



Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: 1200M Wi-Fi 5 (802.11ac) Home Router

Trade Mark: iRideWiFi

Test Model: BH450

Environmental Conditions

Temperature:	23.6° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Kay Hu
Supervised by:	Li Huan



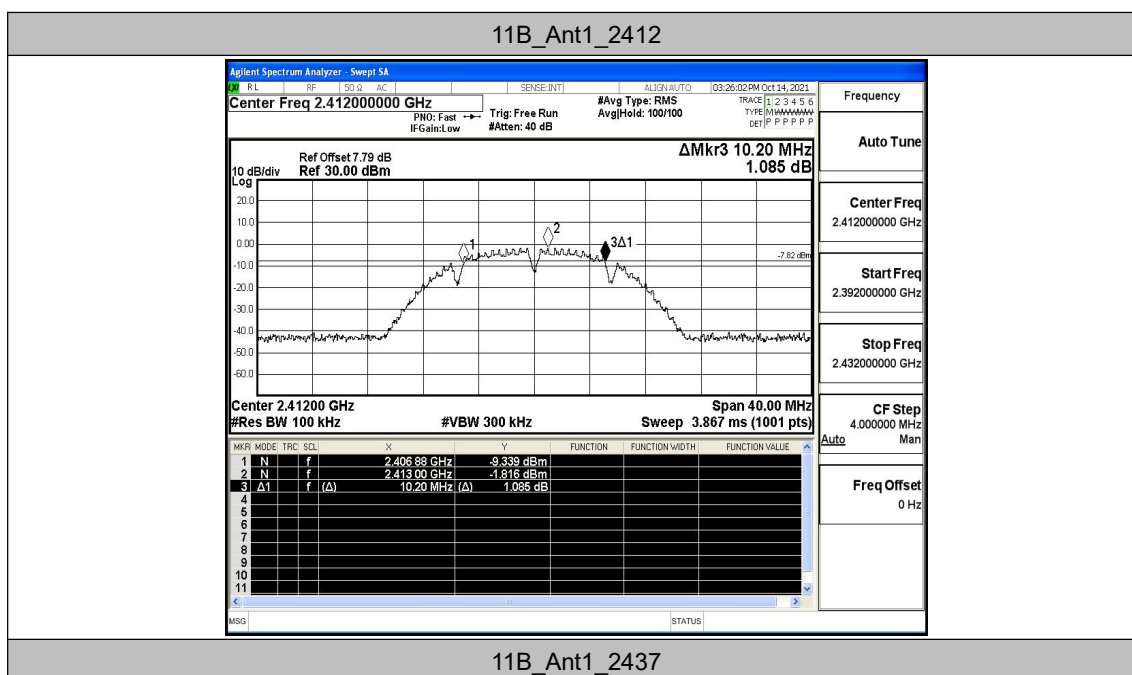
A.1 6dB Bandwidth

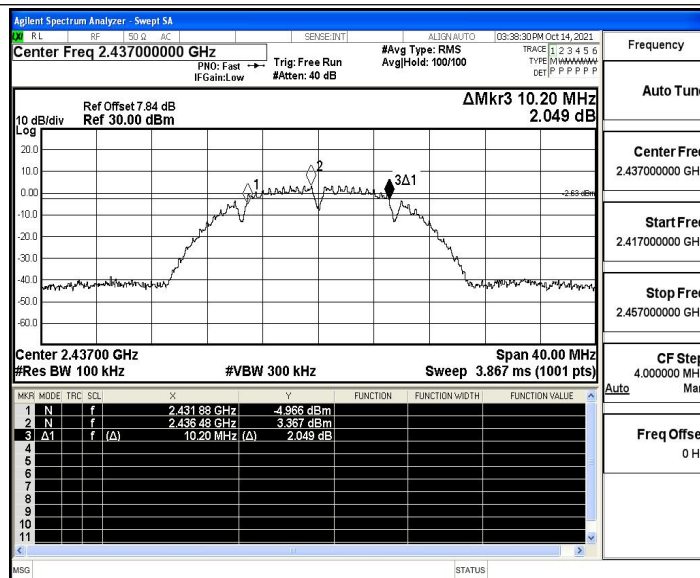
Test Result

ANT1

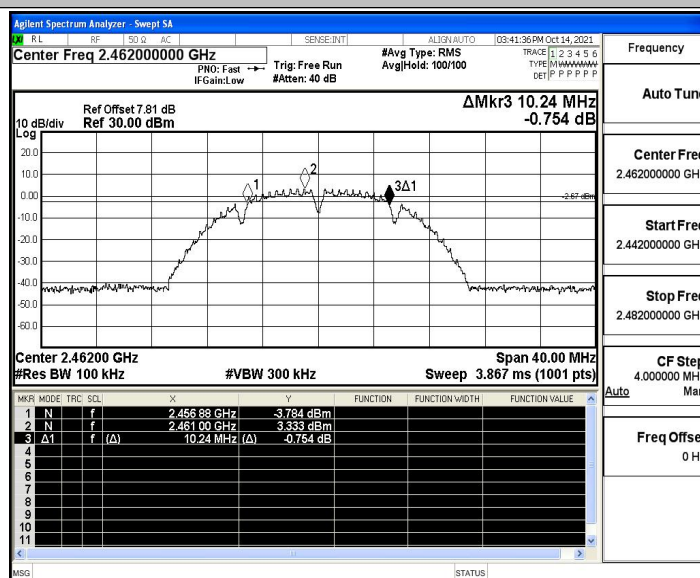
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.200	2406.880	2417.080	0.5	PASS
		2437	10.200	2431.880	2442.080	0.5	PASS
		2462	10.240	2456.880	2467.120	0.5	PASS
11G	Ant1	2412	16.480	2403.760	2420.240	0.5	PASS
		2437	16.480	2428.760	2445.240	0.5	PASS
		2462	16.480	2453.760	2470.240	0.5	PASS
11N20SISO	Ant1	2412	17.680	2403.160	2420.840	0.5	PASS
		2437	17.680	2428.160	2445.840	0.5	PASS
		2462	17.720	2453.120	2470.840	0.5	PASS
11N40SISO	Ant1	2422	36.480	2403.760	2440.240	0.5	PASS
		2437	36.480	2418.760	2455.240	0.5	PASS
		2452	36.480	2433.760	2470.240	0.5	PASS

Test Graphs

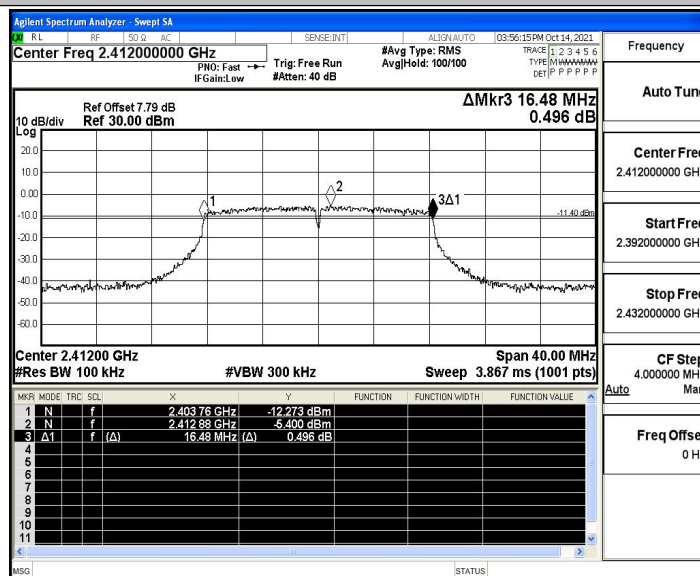




11B_Ant1_2462

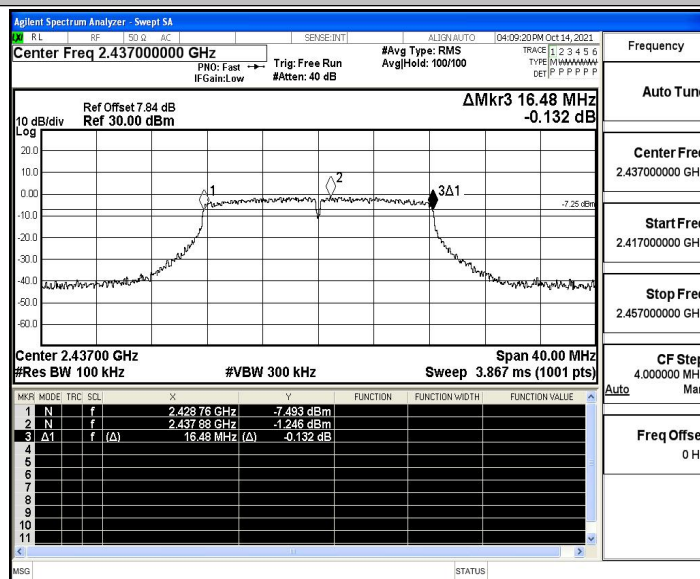


11G_Ant1_2412

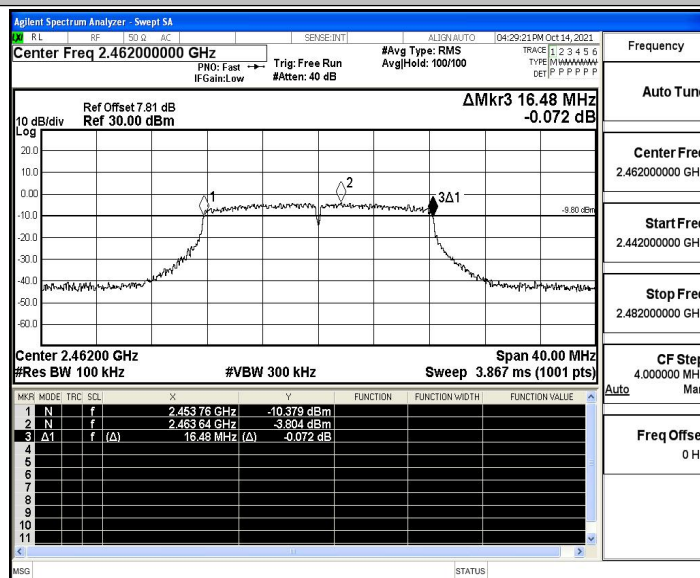




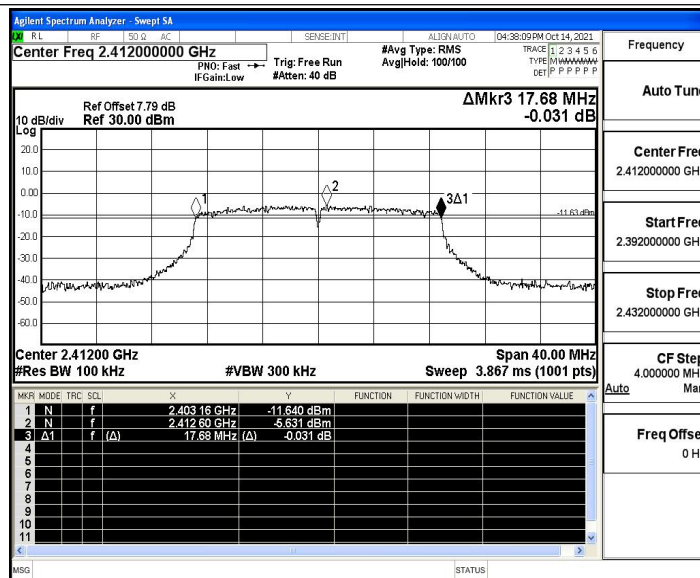
11G_Ant1_2437



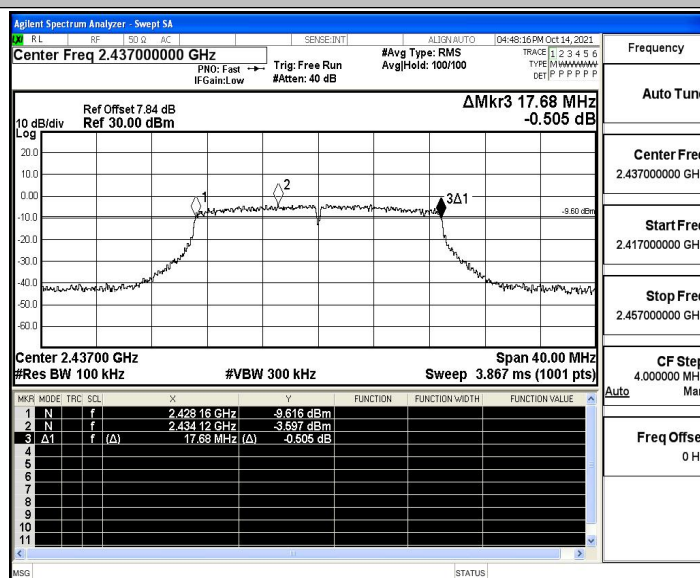
11G_Ant1_2462



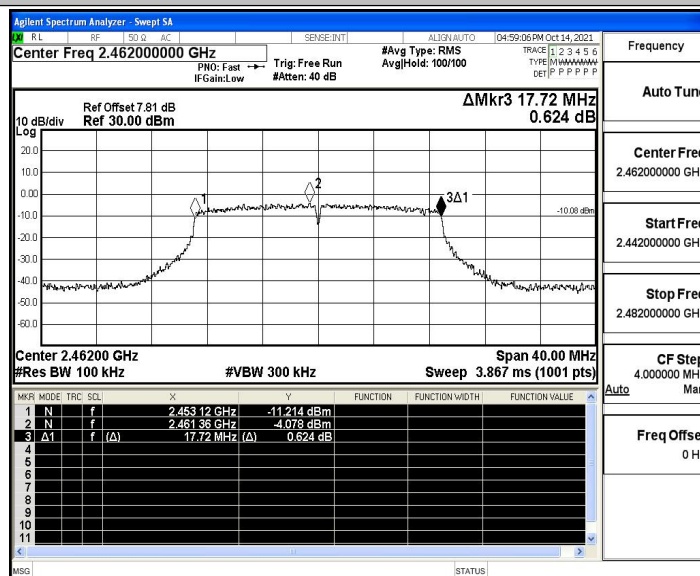
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437

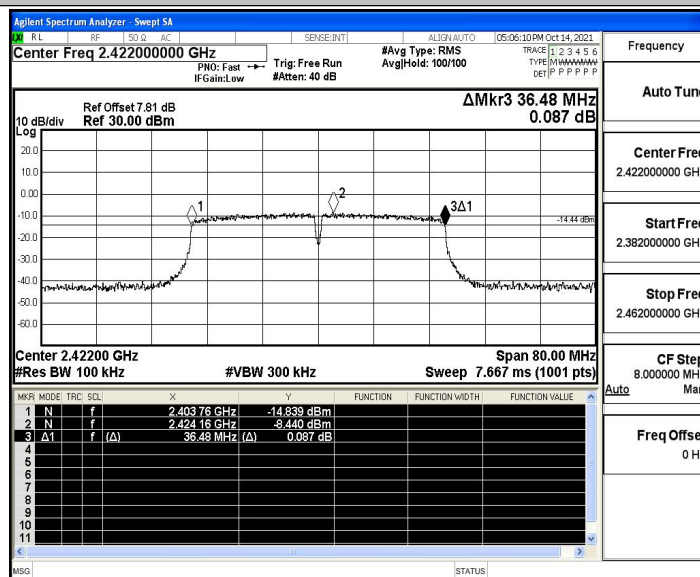


11N20SISO_Ant1_2462

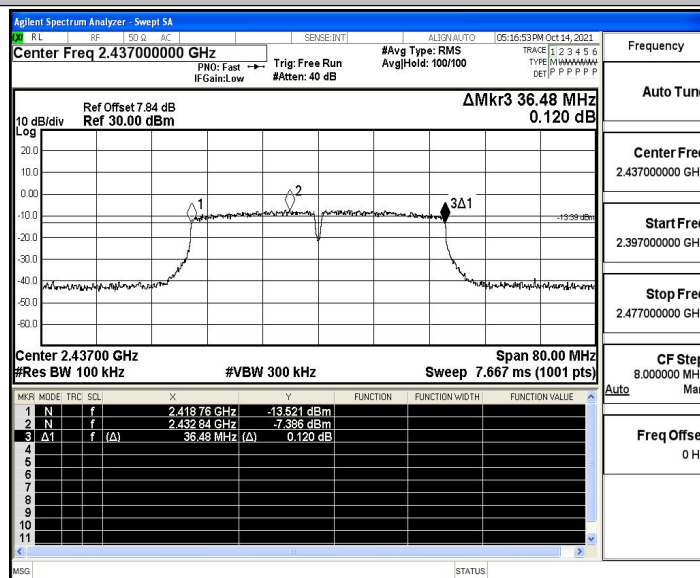




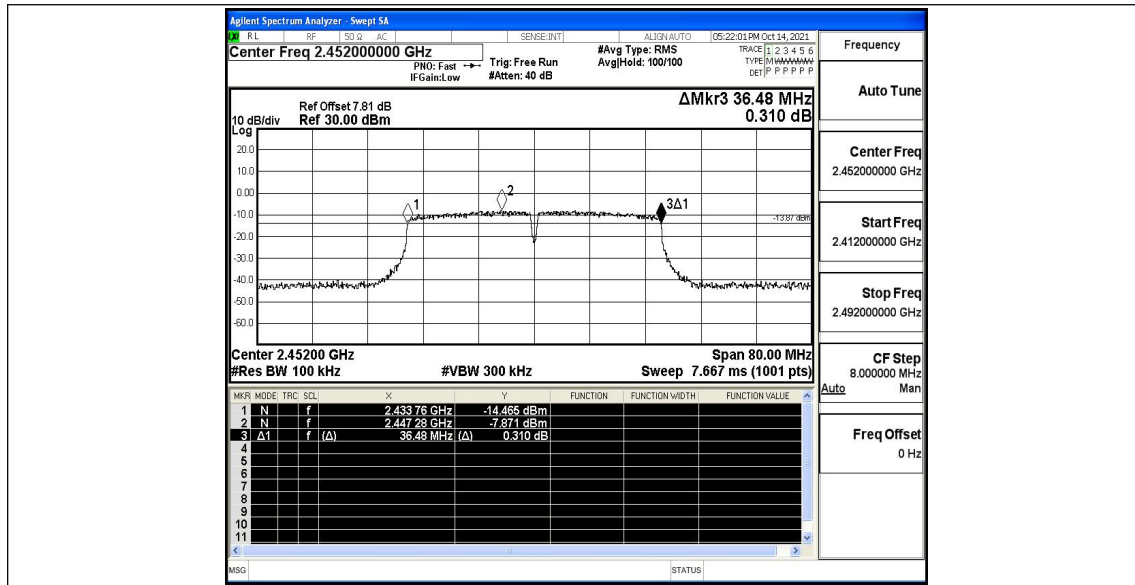
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant2	2412	10.120	2406.920	2417.040	0.5	PASS
		2437	10.160	2431.920	2442.080	0.5	PASS
		2462	10.160	2456.920	2467.080	0.5	PASS
11G	Ant2	2412	15.960	2404.000	2419.960	0.5	PASS
		2437	15.400	2429.400	2444.800	0.5	PASS
		2462	15.360	2454.440	2469.800	0.5	PASS
11N20SISO	Ant2	2412	16.000	2404.200	2420.200	0.5	PASS
		2437	15.800	2429.360	2445.160	0.5	PASS
		2462	17.120	2453.400	2470.520	0.5	PASS
11N40SISO	Ant2	2422	35.440	2404.400	2439.840	0.5	PASS
		2437	35.280	2419.400	2454.680	0.5	PASS
		2452	34.160	2435.440	2469.600	0.5	PASS

11B_Ant2_2412

Agilent Spectrum Analyzer - Sweep SA

RL RF SQ G AC SENSE:INT ALIGN: AUTO 06:49:42 PM Oct 15, 2021

Center Freq 2.412000000 GHz PNO: Fast Trg: Free Run #Avg Type: RMS AvgHld: 100/100 TRF: 1111111111 DET: P P P P P P

IF Gain: Low #Atten: 40 dB

Ref Offset 7.79 dB ΔMkr3 10.12 MHz
Ref 30.00 dBm 0.964 dB

10 dB/div Log

Center 2.41200 GHz Span 40.00 MHz
#Res BW 100 kHz #VBW 300 kHz Sweep 3.867 ms (1001 pts)

Mkr	Mode	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f		2.40692 GHz	-9.083 dBm			
2	N	f		2.41400 GHz	-1.798 dBm			
3	Δ1	f	(Δ)	10.12 MHz (Δ)	0.964 dB			
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

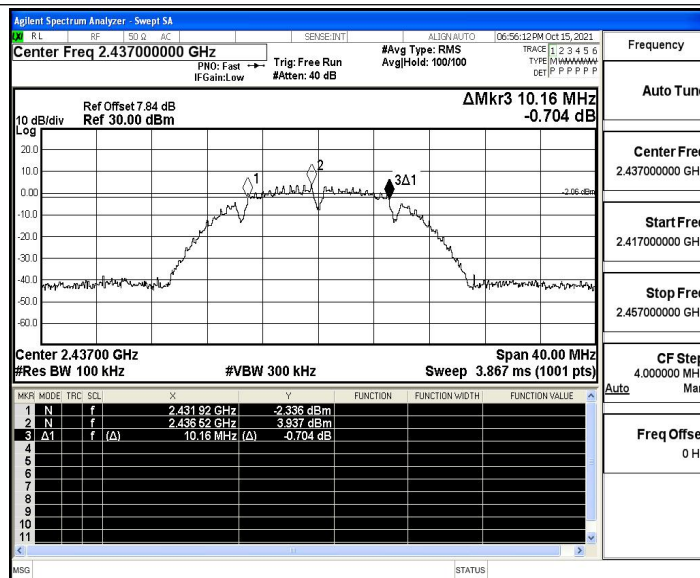
Center Freq
2.412000000 GHz

Start Freq
2.392000000 GHz

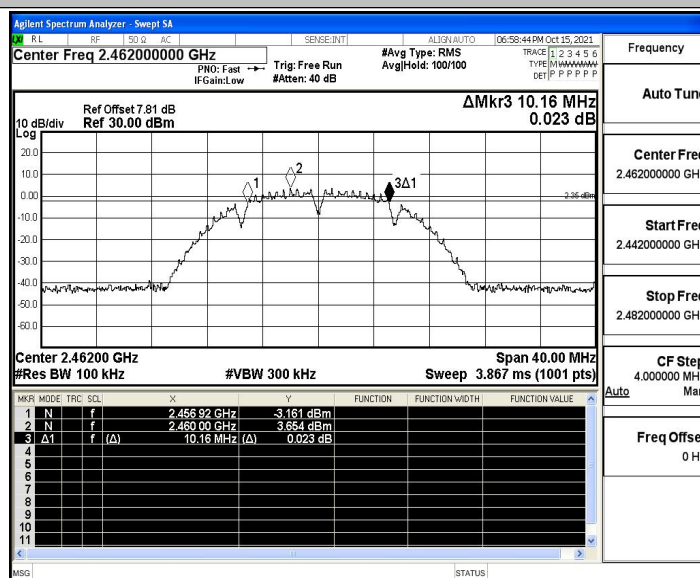
Stop Freq
2.432000000 GHz

CF Stop
4.000000 MHz
Auto Man

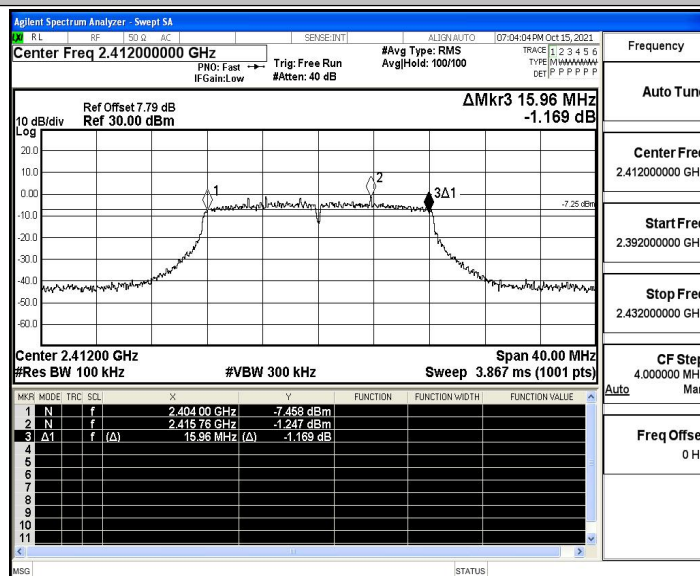
Freq Offset
0 Hz



11B_Ant2_2462

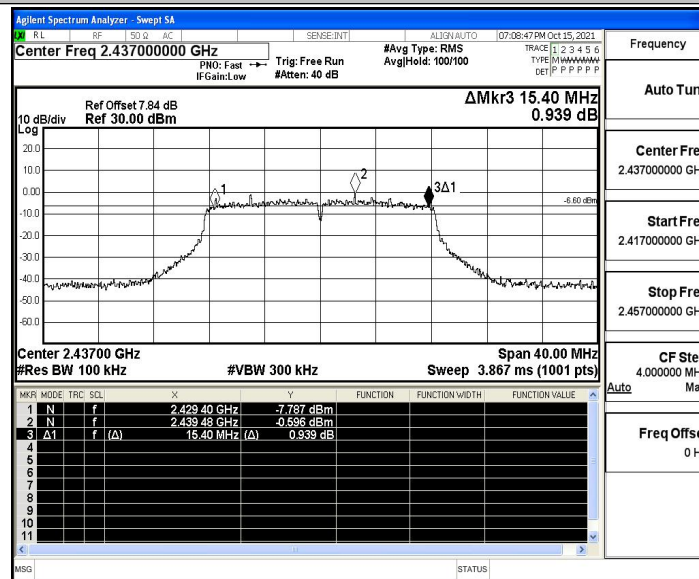


11G_Ant2_2412

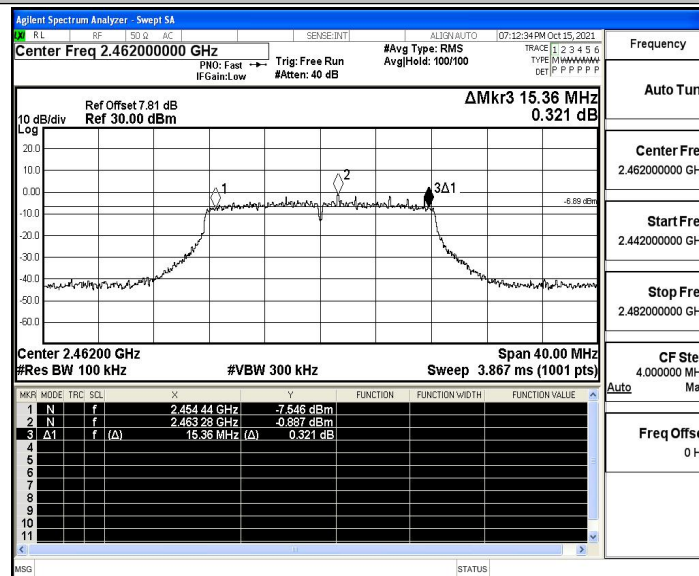




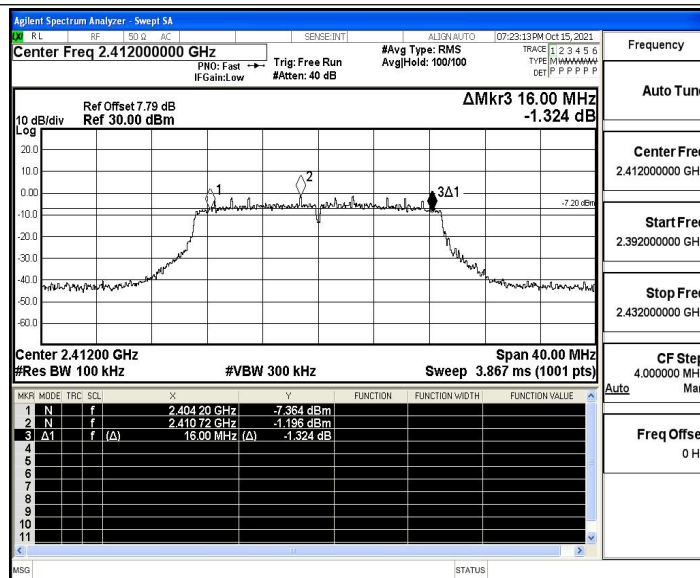
11G_Ant2_2437



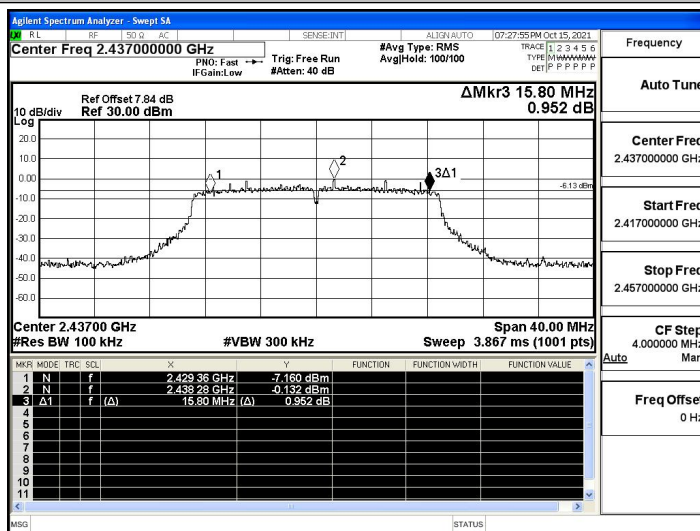
11G_Ant2_2462



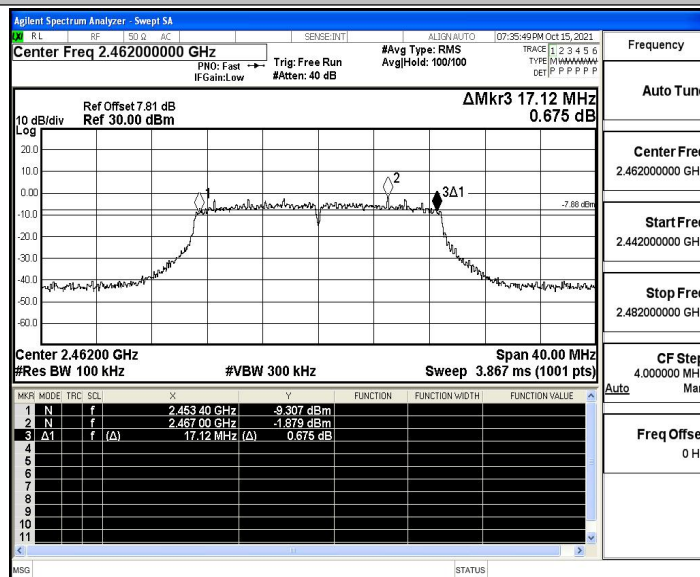
11N20SISO_Ant2_2412



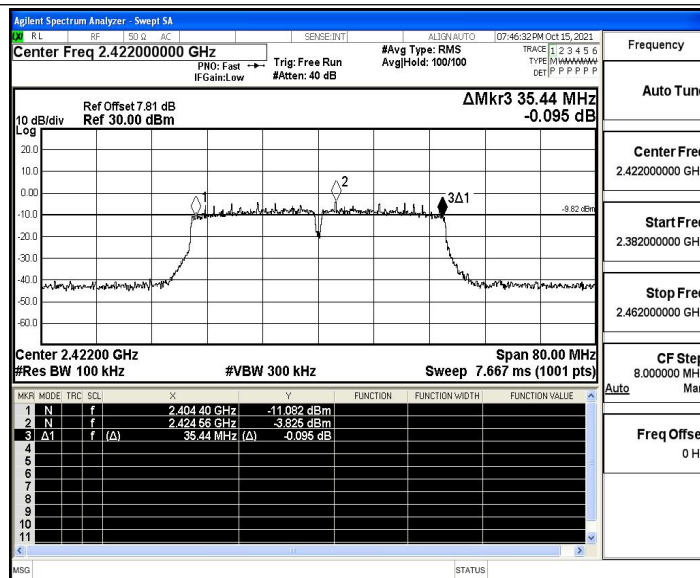
11N20SISO_Ant2_2437



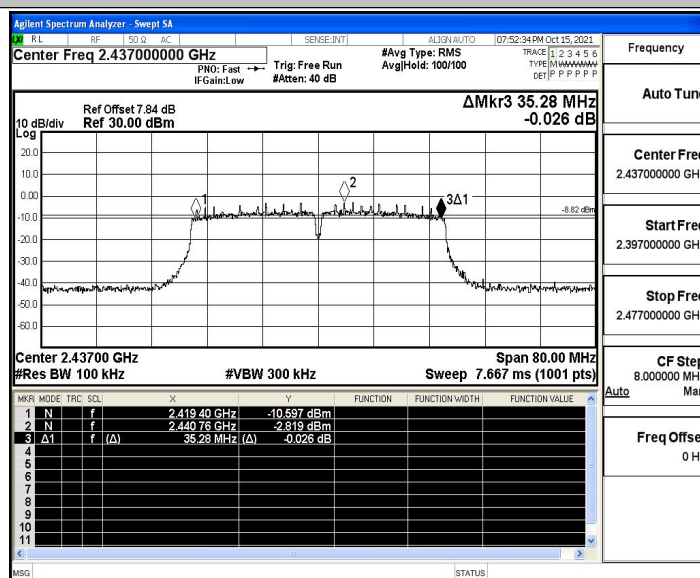
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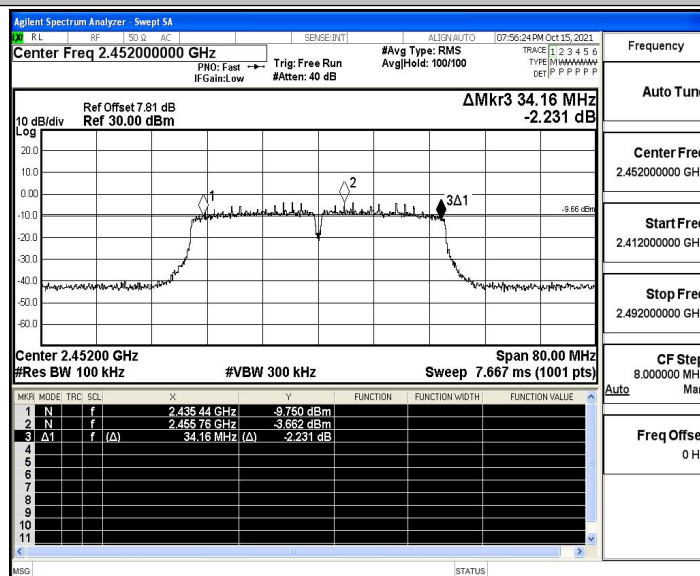
11N40SISO_Ant2_2422



11N40SISO_Ant2_2437



11N40SISO_Ant2_2452





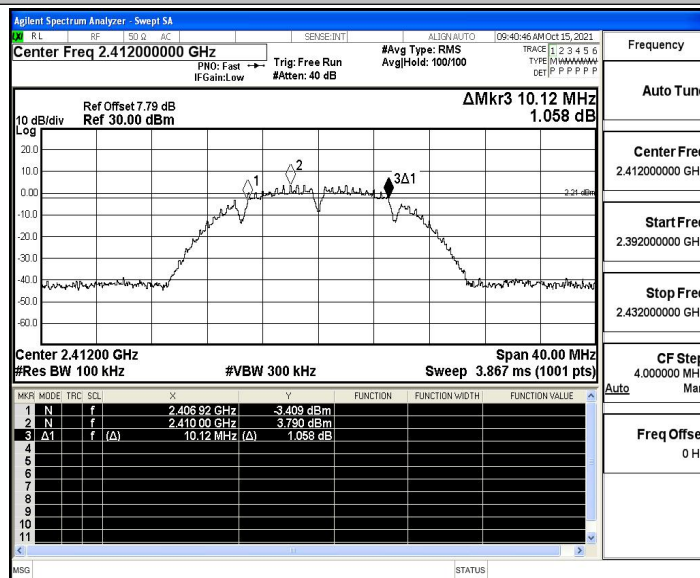
ANT3

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant3	2412	10.120	2406.920	2417.040	0.5	PASS
		2437	10.160	2431.920	2442.080	0.5	PASS
		2462	10.160	2456.920	2467.080	0.5	PASS
11G	Ant3	2412	14.920	2404.680	2419.600	0.5	PASS
		2437	16.360	2428.800	2445.160	0.5	PASS
		2462	16.400	2453.800	2470.200	0.5	PASS
11N20SISO	Ant3	2412	16.680	2403.480	2420.160	0.5	PASS
		2437	17.600	2428.200	2445.800	0.5	PASS
		2462	17.120	2453.400	2470.520	0.5	PASS
11N40SISO	Ant3	2422	34.240	2404.400	2438.640	0.5	PASS
		2437	35.200	2419.480	2454.680	0.5	PASS
		2452	34.320	2435.280	2469.600	0.5	PASS

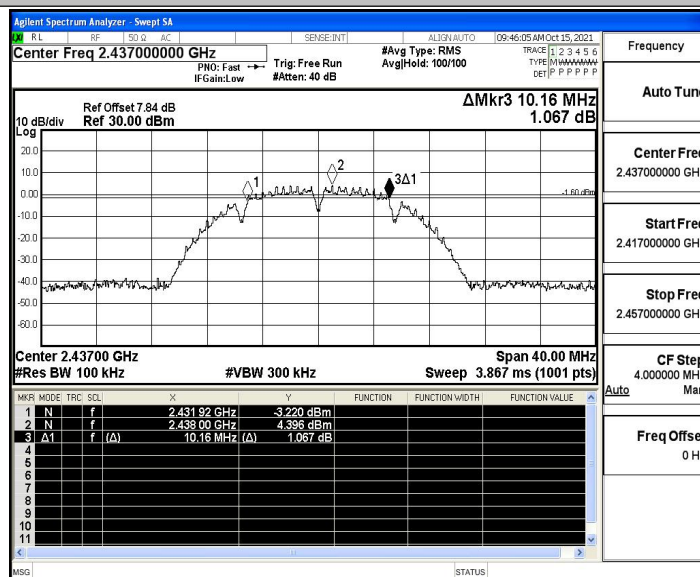


Test Graphs

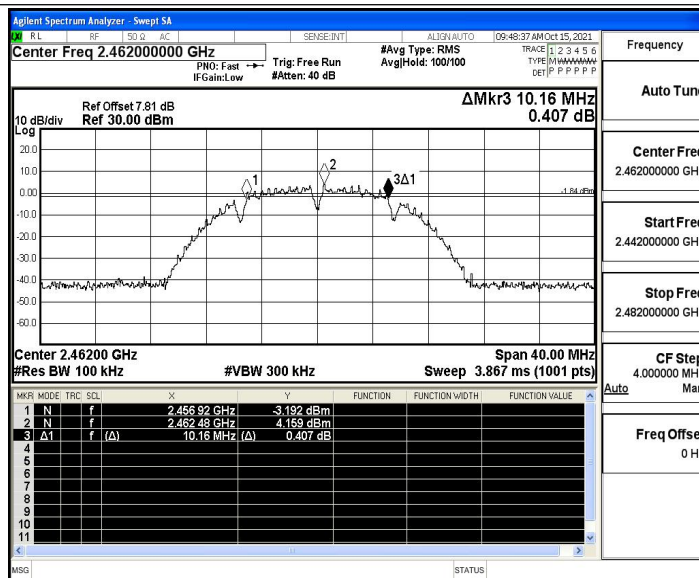
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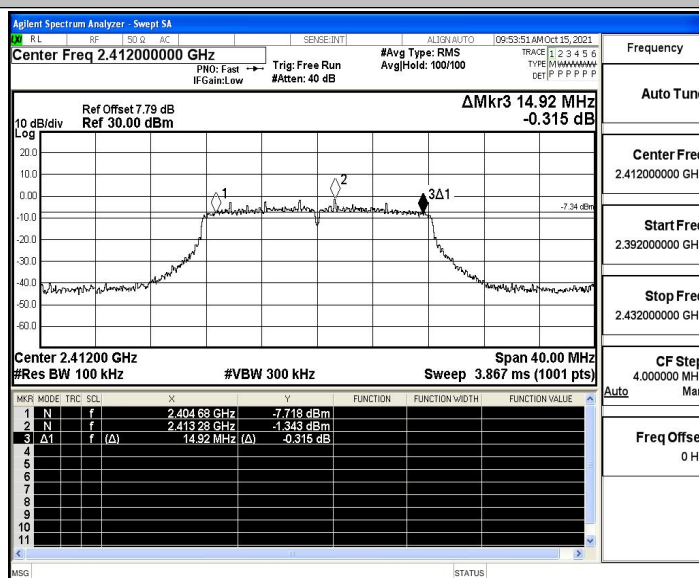
11B_Ant3_2437



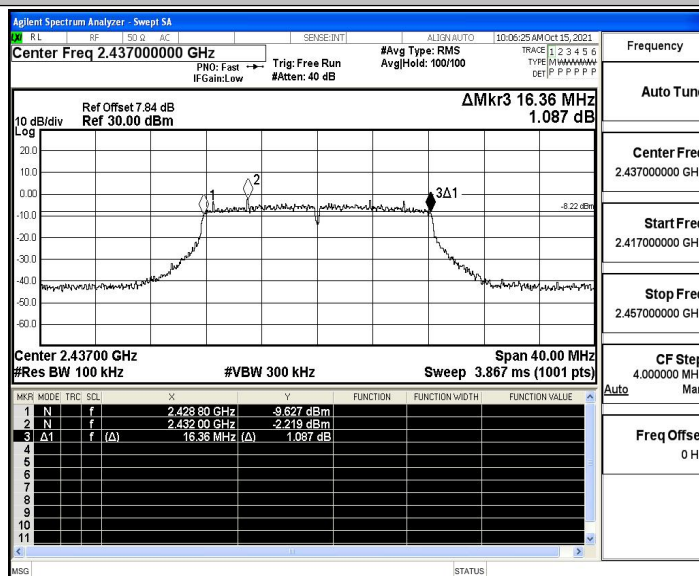
11B_Ant3_2462



11G_Ant3_2412

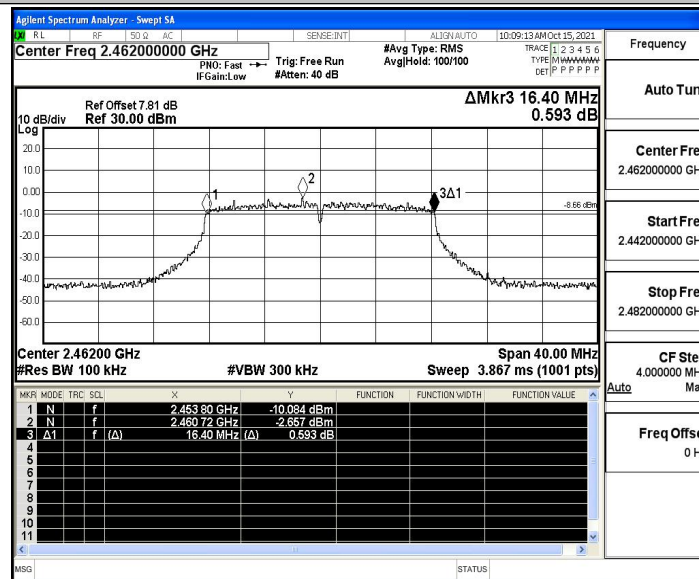


11G_Ant3_2437

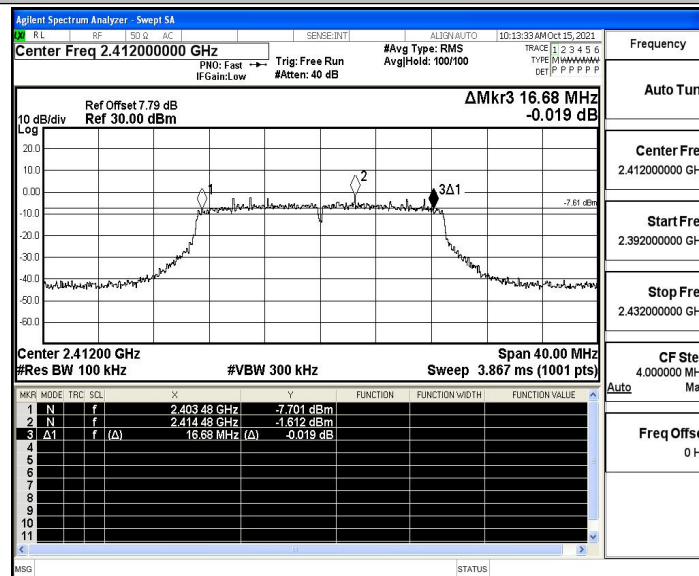




11G_Ant3_2462



11N20SISO_Ant3_2412



11N20SISO_Ant3_2437