



Appendix A

RF Test Data for BT V5.0(DSS) (Conducted Measurement)

Product Name: Alarm Clock Speaker Dock

Trade Mark: EZVALO

Test Model: CSD01

Environmental Conditions

Temperature:	22.6℃
Relative Humidity:	53.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan



A.1 20dB Emission Bandwidth

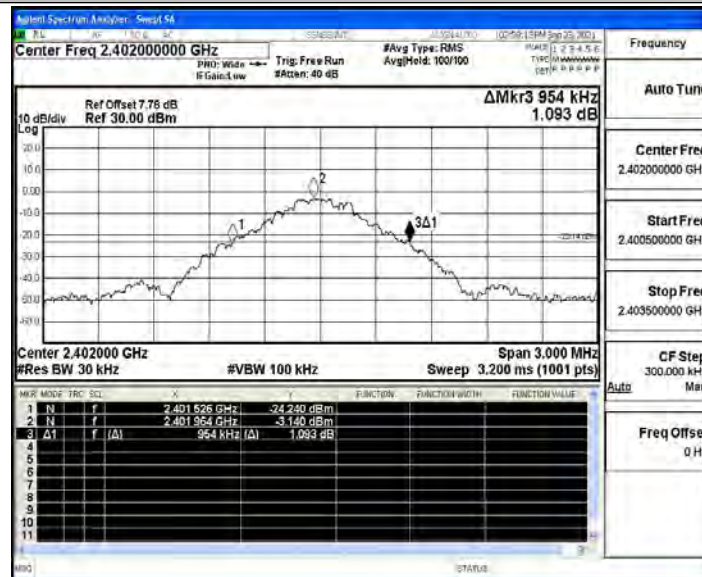
Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.954	2401.526	2402.480	---	PASS
		2441	0.939	2440.526	2441.465	---	PASS
		2480	0.957	2479.523	2480.480	---	PASS
2DH5	Ant1	2402	1.359	2401.313	2402.672	---	PASS
		2441	1.359	2440.313	2441.672	---	PASS
		2480	1.368	2479.307	2480.675	---	PASS

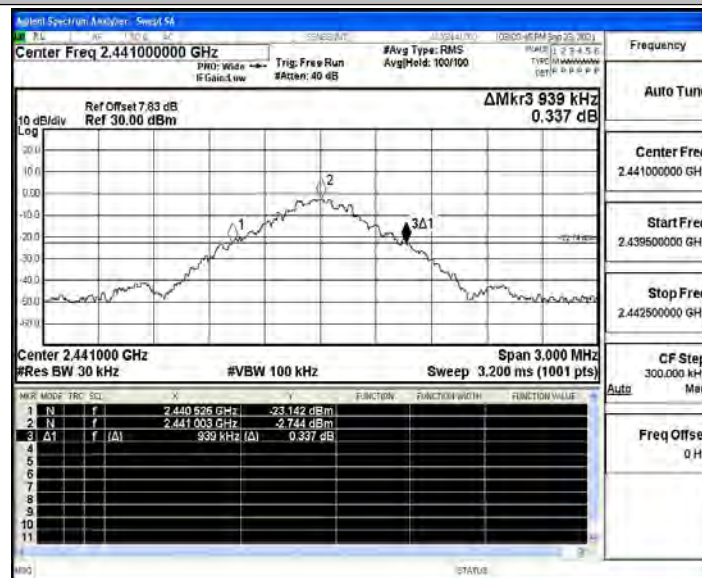


Test Graphs

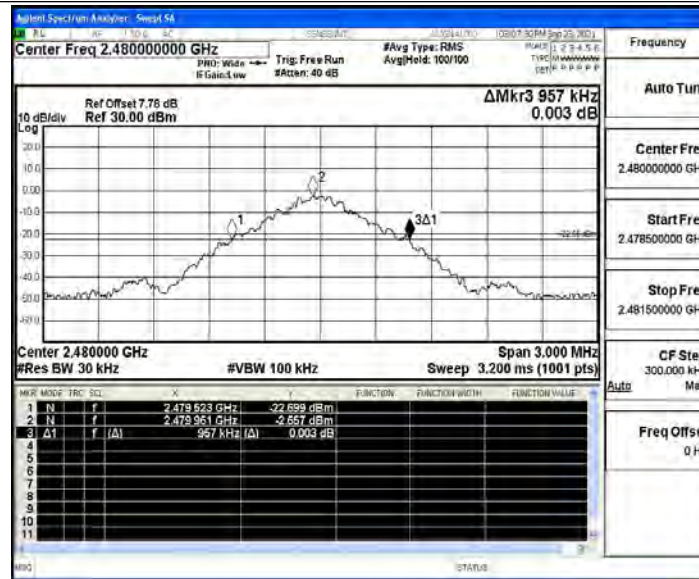
DH5_Ant1_2402



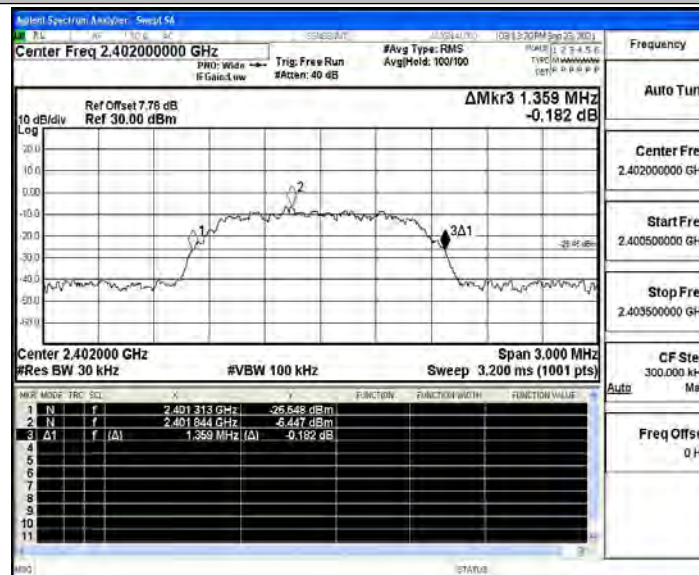
DH5_Ant1_2441



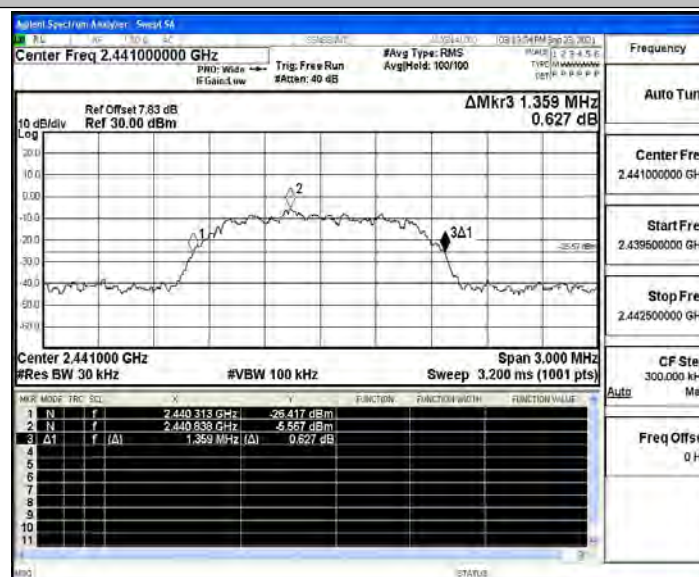
DH5_Ant1_2480



2DH5_Ant1_2402

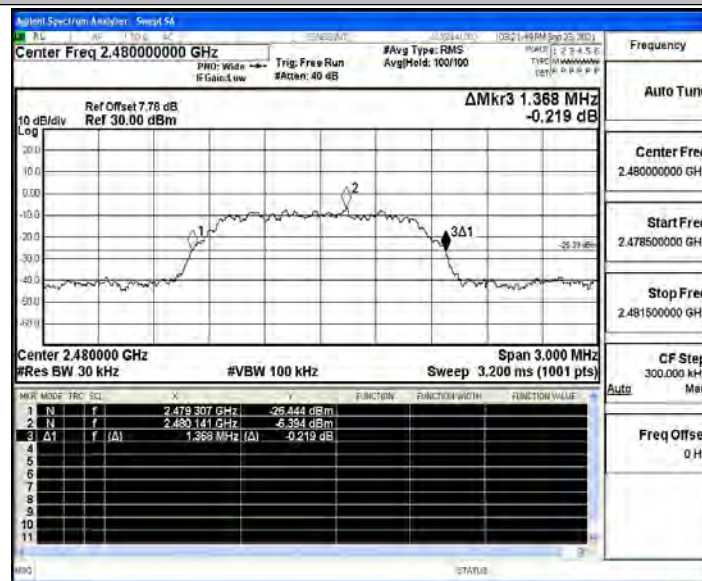


2DH5_Ant1_2441





2DH5_Ant1_2480





Appendix A.2: Occupied Channel Bandwidth

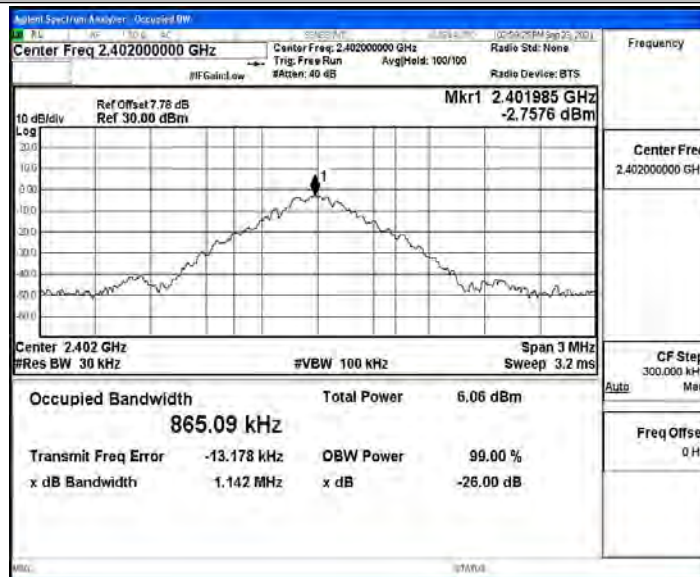
Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86509	2401.554	2402.419	---	PASS
		2441	0.86797	2440.553	2441.420	---	PASS
		2480	0.85735	2479.555	2480.413	---	PASS
2DH5	Ant1	2402	1.1863	2401.392	2402.579	---	PASS
		2441	1.1972	2440.386	2441.583	---	PASS
		2480	1.1893	2479.391	2480.580	---	PASS

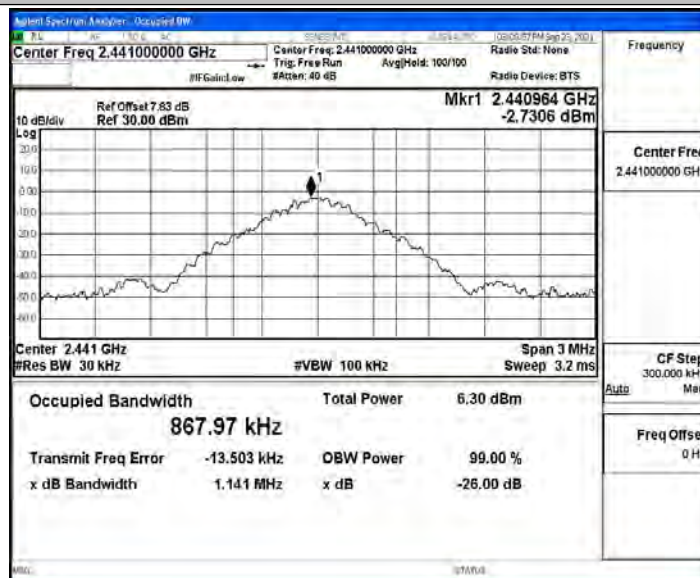


Test Graphs

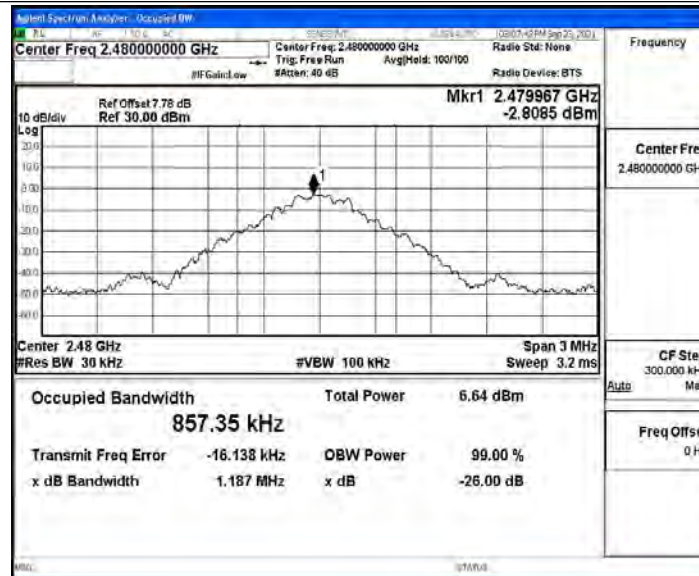
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



2DH5_Ant1_2402



2DH5_Ant1_2441





2DH5_Ant1_2480





A.3 Maximum peak conducted output power

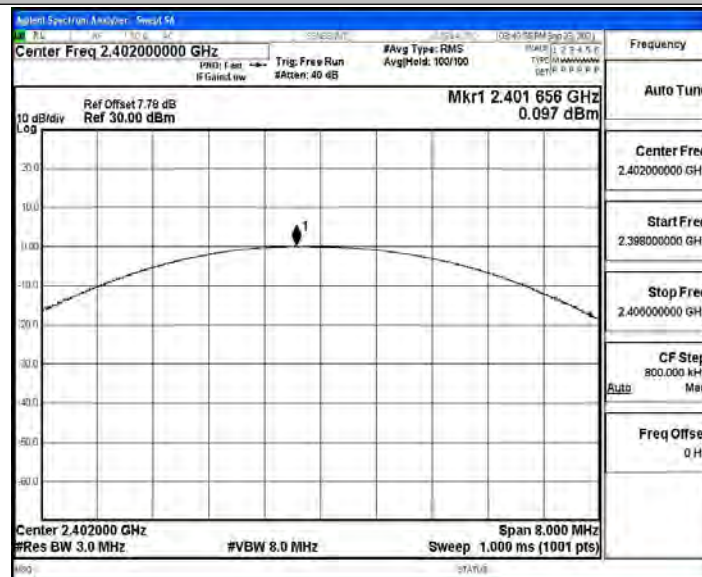
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	0.1	≤ 20.97	PASS
		2441	0.39	≤ 20.97	PASS
		2480	0.47	≤ 20.97	PASS
2DH5	Ant1	2402	0.49	≤ 20.97	PASS
		2441	0.79	≤ 20.97	PASS
		2480	0.83	≤ 20.97	PASS

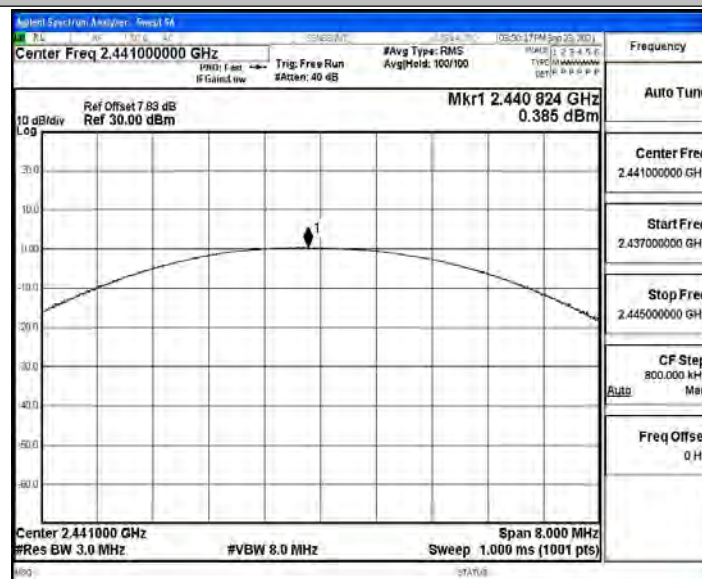


Test Graphs

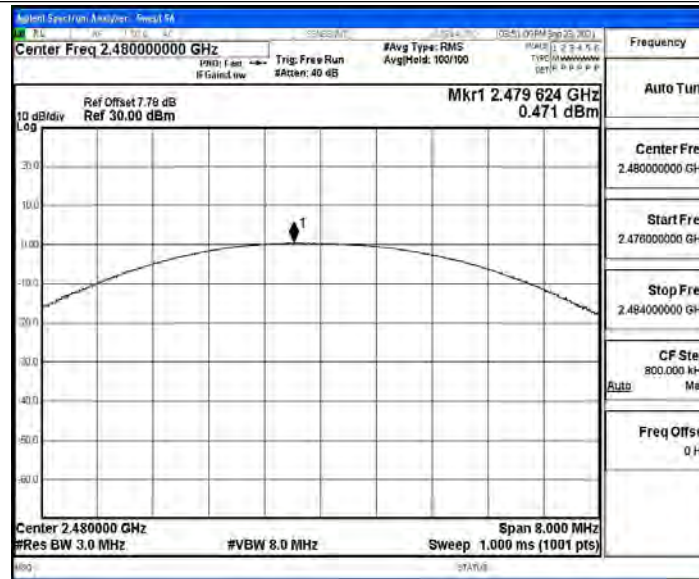
DH5_Ant1_2402



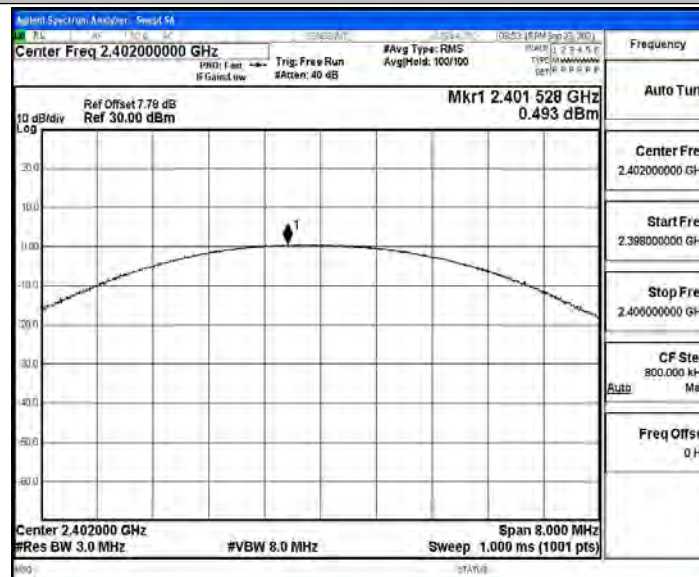
DH5_Ant1_2441



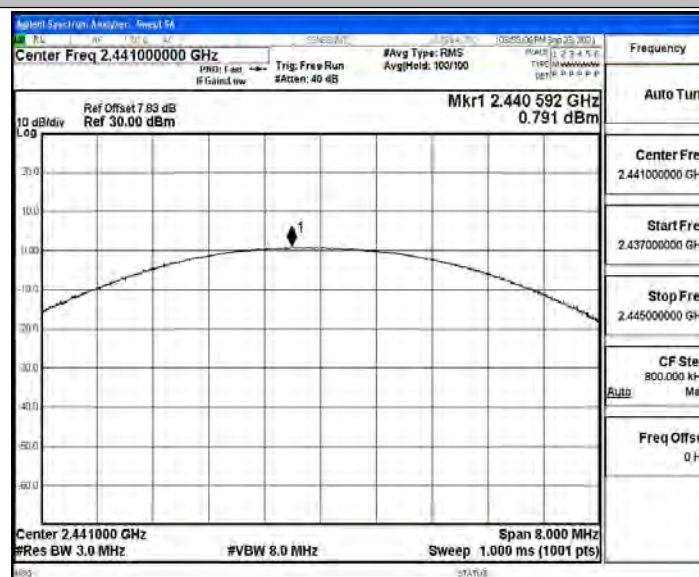
DH5_Ant1_2480



2DH5_Ant1_2402

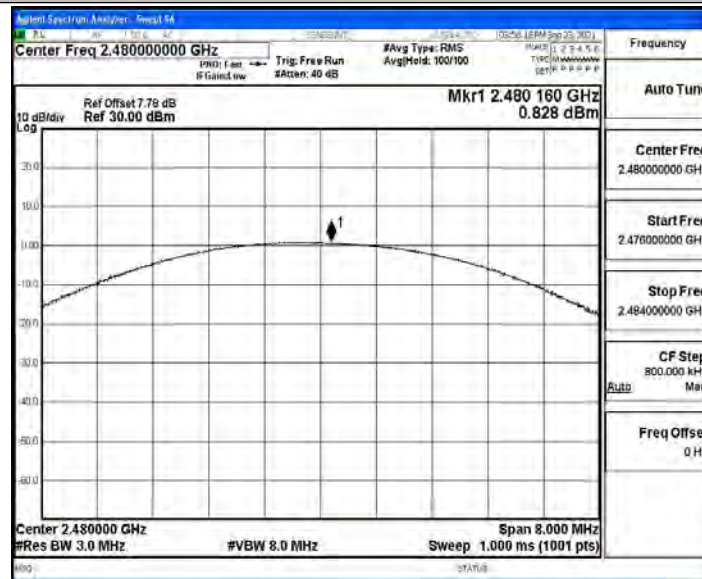


2DH5_Ant1_2441





2DH5_Ant1_2480





A.4 Carrier frequency separation

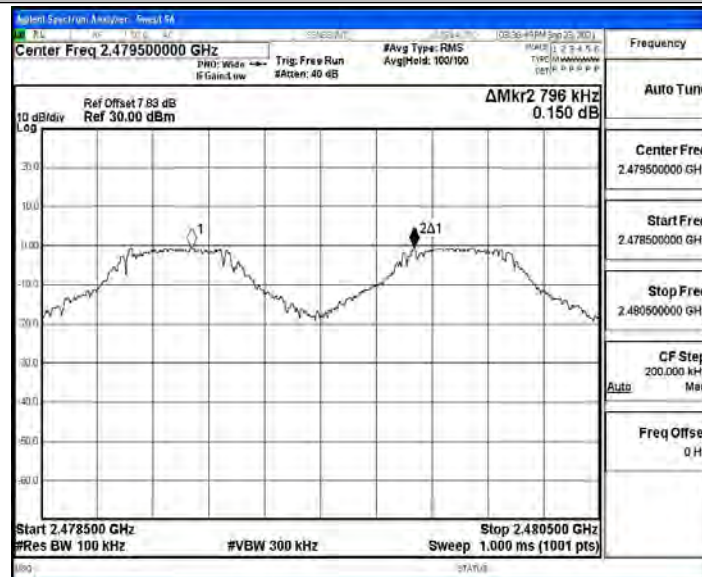
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	Hop	0.796	≥ 0.638	PASS
2DH5	Ant1	Hop	0.998	≥ 0.912	PASS

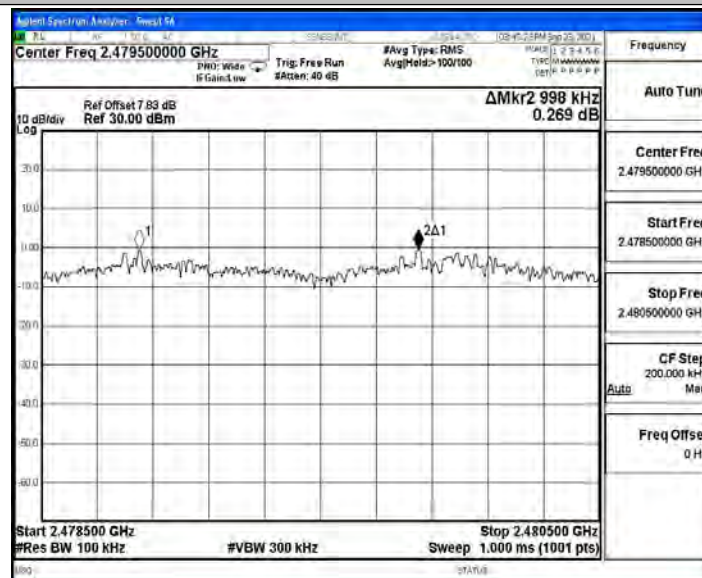


Test Graphs

DH5_Ant1_Hop



2DH5_Ant1_Hop





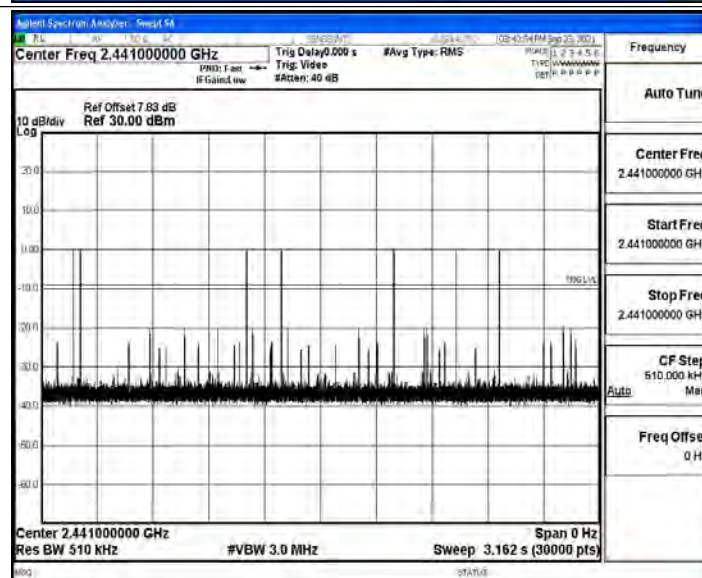
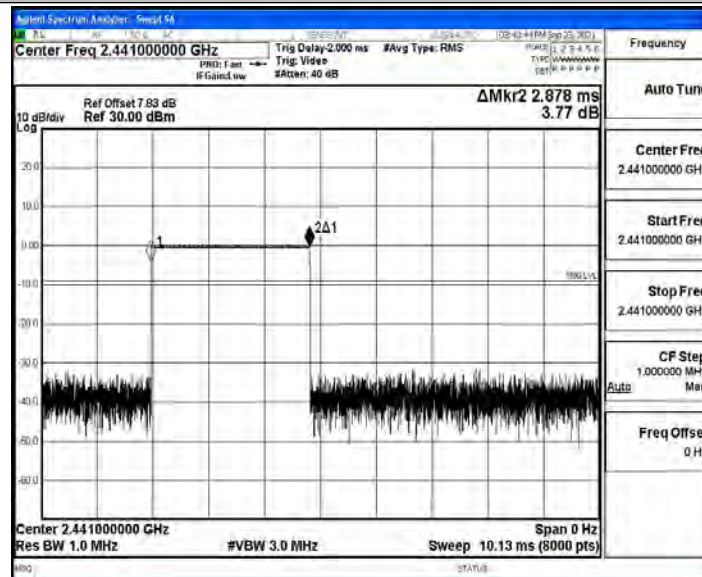
A.5 Time of occupancy

Test Result

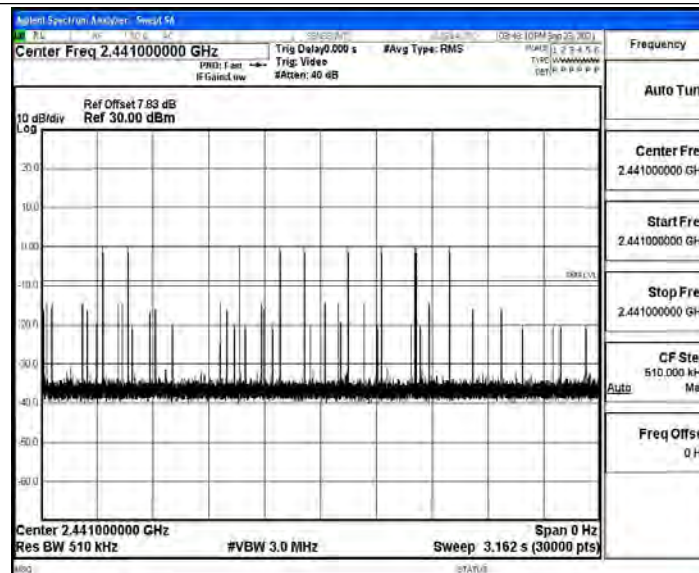
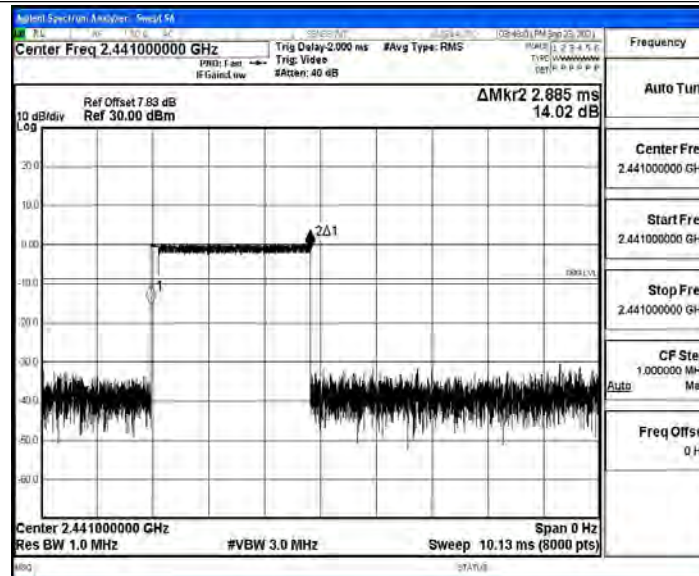
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	80	0.23	≤0.4	PASS
2DH5	Ant1	Hop	2.89	110	0.317	≤0.4	PASS

Test Graphs

DH5_Ant1_Hop



2DH5_Ant1_Hop





A.6 Number of hopping channels

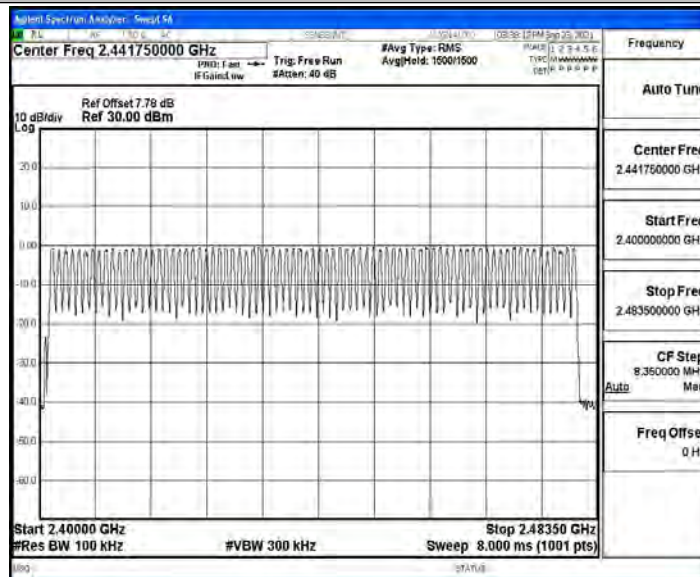
Test Result

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

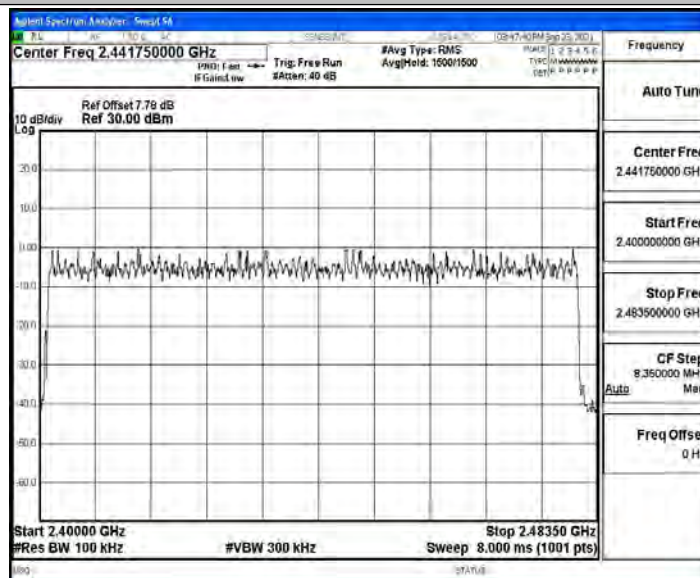


Test Graphs

DH5_Ant1_Hop



2DH5_Ant1_Hop





A.7 Band edge measurements

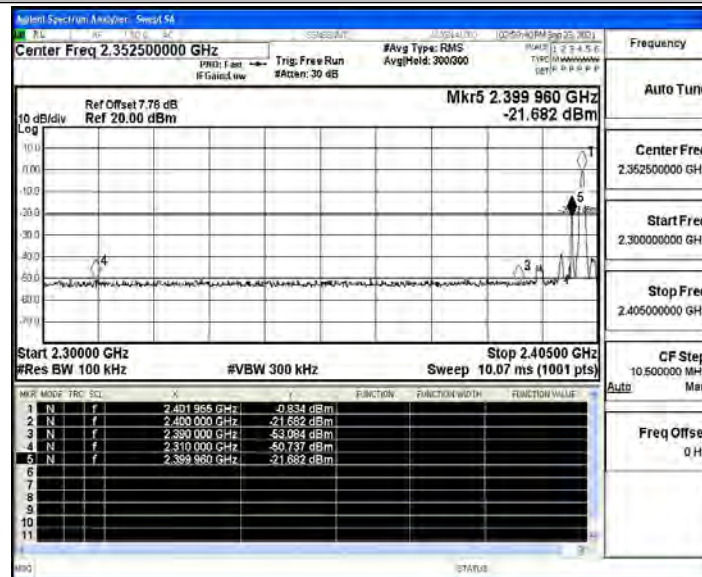
Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.83	-21.68	≤ -20.83	PASS
		High	2480	-0.42	-48.38	≤ -20.42	PASS
		Low	Hop_2402	-1.10	-49.82	≤ -21.1	PASS
		High	Hop_2480	-0.48	-47.99	≤ -20.48	PASS
2DH5	Ant1	Low	2402	-0.86	-21.44	≤ -20.86	PASS
		High	2480	-0.18	-48.55	≤ -20.18	PASS
		Low	Hop_2402	-2.15	-49.36	≤ -22.15	PASS
		High	Hop_2480	-2.30	-47.9	≤ -22.3	PASS

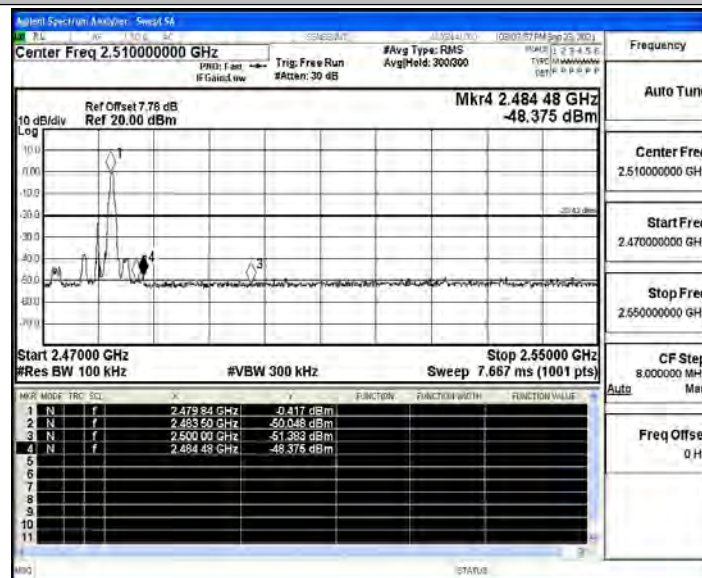


Test Graphs

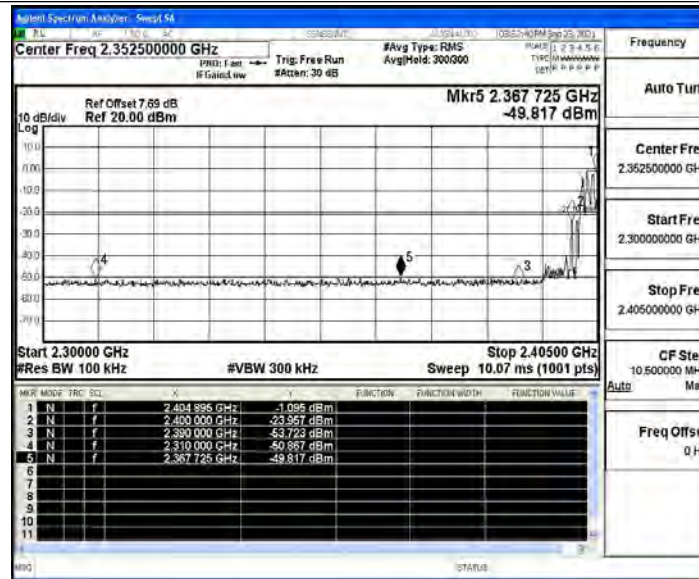
DH5_Ant1_Low_2402



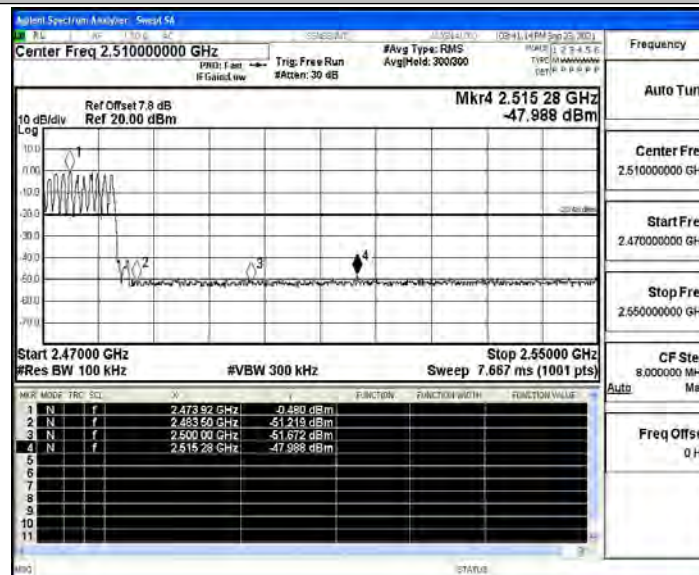
DH5_Ant1_High_2480



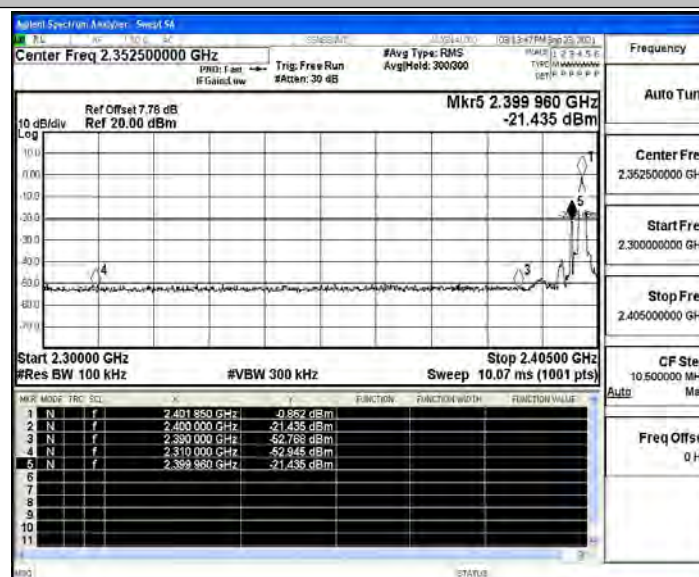
DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480

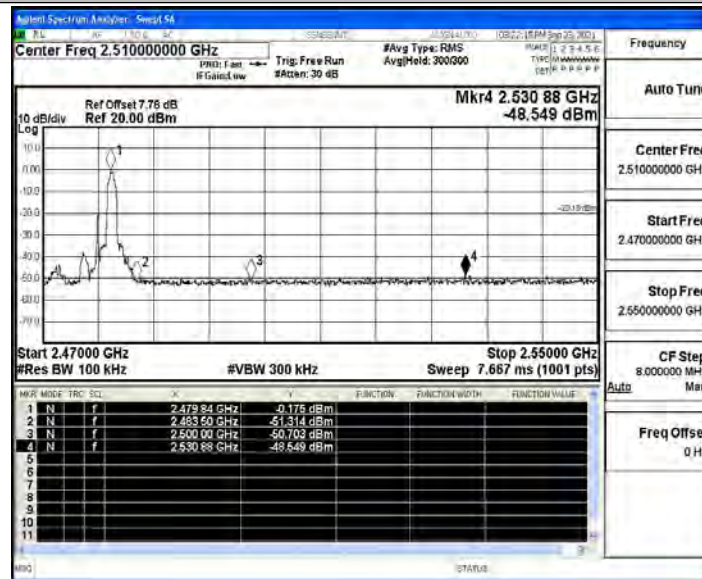


2DH5_Ant1_Low_2402

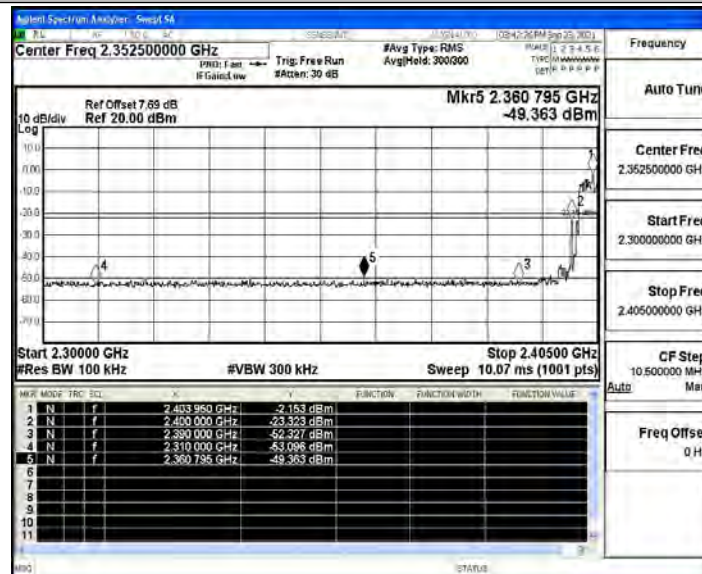




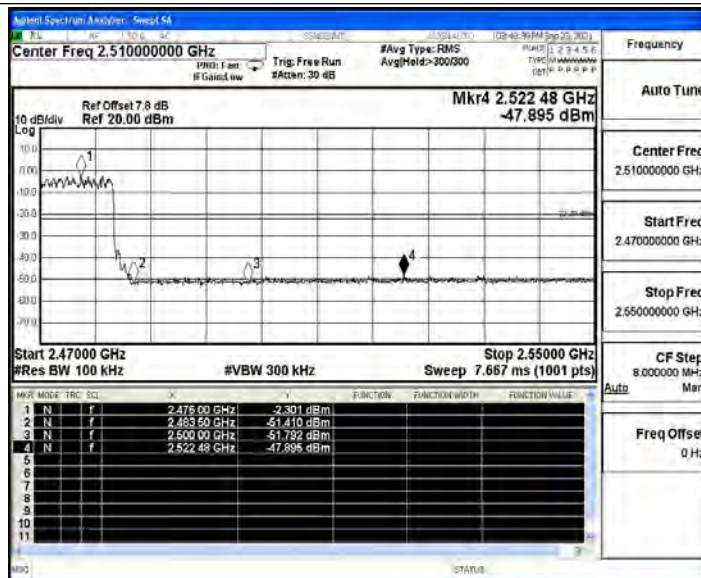
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480





A.8 Conducted Spurious Emission

Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-1.24	-1.24	---	PASS
			30~1000	-1.24	-59.98	≤ -21.24	PASS
			1000~26500	-1.24	-43.18	≤ -21.24	PASS
		2441	Reference	-0.79	-0.79	---	PASS
			30~1000	-0.79	-57.56	≤ -20.79	PASS
			1000~26500	-0.79	-42.26	≤ -20.79	PASS
		2480	Reference	-0.62	-0.62	---	PASS
			30~1000	-0.62	-55.14	≤ -20.62	PASS
			1000~26500	-0.62	-43.34	≤ -20.62	PASS
2DH5	Ant1	2402	Reference	-0.86	-0.86	---	PASS
			30~1000	-0.86	-59.38	≤ -20.86	PASS
			1000~26500	-0.86	-47	≤ -20.86	PASS
		2441	Reference	-0.59	-0.59	---	PASS
			30~1000	-0.59	-56.23	≤ -20.59	PASS
			1000~26500	-0.59	-45.21	≤ -20.59	PASS
		2480	Reference	-0.76	-0.76	---	PASS
			30~1000	-0.76	-59.09	≤ -20.76	PASS
			1000~26500	-0.76	-45.8	≤ -20.76	PASS

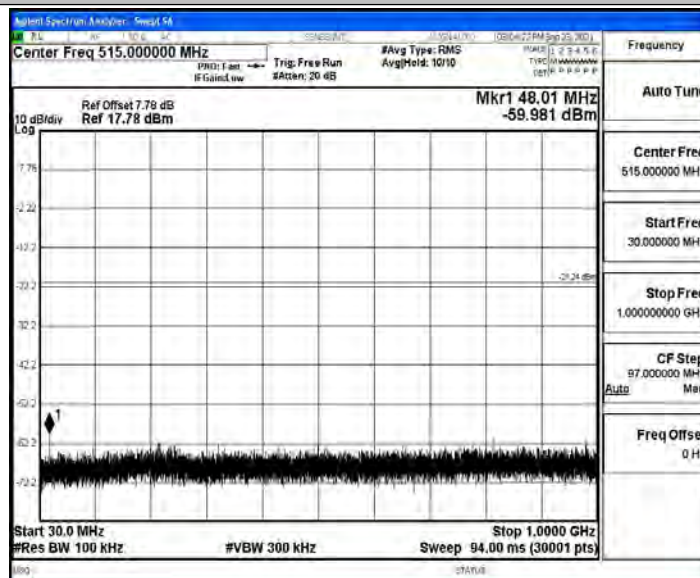


Test Graphs

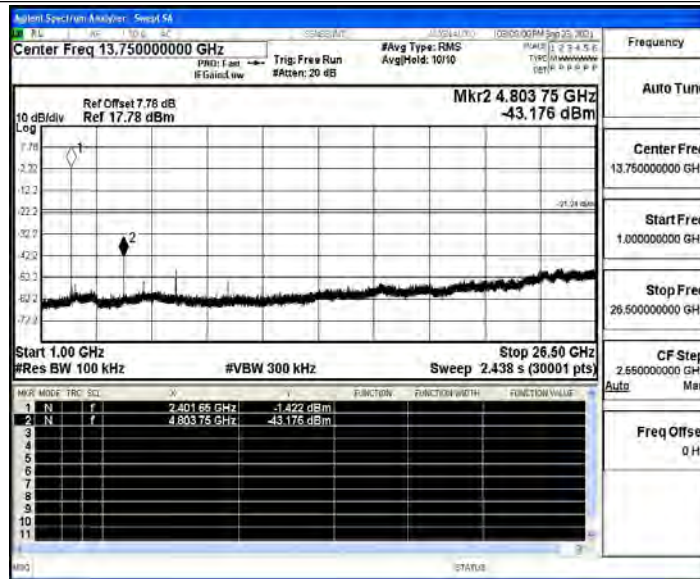
DH5_Ant1_2402_0~Reference



DH5_Ant1_2402_30~1000



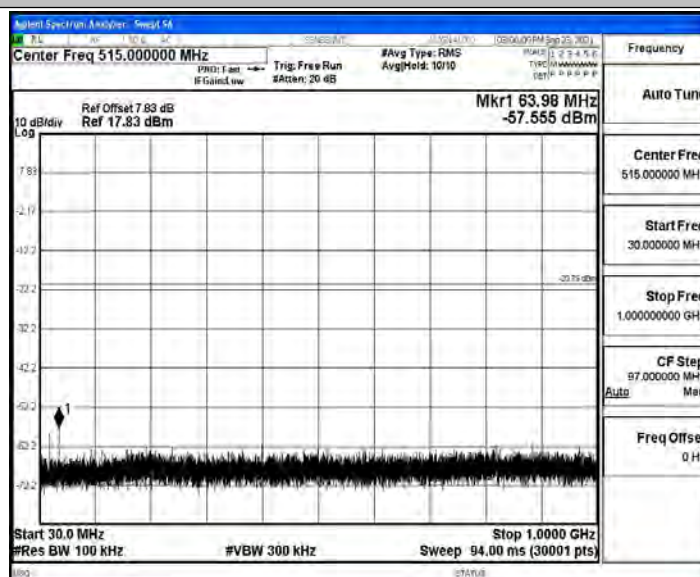
DH5_Ant1_2402_1000~26500



DH5_Ant1_2441_0~Reference

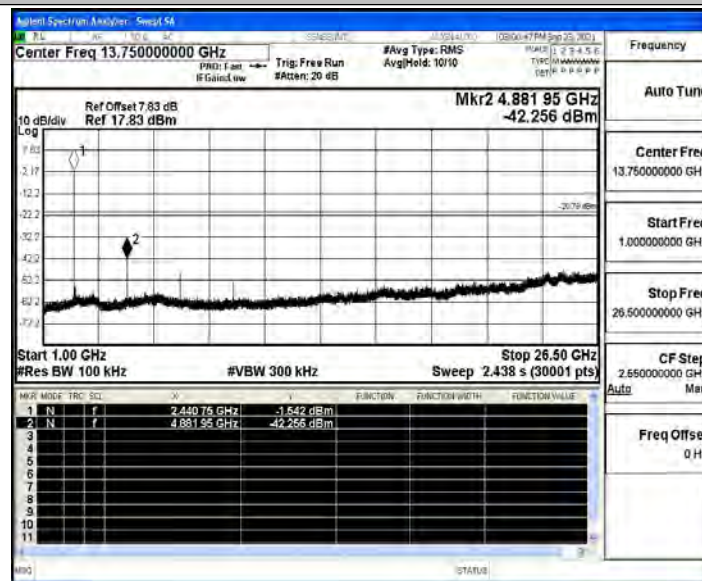


DH5_Ant1_2441_30~1000

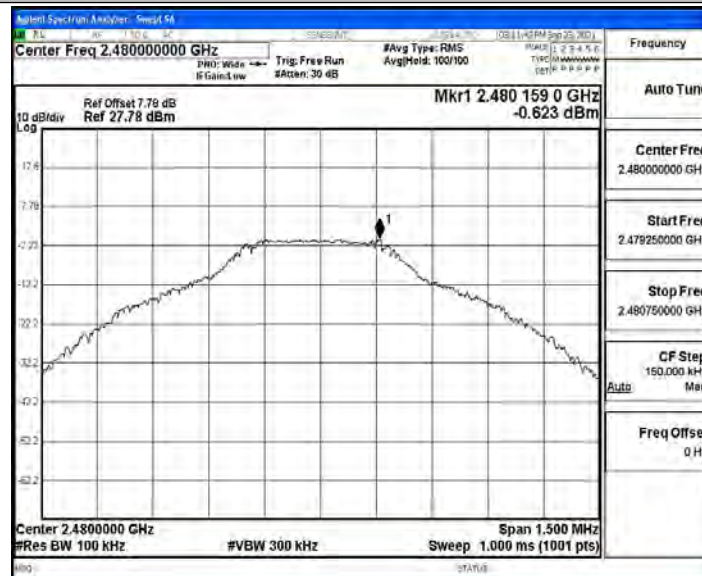




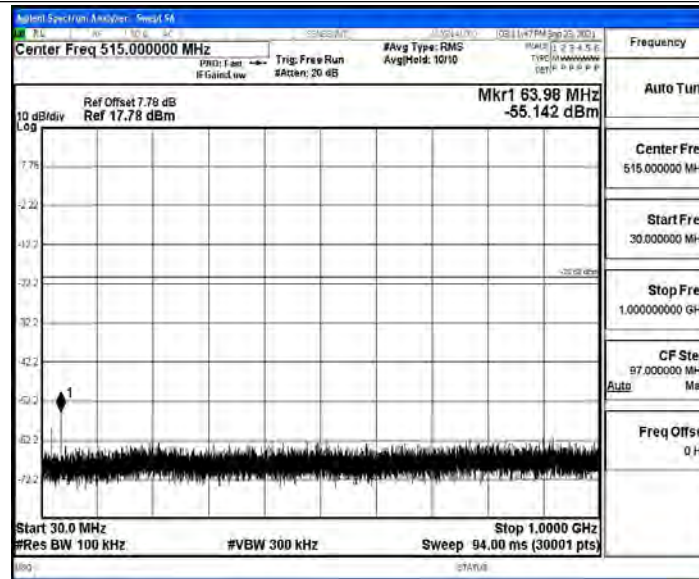
DH5_Ant1_2441_1000~26500



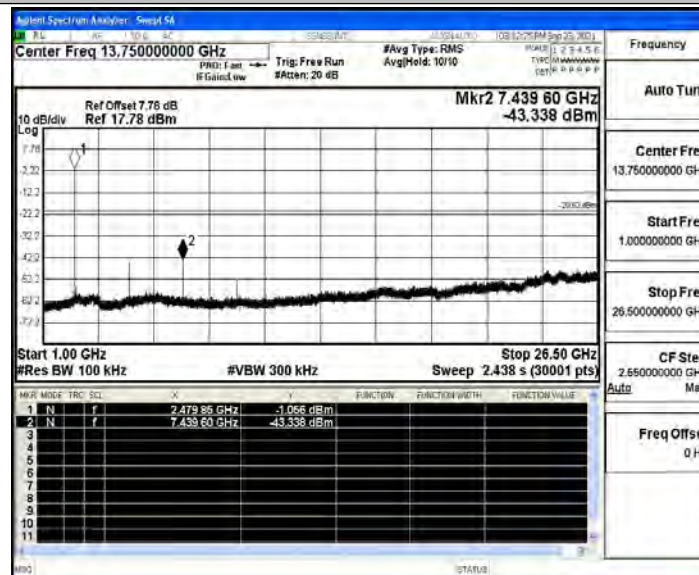
DH5_Ant1_2480_0~Reference



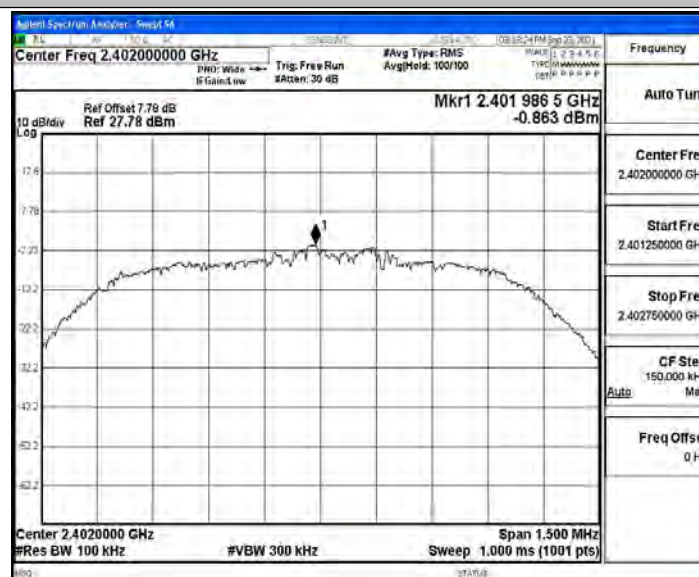
DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500

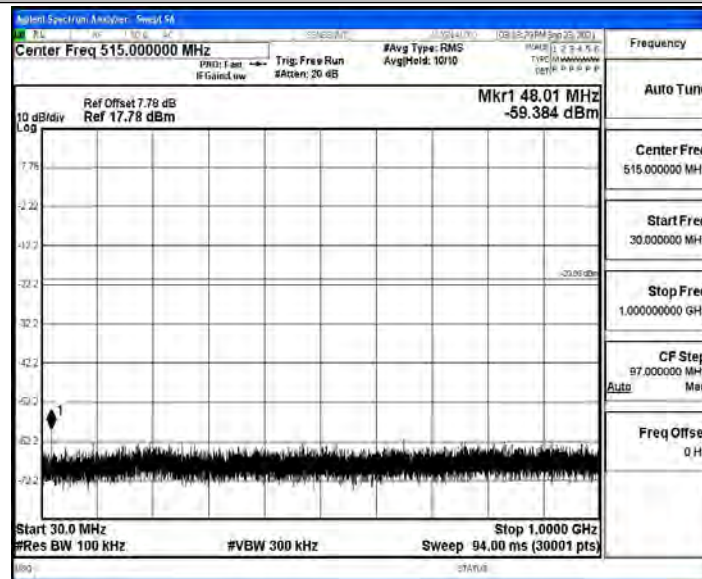


2DH5_Ant1_2402_0~Reference

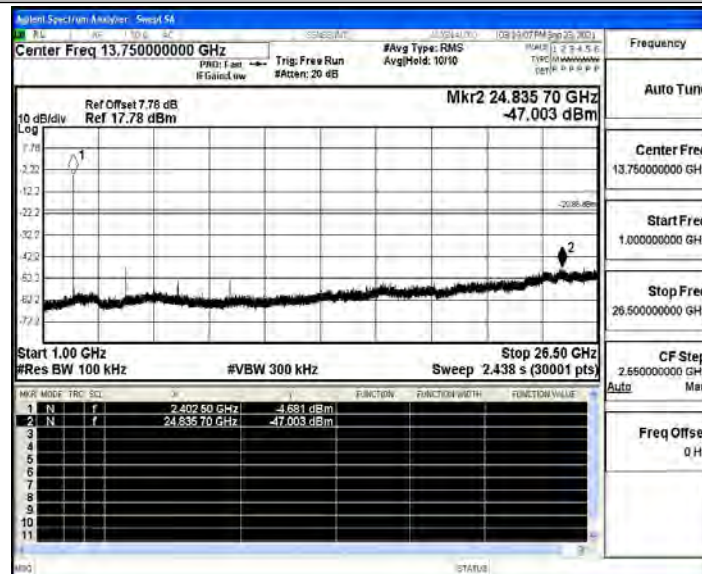




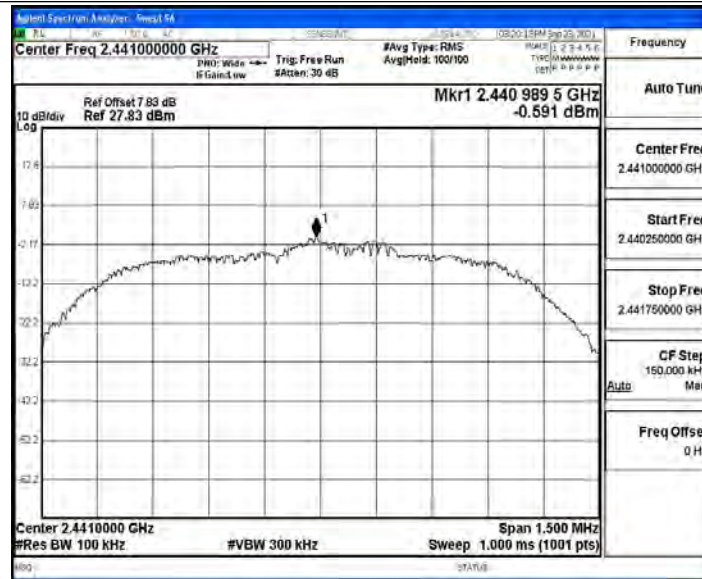
2DH5_Ant1_2402_30~1000



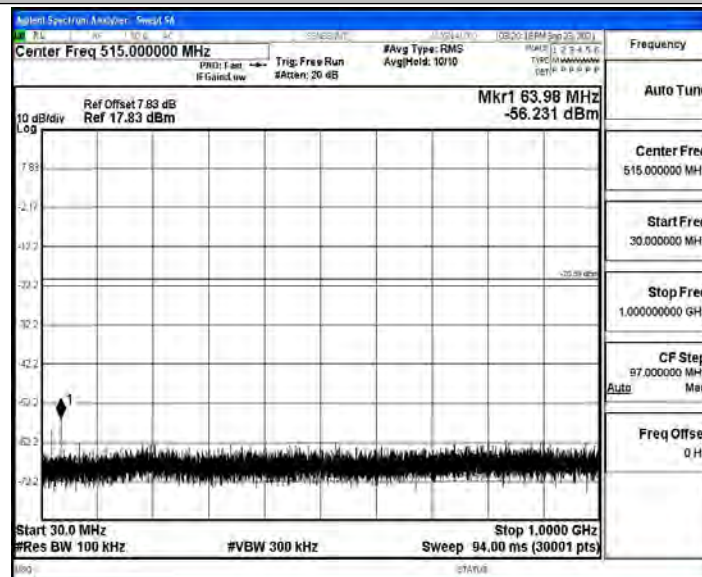
2DH5_Ant1_2402_1000~26500



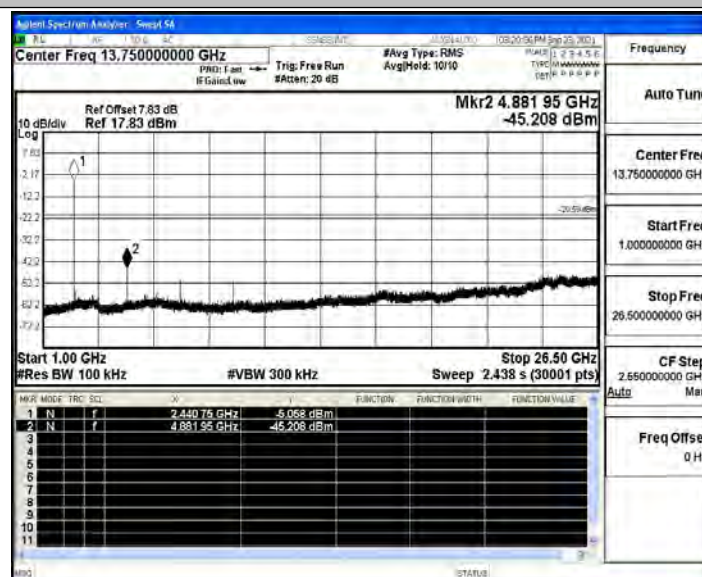
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000

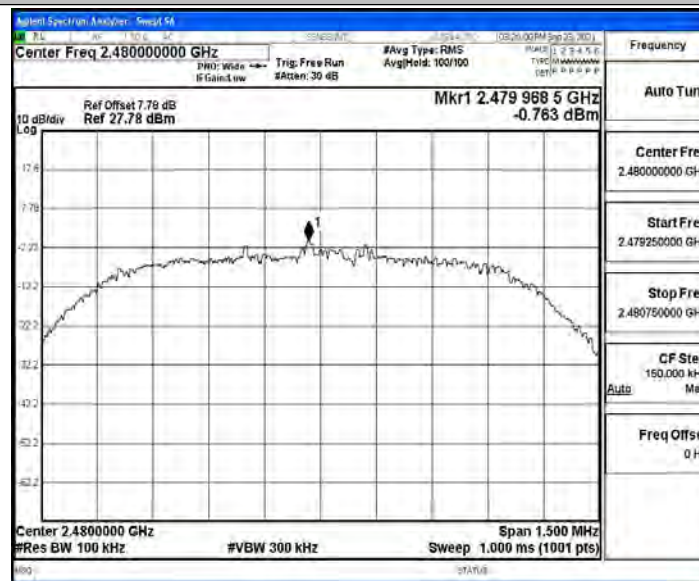


2DH5_Ant1_2441_1000~26500

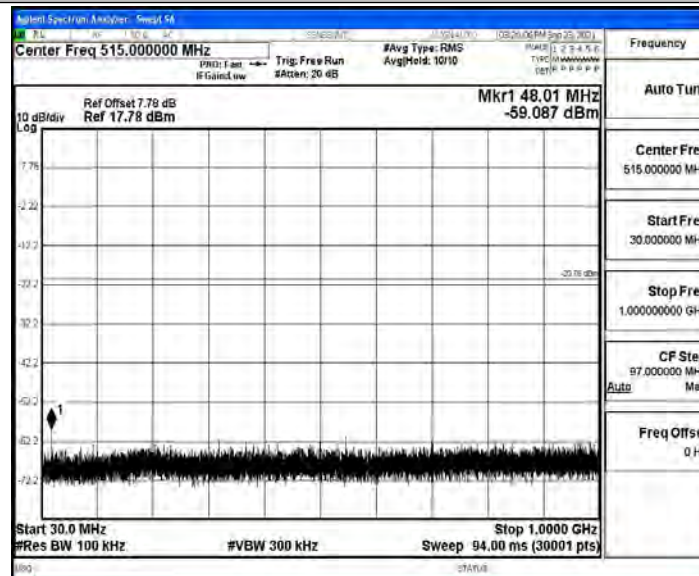




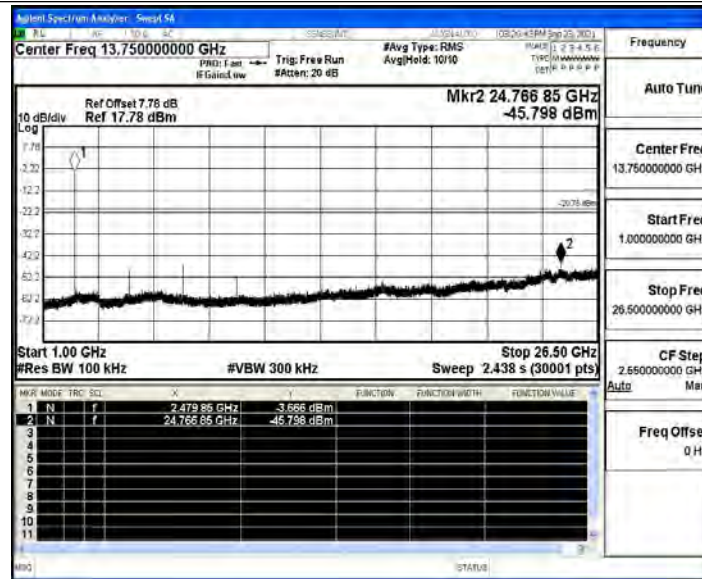
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500





A.9 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	-49.03	≤-41.20	46.17	≤54	PASS
				AV	2389.565	-48.49	≤-41.20	46.71	≤54	PASS
				AV	2390.000	-48.63	≤-41.20	46.57	≤54	PASS
				Peak	2310.000	-39.88	≤-21.20	55.32	≤74	PASS
				Peak	2349.140	-37.7	≤-21.20	57.50	≤74	PASS
				Peak	2390.000	-40	≤-21.20	55.20	≤74	PASS
		High	2480	AV	2483.500	-45.69	≤-41.20	49.51	≤54	PASS
				AV	2483.520	-45.69	≤-41.20	49.51	≤54	PASS
				AV	2500.000	-47.99	≤-41.20	47.21	≤54	PASS
				Peak	2483.500	-37.97	≤-21.20	57.23	≤74	PASS
				Peak	2484.240	-37.69	≤-21.20	57.51	≤74	PASS
				Peak	2500.000	-40.14	≤-21.20	55.06	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-49.04	≤-41.20	46.16	≤54	PASS
				AV	2386.100	-48.48	≤-41.20	46.72	≤54	PASS
				AV	2390.000	-48.61	≤-41.20	46.59	≤54	PASS
				Peak	2310.000	-40.41	≤-21.20	54.79	≤74	PASS
				Peak	2334.335	-38.27	≤-21.20	56.93	≤74	PASS
				Peak	2390.000	-39.85	≤-21.20	55.35	≤74	PASS
		High	2480	AV	2483.500	-45.63	≤-41.20	49.57	≤54	PASS
				AV	2483.520	-45.62	≤-41.20	49.58	≤54	PASS
				AV	2500.000	-48.02	≤-41.20	47.18	≤54	PASS
				Peak	2483.500	-38.19	≤-21.20	57.01	≤74	PASS
				Peak	2484.560	-37.62	≤-21.20	57.58	≤74	PASS
				Peak	2500.000	-39.46	≤-21.20	55.74	≤74	PASS

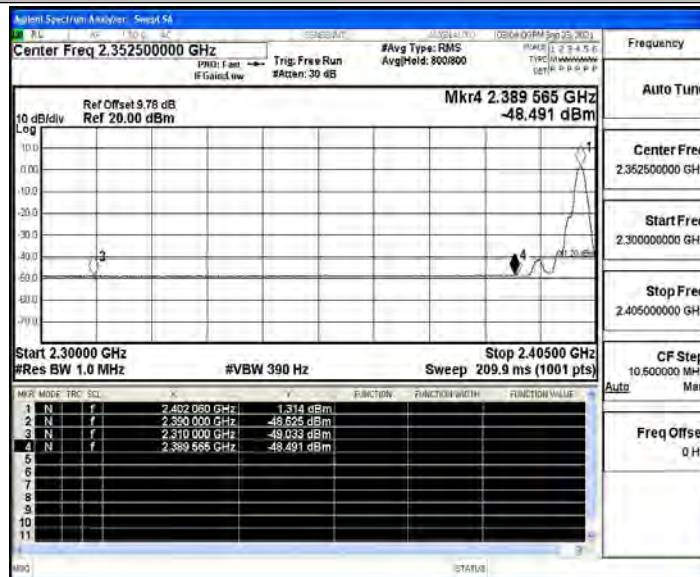
Note:

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.

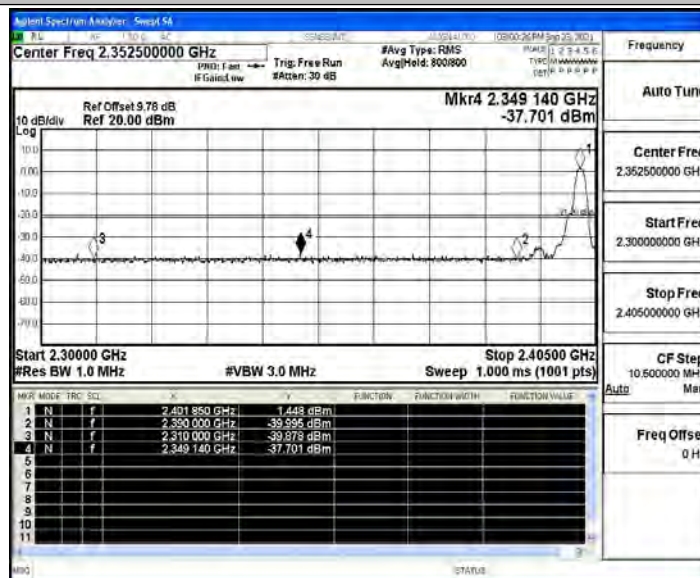


Test Graphs

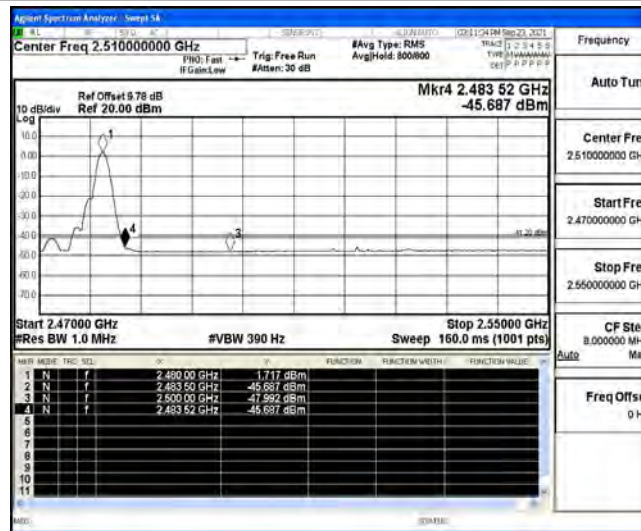
DH5_Ant1_Low_2402_AV



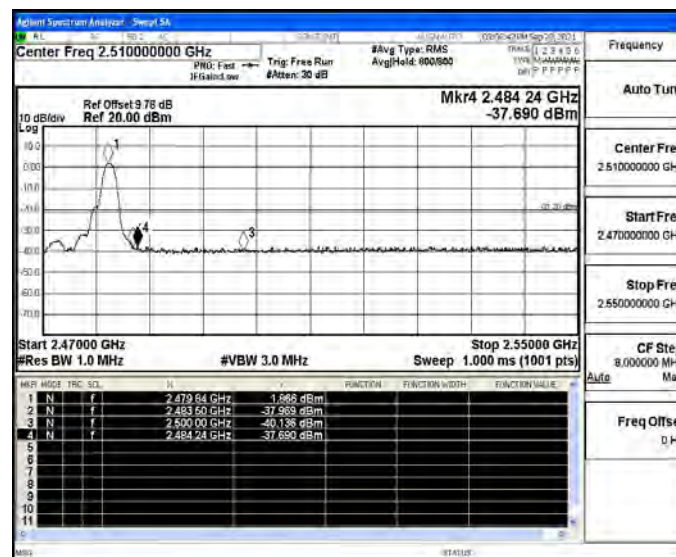
DH5_Ant1_Low_2402_Peak



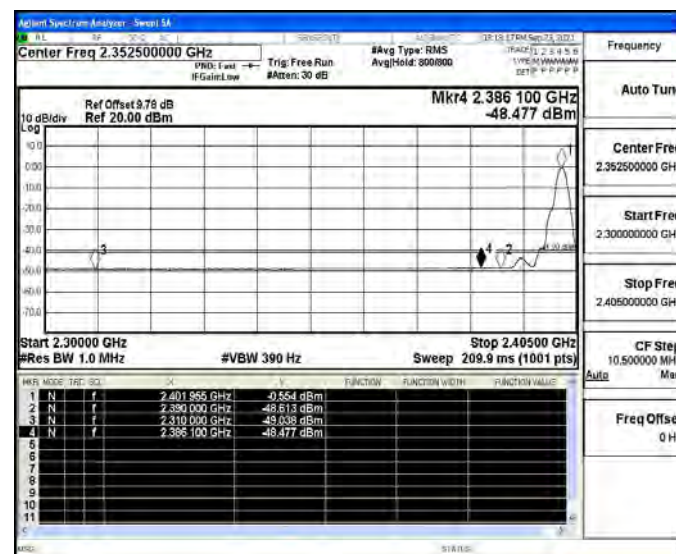
DH5_Ant1_High_2480_AV



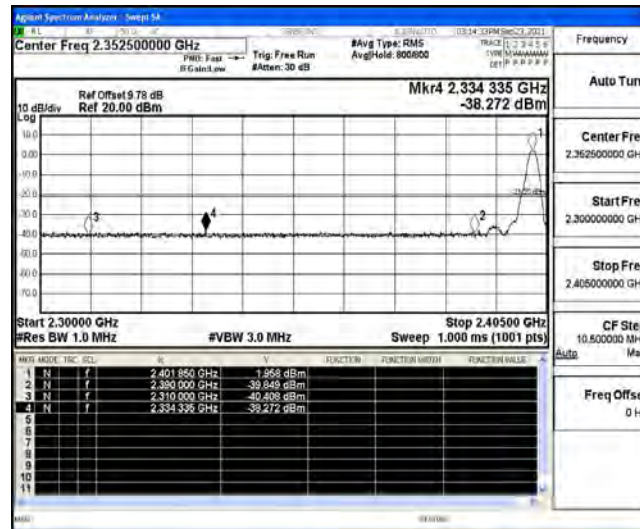
DH5_Ant1_High_2480_Peak



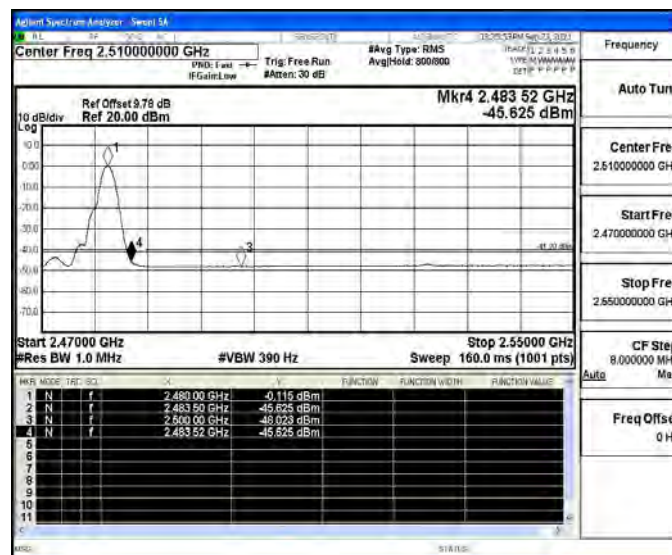
2DH5_Ant1_Low_2402_AV



2DH5_Ant1_Low_2402_Peak



2DH5_Ant1_High_2480_AV



2DH5_Ant1_High_2480_Peak

