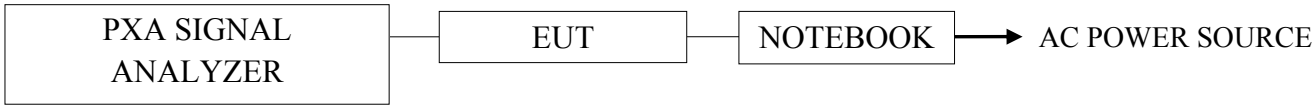
6. 6dB BANDWIDTH MEASUREMENT

6.1. Test Equipment

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Period
1.	PXA signal analyzer	Agilent	N9030A	MY53120217	2024-03-24	1 Year

6.2. Block Diagram of Test Setup



—— : SIGNAL LINE

6.3. Specification Limits

The minimum 6dB bandwidth shall be at least 500kHz.

6.4. Test Procedure

Following measurement procedure is reference to KDB 558074 D01 DTS Meas Guidance v05:

(1) Set RBW = 100 kHz.
(2) Set the video bandwidth (VBW) ≥ 3 × RBW.
(3) Detector = Peak.
(4) Trace mode = max hold.
(5) Sweep = auto couple.
(6) Allow the trace to stabilize.
(7) Setting channel bandwidth function x dB to -6 dB to record the final bandwidth.

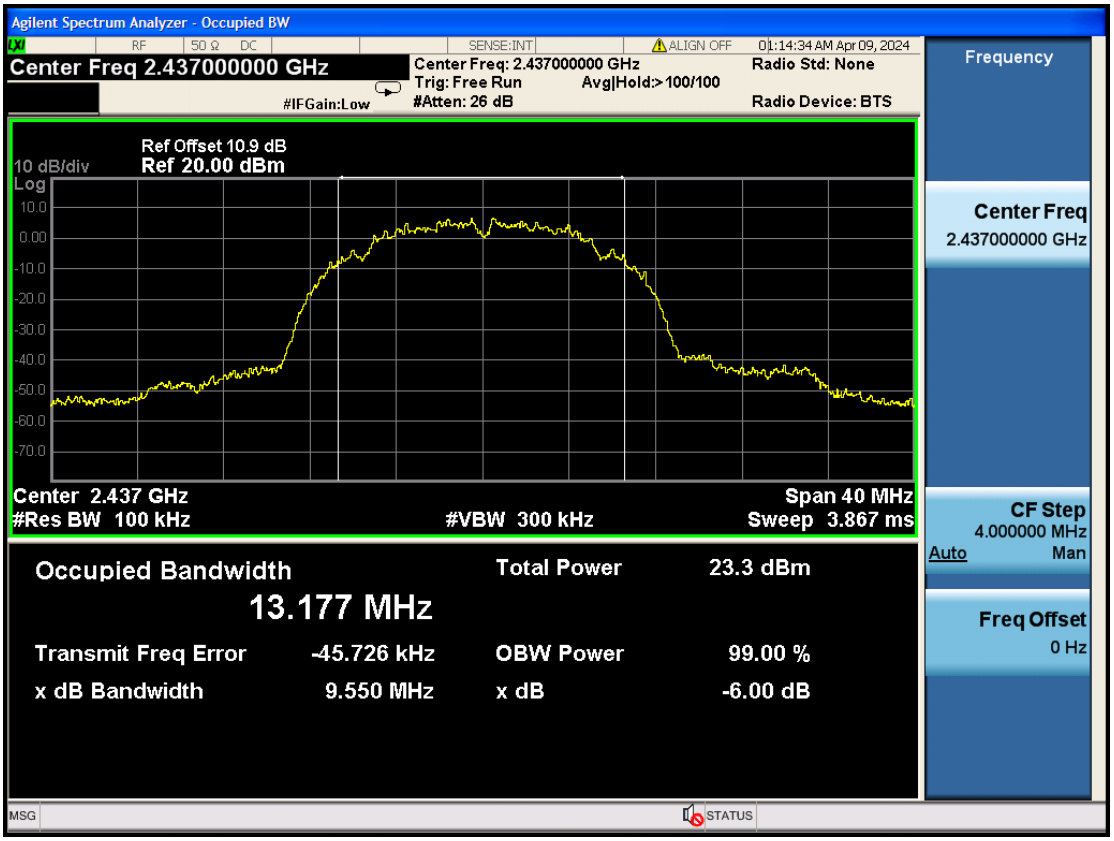
6.5. Test Results

PASSED. All the test results are attached in next pages.

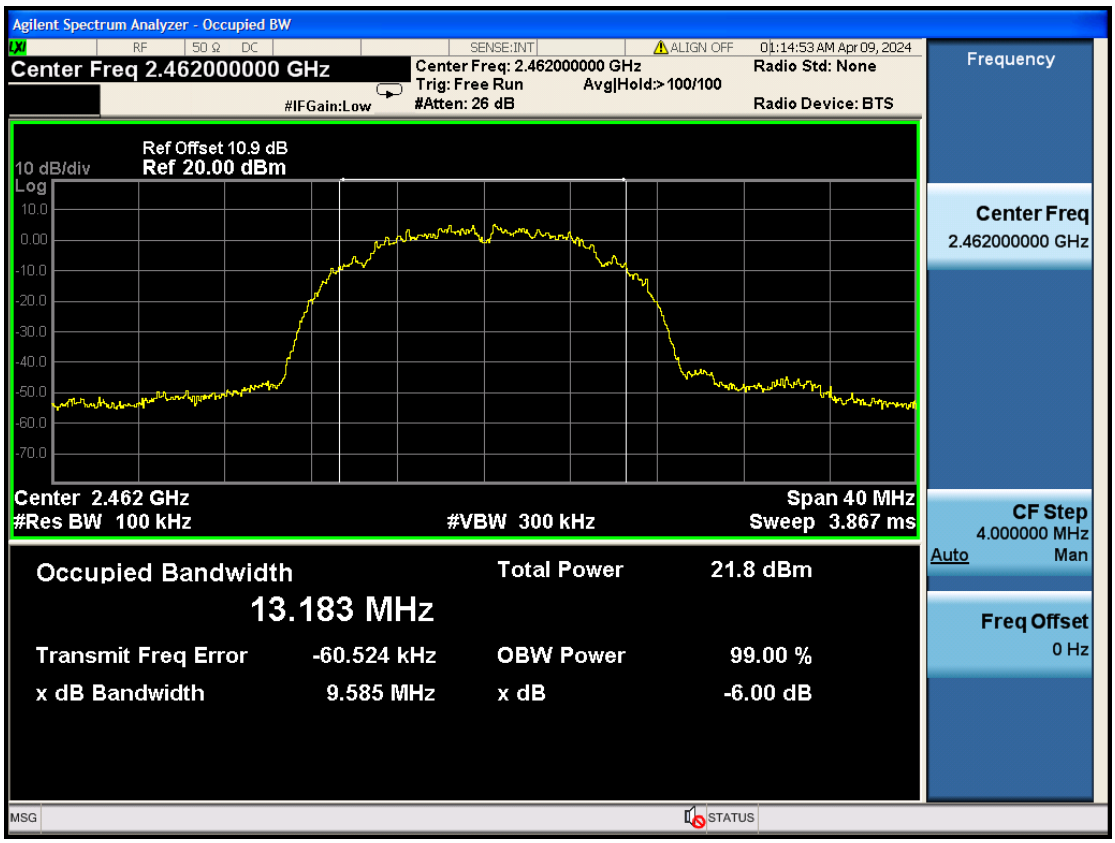
Item	Channel	Test Frequency (MHz)	6dB Bandwidth (MHz)
802.11b	1	2412	9.587
	6	2437	9.550
	11	2462	9.585
802.11g	1	2412	16.48
	6	2437	16.48
	11	2462	16.49
802.11 nHT20	1	2412	17.13
	6	2437	17.09
	11	2462	17.12
802.11 nHT40	3	2422	33.23
	6	2437	33.17
	9	2452	33.19

802.11b CH1

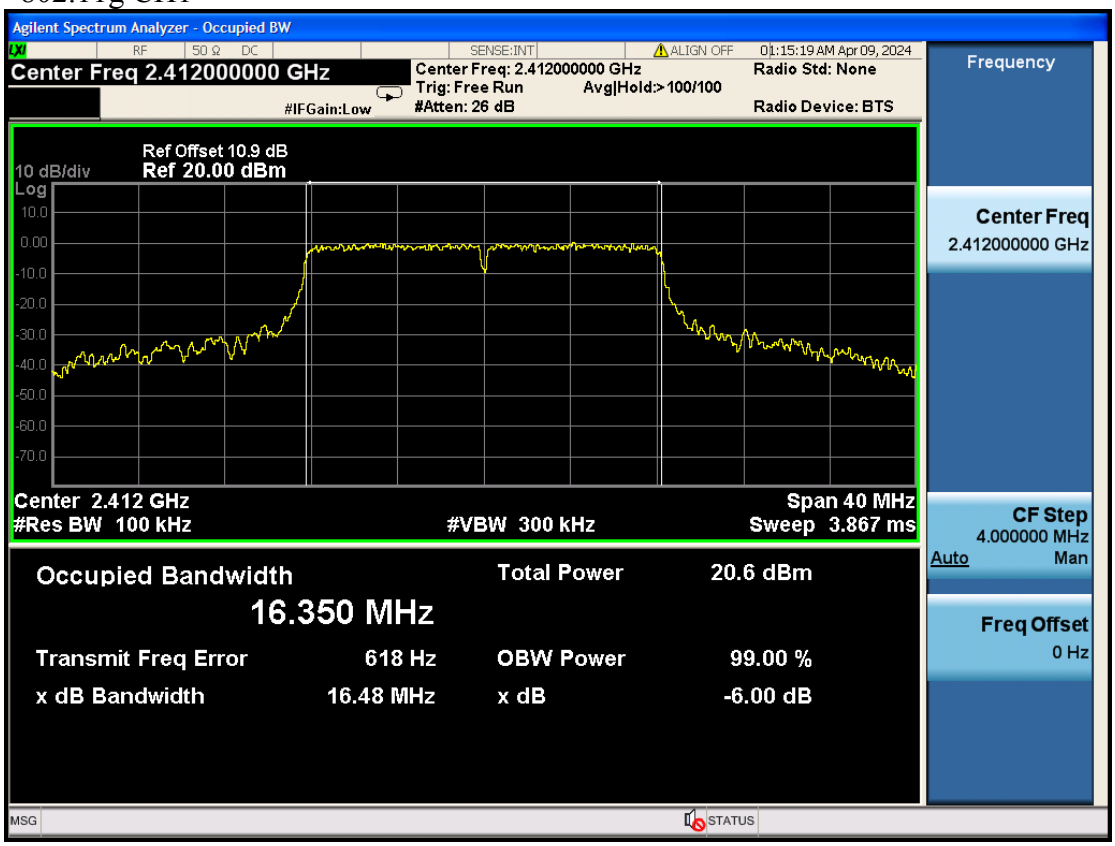
802.11b CH6



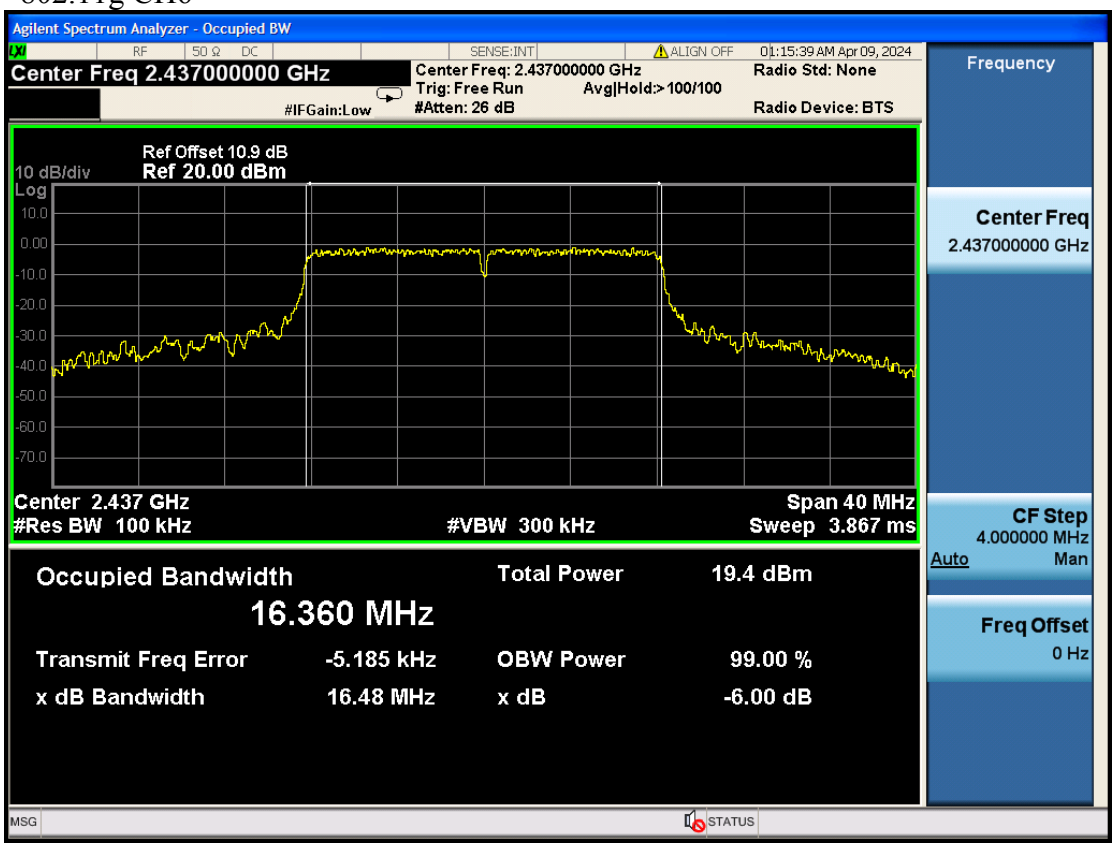
802.11b CH11



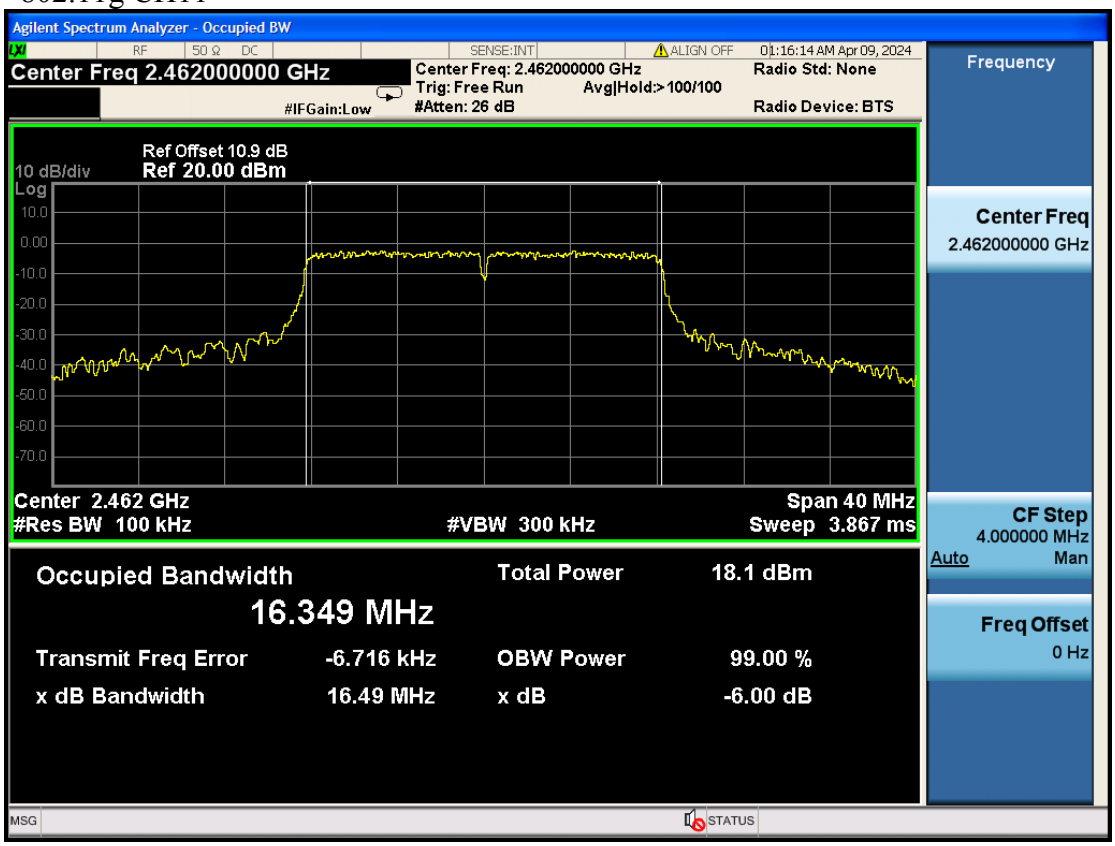
802.11g CH1



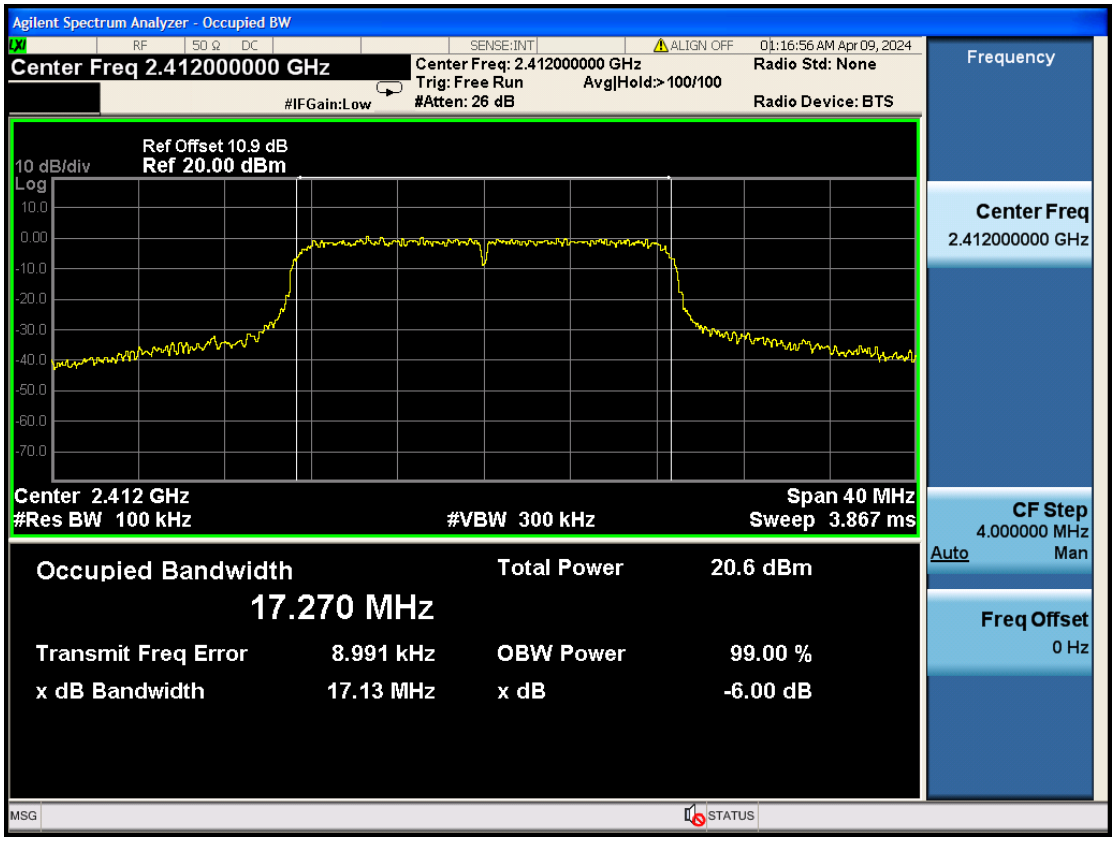
802.11g CH6



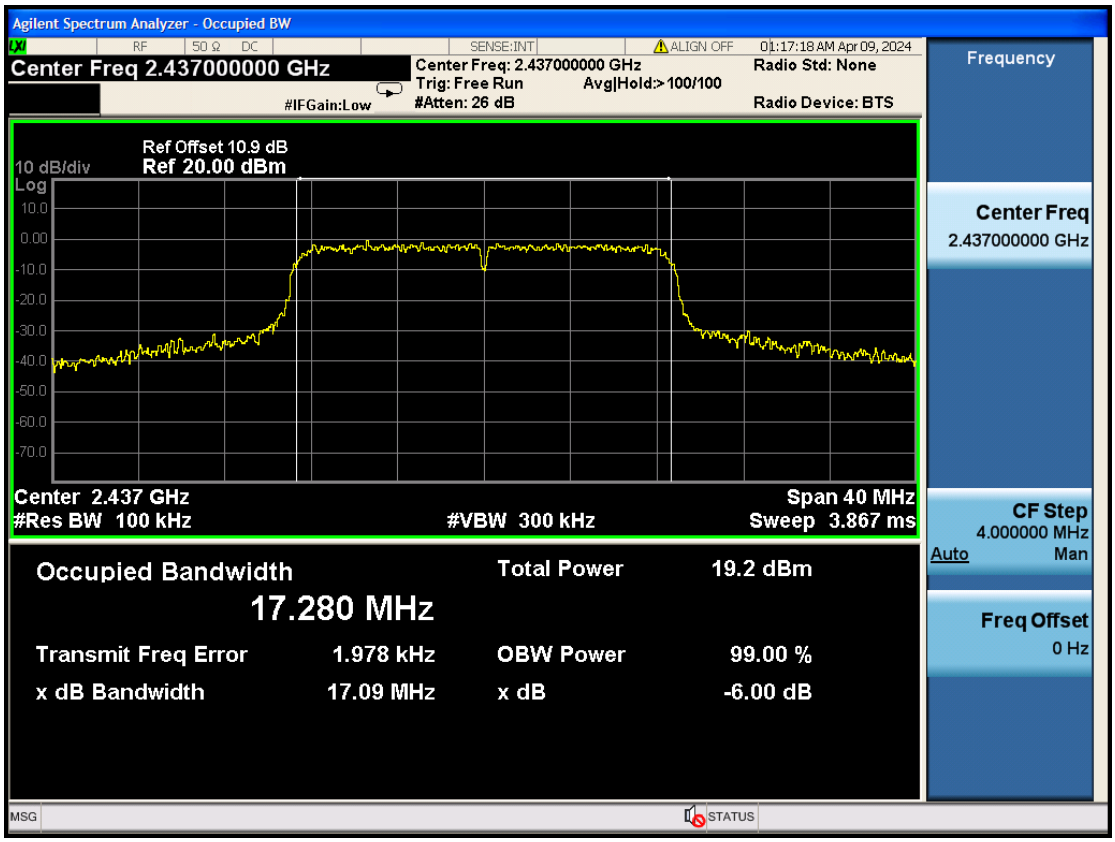
802.11g CH11



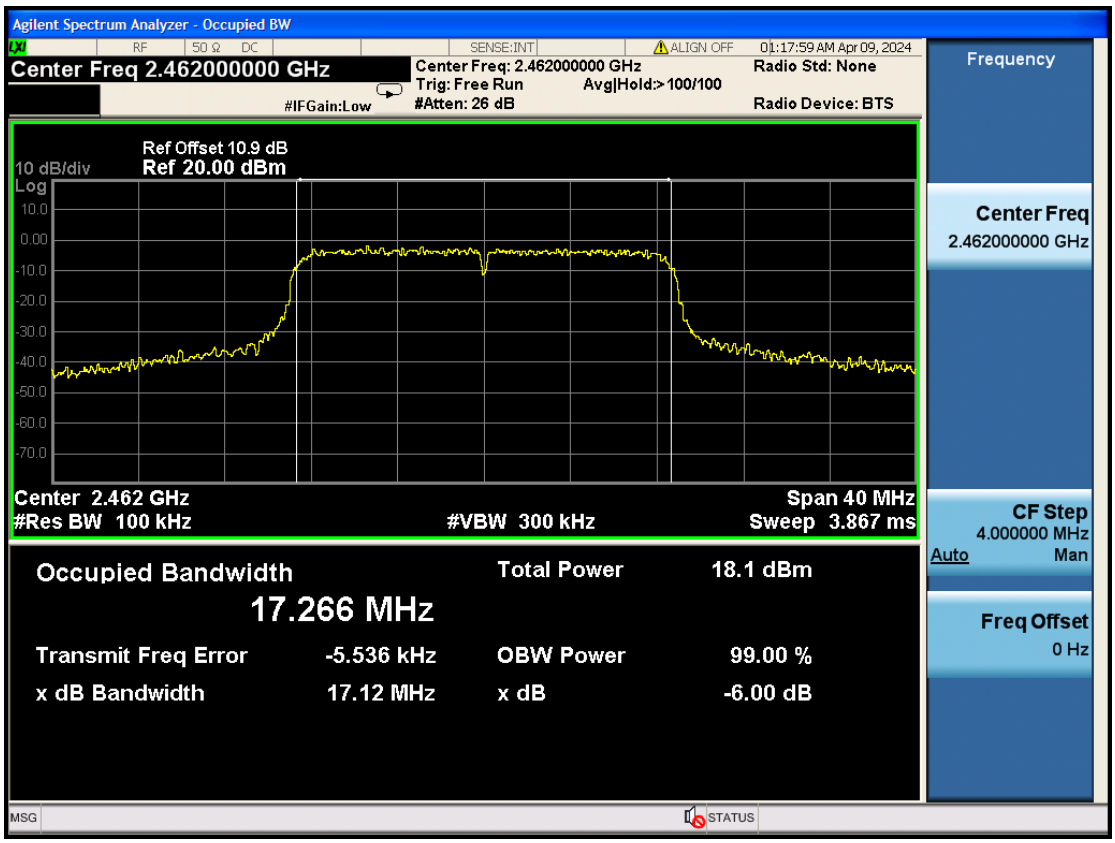
802.11nHT20 CH1



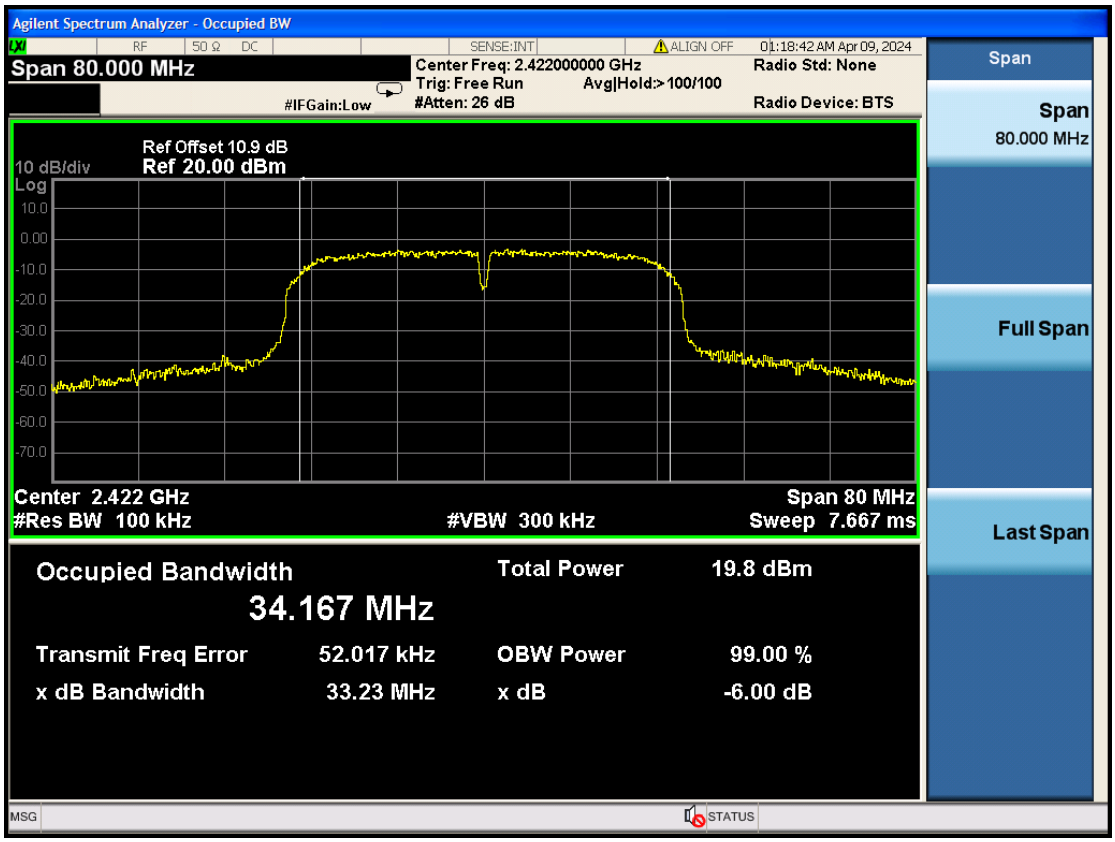
802.11nHT20 CH6



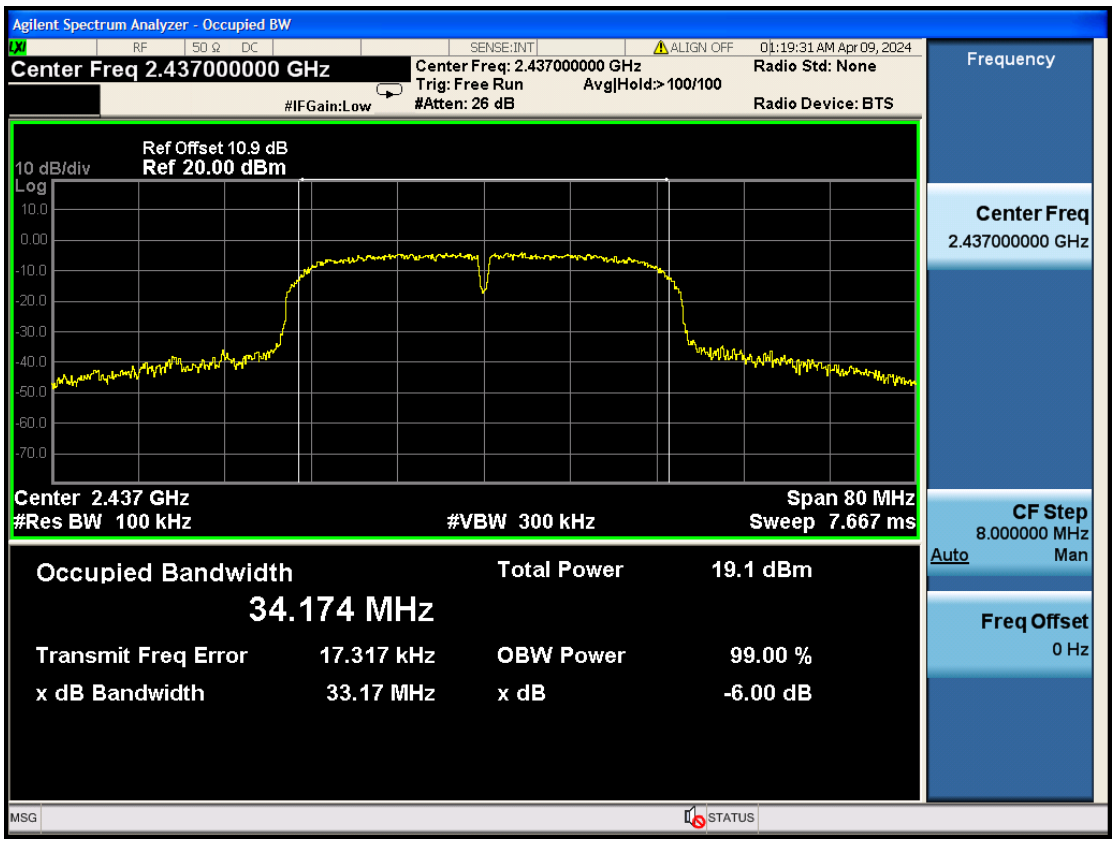
802.11nHT20 CH11



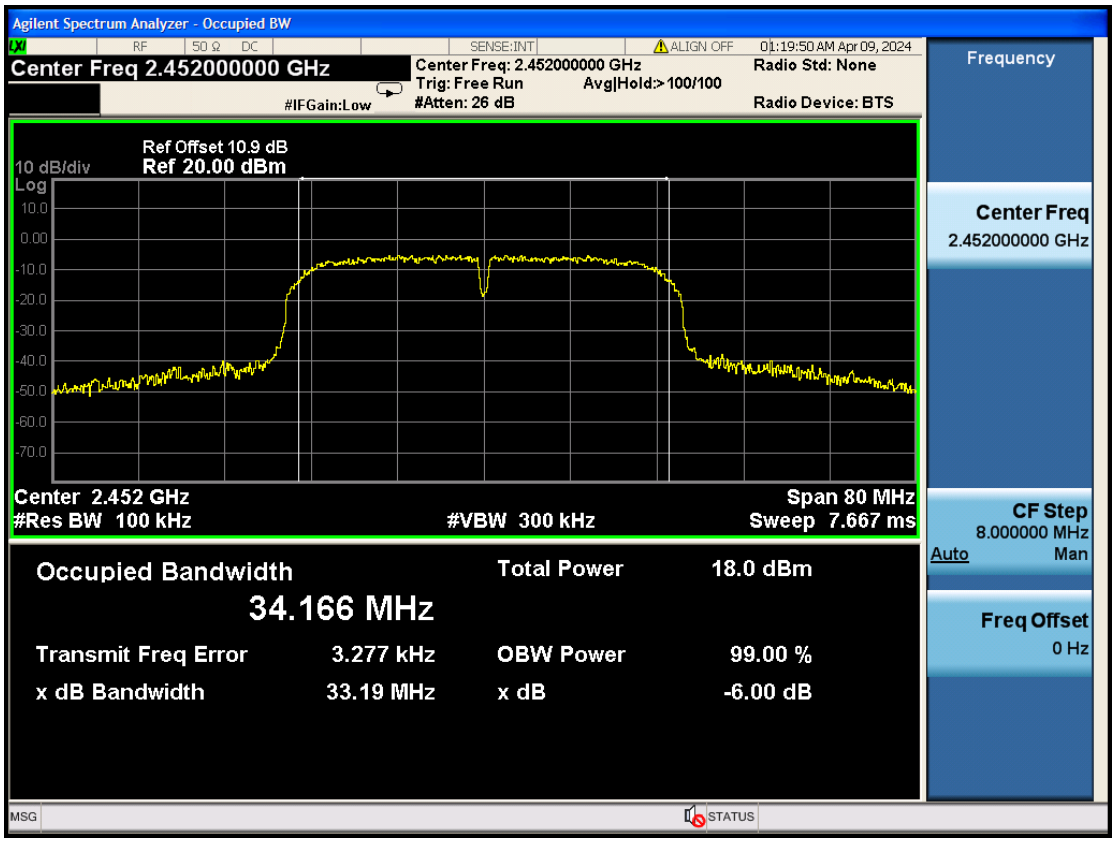
802.11nHT40 CH3



802.11nHT40 CH6



802.11nHT40 CH9

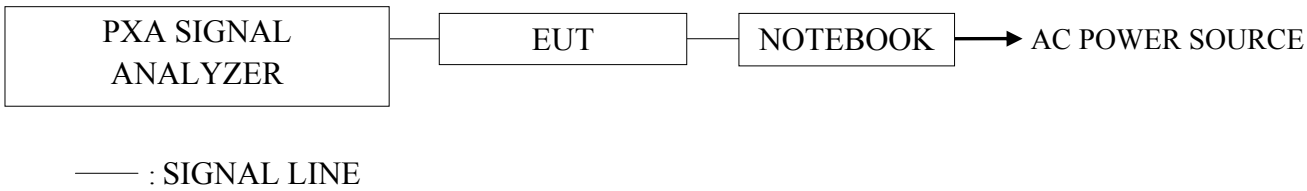


7. OUTPUT POWER MEASUREMENT

7.1. Test Equipment

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Period
1.	PXA signal analyzer	Agilent	N9030A	MY53120217	2024-03-24	1 Year

7.2. Block Diagram of Test Setup



7.3. Specification Limits (§15.247(b)(3))

The Limits of maximum Peak Output Power for digital modulation in 2400-2483.5MHz is : 1Watt. (30dBm), and E.I.R.P.: 4Watt (36dBm)

7.4. Test Procedure

Following measurement procedure is reference to KDB 558074 D01 DTS Meas Guidance v05:

☐**Method AVGSA-2 (Spectrum channel power)**

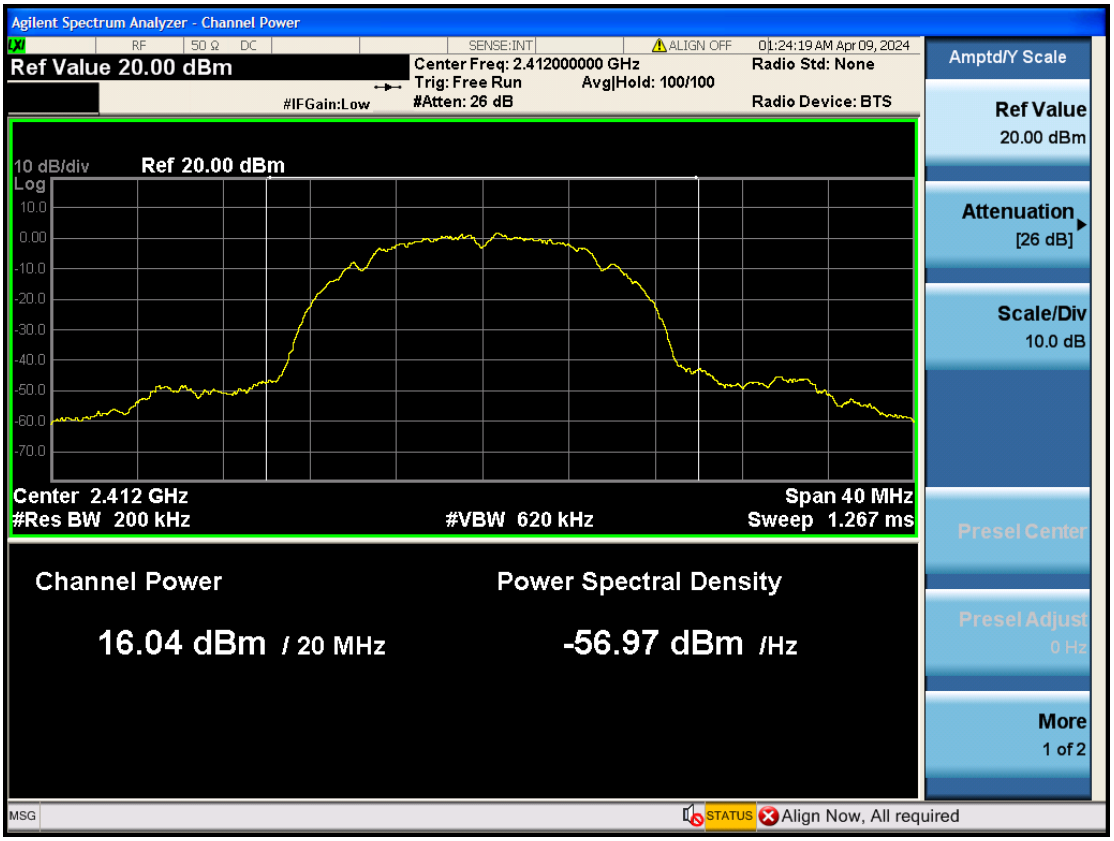
(1) Set span to at least 1.5 times the OBW
(2) Set RBW = 1 -5% of OBW
(3) Set the video bandwidth (VBW) ≥ 3 × RBW.
(4) Detector = RMS.
(5) Trace mode = trace average at least 100 traces
(6) Sweep = auto couple.
(7) Compute power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function with band limits set equal to the OBW band edges.
(8) Duty cycle factor is added when duty cycle presented in chapter3.5 is < 98%.

7.5. Test Results

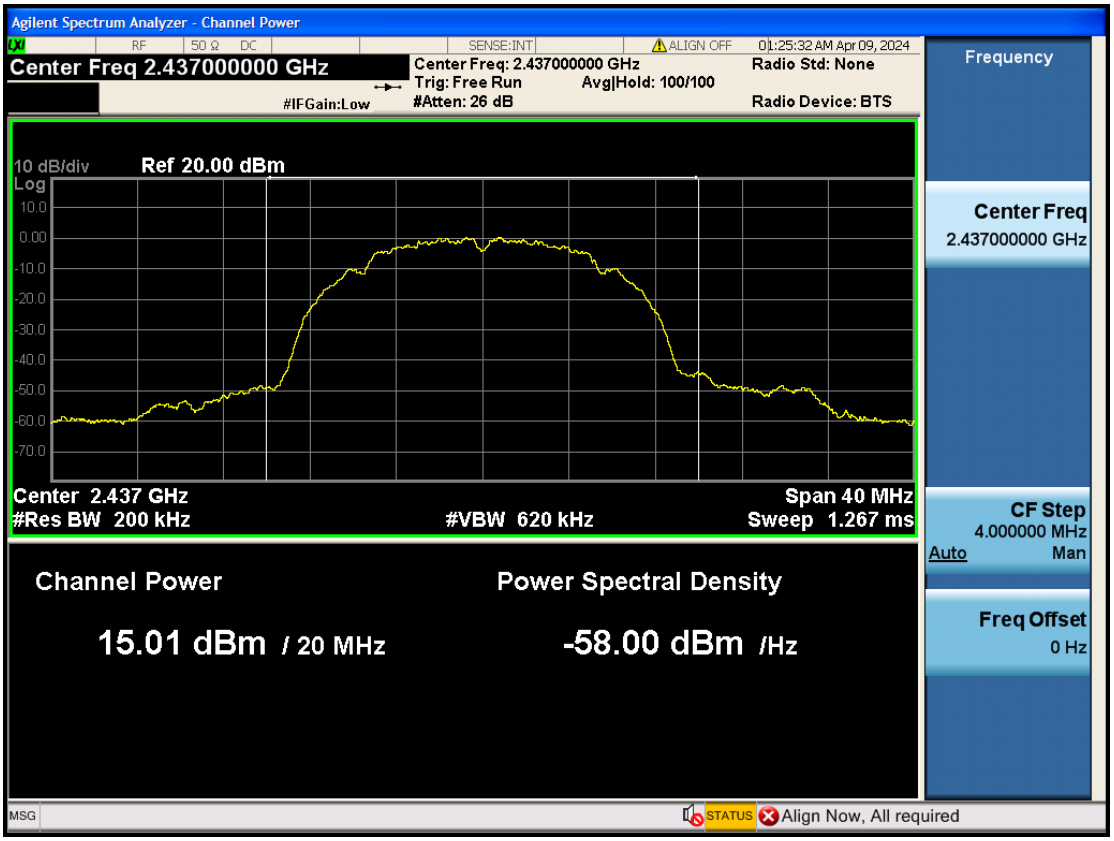
PASSED.

Mode	Frequency	Duty Cycle Factor	Reading (dBm)	Average Output Power(dBm)	Limit (dBm)
11b	2412	0	16.04	16.04	30
	2437		15.01	15.01	
	2462		13.50	13.50	
11g	2412	0	14.18	14.18	
	2437		13.08	13.08	
	2462		11.70	11.70	
11nHT20	2412	0	14.12	14.12	
	2437		13.02	13.02	
	2462		11.59	11.59	
11nHT40	2422	0	13.07	13.07	
	2437		12.30	12.30	
	2452		11.45	11.45	

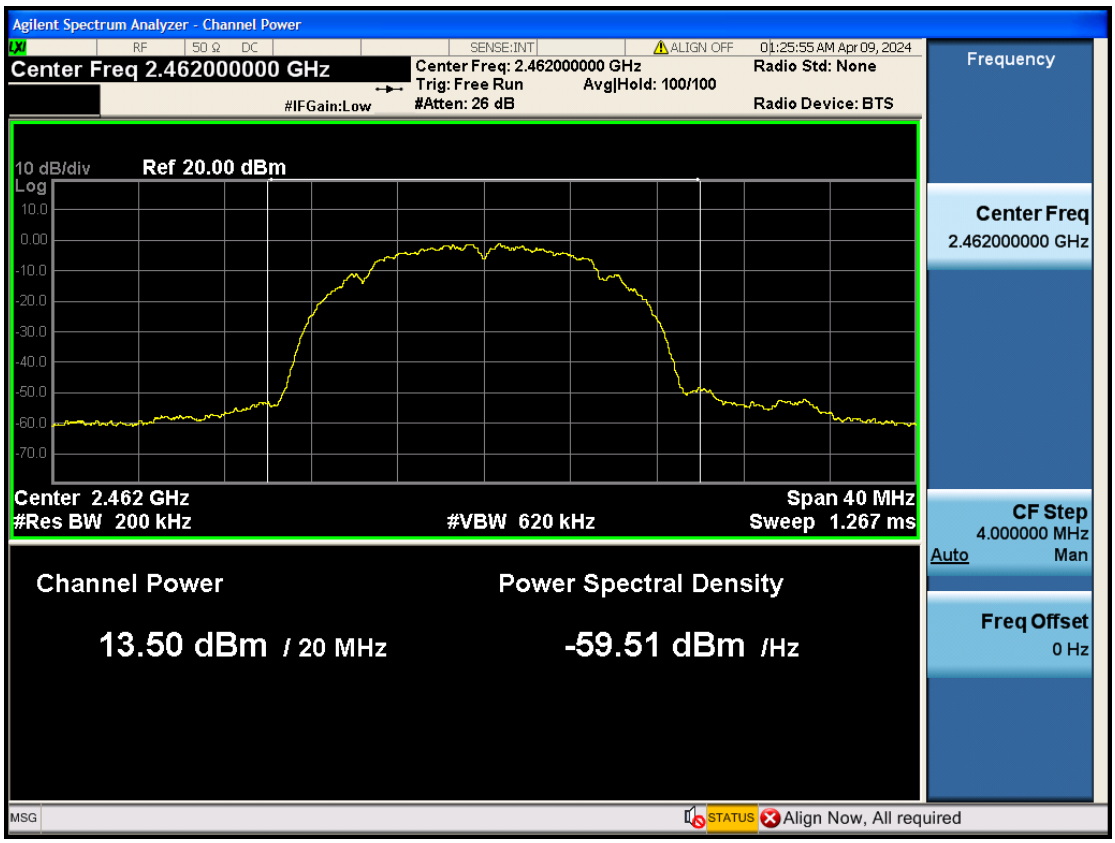
802.11b CH1



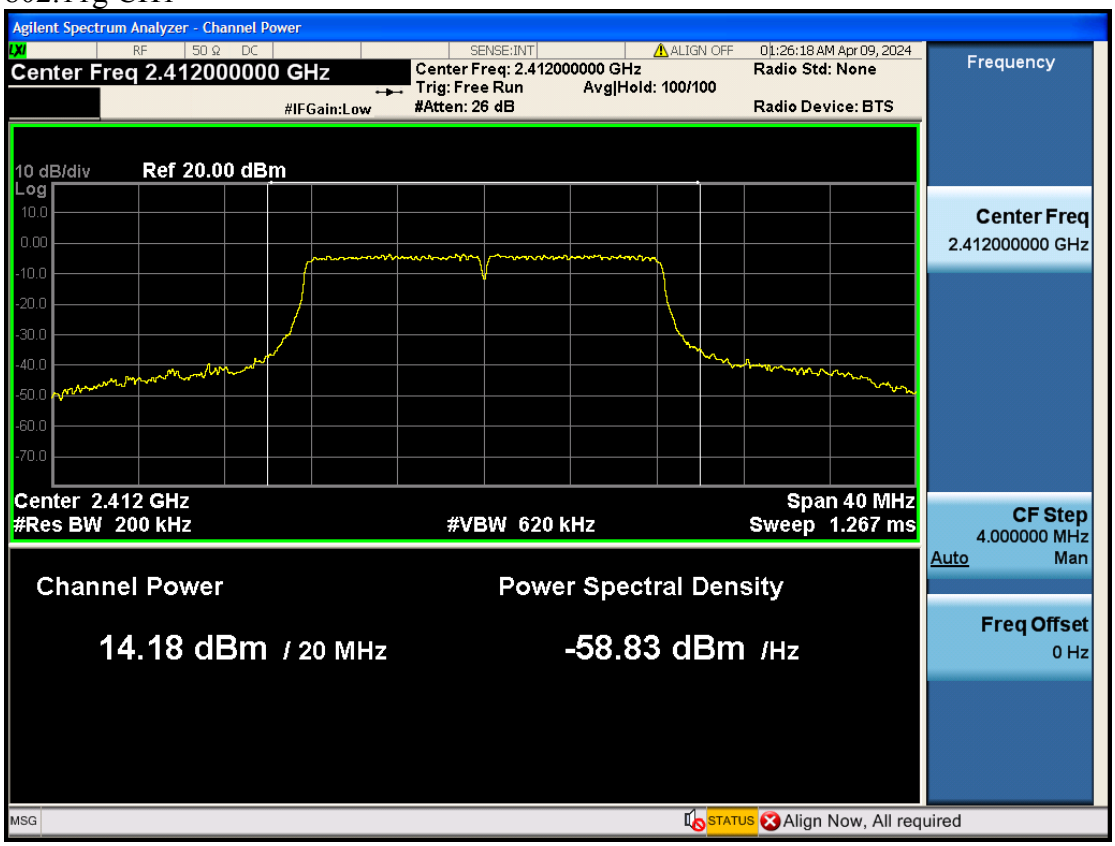
802.11b CH6



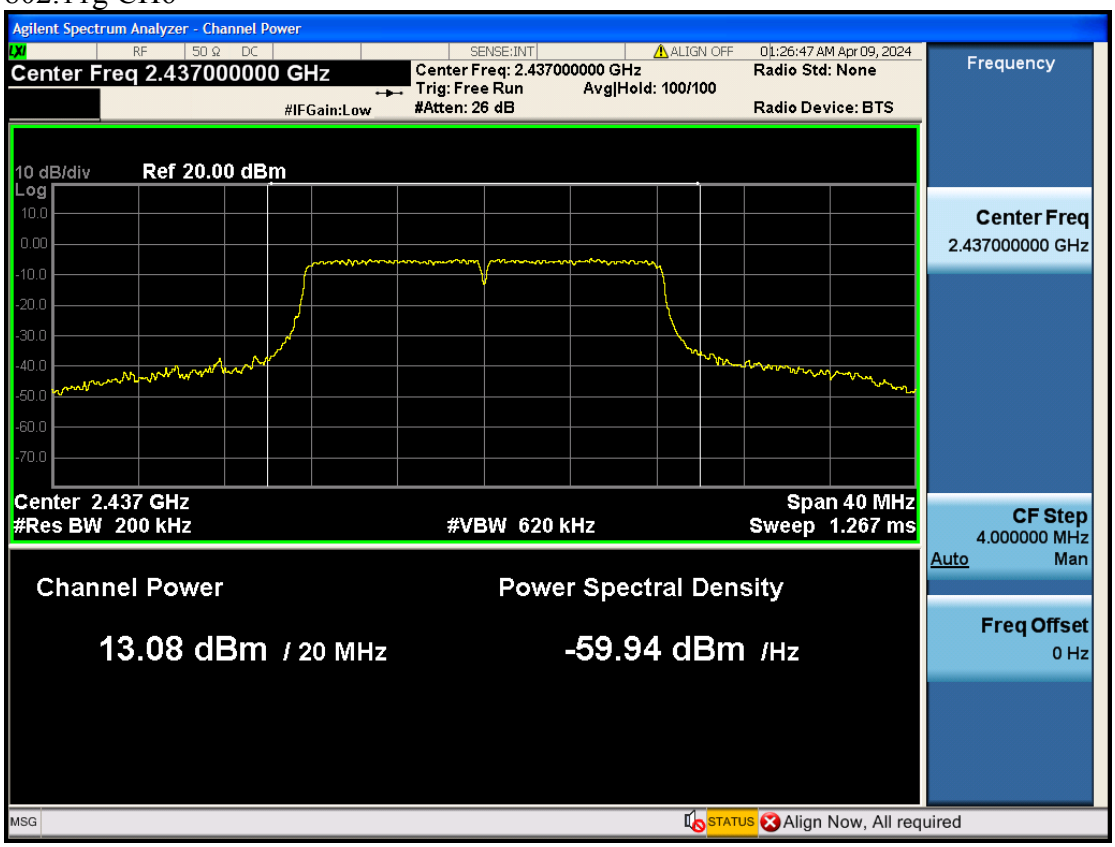
802.11b CH11



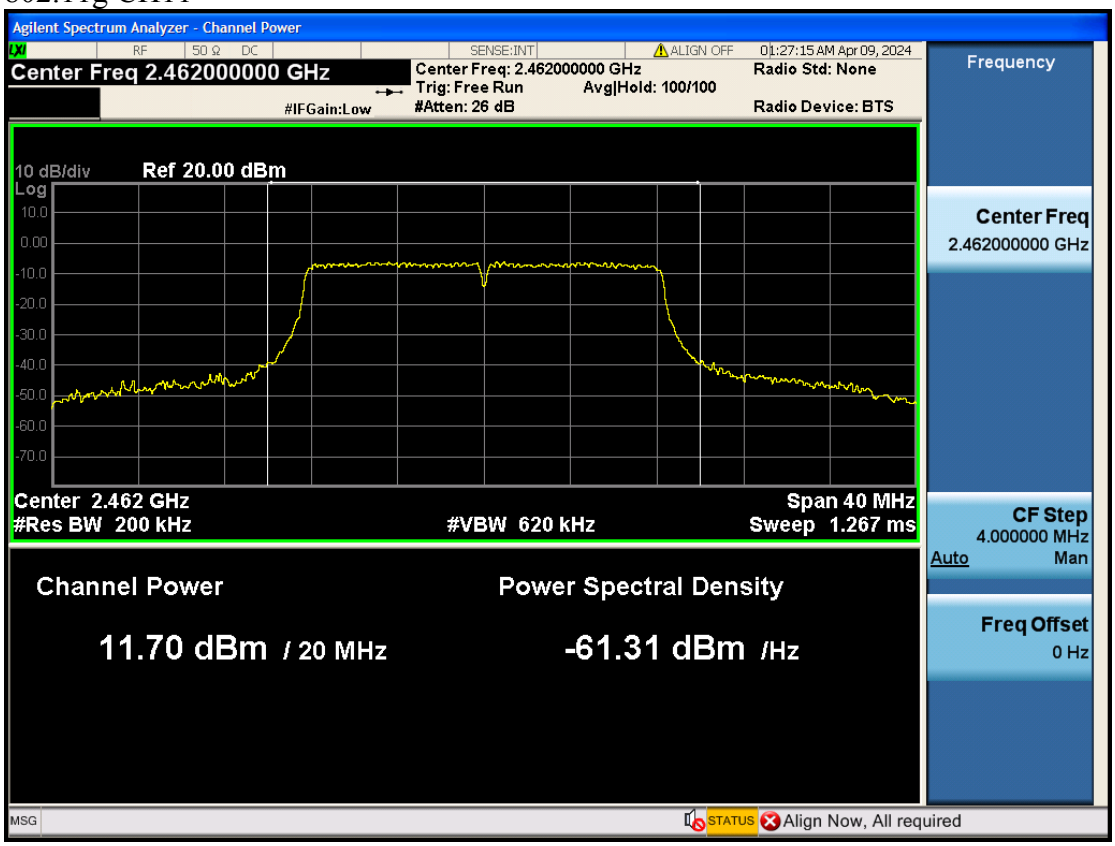
802.11g CH1



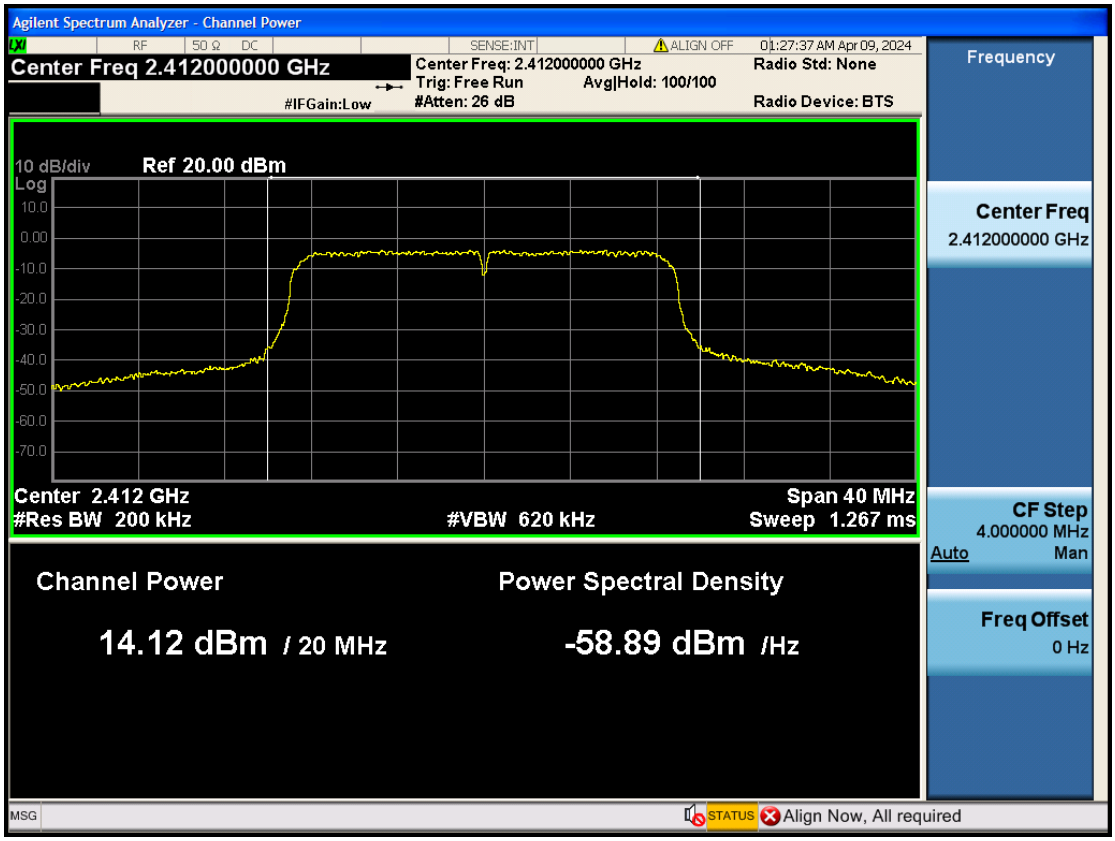
802.11g CH6



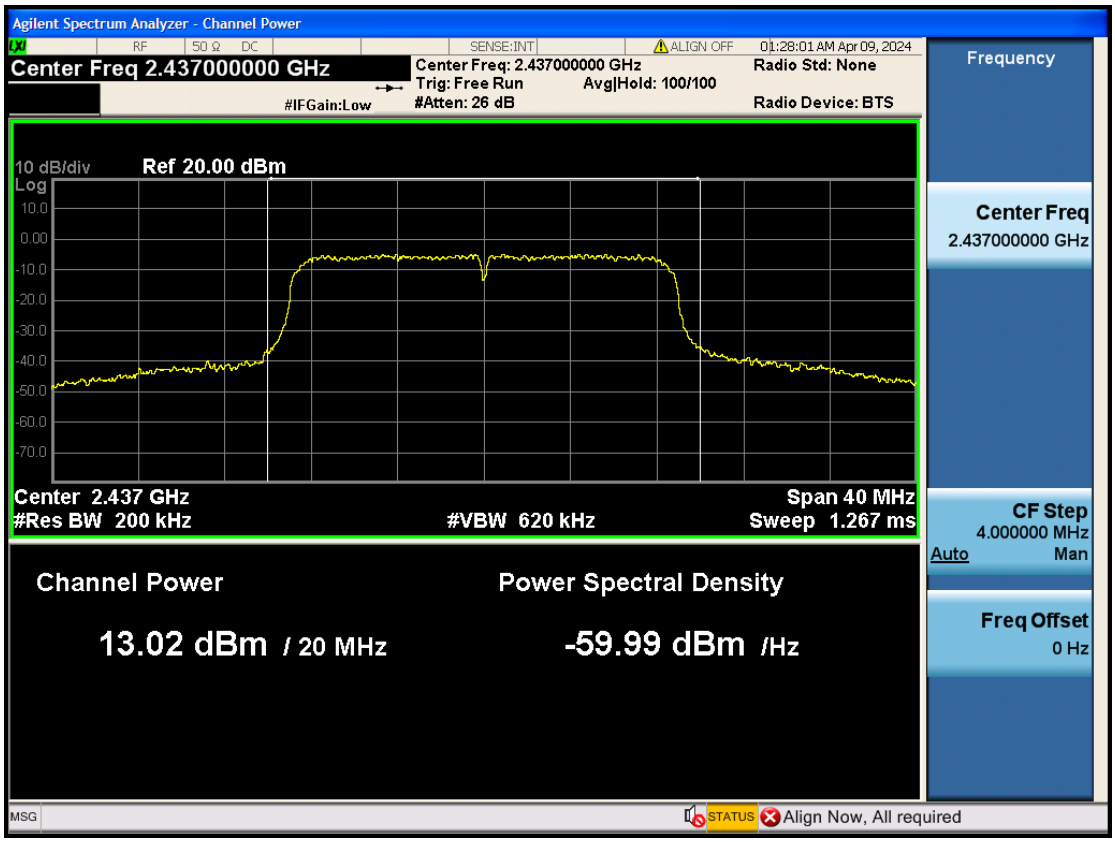
802.11g CH11



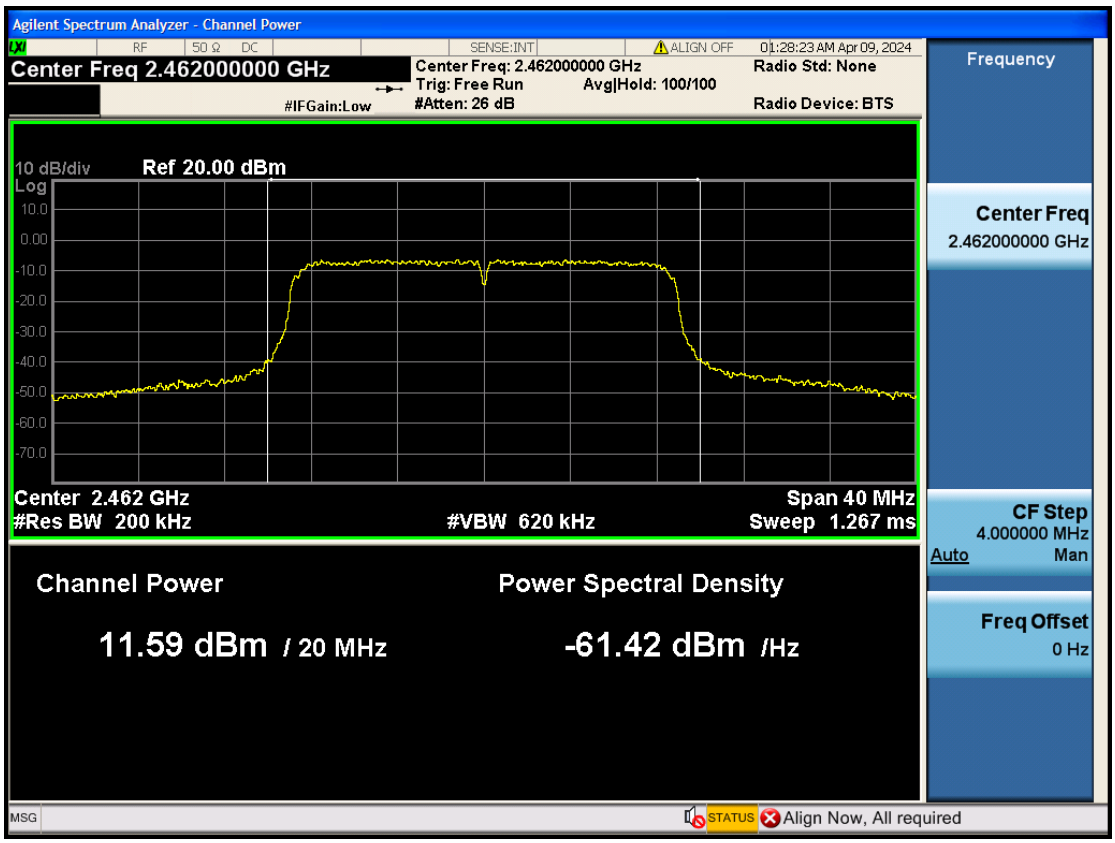
802.11nHT20 CH1



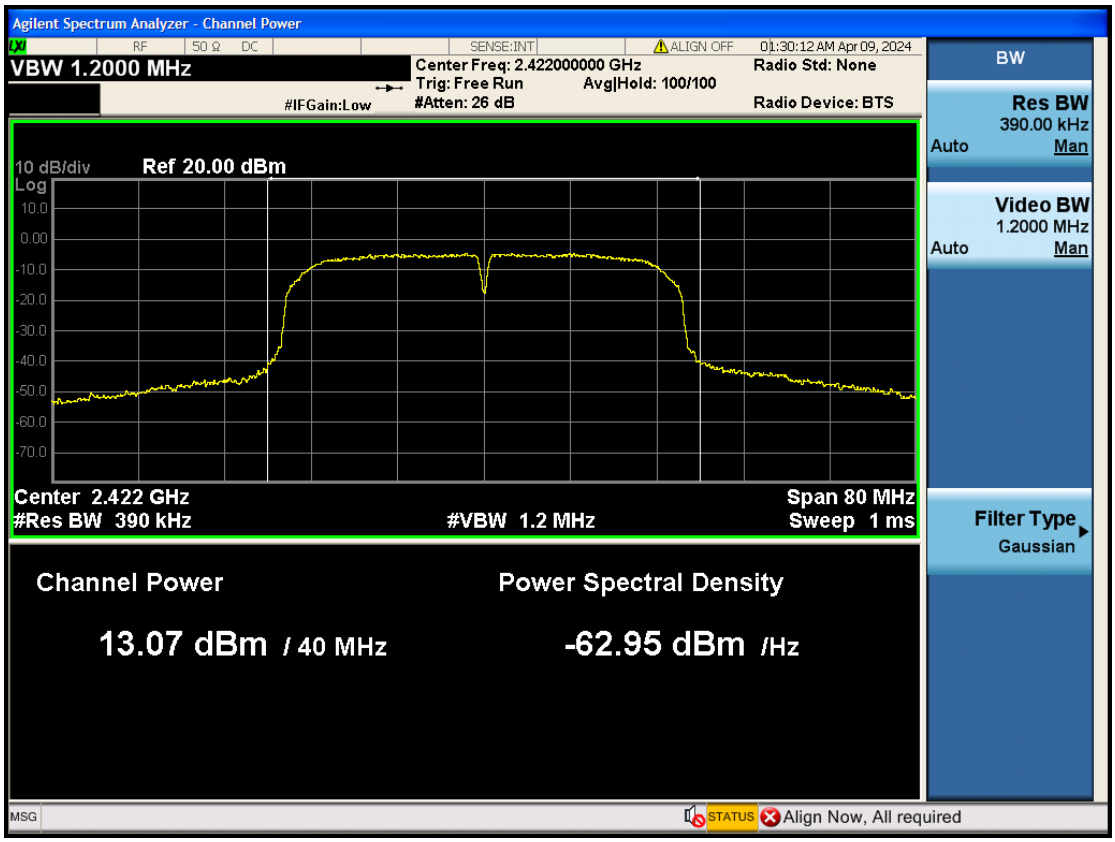
802.11nHT20 CH6



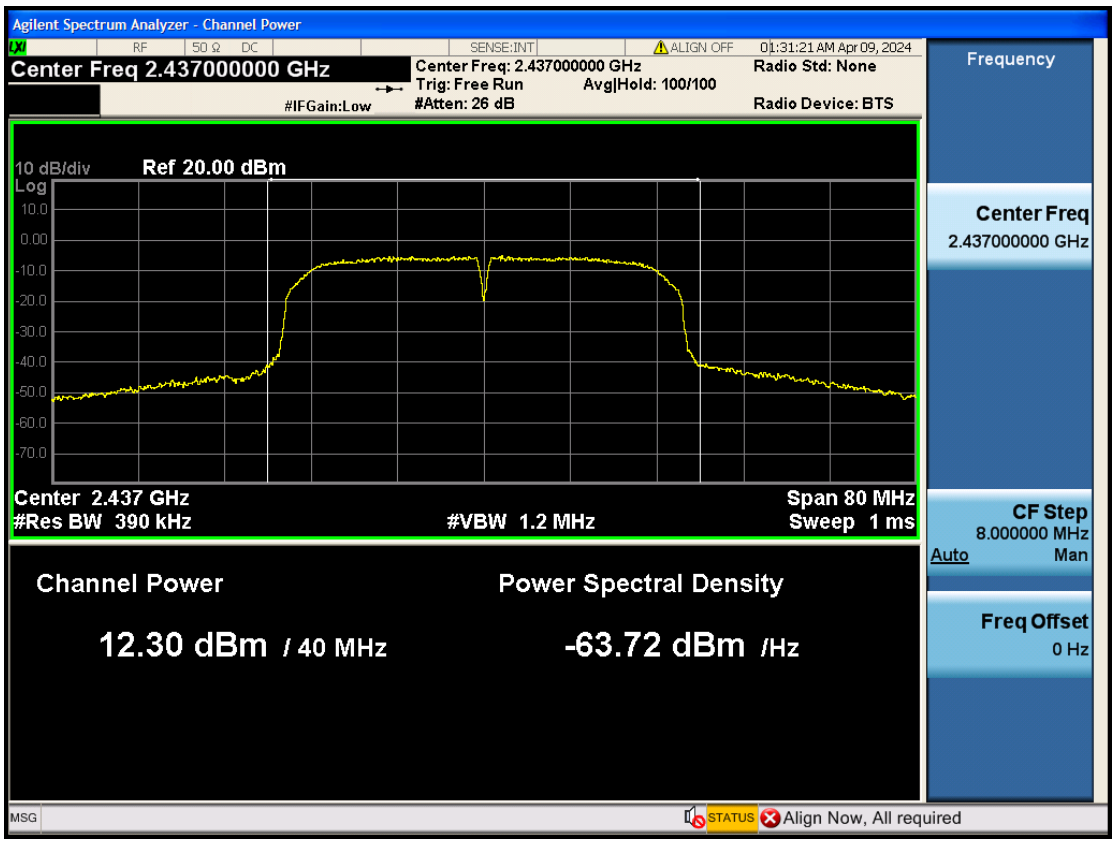
802.11nHT20 CH11



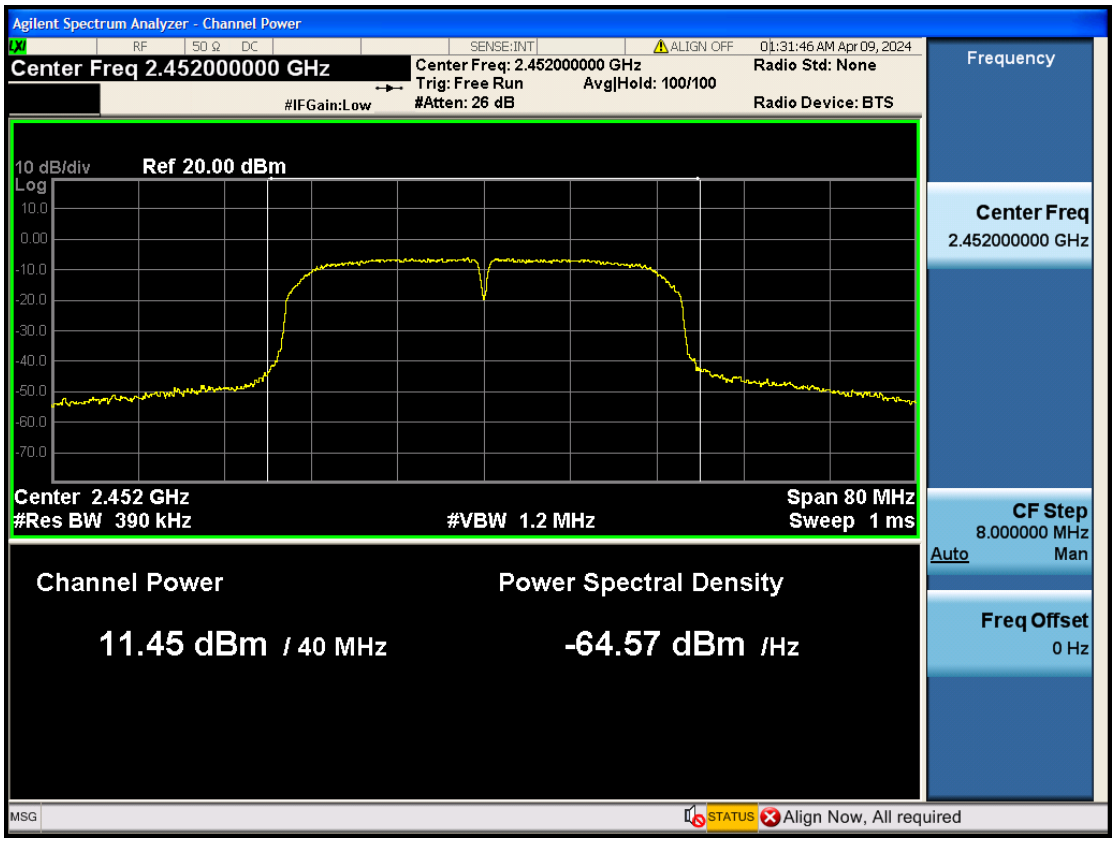
802.11nHT40 CH3



802.11nHT40 CH6



802.11nHT40 CH9



8. POWER SPECTRAL DENSITY MEASUREMENT

8.1. Test Equipment

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Period
1.	PXA signal analyzer	Agilent	N9030A	MY53120217	2024-03-24	1 Year

8.2. Block Diagram of Test Setup

The same as section 6.2.

8.3. Specification Limits

The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band.

8.4. Test Procedure

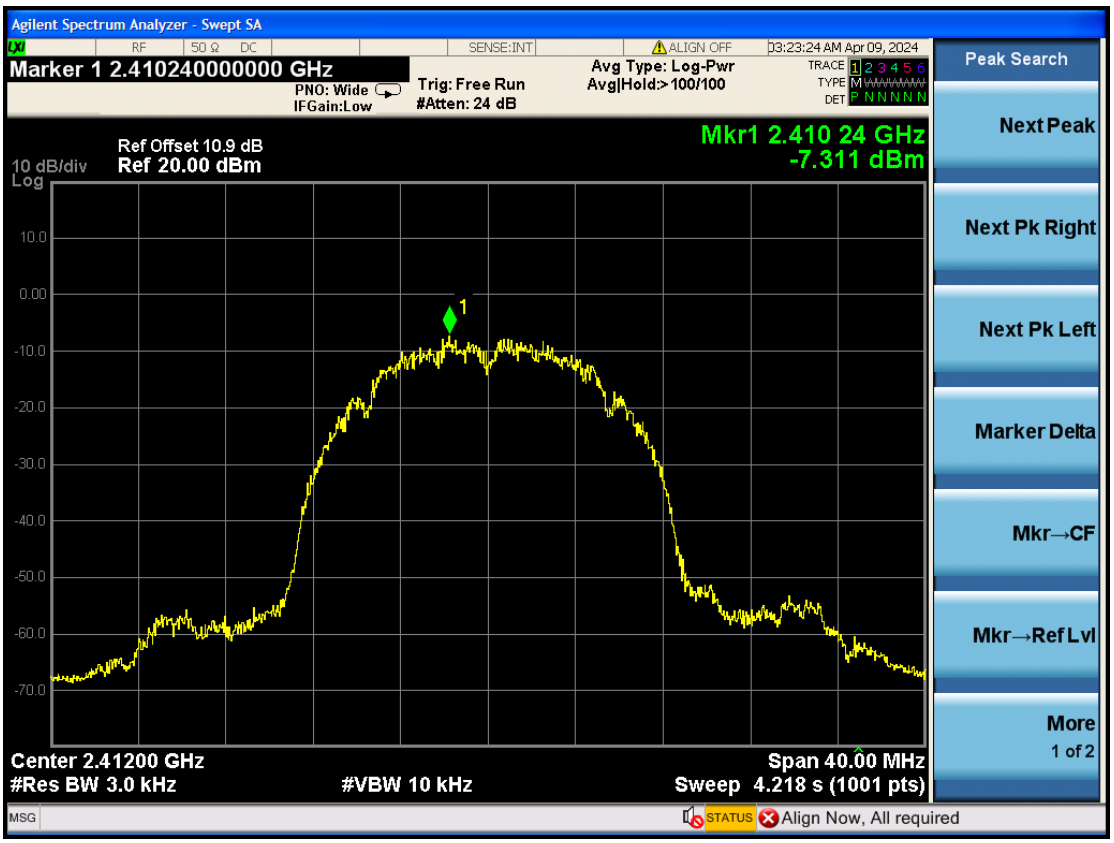
(1) Set analyzer center frequency to DTS channel center frequency.
(2) Set the span to 1.5 times the DTS bandwidth.
(3) Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
(4) Set the VBW ≥ 3 × RBW.
(5) Detector = peak.
(6) Sweep time = auto couple.
(7) Trace mode = max hold.
(8) Allow trace to fully stabilize.
(9) Use the peak marker function to determine the maximum amplitude level.

8.5. Test Results

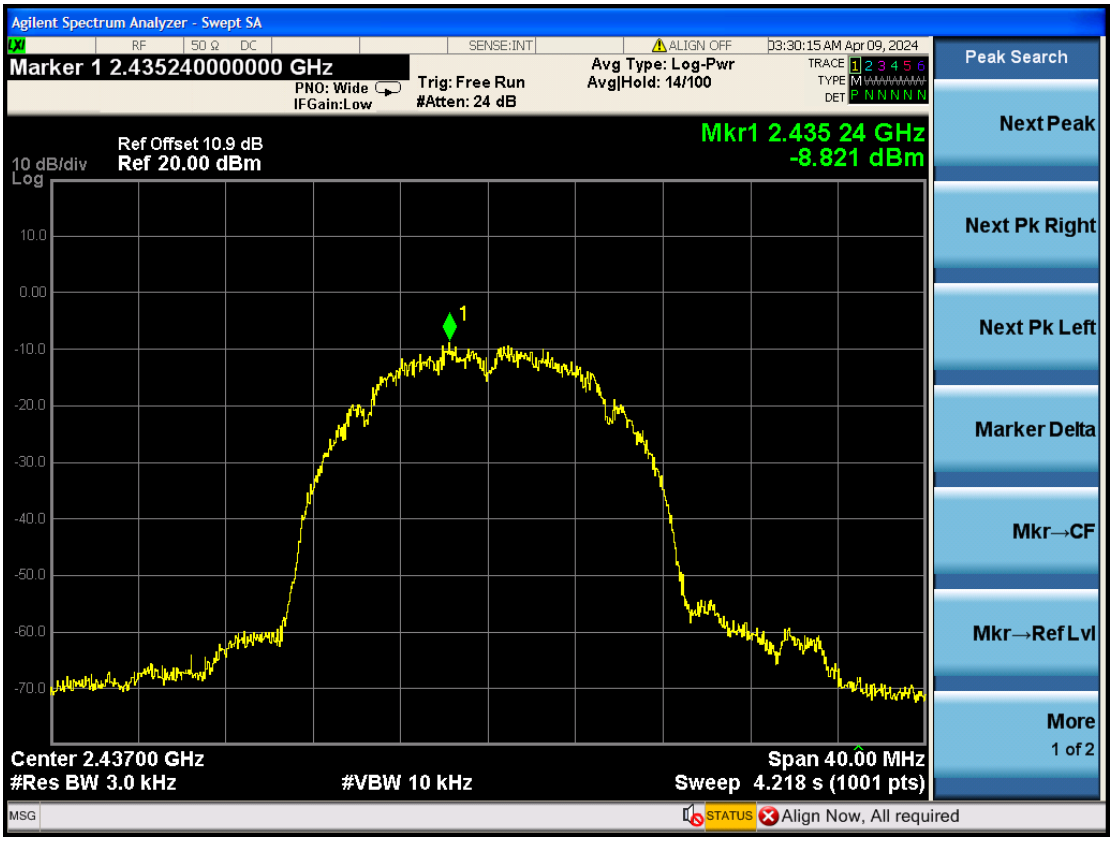
PASSED. All the test results are attached in next page.

Mode	Frequency	Duty Cycle Factor	Reading (dBm)	Result (dBm)	Limit (dBm/3kHz)
11b	2412	0	-7.311	-7.311	8
	2437		-8.821	-8.821	
	2462		-10.312	-10.312	
11g	2412	0	-14.385	-14.385	
	2437		-15.330	-15.330	
	2462		-16.908	-16.908	
11n-HT20	2412	0	-13.675	-13.675	
	2437		-15.200	-15.200	
	2462		-16.200	-16.200	
11n-HT40	2422	0	-15.202	-15.202	
	2437		-16.908	-16.908	
	2452		-17.482	-17.482	

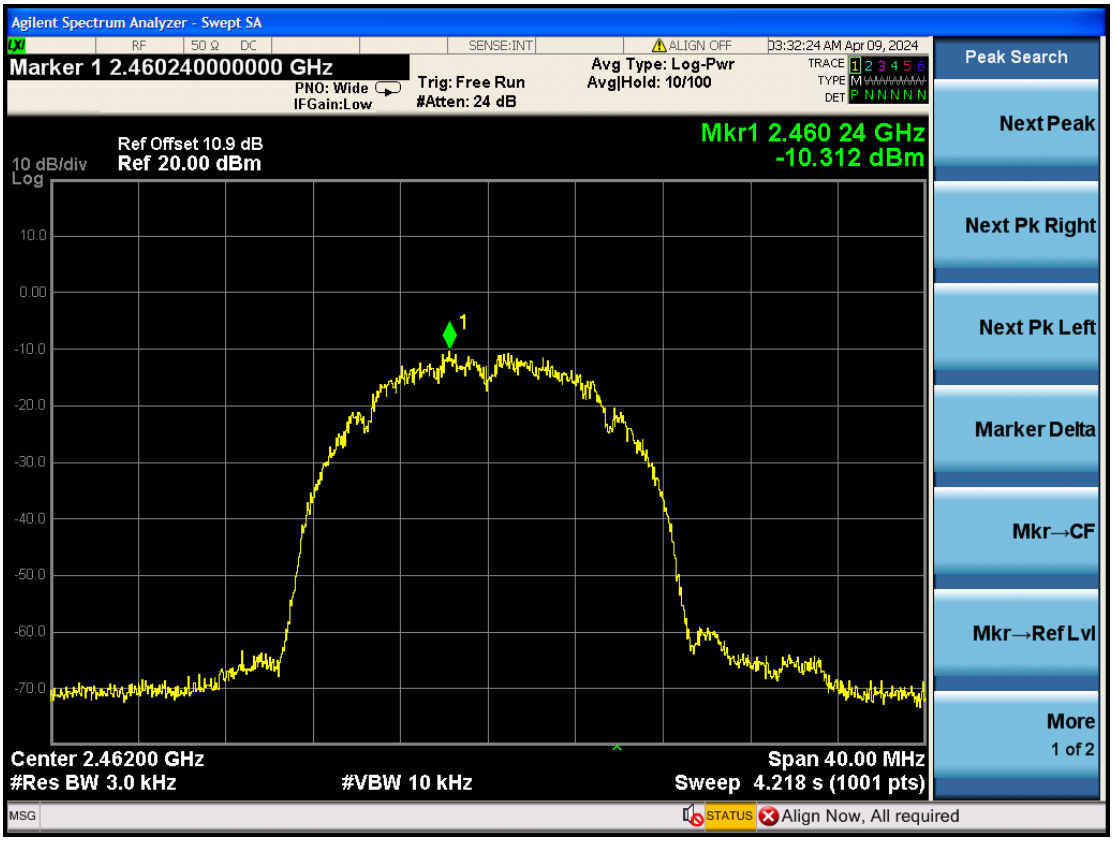
802.11b CH1



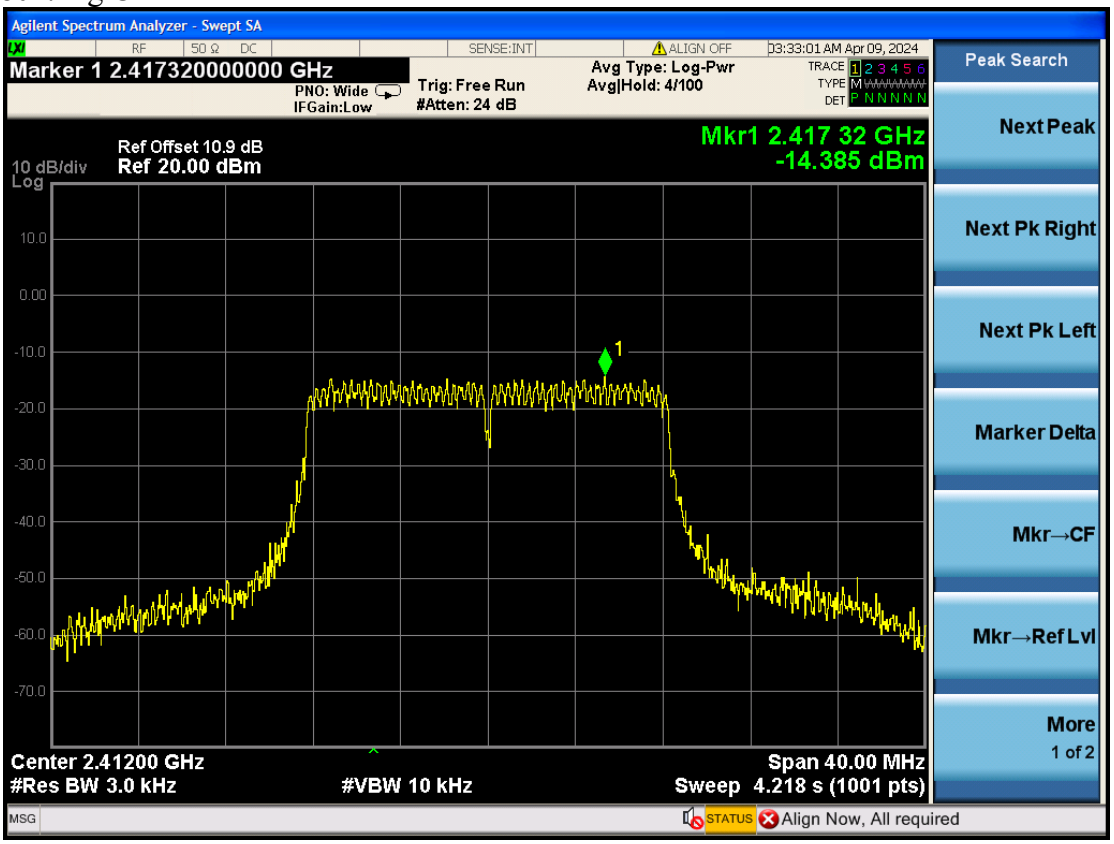
802.11b CH6



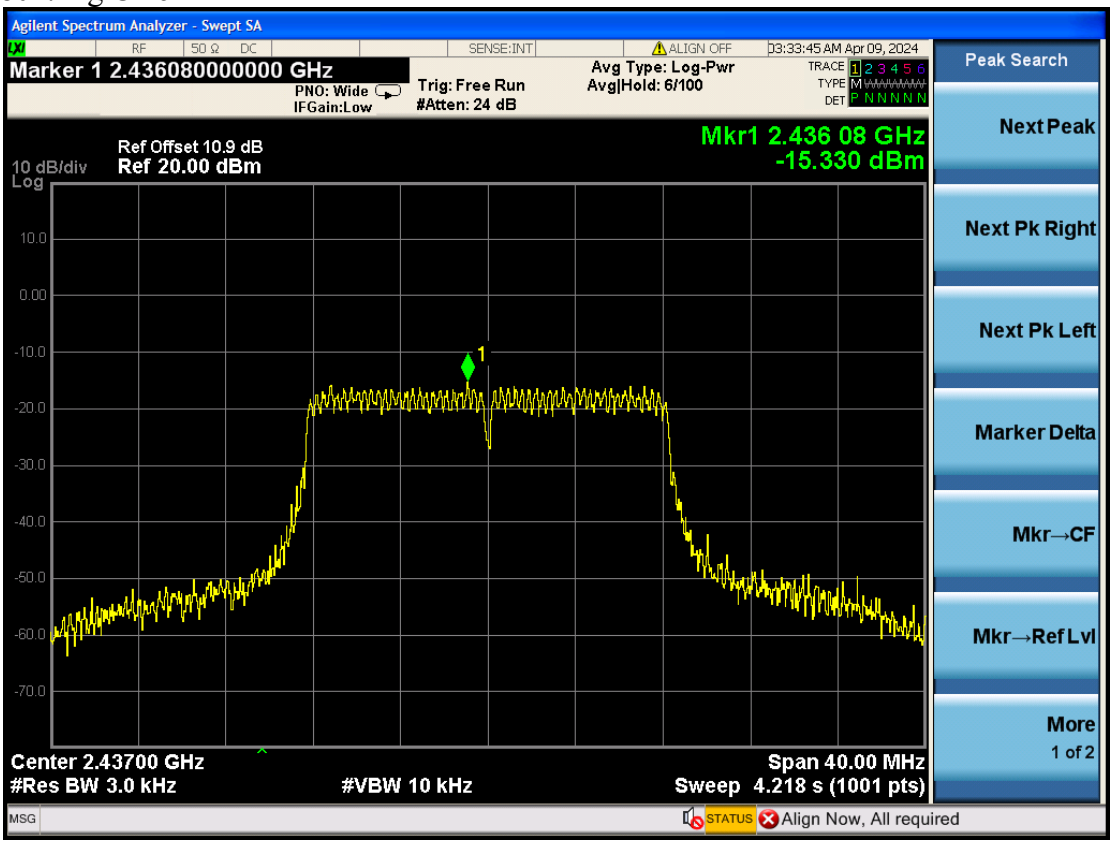
802.11b CH11



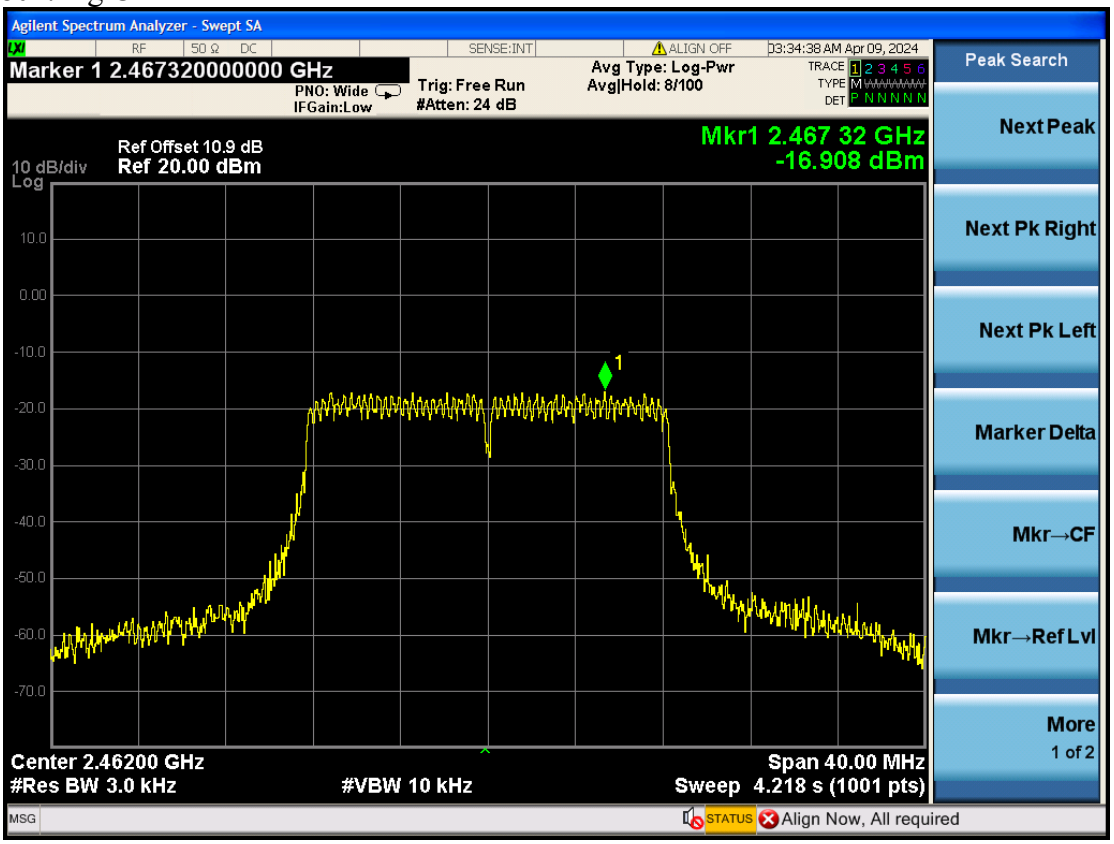
802.11g CH1



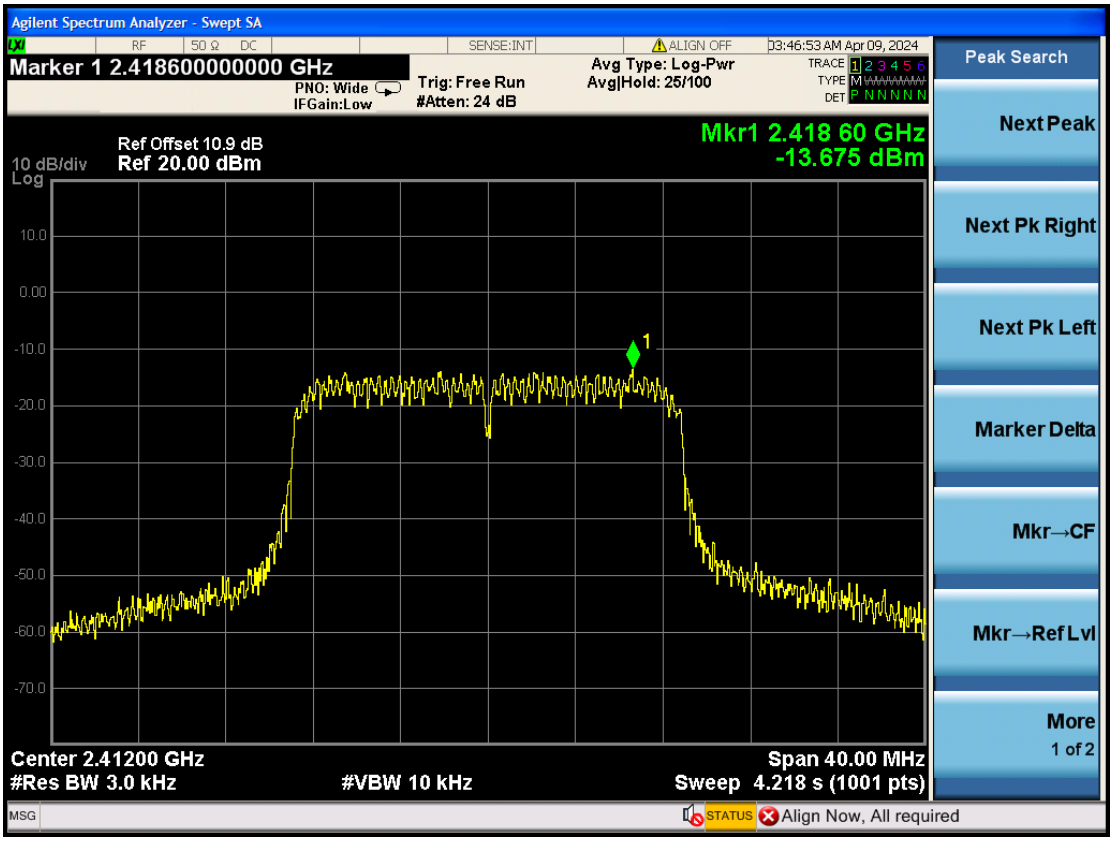
802.11g CH6



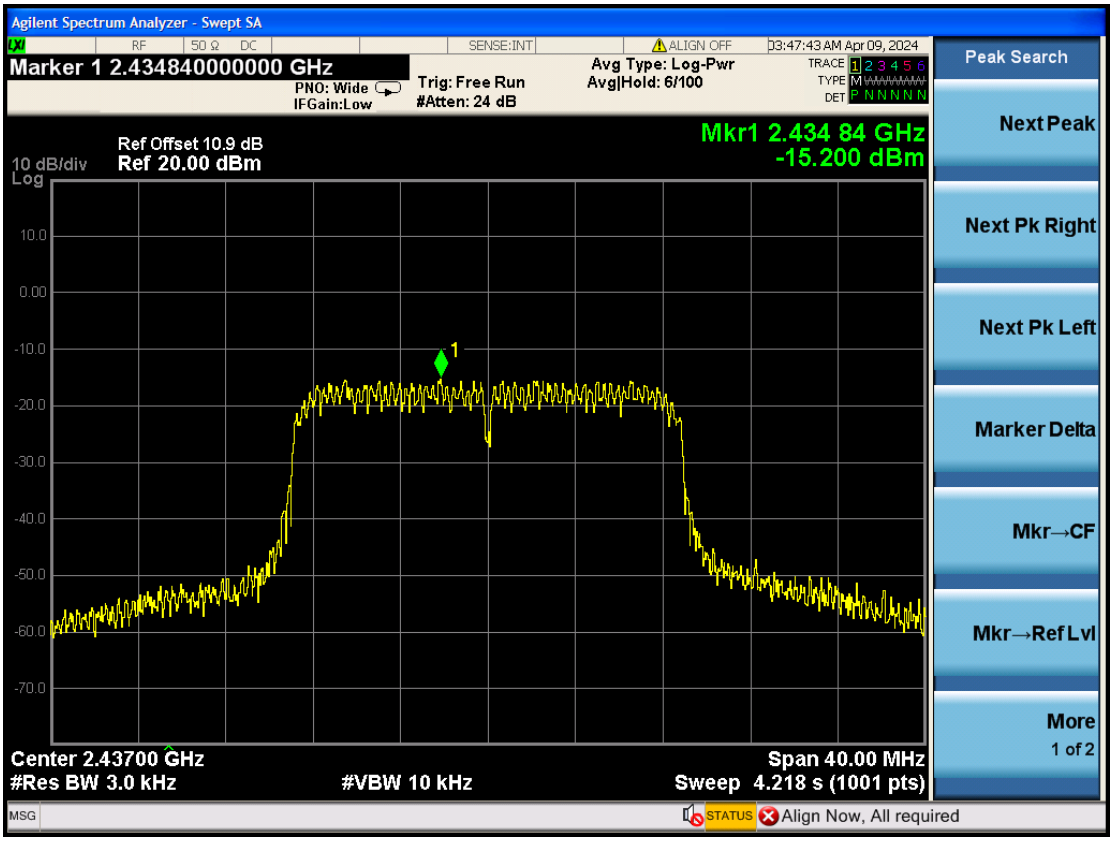
802.11g CH11



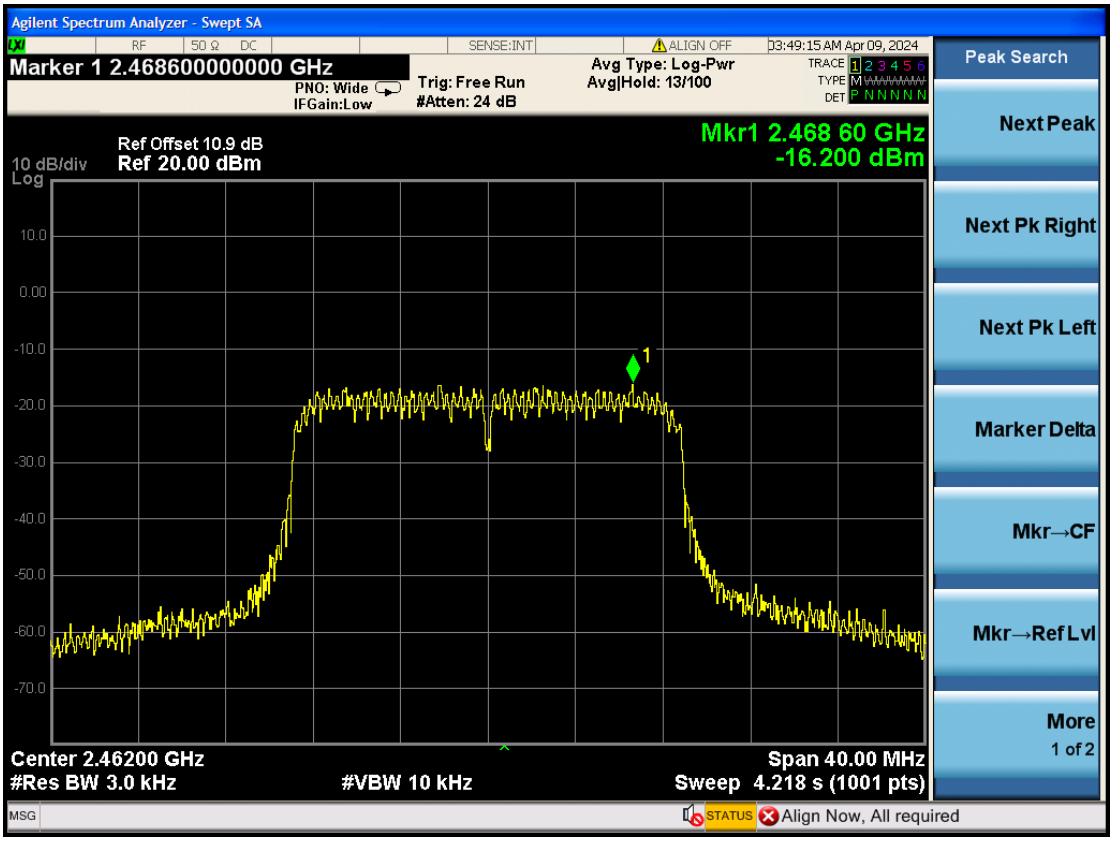
802.11nHT20 CH1



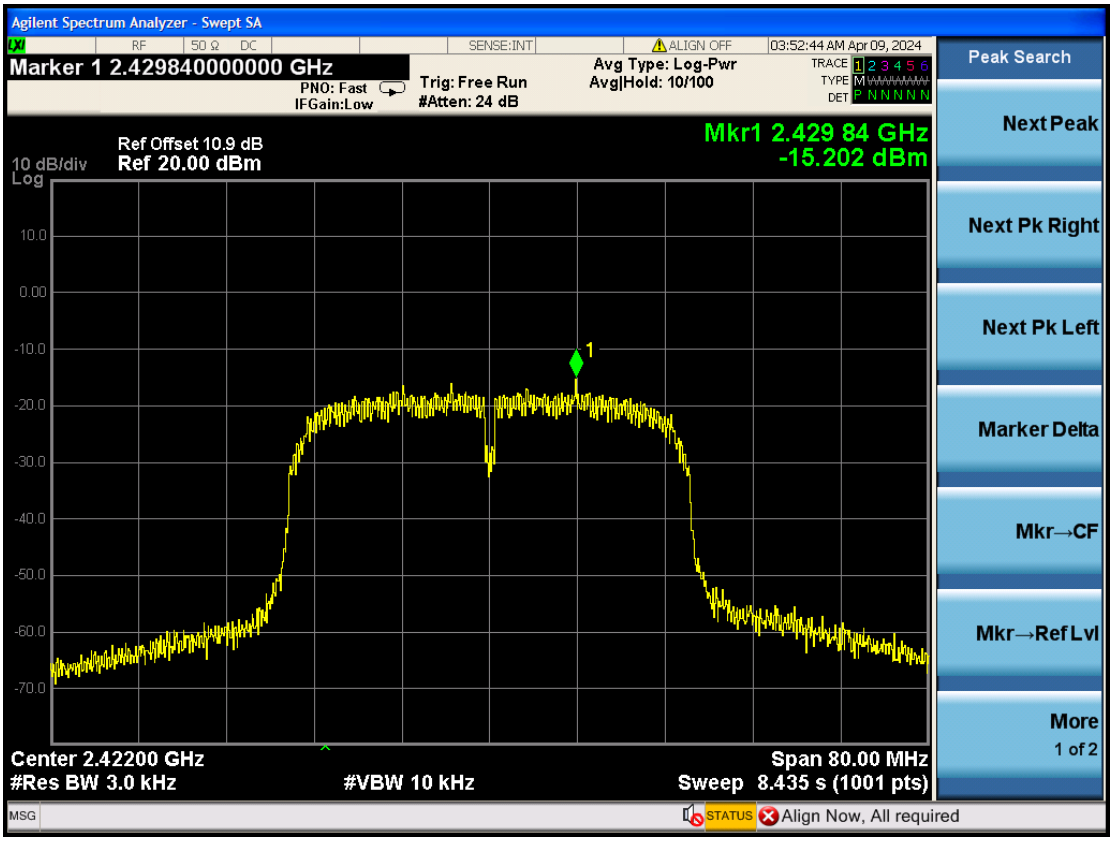
802.11nHT20 CH6



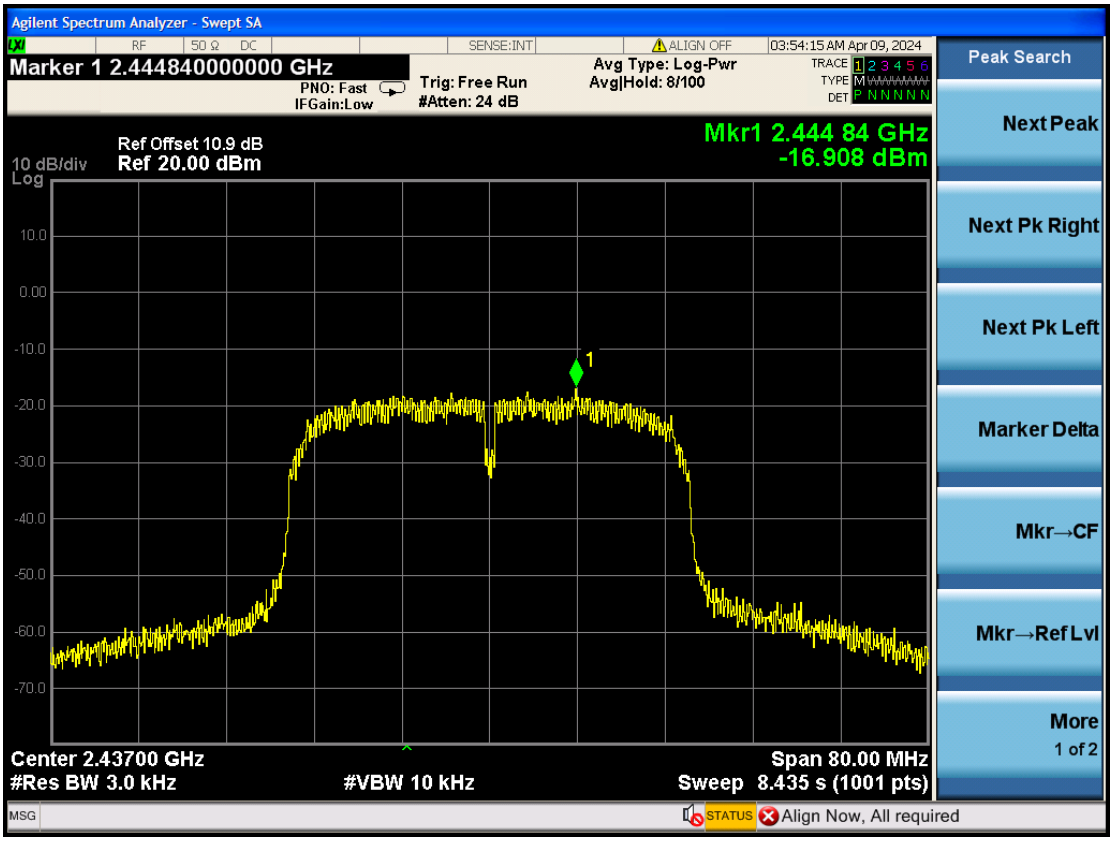
802.11nHT20 CH11



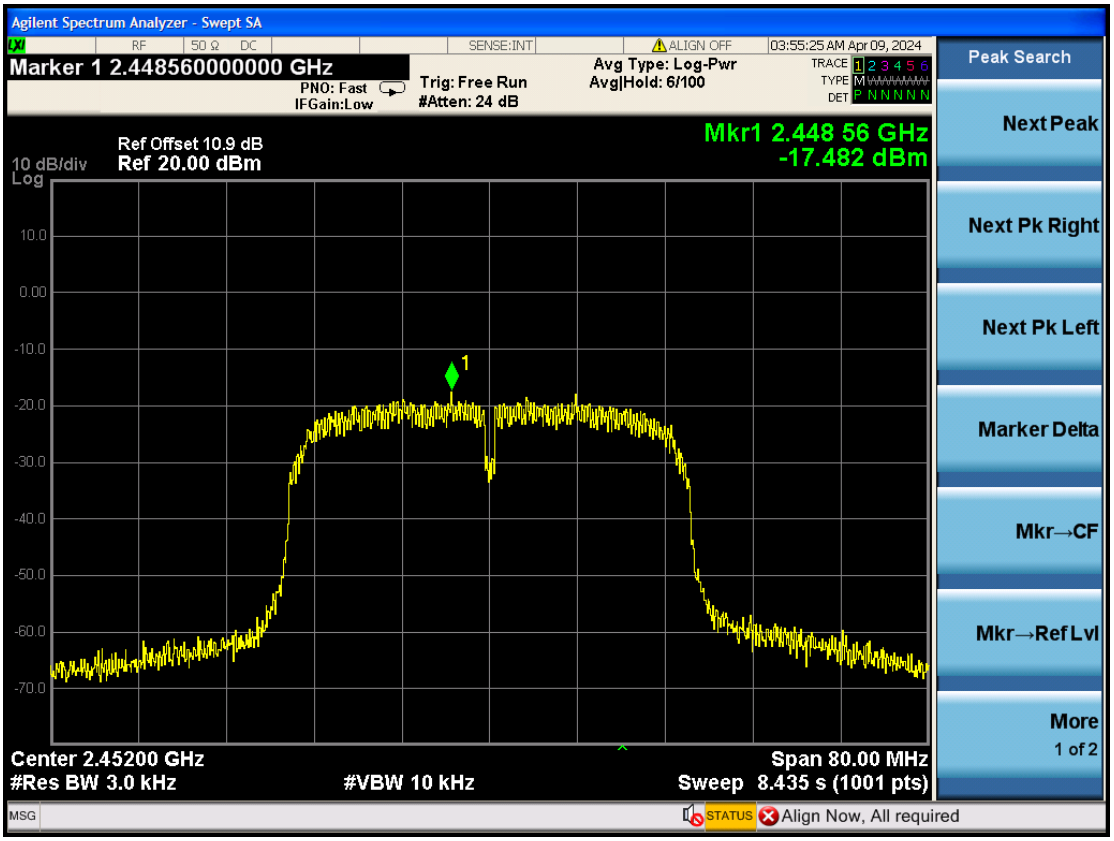
802.11nHT40 CH3



802.11nHT40 CH6



802.11nHT40 CH9



9. EMISSION LIMITATIONS MEASUREMENT

9.1. Test Equipment

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Period
1.	PXA signal analyzer	Agilent	N9030A	MY53120217	2024-03-24	1 Year

9.2. Block Diagram of Test Setup

The same as section 6.2.

9.3. Specification Limits

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, that the required attenuation shall be 30 dB instead of 20 dB.

9.4. Test Procedure

Following measurement procedure is reference to KDB 558074 D01 DTS Meas Guidance v05r02:

(1) Set analyzer center frequency to DTS channel center frequency.

(2) Set the span to 1.5 times the DTS bandwidth.

(3) Set the RBW to: 100 kHz.

(4) Set the VBW ⩾ 3 × RBW.

(5) Detector = peak.

(6) Sweep time = auto couple.

(7) Trace mode = max hold.

(8) Allow trace to fully stabilize to find the max level.

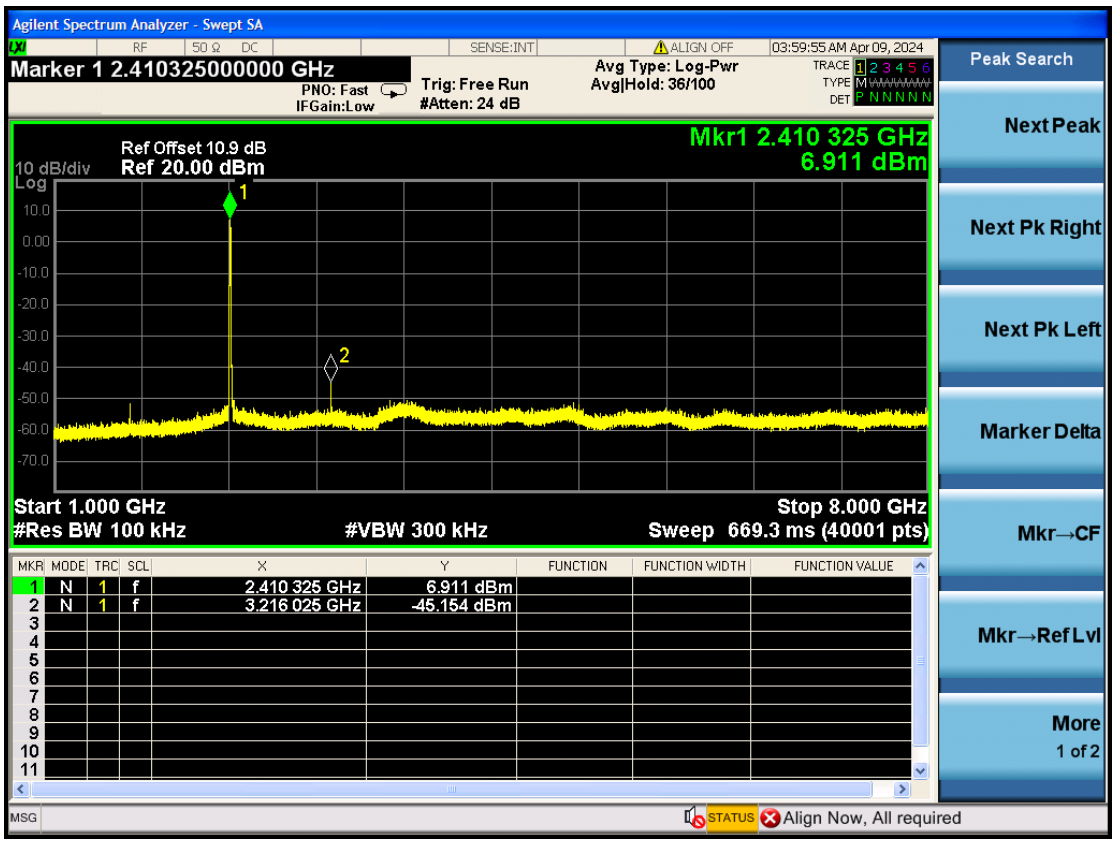
9.5. Test Results

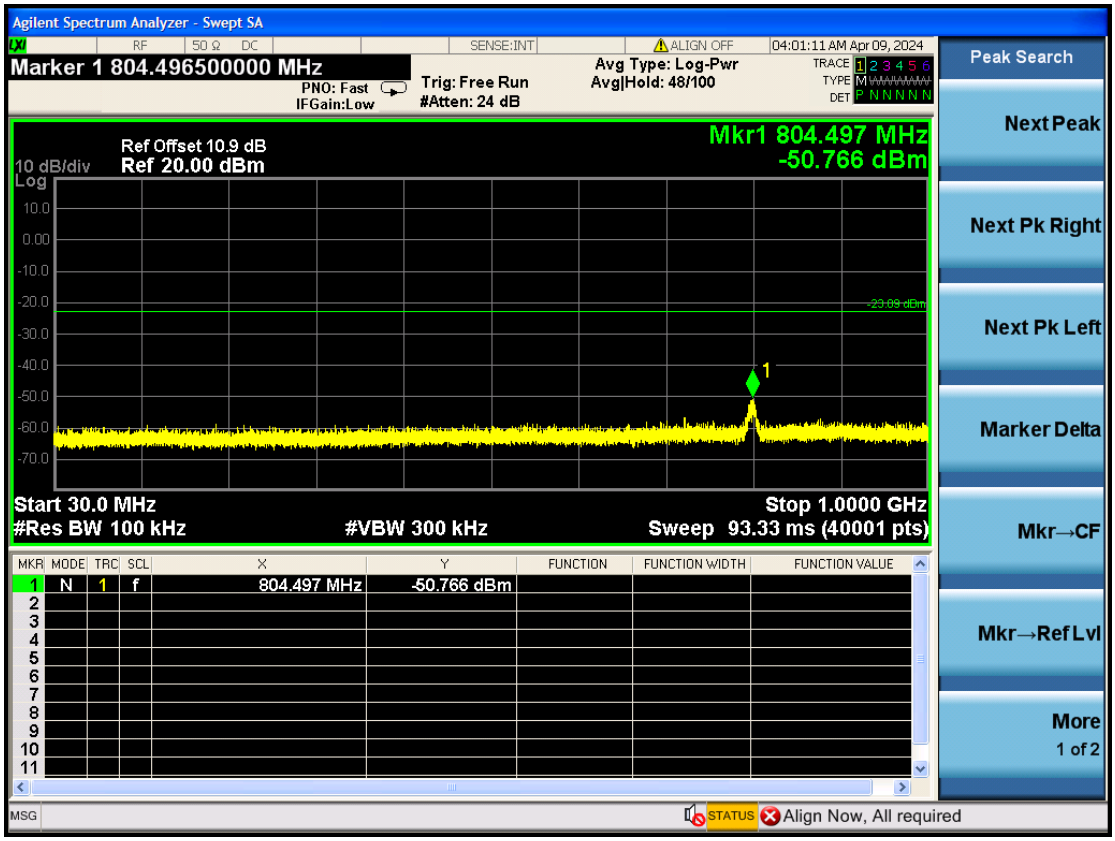
PASSED. All the test results are attached in next pages.

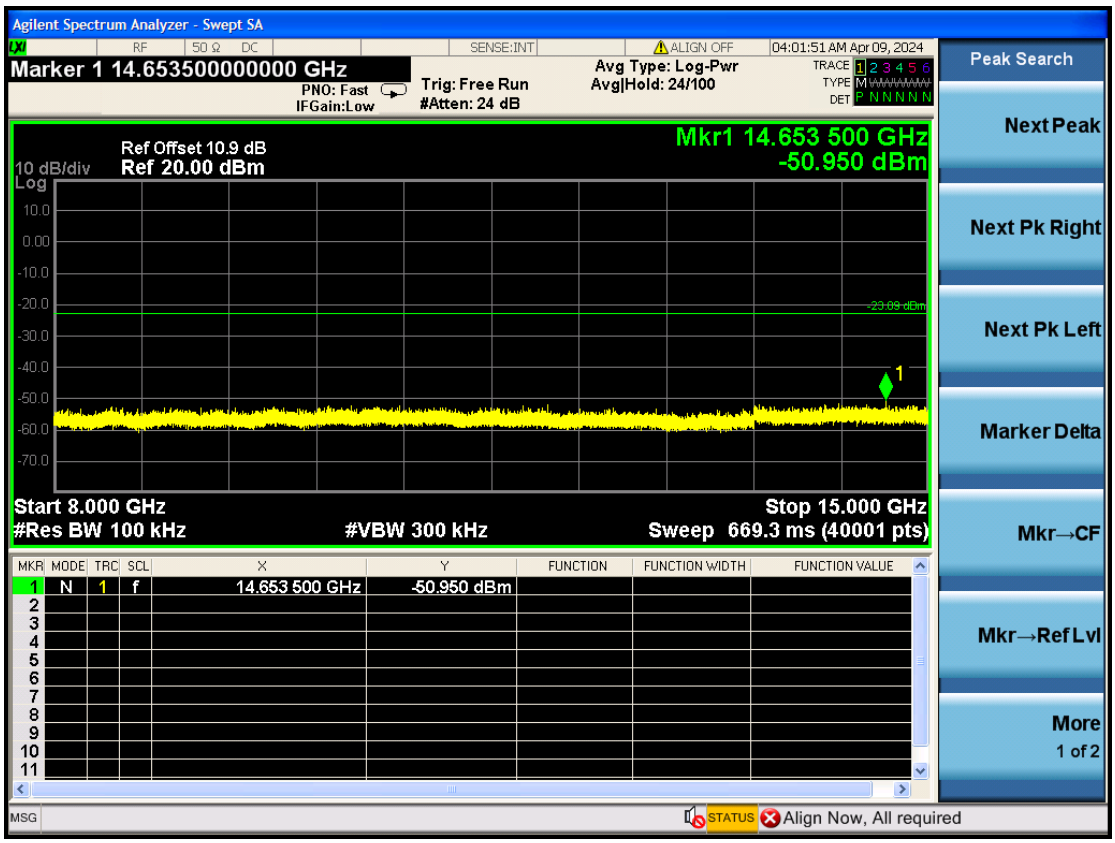
Item	Channel	Frequency (MHz)	Amplitude (dBm)
802.11b	1	2410.325	6.911
		3216.025	-45.154
		804.497	-50.766
		14653.5	-50.950
		24428.5	-47.669
		2390	-54.288
		2400	-46.096
	6	3249.275	-48.414
		2435.35	6.202
		810.365	-51.222
		14466.95	-51.295
		24496.75	-47.371
	11	2462.65	4.659
		3282.7	-48.603
		818.562	-52.808
		14208.475	-51.041
		24500	-47.119
		2483.5	-57.259
802.11g	1	2416.1	0.063
		3216.025	-44.923
		810.729	-54.255
		14397.125	-50.457
		23977.25	-47.502
		2390	-47.439
		2400	-32.880
	6	2441.125	-1.354
		3249.275	-47.670
		808.571	-54.191
		14555.85	-51.136
		24938.75	-47.271
	11	2457.4	-2.571
		3282.7	-47.534
		822.781	-53.371
		14452.6	-51.690
		24207.75	-47.560
		2483.5	-50.527
802.11n HT20	1	2411.375	-0.269
		3216.025	-45.426
		798.749	-53.977
		14213.9	-51.494
		23452.25	-48.346
		2390	-45.329
		2400	-37.180
	6	2432.375	-1.597
		3249.275	-47.612
		804.86	-53.572

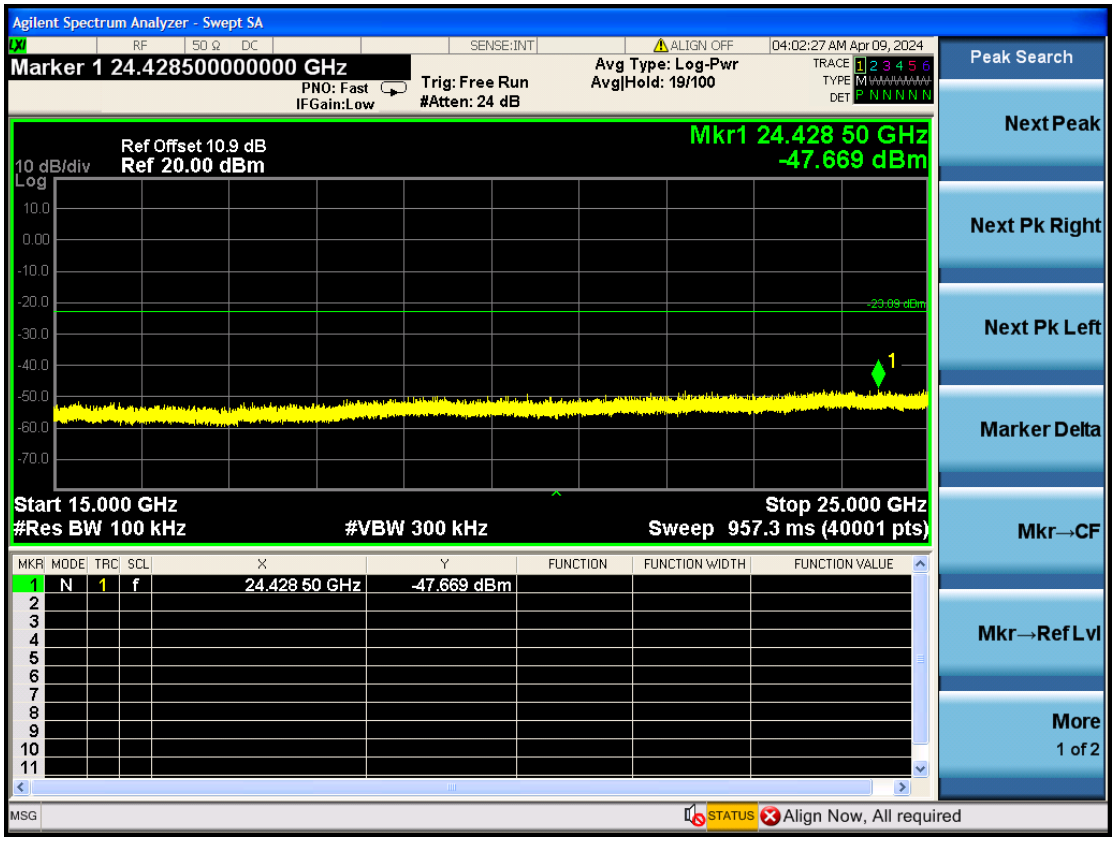
		14222.125	-50.750
		24112.25	-46.302
	11	2456.7	-2.155
		3282.7	-47.589
		817.931	-54.486
		12803.575	-51.913
		24039.5	-47.667
		2483.5	-46.992
802.11n HT40	3	2417.325	-3.965
		3229.325	-45.316
		815.870	-55.032
		14556.025	-51.788
		24056.5	-47.295
		2390	-49.309
		2400	-44.804
	6	2440.425	-4.557
		3249.275	-48.366
		819.386	-55.615
		10947.35	-51.845
		23708.25	-47.140
	9	2454.075	-5.427
		3269.4	-48.158
		812.014	-55.093
		14499.325	-50.513
		23821.5	-47.183
		2483.5	-46.001

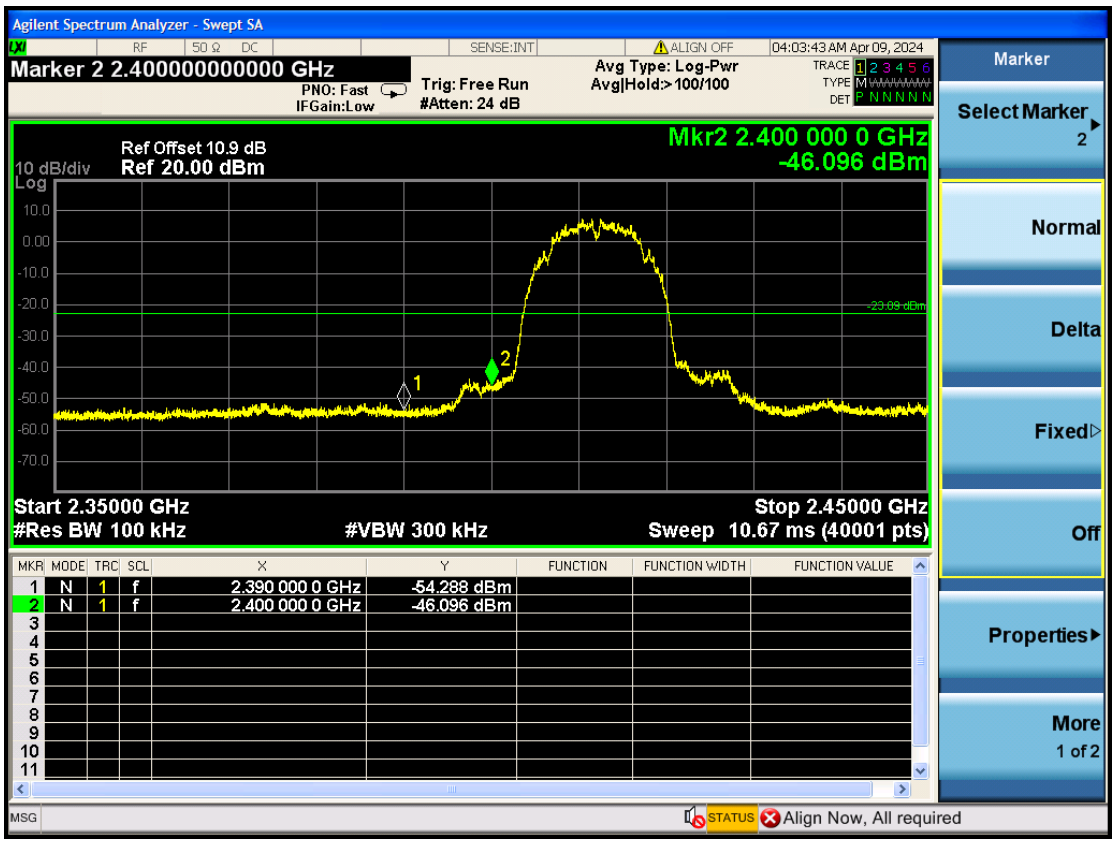
802.11b CH1


Agilent Spectrum Analyzer - Swept SA
Marker 1 2.410325000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 36/100
03:59:55 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.410 325 GHz
6.911 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 8.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 2.410 325 GHz 6.911 dBm
2 N 1 f 3.216 025 GHz -45.154 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

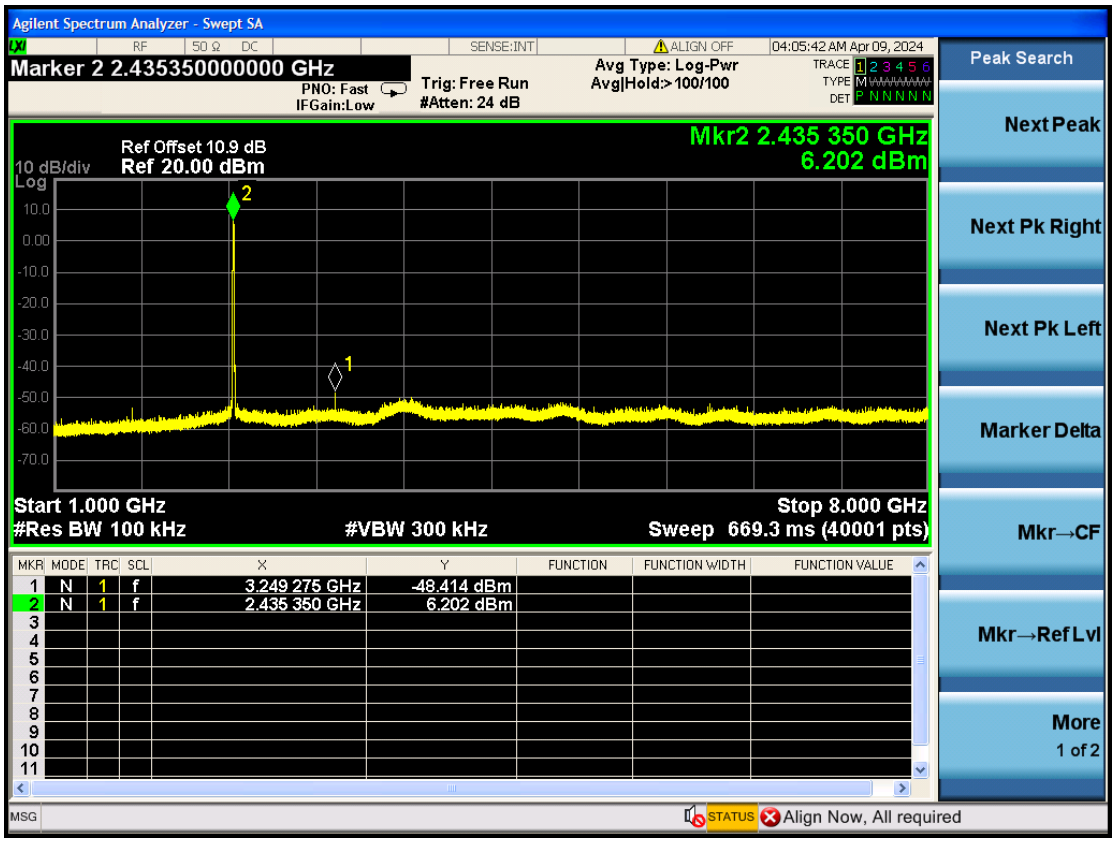

Agilent Spectrum Analyzer - Swept SA
Marker 1 804.496500000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 48/100
04:01:11 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 804.497 MHz
-50.766 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 804.497 MHz -50.766 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

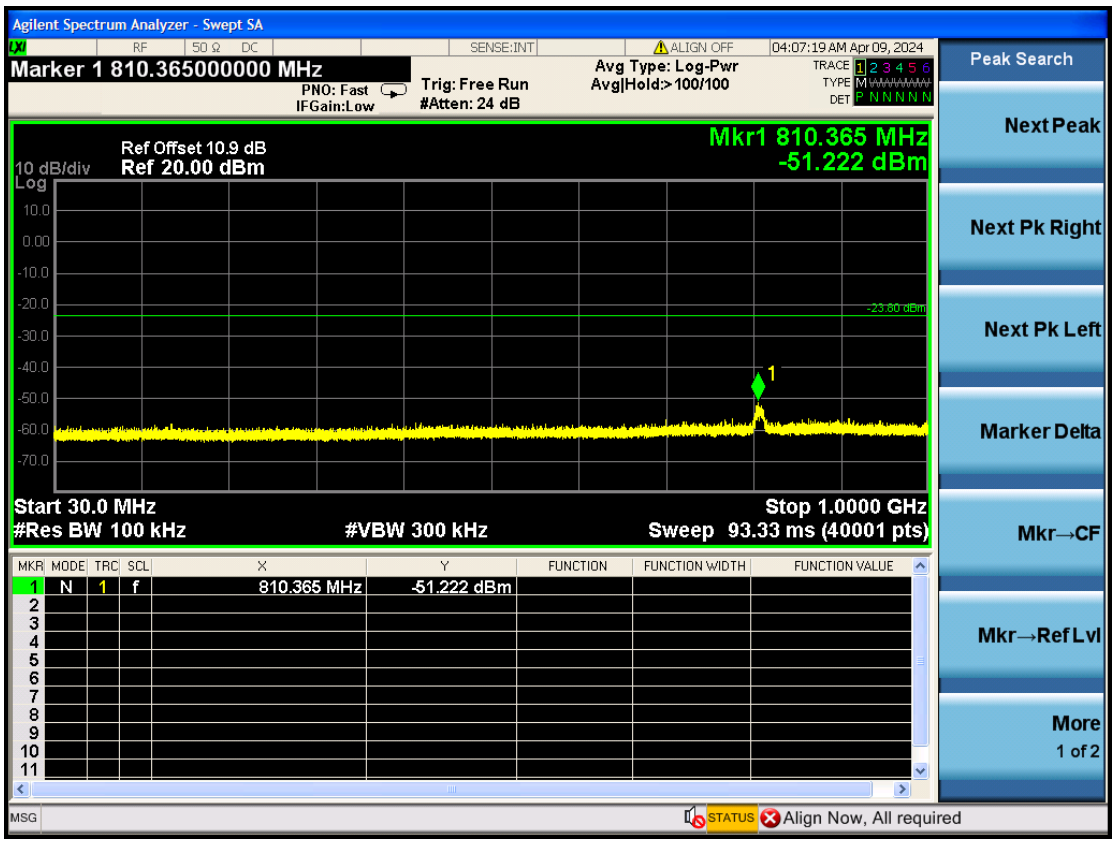

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.653500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 24/100
04:01:51 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.653 500 GHz
-50.950 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.653 500 GHz -50.950 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

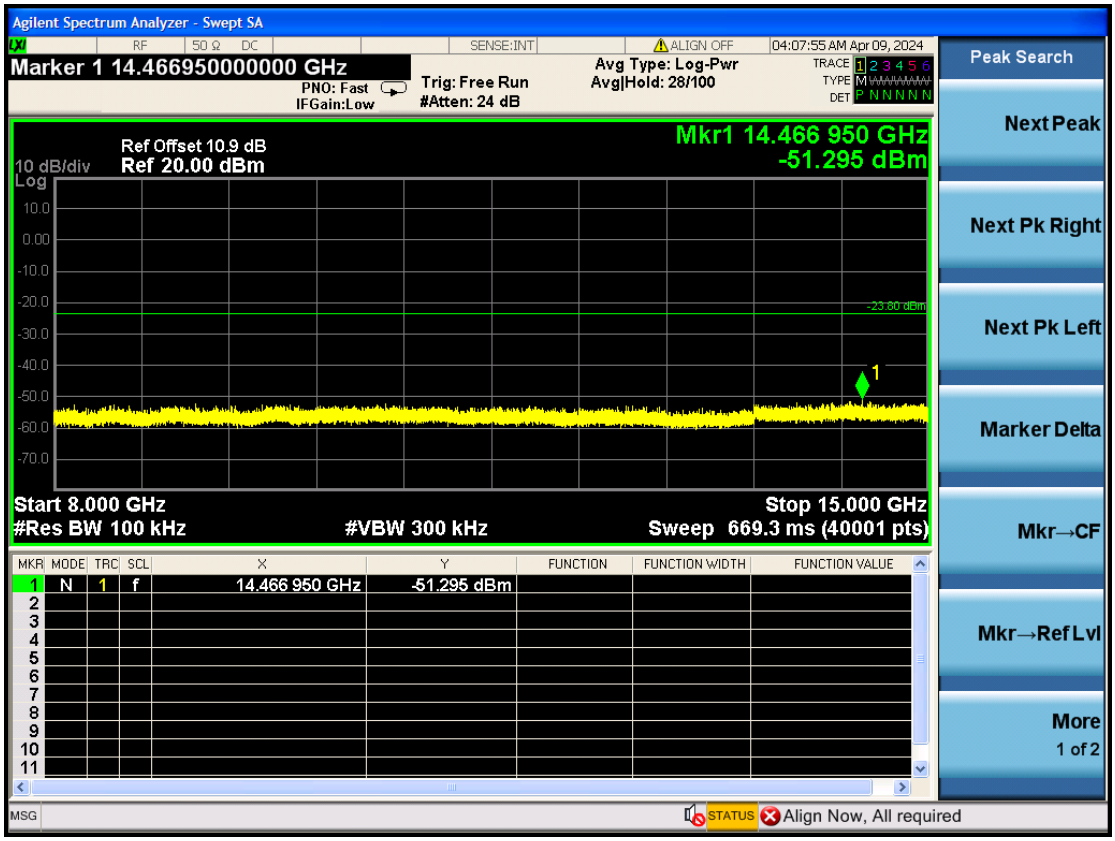

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.428500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 19/100
04:02:27 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 24.428 50 GHz
-47.669 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 24.428 50 GHz -47.669 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

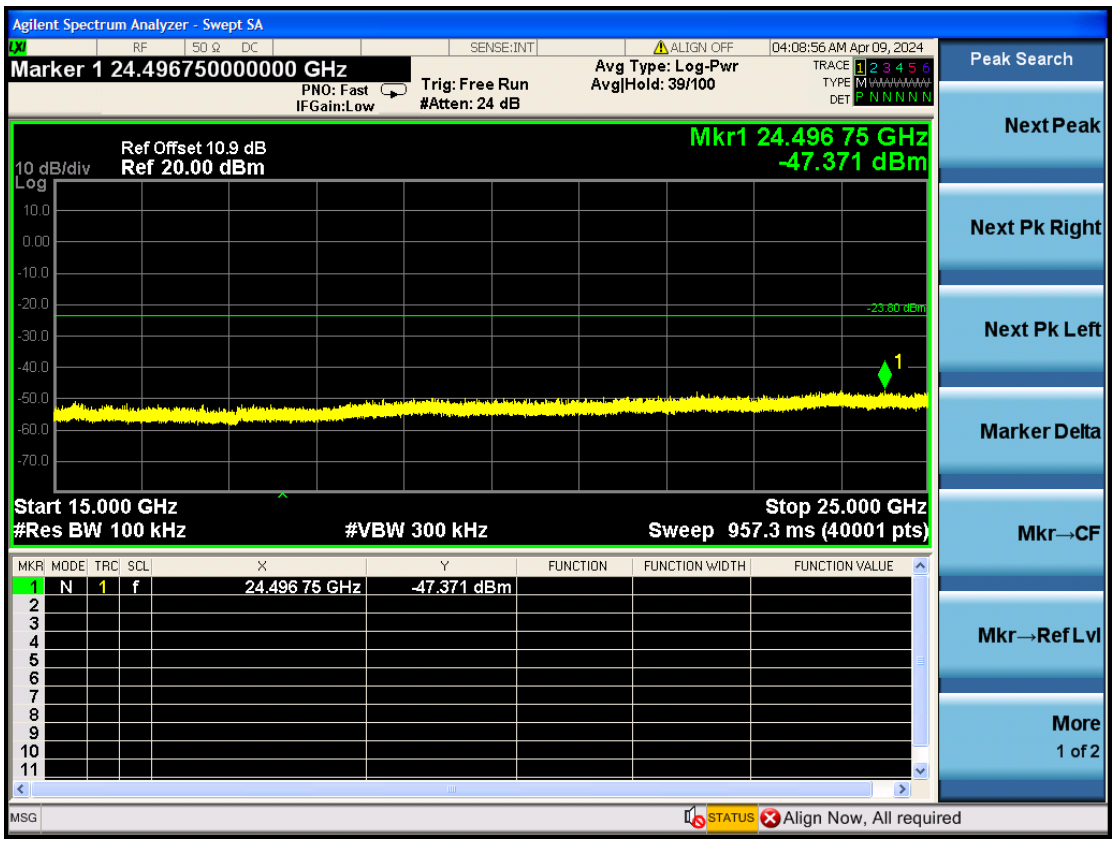

Agilent Spectrum Analyzer - Swept SA
Marker 2 2.400000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:03:43 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr2 2.400 000 0 GHz
-46.096 dBm
Start 2.35000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.45000 GHz
Sweep 10.67 ms (40001 pts)
1 N 1 f 2.390 000 0 GHz -54.288 dBm
2 N 1 f 2.400 000 0 GHz -46.096 dBm
Marker
Select Marker 2
Normal
Delta
Fixed
Off
Properties
More 1 of 2
Align Now, All required

802.11b CH6

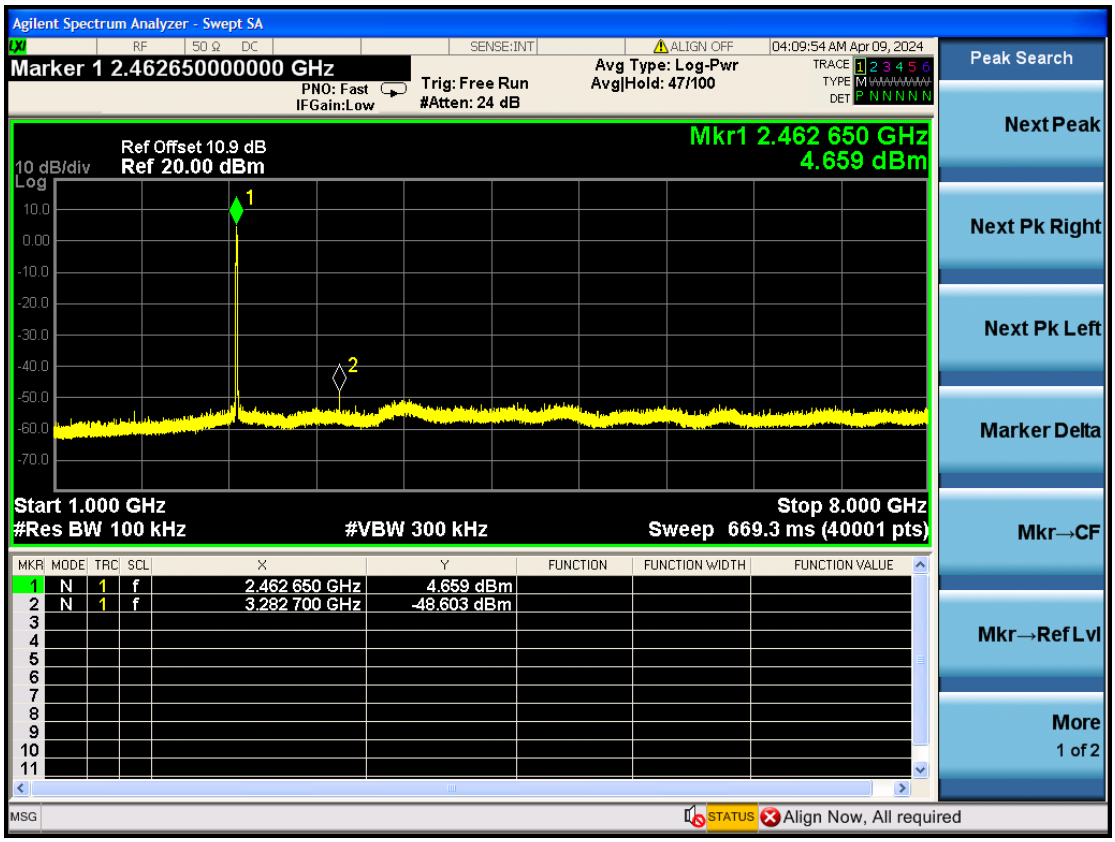

Agilent Spectrum Analyzer - Swept SA
Marker 2 2.435350000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:05:42 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr2 2.435 350 GHz
6.202 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 8.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 3.249 275 GHz -48.414 dBm
2 N 1 f 2.435 350 GHz 6.202 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More 1 of 2
Align Now, All required

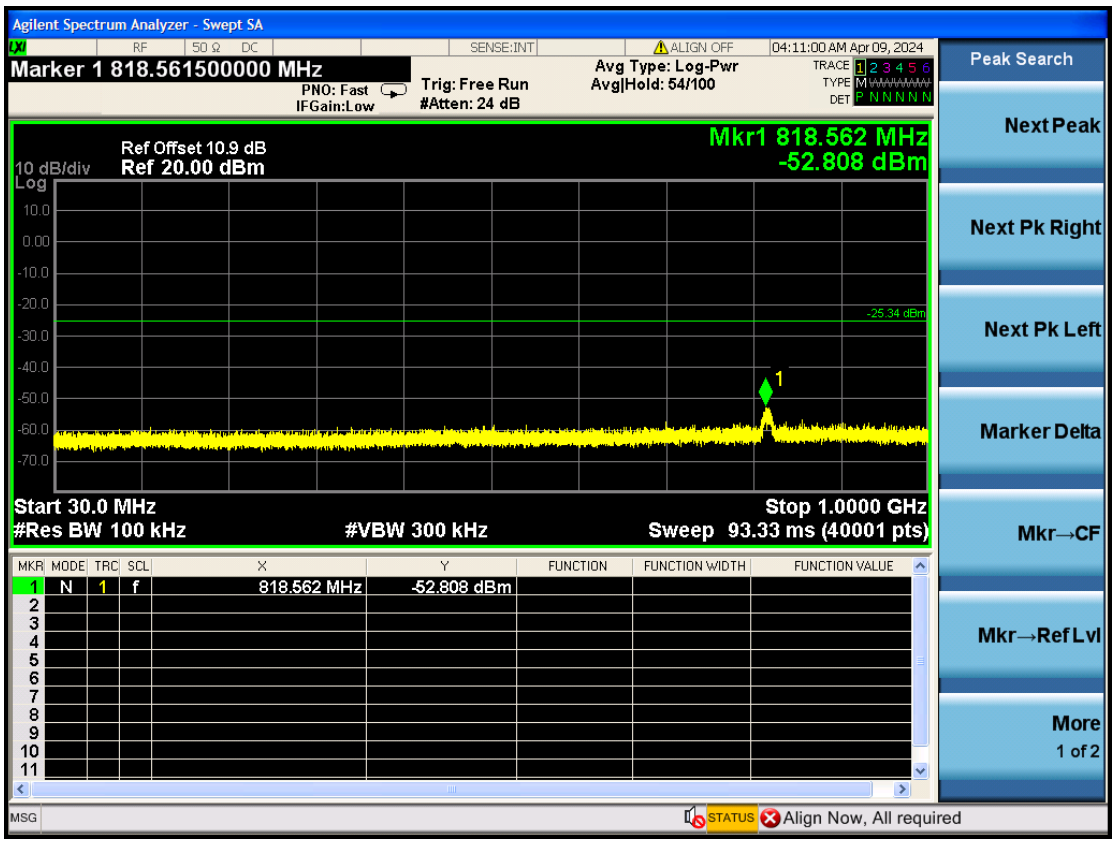

Agilent Spectrum Analyzer - Swept SA
Marker 1 810.365000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:07:19 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 810.365 MHz
-51.222 dBm
-23.80 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 810.365 MHz -51.222 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

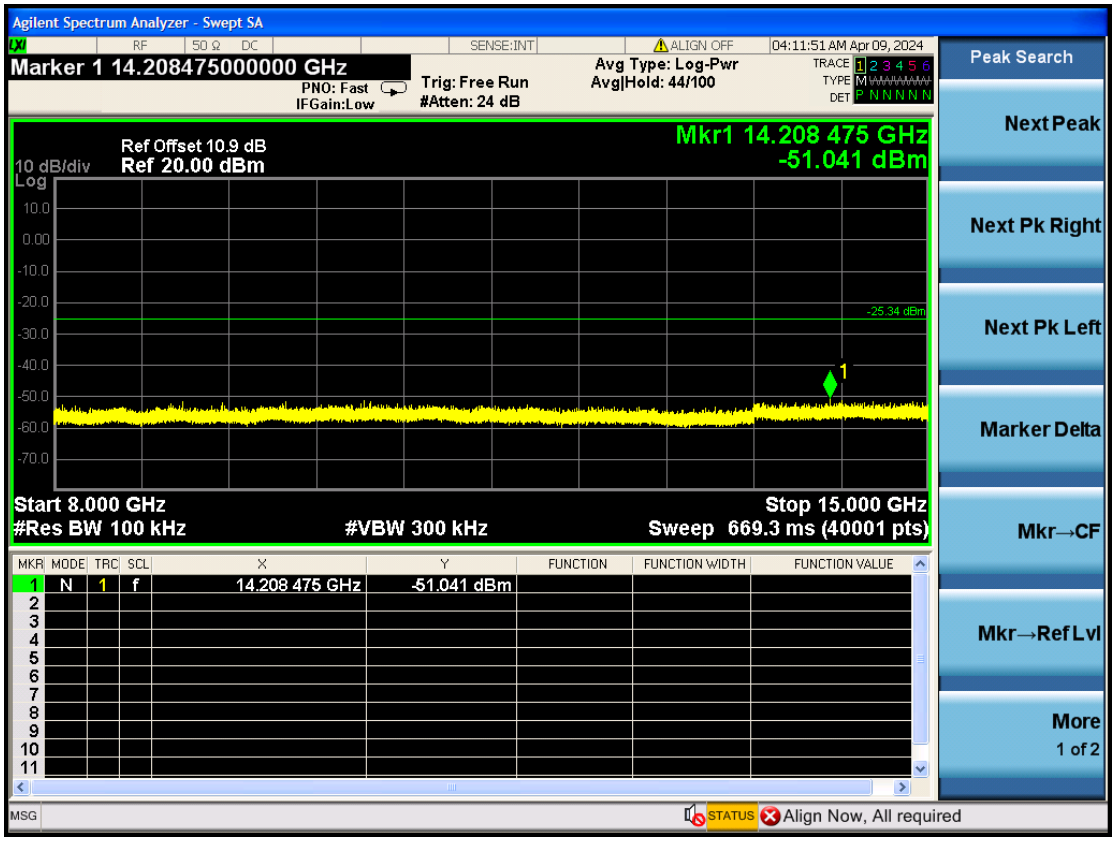

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.466950000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 28/100
04:07:55 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 14.466 950 GHz
-51.295 dBm
-23.80 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.466 950 GHz -51.295 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

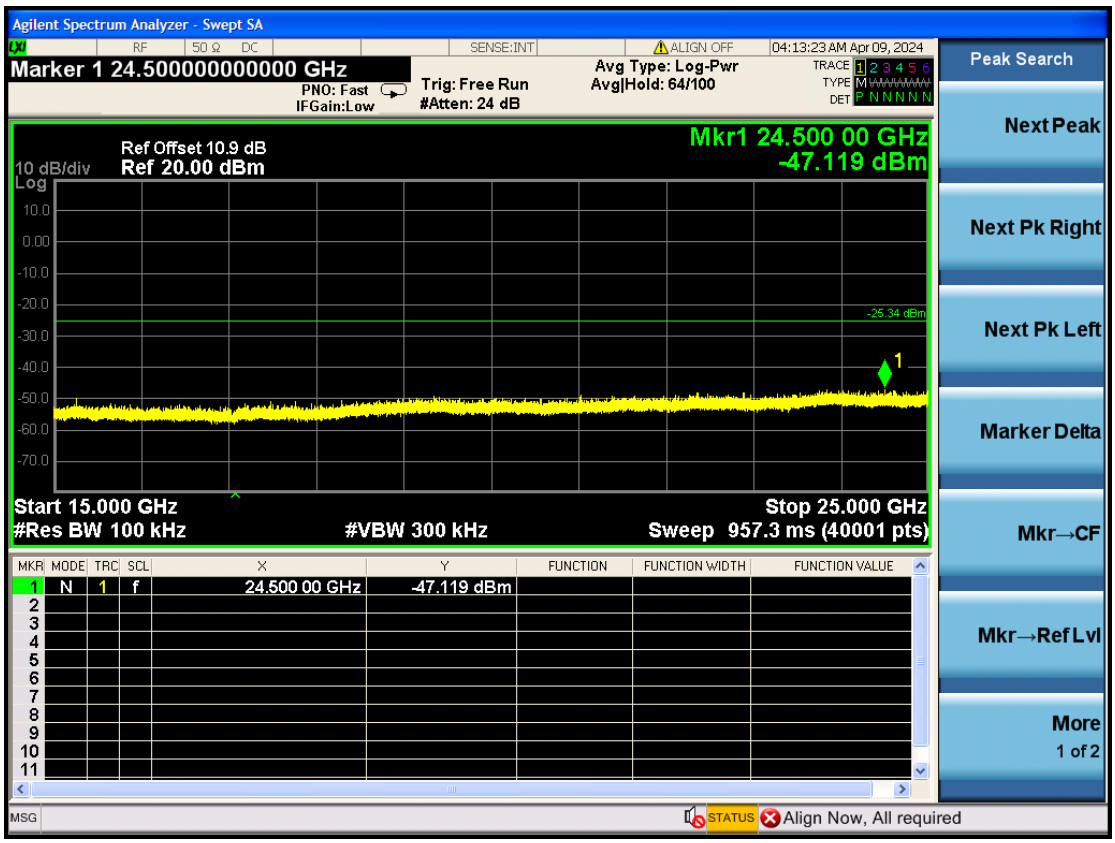

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.496750000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 39/100
04:08:56 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 24.496 75 GHz
-47.371 dBm
-23.80 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 24.496 75 GHz -47.371 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

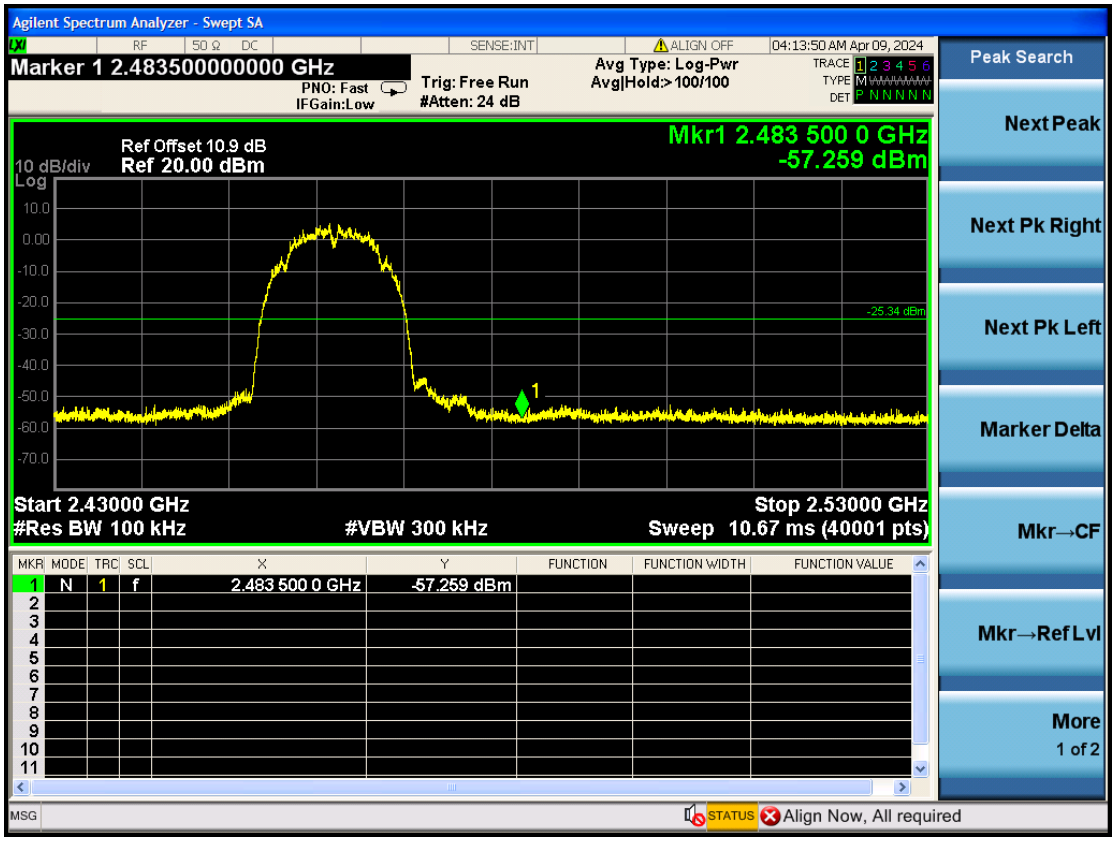
802.11b CH11


Agilent Spectrum Analyzer - Swept SA
Marker 1 2.462650000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 47/100
04:09:54 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.462 650 GHz
4.659 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 8.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 2.462 650 GHz 4.659 dBm
2 N 1 f 3.282 700 GHz -48.603 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

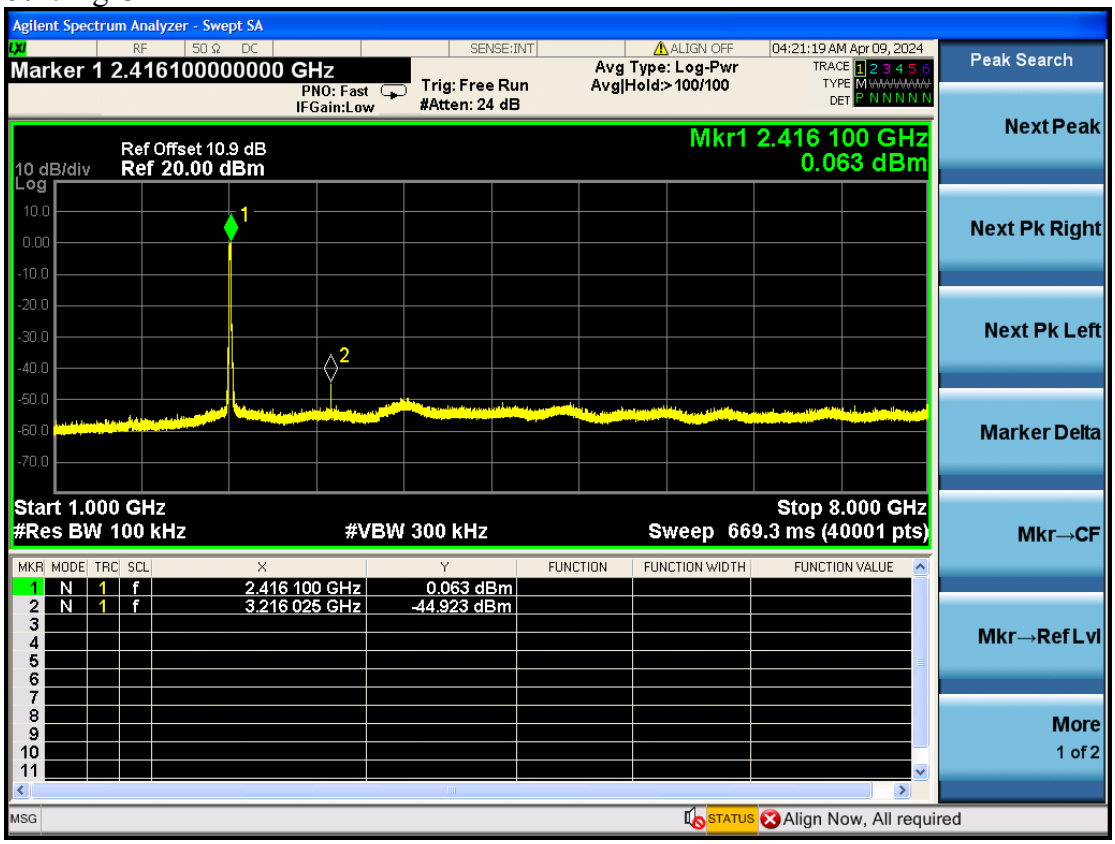

Agilent Spectrum Analyzer - Swept SA
Marker 1 818.561500000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 54/100
04:11:00 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 818.562 MHz
-52.808 dBm
-25.34 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 818.562 MHz -52.808 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

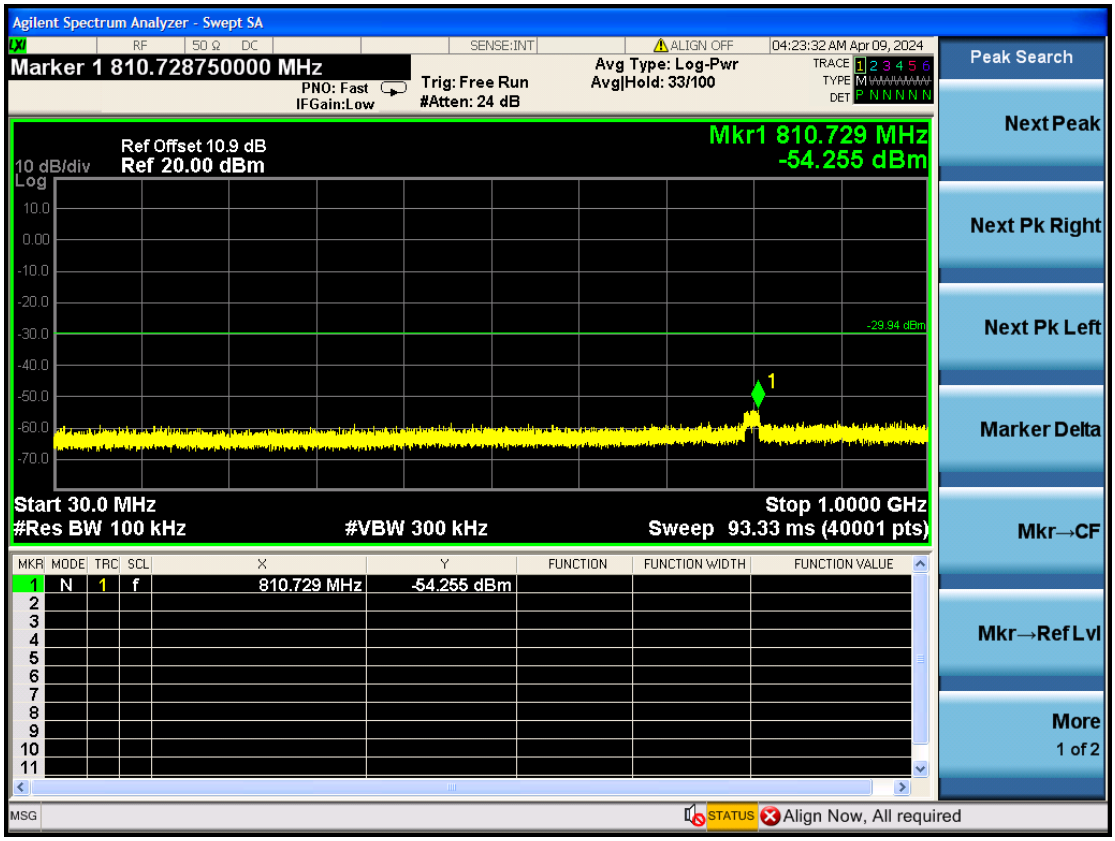

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.208475000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 44/100
04:11:51 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.208 475 GHz
-51.041 dBm
-25.34 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.208 475 GHz -51.041 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

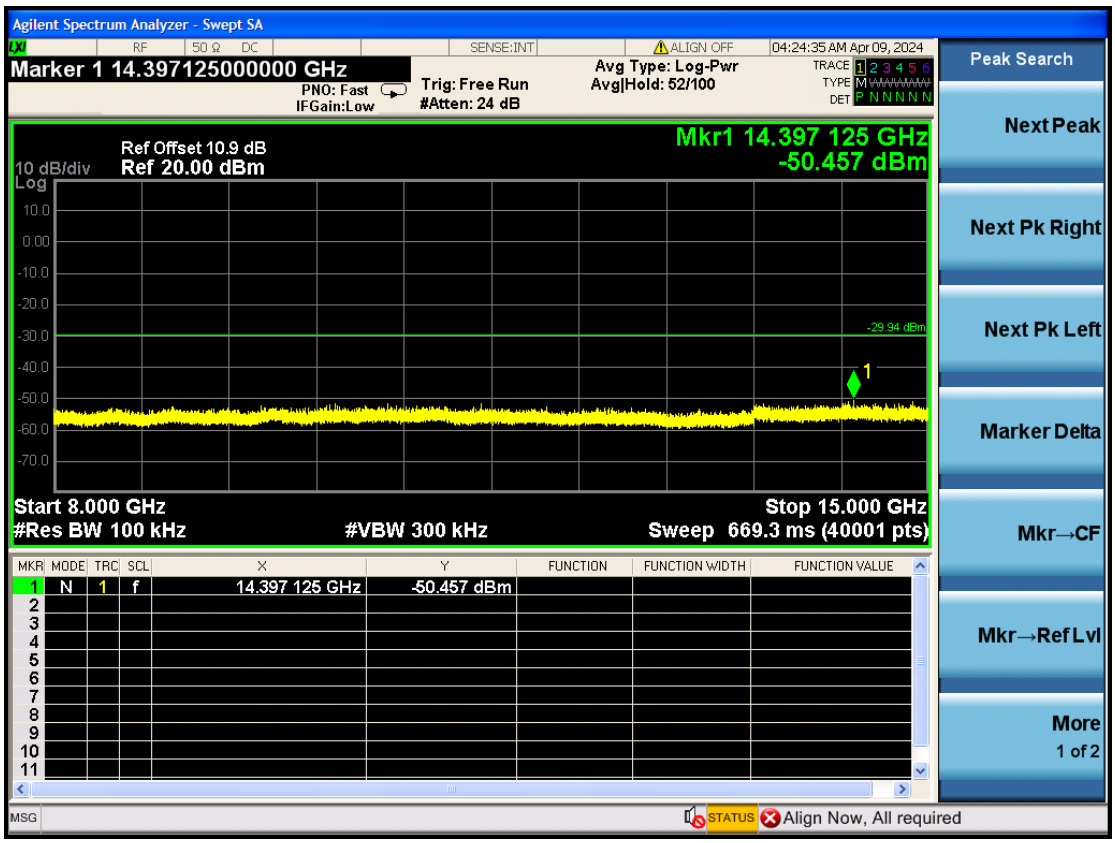

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.500000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 64/100
04:13:23 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 24.500 00 GHz
-47.119 dBm
-25.34 dBm
Start 15.000 GHz
Stop 25.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 24.500 00 GHz -47.119 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

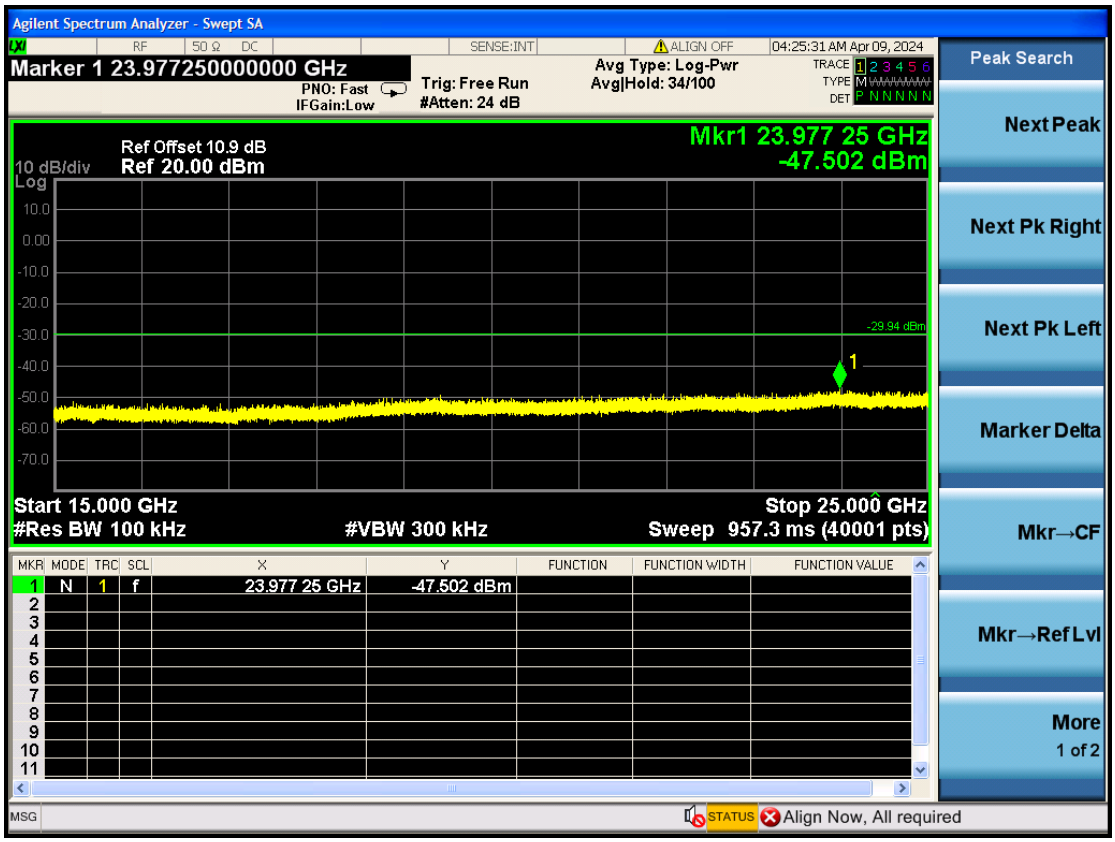

Agilent Spectrum Analyzer - Swept SA
Marker 1 2.483500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:13:50 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.483 500 0 GHz
-57.259 dBm
-25.34 dBm
Start 2.43000 GHz
Stop 2.53000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 10.67 ms (40001 pts)
1 N 1 f 2.483 500 0 GHz -57.259 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

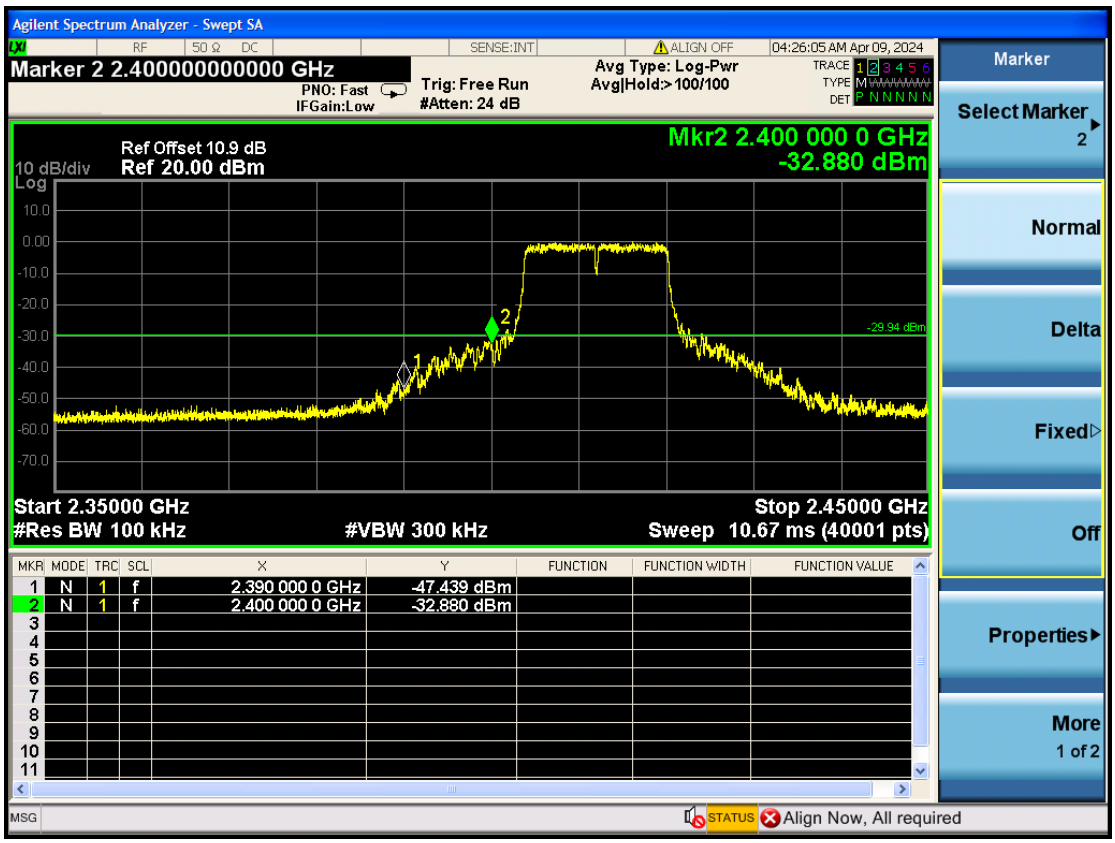
802.11g CH1


Agilent Spectrum Analyzer - Swept SA
Marker 1 2.416100000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:21:19 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.416 100 GHz
0.063 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 8.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 2.416 100 GHz 0.063 dBm
2 N 1 f 3.216 025 GHz -44.923 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

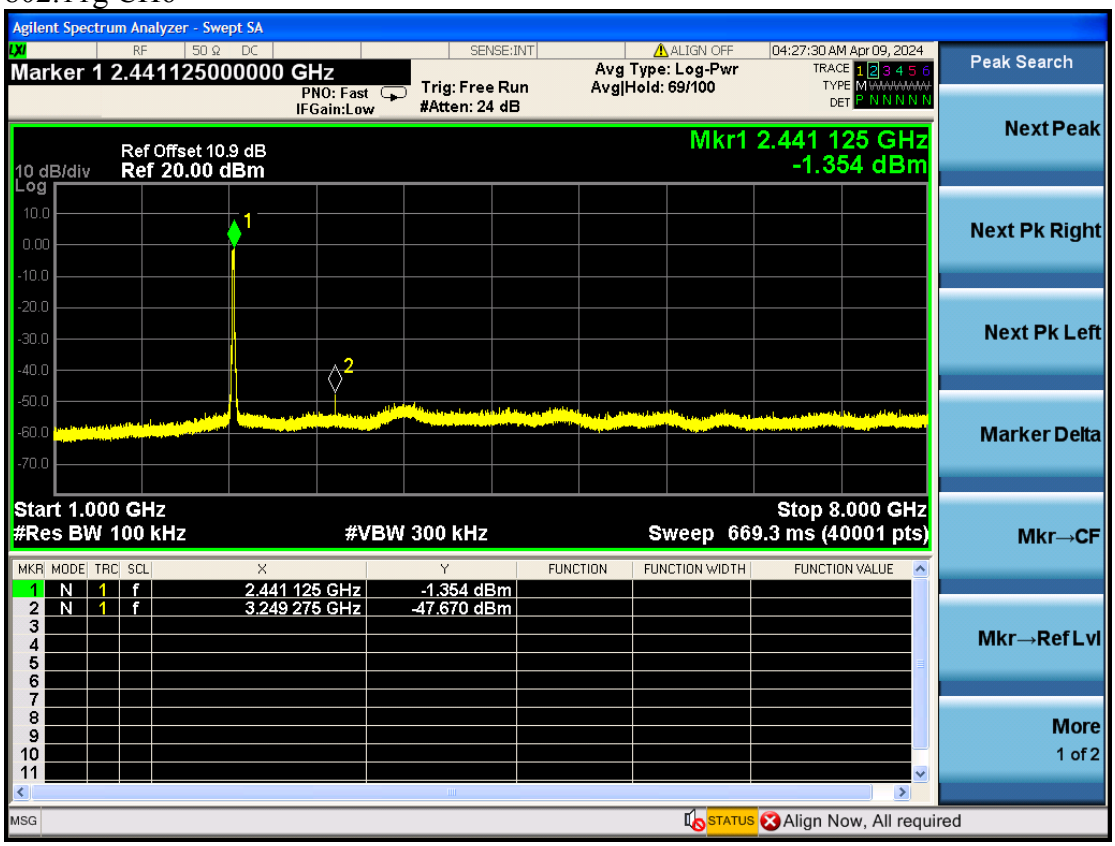

Agilent Spectrum Analyzer - Swept SA
Marker 1 810.728750000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 33/100
04:23:32 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 810.729 MHz
-54.255 dBm
-29.94 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 810.729 MHz -54.255 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

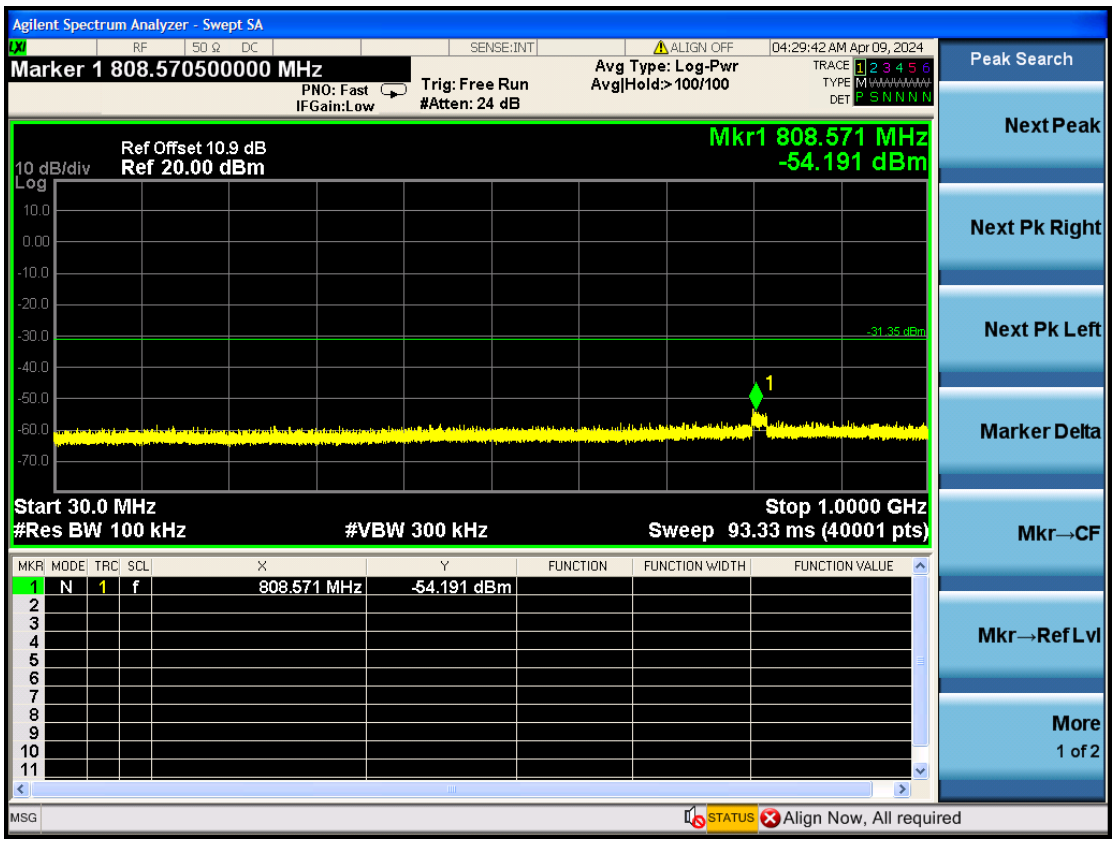

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.397125000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 52/100
04:24:35 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.397 125 GHz
-50.457 dBm
-29.94 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.397 125 GHz -50.457 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

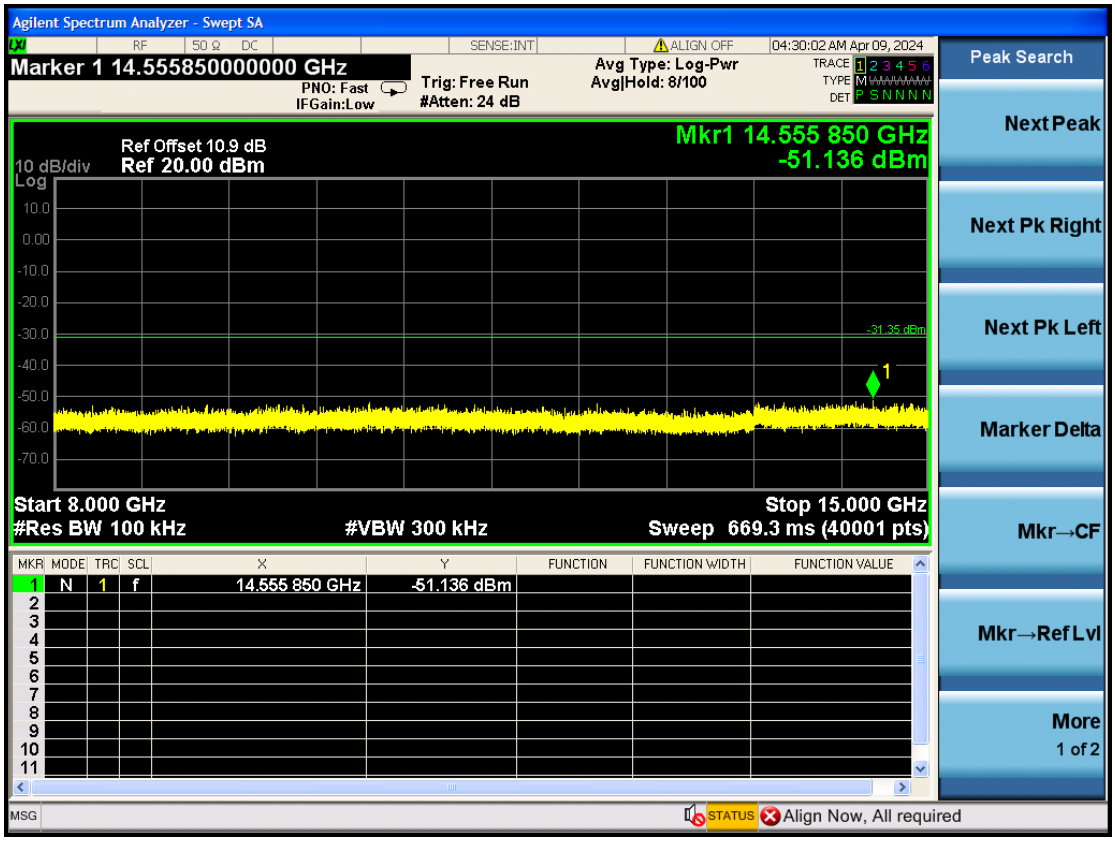

Agilent Spectrum Analyzer - Swept SA
Marker 1 23.977250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 34/100
04:25:31 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 23.977 25 GHz
-47.502 dBm
-29.94 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 23.977 25 GHz -47.502 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

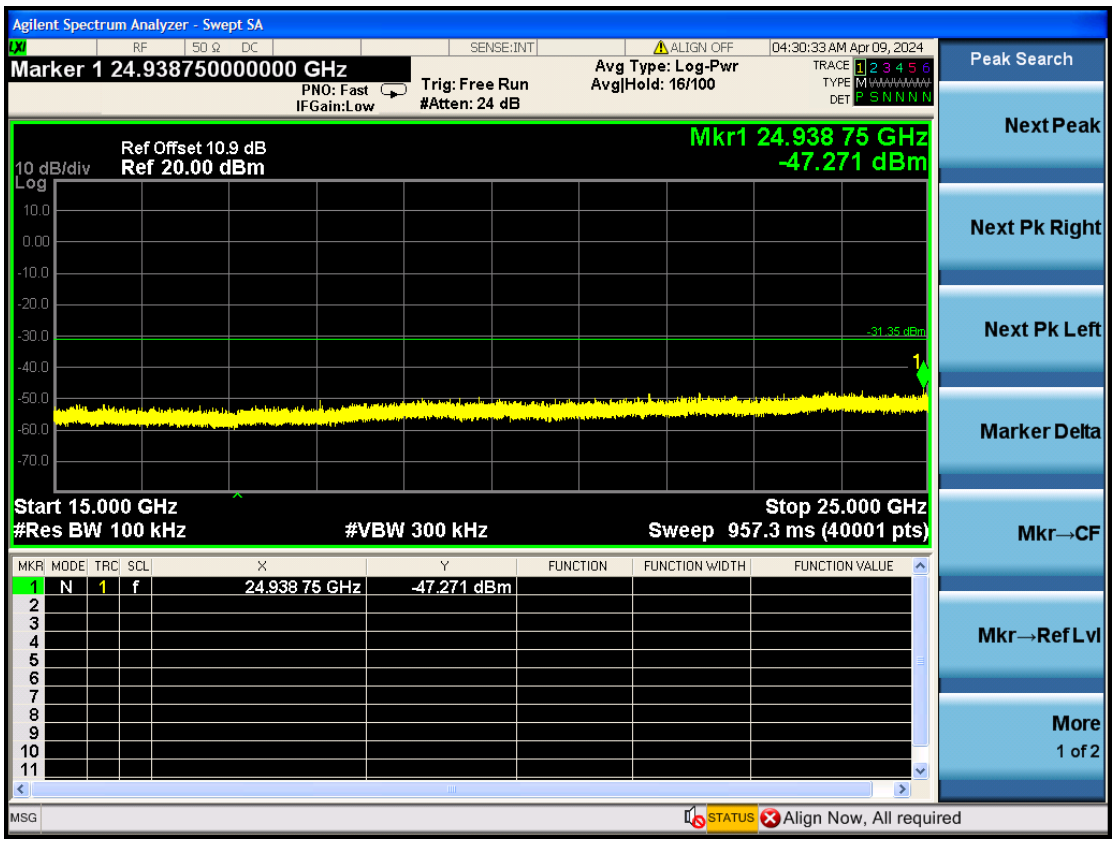

Agilent Spectrum Analyzer - Swept SA
Marker 2 2.400000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:26:05 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr2 2.400 000 0 GHz
-32.880 dBm
-29.94 dBm
Start 2.35000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.45000 GHz
Sweep 10.67 ms (40001 pts)
1 N 1 f 2.390 000 0 GHz -47.439 dBm
2 N 1 f 2.400 000 0 GHz -32.880 dBm
Marker
Select Marker 2
Normal
Delta
Fixed
Off
Properties
More 1 of 2
Align Now, All required

802.11g CH6

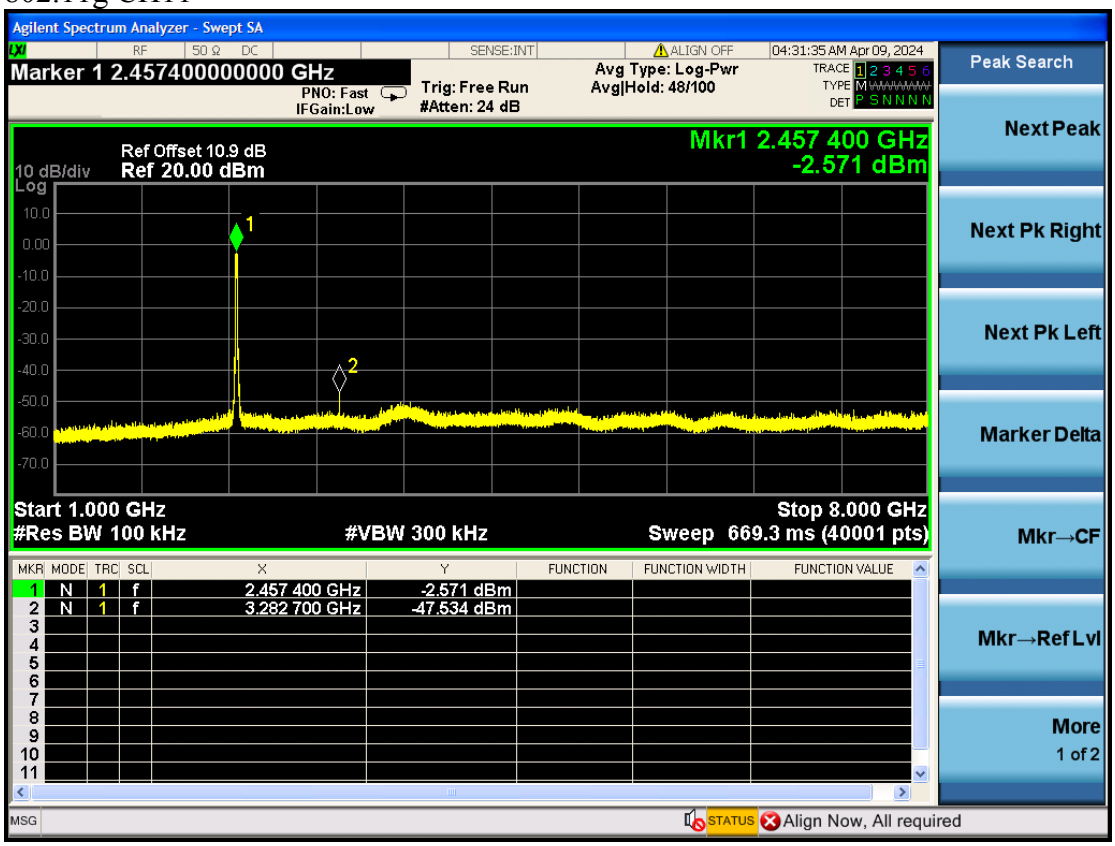

Agilent Spectrum Analyzer - Swept SA
Marker 1 2.441125000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 69/100
04:27:30 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.441 125 GHz
-1.354 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 8.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 2.441 125 GHz -1.354 dBm
2 N 1 f 3.249 275 GHz -47.670 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More 1 of 2
Align Now, All required

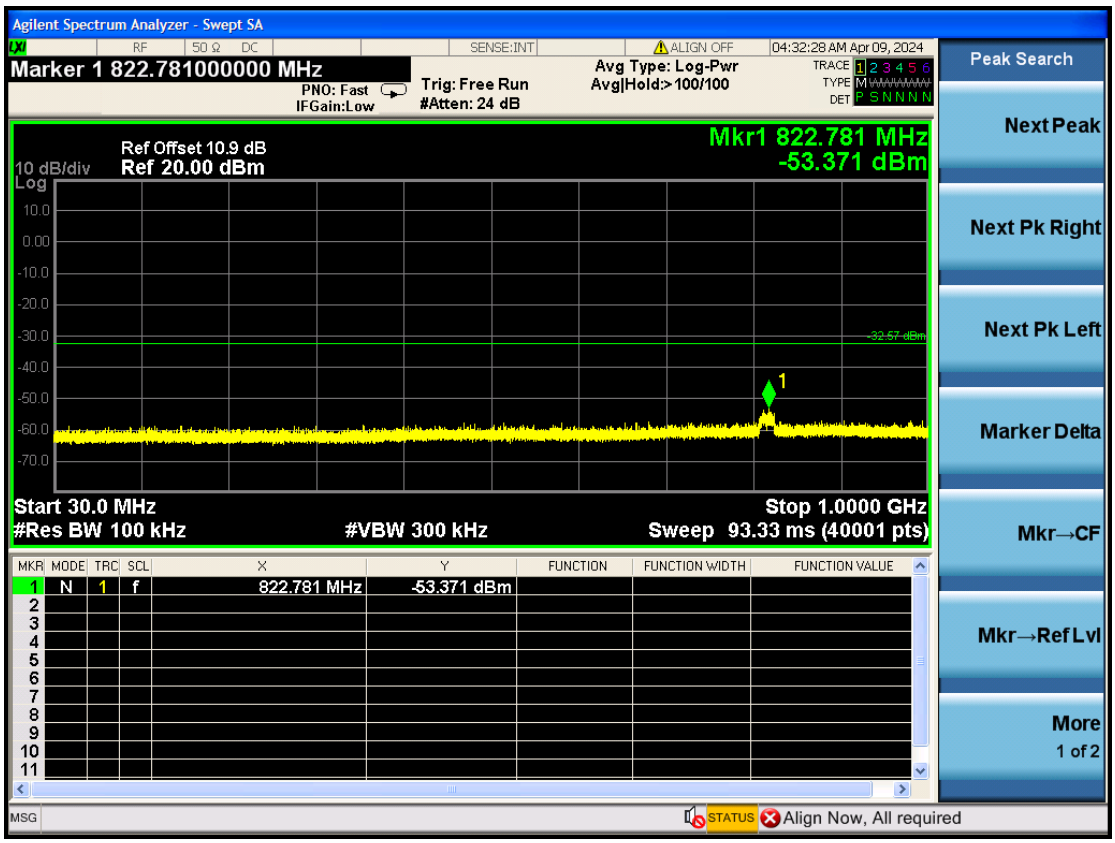

Agilent Spectrum Analyzer - Swept SA
Marker 1 808.570500000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:29:42 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 808.571 MHz
-54.191 dBm
-31.35 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 808.571 MHz -54.191 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

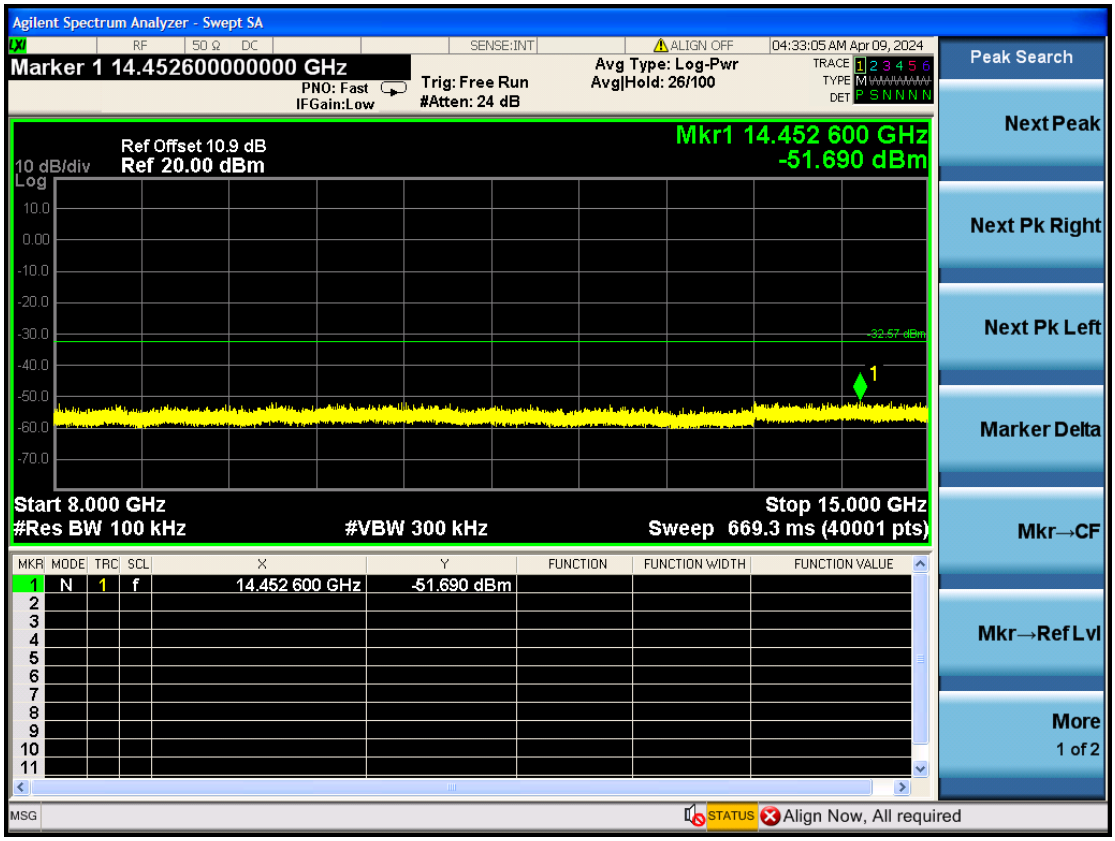

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.555850000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 8/100
04:30:02 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.555 850 GHz
-51.136 dBm
-31.35 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.555 850 GHz -51.136 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

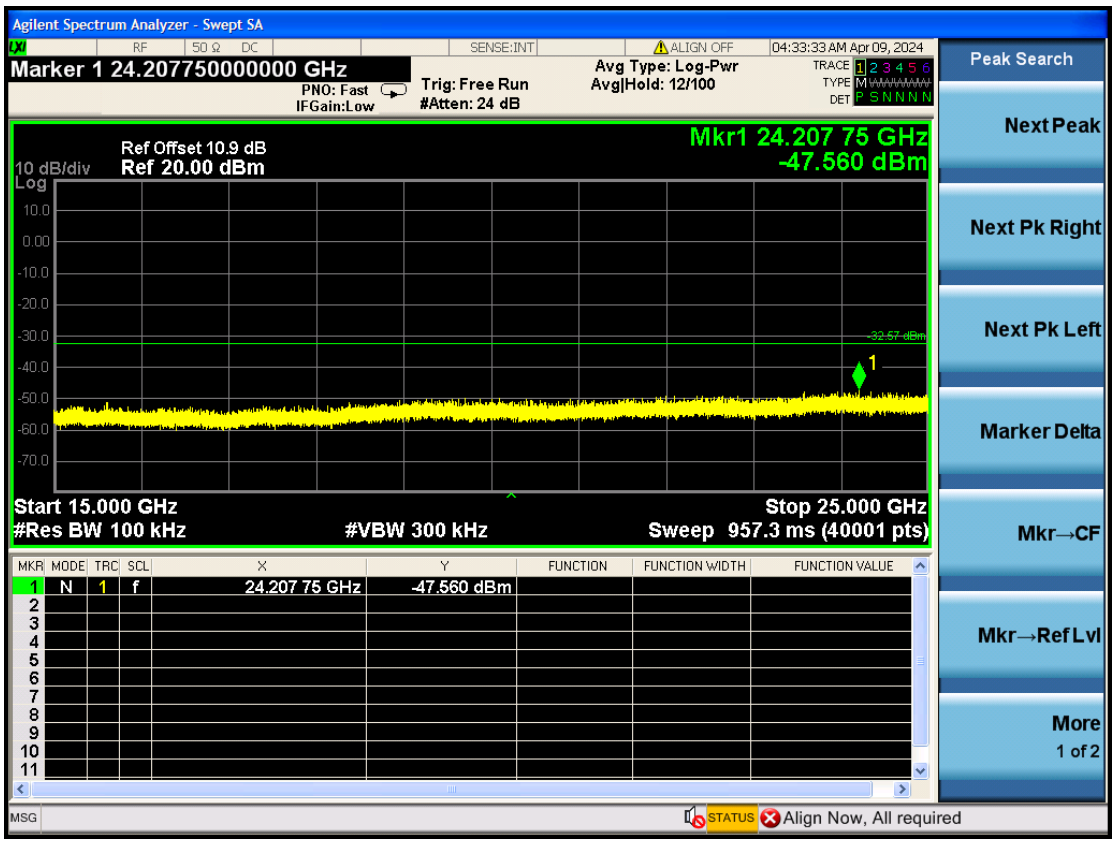

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.938750000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 16/100
04:30:33 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 24.938 75 GHz
-47.271 dBm
-31.35 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 24.938 75 GHz -47.271 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

802.11g CH11


Agilent Spectrum Analyzer - Swept SA
Marker 1 2.457400000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 48/100
04:31:35 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.457 400 GHz
-2.571 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 8.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 2.457 400 GHz -2.571 dBm
2 N 1 f 3.282 700 GHz -47.534 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

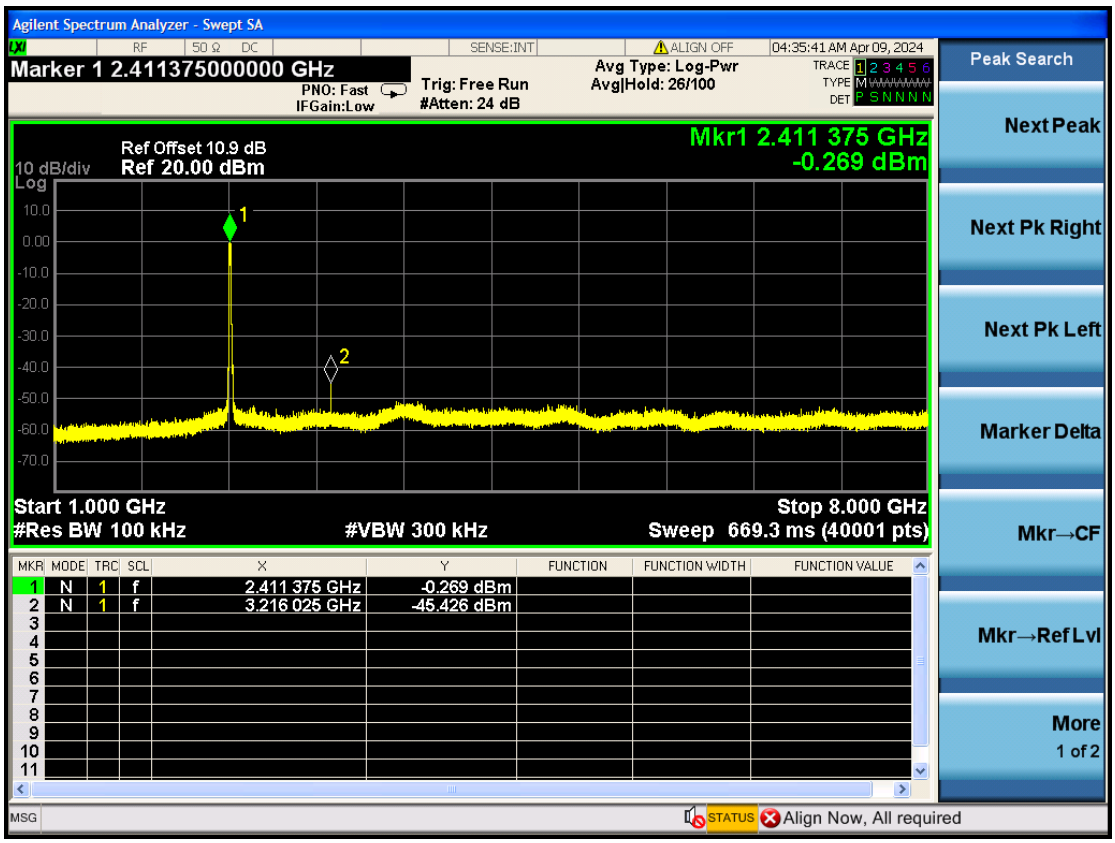

Agilent Spectrum Analyzer - Swept SA
Marker 1 822.781000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:32:28 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 822.781 MHz
-53.371 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 822.781 MHz -53.371 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

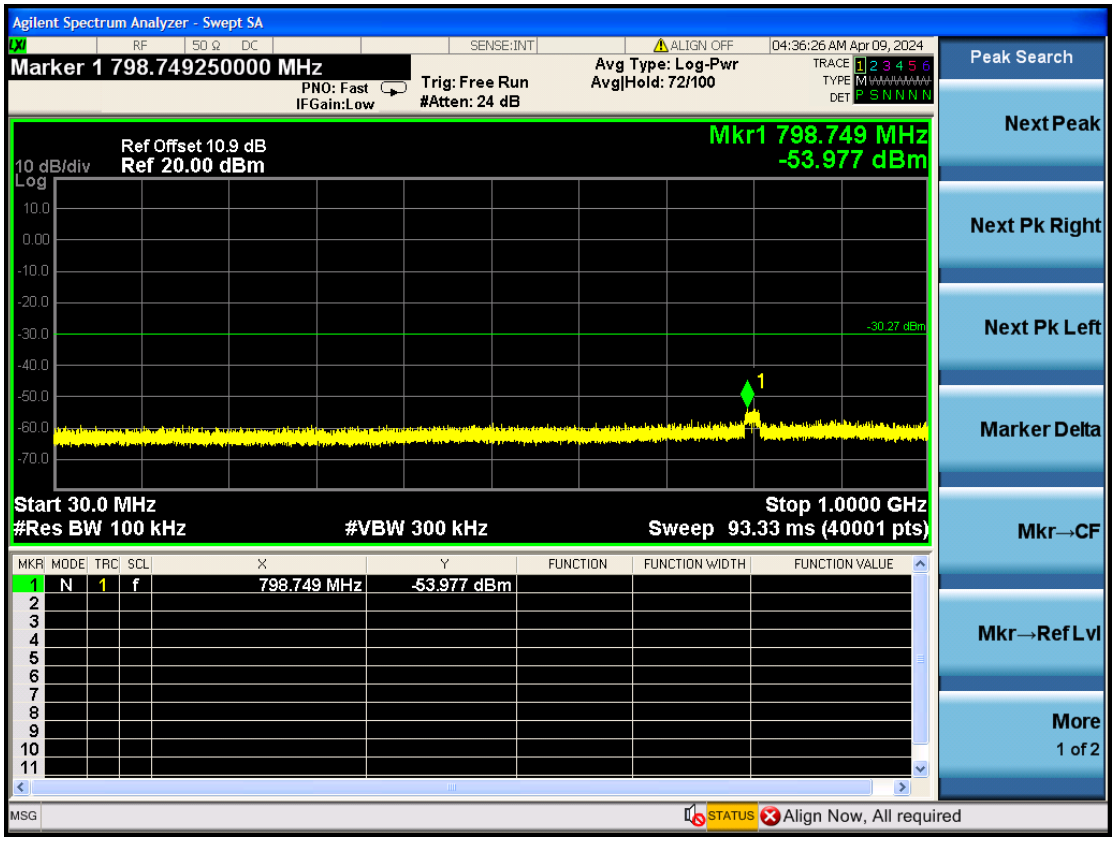

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.452600000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 26/100
04:33:05 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.452 600 GHz
-51.690 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.452 600 GHz -51.690 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

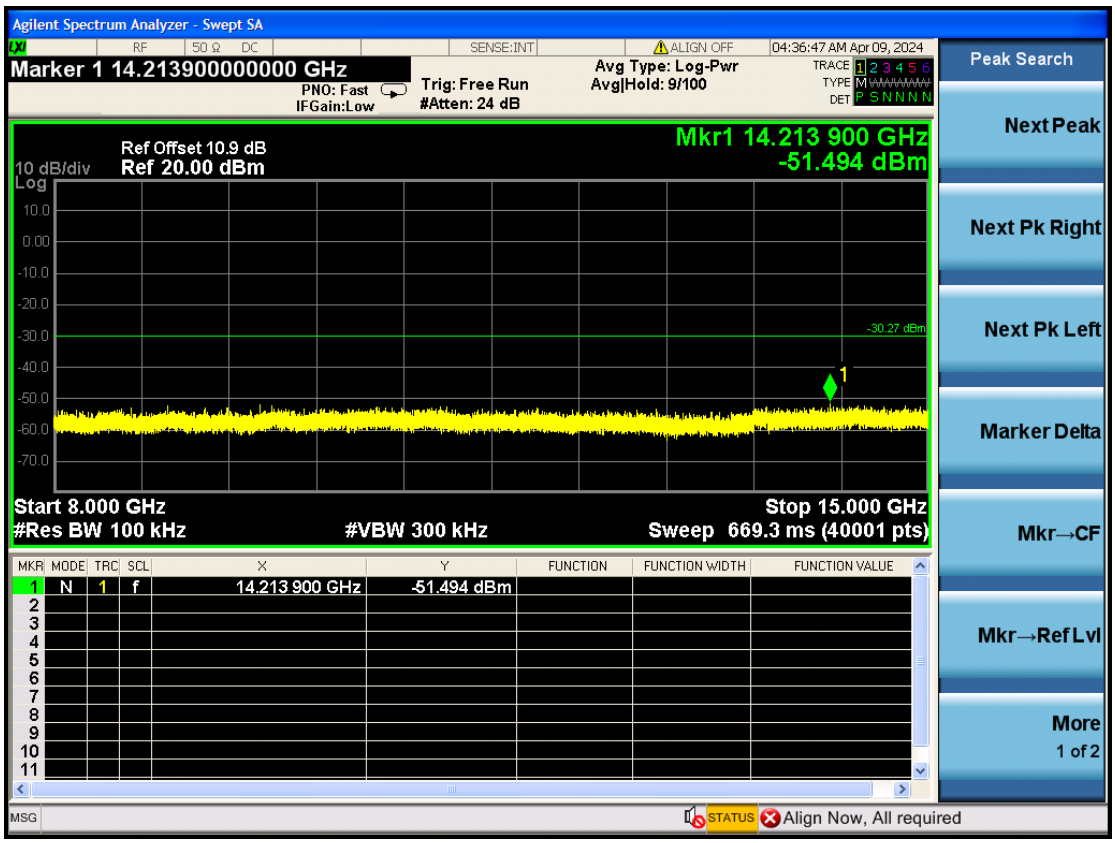

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.207750000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 12/100
04:33:33 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 24.207 75 GHz
-47.560 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 24.207 75 GHz -47.560 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

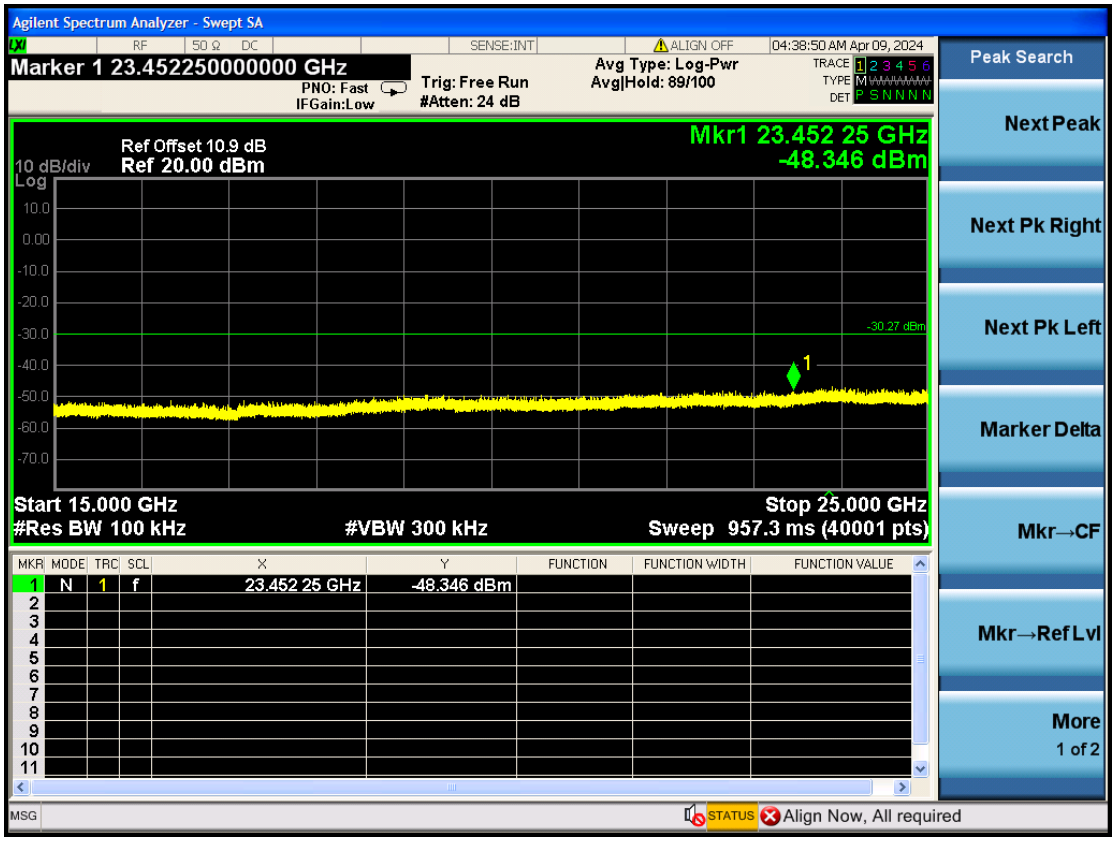
Agilent Spectrum Analyzer - Swept SA
Marker 1 2.483500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:34:01 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.483 500 0 GHz
-50.527 dBm
Start 2.43000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.53000 GHz
Sweep 10.67 ms (40001 pts)
1 N 1 f 2.483 500 0 GHz -50.527 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

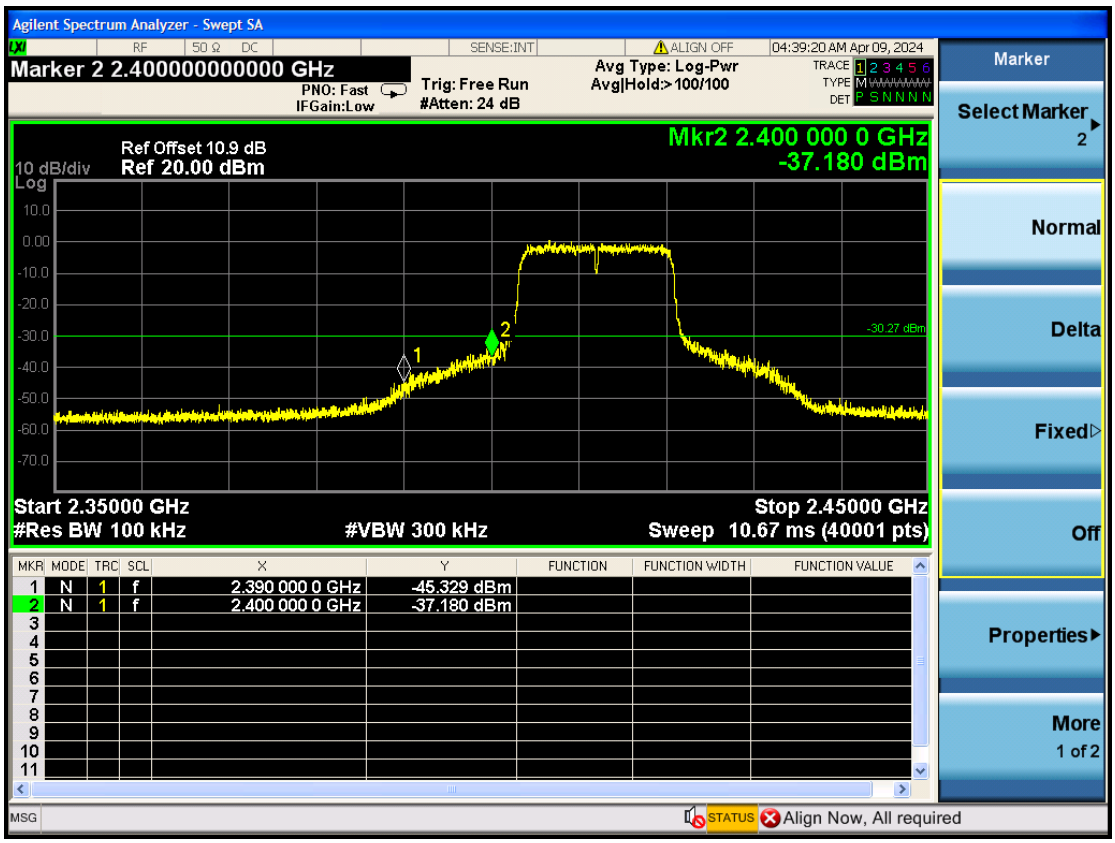
802.11nHT20 CH1



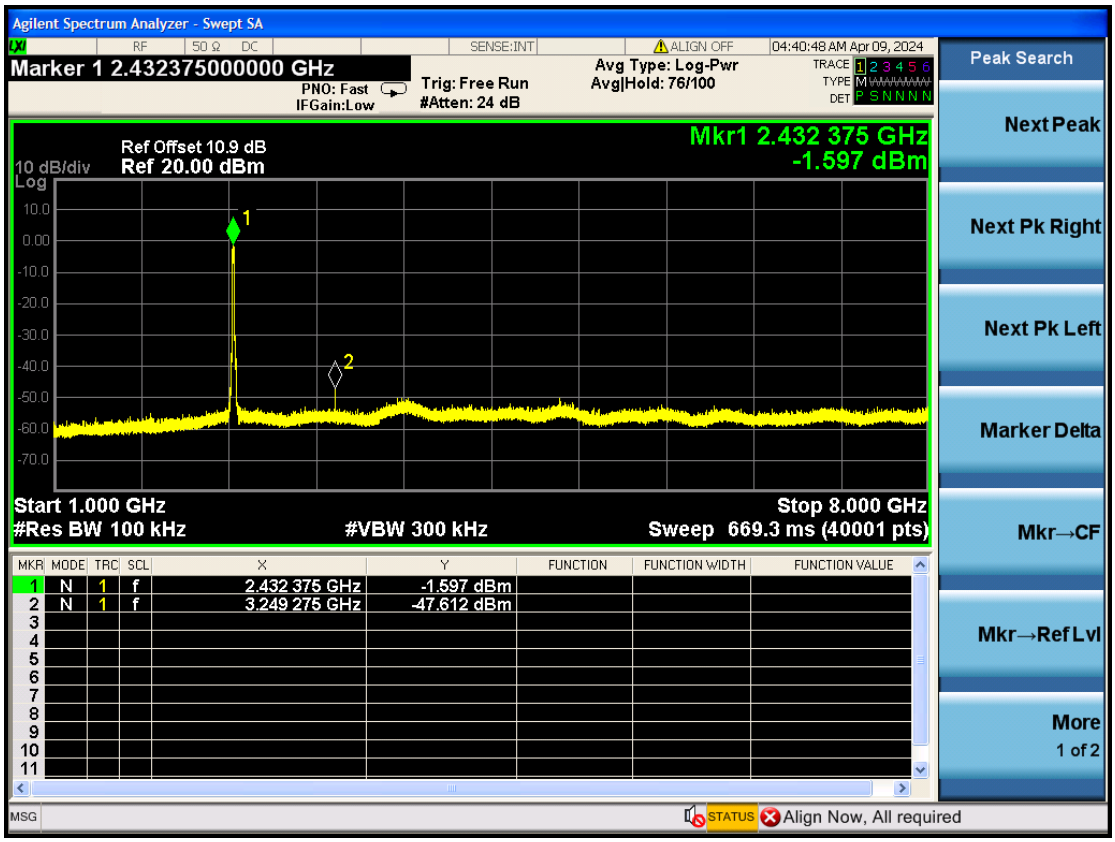


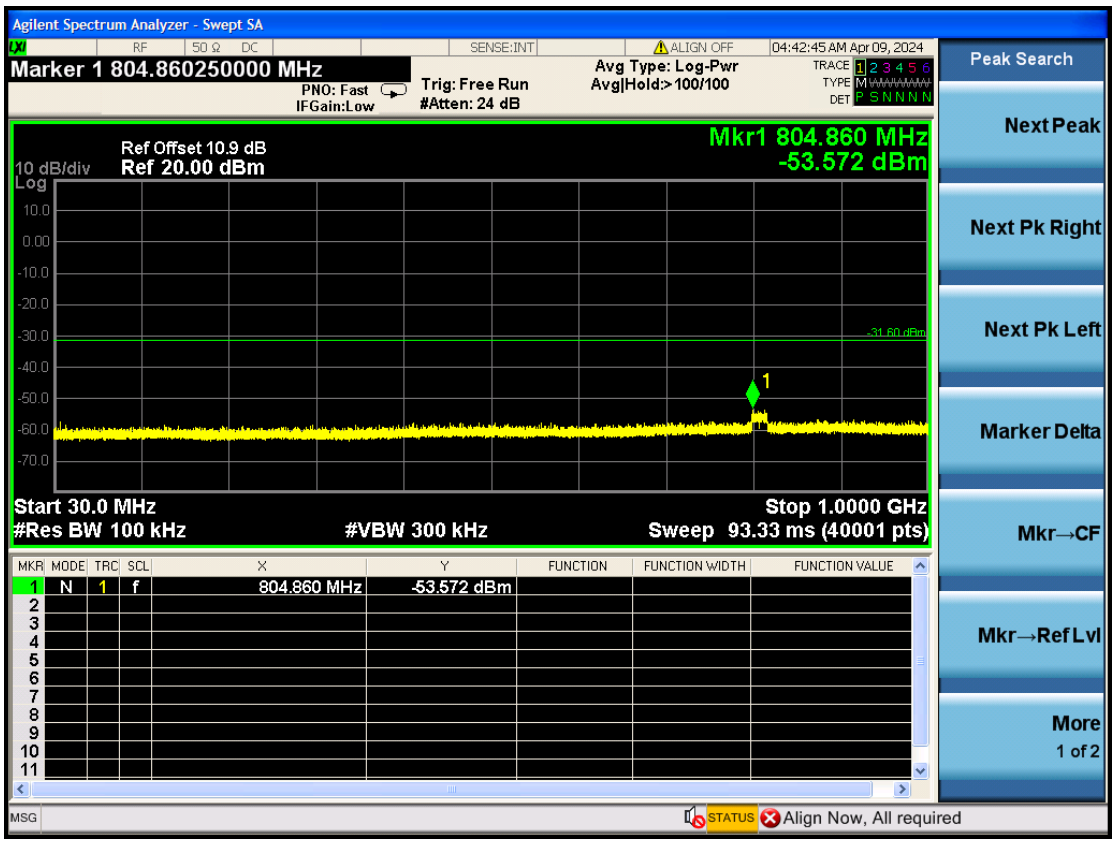

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.213900000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 9/100
04:36:47 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.213 900 GHz
-51.494 dBm
-30.27 dBm
Start 8.000 GHz
Stop 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.213 900 GHz -51.494 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

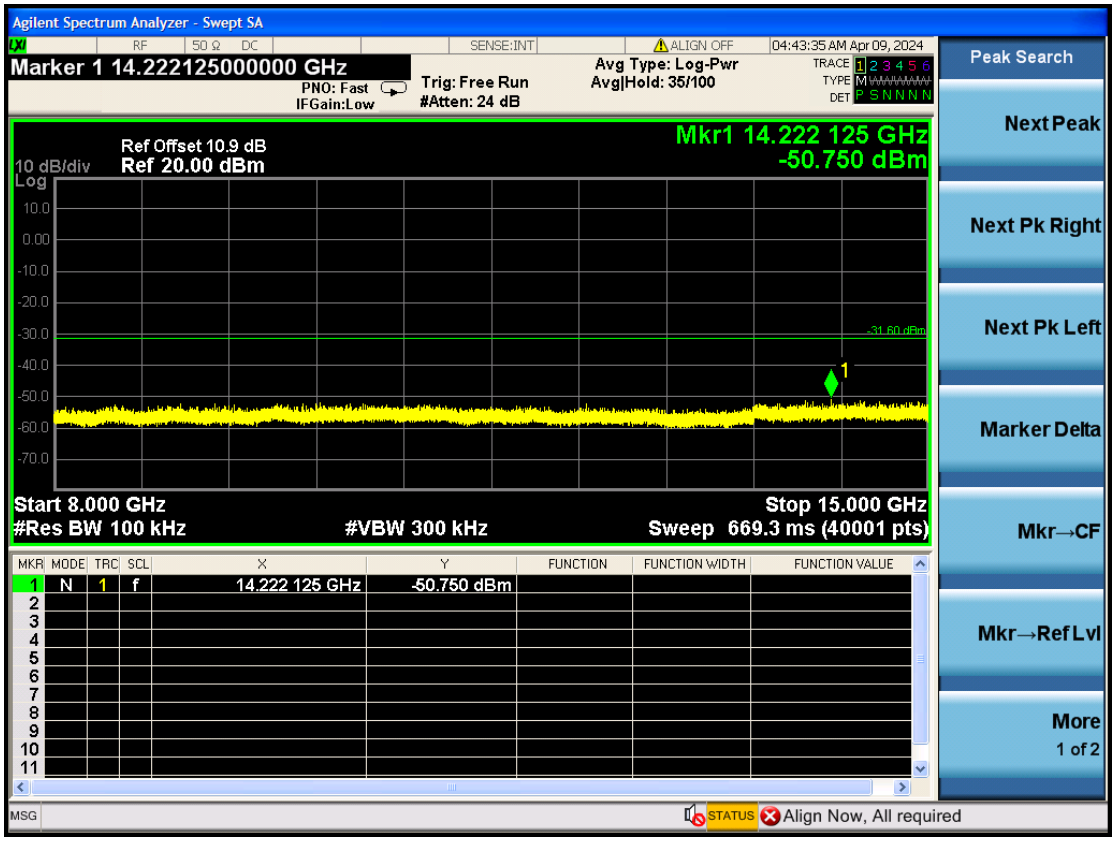

Agilent Spectrum Analyzer - Swept SA
Marker 1 23.452250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 89/100
04:38:50 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 23.452 25 GHz
-48.346 dBm
-30.27 dBm
Start 15.000 GHz
Stop 25.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 23.452 25 GHz -48.346 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

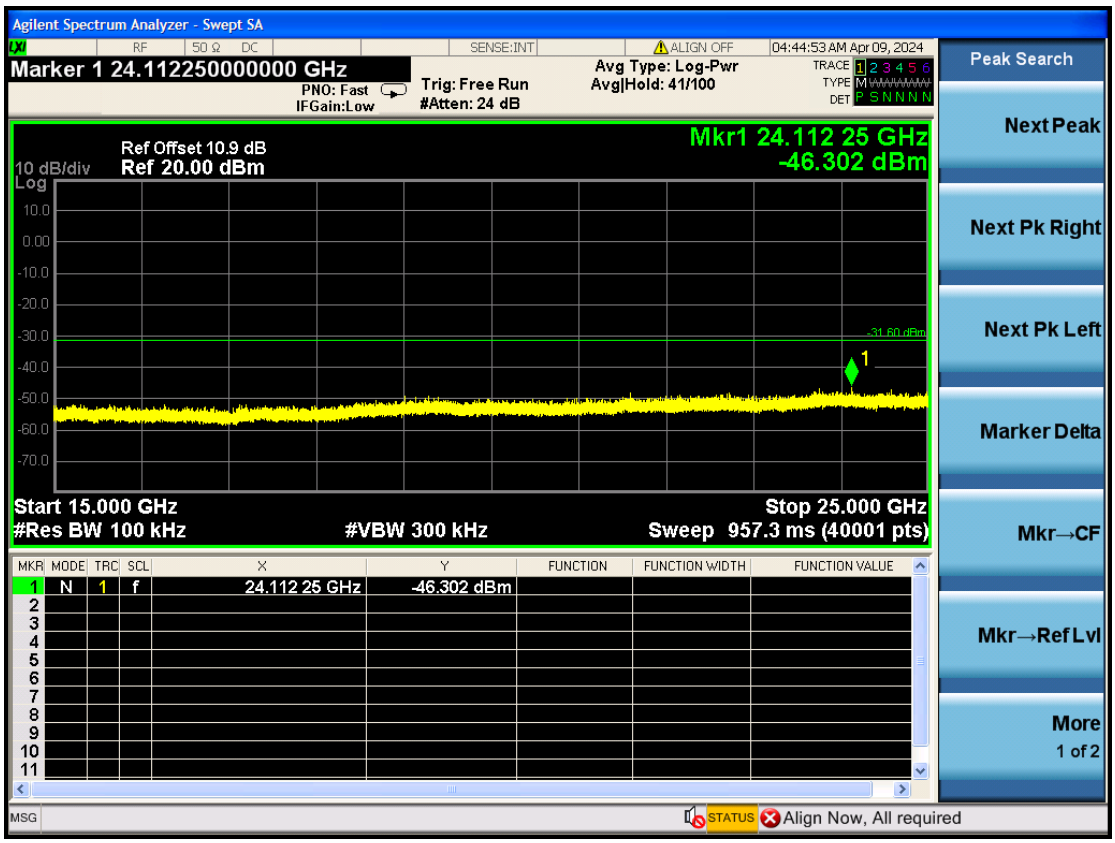


802.11nHT20 CH6

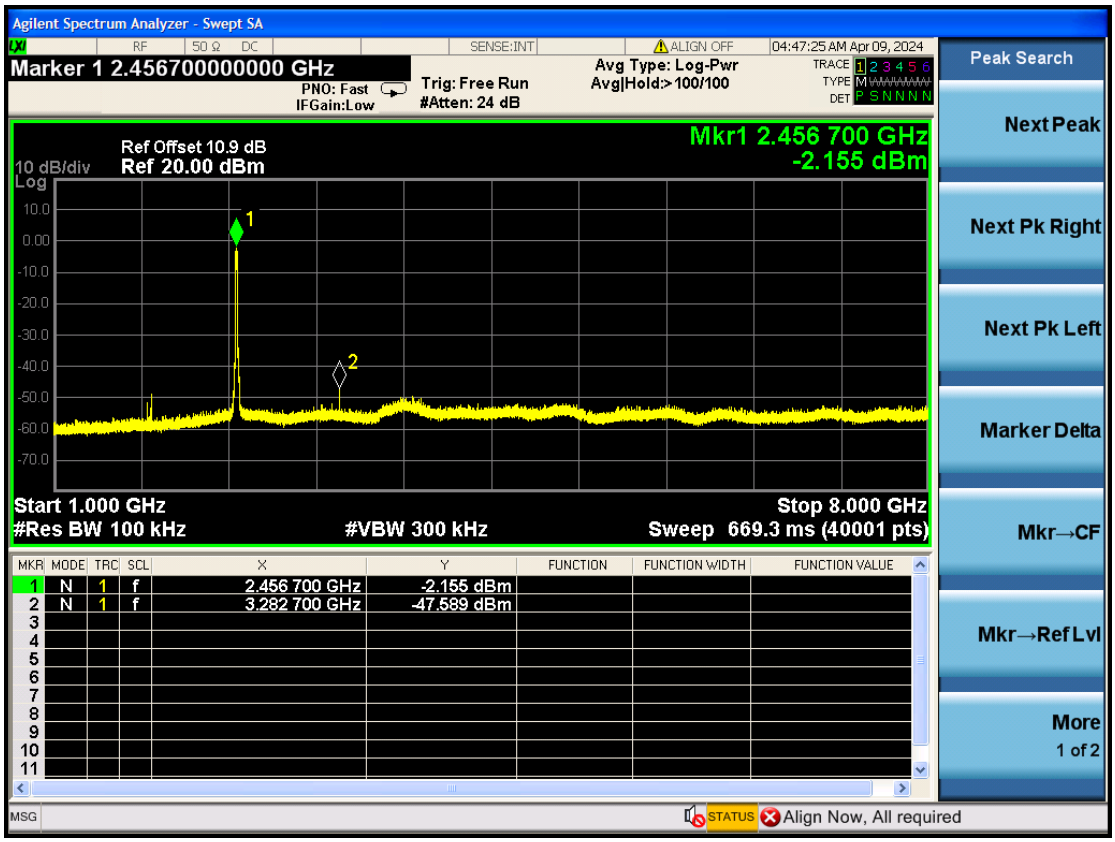


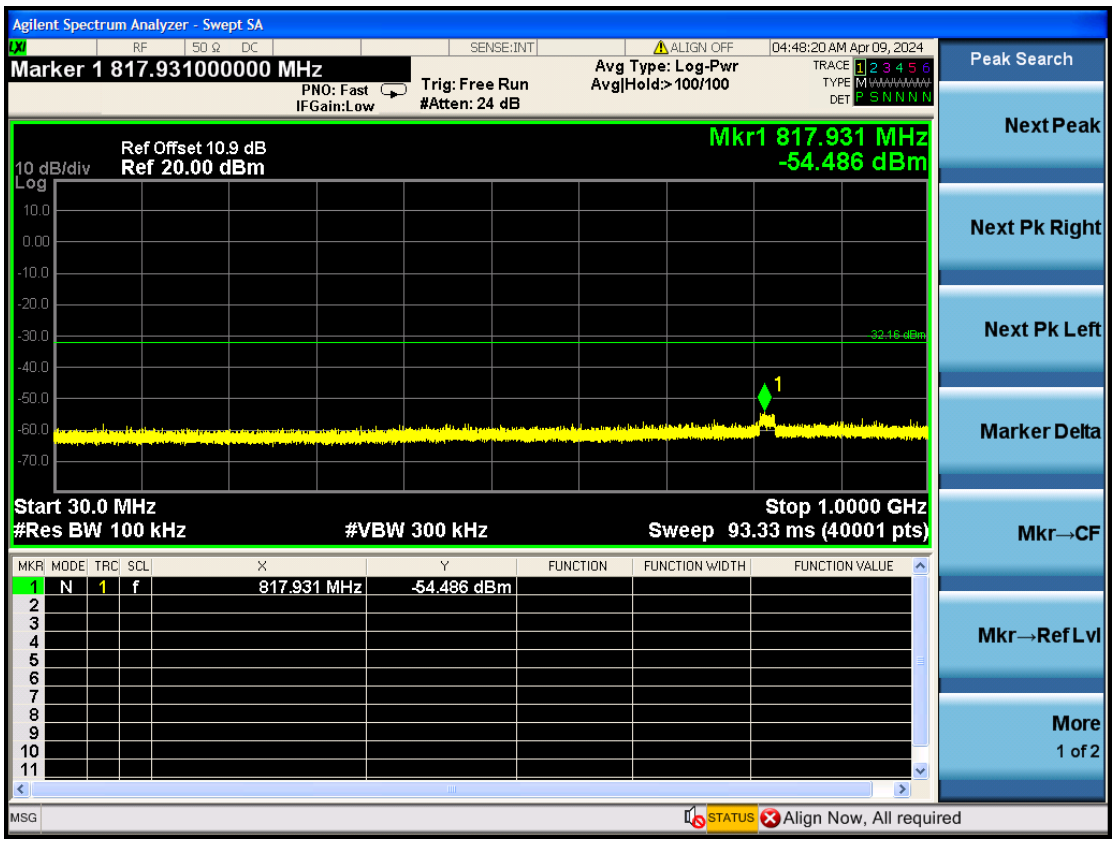

Agilent Spectrum Analyzer - Swept SA
Marker 1 804.860250000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:42:45 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 804.860 MHz
-53.572 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 804.860 MHz -53.572 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

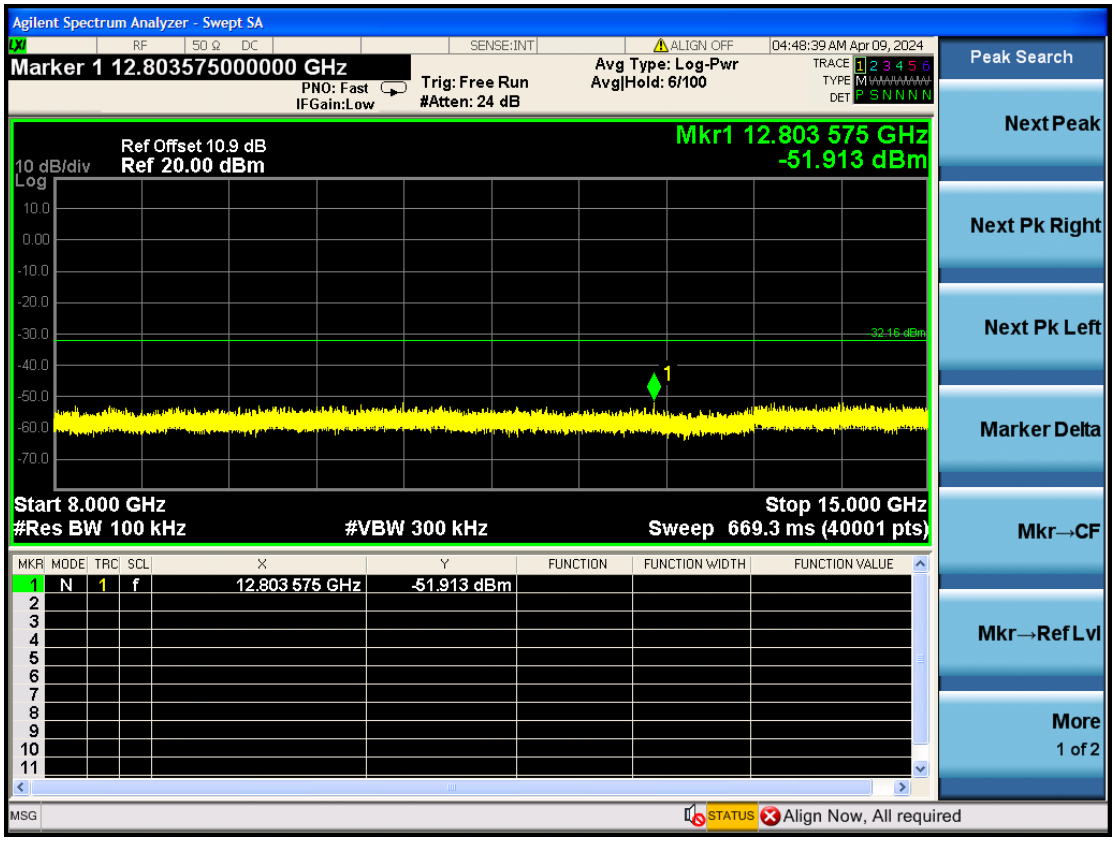

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.222125000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 35/100
04:43:35 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.222 125 GHz
-50.750 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.222 125 GHz -50.750 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

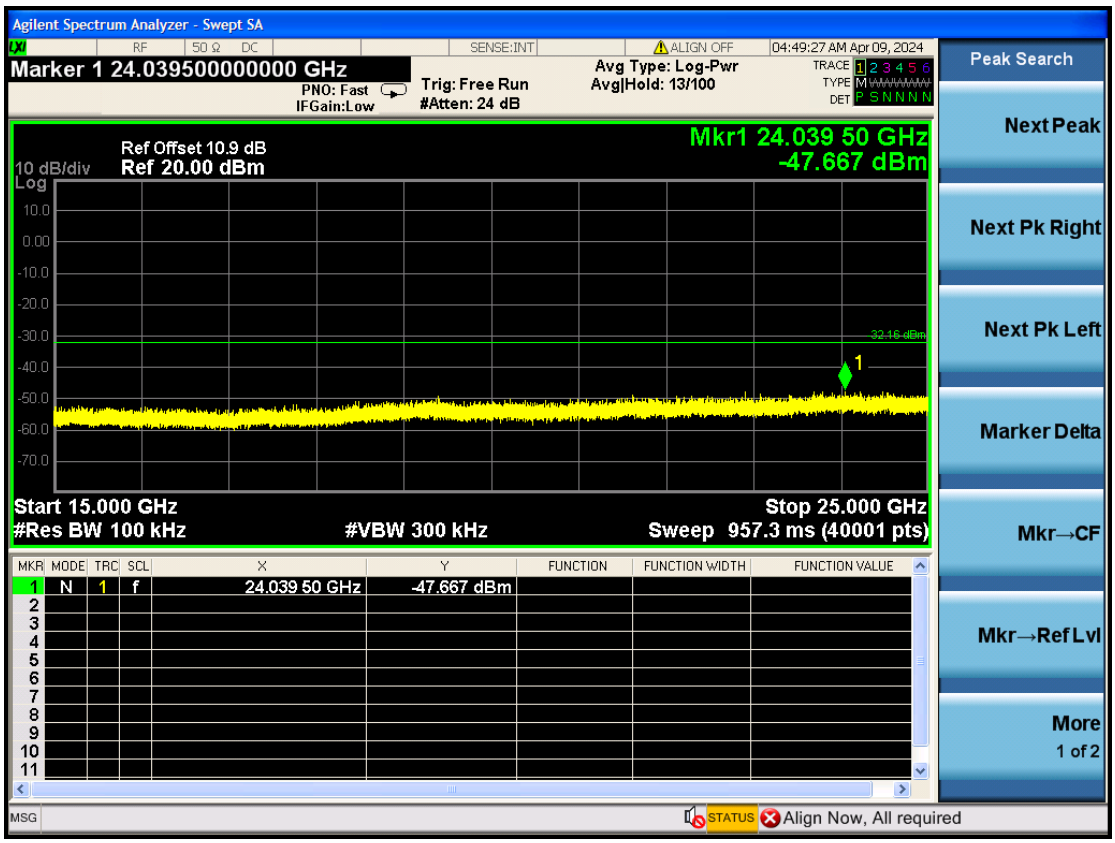


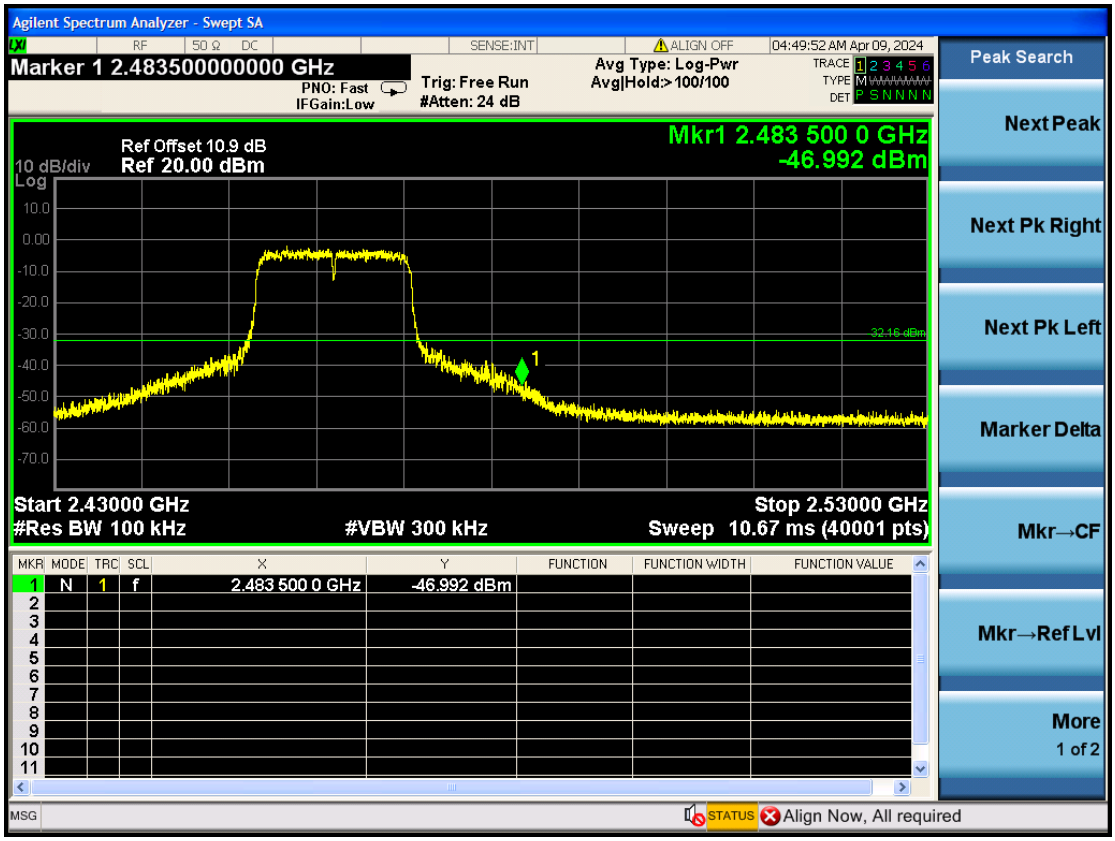
802.11nHT20 CH11



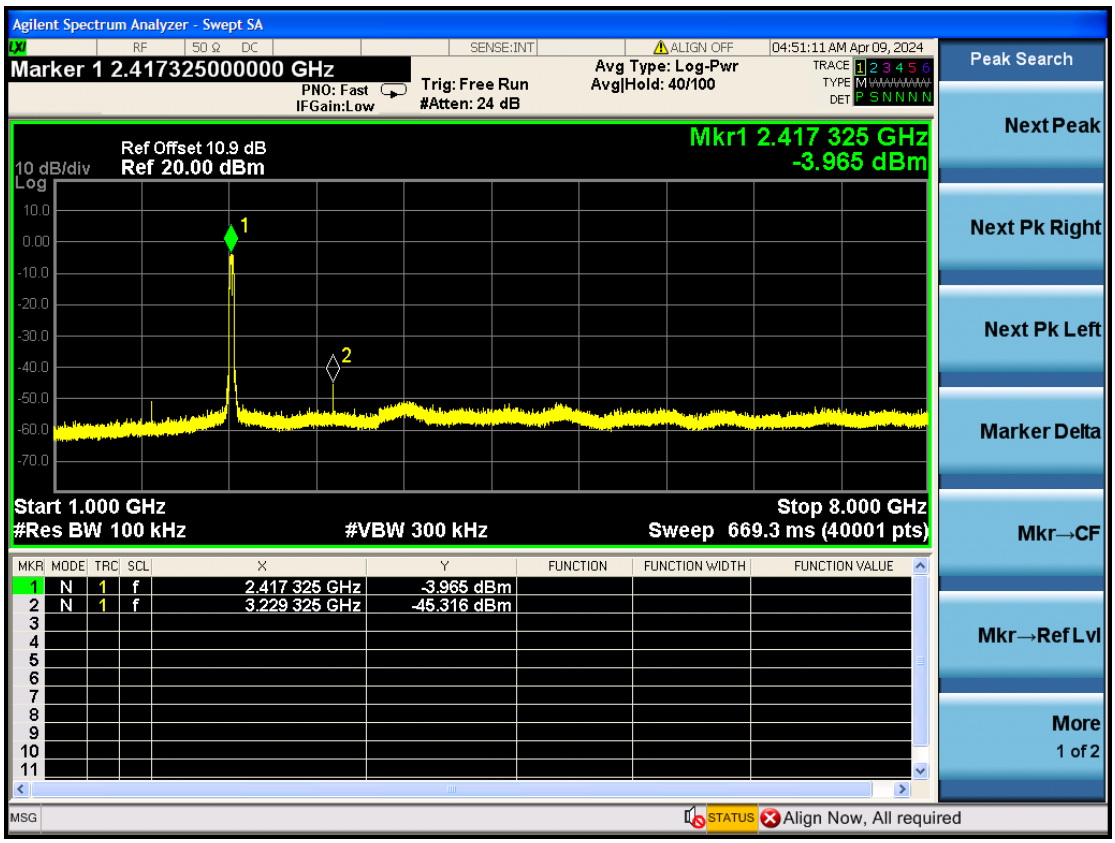

Agilent Spectrum Analyzer - Swept SA
Marker 1 817.931000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:48:20 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 817.931 MHz
-54.486 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 817.931 MHz -54.486 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

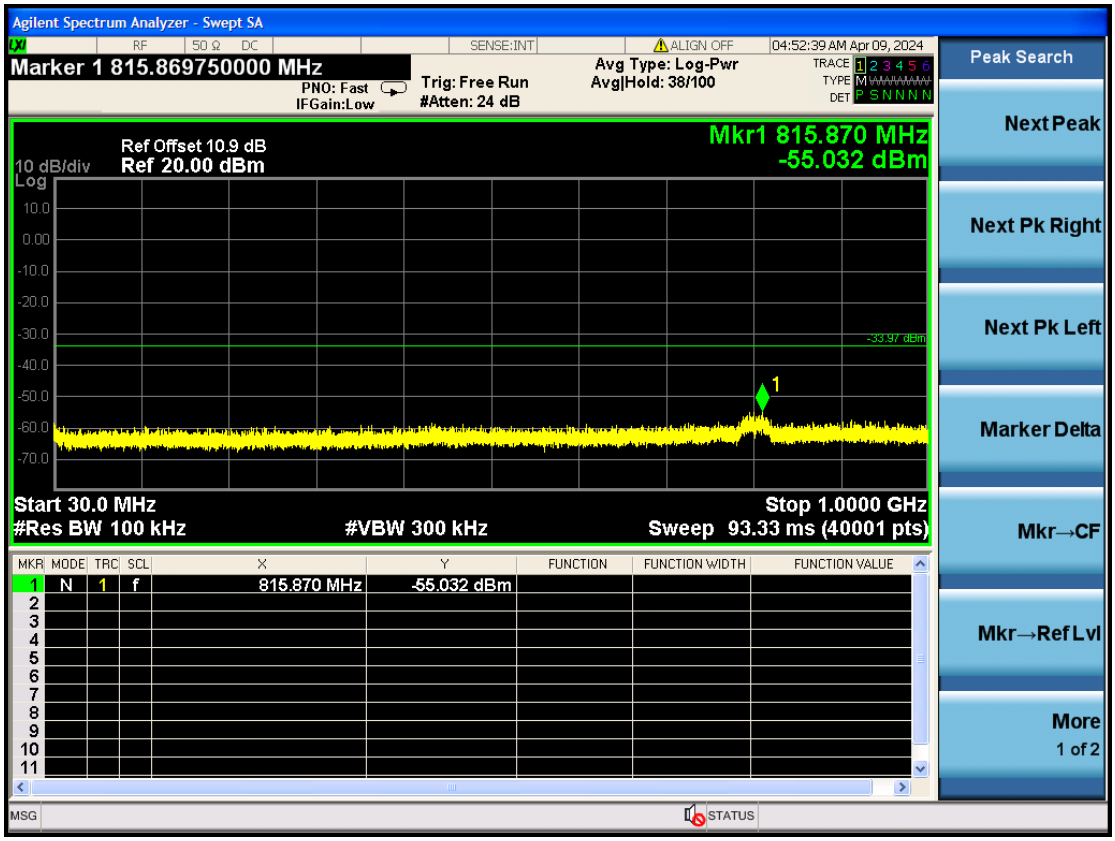

Agilent Spectrum Analyzer - Swept SA
Marker 1 12.803575000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 6/100
04:48:39 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 12.803 575 GHz
-51.913 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 12.803 575 GHz -51.913 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required

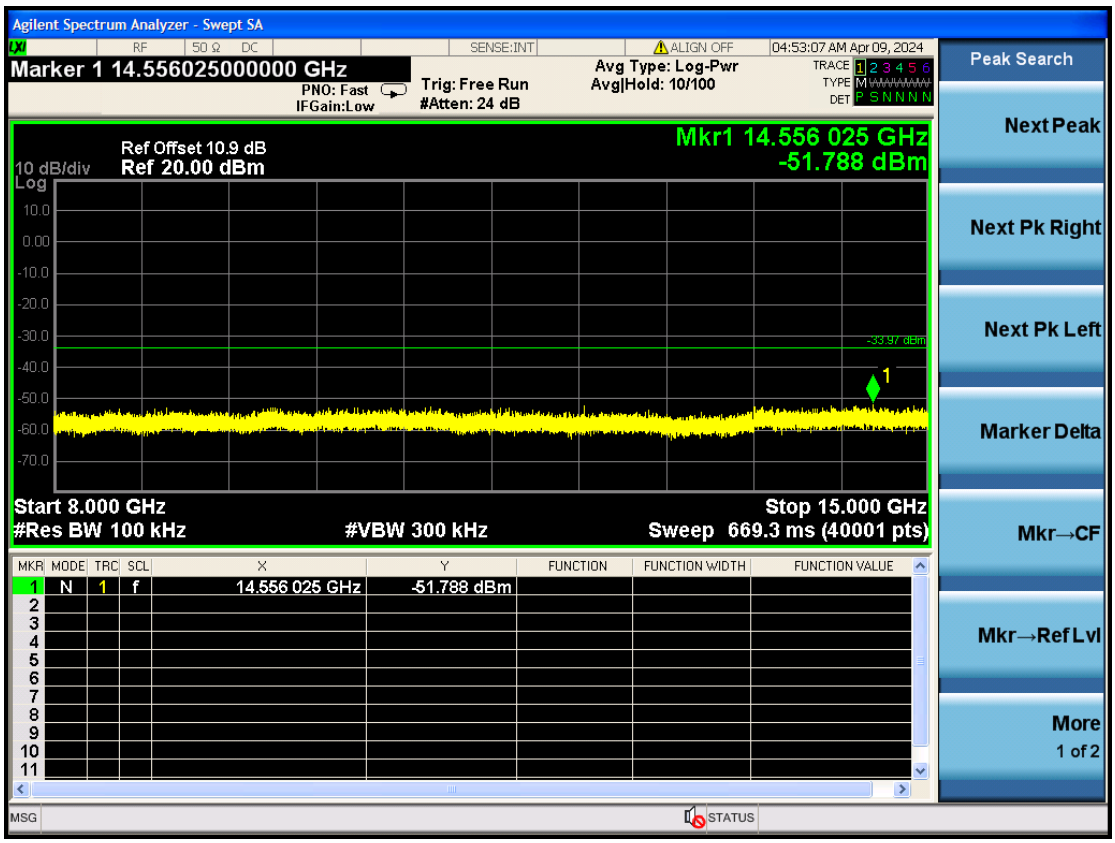

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.039500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 13/100
04:49:27 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 24.039 50 GHz
-47.667 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 24.039 50 GHz -47.667 dBm
Align Now, All required
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

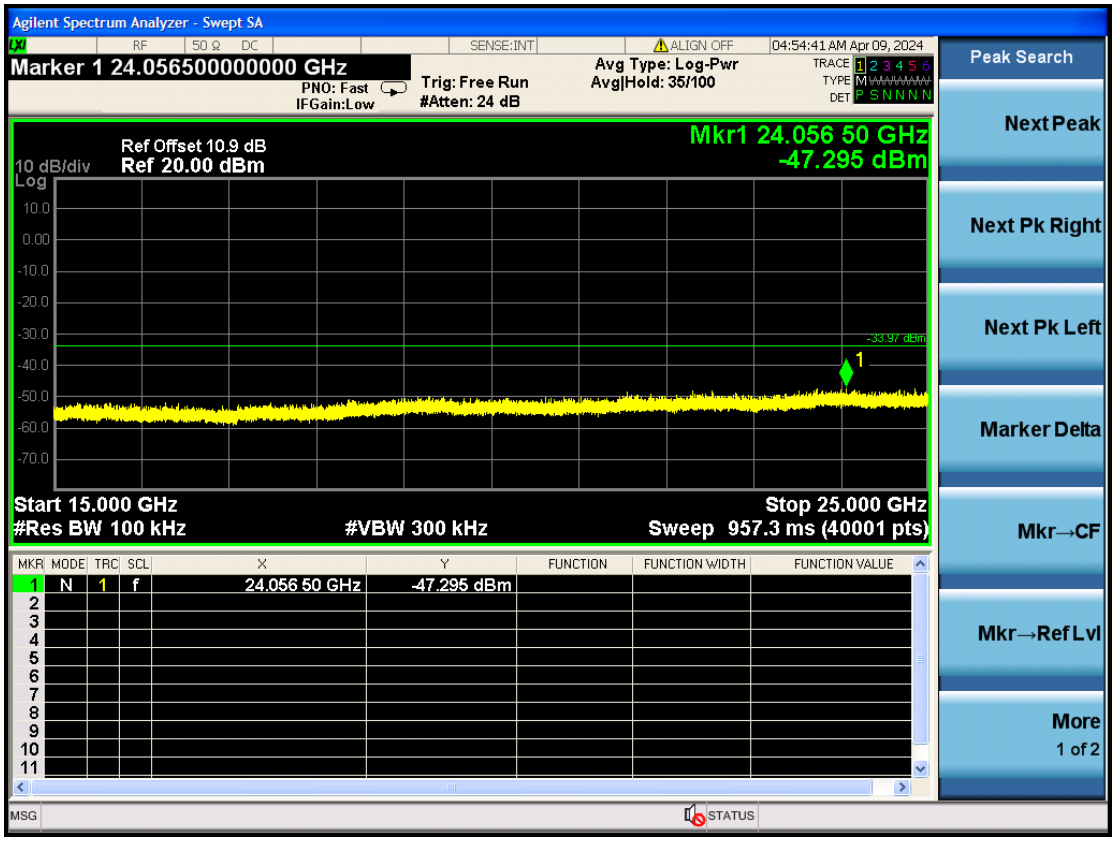

Agilent Spectrum Analyzer - Swept SA
Marker 1 2.483500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:49:52 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.483 500 0 GHz
-46.992 dBm
Start 2.43000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.53000 GHz
Sweep 10.67 ms (40001 pts)
1 N 1 f 2.483 500 0 GHz -46.992 dBm
Align Now, All required
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

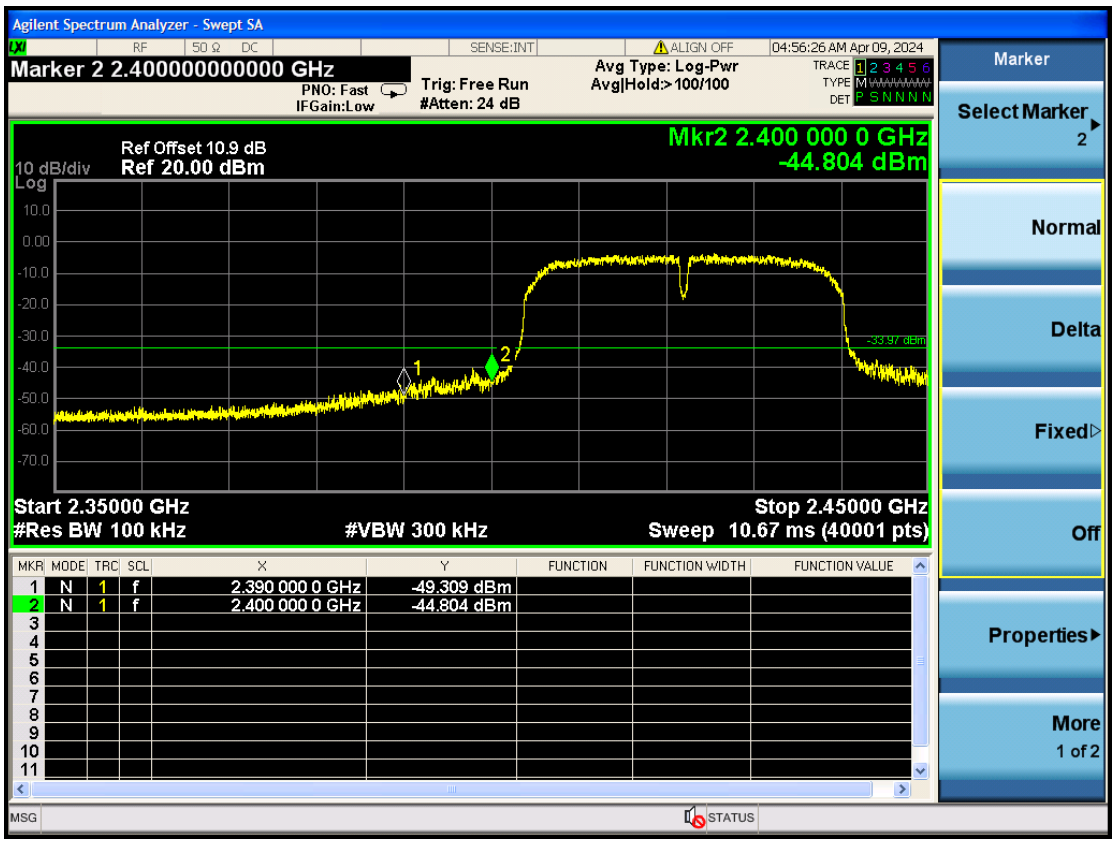
802.11nHT40 CH3



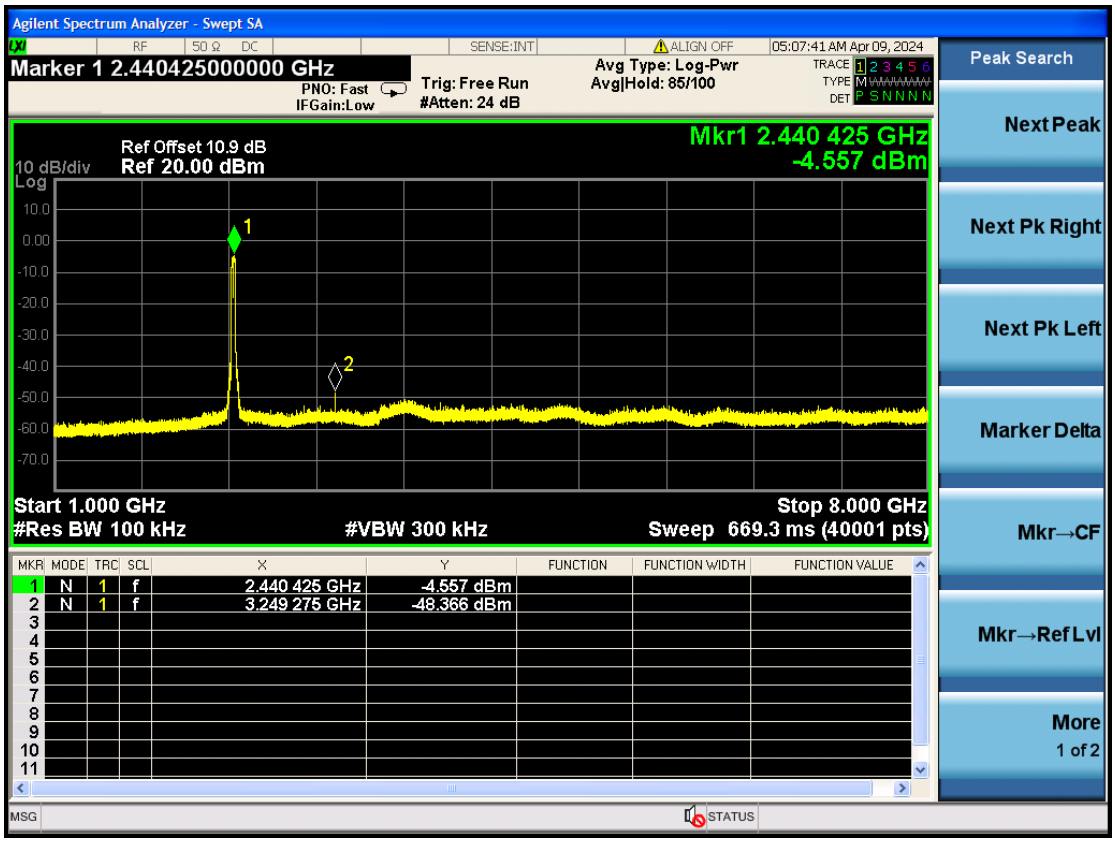


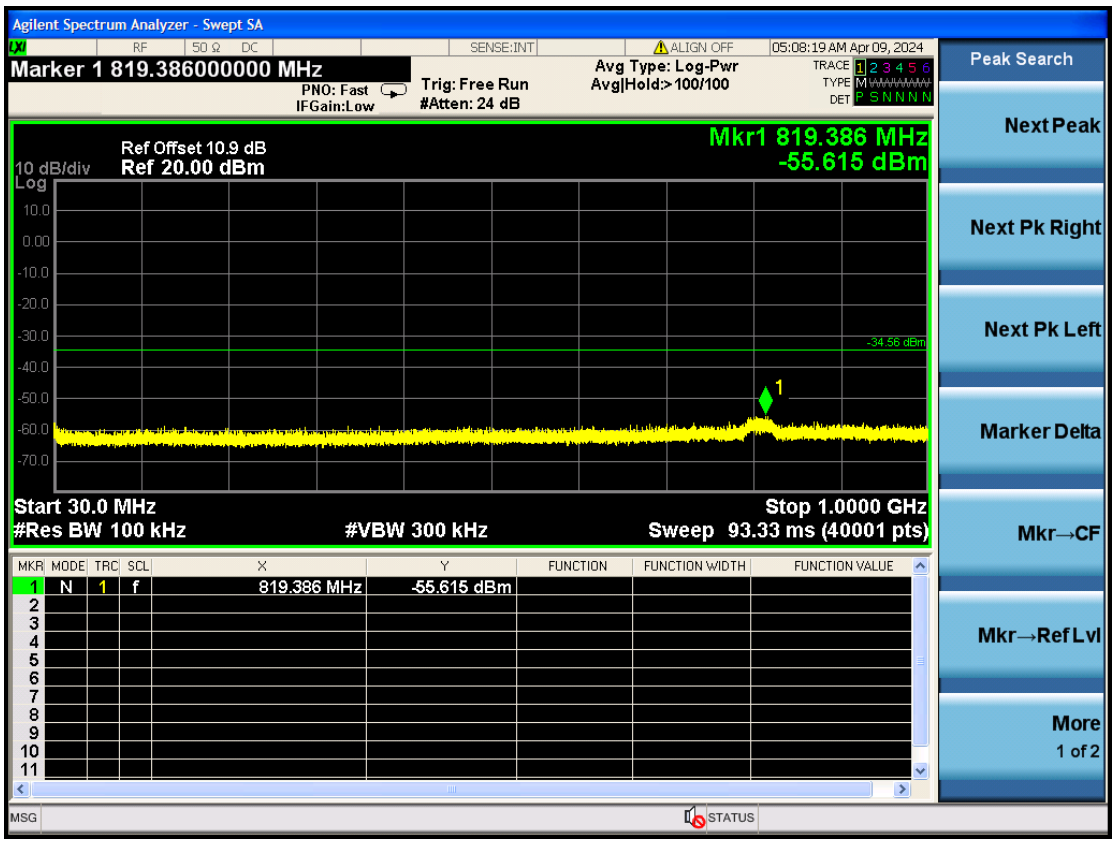

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.556025000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 10/100
04:53:07 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.556 025 GHz
-51.788 dBm
-33.97 dBm
Start 8.000 GHz
Stop 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.556 025 GHz -51.788 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

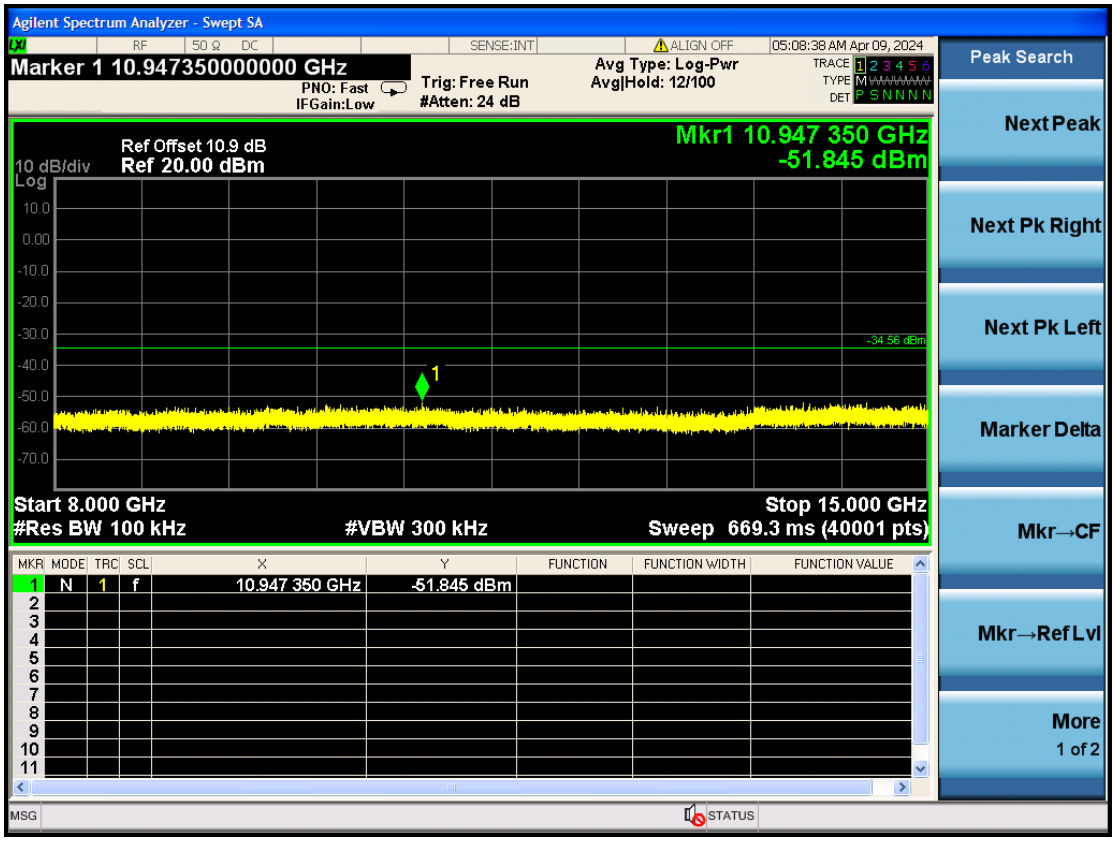

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.056500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 35/100
04:54:41 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 24.056 50 GHz
-47.295 dBm
-33.97 dBm
Start 15.000 GHz
Stop 25.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 24.056 50 GHz -47.295 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

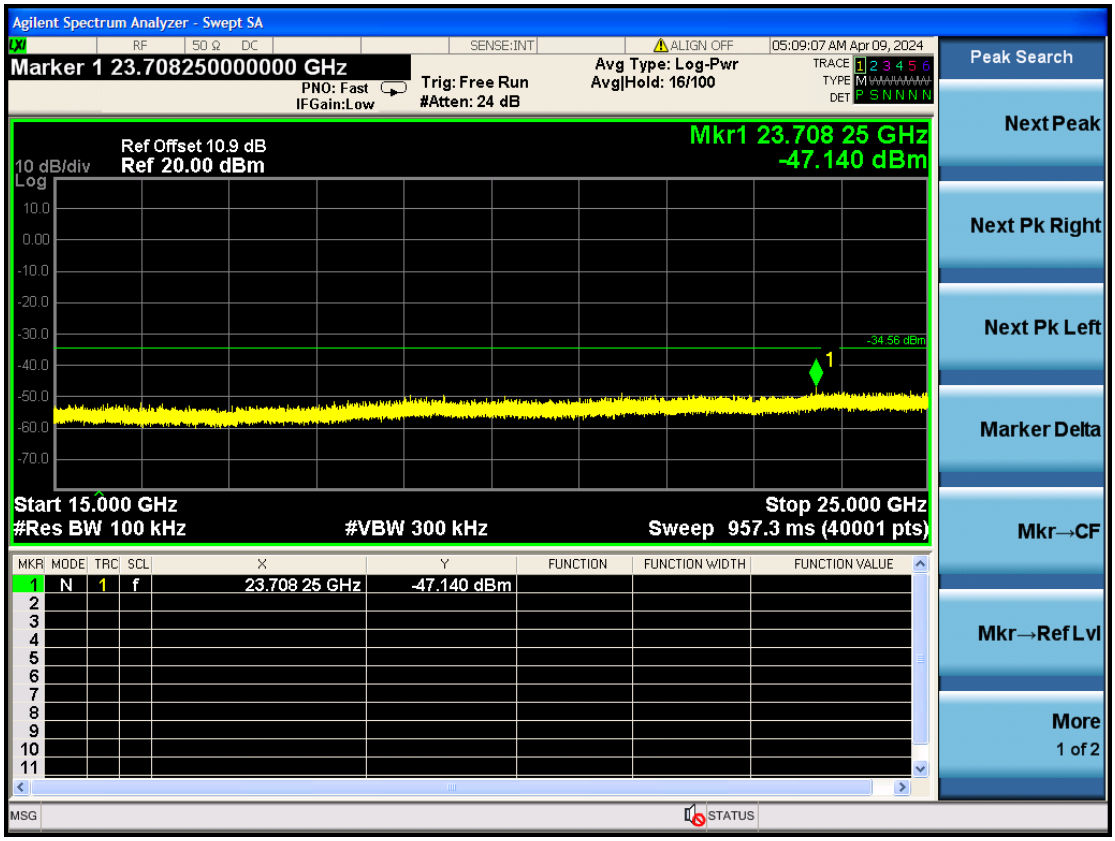


802.11nHT40 CH6




Agilent Spectrum Analyzer - Swept SA
Marker 1 819.386000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
05:08:19 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 819.386 MHz
-55.615 dBm
-34.56 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 819.386 MHz -55.615 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2


Agilent Spectrum Analyzer - Swept SA
Marker 1 10.947350000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 12/100
05:08:38 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 10.947 350 GHz
-51.845 dBm
-34.56 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 10.947 350 GHz -51.845 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2



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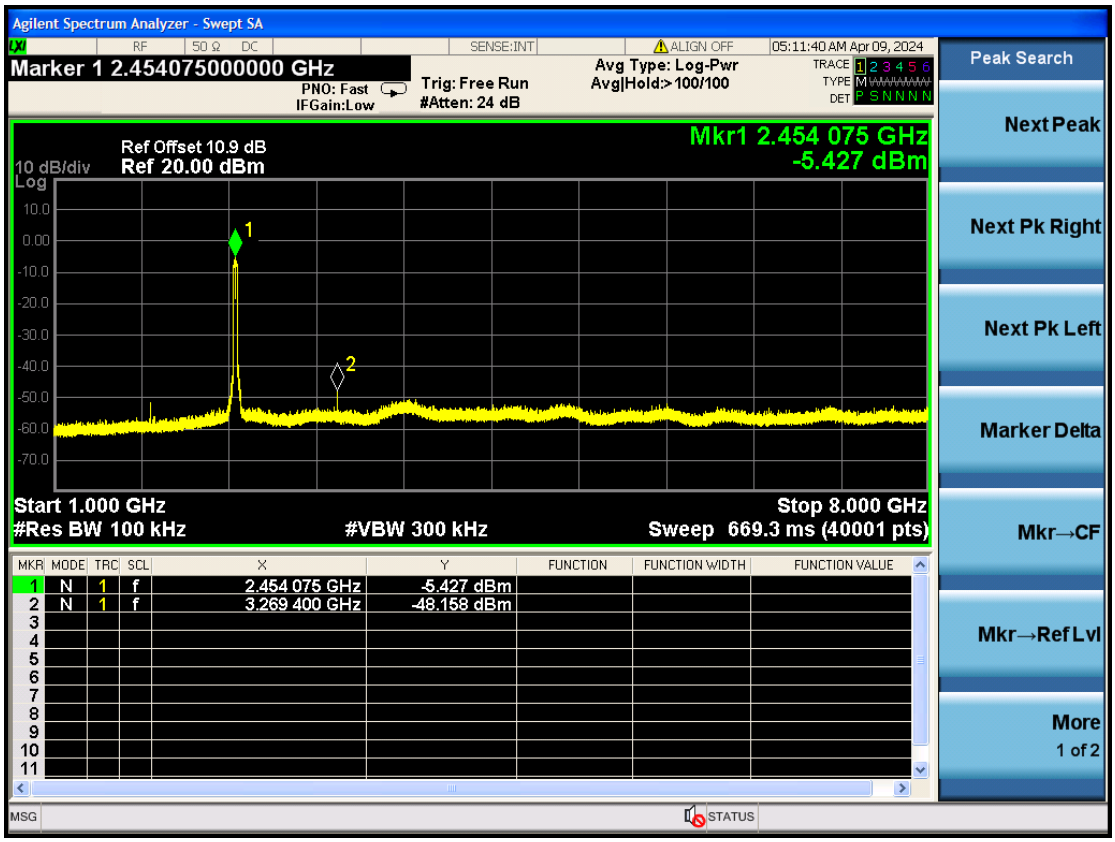
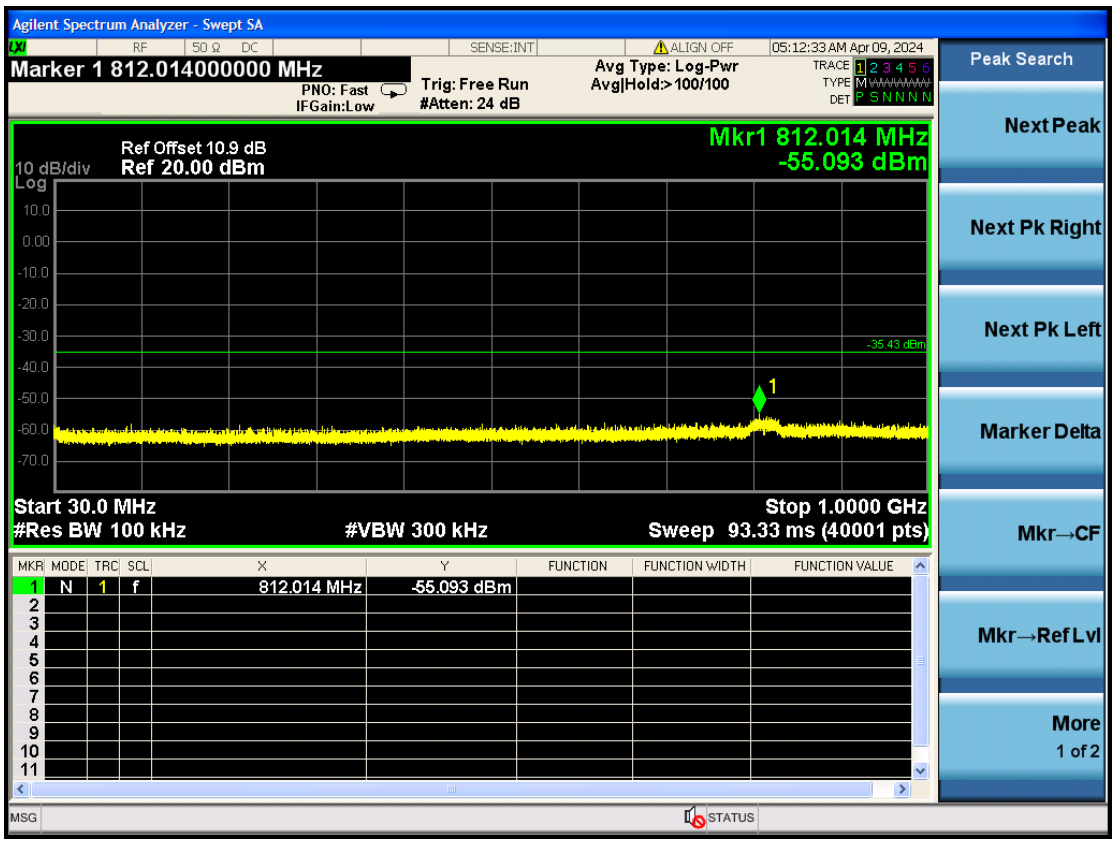
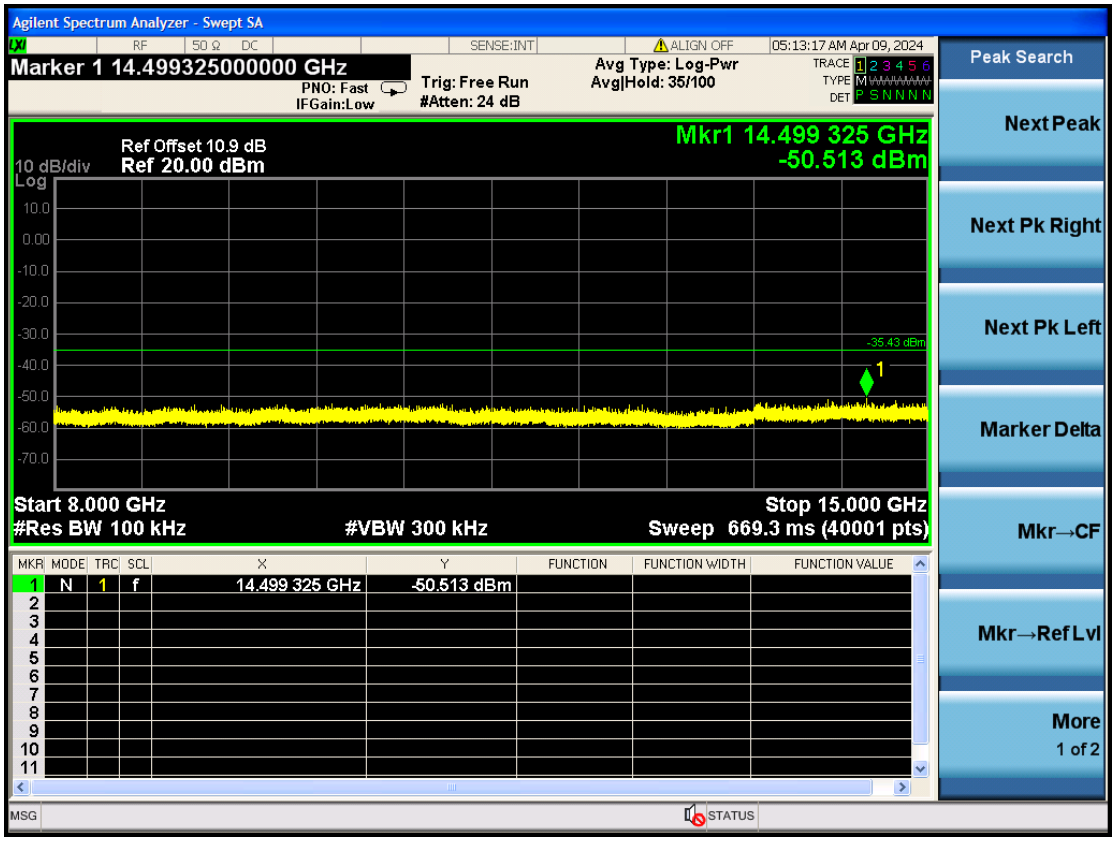
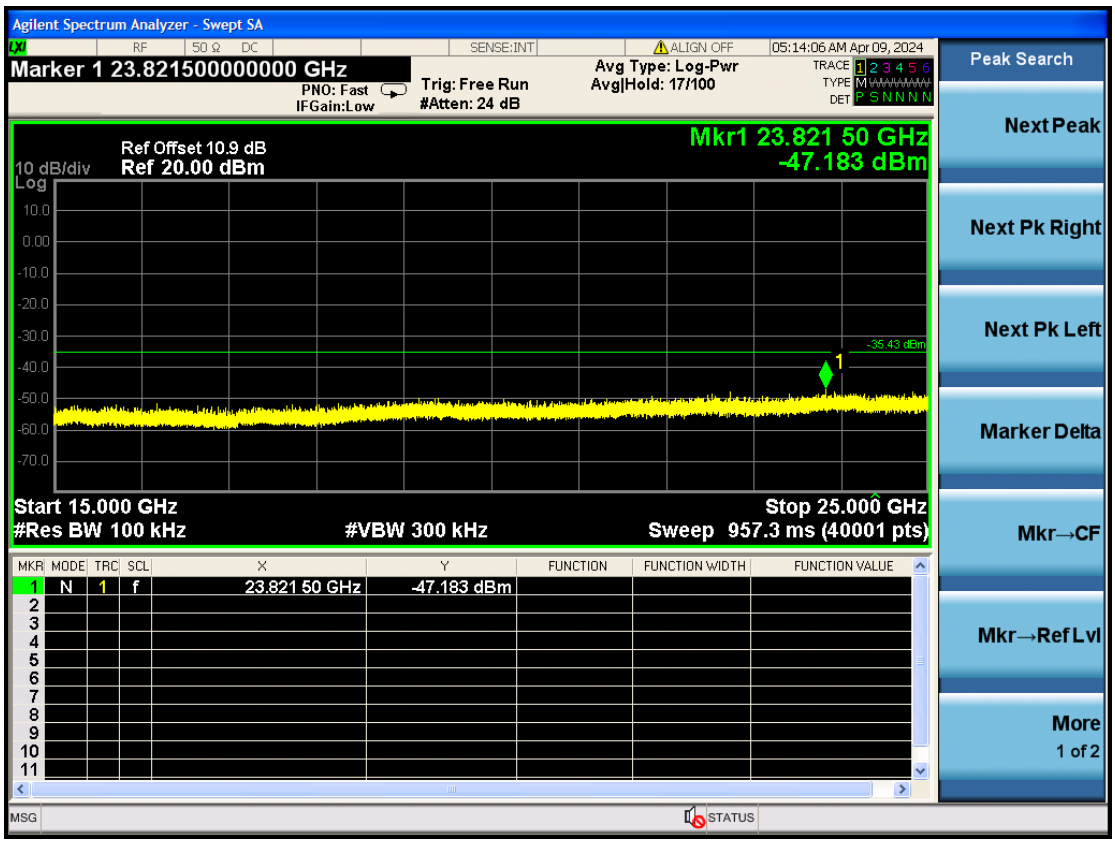
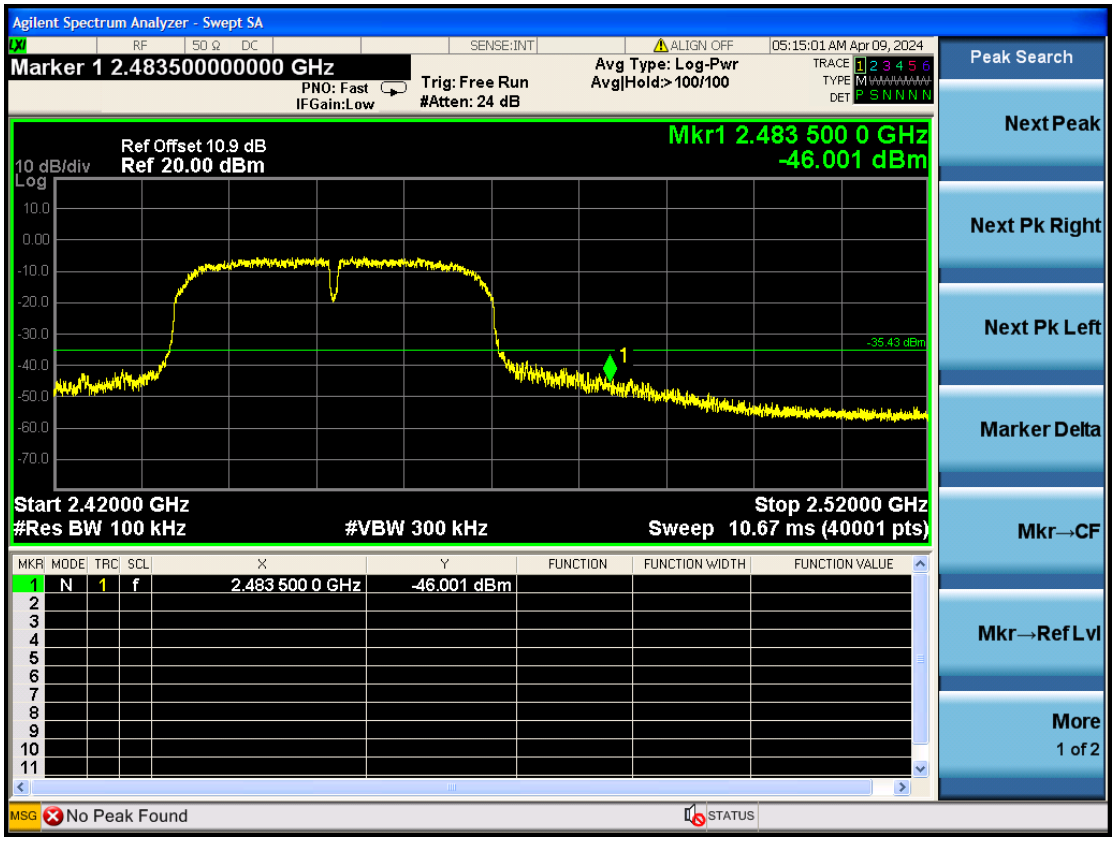



Agilent Spectrum Analyzer - Swept SA
Marker 1 812.014000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
05:12:33 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 812.014 MHz
-55.093 dBm
-35.43 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 812.014 MHz -55.093 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2


Agilent Spectrum Analyzer - Swept SA
Marker 1 14.499325000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 35/100
05:13:17 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.499 325 GHz
-50.513 dBm
-35.43 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.499 325 GHz -50.513 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2


Agilent Spectrum Analyzer - Swept SA
Marker 1 23.821500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 17/100
05:14:06 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 23.821 50 GHz
-47.183 dBm
-35.43 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 23.821 50 GHz -47.183 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2


Agilent Spectrum Analyzer - Swept SA
Marker 1 2.483500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
05:15:01 AM Apr 09, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.483 500 0 GHz
-46.001 dBm
-35.43 dBm
Start 2.42000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.52000 GHz
Sweep 10.67 ms (40001 pts)
1 N 1 f 2.483 500 0 GHz -46.001 dBm
No Peak Found
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

10. DEVIATION TO TEST SPECIFICATIONS

【NONE】

----------The End----------