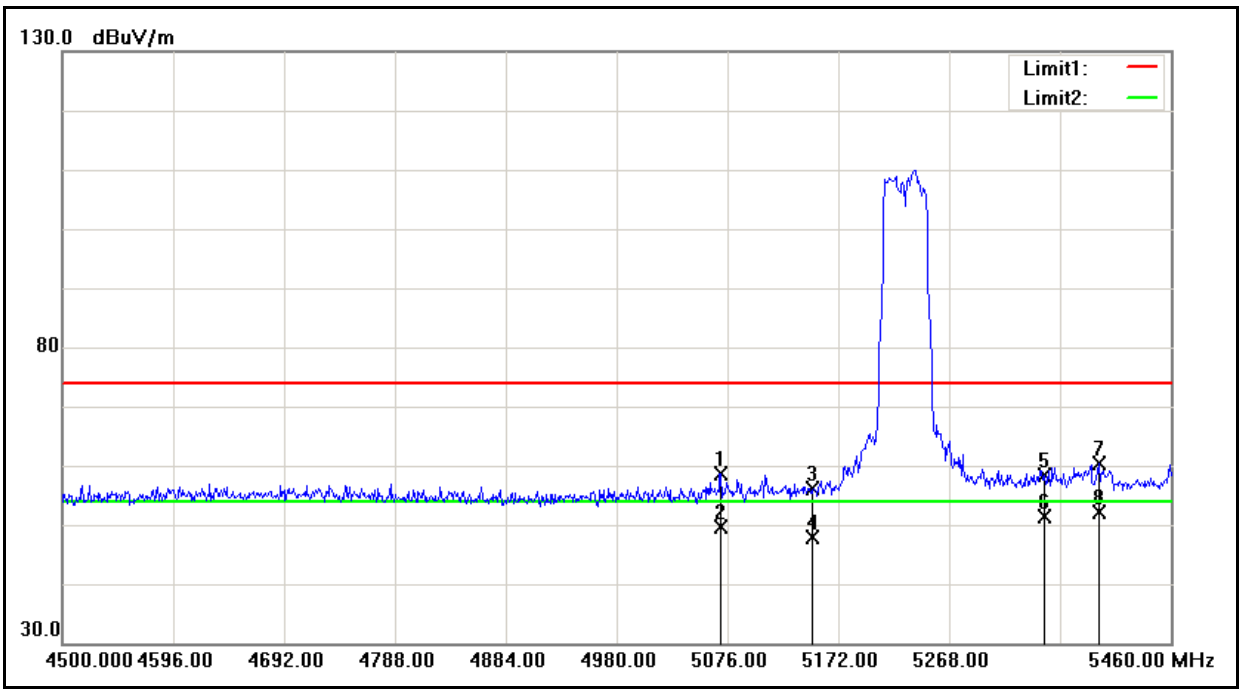
Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Test Mode:	IEEE 802.11ac 40MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Frequency:	5230 MHz		
Ant.Polar.:	Vertical		



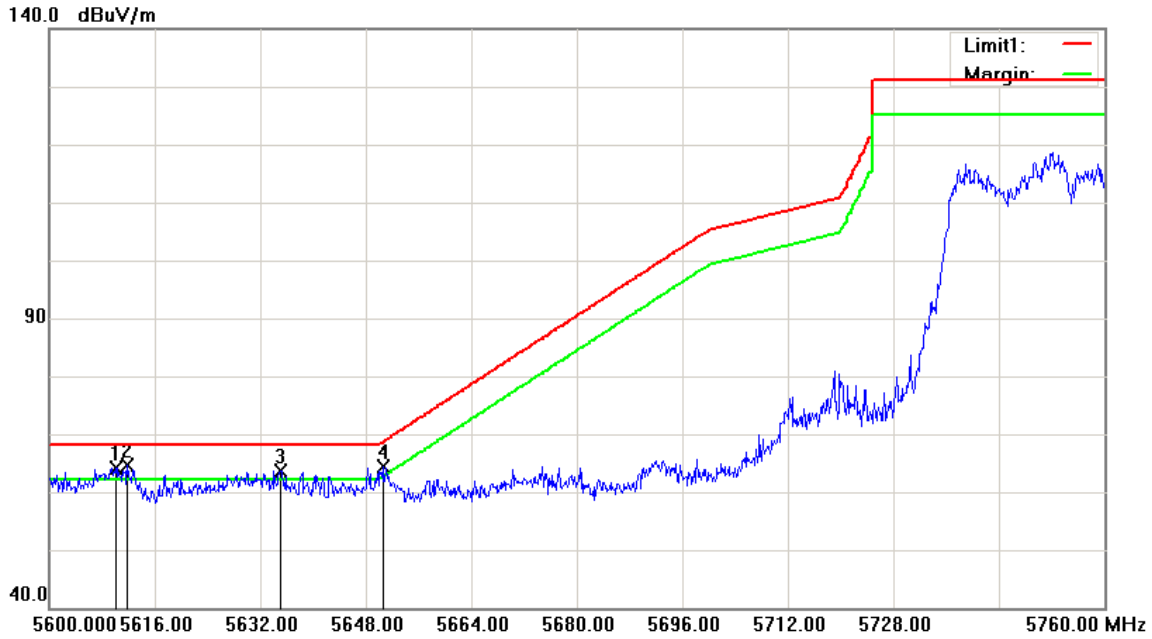
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5070.240	50.63	8.08	58.71	74.00	-15.29	peak
2	5070.240	41.55	8.08	49.63	54.00	-4.37	AVG
3	5150.000	48.04	8.16	56.20	74.00	-17.80	peak
4	5150.000	39.65	8.16	47.81	54.00	-6.19	AVG
5	5350.000	49.96	8.33	58.29	74.00	-15.71	peak
6	5350.000	43.14	8.33	51.47	54.00	-2.53	AVG
7	5397.600	51.96	8.37	60.33	74.00	-13.67	peak
8	5397.600	43.80	8.37	52.17	54.00	-1.83	AVG

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Test Mode:	IEEE 802.11ac 40MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Frequency:	5755 MHz		
Ant.Polar.:	Horizontal		



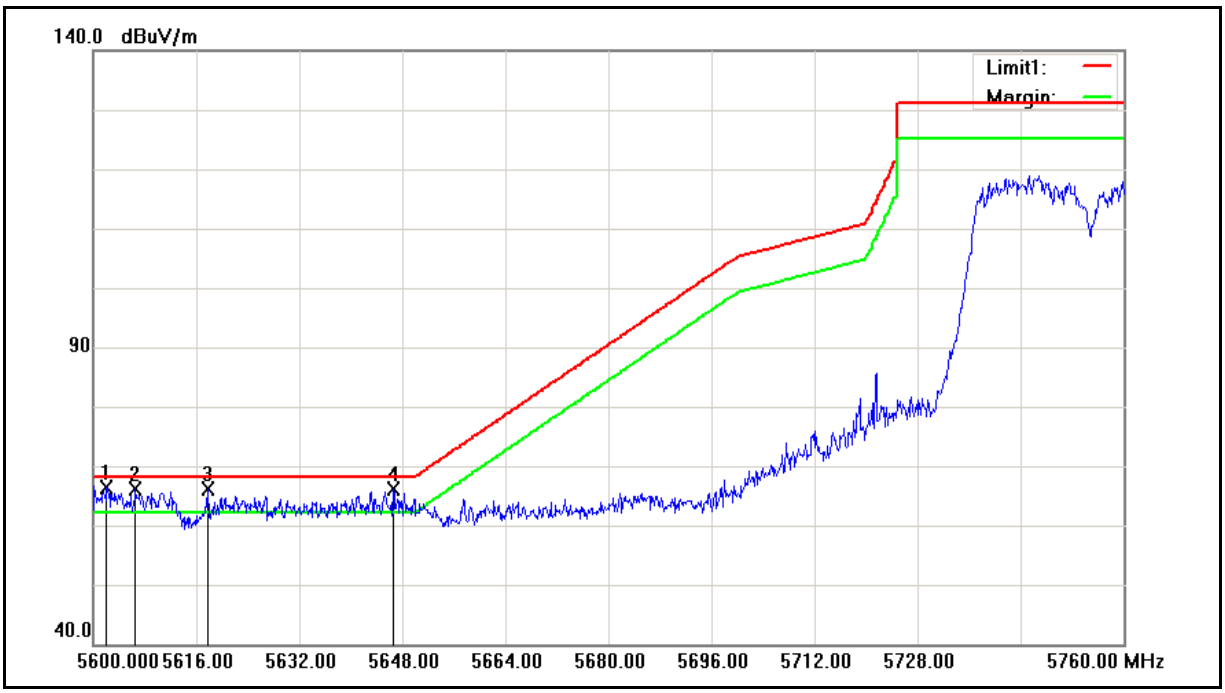
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5610.080	55.32	8.74	64.06	68.20	-4.14	peak
2	5611.840	55.90	8.74	64.64	68.20	-3.56	peak
3	5635.040	54.85	8.80	63.65	68.20	-4.55	peak
4	5650.560	55.66	8.84	64.50	68.61	-4.11	peak

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Test Mode:	IEEE 802.11ac 40MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Frequency:	5755 MHz		
Ant.Polar.:	Vertical		



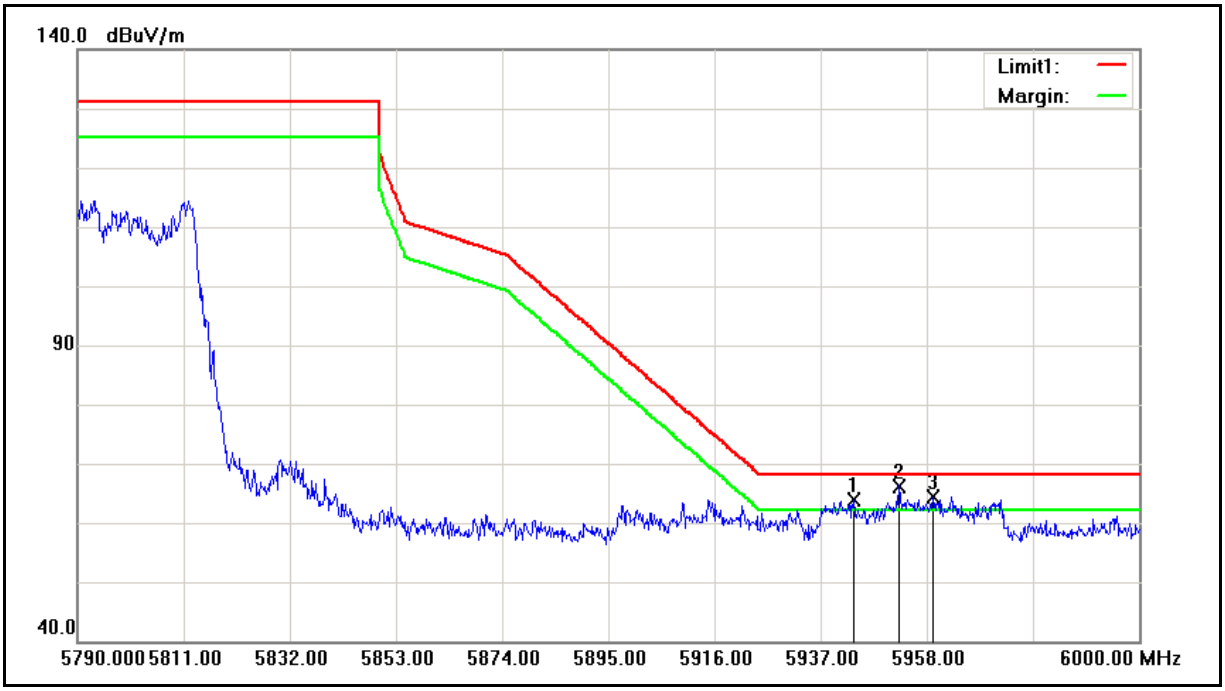
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5602.080	57.75	8.72	66.47	68.20	-1.73	peak
2	5606.560	57.37	8.73	66.10	68.20	-2.10	peak
3	5617.760	57.44	8.76	66.20	68.20	-2.00	peak
4	5646.560	57.34	8.82	66.16	68.20	-2.04	peak

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Test Mode:	IEEE 802.11ac 40MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Frequency:	5795 MHz		
Ant.Polar.:	Horizontal		



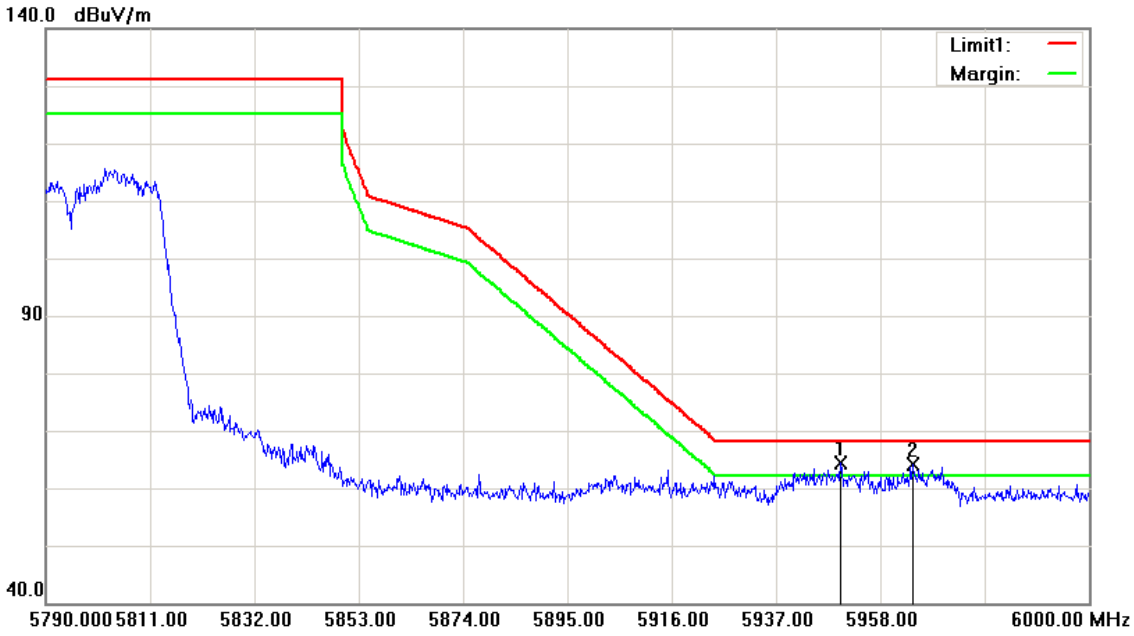
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5943.510	54.41	9.57	63.98	68.20	-4.22	peak
2	5952.540	56.66	9.59	66.25	68.20	-1.95	peak
3	5959.260	54.88	9.61	64.49	68.20	-3.71	peak

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Test Mode:	IEEE 802.11ac 40MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Frequency:	5795 MHz		
Ant.Polar.:	Vertical		



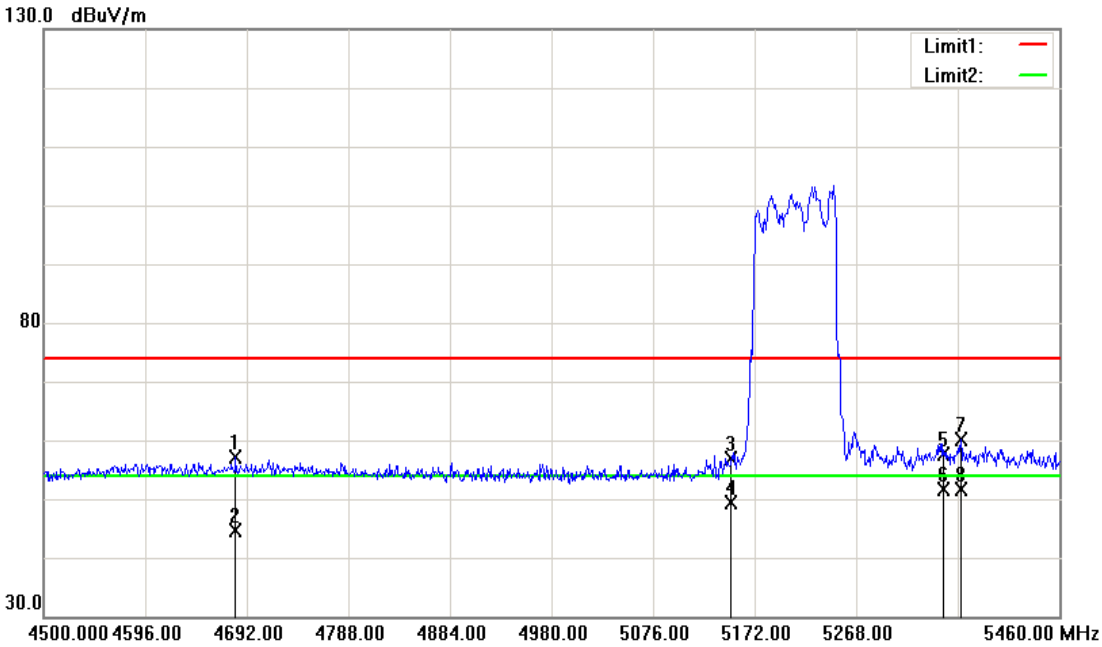
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5950.020	54.80	9.59	64.39	68.20	-3.81	peak
2	5964.510	54.61	9.62	64.23	68.20	-3.97	peak

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Test Mode:	IEEE 802.11ac 80MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Frequency:	5210 MHz		
Ant.Polar.:	Horizontal		



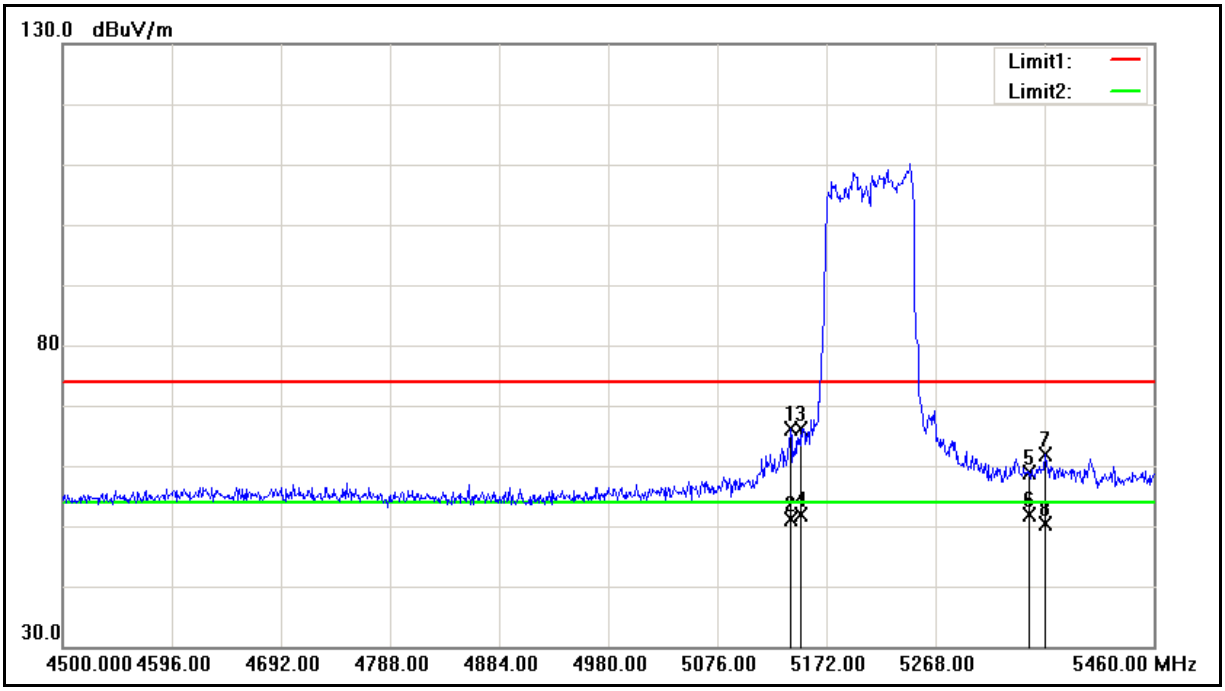
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4681.440	50.26	6.90	57.16	74.00	-16.84	peak
2	4681.440	37.79	6.90	44.69	54.00	-9.31	peak
3	5150.000	48.67	8.16	56.83	74.00	-17.17	peak
4	5150.000	41.16	8.16	49.32	54.00	-4.68	peak
5	5350.000	49.32	8.33	57.65	74.00	-16.35	peak
6	5350.000	43.36	8.33	51.69	54.00	-2.31	peak
7	5366.880	51.80	8.35	60.15	74.00	-13.85	peak
8	5366.880	43.25	8.35	51.60	54.00	-2.40	peak

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Test Mode:	IEEE 802.11ac 80MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Frequency:	5210 MHz		
Ant.Polar.:	Vertical		



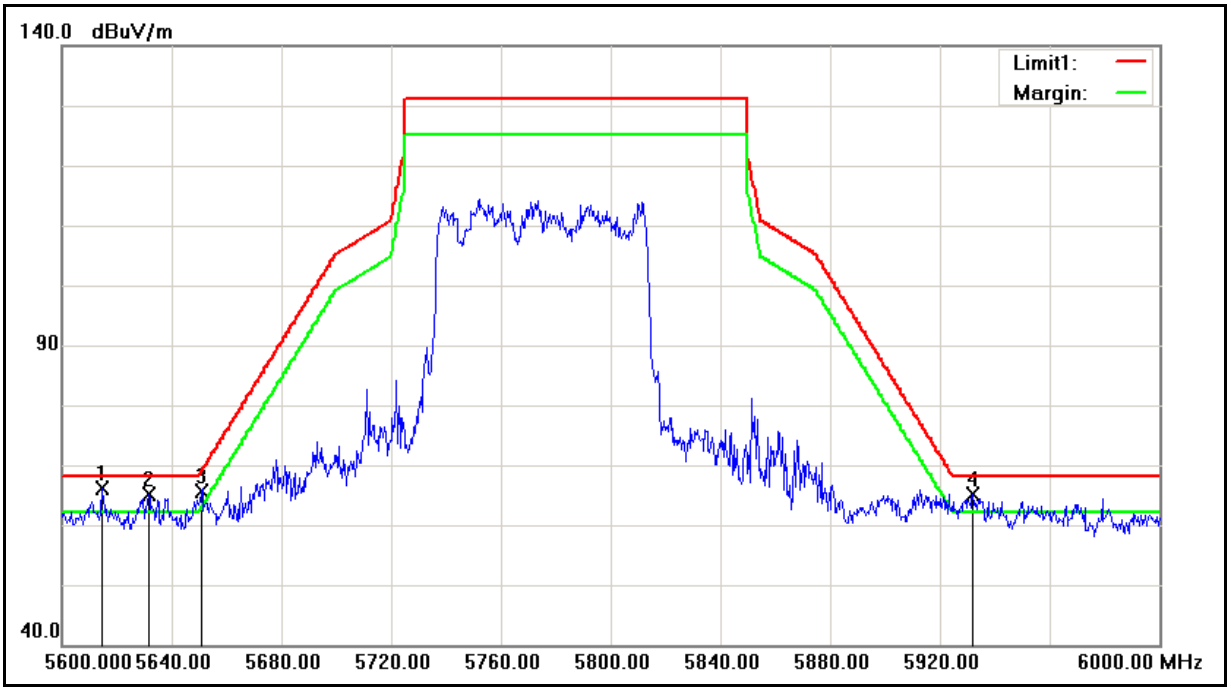
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5140.320	58.10	8.15	66.25	74.00	-7.75	peak
2	5140.320	43.03	8.15	51.18	54.00	-2.82	peak
3	5150.000	57.93	8.16	66.09	74.00	-7.91	peak
4	5150.000	43.78	8.16	51.94	54.00	-2.06	peak
5	5350.000	50.59	8.33	58.92	74.00	-15.08	peak
6	5350.000	43.49	8.33	51.82	54.00	-2.18	peak
7	5364.000	53.44	8.35	61.79	74.00	-12.21	peak
8	5364.000	41.98	8.35	50.33	54.00	-3.67	peak

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Test Mode:	IEEE 802.11ac 80MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Frequency:	5775 MHz		
Ant.Polar.:	Horizontal		



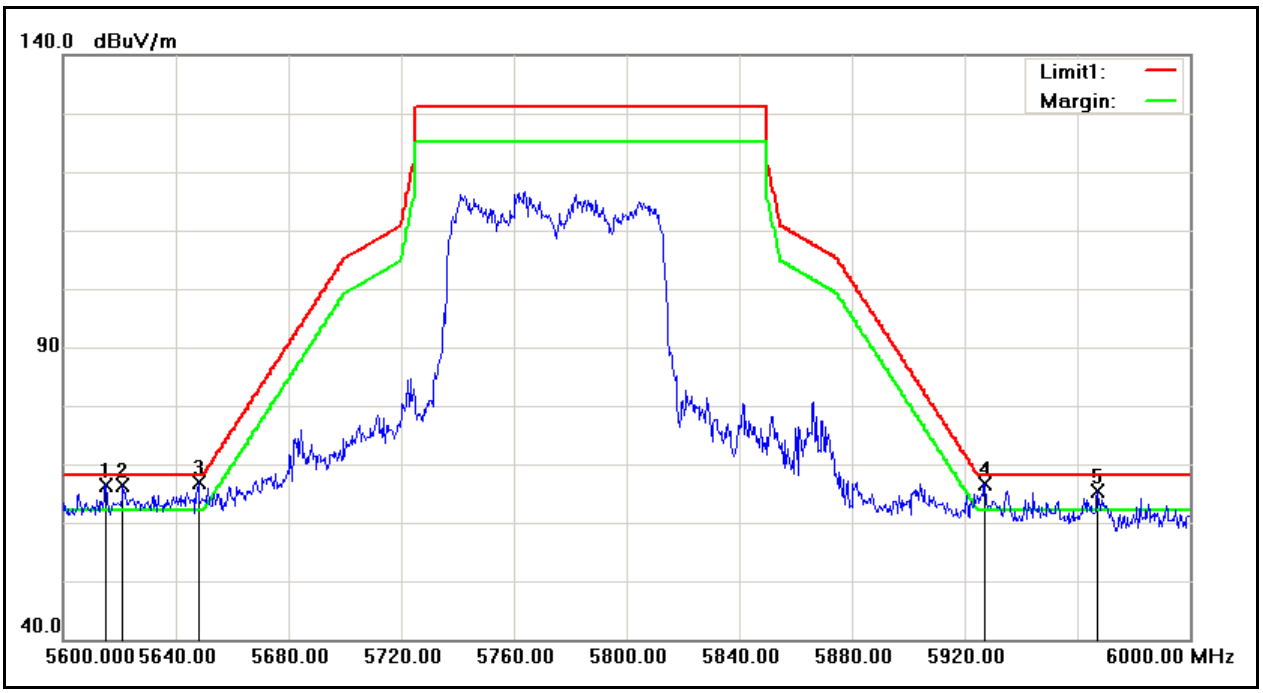
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5614.400	57.40	8.75	66.15	68.20	-2.05	peak
2	5631.600	56.34	8.79	65.13	68.20	-3.07	peak
3	5650.800	56.72	8.84	65.56	68.79	-3.23	peak
4	5932.000	55.48	9.54	65.02	68.20	-3.18	peak

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15E	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Test Mode:	IEEE 802.11ac 80MHz	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Frequency:	5775 MHz		
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5615.200	57.75	8.75	66.50	68.20	-1.70	peak
2	5621.200	57.66	8.76	66.42	68.20	-1.78	peak
3	5648.000	57.96	8.83	66.79	68.20	-1.41	peak
4	5927.200	57.21	9.53	66.74	68.20	-1.46	peak
5	5967.200	55.72	9.63	65.35	68.20	-2.85	peak

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

3. When the peak results are less than average limit, so not need to evaluate the average.

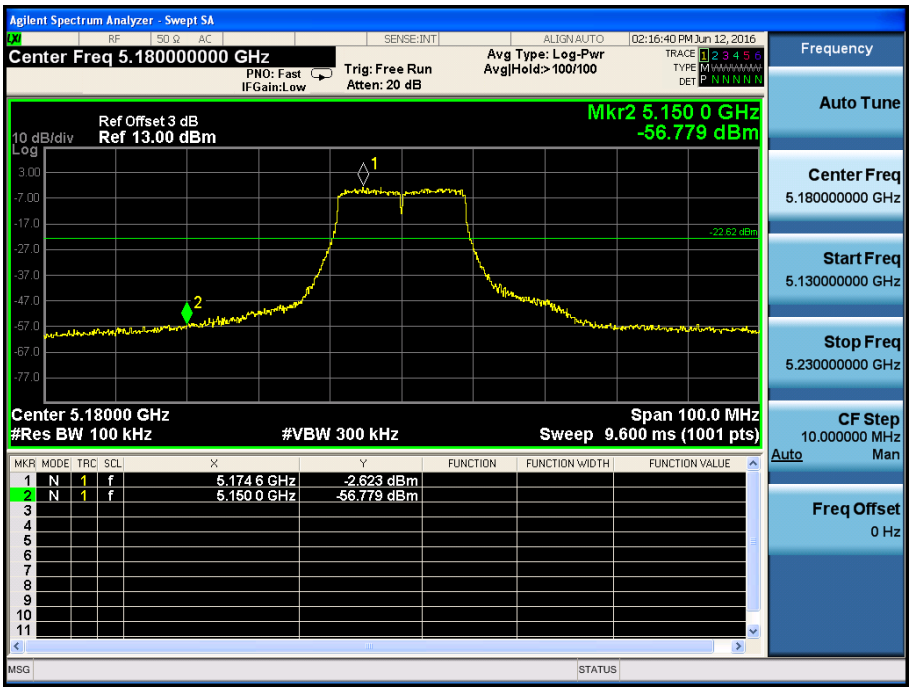
Emissions above 26.5GHz are attenuated more than 20dB below the permissible limits and test data are not reported.

Out-of-Band and Spurious Emission (Conducted)

Antenna 1

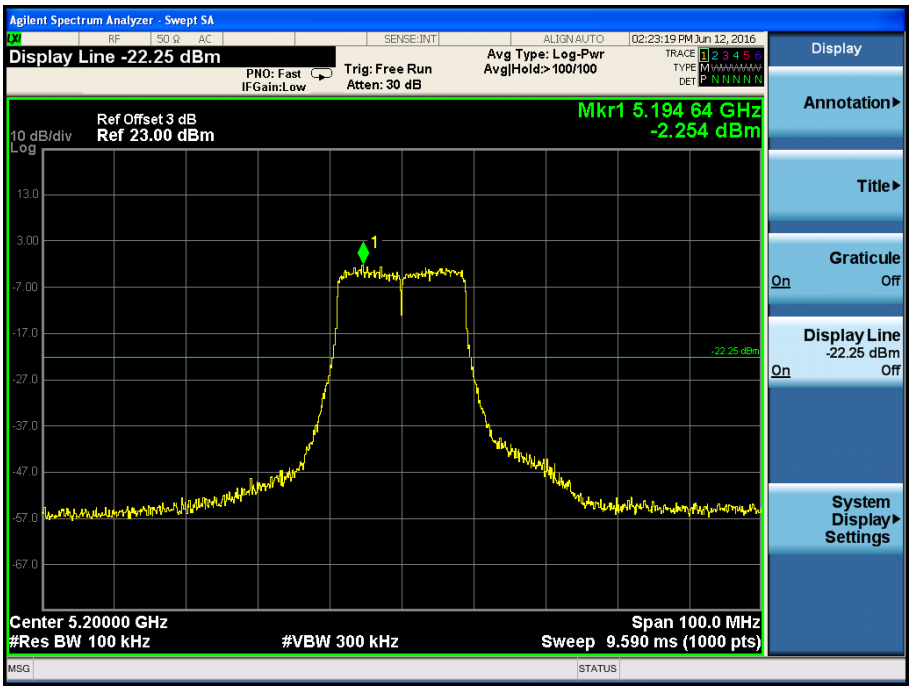
802.11a

5180MHz




Agilent Spectrum Analyzer - Swept SA
Marker 1 8.862043102155 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 36/100
02:21:22 PM Jun 12, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 13.00 dBm
Mkr1 8.862 0 GHz
-52.841 dBm
-22.62 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 64.00 ms (20000 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

5200MHz


Agilent Spectrum Analyzer - Swept SA
Display Line -22.25 dBm
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
02:23:19 PM Jun 12, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 5.194 64 GHz
-2.254 dBm
-22.25 dBm
Center 5.20000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.590 ms (1000 pts)
Display
Annotation
Title
Graticule
On Off
Display Line
-22.25 dBm
On Off
System
Display
Settings

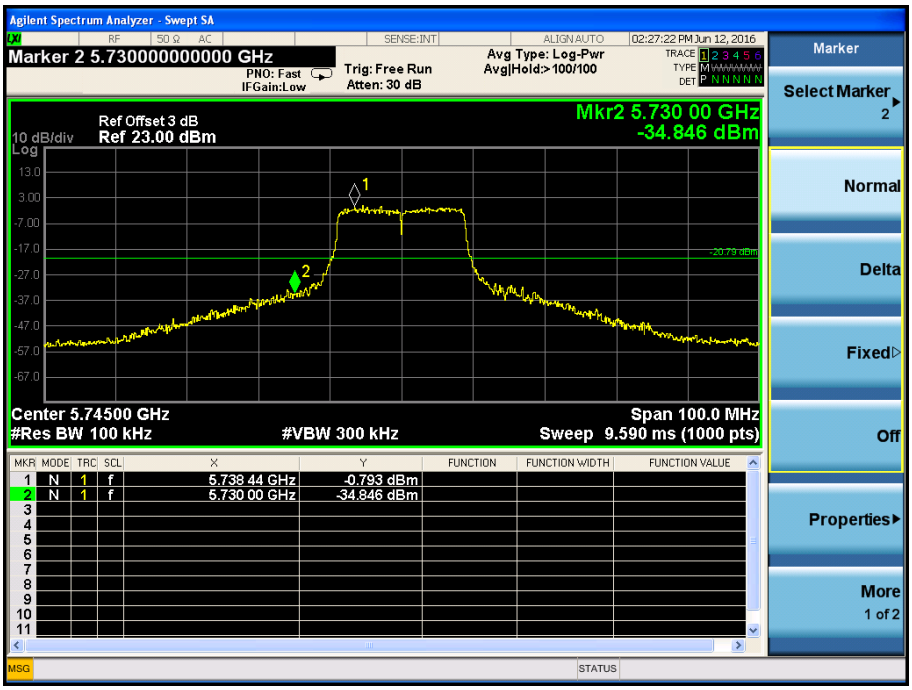

Agilent Spectrum Analyzer - Swept SA
Marker 1 20.552552552553 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 23/100
02:23:46 PM Jun 12, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 20.553 GHz
-35.290 dBm
-22.25 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 63.80 ms (1000 pts)
No Peak Found
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

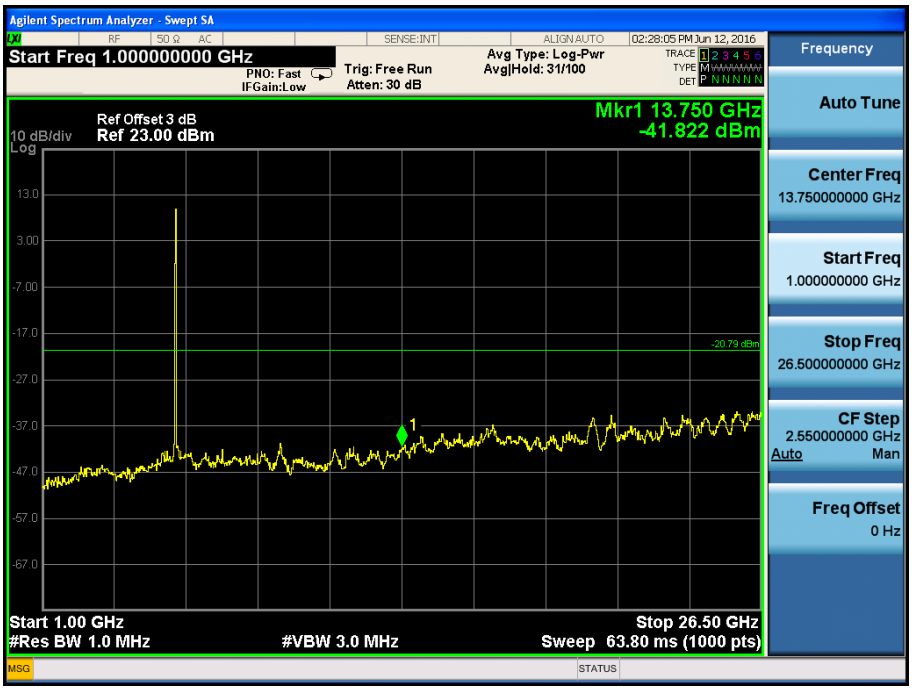
5240MHz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.240000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
02:24:47 PM Jun 12, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 5.234 64 GHz
0.340 dBm
-19.66 dBm
Center 5.24000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.590 ms (1000 pts)
Frequency
Auto Tune
Center Freq
5.240000000 GHz
Start Freq
5.190000000 GHz
Stop Freq
5.290000000 GHz
CF Step
10.000000 MHz
Auto
Man
Freq Offset
0 Hz

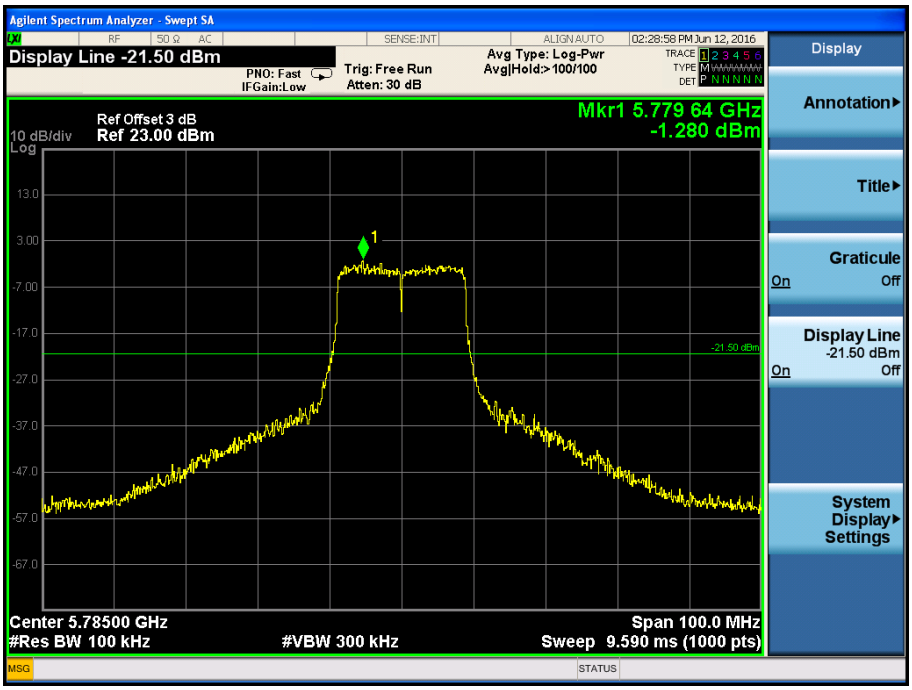

Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 58/100
02:25:33 PM Jun 12, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 16.800 GHz
-38.004 dBm
-19.66 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 63.80 ms (1000 pts)
Frequency
Auto Tune
Center Freq
13.750000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.550000000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

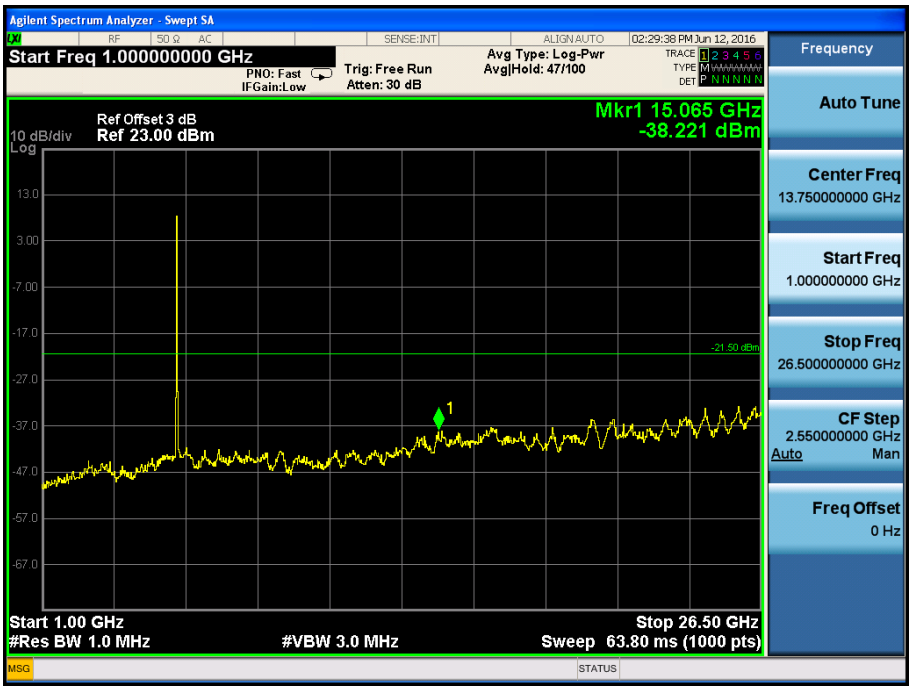
5745MHz


Agilent Spectrum Analyzer - Swept SA
Marker 2 5.730000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
02:27:22 PM Jun 12, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr2 5.730 00 GHz
-34.846 dBm
-20.79 dBm
Center 5.74500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.590 ms (1000 pts)
1 N 1 f 5.738 44 GHz -0.793 dBm
2 N 1 f 5.730 00 GHz -34.846 dBm
Marker
Select Marker
2
Normal
Delta
Fixed
Off
Properties
More
1 of 2
MSG
STATUS

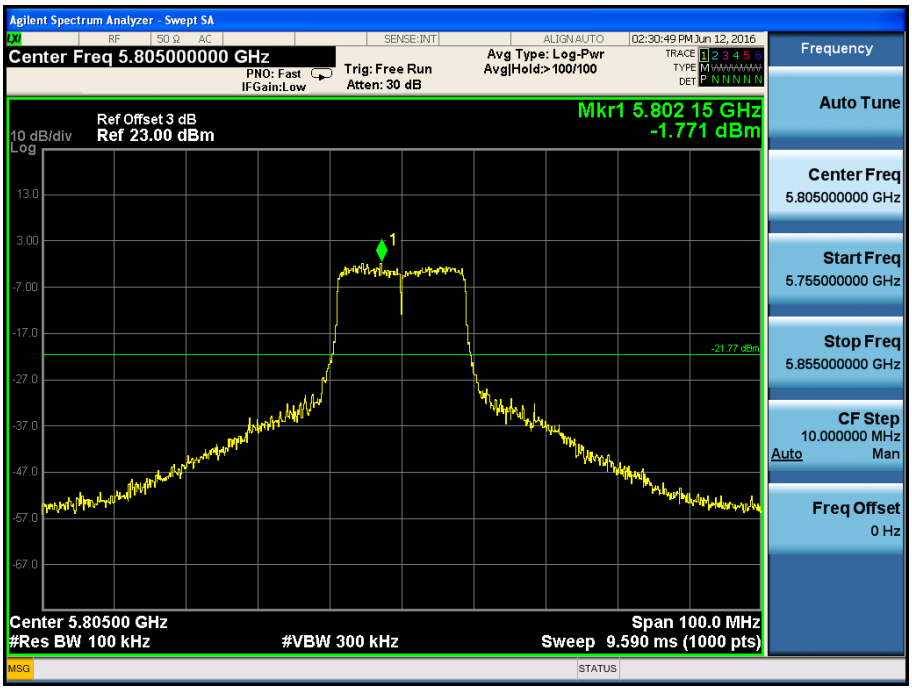

Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 31/100
02:28:05 PM Jun 12, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 13.750 GHz
-41.822 dBm
-20.79 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 63.80 ms (1000 pts)
Frequency
Auto Tune
Center Freq
13.750000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.550000000 GHz
Auto
Man
Freq Offset
0 Hz

5785MHz


Agilent Spectrum Analyzer - Swept SA
Display Line -21.50 dBm
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
02:28:58 PM Jun 12, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 5.779 64 GHz
-1.280 dBm
-21.50 dBm
Center 5.78500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.590 ms (1000 pts)
Display
Annotation
Title
Graticule
On
Off
Display Line
-21.50 dBm
On
Off
System
Display
Settings

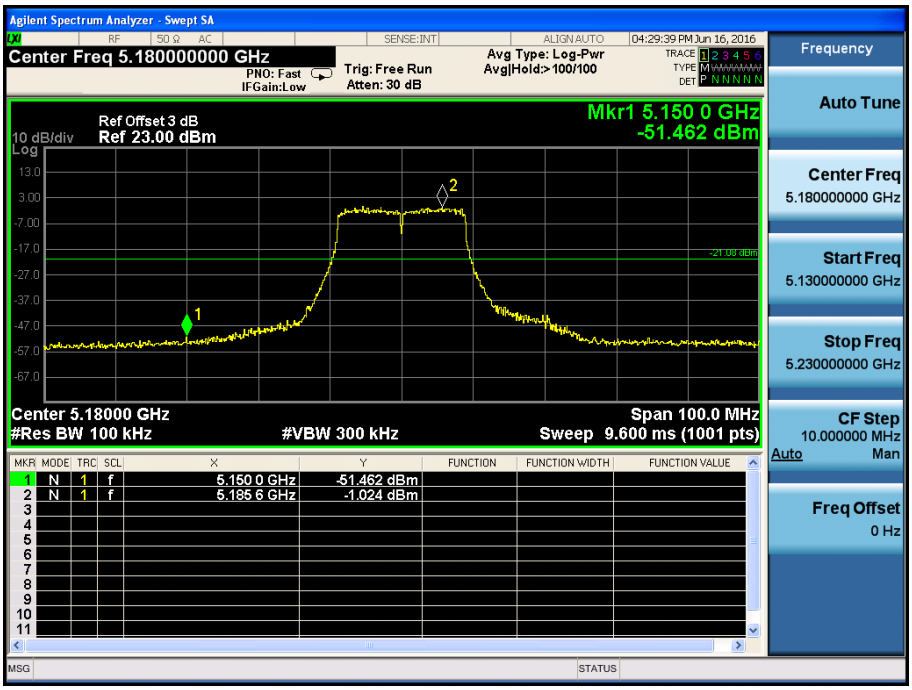

Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 47/100
02:29:38 PM Jun 12, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 15.065 GHz
-38.221 dBm
-21.50 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 63.80 ms (1000 pts)
Frequency
Auto Tune
Center Freq
13.750000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.550000000 GHz
Auto
Man
Freq Offset
0 Hz

5805MHz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.805000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
02:30:49 PM Jun 12, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 5.802 15 GHz
-1.771 dBm
-21.77 dBm
Center 5.80500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.590 ms (1000 pts)
Frequency
Auto Tune
Center Freq
5.805000000 GHz
Start Freq
5.755000000 GHz
Stop Freq
5.855000000 GHz
CF Step
10.000000 MHz
Auto
Man
Freq Offset
0 Hz

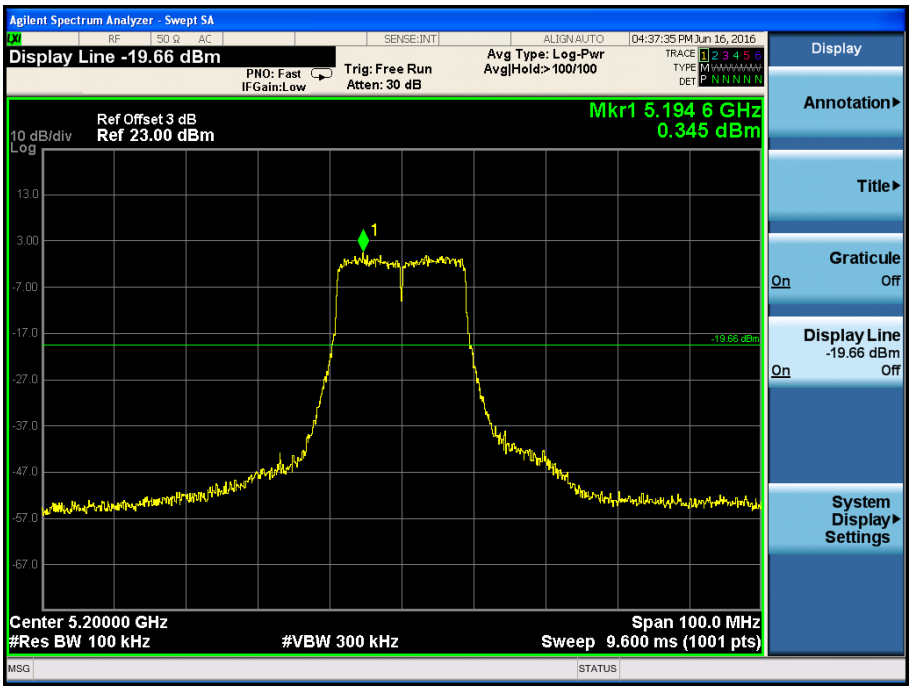
802.11n-HT20

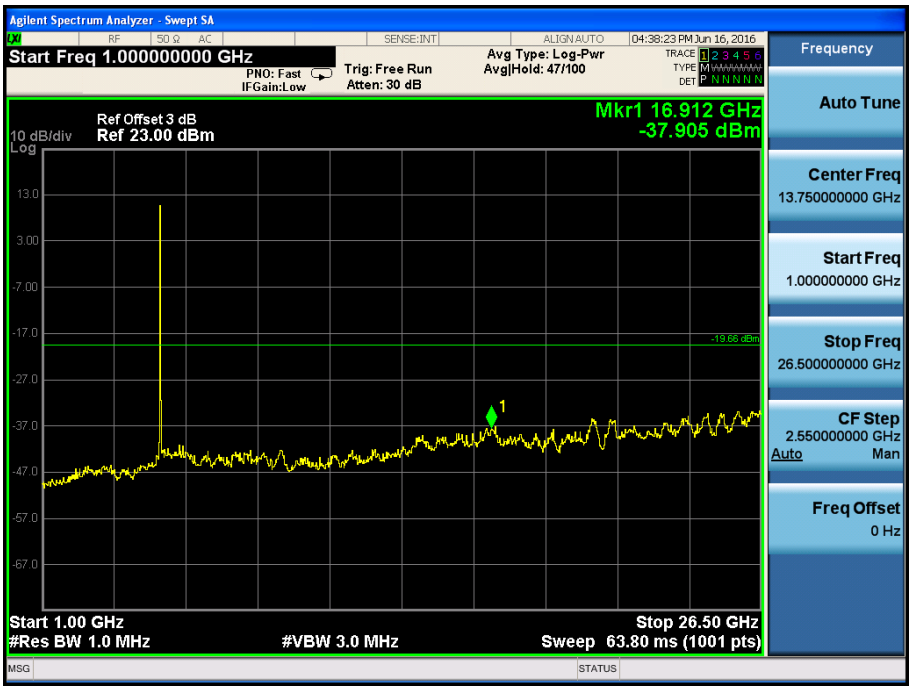
5180MHz



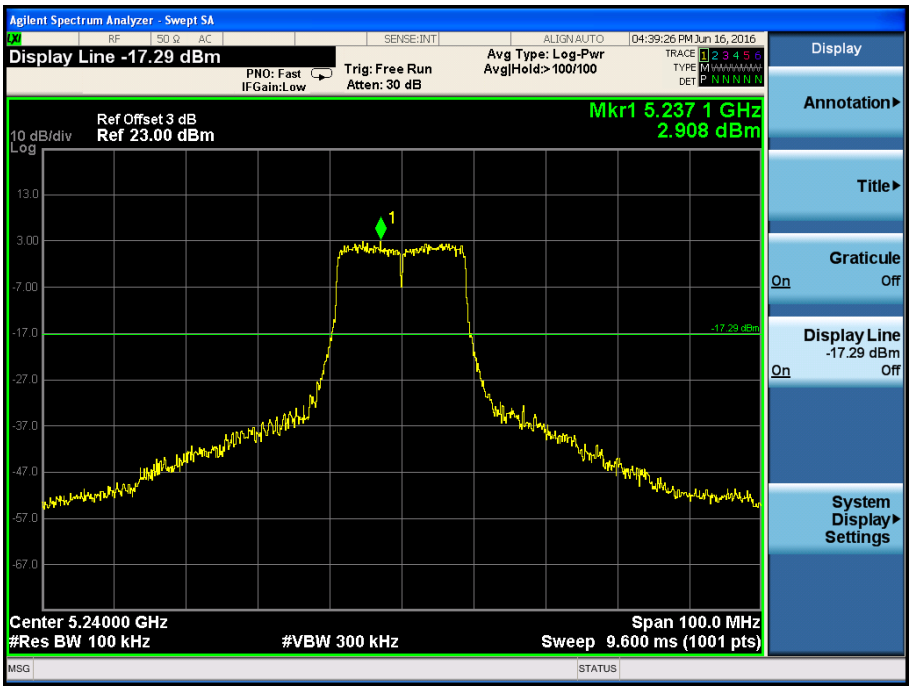

Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:35:25 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 8.340 5 GHz
-41.435 dBm
-21.08 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 64.00 ms (20000 pts)
Frequency
Auto Tune
Center Freq
13.750000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.550000000 GHz
Auto
Man
Freq Offset
0 Hz

5200MHz


Agilent Spectrum Analyzer - Swept SA
Display Line -19.66 dBm
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:37:35 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 5.194 6 GHz
0.345 dBm
-19.66 dBm
Center 5.20000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.600 ms (1001 pts)
Display
Annotation
Title
Graticule
On
Off
Display Line
-19.66 dBm
On
Off
System
Display
Settings

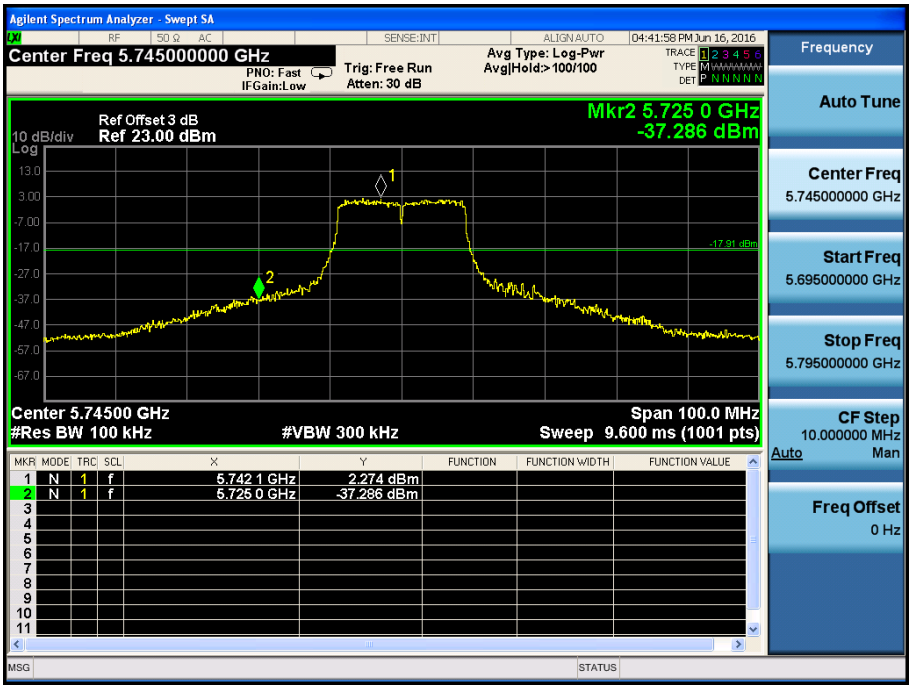

Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 47/100
04:38:23 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 16.912 GHz
-37.905 dBm
-19.66 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 63.80 ms (1001 pts)
Frequency
Auto Tune
Center Freq
13.750000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.550000000 GHz
Auto
Man
Freq Offset
0 Hz

5240MHz


Agilent Spectrum Analyzer - Swept SA
Display Line -17.29 dBm
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:39:26 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 5.237 1 GHz
2.908 dBm
-17.29 dBm
Center 5.24000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.600 ms (1001 pts)
Display
Annotation
Title
Graticule
On
Off
Display Line
-17.29 dBm
On
Off
System
Display
Settings

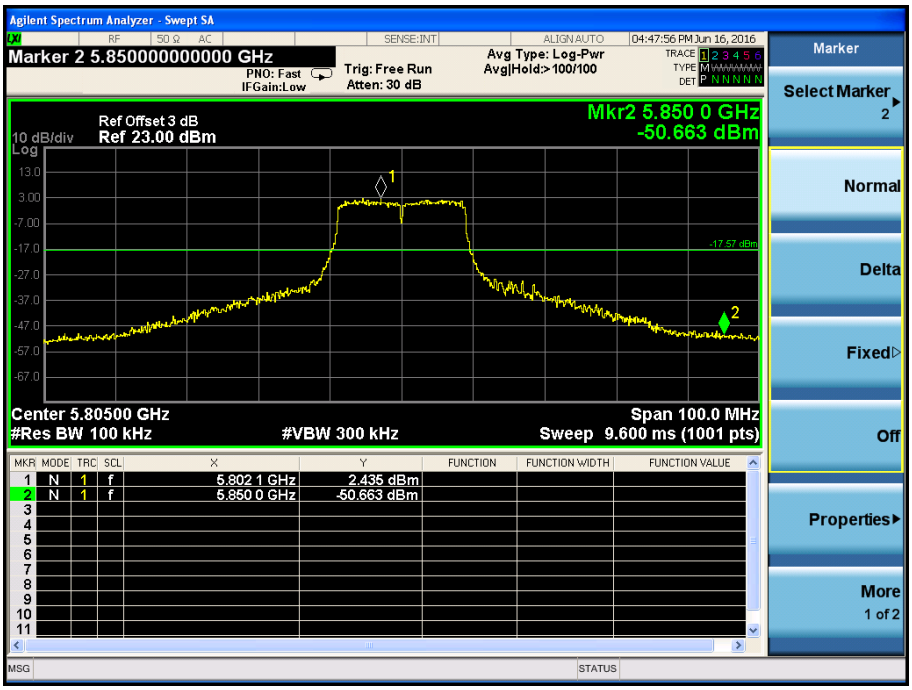

Agilent Spectrum Analyzer - Swept SA
Marker 1 16.708000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 18/100
04:40:01 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 16.708 GHz
-37.305 dBm
-17.29 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 63.80 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

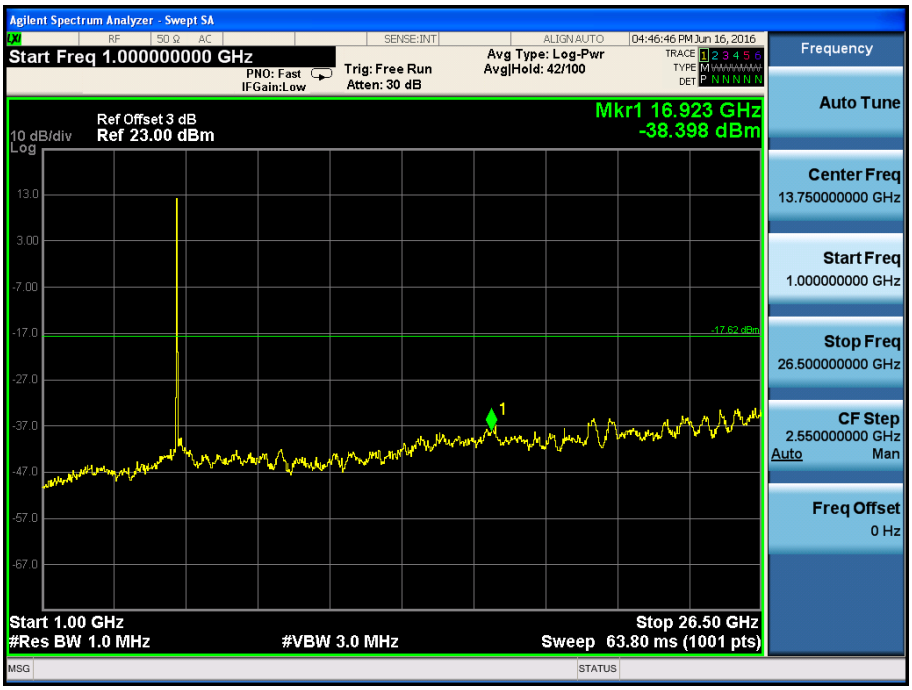
5745MHz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.745000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:41:58 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr2 5.725 0 GHz
-37.286 dBm
-17.91 dBm
Center 5.74500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.600 ms (1001 pts)
1 N 1 f 5.742 1 GHz 2.274 dBm
2 N 1 f 5.725 0 GHz -37.286 dBm
Frequency
Auto Tune
Center Freq
5.745000000 GHz
Start Freq
5.695000000 GHz
Stop Freq
5.795000000 GHz
CF Step
10.000000 MHz
Auto
Man
Freq Offset
0 Hz

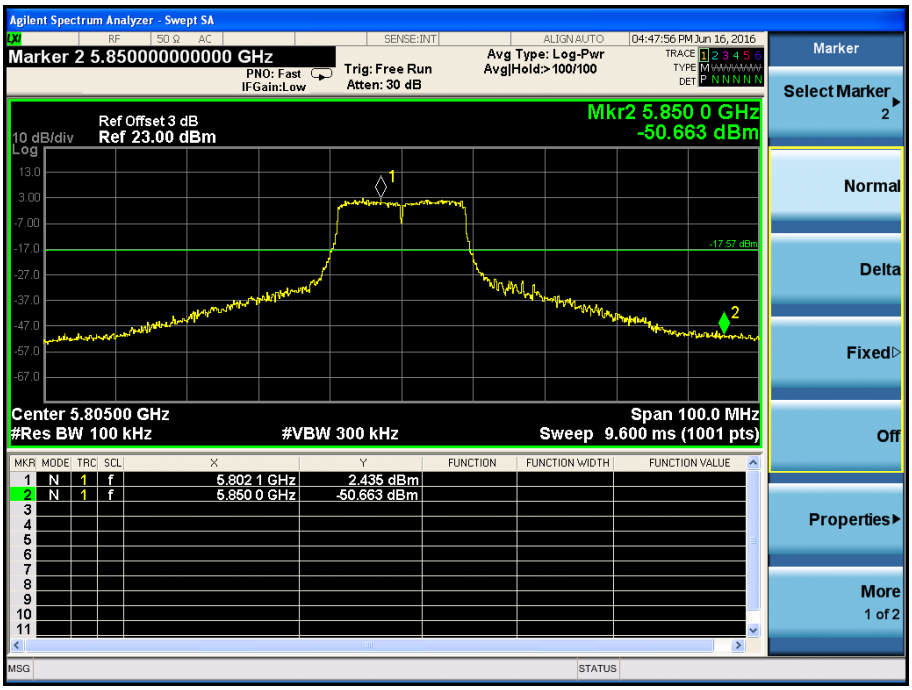

Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 60/100
04:43:02 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 16.861 GHz
-38.640 dBm
-17.91 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 63.80 ms (1001 pts)
Frequency
Auto Tune
Center Freq
13.750000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.550000000 GHz
Auto
Man
Freq Offset
0 Hz

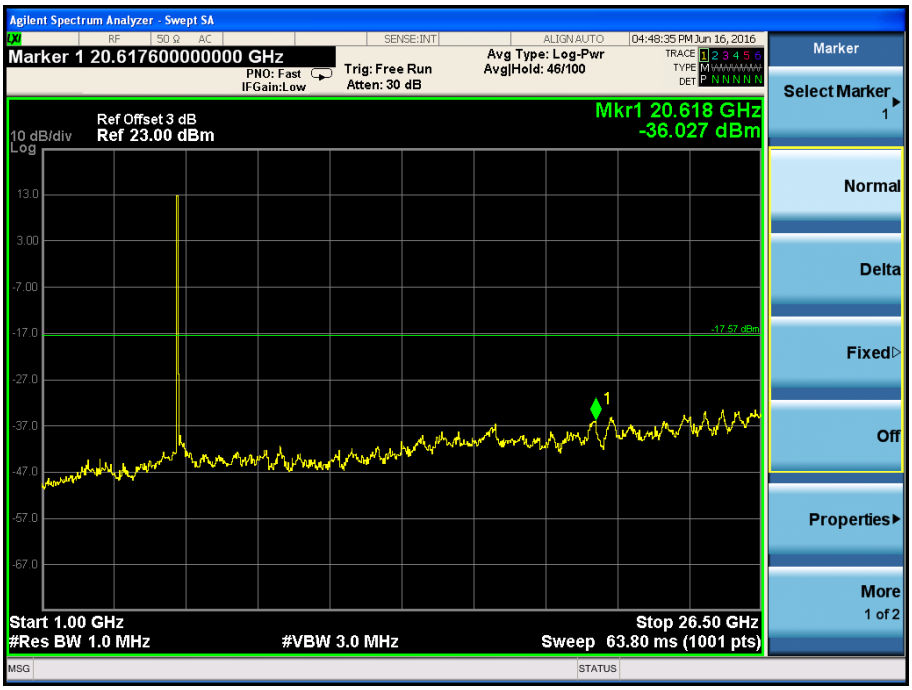
5785MHz


Agilent Spectrum Analyzer - Swept SA
Marker 2 5.850000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:47:56 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr2 5.850 0 GHz
-50.663 dBm
-17.57 dBm
Center 5.80500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.600 ms (1001 pts)
1 N 1 f 5.802 1 GHz 2.435 dBm
2 N 1 f 5.850 0 GHz -50.663 dBm
Marker
Select Marker
2
Normal
Delta
Fixed
Off
Properties
More
1 of 2


Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 42/100
04:46:46 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 16.923 GHz
-38.398 dBm
-17.62 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 63.80 ms (1001 pts)
Frequency
Auto Tune
Center Freq
13.750000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.550000000 GHz
Auto
Man
Freq Offset
0 Hz

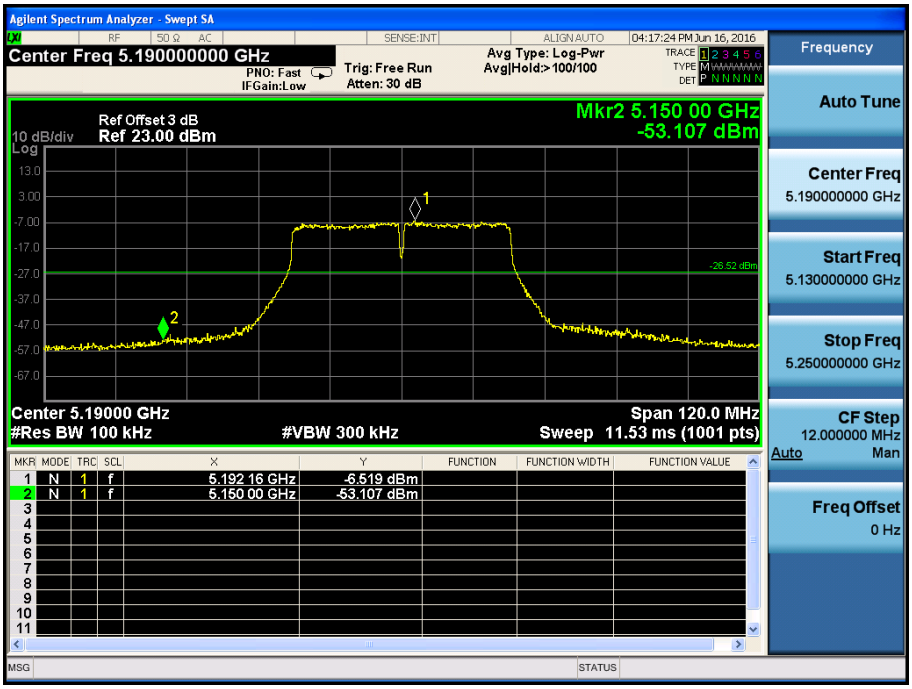
5805MHz

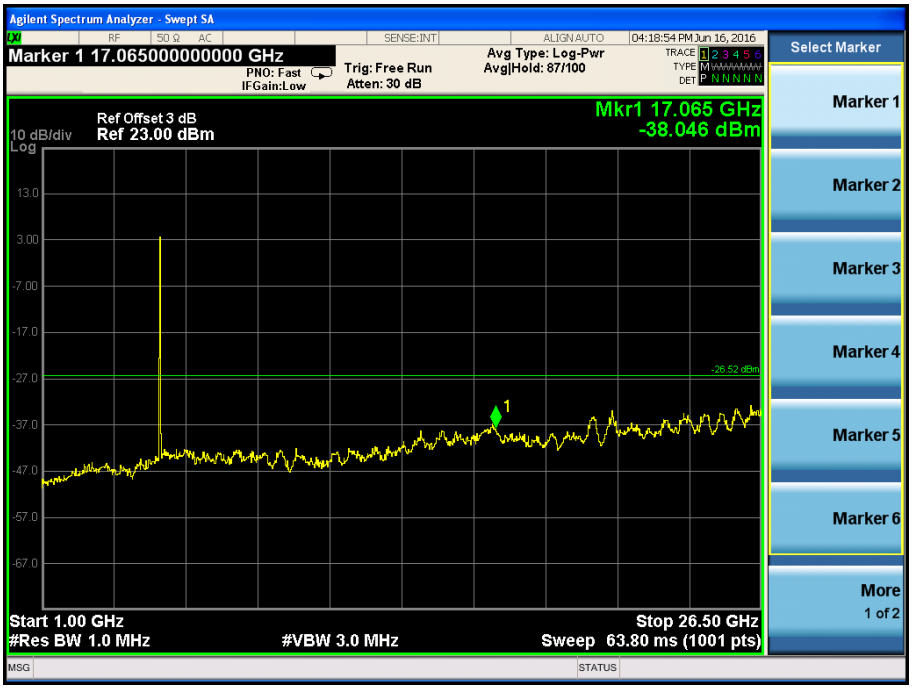

Agilent Spectrum Analyzer - Swept SA
Marker 2 5.850000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:47:56 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr2 5.850 0 GHz
-50.663 dBm
-17.57 dBm
Center 5.80500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.600 ms (1001 pts)
1 N 1 f 5.802 1 GHz 2.435 dBm
2 N 1 f 5.850 0 GHz -50.663 dBm
Marker
Select Marker
2
Normal
Delta
Fixed
Off
Properties
More
1 of 2


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
04:48:35 PM Jun 16, 2016
Marker 1 20.617600000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 46/100
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 20.618 GHz
-36.027 dBm
13.0
3.00
-7.00
-17.0
-27.0
-37.0
-47.0
-57.0
-67.0
-17.57 dBm
1
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 63.80 ms (1001 pts)
MSG
STATUS
Marker
Select Marker
1
Normal
Delta
Fixed
Off
Properties
More
1 of 2

802.11n-HT40

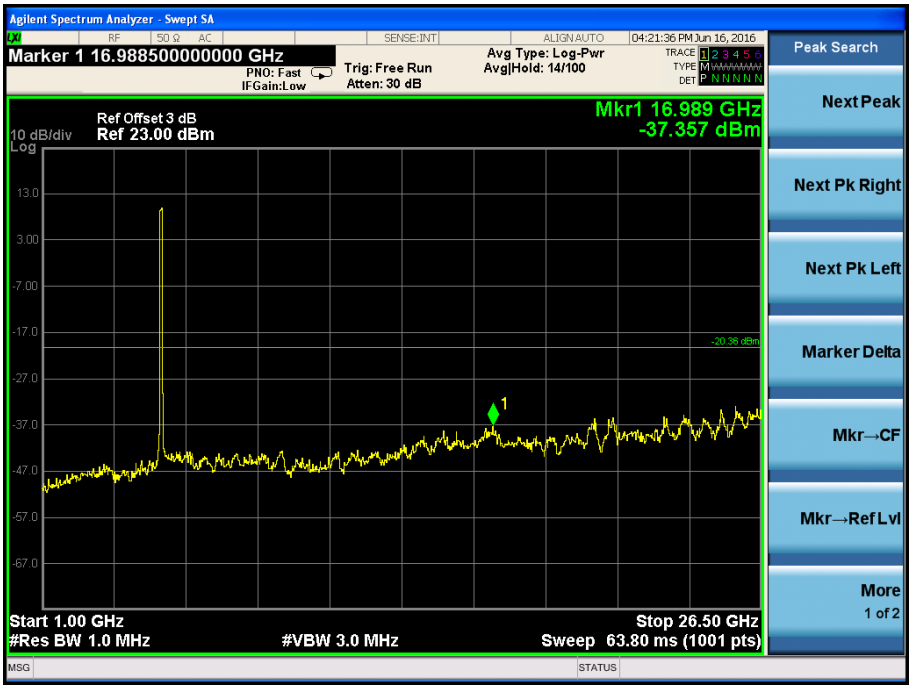
5190MHz



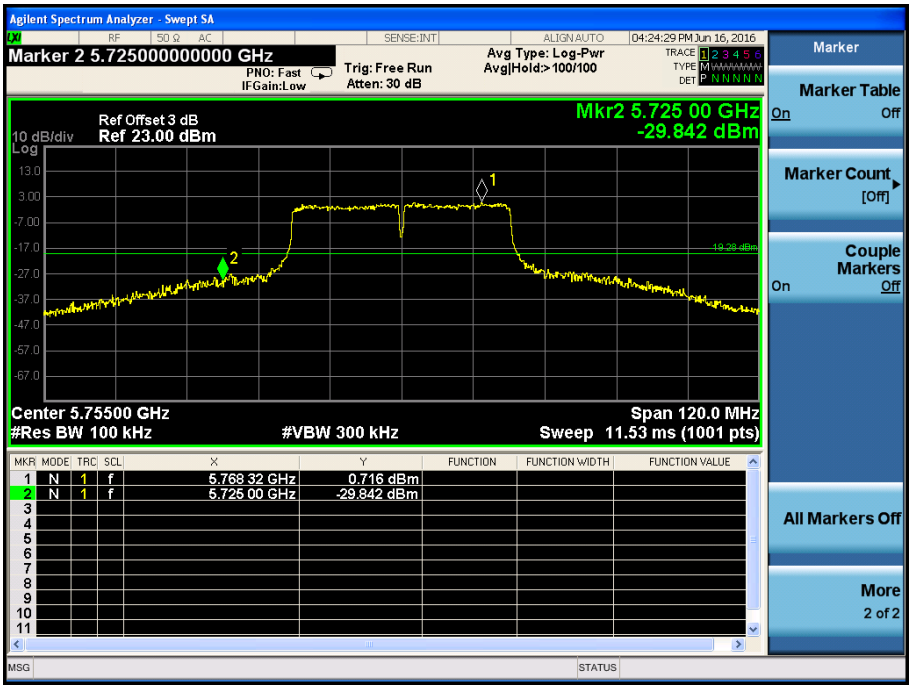


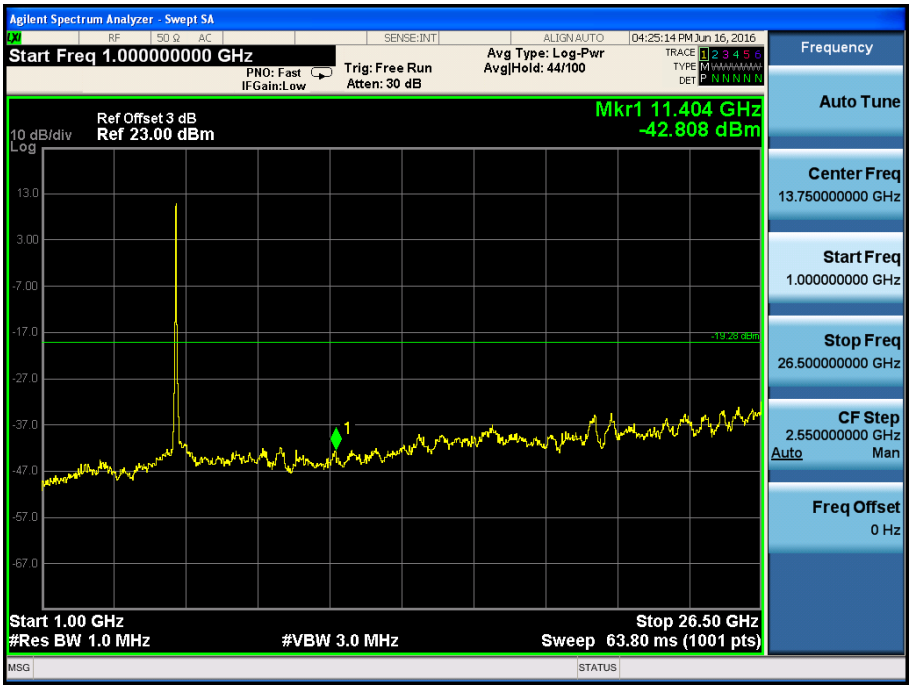
5230MHz


Agilent Spectrum Analyzer - Swept SA
Marker 1 5.243320000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:21:17 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 5.243 32 GHz
-0.326 dBm
-20.36 dBm
Center 5.23000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 120.0 MHz
Sweep 11.53 ms (1001 pts)
Marker
Select Marker
Normal
Delta
Fixed
Off
Properties
More
1 of 2
MSG
STATUS

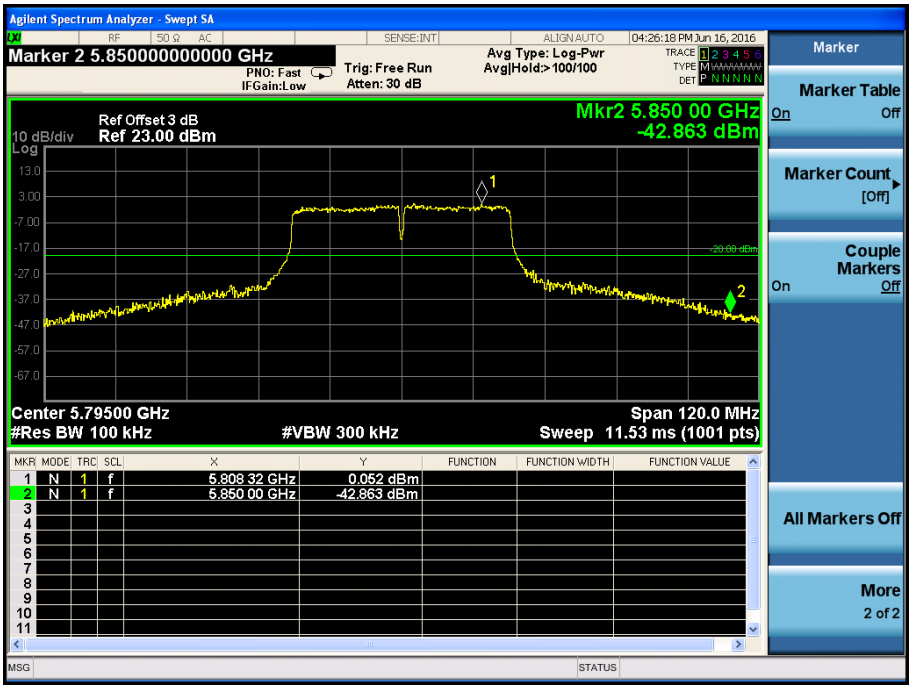

Agilent Spectrum Analyzer - Swept SA
Marker 1 16.988500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 14/100
04:21:36 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 16.989 GHz
-37.357 dBm
-20.36 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 63.80 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

5755MHz


Agilent Spectrum Analyzer - Swept SA
Marker 2 5.725000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:24:29 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 5.725 00 GHz
-29.842 dBm
Center 5.75500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 120.0 MHz
Sweep 11.53 ms (1001 pts)
1 N 1 f 5.768 32 GHz 0.716 dBm
2 N 1 f 5.725 00 GHz -29.842 dBm
Marker
Marker Table
On Off
Marker Count
[Off]
Couple Markers
On Off
All Markers Off
More
2 of 2


Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 44/100
04:25:14 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr1 11.404 GHz
-42.808 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 63.80 ms (1001 pts)
Frequency
Auto Tune
Center Freq
13.750000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.550000000 GHz
Auto Man
Freq Offset
0 Hz

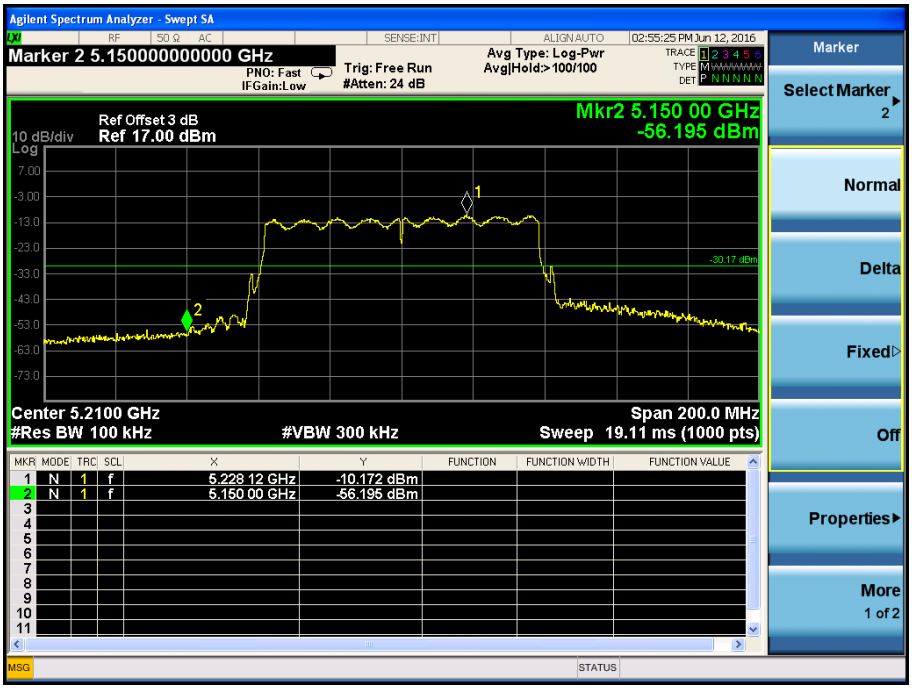
5795MHz

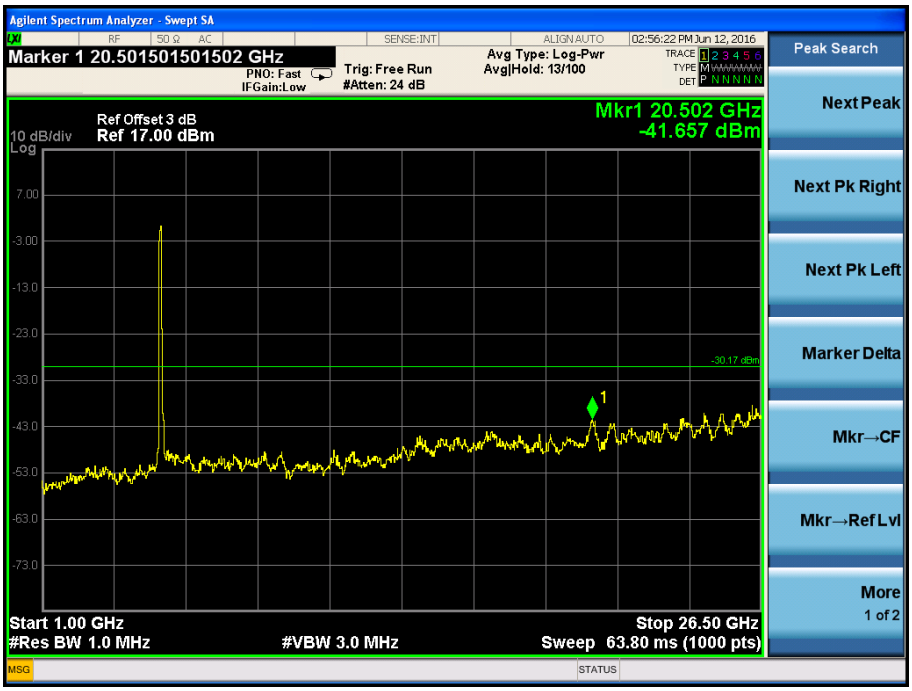

Agilent Spectrum Analyzer - Swept SA
Marker 2 5.850000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
04:26:18 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 5.850 00 GHz
-42.863 dBm
-20.00 dBm
Center 5.79500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 120.0 MHz
Sweep 11.53 ms (1001 pts)
1 N 1 f 5.808 32 GHz 0.052 dBm
2 N 1 f 5.850 00 GHz -42.863 dBm
Marker
Marker Table
On Off
Marker Count
[Off]
Couple Markers
On Off
All Markers Off
More
2 of 2
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Marker 2 21.099000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 75/100
04:27:00 PM Jun 16, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 21.099 GHz
-36.889 dBm
-20.00 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 63.80 ms (1001 pts)
Marker
Select Marker
2
Normal
Delta
Fixed
Off
Properties
More
1 of 2
MSG
STATUS

802.11ac80

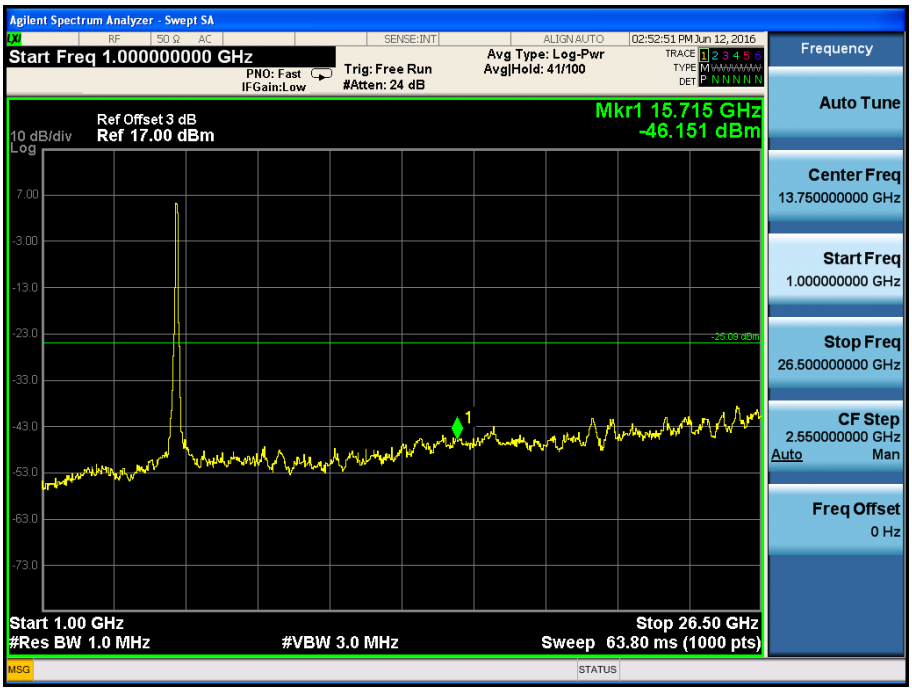
5210MHz





5775MHz

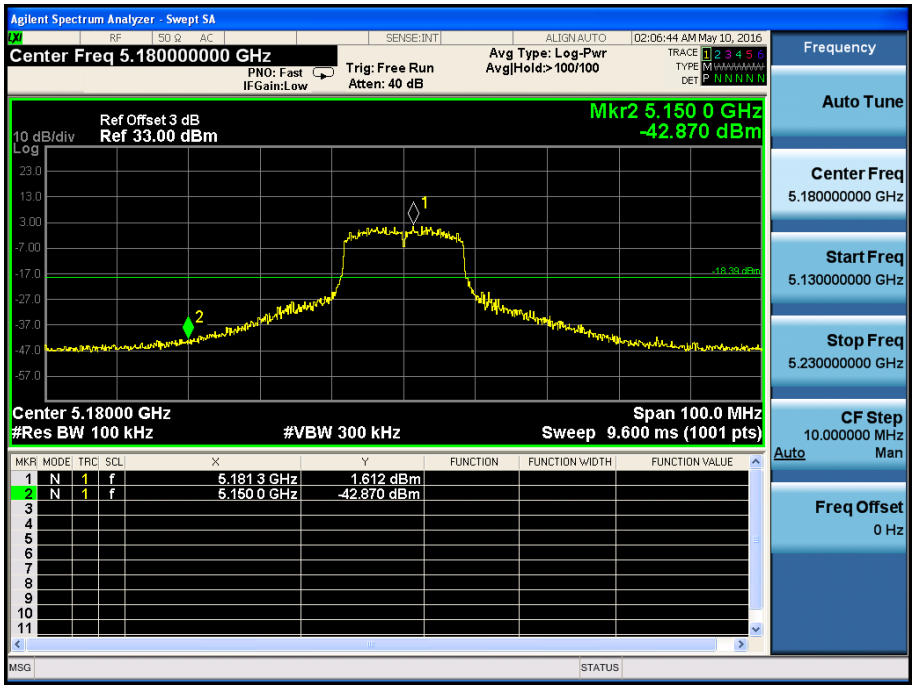

Agilent Spectrum Analyzer - Swept SA
Marker 2 5.725000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
02:51:33 PM Jun 12, 2016
Ref Offset 3 dB
10 dB/div
Ref 17.00 dBm
Mkr2 5.725 00 GHz
-29.452 dBm
Center 5.7750 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 200.0 MHz
Sweep 19.11 ms (1000 pts)
1 N 1 f 5.757 08 GHz -5.055 dBm
2 N 1 f 5.725 00 GHz -29.452 dBm
Marker
Select Marker 2
Normal
Delta
Fixed
Off
Properties
More 1 of 2

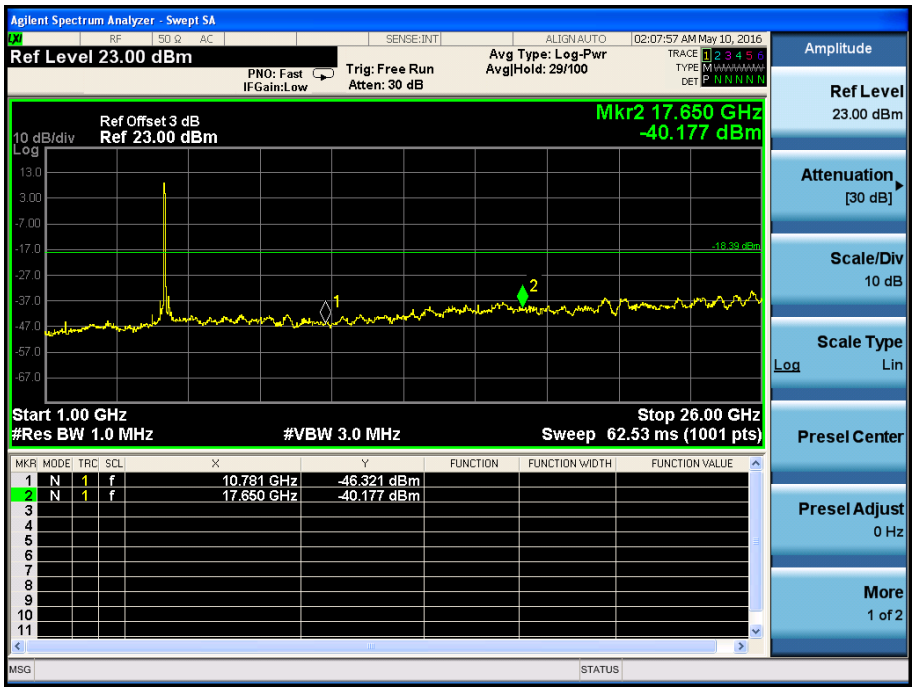

Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 41/100
02:52:51 PM Jun 12, 2016
Ref Offset 3 dB
10 dB/div
Ref 17.00 dBm
Mkr1 15.715 GHz
-46.151 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 63.80 ms (1000 pts)
Frequency
Auto Tune
Center Freq 13.750000000 GHz
Start Freq 1.000000000 GHz
Stop Freq 26.500000000 GHz
CF Step 2.550000000 GHz
Auto Man
Freq Offset 0 Hz

Antenna 2

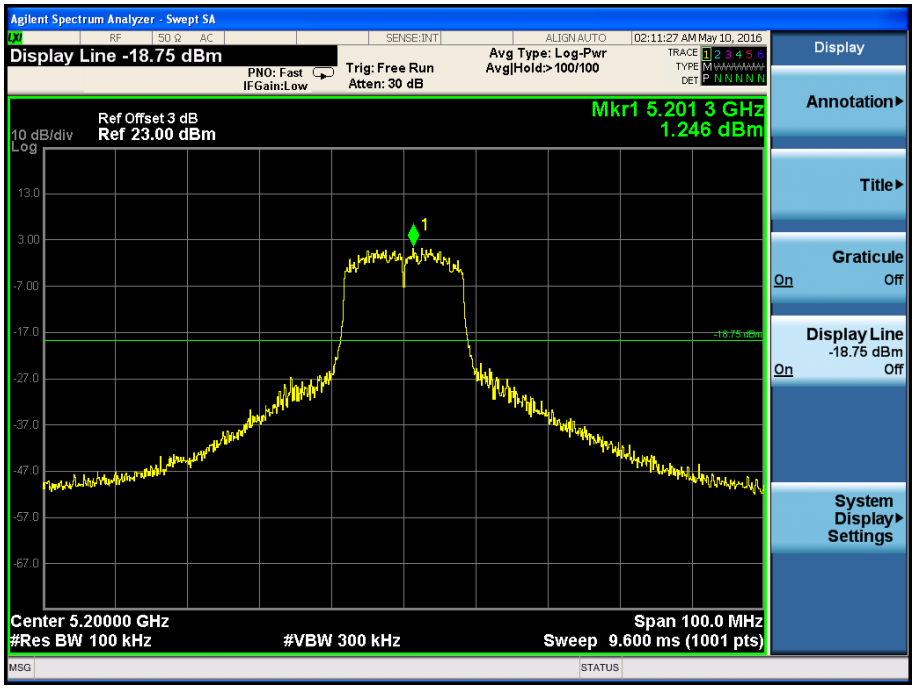
802.11a

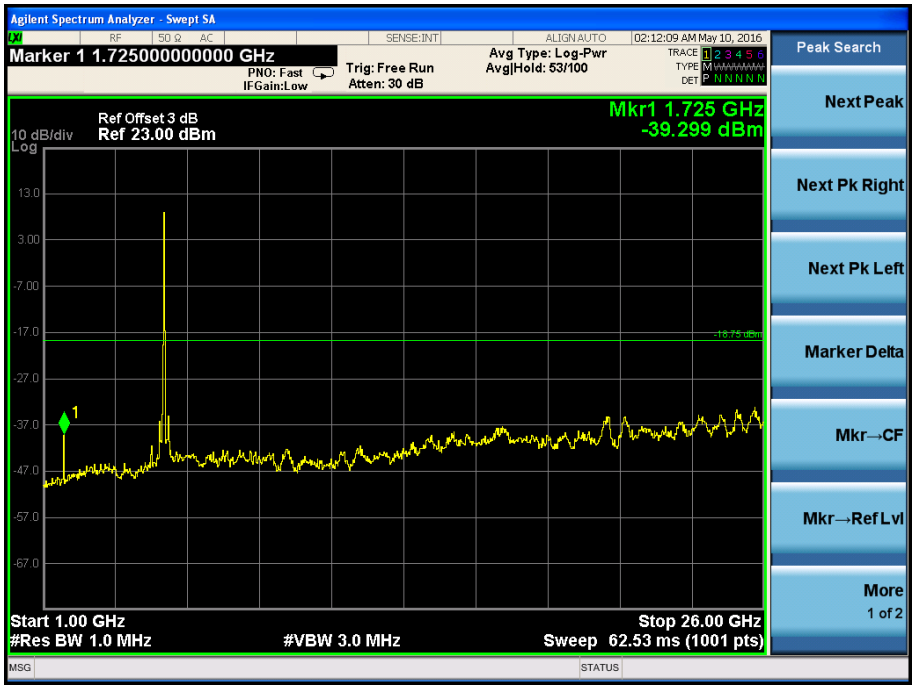
5180MHz



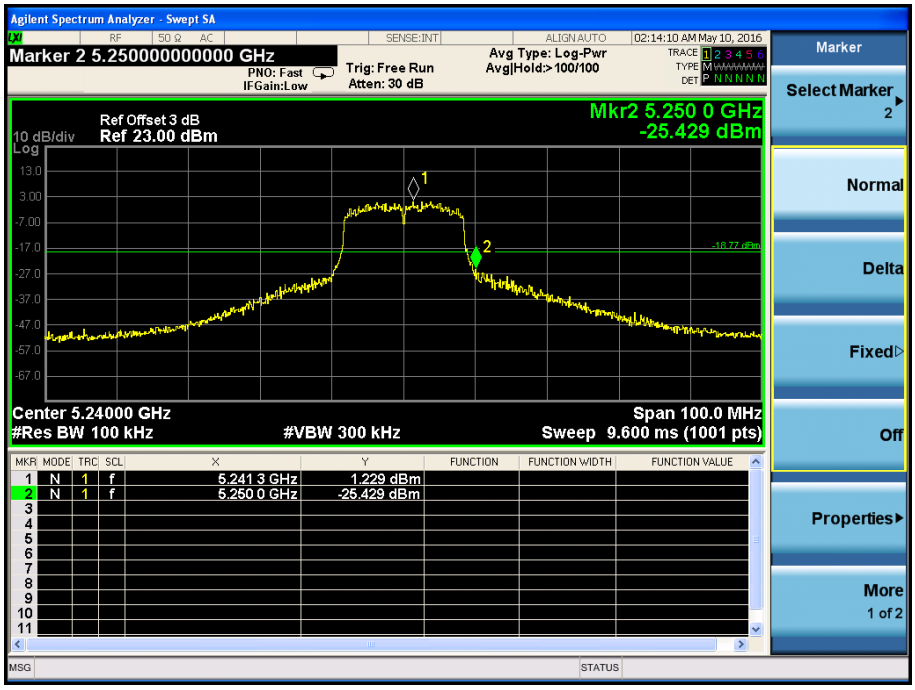


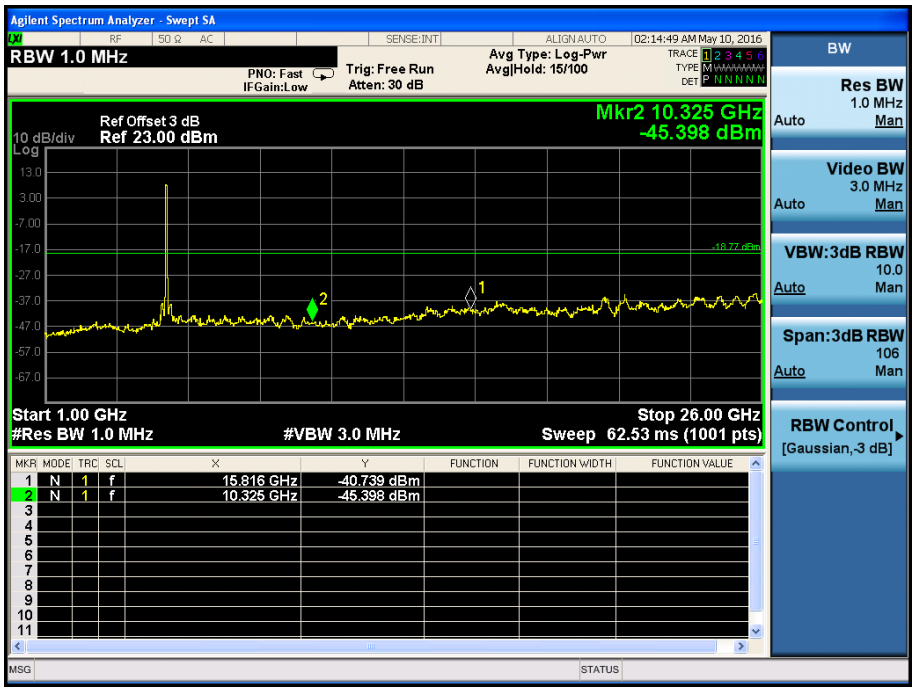
5200MHz


Agilent Spectrum Analyzer - Swept SA
Display Line -18.75 dBm
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
02:11:27 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 5.201 3 GHz
1.246 dBm
Center 5.20000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.600 ms (1001 pts)
Display
Annotation
Title
Graticule
On Off
Display Line
-18.75 dBm
On Off
System
Display
Settings

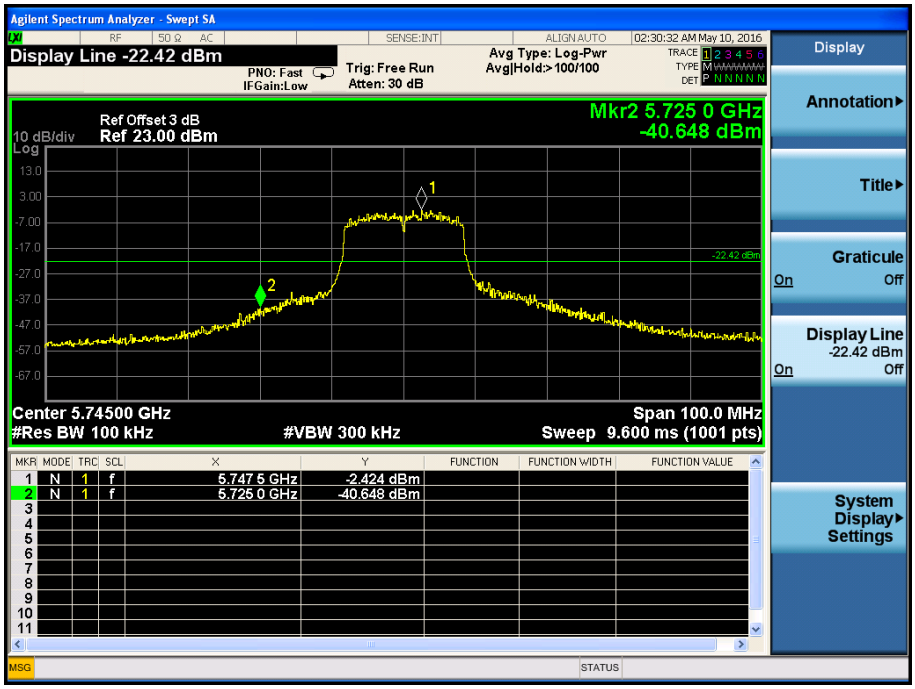

Agilent Spectrum Analyzer - Swept SA
Marker 1 1.725000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 53/100
02:12:09 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 1.725 GHz
-39.299 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.00 GHz
Sweep 62.53 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

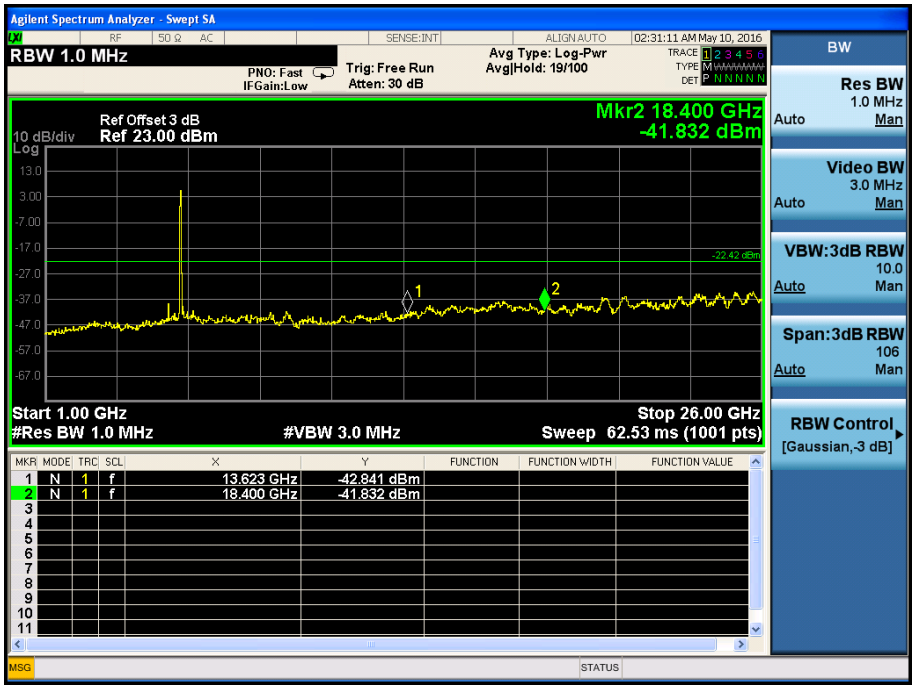
5240MHz


Agilent Spectrum Analyzer - Swept SA
Marker 2 5.250000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
02:14:10 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 5.250 0 GHz
-25.429 dBm
Center 5.24000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.600 ms (1001 pts)
1 N 1 f 5.241 3 GHz 1.229 dBm
2 N 1 f 5.250 0 GHz -25.429 dBm
Marker
Select Marker 2
Normal
Delta
Fixed
Off
Properties
More 1 of 2
MSG
STATUS

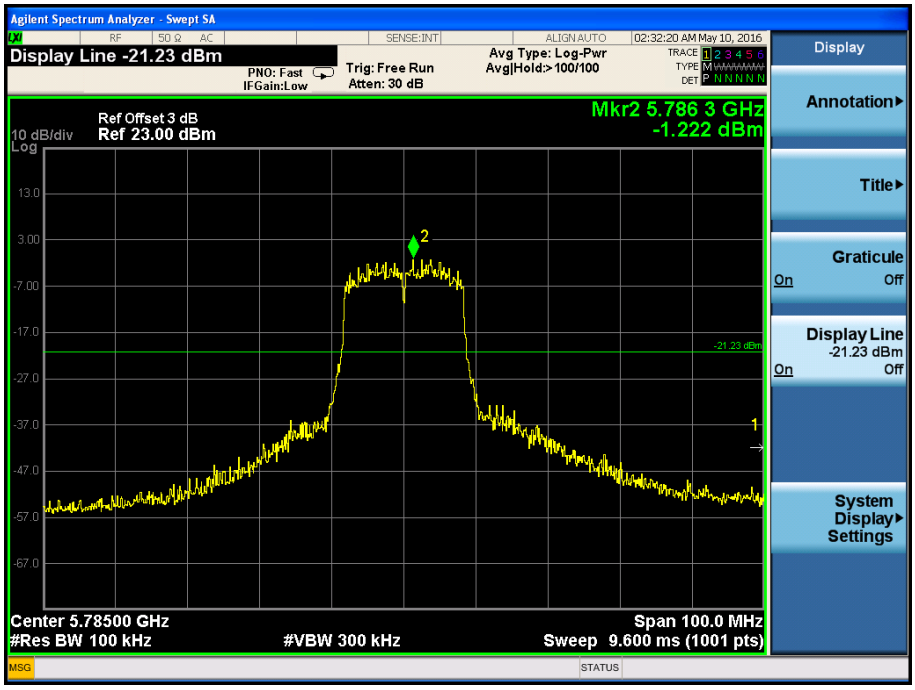

Agilent Spectrum Analyzer - Swept SA
RBW 1.0 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 15/100
02:14:49 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 10.325 GHz
-45.398 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.00 GHz
Sweep 62.53 ms (1001 pts)
1 N 1 f 15.816 GHz -40.739 dBm
2 N 1 f 10.325 GHz -45.398 dBm
BW
Res BW 1.0 MHz
Auto Man
Video BW 3.0 MHz
Auto Man
VBW:3dB RBW 10.0
Auto Man
Span:3dB RBW 106
Auto Man
RBW Control [Gaussian,-3 dB]
MSG
STATUS

5745MHz


Agilent Spectrum Analyzer - Swept SA
Display Line -22.42 dBm
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
02:30:32 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 5.725 0 GHz
-40.648 dBm
-22.42 dBm
Center 5.74500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.600 ms (1001 pts)
1 N 1 f 5.747 5 GHz -2.424 dBm
2 N 1 f 5.725 0 GHz -40.648 dBm
Display
Annotation
Title
Graticule
On Off
Display Line
-22.42 dBm
On Off
System
Display
Settings
MSG
STATUS

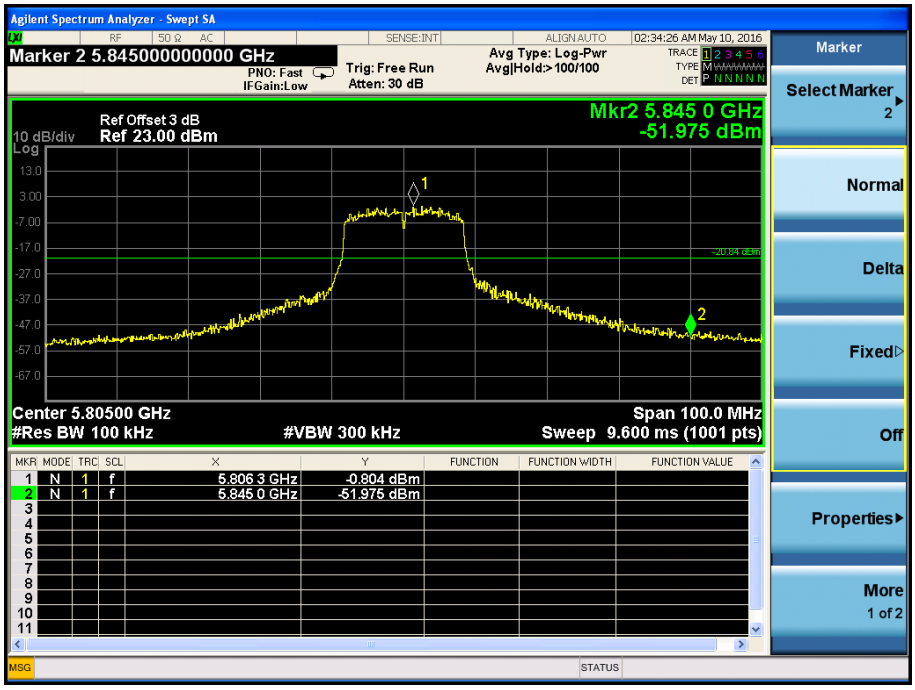

Agilent Spectrum Analyzer - Swept SA
RBW 1.0 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 19/100
02:31:11 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 18.400 GHz
-41.832 dBm
-22.42 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.00 GHz
Sweep 62.53 ms (1001 pts)
1 N 1 f 13.623 GHz -42.841 dBm
2 N 1 f 18.400 GHz -41.832 dBm
BW
Res BW
1.0 MHz
Auto Man
Video BW
3.0 MHz
Auto Man
VBW:3dB RBW
10.0
Auto Man
Span:3dB RBW
106
Auto Man
RBW Control
[Gaussian,-3 dB]
MSG
STATUS

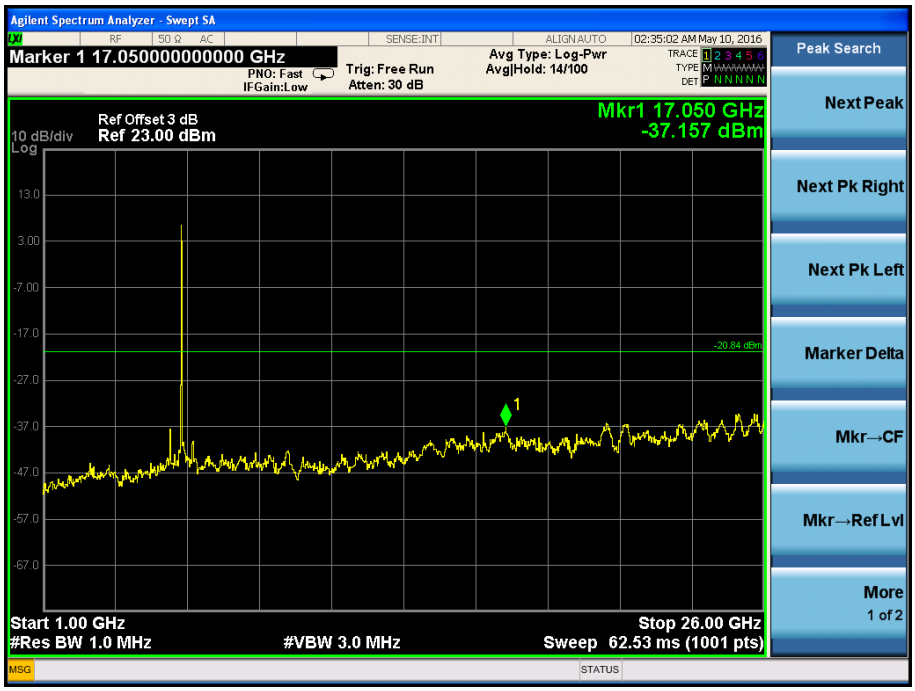
5785MHz


Agilent Spectrum Analyzer - Swept SA
Display Line -21.23 dBm
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
02:32:20 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr2 5.786 3 GHz
-1.222 dBm
-21.23 dBm
Center 5.78500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.600 ms (1001 pts)
Display
Annotation
Title
Graticule
On Off
Display Line
-21.23 dBm
On Off
System
Display
Settings
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 27/100
02:32:52 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 24.525 GHz
-34.641 dBm
-21.23 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.00 GHz
Sweep 62.53 ms (1001 pts)
Frequency
Auto Tune
Center Freq
13.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
26.000000000 GHz
CF Step
2.500000000 GHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

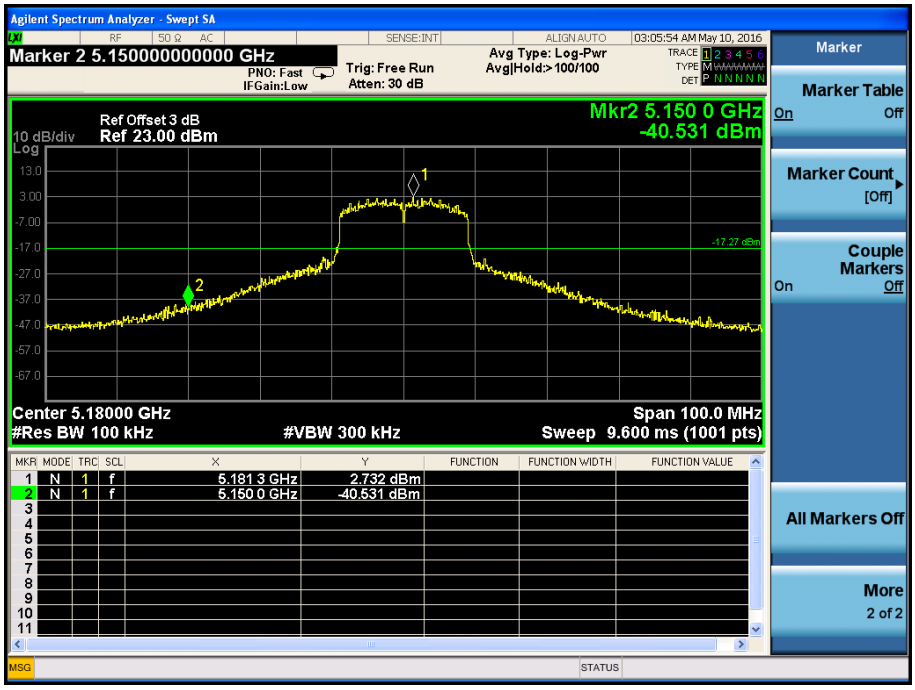
5805MHz

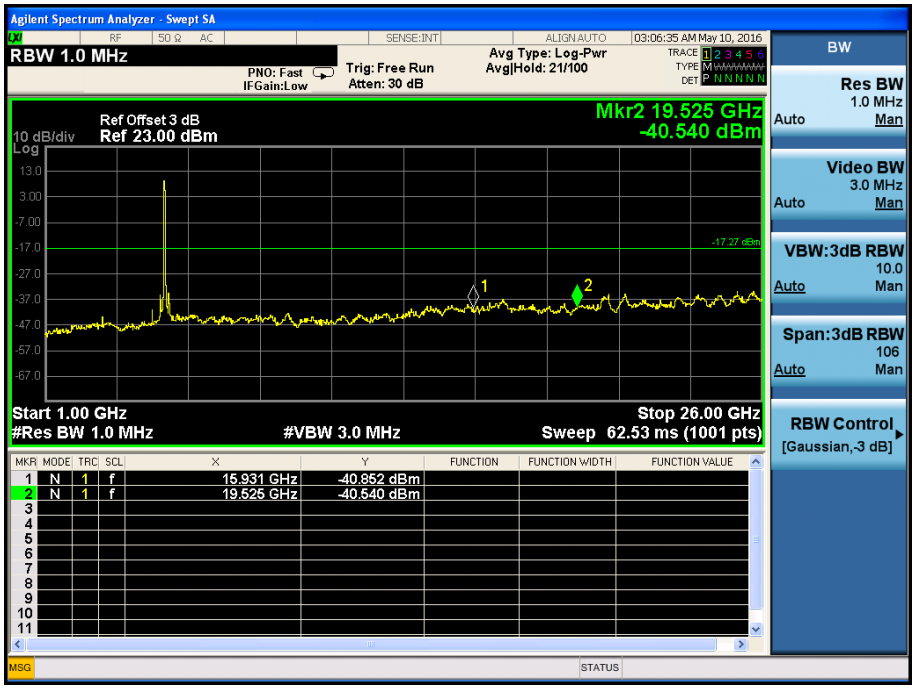

Agilent Spectrum Analyzer - Swept SA
Marker 2 5.845000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
02:34:26 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 5.845 0 GHz
-51.975 dBm
-20.84 dBm
Center 5.80500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.600 ms (1001 pts)
1 N 1 f 5.806 3 GHz -0.804 dBm
2 N 1 f 5.845 0 GHz -51.975 dBm
Marker
Select Marker 2
Normal
Delta
Fixed
Off
Properties
More 1 of 2
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Marker 1 17.050000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 14/100
02:35:02 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr1 17.050 GHz
-37.157 dBm
-20.84 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.00 GHz
Sweep 62.53 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More 1 of 2
MSG
STATUS

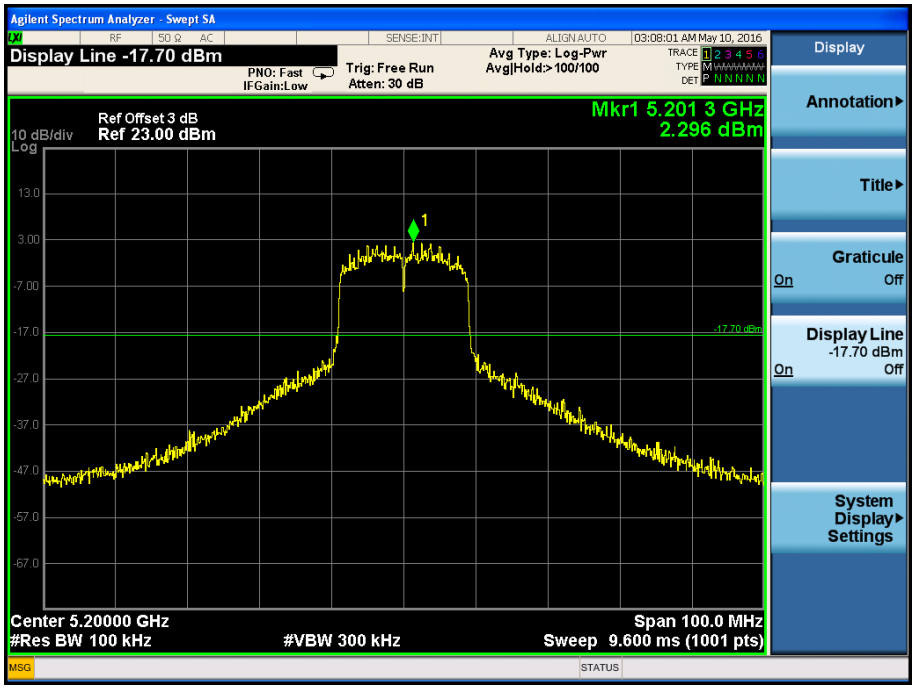
802.11n-HT20

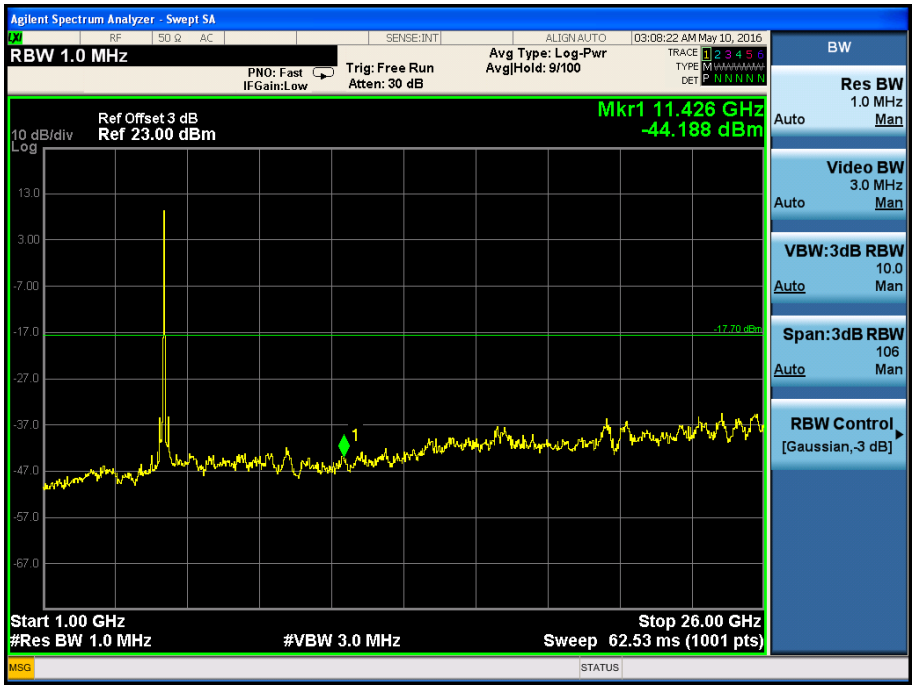
5180MHz





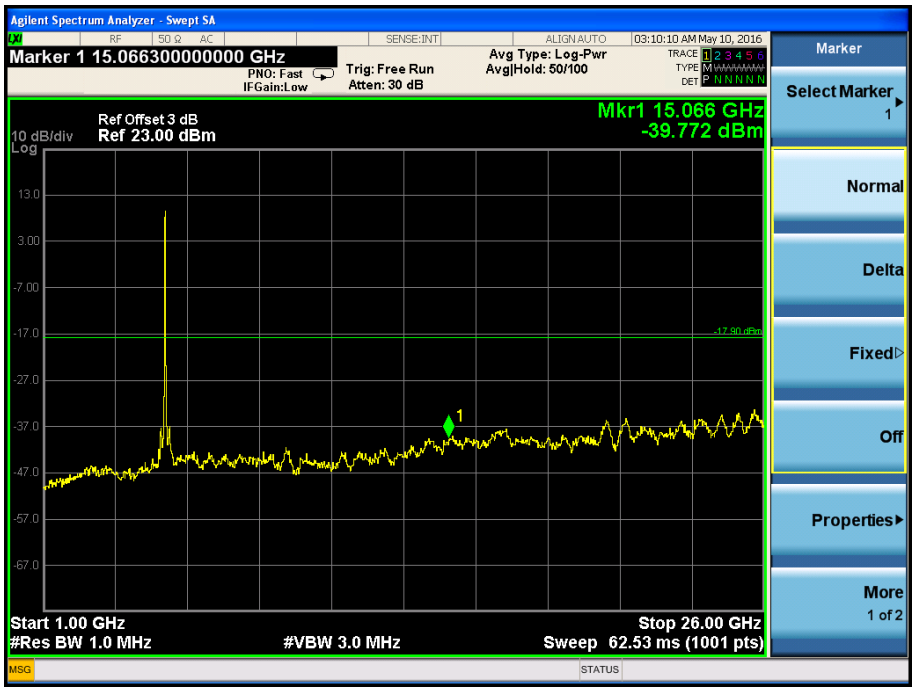
5200MHz


Agilent Spectrum Analyzer - Swept SA
Display Line -17.70 dBm
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
03:08:01 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 5.201 3 GHz
2.296 dBm
13.0
3.00
-7.00
-17.0
-27.0
-37.0
-47.0
-57.0
-67.0
-17.70 dBm
Center 5.20000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.600 ms (1001 pts)
MSG
STATUS
Display
Annotation
Title
Graticule
On
Off
Display Line
-17.70 dBm
On
Off
System
Display
Settings

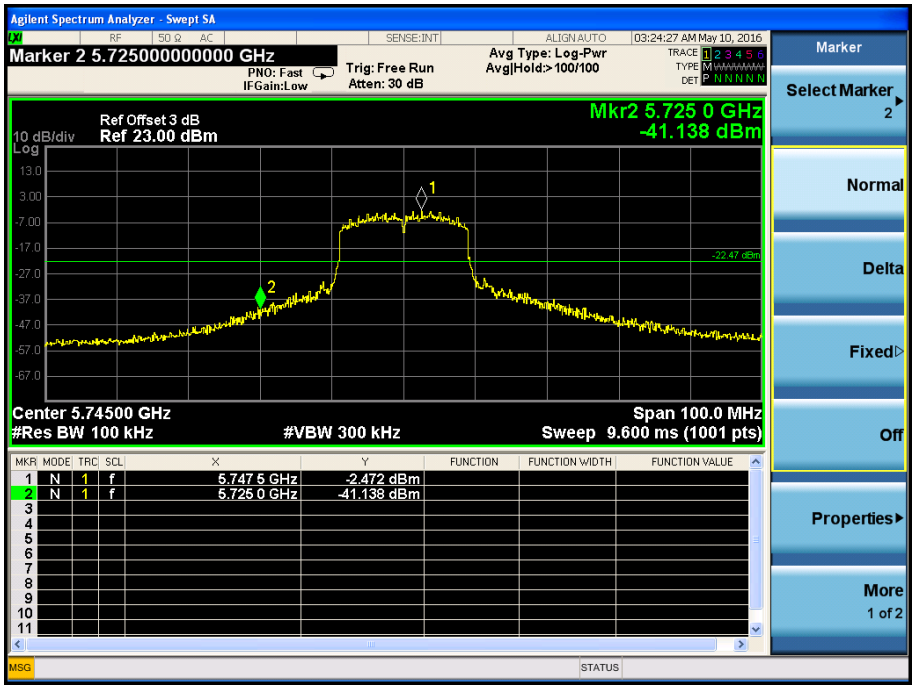

Agilent Spectrum Analyzer - Swept SA
RBW 1.0 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 9/100
03:08:22 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 11.426 GHz
-44.188 dBm
13.0
3.00
-7.00
-17.0
-27.0
-37.0
-47.0
-57.0
-67.0
-17.70 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.00 GHz
Sweep 62.53 ms (1001 pts)
MSG
STATUS
BW
Res BW
1.0 MHz
Auto
Man
Video BW
3.0 MHz
Auto
Man
VBW:3dB RBW
10.0
Auto
Man
Span:3dB RBW
106
Auto
Man
RBW Control
[Gaussian,-3 dB]

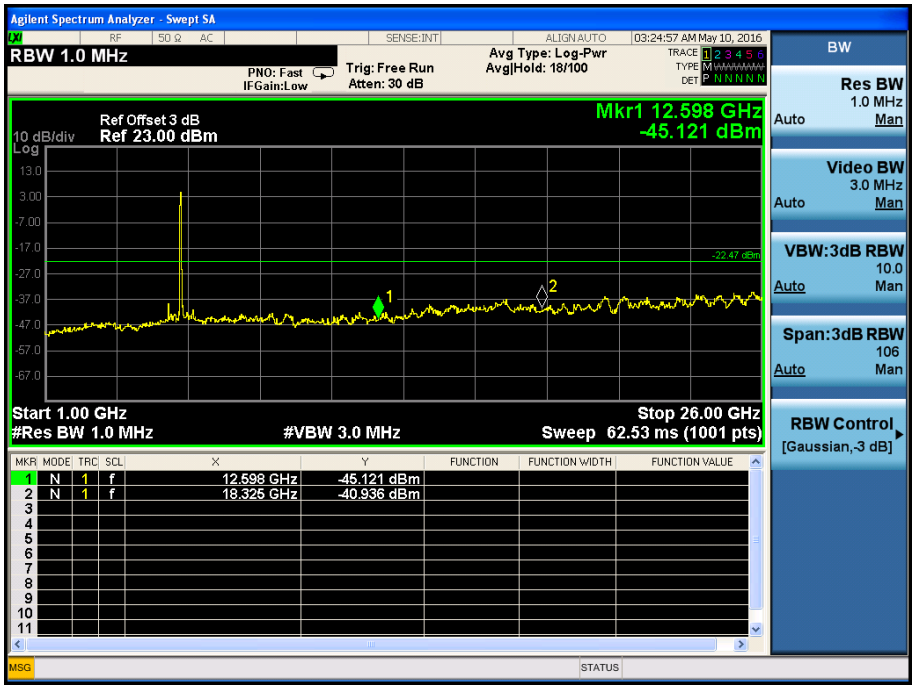
5240MHz


Agilent Spectrum Analyzer - Swept SA
Marker 2 5.250000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
03:09:35 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 5.250 0 GHz
-23.901 dBm
-17.90 dBm
Center 5.24000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.600 ms (1001 pts)
1 N 1 f 5.241 3 GHz 2.097 dBm
2 N 1 f 5.250 0 GHz -23.901 dBm
Marker
Marker Table
On Off
Marker Count
[Off]
Couple Markers
On Off
All Markers Off
More
2 of 2

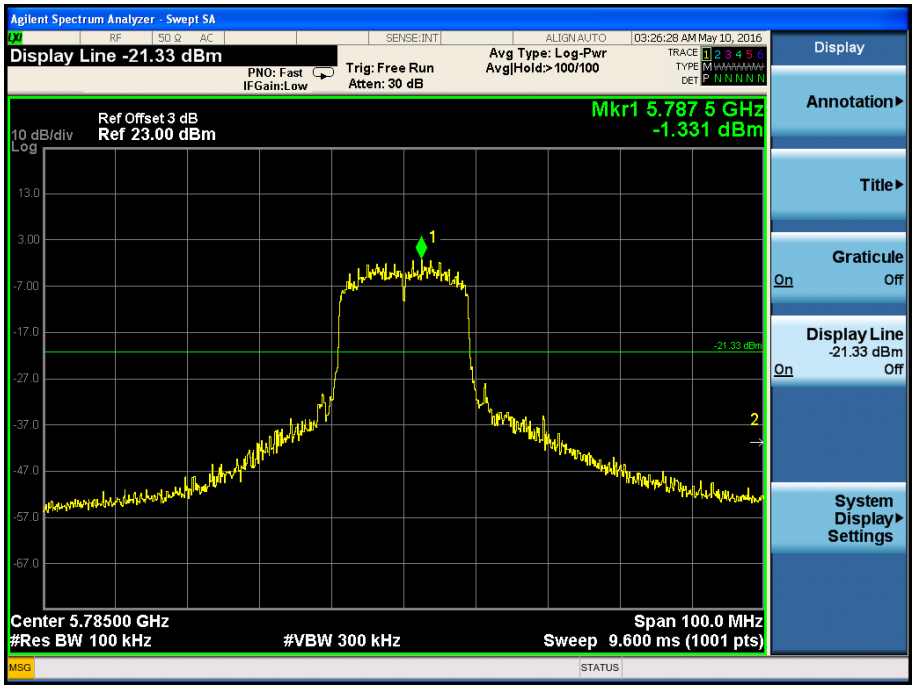

Agilent Spectrum Analyzer - Swept SA
Marker 1 15.066300000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 50/100
03:10:10 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr1 15.066 GHz
-39.772 dBm
-17.90 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.00 GHz
Sweep 62.53 ms (1001 pts)
Marker
Select Marker
1
Normal
Delta
Fixed
Off
Properties
More
1 of 2

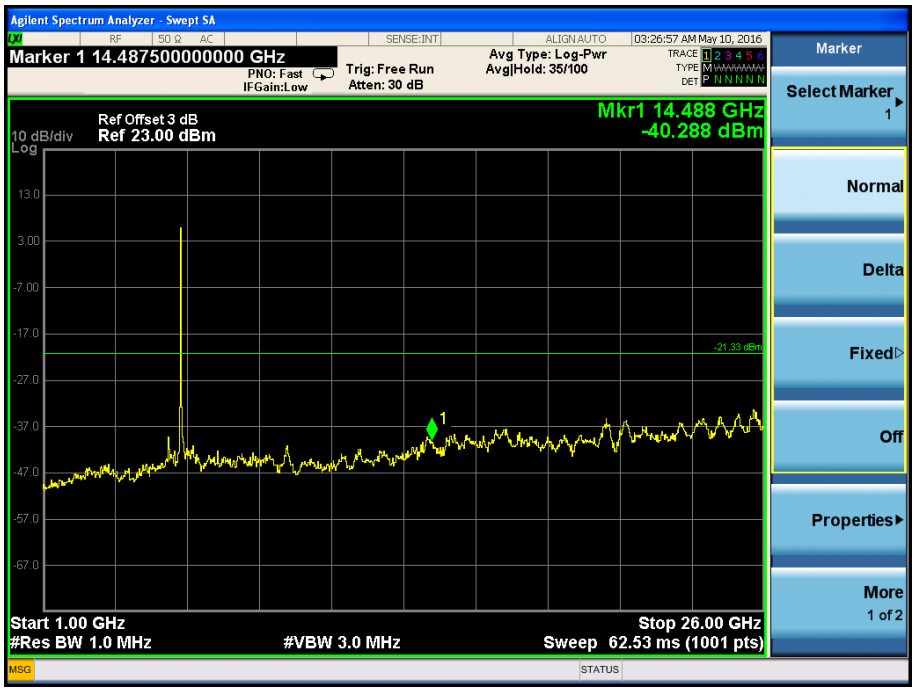
5745MHz


Agilent Spectrum Analyzer - Swept SA
Marker 2 5.725000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
03:24:27 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 5.725 0 GHz
-41.138 dBm
-22.47 dBm
Center 5.74500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.600 ms (1001 pts)
1 N 1 f 5.747 5 GHz -2.472 dBm
2 N 1 f 5.725 0 GHz -41.138 dBm
Marker
Select Marker 2
Normal
Delta
Fixed
Off
Properties
More 1 of 2
MSG
STATUS

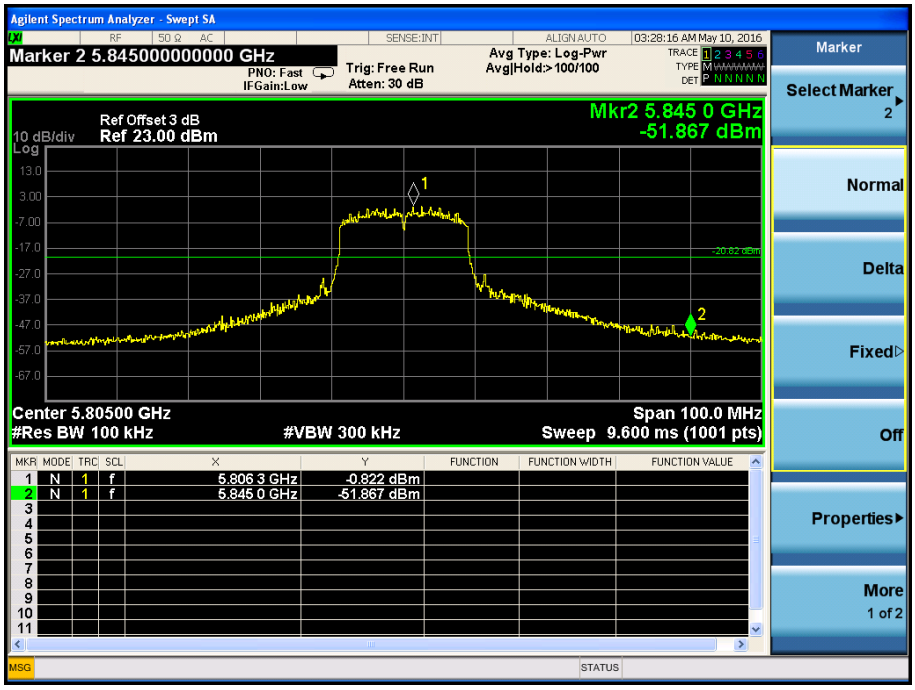

Agilent Spectrum Analyzer - Swept SA
RBW 1.0 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 18/100
03:24:57 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr1 12.598 GHz
-45.121 dBm
-22.47 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.00 GHz
Sweep 62.53 ms (1001 pts)
1 N 1 f 12.598 GHz -45.121 dBm
2 N 1 f 18.325 GHz -40.936 dBm
BW
Res BW 1.0 MHz
Auto Man
Video BW 3.0 MHz
Auto Man
VBW:3dB RBW 10.0
Auto Man
Span:3dB RBW 106
Auto Man
RBW Control [Gaussian,-3 dB]
MSG
STATUS

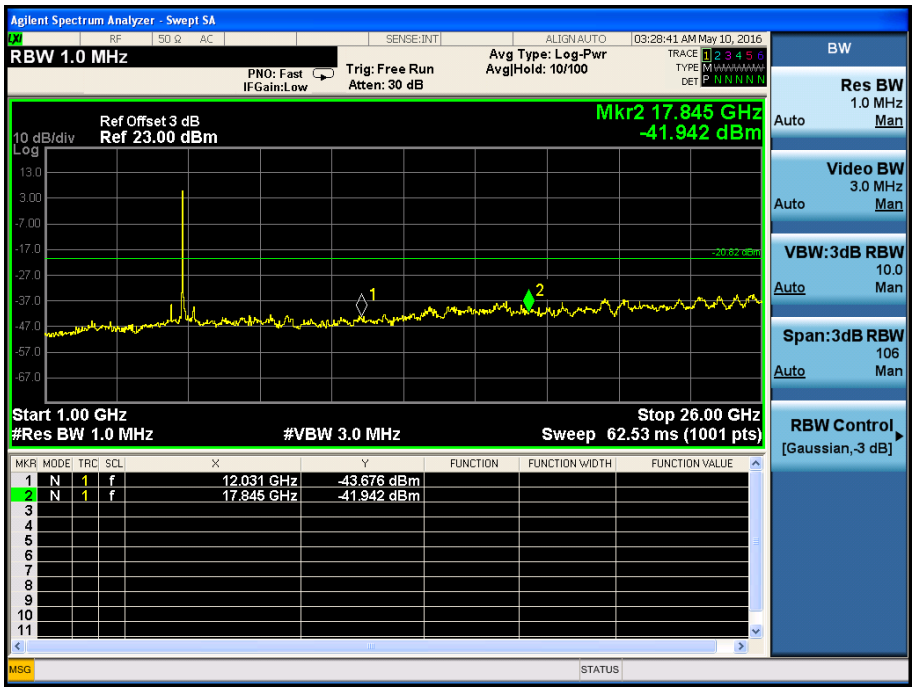
5785MHz


Agilent Spectrum Analyzer - Swept SA
Display Line -21.33 dBm
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
03:26:28 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 5.787 5 GHz
-1.331 dBm
-21.33 dBm
Center 5.78500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.600 ms (1001 pts)
Display
Annotation
Title
Graticule
On
Off
Display Line
-21.33 dBm
On
Off
System
Display
Settings
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Marker 1 14.487500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 35/100
03:26:57 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Log
Ref 23.00 dBm
Mkr1 14.488 GHz
-40.288 dBm
-21.33 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.00 GHz
Sweep 62.53 ms (1001 pts)
Marker
Select Marker
1
Normal
Delta
Fixed
Off
Properties
More
1 of 2
MSG
STATUS

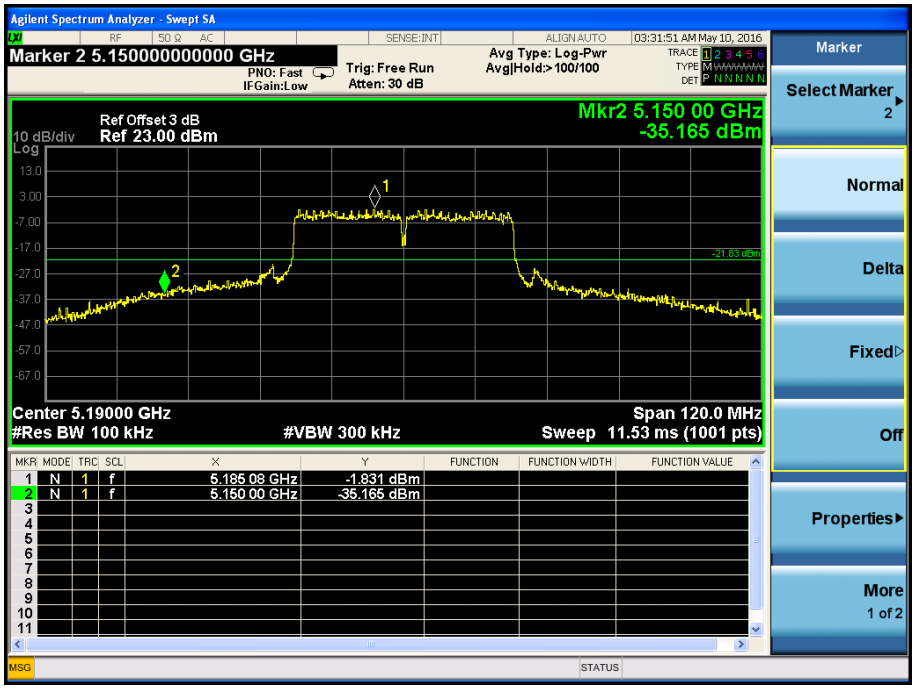
5805MHz

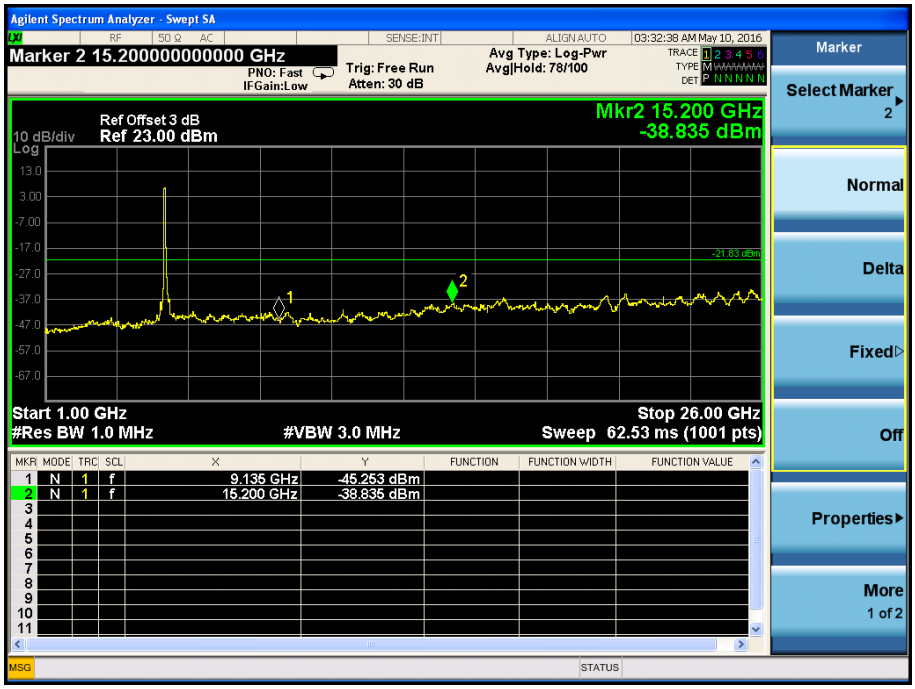

Agilent Spectrum Analyzer - Swept SA
Marker 2 5.845000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
03:28:16 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 5.845 0 GHz
-51.867 dBm
Center 5.80500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 9.600 ms (1001 pts)
1 N 1 f 5.806 3 GHz -0.822 dBm
2 N 1 f 5.845 0 GHz -51.867 dBm
Marker
Select Marker 2
Normal
Delta
Fixed
Off
Properties
More 1 of 2
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
RBW 1.0 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 10/100
03:28:41 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 17.845 GHz
-41.942 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.00 GHz
Sweep 62.53 ms (1001 pts)
1 N 1 f 12.031 GHz -43.676 dBm
2 N 1 f 17.845 GHz -41.942 dBm
BW
Res BW 1.0 MHz
Auto Man
Video BW 3.0 MHz
Auto Man
VBW:3dB RBW 10.0
Auto Man
Span:3dB RBW 106
Auto Man
RBW Control [Gaussian,-3 dB]
MSG
STATUS

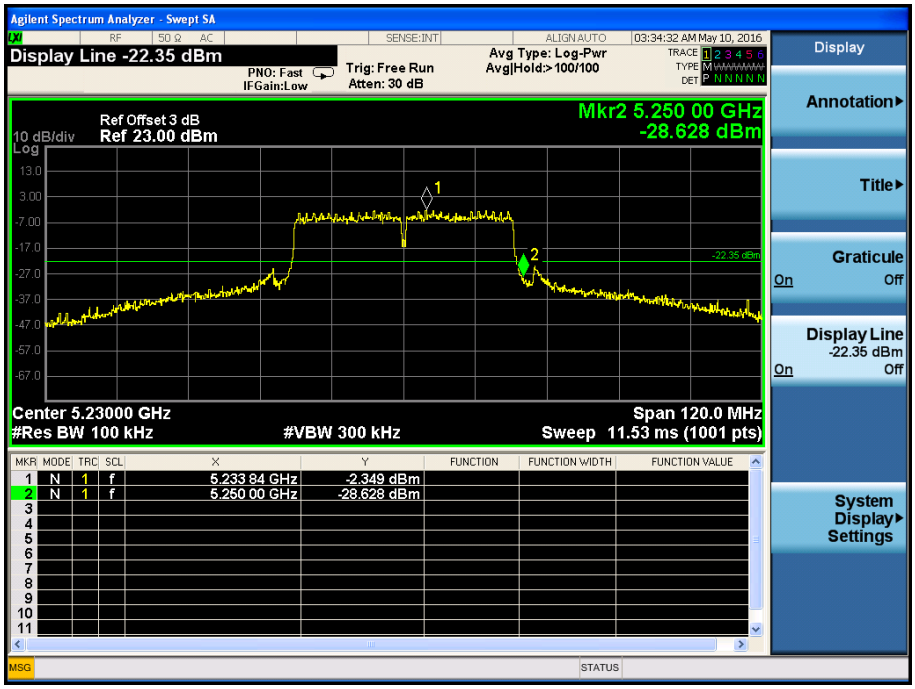
802.11n-HT40

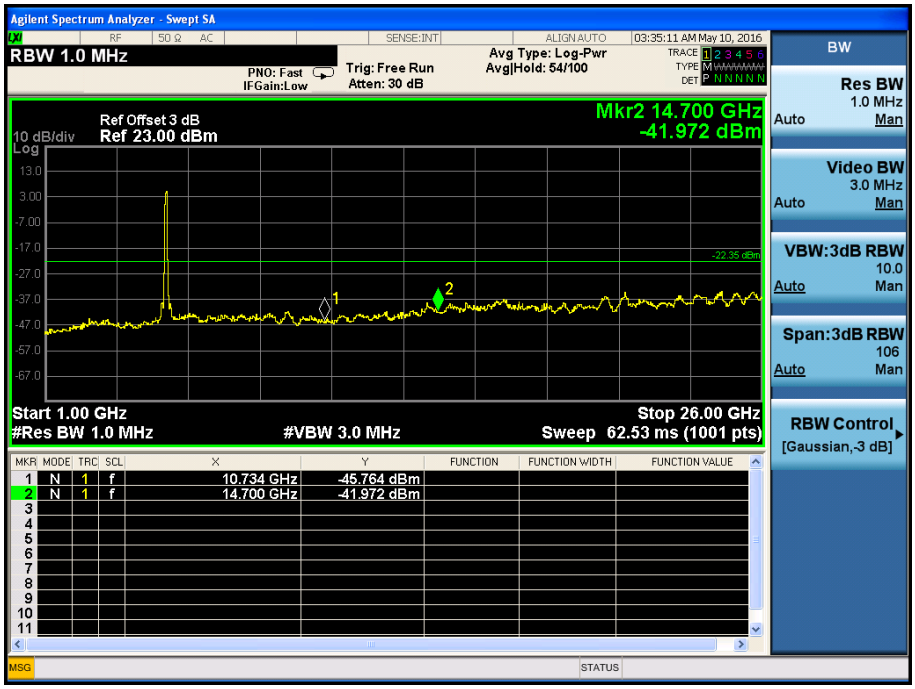
5190MHz



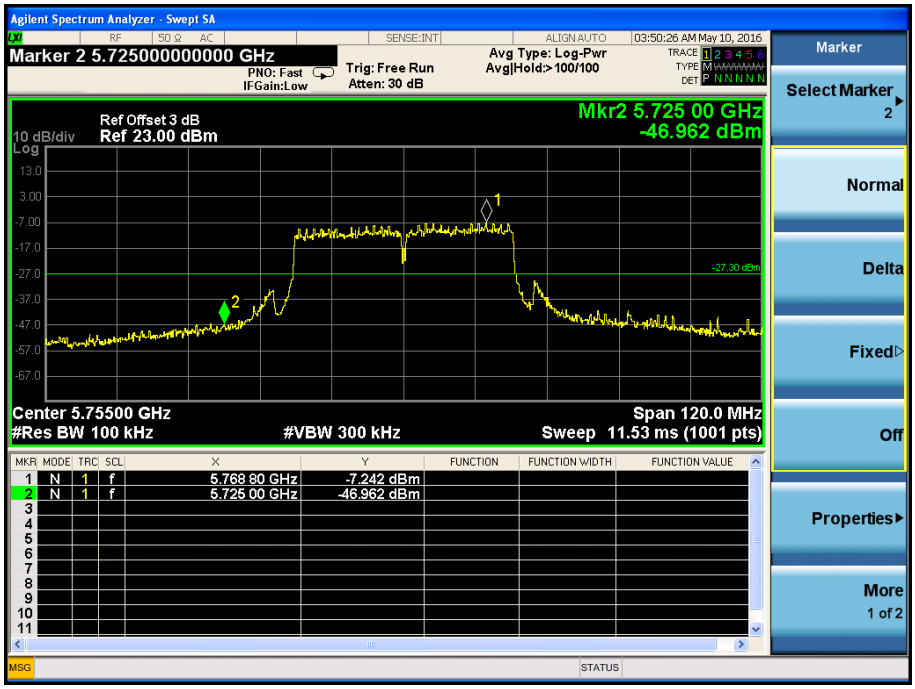


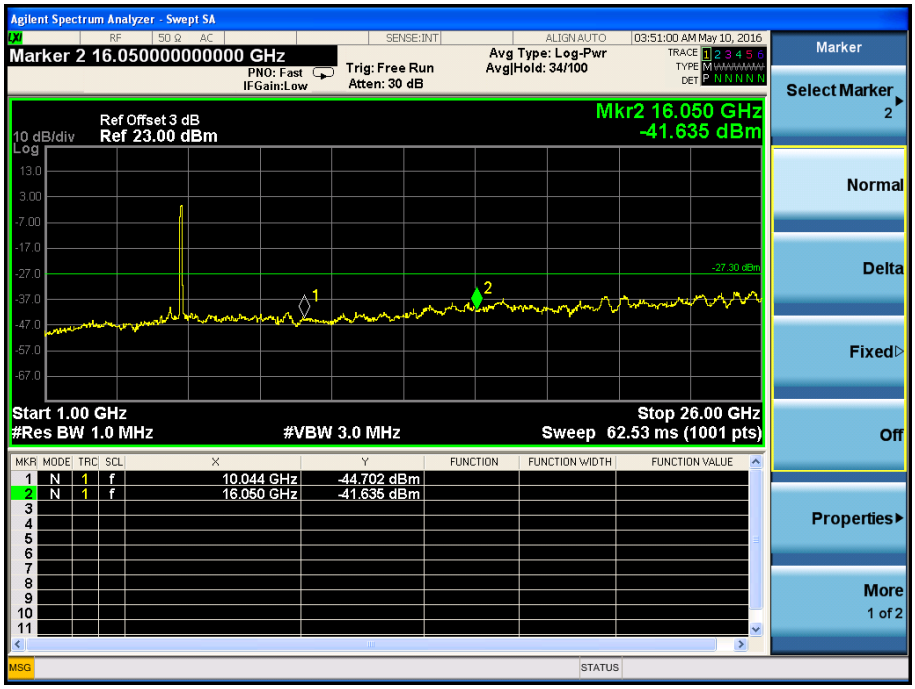
5230MHz


Agilent Spectrum Analyzer - Swept SA
Display Line -22.35 dBm
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
03:34:32 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 5.250 00 GHz
-28.628 dBm
-22.35 dBm
Center 5.23000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 120.0 MHz
Sweep 11.53 ms (1001 pts)
1 N 1 f 5.233 84 GHz -2.349 dBm
2 N 1 f 5.250 00 GHz -28.628 dBm
Display
Annotation
Title
Graticule
On Off
Display Line
-22.35 dBm
On Off
System
Display
Settings

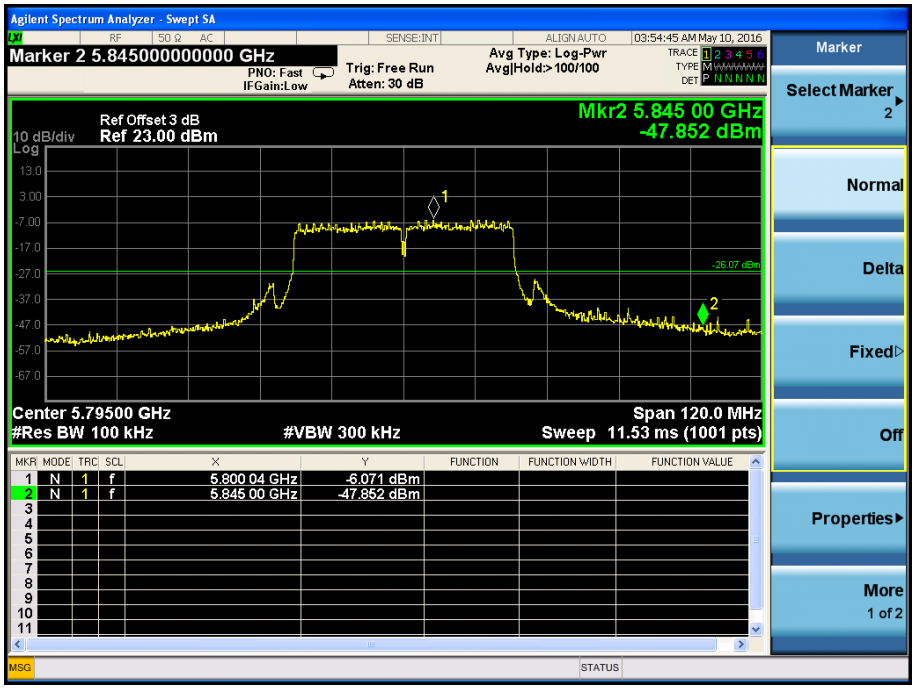

Agilent Spectrum Analyzer - Swept SA
RBW 1.0 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 54/100
03:35:11 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 14.700 GHz
-41.972 dBm
-22.35 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.00 GHz
Sweep 62.53 ms (1001 pts)
1 N 1 f 10.734 GHz -45.764 dBm
2 N 1 f 14.700 GHz -41.972 dBm
BW
Res BW
1.0 MHz
Auto Man
Video BW
3.0 MHz
Auto Man
VBW:3dB RBW
10.0
Auto Man
Span:3dB RBW
106
Auto Man
RBW Control
[Gaussian,-3 dB]

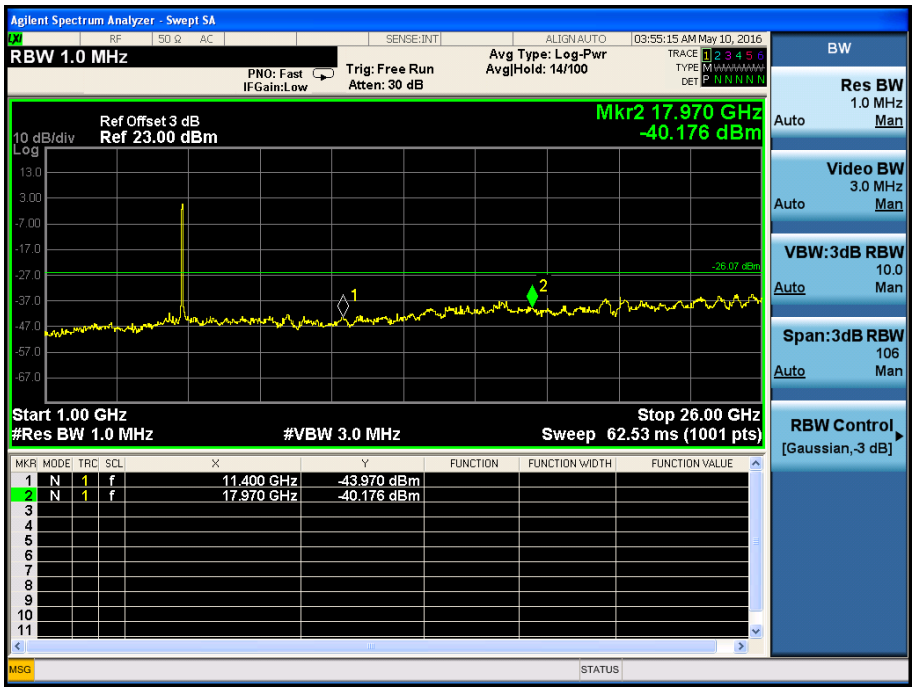
5755MHz


Agilent Spectrum Analyzer - Swept SA
Marker 2 5.725000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
03:50:26 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 5.725 00 GHz
-46.962 dBm
-27.30 dBm
Center 5.75500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 120.0 MHz
Sweep 11.53 ms (1001 pts)
1 N 1 f 5.768 80 GHz -7.242 dBm
2 N 1 f 5.725 00 GHz -46.962 dBm
Marker
Select Marker 2
Normal
Delta
Fixed
Off
Properties
More 1 of 2


Agilent Spectrum Analyzer - Swept SA
Marker 2 16.050000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 34/100
03:51:00 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 16.050 GHz
-41.635 dBm
-27.30 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.00 GHz
Sweep 62.53 ms (1001 pts)
1 N 1 f 10.044 GHz -44.702 dBm
2 N 1 f 16.050 GHz -41.635 dBm
Marker
Select Marker 2
Normal
Delta
Fixed
Off
Properties
More 1 of 2

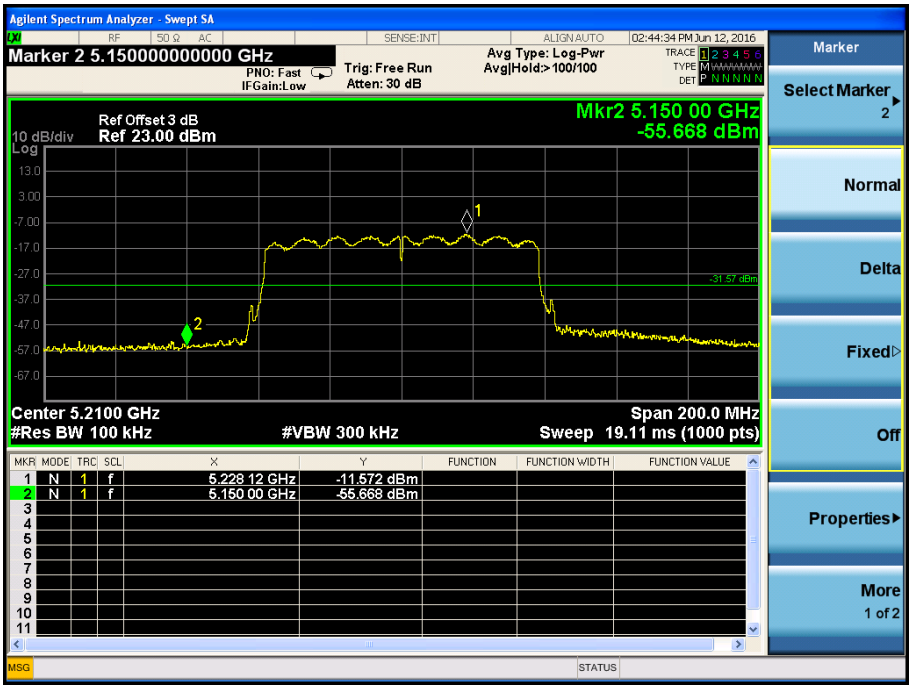
5795MHz


Agilent Spectrum Analyzer - Swept SA
Marker 2 5.845000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
03:54:45 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 5.845 00 GHz
-47.852 dBm
-26.07 dBm
Center 5.79500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 120.0 MHz
Sweep 11.53 ms (1001 pts)
1 N 1 f 5.800 04 GHz -6.071 dBm
2 N 1 f 5.845 00 GHz -47.852 dBm
Marker
Select Marker 2
Normal
Delta
Fixed
Off
Properties
More 1 of 2


Agilent Spectrum Analyzer - Swept SA
RBW 1.0 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 14/100
03:55:15 AM May 10, 2016
Ref Offset 3 dB
10 dB/div
Ref 23.00 dBm
Log
Mkr2 17.970 GHz
-40.176 dBm
-26.07 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.00 GHz
Sweep 62.53 ms (1001 pts)
1 N 1 f 11.400 GHz -43.970 dBm
2 N 1 f 17.970 GHz -40.176 dBm
BW
Res BW 1.0 MHz
Auto Man
Video BW 3.0 MHz
Auto Man
VBW:3dB RBW 10.0
Auto Man
Span:3dB RBW 106
Auto Man
RBW Control [Gaussian,-3 dB]

802.11ac80

5210MHz



5775MHz


Agilent Spectrum Analyzer - Swept SA
Marker 2 5.725000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
02:47:51 PM Jun 12, 2016
Ref Offset 3 dB
10 dB/div
Ref 17.00 dBm
Log
Mkr2 5.725 00 GHz
-37.097 dBm
-26.16 dBm
Center 5.7750 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 200.0 MHz
Sweep 19.11 ms (1000 pts)
1 N 1 f 5.793 12 GHz -6.150 dBm
2 N 1 f 5.725 00 GHz -37.097 dBm
Marker
Select Marker
Normal
Delta
Fixed
Off
Properties
More
1 of 2
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Marker 1 16.927927927928 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 24 dB
Avg Type: Log-Pwr
Avg|Hold: 46/100
02:48:41 PM Jun 12, 2016
Ref Offset 3 dB
10 dB/div
Ref 17.00 dBm
Log
Mkr1 16.928 GHz
-43.993 dBm
-26.16 dBm
Start 1.00 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 63.80 ms (1000 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

10. Frequency Stability

10.1 Standard Applicable

According to §15.407(g), Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

10.2 Test Procedure

According to §2.1055, the following test procedure was performed.
The Frequency Stability is measured directly with a Frequency Domain Analyzer. Frequency Deviation in ppm is calculated from the measured peak to peak value.
The Carrier Frequency Stability over Power Supply Voltage and over Temperature is measured with a Frequency Domain Analyzer in histogram mode

Temperature:	Supply Voltage
20°C	85-115% of declared nominal voltage
-30°C to +50°C	Normal

10.3 Environmental Conditions

Temperature:	20°C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

10.4 Summary of Test Results/Plots

5150-5250MHz

802.11a_20MHz

Reference Frequency(Middle Channel): 5240 MHz			
Environment Temperature (℃)	Power Supplied (VDC)	Frequency Measure with Time Elapsed	
		MCF (Hz)	Error (ppm)
50	3.3	121	0.0231
40	3.3	118	0.0225
30	3.3	116	0.0221
20	3.3	124	0.0237
10	3.3	136	0.0260
0	3.3	141	0.0269
-10	3.3	133	0.0254
-20	3.3	128	0.0244
-30	3.3	144	0.0275

802.11n_HT20

Reference Frequency(Middle Channel): 5240 MHz			
Environment Temperature (℃)	Power Supplied (VDC)	Frequency Measure with Time Elapsed	
		MCF (Hz)	Error (ppm)
50	3.3	141	0.0269
40	3.3	128	0.0244
30	3.3	124	0.0237
20	3.3	154	0.0294
10	3.3	114	0.0218
0	3.3	134	0.0256
-10	3.3	147	0.0281
-20	3.3	118	0.0225

-30	3.3	126	0.0240

802.11n_HT40

Reference Frequency(Middle Channel): 5230 MHz			
Environment Temperature (℃)	Power Supplied (VDC)	Frequency Measure with Time Elapsed	
		MCF (Hz)	Error (ppm)
50	3.3	141	0.0270
40	3.3	145	0.0277
30	3.3	141	0.0270
20	3.3	131	0.0250
10	3.3	148	0.0283
0	3.3	152	0.0291
-10	3.3	158	0.0302
-20	3.3	151	0.0289
-30	3.3	149	0.0285

802.11ac_HT80

Reference Frequency(Fixed Channel): 5210 MHz			
Environment Temperature (℃)	Power Supplied (VDC)	Frequency Measure with Time Elapsed	
		MCF (Hz)	Error (ppm)
50	3.3	148	0.0284
40	3.3	149	0.0286
30	3.3	151	0.0290
20	3.3	144	0.0276
10	3.3	151	0.0290
0	3.3	156	0.0299
-10	3.3	161	0.0309
-20	3.3	154	0.0296
-30	3.3	160	0.0307

5725-5850MHz

802.11a_HT20

Reference Frequency(Middle Channel): 5785MHz			
Environment Temperature (℃)	Power Supplied (VDC)	Frequency Measure with Time Elapsed	
		MCF (Hz)	Error (ppm)
50	3.3	118	0.0338
40	3.3	124	0.0349
30	3.3	134	0.0367
20	3.3	125	0.0351
10	3.3	116	0.0335
0	3.3	147	0.0390
-10	3.3	157	0.0407
-20	3.3	184	0.0455
-30	3.3	164	0.0420

802.11n_HT20

Reference Frequency(Middle Channel): 5785MHz			
Environment Temperature (℃)	Power Supplied (VDC)	Frequency Measure with Time Elapsed	
		MCF (Hz)	Error (ppm)
50	3.3	117	0.0227
40	3.3	127	0.0244
30	3.3	145	0.0276
20	3.3	154	0.0292
10	3.3	165	0.0312
0	3.3	185	0.0347
-10	3.3	154	0.0292
-20	3.3	181	0.0340
-30	3.3	157	0.0297

802.11n_HT40

Reference Frequency(Fixed Channel): 5755 MHz			
Environment Temperature (℃)	Power Supplied (VDC)	Frequency Measure with Time Elapsed	
		MCF (Hz)	Error (ppm)
50	3.3	155	0.0269
40	3.3	162	0.0281
30	3.3	161	0.0280
20	3.3	148	0.0257
10	3.3	129	0.0223
0	3.3	200	0.0347
-10	3.3	169	0.0294
-20	3.3	167	0.0289
-30	3.3	159	0.0276

802.11ac_HT80

Reference Frequency(Fixed Channel): 5775 MHz			
Environment Temperature (℃)	Power Supplied (VDC)	Frequency Measure with Time Elapsed	
		MCF (Hz)	Error (ppm)
50	3.3	160	0.0277
40	3.3	156	0.0270
30	3.3	163	0.0281
20	3.3	156	0.0270
10	3.3	159	0.0275
0	3.3	167	0.0288
-10	3.3	172	0.0298
-20	3.3	167	0.0288
-30	3.3	171	0.0295

So, Frequency Stability Versus Input Voltage is:

5150-5250MHz

802.11a_HT20

Reference Frequency(Middle Channel): 5240 MHz			
Environment Temperature (°C)	Power Supplied (VDC)	Frequency Measure with Time Elapsed	
		Frequency (Hz)	Error (ppm)
20	3.0	139	0.0265
	3.3	136	0.0260
	3.7	133	0.0254

802.11n_HT20

Reference Frequency(Middle Channel): 5240 MHz			
Environment Temperature (°C)	Power Supplied (VDC)	Frequency Measure with Time Elapsed	
		Frequency (Hz)	Error (ppm)
20	3.0	145	0.0277
	3.3	148	0.0282
	3.7	152	0.0290

802.11n_HT40

Reference Frequency(Middle Channel): 5230 MHz			
Environment Temperature (°C)	Power Supplied (VDC)	Frequency Measure with Time Elapsed	
		Frequency (Hz)	Error (ppm)
20	3.0	152	0.0291
	3.3	148	0.0283
	3.7	146	0.0279

802.11ac_HT80

Reference Frequency(Fix Channel): 5210 MHz			
Environment Temperature (°C)	Power Supplied (VDC)	Frequency Measure with Time Elapsed	
		Frequency (Hz)	Error (ppm)
20	3.0	155	0.0298
	3.3	151	0.0290
	3.7	158	0.0303

5725-5850MHz

802.11a_HT20

Reference Frequency(Middle Channel): 5785 MHz			
Environment Temperature (°C)	Power Supplied (VAC)	Frequency Measure with Time Elapsed	
		Frequency (Hz)	Error (ppm)
20	102	147	0.0270
	120	154	0.0306
	138	186	0.0367

802.11n_HT20

Reference Frequency(Middle Channel): 5785 MHz			
Environment Temperature (°C)	Power Supplied (VDC)	Frequency Measure with Time Elapsed	
		Frequency (Hz)	Error (ppm)
20	3.0	184	0.0335
	3.3	149	0.0296
	3.7	158	0.0313

802.11n_HT40

Reference Frequency(Fixed Channel): 5755 MHz			
Environment Temperature (°C)	Power Supplied (VDC)	Frequency Measure with Time Elapsed	
		Frequency (Hz)	Error (ppm)
20	3.0	167	0.0289
	3.3	150	0.0260
	3.7	152	0.0264

802.11ac_HT80

Reference Frequency(Fixed Channel): 5775MHz			
Environment Temperature (°C)	Power Supplied (VDC)	Frequency Measure with Time Elapsed	
		Frequency (Hz)	Error (ppm)
20	3.0	163	0.0281
	3.3	164	0.0284
	3.7	175	0.0303

******* END OF REPORT *******