FCC Test Report

Product Name ： Wireless-AC1900 Dual Band Gigabit Router

Trade Name ： ASUS

Model No. ： RT-AC68U, RT-AC68R, RT-AC68RW, RT-AC68W, TM-AC1900

FCC ID. ： MSQ-RTAC68U

Applicant ： ASUSTeK COMPUTER INC.

Address ： 4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan

Date of Receipt ： Feb. 03, 2016

Issued Date ： Apr. 06, 2016

Report No. ： 1620192R-RFUSP57V00-A

Report Version ： V1.0

Testing Laboratory
3024

Test Report Certification

Issued Date : Apr. 06, 2016
Report No. : 1620192R-RFUSP57V00-A

Product Name	:	Wireless-AC1900 Dual Band Gigabit Router
Applicant	:	ASUSTeK COMPUTER INC.
Address	:	4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan
Manufacturer	:	Askey Technology (Jiangsu) Ltd.
Model No.	:	RT-AC68U, RT-AC68R, RT-AC68RW, RT-AC68W, TM-AC1900
FCC ID.	:	MSQ-RTAC68U
EUT Voltage	:	AC 100-240V, 50-60Hz
Testing Voltage	:	AC 120V/60Hz
Trade Name	:	ASUS
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart E Section 15.407: 2014 ANSI C63.10: 2009
Test Lab	:	QuieTek Hsin Chu Laboratory
Test Result	:	Complied

The test results relate only to the samples tested.
The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Documented By : 
(Demi Chang / Senior Engineering Adm. Specialist)

Tested By : 
(JuBo Shen / Senior Engineer)

Approved By : 
(Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
1460476R-RFUSP59V00	V1.0	Initial issue of report	Jul. 10, 2014
1580213R-RFUSP28V00	V1.0	Update 5G band1 power index by customer requirements. After evaluation, it does not affect the power. Add two level 6 adapter (AD890326 and ADP-33AW). Add one model name (RT-AC68W).	Aug. 28, 2015
1620192R-RFUSP57V00-A	V1.0	Update WLAN 5G band 4 standard to FCC 15.407.	Apr. 06, 2016

Laboratory Information

We, **QuieTek Corporation**, are an independent RF consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted (audited or listed) by the following related bodies in compliance with ISO 17025 specified testing scopes:

Taiwan R.O.C.	**:**	**TAF, Accreditation Number: 3024**
USA	**:**	**FCC, Registration Number: 365520**
Canada	**:**	**IC, Submission No: 181665 / IC Registration Number: 4075C-4**

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site:http://www.quietek.com/english/about/certificates.aspx?bval=5
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/index_en.aspx
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

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No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C.
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com

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1. General Information

1.1. EUT Description

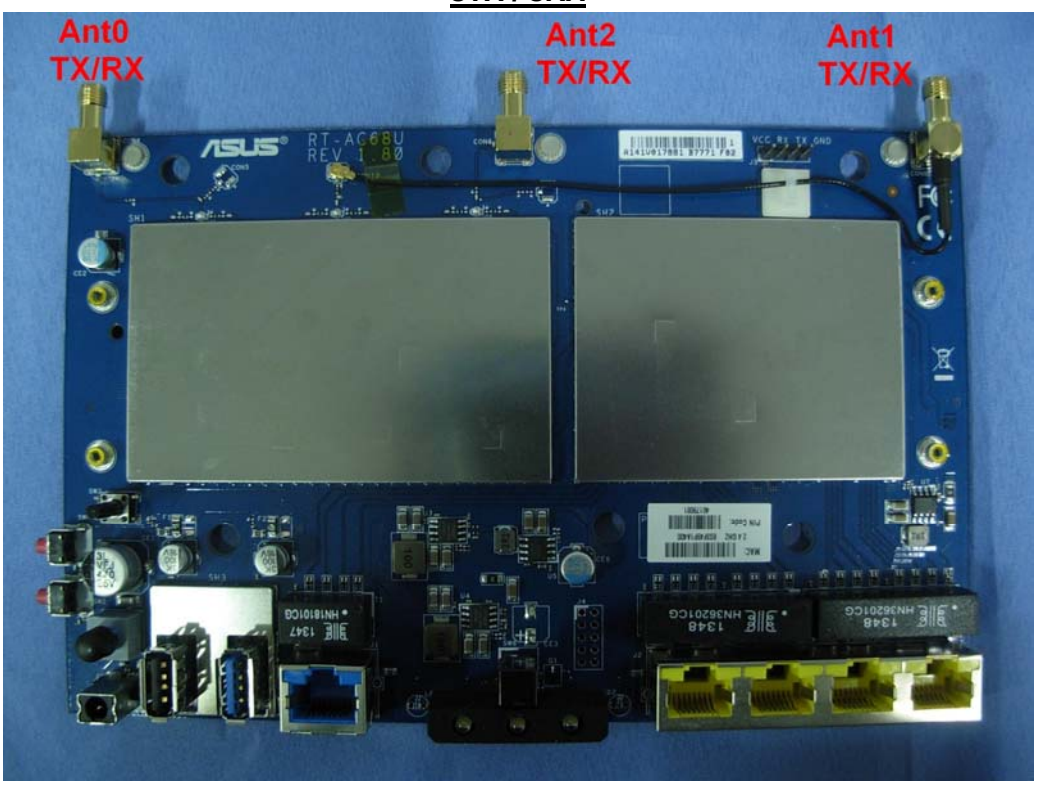
Product Name	Wireless-AC1900 Dual Band Gigabit Router
Trade Name	ASUS
Model No.	RT-AC68U, RT-AC68R, RT-AC68RW, RT-AC68W, TM-AC1900
Frequency Range/Channel Number -IEEE 802.11a & IEEE 802.11n/ac (20MHz)_5.8GHz	5745~5825MHz / 5 Channels
Frequency Range/Channel Number -IEEE 802.11n/ac (40MHz) _5.8GHz	5755~5795MHz / 2 Channels
Frequency Range/Channel Number -IEEE 802.11ac (80MHz) _5.8GHz	5775~5775MHz / 1 Channel
Type of Modulation (IEEE 802.11a/n/ac)	Orthogonal Frequency Division Multiplexing (OFDM)
Data Speed (IEEE 802.11a)	6Mbps,9Mbps,12Mbps,18Mbps,24Mbps,36Mbps,48Mbps,54Mbps
Data Speed (IEEE 802.11n)	Support a subset of the combination of GI, MCS 0~MCS 23 and bandwidth defined in 802.11n
Data Speed (IEEE 802.11ac)	Support a subset of the combination of GI, MCS 0~MCS 9 and bandwidth defined in 802.11ac
Antenna Gain	WAISIN, RFDPA141000SBLB802 Antenna: 5G: Ant0: 4.04dBi, Ant1: 4.04dBi, Ant2: 4.04dBi MAG., EDA-1410-25GR2-A1 Antenna: 5G: Ant0: 4.04dBi, Ant1: 4.04dBi, Ant2: 4.04dBi Master Wave, 98611PRSX003 Antenna: 5G: Ant0: 3.89dBi,Ant1: 3.89dBi, Ant2: 3.89dBi
Beamforming Gain	5G:4.77dB
Antenna Type	Dipole Antenna

Component	
LAN Cable	Non-Shielded, 1.5m
Dipole Antenna	WAISIN,RFDPA141000SBLB802,3pcs
Dipole Antenna	MAG.,EDA-1410-25GR2-A1,3pcs
Dipole Antenna	Master Wave, 98611PRSX003,3pcs
Power Adapter	Enertronix, EXA1206UH I/P: 100-240V~50/60Hz, 1.0A O/P: 19V ⎓ 1.75A Cable Out: Non-Shielded, 2.4m
Power Adapter	PIE, AD890326 I/P: 100-240V~50/60Hz, 0.8A O/P: 19V ⎓ 1.75A Cable Out: Non-Shielded, 2.4m
Power Adapter	Delta, ADP-33AW I/P: 100-240V~50/60Hz, 1.0A O/P: 19V ⎓ 1.75A Cable Out: Non-Shielded, 2.2m

ANT-TX / RX & Bandwidth

ANT-TX / RX	TX			RX		
Mode/ Channel Bandwidth	20MHz	40MHz	80MHz	20MHz	40MHz	80MHz
IEEE802.11a	✓			✓		
IEEE802.11n	✓	✓		✓	✓	
IEEE802.11ac	✓	✓	✓	✓	✓	✓

3TX / 3RX



IEEE 802.11n

MCS Index	Modulation	R	N_{BPSCS}	N_{CBPS}		N_{DBPS}		Data Rate(Mb/s)			
				20MHz	40MHz	20MHz	40MHz	800ns GI		400ns GI	
								20MHz	40MHz	20MHz	40MHz
0	BPSK	1/2	1	52	108	26	54	6.5	13.5	7.2	15.0
1	QPSK	1/2	2	104	216	52	108	13.0	27.0	14.4	30.0
2	QPSK	3/4	2	104	216	78	162	19.5	40.5	21.7	45.0
3	16-QAM	1/2	4	208	432	104	216	26.0	54.0	28.9	60.0
4	16-QAM	3/4	4	208	432	156	324	39.0	81.0	43.3	90.0
5	64-QAM	2/3	6	312	648	208	432	52.0	108.0	57.8	120.0
6	64-QAM	3/4	6	312	648	234	486	58.5	121.5	65.0	135.0
7	64-QAM	5/6	6	312	648	260	540	65.0	135.0	72.2	150.0
Note 1: Support of 400ns GI is optional on transmit and receive.											

Table 1 – MCS parameters for TX Antenna number = 1

MCS Index	Modulation	R	N_{BPSCS}	N_{CBPS}		N_{DBPS}		Data Rate(Mb/s)			
				20MHz	40MHz	20MHz	40MHz	800ns GI		400ns GI	
								20MHz	40MHz	20MHz	40MHz
8	BPSK	1/2	1	104	216	52	108	13.0	27.0	14.4	30.0
9	QPSK	1/2	2	208	432	104	216	26.0	54.0	28.9	60.0
10	QPSK	3/4	2	208	432	156	324	39.0	81.0	43.3	90.0
11	16-QAM	1/2	4	416	864	208	432	52.0	108.0	57.8	120.0
12	16-QAM	3/4	4	416	864	312	648	78.0	162.0	86.7	180.0
13	64-QAM	2/3	6	624	1296	416	864	104.0	216.0	115.6	240.0
14	64-QAM	3/4	6	624	1296	468	972	117.0	243.0	130.0	270.0
15	64-QAM	5/6	6	624	1296	520	1080	130.0	270.0	144.4	300.0
Note 1: Support of 400ns GI is optional on transmit and receive.											

Table 2 – MCS parameters for TX Antenna number = 2

MCS Index	Modulation	R	N_{BPSCS}	N_{CBPS}		N_{DBPS}		Data Rate(Mb/s)			
				20MHz	40MHz	20MHz	40MHz	800ns GI		400ns GI	
								20MHz	40MHz	20MHz	40MHz
16	BPSK	1/2	1	156	324	78	162	19.5	40.5	21.7	45.0
17	QPSK	1/2	2	312	648	156	324	39.0	81.0	43.3	90.0
18	QPSK	3/4	2	312	648	234	486	58.5	121.5	65.0	135.0
19	16-QAM	1/2	4	624	1296	312	648	78.0	162.0	86.7	180.0
20	16-QAM	3/4	4	624	1296	468	972	117.0	243.0	130.0	270.0
21	64-QAM	2/3	6	936	1944	624	1296	156.0	324.0	173.3	360.0
22	64-QAM	3/4	6	936	1944	702	1458	175.5	364.5	195.0	405.0
23	64-QAM	5/6	6	936	1944	780	1620	195.0	405.0	216.7	450.0
Note 1: Support of 400ns GI is optional on transmit and receive.											

Table 3 – MCS parameters for TX Antenna number = 3

Symbol	Explanation
R	Code rate
N_{BPSC}	Number of coded bits per single carrier
N_{CBPS}	Number of coded bits per symbol
N_{DBPS}	Number of data bits per symbol
GI	guard interval

IEEE 802.11ac Data Rate

Spatial Streams (Note1)	MCS Index	Modulation type	Coding rate	Data Rate(Mb/s)							
				20 MHz		40 MHz		80 MHz		160 MHz	
				Guard Interval		Guard Interval		Guard Interval		Guard Interval	
				800ns	400ns	800ns	400ns	800ns	400ns	800ns	400ns
1	0	BPSK	1/2	6.5	7.2	13.5	15	29.3	32.5	58.5	65
	1	QPSK	1/2	13	14.4	27	30	58.5	65	117	130
	2	QPSK	3/4	19.5	21.7	40.5	45	87.8	97.5	175.5	195
	3	16-QAM	1/2	26	28.9	54	60	117	130	234	260
	4	16-QAM	3/4	39	43.3	81	90	175.5	195	351	390
	5	64-QAM	2/3	52	57.8	108	120	234	260	468	520
	6	64-QAM	3/4	58.5	65	121.5	135	263.3	292.5	526.5	585
	7	64-QAM	5/6	65	72.2	135	150	292.5	325	585	650
	8	256-QAM	3/4	78	86.7	162	180	351	390	702	780
	9	256-QAM	5/6	N/A	N/A	180	200	390	433.3	780	866.7
2	0	BPSK	1/2	13	14.4	27	30	58.6	65	117	130
	1	QPSK	1/2	26	28.8	54	60	117	130	234	260
	2	QPSK	3/4	39	43.4	81	90	175.6	195	351	390
	3	16-QAM	1/2	52	57.8	108	120	234	260	468	520
	4	16-QAM	3/4	78	86.6	162	180	351	390	702	780
	5	64-QAM	2/3	104	115.6	216	240	468	520	936	1040
	6	64-QAM	3/4	117	130	243	270	526.6	585	1053	1170
	7	64-QAM	5/6	130	144.4	270	300	585	650	1170	1300
	8	256-QAM	3/4	156	173.4	324	360	702	780	1404	1560
	9	256-QAM	5/6	N/A	N/A	360	400	780	866.6	1560	1733.4
3	0	BPSK	1/2	19.5	21.6	40.5	45	87.9	97.5	175.5	195
	1	QPSK	1/2	39	43.2	81	90	175.5	195	351	390
	2	QPSK	3/4	58.5	65.1	121.5	135	263.4	292.5	526.5	585
	3	16-QAM	1/2	78	86.7	162	180	351	390	702	780
	4	16-QAM	3/4	117	129.9	243	270	526.5	585	1053	1170
	5	64-QAM	2/3	156	173.4	324	360	702	780	1404	1560
	6	64-QAM	3/4	175.5	195	364.5	405	789.9	877.5	1579.5	1755
	7	64-QAM	5/6	195	216.6	405	450	877.5	975	1755	1950
	8	256-QAM	3/4	234	260.1	486	540	1053	1170	2106	2340
	9	256-QAM	5/6	N/A	N/A	540	600	1170	1299.9	2340	2600.1

IEEE 802.11a & IEEE 802.11n (20MHz) & IEEE 802.11ac (20MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
149	5745 MHz	153	5765 MHz	157	5785 MHz	161	5805 MHz
165	5825 MHz						

IEEE 802.11n (40MHz) & IEEE 802.11ac (40MHz)

Working Frequency of Each Channel			
Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

IEEE 802.11ac (80MHz)

Working Frequency of Each Channel	
Channel	Frequency
155	5775 MHz

Note:

1. This device is a Wireless-AC1900 Dual Band Gigabit Router including 2.4GHz b (3x3) and 5GHz a/n/ac (3x3) transmitting and receiving function.
2. The variation of model number is for different strategy of marketing.
3. These test results on a sample of the device are for the purpose of demonstrating Compliance with Part 15 Subpart E Paragraph 15.407.
4. Regards to the frequency band operation; the lowest、middle and highest frequency of channel were selected to perform the test, and then shown on this report.
5. The function of the 2.4GHz & 5.2GHz transmitting is measured and makes a test report of the report number: 1580213R-RFUSP28V00 & 1580213R-RFUSP59V00.
6. This device has USB and Ethernet ports, which can be connected to computer. It is a Class B personal computer and peripheral. Its test report number is 1580213R-RFUSP01V00.
7. This power index value is only suitable for testing samples, It is not suitable for products of the market sells.

1.2. Test Mode

QuieTek has verified the construction and function in typical operation. The preliminary tests were performed in different data rate, and to find the worst condition, which was shown in this test report. The following table is the final test mode.

TX	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH Mode 3: Transmit (CDD Mode)_Adapter: AD890326 Mode 4: Transmit (CDD Mode)_Adapter: ADP-33AW Mode 5: Transmit (SISO Mode)_Adapter: EXA1206UH

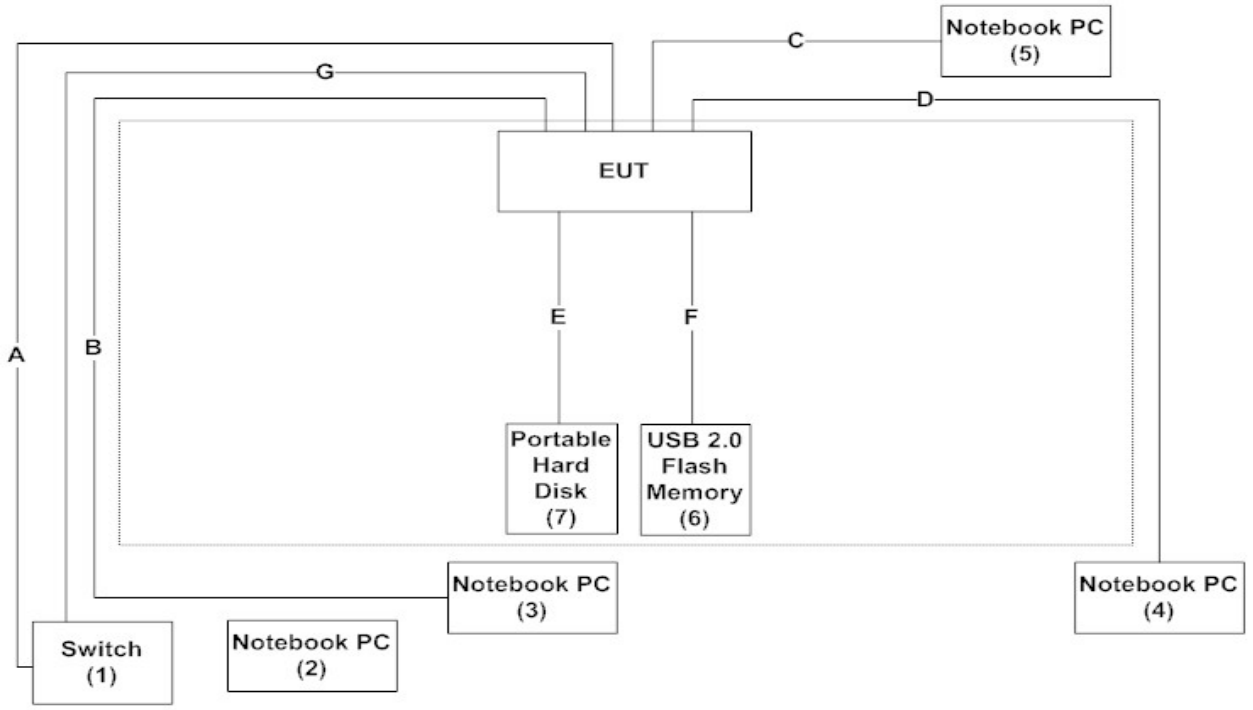
Test Items	Modulation	Channel	Antenna	Result
Conducted Emission	11ac(80MHz)	155	0+1+2	N/A
99 % & 26dB & DTS Bandwidth	11a	149/ 157/ 165	0/1/2	N/A
	11n(20MHz)	149/ 157/ 165	0/1/2	N/A
	11n(40MHz)	151/ 159	0/1/2	N/A
	11ac(80MHz)	155	0/1/2	N/A
Peak Transmit Output	11a	149/ 157/ 165	0+1+2	N/A
	11n(20MHz)	149/ 157/ 165	0+1+2	N/A
	11n(40MHz)	151/ 159	0+1+2	N/A
	11ac(80MHz)	155	0+1+2	N/A
Peak Power Spectrum Density	11a	149/ 157/ 165	0+1+2	Complies
	11n(20MHz)	149/ 157/ 165	0+1+2	Complies
	11n(40MHz)	151/ 159	0+1+2	Complies
	11ac(80MHz)	155	0+1+2	Complies
Radiated Emission	11a	149/ 157/ 165	0+1+2	N/A
	11n(20MHz)	149/ 157/ 165	0+1+2	N/A
	11n(40MHz)	151/ 159	0+1+2	N/A
	11ac(80MHz)	155	0+1+2	N/A
Band Edge	11a	149/ 157/ 165	0+1+2	N/A
	11n(20MHz)	149/ 157/ 165	0+1+2	N/A
	11n(40MHz)	151/ 159	0+1+2	N/A
	11ac(80MHz)	155	0+1+2	N/A
RF antenna conducted test	11a	149/ 157/ 165	0/1/2	N/A
	11n(20MHz)	149/ 157/ 165	0/1/2	N/A
	11n(40MHz)	151/ 159	0/1/2	N/A
	11ac(80MHz)	155	0/1/2	N/A
Frequency Stability	11a	149/ 157/ 165	0/1/2	Complies
	11n(20MHz)	149/ 157/ 165	0/1/2	Complies
	11n(40MHz)	151/ 159	0/1/2	Complies
	11ac(80MHz)	155	0/1/2	Complies

1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1	Switch	D-Link	DGS1216T	F360298000042	DoC	Non-Shielded, 1.8m
2	Notebook PC	DELL	Vostro3400	7F808N1	DoC	Non-Shielded, 1.8m
3	Notebook PC	HP Compaq	NX6320FF	CNU7020BXT	DoC	Non-Shielded, 1.8m
4	Notebook PC	DELL	Precision M65	28G9NIS	DoC	Non-Shielded, 1.8m
5	Notebook PC	DELL	PP37L	CD8BNG1	DoC	Non-Shielded, 1.8m
6	USB 2.0 Flash Memory	Apacer	AH223	N/A	DoC	--
7	Portable Hard Disk	WD	My Passport	WXE1AB0M5632	DoC	--

1.4. Configuration of tested System

Connection Diagram


Signal Cable Type		Signal cable Description
A	LAN Cable	Non-Shielded, 1.5m
B	LAN Cable	Non-Shielded, 1.5m
C	LAN Cable	Non-Shielded, 1.5m
D	LAN Cable	Non-Shielded, 1.5m
E	Portable Hard Disk Cable	Shielded, 1m
F	USB 2.0 Flash Memory Cable	Shielded, 1m
G	LAN Cable	Non-Shielded, 1.5m

1.5. EUT Exercise Software

1	Setup the EUT as shown in Section 1.4.
2	Execute the test program “MTool V2.0.0.7” on the Notebook.
3	Configure the test mode, the test channel, and the data rate.
4	Press “Start TX” to start the continuous transmitting.
5	Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual
Temperature (°C)	FCC PART 15 E 15.407 Peak Power Spectrum Density	15 - 35	25°C
Humidity (%RH)		25 - 75	45%RH
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 E 15.407 Frequency Stability	15 - 35	25°C
Humidity (%RH)		25 - 75	45%RH
Barometric pressure (mbar)		860 - 1060	950-1000

2. Peak Power Spectrum Density

2.1. Test Equipment

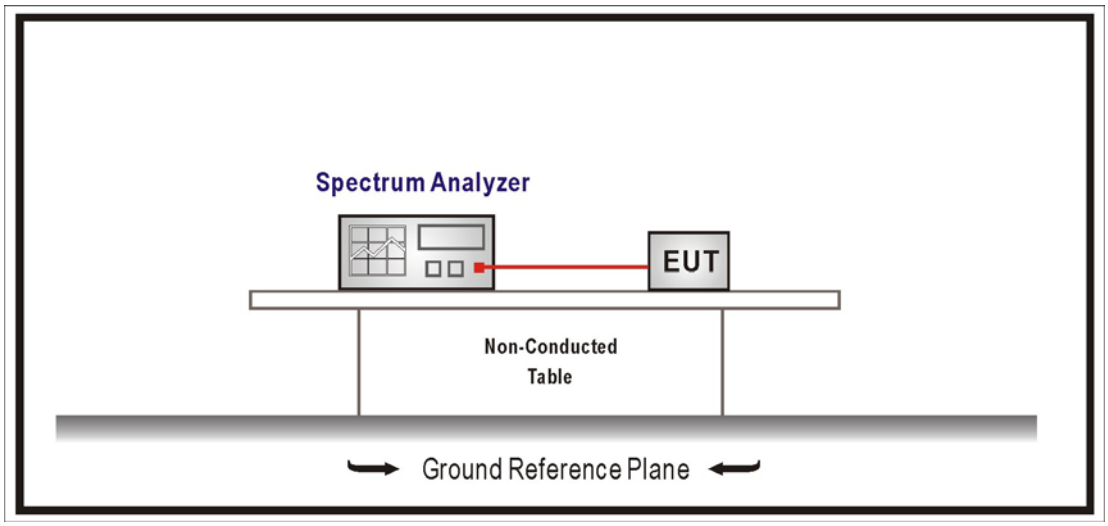
The following test equipments are used during the radiated emission tests:

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.

2.2. Test Setup



2.3. Limits

1. For the band 5.15-5.25 GHz, the peak power spectral density shall not exceed 17 dBm in any 1MHz 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 client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi
3. 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.
4. For the band 5.725-5.850 GHz, the peak power spectral density shall not exceed 30 dBm in any 500KHz 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.

2.4. Test Procedure

The EUT was setup to ANSI C63.10:2009; tested to U-NII test procedure of KDB 789033 D02 V01R01 for compliance to FCC 47CFR Subpart E requirements.

For Band1 : 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.

For Band4 : Set RBW=500KHz, VBW=1.5MHz with RMS detector. The PPSD is the highest level found across the emission in any 500KHz band after 100 sweeps of averaging.

2.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

2.6. Test Result

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE 802.11a (ANT0)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
149	5745	-4.164	12.826	≦26.79
157	5785	-3.584	13.406	≦26.79
165	5825	-3.844	13.146	≦26.79

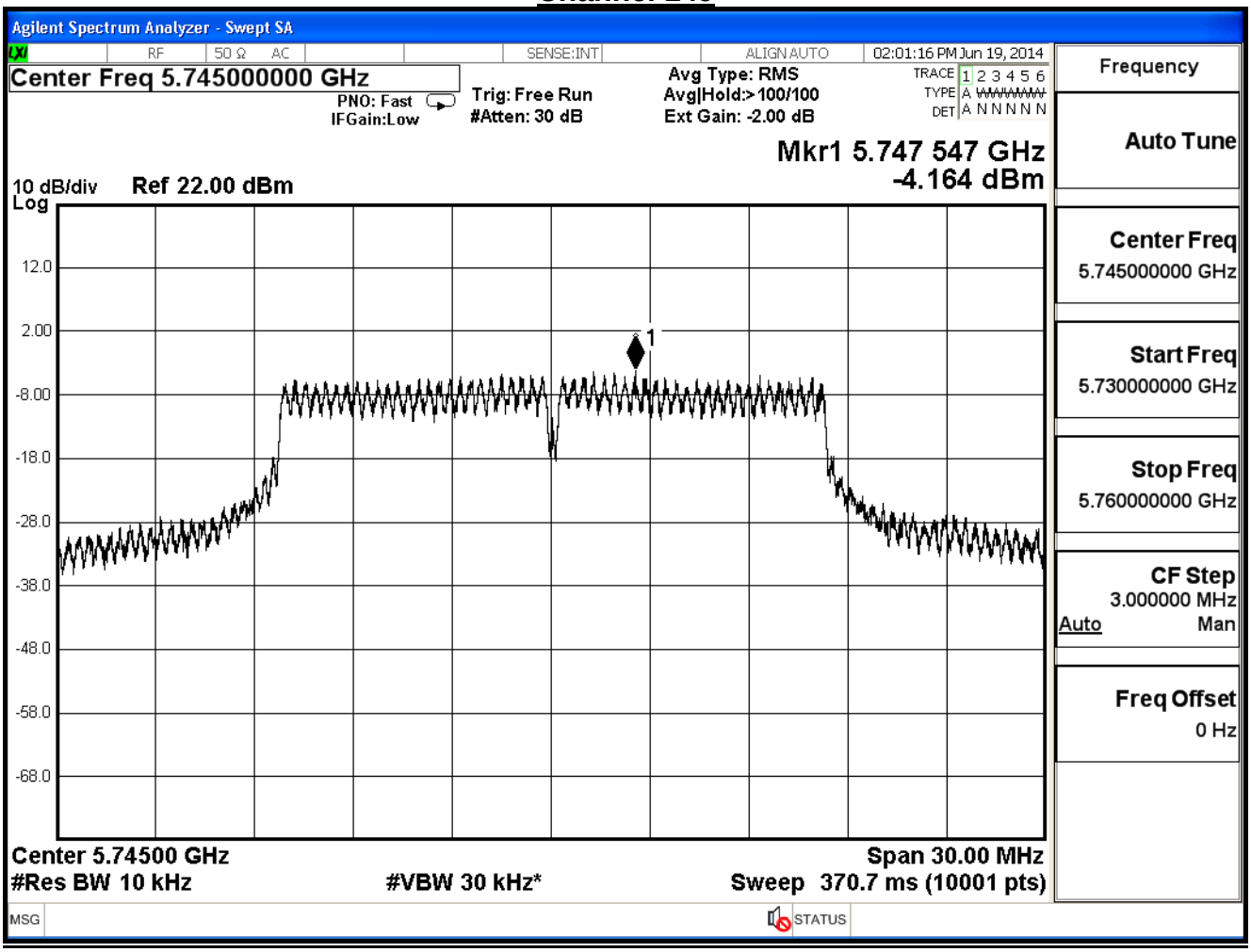
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Channel 149


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
02:01:16 PM Jun 19, 2014
Center Freq 5.745000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.747 547 GHz
-4.164 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
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#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.745000000 GHz
Start Freq
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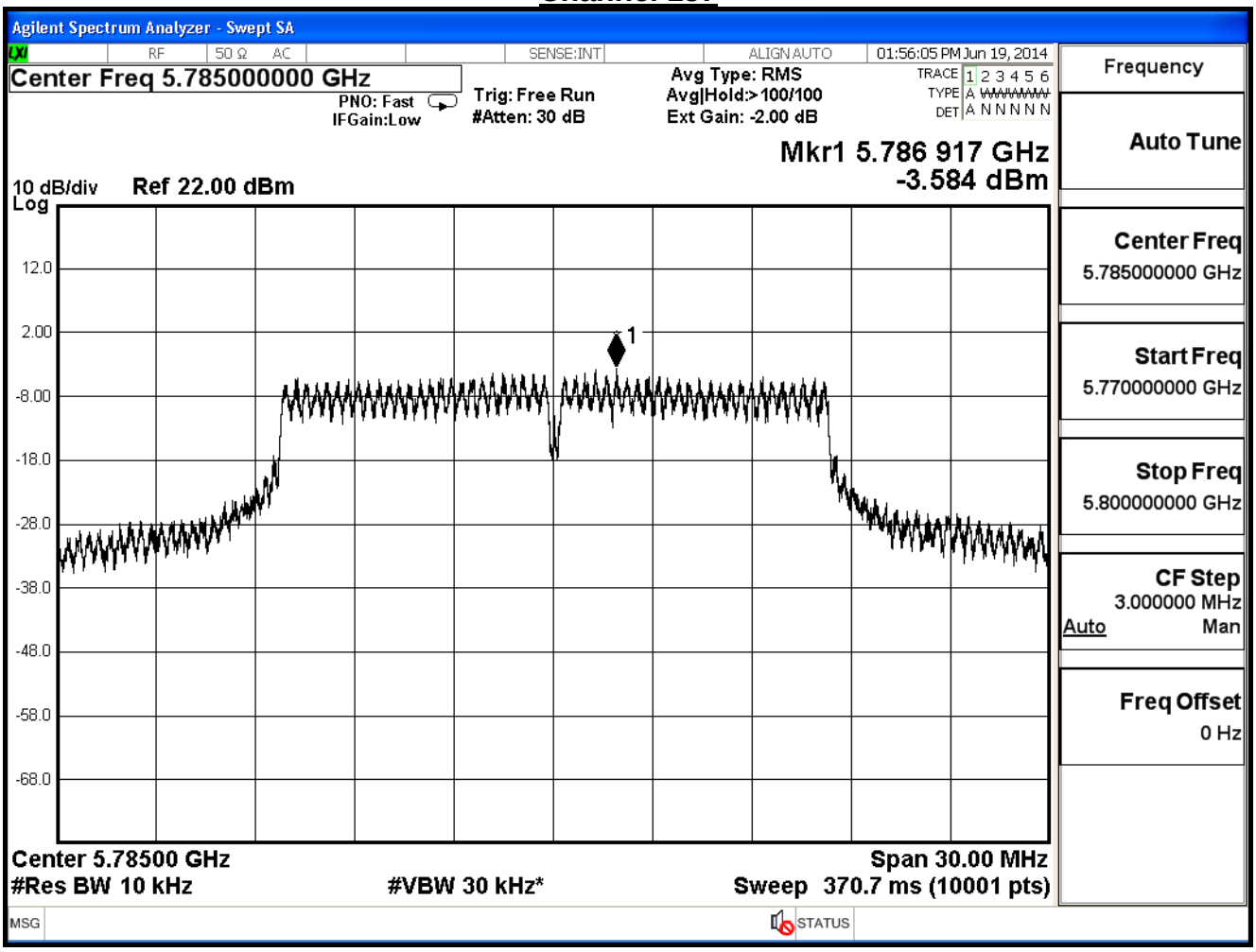
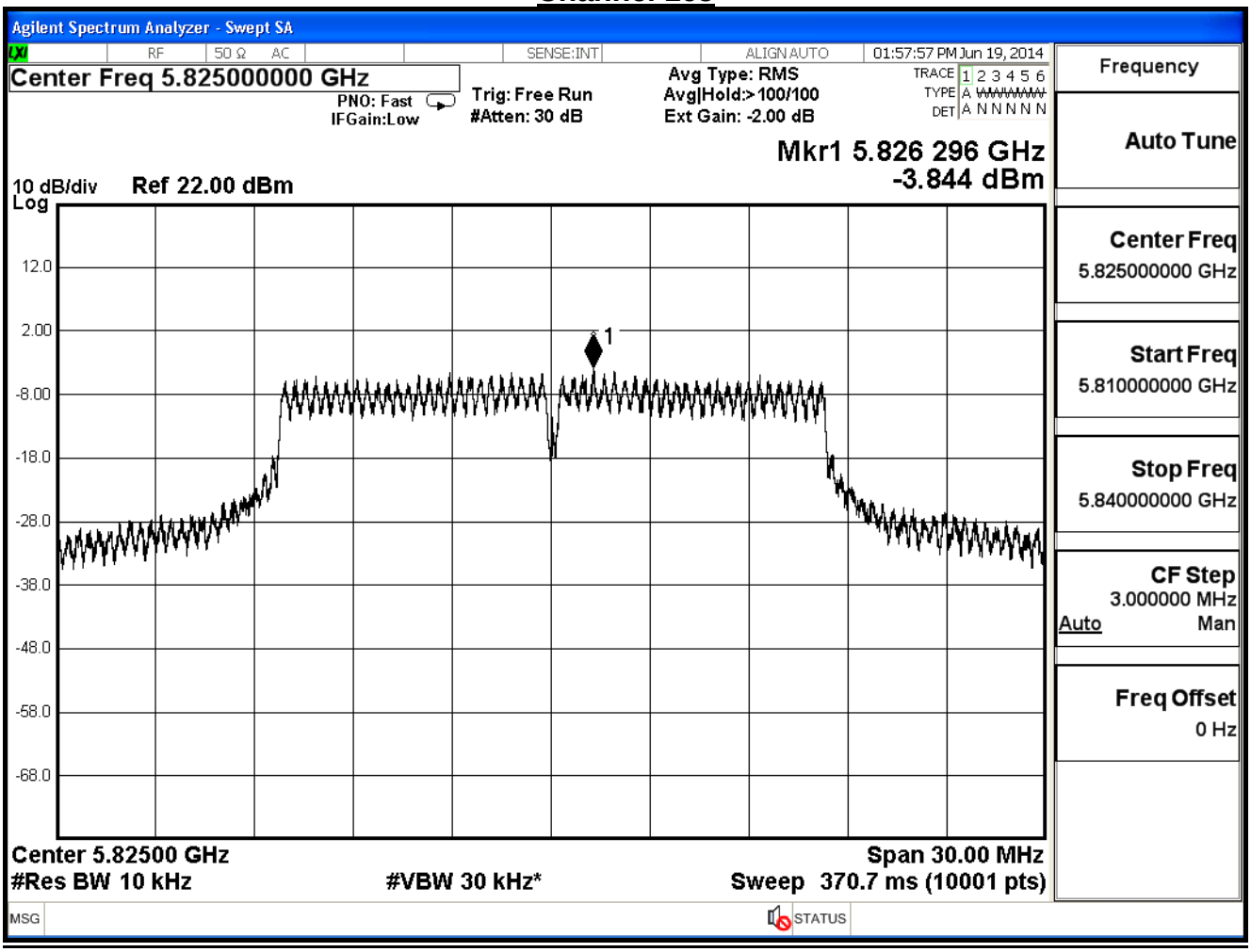
Stop Freq
5.760000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 157


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
01:56:05 PM Jun 19, 2014
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.786 917 GHz
-3.584 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.78500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.785000000 GHz
Start Freq
5.770000000 GHz
Stop Freq
5.800000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 165


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
01:57:57 PM Jun 19, 2014
Center Freq 5.825000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.826 296 GHz
-3.844 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.82500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.825000000 GHz
Start Freq
5.810000000 GHz
Stop Freq
5.840000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE 802.11a (ANT1)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
149	5745	-4.505	12.485	≦26.79
157	5785	-3.821	13.169	≦26.79
165	5825	-4.284	12.706	≦26.79

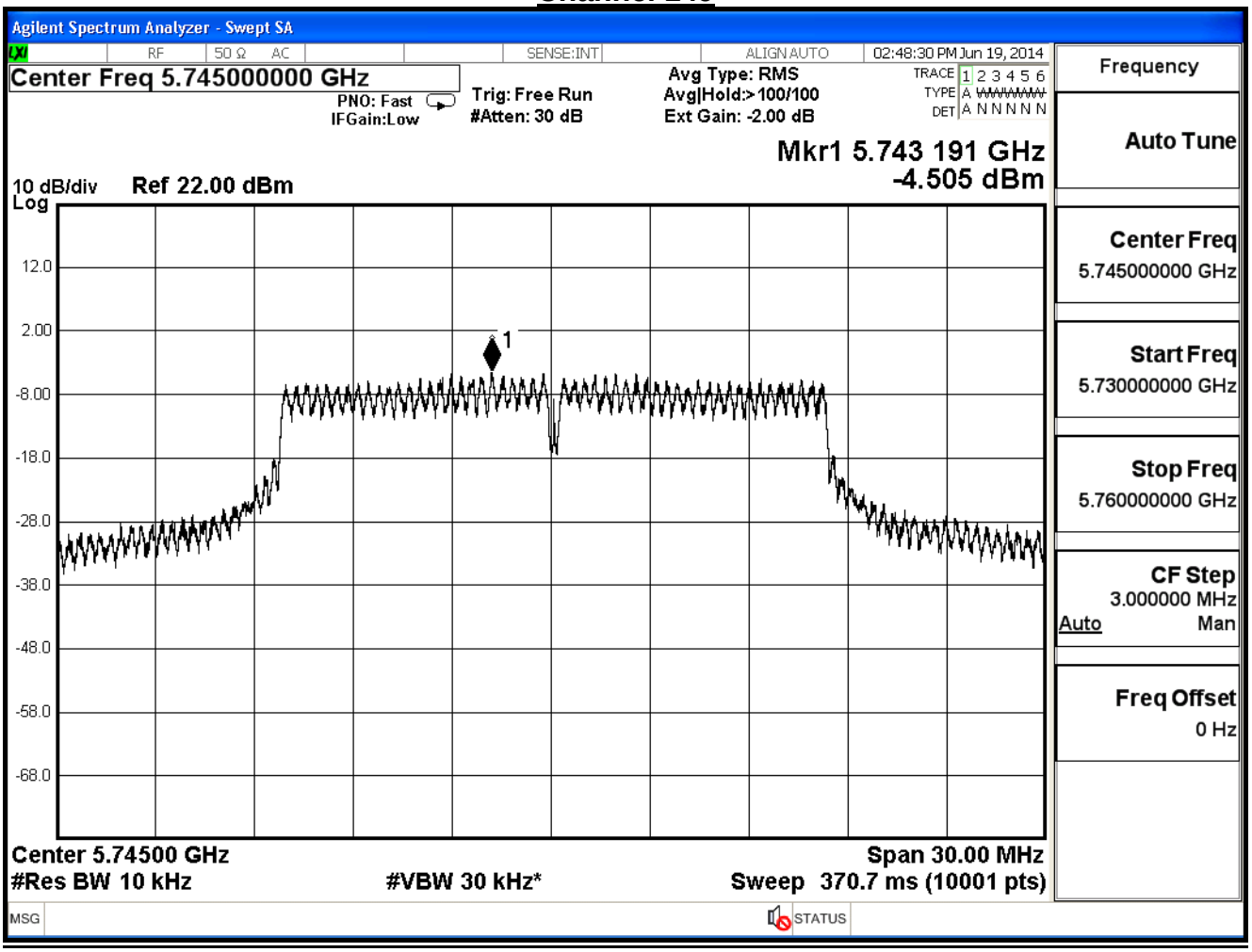
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

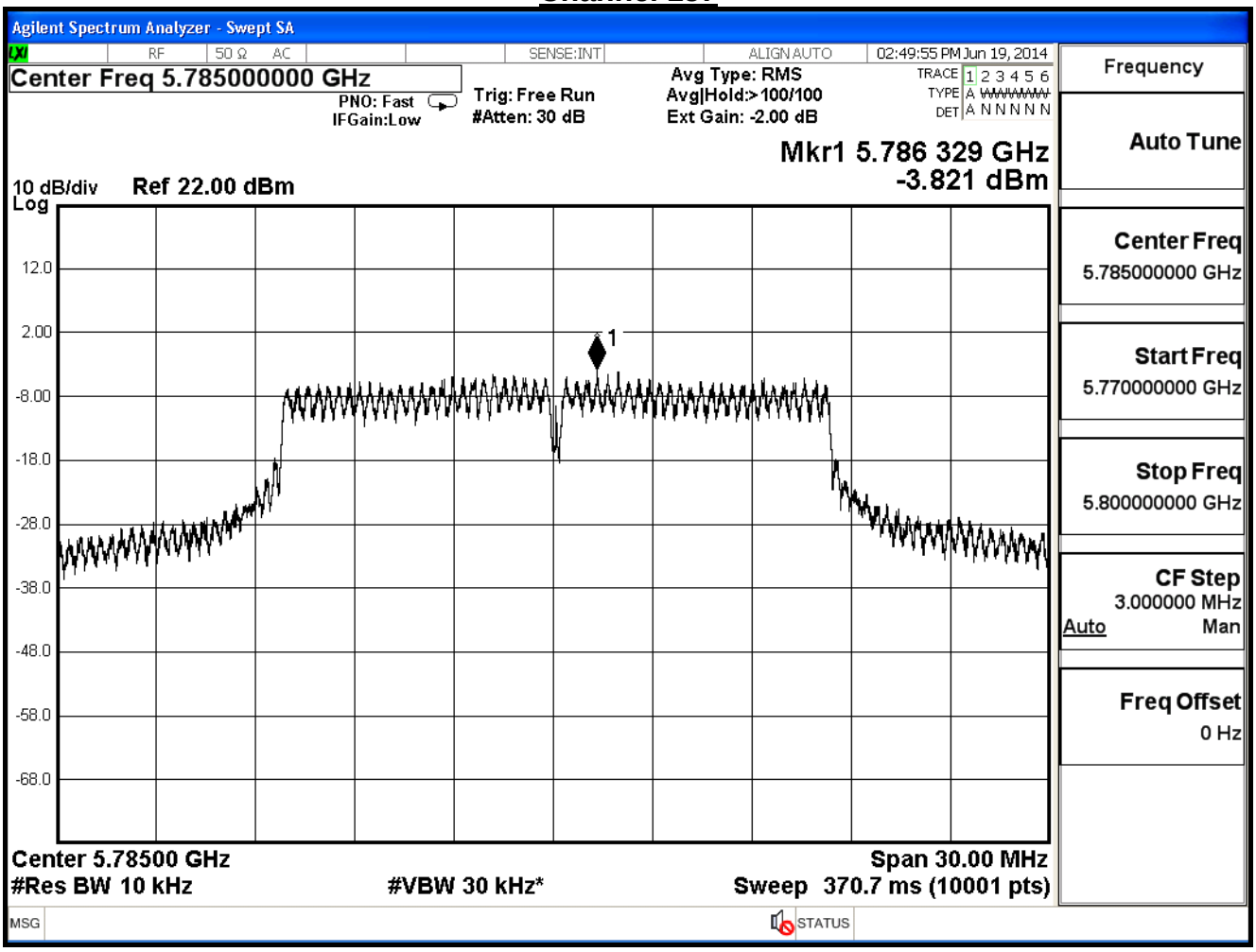
Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

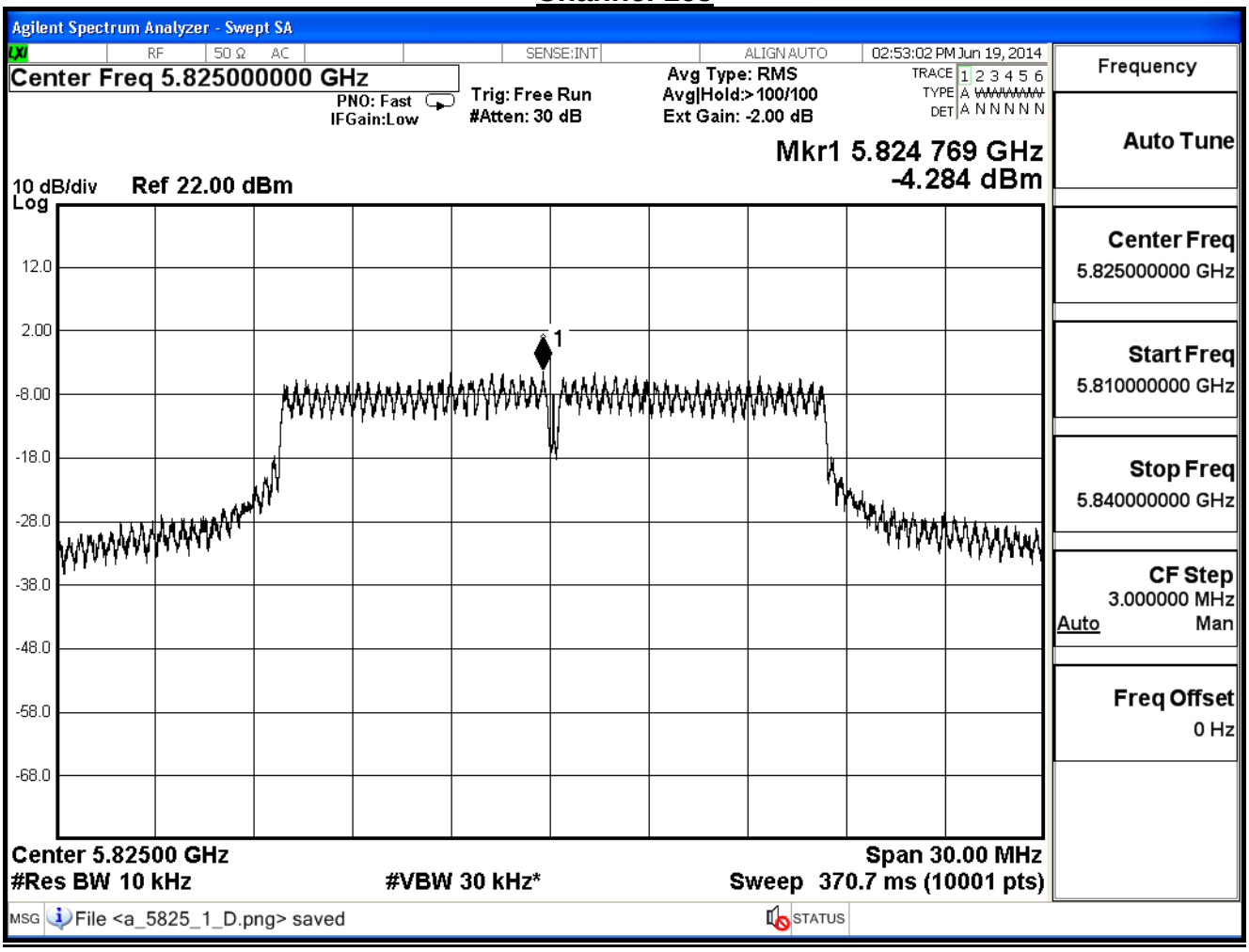
Channel 149


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
02:48:30 PM Jun 19, 2014
Center Freq 5.745000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.743 191 GHz
-4.505 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.74500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.745000000 GHz
Start Freq
5.730000000 GHz
Stop Freq
5.760000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 157


Agilent Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
02:49:55 PM Jun 19, 2014
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.786 329 GHz
-3.821 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
Center 5.78500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.785000000 GHz
Start Freq
5.770000000 GHz
Stop Freq
5.800000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 165


Agilent Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
02:53:02 PM Jun 19, 2014
Center Freq 5.825000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.824 769 GHz
-4.284 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.82500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
File <a_5825_1_D.png> saved
STATUS
Frequency
Auto Tune
Center Freq
5.825000000 GHz
Start Freq
5.810000000 GHz
Stop Freq
5.840000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE 802.11a (ANT2)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
149	5745	-4.125	12.865	≦26.79
157	5785	-4.071	12.919	≦26.79
165	5825	-4.040	12.950	≦26.79

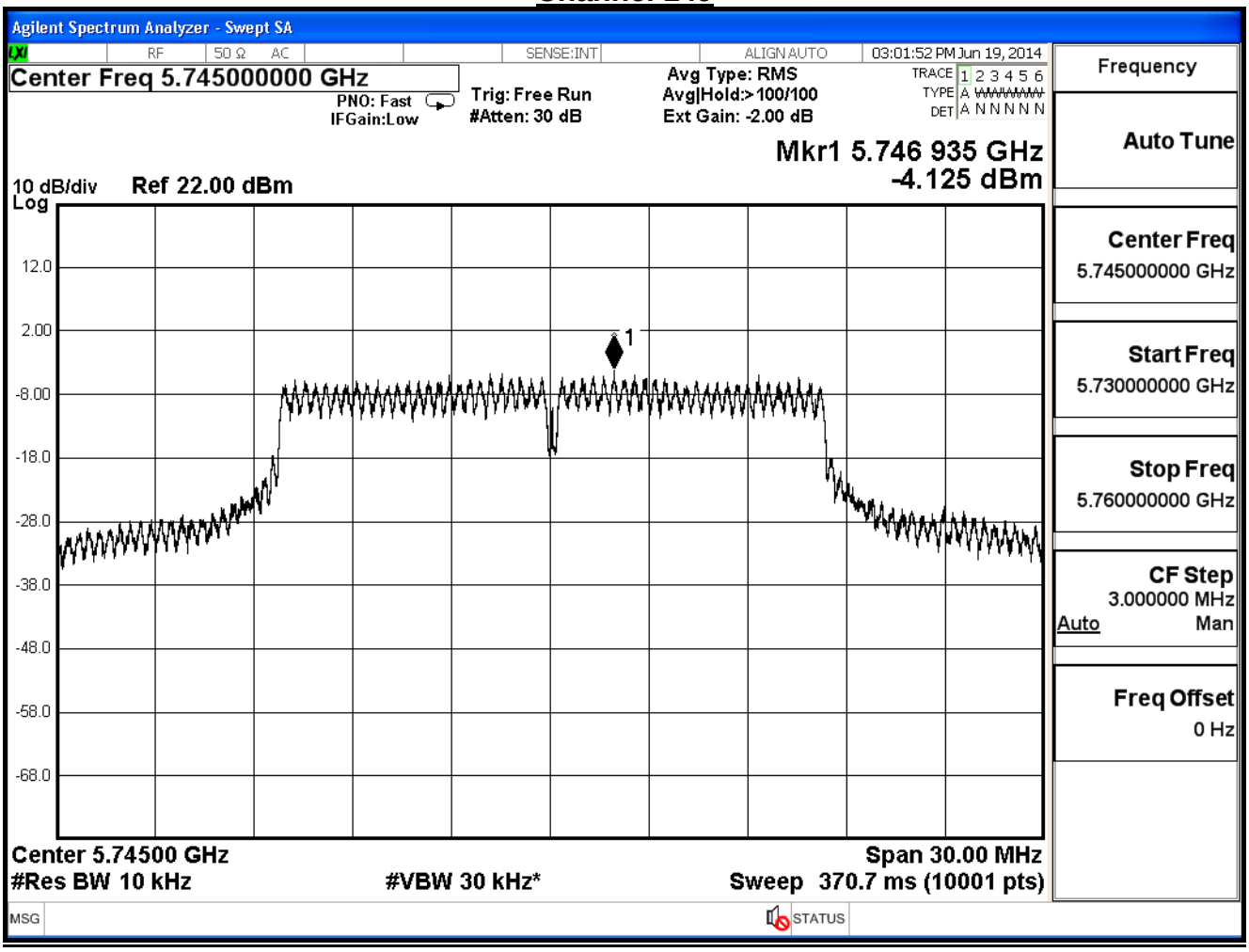
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

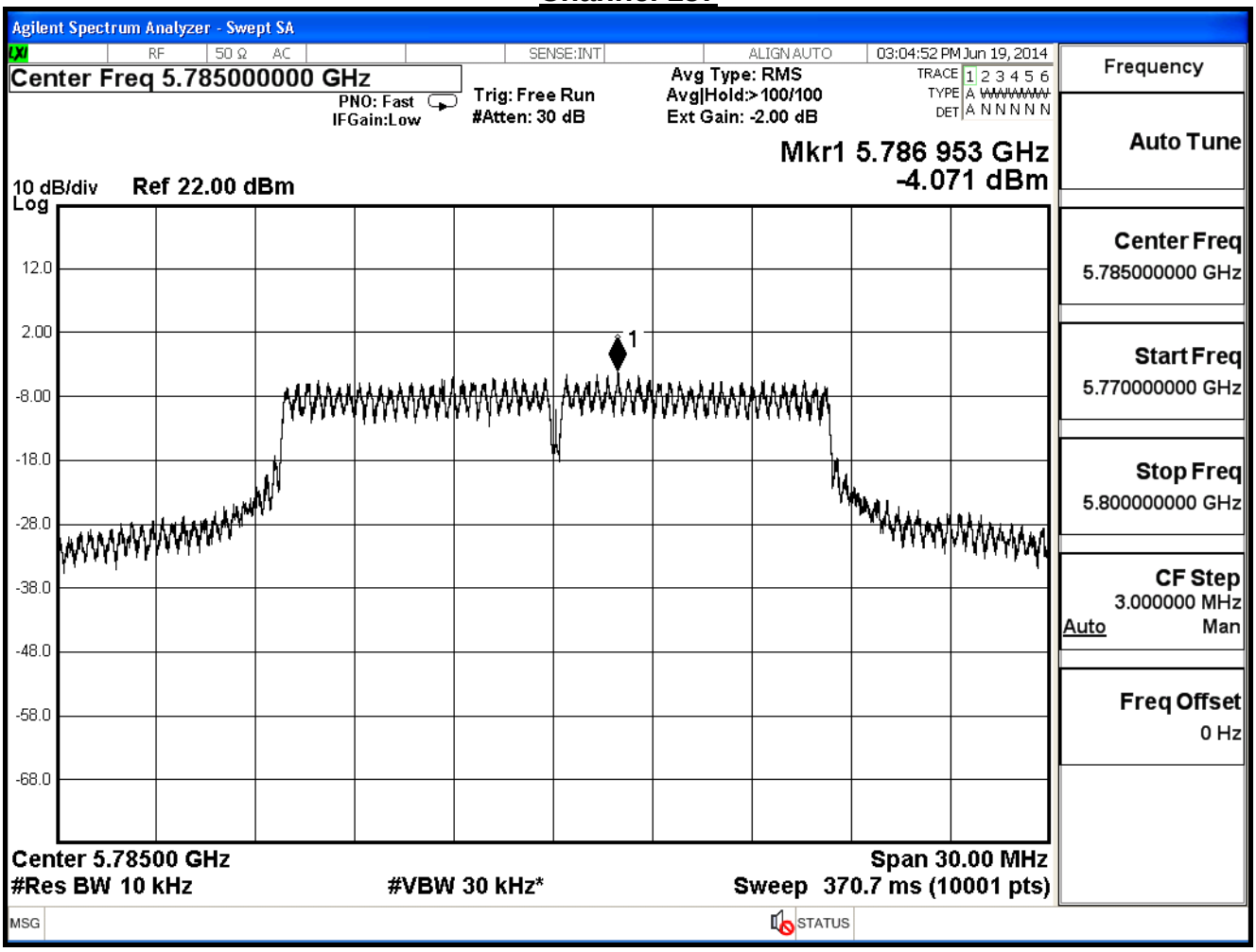
Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

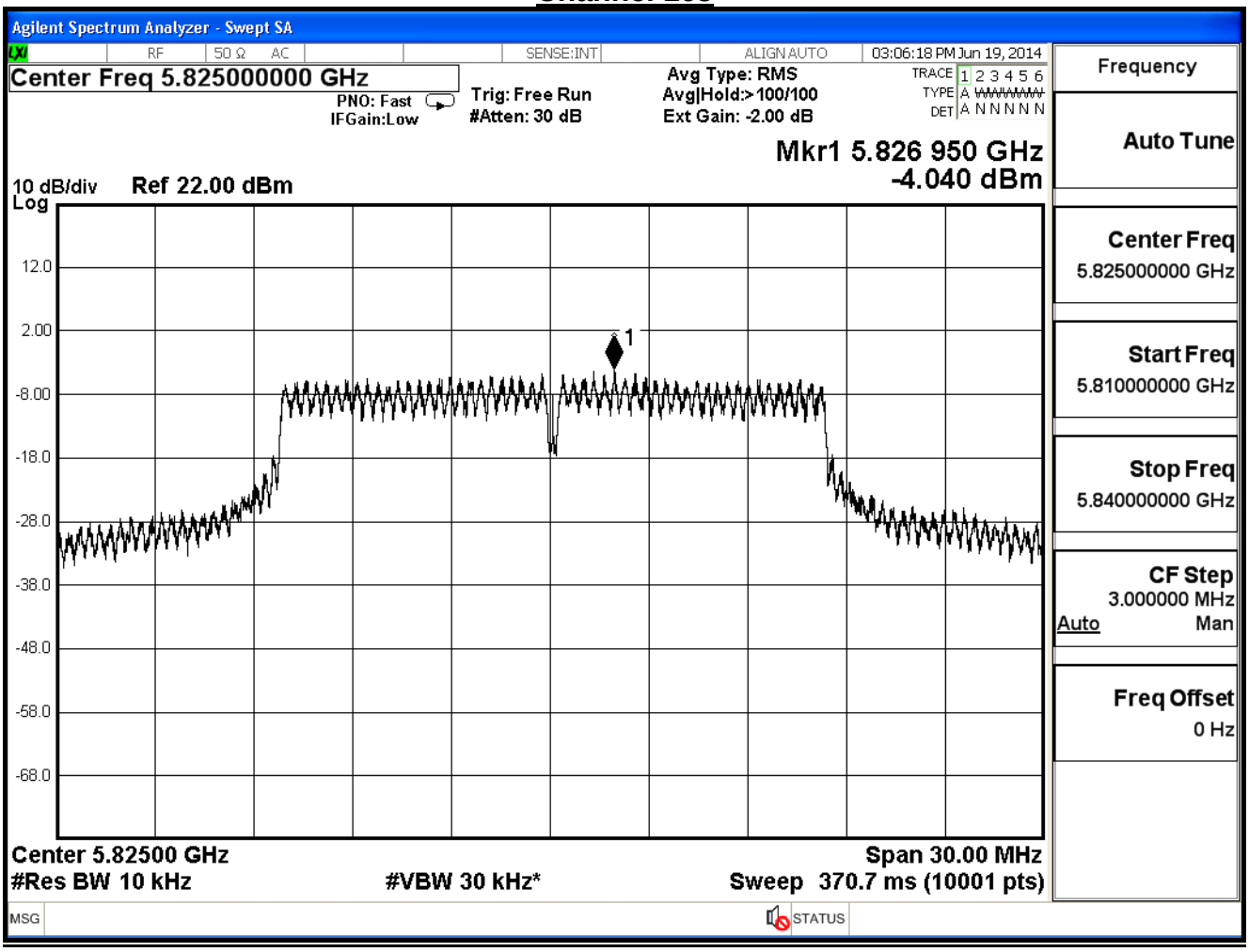
Channel 149


Agilent Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
03:01:52 PM Jun 19, 2014
Center Freq 5.745000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.746 935 GHz
-4.125 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.74500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.745000000 GHz
Start Freq
5.730000000 GHz
Stop Freq
5.760000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 157


Agilent Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
03:04:52 PM Jun 19, 2014
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.786 953 GHz
-4.071 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.78500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.785000000 GHz
Start Freq
5.770000000 GHz
Stop Freq
5.800000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 165


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
03:06:18 PM Jun 19, 2014
Center Freq 5.825000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.826 950 GHz
-4.040 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.82500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.825000000 GHz
Start Freq
5.810000000 GHz
Stop Freq
5.840000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE 802.11a (ANT0+1+2)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
149	5745	17.500	≦26.79
157	5785	17.940	≦26.79
165	5825	17.709	≦26.79

Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE802.11n_20MHz_(ANT 0)

Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
149	5745	-5.469	11.521	≦26.79
157	5785	-5.272	11.718	≦26.79
165	5825	-5.245	11.745	≦26.79

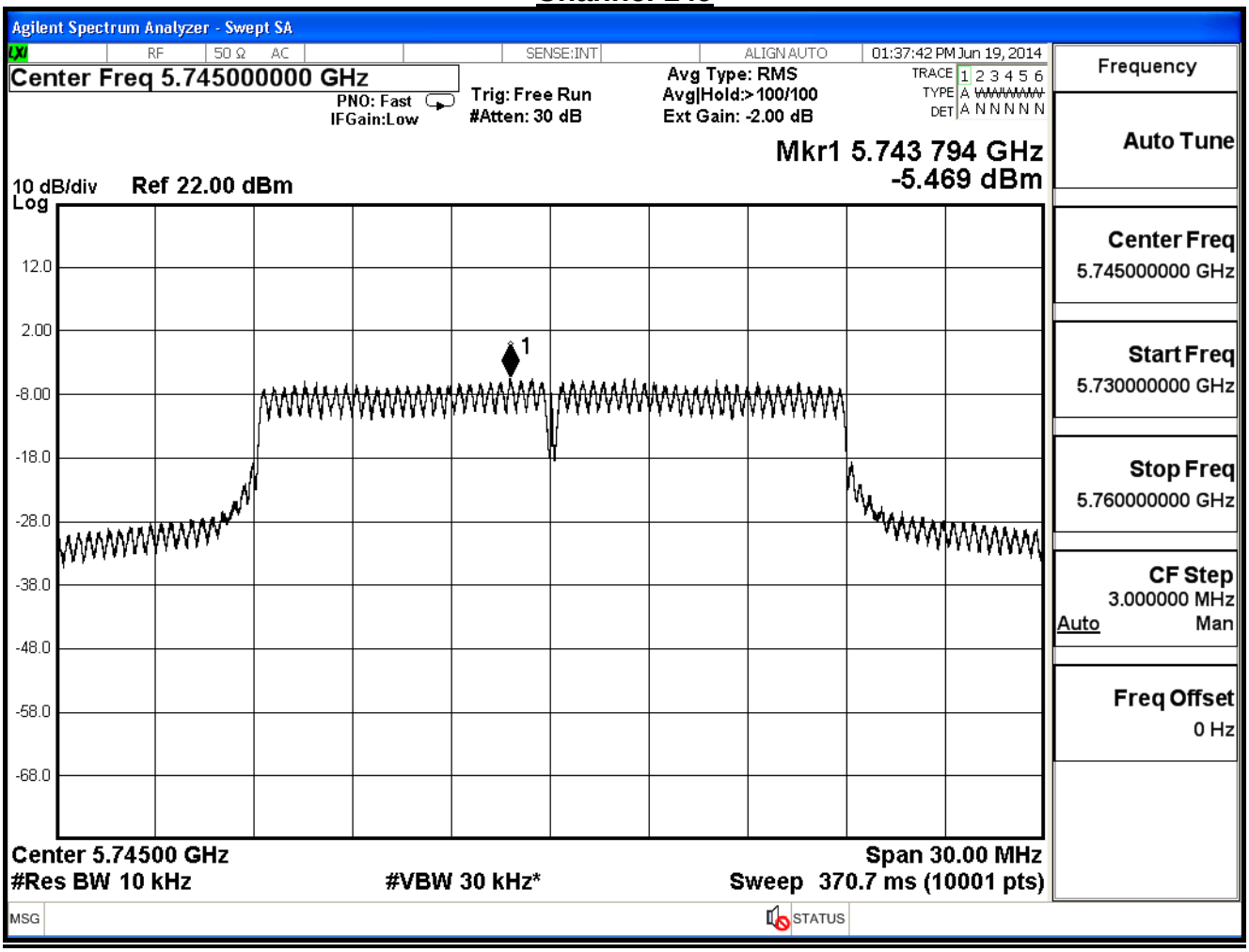
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

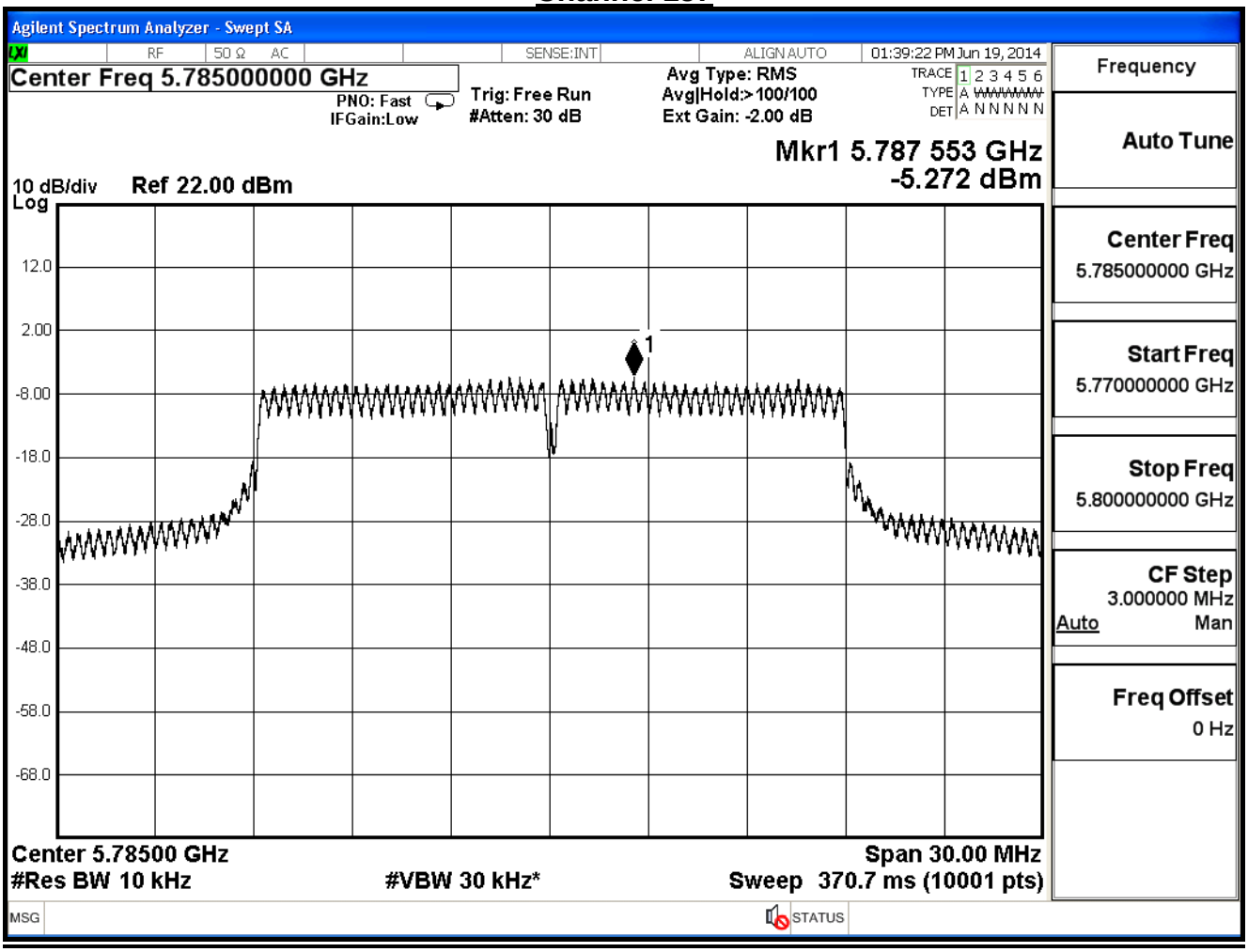
Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

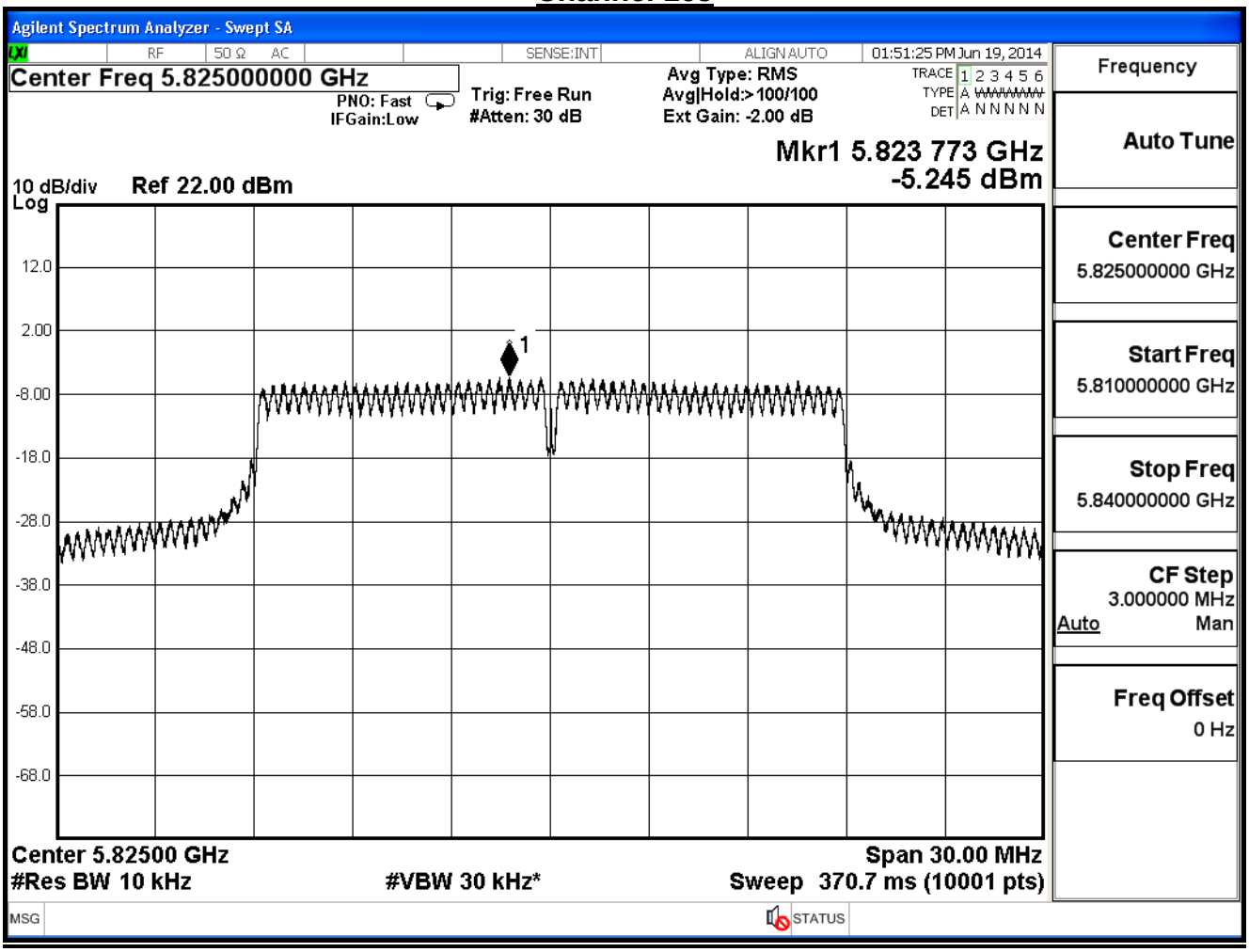
Channel 149


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
01:37:42 PM Jun 19, 2014
Center Freq 5.745000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.743 794 GHz
-5.469 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.74500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.745000000 GHz
Start Freq
5.730000000 GHz
Stop Freq
5.760000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 157


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
01:39:22 PM Jun 19, 2014
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.787 553 GHz
-5.272 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
Center 5.78500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.785000000 GHz
Start Freq
5.770000000 GHz
Stop Freq
5.800000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 165


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
01:51:25 PM Jun 19, 2014
Center Freq 5.825000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.823 773 GHz
-5.245 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.82500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.825000000 GHz
Start Freq
5.810000000 GHz
Stop Freq
5.840000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE802.11n_20MHz_(ANT 1)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
149	5745	-5.375	11.615	≦26.79
157	5785	-5.356	11.634	≦26.79
165	5825	-5.377	11.613	≦26.79

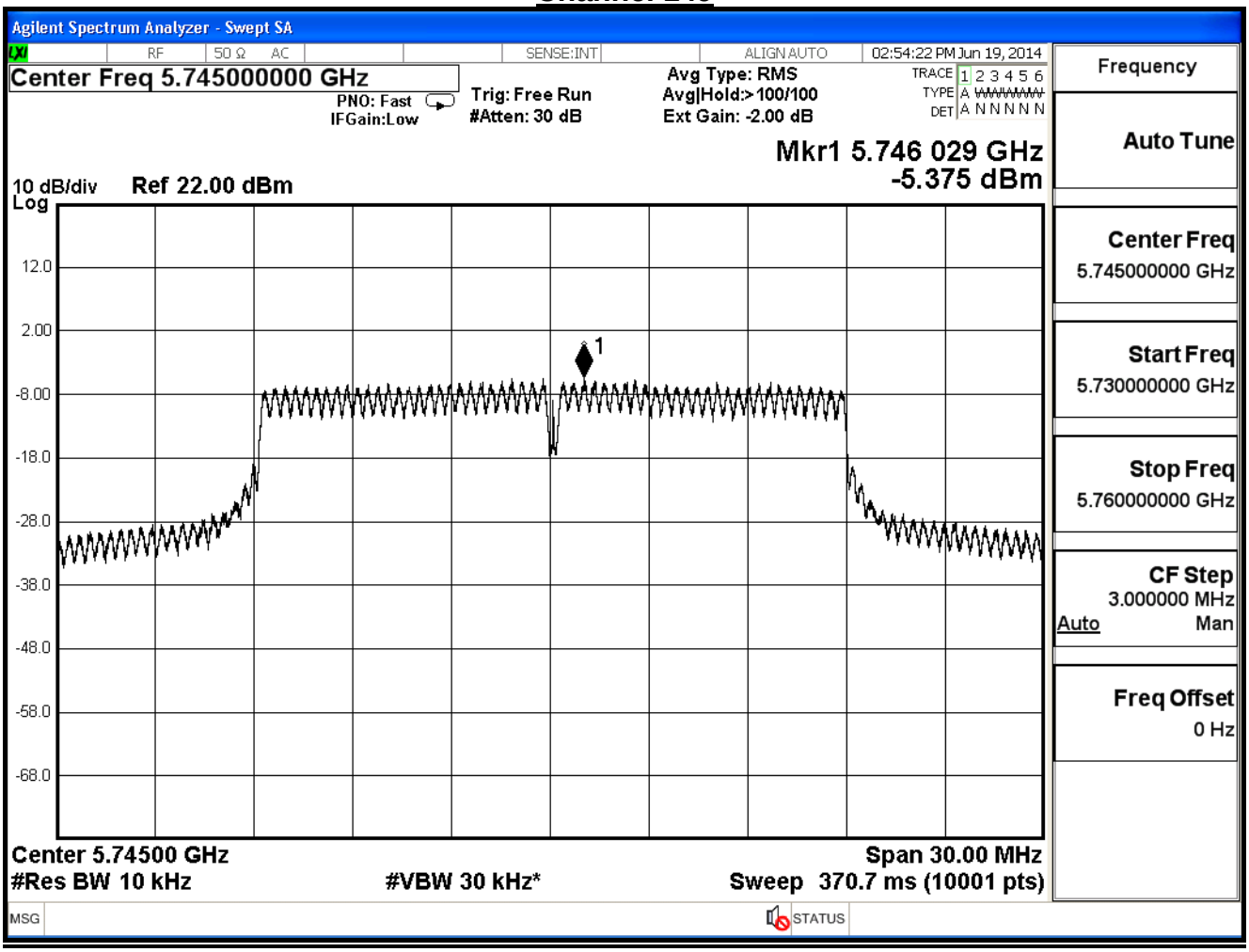
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

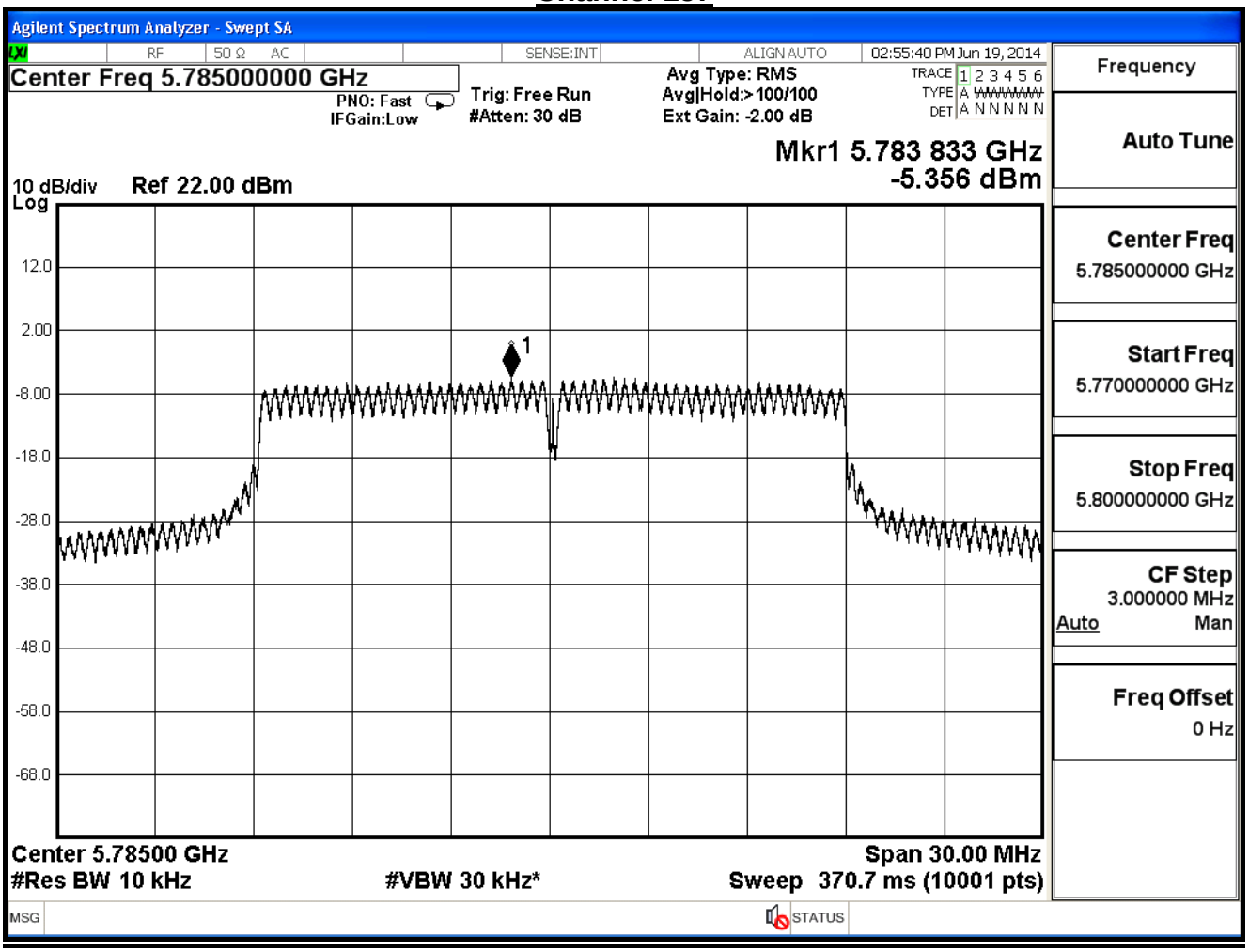
Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

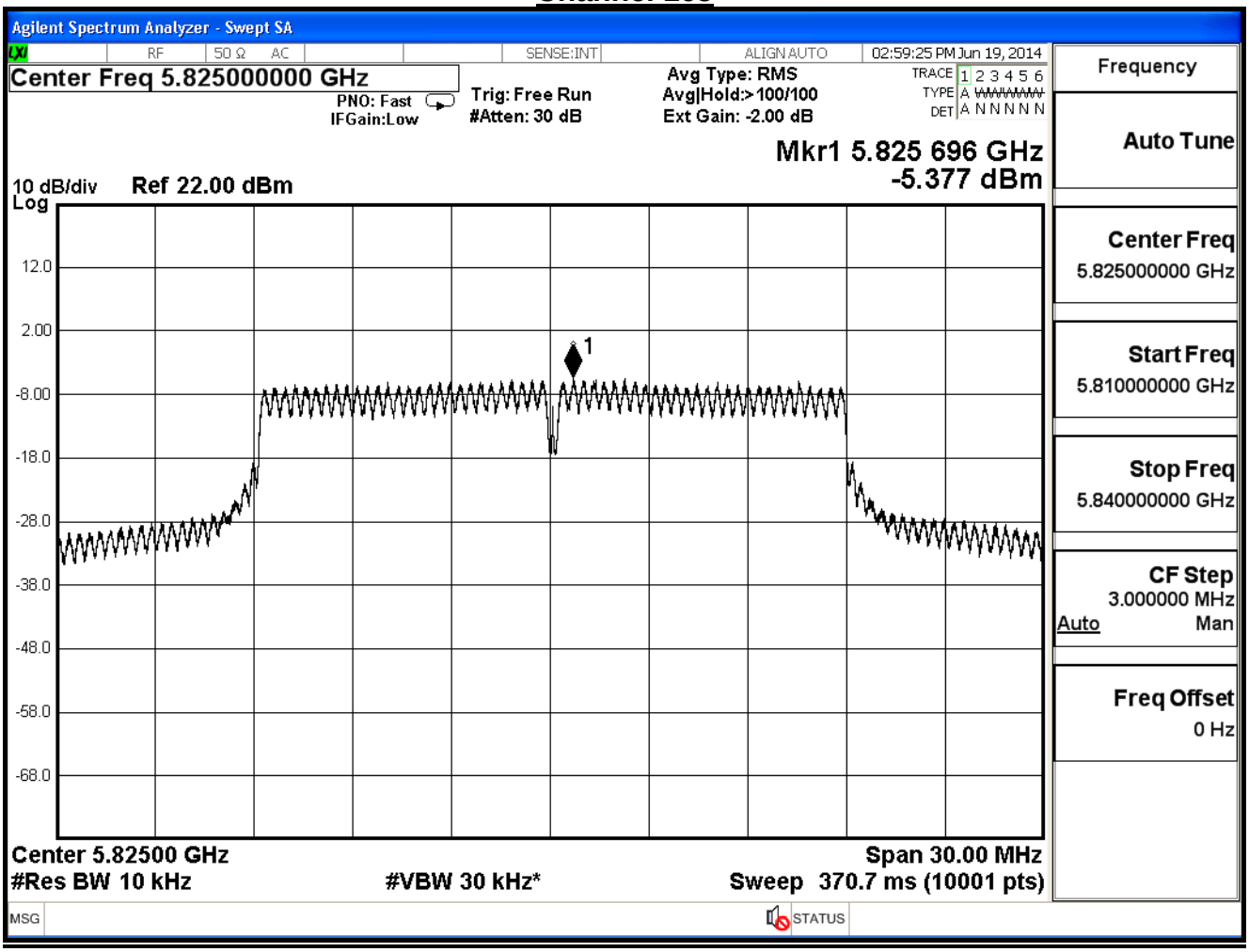
Channel 149


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
02:54:22 PM Jun 19, 2014
Center Freq 5.745000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.746 029 GHz
-5.375 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.74500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.745000000 GHz
Start Freq
5.730000000 GHz
Stop Freq
5.760000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 157


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
02:55:40 PM Jun 19, 2014
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.783 833 GHz
-5.356 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.78500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.785000000 GHz
Start Freq
5.770000000 GHz
Stop Freq
5.800000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 165


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
02:59:25 PM Jun 19, 2014
Center Freq 5.825000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.825 696 GHz
-5.377 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.82500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.825000000 GHz
Start Freq
5.810000000 GHz
Stop Freq
5.840000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE802.11n_20MHz_(ANT 2)

Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
149	5745	-5.467	11.523	≦26.79
157	5785	-4.969	12.021	≦26.79
165	5825	-5.261	11.729	≦26.79

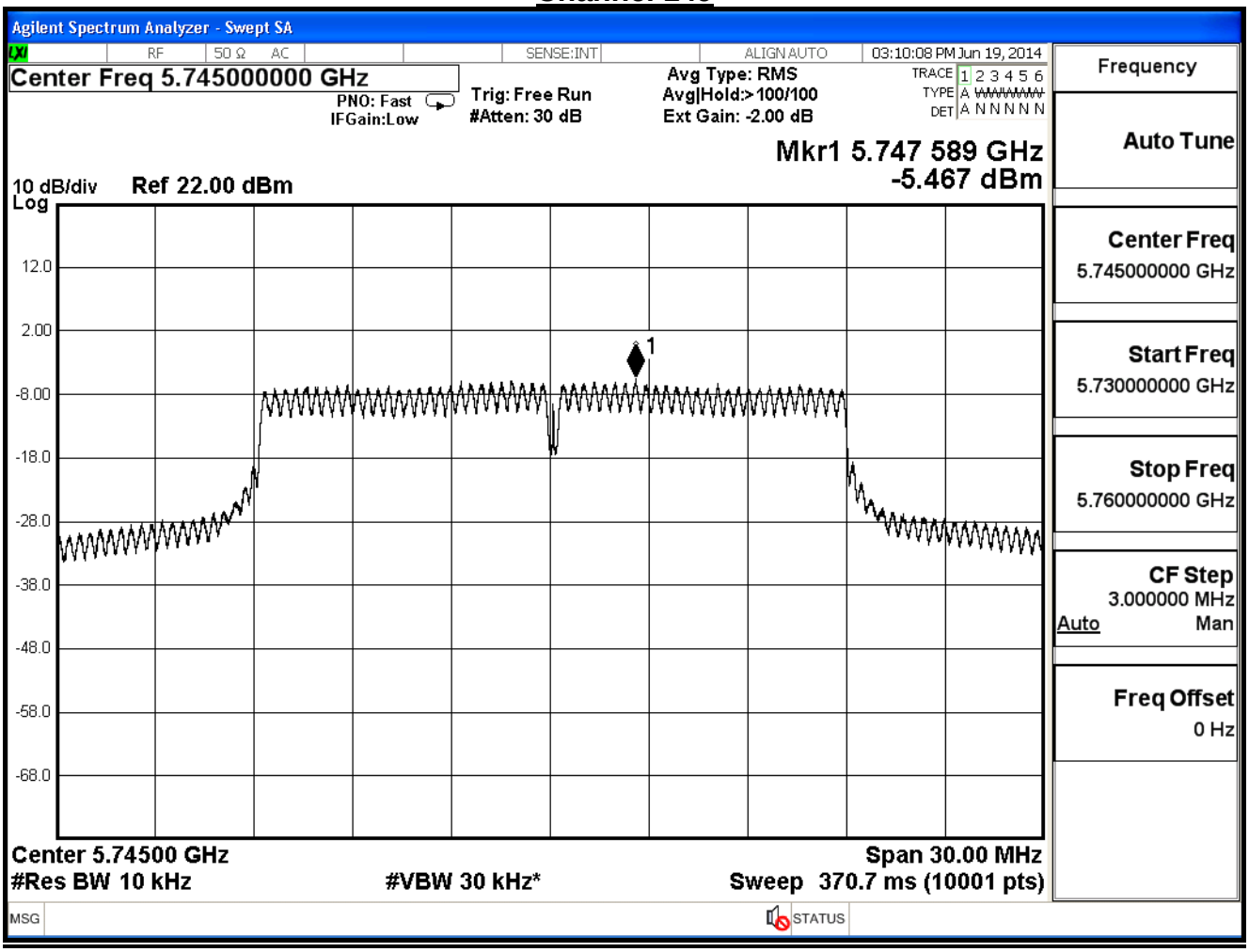
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

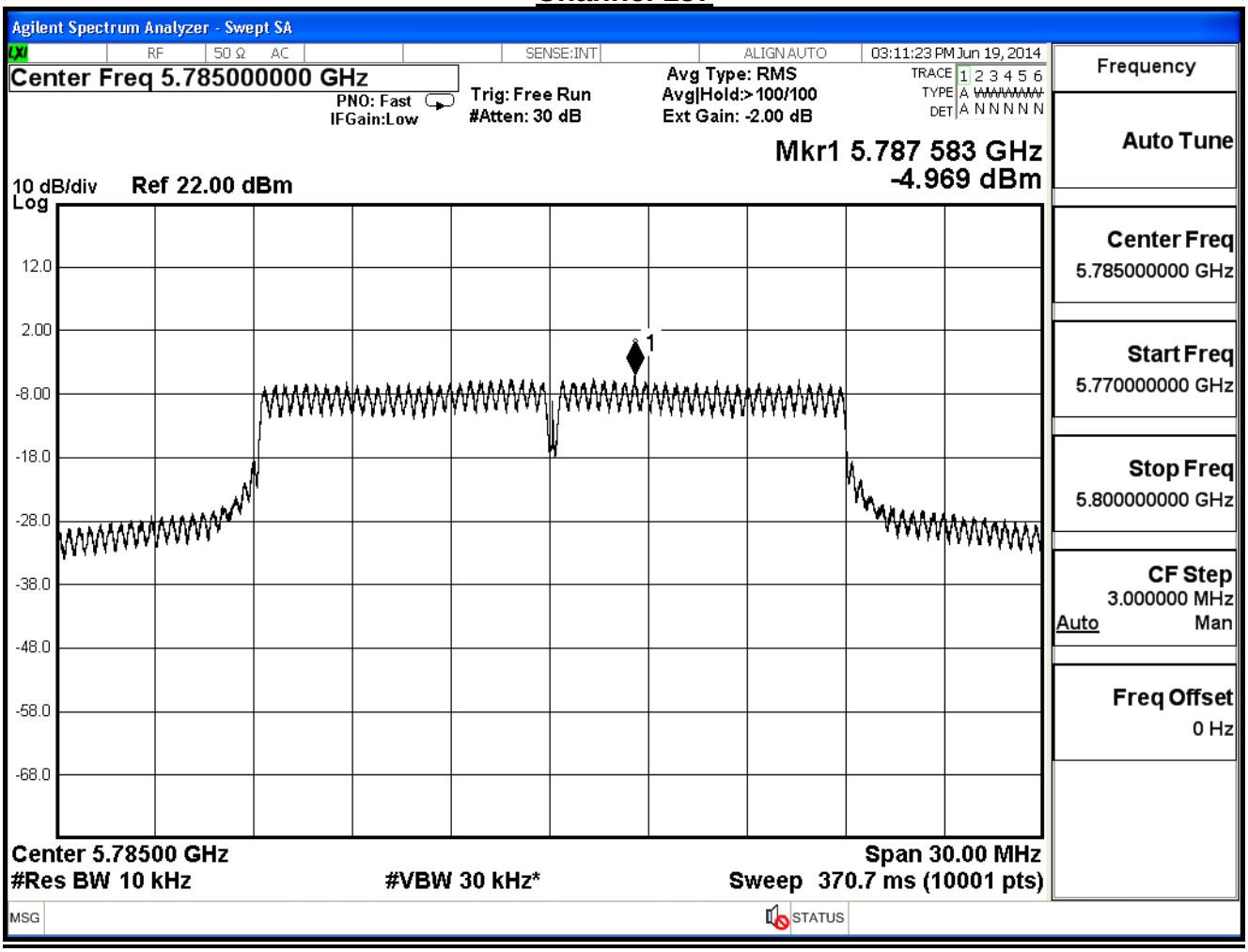
Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

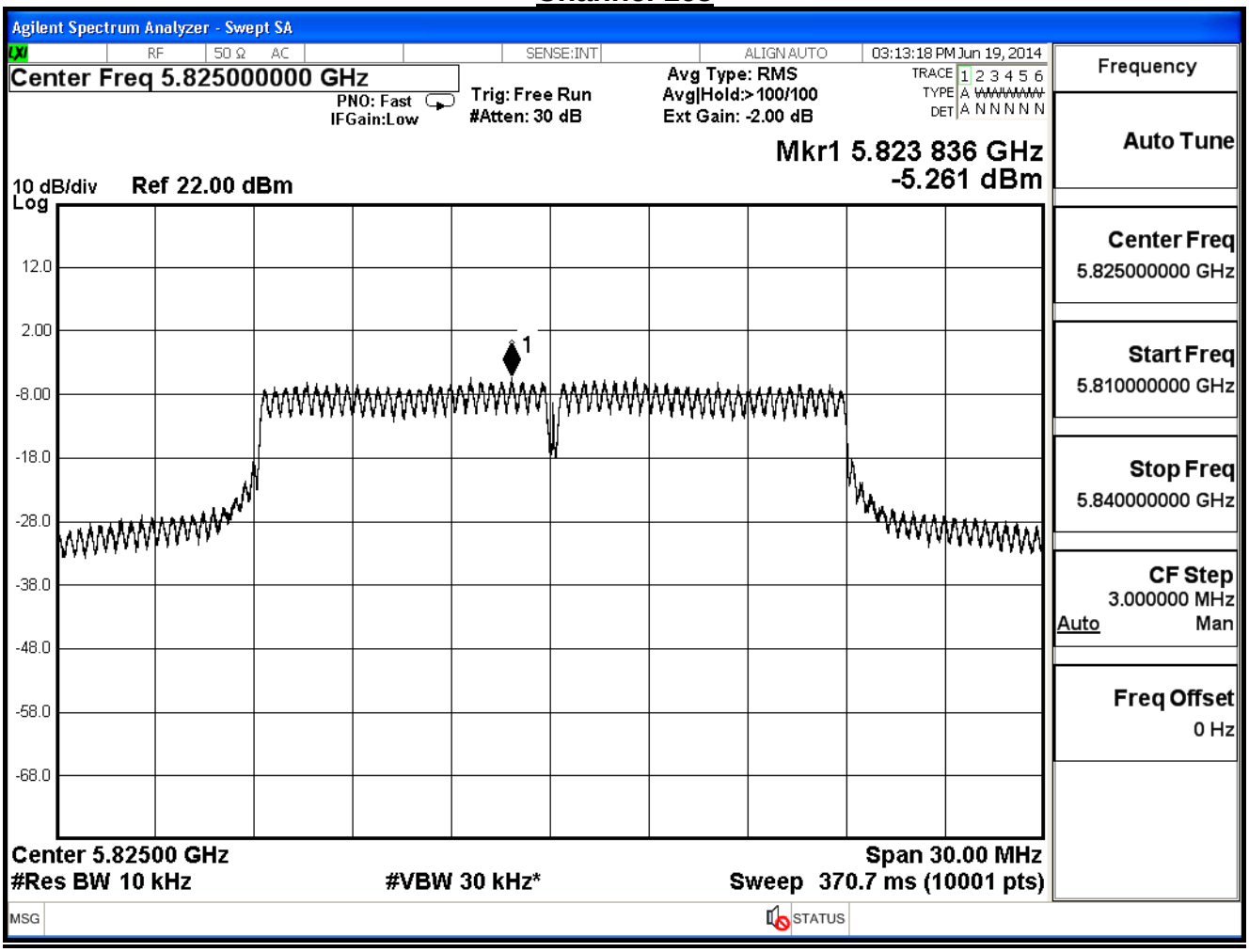
Channel 149


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
03:10:08 PM Jun 19, 2014
Center Freq 5.745000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.747 589 GHz
-5.467 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.74500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.745000000 GHz
Start Freq
5.730000000 GHz
Stop Freq
5.760000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 157


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
03:11:23 PM Jun 19, 2014
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.787 583 GHz
-4.969 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.78500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.785000000 GHz
Start Freq
5.770000000 GHz
Stop Freq
5.800000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 165


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
03:13:18 PM Jun 19, 2014
Center Freq 5.825000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.823 836 GHz
-5.261 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.82500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.825000000 GHz
Start Freq
5.810000000 GHz
Stop Freq
5.840000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE802.11n 20MHz(ANT 0+1+2)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
149	5745	16.324	≦26.79
157	5785	16.565	≦26.79
165	5825	16.467	≦26.79

Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE 802.11n_40MHz (ANT 0)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
151	5755	-10.377	6.613	≦26.79
159	5795	-7.896	9.094	≦26.79

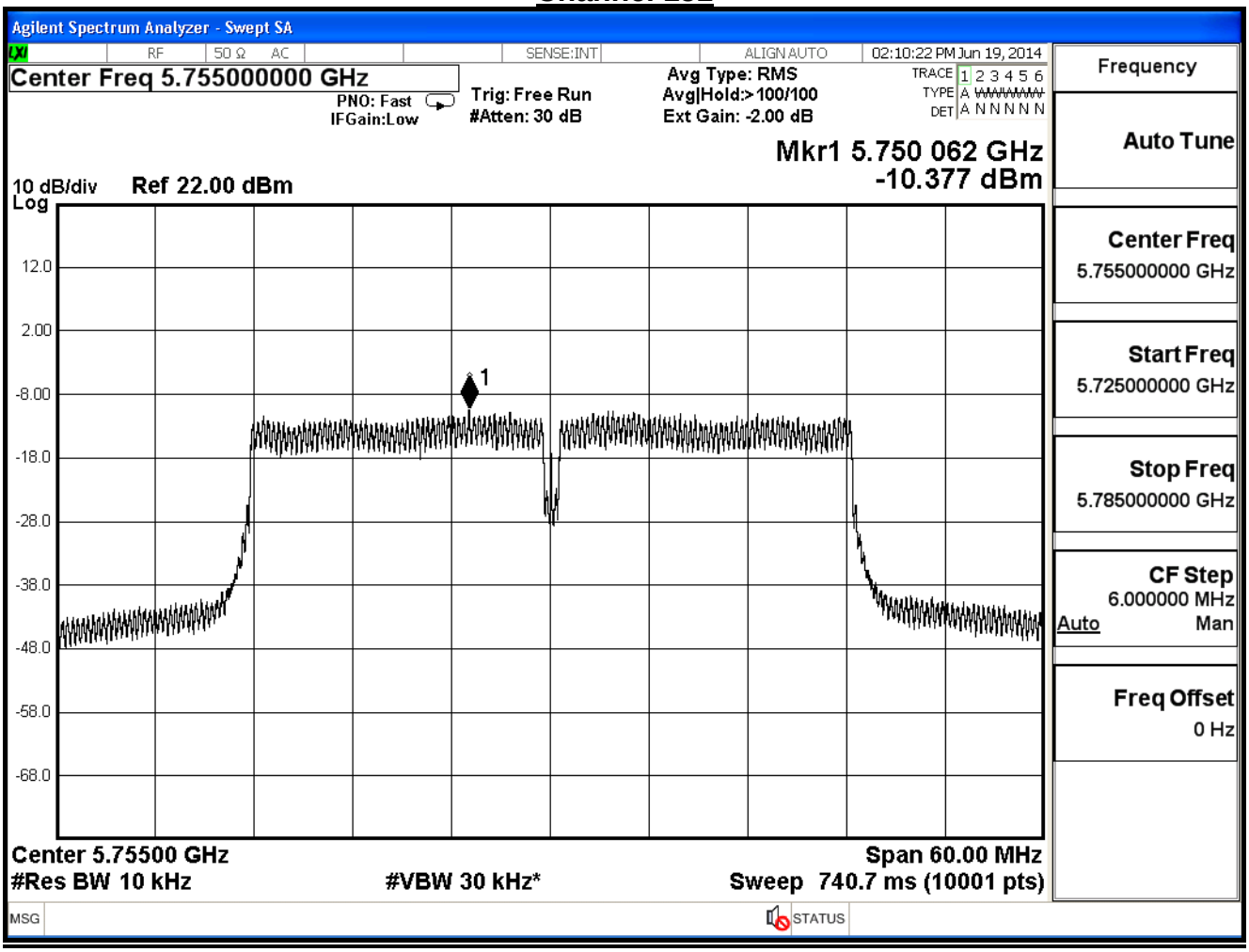
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

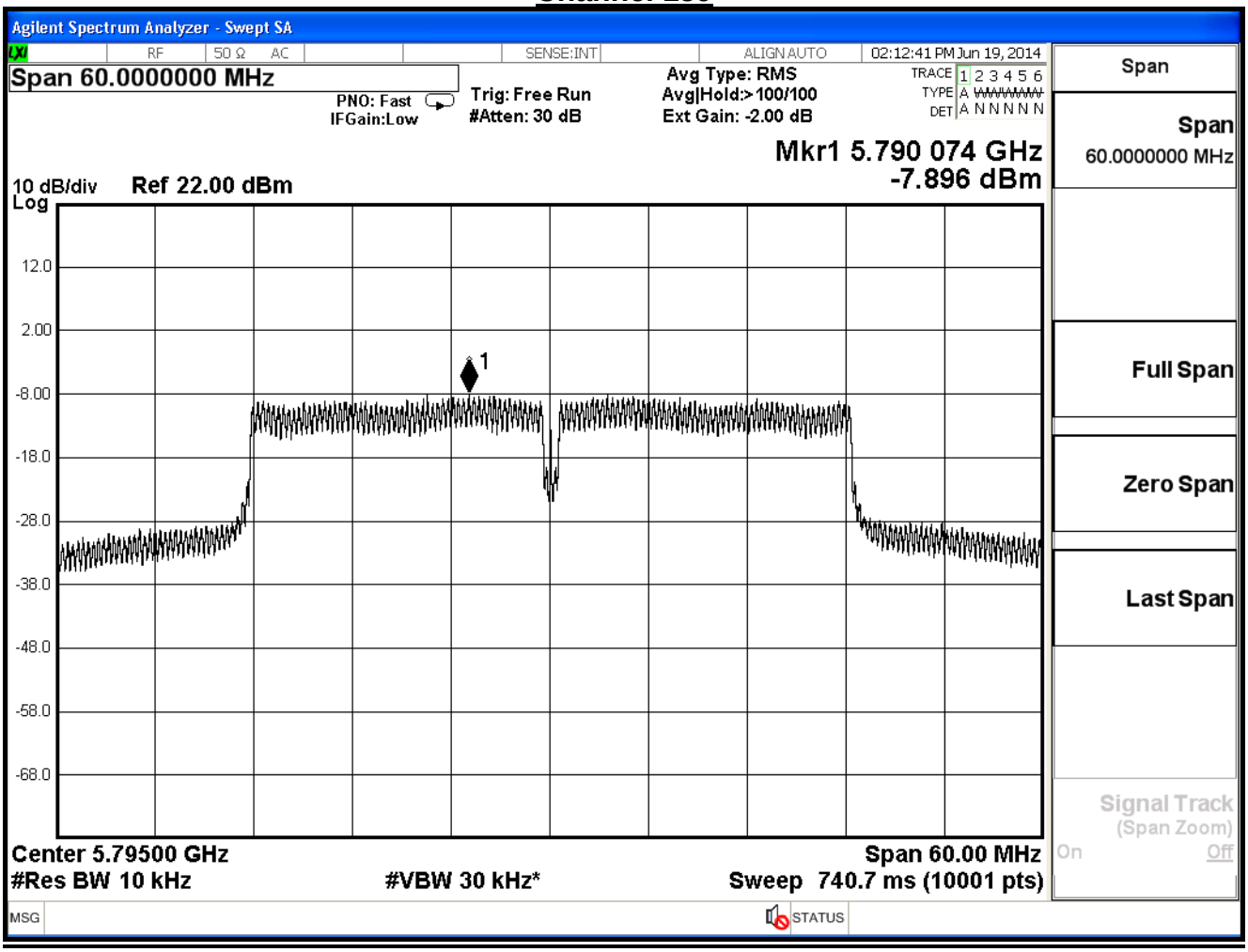
Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Channel 151


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
02:10:22 PM Jun 19, 2014
Center Freq 5.755000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.750 062 GHz
-10.377 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.75500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 60.00 MHz
Sweep 740.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.755000000 GHz
Start Freq
5.725000000 GHz
Stop Freq
5.785000000 GHz
CF Step
6.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 159


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
02:12:41 PM Jun 19, 2014
Span 60.0000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.790 074 GHz
-7.896 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.79500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 60.00 MHz
Sweep 740.7 ms (10001 pts)
MSG
STATUS
Span
Span
60.0000000 MHz
Full Span
Zero Span
Last Span
Signal Track
(Span Zoom)
On
Off

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE 802.11n_40MHz (ANT 1)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
151	5755	-10.597	6.393	≦26.79
159	5795	-7.813	9.177	≦26.79

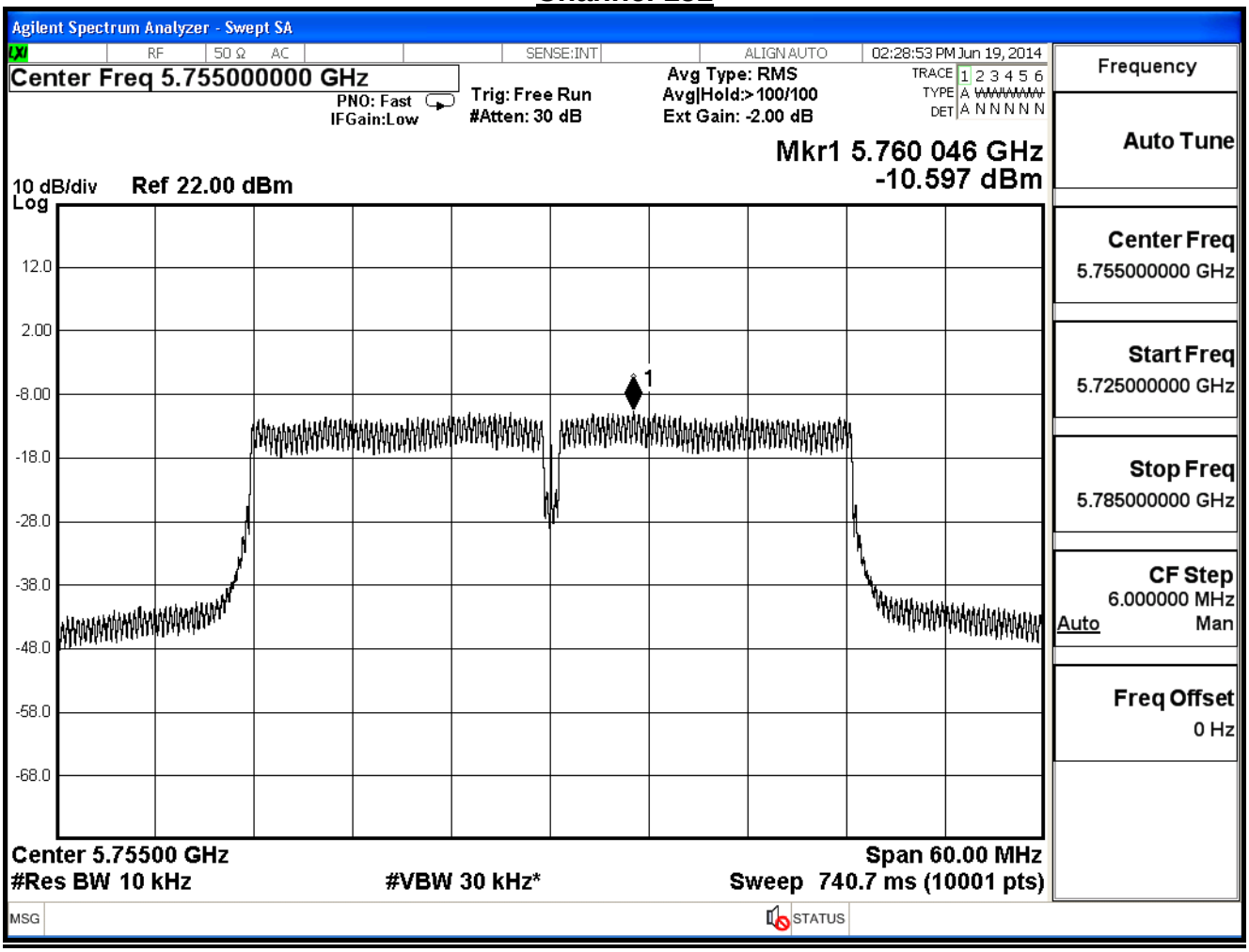
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

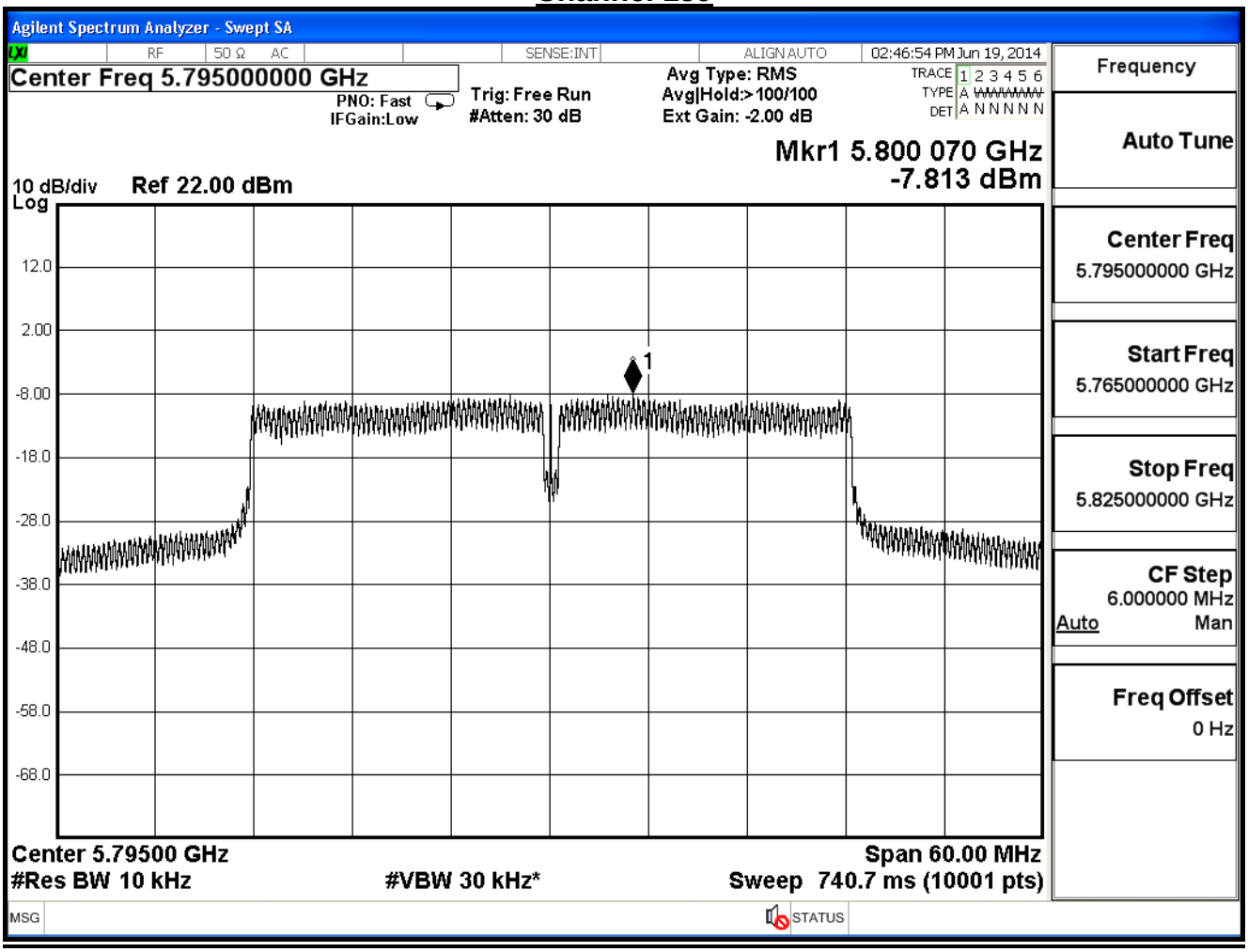
Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Channel 151


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
02:28:53 PM Jun 19, 2014
Center Freq 5.755000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.760 046 GHz
-10.597 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.75500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 60.00 MHz
Sweep 740.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.755000000 GHz
Start Freq
5.725000000 GHz
Stop Freq
5.785000000 GHz
CF Step
6.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 159


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
02:46:54 PM Jun 19, 2014
Center Freq 5.795000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.800 070 GHz
-7.813 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.79500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 60.00 MHz
Sweep 740.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.795000000 GHz
Start Freq
5.765000000 GHz
Stop Freq
5.825000000 GHz
CF Step
6.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

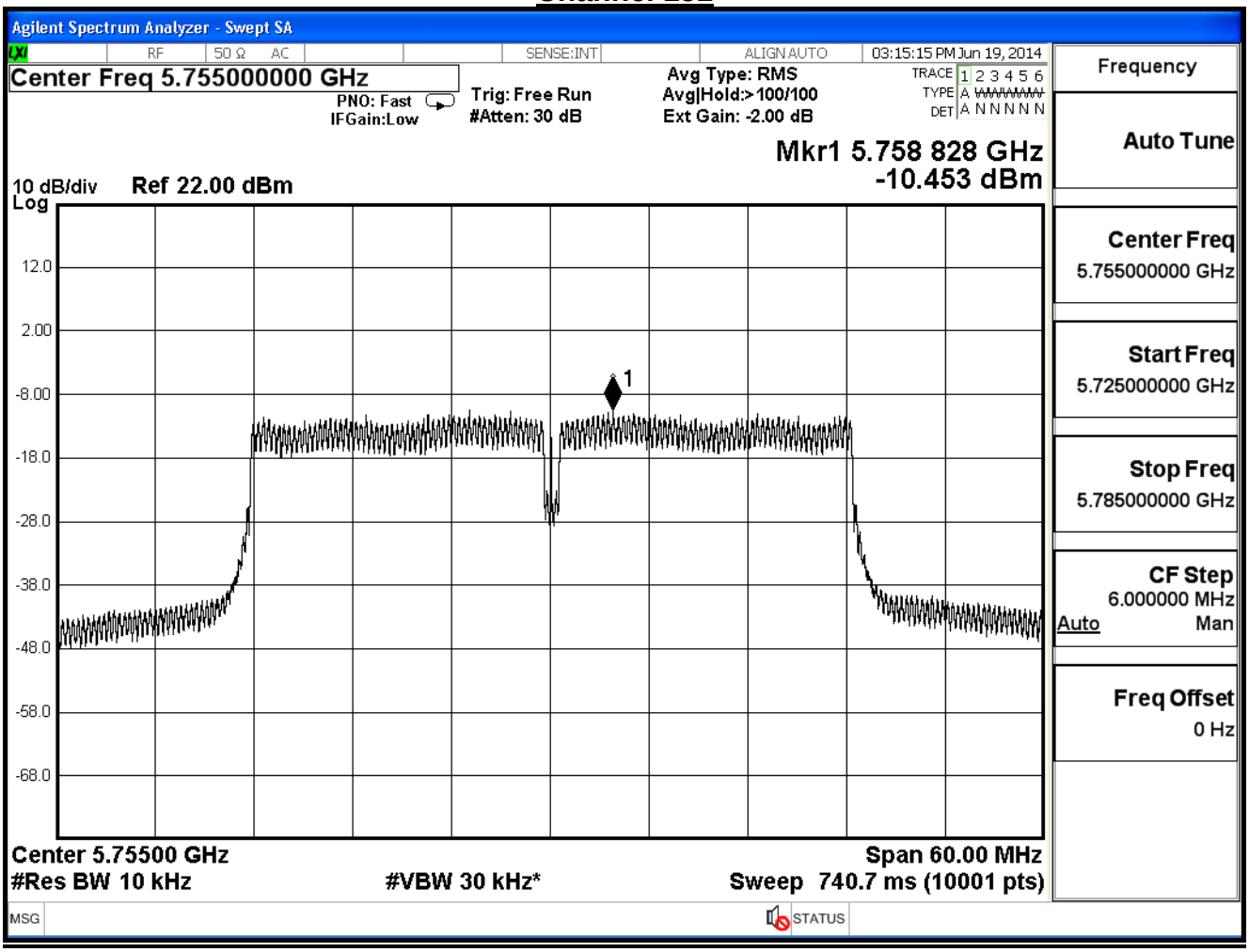
IEEE 802.11n_40MHz (ANT 2)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
151	5755	-10.453	6.537	≦26.79
159	5795	-7.887	9.103	≦26.79

Note:

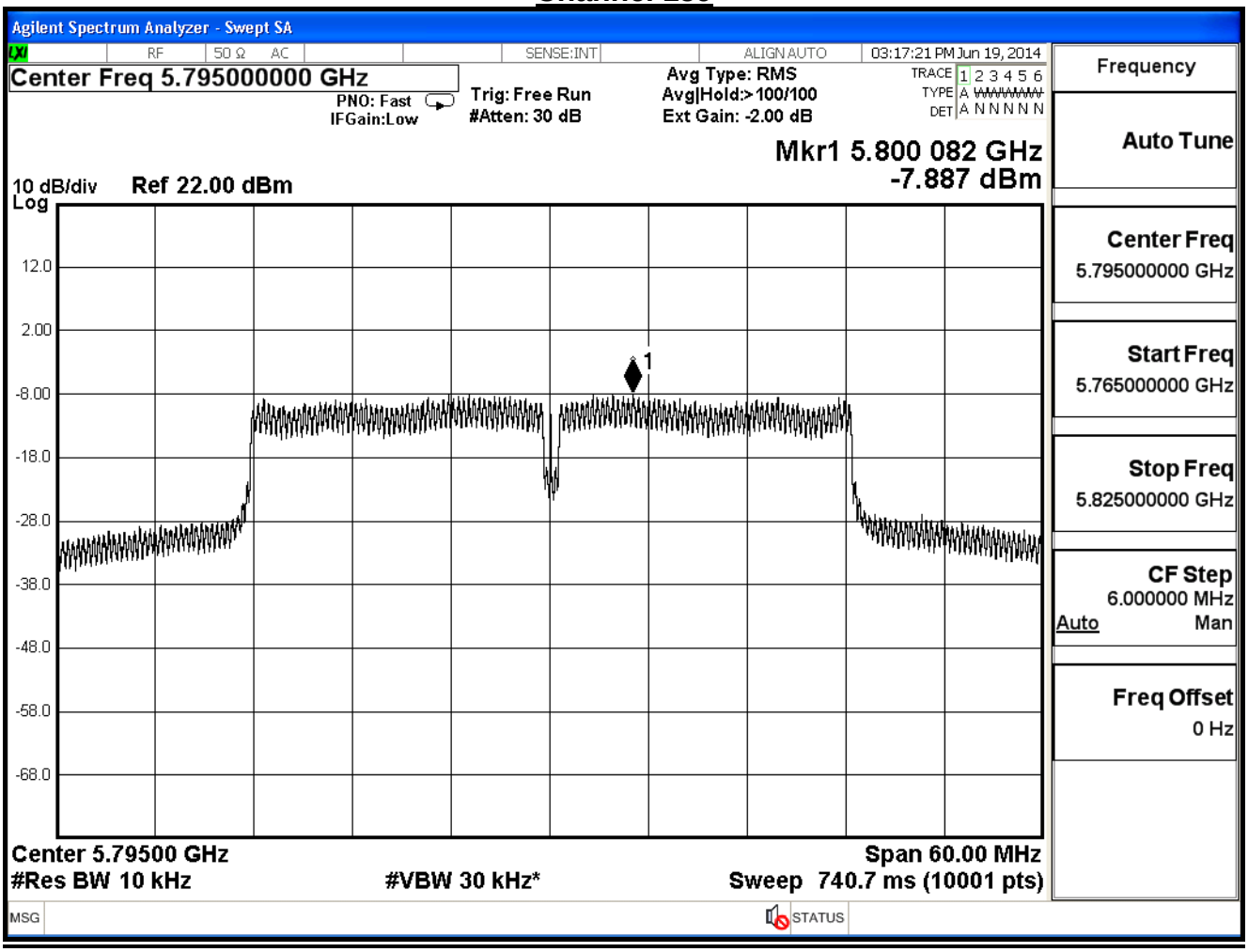
Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB
Measure Level= Reading Level+ correct factor

Channel 151


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
03:15:15 PM Jun 19, 2014
Center Freq 5.755000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.758 828 GHz
-10.453 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.75500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 60.00 MHz
Sweep 740.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.755000000 GHz
Start Freq
5.725000000 GHz
Stop Freq
5.785000000 GHz
CF Step
6.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 159


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
03:17:21 PM Jun 19, 2014
Center Freq 5.795000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.800 082 GHz
-7.887 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.79500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 60.00 MHz
Sweep 740.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.795000000 GHz
Start Freq
5.765000000 GHz
Stop Freq
5.825000000 GHz
CF Step
6.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE802.11n 40MHz(ANT 0+1+2)

Channel No.	Frequency (MHz)	Measurement (dBm)	Limit (dBm)
151	5755	11.287	≦26.79
159	5795	13.896	≦26.79

Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE 802.11ac_80MHz (ANT 0)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
155	5775	-14.320	2.670	≦26.79

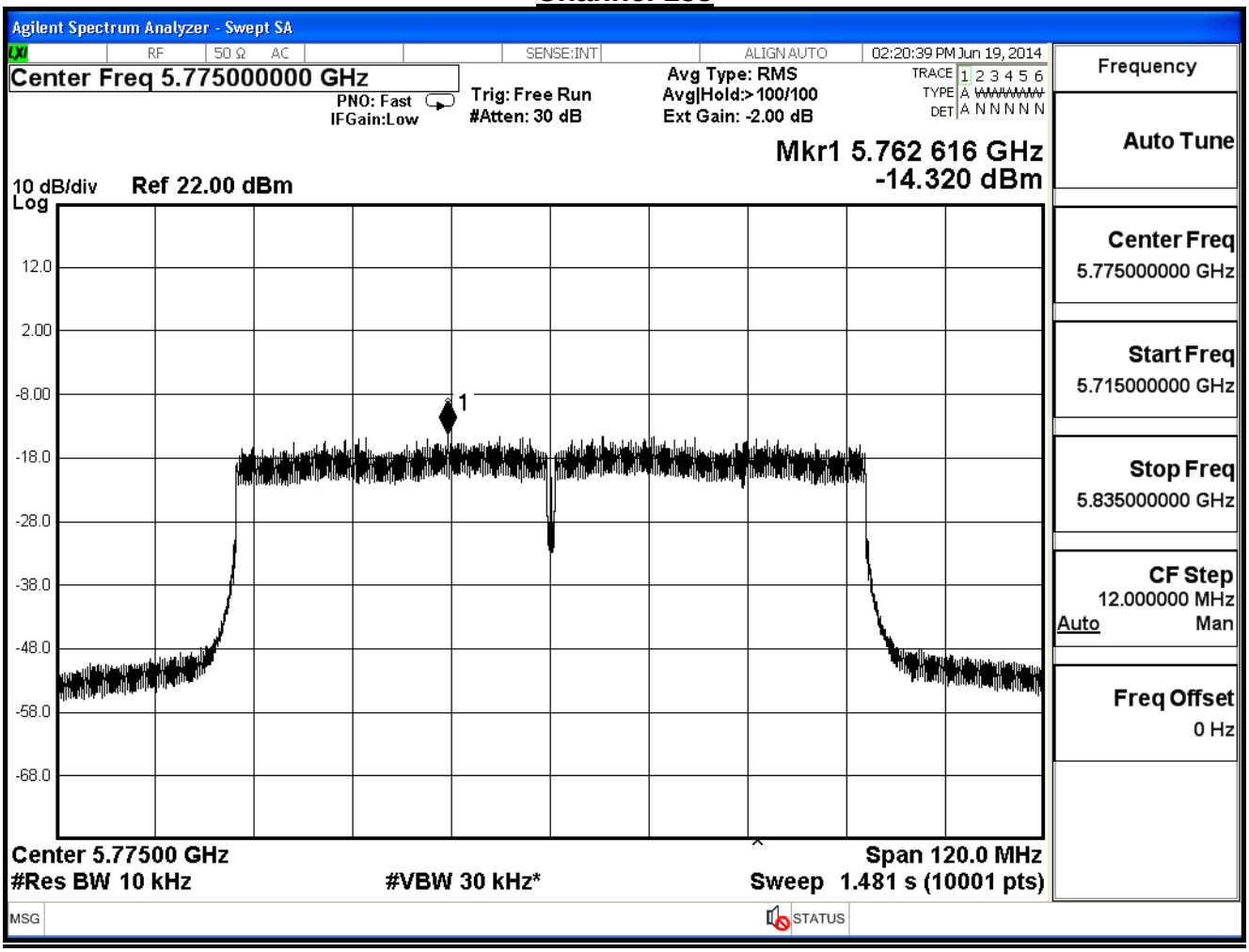
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Channel 155


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
02:20:39 PM Jun 19, 2014
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.762 616 GHz
-14.320 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.77500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 120.0 MHz
Sweep 1.481 s (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.775000000 GHz
Start Freq
5.715000000 GHz
Stop Freq
5.835000000 GHz
CF Step
12.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE 802.11ac_80MHz (ANT 1)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
155	5775	-13.797	3.193	≦26.79

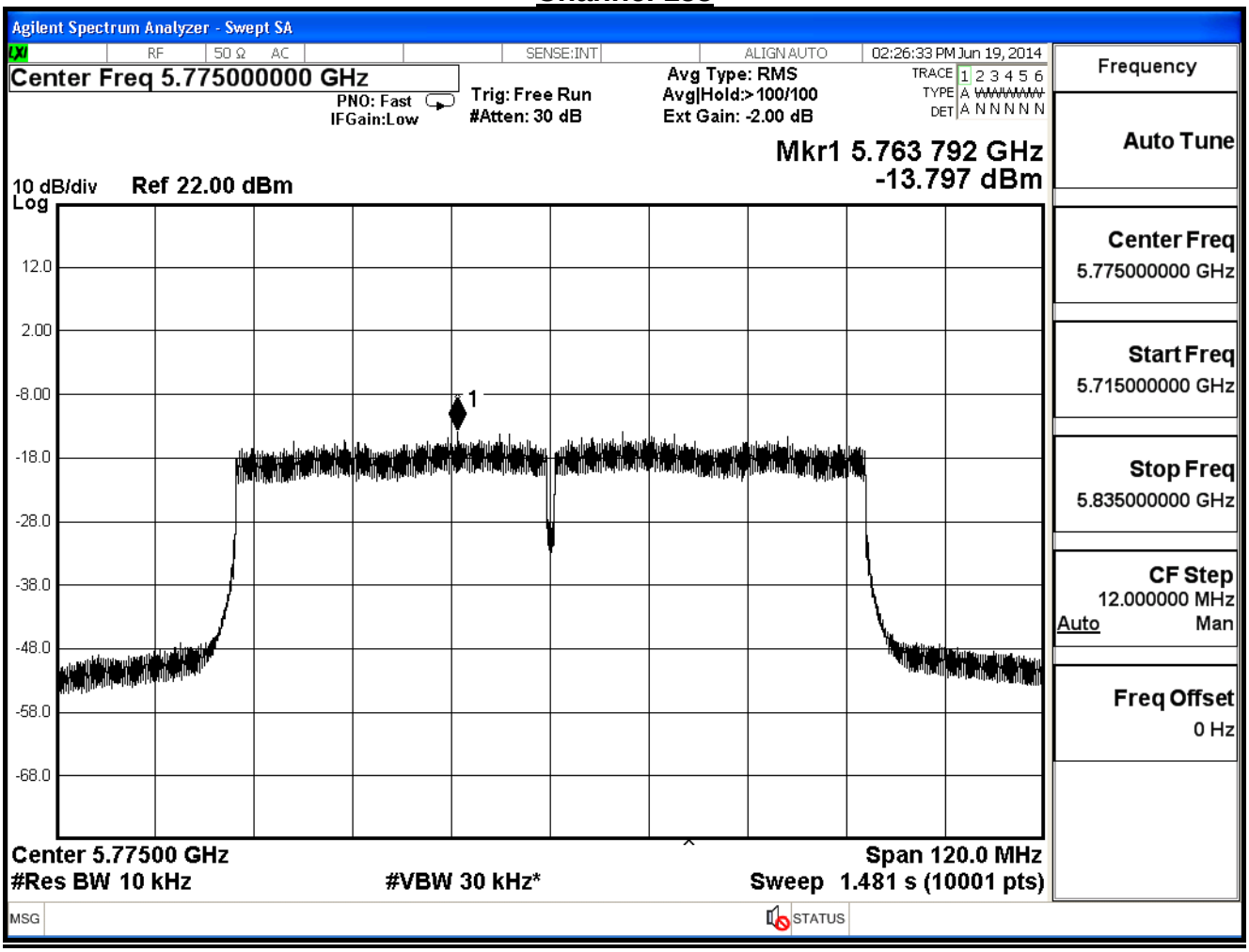
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Channel 155


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
02:26:33 PM Jun 19, 2014
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.763 792 GHz
-13.797 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.77500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 120.0 MHz
Sweep 1.481 s (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.775000000 GHz
Start Freq
5.715000000 GHz
Stop Freq
5.835000000 GHz
CF Step
12.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE 802.11ac_80MHz (ANT 2)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
155	5775	-13.871	3.119	≦26.79

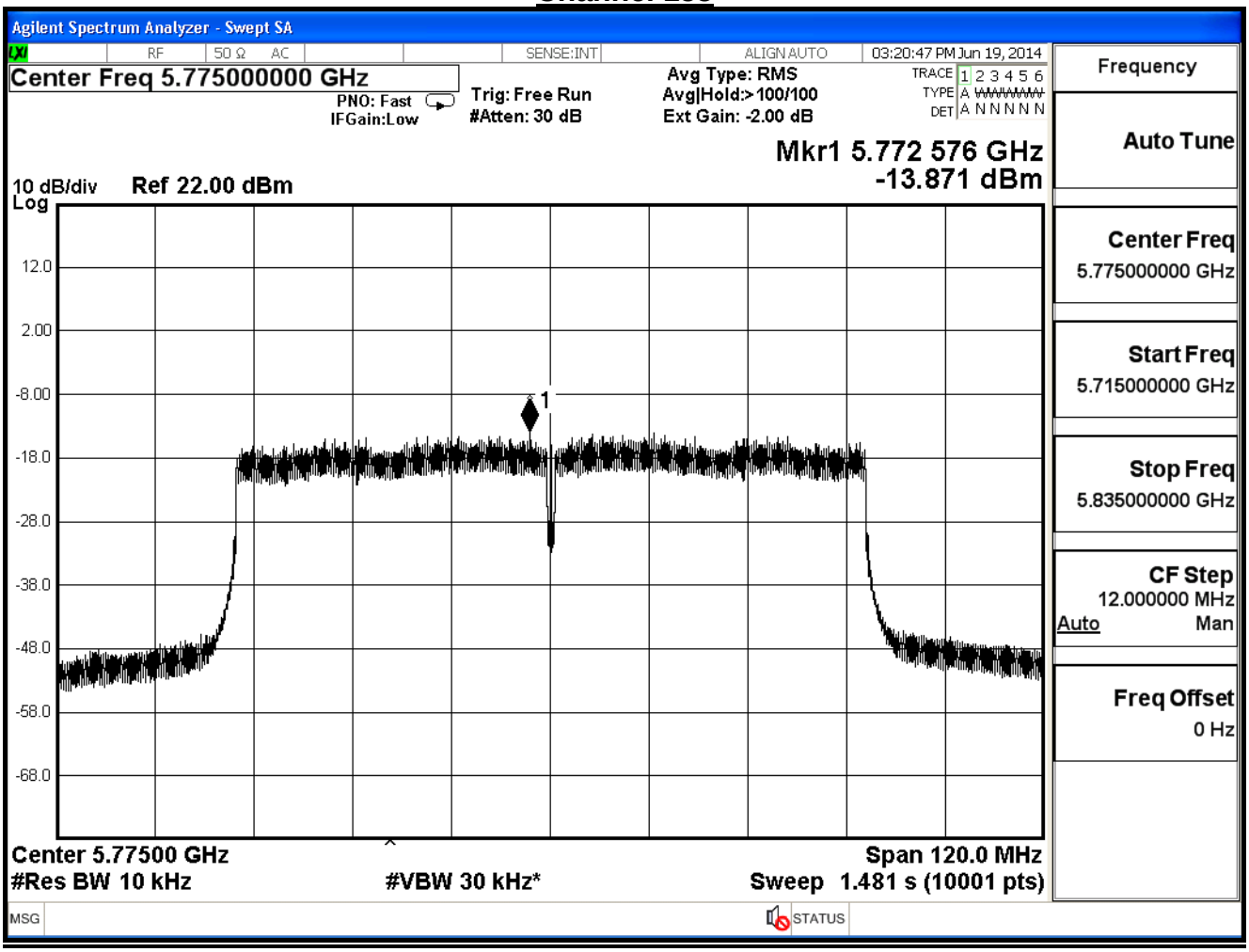
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Channel 155


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
03:20:47 PM Jun 19, 2014
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.772 576 GHz
-13.871 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.77500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 120.0 MHz
Sweep 1.481 s (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.775000000 GHz
Start Freq
5.715000000 GHz
Stop Freq
5.835000000 GHz
CF Step
12.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE802.11ac_80MHz(ANT 0+1+2)

Channel No.	Frequency (MHz)	Measurement (dBm)	Limit (dBm)
155	5775	7.771	≦26.79

Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE802.11n_20MHz_(ANT 0)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
149	5745	-7.228	9.762	≦26.79
157	5785	-7.124	9.866	≦26.79
165	5825	-6.932	10.058	≦26.79

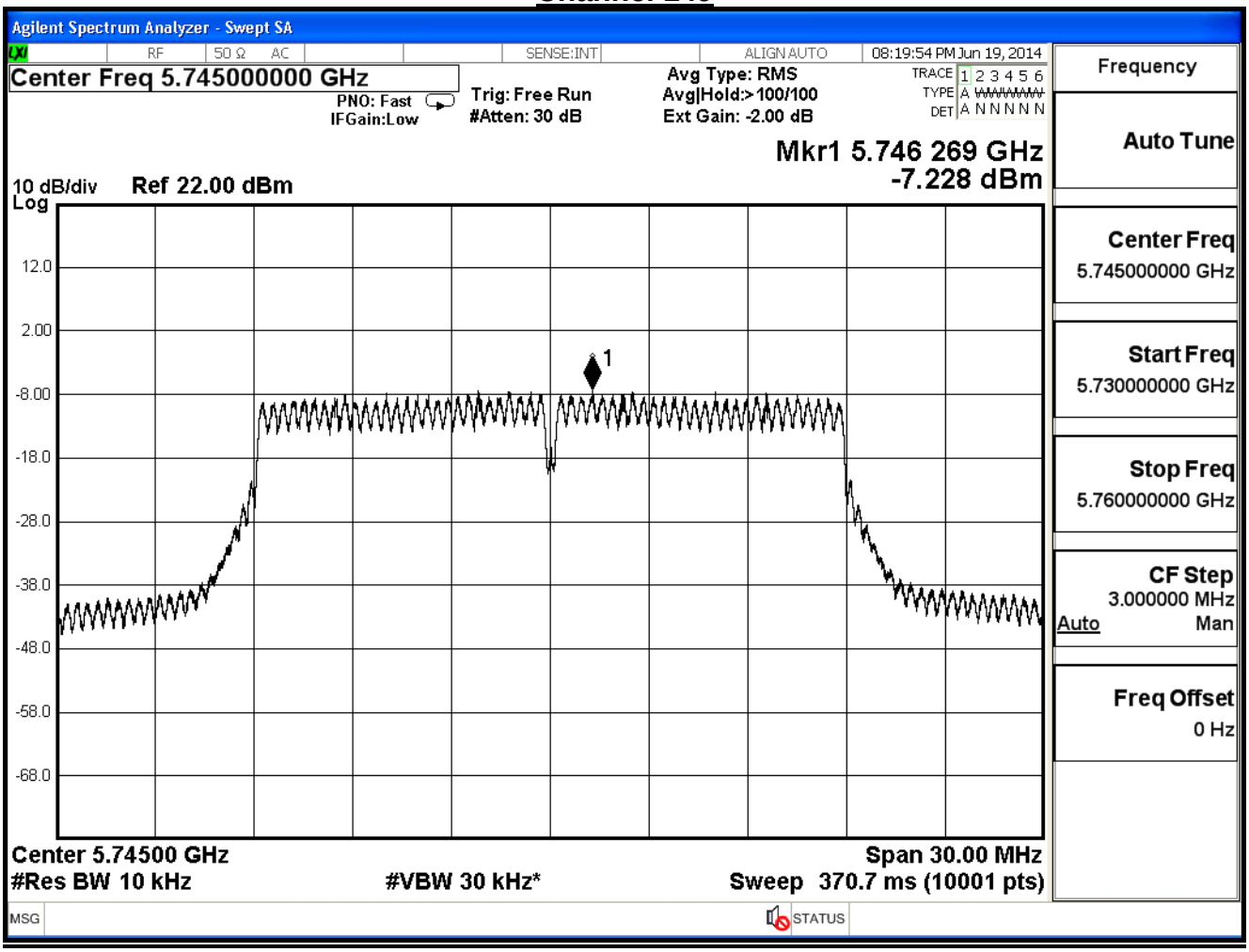
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

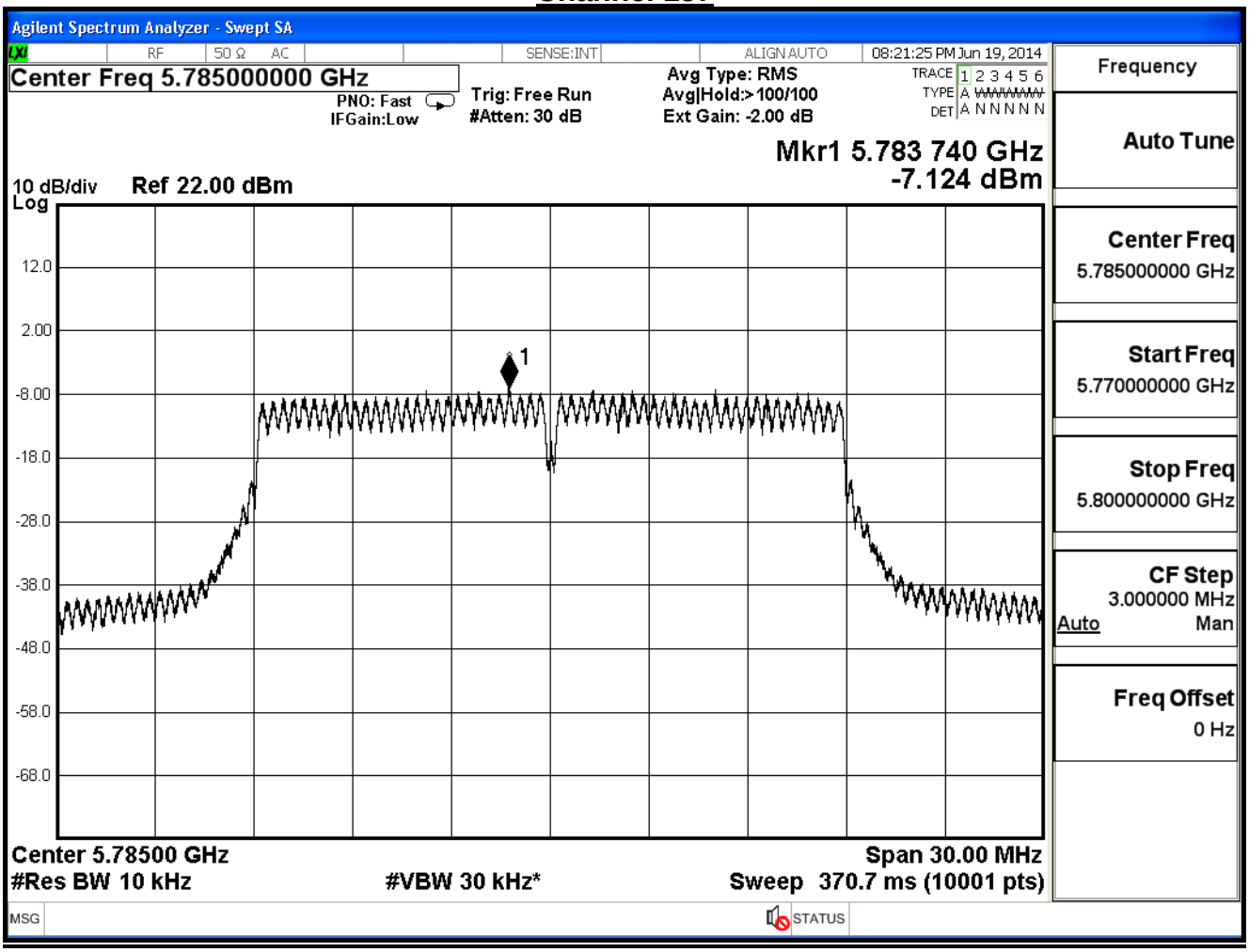
Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

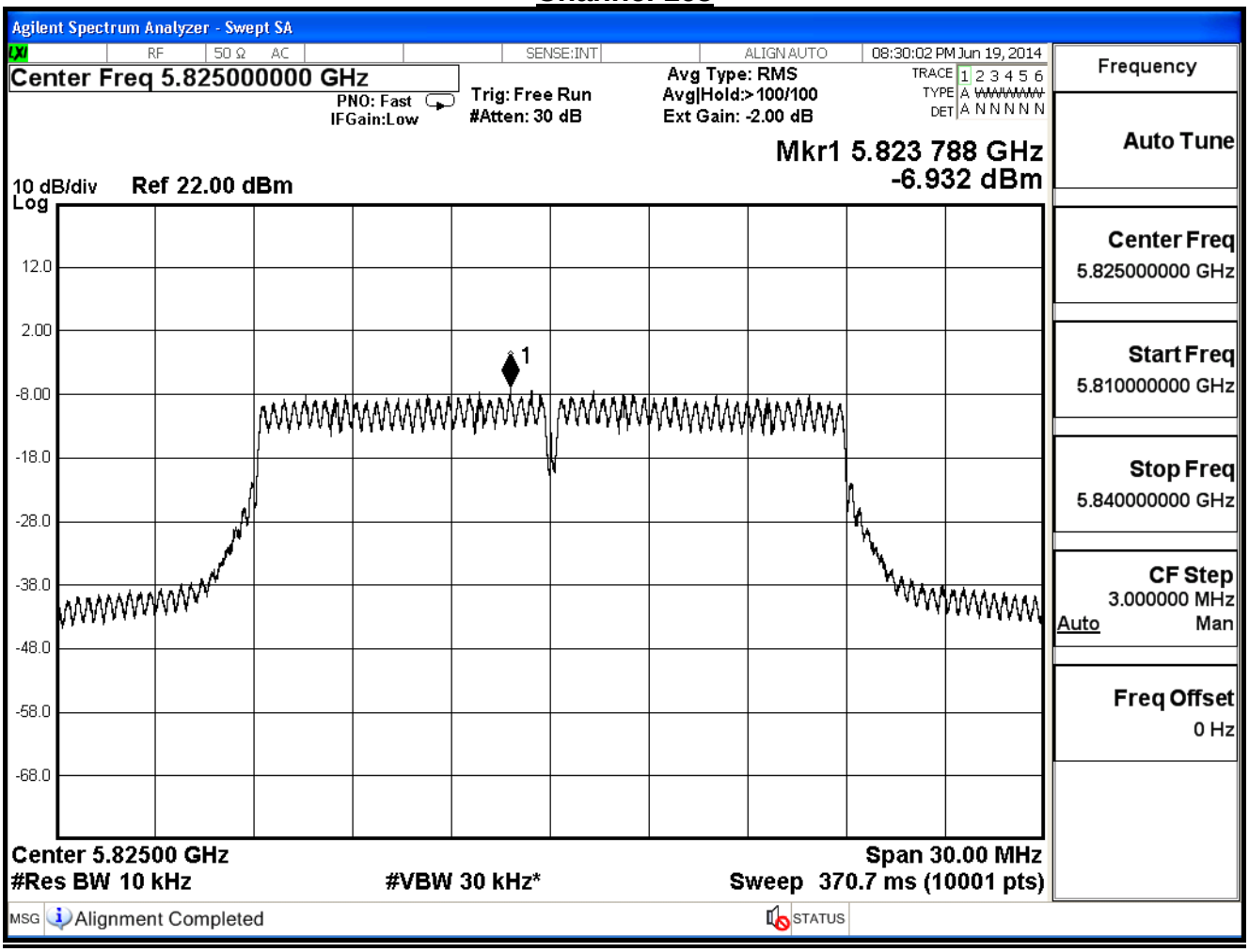
Channel 149


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
08:19:54 PM Jun 19, 2014
Center Freq 5.745000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.746 269 GHz
-7.228 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.74500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.745000000 GHz
Start Freq
5.730000000 GHz
Stop Freq
5.760000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 157


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
08:21:25 PM Jun 19, 2014
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.783 740 GHz
-7.124 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.78500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.785000000 GHz
Start Freq
5.770000000 GHz
Stop Freq
5.800000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 165


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
08:30:02 PM Jun 19, 2014
Center Freq 5.825000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.823 788 GHz
-6.932 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.82500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
Alignment Completed
STATUS
Frequency
Auto Tune
Center Freq
5.825000000 GHz
Start Freq
5.810000000 GHz
Stop Freq
5.840000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE802.11n_20MHz_(ANT 1)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
149	5745	-7.201	9.789	≦26.79
157	5785	-7.518	9.472	≦26.79
165	5825	-6.836	10.154	≦26.79

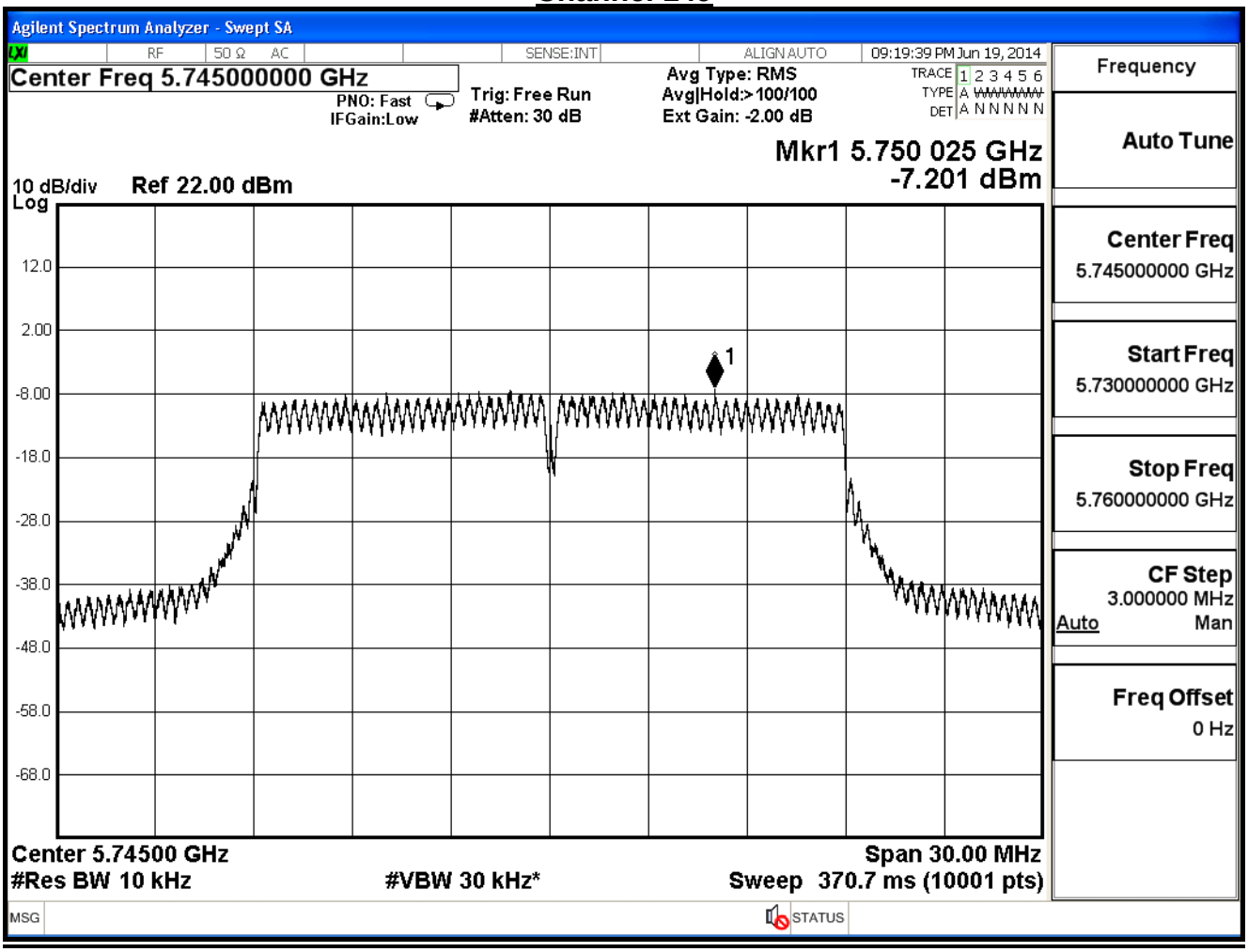
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

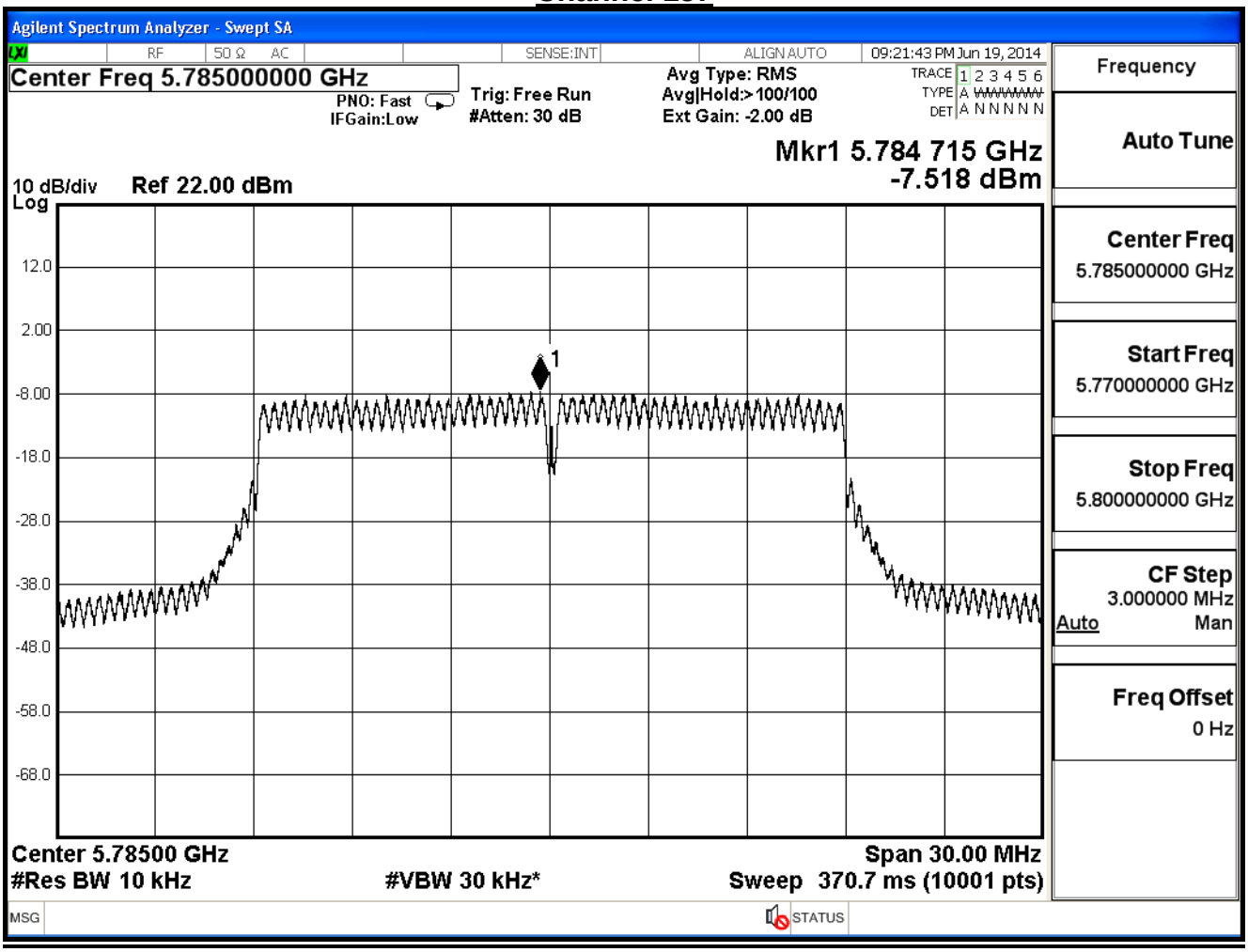
Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

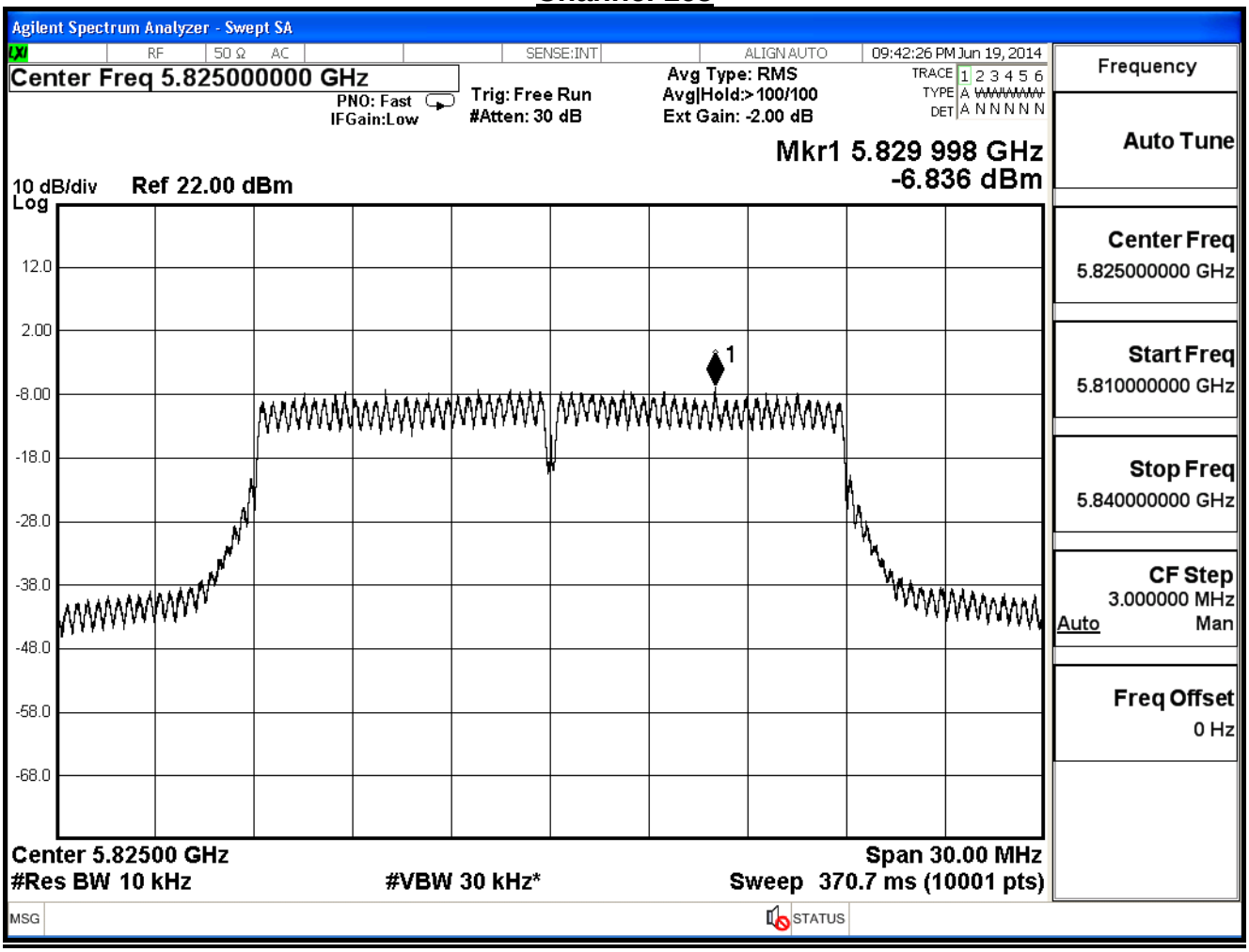
Channel 149


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
09:19:39 PM Jun 19, 2014
Center Freq 5.745000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.750 025 GHz
-7.201 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.74500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.745000000 GHz
Start Freq
5.730000000 GHz
Stop Freq
5.760000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 157


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
09:21:43 PM Jun 19, 2014
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.784 715 GHz
-7.518 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.78500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.785000000 GHz
Start Freq
5.770000000 GHz
Stop Freq
5.800000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 165


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
09:42:26 PM Jun 19, 2014
Center Freq 5.825000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.829 998 GHz
-6.836 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.82500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.825000000 GHz
Start Freq
5.810000000 GHz
Stop Freq
5.840000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE802.11n_20MHz_(ANT 2)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
149	5745	-6.615	10.375	≦26.79
157	5785	-6.879	10.111	≦26.79
165	5825	-7.172	9.818	≦26.79

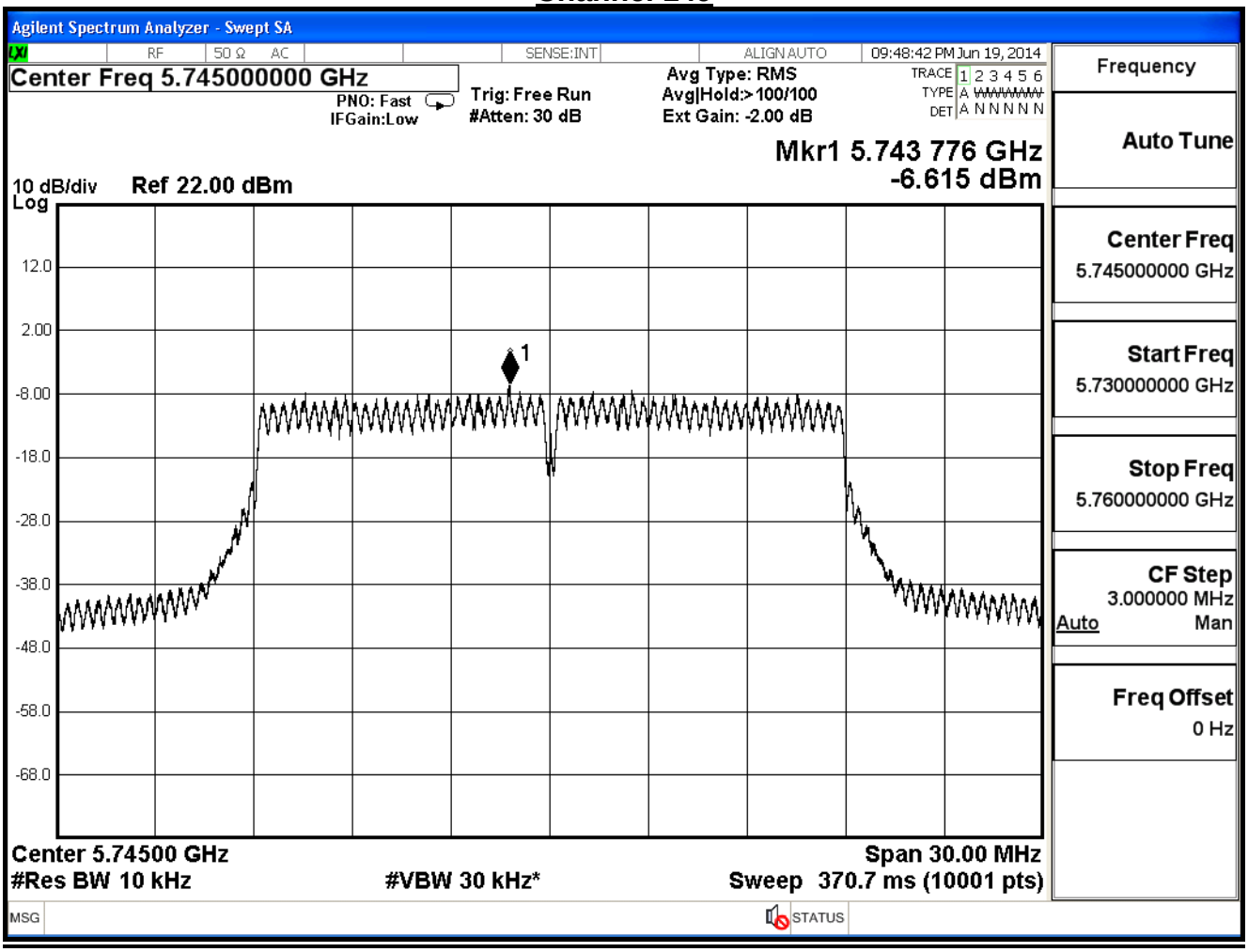
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

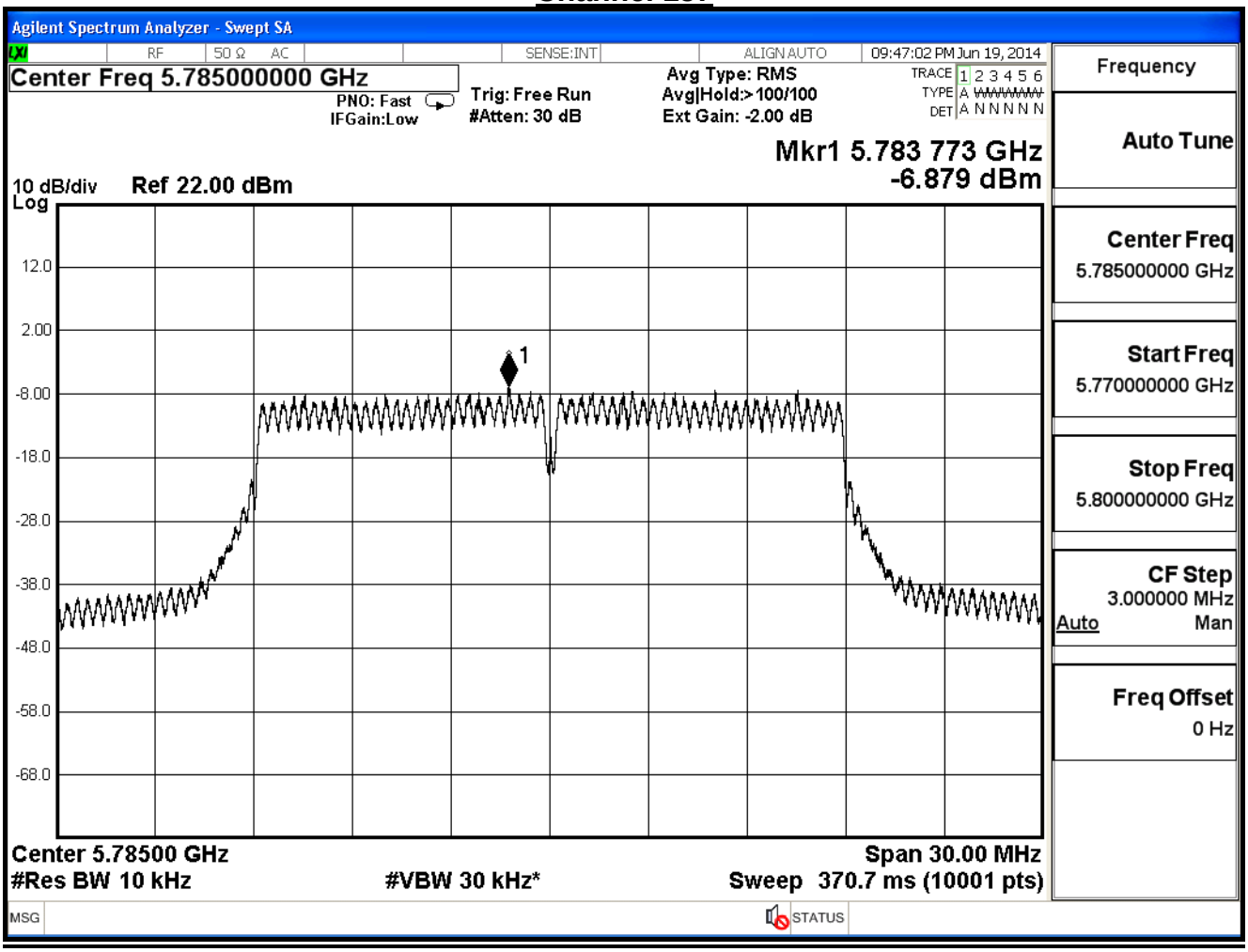
Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

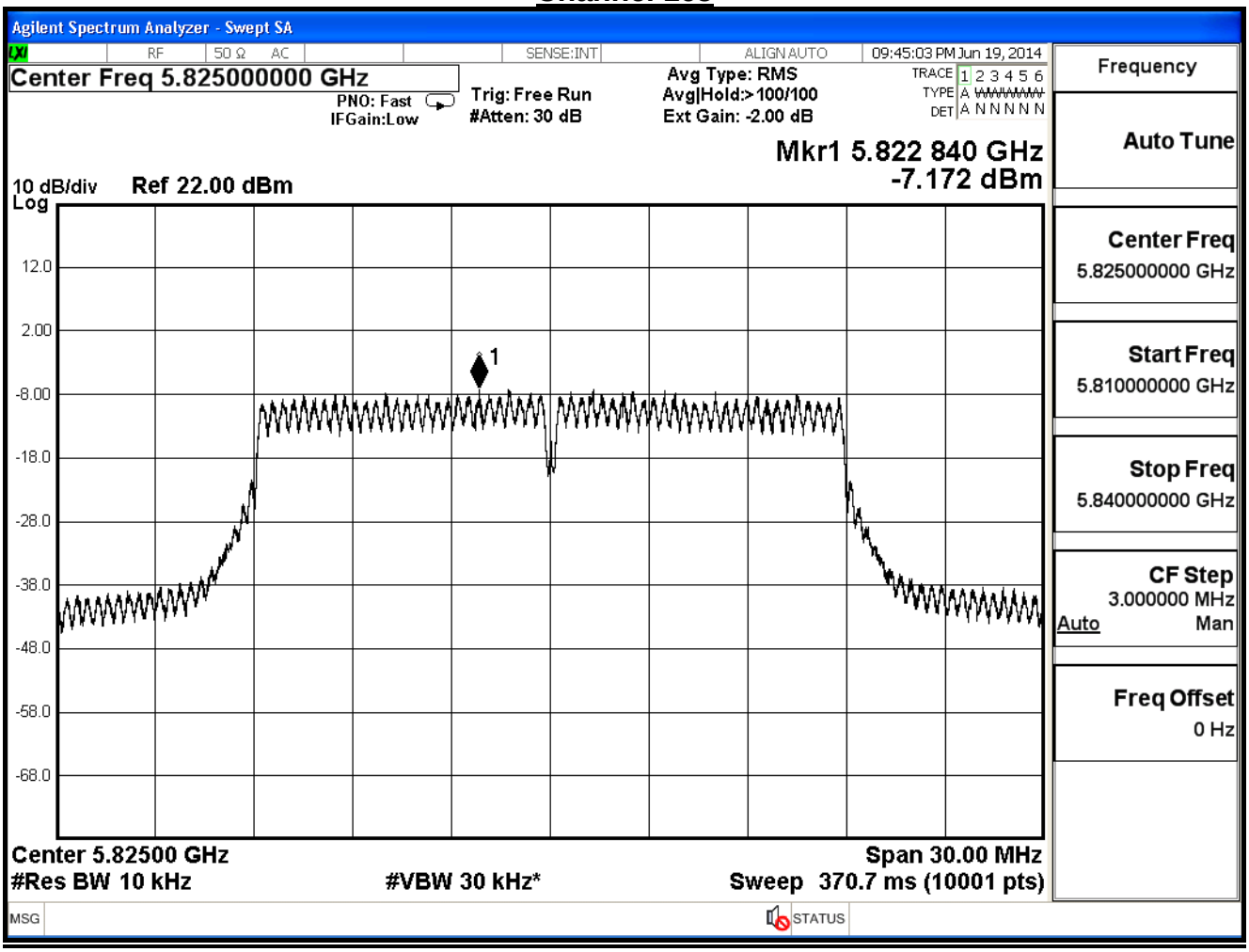
Channel 149


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
09:48:42 PM Jun 19, 2014
Center Freq 5.745000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.743 776 GHz
-6.615 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.74500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.745000000 GHz
Start Freq
5.730000000 GHz
Stop Freq
5.760000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 157


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
09:47:02 PM Jun 19, 2014
Center Freq 5.785000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.783 773 GHz
-6.879 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.78500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.785000000 GHz
Start Freq
5.770000000 GHz
Stop Freq
5.800000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 165


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
09:45:03 PM Jun 19, 2014
Center Freq 5.825000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.822 840 GHz
-7.172 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.82500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 30.00 MHz
Sweep 370.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.825000000 GHz
Start Freq
5.810000000 GHz
Stop Freq
5.840000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE802.11n 20MHz(ANT 0+1+2)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
149	5745	14.756	≦26.79
157	5785	14.595	≦26.79
165	5825	14.783	≦26.79

Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE 802.11n_40MHz (ANT 0)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
151	5755	-8.717	8.273	≦26.79
159	5795	-9.075	7.915	≦26.79

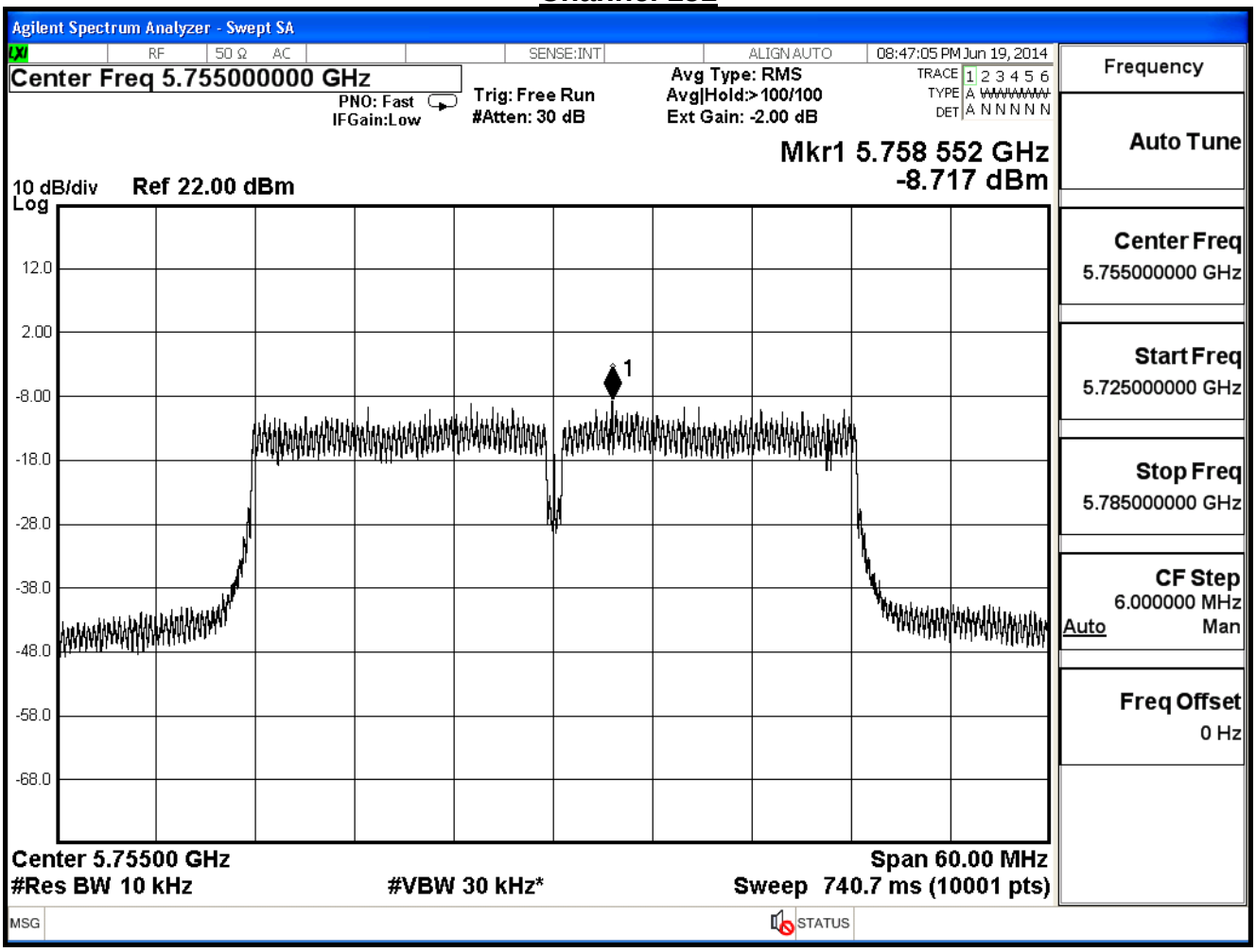
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

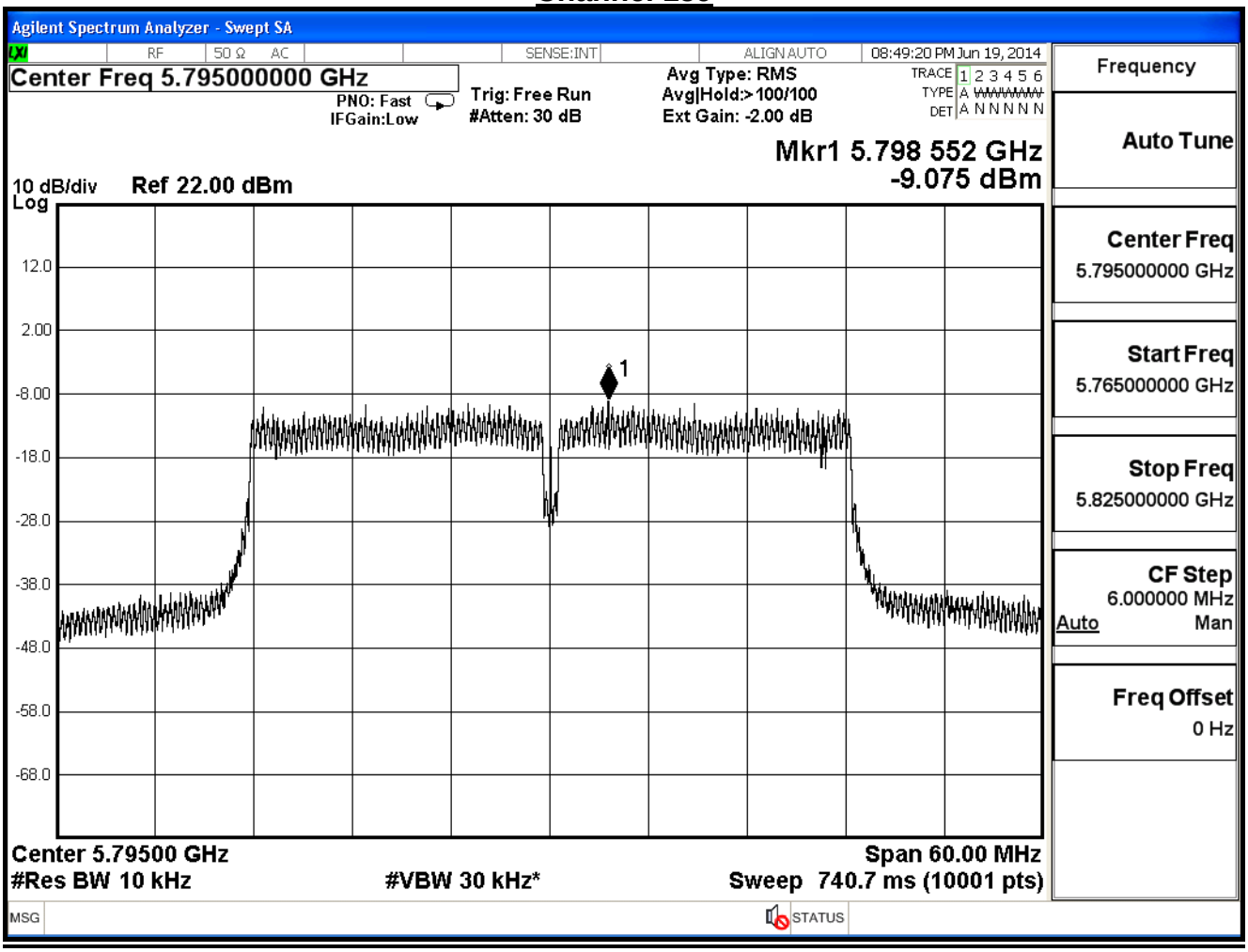
Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Channel 151


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
08:47:05 PM Jun 19, 2014
Center Freq 5.755000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.758 552 GHz
-8.717 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.75500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 60.00 MHz
Sweep 740.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.755000000 GHz
Start Freq
5.725000000 GHz
Stop Freq
5.785000000 GHz
CF Step
6.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 159


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
08:49:20 PM Jun 19, 2014
Center Freq 5.795000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.798 552 GHz
-9.075 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.79500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 60.00 MHz
Sweep 740.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.795000000 GHz
Start Freq
5.765000000 GHz
Stop Freq
5.825000000 GHz
CF Step
6.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

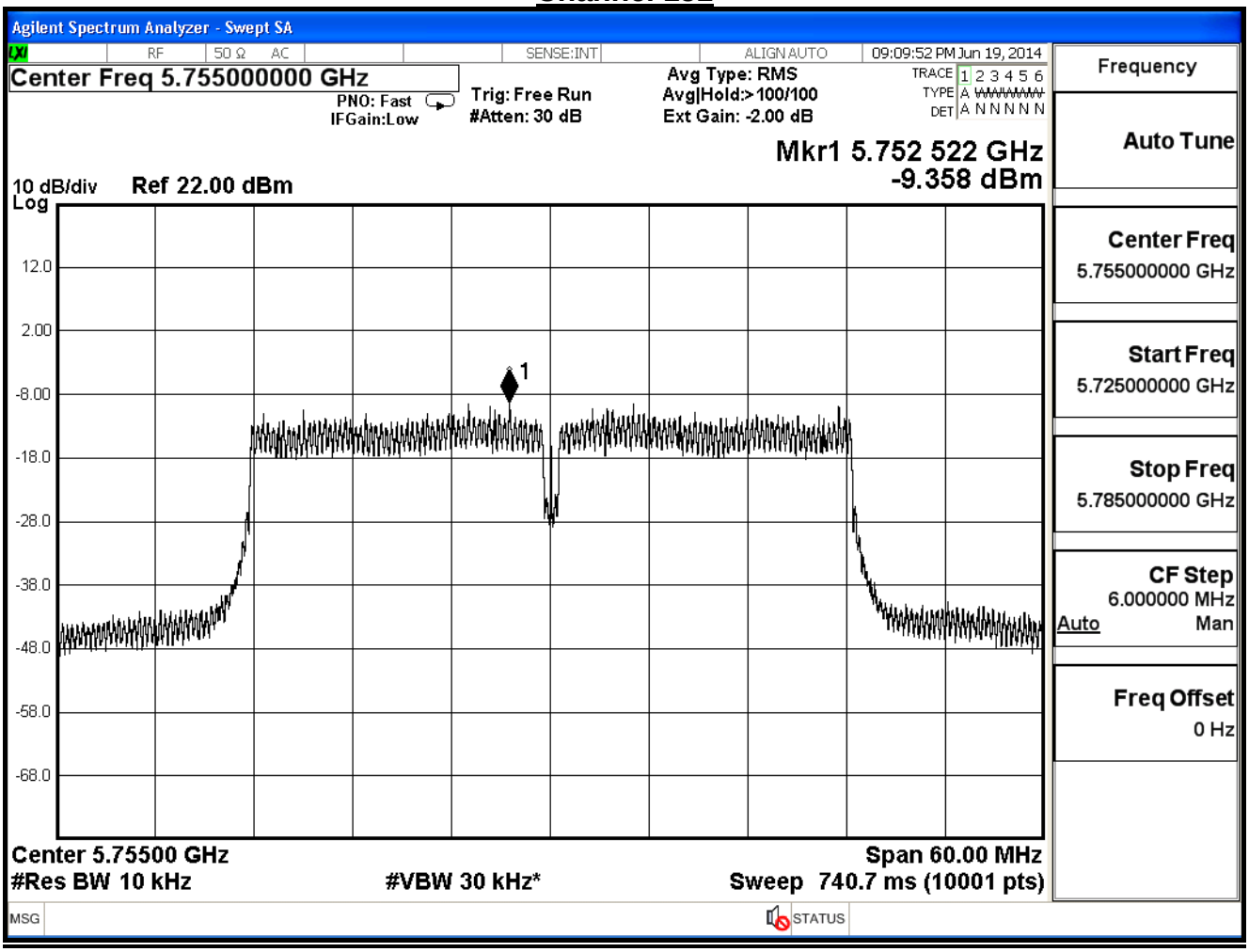
IEEE 802.11n_40MHz (ANT 1)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
151	5755	-9.358	7.632	≦26.79
159	5795	-8.651	8.339	≦26.79

Note:

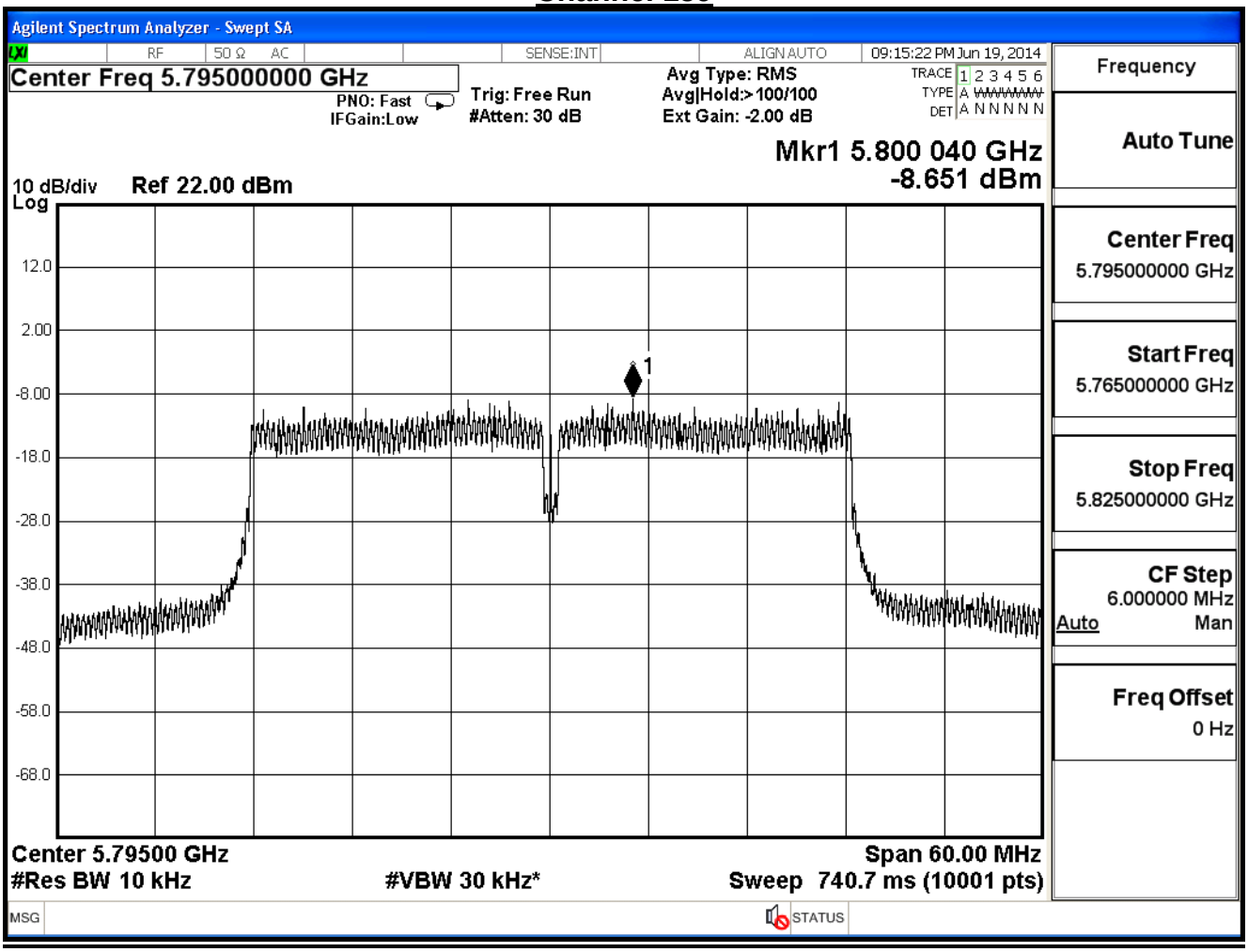
Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB
Measure Level= Reading Level+ correct factor

Channel 151


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
09:09:52 PM Jun 19, 2014
Center Freq 5.755000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.752 522 GHz
-9.358 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.75500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 60.00 MHz
Sweep 740.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.755000000 GHz
Start Freq
5.725000000 GHz
Stop Freq
5.785000000 GHz
CF Step
6.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 159


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
09:15:22 PM Jun 19, 2014
Center Freq 5.795000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.800 040 GHz
-8.651 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.79500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 60.00 MHz
Sweep 740.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.795000000 GHz
Start Freq
5.765000000 GHz
Stop Freq
5.825000000 GHz
CF Step
6.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

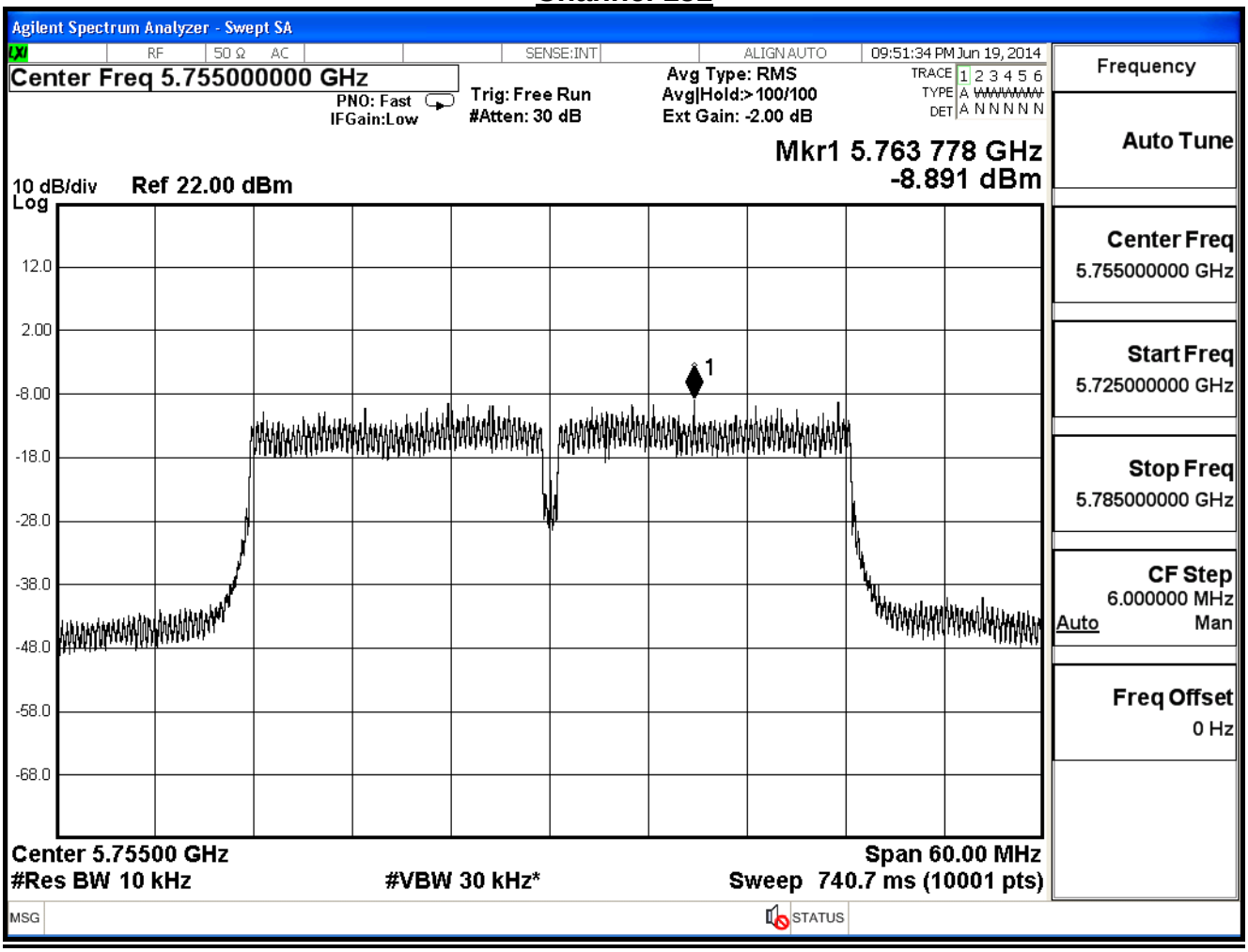
IEEE 802.11n_40MHz (ANT 2)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
151	5755	-8.891	8.099	≦26.79
159	5795	-8.892	8.098	≦26.79

Note:

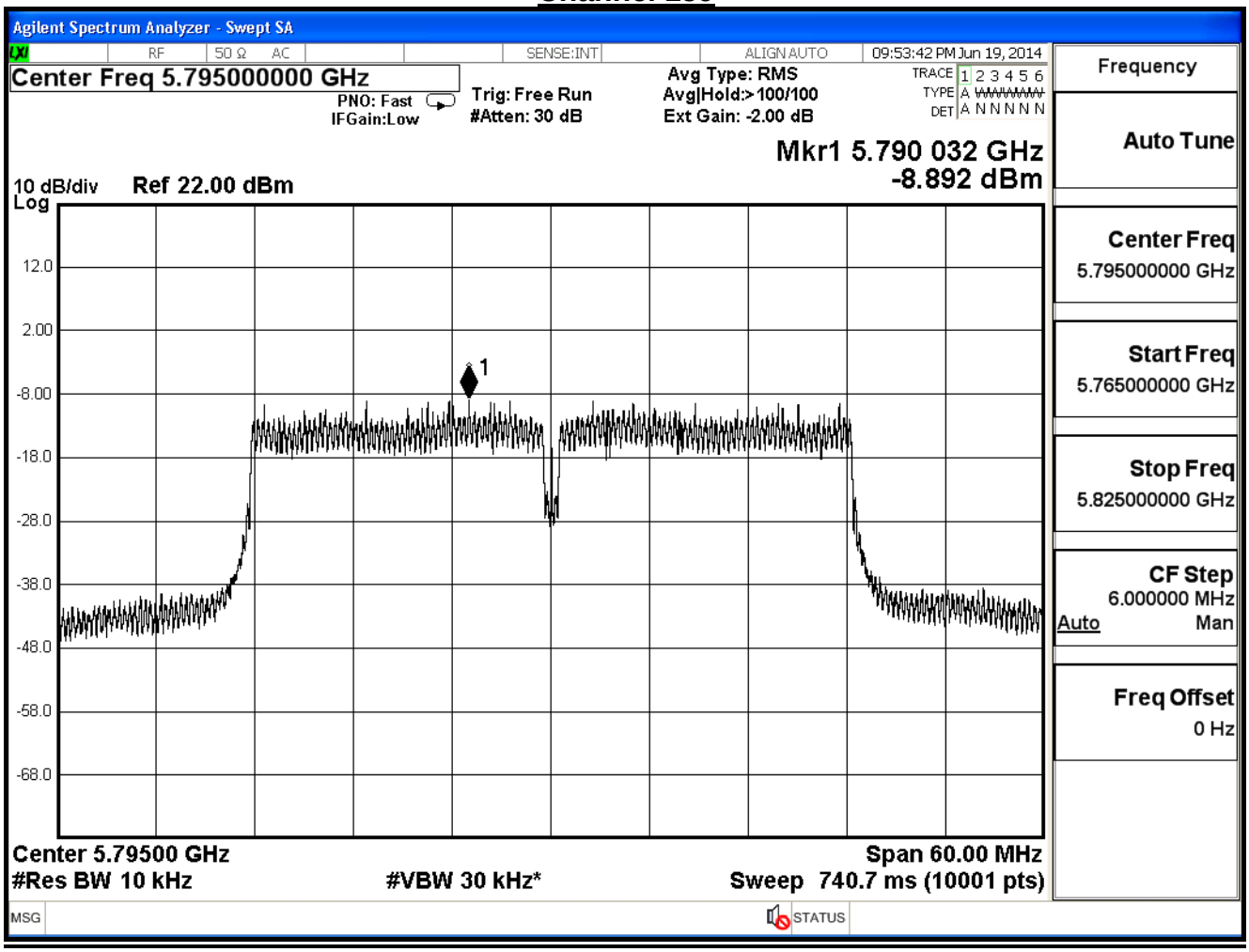
Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB
Measure Level= Reading Level+ correct factor

Channel 151


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
09:51:34 PM Jun 19, 2014
Center Freq 5.755000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.763 778 GHz
-8.891 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.75500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 60.00 MHz
Sweep 740.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.755000000 GHz
Start Freq
5.725000000 GHz
Stop Freq
5.785000000 GHz
CF Step
6.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 159


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
09:53:42 PM Jun 19, 2014
Center Freq 5.795000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.790 032 GHz
-8.892 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.79500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 60.00 MHz
Sweep 740.7 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.795000000 GHz
Start Freq
5.765000000 GHz
Stop Freq
5.825000000 GHz
CF Step
6.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE802.11n 40MHz(ANT 0+1+2)

Channel No.	Frequency (MHz)	Measurement (dBm)	Limit (dBm)
151	5755	12.781	≦26.79
159	5795	12.892	≦26.79

Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE 802.11ac_80MHz (ANT 0)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
155	5775	-12.115	4.875	≦26.79

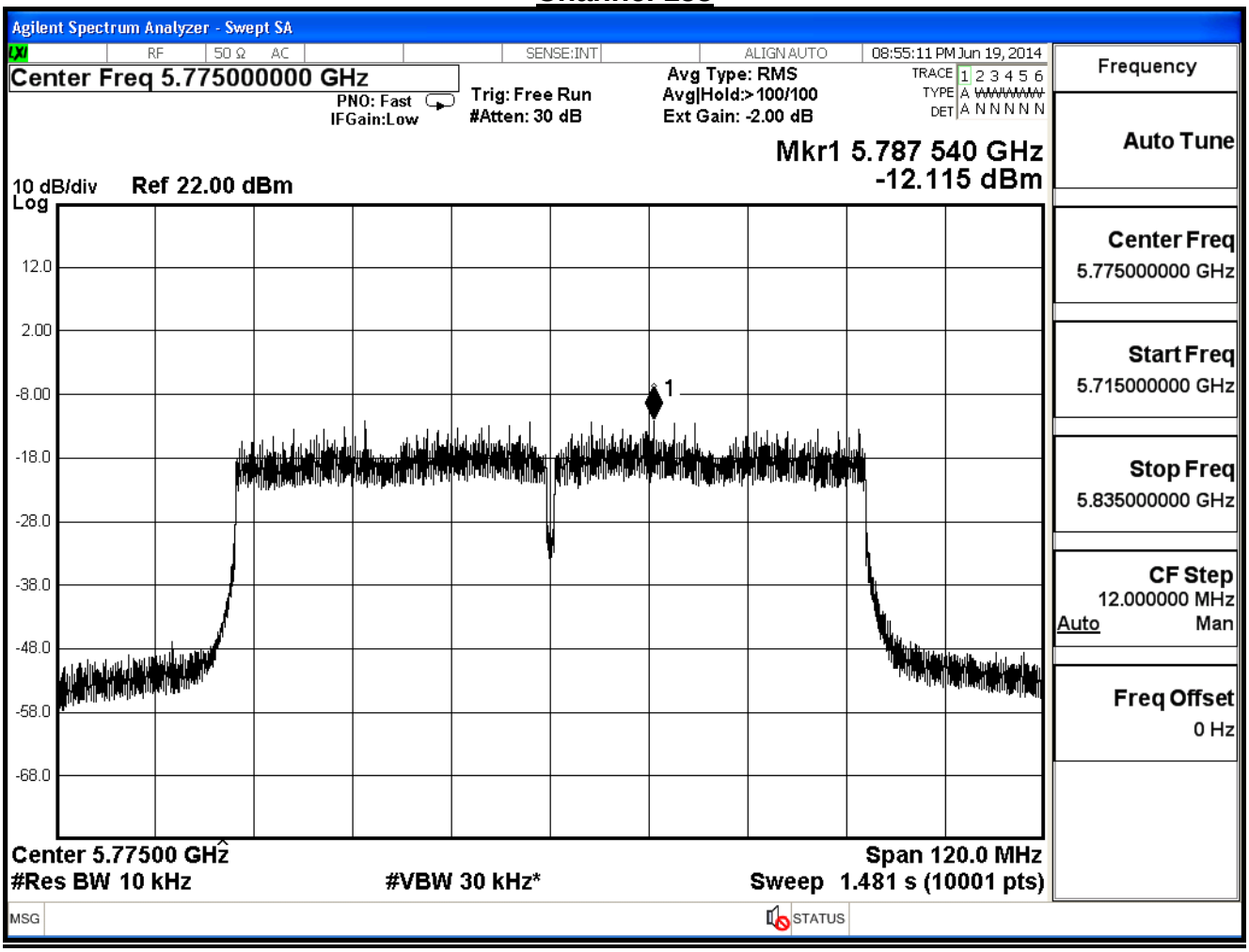
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Channel 155


Agilent Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
08:55:11 PM Jun 19, 2014
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.787 540 GHz
-12.115 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.77500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 120.0 MHz
Sweep 1.481 s (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.775000000 GHz
Start Freq
5.715000000 GHz
Stop Freq
5.835000000 GHz
CF Step
12.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE 802.11ac_80MHz (ANT 1)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
155	5775	-12.513	4.477	≦26.79

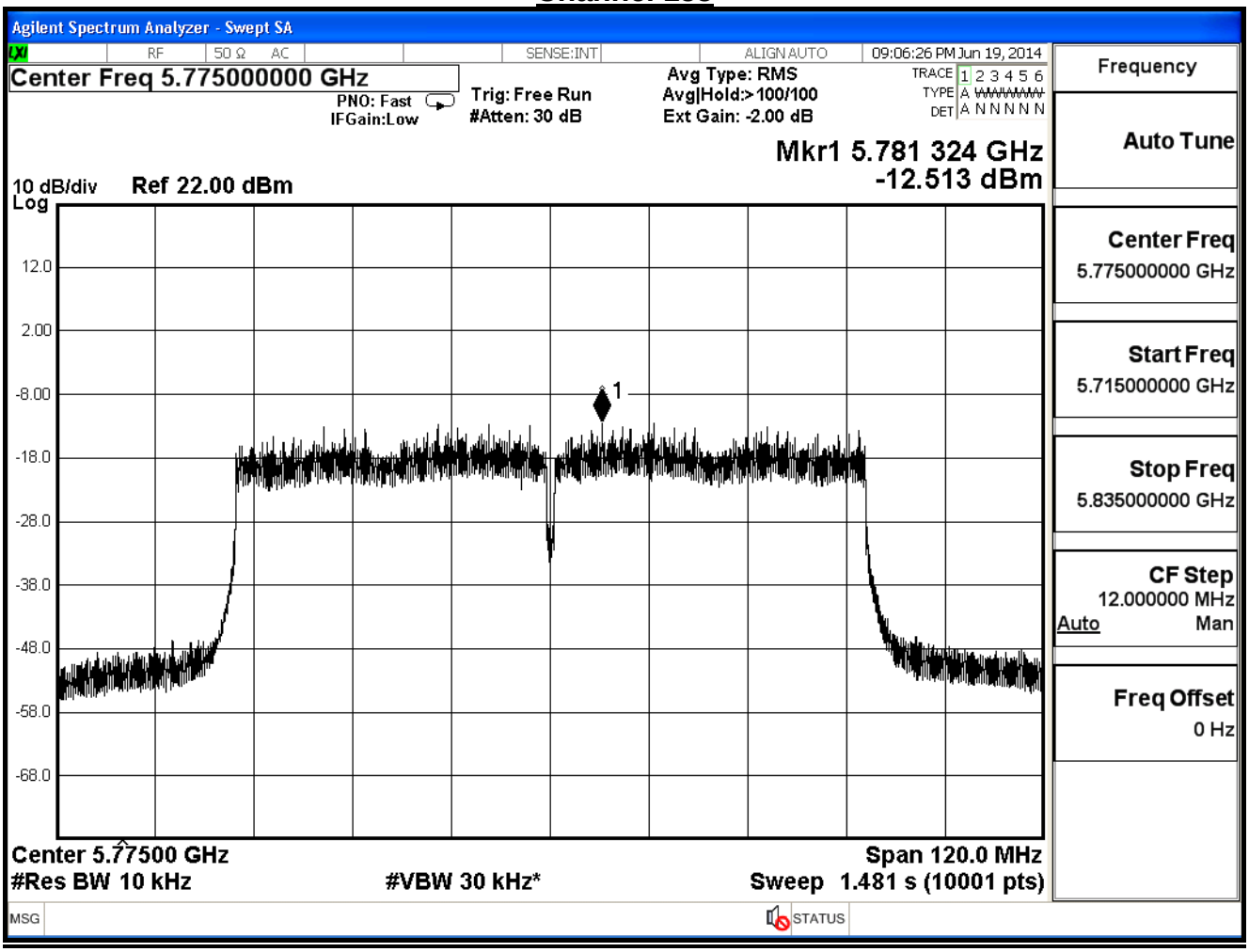
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Channel 155


Agilent Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
09:06:26 PM Jun 19, 2014
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.781 324 GHz
-12.513 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.77500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 120.0 MHz
Sweep 1.481 s (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.775000000 GHz
Start Freq
5.715000000 GHz
Stop Freq
5.835000000 GHz
CF Step
12.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE 802.11ac_80MHz (ANT 2)				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)
155	5775	-11.805	5.185	≦26.79

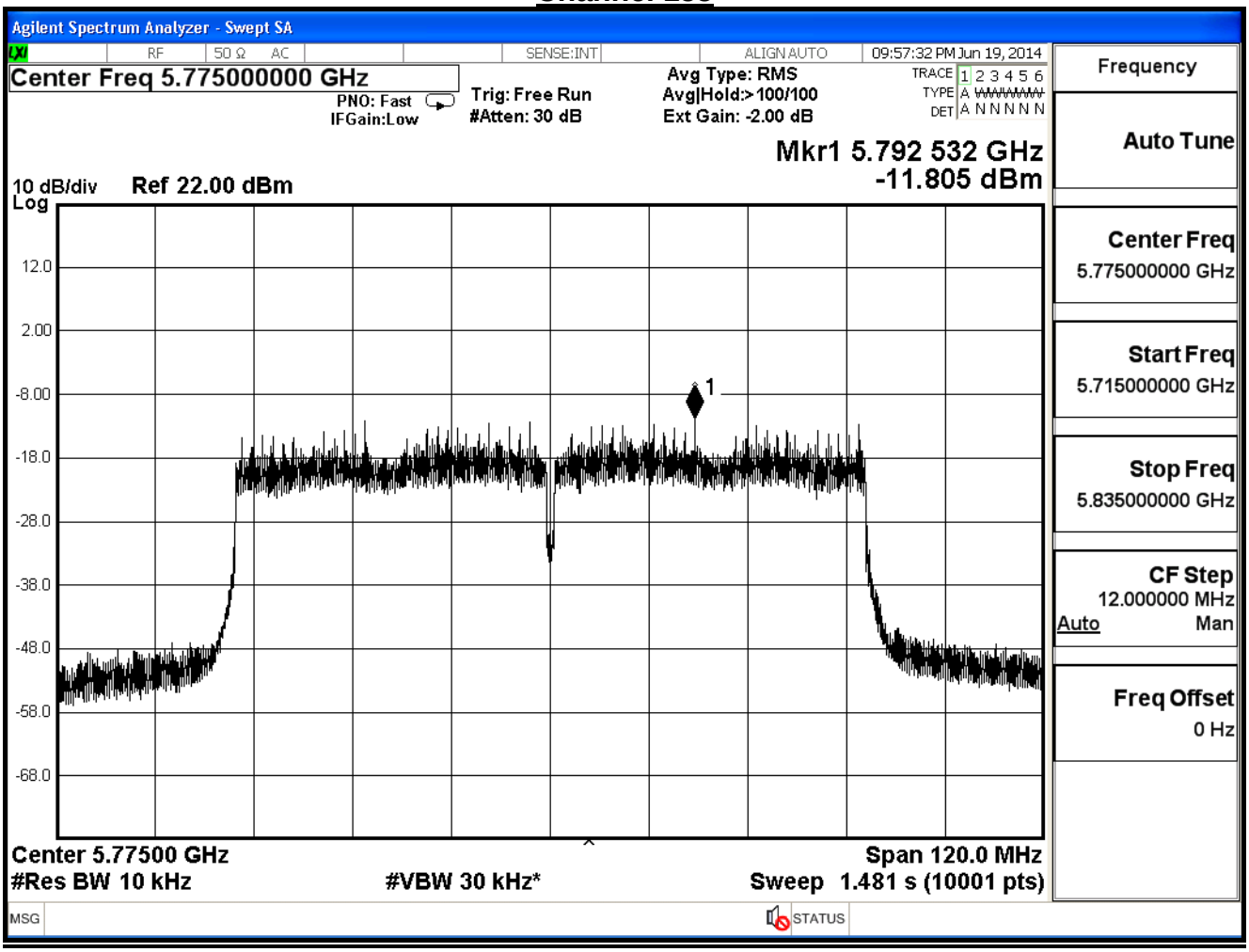
Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

Channel 155


Agilent Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
09:57:32 PM Jun 19, 2014
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE A WWWWW
DET A N N N N N
Mkr1 5.792 532 GHz
-11.805 dBm
10 dB/div
Log
Ref 22.00 dBm
12.0
2.00
-8.00
-18.0
-28.0
-38.0
-48.0
-58.0
-68.0
1
Center 5.77500 GHz
#Res BW 10 kHz
#VBW 30 kHz*
Span 120.0 MHz
Sweep 1.481 s (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
5.775000000 GHz
Start Freq
5.715000000 GHz
Stop Freq
5.835000000 GHz
CF Step
12.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Power Density		
Test Mode	Mode 2: Transmit (Beamforming Mode)_Adapter: EXA1206UH		
Date of Test	2014/06/19	Test Site	SR7

IEEE802.11ac_80MHz(ANT 0+1+2)

Channel No.	Frequency (MHz)	Measurement (dBm)	Limit (dBm)
155	5775	9.627	≦26.79

Note:

Directional Antenna Gain = 10log(3)+max Gain = 9.21dBi
Required Limit = 30dBm - (9.21dBi–6dB) = 26.79dBm

Correct factor =10 log(500KHz/10KHz)=16.99 dB

Measure Level= Reading Level+ correct factor

3. Frequency Stability

3.1. Test Equipment

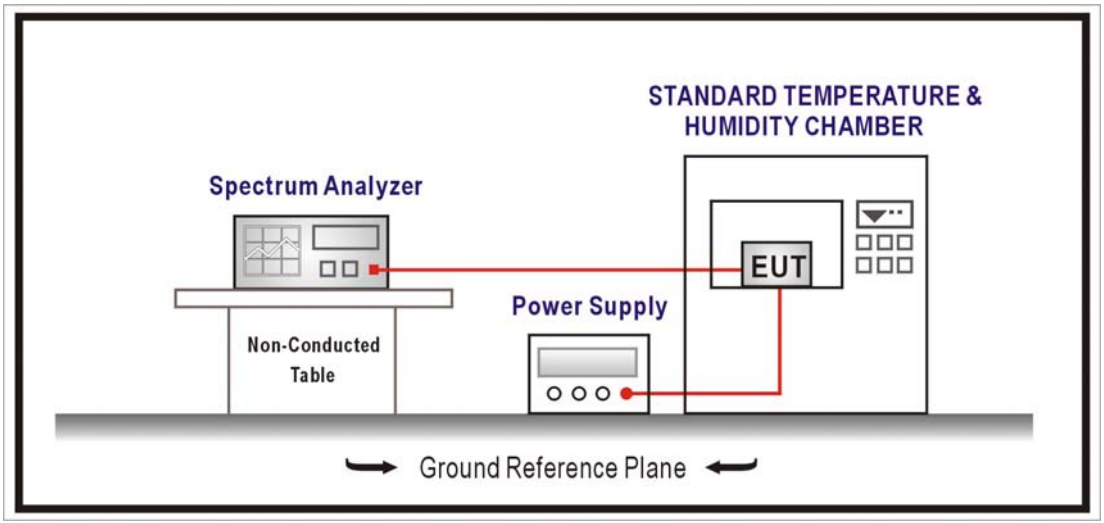
The following test equipments are used during the radiated emission tests:

Frequency Stability / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/08/23
Temperature & Humidity Chamber	WIT	TH-1S-B	1082101	2017/01/18

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

3.2. Test Setup



3.3. Limits

Manufactures of aII 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

3.4. Test Procedure

The EUT was setup to ANSI C63.10:2009; tested to U-NII test procedure of KDB 789033 D02 V01R01 for compliance to FCC 47CFR Subpart E requirements.

3.5. Uncertainty

The measurement uncertainty is defined as ± 150 Hz

3.6. Test Result

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11a - 5745MHz(ANT 0)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5745.0282	4.9096	PASS
-10		5745.0199	3.4690	PASS
0		5744.9898	-1.7819	PASS
10		5744.9990	-0.1699	PASS
20		5744.9593	-7.0788	PASS
30		5744.9691	-5.3727	PASS
40		5744.9950	-0.8732	PASS
50		5744.9680	-5.5766	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5744.9974	-0.4513	PASS
	120	5744.9906	-1.6402	PASS
	138	5745.0009	0.1489	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11a - 5745MHz(ANT 1)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5745.0080	1.3903	PASS
-10		5745.0089	1.5514	PASS
0		5744.9916	-1.4641	PASS
10		5744.9634	-6.3758	PASS
20		5744.9563	-7.6099	PASS
30		5744.9854	-2.5453	PASS
40		5744.9433	-9.8672	PASS
50		5744.9940	-1.0473	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5745.0034	0.5901	PASS
	120	5744.9929	-1.2313	PASS
	138	5744.9942	-1.0119	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11a - 5745MHz(ANT 2)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5745.0120	2.0849	PASS
-10		5745.0019	0.3290	PASS
0		5744.9885	-2.0027	PASS
10		5744.9977	-0.3988	PASS
20		5744.9644	-6.1959	PASS
30		5744.9901	-1.7177	PASS
40		5744.9536	-8.0810	PASS
50		5744.9518	-8.3856	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5744.9982	-0.3211	PASS
	120	5744.9878	-2.1190	PASS
	138	5744.9987	-0.2288	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11a - 5825MH(ANT 0)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5825.0117	2.0124	PASS
-10		5825.0024	0.4082	PASS
0		5824.9984	-0.2700	PASS
10		5824.9689	-5.3461	PASS
20		5824.9994	-0.1099	PASS
30		5824.9602	-6.8262	PASS
40		5824.9529	-8.0918	PASS
50		5824.9546	-7.7936	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5825.0053	0.9113	PASS
	120	5825.0017	0.2872	PASS
	138	5824.9978	-0.3862	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11a - 5825MHz(ANT 1)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5825.0141	2.4200	PASS
-10		5825.0048	0.8156	PASS
0		5824.9923	-1.3267	PASS
10		5824.9697	-5.2006	PASS
20		5824.9849	-2.5904	PASS
30		5824.9755	-4.2112	PASS
40		5824.9835	-2.8250	PASS
50		5824.9662	-5.8061	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5825.0019	0.3278	PASS
	120	5824.9979	-0.3520	PASS
	138	5824.9996	-0.0679	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11a - 5825MHz(ANT 2)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5825.0080	1.3665	PASS
-10		5825.0168	2.8820	PASS
0		5824.9787	-3.6611	PASS
10		5824.9699	-5.1675	PASS
20		5824.9891	-1.8636	PASS
30		5824.9568	-7.4092	PASS
40		5824.9515	-8.3312	PASS
50		5824.9884	-1.9945	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5825.0062	1.0703	PASS
	120	5824.9963	-0.6422	PASS
	138	5825.0017	0.2880	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11n_20M - 5745MHz(ANT 0)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5745.0246	4.2825	PASS
-10		5745.0137	2.3922	PASS
0		5744.9976	-0.4247	PASS
10		5744.9724	-4.7994	PASS
20		5744.9614	-6.7158	PASS
30		5744.9731	-4.6865	PASS
40		5744.9859	-2.4521	PASS
50		5744.9871	-2.2497	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5744.9954	-0.8049	PASS
	120	5745.0041	0.7059	PASS
	138	5745.0035	0.6142	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11n_20M - 5745MHz(ANT 1)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5745.0243	4.2278	PASS
-10		5745.0048	0.8349	PASS
0		5744.9847	-2.6554	PASS
10		5744.9644	-6.2015	PASS
20		5744.9811	-3.2893	PASS
30		5744.9905	-1.6481	PASS
40		5744.9470	-9.2278	PASS
50		5744.9982	-0.3089	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5745.0001	0.0235	PASS
	120	5744.9962	-0.6532	PASS
	138	5744.9950	-0.8696	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11n_20M - 5745MHz(ANT 2)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5745.0271	4.7205	PASS
-10		5745.0145	2.5321	PASS
0		5744.9882	-2.0501	PASS
10		5744.9799	-3.5070	PASS
20		5744.9634	-6.3722	PASS
30		5744.9922	-1.3550	PASS
40		5744.9556	-7.7365	PASS
50		5744.9839	-2.8084	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5744.9954	-0.7978	PASS
	120	5744.9954	-0.8035	PASS
	138	5745.0002	0.0372	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11n_20M - 5825MHz(ANT 0)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5825.0105	1.7942	PASS
-10		5825.0016	0.2710	PASS
0		5824.9880	-2.0668	PASS
10		5824.9975	-0.4260	PASS
20		5824.9596	-6.9307	PASS
30		5824.9559	-7.5714	PASS
40		5824.9909	-1.5553	PASS
50		5824.9486	-8.8211	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5824.9973	-0.4684	PASS
	120	5824.9980	-0.3398	PASS
	138	5824.9974	-0.4511	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11n_20M - 5825MHz(ANT 1)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5825.0271	4.6594	PASS
-10		5825.0060	1.0265	PASS
0		5824.9788	-3.6415	PASS
10		5824.9654	-5.9359	PASS
20		5824.9633	-6.2952	PASS
30		5824.9781	-3.7608	PASS
40		5824.9573	-7.3256	PASS
50		5824.9653	-5.9624	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5825.0033	0.5634	PASS
	120	5824.9857	-2.4522	PASS
	138	5824.9959	-0.7050	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11n_20M - 5825MHz(ANT 2)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5825.0200	3.4418	PASS
-10		5825.0135	2.3255	PASS
0		5824.9722	-4.7788	PASS
10		5824.9863	-2.3452	PASS
20		5824.9578	-7.2411	PASS
30		5824.9516	-8.3016	PASS
40		5824.9488	-8.7950	PASS
50		5824.9385	-10.5534	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5824.9967	-0.5647	PASS
	120	5824.9923	-1.3184	PASS
	138	5825.0046	0.7919	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11n_40M - 5755MHz(ANT 0)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5755.0091	1.5742	PASS
-10		5755.0116	2.0178	PASS
0		5754.9954	-0.7946	PASS
10		5754.9987	-0.2172	PASS
20		5754.9742	-4.4876	PASS
30		5754.9926	-1.2871	PASS
40		5754.9814	-3.2250	PASS
50		5754.9503	-8.6286	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5754.9997	-0.0567	PASS
	120	5755.0060	1.0414	PASS
	138	5754.9995	-0.0788	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11n_40M - 5755MHz(ANT 1)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5755.0060	1.0400	PASS
-10		5755.0114	1.9894	PASS
0		5754.9782	-3.7947	PASS
10		5754.9936	-1.1082	PASS
20		5754.9719	-4.8881	PASS
30		5754.9604	-6.8798	PASS
40		5754.9978	-0.3865	PASS
50		5754.9431	-9.8935	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5754.9990	-0.1669	PASS
	120	5755.0024	0.4247	PASS
	138	5755.0060	1.0423	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11n_40M - 5755MHz(ANT 2)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5755.0164	2.8504	PASS
-10		5755.0082	1.4261	PASS
0		5754.9704	-5.1462	PASS
10		5754.9703	-5.1642	PASS
20		5754.9930	-1.2143	PASS
30		5754.9824	-3.0588	PASS
40		5754.9847	-2.6601	PASS
50		5754.9527	-8.2224	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5755.0045	0.7801	PASS
	120	5754.9939	-1.0533	PASS
	138	5754.9963	-0.6456	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11n_40M - 5795MHz(ANT 0)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5795.0117	2.0190	PASS
-10		5795.0076	1.3106	PASS
0		5794.9768	-3.9990	PASS
10		5794.9747	-4.3736	PASS
20		5794.9589	-7.0989	PASS
30		5794.9848	-2.6290	PASS
40		5794.9944	-0.9589	PASS
50		5794.9898	-1.7629	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5795.0090	1.5488	PASS
	120	5794.9936	-1.1070	PASS
	138	5794.9950	-0.8679	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11n_40M - 5795MHz(ANT 1)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5795.0258	4.4569	PASS
-10		5795.0090	1.5476	PASS
0		5794.9741	-4.4685	PASS
10		5794.9781	-3.7780	PASS
20		5794.9825	-3.0242	PASS
30		5794.9572	-7.3788	PASS
40		5794.9454	-9.4226	PASS
50		5794.9623	-6.5072	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5794.9946	-0.9287	PASS
	120	5794.9975	-0.4261	PASS
	138	5795.0061	1.0487	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11n_40M - 5795MHz(ANT 2)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5795.0115	1.9908	PASS
-10		5795.0050	0.8560	PASS
0		5794.9745	-4.4046	PASS
10		5794.9939	-1.0463	PASS
20		5794.9694	-5.2847	PASS
30		5794.9753	-4.2663	PASS
40		5794.9873	-2.1843	PASS
50		5794.9672	-5.6549	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5794.9908	-1.5889	PASS
	120	5794.9941	-1.0116	PASS
	138	5795.0030	0.5212	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11ac_80M-5775MHz(ANT 0)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5775.0255	4.4198	PASS
-10		5775.0198	3.4221	PASS
0		5774.9948	-0.8972	PASS
10		5774.9879	-2.0916	PASS
20		5774.9830	-2.9398	PASS
30		5774.9812	-3.2626	PASS
40		5774.9632	-6.3738	PASS
50		5774.9658	-5.9259	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5775.0034	0.5831	PASS
	120	5774.9921	-1.3677	PASS
	138	5774.9990	-0.1777	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11ac_80M-5775MHz(ANT 1)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5775.0234	4.0518	PASS
-10		5775.0193	3.3417	PASS
0		5774.9741	-4.4889	PASS
10		5774.9770	-3.9849	PASS
20		5774.9885	-1.9980	PASS
30		5774.9896	-1.8067	PASS
40		5774.9904	-1.6587	PASS
50		5774.9578	-7.2992	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5774.9997	-0.0468	PASS
	120	5775.0074	1.2845	PASS
	138	5774.9993	-0.1157	PASS

Product	Wireless-AC1900 Dual Band Gigabit Router		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit (CDD Mode)_Adapter: EXA1206UH - 802.11ac_80M-5775MHz(ANT 2)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5775.0121	2.0883	PASS
-10		5775.0058	1.0115	PASS
0		5774.9779	-3.8191	PASS
10		5774.9928	-1.2427	PASS
20		5774.9855	-2.5116	PASS
30		5774.9656	-5.9630	PASS
40		5774.9799	-3.4739	PASS
50		5774.9855	-2.5139	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5774.9946	-0.9267	PASS
	120	5774.9978	-0.3753	PASS
	138	5774.9934	-1.1344	PASS