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

Product Name: NucBox
Trade Mark: GMK
Test Model: KB1
FCC ID: 2AXUD-KB1

Environmental Conditions

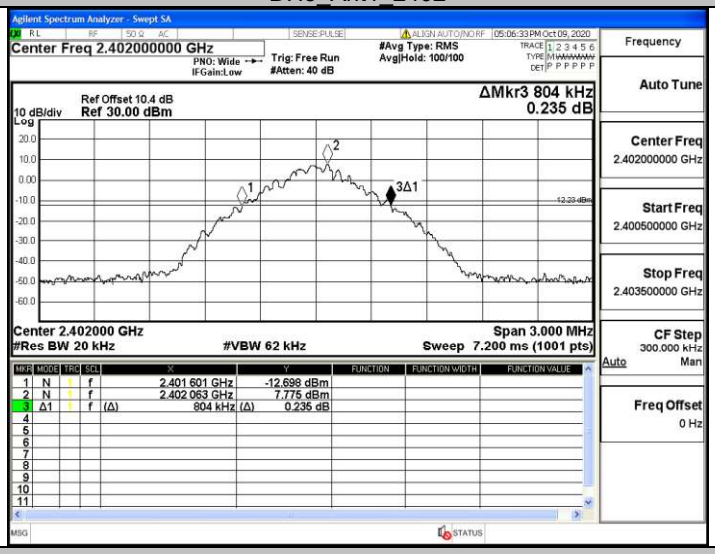
Temperature:	22.8° C
Relative Humidity:	50%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

A.1 20 dB Bandwidth

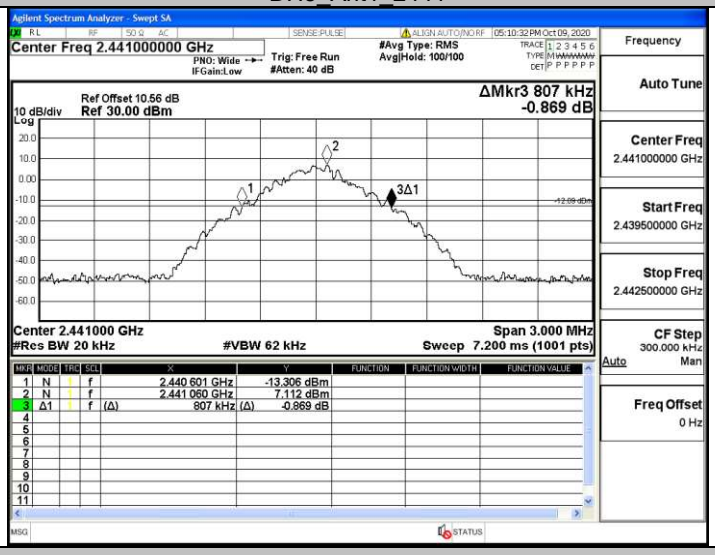
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.804	2401.601	2402.405	---	PASS
		2441	0.807	2440.601	2441.408	---	PASS
		2480	0.804	2479.604	2480.408	---	PASS
2DH5	Ant1	2402	1.302	2401.349	2402.651	---	PASS
		2441	1.251	2440.382	2441.633	---	PASS
		2480	1.260	2479.379	2480.639	---	PASS
3DH5	Ant1	2402	1.278	2401.355	2402.633	---	PASS
		2441	1.296	2440.352	2441.648	---	PASS
		2480	1.275	2479.355	2480.630	---	PASS

Test Graph

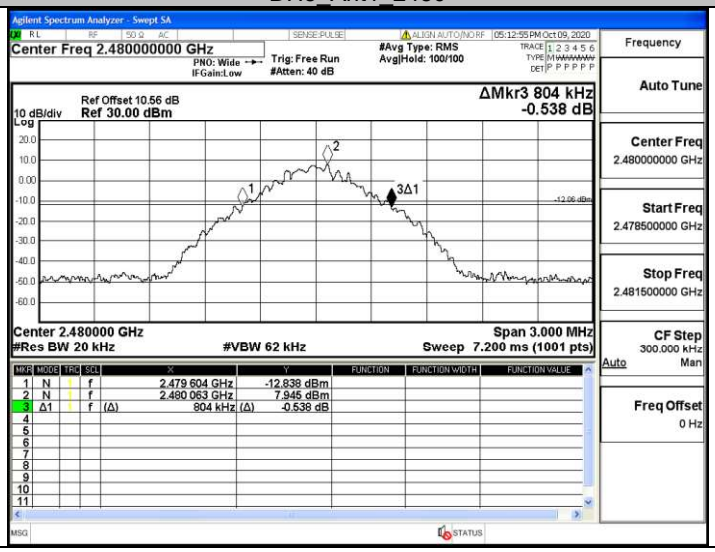
DH5_Ant1_2402



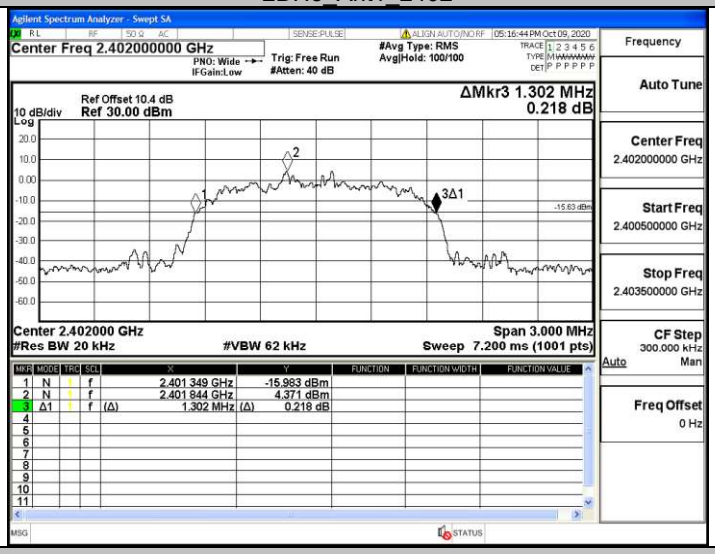
DH5_Ant1_2441



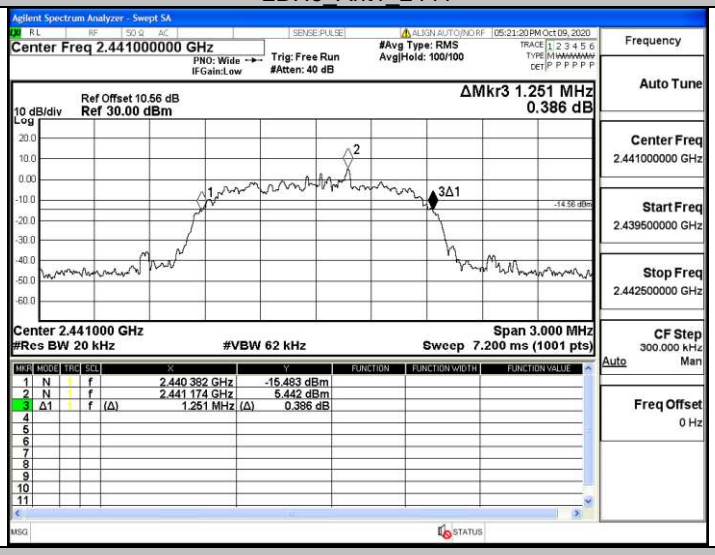
DH5_Ant1_2480



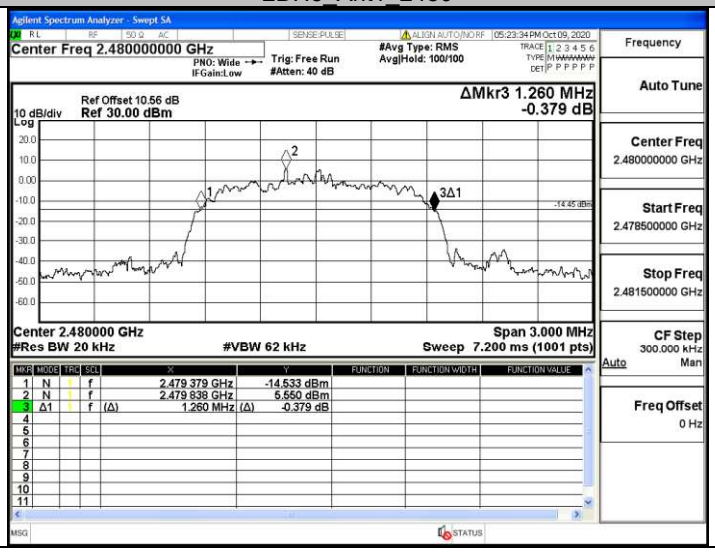
2DH5_Ant1_2402



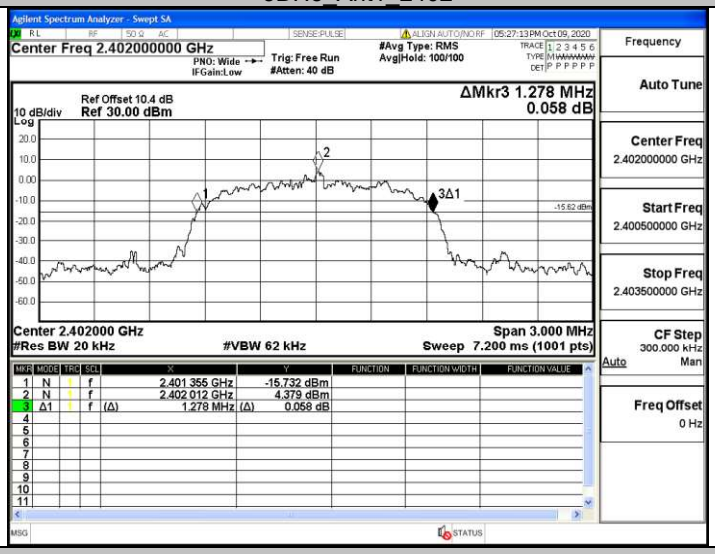
2DH5_Ant1_2441



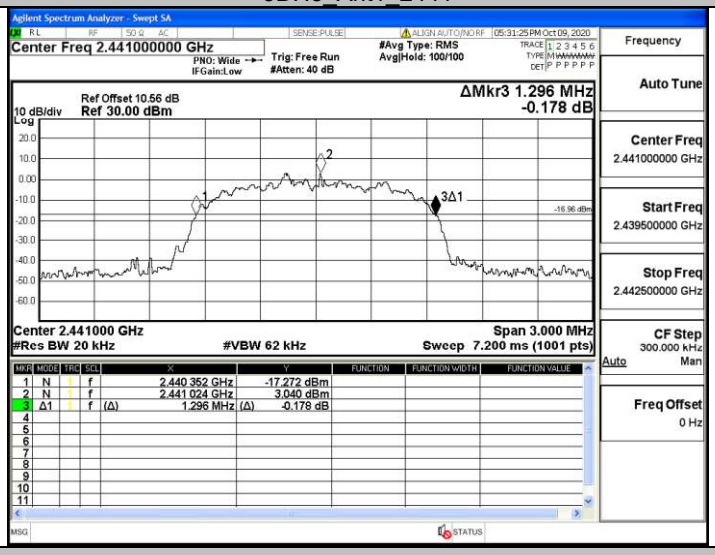
2DH5_Ant1_2480



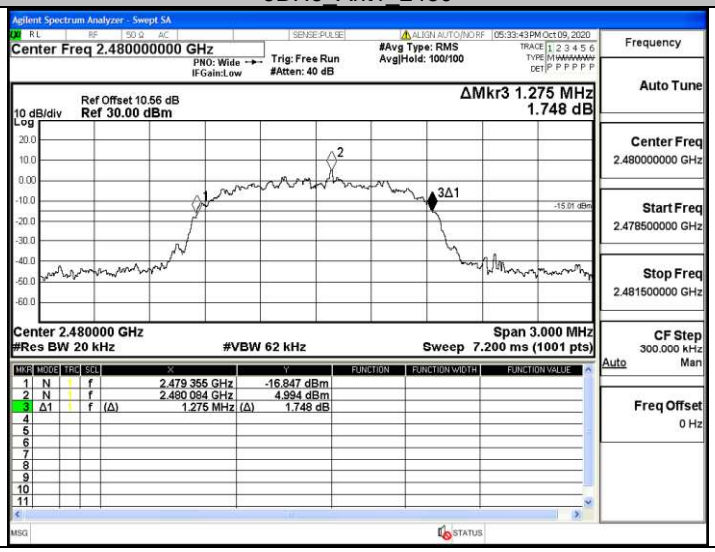
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

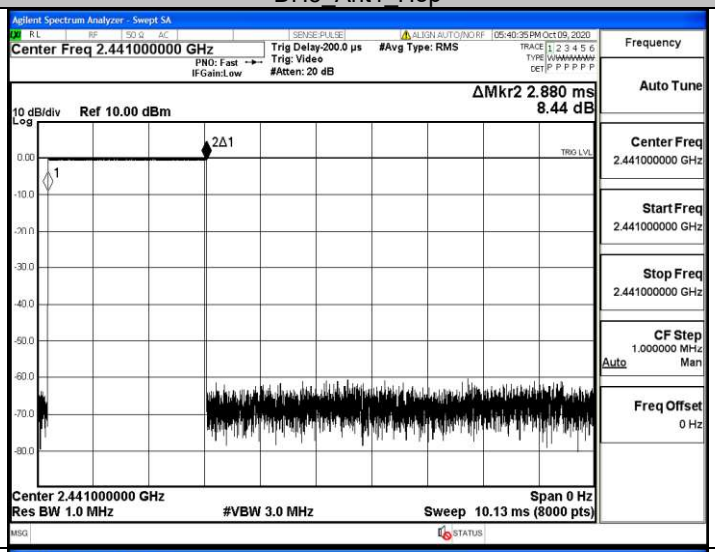


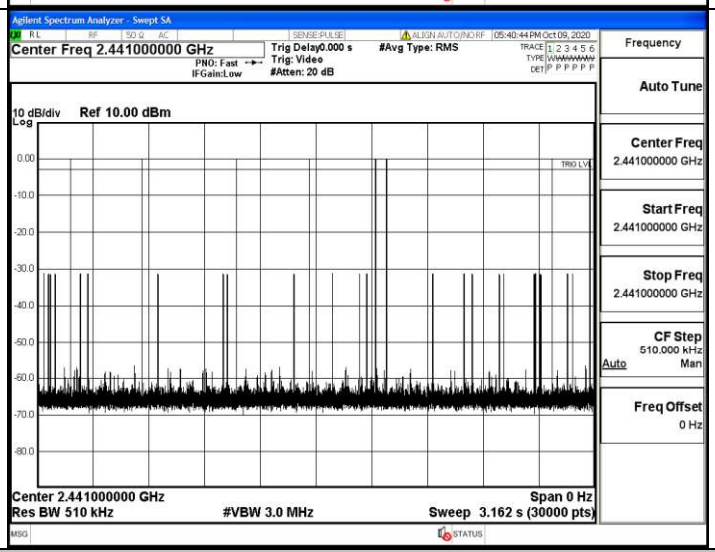
A.2 Dwell Time

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	90	0.259	<=0.4	PASS
2DH5	Ant1	Hop	2.88	120	0.346	<=0.4	PASS
3DH5	Ant1	Hop	2.89	100	0.289	<=0.4	PASS

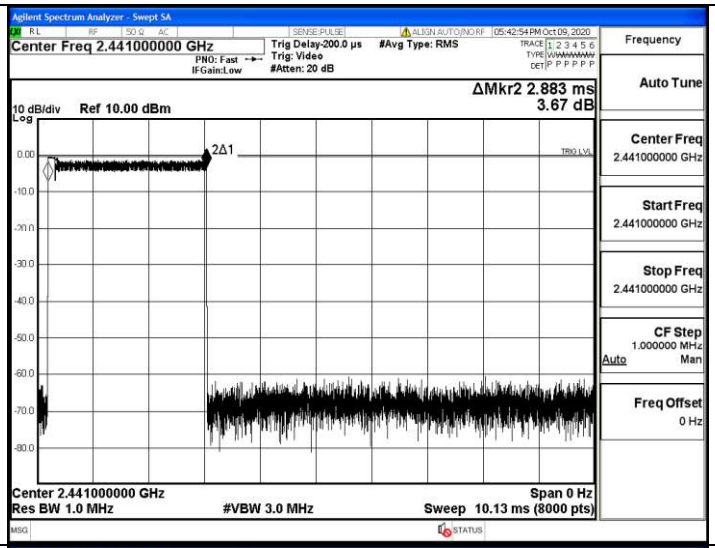
Test Graph

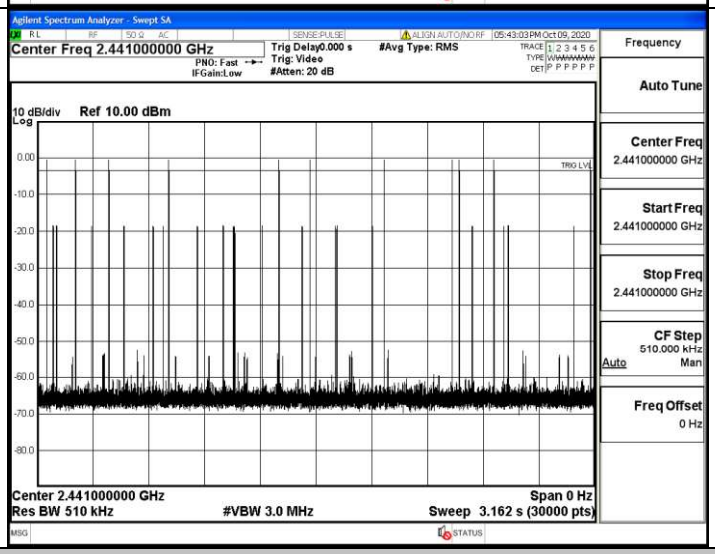
DH5_Ant1_Hop



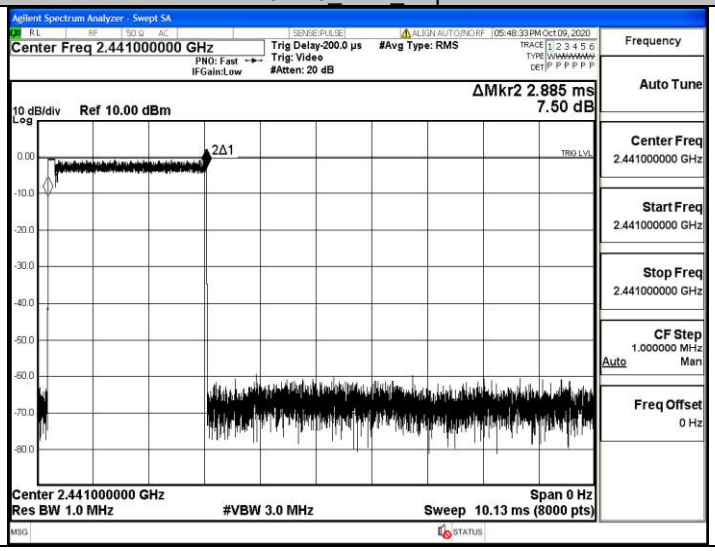


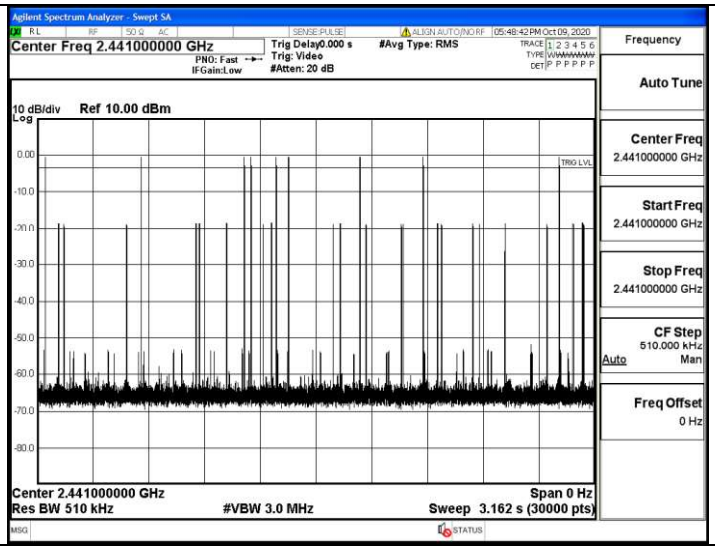
2DH5_Ant1_Hop





3DH5_Ant1_Hop



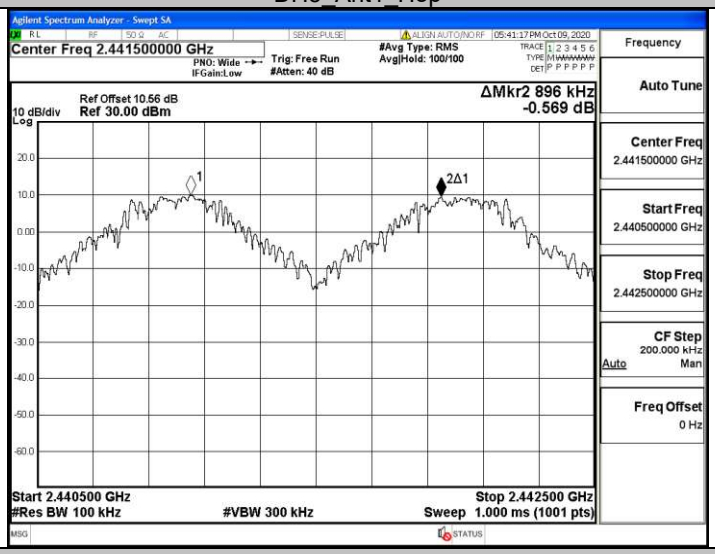

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
PNO: Fast
IFGain:Low
Trig Delay0.000 s
Trig: Video
#Atten: 20 dB
#Avg Type: RMS
05:48:42 PM Oct 09, 2020
Frequency
Auto Tune
10 dB/div
Log
Ref 10.00 dBm
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
TRIG LVL
Center Freq
2.441000000 GHz
Start Freq
2.441000000 GHz
Stop Freq
2.441000000 GHz
CF Step
510.000 kHz
Auto
Man
Freq Offset
0 Hz
Center 2.441000000 GHz
Res BW 510 kHz
#VBW 3.0 MHz
Span 0 Hz
Sweep 3.162 s (30000 pts)
MSG
STATUS

A.3 Carrier Frequency Separation

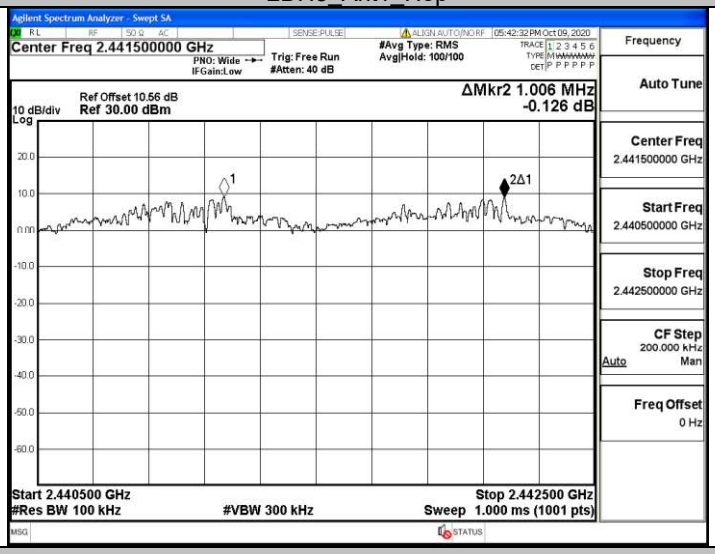
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.896	>=0.807	PASS
2DH5	Ant1	Hop	1.006	>=0.868	PASS
3DH5	Ant1	Hop	1.148	>=0.864	PASS

Test Graph

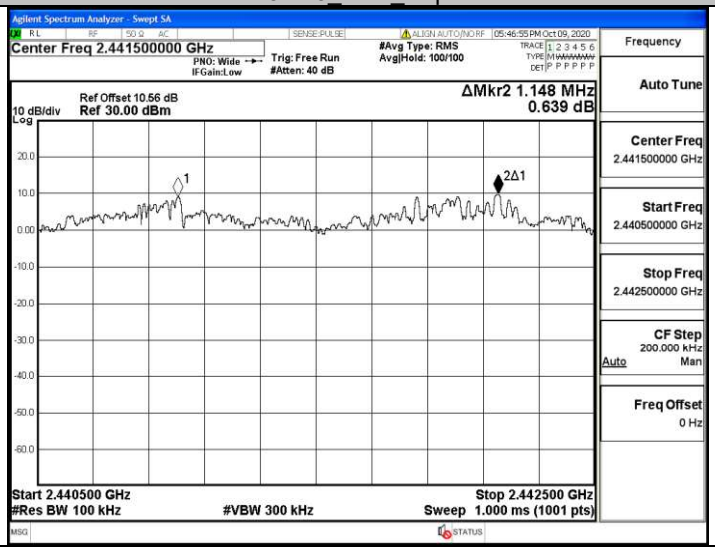
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

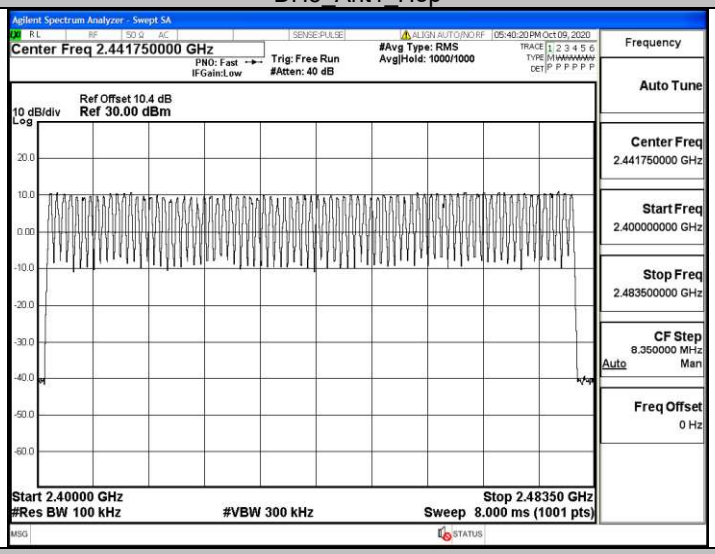


A.4 Hopping Channel Number

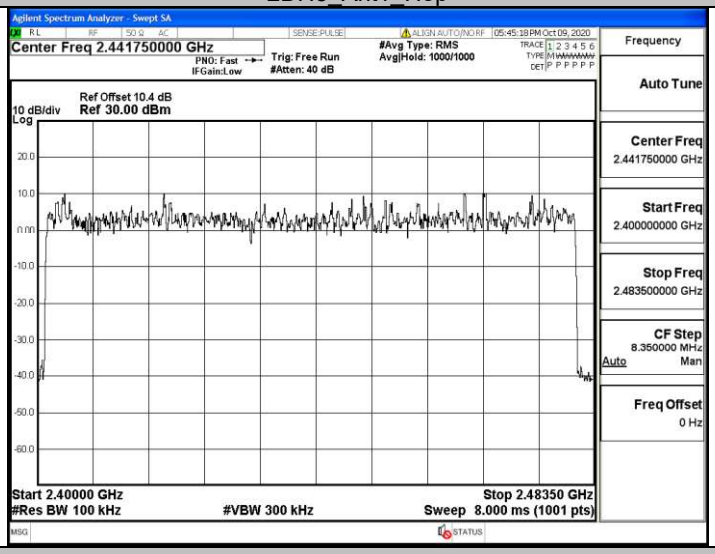
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	>=15	PASS
2DH5	Ant1	Hop	79	>=15	PASS
3DH5	Ant1	Hop	79	>=15	PASS

Test Graph

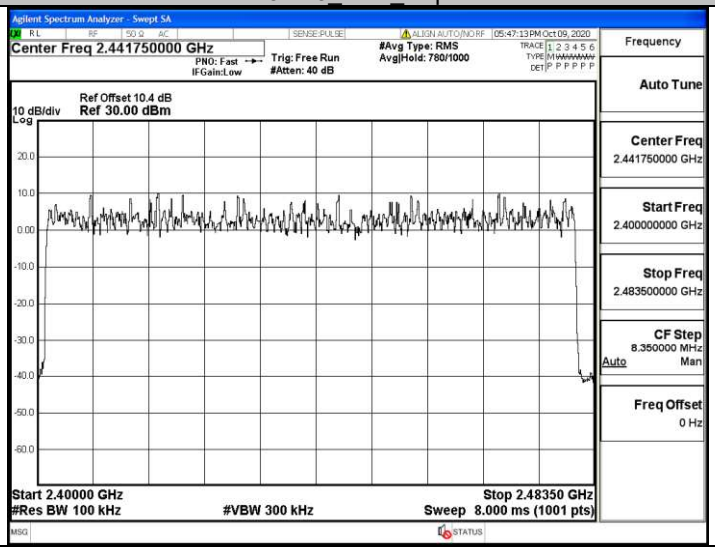
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

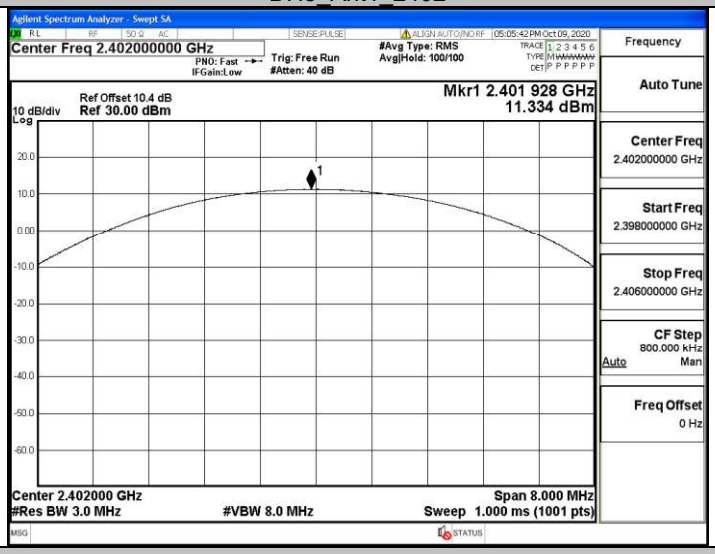


A.5 Conducted Peak Output Power

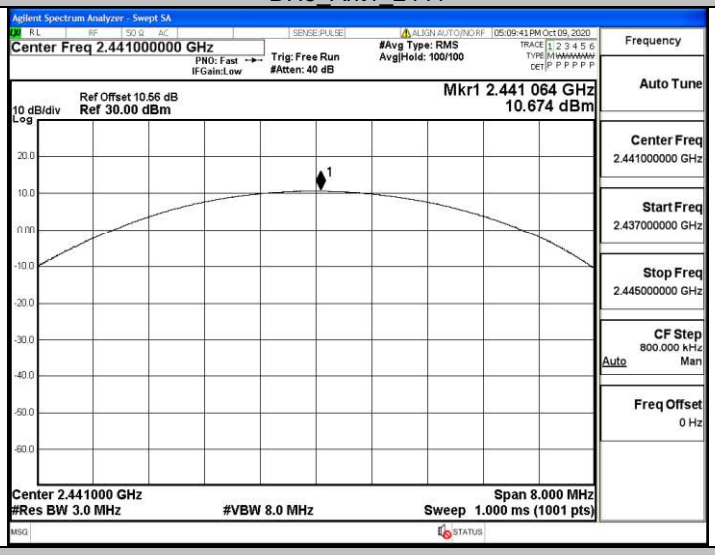
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	11.33	<=30	PASS
		2441	10.67	<=30	PASS
		2480	11.54	<=30	PASS
2DH5	Ant1	2402	10.62	<=30	PASS
		2441	10.1	<=30	PASS
		2480	11.26	<=30	PASS
3DH5	Ant1	2402	10.64	<=30	PASS
		2441	10.12	<=30	PASS
		2480	11.25	<=30	PASS

Test Graph

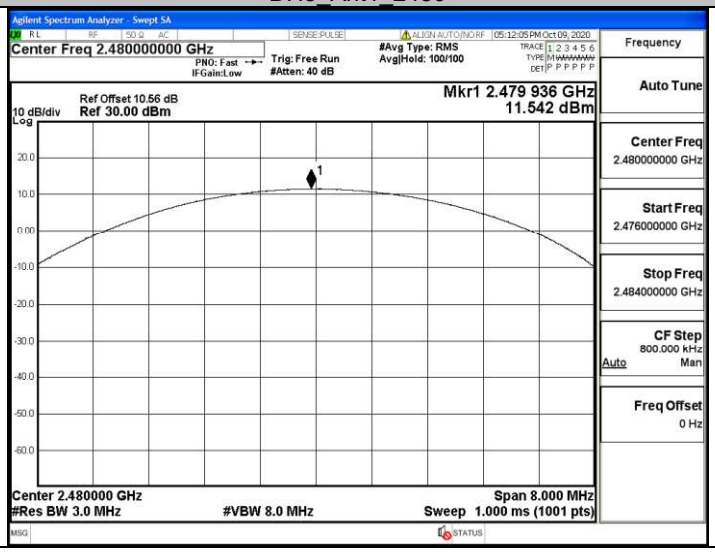
DH5_Ant1_2402



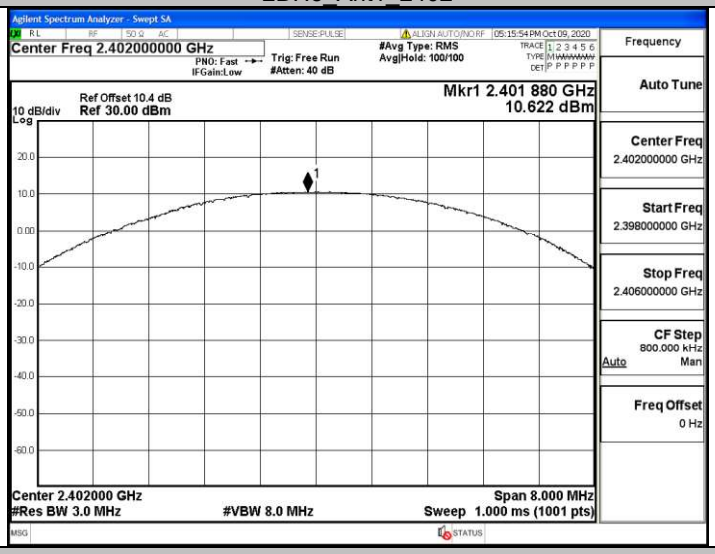
DH5_Ant1_2441



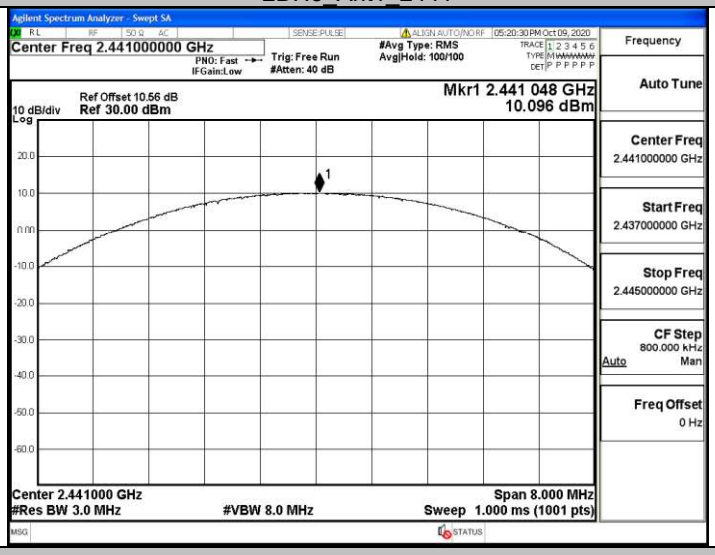
DH5_Ant1_2480



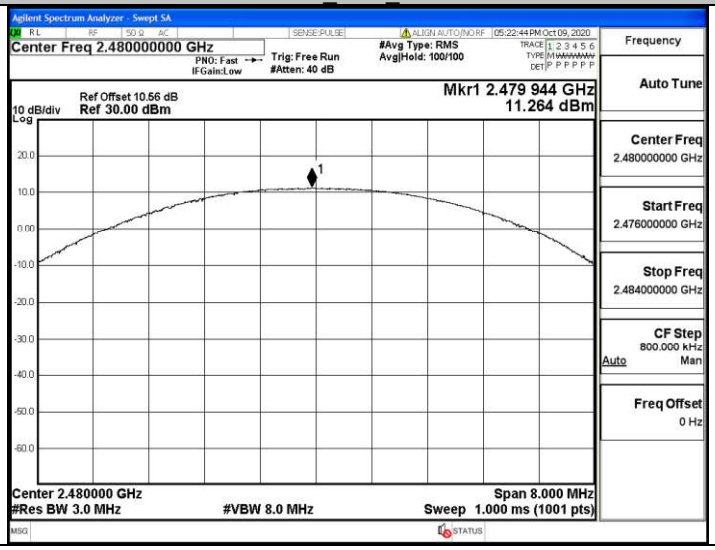
2DH5_Ant1_2402



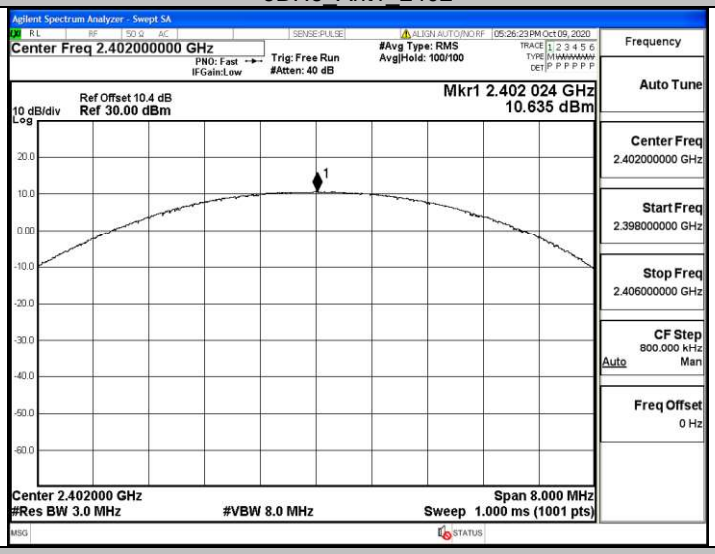
2DH5_Ant1_2441



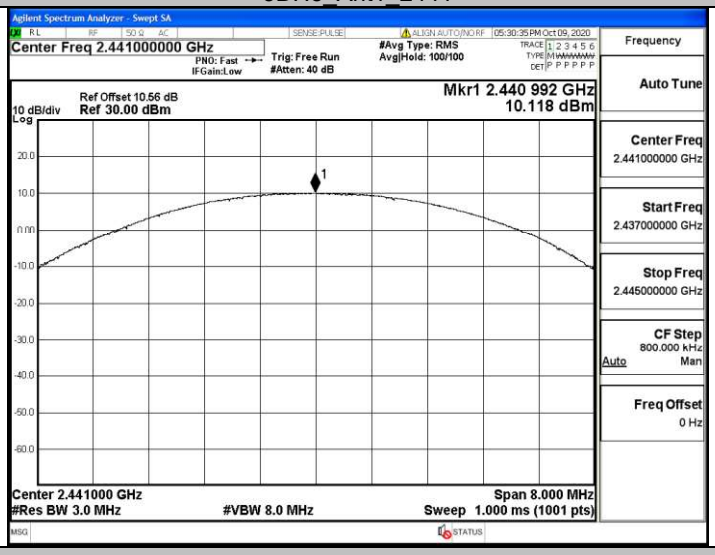
2DH5_Ant1_2480



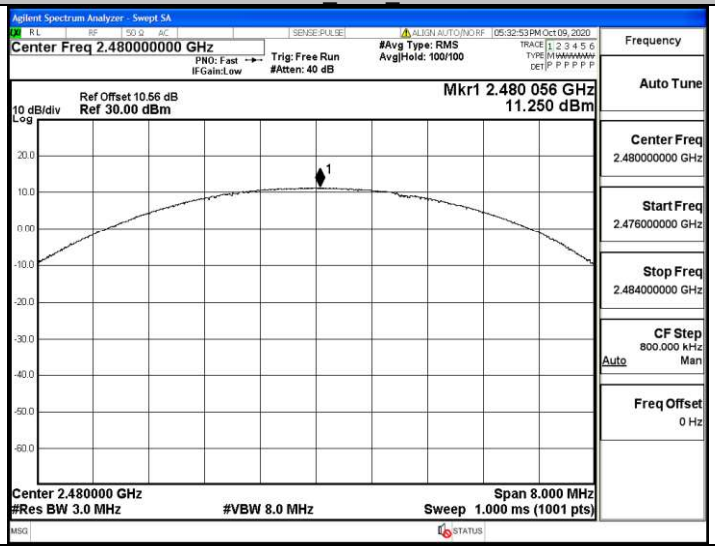
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

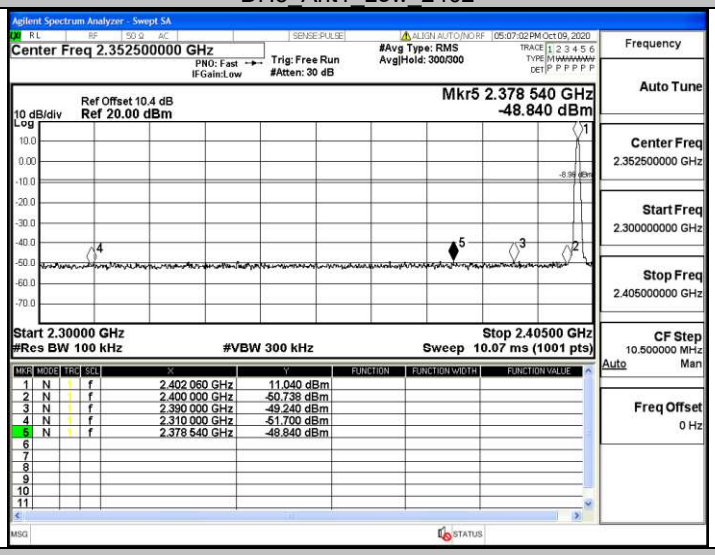


A.6 Band-edge for RF Conducted Emissions

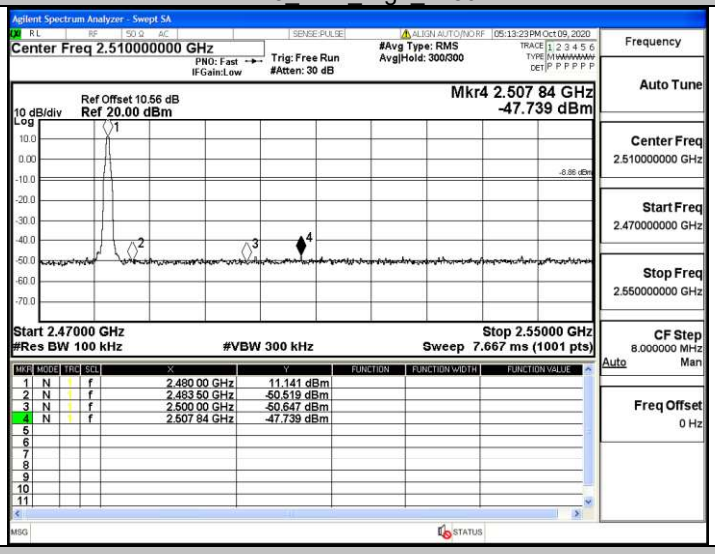
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	11.04	-48.84	<=-8.96	PASS
		High	2480	11.14	-47.74	<=-8.86	PASS
		Low	Hop_2402	10.98	-49.35	<=-9.02	PASS
		High	Hop_2480	11.18	-47.4	<=-8.82	PASS
2DH5	Ant1	Low	2402	9.86	-48.08	<=-10.14	PASS
		High	2480	10.83	-47.81	<=-9.18	PASS
		Low	Hop_2402	4.79	-48.99	<=-15.21	PASS
		High	Hop_2480	6.01	-47.61	<=-13.99	PASS
3DH5	Ant1	Low	2402	10.02	-48.27	<=-9.98	PASS
		High	2480	10.97	-47.01	<=-9.03	PASS
		Low	Hop_2402	5.44	-48.14	<=-14.56	PASS
		High	Hop_2480	10.01	-47.86	<=-9.99	PASS

Test Graph

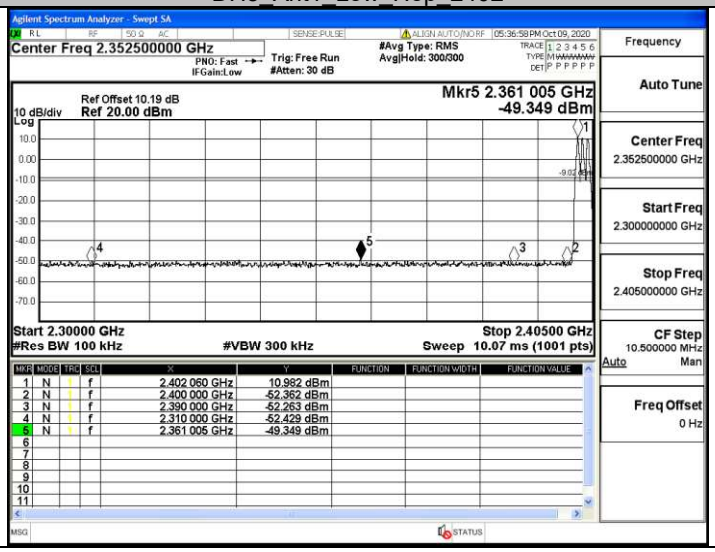
DH5_Ant1_Low_2402



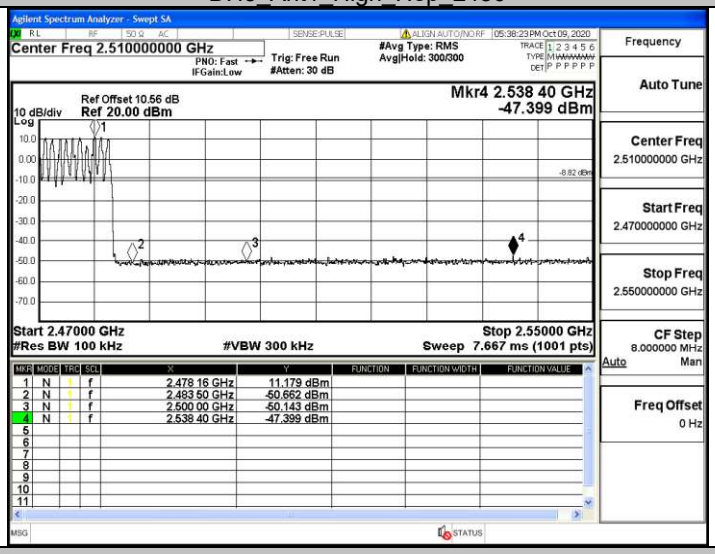
DH5_Ant1_High_2480



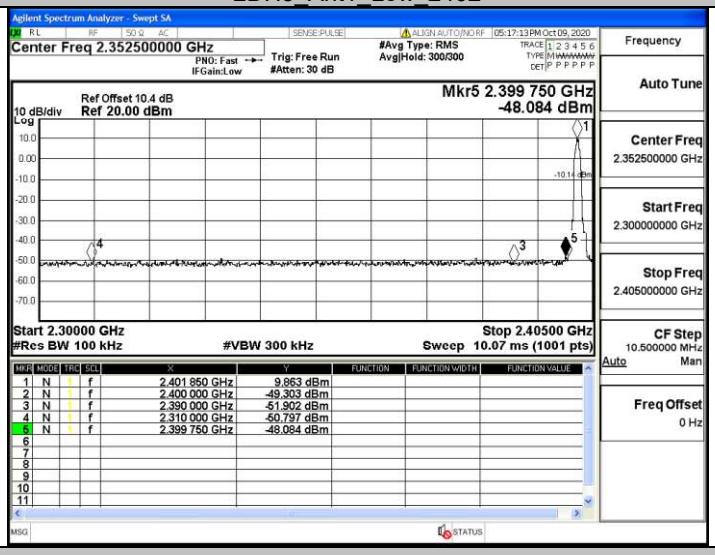
DH5_Ant1_Low_Hop_2402



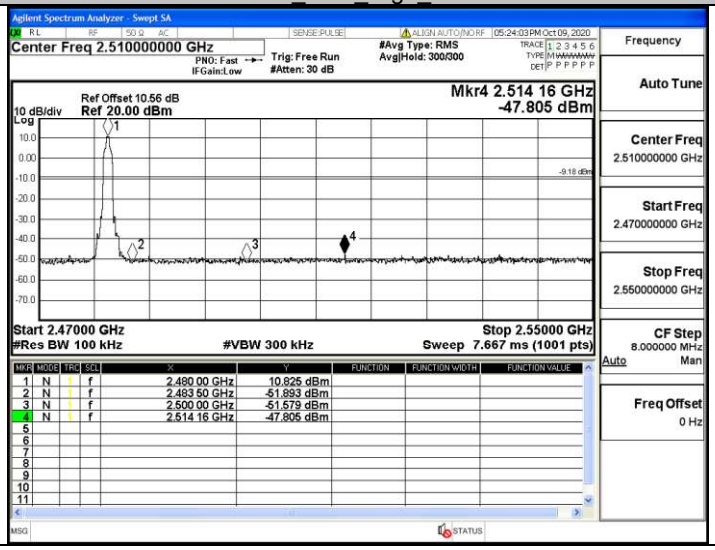
DH5_Ant1_High_Hop_2480



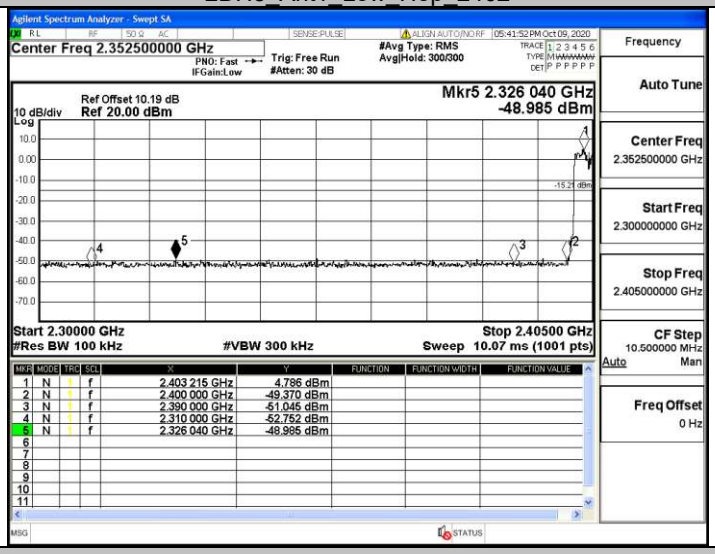
2DH5_Ant1_Low_2402



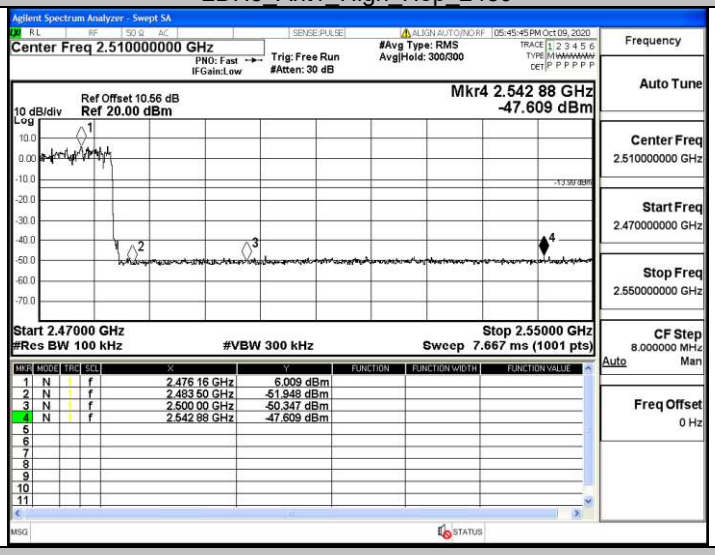
2DH5_Ant1_High_2480



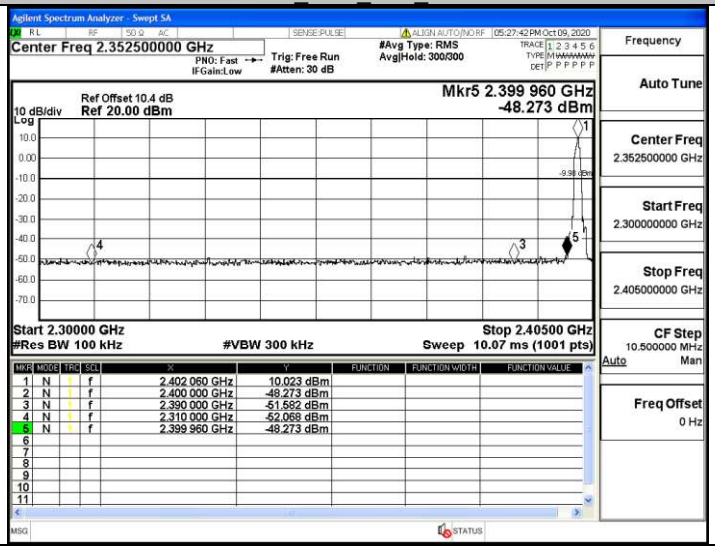
2DH5_Ant1_Low_Hop_2402



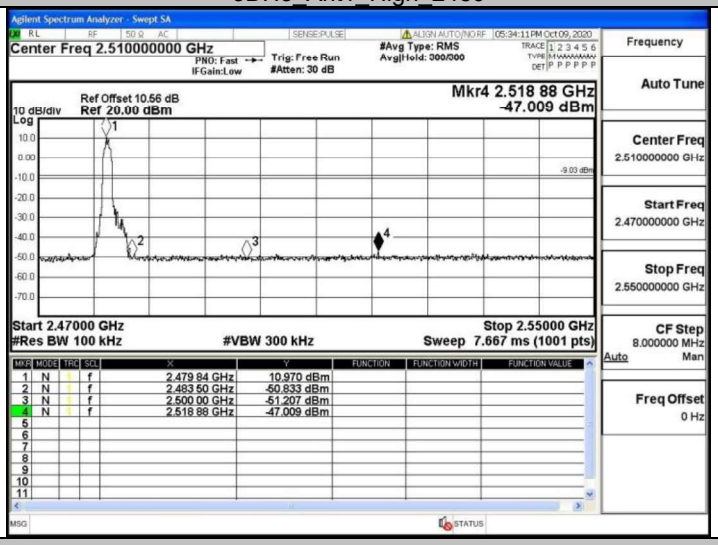
2DH5_Ant1_High_Hop_2480



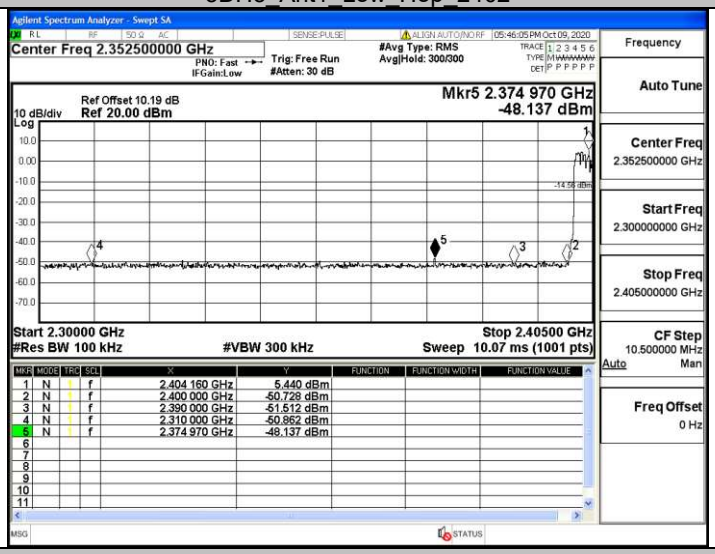
3DH5_Ant1_Low_2402



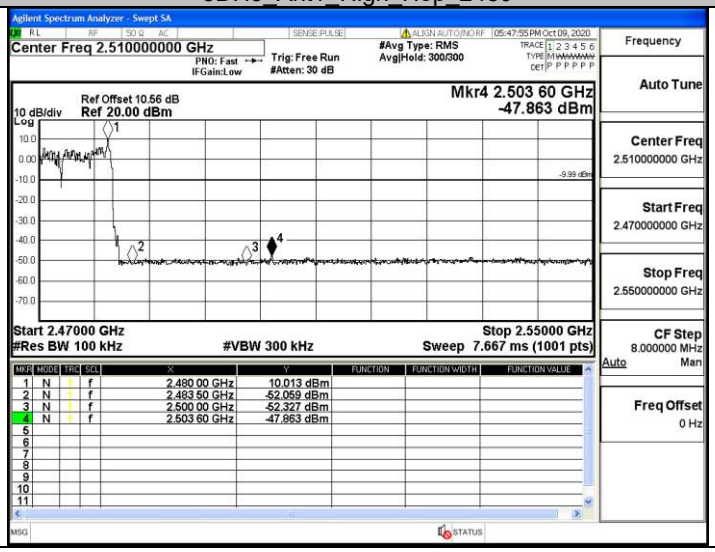
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



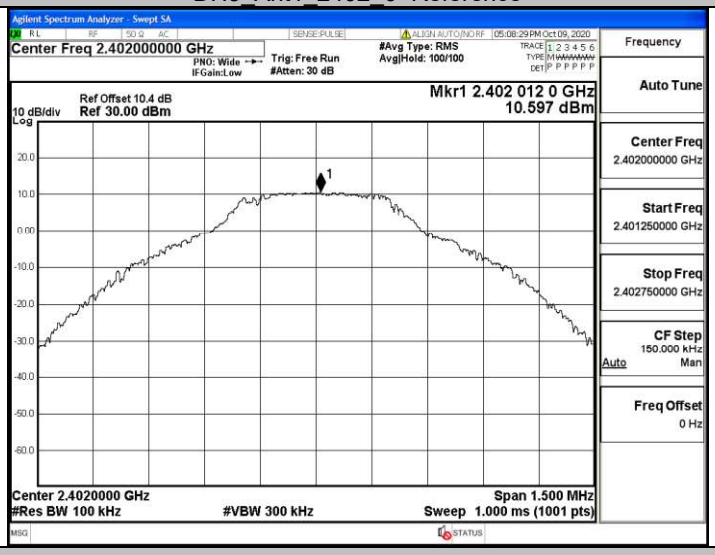
3DH5_Ant1_High_Hop_2480



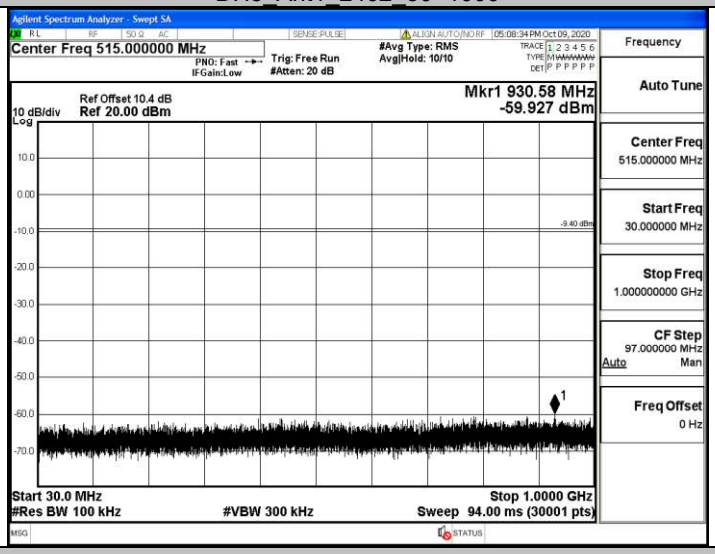
A.7 RF Conducted Spurious Emissions

Test Graph

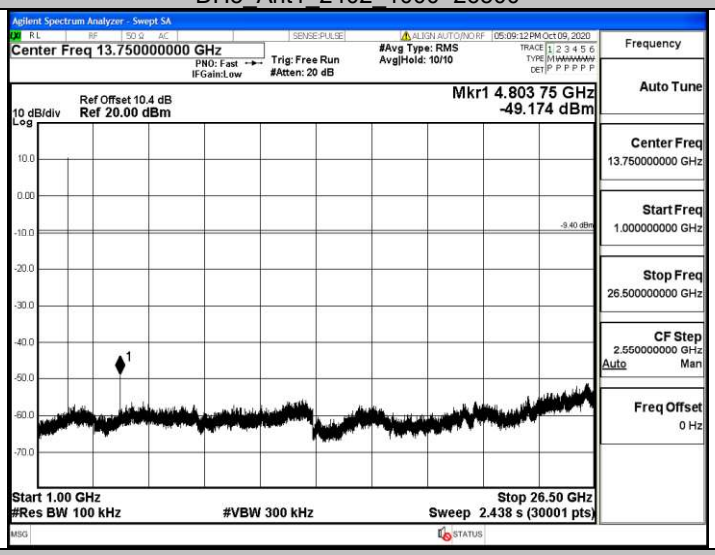
DH5_Ant1_2402_0~Reference



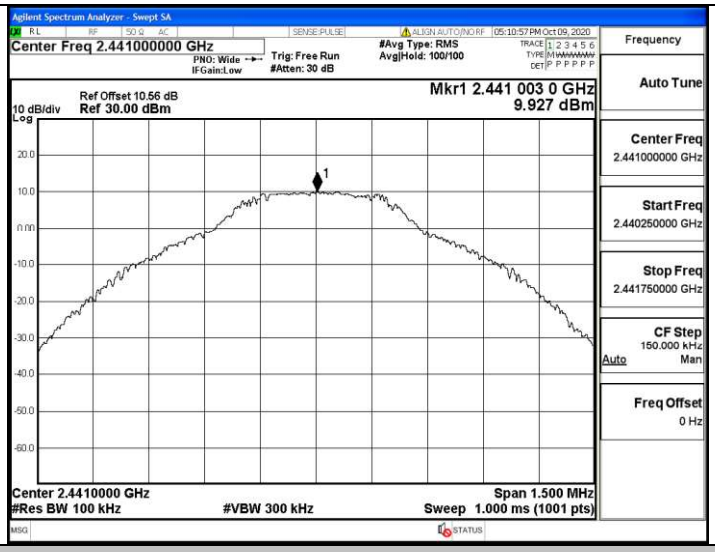
DH5_Ant1_2402_30~1000



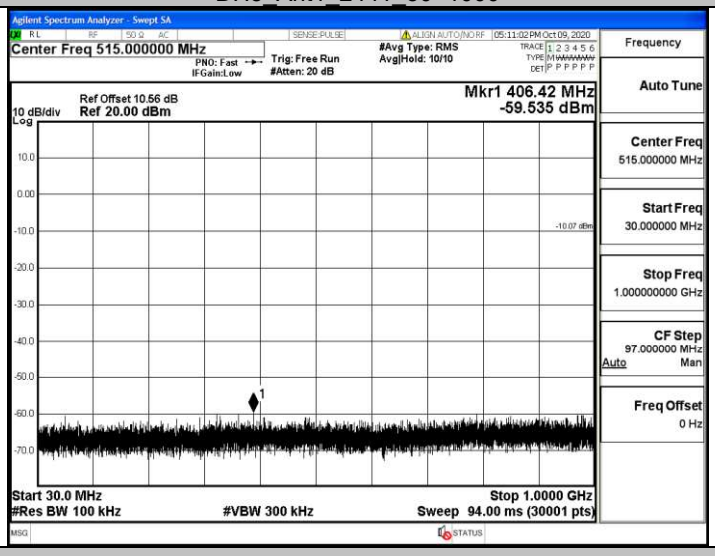
DH5_Ant1_2402_1000~26500



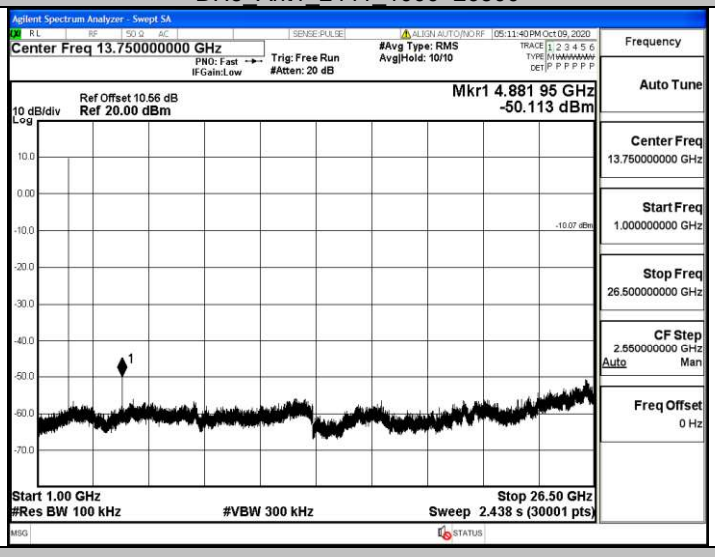
DH5_Ant1_2441_0~Reference



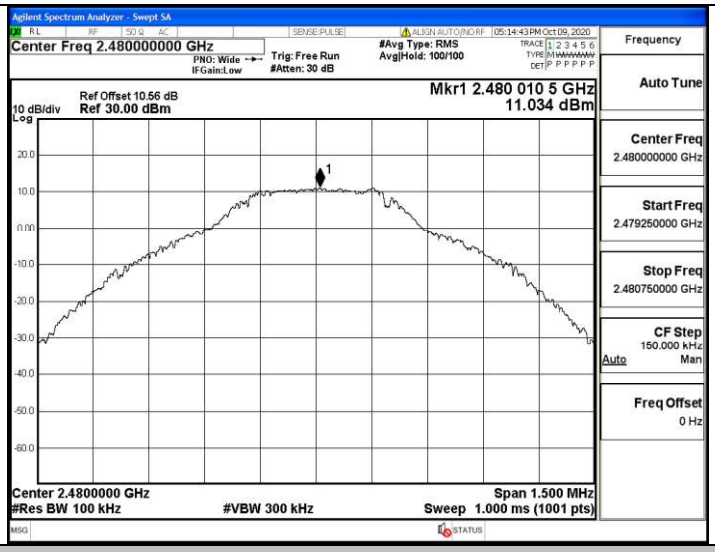
DH5_Ant1_2441_30~1000



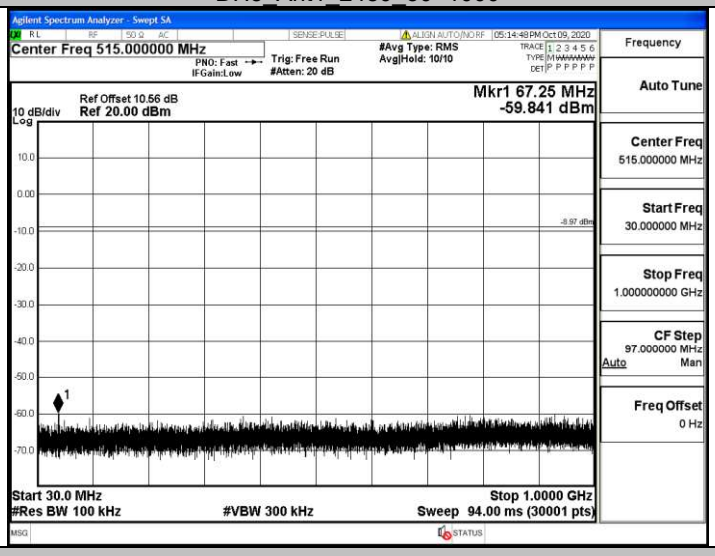
DH5_Ant1_2441_1000~26500



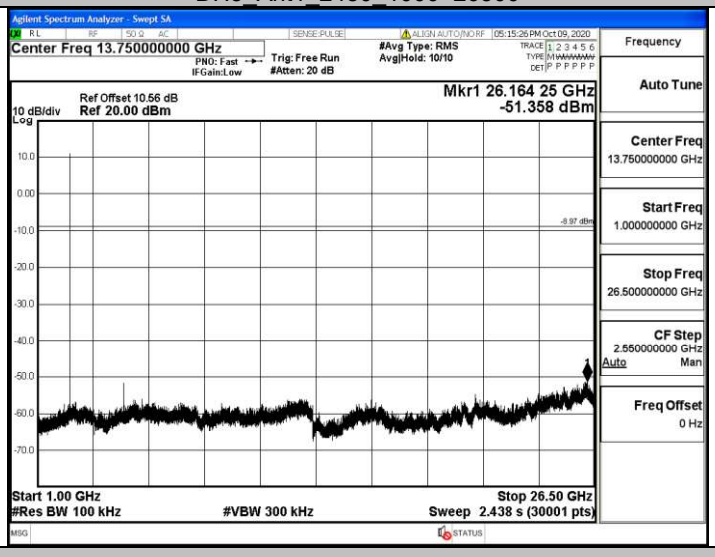
DH5_Ant1_2480_0~Reference



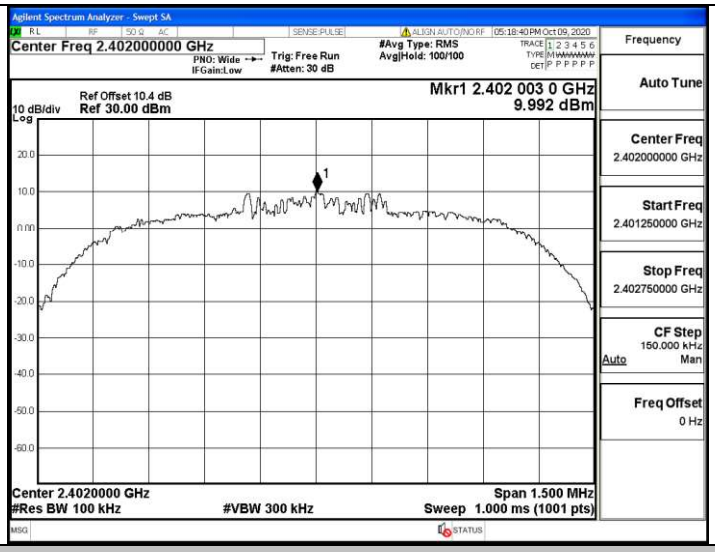
DH5_Ant1_2480_30~1000



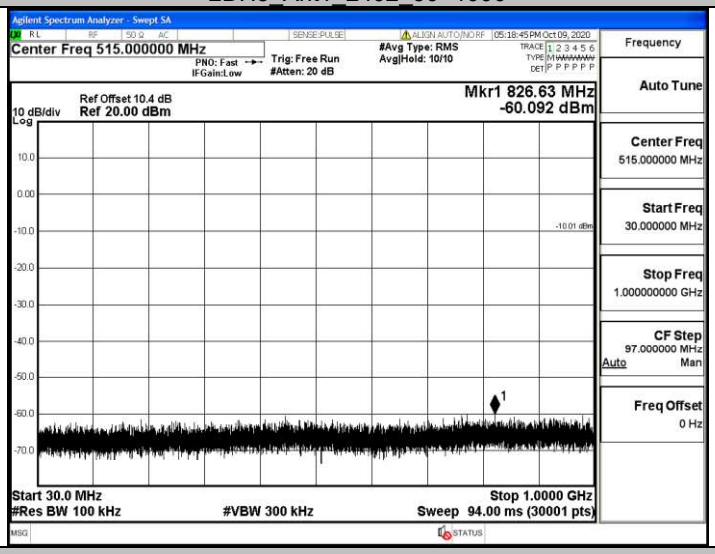
DH5_Ant1_2480_1000~26500



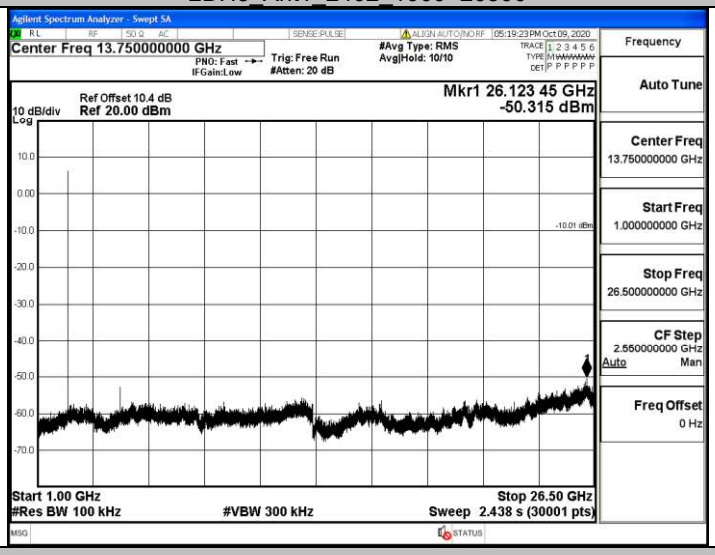
2DH5_Ant1_2402_0~Reference



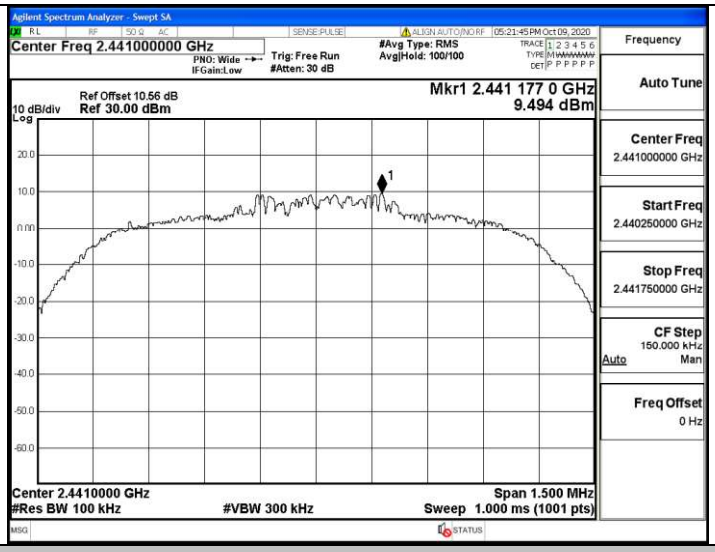
2DH5_Ant1_2402_30~1000



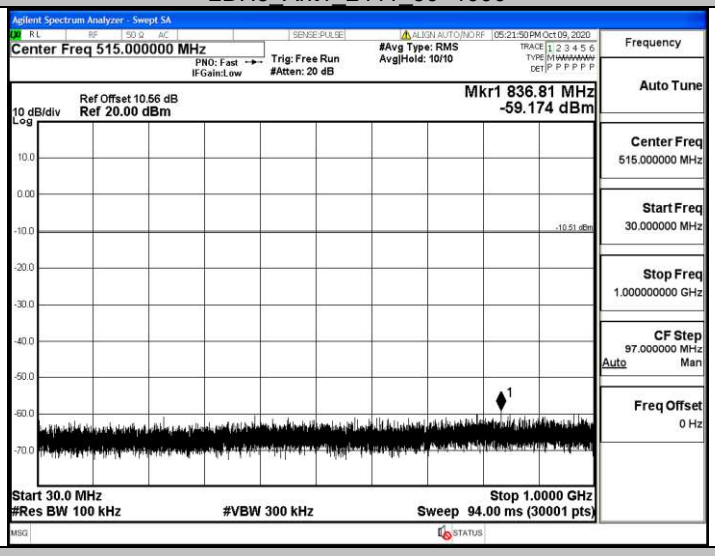
2DH5_Ant1_2402_1000~26500



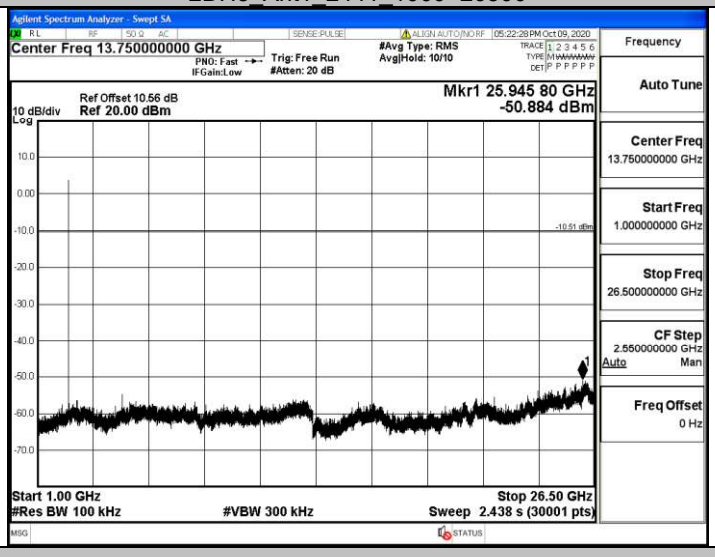
2DH5_Ant1_2441_0~Reference



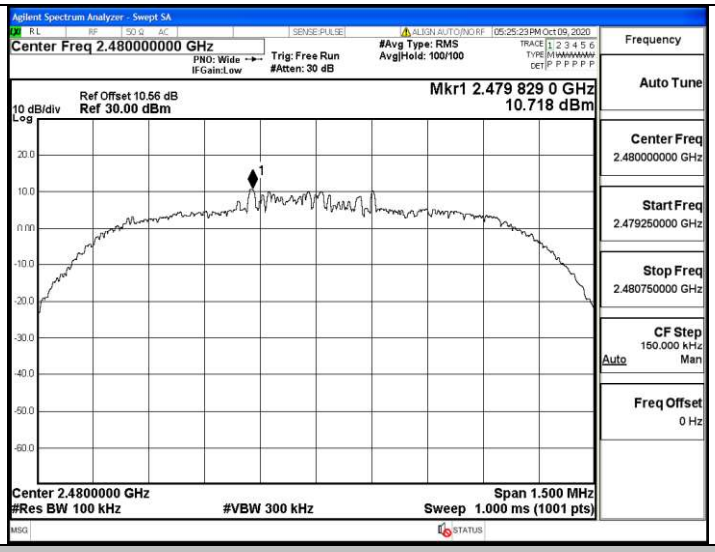
2DH5_Ant1_2441_30~1000



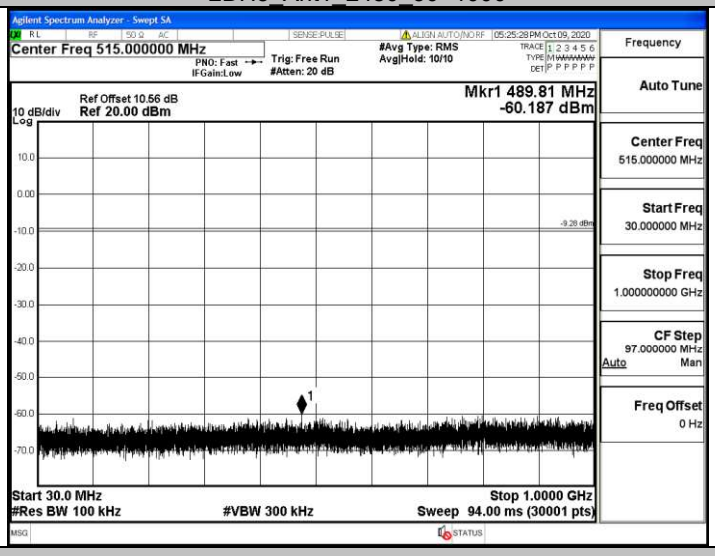
2DH5_Ant1_2441_1000~26500



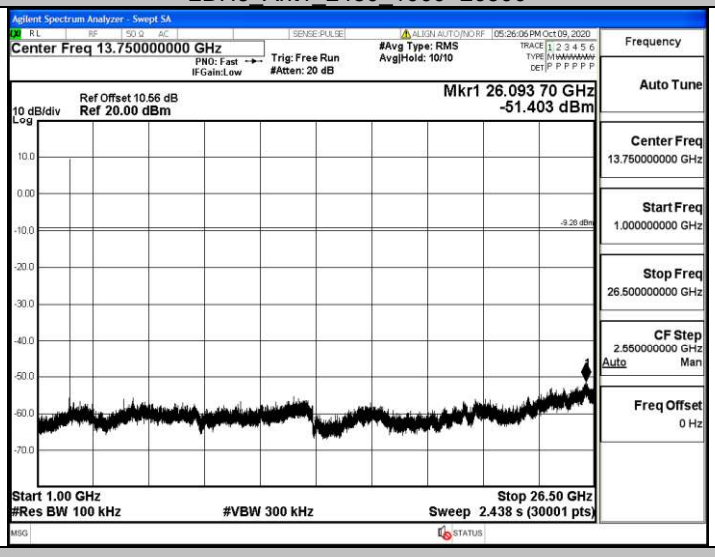
2DH5_Ant1_2480_0~Reference



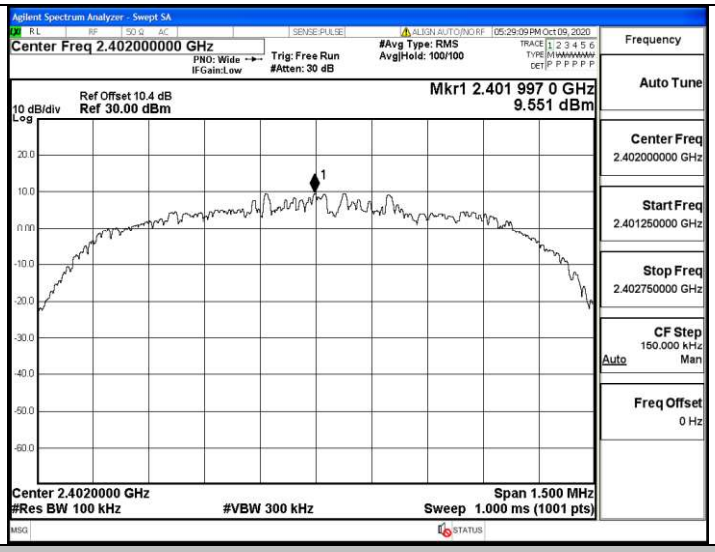
2DH5_Ant1_2480_30~1000



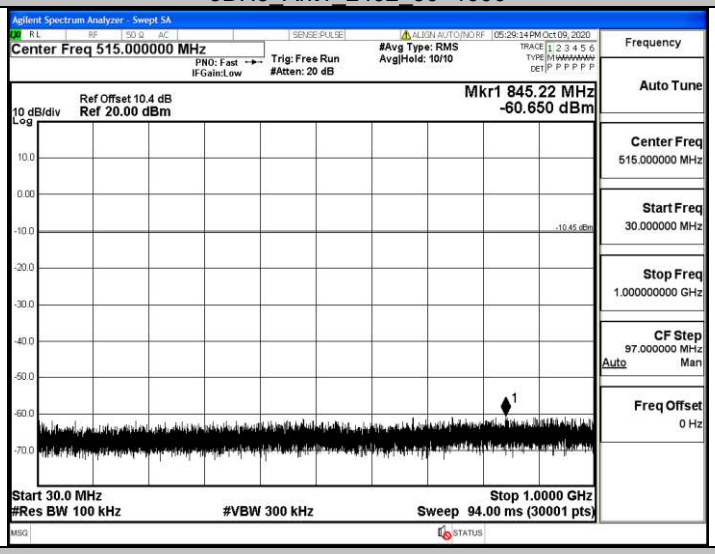
2DH5_Ant1_2480_1000~26500



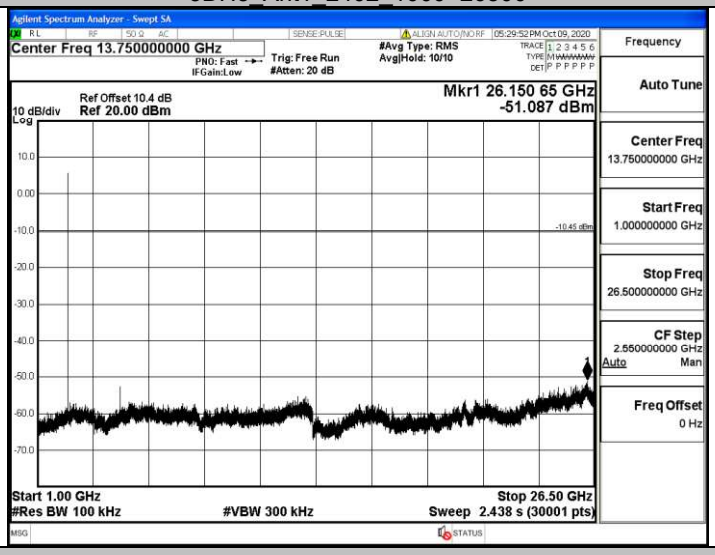
3DH5_Ant1_2402_0~Reference



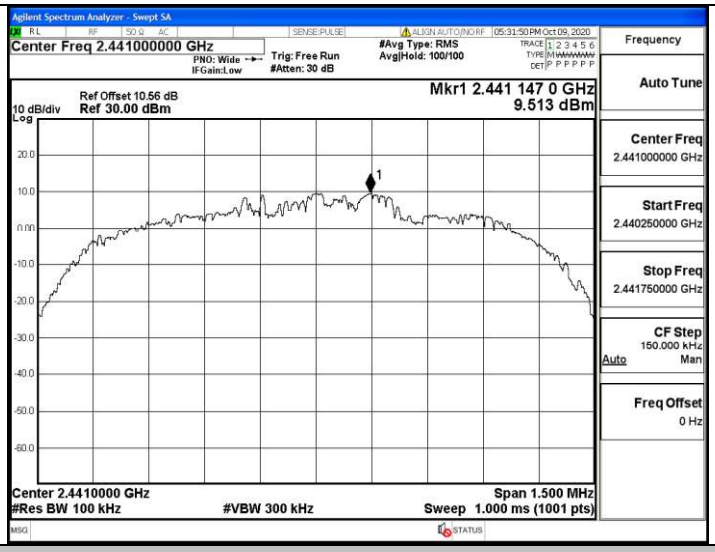
3DH5_Ant1_2402_30~1000



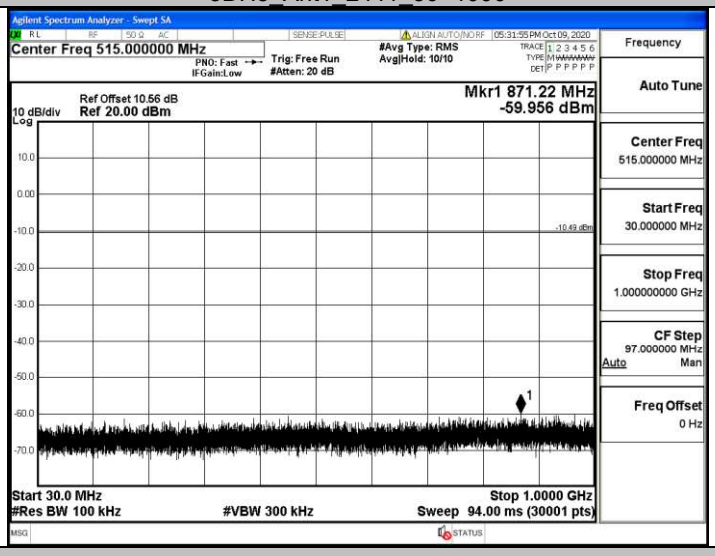
3DH5_Ant1_2402_1000~26500



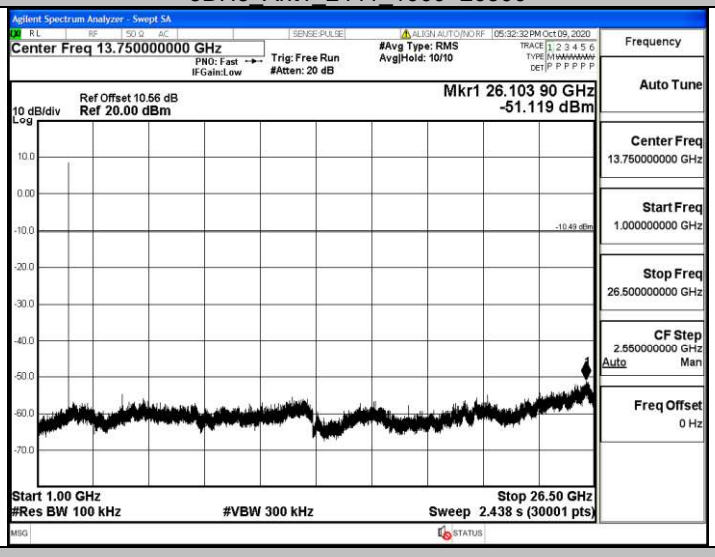
3DH5_Ant1_2441_0~Reference



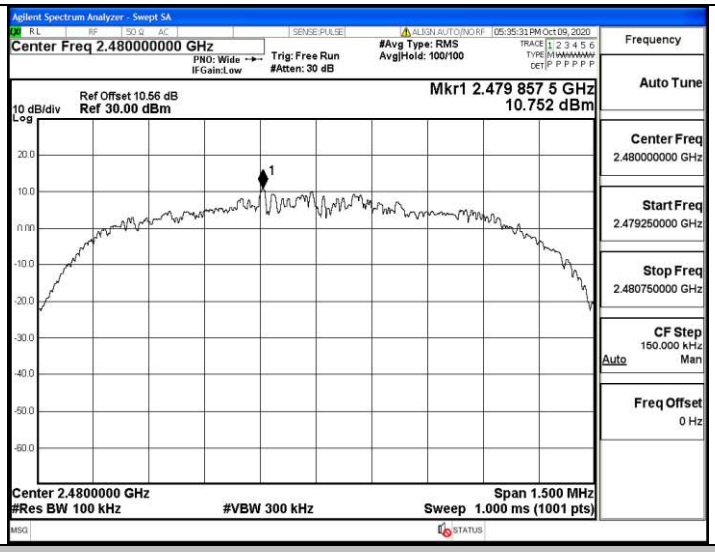
3DH5_Ant1_2441_30~1000



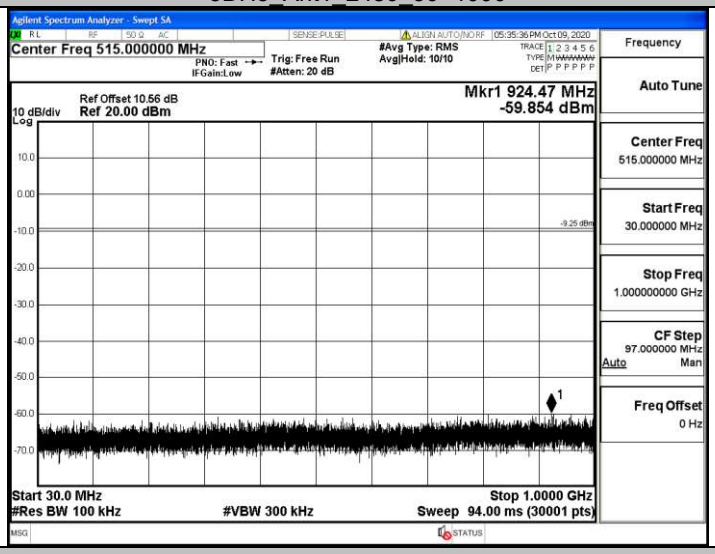
3DH5_Ant1_2441_1000~26500



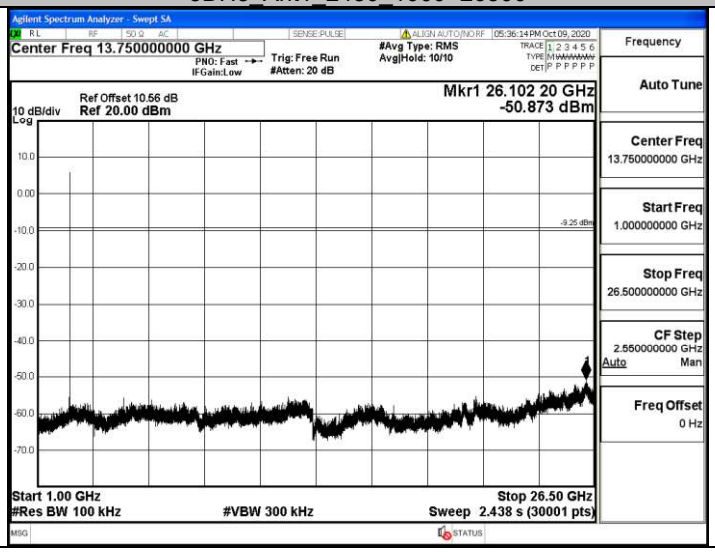
3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000



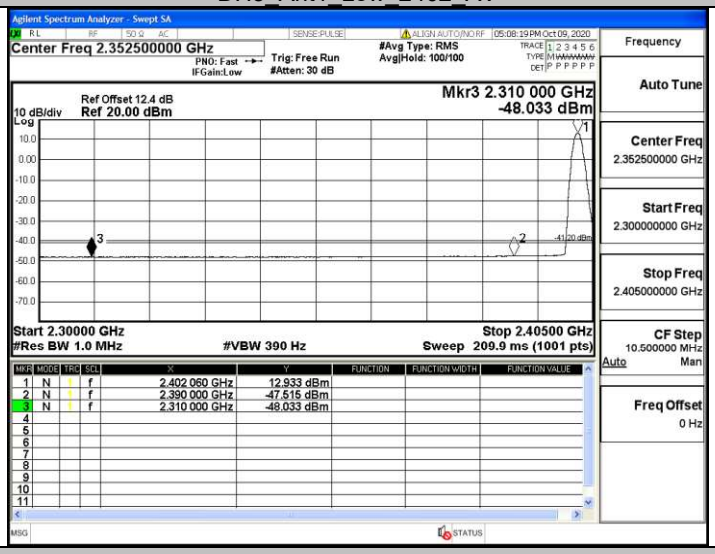
3DH5_Ant1_2480_1000~26500



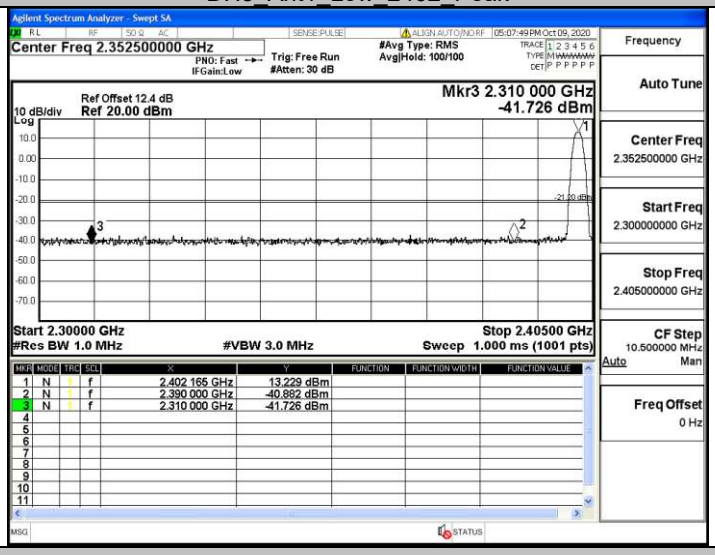
A.8 Restrict-band band-edge measurements

TestMode	Antenna	ChName	Channel	Detector	Freq	Result	Limit	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-48.03	<=-41.20	PASS
				AV	2390.000	-47.52	<=-41.20	PASS
				Peak	2310.000	-41.73	<=-21.20	PASS
				Peak	2390.000	-40.88	<=-21.20	PASS
		High	2480	AV	2483.500	-44.67	<=-41.20	PASS
				AV	2500.000	-46.84	<=-41.20	PASS
				Peak	2483.500	-38.4	<=-21.20	PASS
				Peak	2500.000	-39.91	<=-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-48.06	<=-41.20	PASS
				AV	2390.000	-47.56	<=-41.20	PASS
				Peak	2310.000	-40.98	<=-21.20	PASS
				Peak	2390.000	-40.21	<=-21.20	PASS
		High	2480	AV	2483.500	-44.64	<=-41.20	PASS
				AV	2500.000	-46.84	<=-41.20	PASS
				Peak	2483.500	-38.04	<=-21.20	PASS
				Peak	2500.000	-39.83	<=-21.20	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-48.03	<=-41.20	PASS
				AV	2390.000	-47.33	<=-41.20	PASS
				Peak	2310.000	-39.23	<=-21.20	PASS
				Peak	2390.000	-41.38	<=-21.20	PASS
		High	2480	AV	2483.500	-44.79	<=-41.20	PASS
				AV	2500.000	-46.96	<=-41.20	PASS
				Peak	2483.500	-39.57	<=-21.20	PASS
				Peak	2500.000	-40.37	<=-21.20	PASS

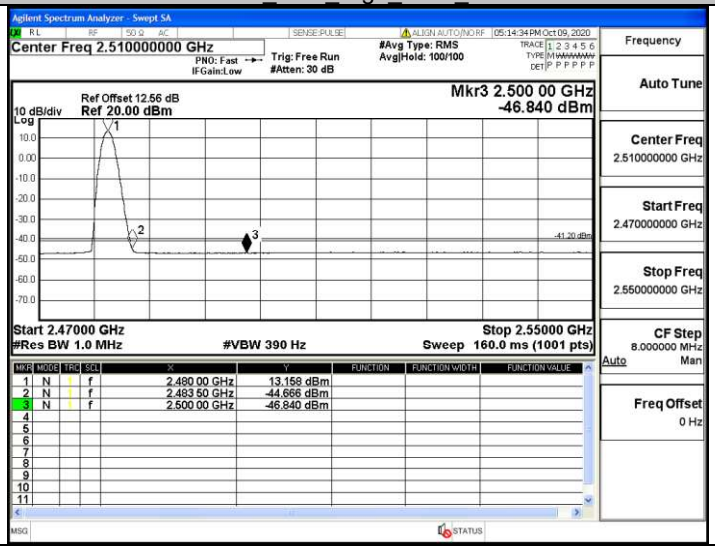
DH5_Ant1_Low_2402_AV



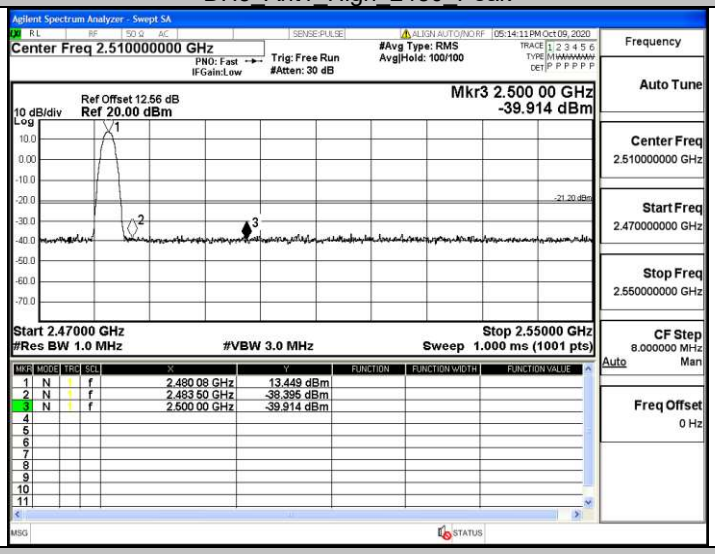
DH5_Ant1_Low_2402_Peak



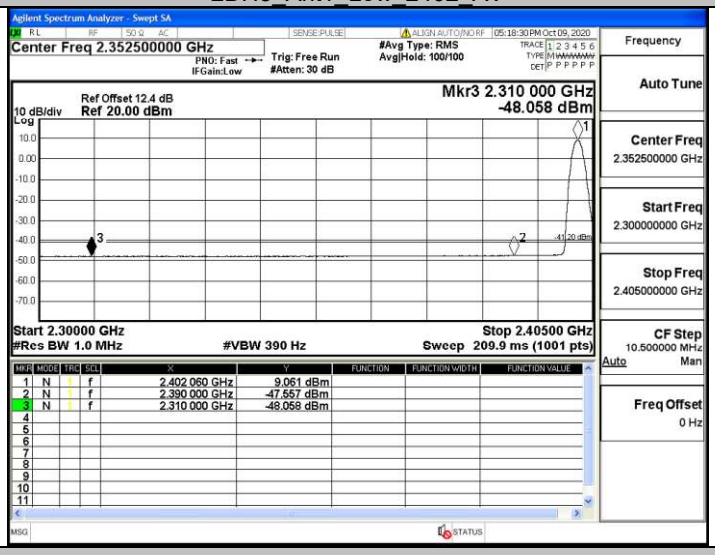
DH5_Ant1_High_2480_AV



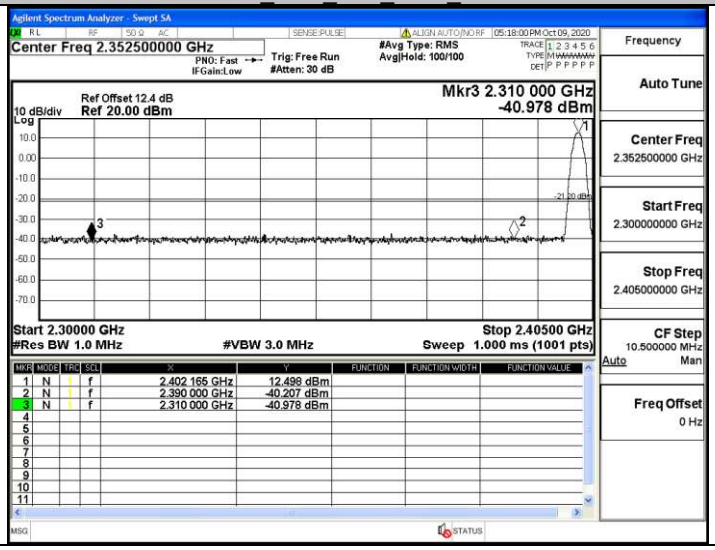
DH5_Ant1_High_2480_Peak



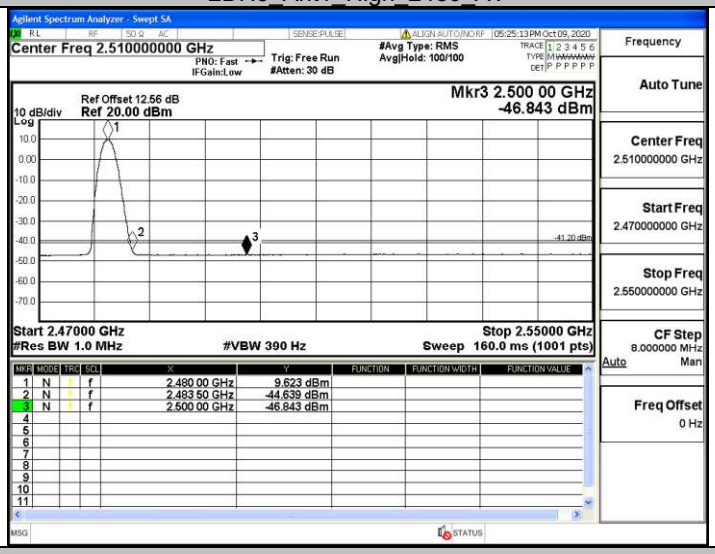
2DH5_Ant1_Low_2402_AV



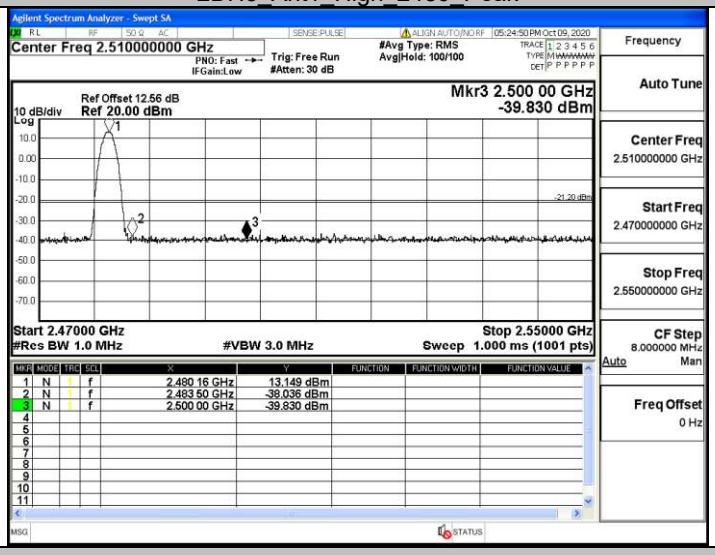
2DH5_Ant1_Low_2402_Peak



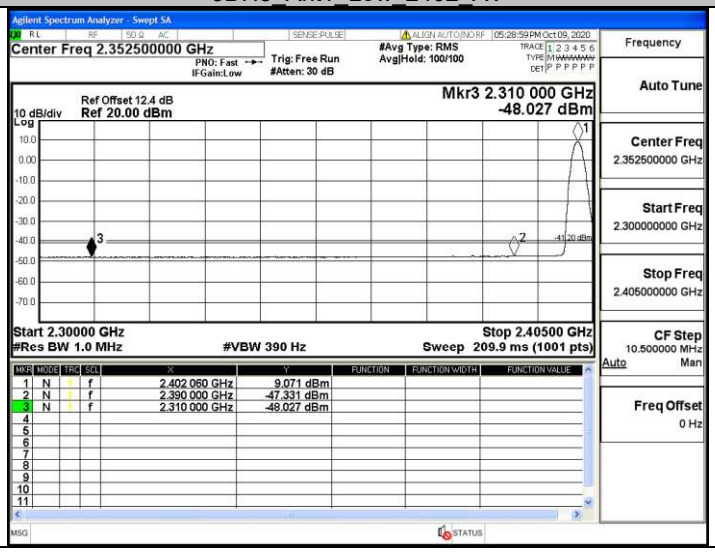
2DH5_Ant1_High_2480_AV



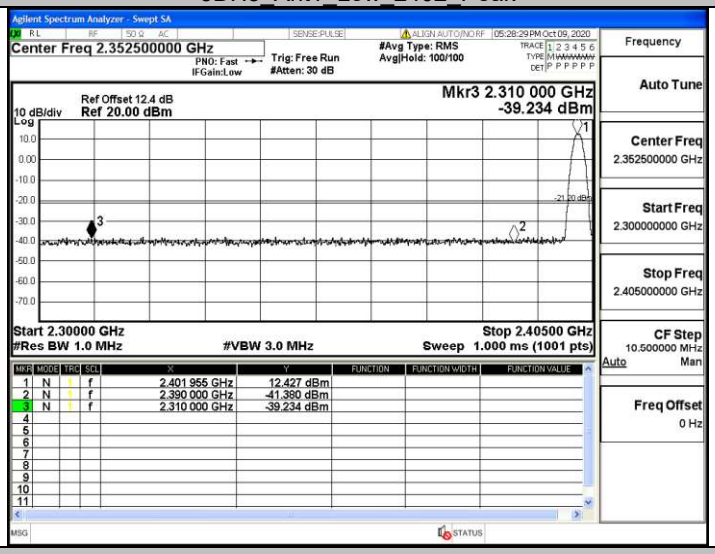
2DH5_Ant1_High_2480_Peak



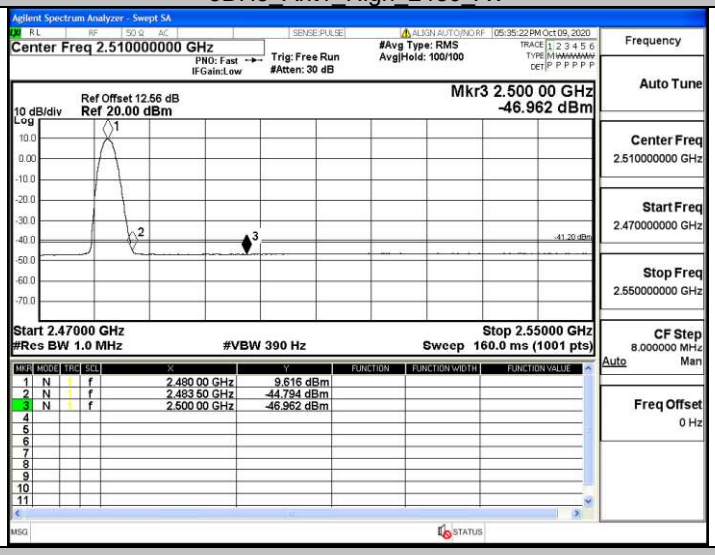
3DH5_Ant1_Low_2402_AV



3DH5_Ant1_Low_2402_Peak



3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak