **3.200 ms (1001 pts)**

Ref Offset **7.78 dB** ΔMkr3 **1.296 MHz**
 Ref **30.00 dBm** 0.057 dB

Auto Tune

Center Freq **2.480000000 GHz**

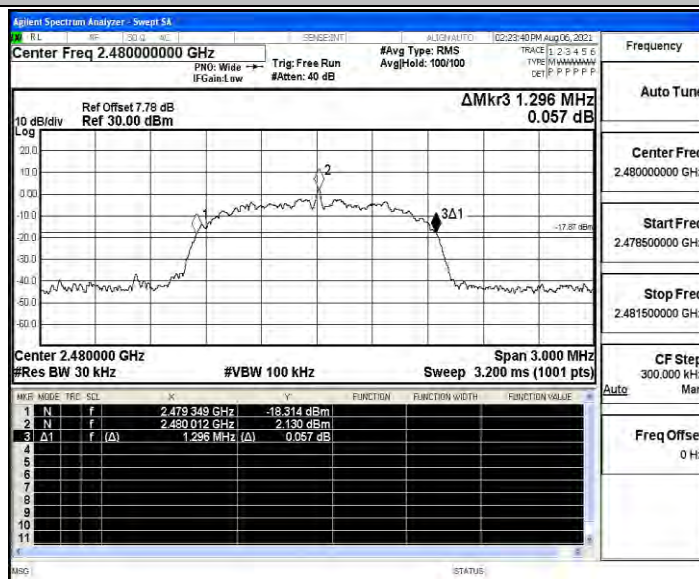
Start Freq **2.478500000 GHz**

Stop Freq **2.481500000 GHz**

CF Step **300.000 kHz**

Freq Offset **0 Hz**

MARK	MODE	FREQ	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f		2.479 349 GHz	-18.314 dBm			
2	N	f		2.480 012 GHz	2.130 dBm			
3	Δ1	f (Δ)		1.296 MHz (Δ)	0.057 dB			





Appendix A.2.2: Occupied Channel Bandwidth

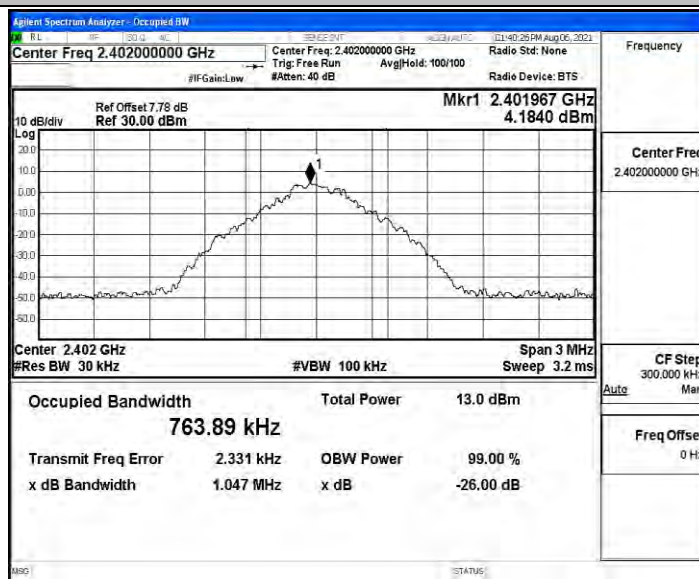
Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.76389	2401.620	2402.384	---	PASS
		2441	0.75289	2440.626	2441.379	---	PASS
		2480	0.75471	2479.625	2480.380	---	PASS
2DH5	Ant1	2402	1.1716	2401.409	2402.581	---	PASS
		2441	1.1681	2440.414	2441.582	---	PASS
		2480	1.1718	2479.409	2480.581	---	PASS
3DH5	Ant1	2402	1.1619	2401.418	2402.580	---	PASS
		2441	1.1771	2440.409	2441.586	---	PASS
		2480	1.1696	2479.415	2480.585	---	PASS

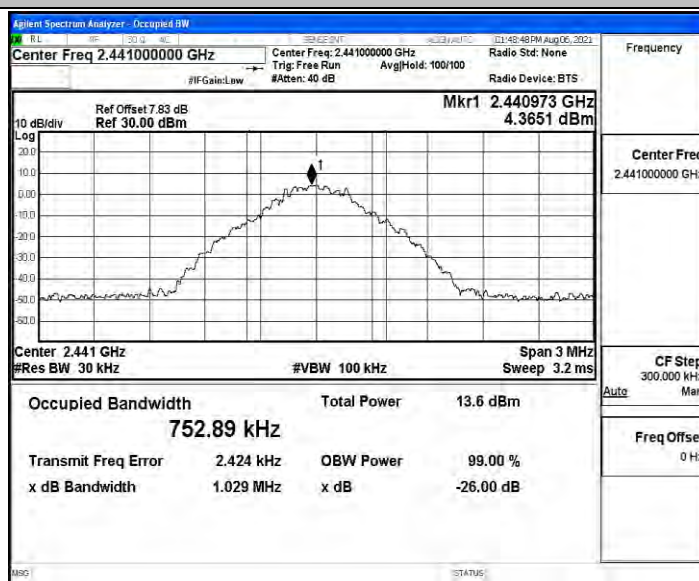


Test Graphs

DH5_Ant1_2402

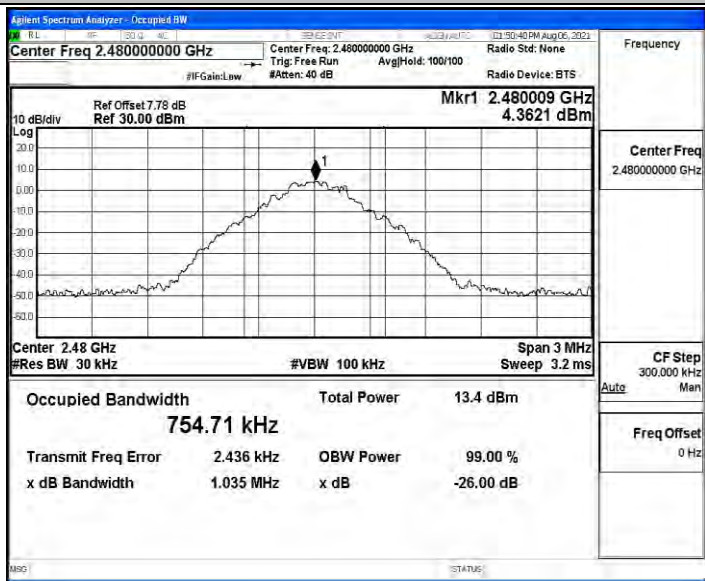


DH5_Ant1_2441





DH5_Ant1_2480

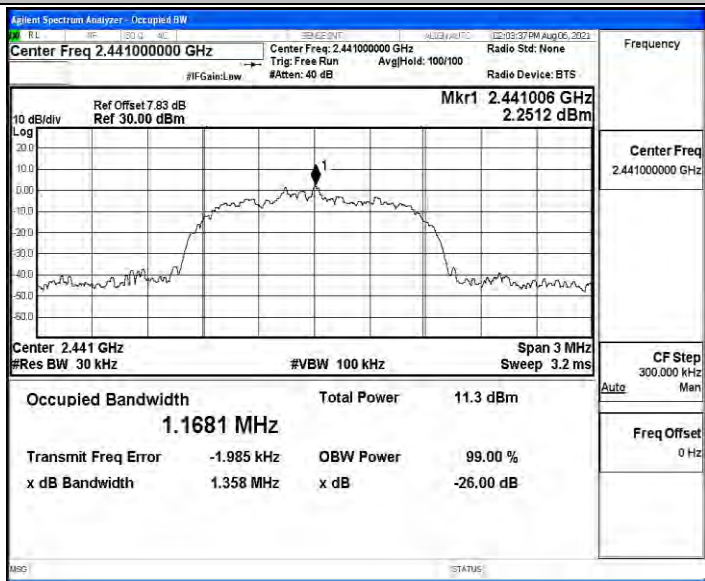


2DH5_Ant1_2402





2DH5_Ant1_2441



2DH5_Ant1_2480

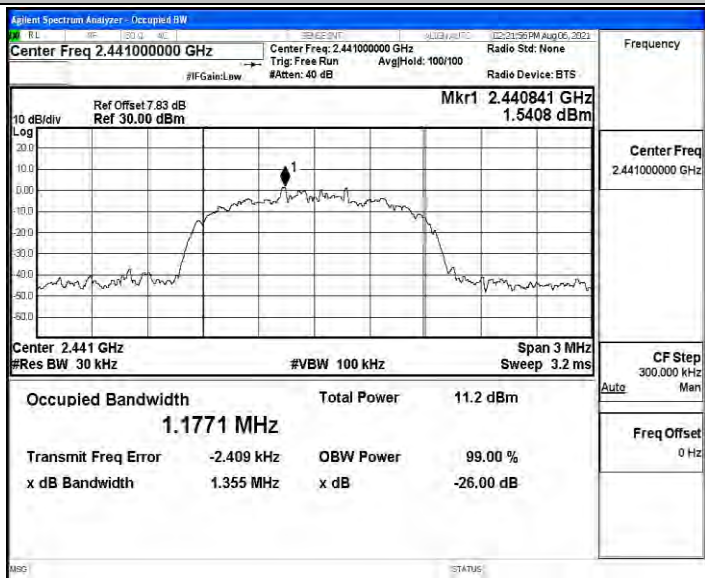




3DH5_Ant1_2402

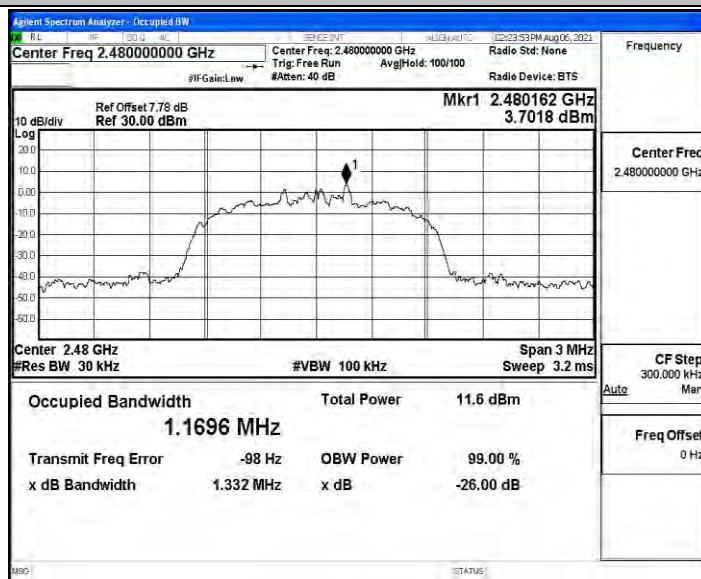


3DH5_Ant1_2441





3DH5_Ant1_2480





Appendix A.3: Carrier frequency separation

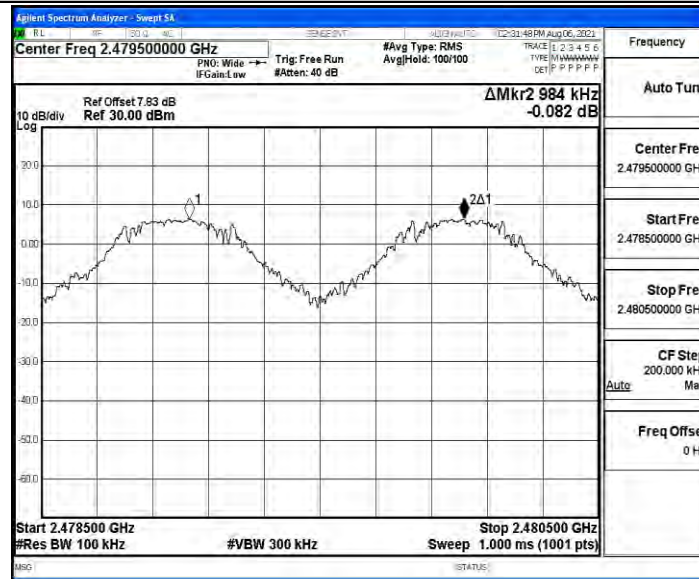
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	Hop	0.984	≥ 0.849	PASS
2DH5	Ant1	Hop	1	≥ 0.860	PASS
3DH5	Ant1	Hop	1.378	≥ 1.296	PASS

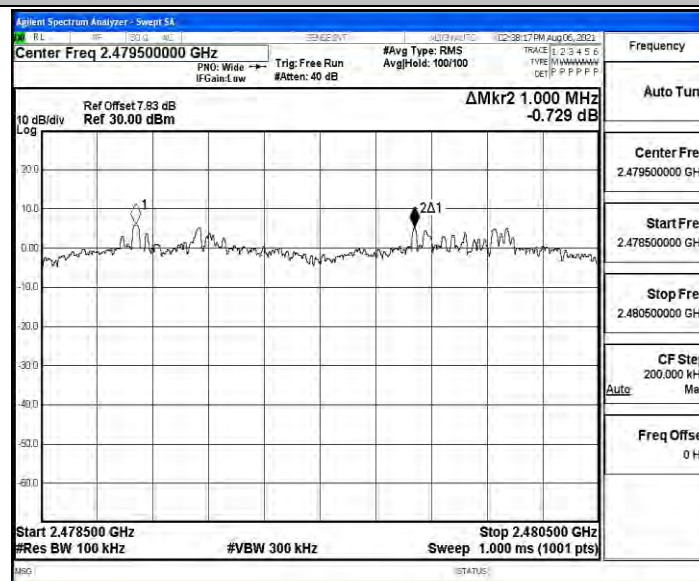


Test Graphs

DH5_Ant1_Hop

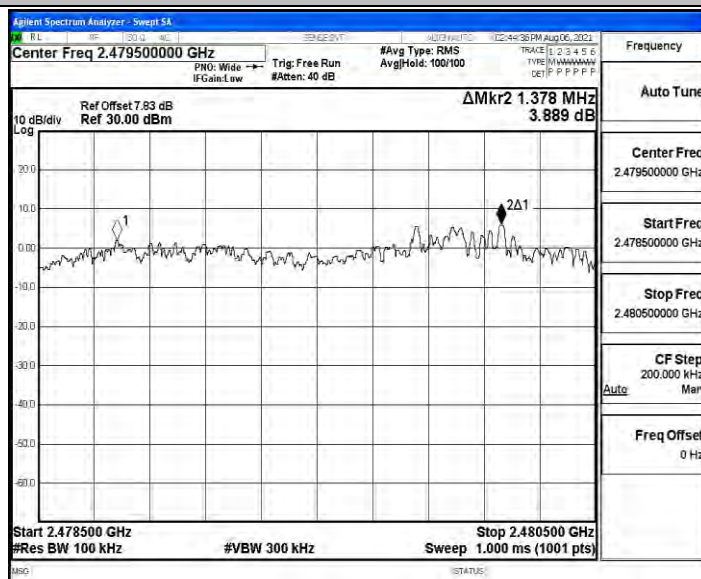


2DH5_Ant1_Hop





3DH5_Ant1_Hop





Appendix A.4: Number of hopping channels

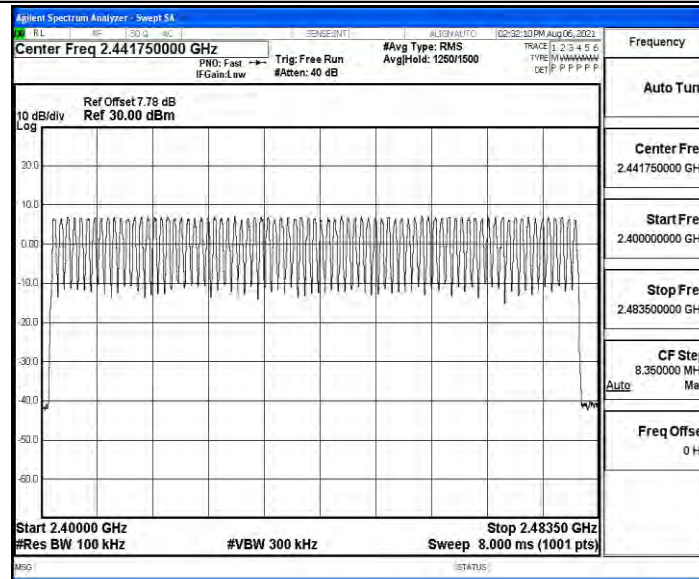
Test Result

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

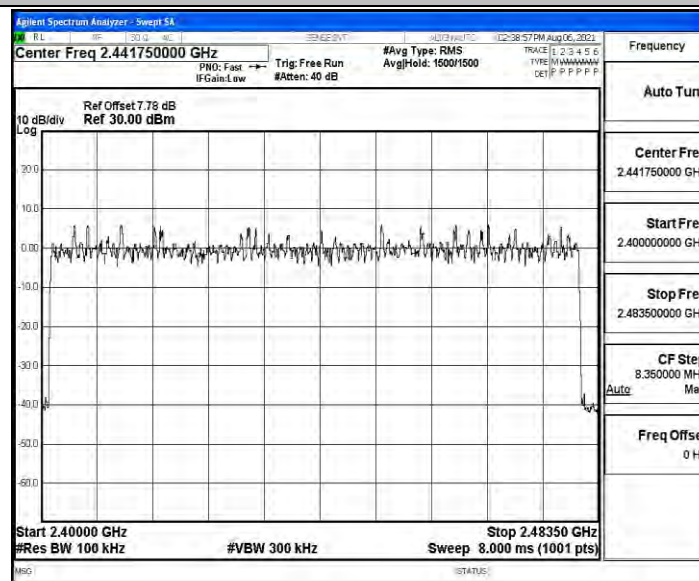


Test Graphs

DH5_Ant1_Hop

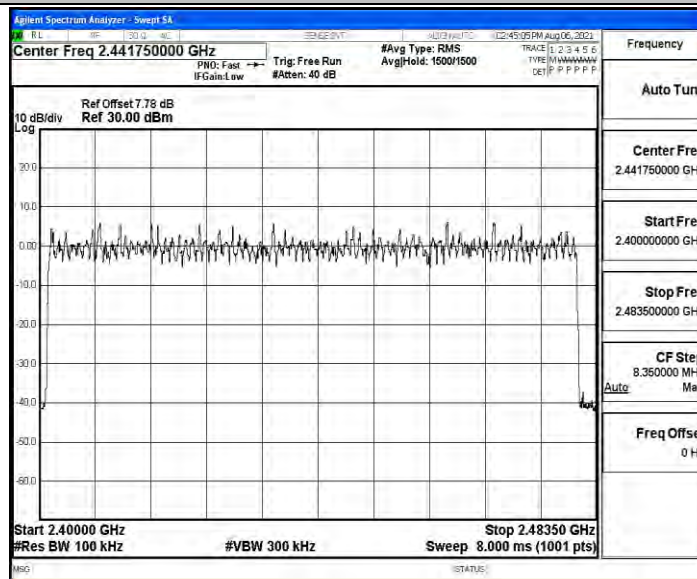


2DH5_Ant1_Hop





3DH5_Ant1_Hop





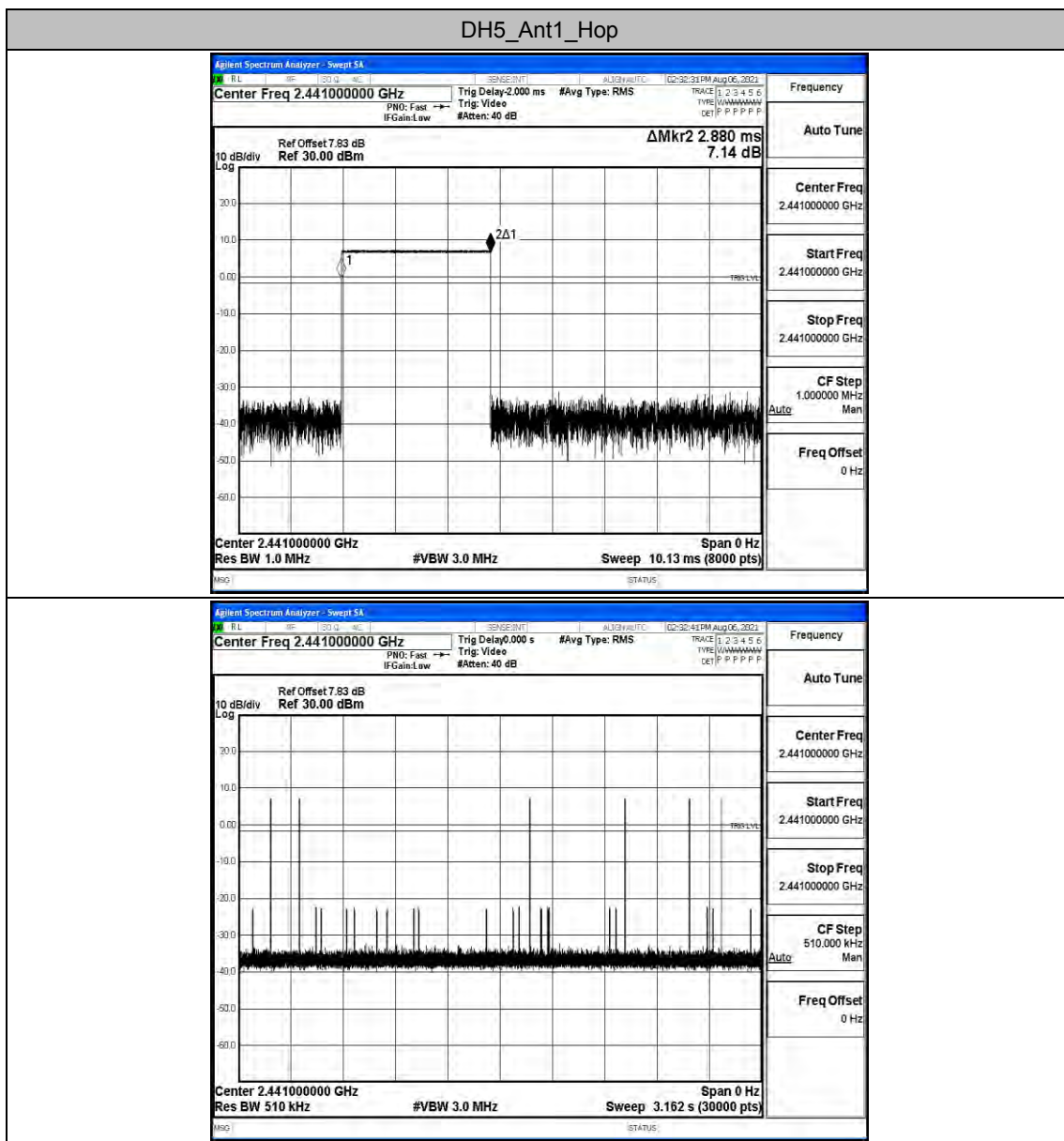
Appendix A.5.1: Time of occupancy

Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	70	0.202	≤0.4	PASS
2DH5	Ant1	Hop	2.88	90	0.26	≤0.4	PASS
3DH5	Ant1	Hop	2.89	130	0.375	≤0.4	PASS

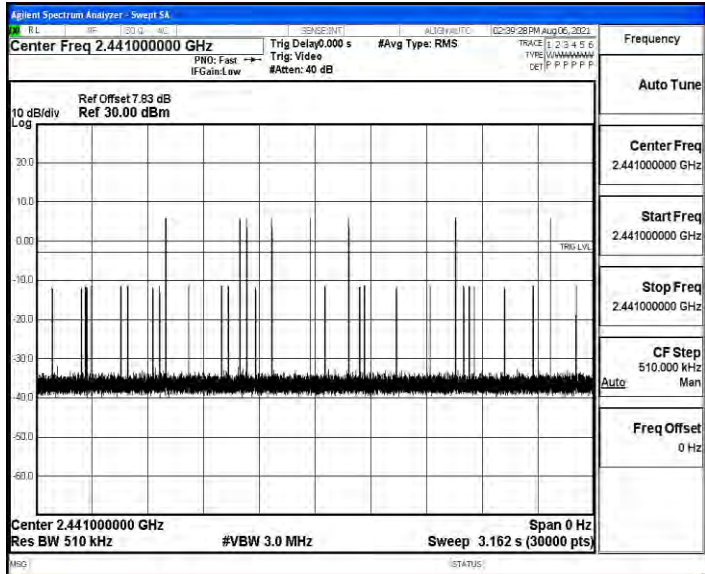
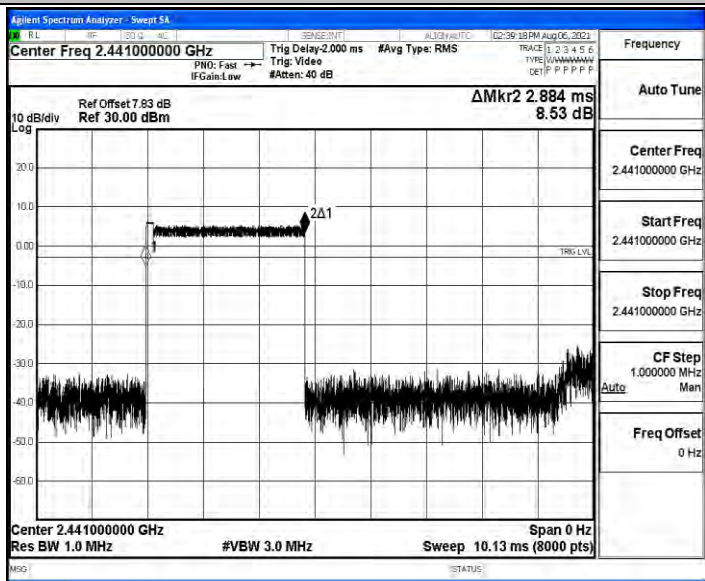


Test Graphs

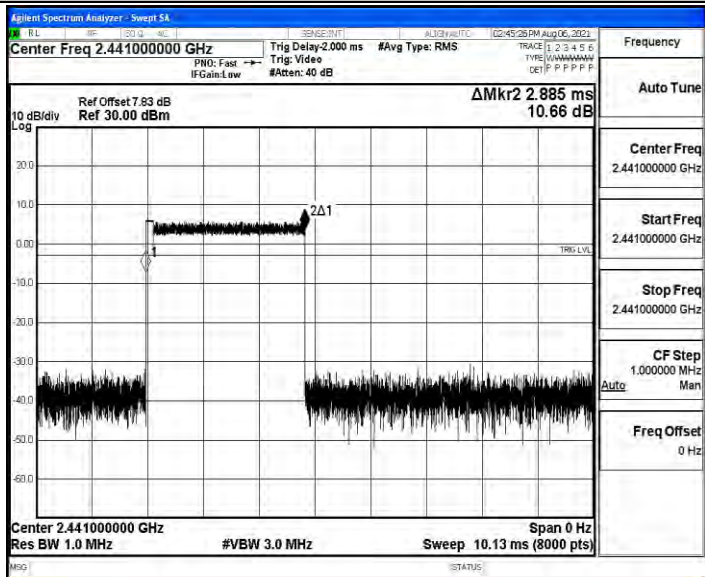


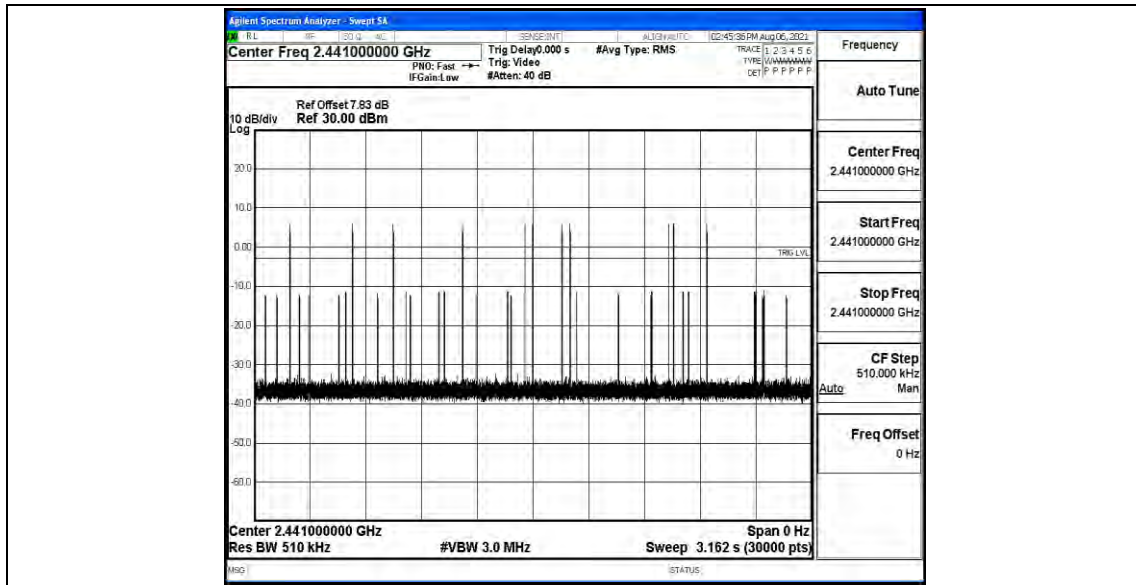


2DH5_Ant1_Hop



3DH5_Ant1_Hop







Appendix A.5.2: Duty Cycle

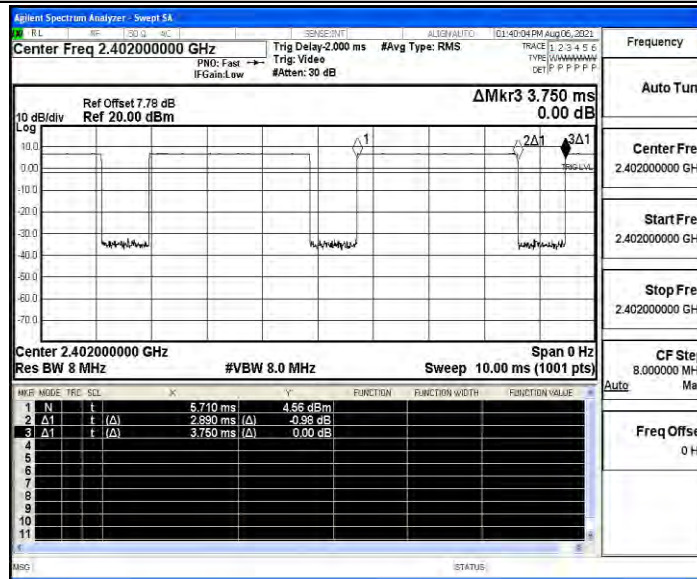
Test Result

TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
DH5	Ant1		2.89	3.75	0.7707	77.07	1.13	---	PASS
			2.88	3.75	0.7680	76.80	1.15	---	PASS
			2.88	3.75	0.7680	76.80	1.15	---	PASS
2DH5	Ant1		2.89	3.75	0.7707	77.07	1.13	---	PASS
			2.88	3.75	0.7680	76.80	1.15	---	PASS
			2.88	3.75	0.7680	76.80	1.15	---	PASS
3DH5	Ant1		2.89	3.75	0.7707	77.07	1.13	---	PASS
			2.89	3.75	0.7707	77.07	1.13	---	PASS
			2.89	3.75	0.7707	77.07	1.13	---	PASS

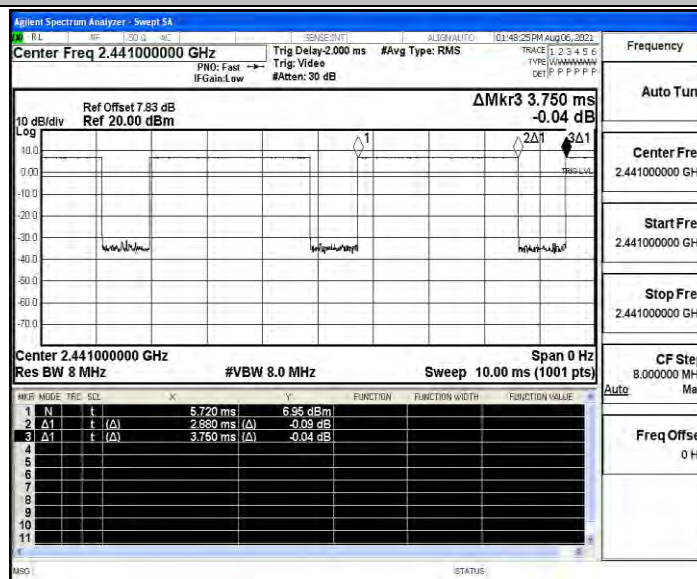


Test Graphs

DH5_Ant1_2402

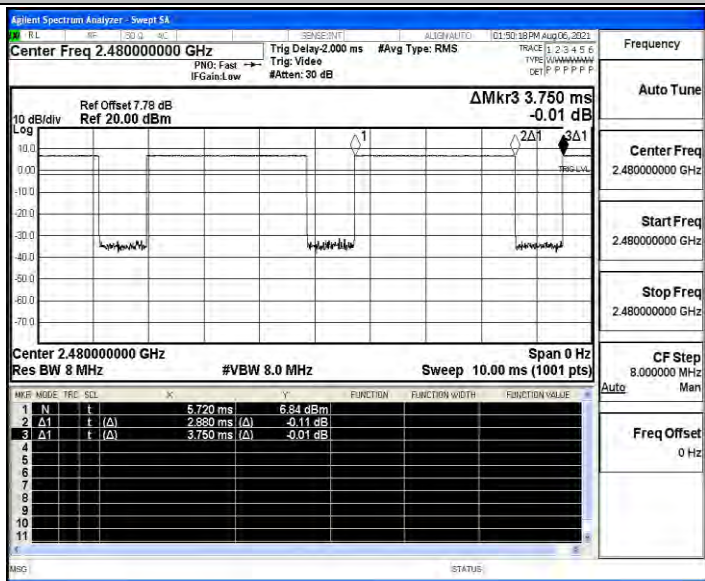


DH5_Ant1_2441

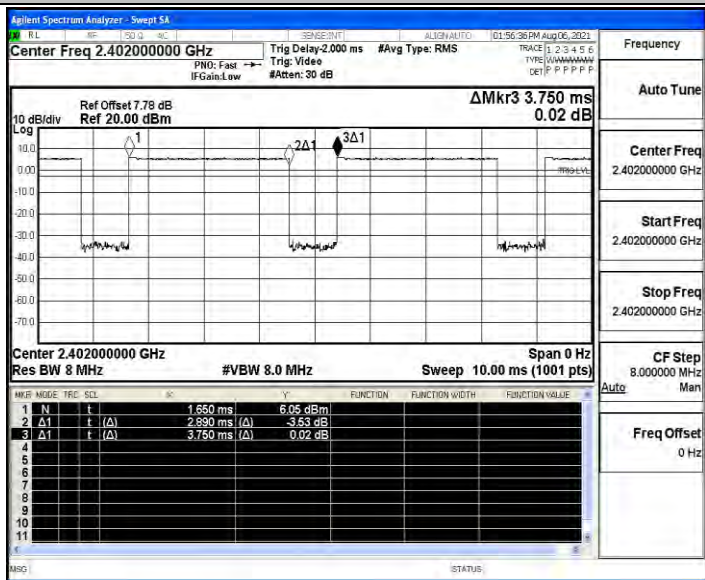




DH5_Ant1_2480

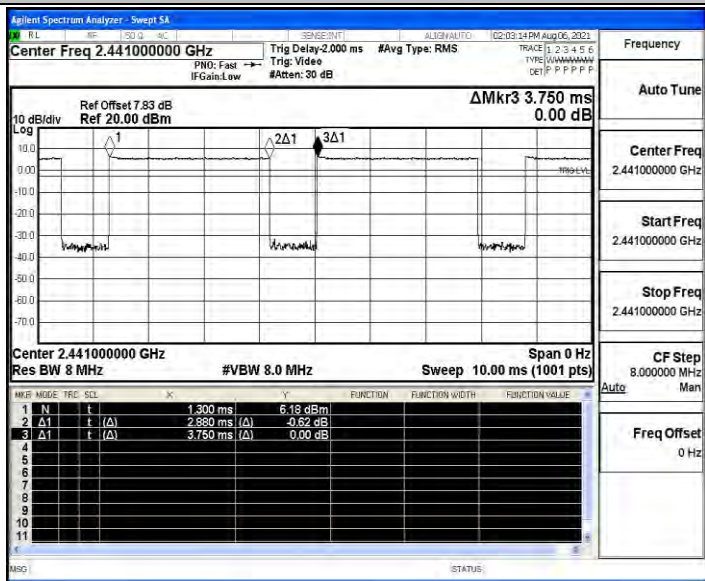


2DH5_Ant1_2402

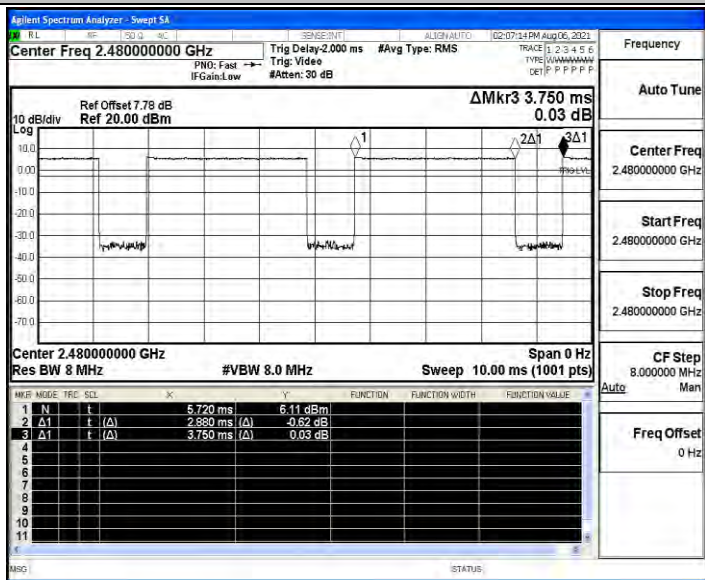




2DH5_Ant1_2441



2DH5_Ant1_2480





3DH5_Ant1_2402

Agilent Spectrum Analyzer - Swept SA

Center Freq **2.402000000 GHz** Trig Delay: 2.000 ms #Avg Type: RMS
 PNO: Fast IF Gain: Low Trig: Video #Atten: 30 dB

Ref Offset 7.78 dB **ΔMkr3 3.750 ms**
 Ref 20.00 dBm 0.11 dB

10 dB/div Log

Center **2.402000000 GHz** Span **0 Hz**
 Res BW **8 MHz** #VBW **8.0 MHz** Sweep **10.00 ms (1601 pts)**

MKR	MODE	FREQ	SCN	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N							
2	Δ1			1.170 ms	4.77 dBm			
3	Δ1			2.890 ms (Δ)	-1.18 dB			
4	Δ1			3.750 ms (Δ)	0.11 dB			
5								
6								
7								
8								
9								
10								
11								

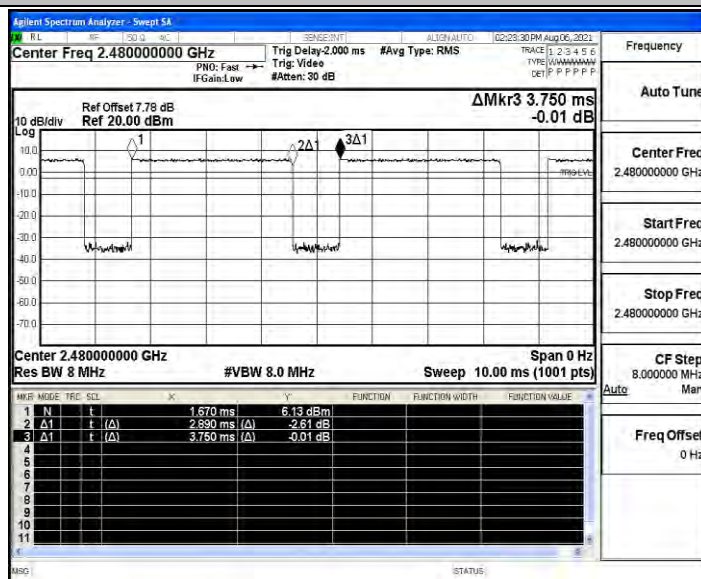
Frequency: **Auto Tune**
 Center Freq: **2.402000000 GHz**
 Start Freq: **2.402000000 GHz**
 Stop Freq: **2.402000000 GHz**
 CF Step: **8.000000 MHz**
 Man: **Auto**
 Freq Offset: **0 Hz**

STATUS

[illegible]



3DH5_Ant1_2480





Appendix A.6: Conducted Spurious Emission

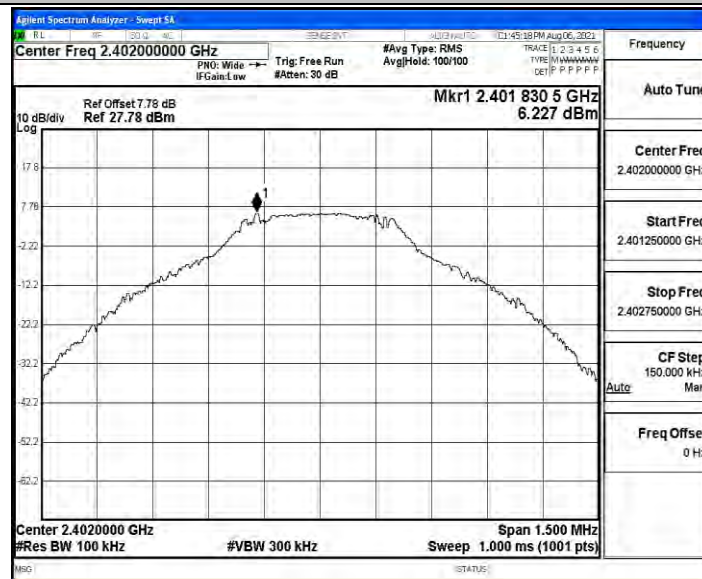
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	6.23	6.23	---	PASS
			30~1000	6.23	-61.79	≤ -13.77	PASS
			1000~26500	6.23	-46.86	≤ -13.77	PASS
		2441	Reference	6.17	6.17	---	PASS
			30~1000	6.17	-60.96	≤ -13.83	PASS
			1000~26500	6.17	-46.6	≤ -13.83	PASS
		2480	Reference	6.41	6.41	---	PASS
			30~1000	6.41	-60.74	≤ -13.59	PASS
			1000~26500	6.41	-46.41	≤ -13.59	PASS
2DH5	Ant1	2402	Reference	4.99	4.99	---	PASS
			30~1000	4.99	-61.81	≤ -15.02	PASS
			1000~26500	4.99	-46.6	≤ -15.02	PASS
		2441	Reference	5.52	5.52	---	PASS
			30~1000	5.52	-61.05	≤ -14.48	PASS
			1000~26500	5.52	-46.93	≤ -14.48	PASS
		2480	Reference	1.60	1.60	---	PASS
			30~1000	1.60	-60.9	≤ -18.4	PASS
			1000~26500	1.60	-47.03	≤ -18.4	PASS
3DH5	Ant1	2402	Reference	5.13	5.13	---	PASS
			30~1000	5.13	-60.13	≤ -14.87	PASS
			1000~26500	5.13	-46.62	≤ -14.87	PASS
		2441	Reference	5.68	5.68	---	PASS
			30~1000	5.68	-61.34	≤ -14.32	PASS
			1000~26500	5.68	-47.71	≤ -14.32	PASS
		2480	Reference	4.57	4.57	---	PASS
			30~1000	4.57	-61.46	≤ -15.43	PASS
			1000~26500	4.57	-47.84	≤ -15.43	PASS

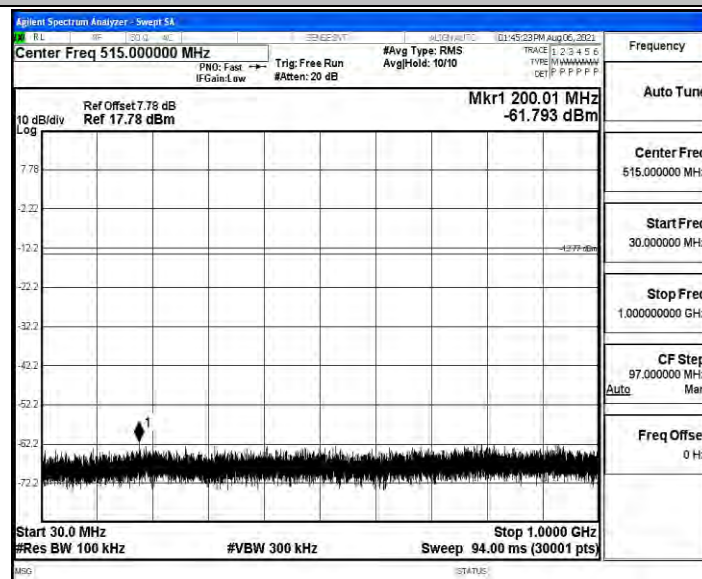


Test Graphs

DH5_Ant1_2402_0~Reference

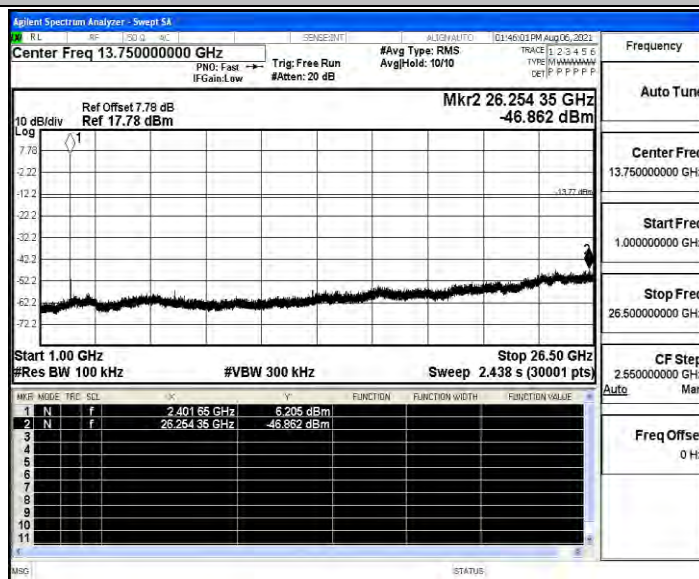


DH5_Ant1_2402_30~1000

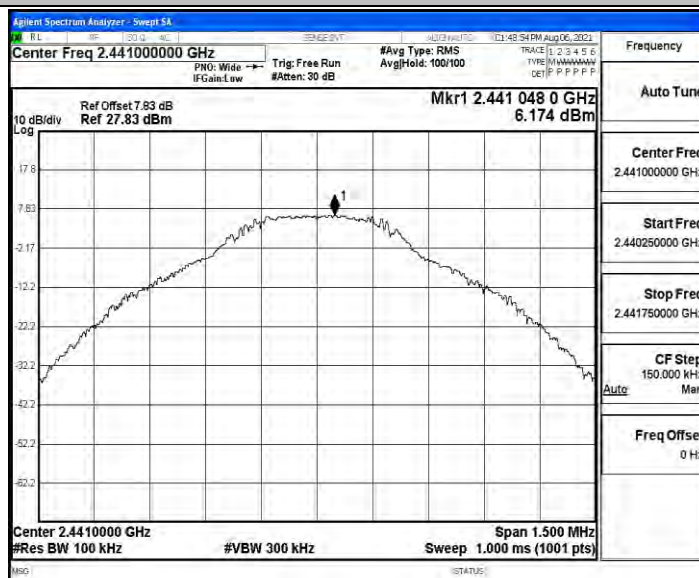




DH5_Ant1_2402_1000~26500

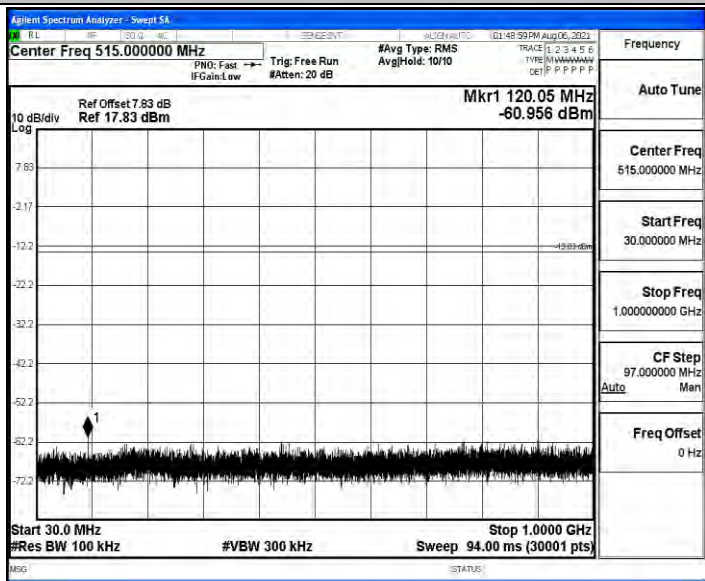


DH5_Ant1_2441_0~Reference

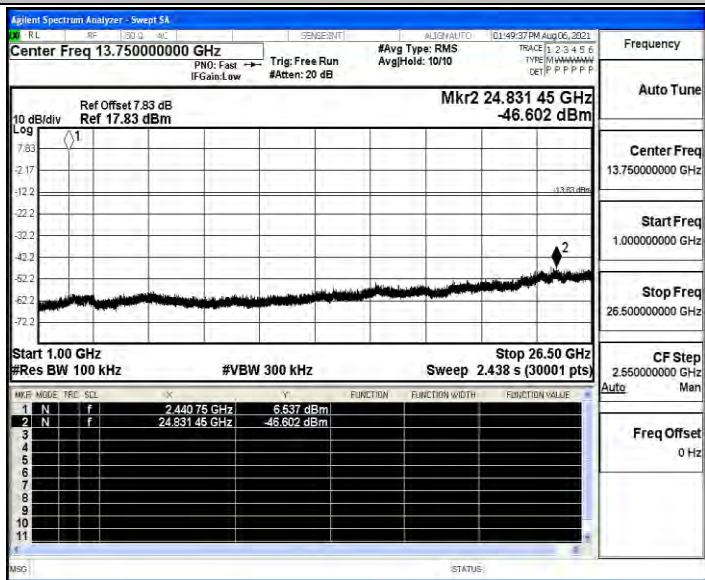




DH5_Ant1_2441_30~1000

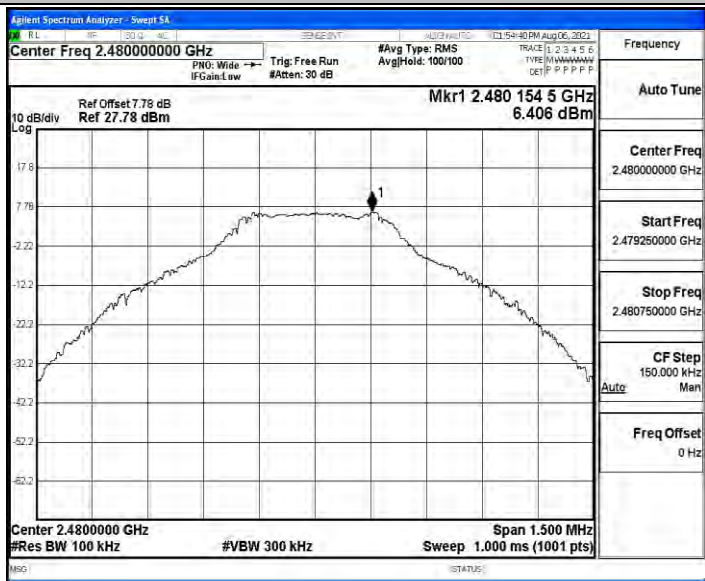


DH5_Ant1_2441_1000~26500

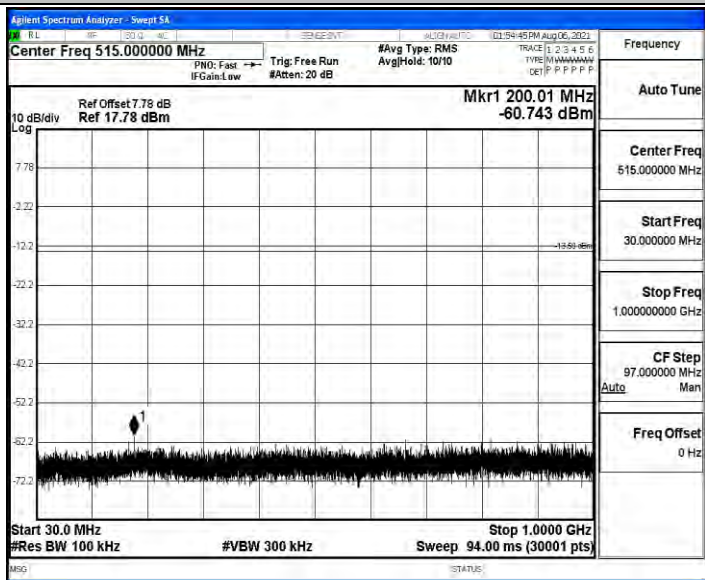




DH5_Ant1_2480_0~Reference

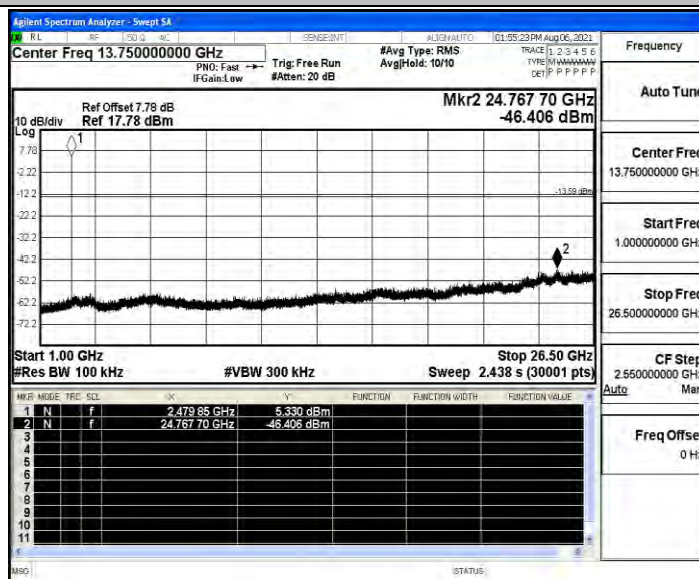


DH5_Ant1_2480_30~1000

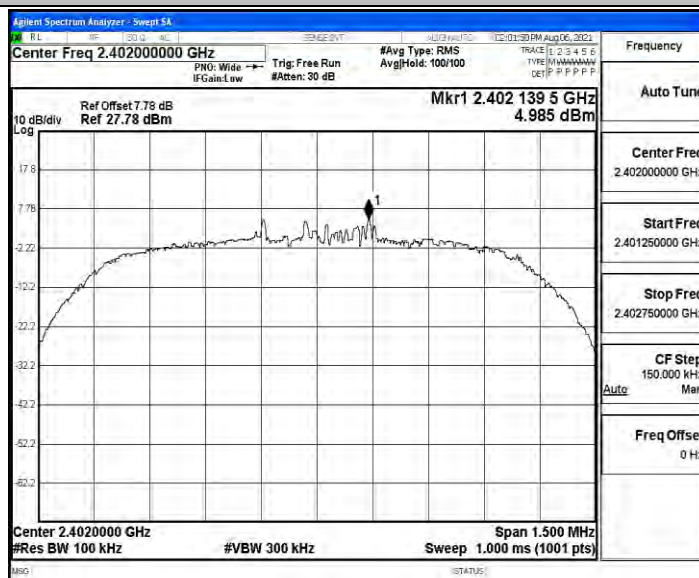




DH5_Ant1_2480_1000~26500

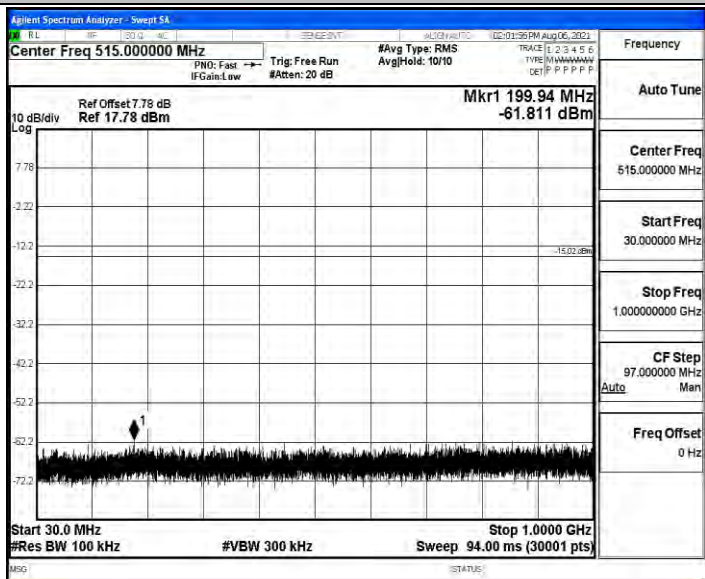


2DH5_Ant1_2402_0~Reference

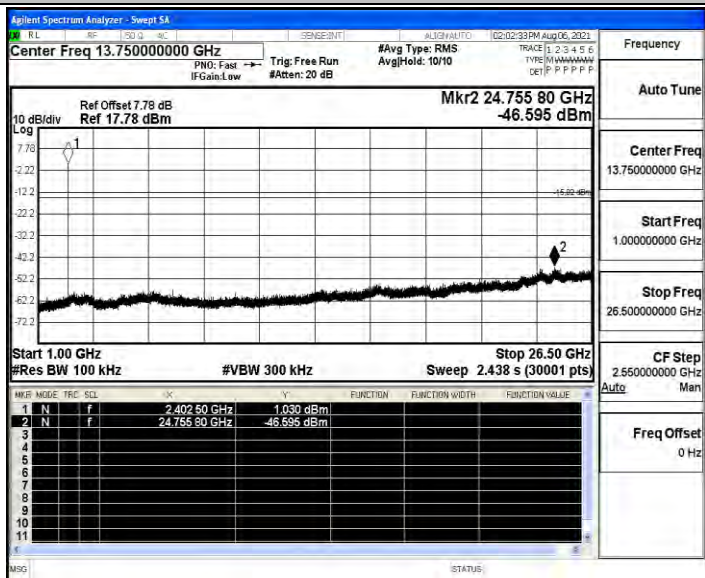




2DH5_Ant1_2402_30~1000

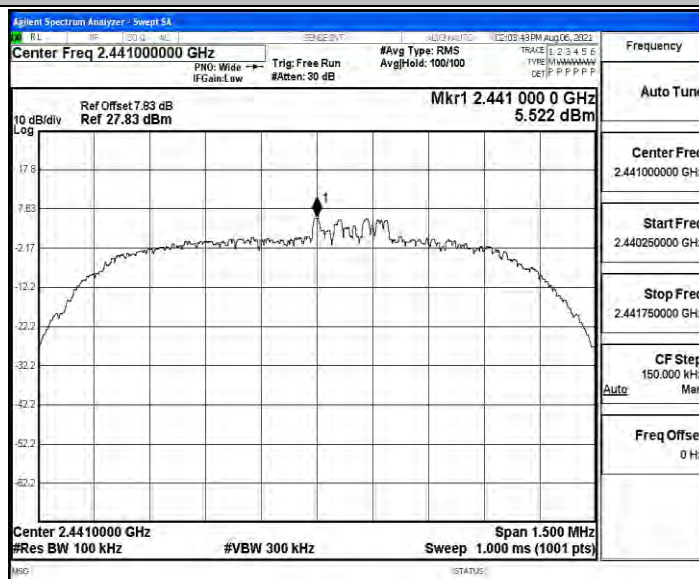


2DH5_Ant1_2402_1000~26500

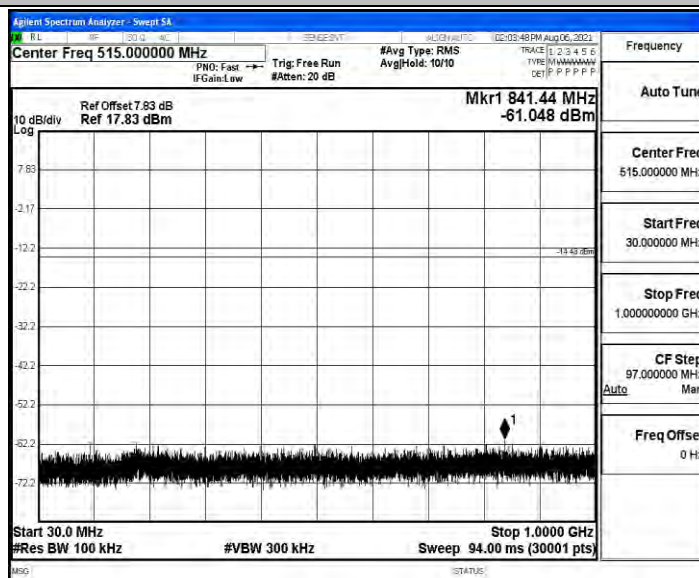




2DH5_Ant1_2441_0~Reference

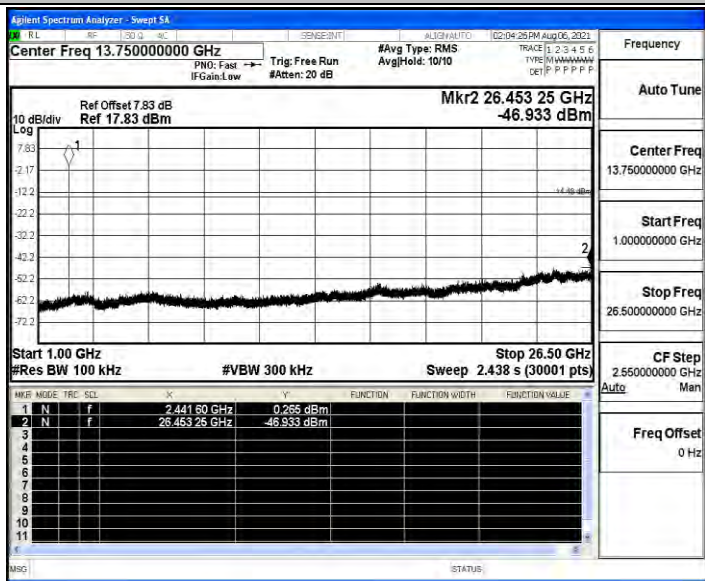


2DH5_Ant1_2441_30~1000

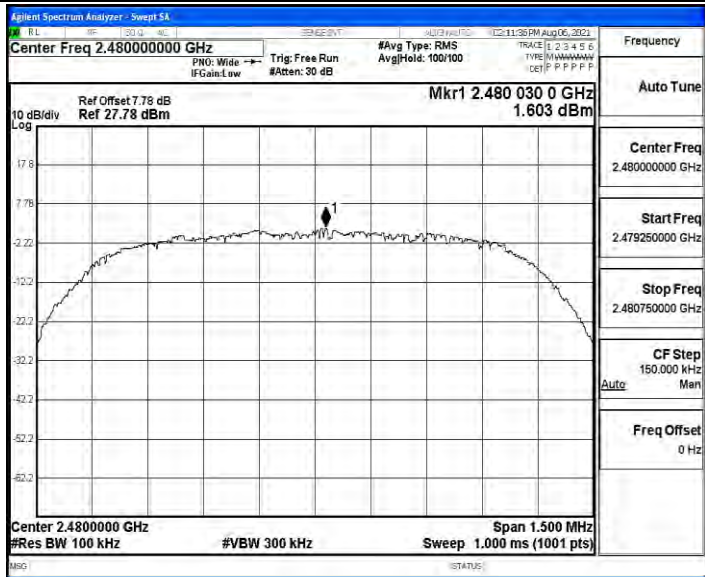




2DH5_Ant1_2441_1000~26500

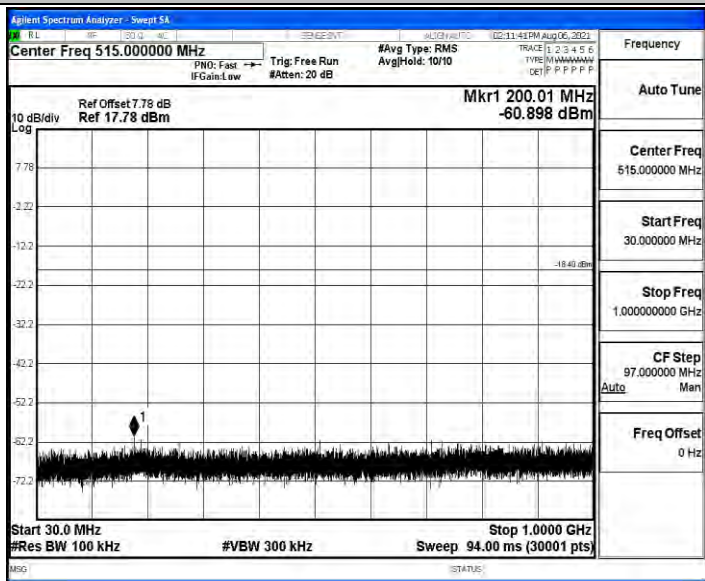


2DH5_Ant1_2480_0~Reference

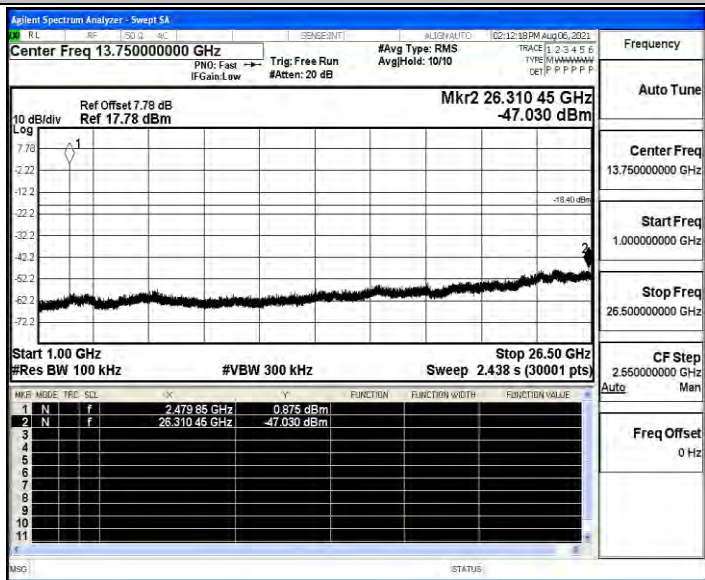




2DH5_Ant1_2480_30~1000

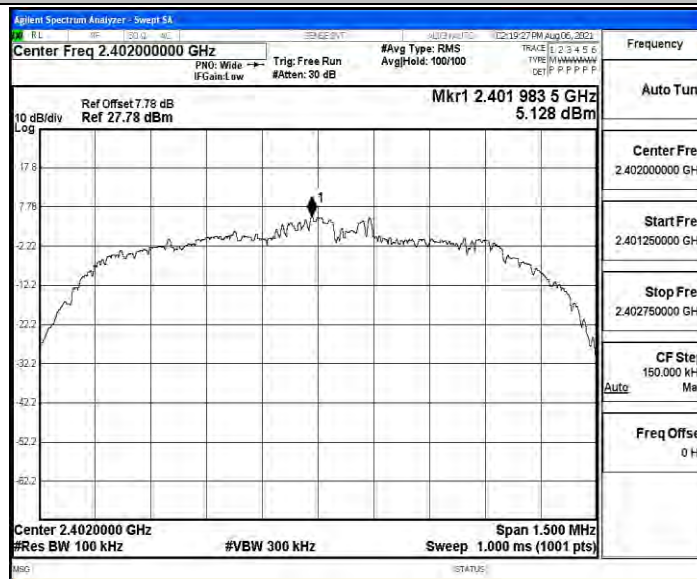


2DH5_Ant1_2480_1000~26500

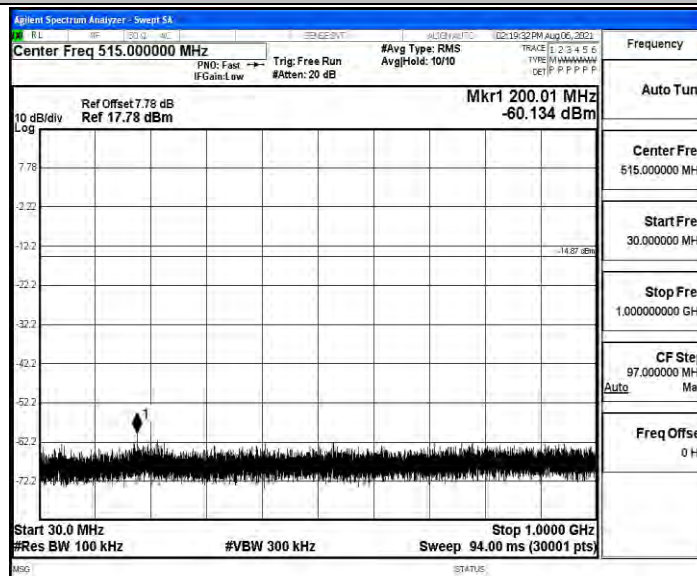




3DH5_Ant1_2402_0~Reference

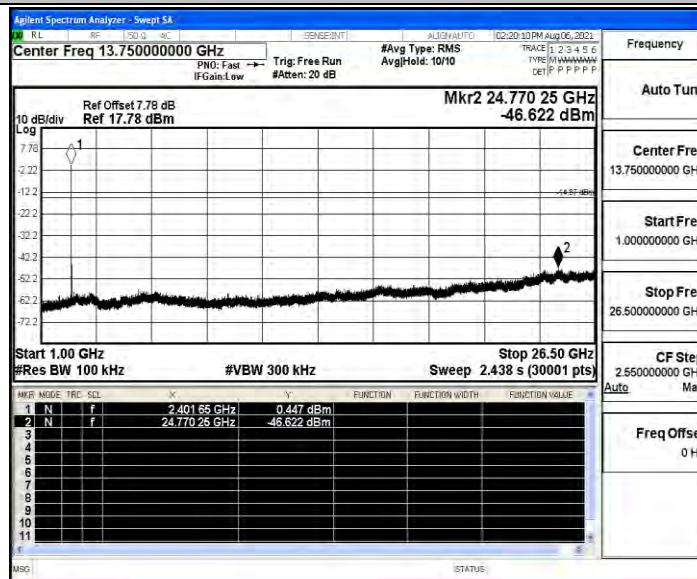


3DH5_Ant1_2402_30~1000

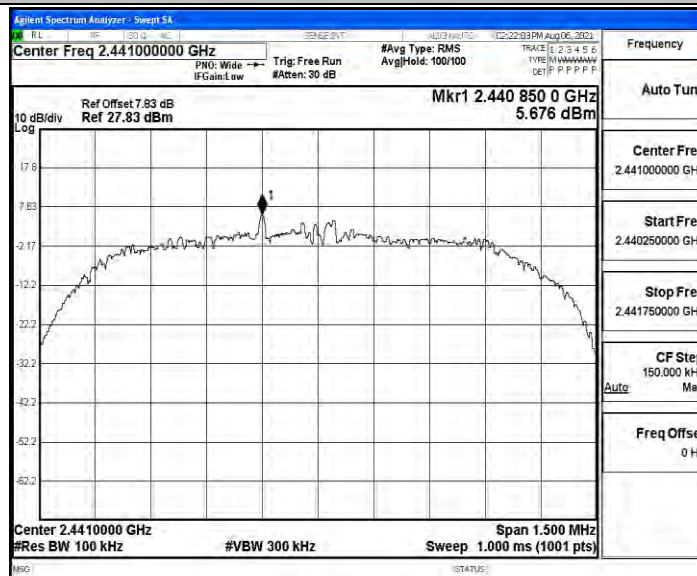




3DH5_Ant1_2402_1000~26500

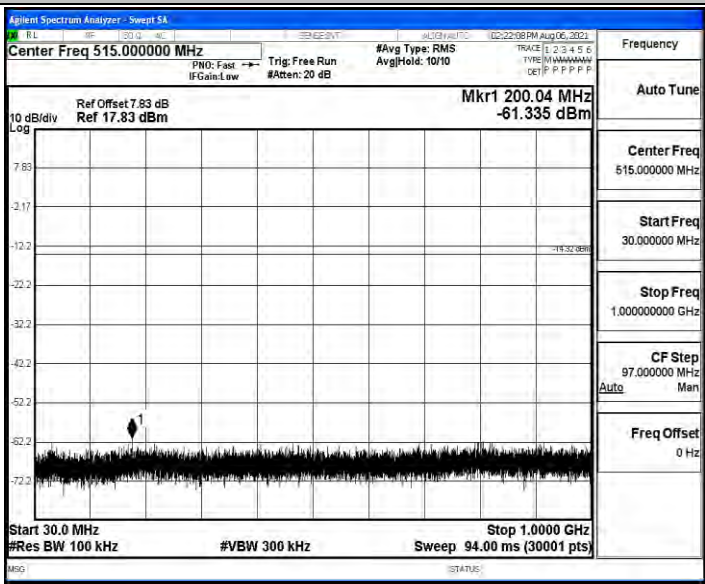


3DH5_Ant1_2441_0~Reference

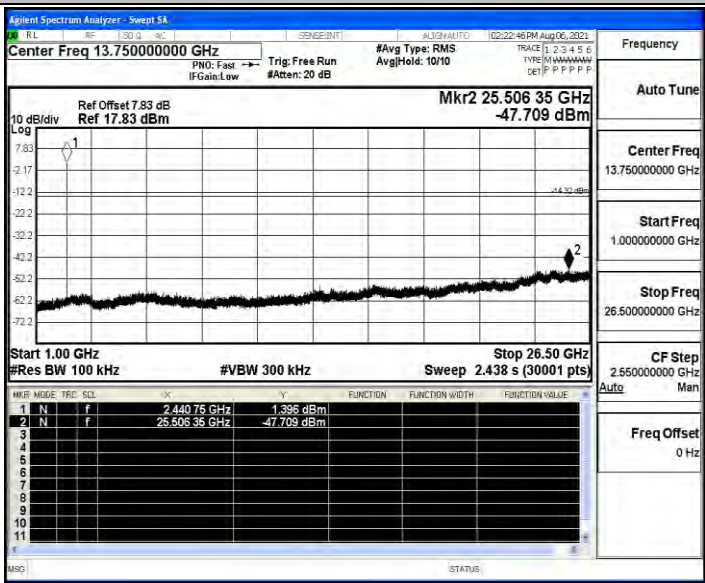




3DH5_Ant1_2441_30~1000

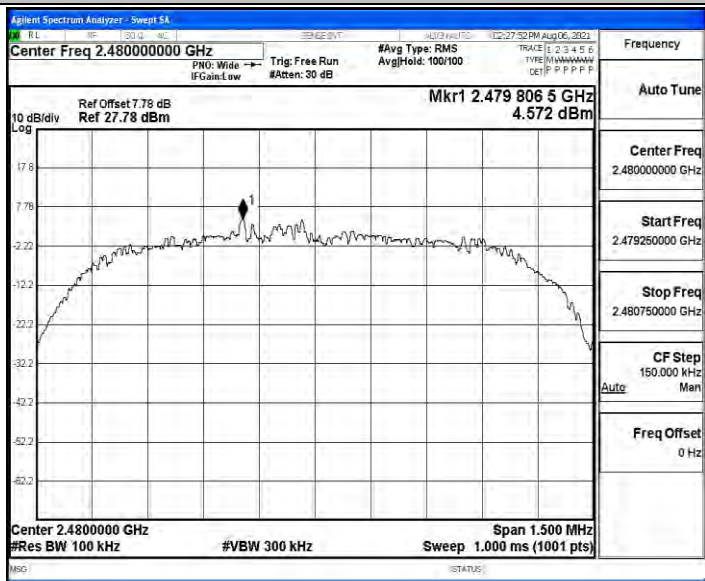


3DH5_Ant1_2441_1000~26500

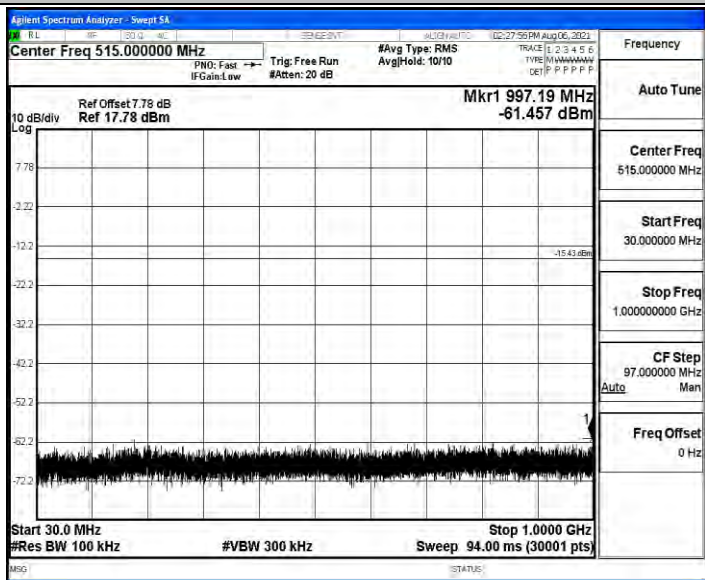


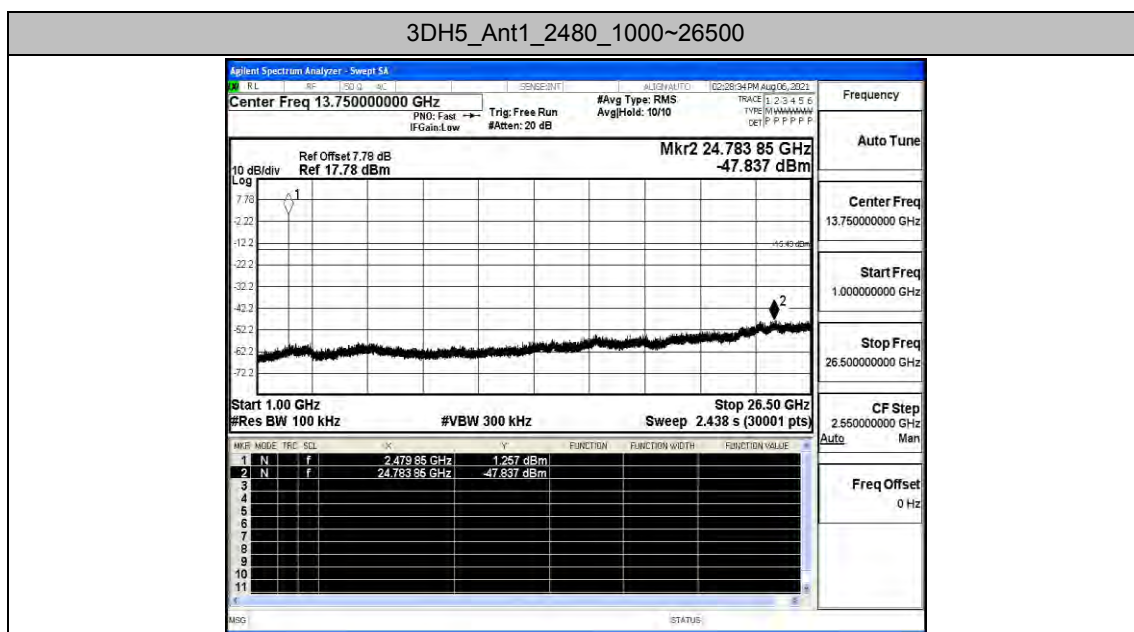


3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000







Appendix A.7: Band edge measurements

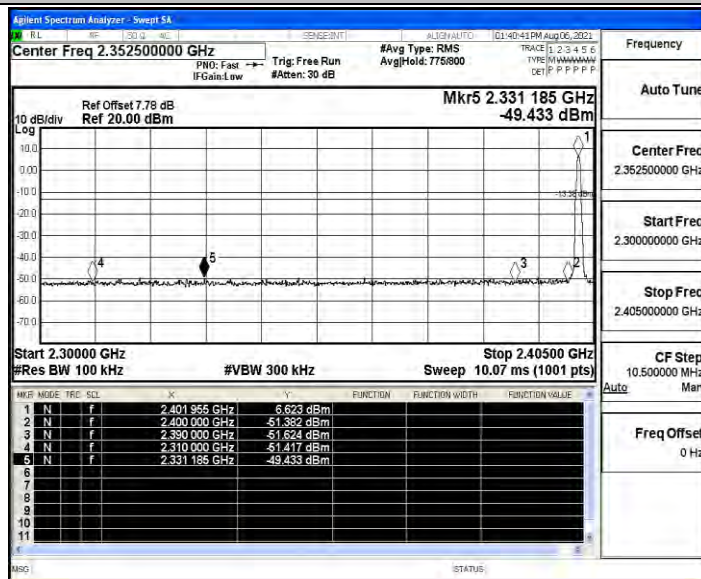
Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	6.62	-49.43	≤ -13.38	PASS
		High	2480	6.64	-48.64	≤ -13.37	PASS
		Low	Hop_2402	6.48	-49.63	≤ -13.52	PASS
		High	Hop_2480	6.39	-48.63	≤ -13.61	PASS
2DH5	Ant1	Low	2402	5.65	-48.81	≤ -14.35	PASS
		High	2480	5.95	-48.78	≤ -14.05	PASS
		Low	Hop_2402	1.06	-48.74	≤ -18.94	PASS
		High	Hop_2480	5.03	-47.77	≤ -14.97	PASS
3DH5	Ant1	Low	2402	5.70	-47.88	≤ -14.3	PASS
		High	2480	5.87	-48.65	≤ -14.13	PASS
		Low	Hop_2402	1.53	-49.33	≤ -18.47	PASS
		High	Hop_2480	5.30	-48.38	≤ -14.7	PASS

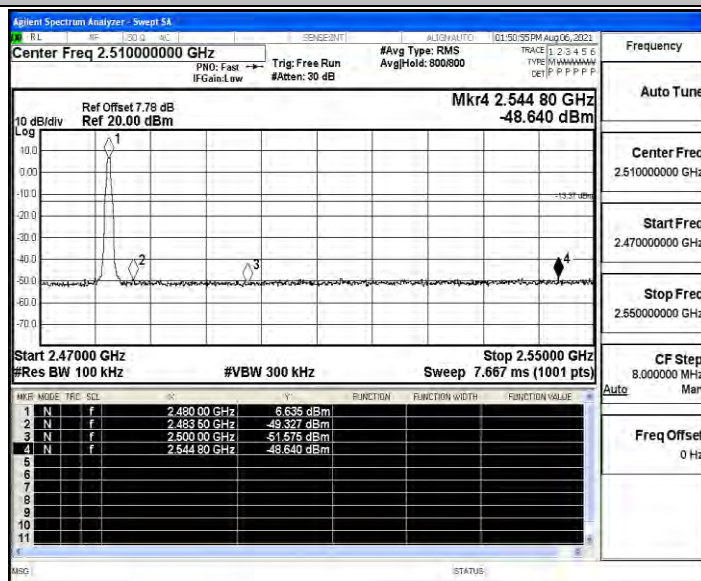


Test Graphs

DH5_Ant1_Low_2402

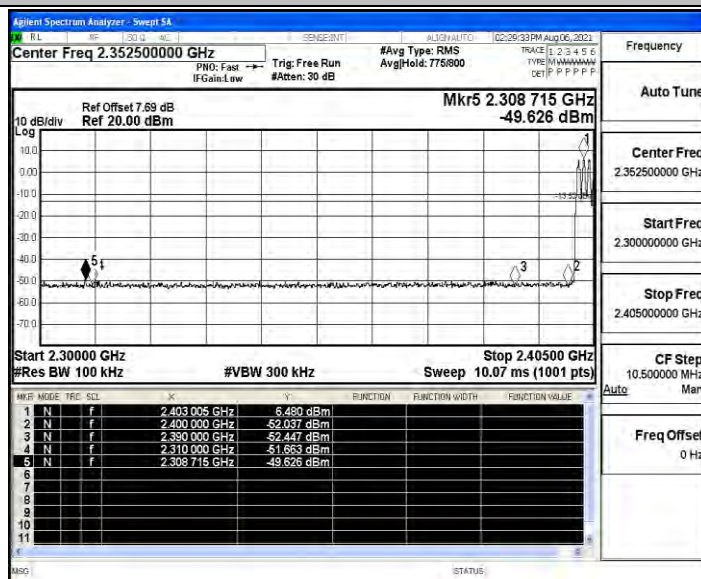


DH5_Ant1_High_2480

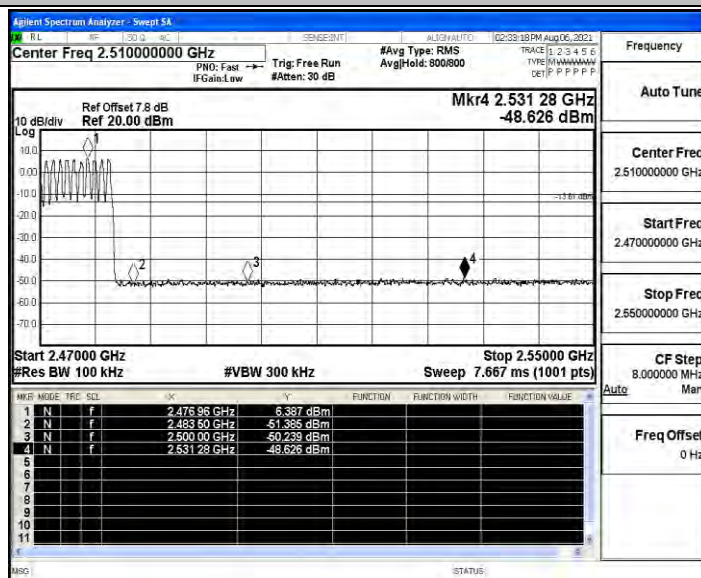




DH5_Ant1_Low_Hop_2402

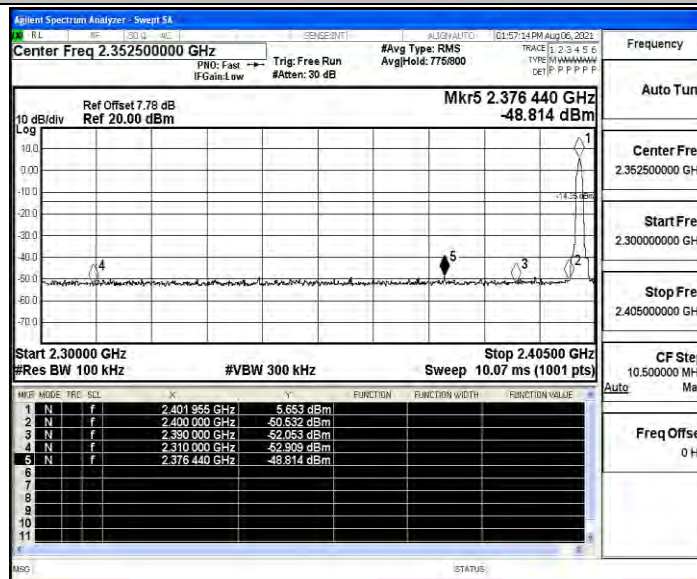


DH5_Ant1_High_Hop_2480

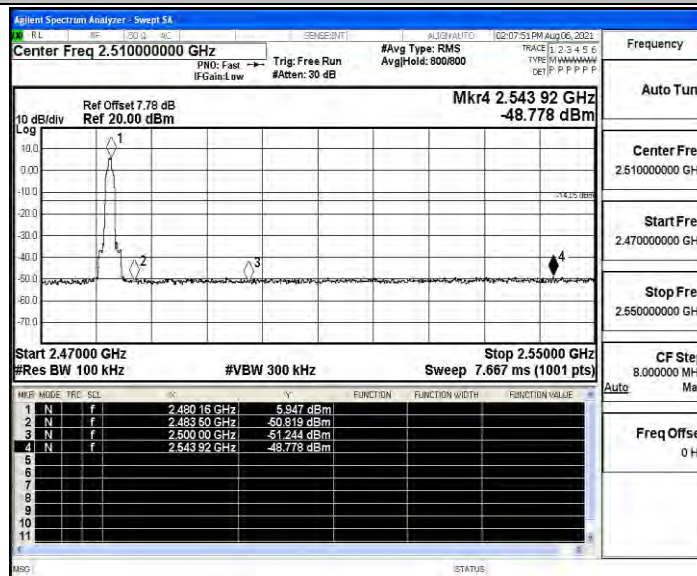




2DH5_Ant1_Low_2402

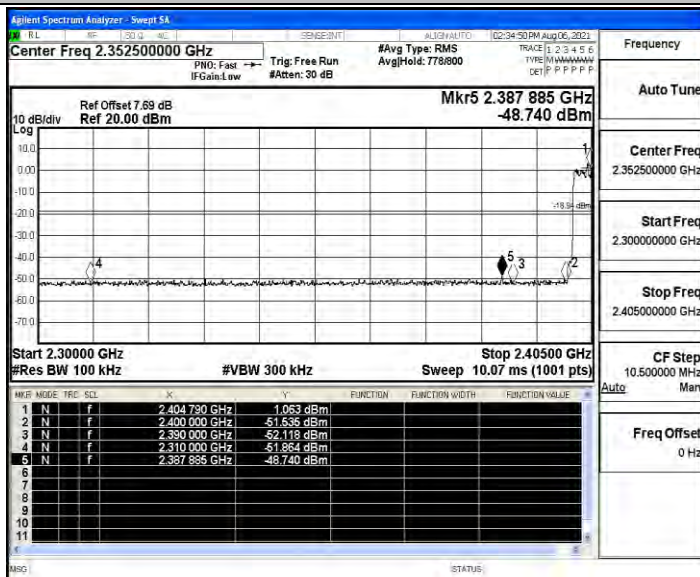


2DH5_Ant1_High_2480

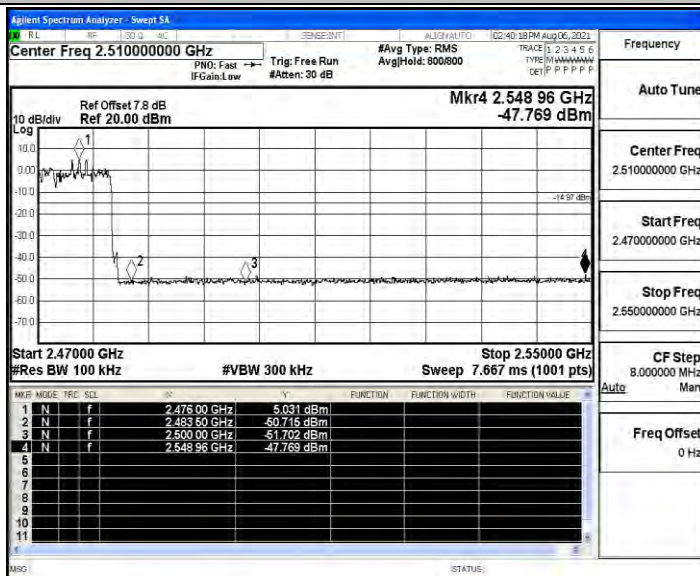




2DH5_Ant1_Low_Hop_2402

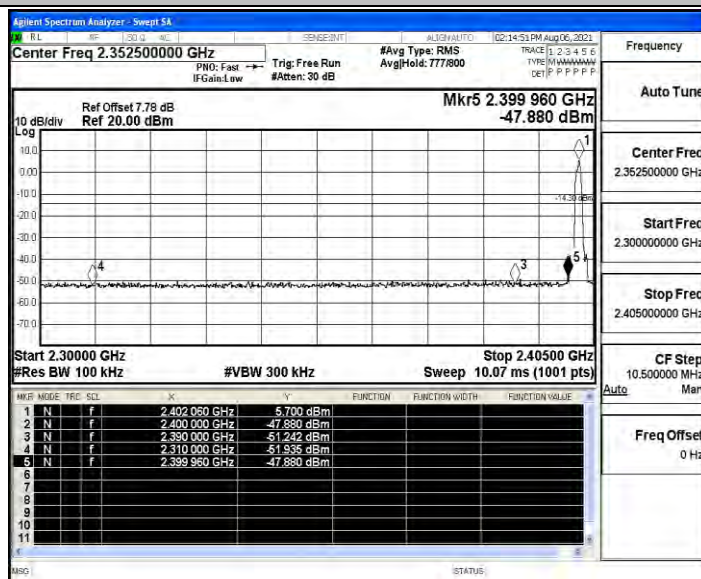


2DH5_Ant1_High_Hop_2480

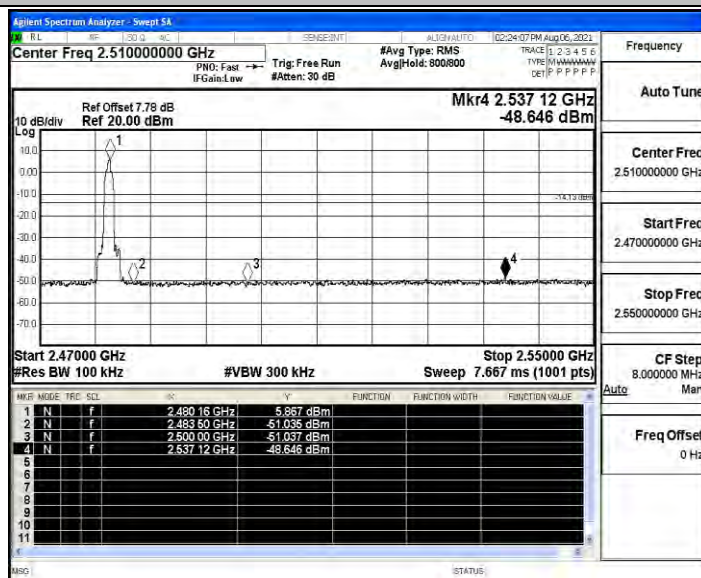




3DH5_Ant1_Low_2402

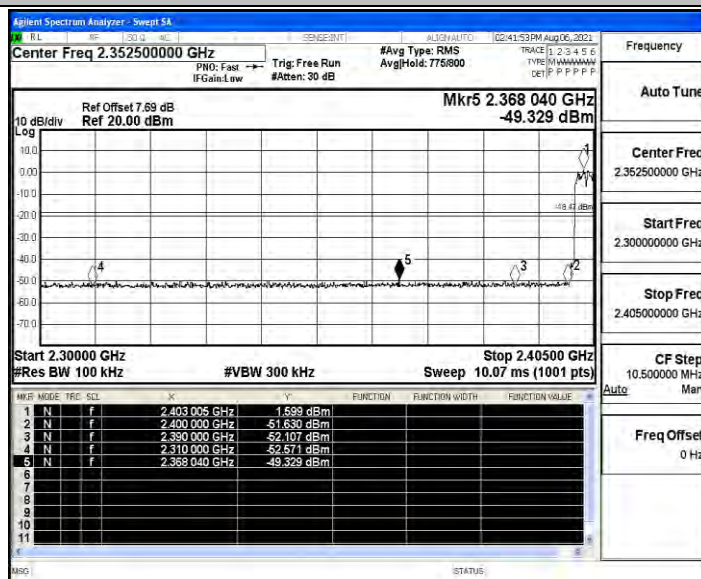


3DH5_Ant1_High_2480

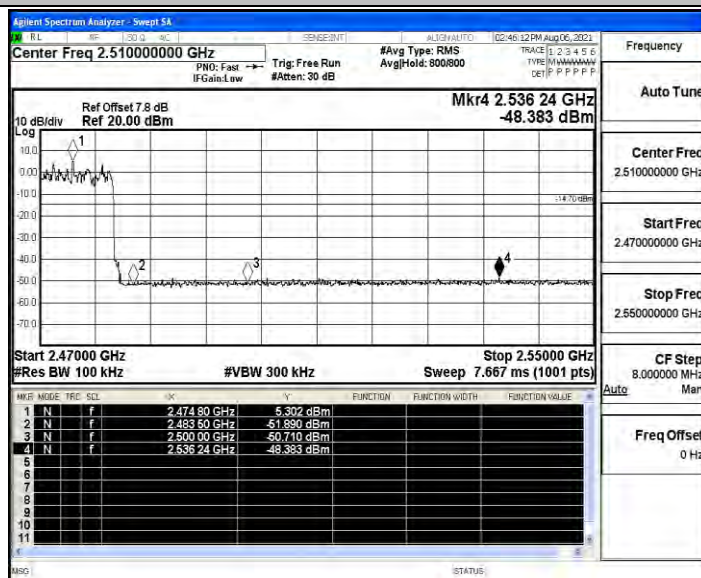




3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480





Appendix A.8: Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-48.86	≤-41.20	46.34	≤54	PASS
				AV	2388.620	-48.39	≤-41.20	46.81	≤54	PASS
				AV	2390.000	-48.48	≤-41.20	46.72	≤54	PASS
				Peak	2310.000	-39.84	≤-21.20	55.36	≤74	PASS
				Peak	2365.625	-38.42	≤-21.20	56.78	≤74	PASS
				Peak	2390.000	-40.45	≤-21.20	54.75	≤74	PASS
		High	2480	AV	2483.500	-47.02	≤-41.20	48.18	≤54	PASS
				AV	2483.520	-47.02	≤-41.20	48.18	≤54	PASS
				AV	2500.000	-47.91	≤-41.20	47.29	≤54	PASS
				Peak	2483.500	-40.2	≤-21.20	55.00	≤74	PASS
				Peak	2497.040	-37.53	≤-21.20	57.67	≤74	PASS
				Peak	2500.000	-39.23	≤-21.20	55.97	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-40.82	≤-21.20	54.38	≤74	PASS
				Peak	2374.970	-38.17	≤-21.20	57.03	≤74	PASS
				Peak	2390.000	-39.64	≤-21.20	55.56	≤74	PASS
		High	Hop_2480	Peak	2483.500	-39.83	≤-21.20	55.37	≤74	PASS
				Peak	2496.960	-37.93	≤-21.20	57.27	≤74	PASS
				Peak	2500.000	-38.77	≤-21.20	56.43	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-48.9	≤-41.20	46.30	≤54	PASS
				AV	2385.680	-48.34	≤-41.20	46.86	≤54	PASS
				AV	2390.000	-48.44	≤-41.20	46.76	≤54	PASS
				Peak	2310.000	-41.52	≤-21.20	53.68	≤74	PASS
				Peak	2332.760	-37.87	≤-21.20	57.33	≤74	PASS
				Peak	2390.000	-39.69	≤-21.20	55.51	≤74	PASS
		High	2480	AV	2483.500	-46.94	≤-41.20	48.26	≤54	PASS
				AV	2483.520	-46.94	≤-41.20	48.26	≤54	PASS
				AV	2500.000	-47.93	≤-41.20	47.27	≤54	PASS
				Peak	2483.500	-39.83	≤-21.20	55.37	≤74	PASS
				Peak	2494.800	-37.95	≤-21.20	57.25	≤74	PASS
				Peak	2500.000	-39.39	≤-21.20	55.81	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-40.57	≤-21.20	54.63	≤74	PASS
				Peak	2387.780	-38.45	≤-21.20	56.75	≤74	PASS
				Peak	2390.000	-39.81	≤-21.20	55.39	≤74	PASS
		High	Hop_2480	Peak	2483.500	-38.7	≤-21.20	56.50	≤74	PASS
				Peak	2497.200	-37.52	≤-21.20	57.68	≤74	PASS
				Peak	2500.000	-38.29	≤-21.20	56.91	≤74	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-48.9	≤-41.20	46.30	≤54	PASS



				AV	2388.515	-48.37	≤ -41.20	46.83	≤ 54	PASS
				AV	2390.000	-48.54	≤ -41.20	46.66	≤ 54	PASS
				Peak	2310.000	-39.07	≤ -21.20	56.13	≤ 74	PASS
				Peak	2365.310	-37.85	≤ -21.20	57.35	≤ 74	PASS
				Peak	2390.000	-41.34	≤ -21.20	53.86	≤ 74	PASS
		High	2480	AV	2483.500	-46.88	≤ -41.20	48.32	≤ 54	PASS
				AV	2483.520	-46.88	≤ -41.20	48.32	≤ 54	PASS
				AV	2500.000	-47.94	≤ -41.20	47.26	≤ 54	PASS
				Peak	2483.500	-39.99	≤ -21.20	55.21	≤ 74	PASS
				Peak	2499.520	-37.37	≤ -21.20	57.83	≤ 74	PASS
				Peak	2500.000	-38.9	≤ -21.20	56.30	≤ 74	PASS
		Low	Hop_2402	Peak	2310.000	-40.91	≤ -21.20	54.29	≤ 74	PASS
				Peak	2374.025	-38.02	≤ -21.20	57.18	≤ 74	PASS
				Peak	2390.000	-39.61	≤ -21.20	55.59	≤ 74	PASS
		High	Hop_2480	Peak	2483.500	-39.89	≤ -21.20	55.31	≤ 74	PASS
				Peak	2495.680	-37.61	≤ -21.20	57.59	≤ 74	PASS
				Peak	2500.000	-38.65	≤ -21.20	56.55	≤ 74	PASS

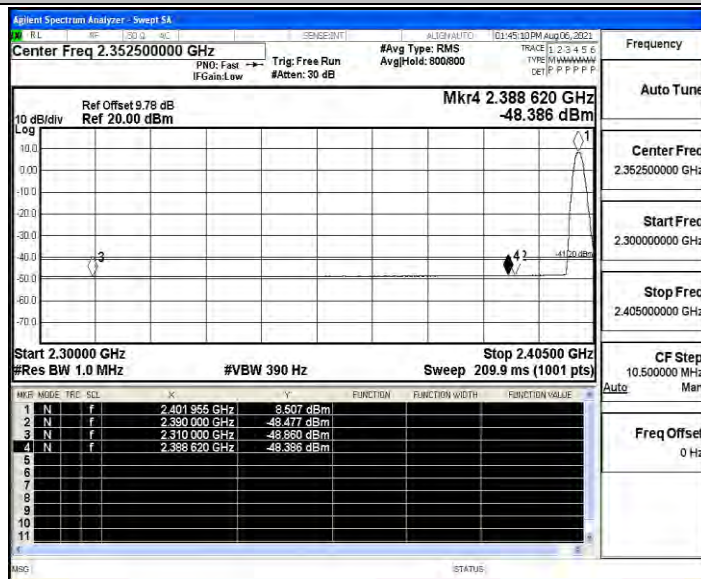
Note:

1. The Antenna Gain is compensated in the graph.
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.

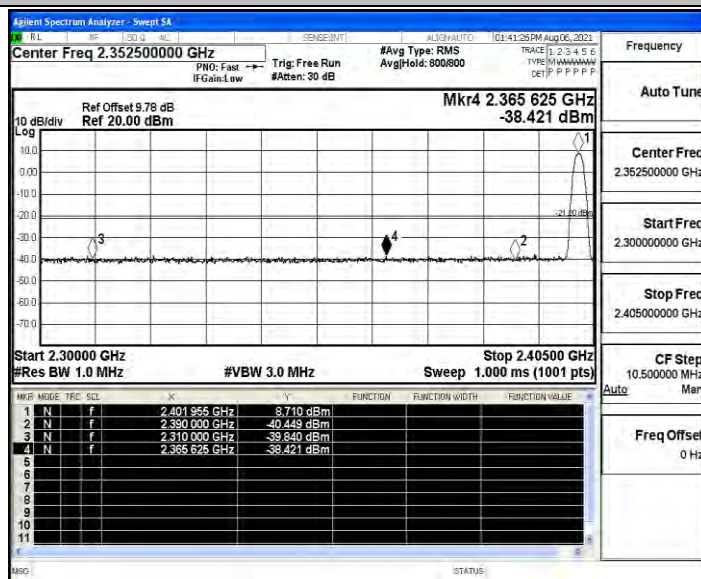


Test Graphs

DH5_Ant1_Low_2402_AV

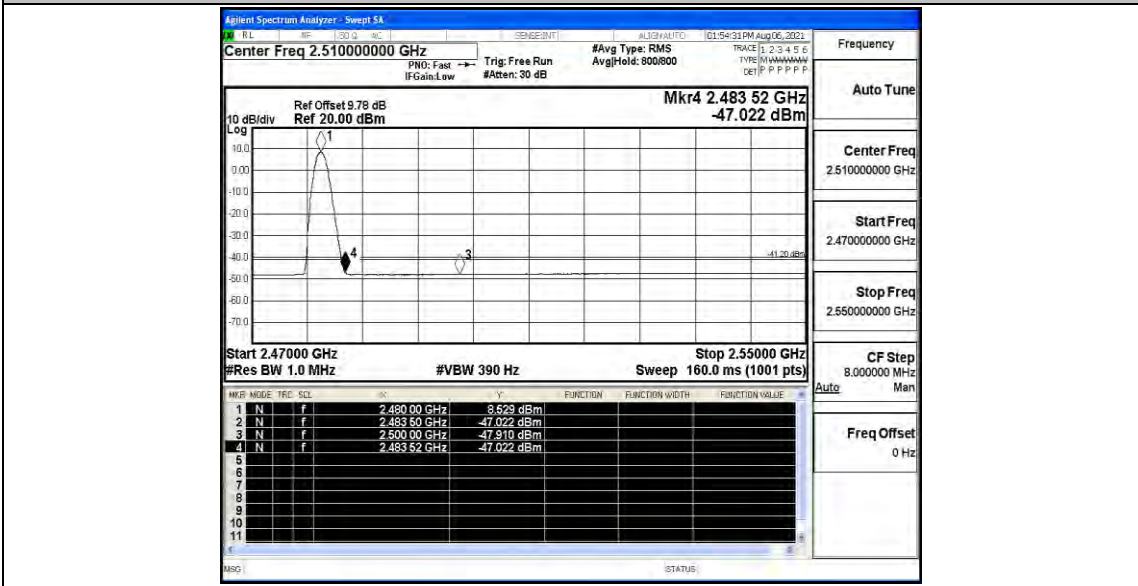


DH5_Ant1_Low_2402_Peak

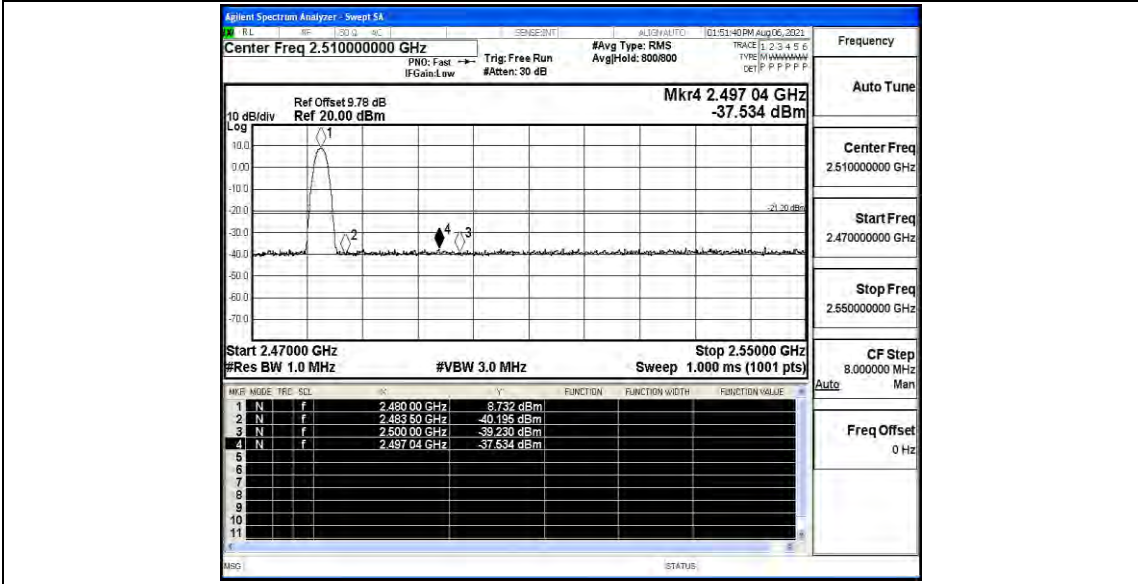




DH5_Ant1_High_2480_AV

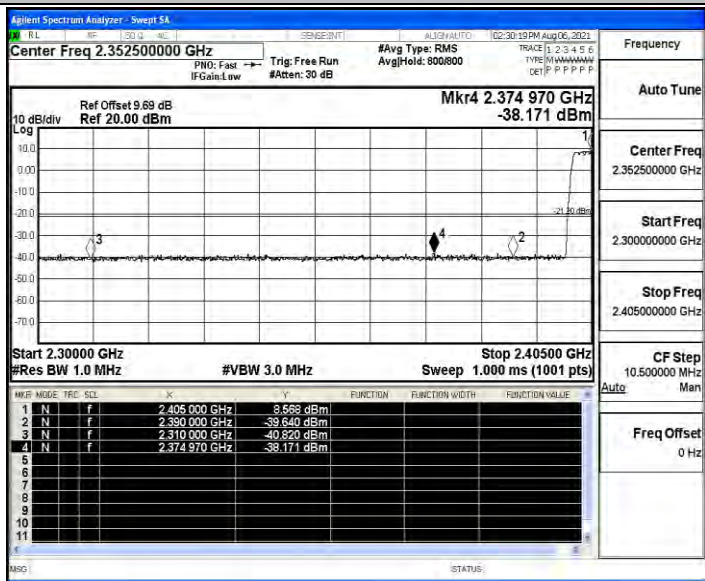


DH5_Ant1_High_2480_Peak

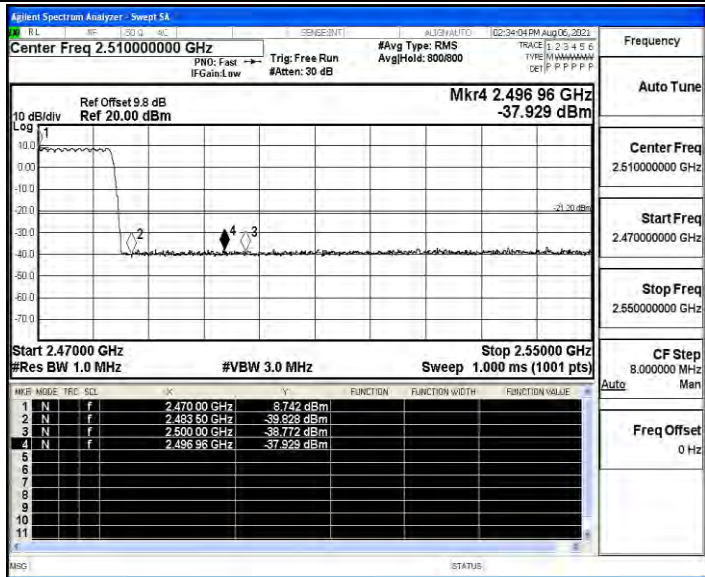




DH5_Ant1_Low_Hop_2402_Peak

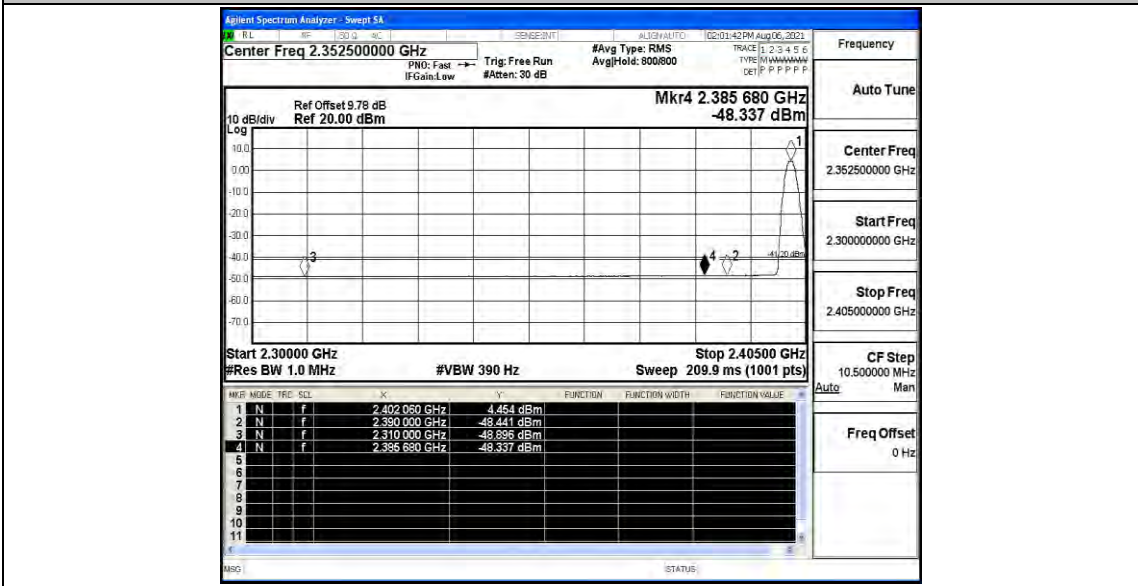


DH5_Ant1_High_Hop_2480_Peak

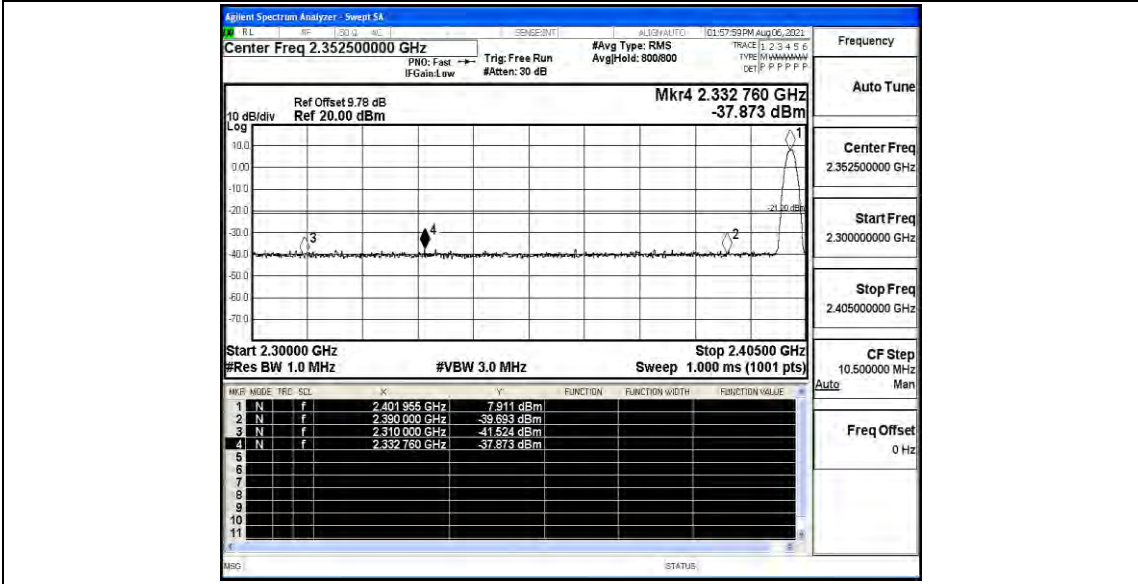




2DH5_Ant1_Low_2402_AV

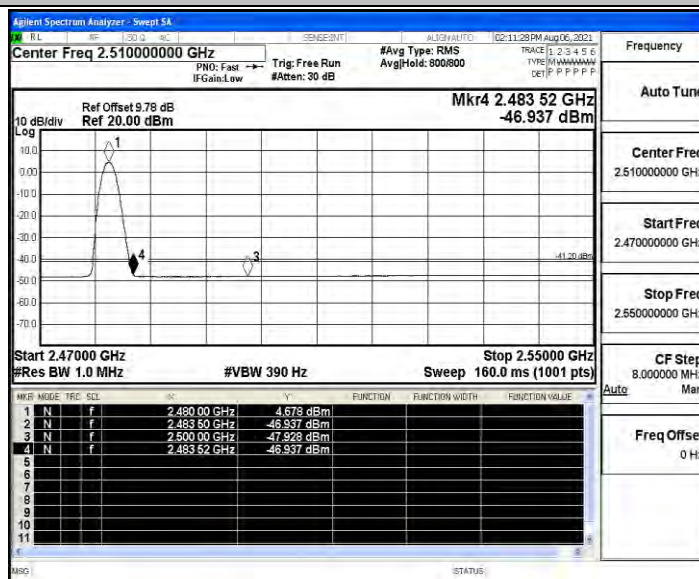


2DH5_Ant1_Low_2402_Peak

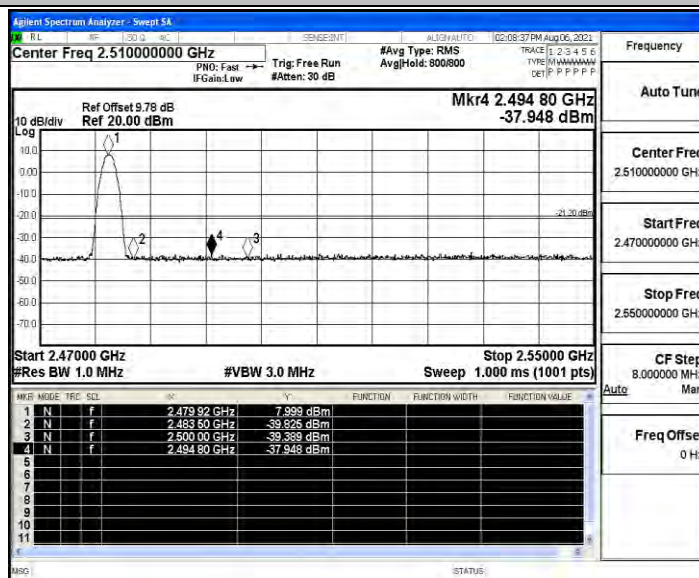




2DH5_Ant1_High_2480_AV

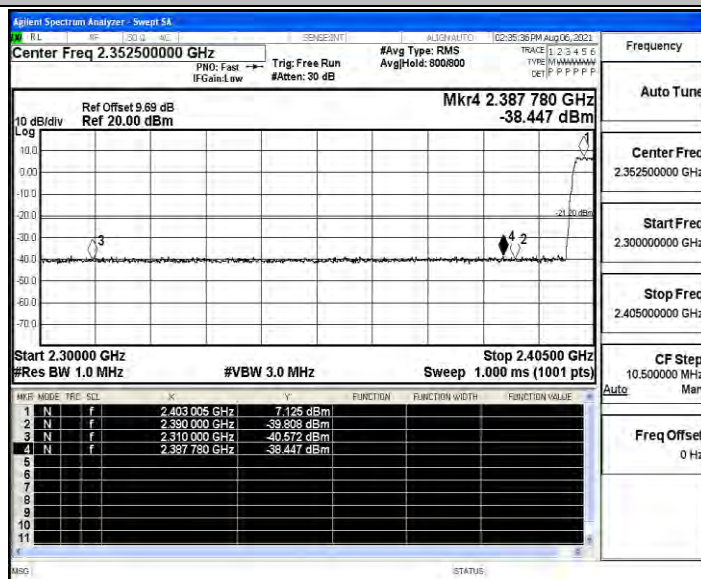


2DH5_Ant1_High_2480_Peak

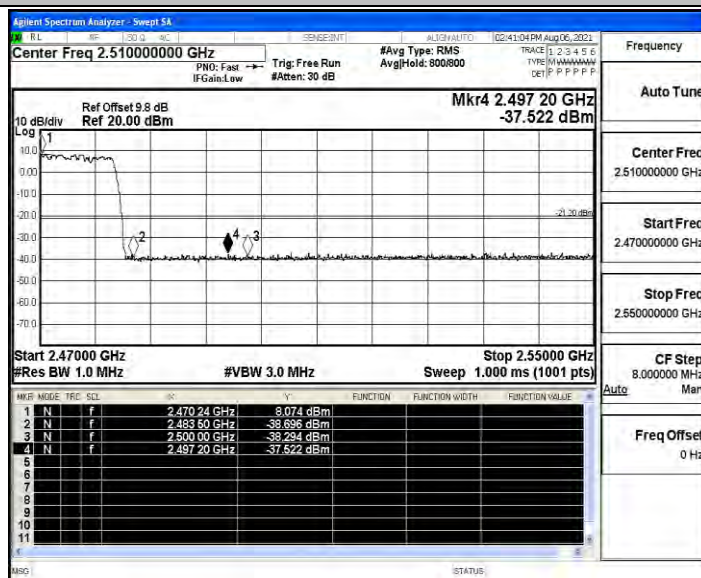




2DH5_Ant1_Low_Hop_2402_Peak

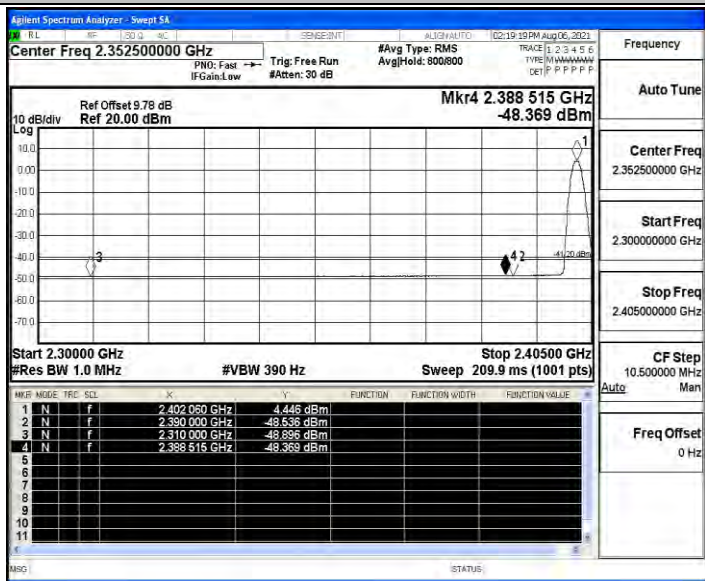


2DH5_Ant1_High_Hop_2480_Peak

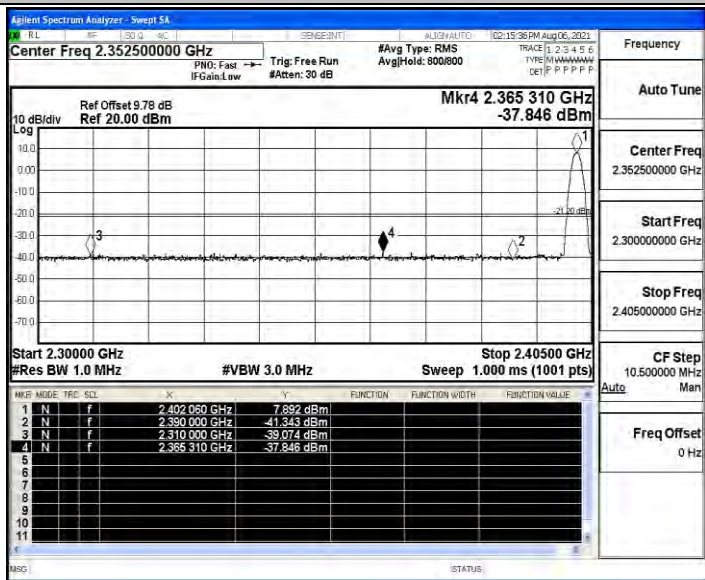




3DH5_Ant1_Low_2402_AV

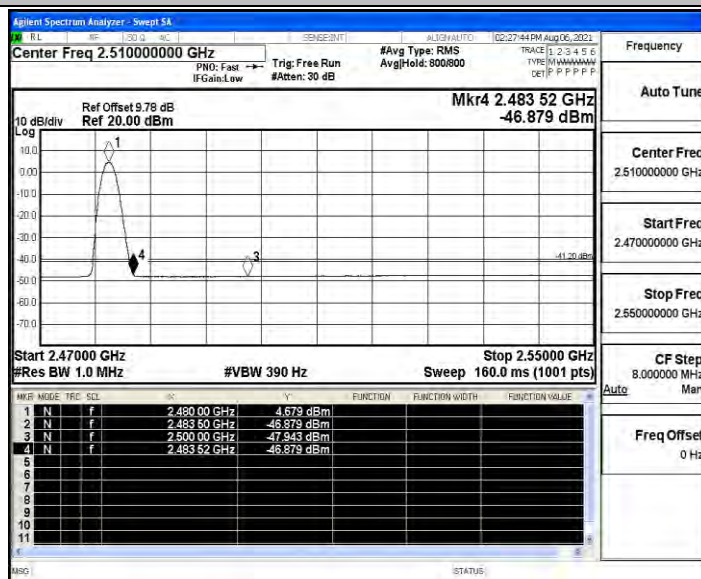


3DH5_Ant1_Low_2402_Peak

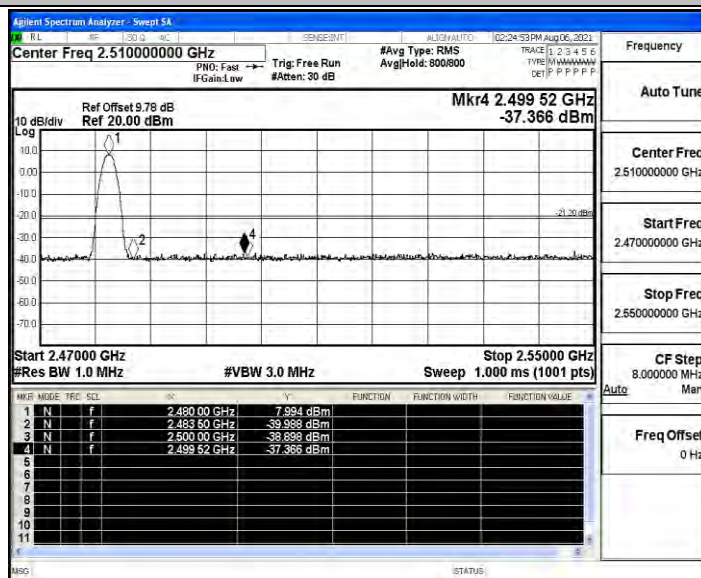




3DH5_Ant1_High_2480_AV

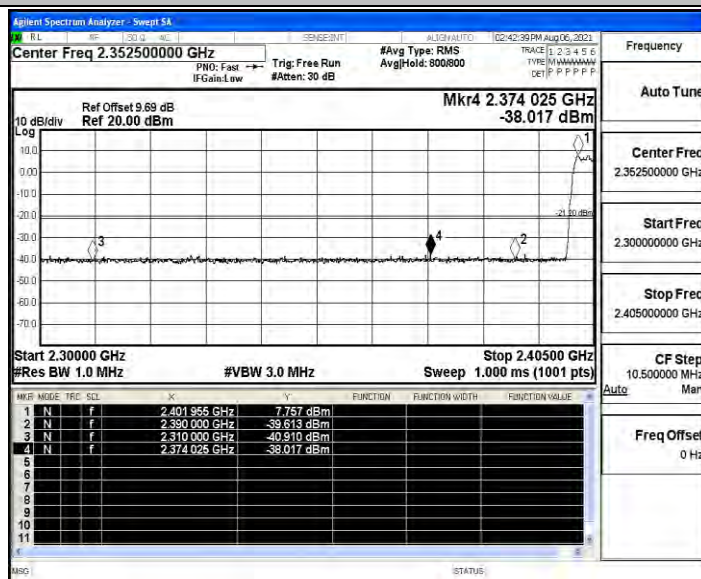


3DH5_Ant1_High_2480_Peak





3DH5_Ant1_Low_Hop_2402_Peak



3DH5_Ant1_High_Hop_2480_Peak

