

Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Bluetooth speaker

Test Model: HY-3317

Environmental Conditions

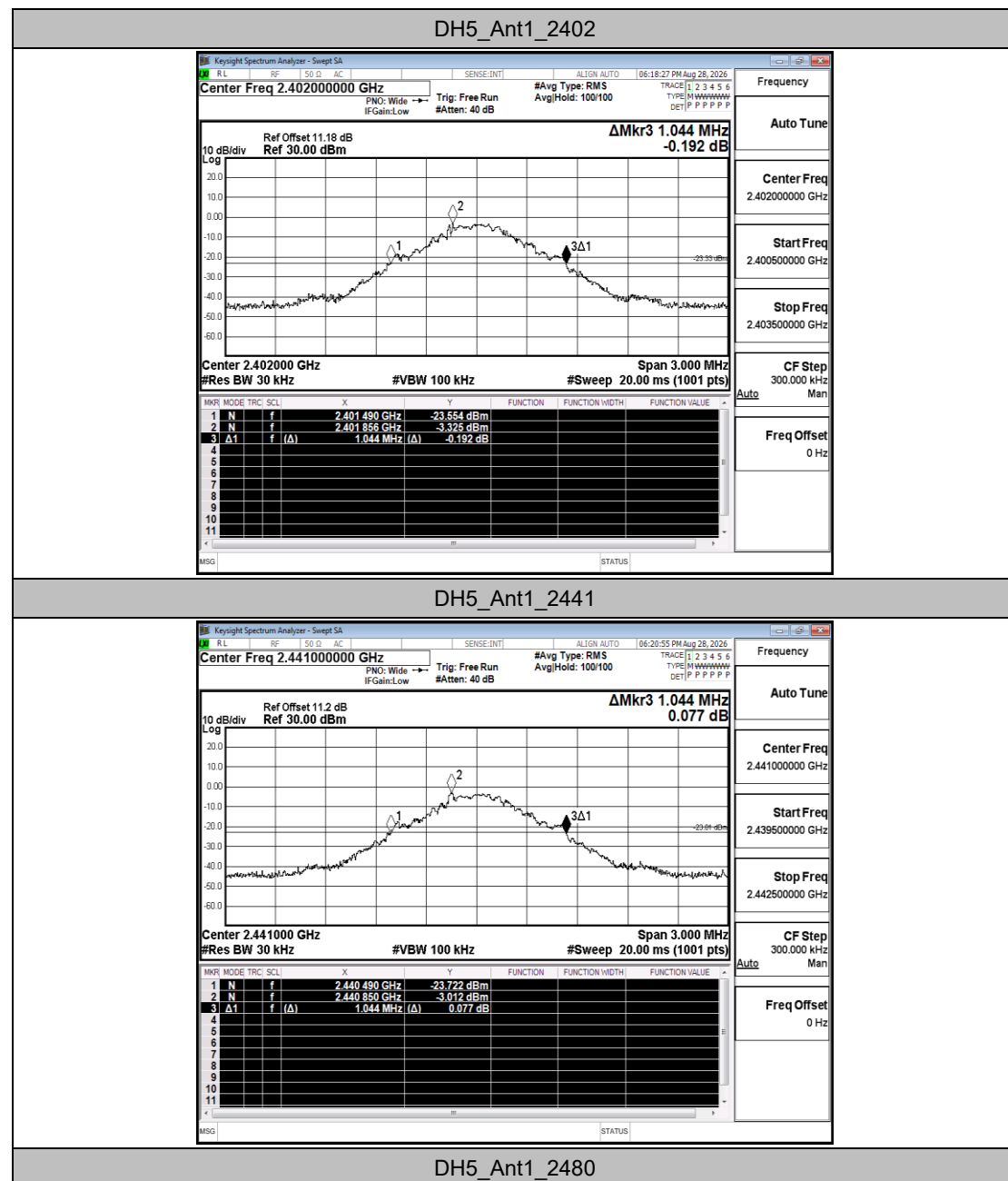
Temperature:	23.5°C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

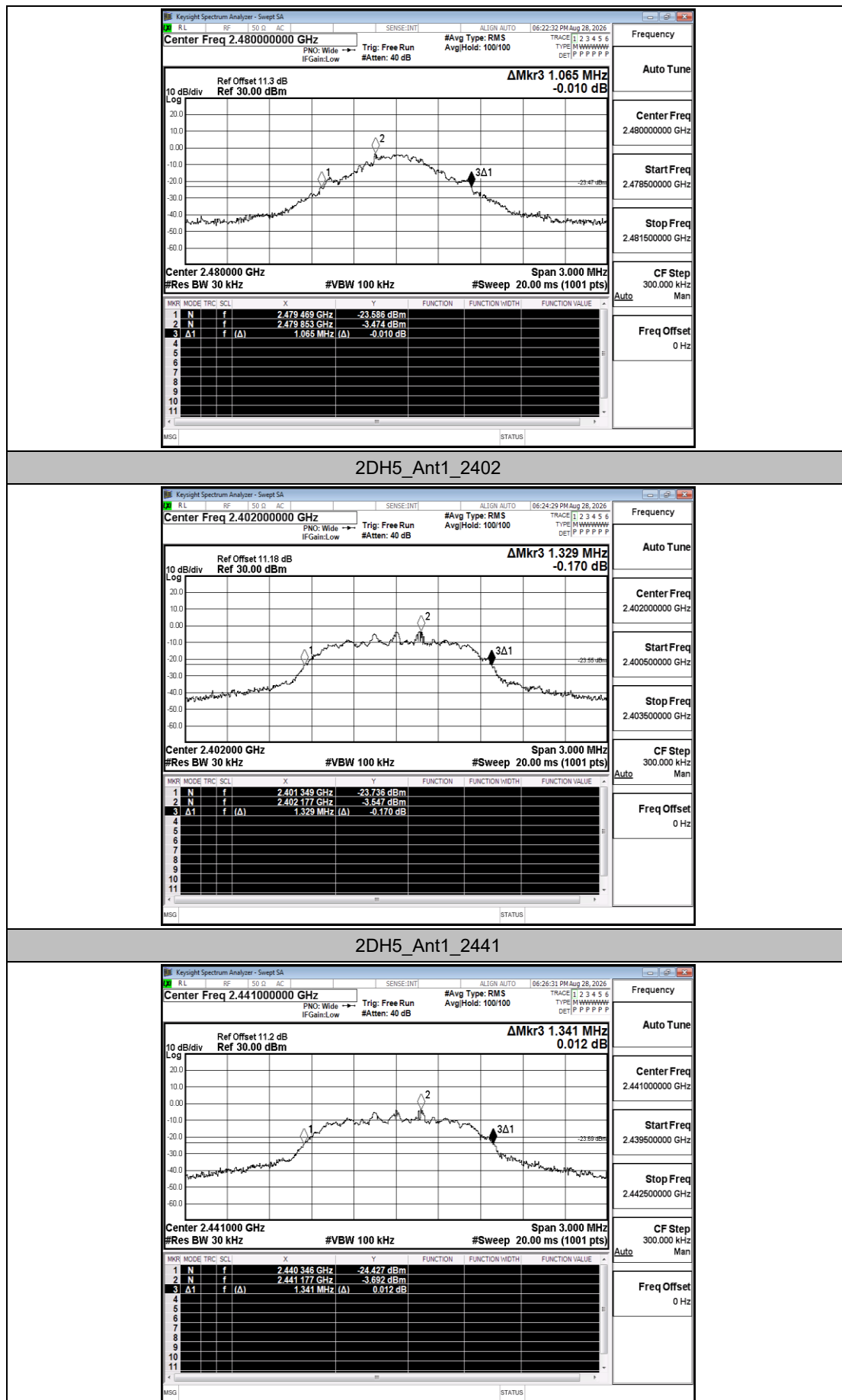
A.1 20dB Emission Bandwidth

Test Result

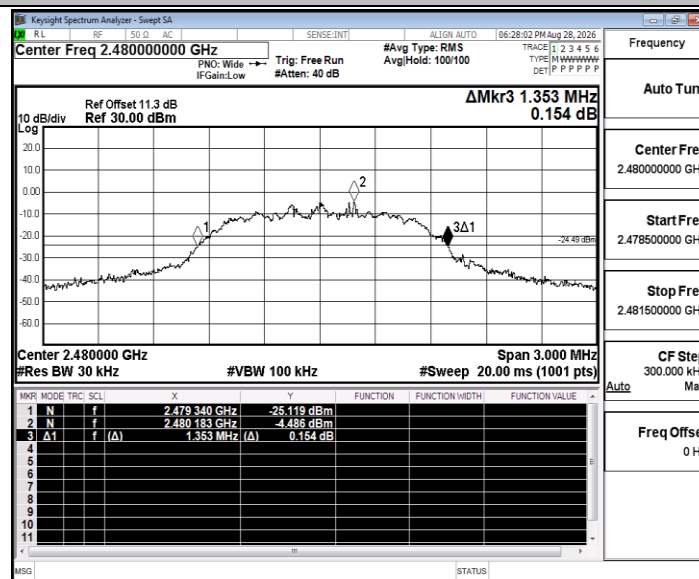
TestMode	Antenna	Freq (MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
DH5	Ant1	2402	1.044	2401.490	2402.534	---	---
		2441	1.044	2440.490	2441.534	---	---
		2480	1.065	2479.469	2480.534	---	---
2DH5	Ant1	2402	1.329	2401.349	2402.678	---	---
		2441	1.341	2440.346	2441.687	---	---
		2480	1.353	2479.340	2480.693	---	---
3DH5	Ant1	2402	1.290	2401.367	2402.657	---	---
		2441	1.290	2440.364	2441.654	---	---
		2480	1.287	2479.361	2480.648	---	---

Test Graphs

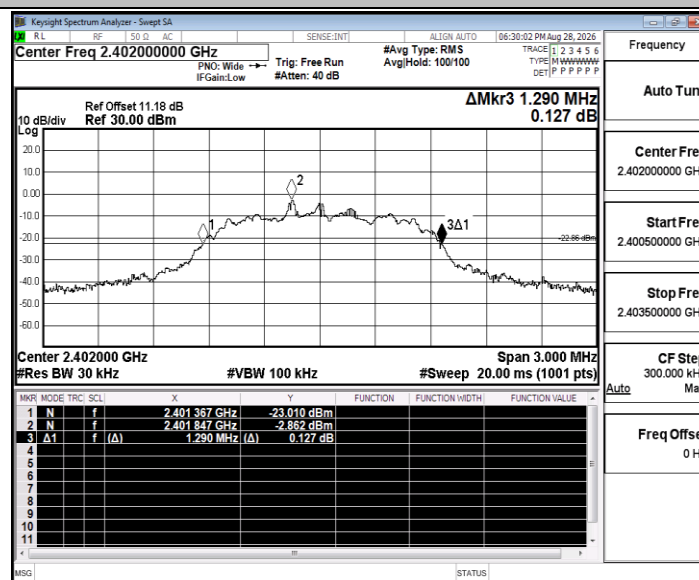




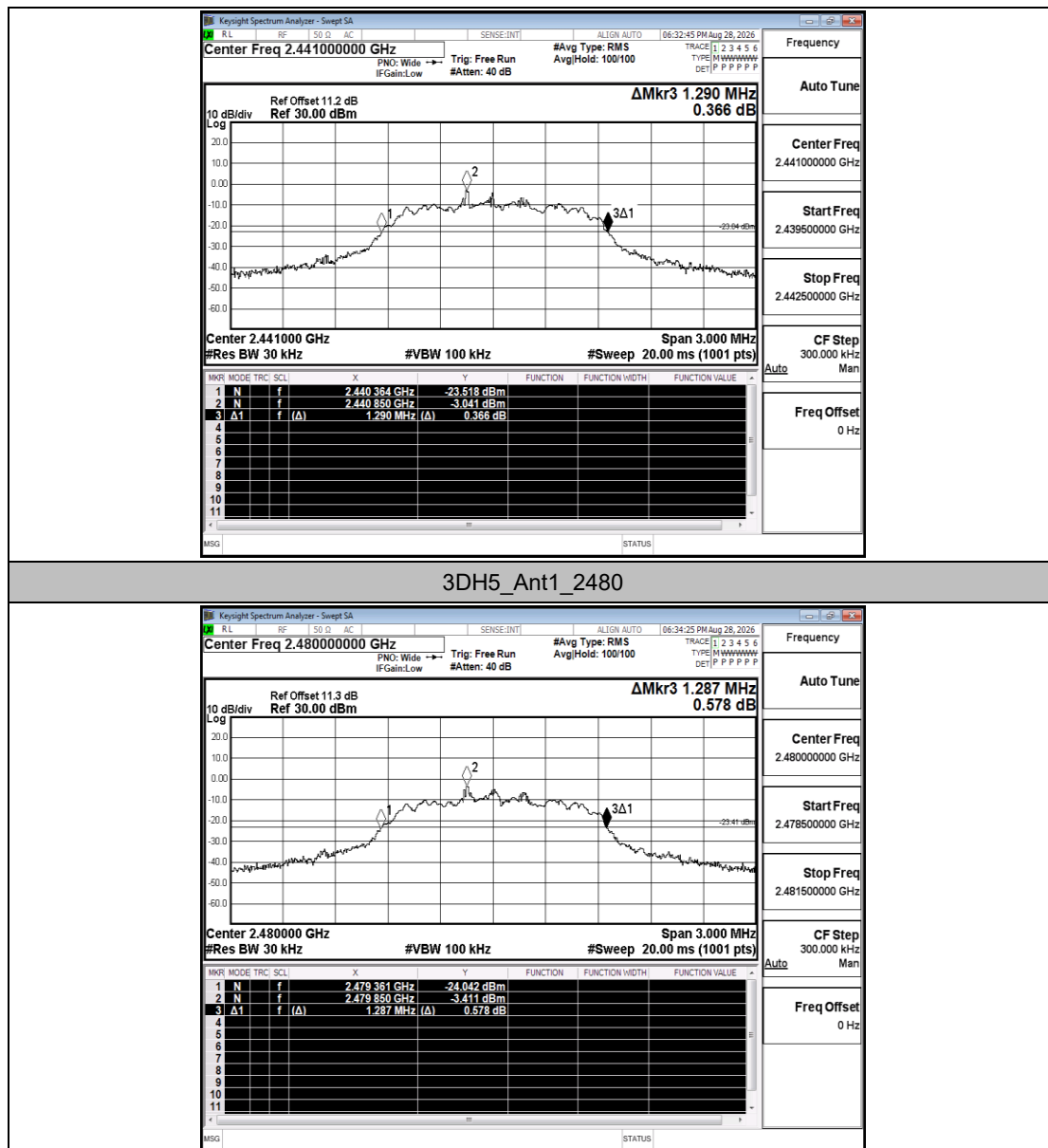
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441

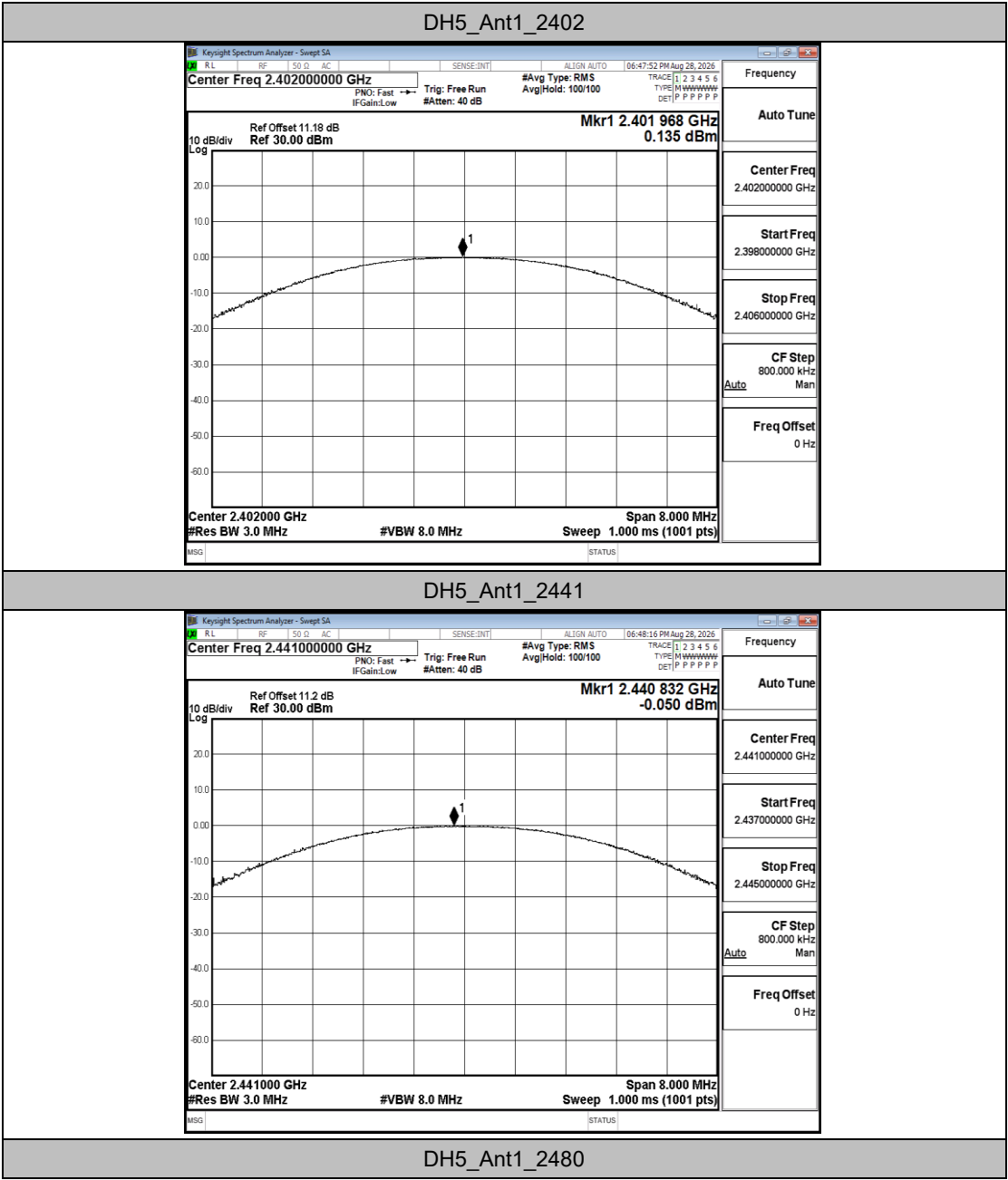


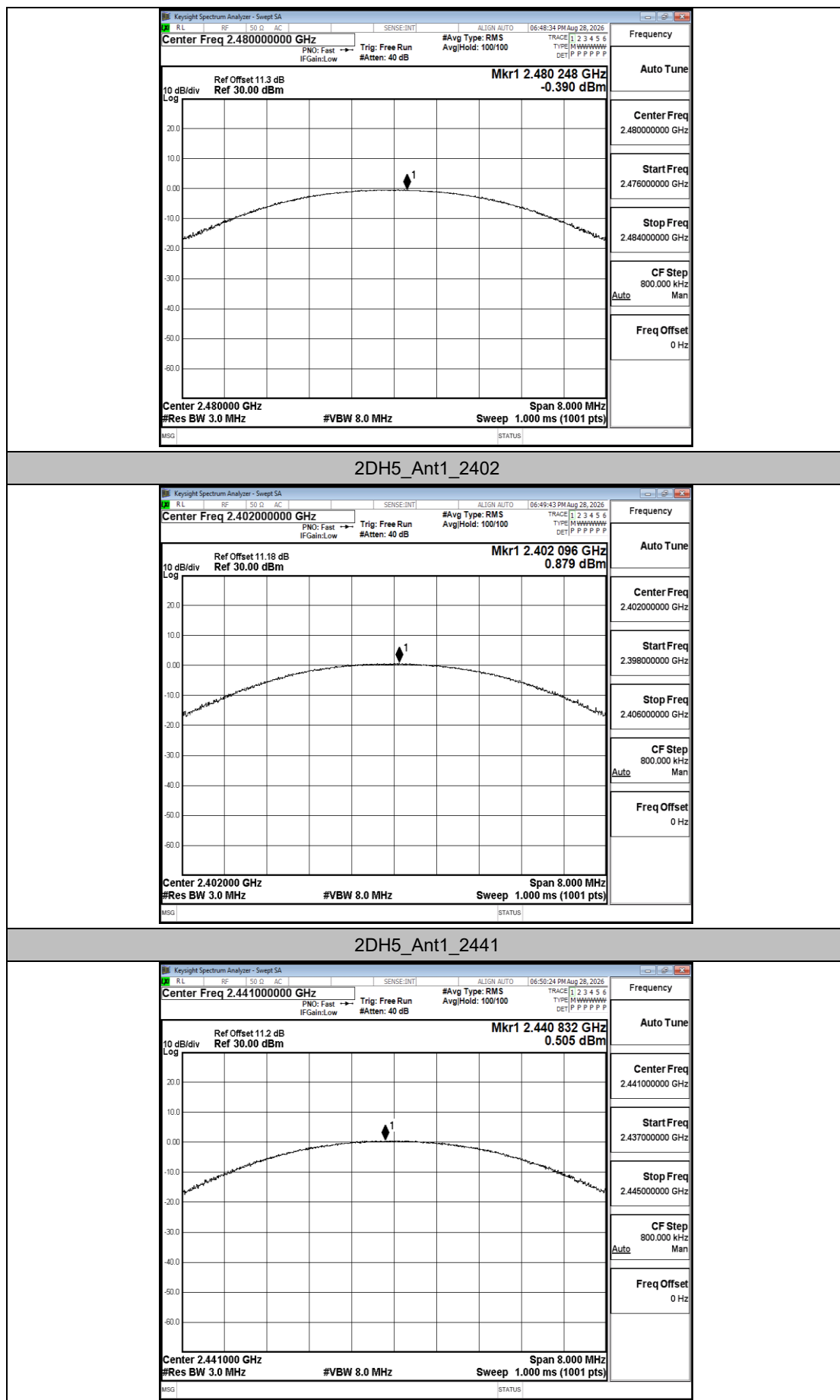
A.2 Maximum Peak conducted output power

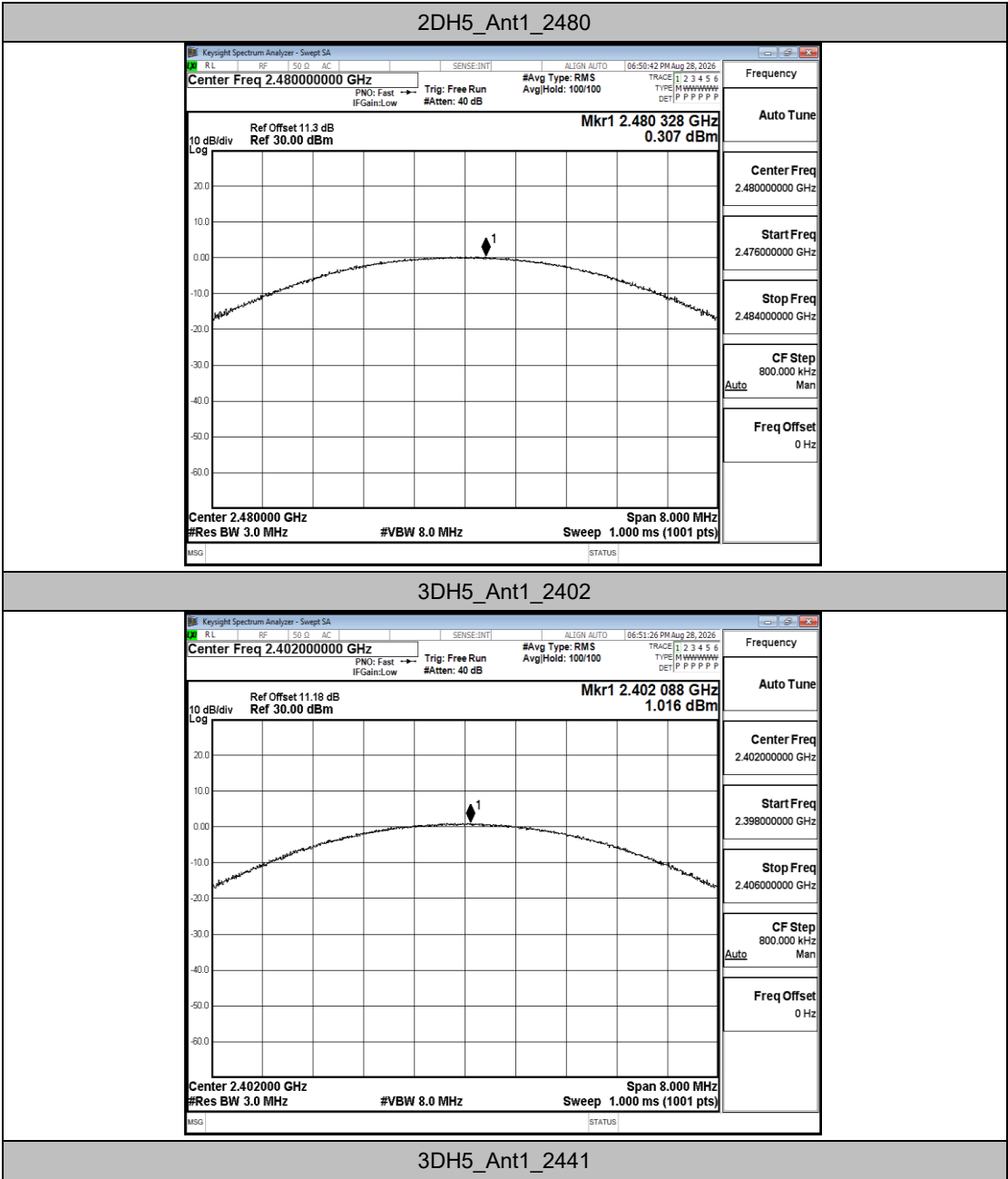
Test Result Peak

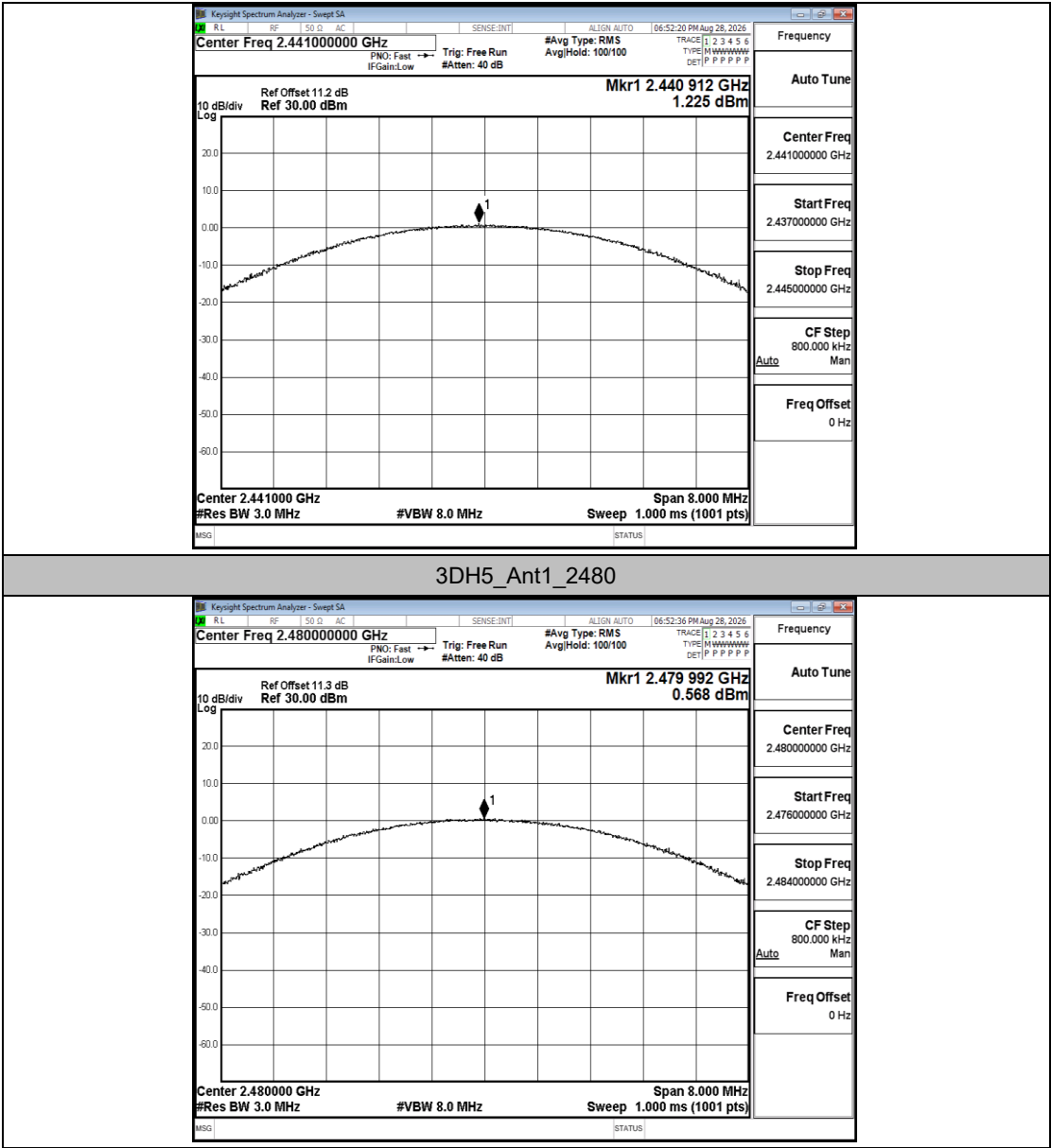
TestMode	Antenna	Freq (MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.14	≤20.97	PASS
		2441	-0.05	≤20.97	PASS
		2480	-0.39	≤20.97	PASS
2DH5	Ant1	2402	0.88	≤20.97	PASS
		2441	0.51	≤20.97	PASS
		2480	0.31	≤20.97	PASS
3DH5	Ant1	2402	1.02	≤20.97	PASS
		2441	1.23	≤20.97	PASS
		2480	0.57	≤20.97	PASS

Test Graphs







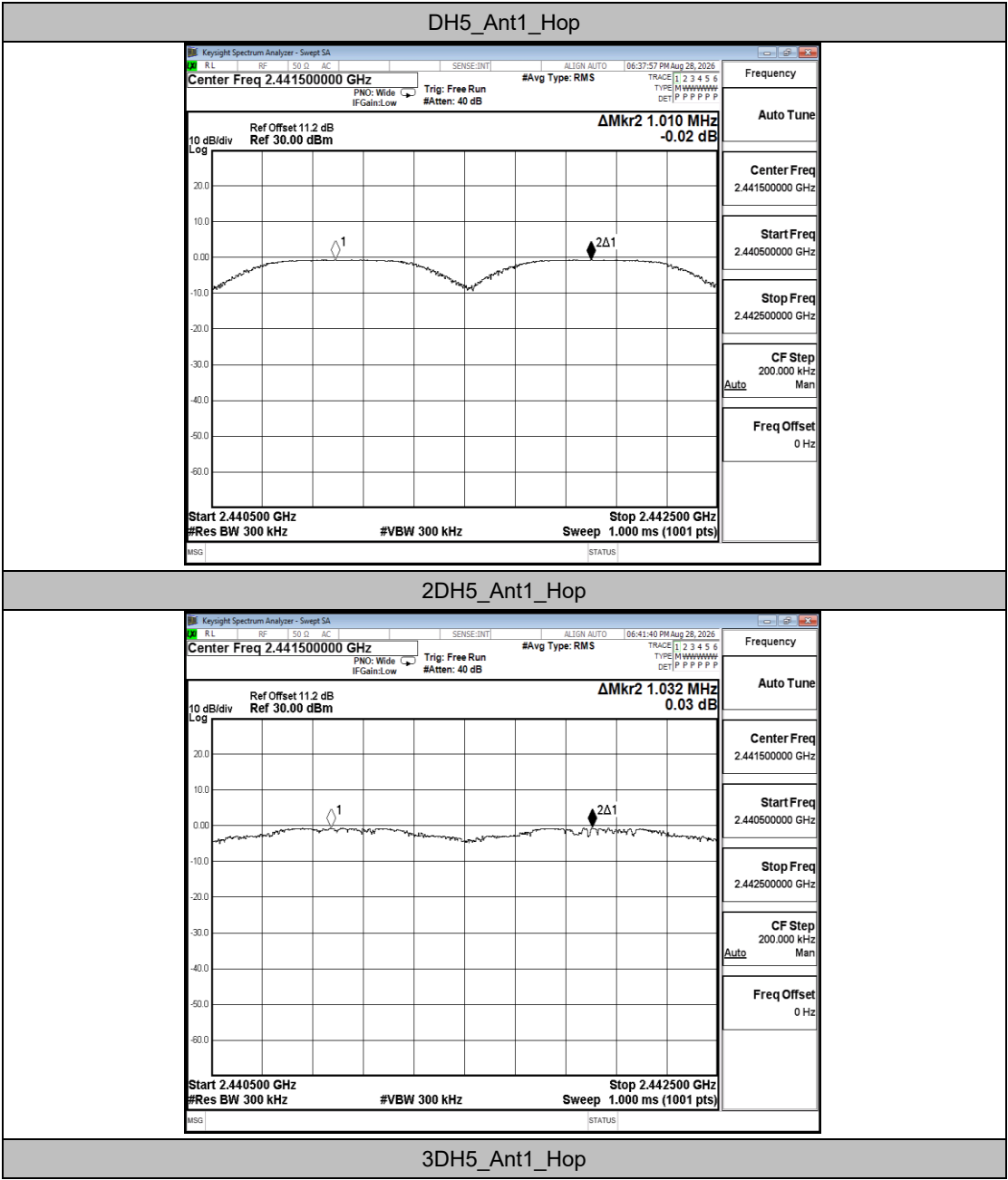


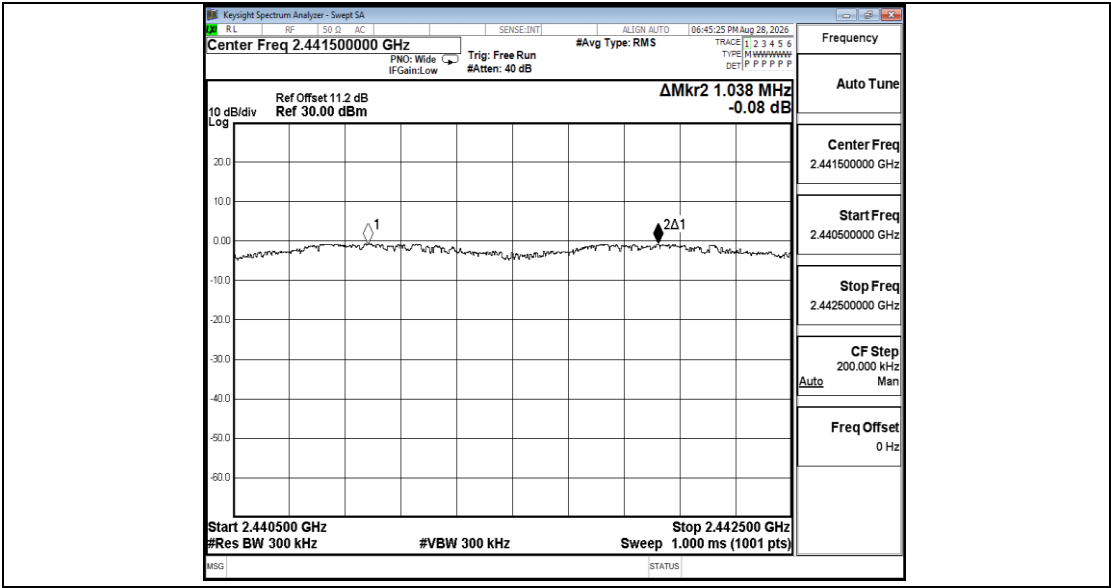
A.3 Carrier frequency separation

Test Result

TestMode	Antenna	Freq (MHz)	Result [MHz]	Limit [MHz]	Verdict
DH5	Ant1	Hop	1.01	≥ 0.710	PASS
2DH5	Ant1	Hop	1.032	≥ 0.902	PASS
3DH5	Ant1	Hop	1.038	≥ 0.860	PASS

Test Graphs



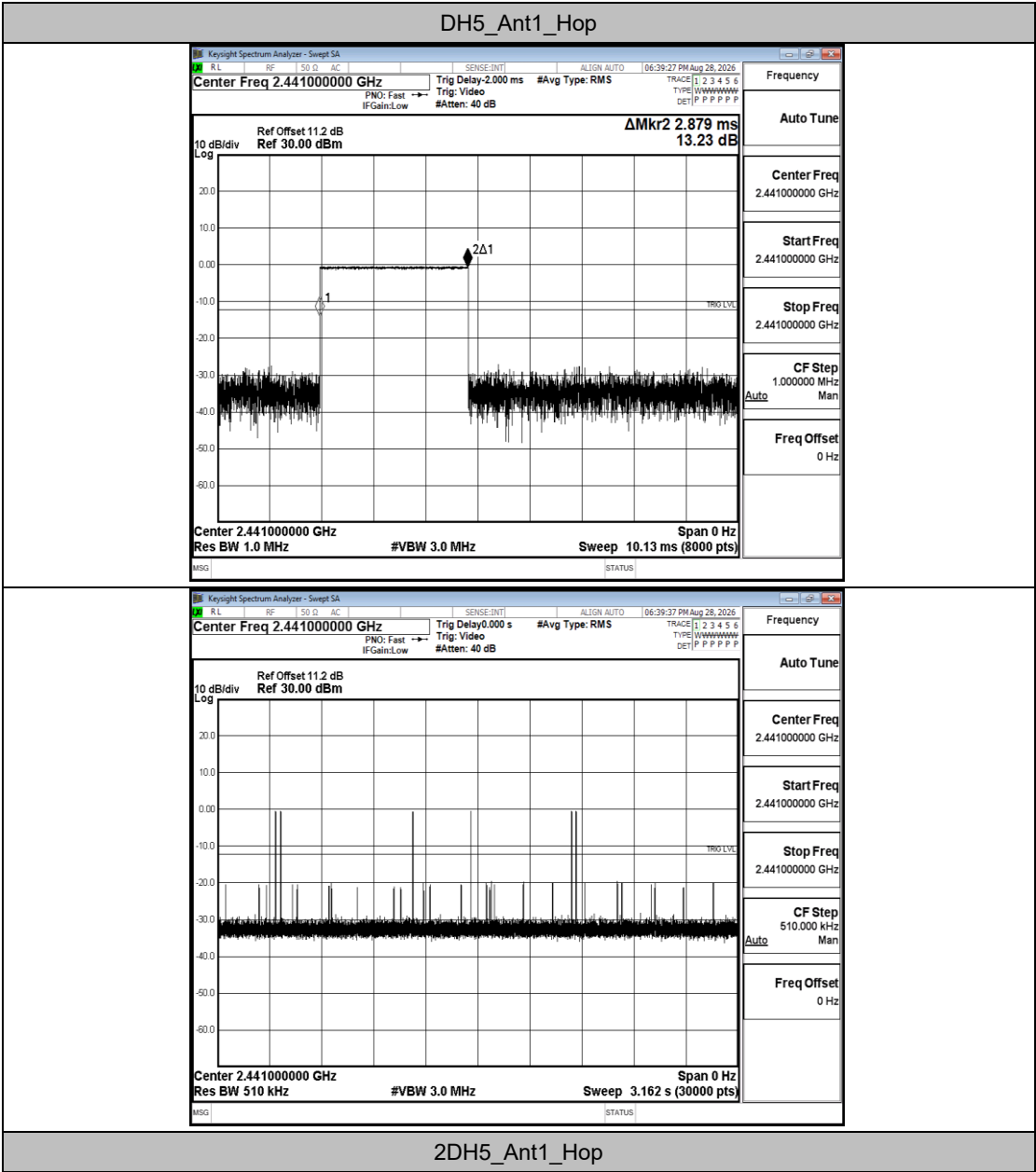


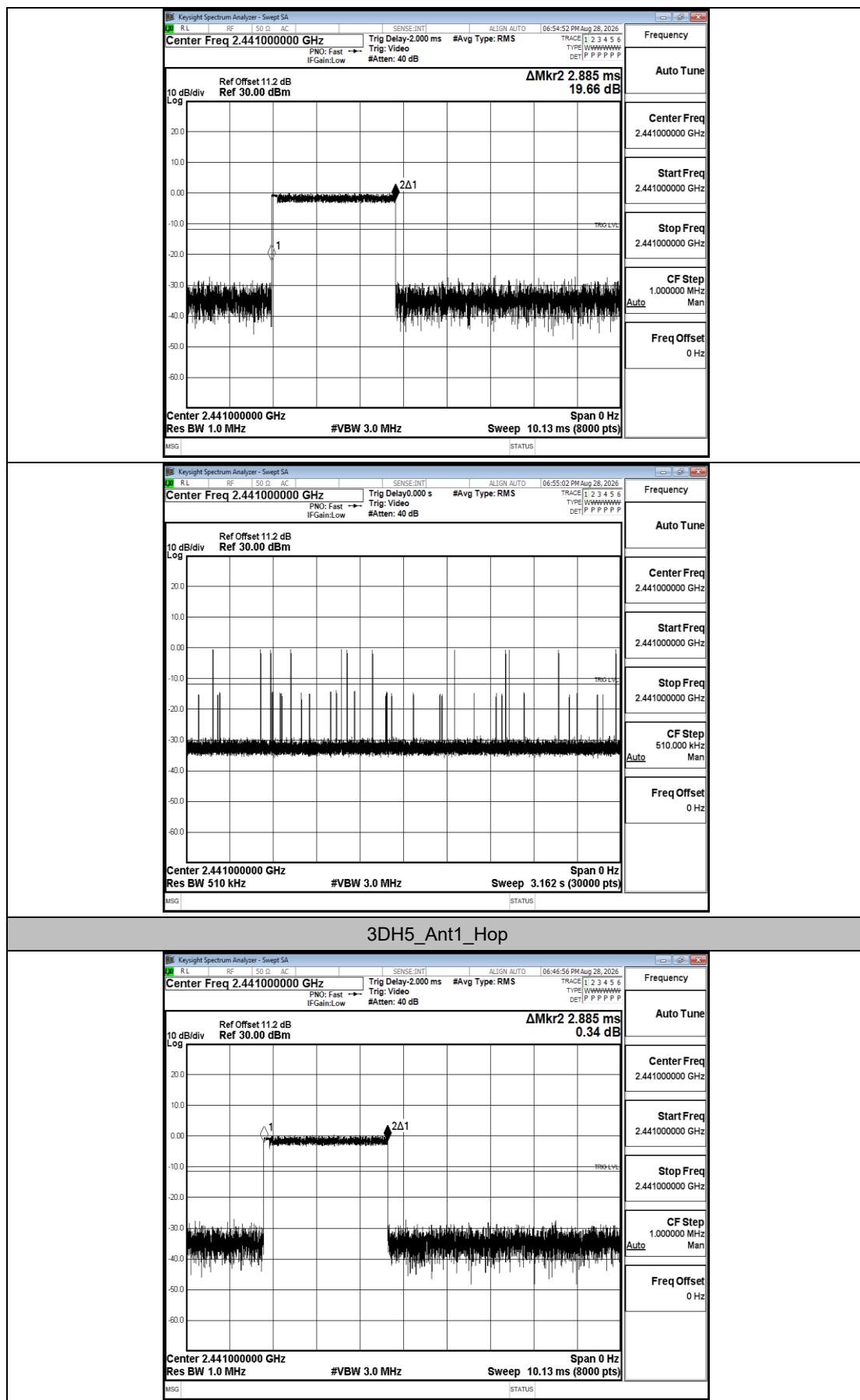
A.4 Time of occupancy

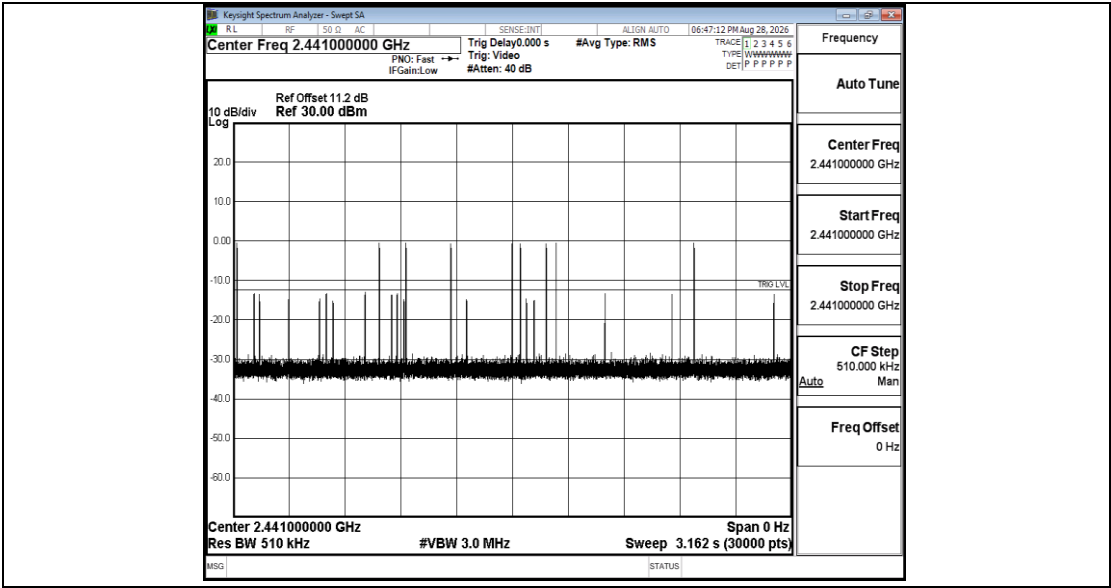
Test Result

TestMode	Antenna	Freq (MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.879	70	0.202	≤0.4	PASS
2DH5	Ant1	Hop	2.885	130	0.375	≤0.4	PASS
3DH5	Ant1	Hop	2.885	100	0.289	≤0.4	PASS

Test Graphs





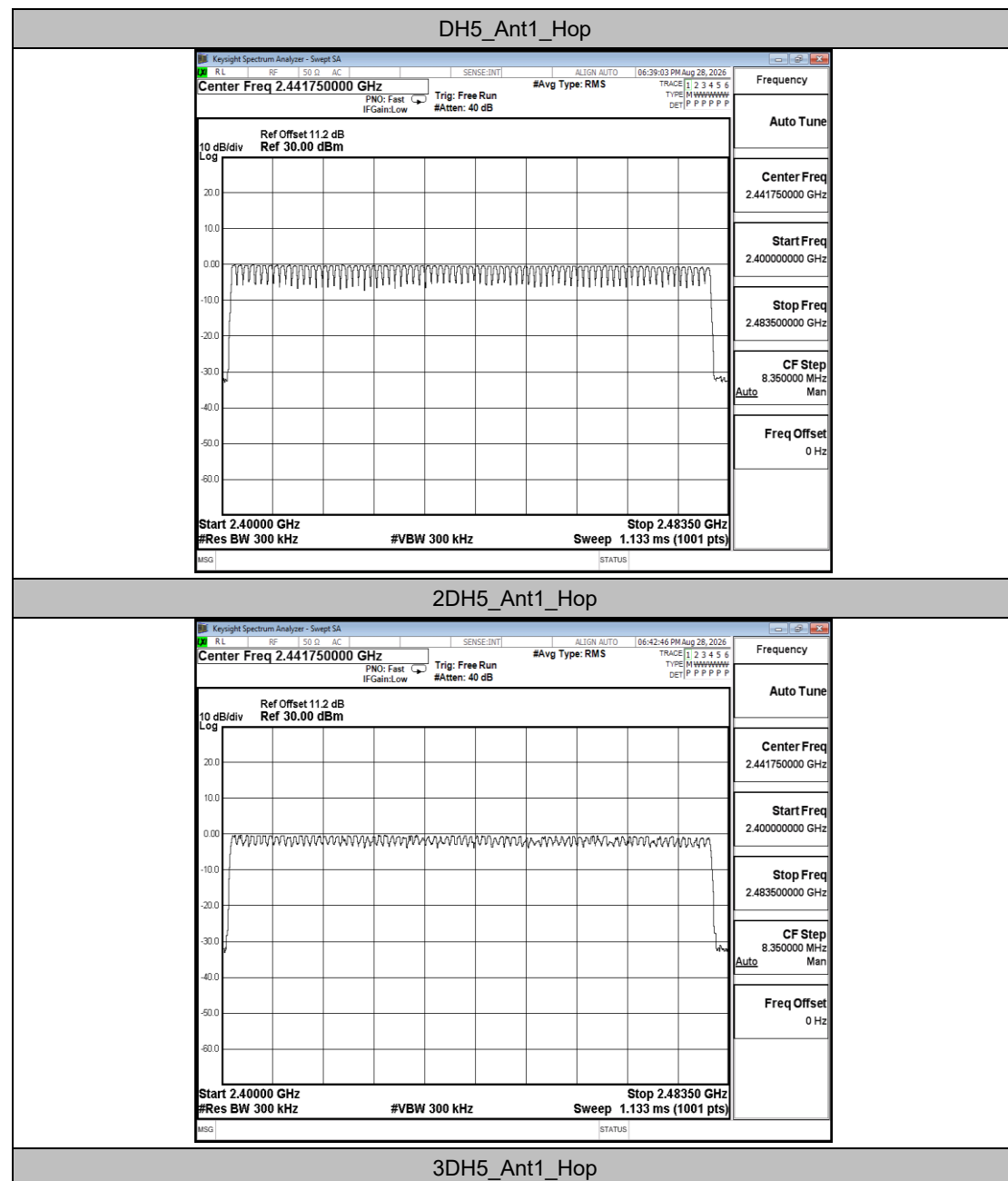


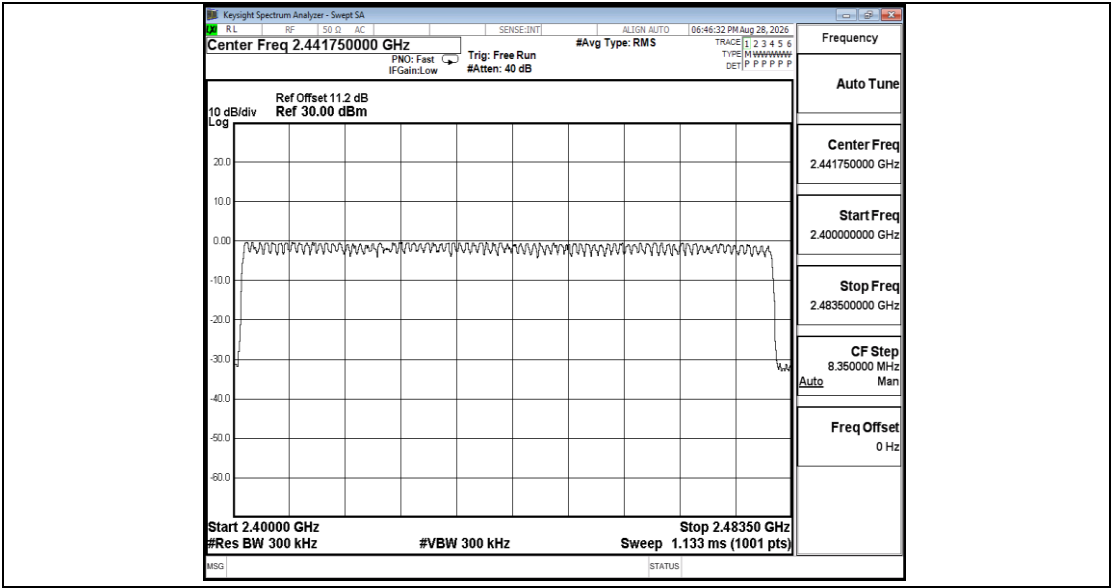
A.5 Number of hopping channels

Test Result

TestMode	Antenna	Freq (MHz)	Result [Num]	Limit [Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs



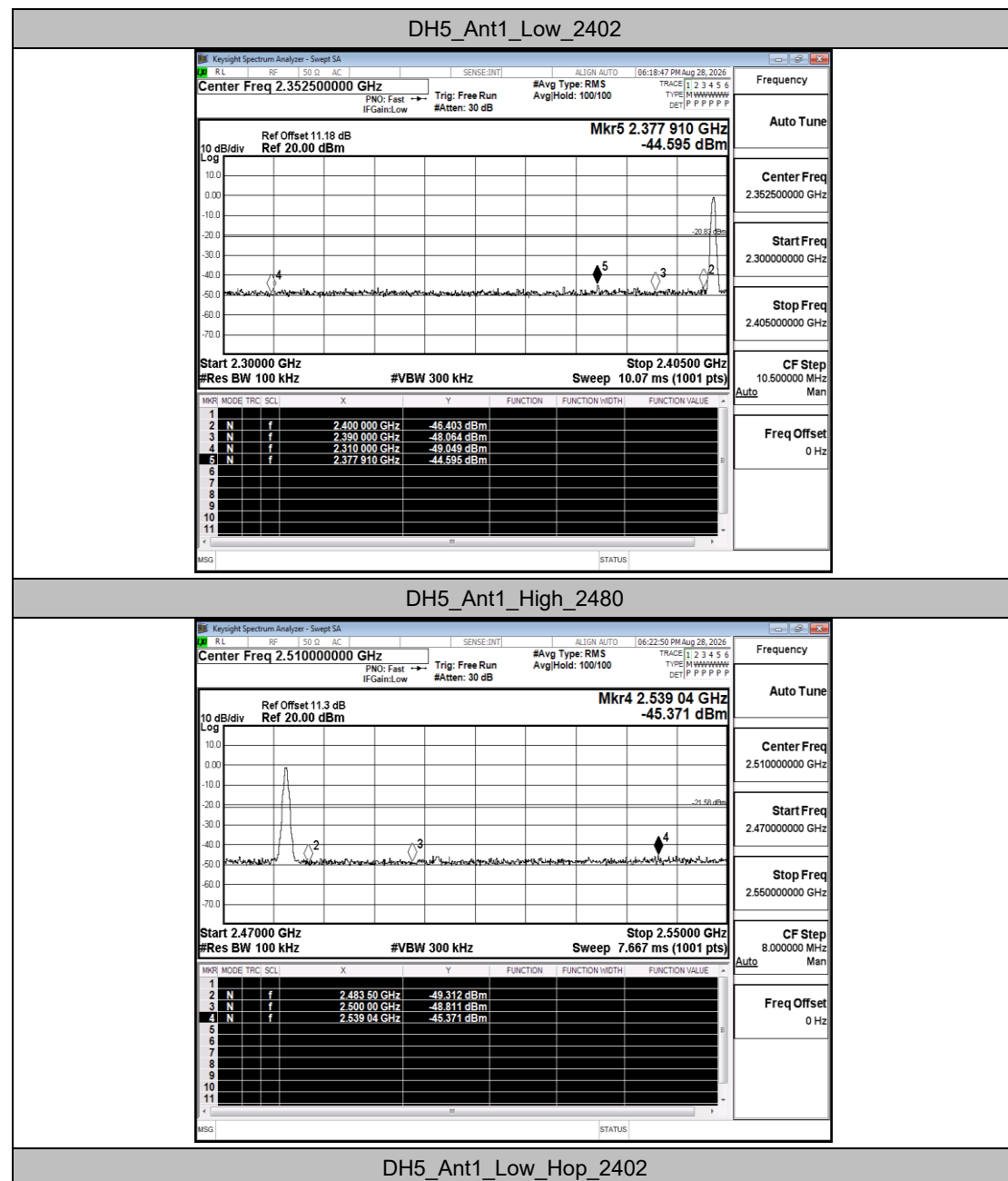


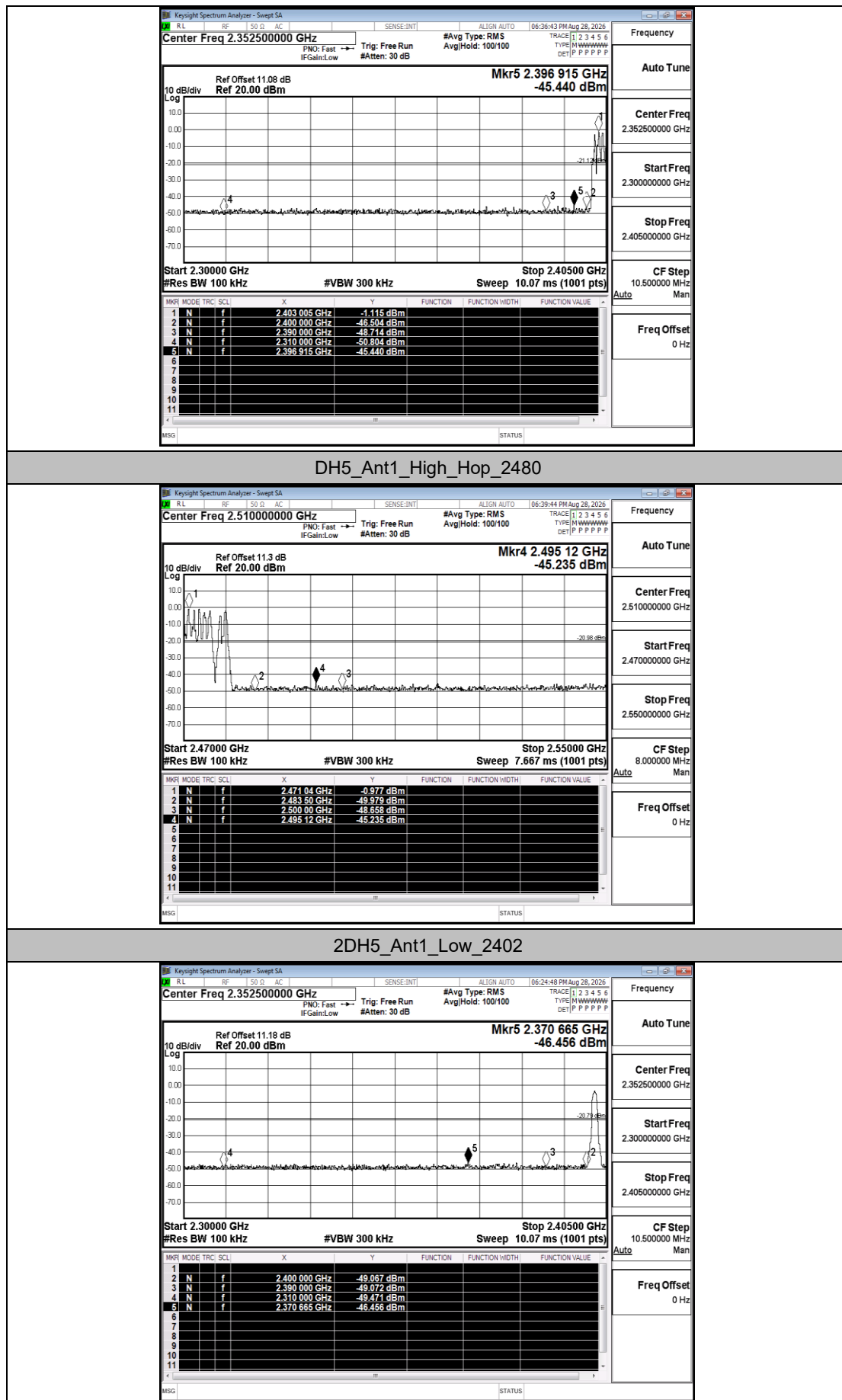
A.6 Band edge measurements

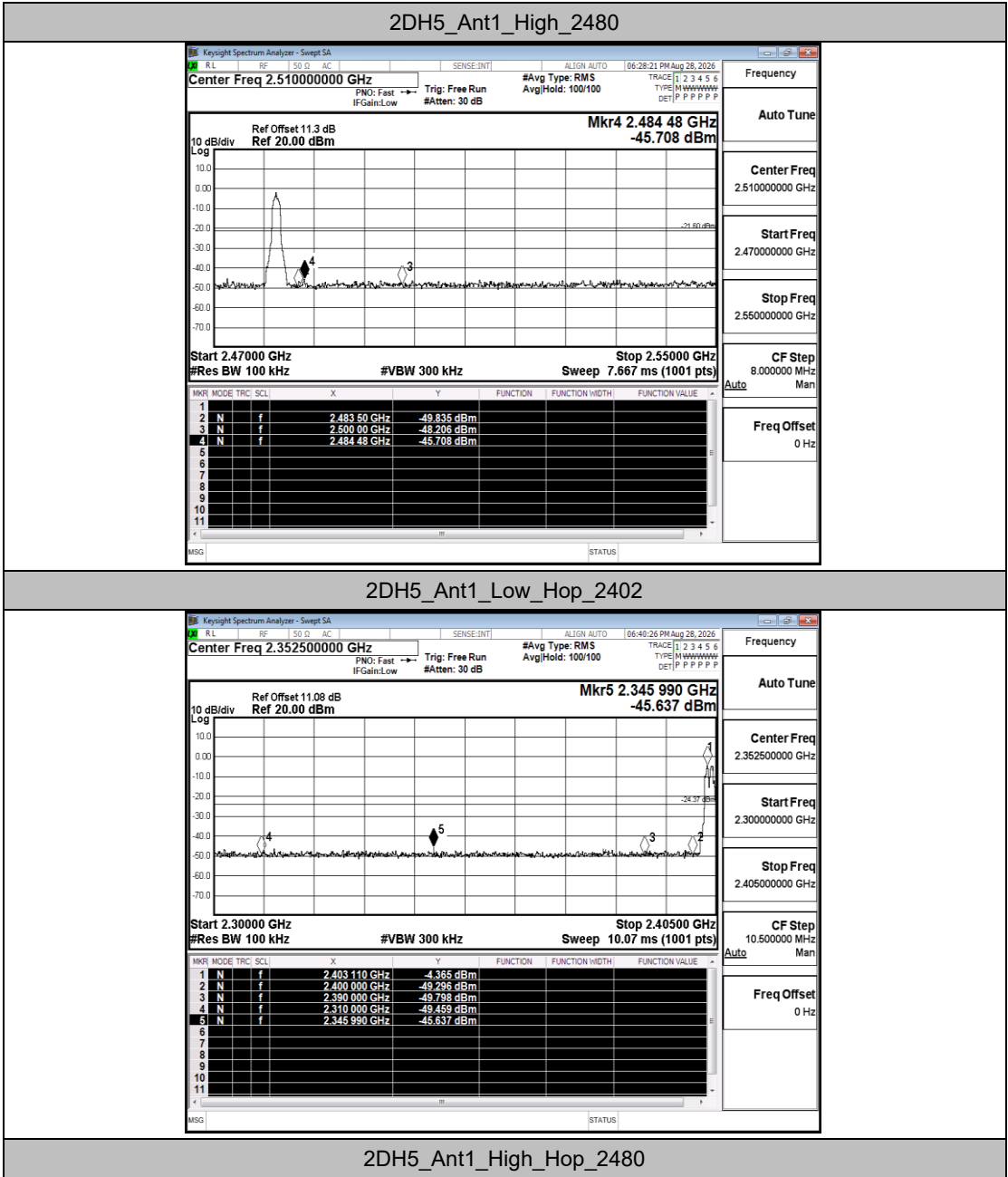
Test Result

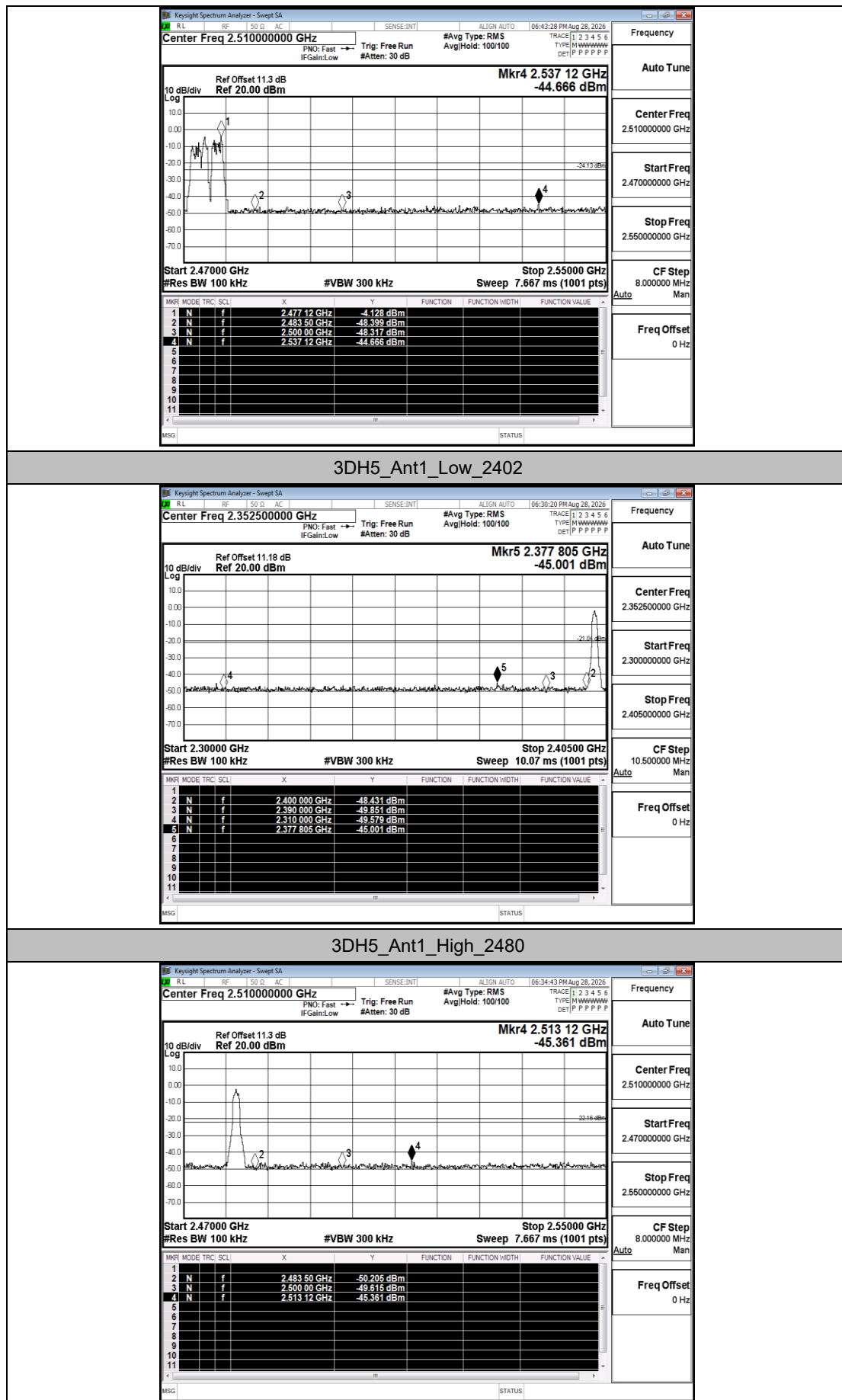
TestMode	Antenna	ChName	Freq (MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.83	-44.6	≤ -20.83	PASS
		High	2480	-1.58	-45.37	≤ -21.58	PASS
		Low	Hop_2402	-1.12	-45.44	≤ -21.12	PASS
		High	Hop_2480	-0.98	-45.24	≤ -20.98	PASS
2DH5	Ant1	Low	2402	-0.79	-46.46	≤ -20.79	PASS
		High	2480	-1.60	-45.71	≤ -21.6	PASS
		Low	Hop_2402	-4.37	-45.64	≤ -24.37	PASS
		High	Hop_2480	-4.13	-44.67	≤ -24.13	PASS
3DH5	Ant1	Low	2402	-1.04	-45	≤ -21.04	PASS
		High	2480	-2.16	-45.36	≤ -22.16	PASS
		Low	Hop_2402	-4.78	-46.7	≤ -24.78	PASS
		High	Hop_2480	-2.94	-45.48	≤ -22.94	PASS

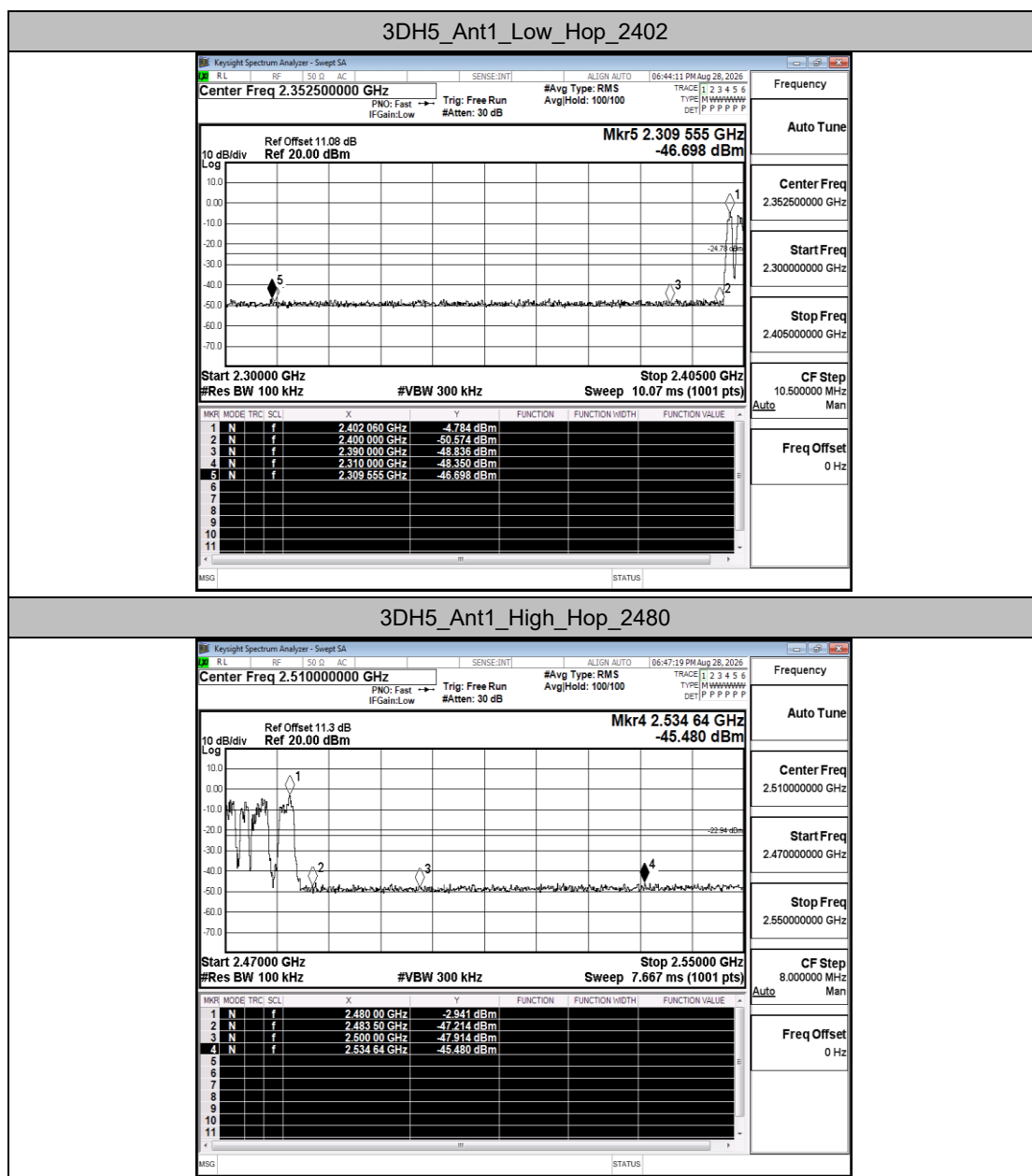
Test Graphs











A.7 Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq (MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.73	-0.73	---	PASS
			30~1000	-0.73	-62.57	≤-20.73	PASS
			1000~26500	-0.73	-34.7	≤-20.73	PASS
		2441	Reference	-1.02	-1.02	---	PASS
			30~1000	-1.02	-60.6	≤-21.02	PASS
			1000~26500	-1.02	-32.9	≤-21.02	PASS
		2480	Reference	-1.41	-1.41	---	PASS
			30~1000	-1.41	-58.9	≤-21.41	PASS
			1000~26500	-1.41	-31.86	≤-21.41	PASS
2DH5	Ant1	2402	Reference	-0.76	-0.76	---	PASS
			30~1000	-0.76	-59.95	≤-20.76	PASS
			1000~26500	-0.76	-38.43	≤-20.76	PASS
		2441	Reference	-1.04	-1.04	---	PASS
			30~1000	-1.04	-57.62	≤-21.04	PASS
			1000~26500	-1.04	-36.39	≤-21.04	PASS
		2480	Reference	-1.37	-1.37	---	PASS
			30~1000	-1.37	-58.08	≤-21.37	PASS
			1000~26500	-1.37	-35.3	≤-21.37	PASS
3DH5	Ant1	2402	Reference	-0.79	-0.79	---	PASS
			30~1000	-0.79	-61.98	≤-20.79	PASS
			1000~26500	-0.79	-37.92	≤-20.79	PASS
		2441	Reference	-1.06	-1.06	---	PASS
			30~1000	-1.06	-58.57	≤-21.06	PASS
			1000~26500	-1.06	-34.04	≤-21.06	PASS
		2480	Reference	-1.42	-1.42	---	PASS
			30~1000	-1.42	-60.27	≤-21.42	PASS
			1000~26500	-1.42	-31.11	≤-21.42	PASS

Test Graphs

