FCC Test Report

Product Name ： PCE-AC56 Dual-Band Wireless PCI-E Adapter

Trade Name ： ASUS

Model No. ： PCE-AC56

FCC ID. ： MSQ-PCEAC56

Applicant ： ASUSTeK COMPUTER INC.

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

Date of Receipt ： Feb. 01, 2016

Issued Date ： May 11, 2016

Report No. ： 1620121R-RFUSP42V00

Report Version ： V1.0

Testing Laboratory
3024

Test Report Certification

Issued Date : May 11, 2016
Report No. : 1620121R-RFUSP42V00

Product Name	:	PCE-AC56 Dual-Band Wireless PCI-E Adapter
Applicant	:	ASUSTeK COMPUTER INC.
Address	:	4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan
Manufacturer	:	Arcadyan Technology Corporation
Model No.	:	PCE-AC56
FCC ID.	:	MSQ-PCEAC56
EUT Voltage	:	DC 3.3V (Power by PC)
Testing Voltage	:	DC 3.3V (Power by PC)
Trade Name	:	ASUS
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart E Section 15.407: 2015 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 : (Carol Tsai / Senior Engineering Adm. Specialist)

Tested By : (Bruno Tsai / Senior Engineer)

Approved By : (Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
13B0341R-RFUSP55V00	V1.0	Initial issue of report	Dec. 11, 2013
1620121R-RFUSP42V00	V1.0	Update WLAN 5G band 1 standard to FCC 15.407. For market purpose, customer adjust reduced the peak power, so verified the 99% & 26dB BW, peak transmit output power, power density, radiation(above 1GHz), bandedge and frequency stability by customer requirements.	May 11, 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:

HsinChu Testing Laboratory:
No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan, R.O.C.
TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com

LinKou Testing Laboratory:
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

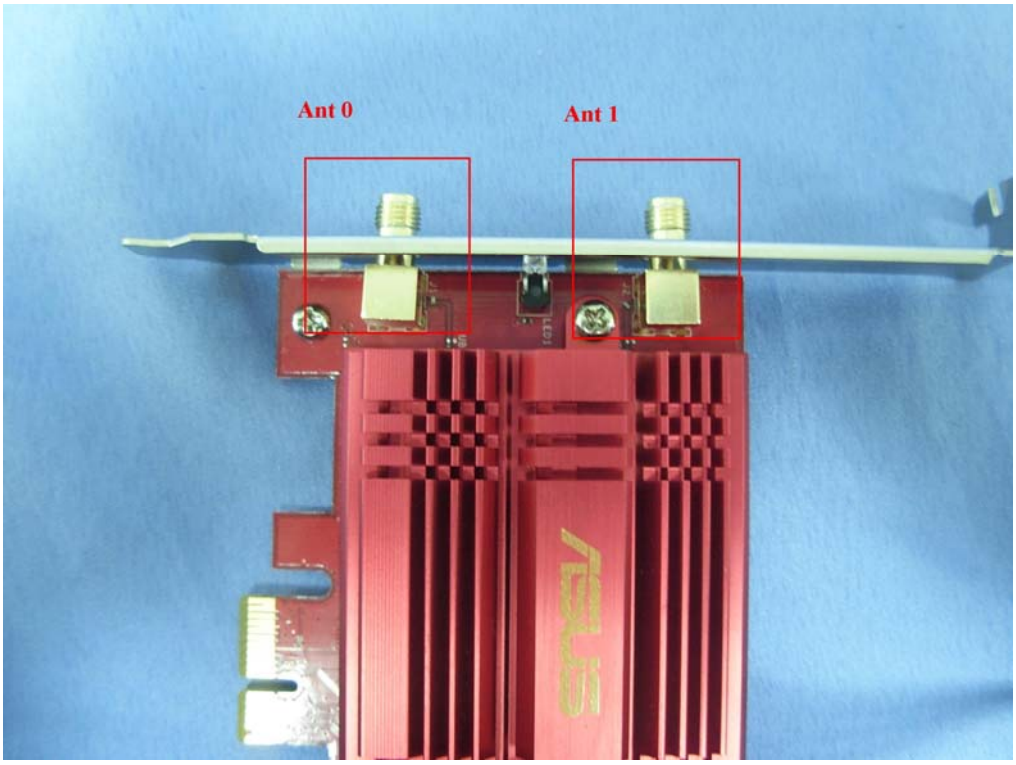
Product Name	PCE-AC56 Dual-Band Wireless PCI-E Adapter	
Trade Name	ASUS	
Model No.	PCE-AC56	
Frequency Range/ Channel Number	IEEE 802.11a/n (20MHz)	5180~5240MHz / 4 Channels
	IEEE 802.11n (40MHz)	5190~5230MHz / 2 Channels
	IEEE 802.11ac (80MHz)	5210~5210MHz / 1 Channel
Type of Modulation	IEEE 802.11a/n/ac	Orthogonal Frequency Division Multiplexing
Data Speed	IEEE 802.11a	6Mbps,9Mbps,12Mbps,18Mbps,24Mbps,36Mbps,48Mbps,54Mbps
	IEEE 802.11n	Support a subset of the combination of GI, MCS 0~MCS 7 and bandwidth defined in 802.11n
	IEEE 802.11ac	Support a subset of the combination of GI, MCS 0~MCS 9 and bandwidth defined in 802.11ac

Antenna Information	
Antenna Gain	Ant0: 4dBi, Ant1: 4dBi
Beamforming Gain	3dBi
Antenna Type	Dipole Antenna

ANT-TX / RX & Bandwidth

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

2TX / 2RX



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

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

IEEE 802.11a & IEEE 802.11n (20MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz	48	5240 MHz

IEEE 802.11n (40MHz)

Working Frequency of Each Channel			
Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

IEEE 802.11ac (80MHz)

Working Frequency of Each Channel	
Channel	Frequency
42	5210 MHz

Note:

1. This device is a PCE-AC56 Dual-Band Wireless PCI-E Adapter including 2.4GHz b/g/n and 5GHz a/n/ac (2x2) transmitting and receiving function.
2. These test results on a sample of the device are for the purpose of demonstrating Compliance with Part 15 Subpart E Paragraph 15.407.
3. 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.
4. The 5.2GHz is performed according to the UNII Test Procedures New Rules.
5. The function of the 2.4GHz & 5.8GHz transmitting is measured and makes a test report of the report number: 13B0341R-RFUSP38V00 & 1620121R-RFUSP42V00-A.
6. This device is a composite device in accordance with Part 15 regulations. The receiving function receiving was tested and its test report number is 13B0341R-RFUSP01V00.

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

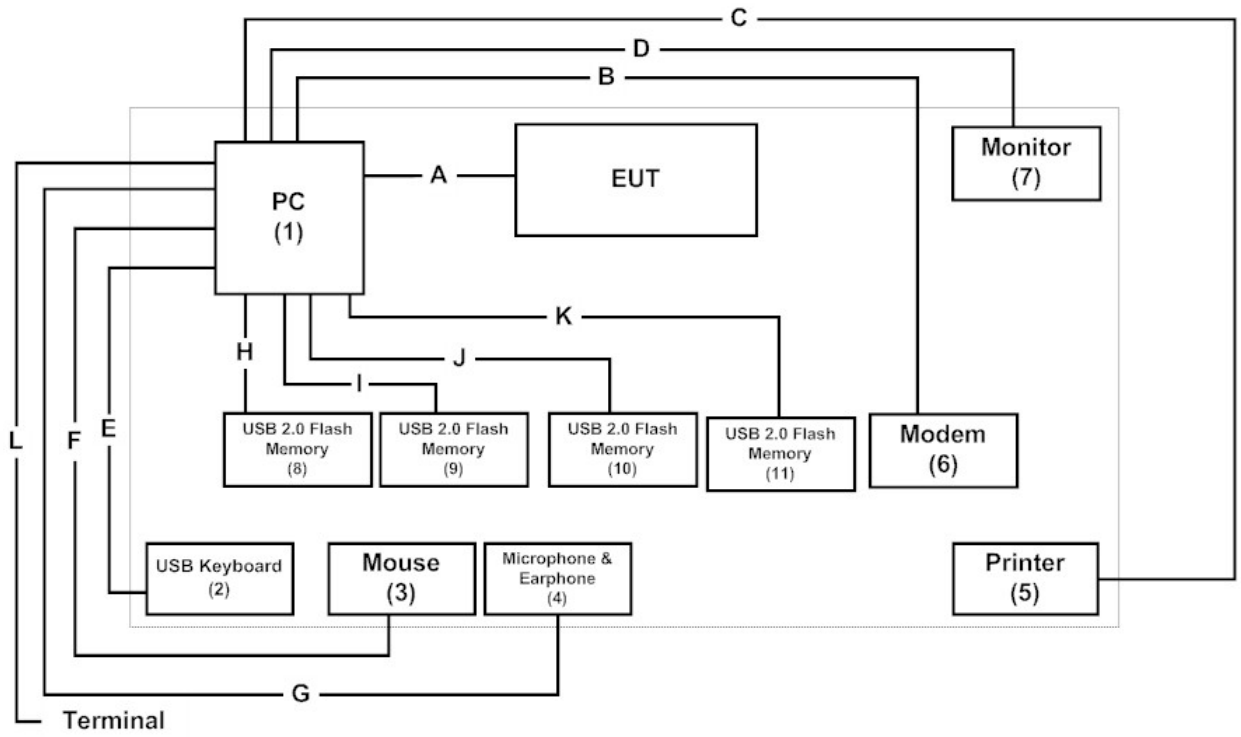
Test Items	Modulation	Channel	Antenna	Result
Conducted Emission	11ac (80MHz)	42	0+1	N/A
99 % & 26dB Bandwidth	11a	36/44/48	0/1	Complies
	11n (20MHz)	36/44/48	0/1	Complies
	11n (40MHz)	38/46	0/1	Complies
	11ac (80MHz)	42	0/1	Complies
Peak Transmit Output	11a	36/44/48	0+1	Complies
	11n (20MHz)	36/44/48	0+1	Complies
	11n (40MHz)	38/46	0+1	Complies
	11ac (80MHz)	42	0+1	Complies
Peak Power Spectrum Density	11a	36/44/48	0+1	Complies
	11n (20MHz)	36/44/48	0+1	Complies
	11n (40MHz)	38/46	0+1	Complies
	11ac (80MHz)	42	0+1	Complies
Radiated Emission	11a	36/44/48	0+1	Complies
	11n (20MHz)	36/44/48	0+1	Complies
	11n (40MHz)	38/46	0+1	Complies
	11ac (80MHz)	42	0+1	Complies
Band Edge	11a	36/44/48	0+1	Complies
	11n (20MHz)	36/44/48	0+1	Complies
	11n (40MHz)	38/46	0+1	Complies
	11ac (80MHz)	42	0+1	Complies
Frequency Stability	11a	36/48	0/1	Complies
	11n (20MHz)	36/48	0/1	Complies
	11n (40MHz)	38/46	0/1	Complies
	11ac (80MHz)	42	0/1	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	PC	DELL	DCSM	00144-531-356-513	DoC	Non-Shielded, 1.8m
2	USB Keyboard	DELL	SK-8115	1437	DoC	--
3	Mouse	Logitech	M-SBF83	HCA52200315	DoC	--
4	Microphone & Earphone	Fujiei	SBZ-38	N/A	DoC	--
5	Printer	HP	C2642A	MY75N1D2Y1	DoC	Non-Shielded, 0.7m
6	Modem	ACEEX	DM-1414	980033034	DoC	Non-Shielded, 1.6m
7	Monitor	DELL	U2410f	082WXD-72872-16R-0W2L	DoC	Non-Shielded, 1.8m
8	USB 2.0 Flash Memory	Apacer	AH223	N/A	DoC	--
9	USB 2.0 Flash Memory	Apacer	AH223	N/A	DoC	--
10	USB 2.0 Flash Memory	Apacer	AH223	N/A	DoC	--
11	USB 2.0 Flash Memory	Apacer	AH223	N/A	DoC	--

1.4. Configuration of tested System

Connection Diagram


Signal Cable Type		Signal cable Description
A	RF Cable	Non-Shielded, 0.8m
B	Modem Cable	Shielded, 1.5m
C	Printer Cable	Shielded, 1.2m
D	VGA Cable	Shielded, 1.8m, two ferrite cores bonded.
E	USB Keyboard Cable	Shielded, 1.5m
F	USB Mouse Cable	Shielded, 1.5m
G	Microphone & Earphone Cable	Non-Shielded, 1.2m
H	USB 2.0 Flash Memory Cable	Non-Shielded, 0.5m
I	USB 2.0 Flash Memory Cable	Non-Shielded, 0.5m
J	USB 2.0 Flash Memory Cable	Non-Shielded, 0.5m
K	USB 2.0 Flash Memory Cable	Non-Shielded, 0.5m
L	LAN Cable	Non-Shielded, 10m

1.5. EUT Exercise Software

1	Setup the EUT as shown in Section 1.4.
2	Execute the control program “Mtool Ver 1.0.0.9” on the EUT.
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 99 % & 26dB Bandwidth	15 - 35	25
Humidity (%RH)		25 - 75	45
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 E 15.407 Peak Transmit Power	15 - 35	25
Humidity (%RH)		25 - 75	65
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 E 15.407 Peak Power Spectrum Density	15 - 35	25
Humidity (%RH)		25 - 75	45
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 E 15.407 Radiated Emission	15 - 35	25
Humidity (%RH)		25 - 75	45
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 E 15.407 Band Edge	15 - 35	25
Humidity (%RH)		25 - 75	45
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 E 15.407 Frequency Stability	15 - 35	25
Humidity (%RH)		25 - 75	45
Barometric pressure (mbar)		860 - 1060	950-1000

2. 99% & 26dB Bandwidth

2.1. Test Equipment

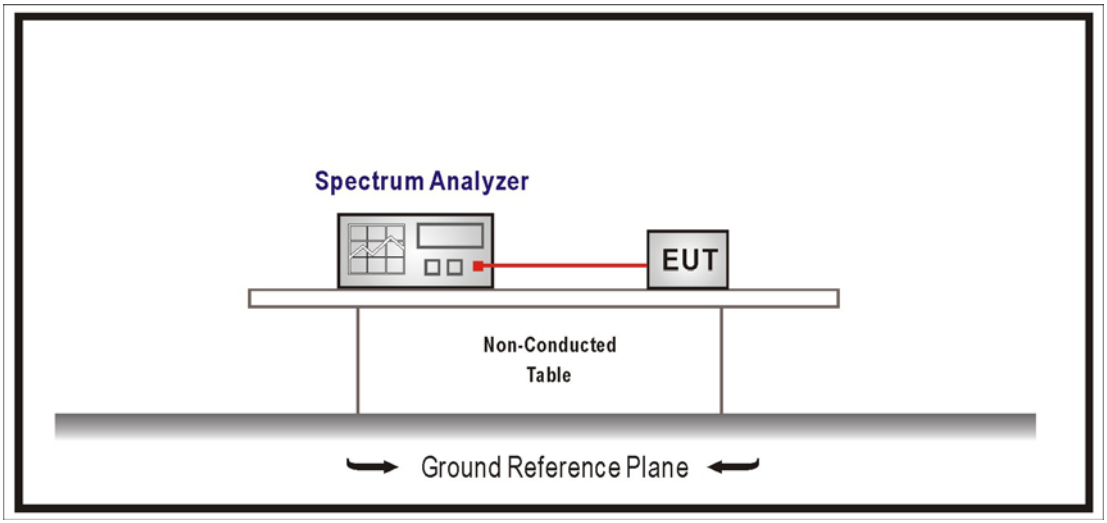
The following test equipments are used during the radiated emission tests:

99% & 26dB Bandwidth / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/07/13

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

2.2. Test Setup



2.3. Limits

99% & 26dB Bandwidth : No Required

2.4. Test Procedure

99% & 26dB Bandwidth :
The EUT was tested according to U-NII test procedure of 789033 D02 General UNII Test Procedures New Rules v01 .
Set RBW 1% of the emission bandwidth, VBW equal to 3 times the RBW.

2.5. Uncertainty

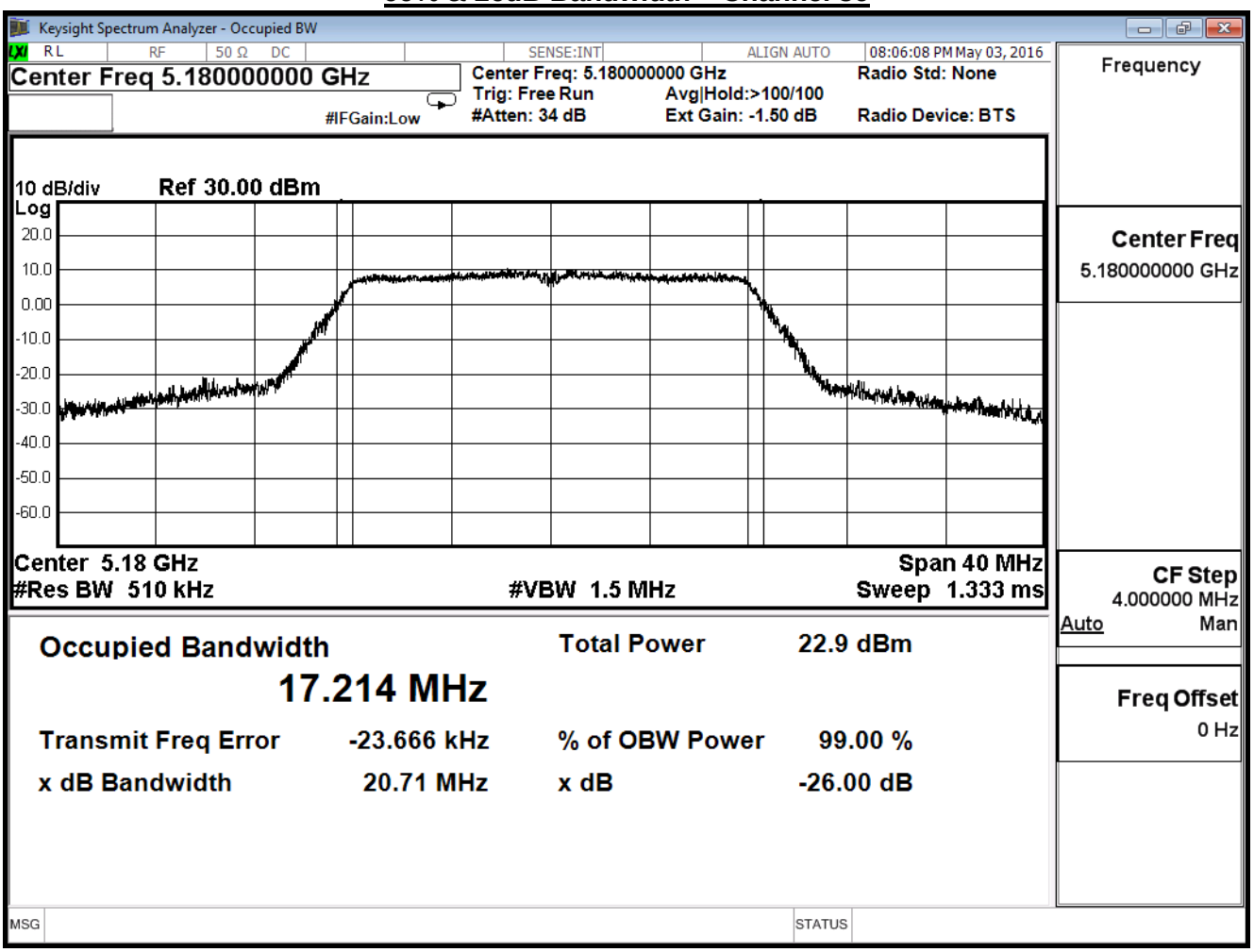
The measurement uncertainty is defined as ±150Hz

2.6. Test Result

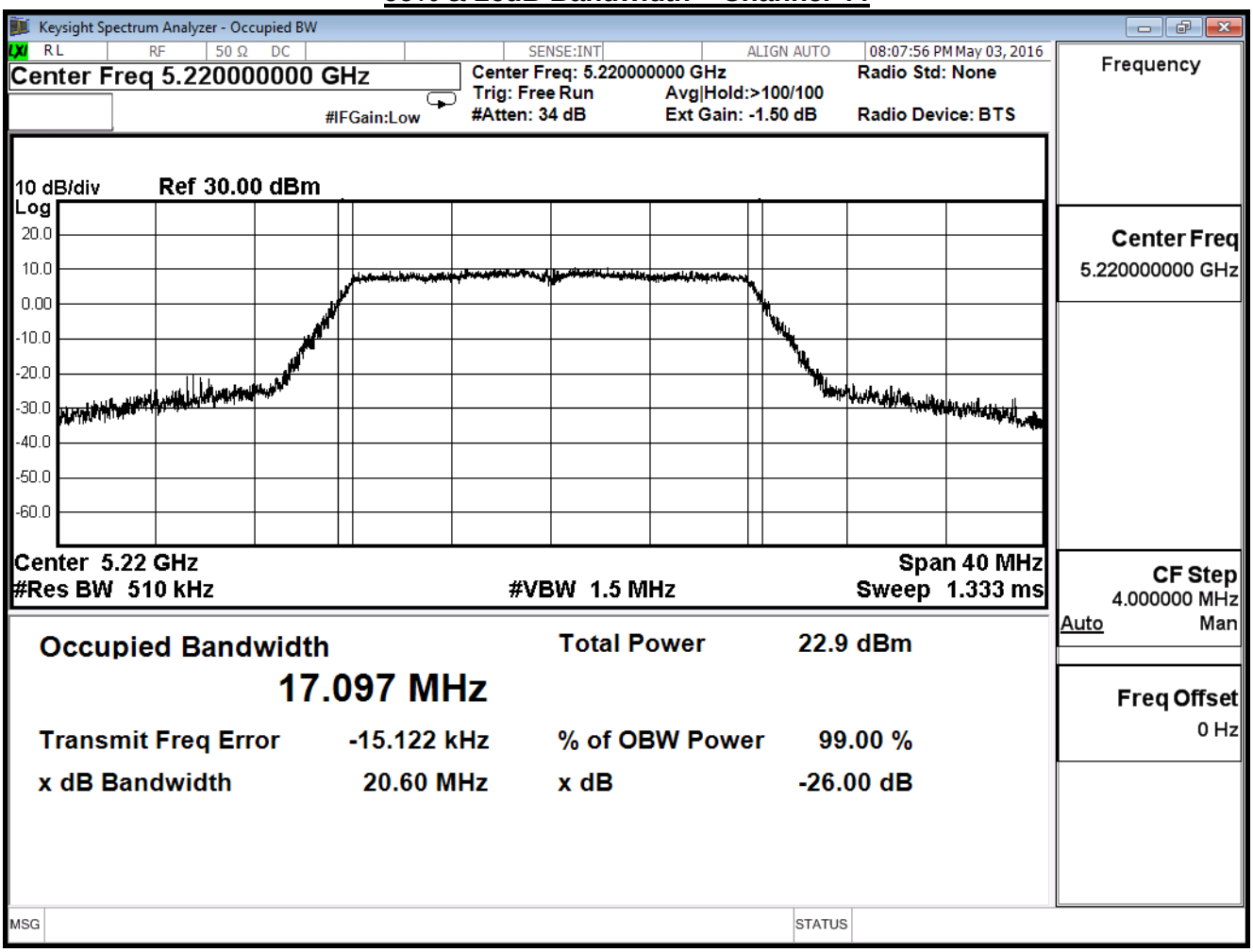
Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

802.11a (ANT 0)					
Channel No.	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)	Result
		26dB Bandwidth	99% Bandwidth		
36	5180	20.71	17.21	--	Pass
44	5220	20.60	17.10	--	Pass
48	5240	20.47	17.14	--	Pass

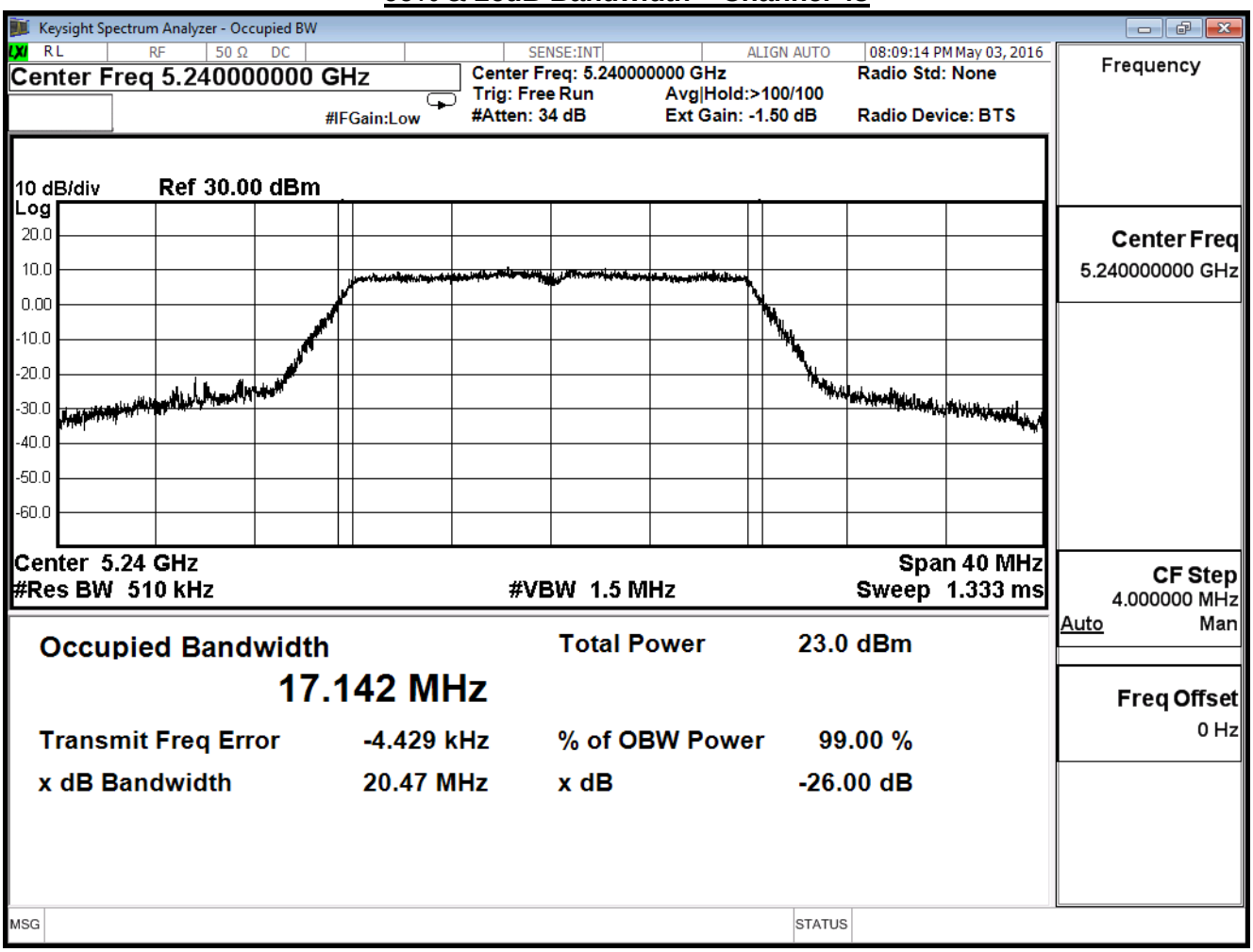
99% & 26dB Bandwidth – Channel 36



99% & 26dB Bandwidth – Channel 44



99% & 26dB Bandwidth – Channel 48

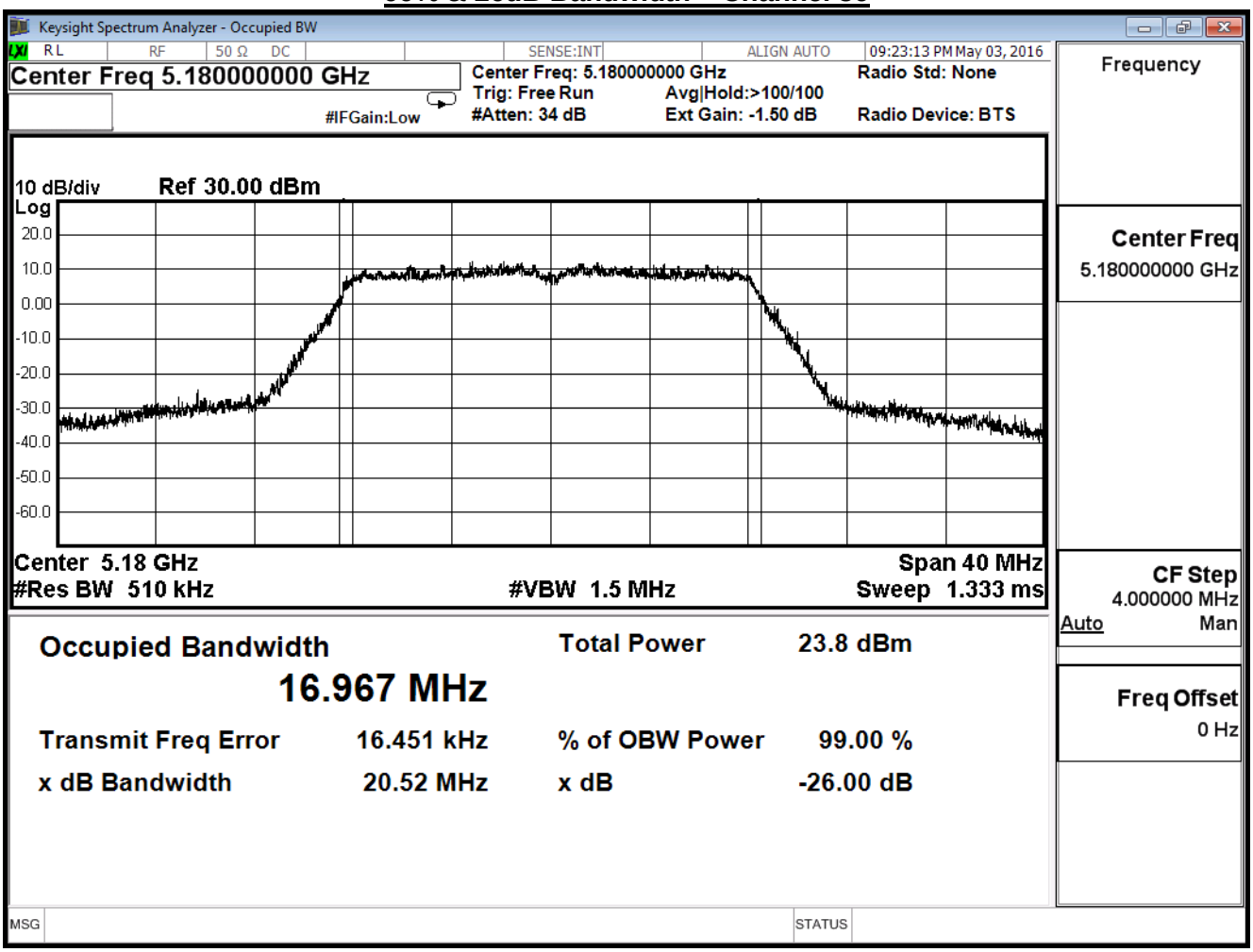


Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

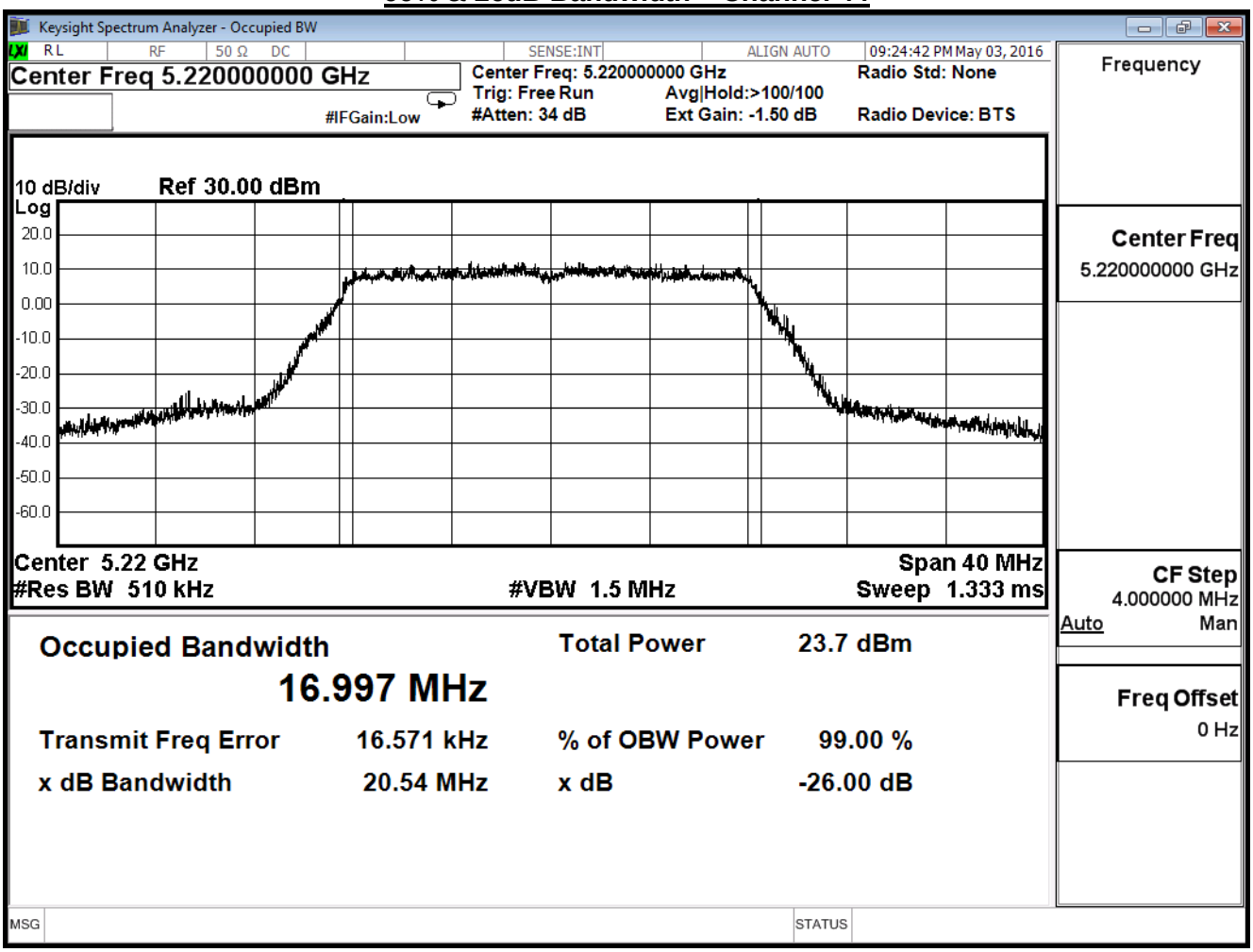
802.11a (ANT 1)

Channel No.	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)	Result
		26dB Bandwidth	99% Bandwidth		
36	5180	20.52	16.97	--	Pass
44	5220	20.54	17.00	--	Pass
48	5240	20.54	16.96	--	Pass

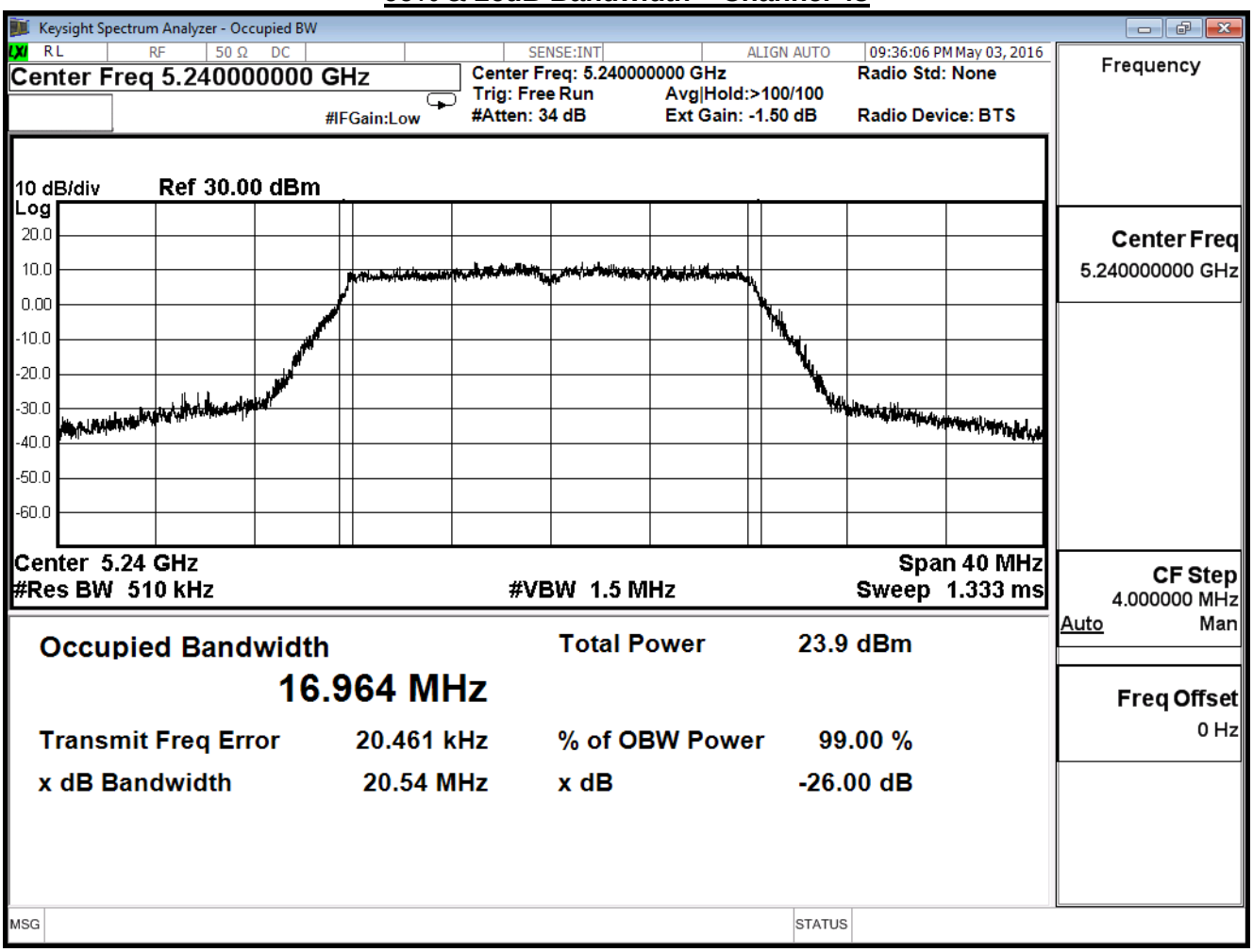
99% & 26dB Bandwidth – Channel 36



99% & 26dB Bandwidth – Channel 44



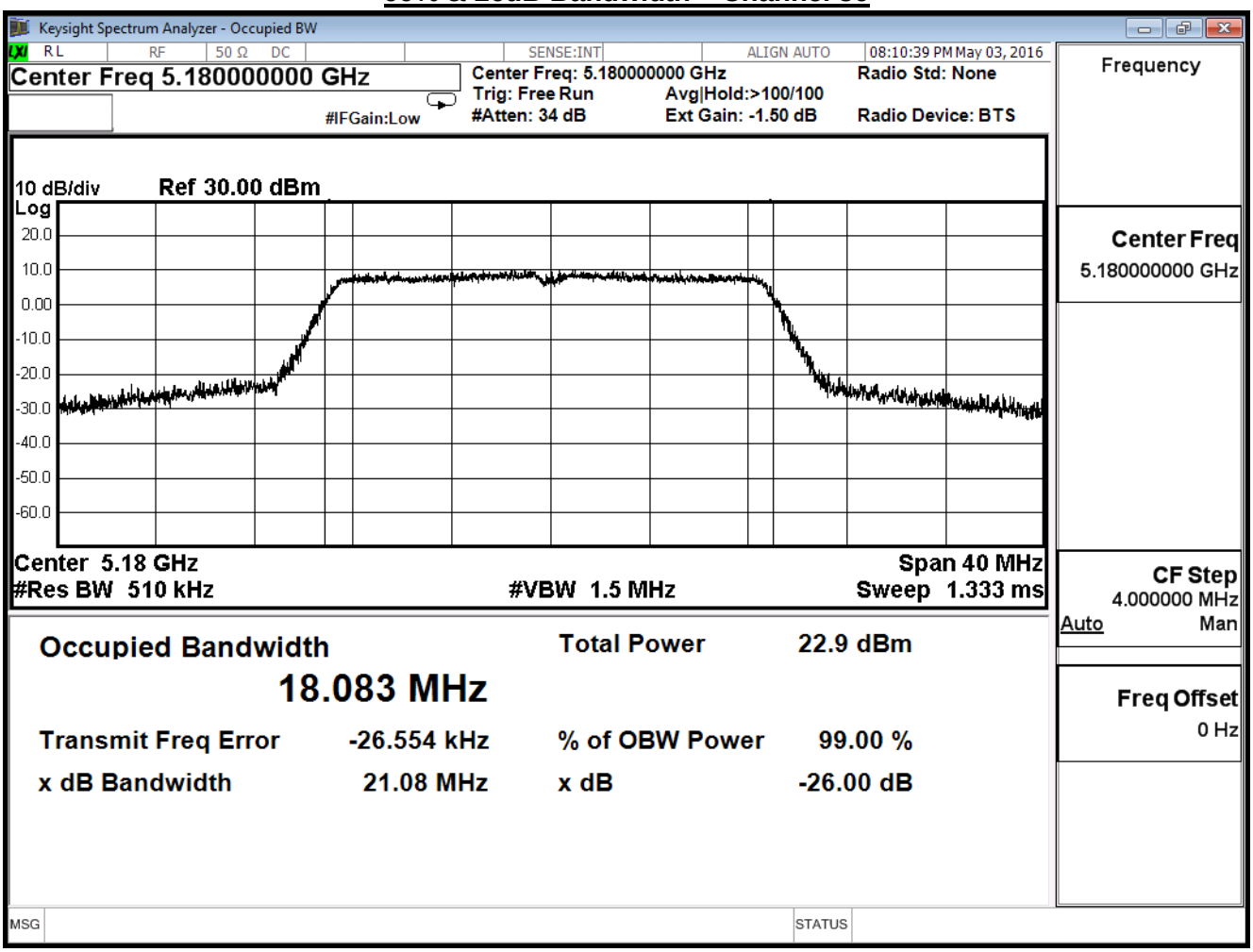
99% & 26dB Bandwidth – Channel 48



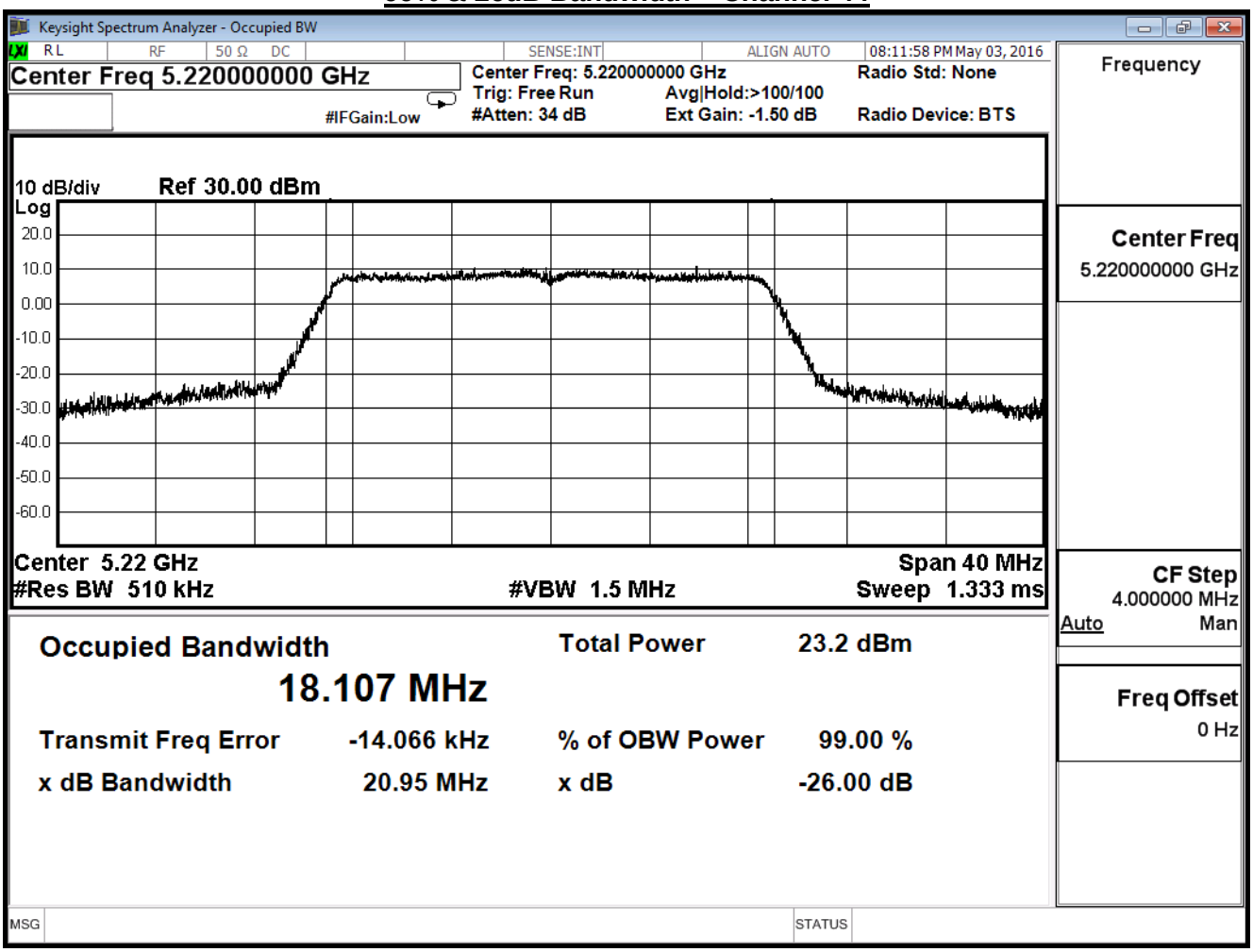
Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

IEEE 802.11n_20M (ANT 0)					
Channel No.	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)	Result
		26dB Bandwidth	99% Bandwidth		
36	5180	21.08	18.08	--	Pass
44	5220	20.95	18.11	--	Pass
48	5240	21.13	18.05	--	Pass

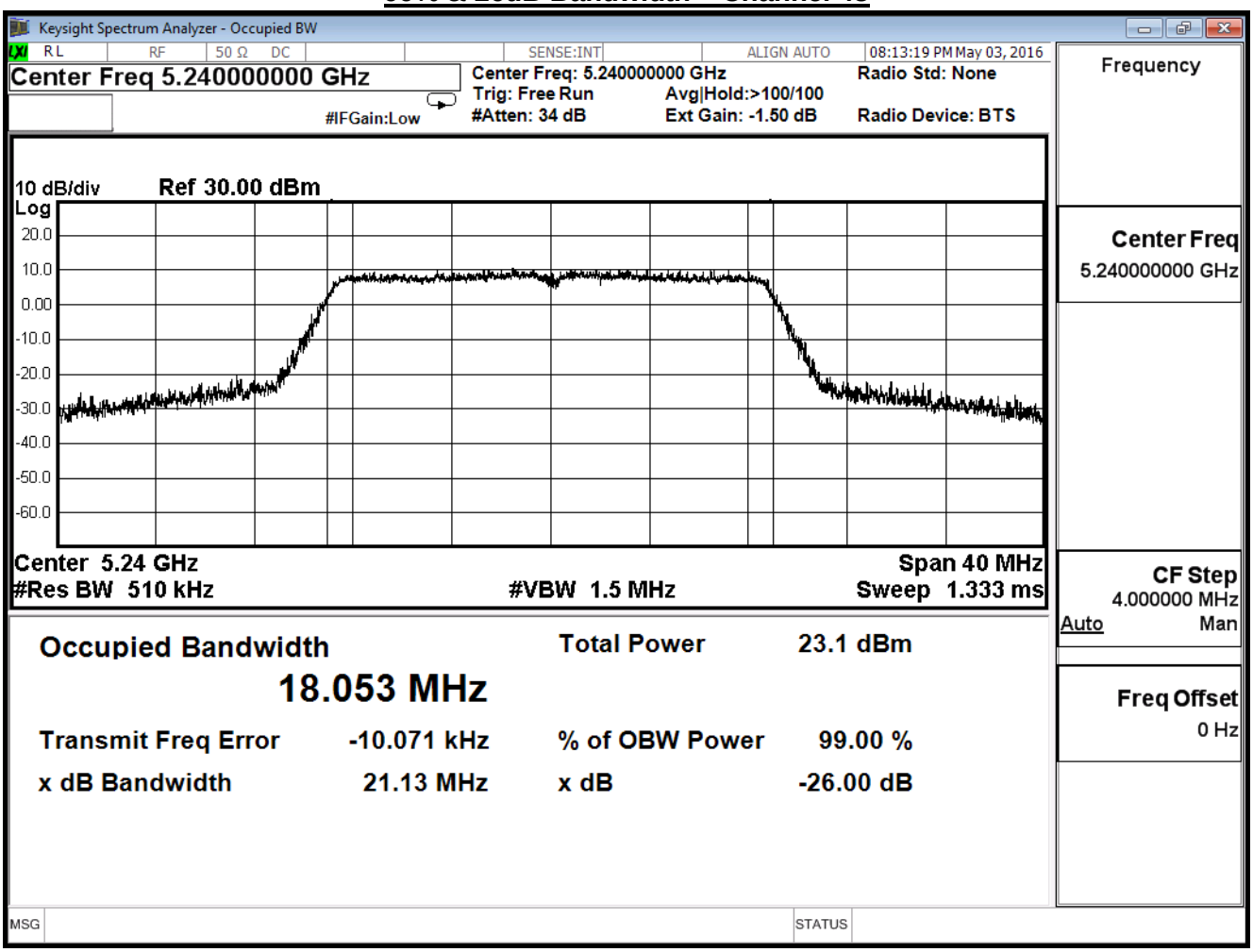
99% & 26dB Bandwidth – Channel 36



99% & 26dB Bandwidth – Channel 44



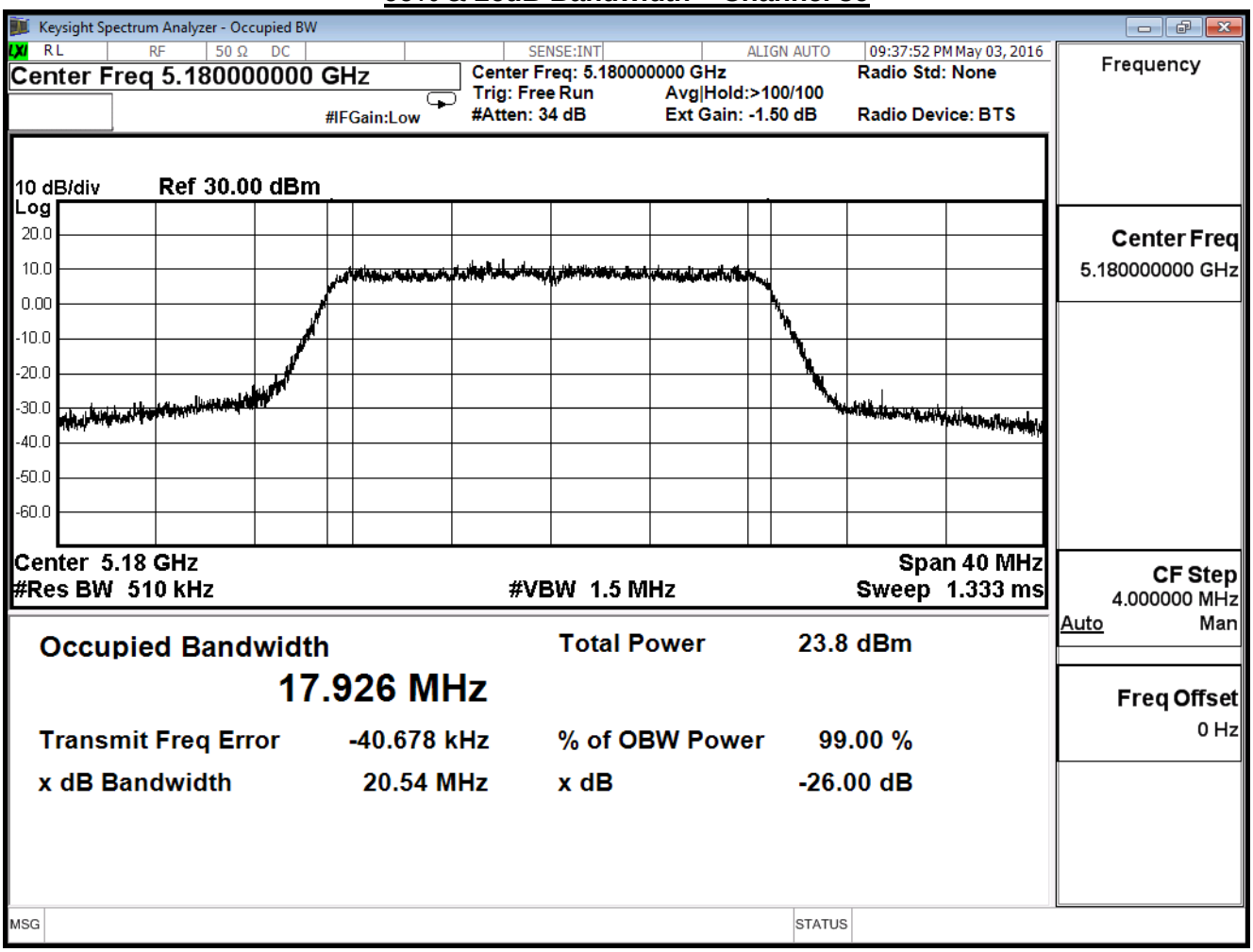
99% & 26dB Bandwidth – Channel 48



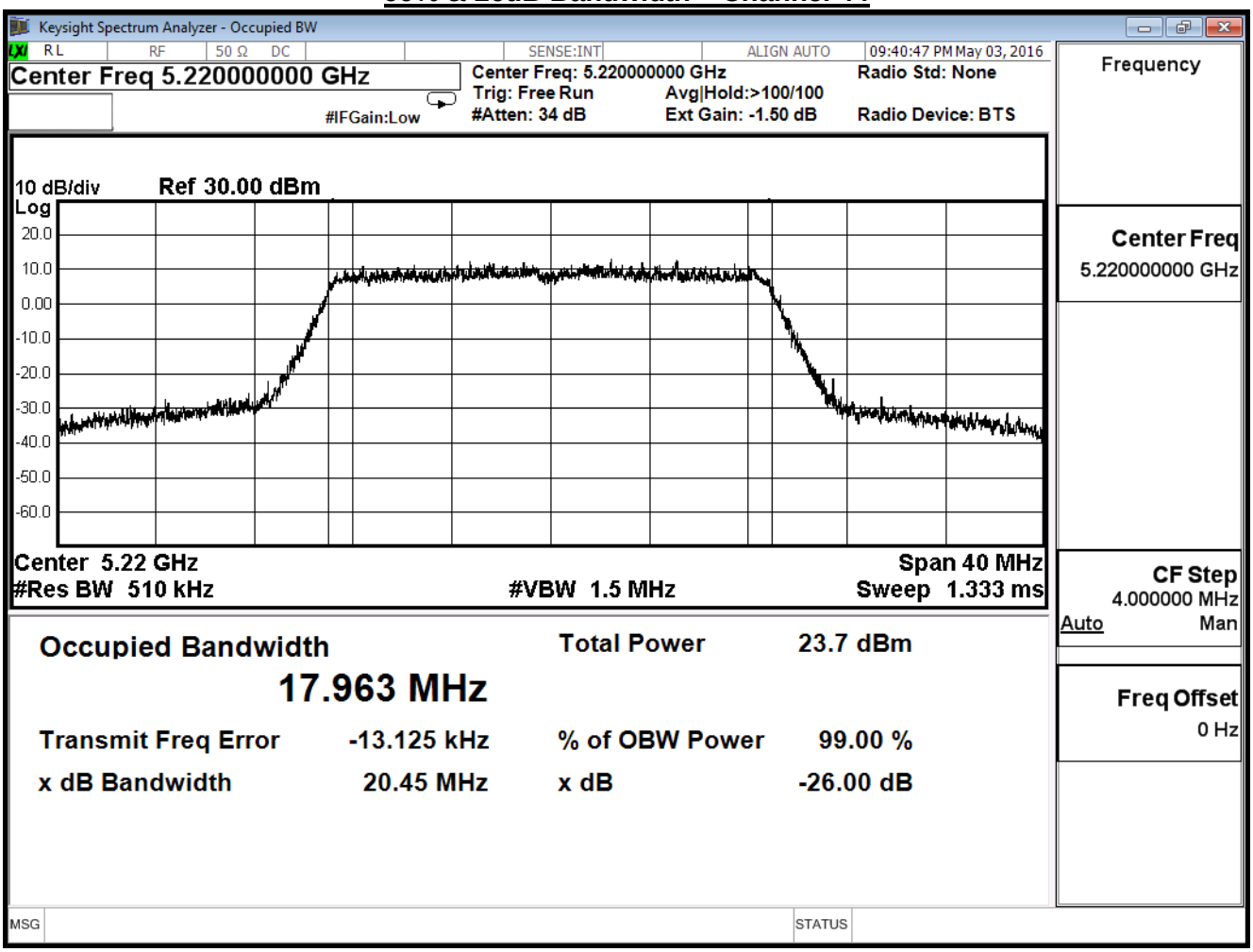
Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

IEEE 802.11n_20M (ANT 1)					
Channel No.	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)	Result
		26dB Bandwidth	99% Bandwidth		
36	5180	20.54	17.93	--	Pass
44	5220	20.45	17.96	--	Pass
48	5240	20.48	17.92	--	Pass

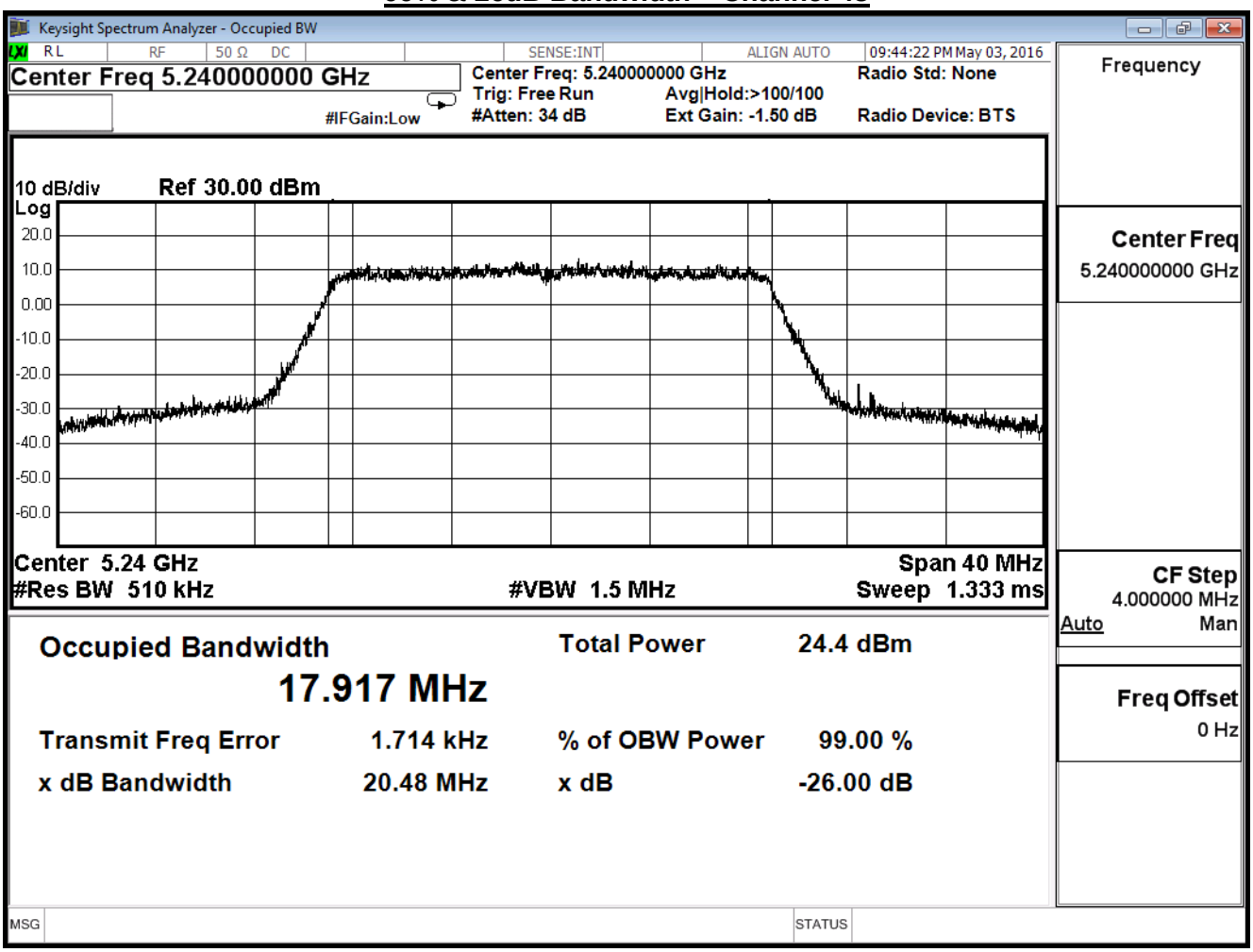
99% & 26dB Bandwidth – Channel 36



99% & 26dB Bandwidth – Channel 44



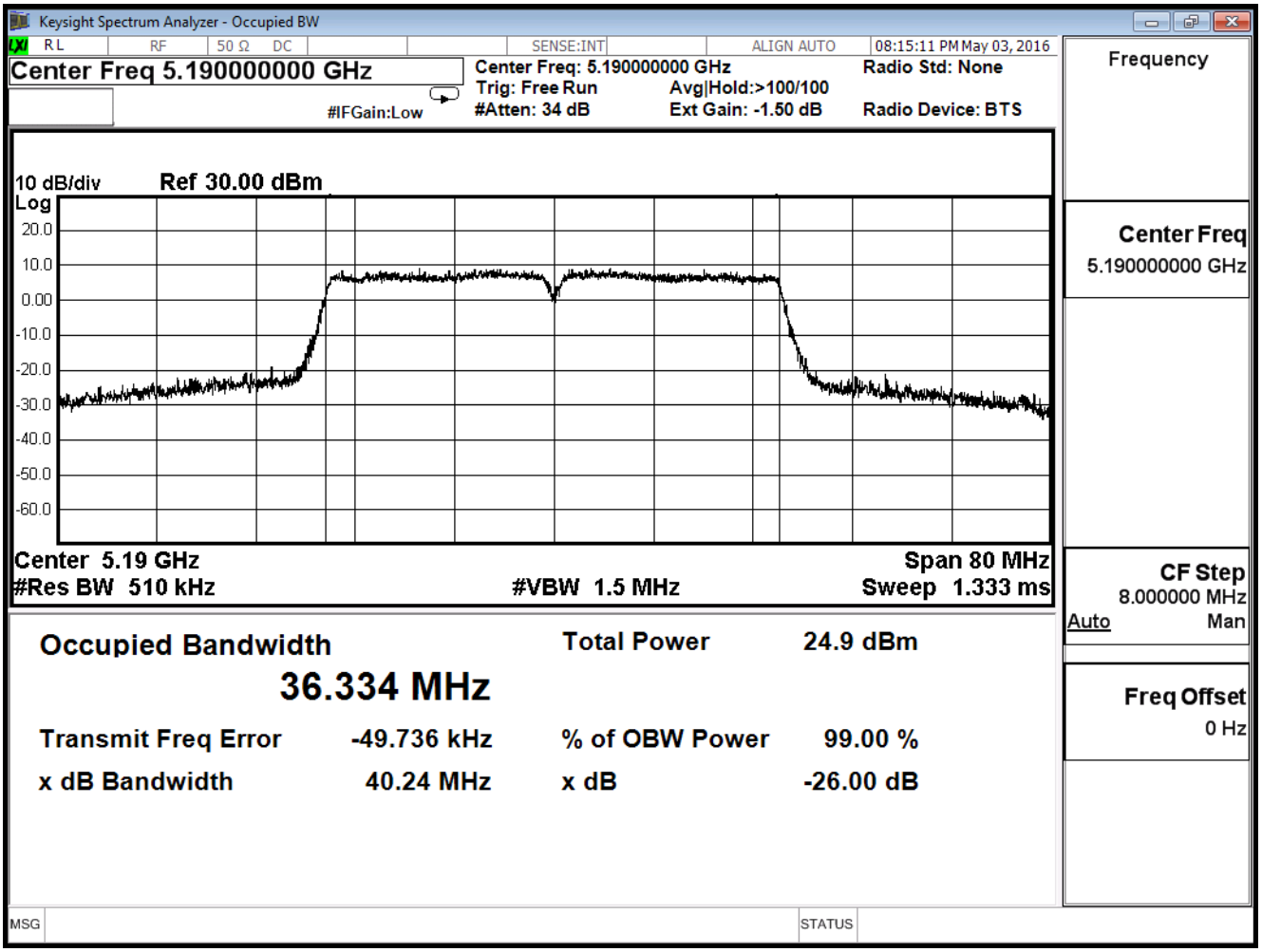
99% & 26dB Bandwidth – Channel 48



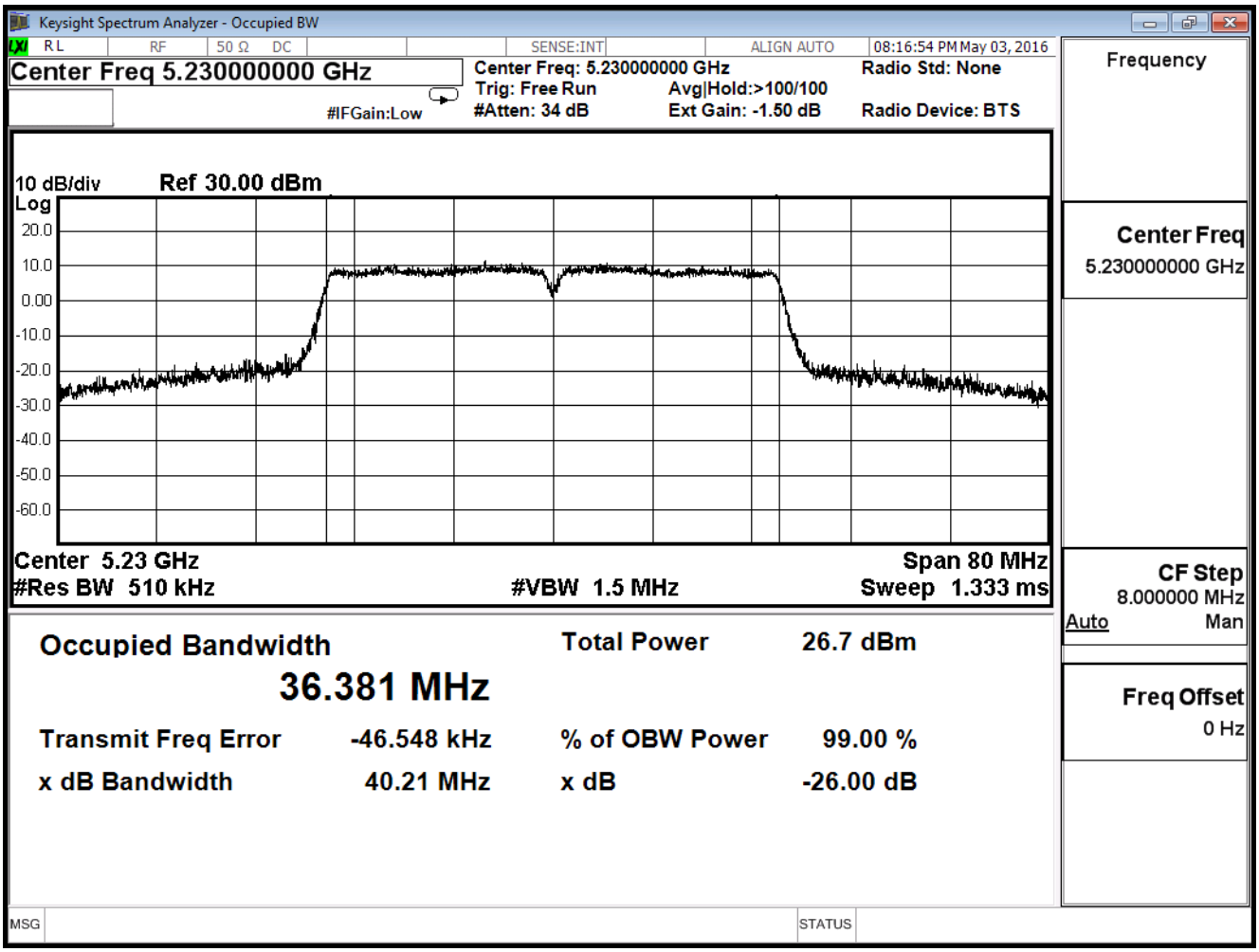
Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

802.11n_40M(ANT 0)					
Channel No.	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)	Result
		26dB Bandwidth	99% Bandwidth		
38	5190	40.24	36.33	--	Pass
46	5230	40.21	36.38	--	Pass

99% & 26dB Bandwidth – Channel 38



99% & 26dB Bandwidth – Channel 46

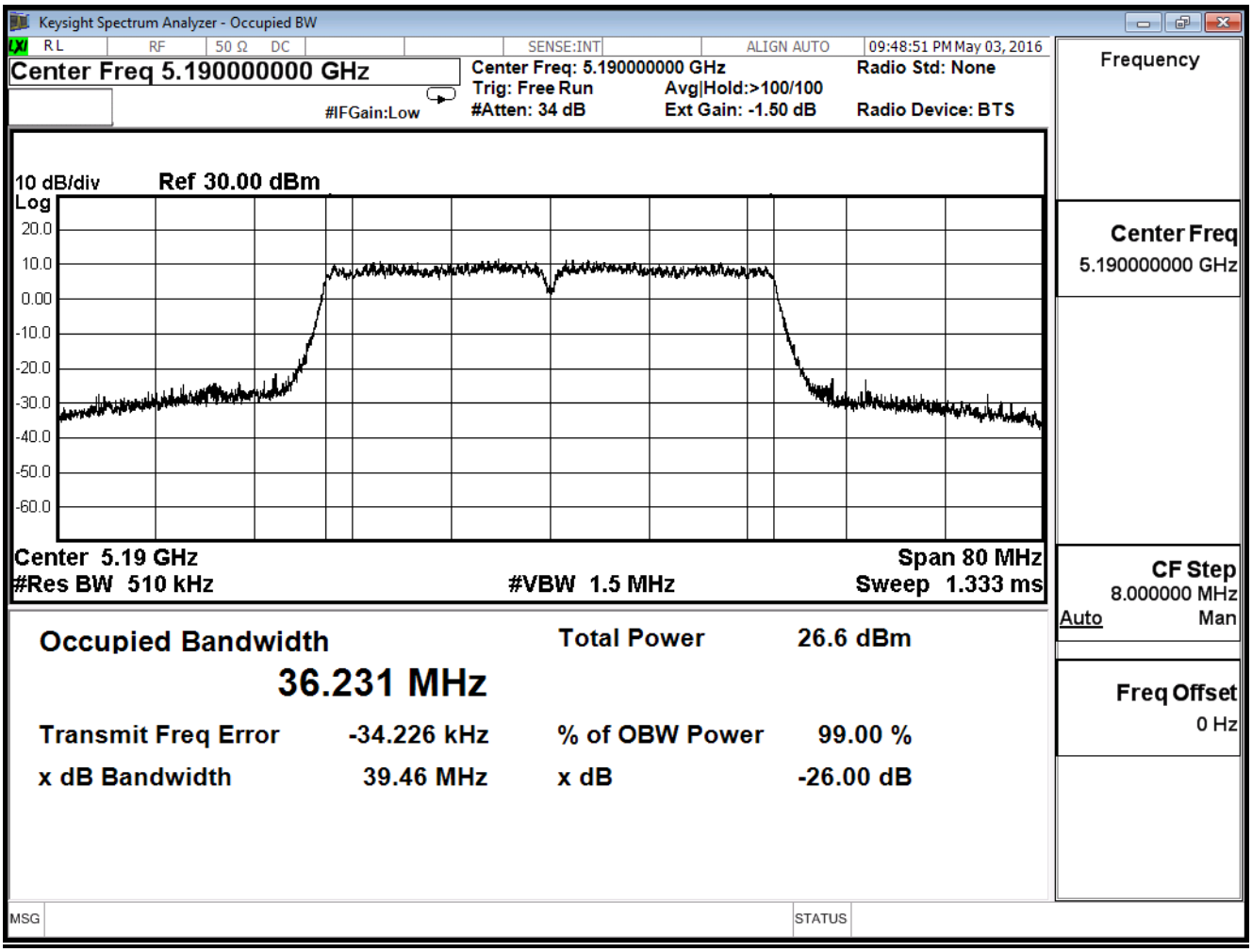


Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

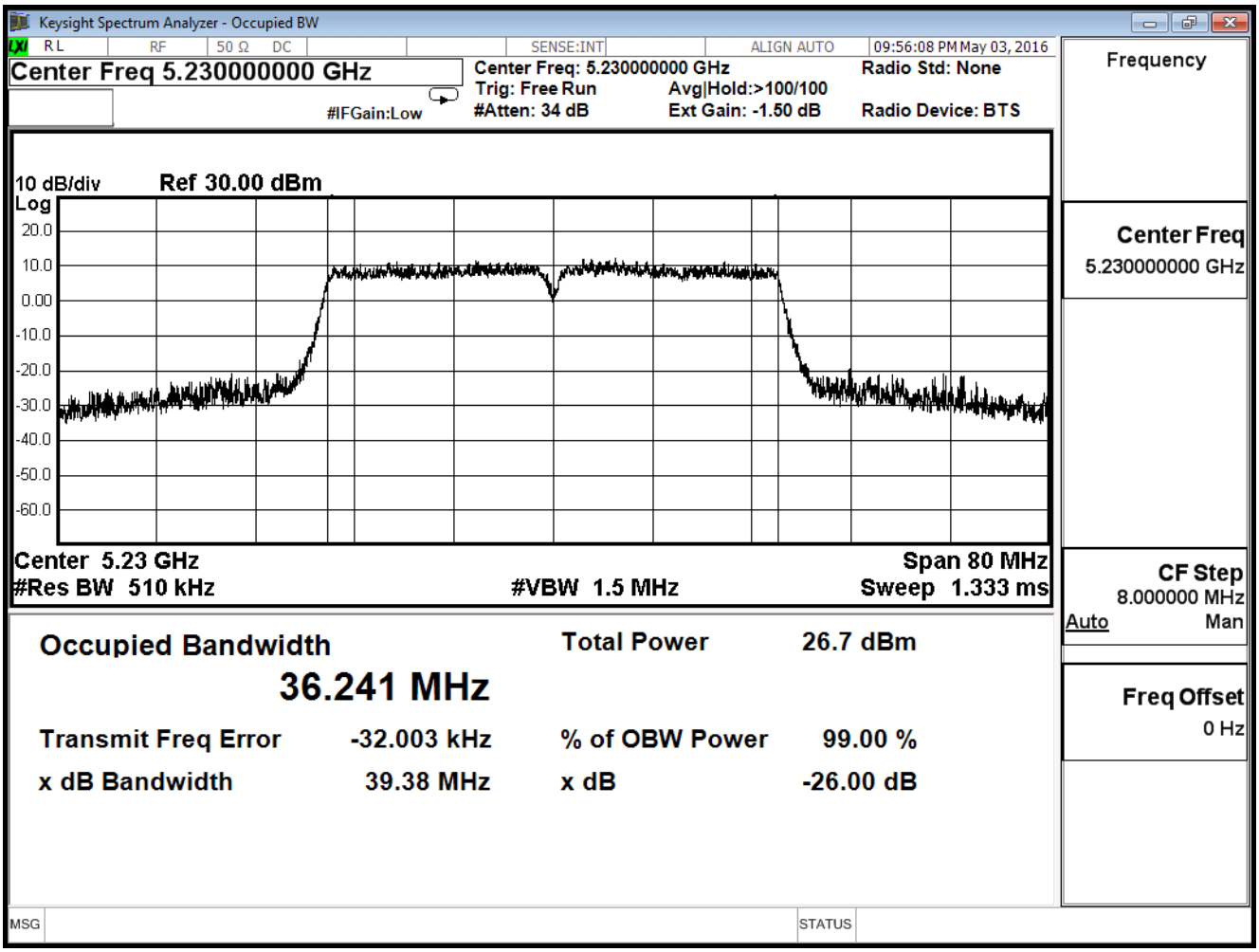
802.11n_40M(ANT 1)

Channel No.	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)	Result
		26dB Bandwidth	99% Bandwidth		
38	5190	39.46	36.23	--	Pass
46	5230	39.38	36.24	--	Pass

99% & 26dB Bandwidth – Channel 38



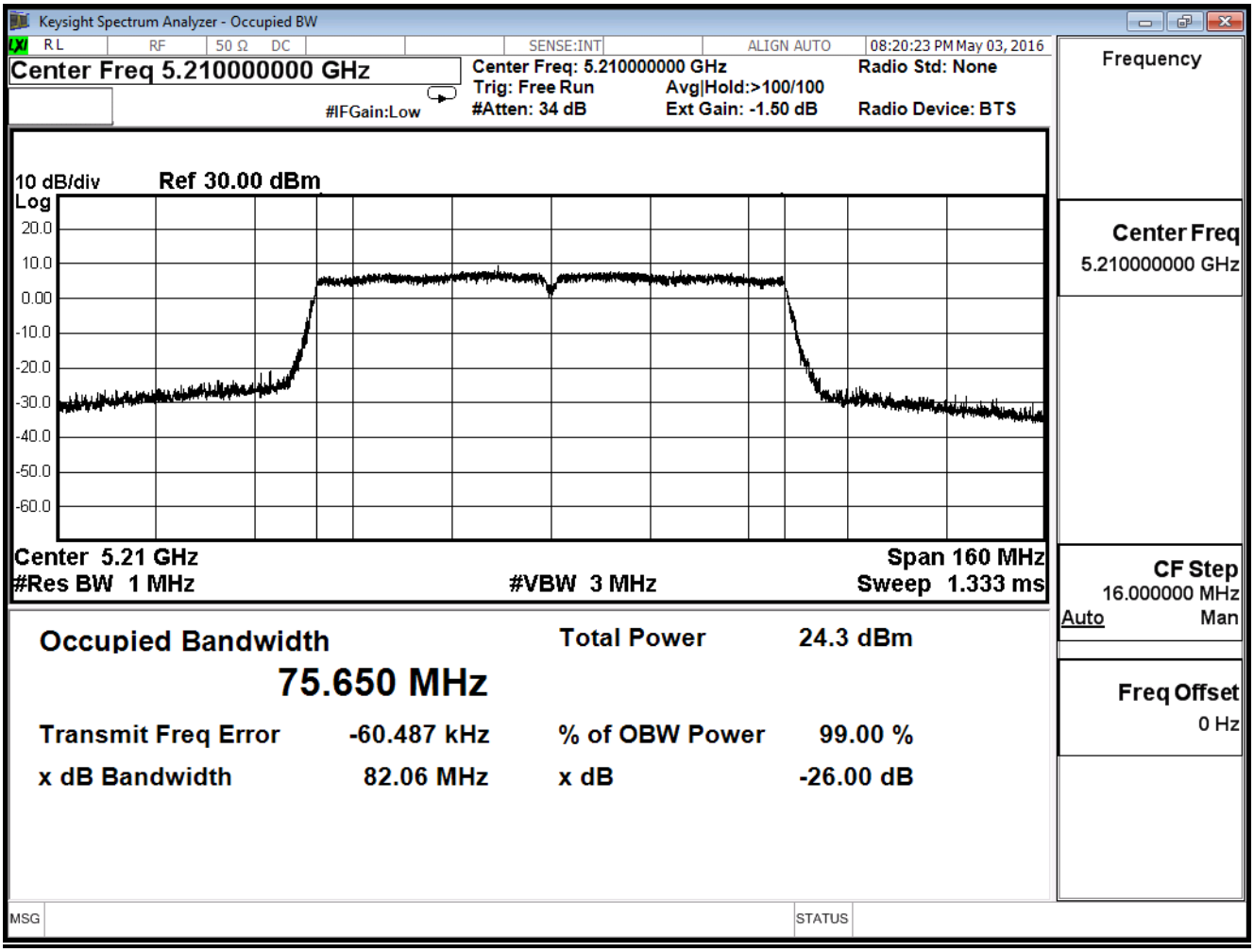
99% & 26dB Bandwidth – Channel 46



Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

802.11 ac_80M(ANT 0)					
Channel No.	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)	Result
		26dB Bandwidth	99% Bandwidth		
42	5210	82.06	75.65	--	Pass

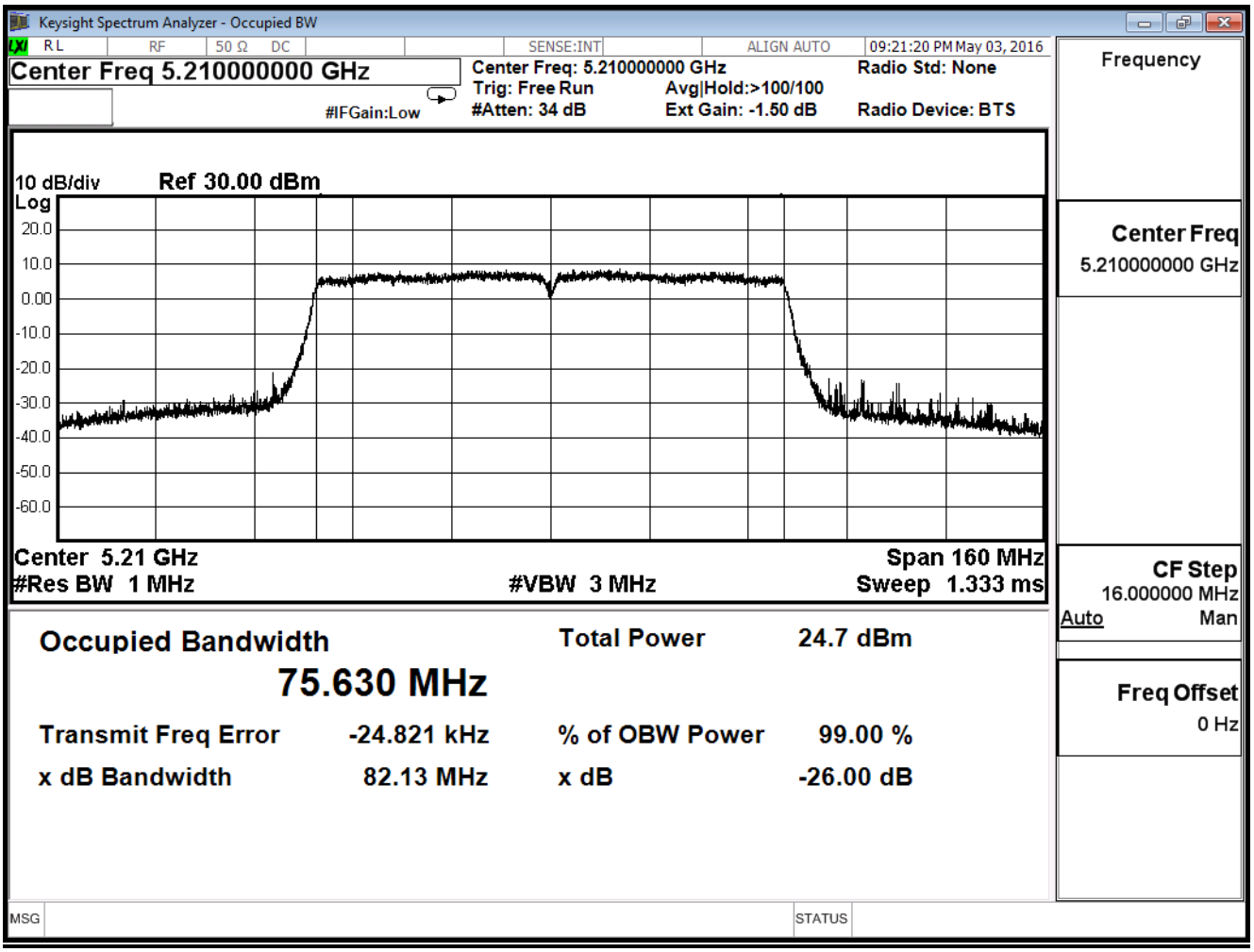
99% & 26dB Bandwidth – Channel 42



Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

802.11 ac_80M(ANT 1)					
Channel No.	Frequency (MHz)	Measure Level (MHz)		Limit (MHz)	Result
		26dB Bandwidth	99% Bandwidth		
42	5210	82.13	75.63	--	Pass

99% & 26dB Bandwidth – Channel 42



3. Peak Transmit Output

3.1. Test Equipment

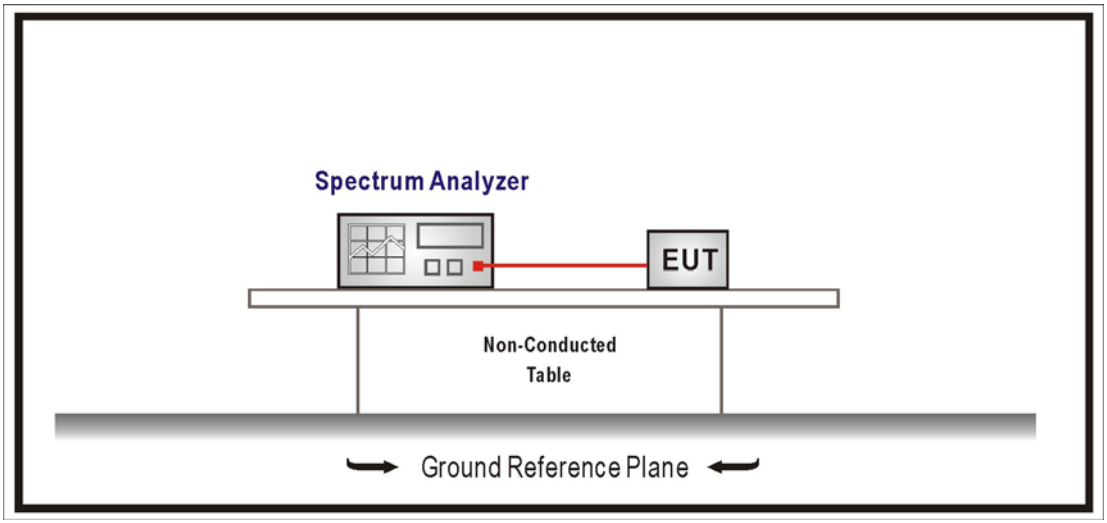
The following test equipments are used during the radiated emission tests:

Peak Transmit Output / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/07/13
Power Meter	Agilent	N1911A	MY45101353	2016/10/11
Power Sensor	Agilent	N1921A	MY45241670	2016/10/11

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

3.2. Test Setup



3.3. Limits

1. For the band 5.15-5.25 GHz, the peak transmit power over the frequency band of operation shall not exceed the lesser of 1W. If transmitting antenna of directional gain greater than 6 dBi are used, the peak transmit power 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 conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. 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 transmit power over the frequency band of operation shall not exceed the lesser of 250 mW. If transmitting antenna of directional gain greater than 6 dBi are used, the peak transmit power 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 transmit power over the frequency band of operation shall not exceed the lesser of 1W. If transmitting antenna of directional gain greater than 6 dBi are used, the peak transmit power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

3.4. Test Procedure

The EUT was setup to ANSI C63.10: 2009; tested to U-NII test procedure of KDB 789033 D02 General UNII Test Procedures New Rules v01 for compliance to FCC 47CFR Subpart E requirements.

3.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

3.6. Test Result

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

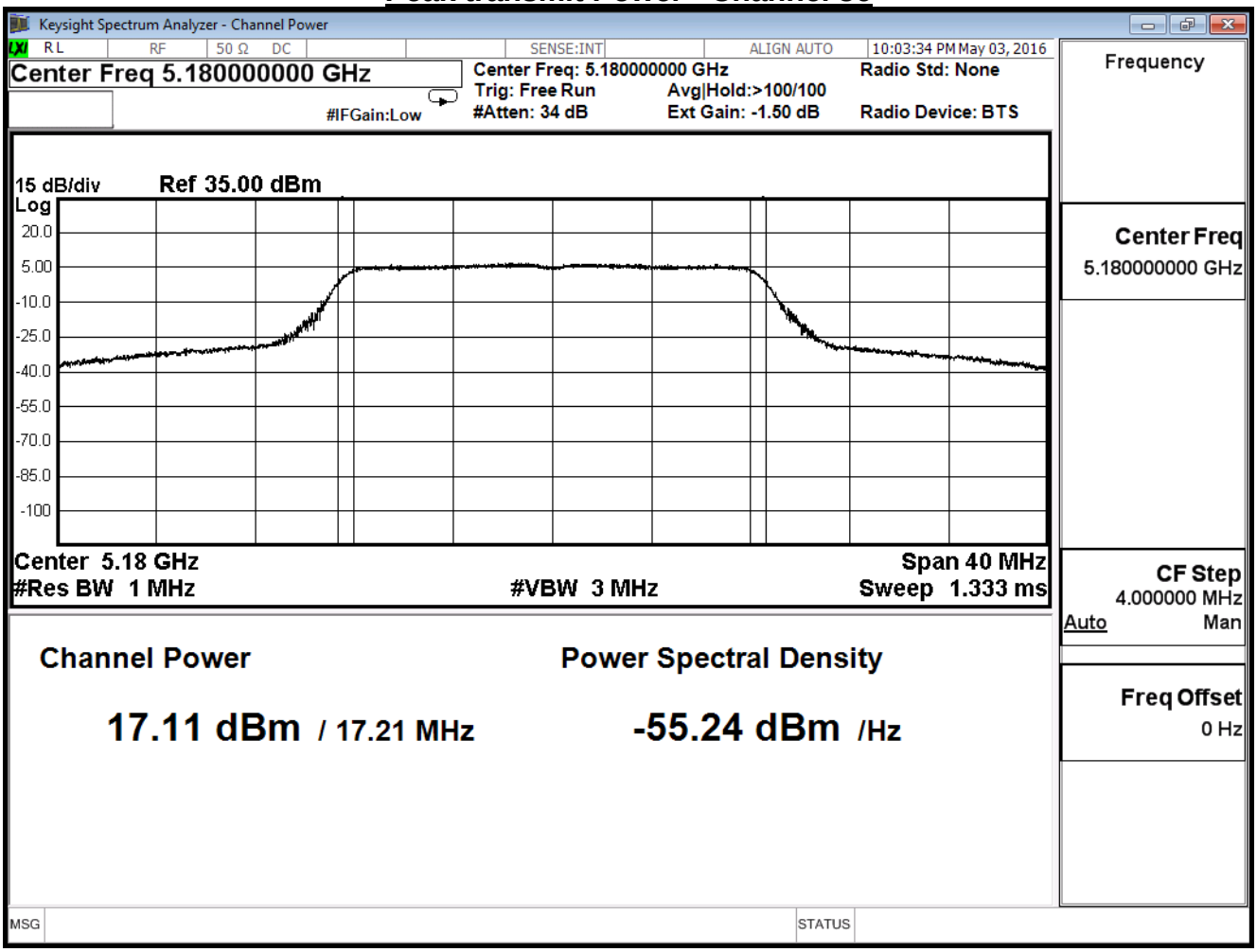
802.11a (ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	17.11	≤24
44	5220	17.16	≤24
48	5240	17.22	≤24

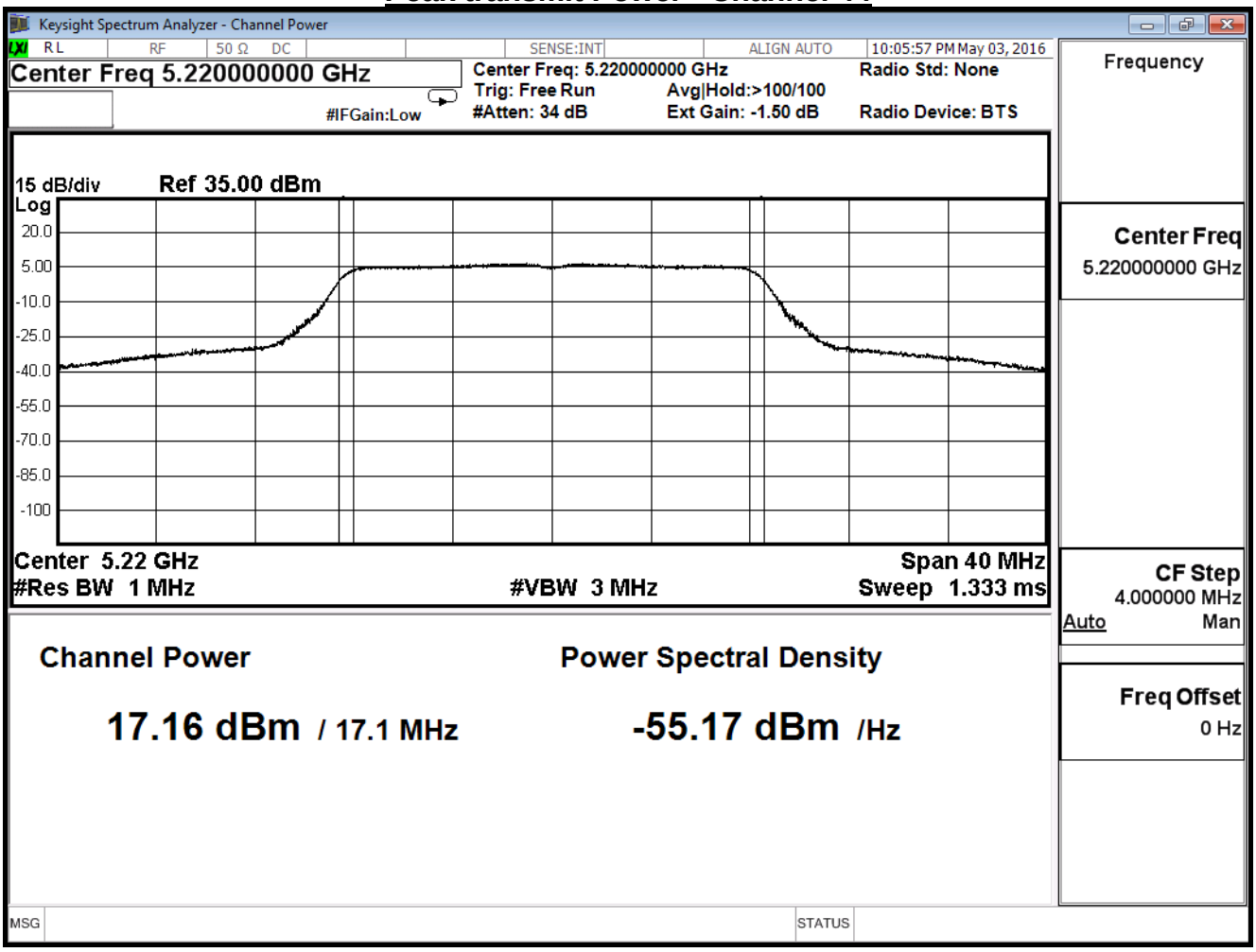
The worst emission of data rate is 6Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
36	5180	17.11	--	--	--	--	--	--	≤24dBm
44	5220	17.16	17.05	16.85	16.75	16.51	16.27	15.97	
48	5240	17.22	--	--	--	--	--	--	

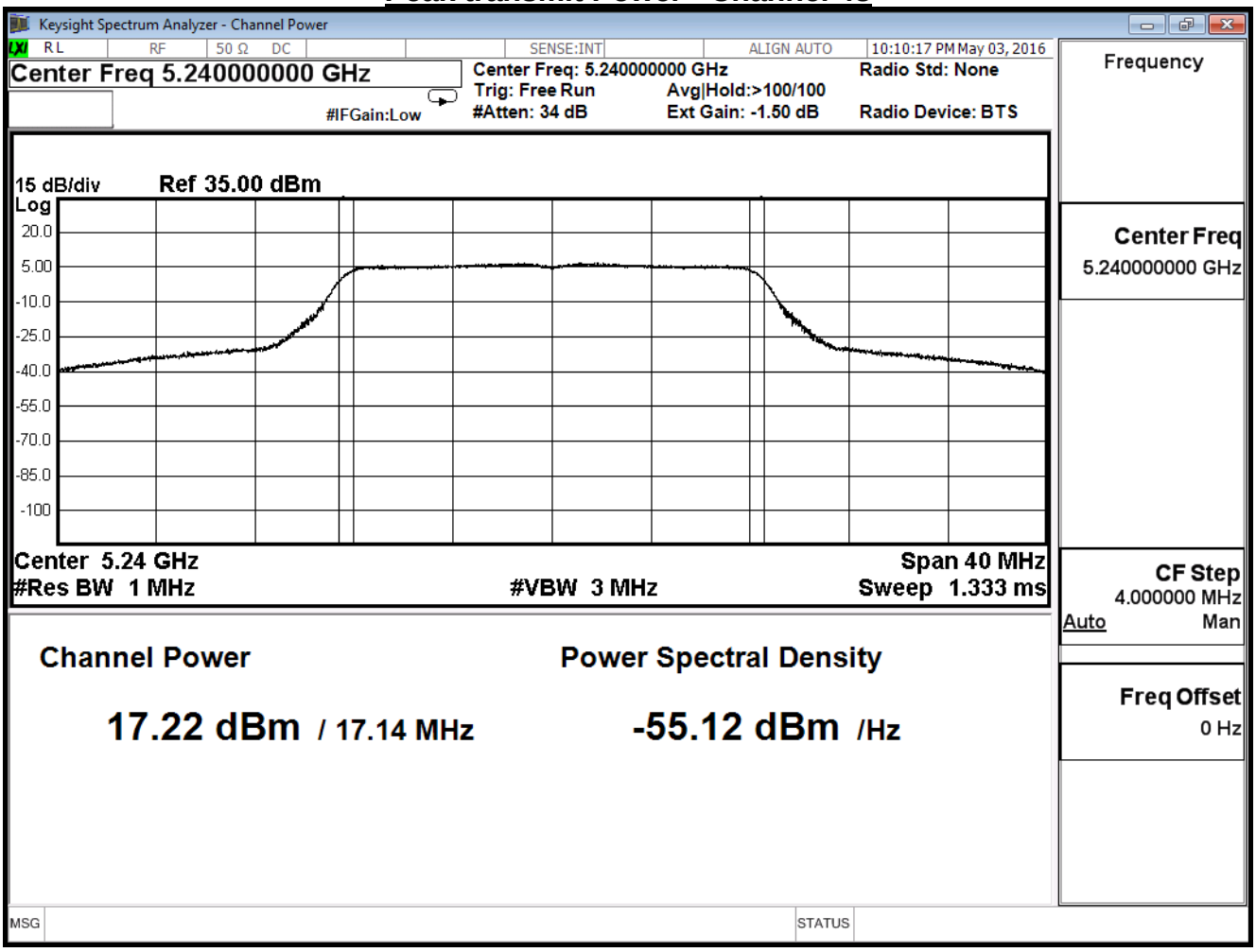
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

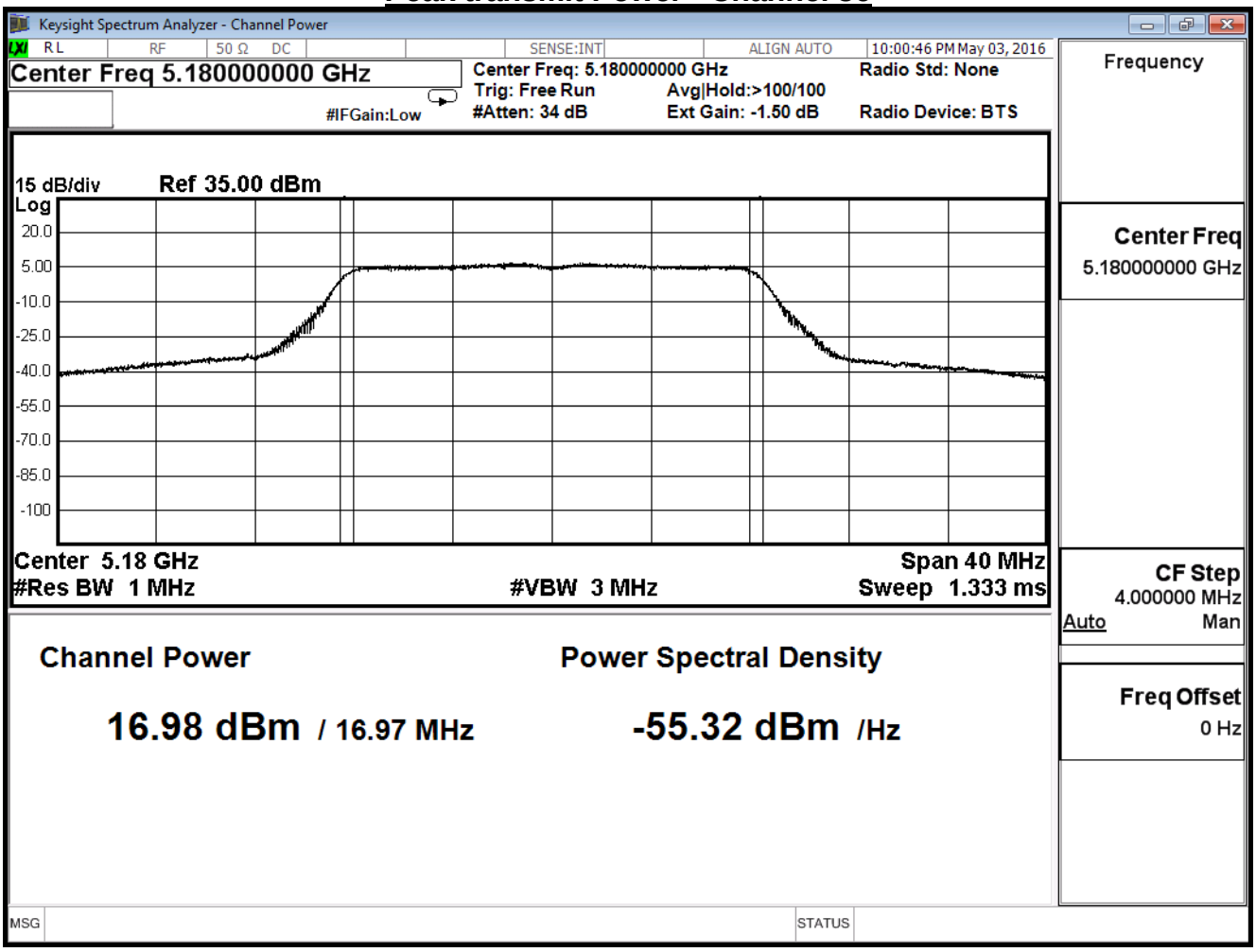
802.11a (ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	16.98	≤24
44	5220	17.19	≤24
48	5240	17.30	≤24

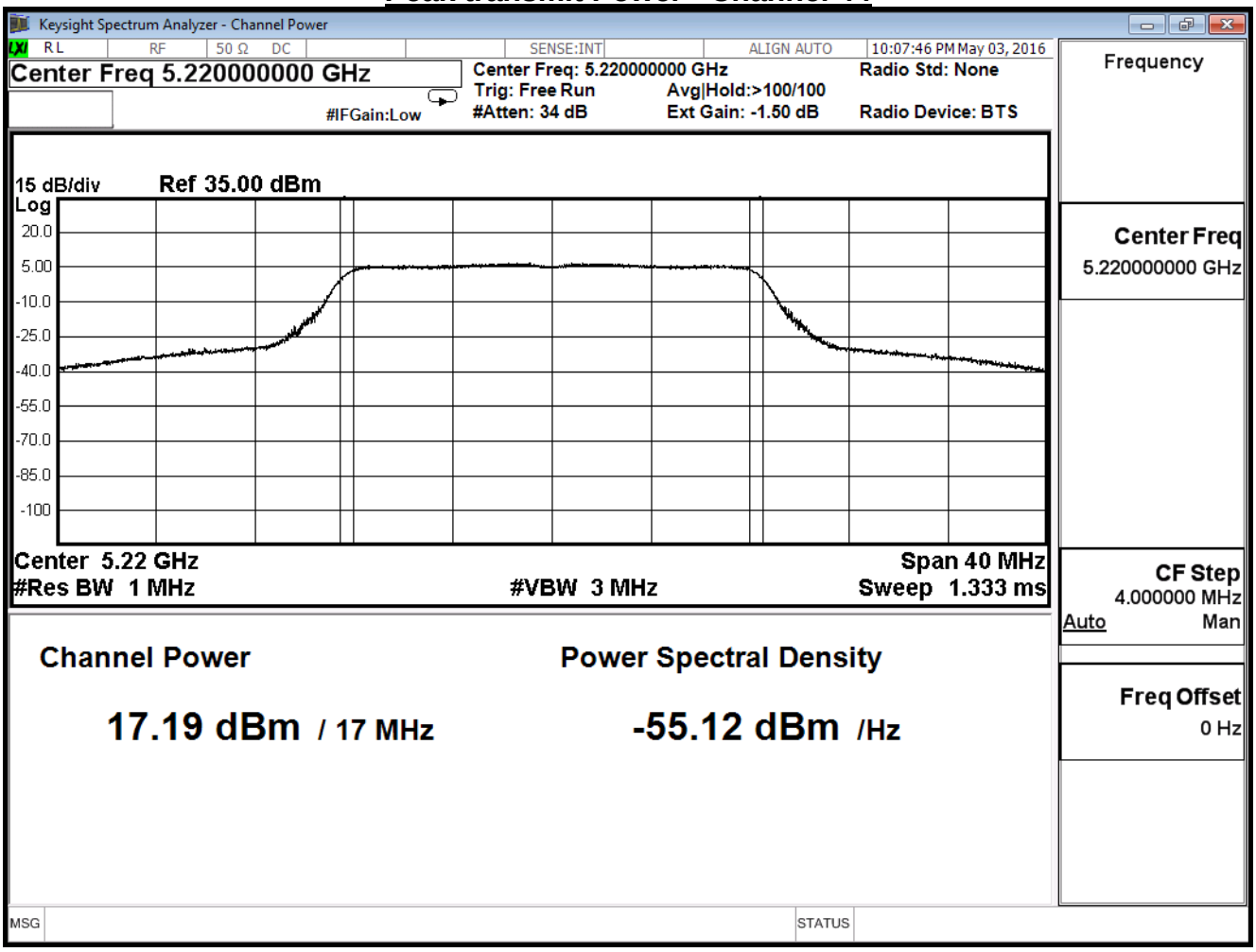
The worst emission of data rate is 6Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
36	5180	16.98	--	--	--	--	--	--	≤24dBm
44	5220	17.19	16.99	16.87	16.67	16.57	16.44	16.20	
48	5240	17.30	--	--	--	--	--	--	

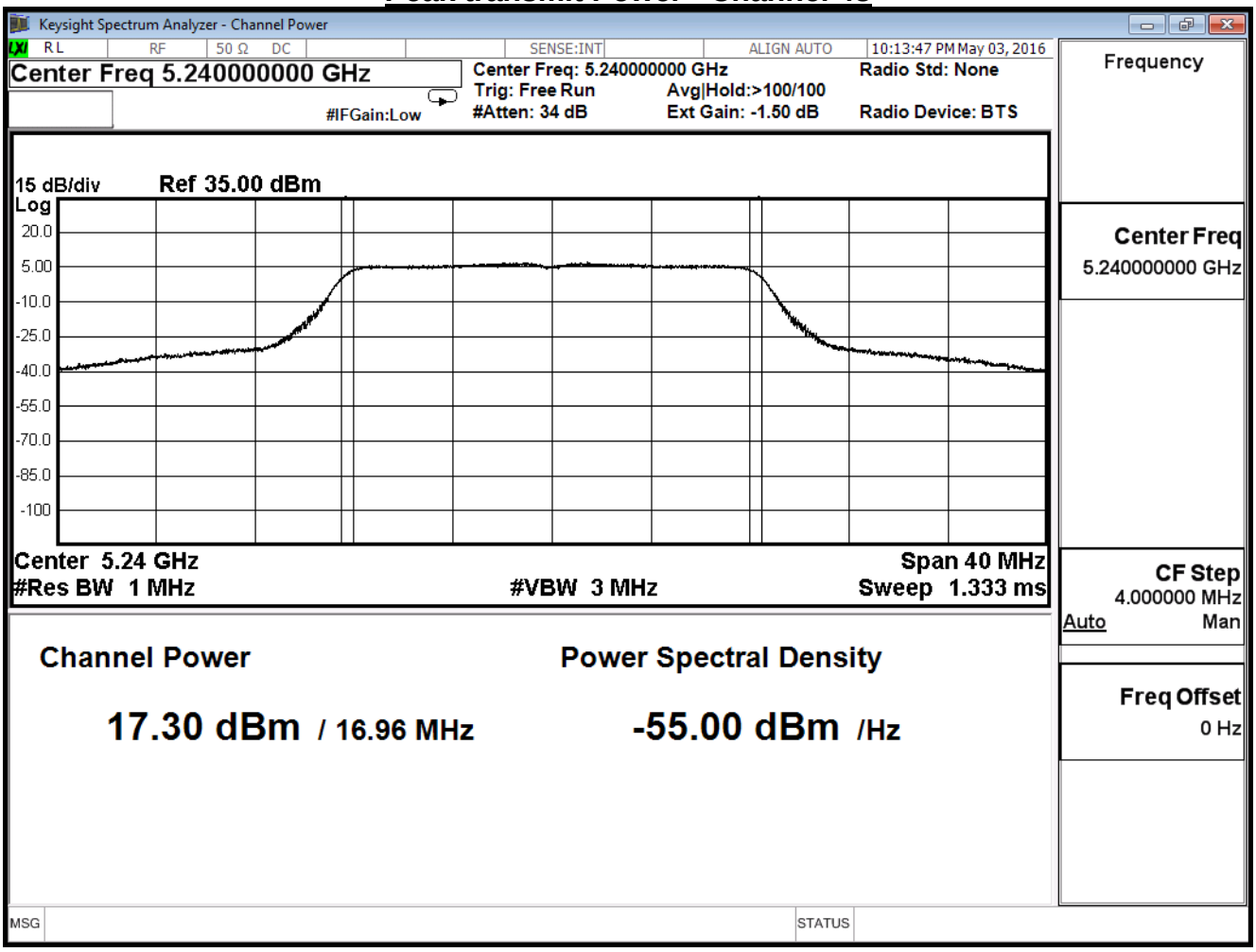
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

802.11a (ANT 0+1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	20.06	≤24
44	5220	20.19	≤24
48	5240	20.27	≤24

The worst emission of data rate is 6Mbps.

Peak Power Output (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
36	5180	20.06	--	--	--	--	--	--	≤24dBm
44	5220	20.19	20.03	19.87	19.72	19.55	19.37	19.10	
48	5240	20.27	--	--	--	--	--	--	

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

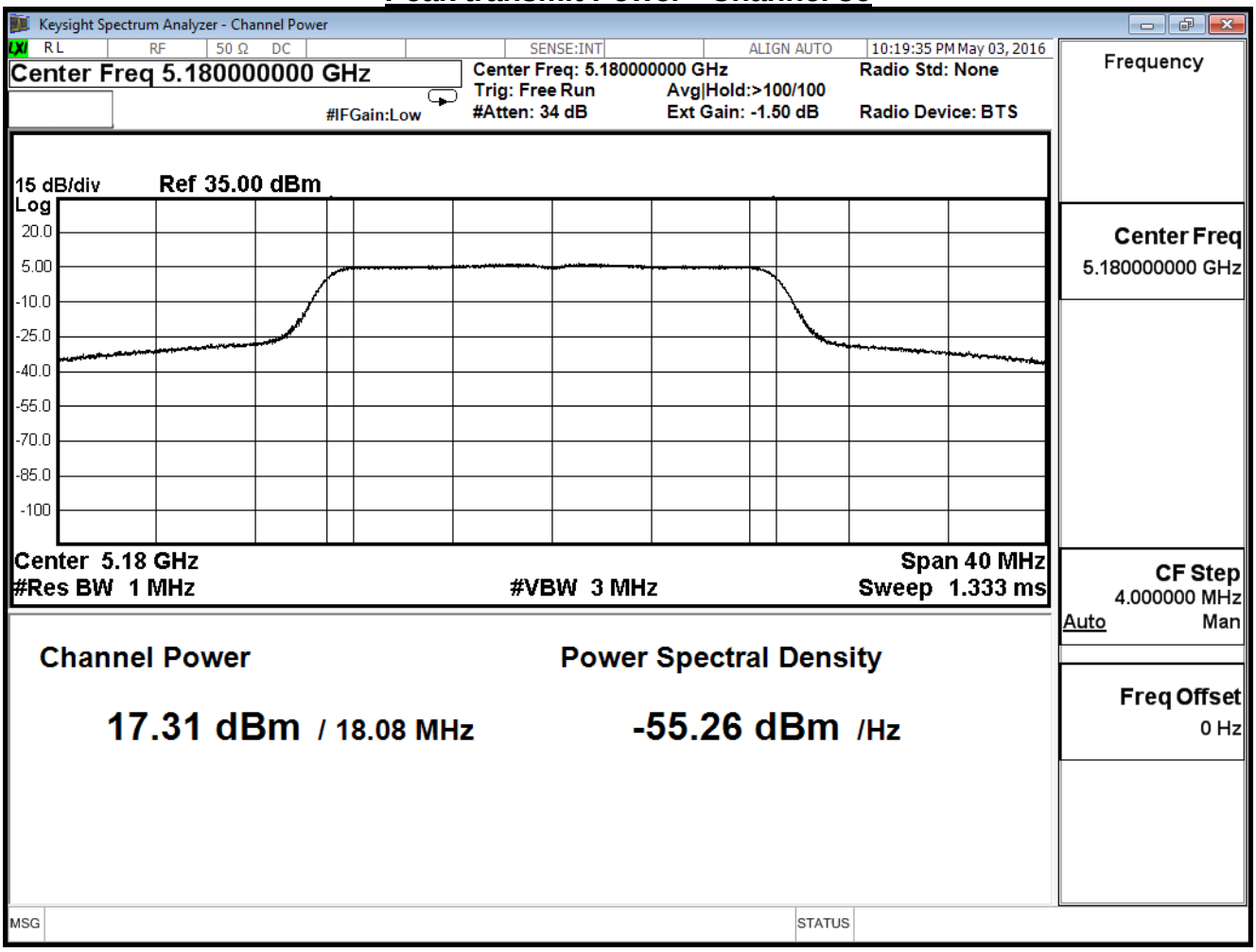
IEEE 802.11n_20M (ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	17.31	≤24
44	5220	17.31	≤24
48	5240	17.33	≤24

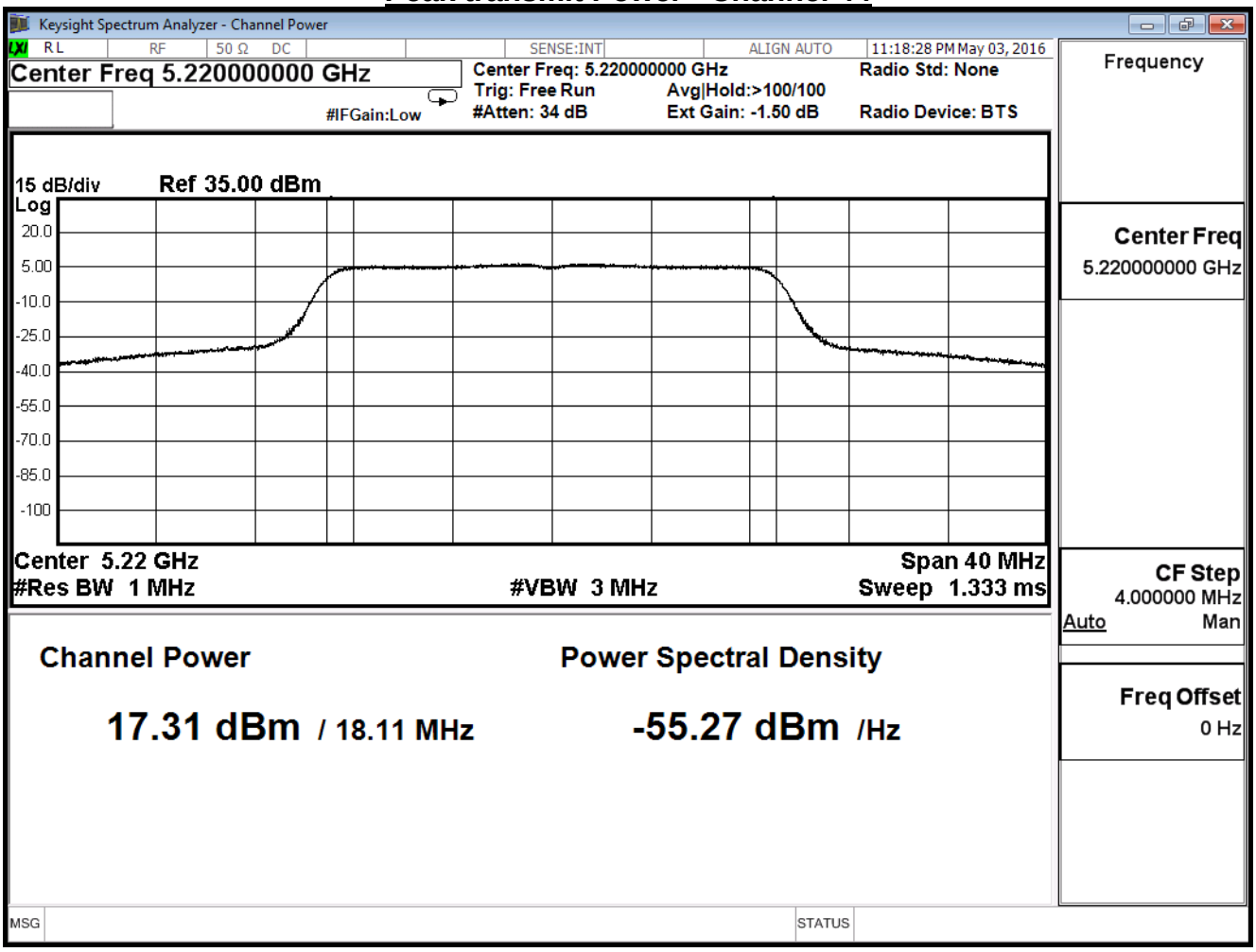
The worst emission of data rate is 6.5 Mbps.

Peak Power Output (dBm)										
MCS Index		0	1	2	3	4	5	6	7	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		6.5	13	19.5	26	39	52	58.5	65	
36	5180	17.31	--	--	--	--	--	--	--	≤24dBm
44	5220	17.31	17.20	17.00	16.80	16.56	16.32	16.02	15.78	
48	5240	17.33	--	--	--	--	--	--	--	

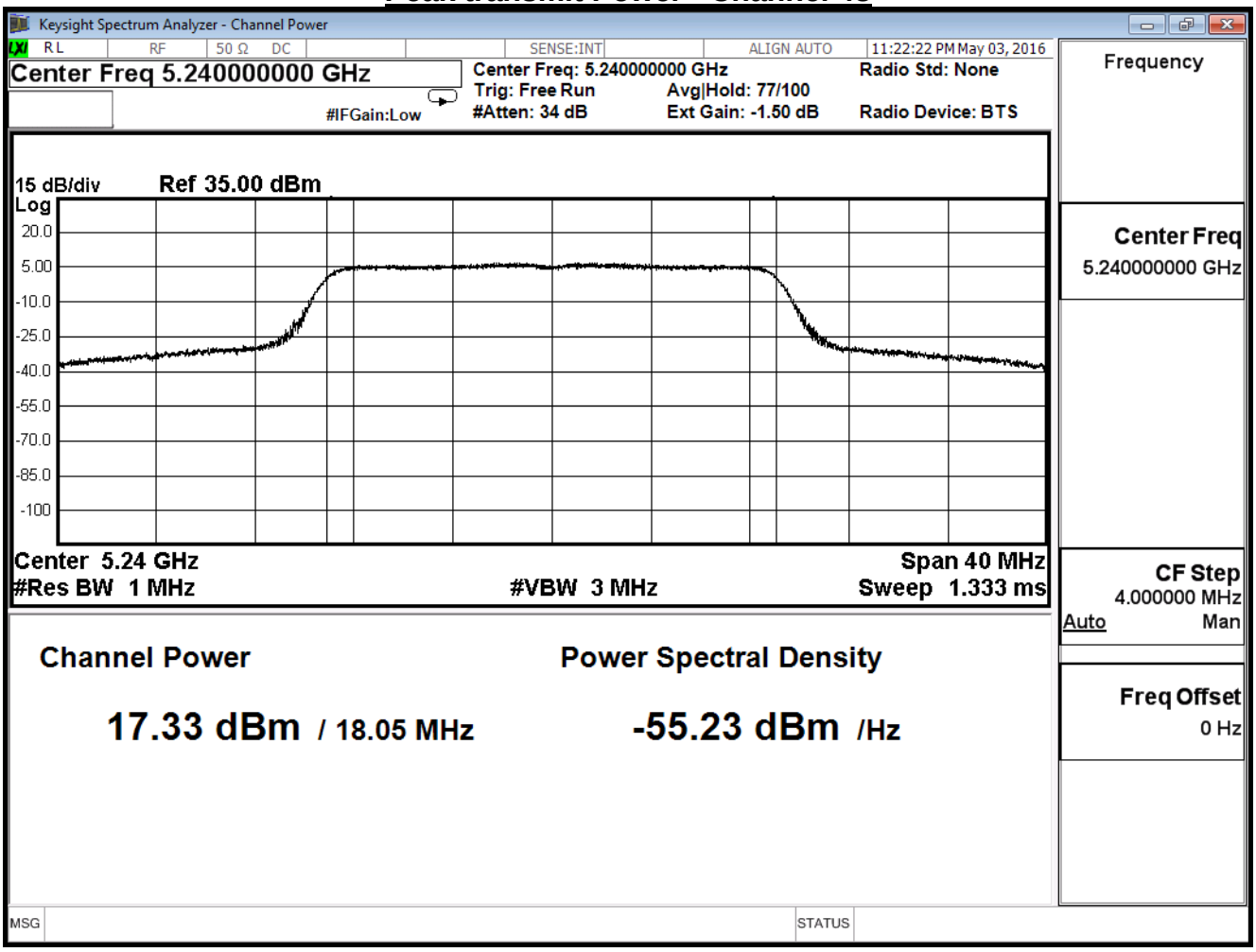
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

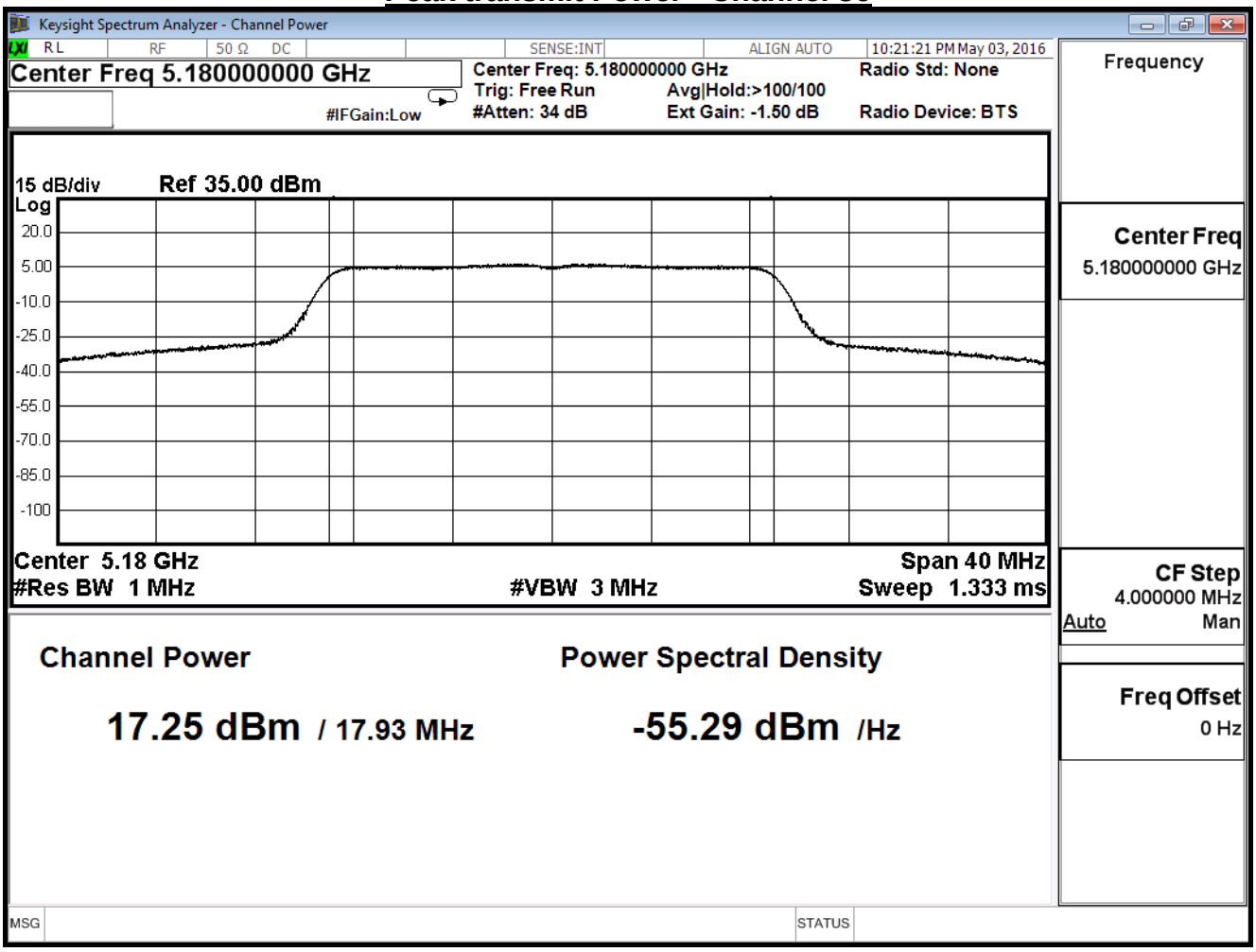
IEEE 802.11n_20M (ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	17.25	≤24
44	5220	17.24	≤24
48	5240	17.25	≤24

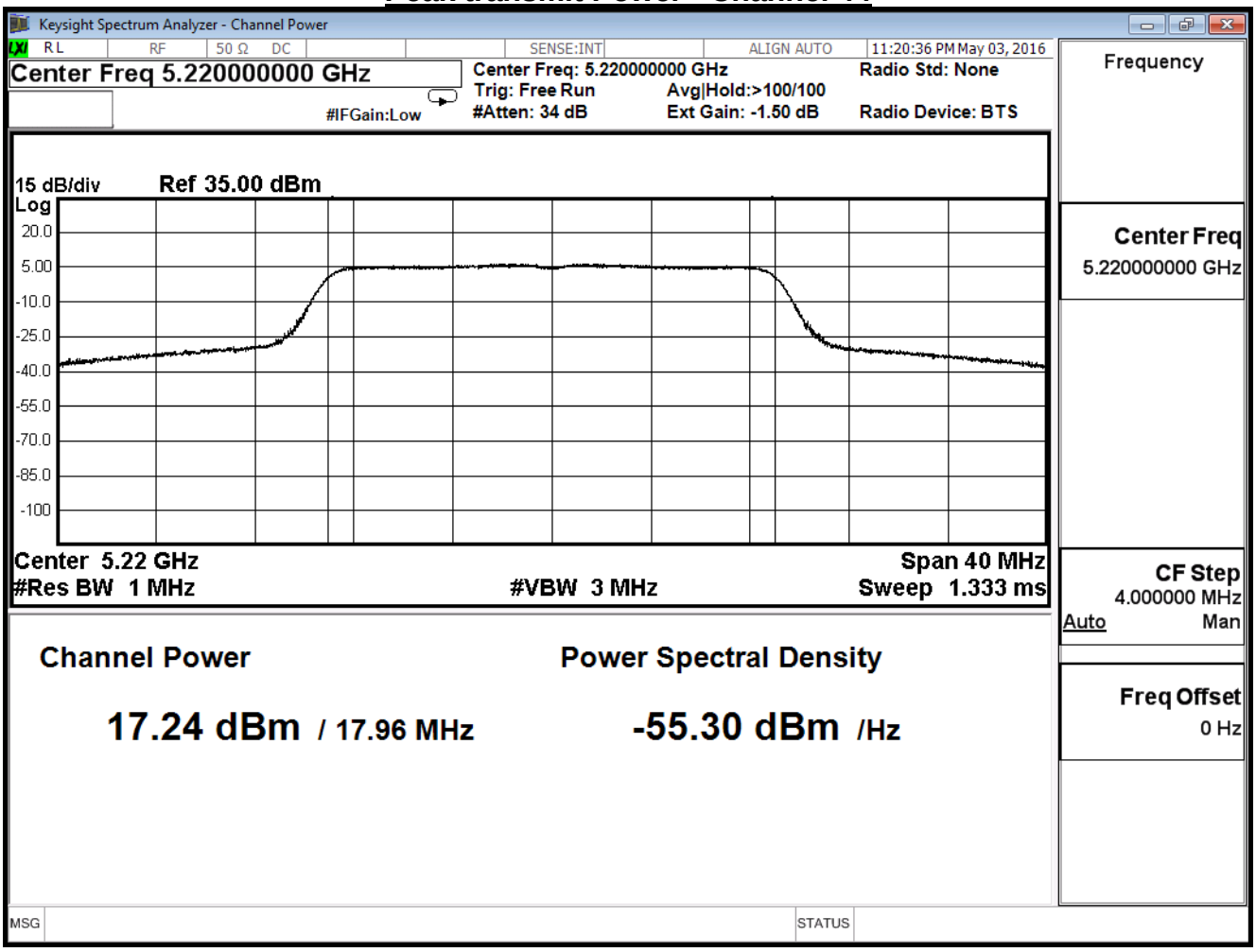
The worst emission of data rate is 6.5 Mbps.

Peak Power Output (dBm)										
MCS Index		0	1	2	3	4	5	6	7	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		6.5	13	19.5	26	39	52	58.5	65	
36	5180	17.25	--	--	--	--	--	--	--	≤24dBm
44	5220	17.24	17.14	17.02	16.82	16.72	16.46	16.22	15.98	
48	5240	17.25	--	--	--	--	--	--	--	

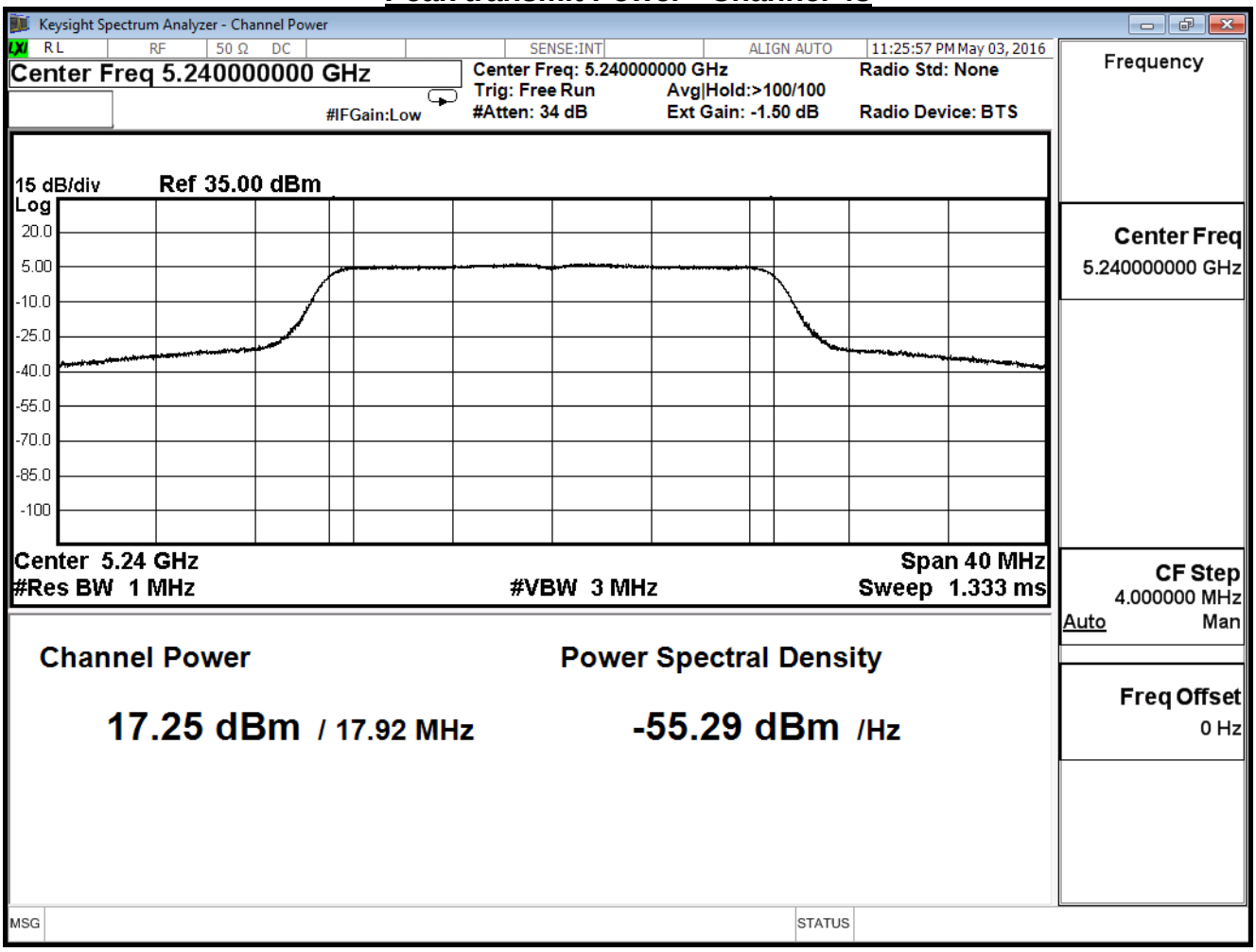
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

IEEE 802.11n_20M (ANT 0+1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	20.29	≤24
44	5220	20.29	≤24
48	5240	20.30	≤24

The worst emission of data rate is 6.5 Mbps.

Peak Power Output (dBm)										
MCS Index		0	1	2	3	4	5	6	7	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		6.5	13	19.5	26	39	52	58.5	65	
36	5180	20.29	--	--	--	--	--	--	--	≤24dBm
44	5220	20.29	20.18	20.02	19.82	19.65	19.40	19.13	18.89	
48	5240	20.30	--	--	--	--	--	--	--	

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/04	Test Site	SR7

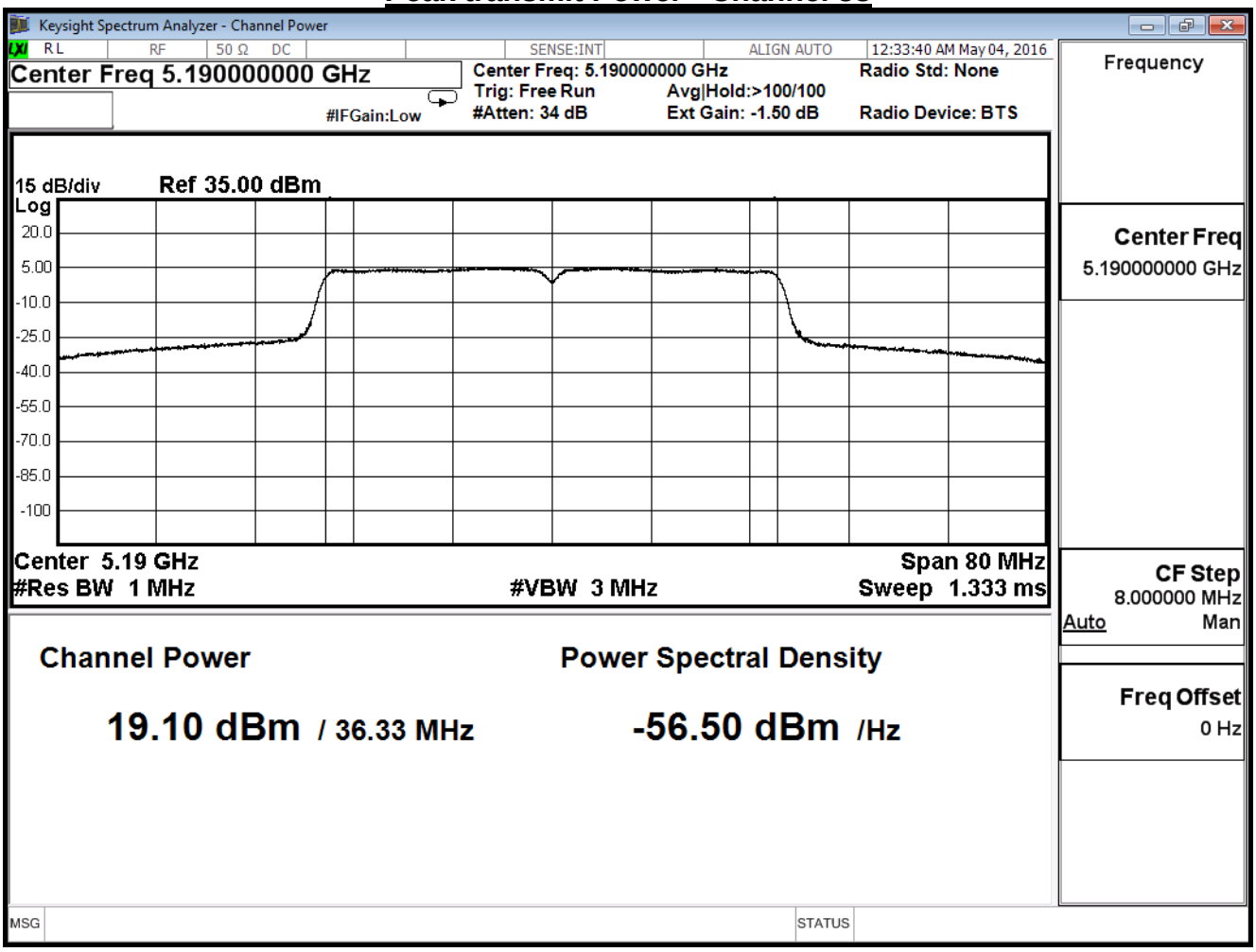
IEEE 802.11n(40MHz)(ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
38	5190	19.10	≤24
46	5230	20.63	≤24

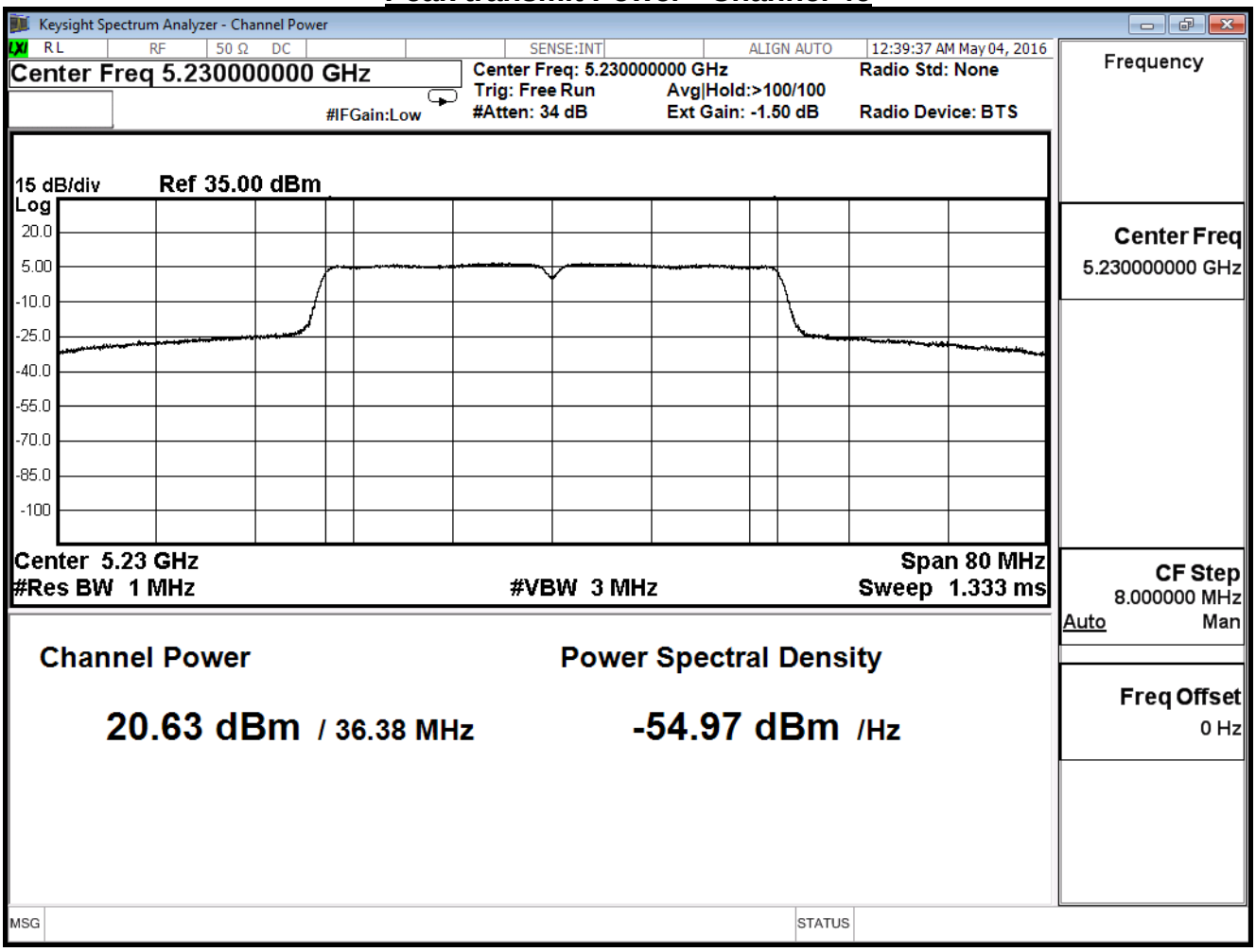
The worst emission of data rate is 13.5 Mbps.

Peak Power Output (dBm)										
MCS Index		0	1	2	3	4	5	6	7	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		13.5	27	40.5	54	81	108	121.5	135	
38	5190	19.10	--	--	--	--	--	--	--	≤24dBm
46	5230	20.63	20.43	20.33	20.13	19.93	19.81	19.69	19.45	

Peak transmit Power - Channel 38



Peak transmit Power - Channel 46



Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/04	Test Site	SR7

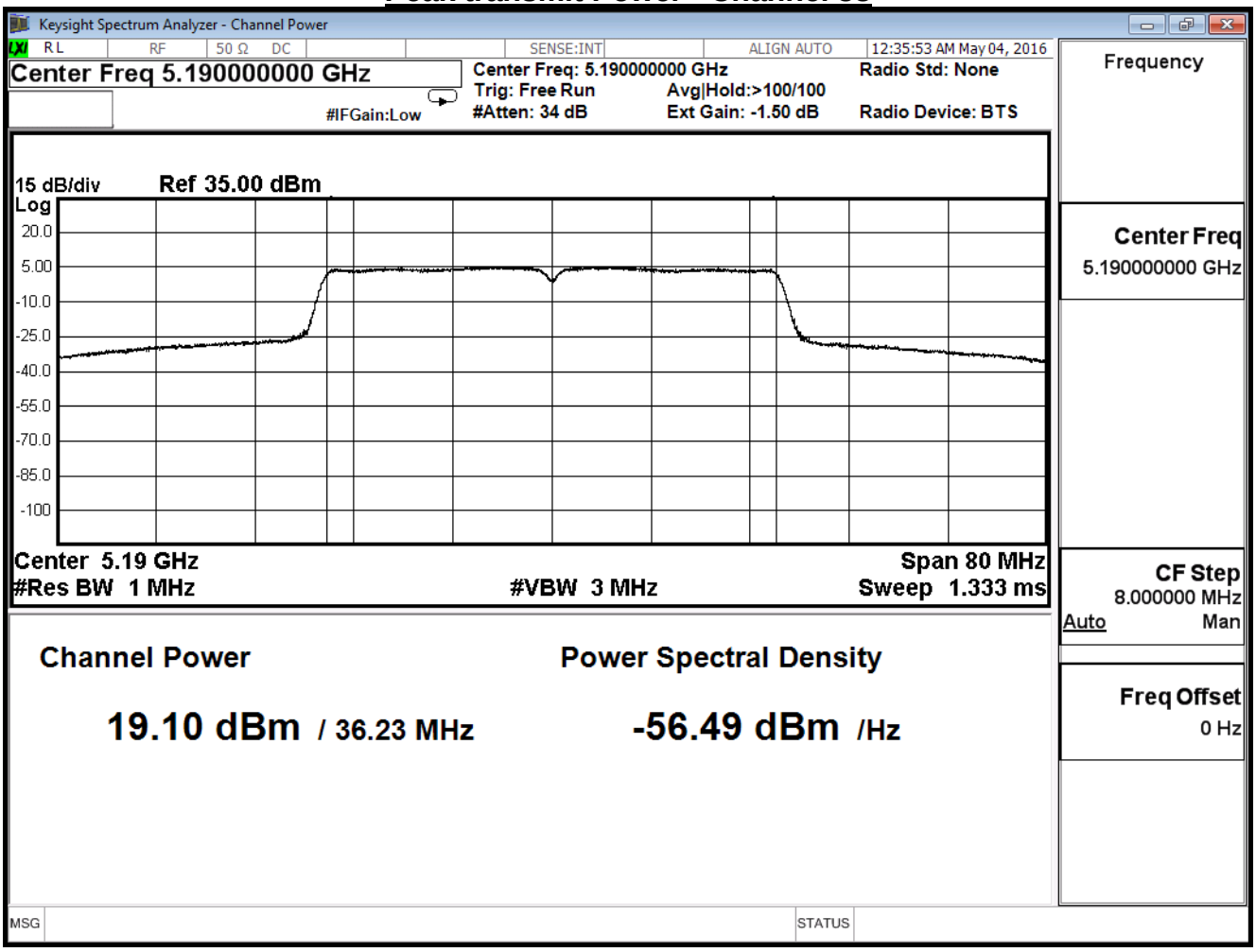
IEEE 802.11n(40MHz)(ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
38	5190	19.10	≤24
46	5230	20.76	≤24

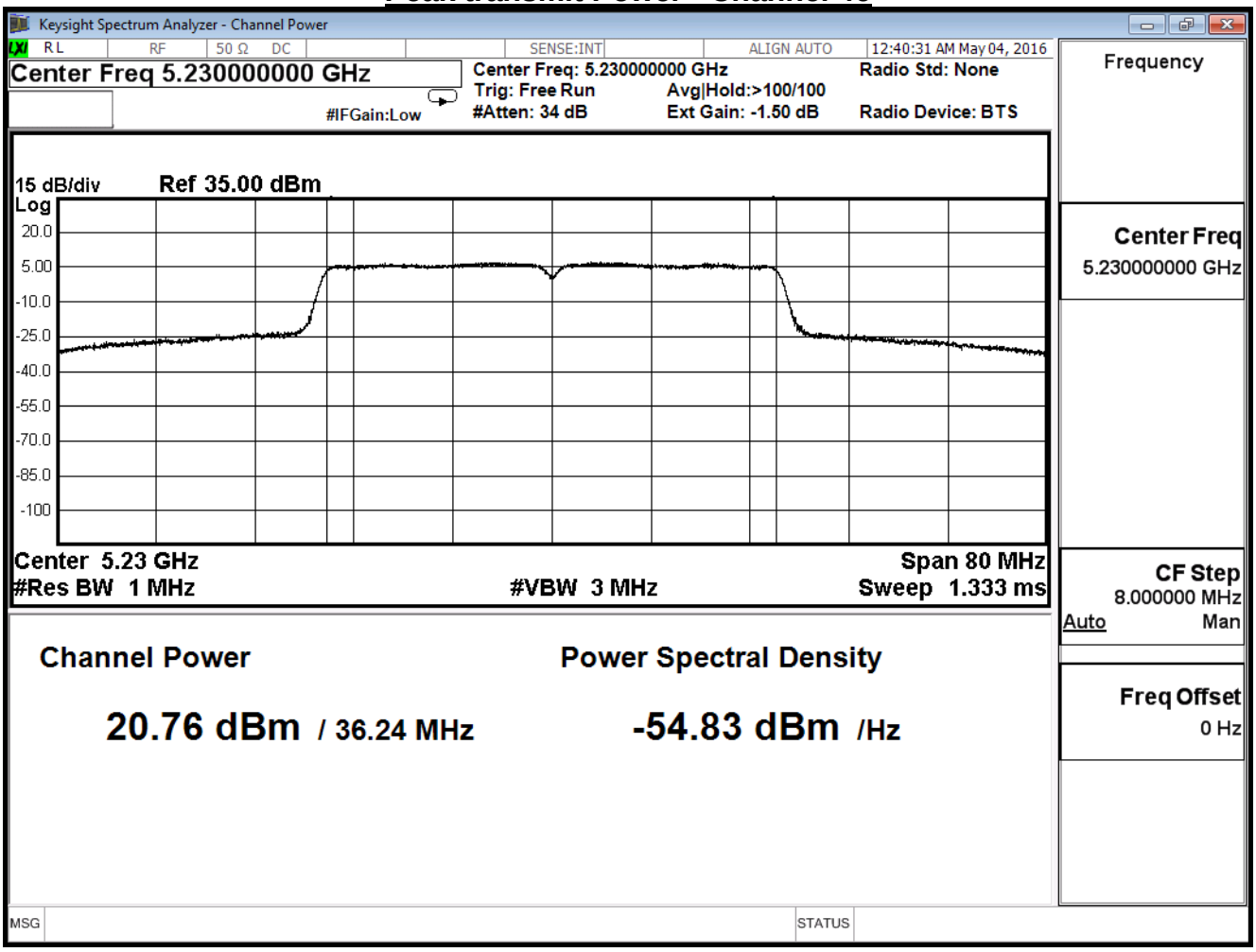
The worst emission of data rate is 13.5 Mbps.

Peak Power Output (dBm)										
MCS Index		0	1	2	3	4	5	6	7	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		13.5	27	40.5	54	81	108	121.5	135	
38	5190	19.10	--	--	--	--	--	--	--	≤24dBm
46	5230	20.76	20.56	20.36	20.26	20.06	19.94	19.70	19.46	

Peak transmit Power - Channel 38



Peak transmit Power - Channel 46



Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/04	Test Site	SR7

IEEE 802.11n(40MHz)(ANT 0+1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
38	5190	22.11	≤24
46	5230	23.71	≤24

The worst emission of data rate is 13.5 Mbps.

Peak Power Output (dBm)										
MCS Index		0	1	2	3	4	5	6	7	Required Limit
Channel No	Frequency (MHz)	Data Rate								
		13.5	27	40.5	54	81	108	121.5	135	
38	5190	22.11	--	--	--	--	--	--	--	≤24dBm
46	5230	23.71	23.51	23.36	23.21	23.01	22.89	22.71	22.47	

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/04	Test Site	SR7

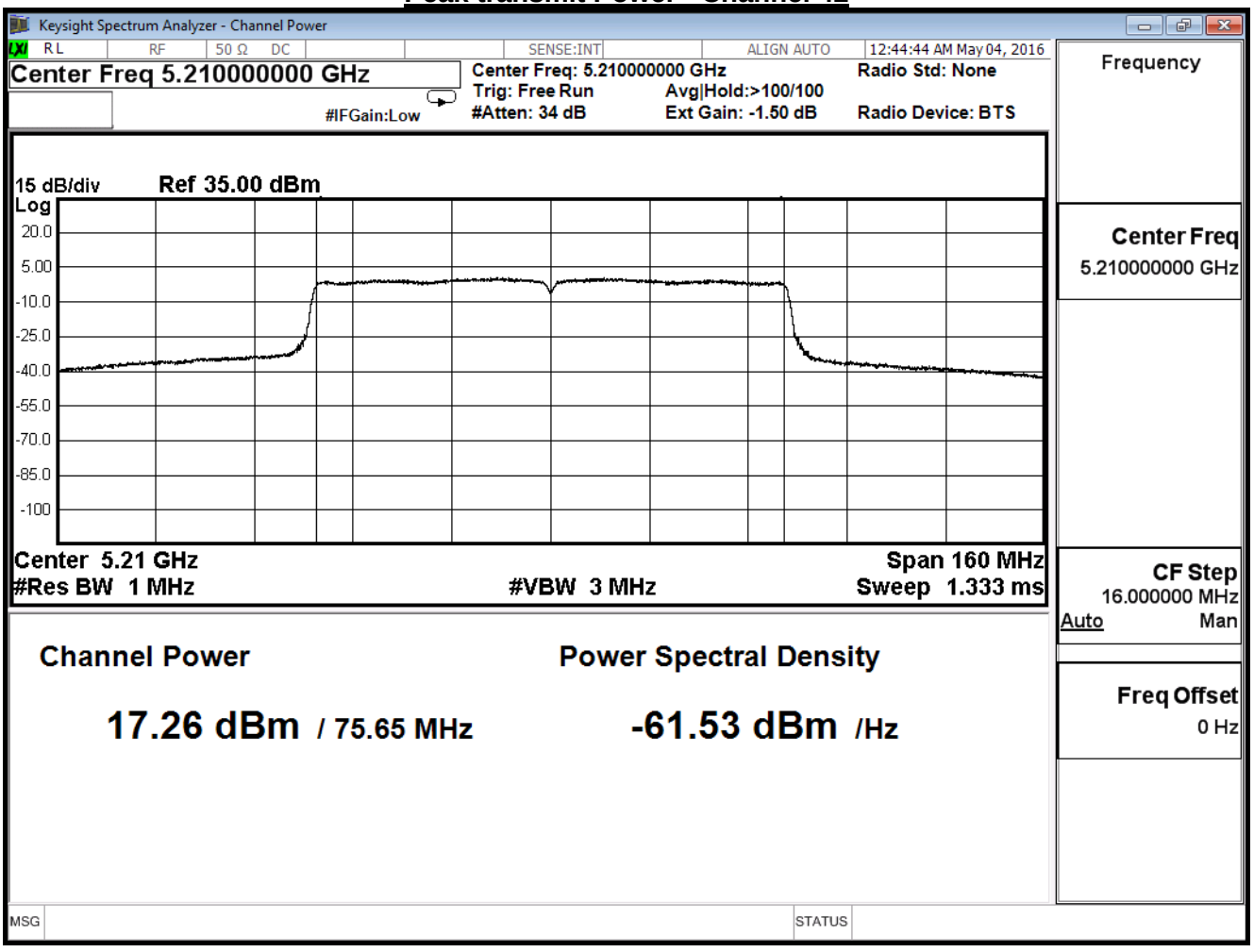
IEEE 802.11ac (80MHz) (ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
42	5210	17.26	≤24

The worst emission of data rate is 29.3 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										
		29.3	58.5	87.8	117	175.5	234	263.3	292.5	351	390	≤24dBm
42	5210	17.26	17.06	16.86	16.76	16.56	16.46	16.22	15.98	15.74	15.62	

Peak transmit Power - Channel 42



Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/04	Test Site	SR7

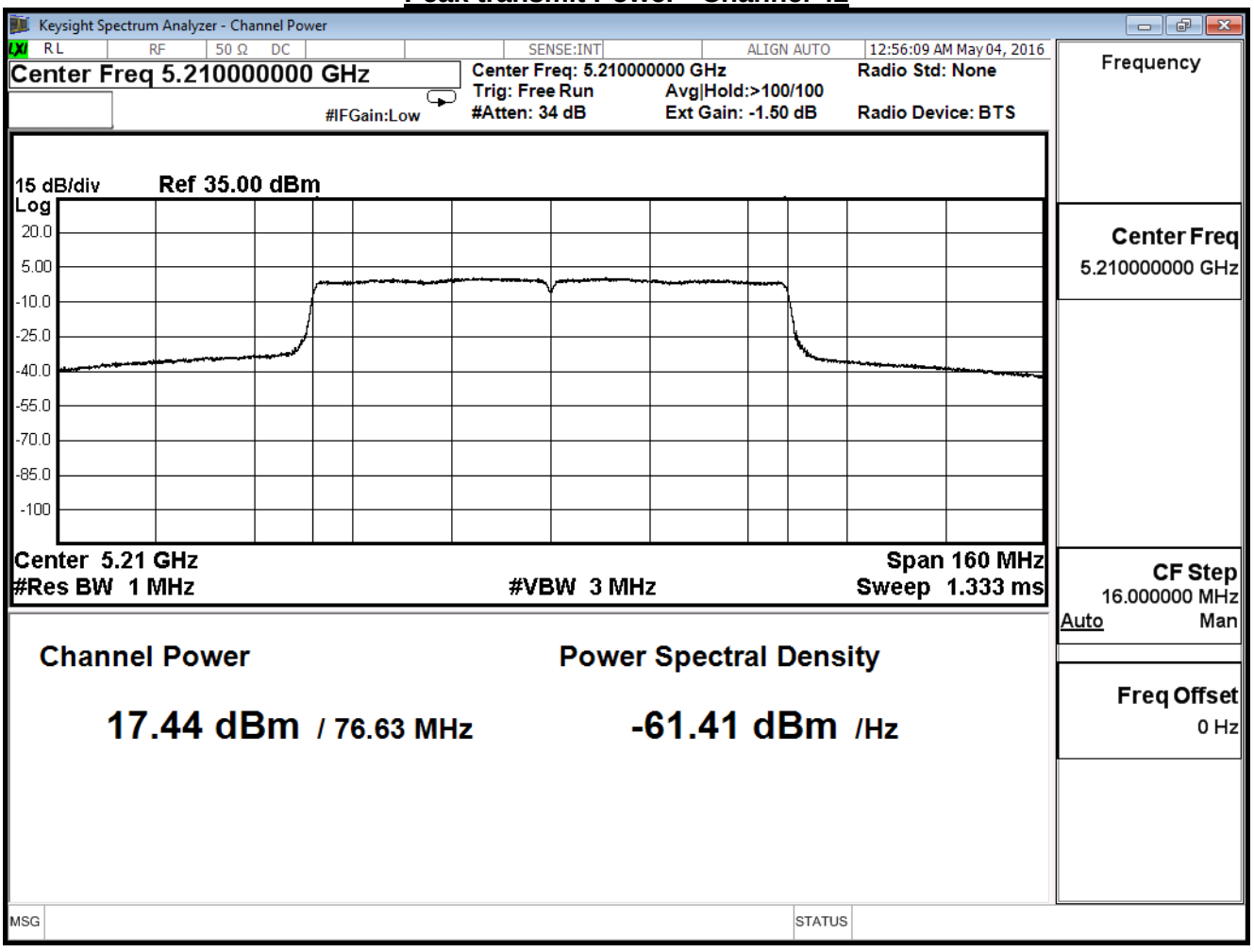
IEEE 802.11ac (80MHz) (ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
42	5210	17.44	≤24

The worst emission of data rate is 29.3 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										
		29.3	58.5	87.8	117	175.5	234	263.3	292.5	351	390	≤24dBm
42	5210	17.44	17.24	17.14	16.94	16.84	16.64	16.40	16.28	16.04	15.80	

Peak transmit Power - Channel 42



Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/04	Test Site	SR7

IEEE 802.11ac (80MHz) (ANT 0+1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
42	5210	20.36	≤24

The worst emission of data rate is 29.3 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										
		29.3	58.5	87.8	117	175.5	234	263.3	292.5	351	390	≤24dBm
42	5210	20.36	20.16	20.01	19.86	19.71	19.56	19.32	19.14	18.90	18.72	

4. Peak Power Spectrum Density

4.1. Test Equipment

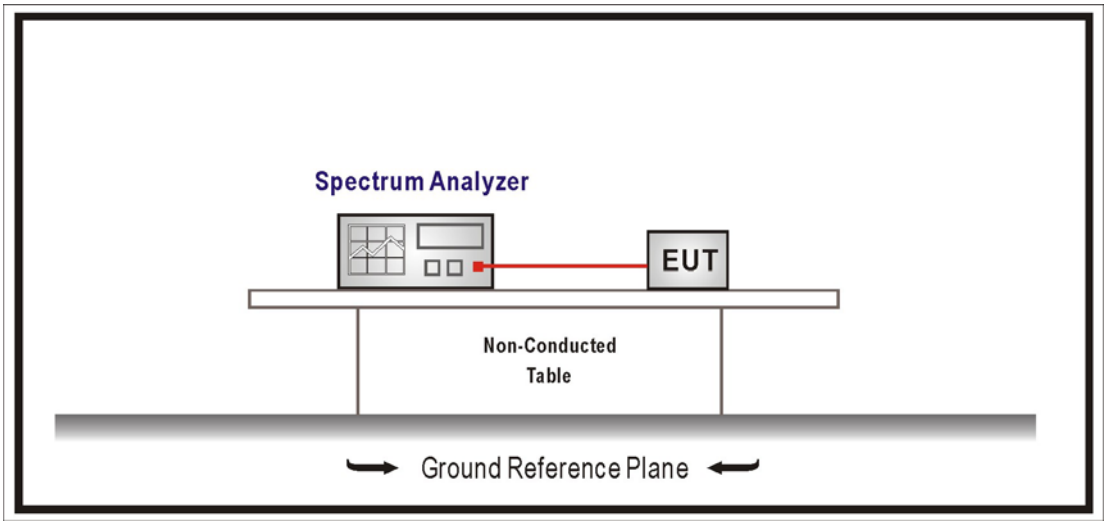
The following test equipments are used during the radiated emission tests:

Peak Power Spectrum Density / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/07/13

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

4.2. Test Setup



4.3. 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..

4.4. Test Procedure

The EUT was setup to ANSI C63.10: 2009; tested to U-NII test procedure of KDB 789033 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.

4.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

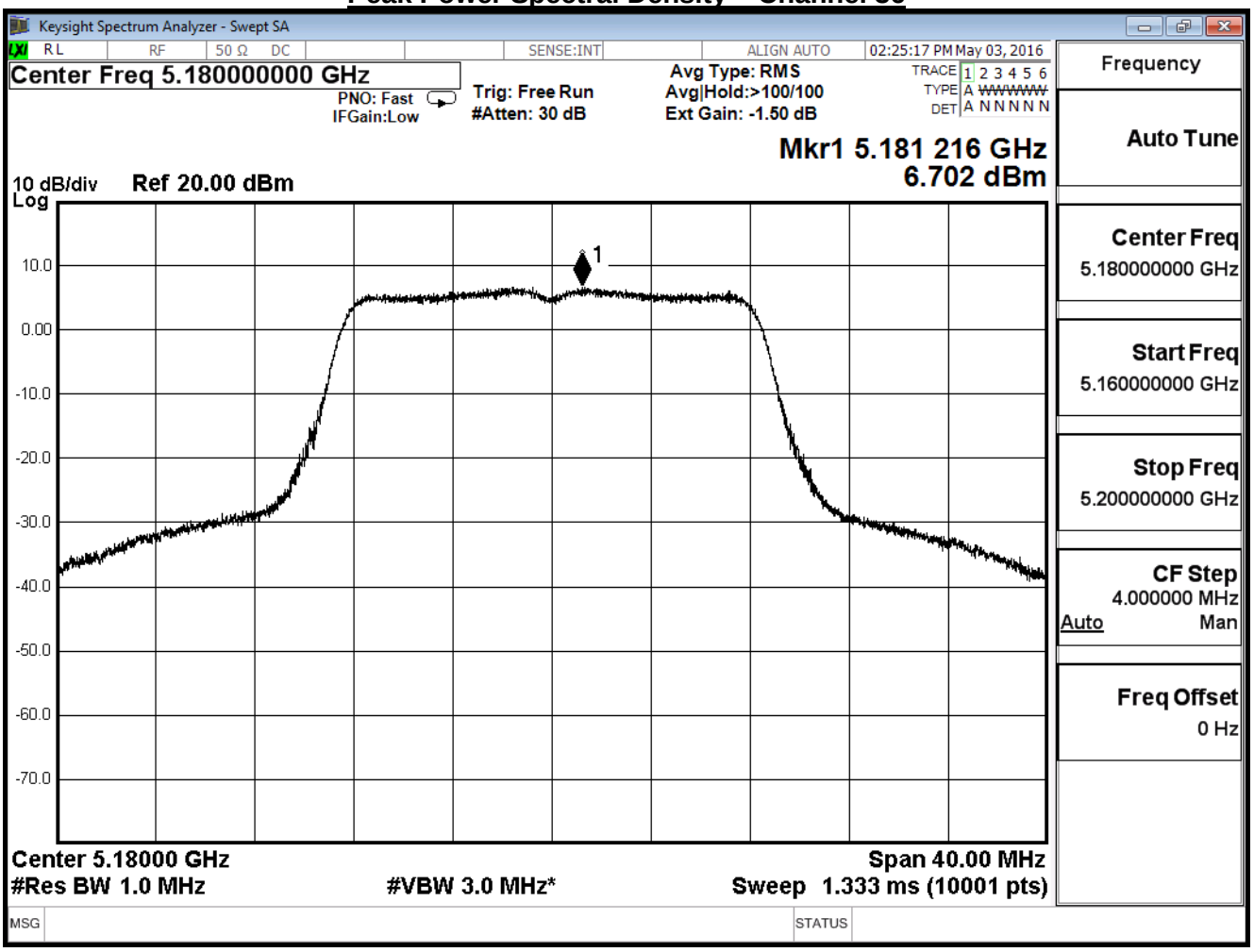
4.6. Test Result

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

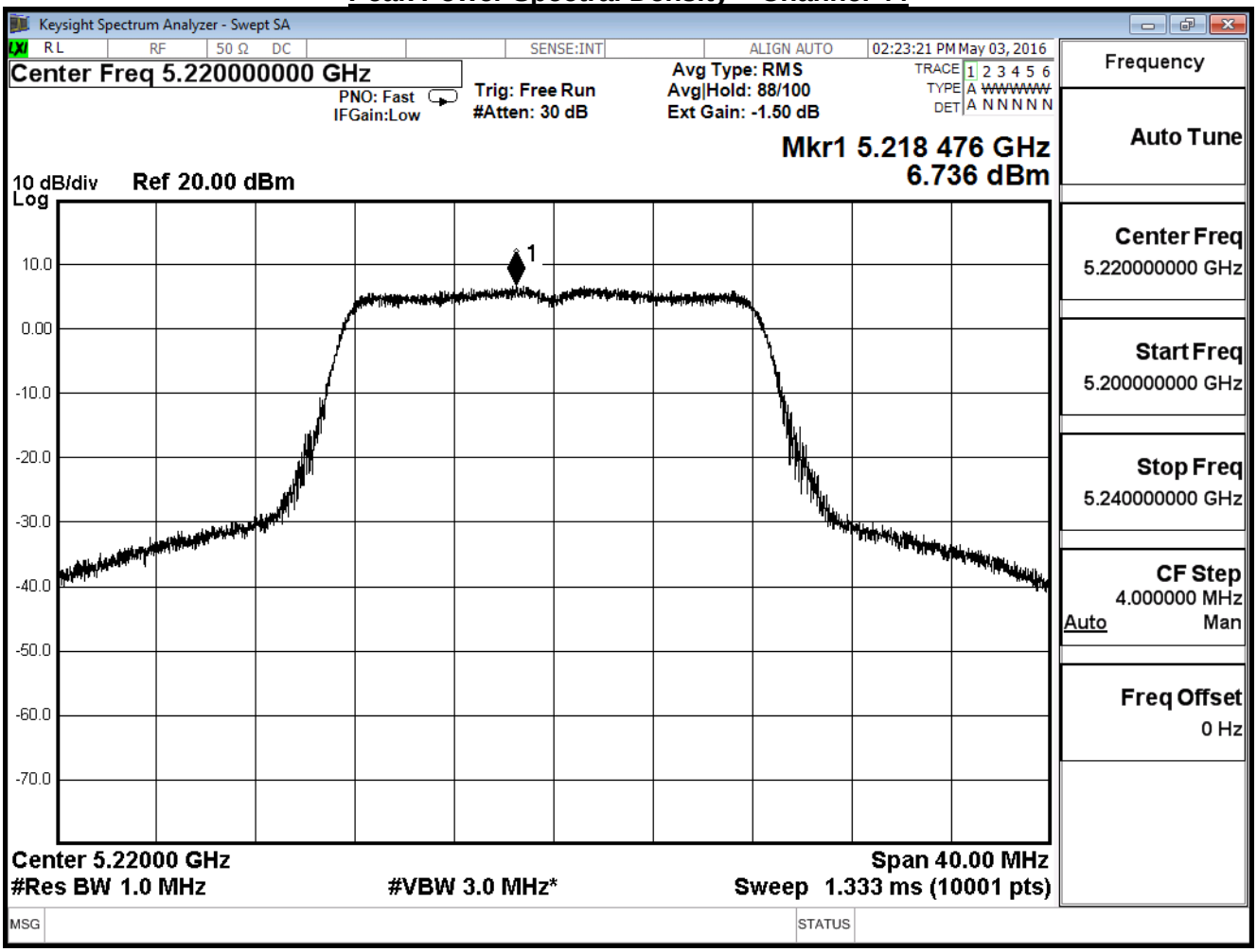
IEEE 802.11a (ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
36	5180	6.70	≦9.99	Pass
44	5220	6.74	≦9.99	Pass
48	5240	6.68	≦9.99	Pass

Total Gain: 10log(ANT N)+max Gain = 7.01dBi
Limit=11-(7.01dBi-6dBi)=9.99dBi

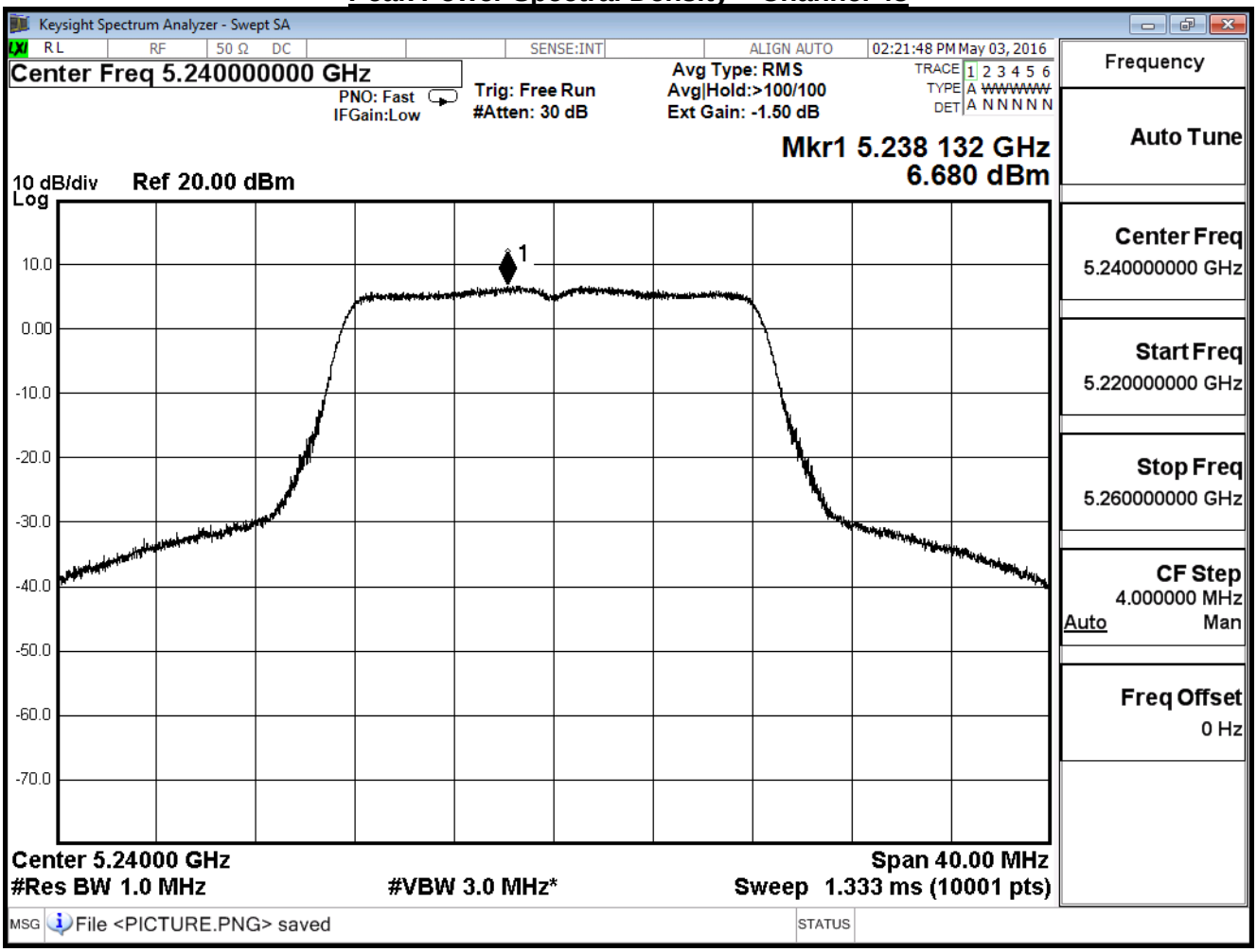
Peak Power Spectral Density – Channel 36



Peak Power Spectral Density – Channel 44



Peak Power Spectral Density – Channel 48

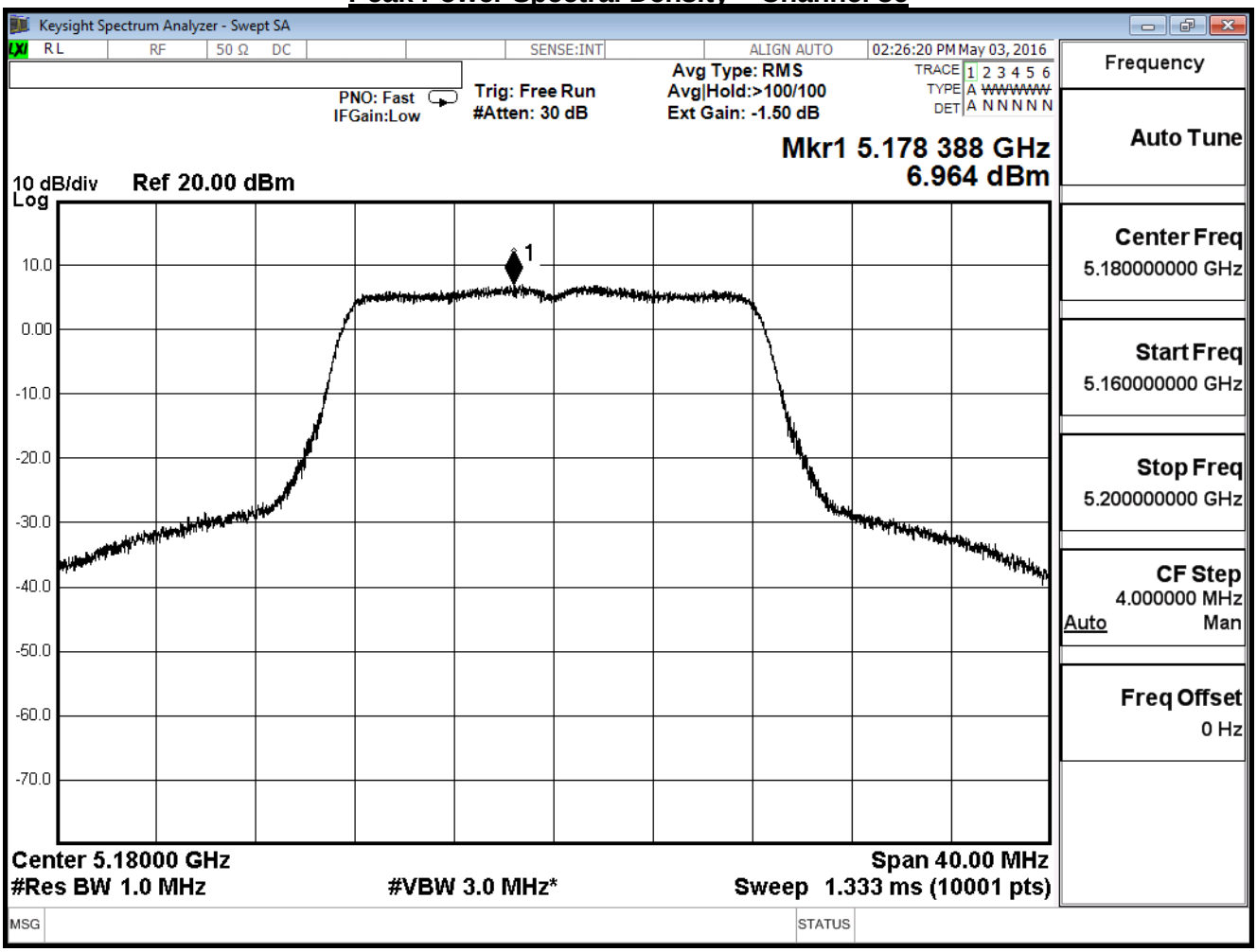


Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

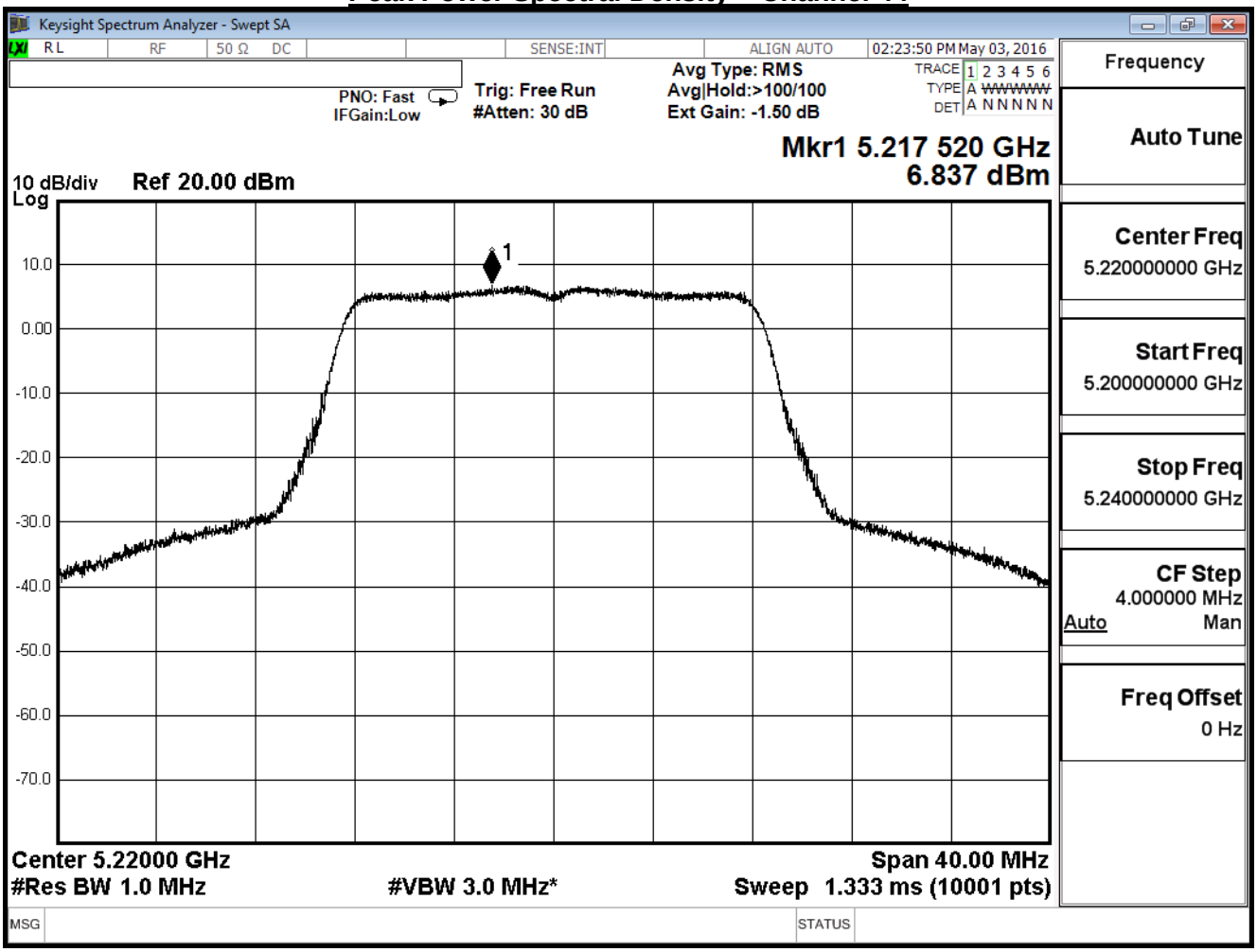
IEEE 802.11a (ANT 1)				
Channel No.	Frequency (MHz)	Measurement (dBm)	Limit (dBm)	Result
36	5180	6.96	≦9.99	Pass
44	5220	6.84	≦9.99	Pass
48	5240	6.84	≦9.99	Pass

Total Gain: 10log(ANT N)+max Gain = 7.01dBi
Limit=11-(7.01dBi-6dBi)=9.99dBi

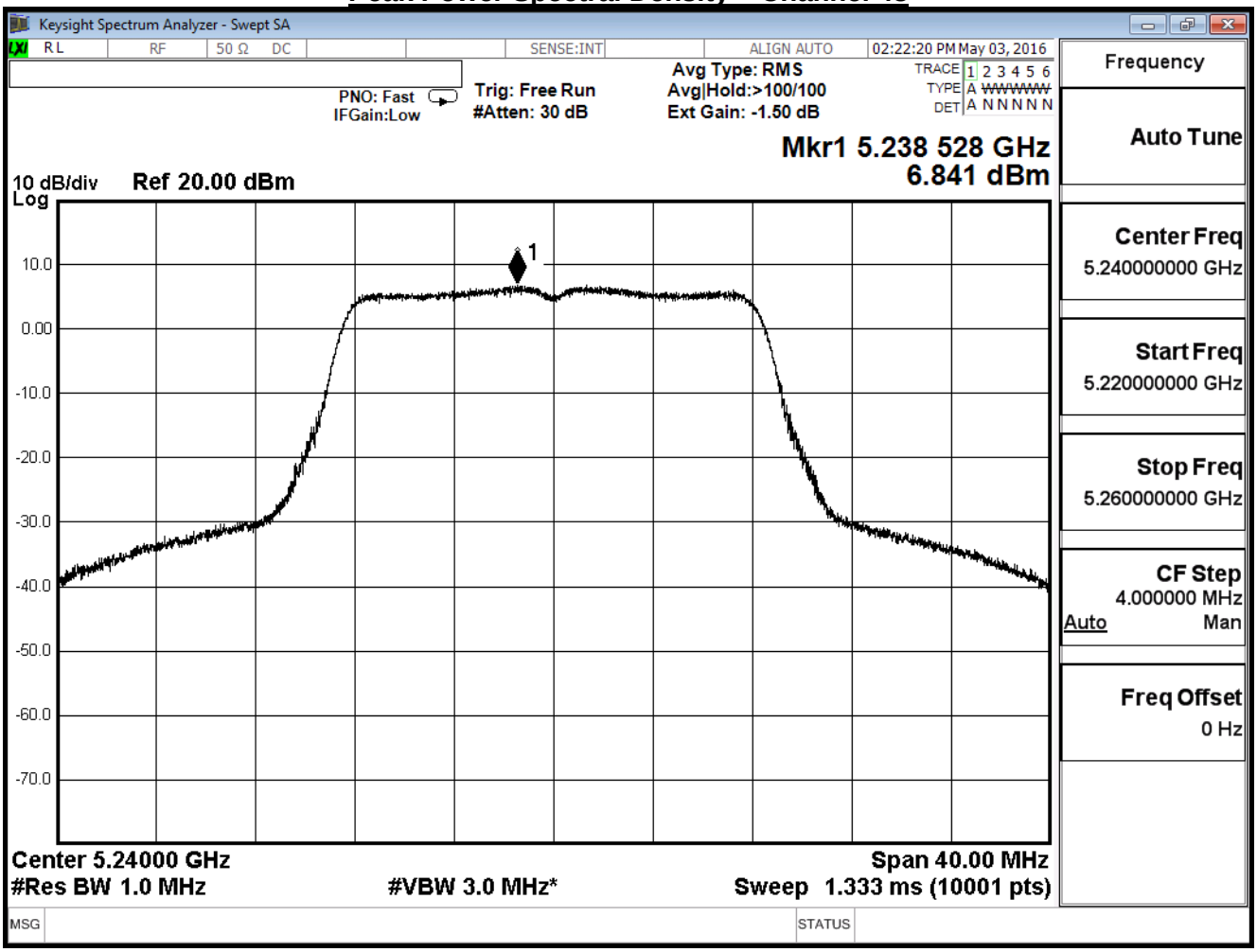
Peak Power Spectral Density – Channel 36



Peak Power Spectral Density – Channel 44



Peak Power Spectral Density – Channel 48



Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

IEEE 802.11a (ANT 0+1)				
Channel No.	Frequency (MHz)	Measurement (dBm)	Limit (dBm)	Result
36	5180	9.85	≦9.99	Pass
44	5220	9.80	≦9.99	Pass
48	5240	9.77	≦9.99	Pass

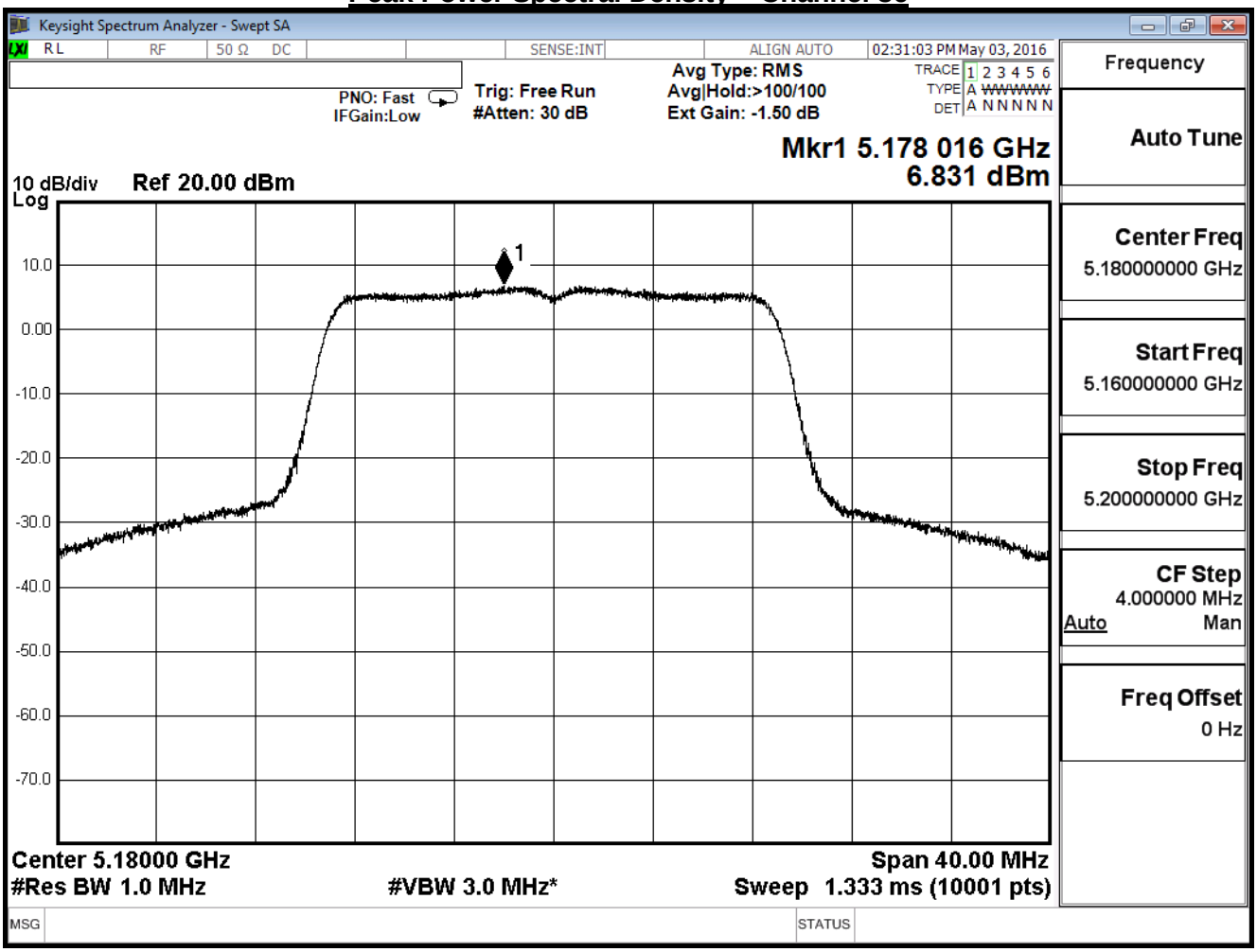
Total Gain: 10log(ANT N)+max Gain = 7.01dBi
Limit=11-(7.01dBi-6dBi)=9.99dBi

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

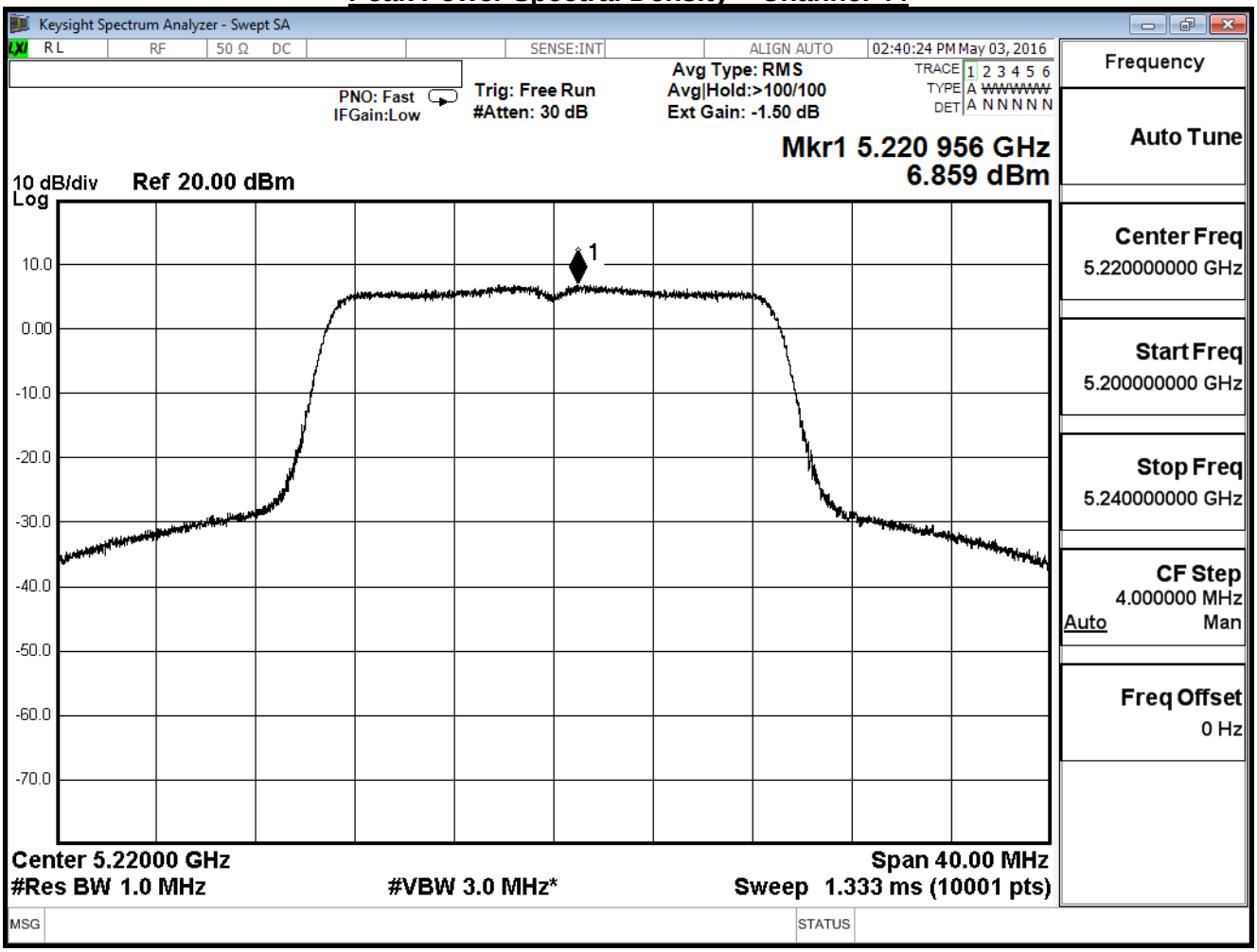
IEEE 802.11n_20M (ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
36	5180	6.83	≦9.99	Pass
44	5220	6.86	≦9.99	Pass
48	5240	6.93	≦9.99	Pass

Total Gain: 10log(ANT N)+max Gain = 7.01dBi
Limit=11-(7.01dBi-6dBi)=9.99dBi

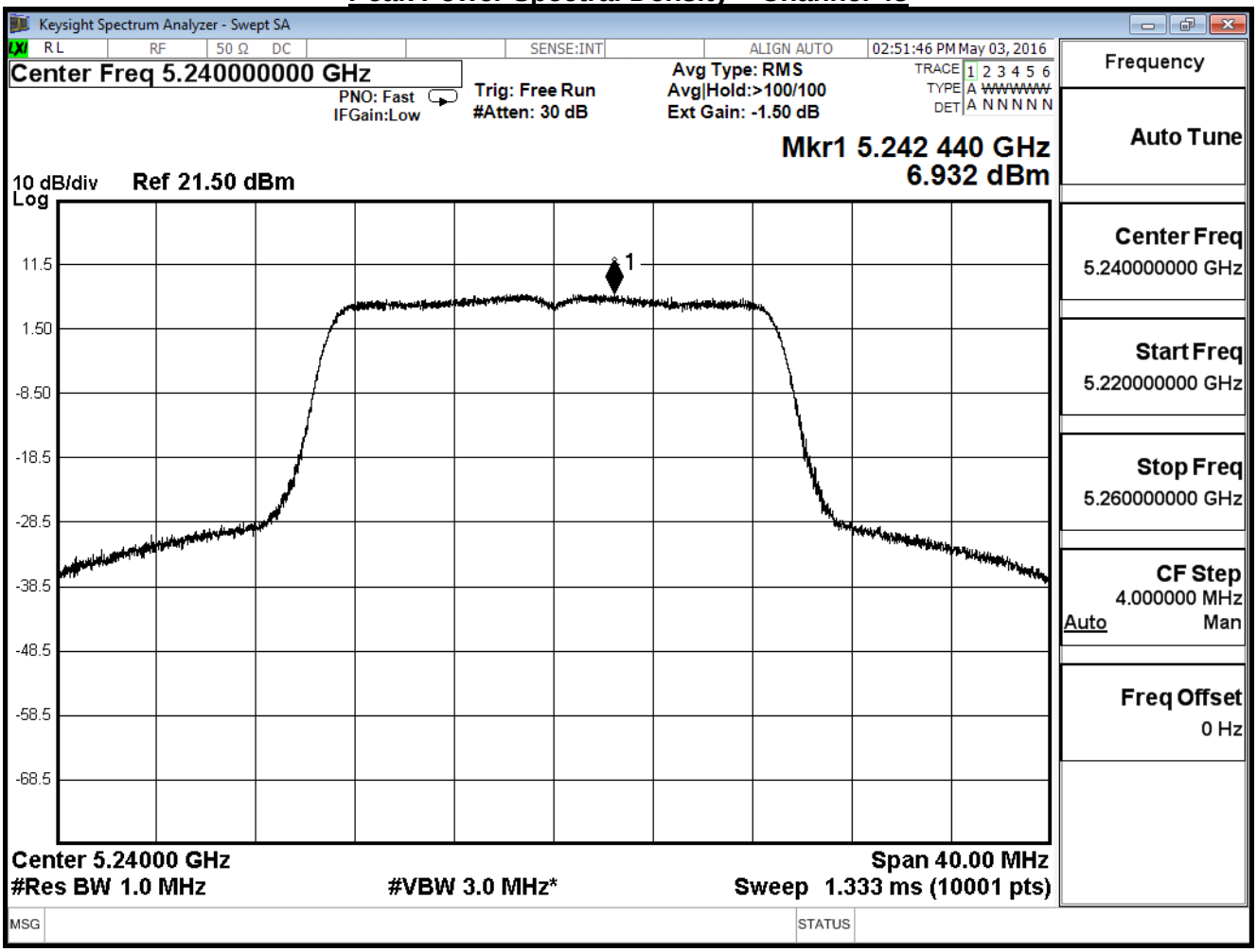
Peak Power Spectral Density – Channel 36



Peak Power Spectral Density – Channel 44



Peak Power Spectral Density – Channel 48

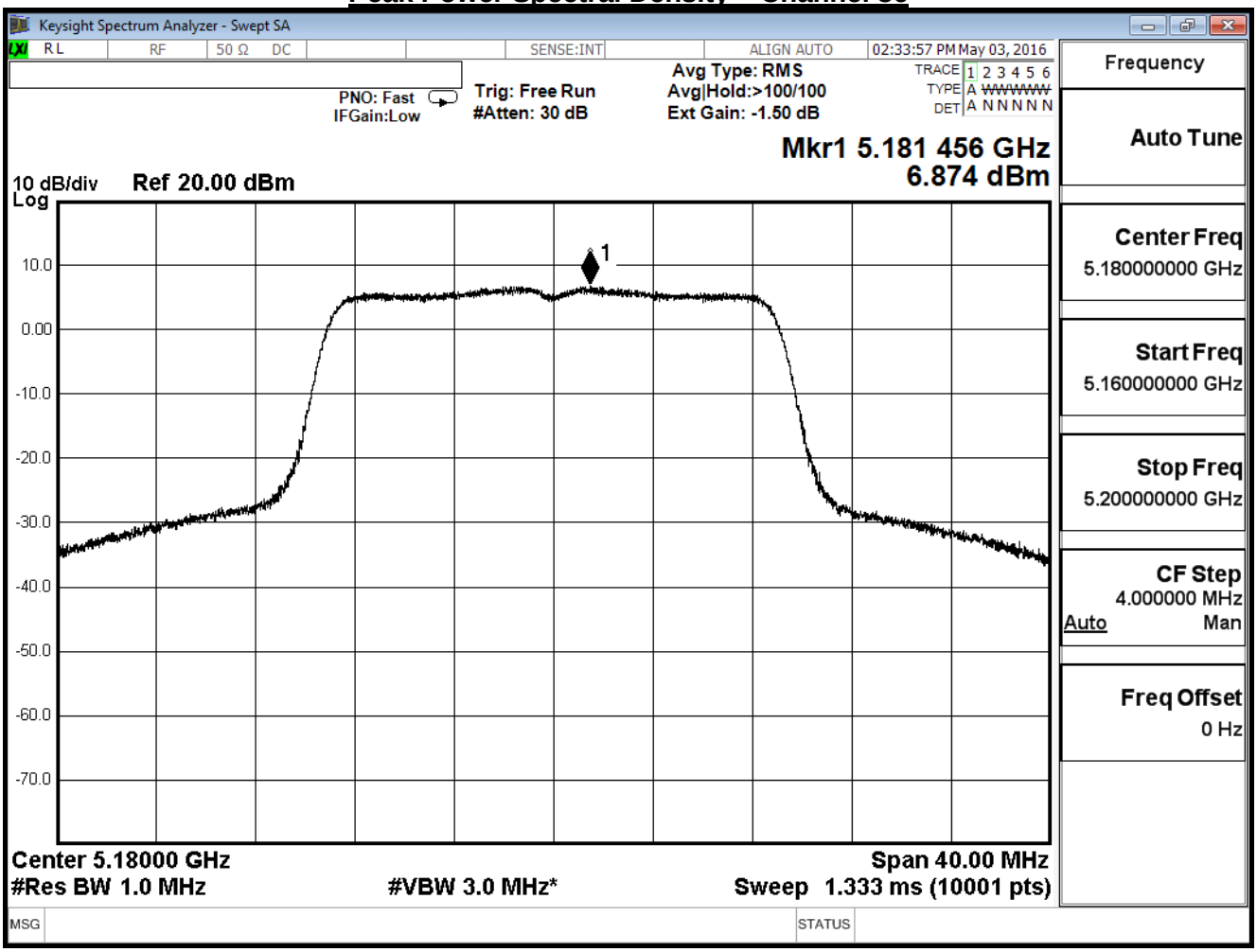


Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

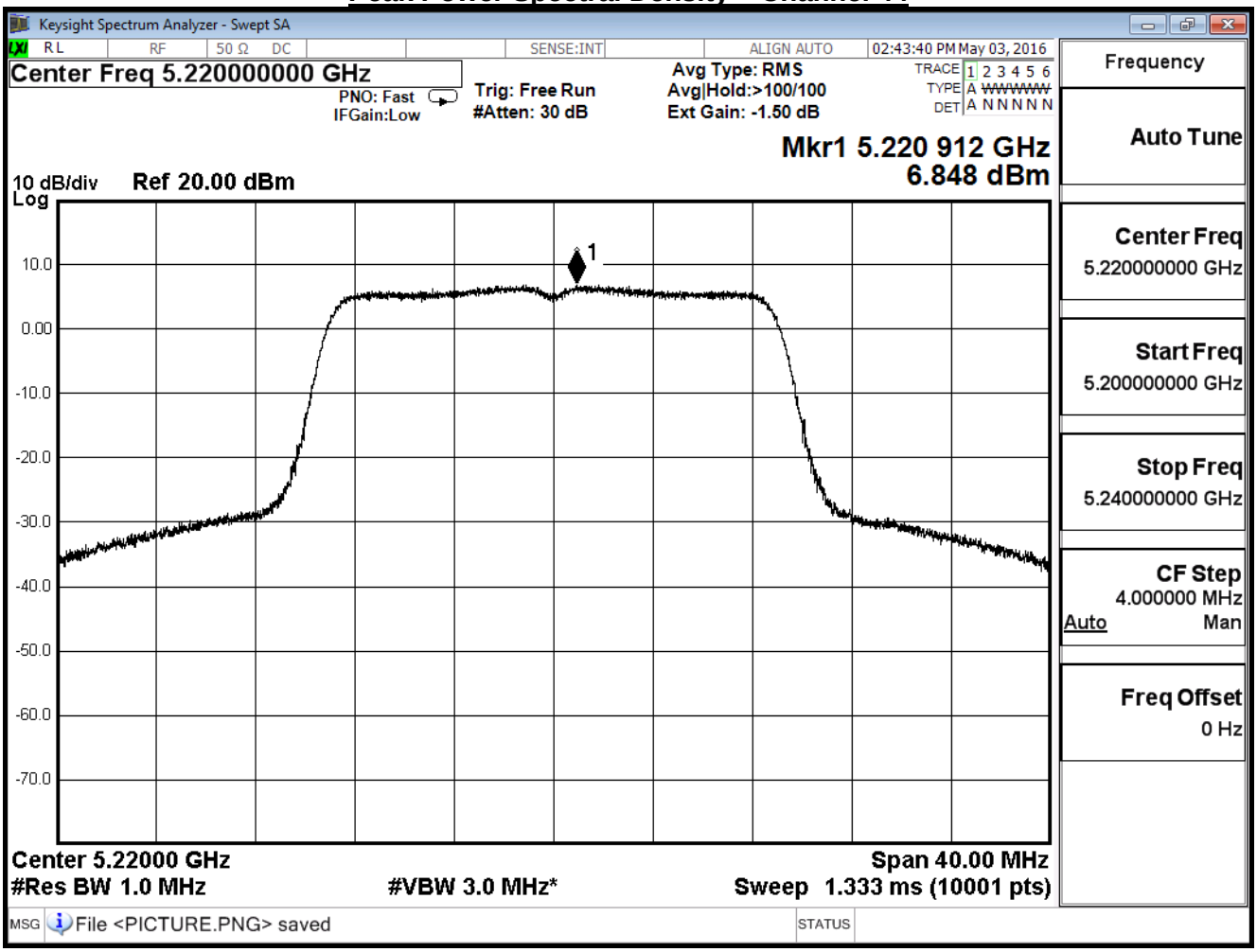
IEEE 802.11n_20M (ANT 1)				
Channel No.	Frequency (MHz)	Measurement (dBm)	Limit (dBm)	Result
36	5180	6.87	≦9.99	Pass
44	5220	6.85	≦9.99	Pass
48	5240	6.87	≦9.99	Pass

Total Gain: 10log(ANT N)+max Gain = 7.01dBi
Limit=11-(7.01dBi-6dBi)=9.99dBi

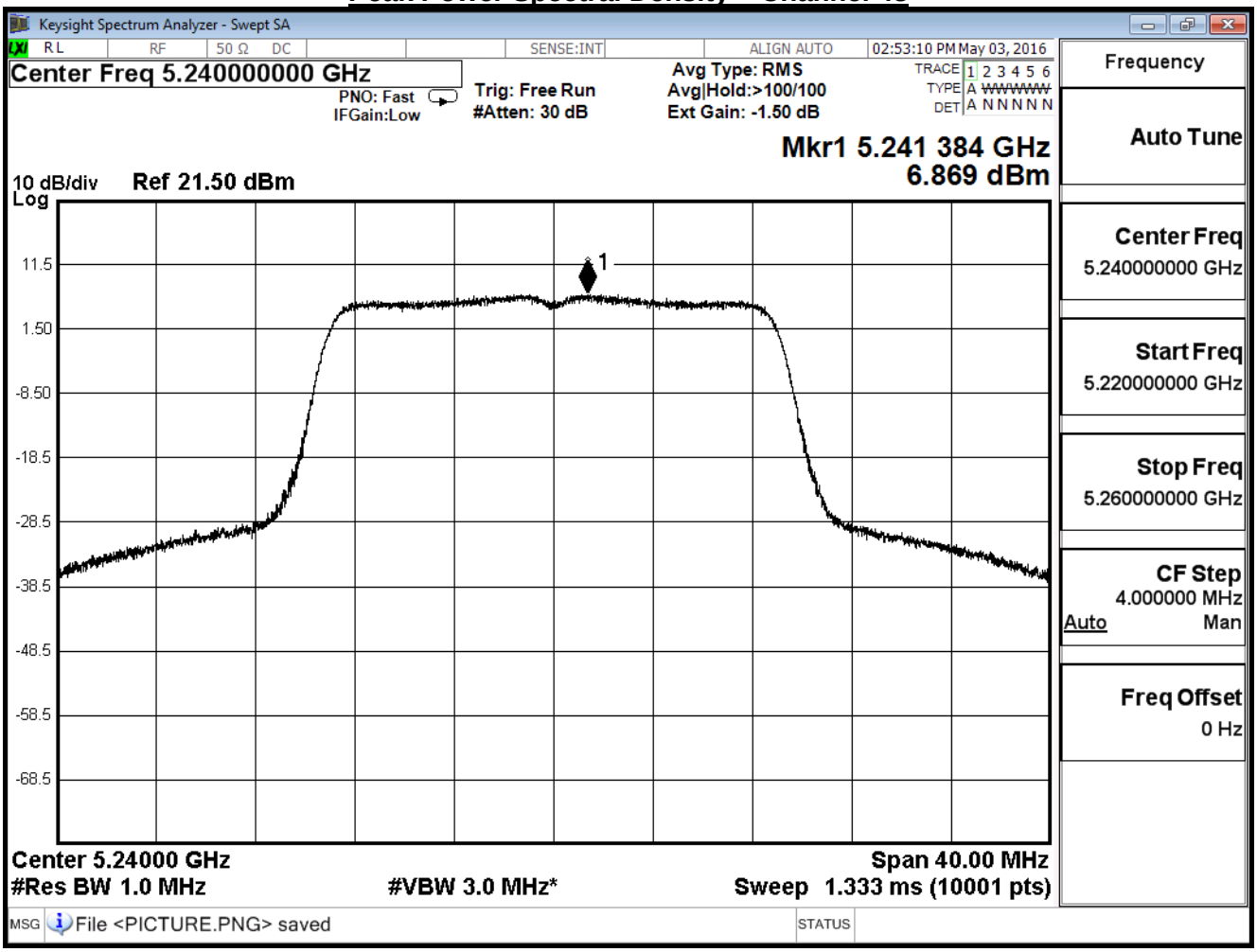
Peak Power Spectral Density – Channel 36



Peak Power Spectral Density – Channel 44



Peak Power Spectral Density – Channel 48



Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

IEEE 802.11n_20M (ANT 0+1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
36	5180	9.86	≦9.99	Pass
44	5220	9.86	≦9.99	Pass
48	5240	9.91	≦9.99	Pass

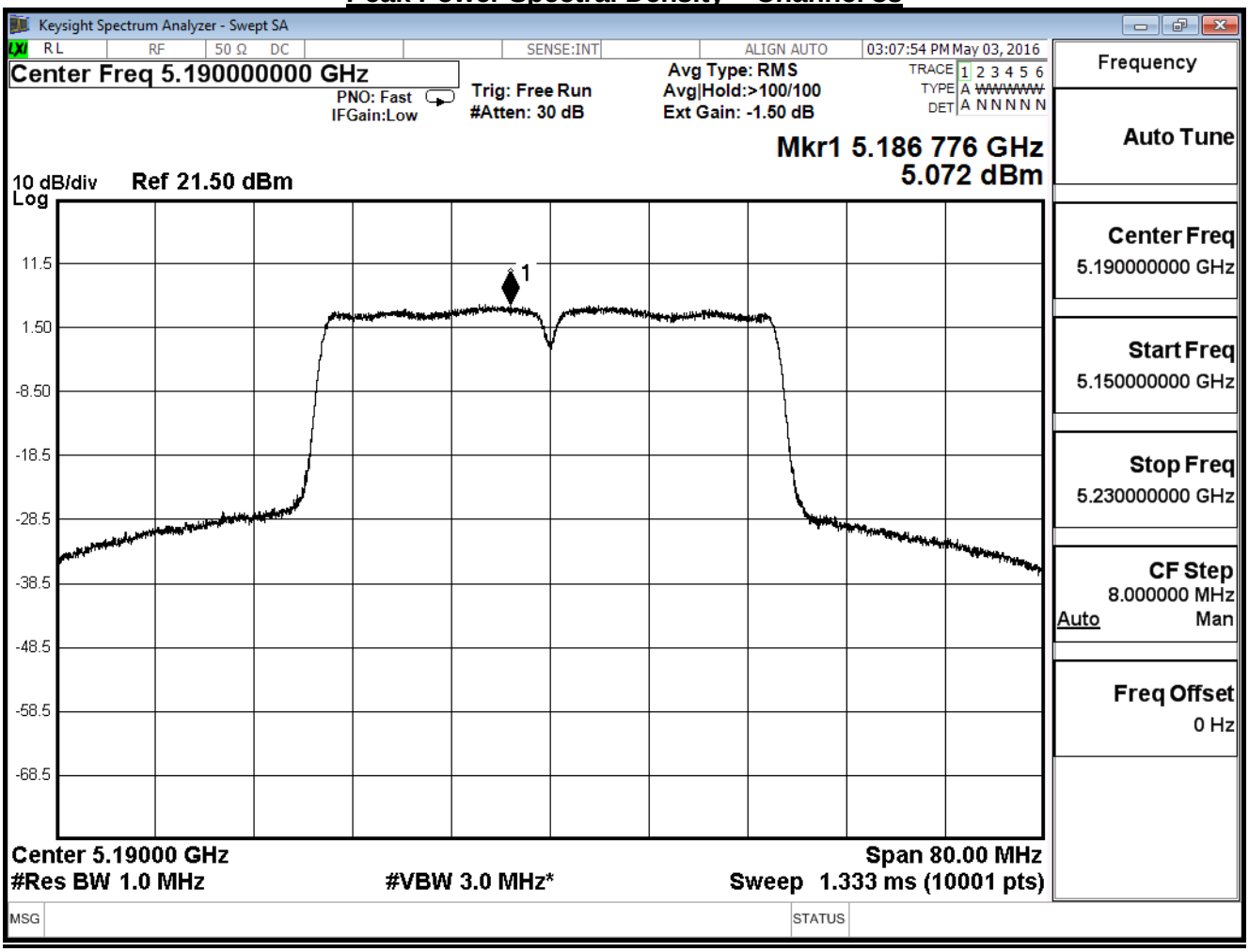
Total Gain: 10log(ANT N)+max Gain = 7.01dBi
Limit=11-(7.01dBi-6dBi)=9.99dBi

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

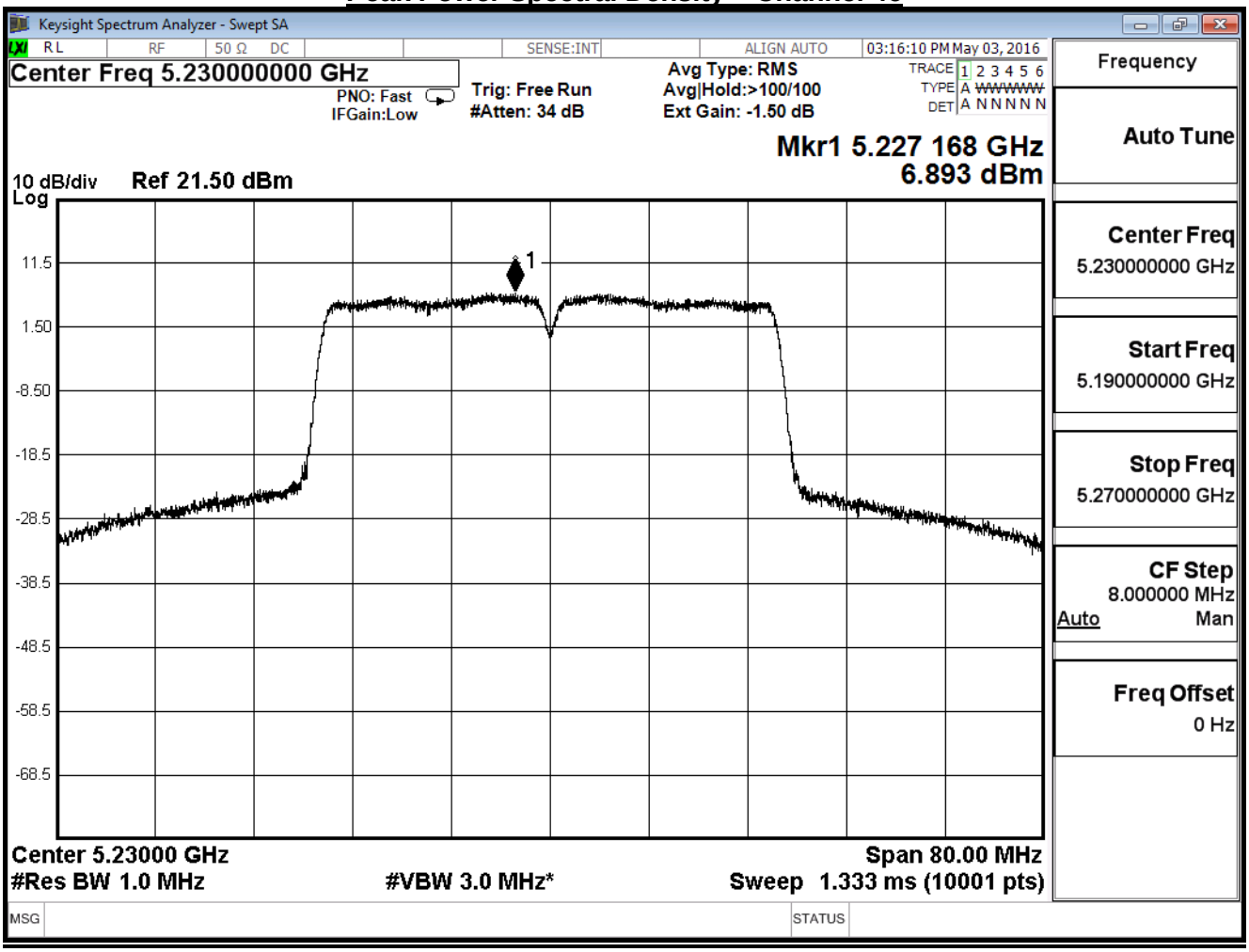
IEEE 802.11n_40M(ANT 0)				
Channel No.	Frequency (MHz)	Measurement (dBm)	Limit (dBm)	Result
38	5190	5.07	≦9.99	Pass
46	5230	6.89	≦9.99	Pass

Total Gain: 10log(ANT N)+max Gain = 7.01dBi
Limit=11-(7.01dBi-6dBi)=9.99dBi

Peak Power Spectral Density – Channel 38



Peak Power Spectral Density – Channel 46

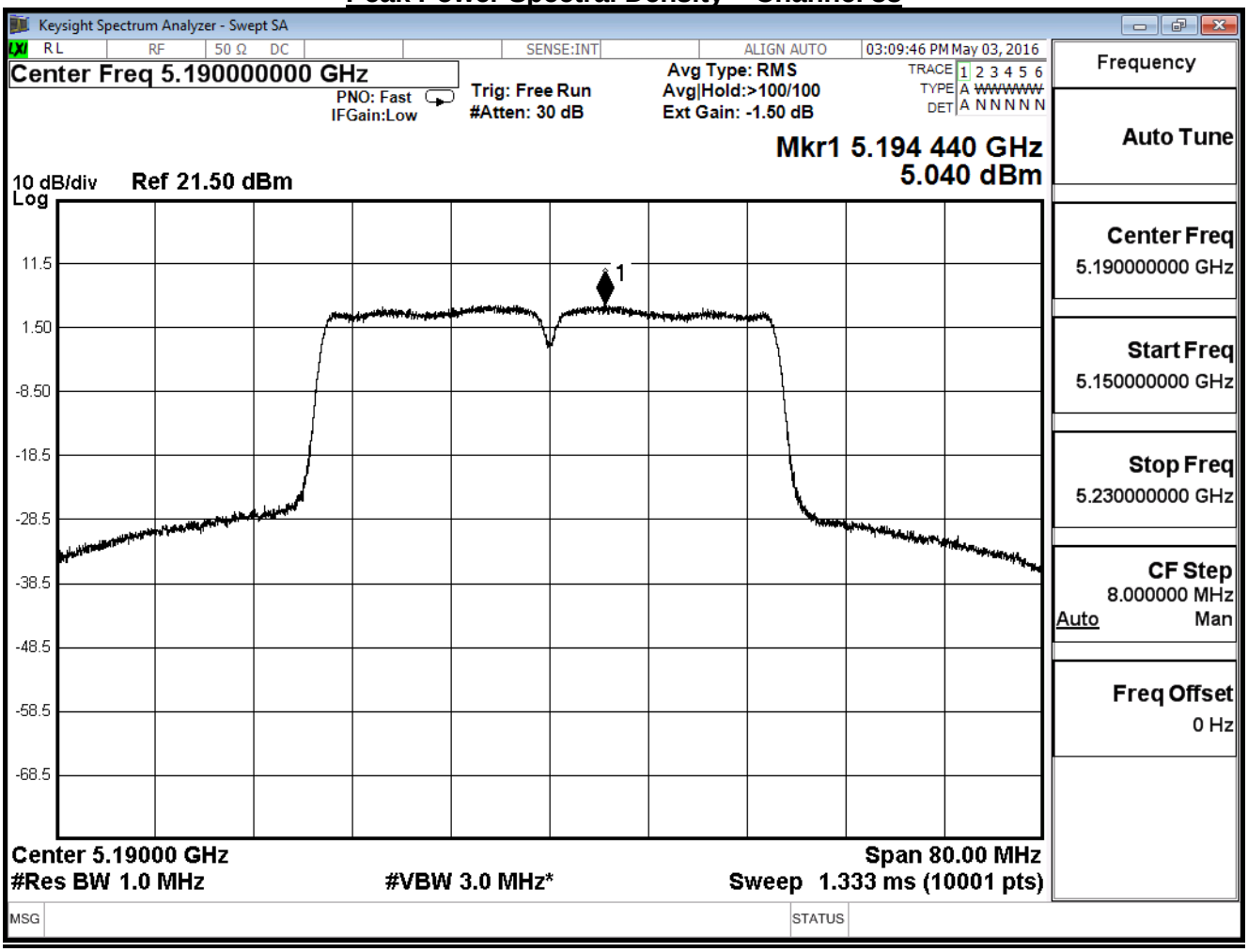


Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

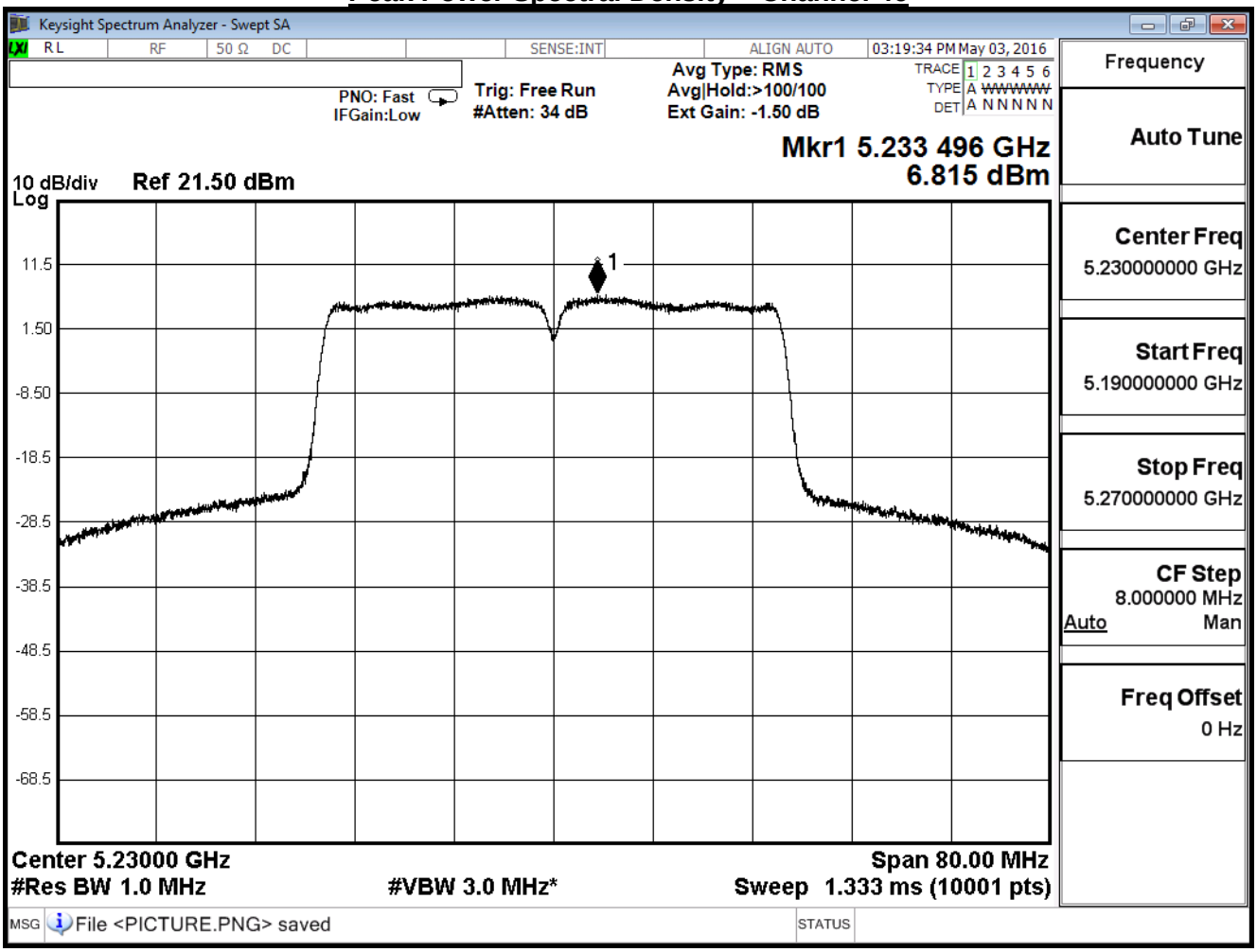
IEEE 802.11n_40M(ANT 1)				
Channel No.	Frequency (MHz)	Measurement (dBm)	Limit (dBm)	Result
38	5190	5.04	≦9.99	Pass
46	5230	6.82	≦9.99	Pass

Total Gain: 10log(ANT N)+max Gain = 7.01dBi
Limit=11-(7.01dBi-6dBi)=9.99dBi

Peak Power Spectral Density – Channel 38



Peak Power Spectral Density – Channel 46



Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

IEEE 802.11n_40M(ANT 0+1)				
Channel No.	Frequency (MHz)	Measurement (dBm)	Limit (dBm)	Result
38	5190	8.07	≦9.99	Pass
46	5230	9.86	≦9.99	Pass

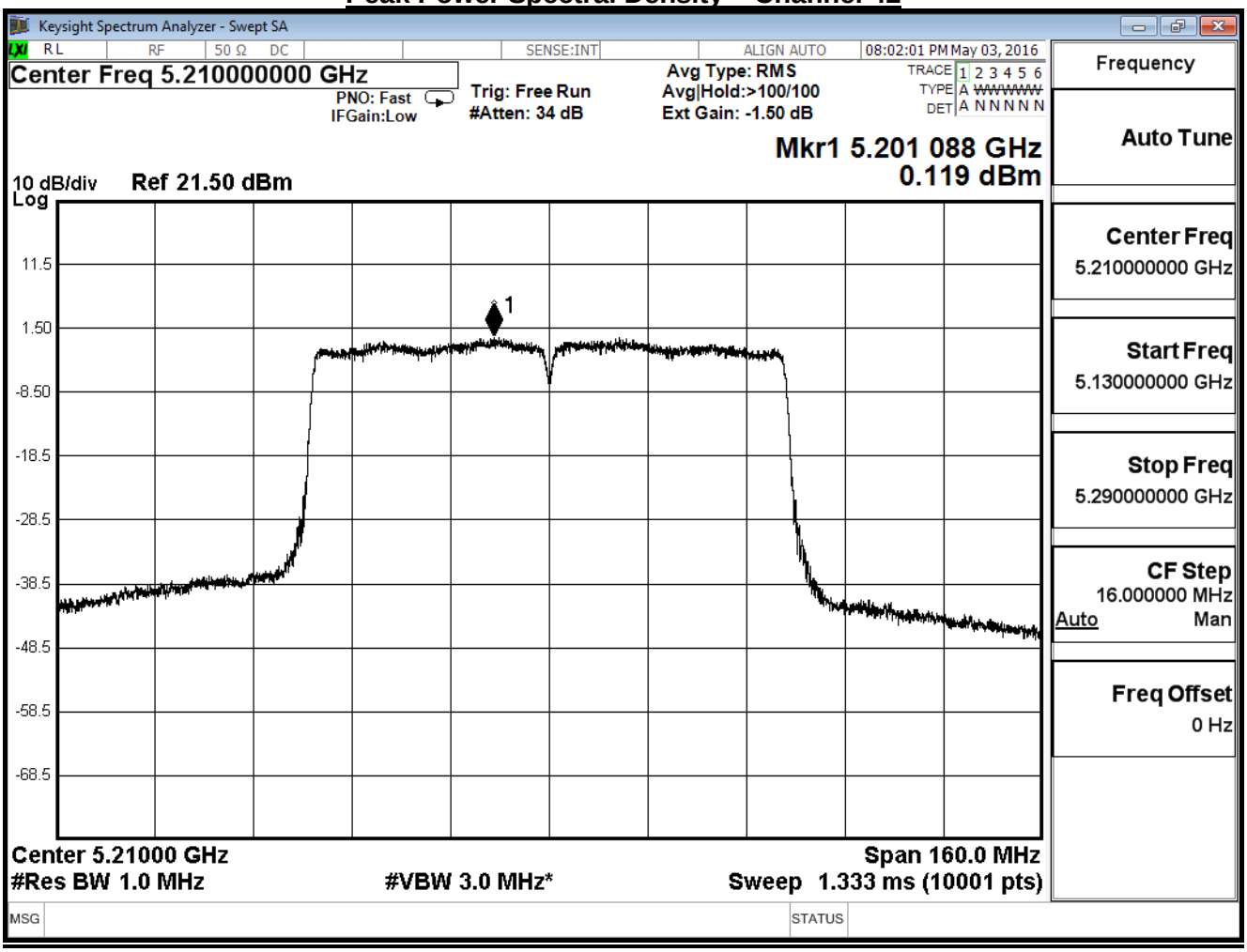
Total Gain: 10log(ANT N)+max Gain = 7.01dBi
Limit=11-(7.01dBi-6dBi)=9.99dBi

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

IEEE 802.11ac_80M(ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
42	5210	0.12	≦9.99	Pass

Total Gain: 10log(ANT N)+max Gain = 7.01dBi
Limit=11-(7.01dBi-6dBi)=9.99dBi

Peak Power Spectral Density – Channel 42

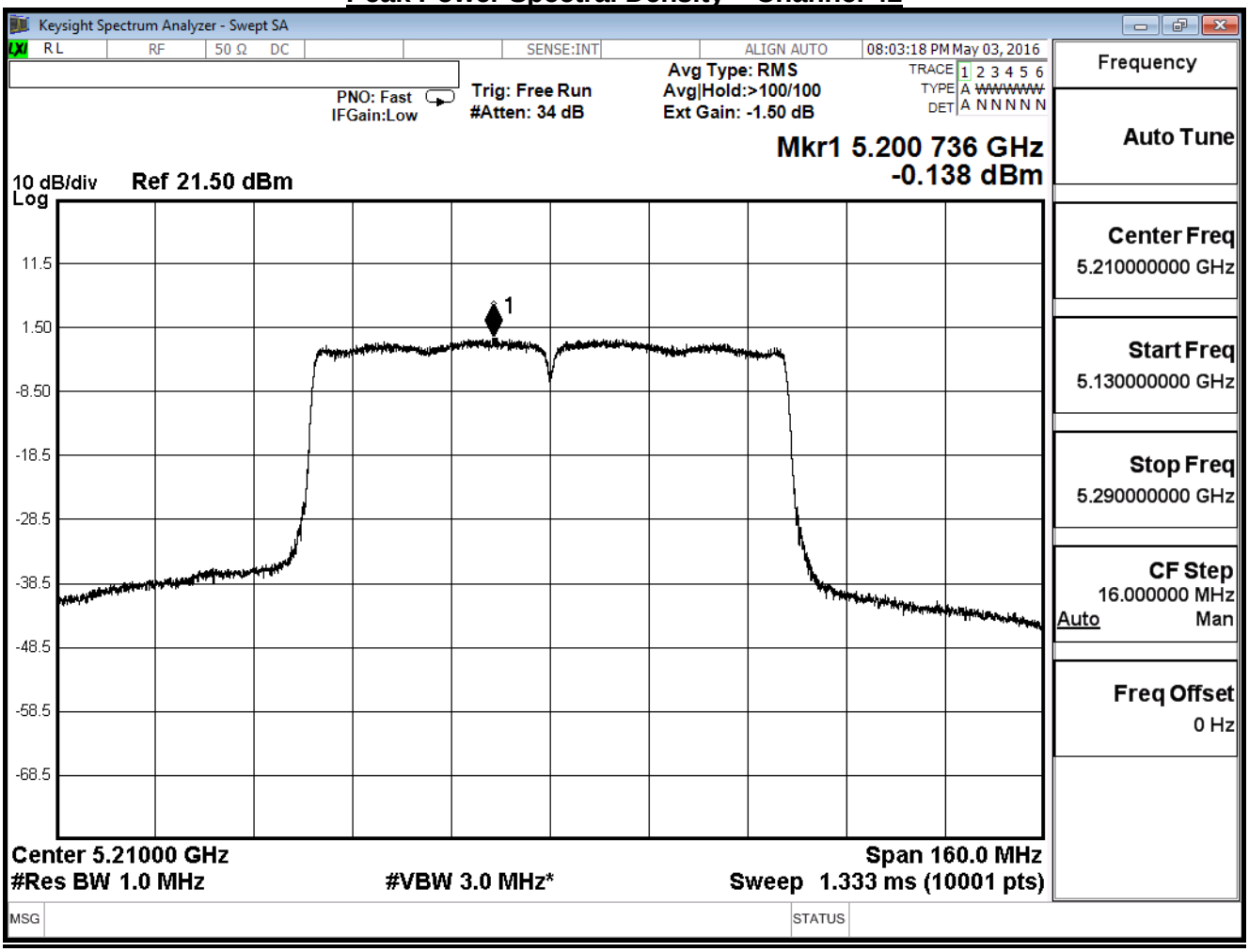


Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

IEEE 802.11ac_80M(ANT 1)				
Channel No.	Frequency (MHz)	Measurement (dBm)	Limit (dBm)	Result
42	5210	-0.14	≦9.99	Pass

Total Gain: 10log(ANT N)+max Gain = 7.01dBi
Limit=11-(7.01dBi-6dBi)=9.99dBi

Peak Power Spectral Density – Channel 42



Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

IEEE 802.11ac_80M(ANT 0+1)				
Channel No.	Frequency (MHz)	Measurement (dBm)	Limit (dBm)	Result
42	5210	3.00	≦9.99	Pass

Total Gain: 10log(ANT N)+max Gain = 7.01dBi
Limit=11-(7.01dBi-6dBi)=9.99dBi

5. Radiated Emission

5.1. Test Equipment

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

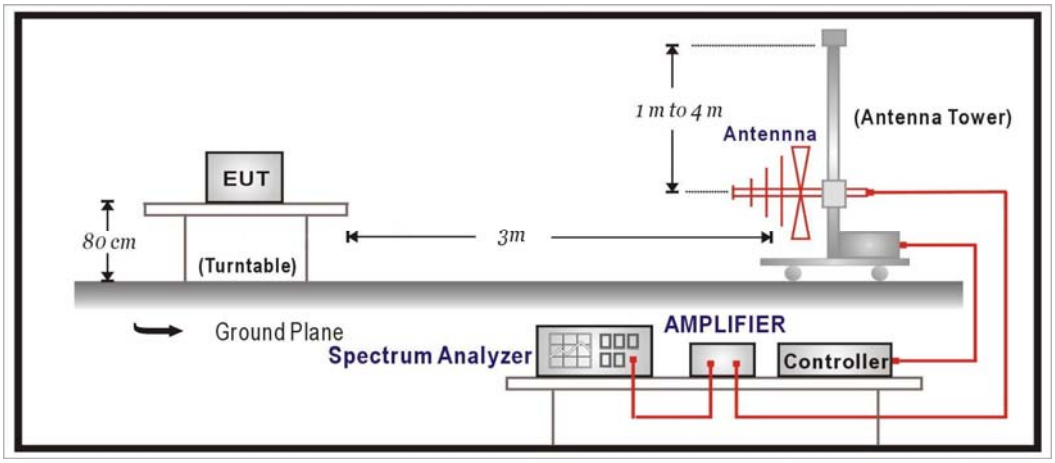
Radiated Emission / CB1

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Bilog Antenna	Schaffner	CBL6112B	2895	2016/08/14
Double Ridged Guide Horn Antenna	Schwarzbeck	BBHA 9120	D743	2017/01/14
Pre-Amplifier	EMCI	EMC0031835	980233	2017/01/26
Pre-Amplifier	QuieTek	AP-025C	CHM-0706049	2017/01/03
Spectrum Analyzer	Agilent	E4440A	MY46187335	2016/12/24
k Type Cable	Huber+Suhner	SF 102	25623/2	2017/01/11
Horn Antenna	Schwarzbeck	BBHA 9170	203	2016/09/07
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/05

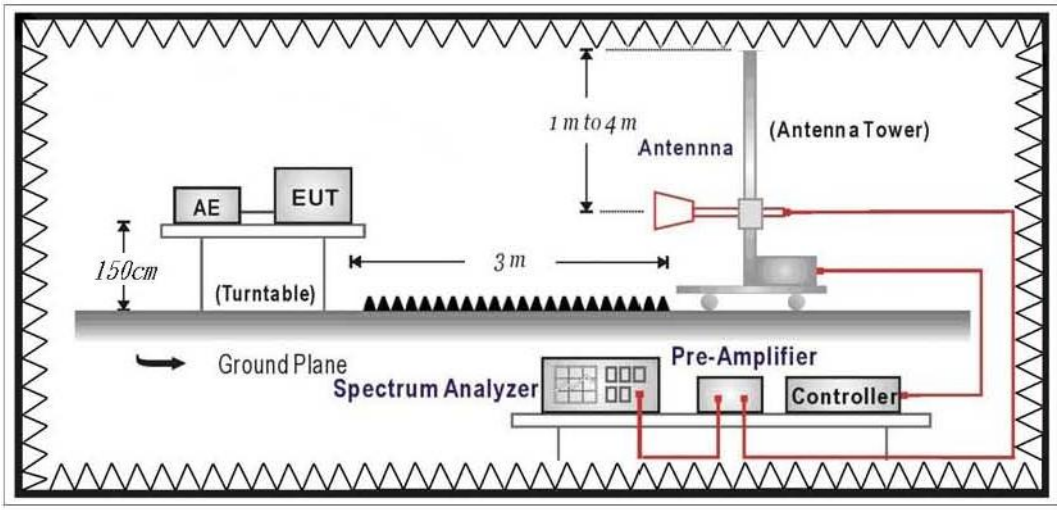
Note: All equipments that need to calibrate are with calibration period of 1 year.

5.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



5.3. Limits

➢ General Radiated Emission Limits

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section. Radiated emissions which fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209:

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	uV/m @3m	dBuV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remark:

1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

➢ Unwanted Emission out of the restricted bands Limits

FCC Part 15 Subpart E Paragraph 15.407(b) Limits		
Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength (dBuV/m@3m)
5150~5250	-27	68.3
5250~5350	-27	68.3
5470~5725	-27	68.3
5725~5850	-27 (Note1)	68.3
	-17 (Note2)	78.3

Remark:

1. For frequencies more than 10 MHz above or below the band edges.
2. For frequency range from the band edges to 10 MHz above or below the band edges.
3. uV/m = $\frac{1000000\sqrt{30 \times EIRP}}{3}$, RF Voltage (dBuV/m) = 20 log RF Voltage (uV/m)

5.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 and 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.
The additional latch filter below 1GHz was used to measure the level of harmonics radiated emission during field dtrength of harmonics measurement.
The bandwidth below 1GHz setting on the field strength meter is 120 KHz, above 1GHz are 1 MHz.
The frequency range from 30MHz to 10th harminics is checked.

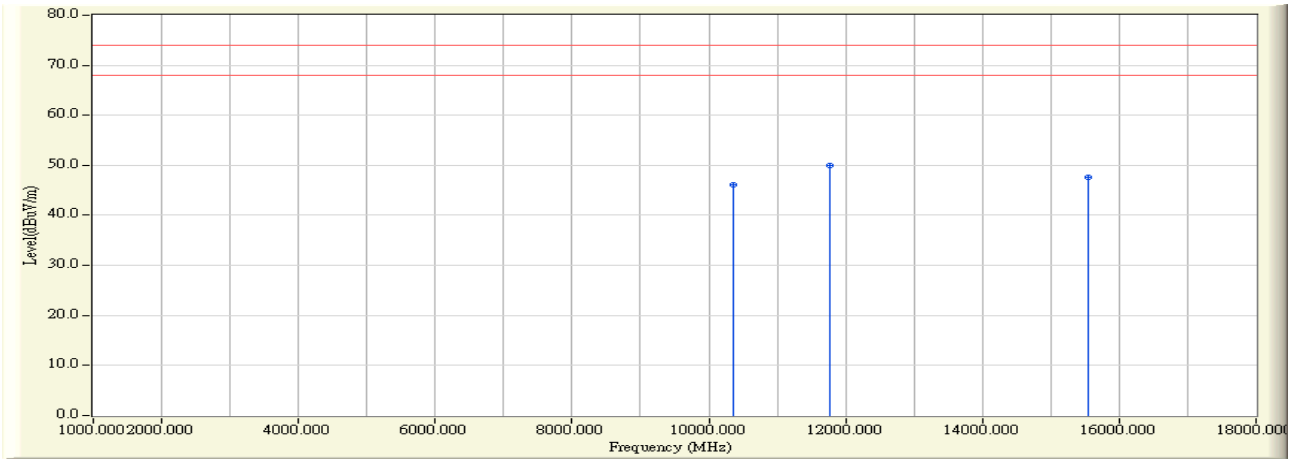
5.5. Uncertainty

The measurement uncertainty
30MHz～1GHz as ±3.43dB
1GHz～26.5Ghz as ±3.65dB

5.6. Test Result

Harmonic & Spurious:

Site : CB1	**Time : 2016/04/27 - 09:54**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5180MHz**

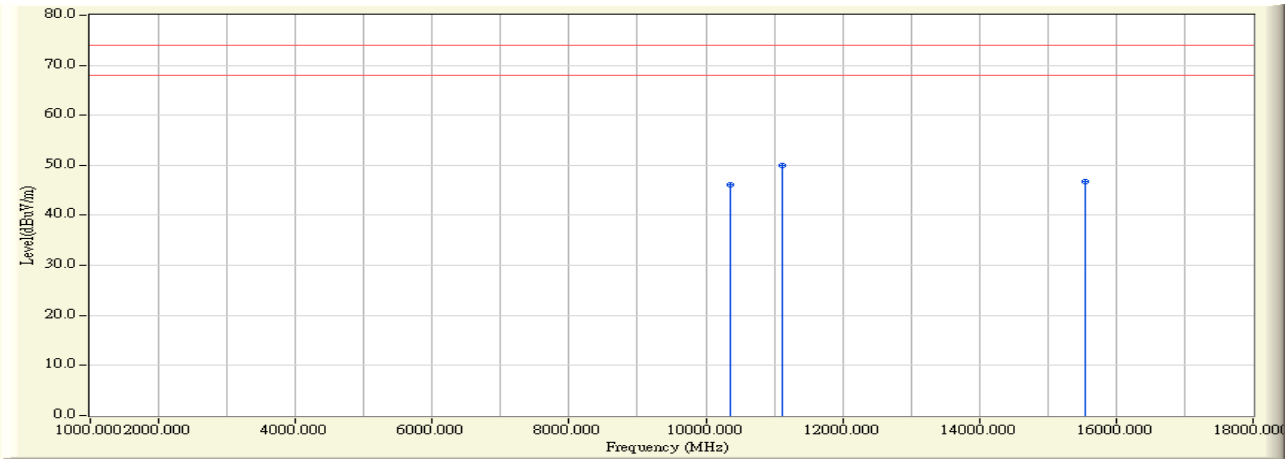


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10360.000	9.160	36.920	46.080	-27.920	74.000	PEAK
2	*	11769.000	10.694	39.220	49.914	-24.086	74.000	PEAK
3		15540.000	9.739	37.830	47.570	-26.430	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 09:59**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5180MHz**

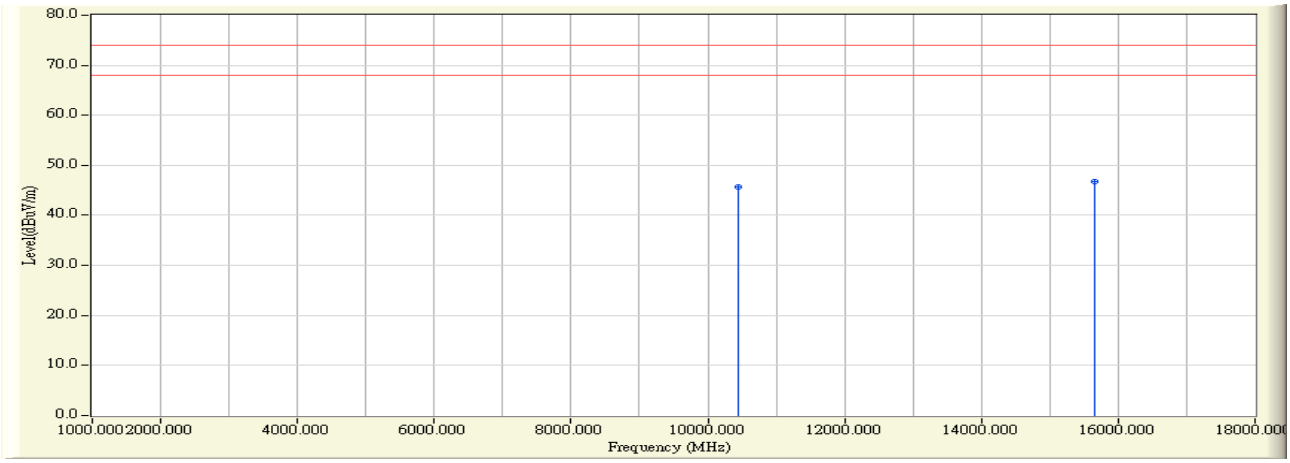


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10360.000	8.537	37.630	46.167	-27.833	74.000	PEAK
2	*	11115.000	11.234	38.670	49.904	-24.096	74.000	PEAK
3		15540.000	9.739	37.000	46.740	-27.260	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 10:06**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5220MHz**

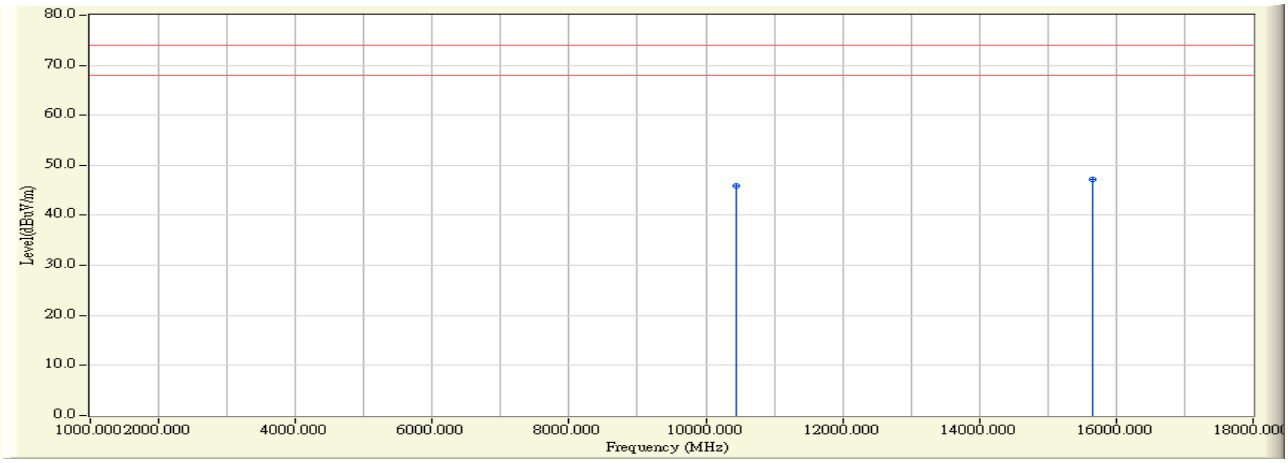


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10440.000	9.094	36.590	45.684	-28.316	74.000	PEAK
2	*	15660.000	9.633	37.040	46.674	-27.326	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 10:19**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5220MHz**

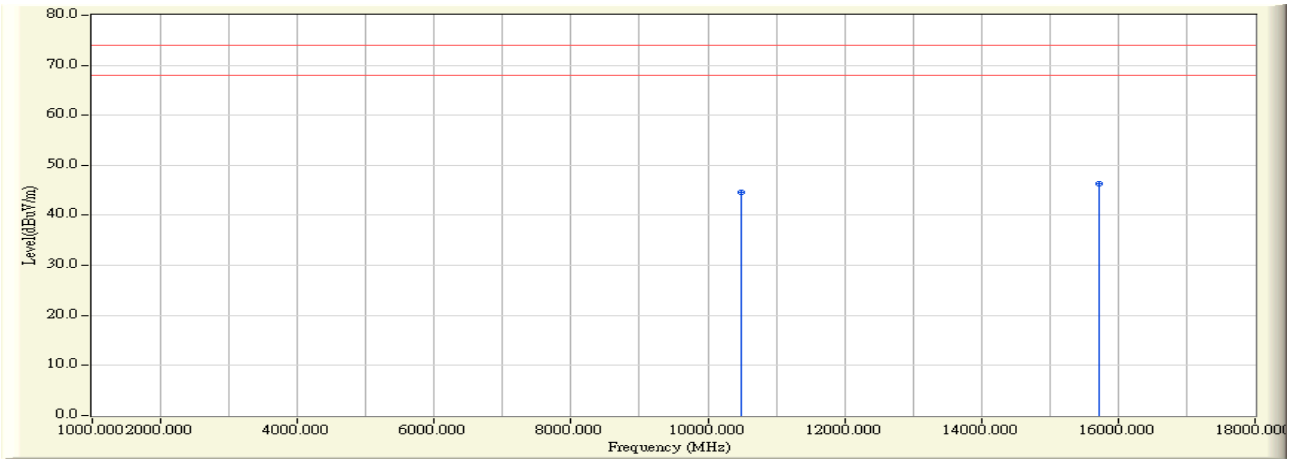


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10440.000	8.551	37.330	45.881	-28.119	74.000	PEAK
2	*	15660.000	9.633	37.490	47.124	-26.876	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 10:22**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5240MHz**

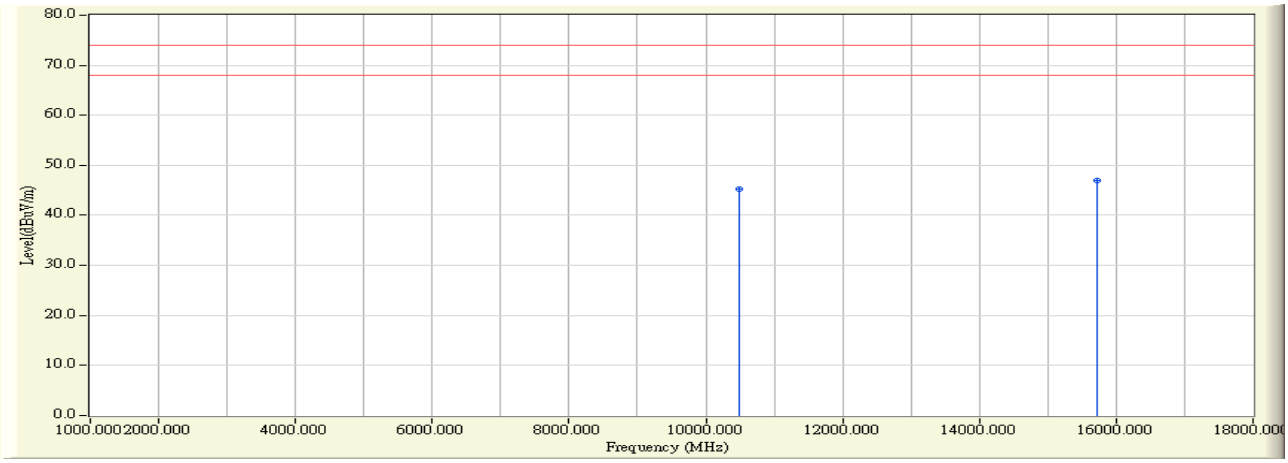


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10480.000	9.071	35.600	44.671	-29.329	74.000	PEAK
2	*	15720.000	9.580	36.680	46.261	-27.739	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 10:25**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5240MHz**

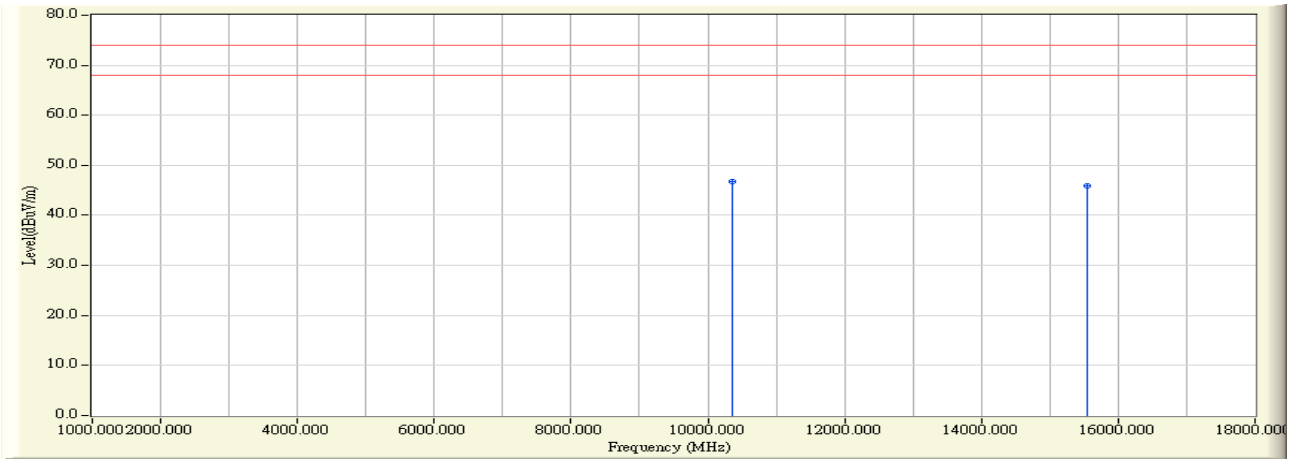


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10480.000	8.568	36.720	45.288	-28.712	74.000	PEAK
2	*	15720.000	9.580	37.360	46.941	-27.059	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 10:29**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5180MHz**

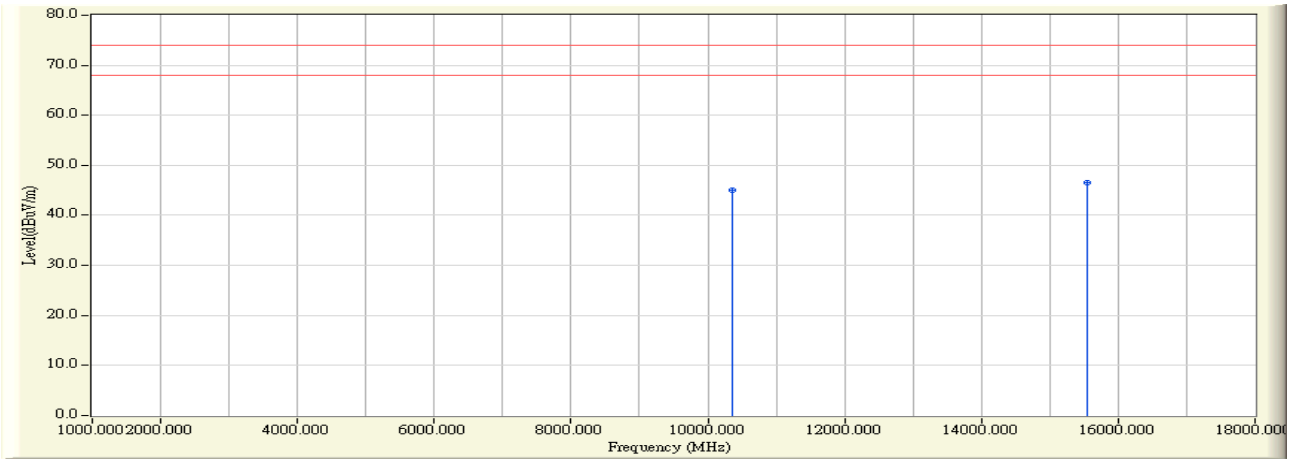


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	10360.000	9.160	37.500	46.660	-27.340	74.000	PEAK
2		15540.000	9.739	36.180	45.920	-28.080	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 10:32**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5180MHz**

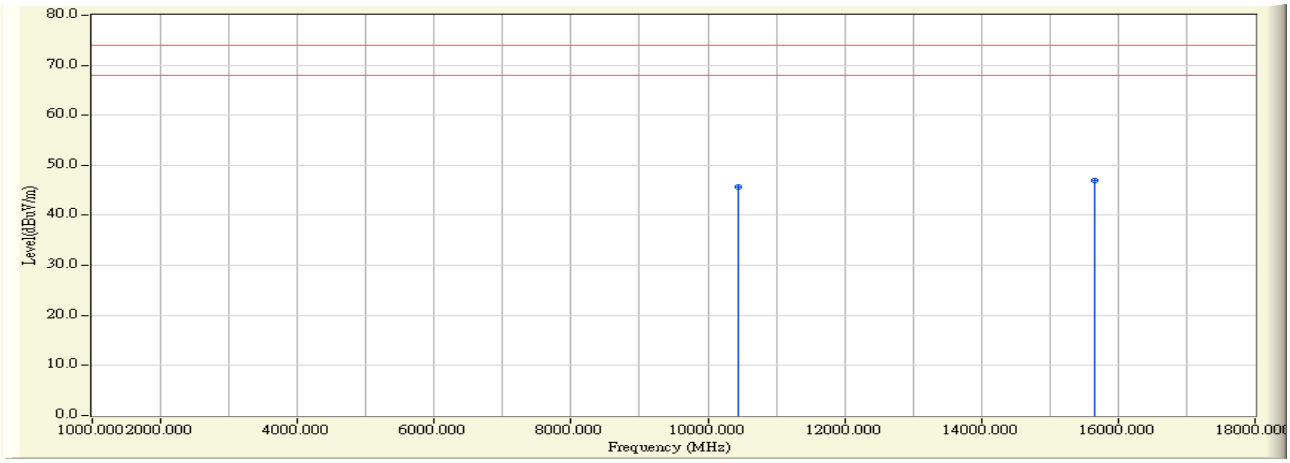


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10360.000	8.537	36.460	44.997	-29.003	74.000	PEAK
2	*	15540.000	9.739	36.780	46.520	-27.480	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 10:35**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5220MHz**

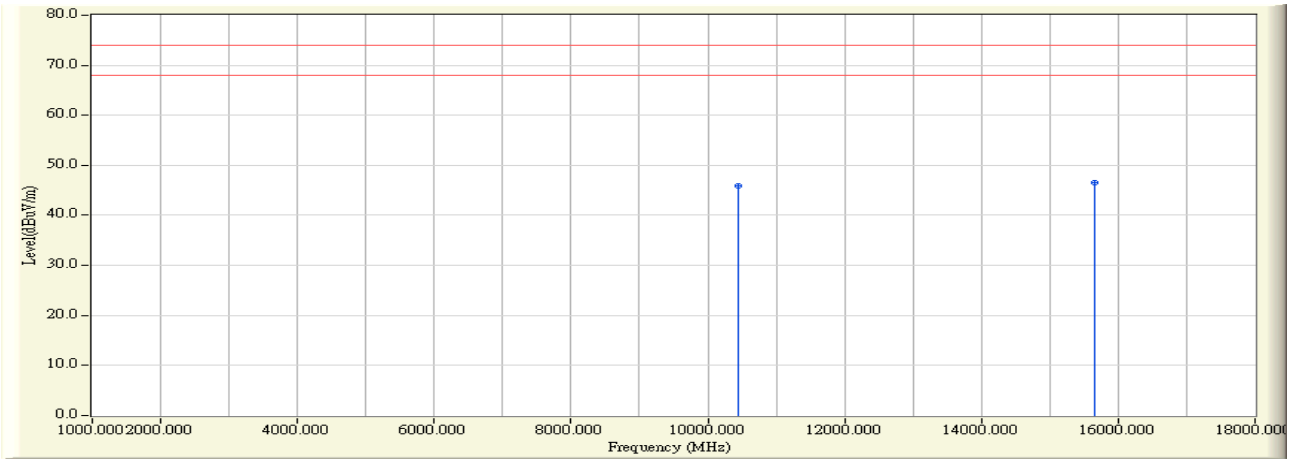


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10440.000	9.094	36.500	45.594	-28.406	74.000	PEAK
2	*	15660.000	9.633	37.320	46.954	-27.046	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 10:37**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5220MHz**

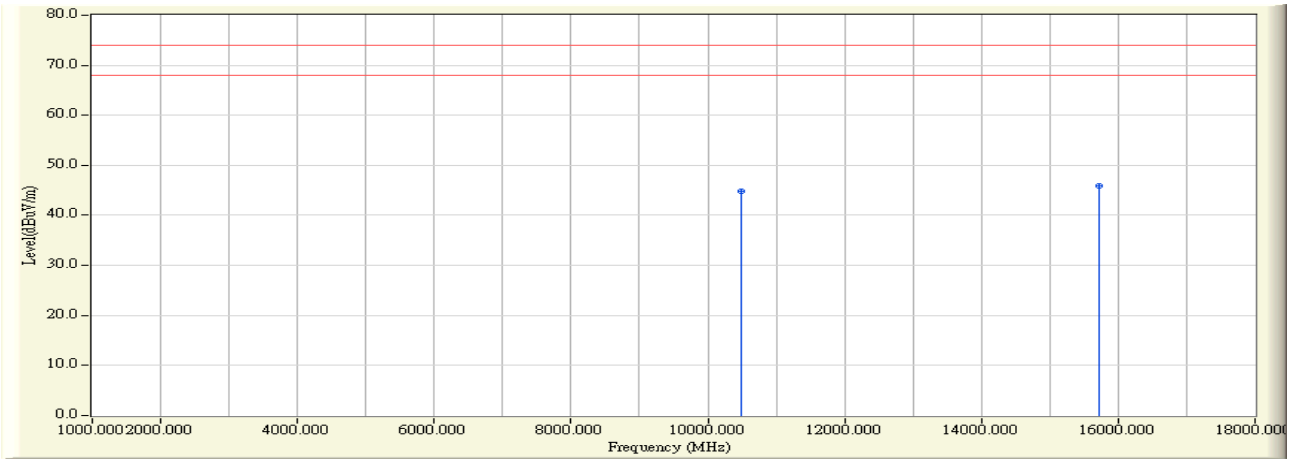


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10440.000	8.551	37.270	45.821	-28.179	74.000	PEAK
2	*	15660.000	9.633	36.920	46.554	-27.446	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 10:41**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5240MHz**

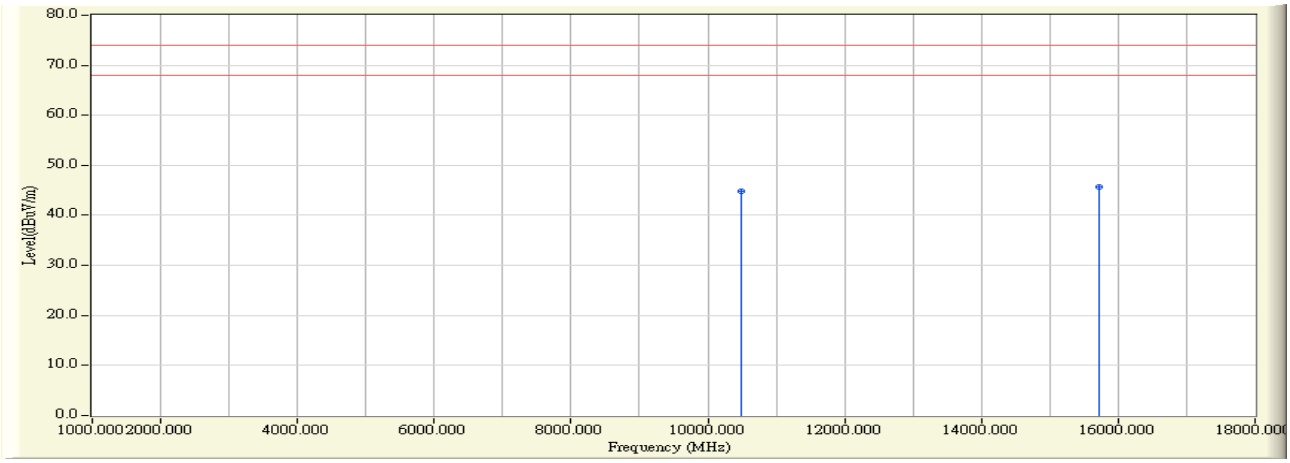


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10480.000	9.071	35.780	44.851	-29.149	74.000	PEAK
2	*	15720.000	9.580	36.290	45.871	-28.129	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 10:44**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5240MHz**

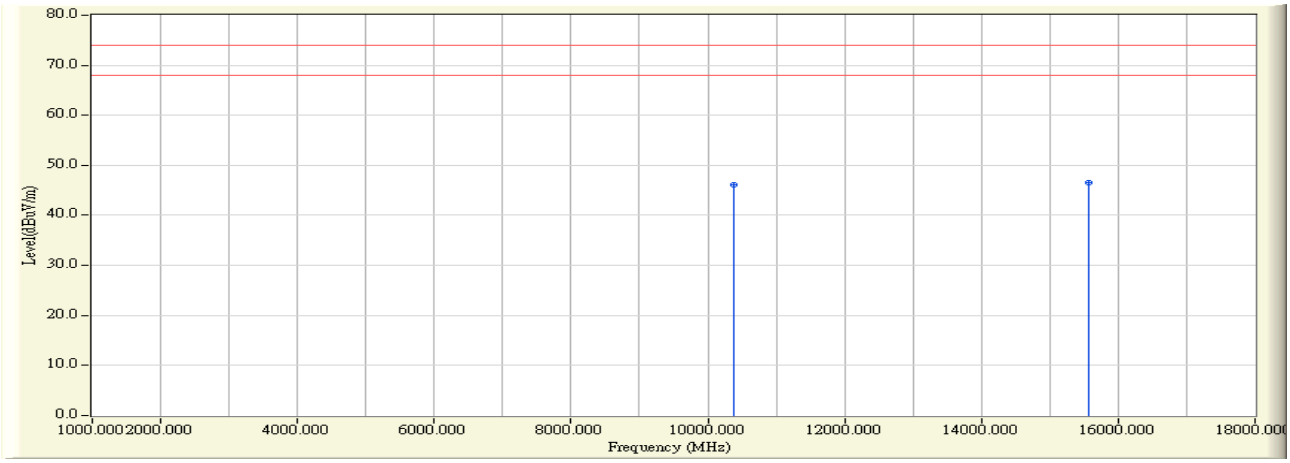


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10480.000	8.568	36.240	44.808	-29.192	74.000	PEAK
2	*	15720.000	9.580	36.090	45.671	-28.329	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 10:47**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(40M)_5190MHz**

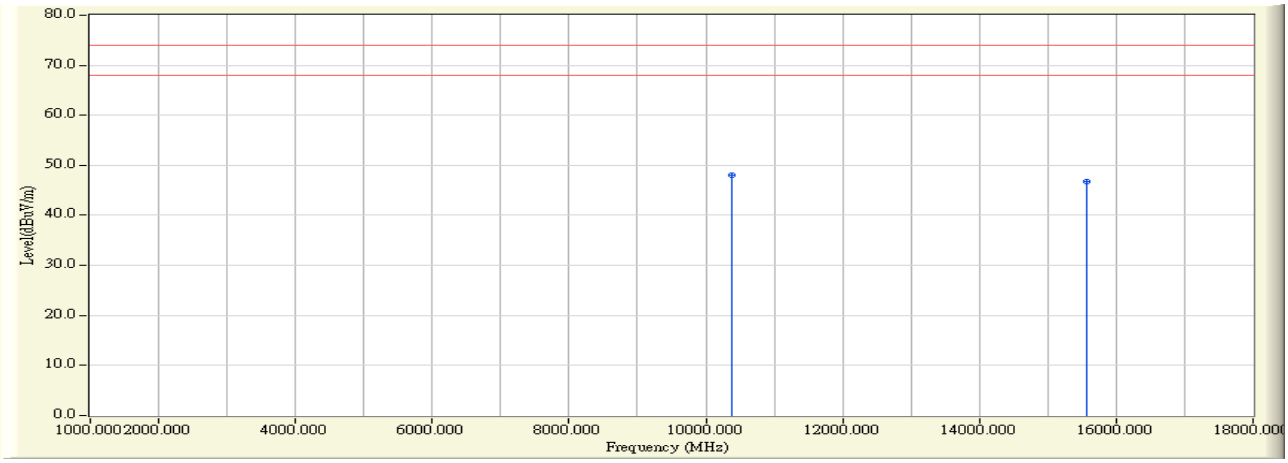


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10380.000	9.144	36.920	46.064	-27.936	74.000	PEAK
2	*	15570.000	9.713	36.870	46.583	-27.417	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 10:50**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(40M)_5190MHz**

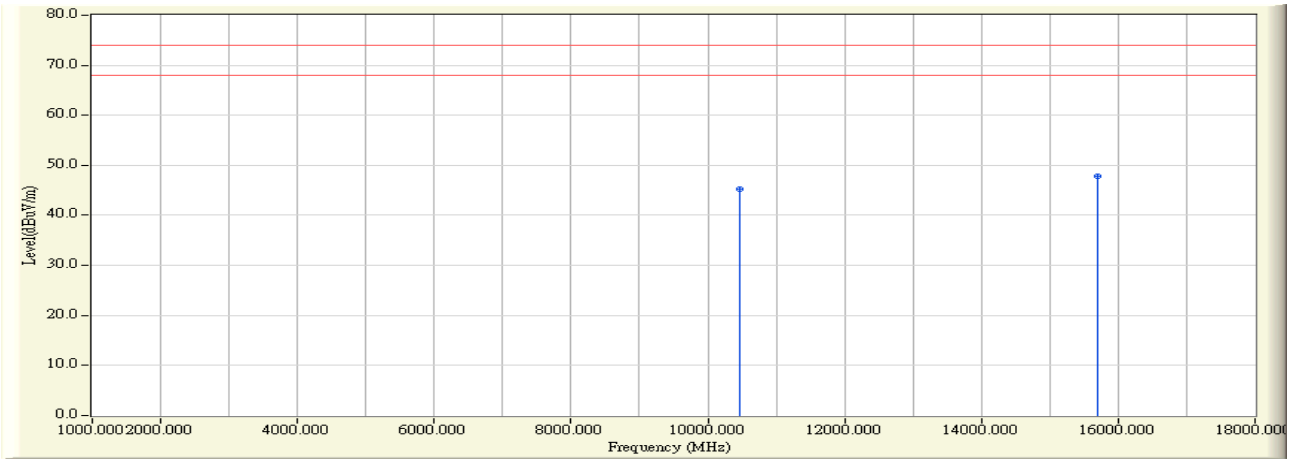


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	10380.000	8.541	39.510	48.051	-25.949	74.000	PEAK
2		15570.000	9.713	37.000	46.713	-27.287	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 10:53**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(40M)_5230MHz**

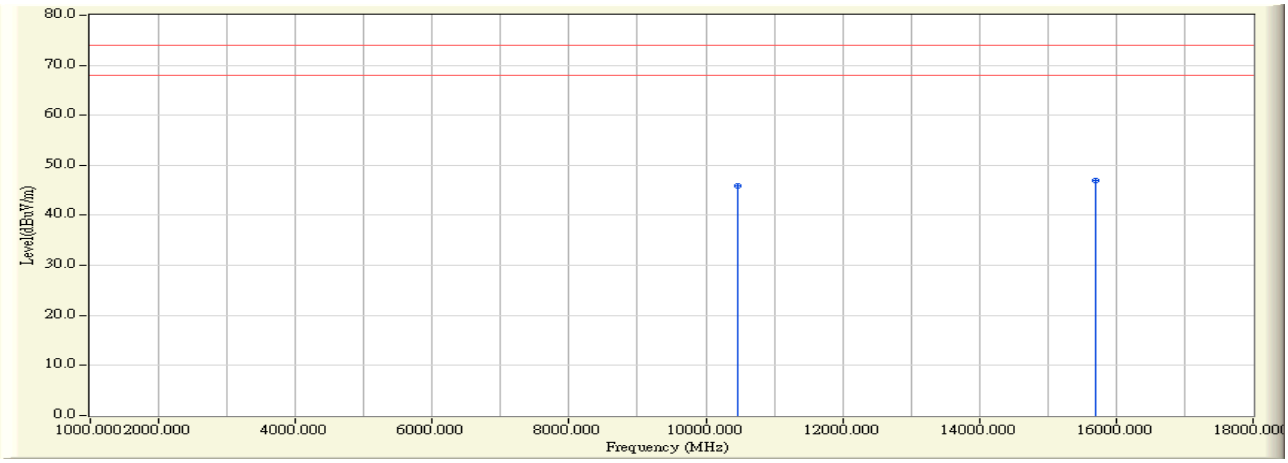


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10460.000	9.077	36.200	45.277	-28.723	74.000	PEAK
2	*	15690.000	9.607	38.190	47.797	-26.203	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 10:56**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(40M)_5230MHz**

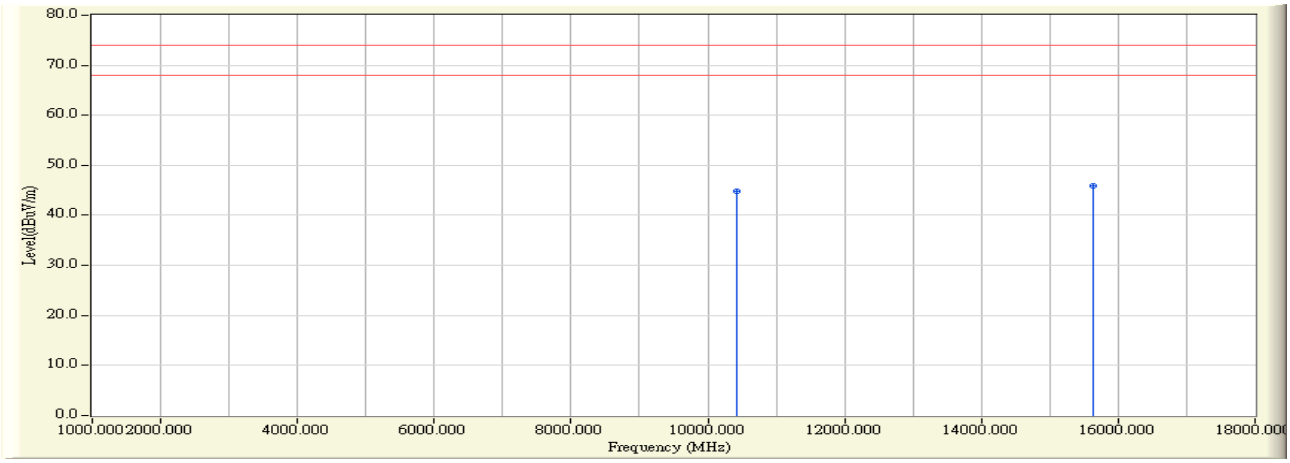


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10460.000	8.554	37.250	45.804	-28.196	74.000	PEAK
2	*	15690.000	9.607	37.430	47.037	-26.963	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 10:59**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11ac(80M)_5210MHz**

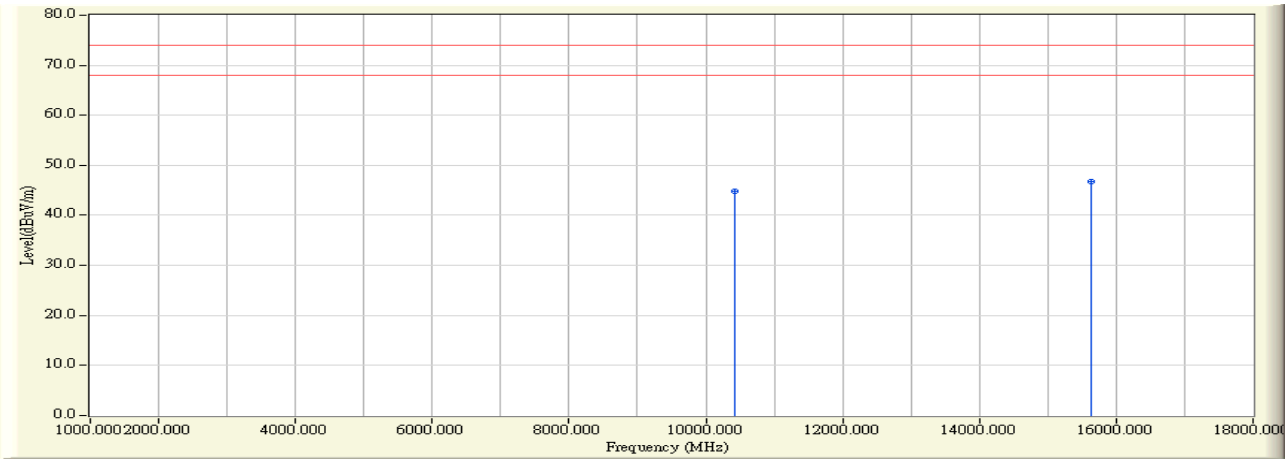


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10420.000	9.110	35.660	44.770	-29.230	74.000	PEAK
2	*	15630.000	9.660	36.320	45.980	-28.020	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/27 - 11:03**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11ac(80M)_5210MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10420.000	8.547	36.200	44.747	-29.253	74.000	PEAK
2	*	15630.000	9.660	37.130	46.790	-27.210	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

6. Band Edge

6.1. Test Equipment

The following test equipments are used during the band edge tests:

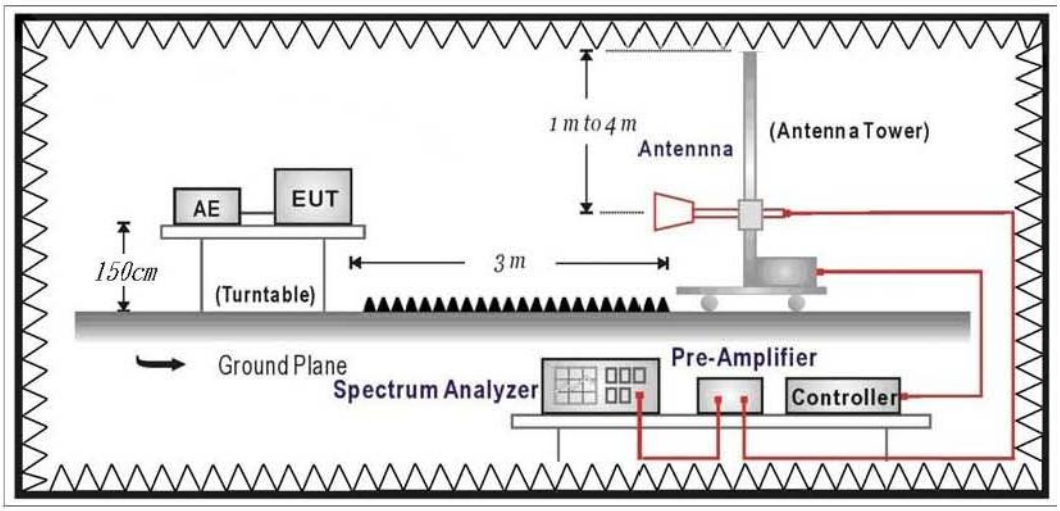
Band Edge / CB1

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Double Ridged Guide Horn Antenna	Schwarzbeck	BBHA 9120	D743	2017/01/14
Spectrum Analyzer	Agilent	E4440A	MY46187335	2016/12/24
k Type Cable	Huber+Suhner	SF 102	25623/2	2017/01/11
Pre-Amplifier	QuieTek	AP-025C	CHM-0706049	2017/01/03
Pre-Amplifier	EMCI	EMC0031835	980233	2017/01/26

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

6.2. Test Setup

RF Radiated Measurement:



6.3. Limits

➢ **General Radiated Emission Limits**

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section. Radiated emissions which fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209:

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	uV/m @3m	dBuV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remark:

1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

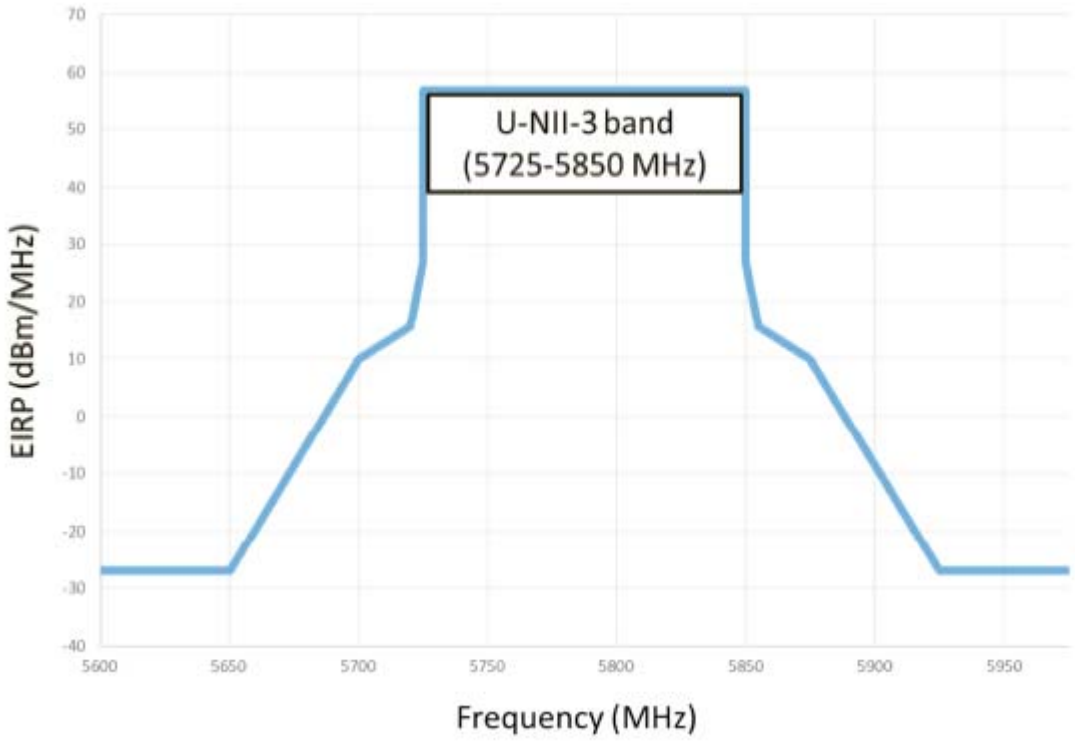
➢ **Unwanted Emission out of the restricted bands Limits**

FCC Part 15 Subpart E Paragraph 15.407(b) Limits		
Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength (dBuV/m@3m)
5150~5250	-27	68.3
5250~5350	-27	68.3
5470~5725	-27	68.3
5725~5850	-27 (Note1)	68.3
	-17 (Note2)	78.3

4. For transmitters operating in the 5.725-5.85 GHz band

(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

(ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in Section 15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in Section 15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.



Remark:

1. For frequencies more than 10 MHz above or below the band edges.
2. For frequency range from the band edges to 10 MHz above or below the band edges.
3. uV/m = $\frac{1000000\sqrt{30 \times EIRP}}{3}$, RF Voltage (dBuV/m) = 20 log RF Voltage (uV/m)

6.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2009 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 KHz, above 1GHz are 1 MHz.

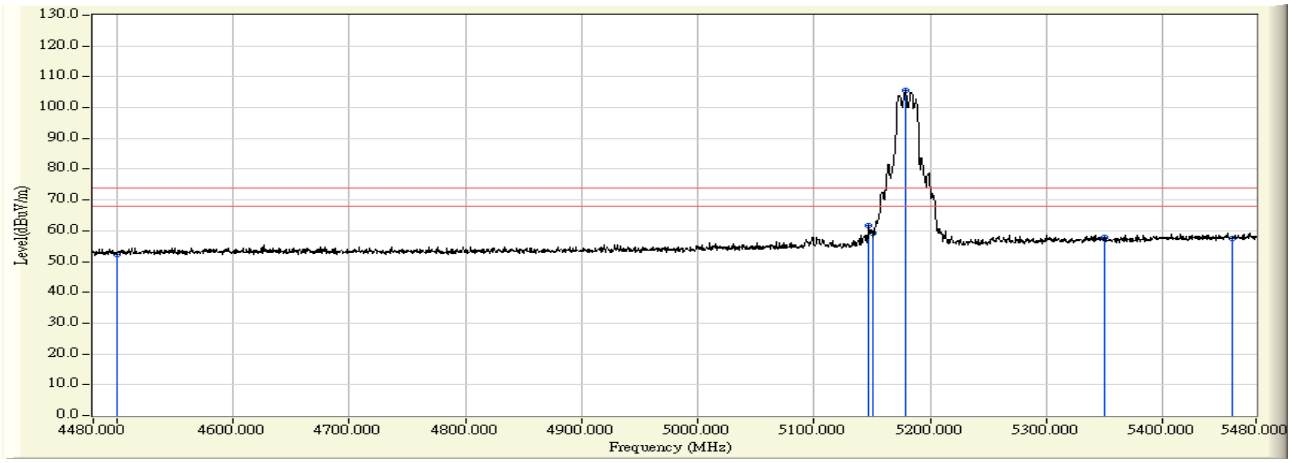
6.5. Uncertainty

The measurement uncertainty is defined as ± 3.65dB

6.6. Test Result

Radiated is defined as

Site : CB1	**Time : 2016/04/21 - 11:09**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5180MHz**

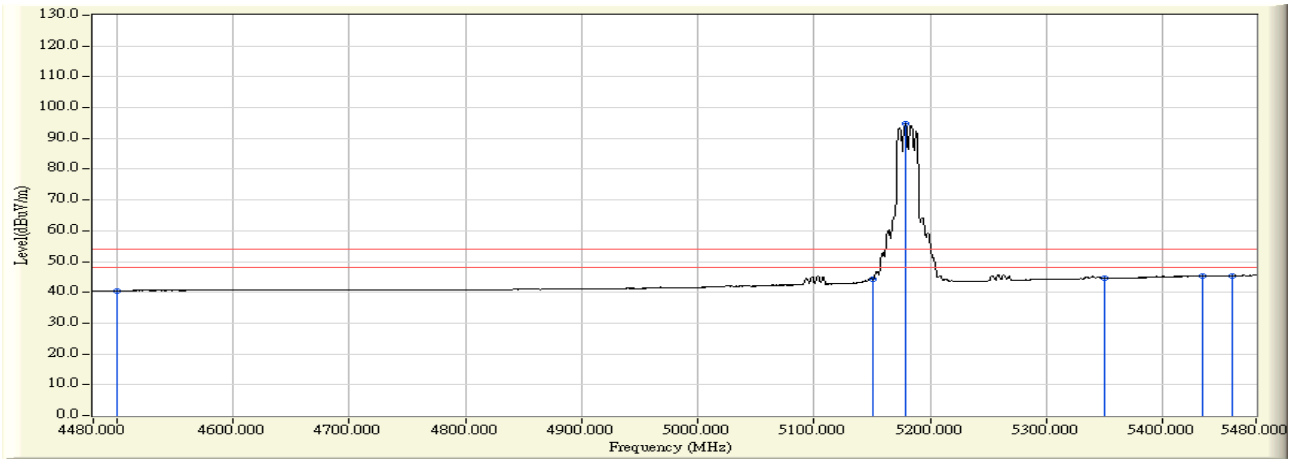


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	55.841	52.413	-21.587	74.000	PEAK
2		5147.000	-0.762	62.355	61.592	-12.408	74.000	PEAK
3		5150.000	-0.737	59.835	59.097	-14.903	74.000	PEAK
4	*	5178.500	-0.500	106.090	105.591	31.591	74.000	PEAK
5		5350.000	0.934	56.891	57.825	-16.175	74.000	PEAK
6		5460.000	1.853	55.567	57.420	-16.580	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 11:11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5180MHz**

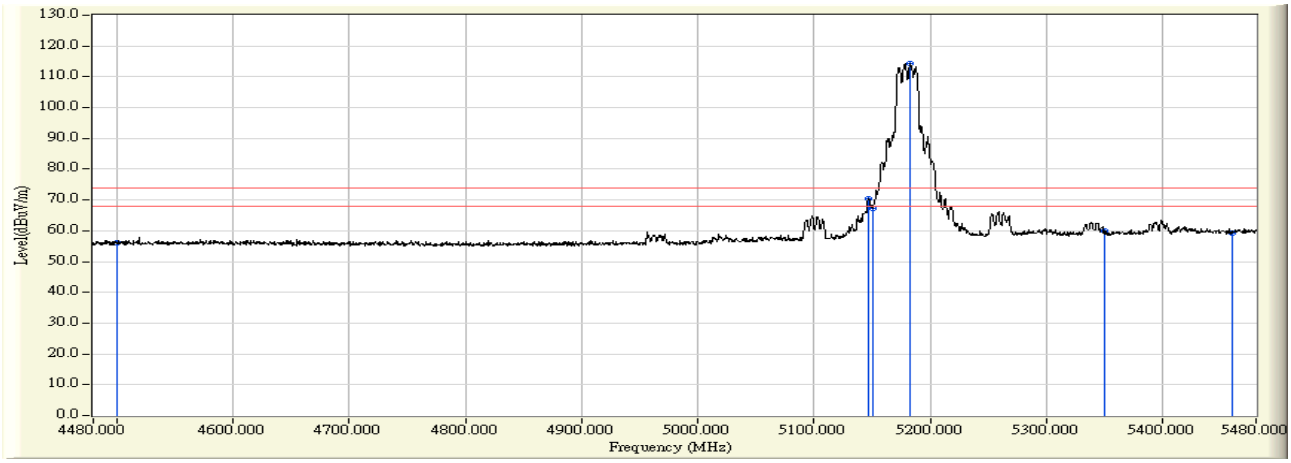


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	43.911	40.483	-13.517	54.000	AVERAGE
2		5150.000	-0.737	44.892	44.154	-9.846	54.000	AVERAGE
3	*	5178.500	-0.500	95.144	94.645	40.645	54.000	AVERAGE
4		5350.000	0.934	43.682	44.616	-9.384	54.000	AVERAGE
5		5434.500	1.640	43.693	45.333	-8.667	54.000	AVERAGE
6		5460.000	1.853	43.565	45.418	-8.582	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 11:01**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5180MHz**

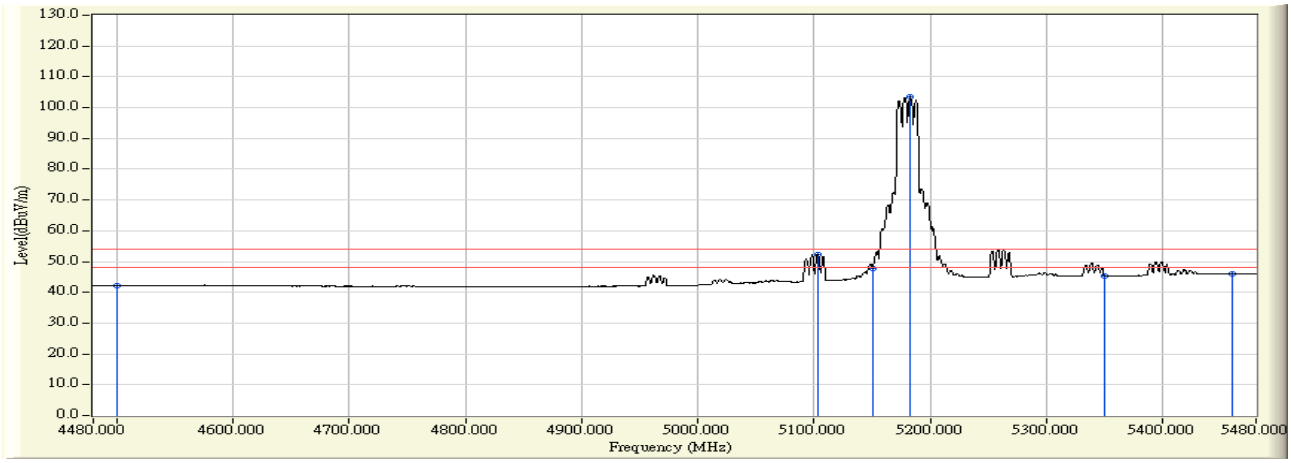


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	57.761	56.040	-17.960	74.000	PEAK
2		5146.500	-0.349	70.710	70.361	-3.639	74.000	PEAK
3		5150.000	-0.321	67.606	67.285	-6.715	74.000	PEAK
4	*	5183.000	-0.062	114.315	114.253	40.253	74.000	PEAK
5		5350.000	1.250	58.530	59.780	-14.220	74.000	PEAK
6		5460.000	2.114	57.116	59.230	-14.770	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 11:02**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5180MHz**

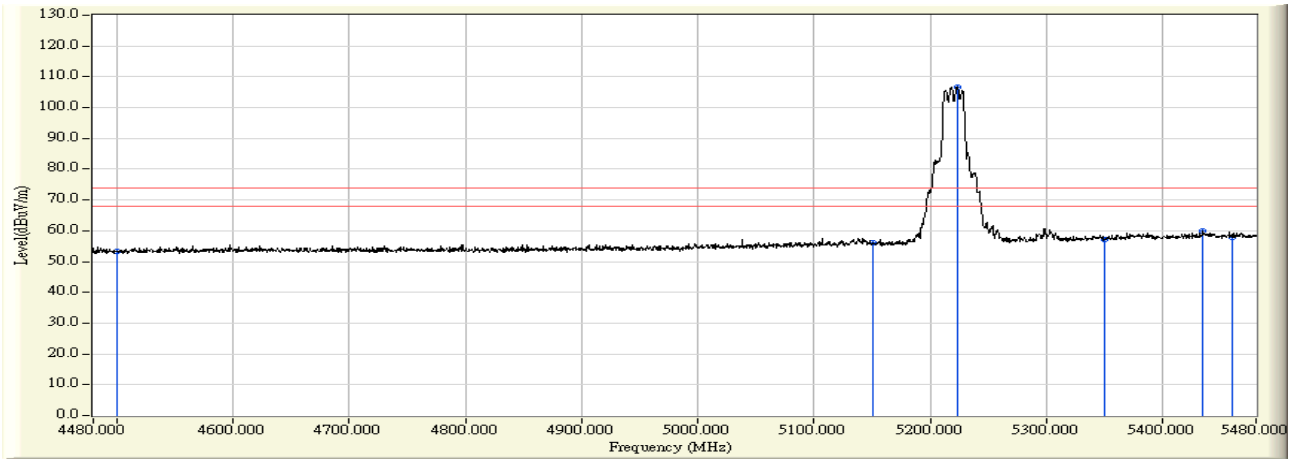


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	43.924	42.203	-11.797	54.000	AVERAGE
2		5103.000	-0.690	53.051	52.361	-1.639	54.000	AVERAGE
3		5150.000	-0.321	48.174	47.853	-6.147	54.000	AVERAGE
4	*	5183.000	-0.062	103.575	103.513	49.513	54.000	AVERAGE
5		5350.000	1.250	44.145	45.395	-8.605	54.000	AVERAGE
6		5460.000	2.114	43.851	45.965	-8.035	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 11:51**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5220MHz**

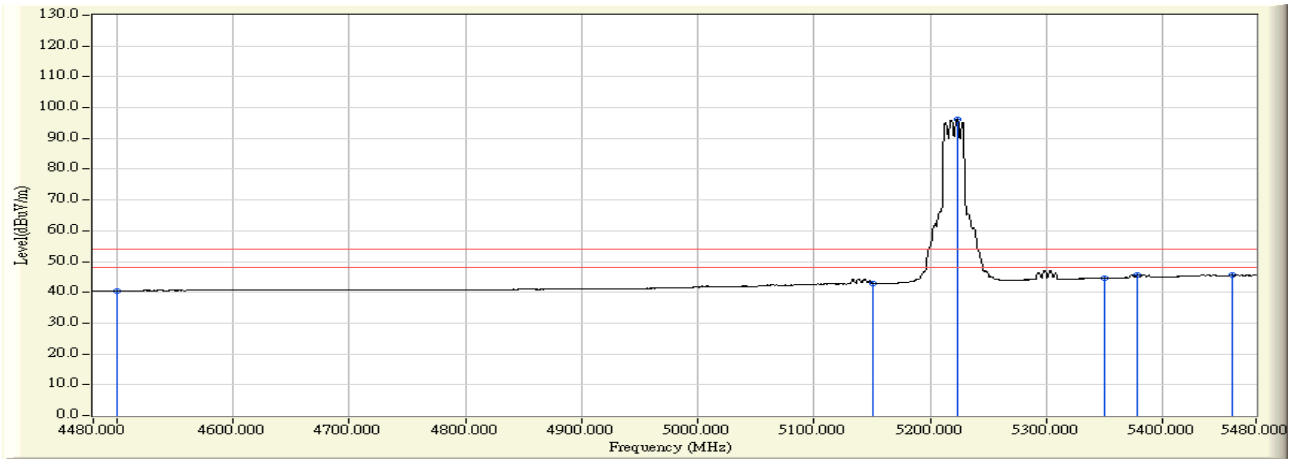


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	56.855	53.427	-20.573	74.000	PEAK
2		5150.000	-0.737	56.765	56.027	-17.973	74.000	PEAK
3	*	5223.000	-0.128	106.784	106.656	32.656	74.000	PEAK
4		5350.000	0.934	56.383	57.317	-16.683	74.000	PEAK
5		5434.000	1.635	58.320	59.956	-14.044	74.000	PEAK
6		5460.000	1.853	56.058	57.911	-16.089	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 11:56**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5220MHz**

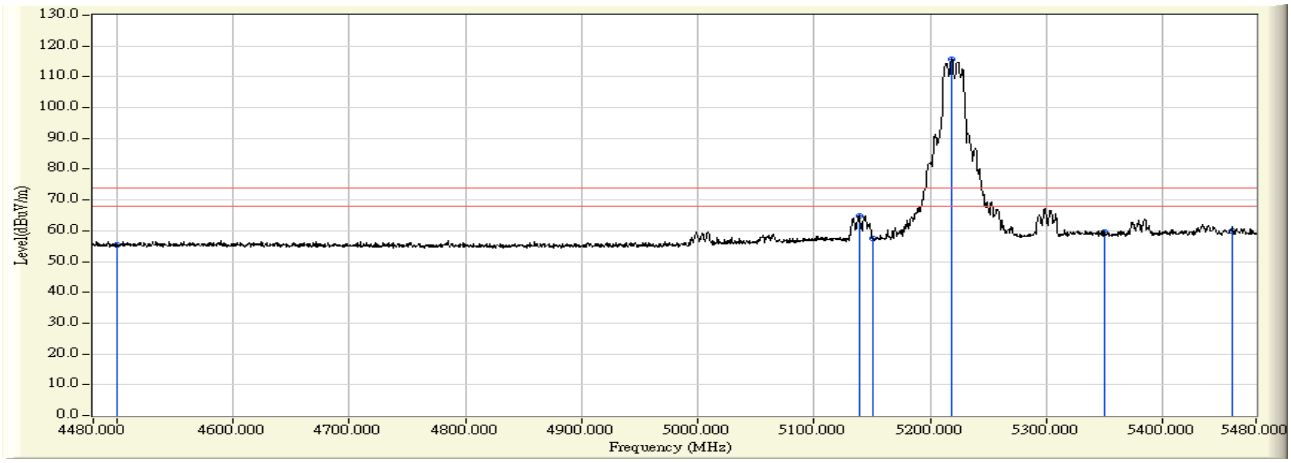


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	43.938	40.510	-13.490	54.000	AVERAGE
2		5150.000	-0.737	43.590	42.852	-11.148	54.000	AVERAGE
3	*	5223.000	-0.128	96.264	96.136	42.136	54.000	AVERAGE
4		5350.000	0.934	43.645	44.579	-9.421	54.000	AVERAGE
5		5378.000	1.168	44.646	45.814	-8.186	54.000	AVERAGE
6		5460.000	1.853	43.660	45.513	-8.487	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 11:26**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5220MHz**

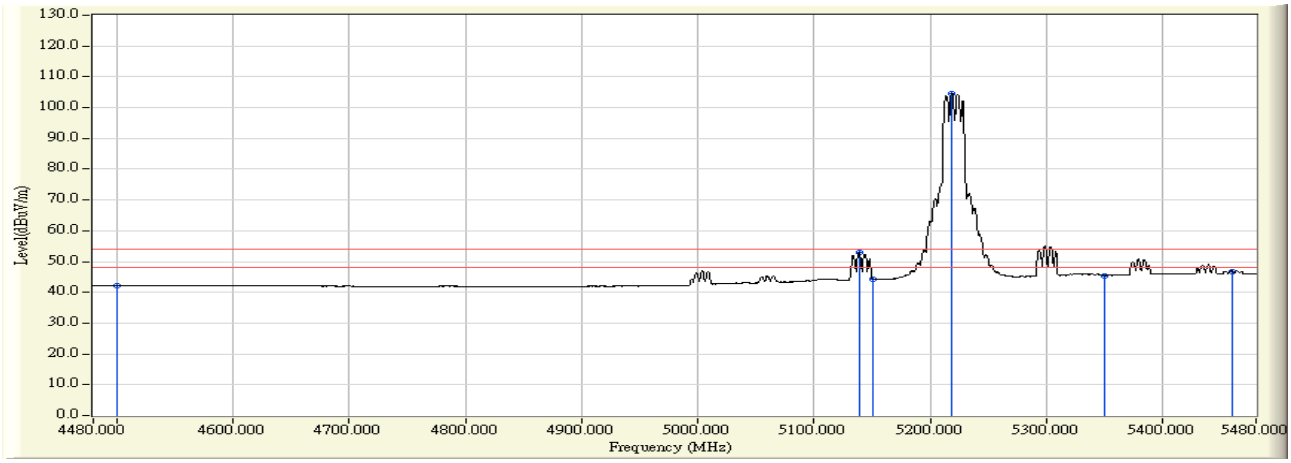


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	57.057	55.336	-18.664	74.000	PEAK
2		5139.000	-0.408	65.326	64.919	-9.081	74.000	PEAK
3		5150.000	-0.321	57.805	57.484	-16.516	74.000	PEAK
4	*	5218.500	0.217	115.394	115.611	41.611	74.000	PEAK
5		5350.000	1.250	58.412	59.662	-14.338	74.000	PEAK
6		5460.000	2.114	57.850	59.964	-14.036	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 11:31**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5220MHz**

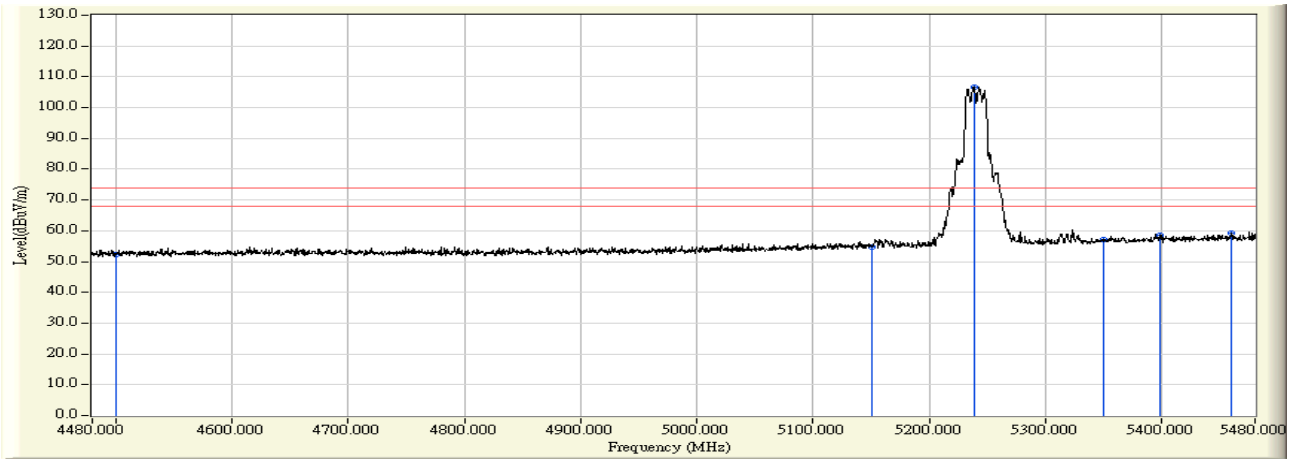


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	43.955	42.234	-11.766	54.000	AVERAGE
2		5138.500	-0.412	53.311	52.900	-1.100	54.000	AVERAGE
3		5150.000	-0.321	44.531	44.210	-9.790	54.000	AVERAGE
4	*	5218.500	0.217	104.382	104.599	50.599	54.000	AVERAGE
5		5350.000	1.250	44.214	45.464	-8.536	54.000	AVERAGE
6		5460.000	2.114	44.490	46.604	-7.396	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 14:18**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5240MHz**

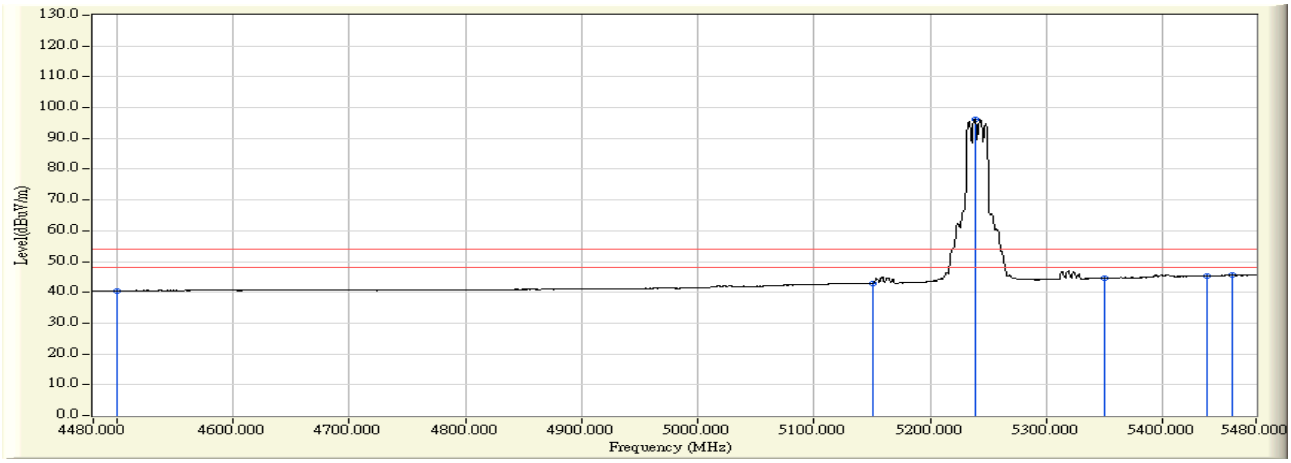


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	55.578	52.150	-21.850	74.000	PEAK
2		5150.000	-0.737	55.432	54.694	-19.306	74.000	PEAK
3	*	5238.000	-0.002	106.813	106.811	32.811	74.000	PEAK
4		5350.000	0.934	56.185	57.119	-16.881	74.000	PEAK
5		5398.500	1.339	57.147	58.486	-15.514	74.000	PEAK
6		5460.000	1.853	57.223	59.076	-14.924	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 14:20**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5240MHz**

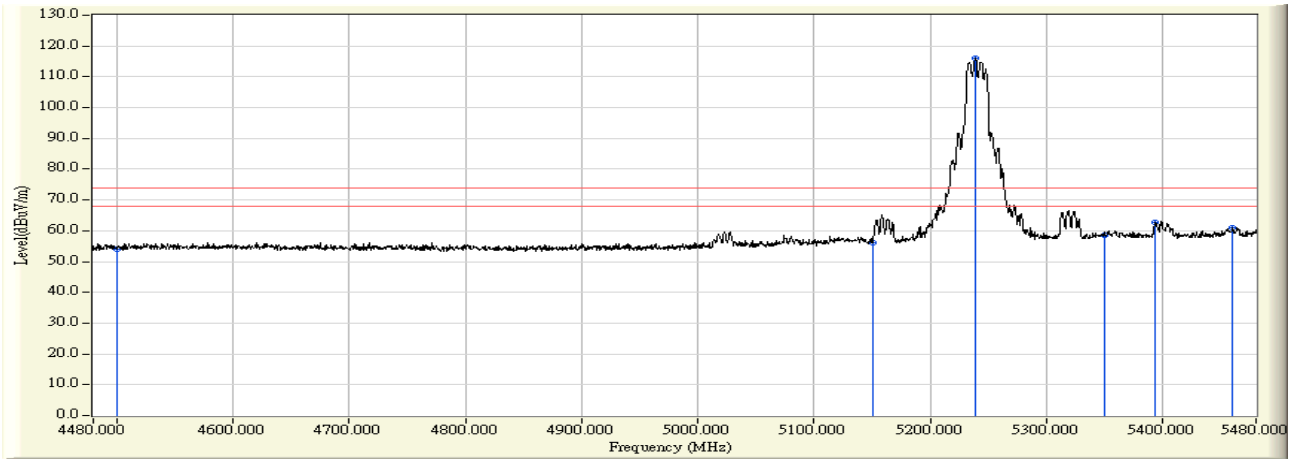


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	43.884	40.456	-13.544	54.000	AVERAGE
2		5150.000	-0.737	43.552	42.814	-11.186	54.000	AVERAGE
3	*	5238.000	-0.002	96.195	96.193	42.193	54.000	AVERAGE
4		5350.000	0.934	43.642	44.576	-9.424	54.000	AVERAGE
5		5437.500	1.665	43.652	45.317	-8.683	54.000	AVERAGE
6		5460.000	1.853	43.807	45.660	-8.340	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 13:30**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5240MHz**

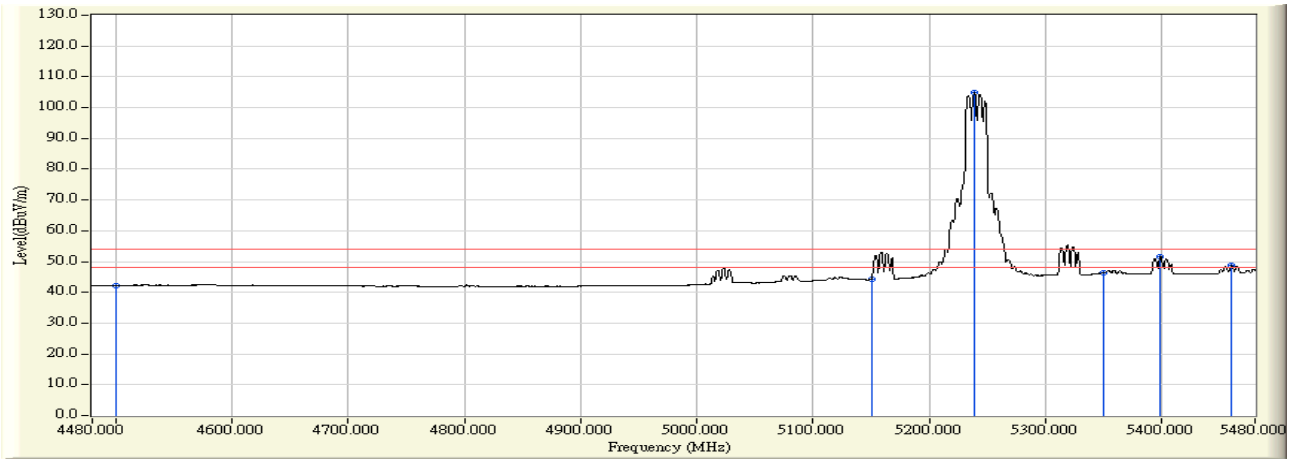


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	55.666	53.945	-20.055	74.000	PEAK
2		5150.000	-0.321	56.286	55.965	-18.035	74.000	PEAK
3	*	5238.500	0.374	115.600	115.974	41.974	74.000	PEAK
4		5350.000	1.250	57.270	58.520	-15.480	74.000	PEAK
5		5393.500	1.592	61.078	62.670	-11.330	74.000	PEAK
6		5460.000	2.114	58.986	61.100	-12.900	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 13:36**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11a_5240MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	44.000	42.279	-11.721	54.000	AVERAGE
2		5150.000	-0.321	44.476	44.155	-9.845	54.000	AVERAGE
3	*	5238.500	0.374	104.457	104.831	50.831	54.000	AVERAGE
4		5350.000	1.250	44.966	46.216	-7.784	54.000	AVERAGE
5		5398.500	1.631	49.979	51.610	-2.390	54.000	AVERAGE
6		5460.000	2.114	46.527	48.641	-5.359	54.000	AVERAGE

Note:

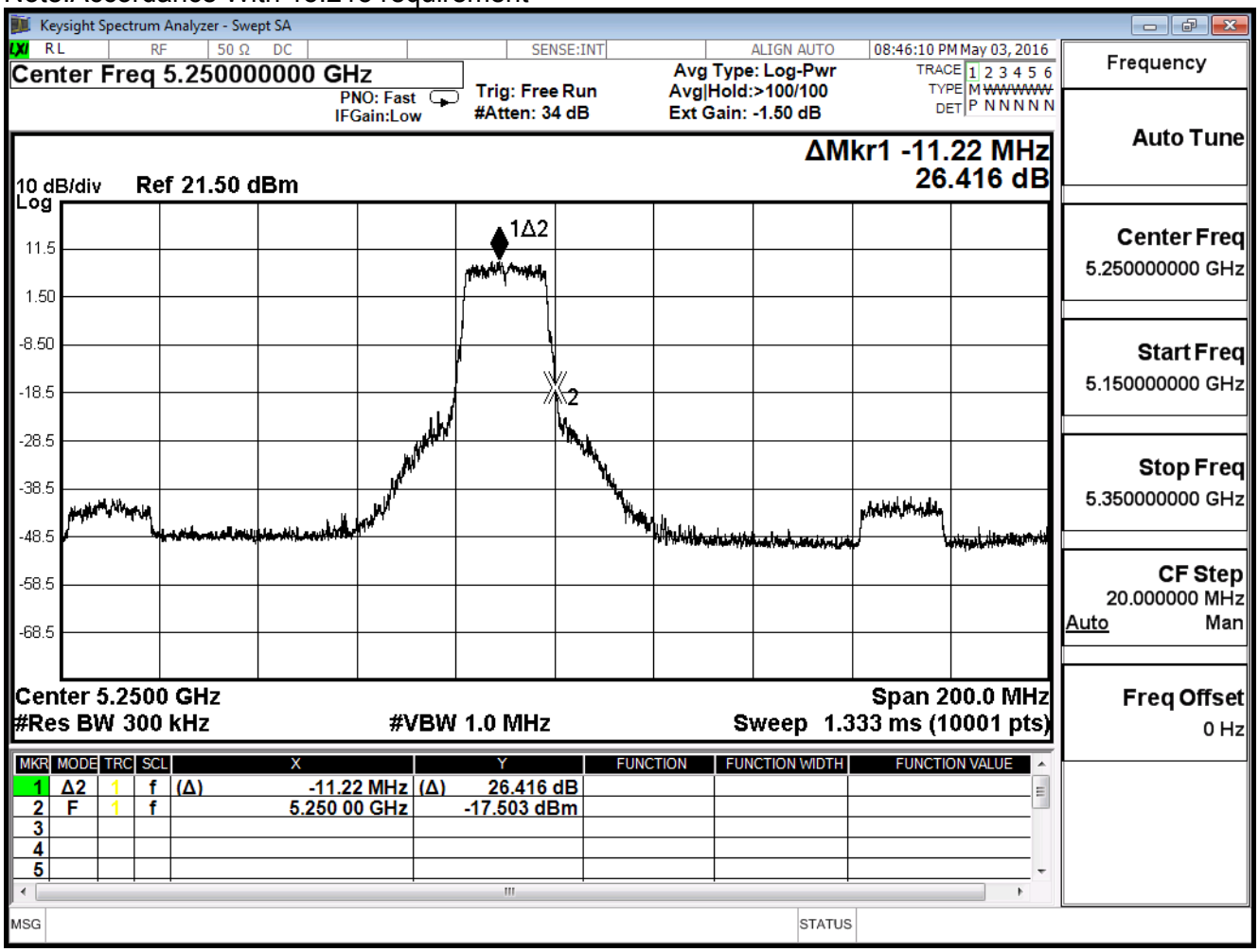
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Band edge Data		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

802.11a (ANT 0)

Test Frequency (MHz)	Measurement Level (dBc)	Limit (dBc)	Result
48	5240	26.416	≧20

Note:Accordance With 15.215 requirement

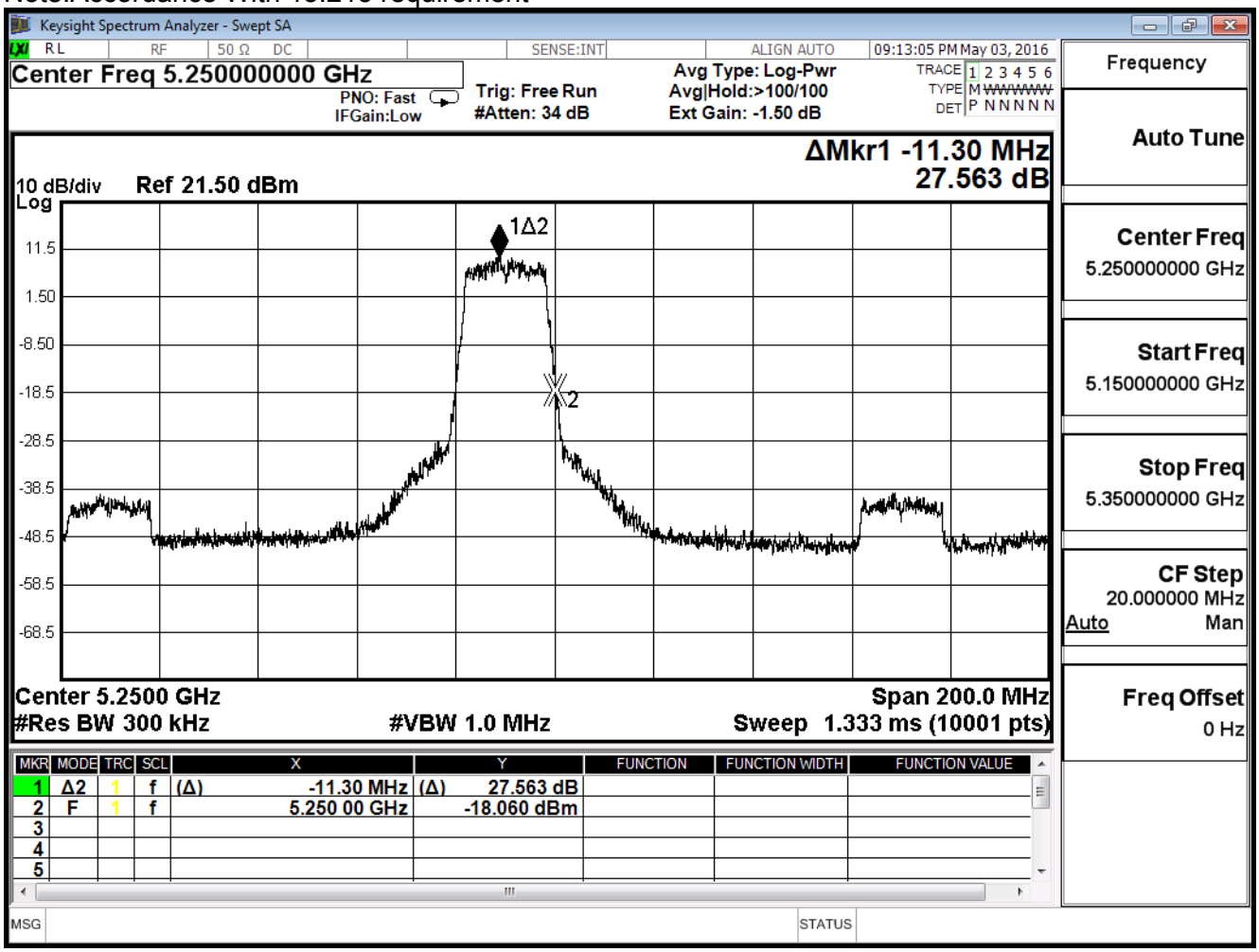


Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Band edge Data		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

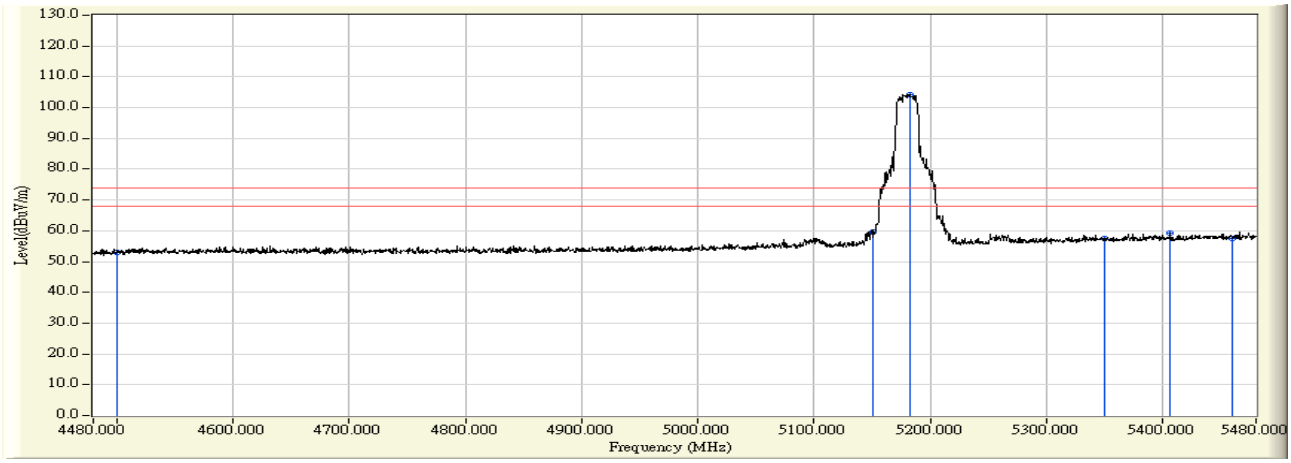
802.11a (ANT 1)

Test Frequency (MHz)	Measurement Level (dBc)	Limit (dBc)	Result
48	5240	27.563	≧20

Note:Accordance With 15.215 requirement



Site : CB1	**Time : 2016/04/21 - 15:57**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5180MHz**

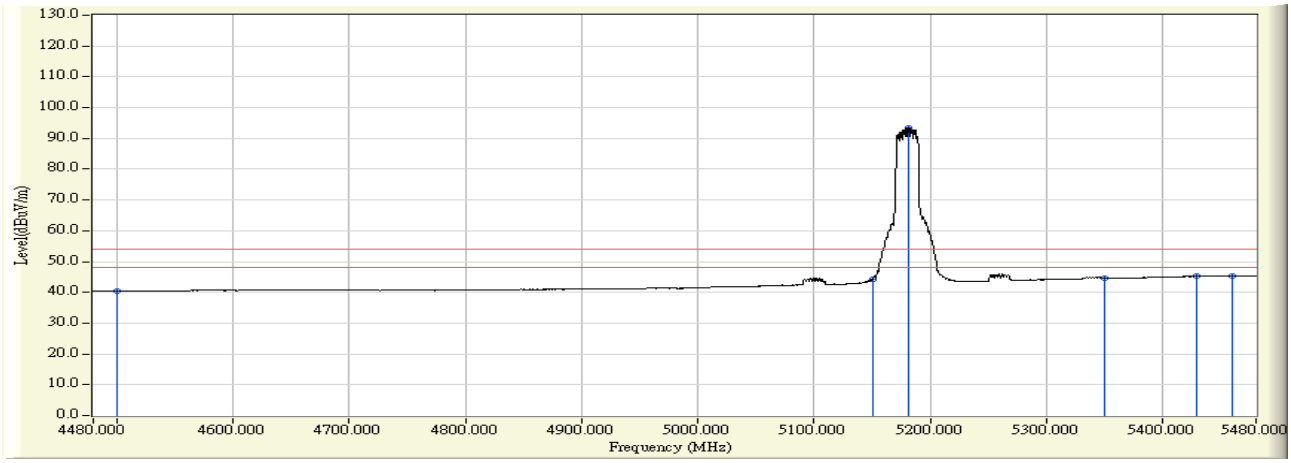


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	56.531	53.103	-20.897	74.000	PEAK
2		5150.000	-0.737	60.203	59.465	-14.535	74.000	PEAK
3	*	5182.500	-0.466	104.701	104.235	30.235	74.000	PEAK
4		5350.000	0.934	56.485	57.419	-16.581	74.000	PEAK
5		5406.500	1.405	57.748	59.154	-14.846	74.000	PEAK
6		5460.000	1.853	55.482	57.335	-16.665	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 15:58**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5180MHz**

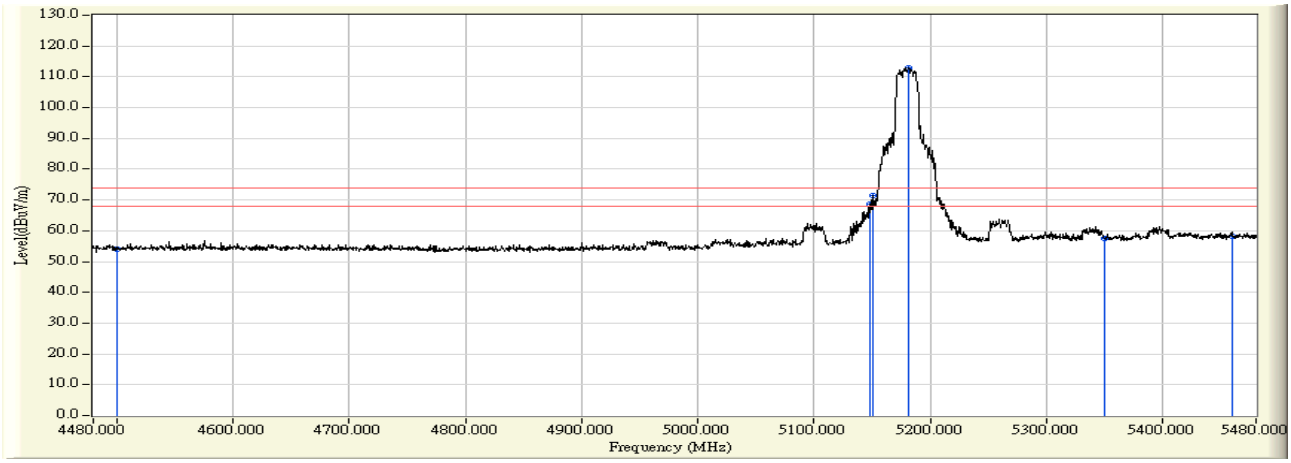


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	43.821	40.393	-13.607	54.000	AVERAGE
2		5150.000	-0.737	45.089	44.351	-9.649	54.000	AVERAGE
3	*	5181.500	-0.475	93.955	93.481	39.481	54.000	AVERAGE
4		5350.000	0.934	43.614	44.548	-9.452	54.000	AVERAGE
5		5428.500	1.590	43.547	45.137	-8.863	54.000	AVERAGE
6		5460.000	1.853	43.488	45.341	-8.659	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 14:42**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5180MHz**

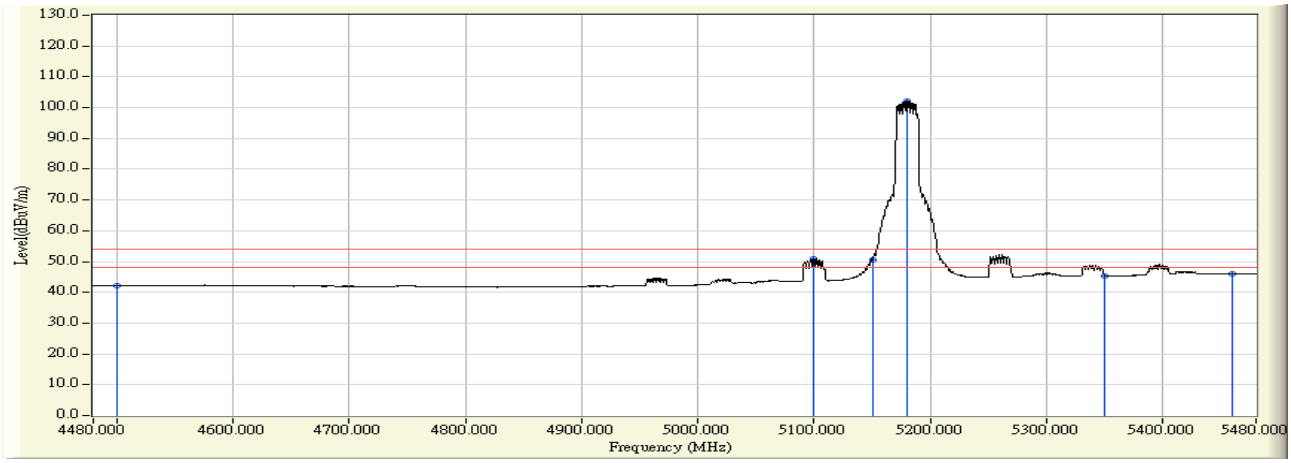


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	55.753	54.032	-19.968	74.000	PEAK
2		5148.000	-0.336	68.953	68.616	-5.384	74.000	PEAK
3		5150.000	-0.321	71.685	71.364	-2.636	74.000	PEAK
4	*	5181.500	-0.074	113.029	112.955	38.955	74.000	PEAK
5		5350.000	1.250	56.163	57.413	-16.587	74.000	PEAK
6		5460.000	2.114	55.936	58.050	-15.950	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 14:45**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5180MHz**

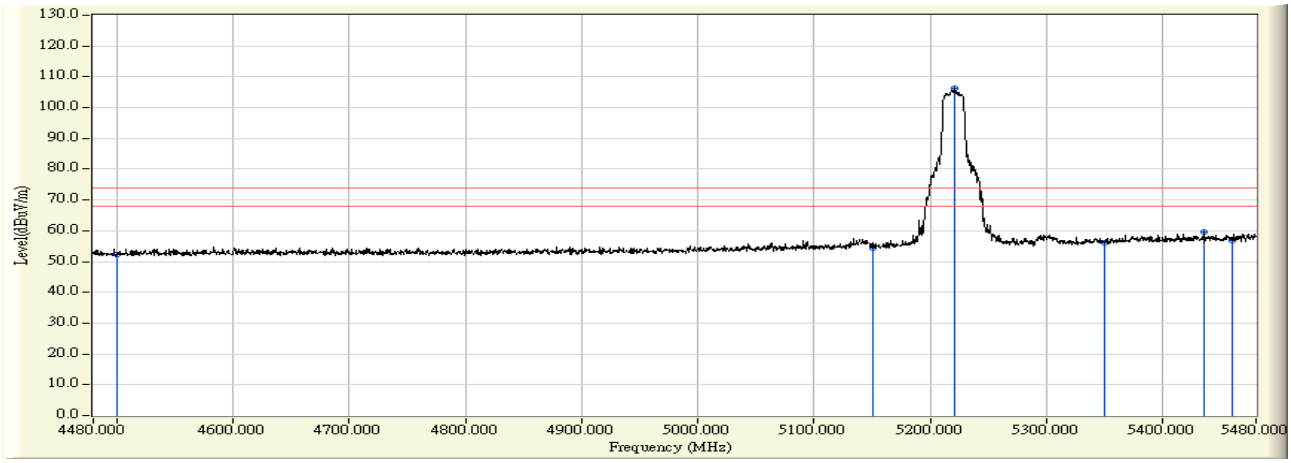


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	43.875	42.154	-11.846	54.000	AVERAGE
2		5099.000	-0.722	51.668	50.946	-3.054	54.000	AVERAGE
3		5150.000	-0.321	50.977	50.656	-3.344	54.000	AVERAGE
4	*	5179.500	-0.089	102.362	102.273	48.273	54.000	AVERAGE
5		5350.000	1.250	44.209	45.459	-8.541	54.000	AVERAGE
6		5460.000	2.114	43.823	45.937	-8.063	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 16:49**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5220MHz**

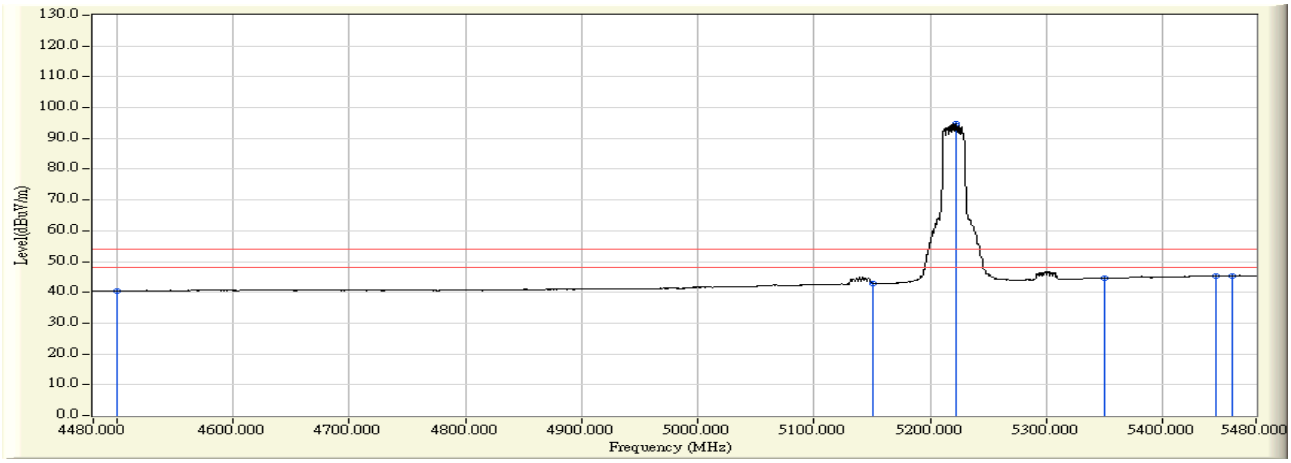


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	55.749	52.321	-21.679	74.000	PEAK
2		5150.000	-0.737	55.062	54.324	-19.676	74.000	PEAK
3	*	5220.500	-0.149	106.416	106.268	32.268	74.000	PEAK
4		5350.000	0.934	55.288	56.222	-17.778	74.000	PEAK
5		5435.000	1.644	57.788	59.432	-14.568	74.000	PEAK
6		5460.000	1.853	54.942	56.795	-17.205	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 16:50**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5220MHz**

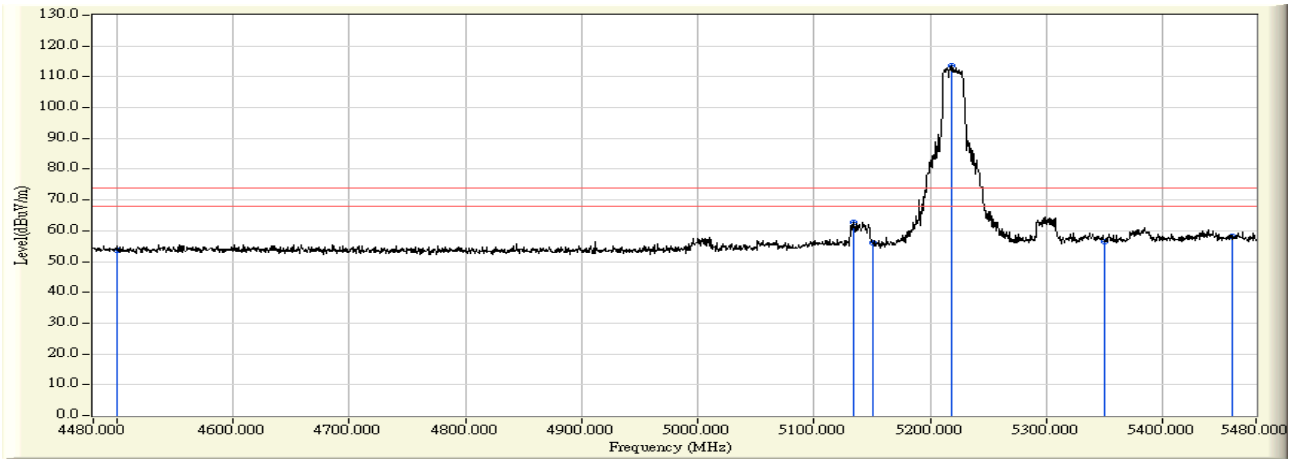


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	43.839	40.411	-13.589	54.000	AVERAGE
2		5150.000	-0.737	43.647	42.909	-11.091	54.000	AVERAGE
3	*	5221.500	-0.141	94.896	94.756	40.756	54.000	AVERAGE
4		5350.000	0.934	43.537	44.471	-9.529	54.000	AVERAGE
5		5445.000	1.728	43.659	45.386	-8.614	54.000	AVERAGE
6		5460.000	1.853	43.502	45.355	-8.645	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 16:17**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5220MHz**

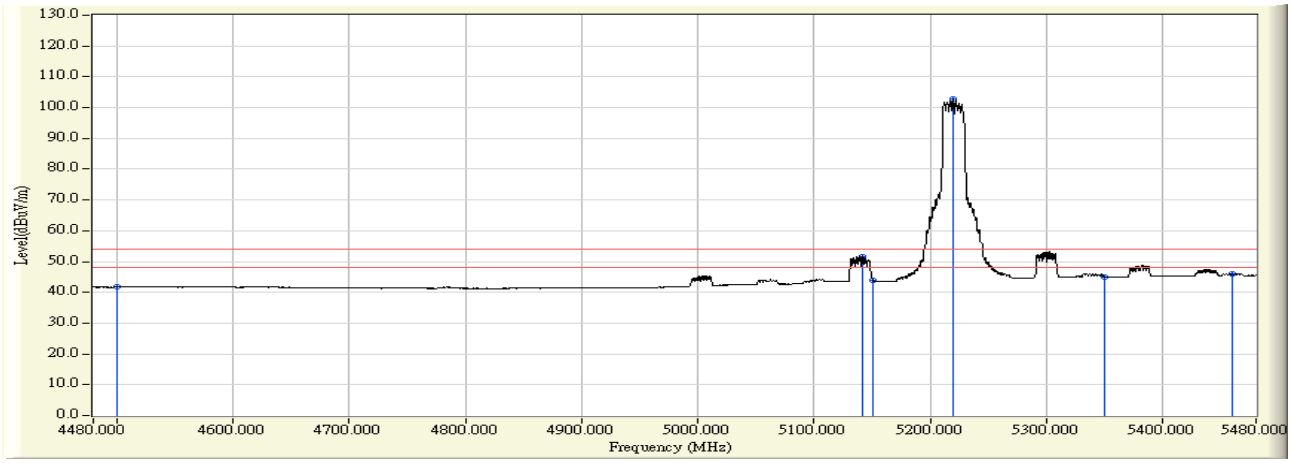


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	55.484	53.763	-20.237	74.000	PEAK
2		5134.000	-0.446	63.151	62.704	-11.296	74.000	PEAK
3		5150.000	-0.321	56.265	55.944	-18.056	74.000	PEAK
4	*	5218.500	0.217	113.462	113.679	39.679	74.000	PEAK
5		5350.000	1.250	55.276	56.526	-17.474	74.000	PEAK
6		5460.000	2.114	55.923	58.037	-15.963	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 16:21**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5220MHz**

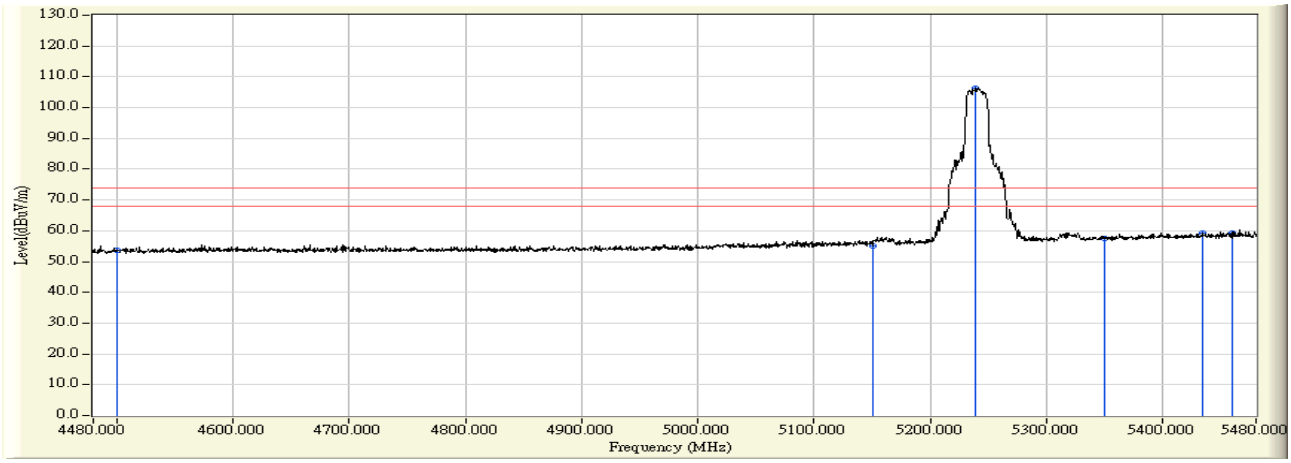


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	43.379	41.658	-12.342	54.000	AVERAGE
2		5142.000	-0.384	52.129	51.745	-2.255	54.000	AVERAGE
3		5150.000	-0.321	44.086	43.765	-10.235	54.000	AVERAGE
4	*	5219.500	0.225	102.445	102.670	48.670	54.000	AVERAGE
5		5350.000	1.250	43.604	44.854	-9.146	54.000	AVERAGE
6		5460.000	2.114	43.746	45.860	-8.140	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 17:07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5240MHz**

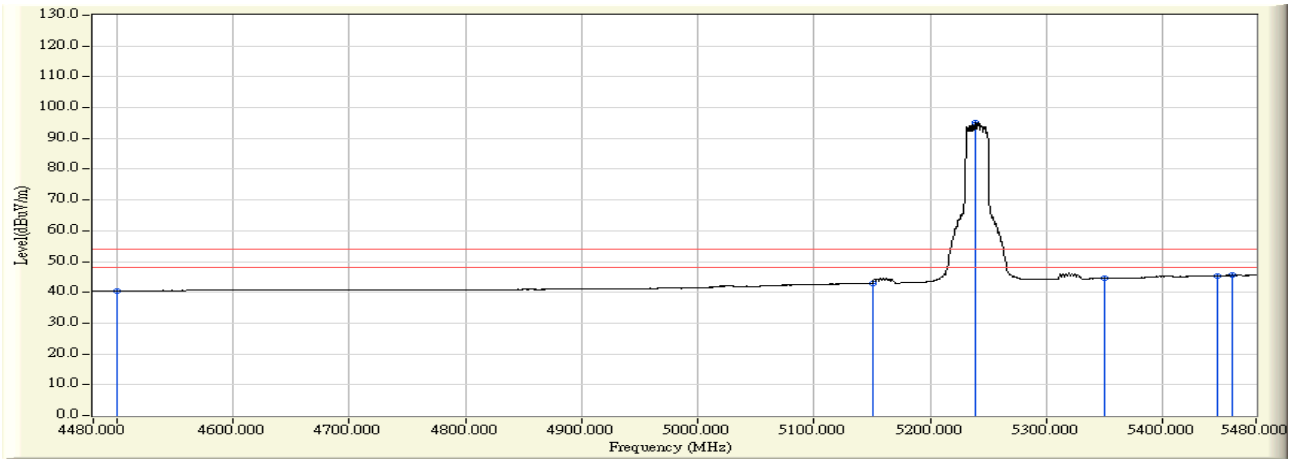


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	57.114	53.686	-20.314	74.000	PEAK
2		5150.000	-0.737	55.649	54.911	-19.089	74.000	PEAK
3	*	5238.500	0.002	106.331	106.333	32.333	74.000	PEAK
4		5350.000	0.934	56.470	57.404	-16.596	74.000	PEAK
5		5434.000	1.635	57.696	59.332	-14.668	74.000	PEAK
6		5460.000	1.853	57.269	59.122	-14.878	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 17:12**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5240MHz**

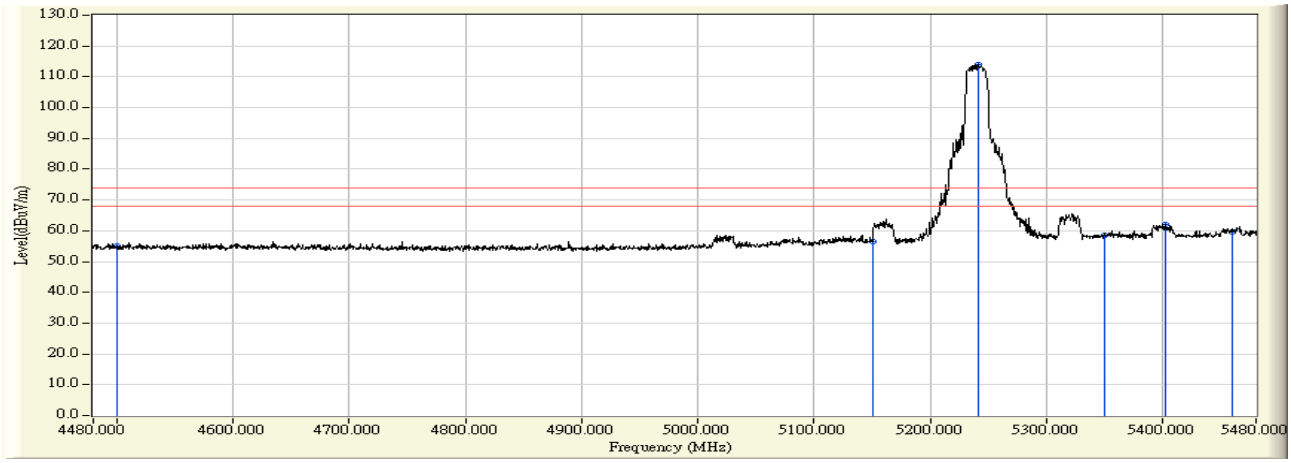


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	43.887	40.459	-13.541	54.000	AVERAGE
2		5150.000	-0.737	43.605	42.867	-11.133	54.000	AVERAGE
3	*	5239.000	0.006	95.147	95.153	41.153	54.000	AVERAGE
4		5350.000	0.934	43.638	44.572	-9.428	54.000	AVERAGE
5		5446.500	1.739	43.630	45.370	-8.630	54.000	AVERAGE
6		5460.000	1.853	43.656	45.509	-8.491	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 16:56**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5240MHz**

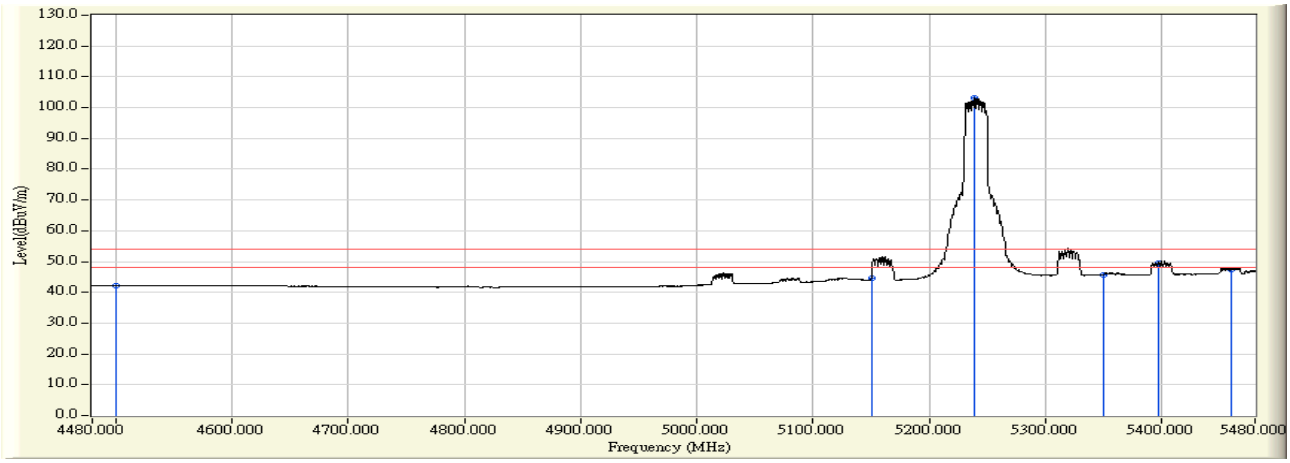


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	56.781	55.060	-18.940	74.000	PEAK
2		5150.000	-0.321	56.816	56.495	-17.505	74.000	PEAK
3	*	5241.500	0.397	113.531	113.929	39.929	74.000	PEAK
4		5350.000	1.250	57.353	58.603	-15.397	74.000	PEAK
5		5402.000	1.658	60.455	62.114	-11.886	74.000	PEAK
6		5460.000	2.114	57.491	59.605	-14.395	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 16:58**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(20M)_5240MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	43.824	42.103	-11.897	54.000	AVERAGE
2		5150.000	-0.321	44.762	44.441	-9.559	54.000	AVERAGE
3	*	5239.000	0.378	102.654	103.032	49.032	54.000	AVERAGE
4		5350.000	1.250	44.572	45.822	-8.178	54.000	AVERAGE
5		5397.500	1.624	48.016	49.639	-4.361	54.000	AVERAGE
6		5460.000	2.114	45.399	47.513	-6.487	54.000	AVERAGE

Note:

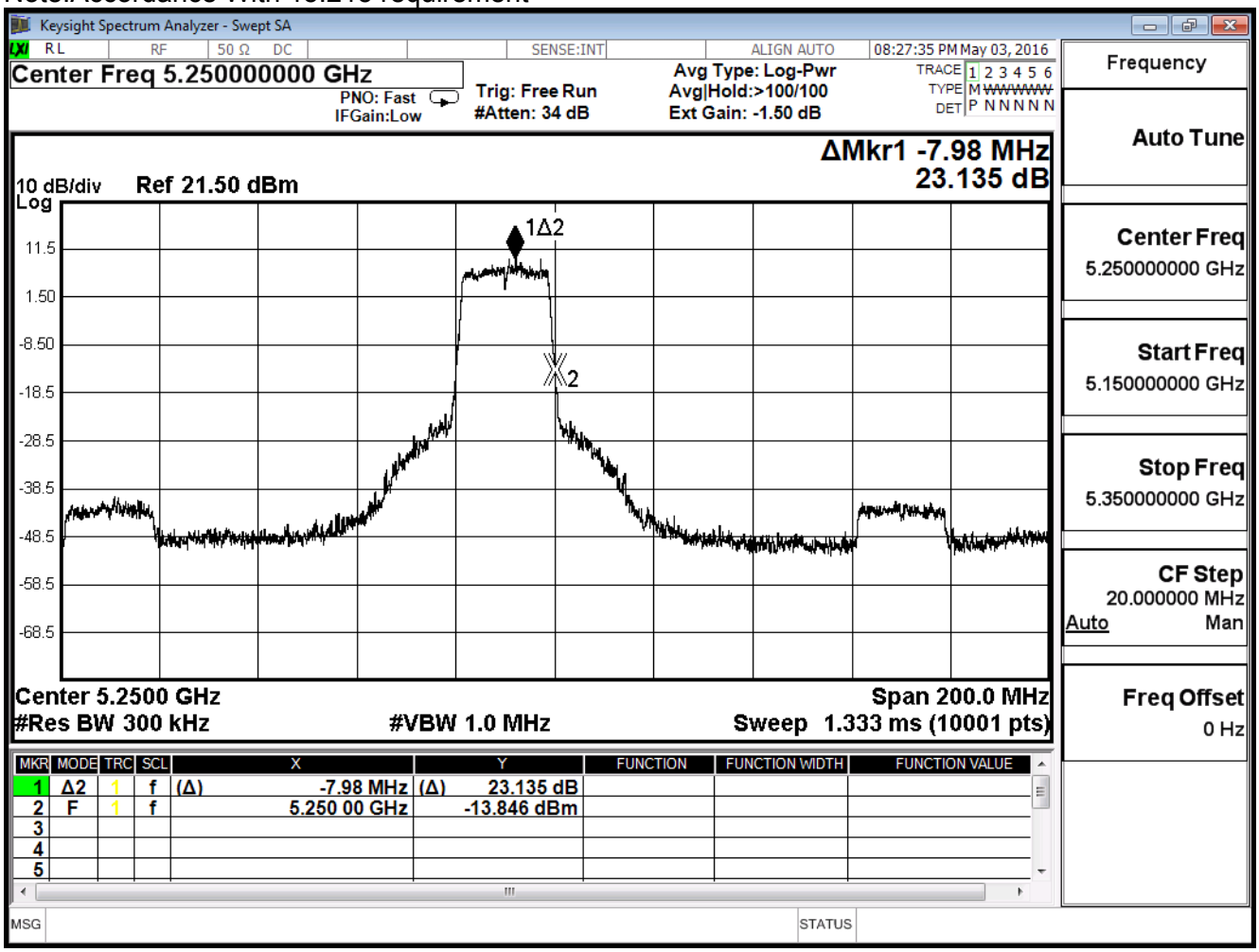
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Band edge Data		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

IEEE 802.11n_20M (ANT 0)

Test Frequency (MHz)	Measurement Level (dBc)	Limit (dBc)	Result
48	5240	23.135	≧20

Note:Accordance With 15.215 requirement

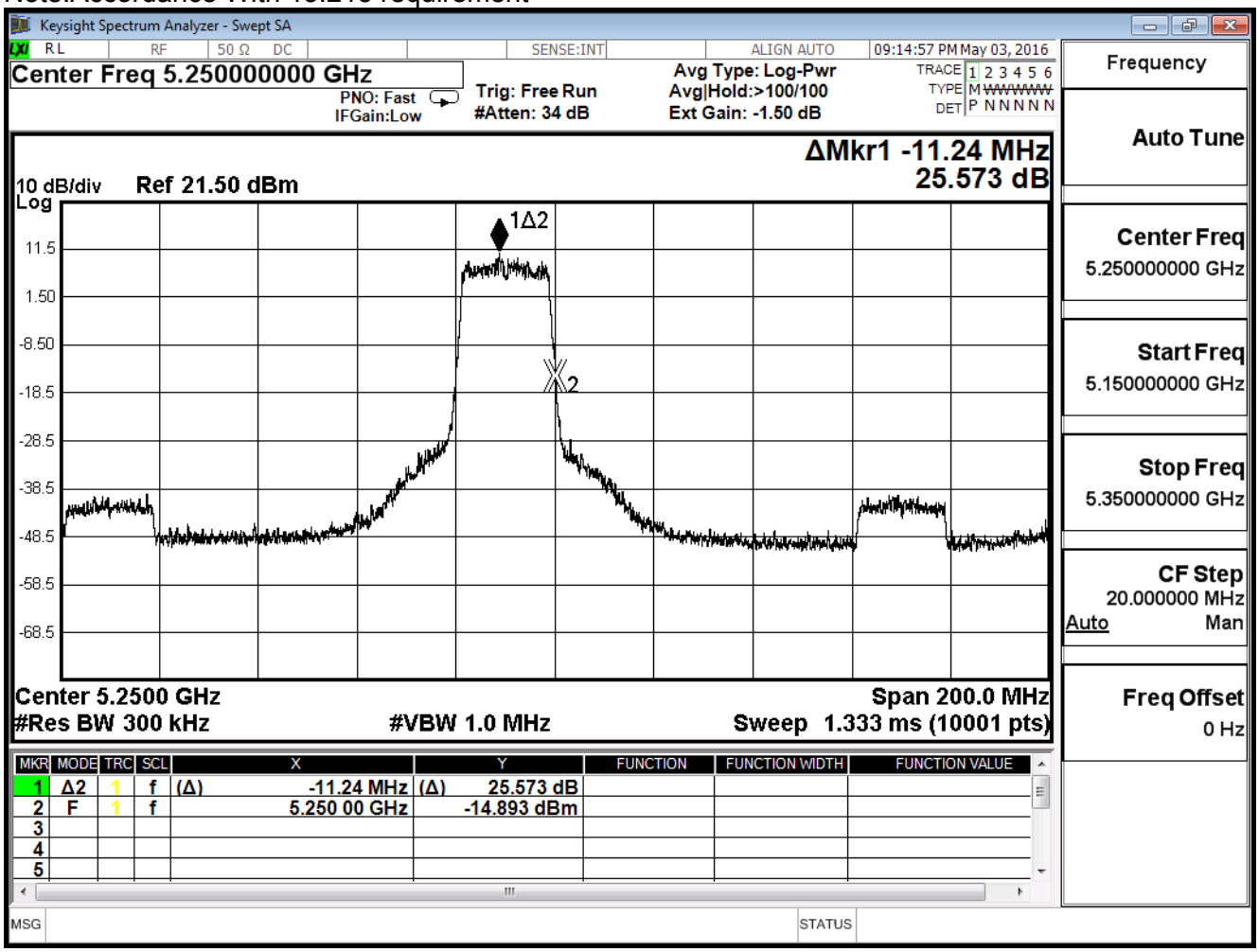


Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Band edge Data		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

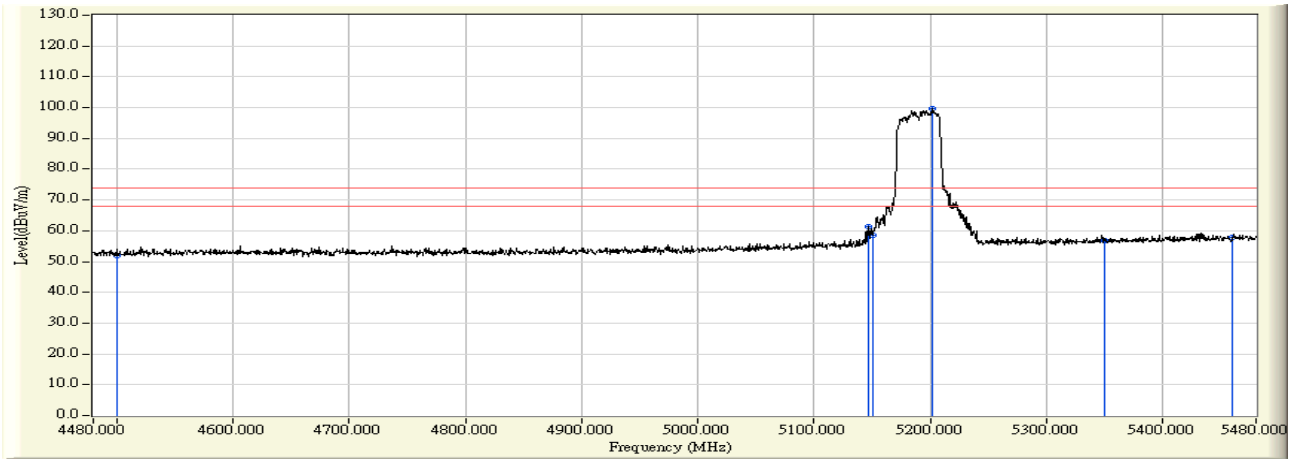
IEEE 802.11n_20M (ANT 1)

Test Frequency (MHz)	Measurement Level (dBc)	Limit (dBc)	Result
48	5240	25.573	≧20

Note:Accordance With 15.215 requirement



Site : CB1	**Time : 2016/04/21 - 20:17**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(40M)_5190MHz**

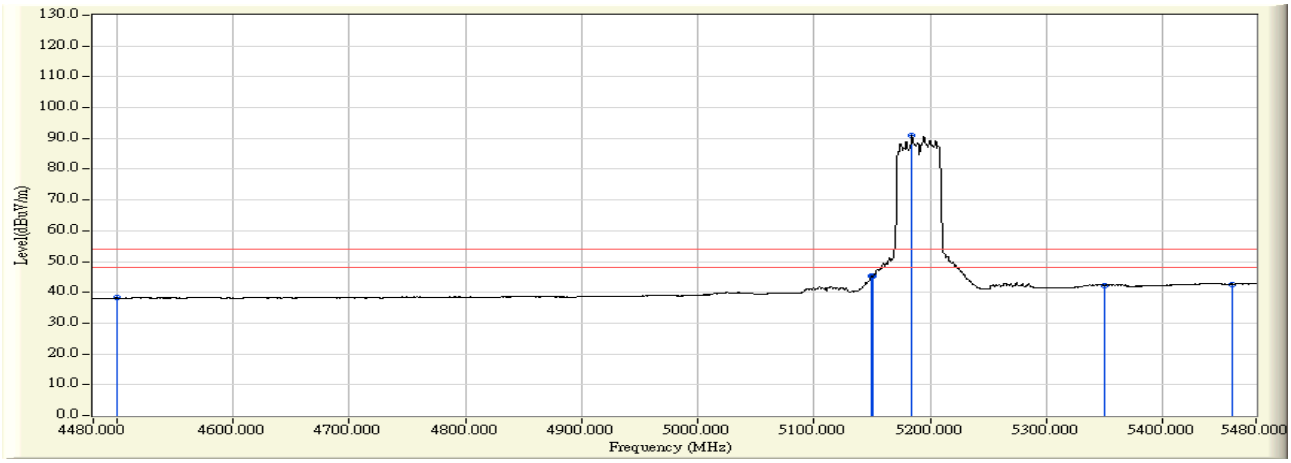


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	55.292	51.864	-22.136	74.000	PEAK
2		5146.500	-0.768	62.059	61.292	-12.708	74.000	PEAK
3		5150.000	-0.737	59.230	58.492	-15.508	74.000	PEAK
4	*	5201.000	-0.312	99.860	99.549	25.549	74.000	PEAK
5		5350.000	0.934	55.948	56.882	-17.118	74.000	PEAK
6		5460.000	1.853	56.044	57.897	-16.103	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 20:19**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(40M)_5190MHz_**

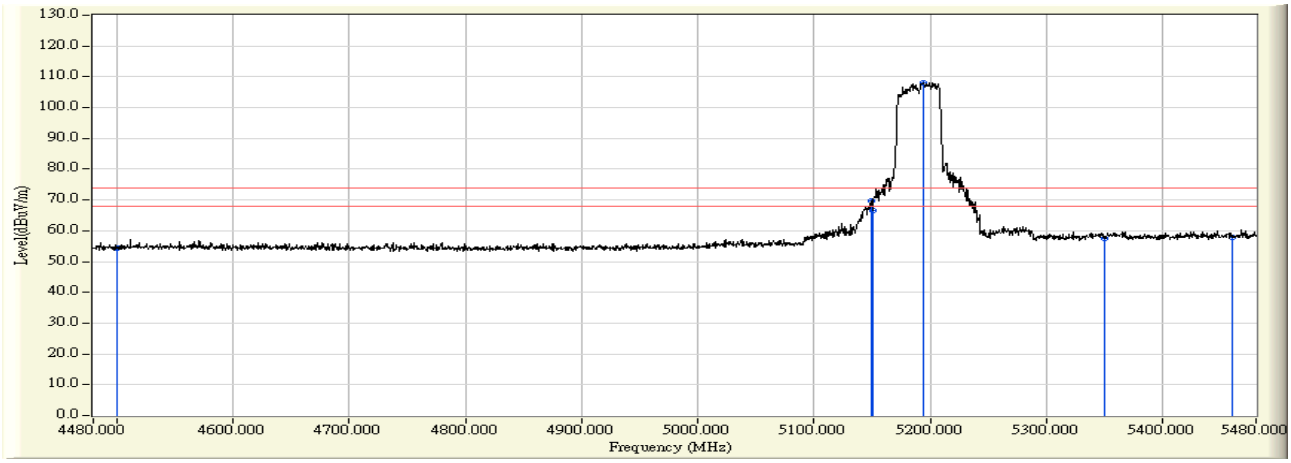


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.473	41.783	38.311	-15.689	54.000	AVERAGE
2		5149.000	-0.888	46.028	45.140	-8.860	54.000	AVERAGE
3		5150.000	-0.880	46.200	45.320	-8.680	54.000	AVERAGE
4	*	5184.000	-0.595	91.454	90.859	36.859	54.000	AVERAGE
5		5350.000	0.792	41.378	42.170	-11.830	54.000	AVERAGE
6		5460.000	1.711	40.895	42.606	-11.394	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 19:46**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(40M)_5190MHz**

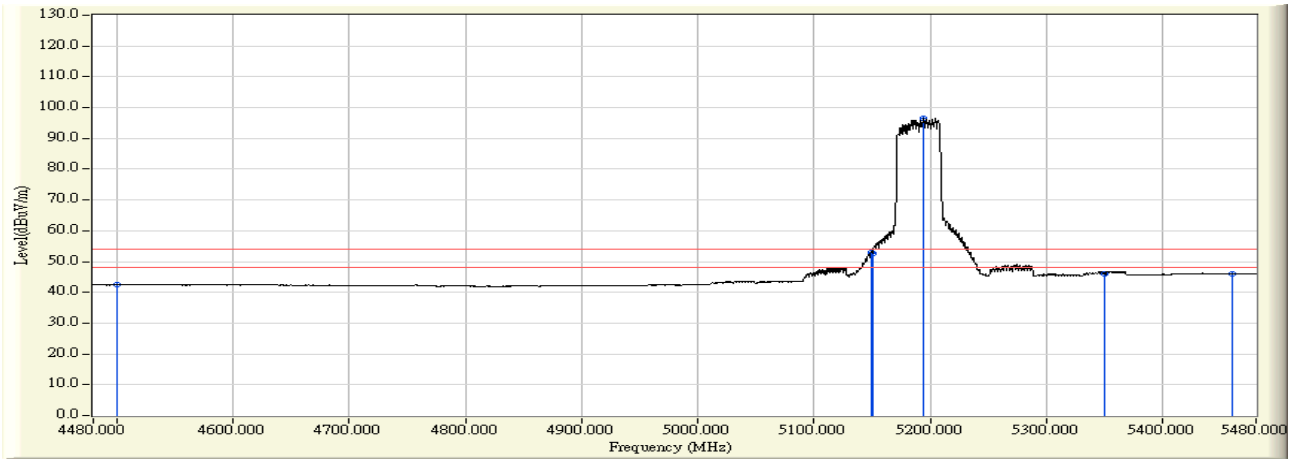


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	55.979	54.258	-19.742	74.000	PEAK
2		5149.000	-0.329	69.982	69.653	-4.347	74.000	PEAK
3		5150.000	-0.321	66.923	66.602	-7.398	74.000	PEAK
4	*	5194.000	0.025	108.028	108.053	34.053	74.000	PEAK
5		5350.000	1.250	56.256	57.506	-16.494	74.000	PEAK
6		5460.000	2.114	55.788	57.902	-16.098	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 19:39**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(40M)_5190MHz**

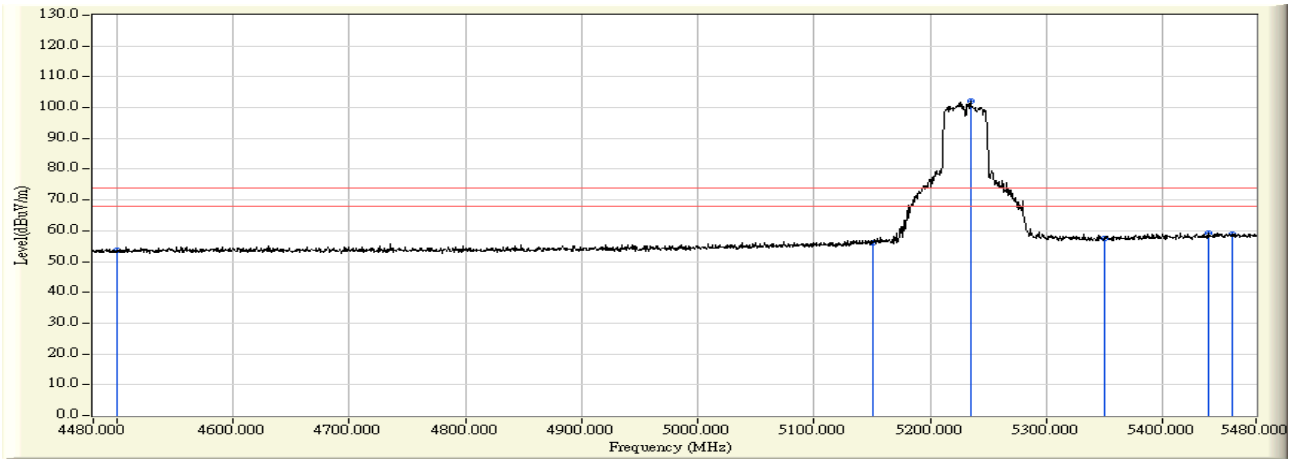


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	44.159	42.438	-11.562	54.000	AVERAGE
2		5149.000	-0.329	53.292	52.963	-1.037	54.000	AVERAGE
3		5150.000	-0.321	53.020	52.699	-1.301	54.000	AVERAGE
4	*	5194.000	0.025	96.553	96.578	42.578	54.000	AVERAGE
5		5350.000	1.250	44.615	45.865	-8.135	54.000	AVERAGE
6		5460.000	2.114	43.920	46.034	-7.966	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 22:16**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(40M)_5230MHz**

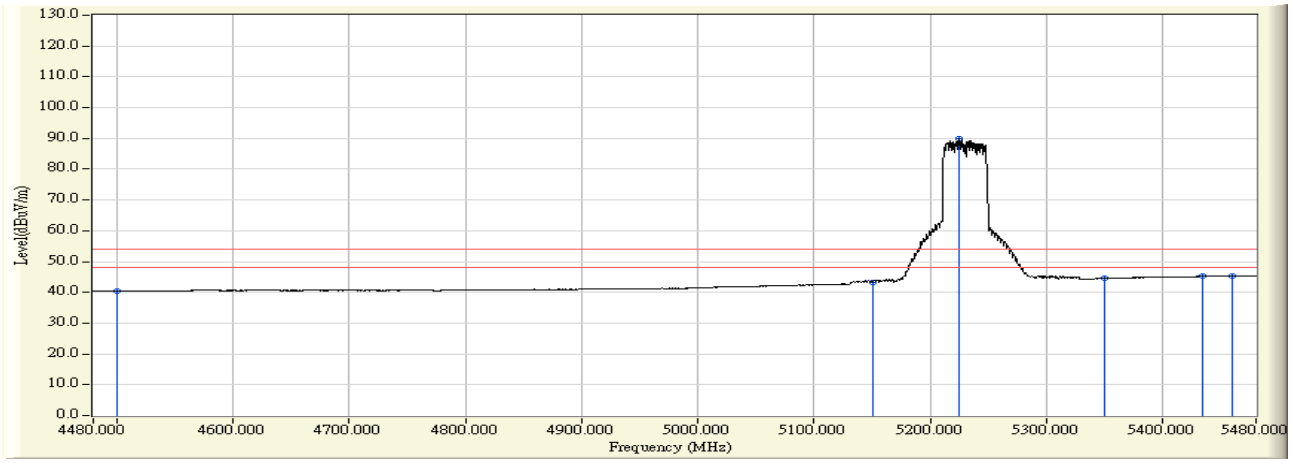


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	57.199	53.771	-20.229	74.000	PEAK
2		5150.000	-0.737	56.947	56.209	-17.791	74.000	PEAK
3	*	5234.500	-0.031	102.180	102.149	28.149	74.000	PEAK
4		5350.000	0.934	56.448	57.382	-16.618	74.000	PEAK
5		5439.500	1.682	57.582	59.263	-14.737	74.000	PEAK
6		5460.000	1.853	56.940	58.793	-15.207	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 22:17**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(40M)_5230MHz**

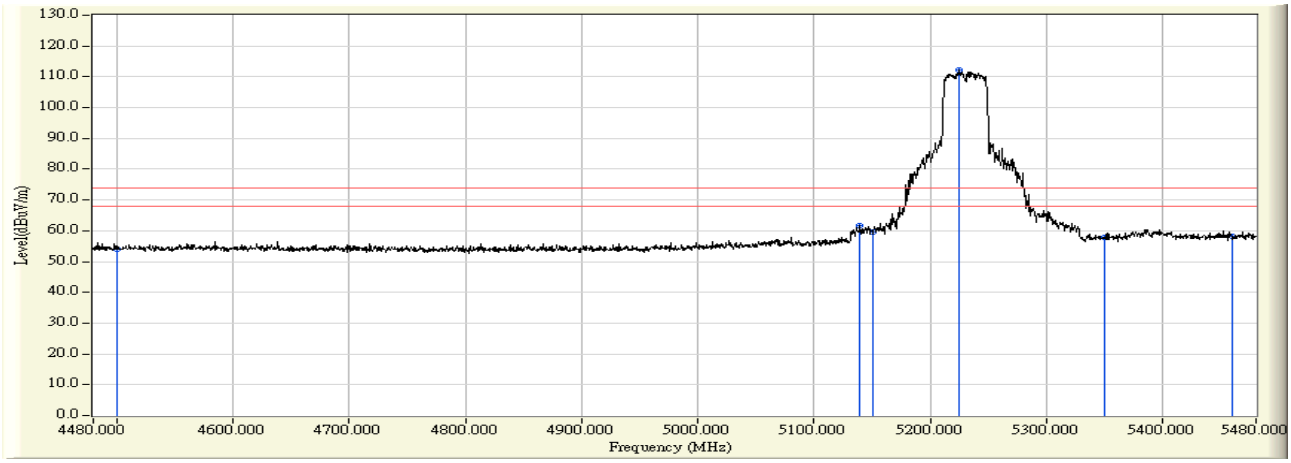


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	43.858	40.430	-13.570	54.000	AVERAGE
2		5150.000	-0.737	44.050	43.312	-10.688	54.000	AVERAGE
3	*	5224.000	-0.119	89.893	89.774	35.774	54.000	AVERAGE
4		5350.000	0.934	43.552	44.486	-9.514	54.000	AVERAGE
5		5434.500	1.640	43.612	45.252	-8.748	54.000	AVERAGE
6		5460.000	1.853	43.472	45.325	-8.675	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 21:16**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(40M)_5230MHz**

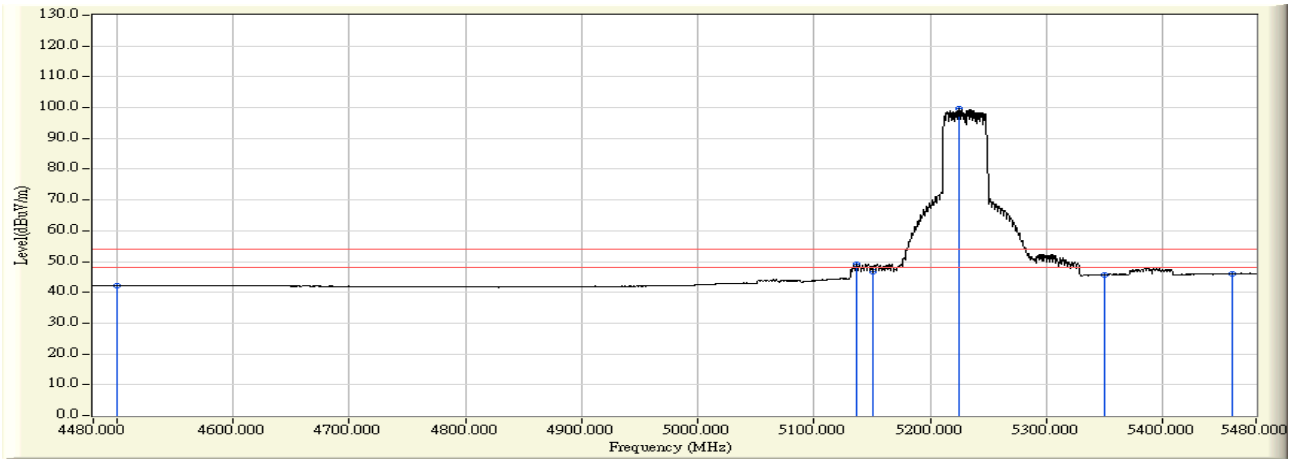


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	55.872	54.151	-19.849	74.000	PEAK
2		5139.500	-0.404	61.976	61.572	-12.428	74.000	PEAK
3		5150.000	-0.321	59.930	59.609	-14.391	74.000	PEAK
4	*	5224.500	0.265	112.084	112.348	38.348	74.000	PEAK
5		5350.000	1.250	56.495	57.745	-16.255	74.000	PEAK
6		5460.000	2.114	56.131	58.245	-15.755	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 21:19**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11n(40M)_5230MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	43.872	42.151	-11.849	54.000	AVERAGE
2		5136.500	-0.427	49.500	49.073	-4.927	54.000	AVERAGE
3		5150.000	-0.321	47.174	46.853	-7.147	54.000	AVERAGE
4	*	5224.000	0.261	99.338	99.598	45.598	54.000	AVERAGE
5		5350.000	1.250	44.448	45.698	-8.302	54.000	AVERAGE
6		5460.000	2.114	43.935	46.049	-7.951	54.000	AVERAGE

Note:

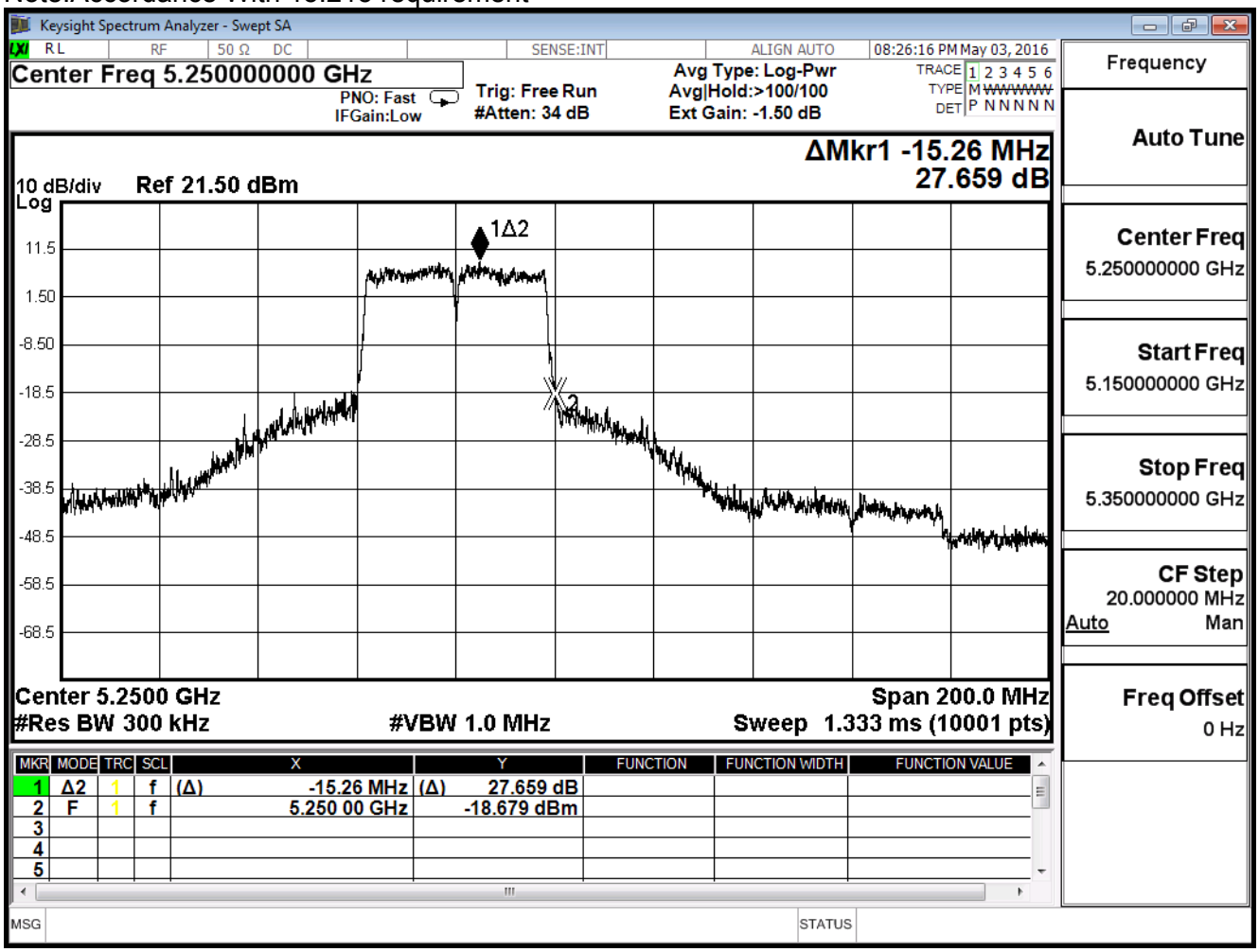
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Band edge Data		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

IEEE 802.11n_40M (ANT 0)

Test Frequency (MHz)	Measurement Level (dBc)	Limit (dBc)	Result
46	5230	27.659	≧20

Note:Accordance With 15.215 requirement

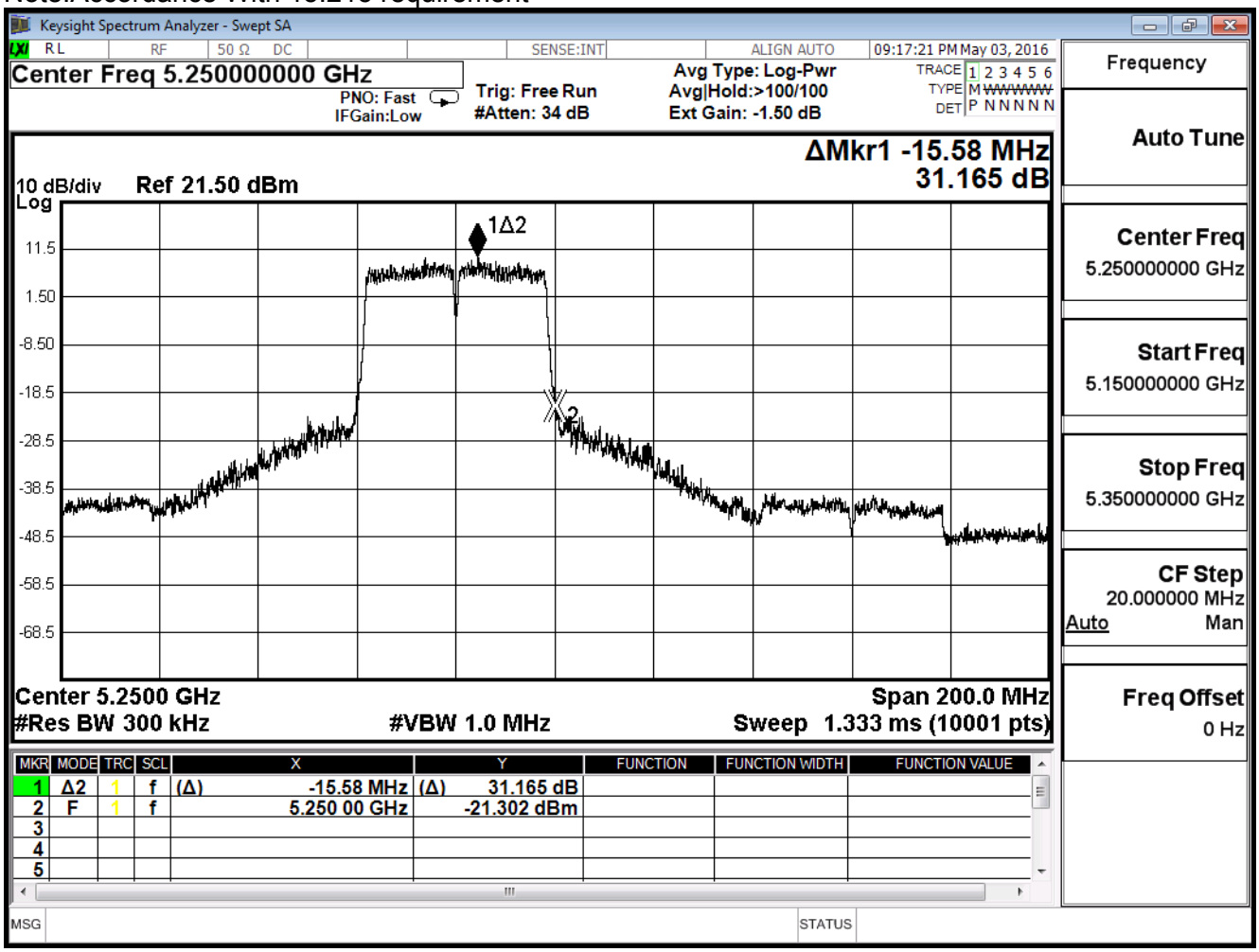


Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Band edge Data		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

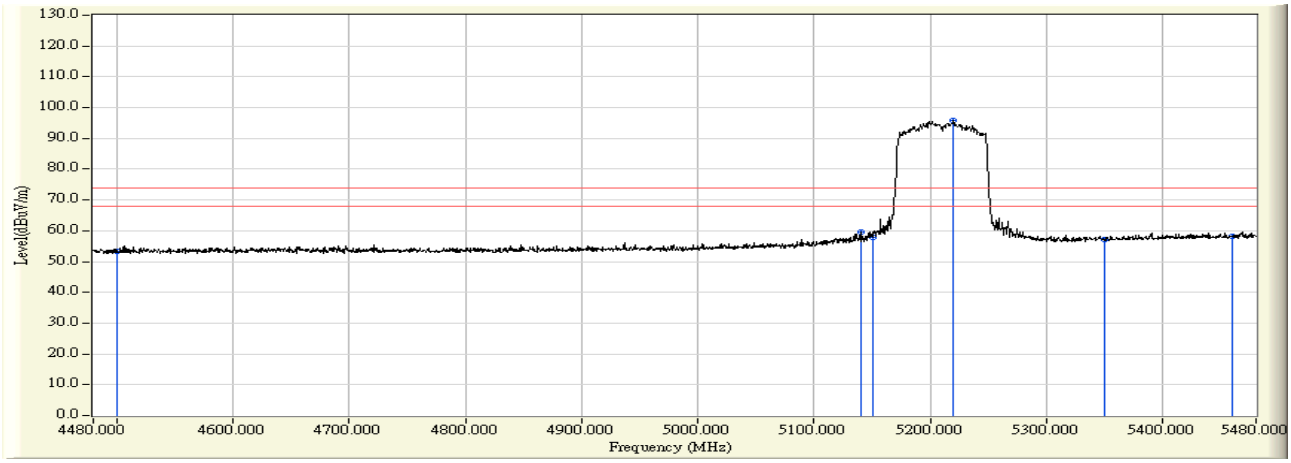
IEEE 802.11n_40M (ANT 1)

Test Frequency (MHz)	Measurement Level (dBc)	Limit (dBc)	Result
46	5230	31.165	≧20

Note:Accordance With 15.215 requirement



Site : CB1	**Time : 2016/04/21 - 22:45**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11ac(80M)_5210MHz**

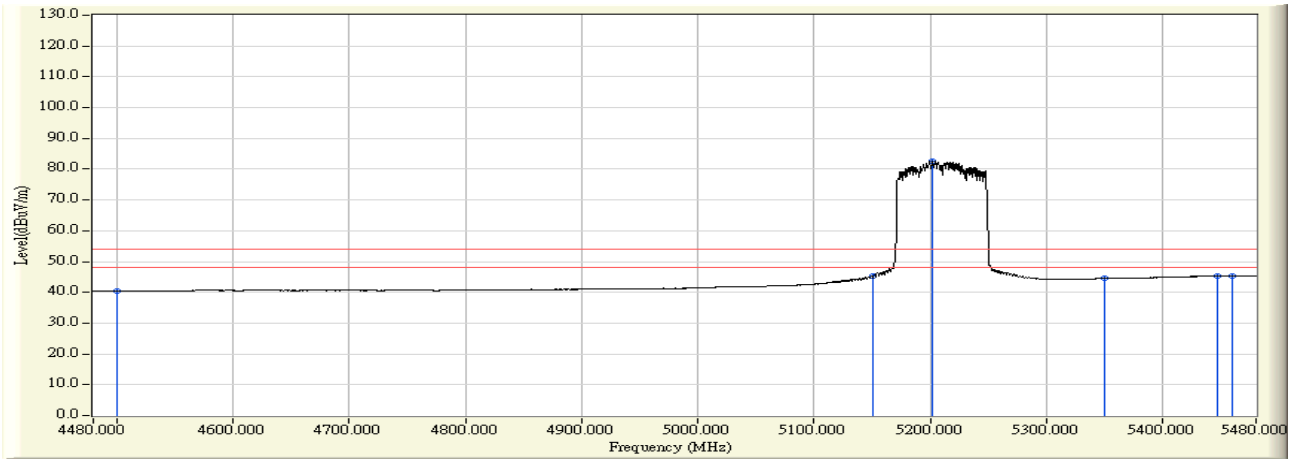


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	56.612	53.184	-20.816	74.000	PEAK
2		5140.000	-0.821	60.320	59.499	-14.501	74.000	PEAK
3		5150.000	-0.737	58.729	57.991	-16.009	74.000	PEAK
4	*	5219.500	-0.156	96.061	95.904	21.904	74.000	PEAK
5		5350.000	0.934	56.169	57.103	-16.897	74.000	PEAK
6		5460.000	1.853	56.230	58.083	-15.917	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 22:50**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11ac(80M)_5210MHz**

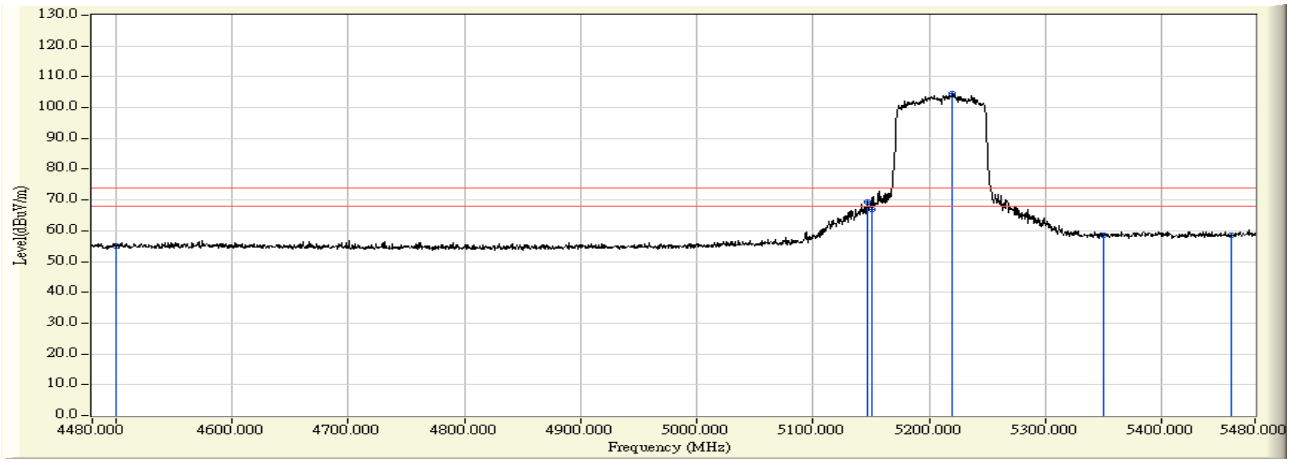


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-3.428	43.856	40.428	-13.572	54.000	AVERAGE
2		5150.000	-0.737	45.874	45.136	-8.864	54.000	AVERAGE
3	*	5201.500	-0.308	82.946	82.639	28.639	54.000	AVERAGE
4		5350.000	0.934	43.588	44.522	-9.478	54.000	AVERAGE
5		5446.500	1.739	43.513	45.253	-8.747	54.000	AVERAGE
6		5460.000	1.853	43.431	45.284	-8.716	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 22:37**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11ac(80M)_5210MHz**

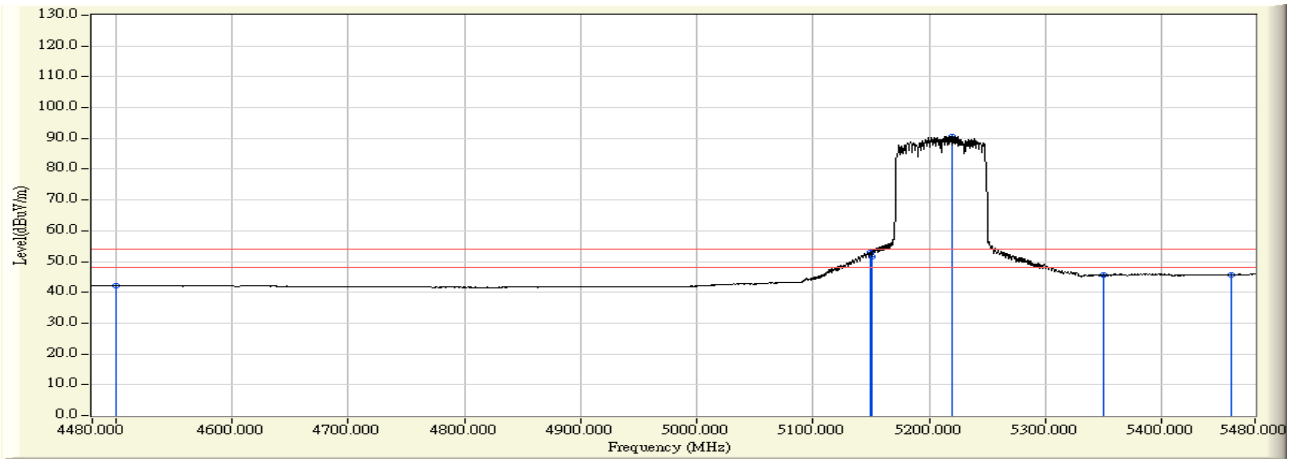


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	56.915	55.194	-18.806	74.000	PEAK
2		5147.000	-0.344	69.758	69.413	-4.587	74.000	PEAK
3		5150.000	-0.321	67.282	66.961	-7.039	74.000	PEAK
4	*	5219.500	0.225	104.326	104.551	30.551	74.000	PEAK
5		5350.000	1.250	57.344	58.594	-15.406	74.000	PEAK
6		5460.000	2.114	56.411	58.525	-15.475	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2016/04/21 - 22:33**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
EUT : PCE-AC56 Dual-Band Wireless PCI-E Adapter	**Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL**
Power : DC 3.3V (Power by PC)	**Note : 802.11ac(80M)_5210MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	43.783	42.062	-11.938	54.000	AVERAGE
2		5149.000	-0.329	53.301	52.972	-1.028	54.000	AVERAGE
3		5150.000	-0.321	52.035	51.714	-2.286	54.000	AVERAGE
4	*	5219.000	0.221	90.552	90.773	36.773	54.000	AVERAGE
5		5350.000	1.250	44.299	45.549	-8.451	54.000	AVERAGE
6		5460.000	2.114	43.563	45.677	-8.323	54.000	AVERAGE

Note:

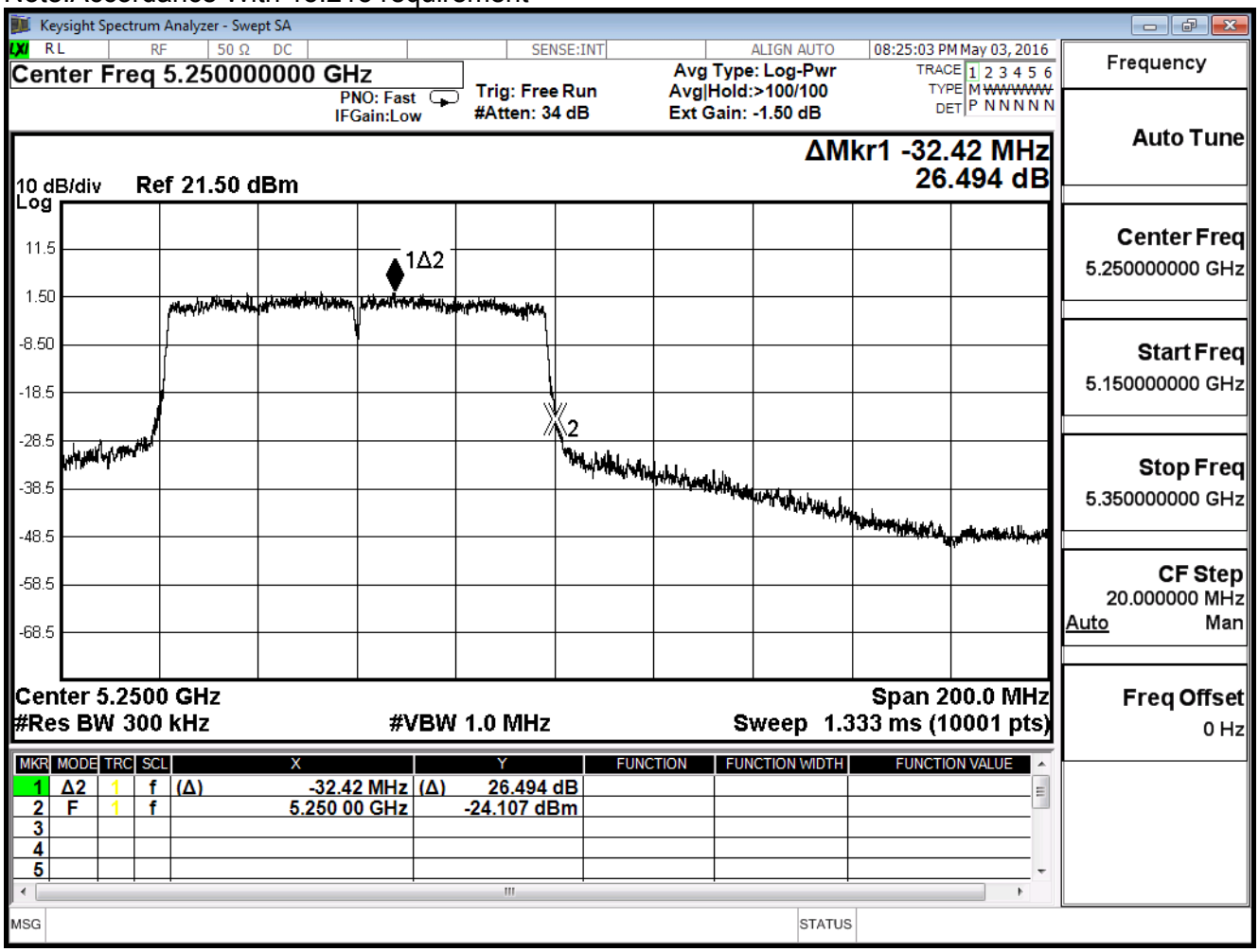
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Band edge Data		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

IEEE 802.11ac(80MHz) (ANT 0)

Test Frequency (MHz)	Measurement Level (dBc)	Limit (dBc)	Result
42	5210	26.494	≧20

Note:Accordance With 15.215 requirement

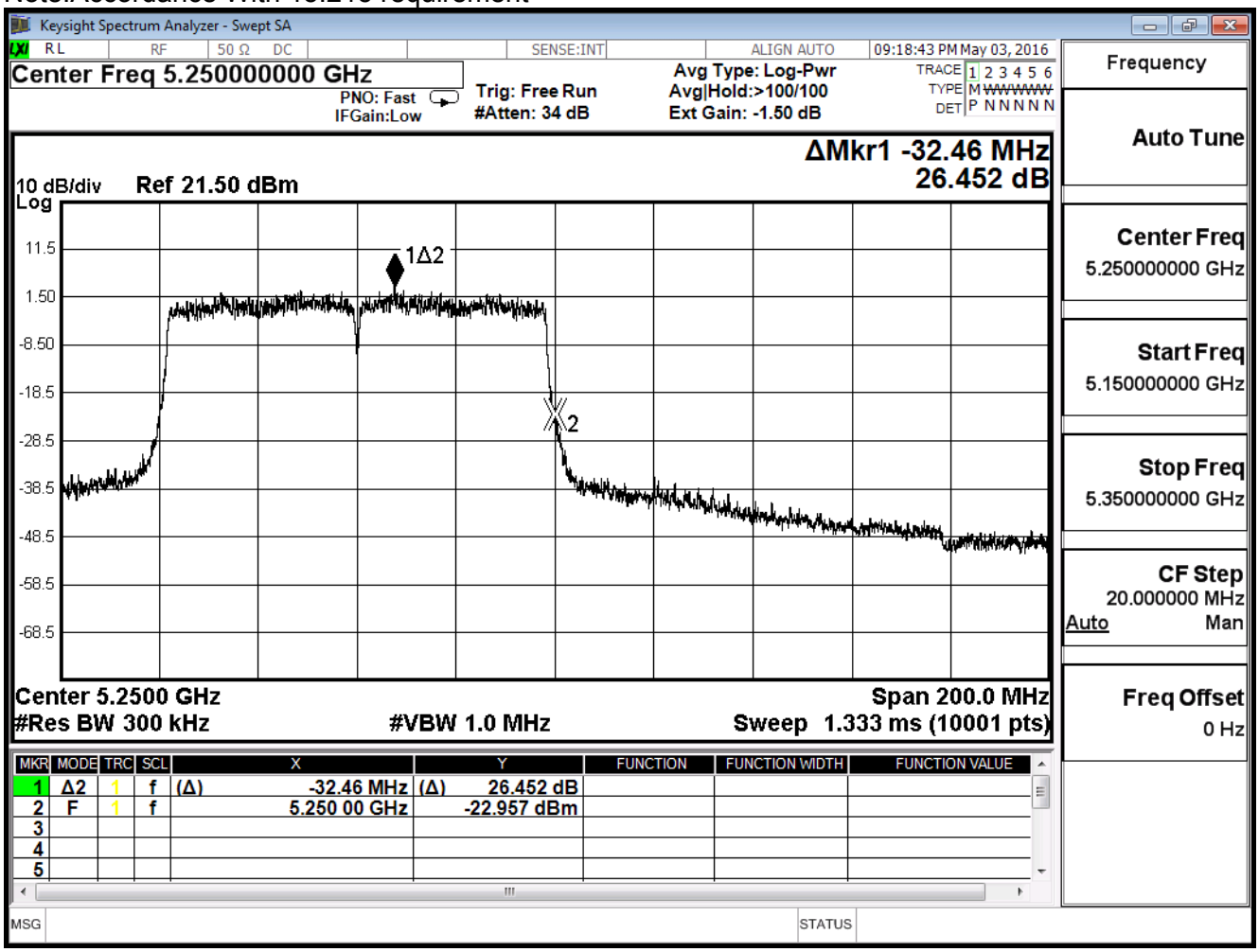


Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Band edge Data		
Test Mode	Mode 1: Transmit_CDD Mode		
Date of Test	2016/05/03	Test Site	SR7

IEEE 802.11ac(80MHz) (ANT 1)

Test Frequency (MHz)	Measurement Level (dBc)	Limit (dBc)	Result
42	5210	26.452	≧20

Note:Accordance With 15.215 requirement



7. Frequency Stability

7.1. Test Equipment

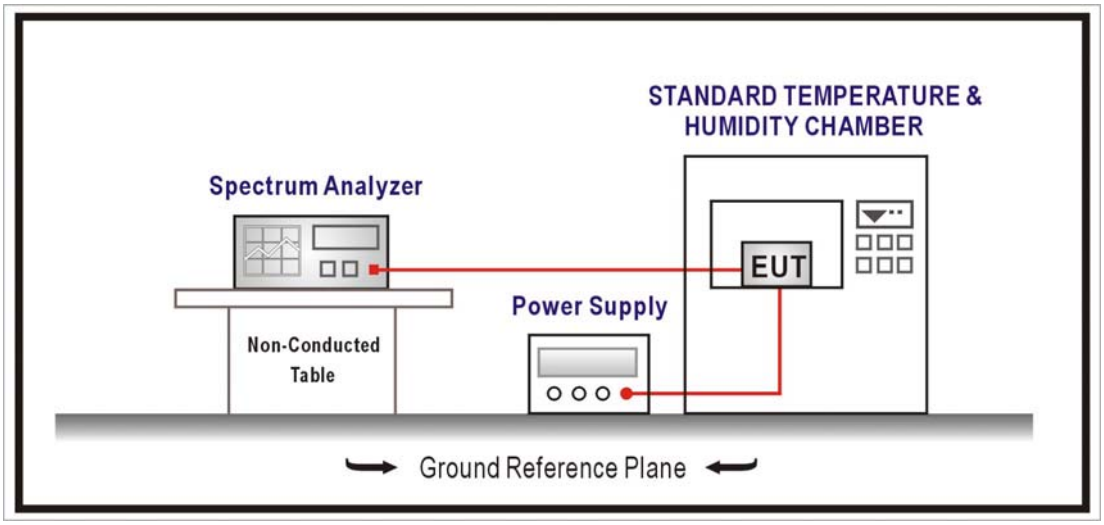
The following test equipments are used during the radiated emission tests:

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

7.2. Test Setup



7.3. Limits

Manufactures of all 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

7.4. Test Procedure

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

7.5. Uncertainty

The measurement uncertainty is defined as ± 150 Hz

7.6. Test Result

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit_CDD Mode - 802.11a - 5180MHz(ANT 0)		
Date of Test	2016/05/10	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5180.03910	7.5545	PASS
-10		5180.02381	4.5963	PASS
0		5180.02334	4.5060	PASS
10		5179.98701	-2.5084	PASS
20		5179.99267	-1.4160	PASS
30		5179.99012	-1.9070	PASS
40		5179.98328	-3.2271	PASS
50		5179.98115	-3.6390	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5179.99734	-0.5135	PASS
	120	5179.96348	-7.0499	PASS
	138	5179.97174	-5.4565	PASS

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit_CDD Mode - 802.11a - 5240MHz(ANT 0)		
Date of Test	2016/05/10	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5240.00863	1.6530	PASS
-10		5240.02964	5.6568	PASS
0		5240.02048	3.9092	PASS
10		5239.99297	-1.3412	PASS
20		5239.98731	-2.4224	PASS
30		5239.97843	-4.1157	PASS
40		5239.95229	-9.1041	PASS
50		5239.95667	-8.2684	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5239.99959	-0.0773	PASS
	120	5239.99085	-1.7459	PASS
	138	5239.99866	-0.2562	PASS

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit_CDD Mode - 802.11a - 5180MHz(ANT 1)		
Date of Test	2016/05/10	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5180.00595	1.1541	PASS
-10		5180.03110	6.0033	PASS
0		5180.00006	0.0111	PASS
10		5179.98738	-2.4365	PASS
20		5179.98157	-3.5576	PASS
30		5179.97405	-5.0097	PASS
40		5179.99581	-0.8097	PASS
50		5179.96992	-5.8073	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5179.99922	-0.1508	PASS
	120	5179.98970	-1.9879	PASS
	138	5179.99572	-0.8269	PASS

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit_CDD Mode - 802.11a - 5240MHz(ANT 1)		
Date of Test	2016/05/10	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5240.01339	2.5604	PASS
-10		5240.03752	7.1595	PASS
0		5240.00968	1.8481	PASS
10		5239.98563	-2.7425	PASS
20		5239.99022	-1.8663	PASS
30		5239.98785	-2.3186	PASS
40		5239.96750	-6.2030	PASS
50		5239.95498	-8.5917	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5239.99782	-0.4159	PASS
	120	5239.98989	-1.9298	PASS
	138	5239.95025	-9.4935	PASS

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit_CDD Mode - 802.11n_20M - 5180MHz(ANT 0)		
Date of Test	2016/05/10	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5180.01571	3.0391	PASS
-10		5180.01558	3.0081	PASS
0		5180.02250	4.3429	PASS
10		5179.99408	-1.1423	PASS
20		5179.98367	-3.1525	PASS
30		5179.99478	-1.0075	PASS
40		5179.98041	-3.7825	PASS
50		5179.96156	-7.4213	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5179.99872	-0.2469	PASS
	120	5179.97871	-4.1109	PASS
	138	5179.95259	-9.1518	PASS

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit_CDD Mode - 802.11n_20M - 5240MHz(ANT 0)		
Date of Test	2016/05/10	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5240.00187	0.3636	PASS
-10		5240.02948	5.6264	PASS
0		5240.01586	3.0277	PASS
10		5239.98988	-1.9313	PASS
20		5239.99524	-0.9082	PASS
30		5239.98932	-2.0373	PASS
40		5239.96400	-6.8707	PASS
50		5239.99625	-0.7156	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5239.99801	-0.3805	PASS
	120	5239.98994	-1.9202	PASS
	138	5239.99144	-1.6332	PASS

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit_CDD Mode - 802.11n_20M - 5180MHz(ANT 1)		
Date of Test	2016/05/10	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5180.01905	3.6844	PASS
-10		5180.03887	7.5037	PASS
0		5180.02795	5.3949	PASS
10		5179.98389	-3.1094	PASS
20		5179.99861	-0.2684	PASS
30		5179.99285	-1.3798	PASS
40		5179.99600	-0.7722	PASS
50		5179.95348	-8.9815	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5179.99972	-0.0536	PASS
	120	5179.97538	-4.7534	PASS
	138	5179.96900	-5.9848	PASS

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit_CDD Mode - 802.11n_20M - 5240MHz(ANT 1)		
Date of Test	2016/05/10	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5240.04110	7.8489	PASS
-10		5240.00661	1.2609	PASS
0		5240.00817	1.5598	PASS
10		5239.99009	-1.8910	PASS
20		5239.99312	-1.3123	PASS
30		5239.97200	-5.3441	PASS
40		5239.94916	-9.7018	PASS
50		5239.97671	-4.4455	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5239.99930	-0.1339	PASS
	120	5239.97358	-5.0414	PASS
	138	5239.95109	-9.3334	PASS

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit_CDD Mode - 802.11n_40M - 5190MHz(ANT 0)		
Date of Test	2016/05/10	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5190.04694	9.0498	PASS
-10		5190.01543	2.9721	PASS
0		5190.00370	0.7130	PASS
10		5189.99646	-0.6814	PASS
20		5189.98167	-3.5318	PASS
30		5189.98238	-3.3954	PASS
40		5189.94567	-10.4677	PASS
50		5189.98993	-1.9400	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5189.99850	-0.2891	PASS
	120	5189.98406	-3.0710	PASS
	138	5189.95723	-8.2405	PASS

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit_CDD Mode - 802.11n_40M - 5230MHz(ANT 0)		
Date of Test	2016/05/10	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5230.04212	8.0602	PASS
-10		5230.03541	6.7710	PASS
0		5230.02017	3.8557	PASS
10		5229.99818	-0.3480	PASS
20		5229.98675	-2.5338	PASS
30		5229.98324	-3.2040	PASS
40		5229.98964	-1.9807	PASS
50		5229.98168	-3.5021	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5229.99918	-0.1568	PASS
	120	5229.96042	-7.5684	PASS
	138	5229.97844	-4.1215	PASS

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit_CDD Mode - 802.11n_40M - 5190MHz(ANT 1)		
Date of Test	2016/05/10	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5190.01166	2.2521	PASS
-10		5190.01587	3.0582	PASS
0		5190.00208	0.4006	PASS
10		5189.99899	-0.1938	PASS
20		5189.99830	-0.3284	PASS
30		5189.99800	-0.3848	PASS
40		5189.95640	-8.4012	PASS
50		5189.95413	-8.8376	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5189.99825	-0.3373	PASS
	120	5189.99195	-1.5513	PASS
	138	5189.96043	-7.6243	PASS

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit_CDD Mode - 802.11n_40M - 5230MHz(ANT 1)		
Date of Test	2016/05/10	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5230.02635	5.0451	PASS
-10		5230.00495	0.9459	PASS
0		5230.01894	3.6213	PASS
10		5229.98357	-3.1424	PASS
20		5229.99940	-0.1151	PASS
30		5229.98805	-2.2848	PASS
40		5229.94700	-10.1346	PASS
50		5229.98553	-2.7659	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5229.99844	-0.2991	PASS
	120	5229.98462	-2.9416	PASS
	138	5229.99695	-0.5841	PASS

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit_CDD Mode - 802.11ac_80M -5210MHz(ANT 0)		
Date of Test	2016/05/10	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5210.02118	4.0716	PASS
-10		5210.02638	5.0628	PASS
0		5210.02045	3.9260	PASS
10		5209.99064	-1.7966	PASS
20		5209.98082	-3.6812	PASS
30		5209.97642	-4.5265	PASS
40		5209.98362	-3.1447	PASS
50		5209.97123	-5.5230	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5209.99936	-0.1230	PASS
	120	5209.98378	-3.1140	PASS
	138	5209.98808	-2.2886	PASS

Product	PCE-AC56 Dual-Band Wireless PCI-E Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit_CDD Mode - 802.11ac_80M -5210MHz(ANT 1)		
Date of Test	2016/05/10	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5210.00827	1.5937	PASS
-10		5210.01042	2.0004	PASS
0		5210.00109	0.2086	PASS
10		5209.98920	-2.0732	PASS
20		5209.98731	-2.4349	PASS
30		5209.97160	-5.4520	PASS
40		5209.99411	-1.1297	PASS
50		5209.97708	-4.3998	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5209.99903	-0.1867	PASS
	120	5209.96917	-5.9172	PASS
	138	5209.98445	-2.9852	PASS