



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Wireless Speaker

Test Model: XY-AU003

Environmental Conditions

Temperature:	23.7° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Monkey Li
Supervised by:	Li huan



A.1 20dB Emission Bandwidth

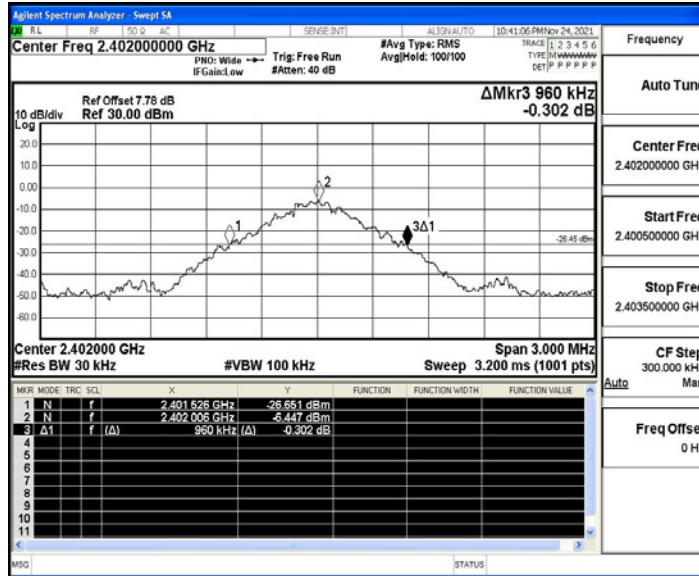
Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.960	2401.526	2402.486	---	PASS
		2441	0.966	2440.523	2441.489	---	PASS
		2480	0.951	2479.526	2480.477	---	PASS
2DH5	Ant1	2402	1.284	2401.361	2402.645	---	PASS
		2441	1.326	2440.328	2441.654	---	PASS
		2480	1.269	2479.379	2480.648	---	PASS

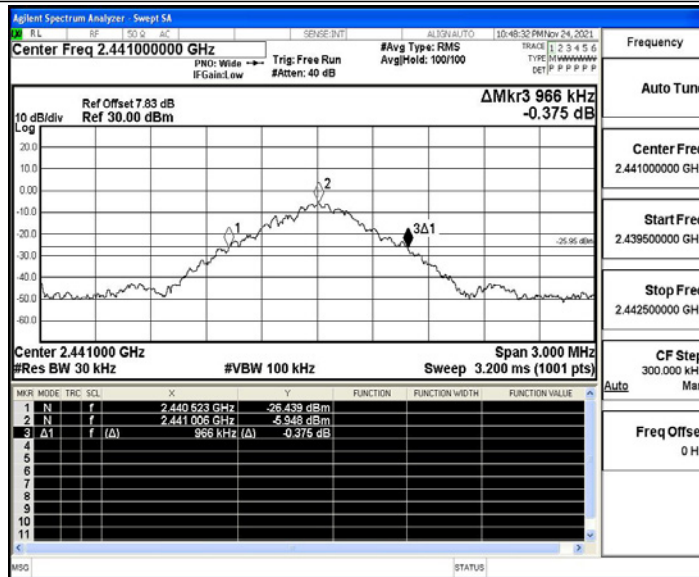


Test Graphs

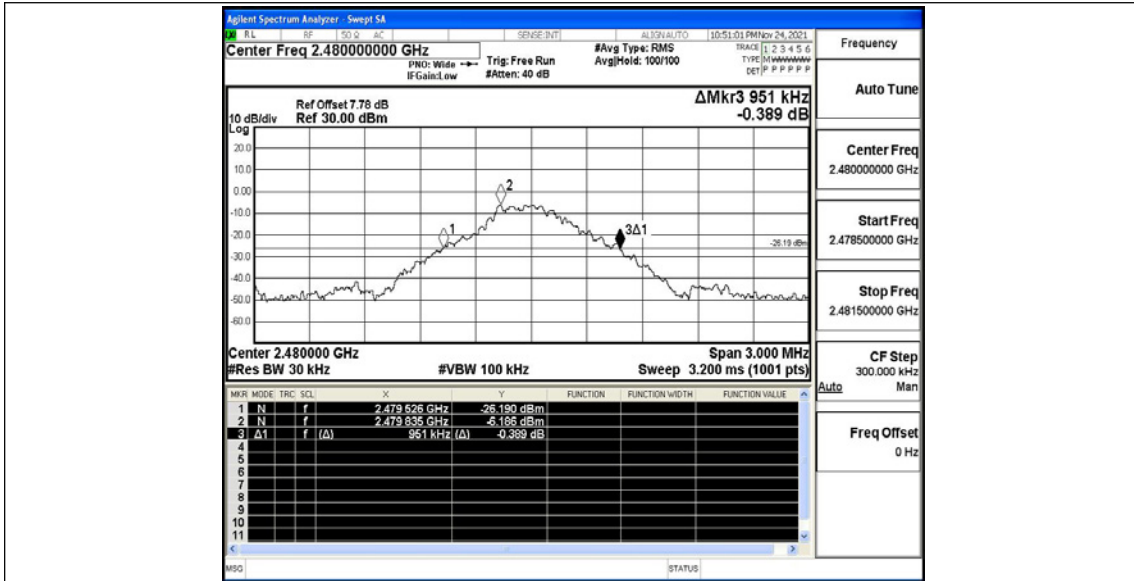
DH5_Ant1_2402



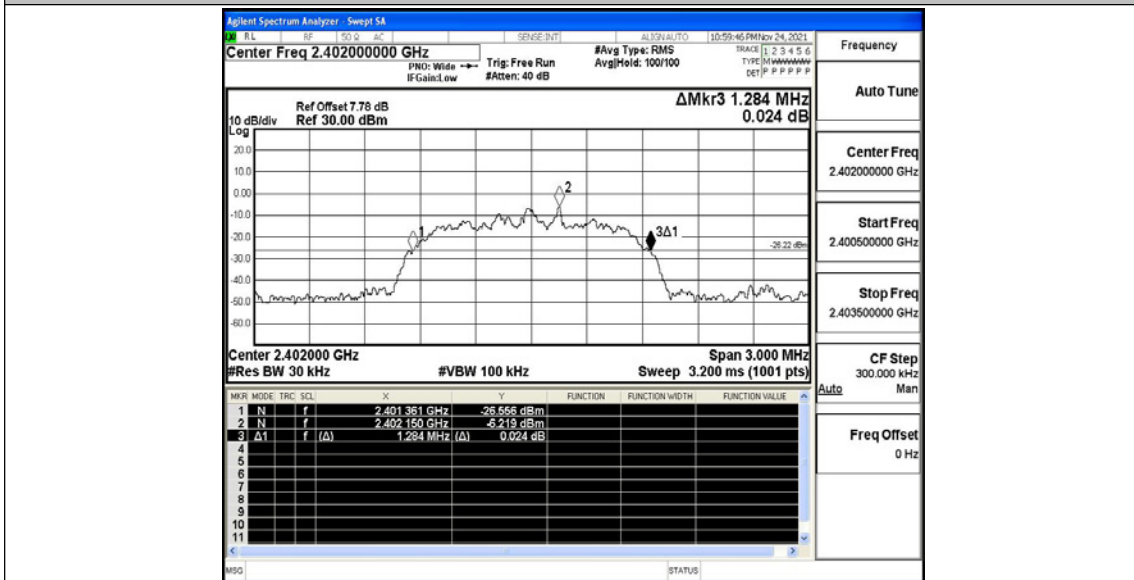
DH5_Ant1_2441



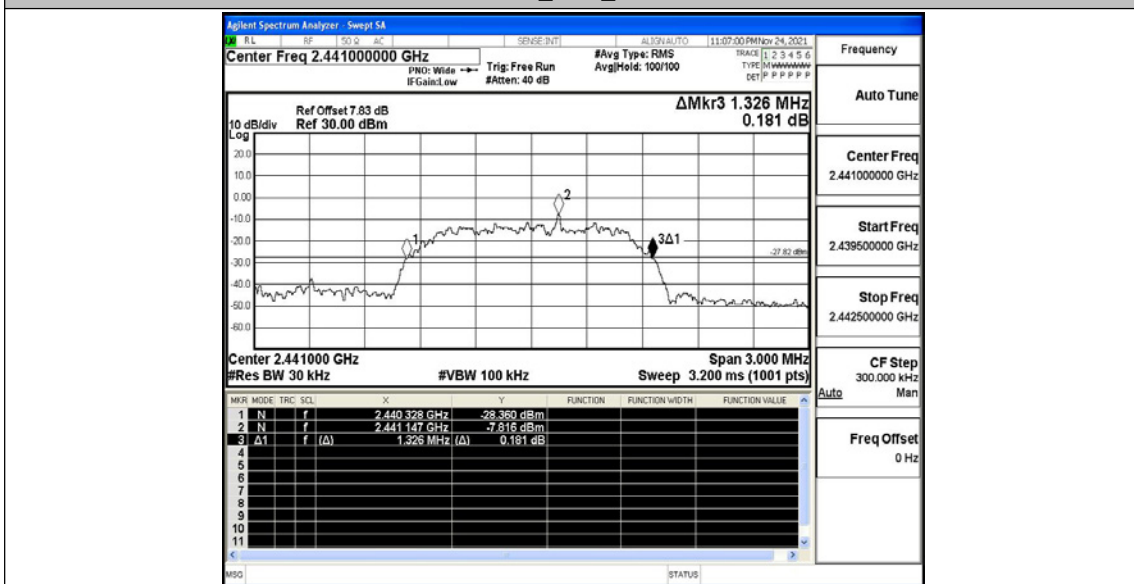
DH5_Ant1_2480



2DH5_Ant1_2402

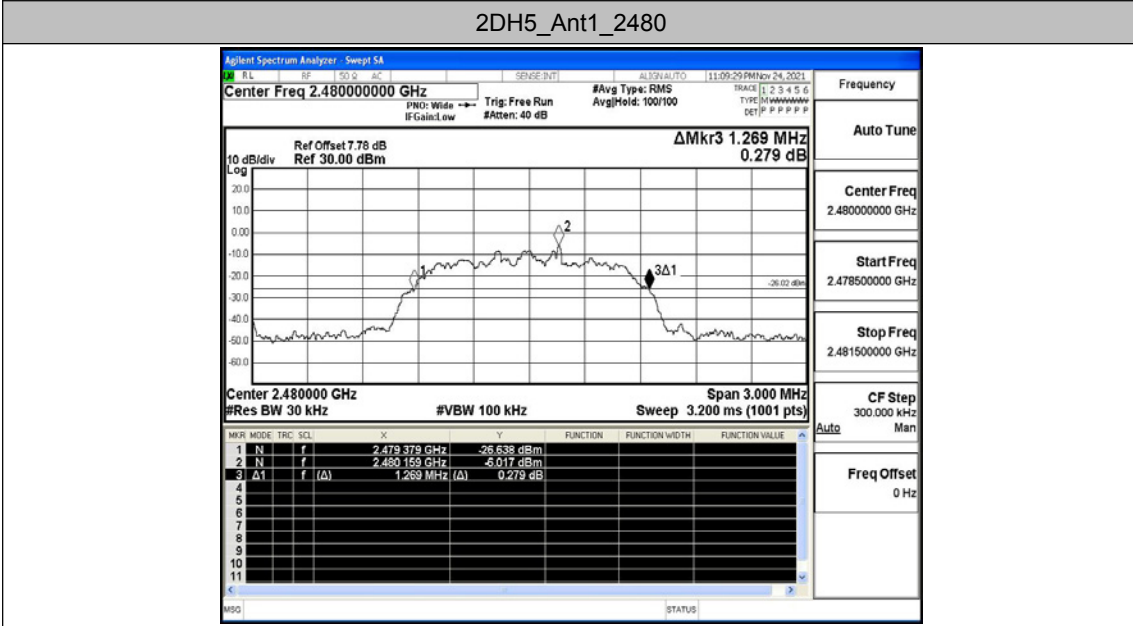


2DH5_Ant1_2441





2DH5_Ant1_2480





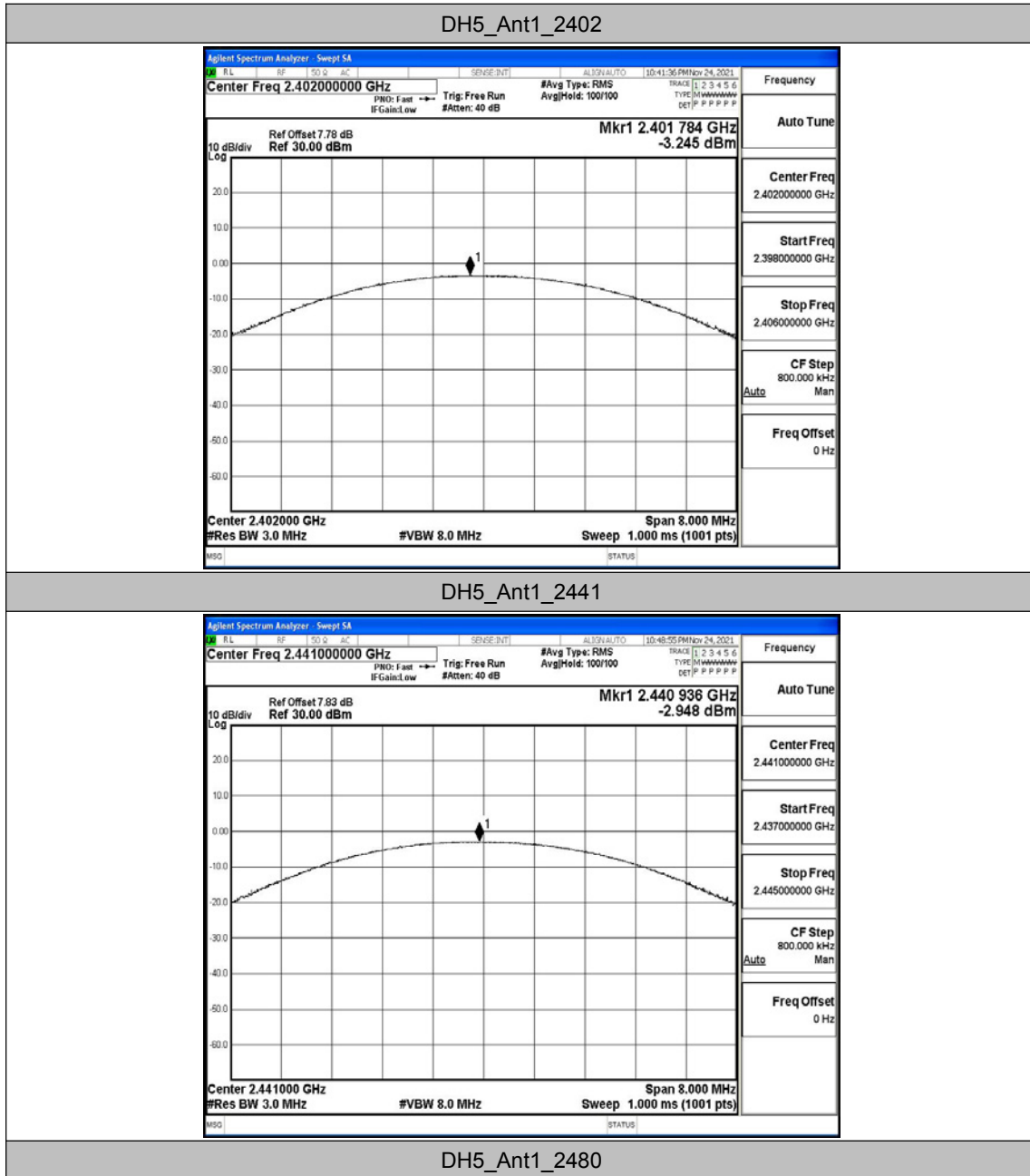
A.2 Maximum conducted output power

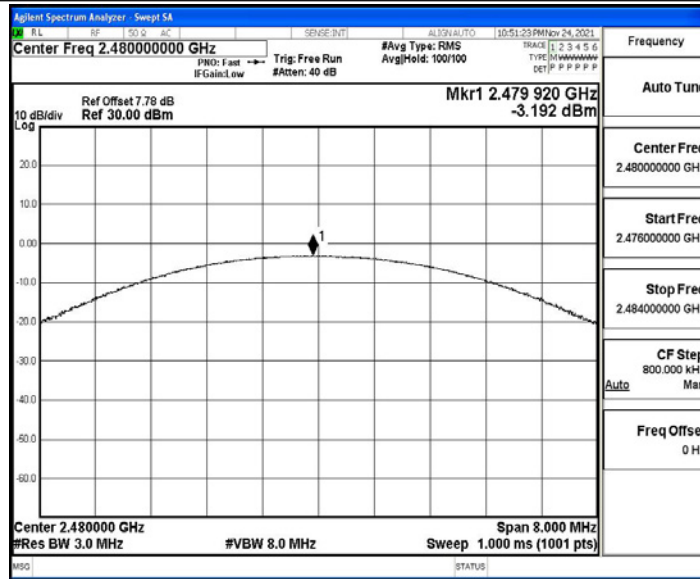
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-3.25	≤30	PASS
		2441	-2.95	≤30	PASS
		2480	-3.19	≤30	PASS
2DH5	Ant1	2402	-2.83	≤20.97	PASS
		2441	-2.3	≤20.97	PASS
		2480	-2.44	≤20.97	PASS

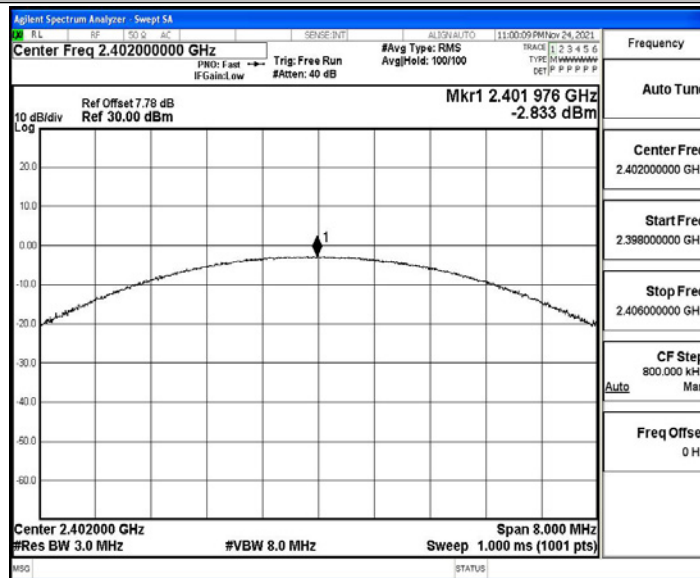


Test Graphs

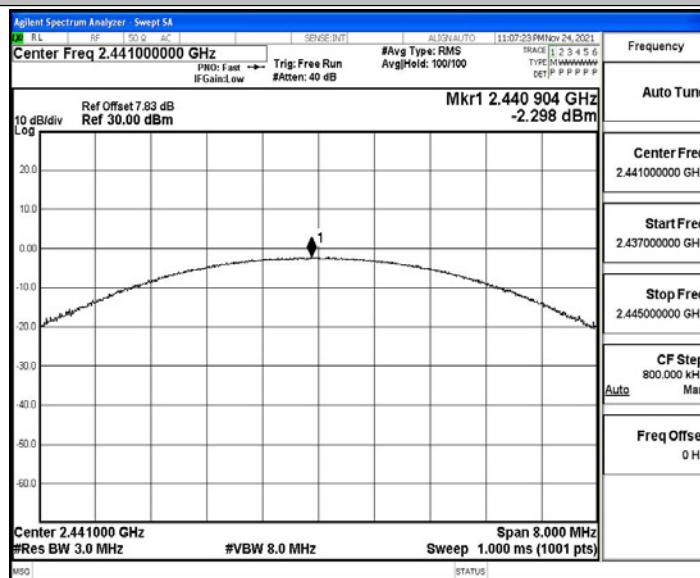




2DH5_Ant1_2402

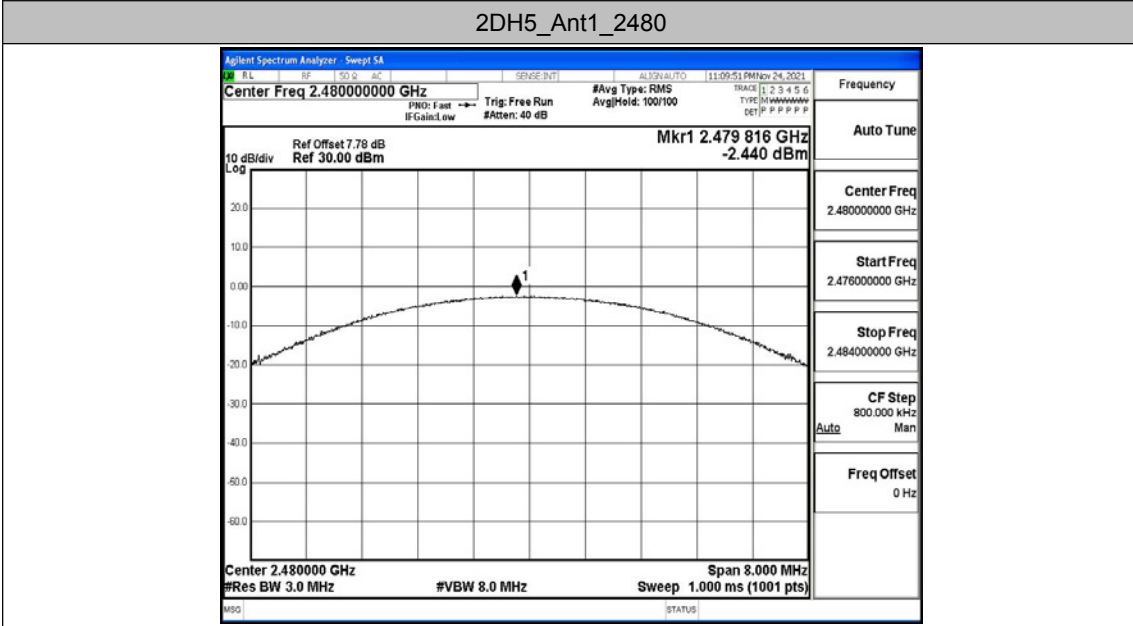


2DH5_Ant1_2441





2DH5_Ant1_2480



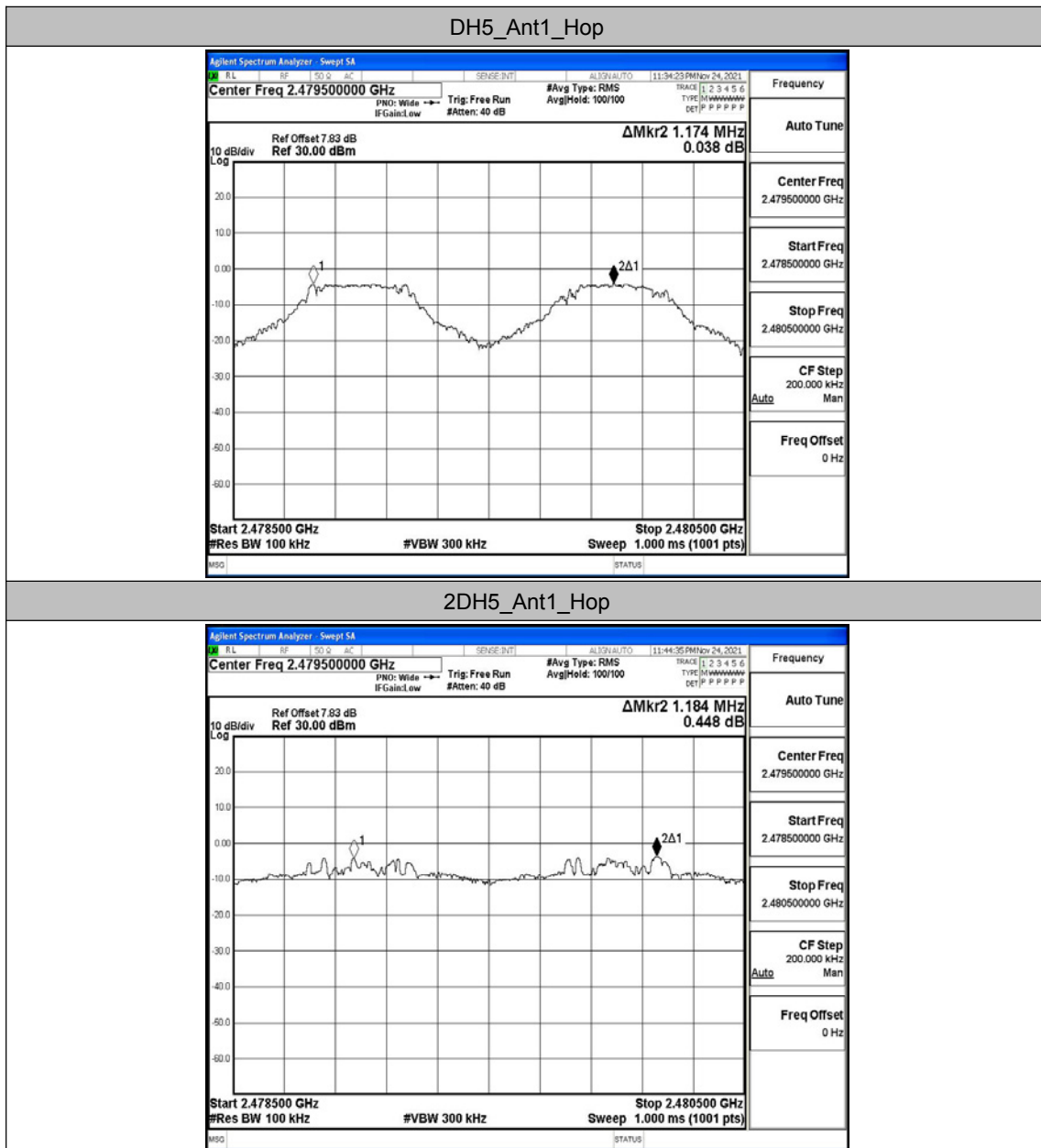


A.3 Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.174	≥0.966	PASS
2DH5	Ant1	Hop	1.184	≥0.884	PASS

Test Graphs



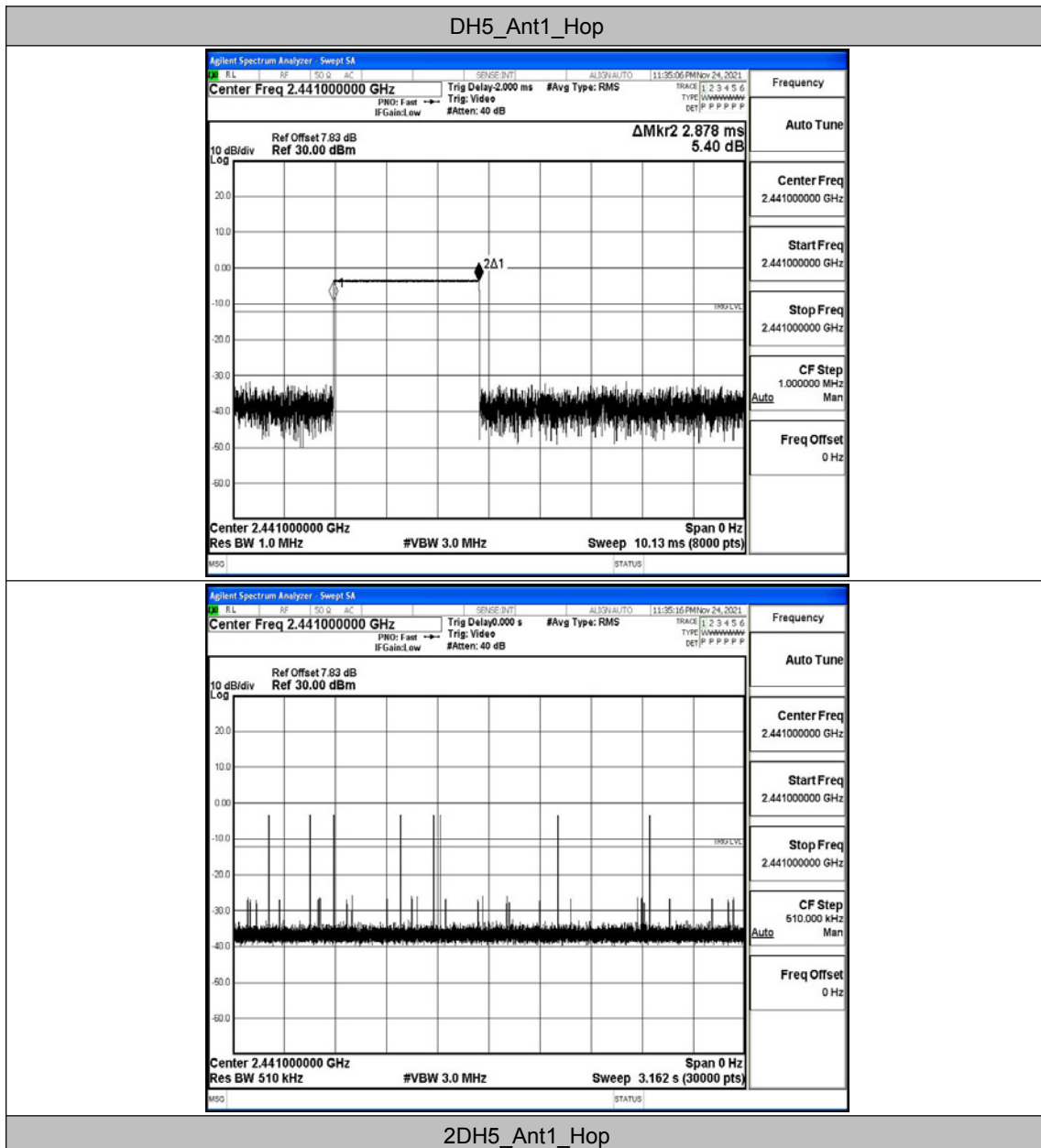


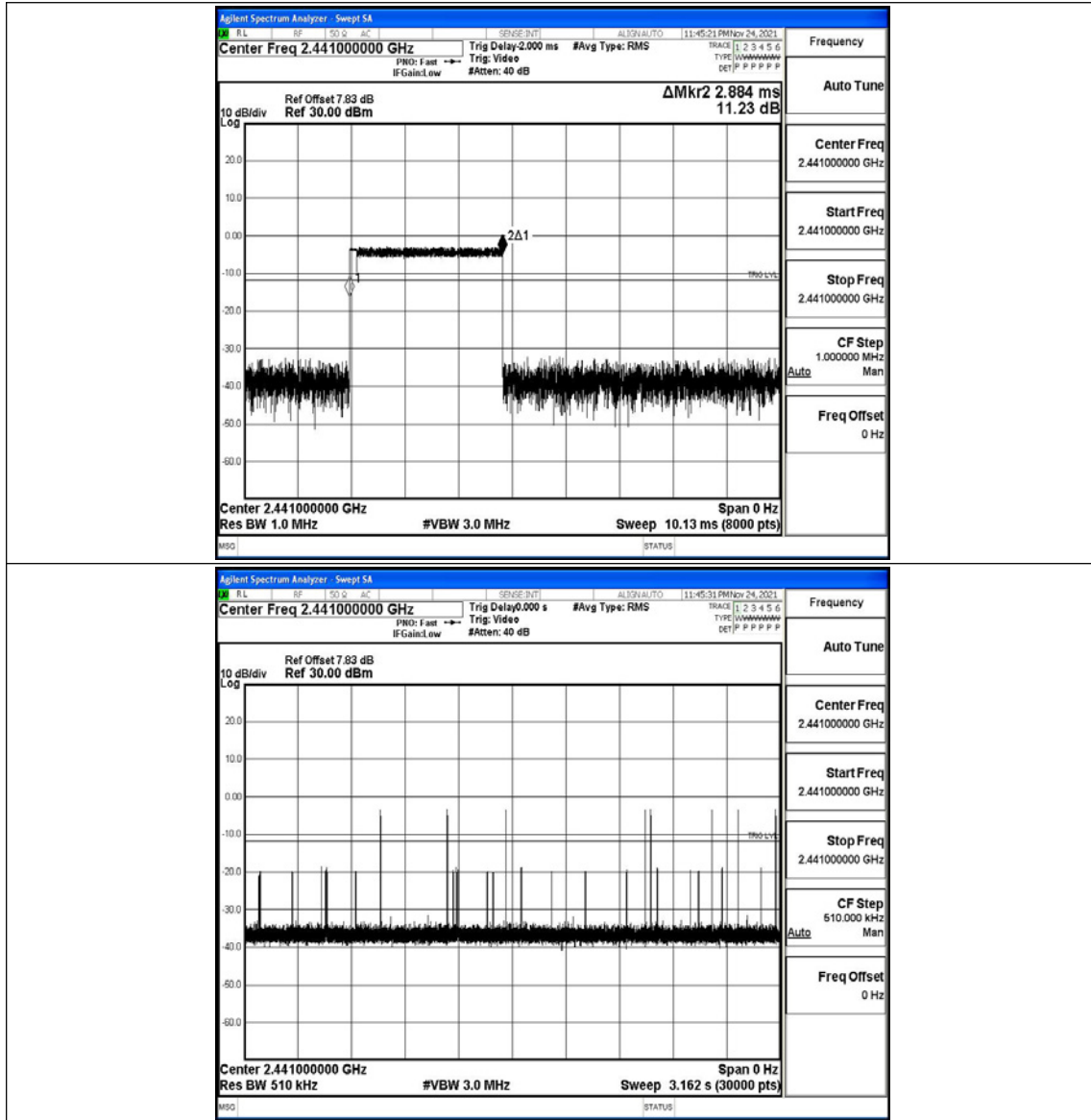
A.4 Time of occupancy

Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	90	0.259	≤0.4	PASS
2DH5	Ant1	Hop	2.88	90	0.26	≤0.4	PASS

Test Graphs





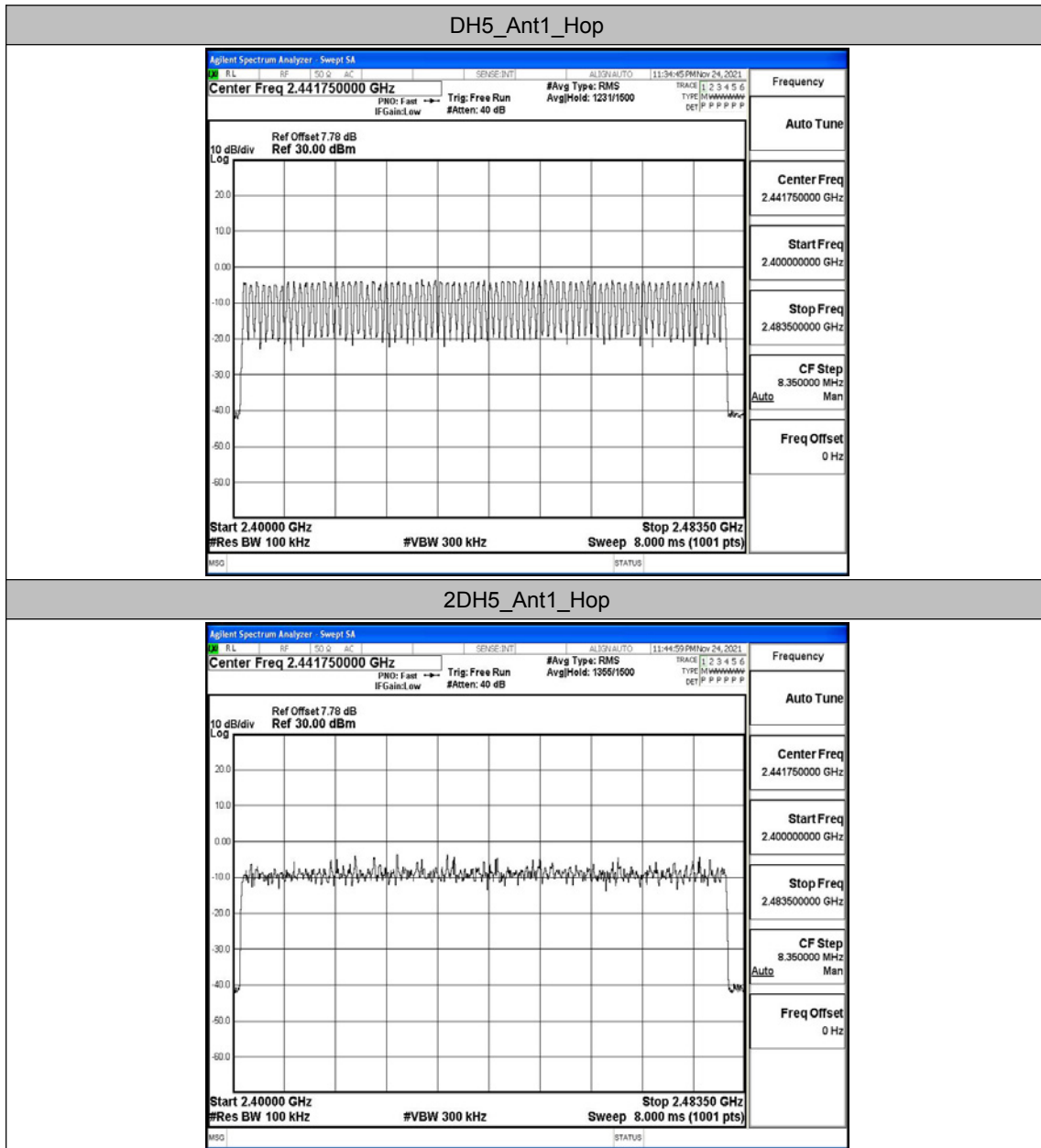


A.5 Number of hopping channels

Test Result

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

Test Graphs





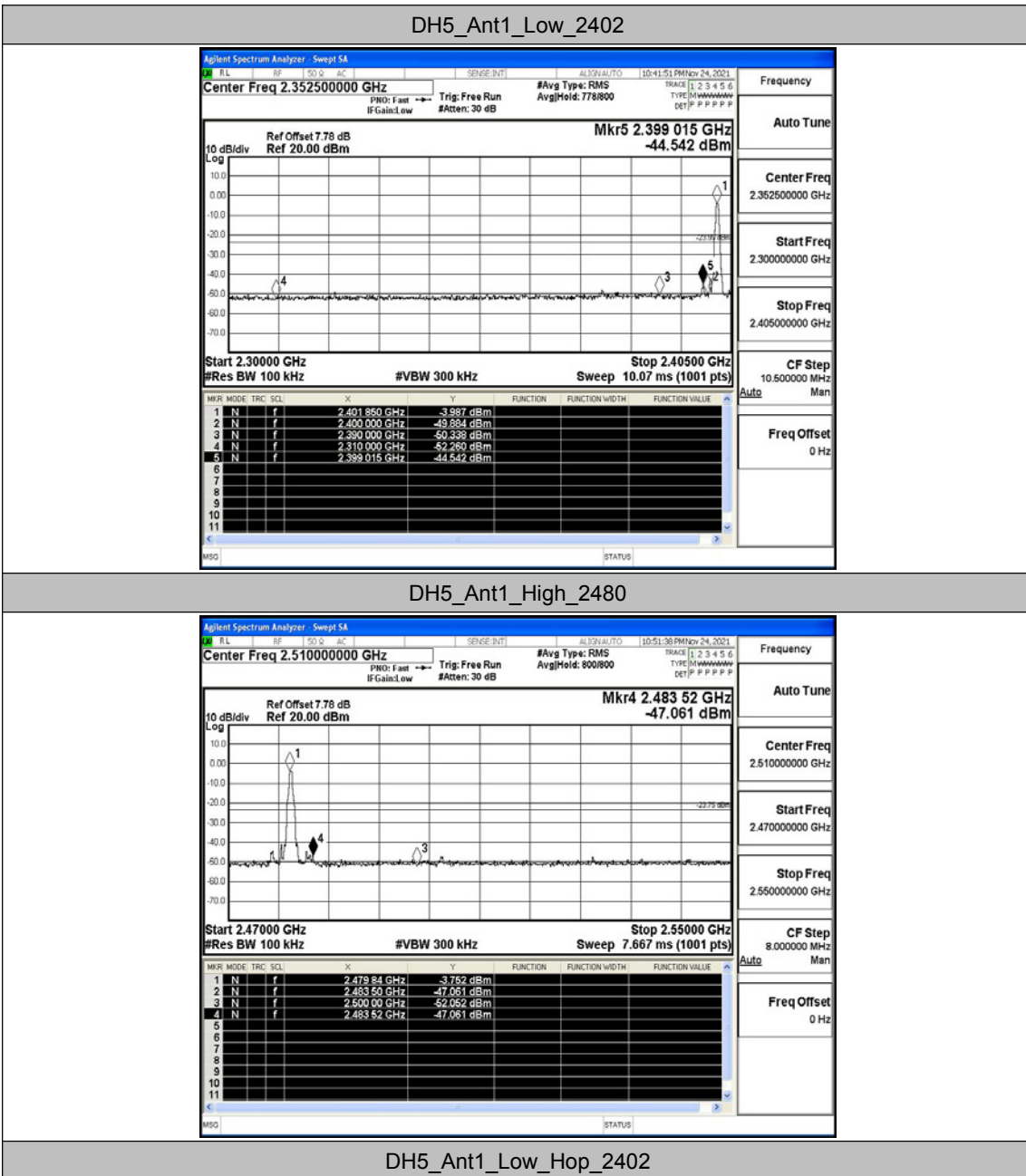
A.6 Band edge measurements

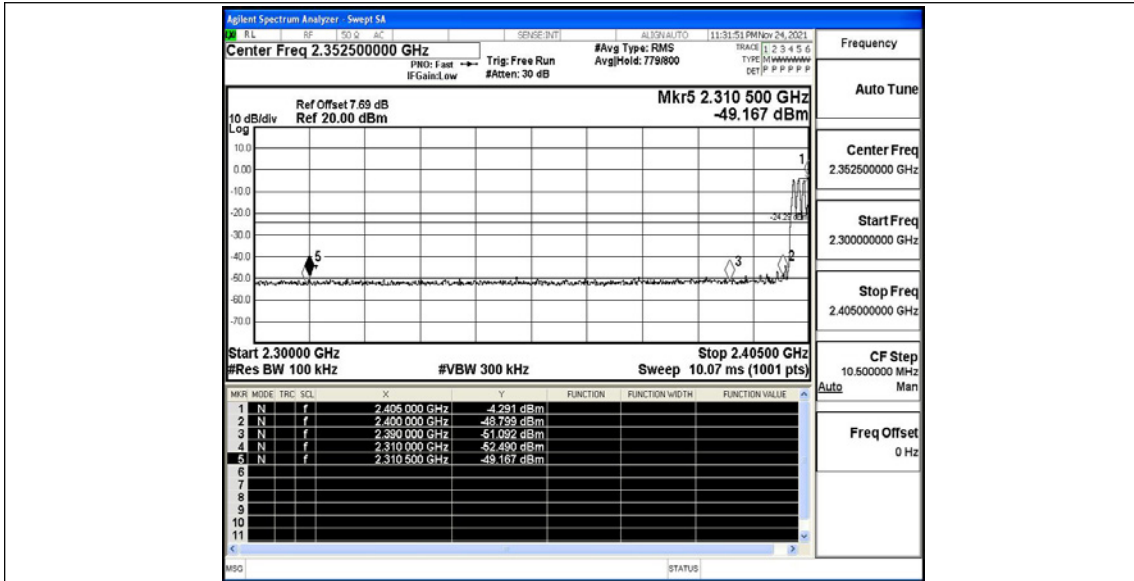
Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-3.99	-44.54	≤-23.99	PASS
		High	2480	-3.75	-47.06	≤-23.75	PASS
		Low	Hop_2402	-4.29	-49.17	≤-24.29	PASS
		High	Hop_2480	-3.80	-47.67	≤-23.8	PASS
2DH5	Ant1	Low	2402	-4.03	-46.99	≤-24.03	PASS
		High	2480	-3.74	-47.37	≤-23.74	PASS
		Low	Hop_2402	-7.99	-48.96	≤-27.99	PASS
		High	Hop_2480	-3.77	-48.47	≤-23.77	PASS

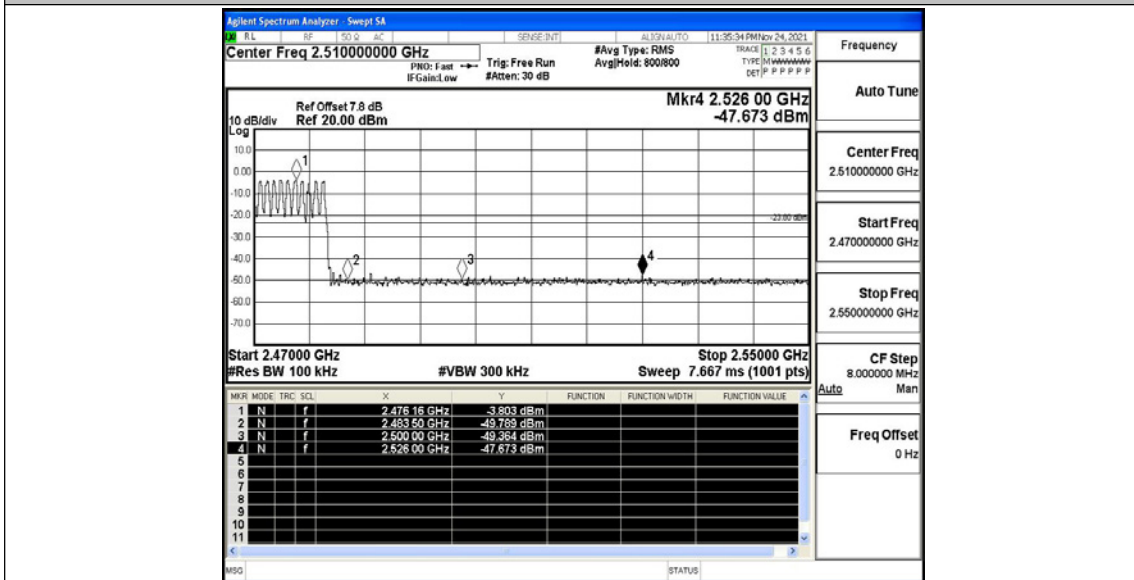


Test Graphs

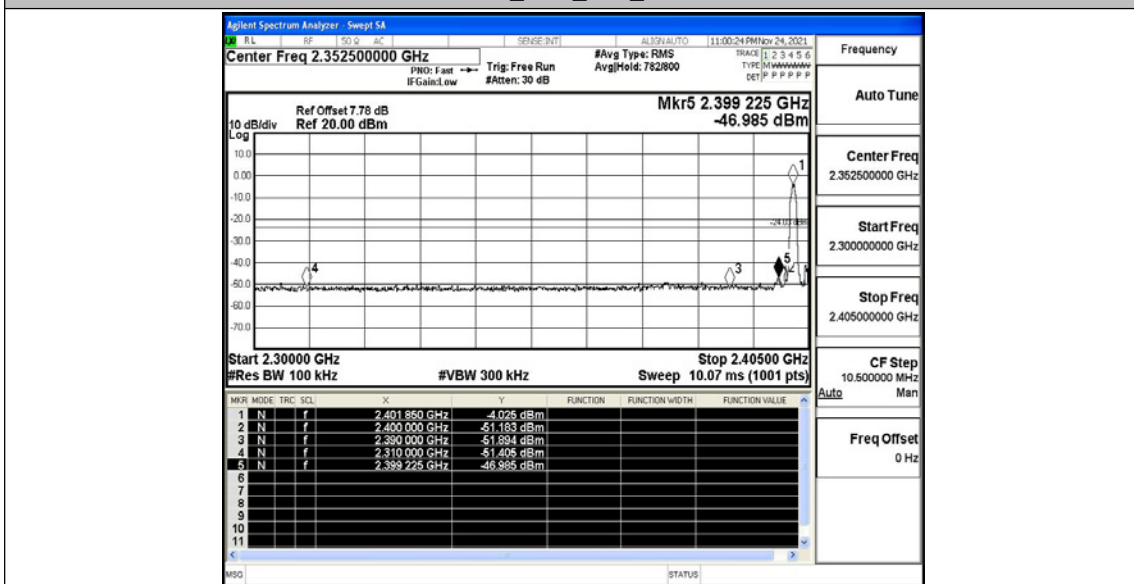




DH5_Ant1_High_Hop_2480

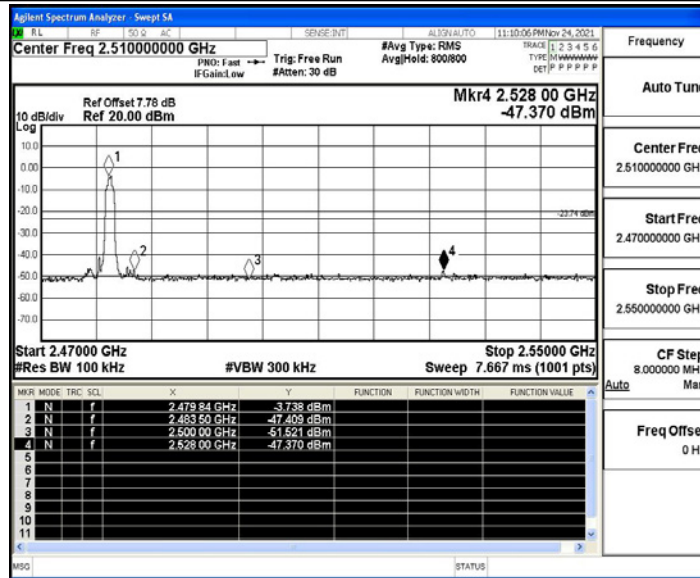


2DH5_Ant1_Low_2402

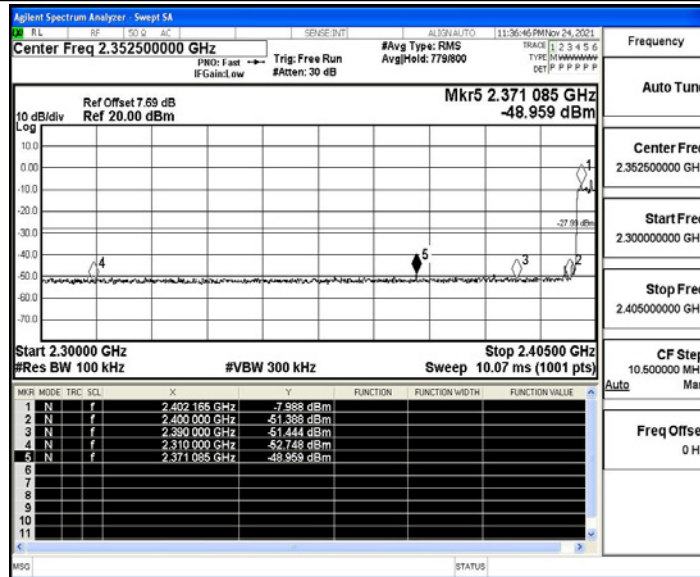




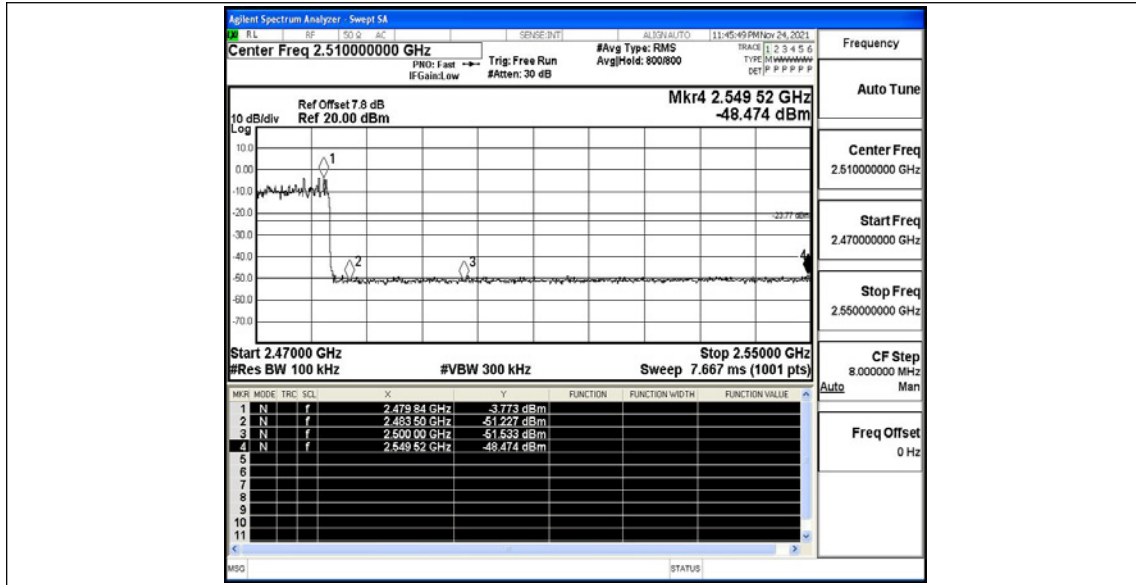
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480





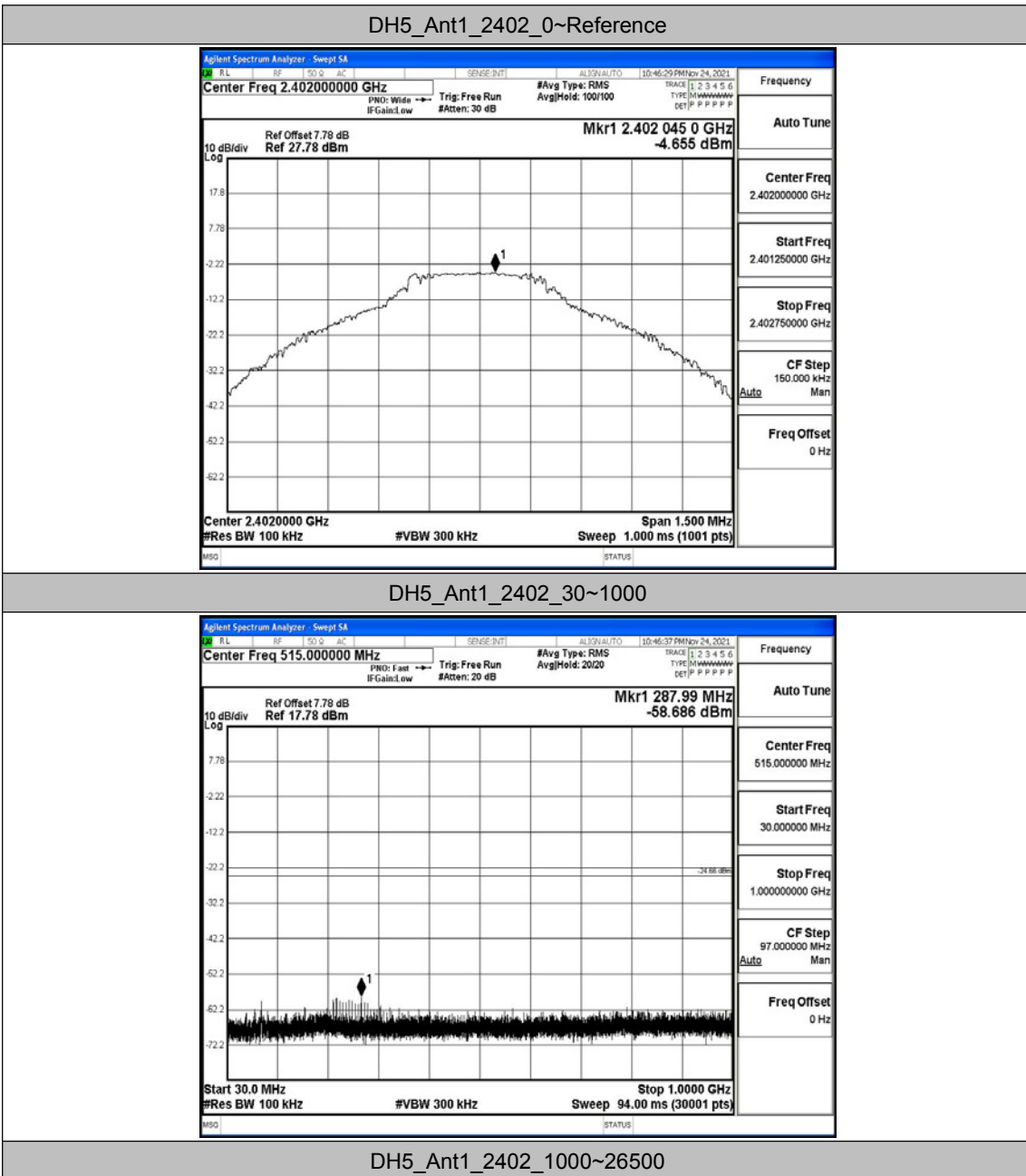
A.7 Conducted Spurious Emission

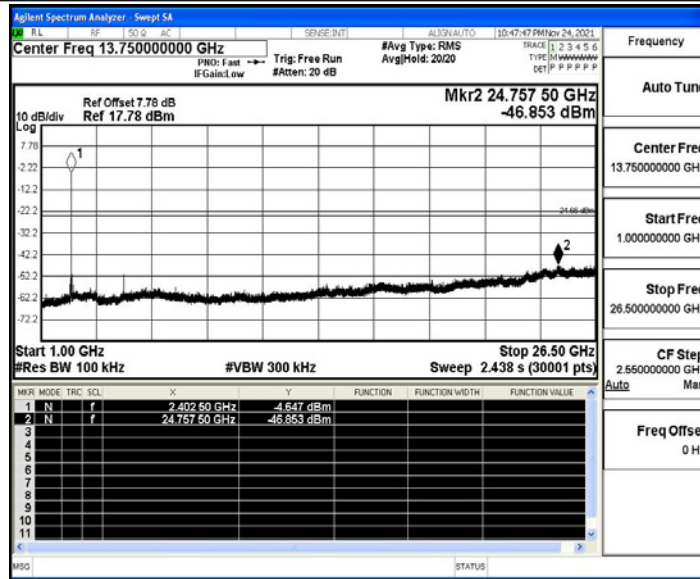
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-4.66	-4.66	---	PASS
			30~1000	-4.66	-58.69	≤-24.66	PASS
			1000~26500	-4.66	-46.85	≤-24.66	PASS
		2441	Reference	-4.13	-4.13	---	PASS
			30~1000	-4.13	-56.01	≤-24.13	PASS
			1000~26500	-4.13	-46.76	≤-24.13	PASS
		2480	Reference	-4.30	-4.30	---	PASS
			30~1000	-4.30	-57.26	≤-24.3	PASS
			1000~26500	-4.30	-47.11	≤-24.3	PASS
2DH5	Ant1	2402	Reference	-5.24	-5.24	---	PASS
			30~1000	-5.24	-58.79	≤-25.24	PASS
			1000~26500	-5.24	-46.12	≤-25.24	PASS
		2441	Reference	-3.68	-3.68	---	PASS
			30~1000	-3.68	-59.03	≤-23.68	PASS
			1000~26500	-3.68	-47.07	≤-23.68	PASS
		2480	Reference	-7.07	-7.07	---	PASS
			30~1000	-7.07	-58.46	≤-27.07	PASS
			1000~26500	-7.07	-47.21	≤-27.07	PASS

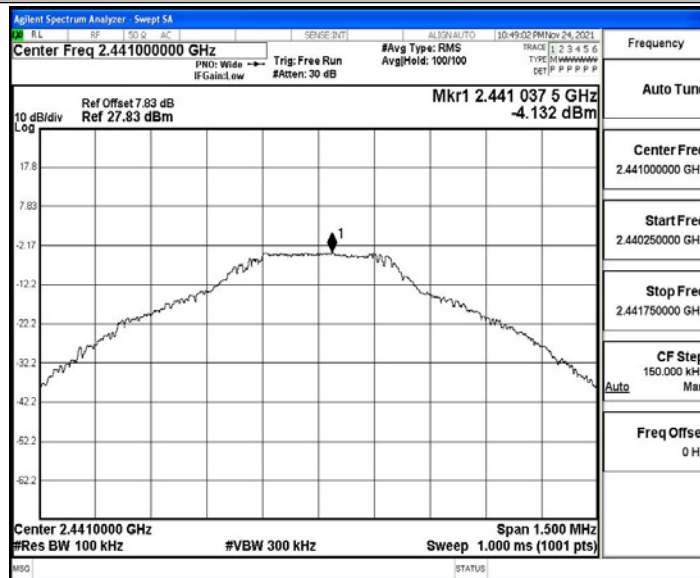


Test Graphs

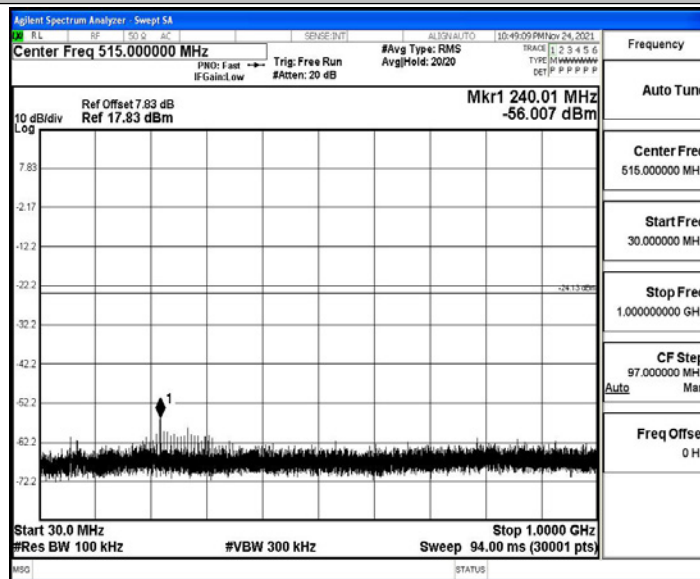




DH5_Ant1_2441_0~Reference

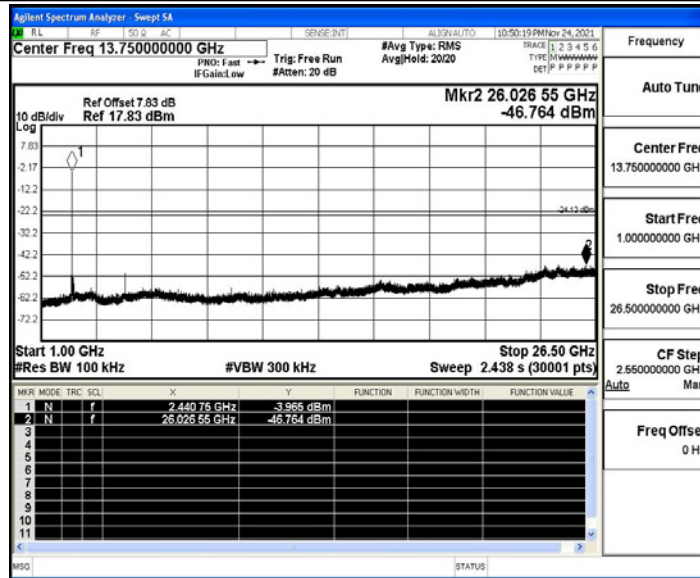


DH5_Ant1_2441_30~1000

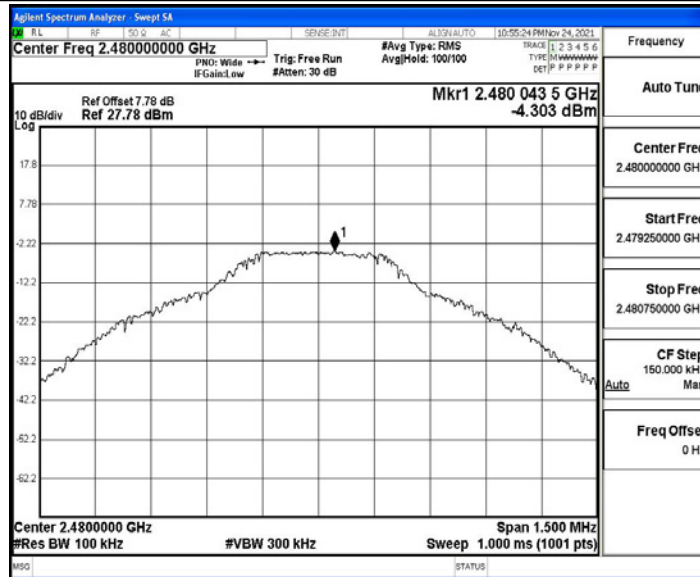




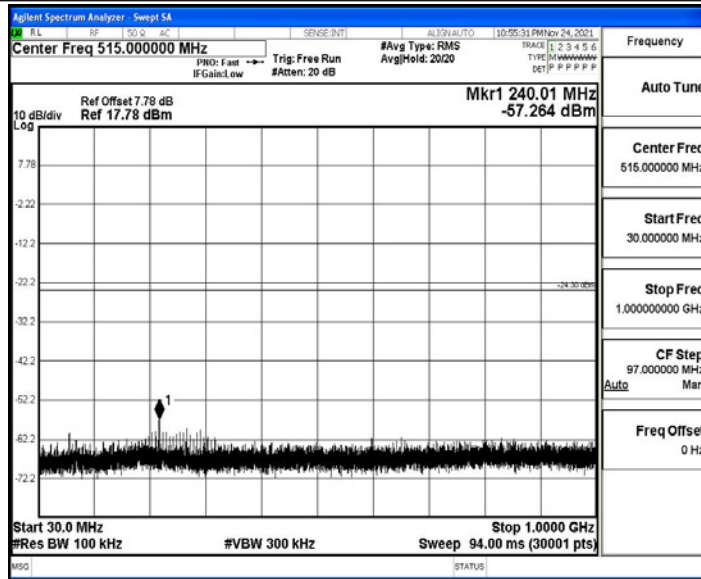
DH5_Ant1_2441_1000~26500



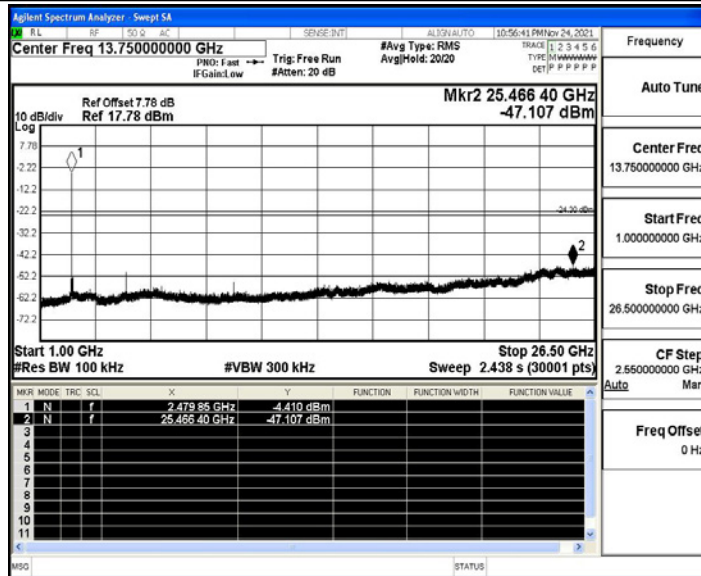
DH5_Ant1_2480_0~Reference



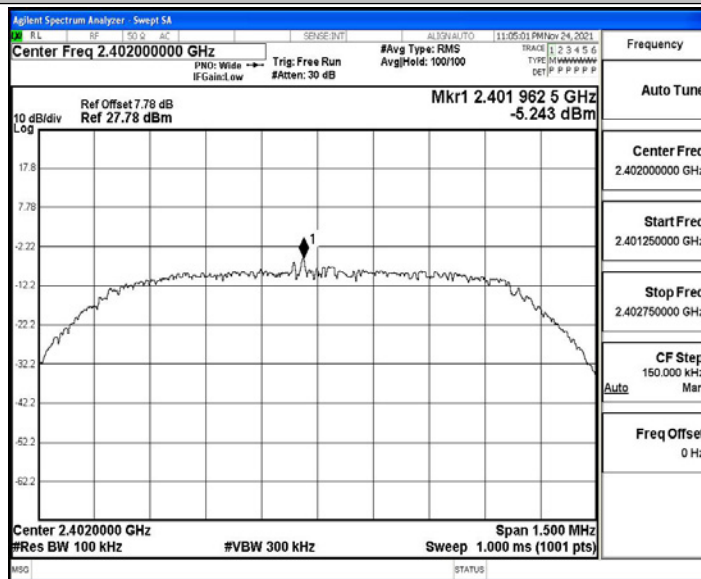
DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500

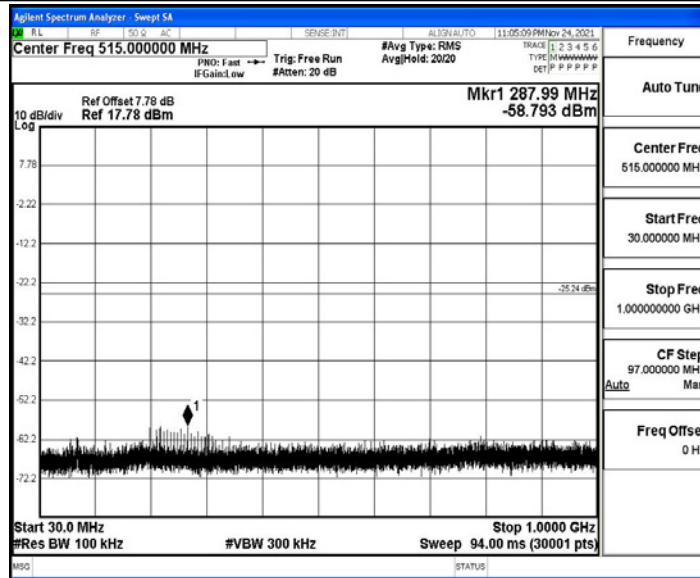


2DH5_Ant1_2402_0~Reference

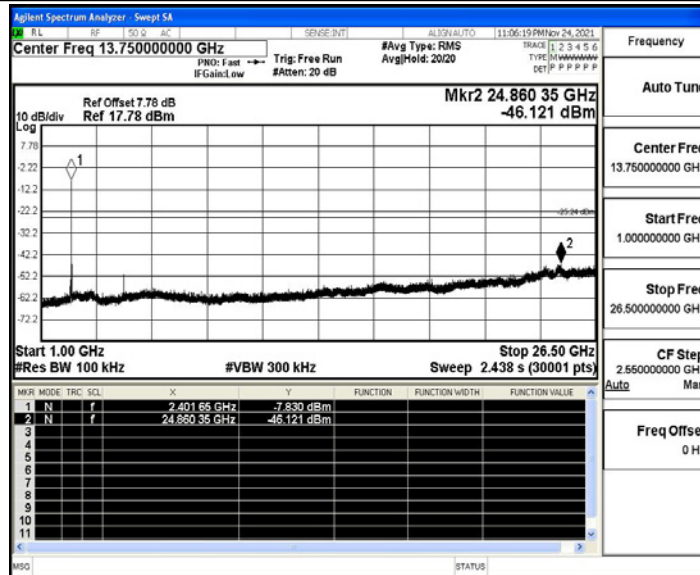




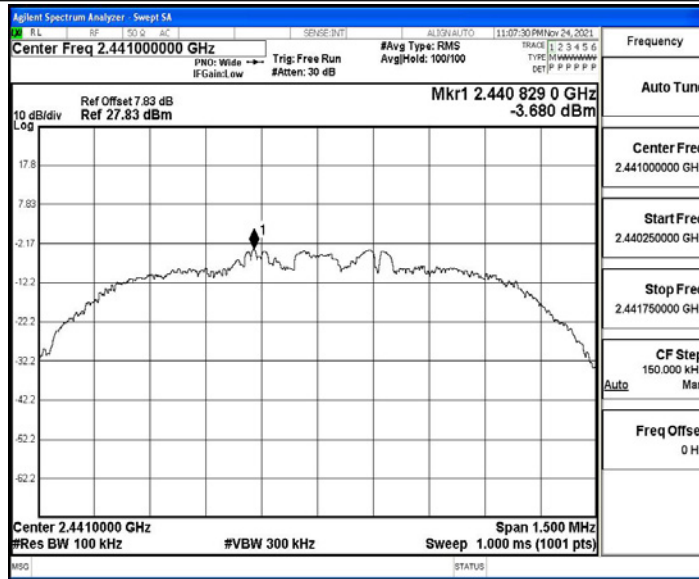
2DH5_Ant1_2402_30~1000



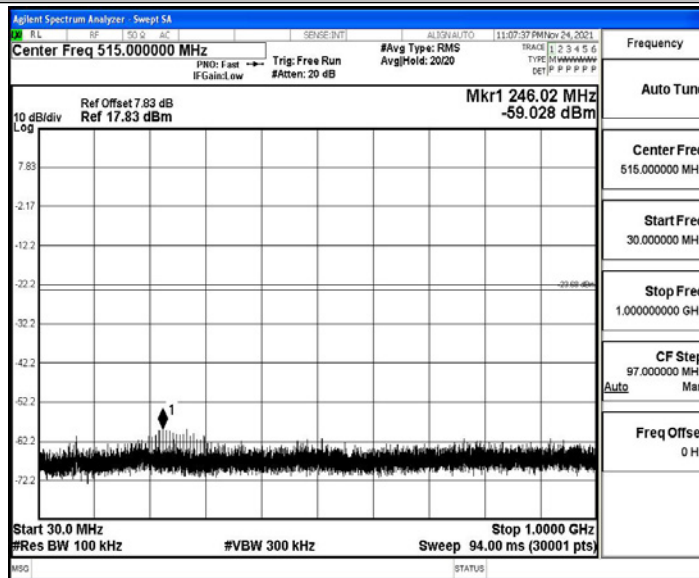
2DH5_Ant1_2402_1000~26500



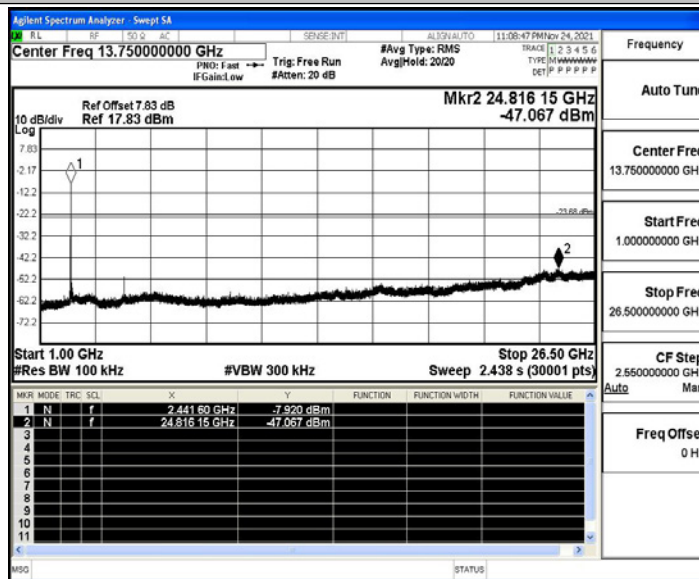
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~100

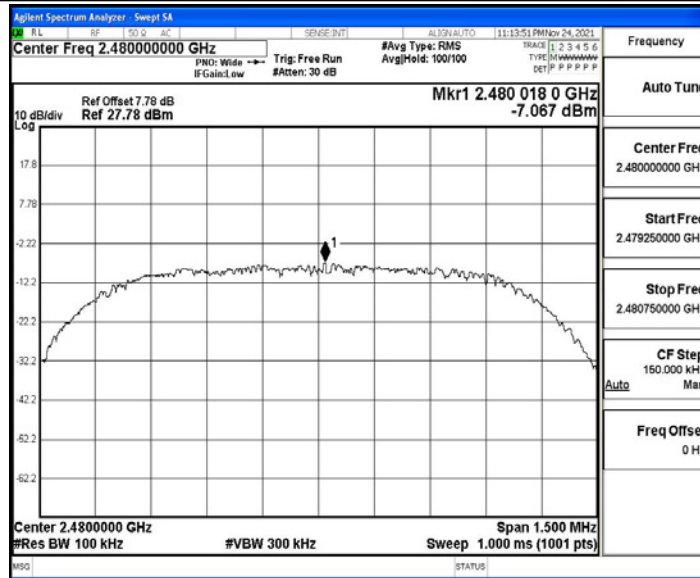


2DH5_Ant1_2441_1000~26500

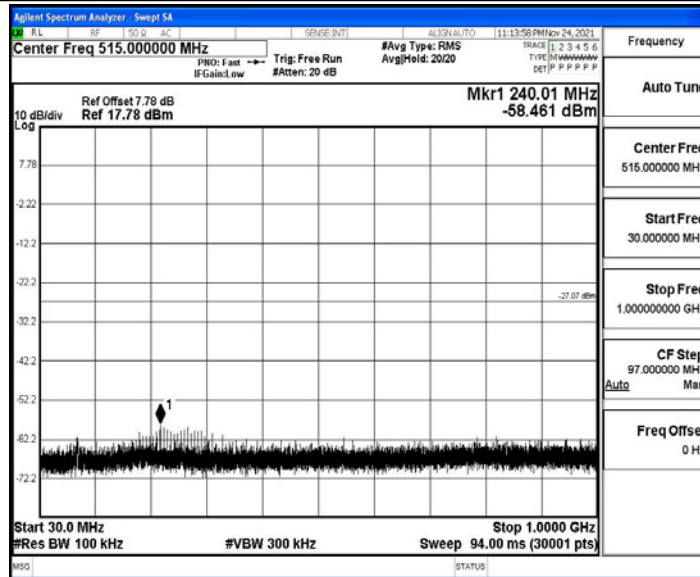




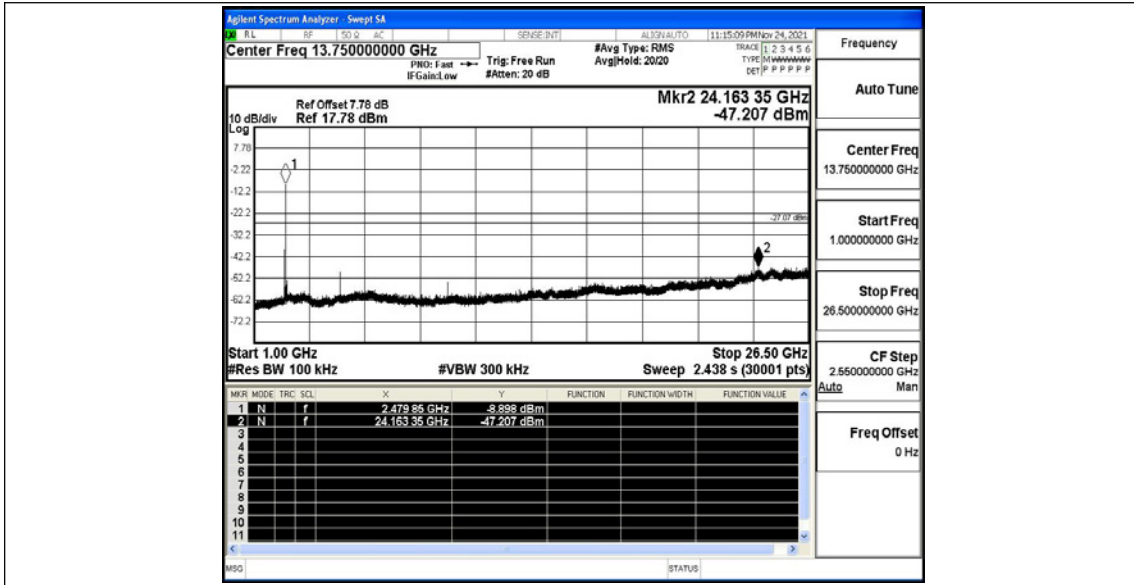
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500





A.8 Emissions in Restricted Bands

Test Result

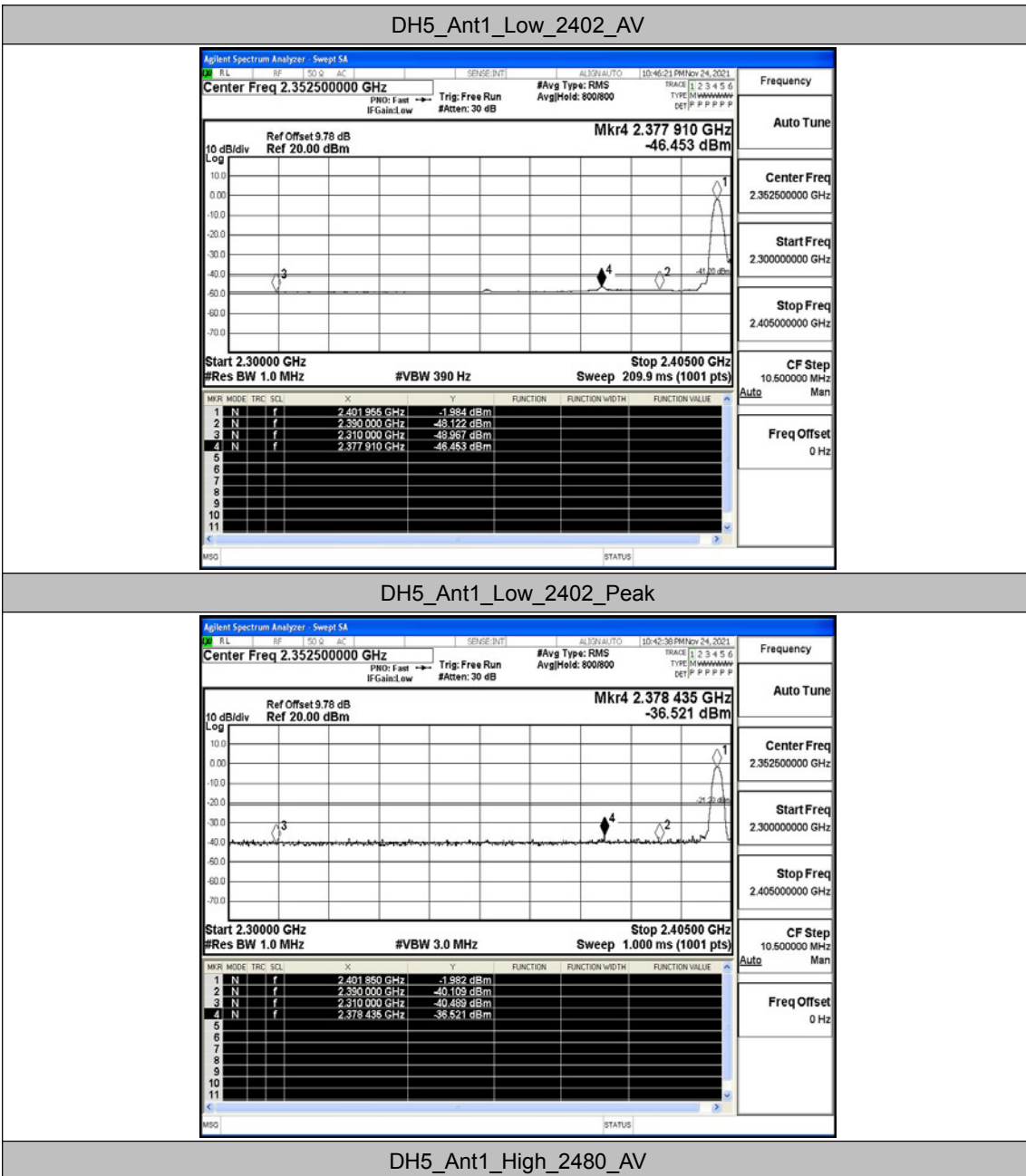
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-48.97	≤-41.20	46.23	≤54	PASS
				AV	2377.910	-46.45	≤-41.20	48.75	≤54	PASS
				AV	2390.000	-48.12	≤-41.20	47.08	≤54	PASS
				Peak	2310.000	-40.49	≤-21.20	54.71	≤74	PASS
				Peak	2378.435	-36.52	≤-21.20	58.68	≤74	PASS
				Peak	2390.000	-40.11	≤-21.20	55.09	≤74	PASS
		High	2480	AV	2483.500	-45.48	≤-41.20	49.72	≤54	PASS
				AV	2483.520	-45.48	≤-41.20	49.72	≤54	PASS
				AV	2500.000	-47.52	≤-41.20	47.68	≤54	PASS
				Peak	2483.500	-37.96	≤-21.20	57.24	≤74	PASS
				Peak	2483.760	-36.38	≤-21.20	58.82	≤74	PASS
				Peak	2500.000	-39.56	≤-21.20	55.64	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-48.79	≤-41.20	46.41	≤54	PASS
				AV	2378.015	-46.99	≤-41.20	48.21	≤54	PASS
				AV	2390.000	-48.11	≤-41.20	47.09	≤54	PASS
				Peak	2310.000	-40.95	≤-21.20	54.25	≤74	PASS
				Peak	2377.700	-37.87	≤-21.20	57.33	≤74	PASS
				Peak	2390.000	-39.18	≤-21.20	56.02	≤74	PASS
		High	2480	AV	2483.500	-46.22	≤-41.20	48.98	≤54	PASS
				AV	2483.520	-46.22	≤-41.20	48.98	≤54	PASS
				AV	2500.000	-47.31	≤-41.20	47.89	≤54	PASS
				Peak	2483.500	-37.82	≤-21.20	57.38	≤74	PASS
				Peak	2497.840	-36.56	≤-21.20	58.64	≤74	PASS
				Peak	2500.000	-39.39	≤-21.20	55.81	≤74	PASS

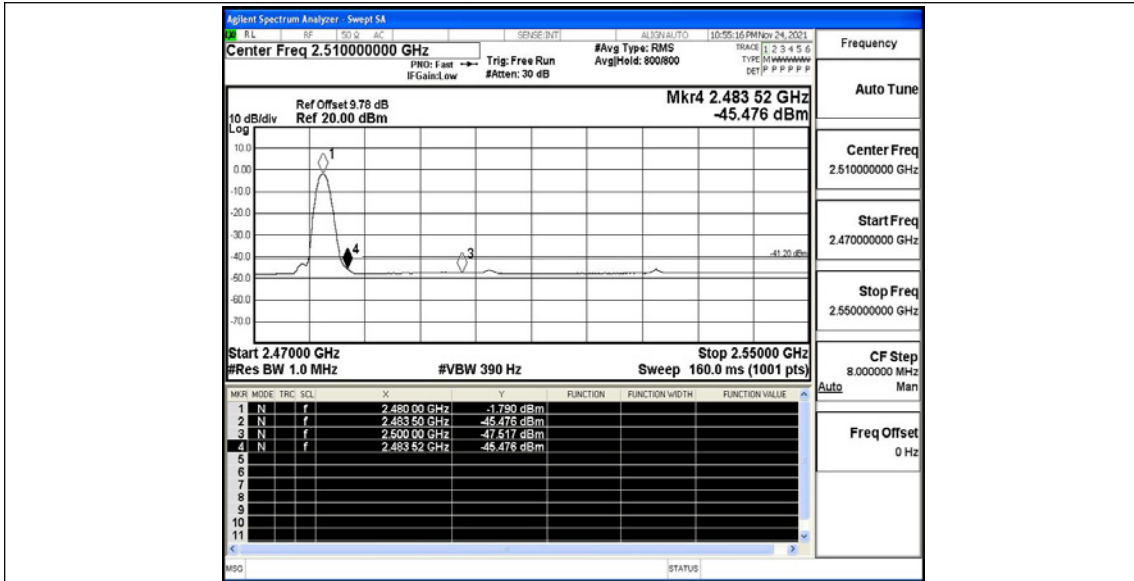
Note:

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.

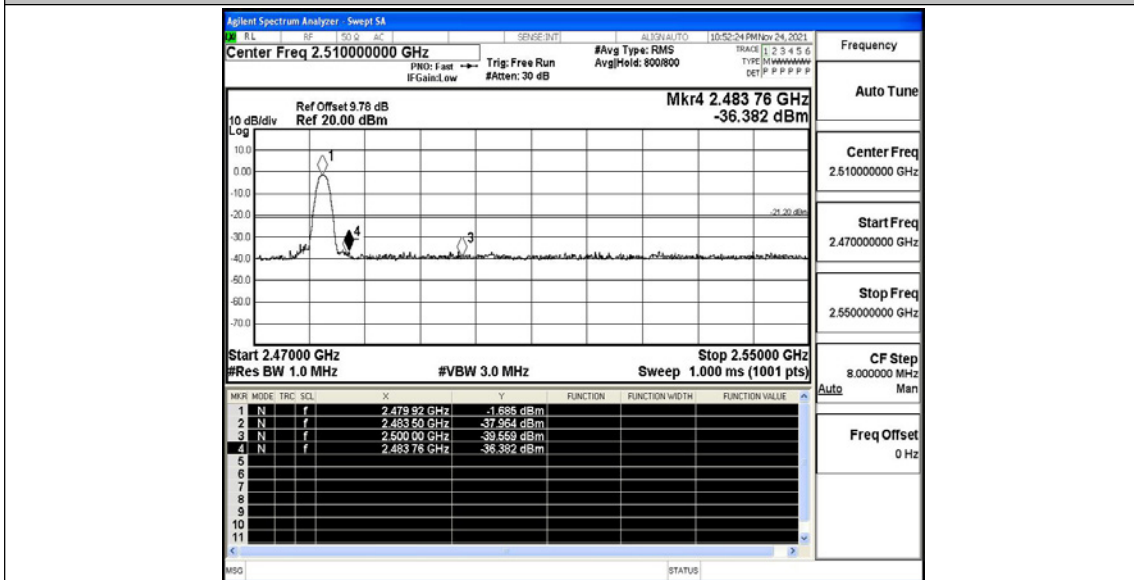


Test Graphs

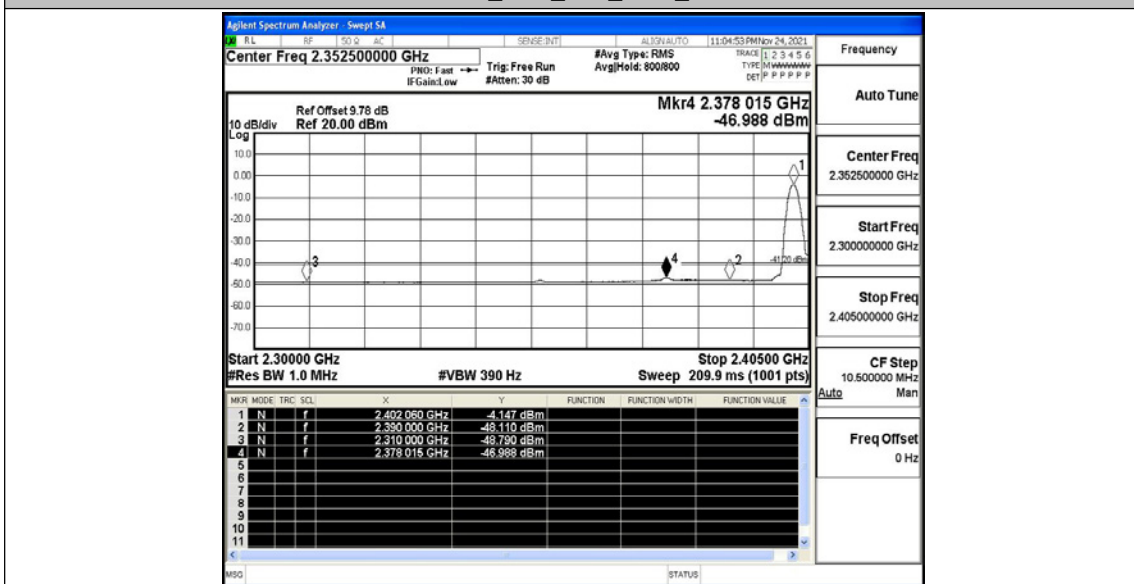




DH5_Ant1_High_2480_Peak

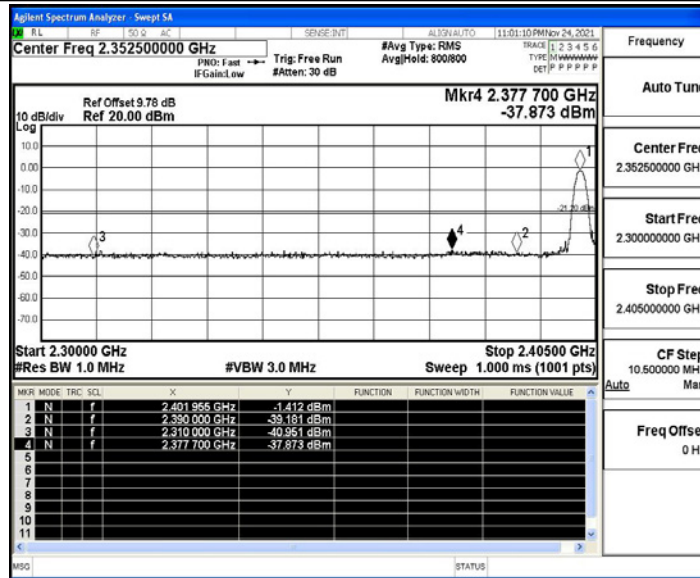


2DH5_Ant1_Low_2402_AV

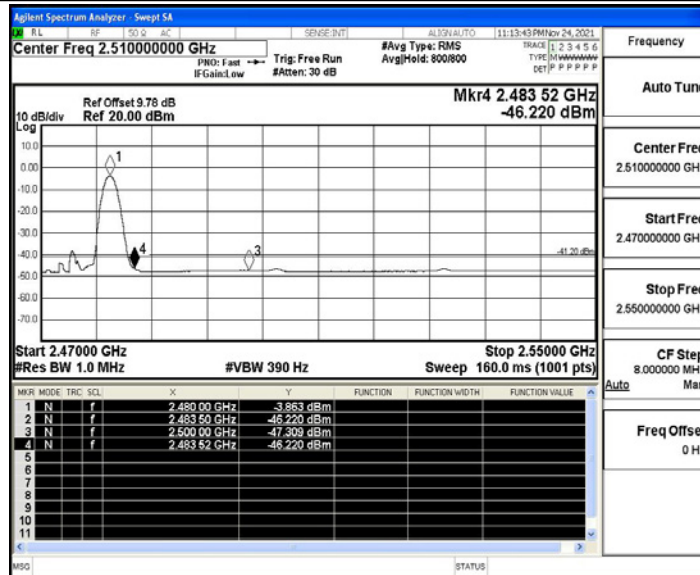




2DH5_Ant1_Low_2402_Peak



2DH5_Ant1_High_2480_AV



2DH5_Ant1_High_2480_Peak

