Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2013/04/18	Test Site	SR7

IEEE 802.11n(40MHz)_ANT 1, Power Index : ch38:47, ch46:49

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit		Result
				Fixed Limit (dBm)	4+10logB Limit (dBm)	
38	5190	40.450	7.62	≤ 14.19	≤20.07	Pass
46	5230	40.497	8.18	≤ 14.19	≤20.07	Pass

The worst emission of data rate is 40.5 Mbps

Peak Power Output (dBm)									
MCS Index	16	17	18	19	20	21	22	23	Required Limit
Channel Frequency	Data Rate								
No (MHz)	40.5	81	121.5	162	243	324	364.5	405	
38 5190	7.62	7.58	7.55	7.50	7.45	7.40	7.38	7.33	14.19dBm or
46 5230	8.18	--	--	--	--	--	--	--	4dBm+10logB

Note:
Total Gain : 10log(Ant N) + Max Gain = 10log(3)+4.04dBi =8.81dBi
Required Limit = 17dBm - (8.81dBi – 6dBi) = 17－2.81 = 14.19 dBm

Peak transmit Power - Channel 38

Peak transmit Power - Channel 46

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2013/04/18	Test Site	SR7

IEEE 802.11n(40MHz)_ANT 2, Power Index : ch38:47, ch46:49

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit		Result
				Fixed Limit (dBm)	4+10logB Limit (dBm)	
38	5190	40.492	9.04	≤ 14.19	≤20.07	Pass
46	5230	40.574	9.39	≤ 14.19	≤20.08	Pass

The worst emission of data rate is 40.5 Mbps

Peak Power Output (dBm)									
MCS Index		16	17	18	19	20	21	22	23	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		40.5	81	121.5	162	243	324	364.5	405	
38	5190	9.04	9.00	8.95	8.92	8.88	8.81	8.75	8.70	14.19dBm or
46	5230	9.39	--	--	--	--	--	--	--	4dBm+10logB

Note:
Total Gain : 10log(Ant N) + Max Gain = 10log(3)+4.04dBi =8.81dBi
Required Limit = 17dBm - (8.81dBi – 6dBi) = 17－2.81 = 14.19 dBm

Peak transmit Power - Channel 38

Peak transmit Power - Channel 46

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2013/04/18	Test Site	SR7

IEEE 802.11n(40MHz)_ANT 0+1+2

Channel No.	Frequency (MHz)	Total Output Power		Required Limit (dBm)	Result
		(mW)	(dBm)		
38	5190	21.11	13.24	≤ 14.19	Pass
46	5230	23.39	13.69	≤ 14.19	Pass

802.11 n(40M), Antenna 0+1+2

Peak Power Output (dBm)									
MCS Index		16	17	18	19	20	21	22	23	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		40.5	81	121.5	162	243	324	364.5	405	
38	5190	13.24	13.20	13.16	13.12	13.09	13.02	12.97	12.92	14.19dBm or
46	5230	13.69	--	--	--	--	--	--	--	4dBm+10logB

Note:
Total Gain : 10log(Ant N) + Max Gain = 10log(3)+4.04dBi =8.81dBi
Required Limit = 17dBm - (8.81dBi – 6dBi) = 17－2.81 = 14.19 dBm

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2013/04/18	Test Site	SR7

IEEE 802.11ac(80MHz)_ANT 0, Power Index : ch42:47						
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit		Result
				Fixed Limit (dBm)	4+10logB Limit (dBm)	
42	5210	82.798	8.58	≤ 14.19	≤23.18	Pass

The worst emission of data rate is 87.9 Mbps

Peak Power Output (dBm)											
MCS Index		0	1	2	3	4	5	6	7	8	9	Required Limit
Channel No	Frequency (MHz)	Data Rate									
		87.9	175.5	263.4	351	526.5	702	789.9	877.5	1053	1170
42	5210	8.58	8.50	8.45	8.41	8.38	8.32	8.24	8.21	8.18	8.11	14.19 or 4dBm+10logB

Note:
Total Gain : 10log(Ant N) + Max Gain = 10log(3)+4.04dBi =8.81dBi
Required Limit = 17dBm - (8.81dBi – 6dBi) = 17－2.81 = 14.19 dBm

Peak transmit Power - Channel 42

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: Transmit (Beamforming Mode)_ Adapter: EXA1206UH		
Date of Test	2013/04/18	Test Site	SR7

IEEE 802.11ac(40MHz)_ANT 1, Power Index : ch42:47						
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit		Result
				Fixed Limit (dBm)	4+10logB Limit (dBm)	
42	5210	82.614	7.58	≤ 14.19	≤23.17	Pass

The worst emission of data rate is 87.9 Mbps

Peak Power Output (dBm)											
MCS Index		0	1	2	3	4	5	6	7	8	9
Channel No	Frequency (MHz)	Data Rate									Required Limit
		87.9	175.5	263.4	351	526.5	702	789.9	877.5	1053	1170
42	5210	7.58	7.55	7.48	7.42	7.37	7.33	7.24	7.20	7.15	7.11	14.19 or 4dBm+10logB

Note:
Total Gain : 10log(Ant N) + Max Gain = 10log(3)+4.04dBi =8.81dBi
Required Limit = 17dBm - (8.81dBi – 6dBi) = 17－2.81 = 14.19 dBm m

Peak transmit Power - Channel 42

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: Transmit (Beamforming Mode)_ Adapter: EXA1206UH		
Date of Test	2013/04/18	Test Site	SR7

IEEE 802.11ac(40MHz)_ANT 2, Power Index : ch42:47						
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Required Limit		Result
				Fixed Limit (dBm)	4+10logB Limit (dBm)	
42	5210	81.825	9.34	≤ 14.19	≤23.13	Pass

The worst emission of data rate is 87.9 Mbps

Peak Power Output (dBm)											
MCS Index		0	1	2	3	4	5	6	7	8	9	Required Limit
Channel No	Frequency (MHz)	Data Rate										
		87.9	175.5	263.4	351	526.5	702	789.9	877.5	1053	1170	
42	5210	9.34	9.30	9.24	9.21	9.14	9.10	9.07	9.02	8.89	8.81	14.19 or 4dBm+10logB

Note:
Total Gain : 10log(Ant N) + Max Gain = 10log(3)+4.04dBi =8.81dBi
Required Limit = 17dBm - (8.81dBi – 6dBi) = 17－2.81 = 14.19 dBm

Peak transmit Power - Channel 42

Agilent Spectrum Analyzer - Channel Power

| 50 Ω | | AC | SENSE:INT | | ALIGN AUTO | 11:29:28 AM Apr 18, 2013 | Screen Image |

Center Freq 5.210000000 GHz
Input: RF
IFGain:Low

Center Freq: 5.210000000 GHz
Trig: Free Run
#Atten: 30 dB

Avg|Hold:>100/100
Ext Gain: -1.00 dB

Radio Std: None
Radio Device: BTS

Themes
Flat Monochrome

Save As ...

10 dB/div   Ref 20 dBm
Log

10
0
-10
-20
-30
-40
-50
-60
-70

Center 5.21 GHz
#Res BW 1 MHz

Span 160 MHz
#Sweep 200 ms

#VBW 3 MHz

Channel Power

9.34 dBm/ 81.83 MHz

Power Spectral Density

-69.79 dBm/Hz

MSG   STATUS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Transmit Output		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2013/04/18	Test Site	SR7

IEEE 802.11ac(80MHz)_ANT 0+1+2

Channel No.	Frequency (MHz)	Total Output Power		Required Limit (dBm)	Result
		(mW)	(dBm)		
42	5210	21.53	13.33	≤ 14.19	Pass

802.11 AC(80M), Antenna 0+1+2

Peak Power Output (dBm)											
MCS Index		0	1	2	3	4	5	6	7	8	9	Required Limit
Channel No	Frequency (MHz)	Data Rate									
		87.9	175.5	263.4	351	526.5	702	789.9	877.5	1053	1170	
42	5210	13.33	13.28	13.22	13.18	13.13	13.08	13.02	12.98	12.90	12.84	14.19 or 4dBm+10log B

Note:
Total Gain : 10log(Ant N) + Max Gain = 10log(3)+4.04dBi =8.81dBi

Required Limit **=** 17dBm - (8.81dBi – 6dBi) = 17－2.81 = 14.19 dBm

Report No：134199R-RFUSP46V01

5. Peak Power Spectrum Density
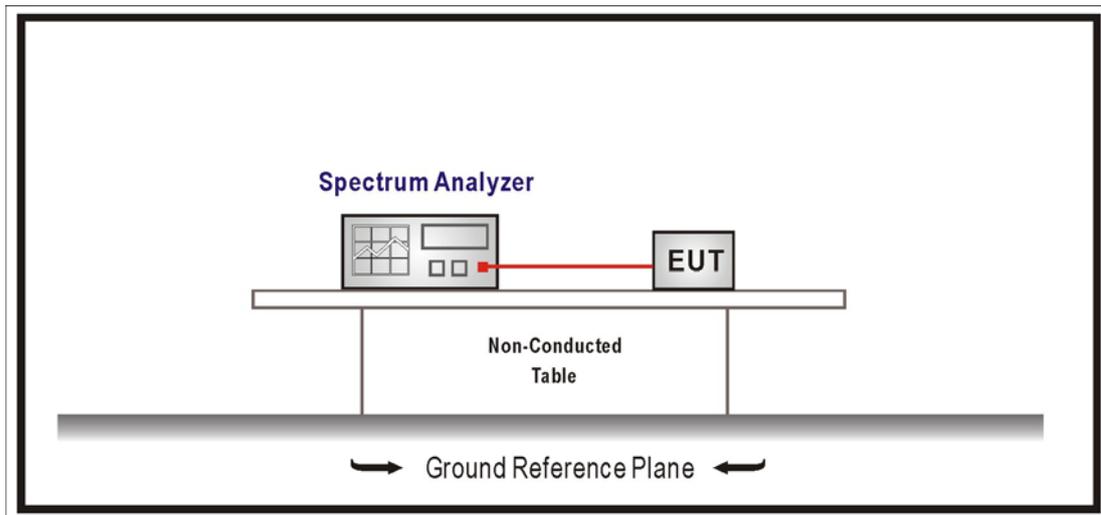
5.1. Test Equipment

The following test equipments are used during the radiated emission tests:

Peak Power Spectrum Density / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2014/08/05

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

5.2. Test Setup

5.3. Limits

1. For the band 5.15-5.25 GHz, the peak power spectral density shall not exceed 4 dBm in any 1-MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

2. For the band 5.25-5.35 GHz, the peak power spectral density shall not exceed 11 dBm in any 1-MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

3. For the band 5.725-5.825 GHz, the peak power spectral density shall not exceed 17 dBm in any 1-MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

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5.4. Test Procedure

The EUT was setup to ANSI C63.4, 2009; tested to U-NII test procedure of March 2012 KDB 789033 for compliance to FCC 47CFR Subpart E requirements.

Set RBW=1MHz, VBW=3MHz with RMS detector. The PPSD is the highest level found across the emission in any 1-MHz band after 100 sweeps of averaging.

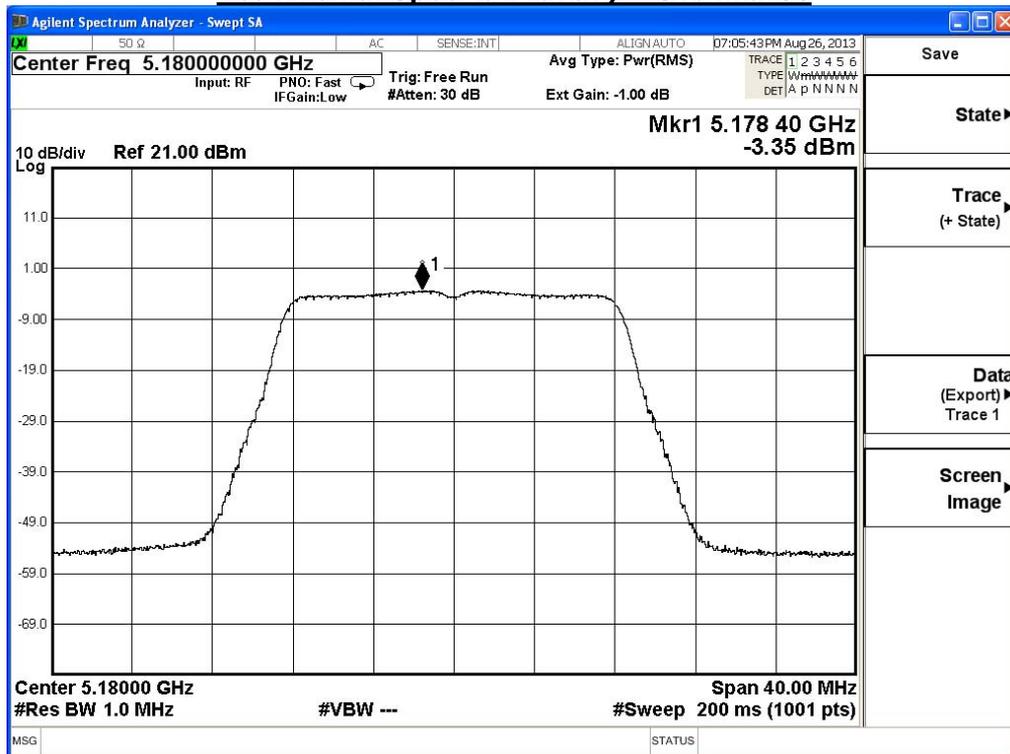## 5.5. Uncertainty

The measurement uncertainty is defined as $\pm$ 1.27 dB

5.6. Test Result

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11a (ANT0)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
36	5180	-3.35	$\leqq$1.19	Pass
44	5220	-3.60	$\leqq$1.19	Pass
48	5240	-3.76	$\leqq$1.19	Pass

Note:
Total Gain = 10log(3) + Max Gain = 8.81dBi
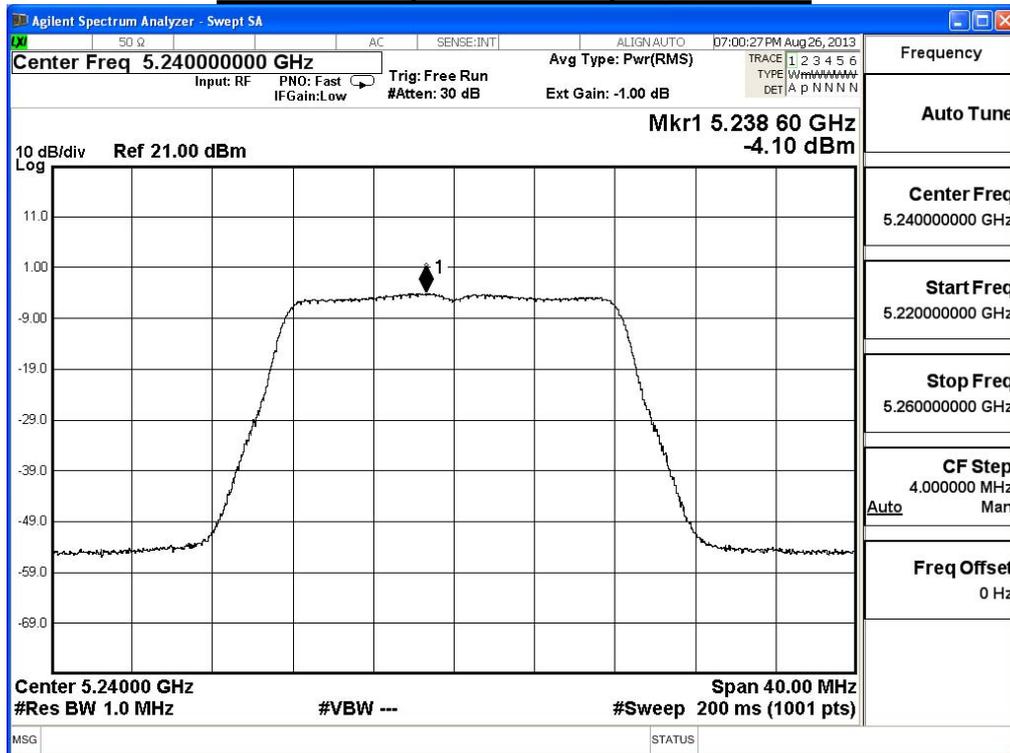Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm

Peak Power Spectral Density – Channel 36

Peak Power Spectral Density – Channel 44

Peak Power Spectral Density – Channel 48

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11a (ANT1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
36	5180	-4.06	≦1.19	Pass
44	5220	-3.83	≦1.19	Pass
48	5240	-4.10	≦1.19	Pass

Note:
Total Gain = 10log(3) + Max Gain = 8.81dBi
Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm

Peak Power Spectral Density – Channel 36

QuieTek

Peak Power Spectral Density – Channel 44

Agilent Spectrum Analyzer - Swept SA

50 Ω   AC   SENSE:INT   ALIGN AUTO   07:01:49 PM Aug 26, 2013

Center Freq 5.220000000 GHz   Avg Type: Pwr(RMS)   TRACE 1 2 3 4 5 6   Frequency

Input: RF   PNO: Fast   Trig: Free Run   TYPE W m W W W W   Auto Tune
IFGain:Low   #Atten: 30 dB   Ext Gain: -1.00 dB   DET A p N N N N

Mkr1 5.218 28 GHz
-3.83 dBm

10 dB/div   Ref 21.00 dBm
Log

11.0
1.00
-9.00
-19.0
-29.0
-39.0
-49.0
-59.0
-69.0

Center 5.22000 GHz   Span 40.00 MHz
#Res BW 1.0 MHz   #VBW ---   #Sweep 200 ms (1001 pts)

Center Freq 5.220000000 GHz
Start Freq 5.200000000 GHz
Stop Freq 5.240000000 GHz
CF Step 4.000000 MHz
Auto   Man
Freq Offset 0 Hz

MSG   STATUS

Peak Power Spectral Density – Channel 48

Agilent Spectrum Analyzer - Swept SA

50 Ω   AC   SENSE:INT   ALIGN AUTO   07:00:27 PM Aug 26, 2013

Center Freq 5.240000000 GHz   Avg Type: Pwr(RMS)   TRACE 1 2 3 4 5 6   Frequency

Input: RF   PNO: Fast   Trig: Free Run   TYPE W m W W W W   Auto Tune
IFGain:Low   #Atten: 30 dB   Ext Gain: -1.00 dB   DET A p N N N N

Mkr1 5.238 60 GHz
-4.10 dBm

10 dB/div   Ref 21.00 dBm
Log

11.0
1.00
-9.00
-19.0
-29.0
-39.0
-49.0
-59.0
-69.0

Center 5.24000 GHz   Span 40.00 MHz
#Res BW 1.0 MHz   #VBW ---   #Sweep 200 ms (1001 pts)

Center Freq 5.240000000 GHz
Start Freq 5.220000000 GHz
Stop Freq 5.260000000 GHz
CF Step 4.000000 MHz
Auto   Man
Freq Offset 0 Hz

MSG   STATUS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11a (ANT2)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
36	5180	-3.71	≦1.19	Pass
44	5220	-3.60	≦1.19	Pass
48	5240	-3.21	≦1.19	Pass

Note:
Total Gain = 10log(3) + Max Gain = 8.81dBi
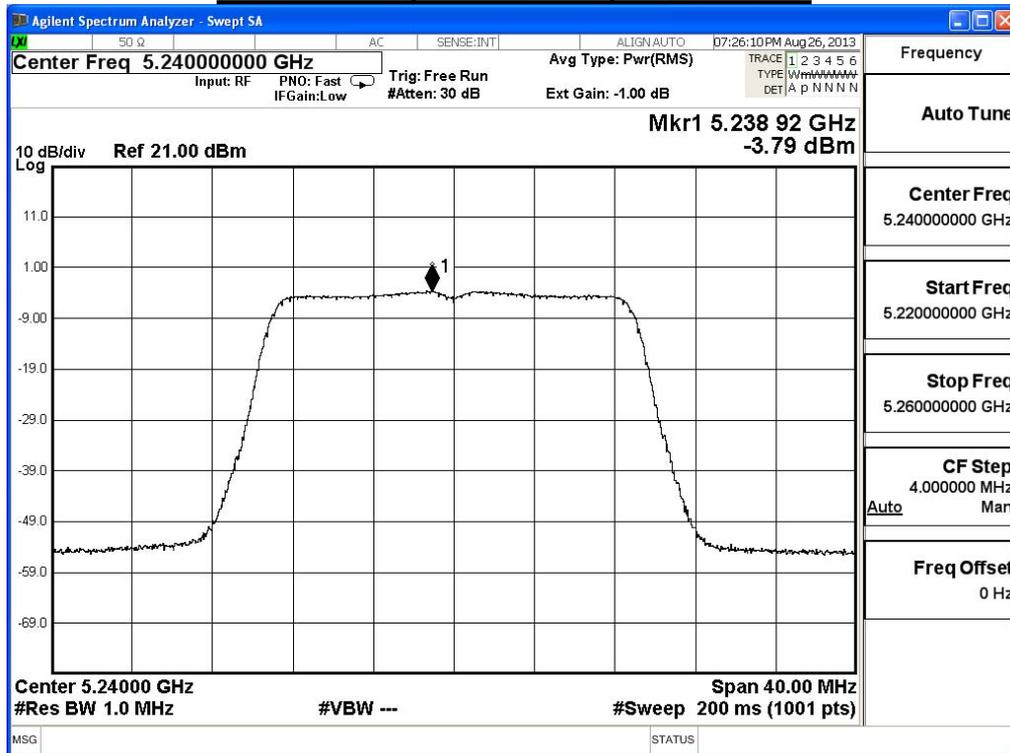Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm

Peak Power Spectral Density – Channel 36

Peak Power Spectral Density – Channel 44

Peak Power Spectral Density – Channel 48

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11a (ANT 0+1+2)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
36	5180	1.07	≦1.19	Pass
44	5220	1.10	≦1.19	Pass
48	5240	1.10	≦1.19	Pass

Note:
Total Gain = 10log(3) + Max Gain = 8.81dBi
Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11n_20M(ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
36	5180	-3.71	≦1.19	Pass
44	5220	-4.01	≦1.19	Pass
48	5240	-3.79	≦1.19	Pass

Note:
Total Gain = 10log(3) + Max Gain = 8.81dBi
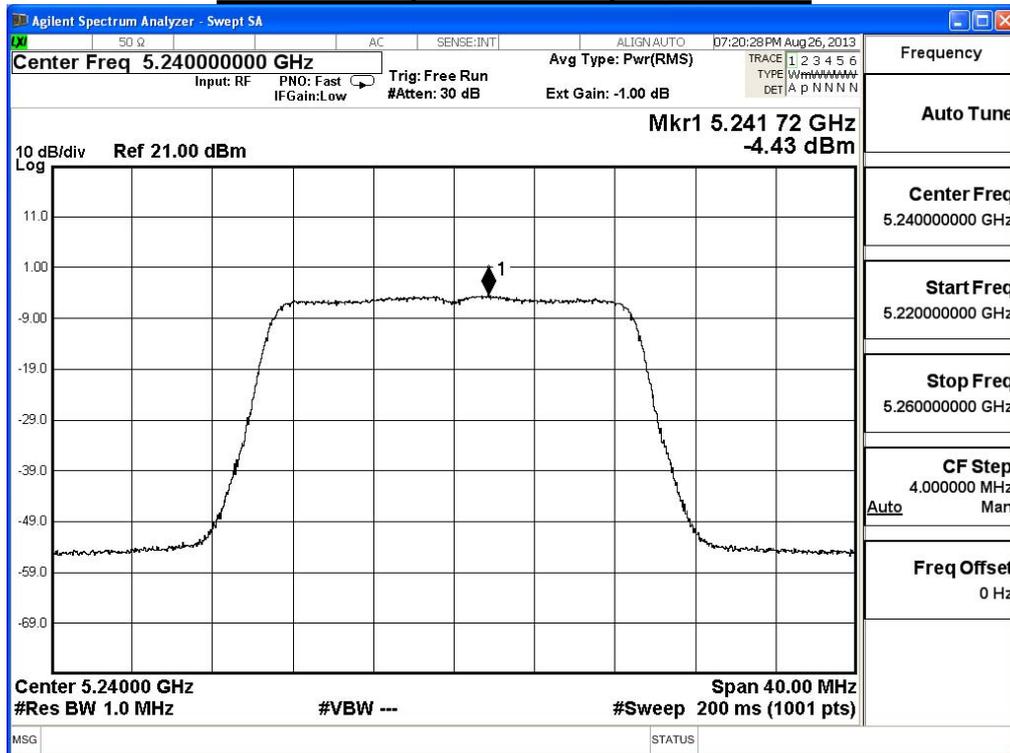Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm

Peak Power Spectral Density – Channel 36

Peak Power Spectral Density – Channel 44

Peak Power Spectral Density – Channel 48

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11n_20M(ANT 1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
36	5180	-4.09	≦1.19	Pass
44	5220	-4.17	≦1.19	Pass
48	5240	-4.43	≦1.19	Pass

Note:
Total Gain = 10log(3) + Max Gain = 8.81dBi
Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm

Peak Power Spectral Density – Channel 36

Peak Power Spectral Density – Channel 44
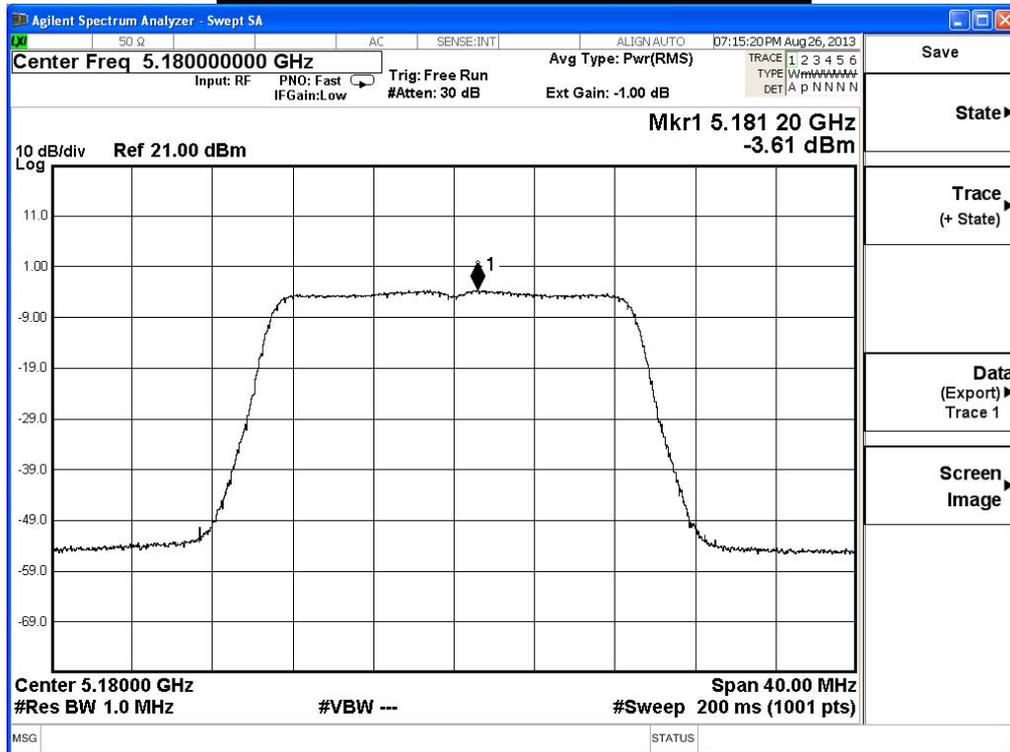

Peak Power Spectral Density – Channel 48

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11n_20M(ANT 2)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
36	5180	-3.61	≦1.19	Pass
44	5220	-3.85	≦1.19	Pass
48	5240	–4.00	≦1.19	Pass

Note:
Total Gain = 10log(3) + Max Gain = 8.81dBi
Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm
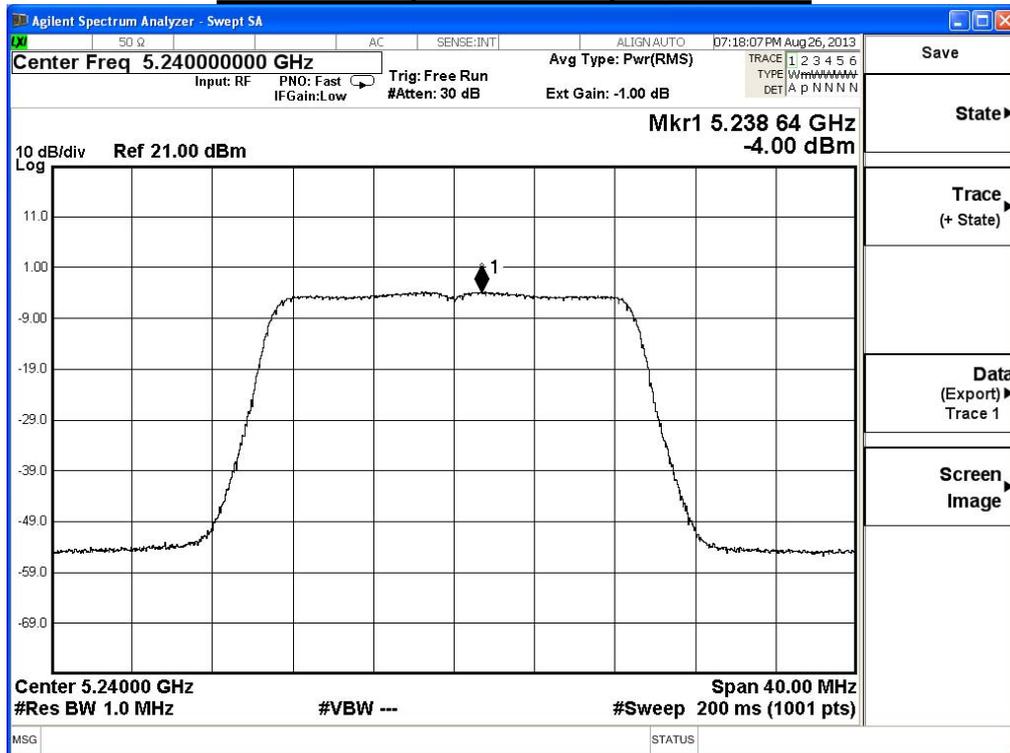
Peak Power Spectral Density – Channel 36

Peak Power Spectral Density – Channel 44

Peak Power Spectral Density – Channel 48

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11n_20M(ANT 0+1+2)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
36	5180	0.97	≦1.19	Pass
44	5220	0.76	≦1.19	Pass
48	5240	0.71	≦1.19	Pass

Note:
Total Gain = 10log(3) + Max Gain = 8.81dBi
Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11n_40M(ANT 0)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
38	5190	-3.58	≦1.19	Pass
46	5230	-3.43	≦1.19	Pass

Note:
Total Gain = 10log(3) + Max Gain = 8.81dBi
Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm

Peak Power Spectral Density – Channel 38

Peak Power Spectral Density – Channel 46

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11n_40M(ANT 1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
38	5190	-3.78	≦1.19	Pass
46	5230	-3.83	≦1.19	Pass

Note:
Total Gain = 10log(3) + Max Gain = 8.81dBi
Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm

Peak Power Spectral Density – Channel 38

Peak Power Spectral Density – Channel 46

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11n_40M(ANT 2)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
38	5190	-3.53	≦1.19	Pass
46	5230	-3.70	≦1.19	Pass

Note:
Total Gain = 10log(3) + Max Gain = 8.81dBi
Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm
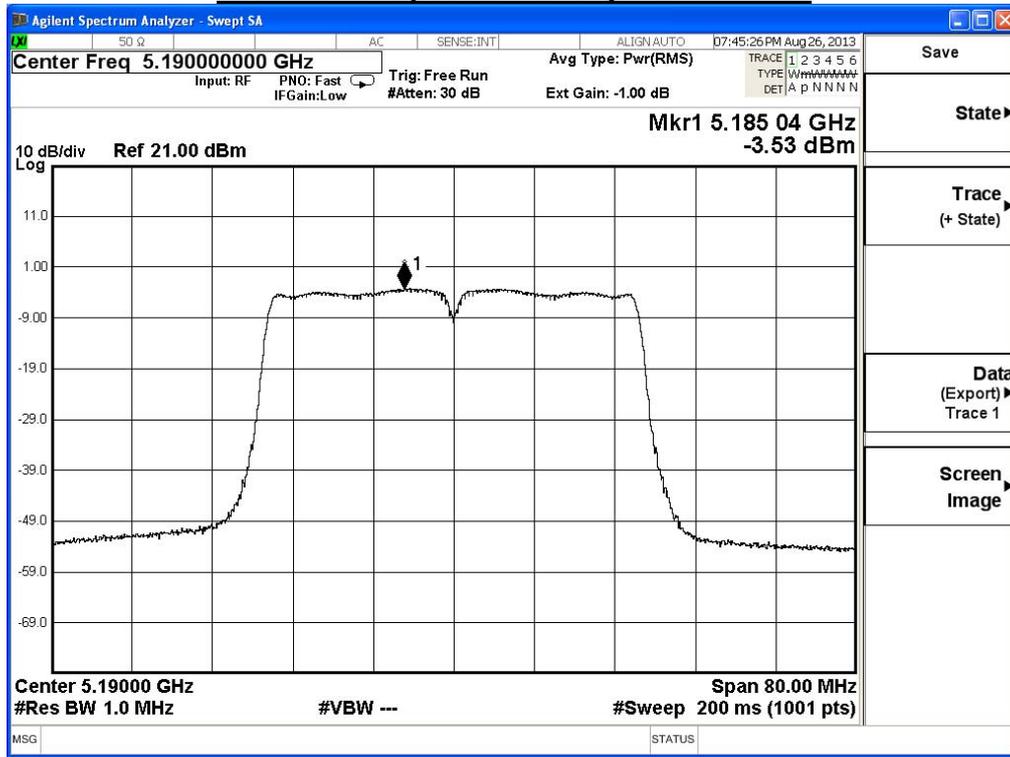
Peak Power Spectral Density – Channel 38

Peak Power Spectral Density – Channel 46

Agilent Spectrum Analyzer - Swept SA

50 Ω   AC   SENSE:INT   ALIGN AUTO   07:43:20 PM Aug 26, 2013

Center Freq 5.230000000 GHz

Input: RF   PNO: Fast   Trig: Free Run
IFGain:Low   #Atten: 30 dB

Avg Type: Pwr(RMS)

Ext Gain: -1.00 dB

TRACE 1 2 3 4 5 6
TYPE W m W W W W
DET A p N N N N

Save

State▶

Trace▶
(+ State)

Data▶
(Export)
Trace 1

Screen▶
Image

Mkr1 5.225 84 GHz
-3.70 dBm

10 dB/div   Ref 21.00 dBm
Log

11.0

1.00

-9.00

-19.0

-29.0

-39.0

-49.0

-59.0

-69.0

Center 5.23000 GHz   Span 80.00 MHz
#Res BW 1.0 MHz   #VBW ---   #Sweep 200 ms (1001 pts)

MSG   STATUS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11n_40M(ANT 0+1+2)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
38	5190	1.14	≦1.19	Pass
46	5230	1.12	≦1.19	Pass

Note:
Total Gain = 10log(3) + Max Gain = 8.81dBi
Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11ac_80M(ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
42	5210	-4.89	≦1.19	Pass

Note:
Total Gain = 10log(3) + Max Gain = 8.81dBi
Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm

Peak Power Spectral Density – Channel 42

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11ac_80M(ANT 1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
42	5210	-5.13	≦1.19	Pass

Note:
Total Gain = 10log(3) + Max Gain = 8.81dBi
Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm

Peak Power Spectral Density – Channel 42

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11ac_80M(ANT 2)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
42	5210	-4.89	≦1.19	Pass

Note:
Total Gain = 10log(3) + Max Gain = 8.81dBi
Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm

Peak Power Spectral Density – Channel 42

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2013/08/26	Test Site	SR7

IEEE 802.11ac_80M(ANT 0+1+2)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
42	5210	-0.2	≦1.19	Pass

Note:

Total Gain = 10log(3) + Max Gain = 8.81dBi

Required Limit = 4dBm – (8.81dBi - 6dB) = 1.19dBm

Product	Wireless-AC1900 Dual Band Gigabit Router	
Test Item	Peak Power Spectral Density	
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH	
Date of Test	2013/05/02	Test Site SR7

IEEE 802.11a				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
36	5180	0.509	$\leqq 1.19$	Pass
44	5220	0.538	$\leqq 1.19$	Pass
48	5240	0.605	$\leqq 1.19$	Pass

Note:

Total Gain : 10log(Ant N) + max Gain + Beamforming Gain = 10log(1)+4.04dBi+4.77dB =8.81dBi
Required Limit **=** 4dBm - (8.81dBi – 6dBi) = 1.19 dBm

Peak Power Spectral Density – Channel 36

QuieTek

Peak Power Spectral Density – Channel 44

Peak Power Spectral Density – Channel 48

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2013/05/02	Test Site	SR7

IEEE 802.11n_20M(ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Required Limit (dBm)	Result
36	5180	-4.677	≦1.19	Pass
44	5220	-4.446	≦1.19	Pass
48	5240	-4.046	≦1.19	Pass

Note:

Total Gain : 10log(Ant N) + max Gain = 10log(3)+4.04dBi =8.81dBi

Required Limit **=** 4dBm - (8.81dBi – 6dBi) = 1.19 dBm

Peak Power Spectral Density – Channel 36

Peak Power Spectral Density – Channel 44

Peak Power Spectral Density – Channel 48