



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: MULTIMEDIA PROJECTOR

Test Model: RPJ240-COMBO-VOUCHER

Environmental Conditions

Temperature:	21.6° C
Relative Humidity:	52.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

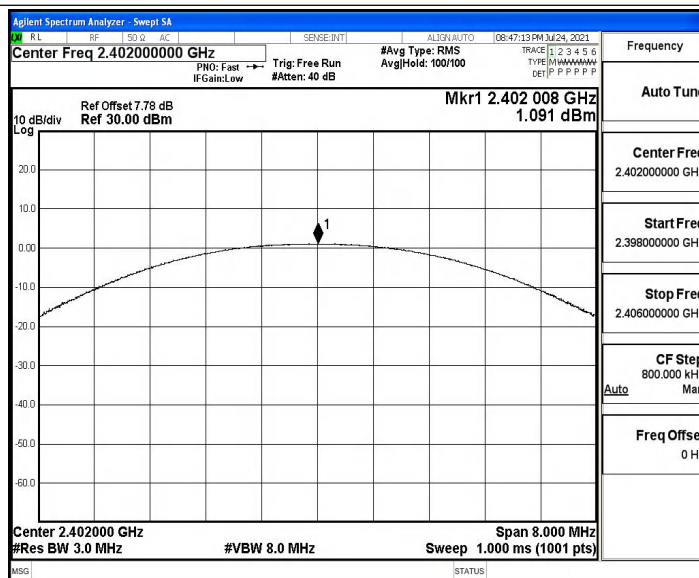


A.1 Maximum conducted output power

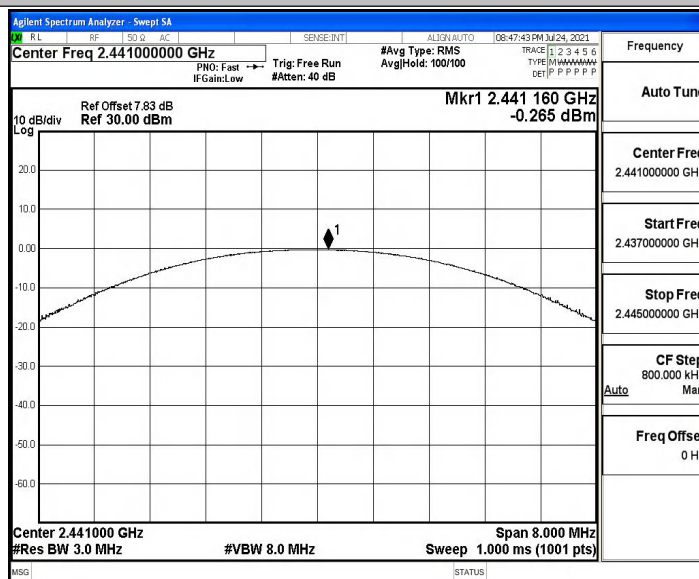
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	1.09	≤20.97	PASS
		2441	-0.27	≤20.97	PASS
		2480	0.78	≤20.97	PASS
2DH5	Ant1	2402	0.17	≤20.97	PASS
		2441	-1.06	≤20.97	PASS
		2480	-0.04	≤20.97	PASS

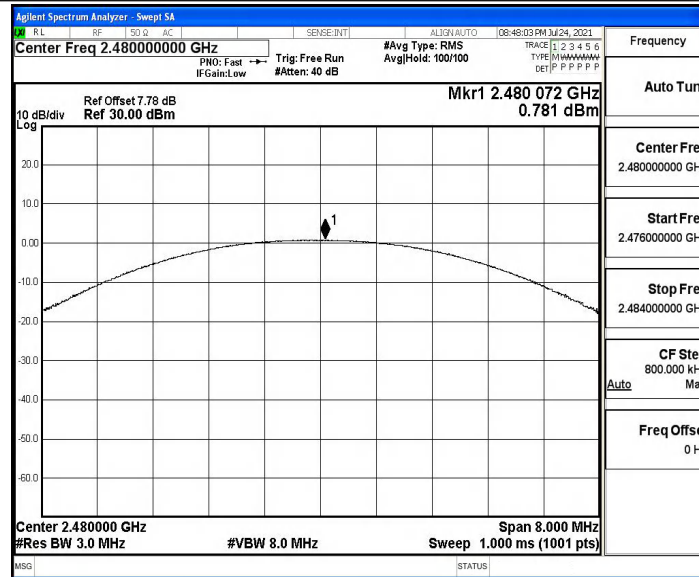
Test Graphs



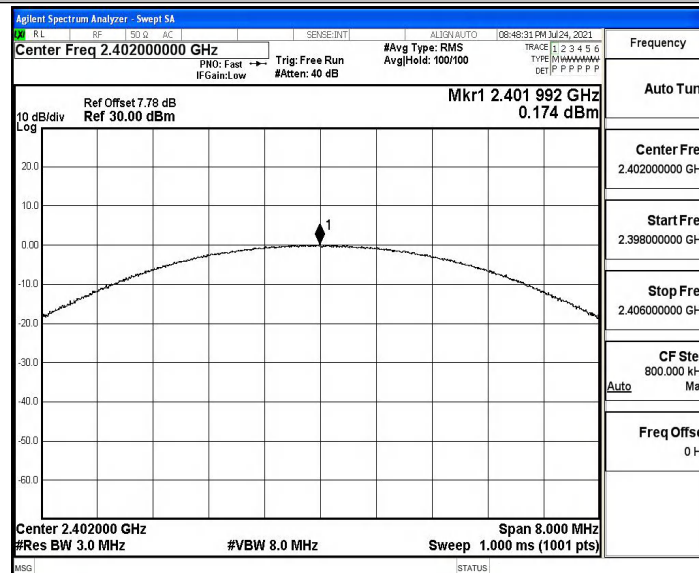
DH5_Ant1_2402



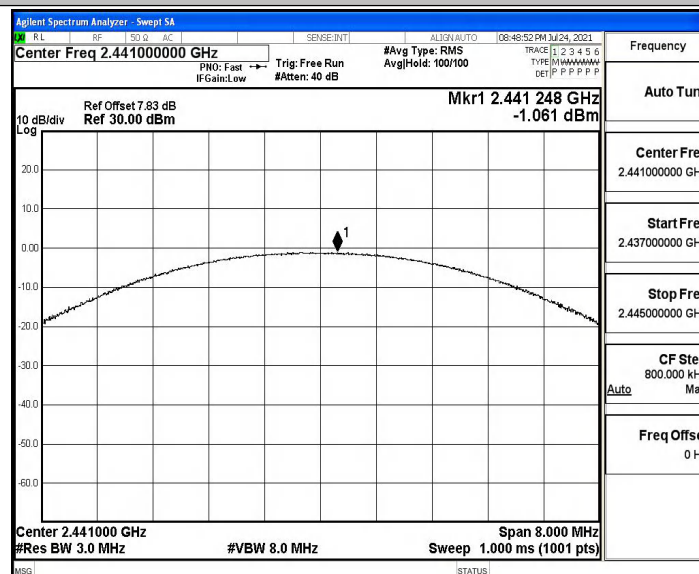
DH5_Ant1_2441



DH5_Ant1_2480

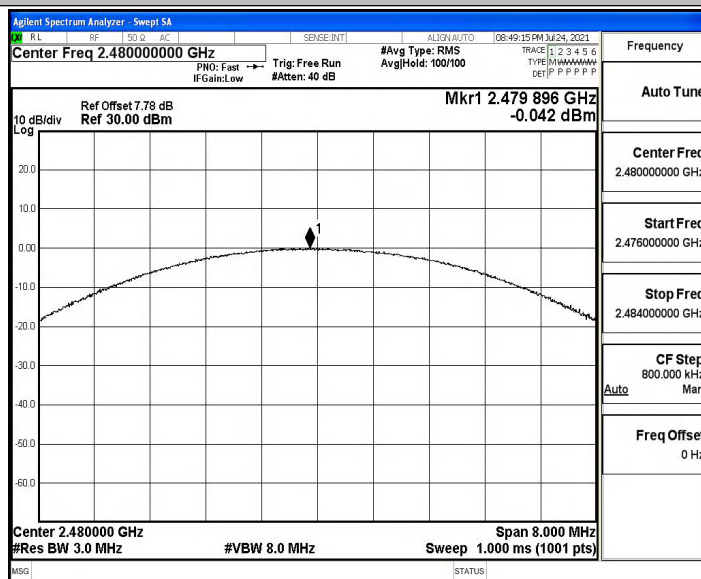


2DH5_Ant1_2402





2DH5_Ant1_2441



2DH5_Ant1_2480

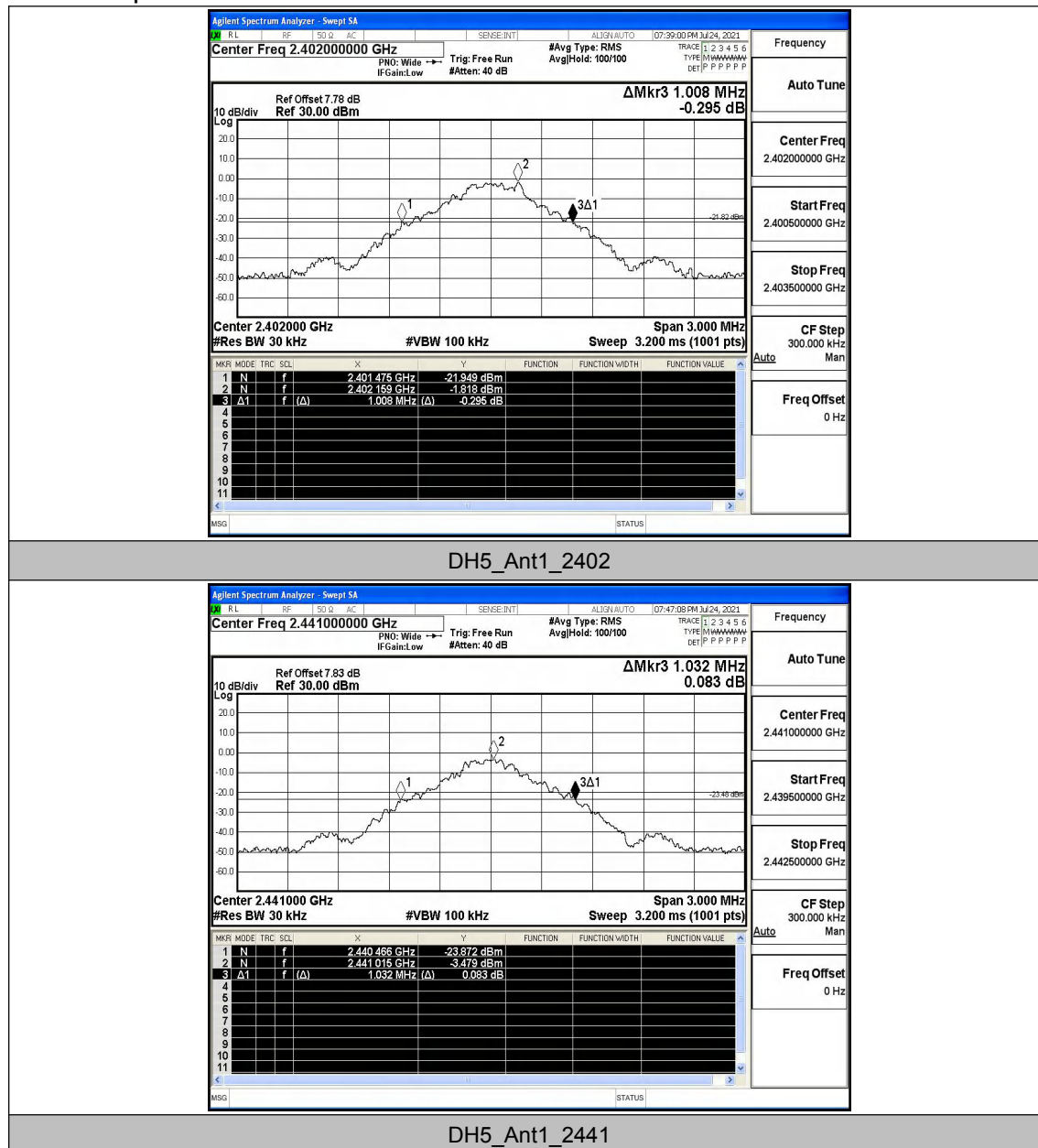


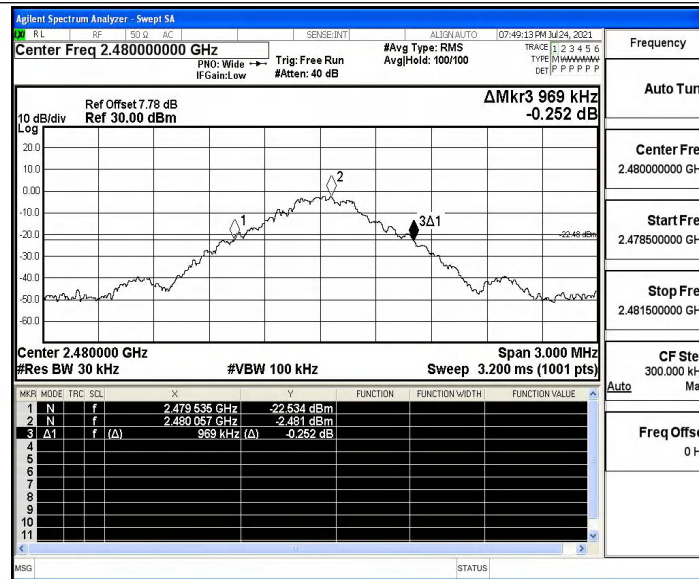
A.2 20dB Emission Bandwidth

Test Result

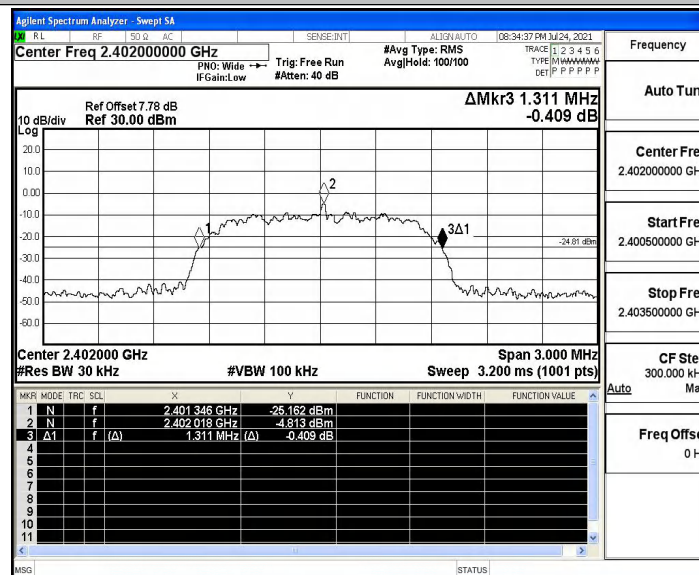
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.008	2401.475	2402.483	---	PASS
		2441	1.032	2440.466	2441.498	---	PASS
		2480	0.969	2479.535	2480.504	---	PASS
2DH5	Ant1	2402	1.311	2401.346	2402.657	---	PASS
		2441	1.275	2440.382	2441.657	---	PASS
		2480	1.338	2479.331	2480.669	---	PASS

Test Graphs

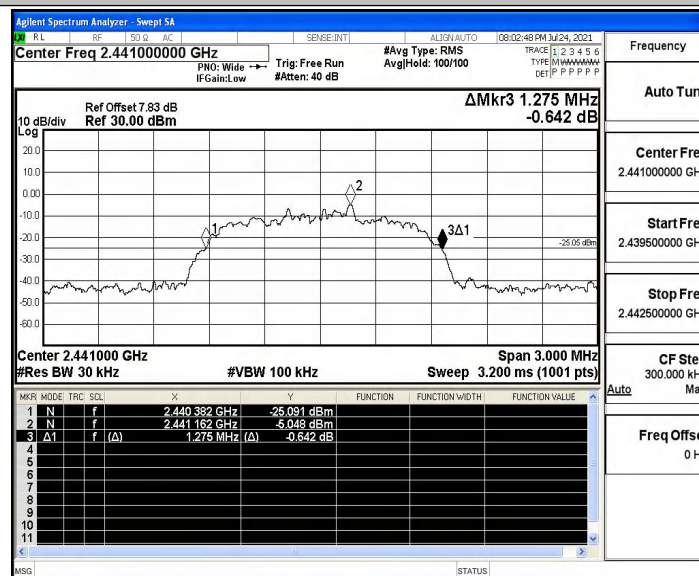




DH5_Ant1_2480

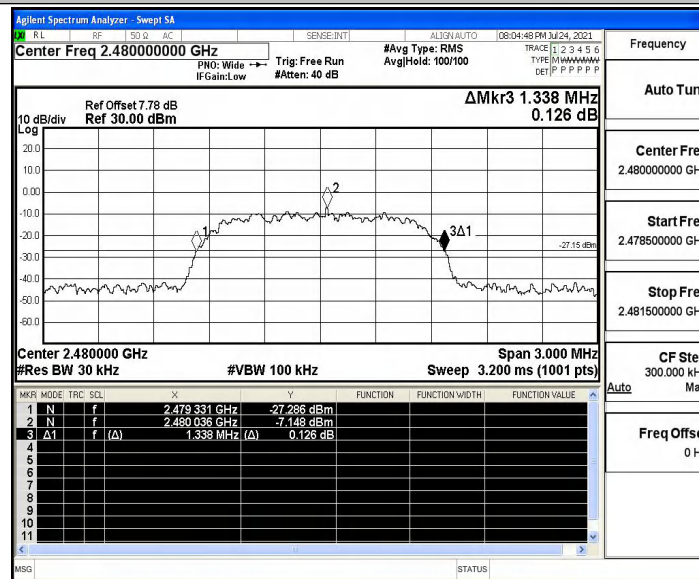


2DH5_Ant1_2402





2DH5_Ant1_2441



2DH5_Ant1_2480

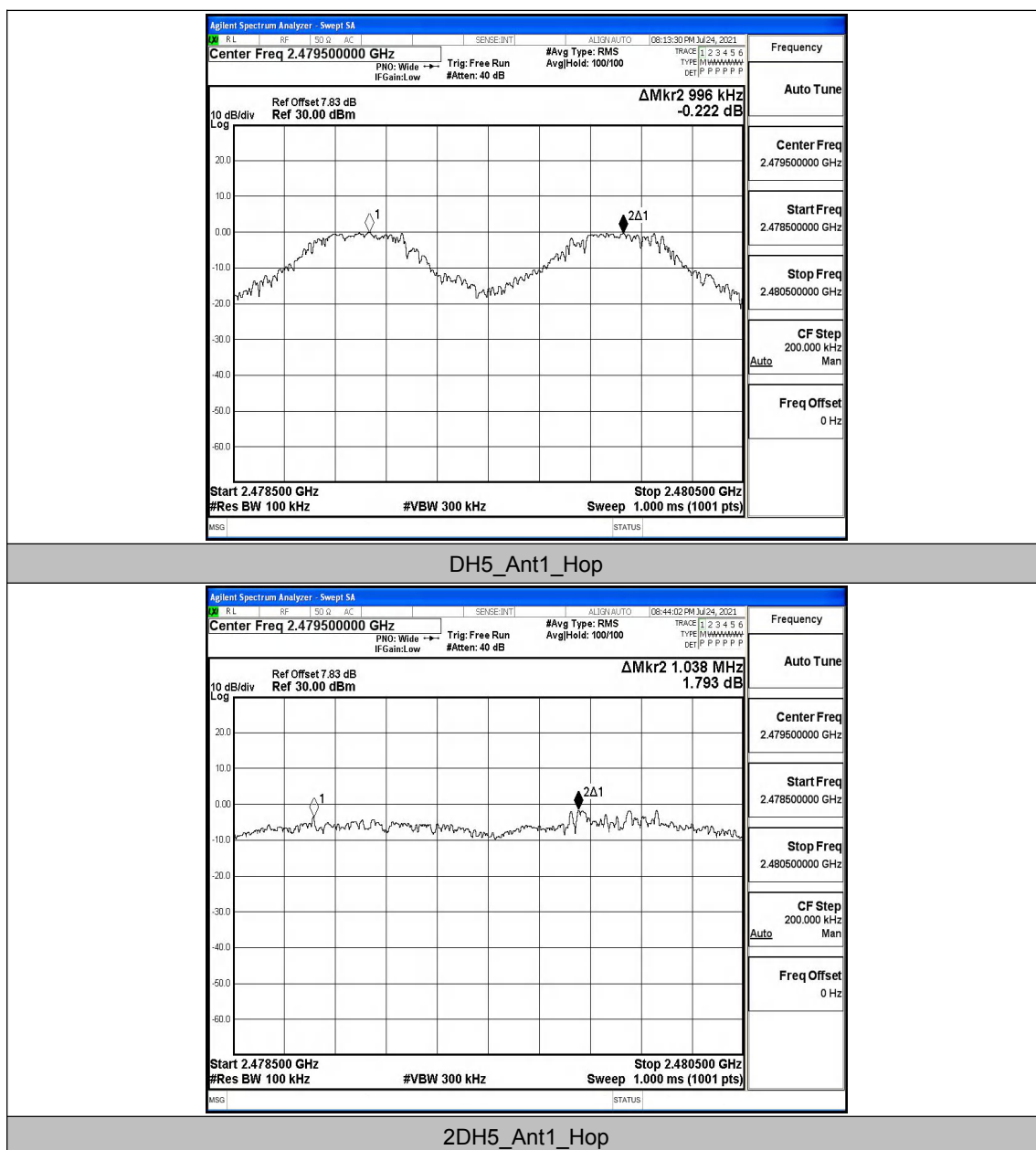


A.3 frequency Separation

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	Hop	0.996	≥ 0.688	PASS
2DH5	Ant1	Hop	1.038	≥ 0.892	PASS

Test Graphs



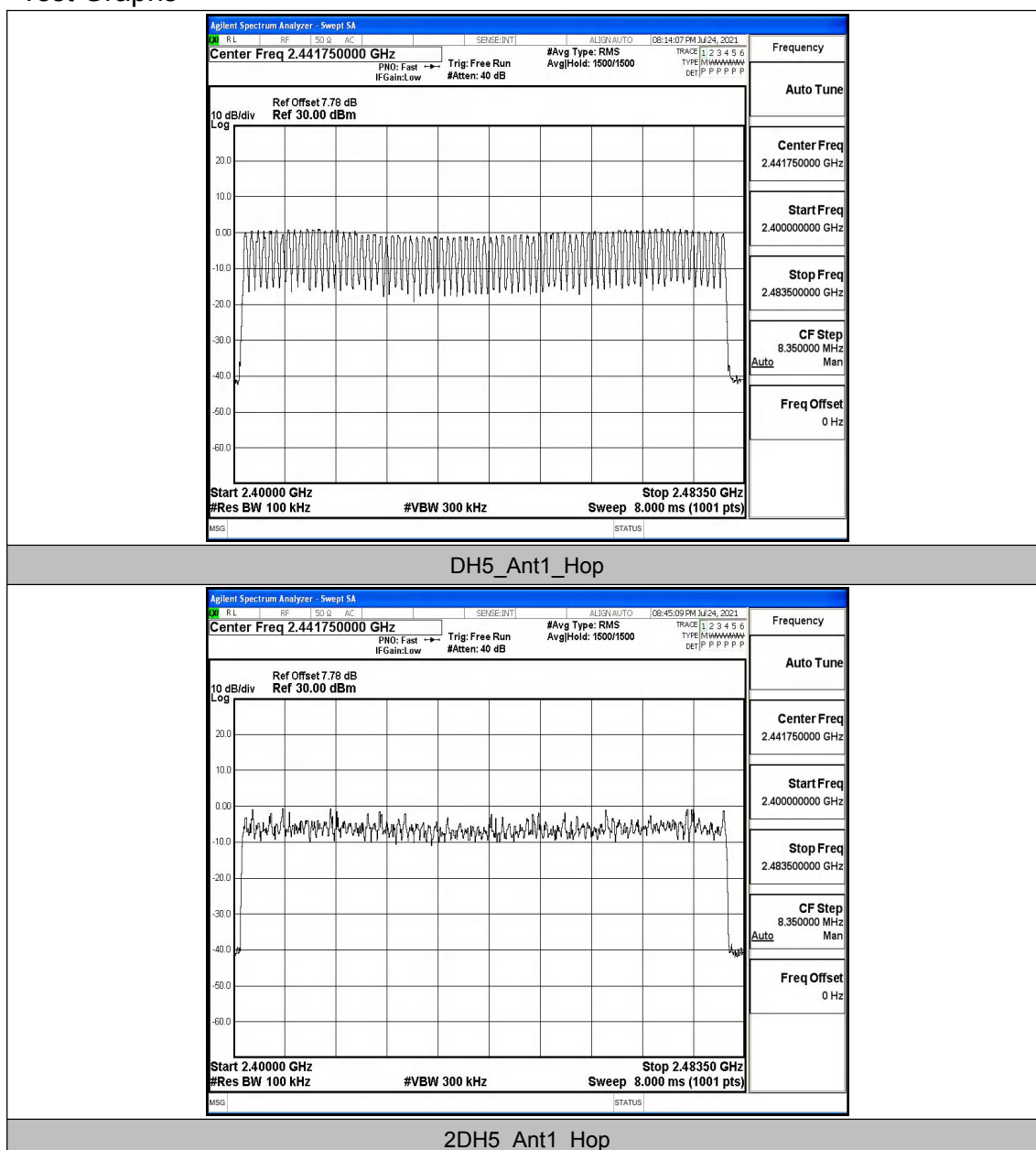


A.4 Number of hopping channels

Test Result

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

Test Graphs



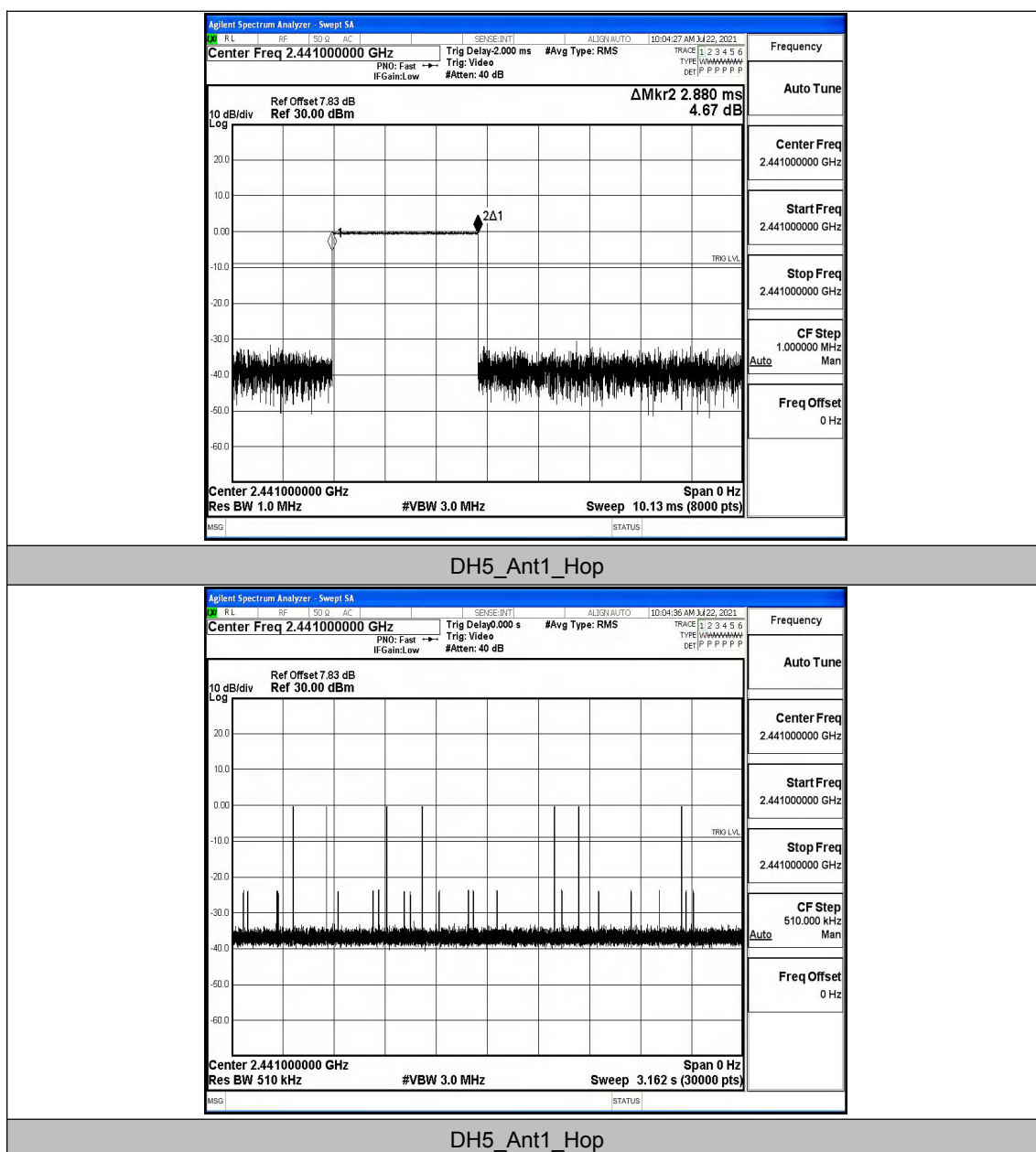


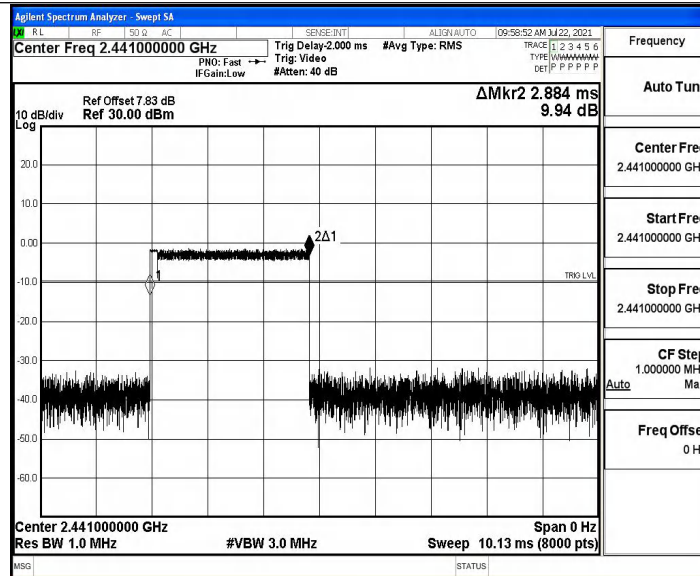
A.5 Time of occupancy

Test Result

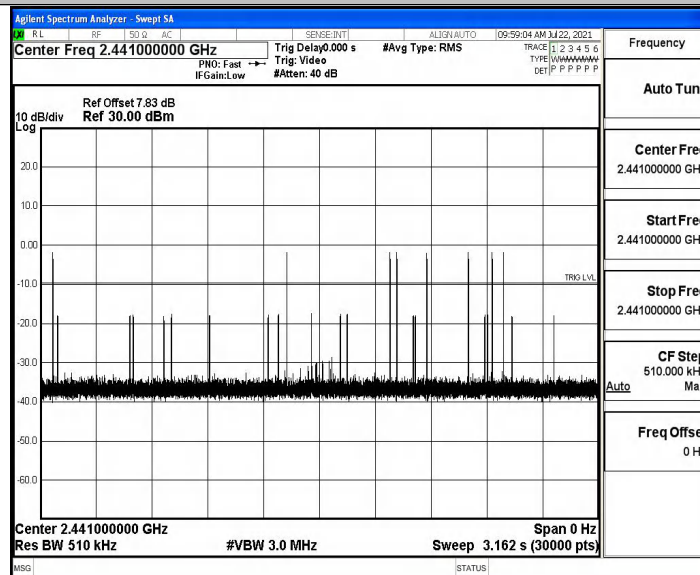
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	80	0.23	≤0.4	PASS
2DH5	Ant1	Hop	2.88	90	0.26	≤0.4	PASS

Test Graphs





2DH5_Ant1_Hop



2DH5_Ant1_Hop



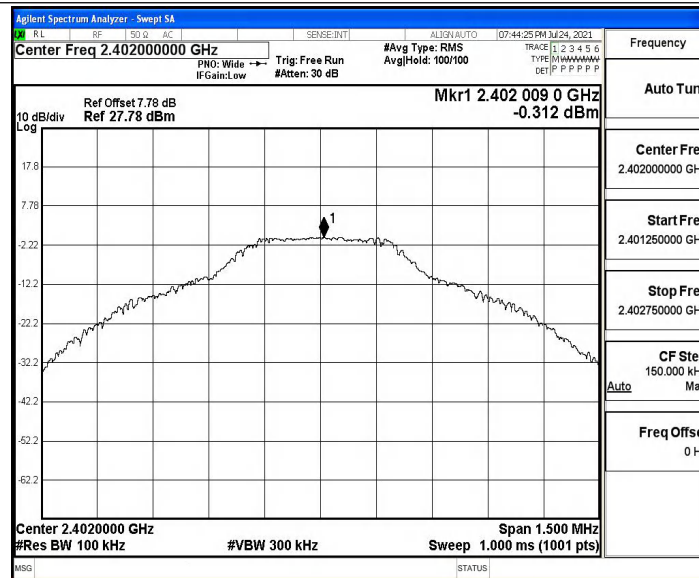
A.6 Conducted Spurious Emission

Test Result

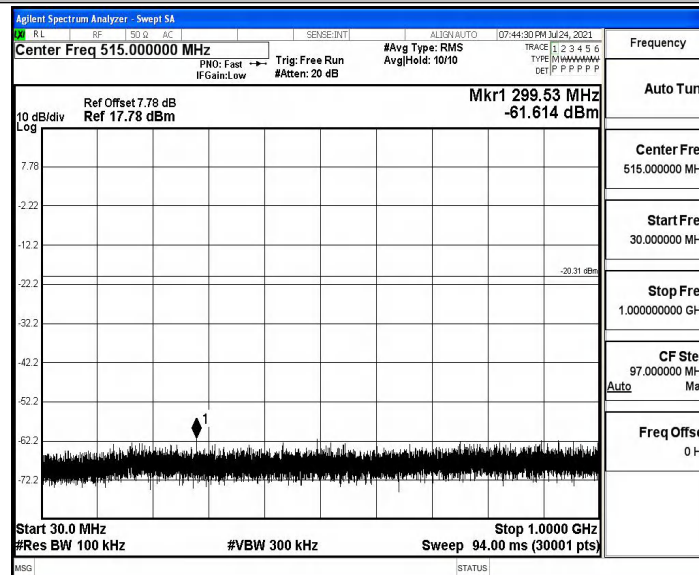
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.31	-0.31	---	PASS
			30~1000	-0.31	-61.61	≤ -20.31	PASS
			1000~26500	-0.31	-47.93	≤ -20.31	PASS
		2441	Reference	-1.03	-1.03	---	PASS
			30~1000	-1.03	-61.01	≤ -21.03	PASS
			1000~26500	-1.03	-45.18	≤ -21.03	PASS
		2480	Reference	-0.35	-0.35	---	PASS
			30~1000	-0.35	-61.85	≤ -20.35	PASS
			1000~26500	-0.35	-40.87	≤ -20.35	PASS
2DH5	Ant1	2402	Reference	-4.29	-4.29	---	PASS
			30~1000	-4.29	-61.19	≤ -24.29	PASS
			1000~26500	-4.29	-46.75	≤ -24.29	PASS
		2441	Reference	-2.35	-2.35	---	PASS
			30~1000	-2.35	-62.04	≤ -22.35	PASS
			1000~26500	-2.35	-47.4	≤ -22.35	PASS
		2480	Reference	-4.31	-4.31	---	PASS
			30~1000	-4.31	-61.44	≤ -24.31	PASS
			1000~26500	-4.31	-46.88	≤ -24.31	PASS



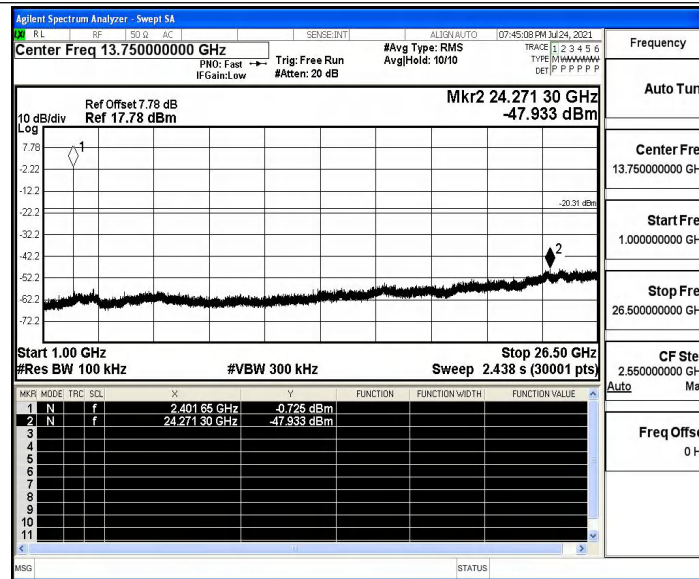
Test Graphs



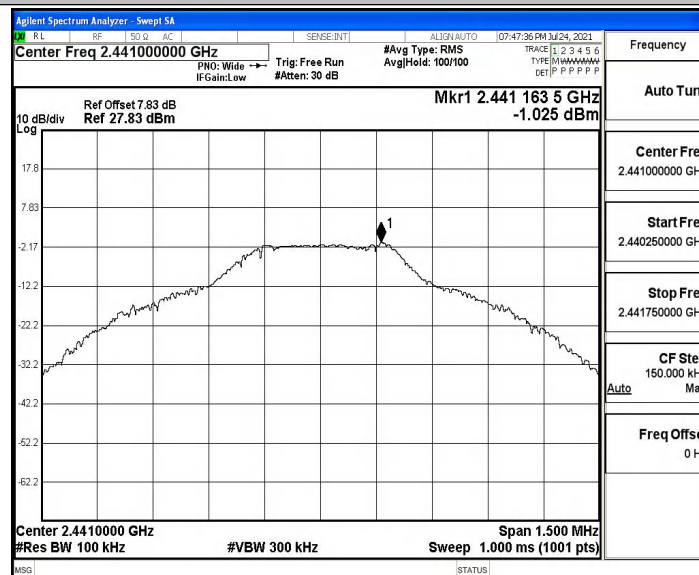
DH5_Ant1_2402_0~Reference



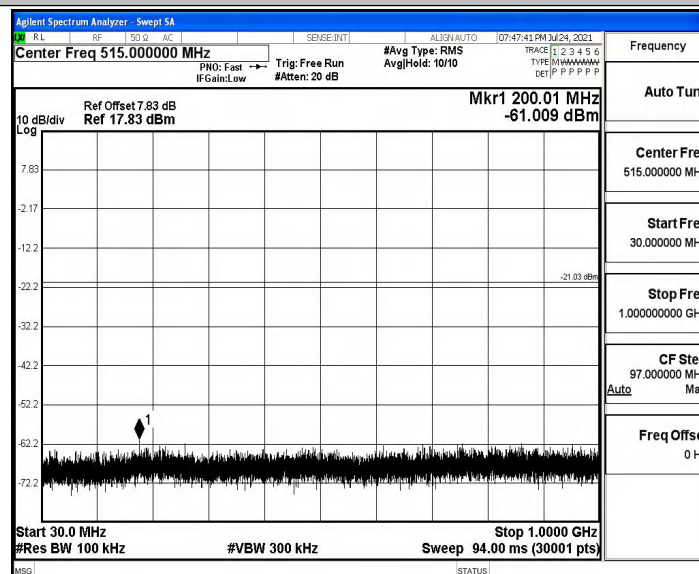
DH5_Ant1_2402_30~1000



DH5_Ant1_2402_1000~26500

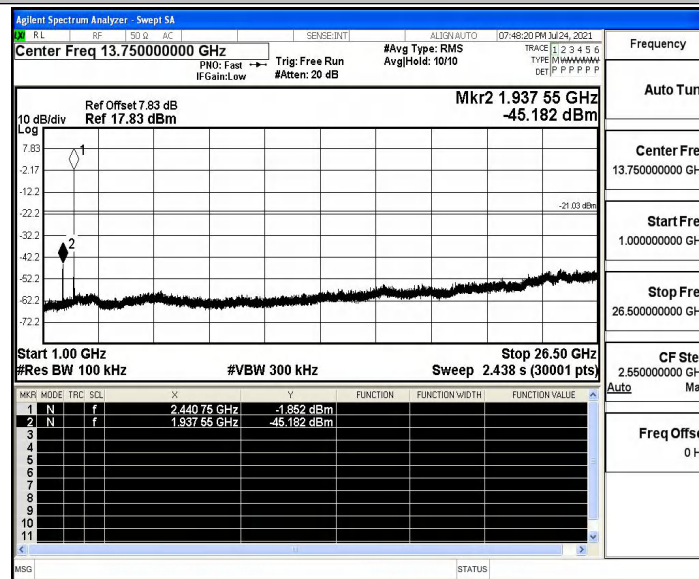


DH5_Ant1_2441_0~Reference

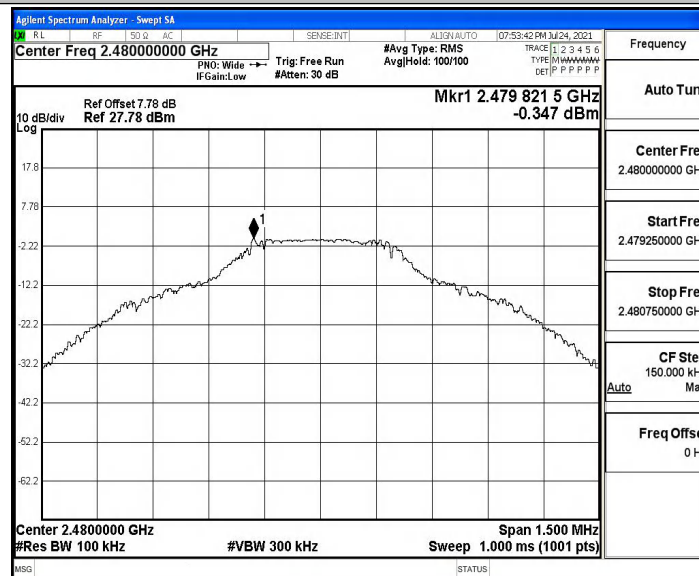




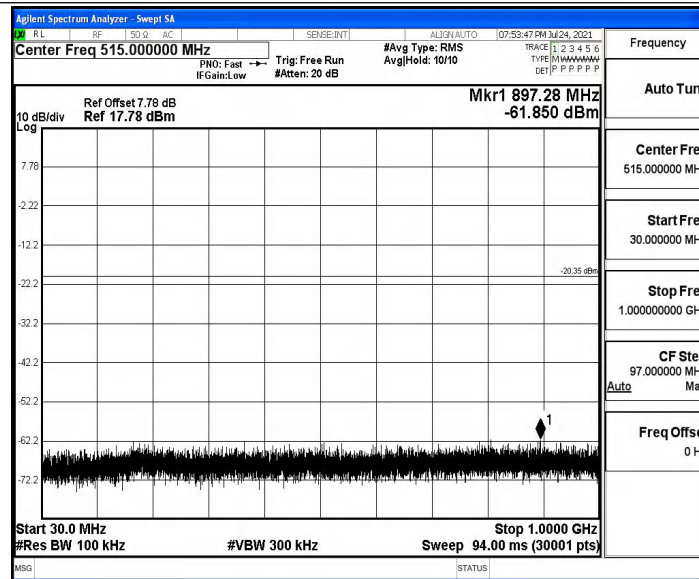
DH5_Ant1_2441_30~1000



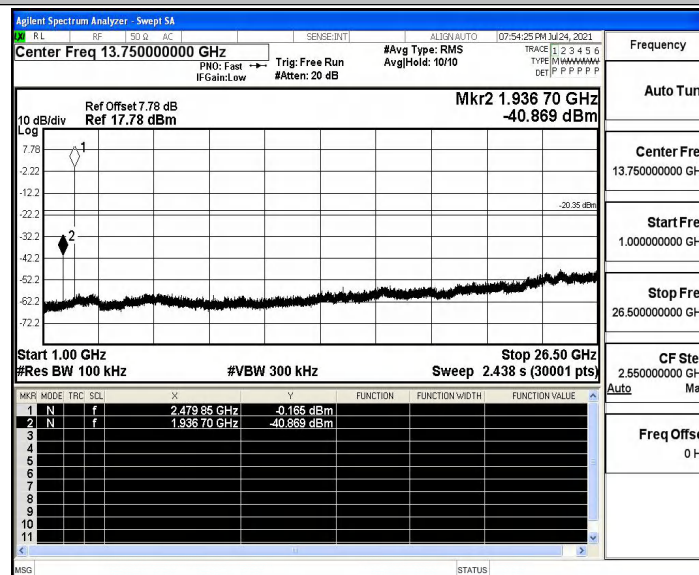
DH5_Ant1_2441_1000~26500



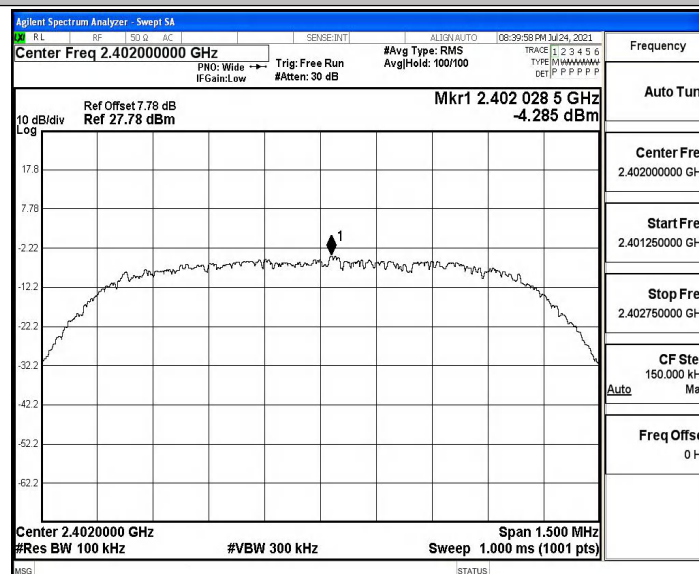
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000

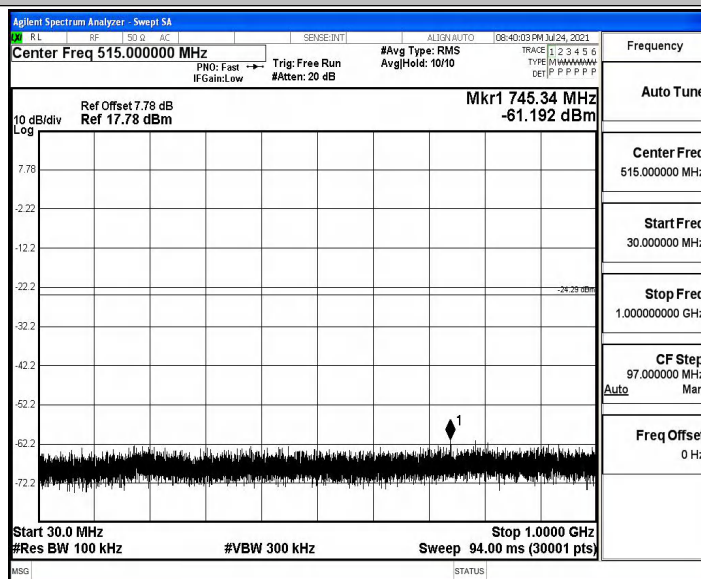


DH5_Ant1_2480_1000~26500

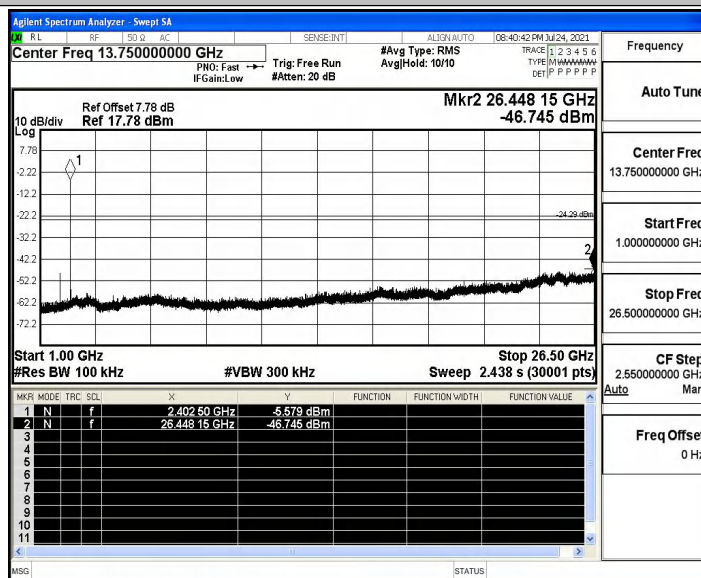




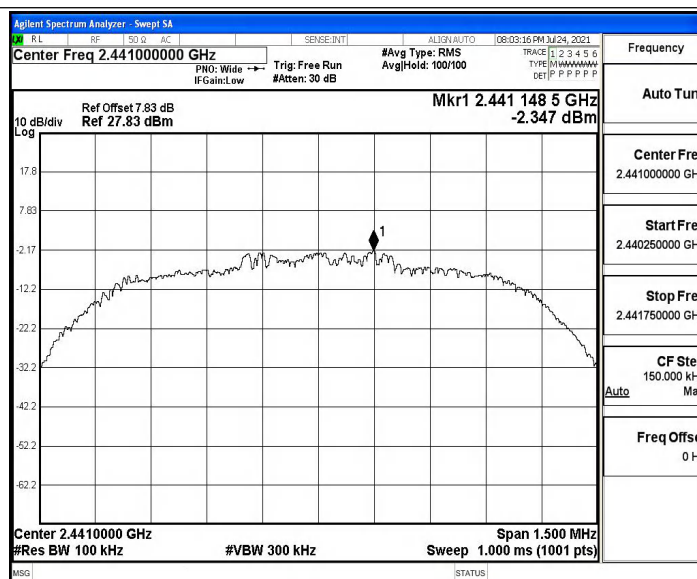
2DH5_Ant1_2402_0~Reference



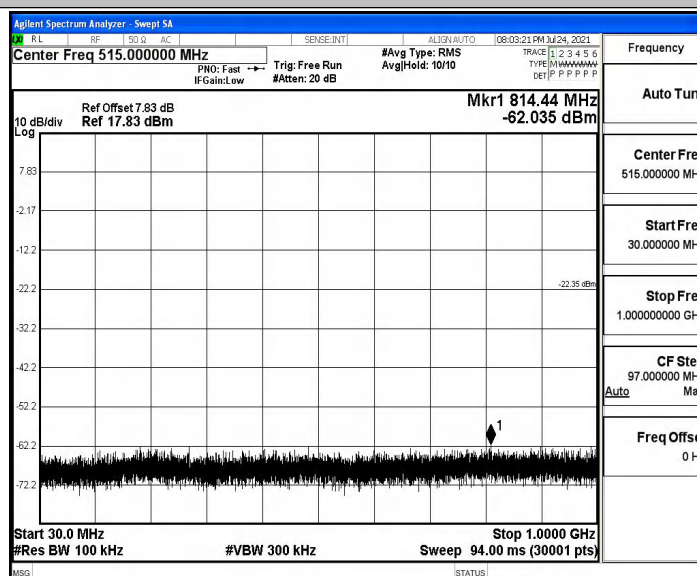
2DH5_Ant1_2402_30~1000



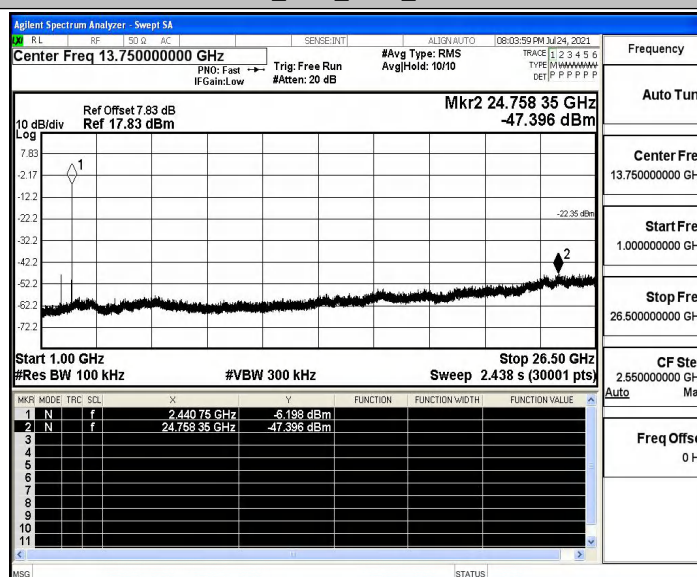
2DH5_Ant1_2402_1000~26500



2DH5 Ant1 2441 0~Reference

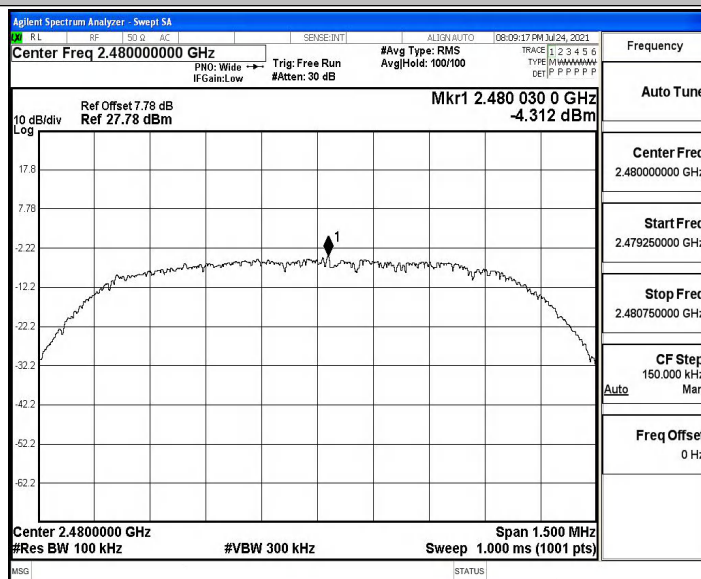


2DH5 Ant1 2441 30~1000

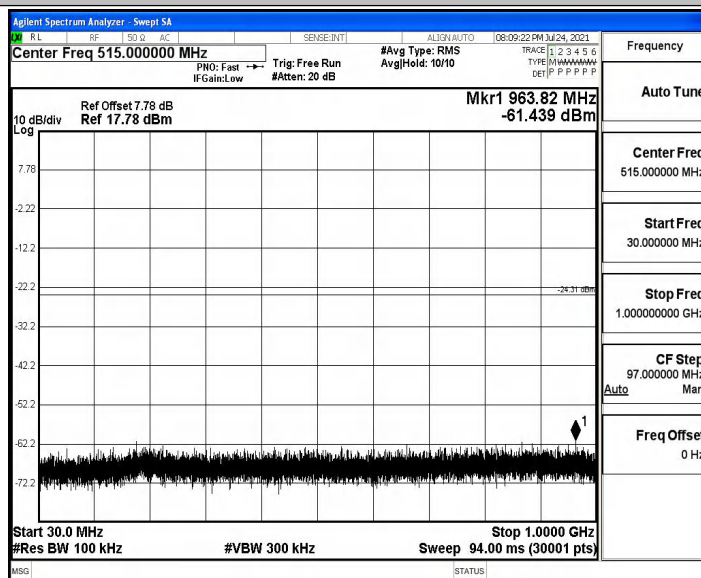




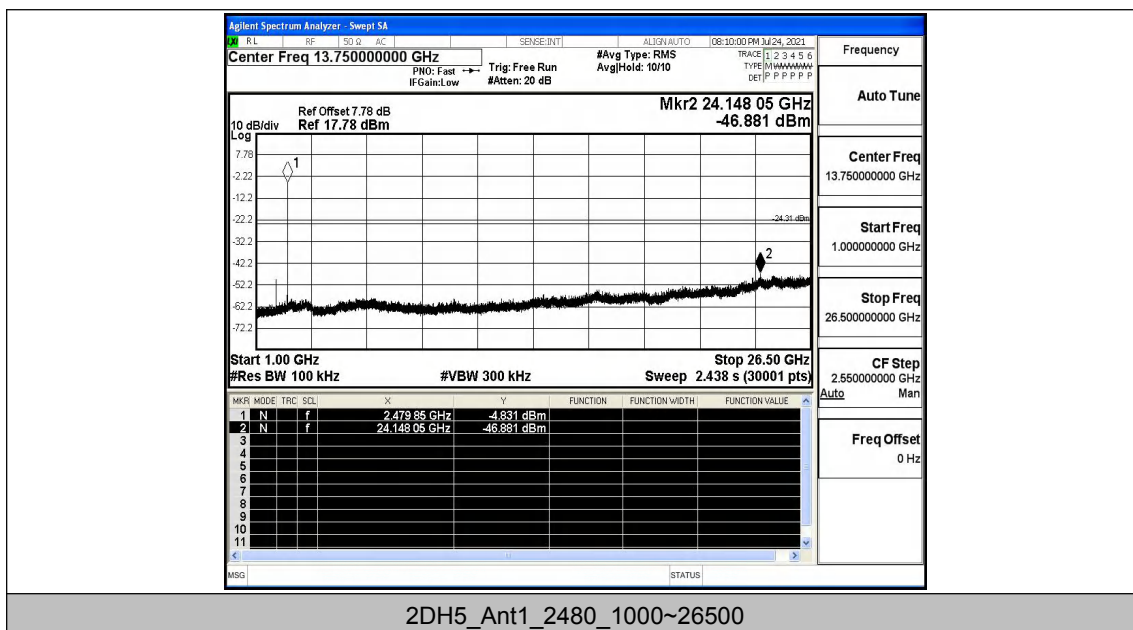
2DH5_Ant1_2441_1000~26500



2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000





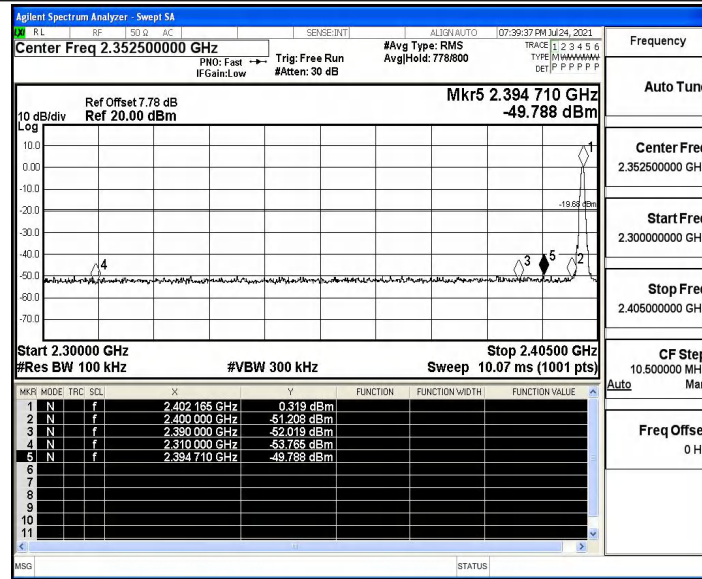
A.7 Band edge measurements

Test Result

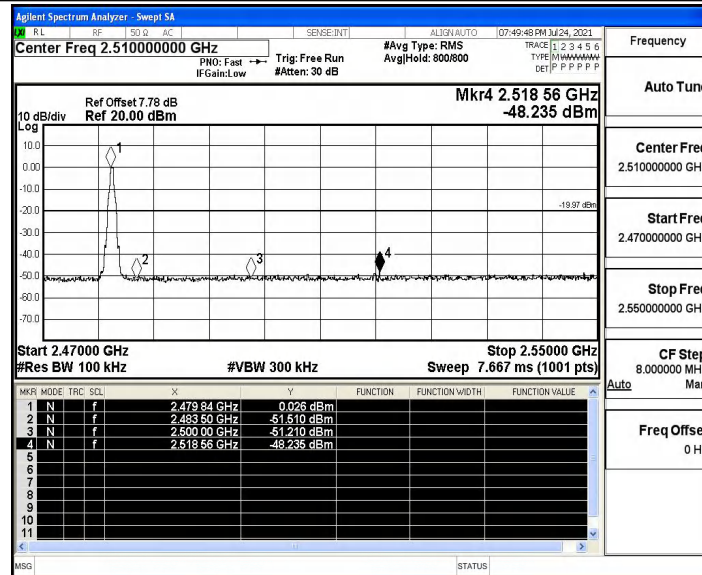
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.32	-49.79	≤ -19.68	PASS
		High	2480	0.03	-48.24	≤ -19.97	PASS
		Low	Hop_2402	0.50	-49.91	≤ -19.5	PASS
		High	Hop_2480	0.86	-48.02	≤ -19.14	PASS
2DH5	Ant1	Low	2402	-1.02	-49.41	≤ -21.02	PASS
		High	2480	-1.14	-48.63	≤ -21.14	PASS
		Low	Hop_2402	-4.06	-40.87	≤ -24.06	PASS
		High	Hop_2480	-1.98	-48.68	≤ -21.98	PASS



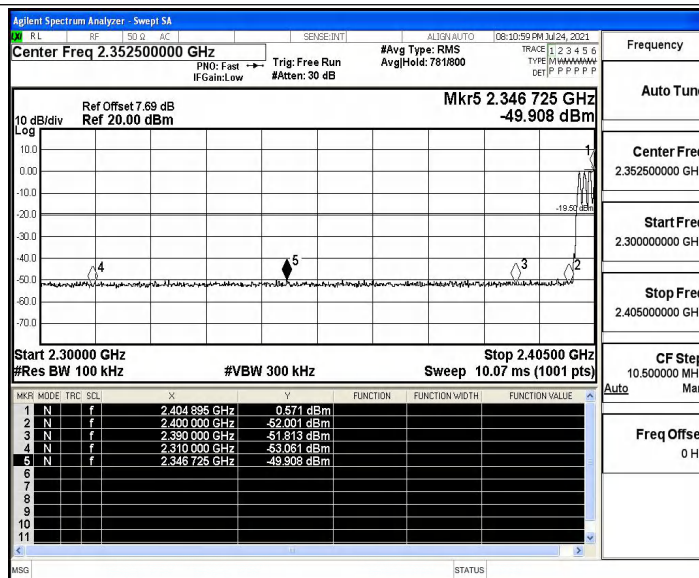
Test Graphs



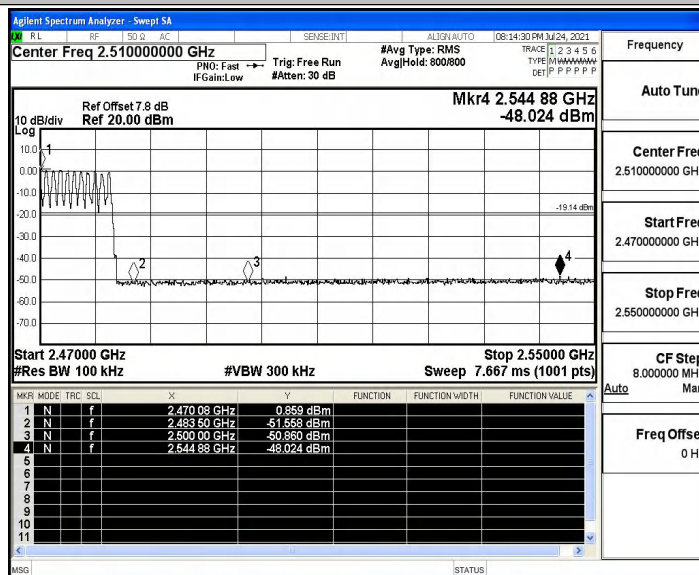
DH5_Ant1_Low_2402



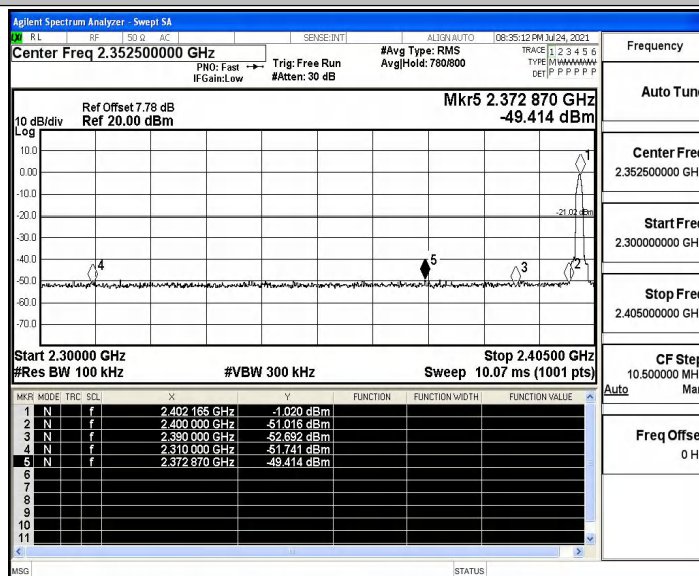
DH5_Ant1_High_2480



DH5_Ant1_Low_Hop_2402

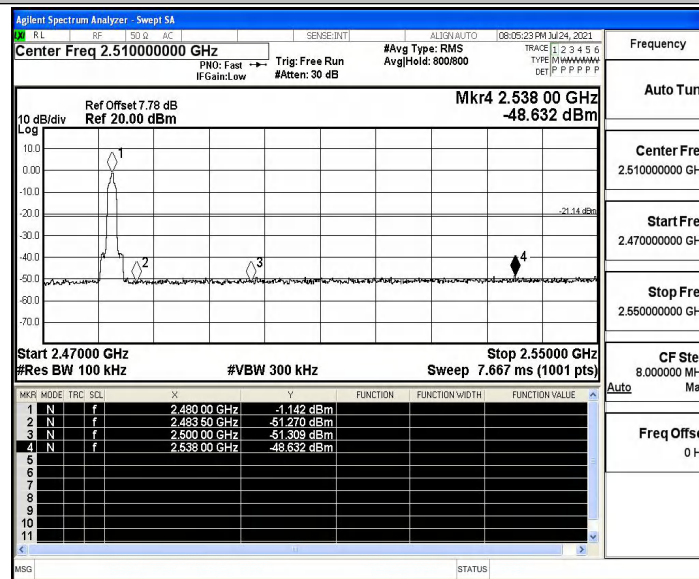


DH5_Ant1_High_Hop_2480

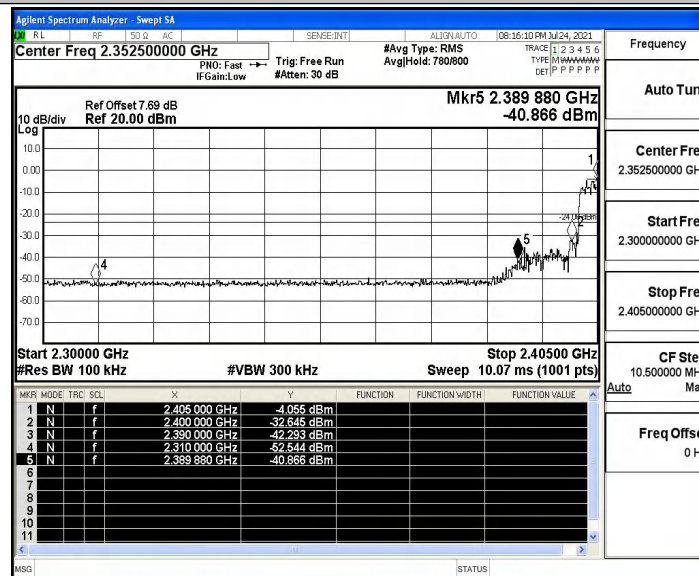




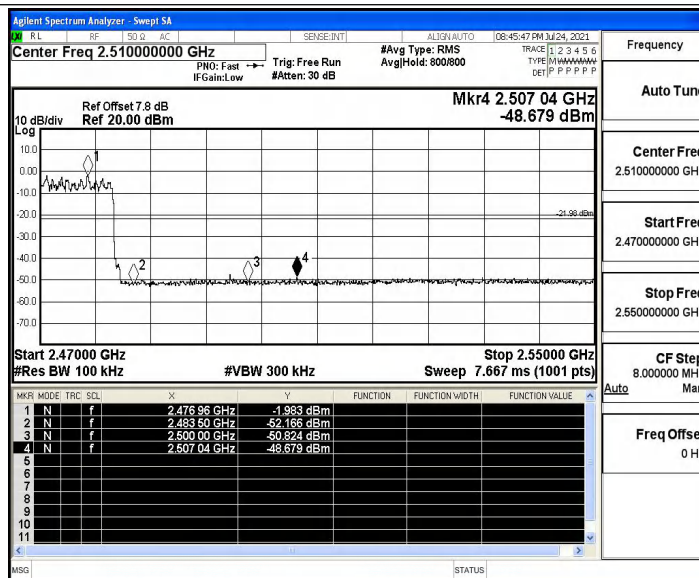
2DH5_Ant1_Low_2402



2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480



A.8 Emissions in Restricted Bands

Test Result

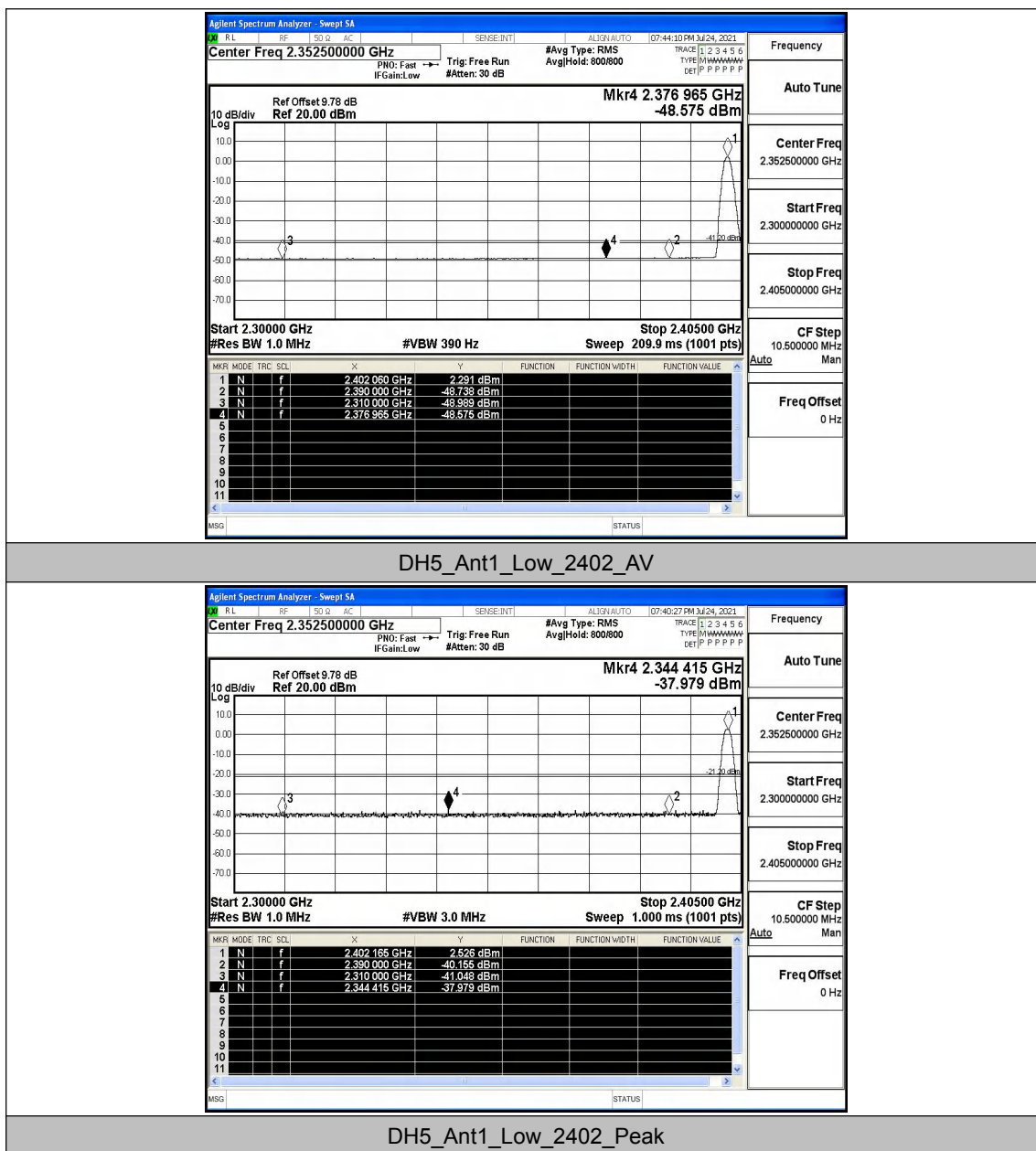
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-48.99	≤-41.20	48.24	≤54	PASS
				AV	2376.965	-48.58	≤-41.20	48.65	≤54	PASS
				AV	2390.000	-48.74	≤-41.20	48.49	≤54	PASS
				Peak	2310.000	-41.05	≤-21.20	56.18	≤74	PASS
				Peak	2344.415	-37.98	≤-21.20	59.25	≤74	PASS
				Peak	2390.000	-40.16	≤-21.20	57.07	≤74	PASS
		High	2480	AV	2483.500	-47.89	≤-41.20	49.34	≤54	PASS
				AV	2483.520	-47.89	≤-41.20	49.34	≤54	PASS
				AV	2500.000	-48.04	≤-41.20	49.19	≤54	PASS
				Peak	2483.500	-40	≤-21.20	57.23	≤74	PASS
				Peak	2492.160	-36.32	≤-21.20	60.91	≤74	PASS
				Peak	2500.000	-39.65	≤-21.20	57.58	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-48.85	≤-41.20	48.38	≤54	PASS
				AV	2387.885	-48.32	≤-41.20	48.91	≤54	PASS
				AV	2390.000	-48.53	≤-41.20	48.70	≤54	PASS
				Peak	2310.000	-41.87	≤-21.20	55.36	≤74	PASS
				Peak	2371.400	-38.21	≤-21.20	59.02	≤74	PASS
				Peak	2390.000	-39.43	≤-21.20	57.80	≤74	PASS
		High	2480	AV	2483.500	-47.86	≤-41.20	49.37	≤54	PASS
				AV	2498.480	-47.85	≤-41.20	49.38	≤54	PASS
				AV	2500.000	-47.84	≤-41.20	49.39	≤54	PASS
				Peak	2483.500	-38.83	≤-21.20	58.40	≤74	PASS
				Peak	2483.760	-37.59	≤-21.20	59.64	≤74	PASS
				Peak	2500.000	-38.36	≤-21.20	58.87	≤74	PASS

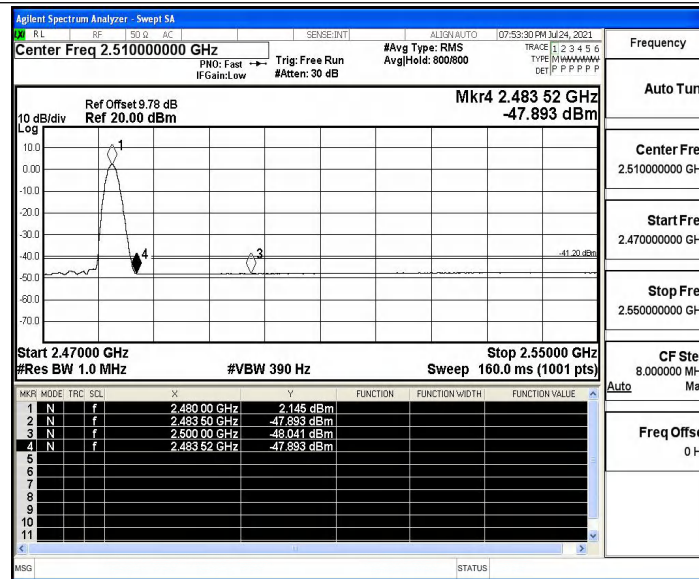
Note:

1. The Antenna Gain is compensated in the graph.
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.

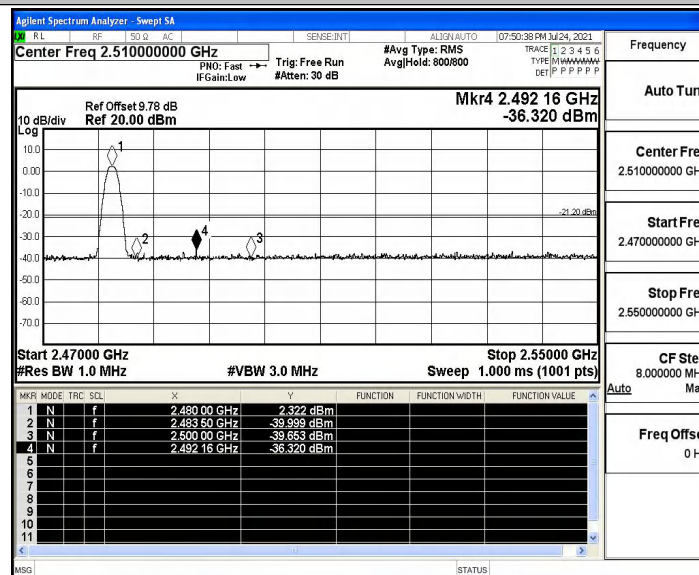


Test Graphs

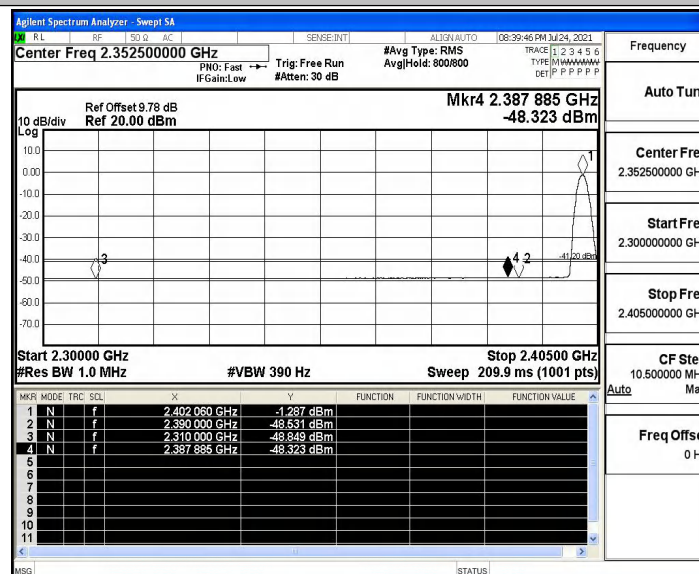




DH5_Ant1_High_2480_AV

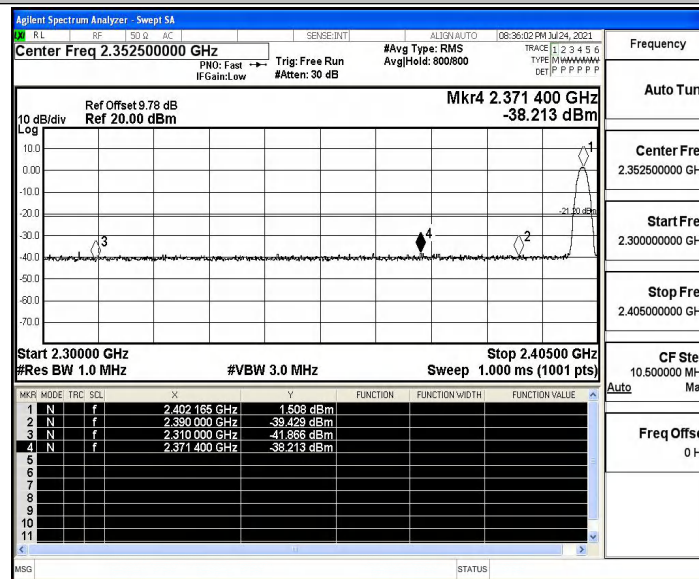


DH5_Ant1_High_2480_Peak

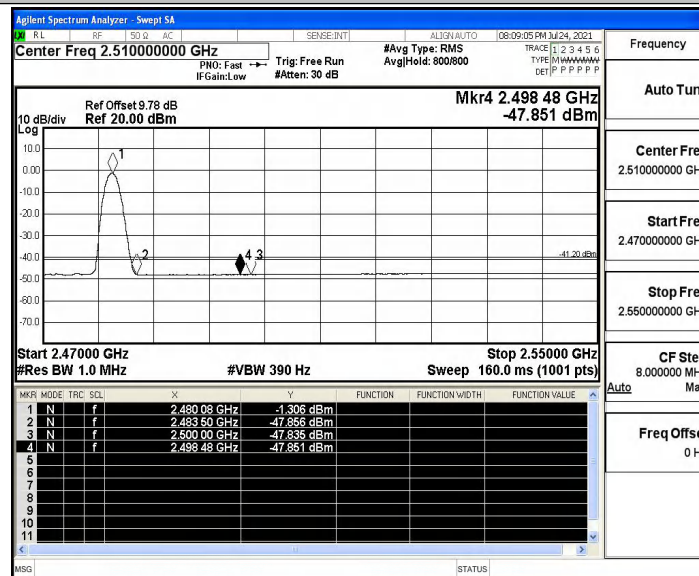




2DH5_Ant1_Low_2402_AV



2DH5_Ant1_Low_2402_Peak



2DH5_Ant1_High_2480_AV

