



Appendix A

RF Test Data for BT V4.2 (DSS) (Conducted Measurement)

Product Name: Smartphone

Trade Mark: S Smooth

Test Model: Smooth 5.5 Lite

Environmental Conditions

Temperature:	21.1 ° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Carl Fu
Supervised by:	Li Huan



A.1 20dB Emission Bandwidth

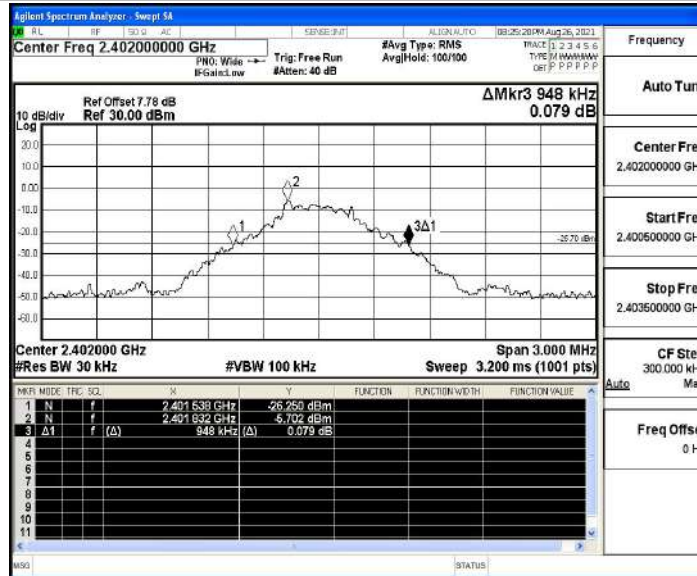
Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.948	2401.538	2402.486	---	PASS
		2441	0.945	2440.541	2441.486	---	PASS
		2480	0.948	2479.532	2480.480	---	PASS
2DH5	Ant1	2402	1.278	2401.373	2402.651	---	PASS
		2441	1.347	2440.322	2441.669	---	PASS
		2480	1.323	2479.334	2480.657	---	PASS
3DH5	Ant1	2402	1.302	2401.352	2402.654	---	PASS
		2441	1.299	2440.346	2441.645	---	PASS
		2480	1.299	2479.352	2480.651	---	PASS

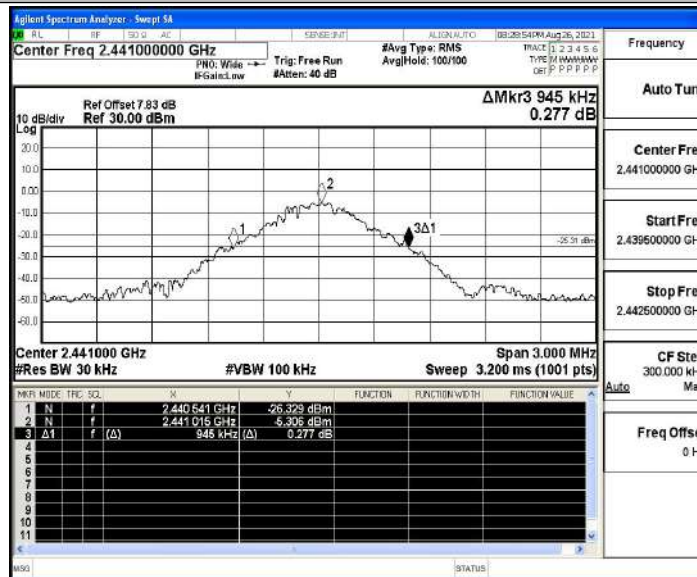


Test Graphs

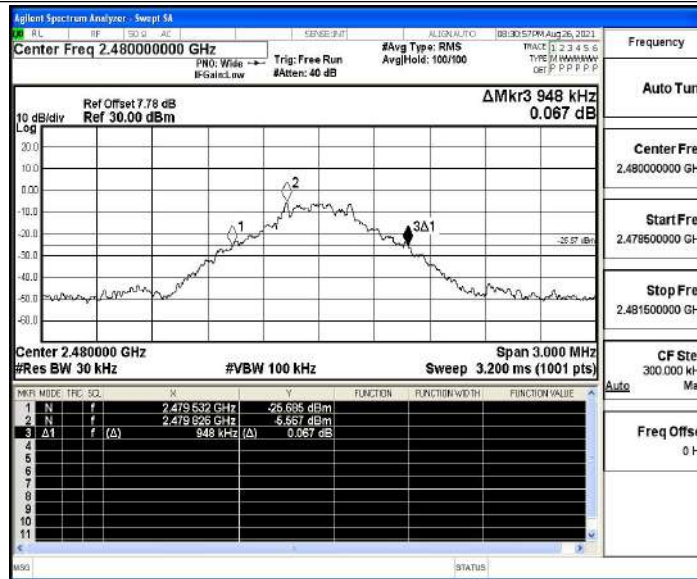
DH5_Ant1_2402



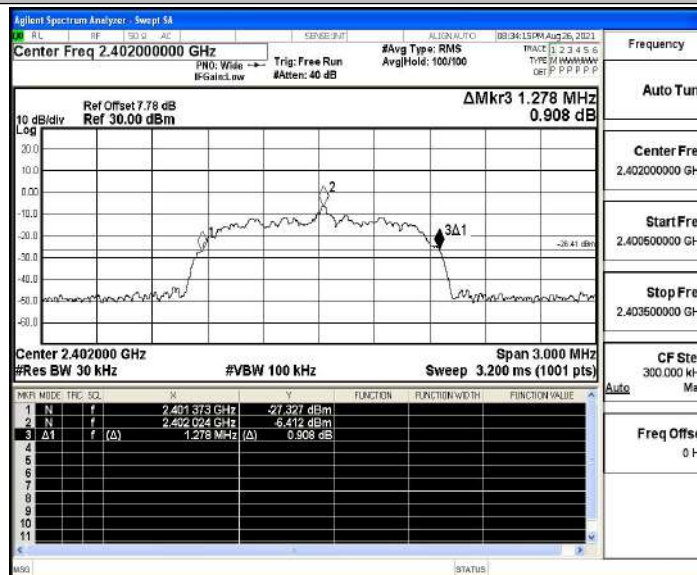
DH5_Ant1_2441



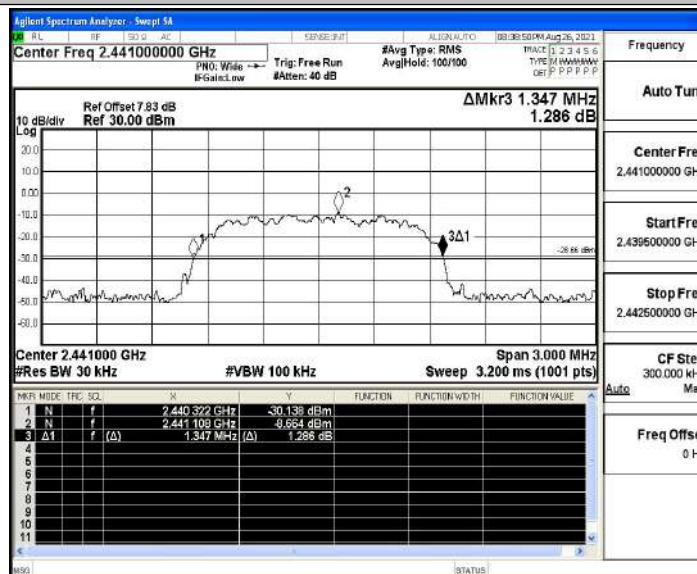
DH5_Ant1_2480



2DH5_Ant1_2402

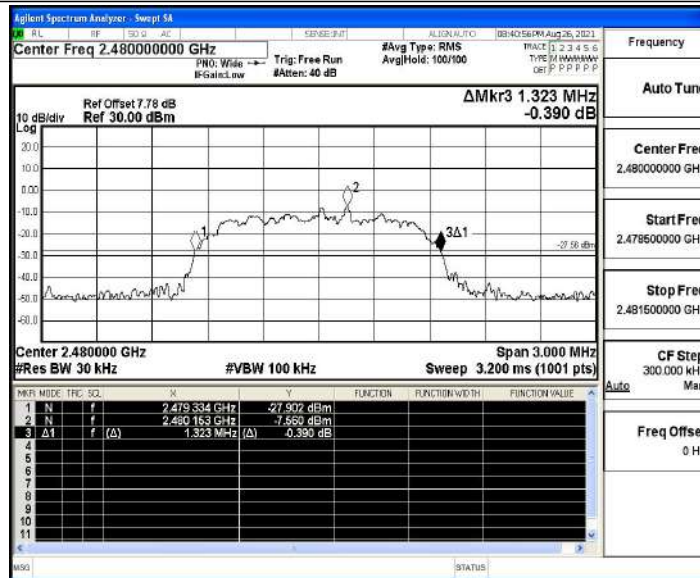


2DH5_Ant1_2441

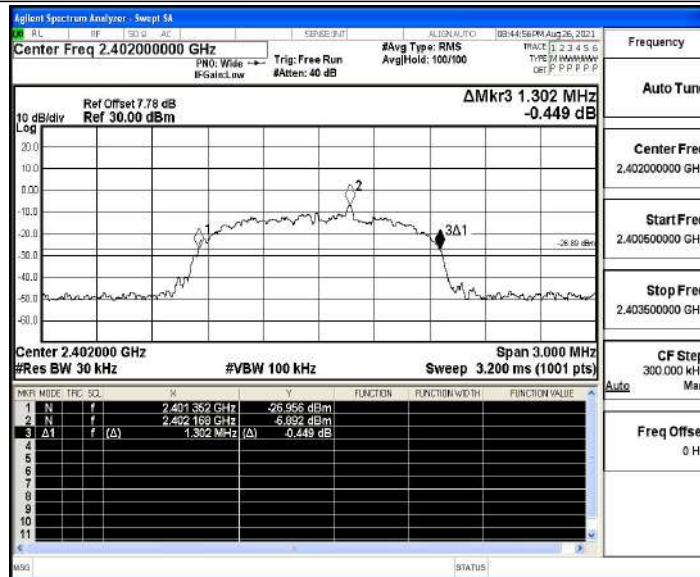




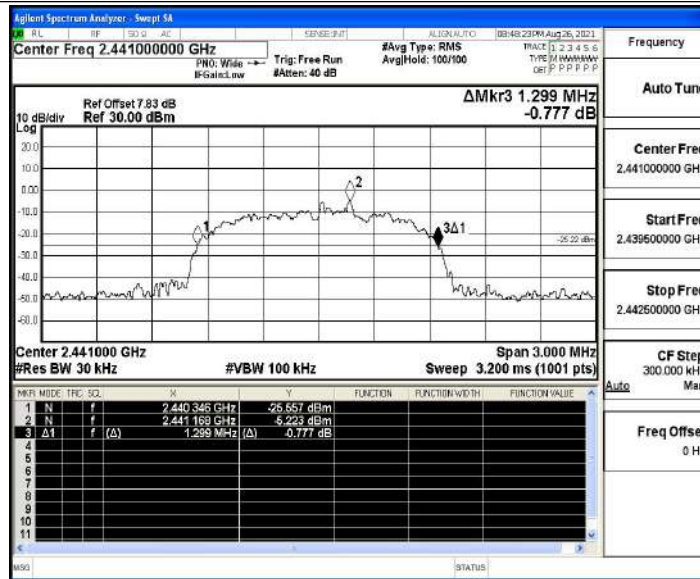
2DH5_Ant1_2480



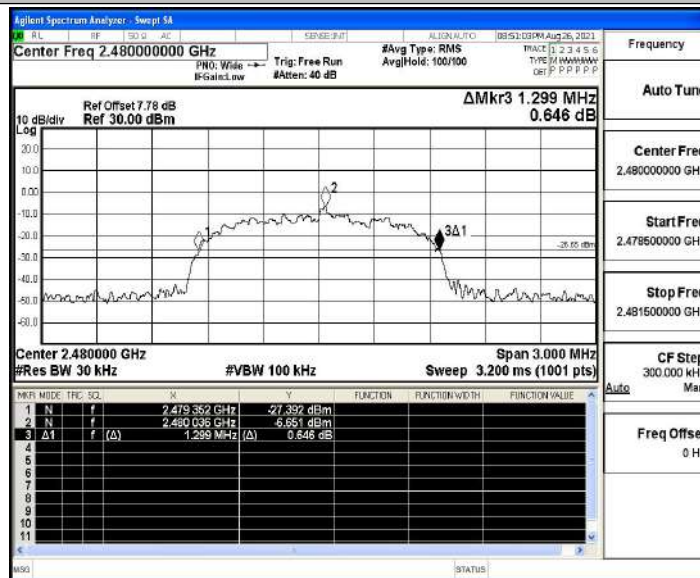
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480





A.2 Maximum peak conducted output power

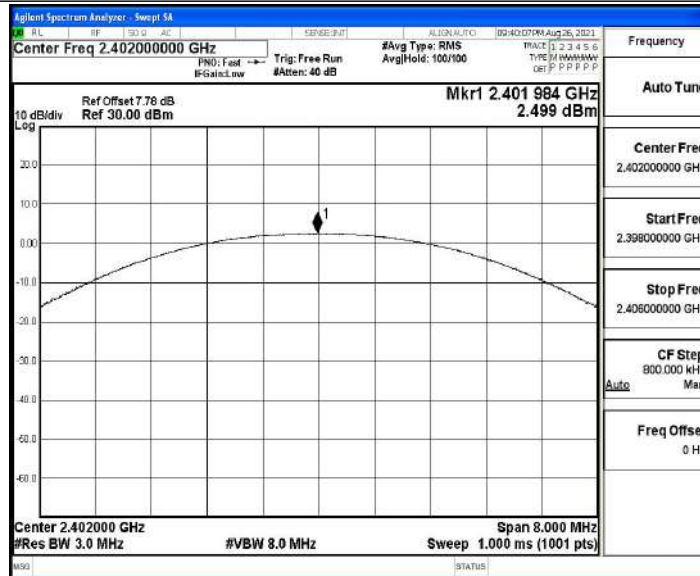
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	2.5	≤20.97	PASS
		2441	3.44	≤20.97	PASS
		2480	2.85	≤20.97	PASS
2DH5	Ant1	2402	3.19	≤20.97	PASS
		2441	3.2	≤20.97	PASS
		2480	3.51	≤20.97	PASS
3DH5	Ant1	2402	3.42	≤20.97	PASS
		2441	3.52	≤20.97	PASS
		2480	3.8	≤20.97	PASS

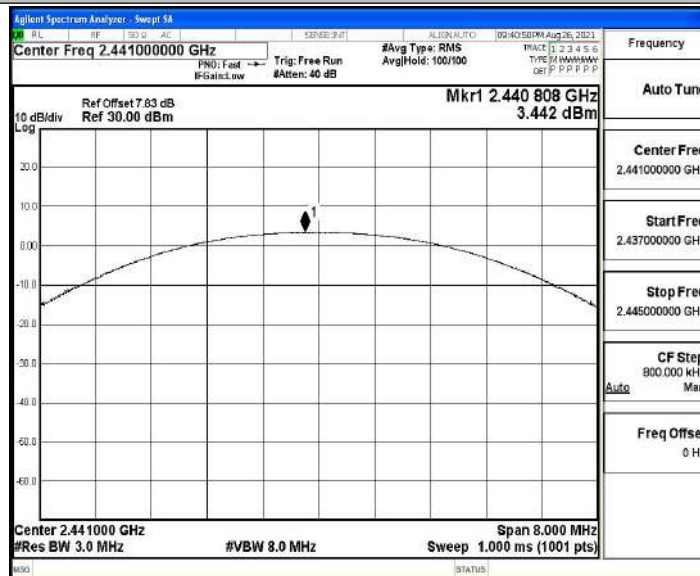


Test Graphs

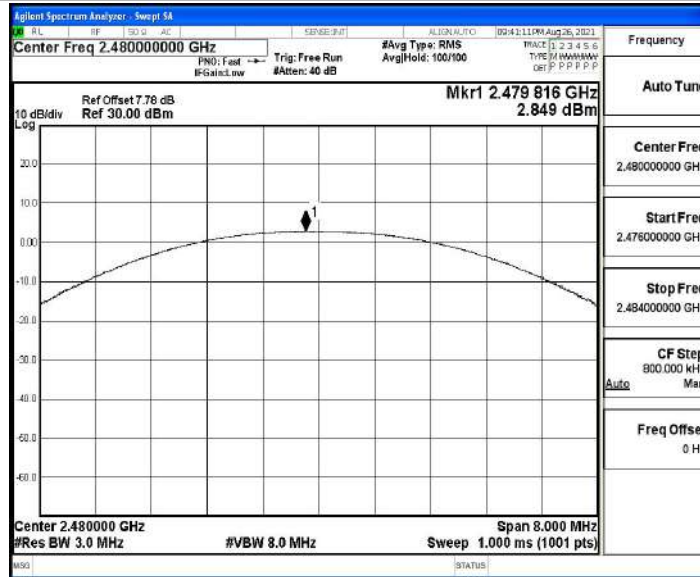
DH5_Ant1_2402



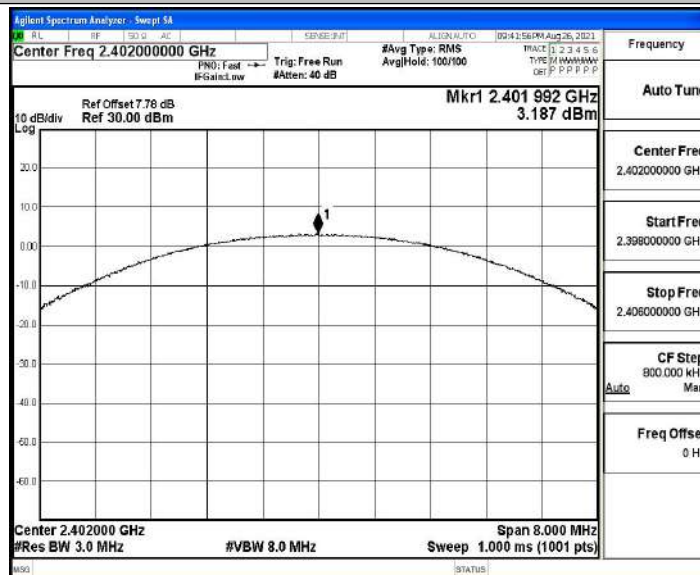
DH5_Ant1_2441



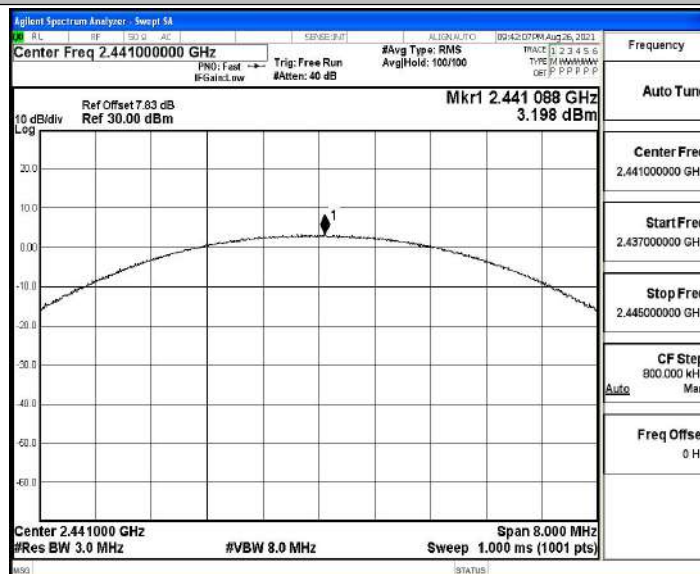
DH5_Ant1_2480



2DH5_Ant1_2402

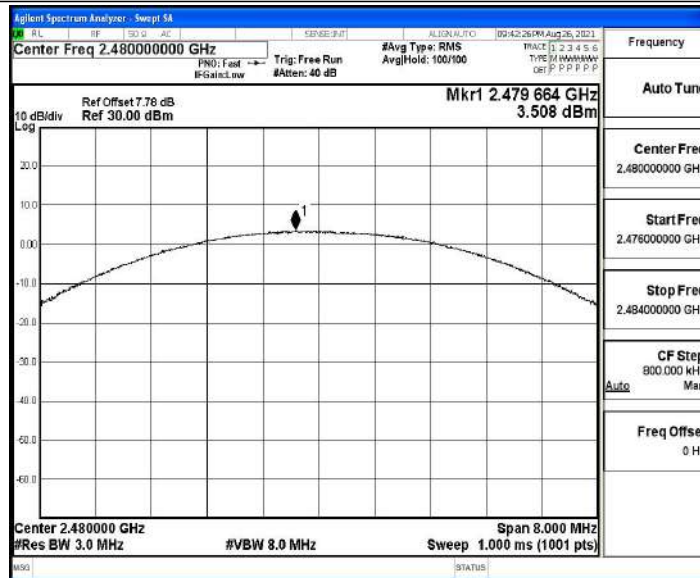


2DH5_Ant1_2441

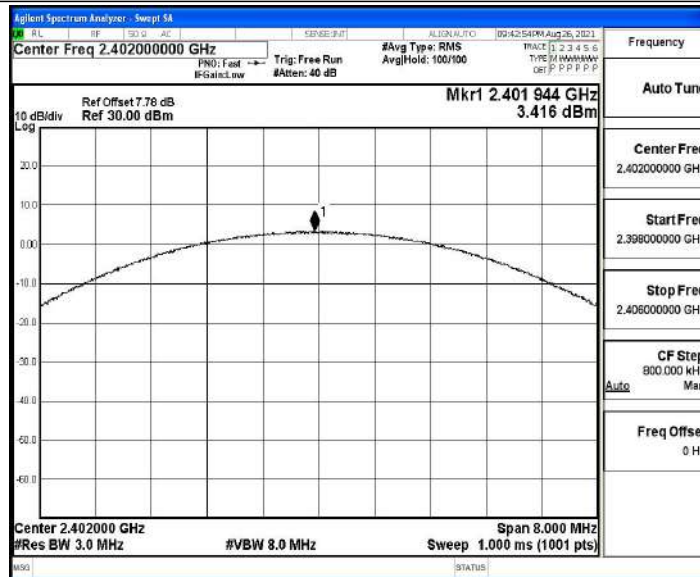




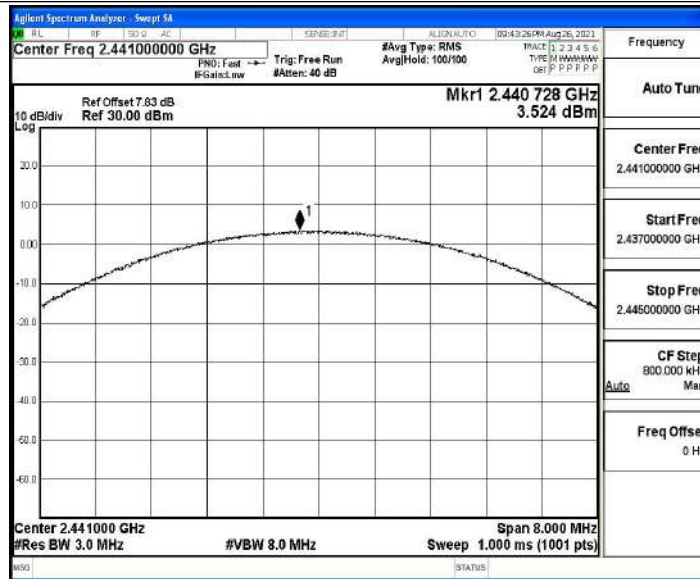
2DH5_Ant1_2480



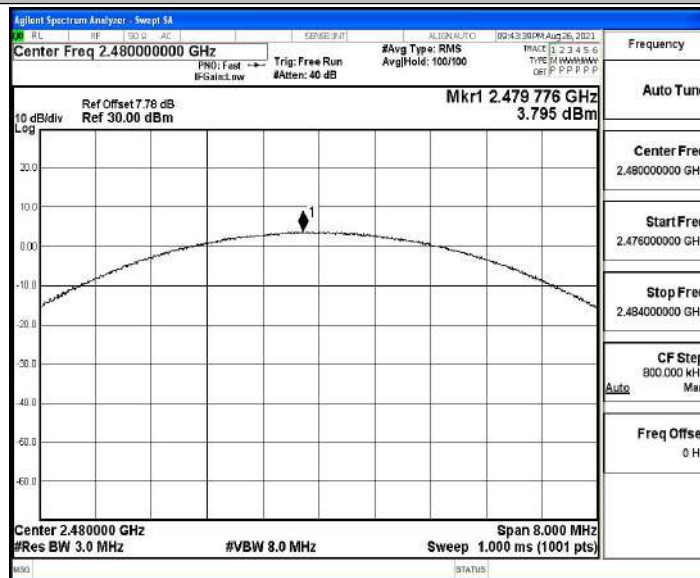
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480





A.3 Carrier frequency separation

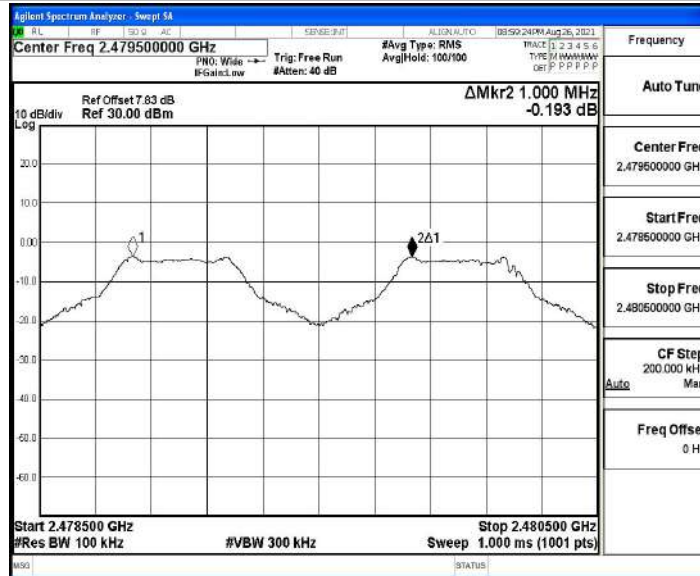
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	Hop	1	≥ 0.632	PASS
2DH5	Ant1	Hop	0.976	≥ 0.898	PASS
3DH5	Ant1	Hop	1.018	≥ 0.868	PASS

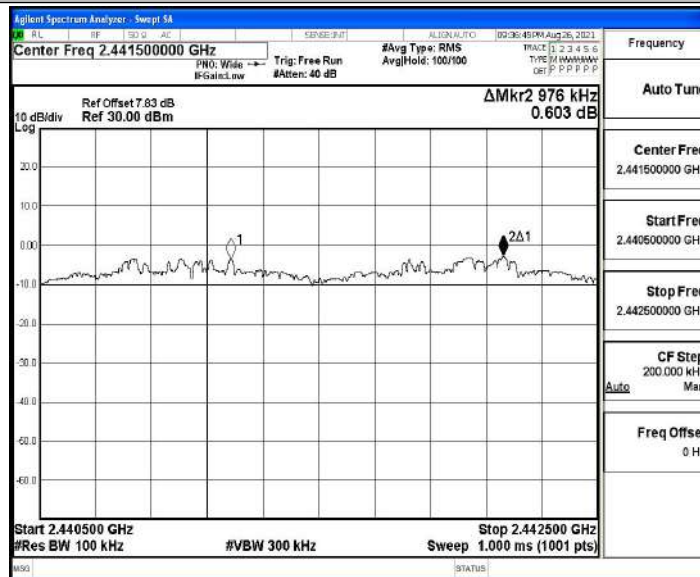


Test Graphs

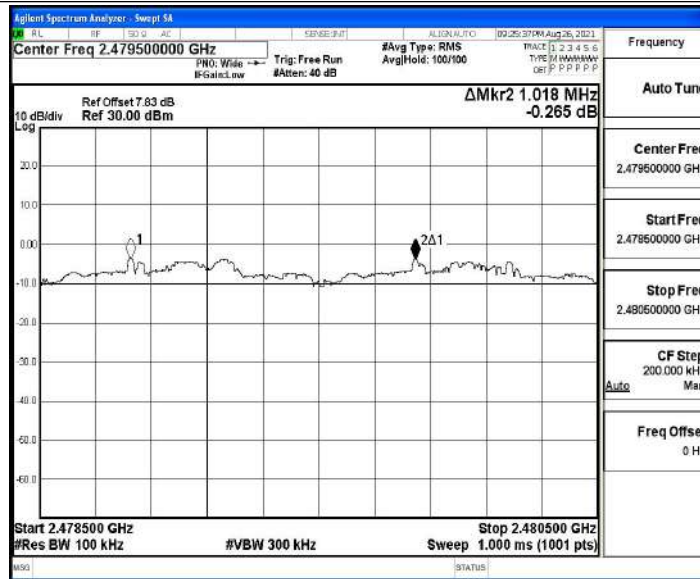
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop





A.4 Time of occupancy

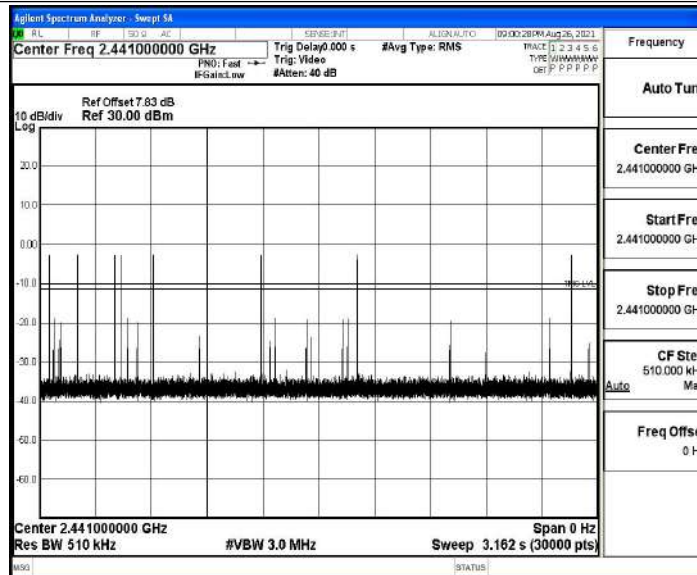
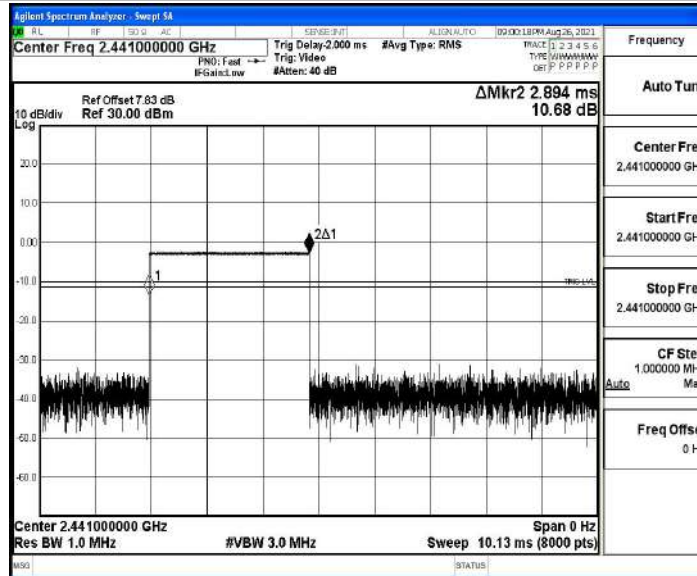
Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.89	90	0.26	≤0.4	PASS
2DH5	Ant1	Hop	2.88	100	0.288	≤0.4	PASS
3DH5	Ant1	Hop	2.88	100	0.288	≤0.4	PASS

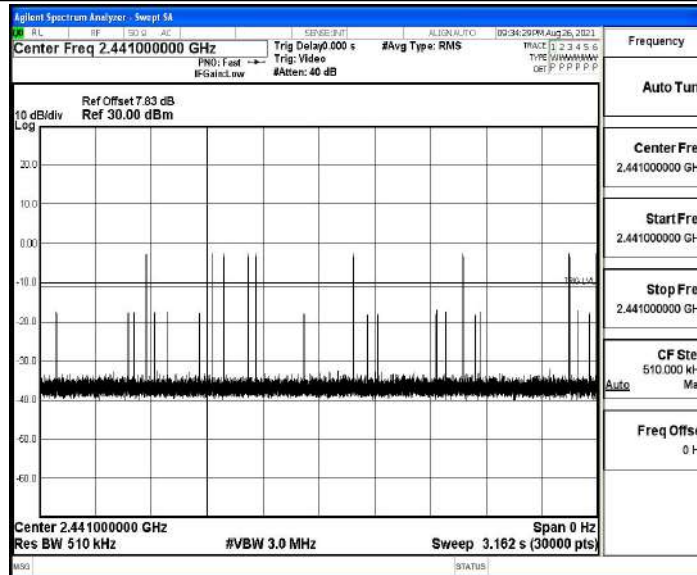
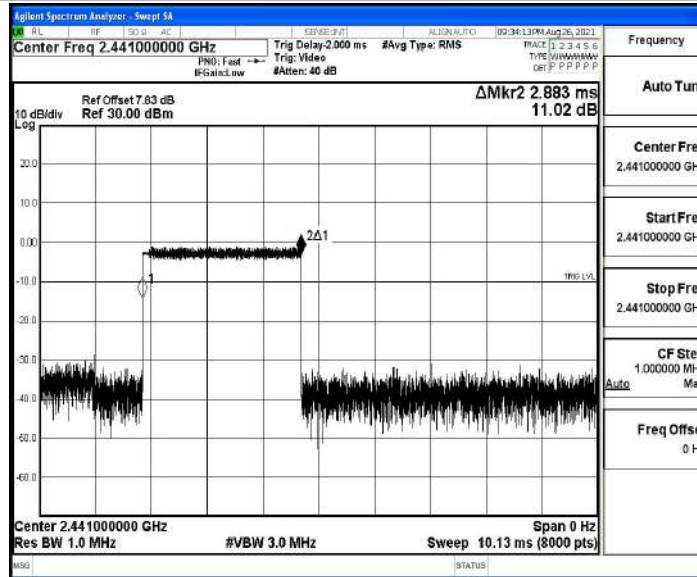


Test Graphs

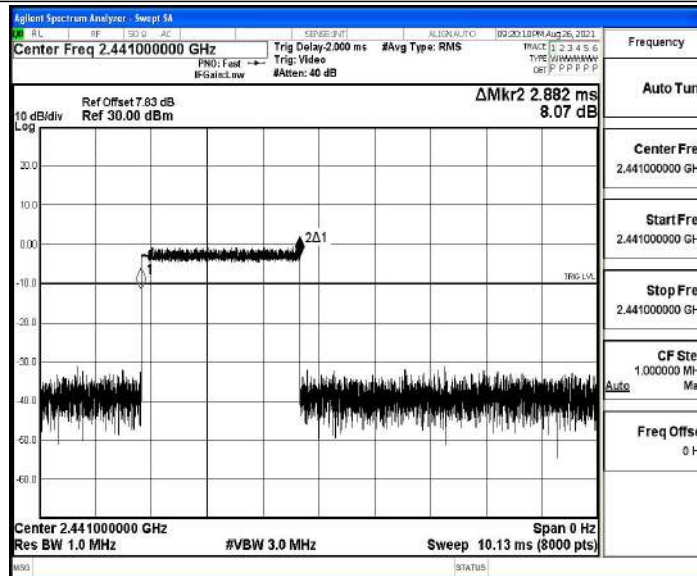
DH5_Ant1_Hop

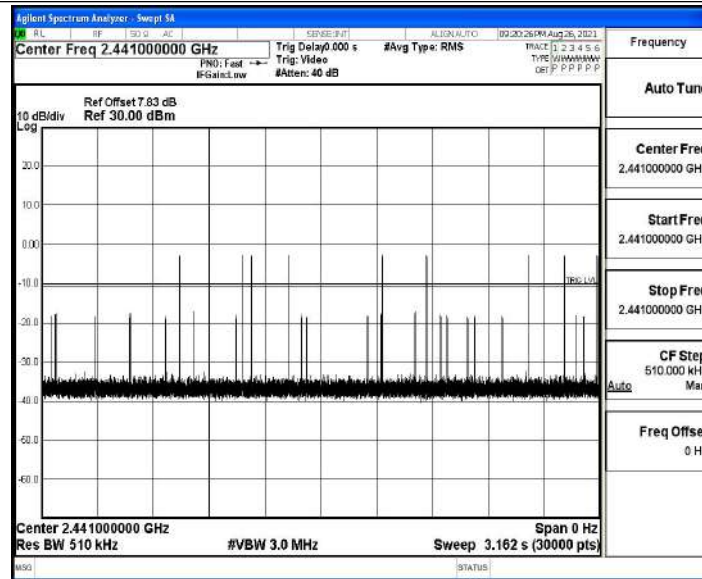


2DH5_Ant1_Hop



3DH5_Ant1_Hop







A.5 Number of hopping channels

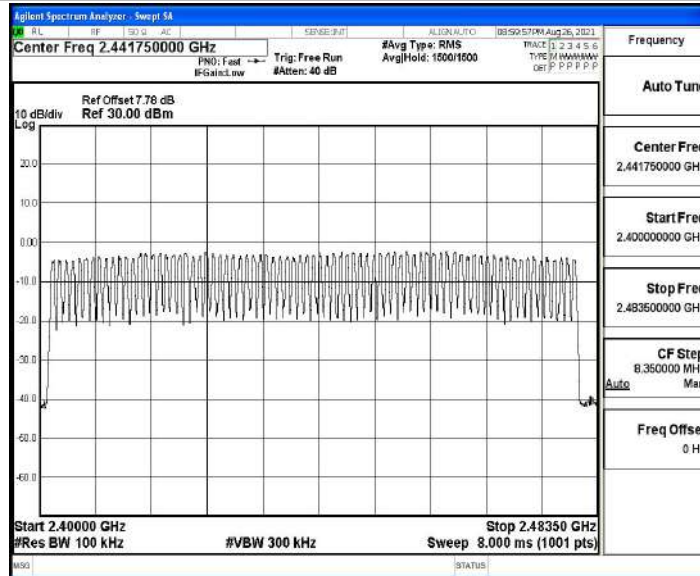
Test Result

TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥ 15	PASS
2DH5	Ant1	Hop	79	≥ 15	PASS
3DH5	Ant1	Hop	79	≥ 15	PASS

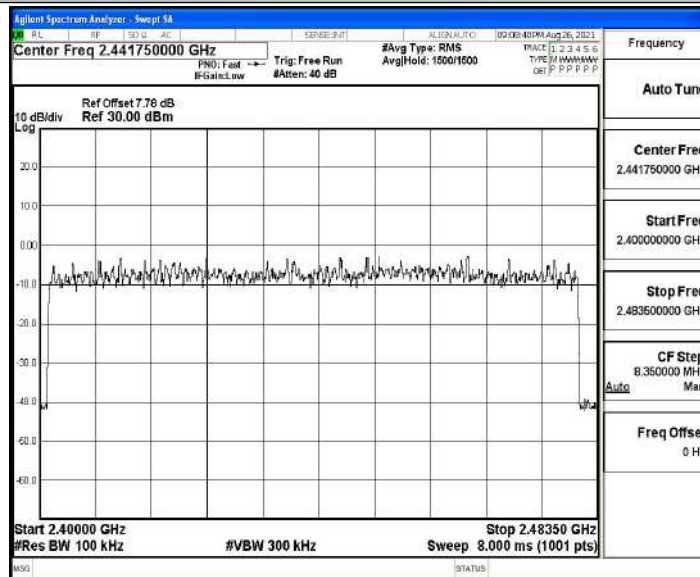


Test Graphs

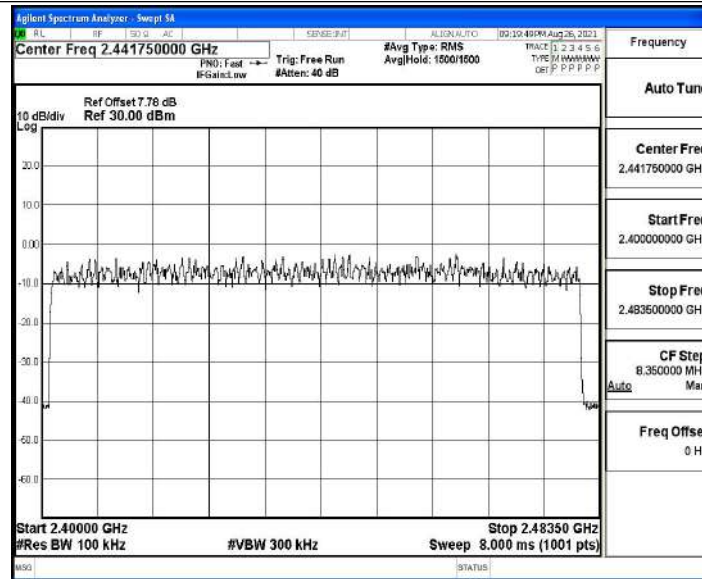
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop





A.6 Band edge measurements

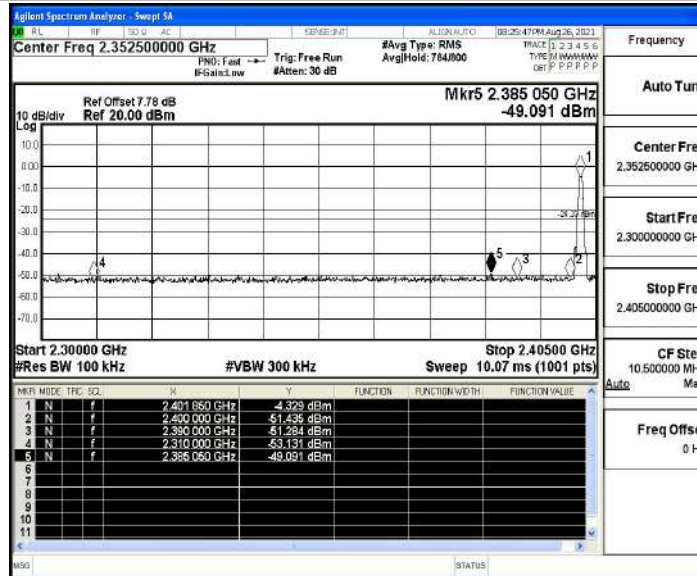
Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-4.33	-49.09	≤ -24.33	PASS
		High	2480	-3.82	-48.3	≤ -23.82	PASS
		Low	Hop_2402	5.59	-49.9	≤ -14.41	PASS
		High	Hop_2480	-3.56	-48.71	≤ -23.56	PASS
2DH5	Ant1	Low	2402	-4.34	-49.86	≤ -24.34	PASS
		High	2480	-3.99	-48.51	≤ -23.99	PASS
		Low	Hop_2402	-6.28	-49.34	≤ -26.28	PASS
		High	Hop_2480	-4.69	-48.62	≤ -24.69	PASS
3DH5	Ant1	Low	2402	-4.49	-49.85	≤ -24.49	PASS
		High	2480	-3.75	-48.83	≤ -23.75	PASS
		Low	Hop_2402	-7.12	-49.5	≤ -27.12	PASS
		High	Hop_2480	-4.21	-48.51	≤ -24.21	PASS

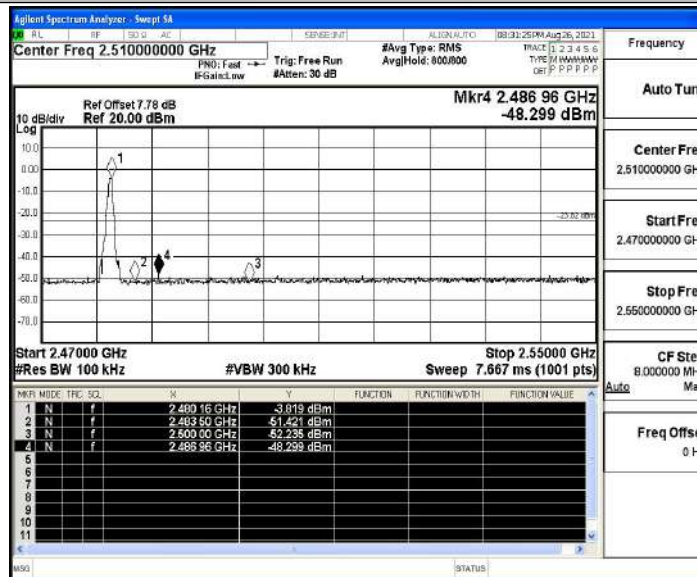


Test Graphs

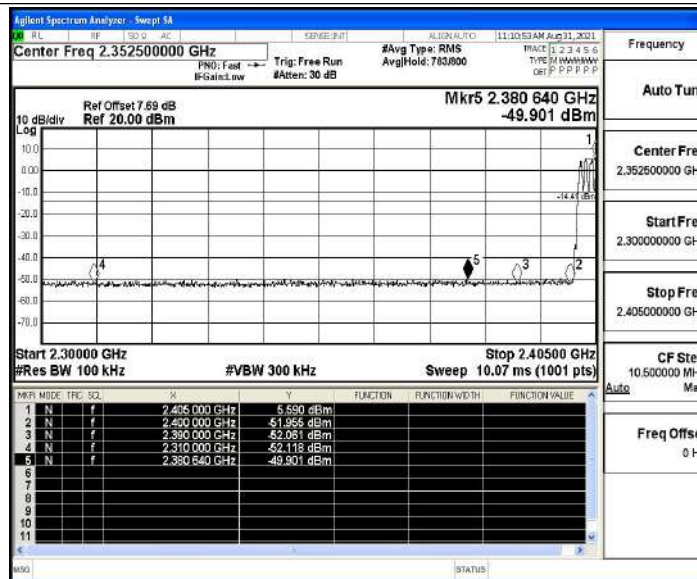
DH5_Ant1_Low_2402



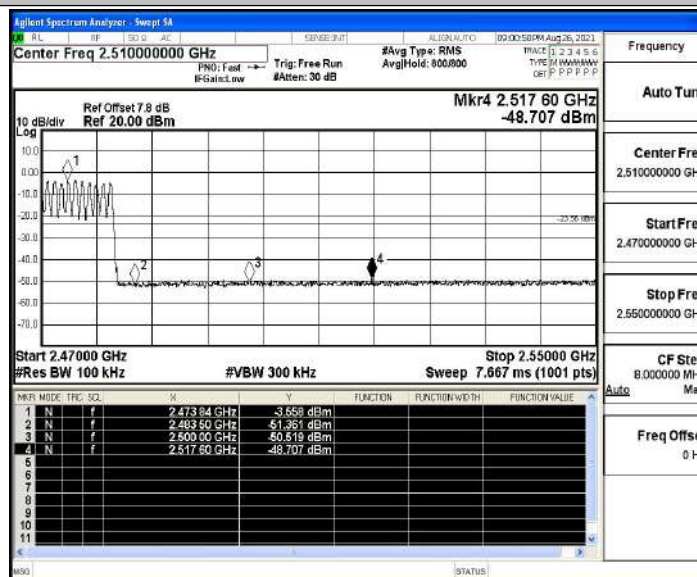
DH5_Ant1_High_2480



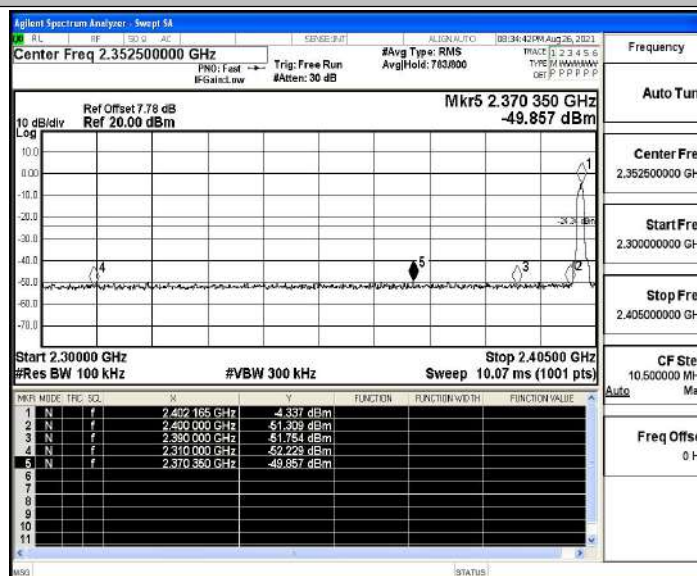
DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480

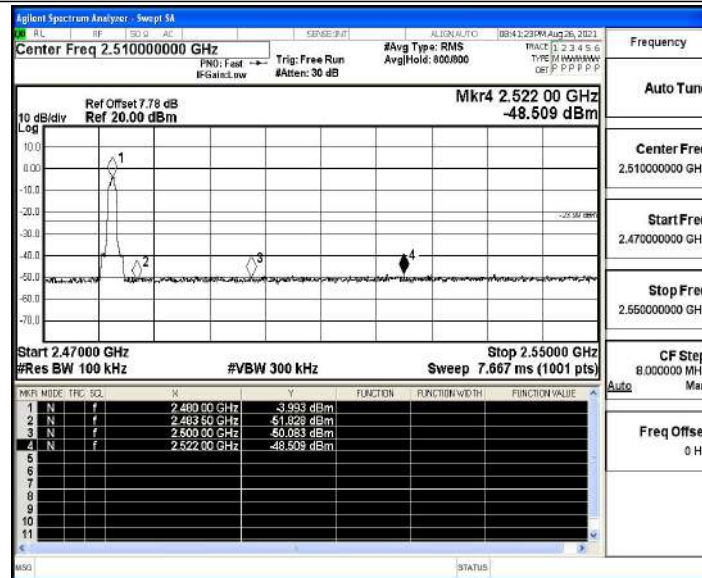


2DH5_Ant1_Low_2402

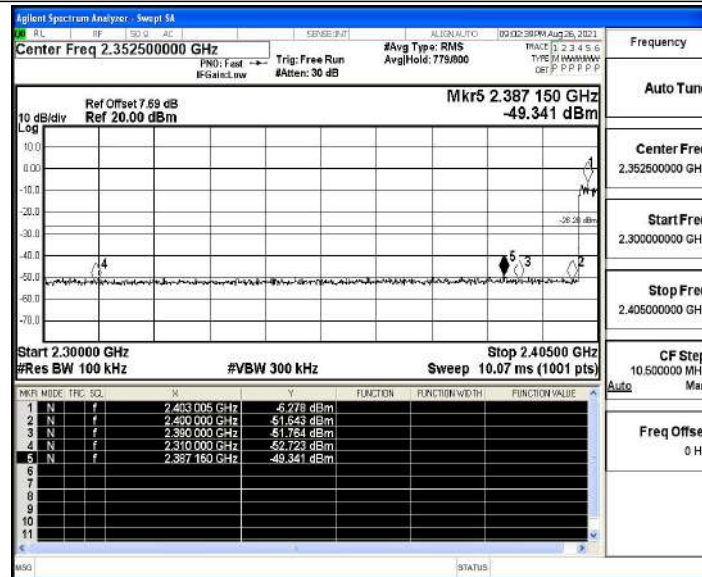




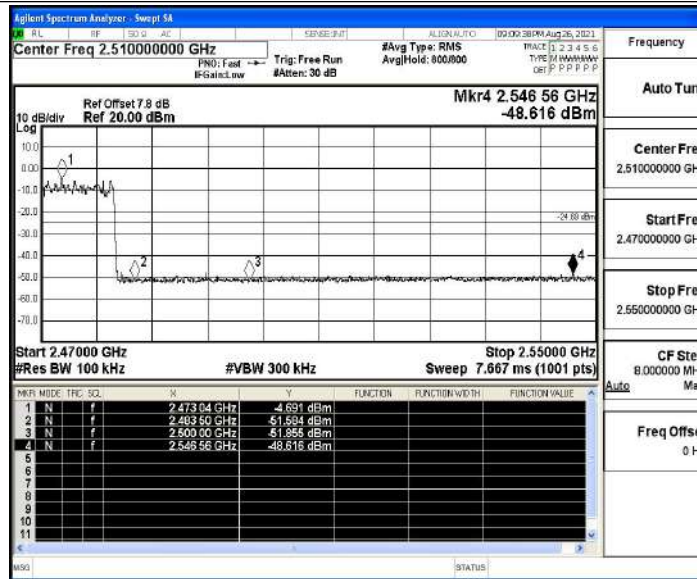
2DH5_Ant1_High_2480



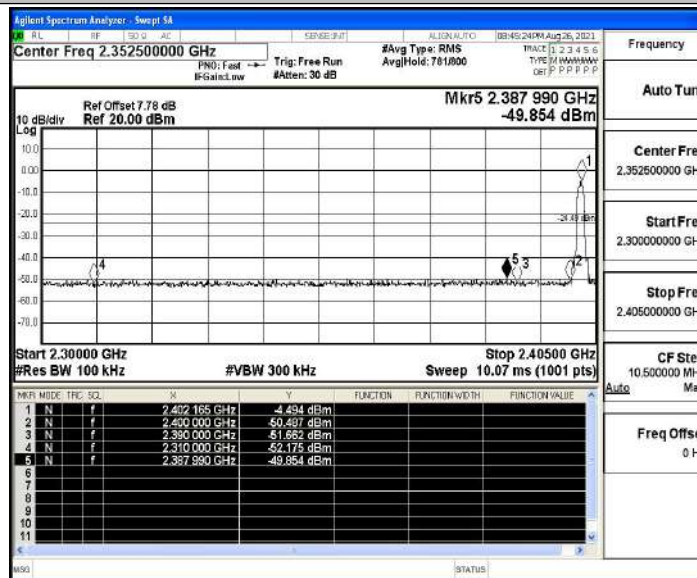
2DH5_Ant1_Low_Hop_2402



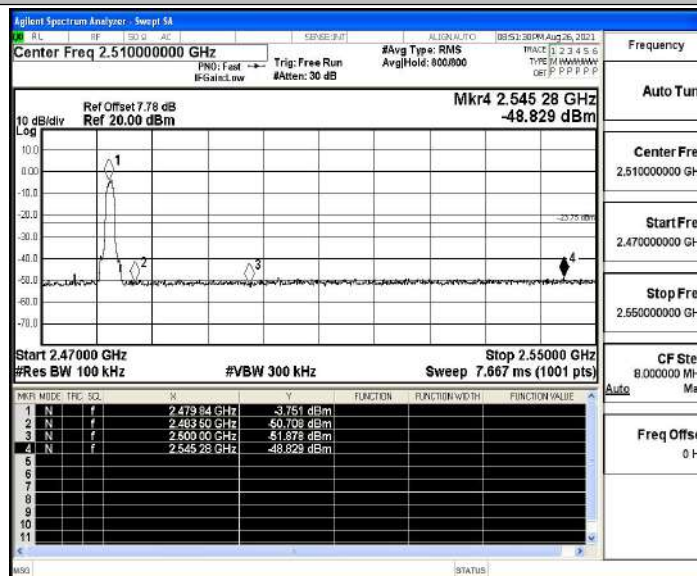
2DH5_Ant1_High_Hop_2480



3DH5_Ant1_Low_2402

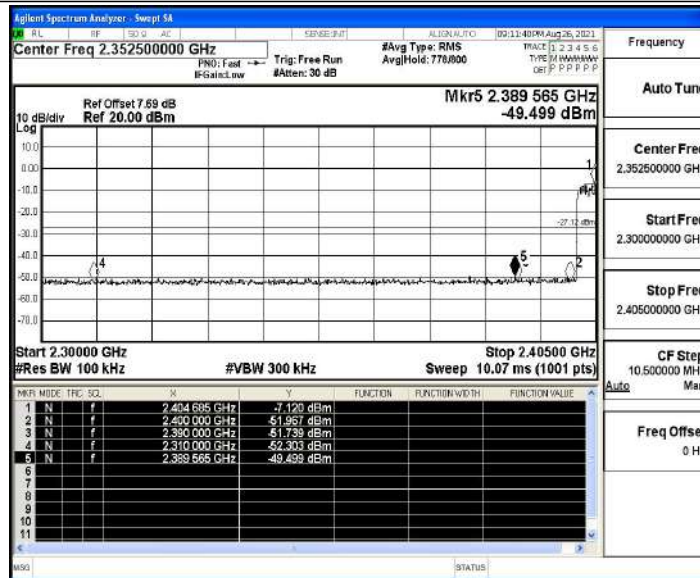


3DH5_Ant1_High_2480

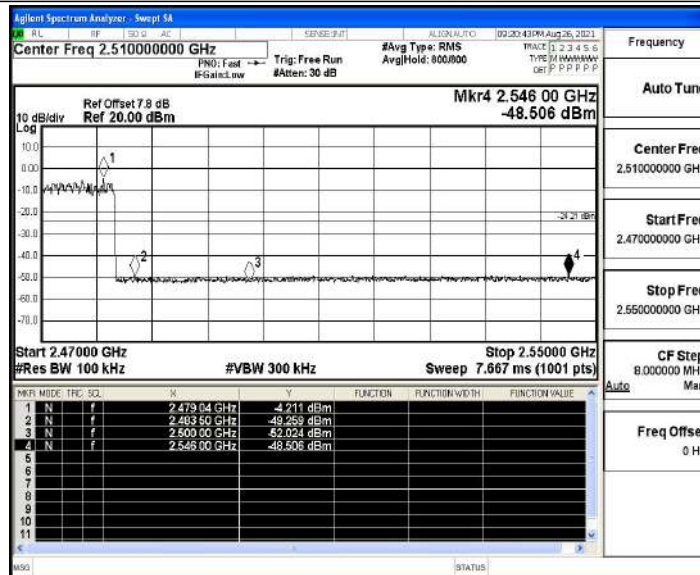




3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480





A.7 Conducted Spurious Emission

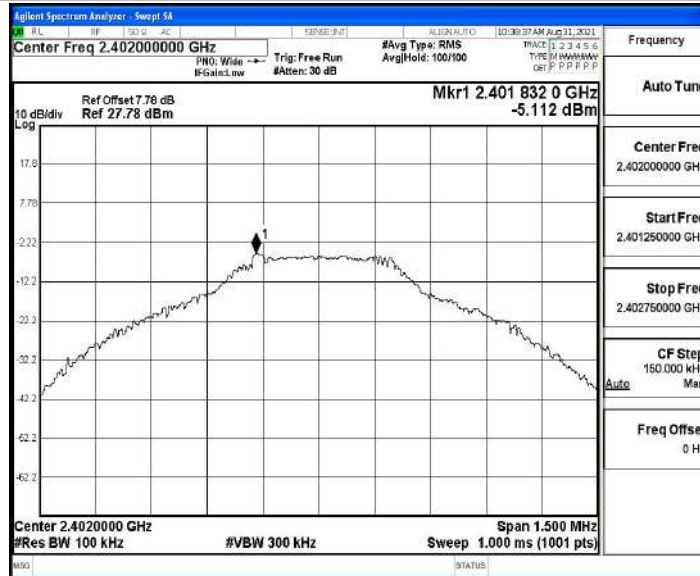
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-5.11	-5.11	---	PASS
			30~1000	-5.11	-58.84	≤ -25.11	PASS
			1000~26500	-5.11	-47.65	≤ -25.11	PASS
		2441	Reference	-3.70	-3.70	---	PASS
			30~1000	-3.70	-60.37	≤ -23.7	PASS
			1000~26500	-3.70	-47.92	≤ -23.7	PASS
		2480	Reference	-5.46	-5.46	---	PASS
			30~1000	-5.46	-59.45	≤ -25.46	PASS
			1000~26500	-5.46	-47.26	≤ -25.46	PASS
2DH5	Ant1	2402	Reference	-10.33	-10.33	---	PASS
			30~1000	-10.33	-61.01	≤ -30.33	PASS
			1000~26500	-10.33	-48.1	≤ -30.33	PASS
		2441	Reference	-8.68	-8.68	---	PASS
			30~1000	-8.68	-57.83	≤ -28.68	PASS
			1000~26500	-8.68	-47.21	≤ -28.68	PASS
		2480	Reference	-10.05	-10.05	---	PASS
			30~1000	-10.05	-61.73	≤ -30.05	PASS
			1000~26500	-10.05	-47.56	≤ -30.05	PASS
3DH5	Ant1	2402	Reference	-10.08	-10.08	---	PASS
			30~1000	-10.08	-54.58	≤ -30.08	PASS
			1000~26500	-10.08	-47.67	≤ -30.08	PASS
		2441	Reference	-8.38	-8.38	---	PASS
			30~1000	-8.38	-55.2	≤ -28.38	PASS
			1000~26500	-8.38	-48.01	≤ -28.38	PASS
		2480	Reference	-7.36	-7.36	---	PASS
			30~1000	-7.36	-58.02	≤ -27.36	PASS
			1000~26500	-7.36	-47.61	≤ -27.36	PASS

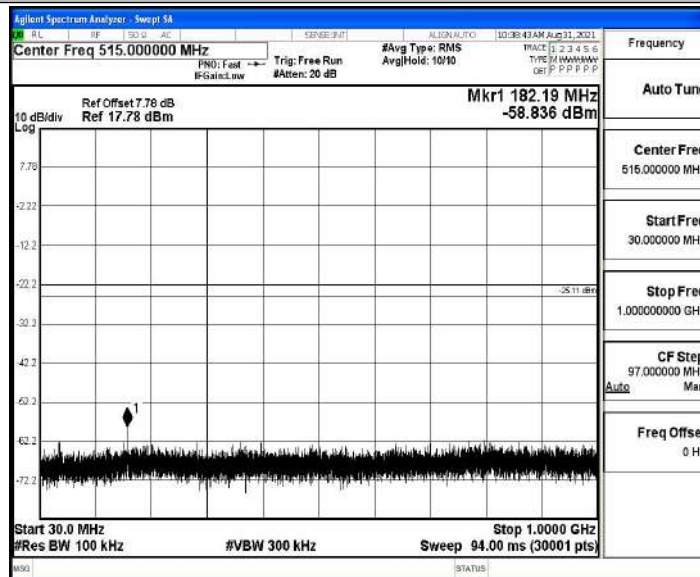


Test Graphs

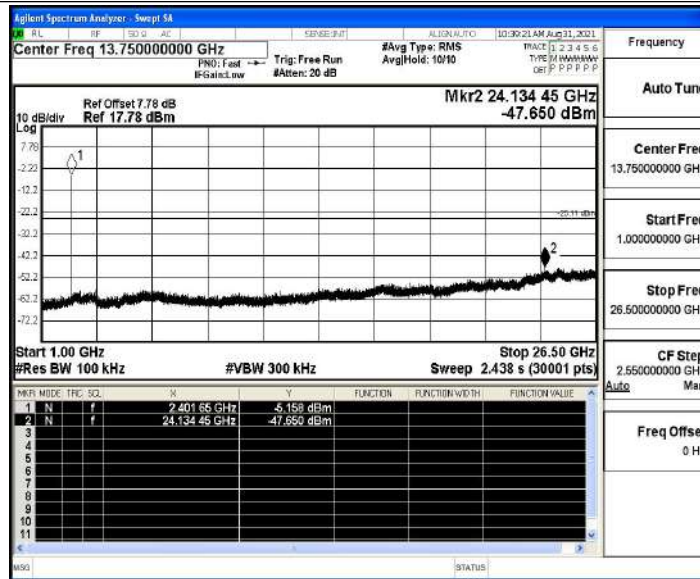
DH5_Ant1_2402_0~Reference



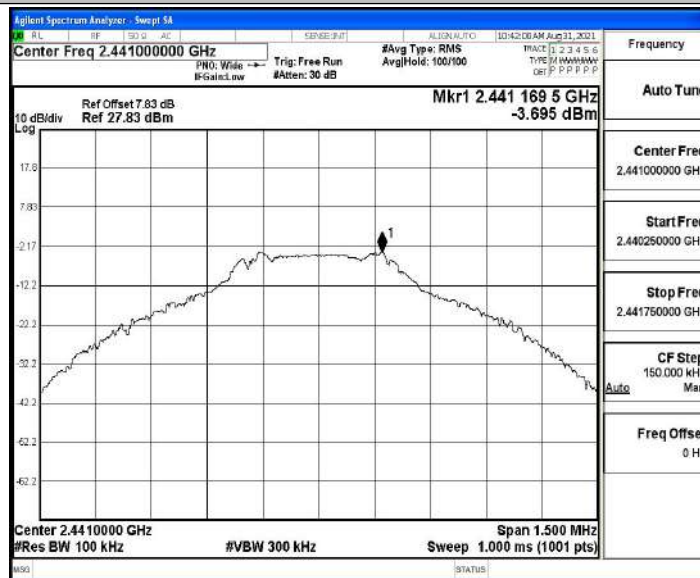
DH5_Ant1_2402_30~1000



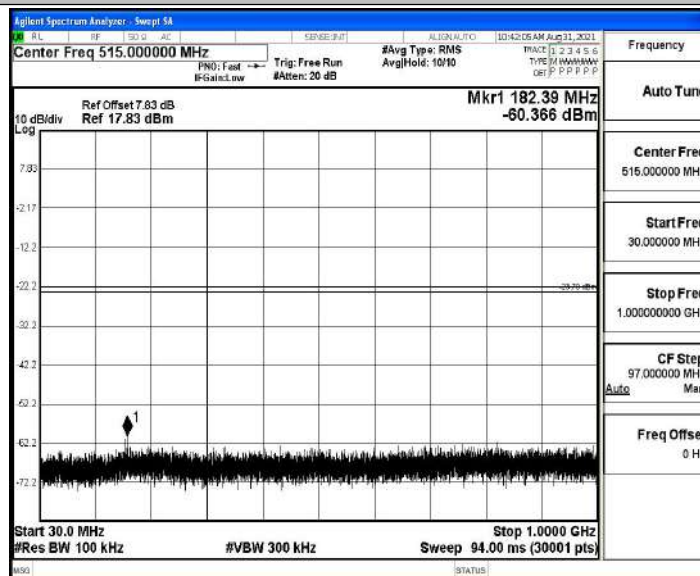
DH5_Ant1_2402_1000~26500



DH5_Ant1_2441_0~Reference

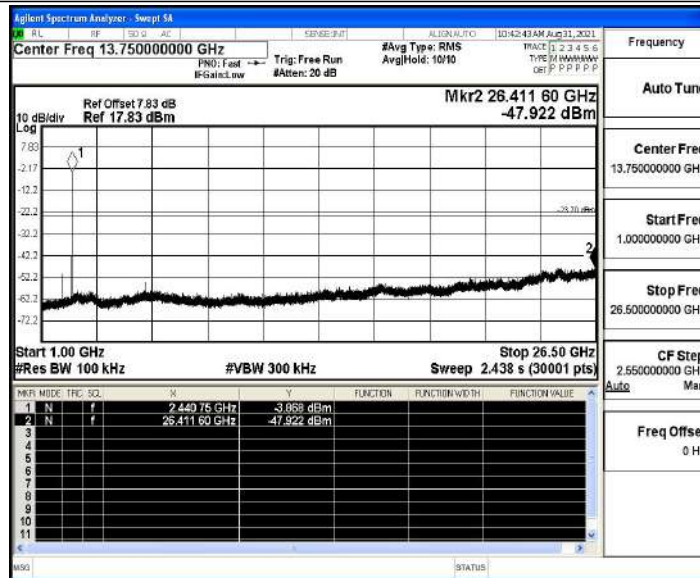


DH5_Ant1_2441_30~1000

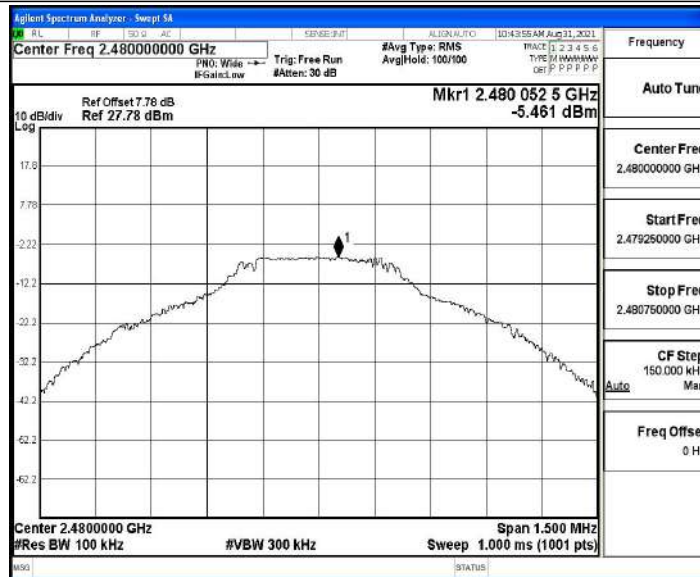




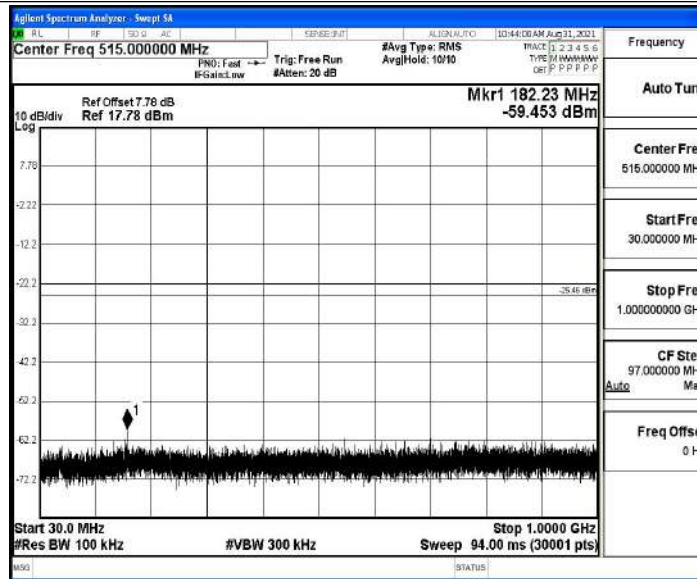
DH5_Ant1_2441_1000~26500



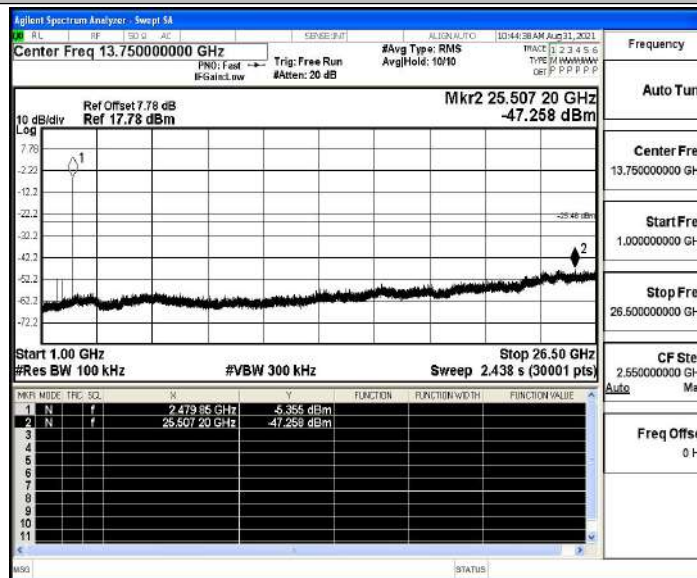
DH5_Ant1_2480_0~Reference



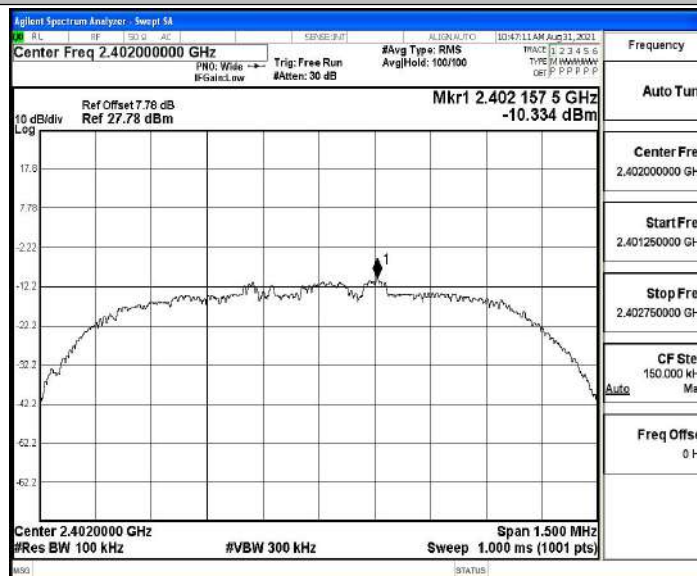
DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500

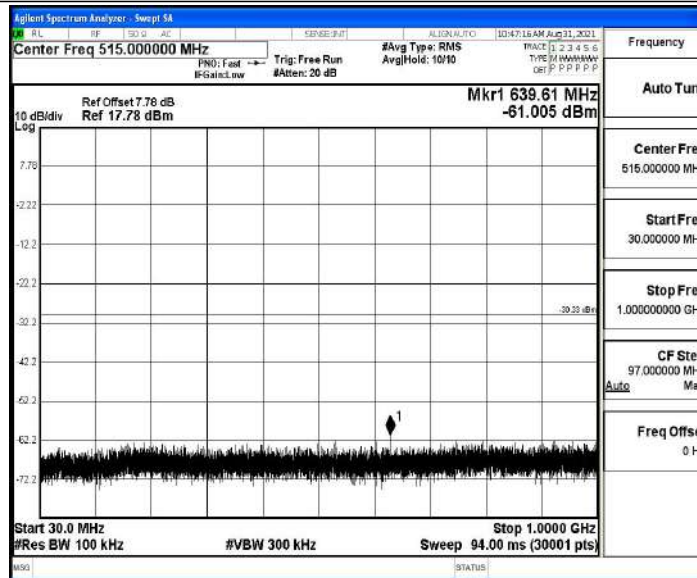


2DH5_Ant1_2402_0~Reference

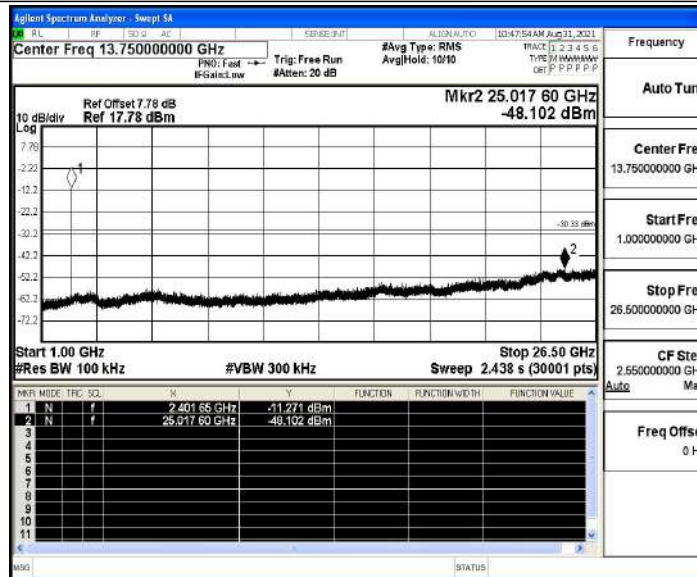




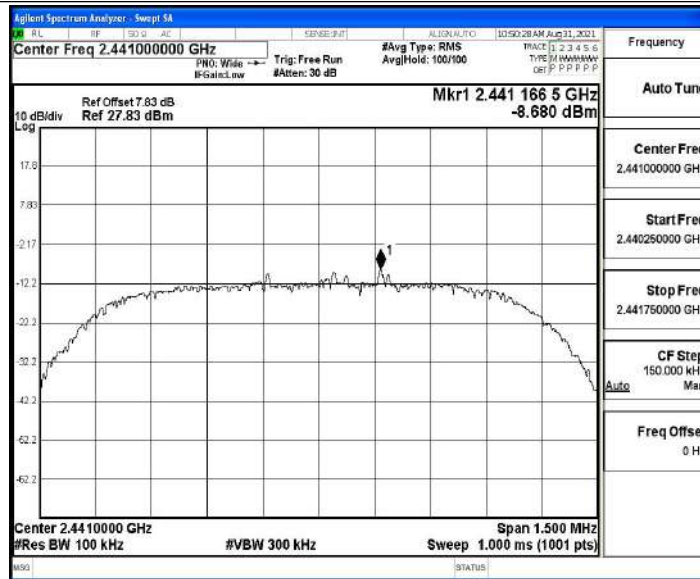
2DH5_Ant1_2402_30~1000



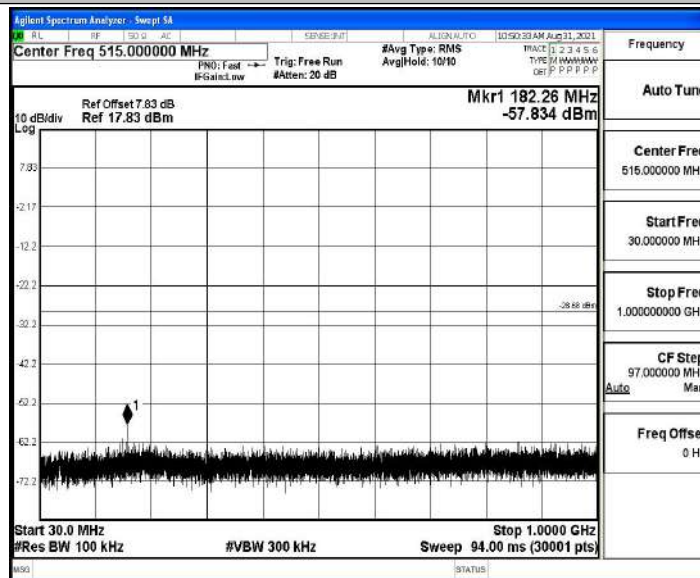
2DH5_Ant1_2402_1000~26500



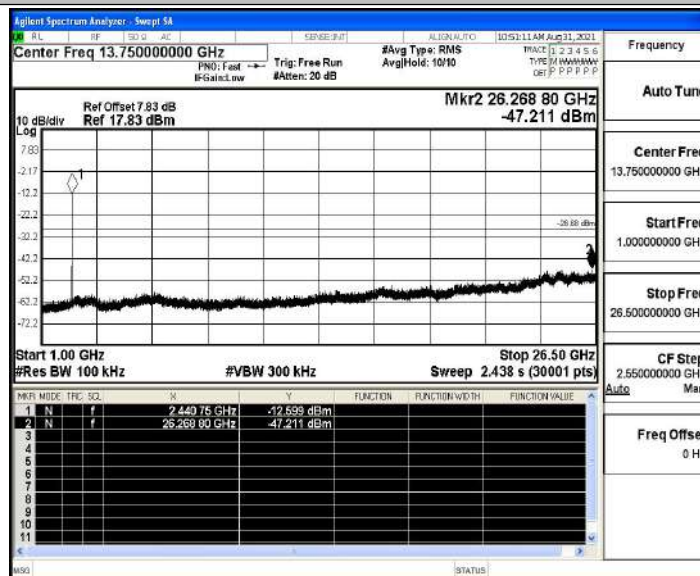
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000

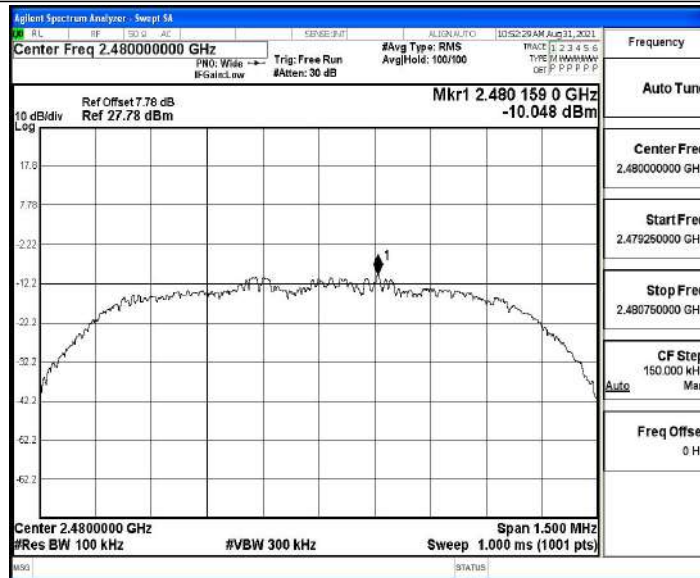


2DH5_Ant1_2441_1000~26500

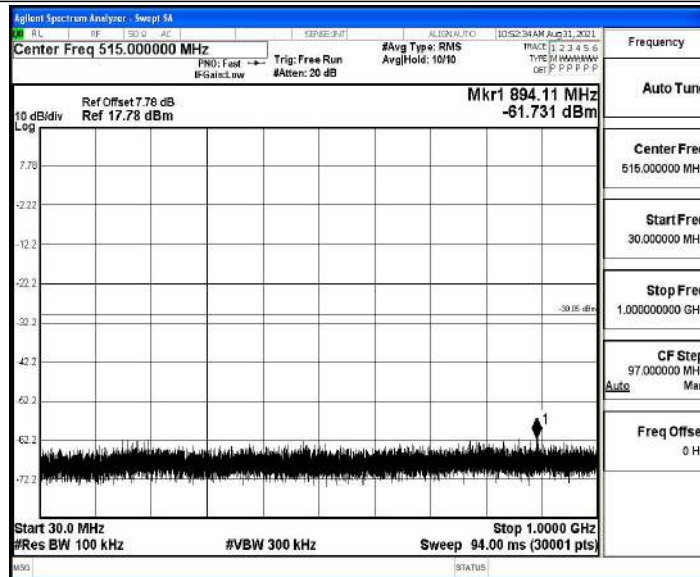




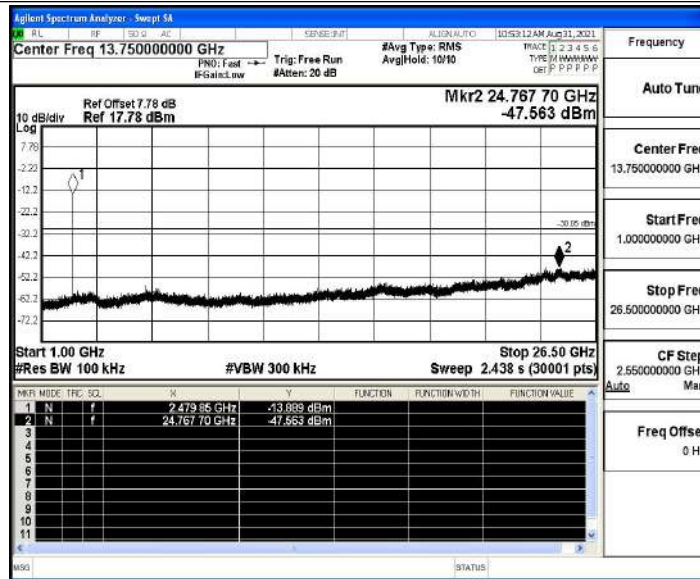
2DH5_Ant1_2480_0~Reference



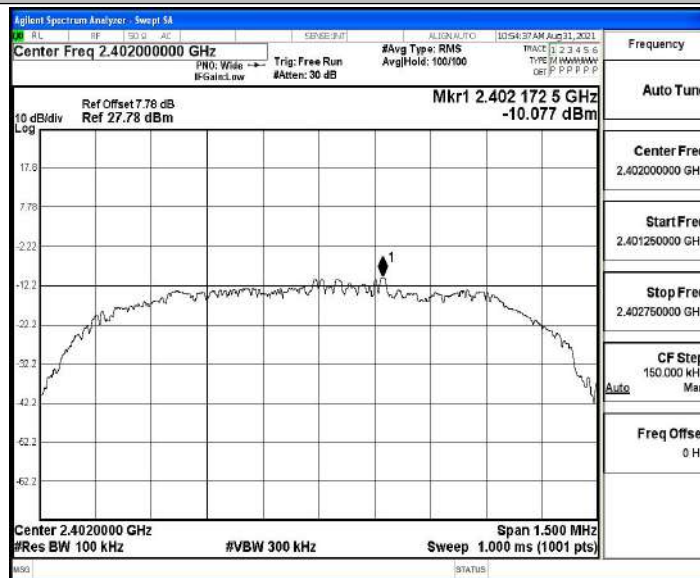
2DH5_Ant1_2480_30~1000



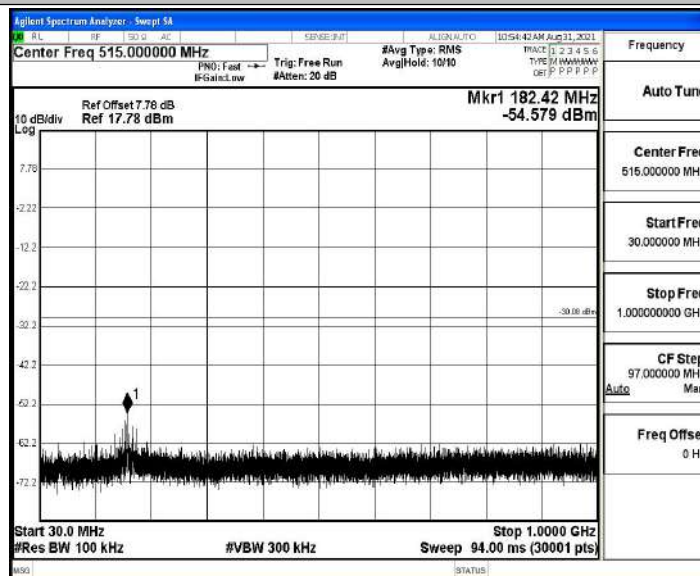
2DH5_Ant1_2480_1000~26500



3DH5_Ant1_2402_0~Reference

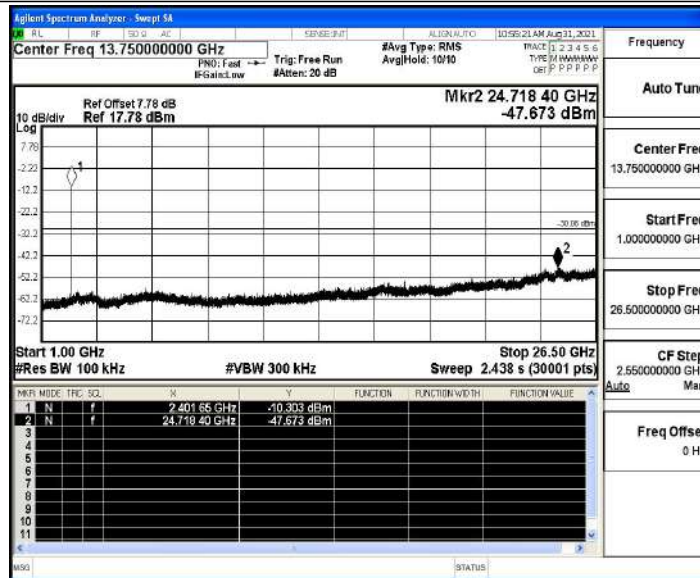


3DH5_Ant1_2402_30~1000

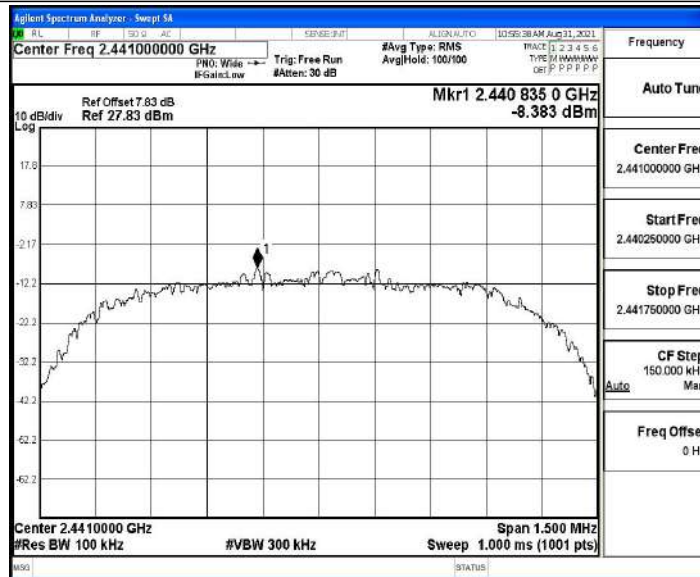




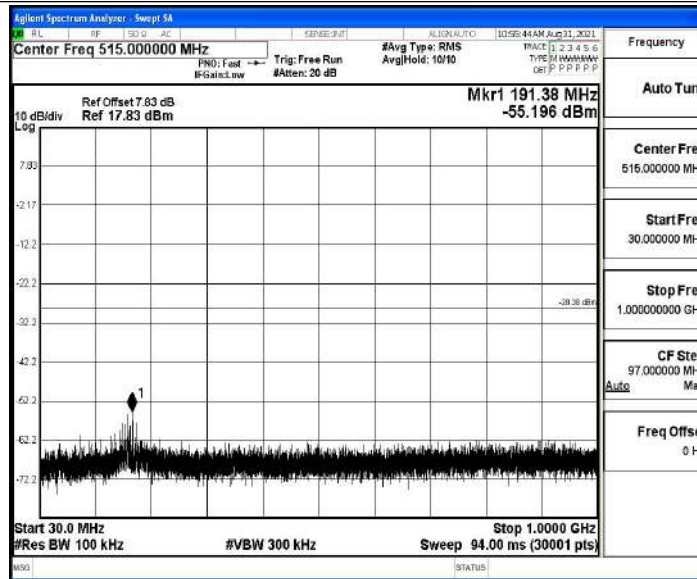
3DH5_Ant1_2402_1000~26500



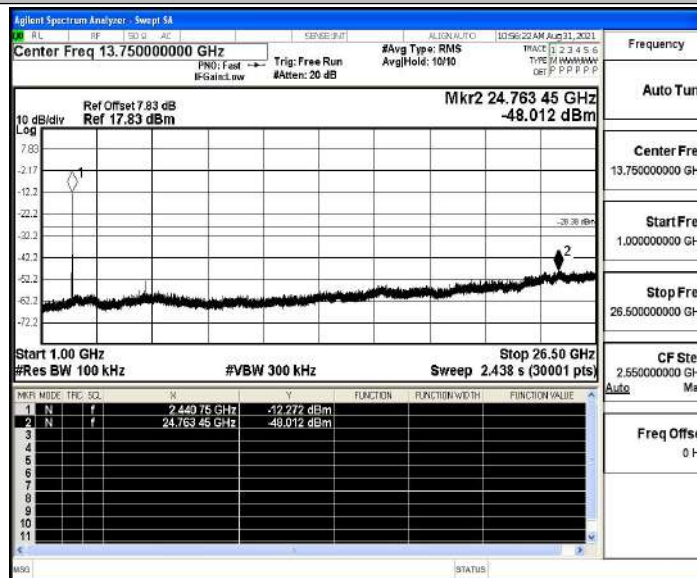
3DH5_Ant1_2441_0~Reference



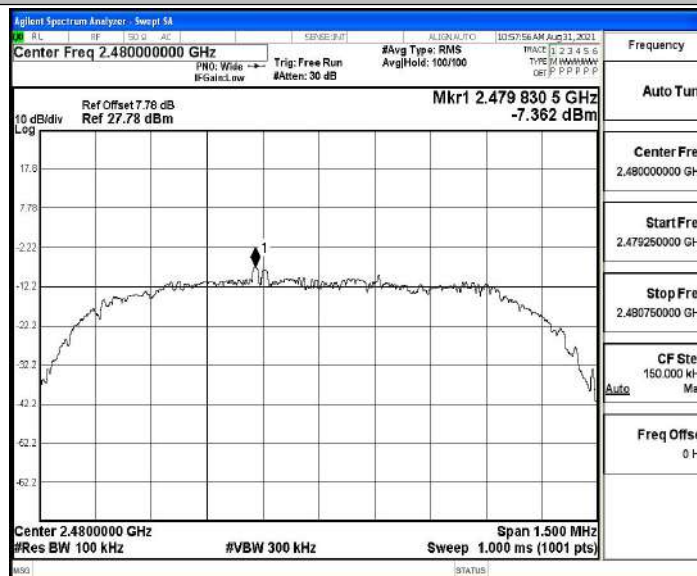
3DH5_Ant1_2441_30~1000



3DH5_Ant1_2441_1000~26500

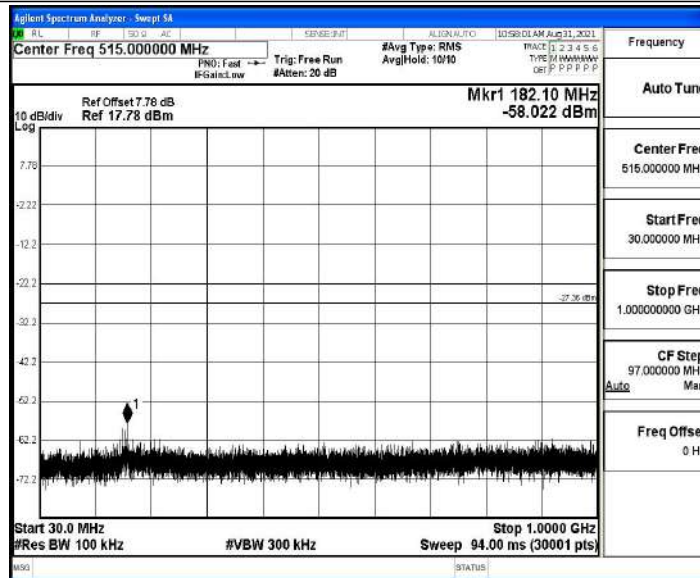


3DH5_Ant1_2480_0~Reference

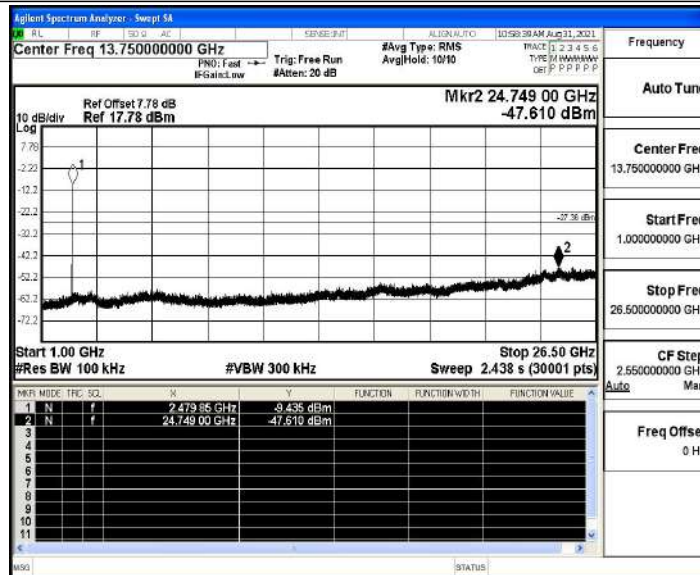




3DH5_Ant1_2480_30~1000



3DH5_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	-49.38	≤-41.20	45.82	≤54	PASS
				AV	2385.050	-48.63	≤-41.20	46.57	≤54	PASS
				AV	2390.000	-49.03	≤-41.20	46.17	≤54	PASS
				Peak	2310.000	-45.13	≤-21.20	50.07	≤74	PASS
				Peak	2385.050	-40	≤-21.20	55.20	≤74	PASS
				Peak	2390.000	-52.51	≤-21.20	42.69	≤74	PASS
		High	2480	AV	2483.500	-48.54	≤-41.20	46.66	≤54	PASS
				AV	2498.720	-48.11	≤-41.20	47.09	≤54	PASS
				AV	2500.000	-48.39	≤-41.20	46.81	≤54	PASS
				Peak	2483.500	-41.83	≤-21.20	53.37	≤74	PASS
				Peak	2495.280	-40.33	≤-21.20	54.87	≤74	PASS
				Peak	2500.000	-46.98	≤-21.20	48.22	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-49.43	≤-41.20	45.77	≤54	PASS
				AV	2385.890	-48.8	≤-41.20	46.40	≤54	PASS
				AV	2390.000	-48.96	≤-41.20	46.24	≤54	PASS
				Peak	2310.000	-48.31	≤-21.20	46.89	≤74	PASS
				Peak	2376.230	-40.49	≤-21.20	54.71	≤74	PASS
				Peak	2390.000	-46.32	≤-21.20	48.88	≤74	PASS
		High	2480	AV	2483.500	-48.47	≤-41.20	46.73	≤54	PASS
				AV	2499.600	-47.99	≤-41.20	47.21	≤54	PASS
				AV	2500.000	-48.48	≤-41.20	46.72	≤54	PASS
				Peak	2483.500	-49.01	≤-21.20	46.19	≤74	PASS
				Peak	2498.080	-40.92	≤-21.20	54.28	≤74	PASS
				Peak	2500.000	-47.01	≤-21.20	48.19	≤74	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-49.31	≤-41.20	45.89	≤54	PASS
				AV	2382.425	-48.72	≤-41.20	46.48	≤54	PASS
				AV	2390.000	-49.15	≤-41.20	46.05	≤54	PASS
				Peak	2310.000	-49.82	≤-21.20	45.38	≤74	PASS
				Peak	2379.170	-40.97	≤-21.20	54.23	≤74	PASS
				Peak	2390.000	-44.27	≤-21.20	50.93	≤74	PASS
		High	2480	AV	2483.500	-48.73	≤-41.20	46.47	≤54	PASS
				AV	2492.800	-48.12	≤-41.20	47.08	≤54	PASS
				AV	2500.000	-48.15	≤-41.20	47.05	≤54	PASS
				Peak	2483.500	-50.61	≤-21.20	44.59	≤74	PASS
				Peak	2494.240	-39.53	≤-21.20	55.67	≤74	PASS
				Peak	2500.000	-43.32	≤-21.20	51.88	≤74	PASS



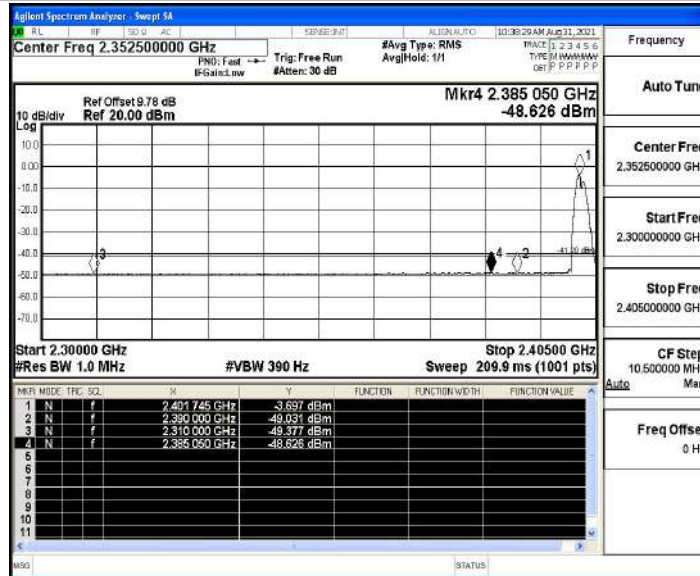
Note:

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.

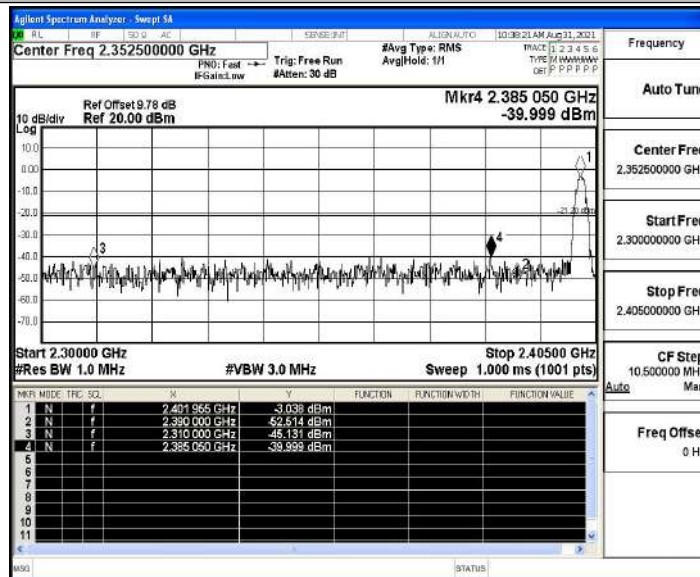


Test Graphs

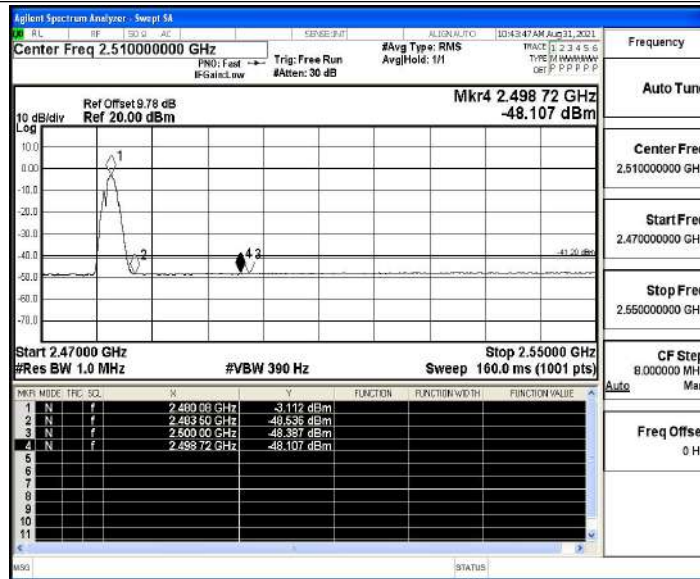
DH5_Ant1_Low_2402_AV



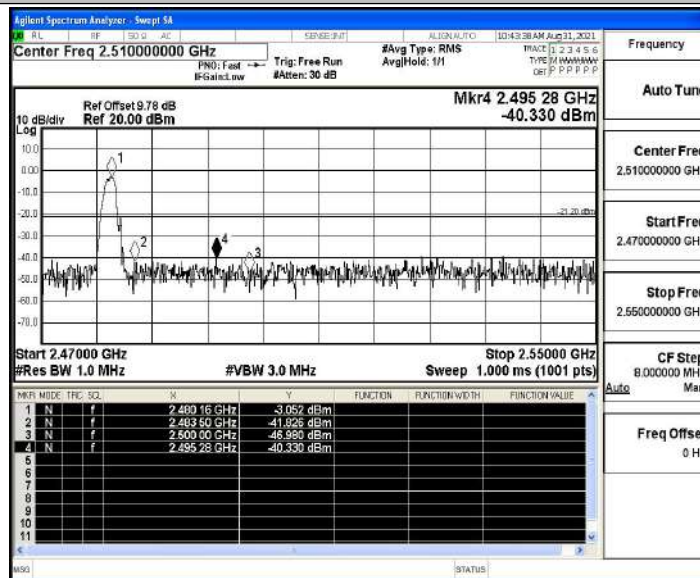
DH5_Ant1_Low_2402_Peak



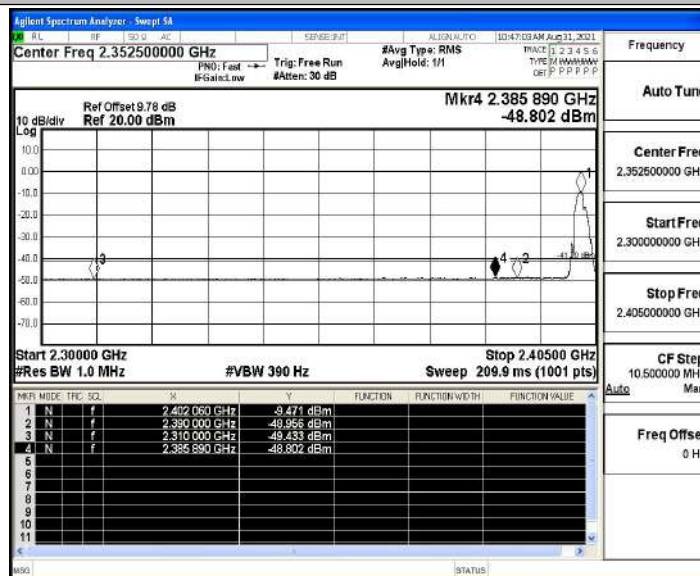
DH5_Ant1_High_2480_AV



DH5_Ant1_High_2480_Peak

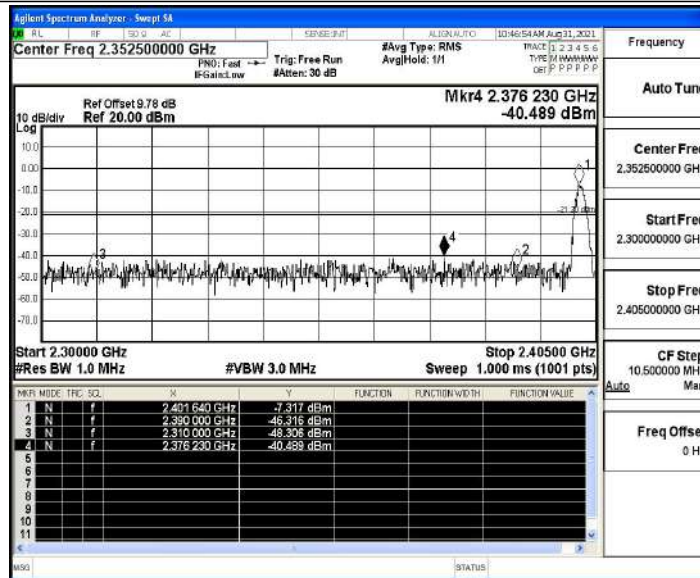


2DH5_Ant1_Low_2402_AV

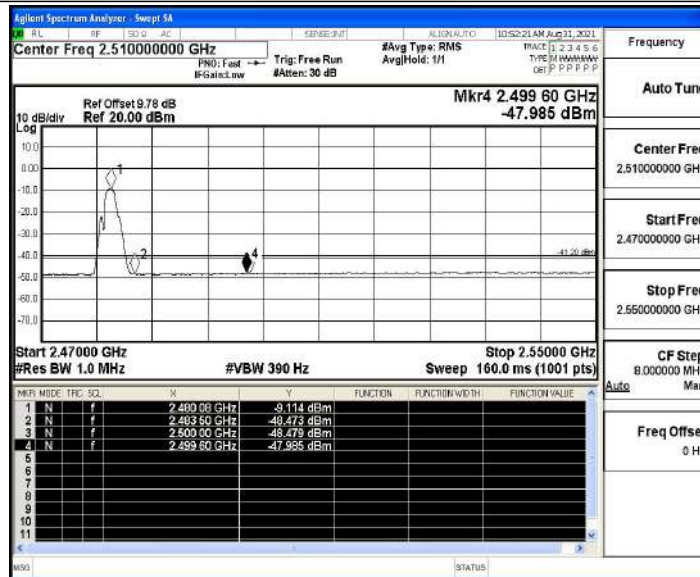




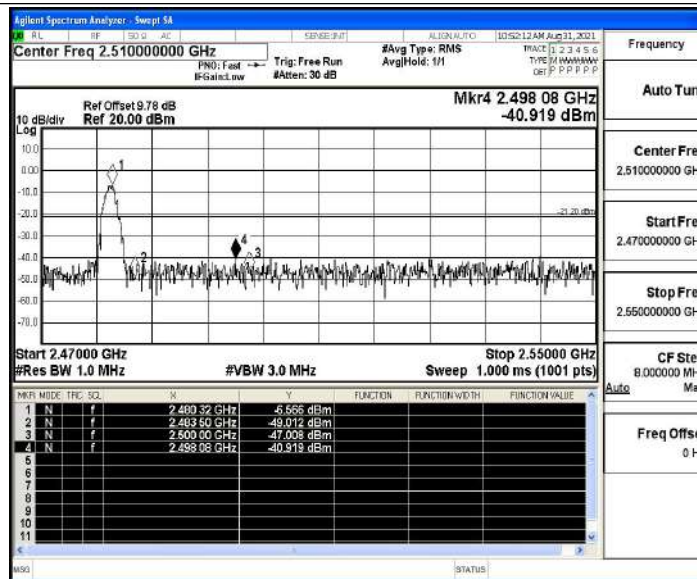
2DH5_Ant1_Low_2402_Peak



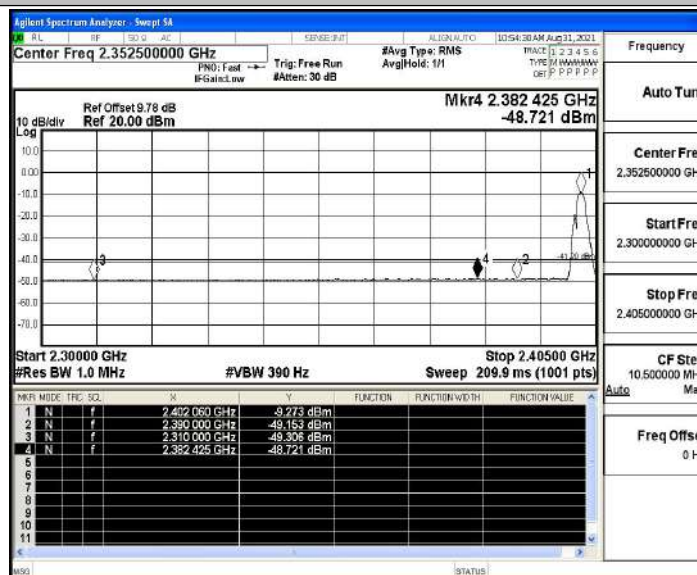
2DH5_Ant1_High_2480_AV



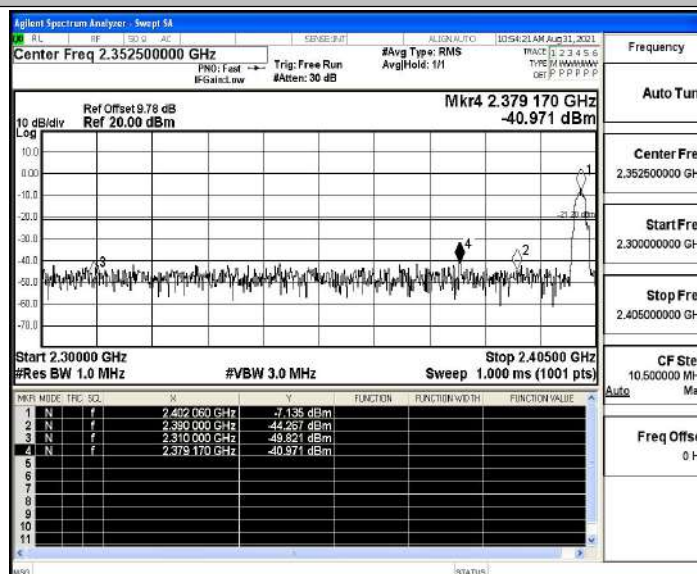
2DH5_Ant1_High_2480_Peak



3DH5_Ant1_Low_2402_AV

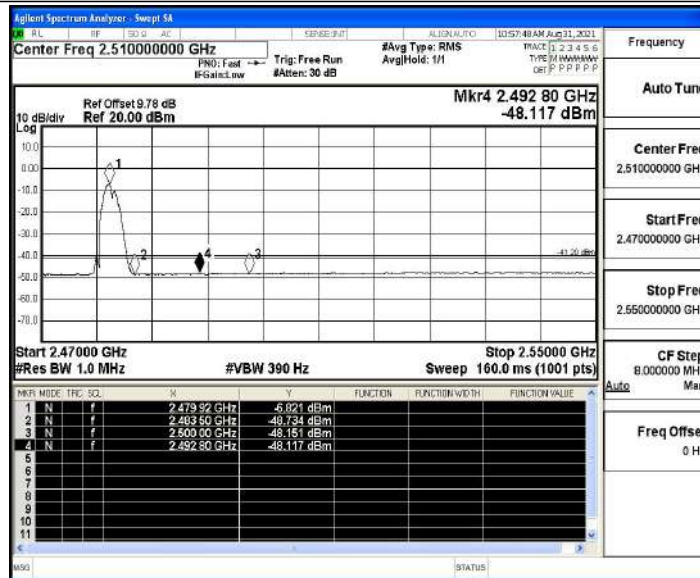


3DH5_Ant1_Low_2402_Peak





3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak

