



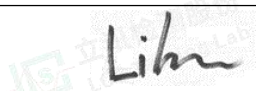
Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Bluetooth Led Whip Light

Test Model: ATA12WT

Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	 Bill Zhu
Supervised by:	 Li Huan



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A.1 20dB Bandwidth

Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.969	2401.526	2402.495	---	---
		2441	1.044	2440.457	2441.501	---	---
		2480	1.041	2479.463	2480.504	---	---
2DH5	Ant1	2402	1.290	2401.361	2402.651	---	---
		2441	1.290	2440.361	2441.651	---	---
		2480	1.290	2479.361	2480.651	---	---



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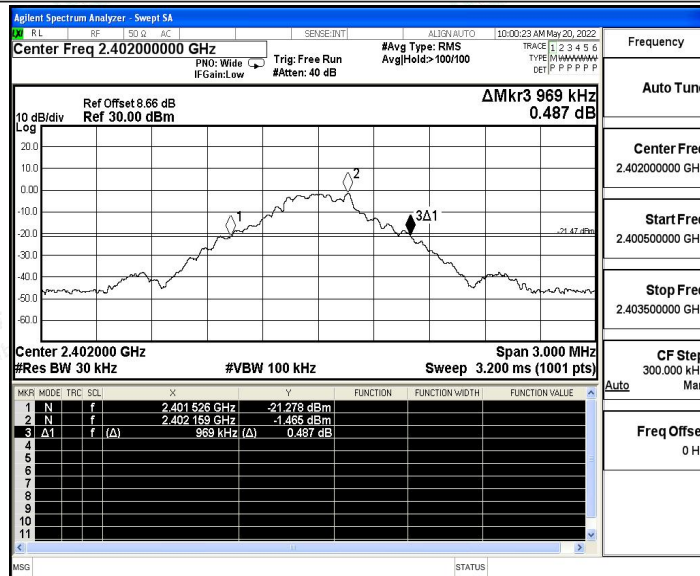
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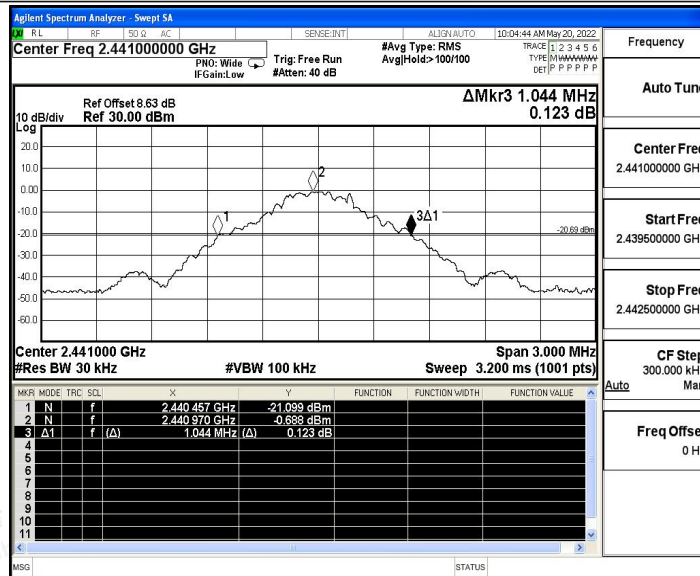


Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480

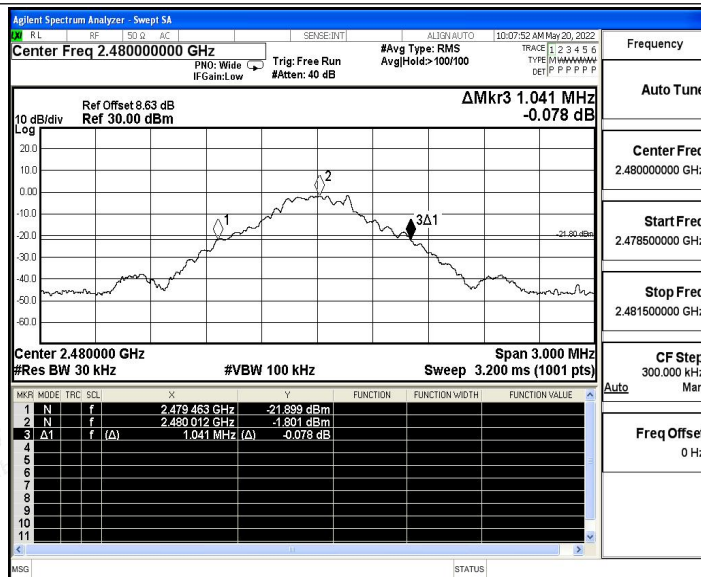


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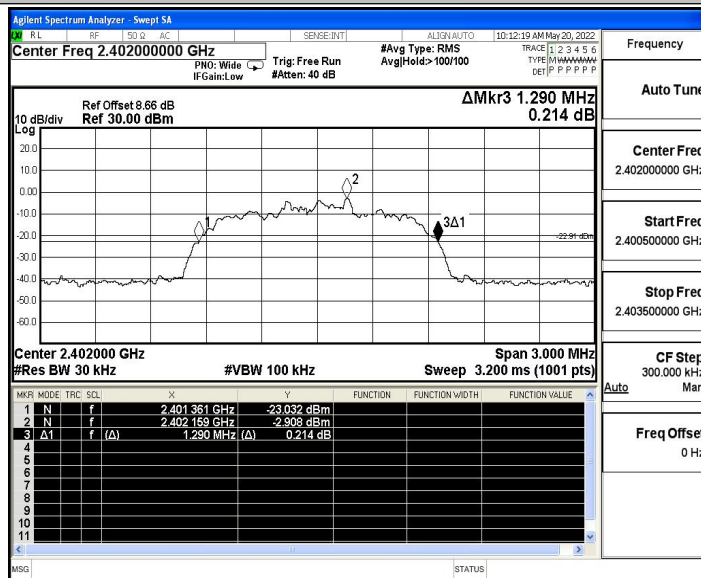
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2DH5_Ant1_2402



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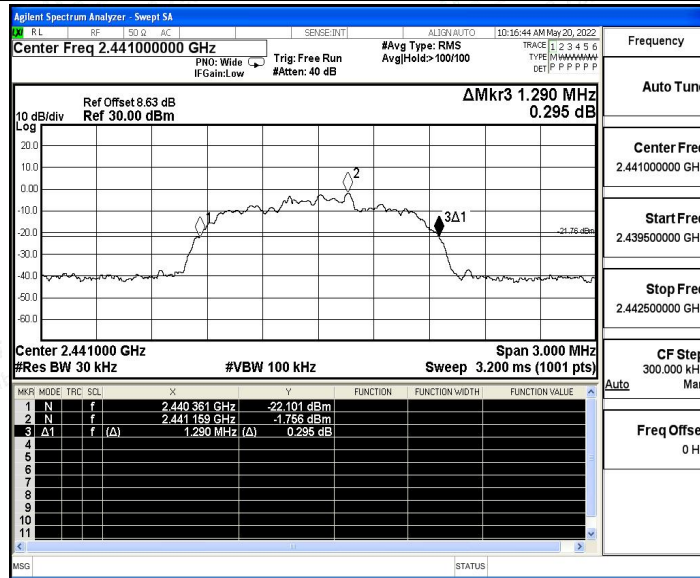
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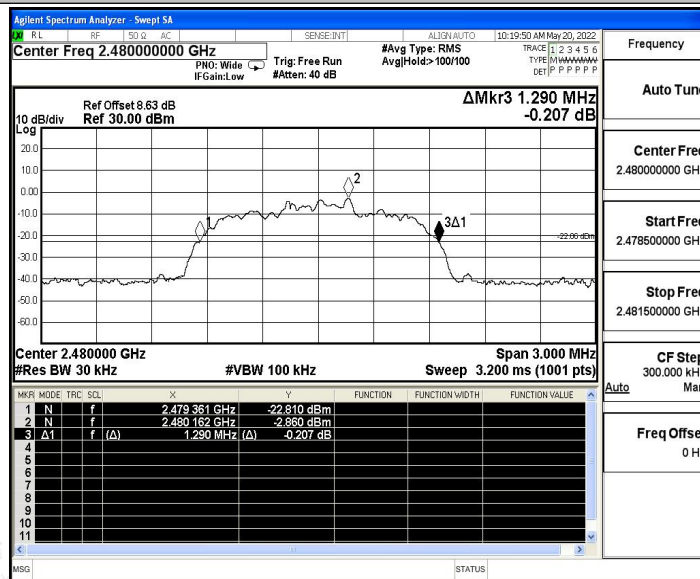
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2DH5_Ant1_2441



2DH5_Ant1_2480



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A.2 Maximum Conducted Output Power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	1.18	≤20.97	PASS
		2441	2.33	≤20.97	PASS
		2480	1.25	≤20.97	PASS
2DH5	Ant1	2402	0.94	≤20.97	PASS
		2441	2.1	≤20.97	PASS
		2480	1.05	≤20.97	PASS



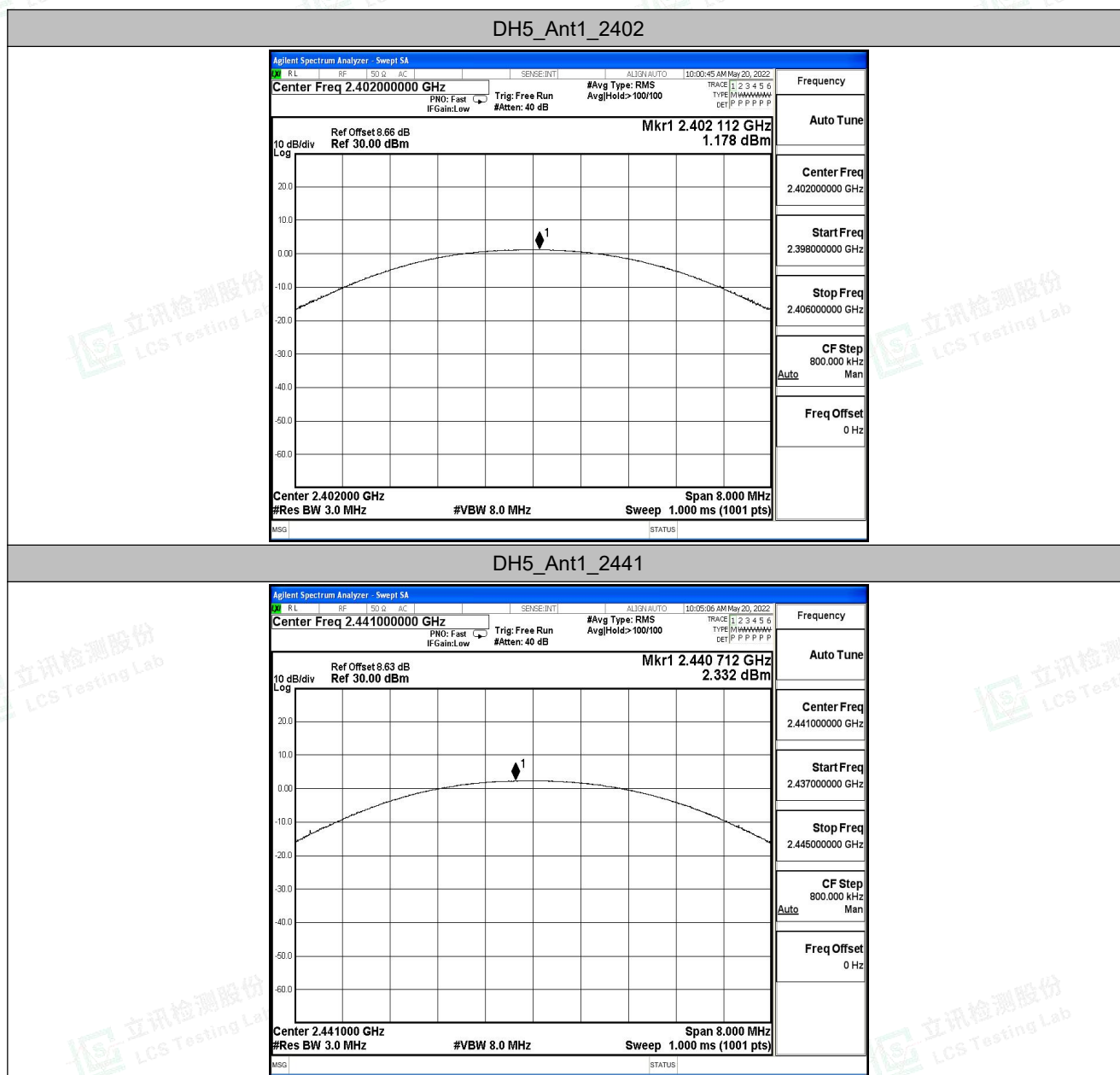
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Test Graphs



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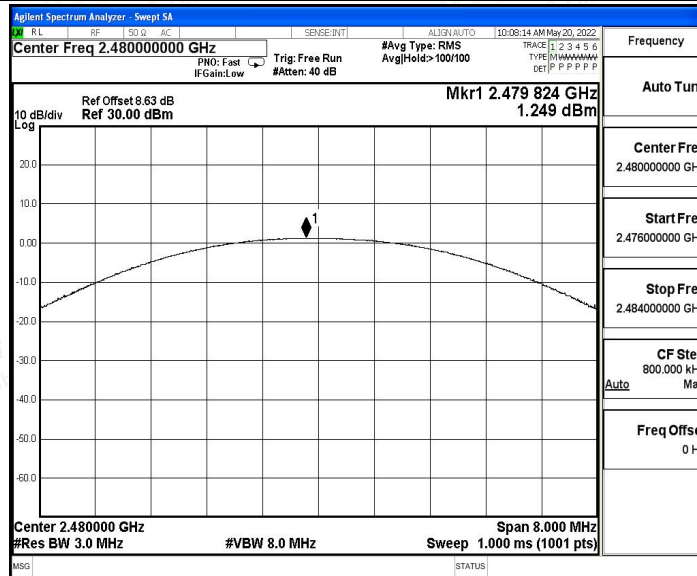
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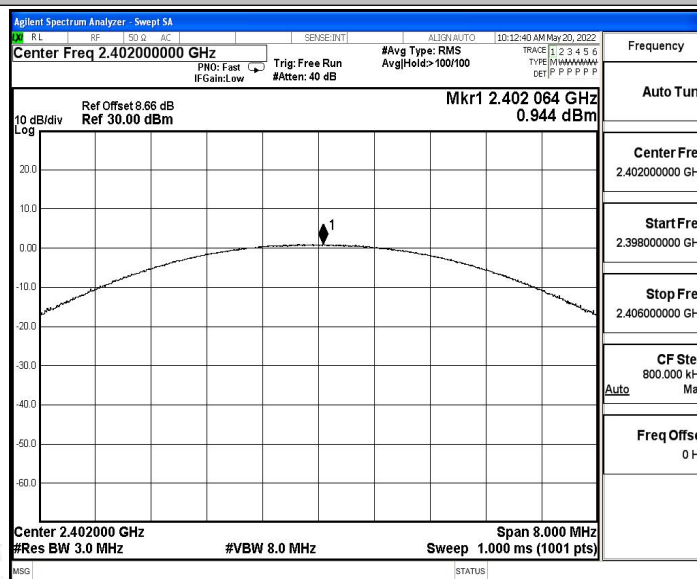
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DH5_Ant1_2480



2DH5_Ant1_2402



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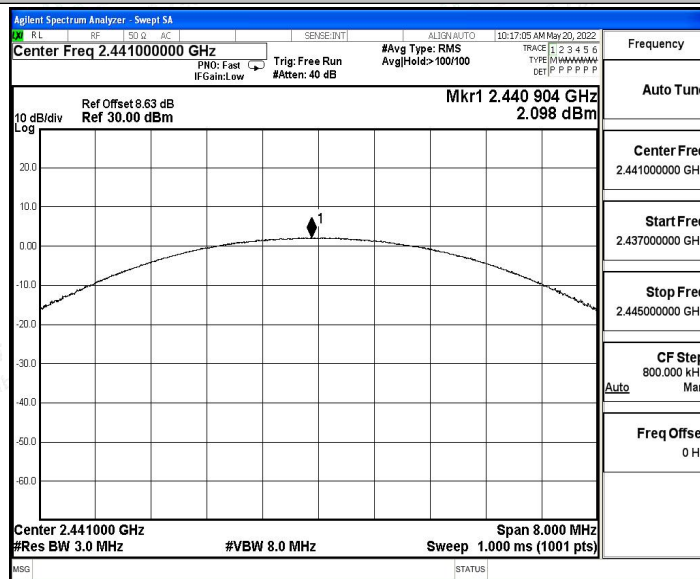
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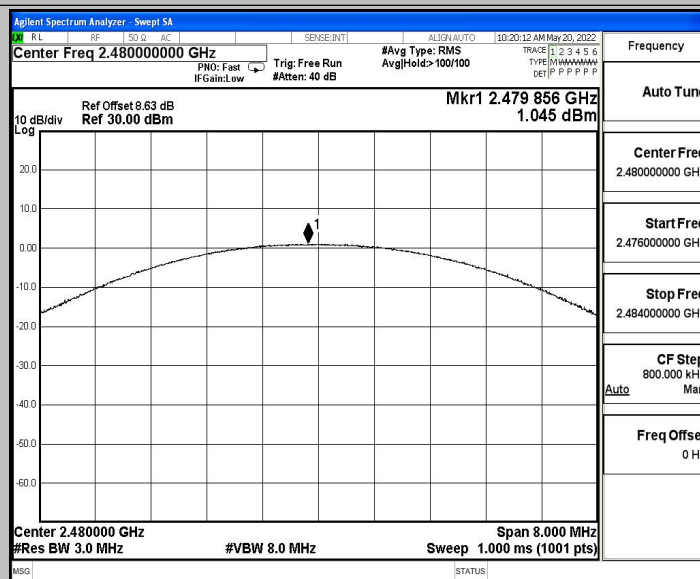
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2DH5_Ant1_2441



2DH5_Ant1_2480



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A.3 Carrier Frequencies Separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.124	≥ 1.044	PASS
2DH5	Ant1	Hop	0.876	≥ 0.860	PASS



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Test Graphs



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A.4 Dwell Time

Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	106.67	0.307	≤0.4	PASS
2DH5	Ant1	Hop	2.88	106.67	0.308	≤0.4	PASS



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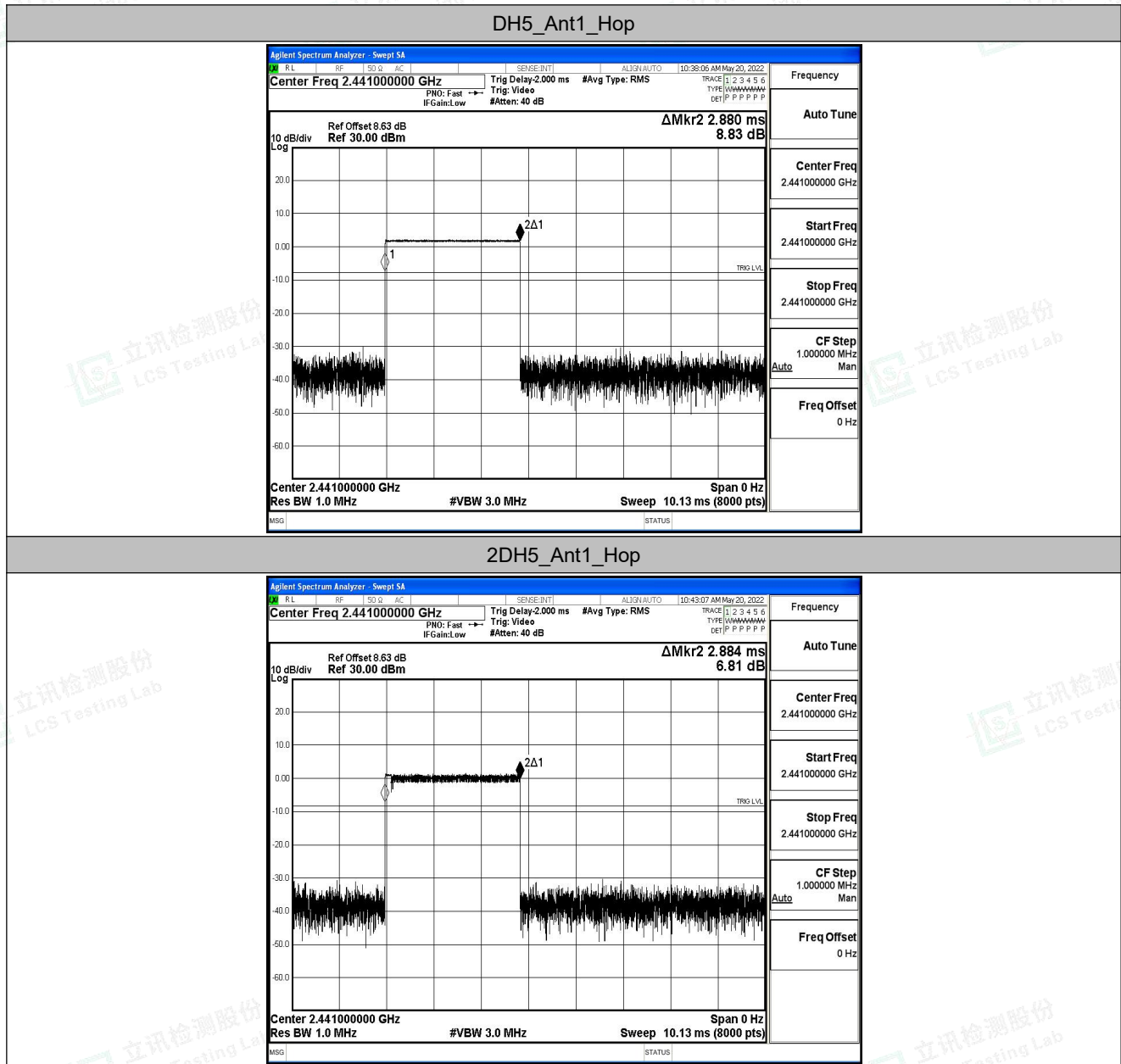
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Test Graphs



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A.5 Number of Hopping Channel

Test Result

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





Test Graphs



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A.6 Band Edge

Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.52	-47.8	≤ -19.48	PASS
		High	2480	0.79	-47.9	≤ -19.22	PASS
		Low	Hop_2402	-0.16	-48.99	≤ -20.16	PASS
		High	Hop_2480	0.92	-48.34	≤ -19.08	PASS
2DH5	Ant1	Low	2402	-1.12	-48.68	≤ -21.12	PASS
		High	2480	-0.07	-48.15	≤ -20.07	PASS
		Low	Hop_2402	-1.78	-49.42	≤ -21.78	PASS
		High	Hop_2480	-1.70	-47.88	≤ -21.7	PASS



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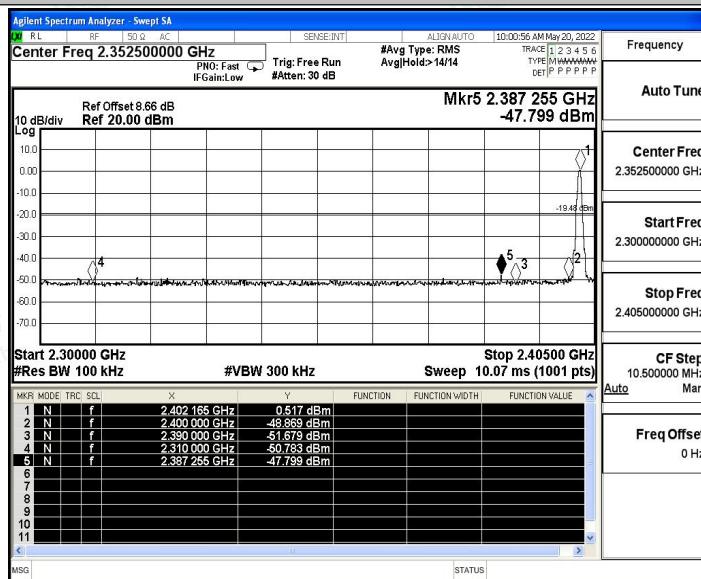
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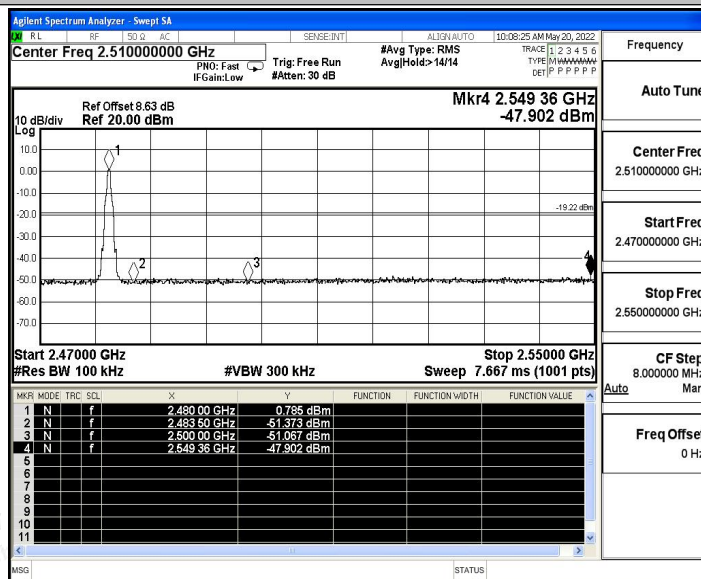


Test Graphs

DH5_Ant1_Low_2402



DH5_Ant1_High_2480



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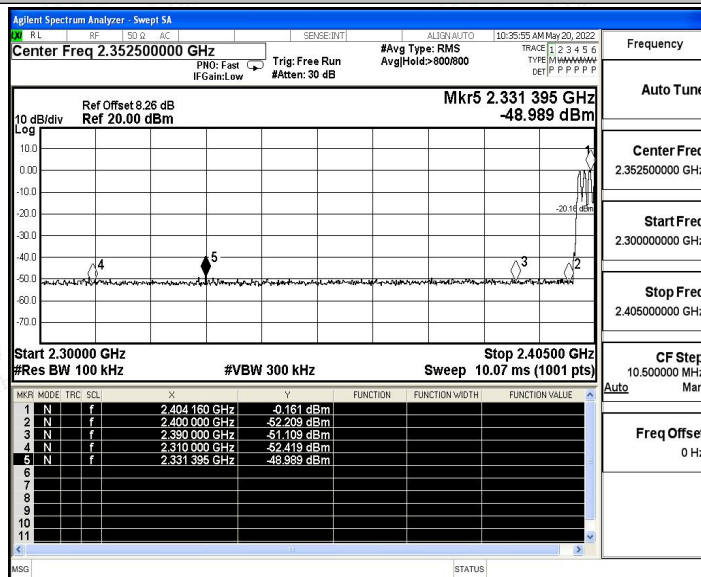
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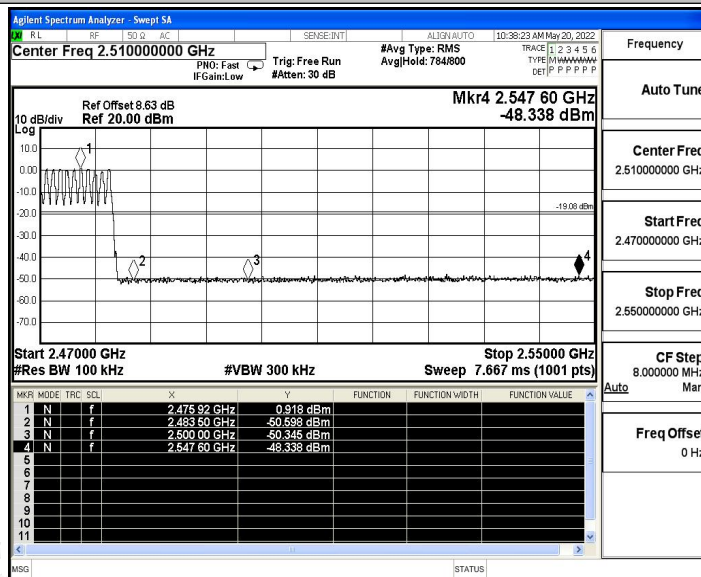
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DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480



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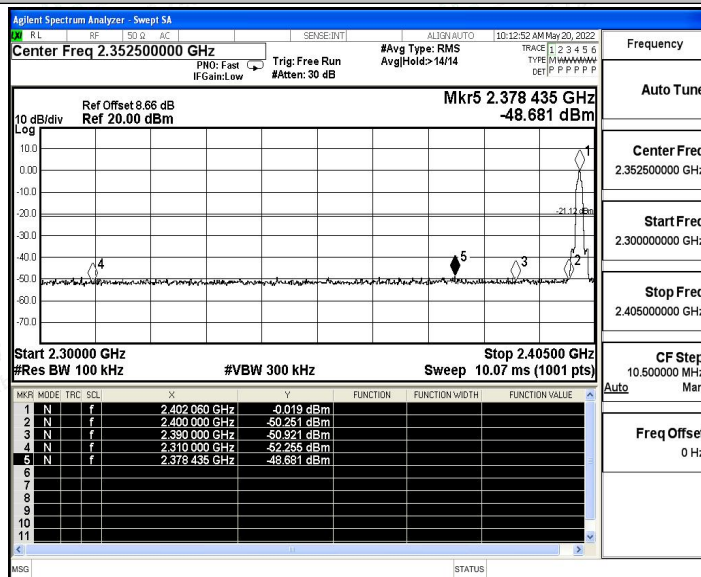
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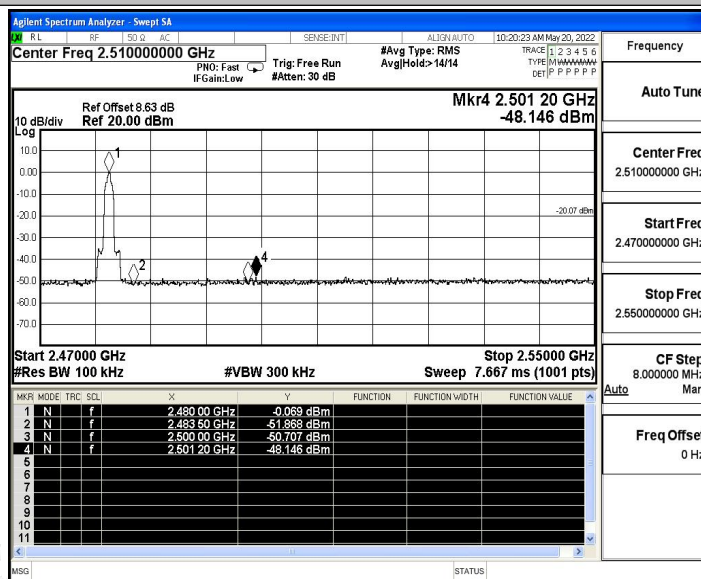
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2DH5_Ant1_Low_2402



2DH5_Ant1_High_2480



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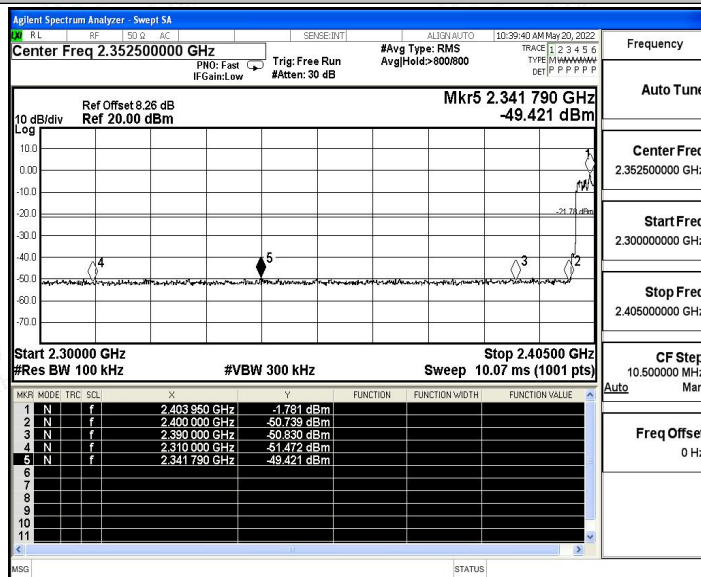
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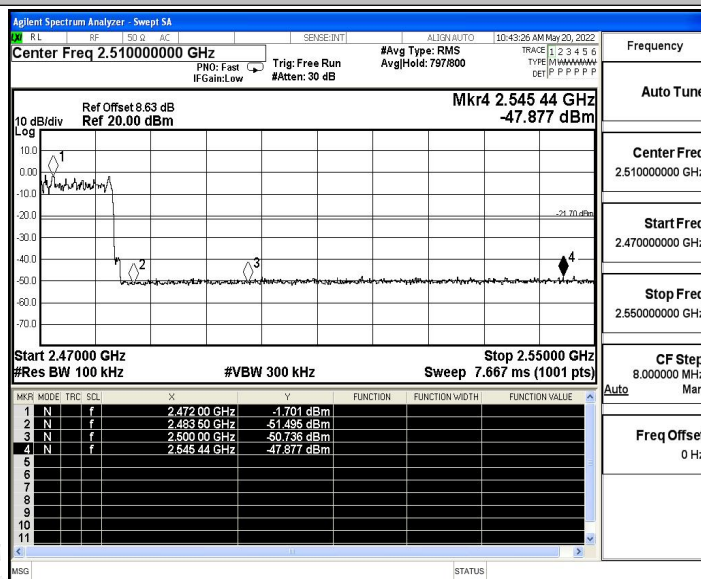
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2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480



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A.7 Conducted RF Spurious Emission

Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.51	0.51	---	PASS
			30~1000	0.51	-59.34	≤ -19.49	PASS
			1000~26500	0.51	-45.95	≤ -19.49	PASS
		2441	Reference	1.73	1.73	---	PASS
			30~1000	1.73	-57.57	≤ -18.27	PASS
			1000~26500	1.73	-45.9	≤ -18.27	PASS
		2480	Reference	0.54	0.54	---	PASS
			30~1000	0.54	-57.2	≤ -19.46	PASS
			1000~26500	0.54	-46.45	≤ -19.46	PASS
2DH5	Ant1	2402	Reference	-0.21	-0.21	---	PASS
			30~1000	-0.21	-58.1	≤ -20.21	PASS
			1000~26500	-0.21	-45.68	≤ -20.21	PASS
		2441	Reference	0.99	0.99	---	PASS
			30~1000	0.99	-57.32	≤ -19.01	PASS
			1000~26500	0.99	-45.77	≤ -19.01	PASS
		2480	Reference	-0.51	-0.51	---	PASS
			30~1000	-0.51	-56.84	≤ -20.51	PASS
			1000~26500	-0.51	-46.62	≤ -20.51	PASS



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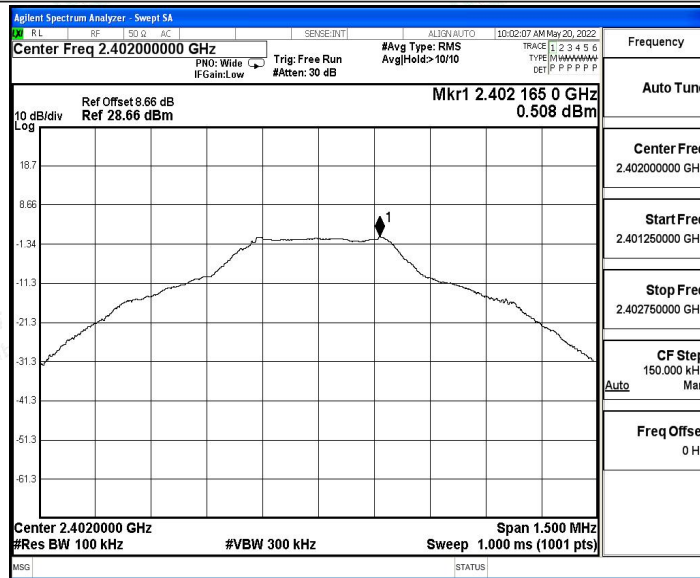
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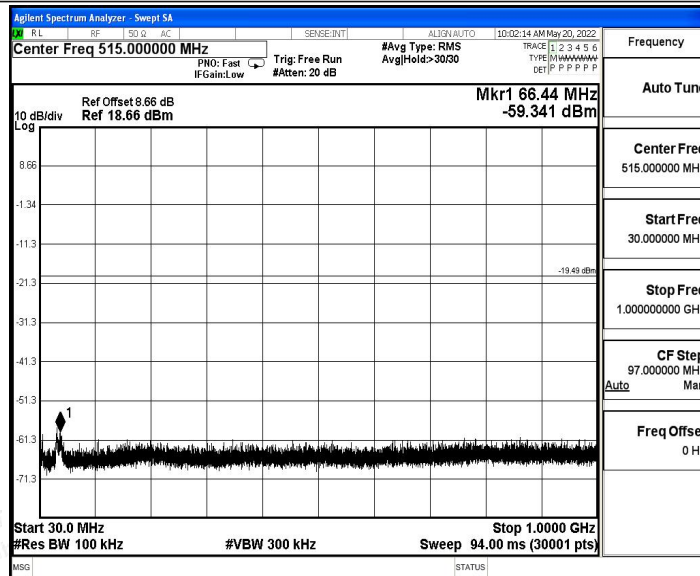


Test Graphs

DH5_Ant1_2402_0~Reference



DH5_Ant1_2402_30~1000



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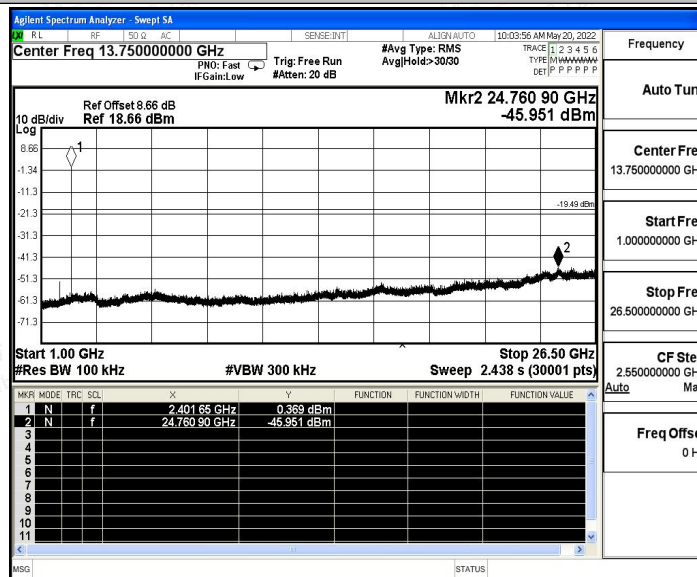
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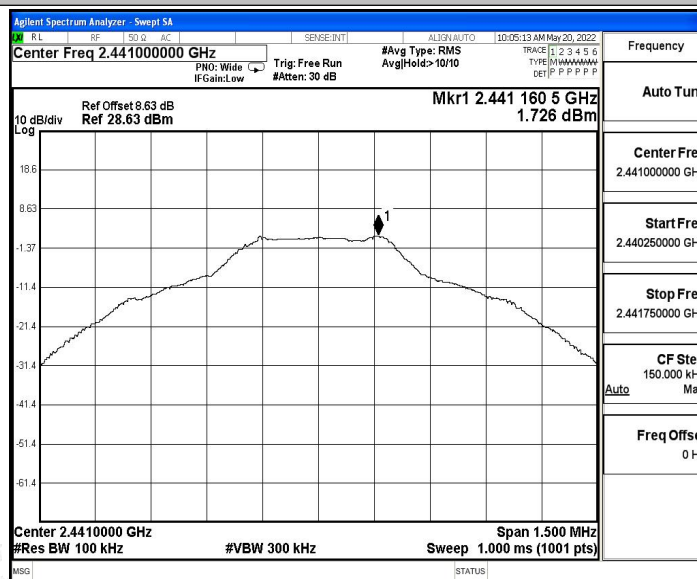
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DH5_Ant1_2402_1000~26500



DH5_Ant1_2441_0~Reference



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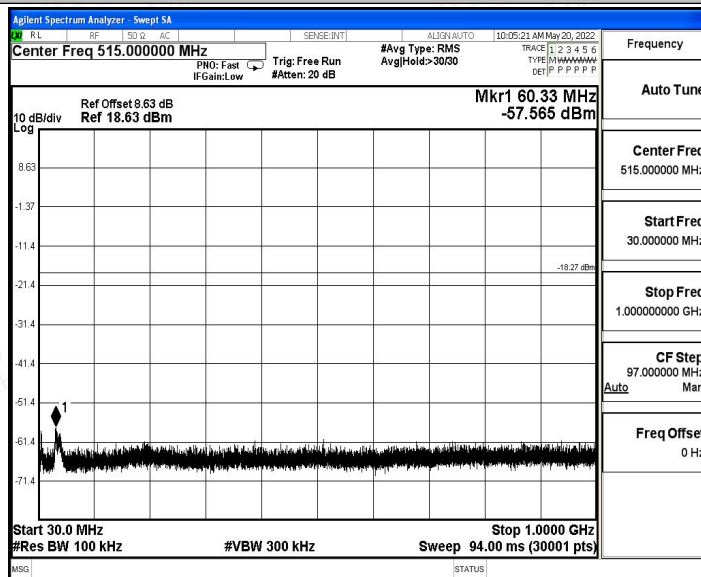
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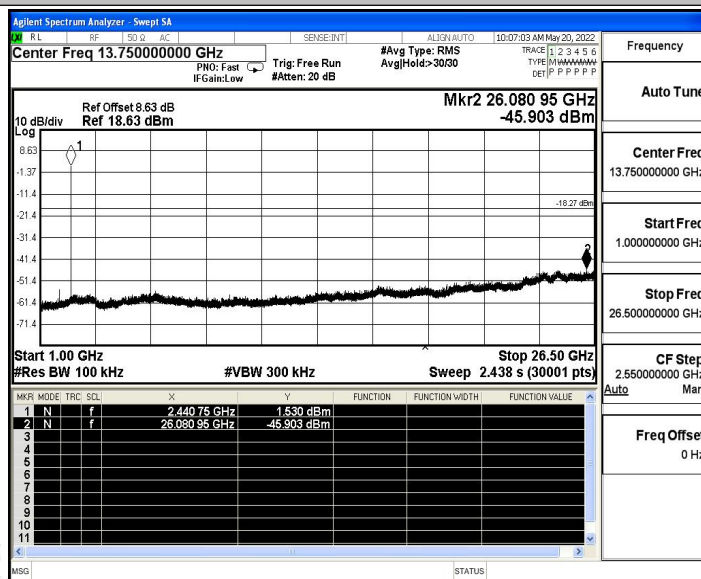
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DH5_Ant1_2441_30~1000



DH5_Ant1_2441_1000~26500



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