Appendix A
RF Test Data for BT(BDR/EDR) (Conducted Measurement)
Product Name: Active noise cancelling Bluetooth headphone
Trade Mark: N/A

Test Model: NC-1029

FCC ID: 2AAHX-NC1029

Environmental Conditions

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

A.1 20 dB Bandwidth

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.939	2401.523	2402.462	---	PASS
		2441	0.945	2440.526	2441.471	---	PASS
		2480	0.951	2479.520	2480.471	---	PASS
2DH5	Ant1	2402	1.524	2401.223	2402.747	---	PASS
		2441	1.527	2440.220	2441.747	---	PASS
		2480	1.527	2479.220	2480.747	---	PASS
3DH5	Ant1	2402	1.515	2401.238	2402.753	---	PASS
		2441	1.485	2440.265	2441.750	---	PASS
		2480	1.488	2479.262	2480.750	---	PASS

Test Graph

DH5_Ant1_2402

DH5_Ant1_2441

DH5_Ant1_2480

2DH5_Ant1_2402

2DH5_Ant1_2441

2DH5_Ant1_2480

3DH5_Ant1_2402

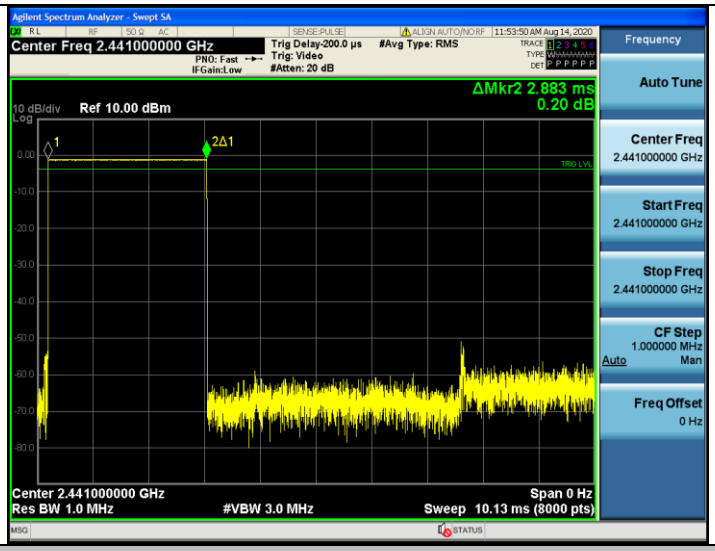
3DH5_Ant1_2441

3DH5_Ant1_2480

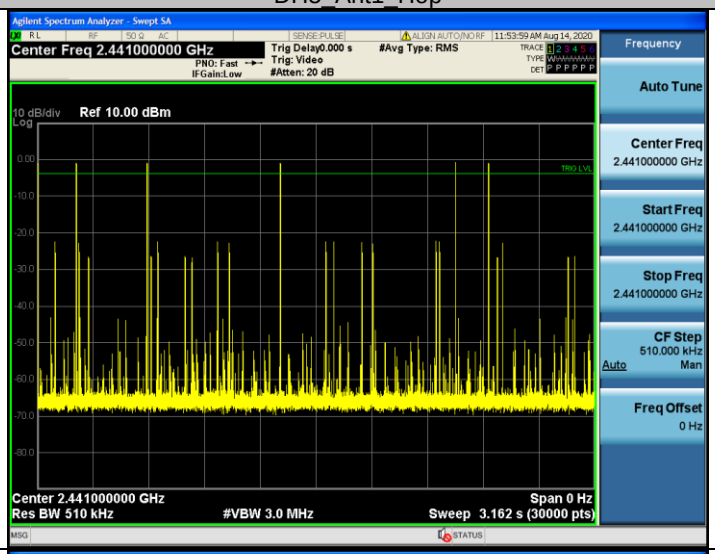
A.2 Dwell Time

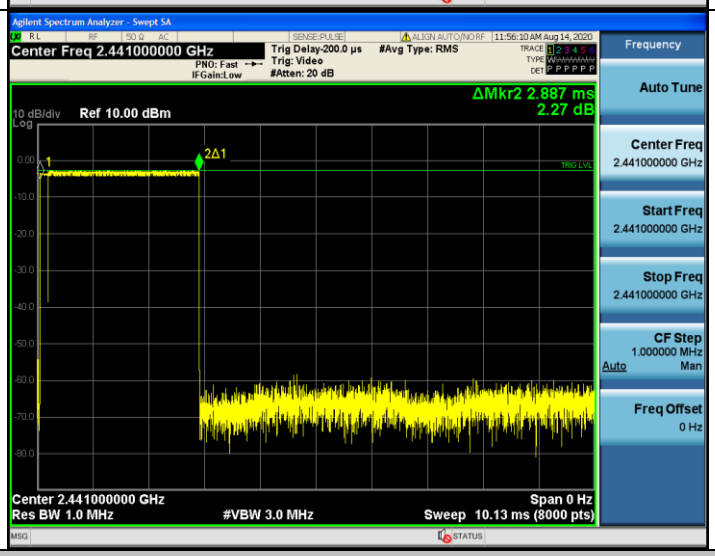
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	60	0.173	<=0.4	PASS
2DH5	Ant1	Hop	2.89	100	0.289	<=0.4	PASS
3DH5	Ant1	Hop	2.89	80	0.231	<=0.4	PASS

Test Graph

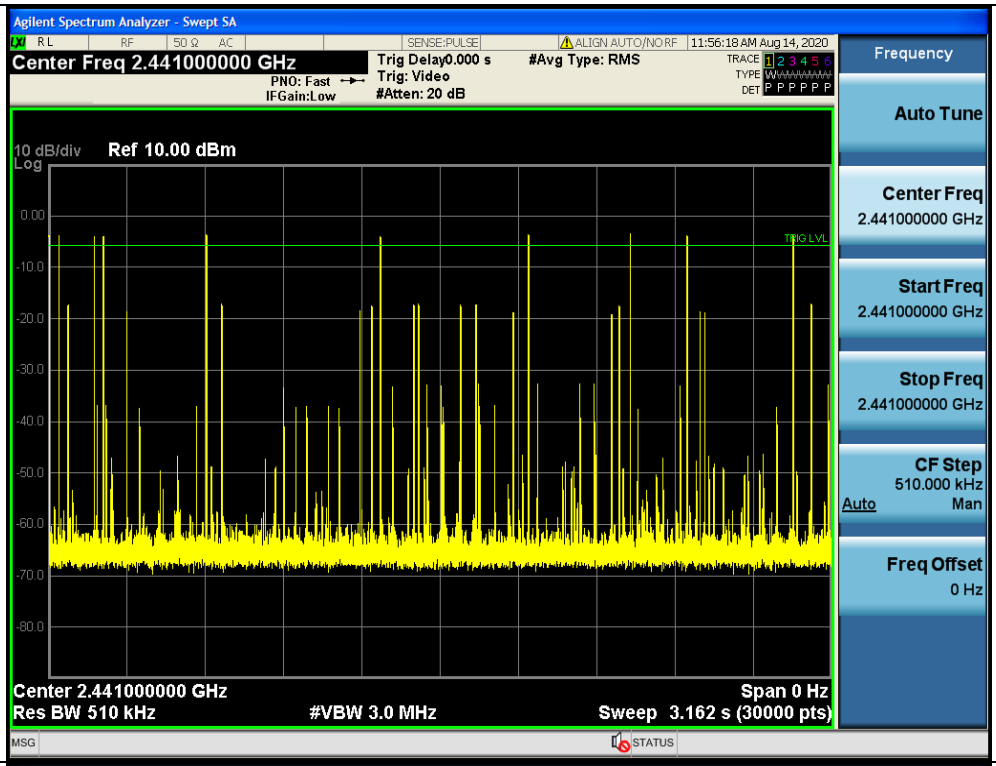


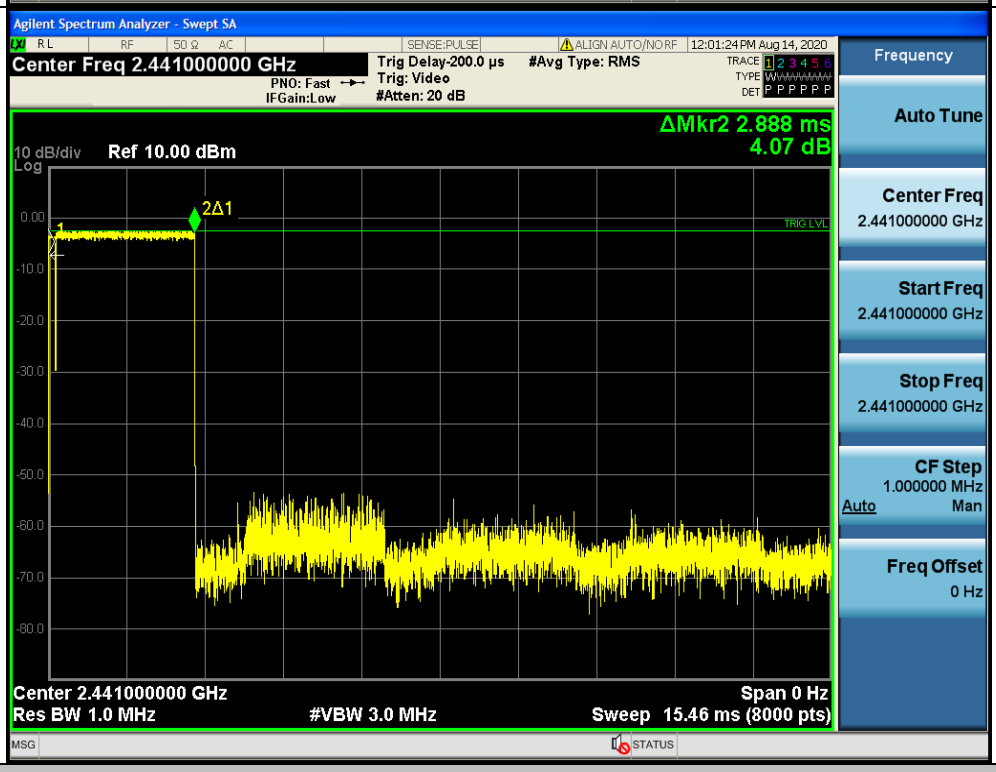
DH5_Ant1_Hop



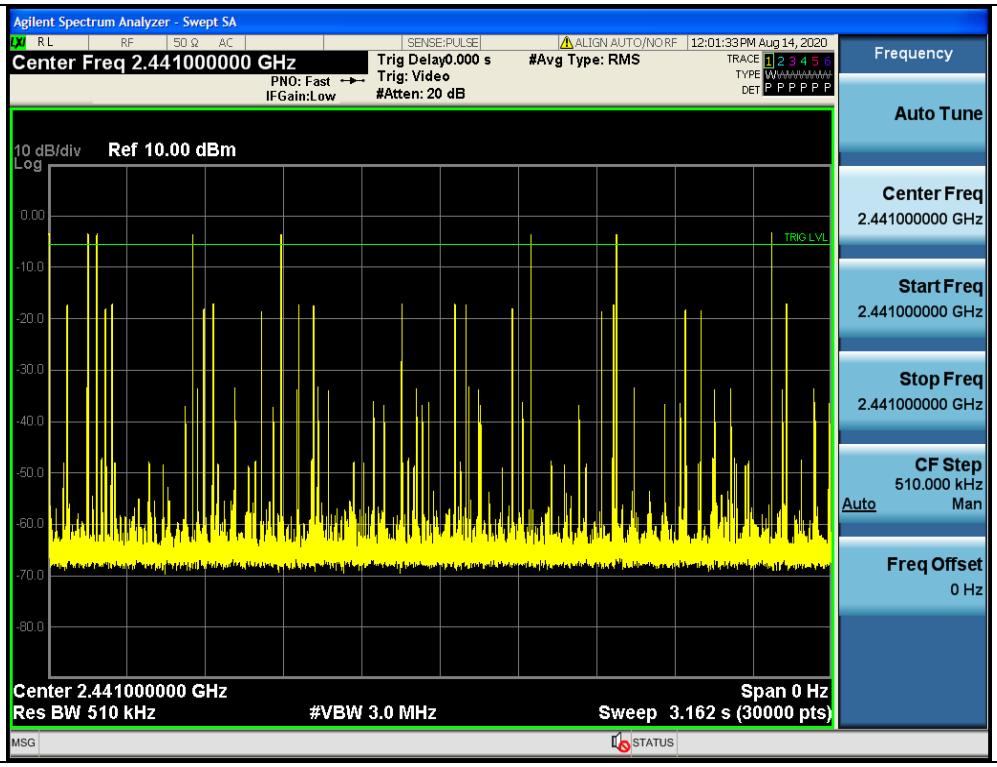


2DH5_Ant1_Hop





3DH5_Ant1_Hop

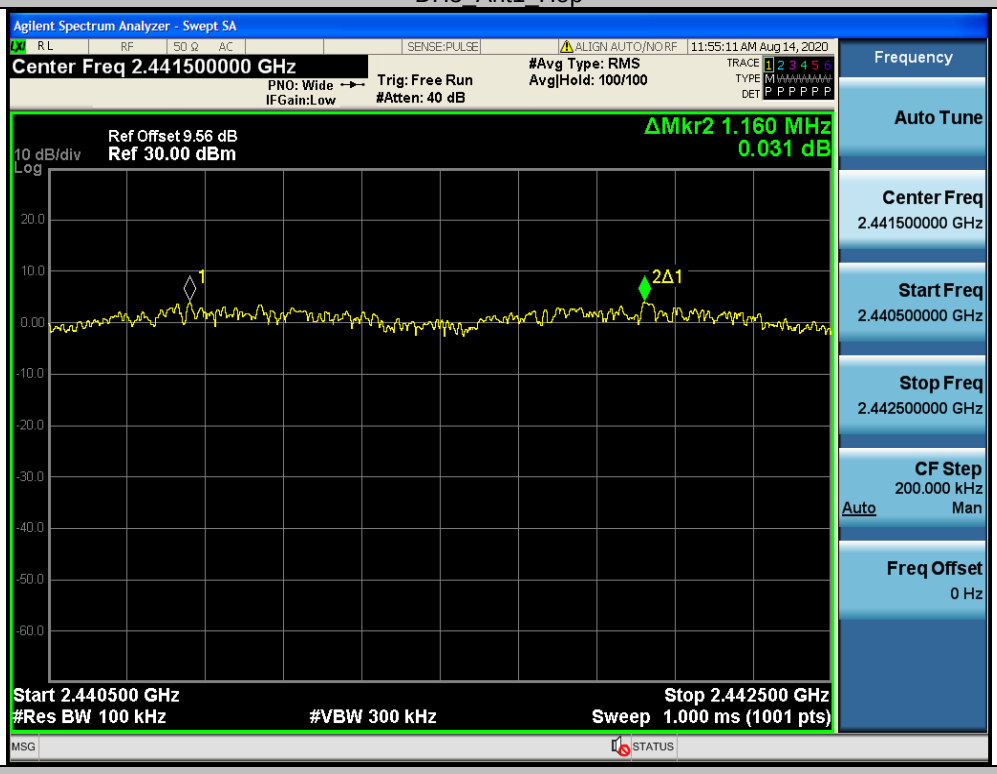

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
PNO: Fast
IFGain:Low
Trig Delay 0.000 s
Trig: Video
#Atten: 20 dB
#Avg Type: RMS
12:01:33 PM Aug 14, 2020
10 dB/div
Log
Ref 10.00 dBm
TRIG LVL
Center 2.441000000 GHz
Res BW 510 kHz
#VBW 3.0 MHz
Span 0 Hz
Sweep 3.162 s (30000 pts)
Frequency
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

A.3 Carrier Frequency Separation

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.036	>=0.951	PASS
2DH5	Ant1	Hop	1.160	>=1.018	PASS
3DH5	Ant1	Hop	1.068	>=1.010	PASS

Test Graph

DH5_Ant1_Hop



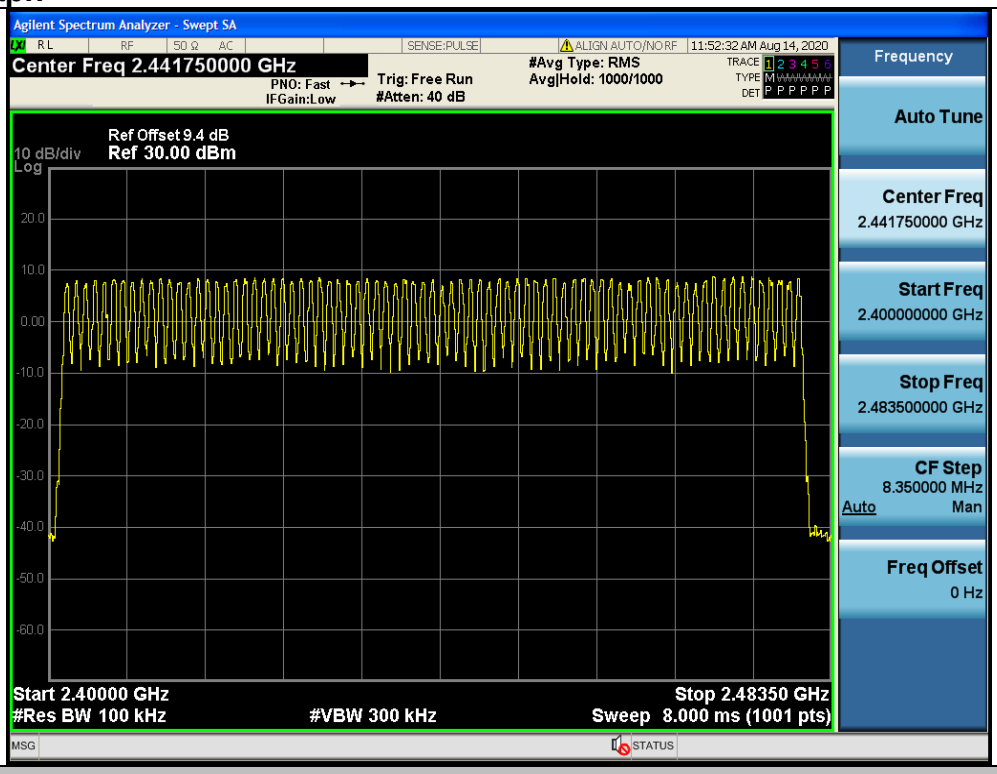
2DH5_Ant1_Hop

3DH5_Ant1_Hop

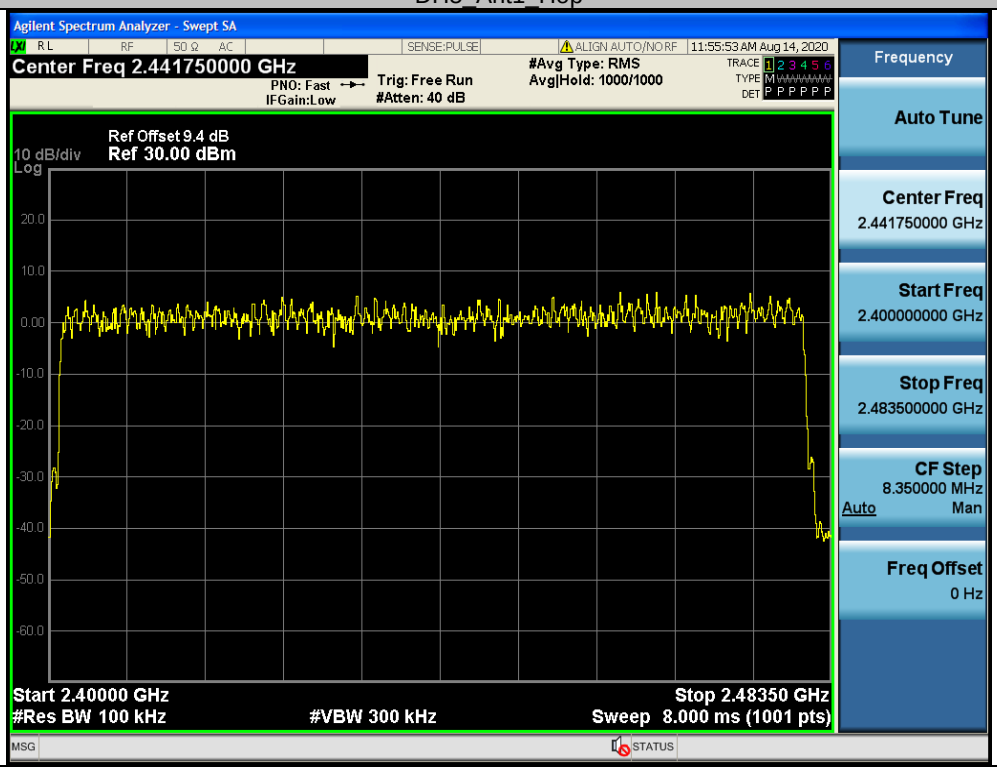
A.4 Hopping Channel Number

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

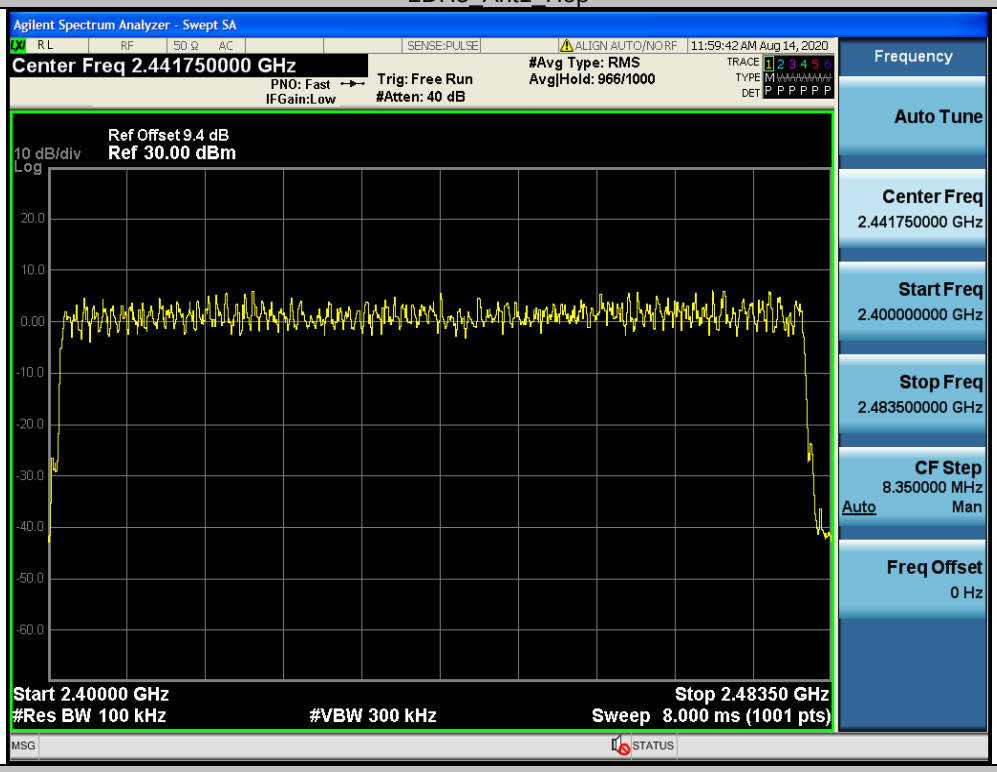
Test Graph



DH5_Ant1_Hop

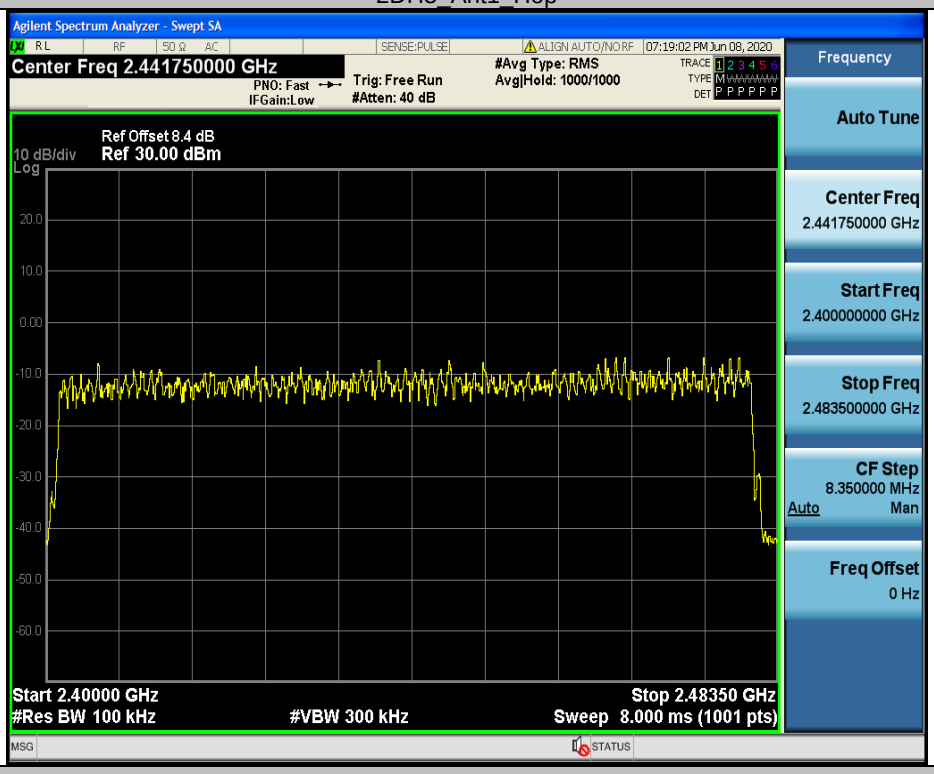


2DH5_Ant1_Hop



3DH5_Ant1_Hop

2DH5_Ant1_Hop

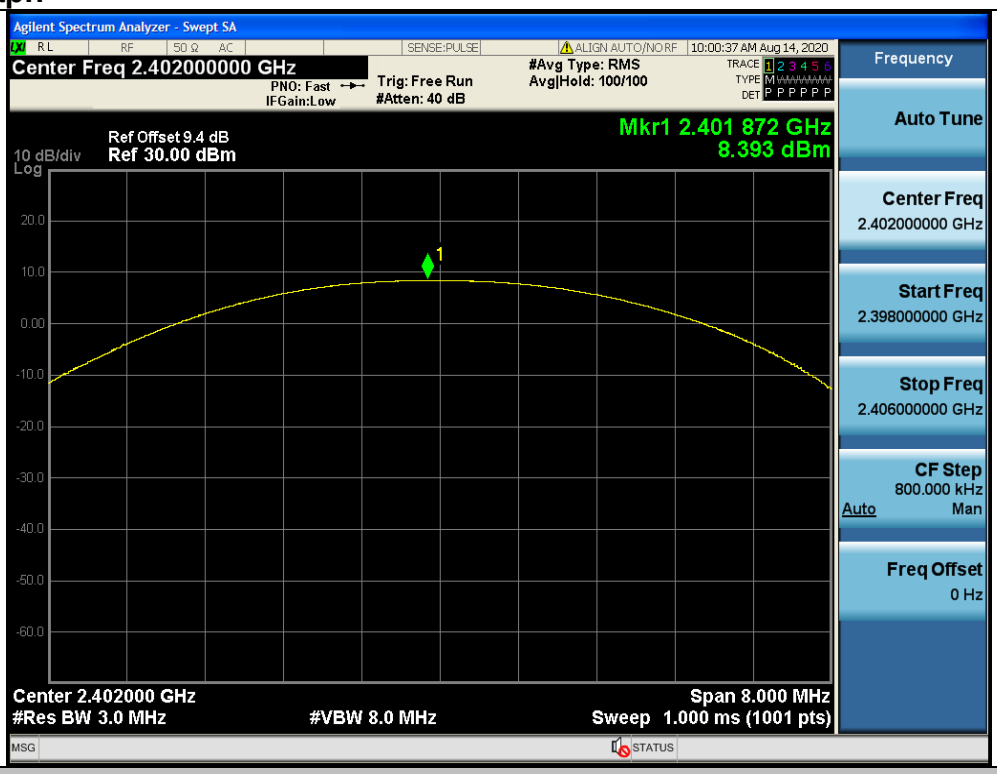


3DH5_Ant1_Hop

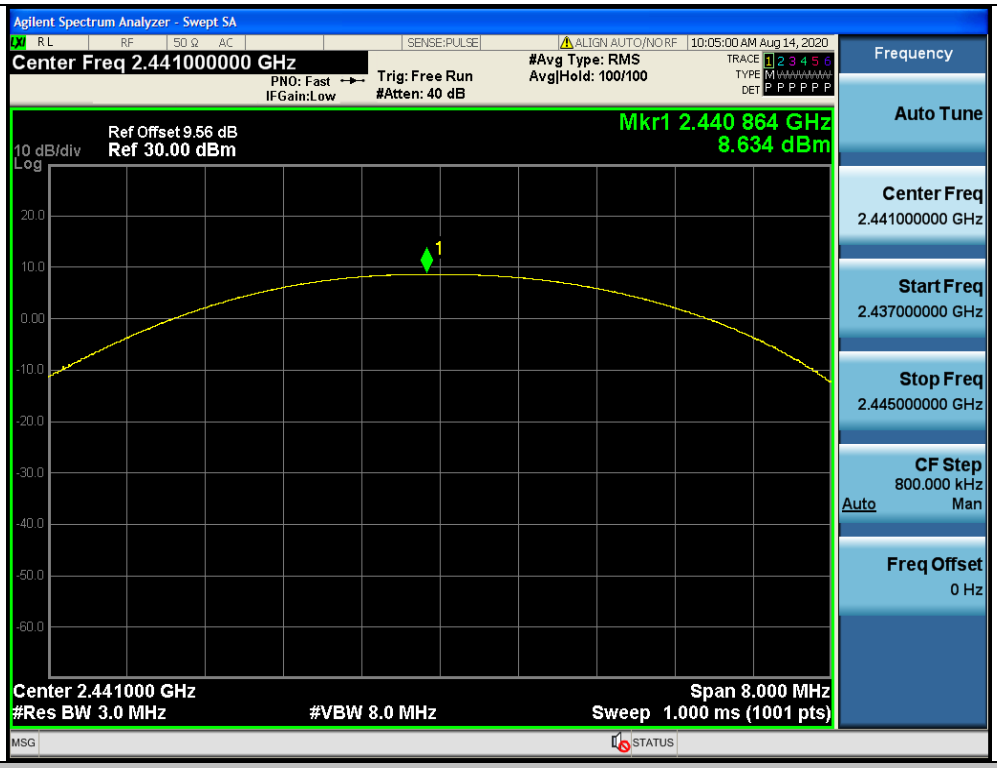
A.5 Conducted Peak Output Power

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	8.40	<=30	PASS
		2441	8.63	<=30	PASS
		2480	8.91	<=30	PASS
2DH5	Ant1	2402	7.14	<=20.97	PASS
		2441	7.39	<=20.97	PASS
		2480	7.71	<=20.97	PASS
3DH5	Ant1	2402	7.26	<=20.97	PASS
		2441	7.50	<=20.97	PASS
		2480	7.82	<=20.97	PASS

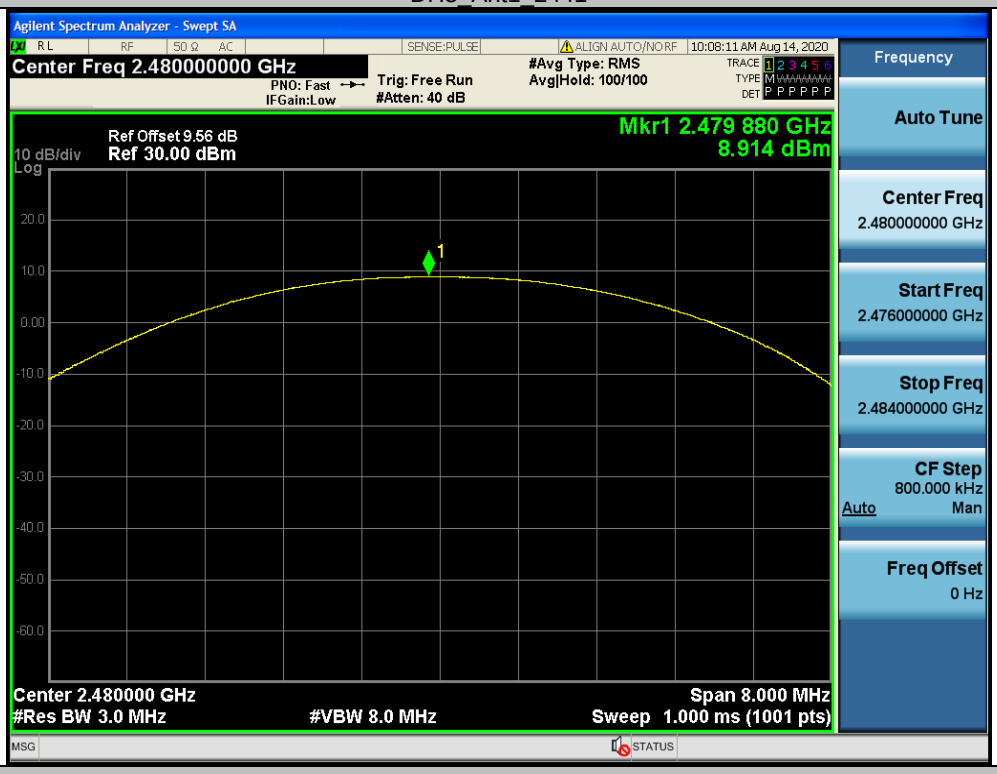
Test Graph



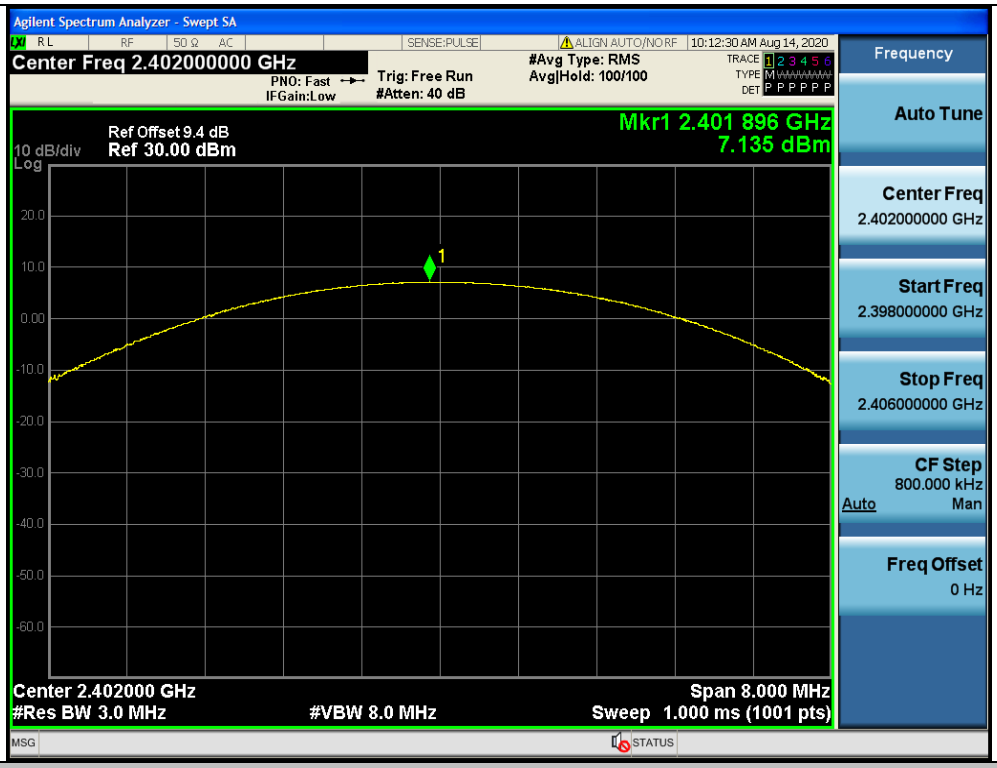
DH5_Ant1_2402



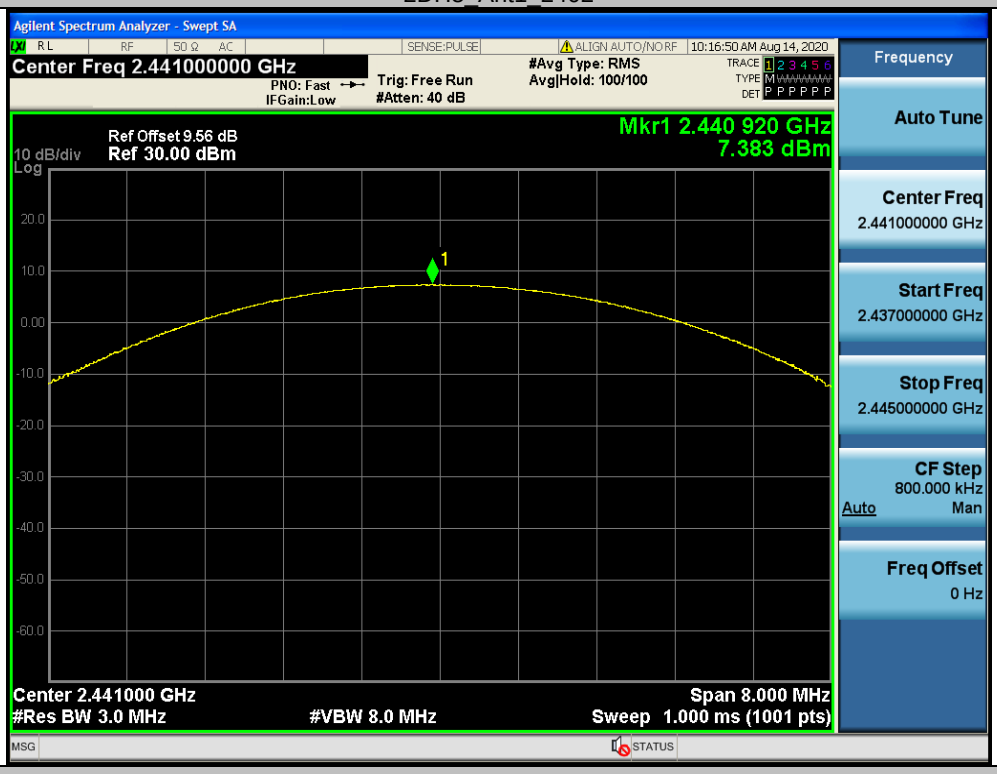
DH5_Ant1_2441



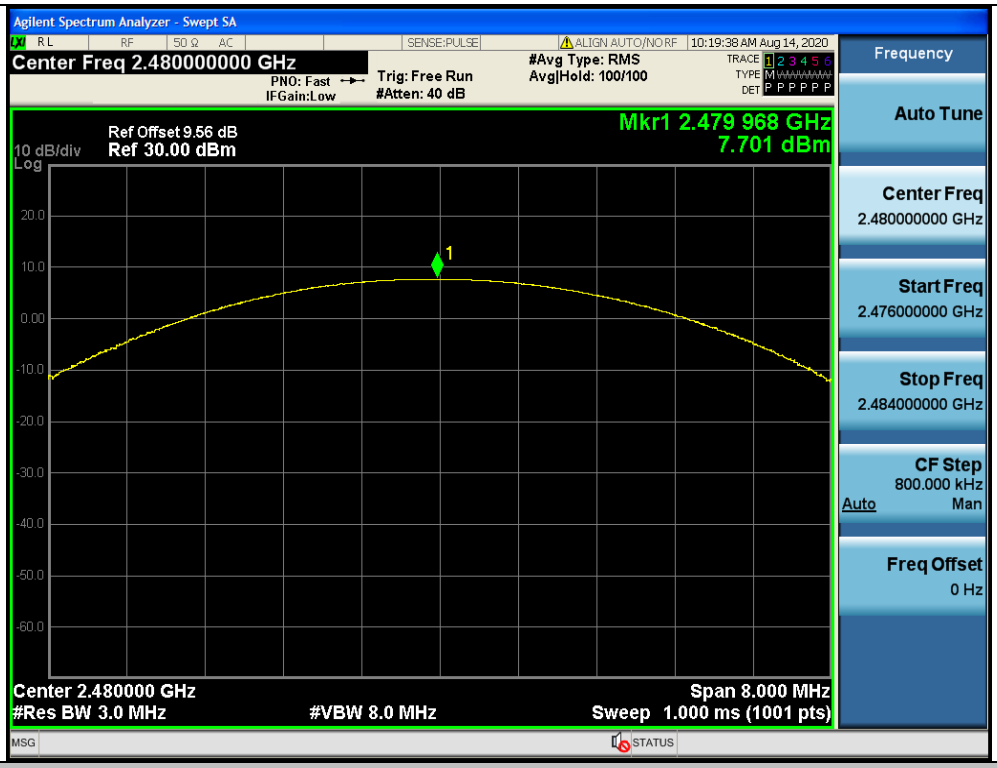
DH5_Ant1_2480



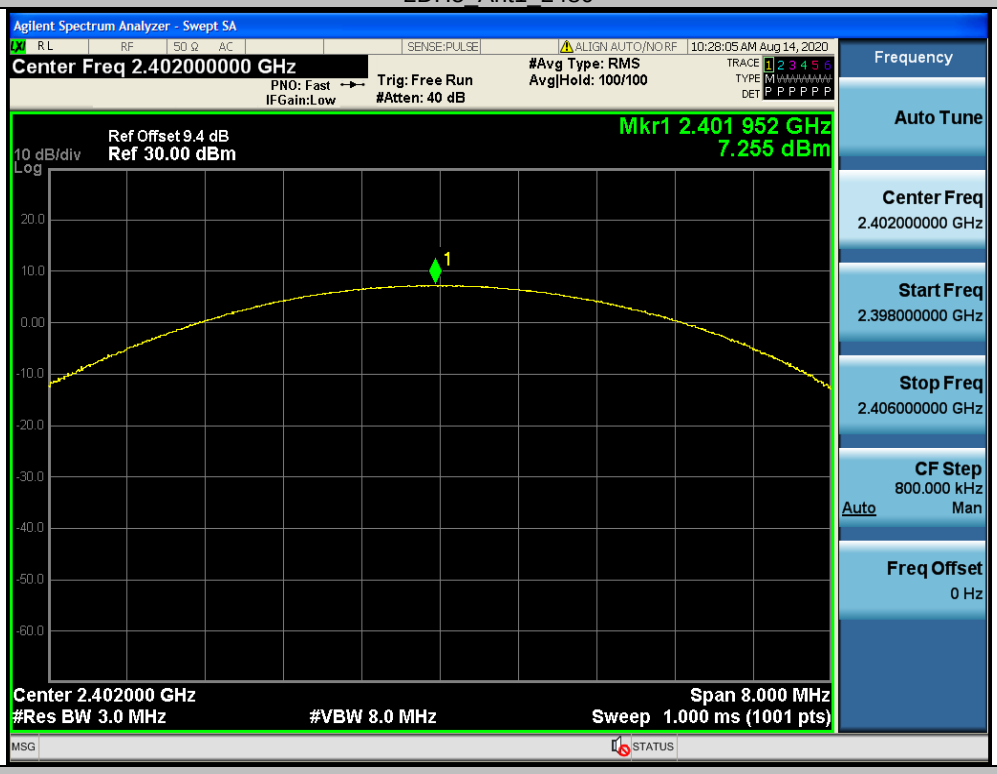
2DH5_Ant1_2402



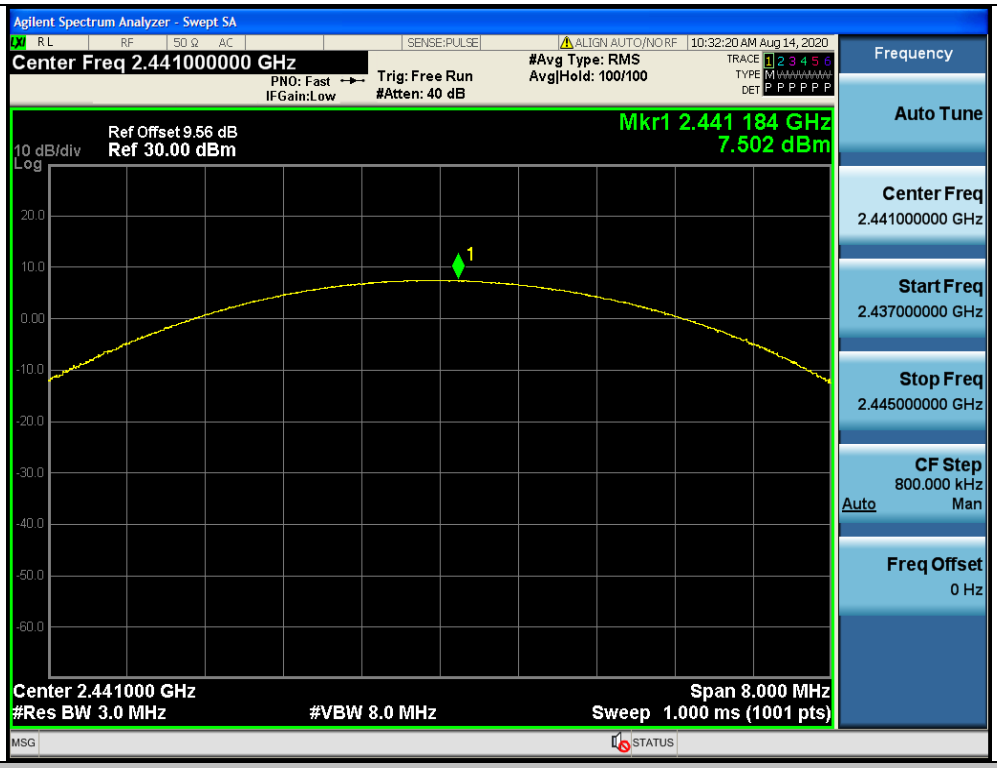
2DH5_Ant1_2441



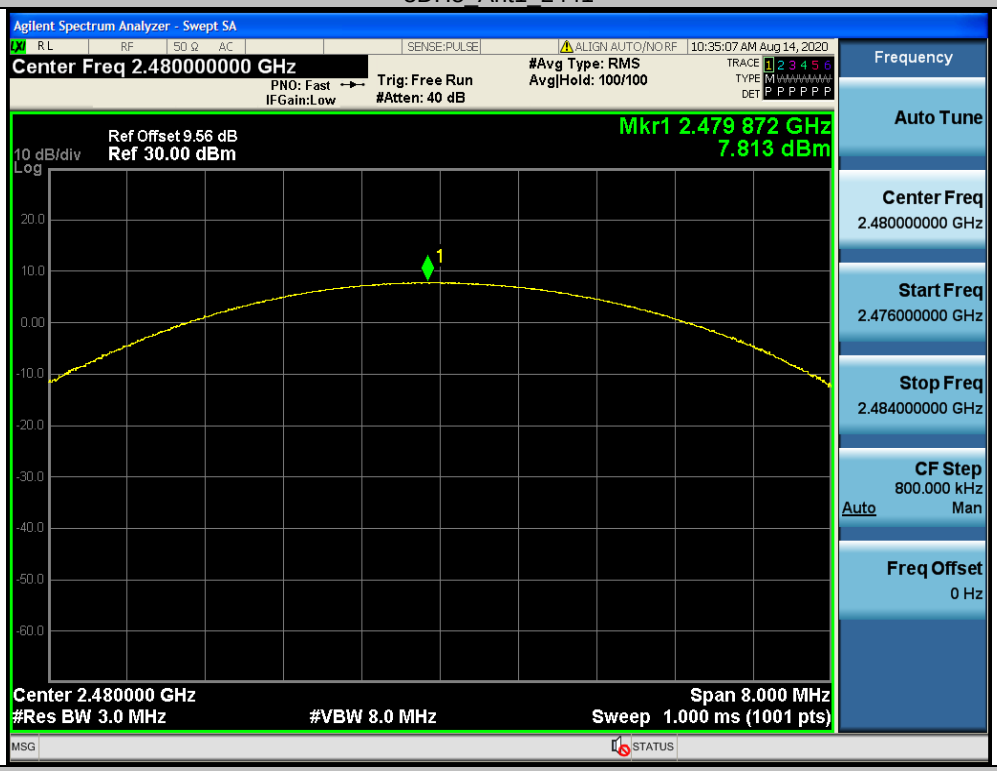
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441

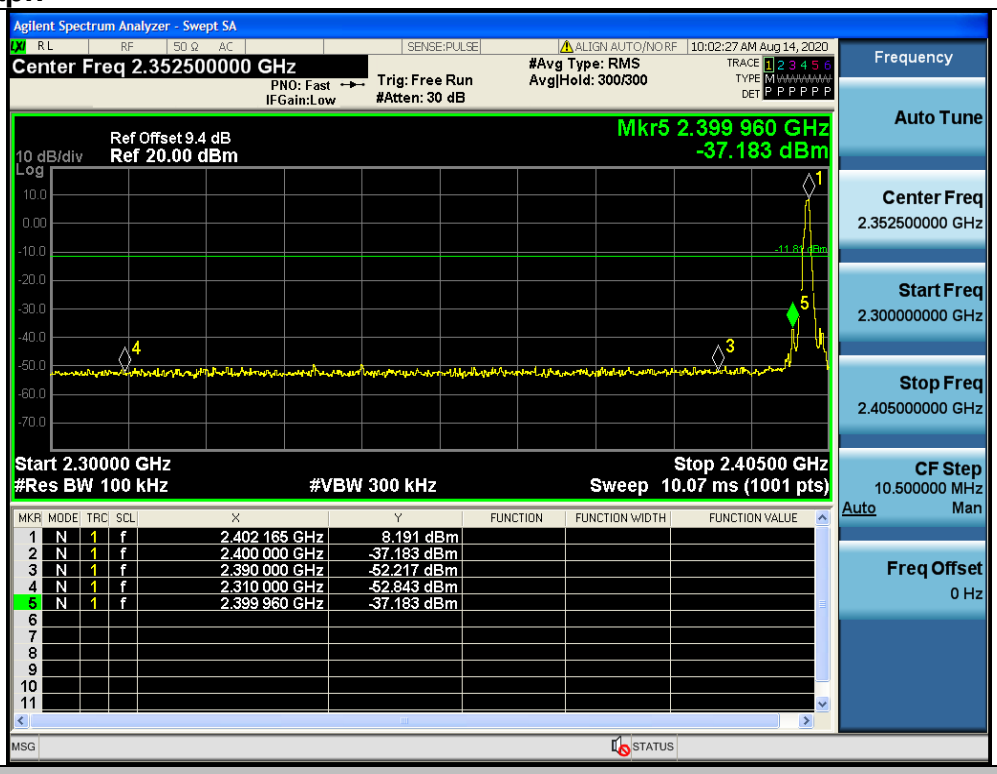


3DH5_Ant1_2480

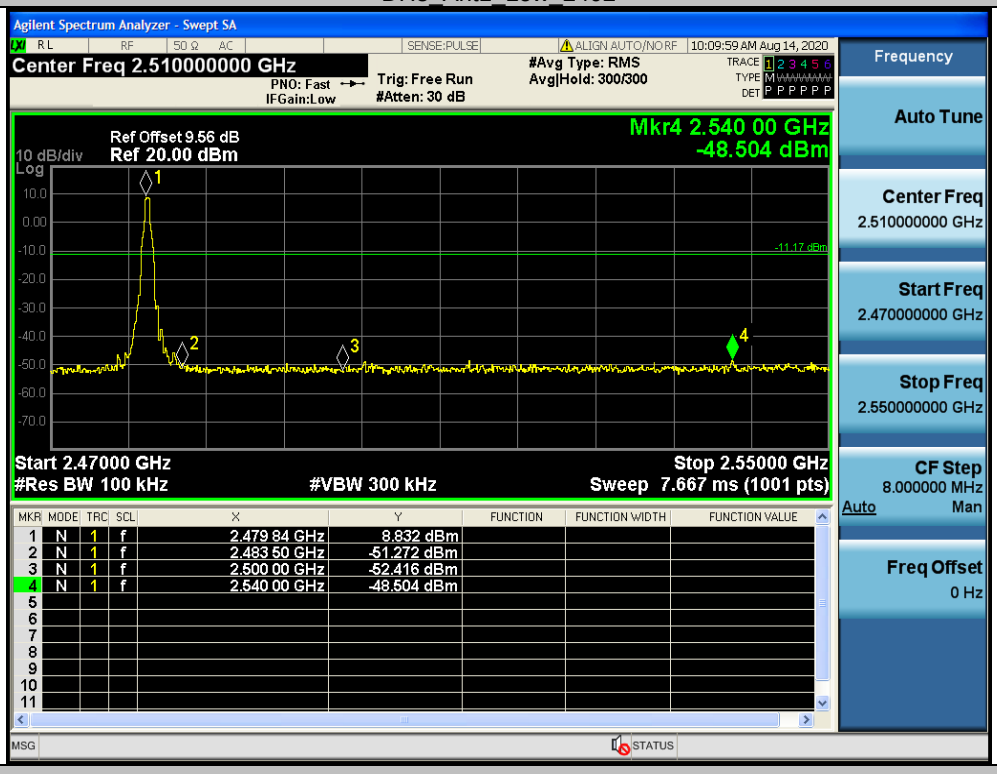
A.6 Band-edge for RF Conducted Emissions

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	8.20	-37.18	<=-11.81	PASS
		High	2480	8.83	-48.5	<=-11.17	PASS
		Low	Hop_2402	-2.91	-49.64	<=-22.91	PASS
		High	Hop_2480	-2.75	-48.06	<=-22.74	PASS
2DH5	Ant1	Low	2402	5.37	-40.09	<=-14.63	PASS
		High	2480	5.48	-44.87	<=-14.52	PASS
		Low	Hop_2402	-8.32	-49	<=-28.32	PASS
		High	Hop_2480	-7.55	-48.68	<=-27.55	PASS
3DH5	Ant1	Low	2402	5.07	-38.24	<=-14.93	PASS
		High	2480	5.99	-48.69	<=-14.01	PASS
		Low	Hop_2402	-7.77	-50.25	<=-27.77	PASS
		High	Hop_2480	-4.46	-48.8	<=-24.45	PASS

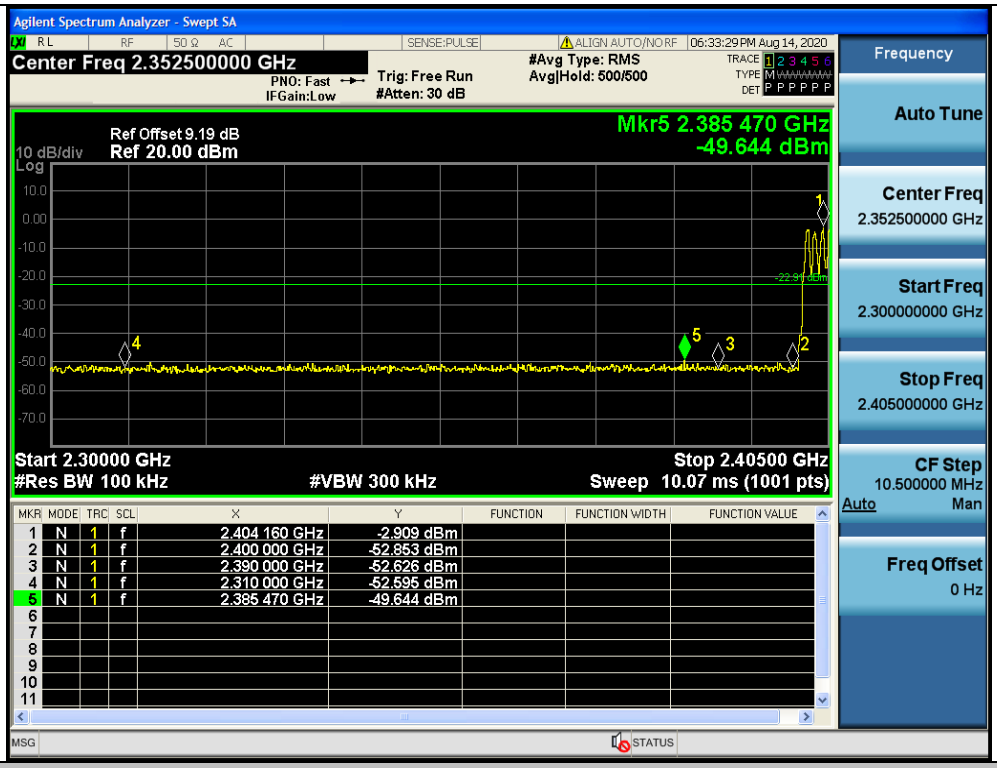
Test Graph



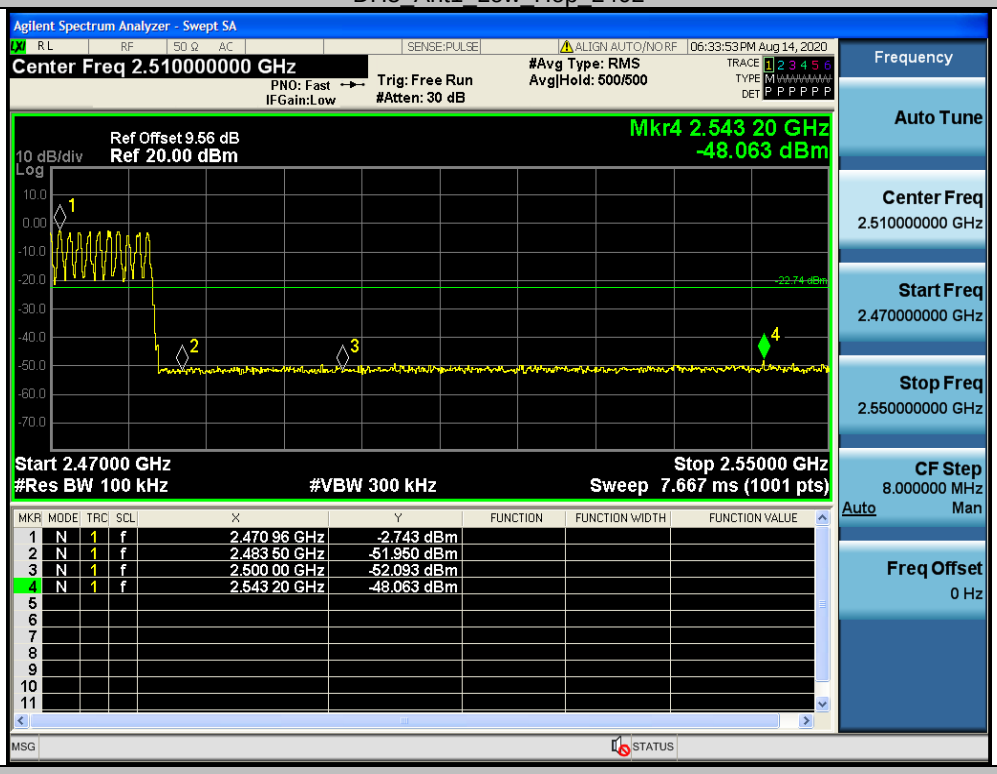
DH5_Ant1_Low_2402



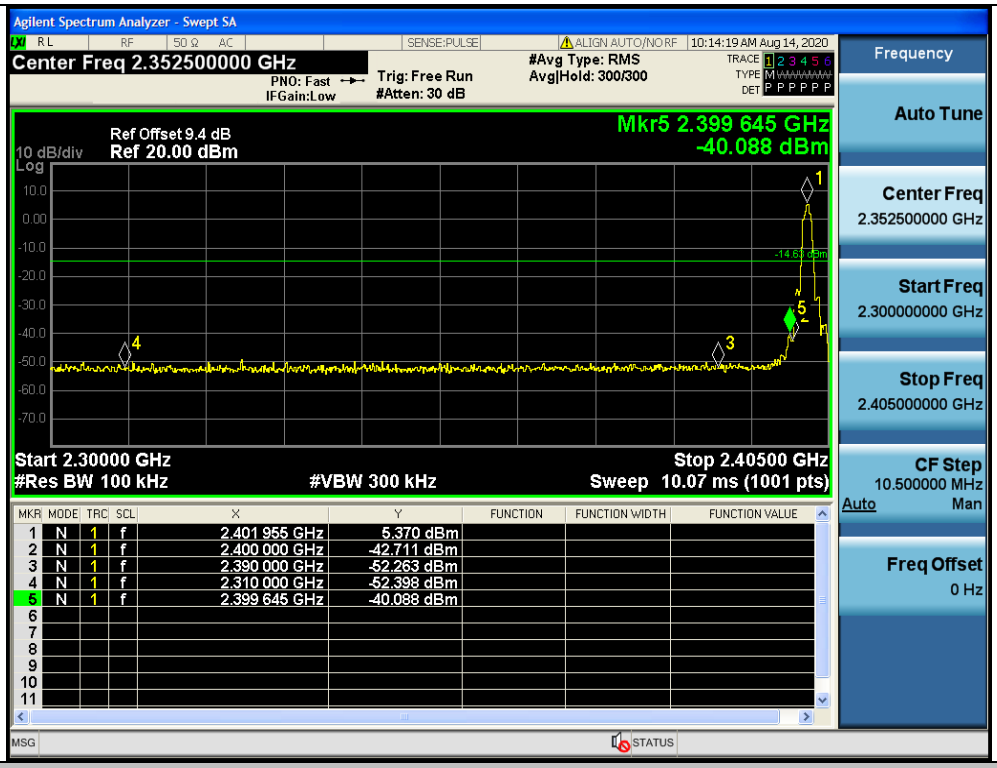
DH5_Ant1_High_2480



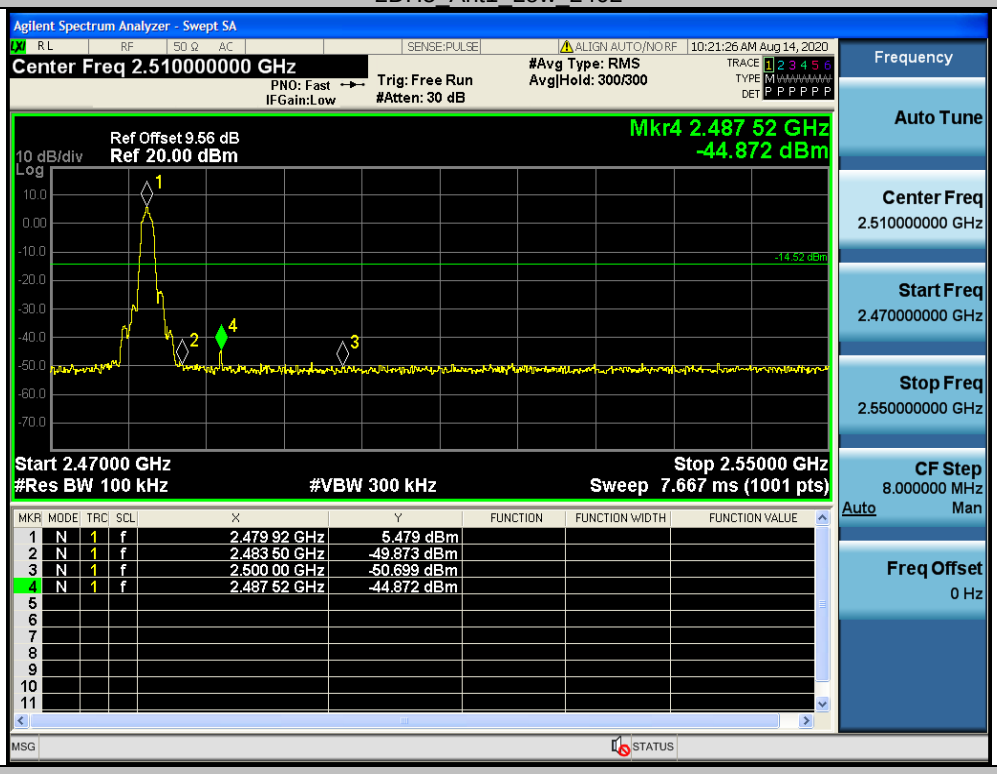
DH5_Ant1_Low_Hop_2402



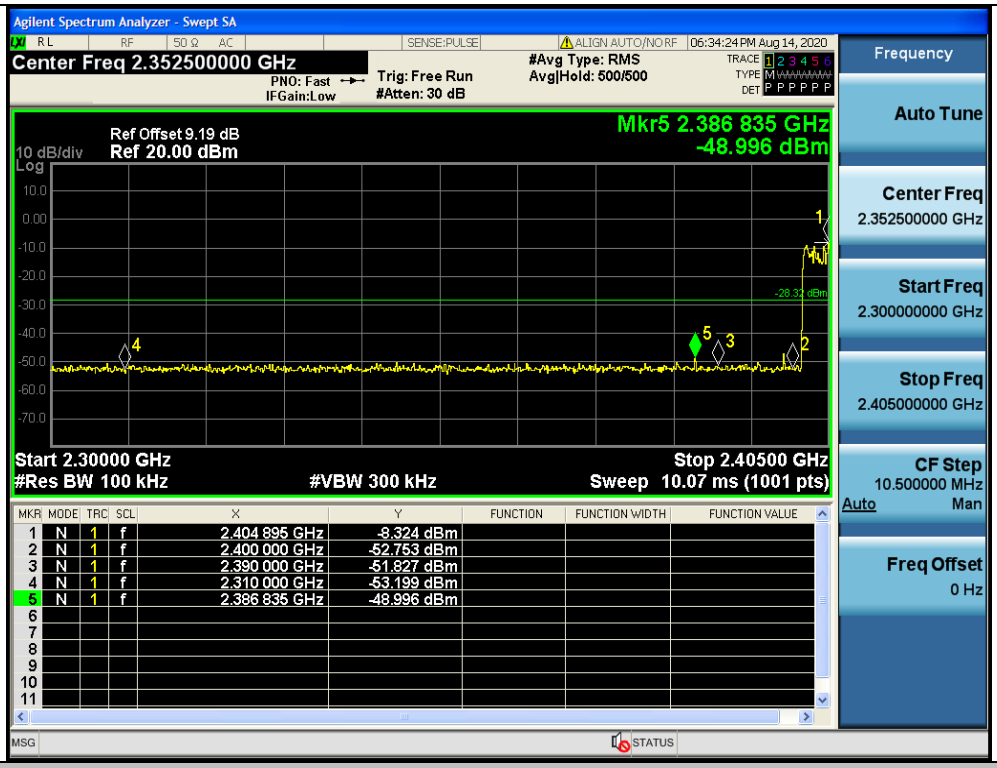
DH5_Ant1_High_Hop_2480



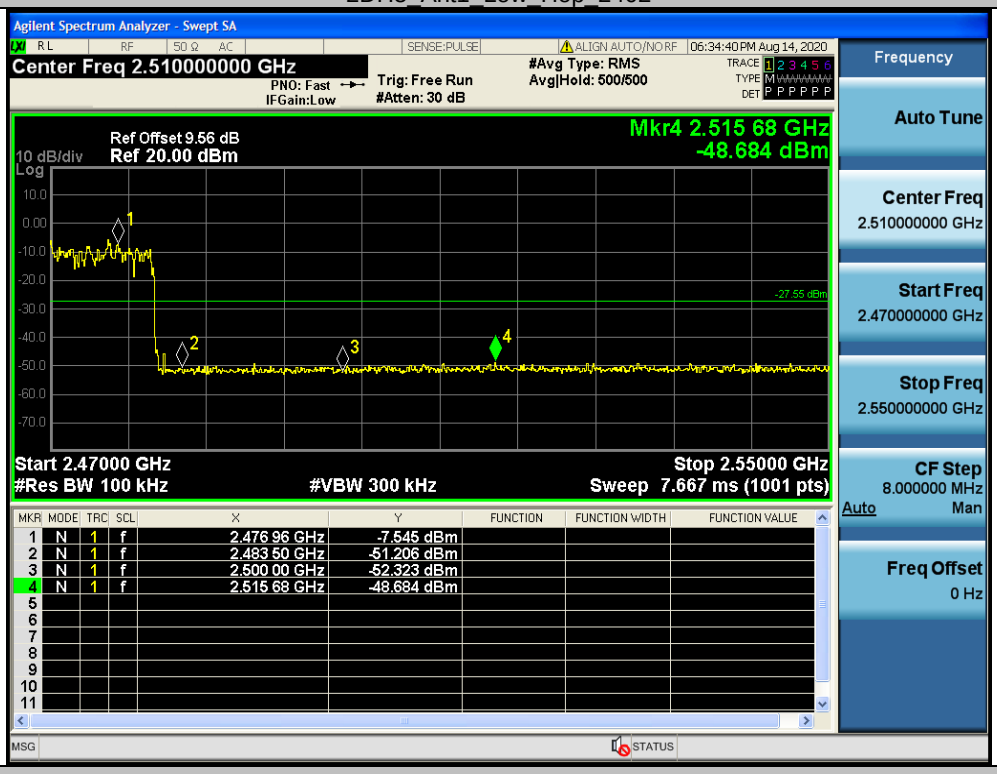
2DH5_Ant1_Low_2402



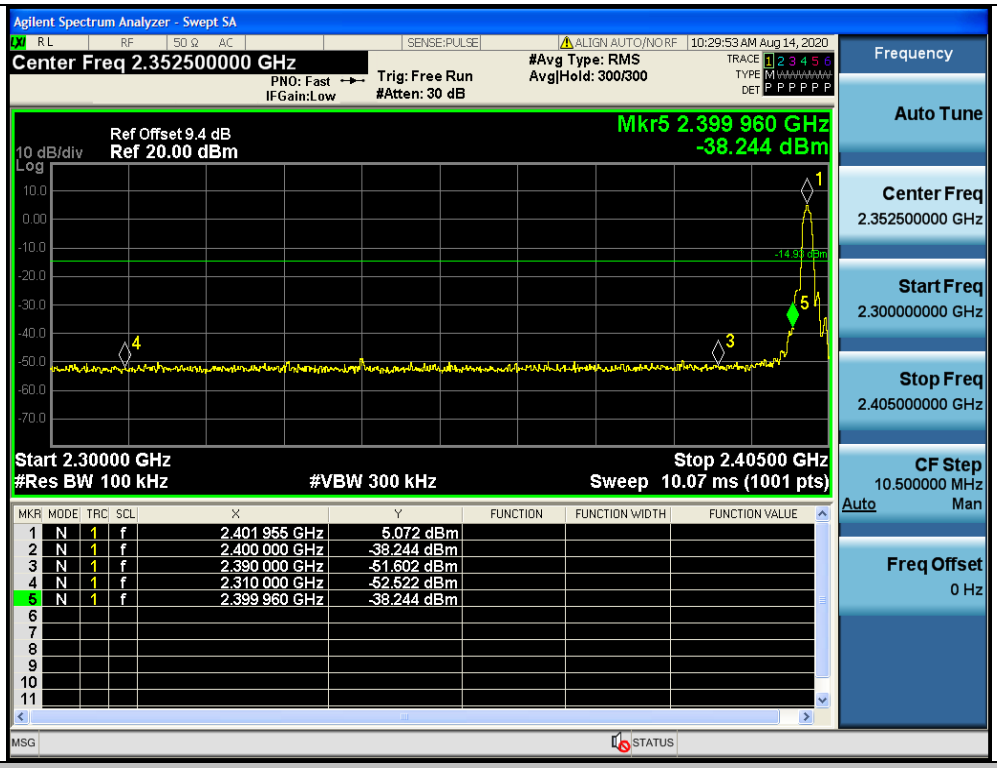
2DH5_Ant1_High_2480



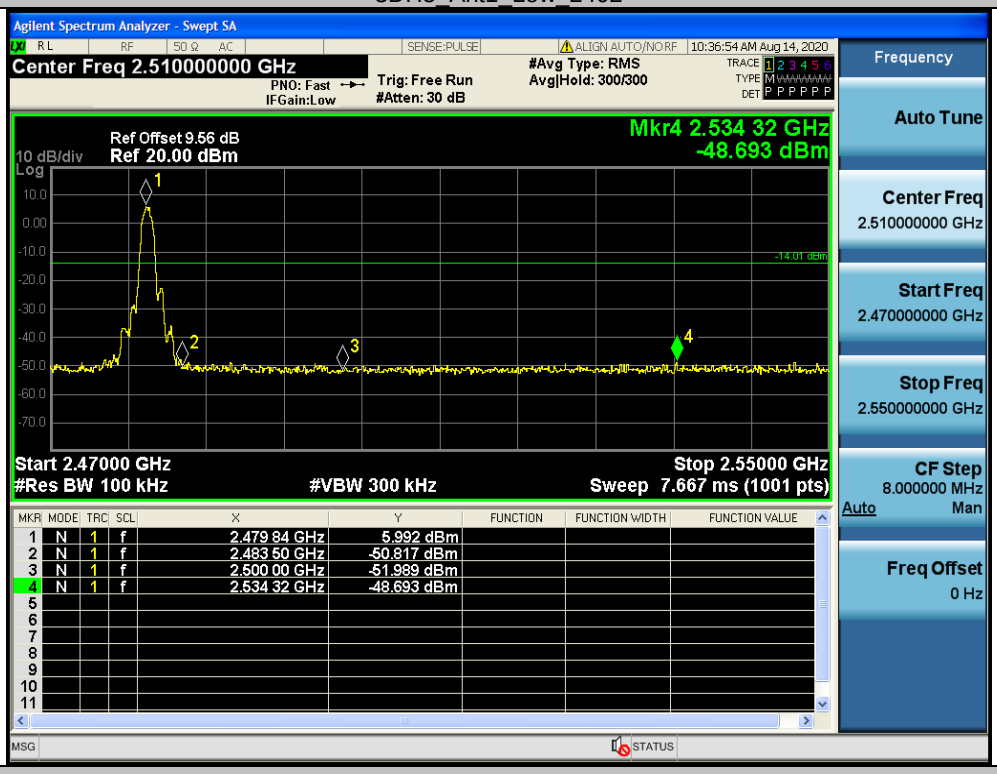
2DH5_Ant1_Low_Hop_2402



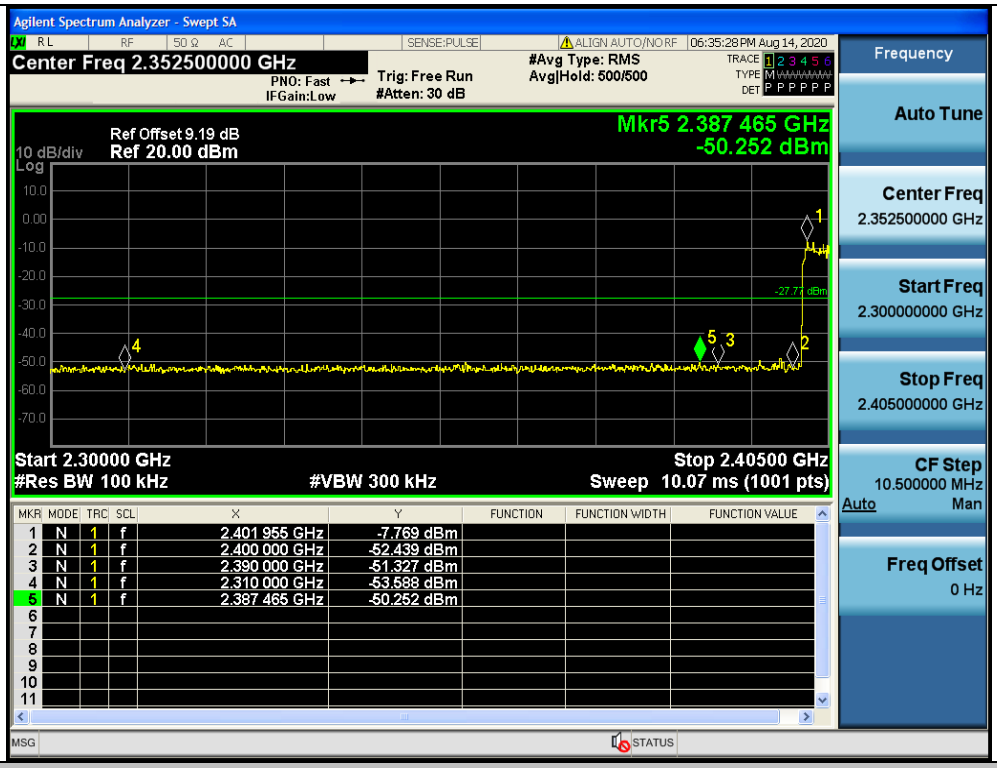
2DH5_Ant1_High_Hop_2480



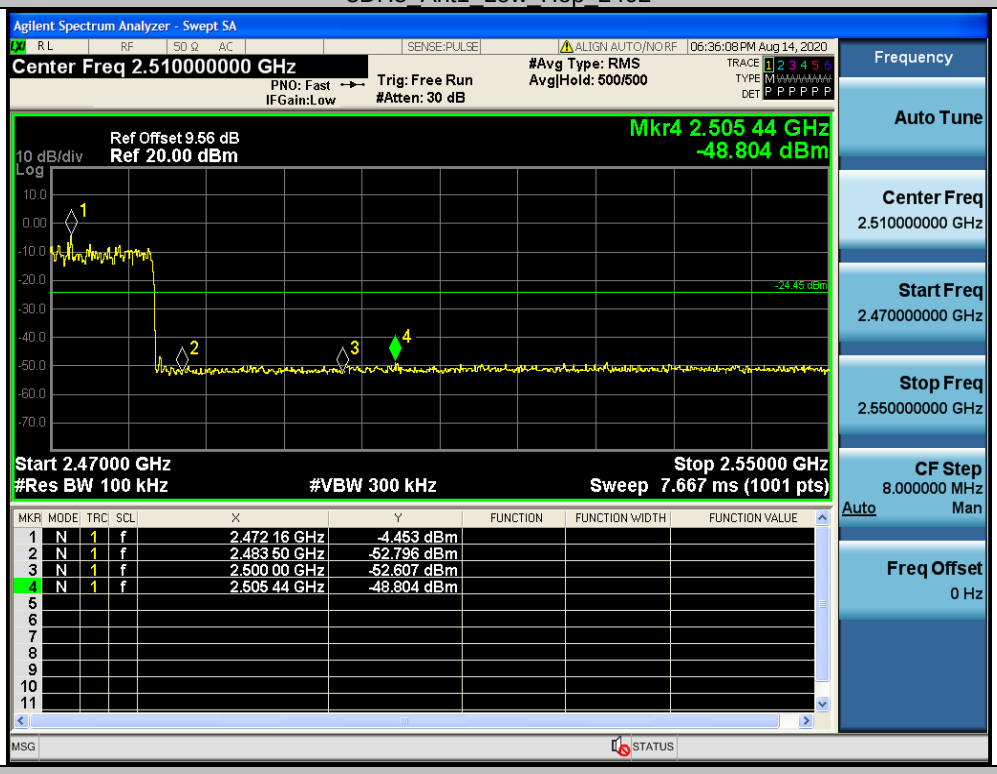
3DH5_Ant1_Low_2402



3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402

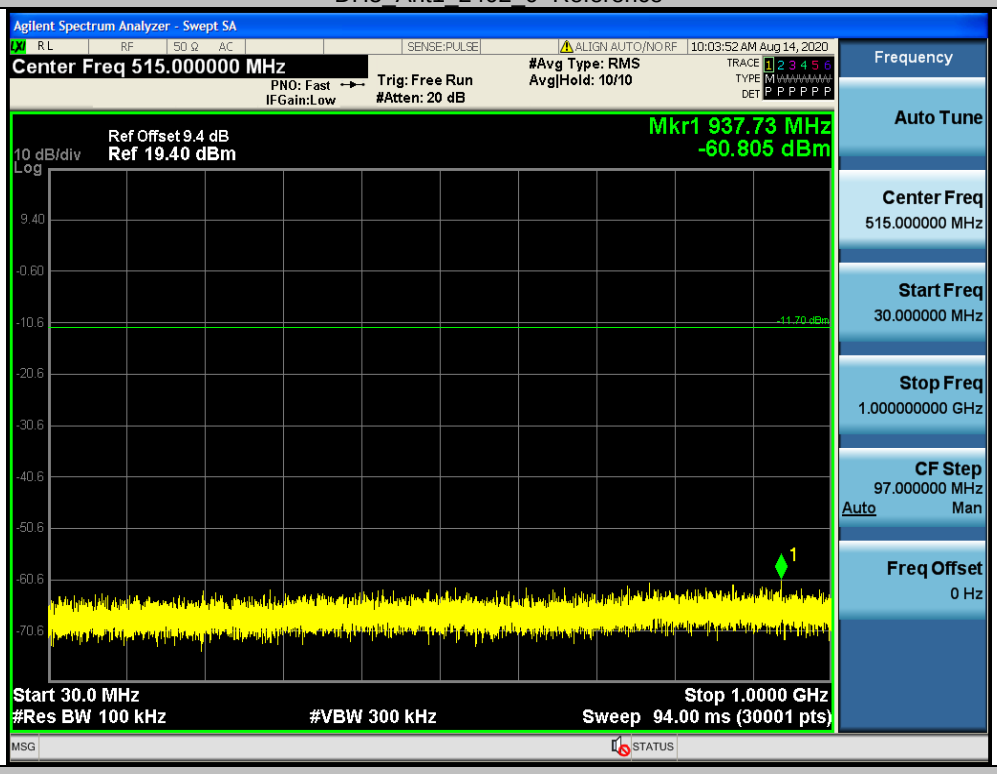


3DH5_Ant1_High_Hop_2480

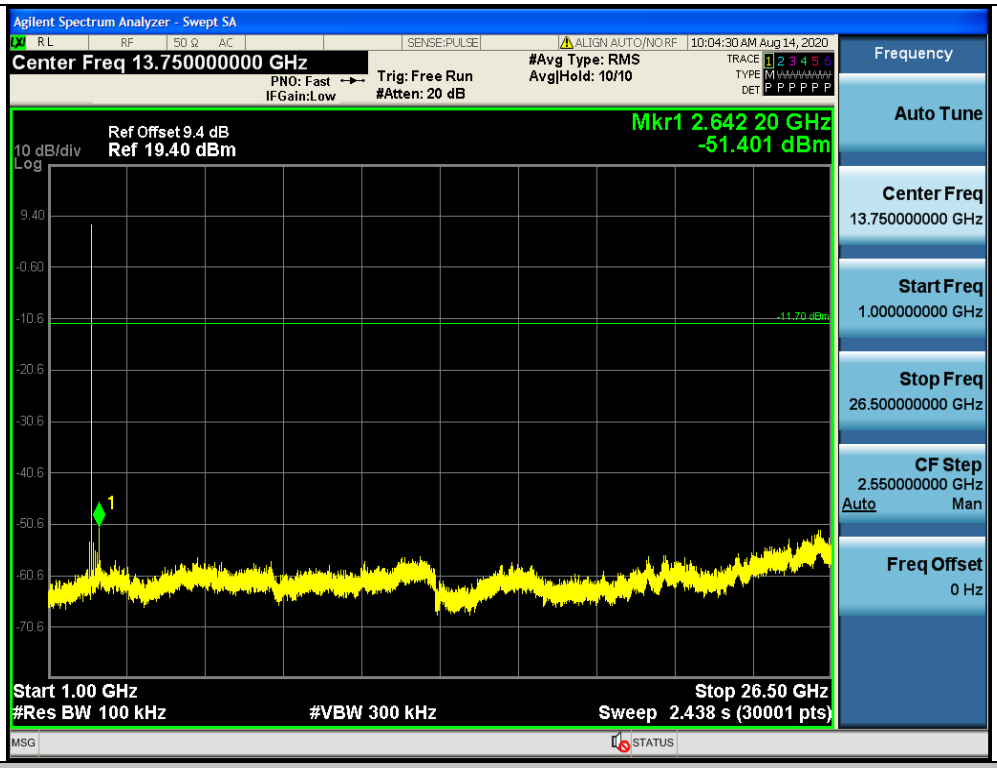
A.7 RF Conducted Spurious Emissions

Test Graph

DH5_Ant1_2402_0~Reference

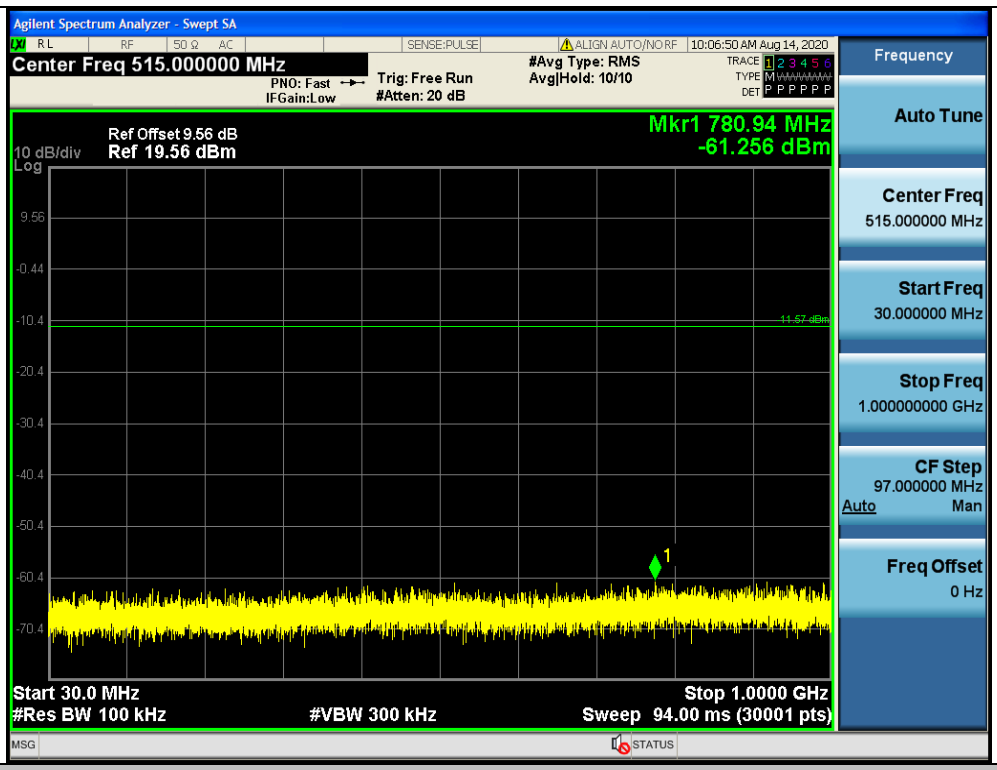


DH5_Ant1_2402_30~1000

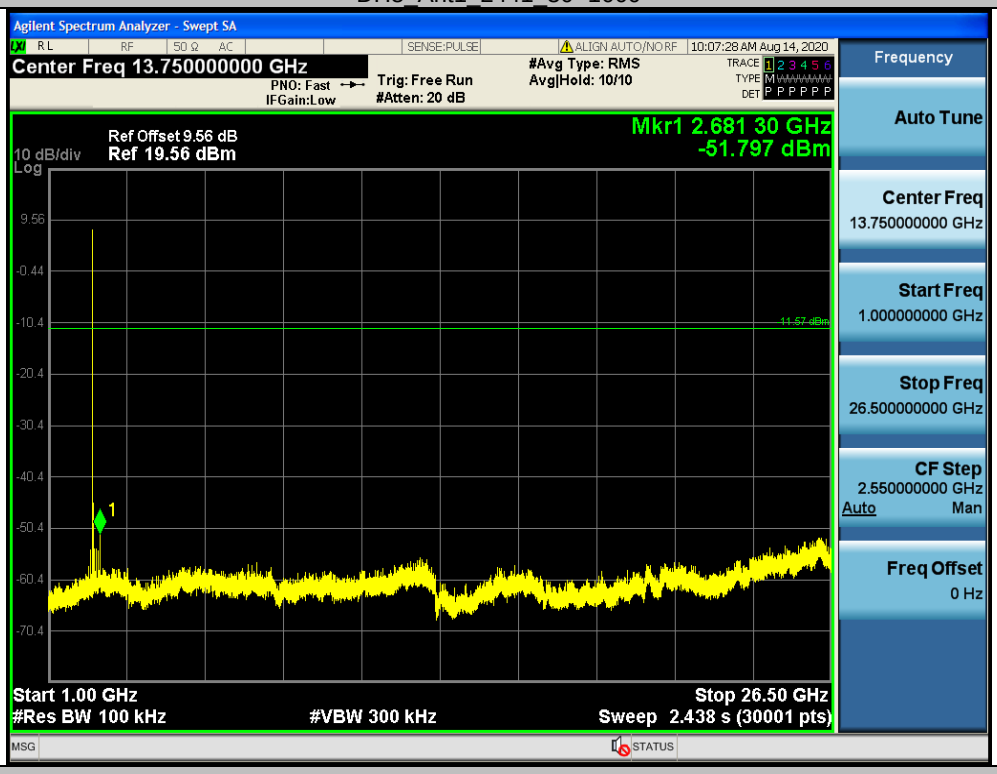


DH5_Ant1_2402_1000~26500

DH5_Ant1_2441_0~Reference

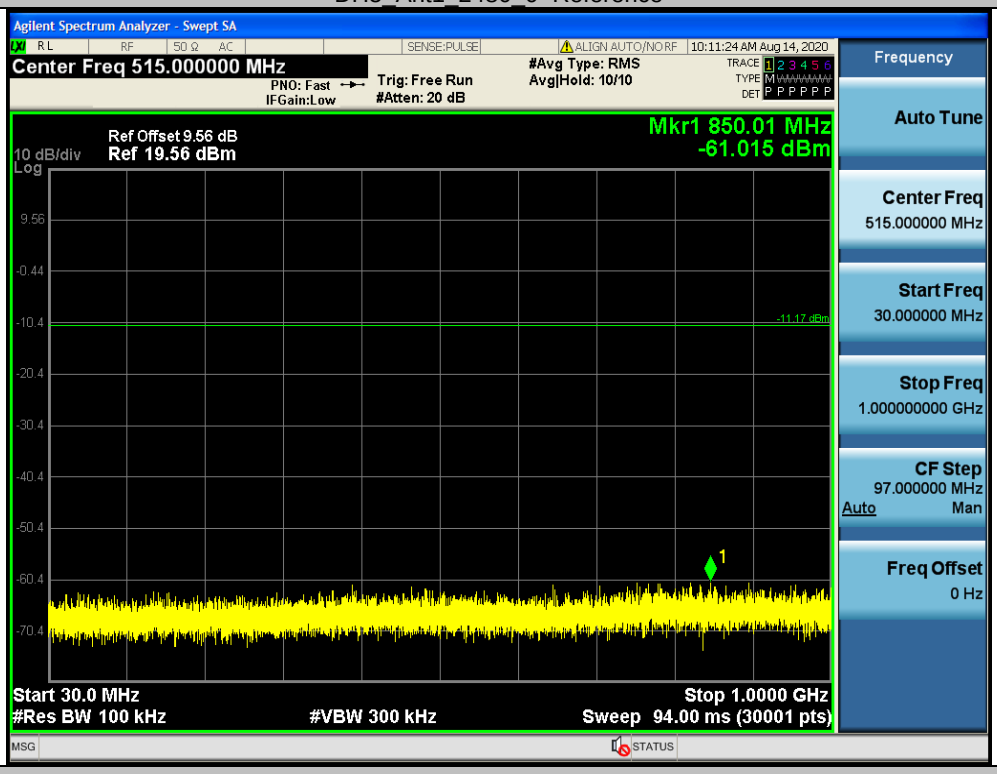


DH5_Ant1_2441_30~1000

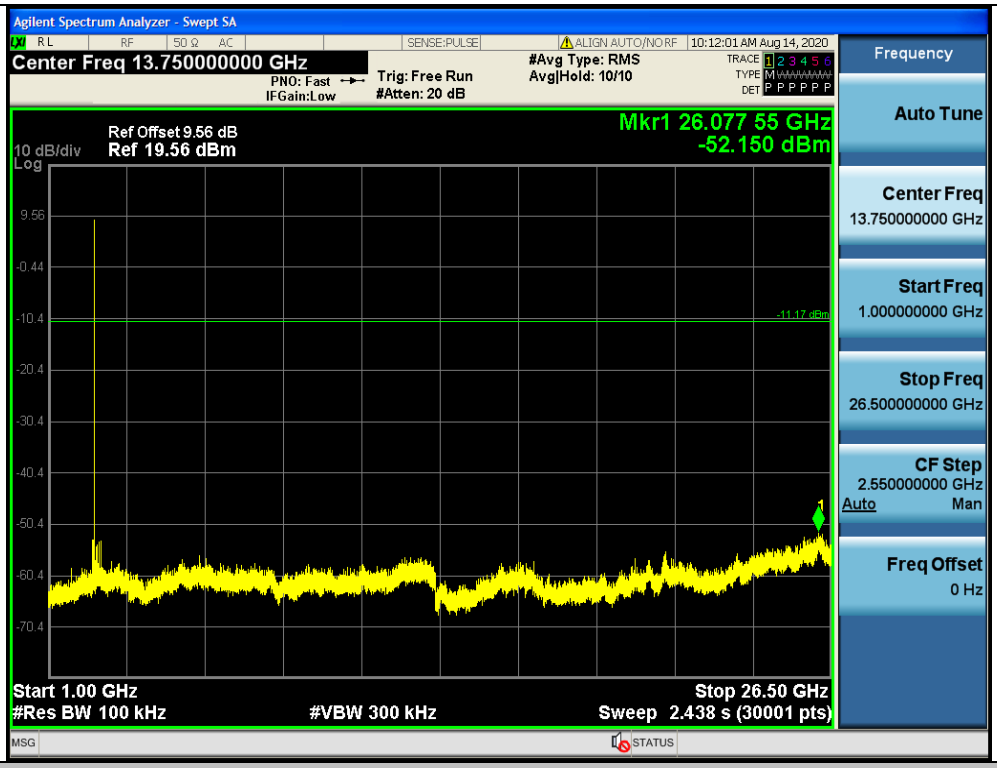


DH5_Ant1_2441_1000~26500

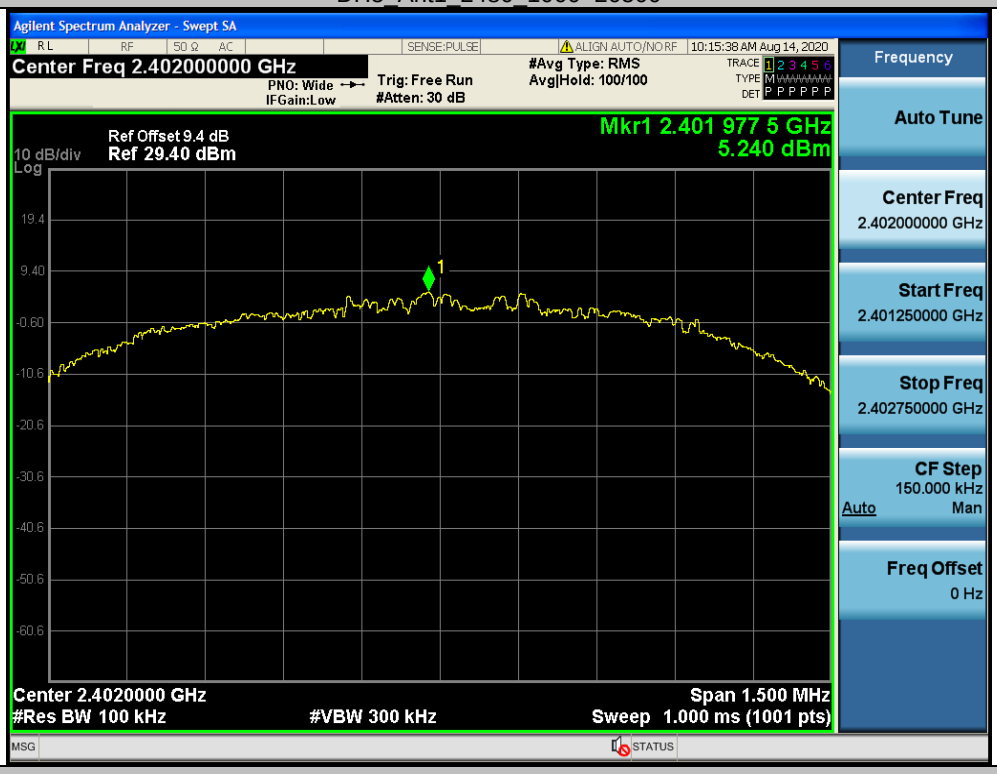
DH5_Ant1_2480_0~Reference



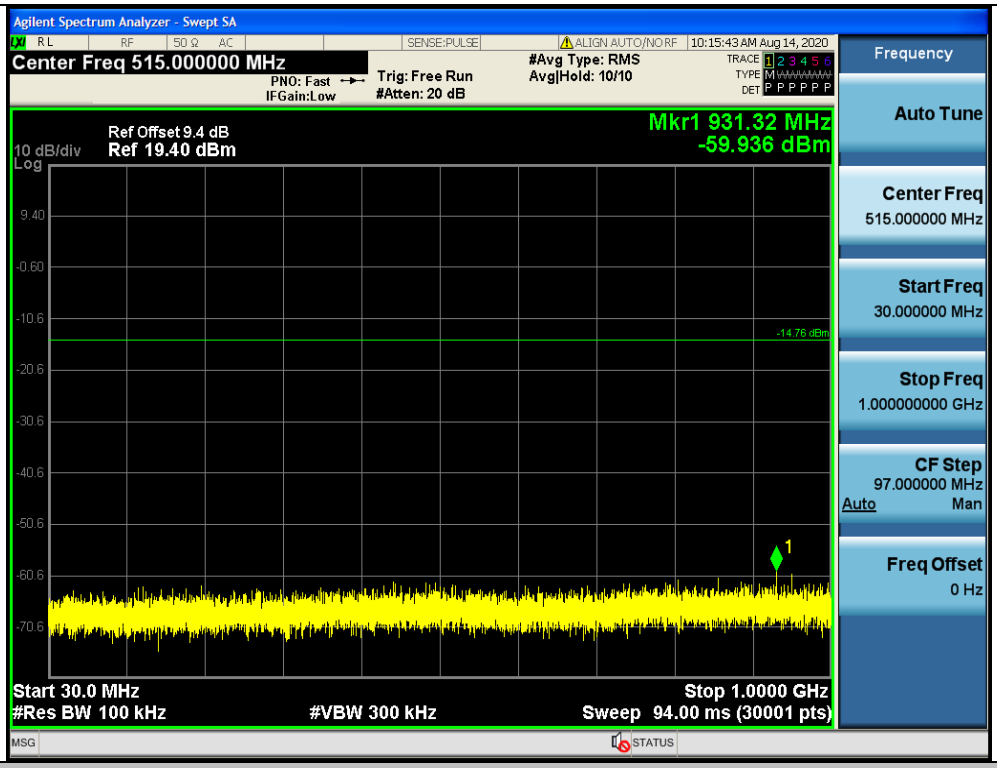
DH5_Ant1_2480_30~1000



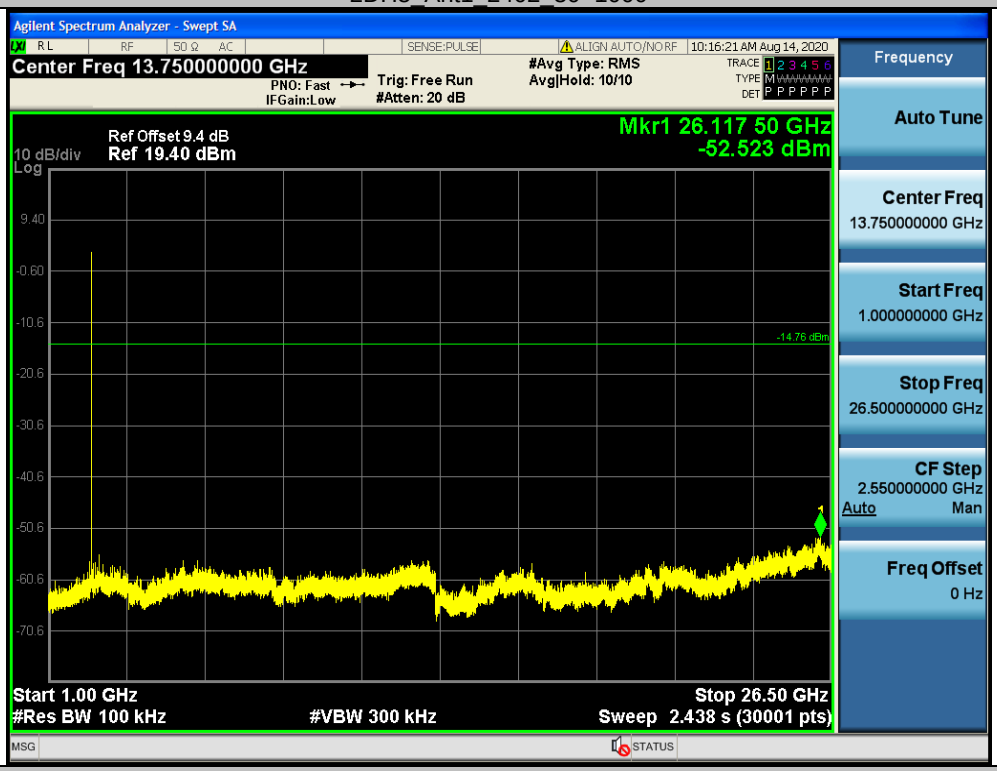
DH5_Ant1_2480_1000~26500



2DH5_Ant1_2402_0~Reference

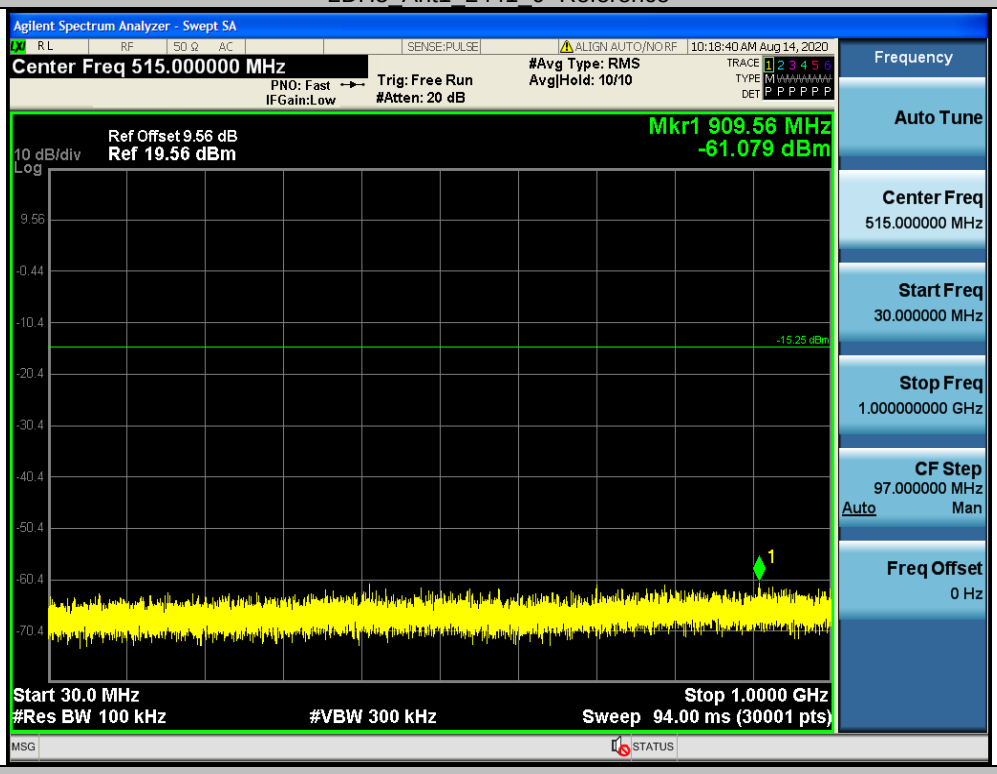


2DH5_Ant1_2402_30~1000

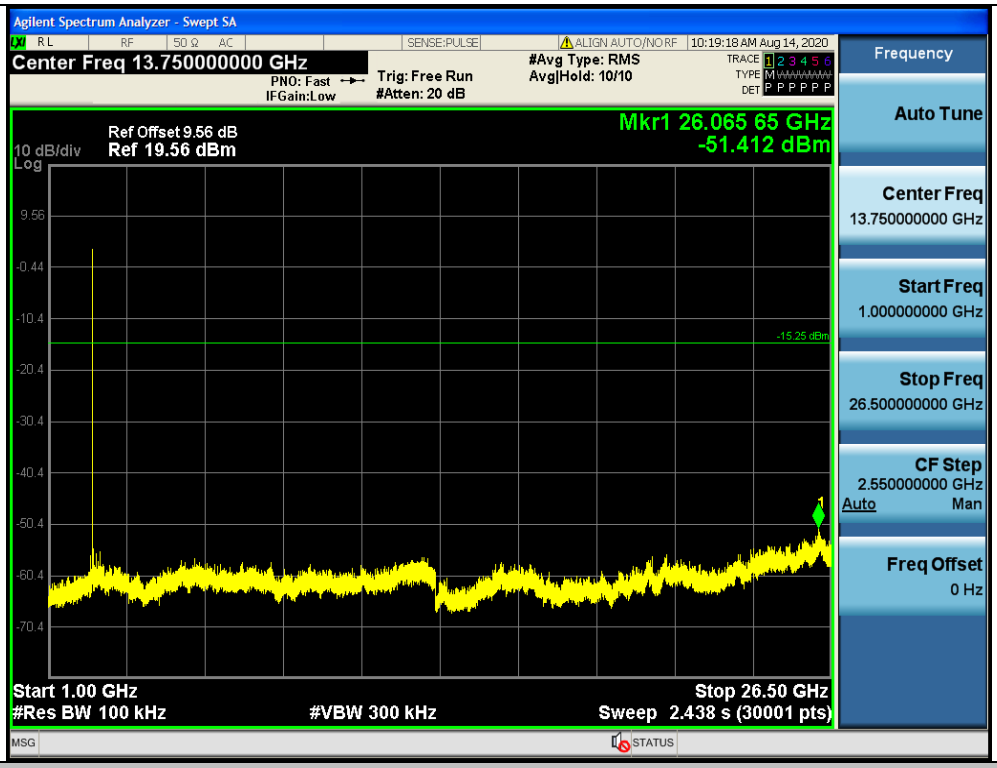


2DH5_Ant1_2402_1000~26500

2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



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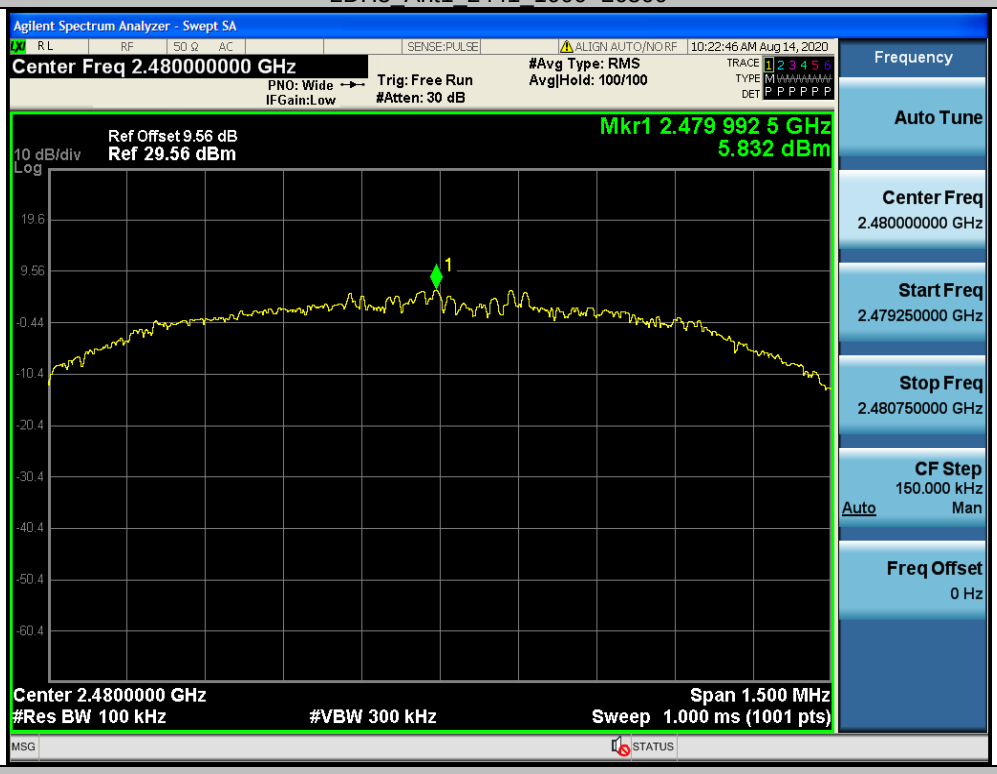

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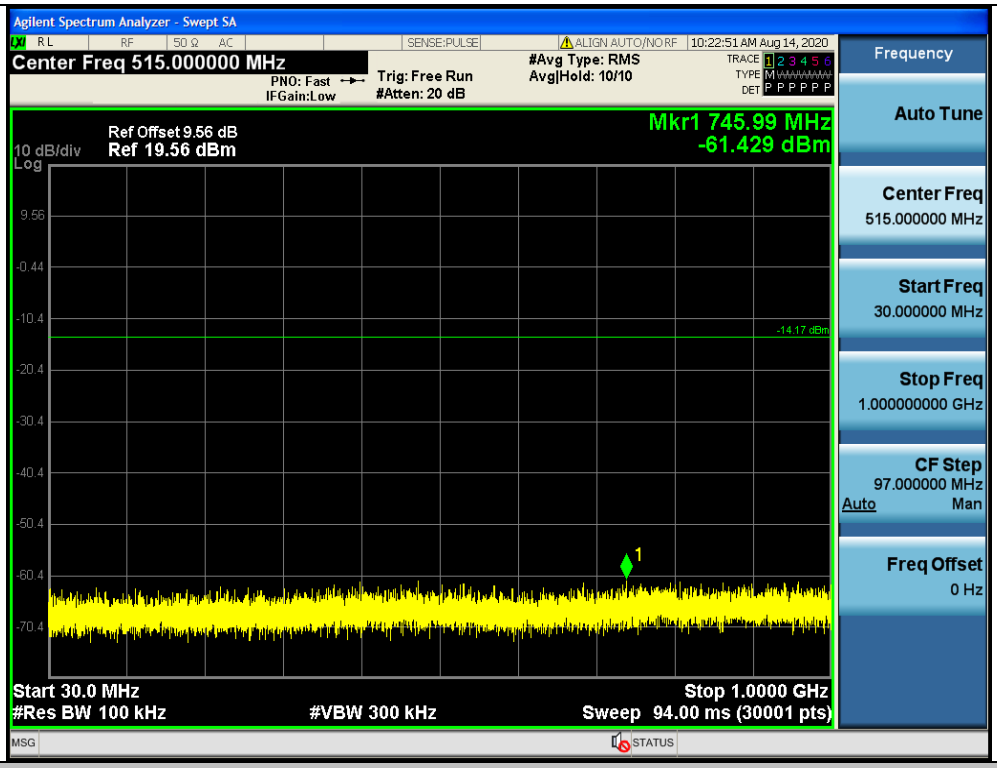

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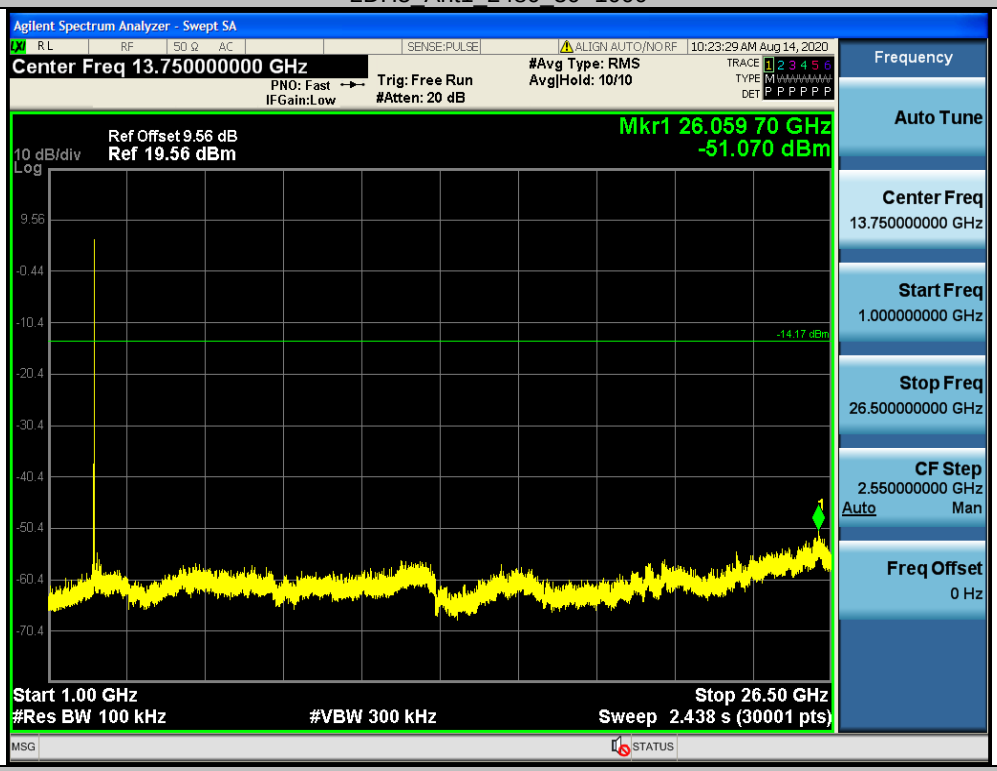

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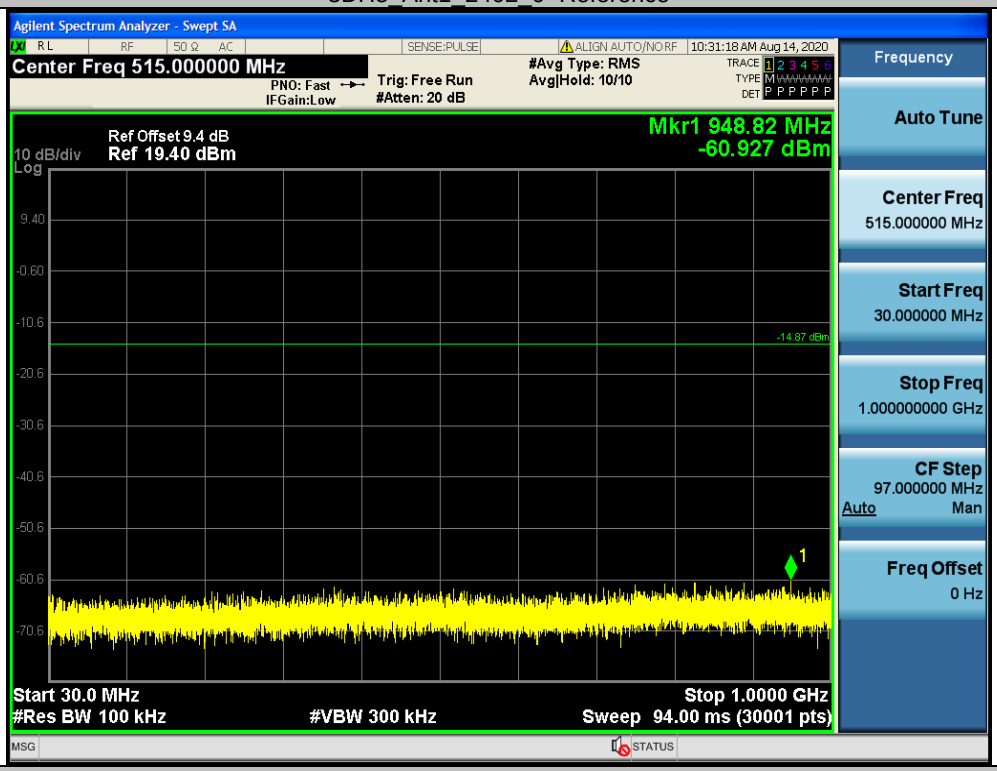

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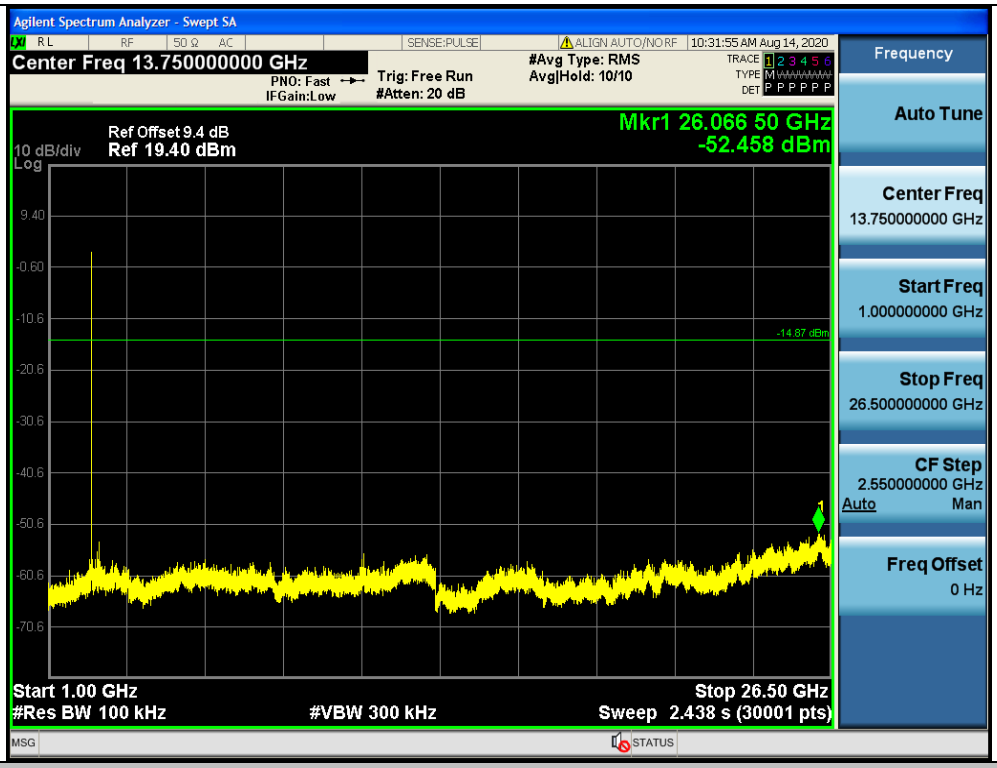
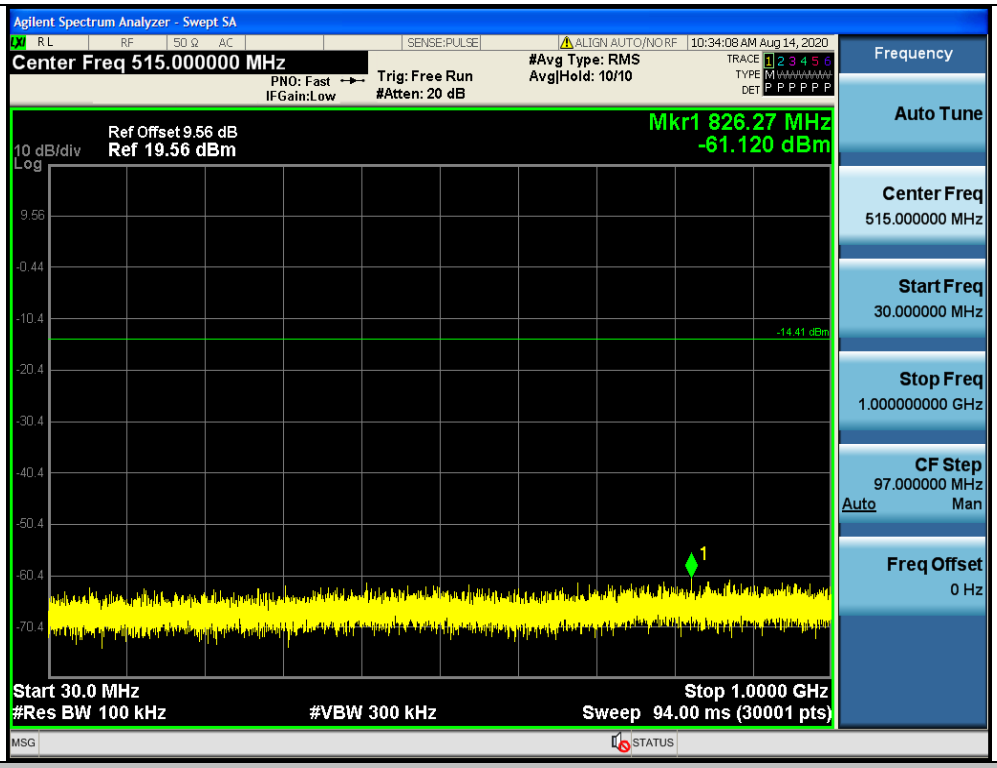


3DH5_Ant1_2402_1000~26500

3DH5_Ant1_2441_0~Reference



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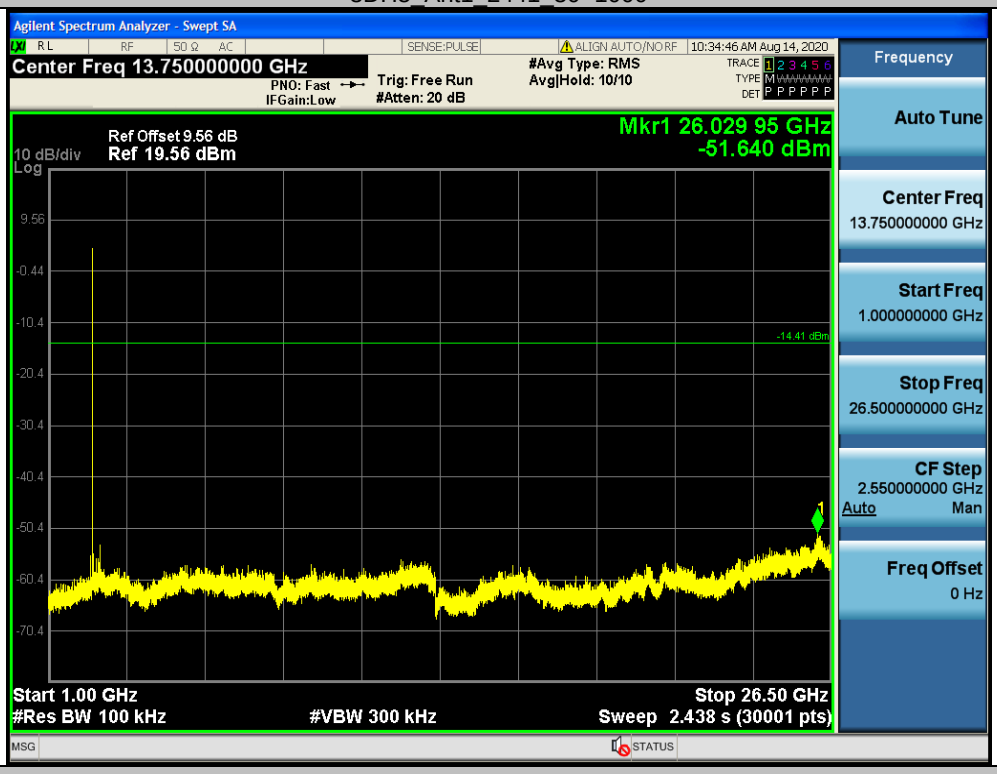
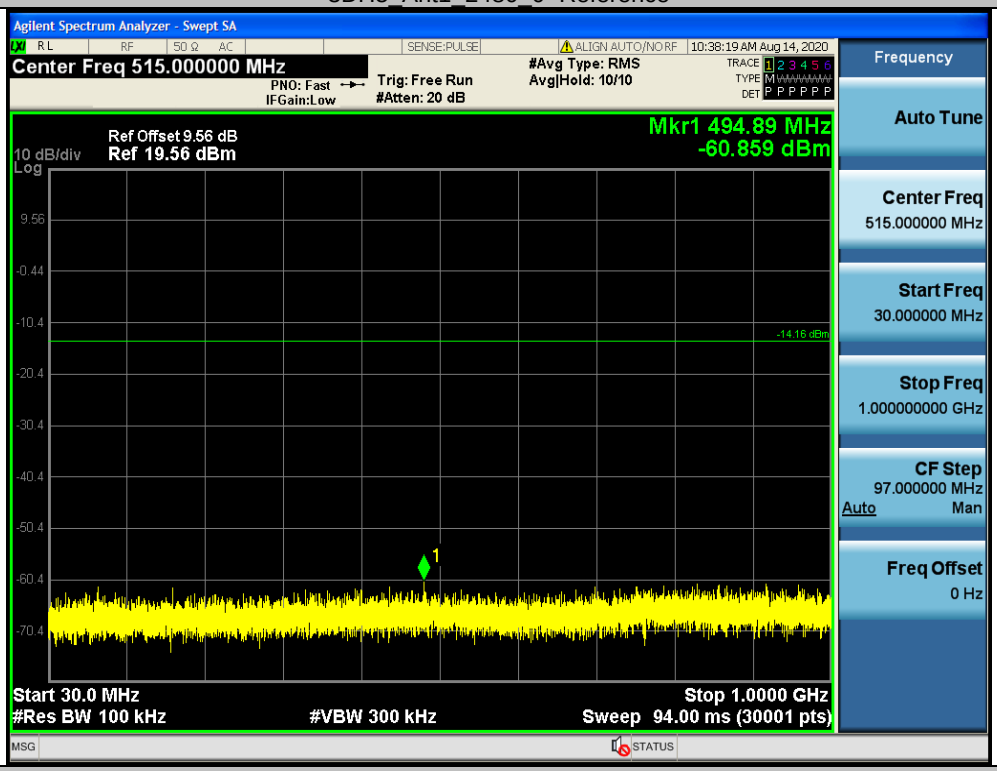


3DH5_Ant1_2441_1000~26500

3DH5_Ant1_2480_0~Reference



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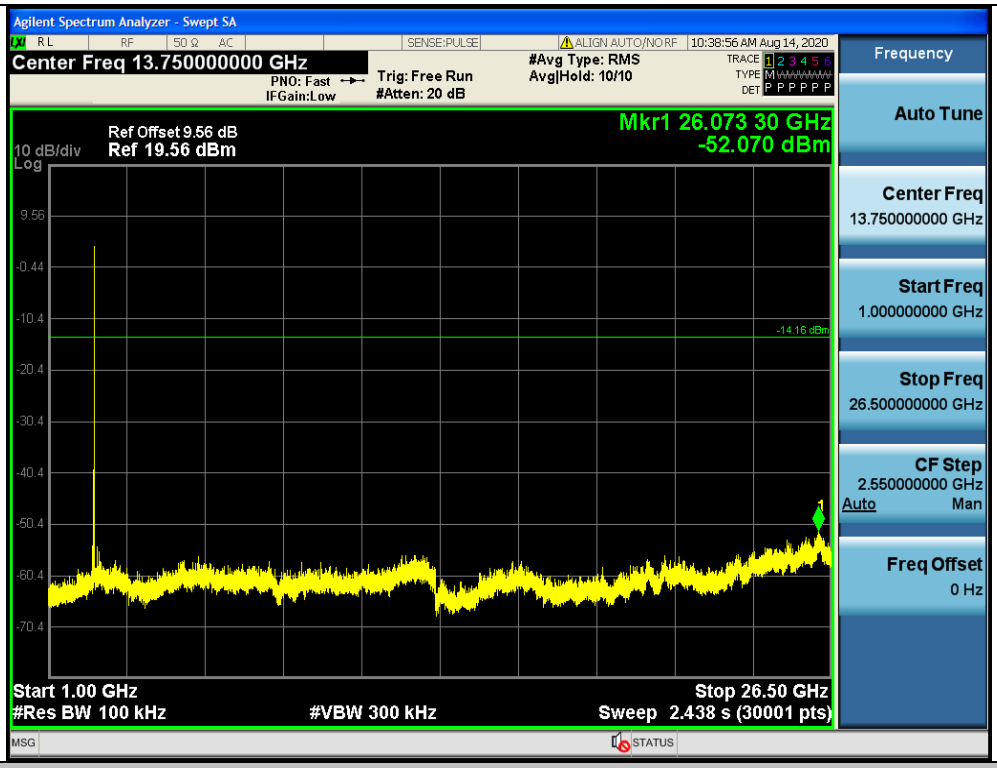


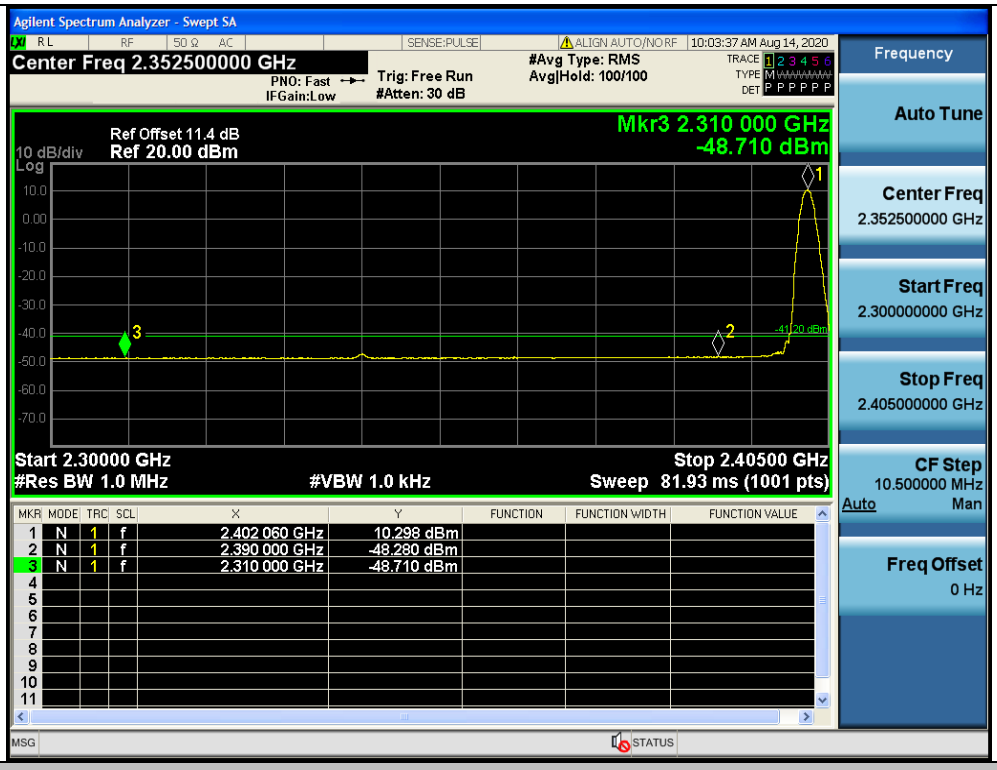
3DH5_Ant1_2480_1000~26500

A.8 Restrict-band band-edge measurements

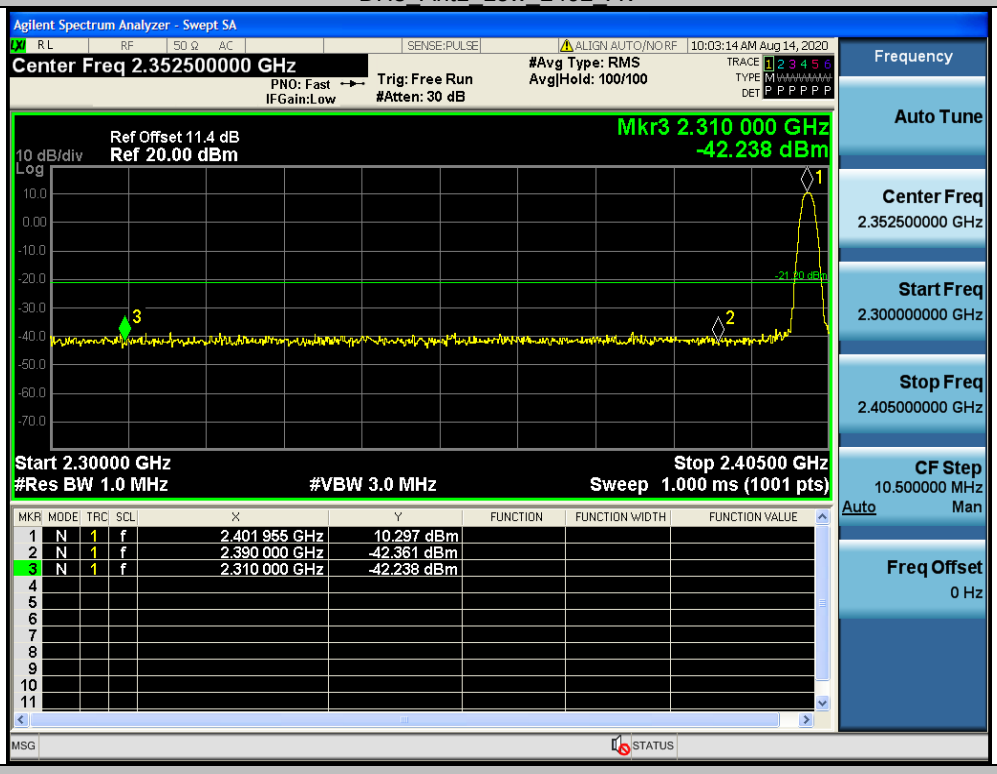
TestMode	Antenna	ChName	Channel	Detector	Freq	Result	Limit	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-48.71	<=-41.20	PASS
				AV	2390.000	-48.28	<=-41.20	PASS
				Peak	2310.000	-42.23	<=-21.20	PASS
				Peak	2390.000	-42.37	<=-21.20	PASS
		High	2480	AV	2483.500	-45.38	<=-41.20	PASS
				AV	2500.000	-47.75	<=-41.20	PASS
				Peak	2483.500	-39.57	<=-21.20	PASS
				Peak	2500.000	-40.51	<=-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-47.43	<=-41.20	PASS
				AV	2390.000	-46.68	<=-41.20	PASS
				Peak	2310.000	-41.66	<=-21.20	PASS
				Peak	2390.000	-42.28	<=-21.20	PASS
		High	2480	AV	2483.500	-42.21	<=-41.20	PASS
				AV	2500.000	-46.74	<=-41.20	PASS
				Peak	2483.500	-38.59	<=-21.20	PASS
				Peak	2500.000	-41.41	<=-21.20	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-48.57	<=-41.20	PASS
				AV	2390.000	-47.87	<=-41.20	PASS
				Peak	2310.000	-40.27	<=-21.20	PASS
				Peak	2390.000	-40.12	<=-21.20	PASS
		High	2480	AV	2483.500	-43.04	<=-41.20	PASS
				AV	2500.000	-47.62	<=-41.20	PASS
				Peak	2483.500	-35.24	<=-21.20	PASS
				Peak	2500.000	-39.10	<=-21.20	PASS

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.

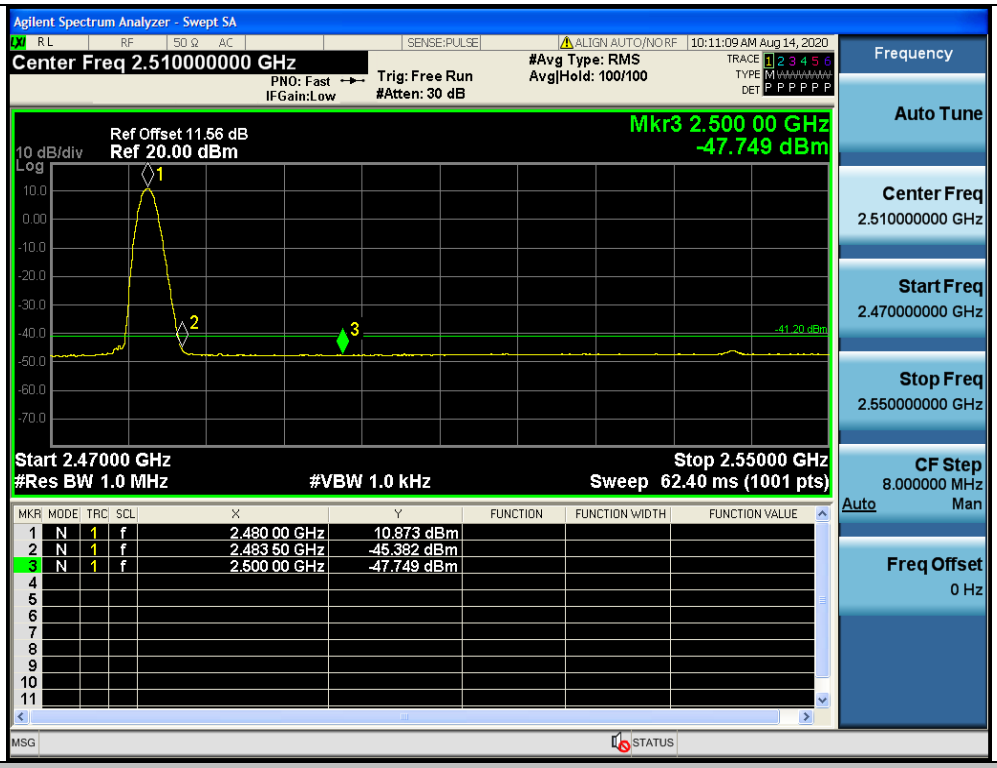
Test Graphs



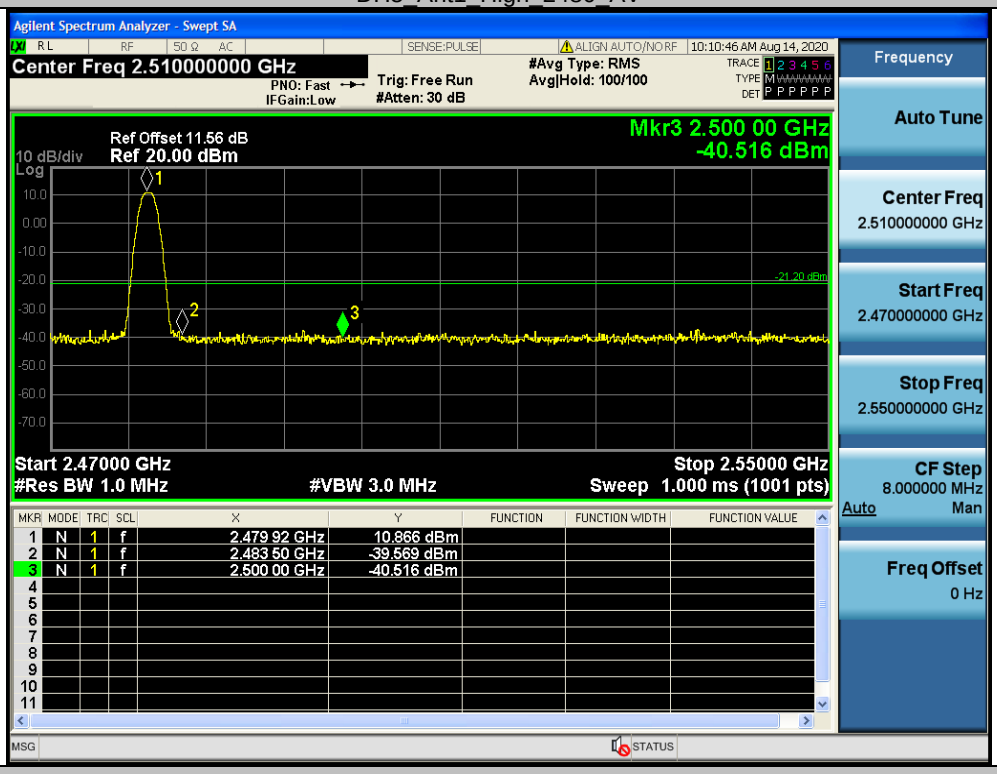
DH5_Ant1_Low_2402_AV



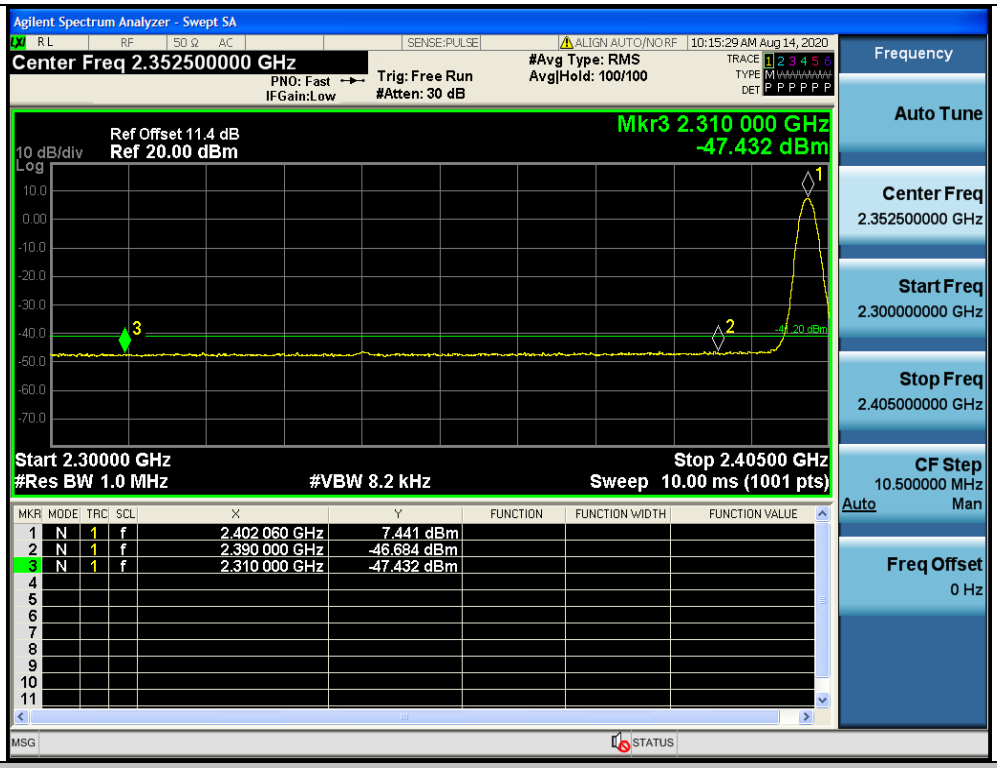
DH5_Ant1_Low_2402_Peak



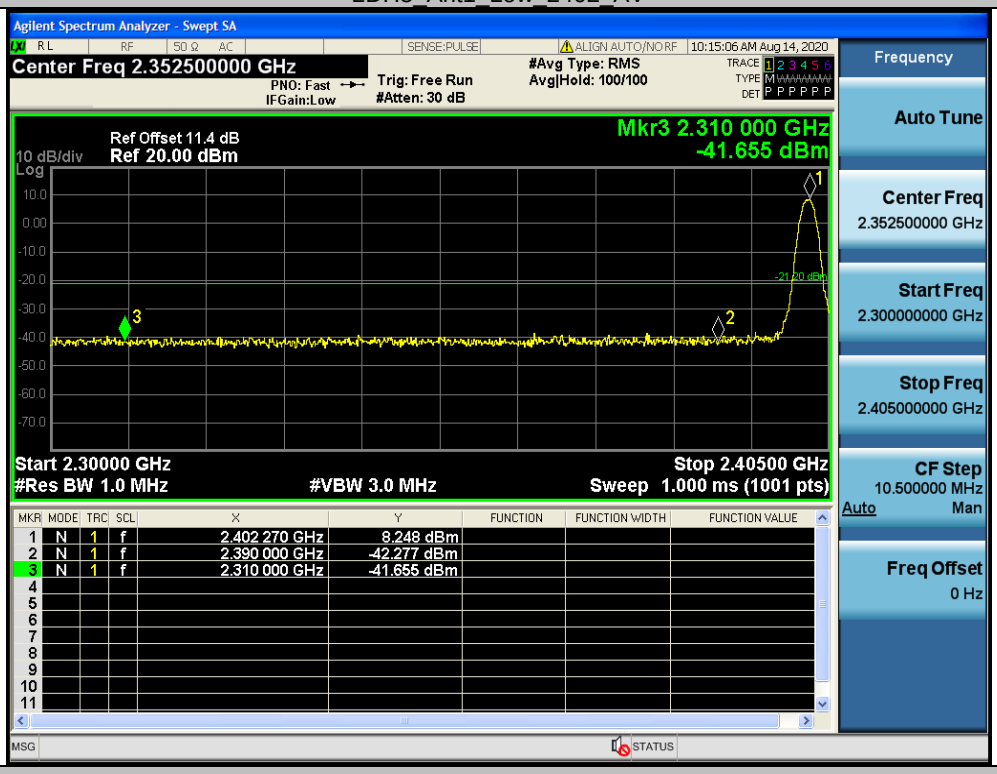
DH5_Ant1_High_2480_AV



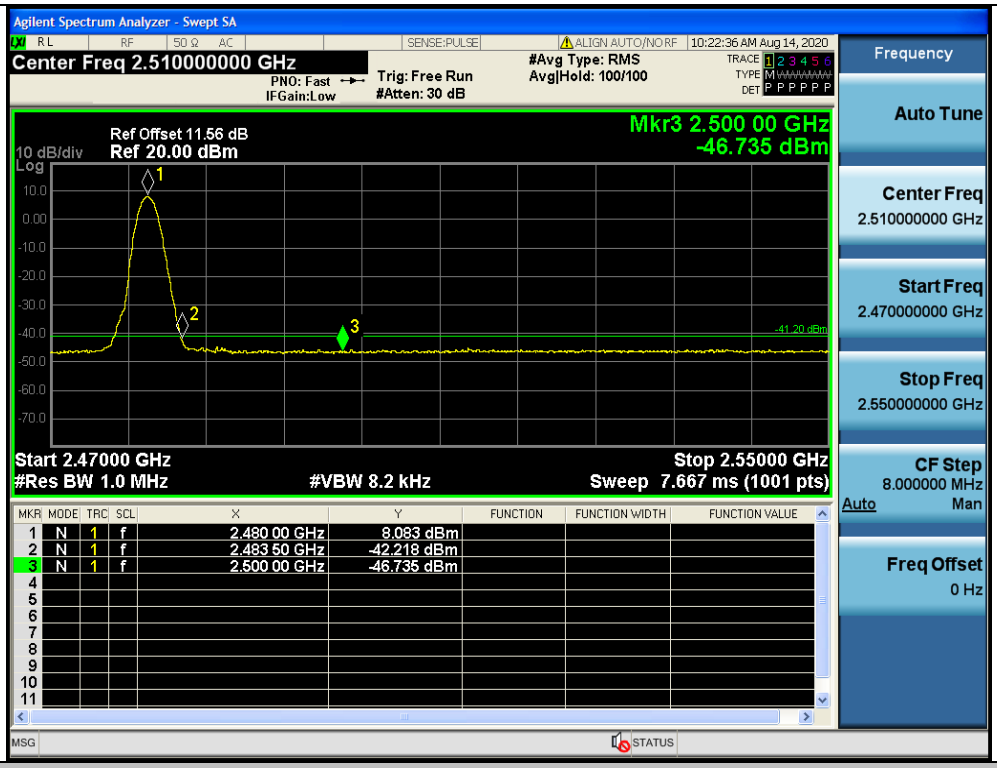
DH5_Ant1_High_2480_Peak



2DH5_Ant1_Low_2402_AV



2DH5_Ant1_Low_2402_Peak



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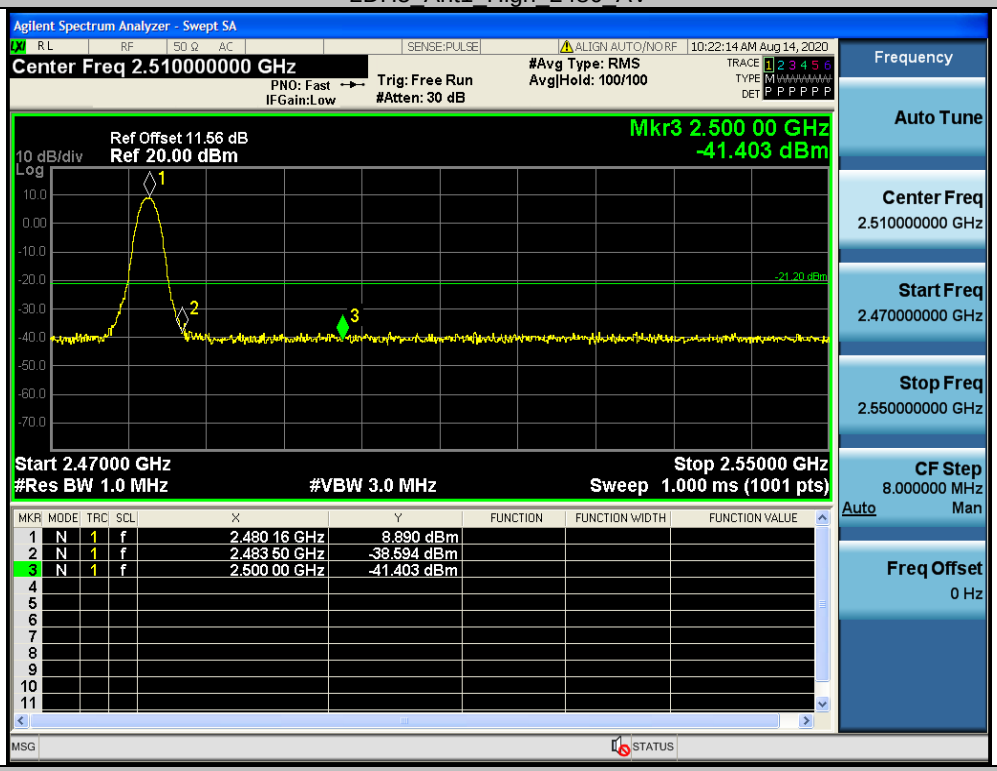

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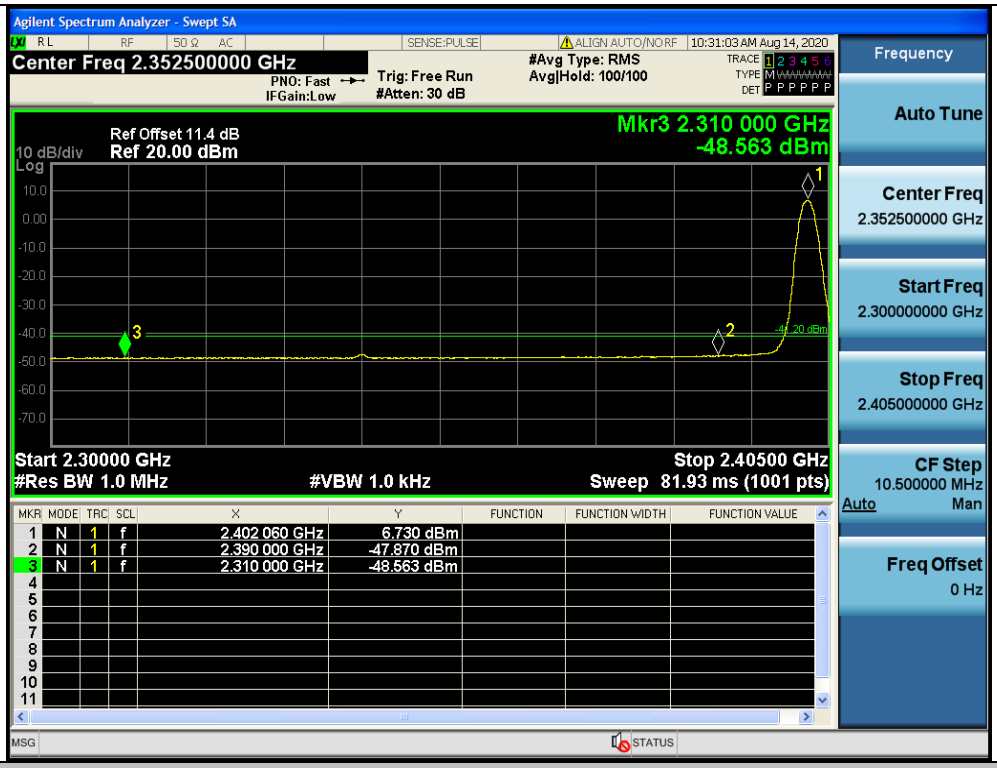
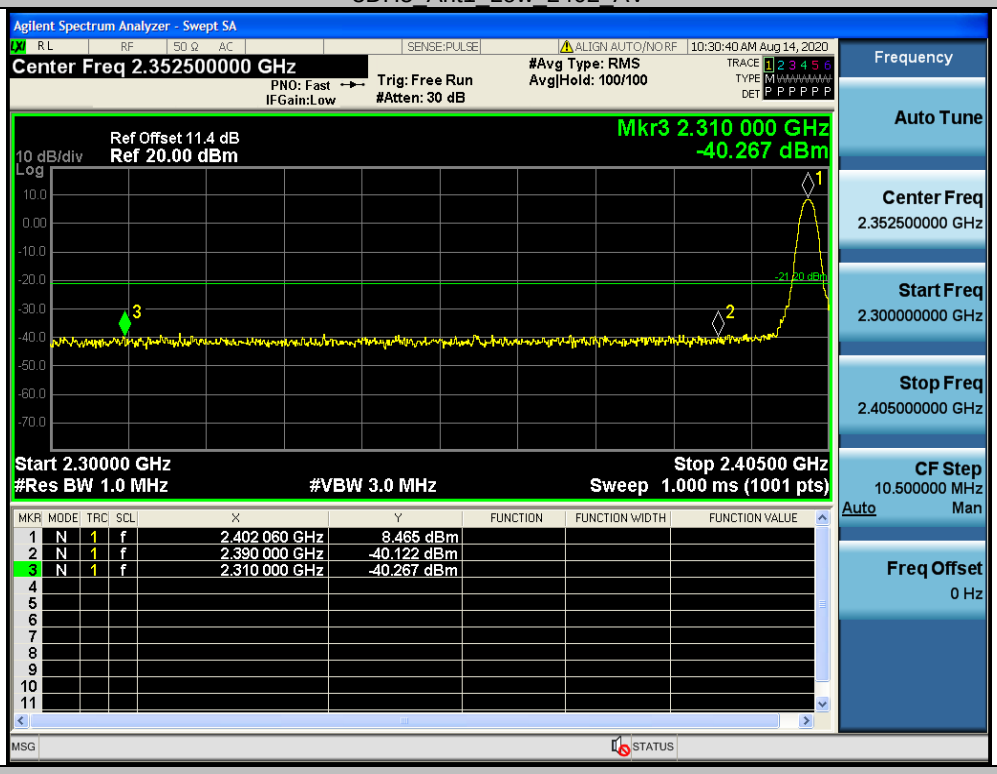


3DH5_Ant1_Low_2402_AV



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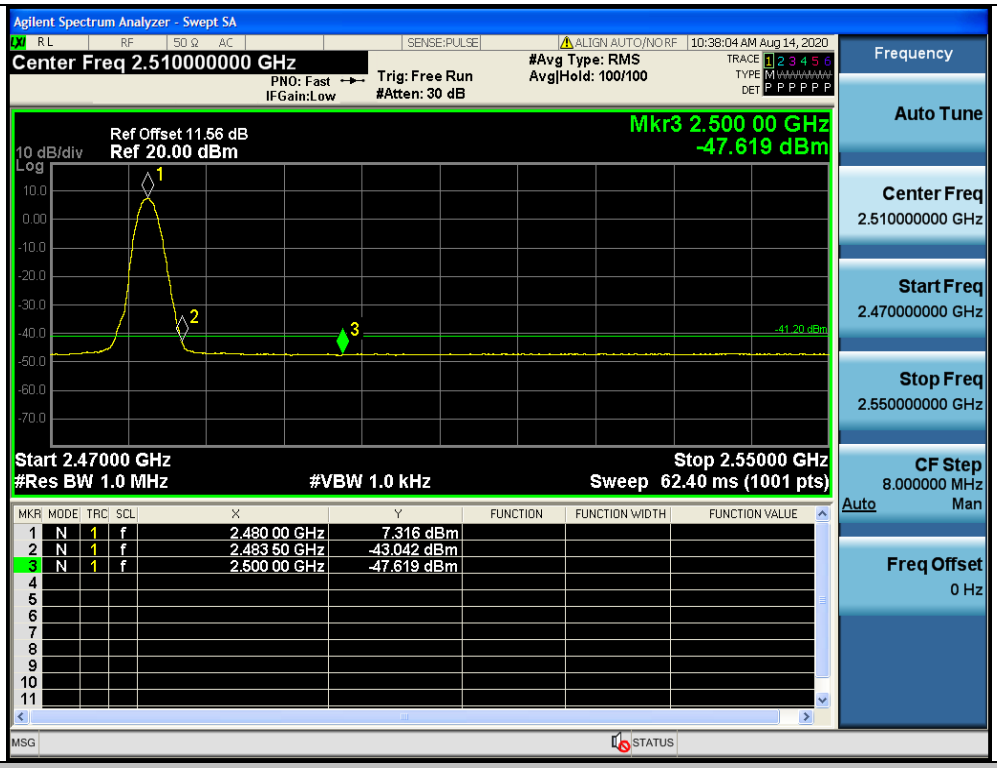
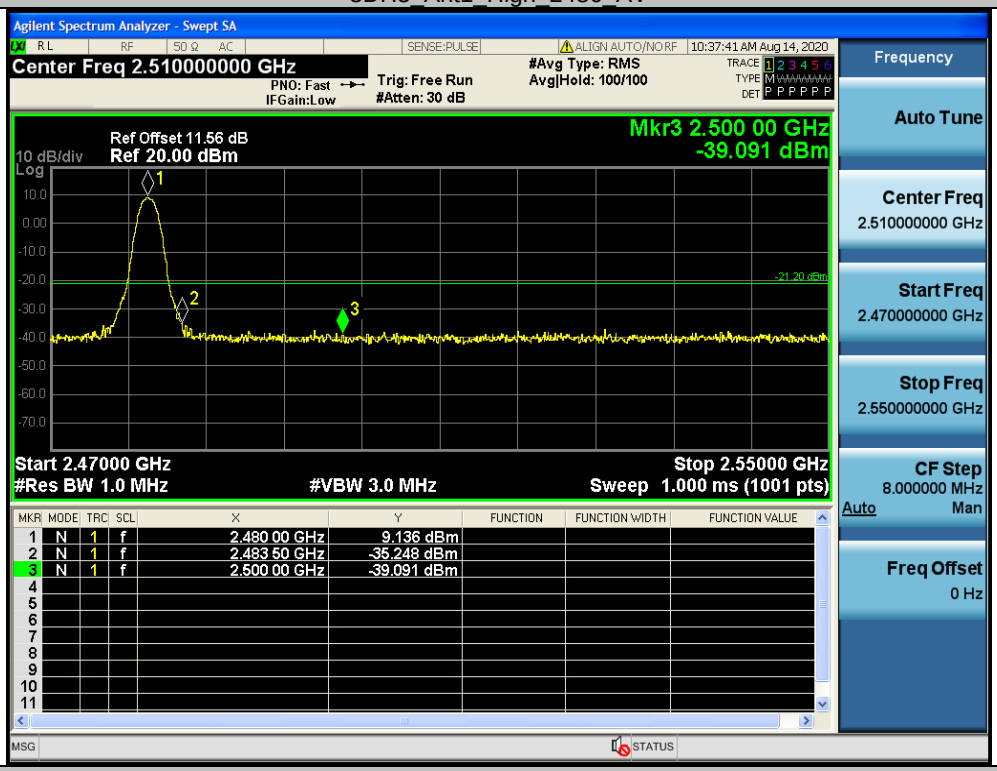


3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak