

## Appendix A

### RF Test Data for BT(BDR/EDR) (Conducted Measurement)

Product Name: Feature phone

Trade Mark: Sunelan

Test Model: S1

FCC ID: 2A2AJ-S1

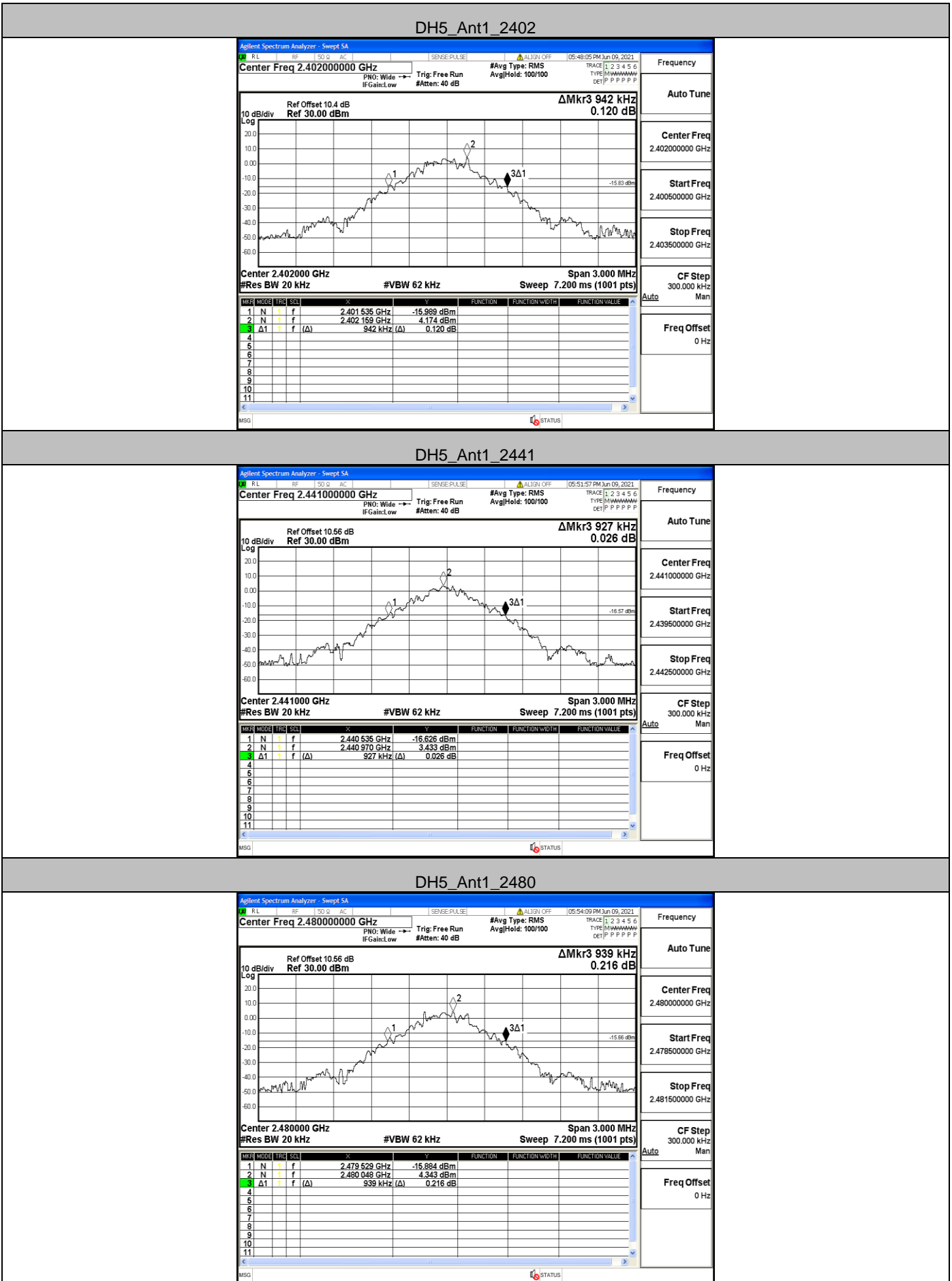
### Environmental Conditions

Temperature:	23.8°C
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Nancy Li
Supervised by:	Hugo Chen

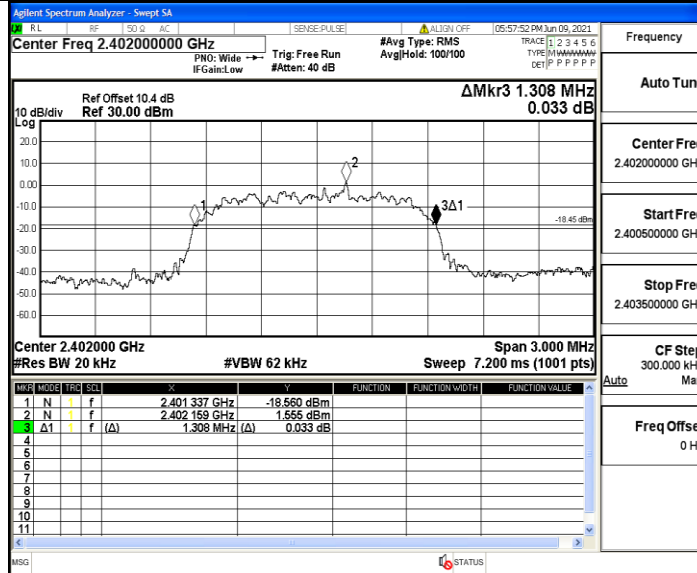
### Appendix A: 20dB Emission Bandwidth Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.942	2401.535	2402.477	---	PASS
		2441	0.927	2440.535	2441.462	---	PASS
		2480	0.939	2479.529	2480.468	---	PASS
2DH5	Ant1	2402	1.308	2401.337	2402.645	---	PASS
		2441	1.314	2440.331	2441.645	---	PASS
		2480	1.317	2479.331	2480.648	---	PASS
3DH5	Ant1	2402	1.311	2401.337	2402.648	---	PASS
		2441	1.275	2440.340	2441.615	---	PASS
		2480	1.266	2479.346	2480.612	---	PASS

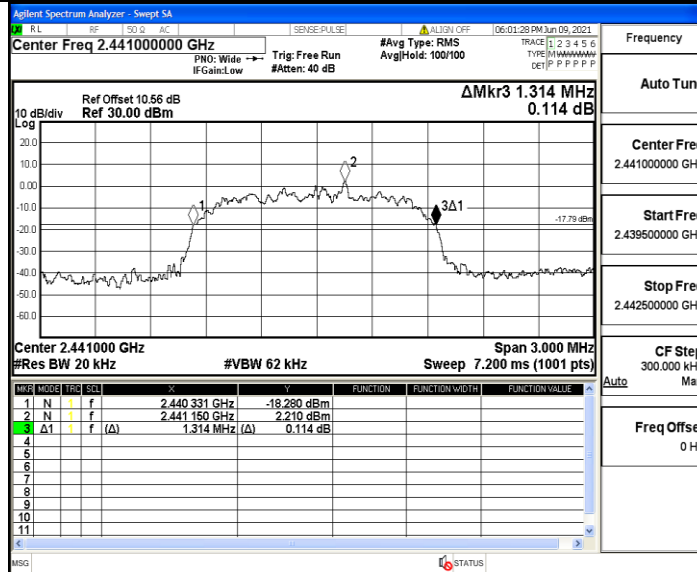
Test Graphs



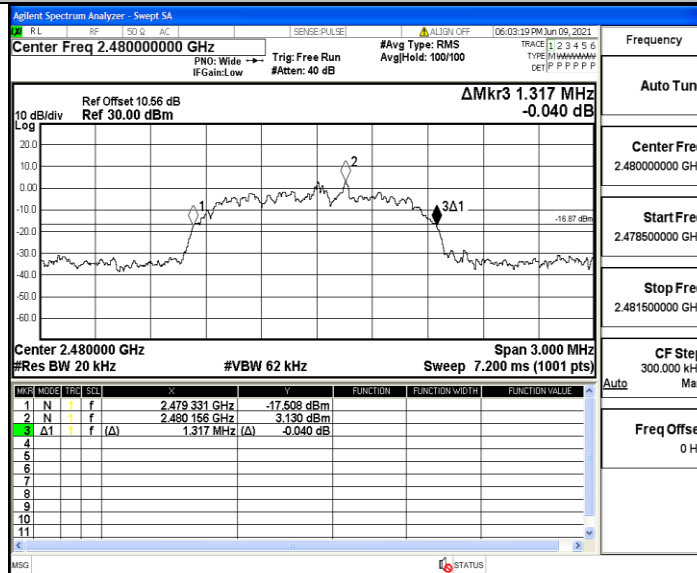
2DH5\_Ant1\_2402



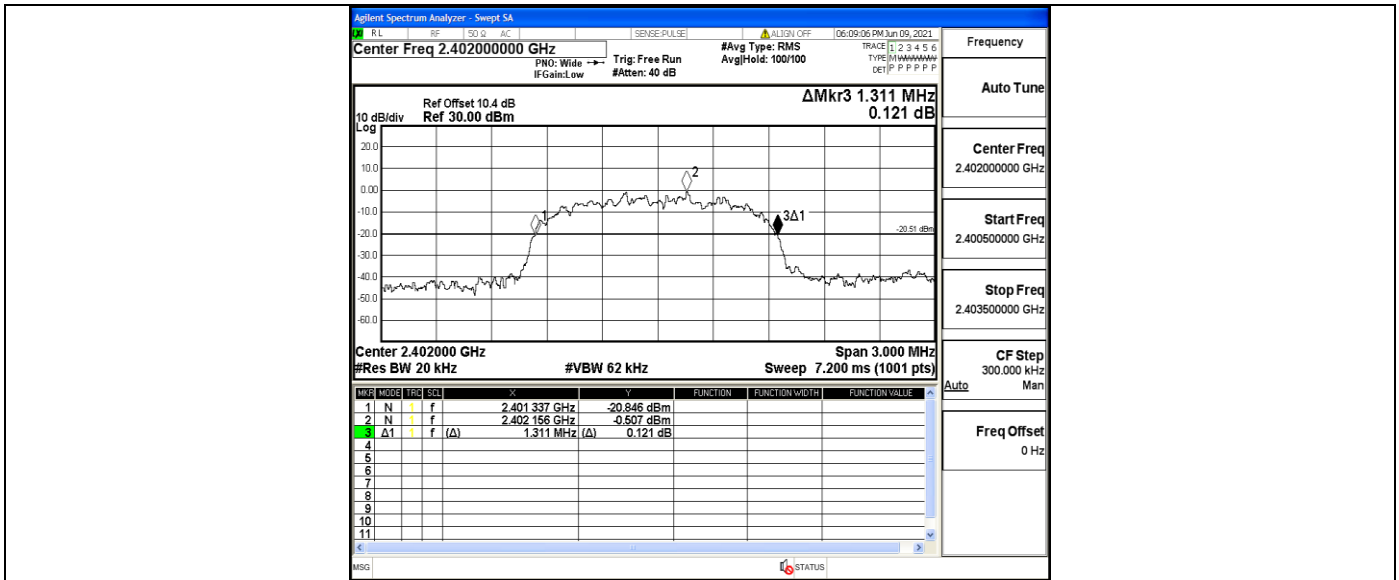
2DH5\_Ant1\_2441



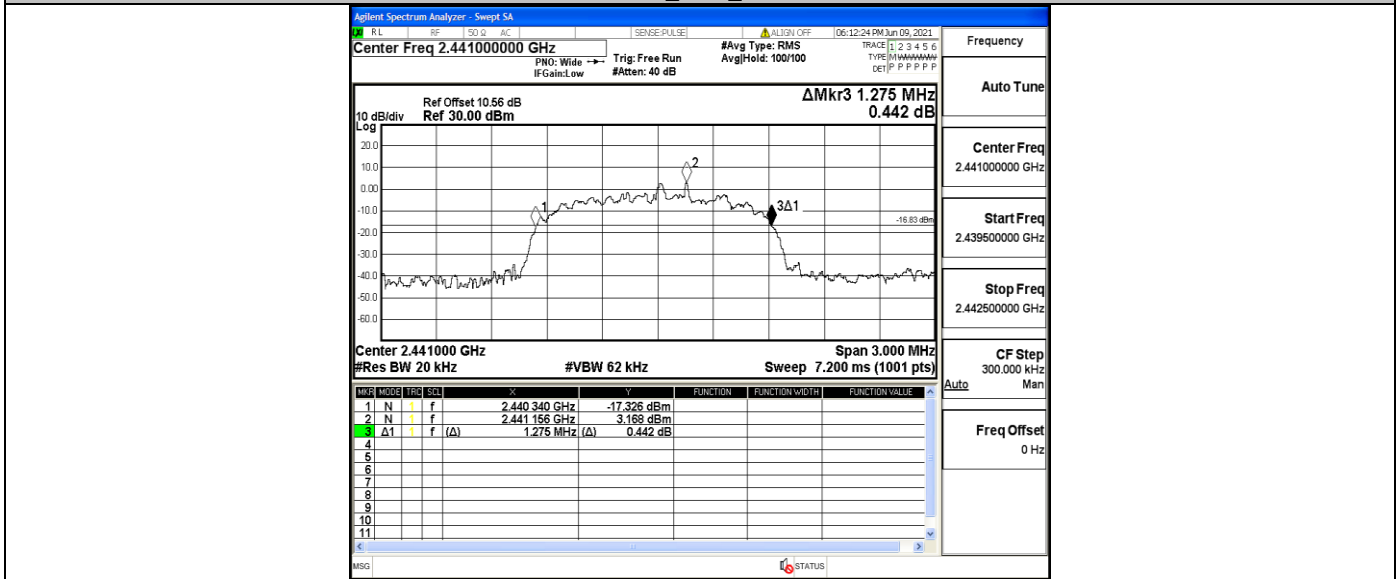
2DH5\_Ant1\_2480



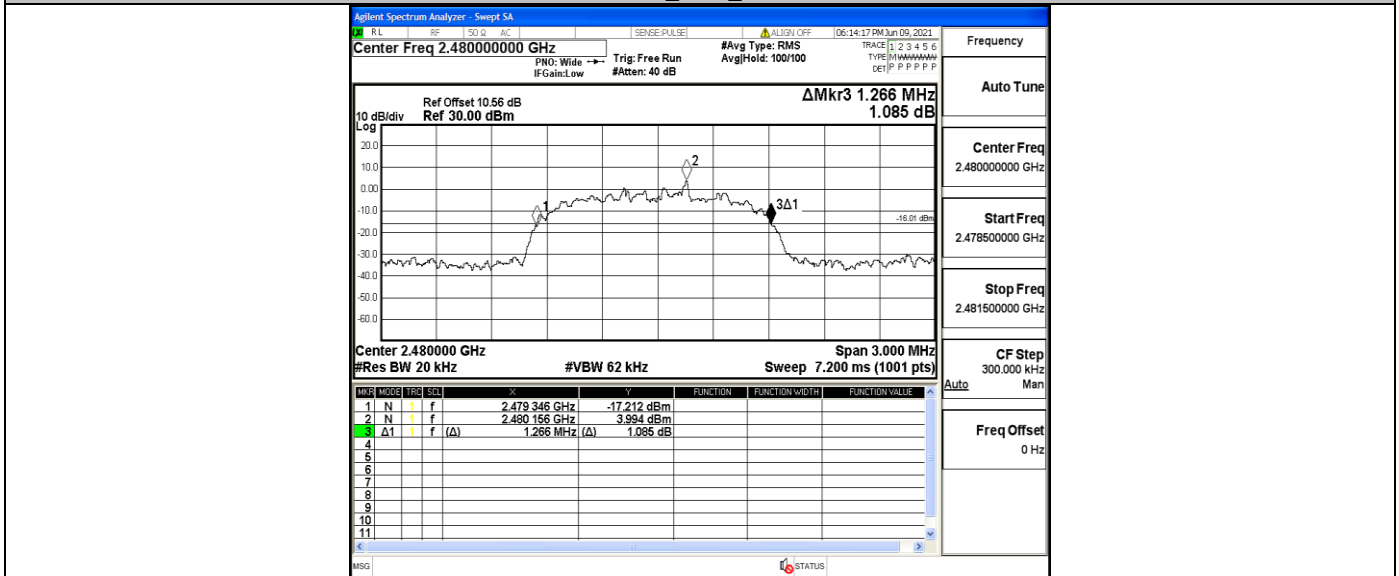
3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480

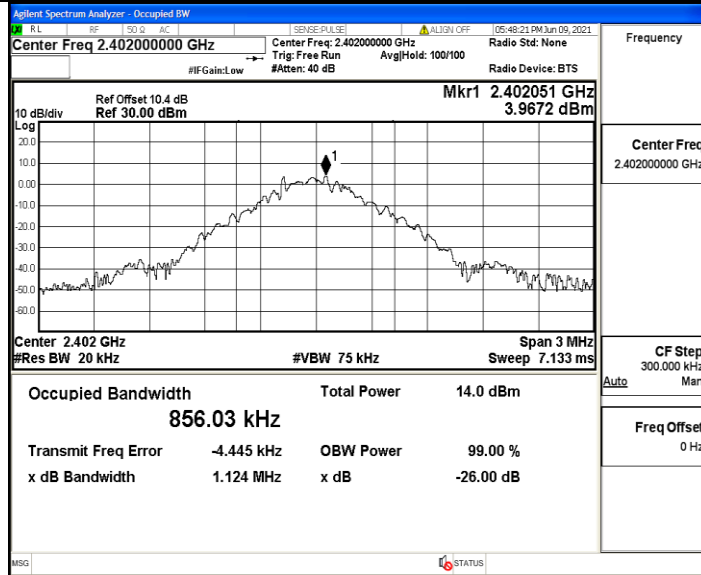


## Appendix B: Occupied Channel Bandwidth Test Result

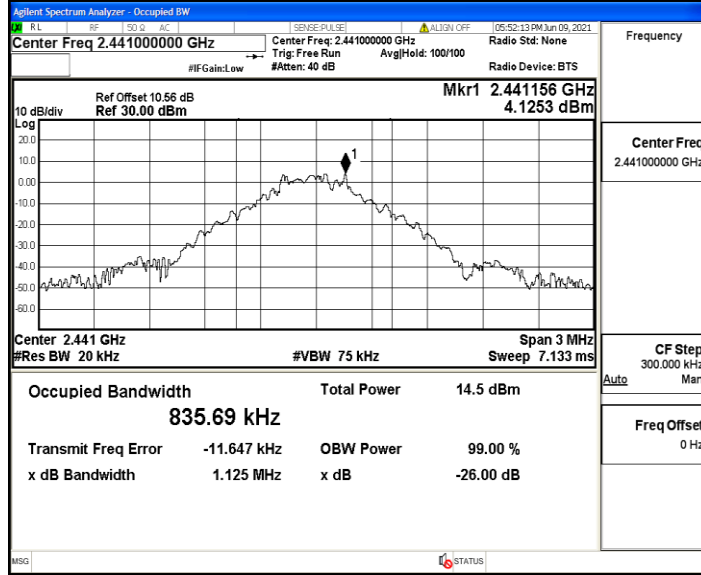
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.85603	2401.568	2402.424	---	PASS
		2441	0.83569	2440.571	2441.406	---	PASS
		2480	0.85205	2479.559	2480.411	---	PASS
2DH5	Ant1	2402	1.1904	2401.398	2402.588	---	PASS
		2441	1.1903	2440.394	2441.584	---	PASS
		2480	1.1996	2479.390	2480.590	---	PASS
3DH5	Ant1	2402	1.1909	2401.390	2402.581	---	PASS
		2441	1.1865	2440.391	2441.578	---	PASS
		2480	1.2143	2479.372	2480.586	---	PASS

Test Graphs

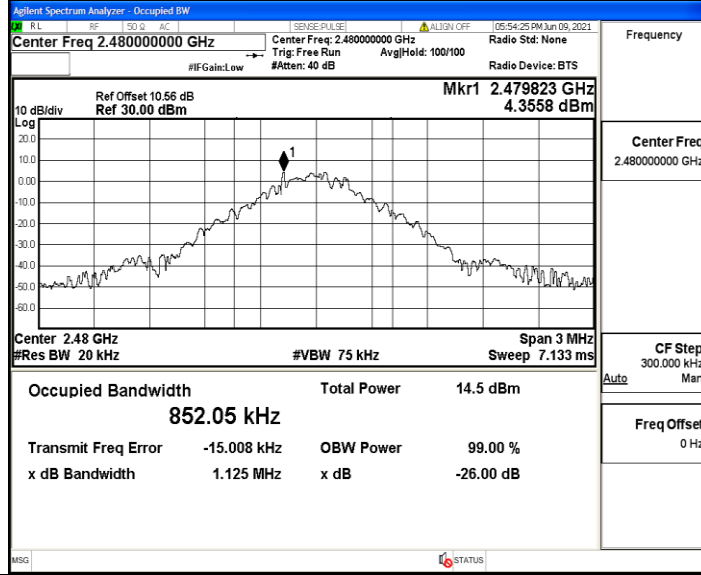
DH5\_Ant1\_2402



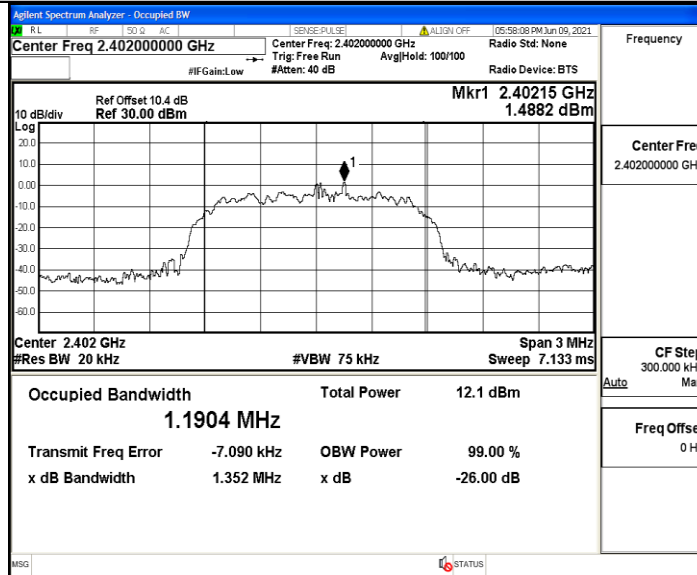
DH5\_Ant1\_2441



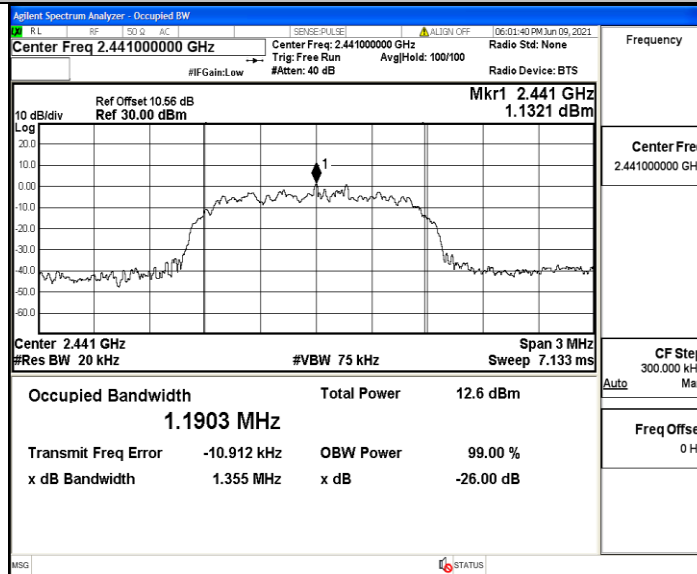
DH5\_Ant1\_2480



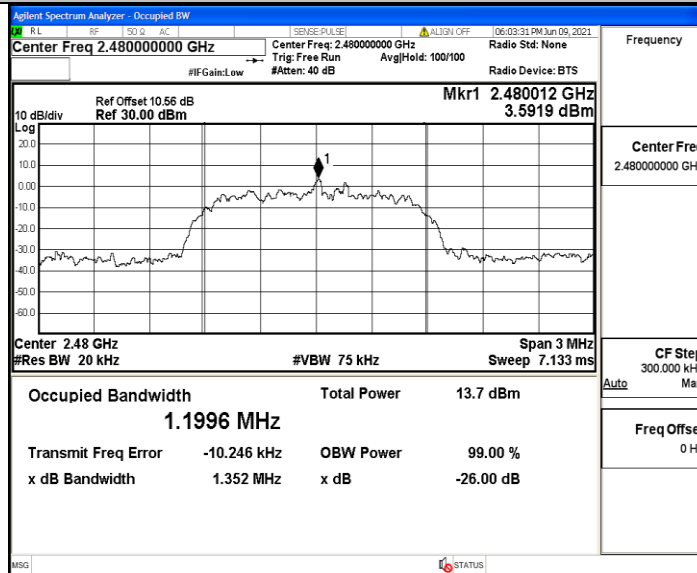
2DH5\_Ant1\_2402



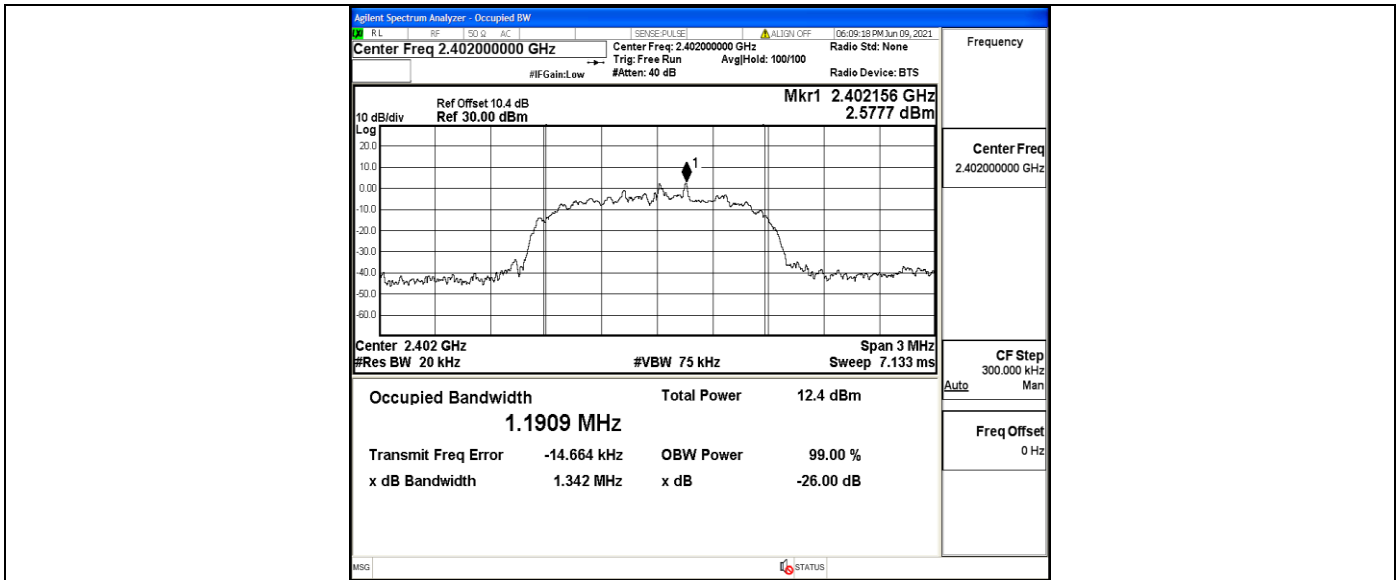
2DH5\_Ant1\_2441



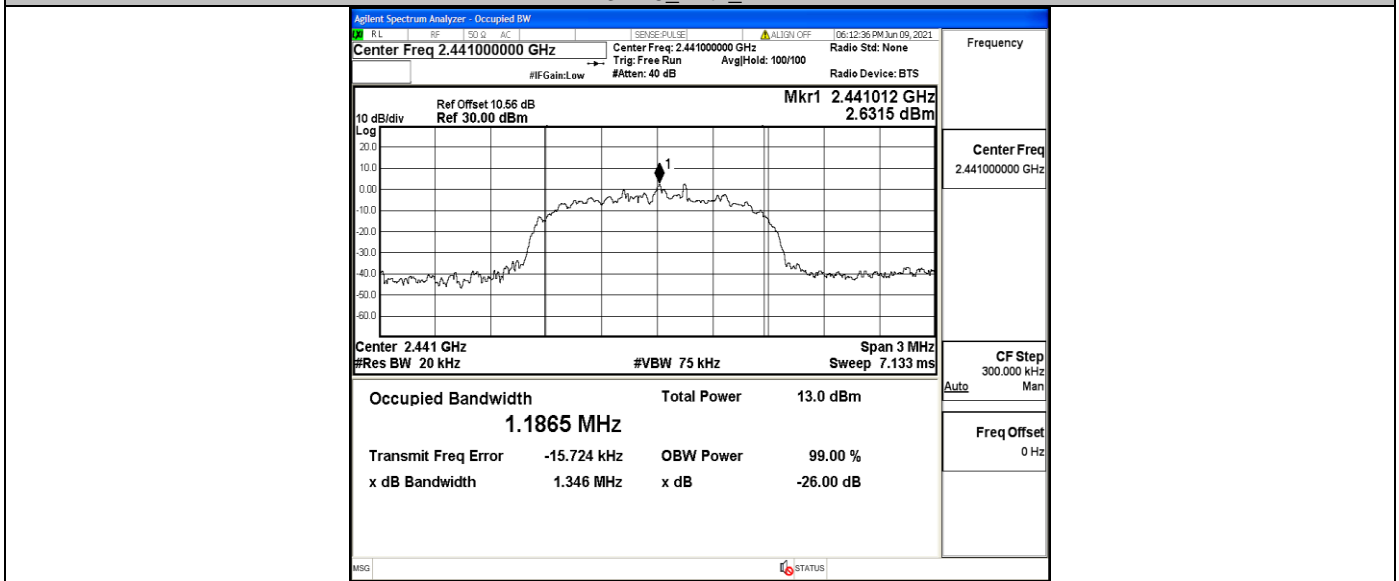
2DH5\_Ant1\_2480



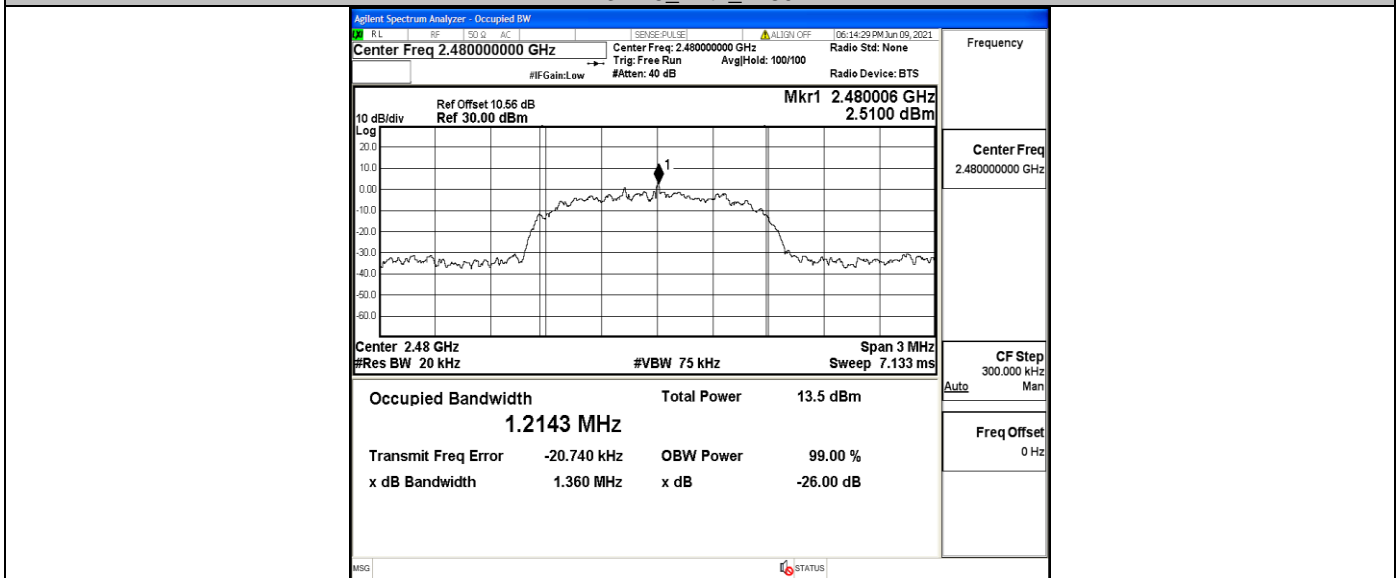
3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480



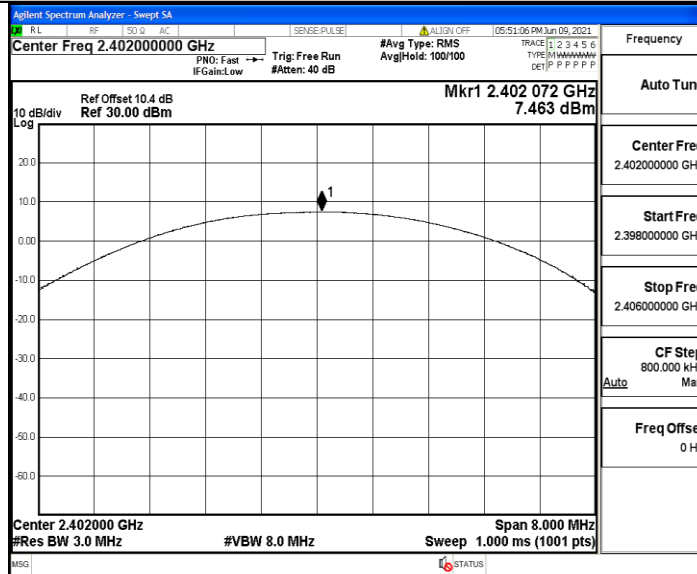


## Appendix C: Maximum conducted output power Test Result

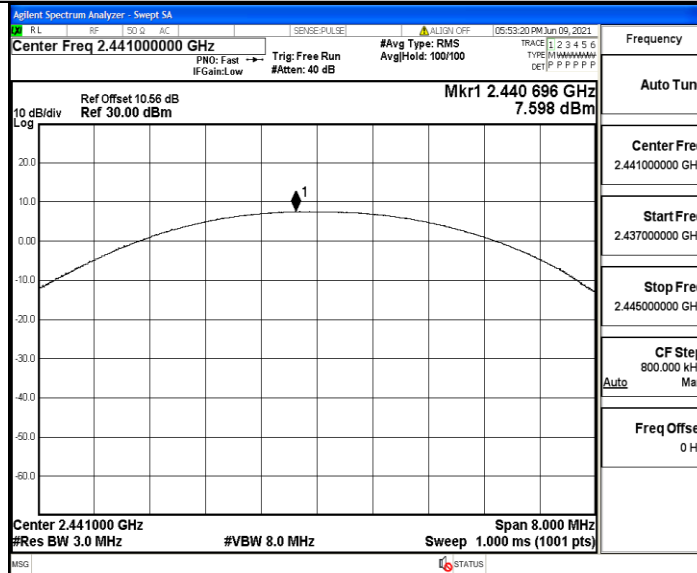
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	7.46	<=20.97	PASS
		2441	7.6	<=20.97	PASS
		2480	7.82	<=20.97	PASS
2DH5	Ant1	2402	7.58	<=20.97	PASS
		2441	8.28	<=20.97	PASS
		2480	8.83	<=20.97	PASS
3DH5	Ant1	2402	7.9	<=20.97	PASS
		2441	8.61	<=20.97	PASS
		2480	9.01	<=20.97	PASS

### Test Graphs

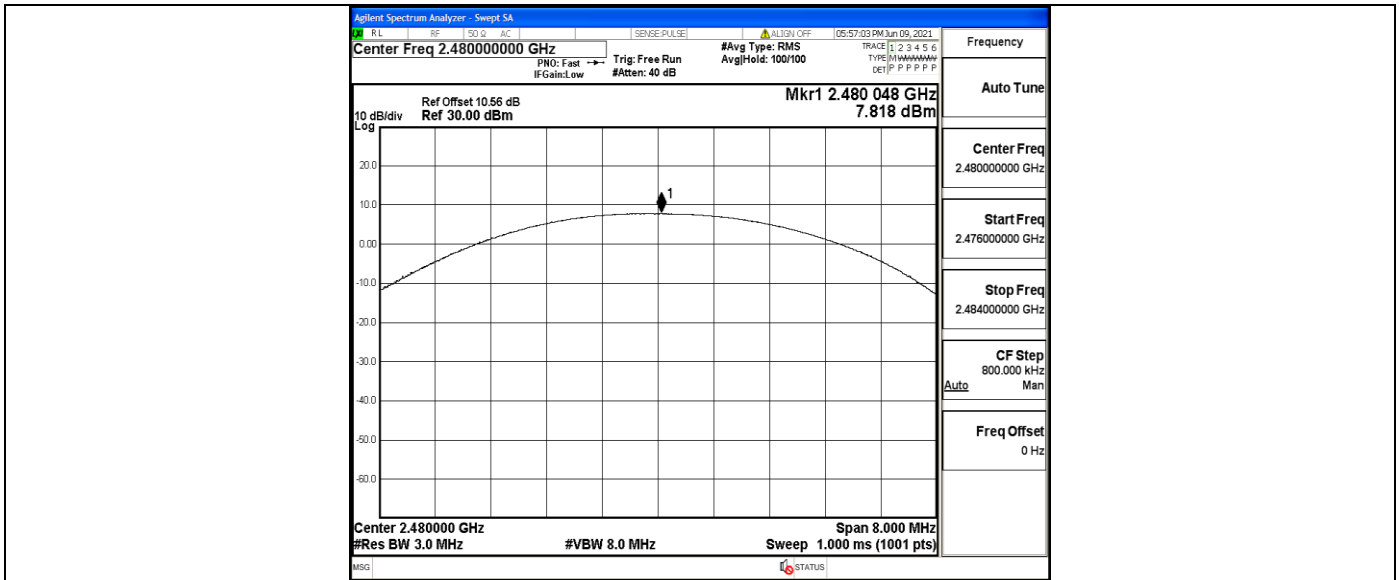
DH5\_Ant1\_2402



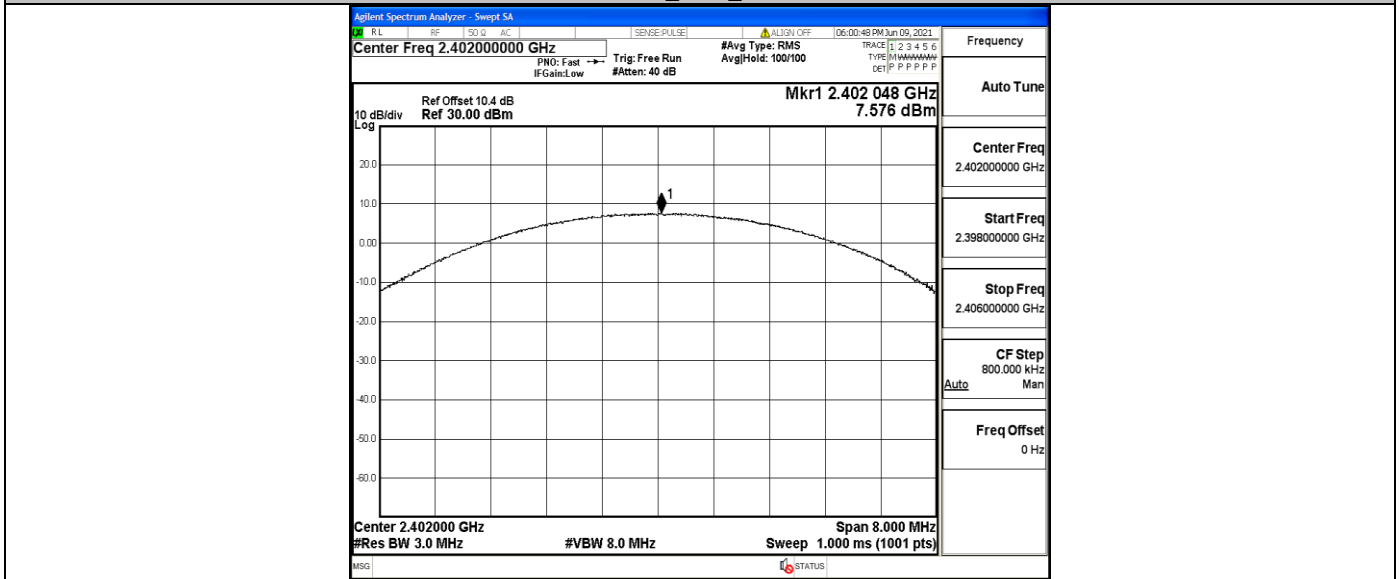
DH5\_Ant1\_2441



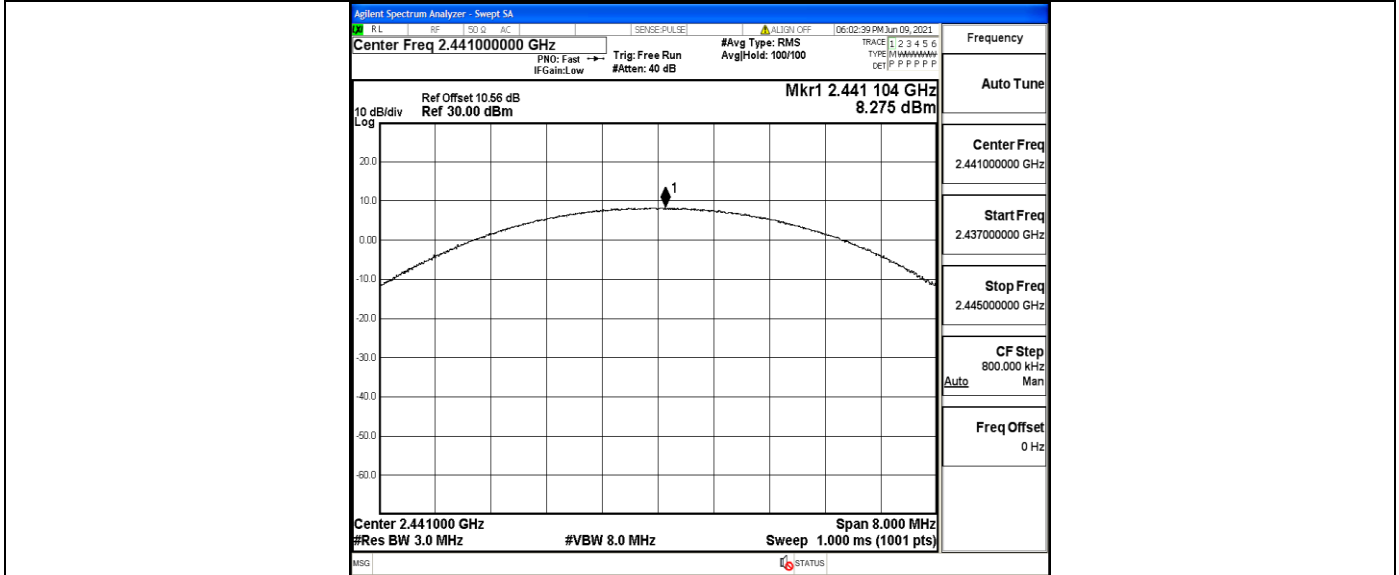
DH5\_Ant1\_2480



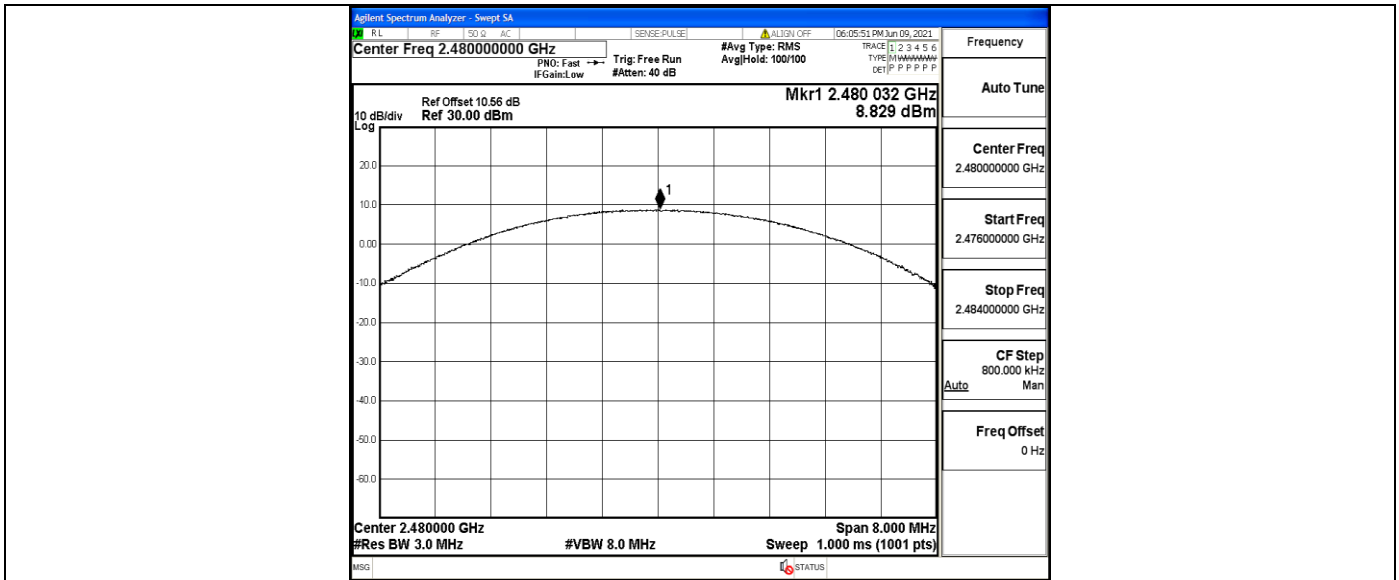
2DH5\_Ant1\_2402



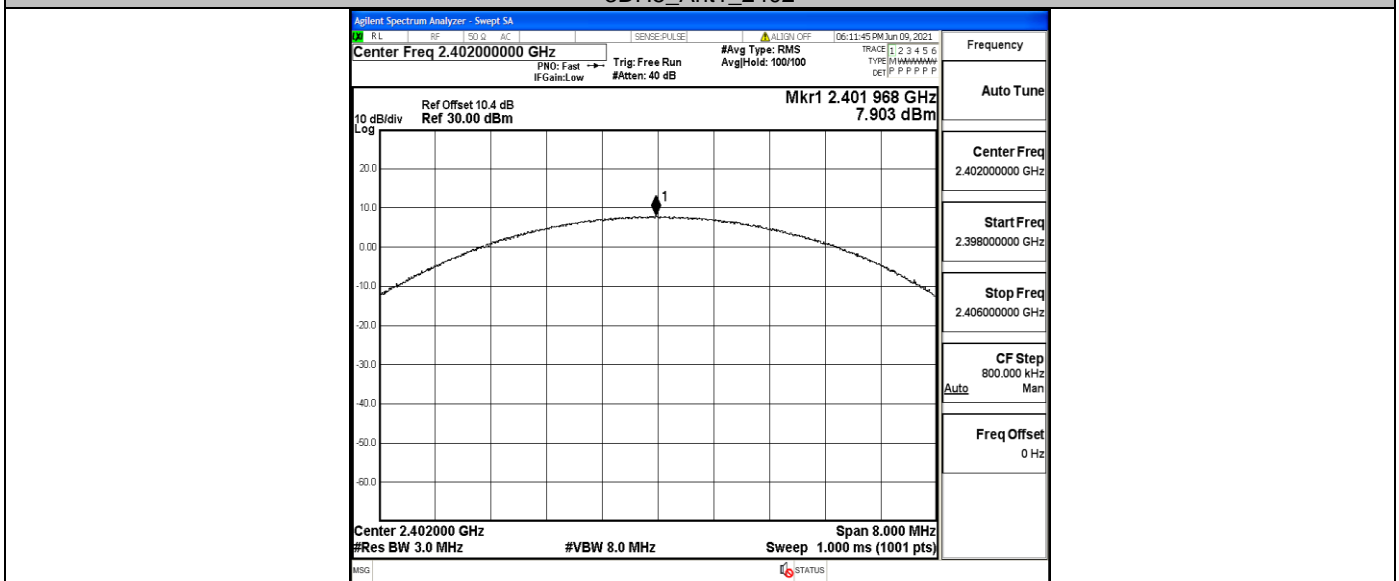
2DH5\_Ant1\_2441



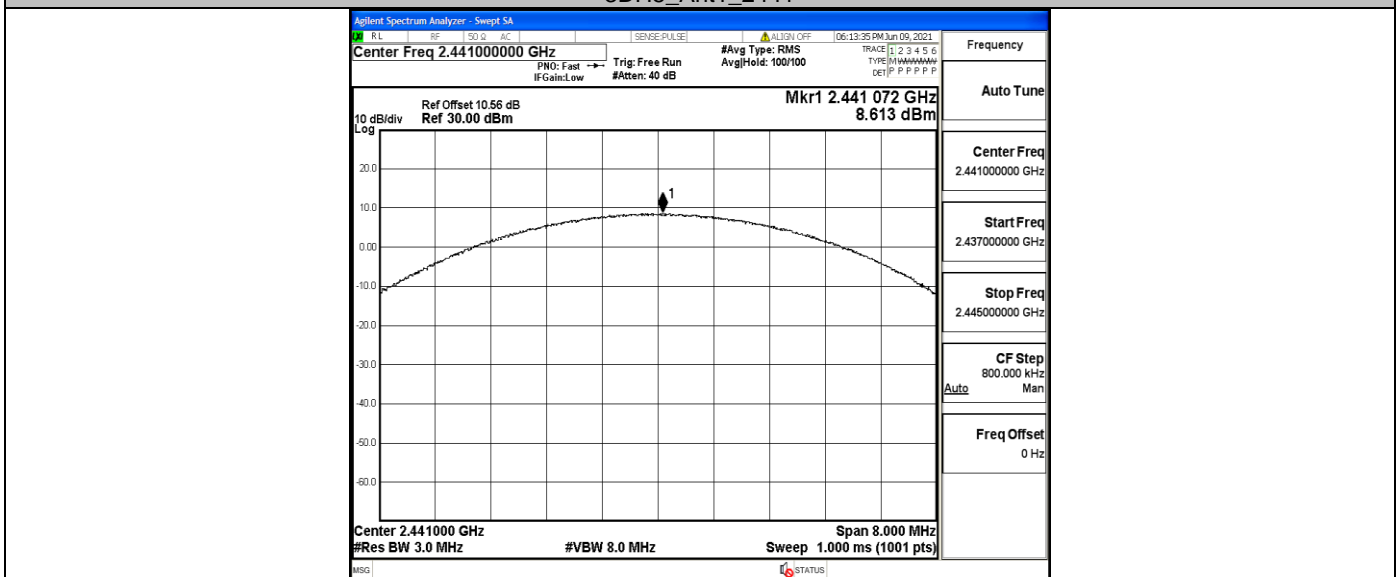
2DH5\_Ant1\_2480



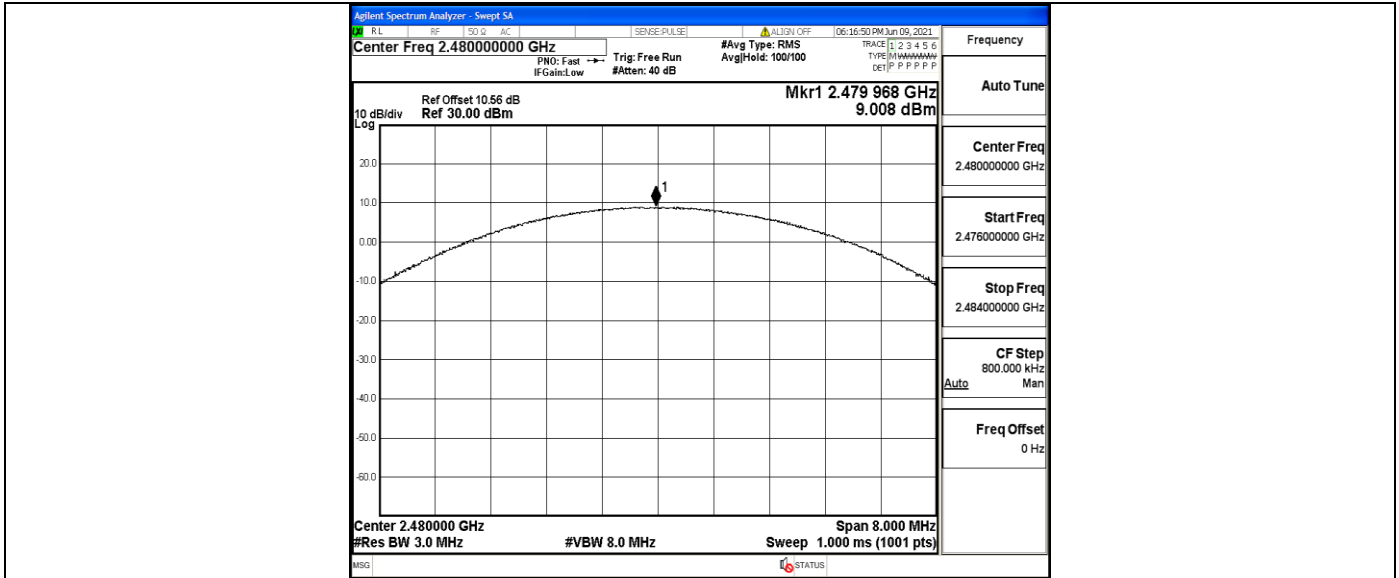
3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



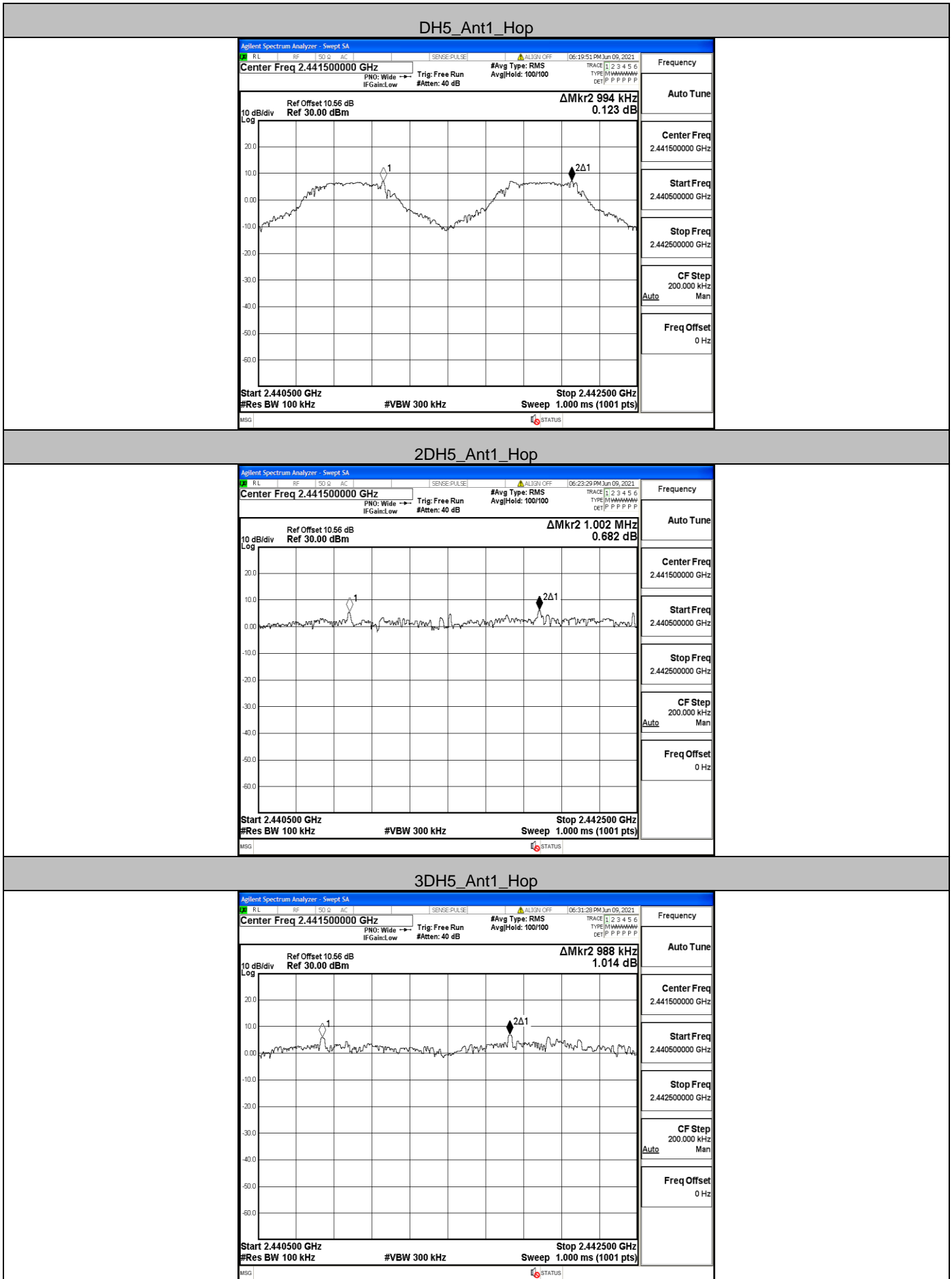
3DH5\_Ant1\_2480



**Appendix D: Carrier frequency separation****Test Result**

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.994	$\geq 0.942$	PASS
2DH5	Ant1	Hop	1.002	$\geq 0.878$	PASS
3DH5	Ant1	Hop	0.988	$\geq 0.874$	PASS

### Test Graphs





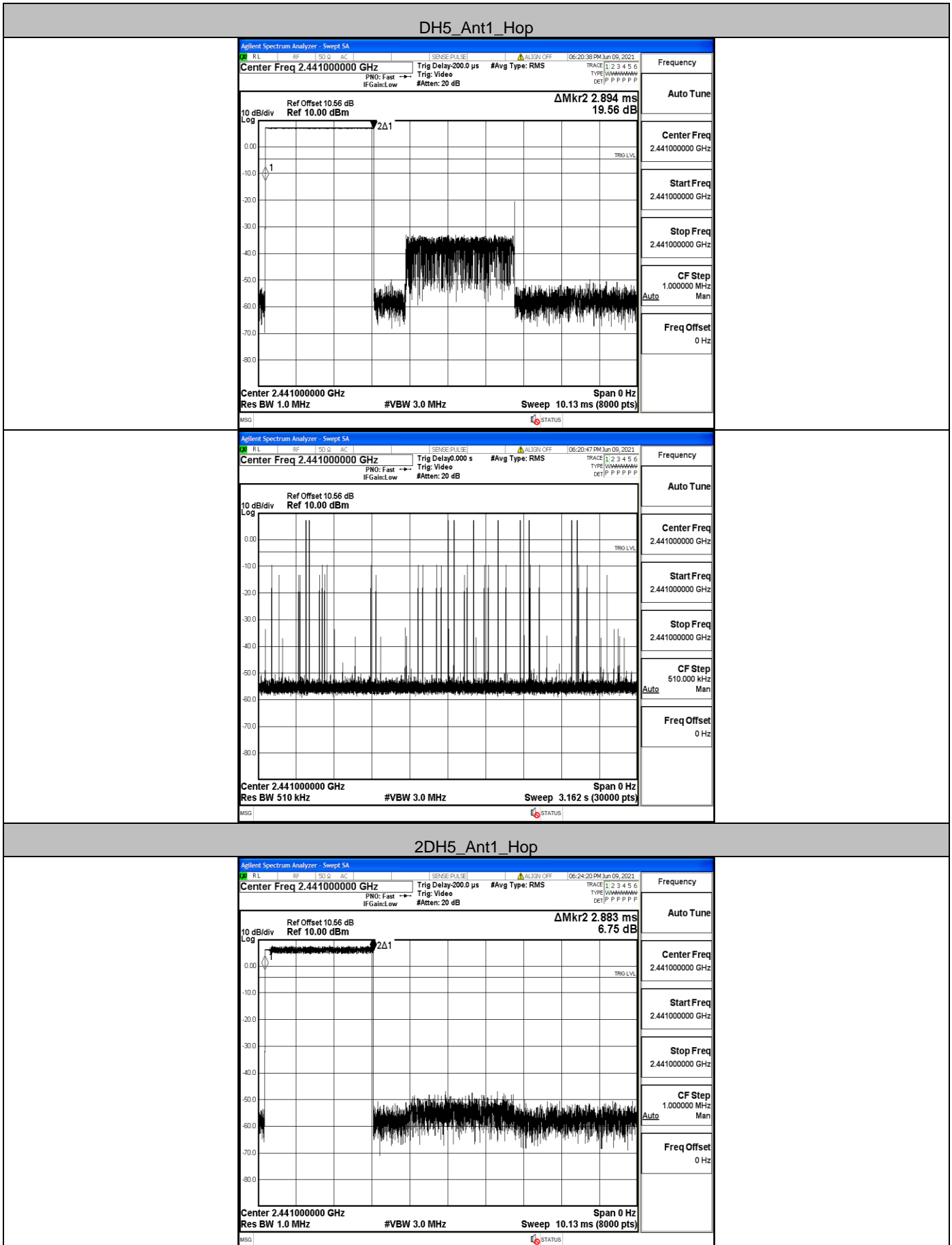


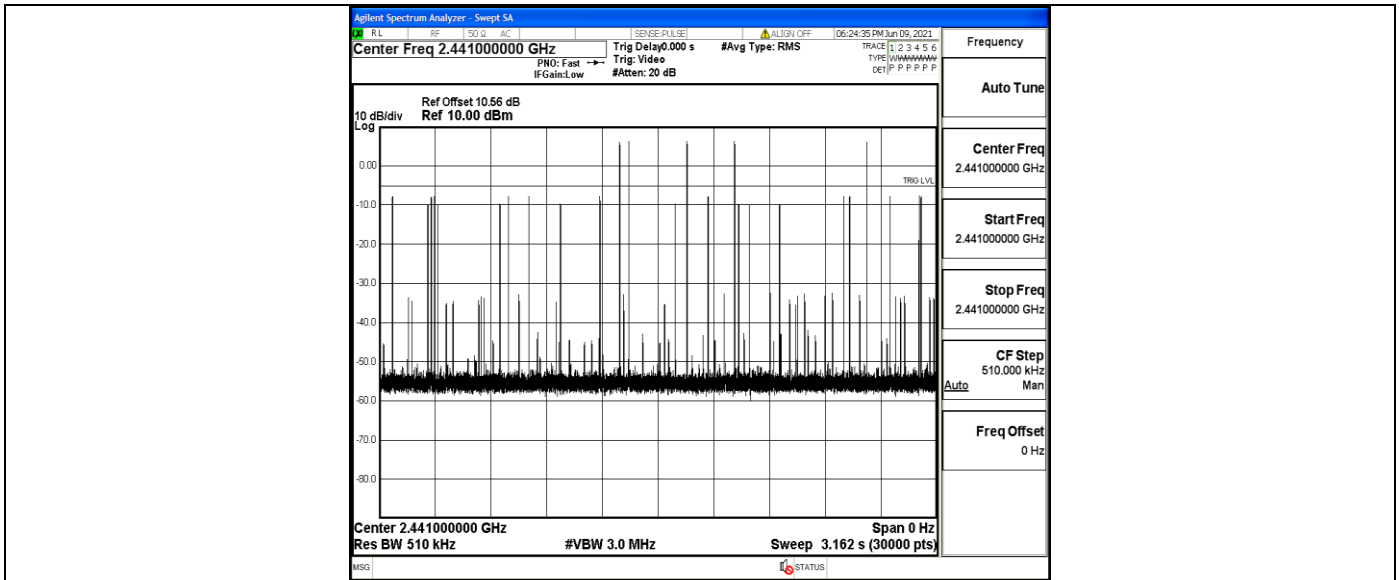
## Appendix E: Time of occupancy

### Test Result

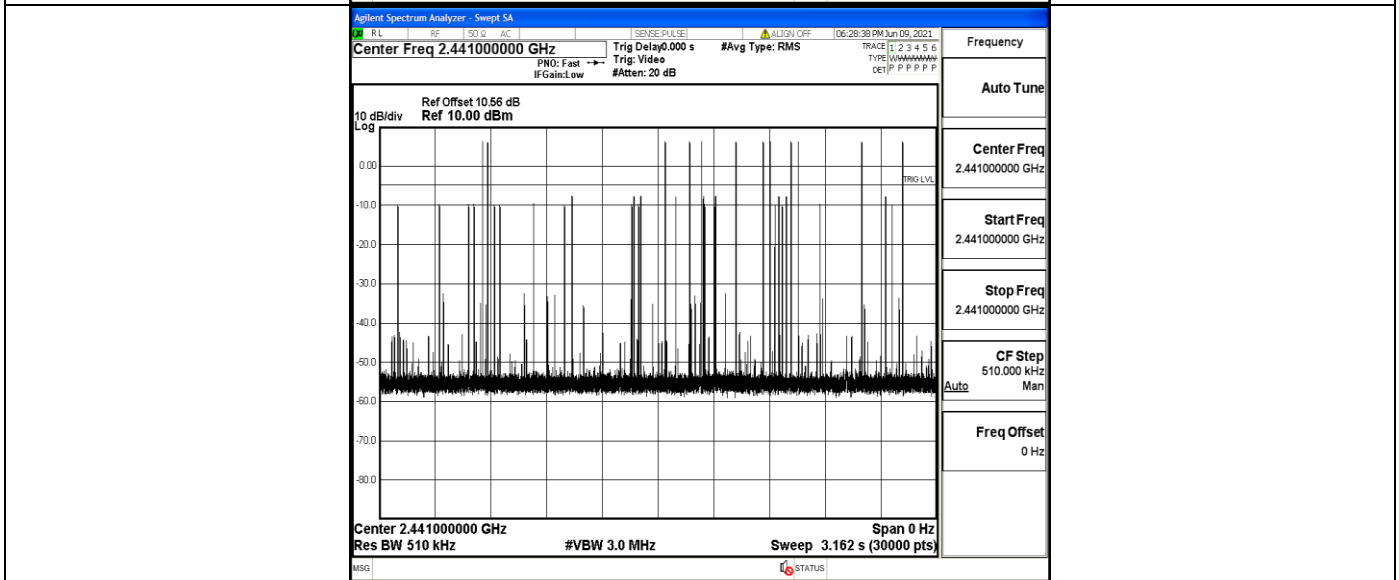
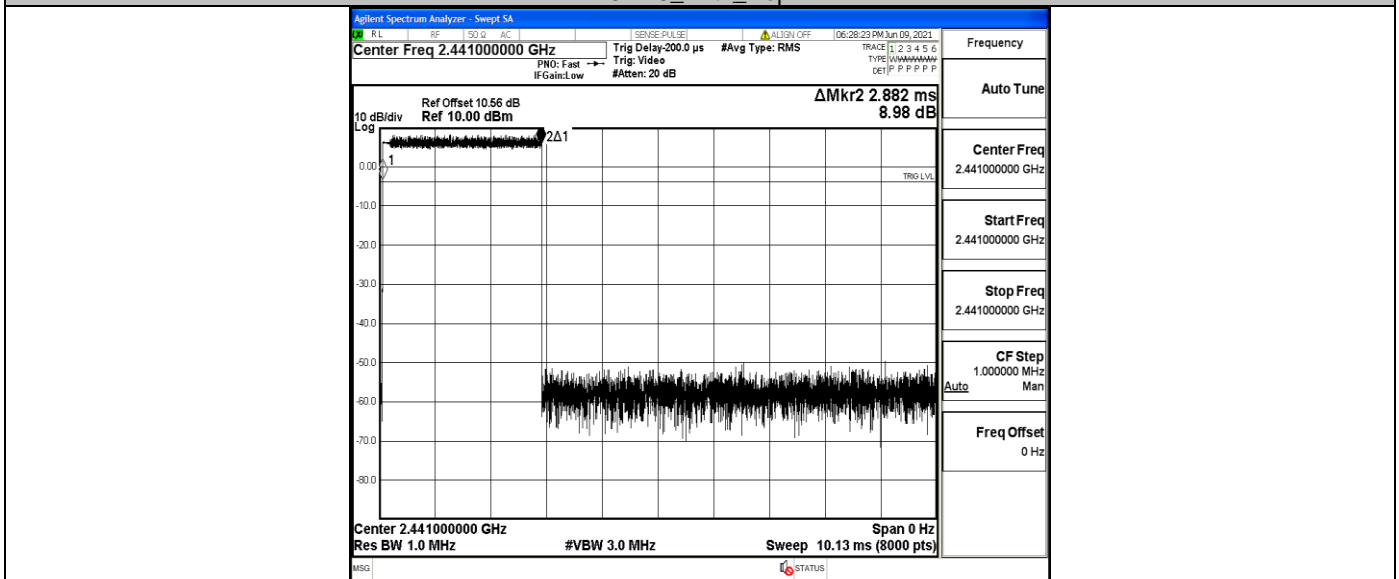
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.89	110	0.318	<=0.4	PASS
2DH5	Ant1	Hop	2.88	60	0.173	<=0.4	PASS
3DH5	Ant1	Hop	2.88	130	0.375	<=0.4	PASS

Test Graphs





3DH5\_Ant1\_Hop

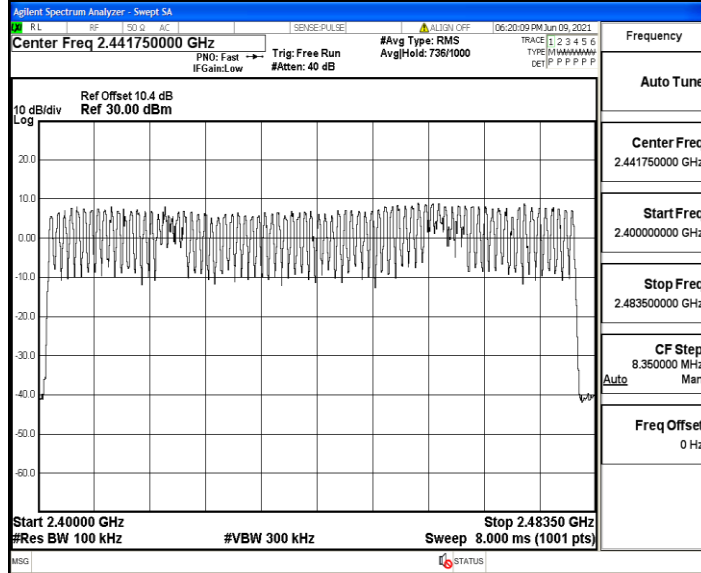


**Appendix F: Number of hopping channels****Test Result**

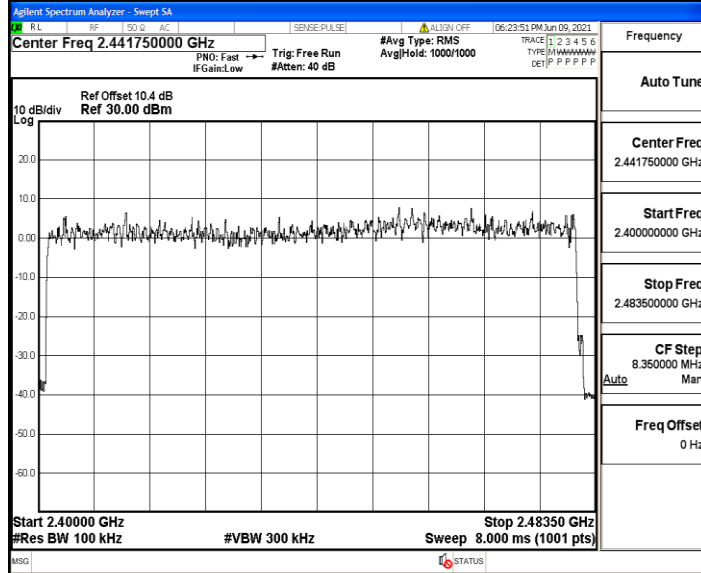
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	>=15	PASS
2DH5	Ant1	Hop	79	>=15	PASS
3DH5	Ant1	Hop	79	>=15	PASS

### Test Graphs

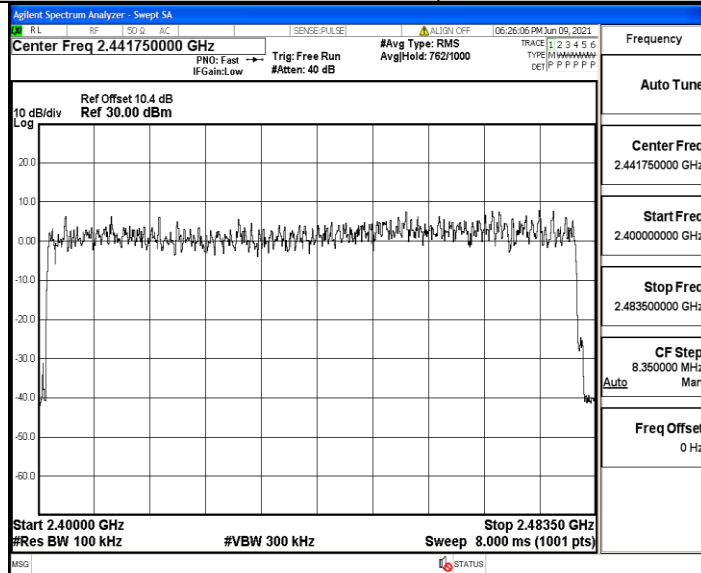
#### DH5\_Ant1\_Hop



#### 2DH5\_Ant1\_Hop



#### 3DH5\_Ant1\_Hop



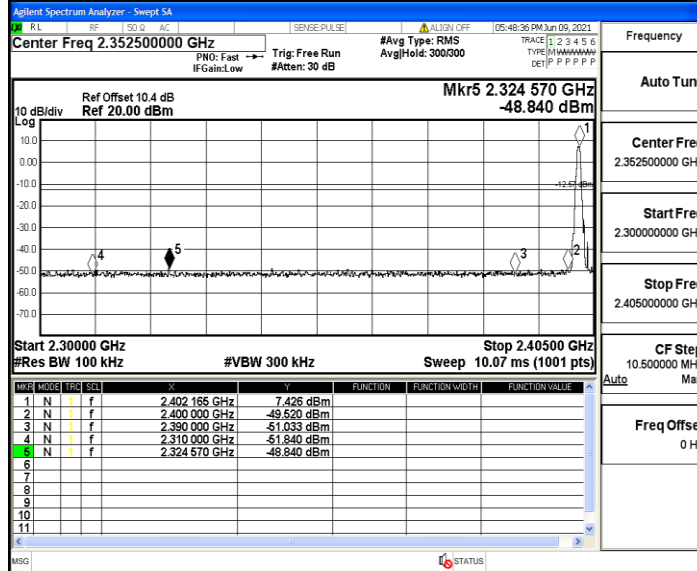
## Appendix G: Band edge measurements

### Test Result

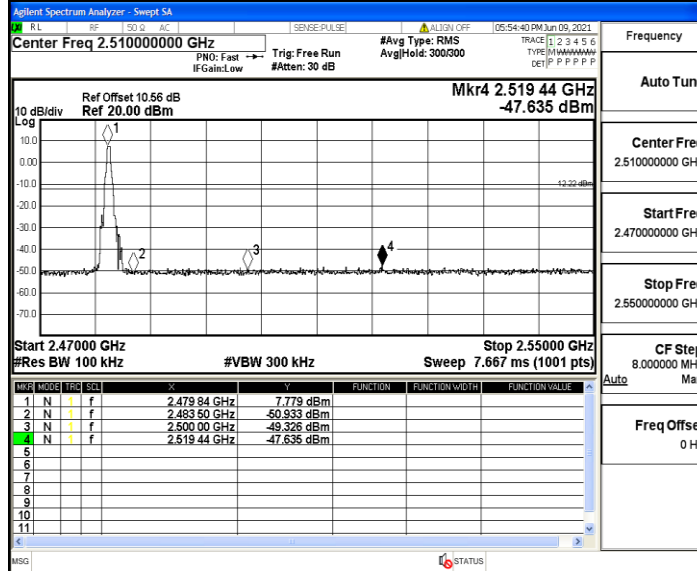
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	7.43	-48.84	<=-12.57	PASS
		High	2480	7.78	-47.64	<=-12.22	PASS
		Low	Hop_2402	7.06	-49.11	<=-12.94	PASS
		High	Hop_2480	8.97	-46.21	<=-11.03	PASS
2DH5	Ant1	Low	2402	5.64	-45.54	<=-14.36	PASS
		High	2480	7.16	-47.79	<=-12.84	PASS
		Low	Hop_2402	3.36	-49.27	<=-16.65	PASS
		High	Hop_2480	6.90	-47.68	<=-13.1	PASS
3DH5	Ant1	Low	2402	5.55	-44.44	<=-14.45	PASS
		High	2480	7.29	-47.59	<=-12.71	PASS
		Low	Hop_2402	2.90	-48.74	<=-17.1	PASS
		High	Hop_2480	7.26	-47.77	<=-12.74	PASS

Test Graphs

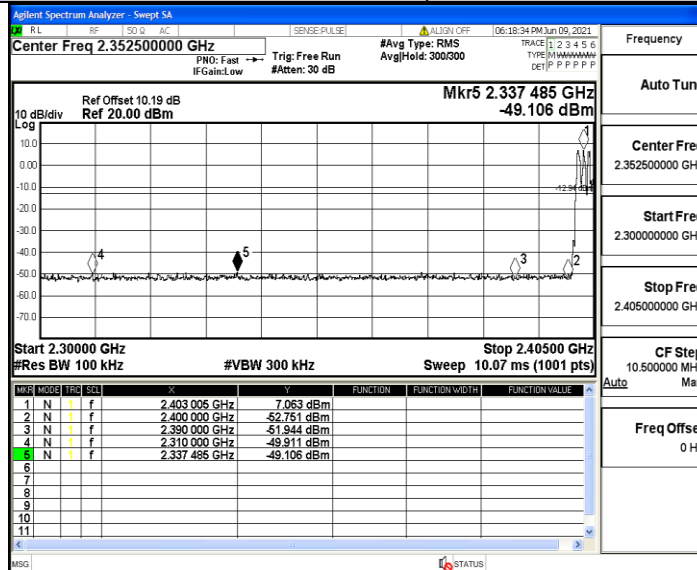
DH5\_Ant1\_Low\_2402



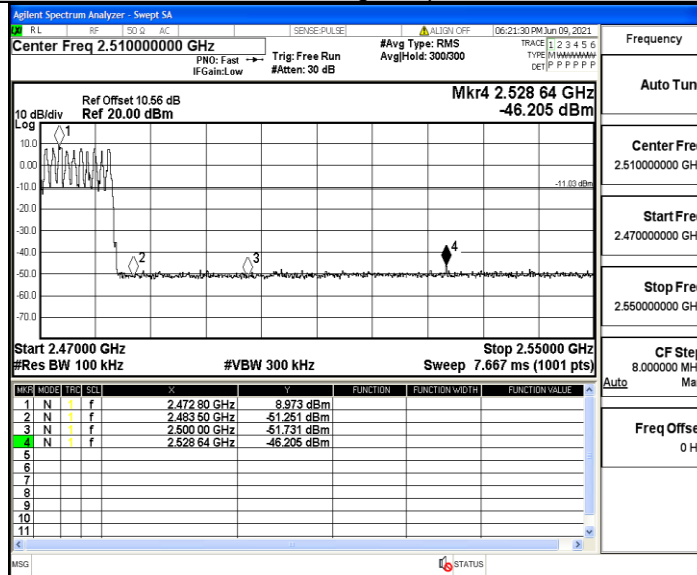
DH5\_Ant1\_High\_2480



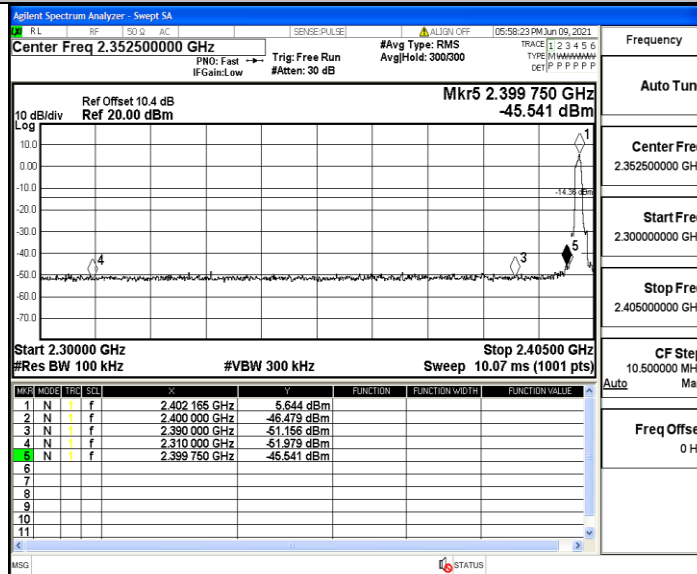
DH5\_Ant1\_Low\_Hop\_2402



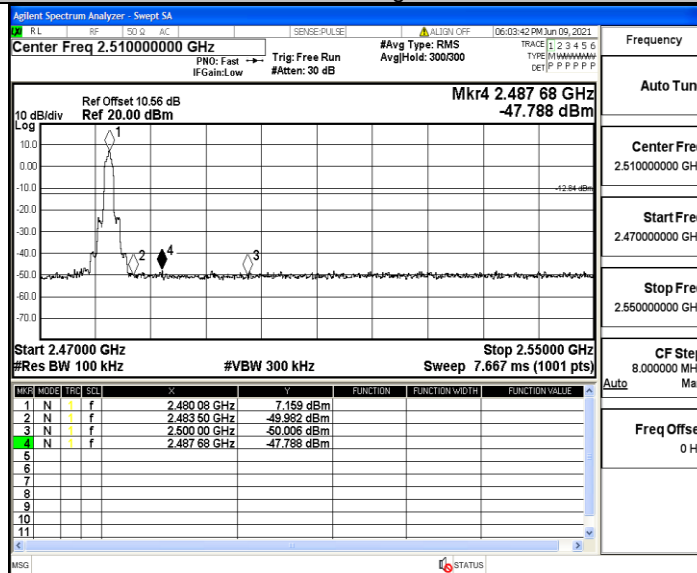
DH5\_Ant1\_High\_Hop\_2480



2DH5\_Ant1\_Low\_2402

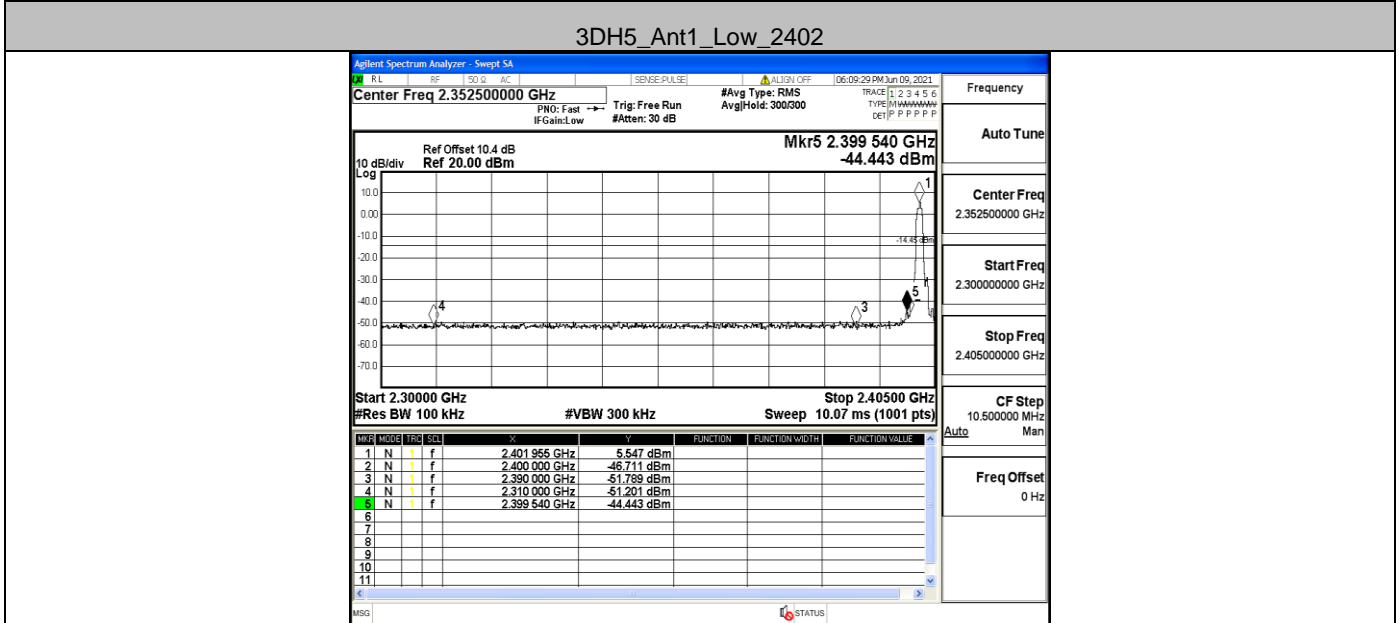
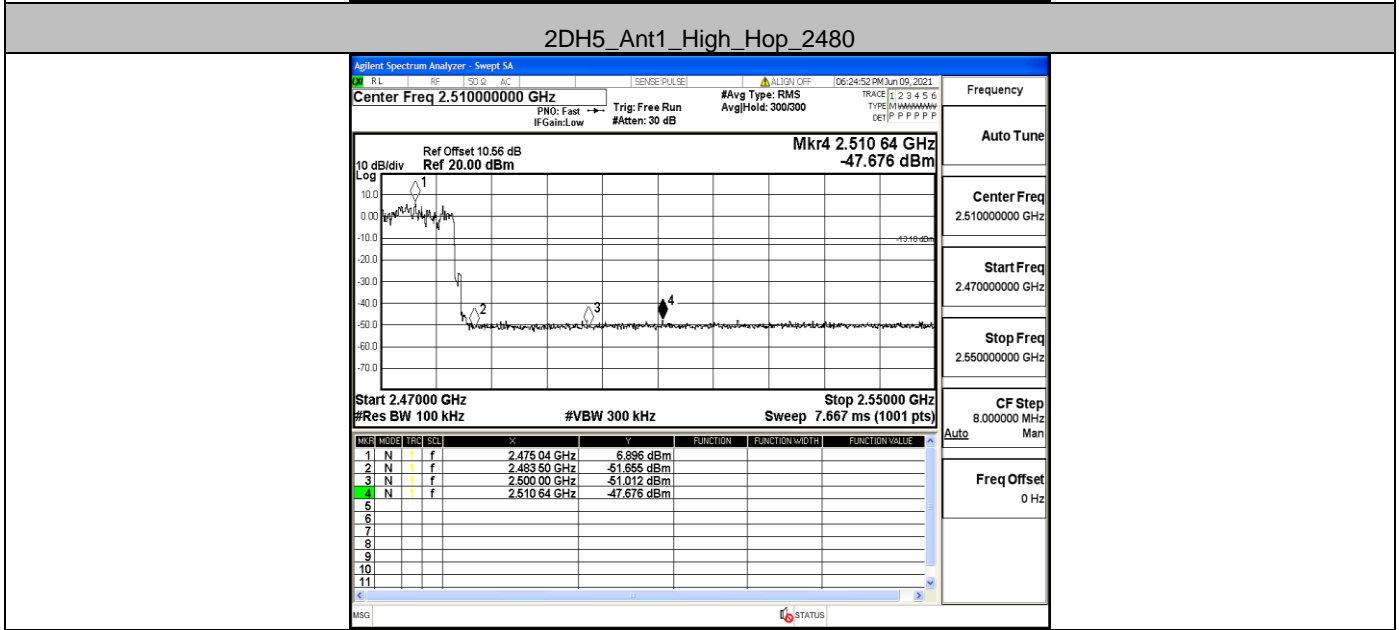
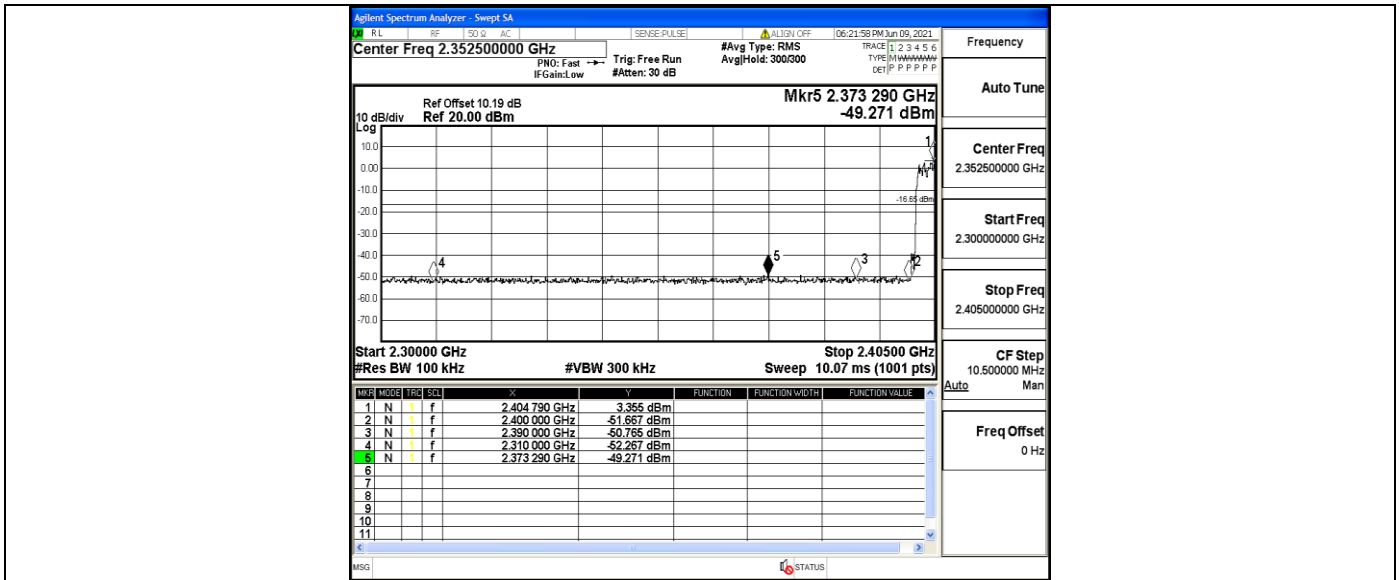


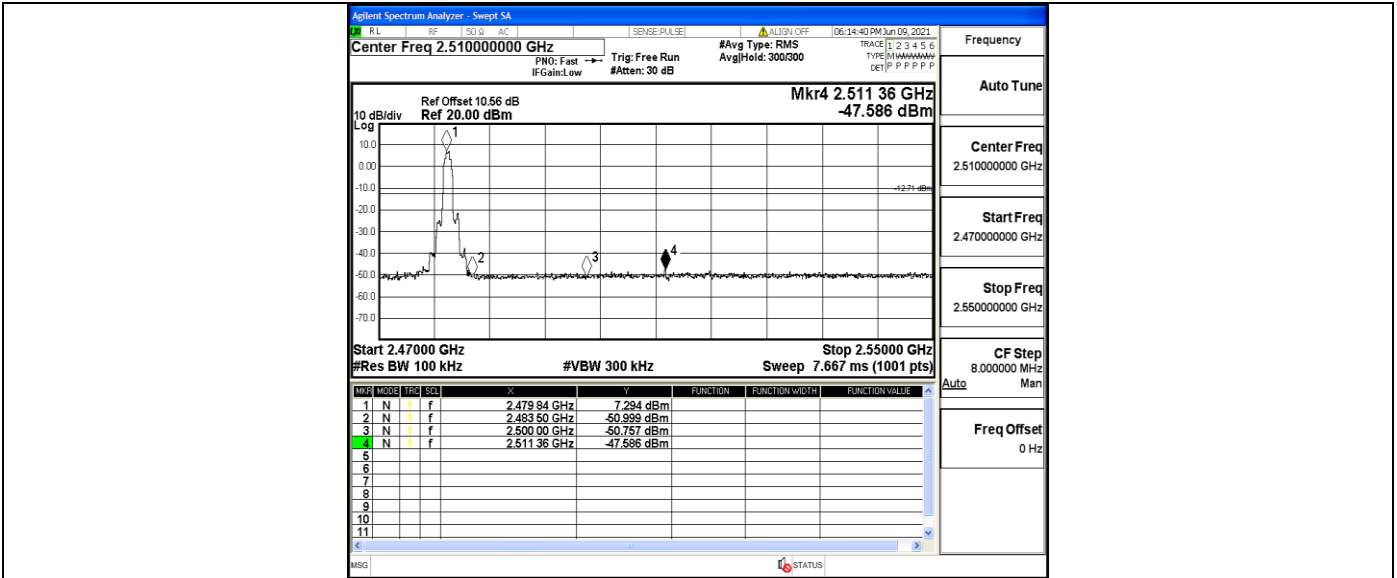
2DH5\_Ant1\_High\_2480



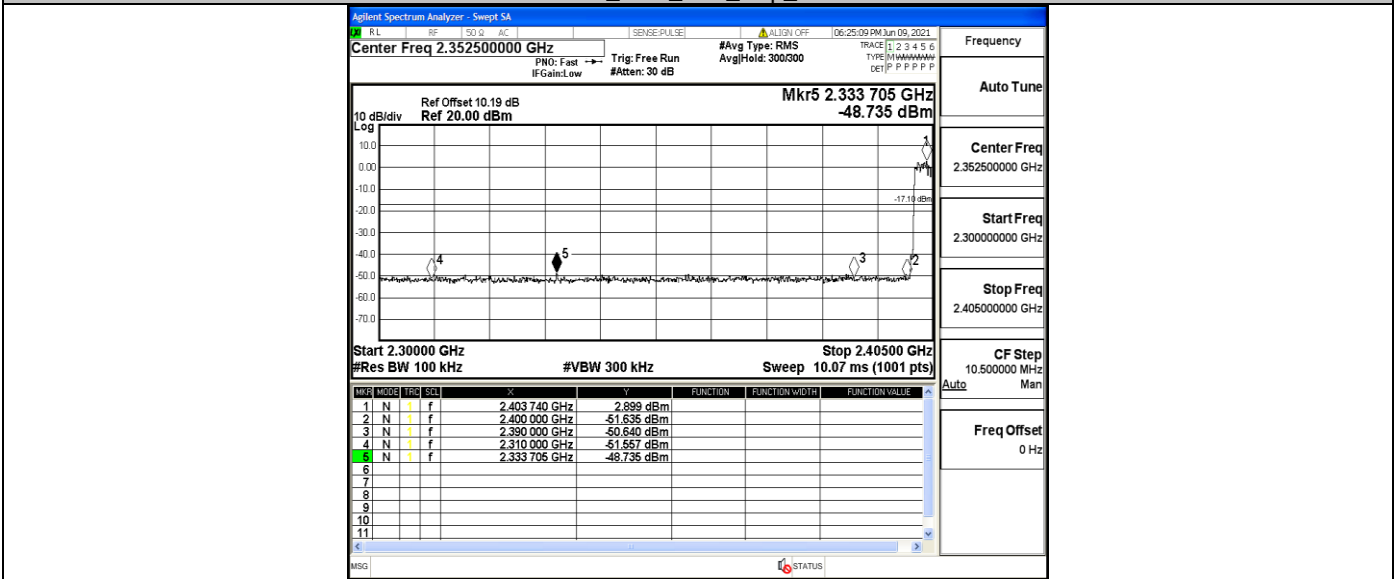
2DH5\_Ant1\_Low\_Hop\_2402



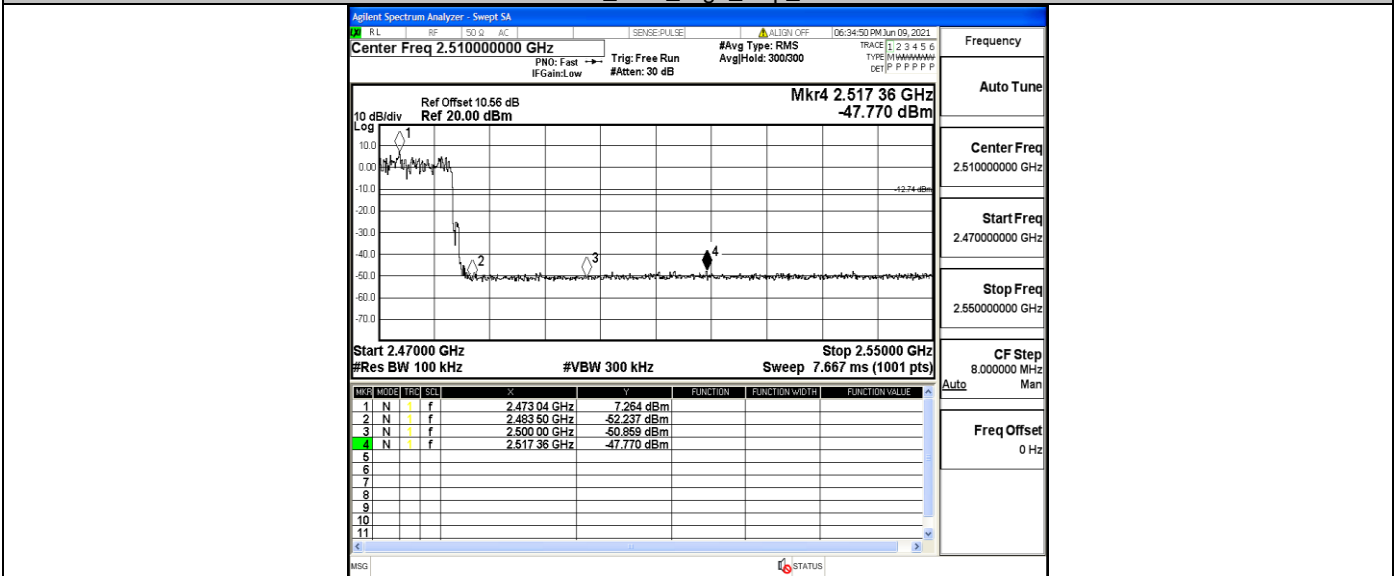




3DH5\_Ant1\_Low\_Hop\_2402



3DH5\_Ant1\_High\_Hop\_2480

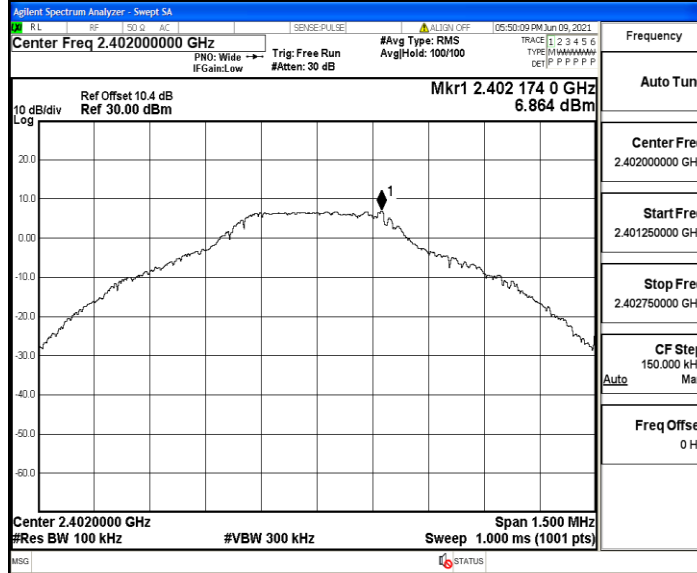


## Appendix H: Conducted Spurious Emission Test Result

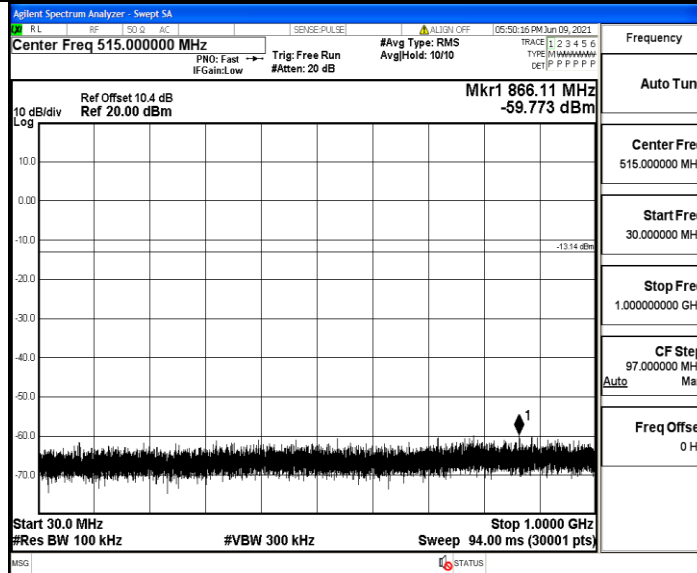
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	6.86	6.86	---	PASS
			30~1000	6.86	-59.77	<=-13.14	PASS
			1000~26500	6.86	-50.82	<=-13.14	PASS
		2441	Reference	7.26	7.26	---	PASS
			30~1000	7.26	-59.65	<=-12.74	PASS
			1000~26500	7.26	-50.13	<=-12.74	PASS
		2480	Reference	7.18	7.18	---	PASS
			30~1000	7.18	-60.05	<=-12.82	PASS
			1000~26500	7.18	-50.42	<=-12.82	PASS
2DH5	Ant1	2402	Reference	5.58	5.58	---	PASS
			30~1000	5.58	-59.81	<=-14.43	PASS
			1000~26500	5.58	-50.97	<=-14.43	PASS
		2441	Reference	5.69	5.69	---	PASS
			30~1000	5.69	-59.99	<=-14.32	PASS
			1000~26500	5.69	-51.23	<=-14.32	PASS
		2480	Reference	6.57	6.57	---	PASS
			30~1000	6.57	-59.3	<=-13.43	PASS
			1000~26500	6.57	-50.54	<=-13.43	PASS
3DH5	Ant1	2402	Reference	5.74	5.74	---	PASS
			30~1000	5.74	-60.46	<=-14.26	PASS
			1000~26500	5.74	-51.26	<=-14.26	PASS
		2441	Reference	6.24	6.24	---	PASS
			30~1000	6.24	-59.45	<=-13.76	PASS
			1000~26500	6.24	-50.57	<=-13.76	PASS
		2480	Reference	6.32	6.32	---	PASS
			30~1000	6.32	-58.69	<=-13.68	PASS
			1000~26500	6.32	-49.48	<=-13.68	PASS

### Test Graphs

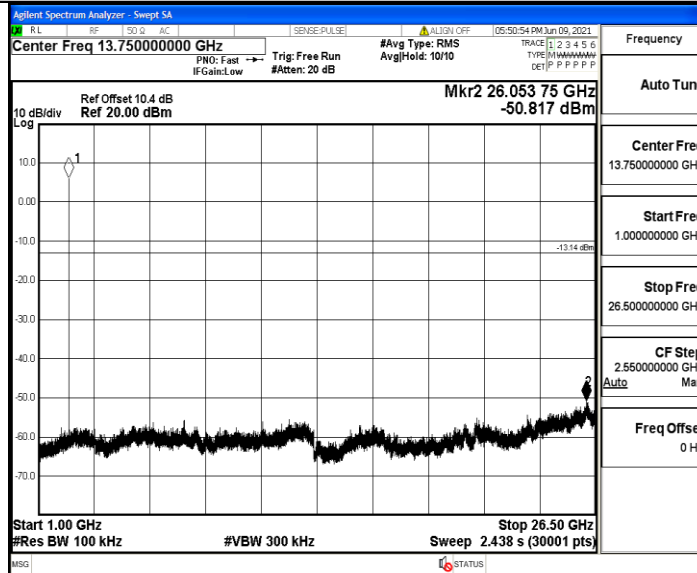
DH5\_Ant1\_2402\_0~Reference



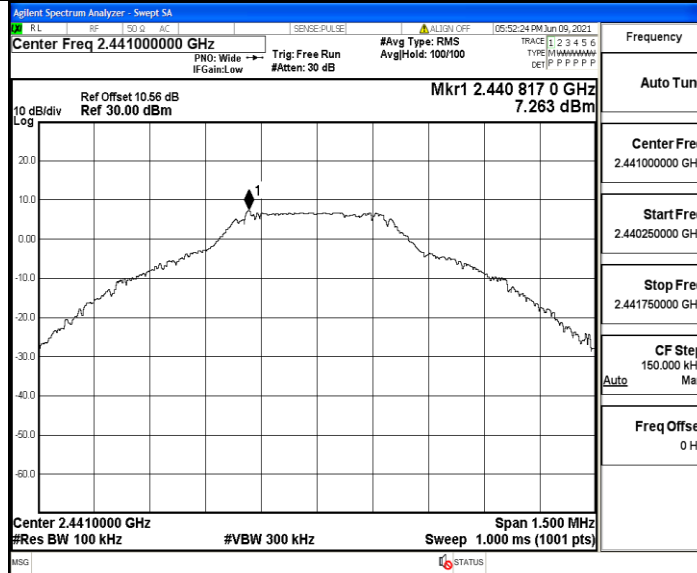
DH5\_Ant1\_2402\_30~1000



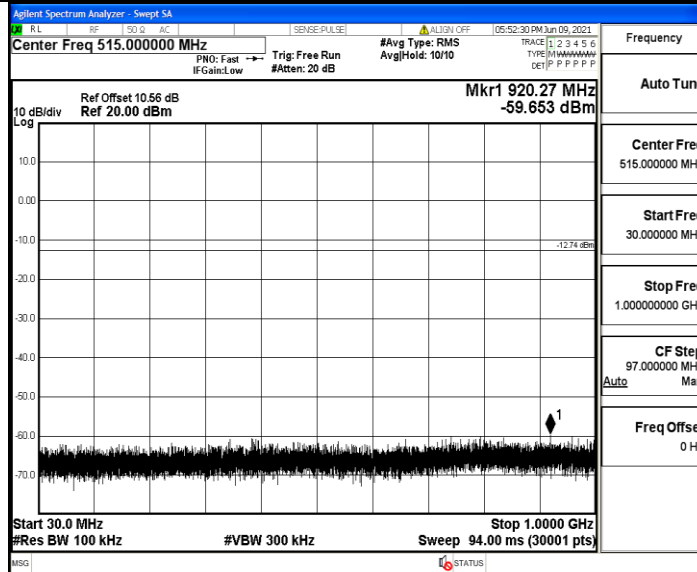
DH5\_Ant1\_2402\_1000~26500



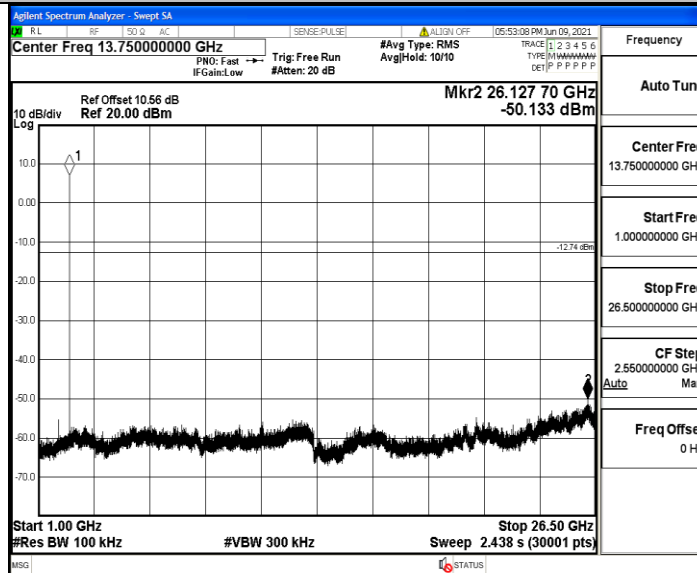
DH5\_Ant1\_2441\_0~Reference



DH5\_Ant1\_2441\_30~1000



DH5\_Ant1\_2441\_1000~26500



DH5\_Ant1\_2480\_0~Reference