

Case No. : <u>GTS20251104008-01</u>	
Ambient Condition: <u>23</u> °C, <u>49</u> %RH	
According Standard: ■Part15C	
Test Date: <u>2025.11.11</u>	Test Engineer: <u>Evan ouyang</u>

Appendix A.1: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.795	2401.610	2402.405	---	---
		2441	0.840	2440.568	2441.408	---	---
		2480	0.834	2479.568	2480.402	---	---
2DH1	Ant1	2402	1.242	2401.379	2402.621	---	---
		2441	1.248	2440.373	2441.621	---	---
		2480	1.233	2479.385	2480.618	---	---
3DH1	Ant1	2402	1.227	2401.400	2402.627	---	---
		2441	1.248	2440.379	2441.627	---	---
		2480	1.260	2479.370	2480.630	---	---

Test Graphs

DH1_Ant1_2402



DH1_Ant1_2441



DH1_Ant1_2480



2DH1_Ant1_2402



2DH1_Ant1_2441



2DH1_Ant1_2480



3DH1_Ant1_2402



3DH1_Ant1_2441



3DH1_Ant1_2480



Appendix A.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.72633	2401.6294	2402.3557	---	---
		2441	0.72647	2440.6319	2441.3584	---	---
		2480	0.72910	2479.6283	2480.3574	---	---
2DH1	Ant1	2402	1.1516	2401.4222	2402.5738	---	---
		2441	1.1523	2440.4195	2441.5718	---	---
		2480	1.1542	2479.4204	2480.5746	---	---
3DH1	Ant1	2402	1.1453	2401.4356	2402.5809	---	---
		2441	1.1488	2440.4348	2441.5836	---	---
		2480	1.1543	2479.4323	2480.5866	---	---

Test Graphs

DH1_Ant1_2402



DH1_Ant1_2441



DH1_Ant1_2480



2DH1_Ant1_2402



2DH1_Ant1_2441



2DH1_Ant1_2480



3DH1_Ant1_2402



3DH1_Ant1_2441



3DH1_Ant1_2480



Appendix A.3: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH1	Ant1	2402	3.79	≤ 20.97	PASS
		2441	3.26	≤ 20.97	PASS
		2480	4.10	≤ 20.97	PASS
2DH1	Ant1	2402	0.12	≤ 20.97	PASS
		2441	2.09	≤ 20.97	PASS
		2480	2.98	≤ 20.97	PASS
3DH1	Ant1	2402	0.12	≤ 20.97	PASS
		2441	2.06	≤ 20.97	PASS
		2480	2.92	≤ 20.97	PASS

Appendix A.4: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Hop_2402	1.002	≥ 0.840	PASS
		Hop_2441	1.016	≥ 0.840	PASS
		Hop_2480	0.854	≥ 0.840	PASS
2DH1	Ant1	Hop_2402	0.996	≥ 0.832	PASS
		Hop_2441	0.998	≥ 0.832	PASS
		Hop_2480	0.998	≥ 0.832	PASS
3DH1	Ant1	Hop_2402	0.846	≥ 0.840	PASS
		Hop_2441	0.844	≥ 0.840	PASS
		Hop_2480	1	≥ 0.840	PASS

Test Graphs

DH1_Ant1_Hop_2402



DH1_Ant1_Hop_2441



DH1_Ant1_Hop_2480



2DH1_Ant1_Hop_2402



2DH1_Ant1_Hop_2441



2DH1_Ant1_Hop_2480



3DH1_Ant1_Hop_2402



3DH1_Ant1_Hop_2441

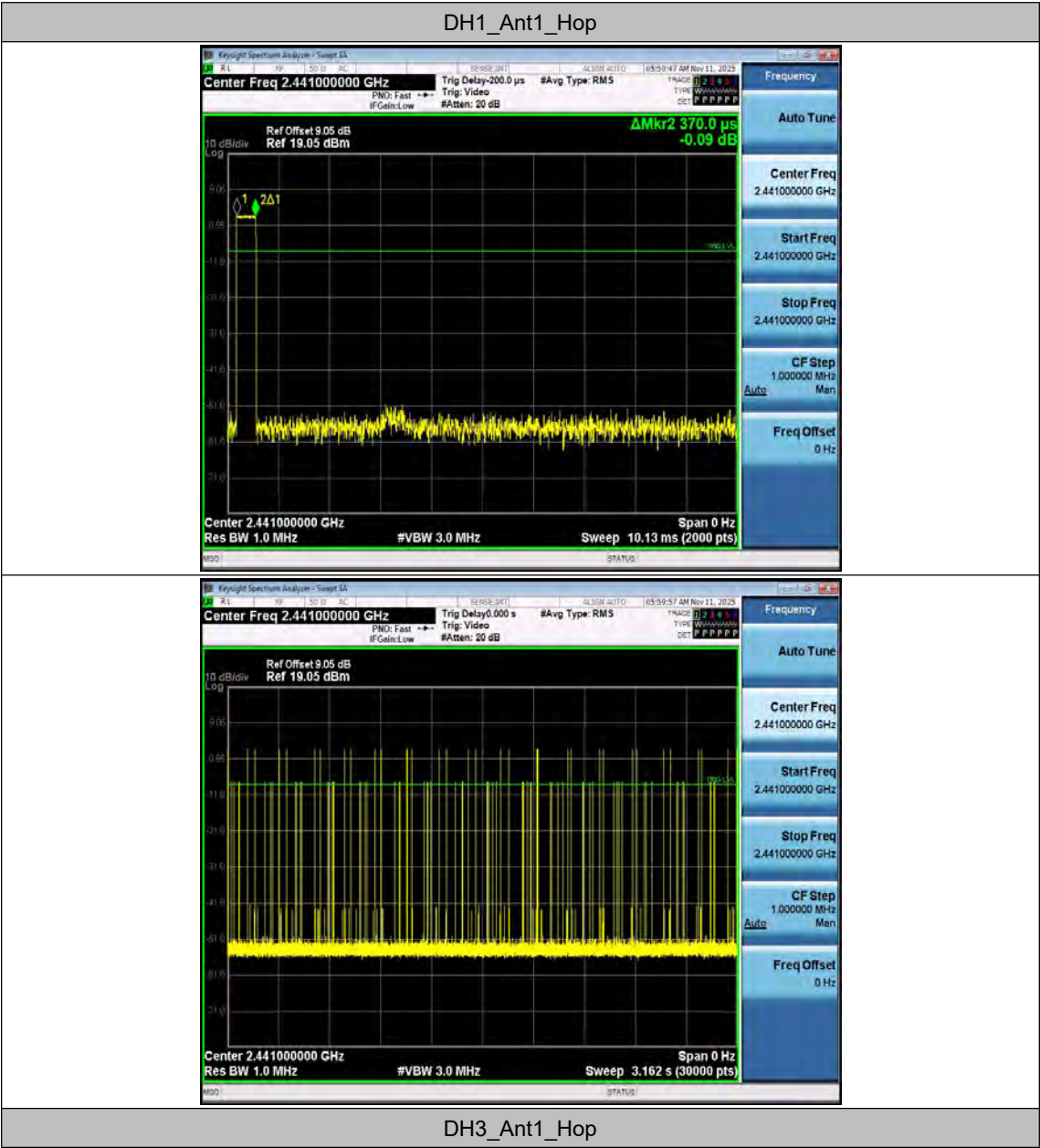
The screenshot displays a Keysight Spectrum Analyzer interface. The main display area shows a spectral plot with a noise floor and two peaks. Peak 1 is marked with a green diamond and a label '1'. Peak 2 is marked with a green diamond and a label '2Δ1'. The plot has a logarithmic scale on the y-axis (dBm) ranging from -10 to -80. The x-axis represents frequency in GHz, ranging from 2.478500 to 2.480500. The top status bar shows the center frequency as 2.479500000 GHz. The right-hand side of the interface contains several control panels: 'Frequency' (Auto Tune), 'Center Freq' (2.479500000 GHz), 'Start Freq' (2.478500000 GHz), 'Stop Freq' (2.480500000 GHz), 'CF Step' (200.000 kHz), 'Auto Man' (Auto), 'Freq Offset' (0 Hz), and 'Auto Tune'. The bottom status bar shows 'Start 2.478500 GHz', '#Res BW 100 kHz', '#VBW 300 kHz', 'Stop 2.480500 GHz', 'Sweep 1.000 ms (1001 pts)', and 'STATUS'.

Appendix A.5: Time of occupancy

Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.370	330	0.122	≤0.4	PASS
DH3	Ant1	Hop	1.626	180	0.293	≤0.4	PASS
DH5	Ant1	Hop	2.873	110	0.316	≤0.4	PASS
2DH1	Ant1	Hop	0.375	320	0.12	≤0.4	PASS
2DH3	Ant1	Hop	1.626	180	0.293	≤0.4	PASS
2DH5	Ant1	Hop	2.873	100	0.287	≤0.4	PASS
3DH1	Ant1	Hop	0.380	320	0.122	≤0.4	PASS
3DH3	Ant1	Hop	1.626	170	0.276	≤0.4	PASS
3DH5	Ant1	Hop	2.878	100	0.288	≤0.4	PASS

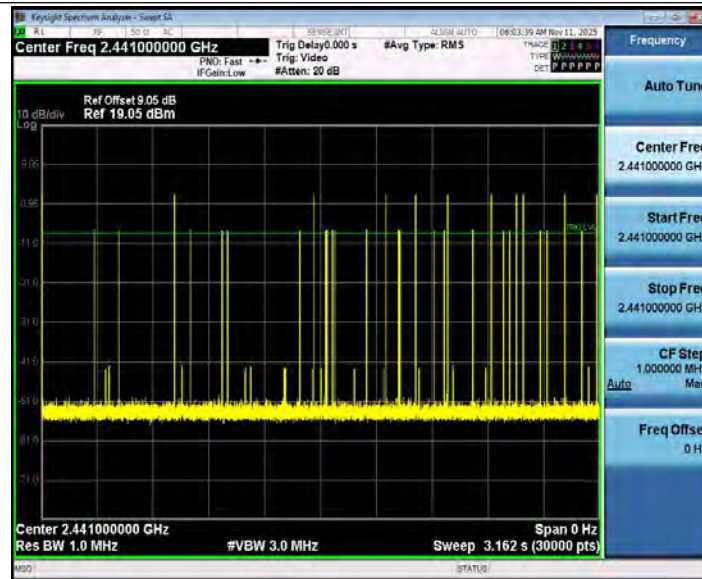
Test Graphs



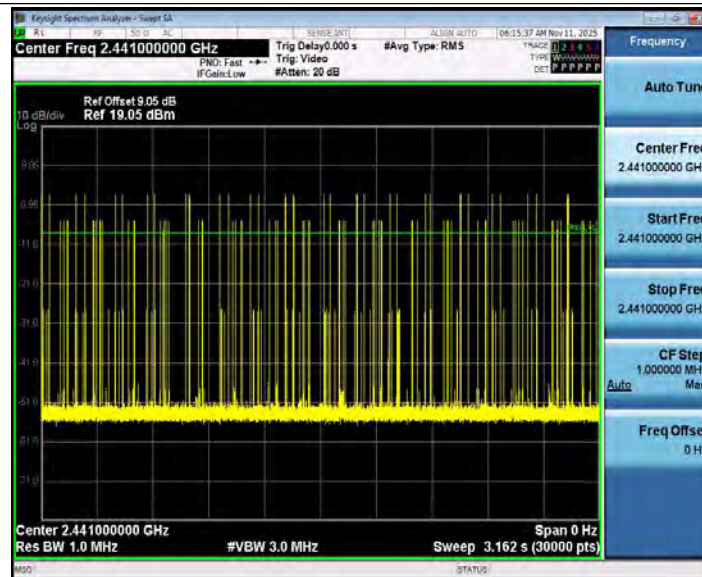
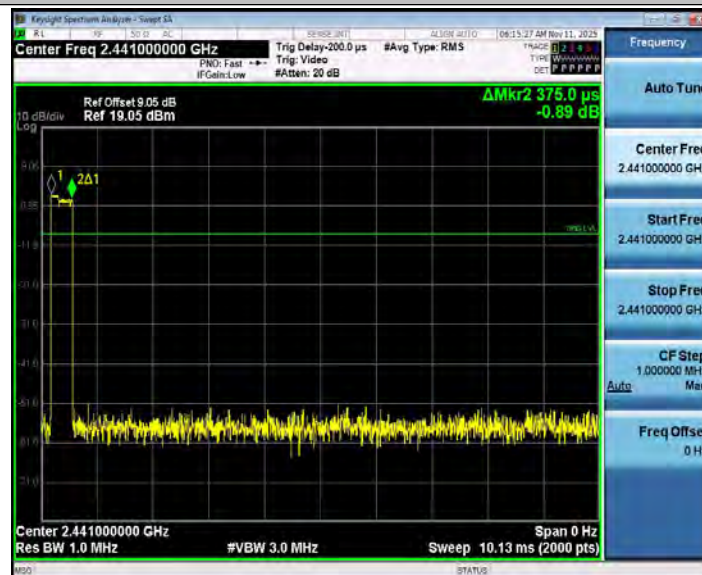


DH5_Ant1_Hop

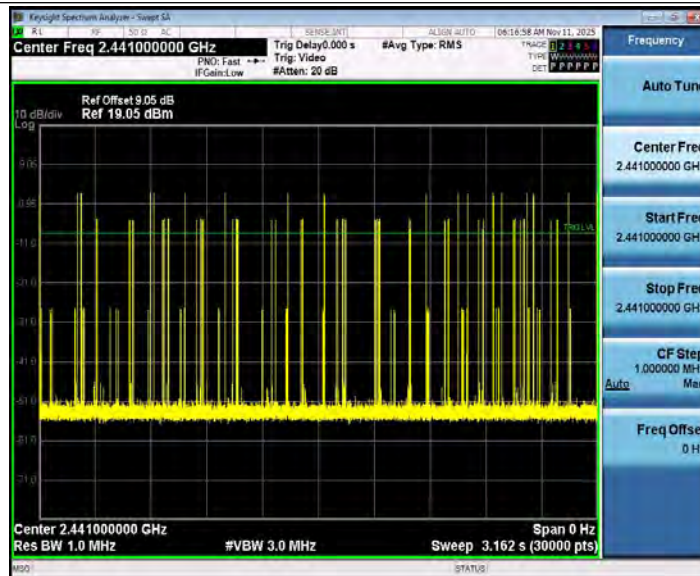




2DH1_Ant1_Hop

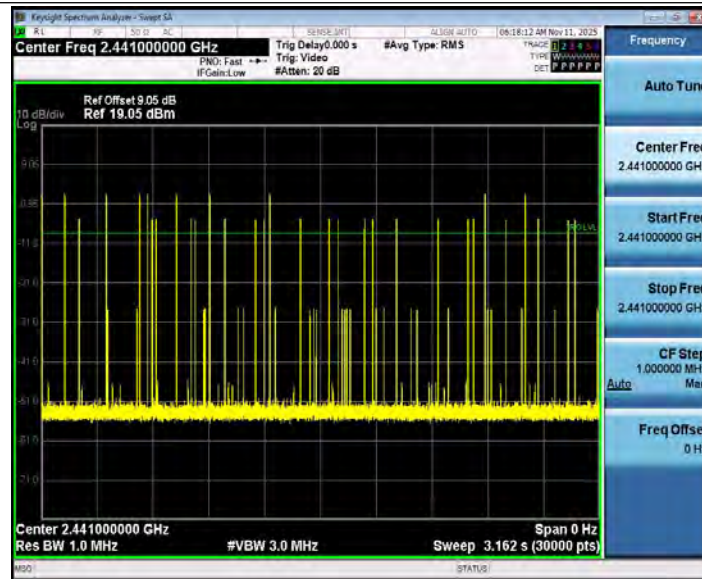


2DH3_Ant1_Hop

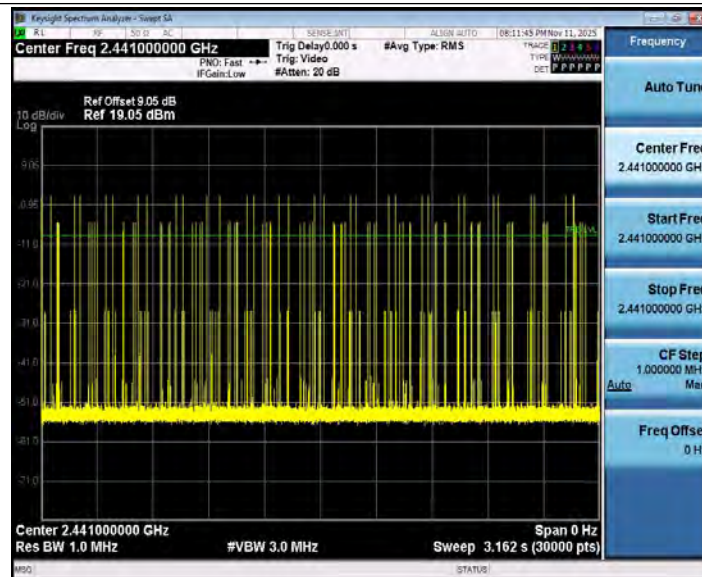


2DH5_Ant1_Hop

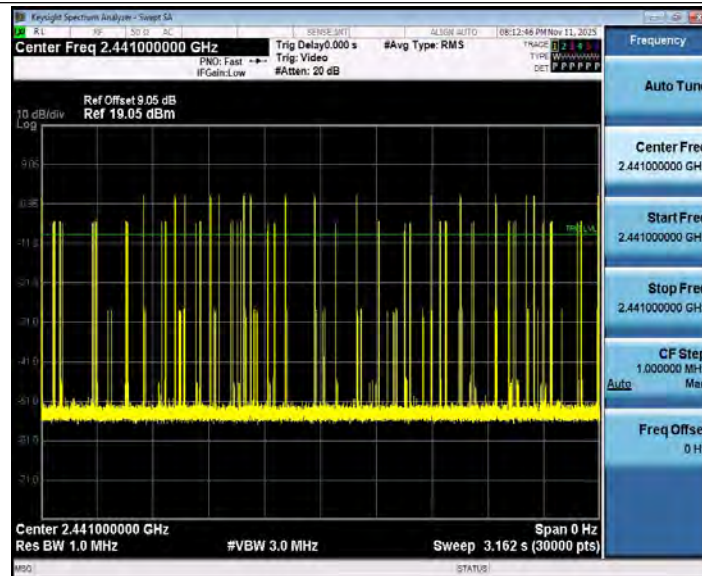




3DH1_Ant1_Hop

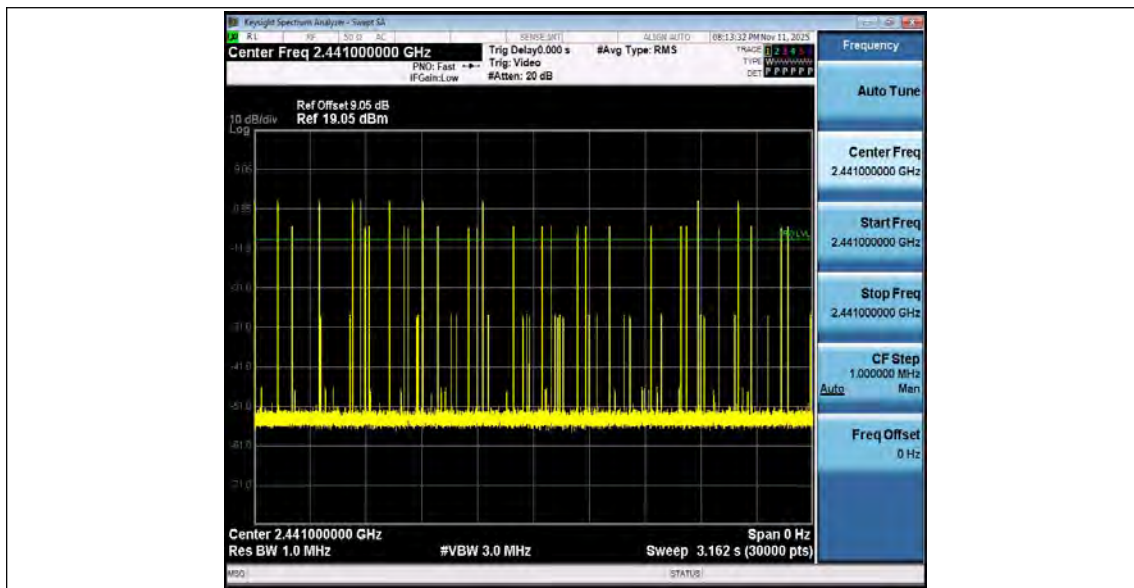


3DH3_Ant1_Hop



3DH5_Ant1_Hop





Appendix A.6: Number of hopping channels

Test Result

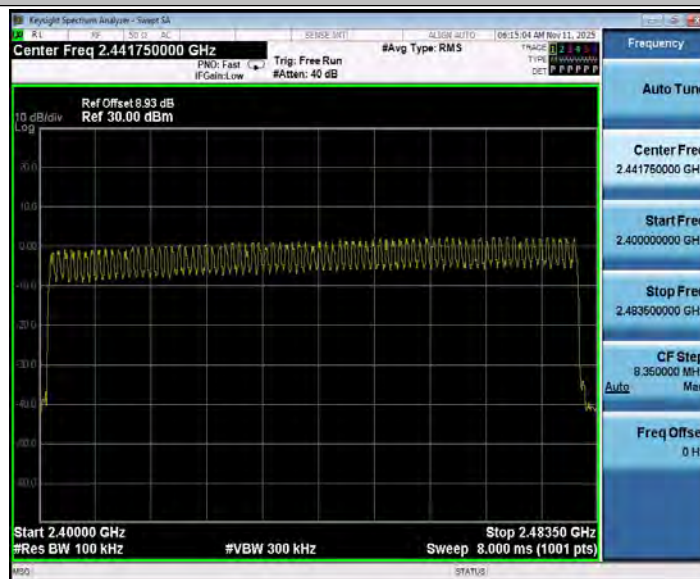
TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH1	Ant1	Hop	79	≥15	PASS
2DH1	Ant1	Hop	79	≥15	PASS
3DH1	Ant1	Hop	79	≥15	PASS

Test Graphs

DH1_Ant1_Hop



2DH1_Ant1_Hop



3DH1_Ant1_Hop



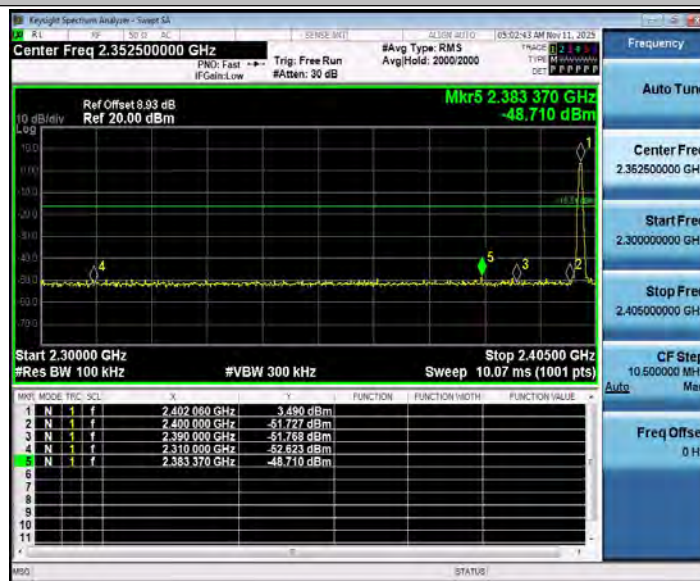
Appendix A.7: Band edge measurements

Test Result

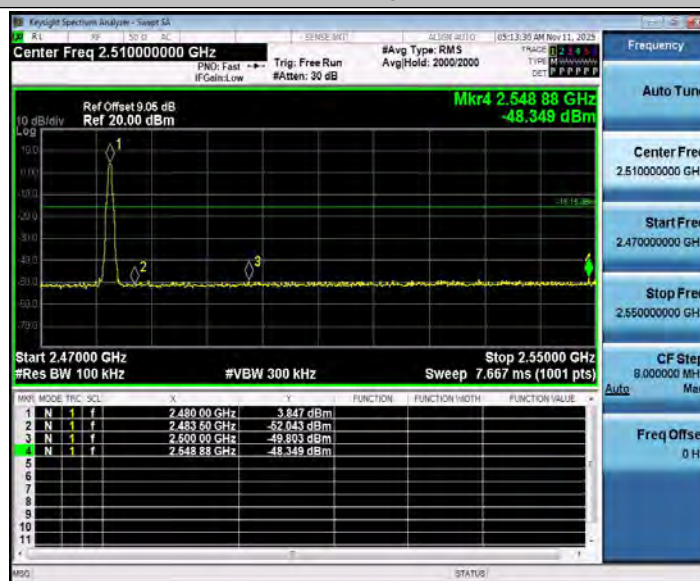
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	3.49	-48.71	≤ -16.51	PASS
		High	2480	3.85	-48.35	≤ -16.15	PASS
		Low	Hop_2402	-0.11	-49.27	≤ -20.11	PASS
		High	Hop_2480	2.00	-48.4	≤ -18	PASS
2DH1	Ant1	Low	2402	-0.44	-49.2	≤ -20.44	PASS
		High	2480	2.60	-48.64	≤ -17.4	PASS
		Low	Hop_2402	-0.65	-48.78	≤ -20.65	PASS
		High	Hop_2480	1.91	-48.22	≤ -18.09	PASS
3DH1	Ant1	Low	2402	-0.42	-49.68	≤ -20.42	PASS
		High	2480	2.61	-48.56	≤ -17.39	PASS
		Low	Hop_2402	-0.90	-49.49	≤ -20.9	PASS
		High	Hop_2480	1.76	-49.54	≤ -18.24	PASS

Test Graphs

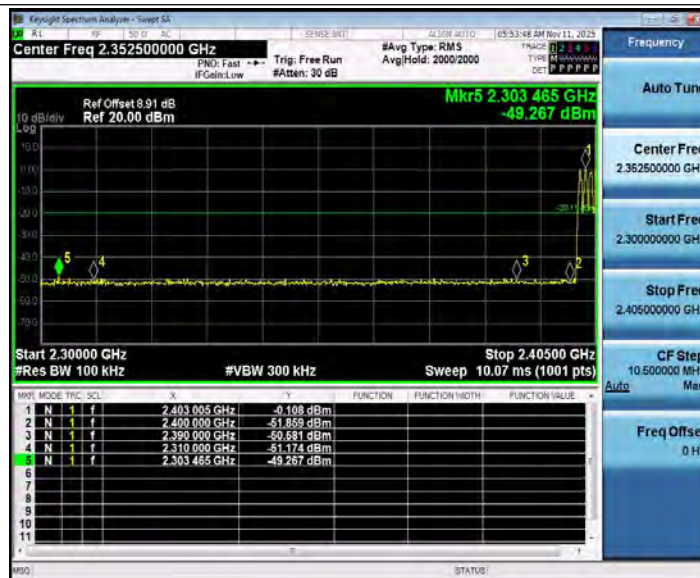
DH1_Ant1_Low_2402



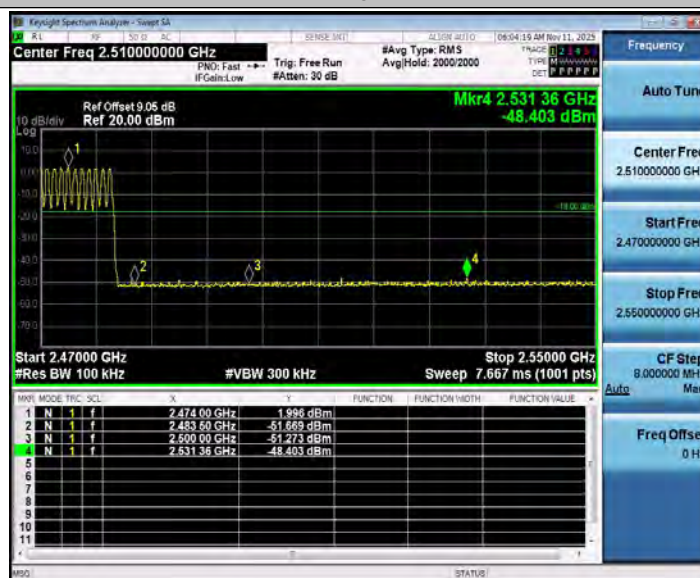
DH1_Ant1_High_2480



DH1_Ant1_Low_Hop_2402



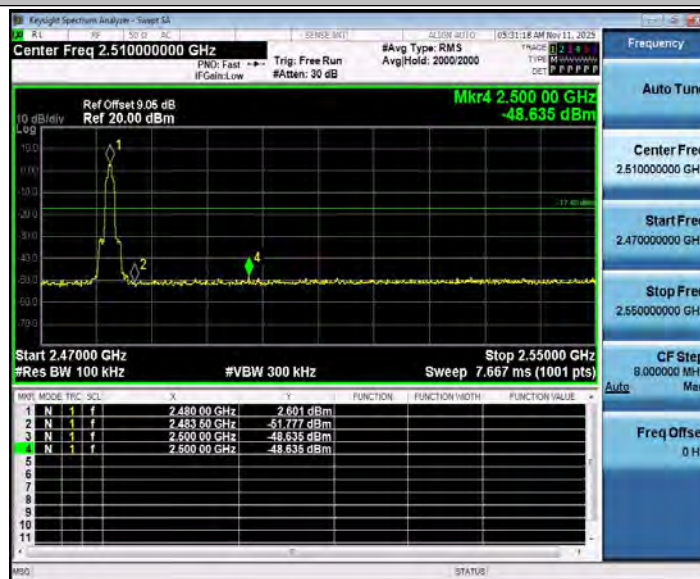
DH1_Ant1_High_Hop_2480



2DH1_Ant1_Low_2402



2DH1_Ant1_High_2480



2DH1_Ant1_Low_Hop_2402



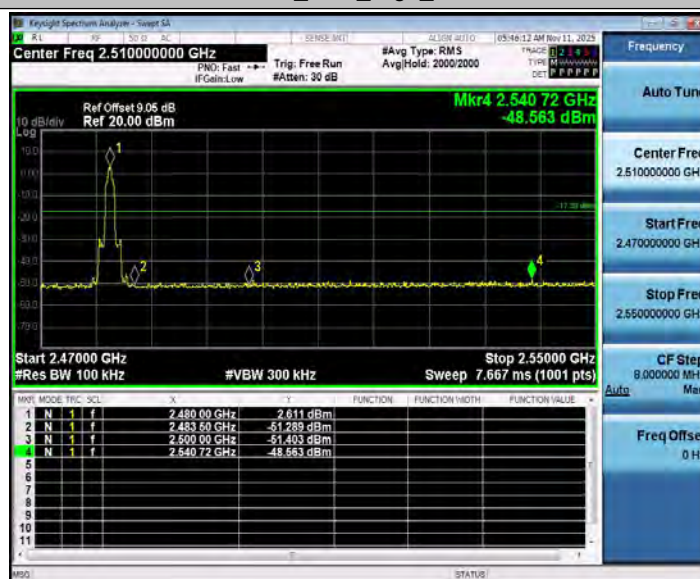
2DH1_Ant1_High_Hop_2480



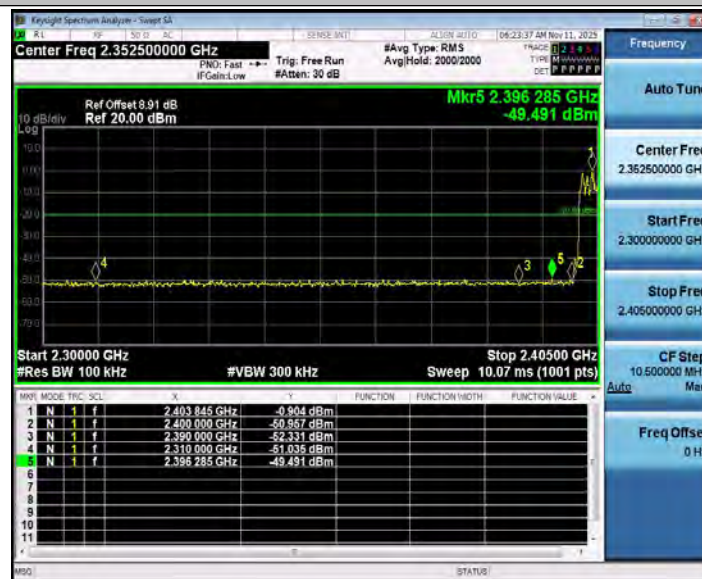
3DH1_Ant1_Low_2402



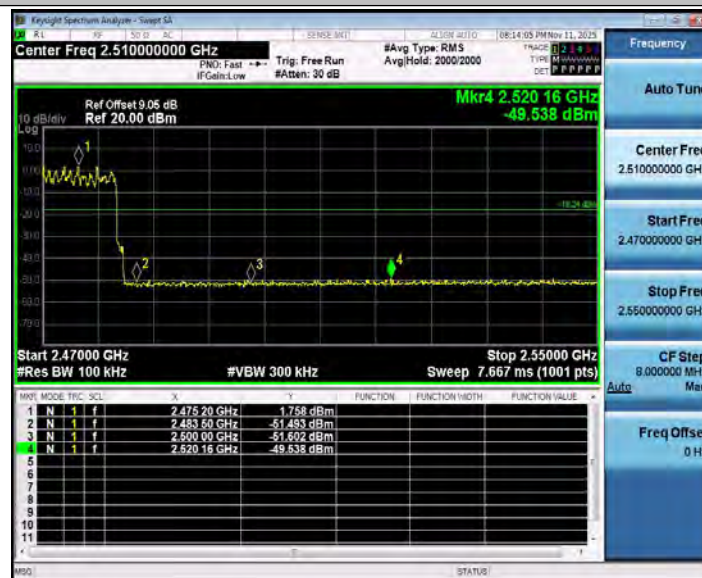
3DH1_Ant1_High_2480



3DH1_Ant1_Low_Hop_2402



3DH1_Ant1_High_Hop_2480



Appendix A.8: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	3.03	3.03	---	PASS
			30~1000	3.03	-60.92	≤-16.97	PASS
			1000~26500	3.03	-47.34	≤-16.97	PASS
		2441	Reference	4.80	4.80	---	PASS
			30~1000	4.80	-60.39	≤-15.2	PASS
			1000~26500	4.80	-47.38	≤-15.2	PASS
		2480	Reference	3.36	3.36	---	PASS
			30~1000	3.36	-60.88	≤-16.64	PASS
			1000~26500	3.36	-47.36	≤-16.64	PASS
2DH1	Ant1	2402	Reference	-0.55	-0.55	---	PASS
			30~1000	-0.55	-44.3	≤-20.55	PASS
			1000~26500	-0.55	-47.42	≤-20.55	PASS
		2441	Reference	1.31	1.31	---	PASS
			30~1000	1.31	-60.28	≤-18.69	PASS
			1000~26500	1.31	-47.46	≤-18.69	PASS
		2480	Reference	2.32	2.32	---	PASS
			30~1000	2.32	-60.46	≤-17.68	PASS
			1000~26500	2.32	-47.71	≤-17.68	PASS
3DH1	Ant1	2402	Reference	-0.65	-0.65	---	PASS
			30~1000	-0.65	-60.74	≤-20.65	PASS
			1000~26500	-0.65	-48.07	≤-20.65	PASS
		2441	Reference	1.29	1.29	---	PASS
			30~1000	1.29	-60.79	≤-18.71	PASS
			1000~26500	1.29	-47.78	≤-18.71	PASS
		2480	Reference	2.26	2.26	---	PASS
			30~1000	2.26	-60.31	≤-17.74	PASS
			1000~26500	2.26	-47.09	≤-17.74	PASS

Test Graphs

DH1_Ant1_2402_0~Reference



DH1_Ant1_2402_30~1000



DH1_Ant1_2402_1000~26500



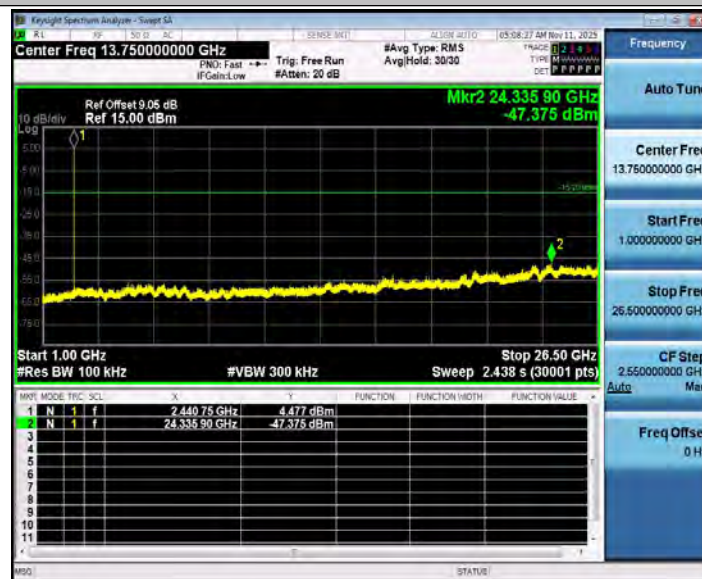
DH1_Ant1_2441_0~Reference



DH1_Ant1_2441_30~1000



DH1_Ant1_2441_1000~26500



DH1_Ant1_2480_0~Reference



DH1_Ant1_2480_30~1000



DH1_Ant1_2480_1000~26500



2DH1_Ant1_2402_0~Reference



2DH1_Ant1_2402_30~1000



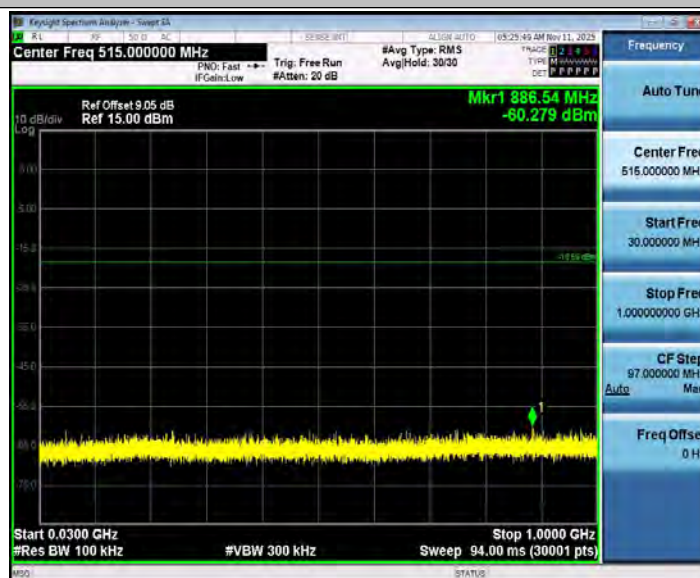
2DH1_Ant1_2402_1000~26500



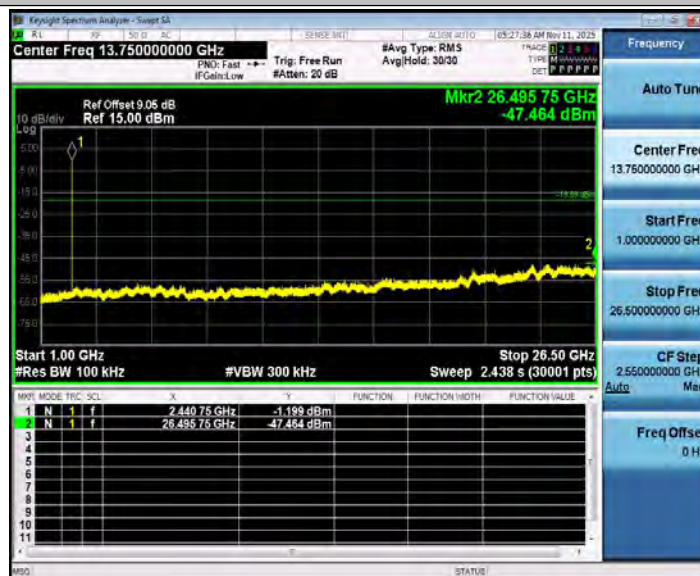
2DH1_Ant1_2441_0~Reference



2DH1_Ant1_2441_30~1000



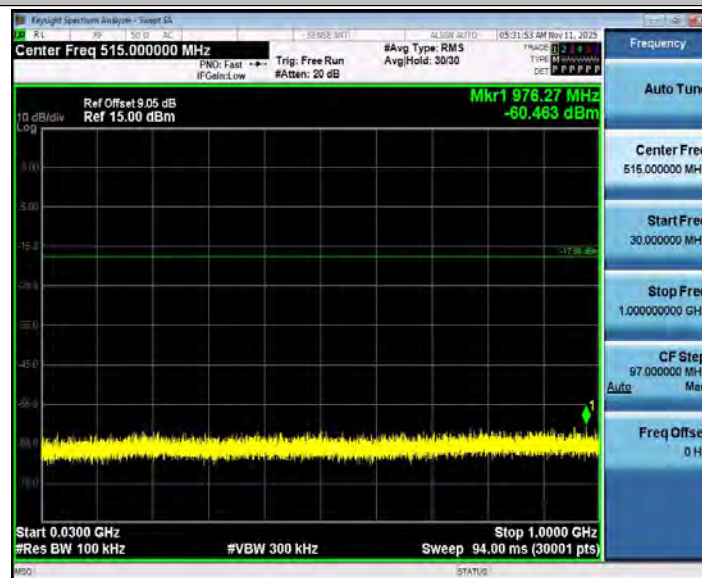
2DH1_Ant1_2441_1000~26500



2DH1_Ant1_2480_0~Reference



2DH1_Ant1_2480_30~1000



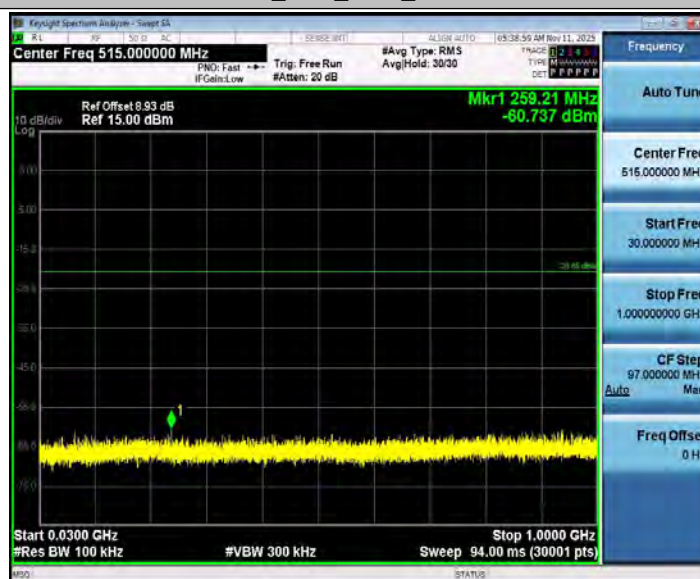
2DH1_Ant1_2480_1000~26500



3DH1_Ant1_2402_0~Reference



3DH1_Ant1_2402_30~1000



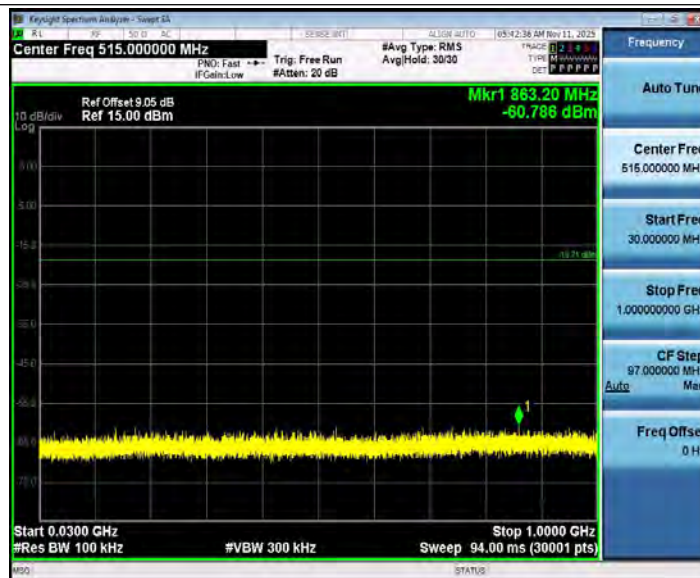
3DH1_Ant1_2402_1000~26500



3DH1_Ant1_2441_0~Reference



3DH1_Ant1_2441_30~1000



3DH1_Ant1_2441_1000~26500



3DH1_Ant1_2480_0~Reference



3DH1_Ant1_2480_30~1000



3DH1_Ant1_2480_1000~26500



Appendix A.9: Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH1	Ant1	Low	2402	AV	2310.000	-49.25	≤-41.20	45.95	≤54	PASS
				AV	2388.725	-48.89	≤-41.20	46.31	≤54	PASS
				AV	2390.000	-49.27	≤-41.20	45.93	≤54	PASS
				Peak	2310.000	-40.97	≤-21.20	54.23	≤74	PASS
				Peak	2378.960	-38.92	≤-21.20	56.28	≤74	PASS
				Peak	2390.000	-41.22	≤-21.20	53.98	≤74	PASS
		High	2480	AV	2483.500	-48.54	≤-41.20	46.66	≤54	PASS
				AV	2483.520	-48.54	≤-41.20	46.66	≤54	PASS
				AV	2500.000	-48.79	≤-41.20	46.41	≤54	PASS
				Peak	2483.500	-40.8	≤-21.20	54.40	≤74	PASS
				Peak	2486.960	-39.07	≤-21.20	56.13	≤74	PASS
				Peak	2500.000	-40.97	≤-21.20	54.23	≤74	PASS
2DH1	Ant1	Low	2402	AV	2310.000	-49.25	≤-41.20	45.95	≤54	PASS
				AV	2389.250	-48.87	≤-41.20	46.33	≤54	PASS
				AV	2390.000	-49.16	≤-41.20	46.04	≤54	PASS
				Peak	2310.000	-41.63	≤-21.20	53.57	≤74	PASS
				Peak	2384.735	-38.52	≤-21.20	56.68	≤74	PASS
				Peak	2390.000	-42.37	≤-21.20	52.83	≤74	PASS
		High	2480	AV	2483.500	-48.49	≤-41.20	46.71	≤54	PASS
				AV	2483.520	-48.49	≤-41.20	46.71	≤54	PASS
				AV	2500.000	-48.7	≤-41.20	46.50	≤54	PASS
				Peak	2483.500	-41.73	≤-21.20	53.47	≤74	PASS
				Peak	2498.240	-38.81	≤-21.20	56.39	≤74	PASS
				Peak	2500.000	-40.24	≤-21.20	54.96	≤74	PASS
3DH1	Ant1	Low	2402	AV	2310.000	-49.41	≤-41.20	45.79	≤54	PASS
				AV	2389.670	-48.88	≤-41.20	46.32	≤54	PASS
				AV	2390.000	-49.05	≤-41.20	46.15	≤54	PASS
				Peak	2310.000	-40.37	≤-21.20	54.83	≤74	PASS
				Peak	2315.540	-38.93	≤-21.20	56.27	≤74	PASS
				Peak	2390.000	-40.78	≤-21.20	54.42	≤74	PASS
		High	2480	AV	2483.500	-48.37	≤-41.20	46.83	≤54	PASS
				AV	2483.520	-48.36	≤-41.20	46.84	≤54	PASS
				AV	2500.000	-48.73	≤-41.20	46.47	≤54	PASS
				Peak	2483.500	-41.44	≤-21.20	53.76	≤74	PASS
				Peak	2494.800	-38.73	≤-21.20	56.47	≤74	PASS
				Peak	2500.000	-40.78	≤-21.20	54.42	≤74	PASS

Note:

1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. 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

DH1_Ant1_Low_2402_AV



DH1_Ant1_Low_2402_Peak



DH1_Ant1_High_2480_AV



DH1_Ant1_High_2480_Peak



2DH1_Ant1_Low_2402_AV



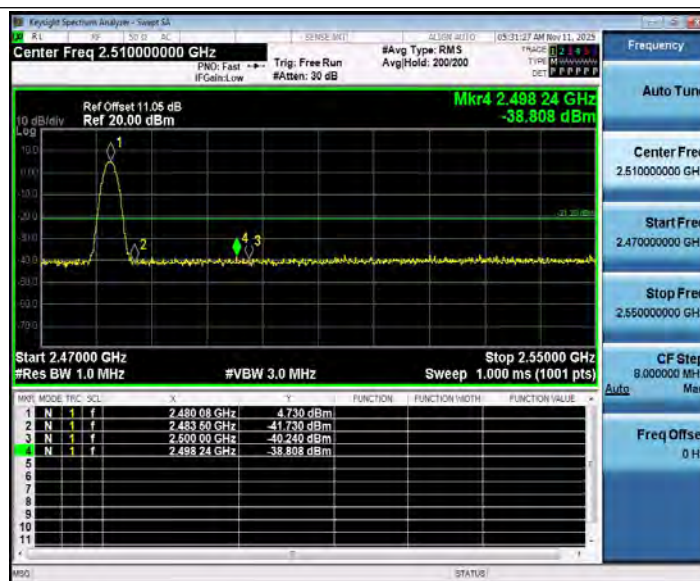
2DH1_Ant1_Low_2402_Peak



2DH1_Ant1_High_2480_AV



2DH1_Ant1_High_2480_Peak



3DH1_Ant1_Low_2402_AV



3DH1_Ant1_Low_2402_Peak



