

Appendix A

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

Product Name: BLUETOOTH CASSETTE ADAPTER WITH HANDSFREE CALLING

Trade Mark: iSimple

Test Model: BTHFS380

FCC ID: 2ATYS-BTHFS380

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	0.942	2401.544	2402.486	---	PASS
		2441	0.948	2440.541	2441.489	---	PASS
		2480	0.948	2479.541	2480.489	---	PASS
2DH5	Ant1	2402	1.314	2401.343	2402.657	---	PASS
		2441	1.320	2440.343	2441.663	---	PASS
		2480	1.308	2479.361	2480.669	---	PASS
3DH5	Ant1	2402	1.311	2401.349	2402.660	---	PASS
		2441	1.266	2440.364	2441.630	---	PASS
		2480	1.287	2479.355	2480.642	---	PASS

Test Graph



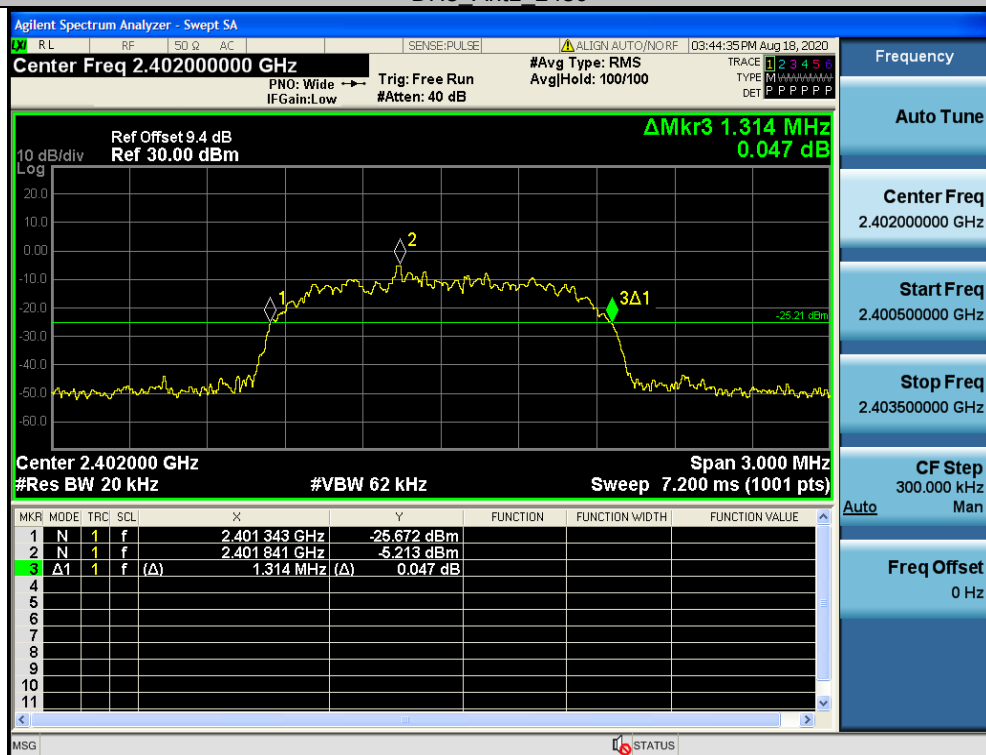
DH5_Ant1_2402



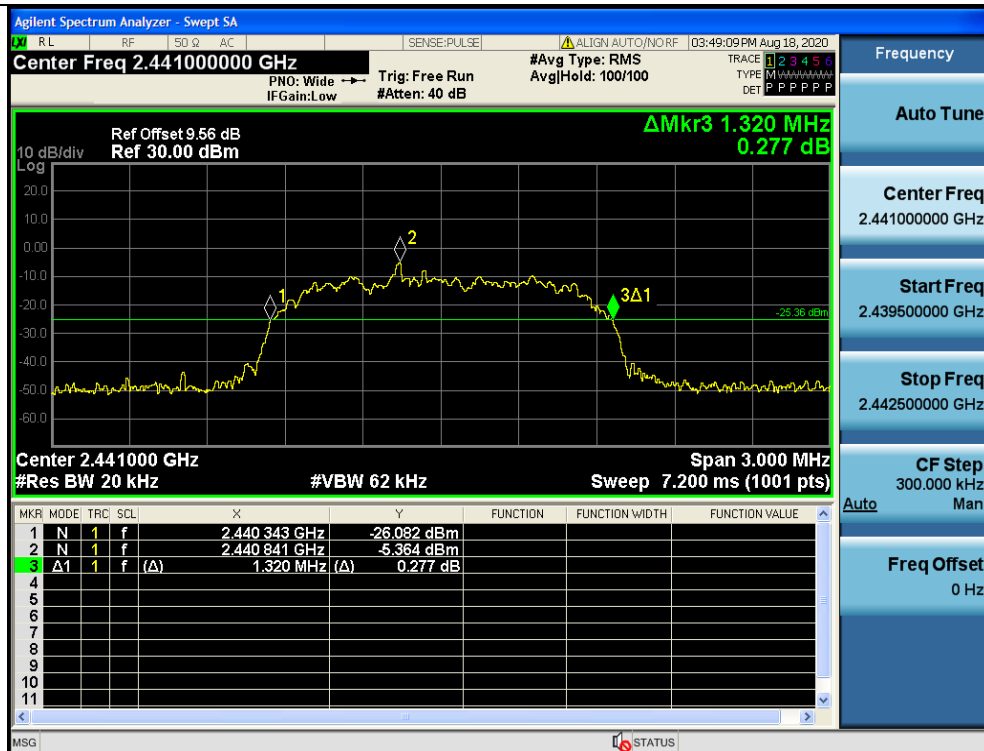
DH5_Ant1_2441



DH5_Ant1_2480



2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441

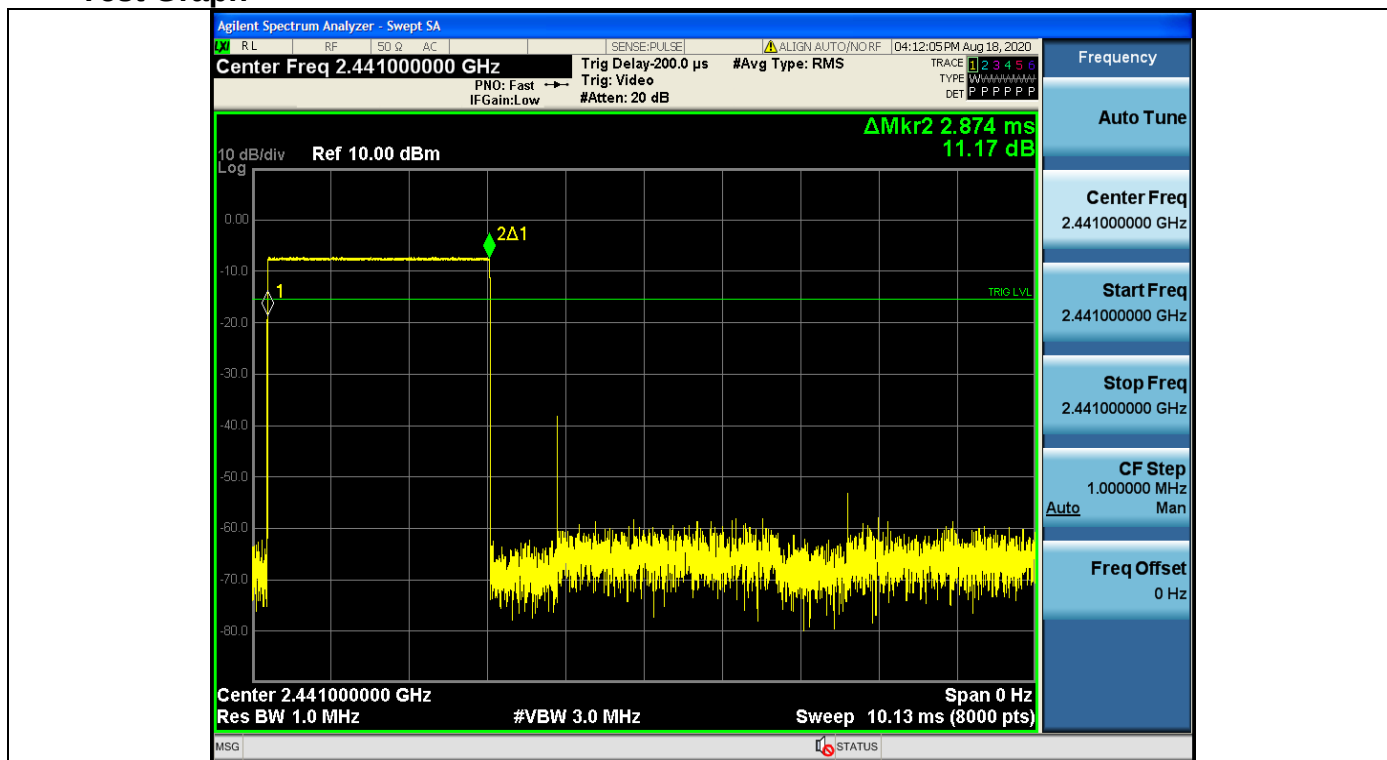


3DH5_Ant1_2480

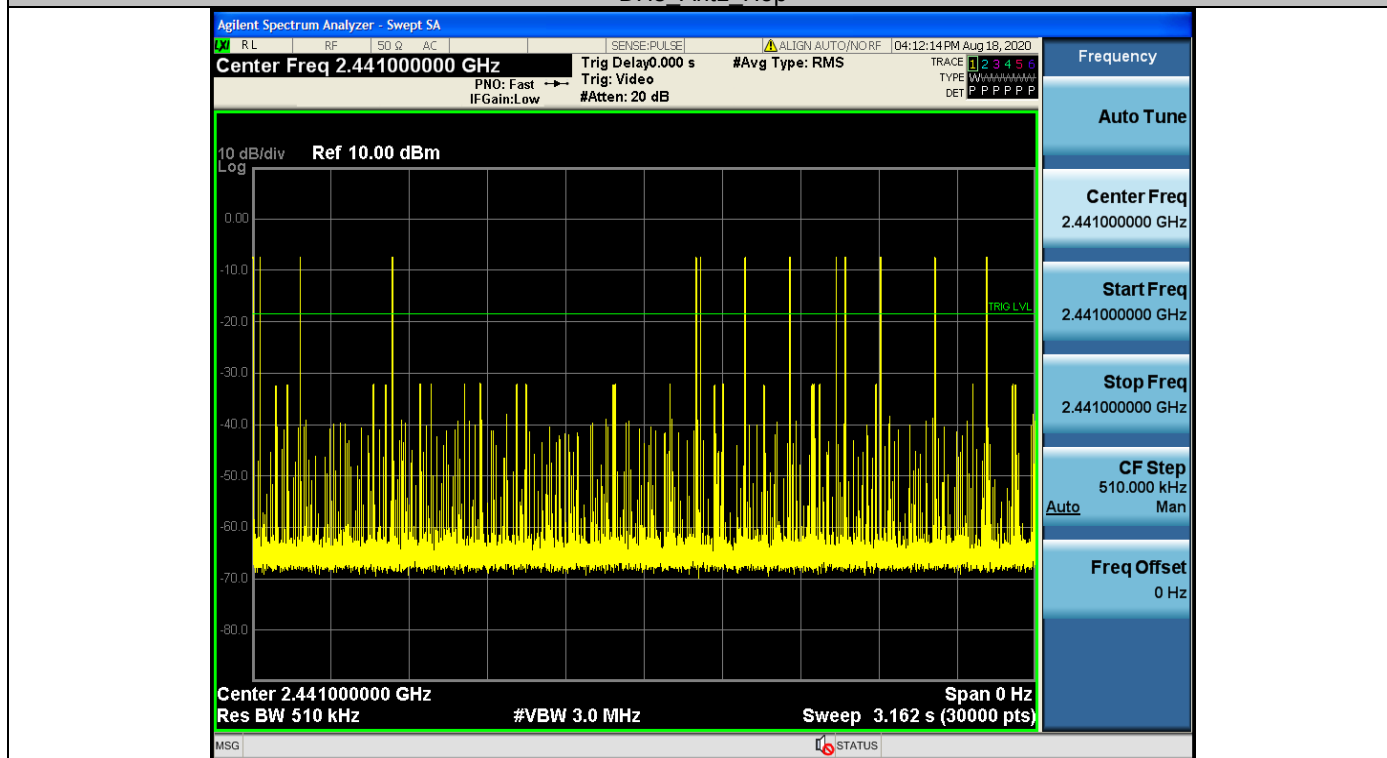
A.2 Dwell Time

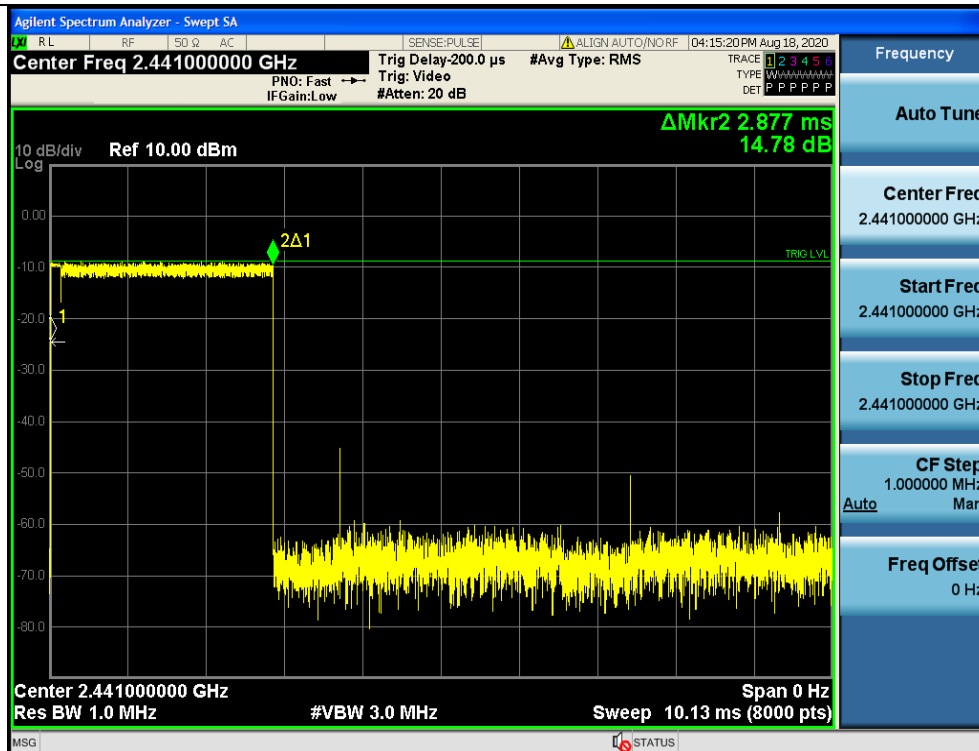
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.87	130	0.374	<=0.4	PASS
2DH5	Ant1	Hop	2.88	70	0.201	<=0.4	PASS
3DH5	Ant1	Hop	2.88	100	0.288	<=0.4	PASS

Test Graph

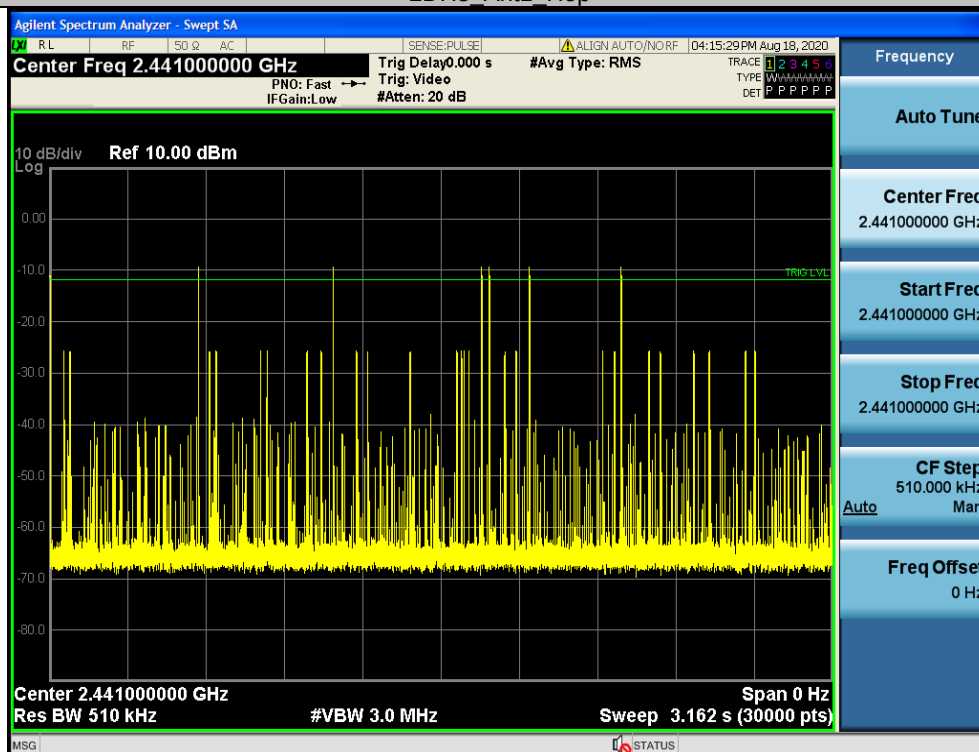


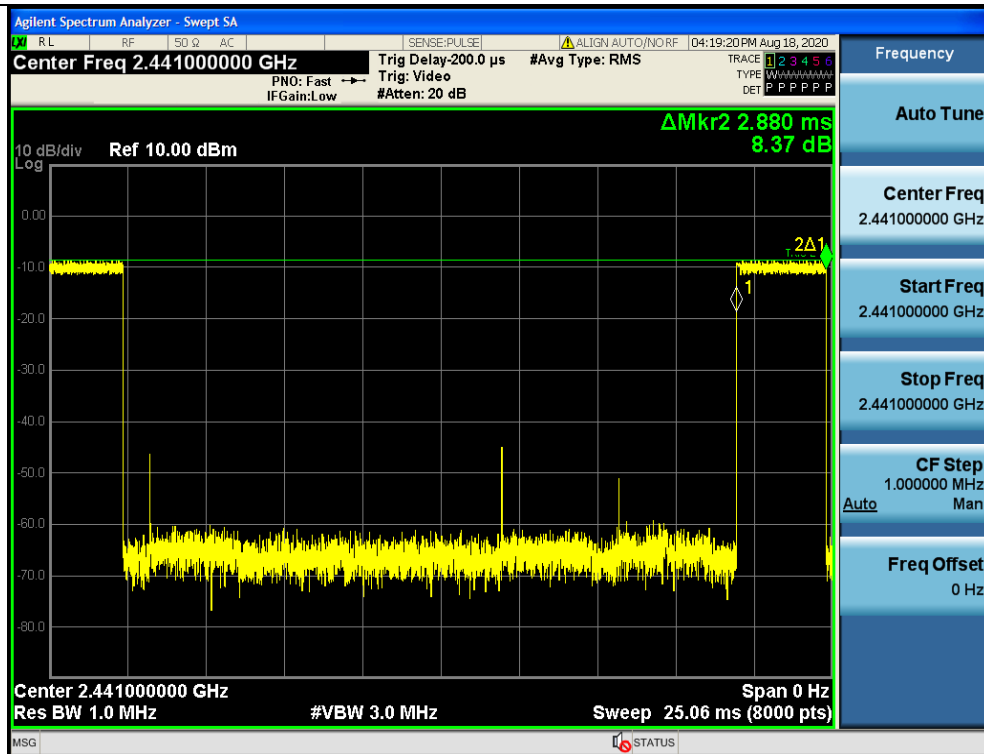
DH5_Ant1_Hop



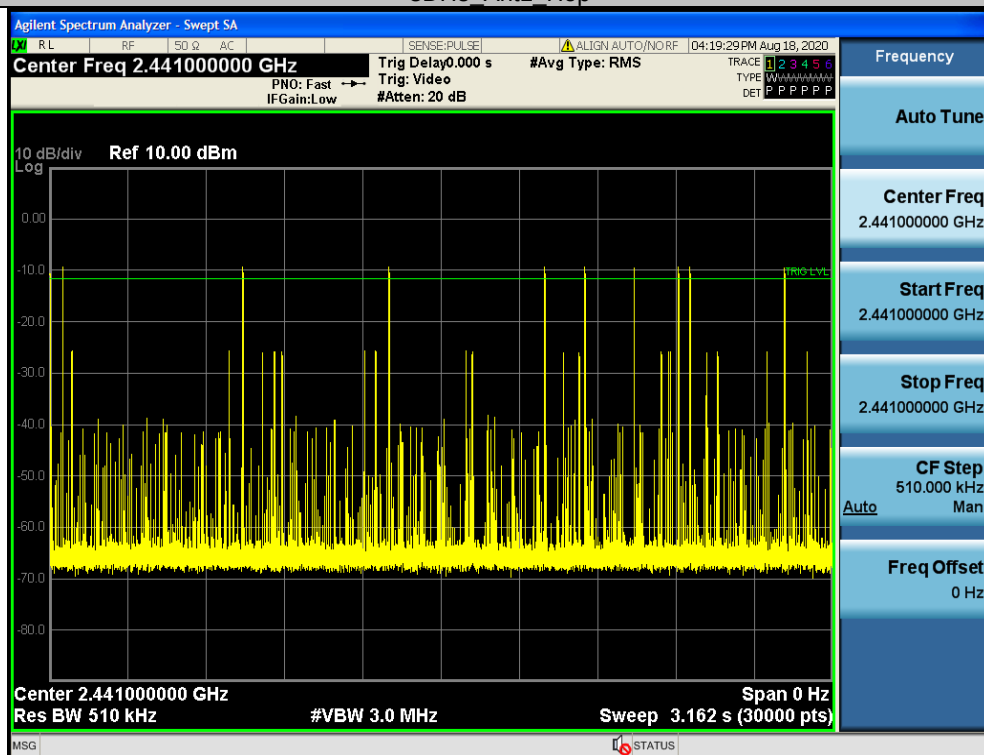


2DH5_Ant1_Hop





3DH5_Ant1_Hop



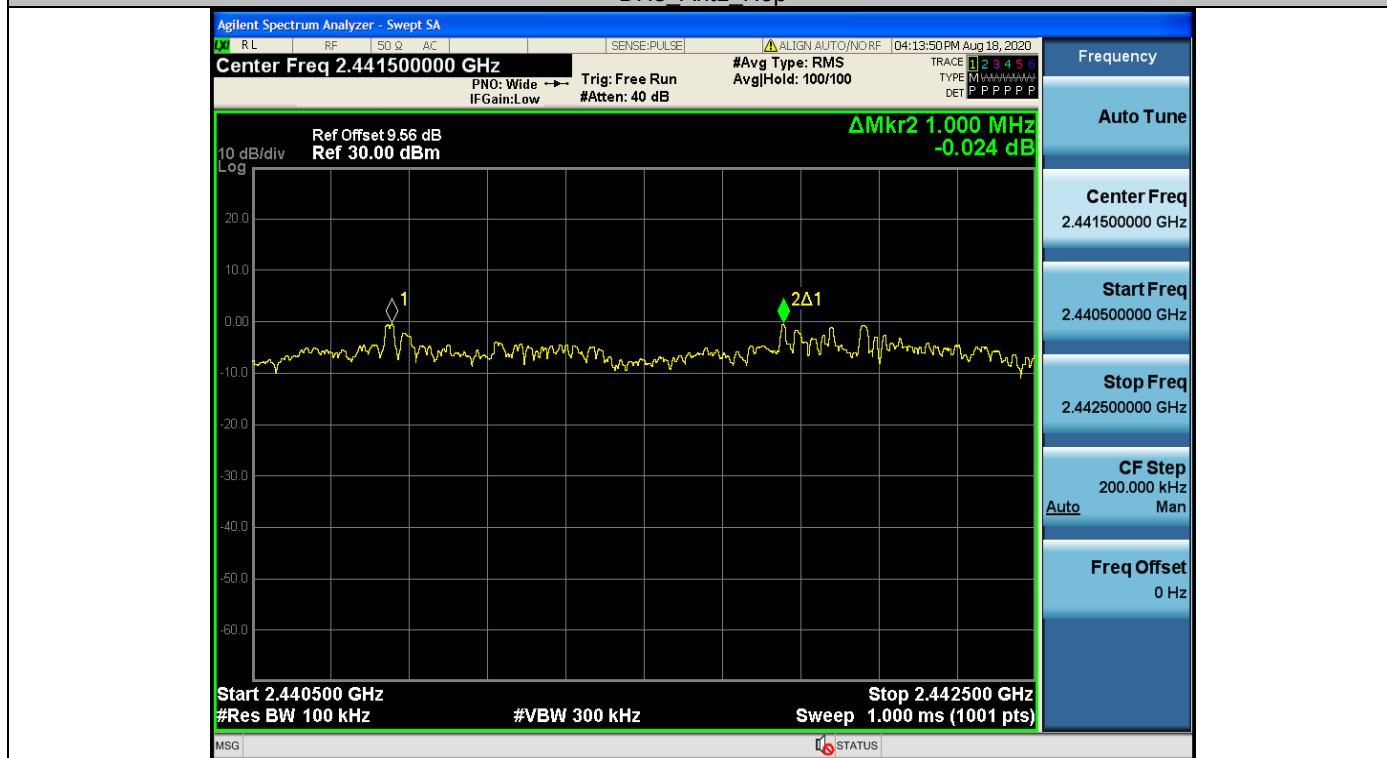
A.3 Carrier Frequency Separation

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.098	≥ 0.948	PASS
2DH5	Ant1	Hop	1.000	≥ 0.880	PASS
3DH5	Ant1	Hop	0.990	≥ 0.874	PASS

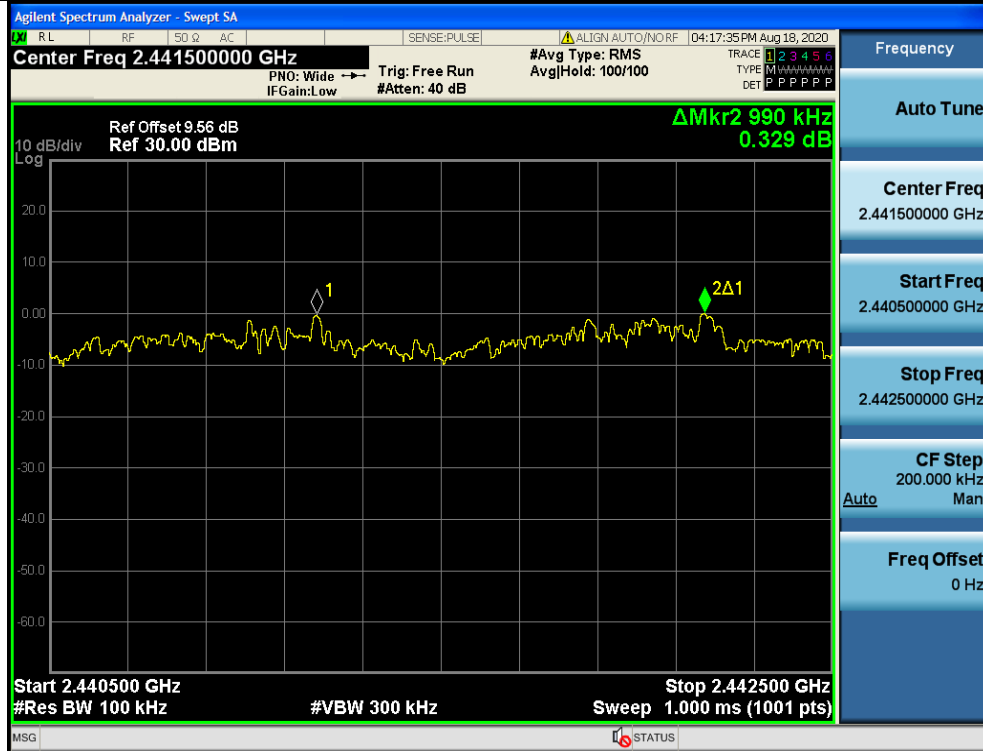
Test Graph



DH5_Ant1_Hop



2DH5_Ant1_Hop

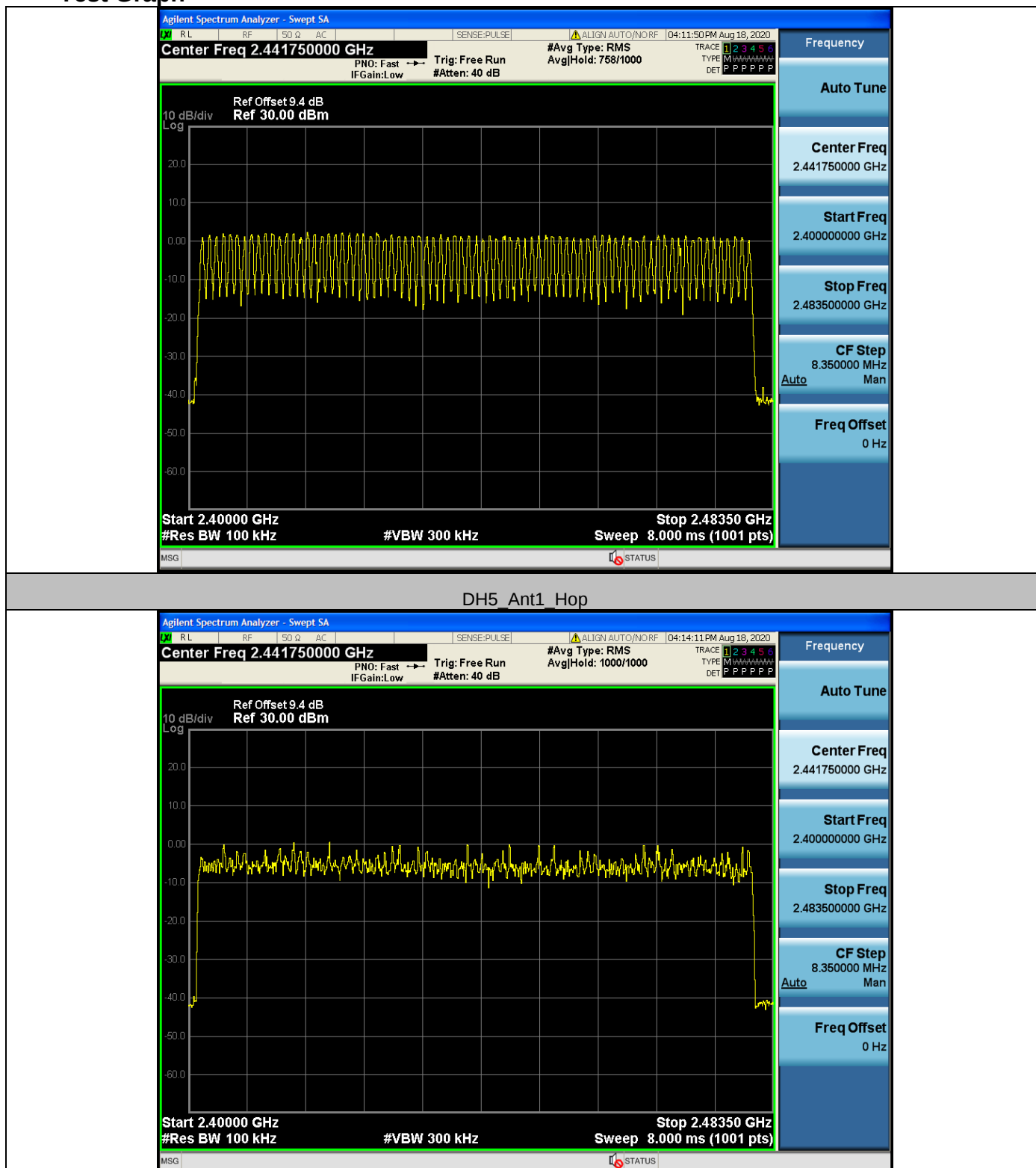


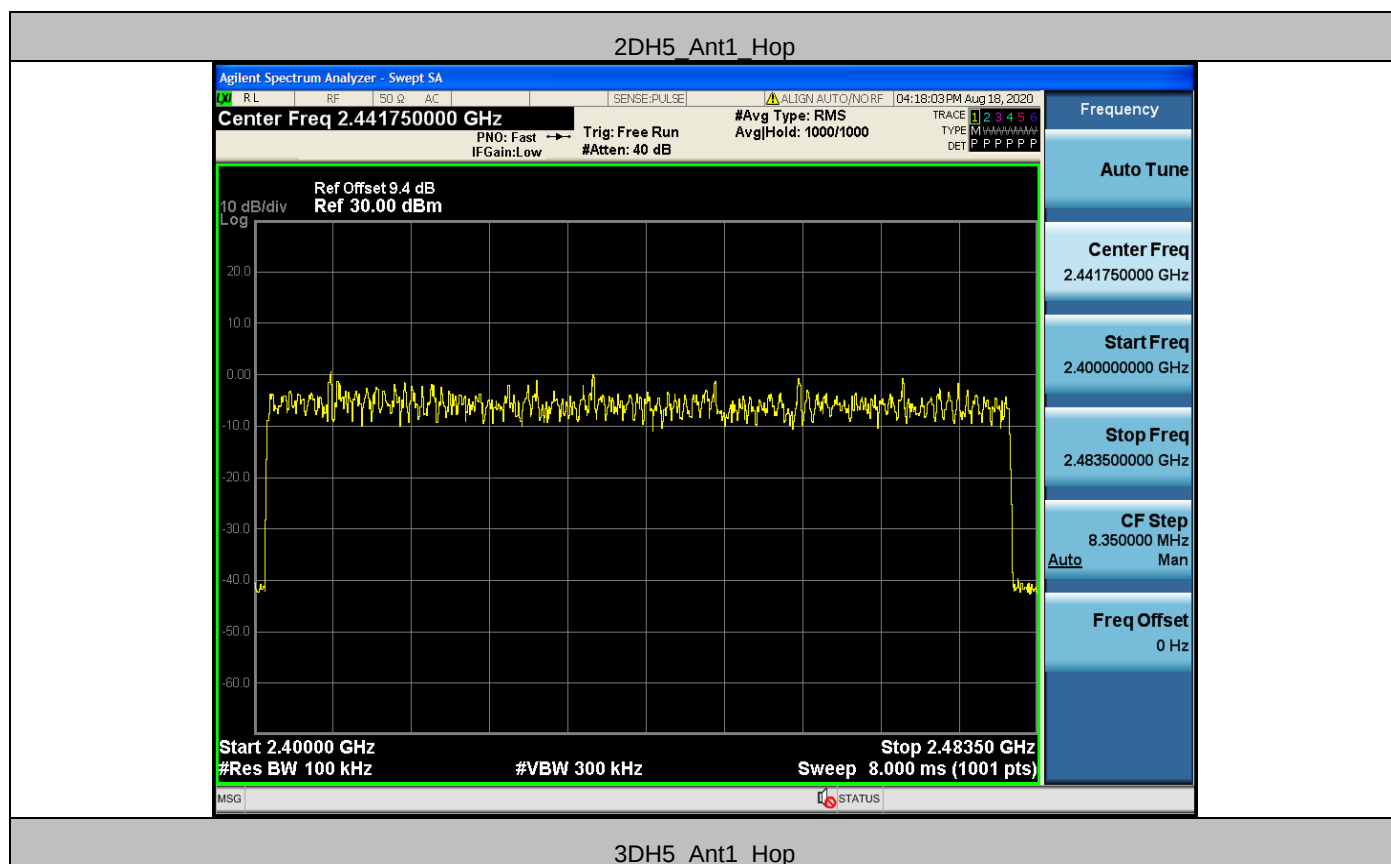
3DH5_Ant1_Hop

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

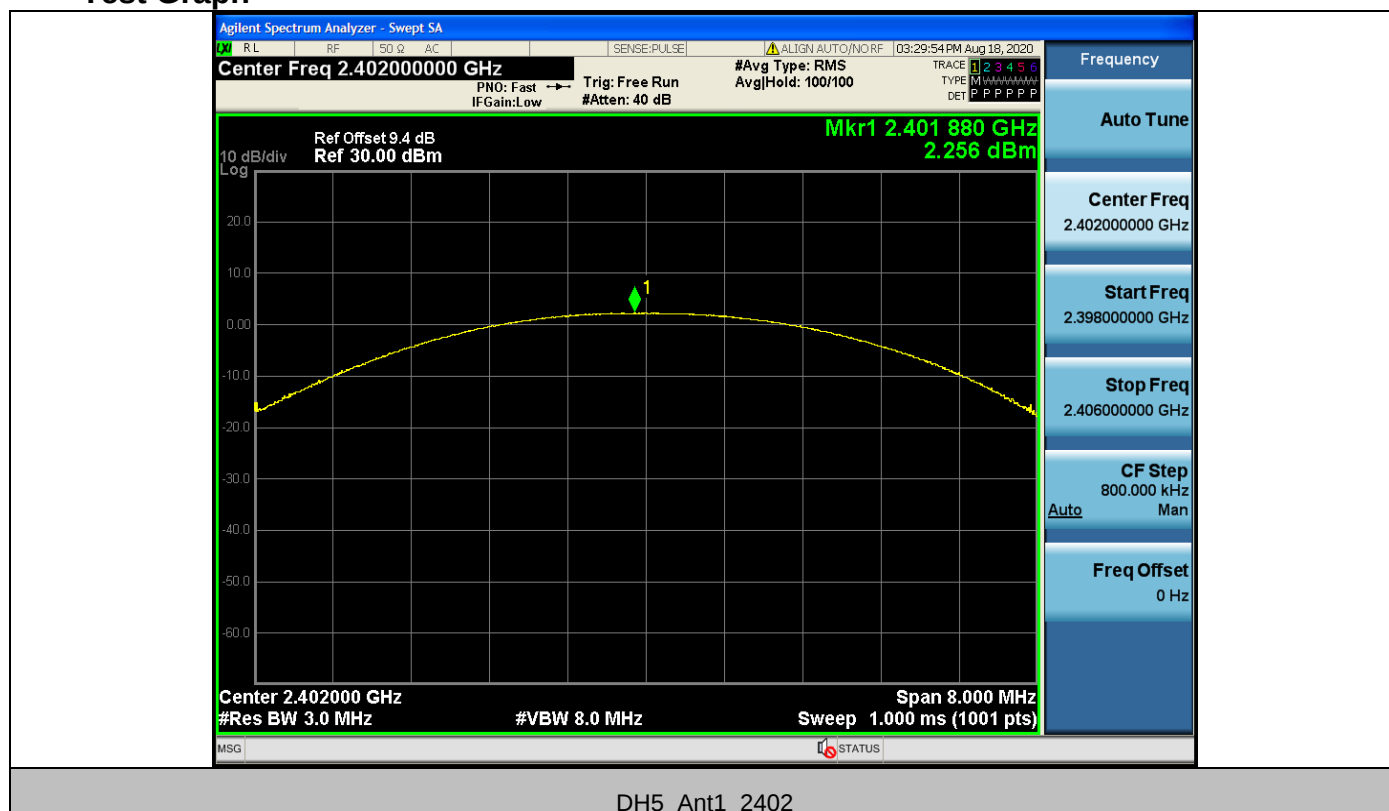


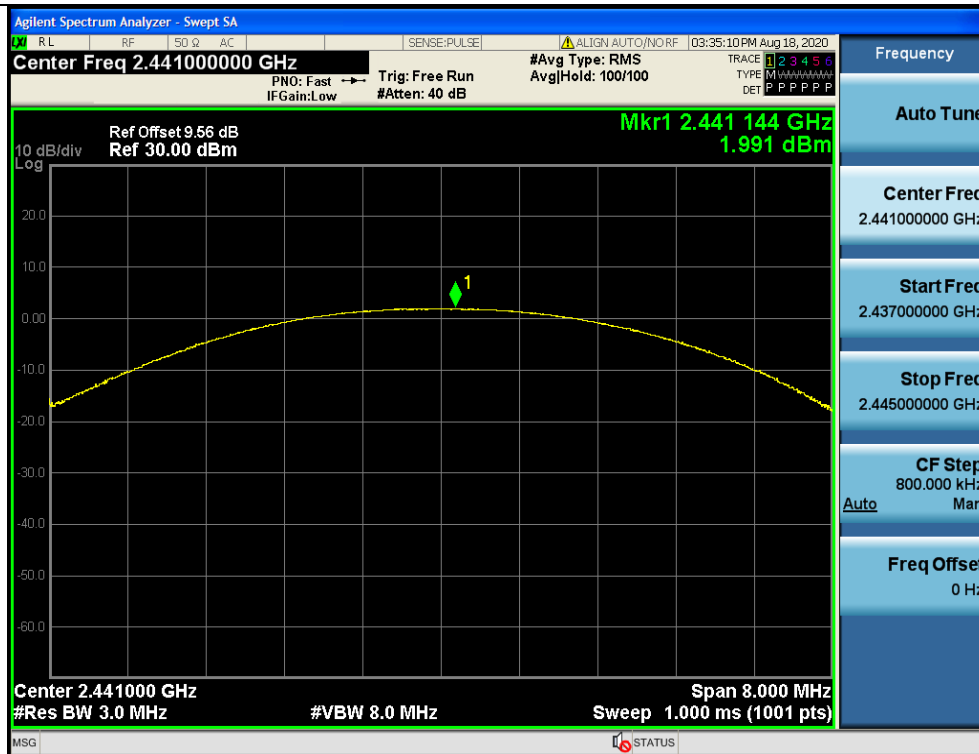


A.5 Conducted Peak Output Power

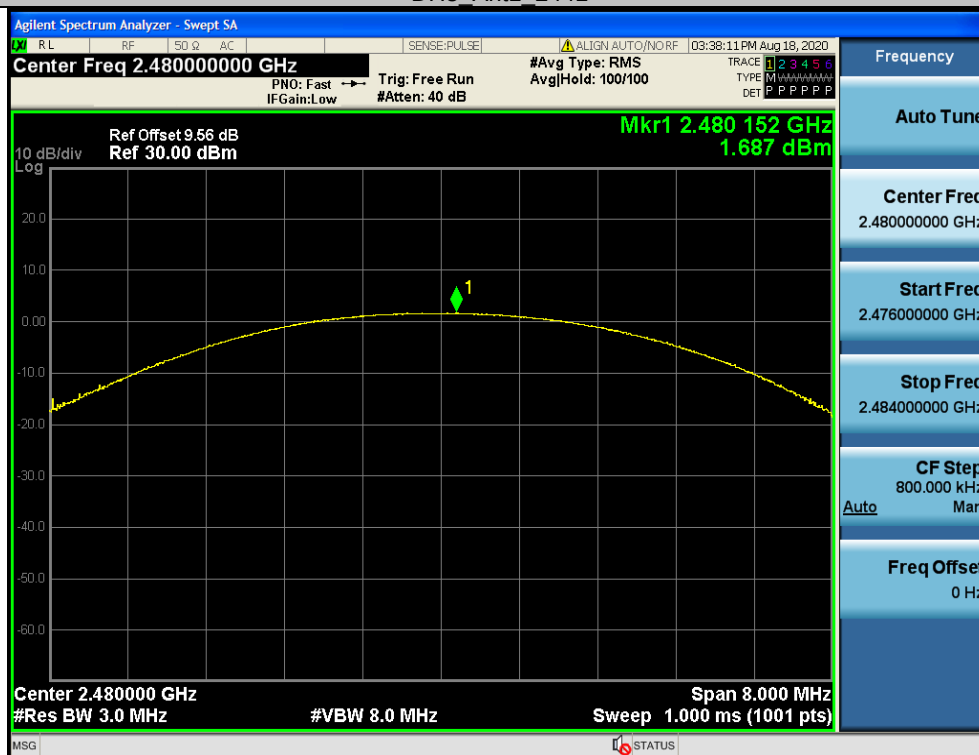
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	2.25	<=30	PASS
		2441	2.00	<=30	PASS
		2480	1.69	<=30	PASS
2DH5	Ant1	2402	1.69	<=20.97	PASS
		2441	1.34	<=20.97	PASS
		2480	0.75	<=20.97	PASS
3DH5	Ant1	2402	1.77	<=20.97	PASS
		2441	1.58	<=20.97	PASS
		2480	0.77	<=20.97	PASS

Test Graph

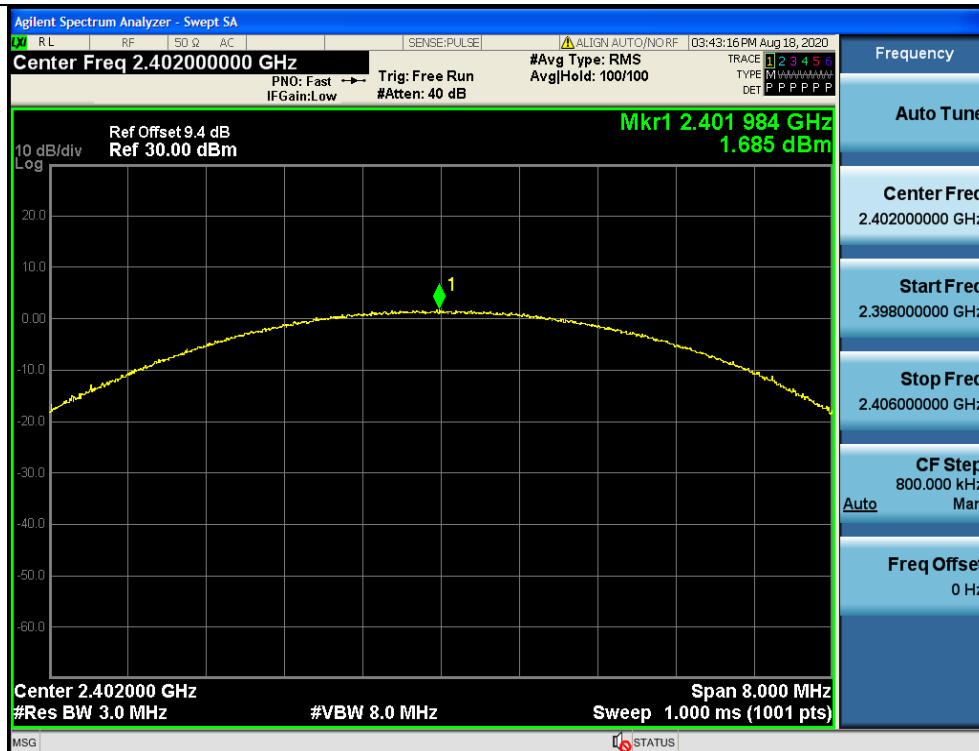




DH5_Ant1_2441



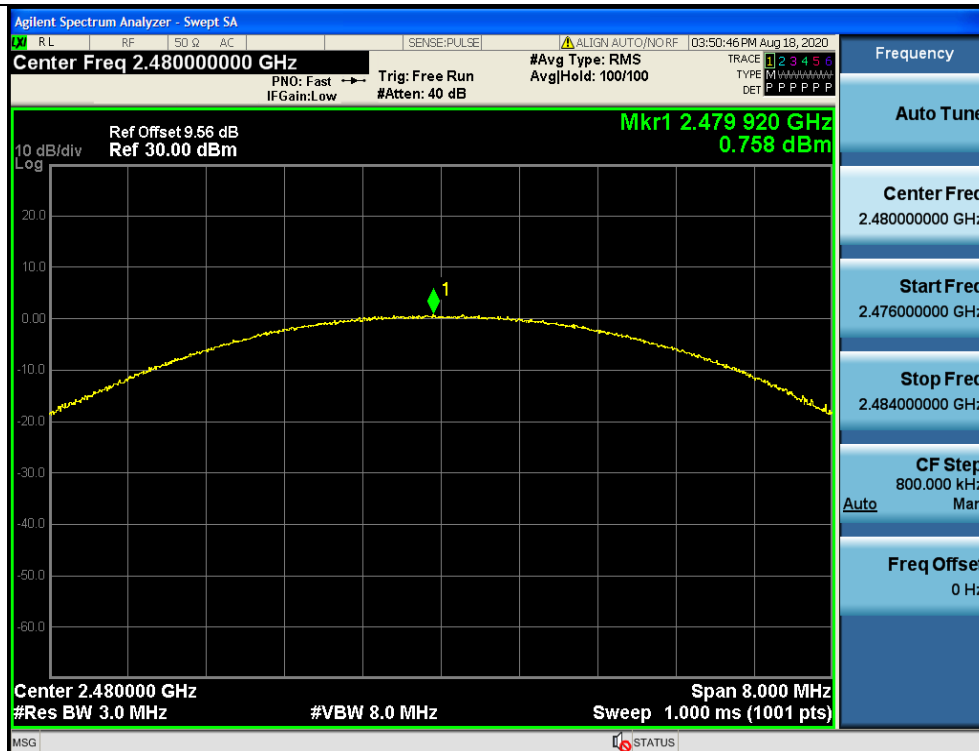
DH5_Ant1_2480



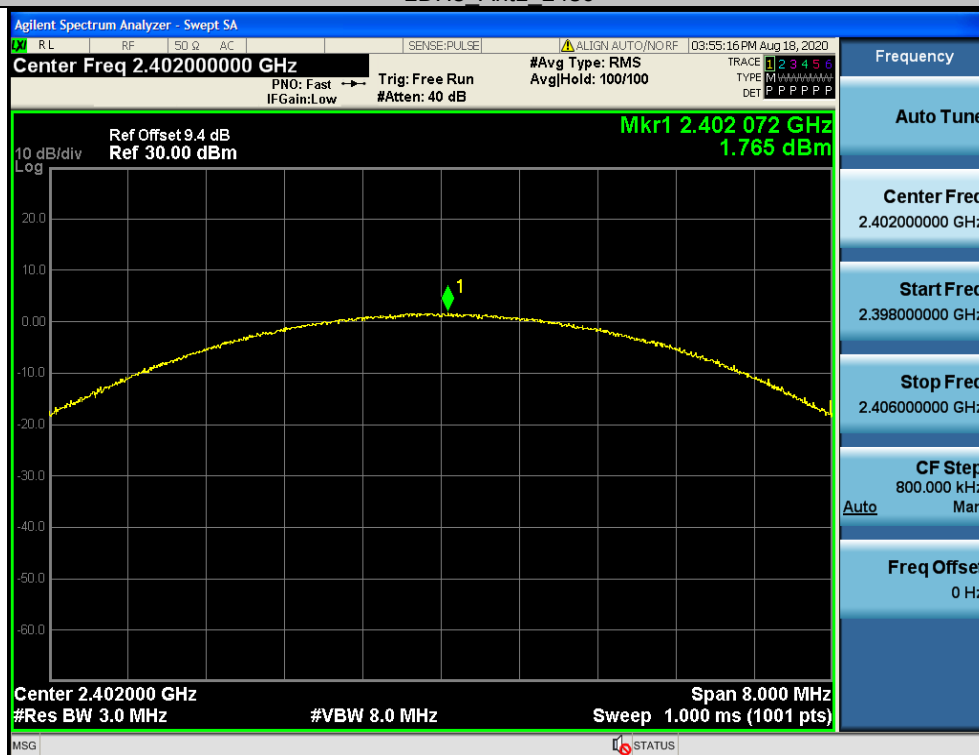
2DH5_Ant1_2402



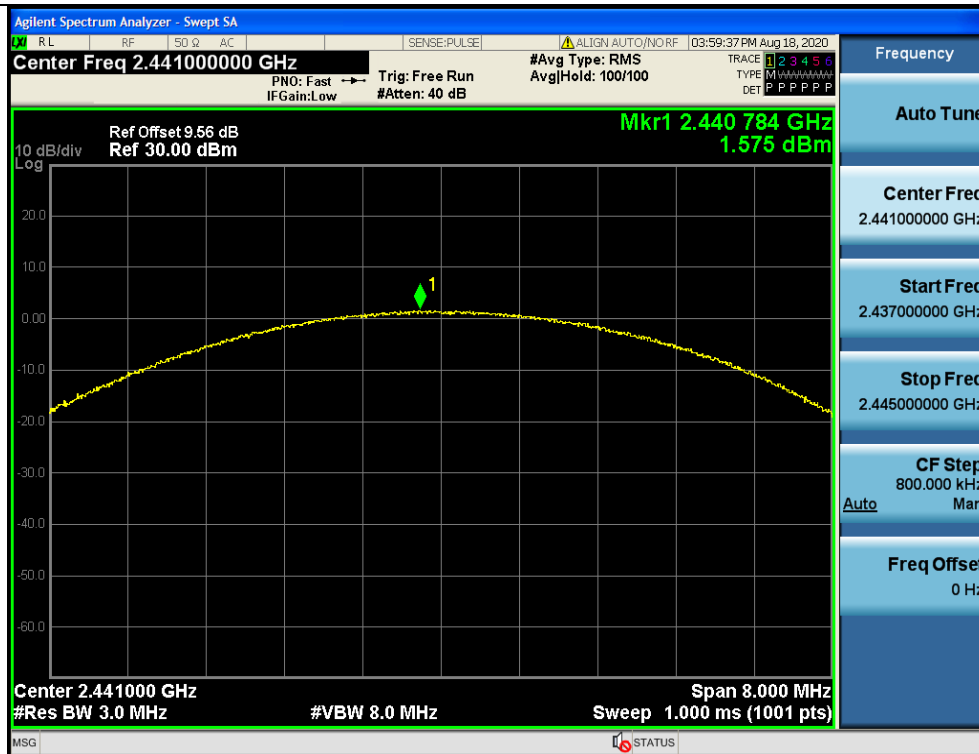
2DH5_Ant1_2441



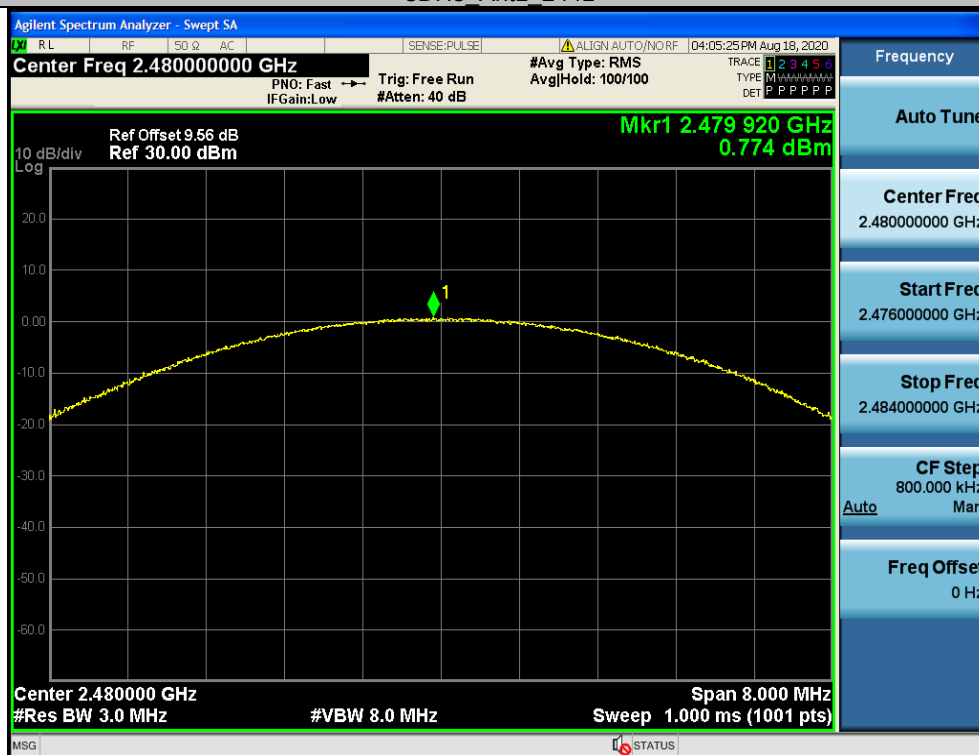
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441

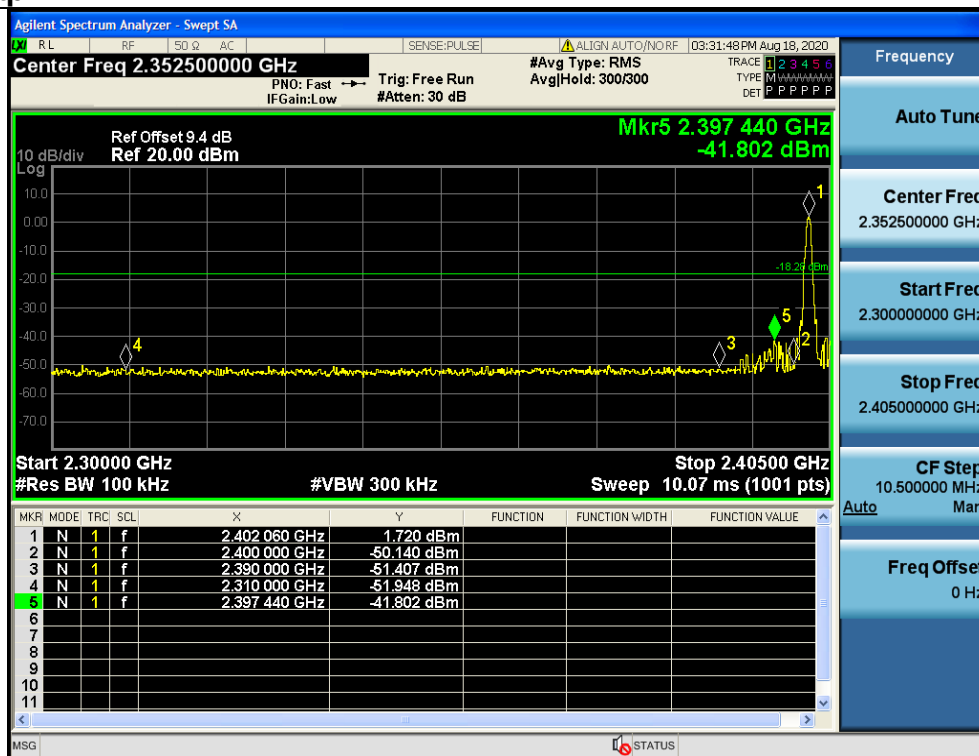


3DH5_Ant1_2480

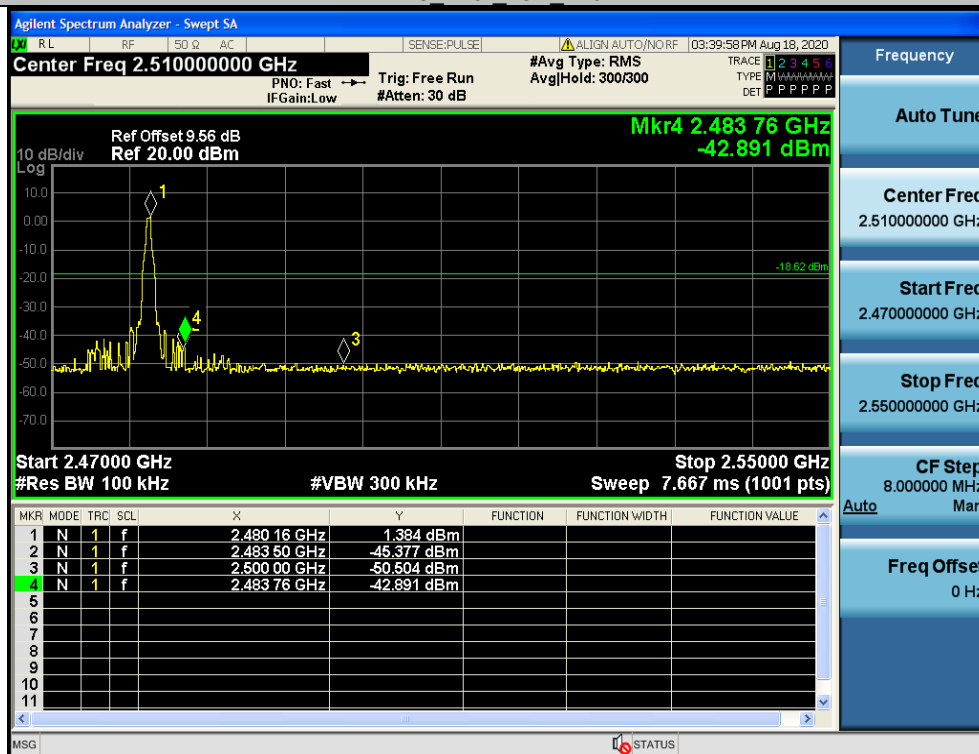
A.6 Band-edge for RF Conducted Emissions

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	1.72	-41.8	<=-18.28	PASS
		High	2480	1.38	-42.89	<=-18.62	PASS
		Low	Hop_2402	1.55	-50.21	<=-18.45	PASS
		High	Hop_2480	0.87	-49.05	<=-19.13	PASS
2DH5	Ant1	Low	2402	-1.01	-41.15	<=-21.01	PASS
		High	2480	-0.64	-43.28	<=-20.65	PASS
		Low	Hop_2402	-2.45	-49.99	<=-22.45	PASS
		High	Hop_2480	-1.06	-48.83	<=-21.06	PASS
3DH5	Ant1	Low	2402	0.37	-40.56	<=-19.63	PASS
		High	2480	-0.73	-46.5	<=-20.73	PASS
		Low	Hop_2402	-3.97	-50.04	<=-23.97	PASS
		High	Hop_2480	-0.56	-48.77	<=-20.56	PASS

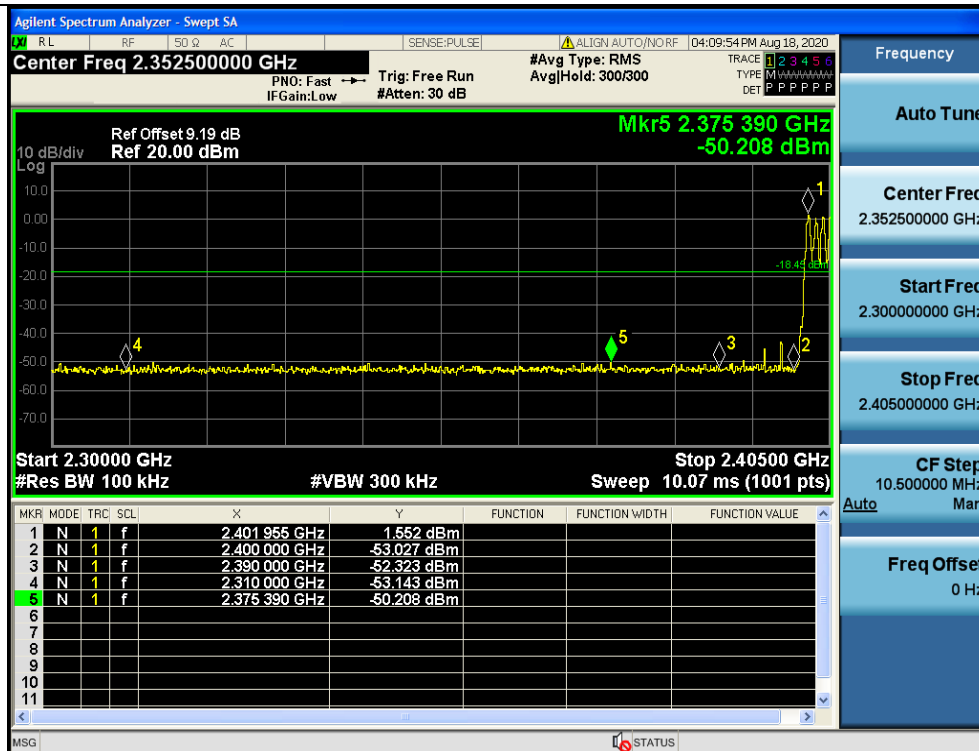
Test Graph



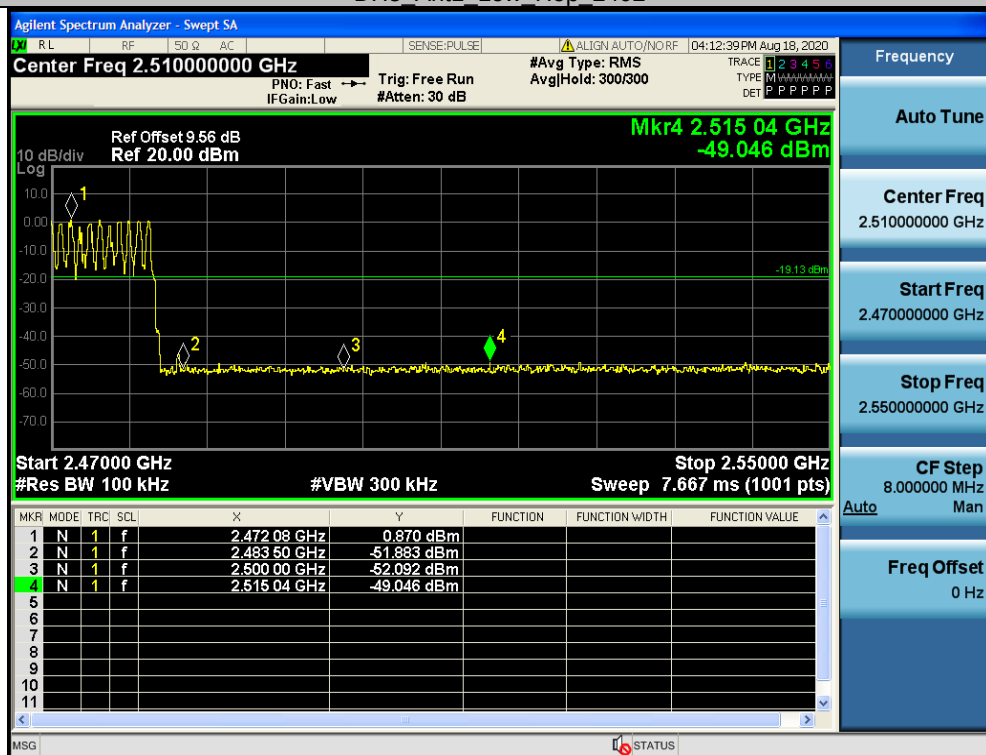
DH5_Ant1_Low_2402



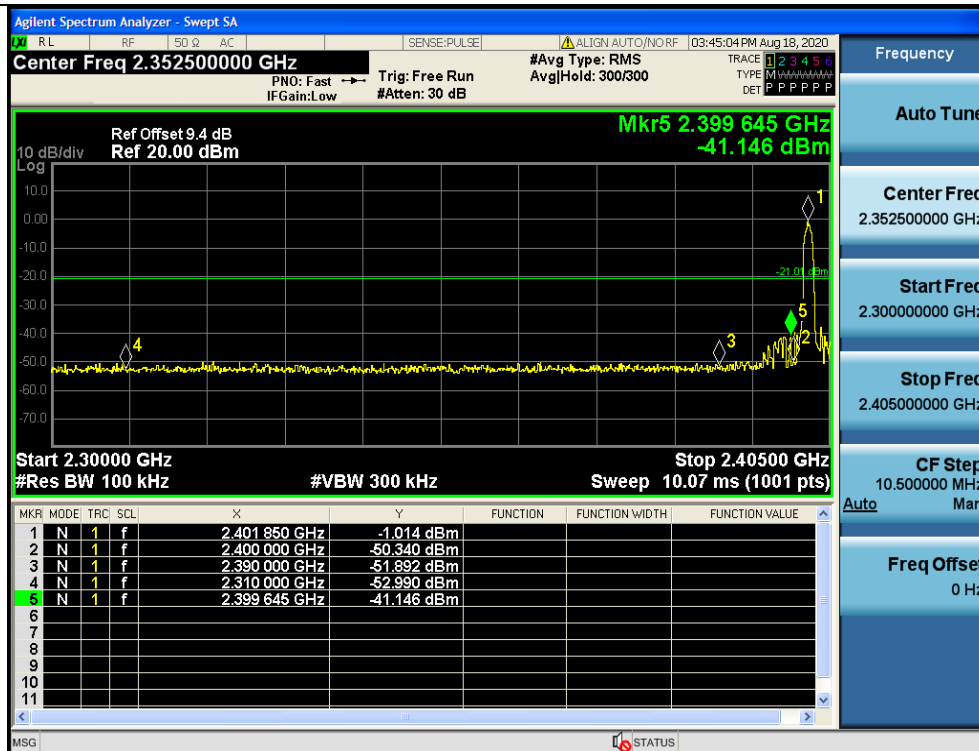
DH5_Ant1_High_2480



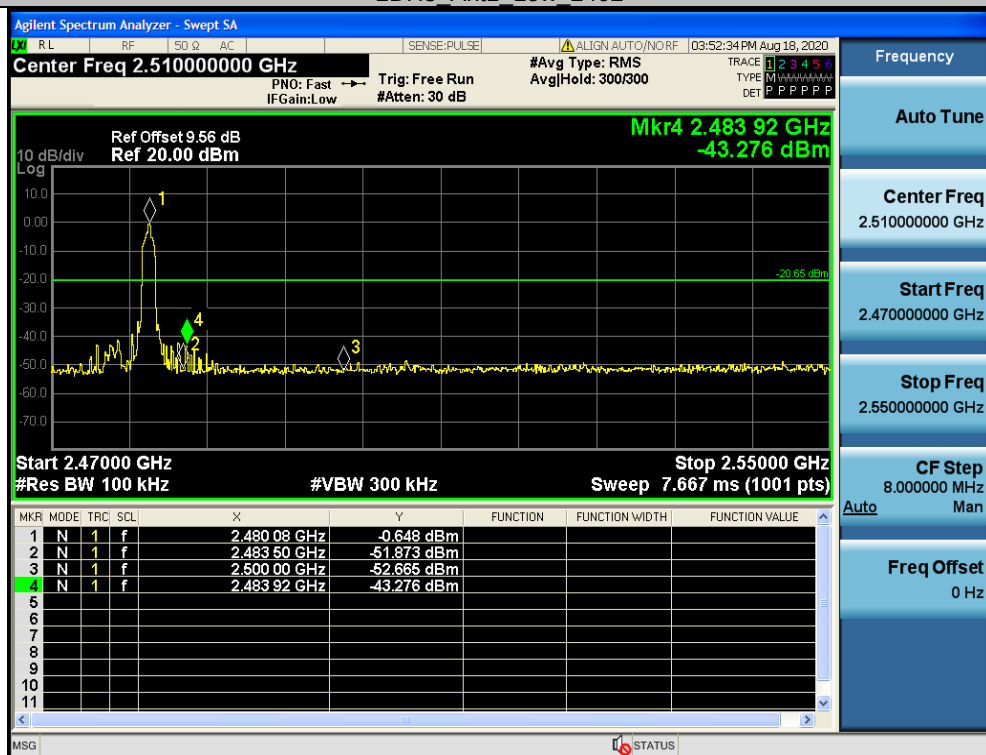
DH5_Ant1_Low_Hop_2402



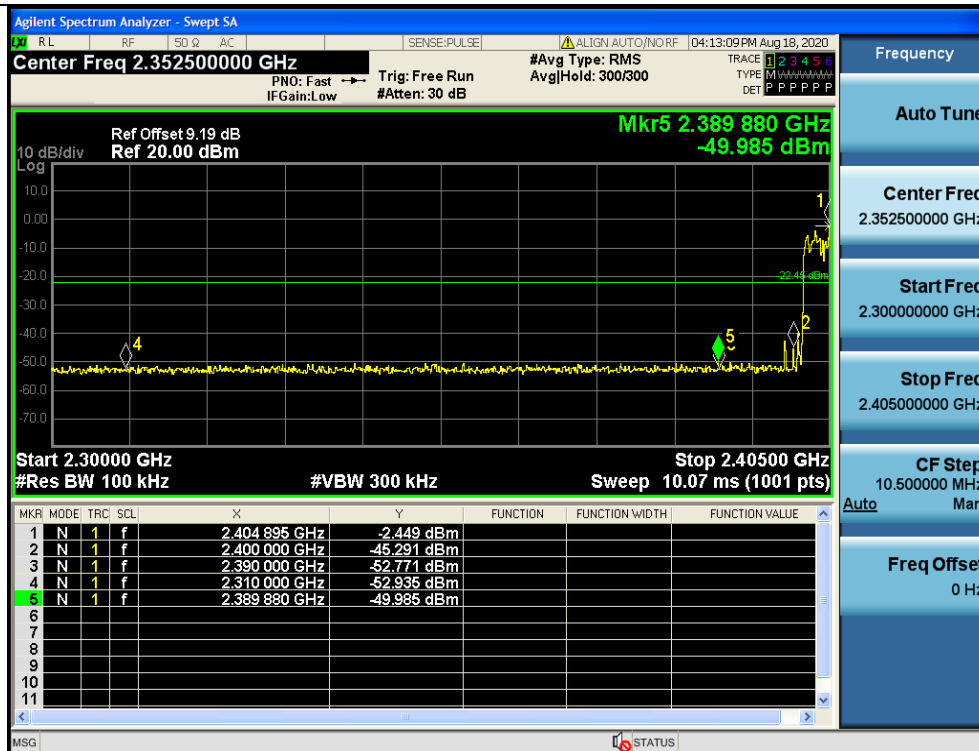
DH5_Ant1_High_Hop_2480



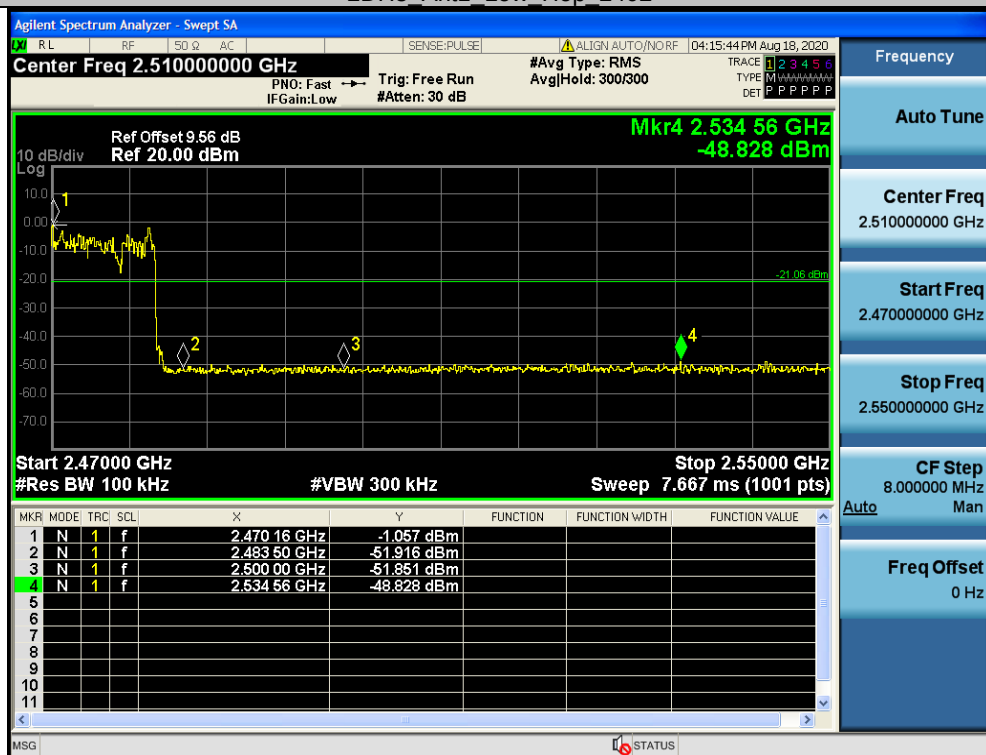
2DH5 Ant1 Low 2402



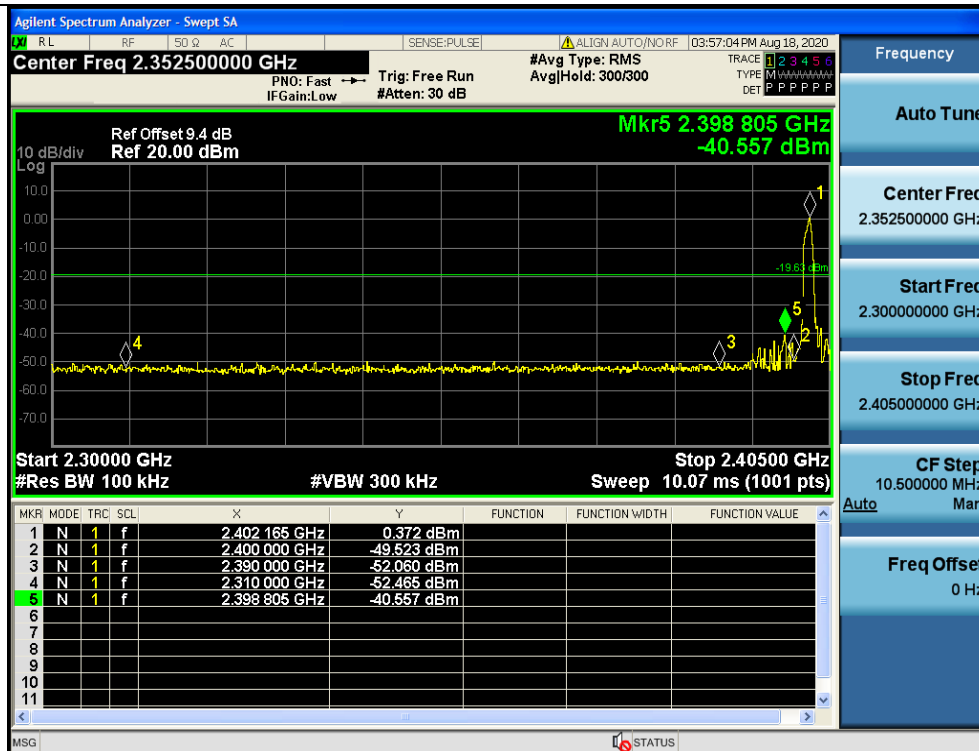
2DH5 Ant1 High 2480



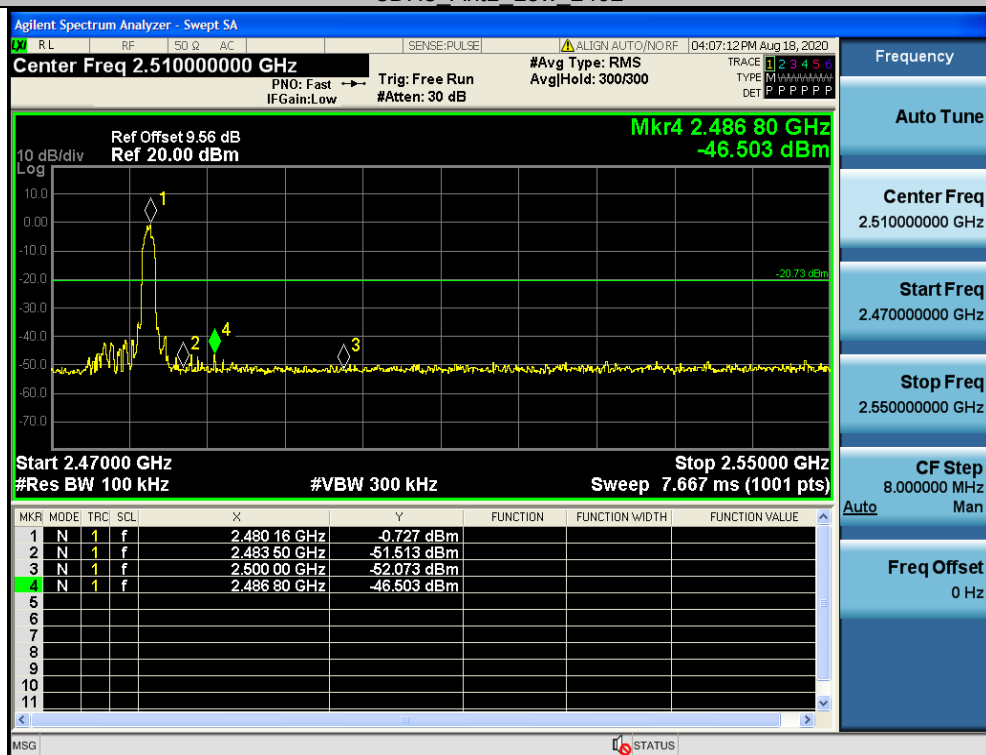
2DH5_Ant1_Low_Hop_2402



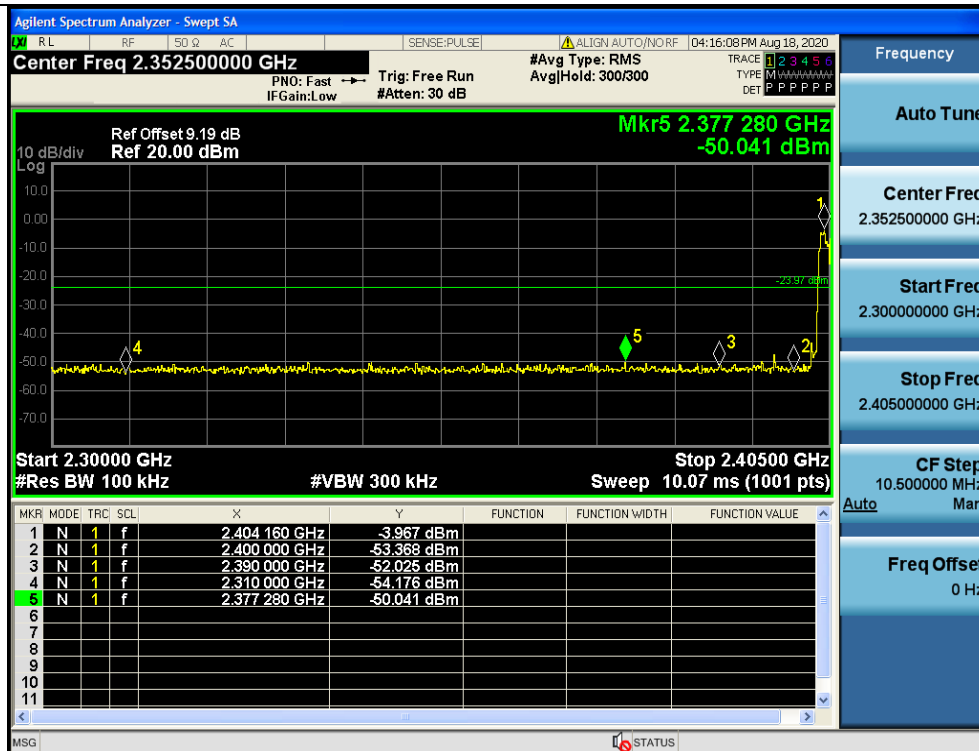
2DH5_Ant1_High_Hop_2480



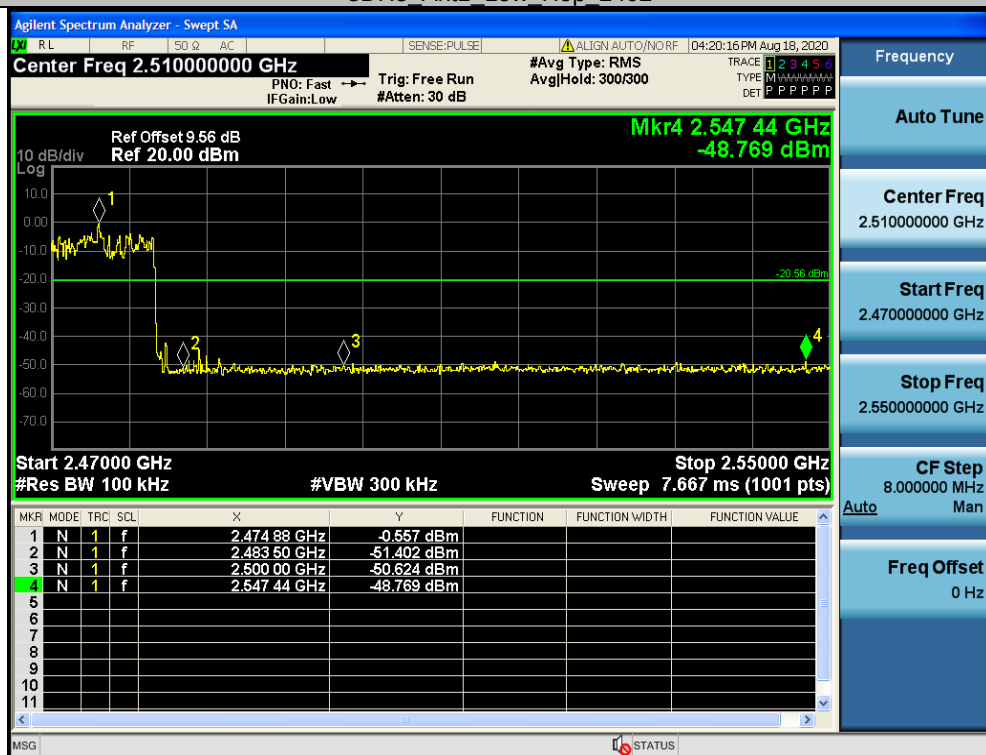
3DH5_Ant1_Low_2402



3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



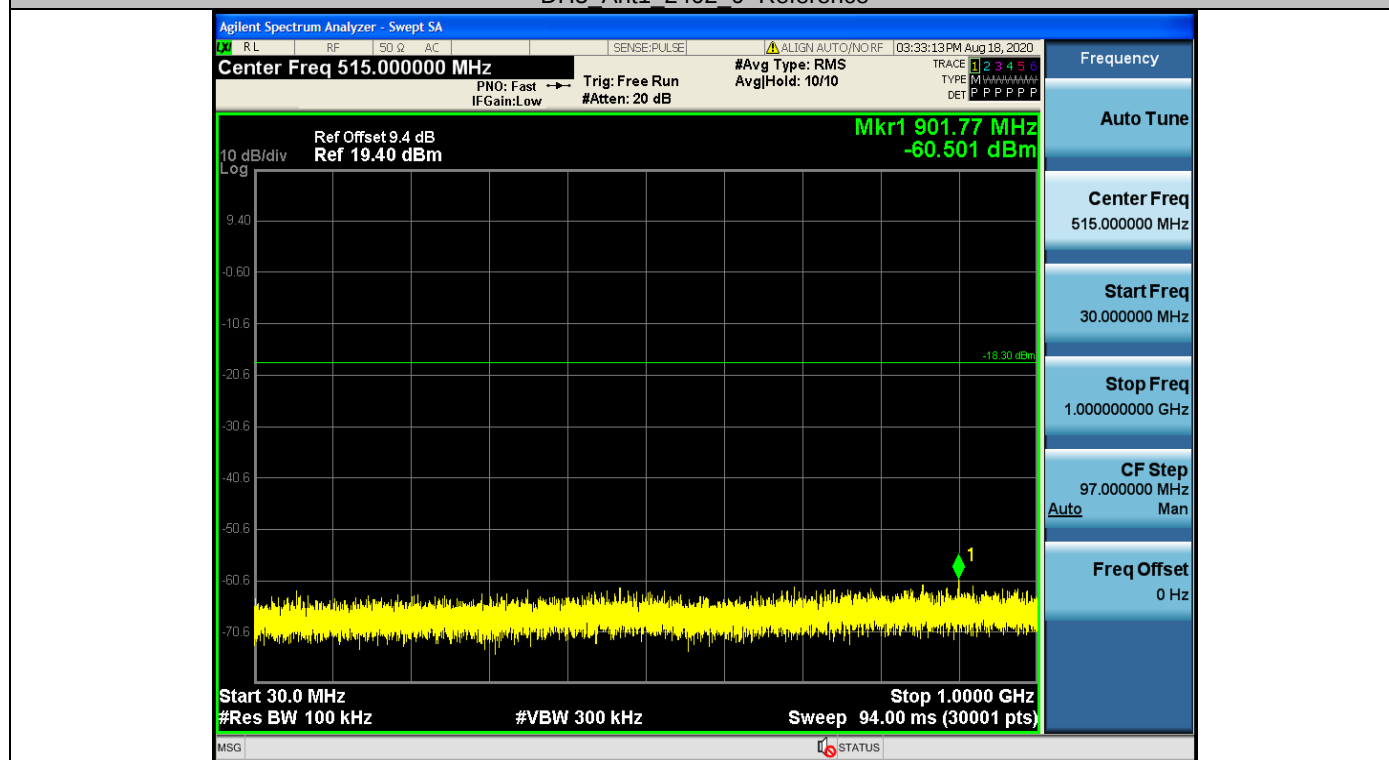
3DH5_Ant1_High_Hop_2480

A.7 RF Conducted Spurious Emissions

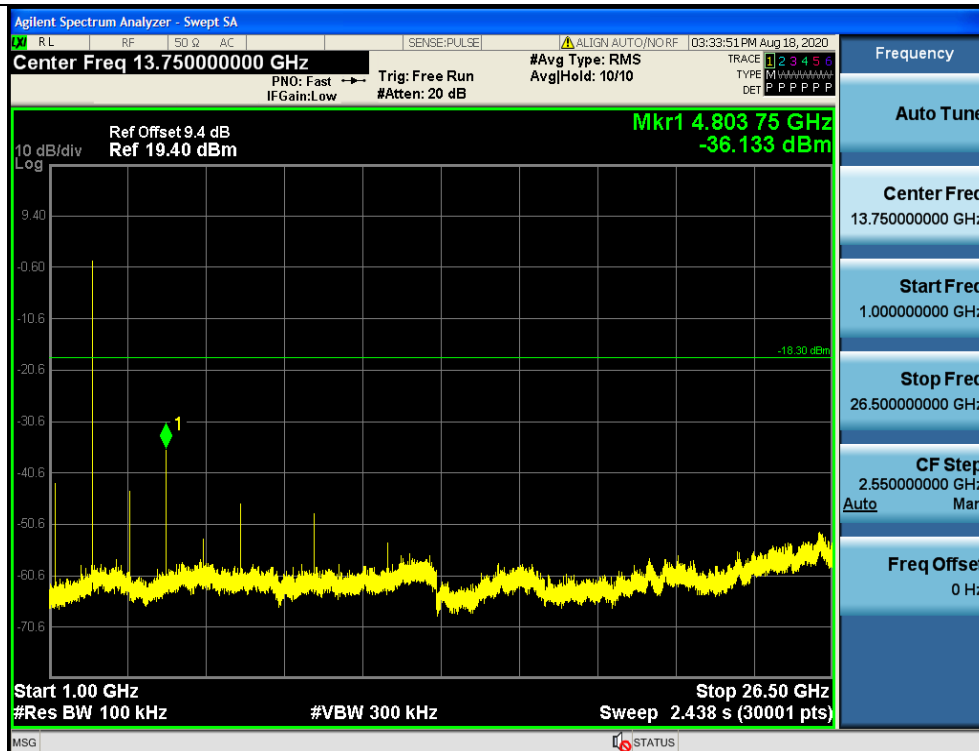
Test Graph



DH5_Ant1_2402_0-Reference



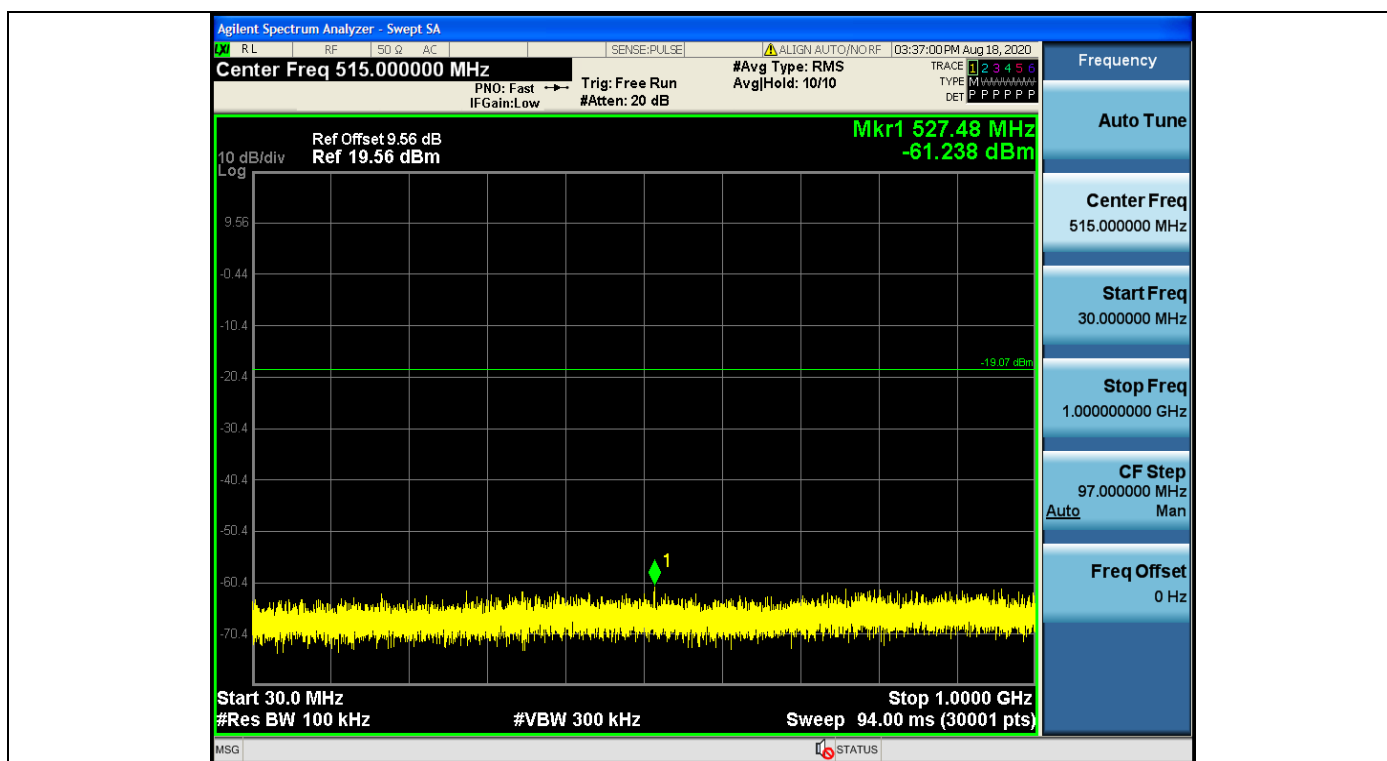
DH5_Ant1_2402_30-1000



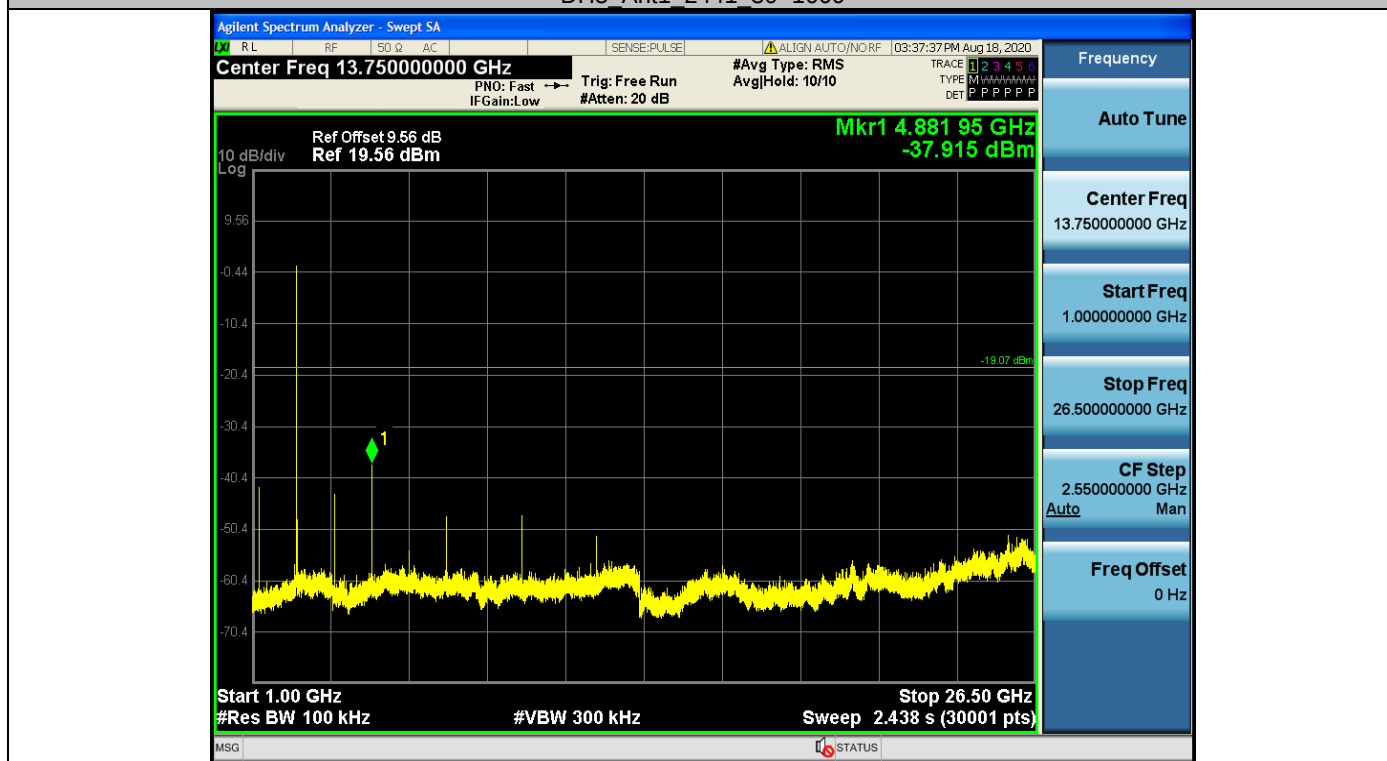
DH5_Ant1_2402_1000~26500



DH5_Ant1_2441_0-Reference



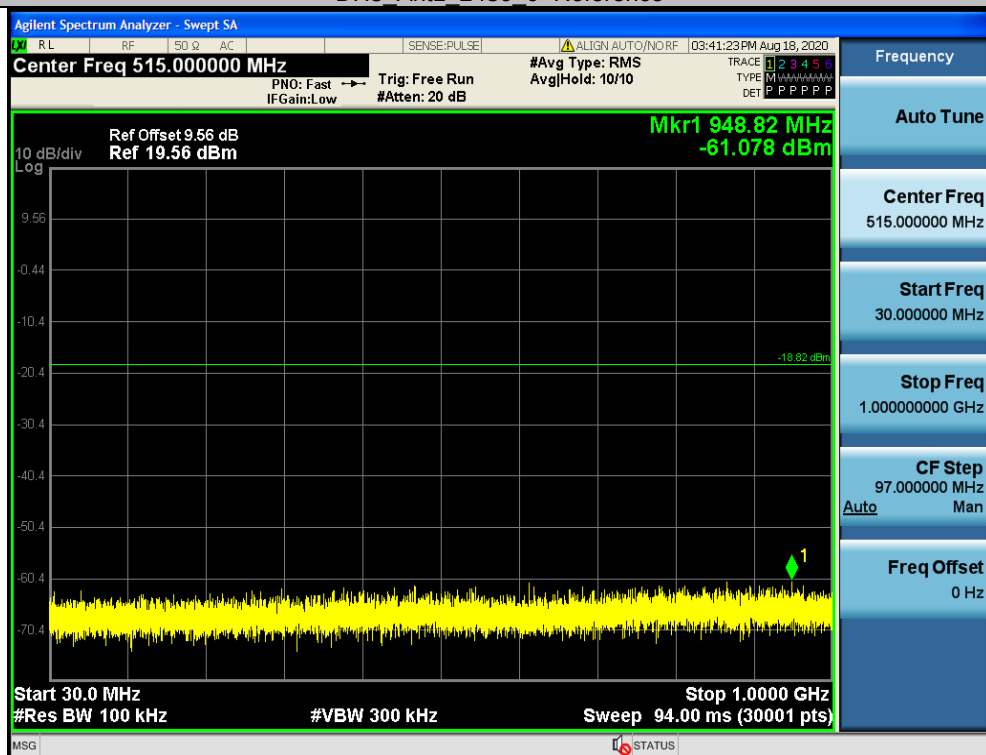
DH5_Ant1_2441_30~1000



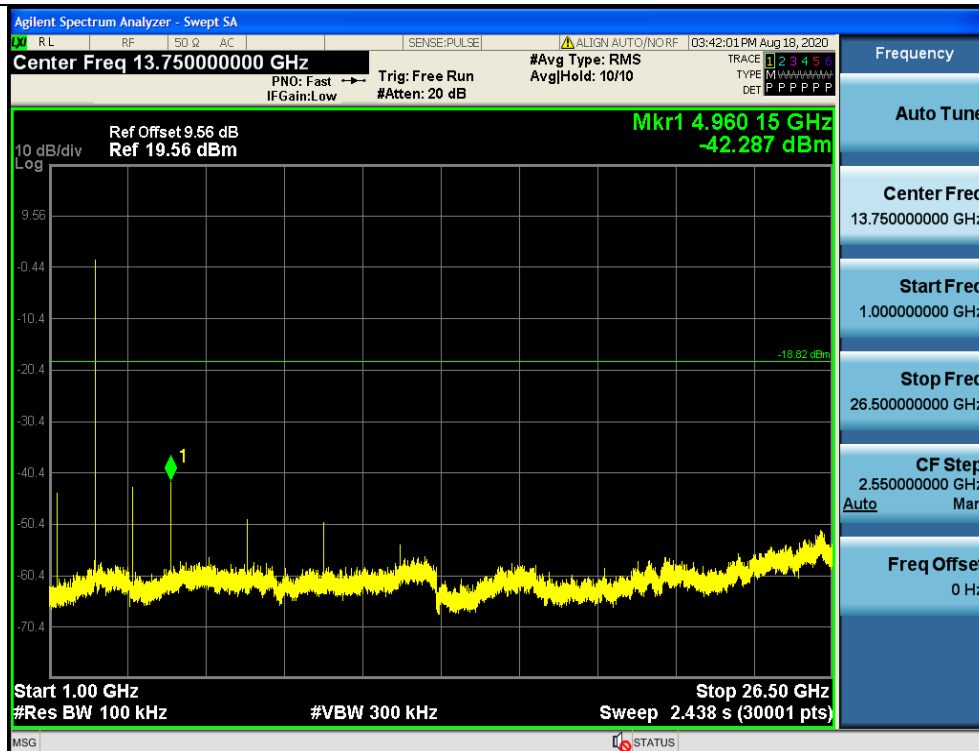
DH5_Ant1_2441_1000~26500



DH5_Ant1_2480_0-Reference



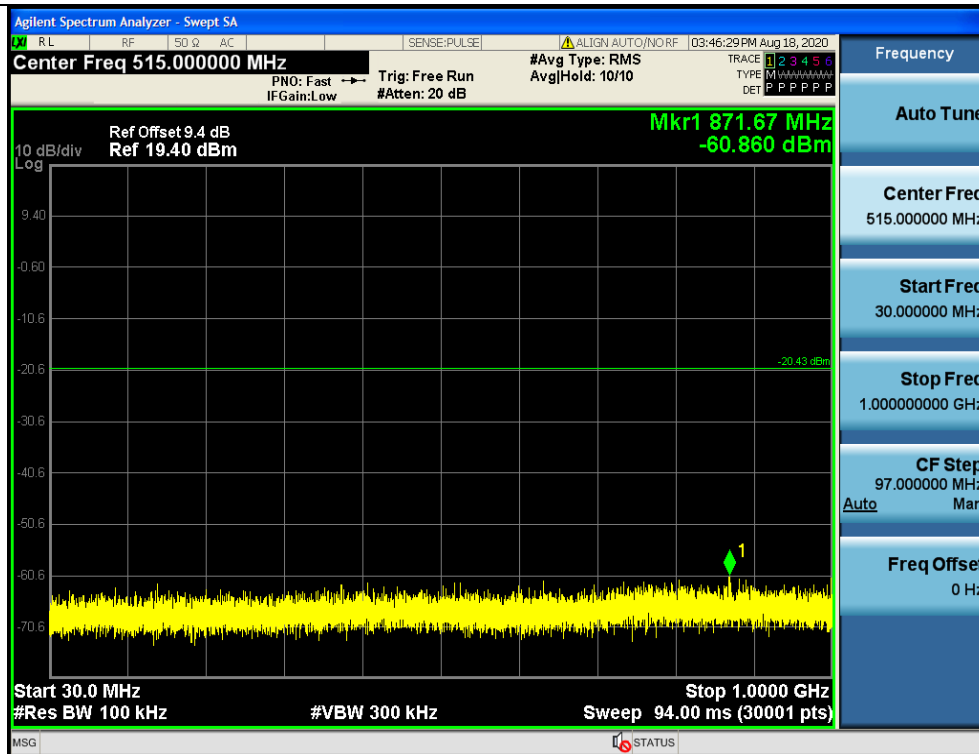
DH5_Ant1_2480_30-1000



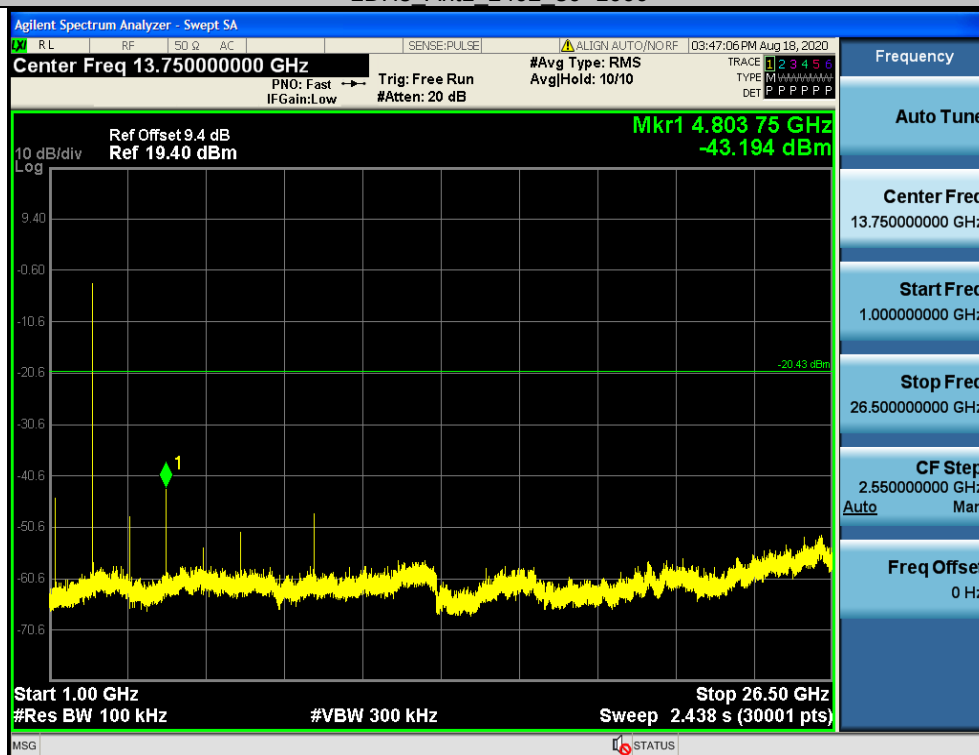
DH5 Ant1 2480 1000~26500



2DH5 Ant1 2402 0~Reference



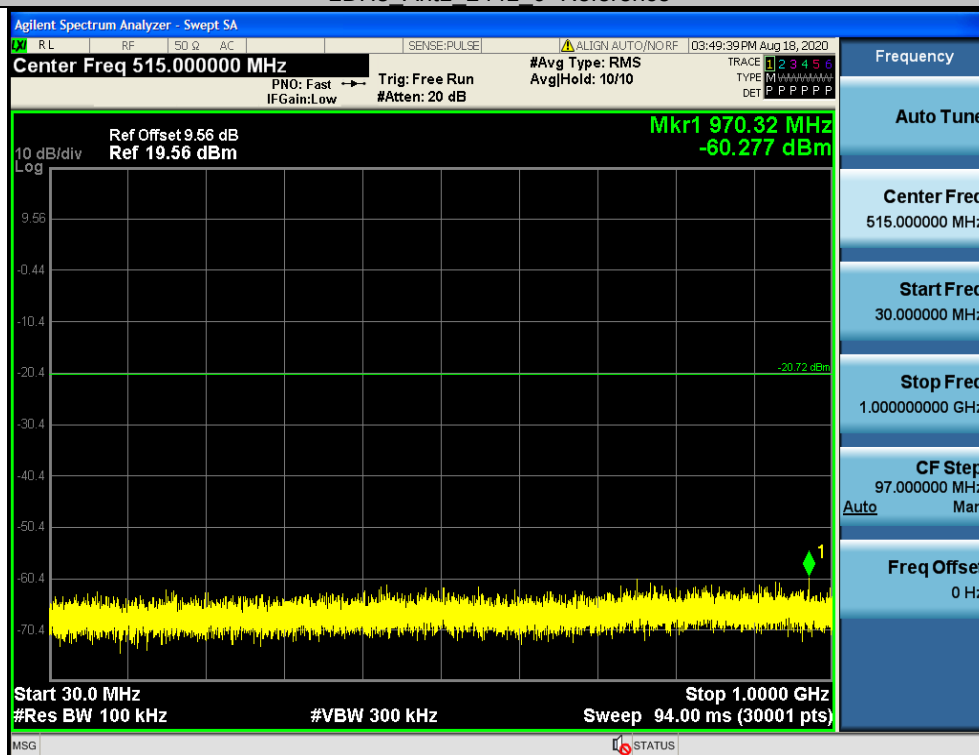
2DH5_Ant1_2402_30~1000



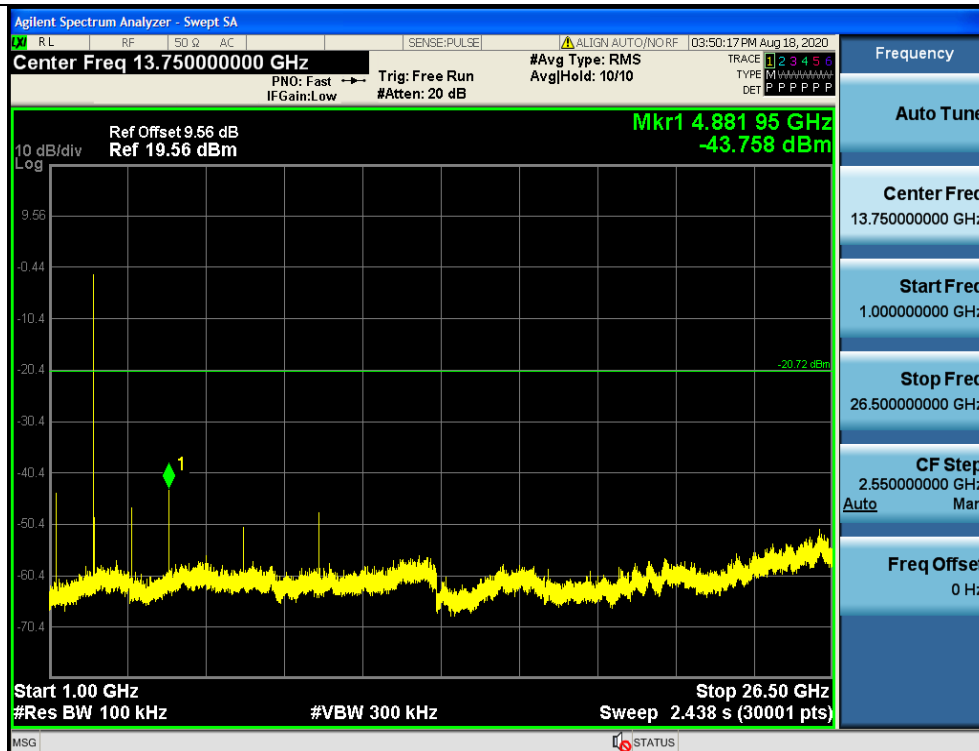
2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0-Reference



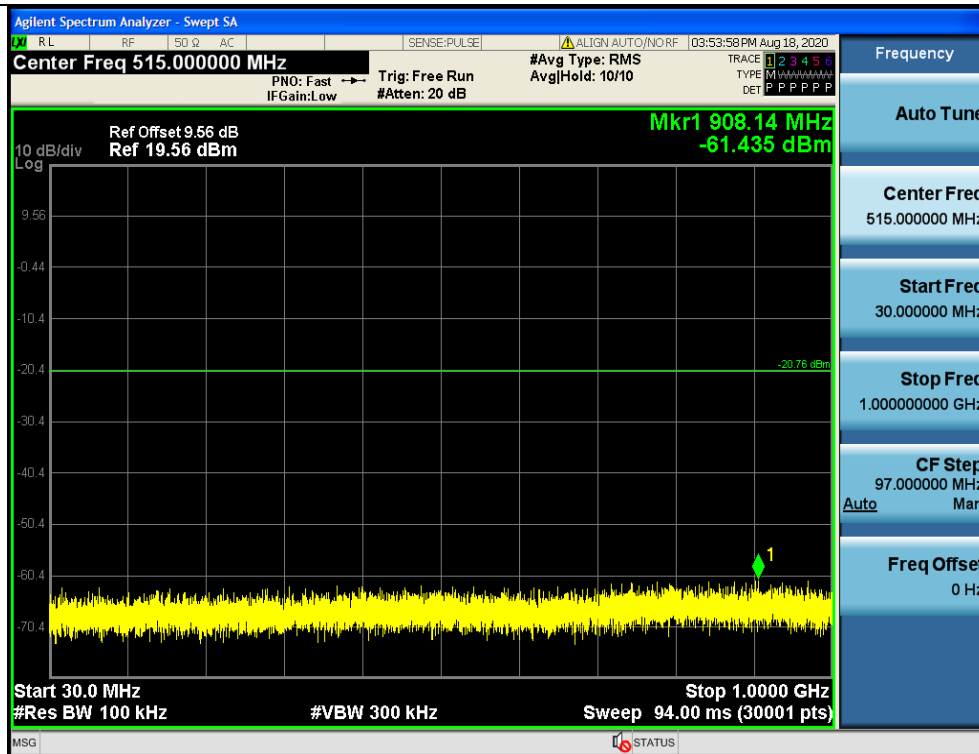
2DH5_Ant1_2441_30-1000



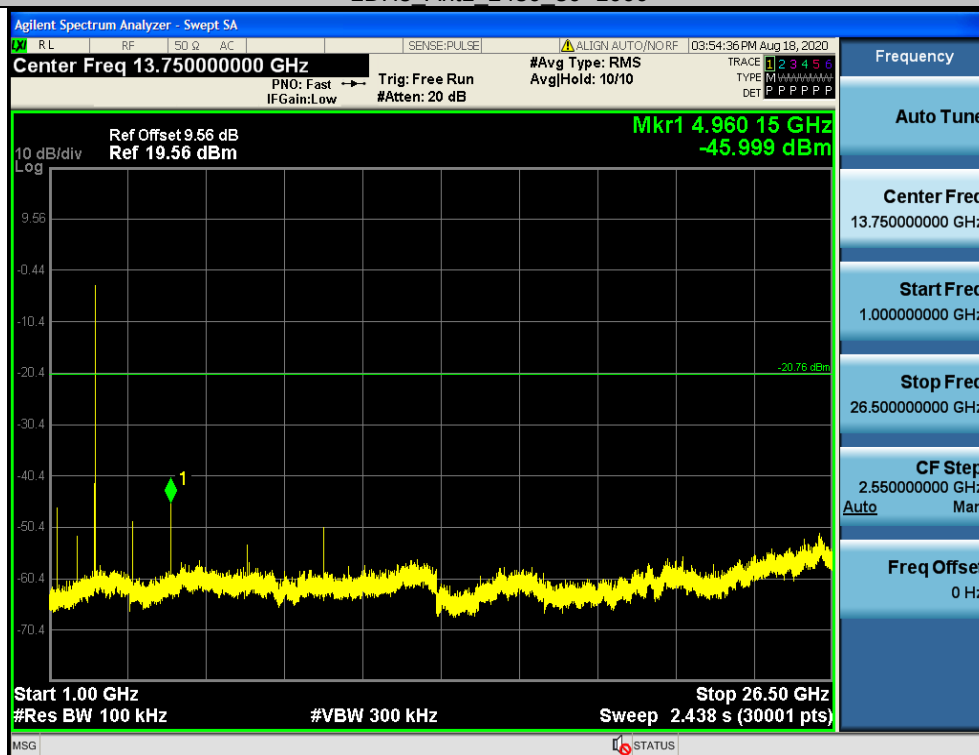
2DH5_Ant1_2441_1000~26500



2DH5_Ant1_2480_0~Reference



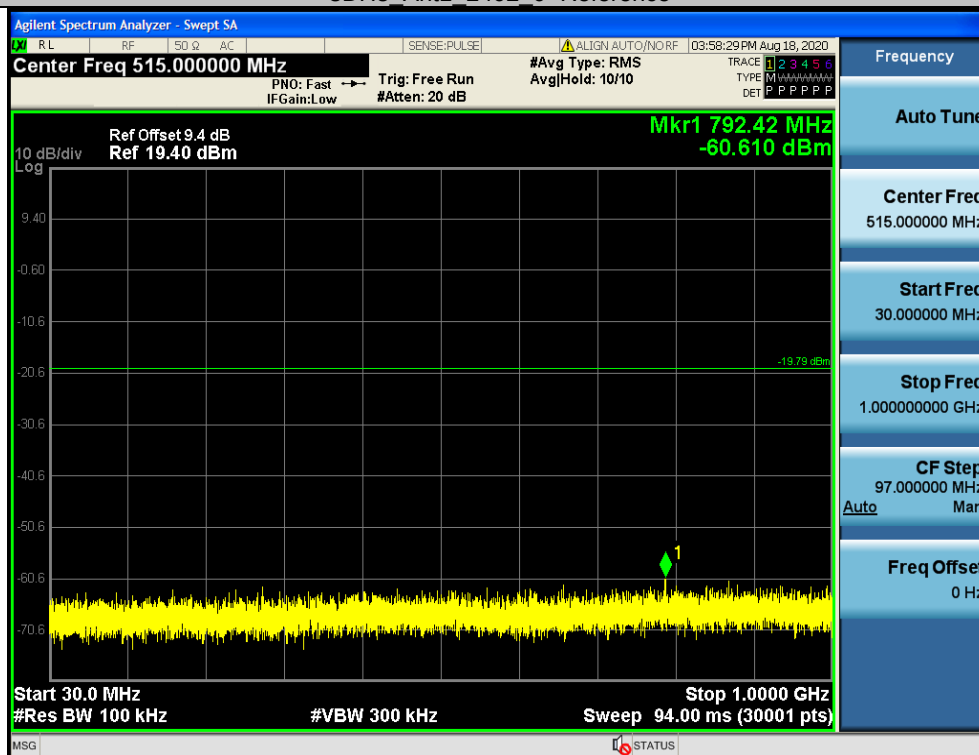
2DH5_Ant1_2480_30~1000



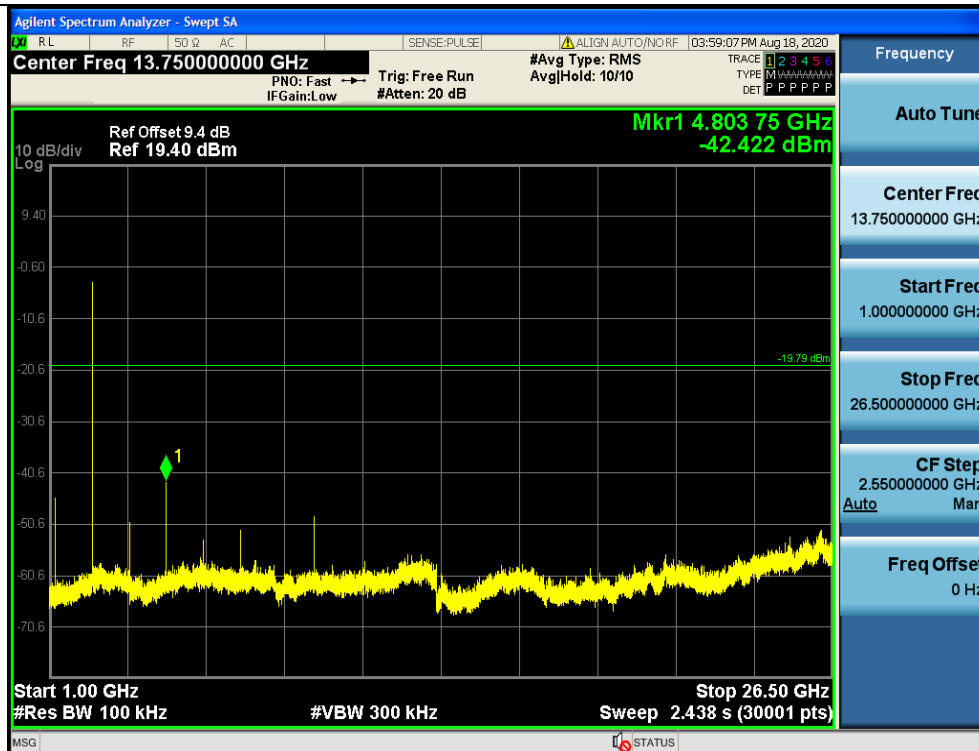
2DH5_Ant1_2480_1000~26500



3DH5_Ant1_2402_0-Reference



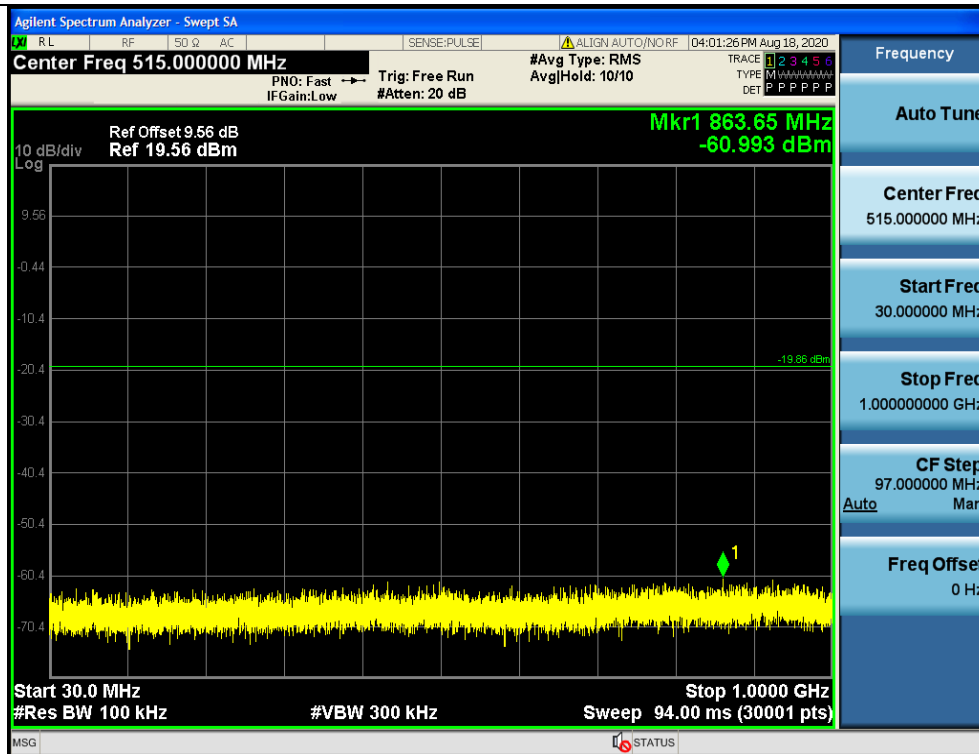
3DH5_Ant1_2402_30-1000



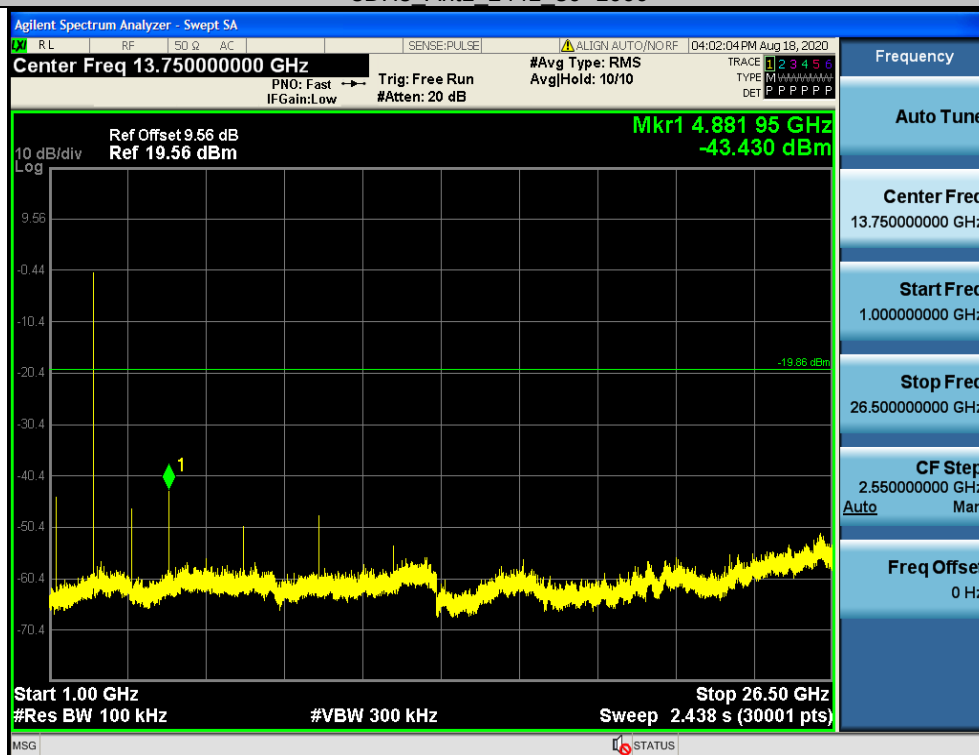
3DH5_Ant1_2402_1000~26500



3DH5_Ant1_2441_0~Reference



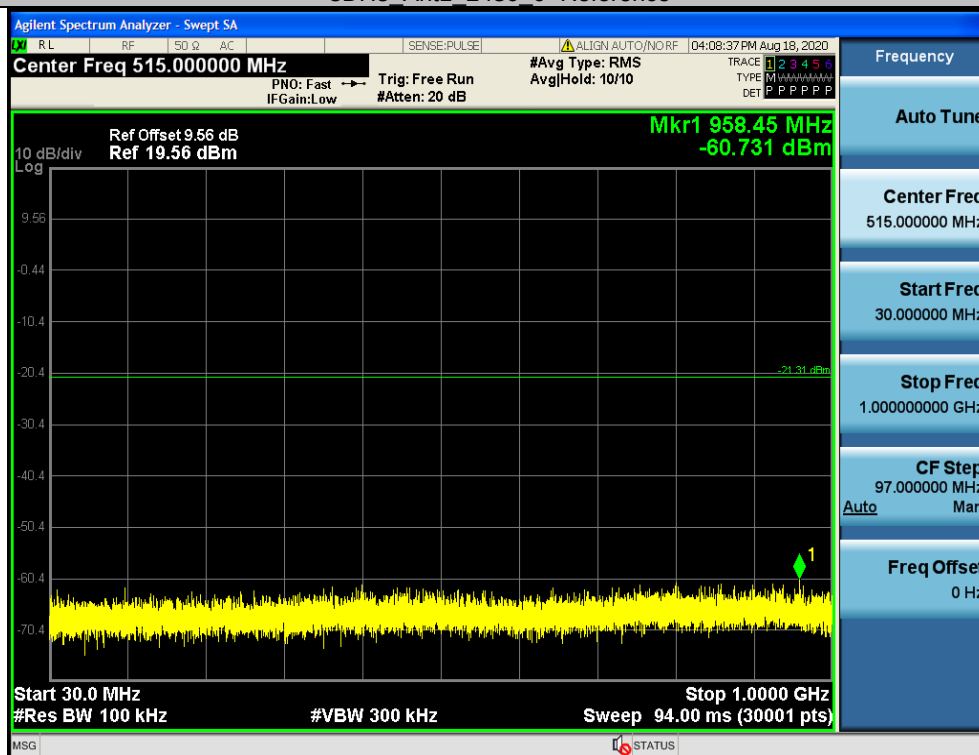
3DH5_Ant1_2441_30~1000



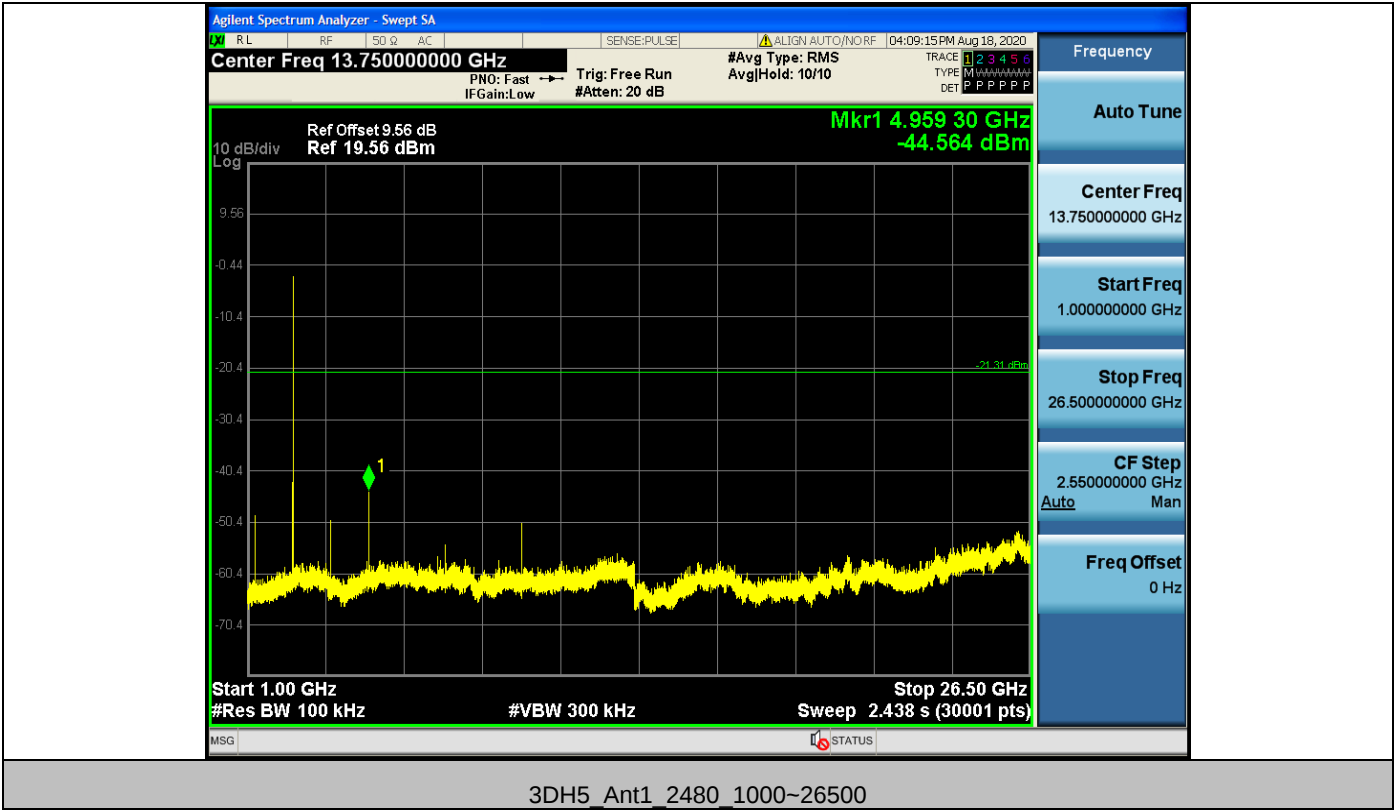
3DH5_Ant1_2441_1000~26500



3DH5_Ant1_2480_0-Reference



3DH5_Ant1_2480_30-1000

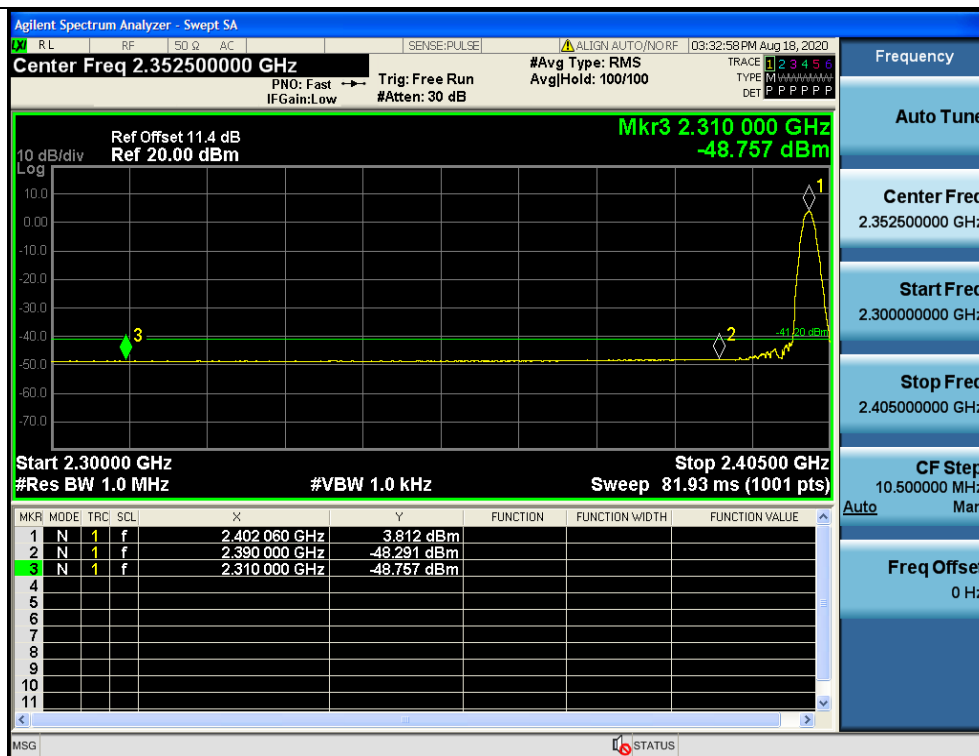


A.8 Restrict-band band-edge measurements

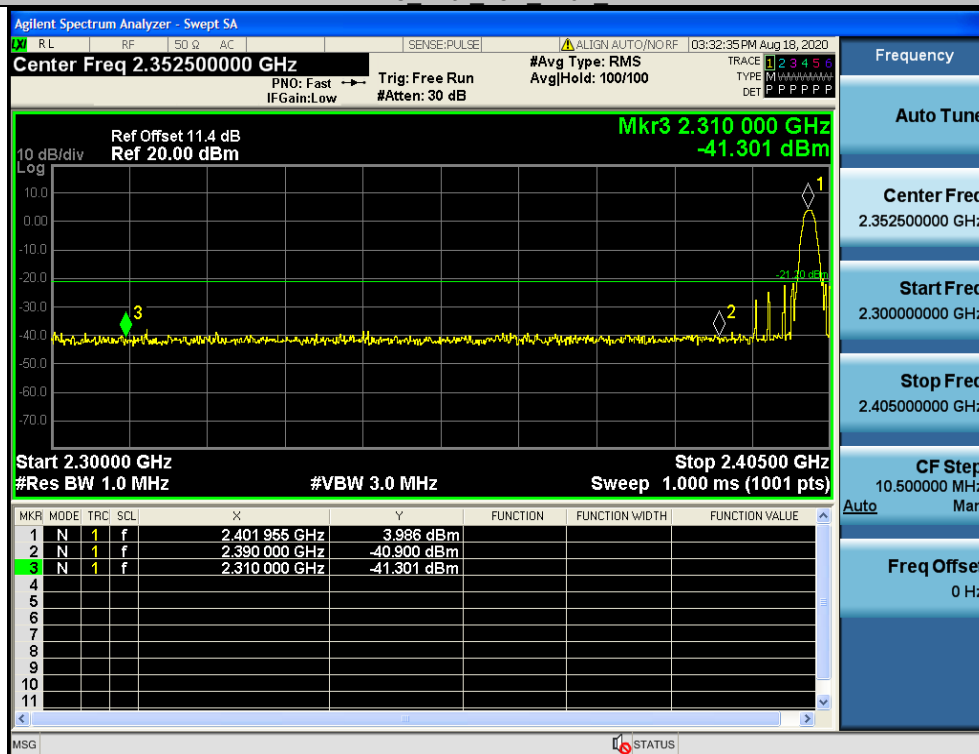
TestMode	Antenna	ChName	Channel	Detector	Freq	Result	Limit	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-48.76	<=-41.20	PASS
				AV	2390.000	-48.30	<=-41.20	PASS
				Peak	2310.000	-41.31	<=-21.20	PASS
				Peak	2390.000	-40.90	<=-21.20	PASS
		High	2480	AV	2483.500	-45.79	<=-41.20	PASS
				AV	2500.000	-47.60	<=-41.20	PASS
				Peak	2483.500	-38.95	<=-21.20	PASS
				Peak	2500.000	-38.49	<=-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-48.76	<=-41.20	PASS
				AV	2390.000	-48.33	<=-41.20	PASS
				Peak	2310.000	-41.50	<=-21.20	PASS
				Peak	2390.000	-42.12	<=-21.20	PASS
		High	2480	AV	2483.500	-47.21	<=-41.20	PASS
				AV	2500.000	-47.86	<=-41.20	PASS
				Peak	2483.500	-39.61	<=-21.20	PASS
				Peak	2500.000	-41.16	<=-21.20	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-48.85	<=-41.20	PASS
				AV	2390.000	-48.36	<=-41.20	PASS
				Peak	2310.000	-41.98	<=-21.20	PASS
				Peak	2390.000	-39.58	<=-21.20	PASS
		High	2480	AV	2483.500	-47.38	<=-41.20	PASS
				AV	2500.000	-47.68	<=-41.20	PASS
				Peak	2483.500	-41.27	<=-21.20	PASS
				Peak	2500.000	-40.99	<=-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.

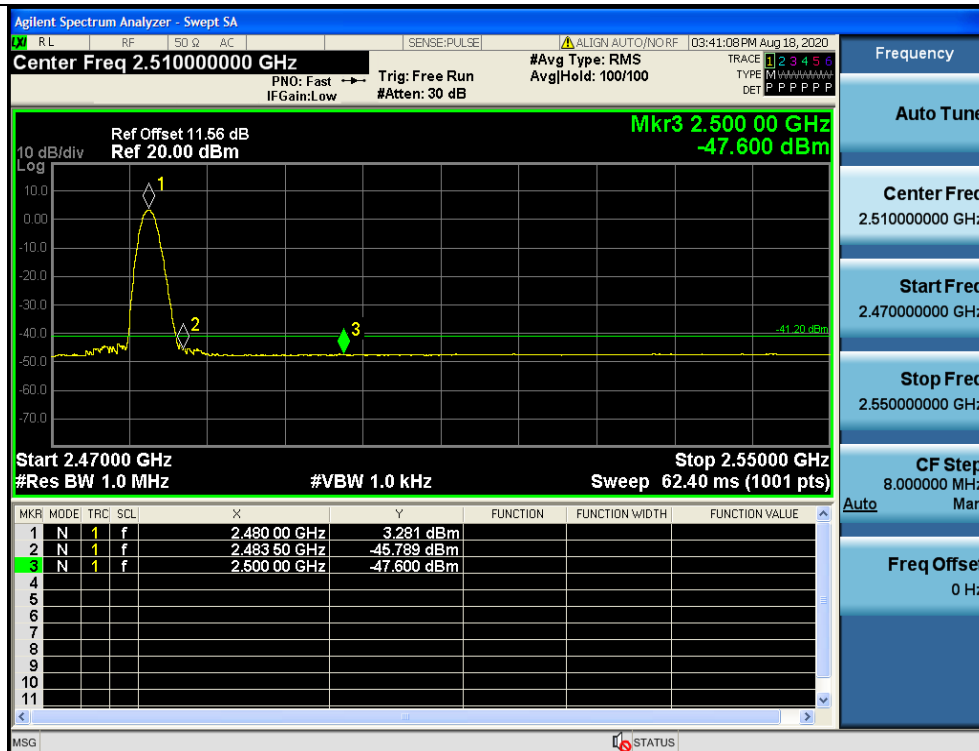
Test Graphs



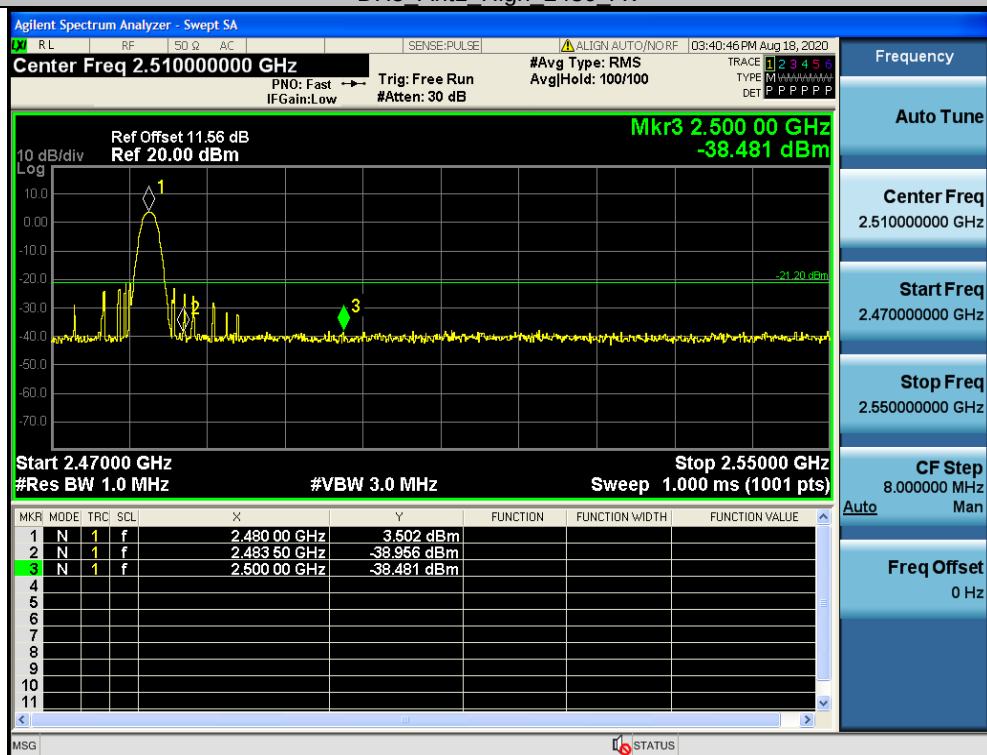
DH5_Ant1_Low_2402_AV



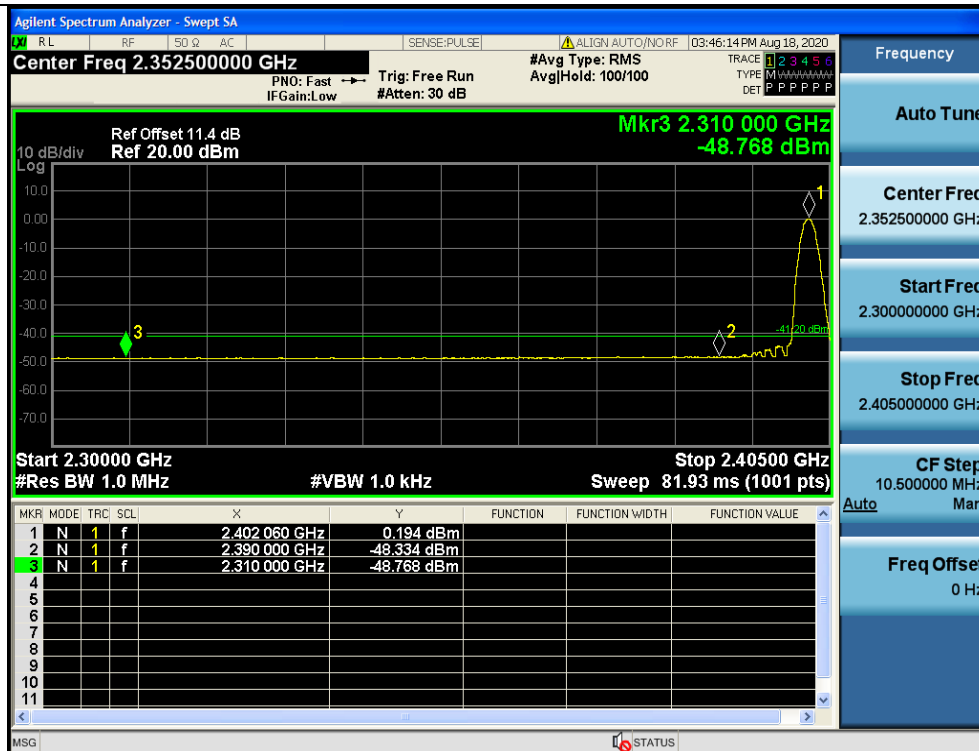
DH5_Ant1_Low_2402_Peak



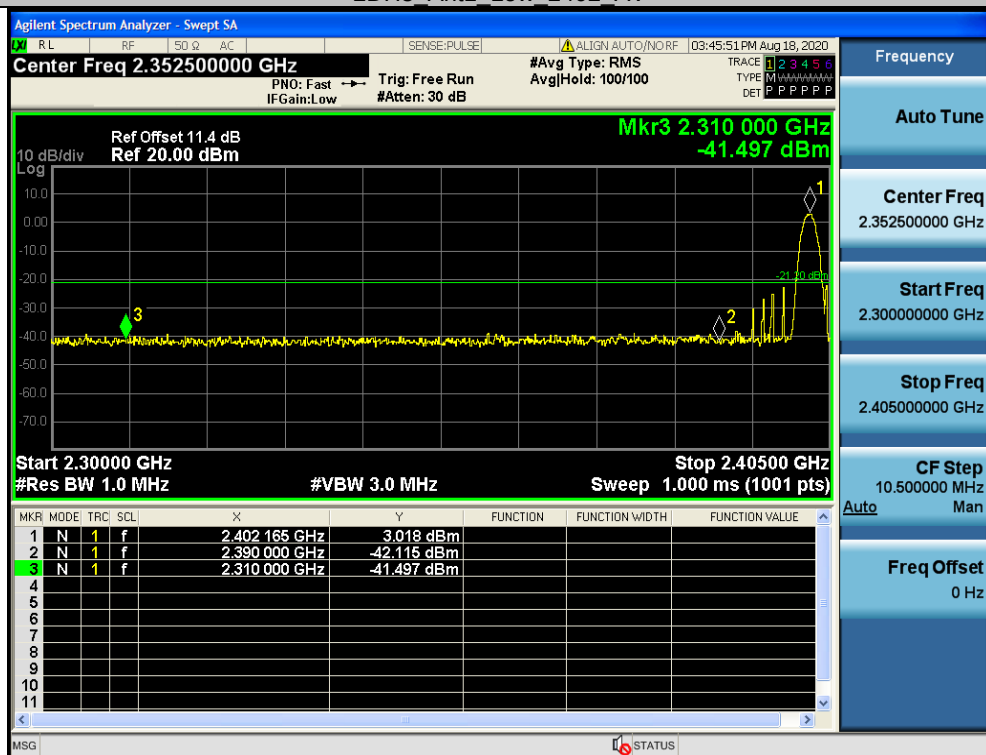
DH5 Ant1 High 2480 AV



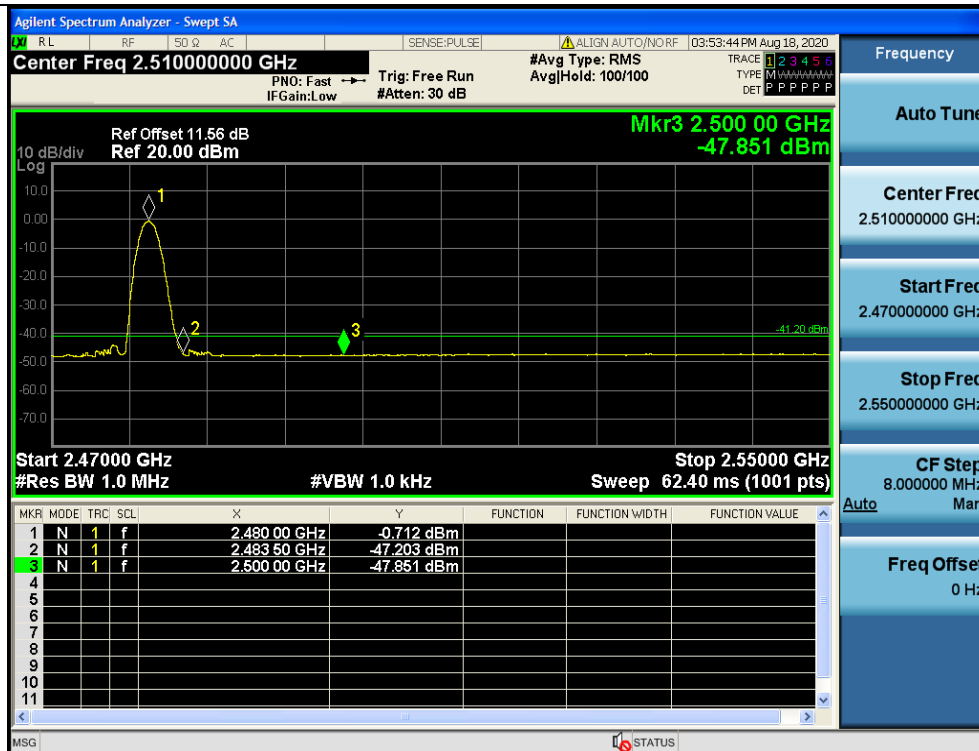
DH5 Ant1 High 2480 Peak



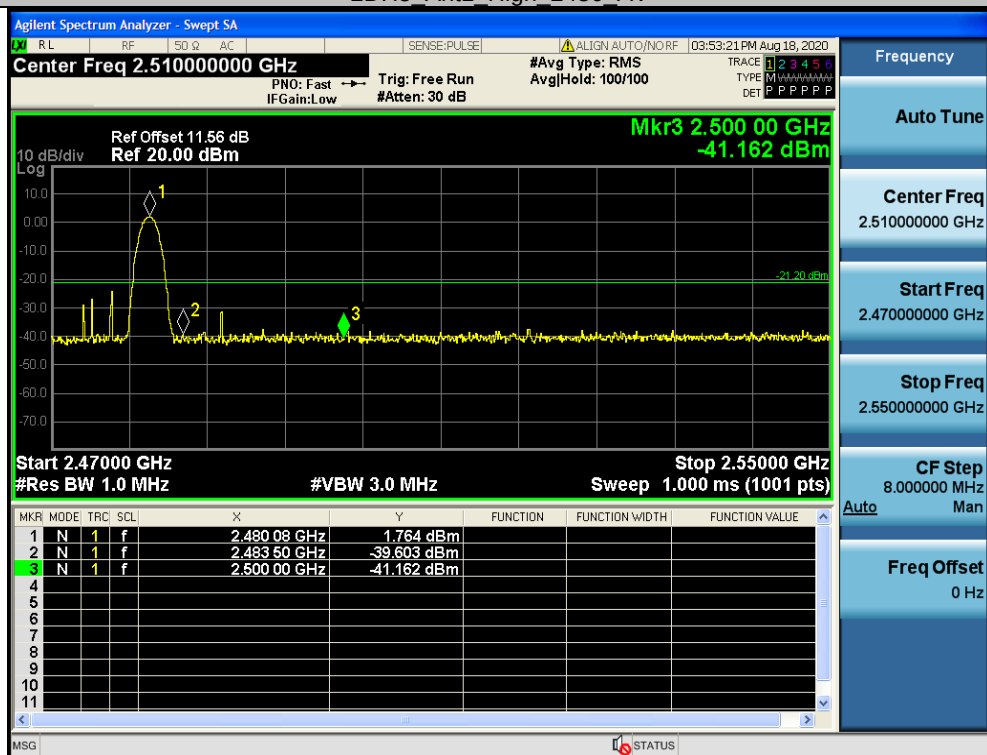
2DH5_Ant1_Low_2402_AV



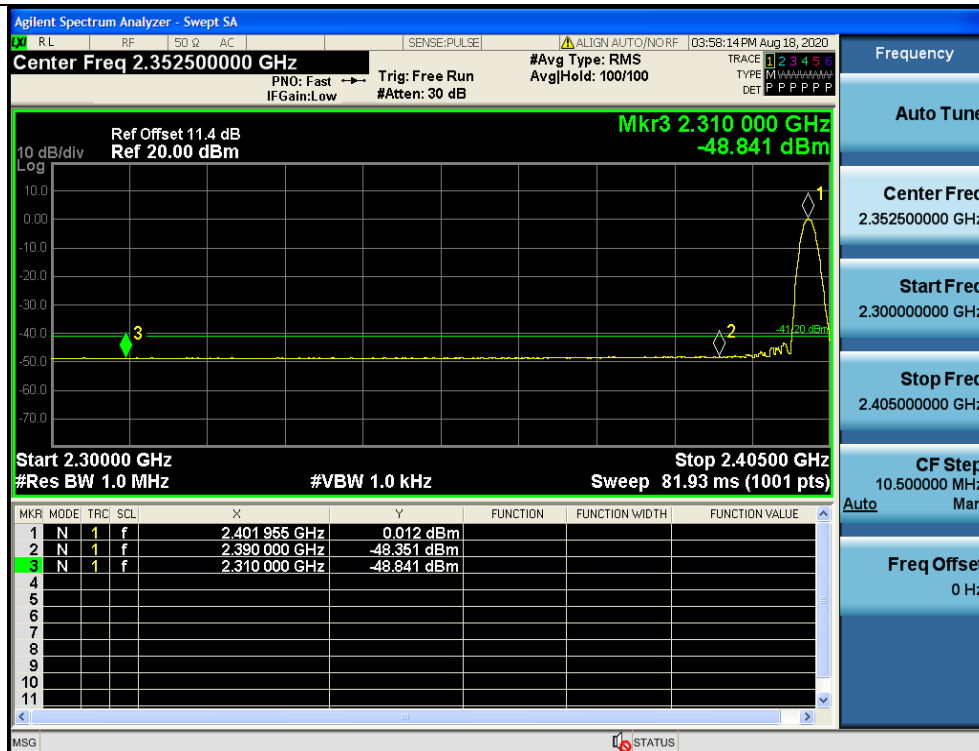
2DH5_Ant1_Low_2402_Peak



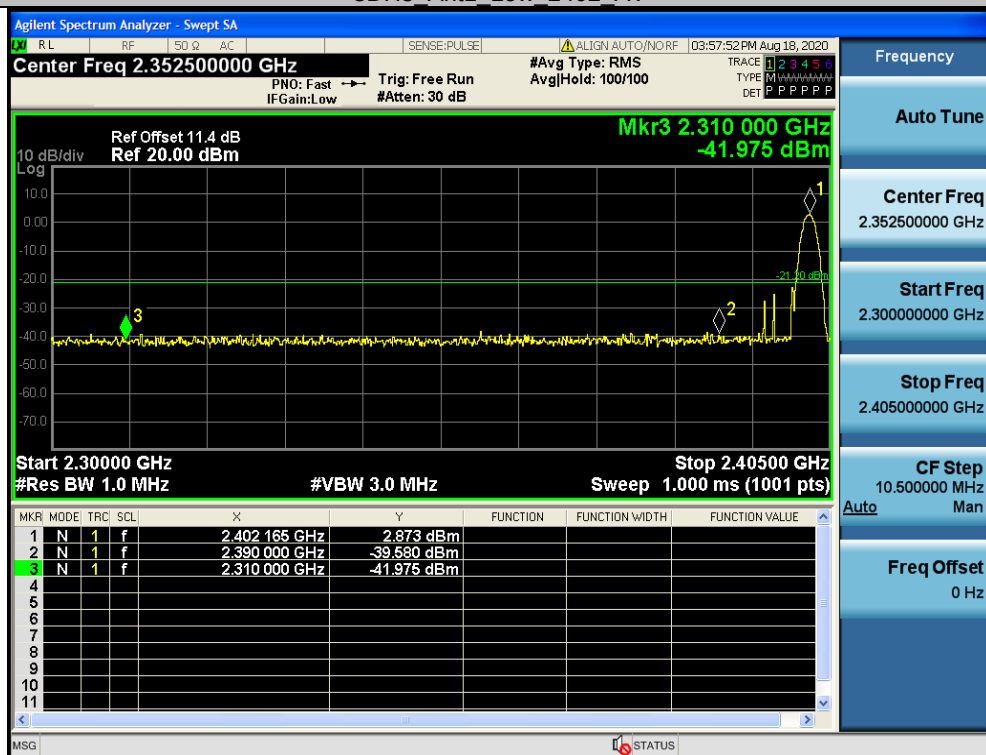
2DH5_Ant1_High_2480_AV



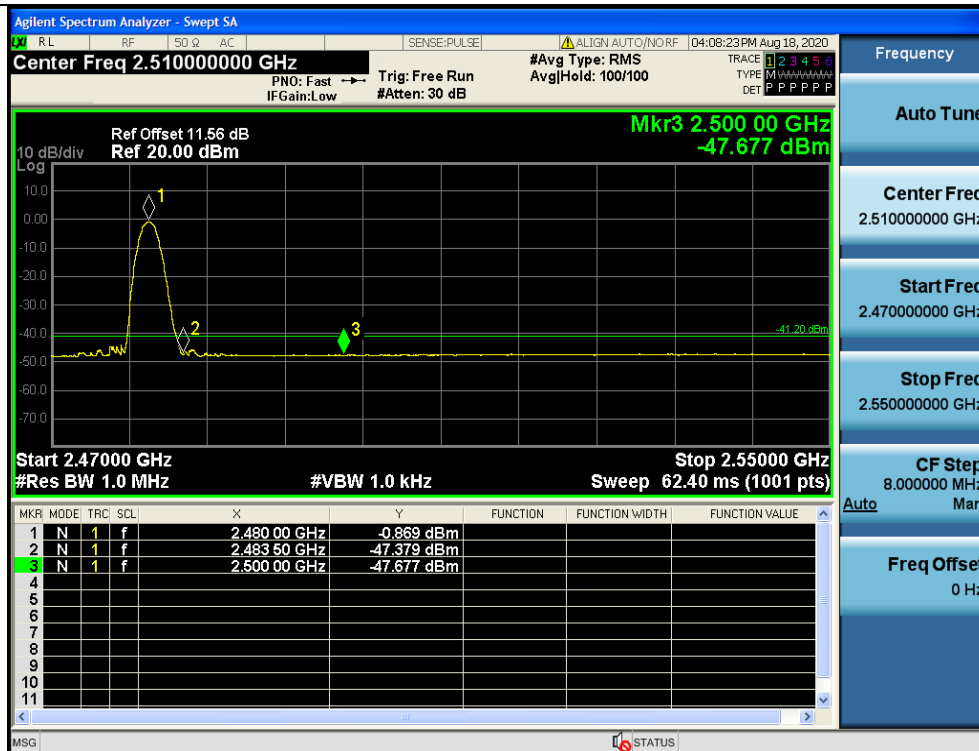
2DH5_Ant1_High_2480_Peak



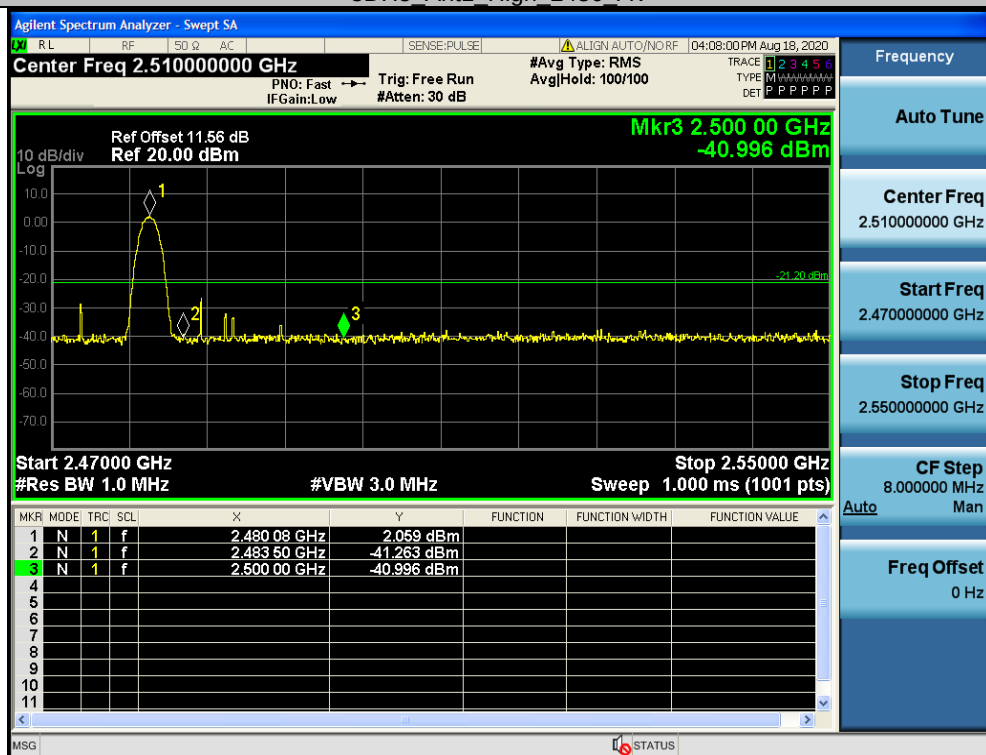
3DH5 Ant1 Low 2402 AV



3DH5 Ant1 Low 2402 Peak



3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak