



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Wall Mountable Bluetooth CD Player

Test Model: YR-Q300

Environmental Conditions

Temperature:	23.5℃
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	 Monkey Li
Supervised by:	 Li Huan



A.1 20dB Emission Bandwidth

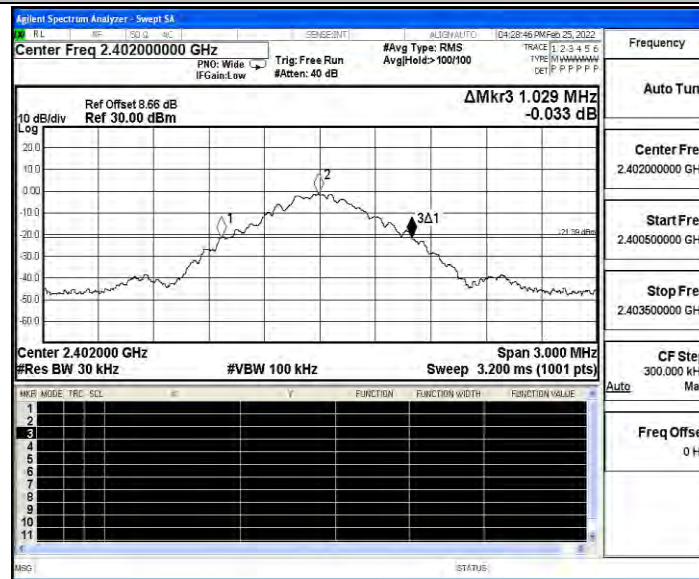
Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.029	2401.466	2402.495	---	---
		2441	1.026	2440.469	2441.495	---	---
		2480	1.032	2479.466	2480.498	---	---
2DH5	Ant1	2402	1.377	2401.313	2402.690	---	---
		2441	1.377	2440.313	2441.690	---	---
		2480	1.380	2479.313	2480.693	---	---
3DH5	Ant1	2402	1.362	2401.316	2402.678	---	---
		2441	1.362	2440.316	2441.678	---	---
		2480	1.365	2479.316	2480.681	---	---

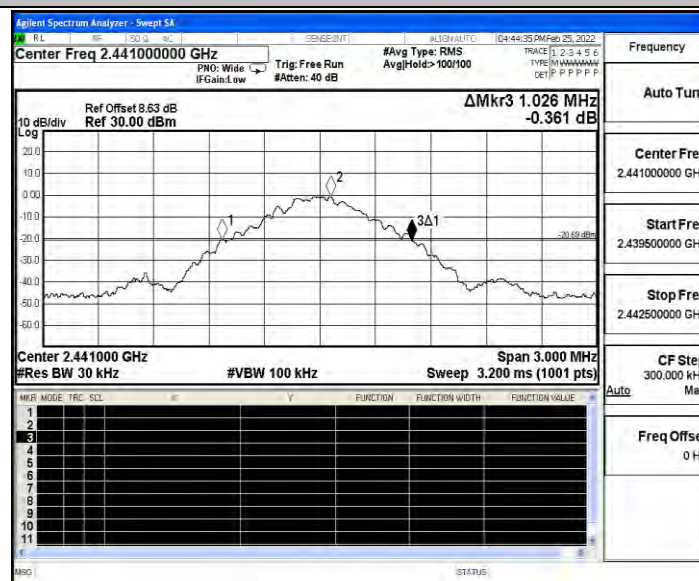


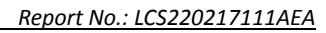
Test Graphs

DH5_Ant1_2402



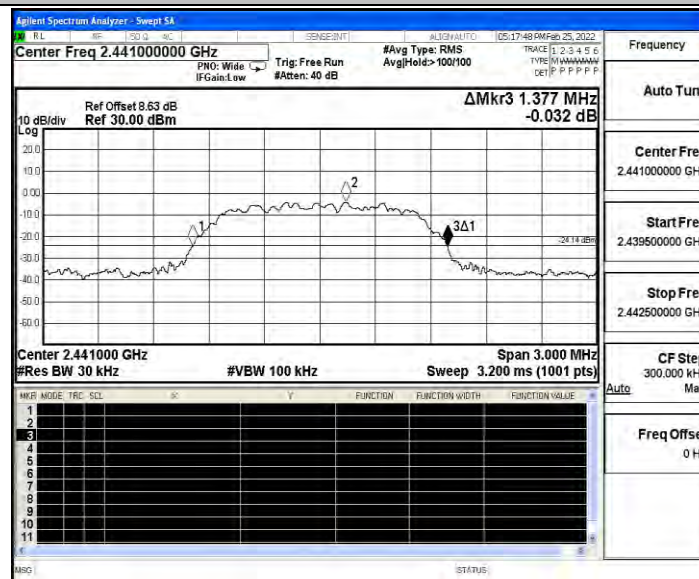
DH5_Ant1_2441



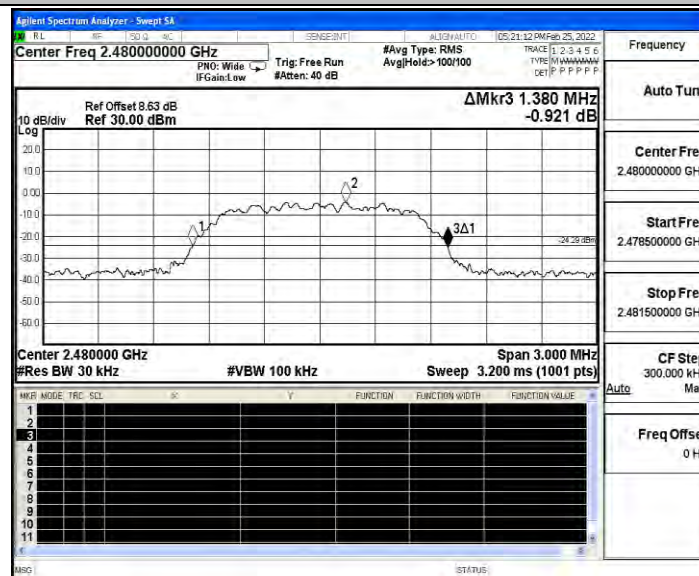




2DH5_Ant1_2441

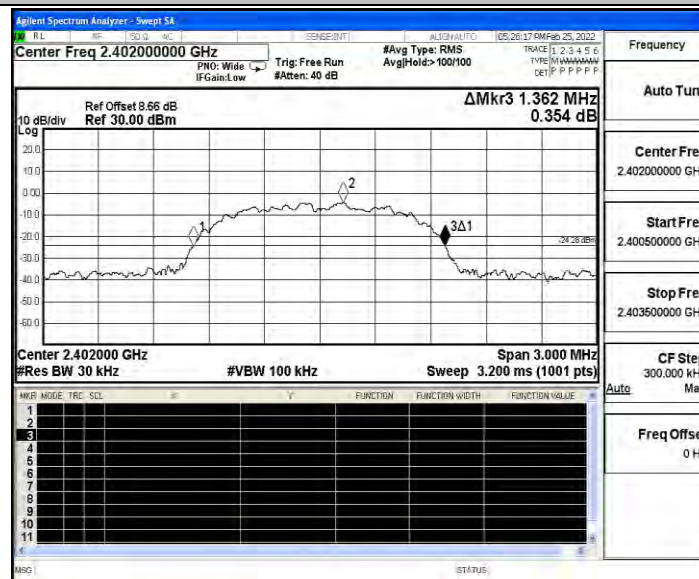


2DH5_Ant1_2480

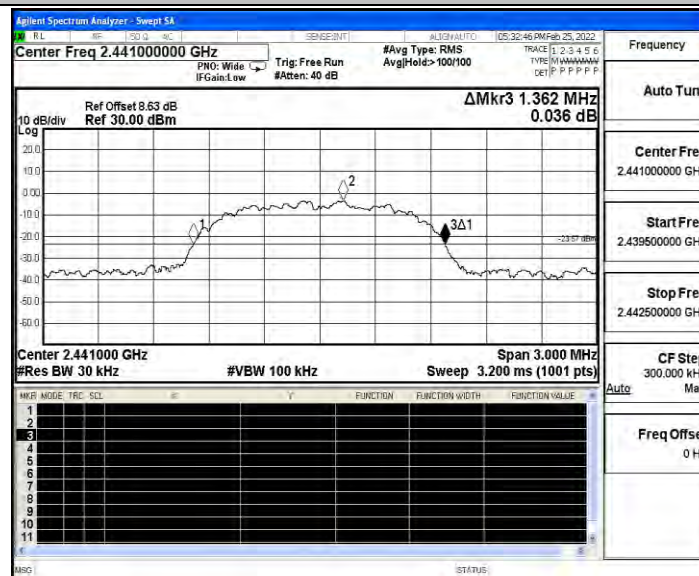




3DH5_Ant1_2402

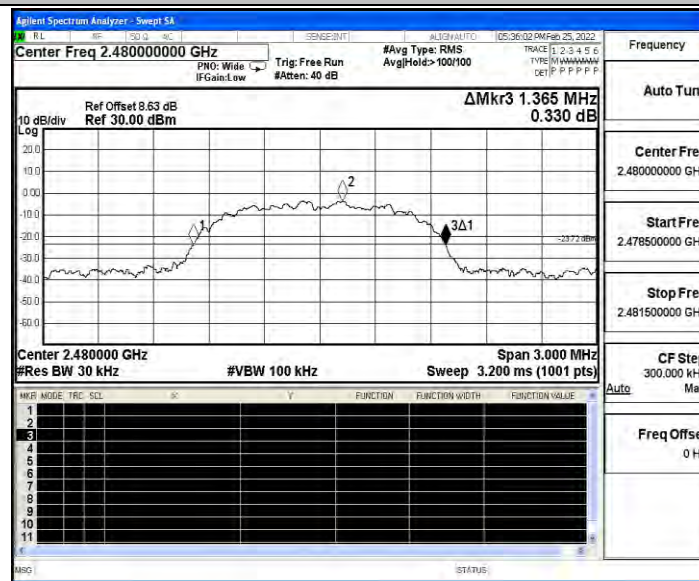


3DH5_Ant1_2441





3DH5_Ant1_2480





A.2 Maximum peak conducted output power

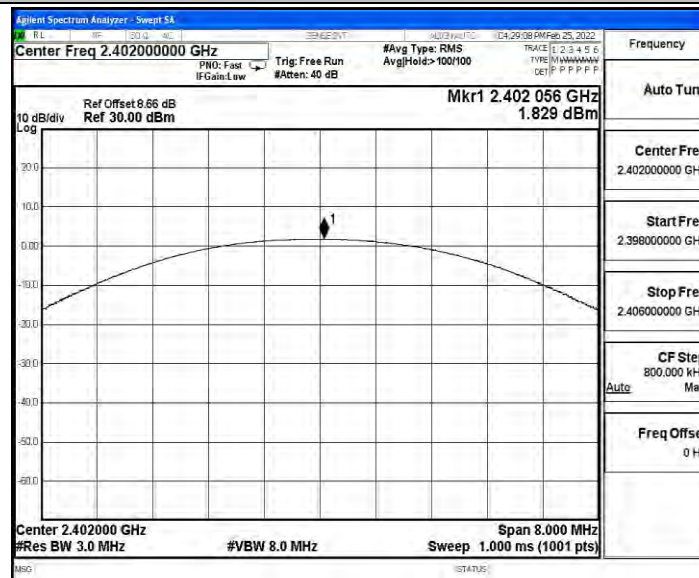
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	1.83	≤20.97	PASS
		2441	2.56	≤20.97	PASS
		2480	2.49	≤20.97	PASS
2DH5	Ant1	2402	3.22	≤20.97	PASS
		2441	3.98	≤20.97	PASS
		2480	3.87	≤20.97	PASS
3DH5	Ant1	2402	3.52	≤20.97	PASS
		2441	4.27	≤20.97	PASS
		2480	4.21	≤20.97	PASS

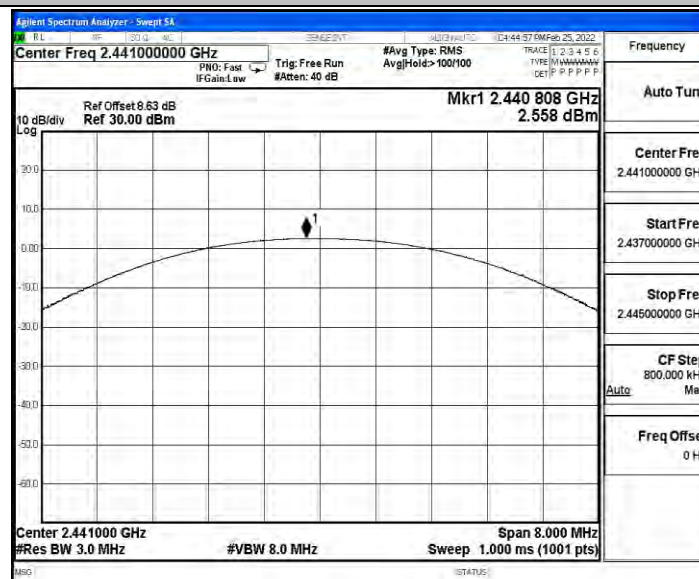


Test Graphs

DH5_Ant1_2402

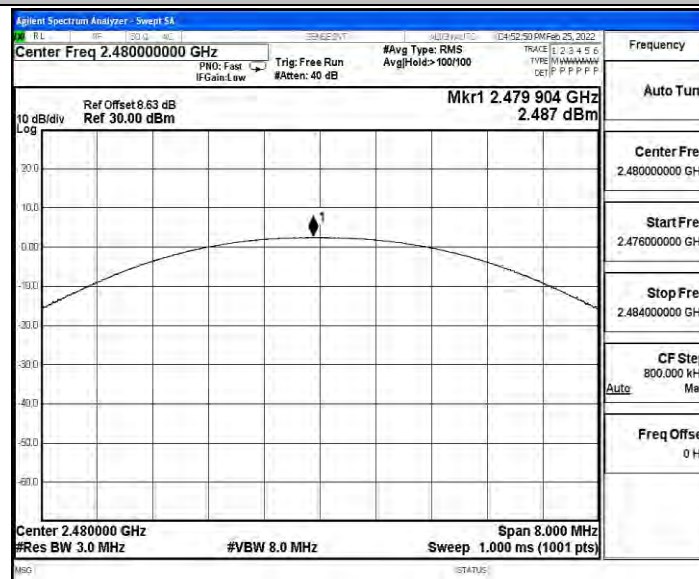


DH5_Ant1_2441

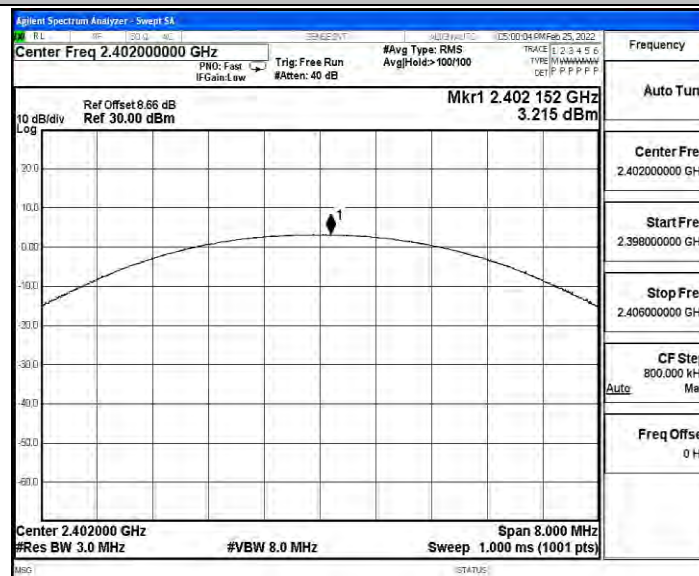




DH5_Ant1_2480

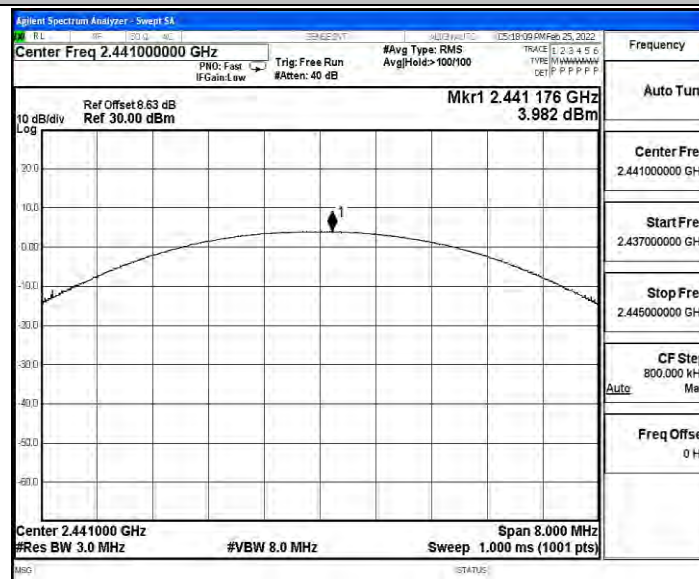


2DH5_Ant1_2402

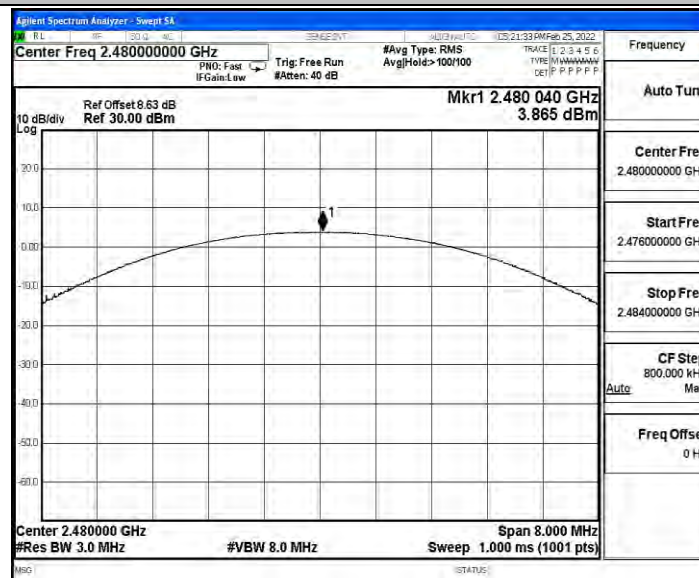




2DH5_Ant1_2441

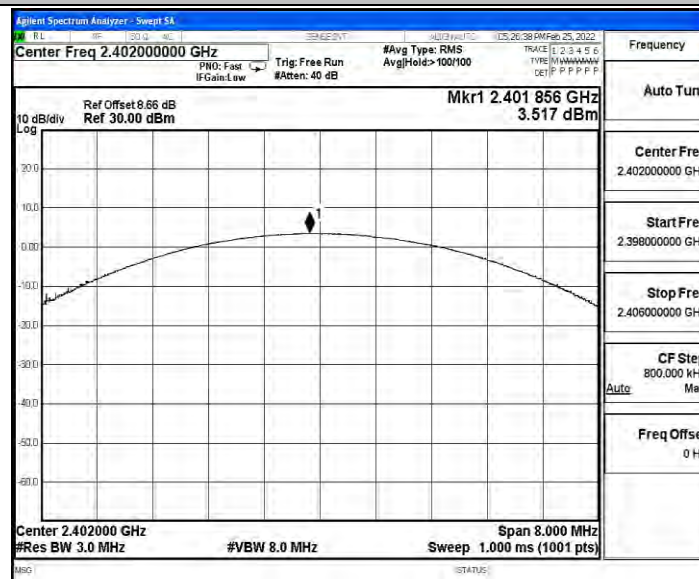


2DH5_Ant1_2480

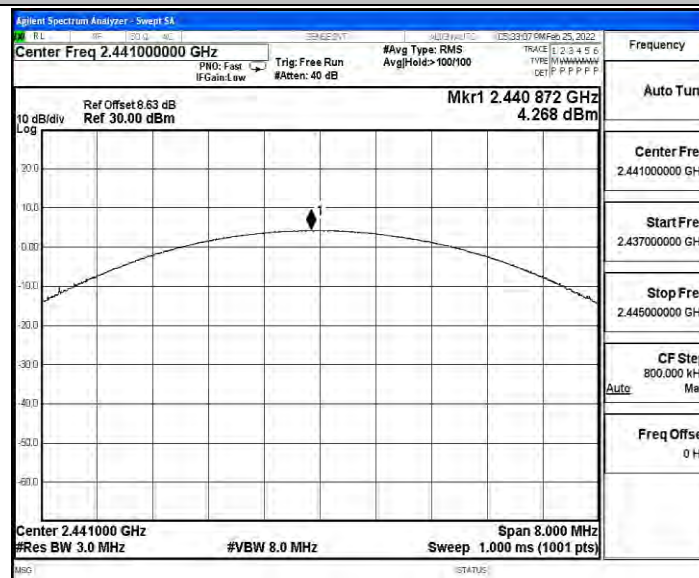




3DH5_Ant1_2402

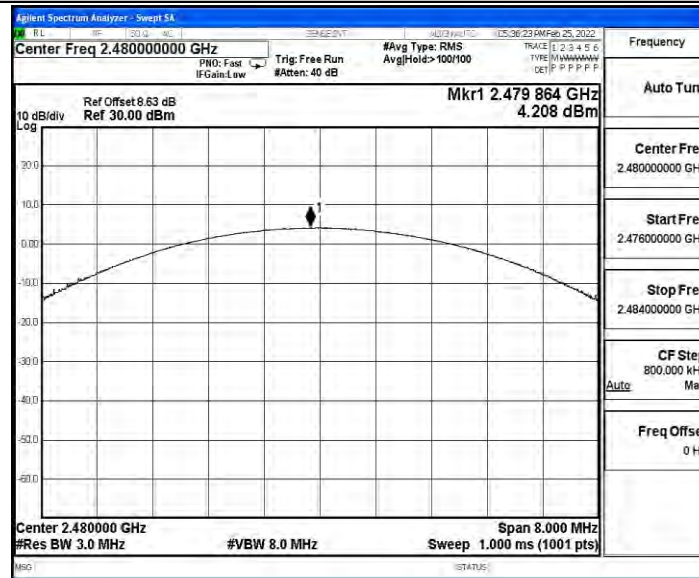


3DH5_Ant1_2441





3DH5_Ant1_2480





A.3 Carrier frequency separation

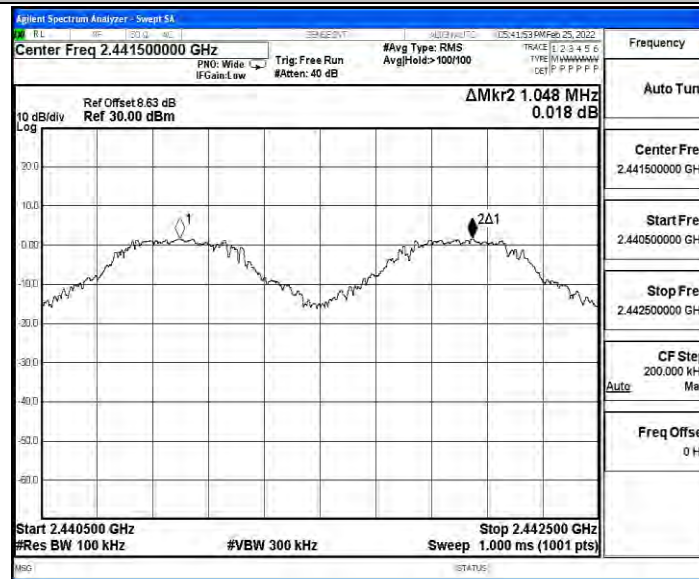
Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.048	≥ 1.032	PASS
2DH5	Ant1	Hop	1.058	≥ 0.920	PASS
3DH5	Ant1	Hop	0.998	≥ 0.910	PASS

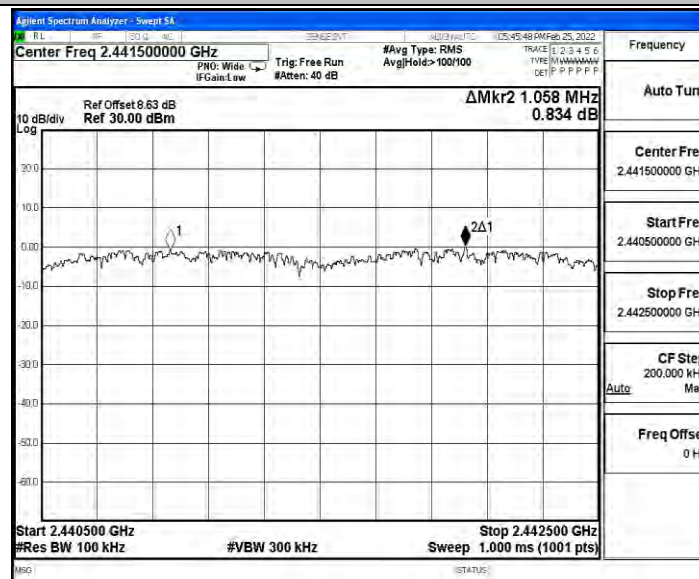


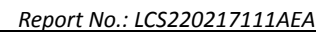
Test Graphs

DH5_Ant1_Hop



2DH5_Ant1_Hop







A.4.1 Time of occupancy

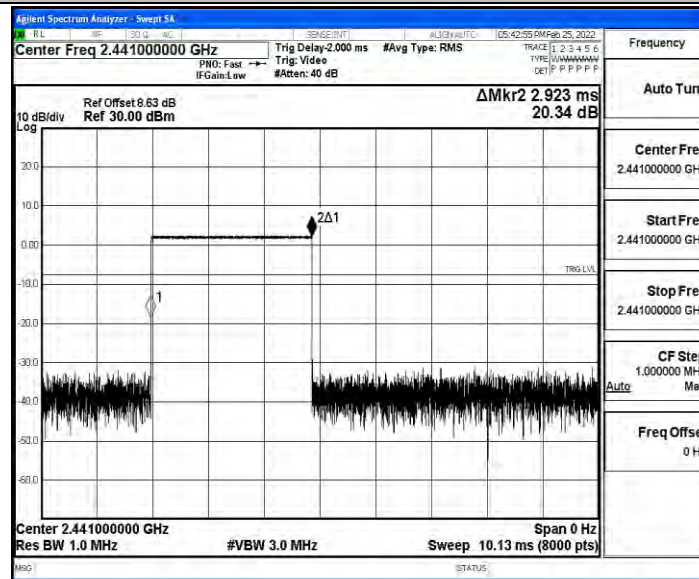
Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.92	106.67	0.312	≤0.4	PASS
2DH5	Ant1	Hop	2.92	106.67	0.311	≤0.4	PASS
3DH5	Ant1	Hop	2.93	106.67	0.313	≤0.4	PASS

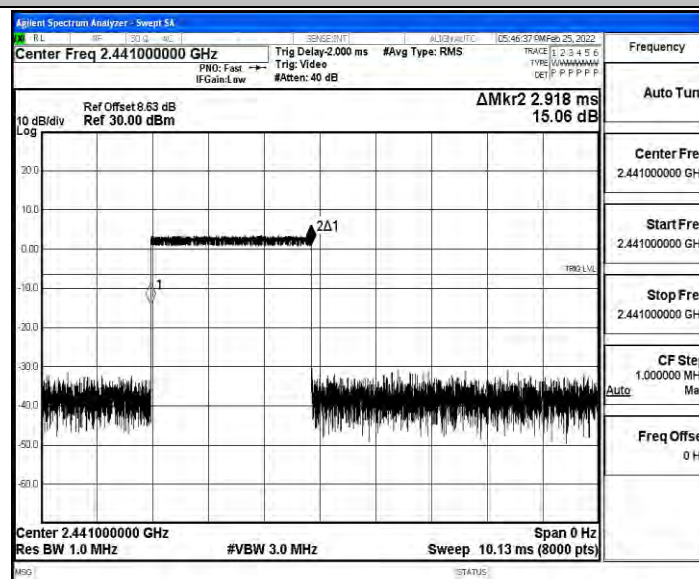


Test Graphs

DH5_Ant1_Hop

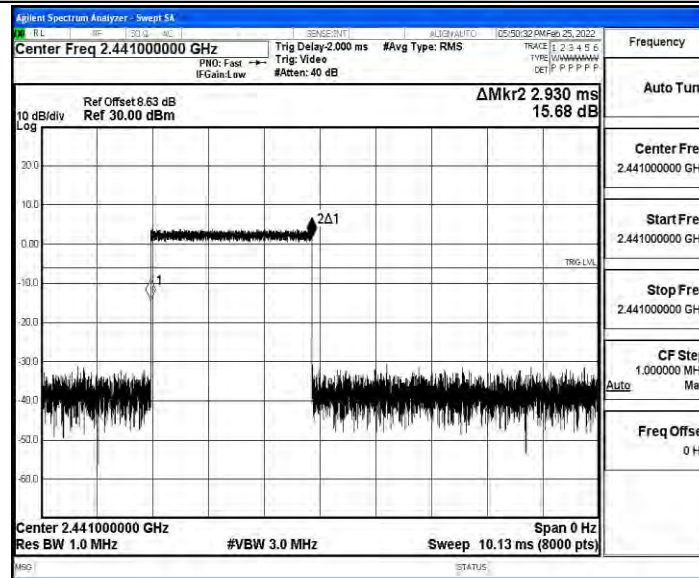


2DH5_Ant1_Hop





3DH5_Ant1_Hop





A.4.2: Duty Cycle

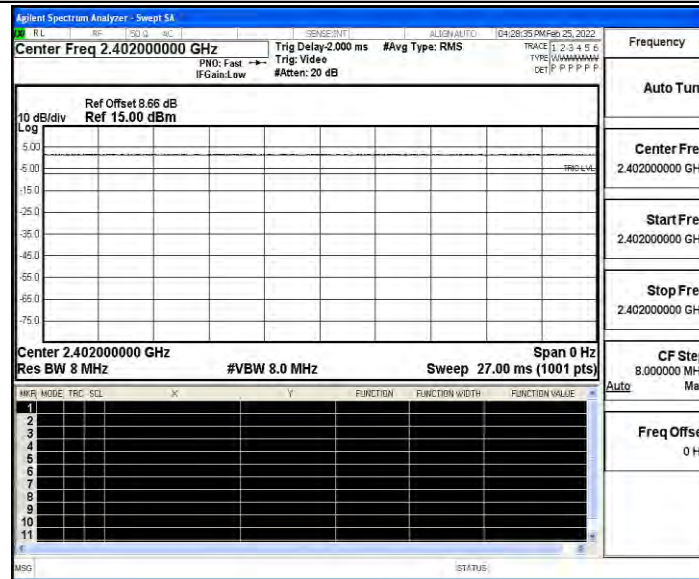
Test Result

TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	27.00	27.00	1.0000	100.00	0.00	---	---
		2441	27.00	27.00	1.0000	100.00	0.00	---	---
		2480	27.00	27.00	1.0000	100.00	0.00	---	---
2DH5	Ant1	2402	27.00	27.00	1.0000	100.00	0.00	---	---
		2441	2.93	3.61	0.8116	81.16	0.91	---	---
		2480	2.94	3.60	0.8167	81.67	0.88	---	---
3DH5	Ant1	2402	2.93	3.60	0.8139	81.39	0.89	---	---
		2441	2.93	3.60	0.8139	81.39	0.89	---	---
		2480	2.94	3.60	0.8167	81.67	0.88	---	---

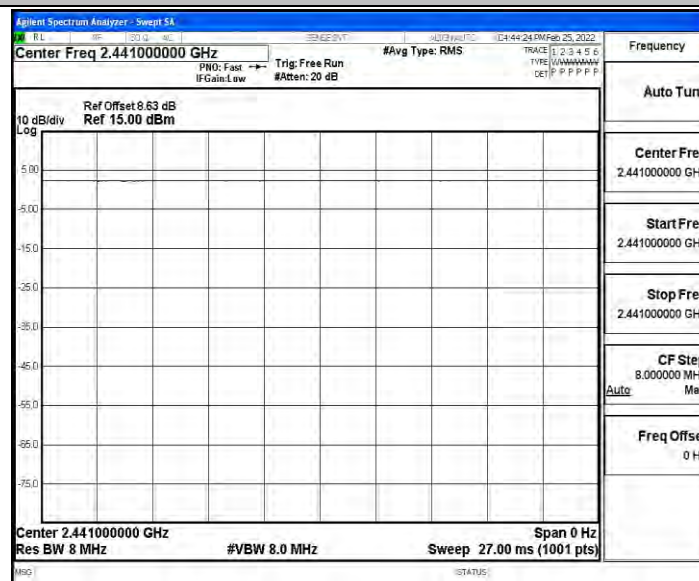


Test Graphs

DH5_Ant1_2402

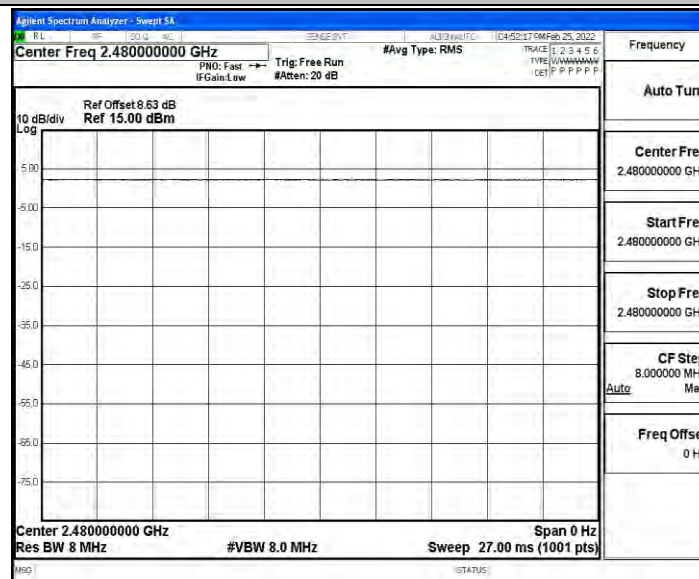


DH5_Ant1_2441

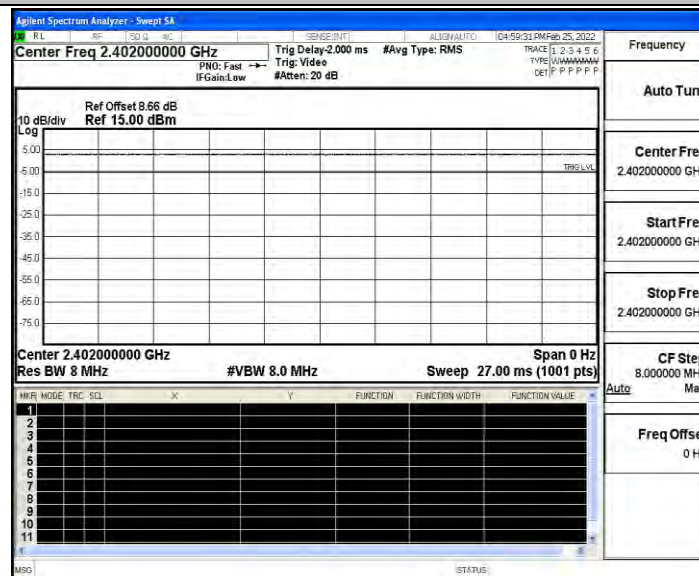




DH5_Ant1_2480

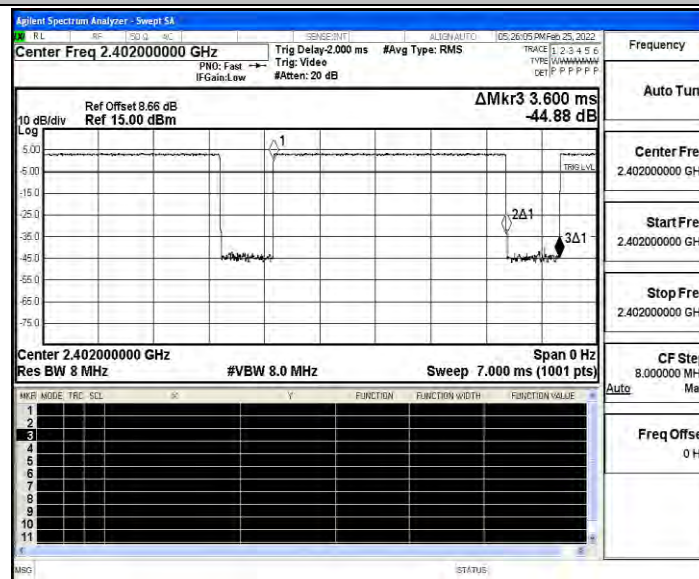


2DH5_Ant1_2402

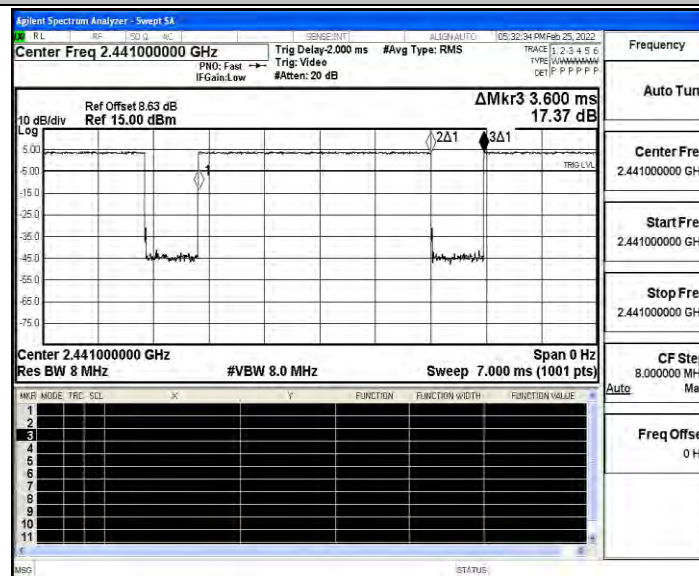




3DH5_Ant1_2402

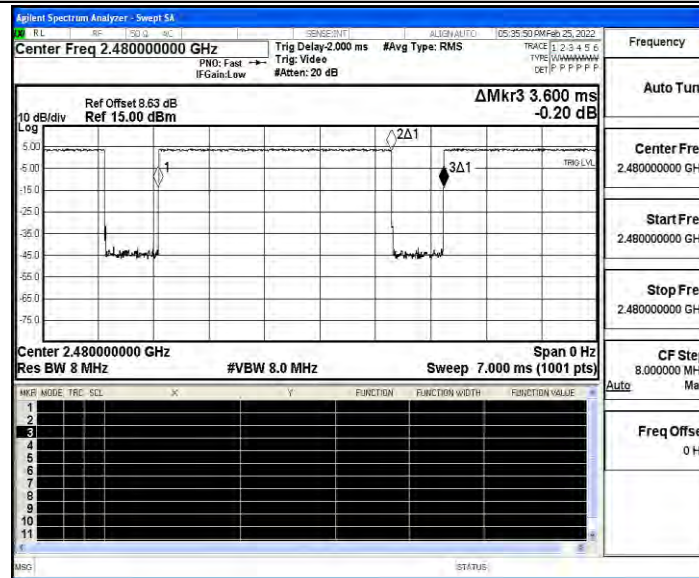


3DH5_Ant1_2441





3DH5_Ant1_2480





A.5 Number of hopping channels

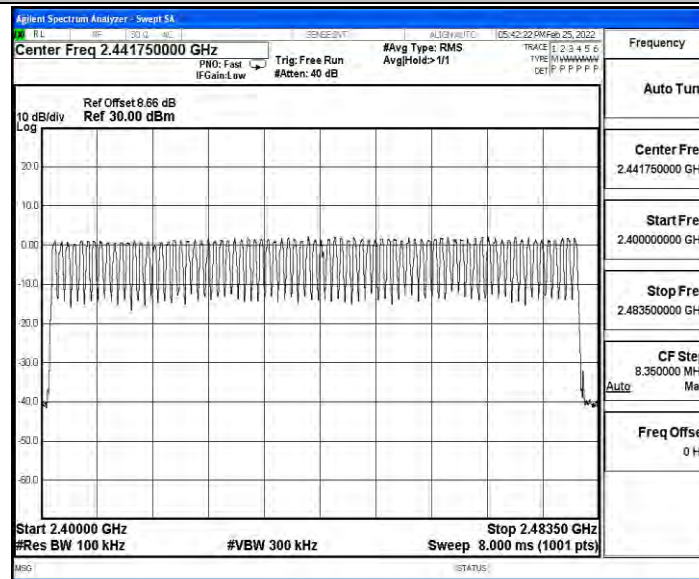
Test Result

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

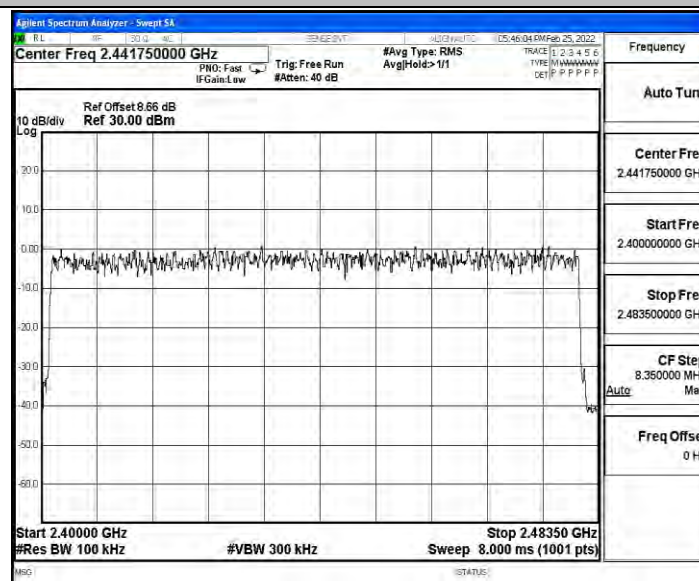


Test Graphs

DH5_Ant1_Hop

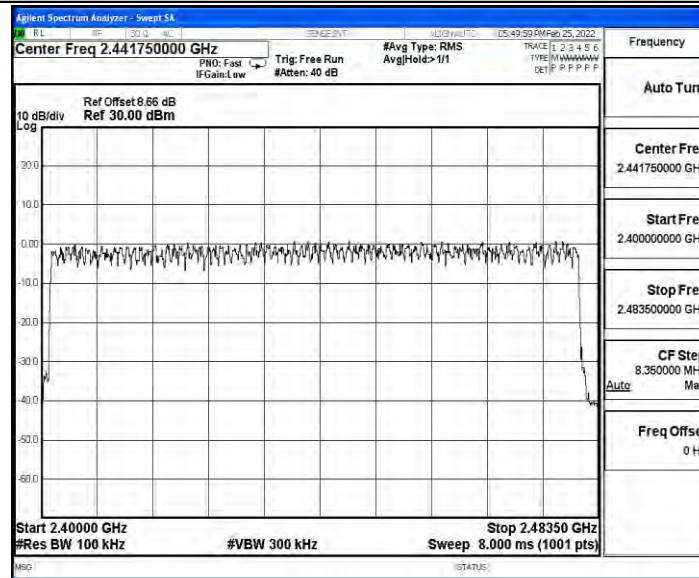


2DH5_Ant1_Hop





3DH5_Ant1_Hop





A.6 Band edge measurements

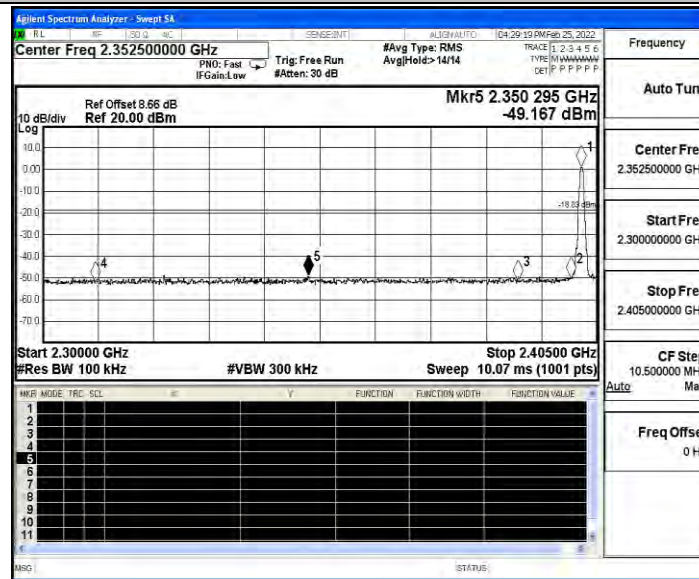
Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	1.17	-49.17	≤ -18.83	PASS
		High	2480	1.88	-47.38	≤ -18.12	PASS
		Low	Hop_2402	0.51	-49.07	≤ -19.49	PASS
		High	Hop_2480	1.70	-45.33	≤ -18.31	PASS
2DH5	Ant1	Low	2402	-0.24	-47.43	≤ -20.24	PASS
		High	2480	0.68	-46.96	≤ -19.32	PASS
		Low	Hop_2402	-1.50	-49.37	≤ -21.5	PASS
		High	Hop_2480	0.76	-47.63	≤ -19.24	PASS
3DH5	Ant1	Low	2402	-0.13	-41.21	≤ -20.13	PASS
		High	2480	0.70	-47.31	≤ -19.3	PASS
		Low	Hop_2402	-1.44	-49.71	≤ -21.44	PASS
		High	Hop_2480	0.55	-48.18	≤ -19.45	PASS

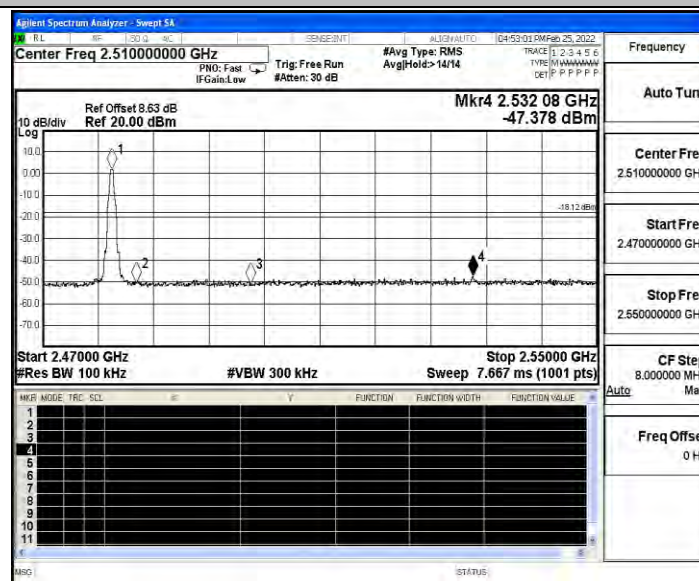


Test Graphs

DH5_Ant1_Low_2402

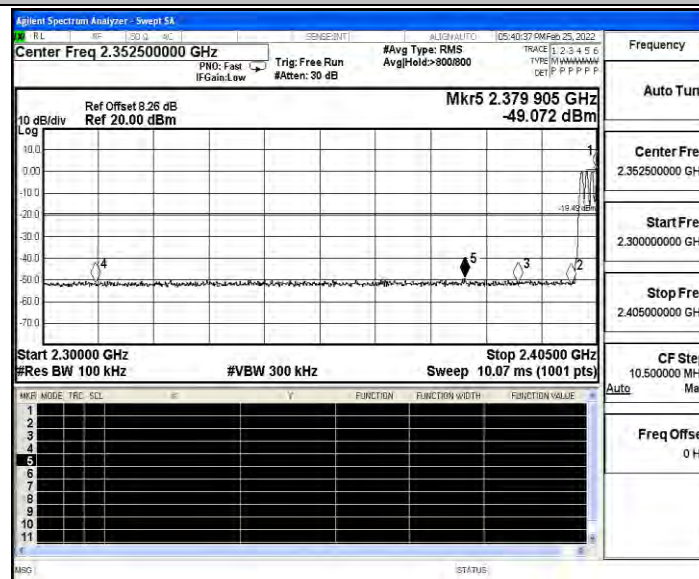


DH5_Ant1_High_2480

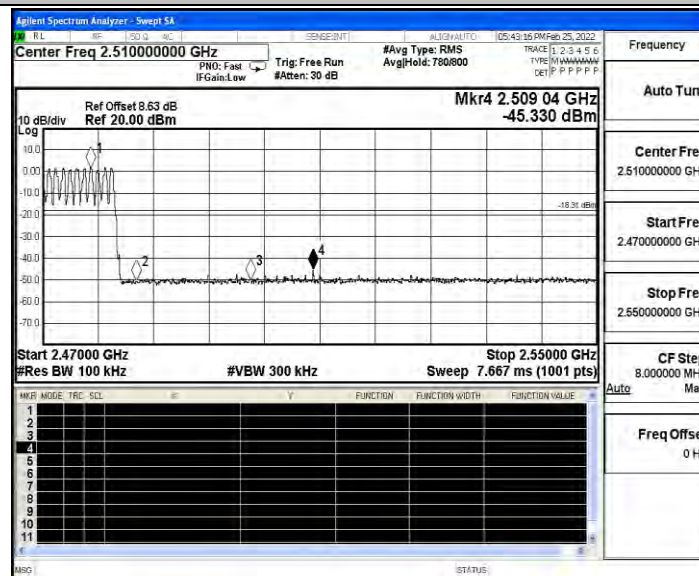




DH5_Ant1_Low_Hop_2402

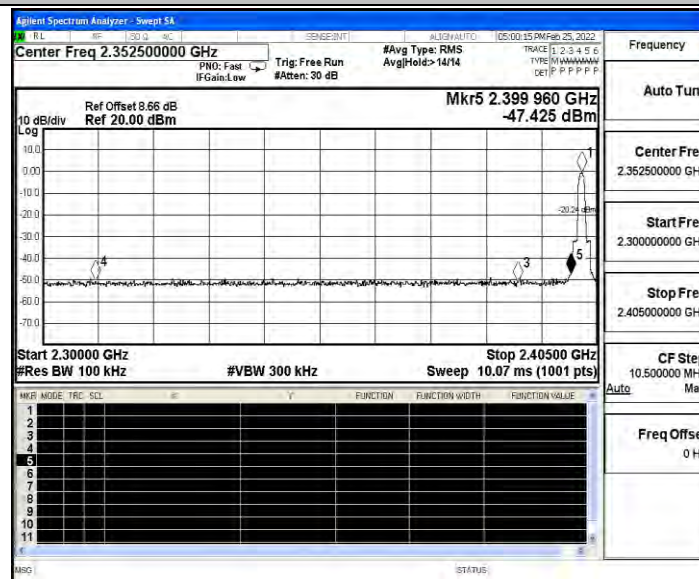


DH5_Ant1_High_Hop_2480

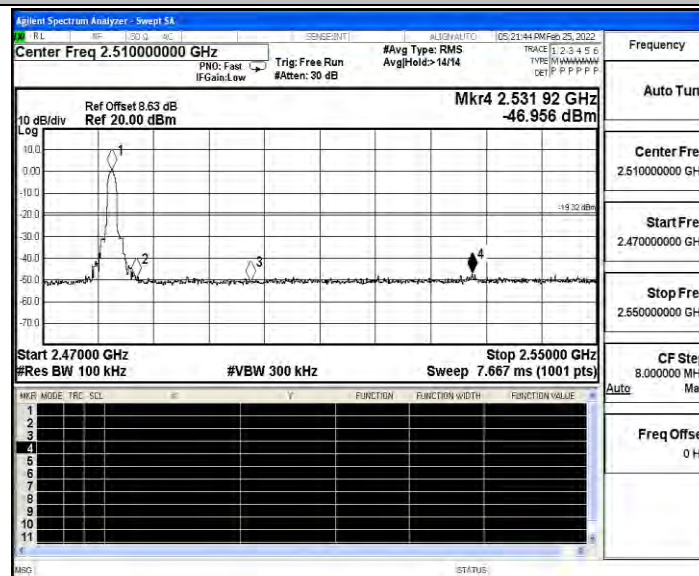


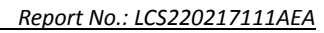


2DH5_Ant1_Low_2402



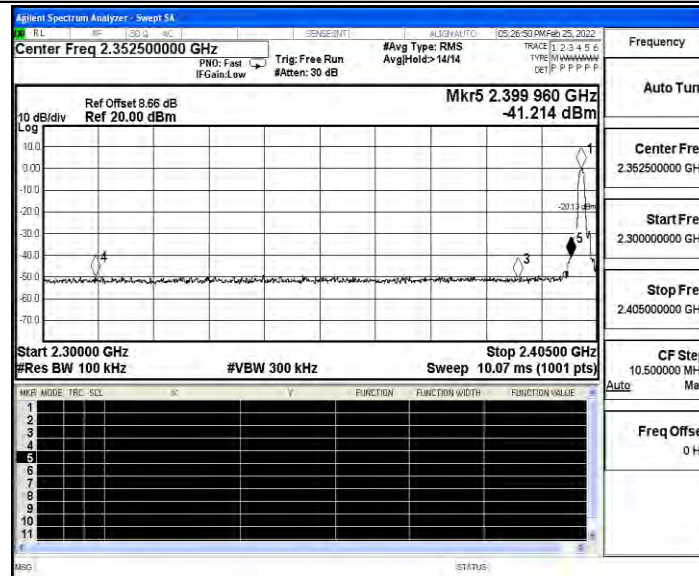
2DH5_Ant1_High_2480



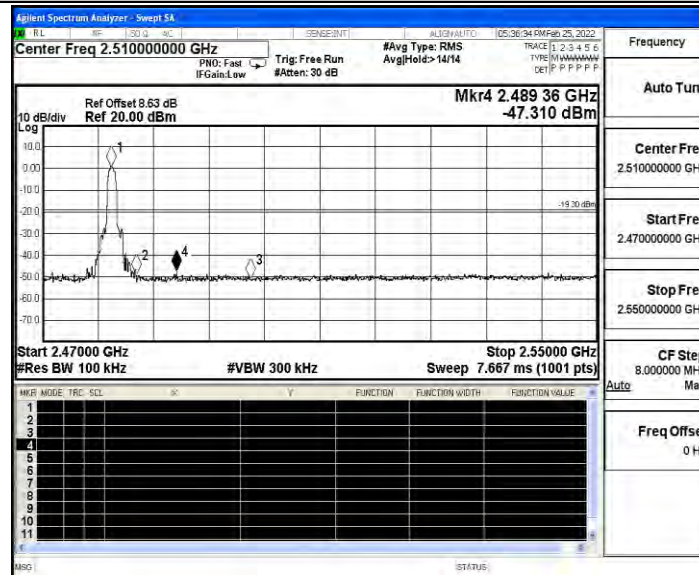




3DH5_Ant1_Low_2402

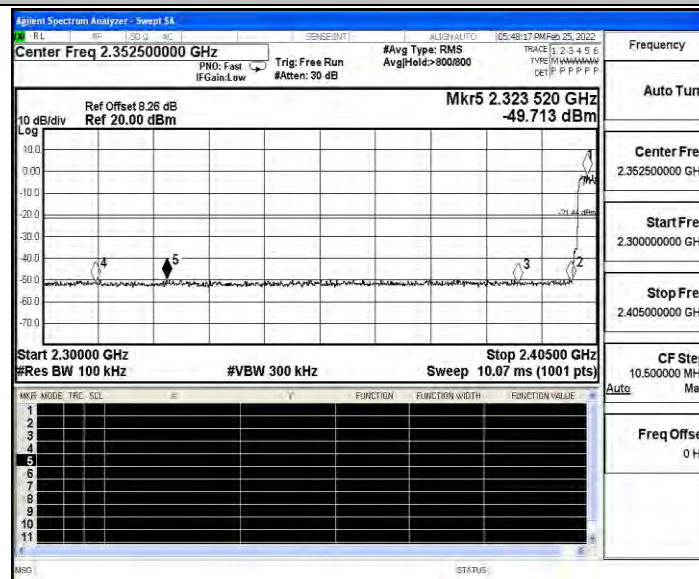


3DH5_Ant1_High_2480

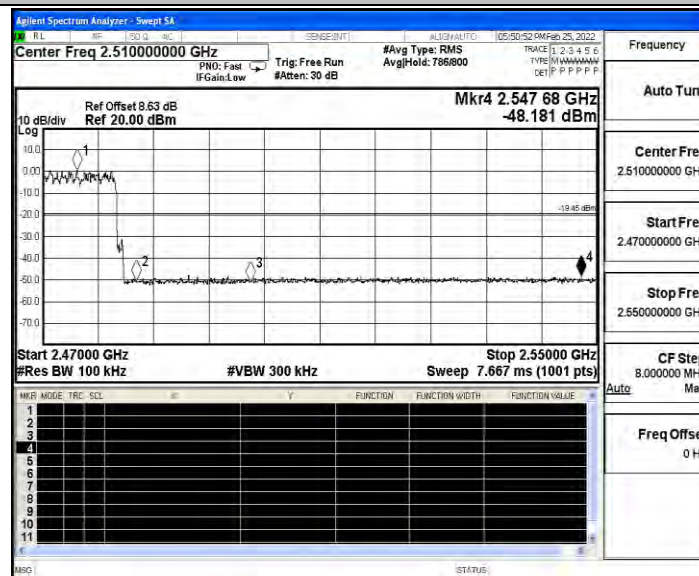




3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480





A.7 Conducted Spurious Emission

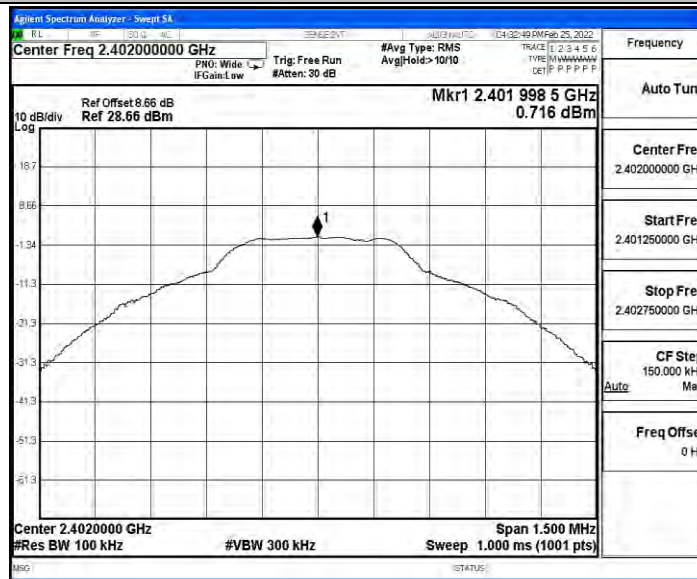
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.72	0.72	---	PASS
			30~1000	0.72	-59.61	≤-19.28	PASS
			1000~26500	0.72	-36.24	≤-19.28	PASS
		2441	Reference	1.53	1.53	---	PASS
			30~1000	1.53	-59.1	≤-18.47	PASS
			1000~26500	1.53	-38.44	≤-18.47	PASS
		2480	Reference	1.49	1.49	---	PASS
			30~1000	1.49	-59.79	≤-18.51	PASS
			1000~26500	1.49	-38.34	≤-18.51	PASS
2DH5	Ant1	2402	Reference	-0.43	-0.43	---	PASS
			30~1000	-0.43	-59.59	≤-20.43	PASS
			1000~26500	-0.43	-37.53	≤-20.43	PASS
		2441	Reference	0.45	0.45	---	PASS
			30~1000	0.45	-59.78	≤-19.55	PASS
			1000~26500	0.45	-39.13	≤-19.55	PASS
		2480	Reference	0.33	0.33	---	PASS
			30~1000	0.33	-59.2	≤-19.67	PASS
			1000~26500	0.33	-40.77	≤-19.67	PASS
3DH5	Ant1	2402	Reference	-0.39	-0.39	---	PASS
			30~1000	-0.39	-60.03	≤-20.39	PASS
			1000~26500	-0.39	-38.69	≤-20.39	PASS
		2441	Reference	0.41	0.41	---	PASS
			30~1000	0.41	-59.86	≤-19.59	PASS
			1000~26500	0.41	-40.11	≤-19.59	PASS
		2480	Reference	0.41	0.41	---	PASS
			30~1000	0.41	-59.57	≤-19.59	PASS
			1000~26500	0.41	-41.48	≤-19.59	PASS

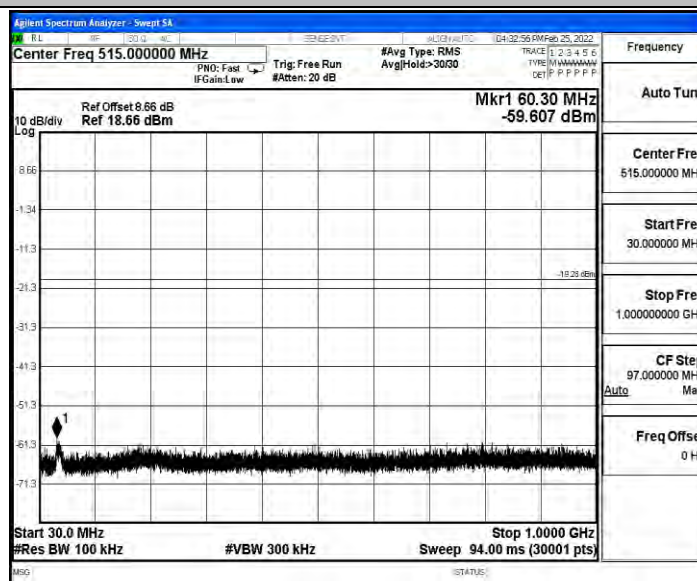


Test Graphs

DH5_Ant1_2402_0~Reference

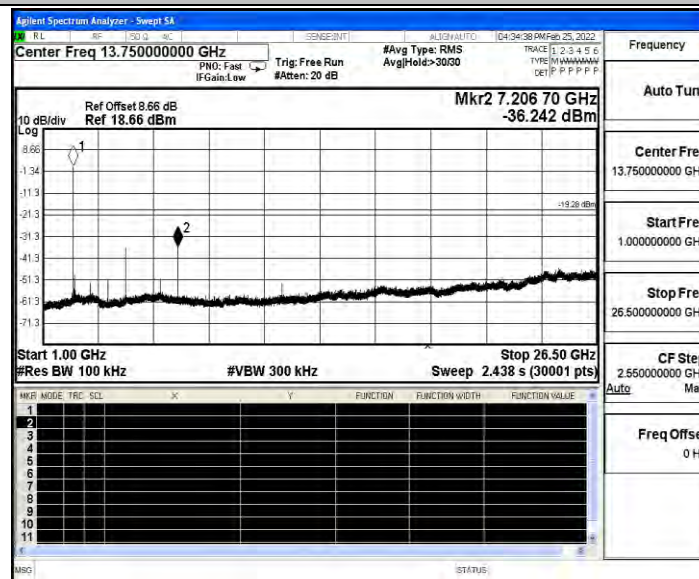


DH5_Ant1_2402_30~1000

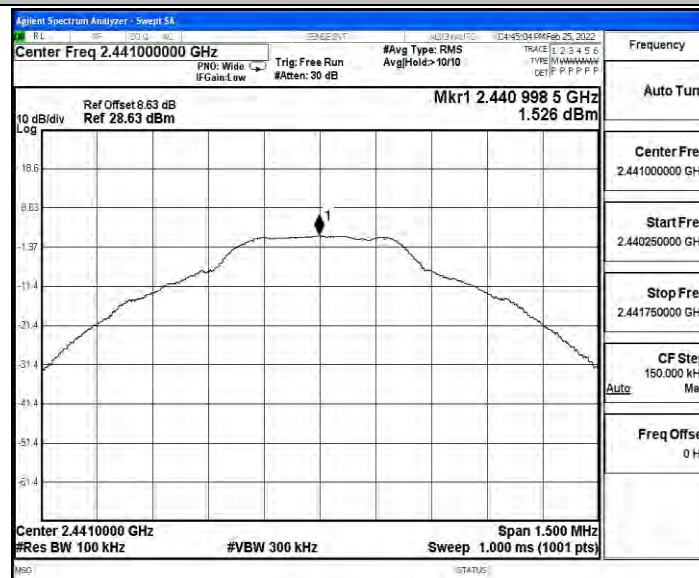




DH5_Ant1_2402_1000~26500

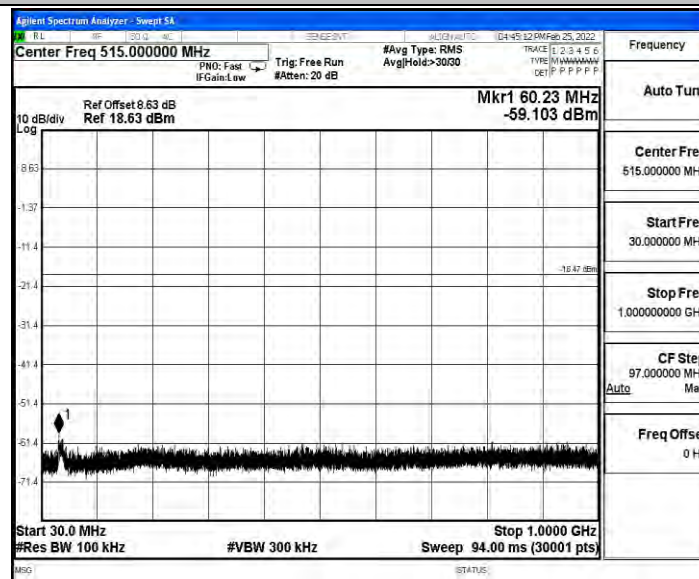


DH5_Ant1_2441_0~Reference

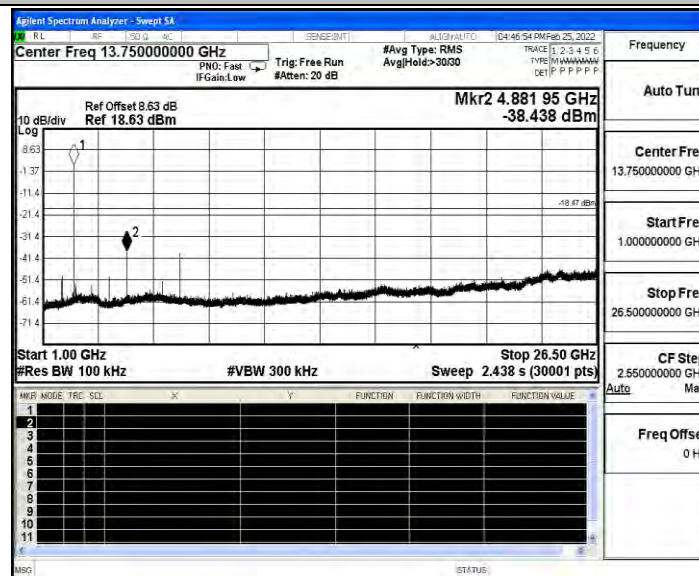




DH5_Ant1_2441_30~1000

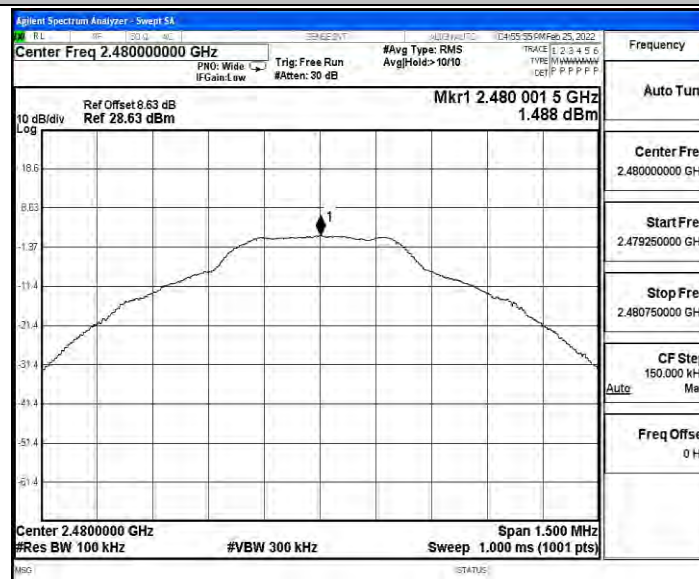


DH5_Ant1_2441_1000~26500

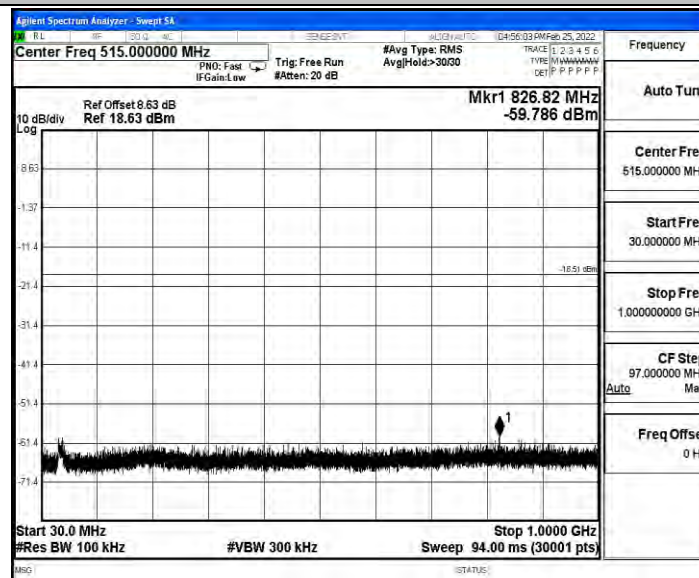




DH5_Ant1_2480_0~Reference

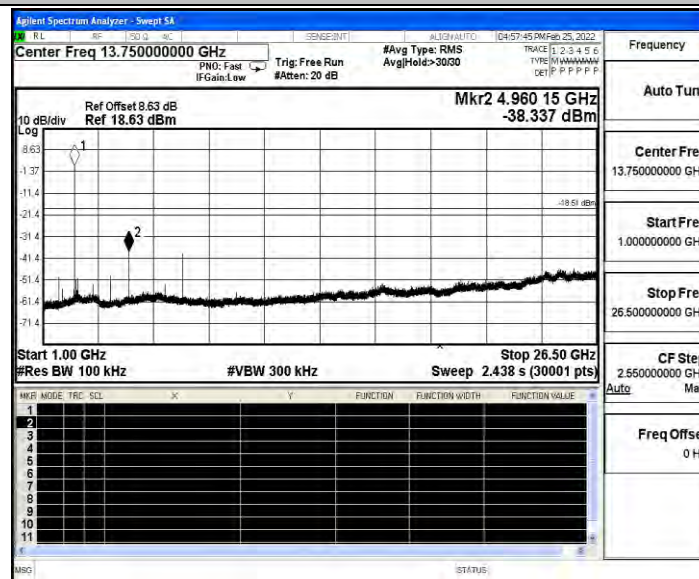


DH5_Ant1_2480_30~1000

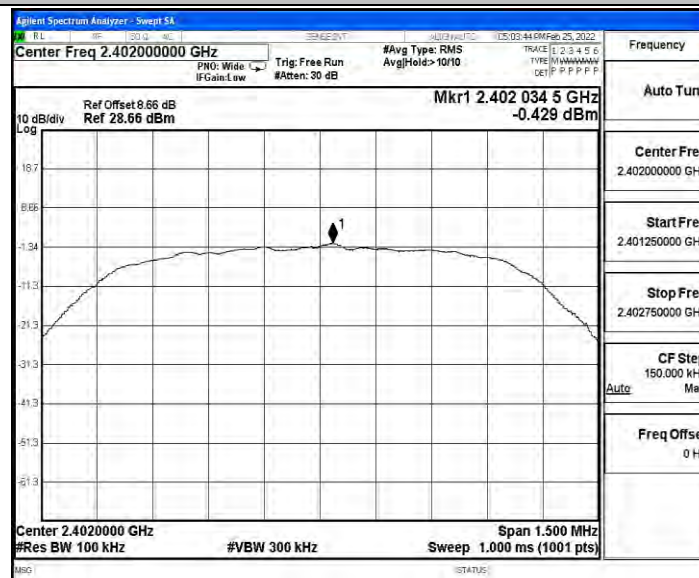




DH5_Ant1_2480_1000~26500

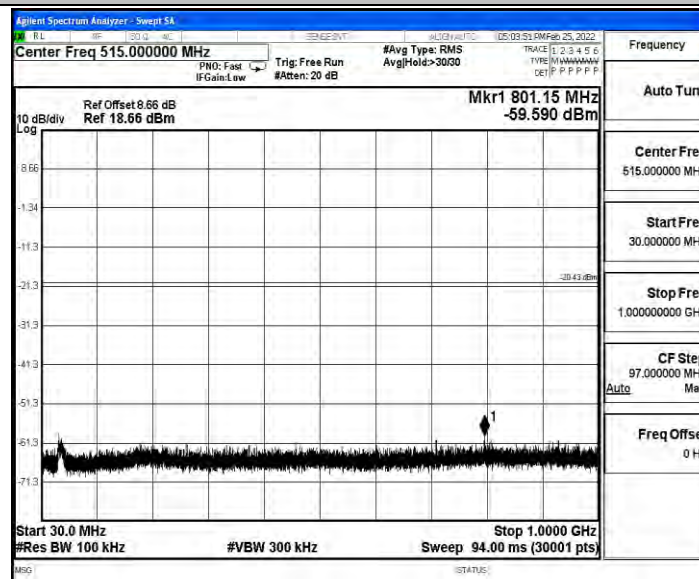


2DH5_Ant1_2402_0~Reference

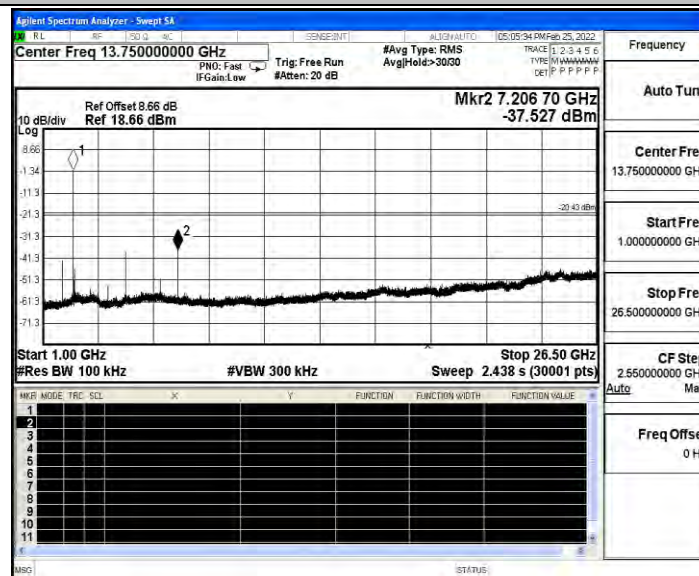




2DH5_Ant1_2402_30~1000

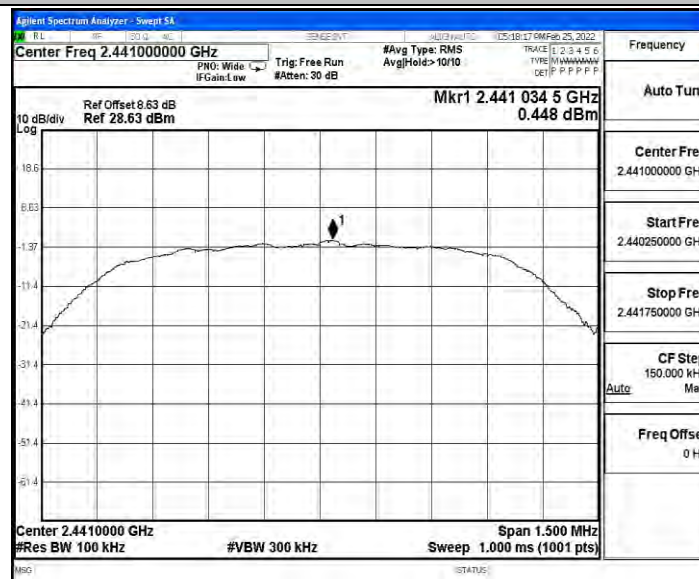


2DH5_Ant1_2402_1000~26500

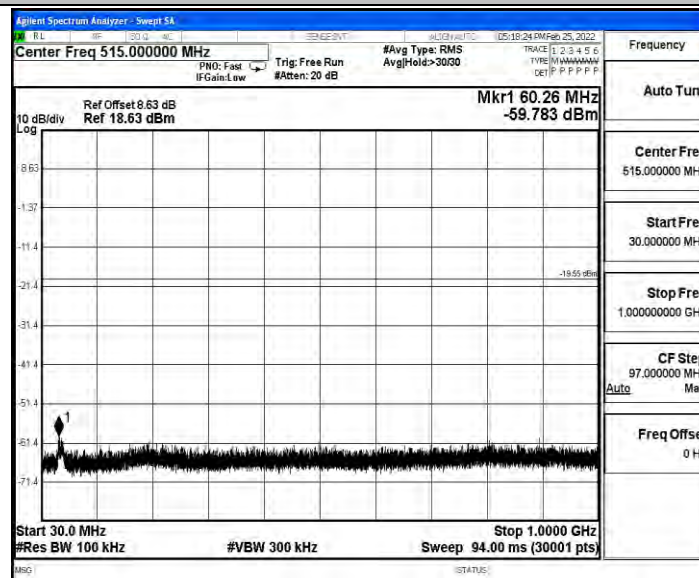




2DH5_Ant1_2441_0~Reference

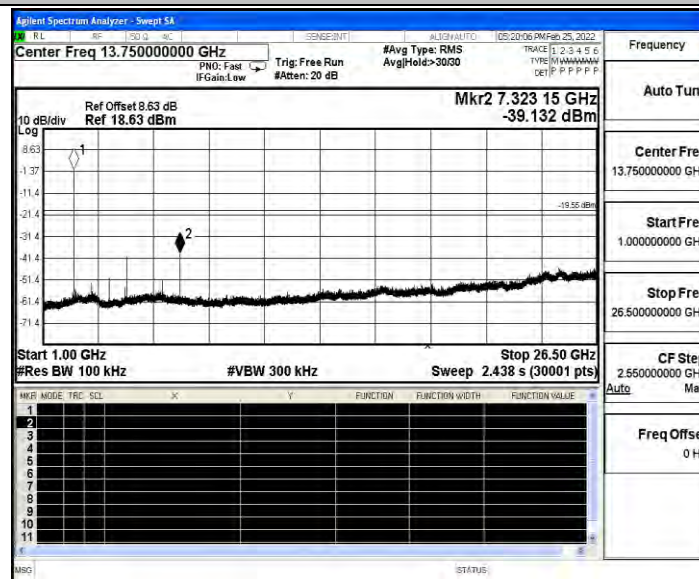


2DH5_Ant1_2441_30~1000

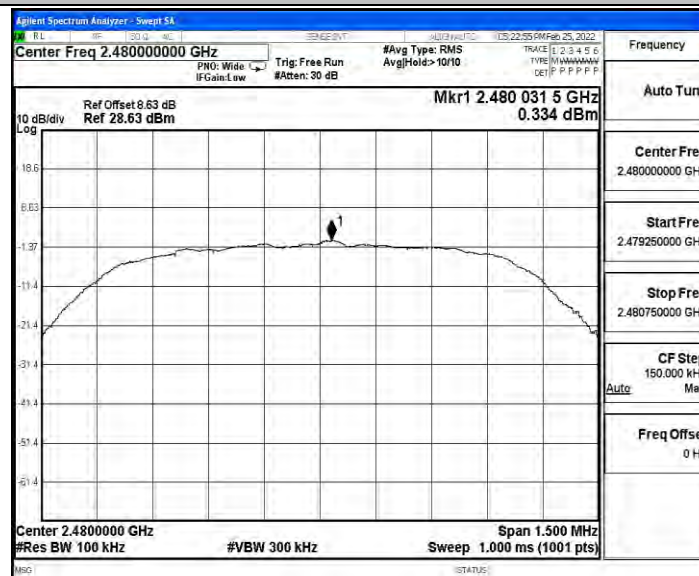




2DH5_Ant1_2441_1000~26500

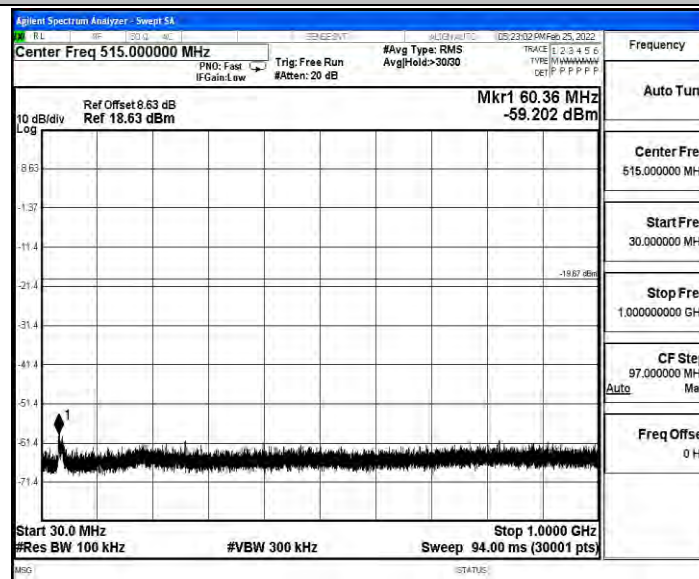


2DH5_Ant1_2480_0~Reference

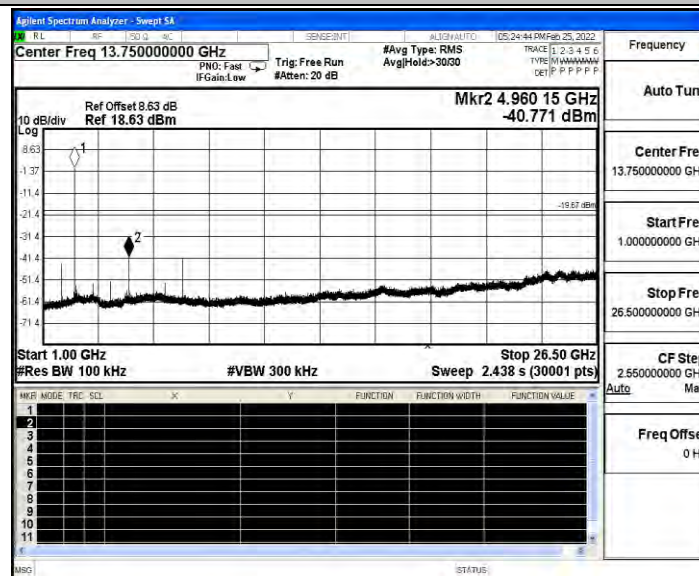




2DH5_Ant1_2480_30~1000

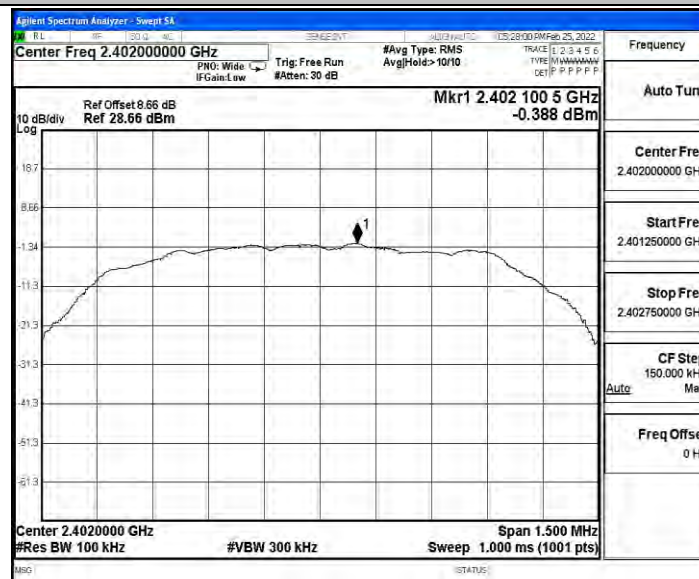


2DH5_Ant1_2480_1000~26500

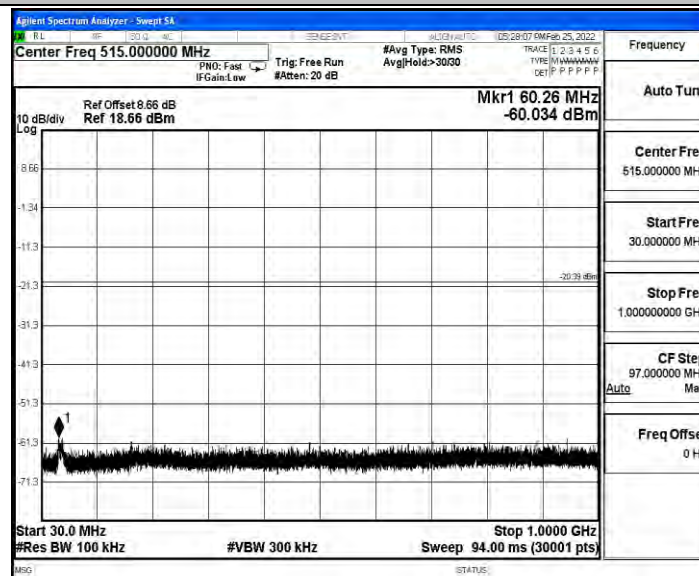




3DH5_Ant1_2402_0~Reference

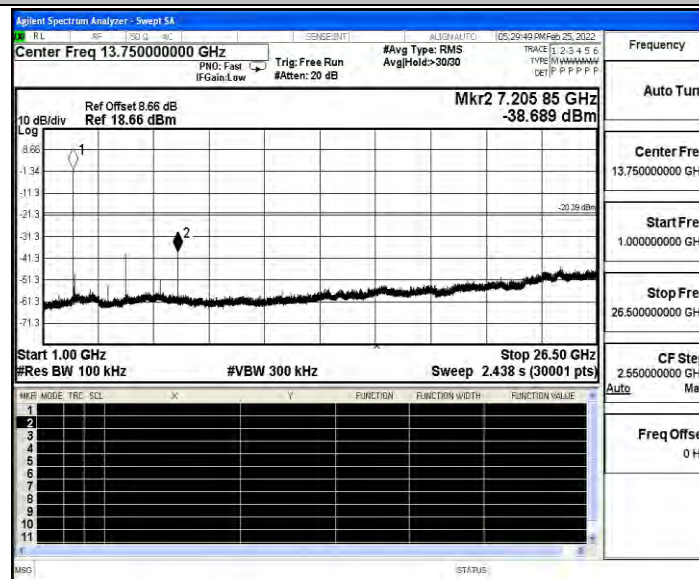


3DH5_Ant1_2402_30~1000

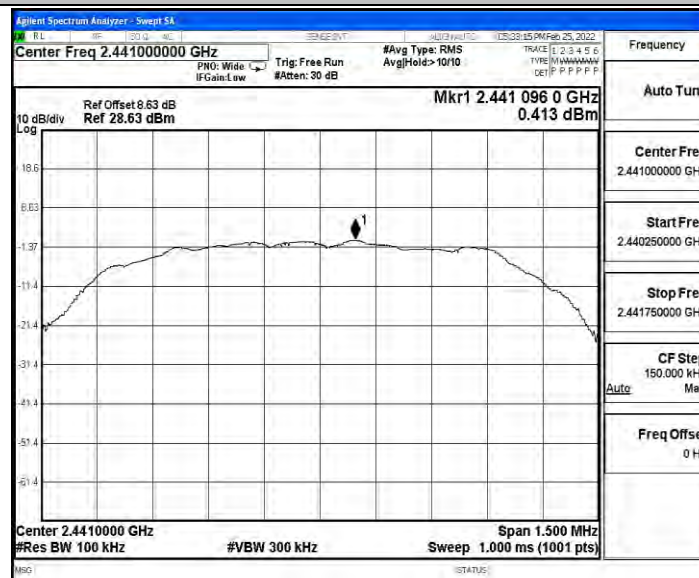




3DH5_Ant1_2402_1000~26500

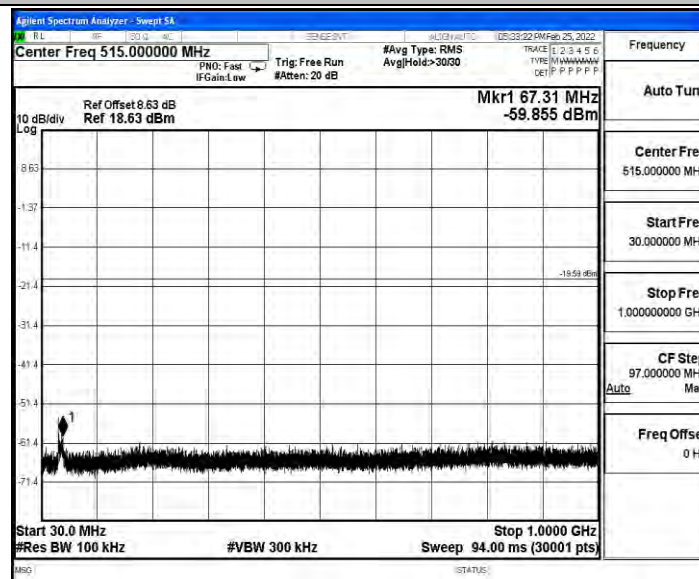


3DH5_Ant1_2441_0~Reference

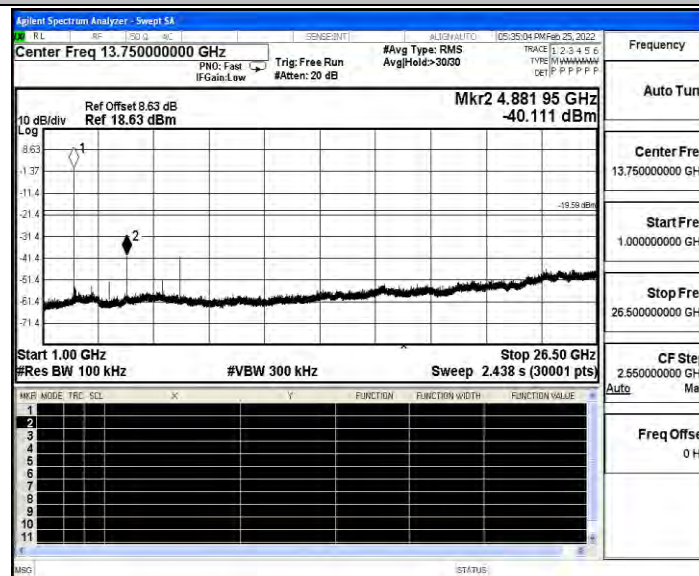




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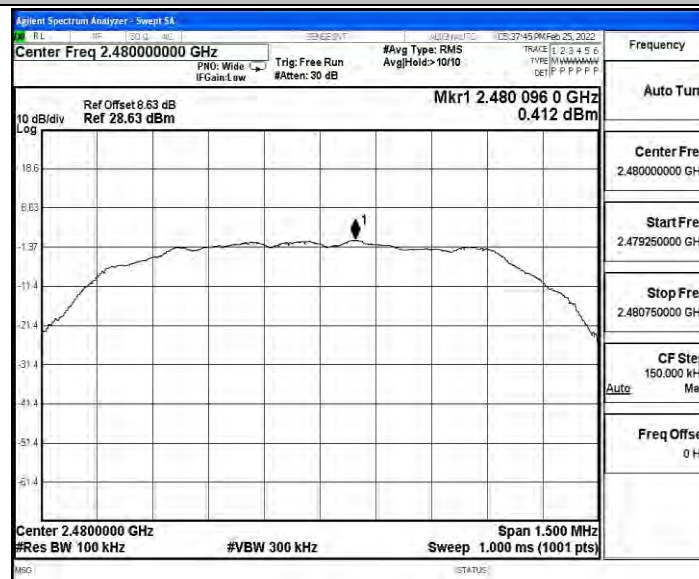


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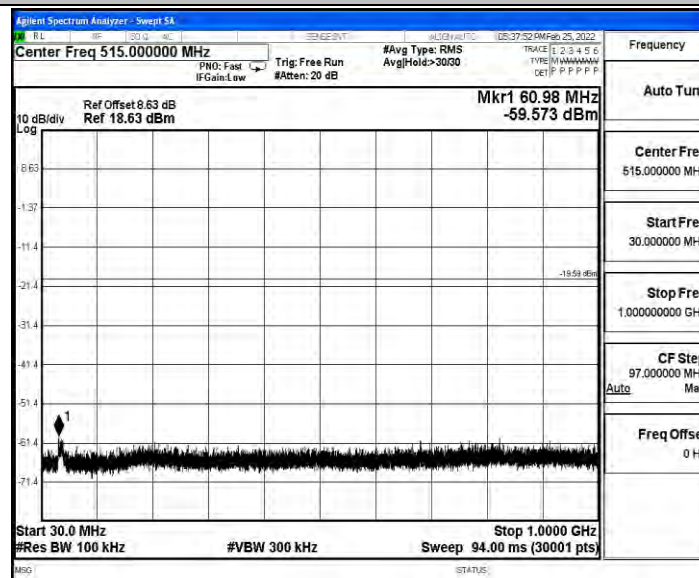




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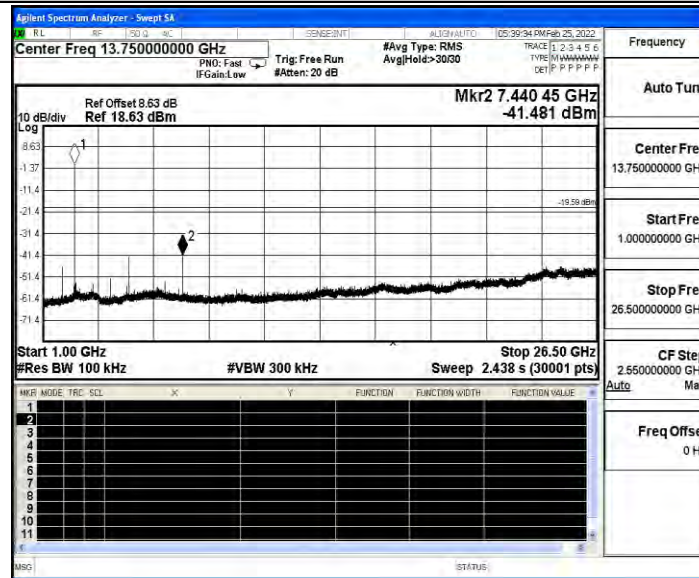


3DH5_Ant1_2480_30~1000





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	-48.74	≤-41.20	46.46	≤54	PASS
				AV	2349.980	-48.19	≤-41.20	47.01	≤54	PASS
				AV	2390.000	-48.37	≤-41.20	46.83	≤54	PASS
				Peak	2310.000	-39.19	≤-21.20	56.01	≤74	PASS
				Peak	2357.960	-36.51	≤-21.20	58.69	≤74	PASS
				Peak	2390.000	-38.38	≤-21.20	56.82	≤74	PASS
		High	2480	AV	2483.500	-47.1	≤-41.20	48.10	≤54	PASS
				AV	2483.520	-47.1	≤-41.20	48.10	≤54	PASS
				AV	2500.000	-47.79	≤-41.20	47.41	≤54	PASS
				Peak	2483.500	-38.27	≤-21.20	56.93	≤74	PASS
				Peak	2492.800	-36.79	≤-21.20	58.41	≤74	PASS
				Peak	2500.000	-37.29	≤-21.20	57.91	≤74	PASS
		Low	Hop_24 02	Peak	2310.000	-39.36	≤-21.20	55.84	≤74	PASS
				Peak	2315.330	-37.06	≤-21.20	58.14	≤74	PASS
				Peak	2390.000	-38.47	≤-21.20	56.73	≤74	PASS
		High	Hop_24 80	Peak	2483.500	-38.41	≤-21.20	56.79	≤74	PASS
				Peak	2483.840	-32.55	≤-21.20	62.65	≤74	PASS
				Peak	2500.000	-38.59	≤-21.20	56.61	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-48.77	≤-41.20	46.43	≤54	PASS
				AV	2375.915	-48.27	≤-41.20	46.93	≤54	PASS
				AV	2390.000	-48.38	≤-41.20	46.82	≤54	PASS
				Peak	2310.000	-38.38	≤-21.20	56.82	≤74	PASS
				Peak	2350.505	-36.79	≤-21.20	58.41	≤74	PASS
				Peak	2390.000	-38.49	≤-21.20	56.71	≤74	PASS
		High	2480	AV	2483.500	-46.38	≤-41.20	48.82	≤54	PASS
				AV	2483.520	-46.38	≤-41.20	48.82	≤54	PASS
				AV	2500.000	-47.42	≤-41.20	47.78	≤54	PASS
				Peak	2483.500	-26.99	≤-21.20	68.21	≤74	PASS
				Peak	2483.520	-26.99	≤-21.20	68.21	≤74	PASS
				Peak	2500.000	-37.87	≤-21.20	57.33	≤74	PASS
		Low	Hop_24 02	Peak	2310.000	-39.31	≤-21.20	55.89	≤74	PASS
				Peak	2359.220	-37.5	≤-21.20	57.70	≤74	PASS
				Peak	2390.000	-39.22	≤-21.20	55.98	≤74	PASS
		High	Hop_24 80	Peak	2483.500	-37.97	≤-21.20	57.23	≤74	PASS
				Peak	2484.400	-34.3	≤-21.20	60.90	≤74	PASS
				Peak	2500.000	-37.45	≤-21.20	57.75	≤74	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-48.48	≤-41.20	46.72	≤54	PASS



				AV	2375.600	-47.93	≤ -41.20	47.27	≤ 54	PASS
				AV	2390.000	-48.02	≤ -41.20	47.18	≤ 54	PASS
				Peak	2310.000	-39.76	≤ -21.20	55.44	≤ 74	PASS
				Peak	2313.755	-36.58	≤ -21.20	58.62	≤ 74	PASS
				Peak	2390.000	-38.83	≤ -21.20	56.37	≤ 74	PASS
		High	2480	AV	2483.500	-46.27	≤ -41.20	48.93	≤ 54	PASS
				AV	2483.520	-46.27	≤ -41.20	48.93	≤ 54	PASS
				AV	2500.000	-47.54	≤ -41.20	47.66	≤ 54	PASS
				Peak	2483.500	-27.99	≤ -21.20	67.21	≤ 74	PASS
				Peak	2483.840	-27.81	≤ -21.20	67.39	≤ 74	PASS
				Peak	2500.000	-37.64	≤ -21.20	57.56	≤ 74	PASS
		Low	Hop_24 02	Peak	2310.000	-37.53	≤ -21.20	57.67	≤ 74	PASS
				Peak	2363.000	-37.15	≤ -21.20	58.05	≤ 74	PASS
				Peak	2390.000	-38.58	≤ -21.20	56.62	≤ 74	PASS
		High	Hop_24 80	Peak	2483.500	-38.91	≤ -21.20	56.29	≤ 74	PASS
				Peak	2484.000	-29.88	≤ -21.20	65.32	≤ 74	PASS
				Peak	2500.000	-38.52	≤ -21.20	56.68	≤ 74	PASS

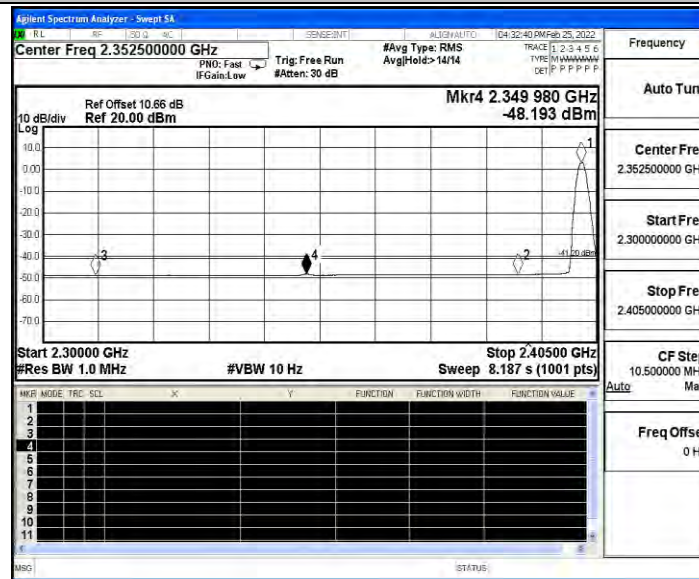
Note:

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.

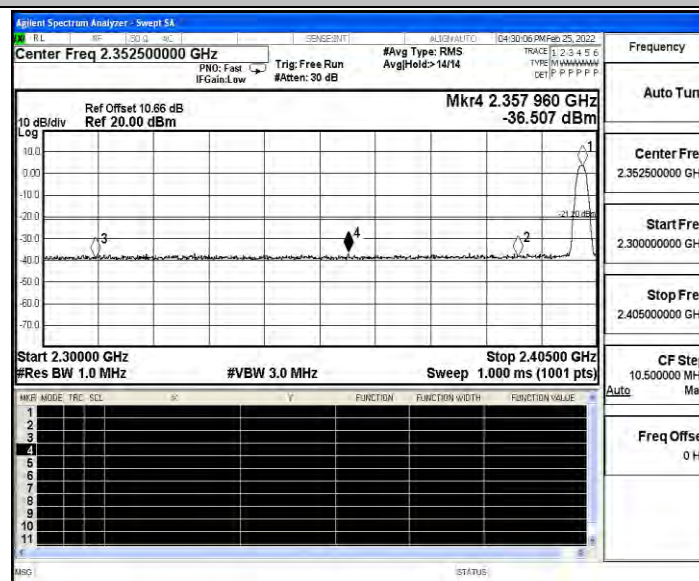


Test Graphs

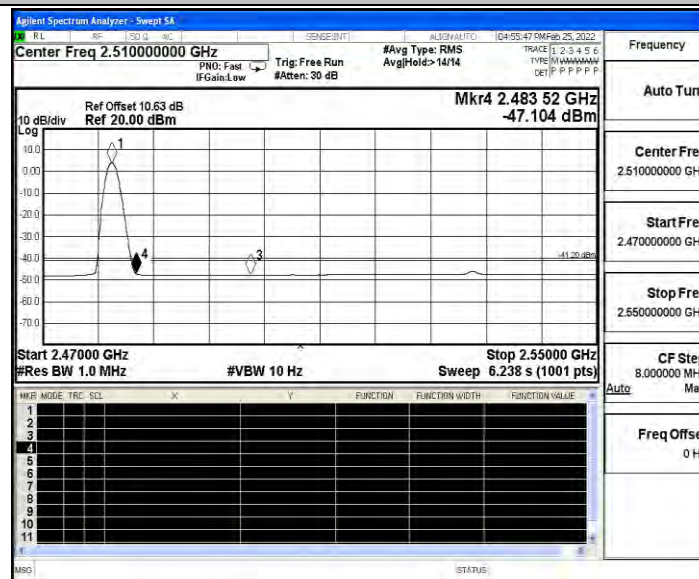
DH5_Ant1_Low_2402_AV



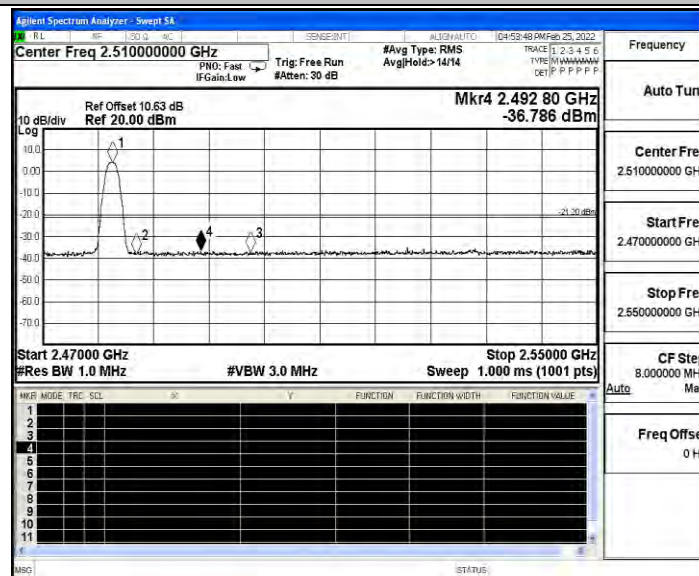
DH5_Ant1_Low_2402_Peak



DH5_Ant1_High_2480_AV

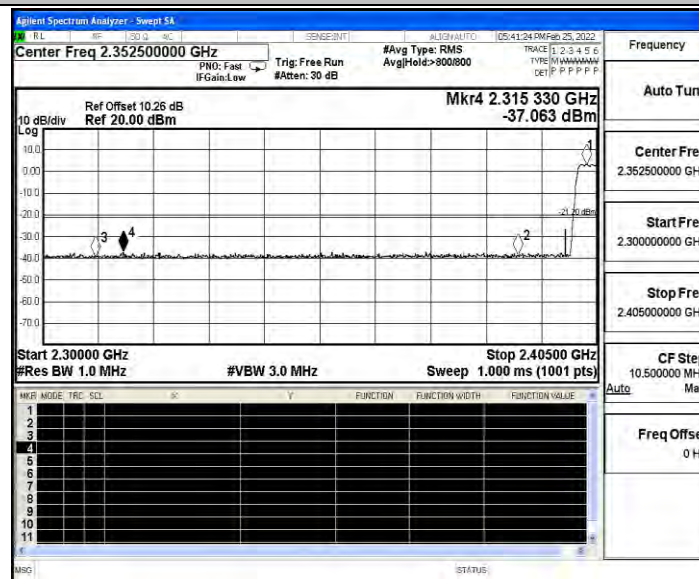


DH5_Ant1_High_2480_Peak

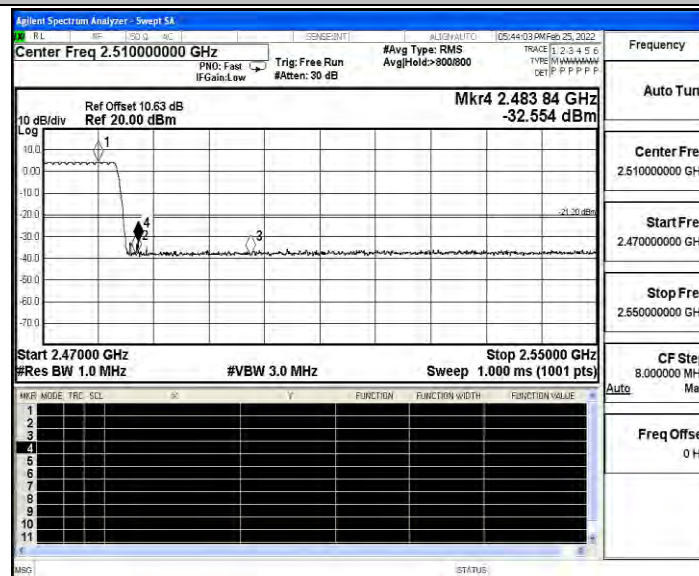




DH5_Ant1_Low_Hop_2402_Peak

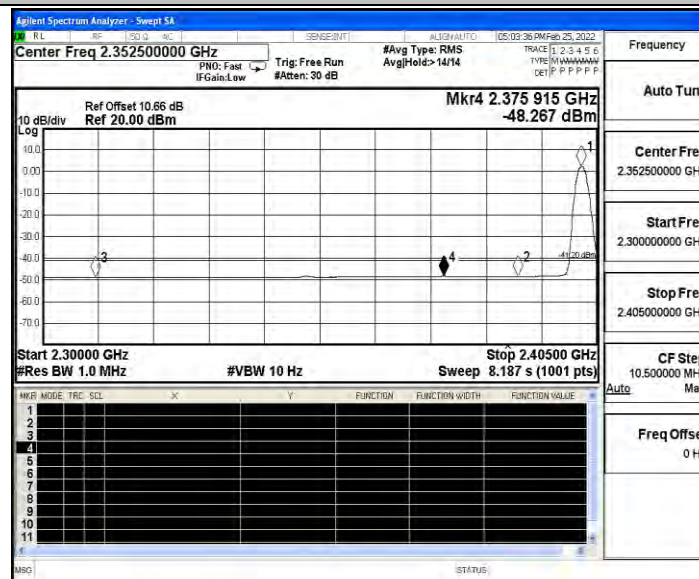


DH5_Ant1_High_Hop_2480_Peak

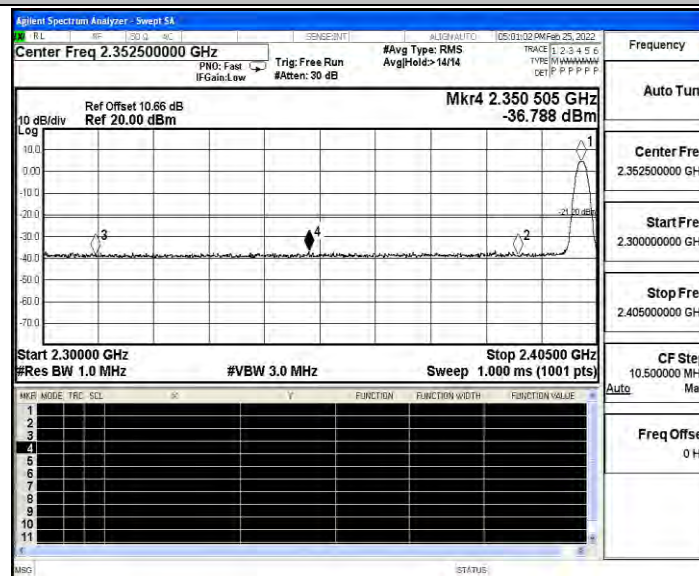




2DH5_Ant1_Low_2402_AV

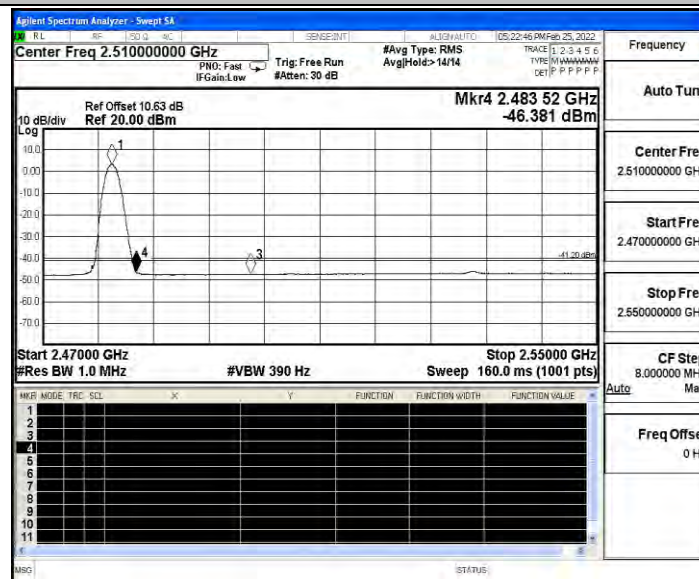


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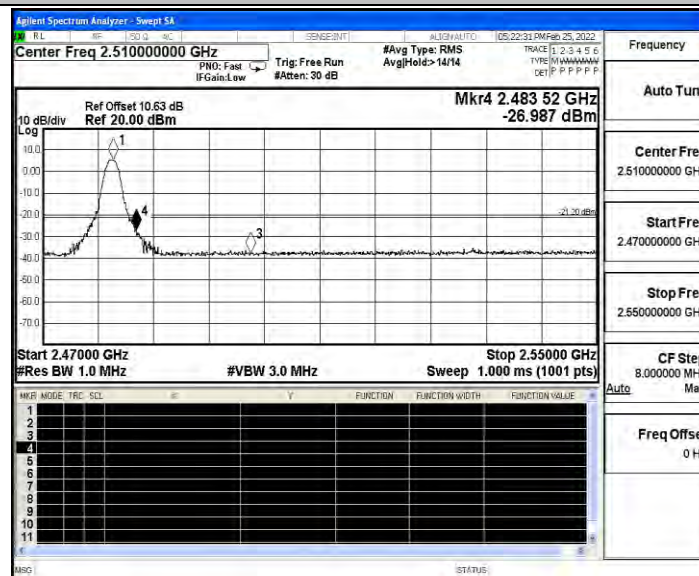




2DH5_Ant1_High_2480_AV

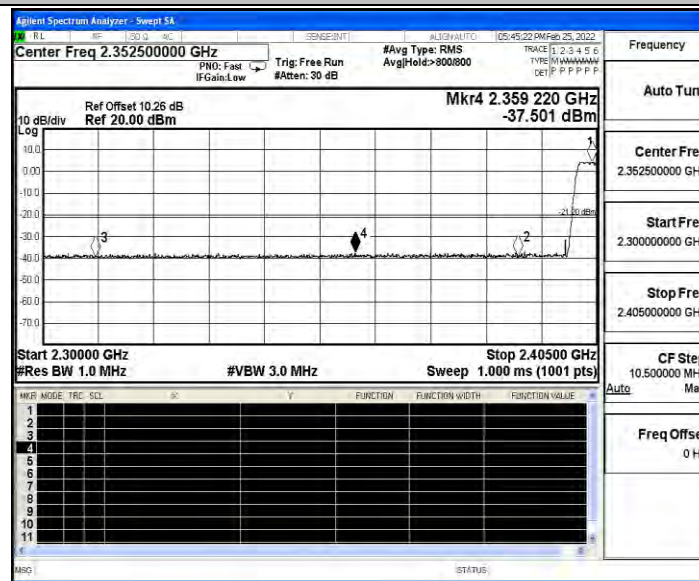


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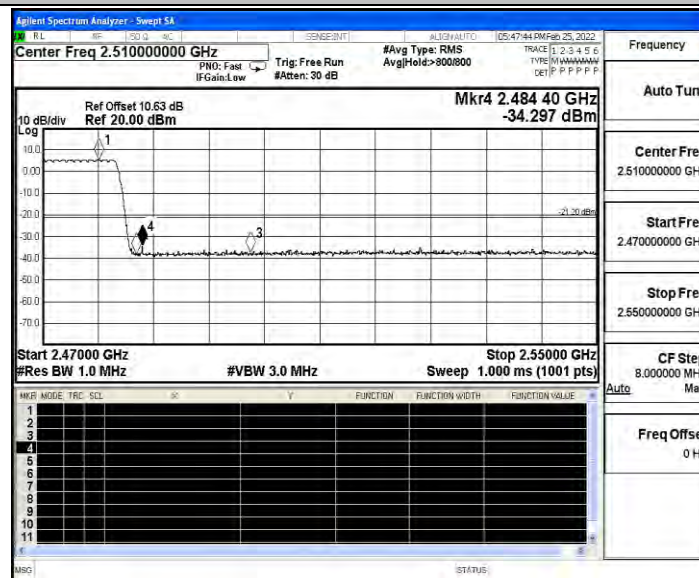




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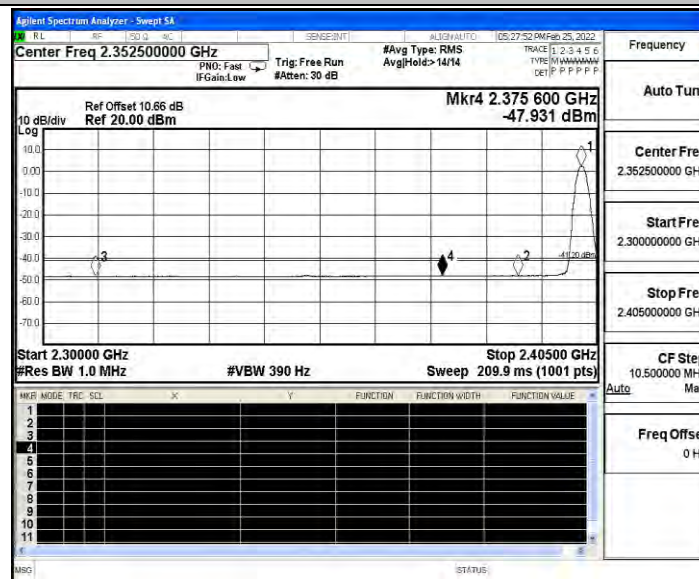


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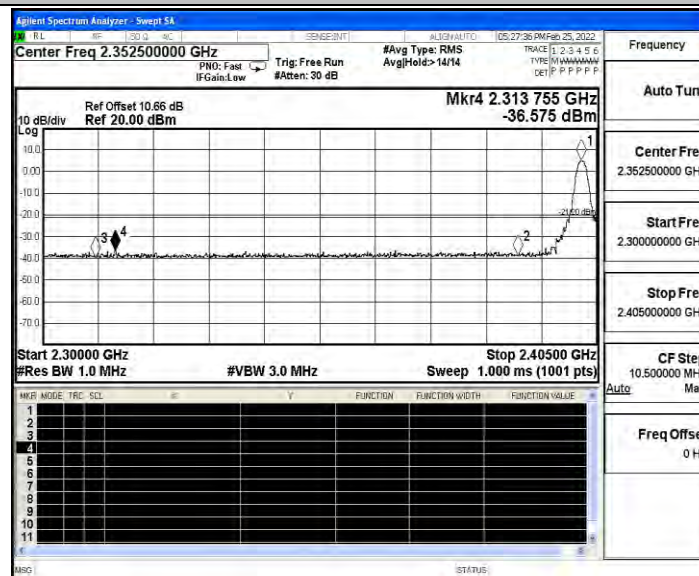




3DH5_Ant1_Low_2402_AV

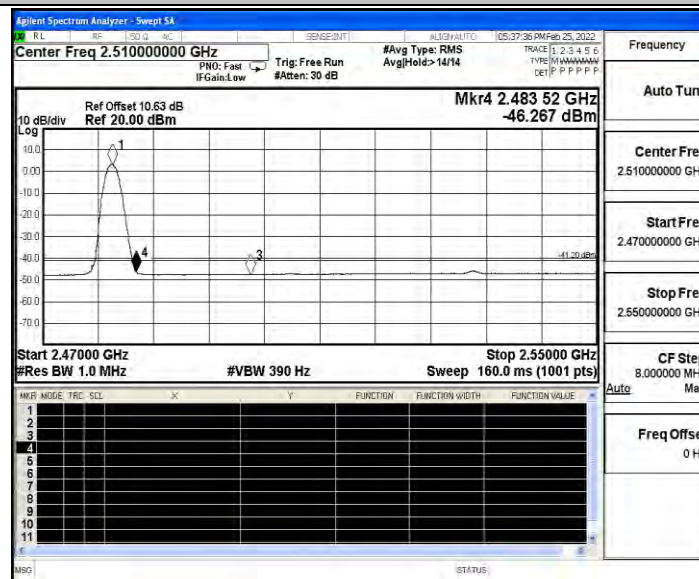


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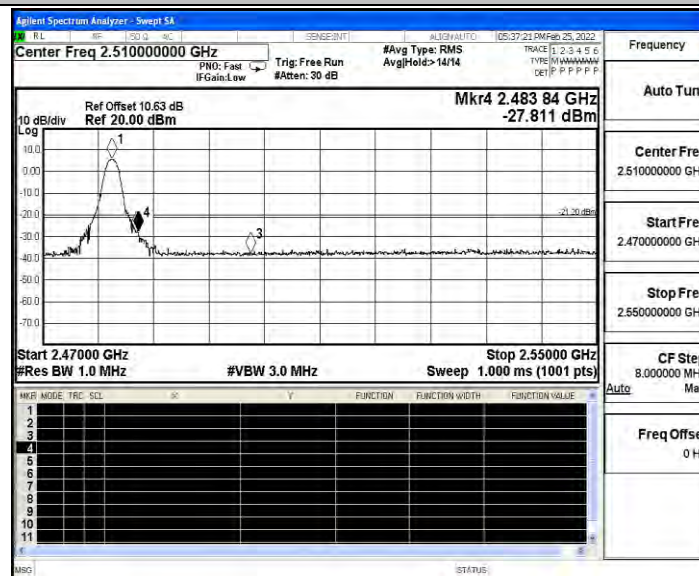




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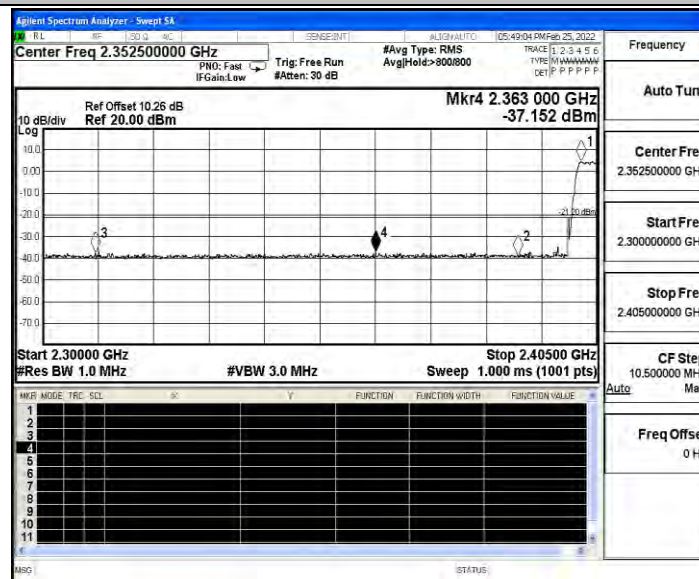


3DH5_Ant1_High_2480_Peak





3DH5_Ant1_Low_Hop_2402_Peak



3DH5_Ant1_High_Hop_2480_Peak

