Appendix A
RF Test Data for BT(BDR/EDR) (Conducted Measurement)
Product Name: True wireless Earphones
Trade Mark: MUVEACOUSTICS
Test Model: MA-3000
FCC ID: 2ANVW-MA-3000

Environmental Conditions

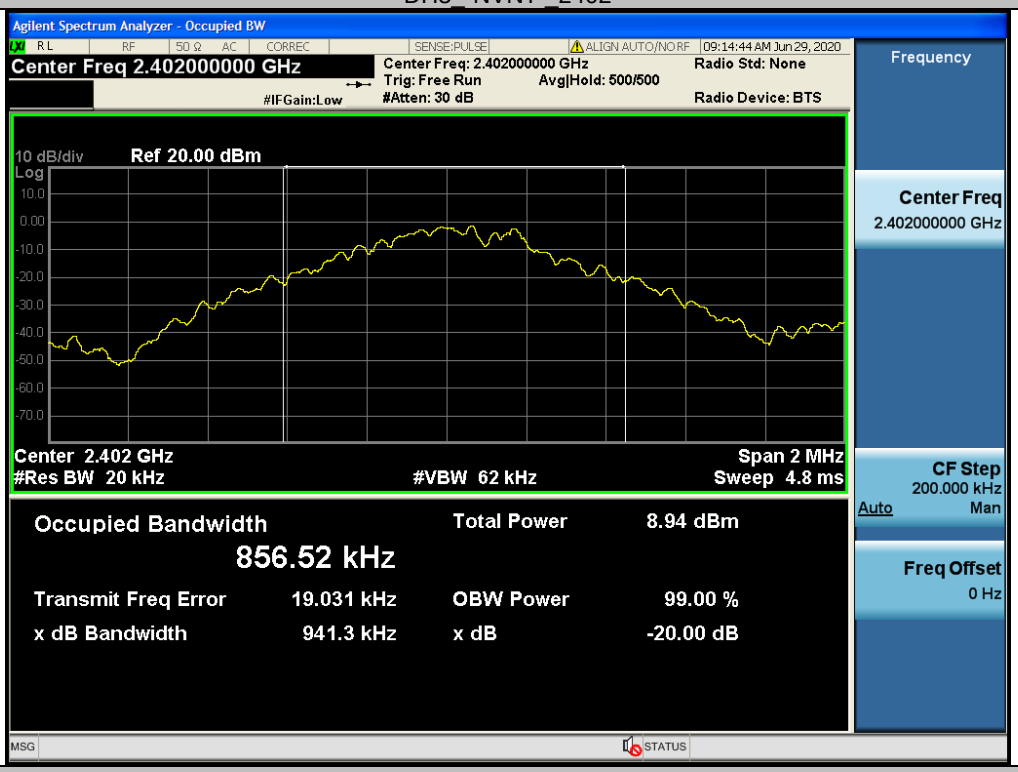
Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Nancy Li
Supervised by:	Hugo Chen

A.1 20 dB Bandwidth

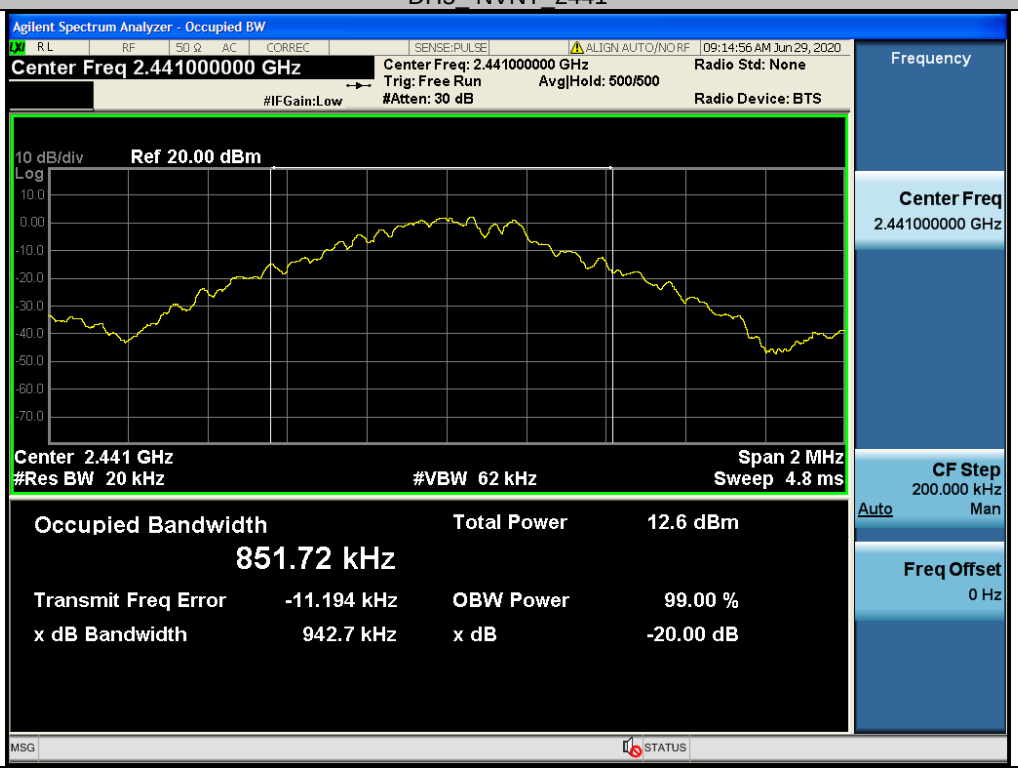
Type	Frequency(MHz)	Nominal Bandwidth(MHz)	Test Condition	20dB Spectrum Bandwidth(MHz)	Conclusion
DH5	2402	1	NVNT	0.942	No Limit
DH5	2441	1	NVNT	0.943	No Limit
DH5	2480	1	NVNT	0.943	No Limit
2DH5	2402	1	NVNT	1.235	No Limit
2DH5	2441	1	NVNT	1.230	No Limit
2DH5	2480	1	NVNT	1.231	No Limit
3DH5	2402	1	NVNT	1.257	No Limit
3DH5	2441	1	NVNT	1.248	No Limit
3DH5	2480	1	NVNT	1.249	No Limit

Test Graph

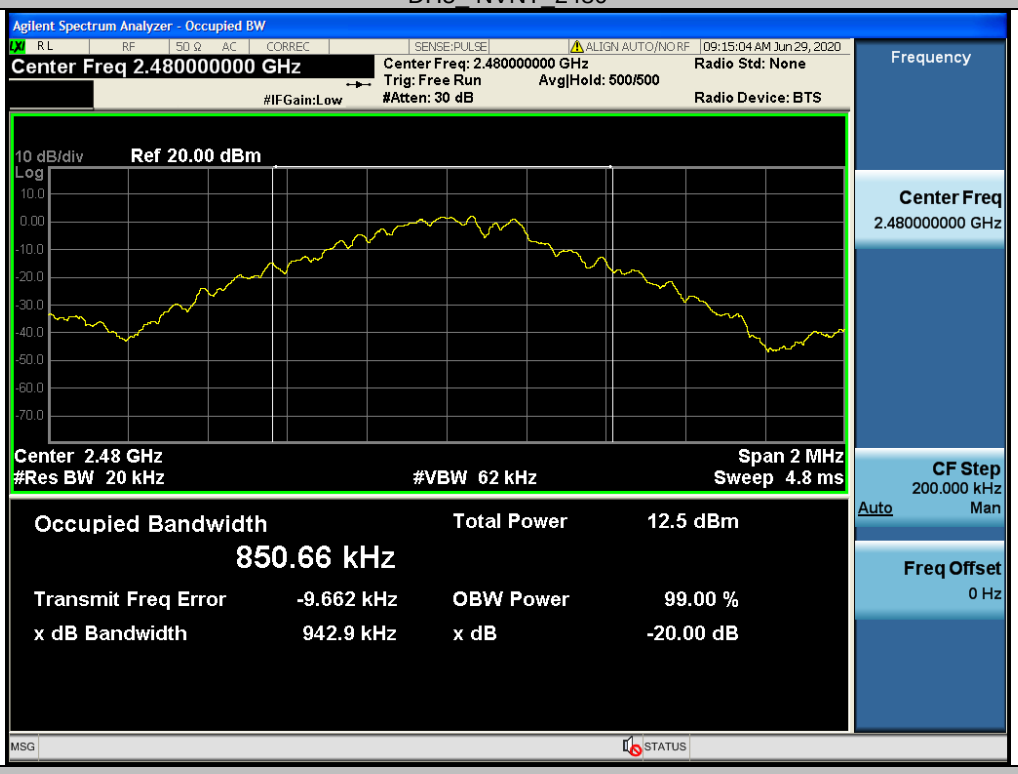
DH5_ NVNT _2402



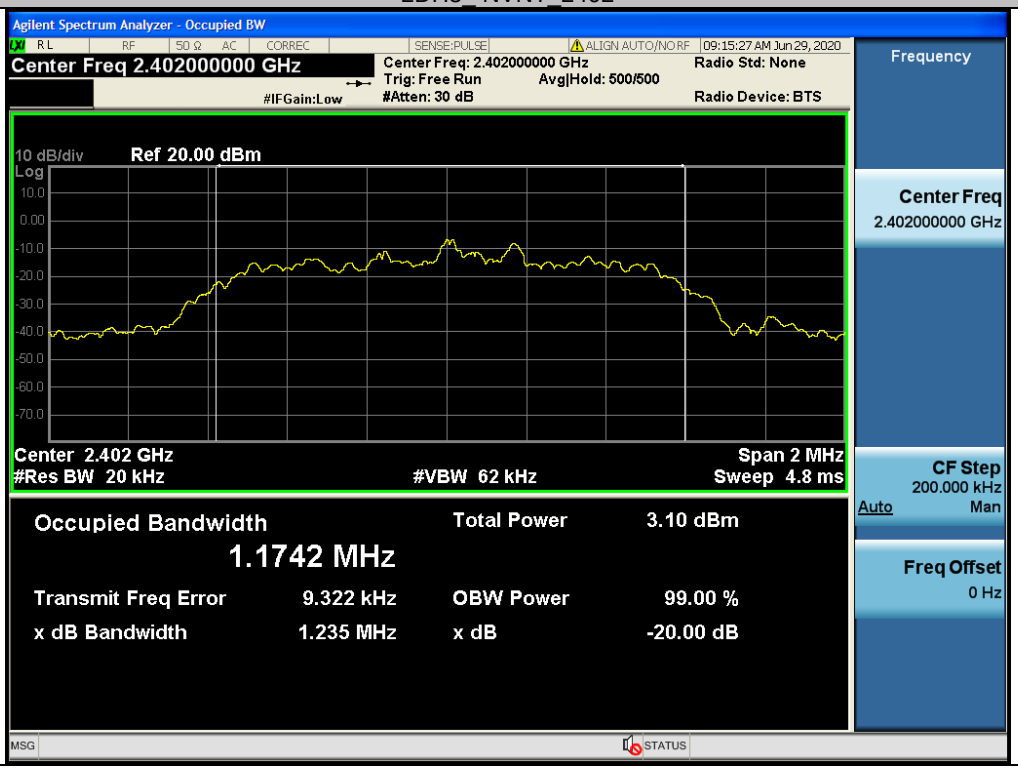
DH5_ NVNT_2441



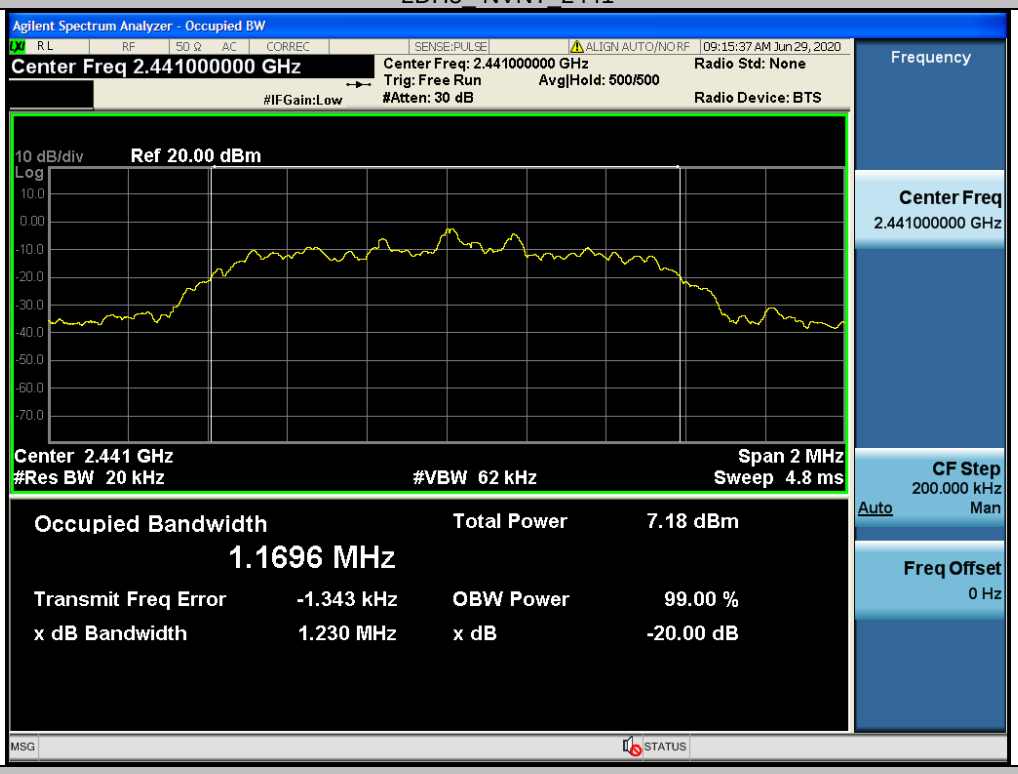
DH5_NVNT_2480



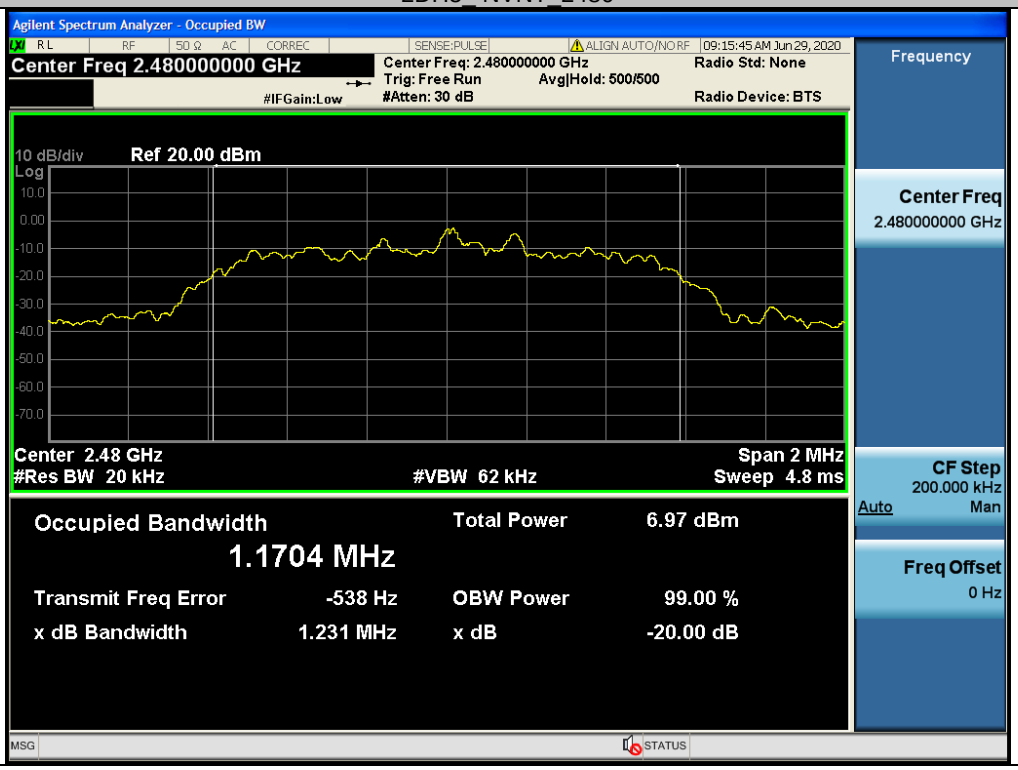
2DH5_NVNT_2402



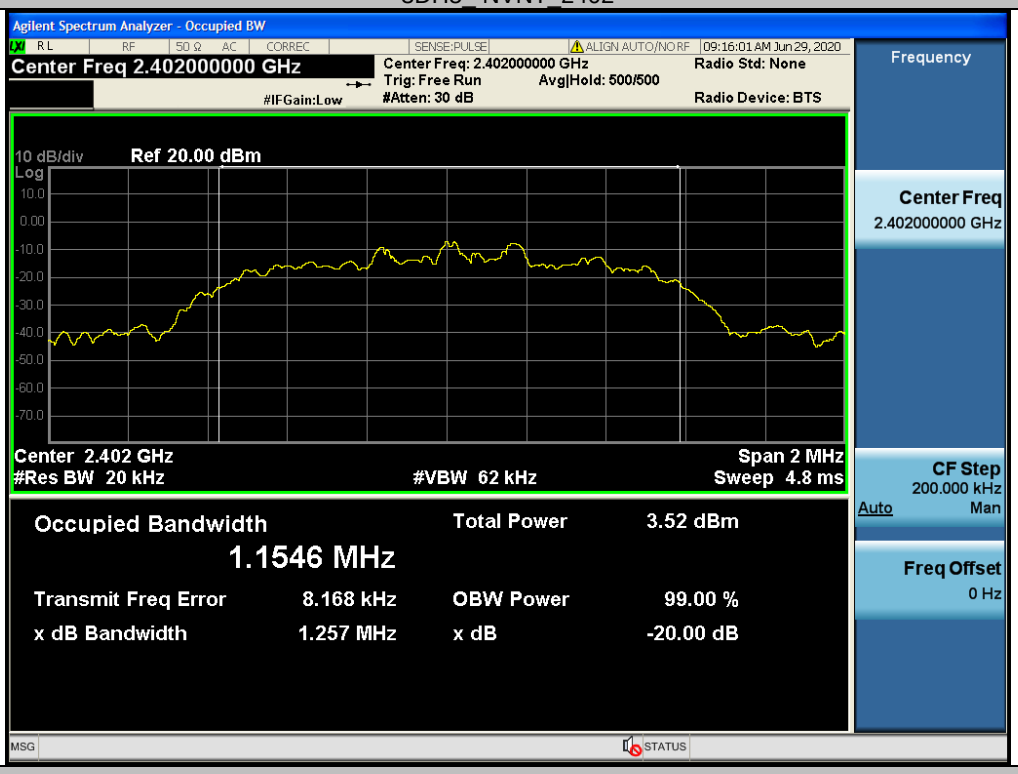
2DH5_NVNT_2441



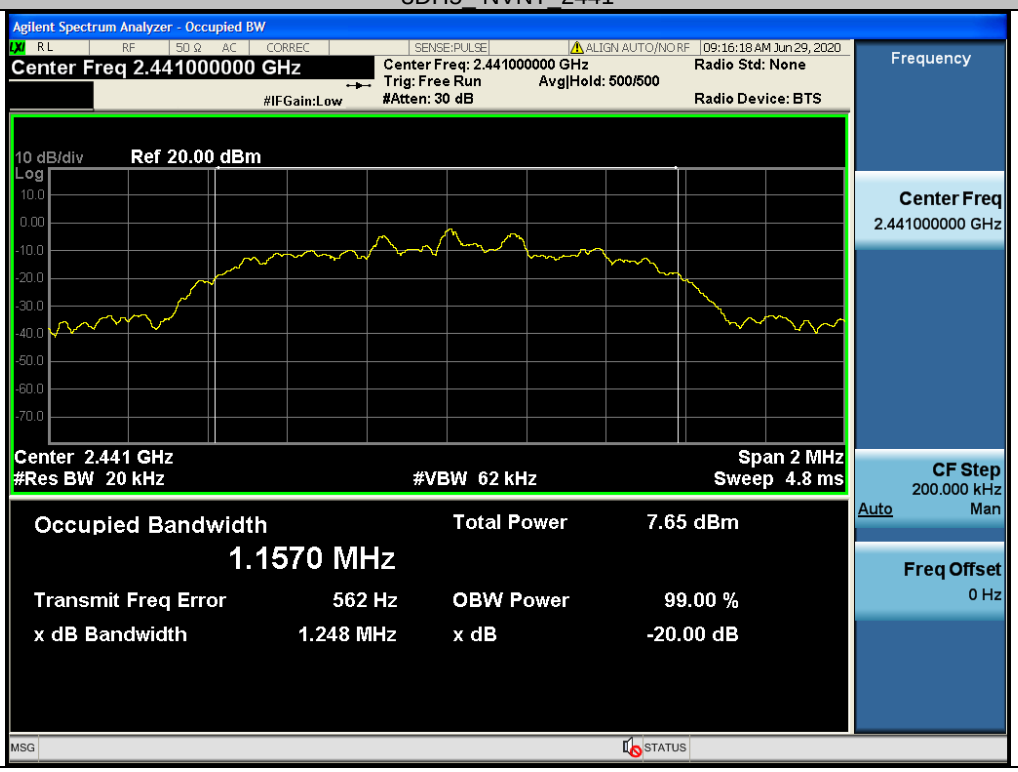
2DH5_NVNT_2480



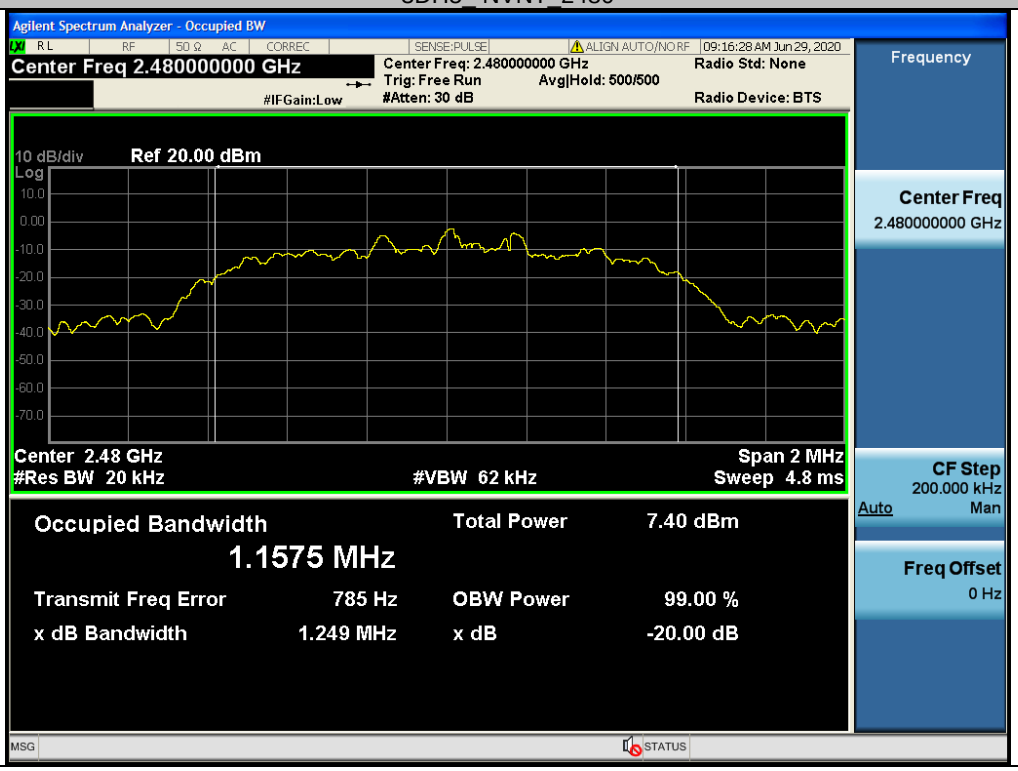
3DH5_NVNT_2402



3DH5_NVNT_2441



3DH5_NVNT_2480

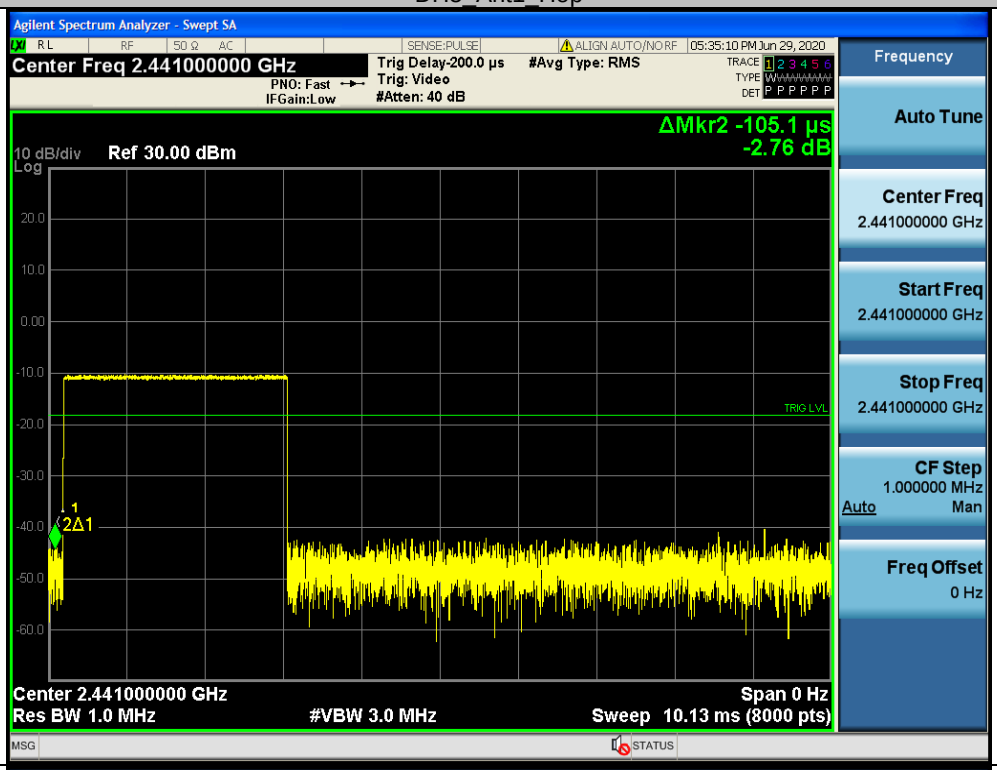


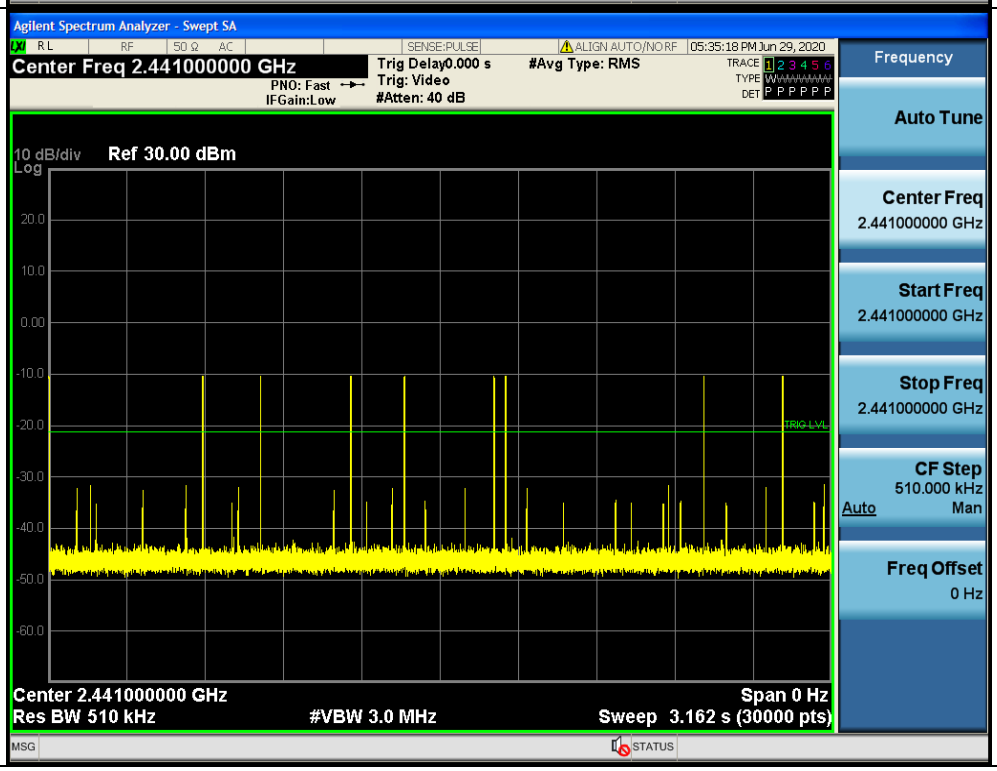
A.2 Dwell Time

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.91	100	0.291	<=0.4	PASS
2DH5	Ant1	Hop	2.91	100	0.291	<=0.4	PASS
3DH5	Ant1	Hop	2.91	100	0.291	<=0.4	PASS

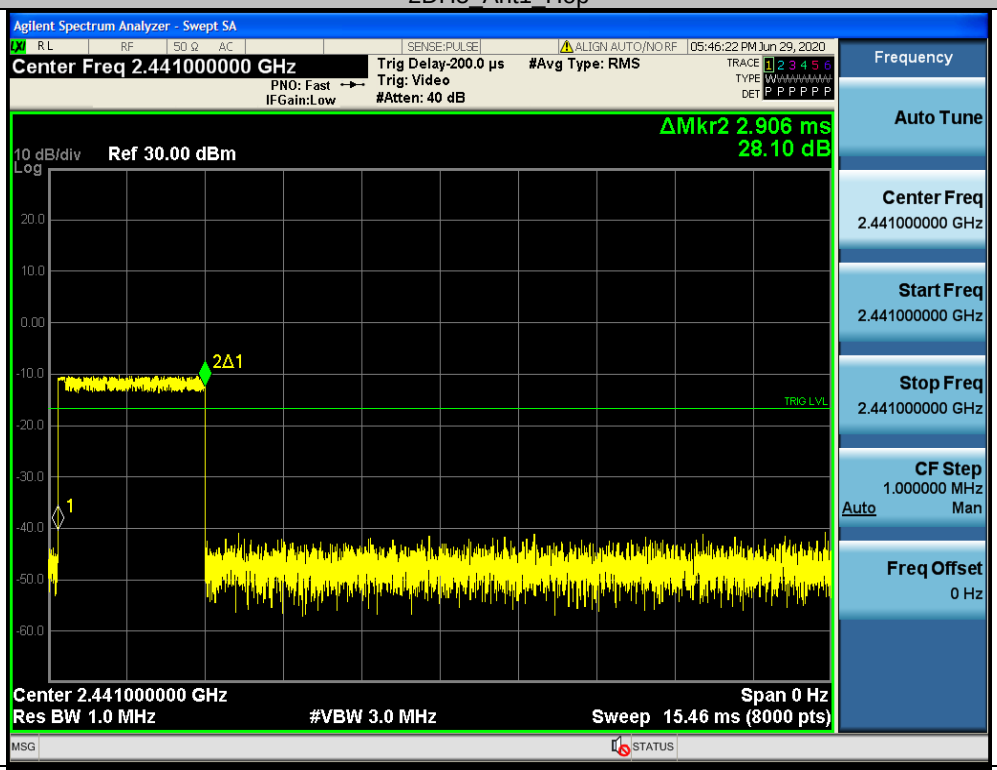
Test Graph

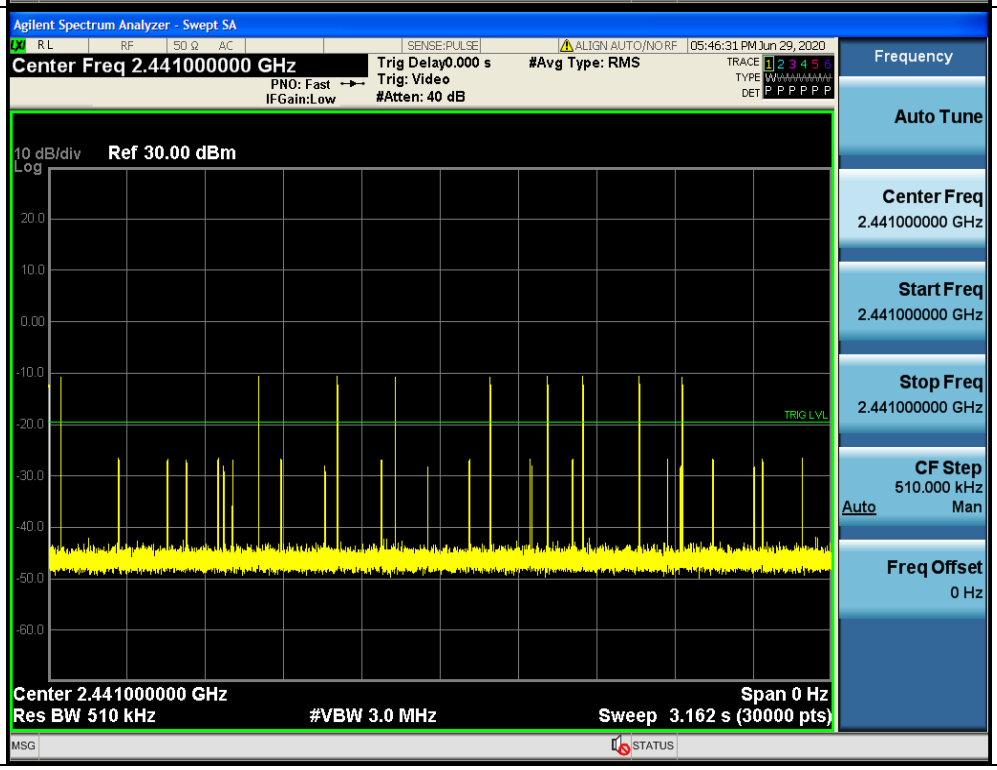
DH5_Ant1_Hop



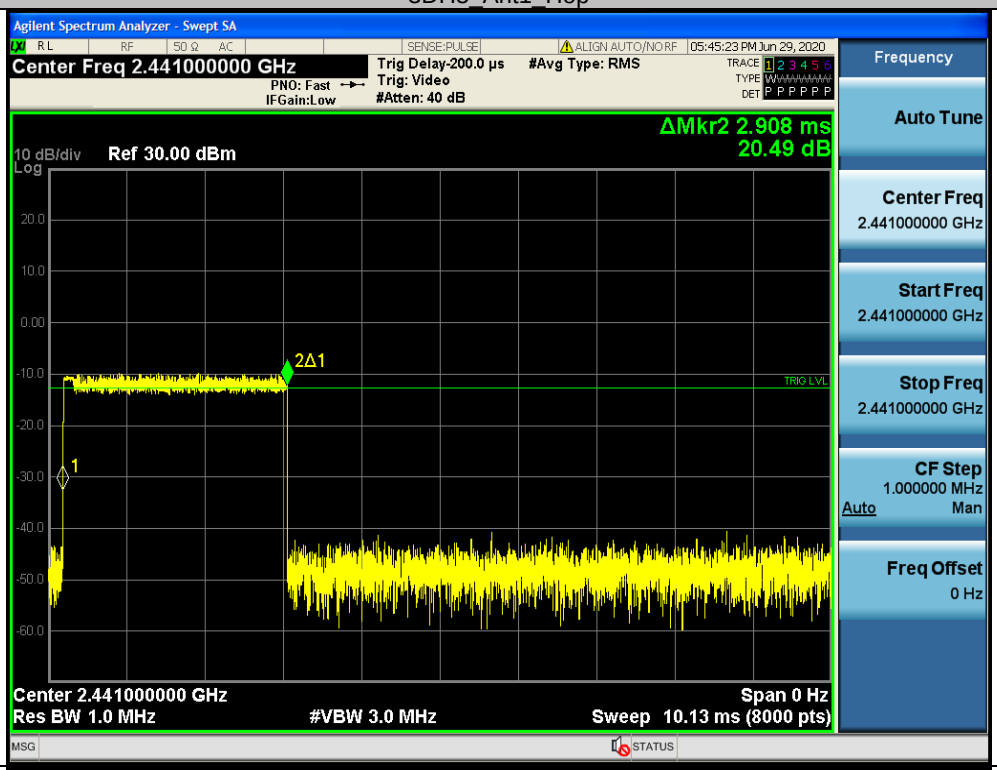


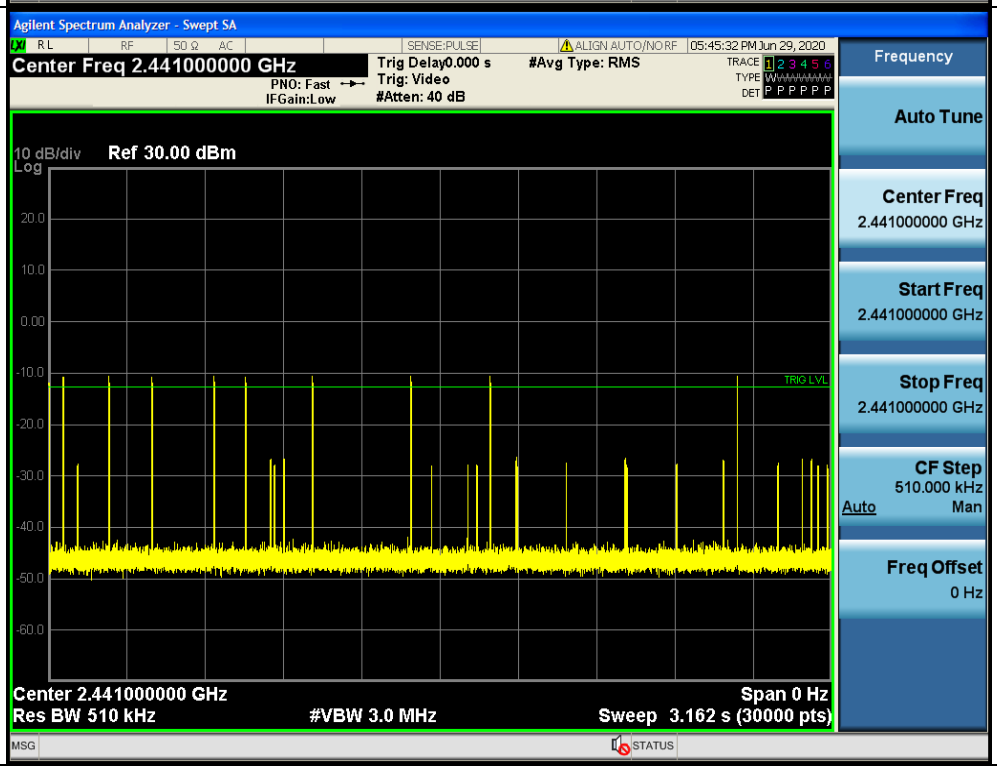
2DH5_Ant1_Hop





3DH5_Ant1_Hop





A.3 Carrier Frequency Separation

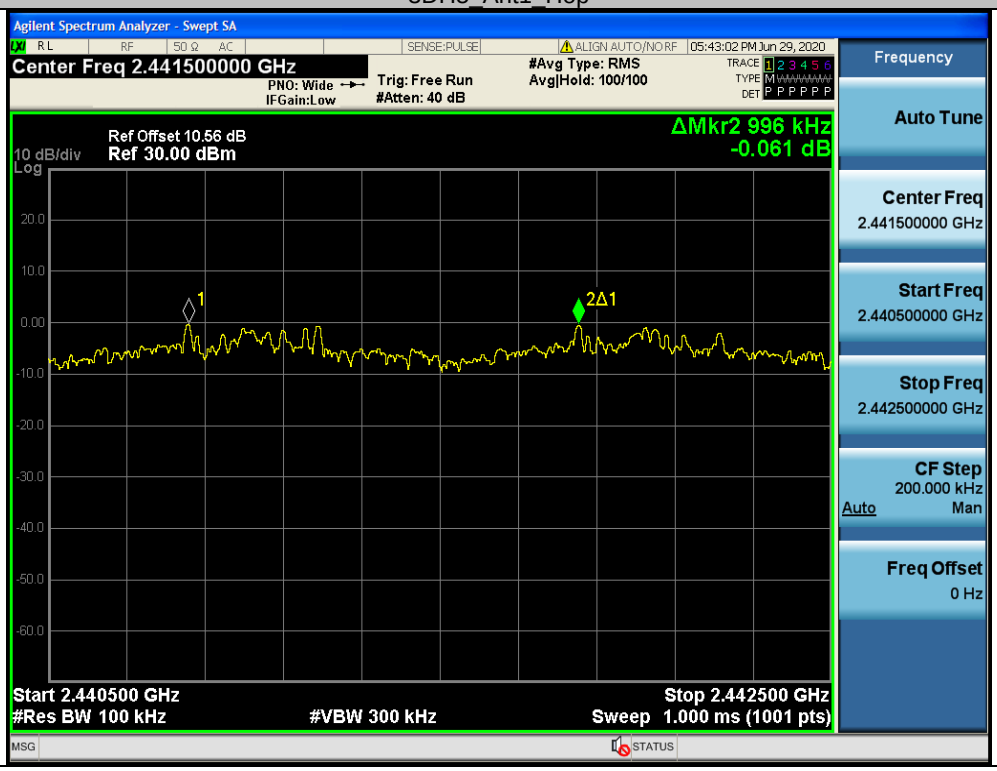
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.02	>=0.728	PASS
2DH5	Ant1	Hop	1.18	>=0.904	PASS
3DH5	Ant1	Hop	0.996	>=0.908	PASS

Test Graph

DH5_Ant1_Hop

2DH5_Ant1_Hop

3DH5_Ant1_Hop

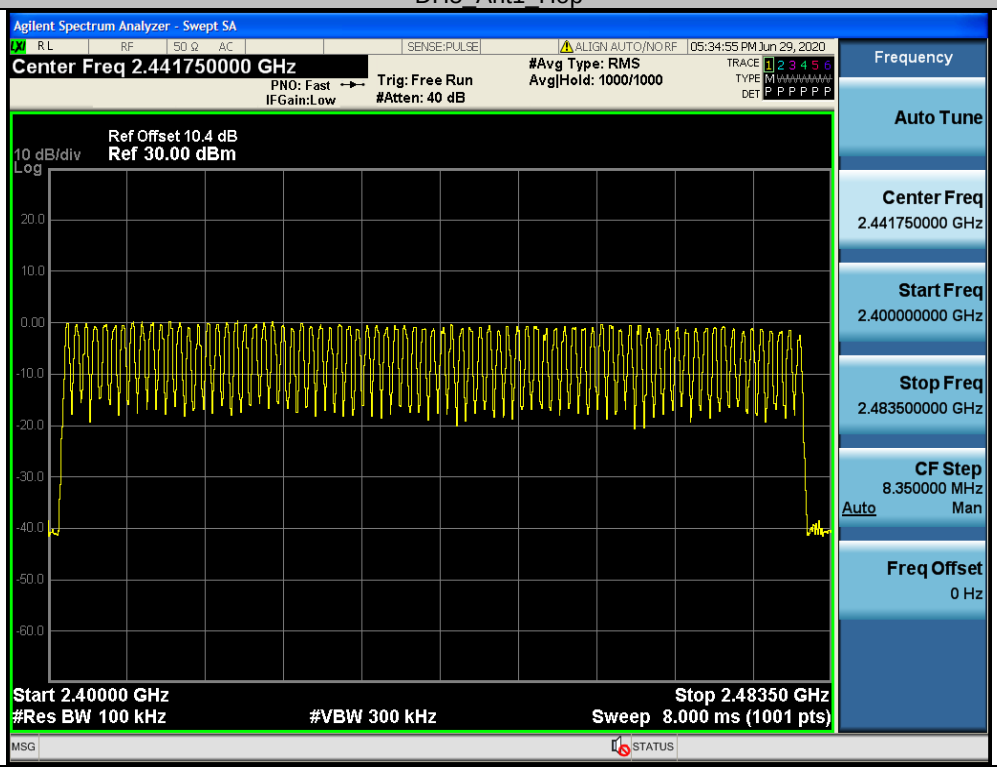


A.4 Hopping Channel Number

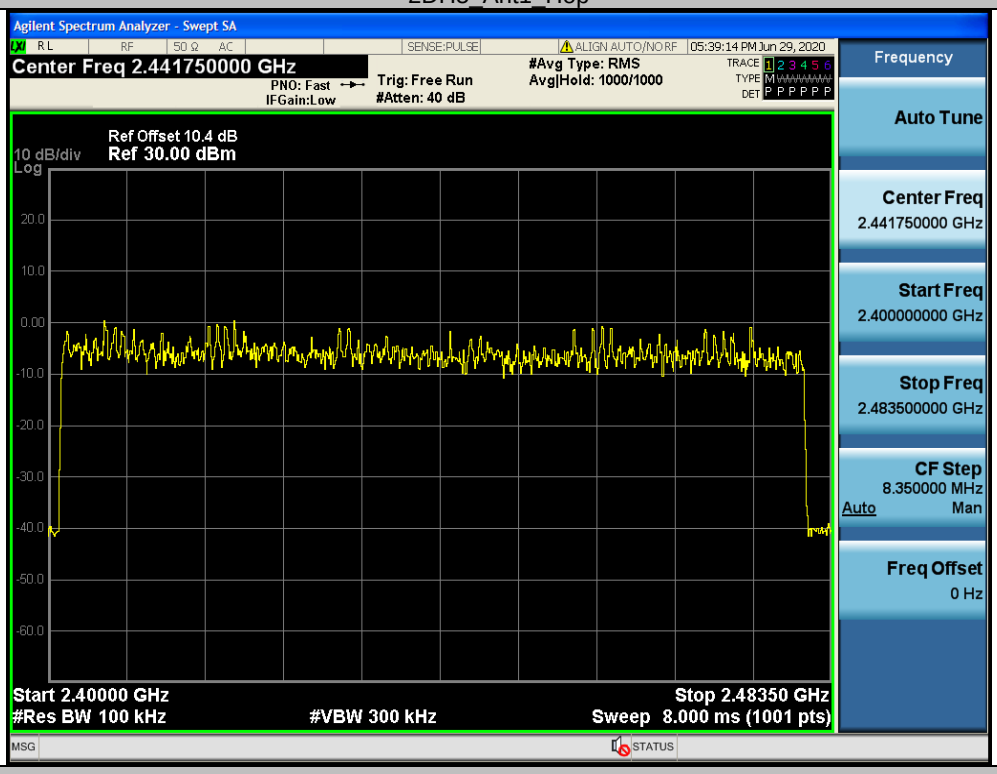
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	>=15	PASS
2DH5	Ant1	Hop	79	>=15	PASS
3DH5	Ant1	Hop	79	>=15	PASS

Test Graph

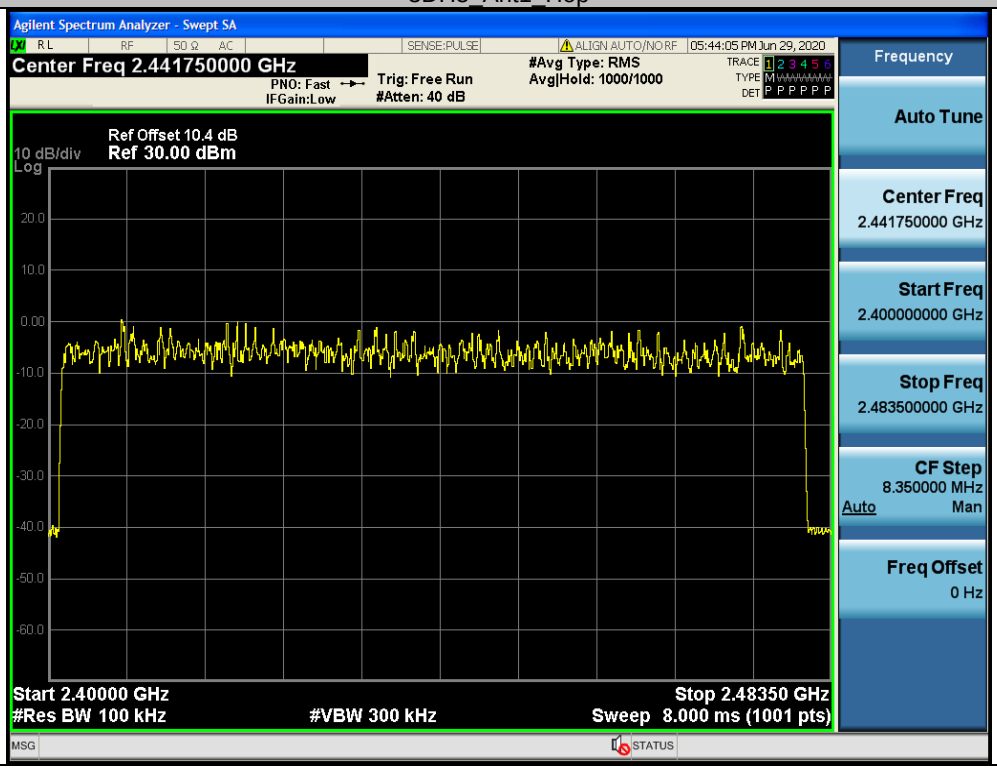
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

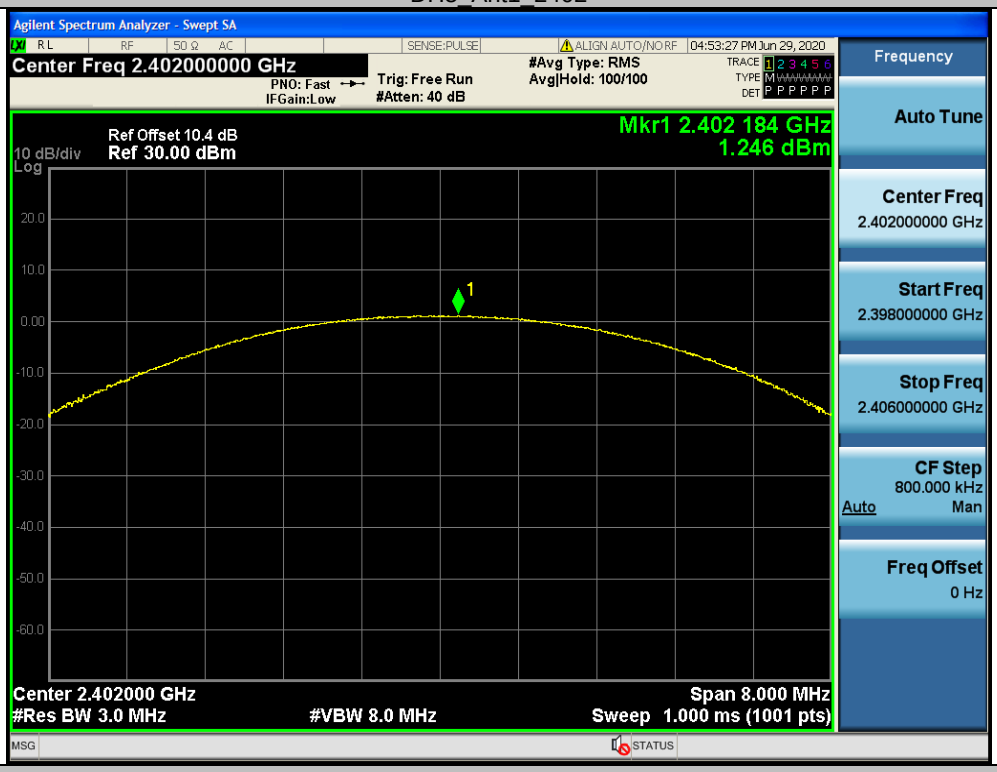


A.5 Conducted Peak Output Power

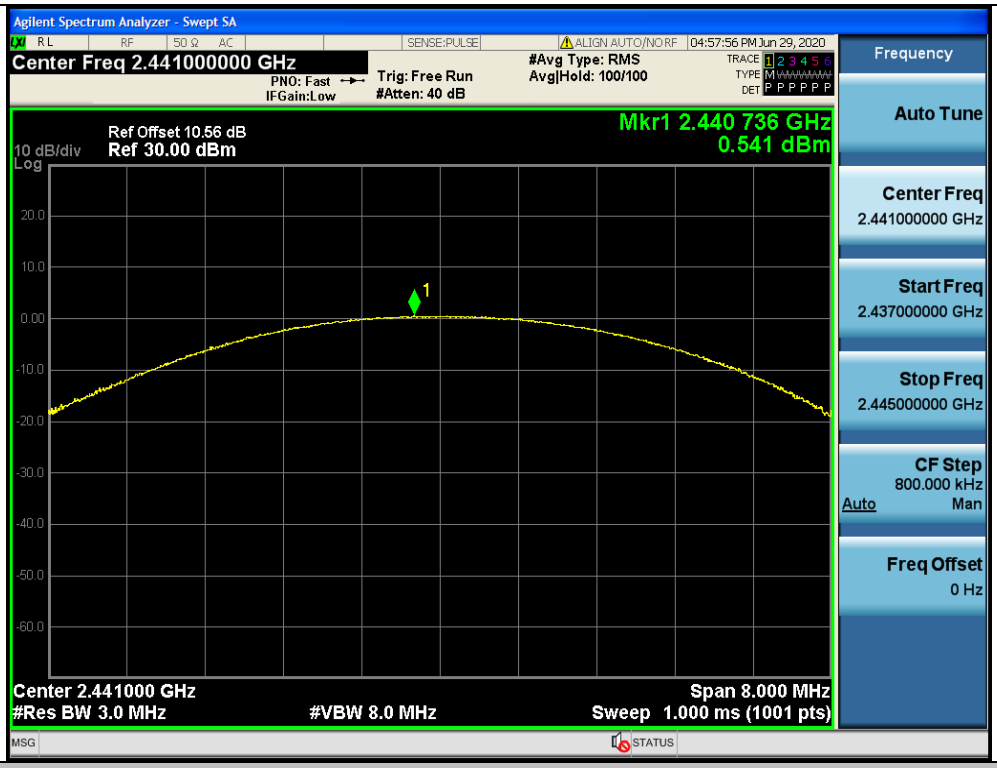
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict	Antenna Gain(dBi)	EIRP (dBm)
DH5	Ant1	2402	1.24	<=20.97	PASS	1.3	2.54
		2441	0.55	<=20.97	PASS	1.3	1.85
		2480	-0.07	<=20.97	PASS	1.3	1.23
2DH5	Ant1	2402	1.85	<=20.97	PASS	1.3	3.15
		2441	1.14	<=20.97	PASS	1.3	2.44
		2480	0.38	<=20.97	PASS	1.3	1.68
3DH5	Ant1	2402	2.00	<=20.97	PASS	1.3	3.3
		2441	1.29	<=20.97	PASS	1.3	2.59
		2480	0.81	<=20.97	PASS	1.3	2.11

Test Graph

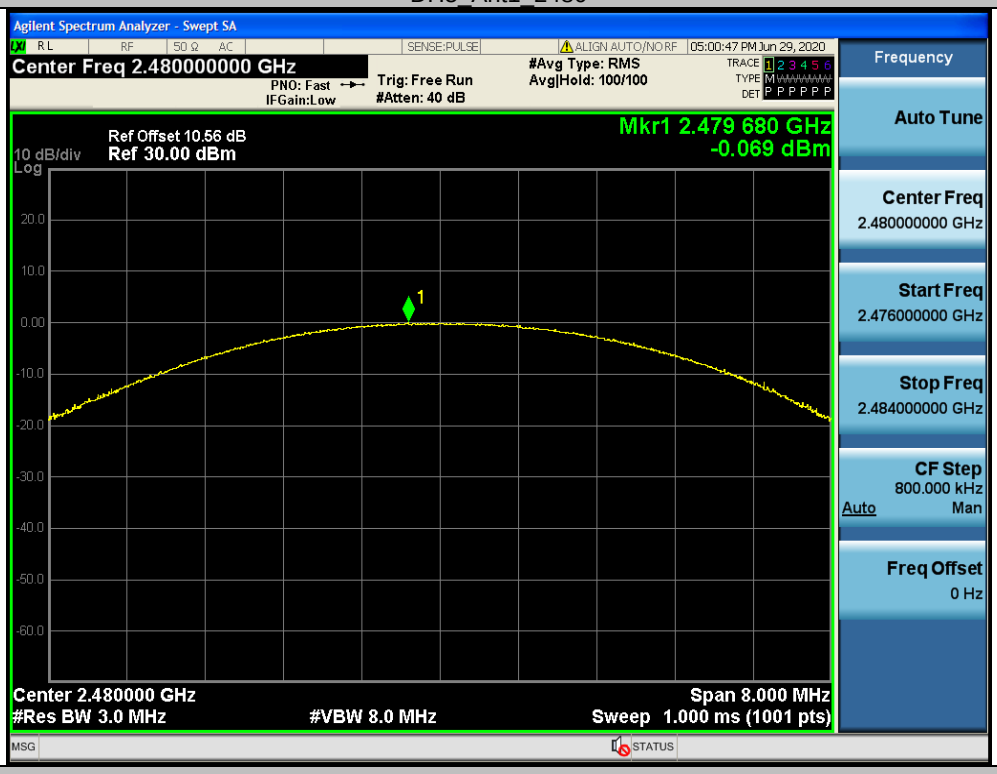
DH5_Ant1_2402



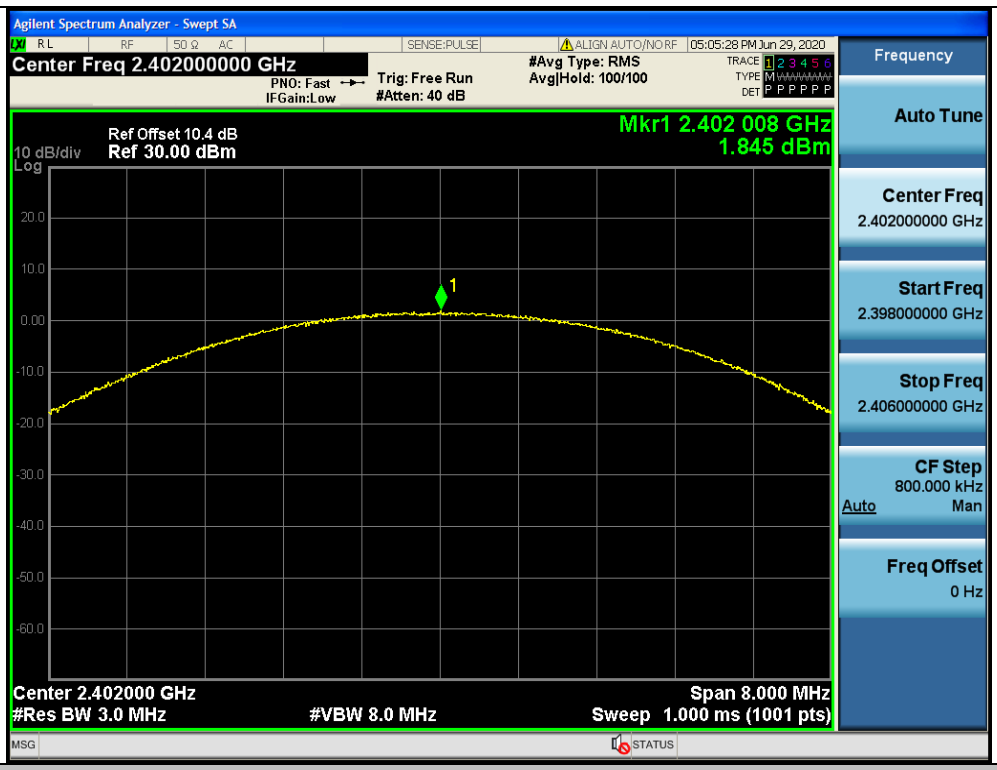
DH5_Ant1_2441



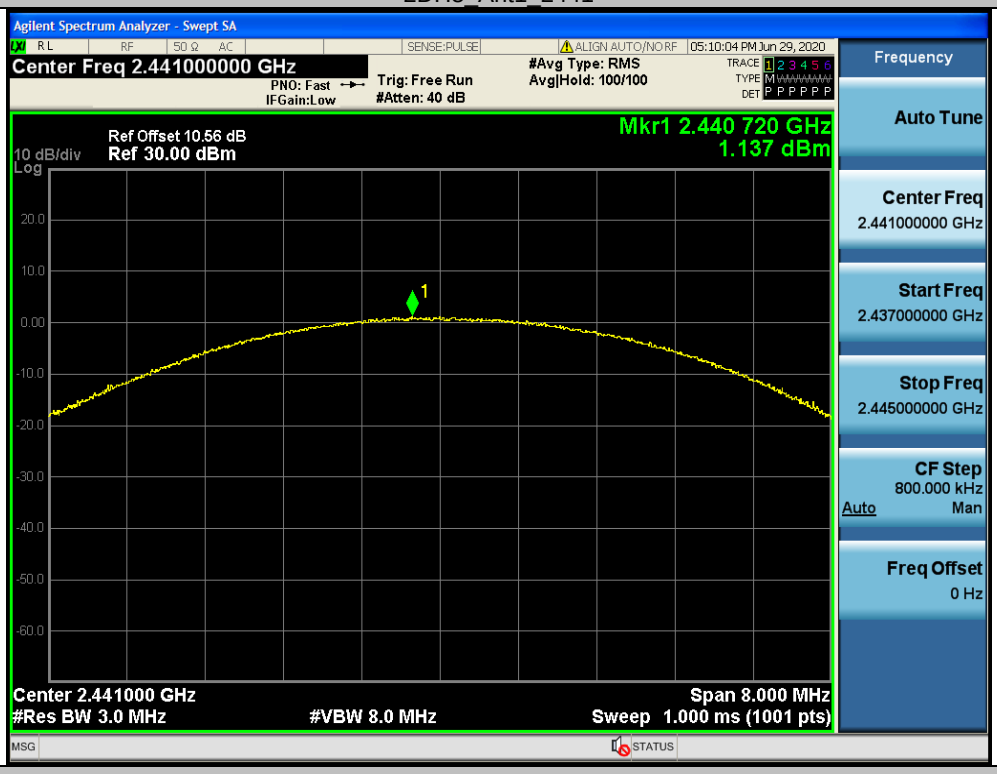
DH5_Ant1_2480



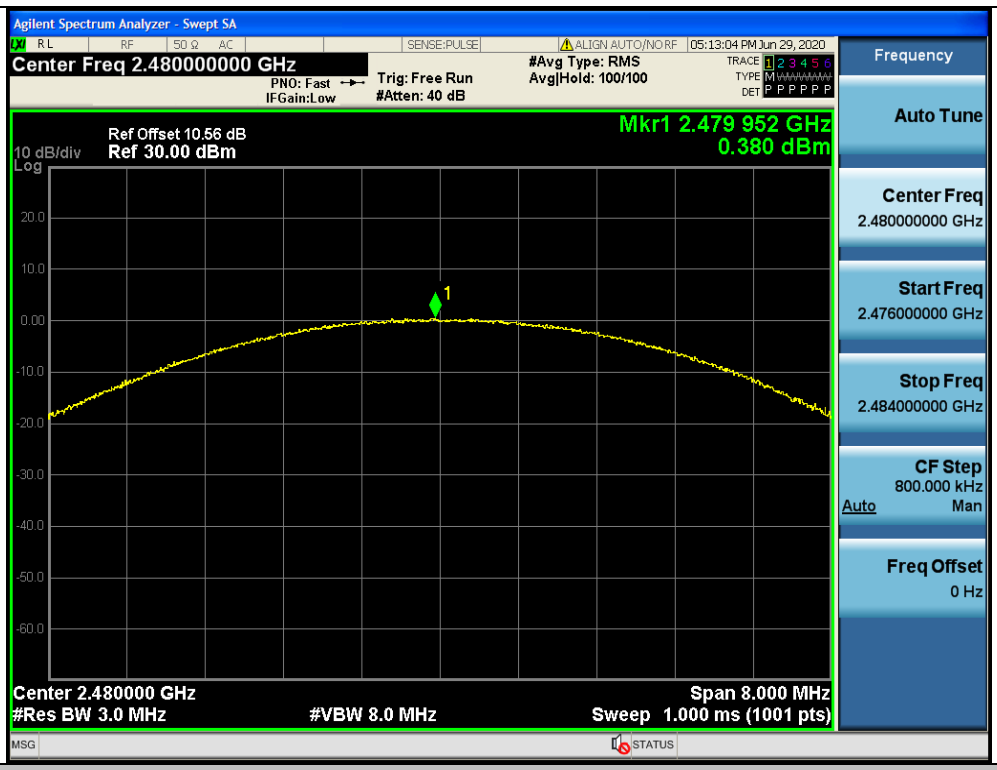
2DH5_Ant1_2402



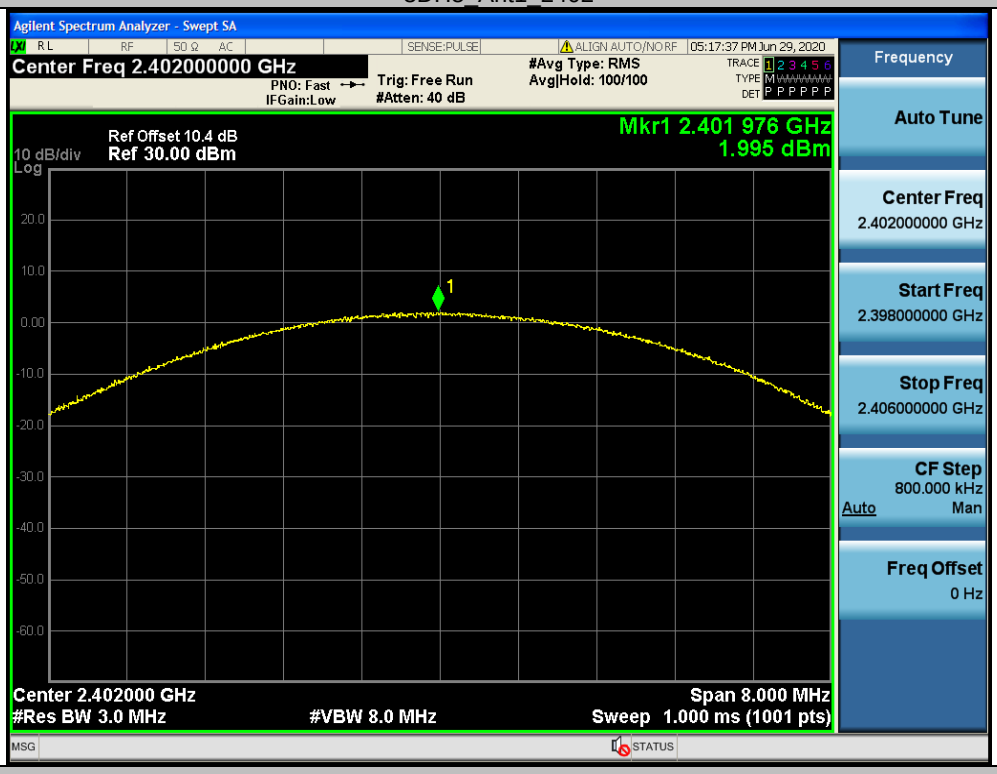
2DH5_Ant1_2441



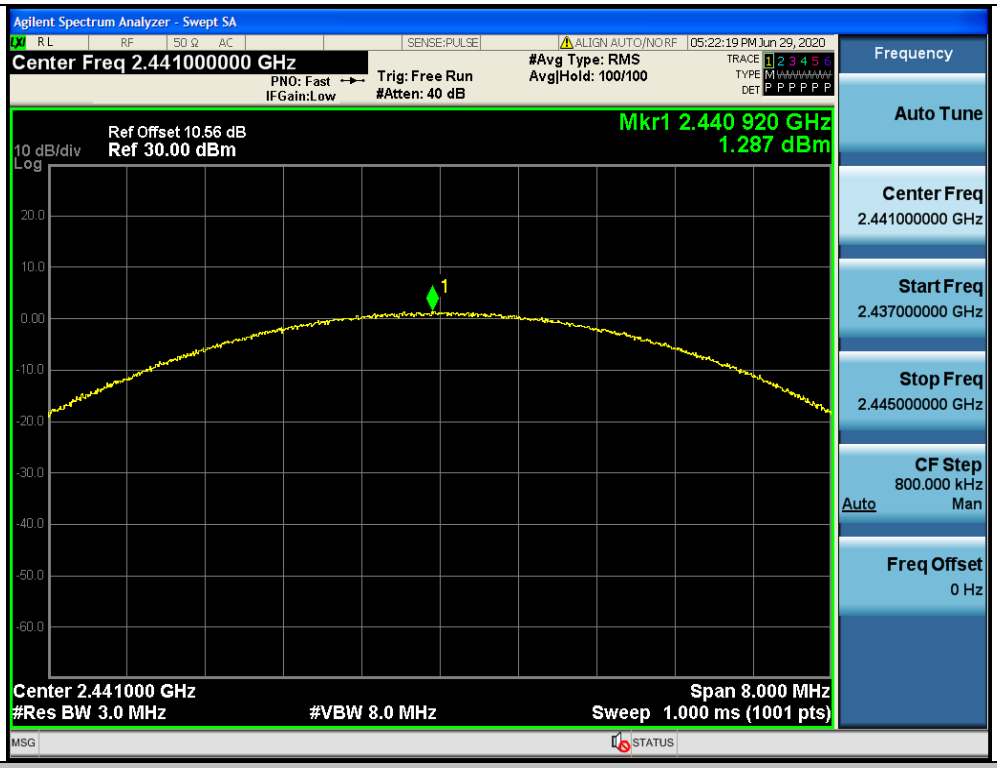
2DH5_Ant1_2480



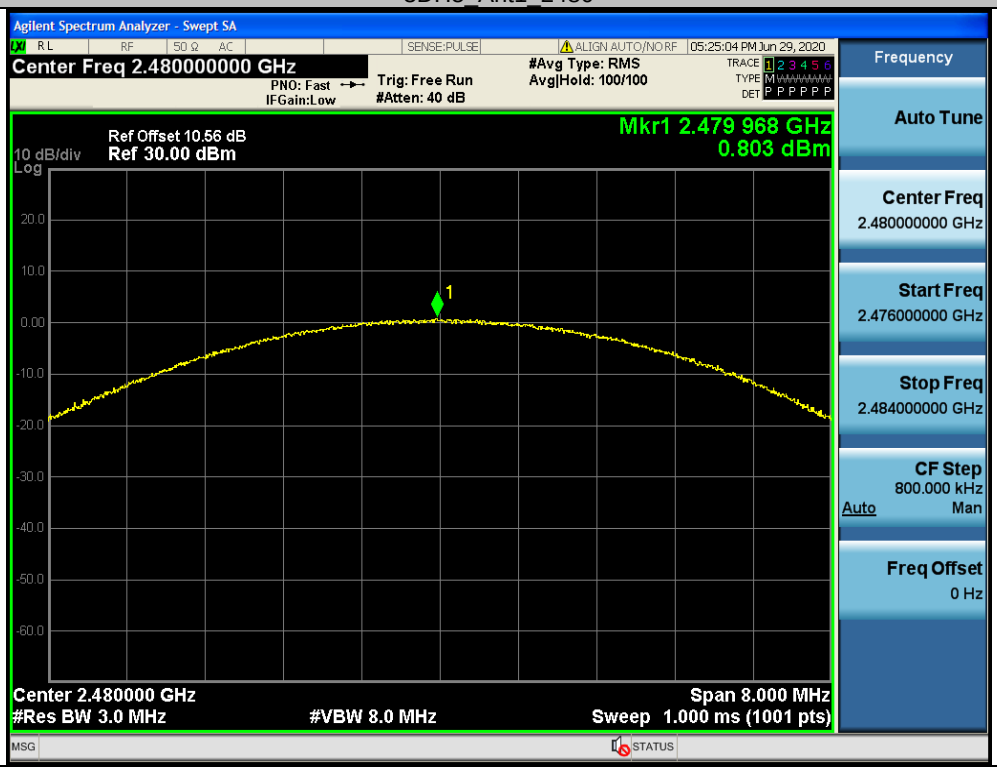
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

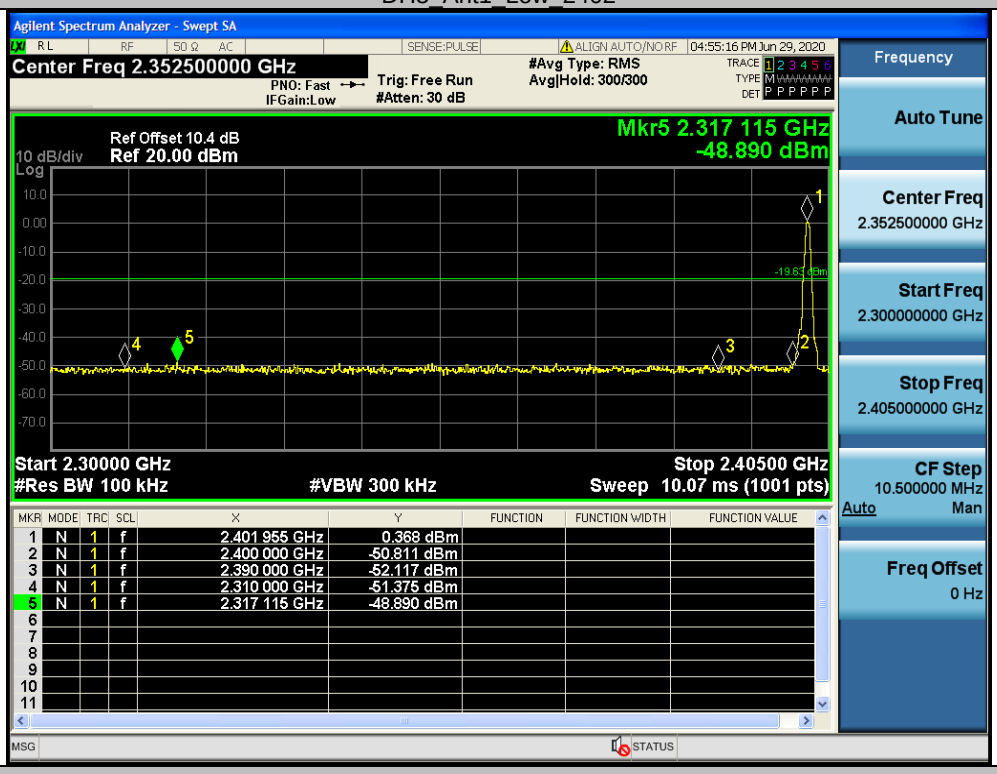


A.6 Band-edge for RF Conducted Emissions

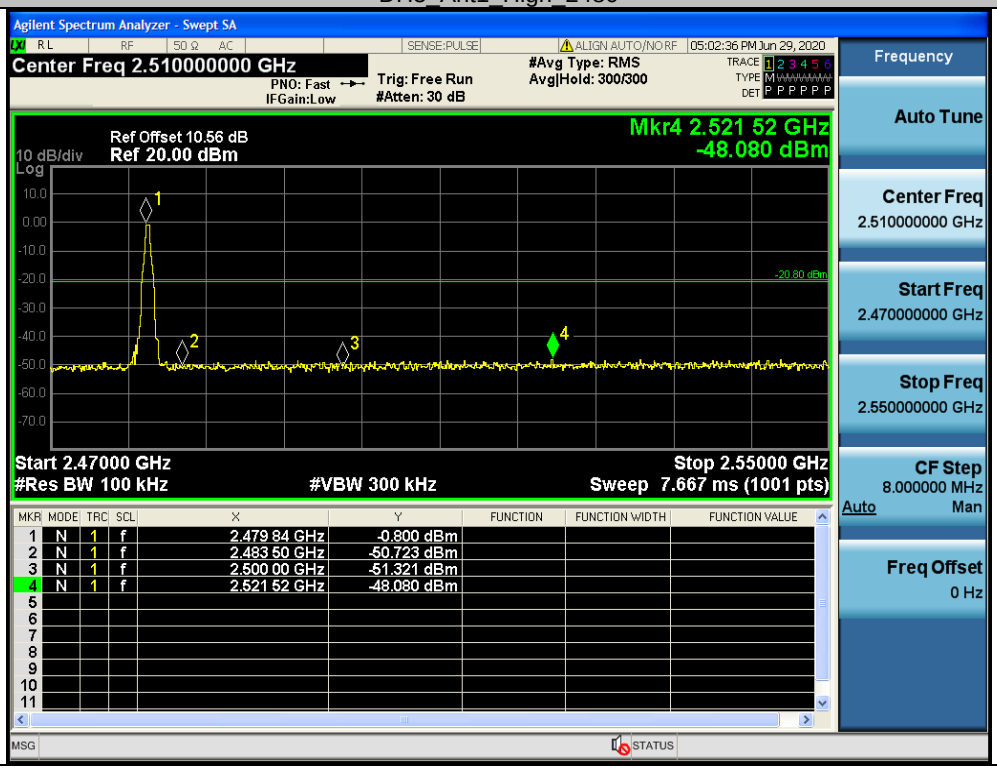
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.37	-48.89	<=-19.63	PASS
		High	2480	-0.80	-48.08	<=-20.8	PASS
		Low	Hop_2402	0.00	-49.33	<=-20.0	PASS
		High	Hop_2480	-0.18	-47.79	<=-20.18	PASS
2DH5	Ant1	Low	2402	0.58	-48.96	<=-19.42	PASS
		High	2480	-0.75	-47.62	<=-20.75	PASS
		Low	Hop_2402	-4.59	-48.80	<=-24.59	PASS
		High	Hop_2480	-3.55	-47.60	<=-23.55	PASS
3DH5	Ant1	Low	2402	0.40	-48.13	<=-19.6	PASS
		High	2480	-0.80	-47.73	<=-20.8	PASS
		Low	Hop_2402	-3.21	-48.98	<=-23.21	PASS
		High	Hop_2480	-3.45	-47.48	<=-23.45	PASS

Test Graph

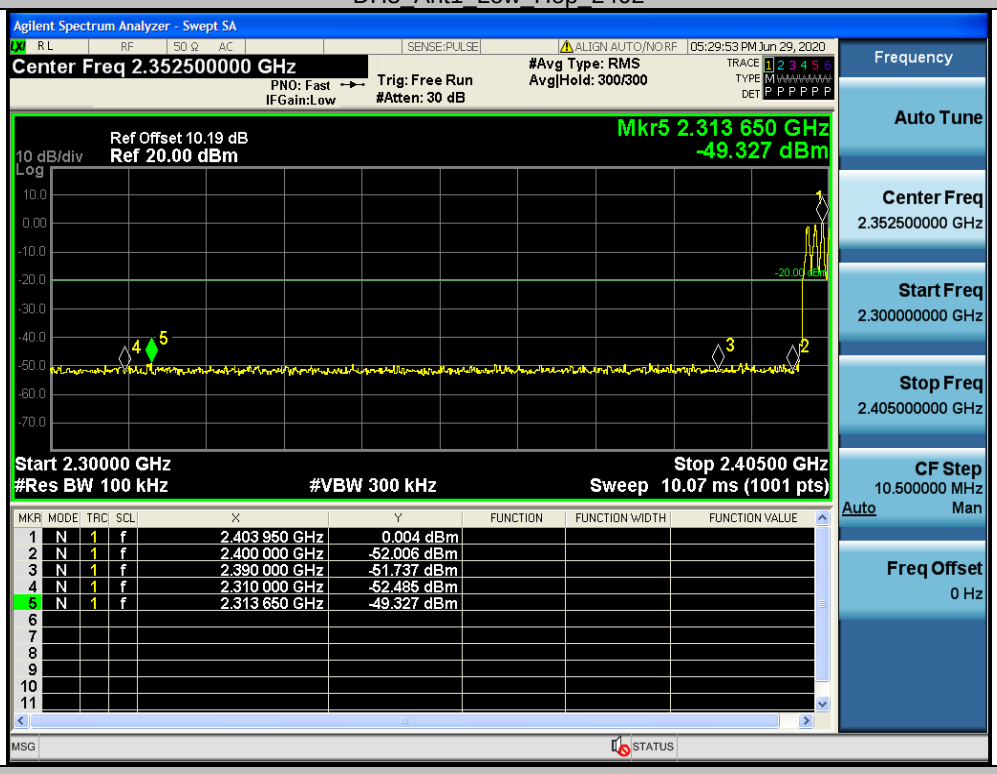
DH5_Ant1_Low_2402



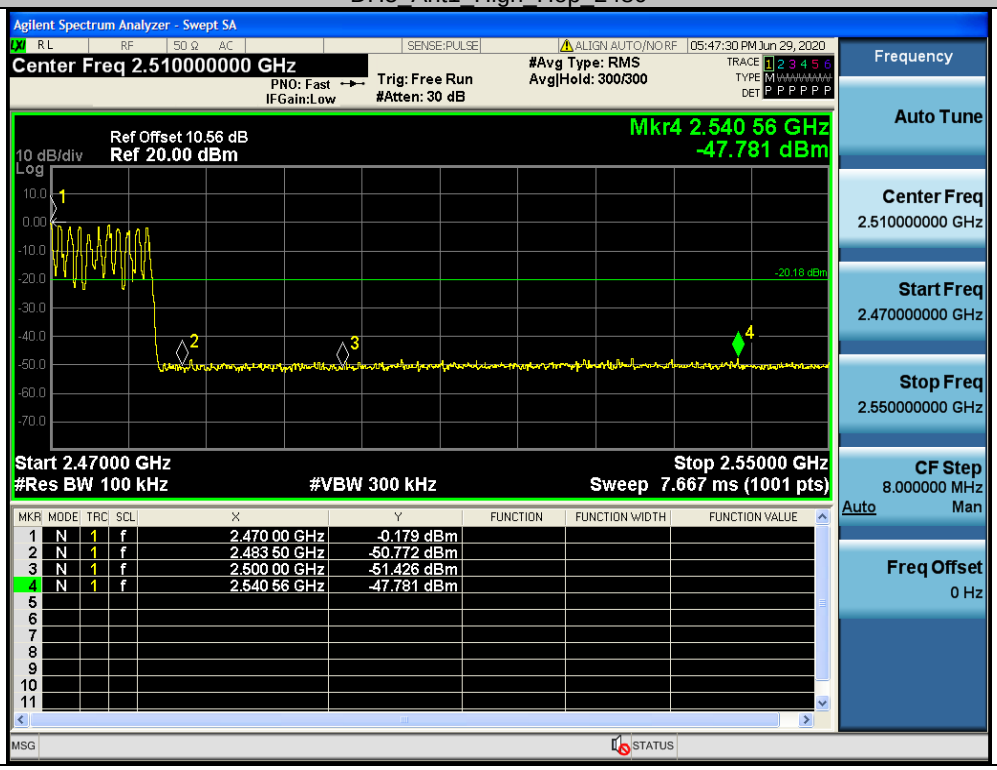
DH5_Ant1_High_2480



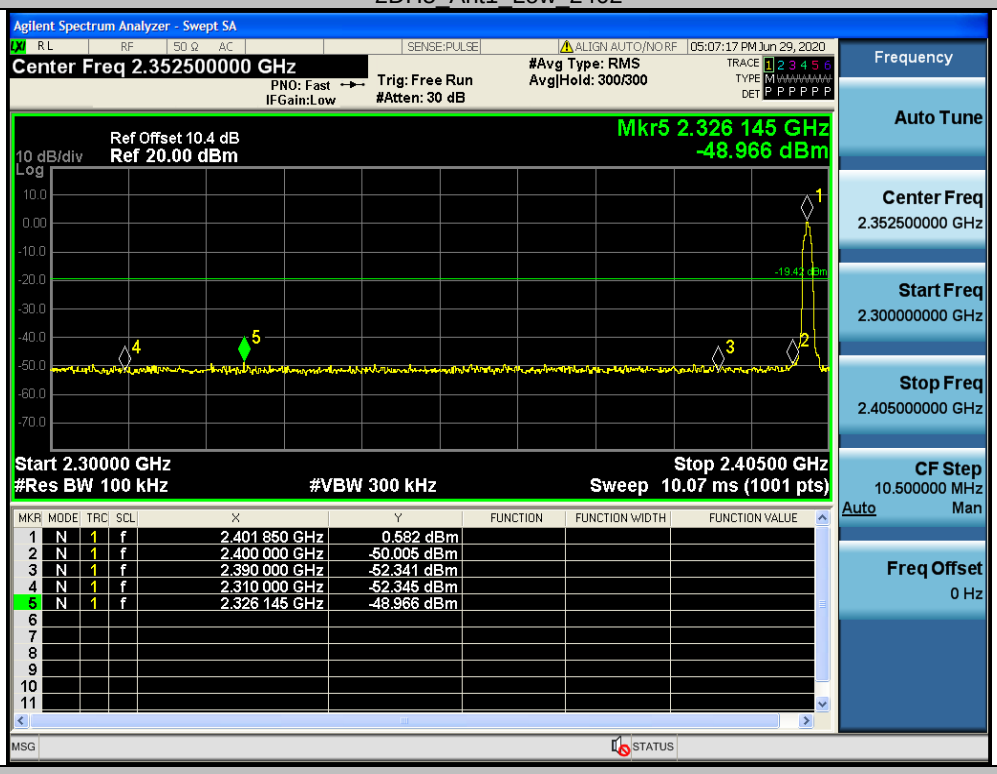
DH5_Ant1_Low_Hop_2402



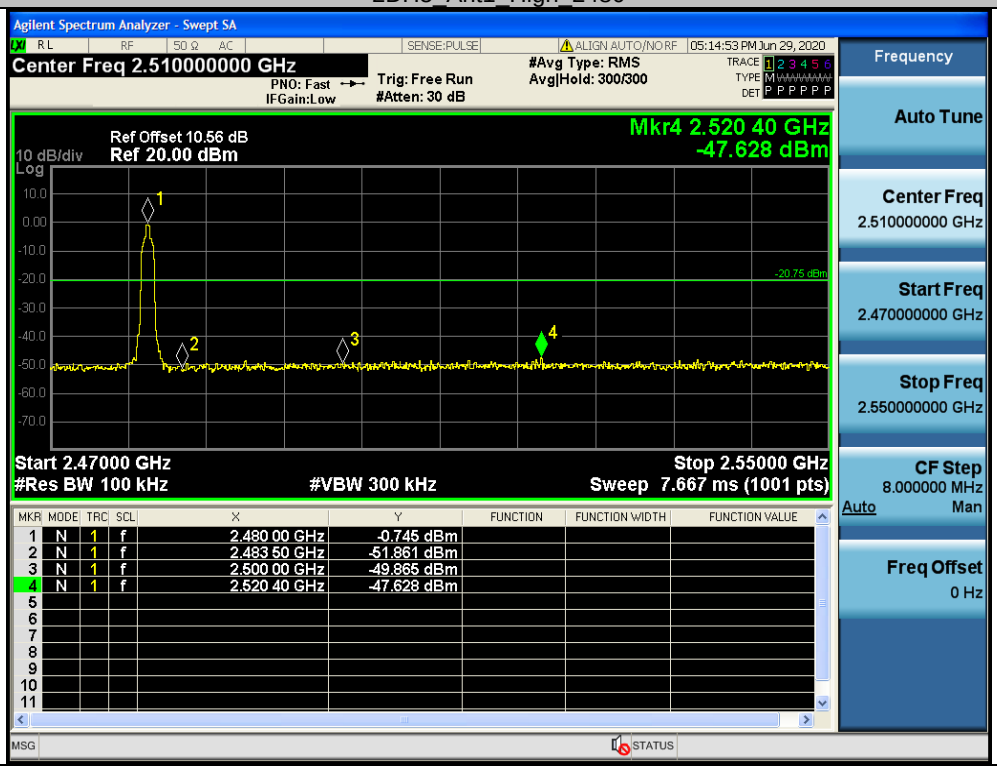
DH5_Ant1_High_Hop_2480



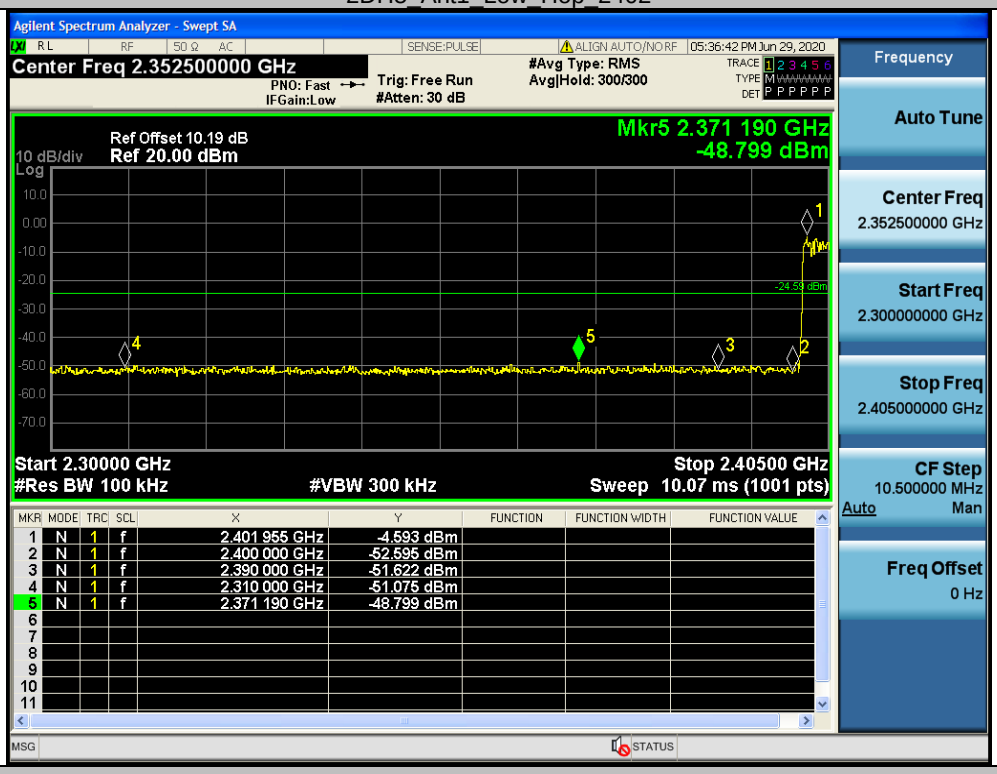
2DH5_Ant1_Low_2402



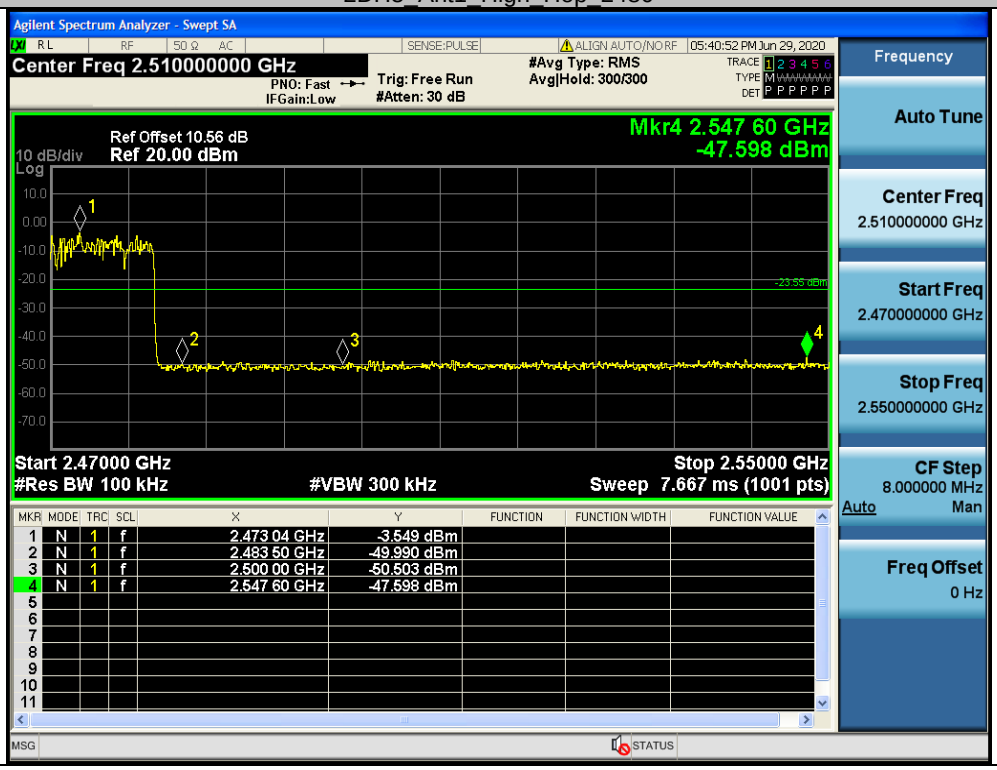
2DH5_Ant1_High_2480



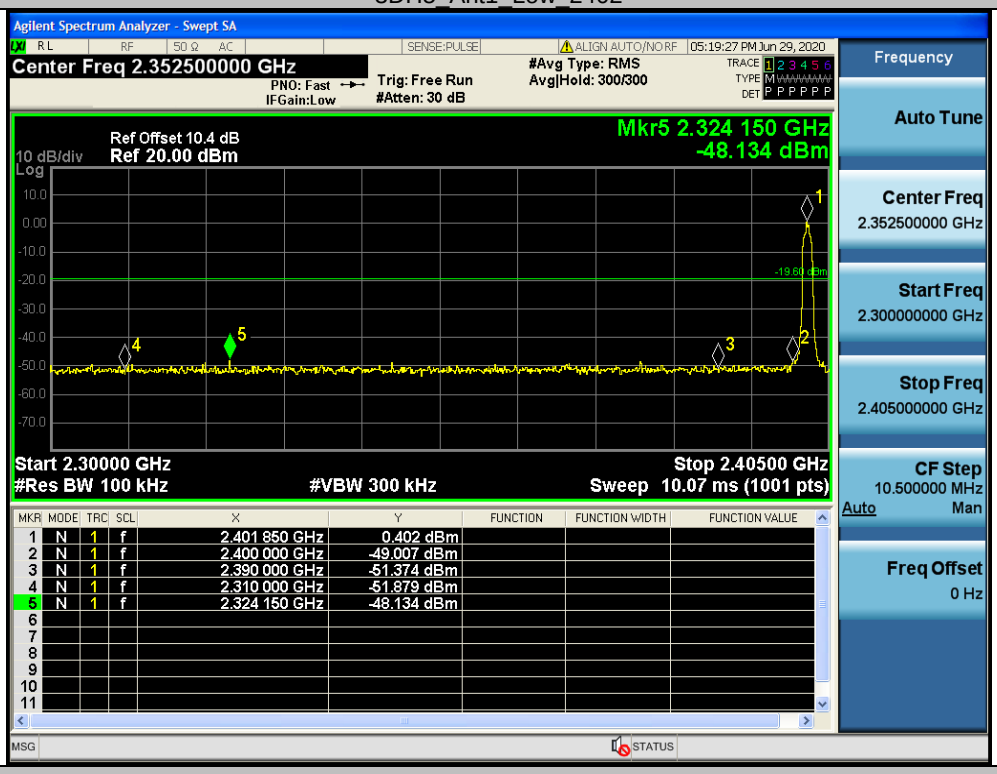
2DH5_Ant1_Low_Hop_2402



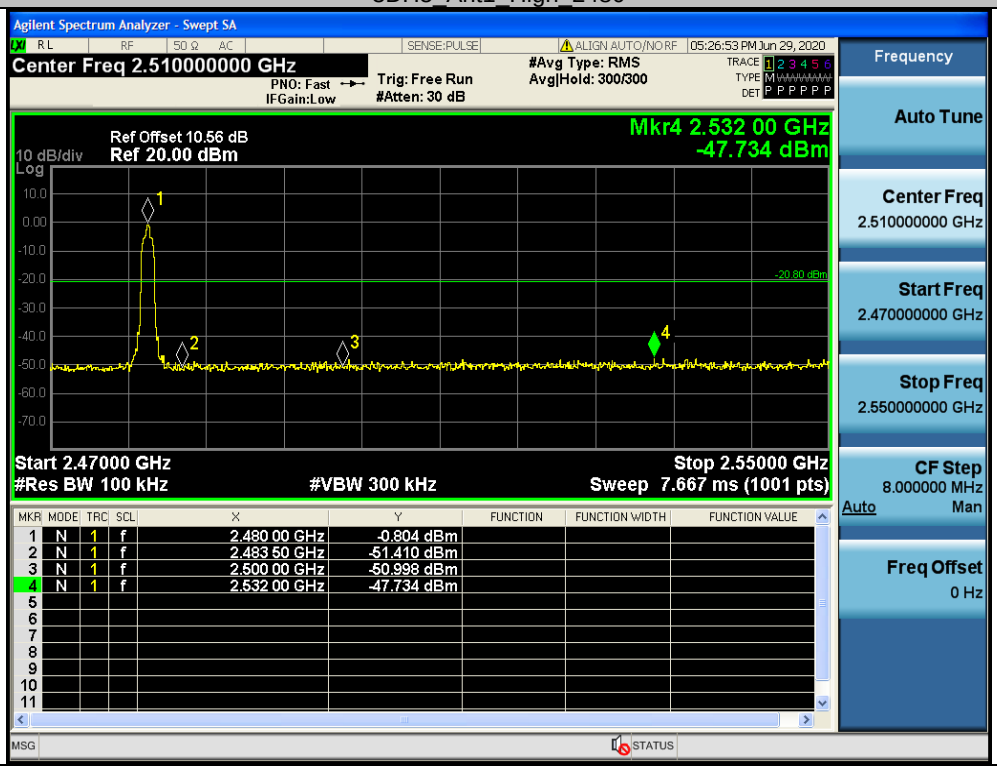
2DH5_Ant1_High_Hop_2480



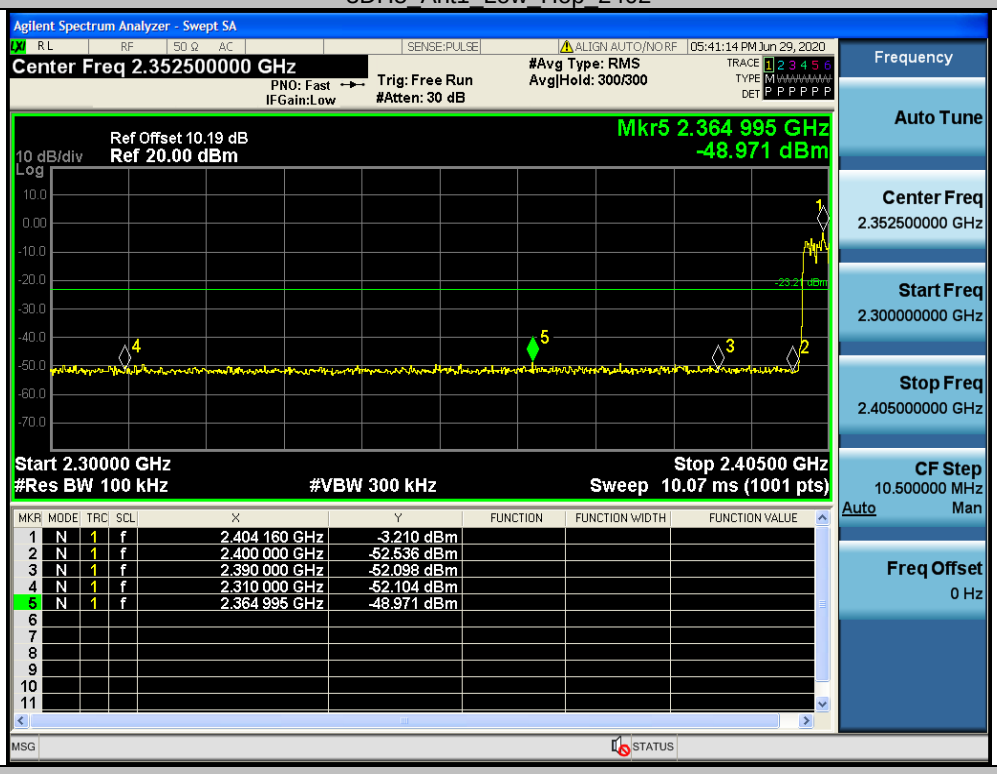
3DH5_Ant1_Low_2402



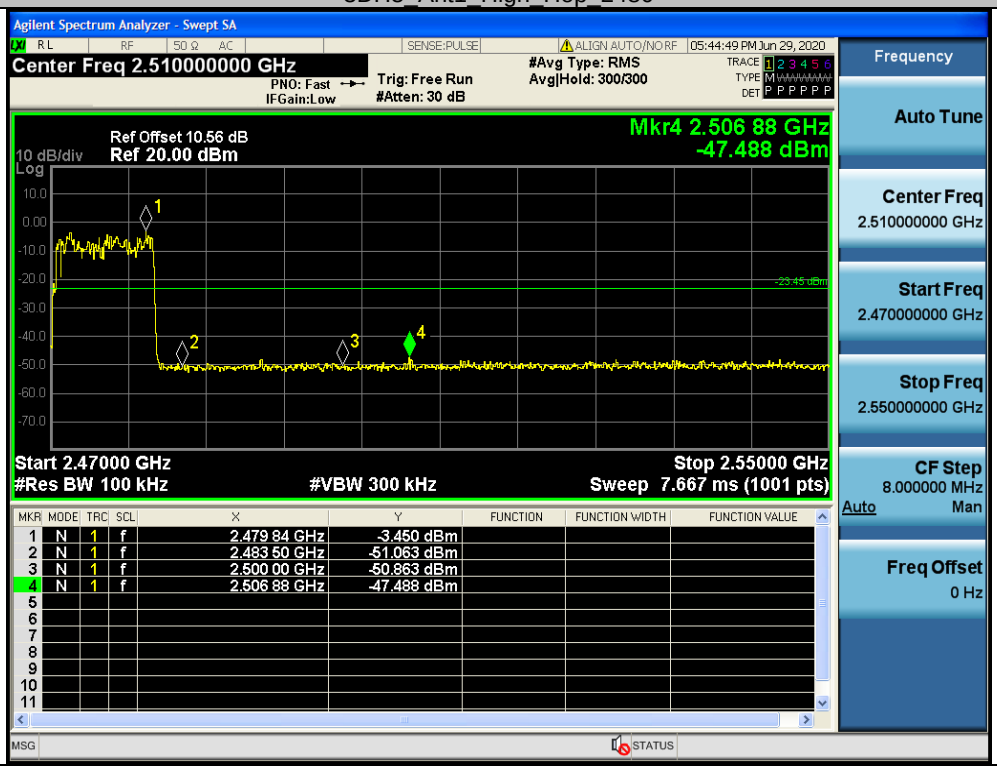
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

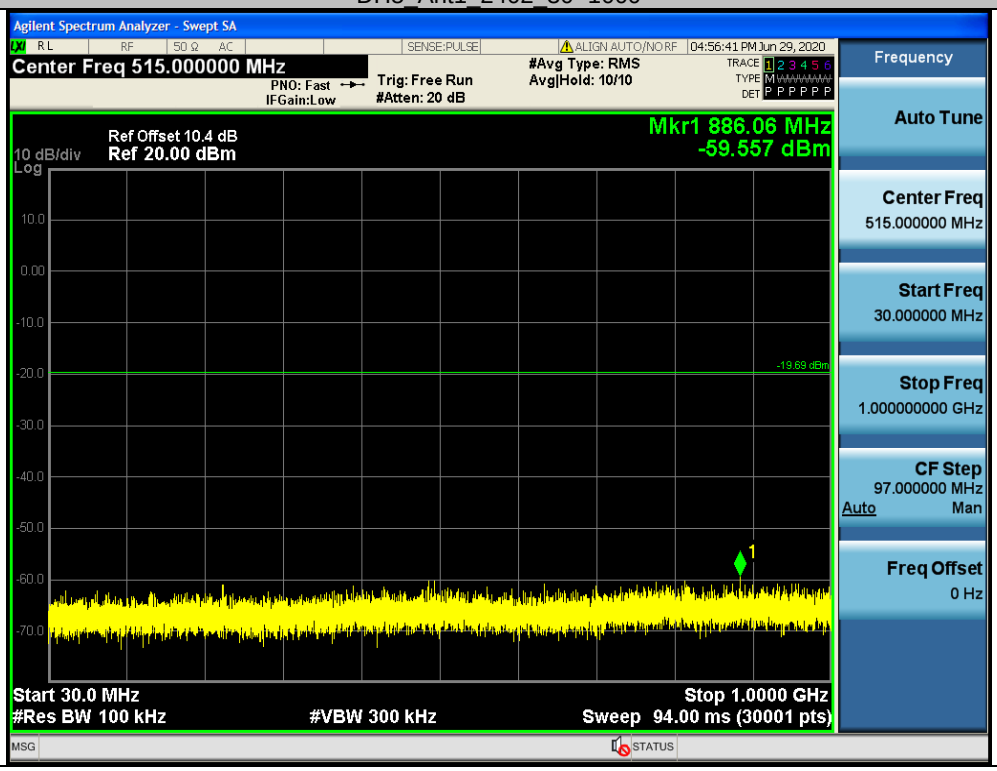


A.7 RF Conducted Spurious Emissions

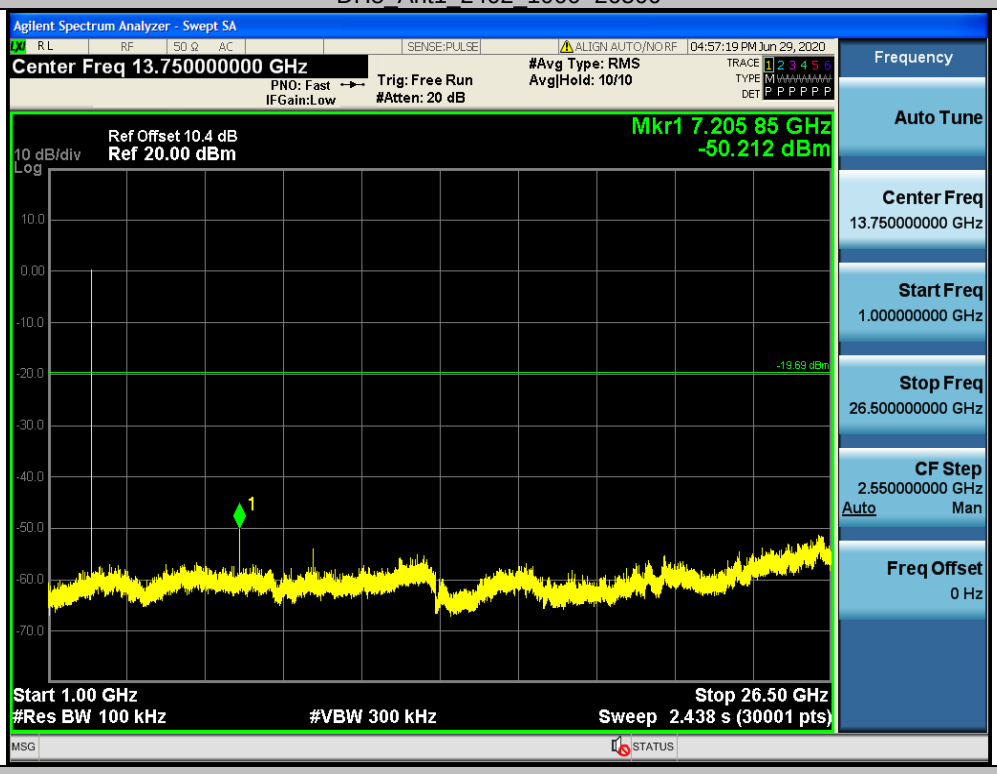
Test Graph

DH5_Ant1_2402_0~Reference

DH5_Ant1_2402_30~1000

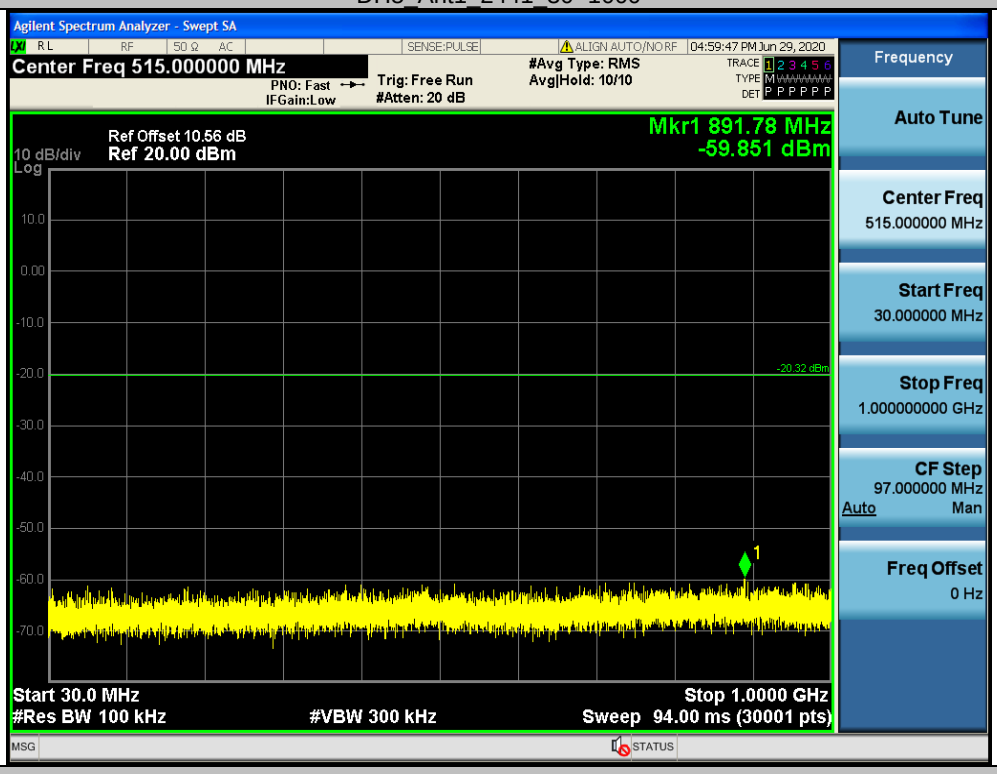


DH5_Ant1_2402_1000~26500

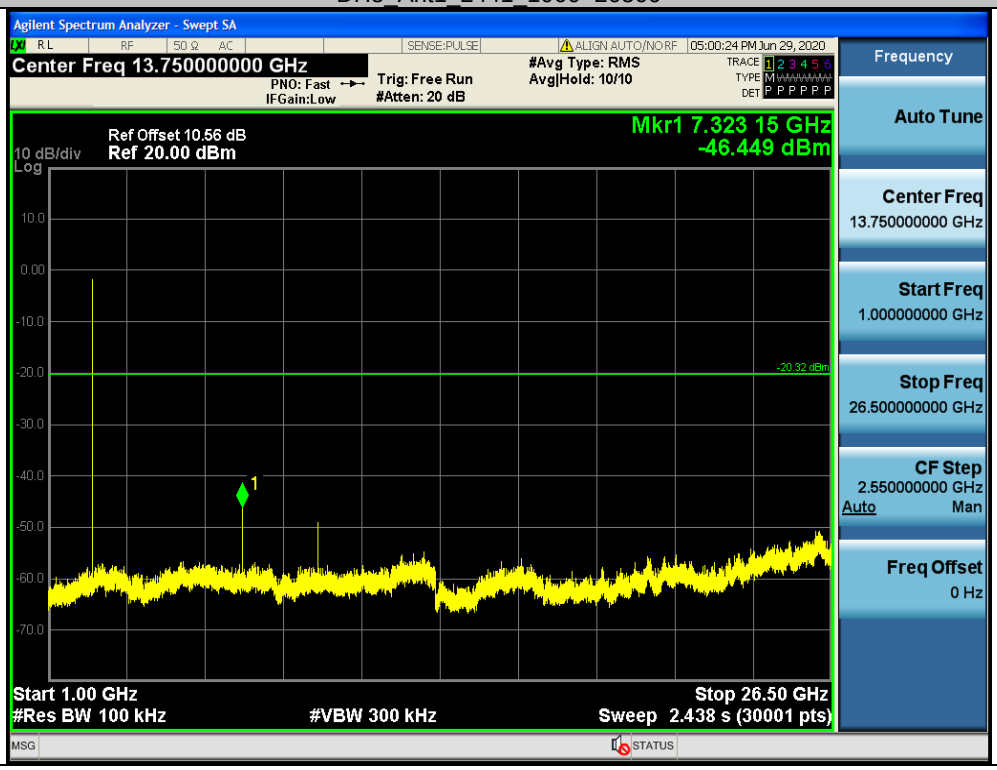


DH5_Ant1_2441_0~Reference

DH5_Ant1_2441_30~1000

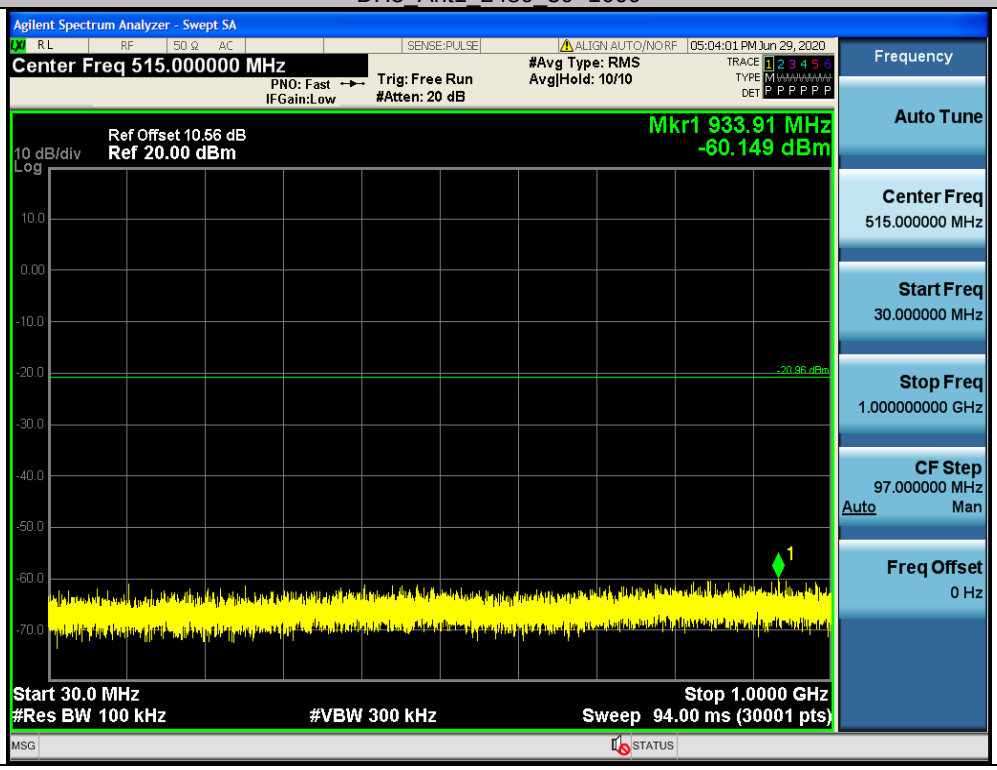


DH5_Ant1_2441_1000~26500



DH5_Ant1_2480_0~Reference

DH5_Ant1_2480_30~1000



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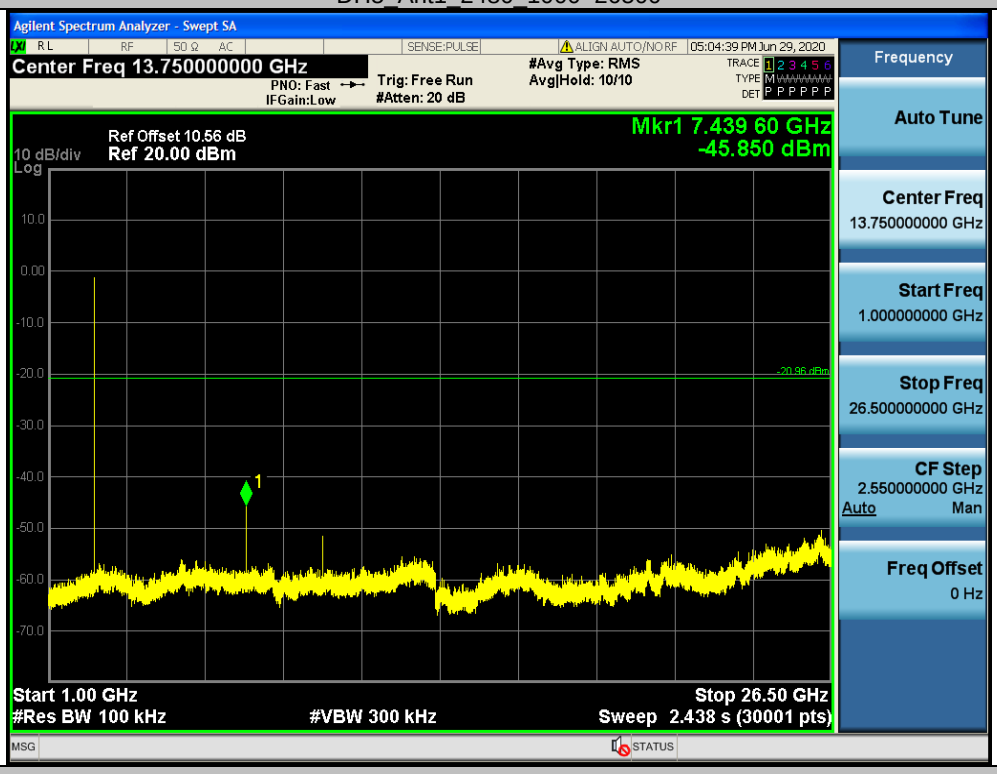

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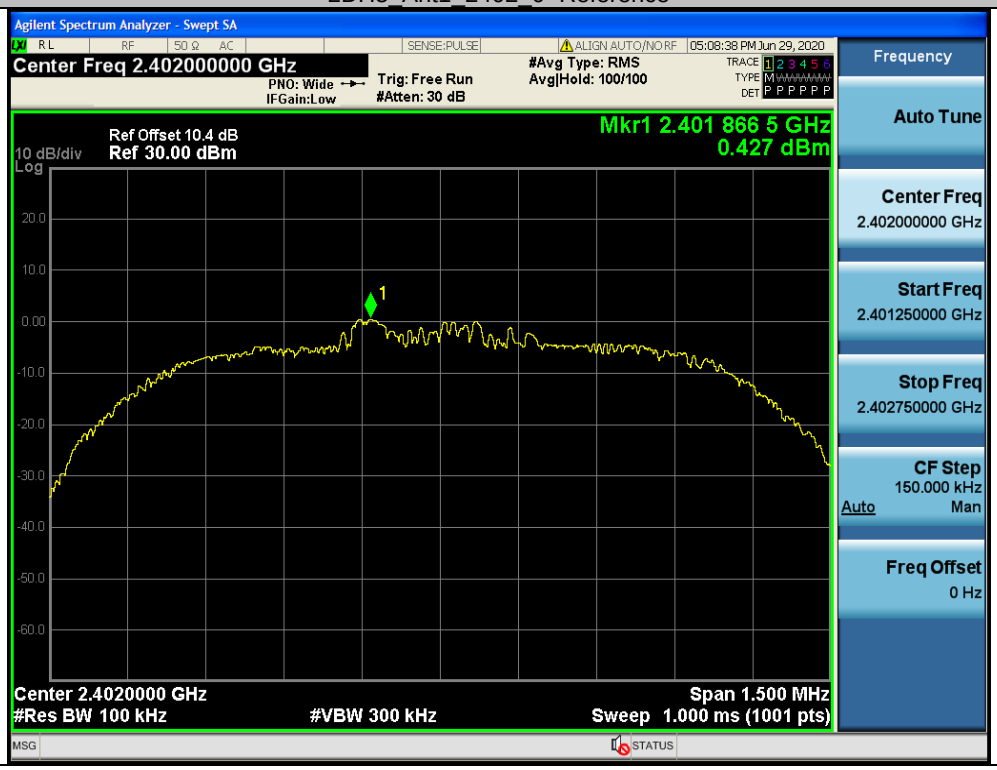

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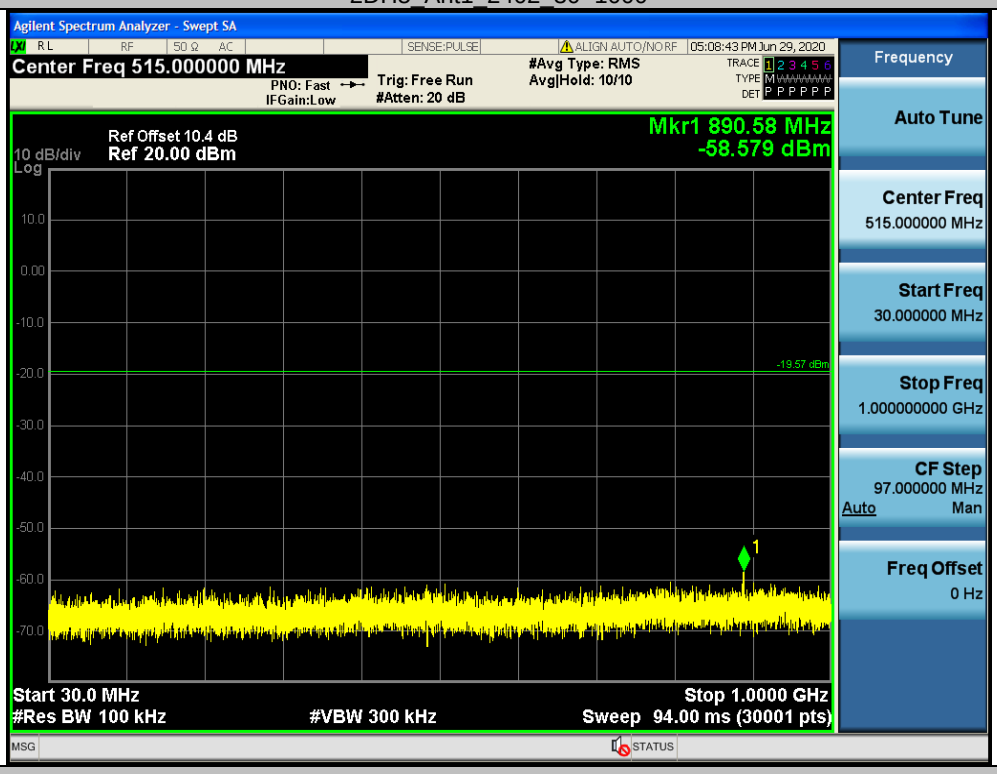

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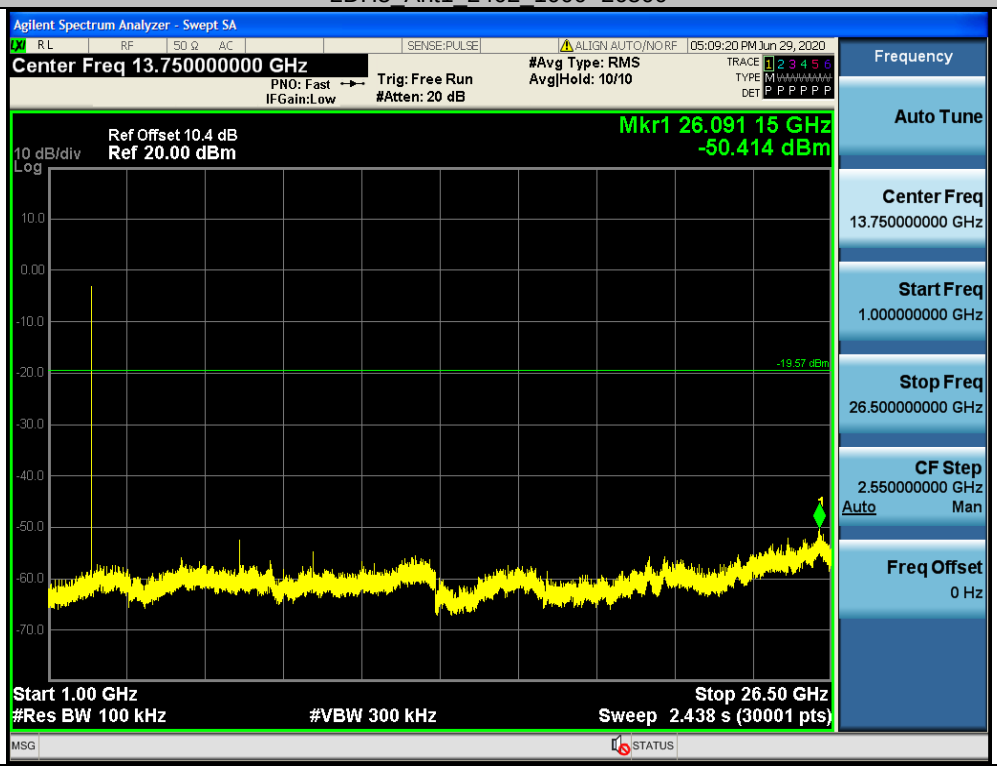

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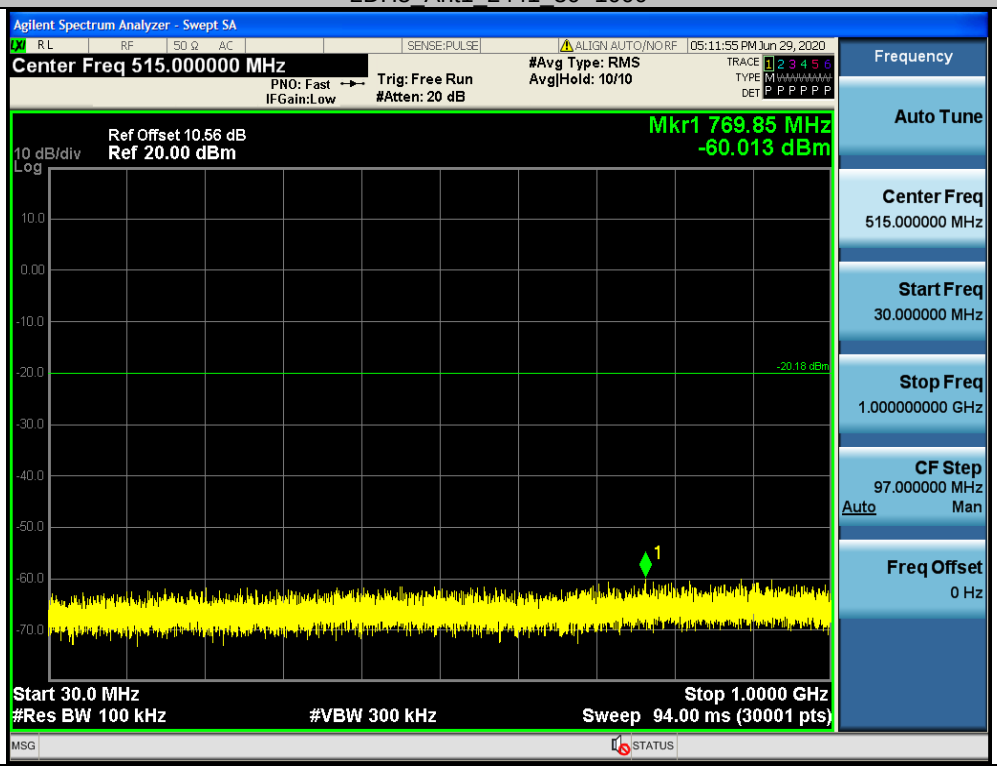

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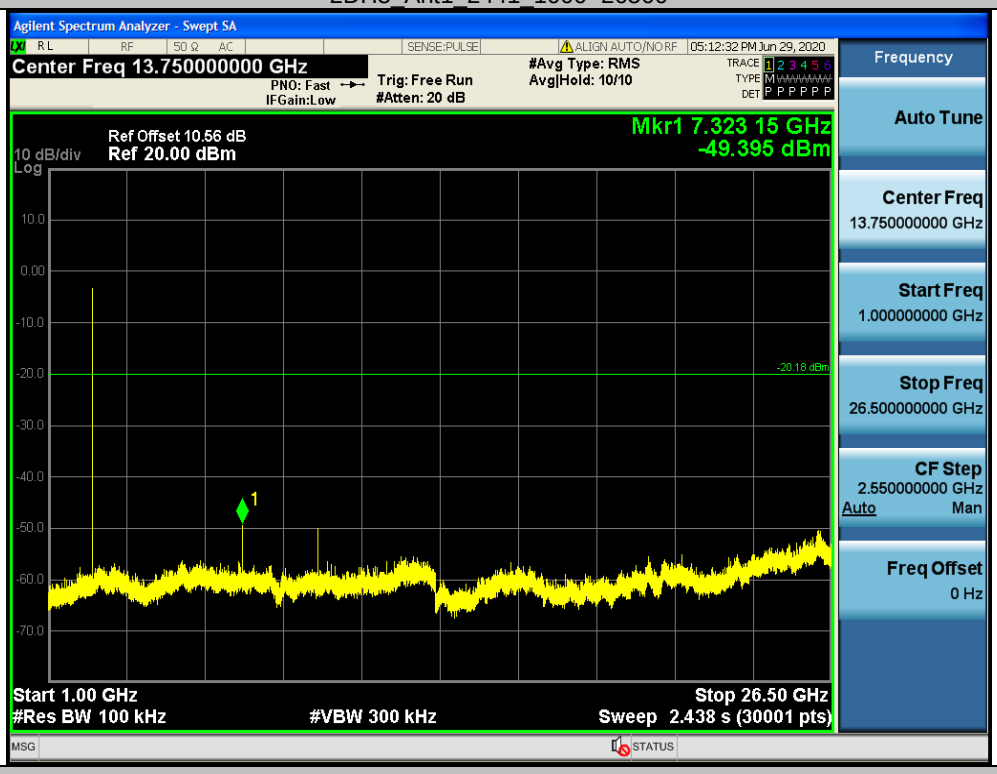

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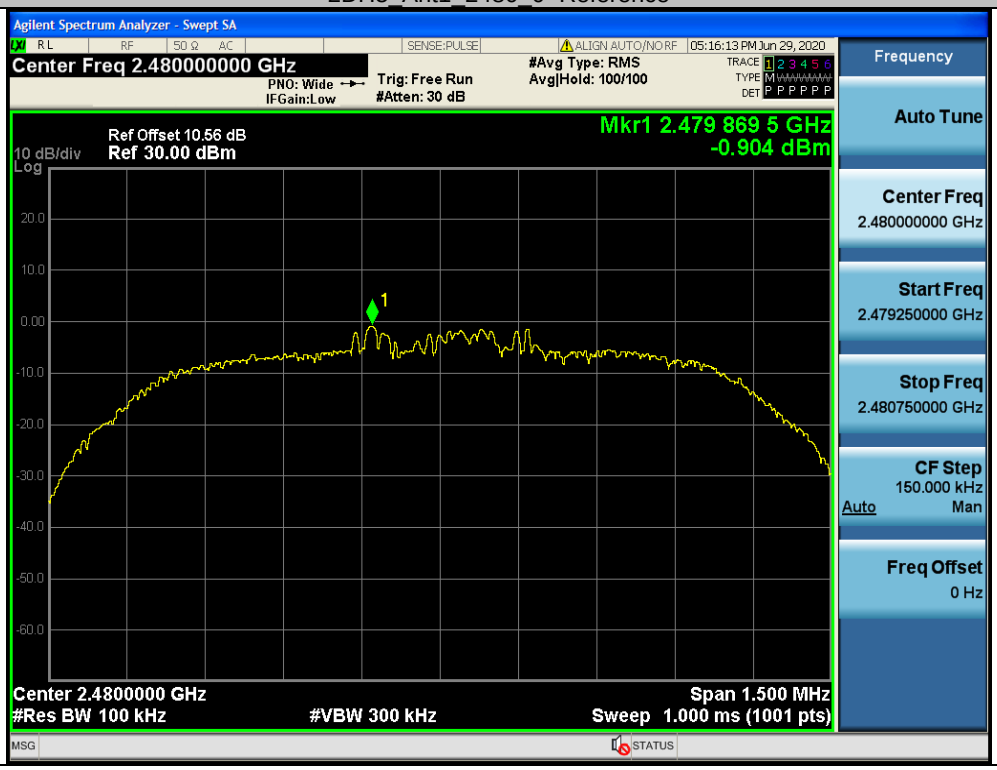

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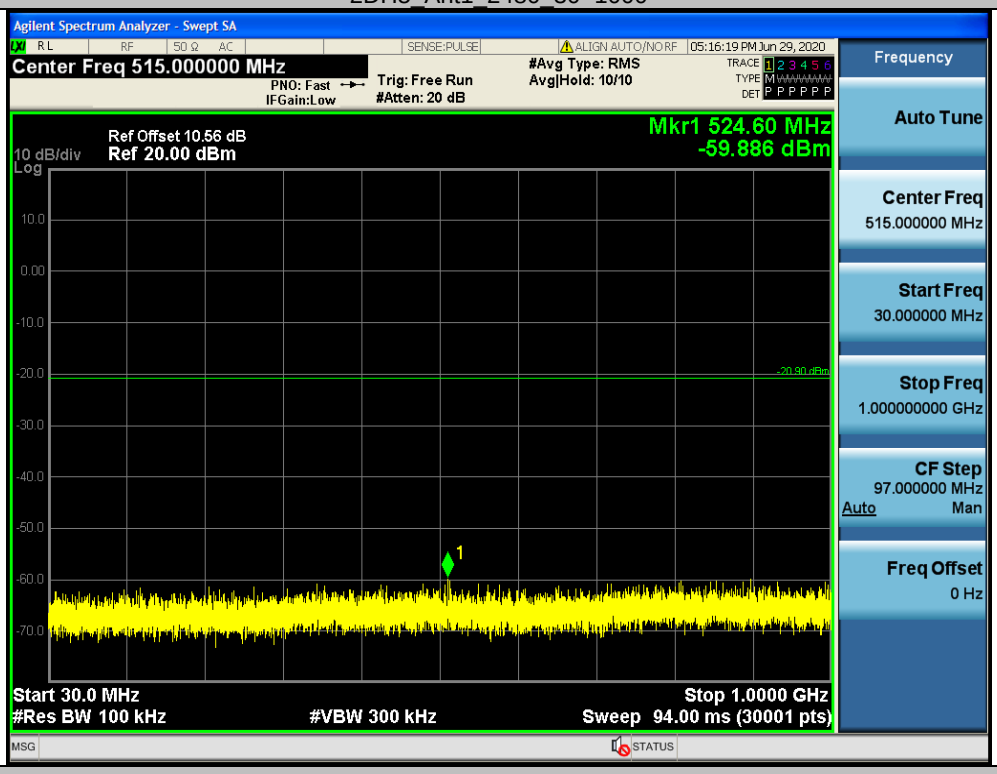

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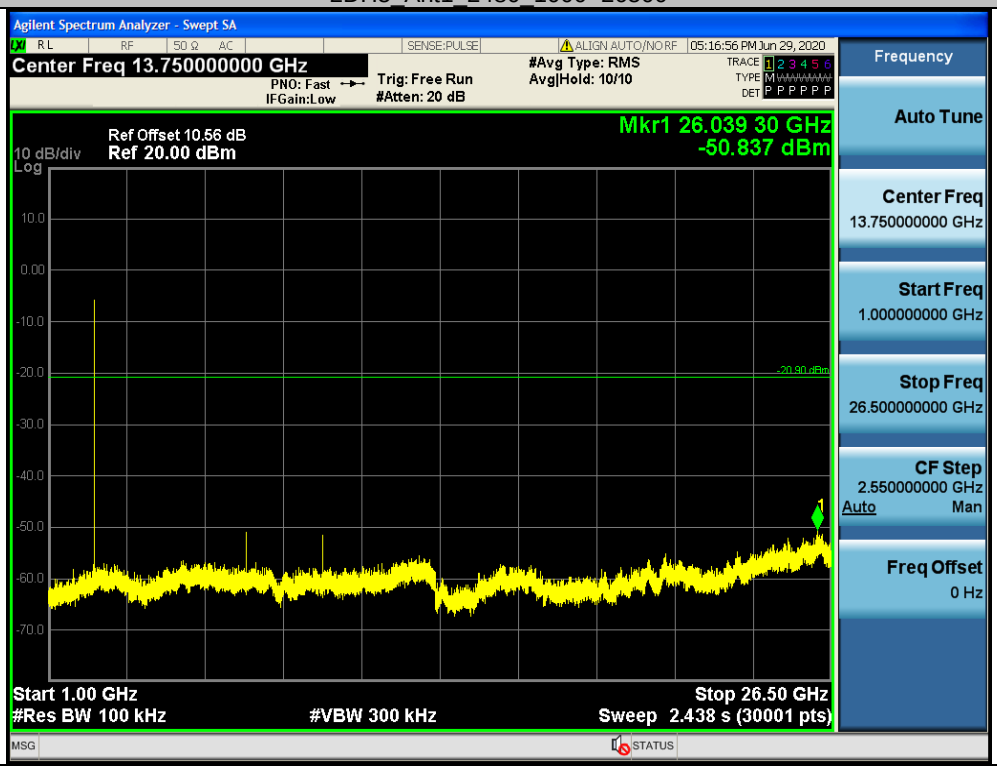

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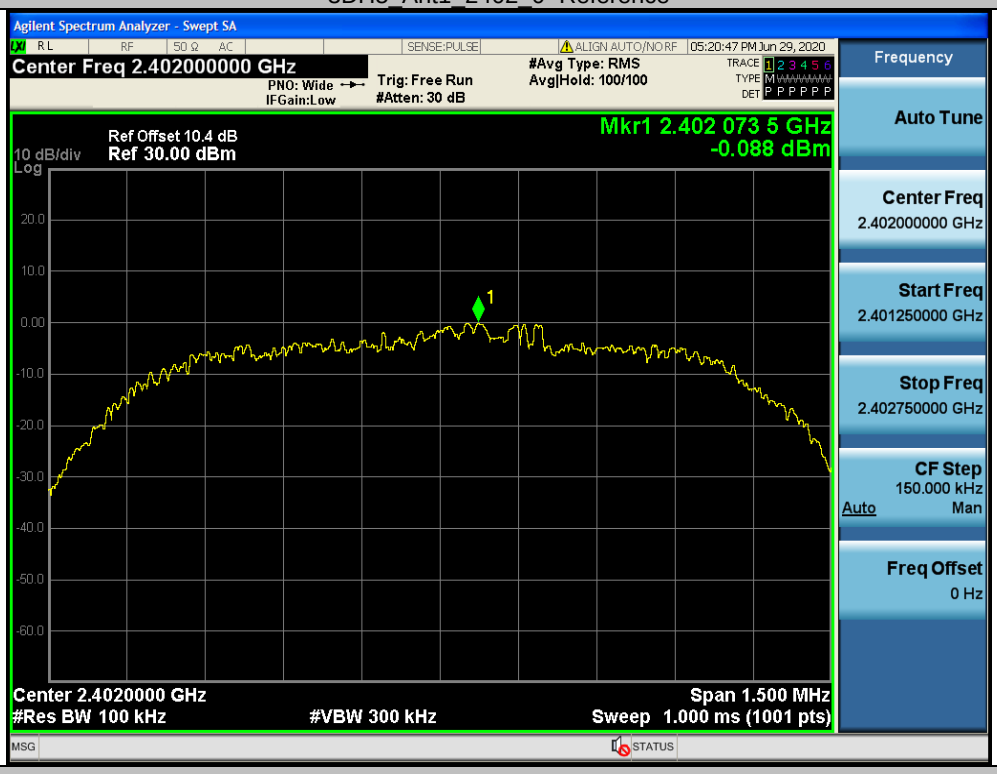

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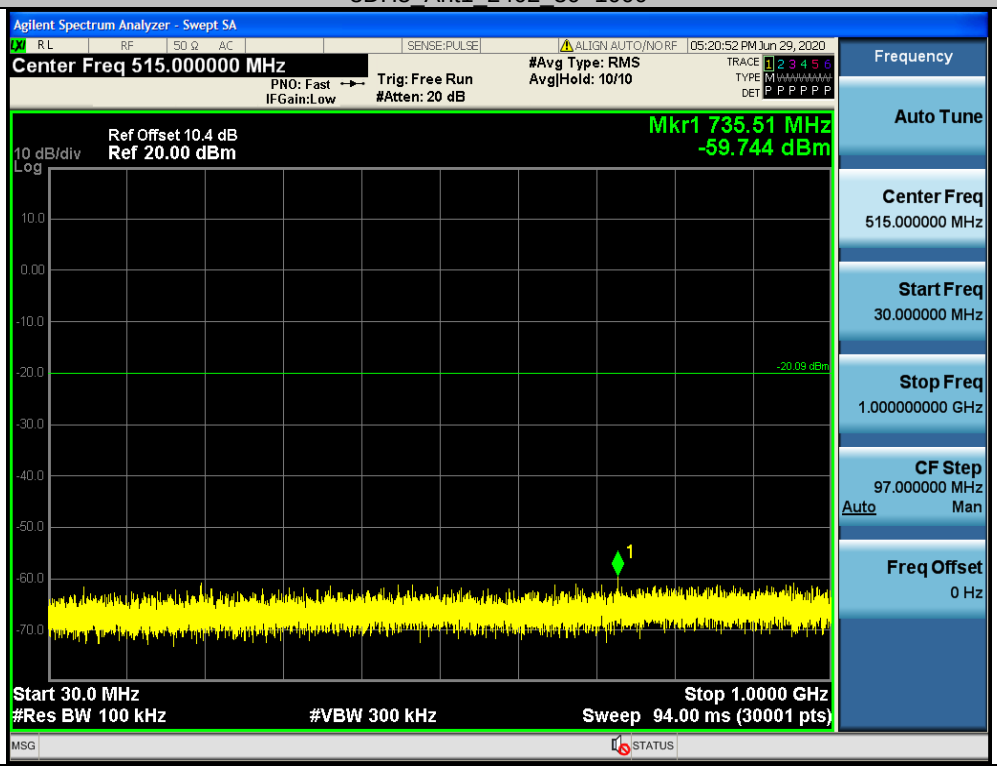

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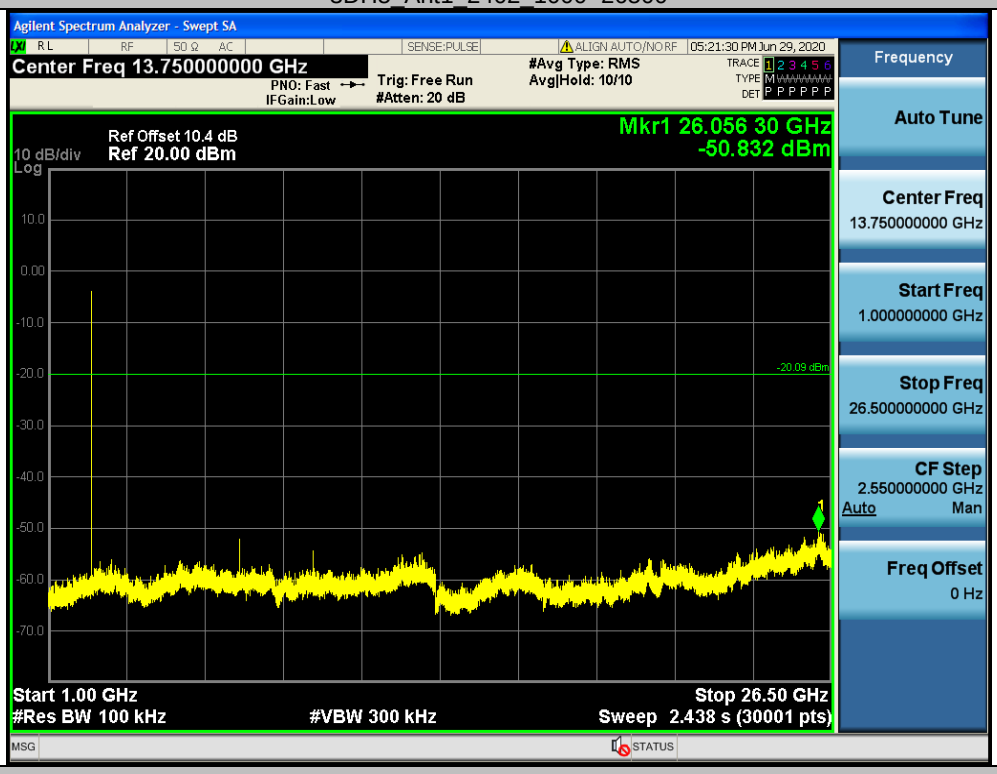

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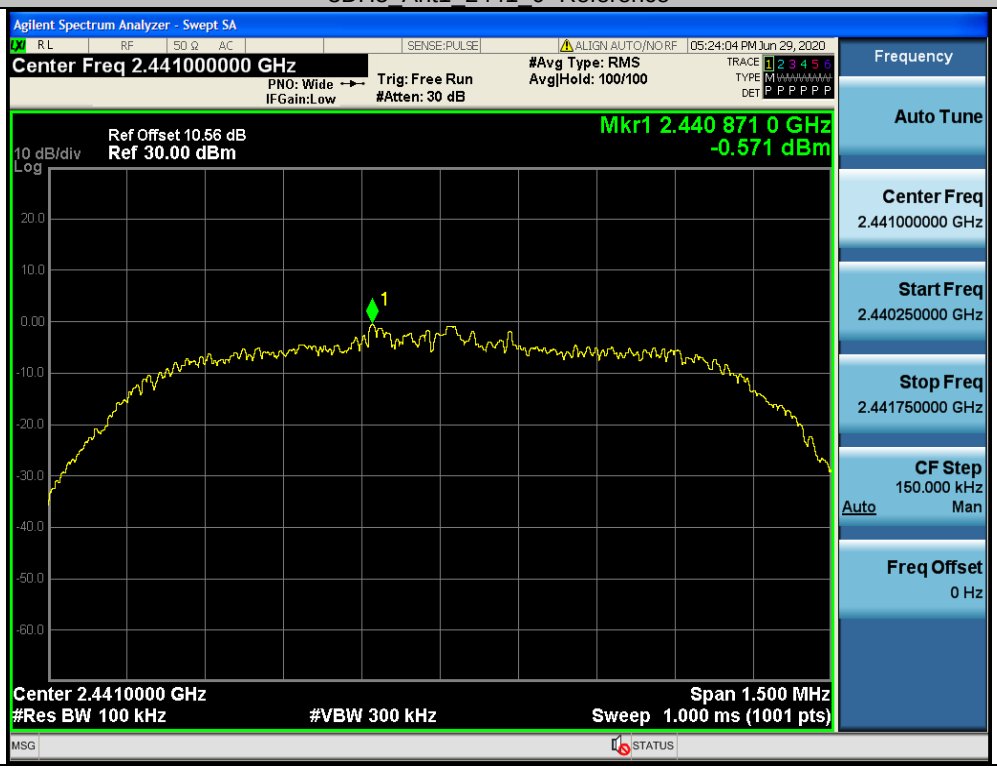

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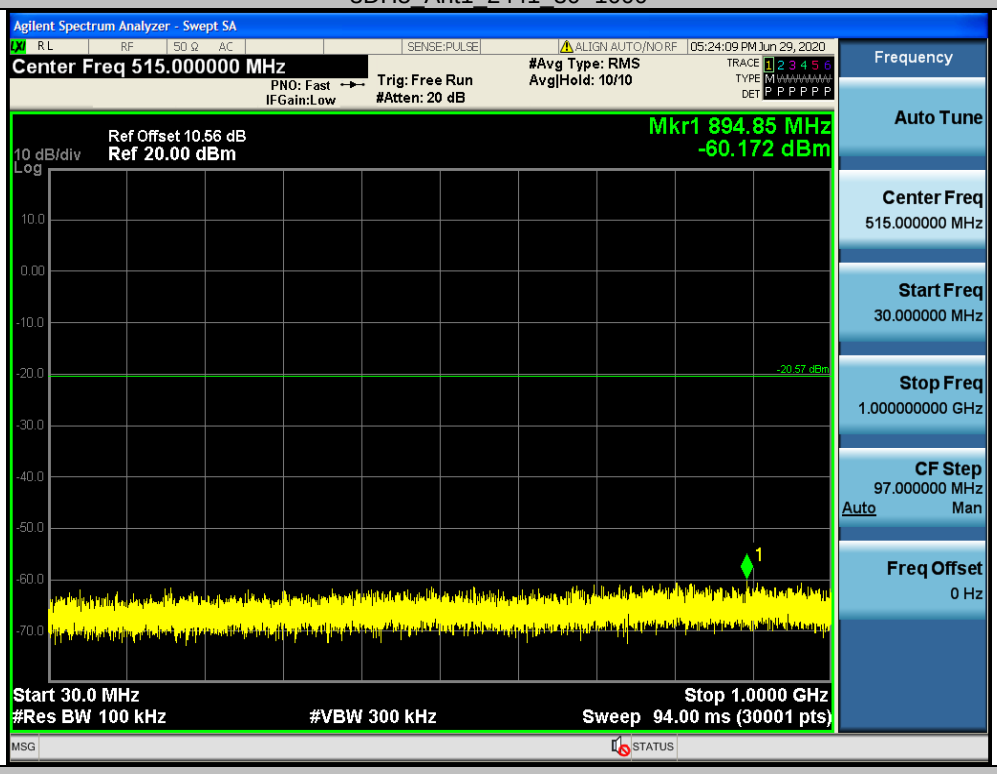

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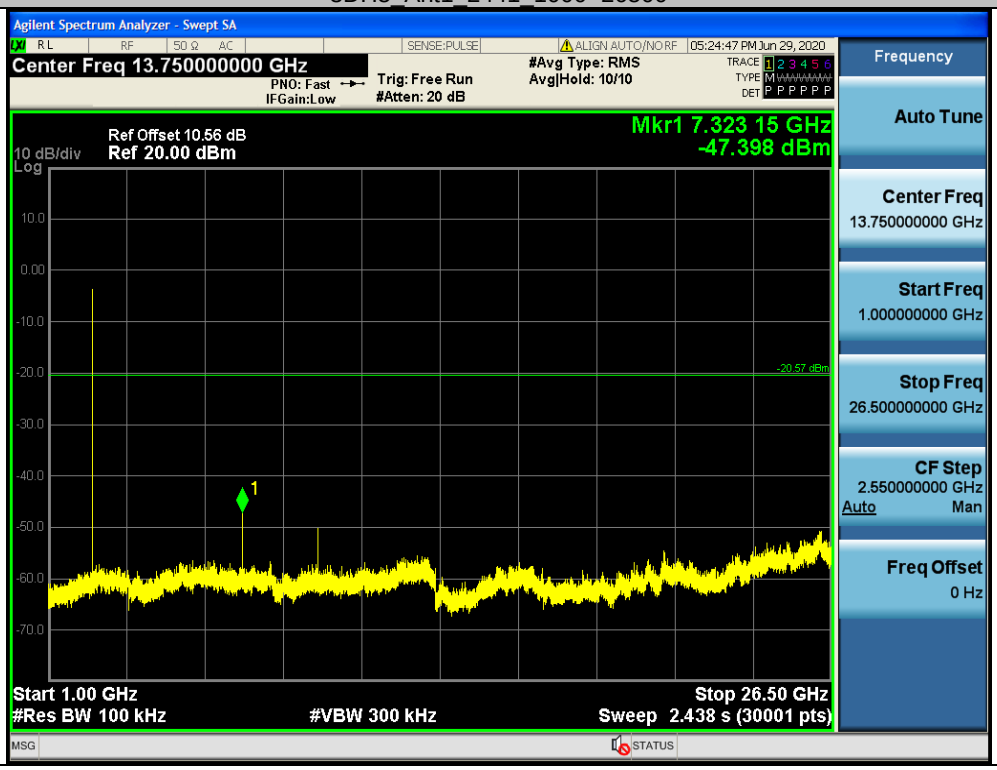

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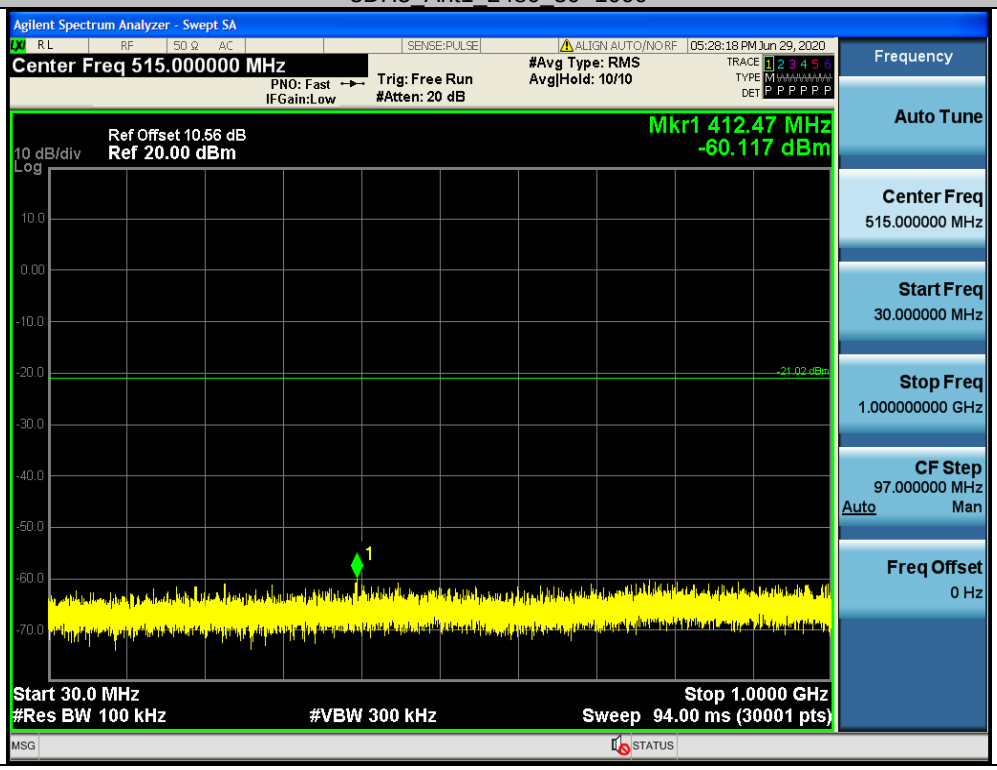

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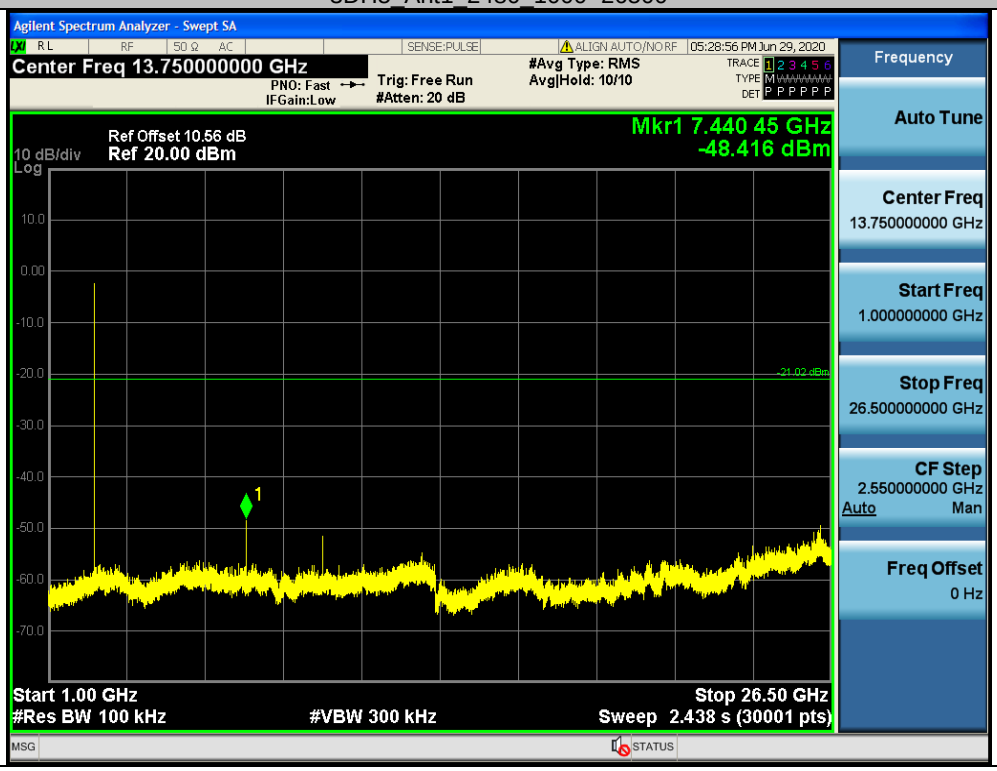


A.8 Restrict-band band-edge measurements

TestMode	Antenna	ChName	Channel	Detector	Freq	Result	Limit	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-47.55	<=-41.20	PASS
				AV	2390.000	-47.43	<=-41.20	PASS
				Peak	2310.000	-42.20	<=-21.20	PASS
				Peak	2390.000	-40.51	<=-21.20	PASS
		High	2480	AV	2483.500	-46.70	<=-41.20	PASS
				AV	2500.000	-46.74	<=-41.20	PASS
				Peak	2483.500	-40.70	<=-21.20	PASS
				Peak	2500.000	-38.34	<=-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-47.69	<=-41.20	PASS
				AV	2390.000	-47.51	<=-41.20	PASS
				Peak	2310.000	-39.89	<=-21.20	PASS
				Peak	2390.000	-39.76	<=-21.20	PASS
		High	2480	AV	2483.500	-46.80	<=-41.20	PASS
				AV	2500.000	-46.60	<=-41.20	PASS
				Peak	2483.500	-37.68	<=-21.20	PASS
				Peak	2500.000	-39.00	<=-21.20	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-47.71	<=-41.20	PASS
				AV	2390.000	-47.52	<=-41.20	PASS
				Peak	2310.000	-40.51	<=-21.20	PASS
				Peak	2390.000	-40.28	<=-21.20	PASS
		High	2480	AV	2483.500	-46.71	<=-41.20	PASS
				AV	2500.000	-46.73	<=-41.20	PASS
				Peak	2483.500	-40.01	<=-21.20	PASS
				Peak	2500.000	-40.87	<=-21.20	PASS

Note：

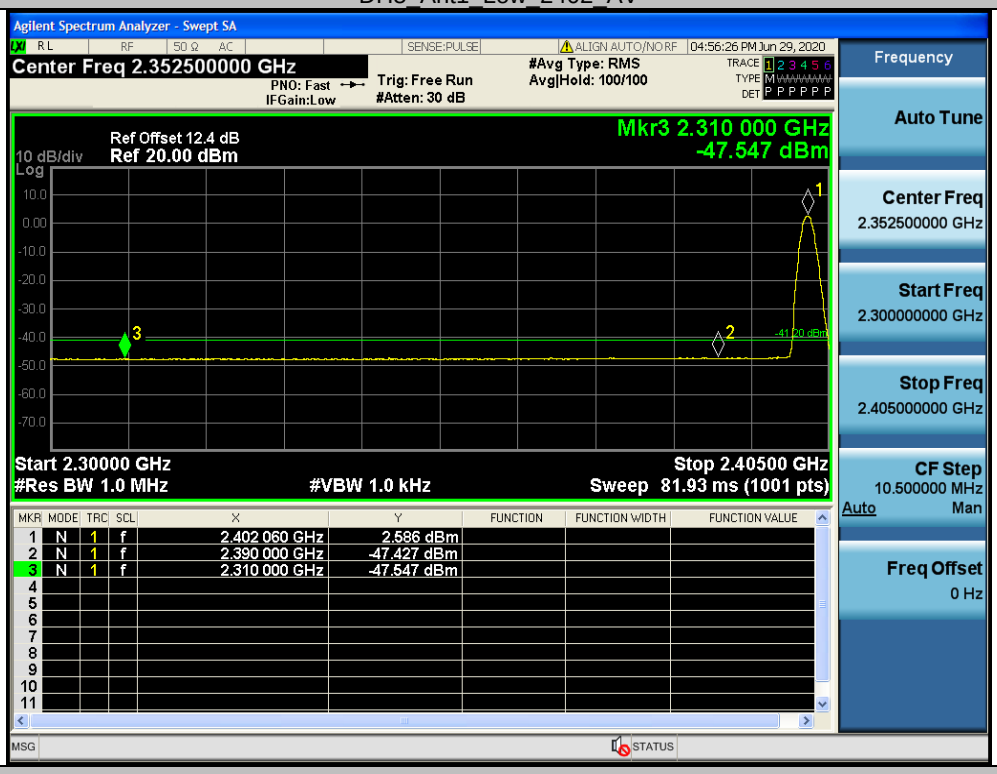
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.

2.The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a),

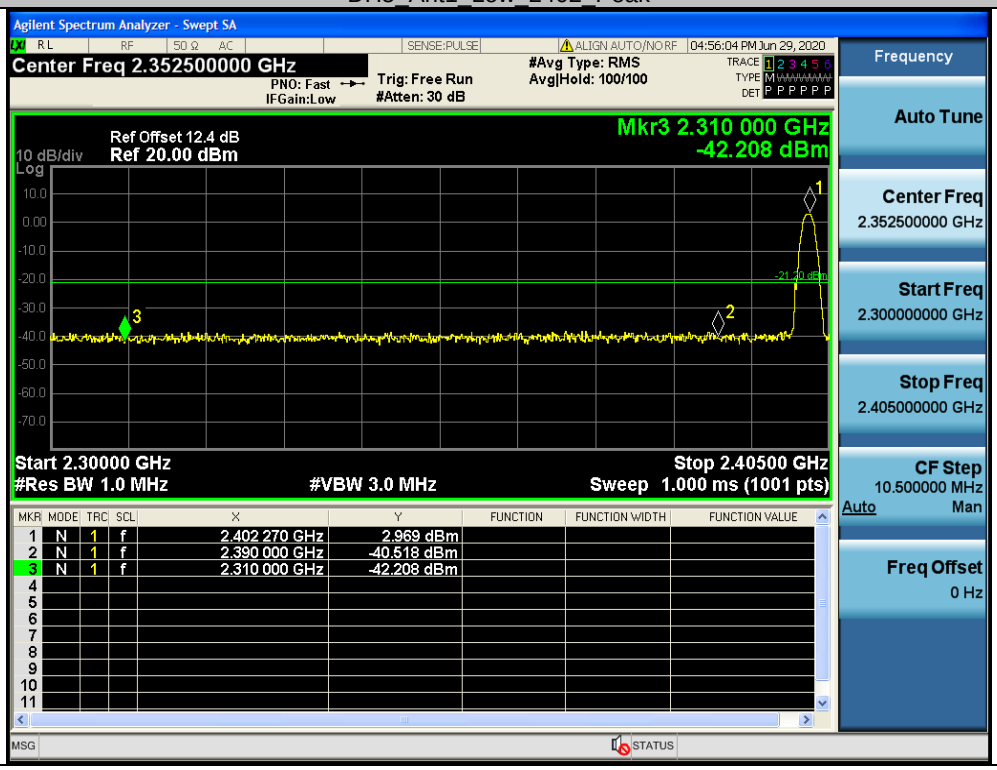
The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

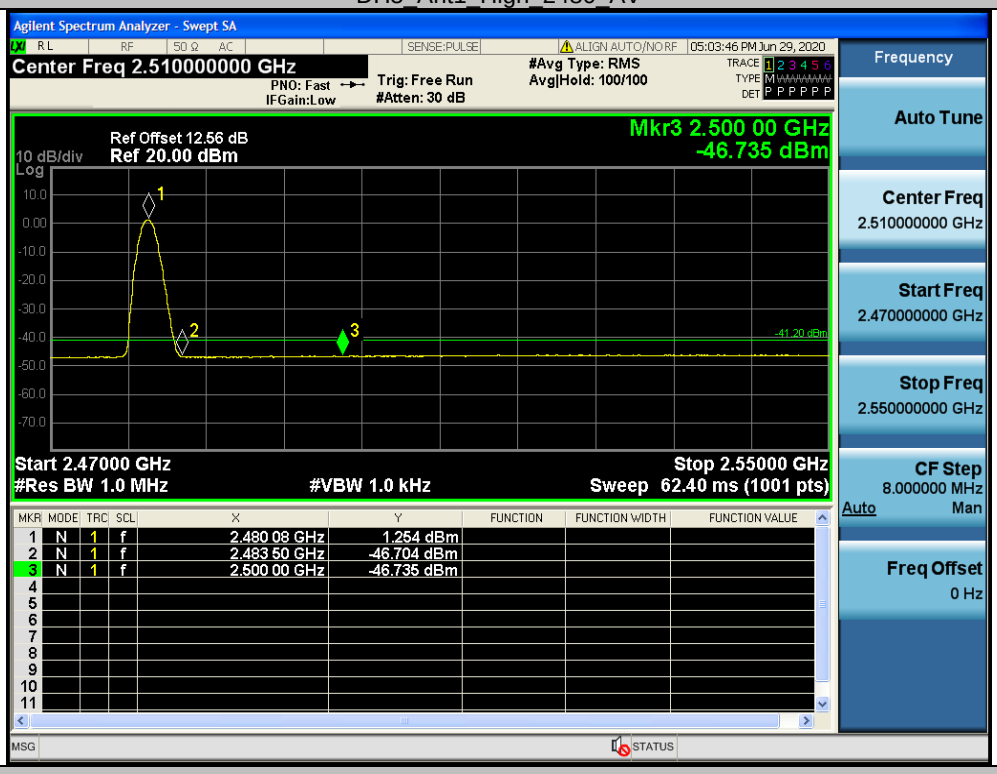
DH5_Ant1_Low_2402_AV



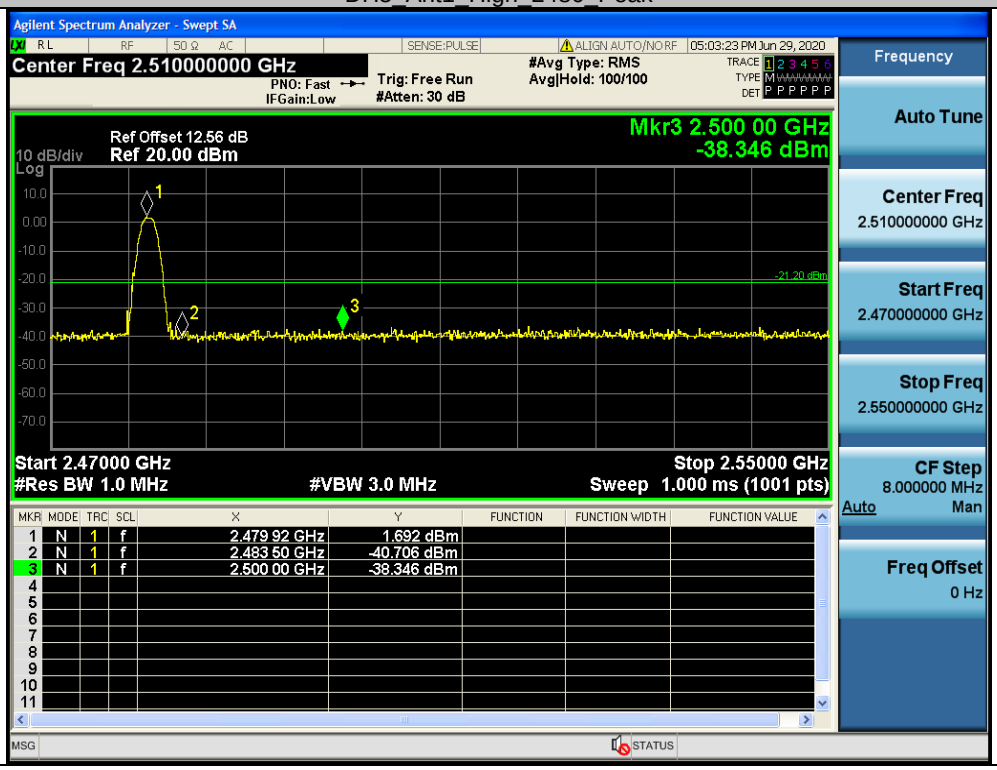
DH5_Ant1_Low_2402_Peak



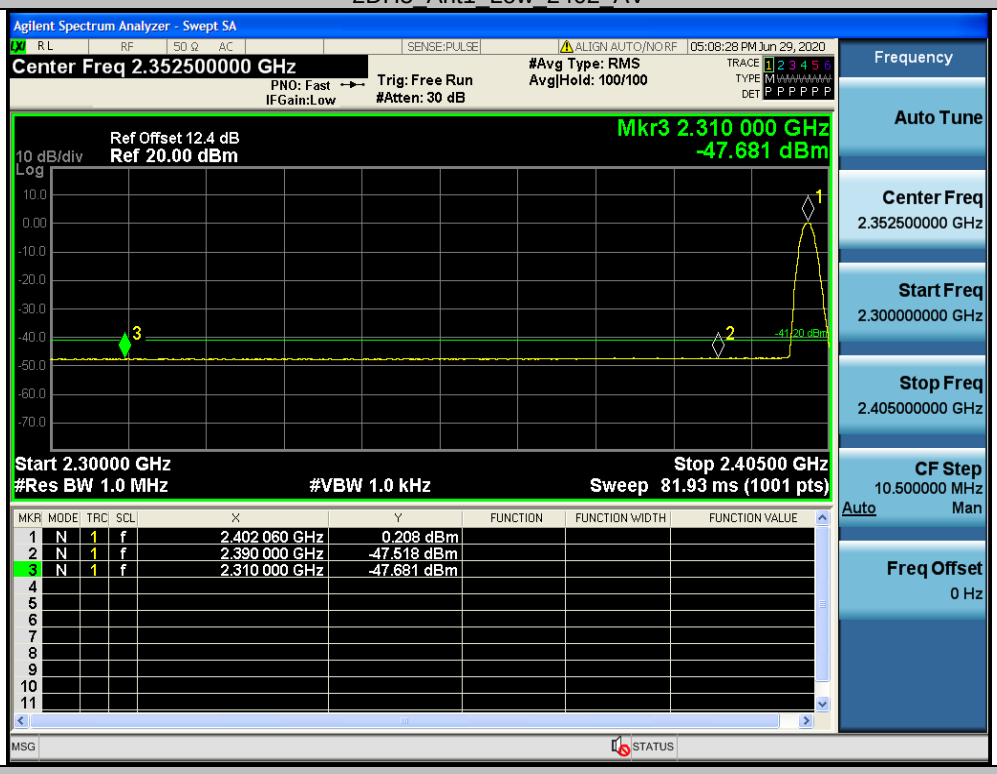
DH5_Ant1_High_2480_AV



DH5_Ant1_High_2480_Peak



2DH5_Ant1_Low_2402_AV



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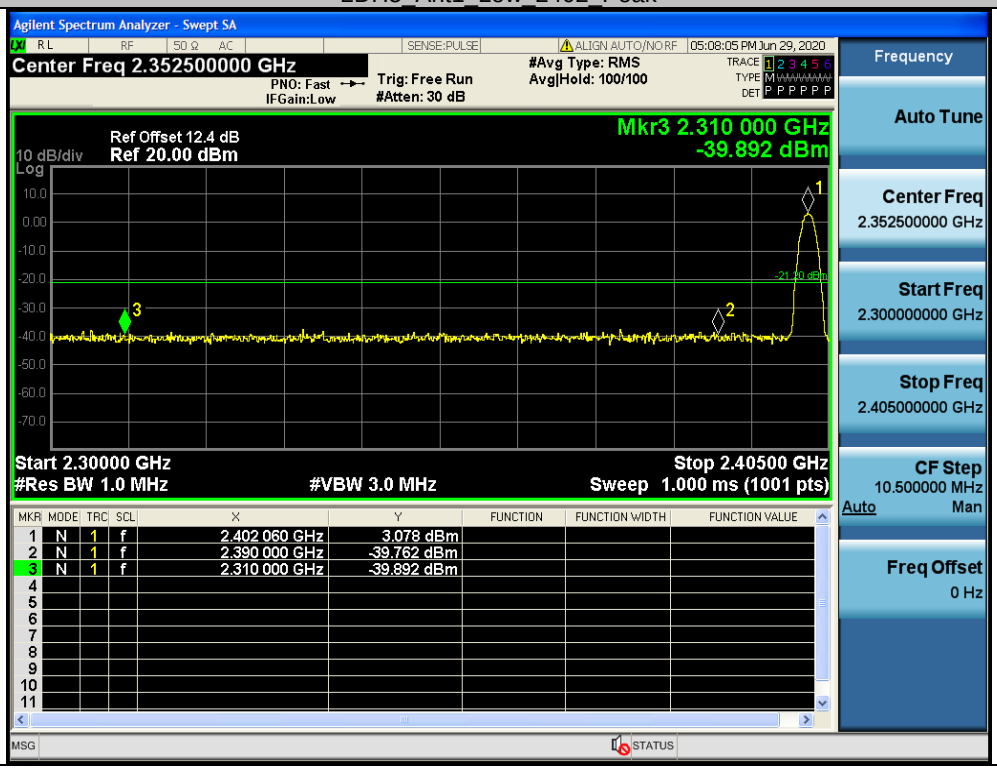

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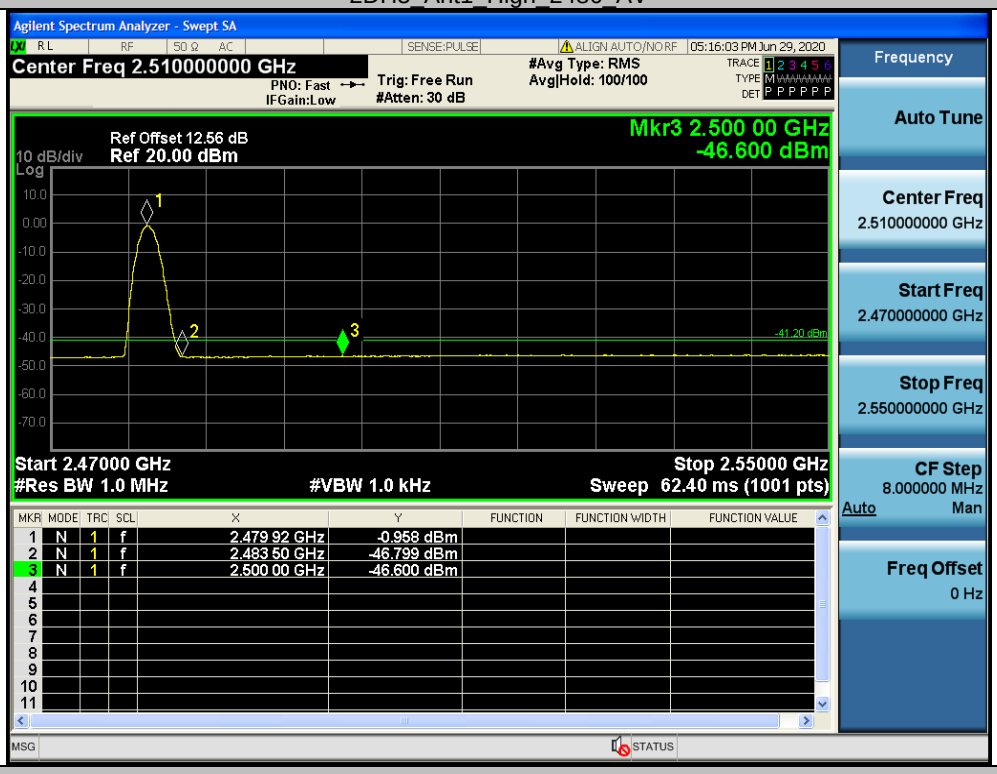

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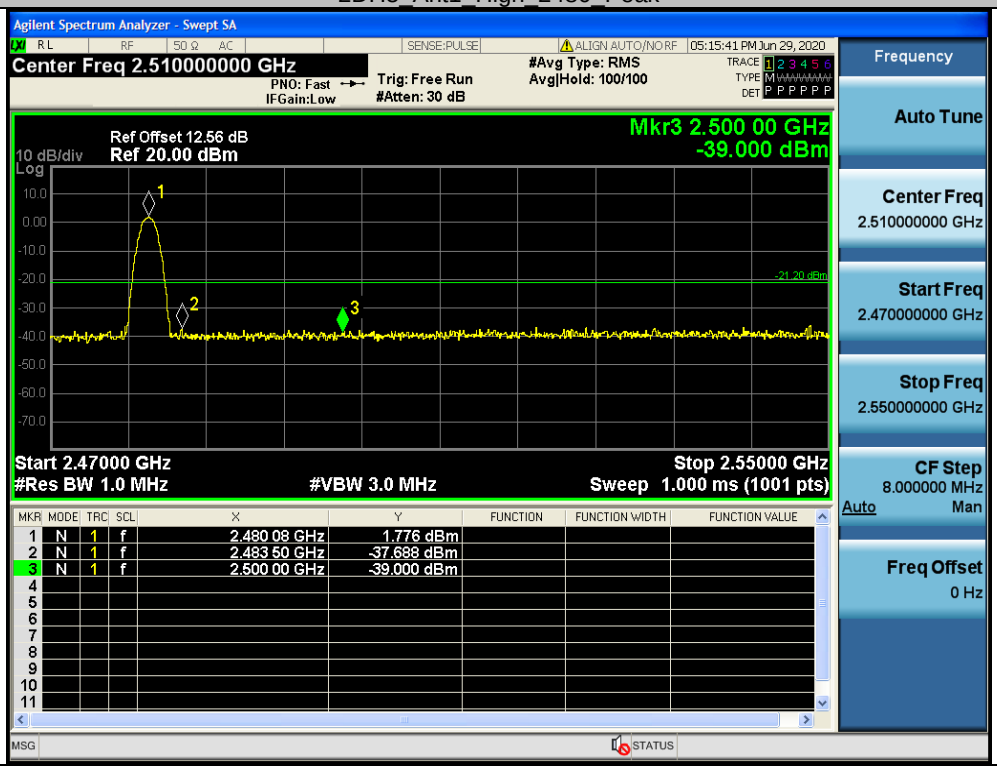

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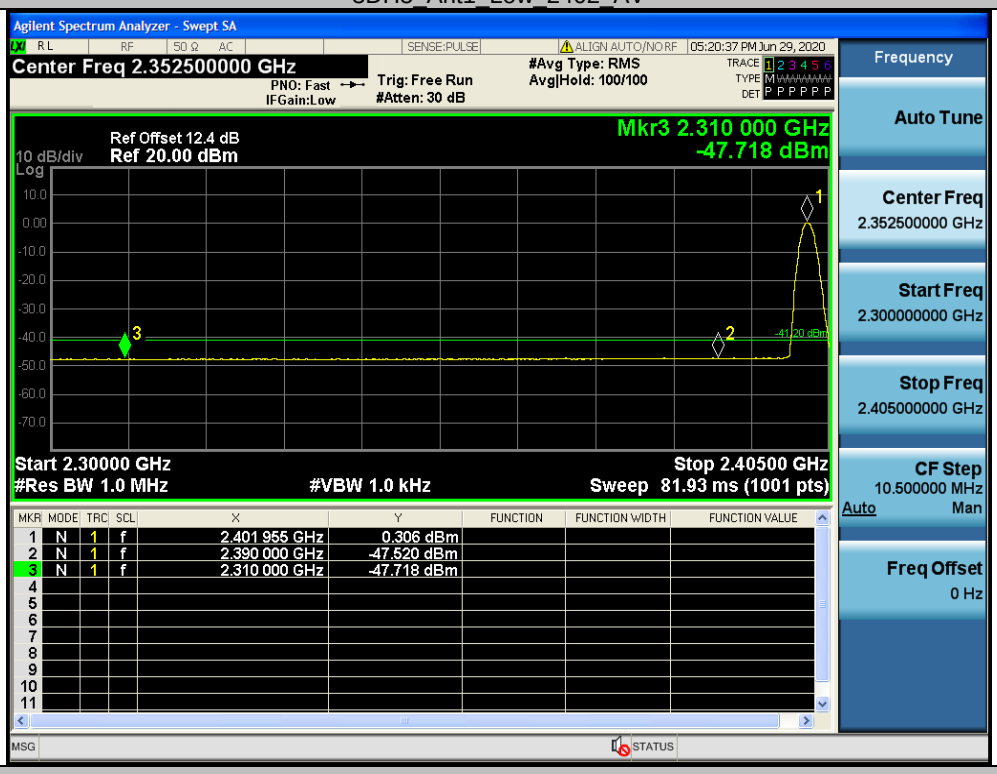

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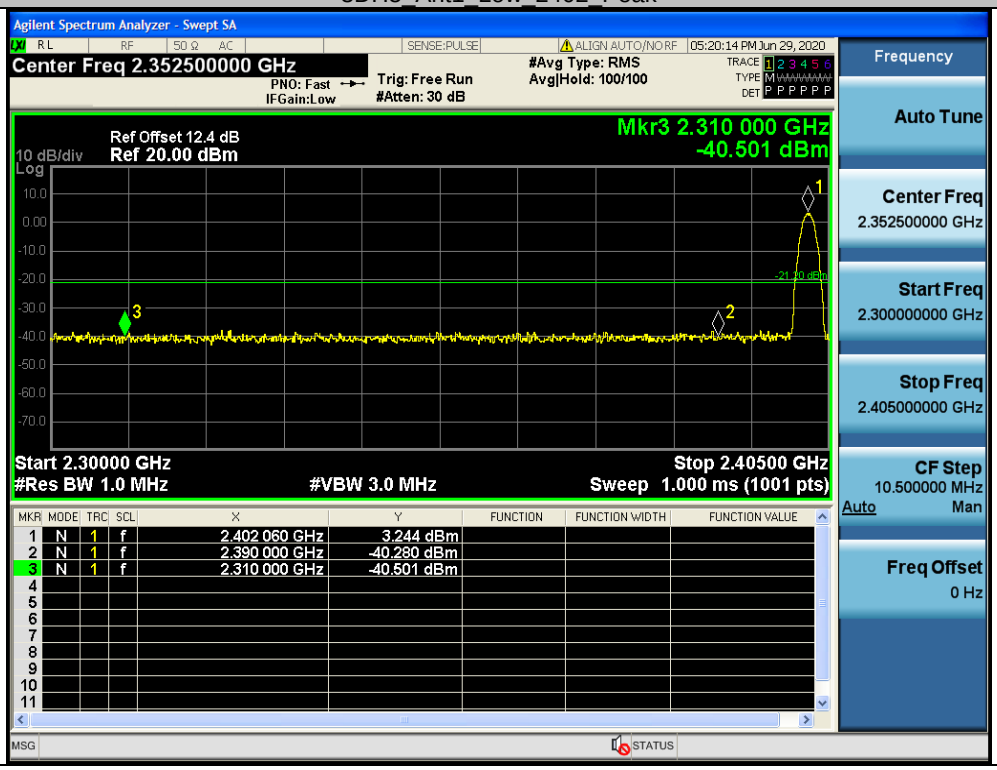

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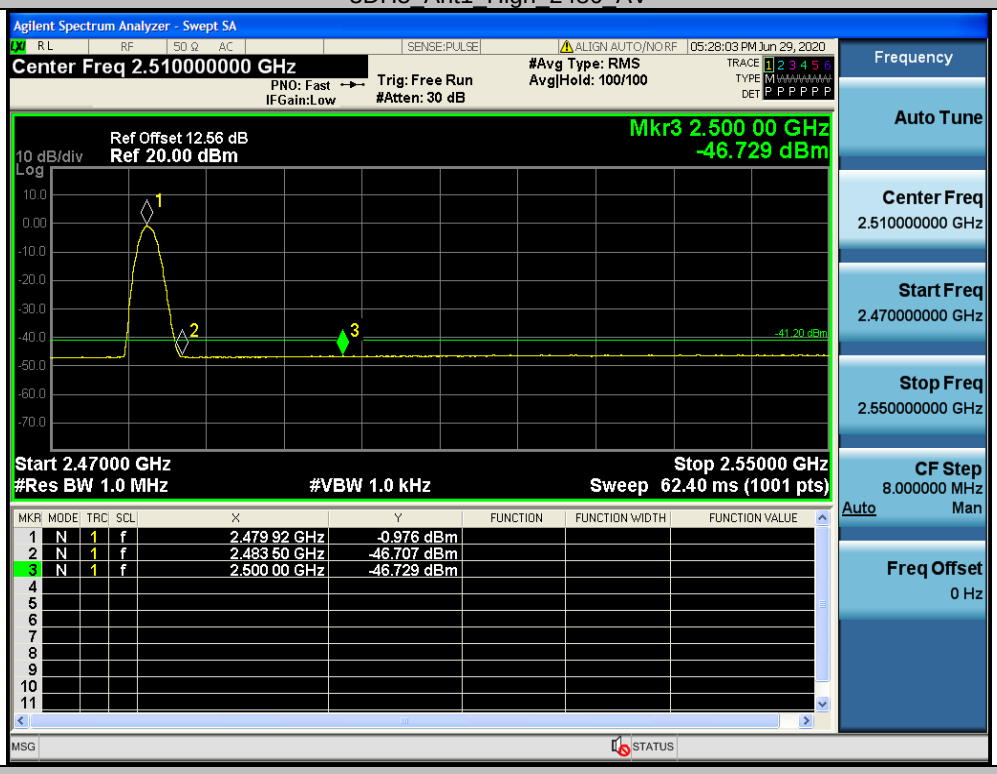
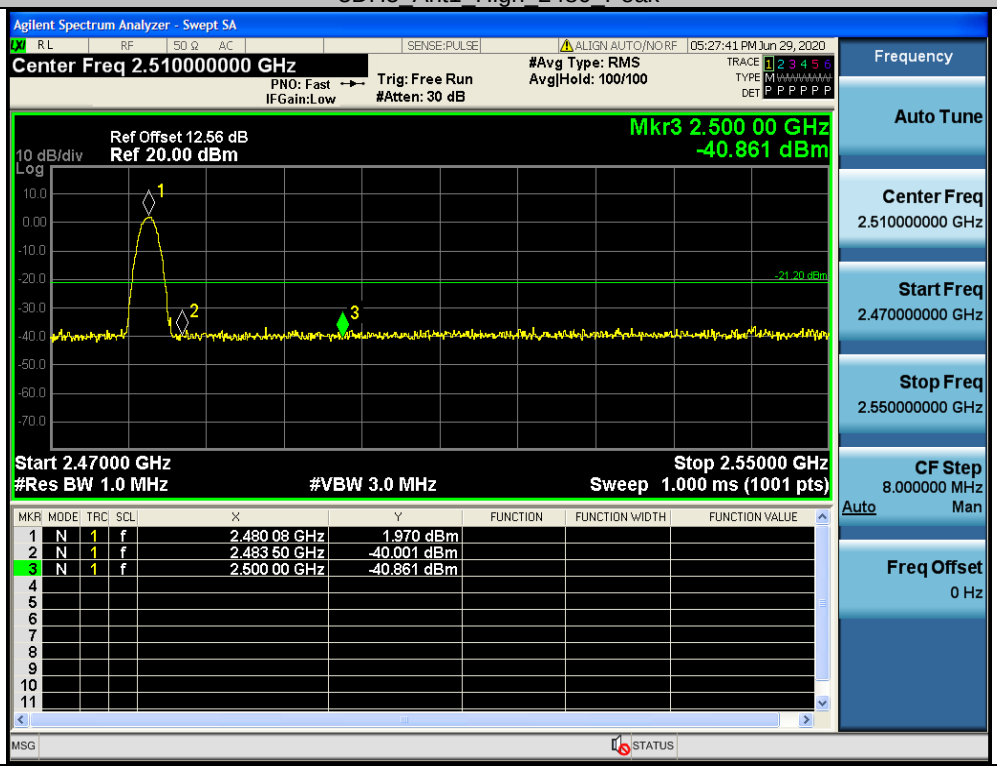
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