

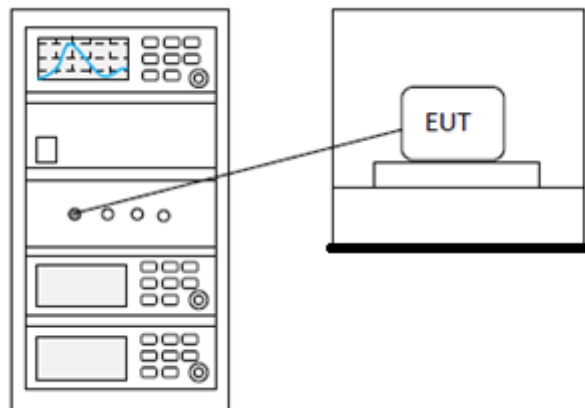
DWELL TIME

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.4
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25°C
Humidity	60%

LIMITS

Frequency(MHz)	Limit
902-928	0.4S within a 20S period(20dB bandwidth<250kHz)
	0.4S within a 10S period(20dB bandwidth≥250kHz)
2400-2483.5	0.4S within a period of 0.4S multiplied by the number of hopping channels
5725-5850	0.4S within a 30S period

BLOCK DIAGRAM OF TEST SETUP



TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

BlueAsia

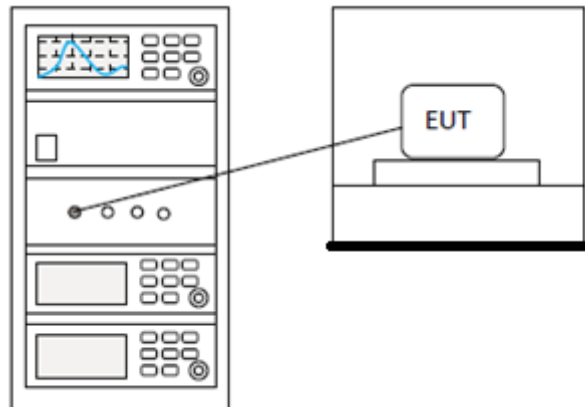
HOPPING CHANNEL NUMBER

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.3
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25°C
Humidity	60%

LIMITS

Frequency range(MHz)	Number of hopping channels (minimum)
902-928	50 for 20dB bandwidth <250kHz
	25 for 20dB bandwidth ≥250kHz
2400-2483.5	15
5725-5850	75

BLOCK DIAGRAM OF TEST SETUP



TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

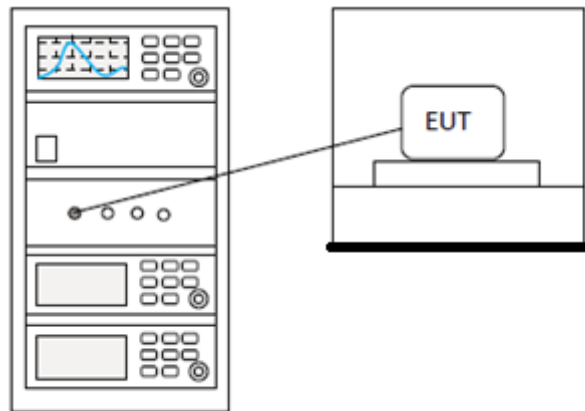
CARRIER FREQUENCIES SEPARATION

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25°C
Humidity	60%

LIMITS

Limit:	2/3 of the 20dB bandwidth base on the transmission power is less than 0.125W
---------------	--

BLOCK DIAGRAM OF TEST SETUP



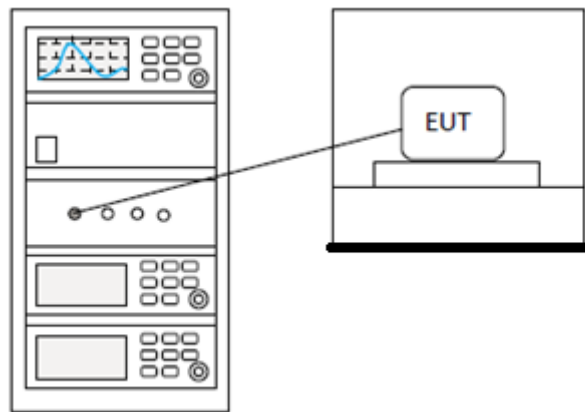
TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

20DB BANDWIDTH

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.7
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25°C
Humidity	60%

BLOCK DIAGRAM OF TEST SETUP



TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

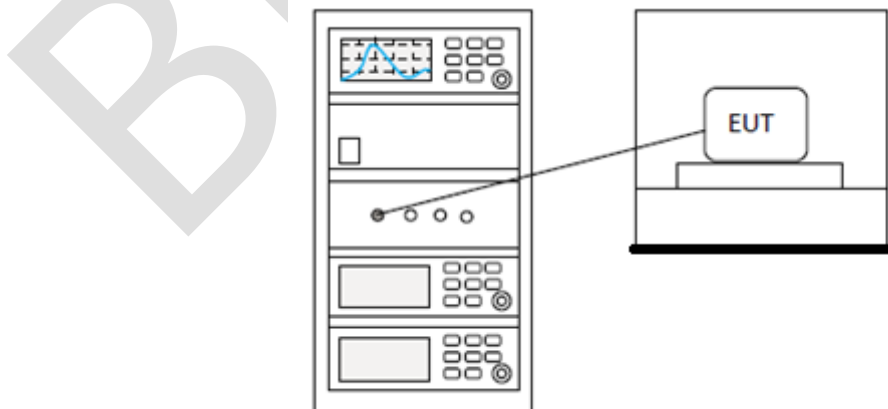
CONDUCTED PEAK OUTPUT POWER

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.5
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25°C
Humidity	60%

LIMITS

Frequency range(MHz)	Output power of the intentional radiator(watt)
902-928	1 for ≥ 50 hopping channels
	0.25 for $25 \leq$ hopping channels < 50
	1 for digital modulation
2400-2483.5	1 for ≥ 75 non-overlapping hopping channels
	0.125 for all other frequency hopping systems
	1 for digital modulation
5725-5850	1 for frequency hopping systems and digital modulation

BLOCK DIAGRAM OF TEST SETUP



TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

BlueAsia

10 APPENDIX

Appendix1

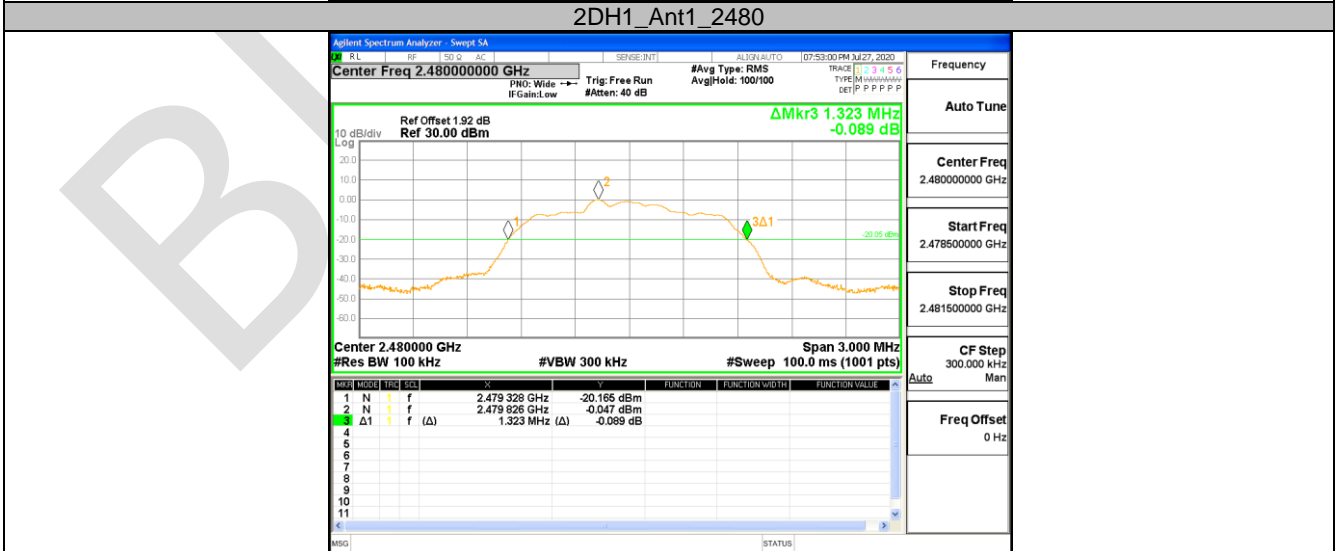
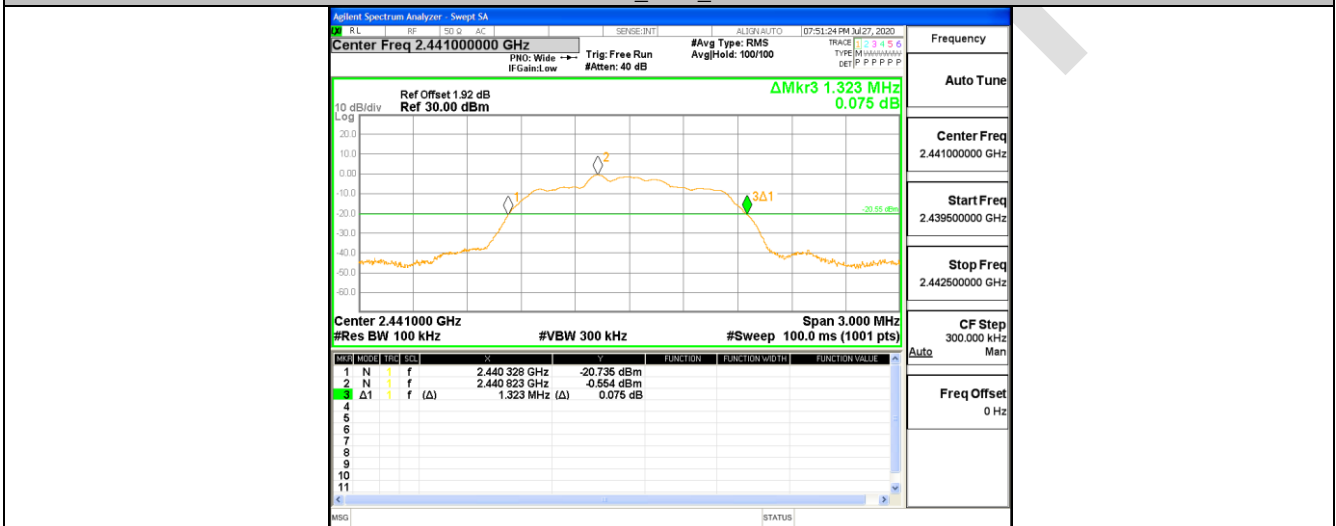
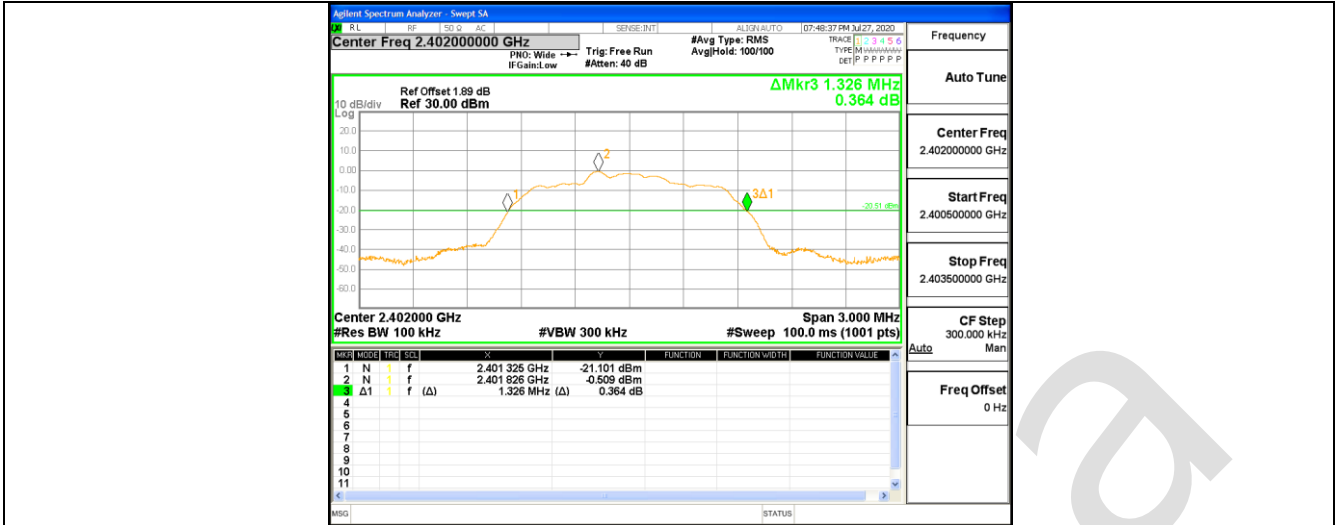
10.1 APPENDIX: 20DBEMISSION BANDWIDTH

Test Result

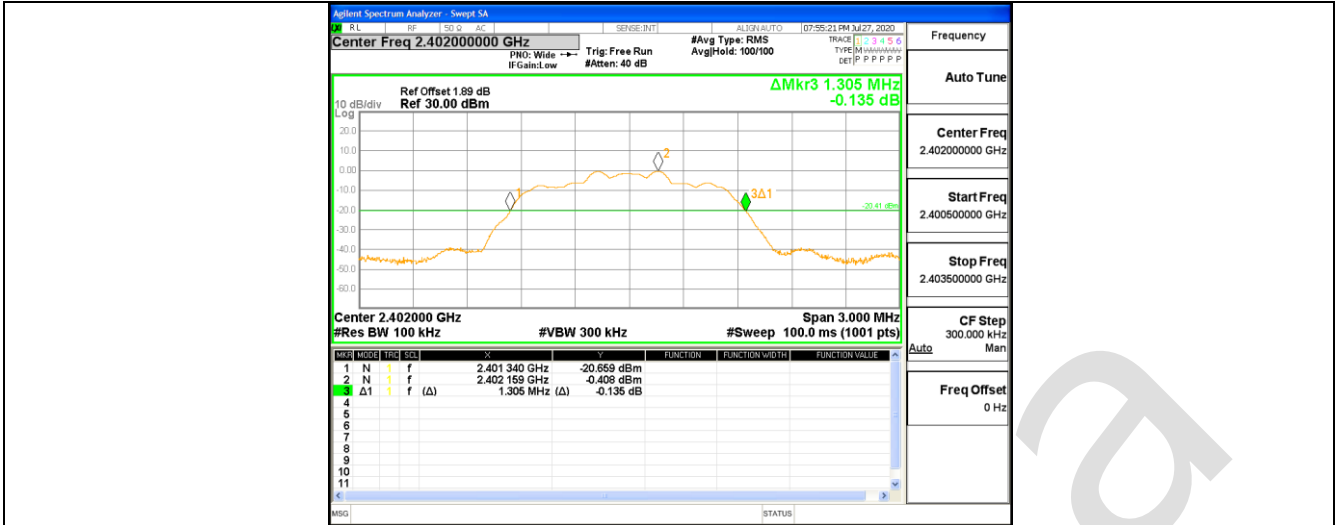
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	1.089	2401.451	2402.540	---	PASS
		2441	1.086	2440.451	2441.537	---	PASS
		2480	1.080	2479.451	2480.531	---	PASS
2DH1	Ant1	2402	1.326	2401.325	2402.651	---	PASS
		2441	1.323	2440.328	2441.651	---	PASS
		2480	1.323	2479.328	2480.651	---	PASS
3DH1	Ant1	2402	1.305	2401.340	2402.645	---	PASS
		2441	1.305	2440.340	2441.645	---	PASS
		2480	1.308	2479.337	2480.645	---	PASS

Test Graphs

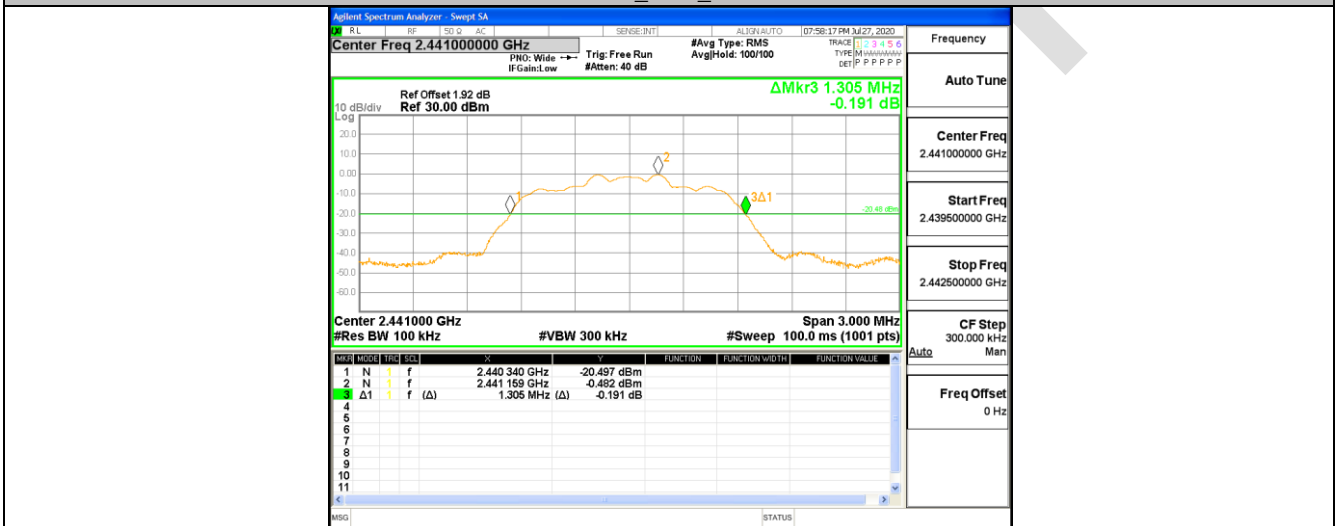




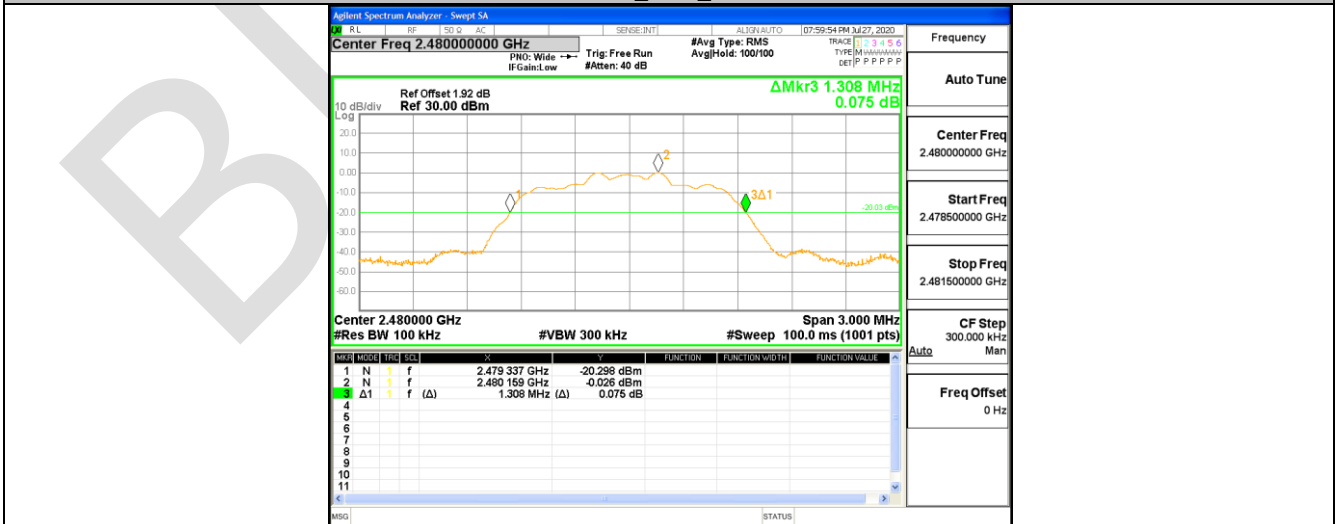
3DH1_Ant1_2402



3DH1_Ant1_2441



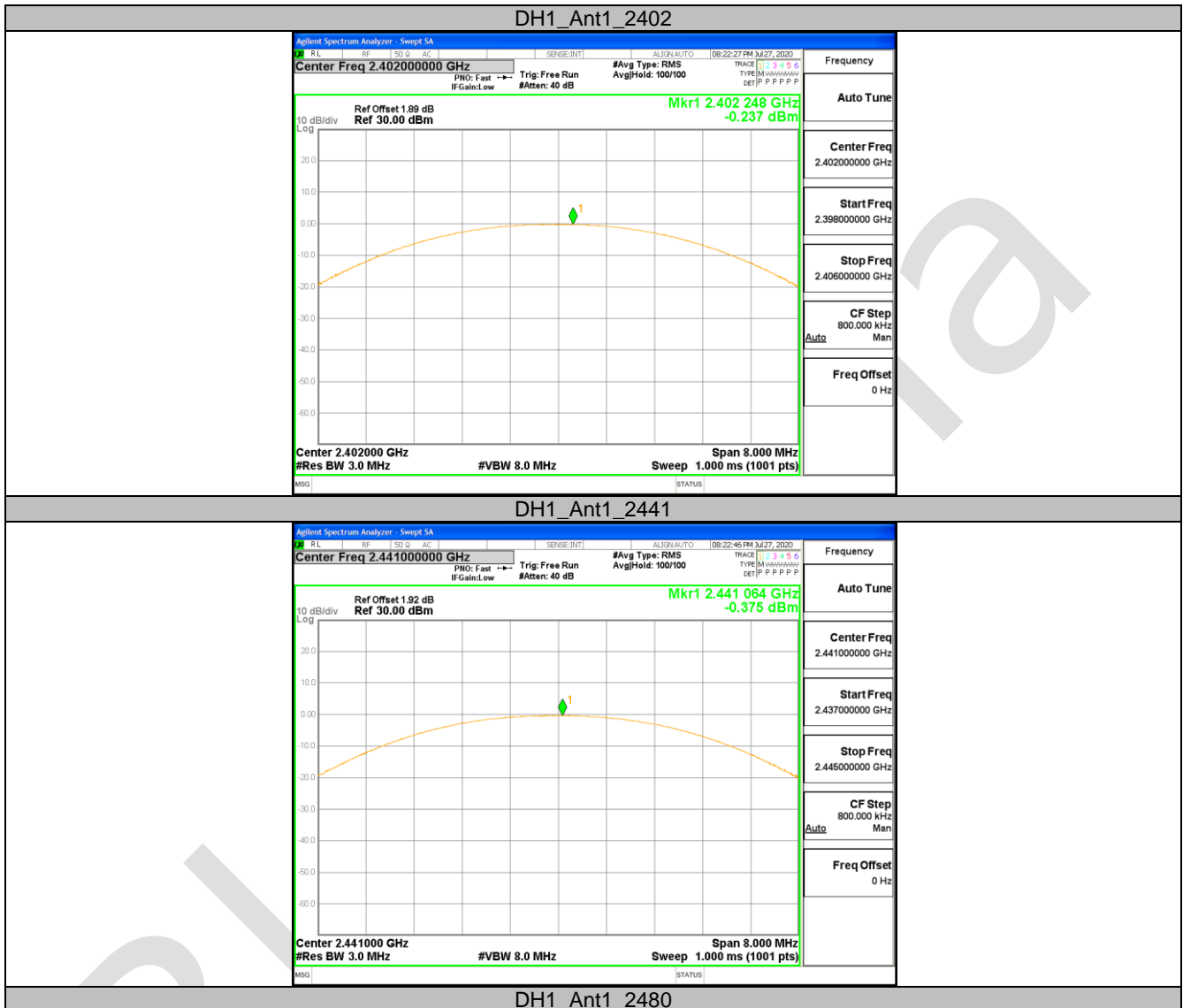
3DH1_Ant1_2480

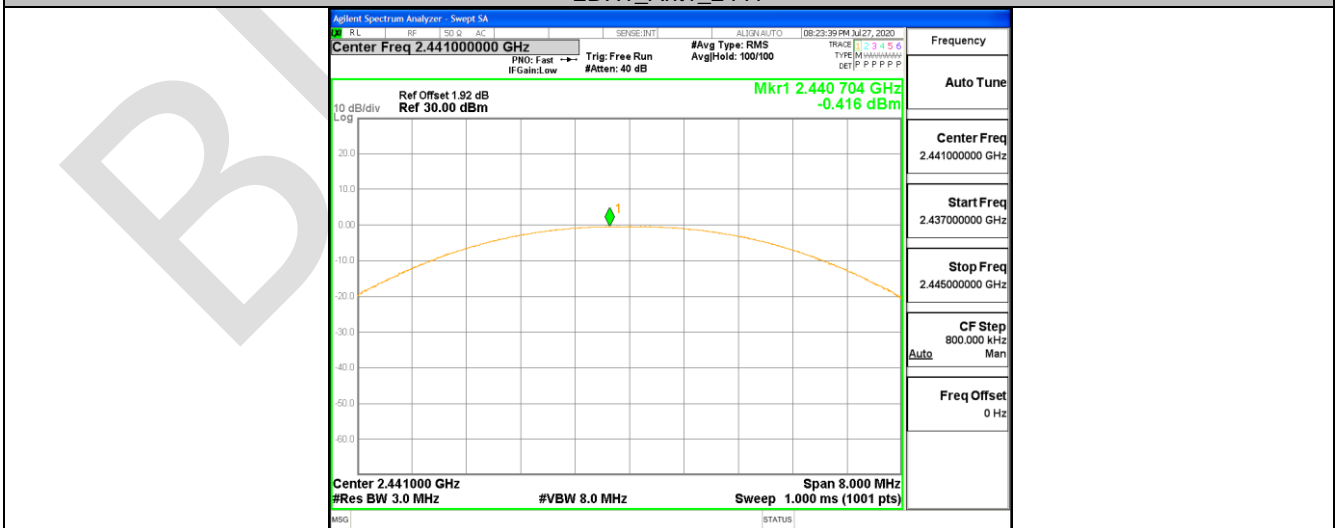
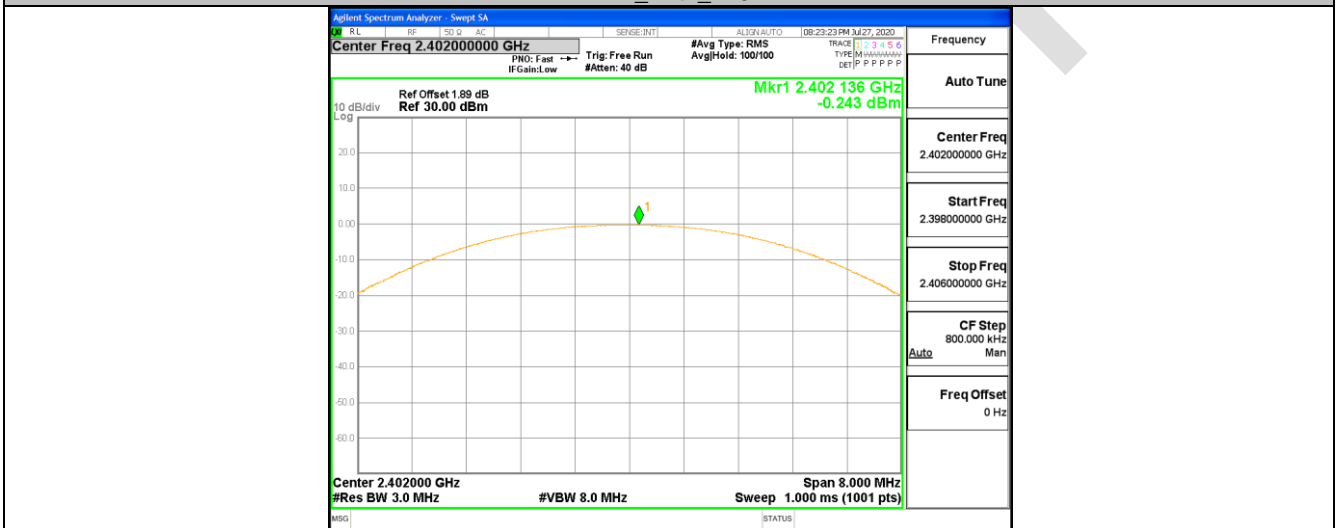
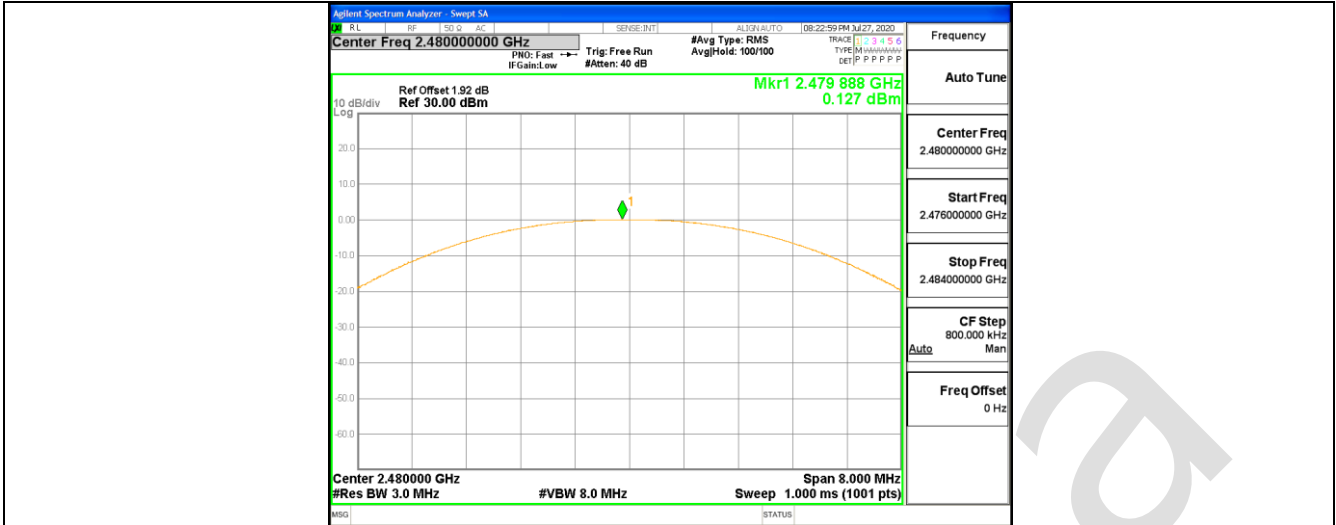


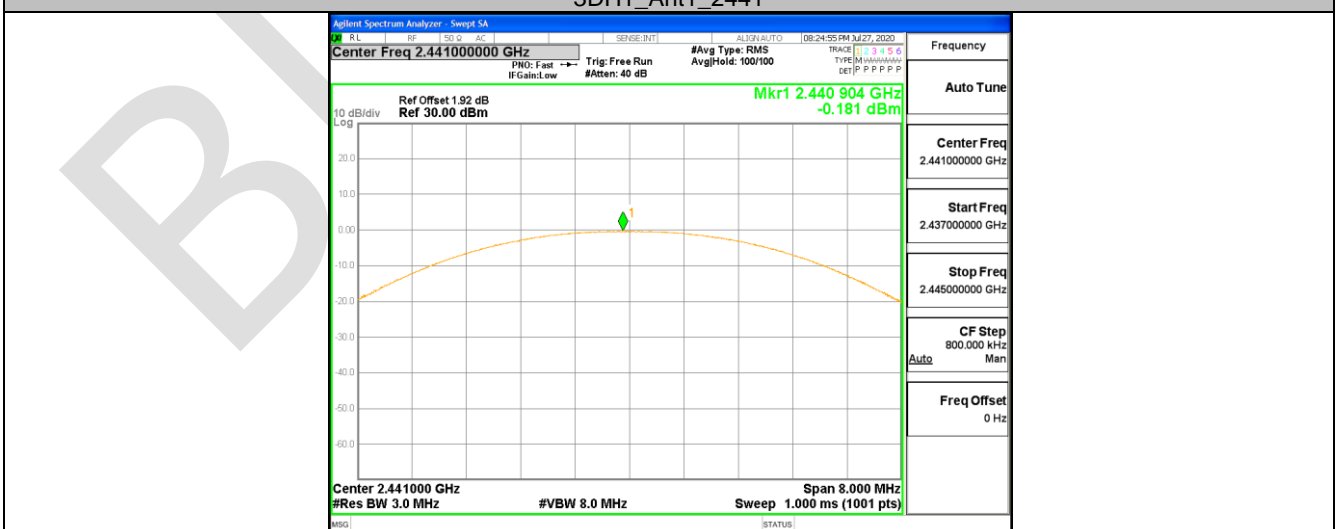
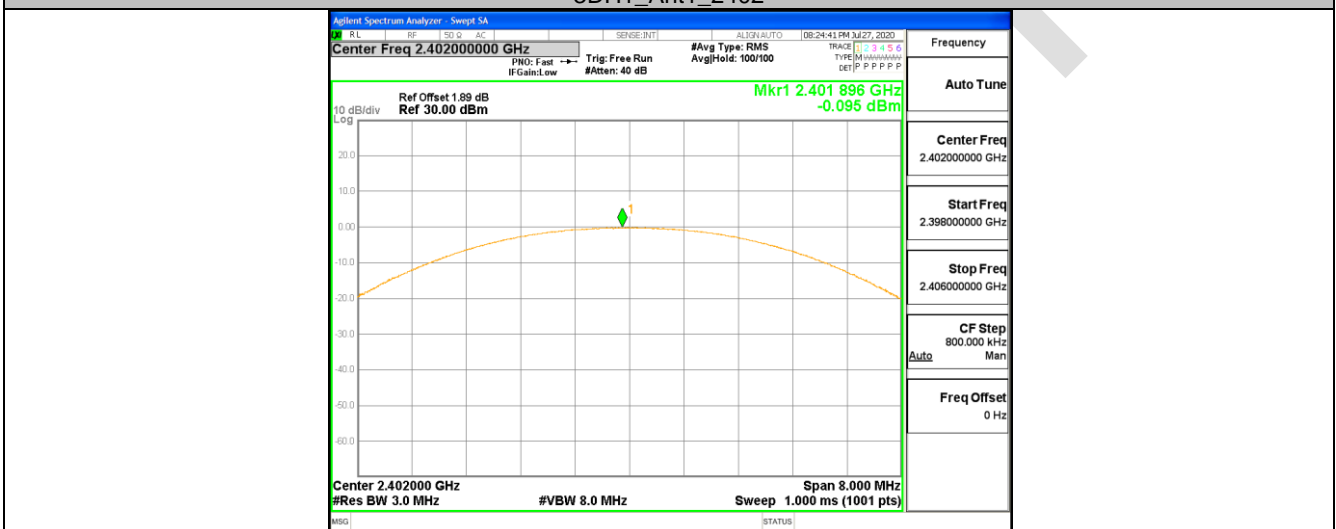
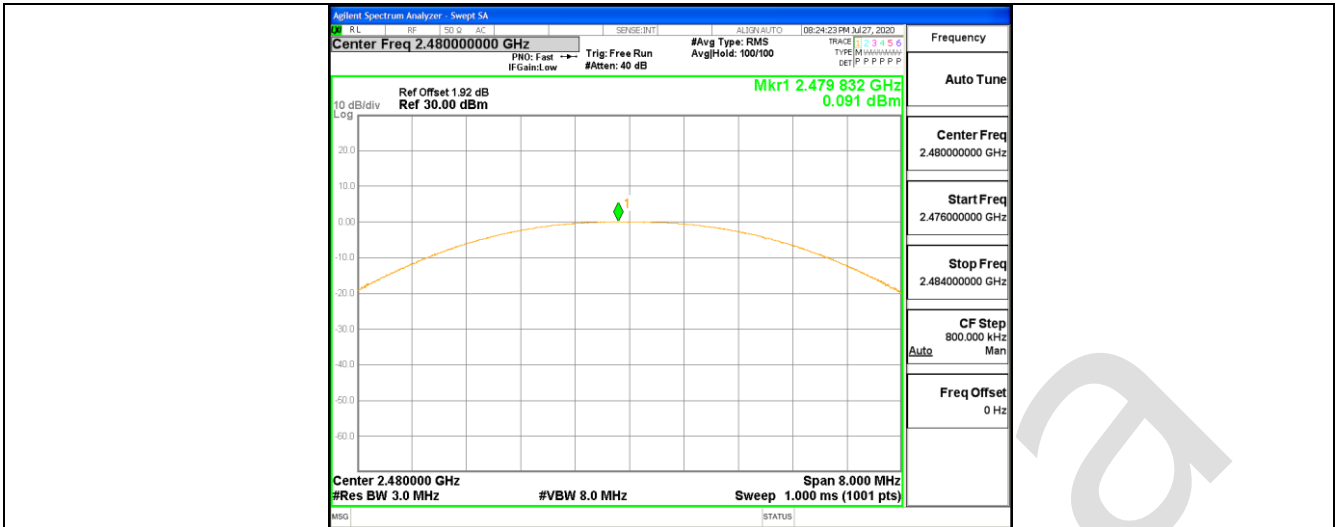
10.2 APPENDIX: MAXIMUM CONDUCTED OUTPUT POWER
Test Result

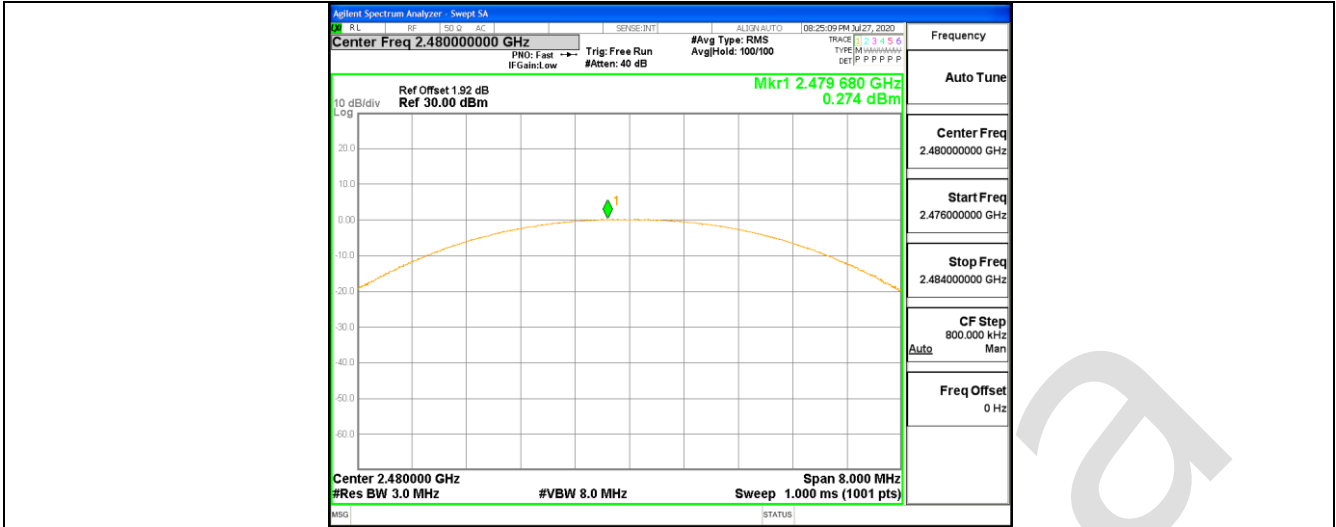
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH1	Ant1	2402	-0.24	<=20.97	PASS
		2441	-0.38	<=20.97	PASS
		2480	0.13	<=20.97	PASS
2DH1	Ant1	2402	-0.24	<=20.97	PASS
		2441	-0.42	<=20.97	PASS
		2480	0.09	<=20.97	PASS
3DH1	Ant1	2402	-0.1	<=20.97	PASS
		2441	-0.18	<=20.97	PASS
		2480	0.27	<=20.97	PASS

Test Graphs







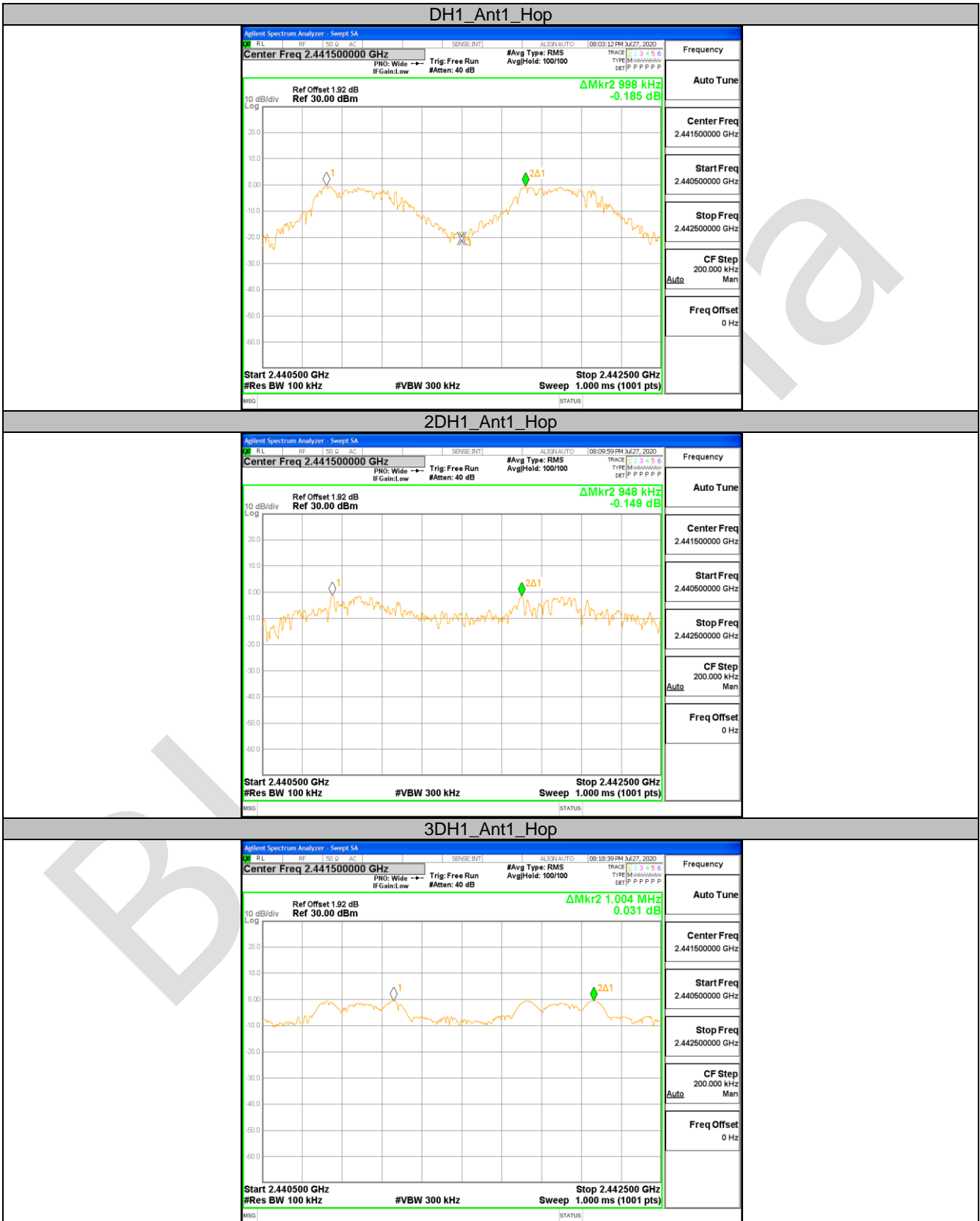


10.3 APPENDIX: CARRIER FREQUENCY SEPARATION

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Hop	0.998	≥ 0.726	PASS
2DH1	Ant1	Hop	0.948	≥ 0.884	PASS
3DH1	Ant1	Hop	1.004	≥ 0.872	PASS

Test Graphs

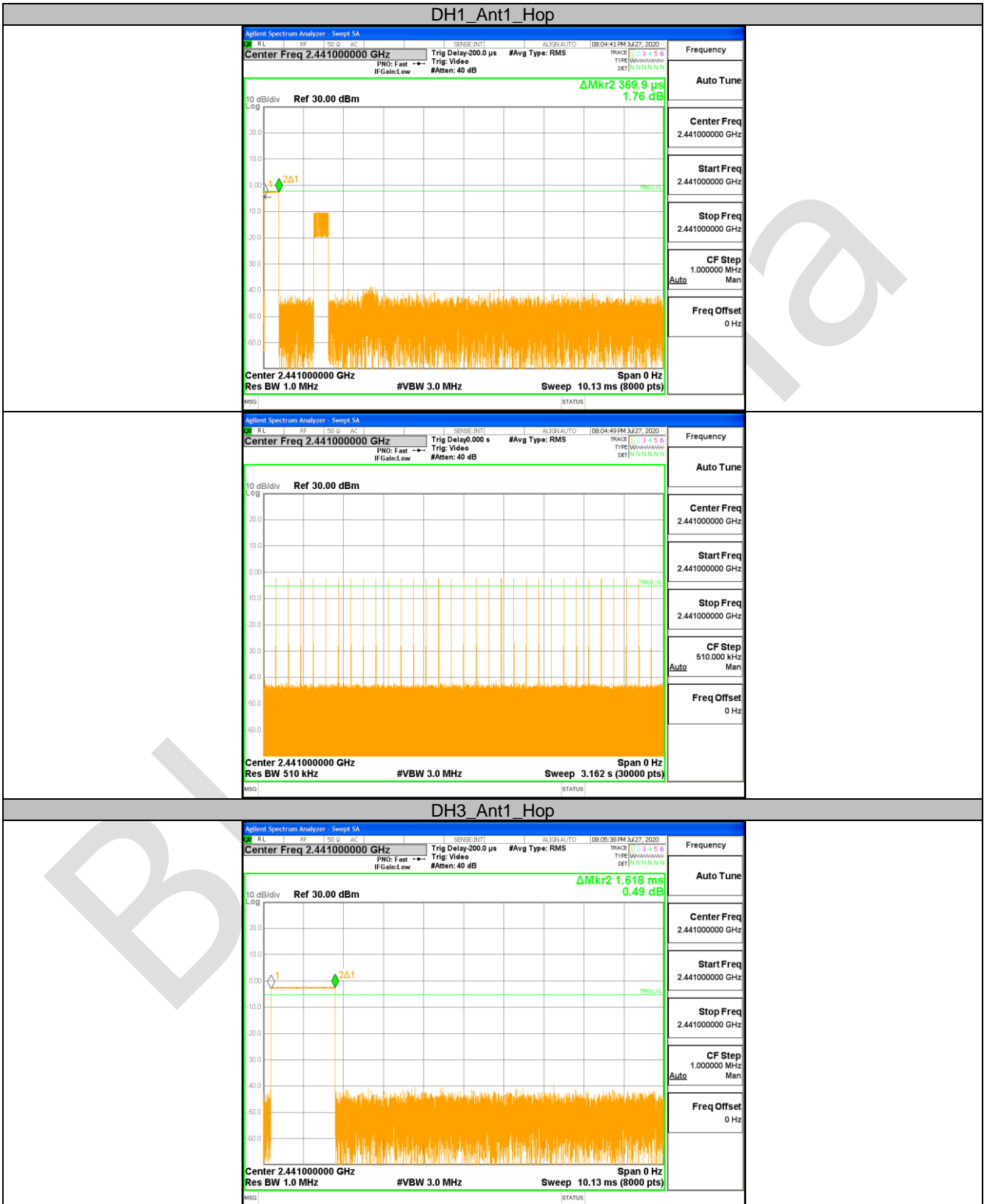


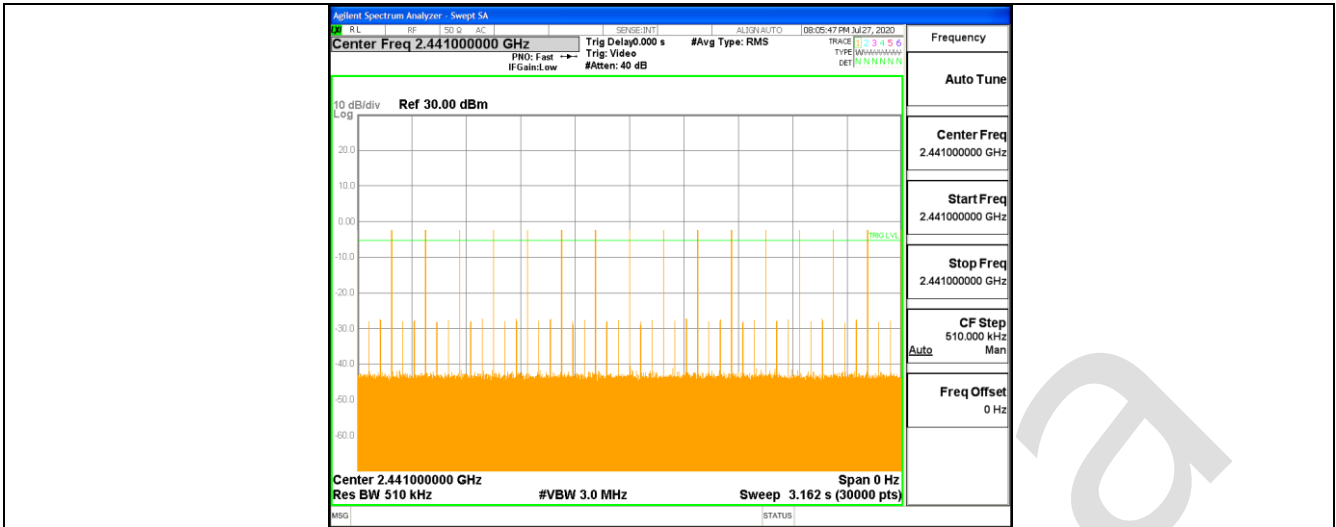
10.4 APPENDIX: TIME OF OCCUPANCY

Test Result

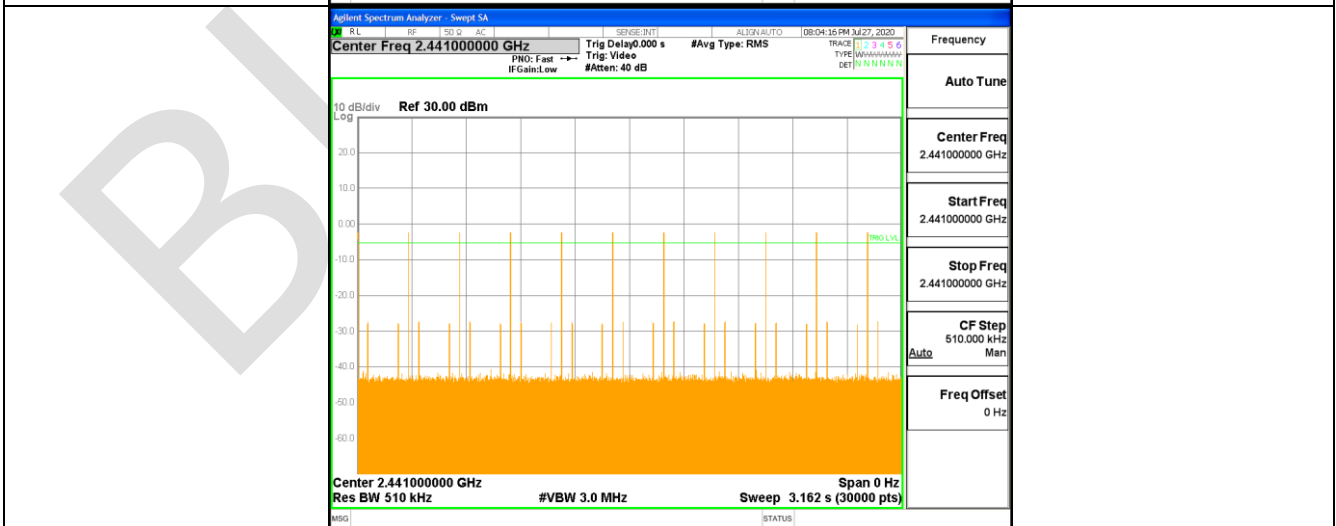
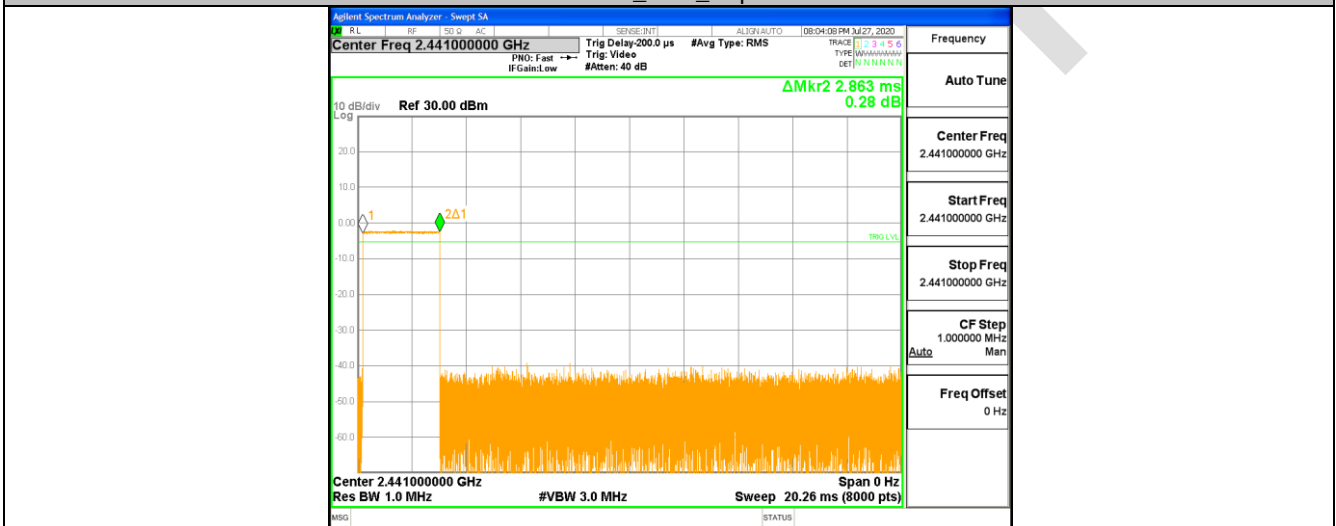
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.37	330	0.122	<=0.4	PASS
DH3	Ant1	Hop	1.62	170	0.275	<=0.4	PASS
DH5	Ant1	Hop	2.86	110	0.315	<=0.4	PASS

Test Graphs





DH5_Ant1_Hop

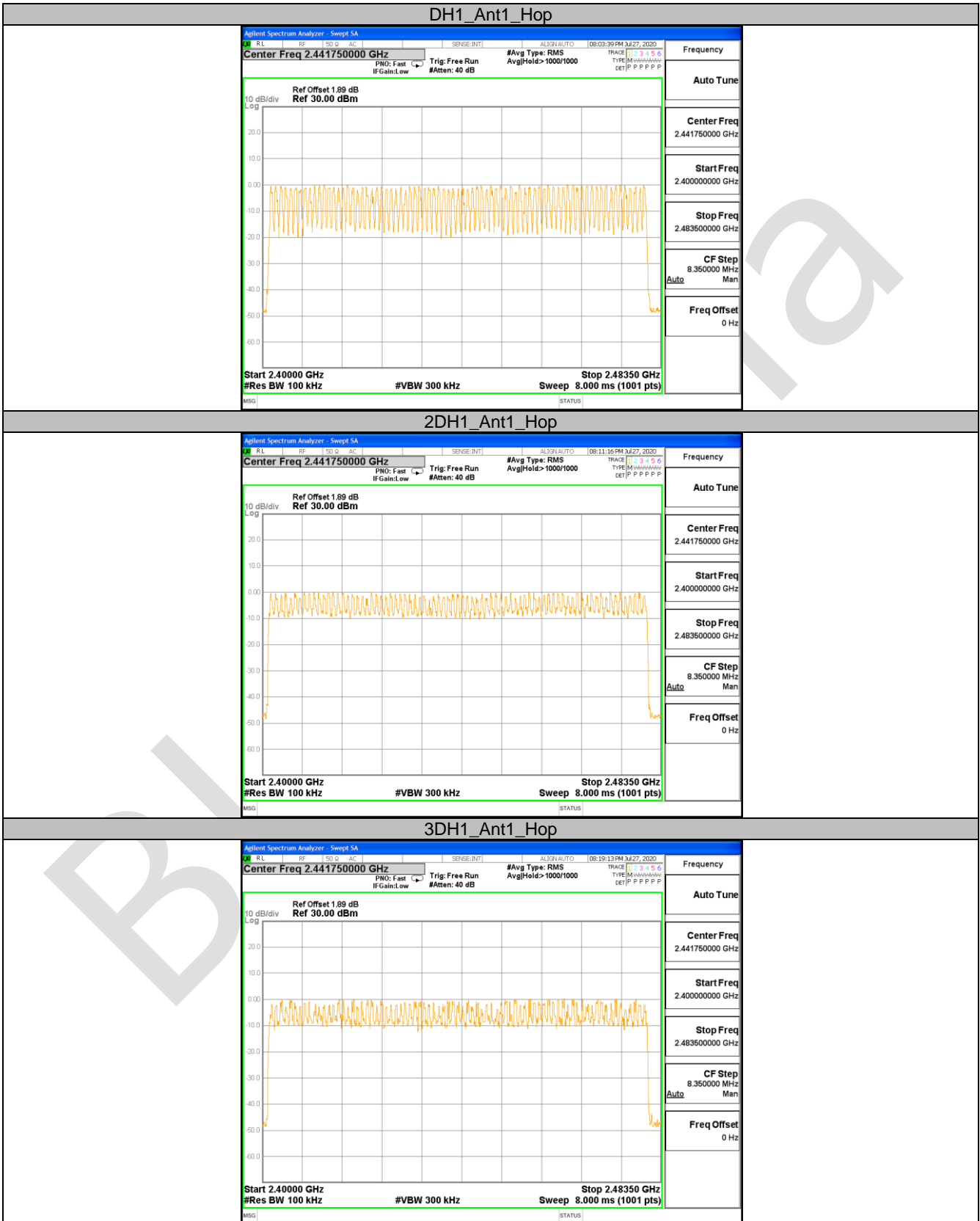


10.5 APPENDIXF: NUMBER OF HOPPING CHANNELS**Test Result**

TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH1	Ant1	Hop	79	≥ 15	PASS
2DH1	Ant1	Hop	79	≥ 15	PASS
3DH1	Ant1	Hop	79	≥ 15	PASS

BlueAsia

Test Graphs



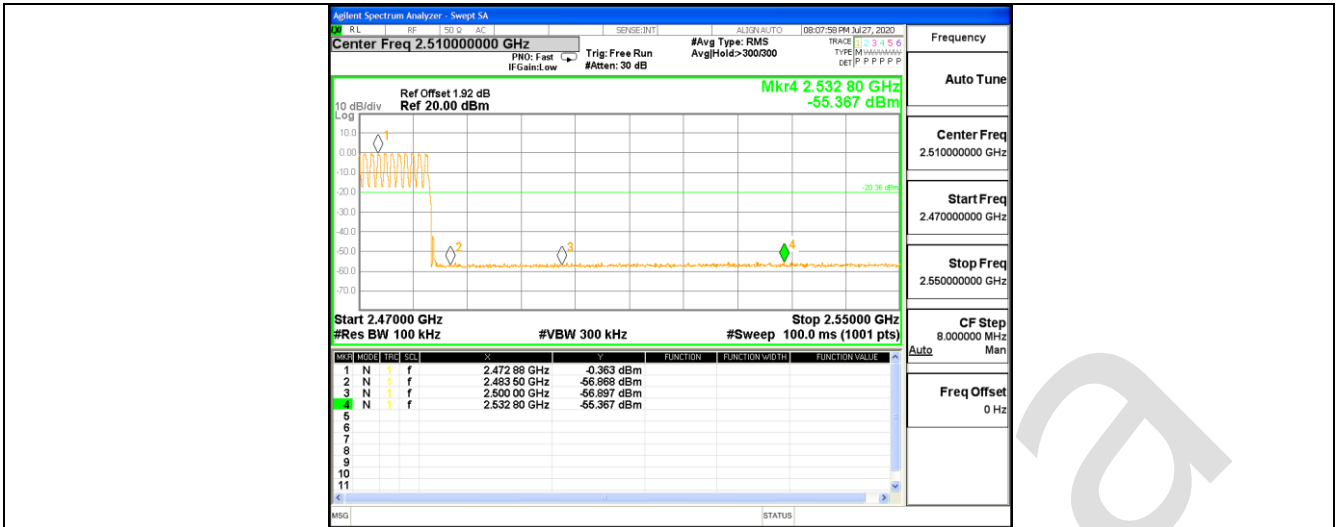
10.6 APPENDIX: BAND EDGE MEASUREMENTS

Test Result

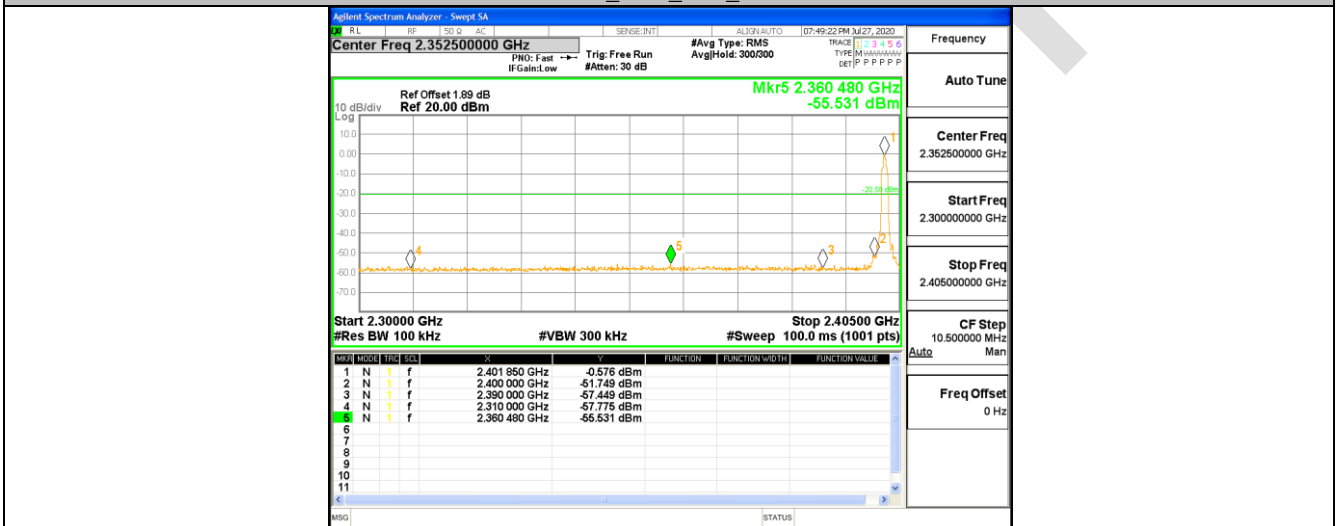
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	-0.63	-55.28	<=-20.63	PASS
		High	2480	-0.13	-55.71	<=-20.13	PASS
		Low	Hop_2402	-0.67	-54.98	-20.67	PASS
		High	Hop_2480	-0.36	-55.37	-20.36	PASS
2DH1	Ant1	Low	2402	-0.58	-55.53	<=-20.58	PASS
		High	2480	-0.09	-55.53	<=-20.09	PASS
		Low	Hop_2402	-0.68	-55.66	-20.68	PASS
		High	Hop_2480	-1.26	-55.7	-21.26	PASS
3DH1	Ant1	Low	2402	-0.48	-55.52	<=-20.48	PASS
		High	2480	-0.08	-54.76	<=-20.08	PASS
		Low	Hop_2402	-0.56	-55.84	-20.56	PASS
		High	Hop_2480	0.01	-54.98	-19.99	PASS

Test Graphs

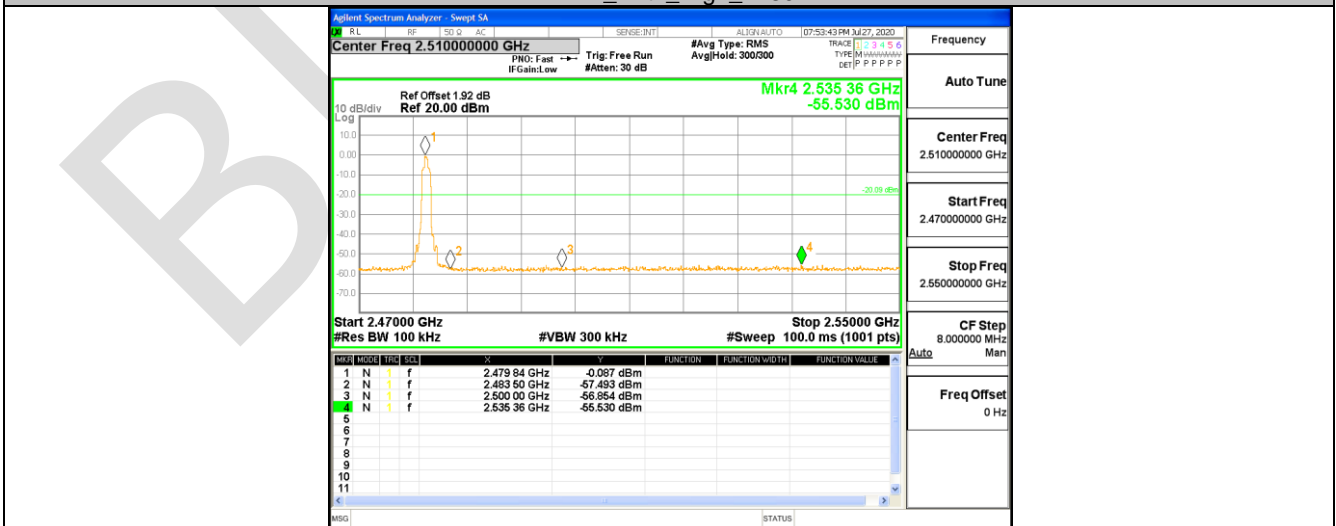




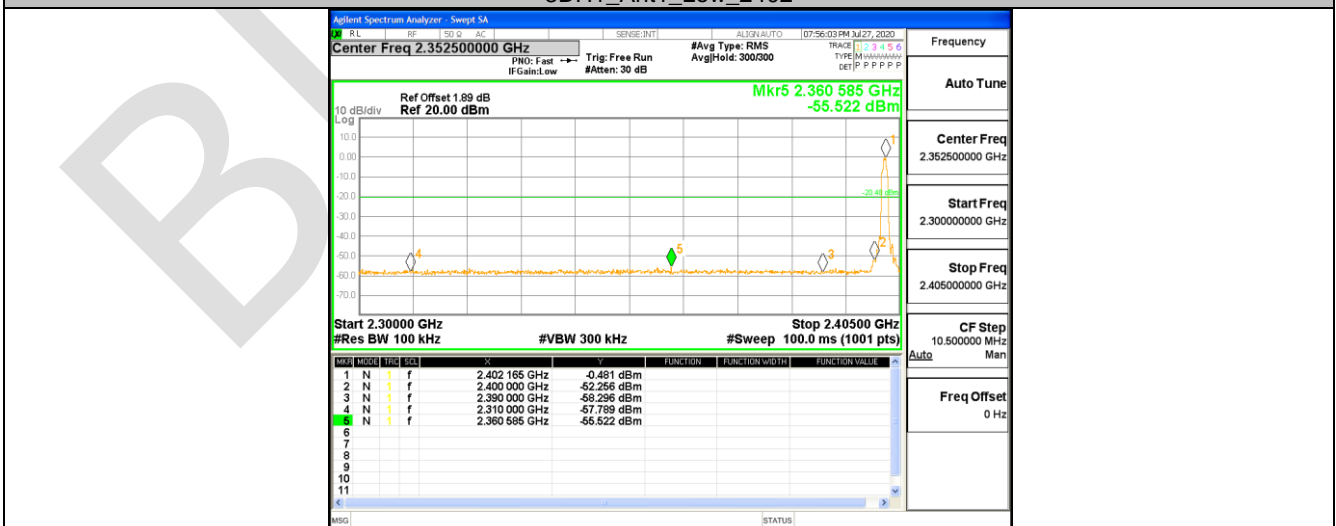
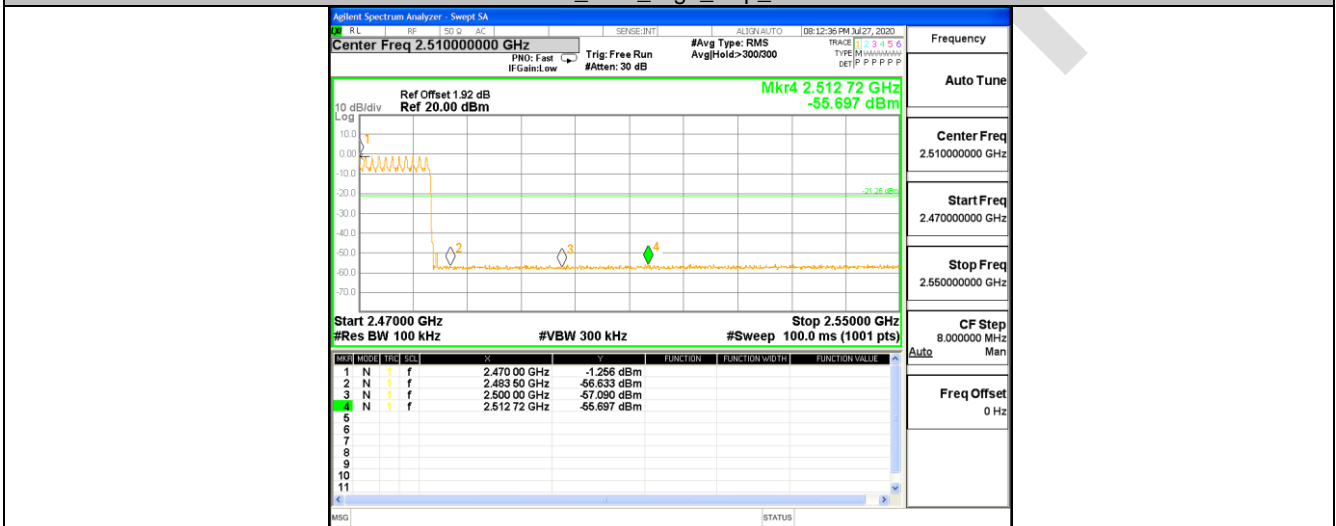
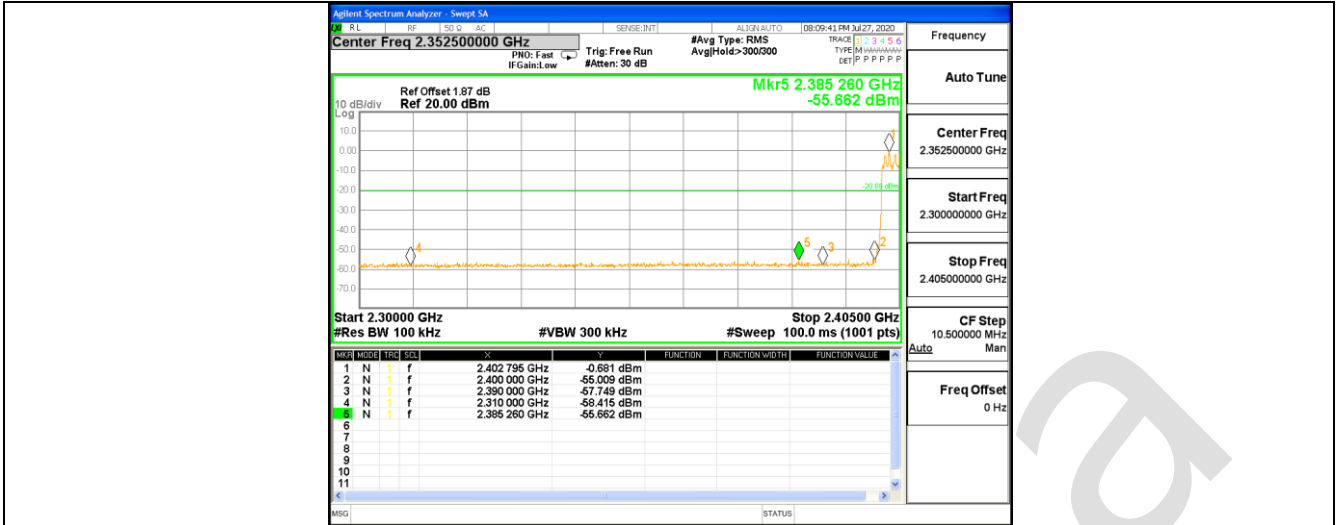
2DH1_Ant1_Low_2402

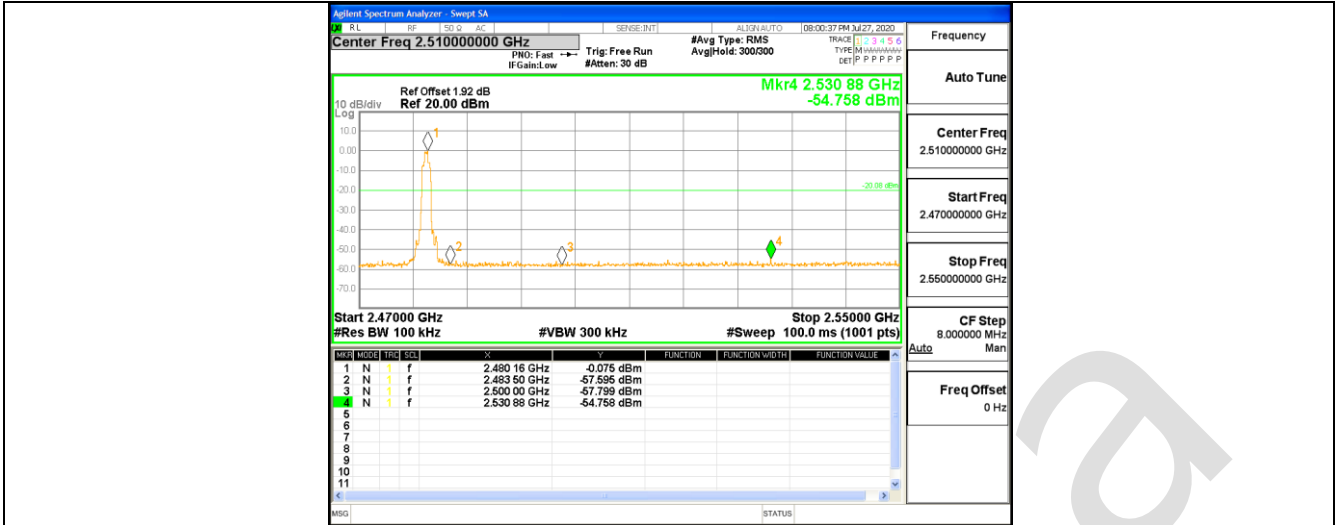


2DH1_Ant1_High_2480

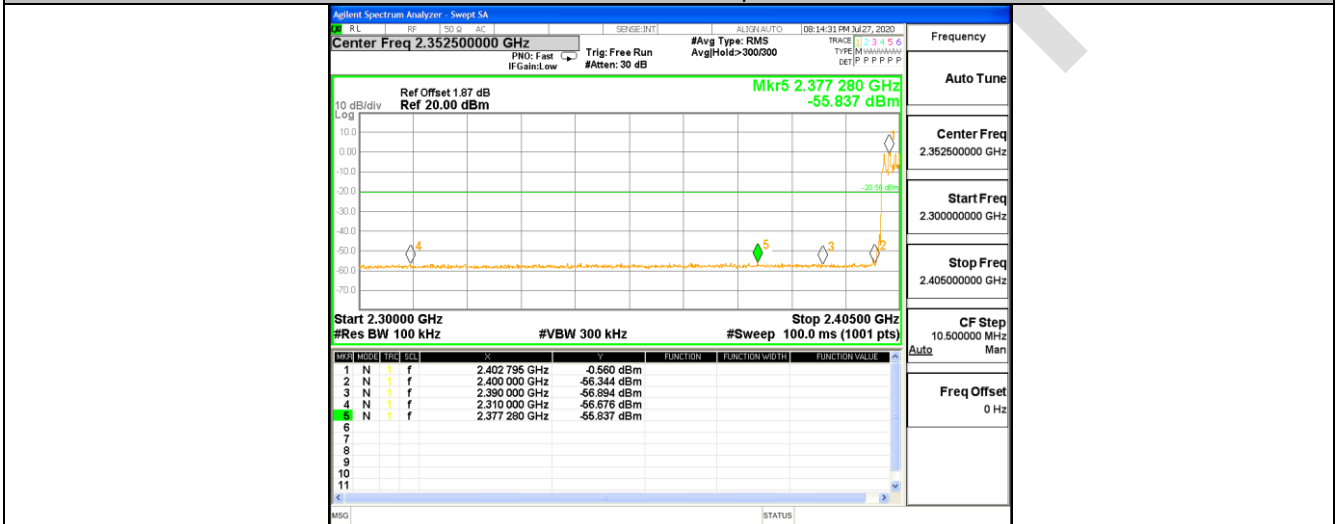


2DH1_Ant1_Low_Hop_2402

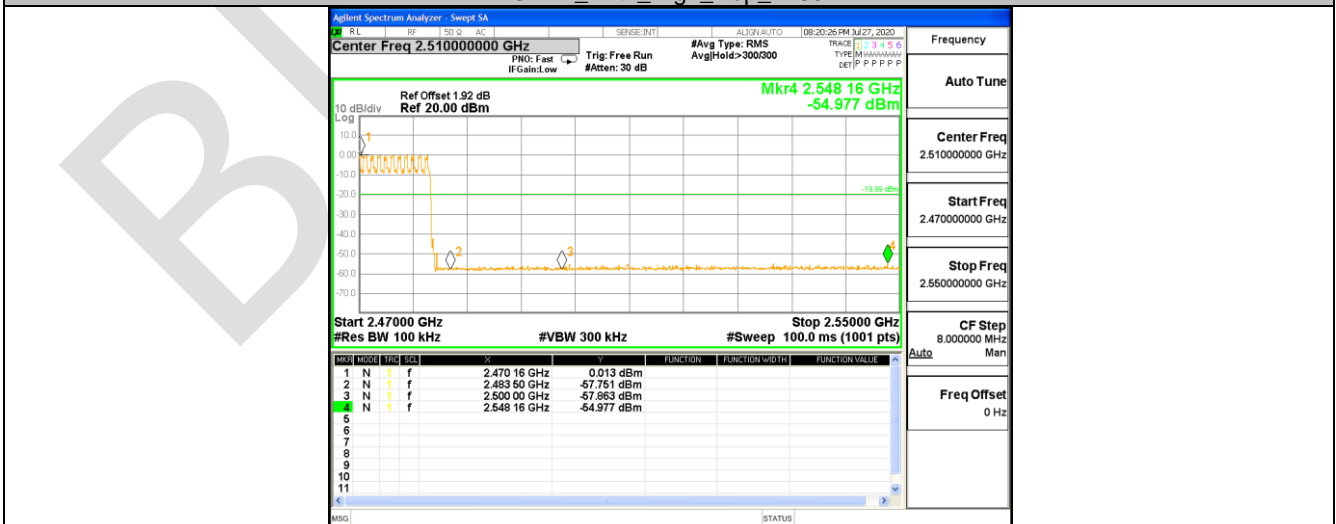




3DH1_Ant1_Low_Hop_2402



3DH1_Ant1_High_Hop_2480

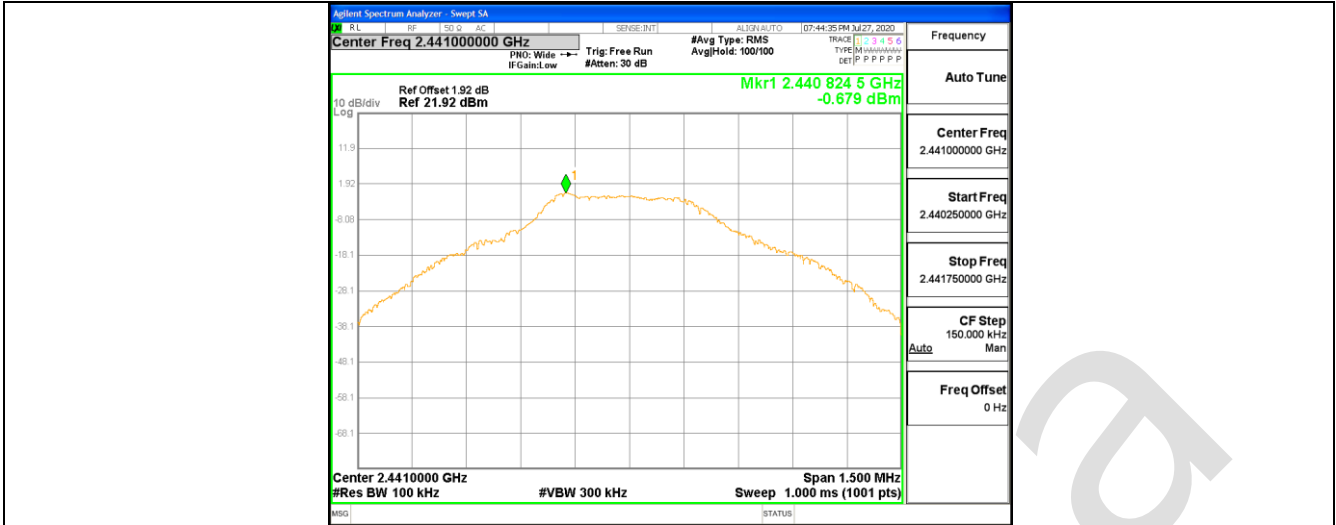


10.7 APPENDIX: CONDUCTED SPURIOUS EMISSION
Test Result

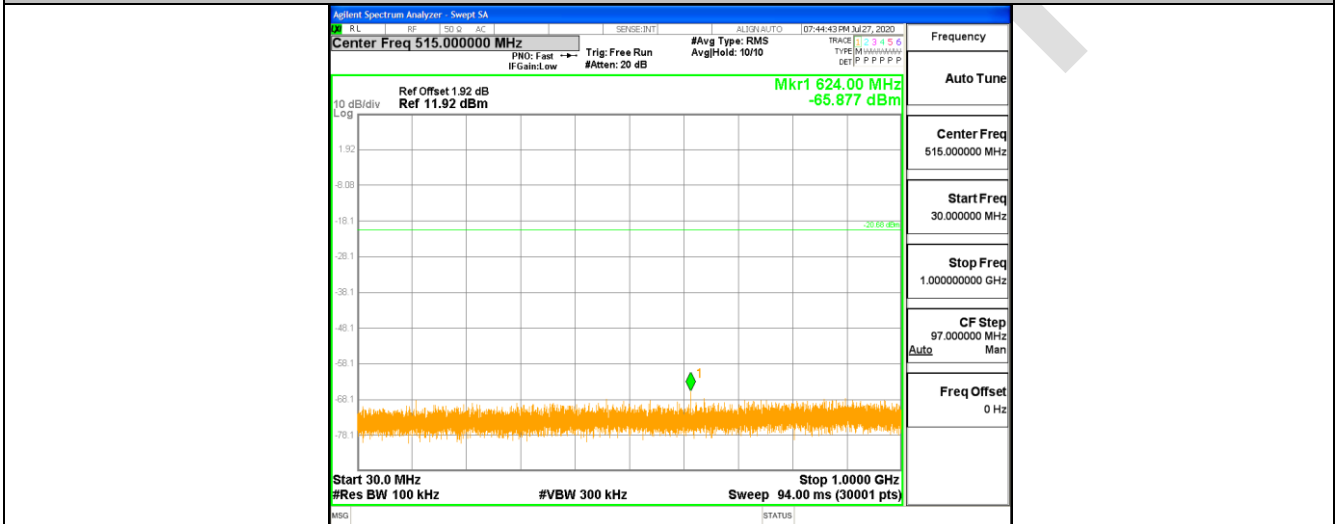
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	-0.65	-0.65	---	PASS
			30~1000	30~1000	-67.424	<=-20.654	PASS
			1000~26500	1000~26500	-50.261	<=-20.654	PASS
		2441	Reference	-0.68	-0.68	---	PASS
			30~1000	30~1000	-65.877	<=-20.679	PASS
			1000~26500	1000~26500	-52.025	<=-20.679	PASS
		2480	Reference	-0.22	-0.22	---	PASS
			30~1000	30~1000	-65.396	<=-20.222	PASS
			1000~26500	1000~26500	-52.261	<=-20.222	PASS
2DH1	Ant1	2402	Reference	-0.59	-0.59	---	PASS
			30~1000	30~1000	-67.942	<=-20.594	PASS
			1000~26500	1000~26500	-53.321	<=-20.594	PASS
		2441	Reference	-0.66	-0.66	---	PASS
			30~1000	30~1000	-67.428	<=-20.663	PASS
			1000~26500	1000~26500	-51.363	<=-20.663	PASS
		2480	Reference	-0.13	-0.13	---	PASS
			30~1000	30~1000	-65.679	<=-20.131	PASS
			1000~26500	1000~26500	-51.94	<=-20.131	PASS
3DH1	Ant1	2402	Reference	-1.39	-1.39	---	PASS
			30~1000	30~1000	-67.399	<=-21.388	PASS
			1000~26500	1000~26500	-53.375	<=-21.388	PASS
		2441	Reference	-0.62	-0.62	---	PASS
			30~1000	30~1000	-65.689	<=-20.618	PASS
			1000~26500	1000~26500	-52.83	<=-20.618	PASS
		2480	Reference	-0.06	-0.06	---	PASS
			30~1000	30~1000	-67.42	<=-20.06	PASS
			1000~26500	1000~26500	-51.892	<=-20.06	PASS

Test Graphs

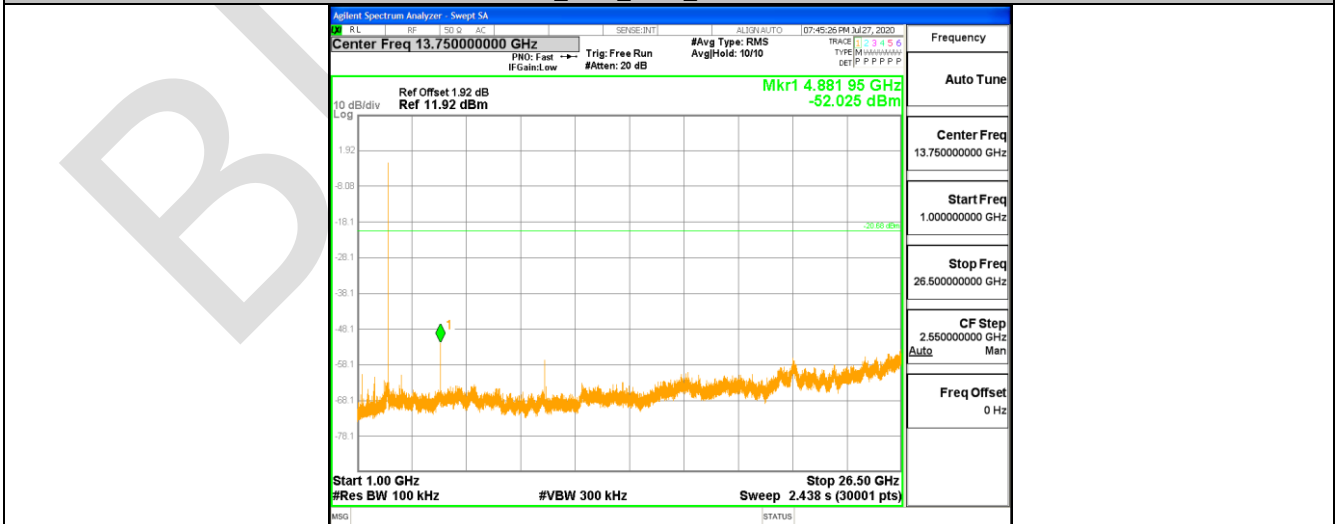




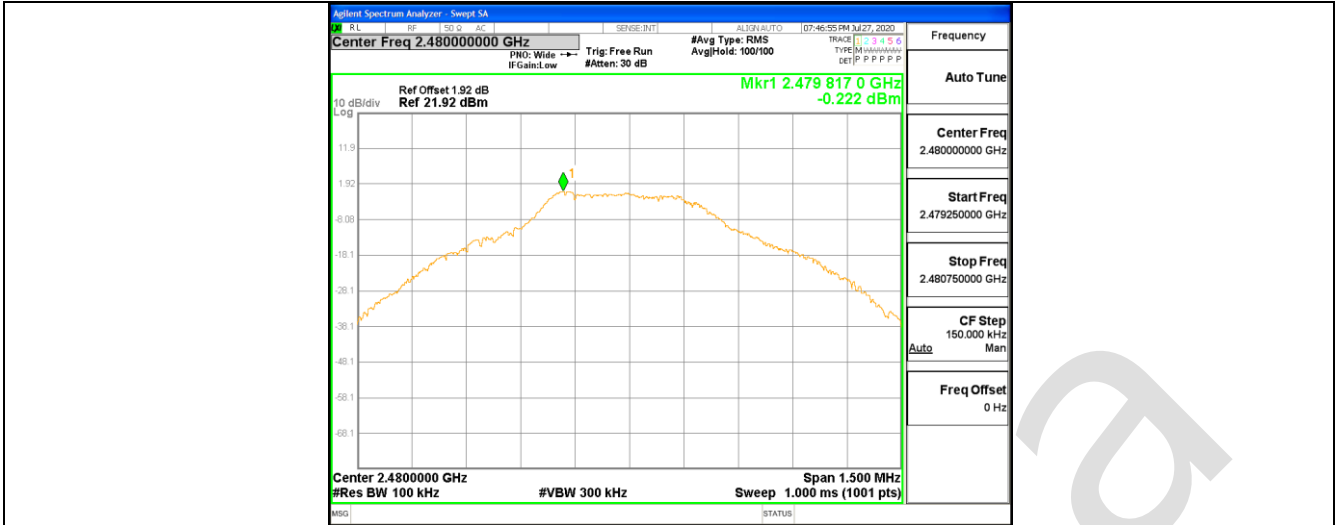
DH1_Ant1_2441_30~1000



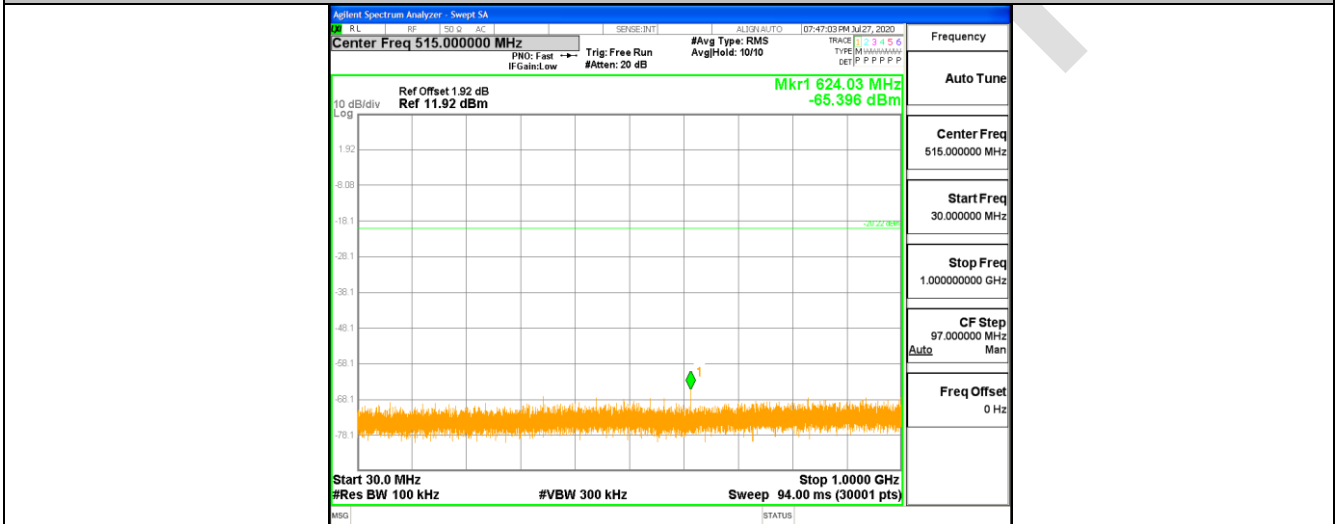
DH1_Ant1_2441_1000~26500



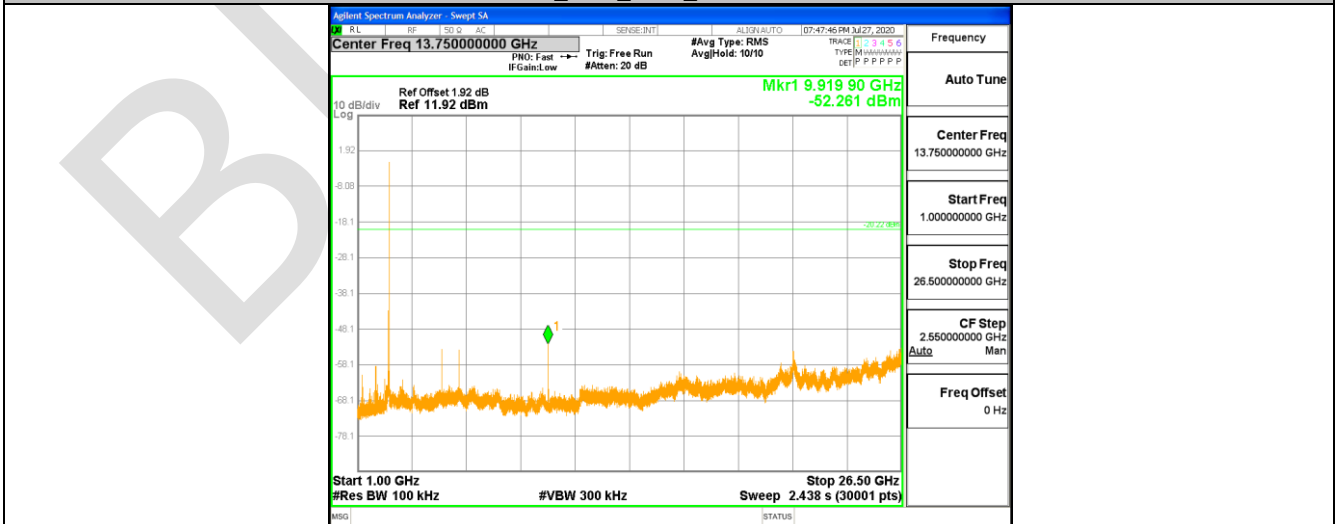
DH1_Ant1_2480_0~Reference



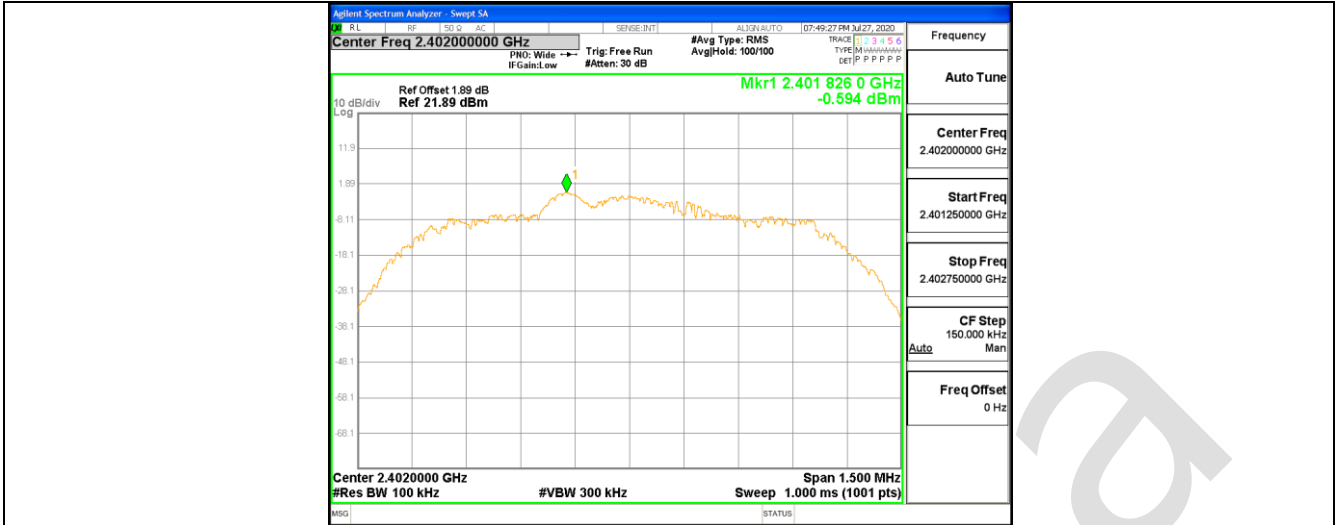
DH1_Ant1_2480_30~1000



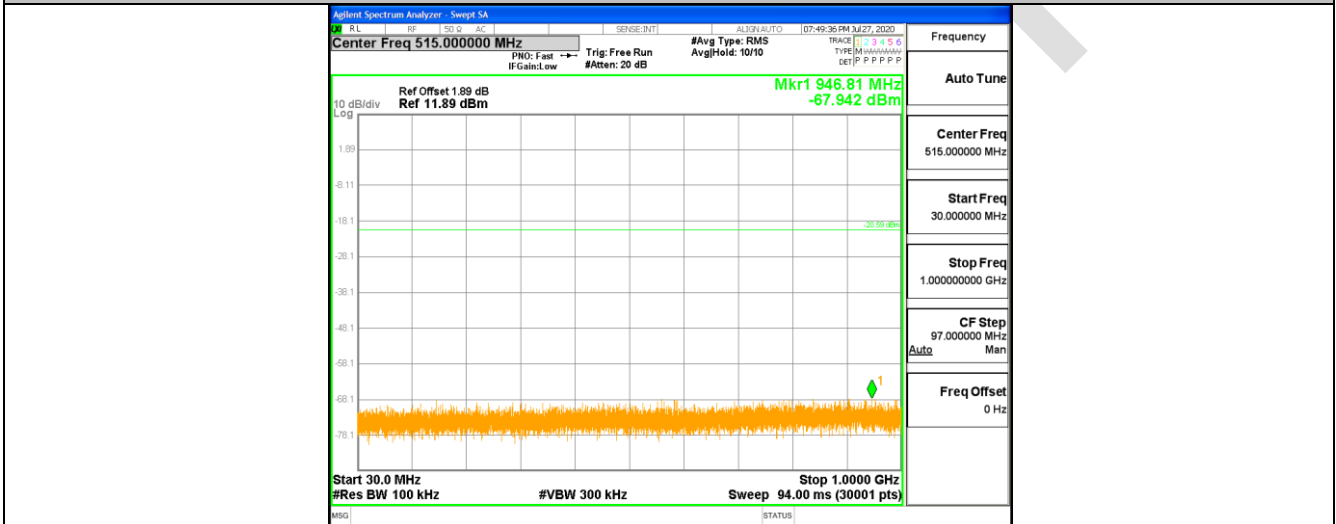
DH1_Ant1_2480_1000~26500



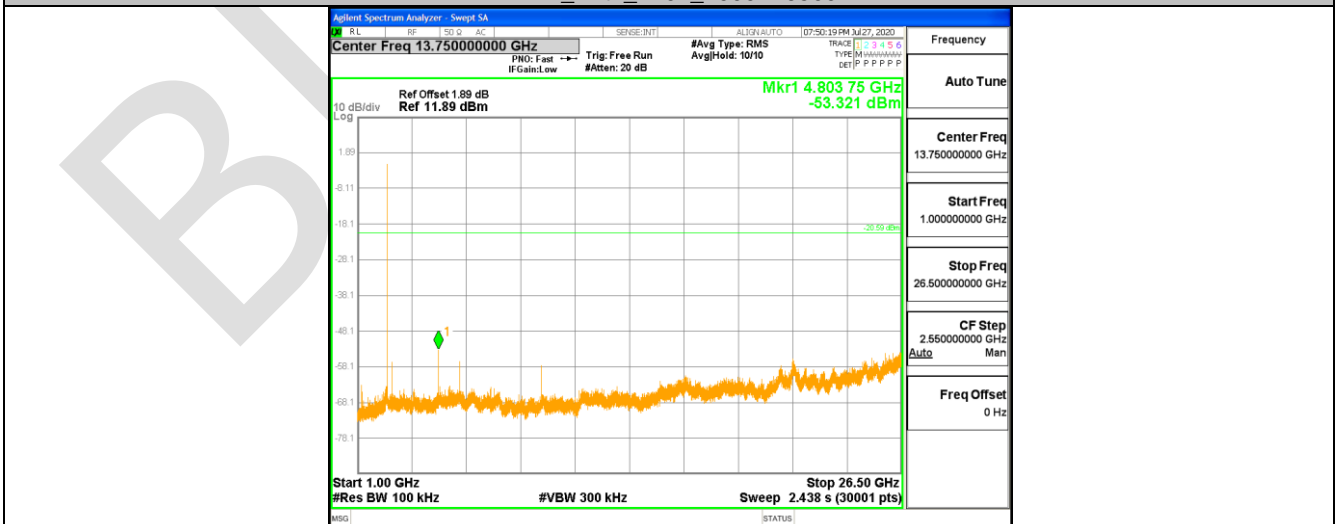
2DH1_Ant1_2402_0~Reference



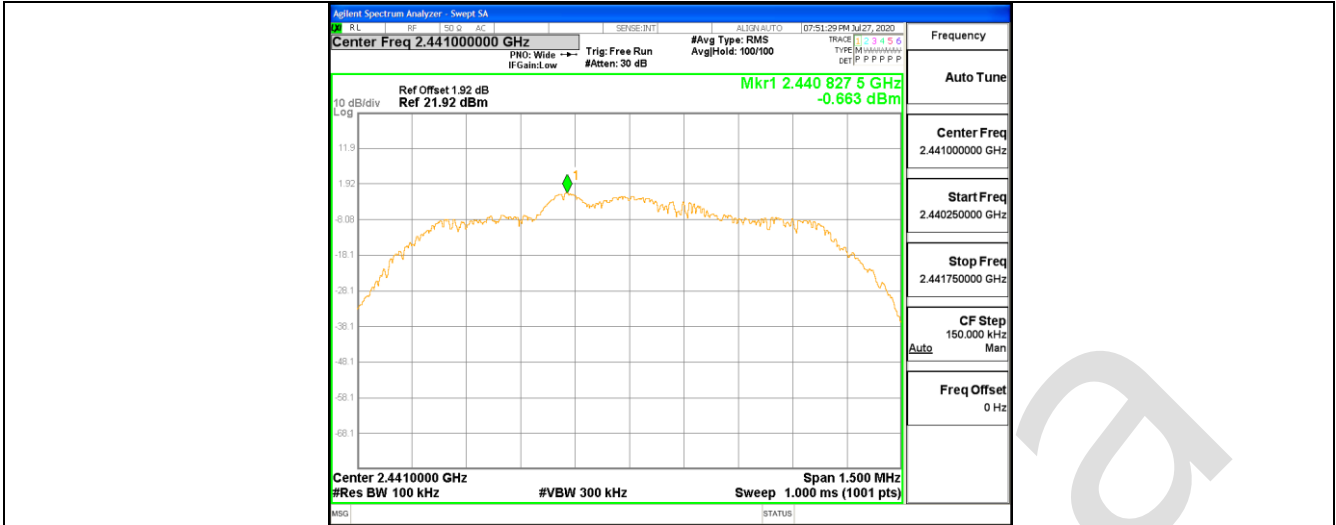
2DH1_Ant1_2402_30~1000



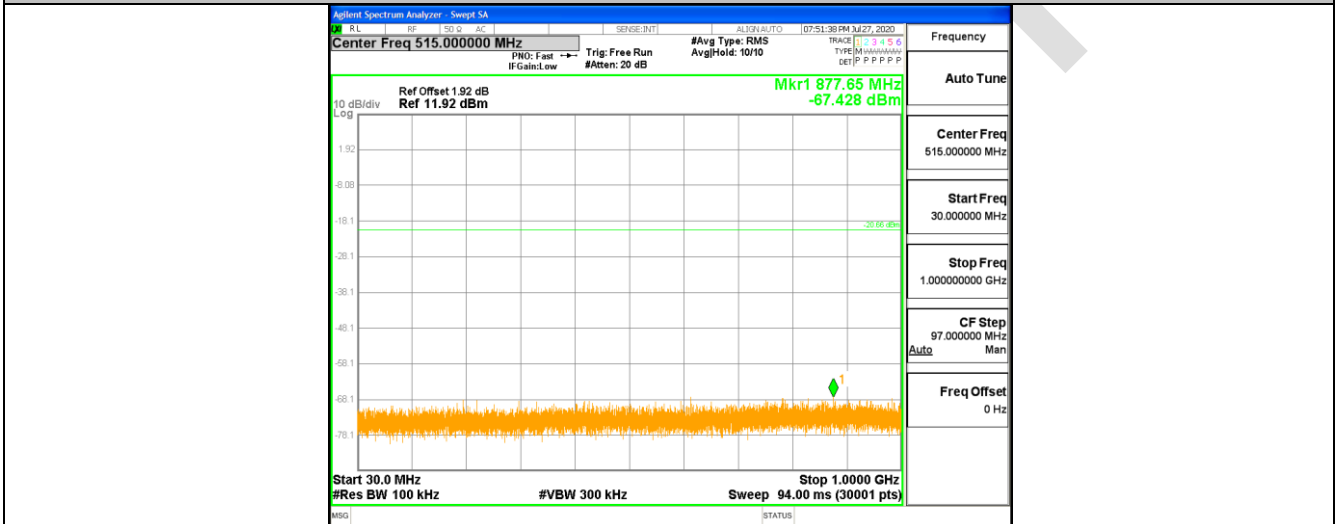
2DH1_Ant1_2402_1000~26500



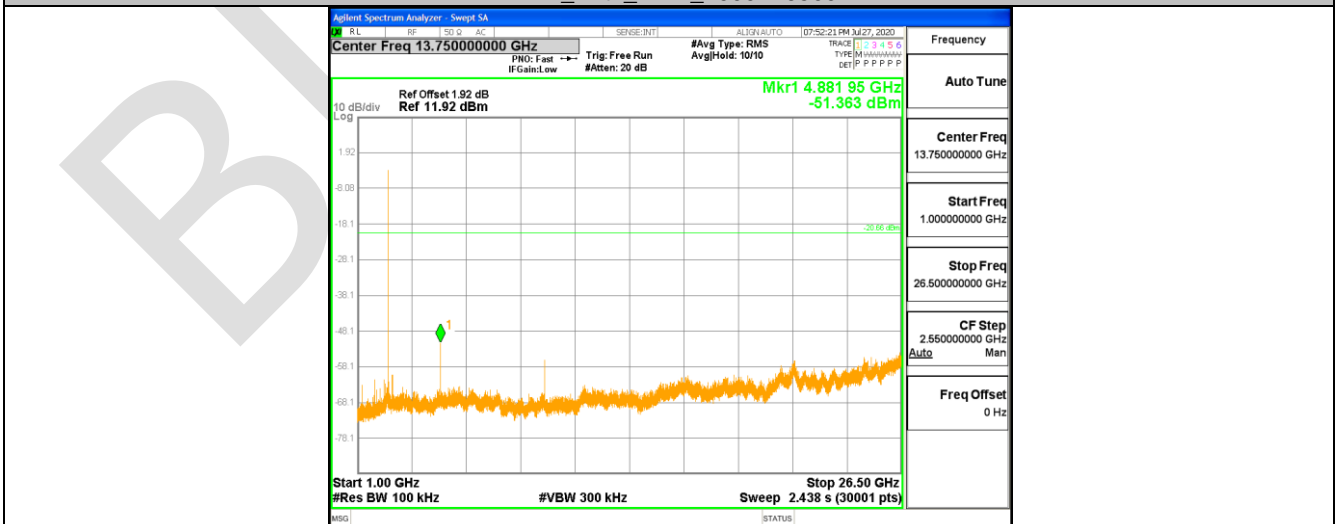
2DH1_Ant1_2441_0~Reference



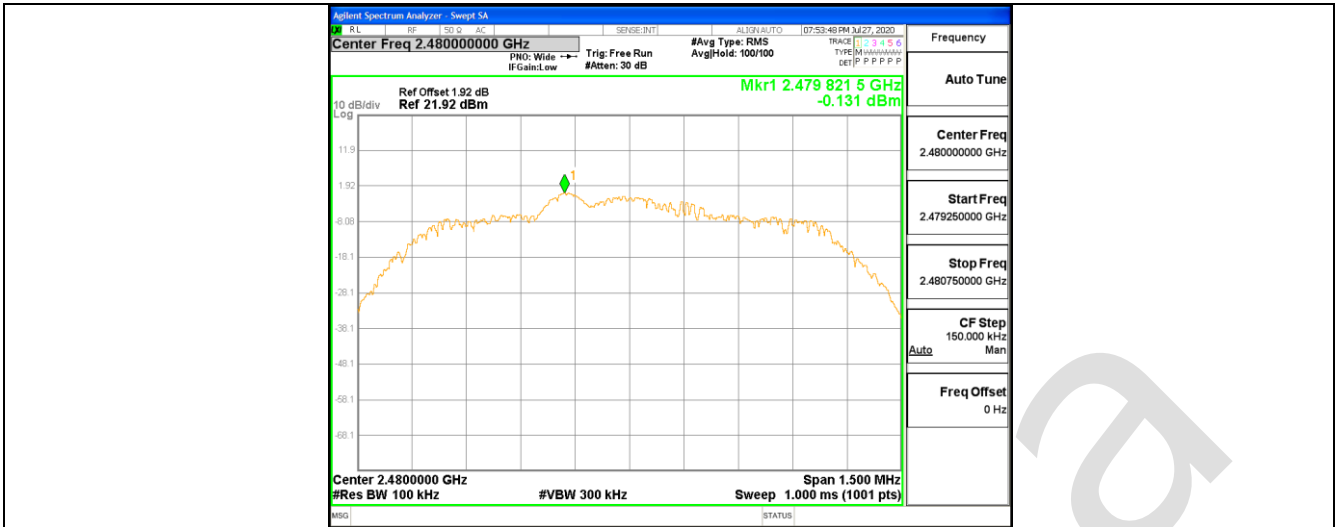
2DH1_Ant1_2441_30~1000



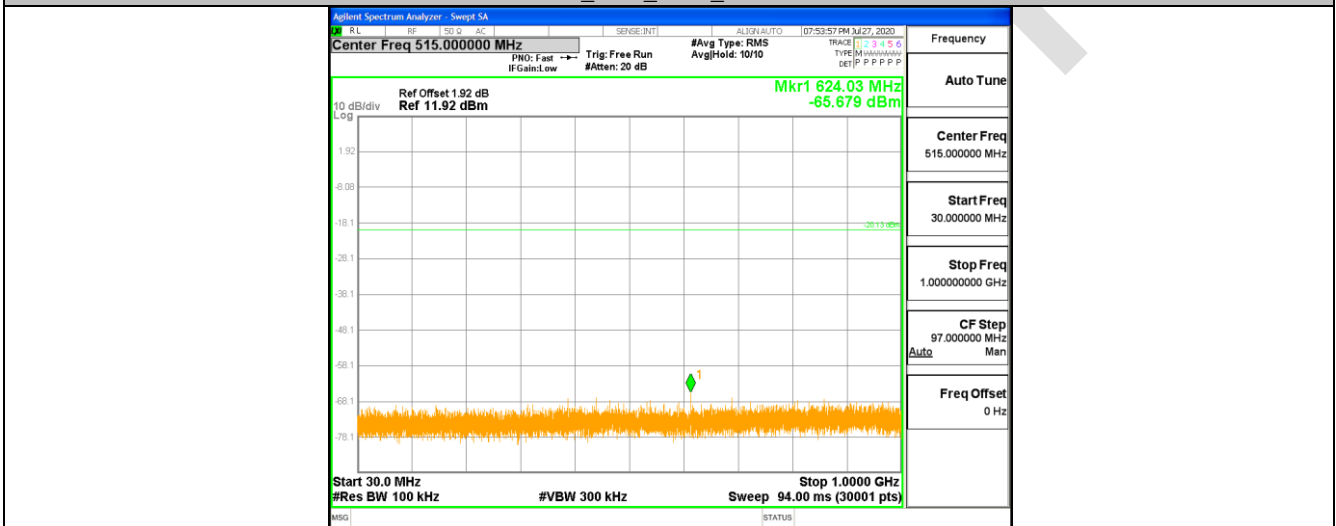
2DH1_Ant1_2441_1000~26500



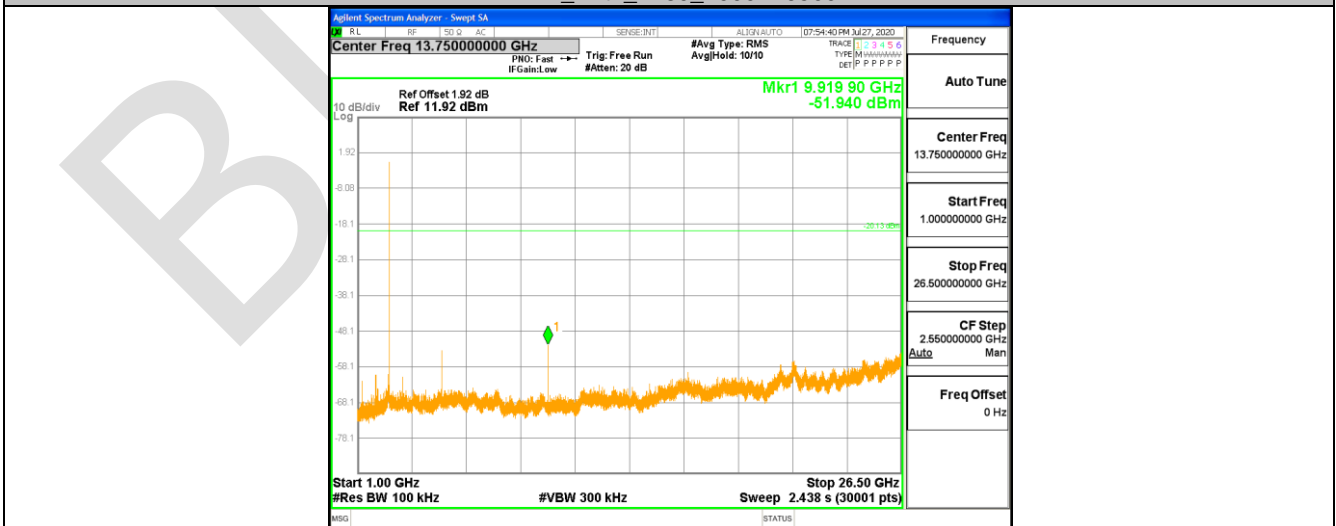
2DH1_Ant1_2480_0~Reference



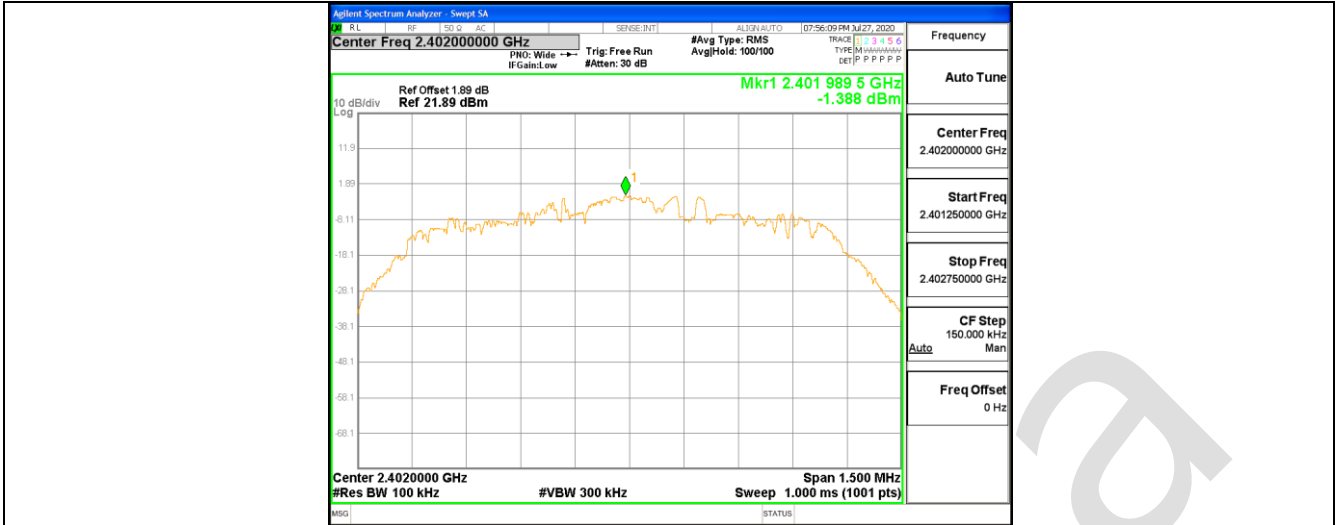
2DH1_Ant1_2480_30~1000



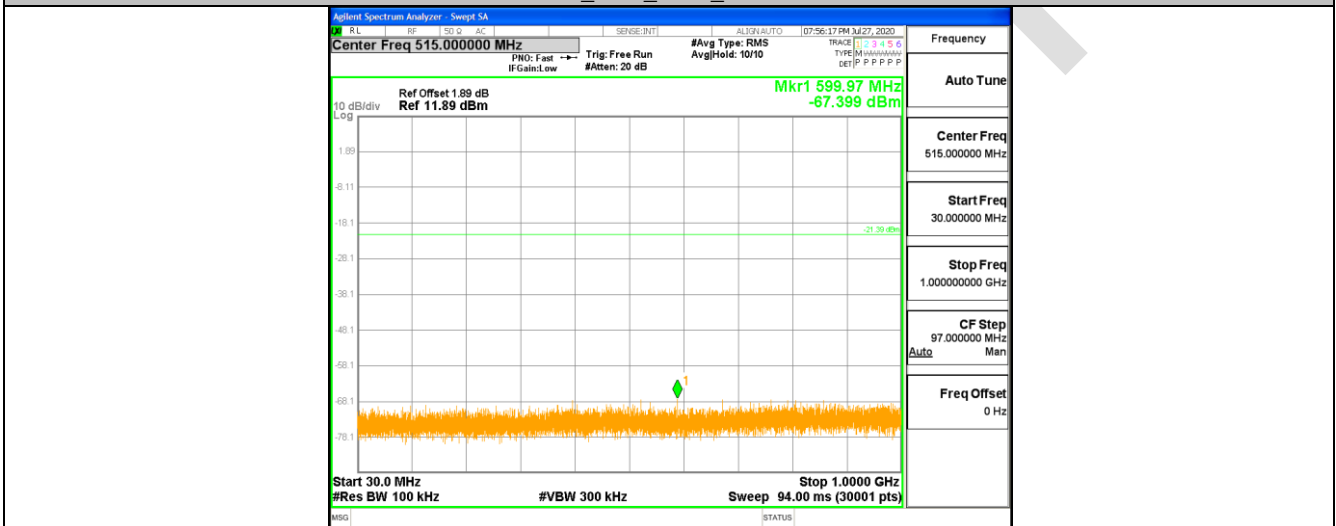
2DH1_Ant1_2480_1000~26500



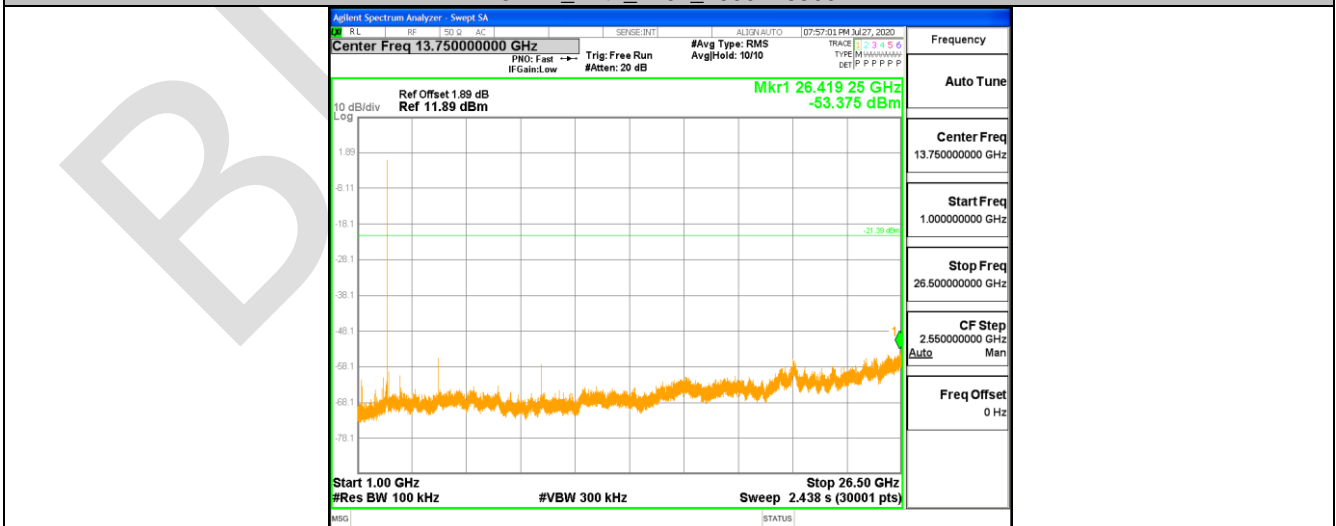
3DH1_Ant1_2402_0~Reference



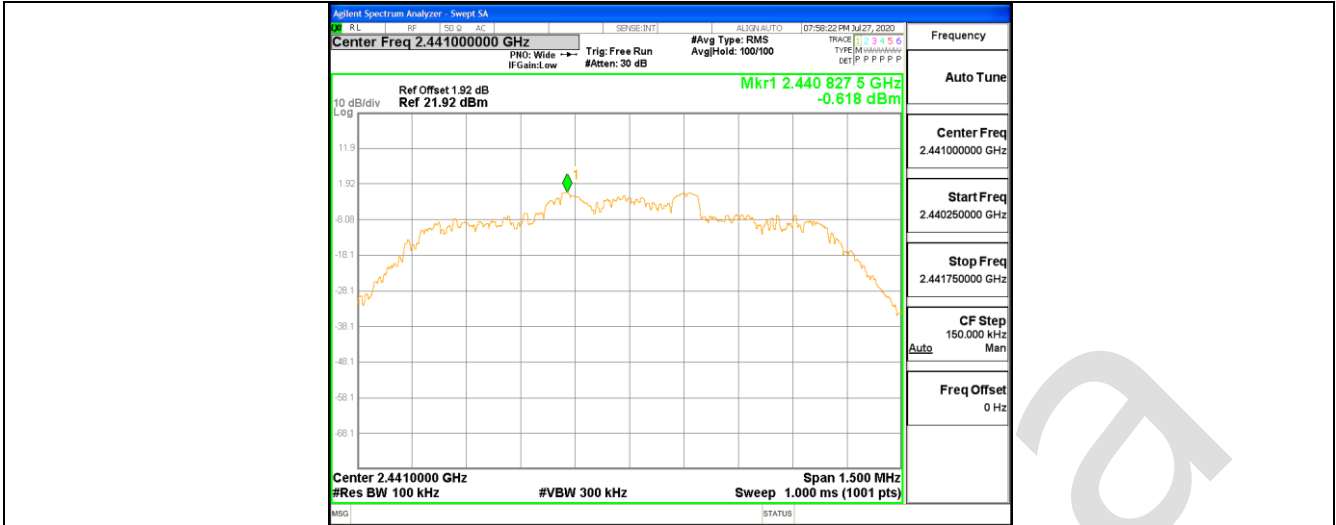
3DH1_Ant1_2402_30~1000



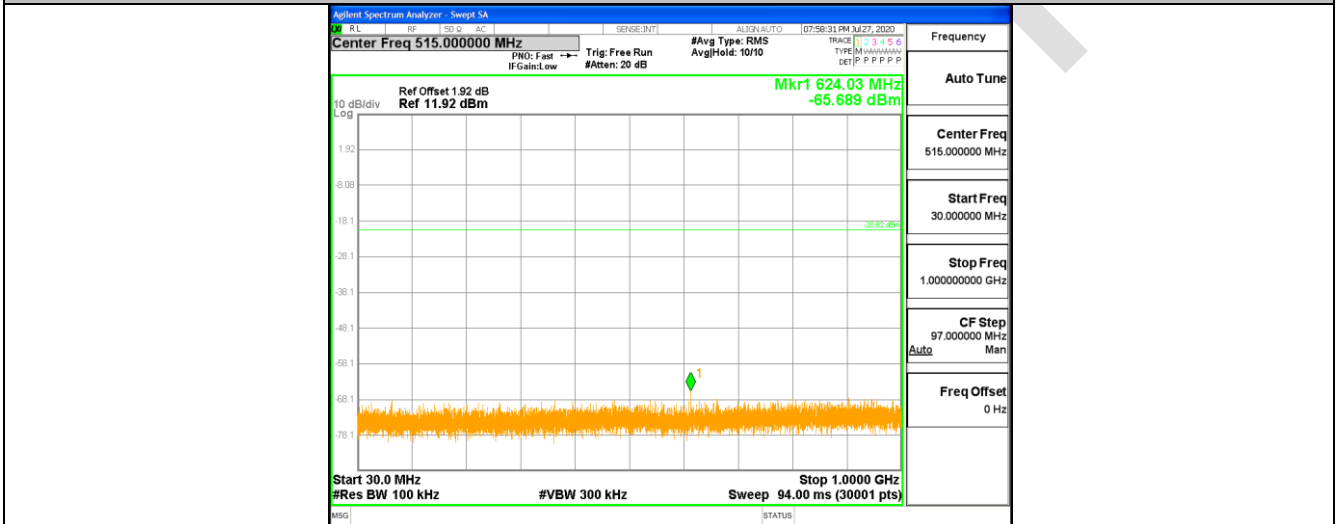
3DH1_Ant1_2402_1000~26500



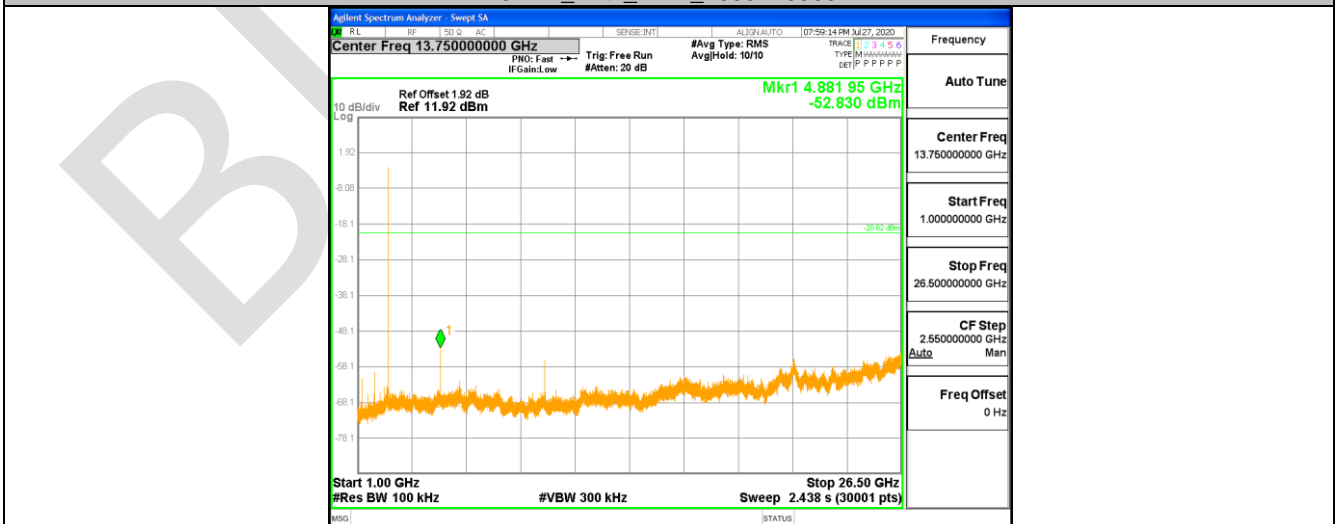
3DH1_Ant1_2441_0~Reference



3DH1_Ant1_2441_30~1000



3DH1_Ant1_2441_1000~26500



3DH1_Ant1_2480_0~Reference

