

Case No. : <u>GTS20230918011-1-13</u>
Ambient Condition: <u>23</u> °C, <u>49</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.10.23</u> Test Engineer: <u>Evan ouyang</u>

Appendix A.1: 20dB Emission Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
2DH1	Ant1	2402	1.146	2401.433	2402.579	---	---
		2441	1.146	2440.433	2441.579	---	---
		2480	1.116	2479.436	2480.552	---	---

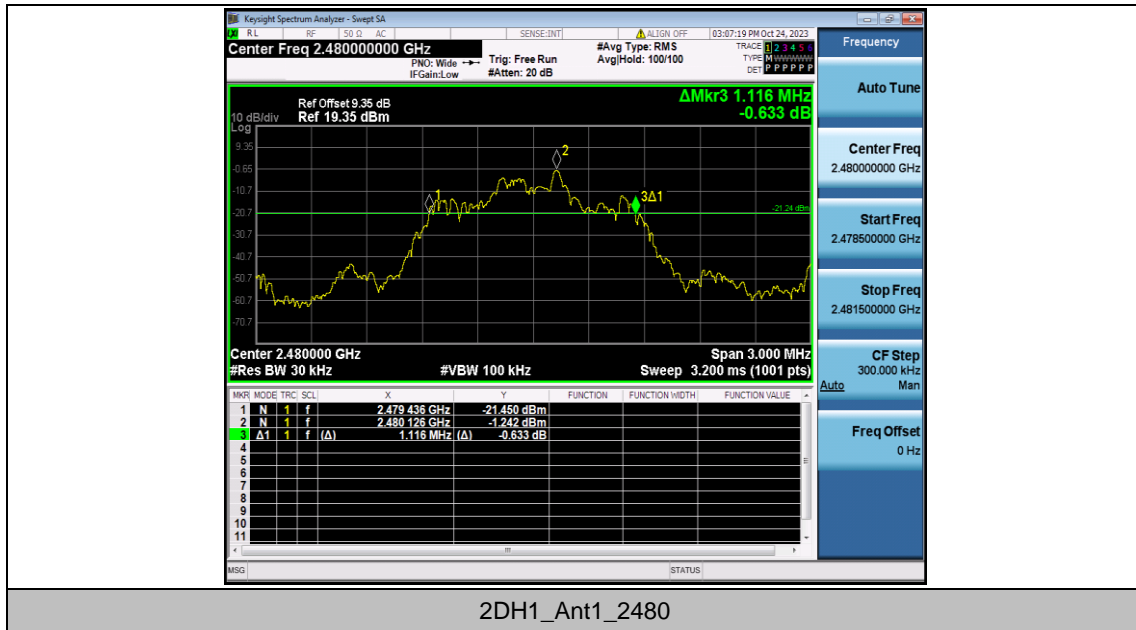
Test Graphs



2DH1_Ant1_2402



2DH1_Ant1_2441



Appendix A.2: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
2DH1	Ant1	2402	1.0707	2401.468	2402.538	---	---
		2441	1.0684	2440.468	2441.536	---	---
		2480	1.0624	2479.466	2480.528	---	---

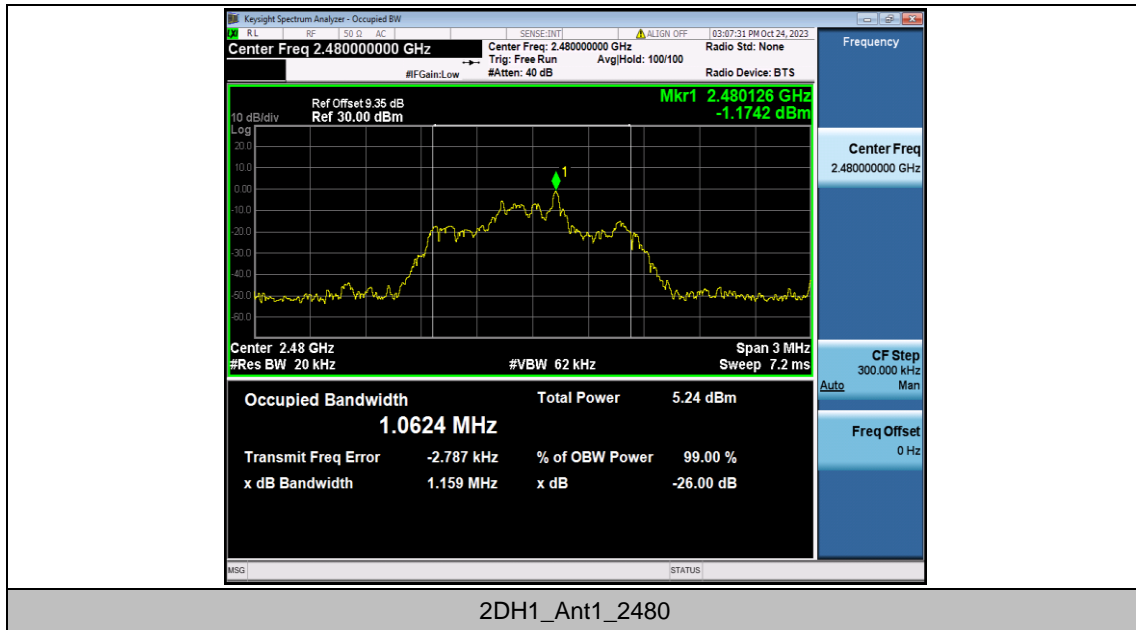
Test Graphs



2DH1_Ant1_2402



2DH1_Ant1_2441



2DH1_Ant1_2480

Appendix A.3: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
2DH1	Ant1	2402	-0.52	≤20.97	PASS
		2441	0.28	≤20.97	PASS
		2480	1	≤20.97	PASS

Appendix A.4: Carrier frequency separation

Test Result

Test Mode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
2DH1	Ant1	Hop_2402	1.008	≥ 0.764	PASS
		Hop_2441	1.002	≥ 0.764	PASS
		Hop_2480	0.99	≥ 0.764	PASS

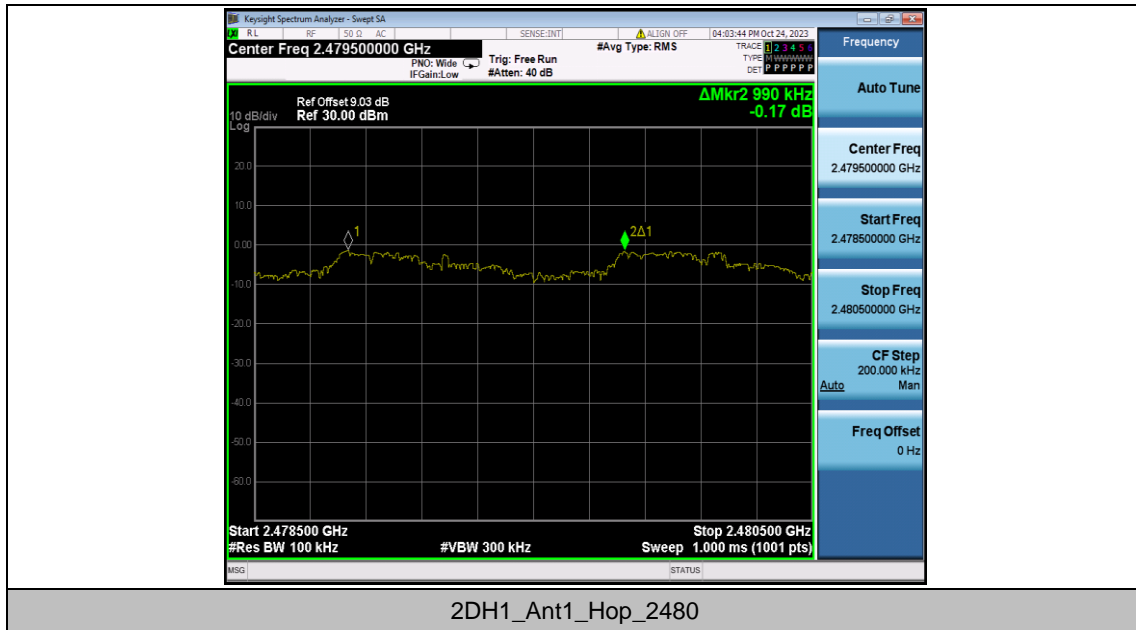
Test Graphs



2DH1_Ant1_Hop_2402



2DH1_Ant1_Hop_2441

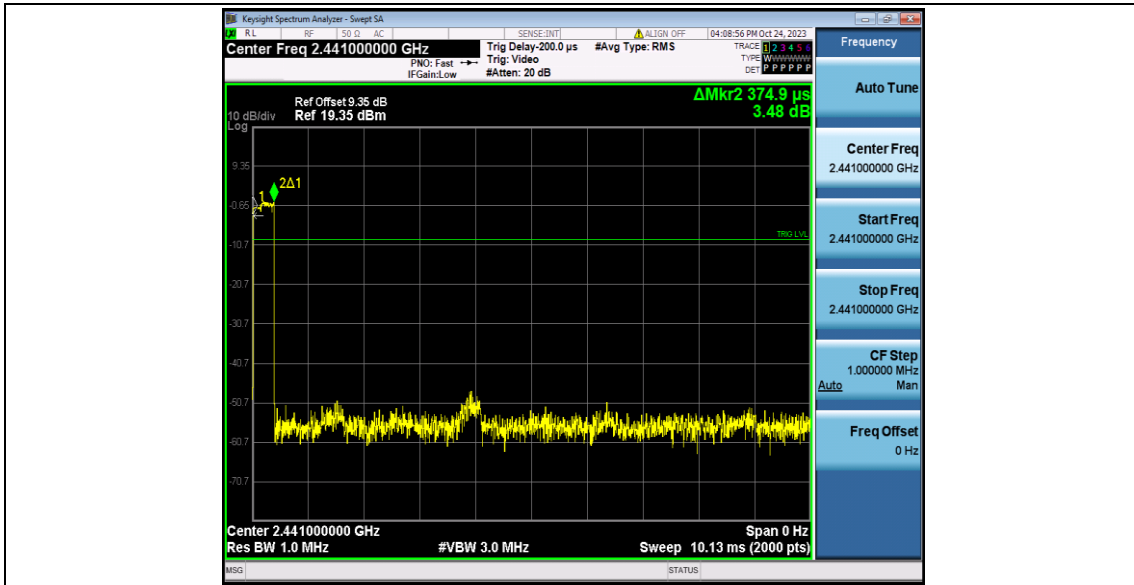


Appendix A.5: Time of occupancy

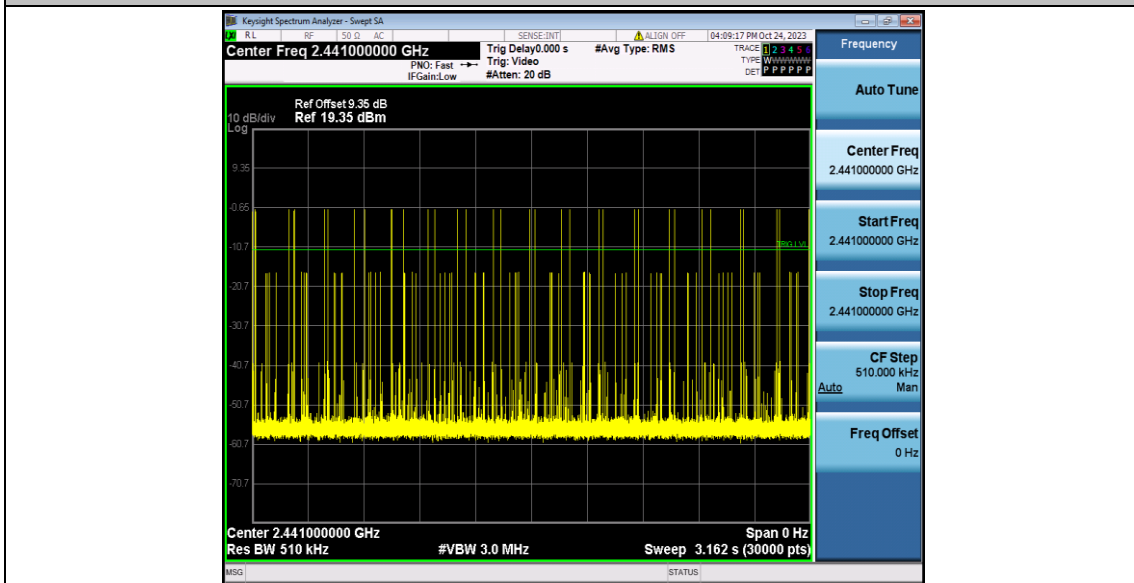
Test Result

Test Mode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
2DH1	Ant1	Hop	0.37	330	0.124	≤0.4	PASS
2DH3	Ant1	Hop	1.63	160	0.26	≤0.4	PASS
2DH5	Ant1	Hop	2.87	90	0.259	≤0.4	PASS

Test Graphs



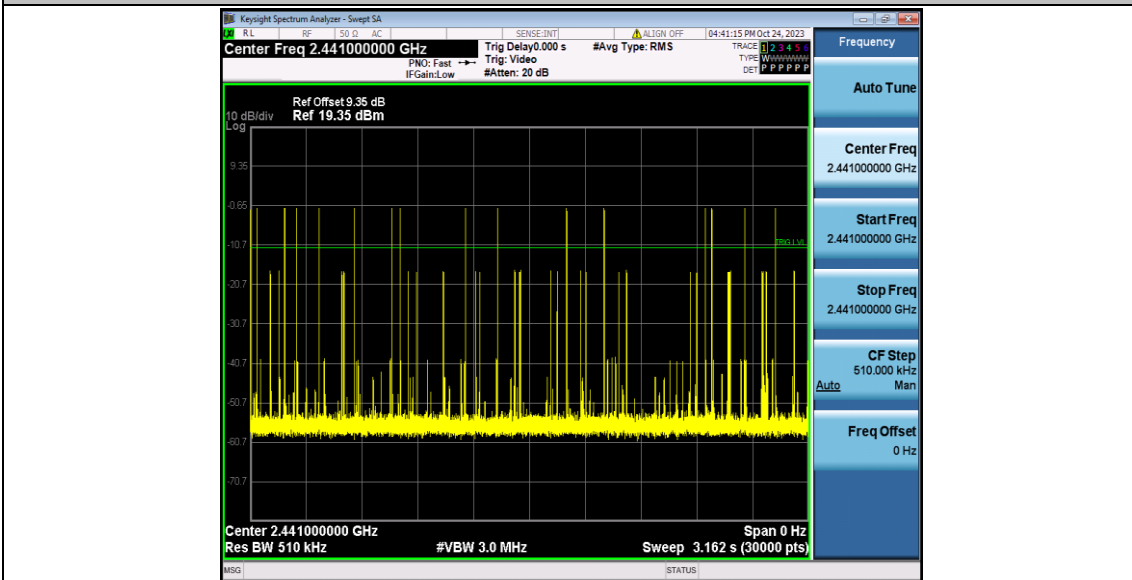
2DH1_Ant1_Hop



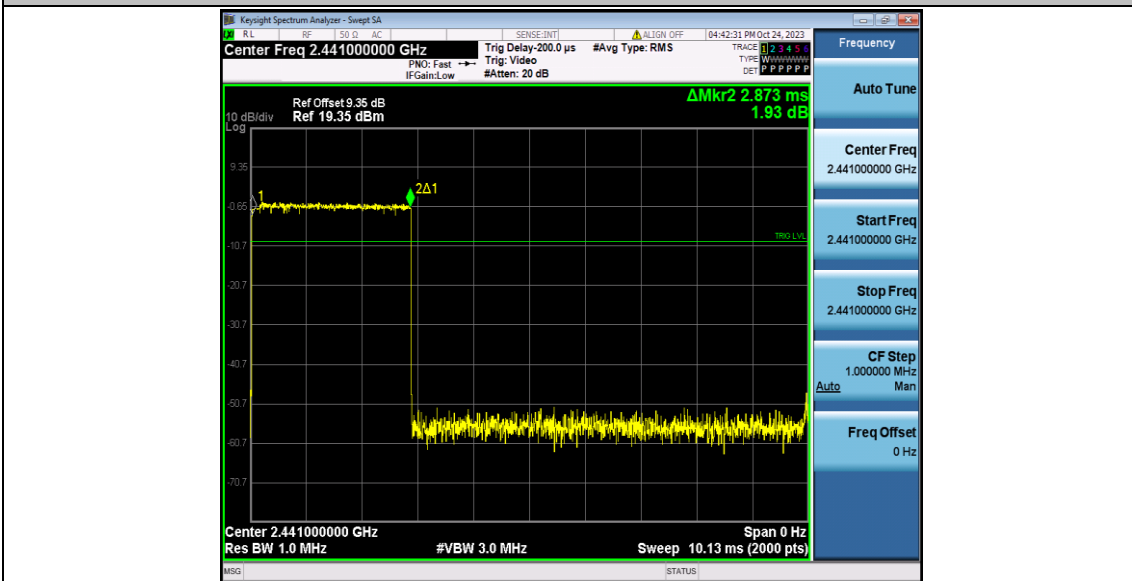
2DH1_Ant1_Hop

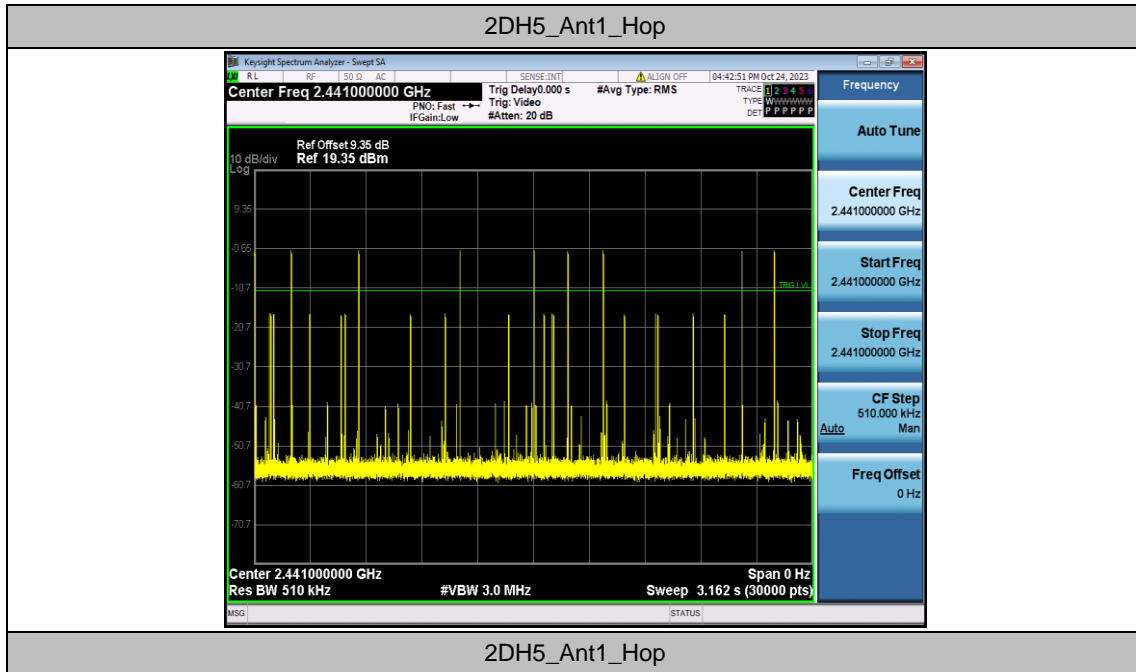


2DH3_Ant1_Hop



2DH3_Ant1_Hop



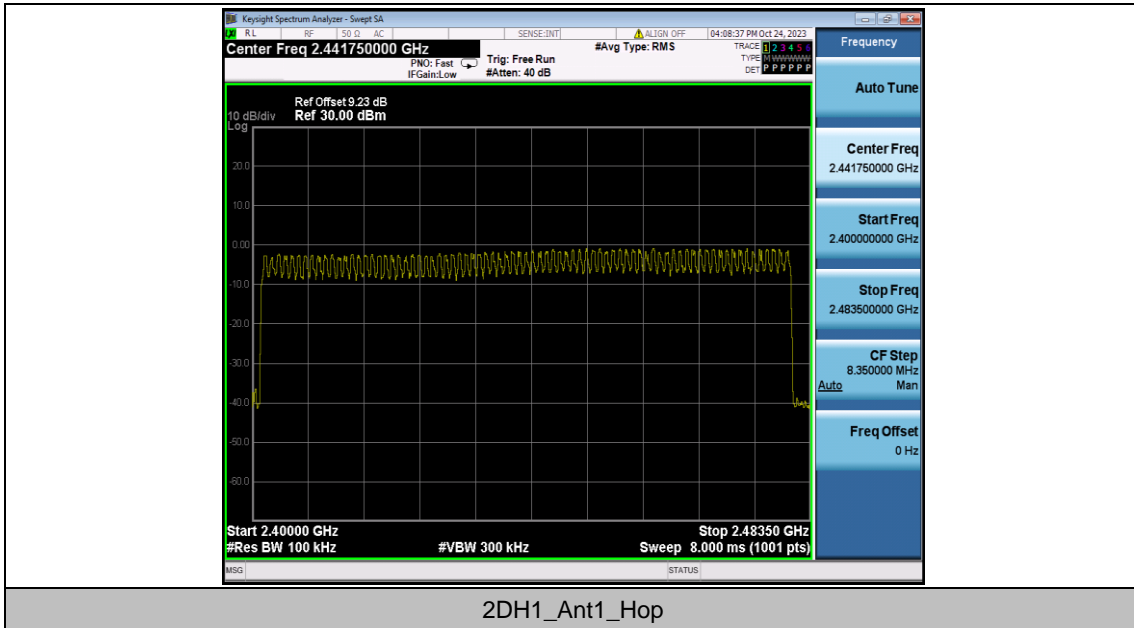


Appendix A.6: Number of hopping channels

Test Result

Test Mode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
2DH1	Ant1	Hop	79	≥15	PASS

Test Graphs

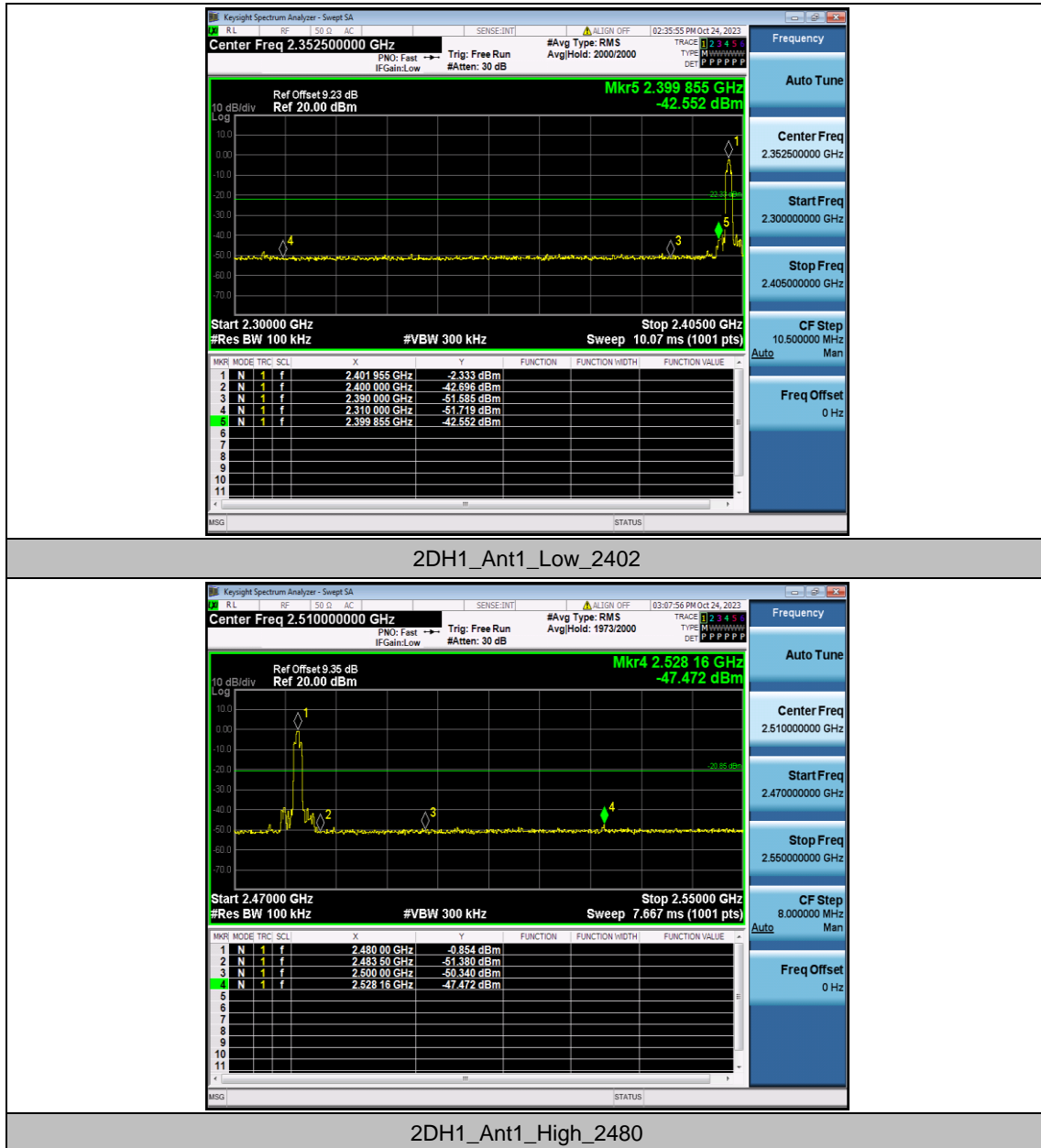


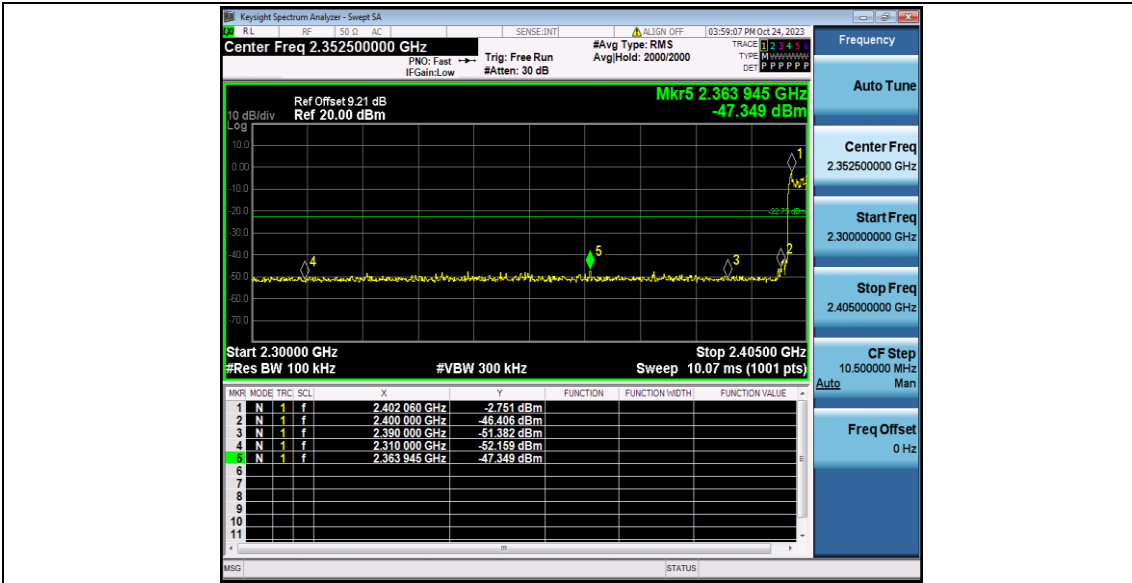
Appendix A.7: Band edge measurements

Test Result

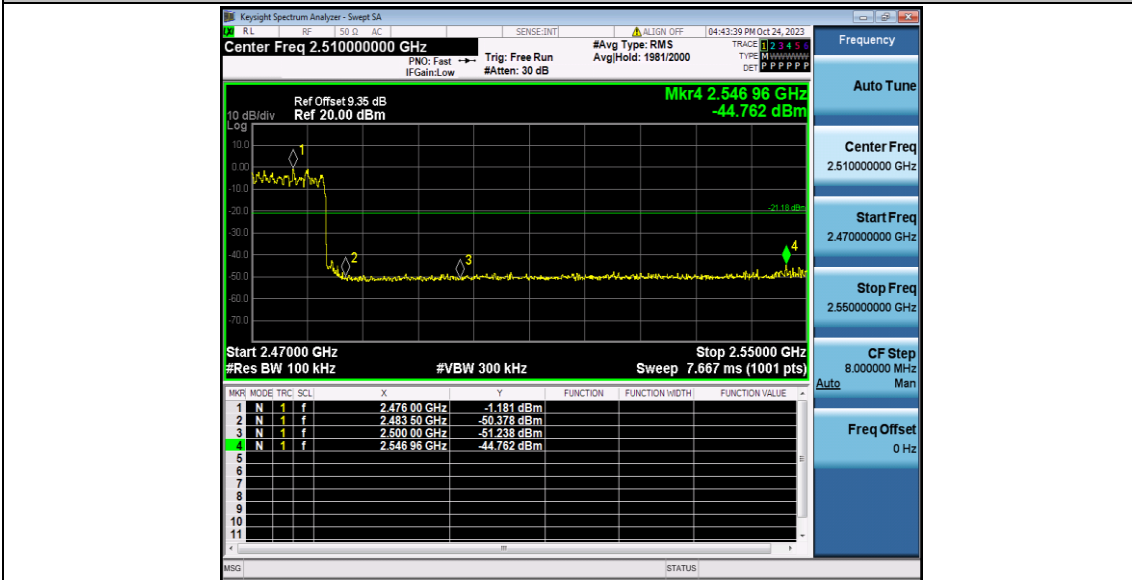
Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
2DH1	Ant1	Low	2402	-2.33	-42.55	≤ -22.33	PASS
		High	2480	-0.85	-47.47	≤ -20.85	PASS
		Low	Hop_2402	-2.75	-47.35	≤ -22.75	PASS
		High	Hop_2480	-1.18	-44.76	≤ -21.18	PASS

Test Graphs





2DH1_Ant1_Low_Hop_2402



2DH1_Ant1_High_Hop_2480

Appendix A.8: Conducted Spurious Emission

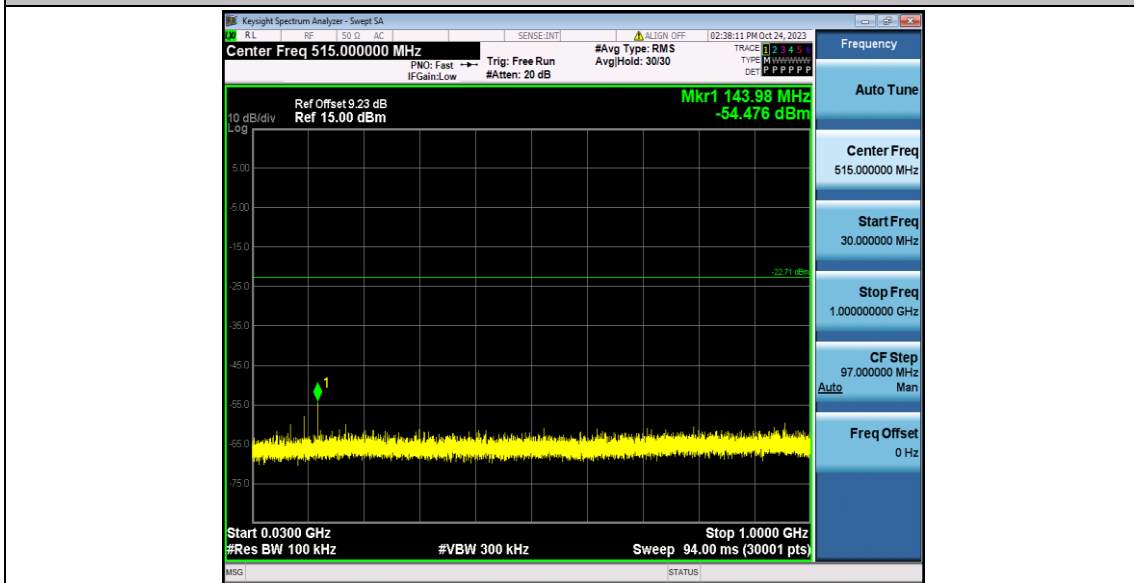
Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
2DH1	Ant1	2402	Reference	-2.71	-2.71	---	PASS
			30~1000	-2.71	-54.48	≤ -22.71	PASS
			1000~26500	-2.71	-45.56	≤ -22.71	PASS
		2441	Reference	-1.78	-1.78	---	PASS
			30~1000	-1.78	-54.68	≤ -21.78	PASS
			1000~26500	-1.78	-44.56	≤ -21.78	PASS
		2480	Reference	-1.13	-1.13	---	PASS
			30~1000	-1.13	-54.2	≤ -21.13	PASS
			1000~26500	-1.13	-45.84	≤ -21.13	PASS

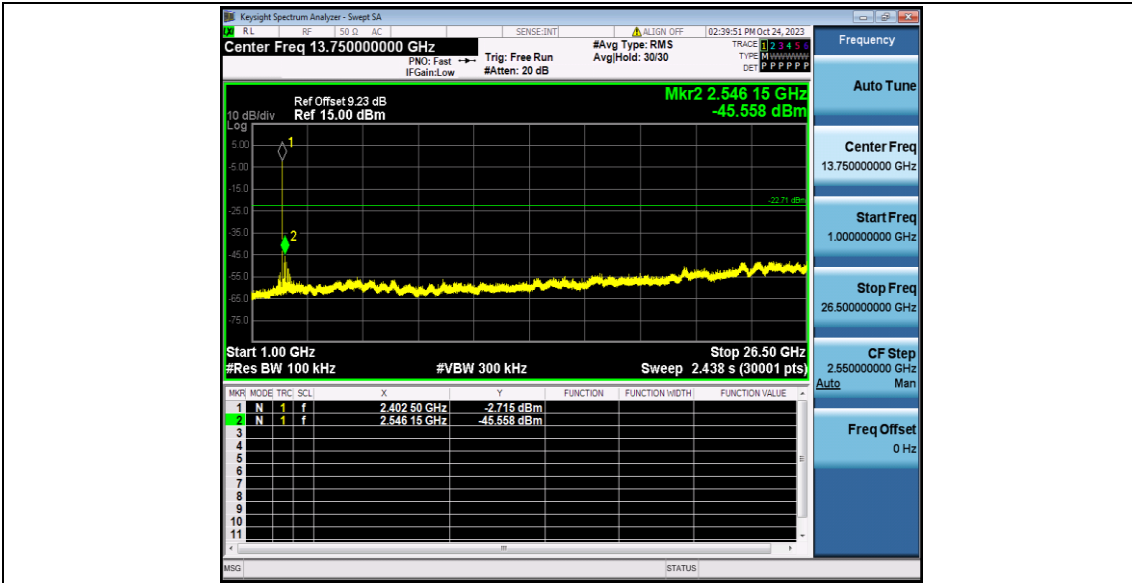
Test Graphs



2DH1_Ant1_2402_0~Reference



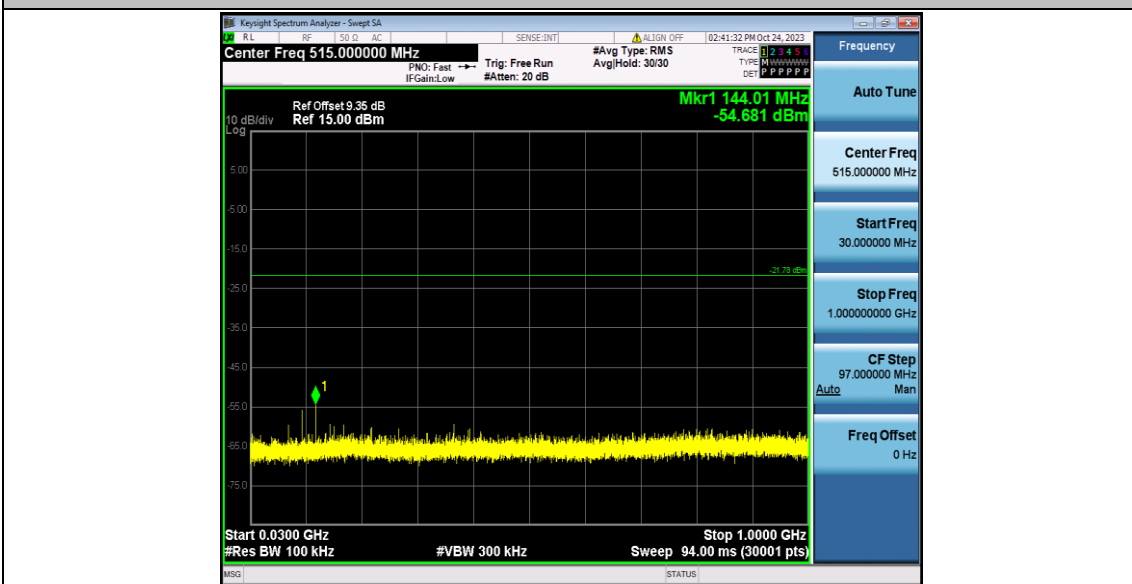
2DH1_Ant1_2402_30~1000



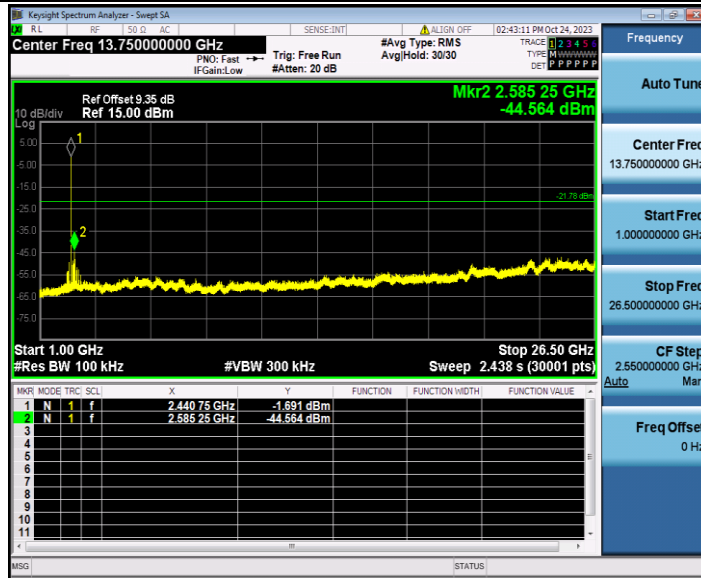
2DH1_Ant1_2402_1000~26500



2DH1_Ant1_2441_0~Reference



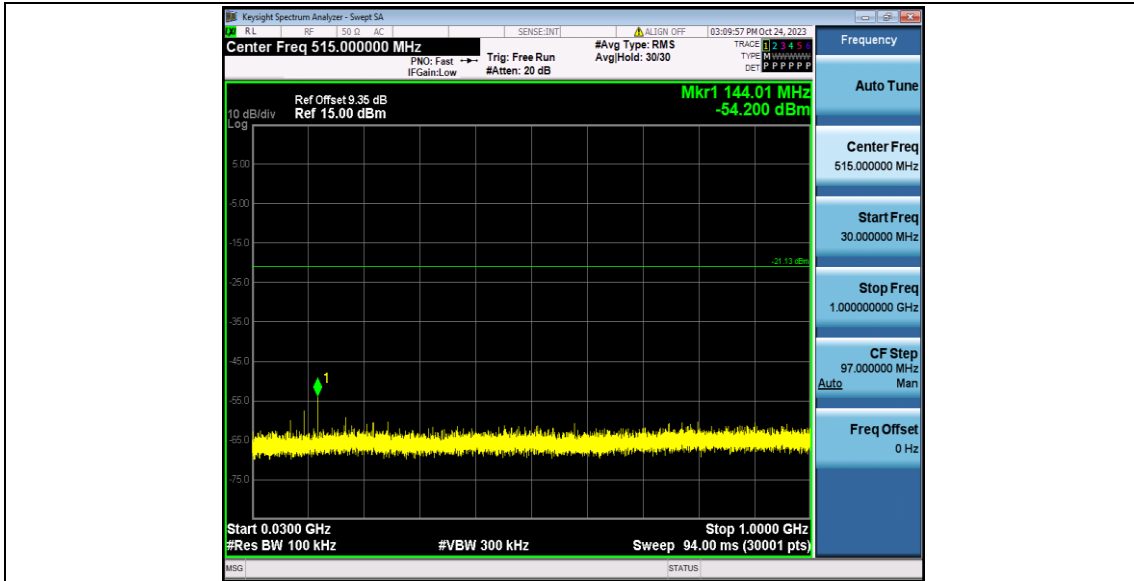
2DH1_Ant1_2441_30~1000



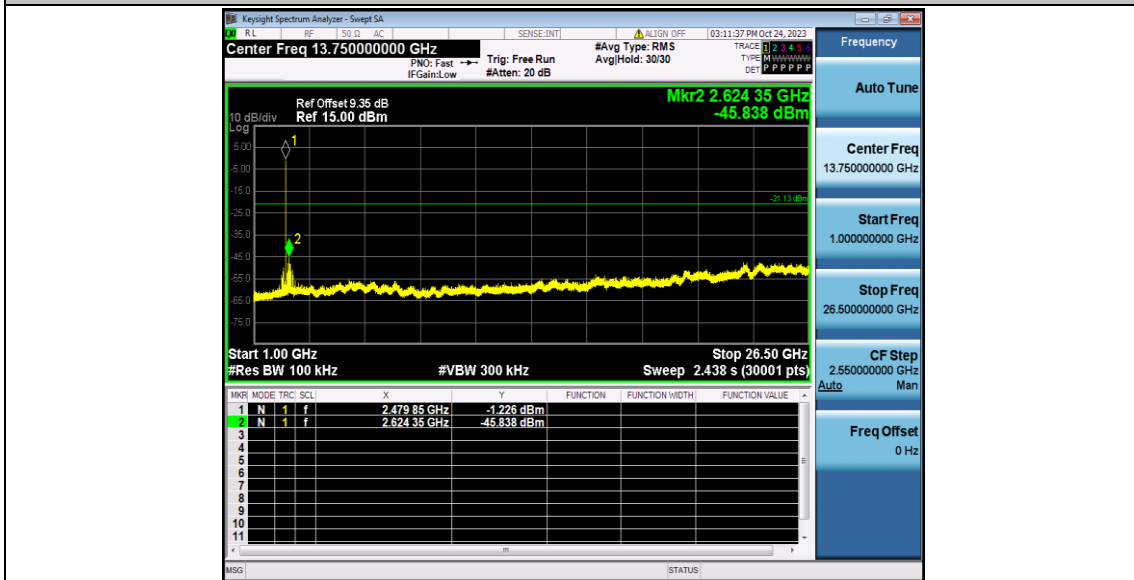
2DH1_Ant1_2441_1000~26500



2DH1_Ant1_2480_0~Reference



2DH1_Ant1_2480_30~1000



2DH1_Ant1_2480_1000~26500

Appendix A.9: Emissions in Restricted Bands

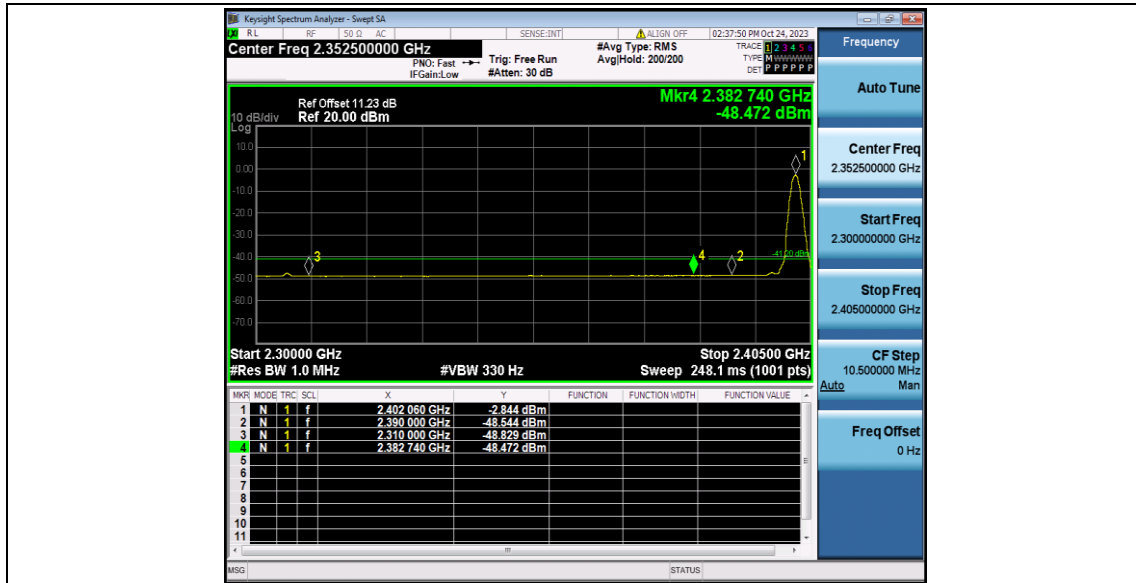
Test Result

TestMode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
2DH1	Ant1	Low	2402	AV	2310.000	-48.83	≤-41.20	46.37	≤54	PASS
				AV	2382.740	-48.47	≤-41.20	46.73	≤54	PASS
				AV	2390.000	-48.54	≤-41.20	46.66	≤54	PASS
				Peak	2310.000	-39.85	≤-21.20	55.35	≤74	PASS
				Peak	2361.740	-38.67	≤-21.20	56.53	≤74	PASS
				Peak	2390.000	-41.16	≤-21.20	54.04	≤74	PASS
		High	2480	AV	2483.500	-47.71	≤-41.20	47.49	≤54	PASS
				AV	2483.520	-47.71	≤-41.20	47.49	≤54	PASS
				AV	2500.000	-48.19	≤-41.20	47.01	≤54	PASS
				Peak	2483.500	-40.99	≤-21.20	54.21	≤74	PASS
				Peak	2487.360	-38.11	≤-21.20	57.09	≤74	PASS
				Peak	2500.000	-41.38	≤-21.20	53.82	≤74	PASS

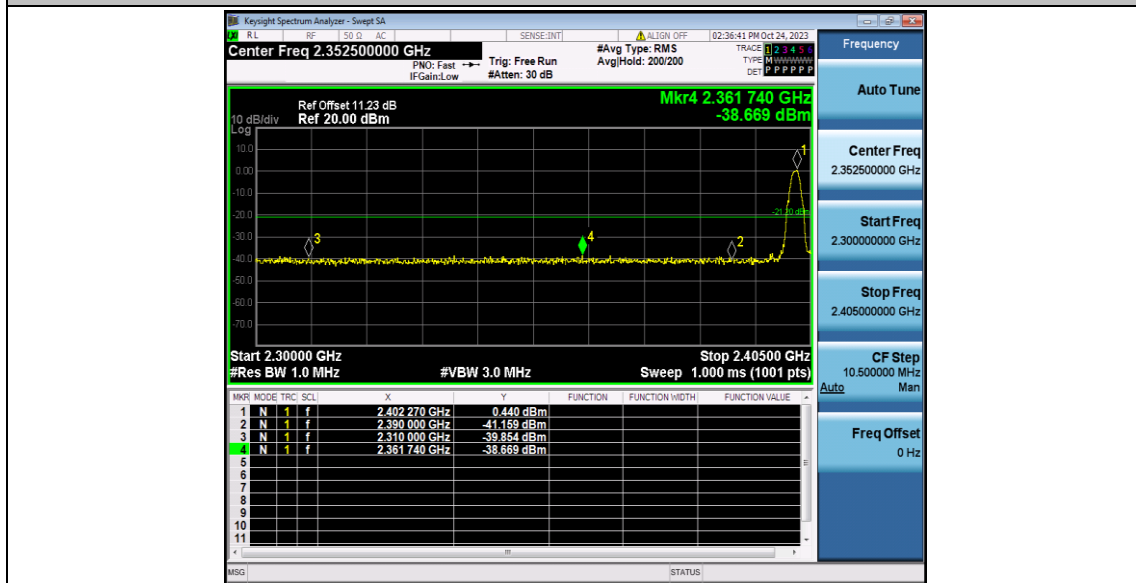
Note:

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.

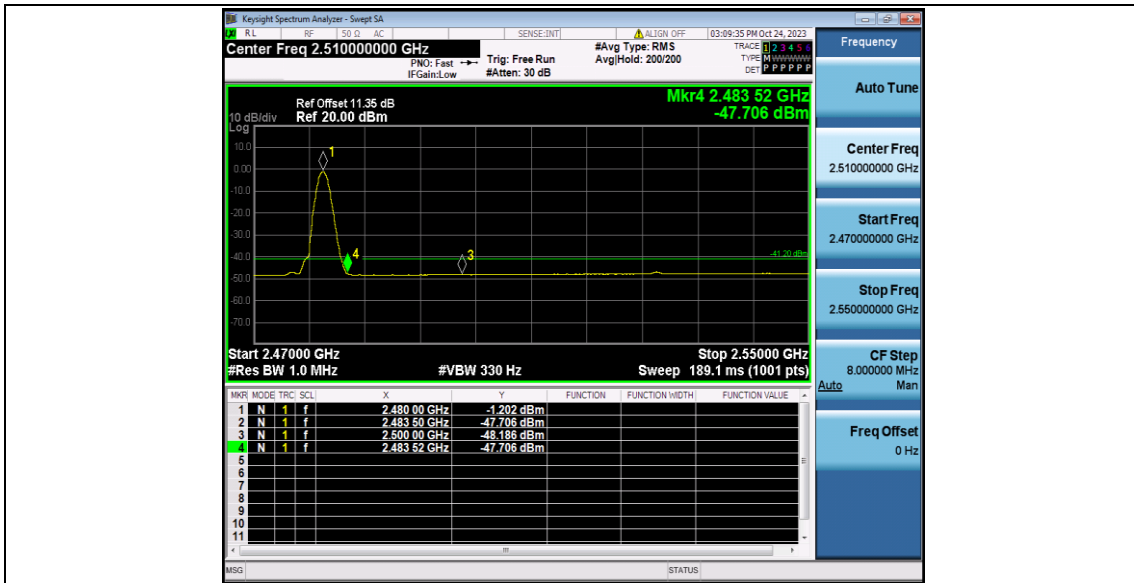
Test Graphs



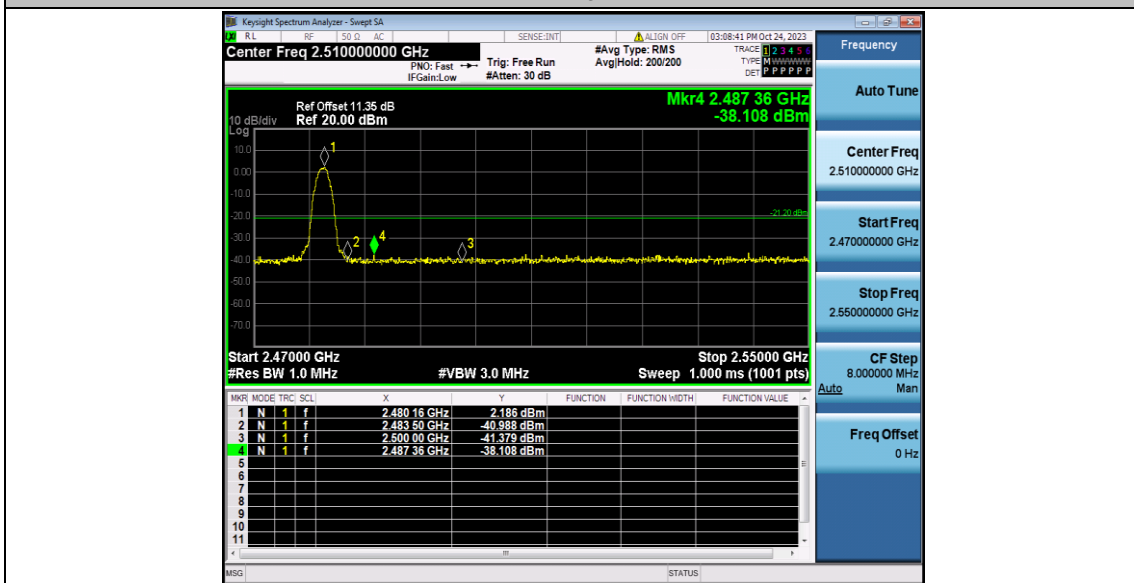
2DH1_Ant1_Low_2402_AV



2DH1_Ant1_Low_2402_Peak



2DH1_Ant1_High_2480_AV



2DH1_Ant1_High_2480_Peak