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

Product Name: Bluetooth Beacon

Trade Mark: Feasycom

Test Model: FSC-BT826E

FCC ID: 2AMWOFSC-BT826E

Environmental Conditions

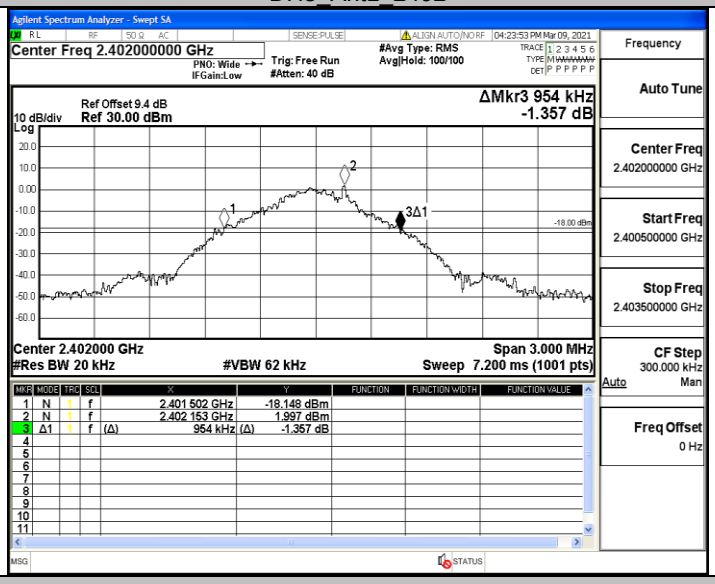
Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Nancy Li
Supervised by:	Hugo Chen

A.1 20 dB Bandwidth

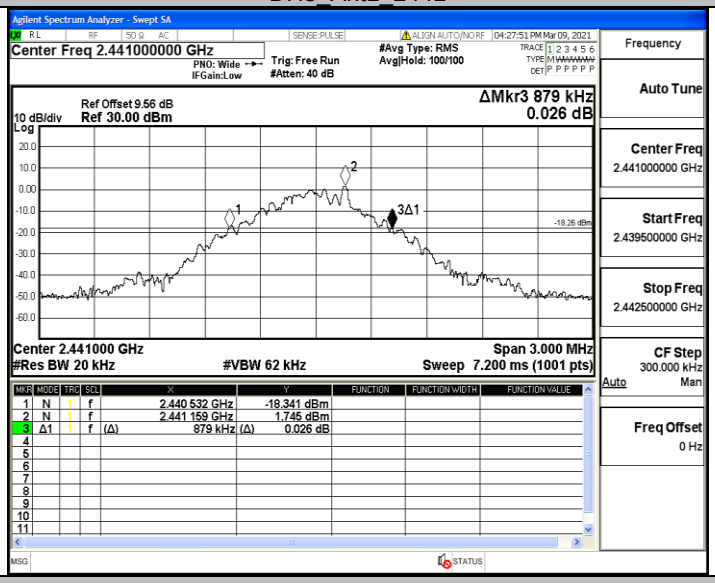
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.954	2401.502	2402.456	---	PASS
		2441	0.879	2440.532	2441.411	---	PASS
		2480	0.954	2479.466	2480.420	---	PASS
2DH5	Ant1	2402	1.302	2401.337	2402.639	---	PASS
		2441	1.311	2440.331	2441.642	---	PASS
		2480	1.290	2479.340	2480.630	---	PASS
3DH5	Ant1	2402	1.281	2401.337	2402.618	---	PASS
		2441	1.272	2440.352	2441.624	---	PASS
		2480	1.272	2479.349	2480.621	---	PASS

Test Graph

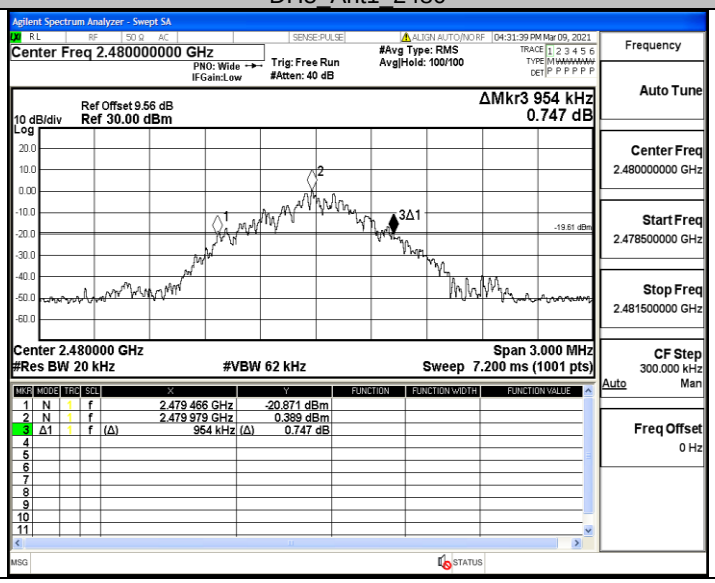
DH5_Ant1_2402



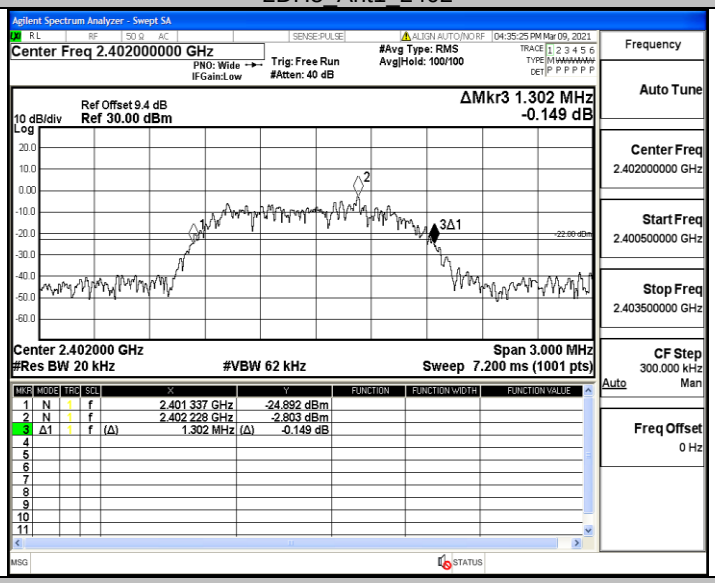
DH5_Ant1_2441



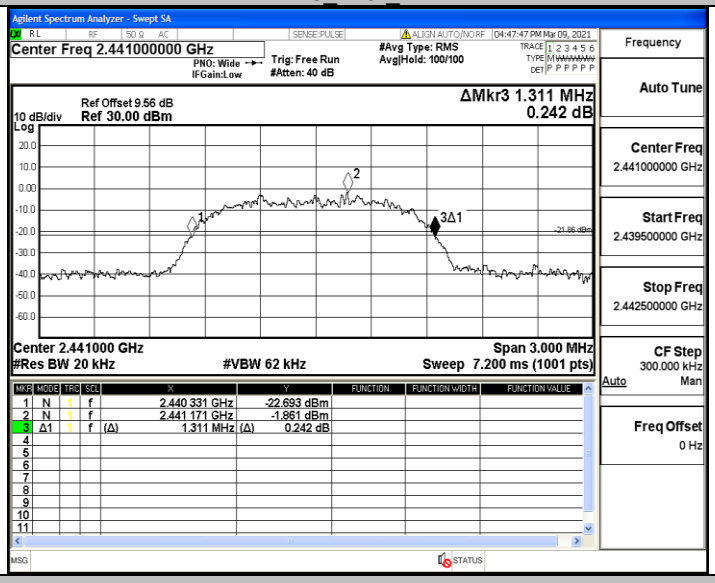
DH5_Ant1_2480



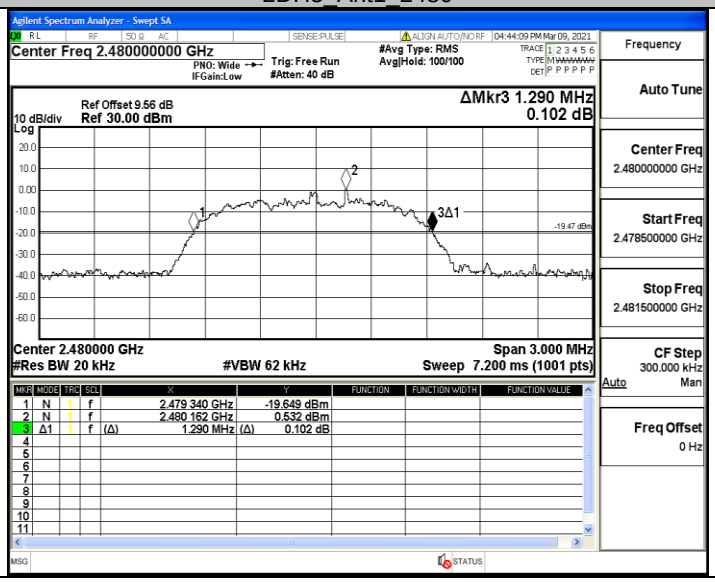
2DH5_Ant1_2402



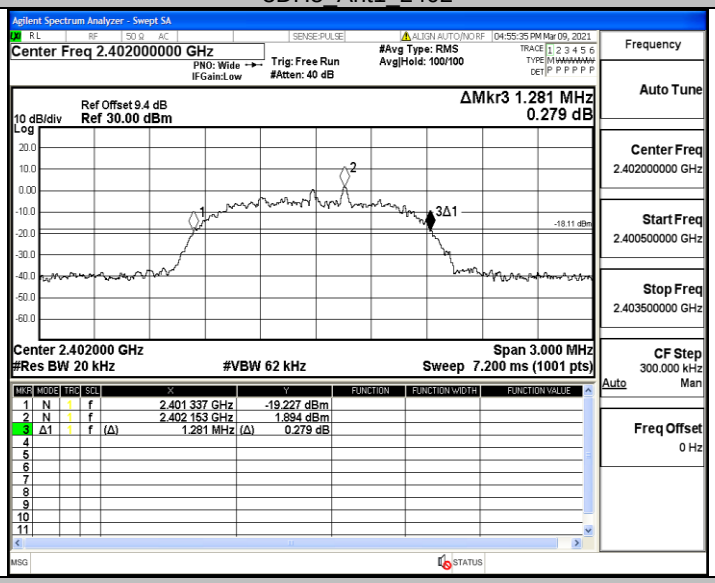
2DH5_Ant1_2441



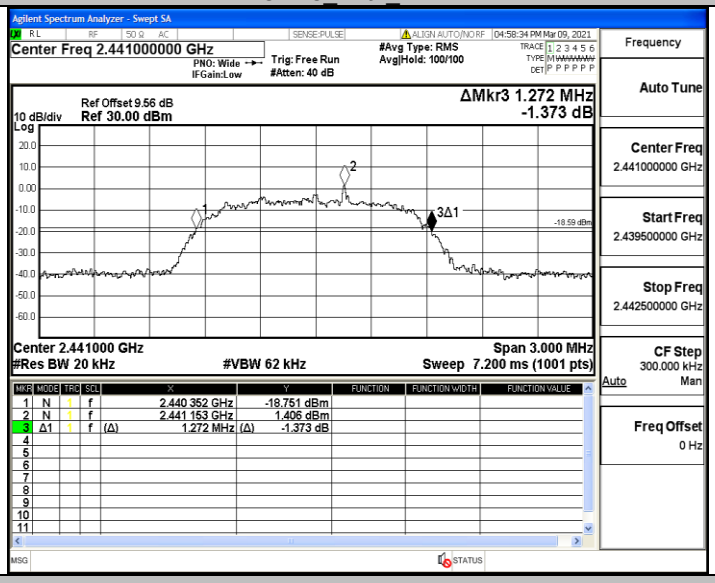
2DH5_Ant1_2480



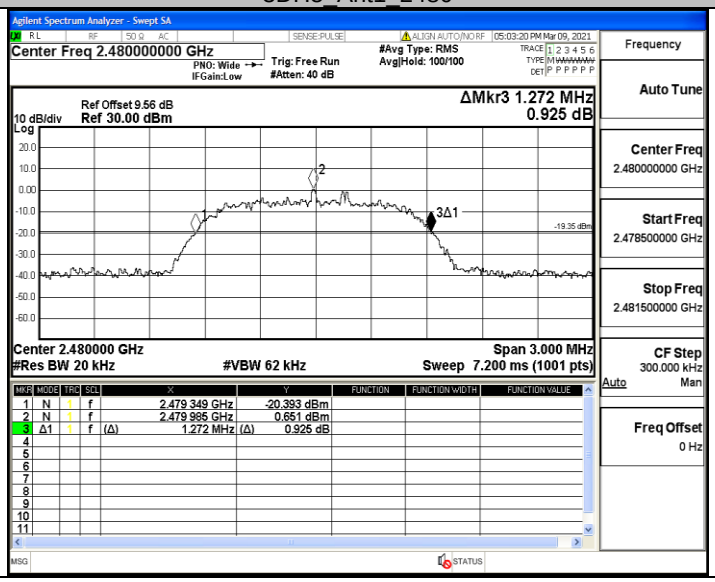
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

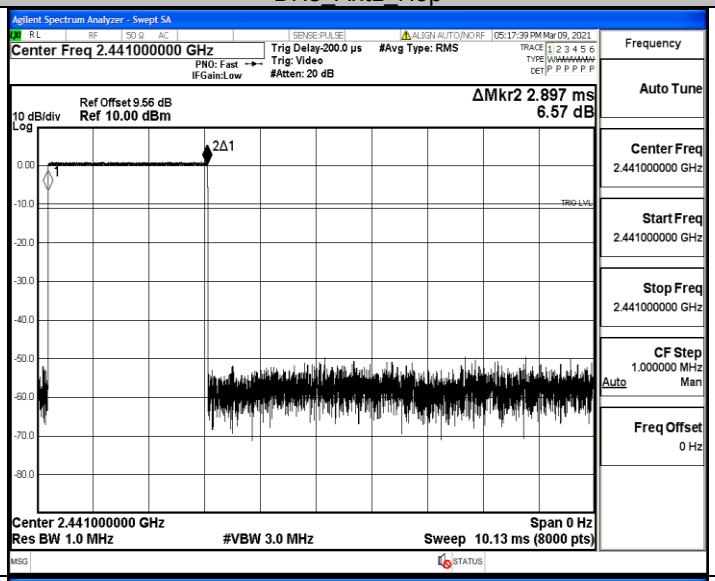


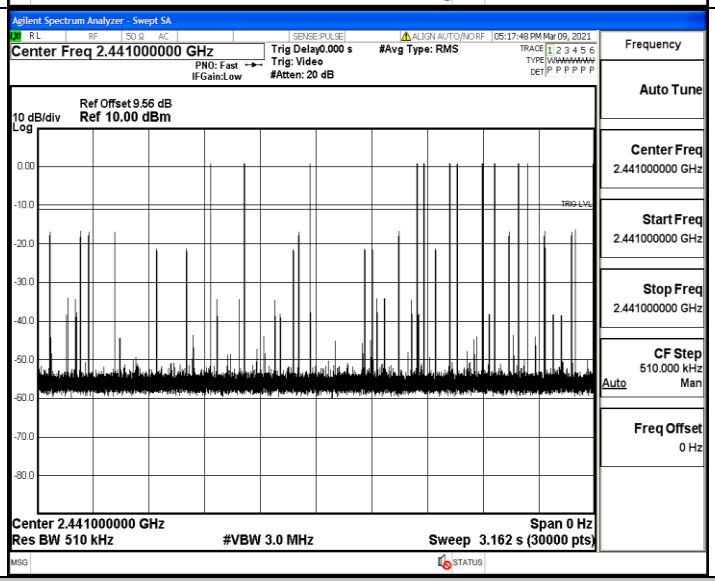
A.2 Dwell Time

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.90	130	0.377	<=0.4	PASS
2DH5	Ant1	Hop	2.90	120	0.348	<=0.4	PASS
3DH5	Ant1	Hop	2.90	130	0.378	<=0.4	PASS

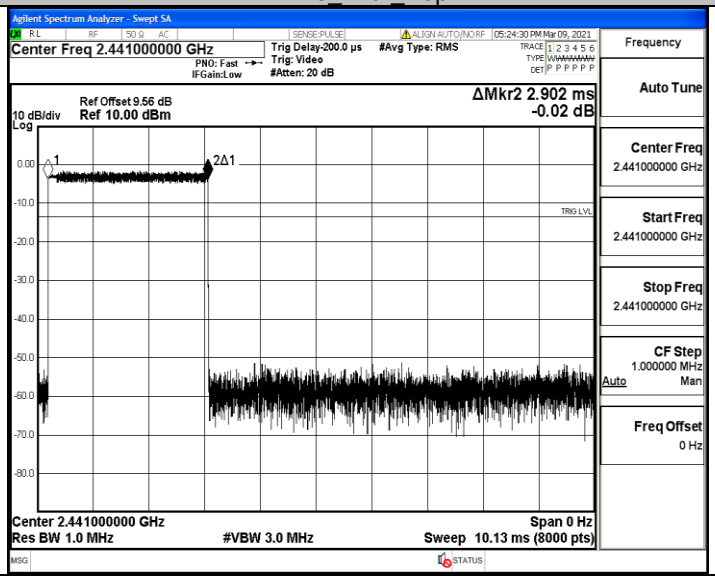
Test Graph

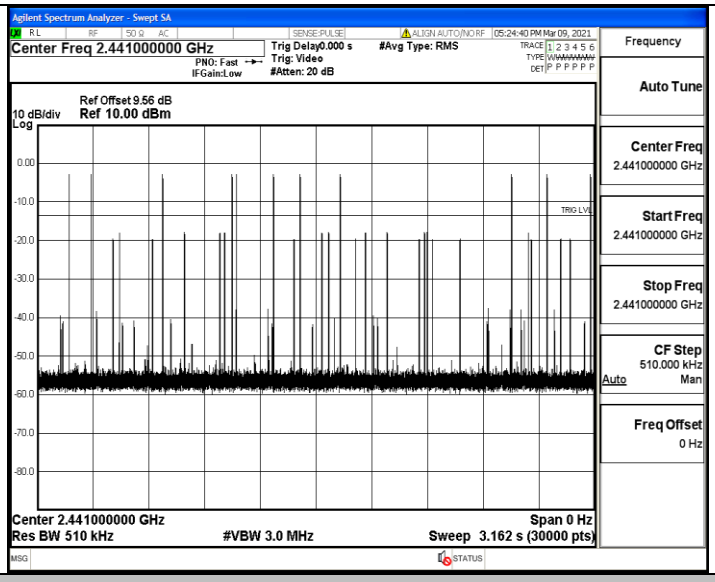
DH5_Ant1_Hop



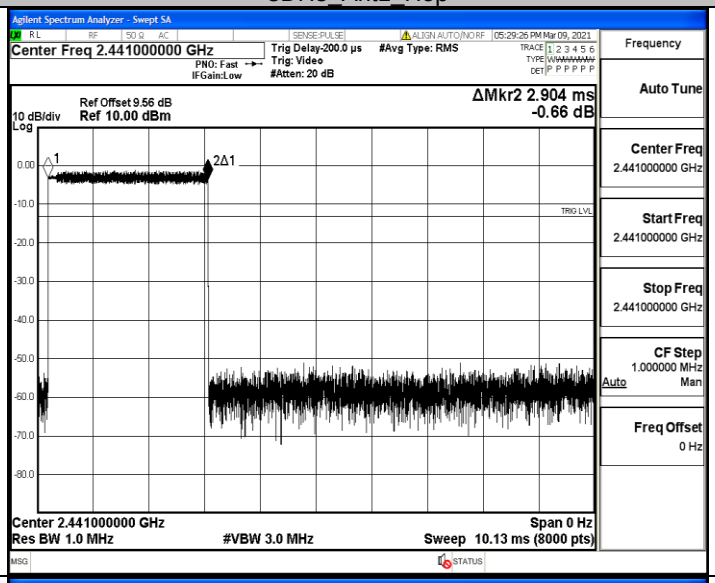


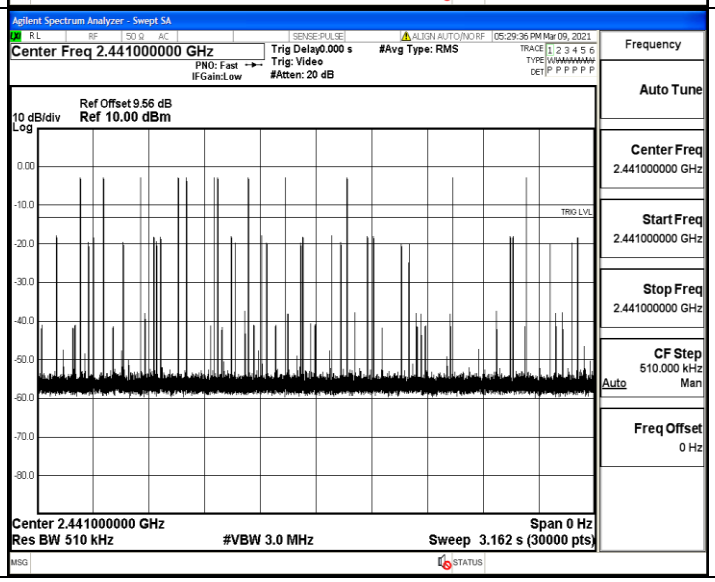
2DH5_Ant1_Hop





3DH5_Ant1_Hop



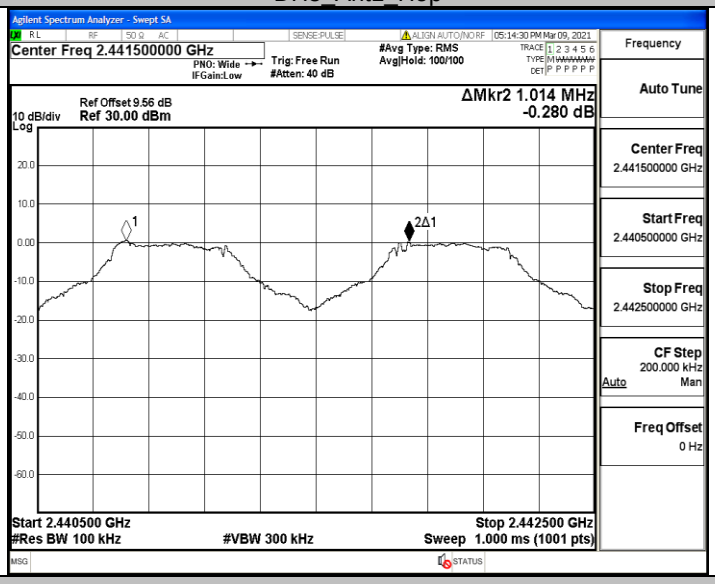


A.3 Carrier Frequency Separation

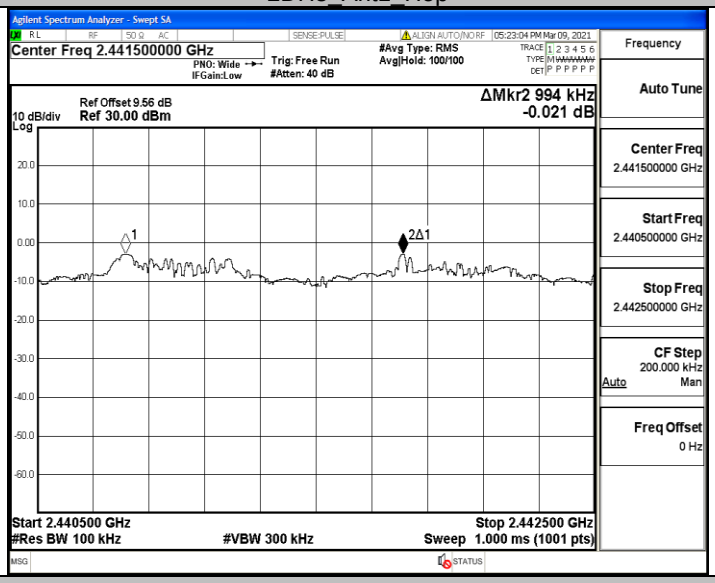
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.014	>=0.954	PASS
2DH5	Ant1	Hop	0.994	>=0.874	PASS
3DH5	Ant1	Hop	0.964	>=0.854	PASS

Test Graph

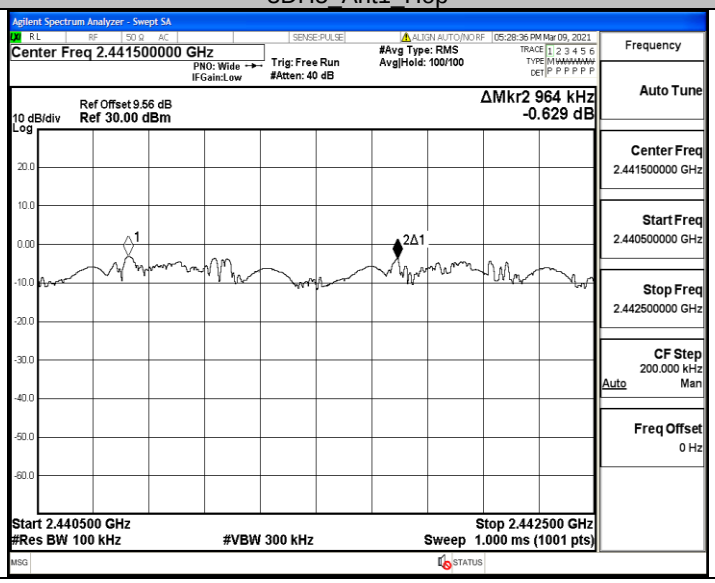
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

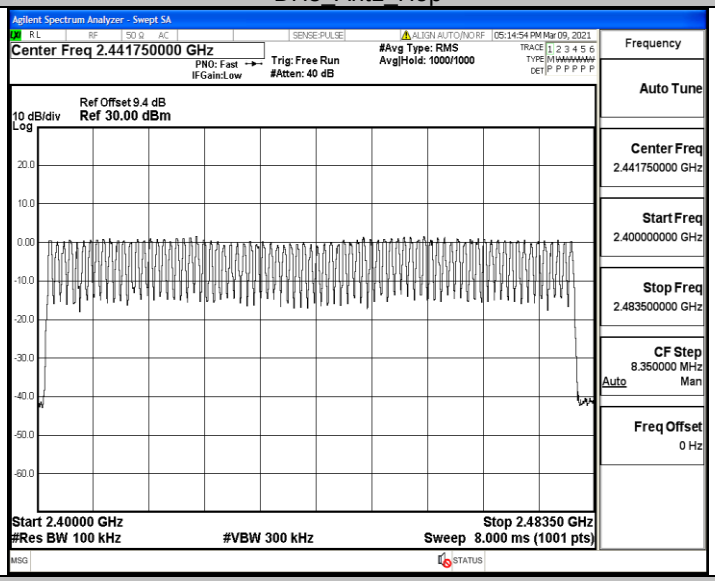


A.4 Hopping Channel Number

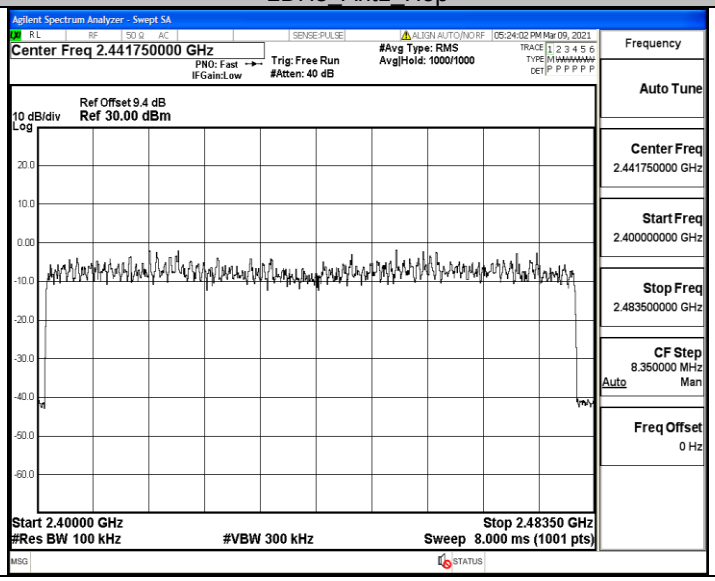
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	>=15	PASS
2DH5	Ant1	Hop	79	>=15	PASS
3DH5	Ant1	Hop	79	>=15	PASS

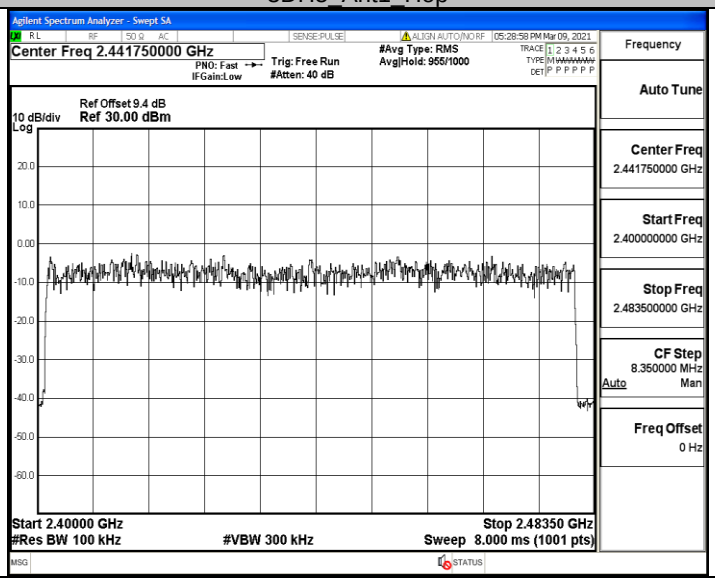
Test Graph

DH5_Ant1_Hop



2DH5_Ant1_Hop



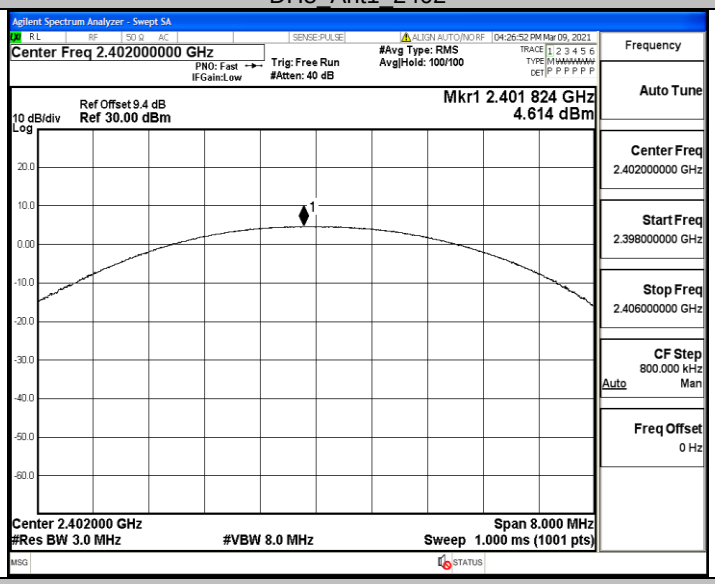
3DH5_Ant1_Hop


A.5 Conducted Peak Output Power

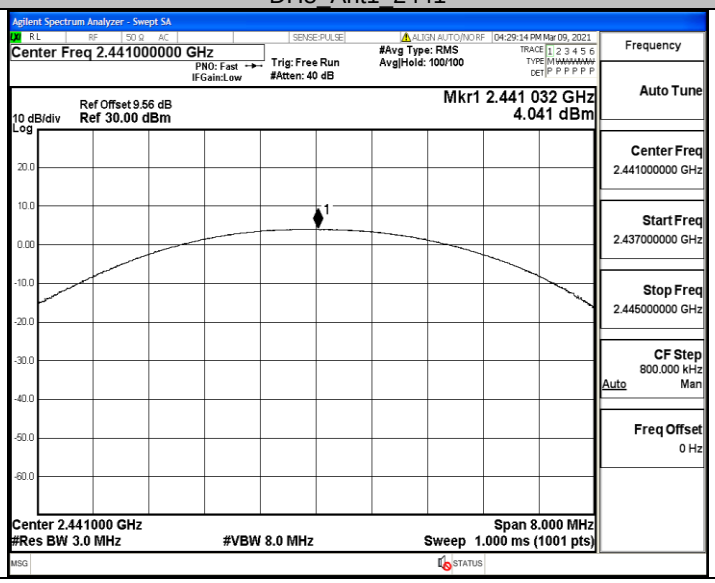
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	4.61	<=20.97	PASS
		2441	4.04	<=20.97	PASS
		2480	4.46	<=20.97	PASS
2DH5	Ant1	2402	5.91	<=20.97	PASS
		2441	5.28	<=20.97	PASS
		2480	5.69	<=20.97	PASS
3DH5	Ant1	2402	6.33	<=20.97	PASS
		2441	5.71	<=20.97	PASS
		2480	6.00	<=20.97	PASS

Test Graph

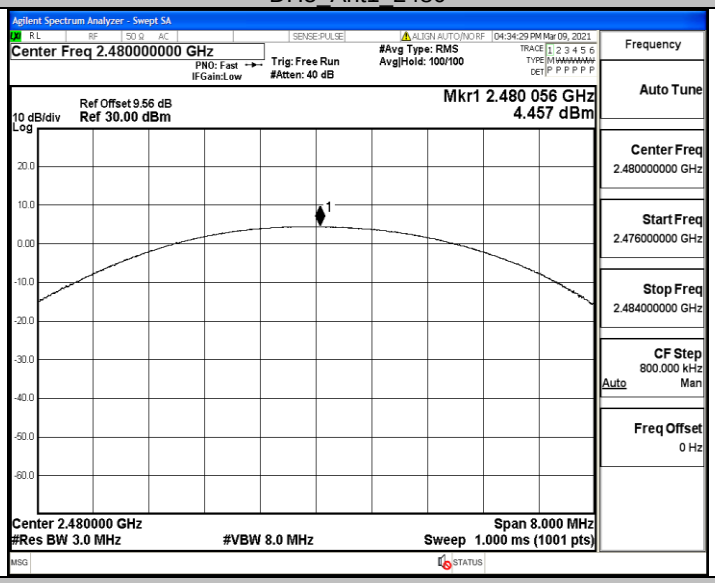
DH5_Ant1_2402



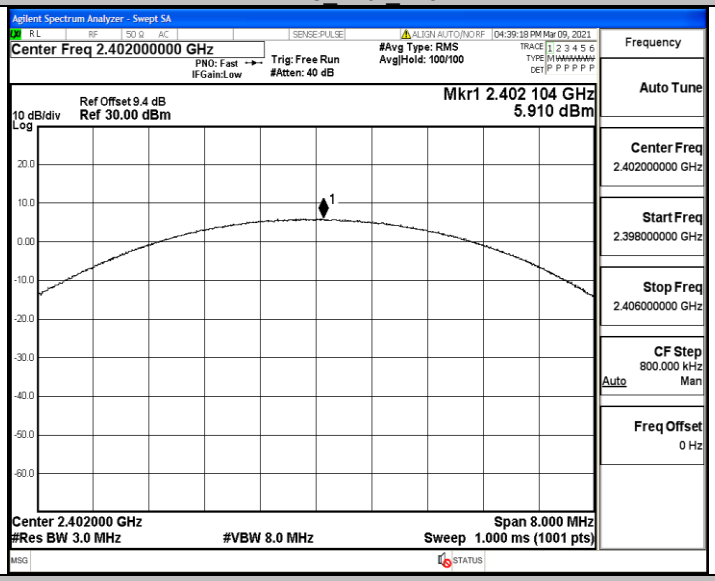
DH5_Ant1_2441



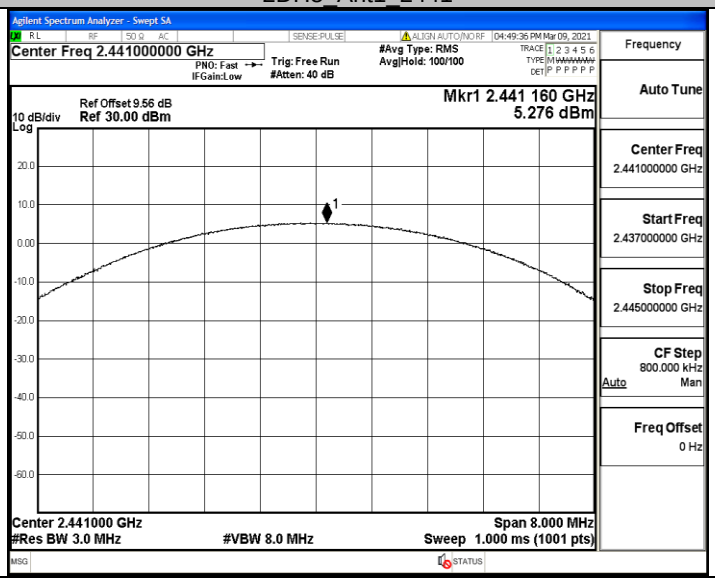
DH5_Ant1_2480



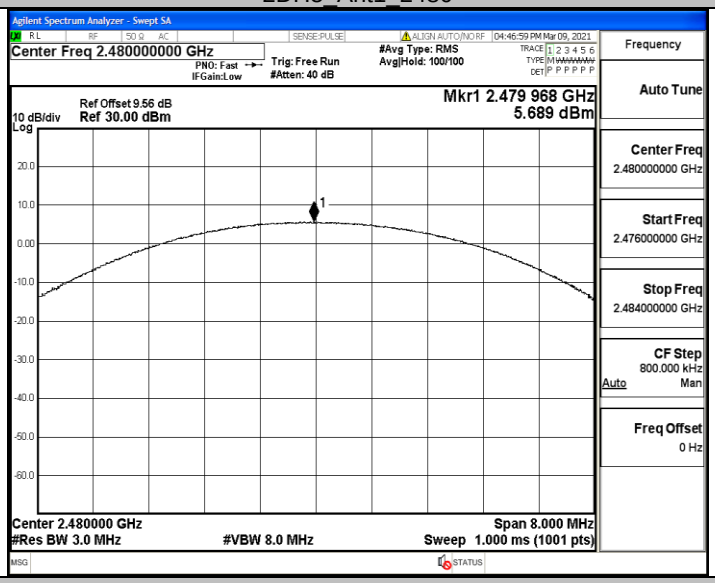
2DH5_Ant1_2402



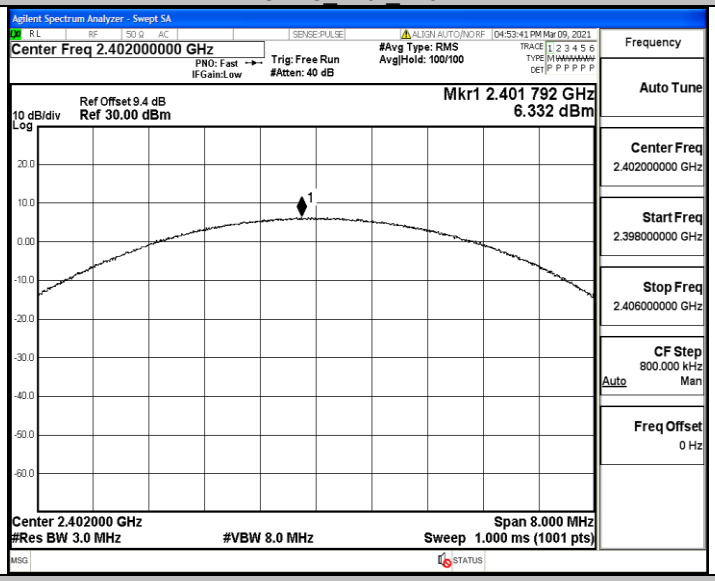
2DH5_Ant1_2441



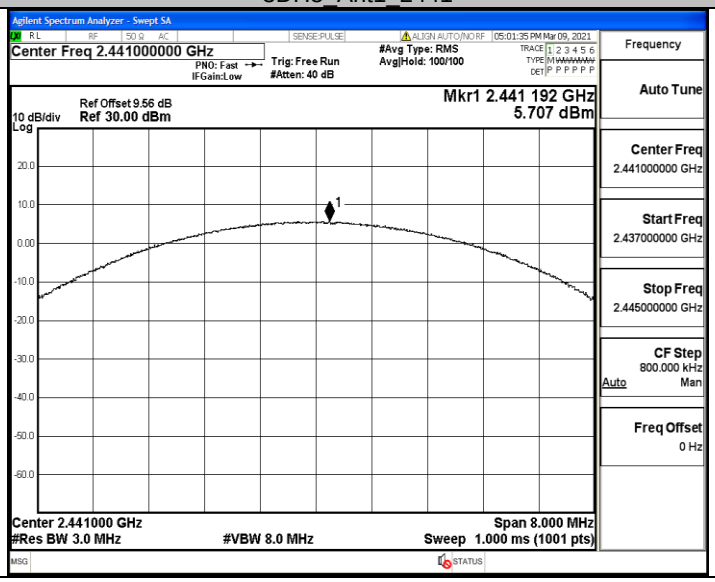
2DH5_Ant1_2480

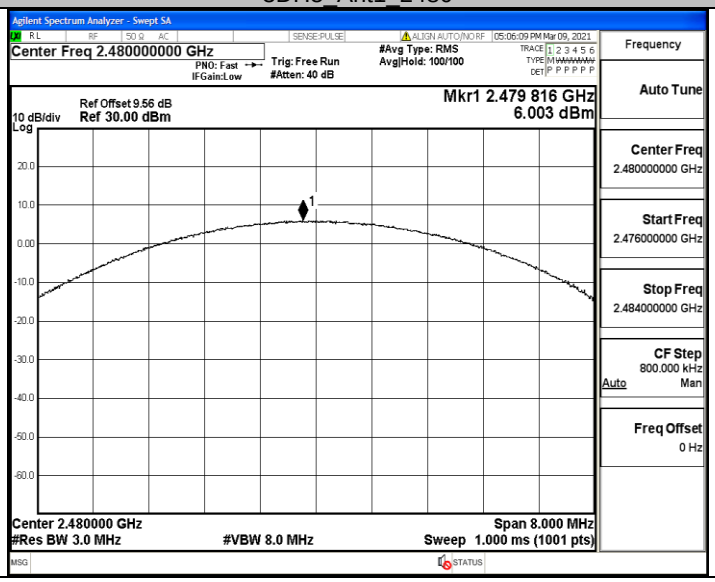


3DH5_Ant1_2402



3DH5_Ant1_2441



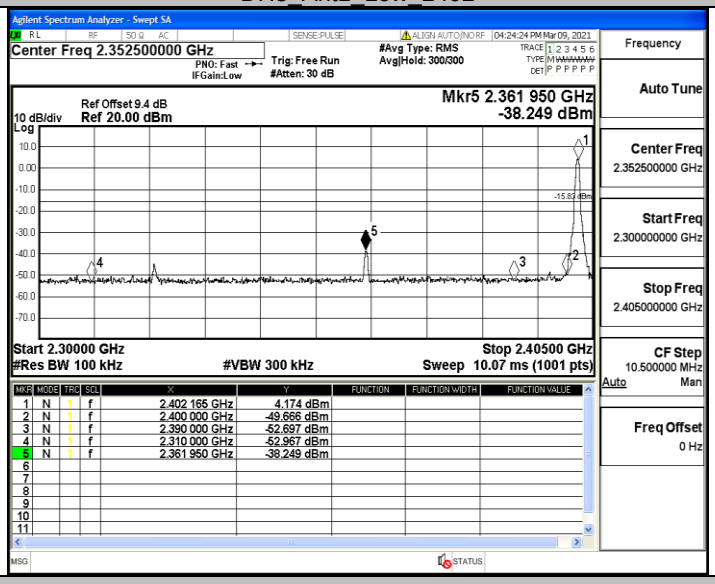
3DH5_Ant1_2480


A.6 Band-edge for RF Conducted Emissions

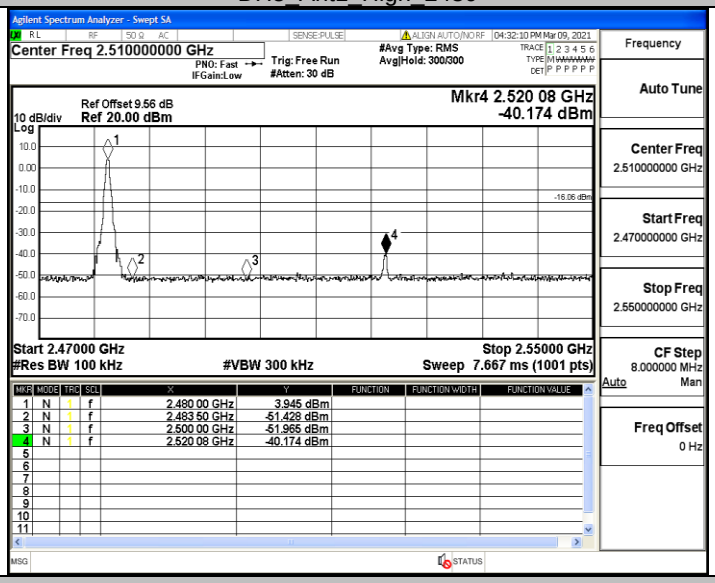
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	4.17	-38.25	<=-15.83	PASS
		High	2480	3.95	-40.17	<=-16.06	PASS
		Low	Hop_2402	0.09	-42.12	<=-19.91	PASS
		High	Hop_2480	0.78	-42.61	<=-19.22	PASS
2DH5	Ant1	Low	2402	4.25	-39.19	<=-15.75	PASS
		High	2480	4.14	-41.61	<=-15.86	PASS
		Low	Hop_2402	-5.66	-44.52	<=-25.66	PASS
		High	Hop_2480	-3.99	-46.74	<=-23.99	PASS
3DH5	Ant1	Low	2402	4.29	-39	<=-15.71	PASS
		High	2480	4.20	-41.87	<=-15.8	PASS
		Low	Hop_2402	-2.80	-44.16	<=-22.8	PASS
		High	Hop_2480	-2.59	-46.79	<=-22.59	PASS

Test Graph

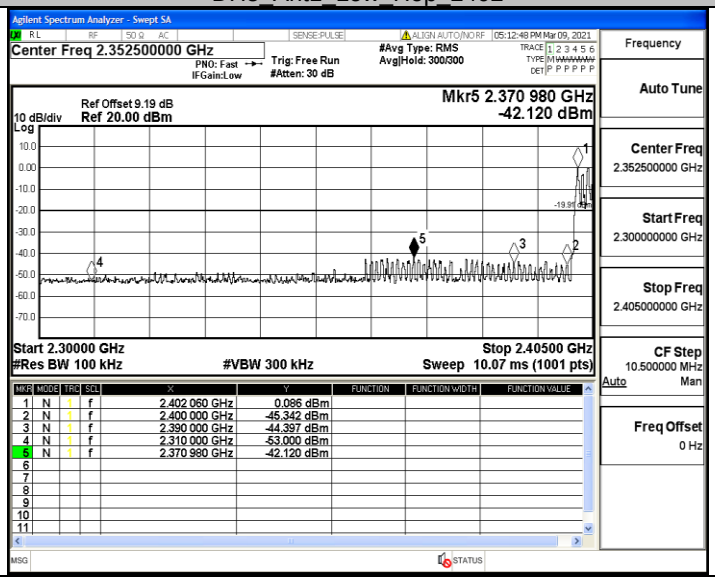
DH5_Ant1_Low_2402



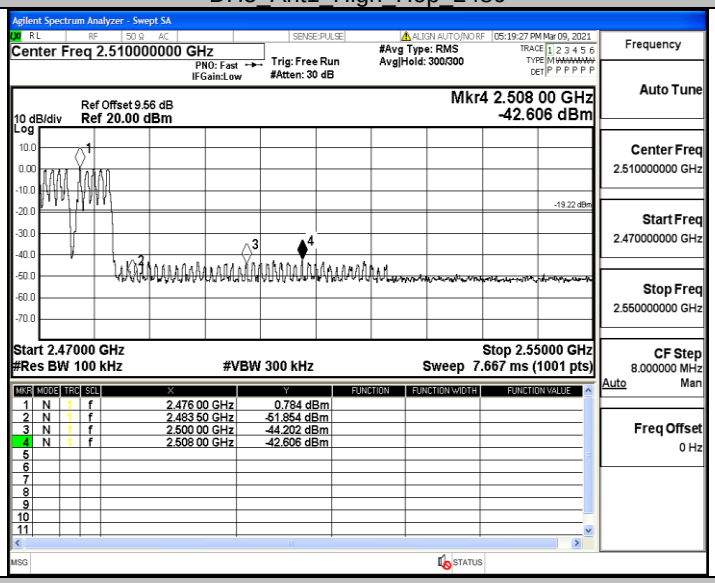
DH5_Ant1_High_2480



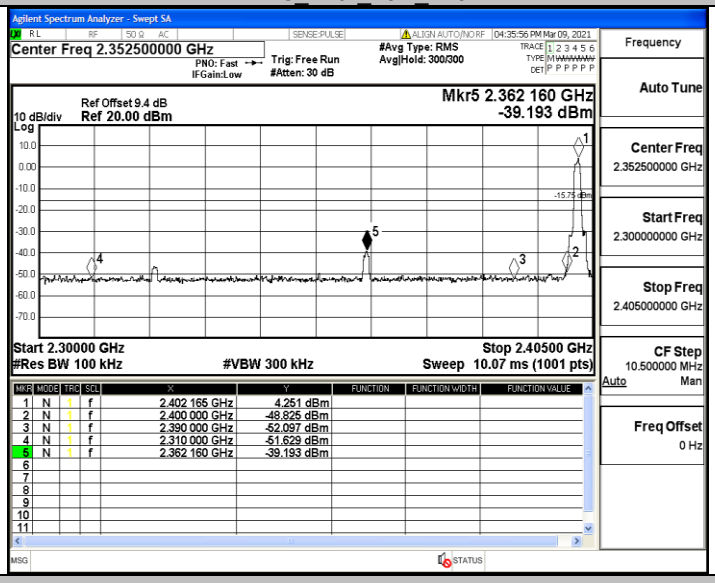
DH5_Ant1_Low_Hop_2402



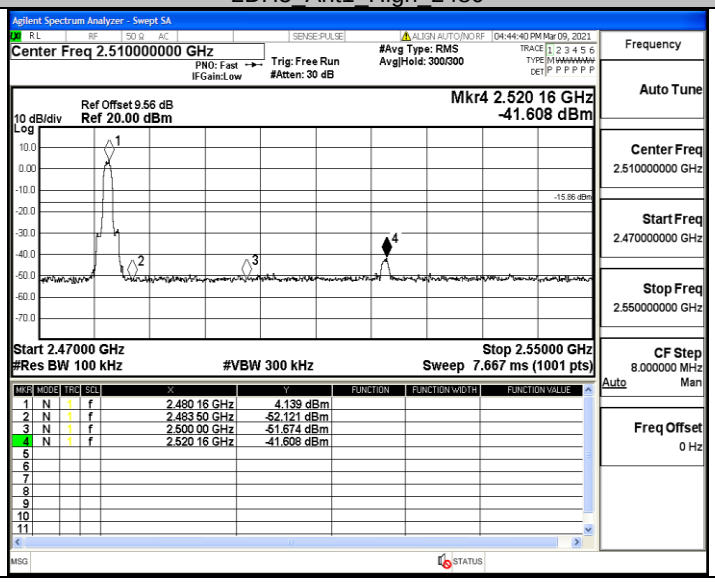
DH5_Ant1_High_Hop_2480



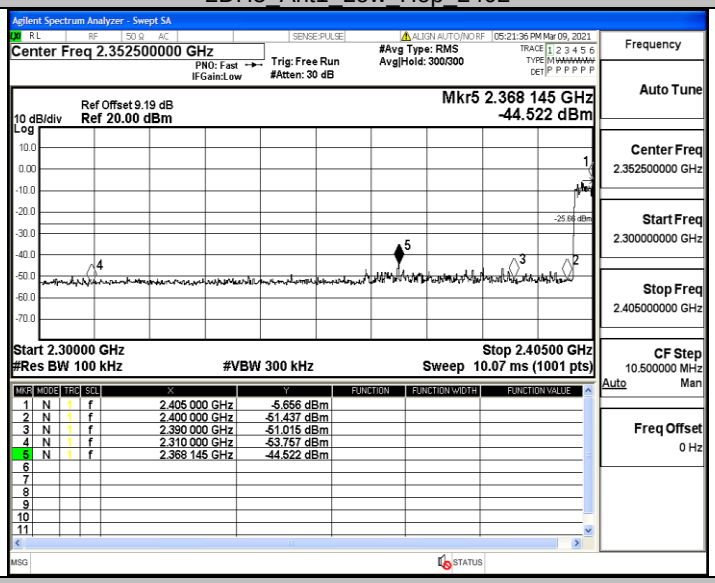
2DH5_Ant1_Low_2402



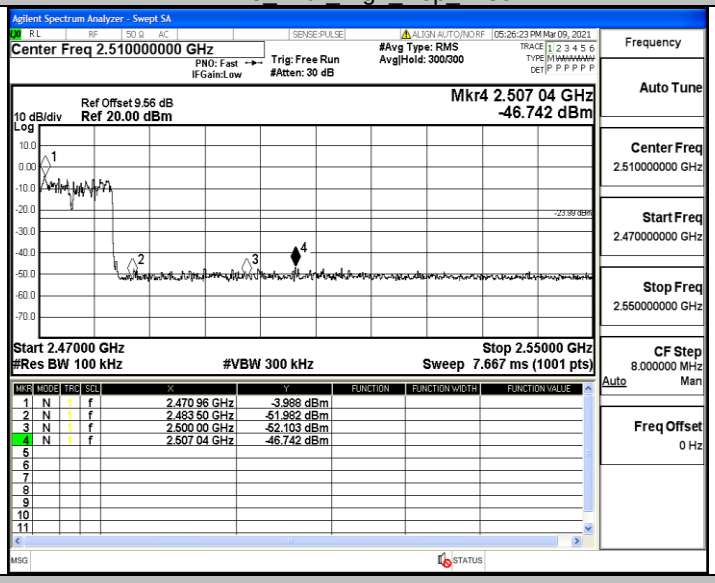
2DH5_Ant1_High_2480



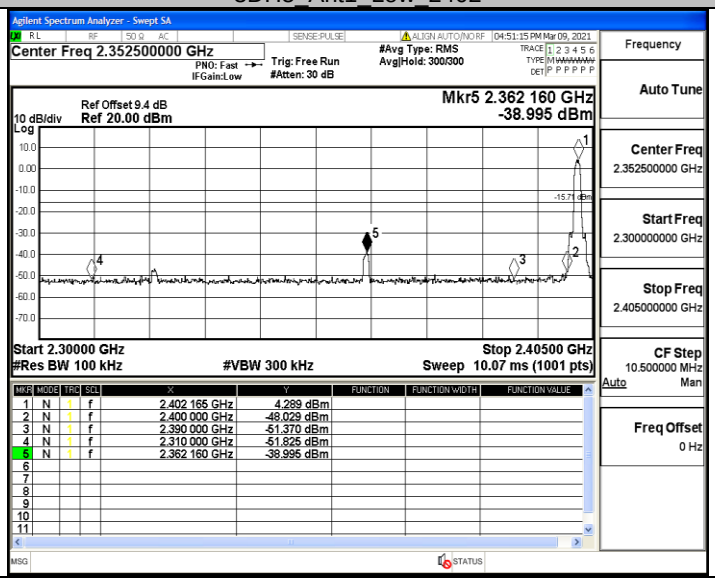
2DH5_Ant1_Low_Hop_2402



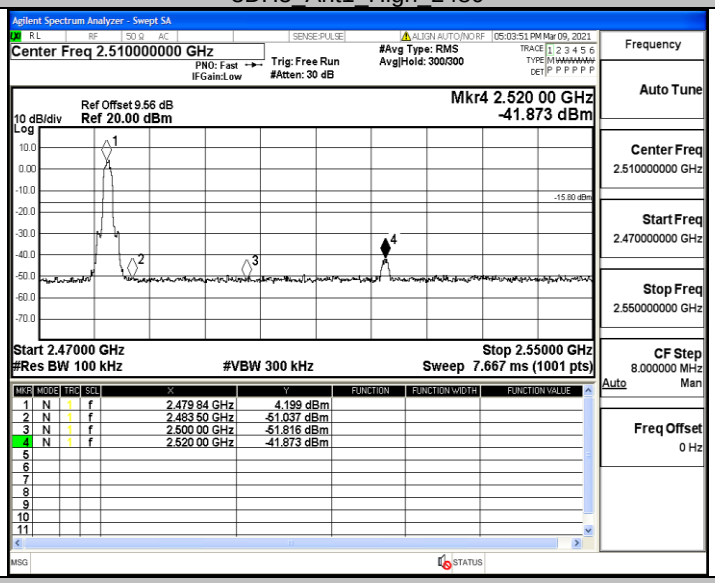
2DH5_Ant1_High_Hop_2480



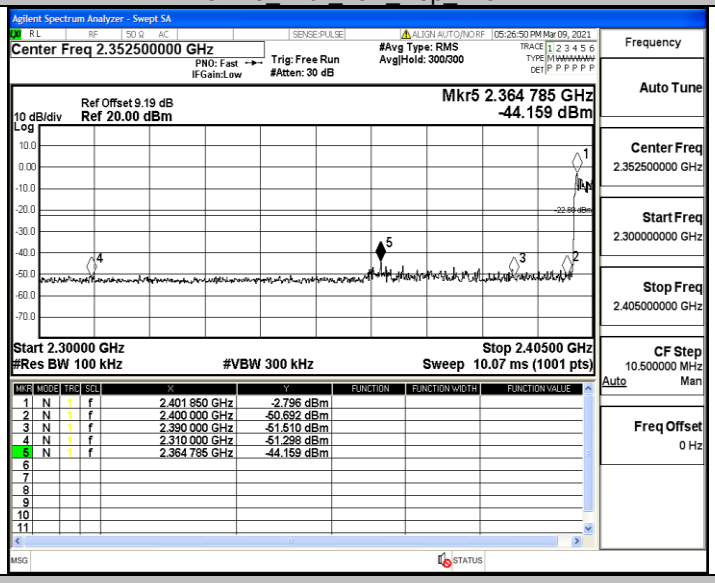
3DH5_Ant1_Low_2402



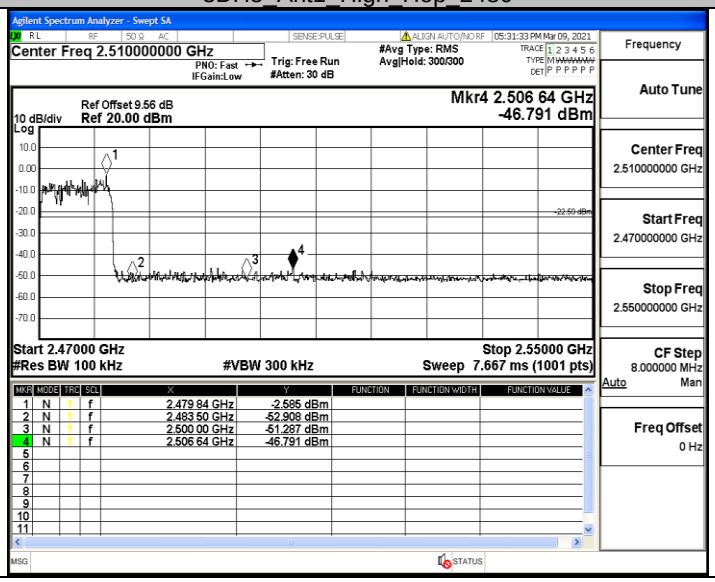
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



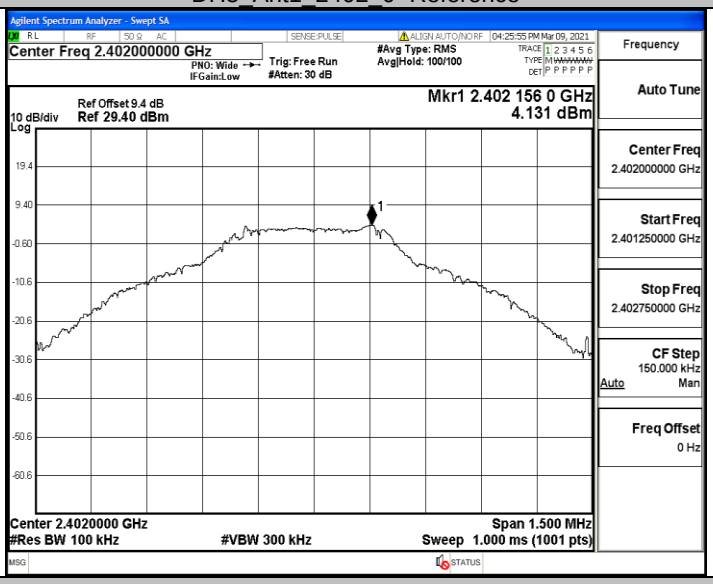
3DH5_Ant1_High_Hop_2480



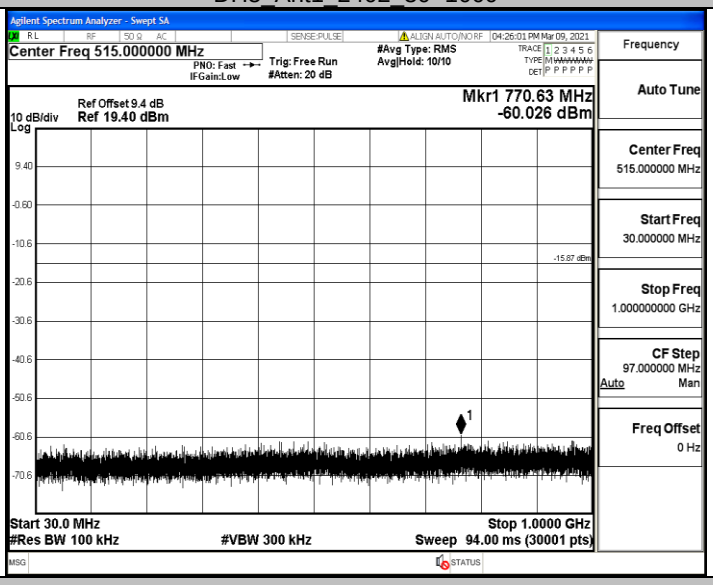
A.7 RF Conducted Spurious Emissions

Test Graph

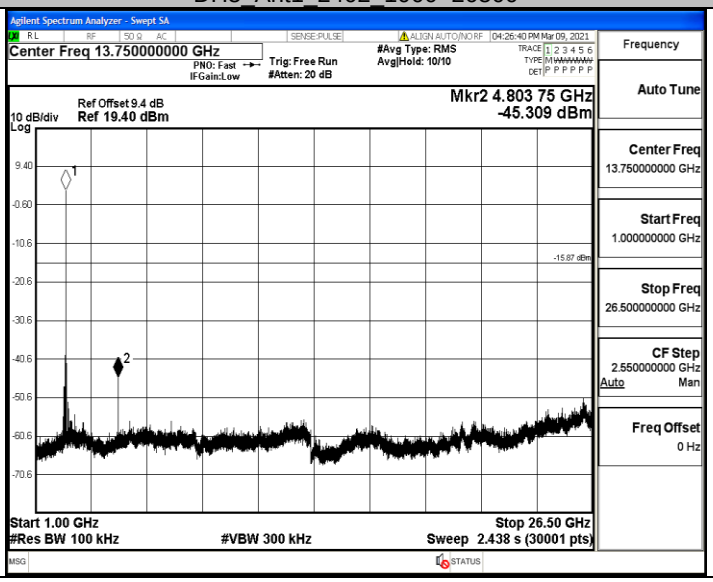
DH5_Ant1_2402_0~Reference



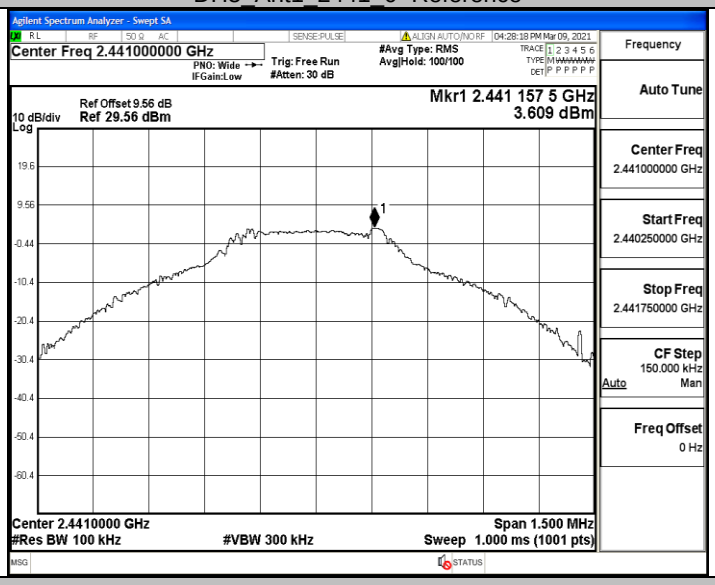
DH5_Ant1_2402_30~1000



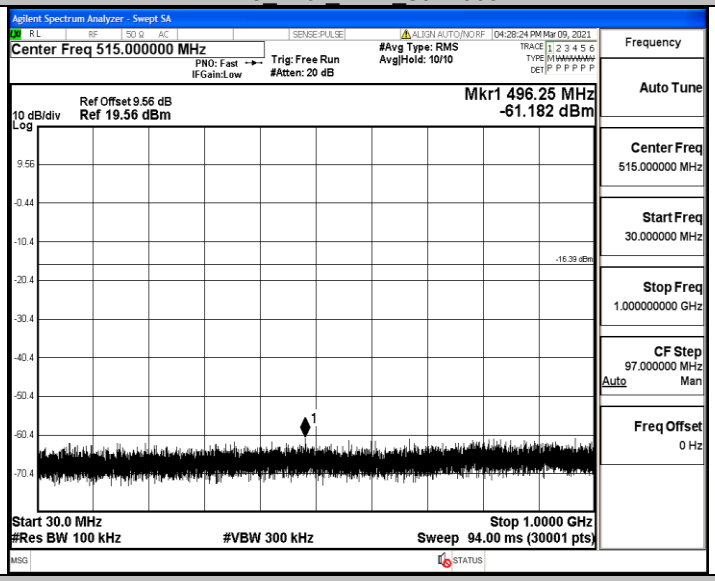
DH5_Ant1_2402_1000~26500



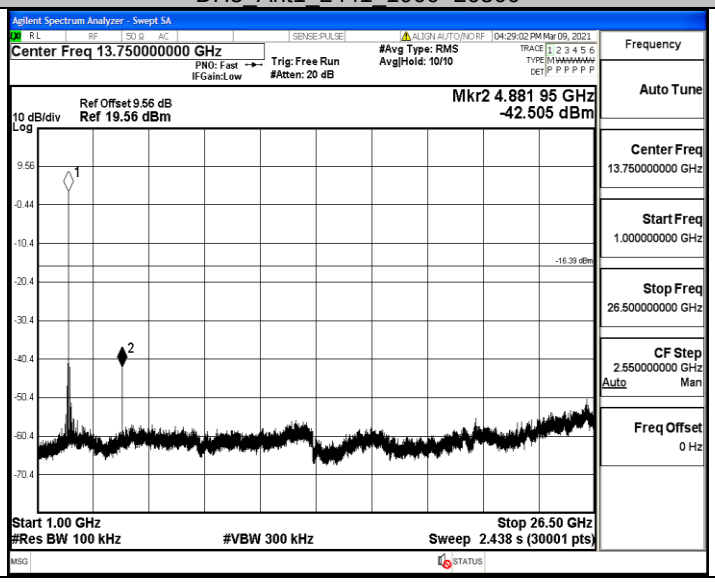
DH5_Ant1_2441_0~Reference



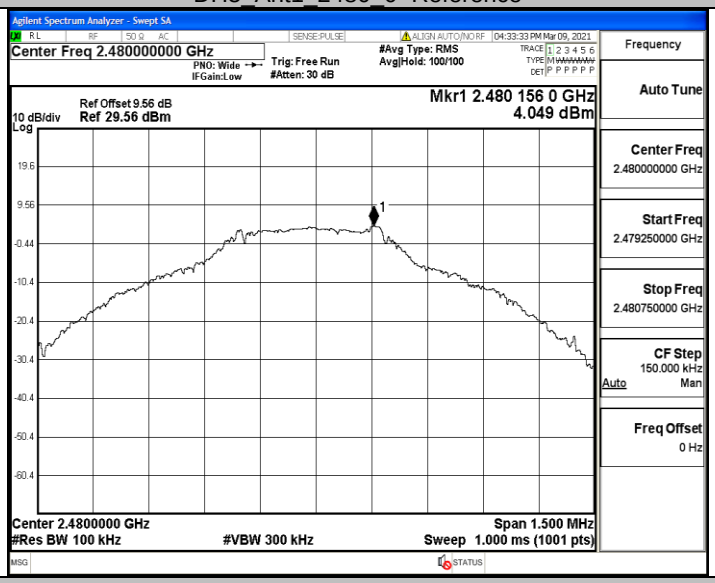
DH5_Ant1_2441_30~1000



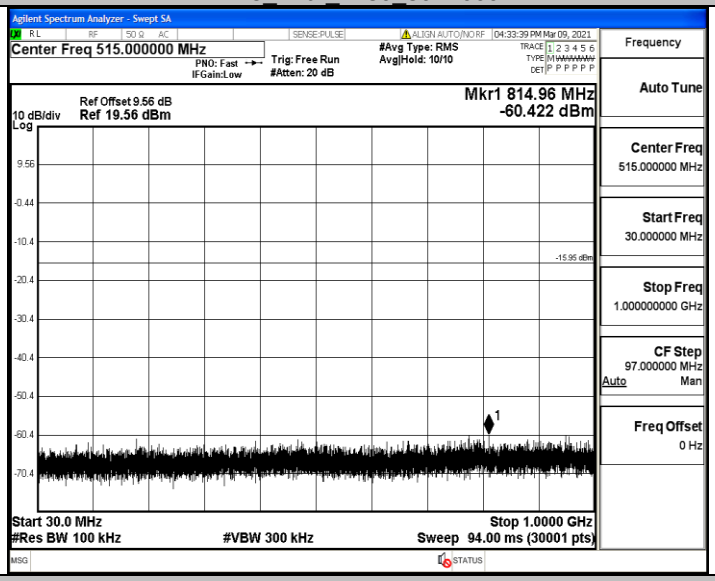
DH5_Ant1_2441_1000~26500



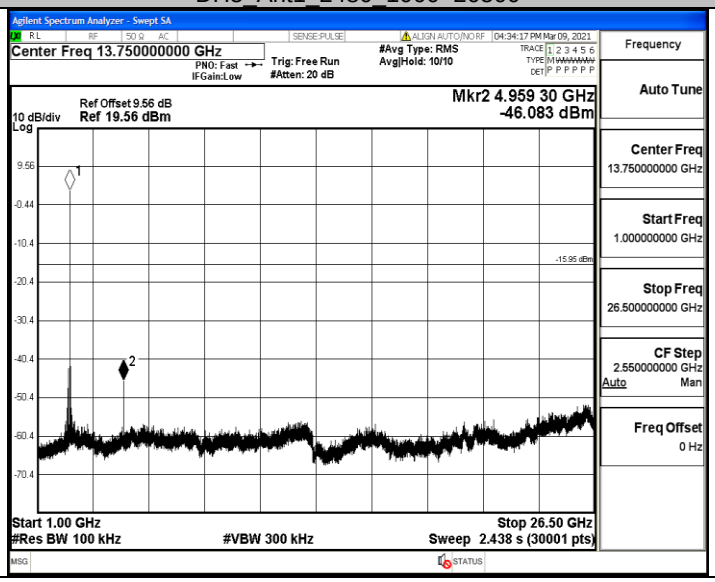
DH5_Ant1_2480_0~Reference



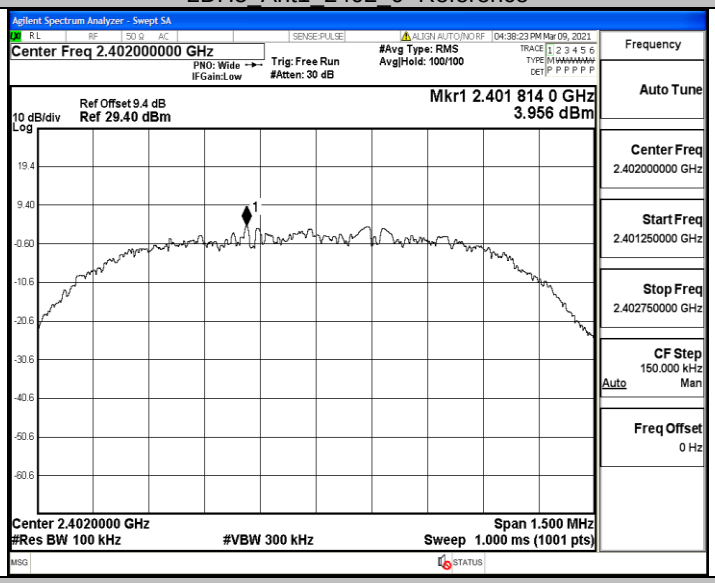
DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500



2DH5_Ant1_2402_0~Reference



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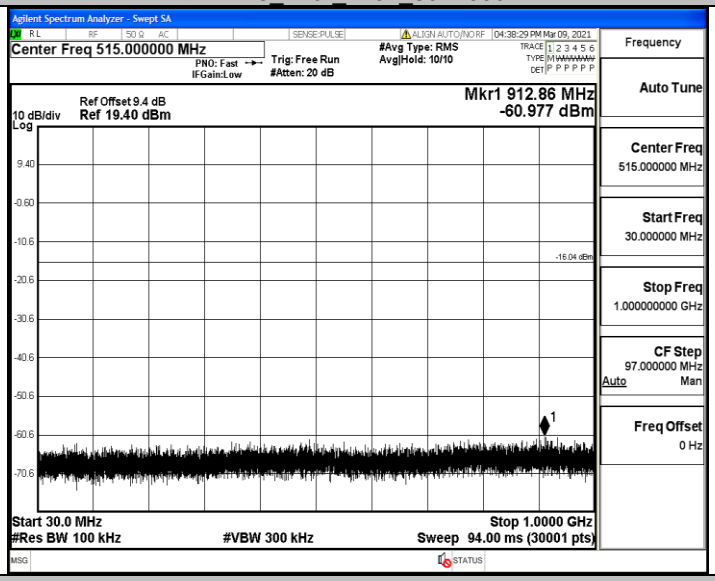

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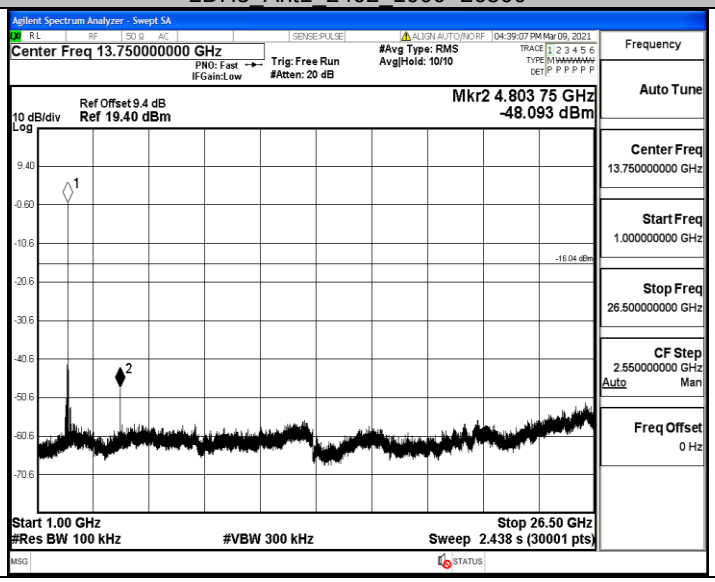
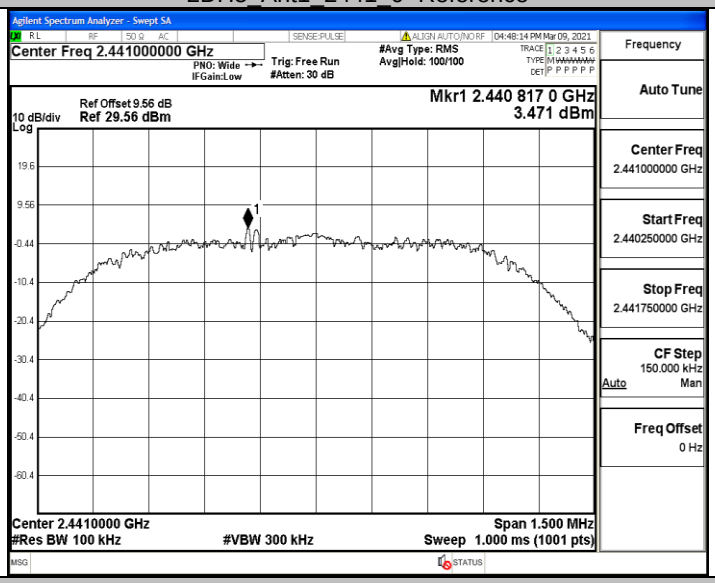


2DH5_Ant1_2441_0~Reference



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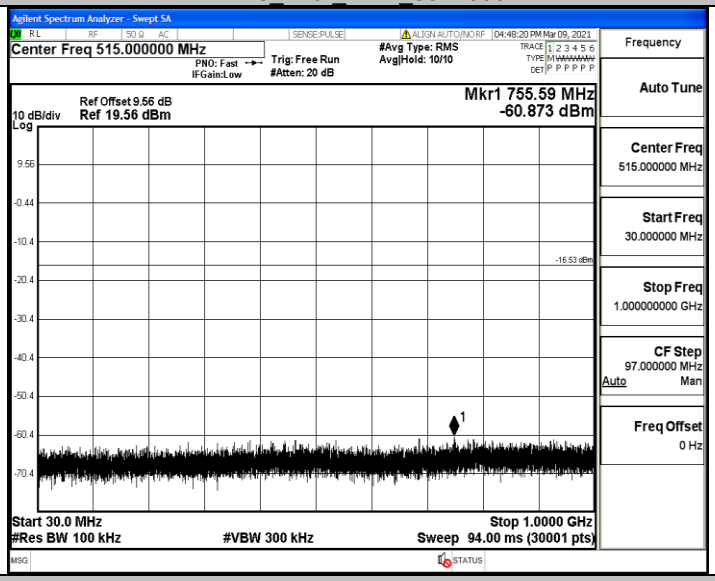
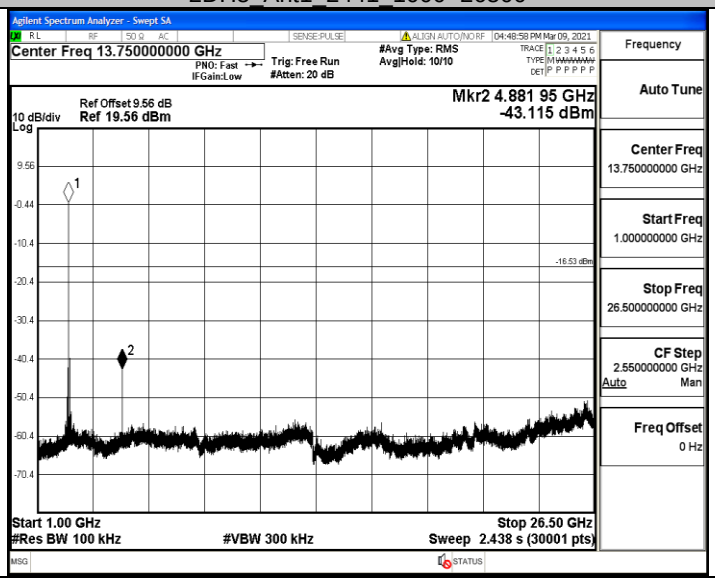


2DH5_Ant1_2441_1000~26500



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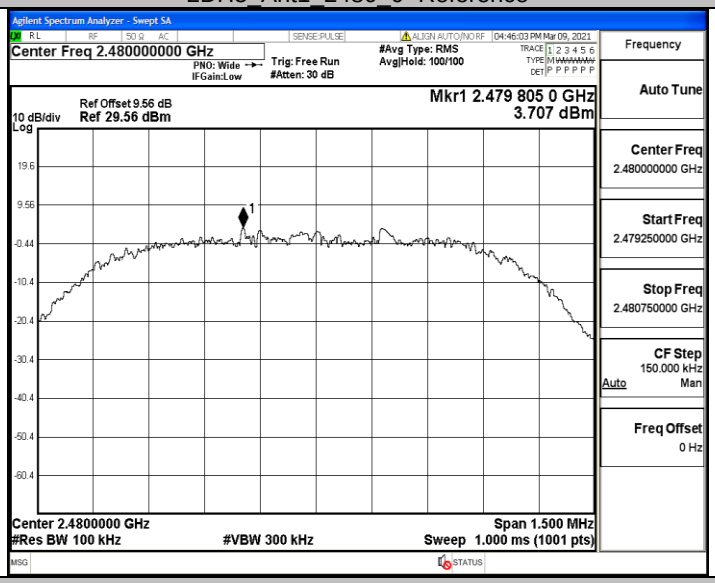
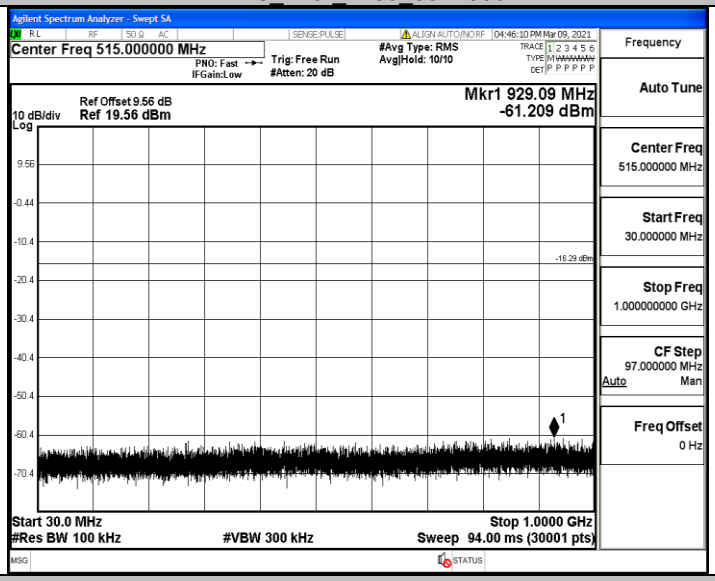


2DH5_Ant1_2480_30~1000



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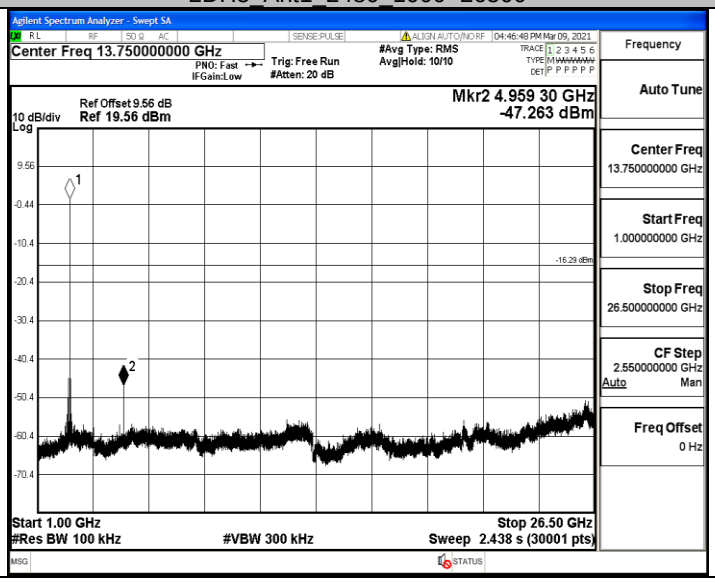
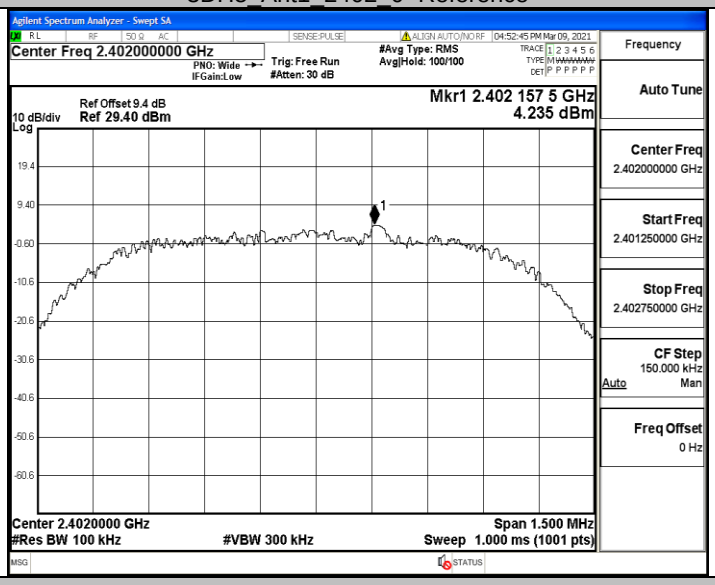


3DH5_Ant1_2402_0~Reference



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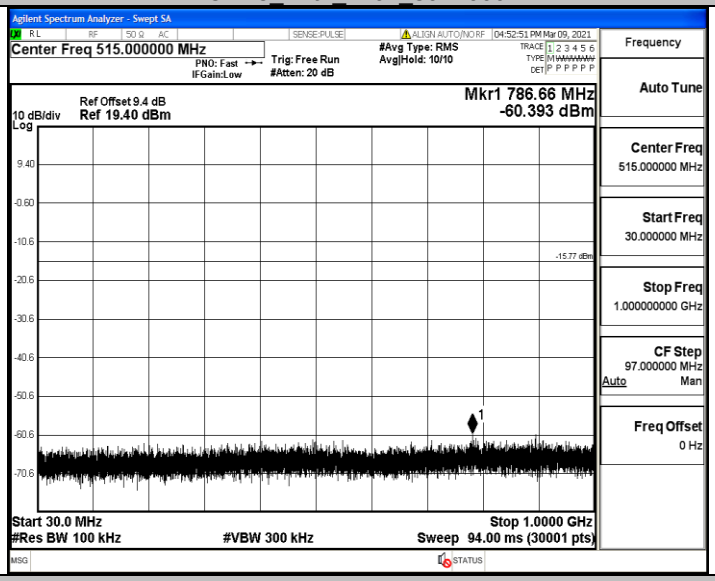
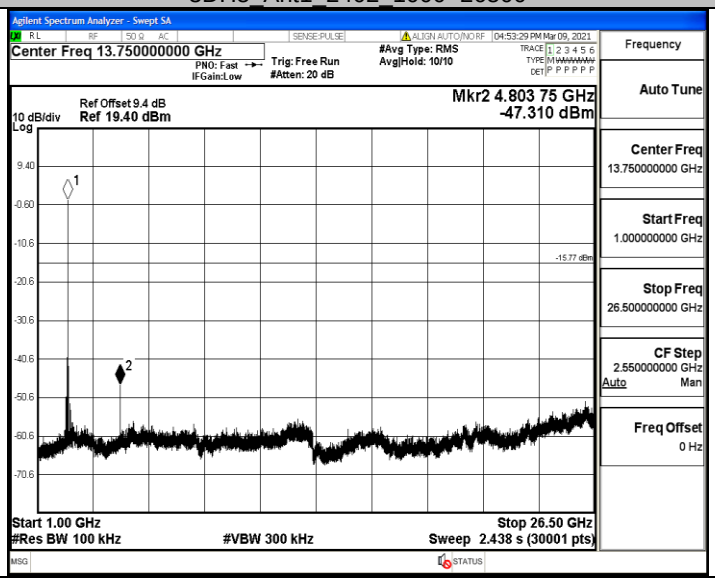
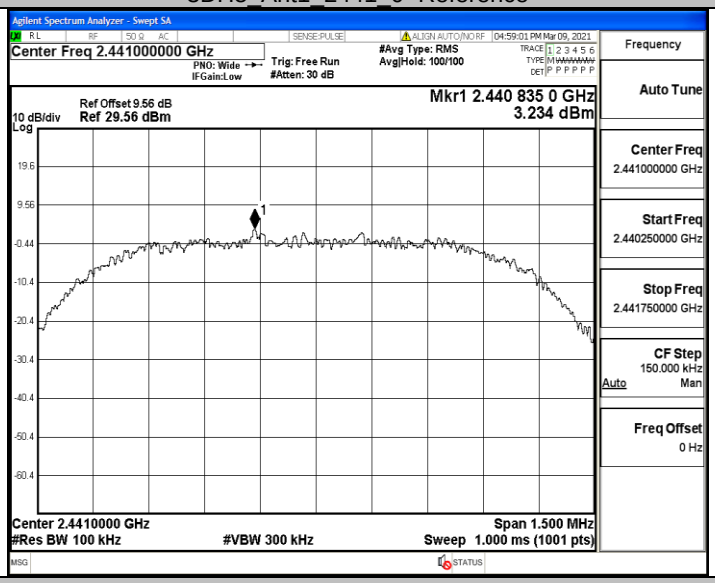


3DH5_Ant1_2402_1000~26500



3DH5_Ant1_2441_0~Reference



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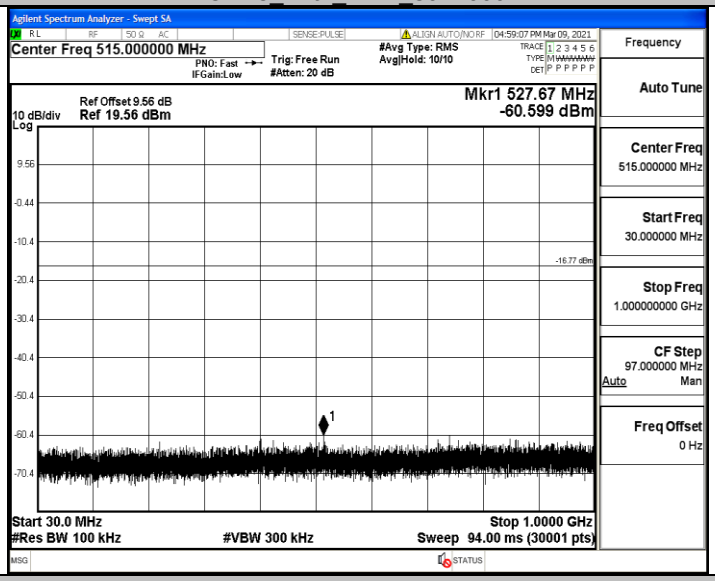

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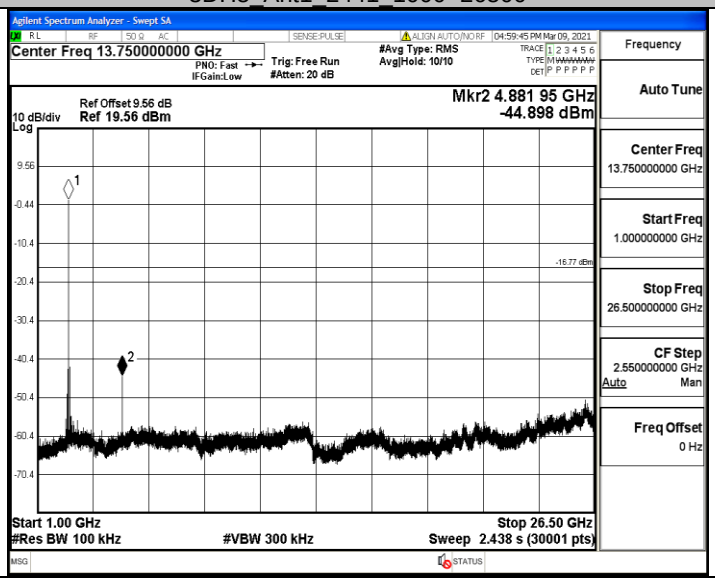

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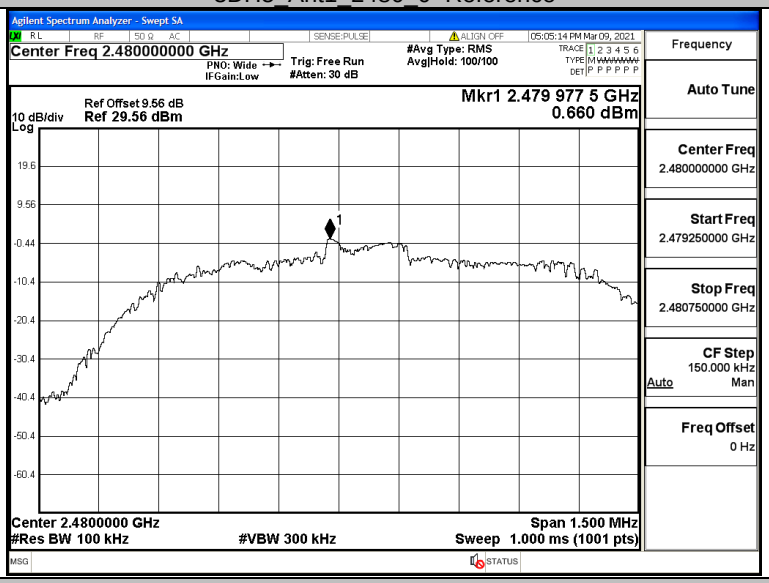

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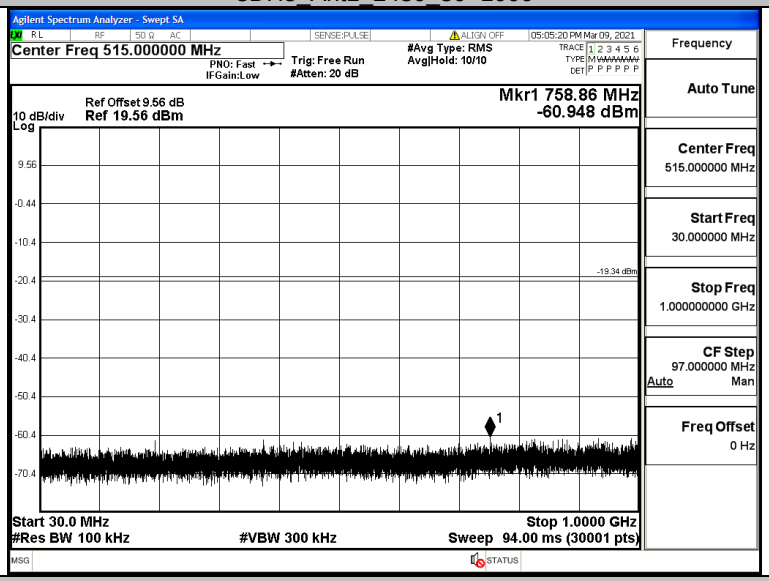

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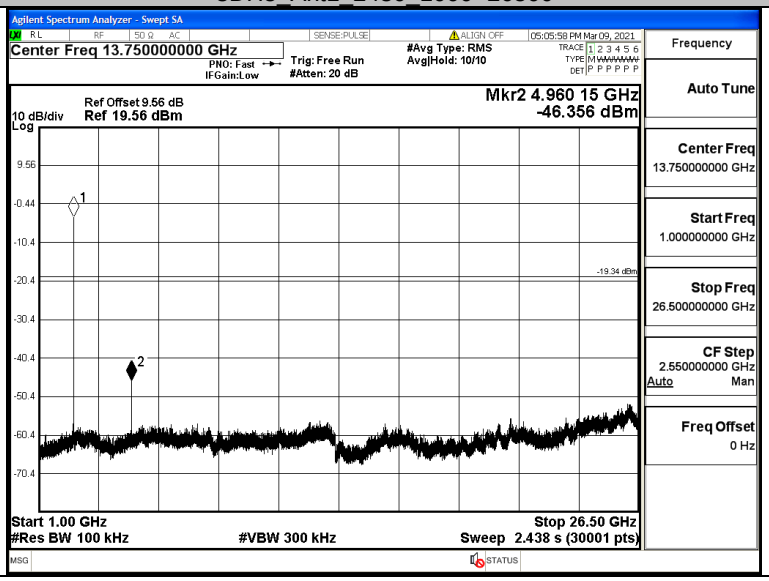


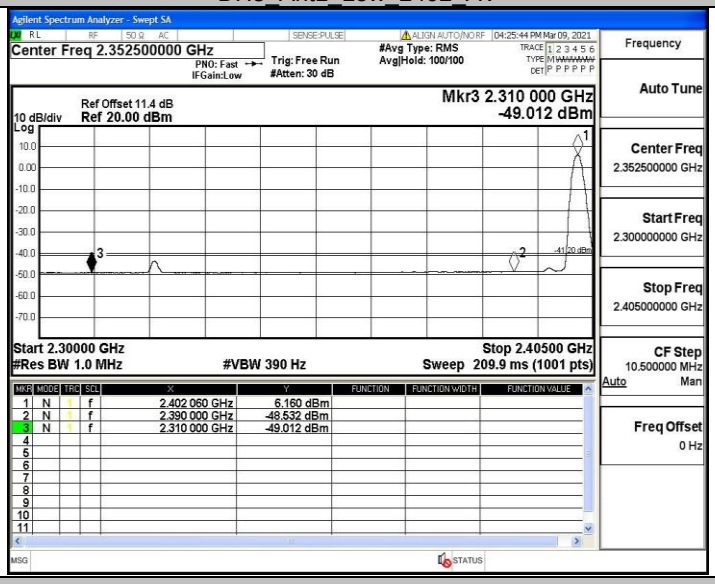
A.8 Restrict-band band-edge measurements

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-49.01	<=-41.20	PASS
				AV	2390.000	-48.53	<=-41.20	PASS
				Peak	2310.000	-42.02	<=-21.20	PASS
				Peak	2390.000	-39.84	<=-21.20	PASS
		High	2480	AV	2483.500	-47.09	<=-41.20	PASS
				AV	2500.000	-47.90	<=-41.20	PASS
				Peak	2483.500	-40.92	<=-21.20	PASS
				Peak	2500.000	-39.84	<=-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-48.92	<=-41.20	PASS
				AV	2390.000	-48.59	<=-41.20	PASS
				Peak	2310.000	-40.41	<=-21.20	PASS
				Peak	2390.000	-42.42	<=-21.20	PASS
		High	2480	AV	2483.500	-46.78	<=-41.20	PASS
				AV	2500.000	-47.91	<=-41.20	PASS
				Peak	2483.500	-40.67	<=-21.20	PASS
				Peak	2500.000	-40.90	<=-21.20	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-48.98	<=-41.20	PASS
				AV	2390.000	-48.49	<=-41.20	PASS
				Peak	2310.000	-42.68	<=-21.20	PASS
				Peak	2390.000	-42.88	<=-21.20	PASS
		High	2480	AV	2483.500	-46.81	<=-41.20	PASS
				AV	2500.000	-47.89	<=-41.20	PASS
				Peak	2483.500	-40.82	<=-21.20	PASS
				Peak	2500.000	-39.60	<=-21.20	PASS

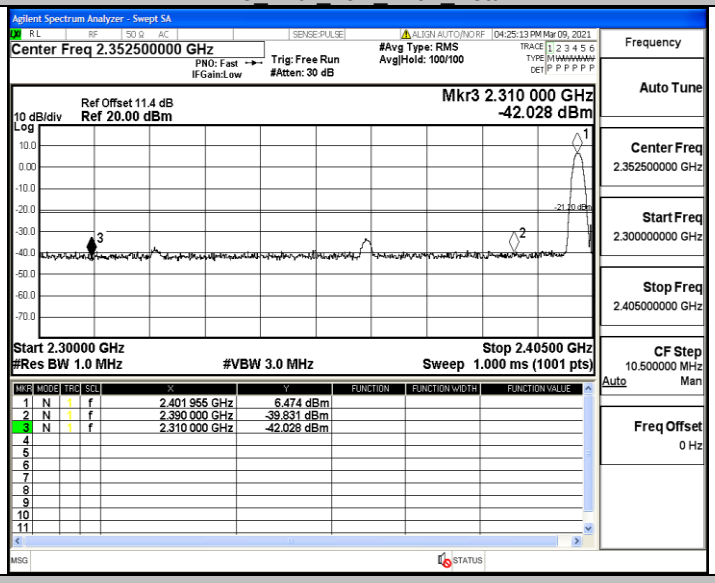
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

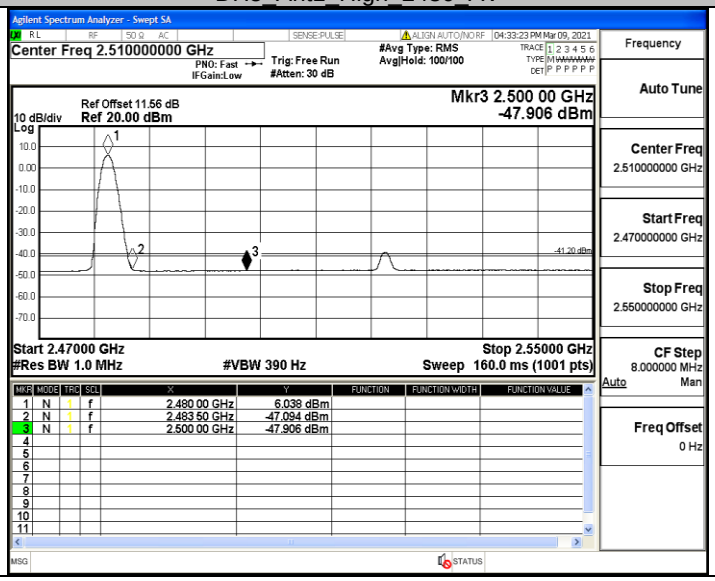
DH5_Ant1_Low_2402_AV



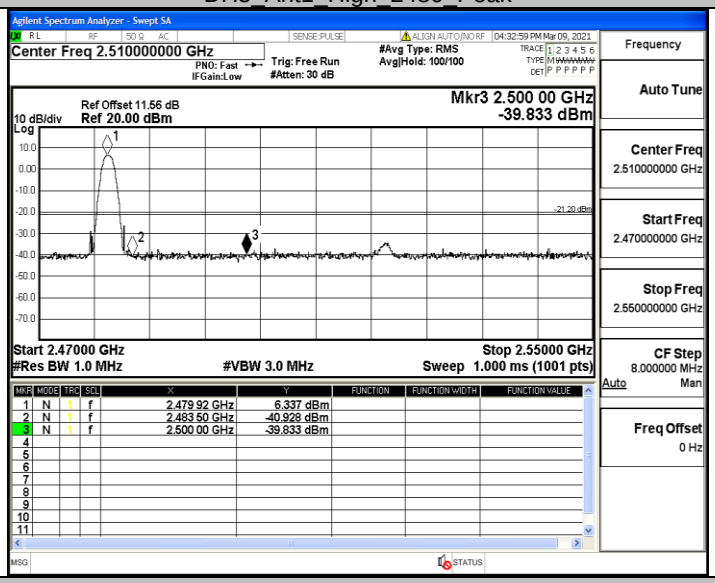
DH5_Ant1_Low_2402_Peak



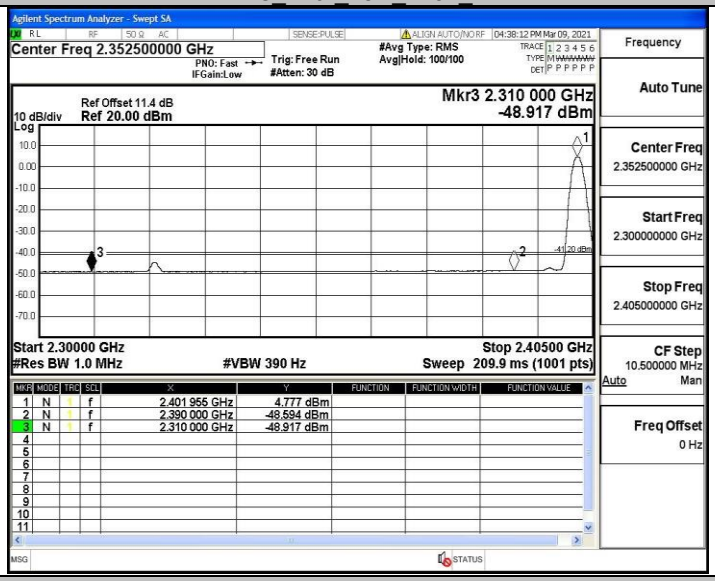
DH5_Ant1_High_2480_AV



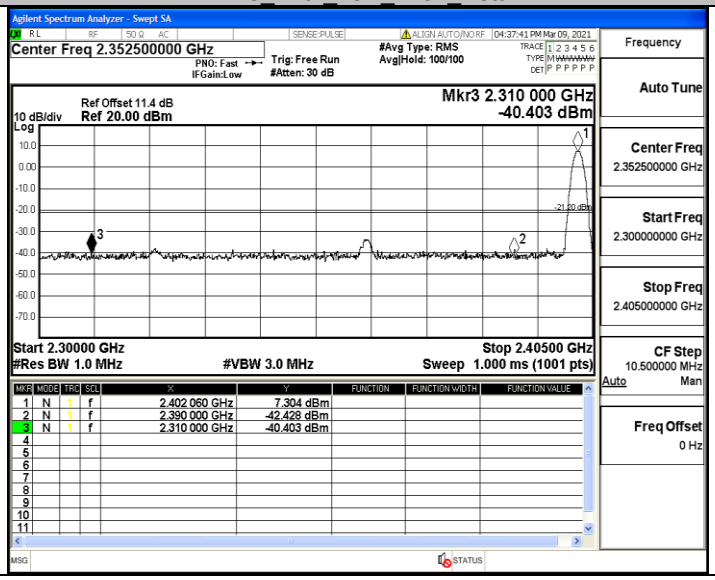
DH5_Ant1_High_2480_Peak



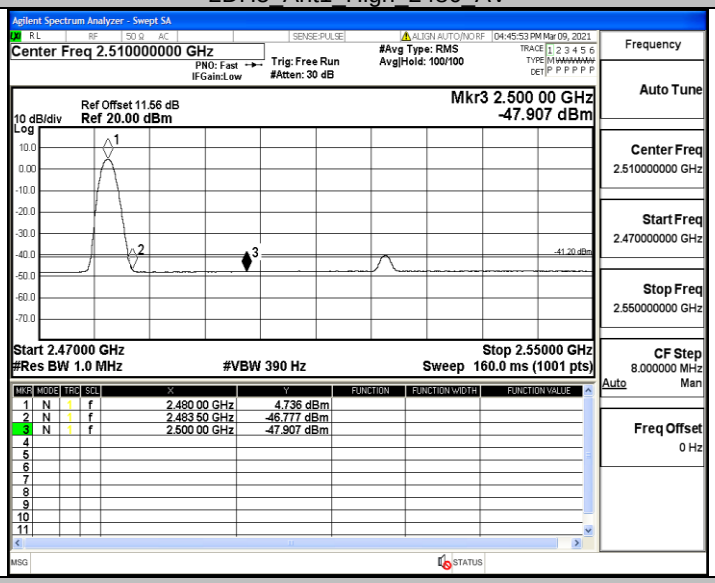
2DH5_Ant1_Low_2402_AV



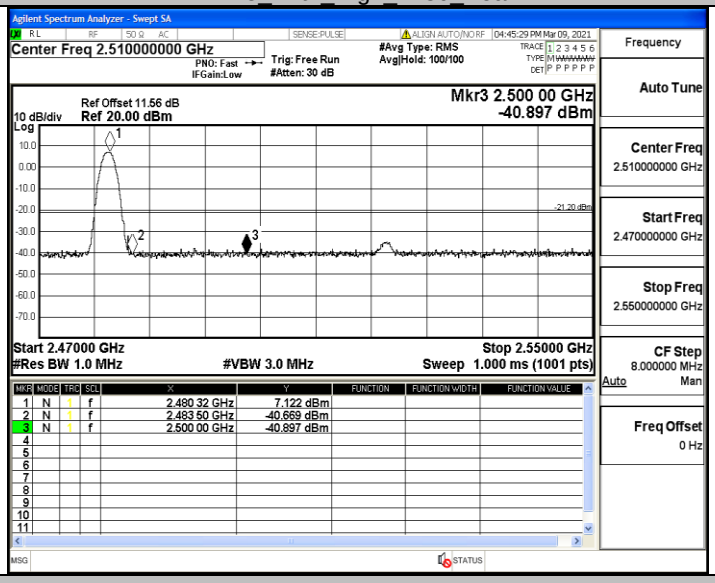
2DH5_Ant1_Low_2402_Peak



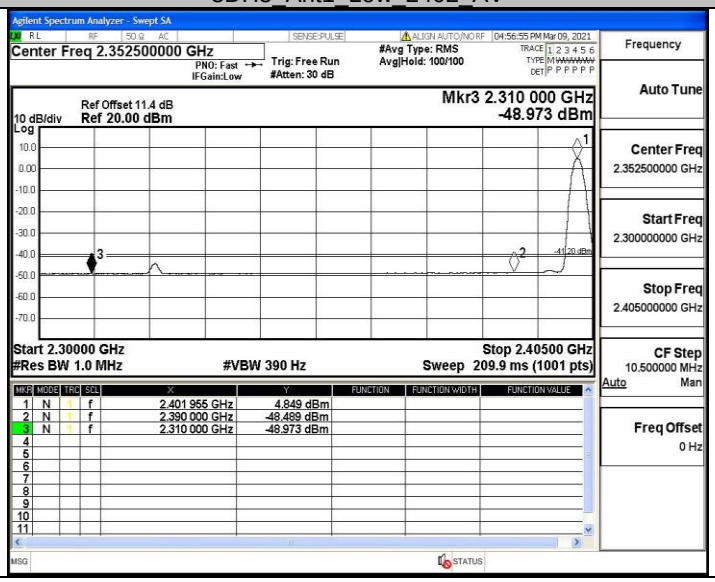
2DH5_Ant1_High_2480_AV



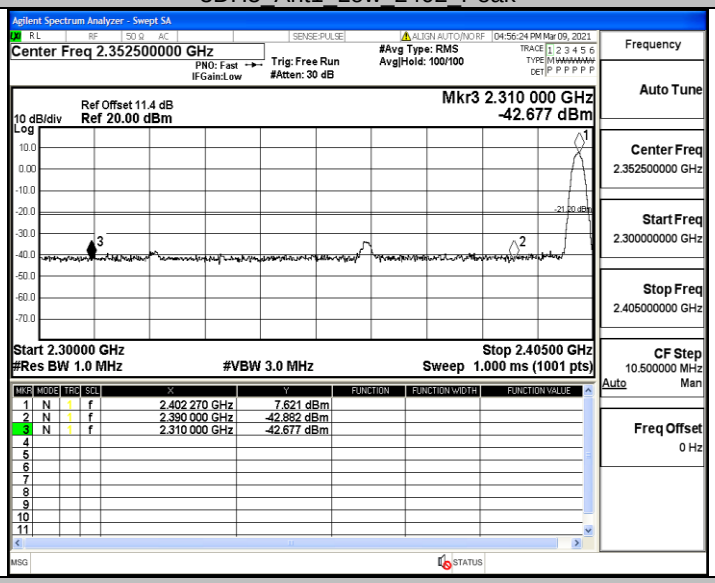
2DH5_Ant1_High_2480_Peak



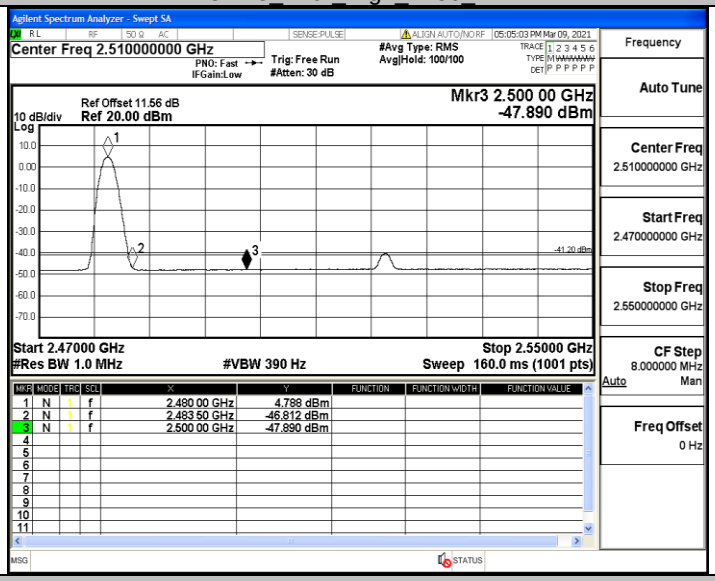
3DH5_Ant1_Low_2402_AV



3DH5_Ant1_Low_2402_Peak



3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak