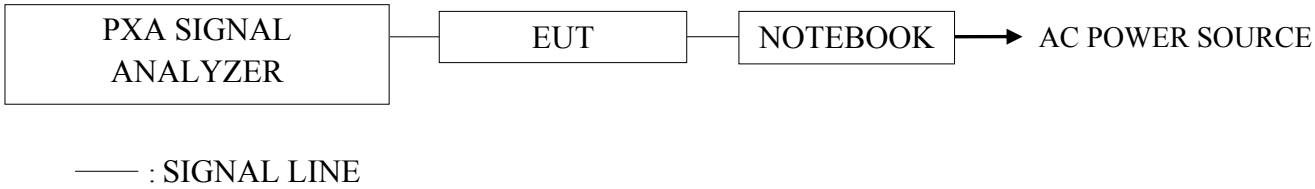
6. 6dB BANDWIDTH MEASUREMENT

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



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:

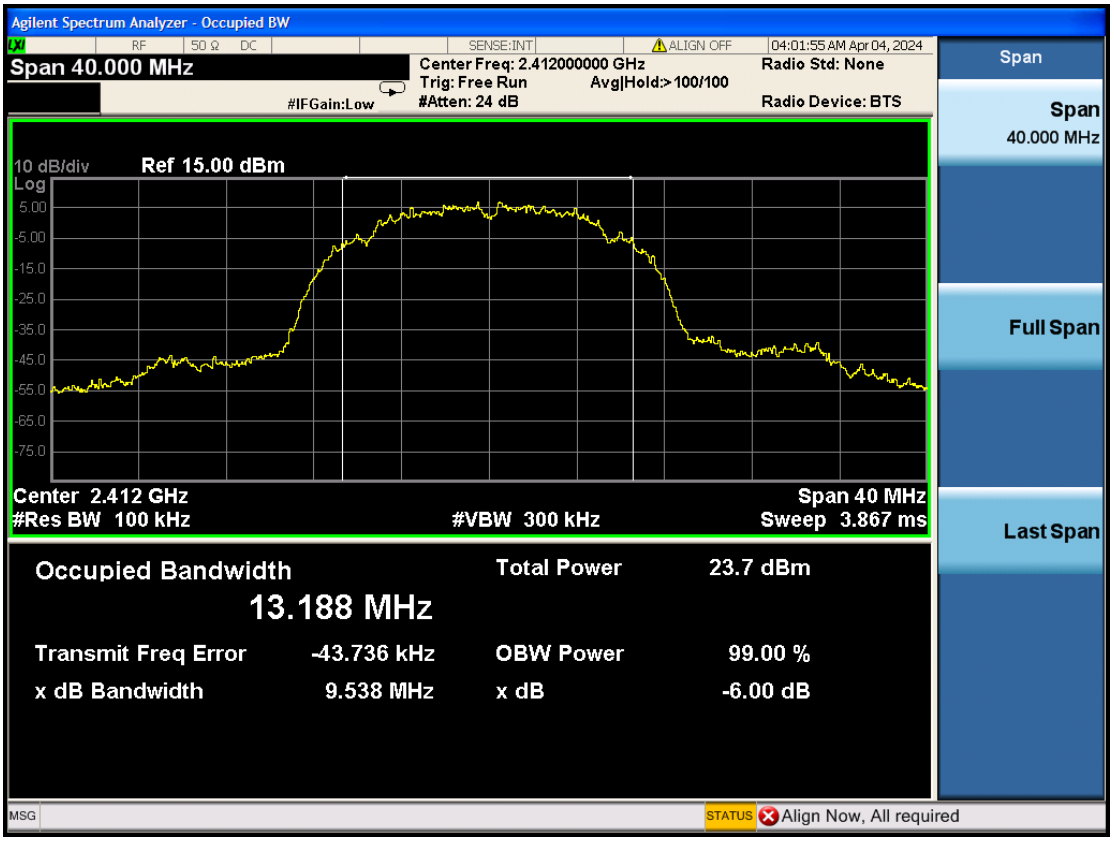
(1) Set RBW = 100 kHz.
(2) Set the video bandwidth (VBW) ≥ 3 × RBW.
(3) Detector = Peak.
(4) Trace mode = max hold.
(5) Sweep = auto couple.
(6) Allow the trace to stabilize.
(7) Setting channel bandwidth function x dB to -6 dB to record the final bandwidth.

6.5. Test Results

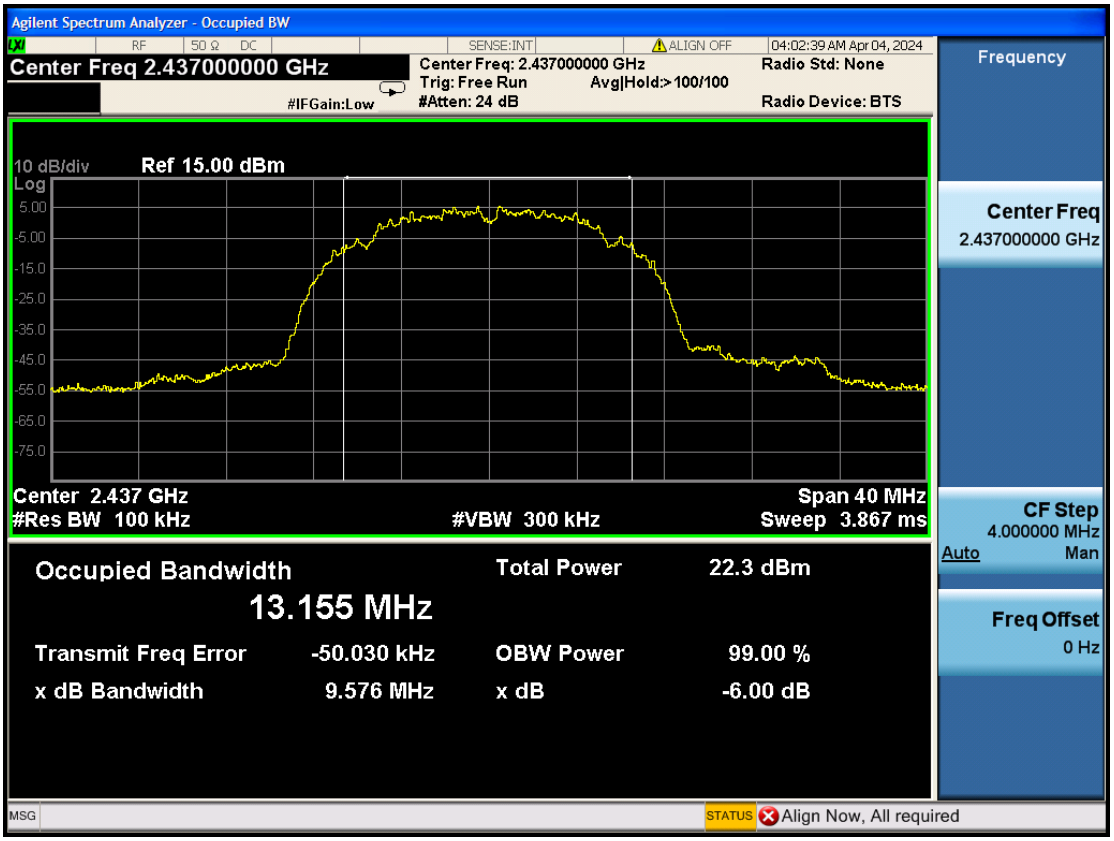
PASSED. All the test results are attached in next pages.

Item	Channel	Test Frequency (MHz)	6dB Bandwidth (MHz)
802.11b	1	2412	9.538
	6	2437	9.576
	11	2462	9.153
802.11g	1	2412	16.45
	6	2437	16.44
	11	2462	16.45
802.11 nHT20	1	2412	16.90
	6	2437	16.91
	11	2462	16.96
802.11 nHT40	3	2422	32.60
	6	2437	32.58
	9	2452	32.70

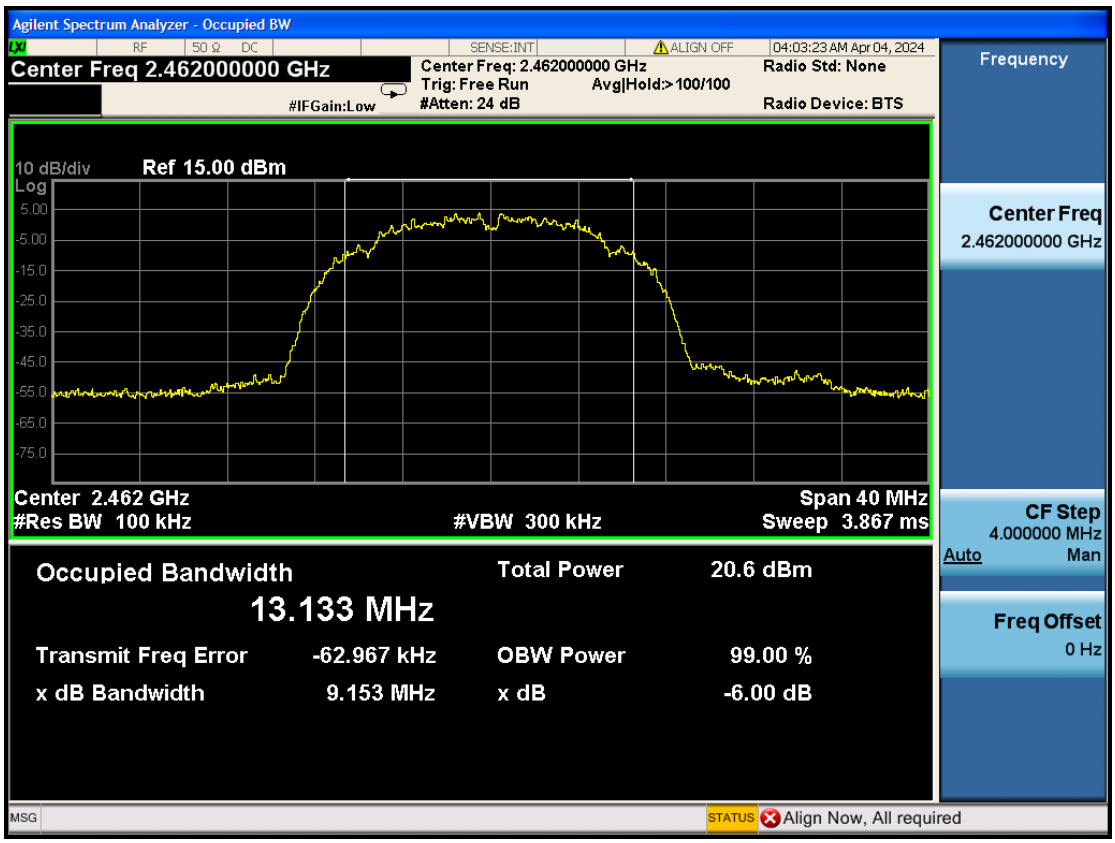
802.11b CH1



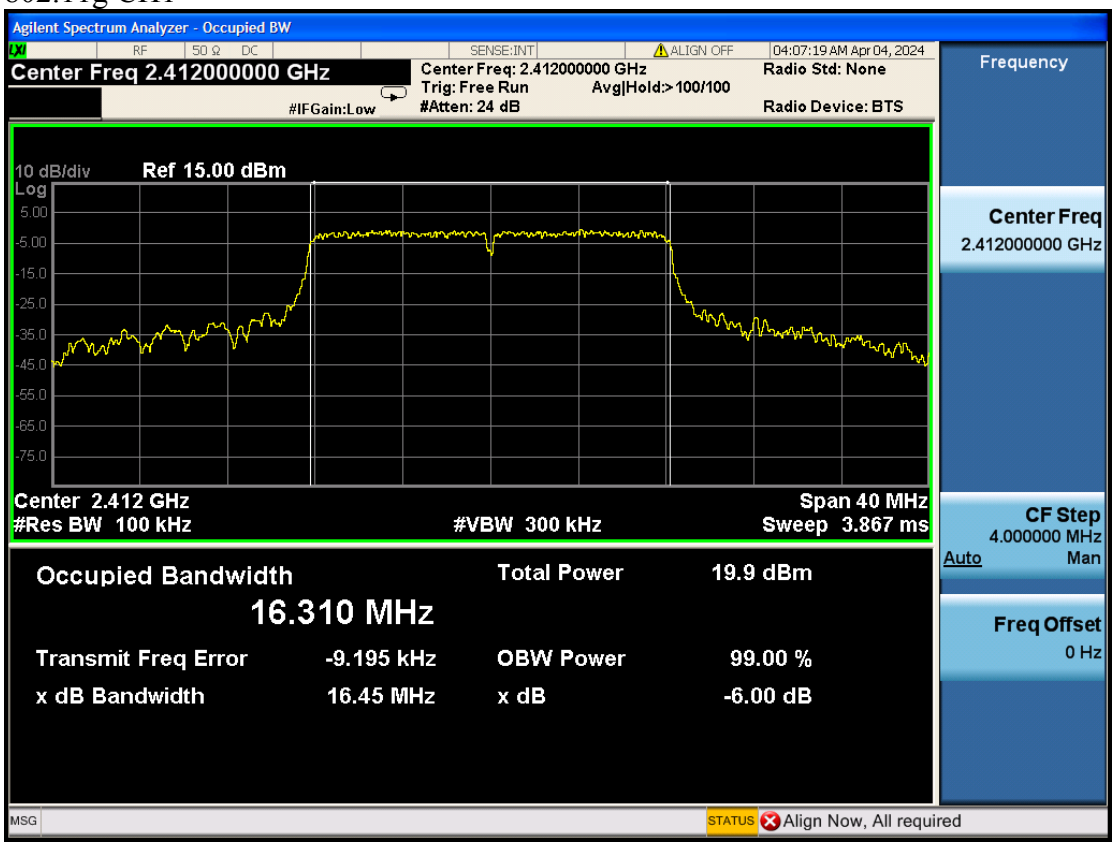
802.11b CH6



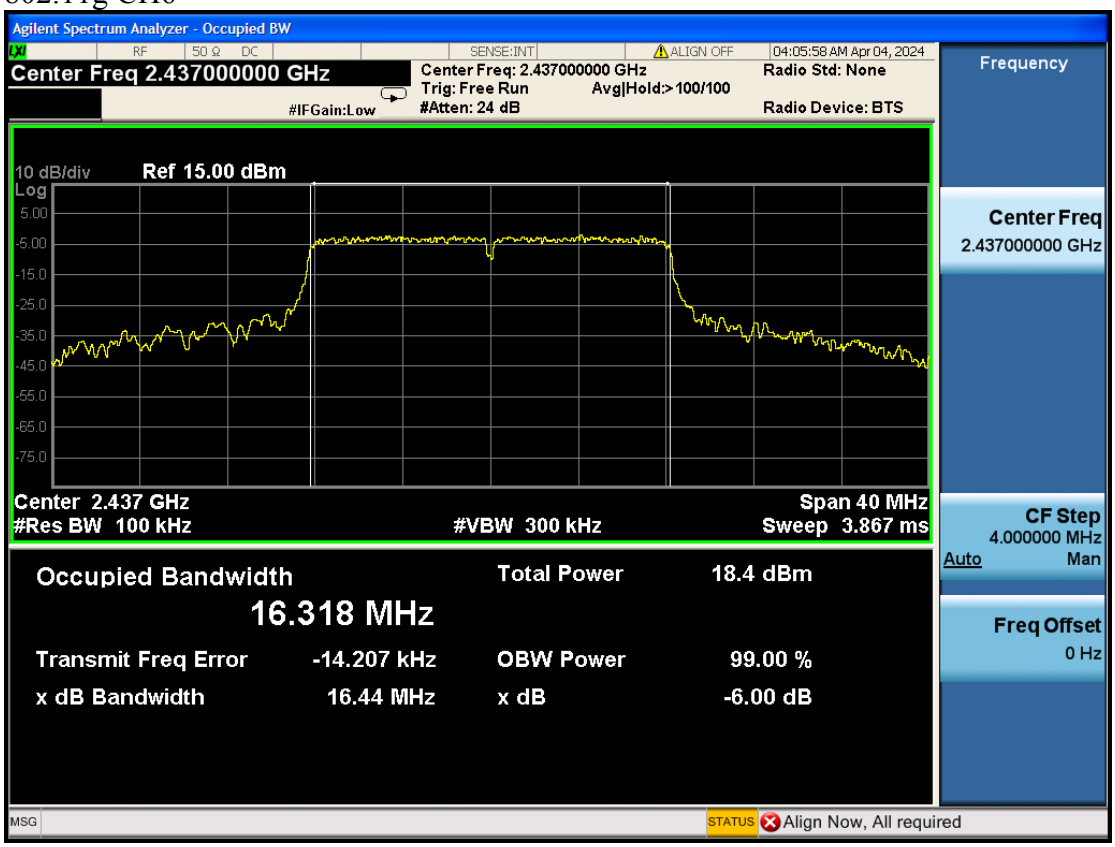
802.11b CH11



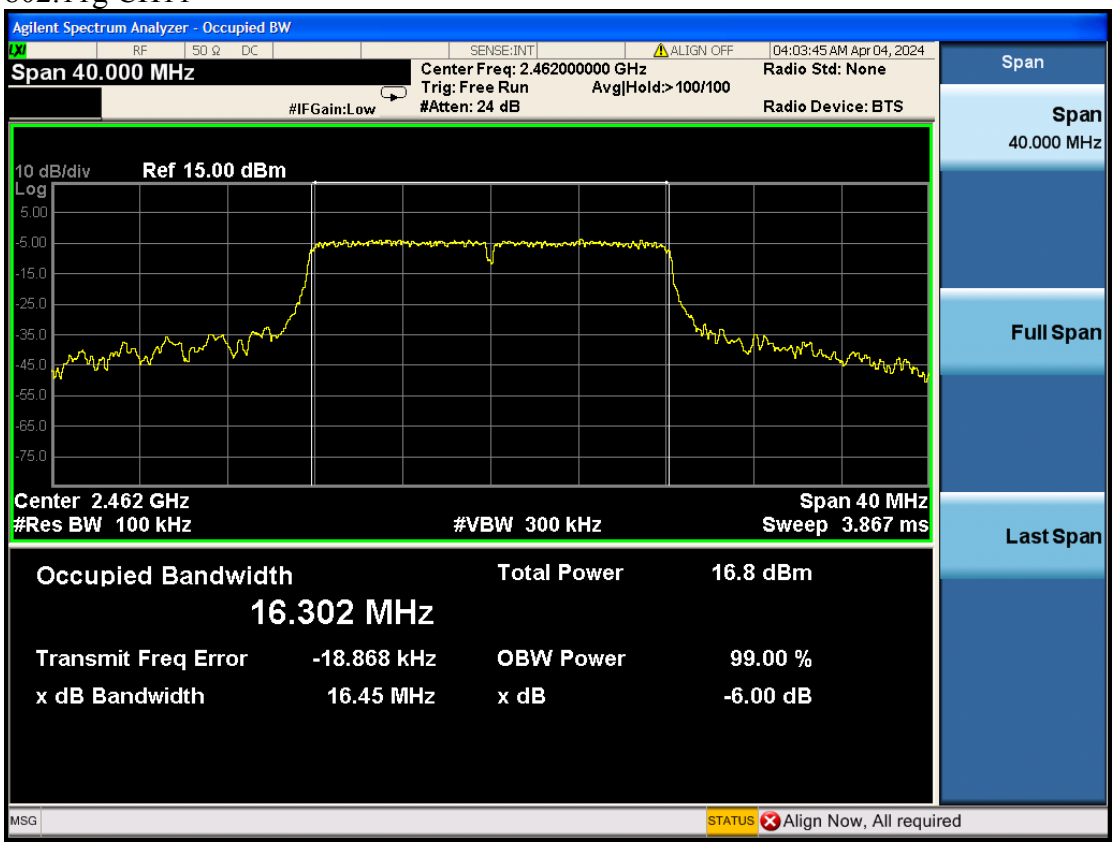
802.11g CH1



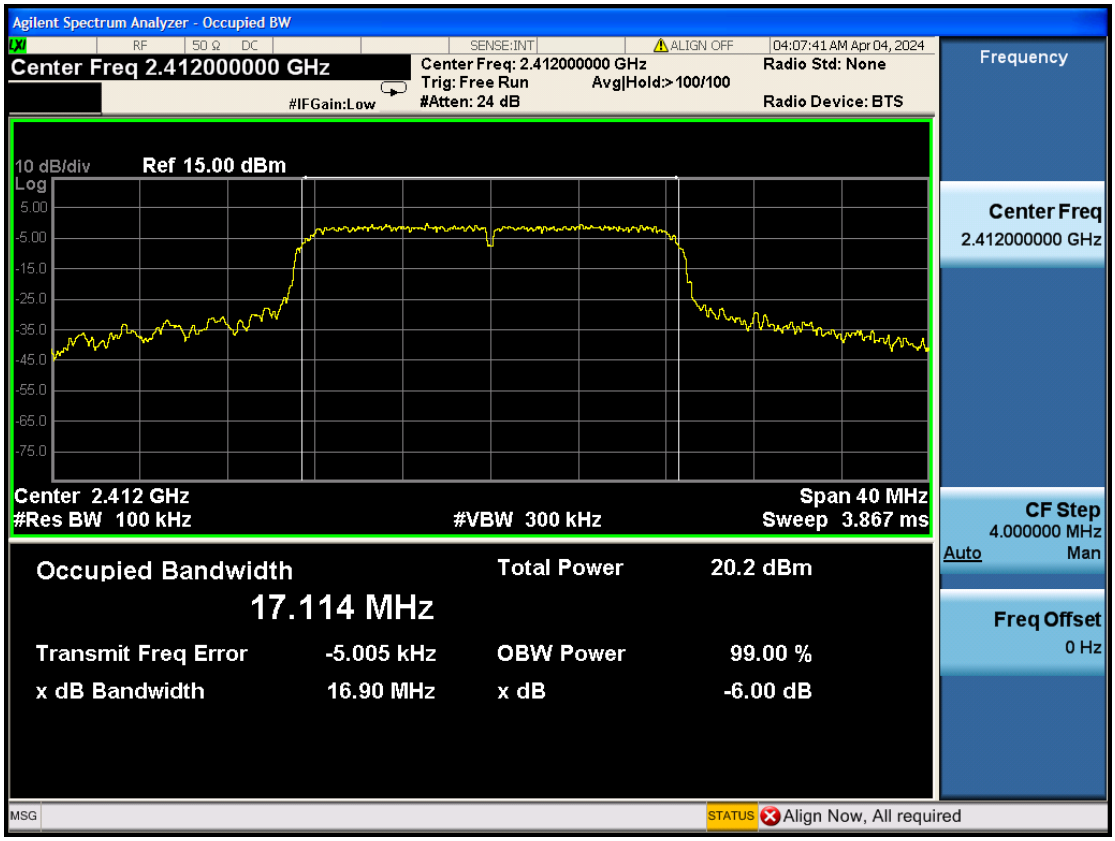
802.11g CH6



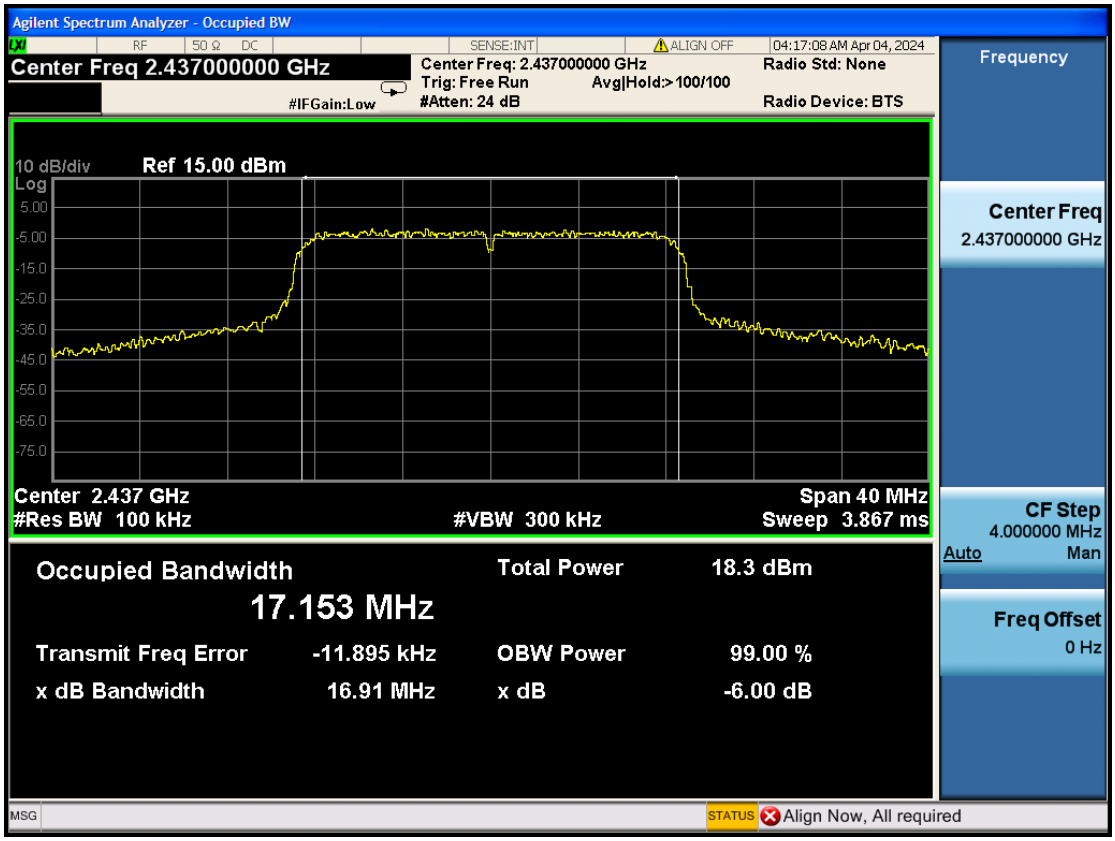
802.11g CH11



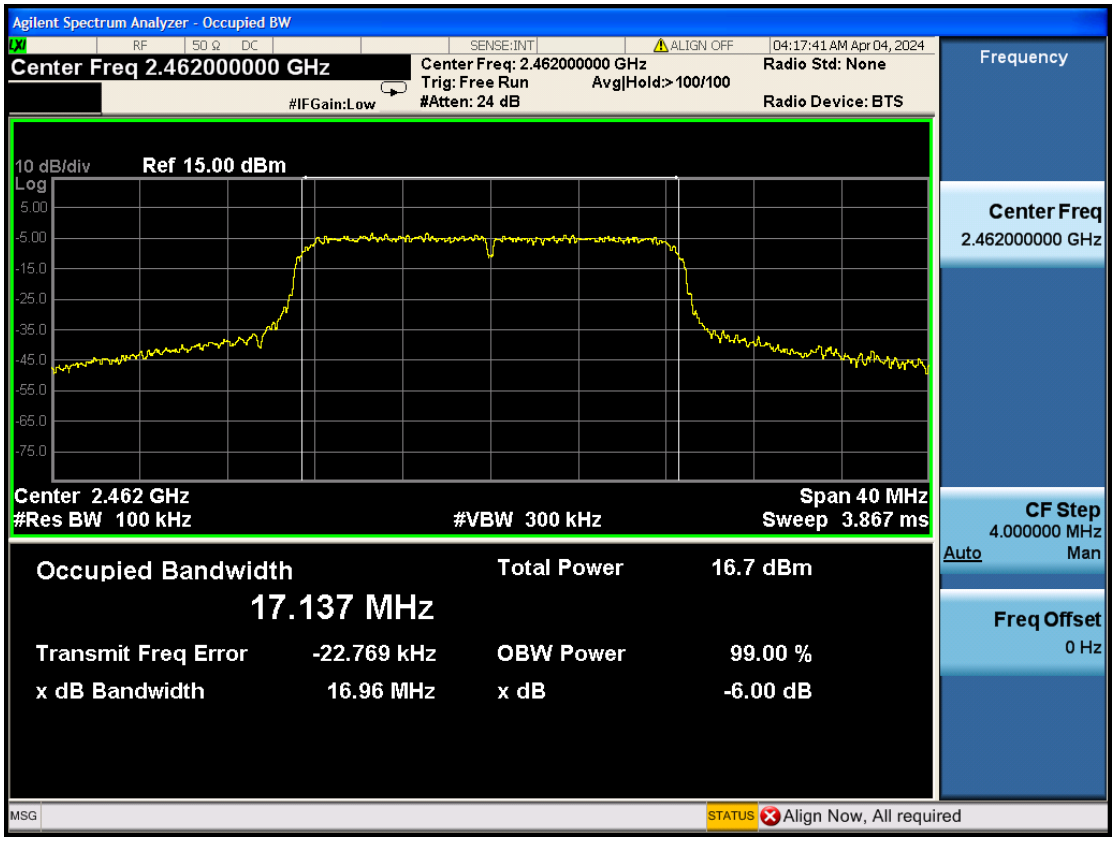
802.11nHT20 CH1



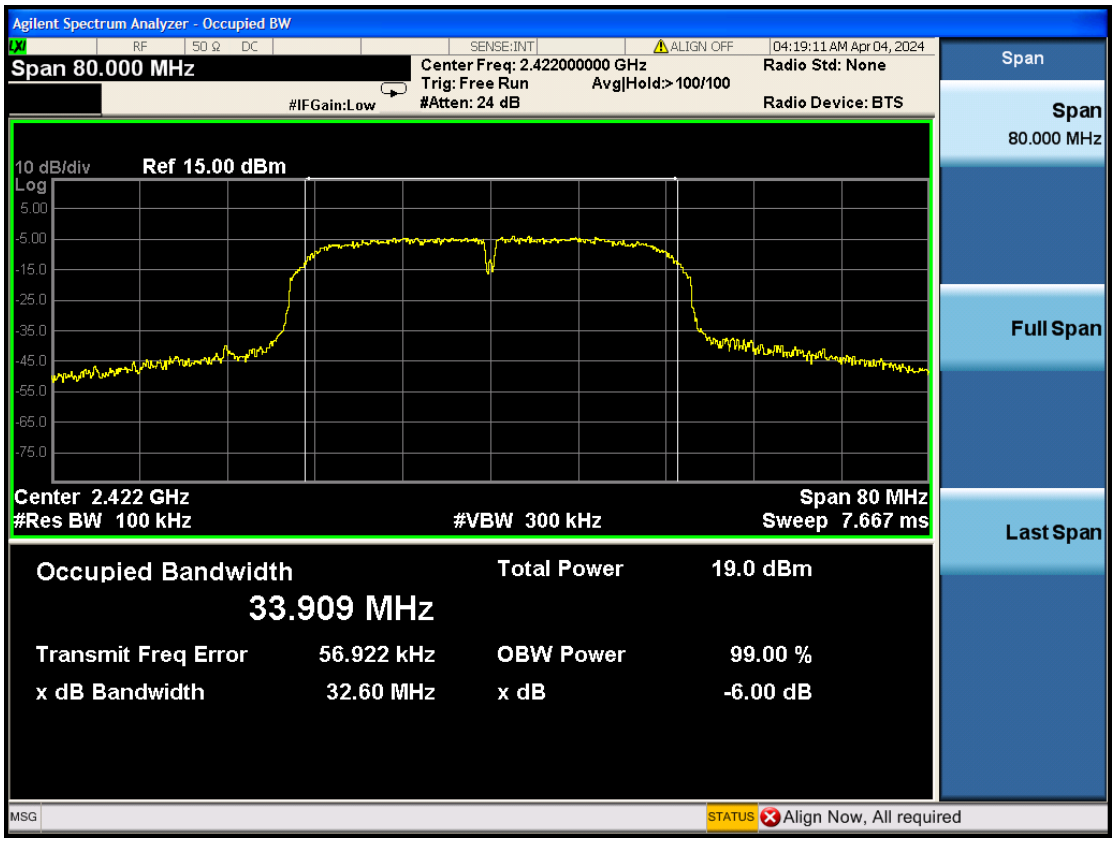
802.11nHT20 CH6



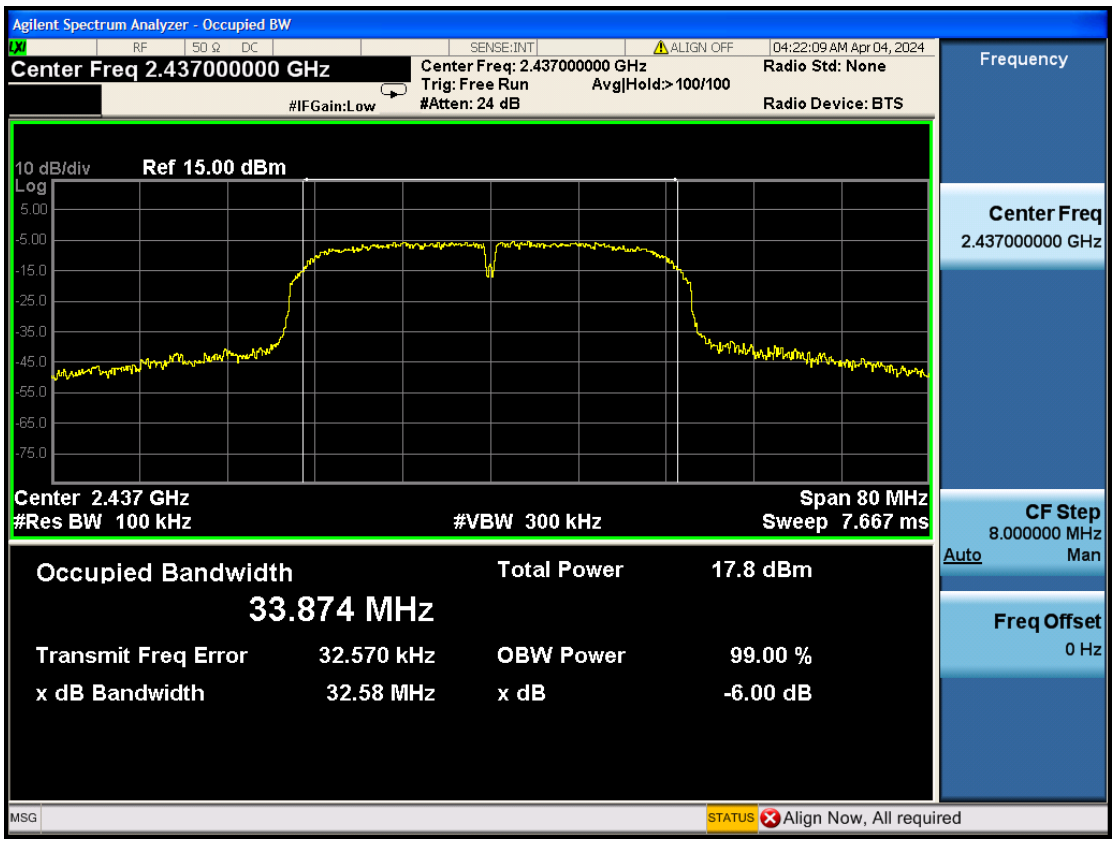
802.11nHT20 CH11



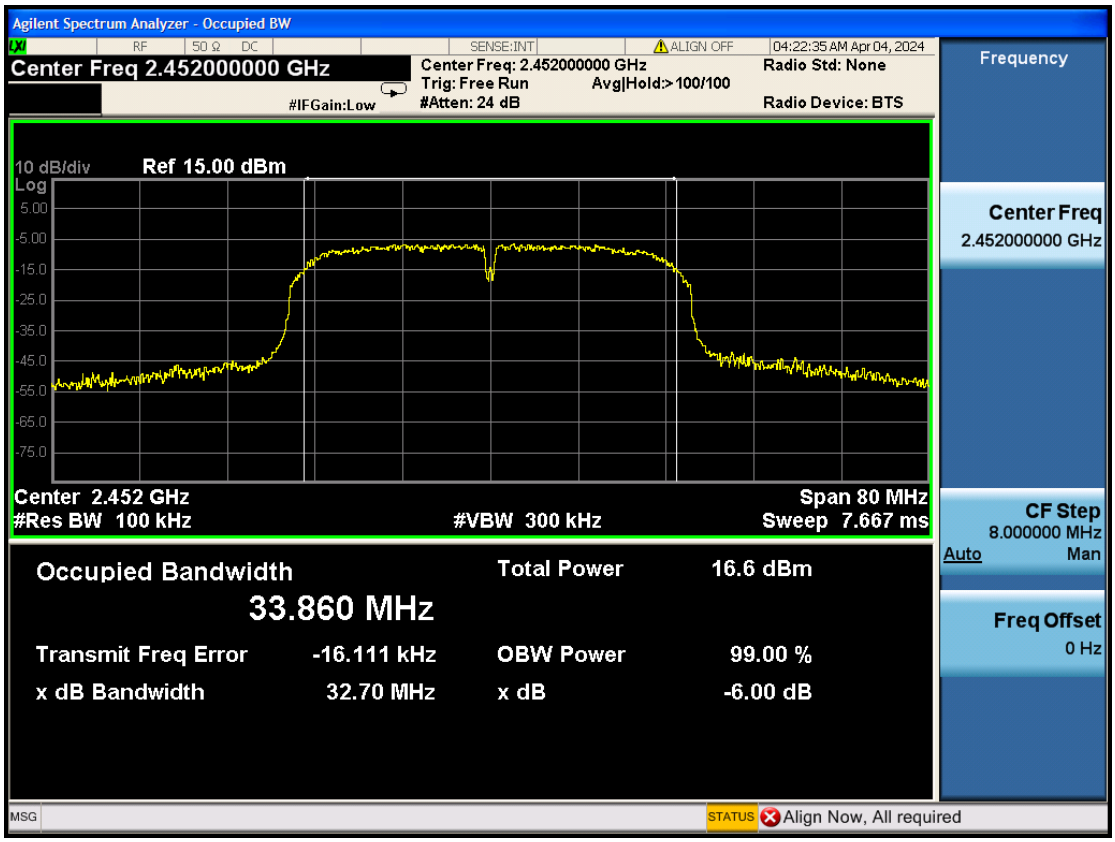
802.11nHT40 CH3



802.11nHT40 CH6



802.11nHT40 CH9

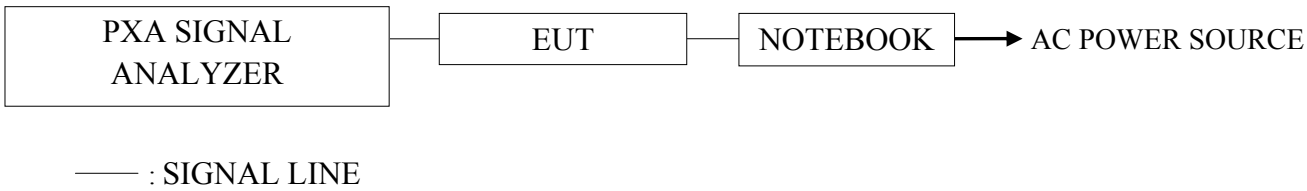


7. OUTPUT POWER MEASUREMENT

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)**

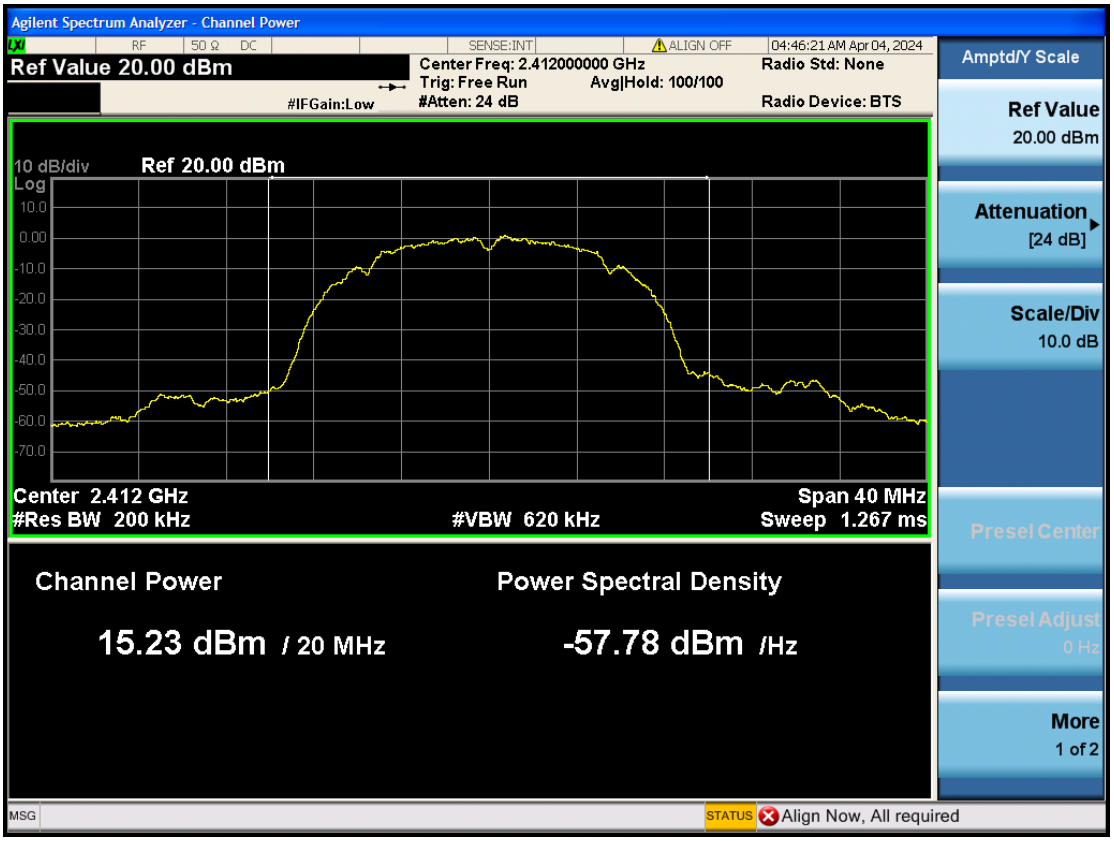
(1) Set span to at least 1.5 times the OBW
(2) Set RBW = 1 -5% of OBW
(3) Set the video bandwidth (VBW) ≥ 3 × RBW.
(4) Detector = RMS.
(5) Trace mode = trace average at least 100 traces
(6) Sweep = auto couple.
(7) Compute power by integrating the spectrum across the OBW of the signal using the instrument's 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

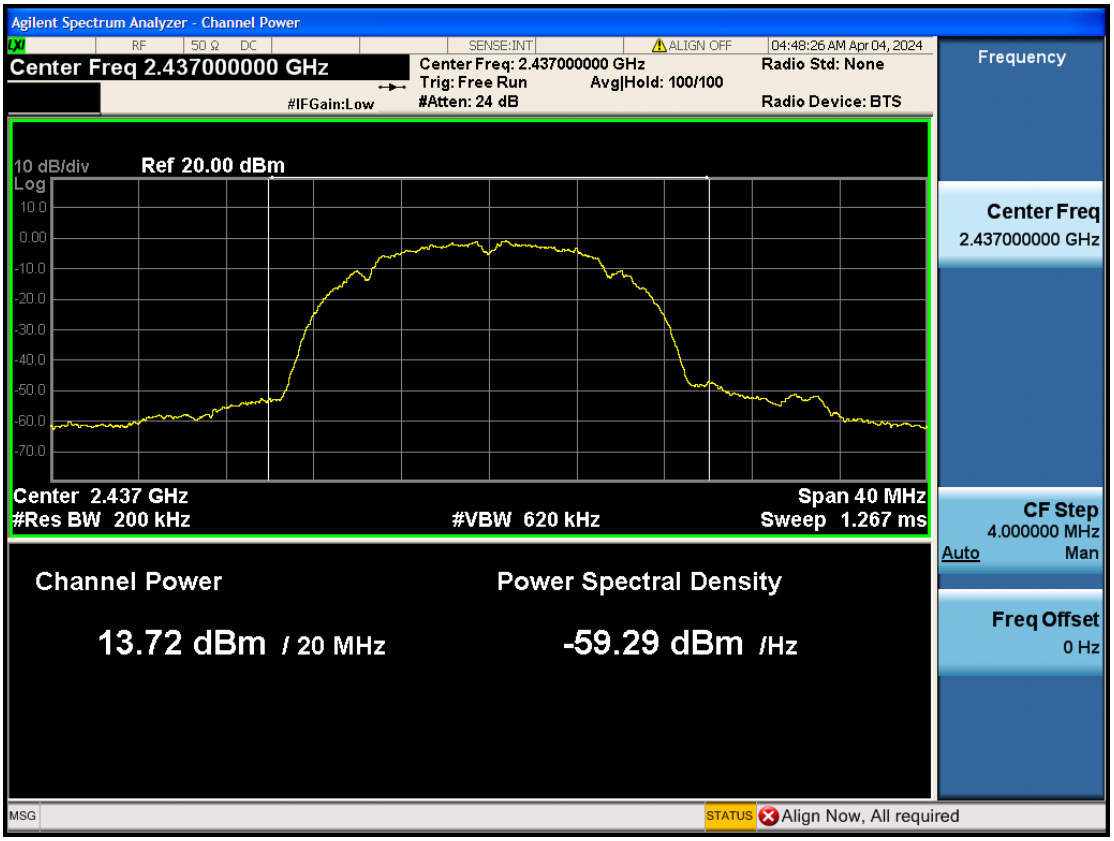
PASSED.

Mode	Frequency	Duty Cycle Factor	Reading (dBm)	Average Output Power(dBm)	Limit (dBm)
11b	2412	0	15.23	15.23	30
	2437		13.72	13.72	
	2462		12.28	12.28	
11g	2412	0	13.31	13.31	
	2437		11.67	11.67	
	2462		10.34	10.34	
11nHT20	2412	0	12.98	12.98	
	2437		11.14	11.14	
	2462		9.84	9.84	
11nHT40	2422	0	12.05	12.05	
	2437		10.77	10.77	
	2452		9.74	9.74	

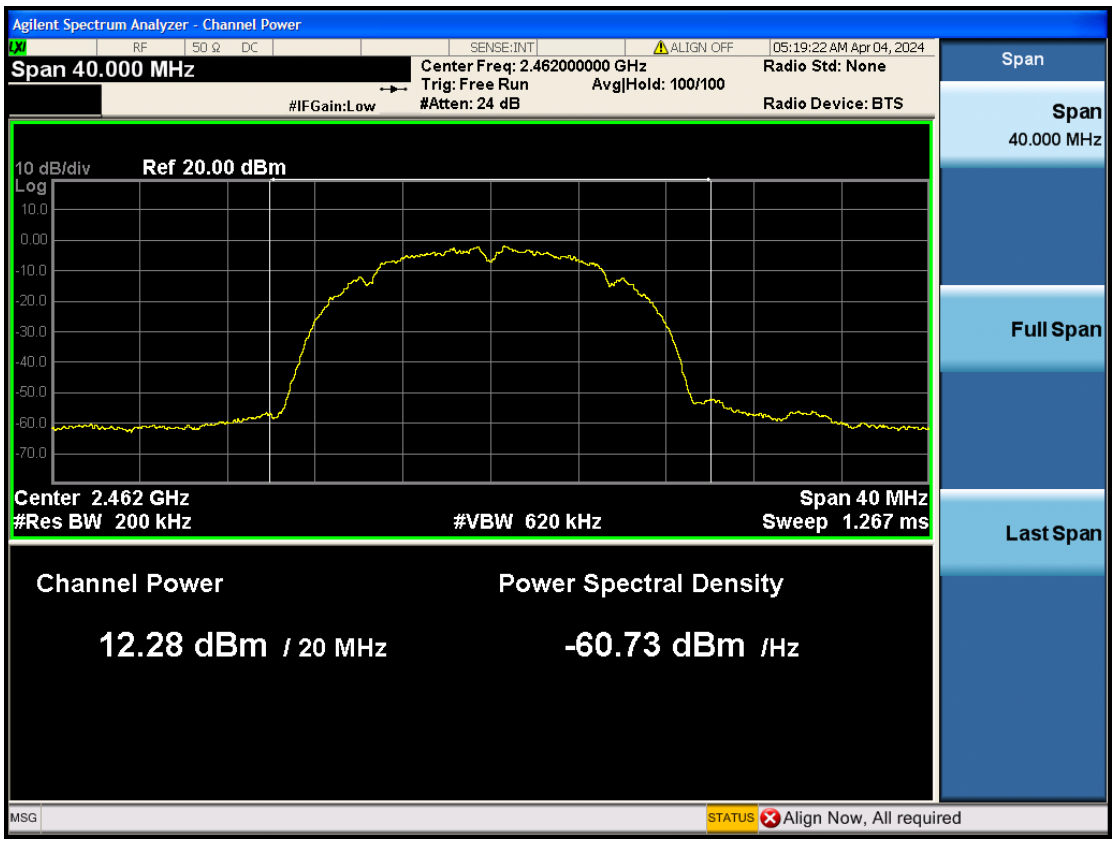
802.11b CH1



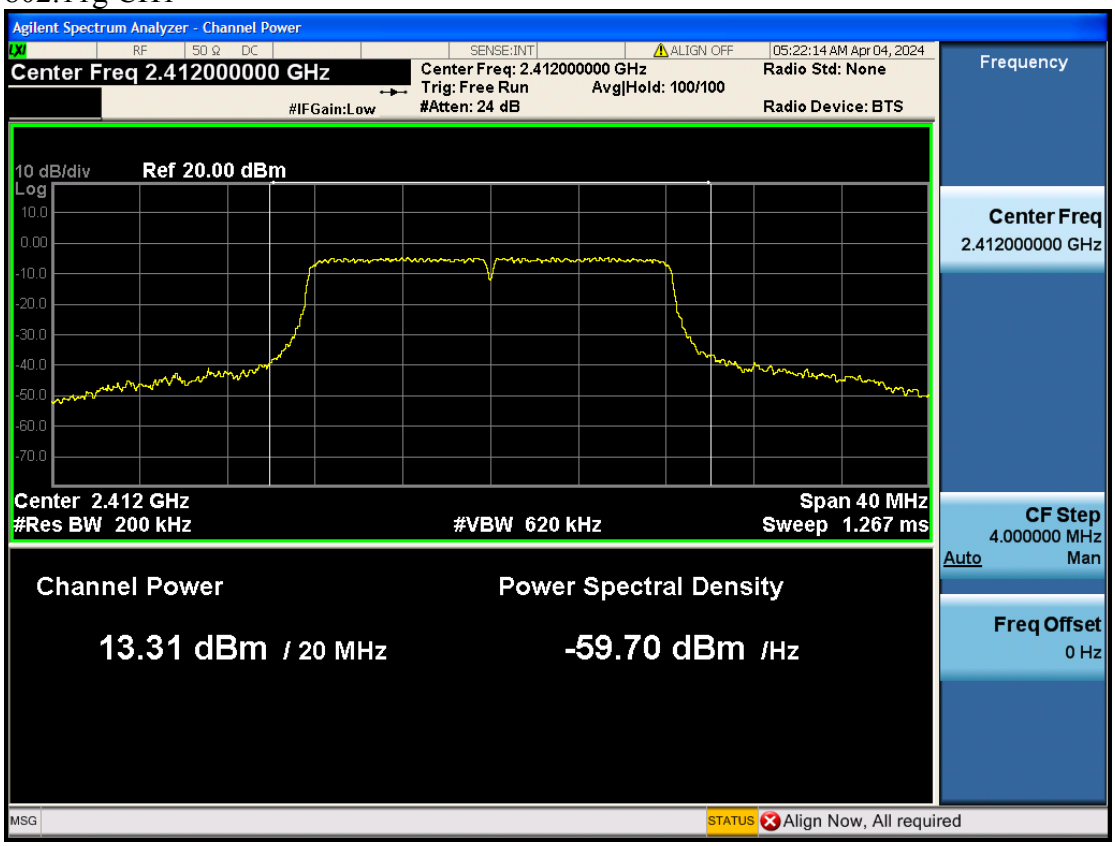
802.11b CH6



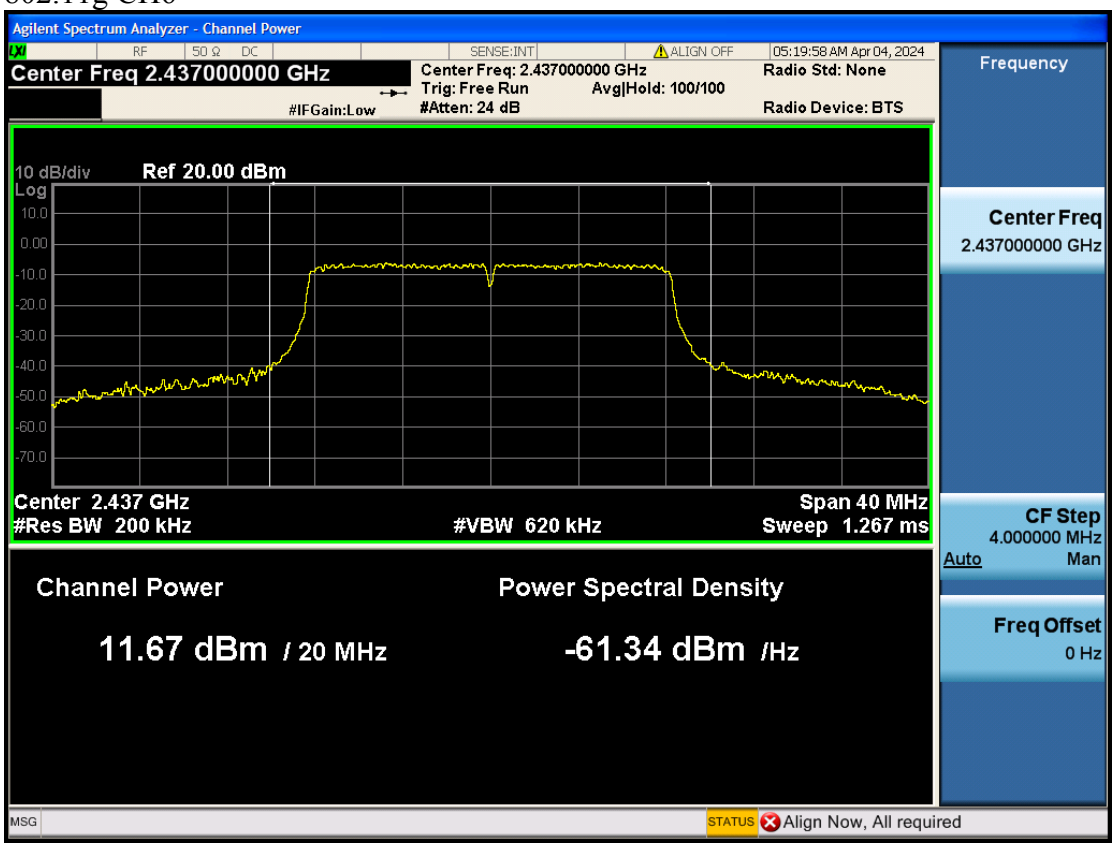
802.11b CH11



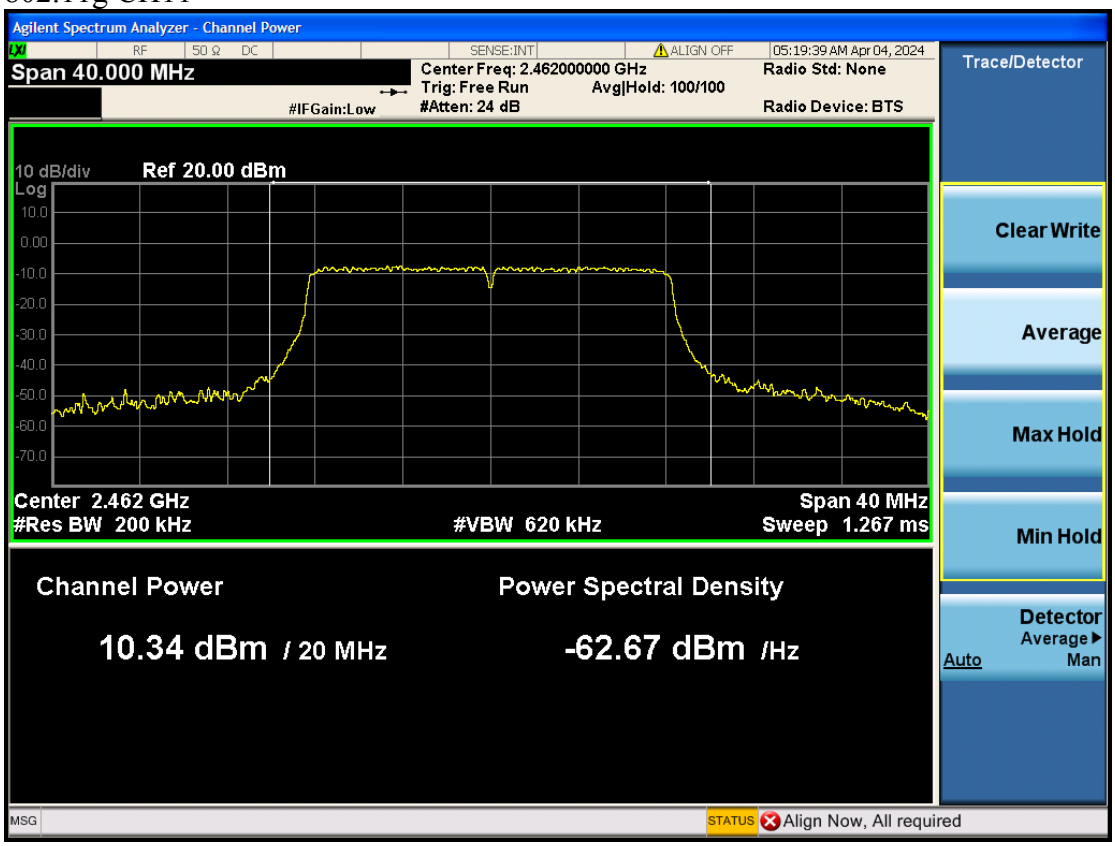
802.11g CH1



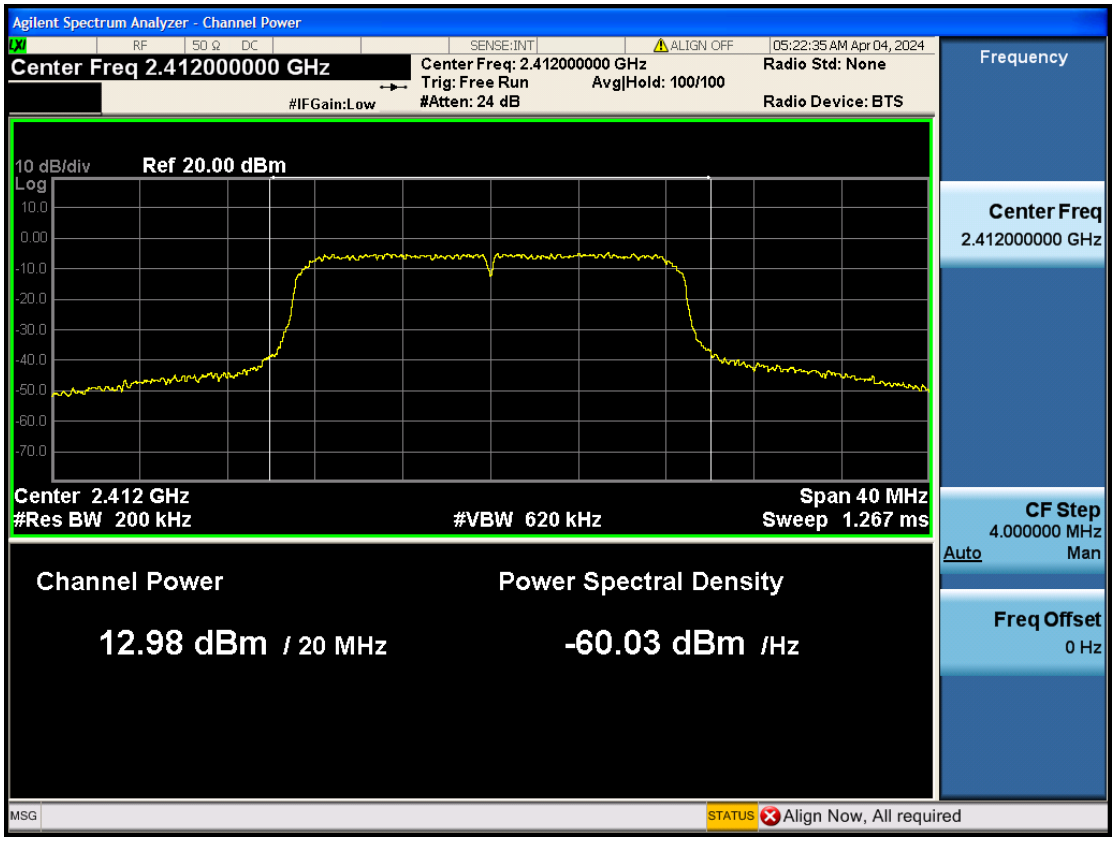
802.11g CH6



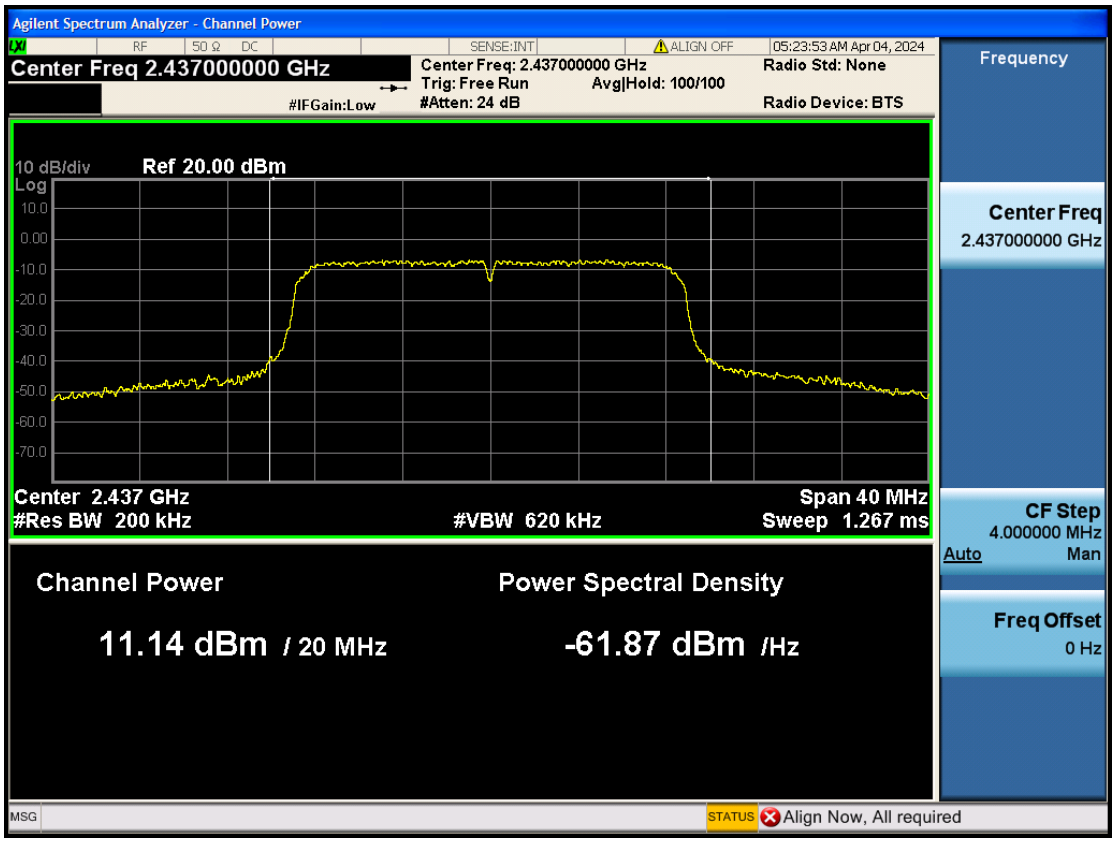
802.11g CH11



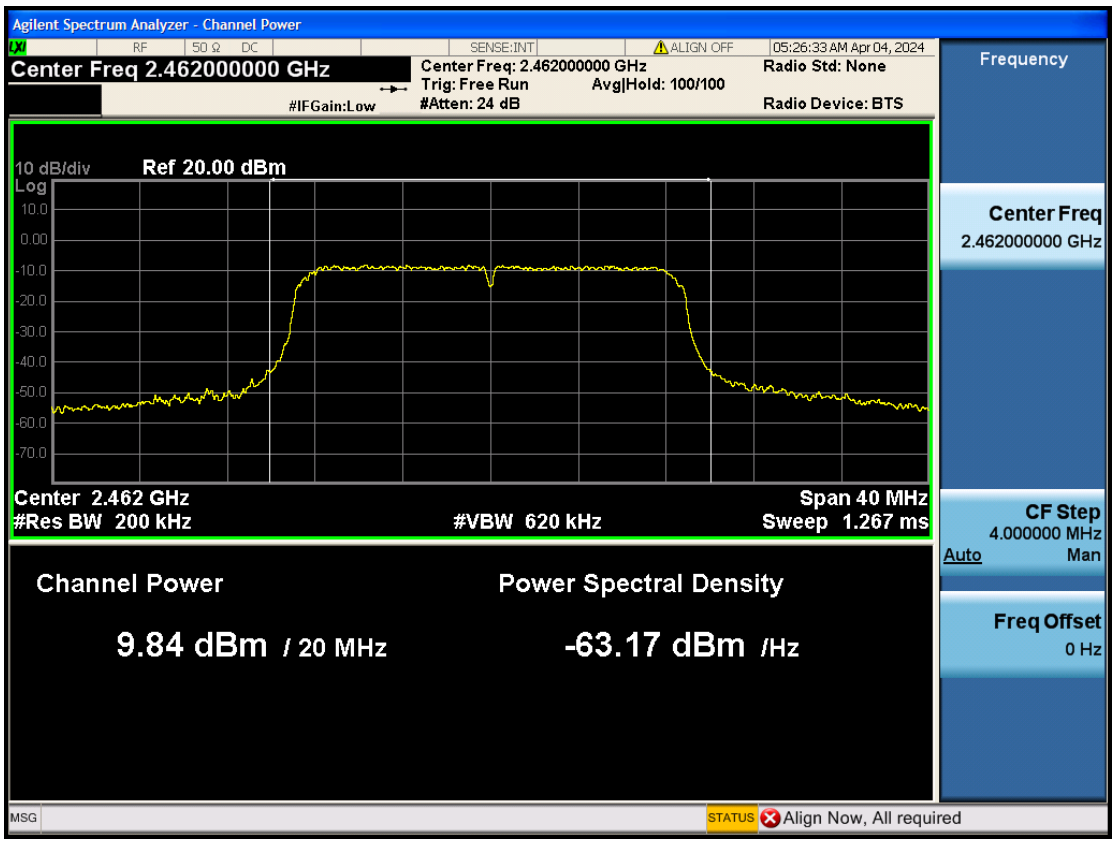
802.11nHT20 CH1



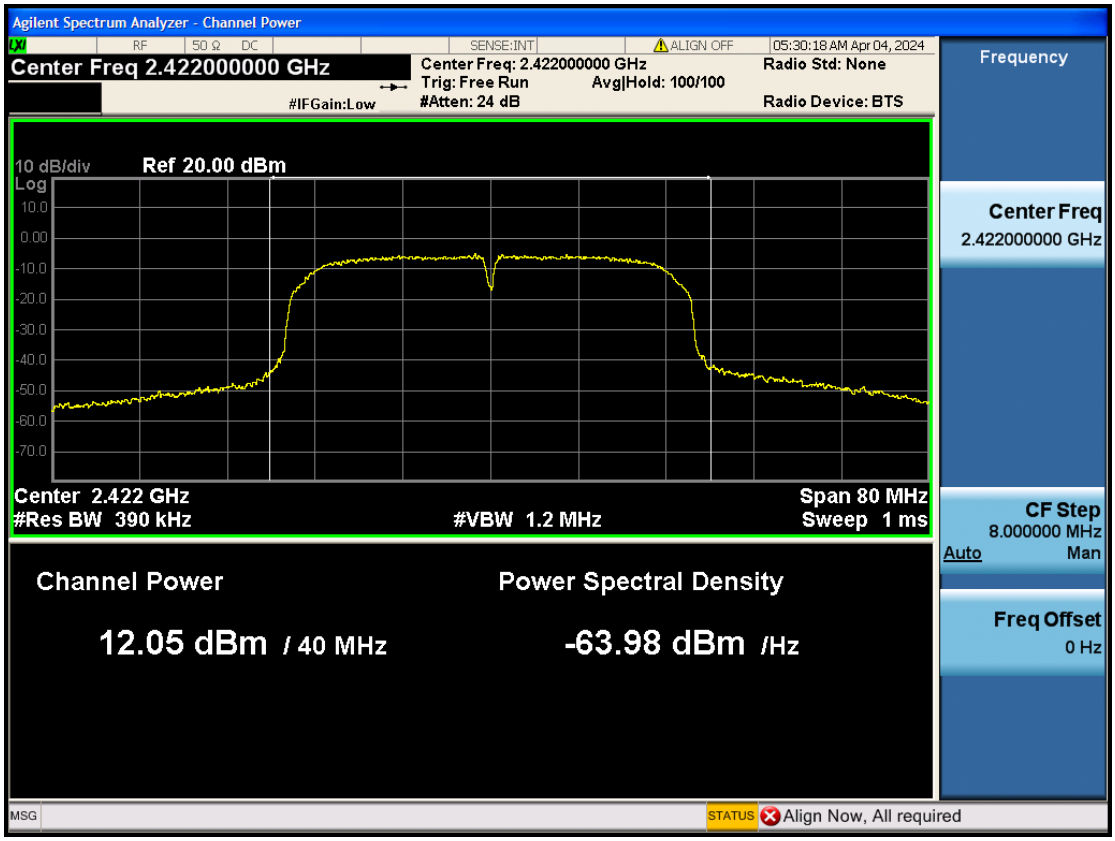
802.11nHT20 CH6



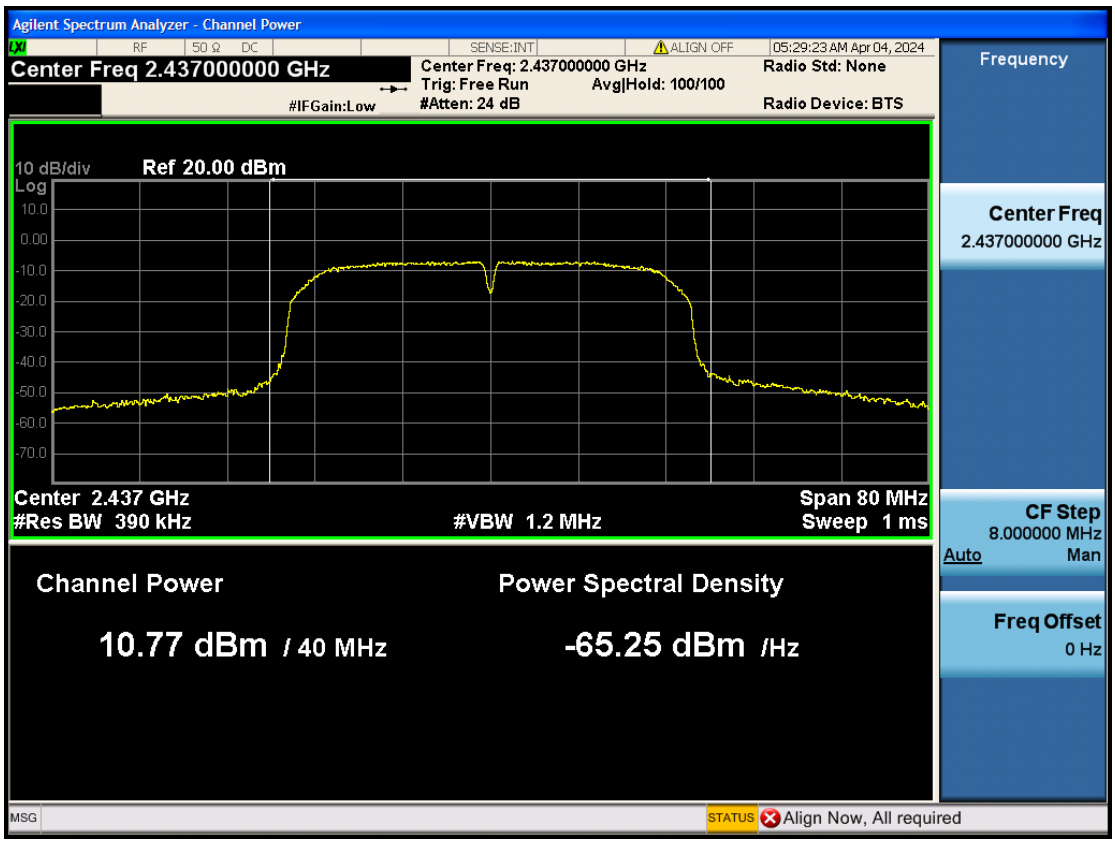
802.11nHT20 CH11



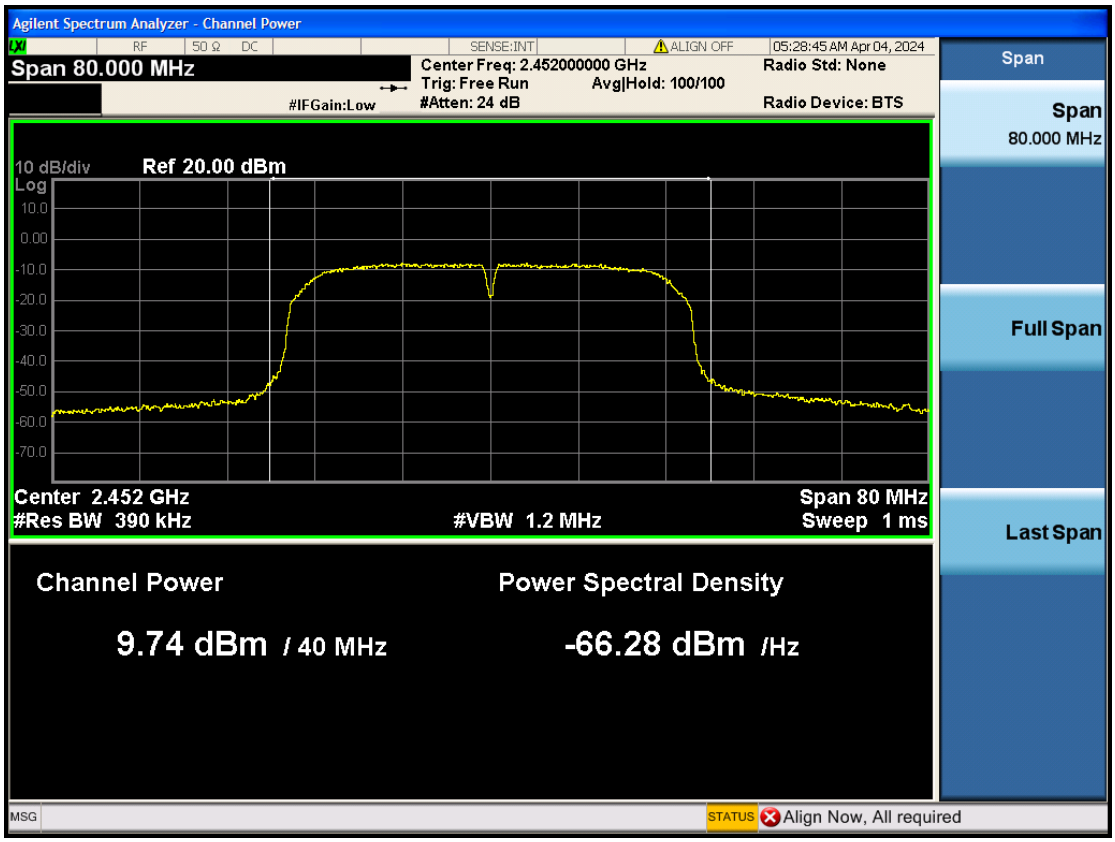
802.11nHT40 CH3



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.

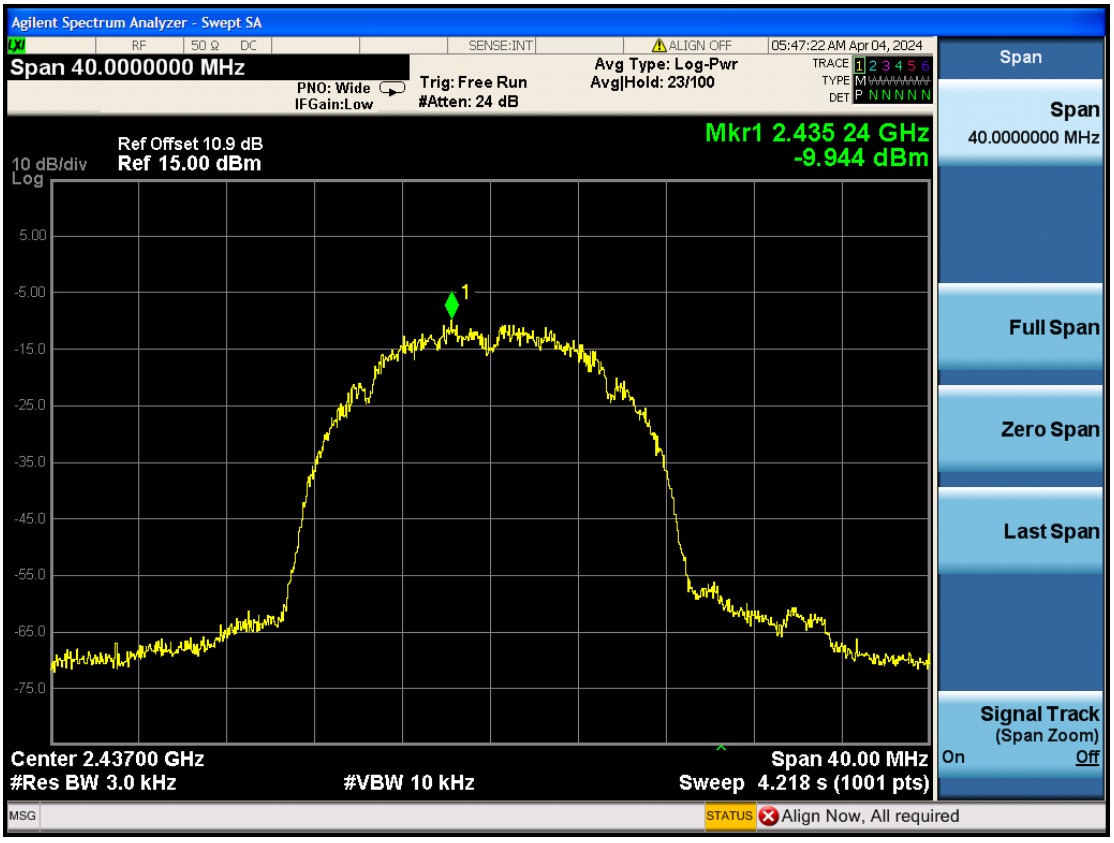
8.5. Test Results

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

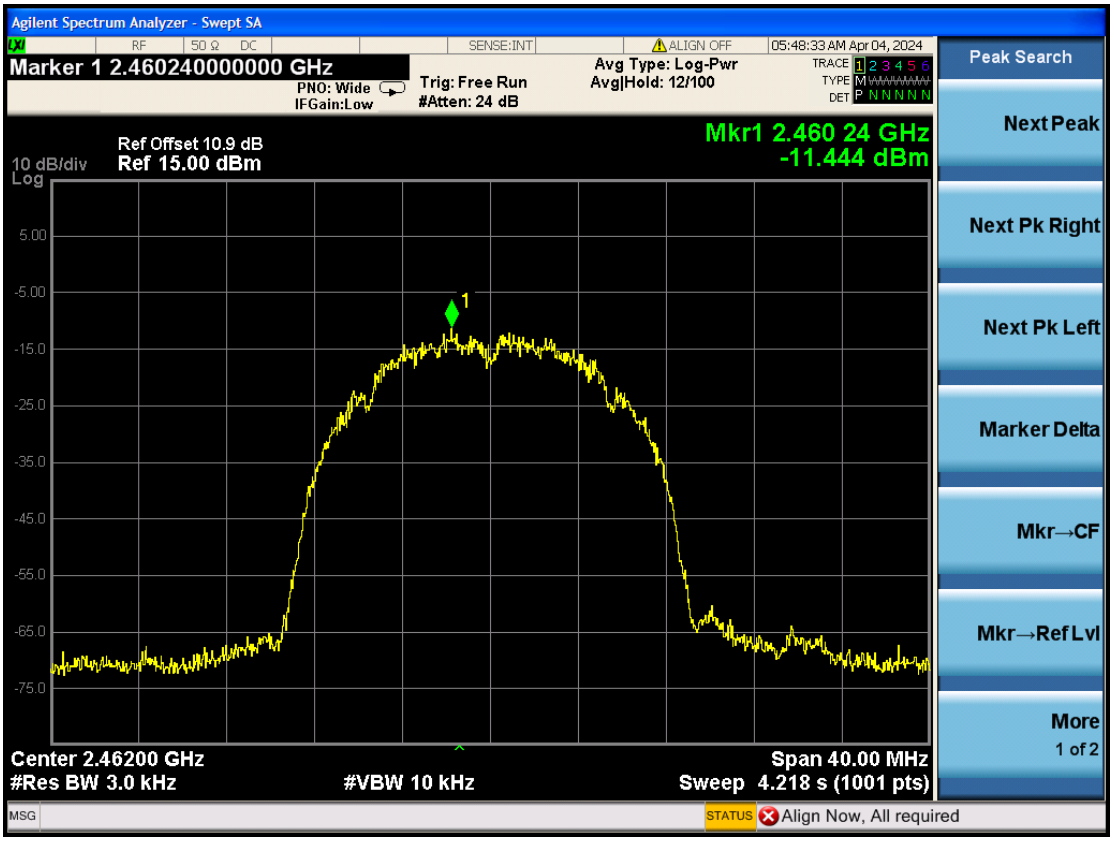
Mode	Frequency	Duty Cycle Factor	Reading (dBm)	Result (dBm)	Limit (dBm/3kHz)
11b	2412	0	-8.347	-8.347	8
	2437		-9.944	-9.944	
	2462		-11.444	-11.444	
11g	2412	0	-14.935	-14.935	
	2437		-16.391	-16.391	
	2462		-18.096	-18.096	
11n-HT20	2412	0	-14.267	-14.267	
	2437		-16.485	-16.485	
	2462		-17.520	-17.520	
11n-HT40	2422	0	-16.888	-16.888	
	2437		-18.549	-18.549	
	2452		-18.441	-18.441	

802.11b CH1

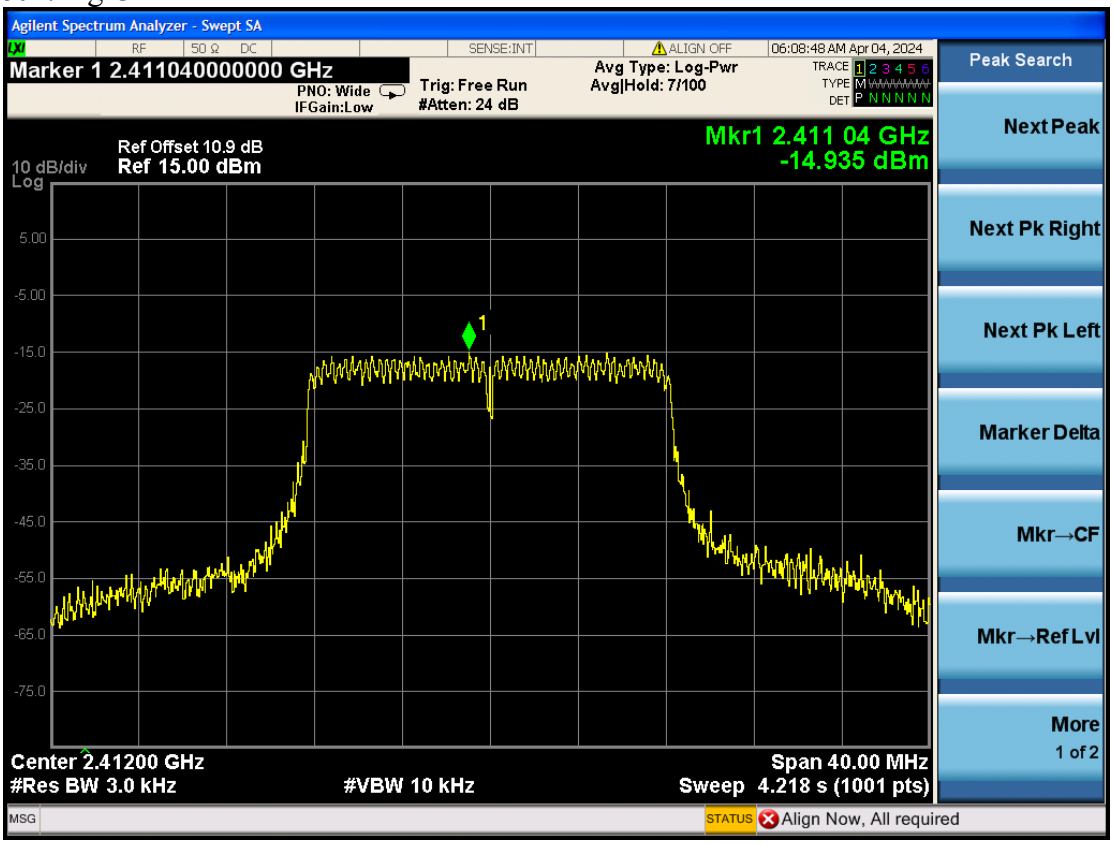
802.11b CH6



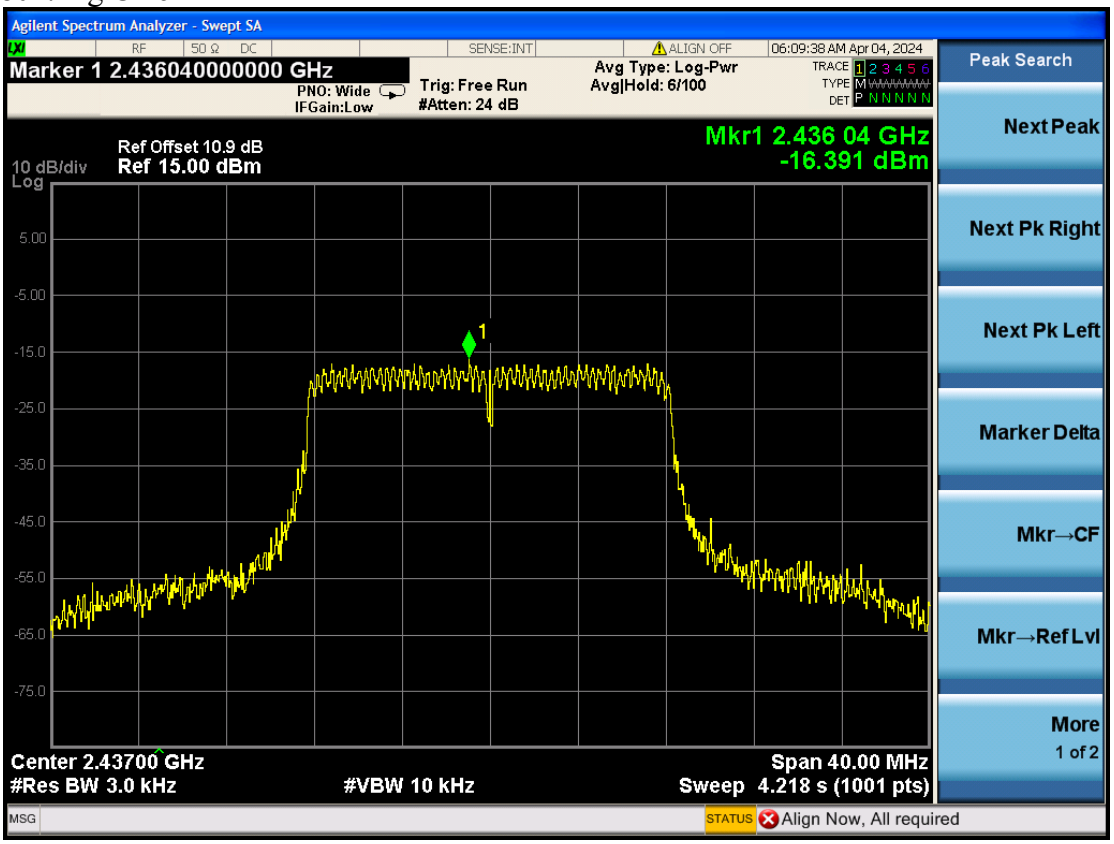
802.11b CH11



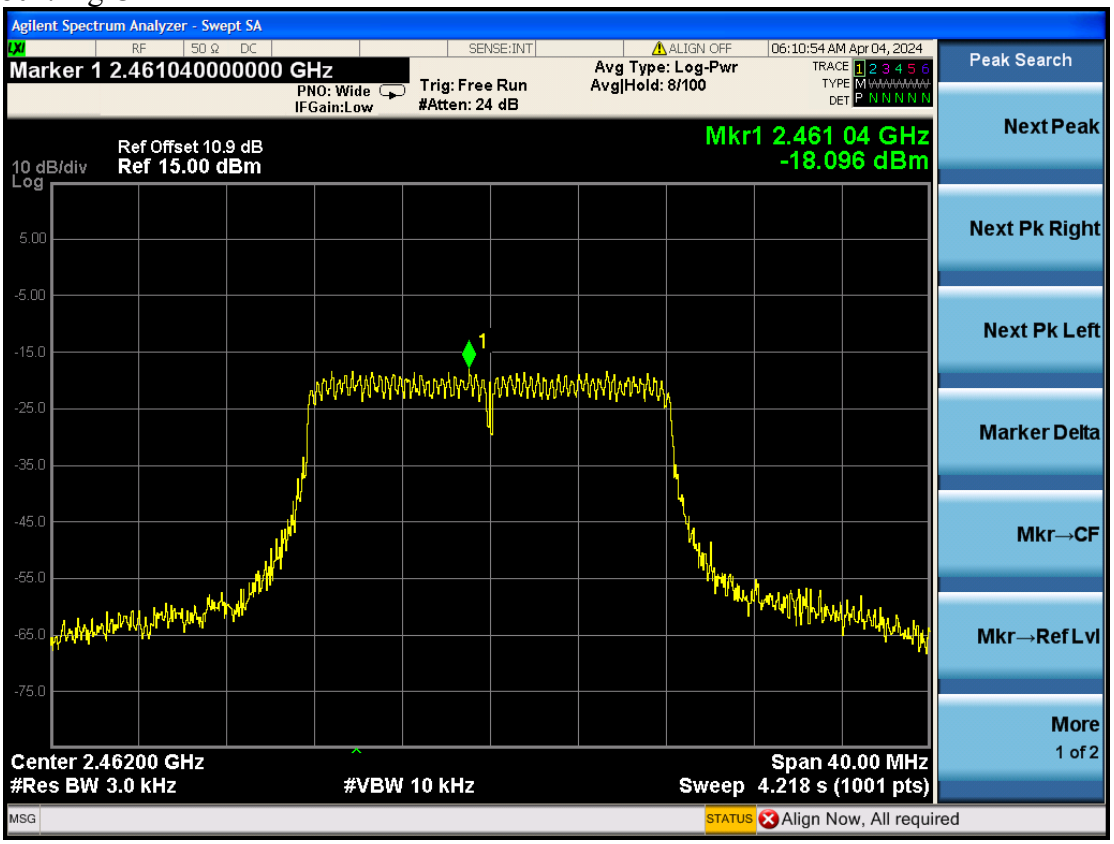
802.11g CH1



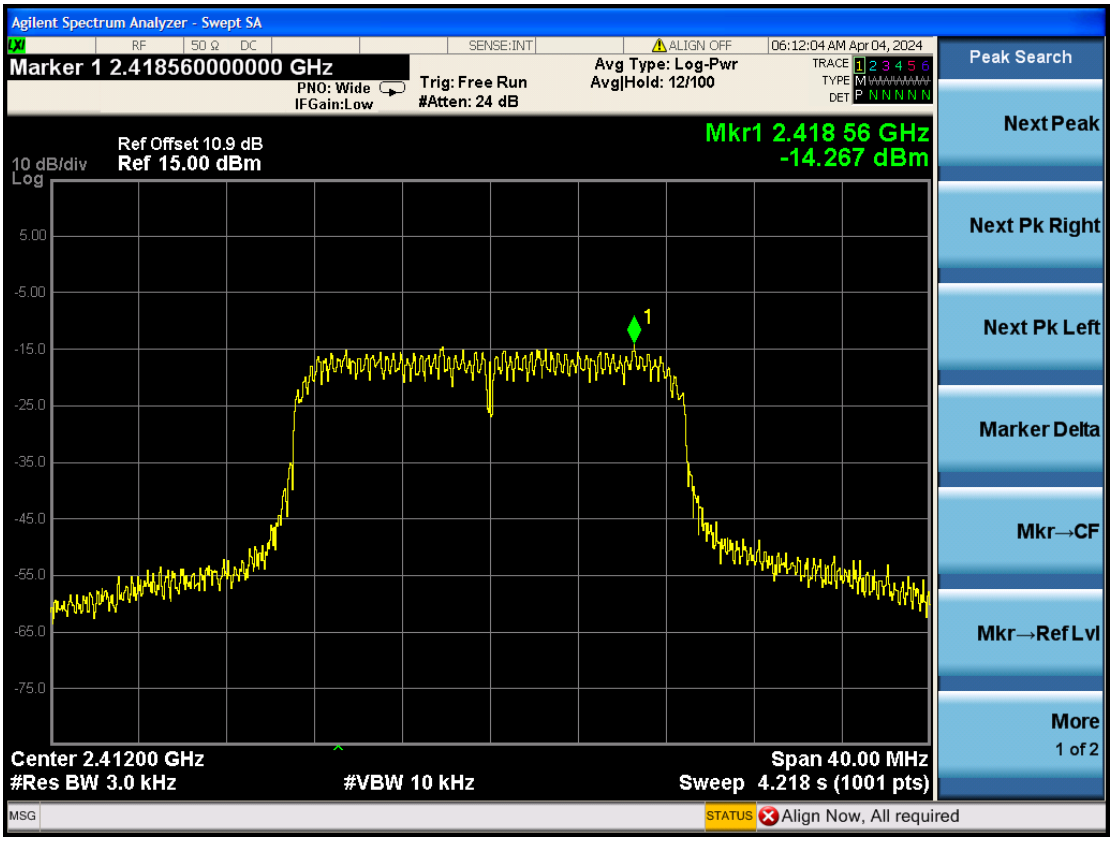
802.11g CH6



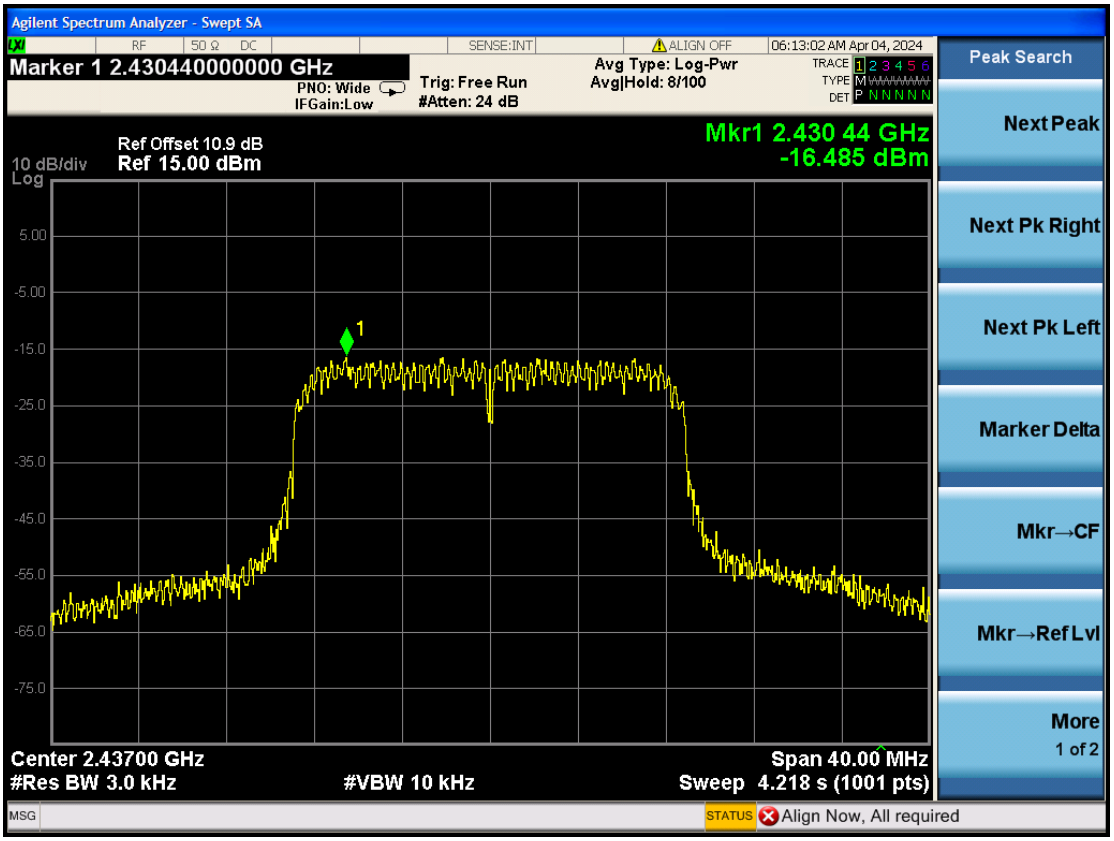
802.11g CH11



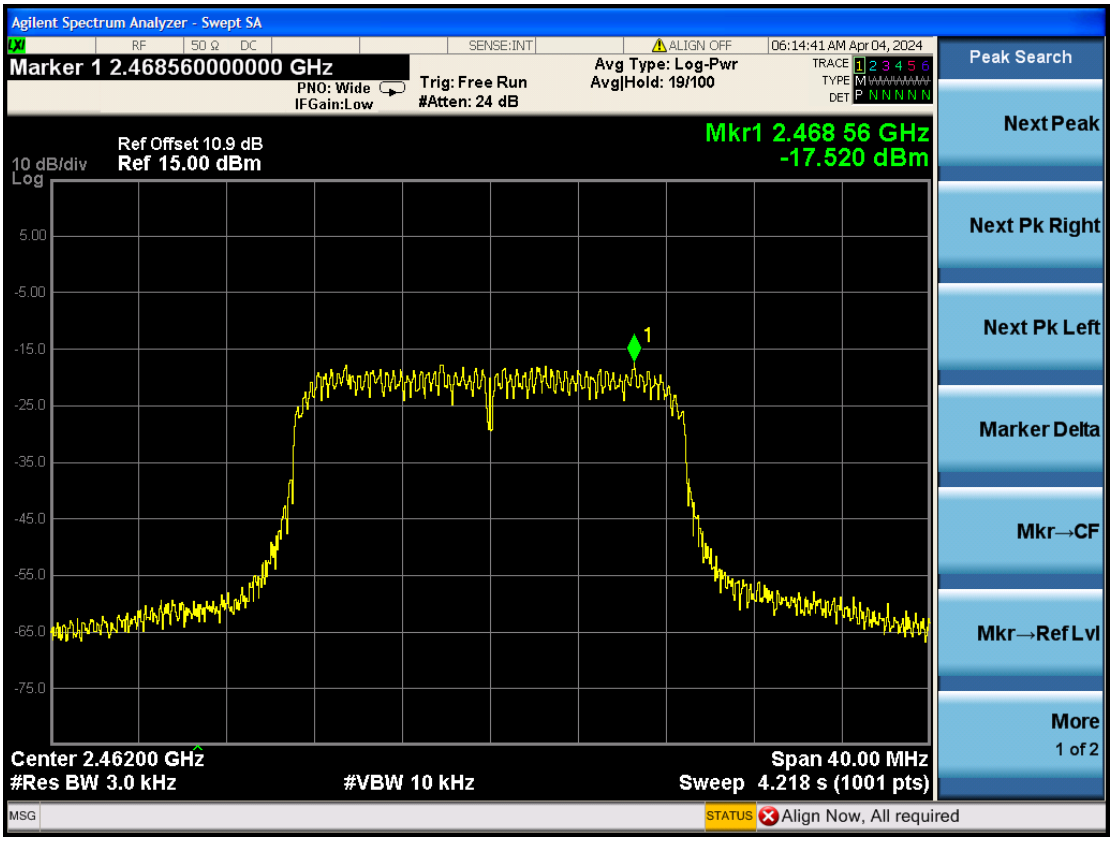
802.11nHT20 CH1



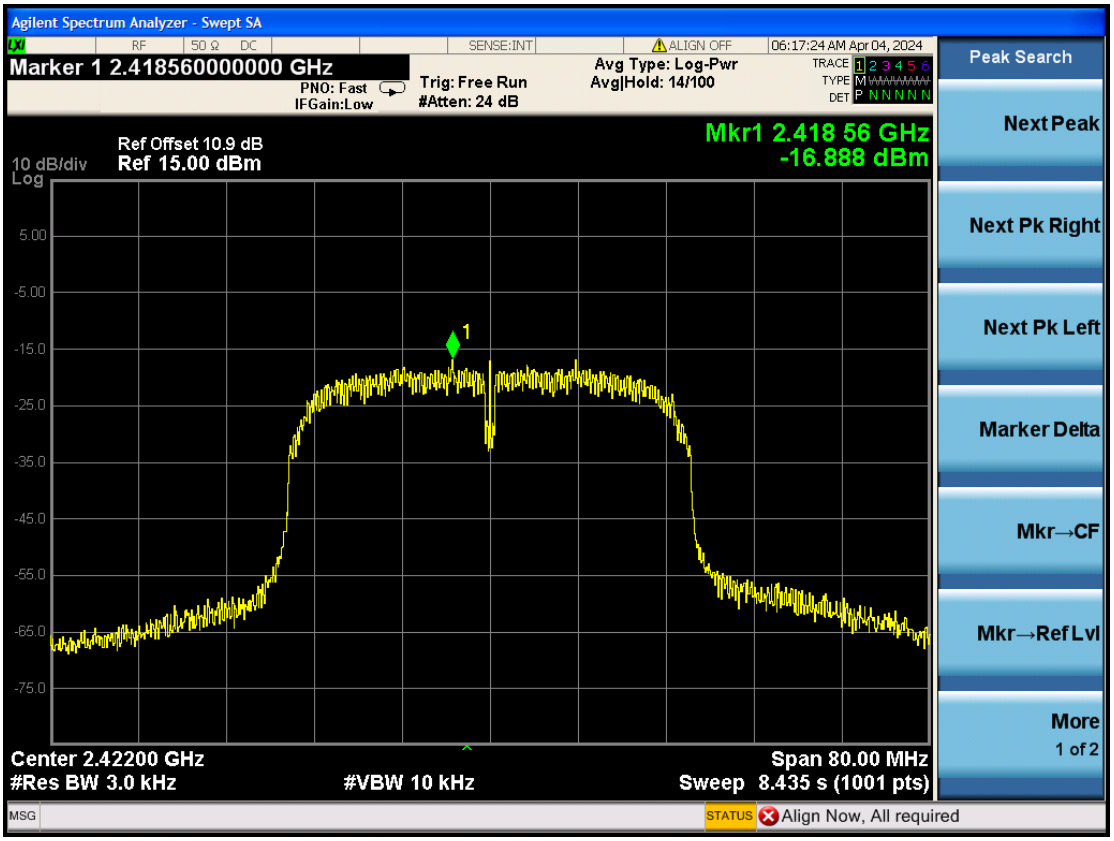
802.11nHT20 CH6



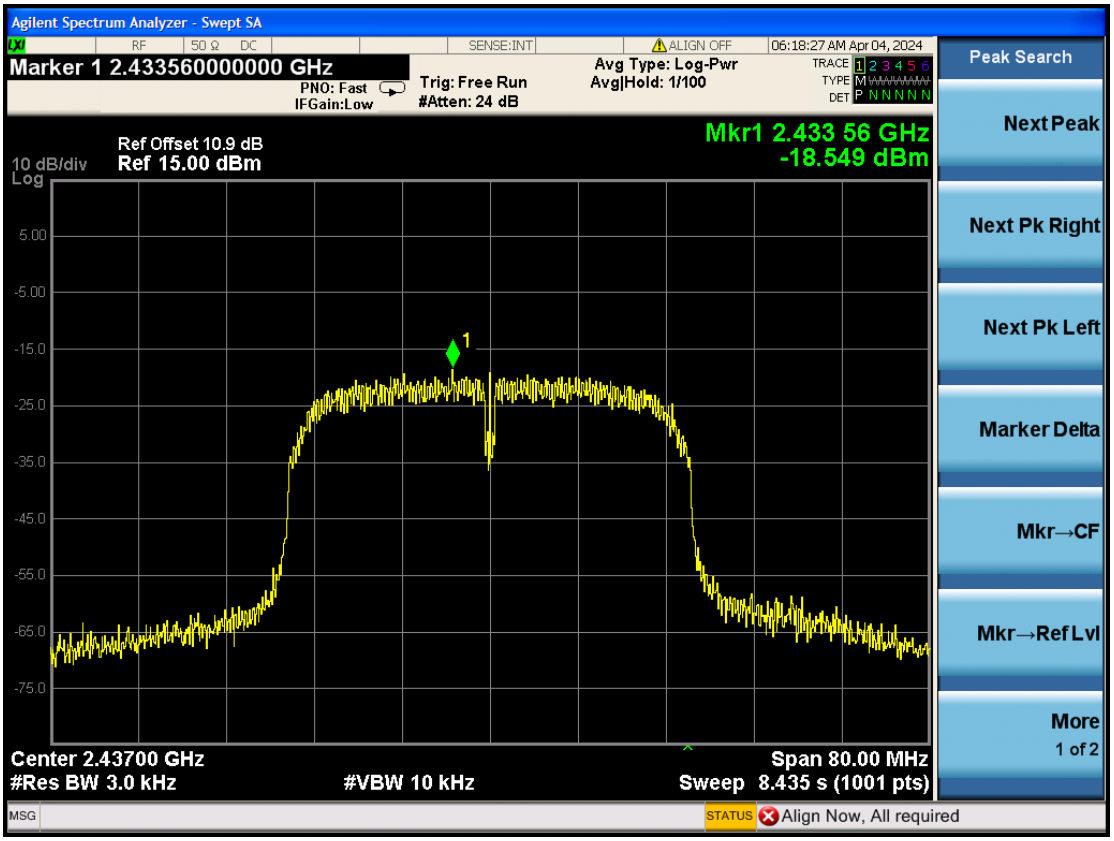
802.11nHT20 CH11



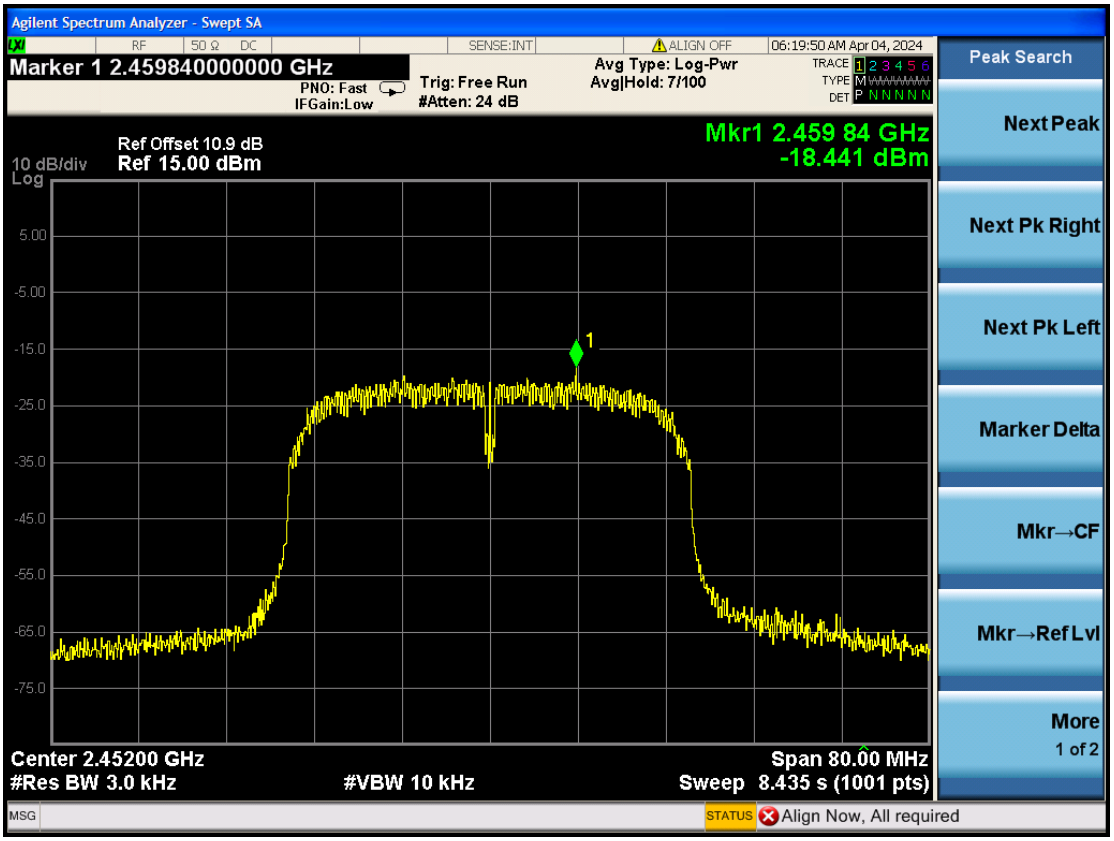
802.11nHT40 CH3



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.

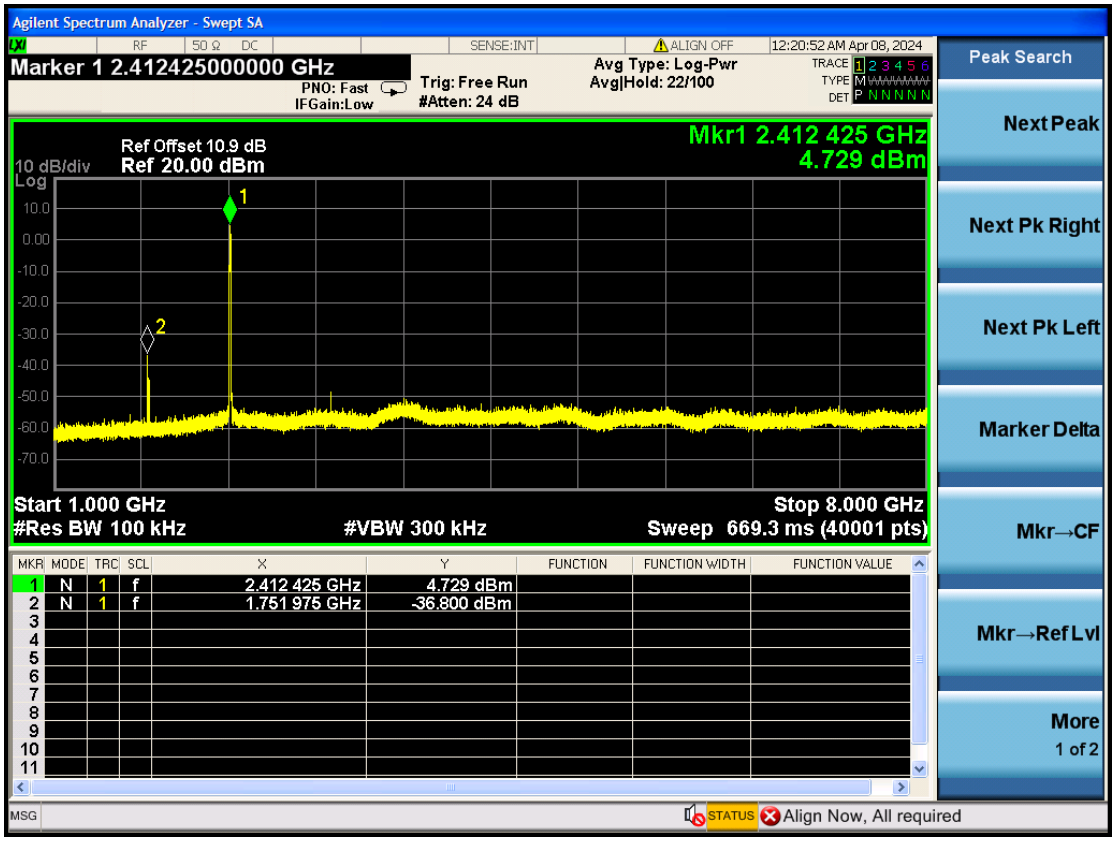
9.5. Test Results

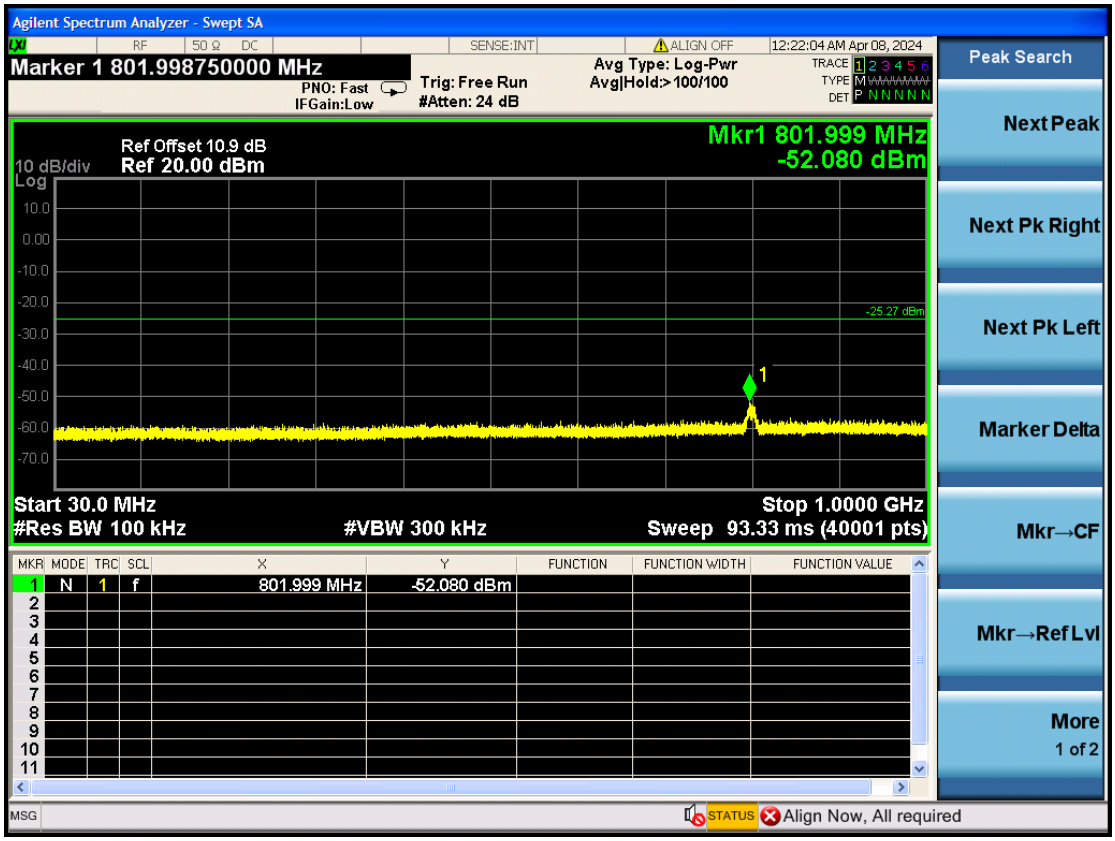
PASSED. All the test results are attached in next pages.

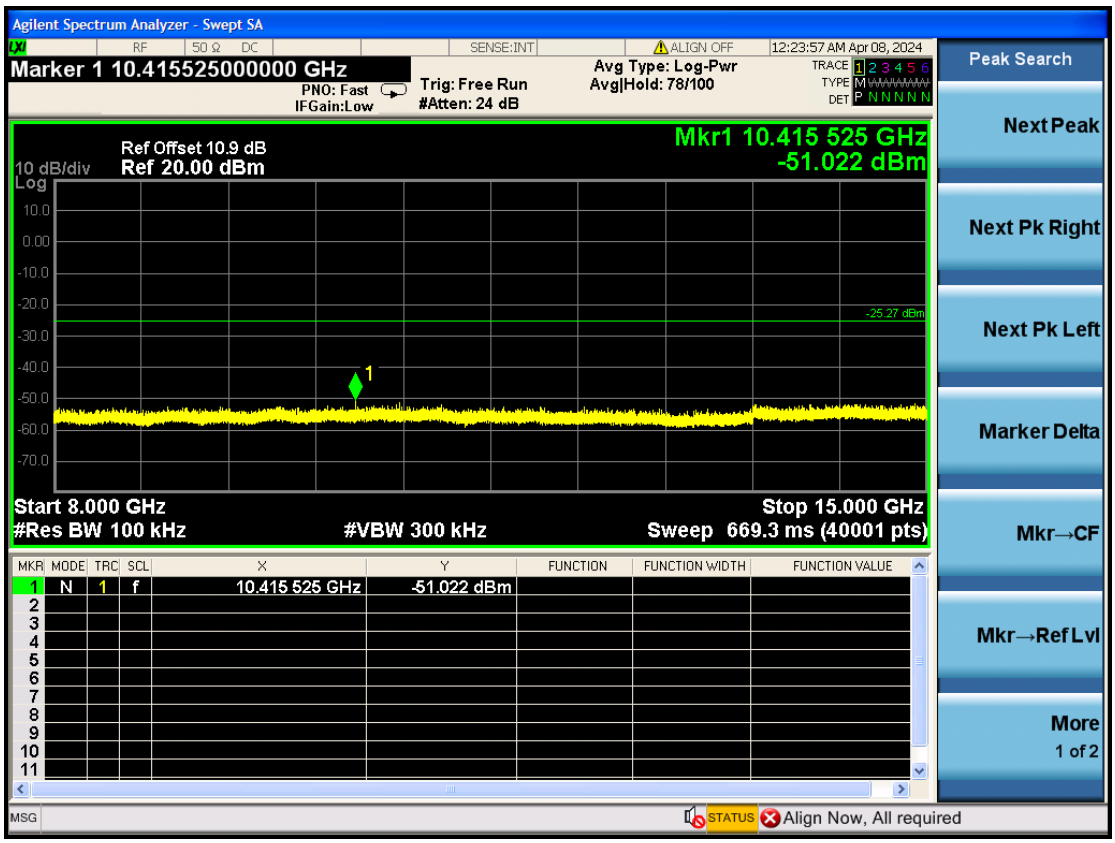
Item	Channel	Frequency (MHz)	Amplitude (dBm)
802.11b	1	2412.425	4.729
		1751.975	-36.800
		801.999	-52.080
		10415.525	-51.022
		24934.25	-46.929
		2390	-57.452
		2400	-53.376
	6	2436.575	8.213
		1624.575	-50.430
		810.68	-52.402
		14903.05	-50.022
		23838.25	-48.386
	11	2460.375	7.604
		1641.375	-50.449
		822.708	-52.264
		14343.925	-51.287
		23648.5	-48.117
		2483.5	-53.483
802.11g	1	2407.35	-3.755
		3216.025	-48.535
		807.916	-55.493
		14091.75	-51.377
		22025.75	-50.013
		2390	-51.521
		2400	-38.512
	6	1773.85	-43.379
		2443.925	2.210
		809.832	-52.875
		14403.25	-52.027
		24095	-48.017
	11	2459.325	1.082
		1765.975	-42.314
		814.657	-53.383
		14351.8	-51.146
		23859.5	-46.992
		2483.5	-38.435
802.11n HT20	1	2409.1	-3.228
		1766.15	-36.292
		807.746	-55.559
		14244.175	-51.389
		23752	-46.915
		2390	-51.788
		2400	-39.726
	6	1766.15	-42.763
		2431.675	2.595
		817.495	-53.610

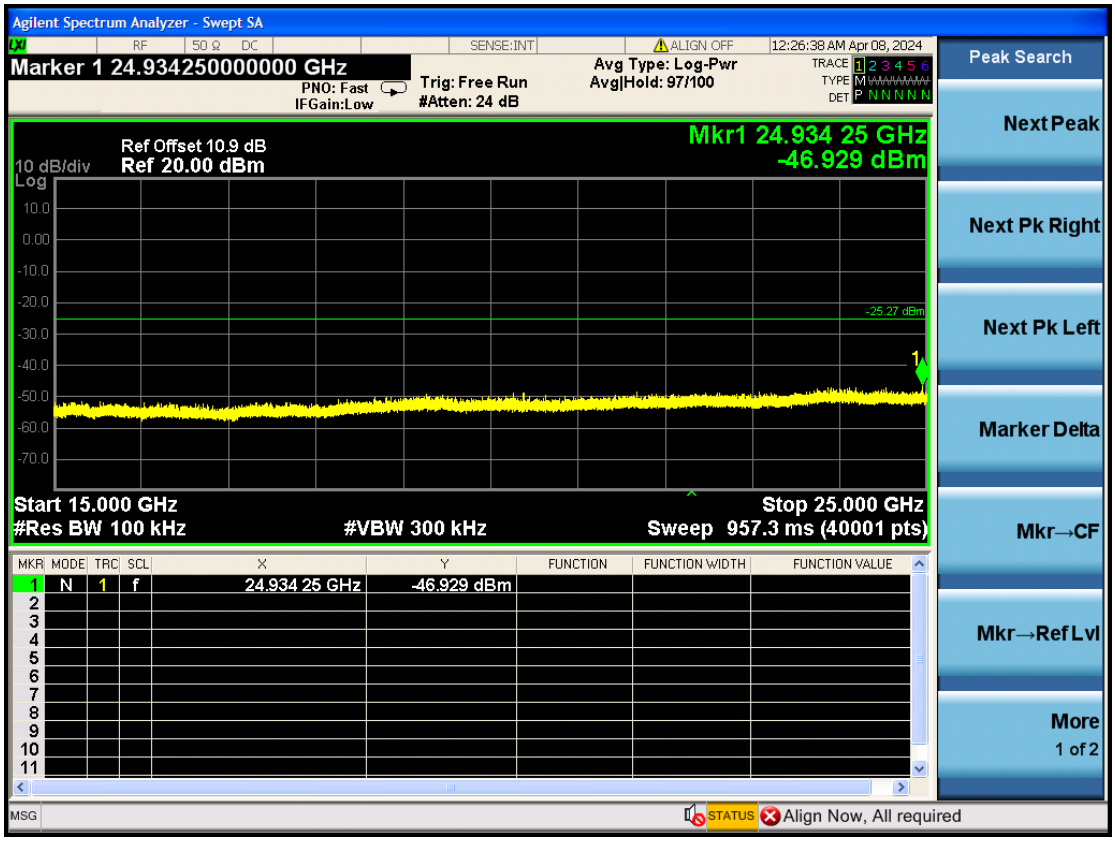
		14364.225	-50.930
		24158.5	-47.933
	11	2462.65	0.720
		3282.7	-49.947
		818.828	-54.075
		11054.8	-51.851
		23939.25	-48.360
		2483.5	-35.277
802.11n HT40	3	2419.775	-4.615
		3229.325	-46.907
		801.975	-54.760
		10432.85	-51.971
		24180.5	-47.890
		2390	-50.676
		2400	-46.521
	6	2432.9	-1.333
		3249.275	-48.831
		803.43	-54.802
		14375.5	-51.099
		23893.75	-47.815
	9	2455.475	-1.599
		1776.475	-32.700
		818.901	-55.276
		10680.125	-51.882
		24868.25	-48.334
		2483.5	-35.852

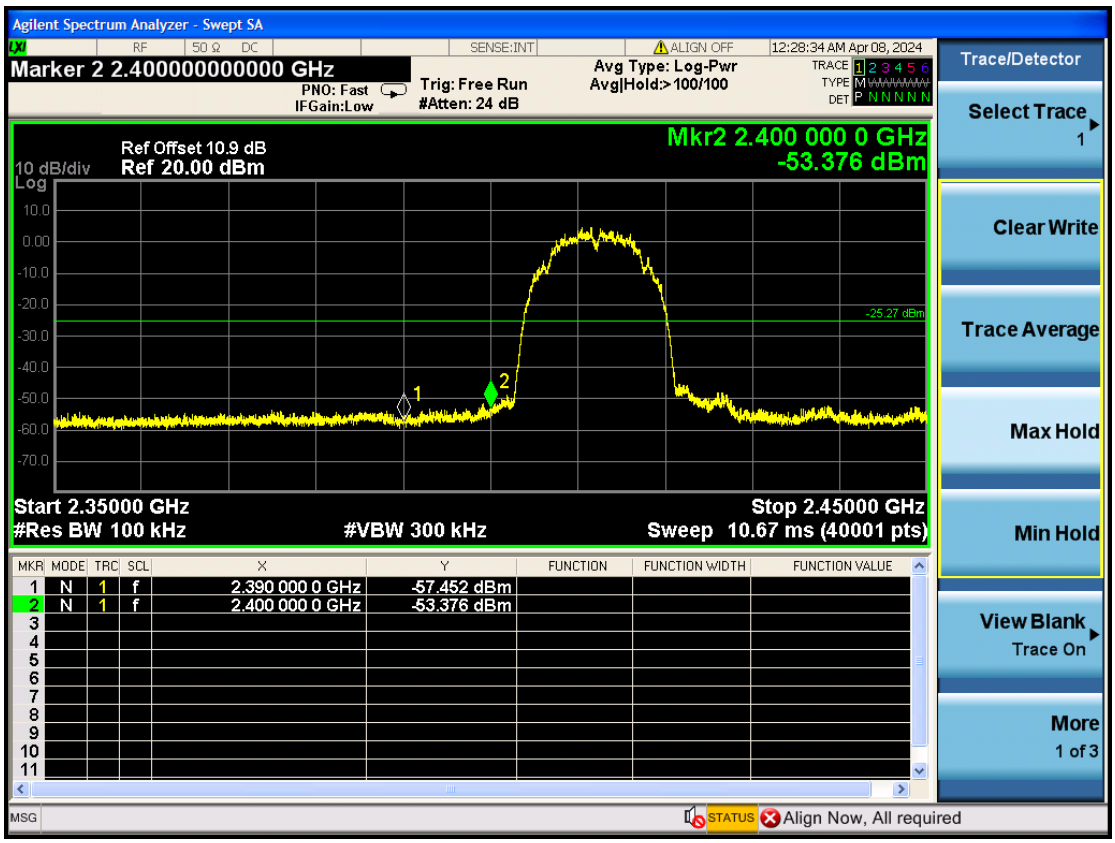
802.11b CH1


Agilent Spectrum Analyzer - Swept SA
Marker 1 2.412425000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
12:20:52 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.412 425 GHz
4.729 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 2.412 425 GHz 4.729 dBm
2 N 1 f 1.751 975 GHz -36.800 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

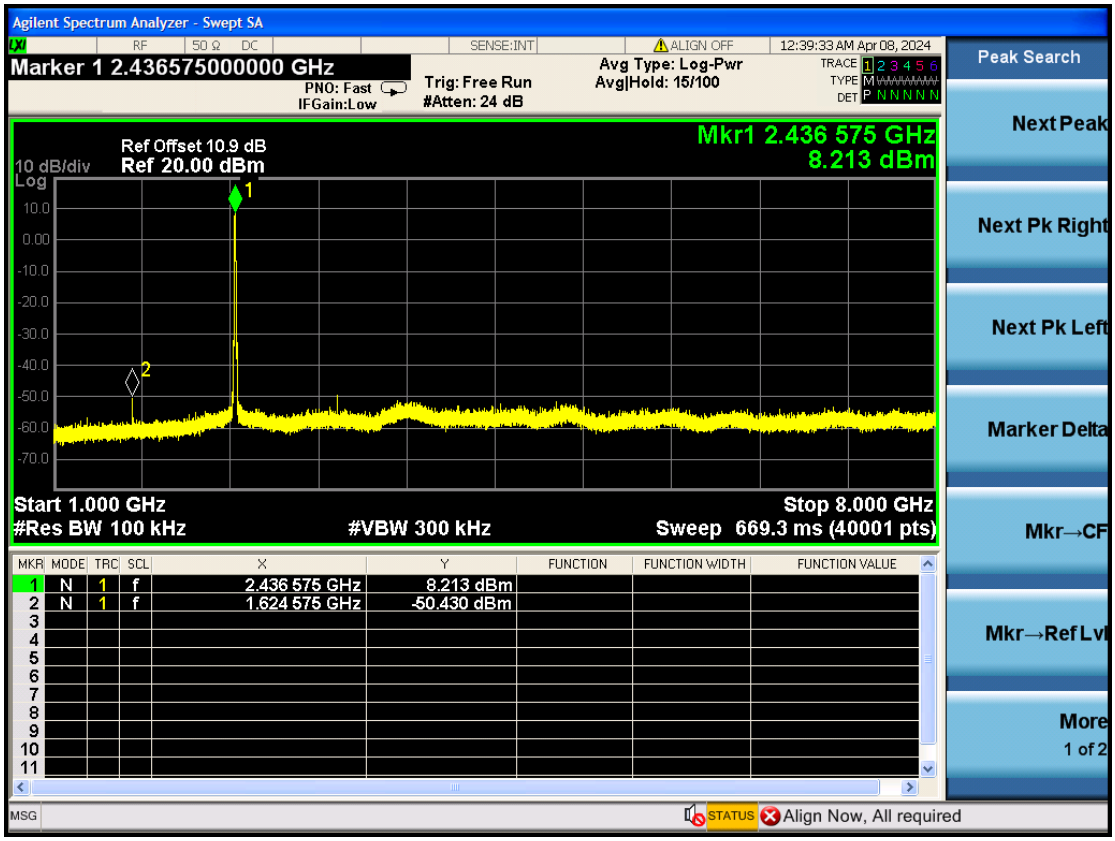

Agilent Spectrum Analyzer - Swept SA
Marker 1 801.998750000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
12:22:04 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 801.999 MHz
-52.080 dBm
-25.27 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 801.999 MHz -52.080 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

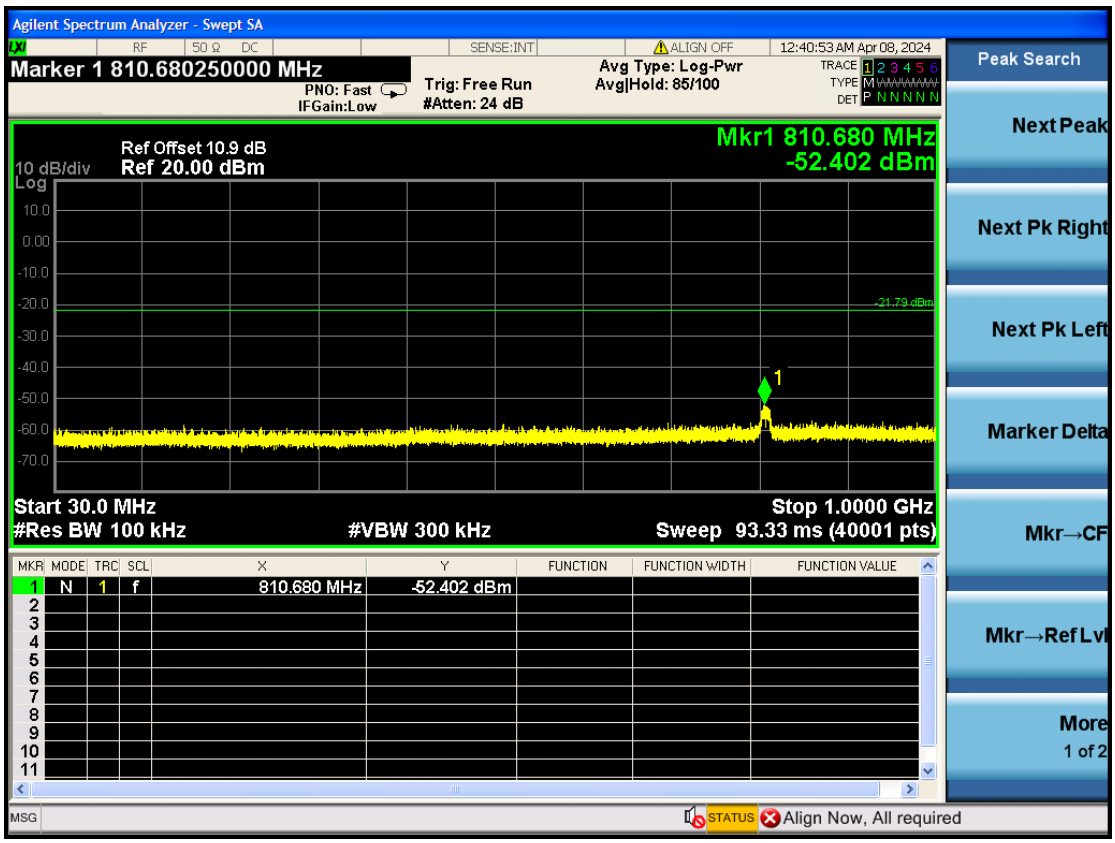

Agilent Spectrum Analyzer - Swept SA
Marker 1 10.415525000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 78/100
12:23:57 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 10.415 525 GHz
-51.022 dBm
-25.27 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 10.415 525 GHz -51.022 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

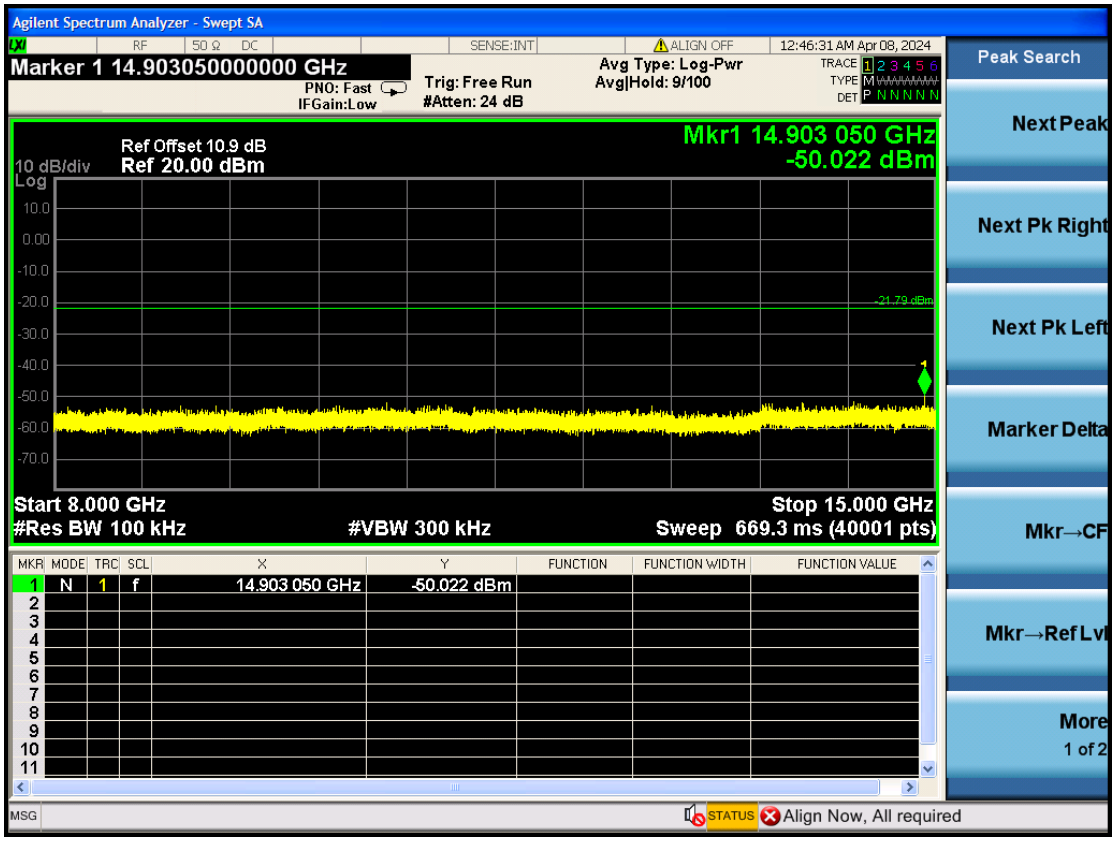

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.934250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 97/100
12:26:38 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 24.934 25 GHz
-46.929 dBm
-25.27 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 24.934 25 GHz -46.929 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

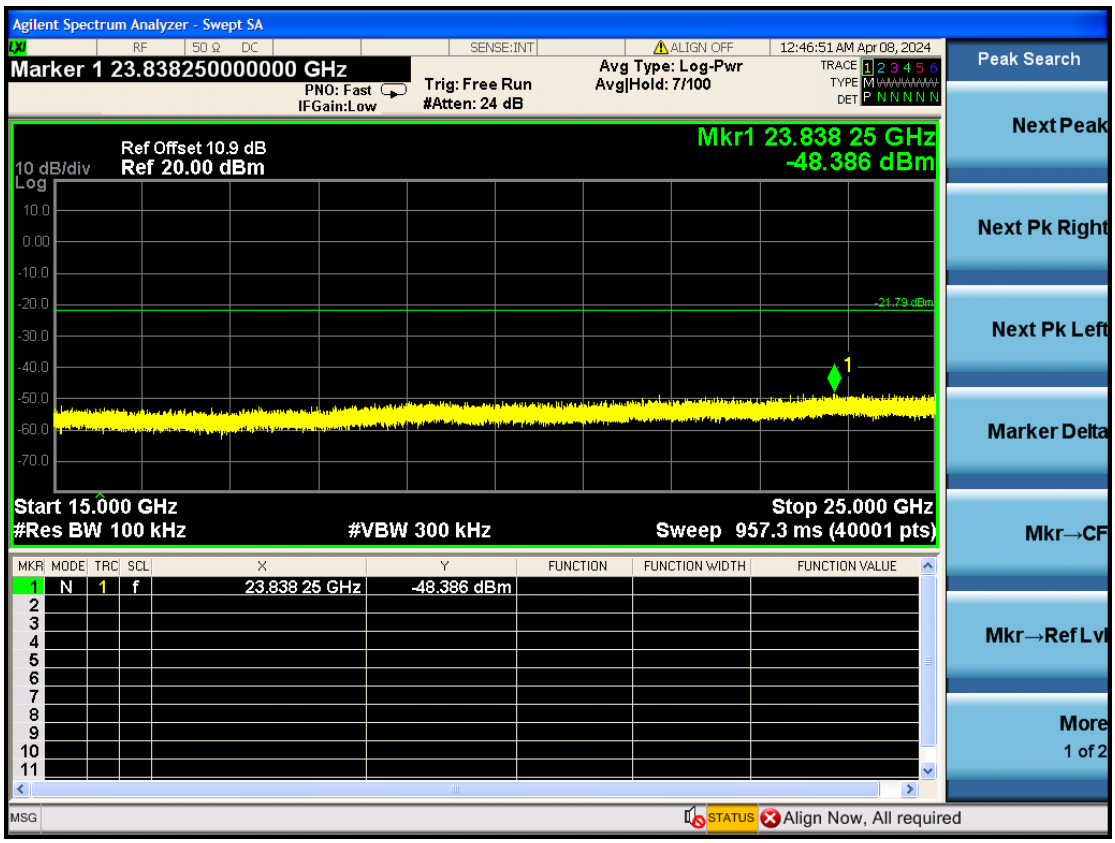

Agilent Spectrum Analyzer - Swept SA
Marker 2 2.400000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
12:28:34 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr2 2.400 000 0 GHz
-53.376 dBm
-25.27 dBm
Start 2.35000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.45000 GHz
Sweep 10.67 ms (40001 pts)
1 N 1 f 2.390 000 0 GHz -57.452 dBm
2 N 1 f 2.400 000 0 GHz -53.376 dBm
Trace/Detector
Select Trace 1
Clear Write
Trace Average
Max Hold
Min Hold
View Blank Trace On
More 1 of 3
Align Now, All required

802.11b CH6

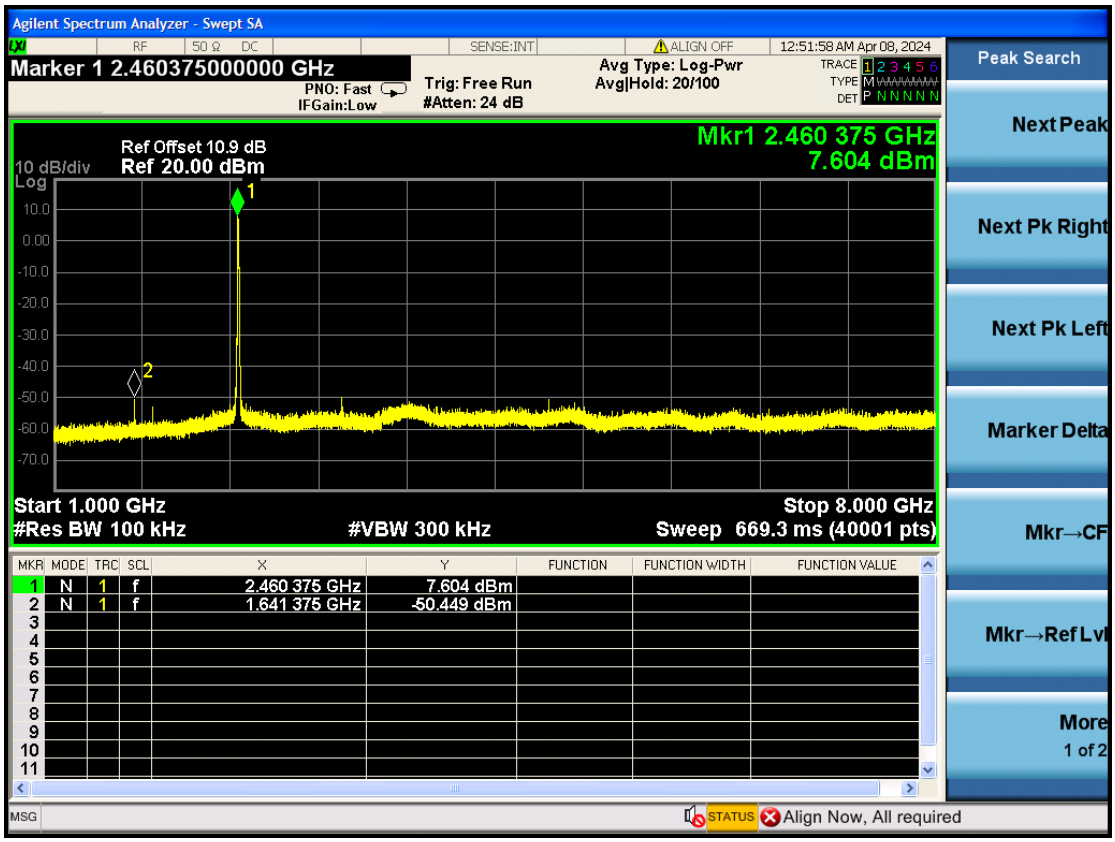

Agilent Spectrum Analyzer - Swept SA
Marker 1 2.436575000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 15/100
12:39:33 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.436 575 GHz
8.213 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 8.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 2.436 575 GHz 8.213 dBm
2 N 1 f 1.624 575 GHz -50.430 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

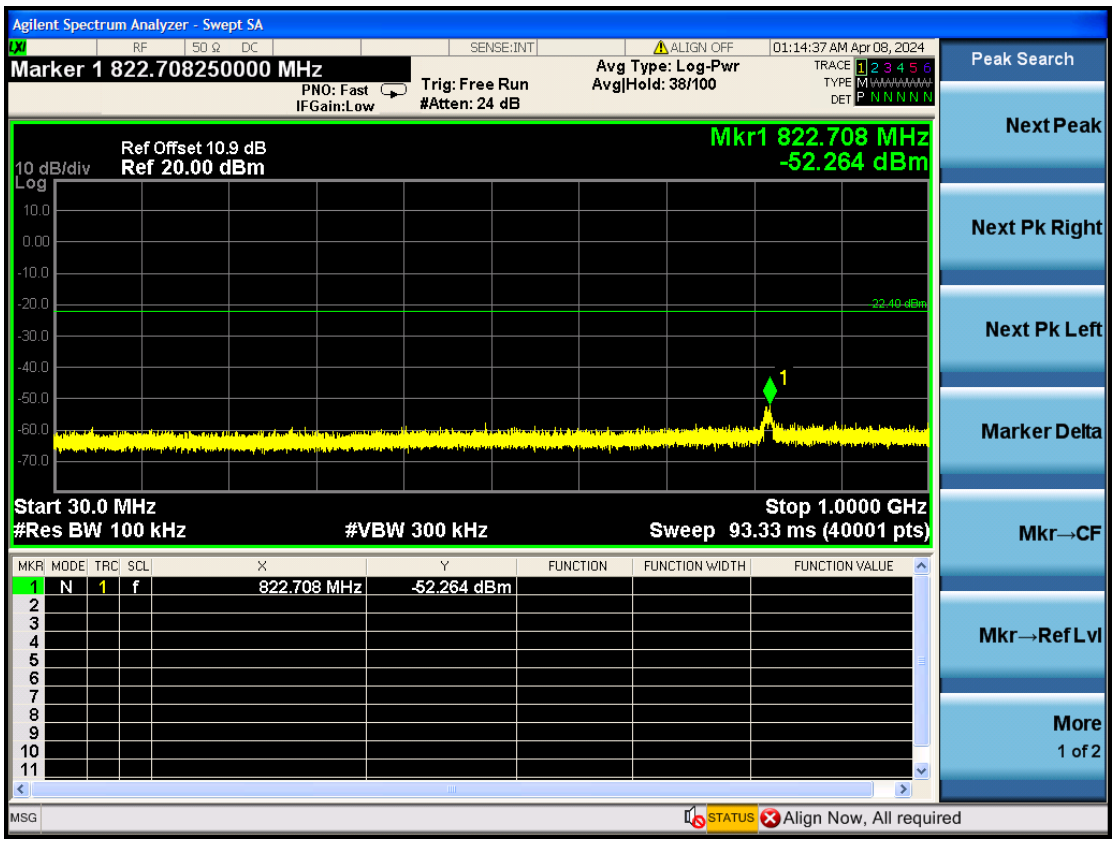

Agilent Spectrum Analyzer - Swept SA
Marker 1 810.680250000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 85/100
12:40:53 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 810.680 MHz
-52.402 dBm
-21.79 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 810.680 MHz -52.402 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

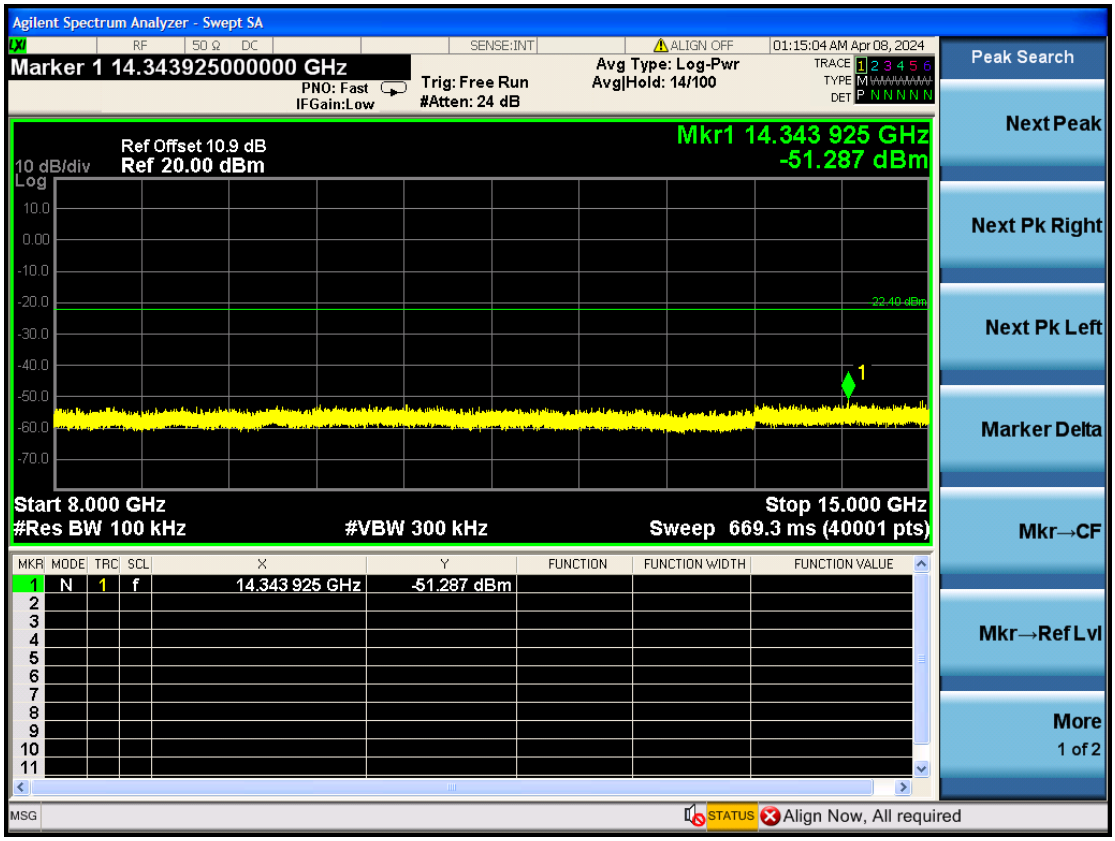

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.903050000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 9/100
12:46:31 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.903 050 GHz
-50.022 dBm
-21.79 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.903 050 GHz -50.022 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

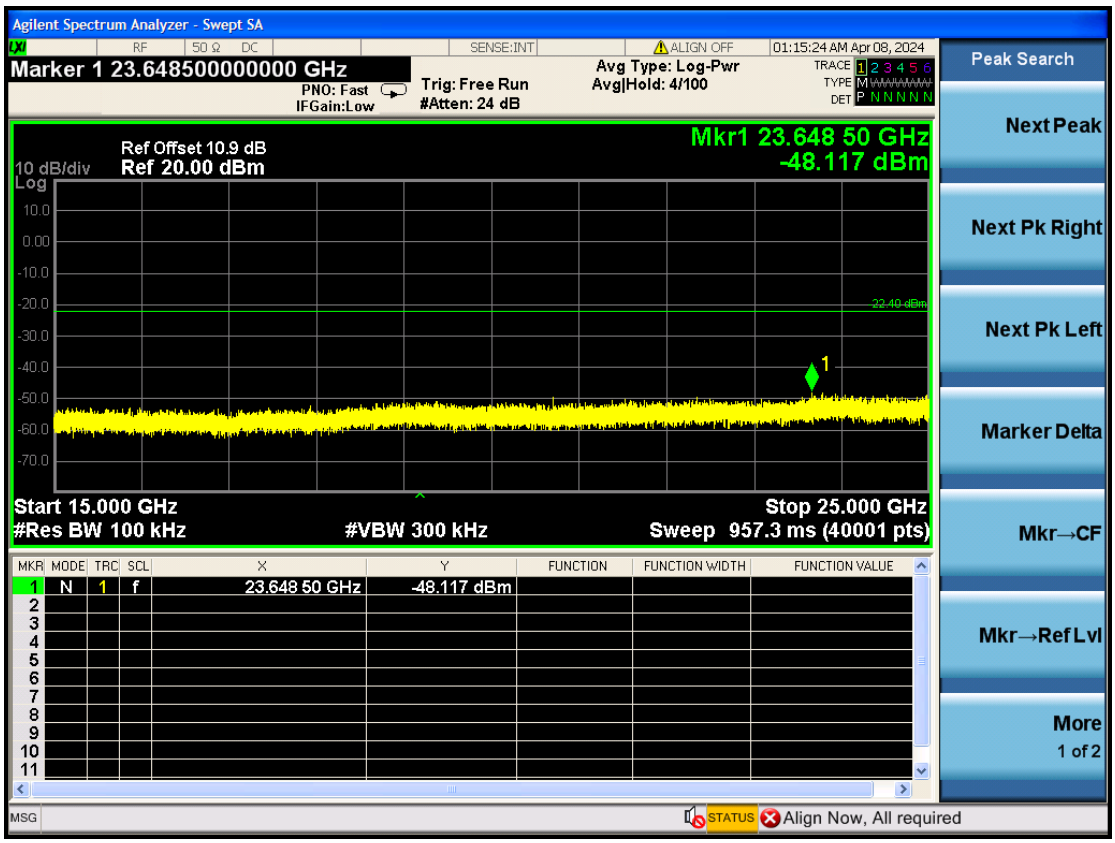

Agilent Spectrum Analyzer - Swept SA
Marker 1 23.838250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 7/100
12:46:51 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 23.838 25 GHz
-48.386 dBm
-21.79 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 23.838 25 GHz -48.386 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

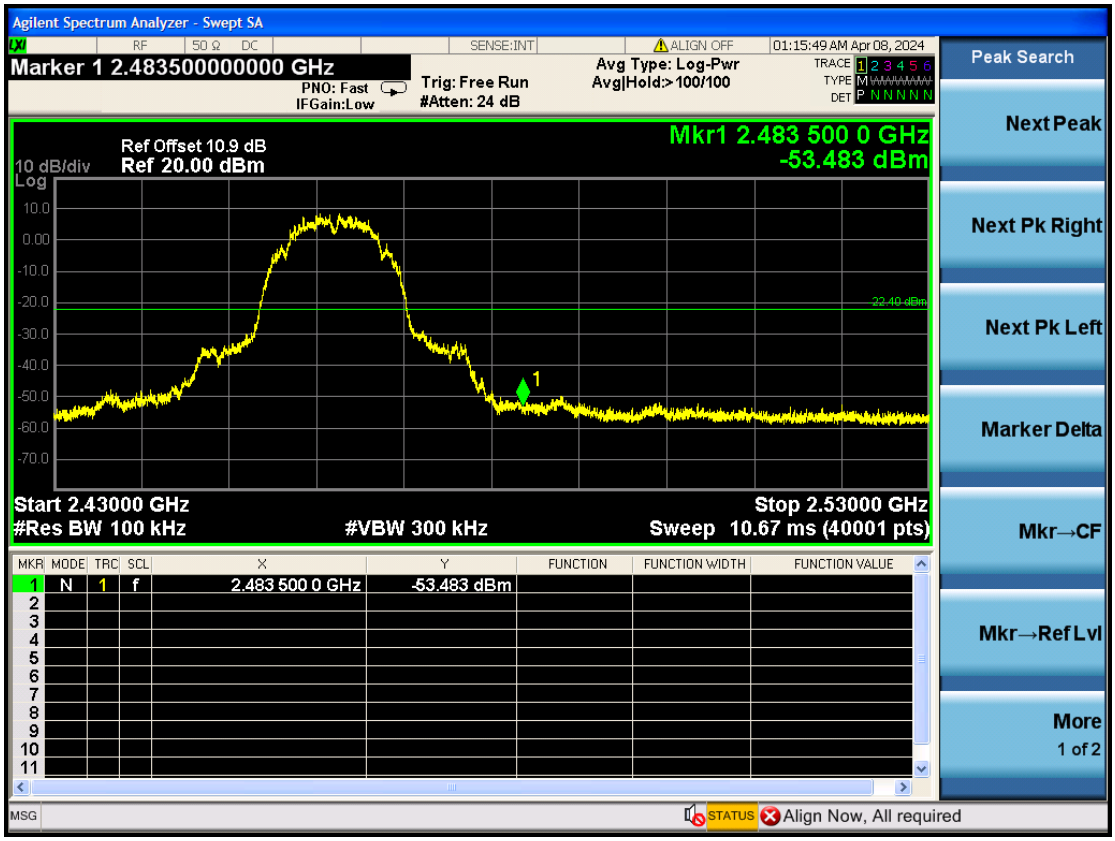
802.11b CH11


Agilent Spectrum Analyzer - Swept SA
Marker 1 2.460375000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 20/100
12:51:58 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.460 375 GHz
7.604 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 2.460 375 GHz 7.604 dBm
2 N 1 f 1.641 375 GHz -50.449 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

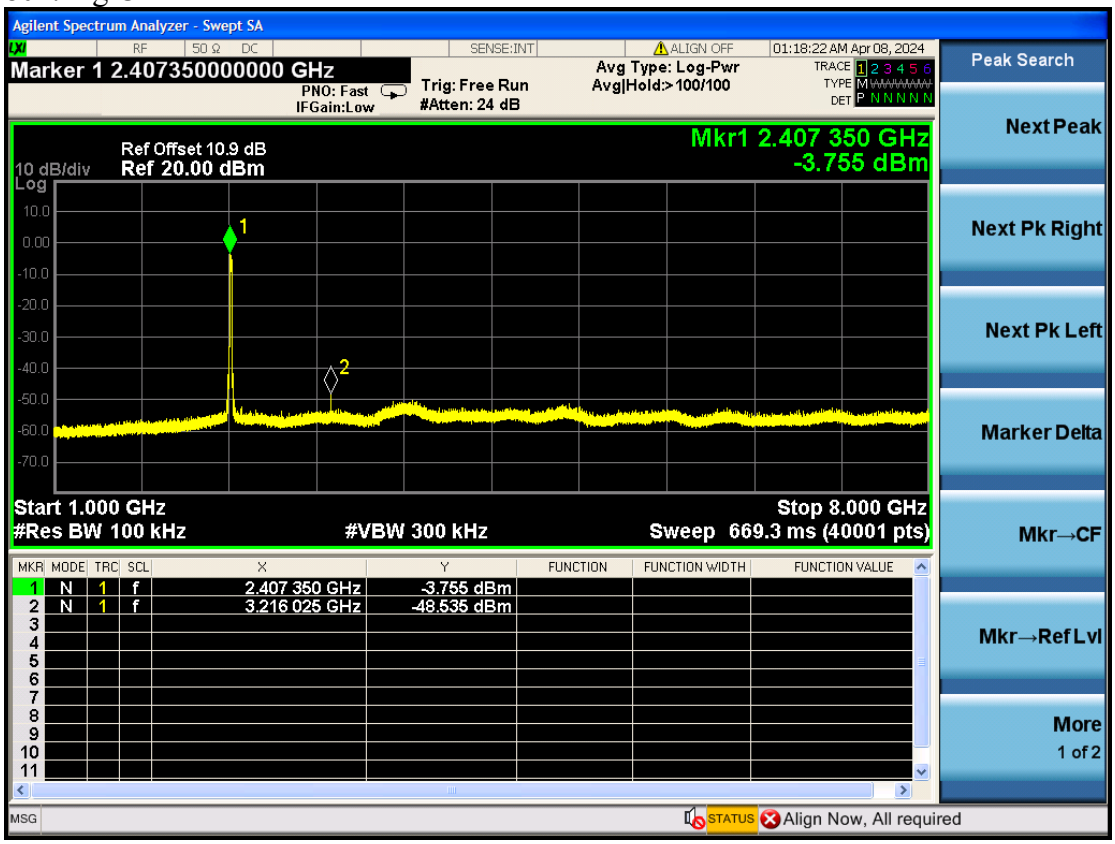

Agilent Spectrum Analyzer - Swept SA
Marker 1 822.708250000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 38/100
01:14:37 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 822.708 MHz
-52.264 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 822.708 MHz -52.264 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

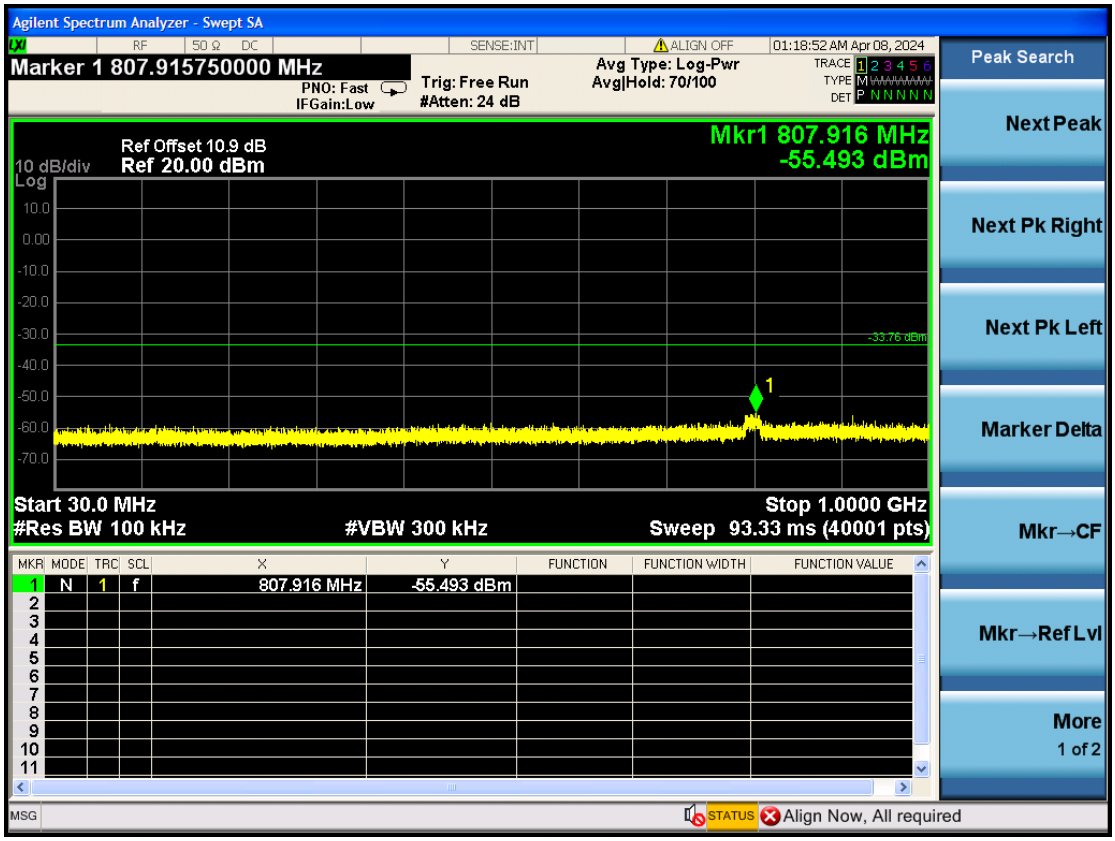

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.343925000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 14/100
01:15:04 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.343 925 GHz
-51.287 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.343 925 GHz -51.287 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

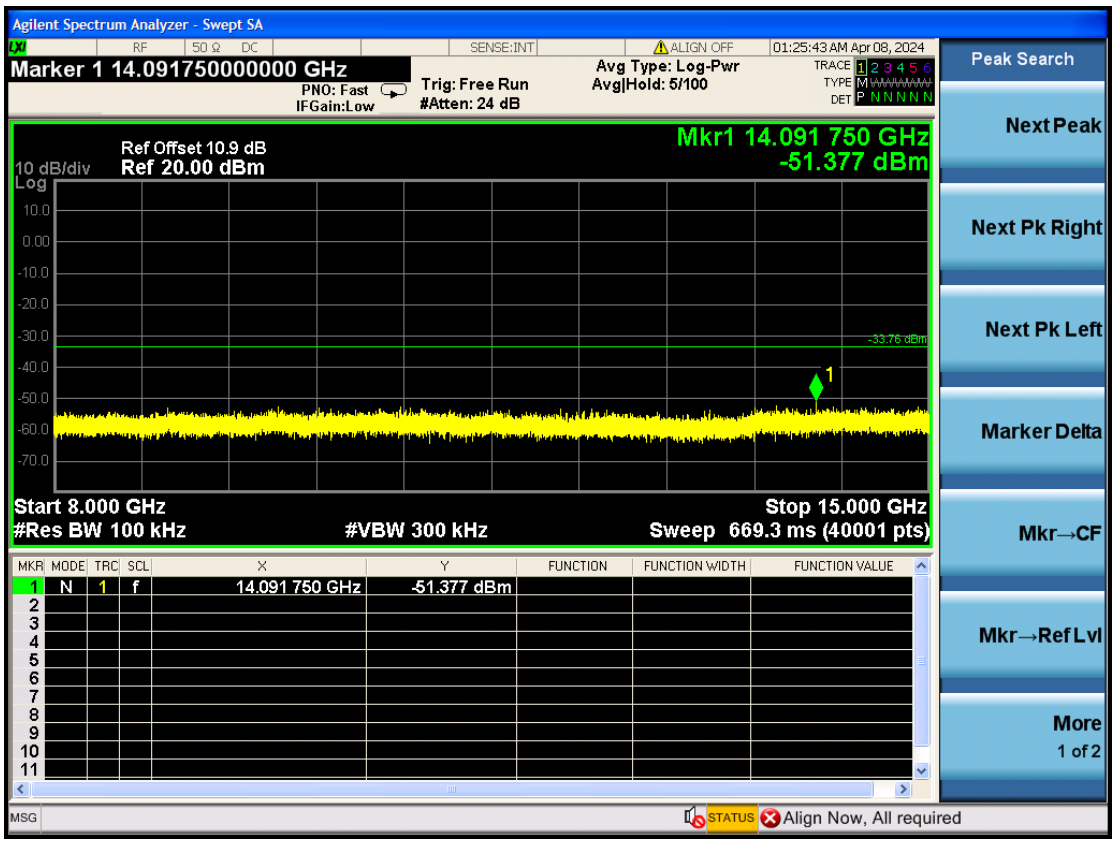

Agilent Spectrum Analyzer - Swept SA
Marker 1 23.648500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 4/100
01:15:24 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 23.648 50 GHz
-48.117 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 23.648 50 GHz -48.117 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

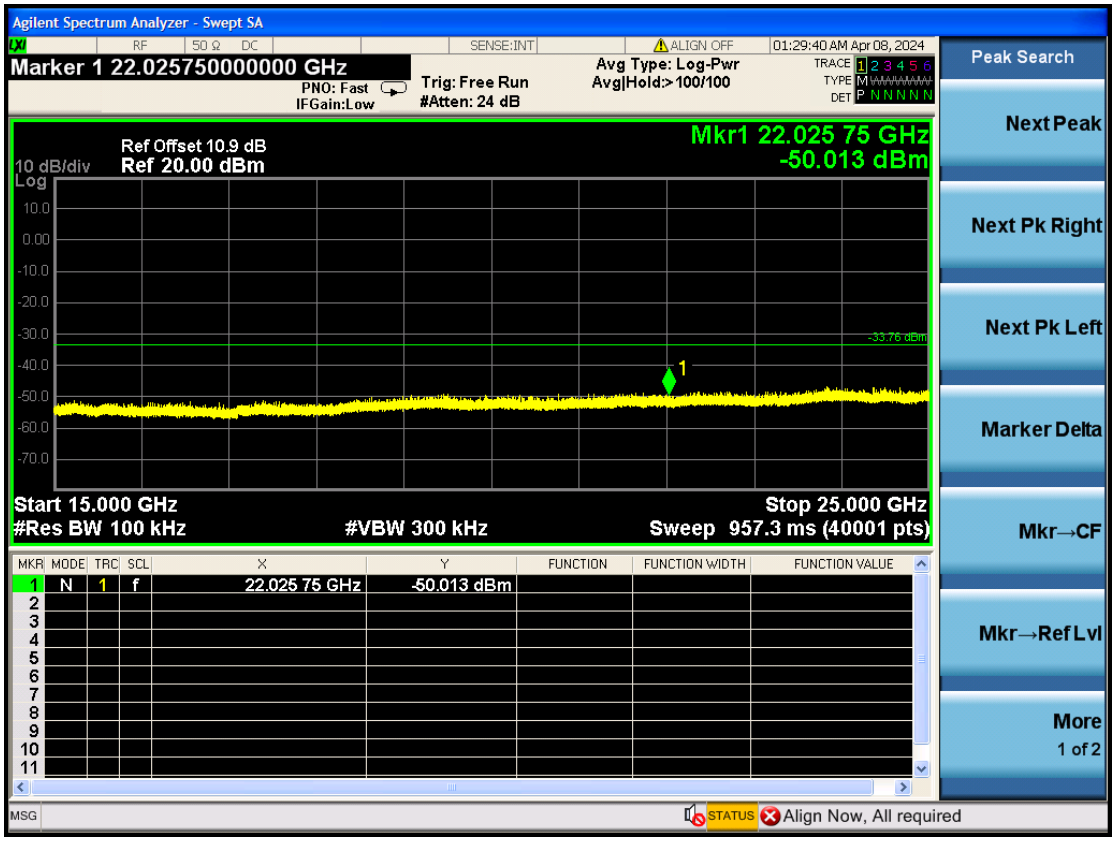

Agilent Spectrum Analyzer - Swept SA
Marker 1 2.483500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
01:15:49 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.483 500 0 GHz
-53.483 dBm
Start 2.43000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.53000 GHz
Sweep 10.67 ms (40001 pts)
1 N 1 f 2.483 500 0 GHz -53.483 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

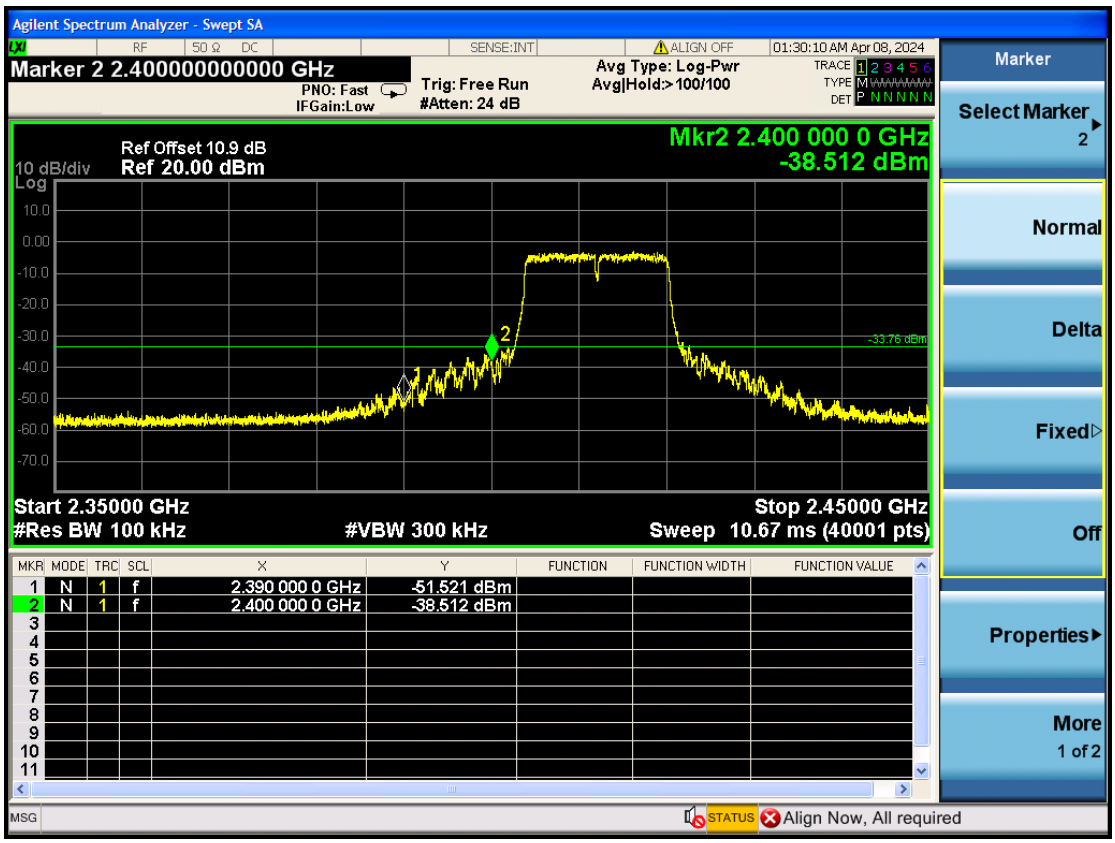
802.11g CH1


Agilent Spectrum Analyzer - Swept SA
Marker 1 2.407350000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
01:18:22 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.407 350 GHz
-3.755 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 2.407 350 GHz -3.755 dBm
2 N 1 f 3.216 025 GHz -48.535 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

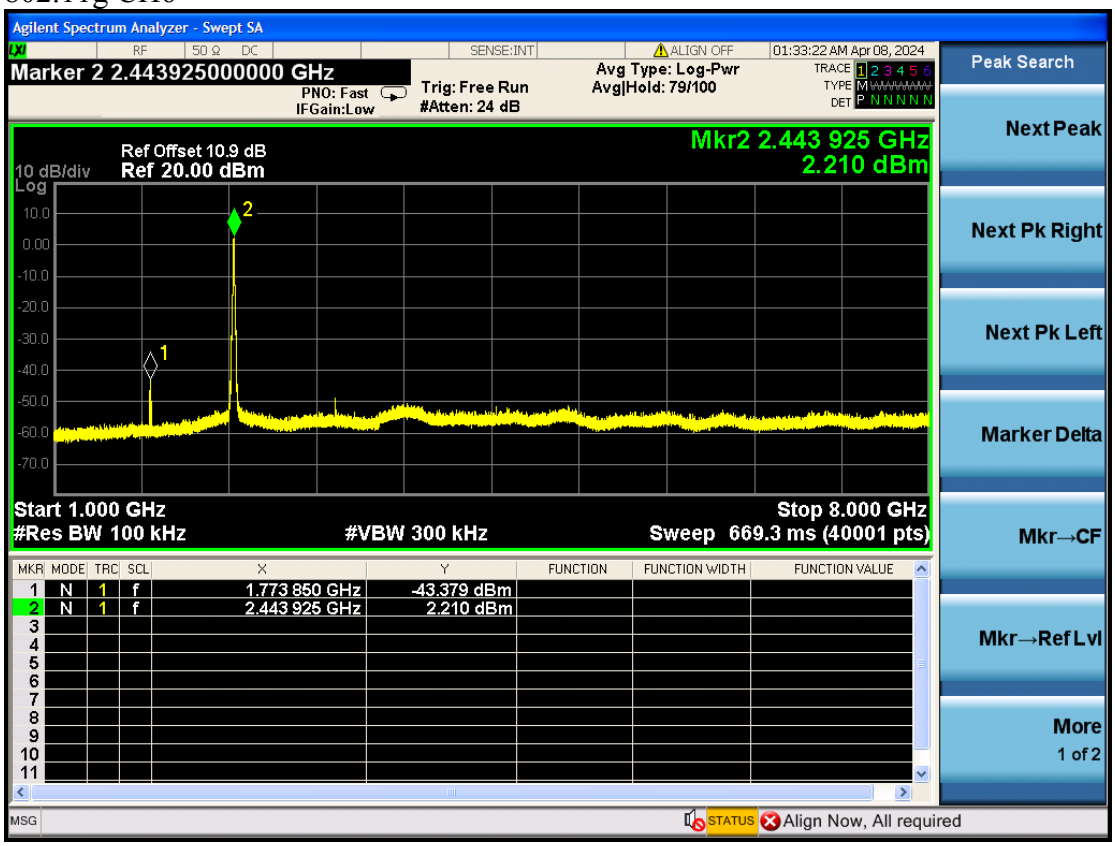

Agilent Spectrum Analyzer - Swept SA
Marker 1 807.915750000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 70/100
01:18:52 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 807.916 MHz
-55.493 dBm
-33.76 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 807.916 MHz -55.493 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 14.091750000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 5/100
01:25:43 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.091 750 GHz
-51.377 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 14.091 750 GHz -51.377 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

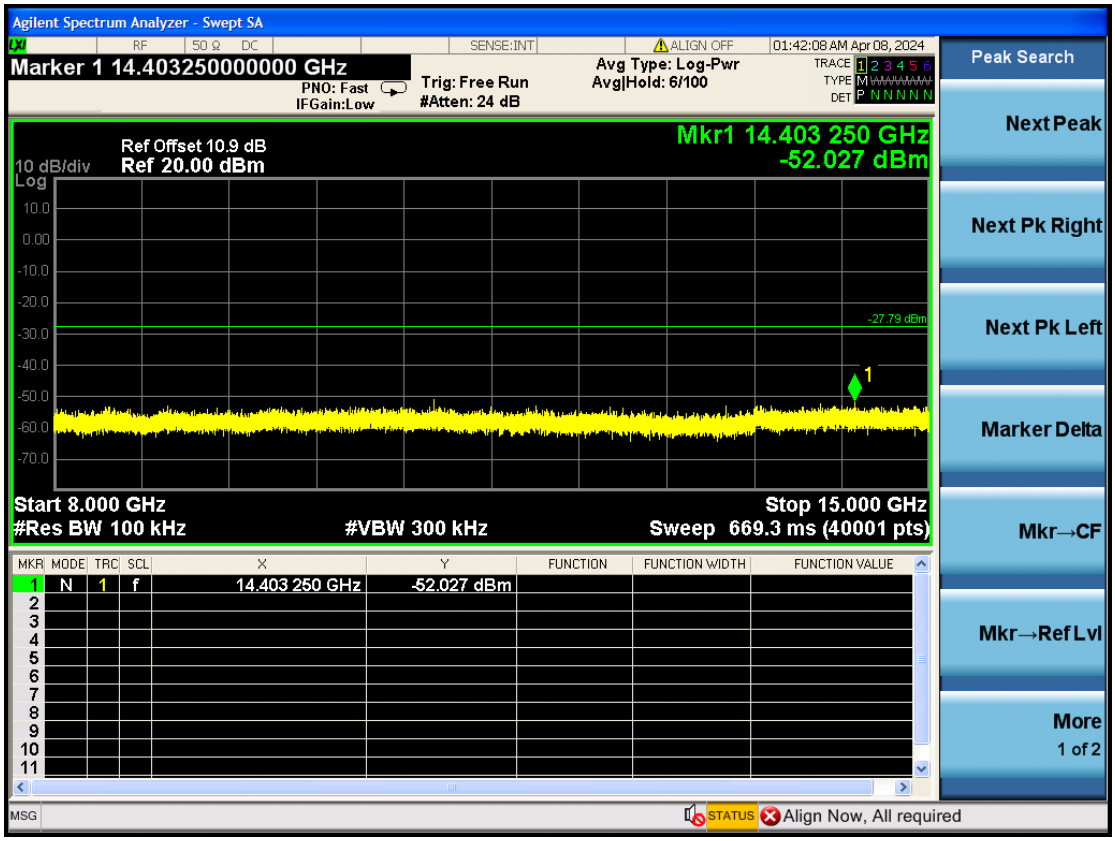

Agilent Spectrum Analyzer - Swept SA
Marker 1 22.025750000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
01:29:40 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 22.025 75 GHz
-50.013 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 22.025 75 GHz -50.013 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

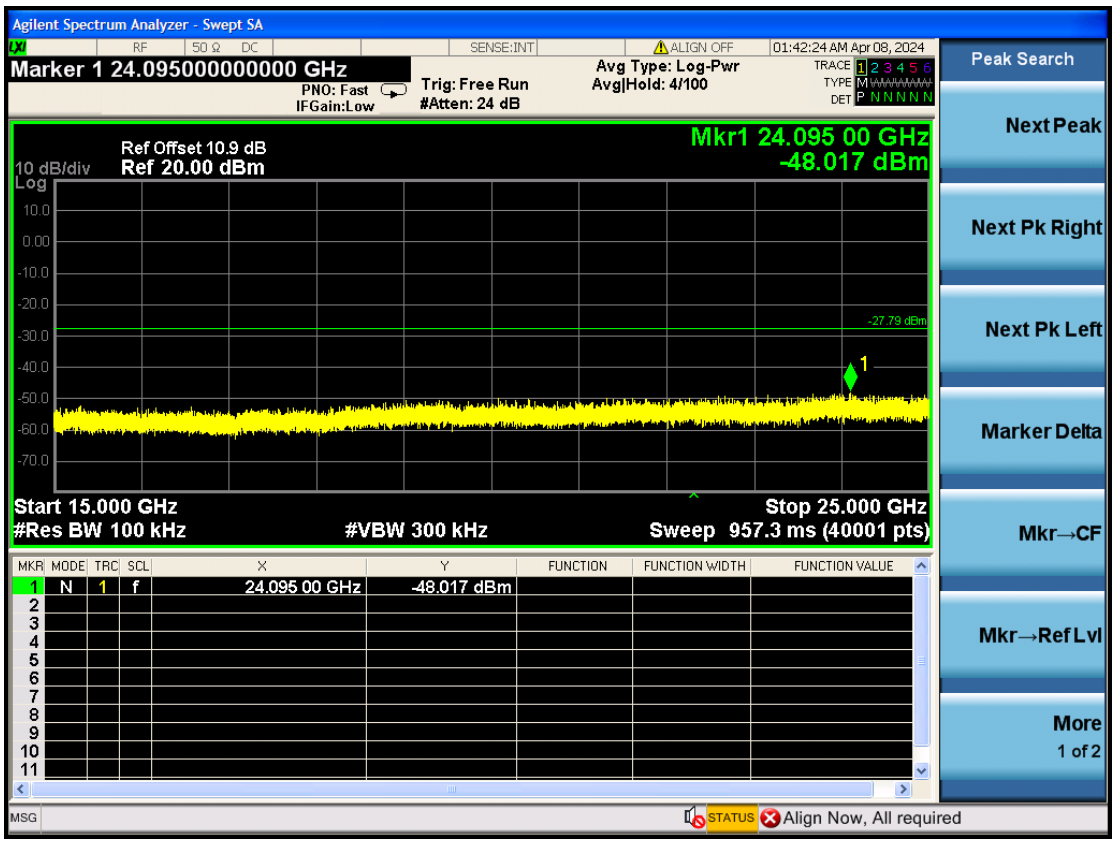

Agilent Spectrum Analyzer - Swept SA
Marker 2 2.400000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
01:30:10 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr2 2.400 000 0 GHz
-38.512 dBm
-33.76 dBm
Start 2.35000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.45000 GHz
Sweep 10.67 ms (40001 pts)
1 N 1 f 2.390 000 0 GHz -51.521 dBm
2 N 1 f 2.400 000 0 GHz -38.512 dBm
Marker
Select Marker 2
Normal
Delta
Fixed
Off
Properties
More 1 of 2
Align Now, All required

802.11g CH6

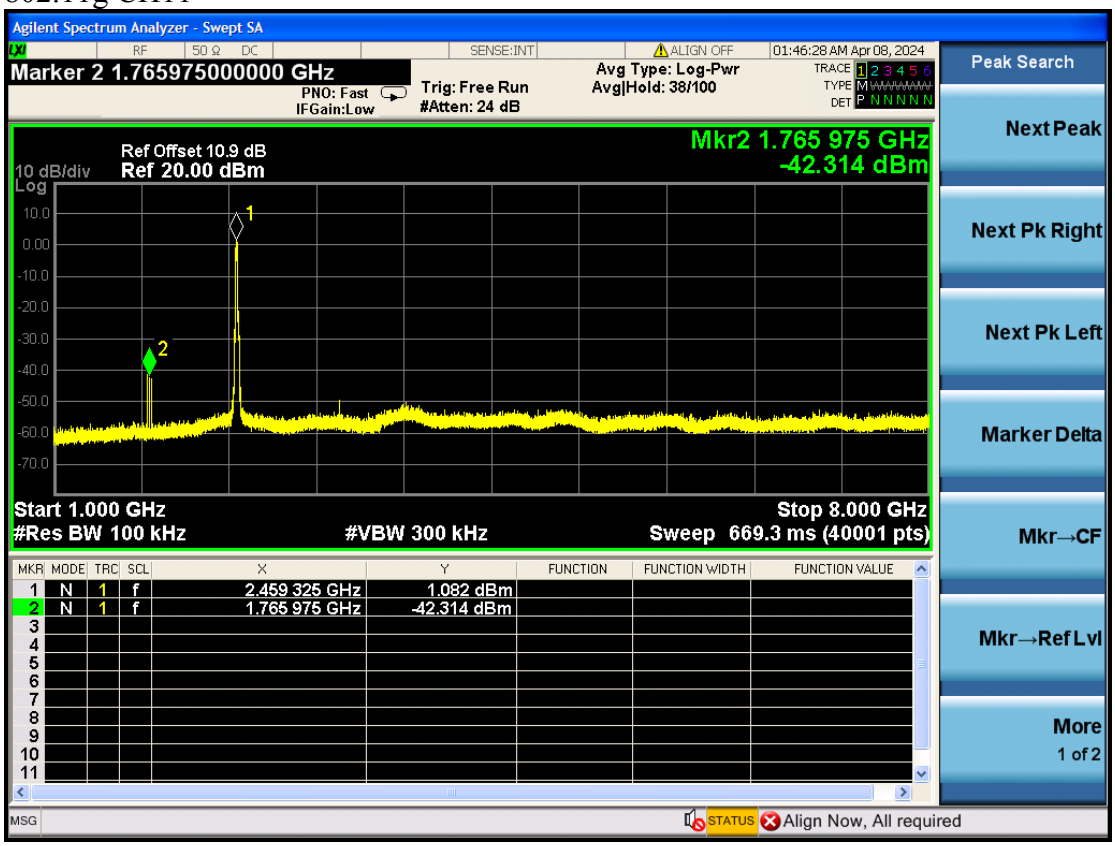

Agilent Spectrum Analyzer - Swept SA
Marker 2 2.443925000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 79/100
01:33:22 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr2 2.443 925 GHz
2.210 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 8.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 1.773 850 GHz -43.379 dBm
2 N 1 f 2.443 925 GHz 2.210 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

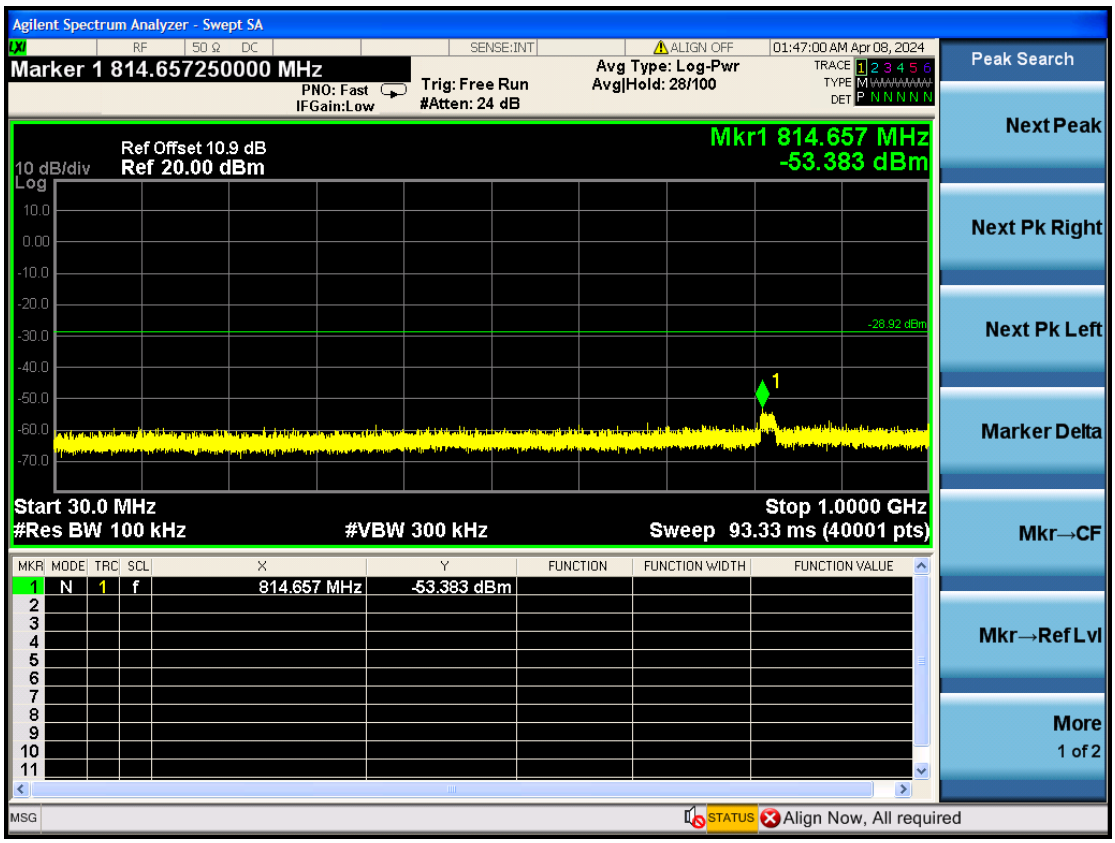
Agilent Spectrum Analyzer - Swept SA
RBW 100 kHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
01:41:46 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 809.832 MHz
-52.875 dBm
-27.79 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 809.832 MHz -52.875 dBm
BW
Res BW 100 kHz
Auto Man
Video BW 300 kHz
Auto Man
VBW:3dB RBW 10.0
Auto Man
Span:3dB RBW 106
Auto Man
RBW Control
[Gaussian,-3 dB]
Align Now, All required

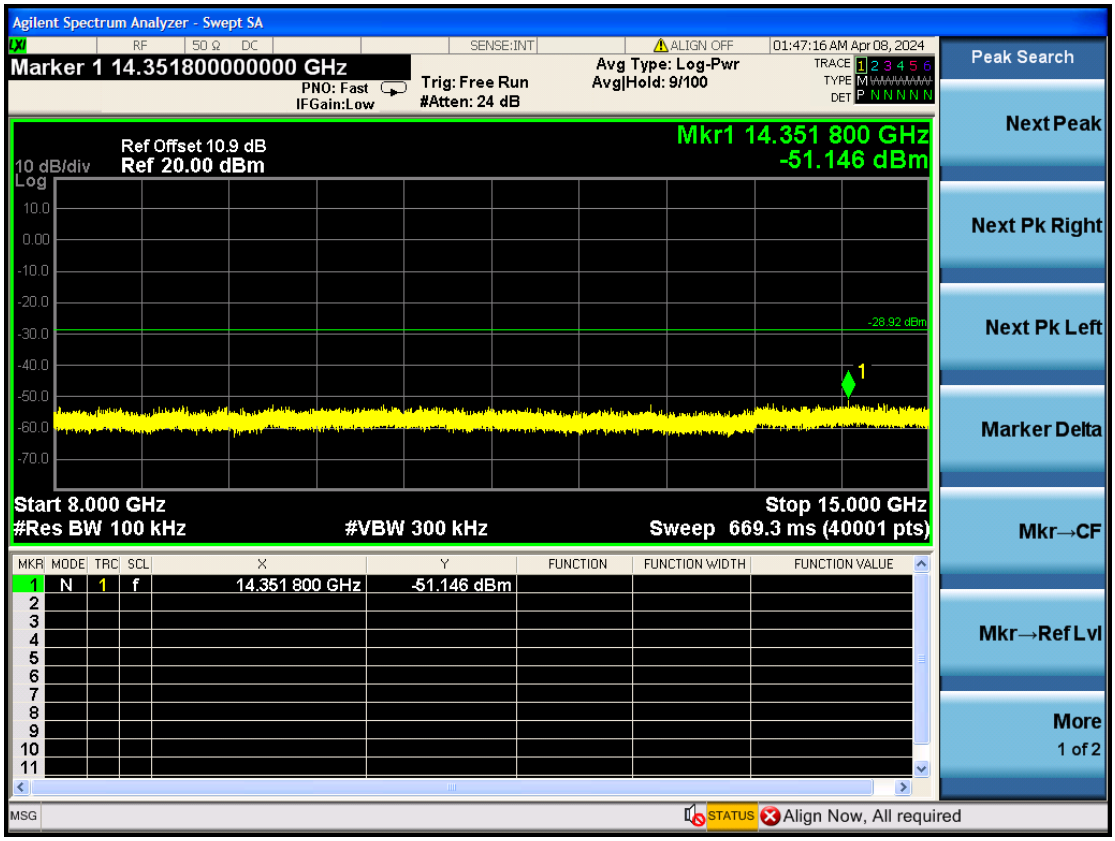

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.403250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 6/100
01:42:08 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.403 250 GHz
-52.027 dBm
-27.79 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.403 250 GHz -52.027 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

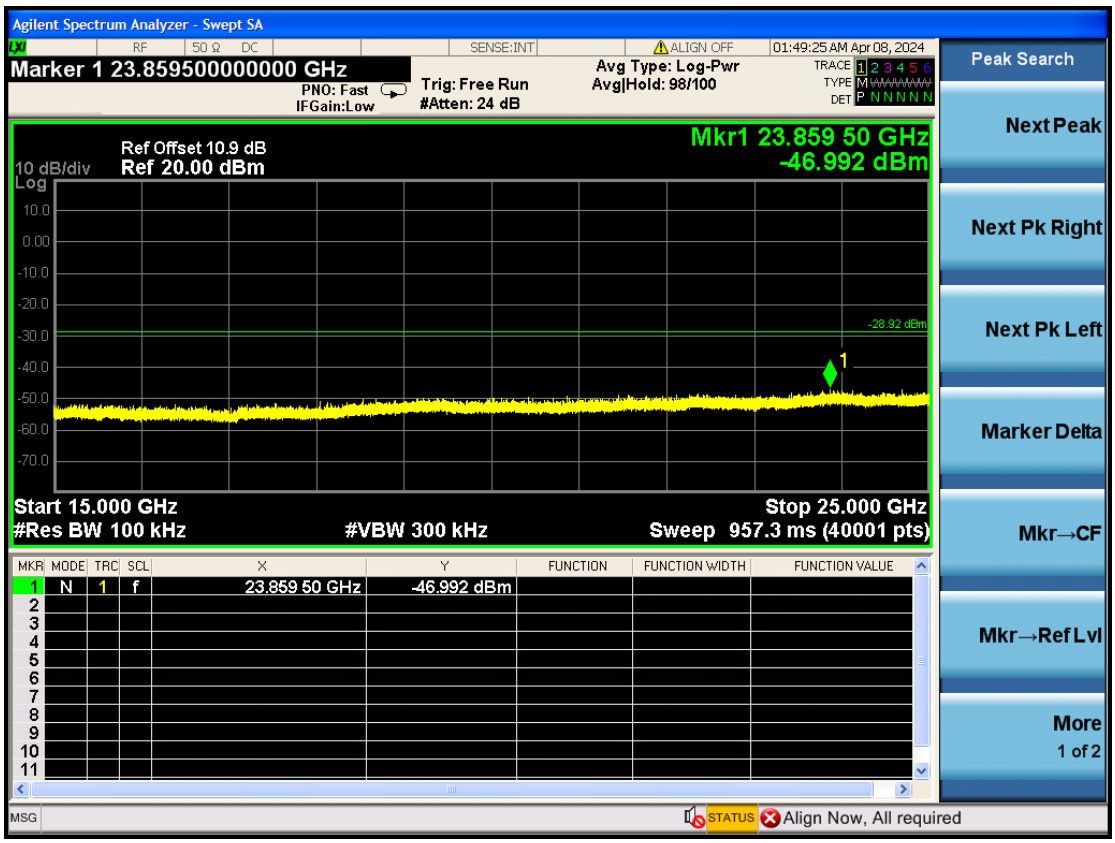

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.095000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 4/100
01:42:24 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 24.095 00 GHz
-48.017 dBm
-27.79 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 24.095 00 GHz -48.017 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

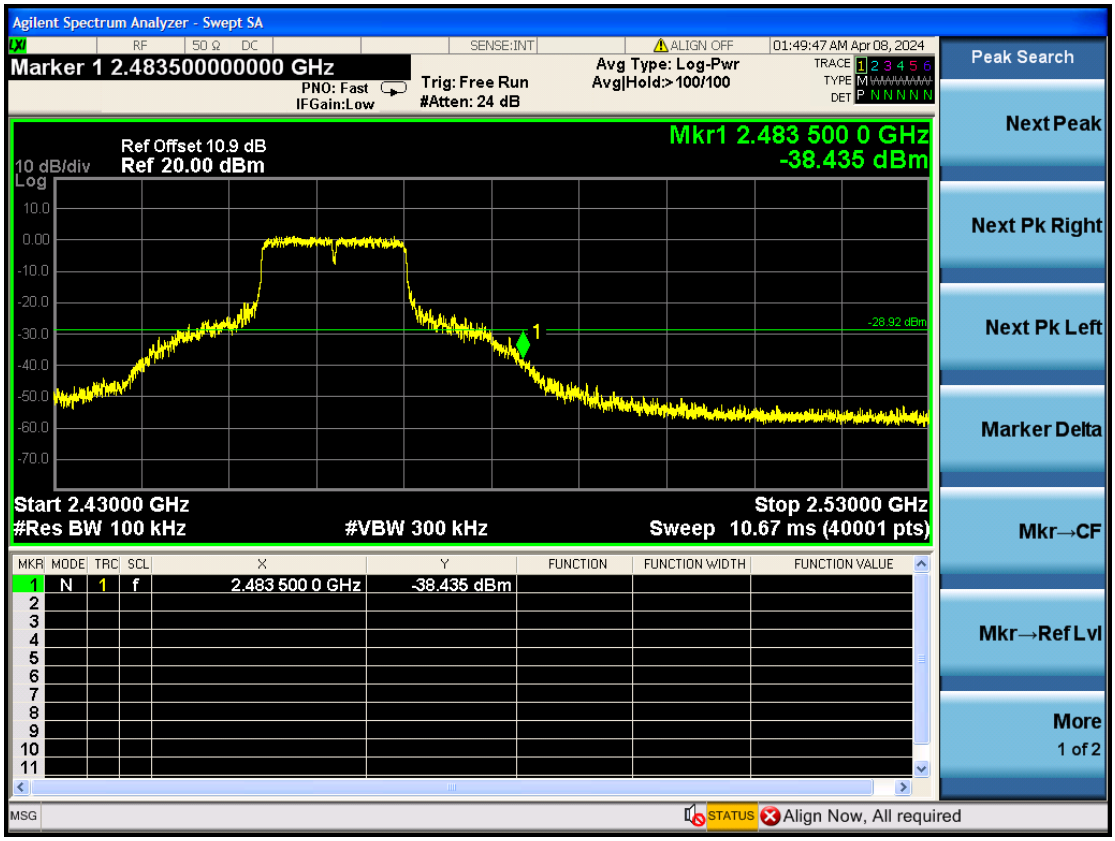
802.11g CH11


Agilent Spectrum Analyzer - Swept SA
Marker 2 1.765975000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 38/100
01:46:28 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr2 1.765 975 GHz
-42.314 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 2.459 325 GHz 1.082 dBm
2 N 1 f 1.765 975 GHz -42.314 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

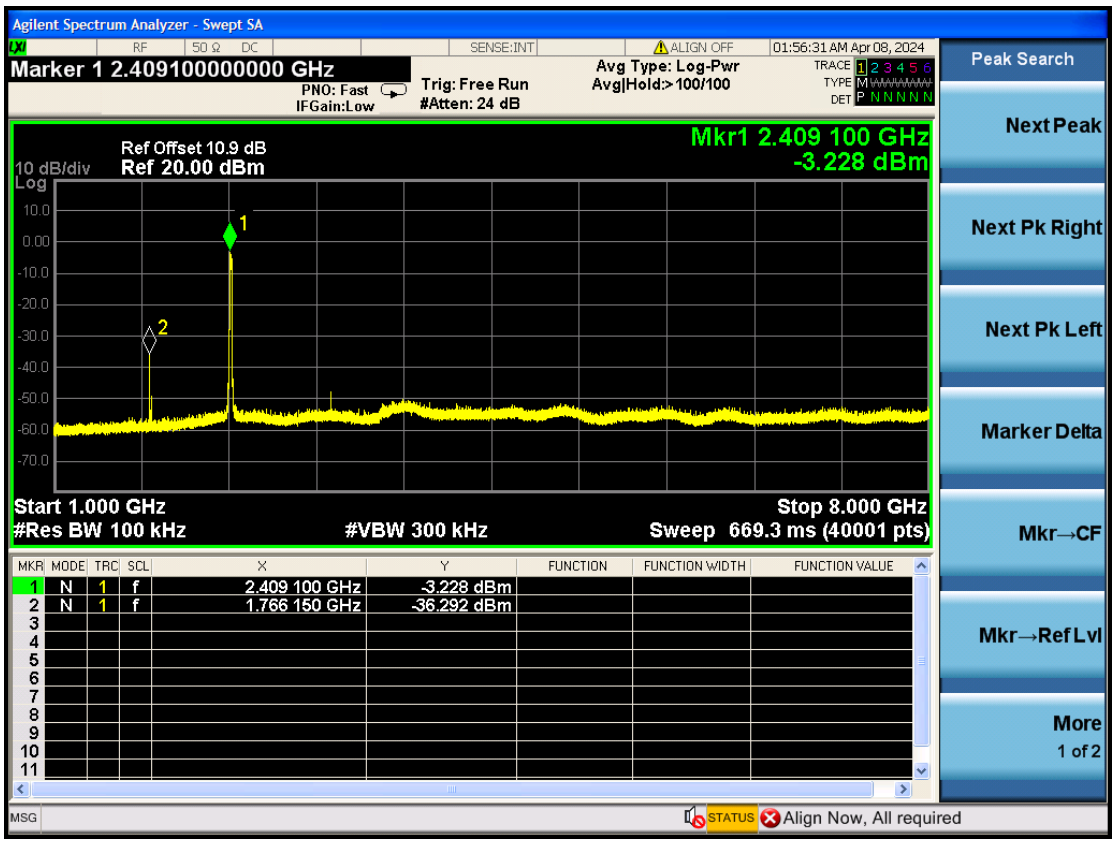

Agilent Spectrum Analyzer - Swept SA
Marker 1 814.657250000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 28/100
01:47:00 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 814.657 MHz
-53.383 dBm
-28.92 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 814.657 MHz -53.383 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

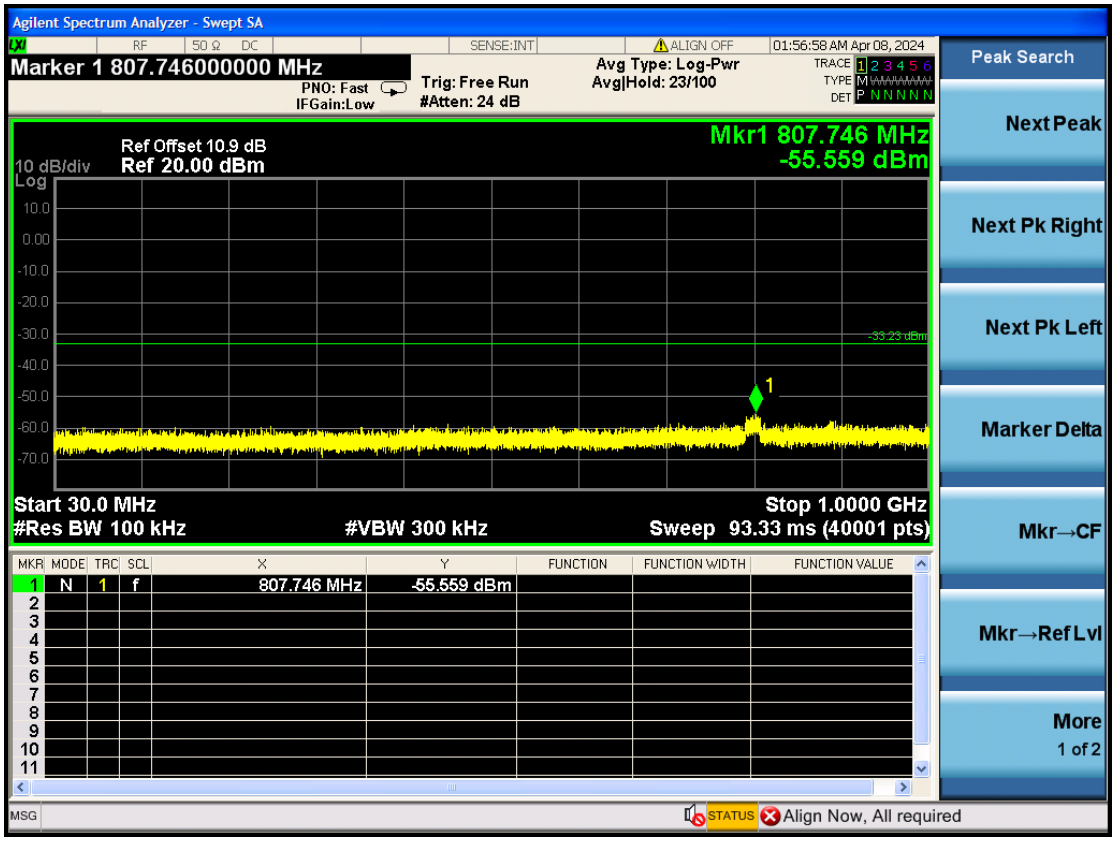

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.351800000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 9/100
01:47:16 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.351 800 GHz
-51.146 dBm
-28.92 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.351 800 GHz -51.146 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

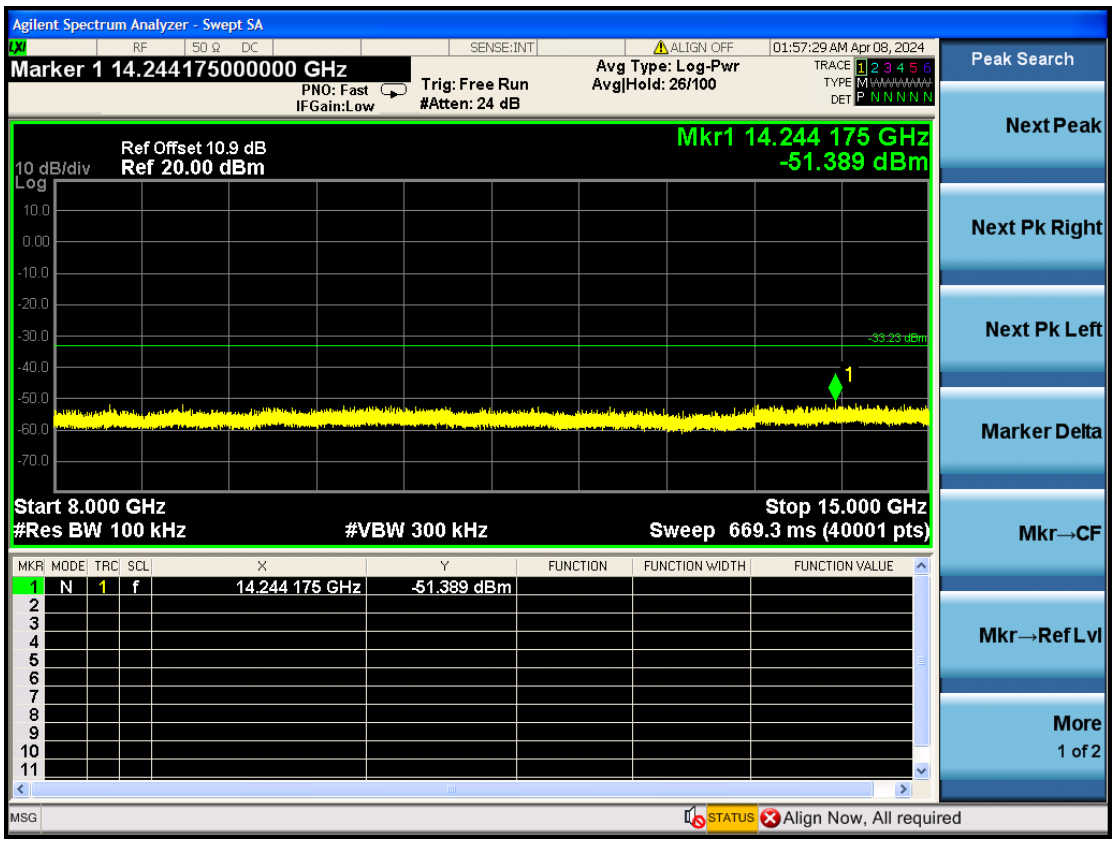

Agilent Spectrum Analyzer - Swept SA
Marker 1 23.859500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 98/100
01:49:25 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 23.859 50 GHz
-46.992 dBm
-28.92 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 23.859 50 GHz -46.992 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

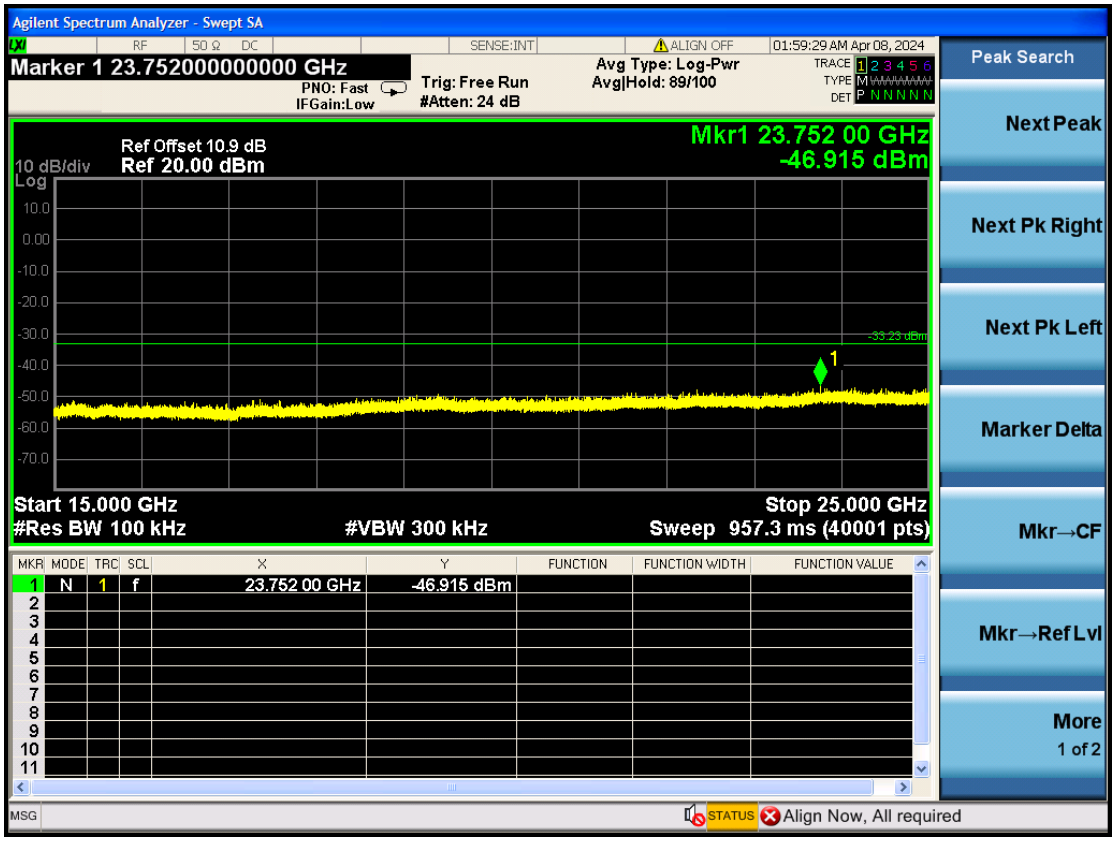

Agilent Spectrum Analyzer - Swept SA
Marker 1 2.483500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
01:49:47 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.483 500 0 GHz
-38.435 dBm
-28.92 dBm
Start 2.43000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.53000 GHz
Sweep 10.67 ms (40001 pts)
1 N 1 f 2.483 500 0 GHz -38.435 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

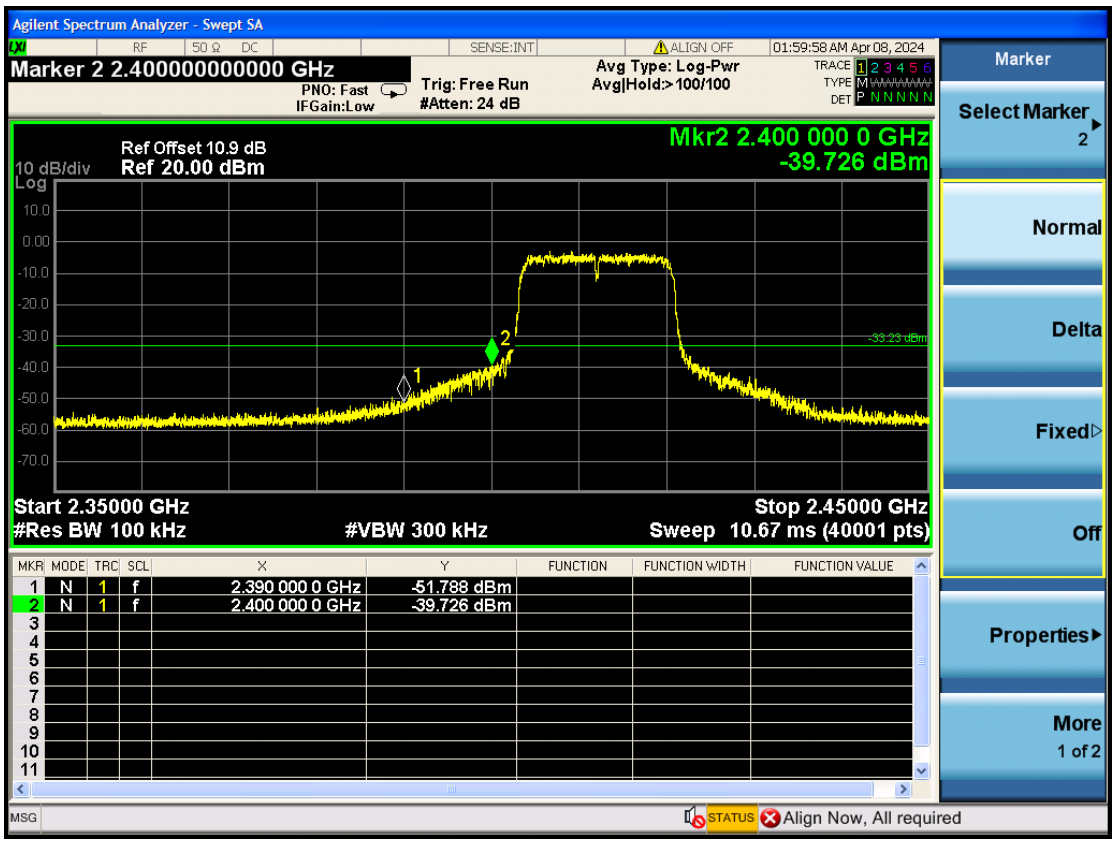
802.11nHT20 CH1



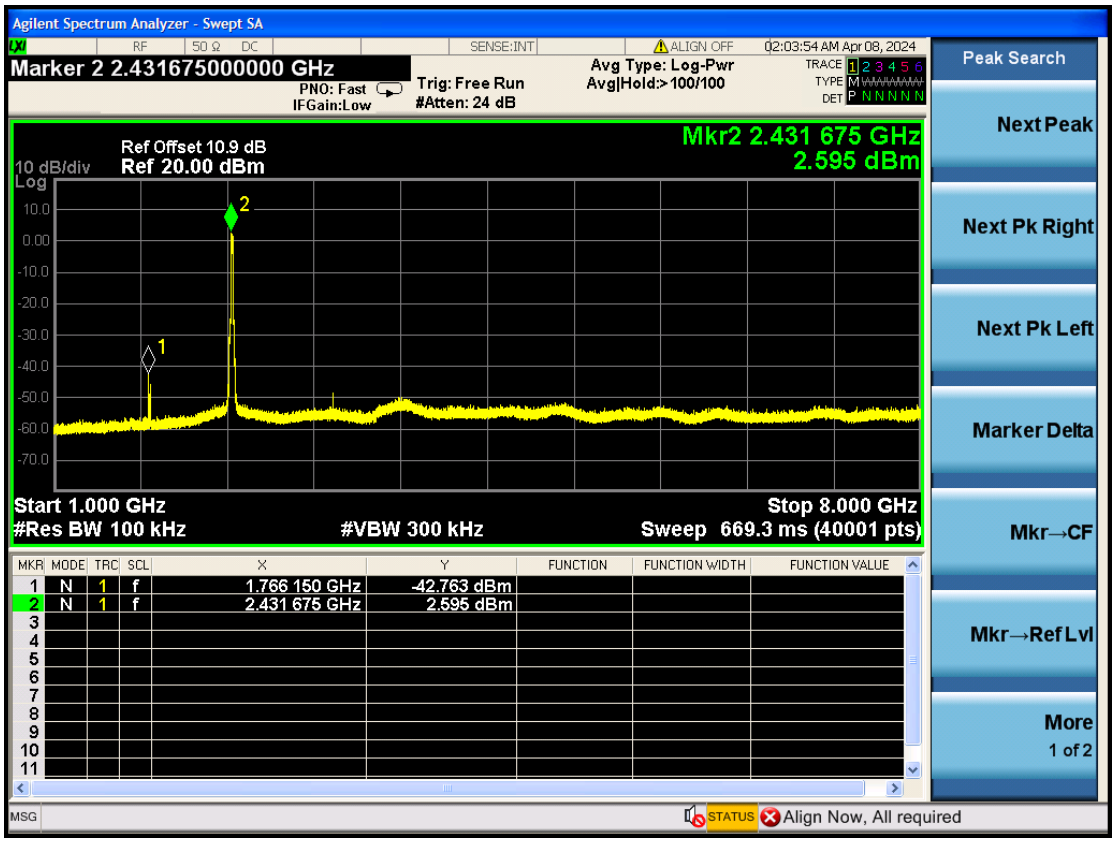


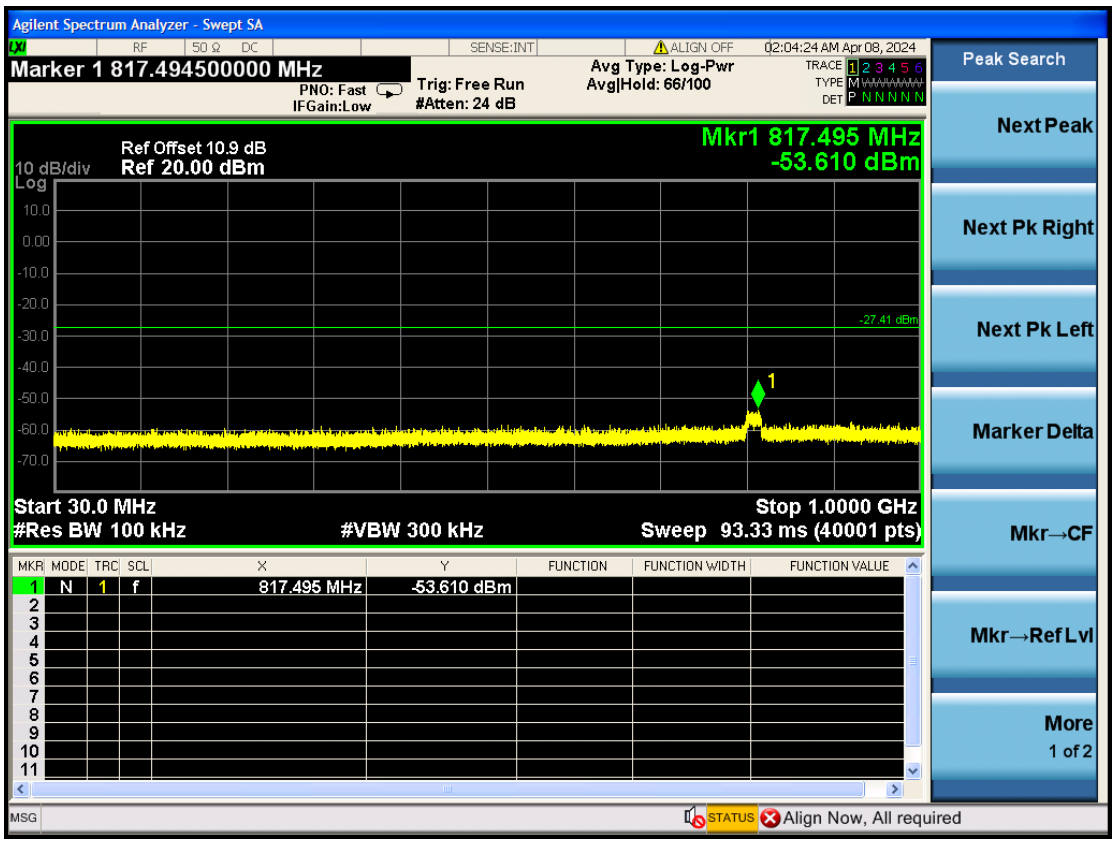

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.244175000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 26/100
01:57:29 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.244 175 GHz
-51.389 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.244 175 GHz -51.389 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

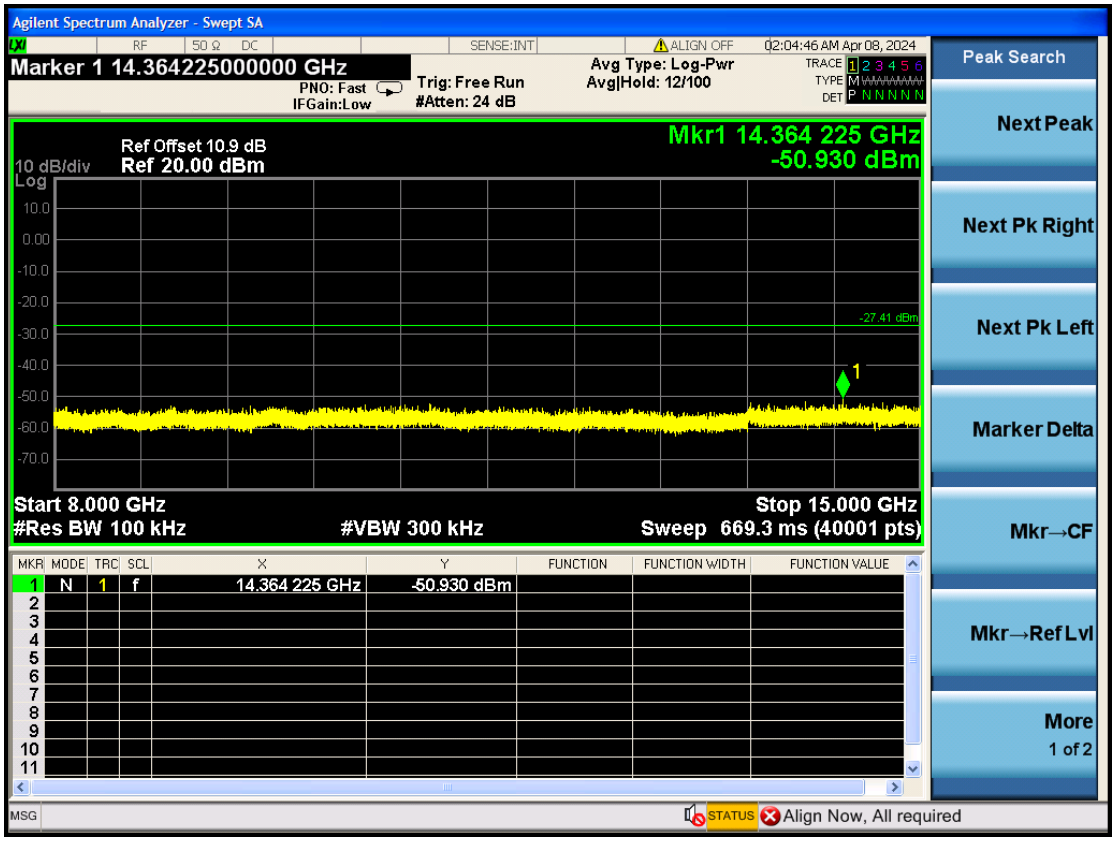

Agilent Spectrum Analyzer - Swept SA
Marker 1 23.752000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 89/100
01:59:29 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 23.752 00 GHz
-46.915 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 23.752 00 GHz -46.915 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

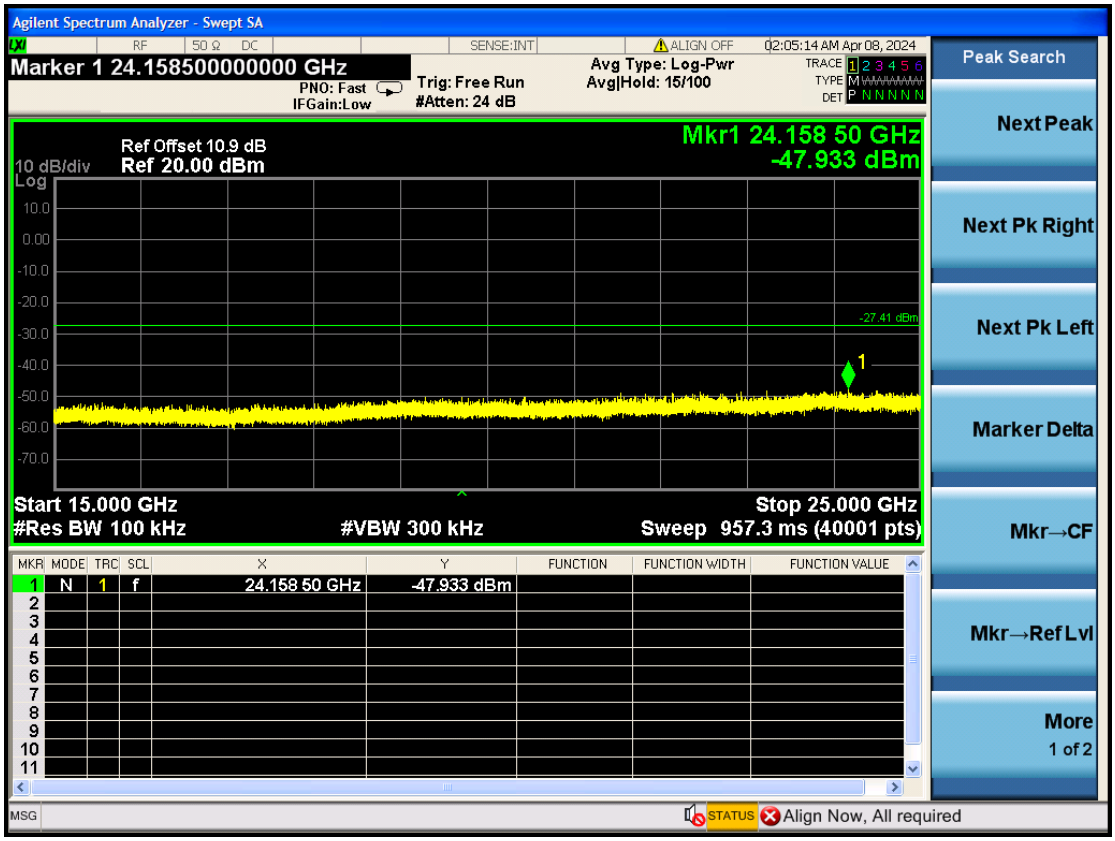


802.11nHT20 CH6

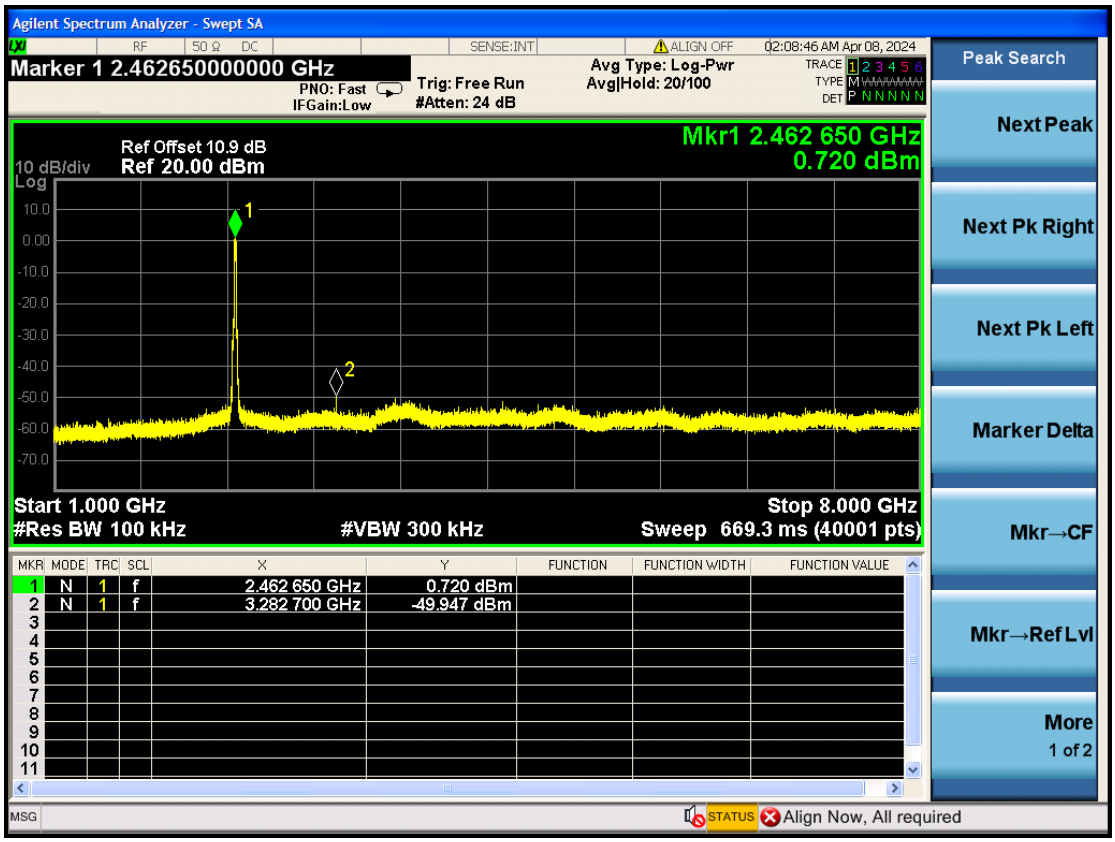


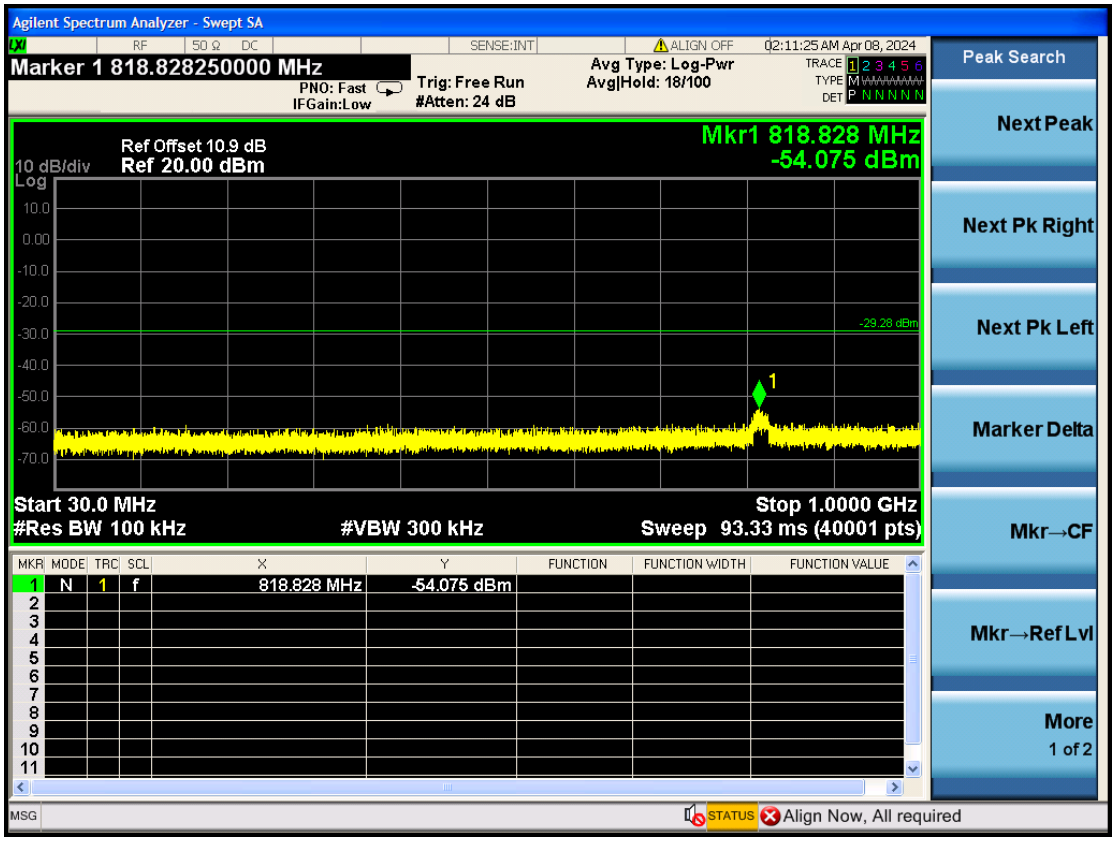

Agilent Spectrum Analyzer - Swept SA
Marker 1 817.494500000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 66/100
02:04:24 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 817.495 MHz
-53.610 dBm
-27.41 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 817.495 MHz -53.610 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

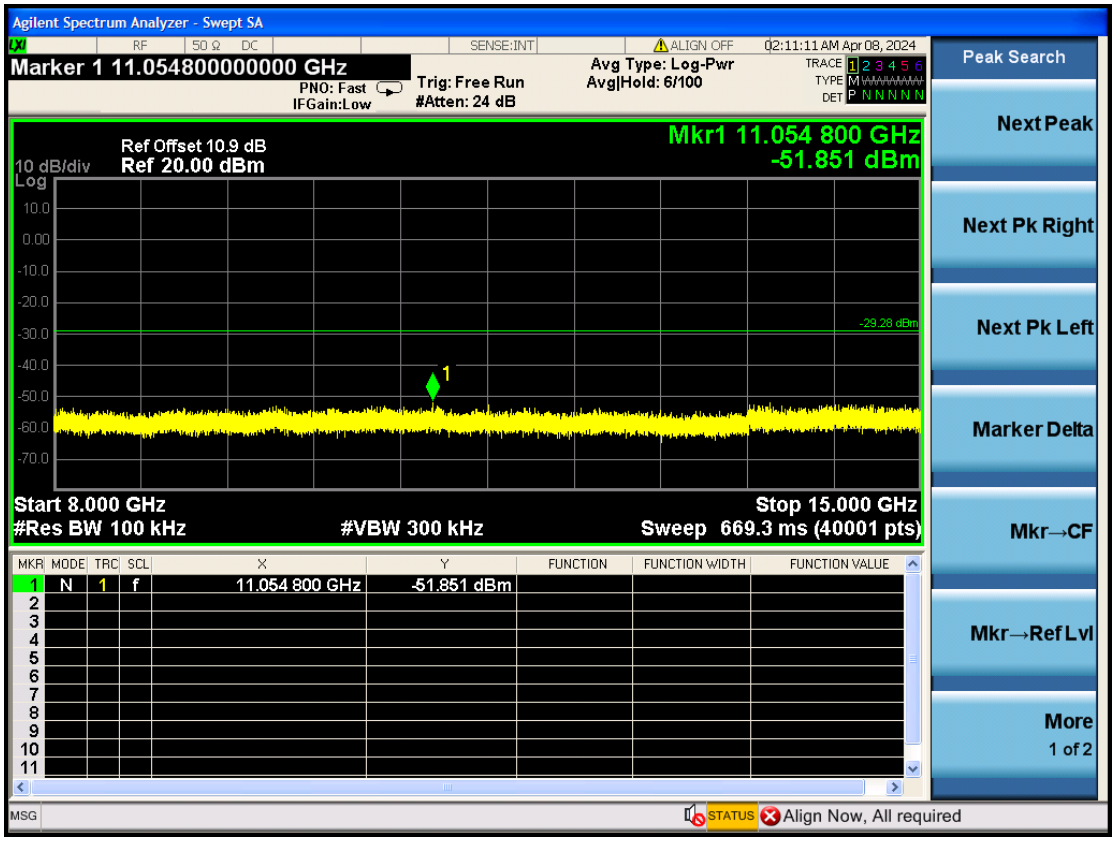

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.364225000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 12/100
02:04:46 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.364 225 GHz
-50.930 dBm
-27.41 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.364 225 GHz -50.930 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

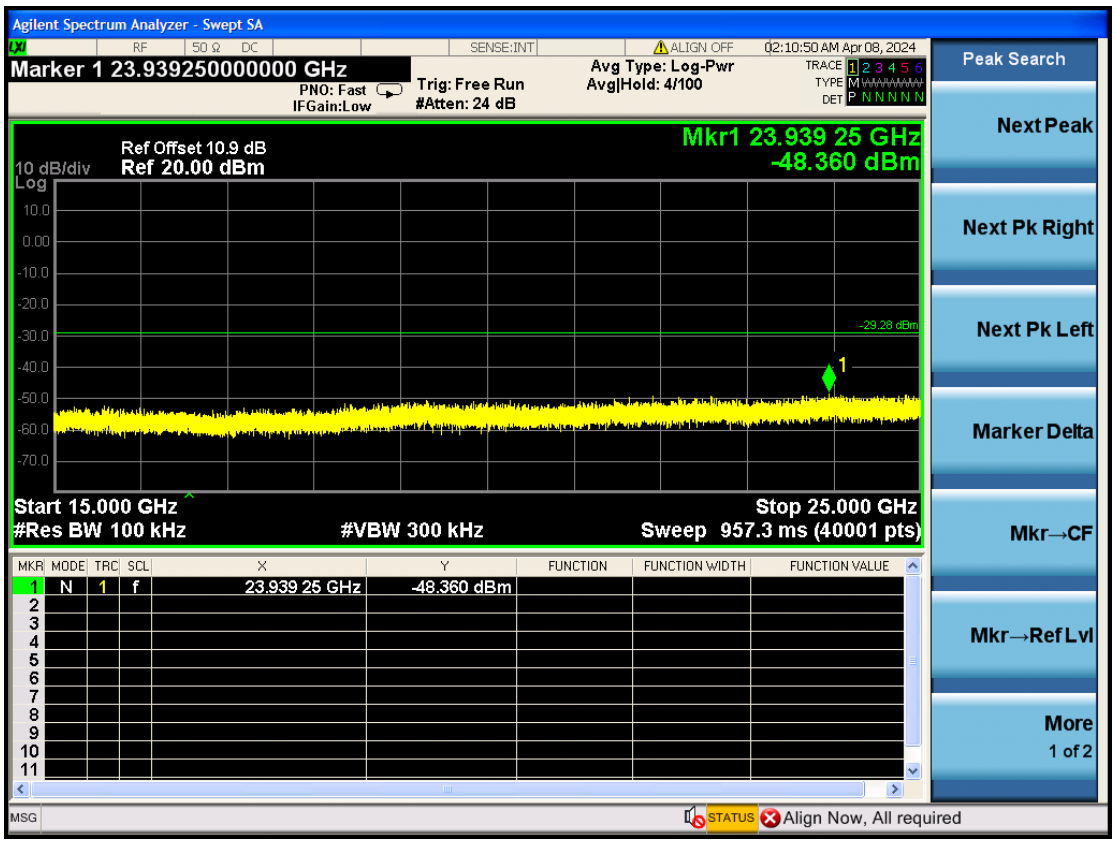


802.11nHT20 CH11



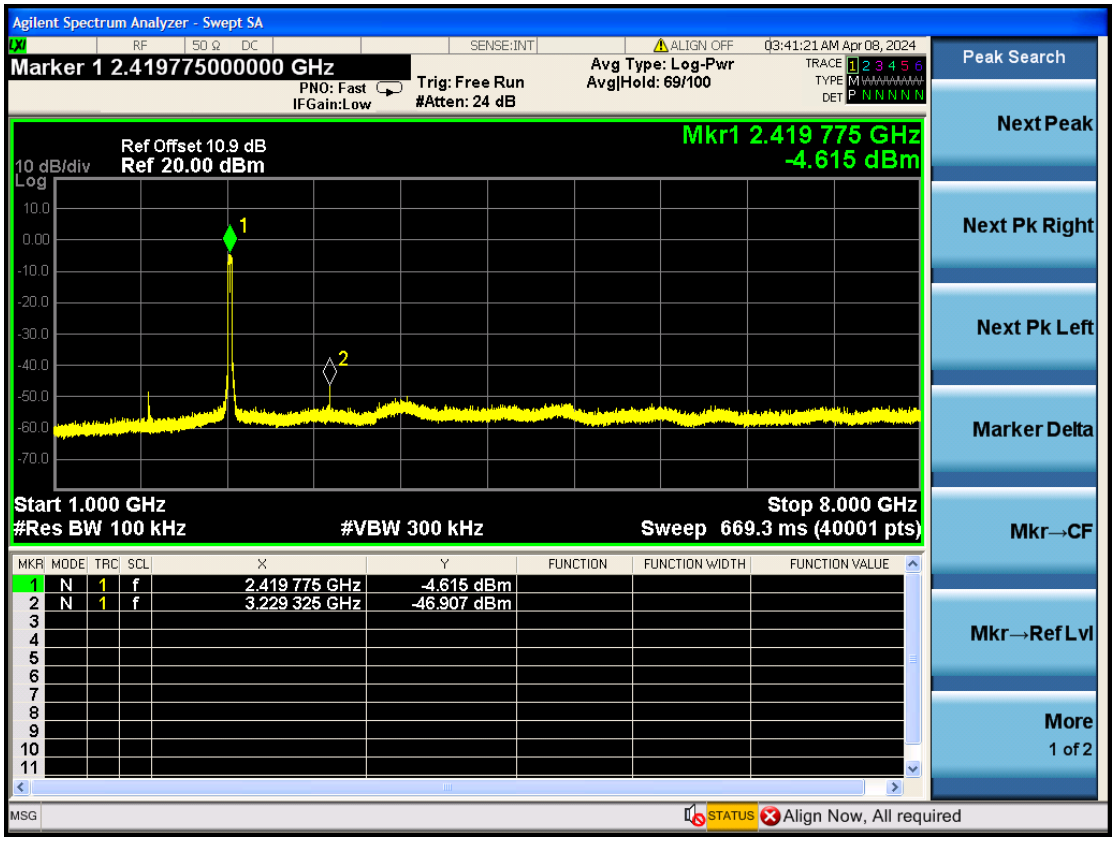

Agilent Spectrum Analyzer - Swept SA
Marker 1 818.828250000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 18/100
02:11:25 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 818.828 MHz
-54.075 dBm
-29.28 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 818.828 MHz -54.075 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

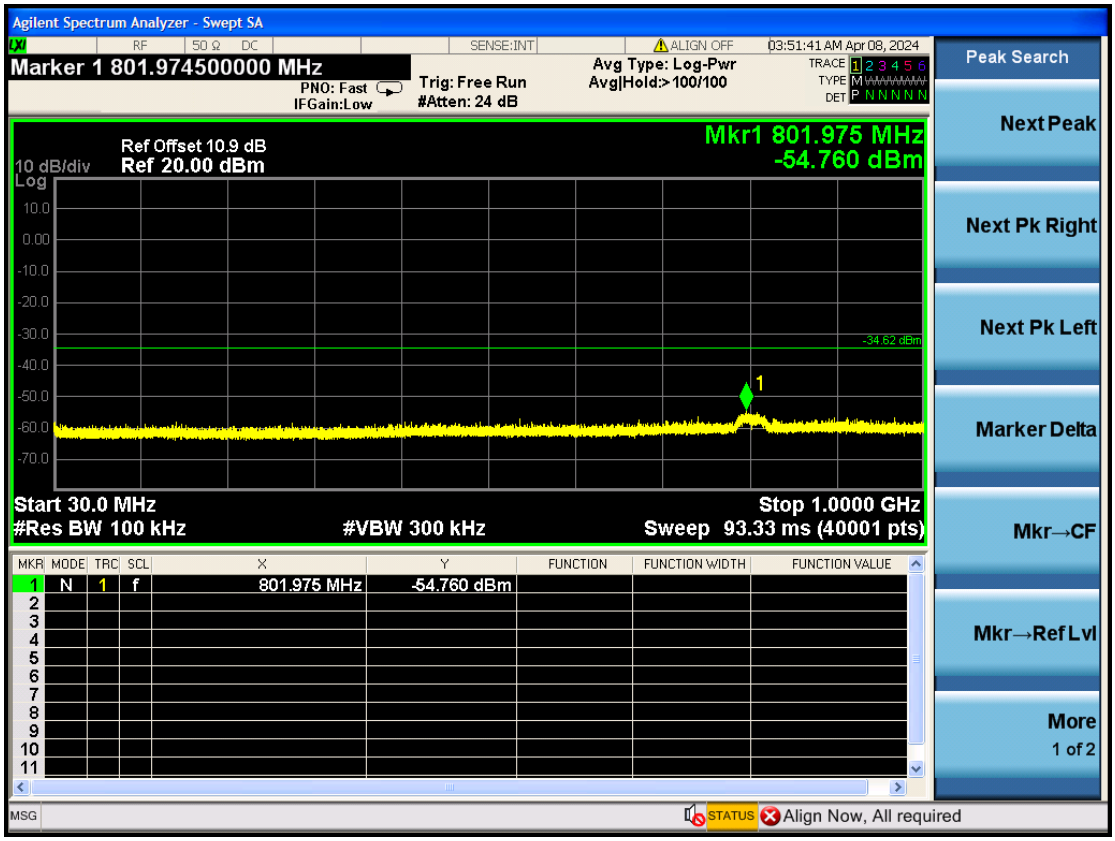

Agilent Spectrum Analyzer - Swept SA
Marker 1 11.054800000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 6/100
02:11:11 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 11.054 800 GHz
-51.851 dBm
-29.28 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 11.054 800 GHz -51.851 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

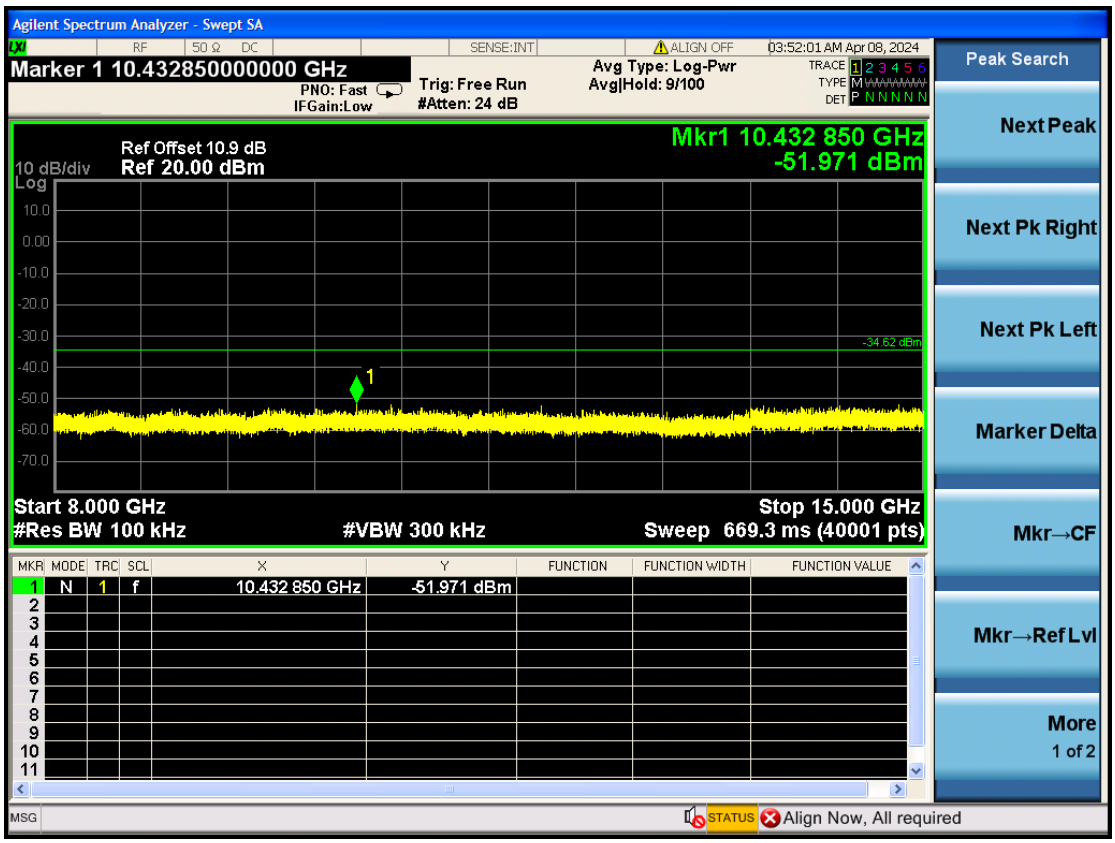

Agilent Spectrum Analyzer - Swept SA
Marker 1 23.939250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 4/100
02:10:50 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 23.939 25 GHz
-48.360 dBm
-29.28 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 23.939 25 GHz -48.360 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

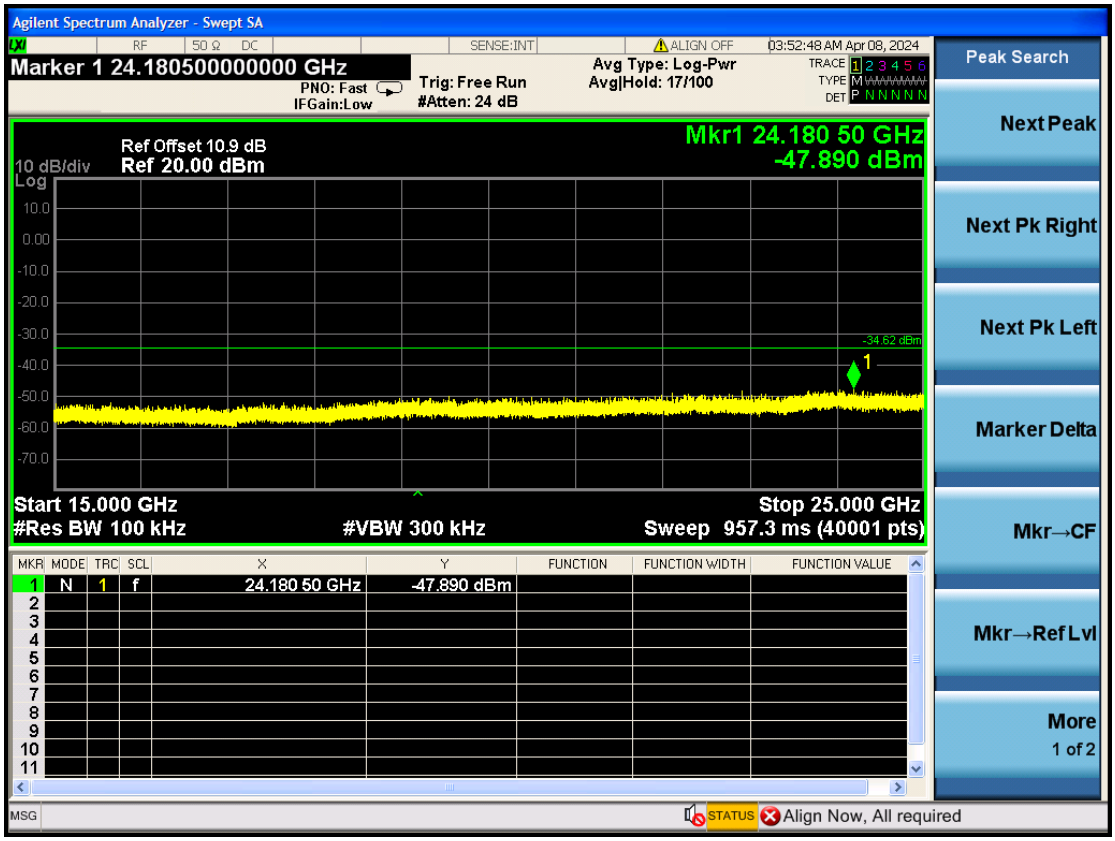
Agilent Spectrum Analyzer - Swept SA
Marker 1 2.483500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
02:10:35 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.483 500 0 GHz
-35.277 dBm
-29.28 dBm
Start 2.43000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.53000 GHz
Sweep 10.67 ms (40001 pts)
1 N 1 f 2.483 500 0 GHz -35.277 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

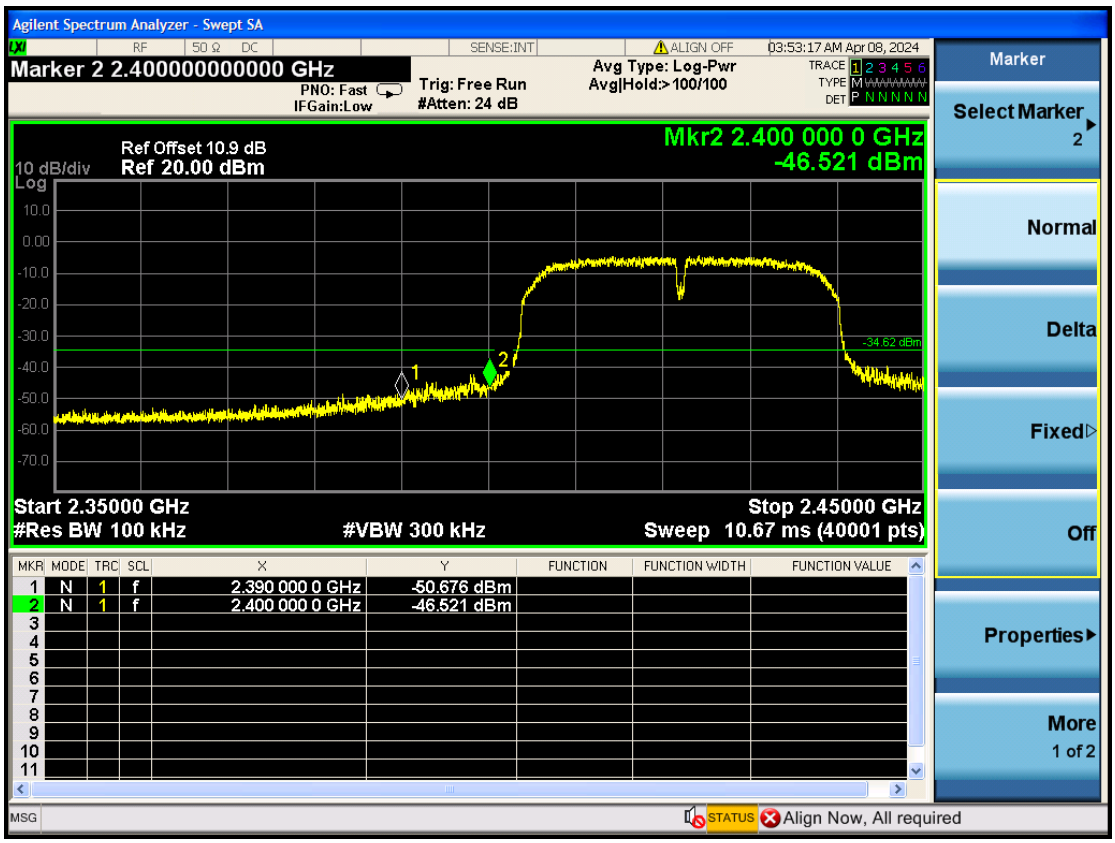
802.11nHT40 CH3



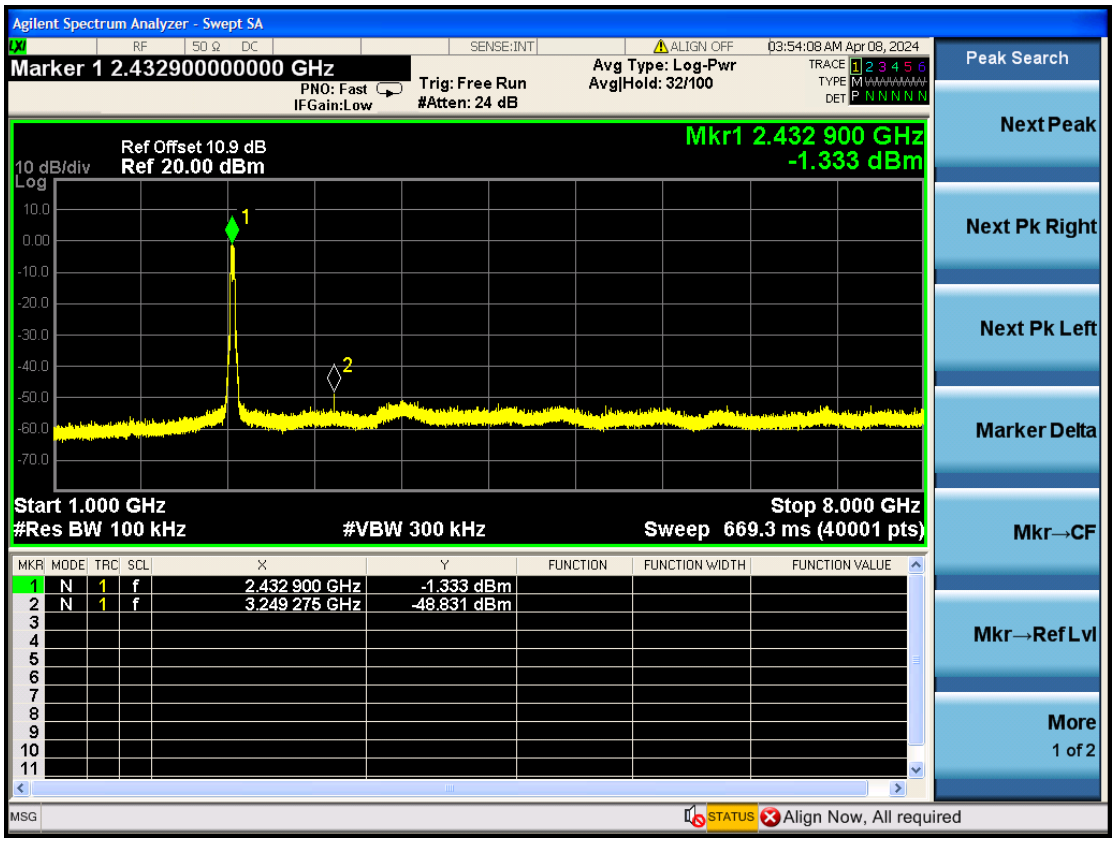


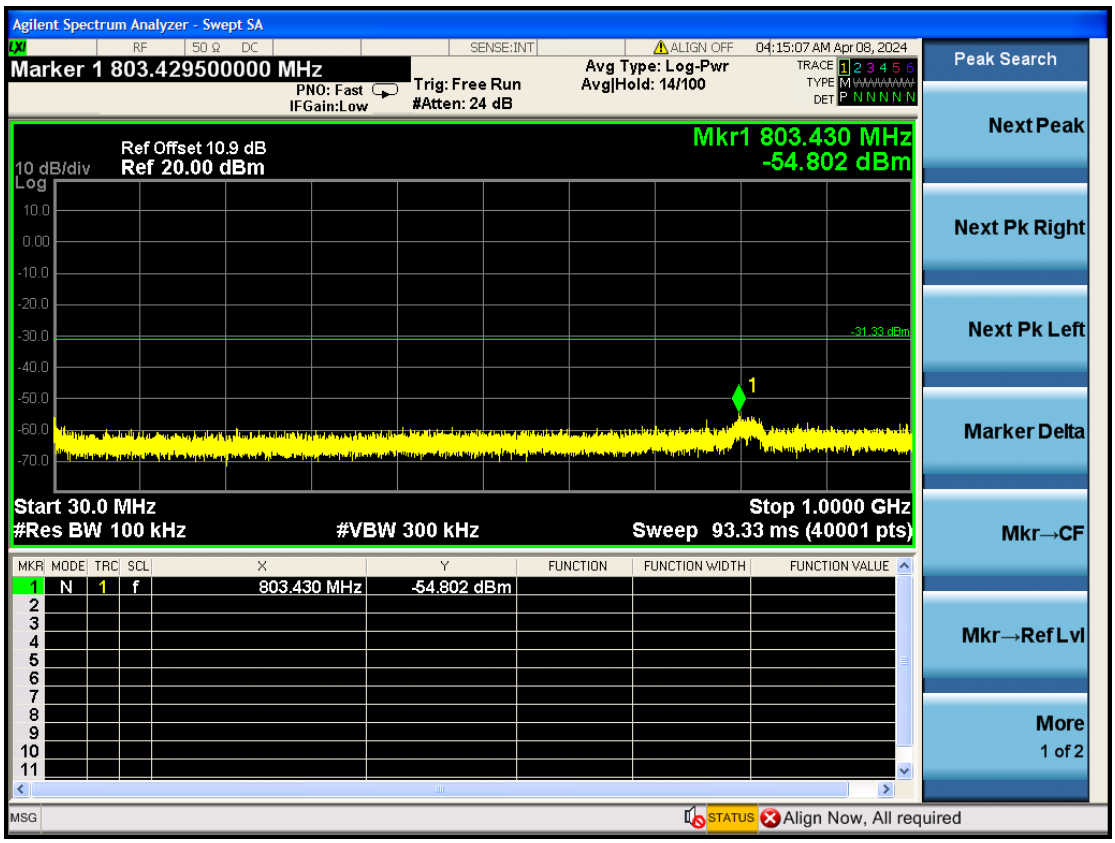

Agilent Spectrum Analyzer - Swept SA
Marker 1 10.432850000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 9/100
03:52:01 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 10.432 850 GHz
-51.971 dBm
-34.62 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 10.432 850 GHz -51.971 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

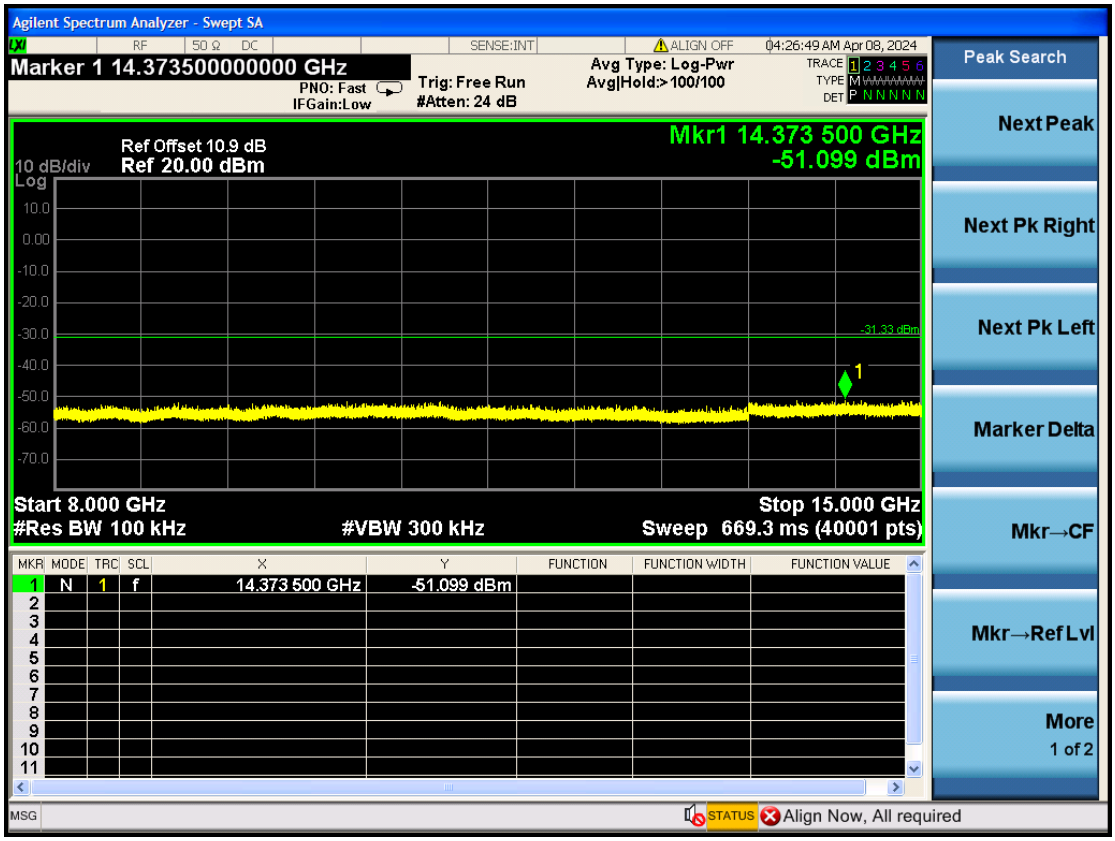

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.180500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 17/100
03:52:48 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 24.180 50 GHz
-47.890 dBm
-34.62 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 957.3 ms (40001 pts)
1 N 1 f 24.180 50 GHz -47.890 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

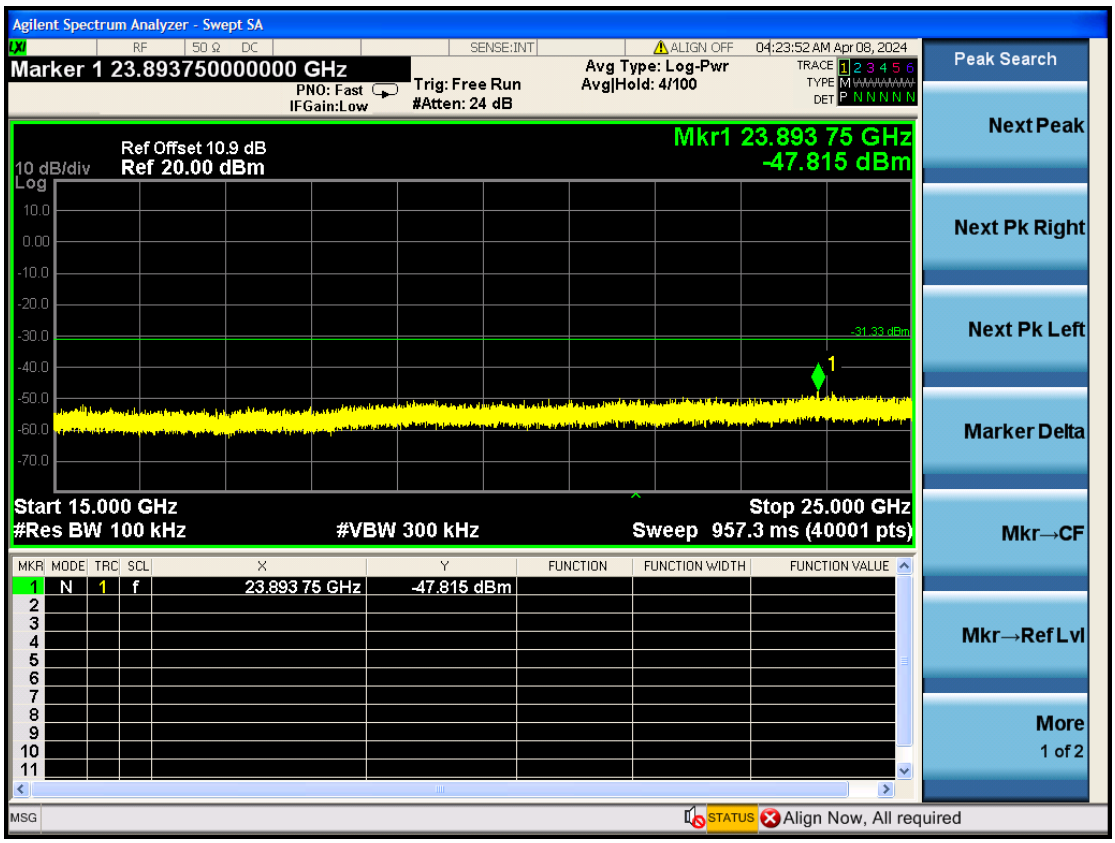


802.11nHT40 CH6

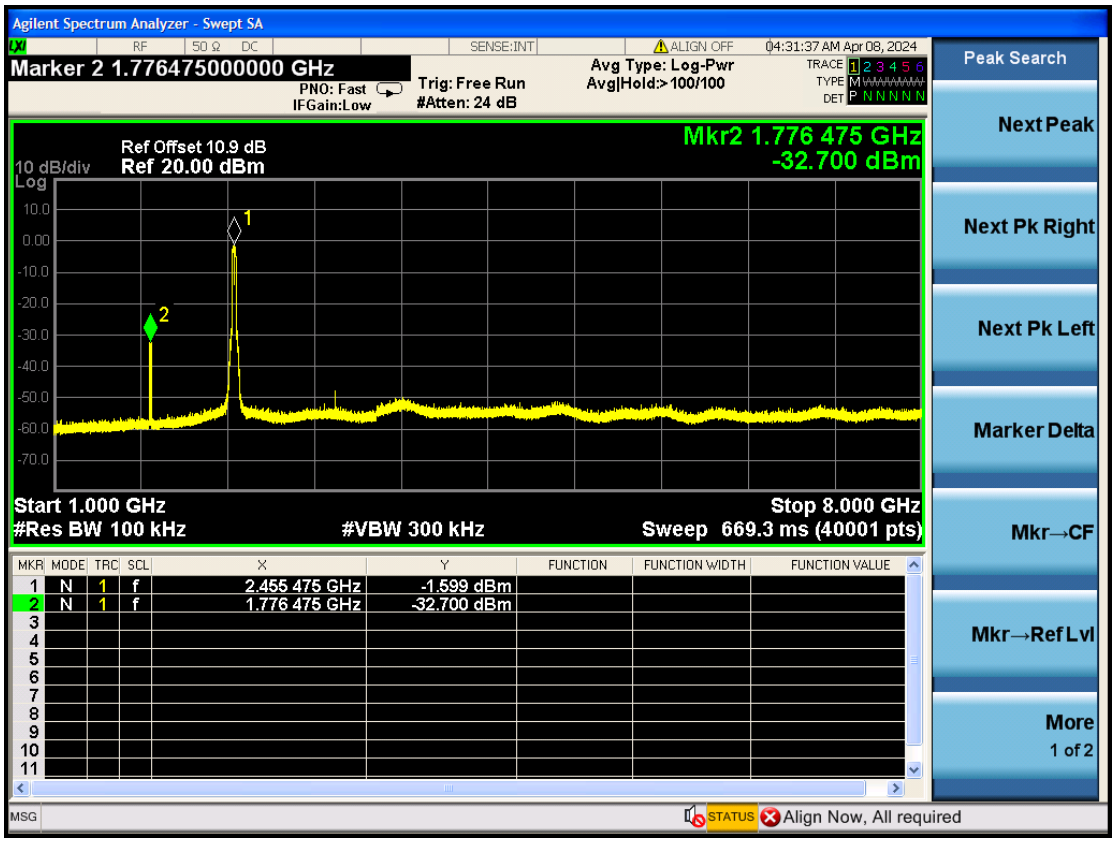


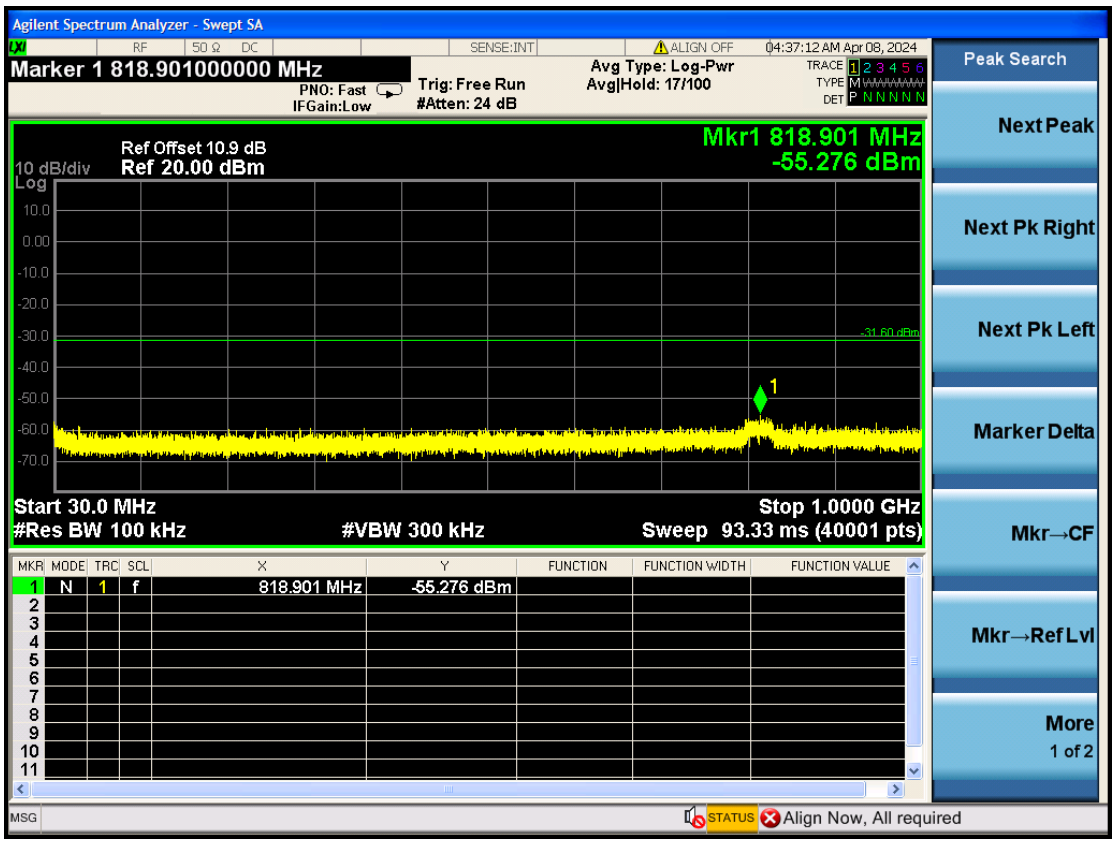

Agilent Spectrum Analyzer - Swept SA
Marker 1 803.429500000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 14/100
04:15:07 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 803.430 MHz
-54.802 dBm
-31.33 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)
1 N 1 f 803.430 MHz -54.802 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

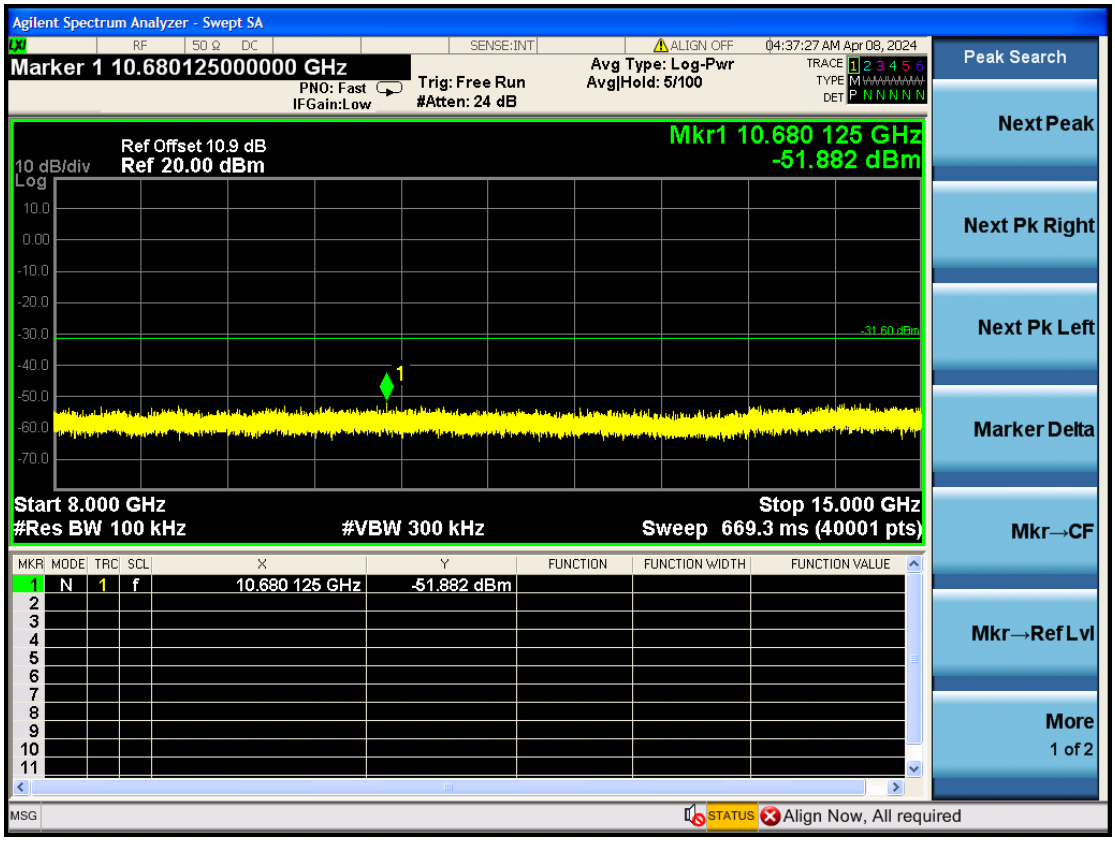

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.373500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:26:49 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 14.373 500 GHz
-51.099 dBm
-31.33 dBm
Start 8.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 669.3 ms (40001 pts)
1 N 1 f 14.373 500 GHz -51.099 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

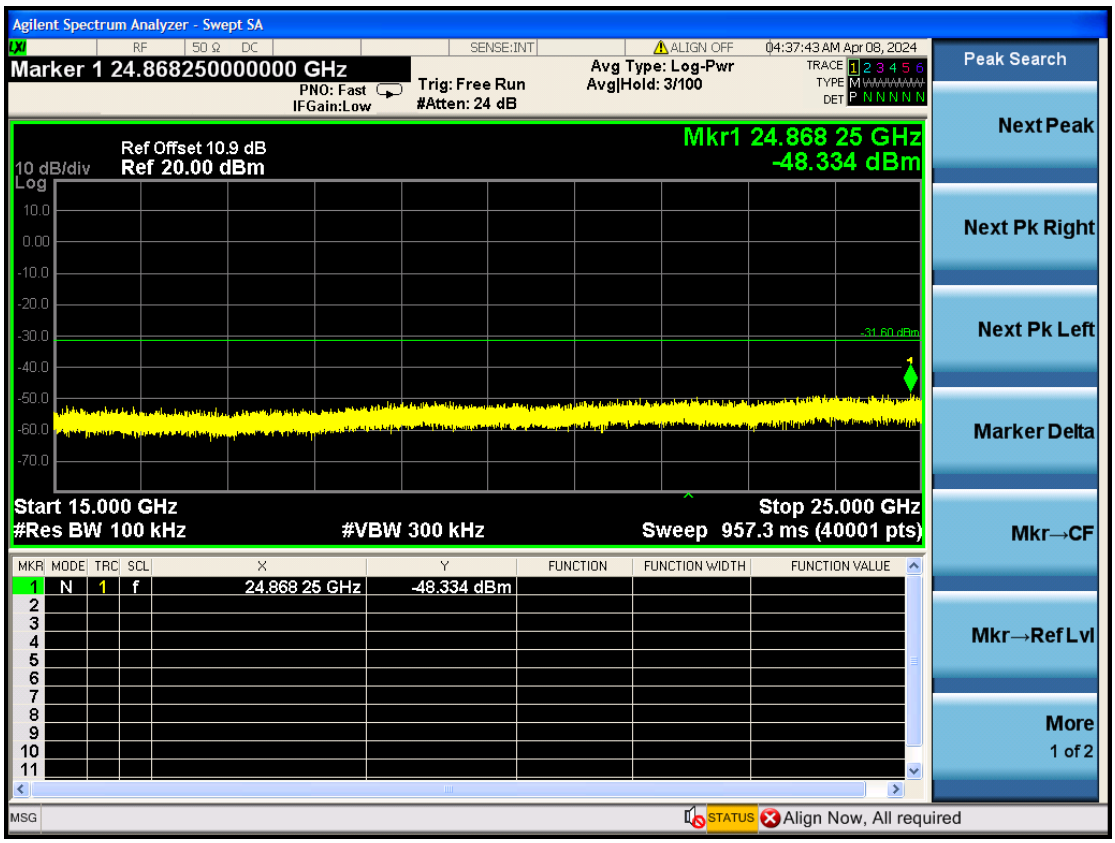


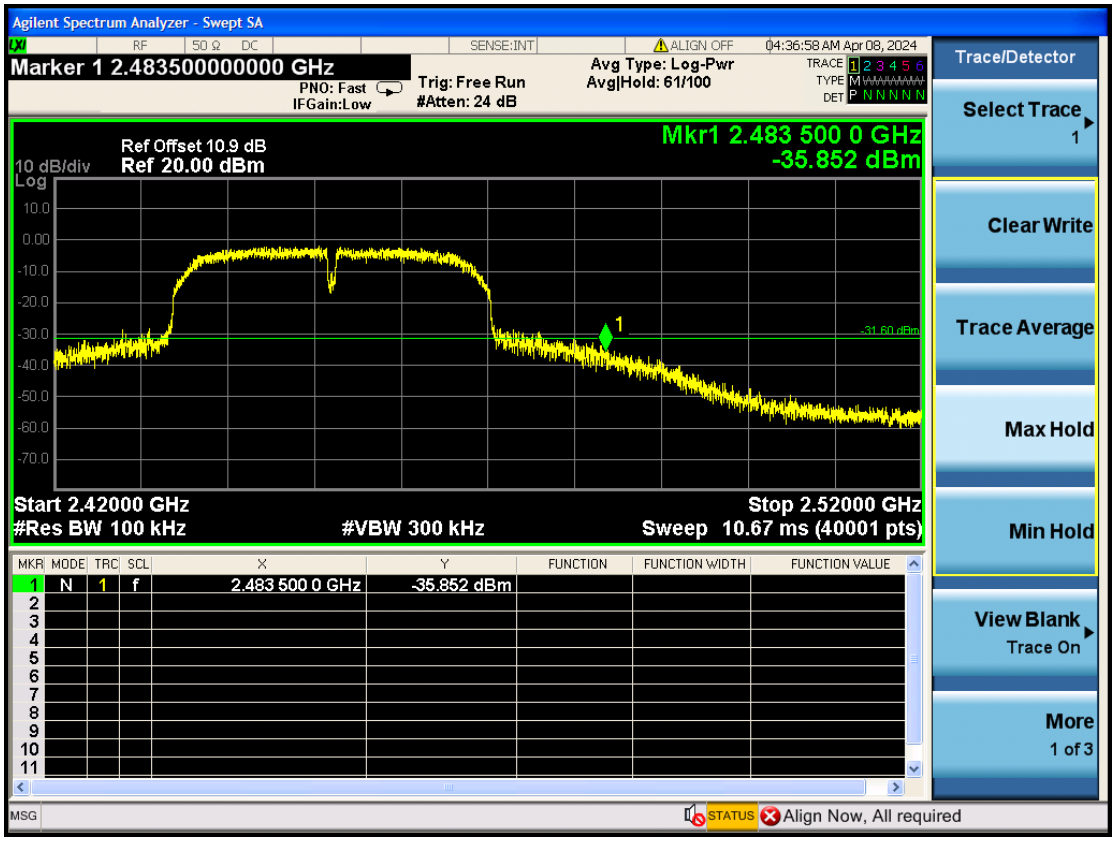
802.11nHT40 CH9




Agilent Spectrum Analyzer - Swept SA
Marker 1 818.901000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 17/100
04:37:12 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 818.901 MHz
-55.276 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 818.901 MHz -55.276 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 10.680125000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 5/100
04:37:27 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 10.680 125 GHz
-51.882 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 10.680 125 GHz -51.882 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 24.868250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 3/100
04:37:43 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 24.868 25 GHz
-48.334 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 24.868 25 GHz -48.334 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: 61/100
04:36:58 AM Apr 08, 2024
Ref Offset 10.9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.483 500 0 GHz
-35.852 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 -35.852 dBm
Trace/Detector
Select Trace
1
Clear Write
Trace Average
Max Hold
Min Hold
View Blank
Trace On
More
1 of 3
Align Now, All required

10. DEVIATION TO TEST SPECIFICATIONS

【NONE】

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