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

Product Name: Bluetooth wireless speaker

Trade Mark: SOUND, BABIEZ, ZOMPERS, KURYAKYN, SIDEKIX, OPTIMA. FALKEN, PURE-HYPR AUDIO

Test Model: SS100

FCC ID: 2AZ4N-SS100

Environmental Conditions

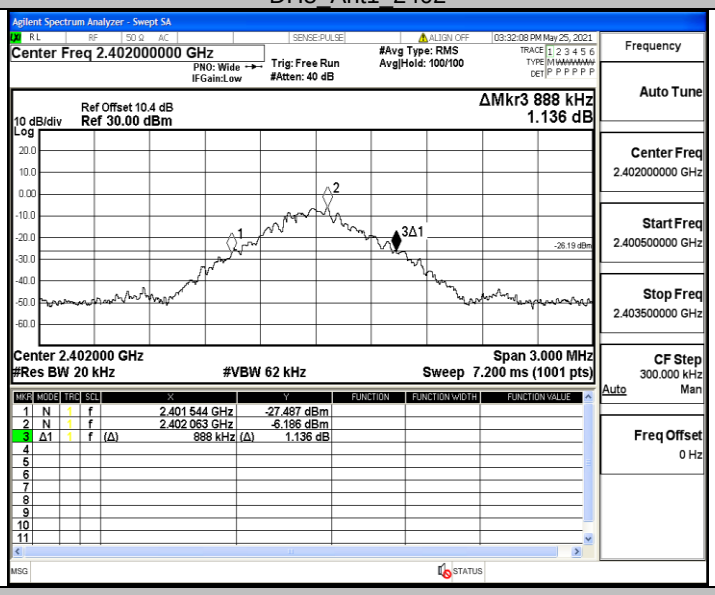
Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Nancy Li
Supervised by:	Hugo Chen

A.1 20 dB Bandwidth

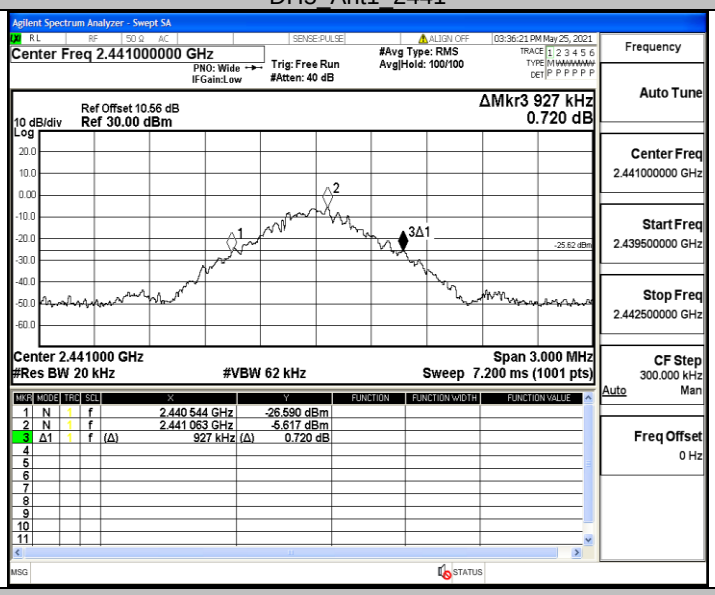
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.888	2401.544	2402.432	---	PASS
		2441	0.927	2440.544	2441.471	---	PASS
		2480	0.888	2479.550	2480.438	---	PASS
2DH5	Ant1	2402	1.320	2401.343	2402.663	---	PASS
		2441	1.317	2440.346	2441.663	---	PASS
		2480	1.314	2479.346	2480.660	---	PASS
3DH5	Ant1	2402	1.191	2401.415	2402.606	---	PASS
		2441	1.233	2440.373	2441.606	---	PASS
		2480	1.227	2479.379	2480.606	---	PASS

Test Graph

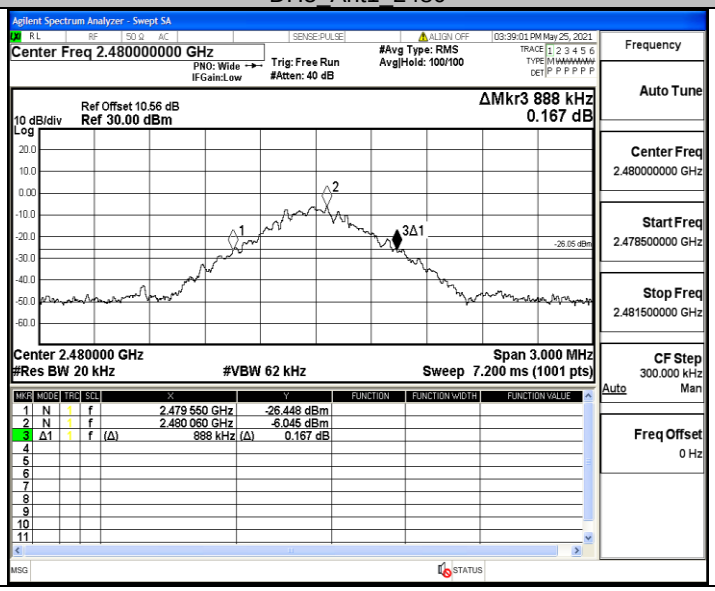
DH5_Ant1_2402



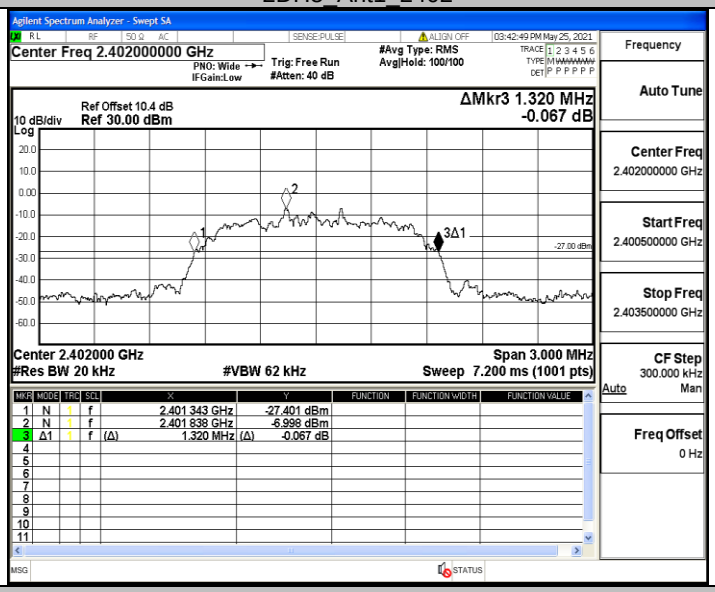
DH5_Ant1_2441



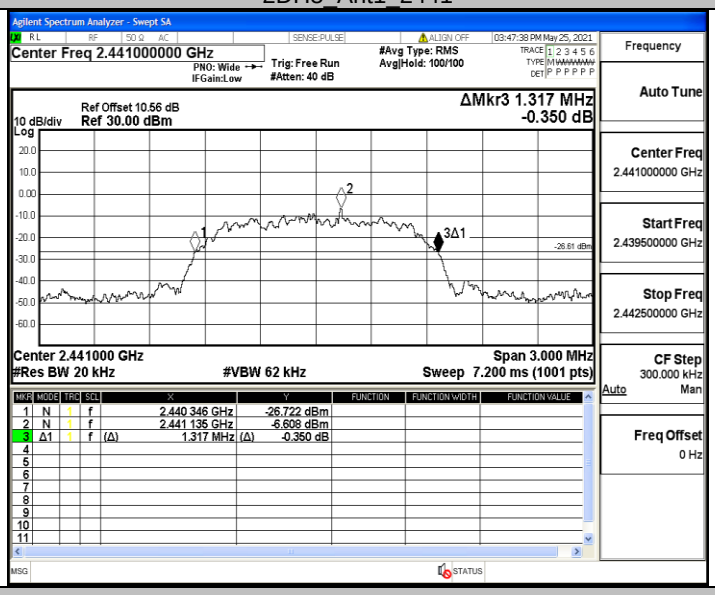
DH5_Ant1_2480



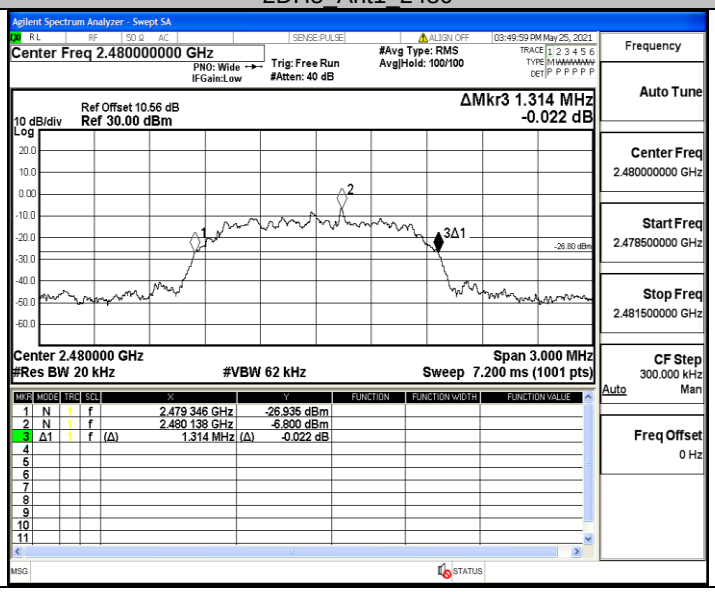
2DH5_Ant1_2402



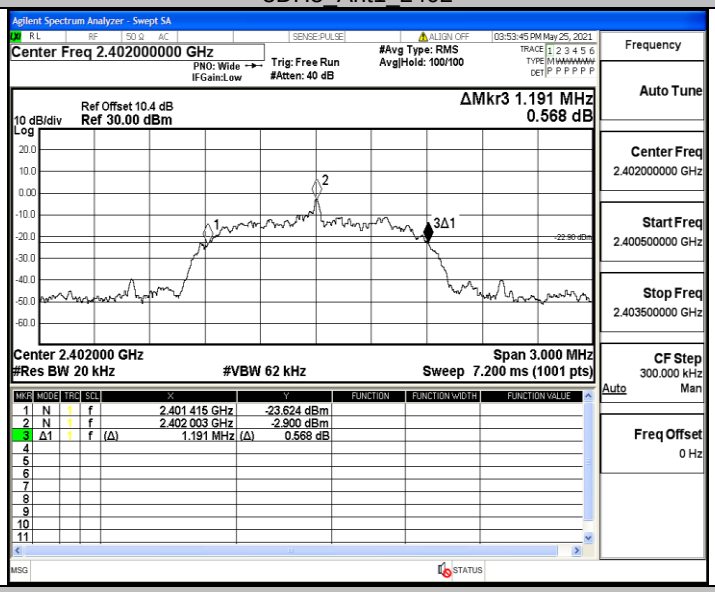
2DH5_Ant1_2441



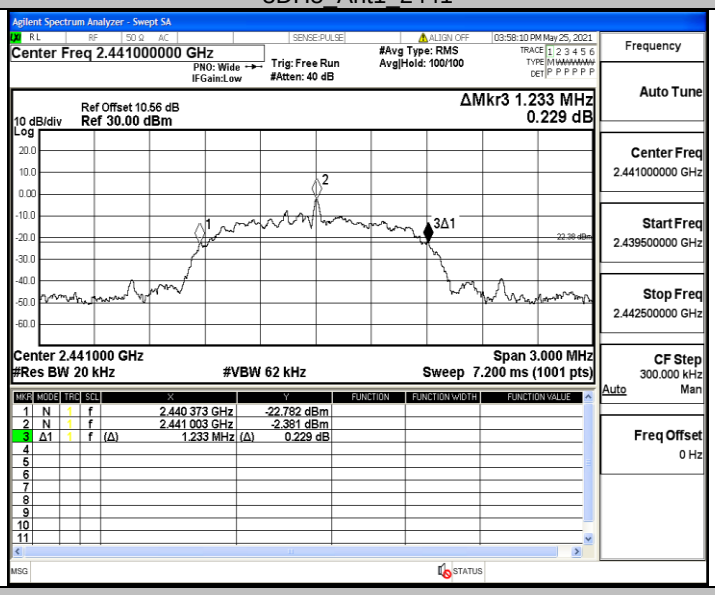
2DH5_Ant1_2480



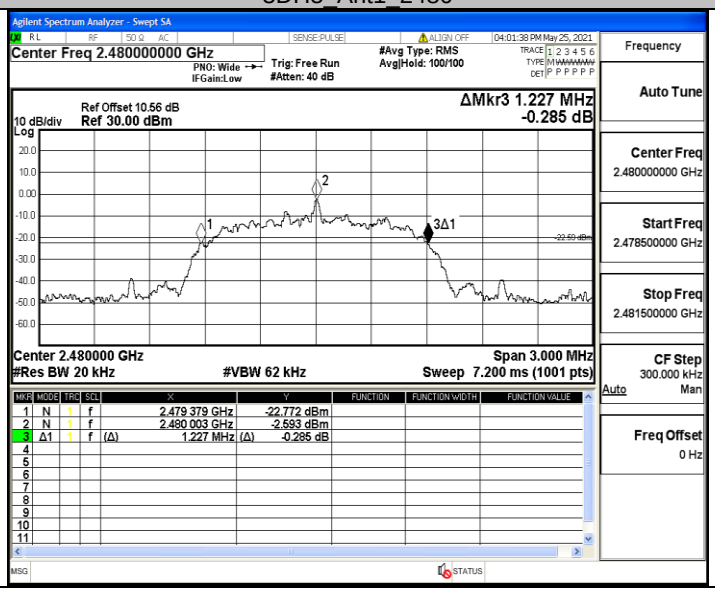
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

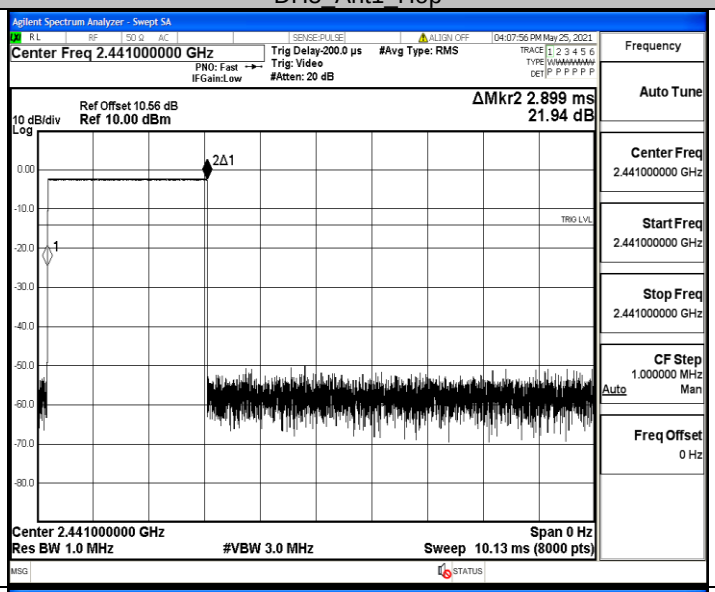


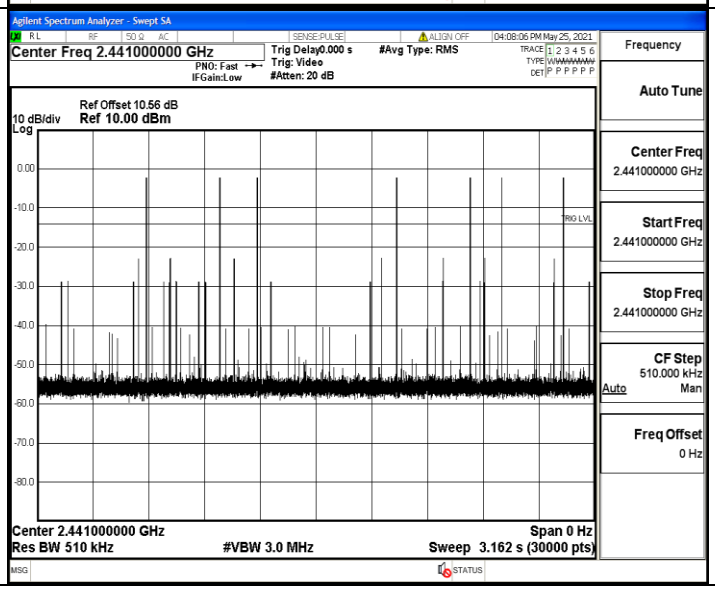
A.2 Dwell Time

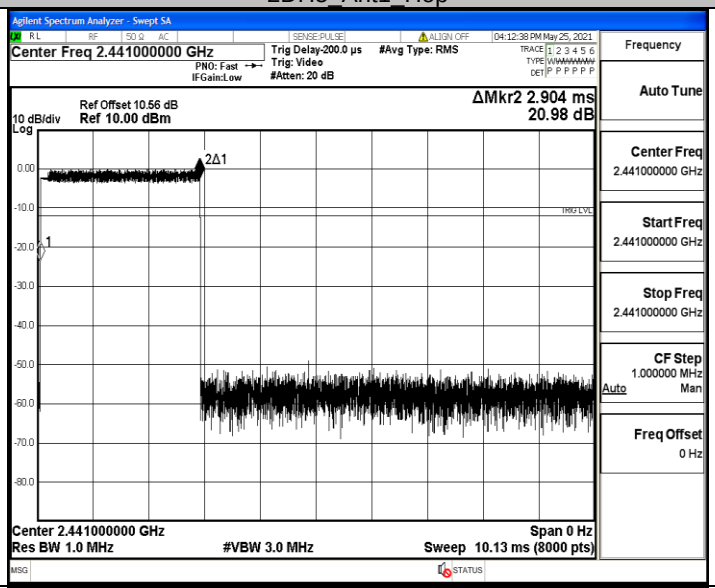
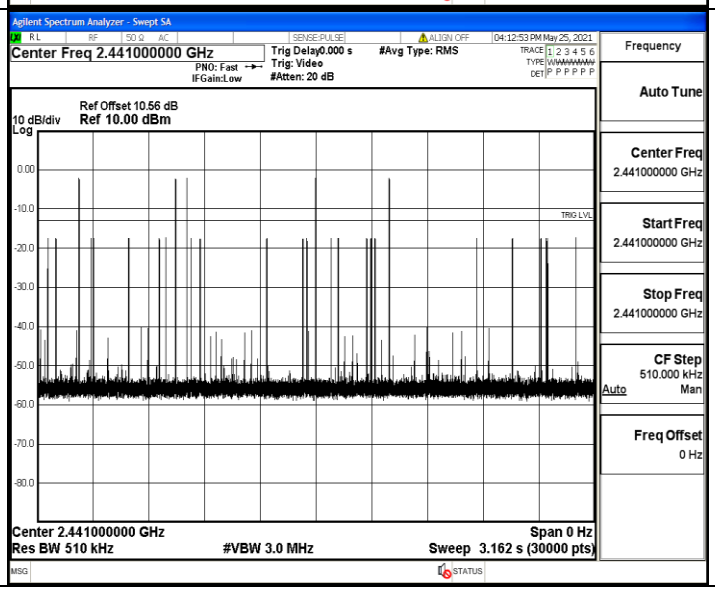
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.90	80	0.232	<=0.4	PASS
2DH5	Ant1	Hop	2.90	60	0.174	<=0.4	PASS
3DH5	Ant1	Hop	2.91	80	0.233	<=0.4	PASS

Test Graph

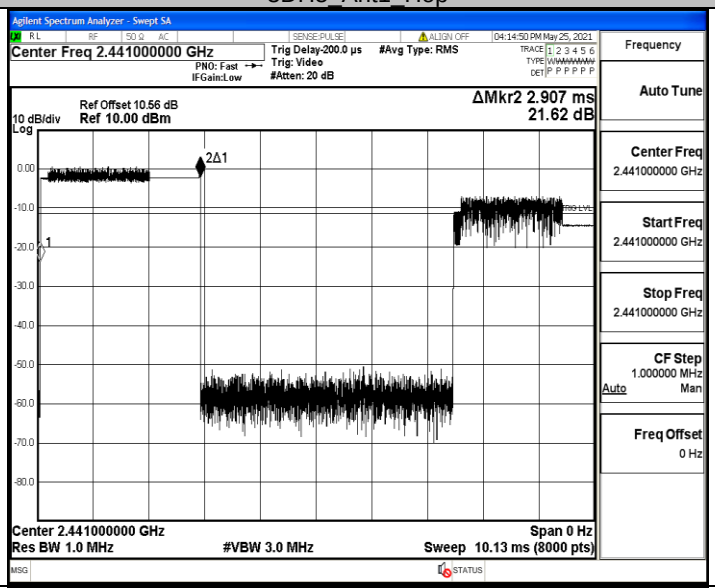
DH5_Ant1_Hop

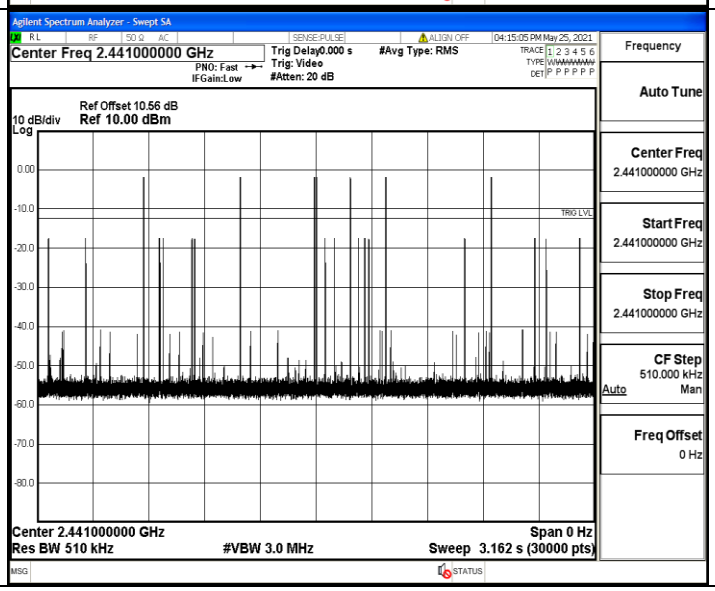




2DH5_Ant1_Hop



3DH5_Ant1_Hop



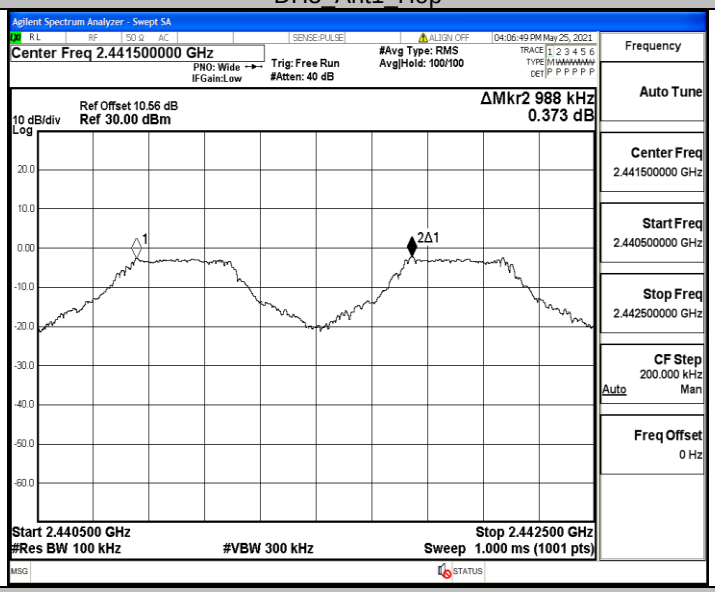


A.3 Carrier Frequency Separation

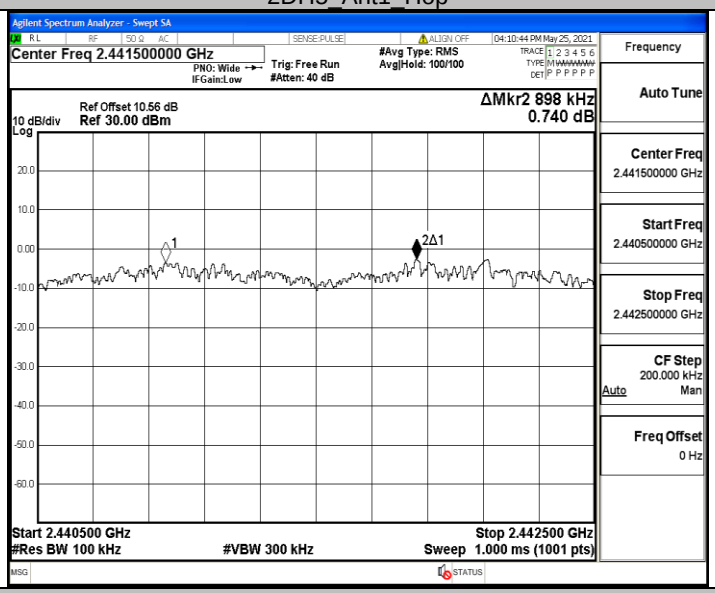
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.988	>=0.927	PASS
2DH5	Ant1	Hop	0.898	>=0.880	PASS
3DH5	Ant1	Hop	0.998	>=0.822	PASS

Test Graph

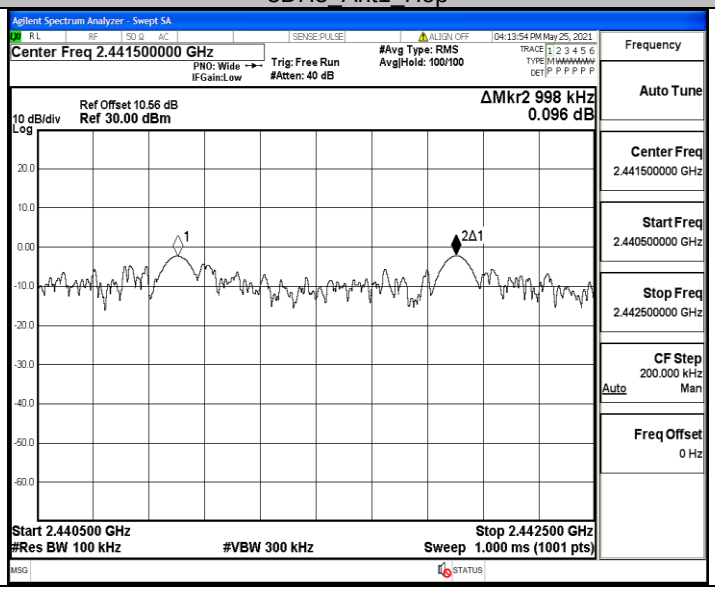
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

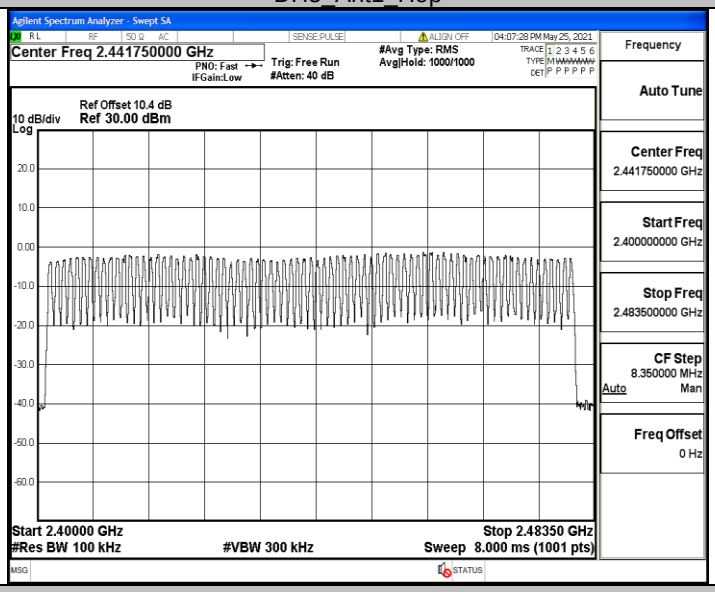


A.4 Hopping Channel Number

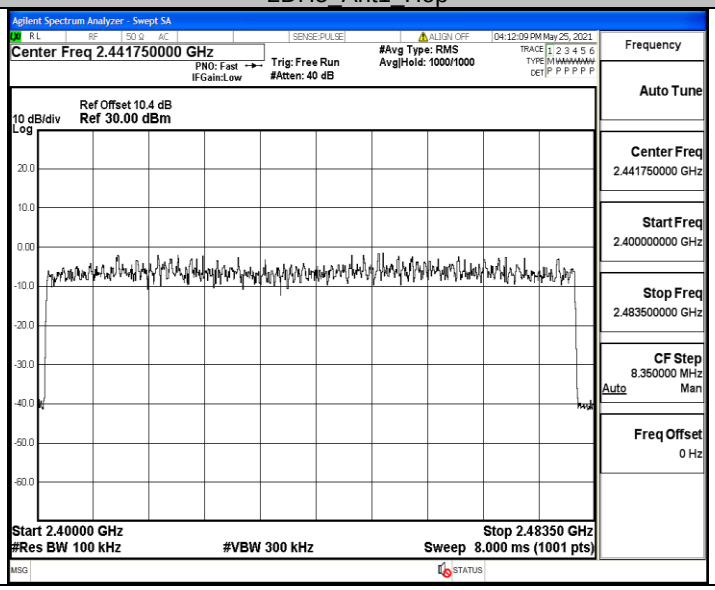
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	>=15	PASS
2DH5	Ant1	Hop	79	>=15	PASS
3DH5	Ant1	Hop	79	>=15	PASS

Test Graph

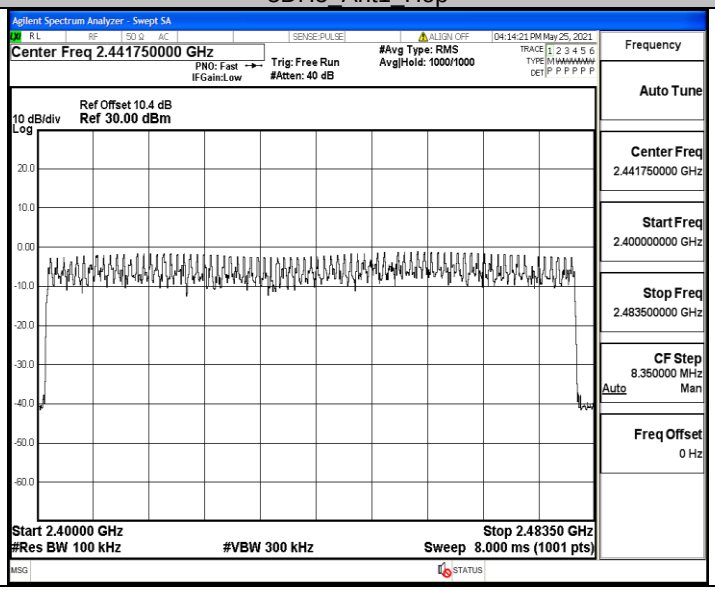
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

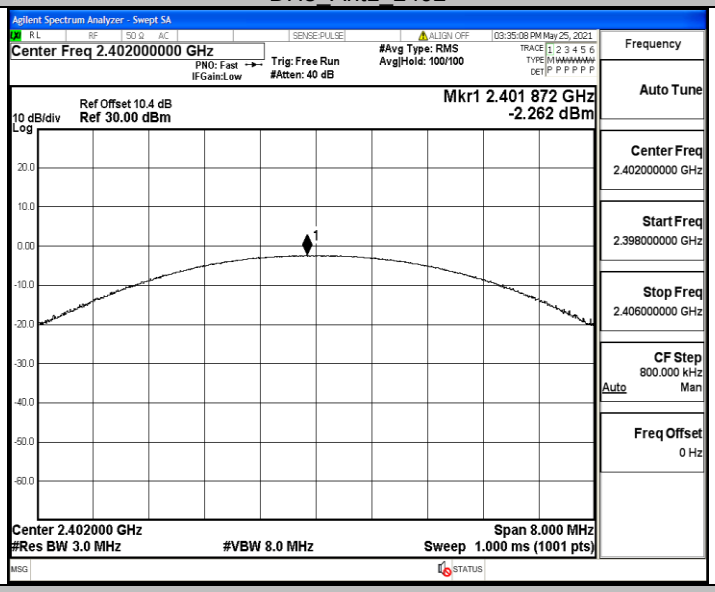


A.5 Conducted Peak Output Power

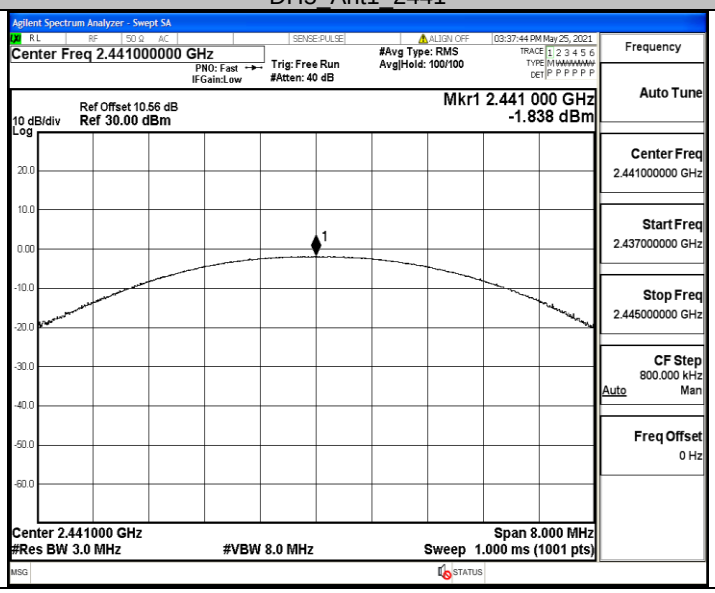
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-2.26	<=20.97	PASS
		2441	-1.84	<=20.97	PASS
		2480	-2.01	<=20.97	PASS
2DH5	Ant1	2402	0.1	<=20.97	PASS
		2441	0.52	<=20.97	PASS
		2480	0.24	<=20.97	PASS
3DH5	Ant1	2402	0.62	<=20.97	PASS
		2441	1.25	<=20.97	PASS
		2480	0.85	<=20.97	PASS

Test Graph

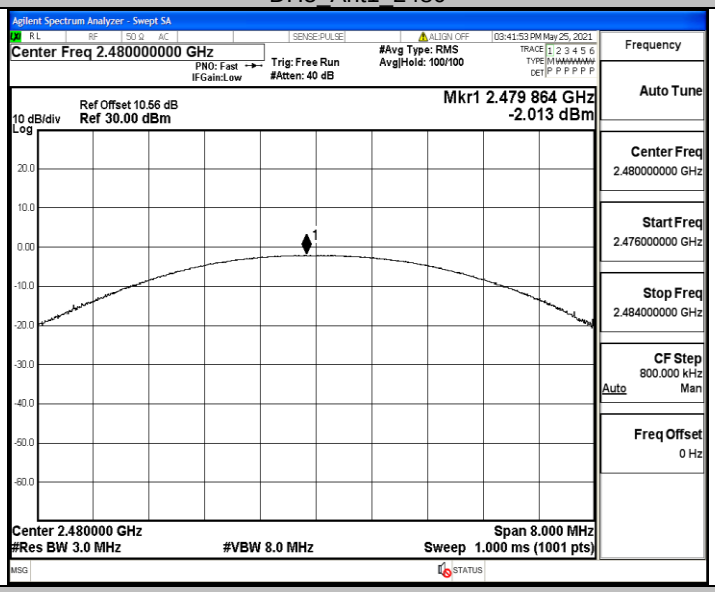
DH5_Ant1_2402



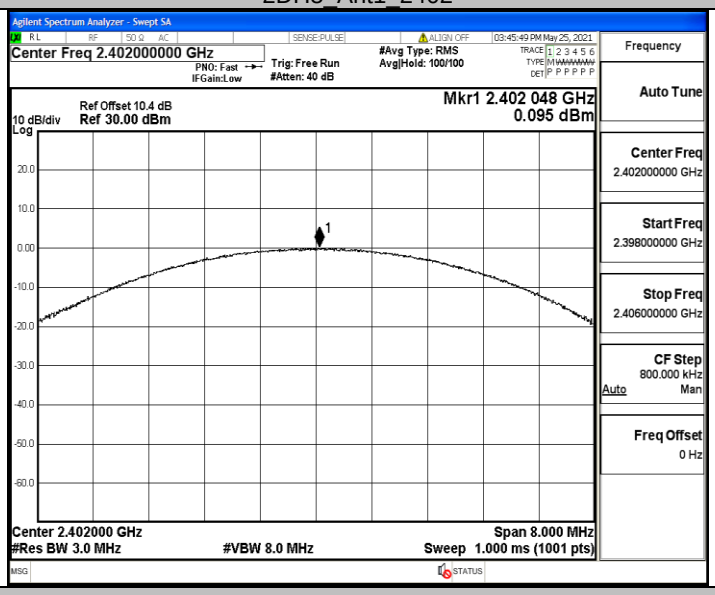
DH5_Ant1_2441



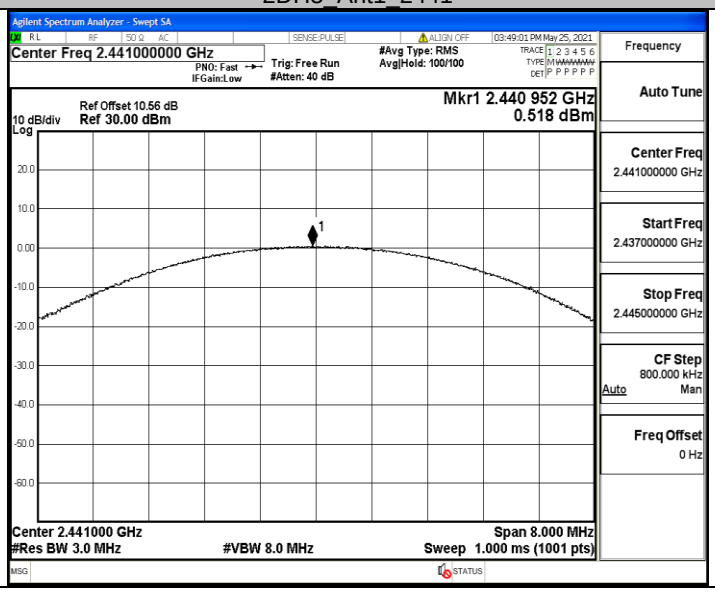
DH5_Ant1_2480



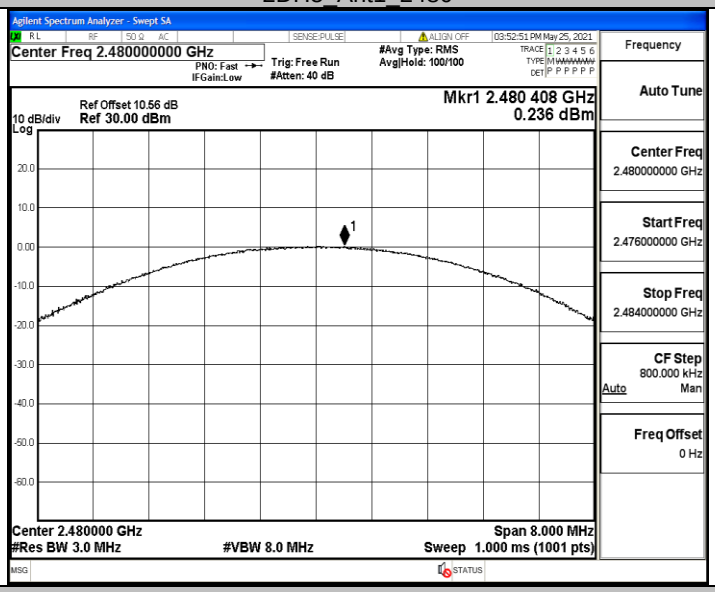
2DH5_Ant1_2402



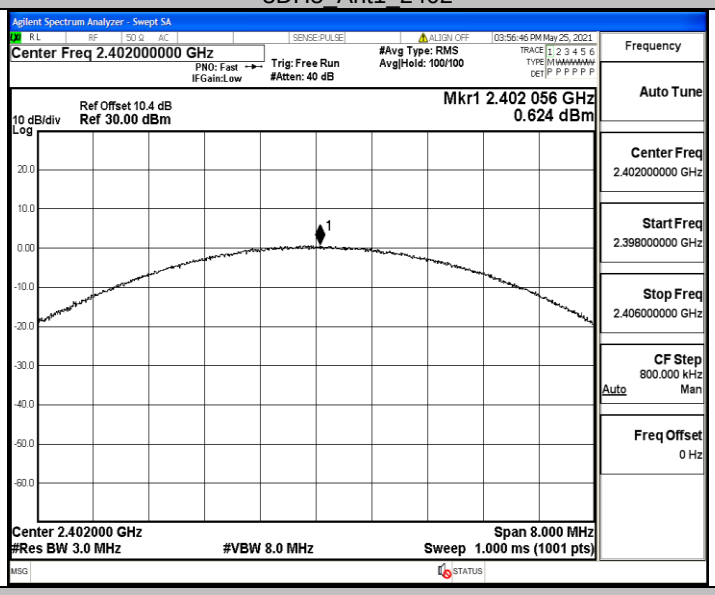
2DH5_Ant1_2441



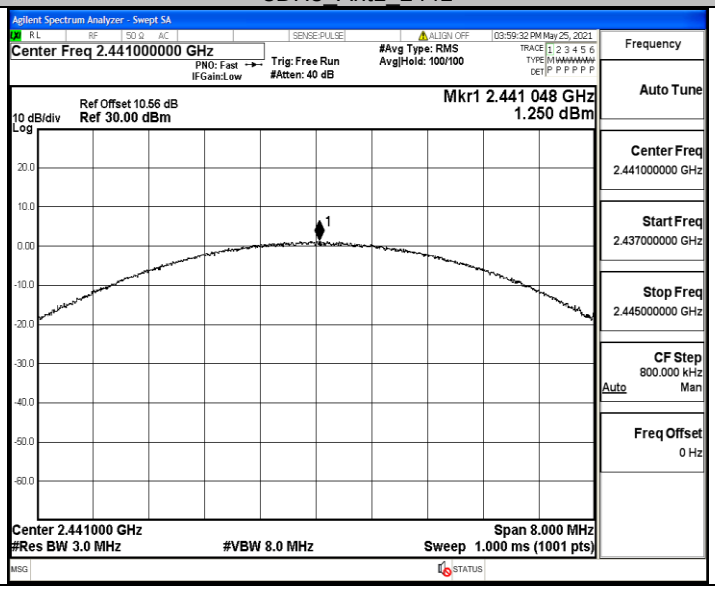
2DH5_Ant1_2480



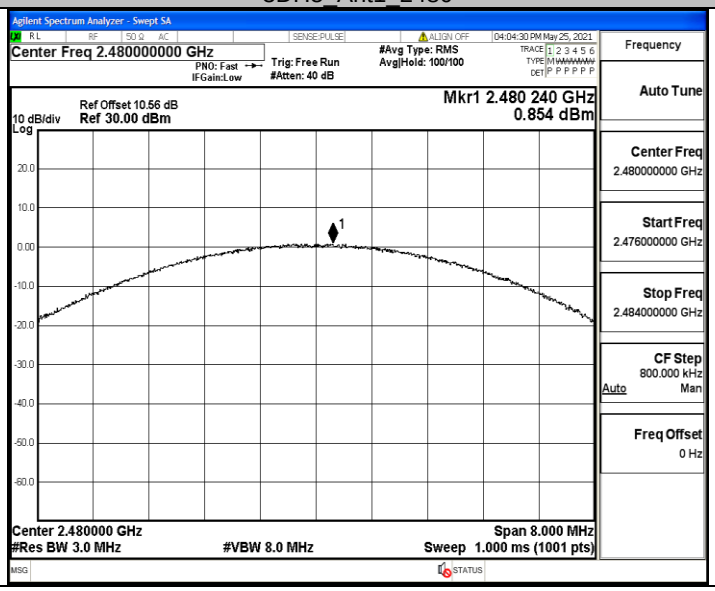
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

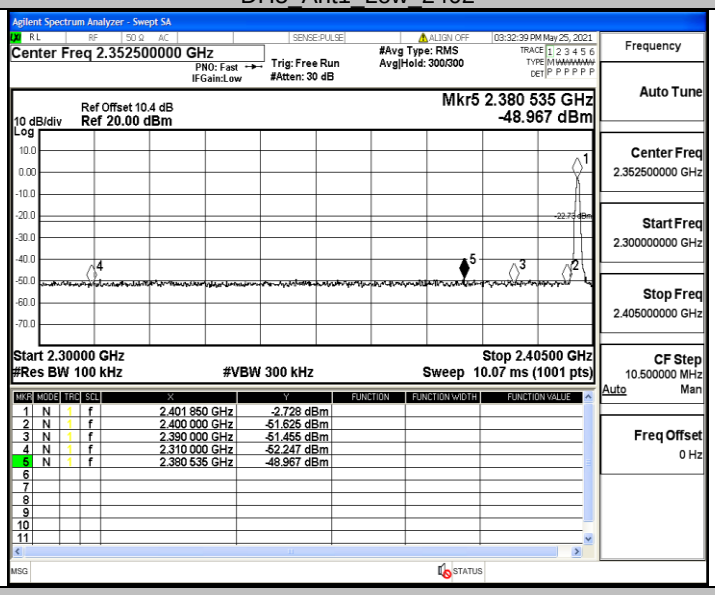


A.6 Band-edge for RF Conducted Emissions

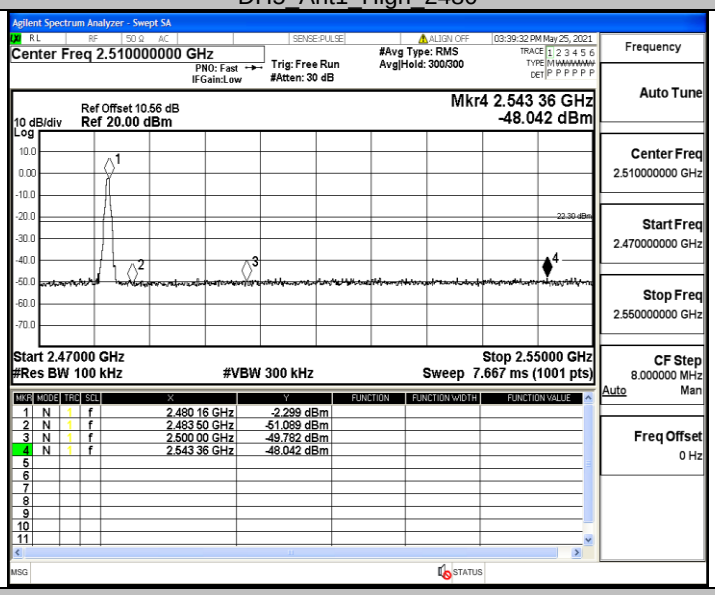
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-2.73	-48.97	<=-22.73	PASS
		High	2480	-2.30	-48.04	<=-22.3	PASS
		Low	Hop_2402	-3.32	-49.26	<=-23.32	PASS
		High	Hop_2480	-2.40	-47.39	<=-22.4	PASS
2DH5	Ant1	Low	2402	-2.65	-48.91	<=-22.65	PASS
		High	2480	-2.27	-47.33	<=-22.27	PASS
		Low	Hop_2402	-6.06	-48.73	<=-26.06	PASS
		High	Hop_2480	-1.84	-47.16	<=-21.84	PASS
3DH5	Ant1	Low	2402	-2.60	-48.78	<=-22.6	PASS
		High	2480	-2.23	-47.3	<=-22.23	PASS
		Low	Hop_2402	-2.57	-48.93	<=-22.57	PASS
		High	Hop_2480	-1.60	-47.94	<=-21.6	PASS

Test Graph

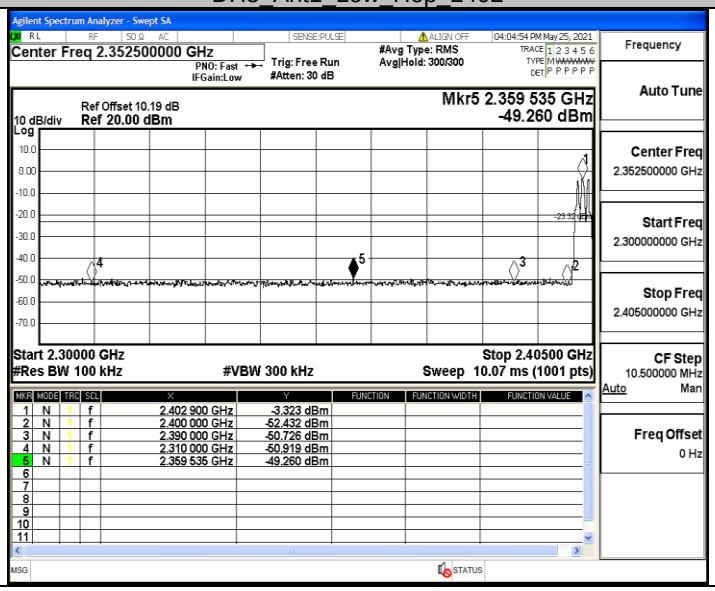
DH5_Ant1_Low_2402



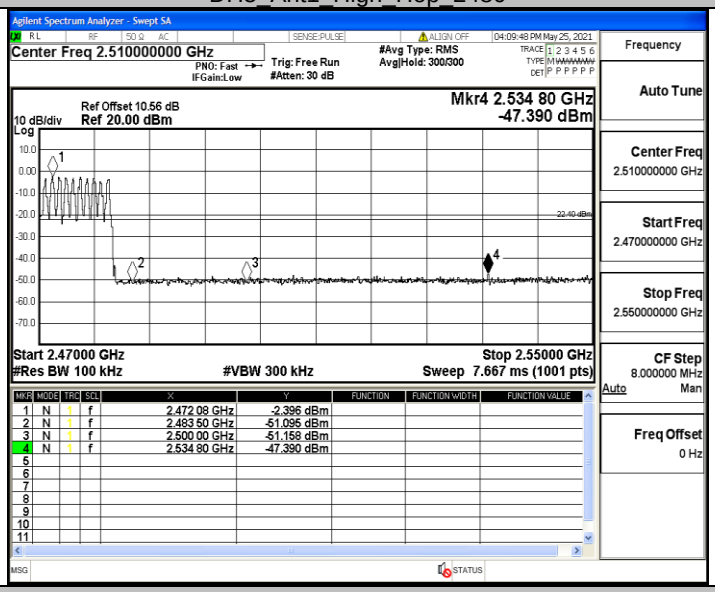
DH5_Ant1_High_2480



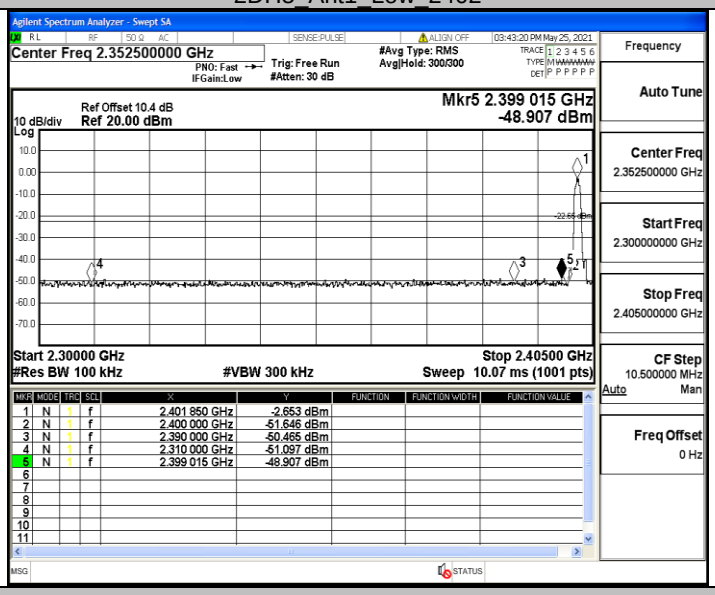
DH5_Ant1_Low_Hop_2402



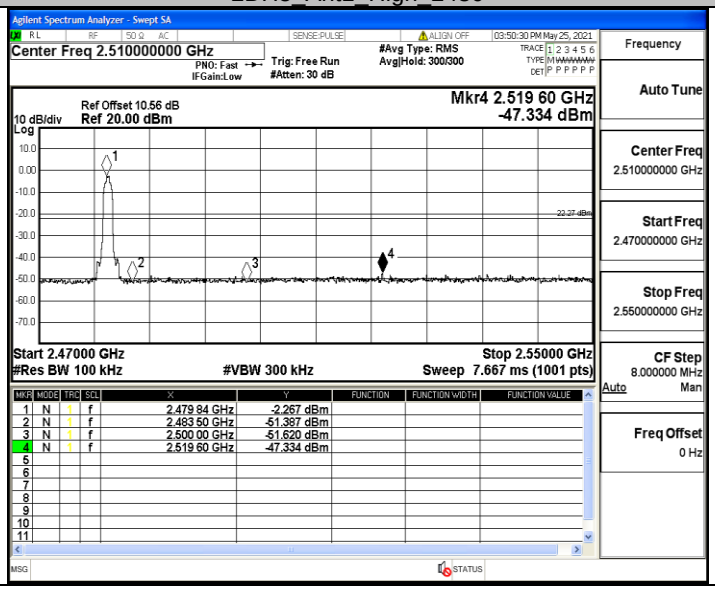
DH5_Ant1_High_Hop_2480



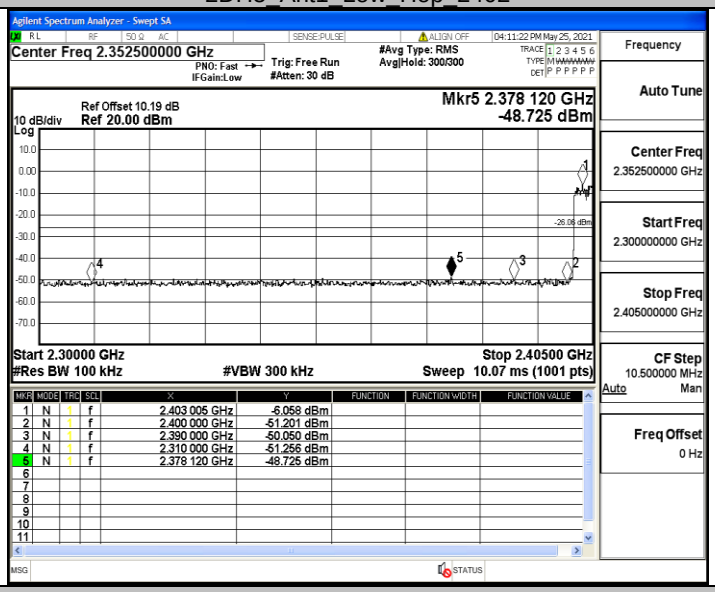
2DH5_Ant1_Low_2402



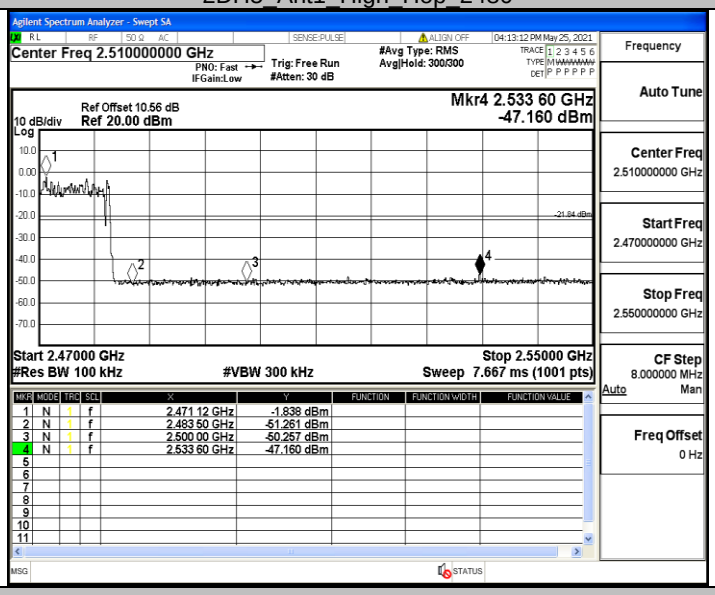
2DH5_Ant1_High_2480



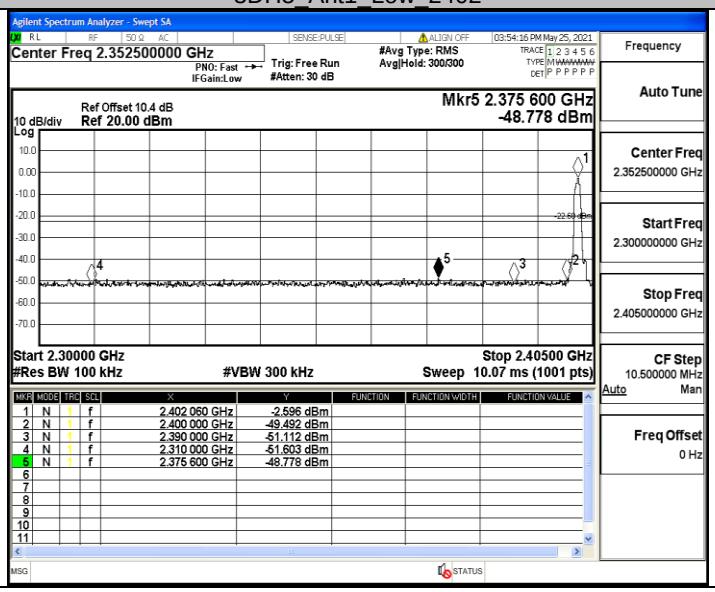
2DH5_Ant1_Low_Hop_2402



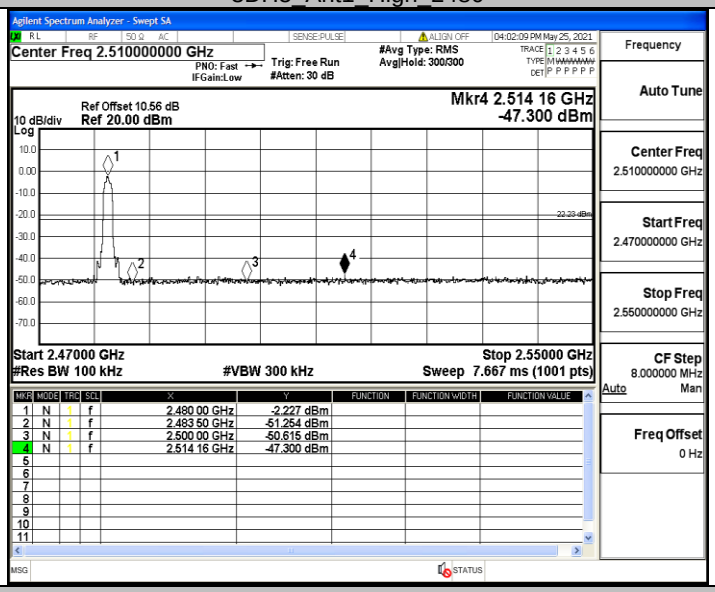
2DH5_Ant1_High_Hop_2480



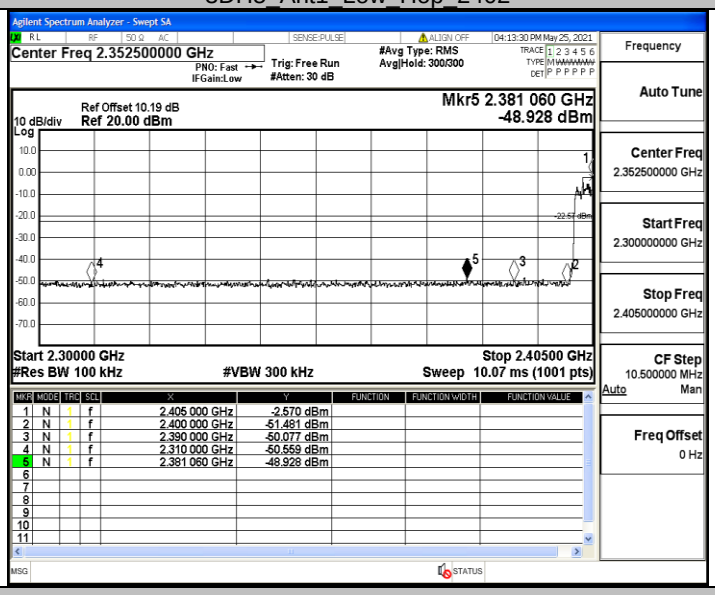
3DH5_Ant1_Low_2402



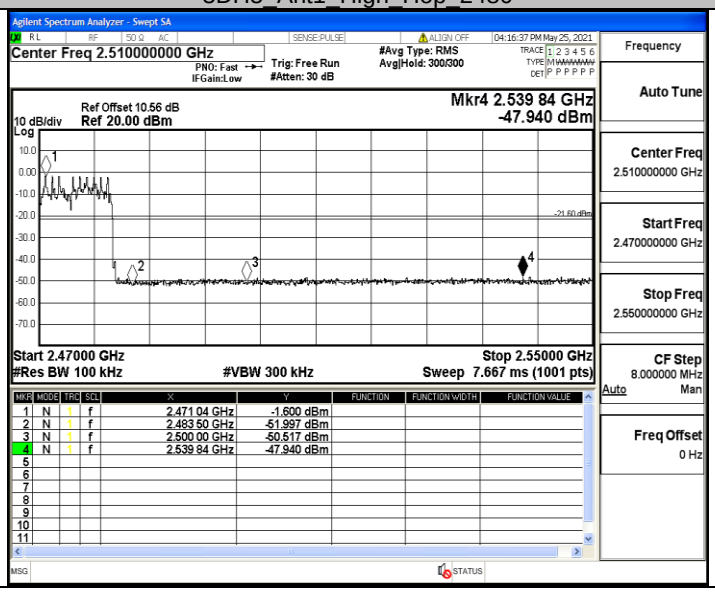
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



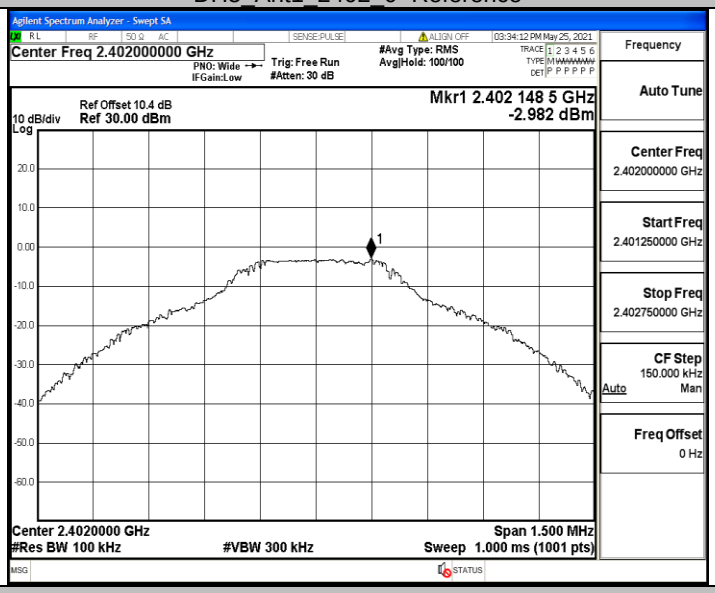
3DH5_Ant1_High_Hop_2480



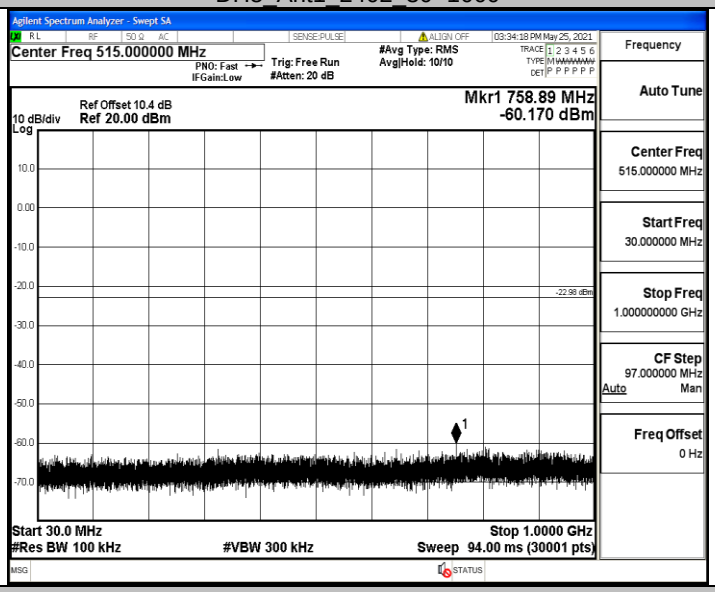
A.7 RF Conducted Spurious Emissions

Test Graph

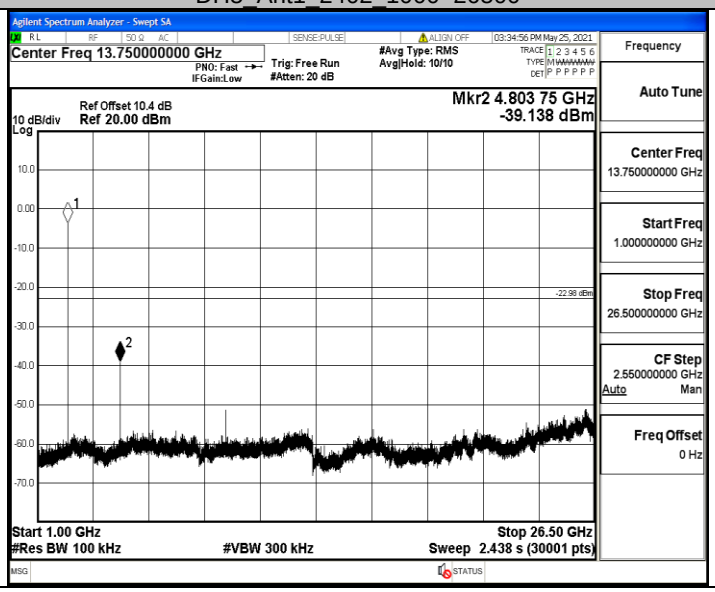
DH5_Ant1_2402_0~Reference



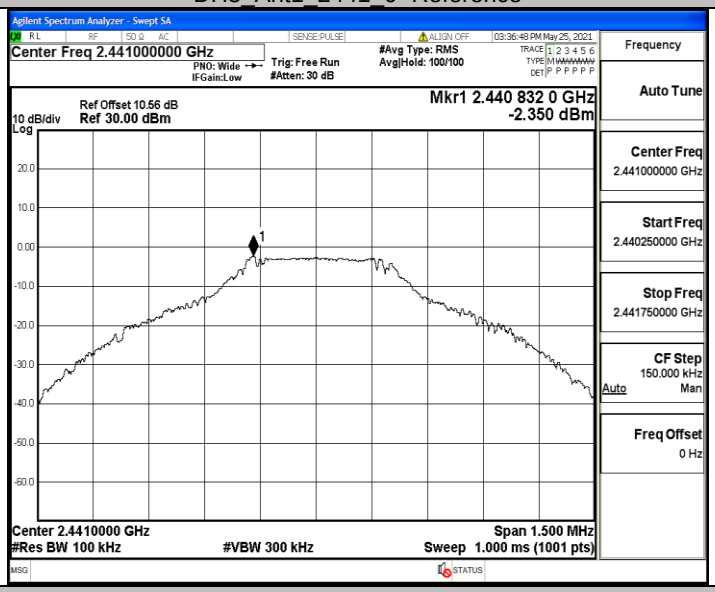
DH5_Ant1_2402_30~1000



DH5_Ant1_2402_1000~26500



DH5_Ant1_2441_0~Reference



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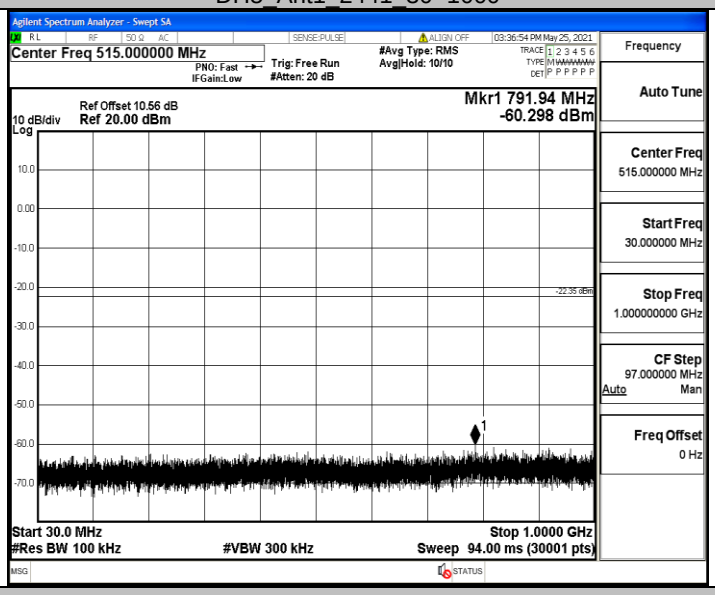

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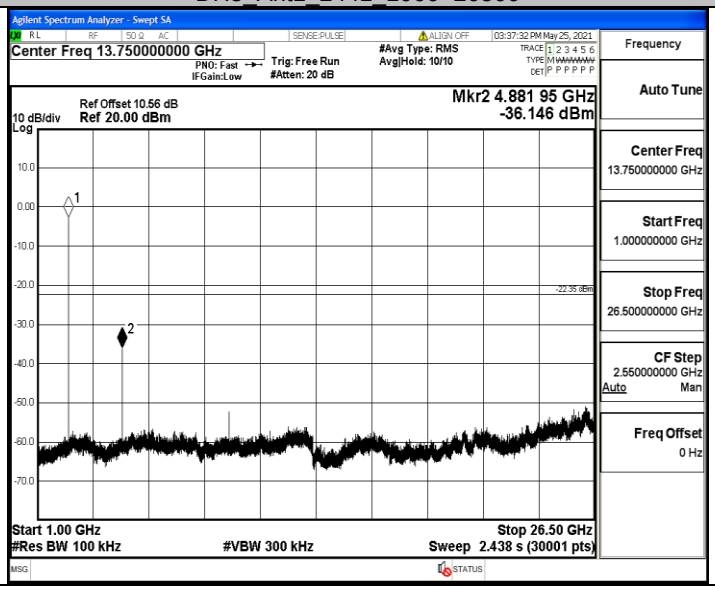

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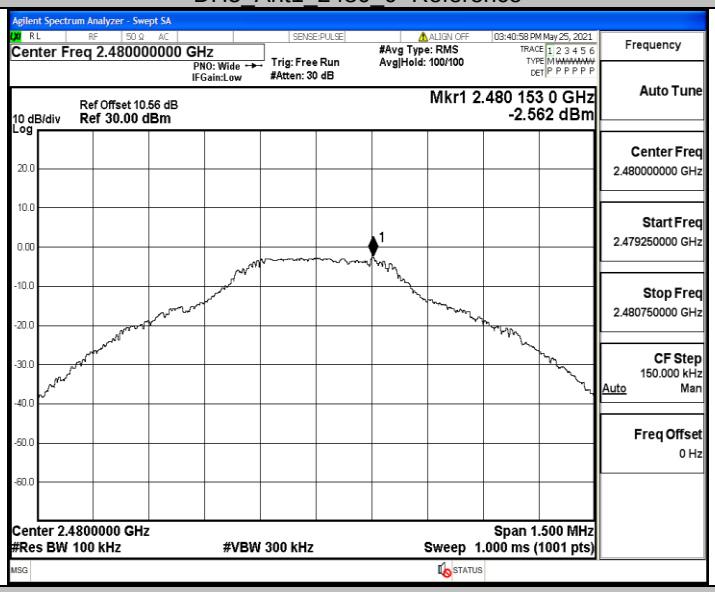

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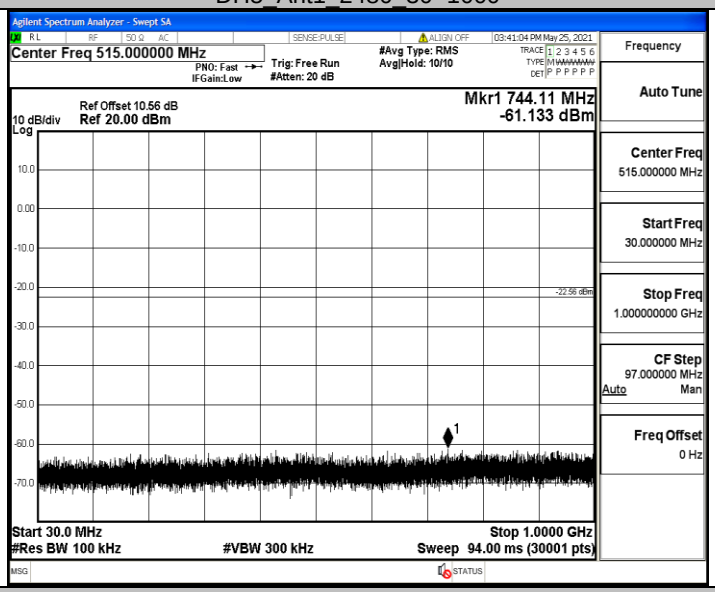

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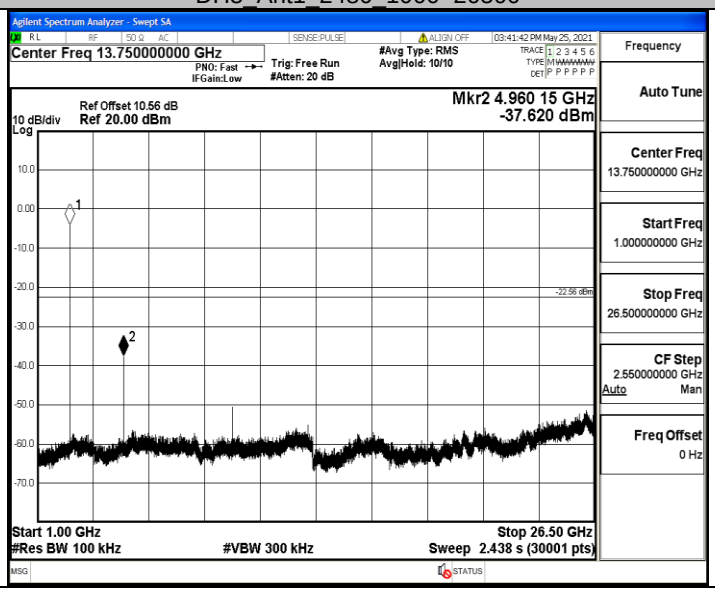

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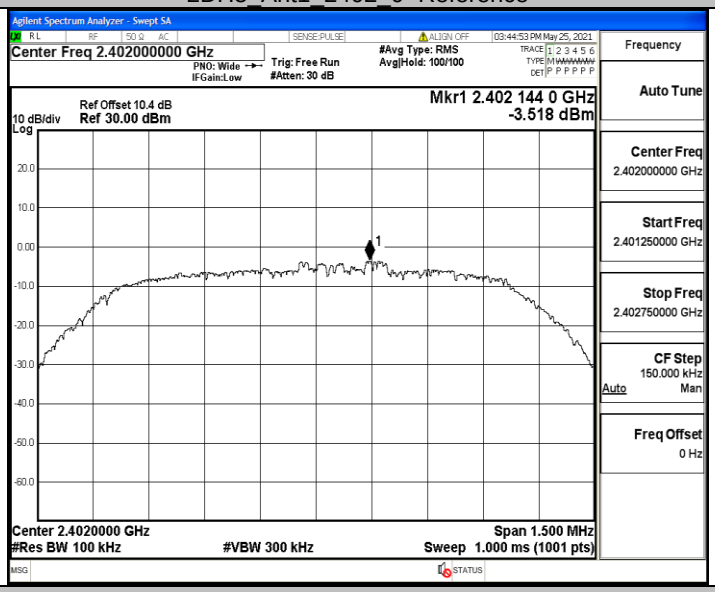

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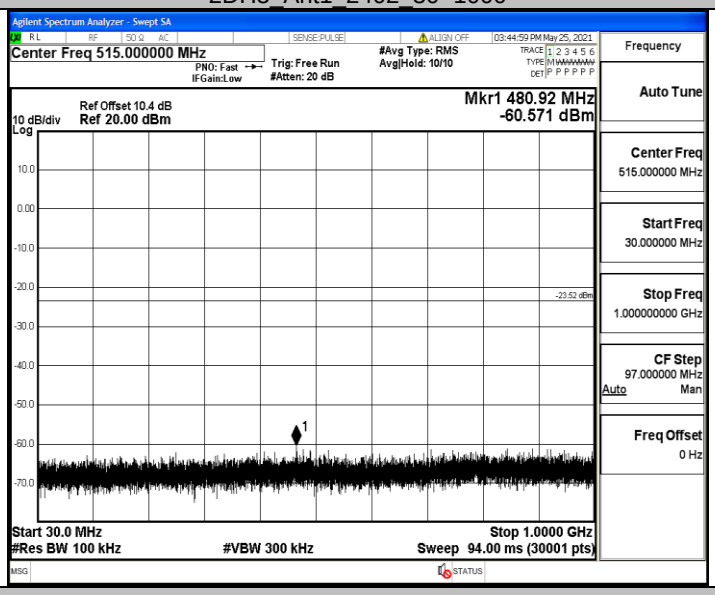

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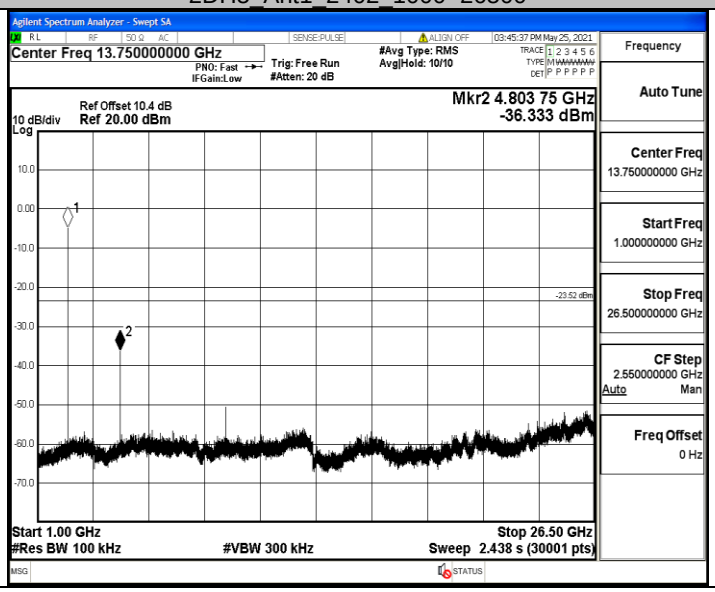

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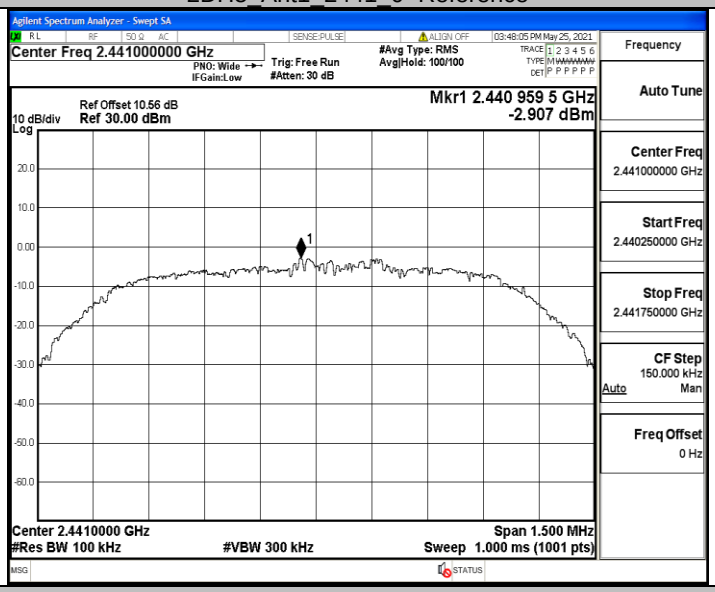

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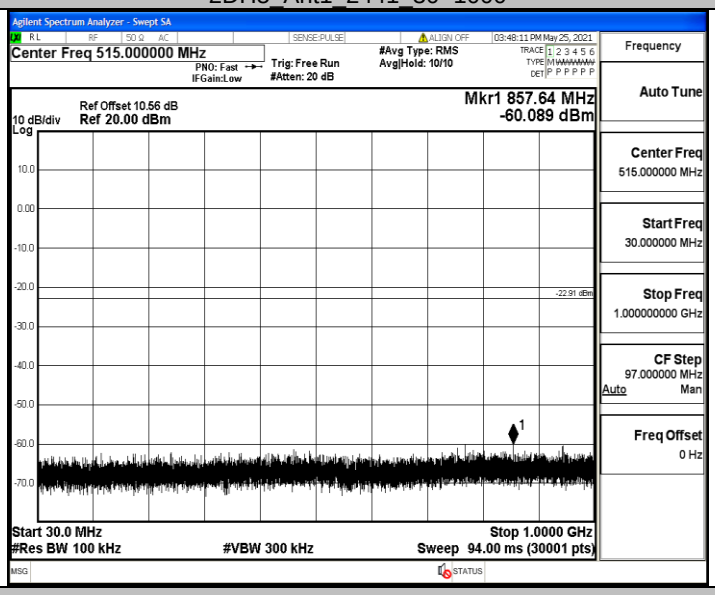

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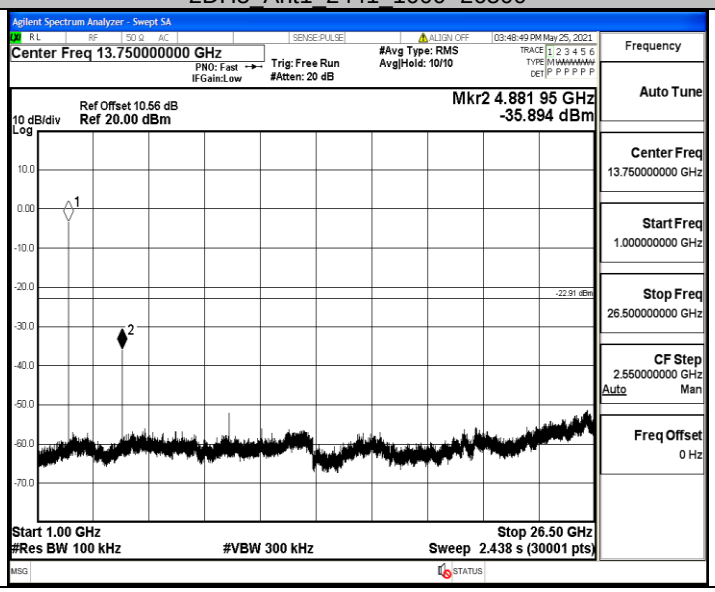

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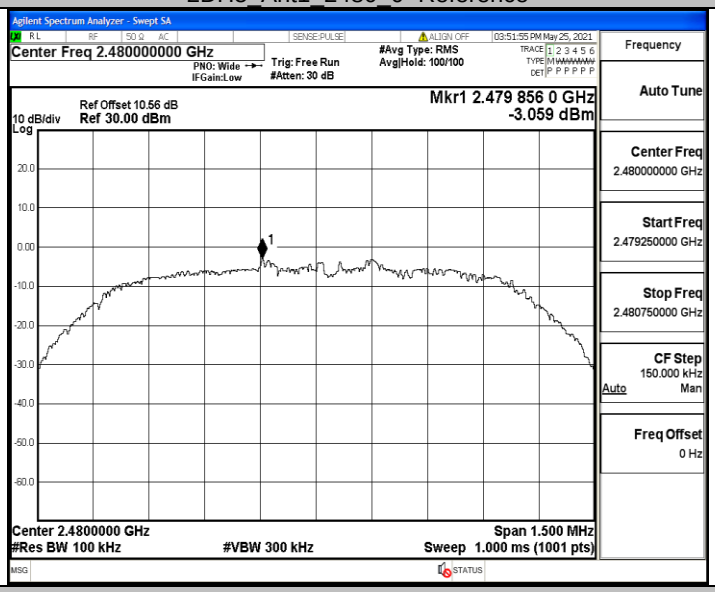

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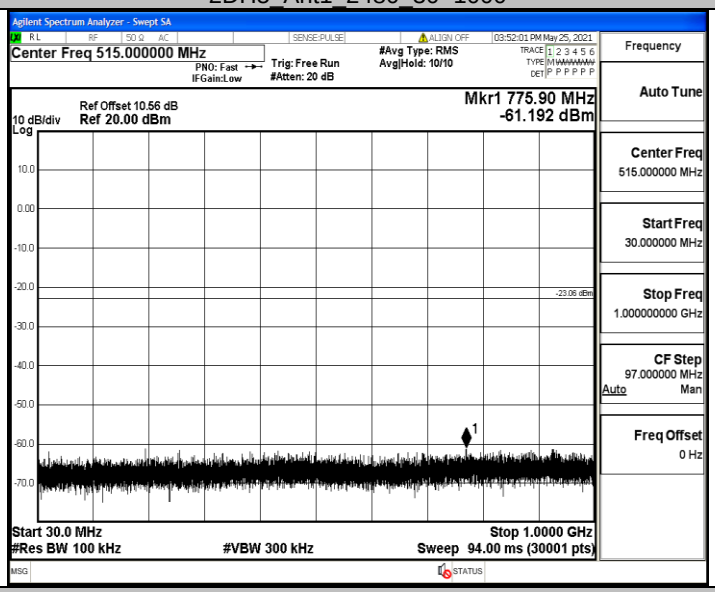

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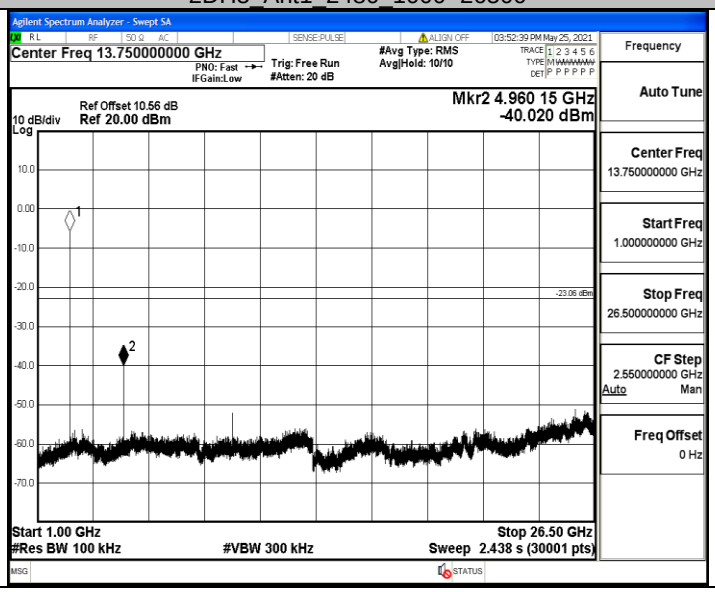

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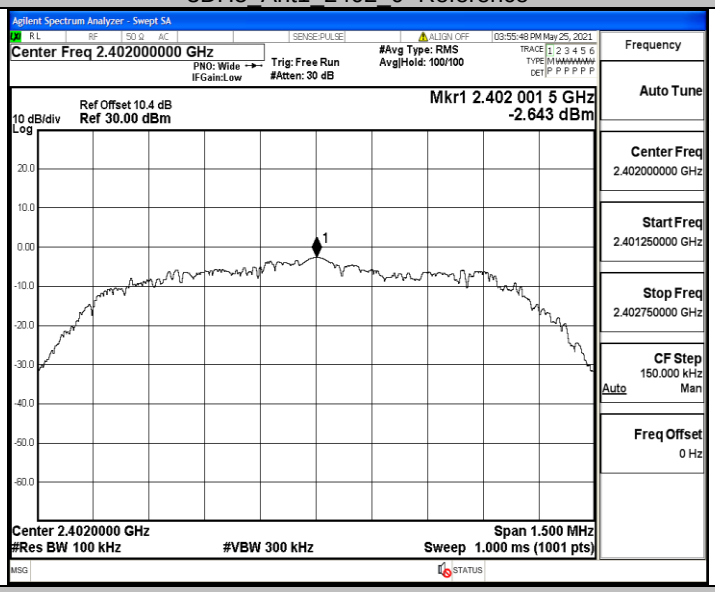

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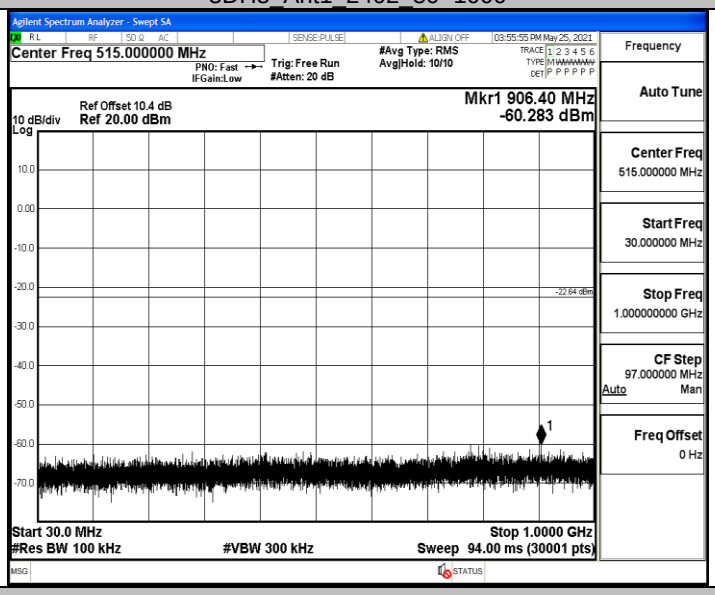

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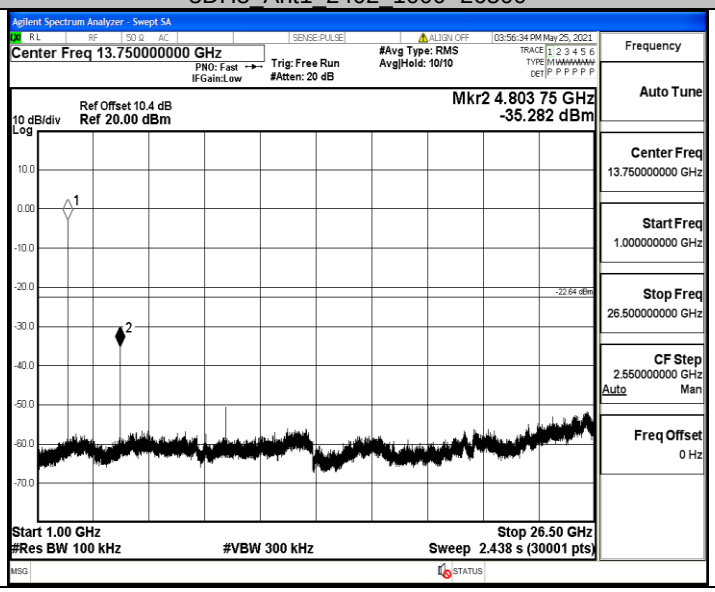

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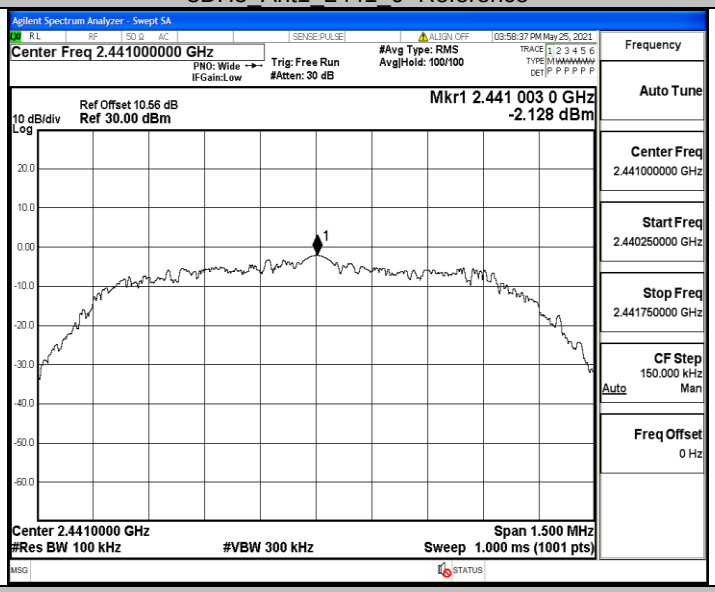

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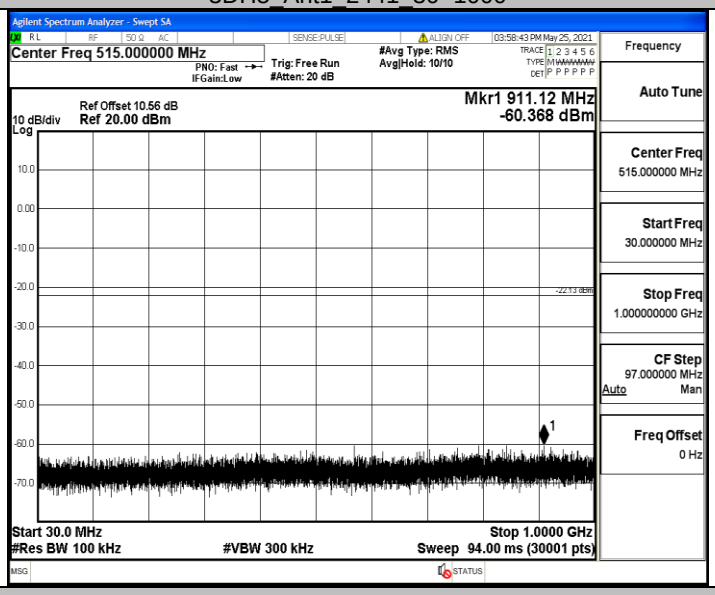

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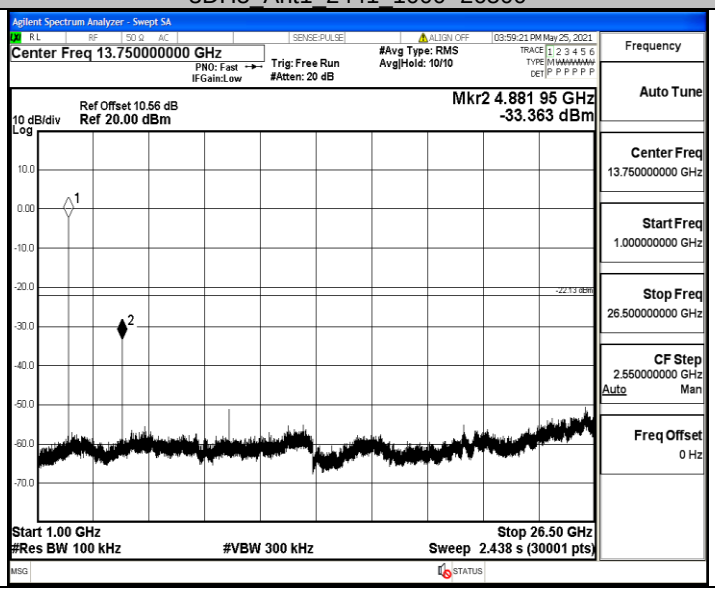

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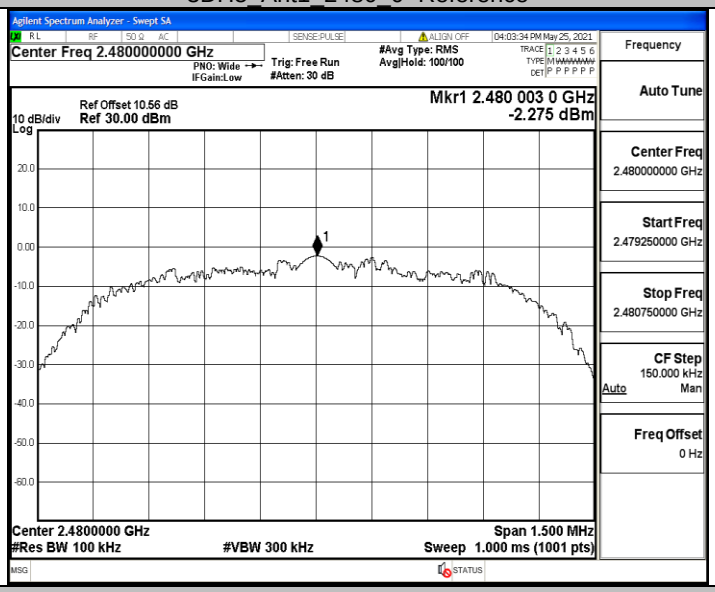

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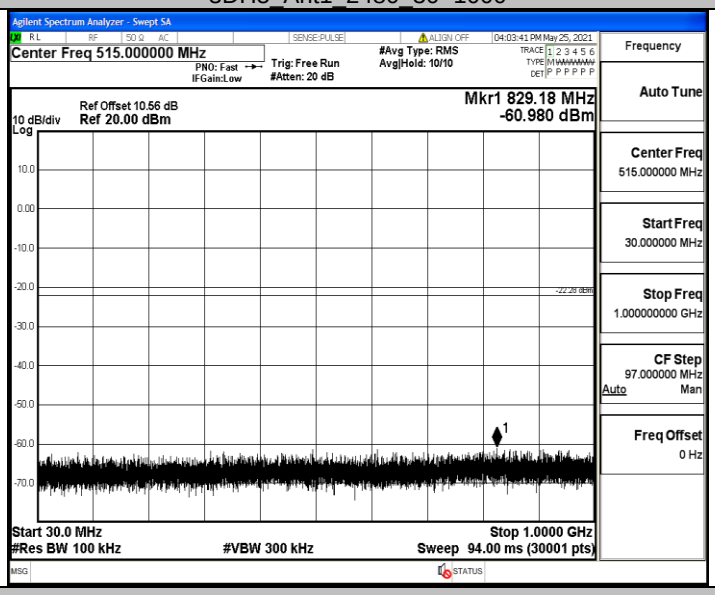

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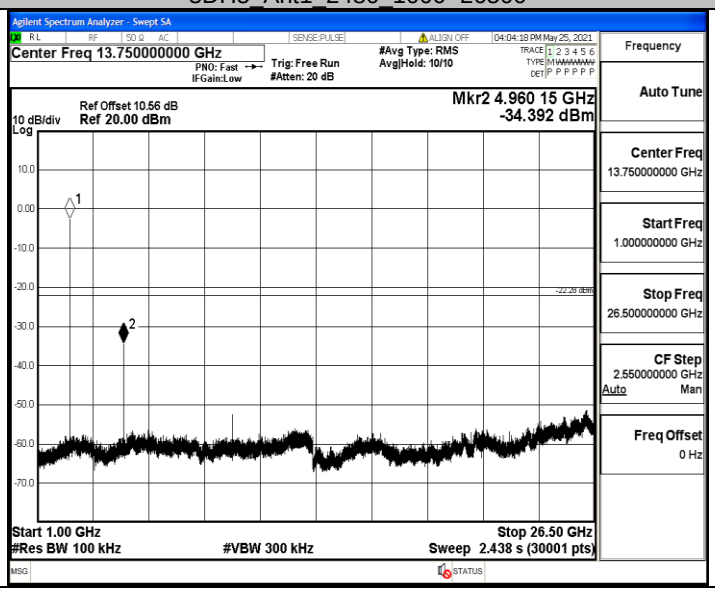


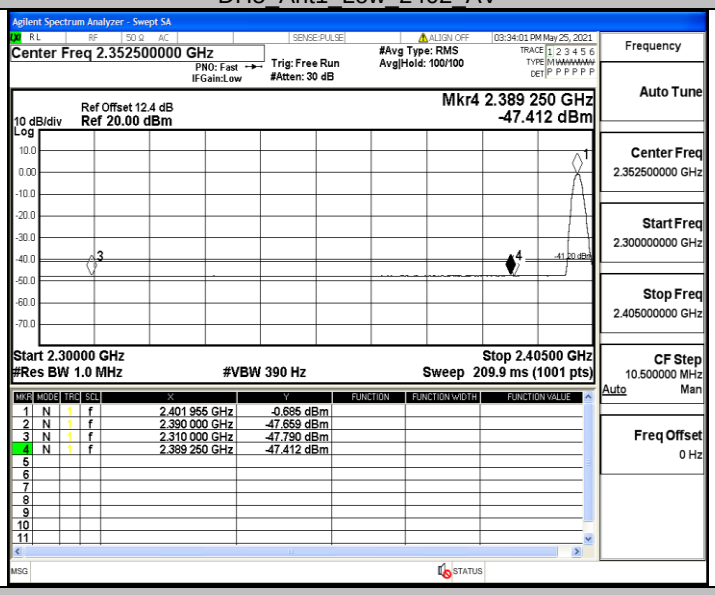
A.8 Restrict-band band-edge measurements

TestMode	Antenna	ChName	Channel	Detector	Freq(MHz)	Result(dBm)	Limit(dBm)	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-47.79	<=-41.20	PASS
				AV	2389.250	-47.41	<=-41.20	PASS
				AV	2390.000	-47.66	<=-41.20	PASS
				Peak	2310.000	-41.29	<=-21.20	PASS
				Peak	2364.470	-37.68	<=-21.20	PASS
				Peak	2390.000	-40.17	<=-21.20	PASS
		High	2480	AV	2483.500	-46.92	<=-41.20	PASS
				AV	2499.840	-46.73	<=-41.20	PASS
				AV	2500.000	-46.85	<=-41.20	PASS
				Peak	2483.500	-39.41	<=-21.20	PASS
				Peak	2494.000	-37.61	<=-21.20	PASS
				Peak	2500.000	-39.27	<=-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-47.84	<=-41.20	PASS
				AV	2389.250	-47.48	<=-41.20	PASS
				AV	2390.000	-47.59	<=-41.20	PASS
				Peak	2310.000	-39.45	<=-21.20	PASS
				Peak	2311.340	-37.11	<=-21.20	PASS
				Peak	2390.000	-40.35	<=-21.20	PASS
		High	2480	AV	2483.500	-46.94	<=-41.20	PASS
				AV	2498.560	-46.72	<=-41.20	PASS
				AV	2500.000	-46.89	<=-41.20	PASS
				Peak	2483.500	-40.49	<=-21.20	PASS
				Peak	2492.160	-36.68	<=-21.20	PASS
				Peak	2500.000	-39.82	<=-21.20	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-47.92	<=-41.20	PASS
				AV	2387.675	-47.48	<=-41.20	PASS
				AV	2390.000	-47.61	<=-41.20	PASS
				Peak	2310.000	-41.34	<=-21.20	PASS
				Peak	2351.555	-37.32	<=-21.20	PASS
				Peak	2390.000	-41.63	<=-21.20	PASS
		High	2480	AV	2483.500	-46.96	<=-41.20	PASS
				AV	2499.920	-46.79	<=-41.20	PASS
				AV	2500.000	-46.89	<=-41.20	PASS
				Peak	2483.500	-41.08	<=-21.20	PASS
				Peak	2497.520	-36.75	<=-21.20	PASS
				Peak	2500.000	-40.57	<=-21.20	PASS

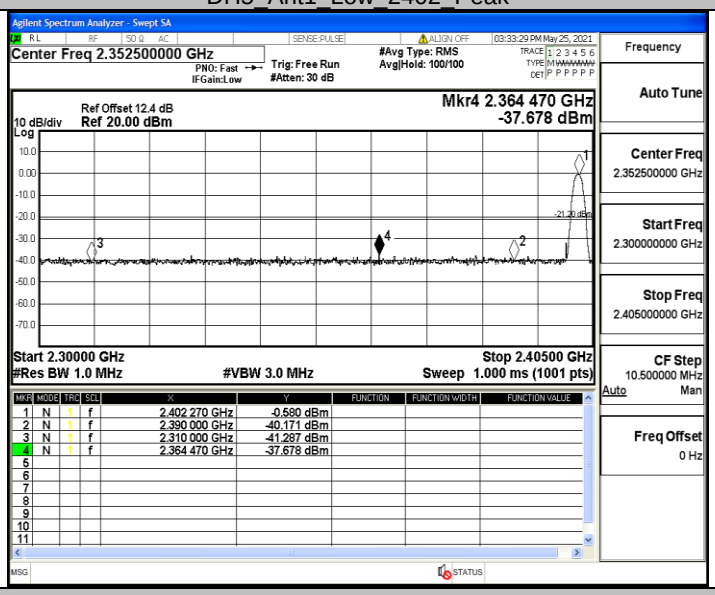
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

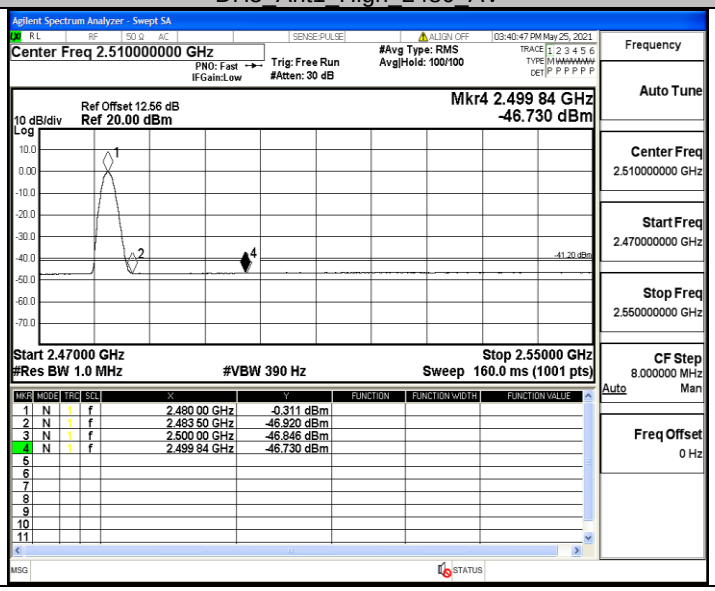
DH5_Ant1_Low_2402_AV



DH5_Ant1_Low_2402_Peak



DH5_Ant1_High_2480_AV



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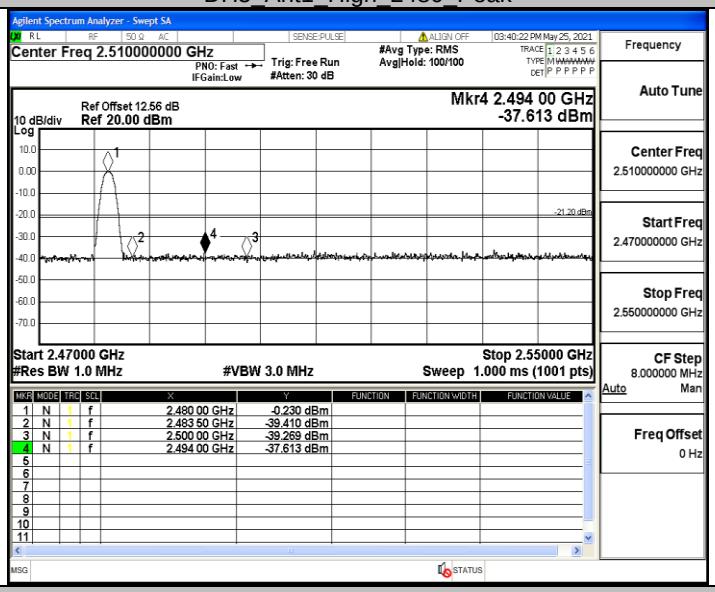

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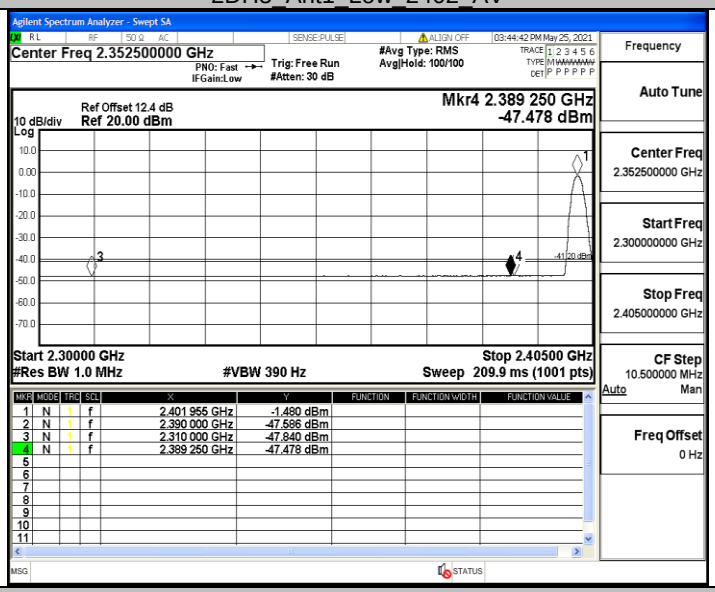

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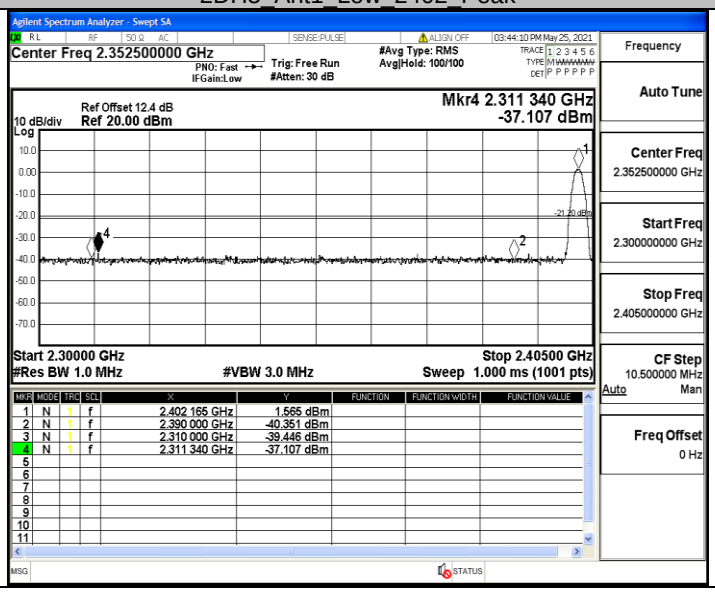
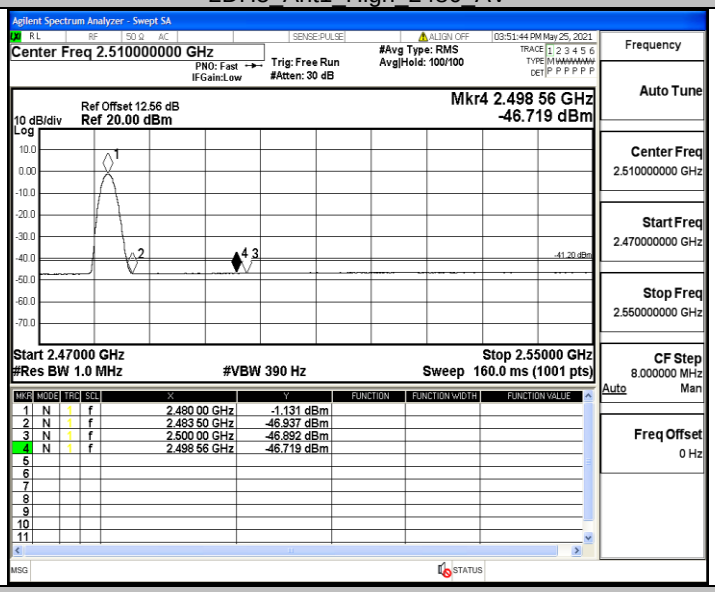


2DH5_Ant1_High_2480_AV



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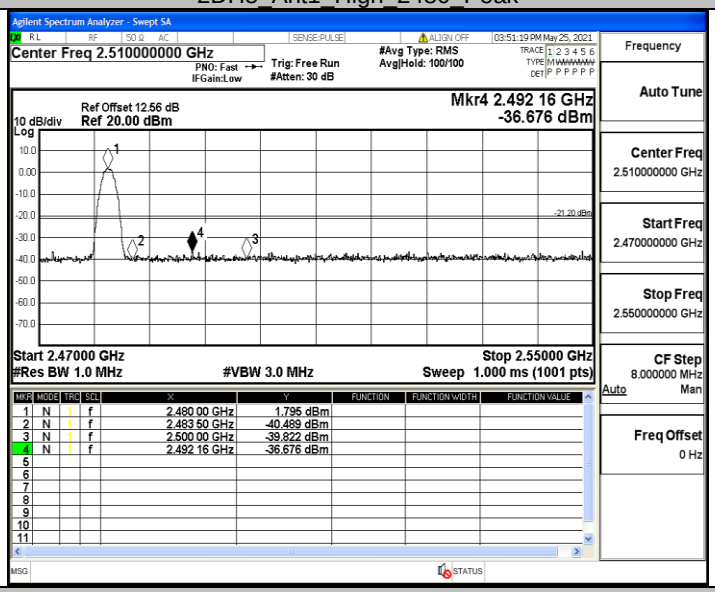

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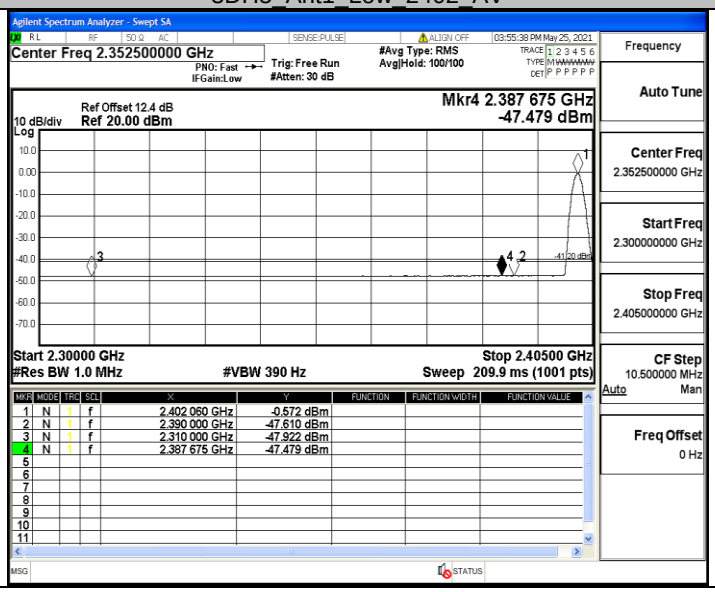

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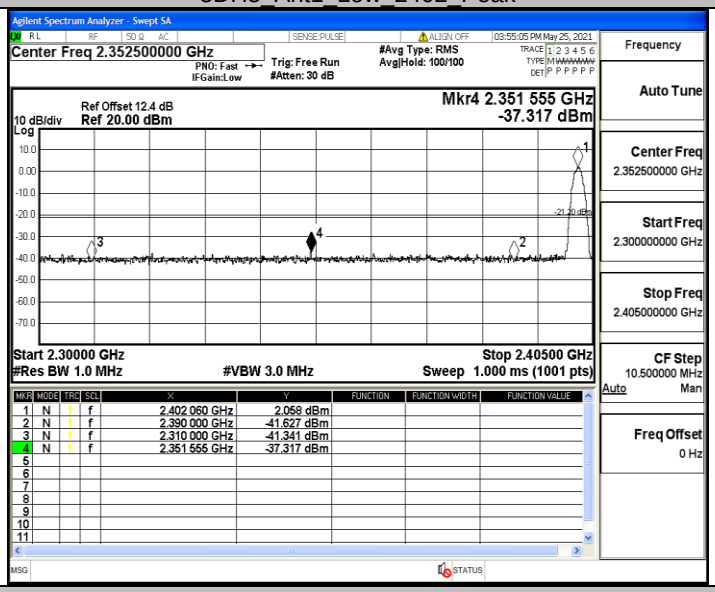

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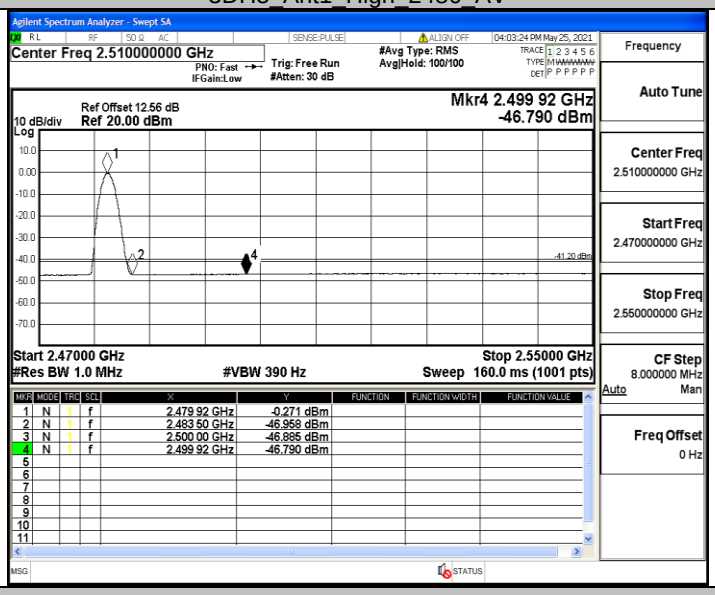
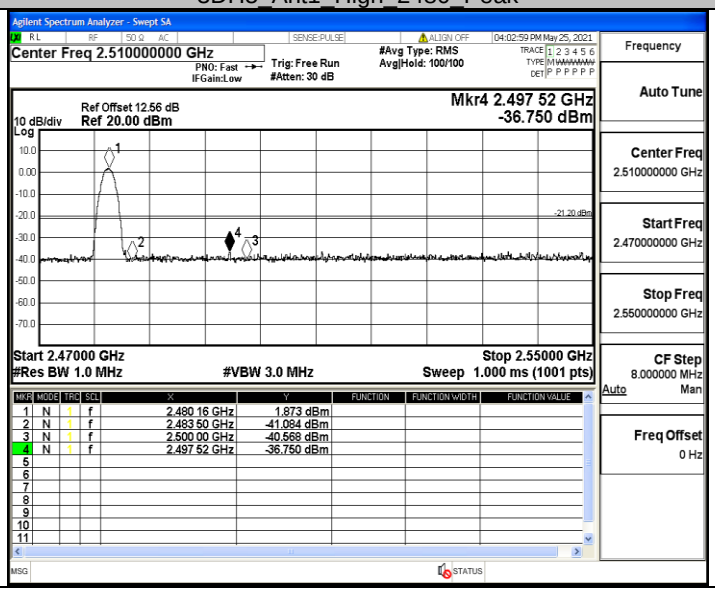
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