

Product Name	MOXA IEEE 802.11 a/b/g/n PCI-e
Model No	WAPN002
FCC ID.	SLE-WAPN002

Applicant	Moxa Inc.
Address	Fl.4. No.135. Lane 235, Baoqiao Rd. Xindian Dist, New
	Taipei City, Taiwan.

Date of Receipt	Oct. 21, 2011
Issue Date	Nov. 23, 2011
Report No.	11A306R-RFUSP28V01
Report Version	V1.0

The test results relate only to the samples tested.

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Test Report Certification

Issue Date: Nov. 23, 2011 Report No.: 11A306R-RFUSP28V01



Accredited by NIST (NVLAP) NVLAP Lab Code: 200533-0

Product Name	MOXA IEEE 802.11 a/b/g/n PCI-e			
Applicant	Moxa Inc.			
Address	Fl.4. No.135. Lane 235, Baoqiao Rd. Xindian Dist, New Taipei City, Taiwan.			
Manufacturer	Moxa Inc.			
Model No.	WAPN002			
FCC ID.	SLE-WAPN002			
EUT Rated Voltage	DC 3.3V (Power by PCI Express)			
EUT Test Voltage	DC 3.3V (Power by PCI Express)			
Trade Name	MOXA			
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2010			
	ANSI C63.4: 2009			
Test Result	Complied			

The test results relate only to the samples tested.

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Tested By

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(Engineer / Vincent Chu)

Approved By





(Manager / Vincent Lin)

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Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	MOXA IEEE 802.11 a/b/g/n PCI-e		
Trade Name	MOXA		
Model No.	WAPN002		
FCC ID.	SLE-WAPN002		
Frequency Range	802.11b/g/n-20MHz:2412-2462MHz,802.11n-40MHz:2422-2452MHz		
	802.11a/n-20MHz:5745-5825MHz ,802.11n-40MHz:5755-5795MHz		
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7		
	802.11a/n-20MHz: 5, n-40MHz: 2		
Data Speed	802.11b: 1-11Mbps, 802.11a/g: 6-54Mbps, 802.11n: up to 300Mbps		
Channel separation	802.11b/g/n-20MHz: 5 MHz, 802.11a/n-20MHz: 20MHz		
	802.11n-40MHz: 40MHz		
Type of Modulation	802.11b:DSSS		
	DBPSK, DQPSK, CCK		
	802.11a/g/n: OFDM		
	BPSK, QPSK, 16QAM, 64QAM		
Antenna Type	Dipole Antenna		
Antenna Gain	Refer to the table "Antenna List"		
Channel Control	Auto		

Antenna List

No.	Manufacturer	Model No.	Antenna Type	Peak Gain
1	KINSUN	ANT-WDB-O-2	Dipole	2dBi for 2.4 GHz
				2dBi for 5GHz
2	KINSUN	ANT-WDB-ANM-0502	Dipole	5dBi for 2.4 GHz
				2dBi for 5GHz

- 1. The antenna of EUT is conform to FCC 15.203
- 2. Only the higher gain antenna was tested and recorded in this report.

QuieTer

802.11b/g/n-20MHz Center Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01:	2412 MHz	Channel 02:	2417 MHz	Channel 03:	2422 MHz	Channel 04:	2427 MHz
Channel 05:	2432 MHz	Channel 06:	2437 MHz	Channel 07:	2442 MHz	Channel 08:	2447 MHz
Channel 09:	2452 MHz	Channel 10:	2457 MHz	Channel 11:	2462 MHz		
802.11a/n-20	MHz Center V	Working Freque	ency of Each	Channel:			
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 149:	5745 MHz	Channel 153:	5765 MHz	Channel 157:	5785 MHz	Channel 161:	5805 MHz
Channel 165: 5825 MHz							
802.11n-40MHz (2.4G Band) Center Working Frequency of Each Channel:							
Channel Frequency Channel Frequency Channel Frequency Channel Frequency							
Channel 3:	2422 MHz	Channel 4:	2427 MHz	Channel 5:	2432 MHz	Channel 6:	2437 MHz
Channel 7:	2442 MHz	Channel 8:	2447 MHz	Channel 9:	2452 MHz		
802.11n-40MHz (5G Band) Center Working Frequency of Each Channel:							

Channel Frequency Channel Frequency Channel 151: 5755 MHz Channel 159: 5795 MHz

- 1. This device is a MOXA IEEE 802.11 a/b/g/n PCI-e With a built-in 2.4GHz and 5GHz WLAN transceiver.
- 2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
- Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11b is 1Mbps \$\sigma 802.11g is 6Mbps \$\sigma 802.11n(20M-BW) is 14.4Mbps and \$\sigma 802.11n(40M-BW) is 30Mbps).
- 4. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11a/b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.

Test Mode:	Mode 1: Transmit - 802.11b 1Mbps		
	Mode 2: Transmit - 802.11g 6Mbps		
	Mode 3: Transmit - 802.11a 6Mbps		
	Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)		
	Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)		
	Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band)		
Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band)			

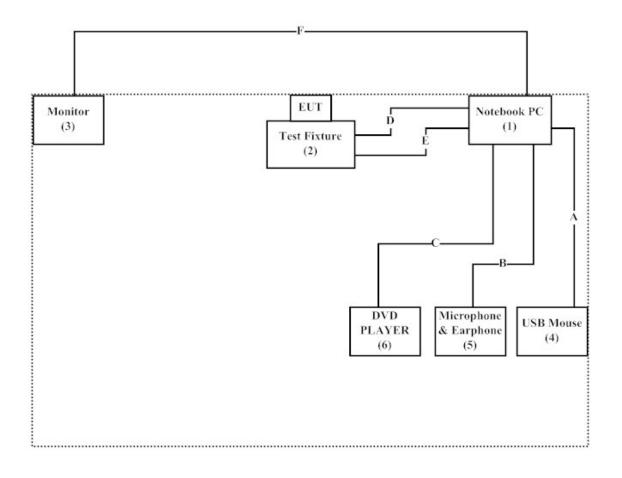
1.3. Tested System Details

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

Pro	duct	Manufacturer	Model No.	Serial No.	Power Cord
(1)	Notebook PC	DELL	PPT	N/A	Non-Shielded, 0.8m
(2)	Test Fixture	MOXA	N/A	N/A	N/A
(3)	Monitor	LG	W2261VT	907YHED07356	Non-Shielded, 1.8m
(4)	USB Mouse	DELL	M056U0A	F0Y01YEP	N/A
(5)	Microphone	PCHOME	N/A	N/A	N/A
	& Earphone				
(6)	DVD PLAYER	DELL	PD01S	N/A	N/A

	Signal Cable Type	Signal cable Description
А	USB Mouse Cable	Non-Shielded, 1.8m
В	Microphone & Earphone Cable	Non-Shielded, 2.5m
С	USB DVD PLAYER Cable	Non-Shielded, 1m
D	RS-232 to RJ-45 Cable	Non-Shielded, 1m
Е	RJ45 Cable	Non-Shielded, 1.5m
F	VGA Cable	Non-Shielded, 1.5m, with one ferrite core bonded.

1.4. Configuration of Tested System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown in Section 1.4
- (2) Execute "ART v0.9.B27" program on the Notebook.
- (3) Configure the test mode, the test channel, and the data rate.
- (4) Press "OK" to start the continuous Transmit.
- (5) Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual	
Temperature (°C)	15-35	20-35	
Humidity (%RH)	25-75	50-65	
Barometric pressure (mbar)	860-1060	950-1000	

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : <u>http://www.quietek.com/tw/ctg/cts/accreditations.htm</u> The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : <u>http://www.quietek.com/</u>

Site Description: File on

Federal Communications Commission FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046 Registration Number: 92195

Accreditation on NVLAP NVLAP Lab Code: 200533-0





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FCC Accreditation Number: TW1014



2. Conducted Emission

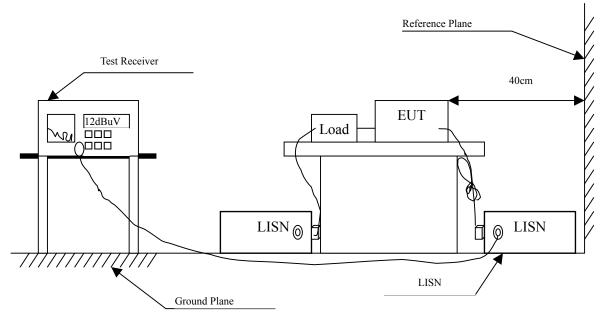
2.1. Test Equipment

The following test equipment are used during the conducted emission test:

	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
Х	Test Receiver	R & S	ESCS 30 / 825442/018	Sep., 2011	
Х	Artificial Mains Network	R & S	ENV4200 / 848411/10	Feb., 2011	Peripherals
Х	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2011	EUT
	DC LISN	Schwarzbeck	8226 / 176	Mar, 2011	EUT
Х	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2011	
	No.1 Shielded Room				

Note: All instruments are calibrated every one year.

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit						
Frequency	Limits					
MHz	QP	AVG				
0.15 - 0.50	66-56	56-46				
0.50-5.0	56	46				
5.0 - 30	60	50				

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2009 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product	:	MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item	:	Conducted Emission Test
Power Line	:	Line 1
Test Mode	:	Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2437MHz)

Frequency	Correct	Reading	Reading Measurement		Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.212	9.688	37.770	47.458	-16.771	64.229
0.283	9.656	36.500	46.156	-16.044	62.200
0.494	9.650	41.140	50.790	-5.381	56.171
0.634	9.650	36.480	46.130	-9.870	56.000
4.306	9.710	29.940	39.650	-16.350	56.000
16.162	9.890	23.910	33.800	-26.200	60.000
Average					
0.212	9.688	37.370	47.058	-7.171	54.229
0.283	9.656	36.410	46.066	-6.134	52.200
0.494	9.650	33.720	43.370	-2.801	46.171
0.634	9.650	33.670	43.320	-2.680	46.000
4.306	9.710	28.300	38.010	-7.990	46.000
16.162	9.890	17.370	27.260	-22.740	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.

2. "means the worst emission level.

3. Measurement Level = Reading Level + Correct Factor

Product Test Item Power Line	 MOXA IEEE 802.11 a/b/g/n PCI-e Conducted Emission Test Line 2 								
Test Mode	: Mode 5:								
Fraguenav	Correct	Deading	Measurement	Margin	Limit				
Frequency	Correct	Reading		Margin	Liiiiit				
	Factor	Level	Level						
MHz	dB	dBuV	dBuV	dB	dBuV				
Line 2									
Quasi-Peak									
0.166	9.720	23.810	33.530	-32.013	65.543				
0.205	9.693	21.760	31.453	-32.976	64.429				
0.564	9.650	32.590	42.240	-13.760	56.000				
1.834	9.700	31.500	41.200	-14.800	56.000				
4.369	9.720	33.790	43.510	-12.490	56.000				
15.787	9.990	21.680	31.670	-28.330	60.000				
Average									
0.166	9.720	8.520	18.240	-37.303	55.543				
0.205	9.693	17.270	26.963	-27.466	54.429				
0.564	9.650	30.440	40.090	-5.910	46.000				
1.834	9.700	29.800	39.500	-6.500	46.000				
4.369	9.720	30.300	40.020	-5.980	46.000				
15.787	9.990	15.690	25.680	-24.320	50.000				

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor

Product Test Item Power Line Test Mode	 MOXA IEEE 802.11 a/b/g/n PCI-e Conducted Emission Test Line 1 Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (5755MHz) 					
Eno que que	Comot	Decding	Maagunant	Manain	Limit	
Frequency	Correct	Reading	Measurement	Margin	Limit	
MI	Factor	Level	Level	ID		
MHz	dB	dBuV	dBuV	dB	dBuV	
Line 1						
Quasi-Peak						
0.212	9.688	37.450	47.138	-17.091	64.229	
0.283	9.656	36.410	46.066	-16.134	62.200	
0.494	9.650	40.210	49.860	-6.311	56.171	
0.986	9.690	29.850	39.540	-16.460	56.000	
4.365	9.710	30.430	40.140	-15.860	56.000	
16.330	9.890	25.420	35.310	-24.690	60.000	
Average						
0.212	9.688	35.990	45.678	-8.551	54.229	
0.283	9.656	36.400	46.056	-6.144	52.200	
0.494	9.650	34.030	43.680	-2.491	46.171	
0.986	9.690	29.840	39.530	-6.470	46.000	
4.365	9.710	28.180	37.890	-8.110	46.000	
16.330	9.890	18.470	28.360	-21.640	50.000	

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor

Product	:	MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item	:	Conducted Emission Test
Power Line	:	Line 2
Test Mode	:	Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (5755MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.209	9.691	28.180	37.871	-26.443	64.314
0.494	9.650	34.810	44.460	-11.711	56.171
1.337	9.690	30.870	40.560	-15.440	56.000
2.462	9.700	29.890	39.590	-16.410	56.000
4.080	9.710	32.970	42.680	-13.320	56.000
17.091	10.020	23.440	33.460	-26.540	60.000
Average					
0.209	9.691	27.790	37.481	-16.833	54.314
0.494	9.650	32.390	42.040	-4.131	46.171
1.337	9.690	29.990	39.680	-6.320	46.000
2.462	9.700	29.010	38.710	-7.290	46.000
4.080	9.710	31.660	41.370	-4.630	46.000
17.091	10.020	17.360	27.380	-22.620	50.000

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor

3. Peak Power Output

3.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.			
Х	Power Meter	Anritsu	ML2495A/6K00003357	May, 2011			
Х	Power Sensor	Anritsu	MA2411B/0738448	Jun, 2011			
Note:							
1.	All equipments are	calibrated with trac	eable calibrations. Each calibra	ation is traceable to the			
	national or international standards.						

2. The test instruments marked with "X" are used to measure the final test results.

3.2. Test Setup

Conducted Measurement



3.3. Limits

The maximum peak power shall be less 1 Watt.

3.4. Test Procedure

The EUT was tested according to DTS test procedure of Mar. 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

3.5. Uncertainty

± 1.27 dB

3.6. Test Result of Peak Power Output

Product	:	MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item	:	Peak Power Output Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit - 802.11b 1Mbps

CHAIN A

Channel No		Average Power For different Data Rate (Mbps)				Peak Power	Required	Result
	(MHz)	1	2	5.5	11	1	Limit	Kesun
			Measur	ement Lev	vel (dBm)			
01	2412	16.97				19.49	<30dBm	Pass
06	2437	17.68	17.6	17.51	17.41	20.25	<30dBm	Pass
11	2462	13.97				16.56	<30dBm	Pass

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

Product	:	MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item	:	Peak Power Output Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit - 802.11g 6Mbps

	Fraguanay		F	Peak Power	Required							
Channel No	Frequency (MHz)	6	9	12	18	24	36	48	54	6	Limit	Result
	Measurement Level (dBm)											
01	2412	16								24.7	<30dBm	Pass
06	2437	17.91	17.85	17.81	17.75	17.71	17.62	17.58	17.5	25.49	<30dBm	Pass
11	2462	13.86								23.39	<30dBm	Pass

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

Product	:	MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item	:	Peak Power Output Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit - 802.11a 6Mbps

CHAIN A

	F		F		U	e Power ata Rate		5)		Peak Power	D 1		
Channel No	Frequency (MHz)	6							6	Required Limit	Result		
			Measurement Level (dBm)										
149	5745	15.2								22.07	<30dBm	Pass	
157	5785	14.3	14.24	14.21	14.19	14.15	14.1	14.07	14.02	21.55	<30dBm	Pass	
165	5825	13.4								21.2	<30dBm	Pass	

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

Product	:	MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item	:	Peak Power Output Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)

CHAIN A

			Average Power								
Fraquanay		For different Data Rate (Mbps)									
Channel No	Frequency (MHz)	14.4	28.9	43.3	57.8	86.7	115.6	130	144.4	14.4	
			Measurement Level (dBm)								
01	2412	9.97						-		20.6	
06	2437	9.88	9.81	9.75	9.71	9.67	9.62	9.57	9.53	20.21	
11	2462	9.83								21.1	

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

CHAIN B

			Average Power									
Freque	Frequency		For different Data Rate (Mbps)									
Channel No	(MHz)	14.4	28.9	43.3	57.8	86.7	115.6	130	144.4	14.4		
		Measurement Level (dBm)										
01	2412	9.95						-		19.73		
06	2437	10.42	9.97	9.94	9.84	9.78	9.71	9.62	9.59	20.21		
11	2462	10.39								20.21		

Note: Peak Power Output Value = Reading value on peak power meter + cable loss

CHAIN A+B

Channel	Frequency	Data Rata	Chain A Power	Chain B Power	Chain A+B Power	Limit	Result
	(MHz)	(Mbps)	(dBm)	(dBm)	(dBm)	(dBm)	
1	2412	HT8	20.60	19.73	23.20	<30dBm	Pass
6	2437	HT8	20.21	20.21	23.22	<30dBm	Pass
11	2462	HT8	21.10	20.21	23.69	<30dBm	Pass

Product	:	MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item	:	Peak Power Output Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)

				1	Average	e Power	r			Peak
T	Frequency		F	or diffe	erent Da	ata Rate	e (Mbps	s)		Power
Channel No	(MHz)	30	60	90	120	180	240	270	300	30
3	2422	9.7	-		-		-			21.25
6	2437	9.83	9.76	9.71	9.65	9.62	9.57	9.51	9.44	21.29
9	2452	9.4								20.86

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

CHAIN B

			Average Power For different Data Rate (Mbps)								
Channel No	Frequency (MHz)	30	60	90	120	180	240	270	300	Power 30	
3	2422	10.46					-	-		21.35	
6	2437	10.21	9.94	9.91	9.84	9.79	9.72	9.68	9.6	21.37	
9	2452	9.9								20.59	

Note: Peak Power Output Value = Reading value on peak power meter + cable loss

CHAIN A+B

Channel	Frequency	Data Rata	Chain A Power	Chain B Power	Chain A+B Power	Limit	Result
	(MHz)	(Mbps)	(dBm)	(dBm)	(dBm)	(dBm)	
3	2422	HT8	21.25	21.35	24.31	<30dBm	Pass
6	2437	HT8	21.29	21.37	24.34	<30dBm	Pass
9	2452	HT8	20.86	20.59	23.74	<30dBm	Pass

Product	:	MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item	:	Peak Power Output Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band)

			Average Power							
	Frequency		For different Data Rate (Mbps)							
Channel No	(MHz)	14.4	28.9	43.3	57.8	86.7	115.6	130	144.4	14.4
			Measurement Level (dBm)							
149	5745	10.8								19.77
157	5785	10.7	10.66	10.61	10.54	10.5	10.47	10.41	10.35	19.58
165	5825	11.12								19.78

Note: Peak Power Output Value = Reading value on peak power meter + cable loss

CHAIN B

			Average Power							
	Frequency		For different Data Rate (Mbps)							
Channel No	(MHz)	14.4	28.9	43.3	57.8	86.7	115.6	130	144.4	14.4
			Measurement Level (dBm)							
149	5745	9.6								19.96
157	5785	9.2	9.18	9.15	9.13	9.1	9.05	9.01	8.97	19.37
165	5825	9.1								19.41

Note: Peak Power Output Value = Reading value on peak power meter + cable loss

CHAIN A+B

Channel	Frequency	Data Rata	Chain A Power	Chain B Power	Chain A+B Power	Limit	Result
	(MHz)	(Mbps)	(dBm)	(dBm)	(dBm)	(dBm)	
149	5745	HT8	19.77	19.96	22.88	<30dBm	Pass
157	5785	HT8	19.58	19.37	22.49	<30dBm	Pass
165	5825	HT8	19.78	19.41	22.61	<30dBm	Pass

Product	:	MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item	:	Peak Power Output Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band)

	Enggyonay		Average Power							
		For different Data Rate (Mbps)								Power
Channel No	Frequency (MHz)	30	60	90	120	180	240	270	300	30
		Measurement Level (dBm)								
151	5755	11.25								20.26
159	5795	10.74	10.7	10.68	10.64	10.59	10.57	10.51	10.46	19.94

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

CHAIN B

	England		Average Power								
			For different Data Rate (Mbps)								
Channel No	Frequency (MHz)	30	60	90	120	180	240	270	300	30	
			Measurement Level (dBm)								
151	5755	9.73	-	-		-			-	20.82	
159	5795	9.18	9.14	9.1	9.08	9.04	9	8.94	8.9	20.24	

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

CHAIN A+B

Channel	Frequency	Data Rata	Chain A Power	Chain B Power	Chain A+B Power	Limit	Result
	(MHz)	(Mbps)	(dBm)	(dBm)	(dBm)	(dBm)	
151	5755	HT8	20.26	20.82	23.56	<30dBm	Pass
159	5795	HT8	19.94	20.24	23.10	<30dBm	Pass

4. Radiated Emission

4.1. Test Equipment

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

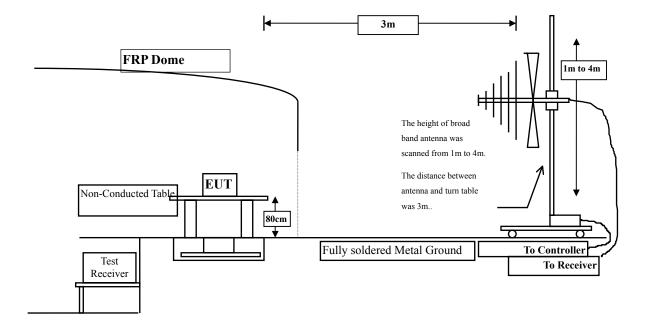
Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 3	Х	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2011
	Х	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2011
	Х	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2011
	Х	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2011
	Х	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2011
	Х	Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar, 2011
	Х	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2011
	Х	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2011
	Х	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2011
	Х	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	Х	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

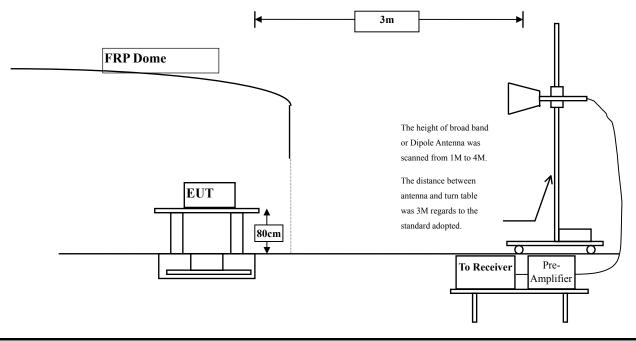
2. The test instruments marked with "X" are used to measure the final test results.

4.2. Test Setup

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



4.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) 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							

Remarks: E field strength $(dBuV/m) = 20 \log E$ field strength (uV/m)

4.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2009 and tested according to DTS test procedure of Mar. 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 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 is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2009 on radiated measurement.

The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

Radiated emission measurements below 1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement. The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna. The worst radiated emission is measured in the Open Area Test Site on the Final Measurement. The measurement frequency range form 30MHz - 10th Harmonic of fundamental was investigated.

4.5. Uncertainty

- ± 3.9 dB above 1GHz
- ± 3.8 dB below 1GHz

4.6. Test Result of Radiated Emission

Product	:	MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit - 802.11b 1Mbps (2412MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.261	40.510	43.771	-30.229	74.000
7236.000	10.650	36.800	47.450	-26.550	74.000
9648.000	13.337	37.780	51.116	-22.884	74.000
Average					
Detector:					
Vertical					
Peak Detector:					
4824.000	6.421	50.720	57.141	-16.859	74.000
7236.000	11.495	38.480	49.975	-24.025	74.000
9648.000	13.807	38.740	52.546	-21.454	74.000
Average					
Detector:					
4824.000	6.421	45.220	51.641	-2.359	54.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: MOXA IEEE 802.11 a/b/g/n PCI-e						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 1: Transmit - 802.11b 1Mbps (2437 MHz)						
	_						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
4874.000	3.038	40.010	43.047	-30.953	74.000		
7311.000	11.795	36.100	47.894	-26.106	74.000		
9748.000	12.635	38.390	51.025	-22.975	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
4874.000	5.812	49.830	55.641	-18.359	74.000		
7311.000	12.630	37.450	50.079	-23.921	74.000		
9748.000	13.126	40.310	53.436	-20.564	74.000		
Average							
Detector:							
4874.000	5.812	44.540	50.351	-3.649	54.000		

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: MOXA IEEE 802.11 a/b/g/n PCI-e						
Test Item	: Harmonic Radiated Emission Data						
Test Site	 No.3 OATS Mode 1: Transmit - 802.11b 1Mbps (2462 MHz) 						
Test Mode							
D					.		
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
4924.000	2.858	39.030	41.887	-32.113	74.000		
7386.000	12.127	34.970	47.098	-26.902	74.000		
9848.000	12.852	37.280	50.133	-23.867	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
4924.000	5.521	46.920	52.440	-21.560	74.000		
7386.000	13.254	35.600	48.854	-25.146	74.000		
9848.000	13.367	38.230	51.597	-22.403	74.000		
Average							
Detector:							

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: MOXA IEEE 802.11 a/b/g/n PCI-e						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 2: Transmit - 802.11g 6Mbps (2412MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
4824.000	3.261	38.090	41.351	-32.649	74.000		
7236.000	10.650	36.540	47.190	-26.810	74.000		
9648.000	13.337	37.130	50.466	-23.534	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
4824.000	6.421	47.270	53.691	-20.309	74.000		
7236.000	11.495	37.800	49.295	-24.705	74.000		
9648.000	13.807	36.470	50.276	-23.724	74.000		
Average							
Detector:							

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: MOXA IEEE 802.11 a/b/g/n PCI-e						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 2: Transmit - 802.11g 6Mbps (2437 MHz)						
Engavora	Correct	Decding	Measurement	Manain	Limit		
Frequency	Factor	Reading Level	Level	Margin	LIIIII		
				ID			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
4874.000	3.038	39.170	42.207	-31.793	74.000		
7311.000	11.795	36.770	48.564	-25.436	74.000		
9748.000	12.635	38.800	51.435	-22.565	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
4874.000	5.812	51.850	57.661	-16.339	74.000		
7311.000	12.630	39.850	52.479	-21.521	74.000		
9748.000	13.126	38.420	51.546	-22.454	74.000		
Average							
Detector:							
4874.000	5.812	36.580	42.391	-11.609	54.000		

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: MOXA IEEE 802.11 a/b/g/n PCI-e						
Test Item	: Harmonic Radiated Emission Data						
Test Site	 No.3 OATS Mode 2: Transmit - 802.11g 6Mbps (2462 MHz) 						
Test Mode							
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
4924.000	2.858	38.080	40.937	-33.063	74.000		
7386.000	12.127	35.790	47.918	-26.082	74.000		
9848.000	12.852	36.930	49.783	-24.217	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
4924.000	5.521	45.610	51.130	-22.870	74.000		
7386.000	13.254	35.660	48.914	-25.086	74.000		
9848.000	13.367	37.350	50.717	-23.283	74.000		
Average							
Detector:							

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: MOXA IEEE 802.11 a/b/g/n PCI-e						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 3: Transmit - 802.11a 6Mbps (5745 MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11490.000	17.106	35.620	52.727	-21.273	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
11490.000	18.034	35.570	53.605	-20.395	74.000		

Average

Detector:

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- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: MOXA IEEE 802.11 a/b/g/n PCI-e						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 3:	Transmit - 802.1	la 6Mbps (5785 MHz	z)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11570.000	16.809	35.350	52.159	-21.841	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
11570.000	17.698	35.870	53.568	-20.432	74.000		

Average

Detector:

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- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: MOXA IEEE 802.11 a/b/g/n PCI-e						
Test Item	: Harmonic Radiated Emission Data						
Test Site	e : No.3 OATS						
Test Mode	: Mode 3: Transmit - 802.11a 6Mbps (5825 MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11650.000	16.158	32.270	48.428	-25.572	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
11650.000	17.274	32.170	49.445	-24.555	74.000		

Average

Detector:

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- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site	 MOXA IEEE 802.11 a/b/g/n PCI-e Harmonic Radiated Emission Data No.3 OATS 					
Test Mode			1n-20BW_14.4Mbps	(2.4G Band) (241	2MHz)	
_	~	- ···			- · ·	
Frequency	Correct	Reading	Measurement	Margin	Limit	
MHz	Factor dB	Level dBuV	Level dBuV/m	dB	dBuV/m	
	ub	dBuv	uDu v/III	цБ		
Horizontal						
Peak Detector:						
4824.000	3.261	37.680	40.941	-33.059	74.000	
7236.000	10.650	36.460	47.110	-26.890	74.000	
9648.000	13.337	36.460	49.796	-24.204	74.000	
Average						
Detector:						
Vertical						
Peak Detector:						
4824.000	6.421	43.700	50.121	-23.879	74.000	
7236.000	11.495	36.690	48.185	-25.815	74.000	
9648.000	13.807	36.440	50.246	-23.754	74.000	
Average						
Detector:						

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: MOXA IEEE 802.11 a/b/g/n PCI-e						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2437 MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
4874.000	3.038	37.350	40.387	-33.613	74.000		
7311.000	11.795	35.290	47.084	-26.916	74.000		
9748.000	12.635	36.990	49.625	-24.375	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
4874.000	5.812	45.100	50.911	-23.089	74.000		
7311.000	12.630	36.300	48.929	-25.071	74.000		
9748.000	13.126	37.270	50.396	-23.604	74.000		
Average							
Detector:							

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site	 MOXA IEEE 802.11 a/b/g/n PCI-e Harmonic Radiated Emission Data No.3 OATS Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2462 MHz) 						
Test Mode							
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level	-			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
4924.000	2.858	38.520	41.377	-32.623	74.000		
7386.000	12.127	35.330	47.458	-26.542	74.000		
9848.000	12.852	36.750	49.603	-24.397	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
4924.000	5.521	45.750	51.270	-22.730	74.000		
7386.000	13.254	35.540	48.794	-25.206	74.000		
9848.000	13.367	37.060	50.427	-23.573	74.000		
Average							
Detector:							

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site	 MOXA IEEE 802.11 a/b/g/n PCI-e Harmonic Radiated Emission Data No.3 OATS 					
Test Mode	: Mode 5:	Transmit - 802.1	1n-40BW_30Mbps(2	.4G Band) (2422)	MHz)	
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit	
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
4844.000	3.171	38.510	41.681	-32.319	74.000	
7266.000	11.162	35.910	47.072	-26.928	74.000	
9688.000	12.964	36.900	49.865	-24.135	74.000	
Average						
Detector:						
Vertical						
Peak Detector:						
4844.000	6.178	43.640	49.818	-24.182	74.000	
7266.000	11.982	35.840	47.822	-26.178	74.000	
9688.000	13.507	36.830	50.338	-23.662	74.000	
Average						
Detector:						

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: MOXA IEEE 802.11 a/b/g/n PCI-e						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2437 MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
4874.000	3.038	46.810	49.847	-24.153	74.000		
7311.000	11.795	38.590	50.384	-23.616	74.000		
9748.000	12.635	42.330	54.965	-19.035	74.000		
Average							
Detector:							
9748.000	12.635	24.450	37.085	-16.915	54.000		
Vertical							
Peak Detector:							
4874.000	5.812	57.600	63.411	-10.589	74.000		
7311.000	12.630	46.030	58.659	-15.341	74.000		
9748.000	13.126	45.500	58.626	-15.374	74.000		
Average							
Detector:							
4874.000	5.812	40.440	46.251	-7.749	54.000		
7311.000	12.630	31.600	44.229	-9.771	54.000		
9748.000	13.126	25.890	39.016	-14.984	54.000		

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site Test Mode	 MOXA IEEE 802.11 a/b/g/n PCI-e Harmonic Radiated Emission Data No.3 OATS Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2452 MHz) 					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
4904.000	2.914	37.620	40.535	-33.465	74.000	
7356.000	11.995	35.070	47.064	-26.936	74.000	
9808.000	12.475	36.690	49.165	-24.835	74.000	
Average						
Detector:						
Vertical						
Peak Detector:						
4904.000	5.530	45.870	51.401	-22.599	74.000	
7356.000	13.005	35.630	48.634	-25.366	74.000	
9808.000	12.901	36.430	49.331	-24.669	74.000	
Average						
Detector:						

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site Test Mode	 MOXA IEEE 802.11 a/b/g/n PCI-e Harmonic Radiated Emission Data No.3 OATS Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (5745MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11490.000	17.106	35.300	52.407	-21.593	74.000		
Average							
Detector:							
Vertical							
Peak Detector:							
11490.000	18.034	35.720	53.755	-20.245	74.000		

Detector:

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- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site Test Mode	 MOXA IEEE 802.11 a/b/g/n PCI-e Harmonic Radiated Emission Data No.3 OATS Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (5785 MHz) 						
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal Peak Detector: 11570.000 Average Detector: 	16.809	32.950	49.759	-24.241	74.000		
Vertical Peak Detector: 11570.000	17.698	33.450	51.148	-22.852	74.000		

Detector:

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- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site Test Mode	 MOXA IEEE 802.11 a/b/g/n PCI-e Harmonic Radiated Emission Data No.3 OATS Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (5825 MHz) 					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal Peak Detector: 11650.000 Average Detector:	16.158	34.870	51.028	-22.972	74.000	
Vertical Peak Detector: 11650.000	17.274	33.900	51.175	-22.825	74.000	

Detector:

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- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site Test Mode	 MOXA IEEE 802.11 a/b/g/n PCI-e Harmonic Radiated Emission Data No.3 OATS Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (5755MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11510.000	17.124	35.060	52.184	-21.816	74.000		
Average Detector: 							
Vertical Peak Detector: 11510.000	18.081	34.810	52.891	-21.109	74.000		

Detector:

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- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site Test Mode	 MOXA IEEE 802.11 a/b/g/n PCI-e Harmonic Radiated Emission Data No.3 OATS Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (5795 MHz) 						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal Peak Detector: 11590.000 Average Detector:	16.701	34.730	51.430	-22.570	74.000		
Vertical Peak Detector: 11590.000	17.567	35.000	52.566	-21.434	74.000		

Detector:

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- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: MOXA IEEE 802.11 a/b/g/n PCI-e							
Test Item	: General Radiated Emission Data							
Test Site	: No.3 OATS							
Test Mode	: Mode 1:	: Mode 1: Transmit - 802.11b 1Mbps (2437 MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBuV	dBuV/m	dB	dBuV/m			
Horizontal								
375.320	-1.209	37.869	36.660	-9.340	46.000			
600.360	3.977	33.514	37.491	-8.509	46.000			
664.380	2.062	33.682	35.744	-10.256	46.000			
709.000	3.458	38.931	42.389	-3.611	46.000			
875.840	5.271	34.425	39.696	-6.304	46.000			
963.140	6.664	28.140	34.804	-19.196	54.000			
Vertical								
385.020	-2.820	39.337	36.517	-9.483	46.000			
563.500	-5.335	38.051	32.716	-13.284	46.000			
664.380	-1.918	38.449	36.531	-9.469	46.000			
749.740	2.510	38.684	41.194	-4.806	46.000			
800.180	2.801	37.172	39.973	-6.027	46.000			
949.560	6.615	32.036	38.651	-7.349	46.000			

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: MOXA	IEEE 802.11 a/b/g	g/n PCI-e		
Test Item		Radiated Emissio	n Data		
Test Site	: No.3 OA				
Test Mode	: Mode 2	: Transmit - 802.11	lg 6Mbps (2437 MHz	z)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
334.580	-3.901	41.859	37.958	-8.042	46.000
400.540	-2.276	36.819	34.543	-11.457	46.000
625.580	1.770	41.282	43.052	-2.948	46.000
749.740	3.320	38.792	42.112	-3.888	46.000
875.840	5.271	32.015	37.286	-8.714	46.000
963.140	6.664	26.576	33.240	-20.760	54.000
Vertical					
400.540	-5.156	37.965	32.810	-13.190	46.000
532.460	-0.563	31.837	31.274	-14.726	46.000
625.580	-2.600	38.194	35.594	-10.406	46.000
749.740	2.510	39.032	41.542	-4.458	46.000
800.180	2.801	36.839	39.640	-6.360	46.000
963.140	7.604	27.479	35.083	-18.917	54.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: MOXA	IEEE 802.11 a/b/g	g/n PCI-e		
Test Item		Radiated Emissio	n Data		
Test Site	: No.3 OA				
Test Mode	: Mode 3	: Transmit - 802.1	la 6Mbps (5785MHz))	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
400.540	-2.276	38.843	36.567	-9.433	46.000
600.360	3.977	38.561	42.538	-3.462	46.000
625.580	1.770	40.530	42.300	-3.700	46.000
749.740	3.320	38.197	41.517	-4.483	46.000
800.180	5.141	35.810	40.951	-5.049	46.000
875.840	5.271	33.364	38.635	-7.365	46.000
Vertical					
375.320	-2.029	39.039	37.010	-8.990	46.000
542.160	-0.269	34.040	33.771	-12.229	46.000
625.580	-2.600	38.736	36.136	-9.864	46.000
749.740	2.510	39.146	41.656	-4.344	46.000
875.840	1.621	34.237	35.858	-10.142	46.000
963.140	7.604	28.952	36.556	-17.444	54.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site Test Mode	: General : : No.3 OA			(2.4G Band) (243	7 MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
355.920	-2.528	38.918	36.390	-9.610	46.000
400.540	-2.276	36.593	34.317	-11.683	46.000
600.360	3.977	31.306	35.283	-10.717	46.000
749.740	3.320	37.733	41.053	-4.947	46.000
875.840	5.271	36.101	41.372	-4.628	46.000
968.960	6.981	27.692	34.673	-19.327	54.000
Vertical					
375.320	-2.029	39.409	37.380	-8.620	46.000
625.580	-2.600	38.436	35.836	-10.164	46.000
749.740	2.510	39.616	42.126	-3.874	46.000
800.180	2.801	37.157	39.958	-6.042	46.000
875.840	1.621	32.493	34.114	-11.886	46.000
951.500	6.621	28.671	35.292	-10.708	46.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site Test Mode	: General : No.3 OA			.4G Band) (2437	MHz)
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
330.700	-4.492	42.846	38.354	-7.646	46.000
400.540	-2.276	37.269	34.993	-11.007	46.000
474.260	0.024	30.784	30.807	-15.193	46.000
600.360	3.977	34.274	38.251	-7.749	46.000
749.740	3.320	37.819	41.139	-4.861	46.000
875.840	5.271	35.104	40.375	-5.625	46.000
Vertical					
375.320	-2.029	40.798	38.769	-7.231	46.000
625.580	-2.600	38.235	35.635	-10.365	46.000
749.740	2.510	38.982	41.492	-4.508	46.000
800.180	2.801	36.721	39.522	-6.478	46.000
875.840	1.621	33.816	35.437	-10.563	46.000
967.020	8.071	28.864	36.935	-17.065	54.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

	Product Test Item Test Site Test Mode	: General : : No.3 OA			(5G Band) (5785	MHz)
	Frequency	Correct	Reading	Measurement	Margin	Limit
		Factor	Level	Level		
	MHz	dB	dBuV	dBuV/m	dB	dBuV/m
]	Horizontal					
	400.540	-2.276	38.981	36.705	-9.295	46.000
	474.260	0.024	33.195	33.218	-12.782	46.000
	625.580	1.770	40.359	42.129	-3.871	46.000
	749.740	3.320	38.075	41.395	-4.605	46.000
	800.180	5.141	35.630	40.771	-5.229	46.000
	875.840	5.271	32.591	37.862	-8.138	46.000
	Vertical					
	375.320	-2.029	39.219	37.190	-8.810	46.000
	625.580	-2.600	38.344	35.744	-10.256	46.000
	749.740	2.510	38.564	41.074	-4.926	46.000
	800.180	2.801	37.027	39.828	-6.172	46.000
	875.840	1.621	32.811	34.432	-11.568	46.000
	967.020	8.071	29.063	37.134	-16.866	54.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site Test Mode	 MOXA IEEE 802.11 a/b/g/n PCI-e General Radiated Emission Data No.3 OATS Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (5755MHz) 									
Frequency	Correct	Reading	Measurement	Margin	Limit					
	Factor	Level	Level							
MHz	dB	dBuV	dBuV/m	dB	dBuV/m					
Horizontal										
375.320	-1.209	37.784	36.575	-9.425	46.000					
600.360	3.977	34.768	38.745	-7.255	46.000					
625.580	1.770	40.302	42.072	-3.928	46.000					
749.740	3.320	36.282	39.602	-6.398	46.000					
800.180	5.141	35.156	40.297	-5.703	46.000					
875.840	5.271	30.945	36.216	-9.784	46.000					
Vertical										
375.320	-2.029	38.885	36.856	-9.144	46.000					
528.580	-0.462	30.362	29.900	-16.100	46.000					
625.580	-2.600	39.166	36.566	-9.434	46.000					
749.740	2.510	38.769	41.279	-4.721	46.000					
800.180	2.801	36.460	39.261	-6.739	46.000					
875.840	1.621	32.233	33.854	-12.146	46.000					

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

5. **RF** antenna conducted test

5.1. Test Equipment

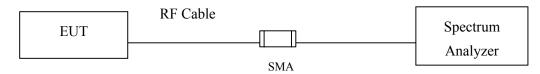
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Х	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2011
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2011
Х	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2011

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

2. The test instruments marked with "X" are used to measure the final test results.

5.2. Test Setup

RF antenna Conducted Measurement:



5.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.4. Test Procedure

The EUT was tested according to DTS test procedure of Mar. 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.

5.5. Uncertainty

The measurement uncertainty Conducted is defined as ± 1.27 dB

5.6. Test Result of RF antenna conducted test

Product	:	MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item	:	RF antenna conducted test
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit - 802.11b 1Mbps

Channel 01 (2412MHz) 30MHz-25GHz-Chain A

Frequency	^E 1 2 3 4 5 6 E MWWWWW	TRAC	ALIGNAUTO : Log-Pwr	Avg Type	ENSE:INT]			50 Ω	RL		
Auto Tur	TPNNNNN	DE				Atten: 30	PNO: Fast 🕞 Gain:Low	Input: RF				
Auto Tun		Mkr1 209.935 MHz طB/div Ref 20.00 dBm -58.61 dBm										
Center Fre										°g		
515.000000 MH							10			0.0		
Start Fre).00		
30.000000 MH	-13.73 dBm					0				0.0		
Stop Fre										0.0		
1.000000000 GF					-	<				0.0		
CF Ste 97.000000 MH										0.0		
Auto Ma										0.0		
Freq Offs	and to			i c				∳ ¹		0.0		
0 H	den se	in the de Holds and a short of								a fragman and		
										0.0		
	000 GHz		Sweep 90			1.0 MHz	-#2 (D)4		MHz 100 kHz	tart 30.0		

								Swept SA	trum Analyzer	
Frequency	^E 1 2 3 4 5 6 E M WWWW	TRAC	ALIGNAUTO : Log-Pwr	Avg Type] Trig: Free	NO: Fast 😱	put: RF P	50 Ω	X/ RL
Auto Tur	5 GHz 7 dBm	r1 2.413	Mk		dB	Atten: 30	Sain:Low	IF	Ref 20.00	10 dB/div
Center Fre 6.500000000 GH									•1	10.0
Start Fr 1.000000000 G	-13.73 dBm									10.0
Stop Fr 12.000000000 G										80.0
CF Sto 1.100000000 G <u>Auto</u> M										0.0
Freq Offs 0		والمنطقي			har an traditional band	(m _{ent} any Addu).			-	i0.0
	.000 GHz 0001 pts)	Stop 12 1.02 s (1	Sweep			1.0 MHz	#VBW			tart 1.00 Res BW
			STATUS							G

RL	50 Ω		A	.c ser	NSE:INT	Ανα Τια	ALIGNAUTO pe: Log-Pwr	04:15:18 PM Nov 02, 201	
	Inj	put: RF PI IFC	NO: Fast 😱 Gain:Low	Trig: Free Atten: 30			g	DET P N N N N	V.
0 dB/div	Ref 20.00 d	dBm					Mkr	1 23.854 7 GHz -47.16 dBm	
og									Center Fre
10.0			0						18.500000000 GH
0.00									Start Fre
0.0	_							-13.73 dBr	12.000000000 GI
20.0									Stop Fre
30.0				9		<	-		25.00000000 G
10.0	_								CF Ste
i0.0									1.300000000 G Auto M
-	and the second			id at the standard of the stan					Freq Offs
60.0 									01
/0.0									
tart 12.00 Res BW 1			#VBW	1.0 MHz			Sweep	Stop 25.000 GHz 1.20 s (10001 pts	
	1.png> saved		Konstration (1967)				STATUS		

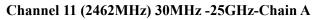


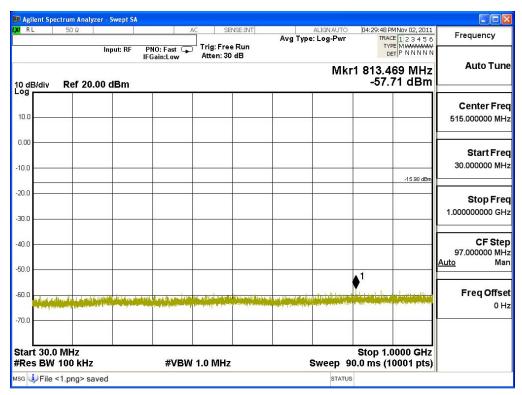
RL	50 Ω	Input: RF P	NO: Fast	Trig: Free		Avg Type	ALIGN AUTO	TRA T	PMNov 02, 2011 ACE 1 2 3 4 5 6 YPE MWWWWW	Frequency
) dB/div	Ref 20.0		Gain:Low	Atten: 30	dB		Mk	r1 960.8	B12 MHz 38 dBm	Auto Tun
										Center Fre 515.000000 MH
00									-12.98 dBm	Start Fre 30.000000 Mi
.0										Stop Fre 1.000000000 Gł
.0										CF Ste 97.000000 Mi Auto Mi
.0 <mark>antarilation</mark>		lagenti i pilg ^a lan ya kuyaci Mala i pila anali sa analiya	a a d _{ina} in a sina ana ana ana ana ana ana ana ana ana	l ingener griften in ter		la en serre print a freguera. An felore print a freguera		and a publication		Freq Offs 0 F
art 30.0) MHz 100 kHz		#\/B\A/	1.0 MHz			Sween		.0000 GHz 10001 pts)	

Channel 06 (2437MHz) 30MHz -25GHz-Chain A

RL 50 Ω		AC SENSE:INT	ALIGN AUTO	04:20:56 PM Nov 02, 2011	Frequency
In	put: RF PNO: Fast 🕞 IFGain:Low	Trig: Free Run Atten: 30 dB	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6 TYPE MWWWW DET P N N N N N	
0 dB/div Ref 20.00 d	dBm		Mk	r1 2.435 5 GHz 7.02 dBm	Auto Tur
					Center Fre
0.0					6.50000000 GH
0.00					Start Fre
0.0				-12.98 dBm	1.00000000 GI
0.0					Stop Fro
0.0					12.000000000 G
0.0					CF Ste
0.0					1.100000000 Gi <u>Auto</u> M
0.0	have the manual damage	and the second second second second	III and a star and a star		Freq Offs
	The second s	and the second se			0
0.0					
tart 1.000 GHz Res BW 100 kHz	#VBW	(1.0 MHz	Sweep	Stop 12.000 GHz 1.02 s (10001 pts)	

Agilent Spectrum Analyzer - Swe					2 / 22 / 22 / 21 / 22 / 23 / 2	
α RL 50Ω Input:		SENSE:INT Trig: Free Run Atten: 30 dB	Avg Type: I	.ign auto .og-Pwr	04:22:09 PMNov 02, 2011 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	Frequency
	il odinicow	Atten: 30 dB		Mkr1	1 21.335 3 GHz -47.29 dBm	Auto Tun
10.0 dB/div Ref 20.00 dB/	n					Center Fre 18.50000000 GH
10.0					-12.98 dBm	Start Fre 12.00000000 Gi
80.0						Stop Fr 25.000000000 G
				1		CF Ste 1.30000000 G <u>Auto</u> M
						Freq Offs
70.0 tart 12.000 GHz Res BW 100 kHz	#VBW 1	.0 MHz		Sweep	Stop 25.000 GHz 1.20 s (10001 pts)	
sg 🗼 File <1.png> saved	40.000 (2000) - 100	and a state of the particular particula		STATUS		







DAgilent Spectrum Ana	lyzer - Swept SA								
<mark>(X)</mark> RL 50 Ω		A]	VSE:INT	Avg Type	ALIGNAUTO : Log-Pwr	TRAC	MNov 02, 2011 E 1 2 3 4 5 6	Frequency
10 dB/div Ref 2	Input: RF PN IFG 0.00 dBm	l0: Fast ⊂⊋⊃ ain:Low	Trig: Free Atten: 30			Mk	r1 2.460	B GHz 0 8 GHz	Auto Tune
) ¹								Center Freq 6.50000000 GHz
-10.0								-15.90 dBm	Start Fred 1.000000000 GHz
-20.0									Stop Fred 12.000000000 GHz
-40.0									CF Step 1.100000000 GH: <u>Auto</u> Mar
-60.0		neralizatea de la tardecia.	dada bashiri di ka						Freq Offse 0 Ha
-70.0 Start 1.000 GHz #Res BW 100 kH	7	#\/B\M	1.0 MHz			Sween	Stop 12	.000 GHz 0001 pts)	
MSG	2	#VDVV	1.0 19162			STATUS		ooor pisj	

Frequency	04:30:25 PM Nov 02, 2011 TRACE 1 2 3 4 5 6	ALIGNAUTO	Avg	SENSE:INT		4		50 Q	RL
Auto Tu	DET P N N N N			ree Run 30 dB	Atten: 3	NO: Fast 🖵 Gain:Low	Input: RF P IF		
Auto Tu	l 23.878 1 GHz -47.98 dBm	Mkr1	- 2		ç.	-23	dBm	Ref 20.00) dB/div
Center Fr									^{′°}
18.50000000 G									0.0
Start Fr		-							00
12.000000000 G	-15.90 dBm								0.0
	-15.90 dBm		-						0.0
Stop Fr 25.00000000 G		_			0				1.0
CF St									1.0
1.300000000 G Auto N	♦ ¹								
				Million Manager		المحصوما المرادا		a Juniar	0.0
Freq Offs 0				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N N		il a statistica de la companya de la).0
									0.0
	Stop 25.000 GHz 1.20 s (10001 pts)				1.0 MH	#VDW		00 GHz 100 kHz	

Product	:	MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit - 802.11g 6Mbps

Channel 01 (2412MHz) 30MHz -25GHz-Chain A

Frequency	MNov 02, 2011 CE 1 2 3 4 5 6 PE MWWWWW ET P N N N N N	TRAC	ALIGNAUTO E: Log-Pwr	Avg Typ]	PNO: Fast 🕞	Input: RF	50 Ω	RL
Auto Tu	48 MHz 38 dBm		Mkr		 Atten. 30	FGain:Low	38 381 - 1200 GW	Ref 20.0	0 dB/div
Center Fr 515.000000 M							-		og 10.0
Start Fr 30.000000 M									0.00
Stop Fr 1.000000000 G	-16.36 dBm								0.0
CF St 97.000000 M Auto M									0.0
Freq Offs 0	↓ ¹	i den sant yekeen sa	a visione jasty vian viena in	aliyan sa yana mada ya ya	aren ar ar an da ar	nan (hing) jack na shina ka san ka s		Personal Processing	
									'0.0
	0000 GHz 0001 pts)		Sweep 9		1.0 MHz	#VBM		MHZ 100 kHz	tart 30.0 Res BW



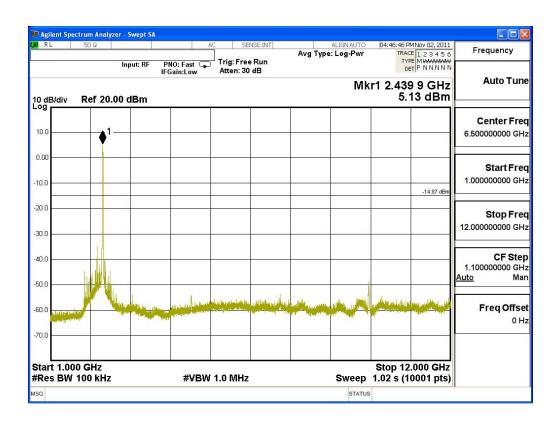
	rum Analyzer - Swe	pt SA							
LXI RL	50 Ω	/ A	7	NSE:INT	Avg Type	ALIGNAUTO e: Log-Pwr	TRAC	4Nov 02, 2011 E 1 2 3 4 5 6	Frequency
	Input:	RF PNO: Fast IFGain:Low	Trig: Free Atten: 30			Mk	r1 2.41€		Auto Tune
10 dB/div l Log	Ref 20.00 dB	m					3.0	63 dBm	
10.0	1								Center Freq 6.50000000 GHz
0.00									Start Fred 1.00000000 GHz
				·				-16.36 dBm	
-20.0									Stop Freq 12.000000000 GHz
-40.0									CF Step 1.100000000 GHz <u>Auto</u> Mar
-60.0			palada, kadiridiya Na			MAN		in to a print of the second	Freq Offse
-70.0		and the second se							0 Hz
Start 1.000 #Res BW 1		#VBW	1.0 MHz			Sweep	Stop 12 1.02 s (1	.000 GHz 0001 pts)	
MSG						STATUS			

	000 GHz 100 kHz		#VBW	1.0 MHz			Sweep	Stop 25.00 1.20 s (1000		
0.0									I	
0.0		and a sub-								Freq Offs 01
0.0		Indea and the second		ille palitications	In the second					
0.0									♦ ¹	1.300000000 G Auto M
										CF St
0.0										Stop Fr 25.00000000 G
0.0				, 					16.36 dBm	04-5-5
0.0				·						12.00000000 G
.00										Start Fr
0.0										18.500000000 G
										Center Fr
) dB/div	Ref 20.0	0 dBm		Se			Mkr	1 24.698 4 -47.83		Auto Tu
			PNO: Fast 🖵 Gain:Low	Trig: Free Atten: 30					NNNN N	Auto Tu
]	NSE:INT	Avg 1	ALIGNAUTO ype: Log-Pwr	04:40:42 PM Nov TRACE 1	23456	Frequency



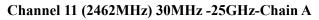
AC SENSE:INT ALIGN AUTO 04:47:22 PM Nov 02, 2011 Avg Type: Log-Pwr TRACE 1 2 3 4 5 6 Freque	ency
Fast Trig: Free Run Low Atten: 30 dB	
Mkr1 503.651 MHz -58.40 dBm	to Tun
Cent	ter Fre
515.000	000 M⊢
Sta	art Fre
30.000	0000 MH
St	op Fre
1.000000	
	CF Ste
97.000 Auto	0000 MH Ma
•1 Free	q Offs
	01
#VBW 1.0 MHz Sweep 90.0 ms (10001 pts)	

Channel 06 (2437MHz) 30MHz -25GHz-Chain A





Agilent Spectr		Swept SA			15			100		
XU RL	50 Ω		Δ	SEM Trig: Free		Avg Type	ALIGNAUTO : Log-Pwr	TRACE	Nov 02, 2011 1 2 3 4 5 6 MWWWWW	Frequency
	n Ref 20.00 (. IFC	NO: Fast 😱 Gain:Low	Atten: 30			Mkr	DET 1 24.642	PNNNNN	Auto Tune
10.0										Center Fred 18.50000000 GH:
-10.0									-14.87 dBm	Start Free 12.000000000 GH
-20.0										Stop Fre 25.000000000 GH
-40.0							a the	in the second	1	CF Ste 1.300000000 GH <u>Auto</u> Ma
-60.0	and the second second									Freq Offse 0 H
-70.0) GHz							Stop 25.	000 GHz	
#Res BW 10	00 kHz		#VBW	1.0 MHz				1.20 s (10	001 pts)	
ısg 🧼 File <1.	png> saved						STATUS			



Frequency	04:55:54 PM Nov 02, 2011 TRACE 1 2 3 4 5 6	e: Log-Pwr	Avg T	SENSE:INT				50 Ω	RL
Auto Tu		6.01.000			Atten: 3	PNO: Fast G IFGain:Low	Input: RF		
	1 926.474 MHz -58.40 dBm	WIKE		20	<i></i>	-23	00 dBm	Ref 20.0	0 dB/div
Center Fr									
515.000000 M						12			10.0
Start Fr									.00
30.000000 M									0.0
Otan Er	-21.01 dBm								0.0
Stop Fr 1.000000000 G									0.0
CF St									0.0
97.000000 M Auto M									3.0
	♦ ¹			2.0					5250
Freq Offs 0	an a	P of Brown of the	an artine states	na lanananina na lanannanina		an a			
									0.0
	Stop 1.0000 GHz).0 ms (10001 pts)	Sween 00			W 1.0 MH	#\/B)		0 MHz 100 kHz	tart 30.



	ctrum Analyzer - Sv	vept SA					<u>.</u>		
LXI RL	50 Ω		1	VSE:INT		ALIGNAUTO : Log-Pwr	TRAC	MNov 02, 2011 E 1 2 3 4 5 6	Frequency
	Inpu	ut: RF PNO: Fast 🖵 IFGain:Low	Trig: Free Atten: 30			Mk	r1 2.45		Auto Tune
10 dB/div Log	Ref 20.00 dl	Bm					-1.	01 dBm	
10.0									Center Freq 6.500000000 GHz
0.00 -10.0	¶1								Start Freq 1.00000000 GHz
-20.0								-21.01 dBm	Stop Freq 12.000000000 GHz
-40.0									CF Step 1.100000000 GHz <u>Auto</u> Mar
-50.0		the states where the state	n A Lister of Party	and the second s		*			Freq Offset 0 Hz
-70.0									
Start 1.00 #Res BW		#VBW	1.0 MHz			Sweep		.000 GHz 0001 pts)	
MSG						STATUS			

RL 50 Ω		C SENSE:INT	Avg Ty	ALIGNAUTO	04:56:30 PM Nov 02, 2011 TRACE 1 2 3 4 5 6	Frequency
Inpu	t: RF PNO: Fast 🖵 IFGain:Low	Trig: Free Run Atten: 30 dB			DET P N N N N	Auto Tur
dB/div Ref 20.00 dE	3m	e		Mkr	l 23.867 7 GHz -47.81 dBm	
79						Center Fre
0.0						18.500000000 G
00						Start Fr
0.0				-		12.00000000 G
0.0					21.01 dBm	Stop Er
0.0						Stop Fr 25.00000000 G
0.0						CF St
					♦ ¹	1.300000000 G Auto N
	Witten and and in the start of the		المرابطة المراجع			
0.0						Freq Offs 0
0.0						
tart 12.000 GHz Res BW 100 kHz	#VBW	1.0 MHz		Sweep	Stop 25.000 GHz 1.20 s (10001 pts)	

Product	:	MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit - 802.11a 6Mbps

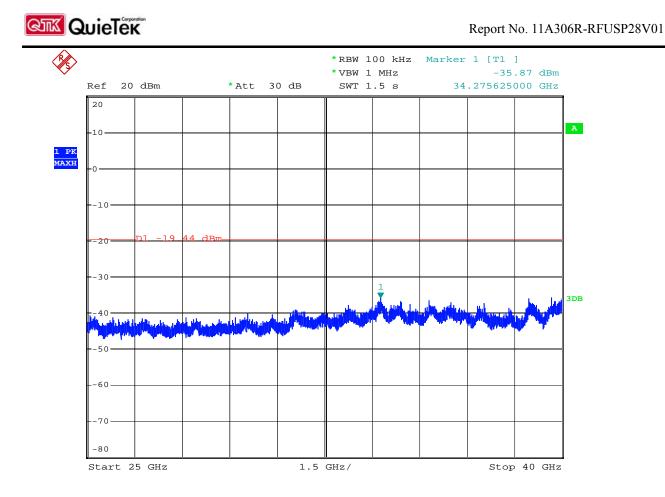
Channel 149 (5745MHz) 30MHz -40GHz-Chain A

🛙 Agilent Spectrum Analyzer - Swep	t SA				
XIRL 50Ω	AC	SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr	09:48:11 AMNov 03, 2011 TRACE 1 2 3 4 5 6	Frequency
Center Freq 515.00000 Input: F	E PNO: Fast	rig: Free Run Atten: 30 dB	Avg Type. Log-t wi	TYPE MWWWWW DET P N N N N N	
10 dB/div Ref 20.00 dBn	ı		Mk	r1 735.287 MHz -55.14 dBm	Auto Tune
					Center Free
10.0					515.000000 MH
0.00					Start Fre
10.0				· · · · ·	30.000000 MH
20.0				-19.44 dBm	Stop Fre
30.0					1.000000000 GH
40.0					CF Ste
50.0			_ 1		97.000000 MH <u>Auto</u> Ma
60.0		and a summer of the second second	also estimated and a second second be	and the second second second second	Freq Offse
and a provide second	office and shall the distance of	No. (11 million of the state o		and the state of the	01
-70.0					
L Start 30.0 MHz #Res BW 100 kHz	#VBW 1.	0 MHz	Sweep 9	Stop 1.0000 GHz 00.0 ms (10001 pts)	
ISG JFile <1.png> saved			STATU		



	ectrum Analyzer -	Swept SA		ne.						
XI RL Center F	^{50 Ω} Freq 6.5000		Hz	7	NSE:INT	Avg Typ	ALIGNAUTO e: Log-Pwr	TRAC	MNov 03, 2011 E 1 2 3 4 5 6	Frequency
10 dB/div	Ref 20.00 (. IFO	NO: Fast 😱 Gain:Low	☐ Trig: Free Atten: 30			Mk	r1 5.749	8 GHz 56 dBm	Auto Tune
10.0				15					7	Center Free 6.500000000 GH
0.00			1	♦ ¹						Start Free
-10.0										1.000000000 GH
20.0			<u>,</u>						-19.44 dBm	Stop Fre 12.000000000 GH
30.0 ———										
50.0			. N							CF Ste 1.100000000 G⊢ <u>Auto</u> Ma
60.0			N	ł	an ta ann			d all search provide		FreqOffse
70.0										0 H
Start 1.0 #Res BW	00 GHz / 100 kHz		#VBW	1.0 MHz			Sweep	Stop 12 1.02 s (1	.000 GHz 0001 pts)	
ISG							STATUS			

RL 50 Ω	Swept SA AC	SENSE:INT	ALIGNAUTO g Type: Log-Pwr	09:48:47 AM Nov 03, 2011 TRACE 1 2 3 4 5 6	Frequency
	nut: BE PNO: Fast	Trig: Free Run Atten: 30 dB	3	DET P N N N N	
dB/div Ref 20.00 c	1Bm		Mkr	1 23.830 0 GHz -47.69 dBm	Auto Tu
a 🗌 🗌					Center Fr
.0					18.500000000 G
00					Start Fr
.0					12.000000000 G
0				-19.44 dBm	Stop Fr
.0					25.00000000 G
.0					CF St
.0			بالعرب اللغ		1.300000000 G <u>Auto</u> N
Alashi ya matali ya m	and the second				Erog Off
0					Freq Off 0
0					
art 12.000 GHz es BW 100 kHz	#VBW 1	.0 MHz	Sweep	Stop 25.000 GHz 1.20 s (10001 pts)	



Date: 30.NOV.2011 08:29:10

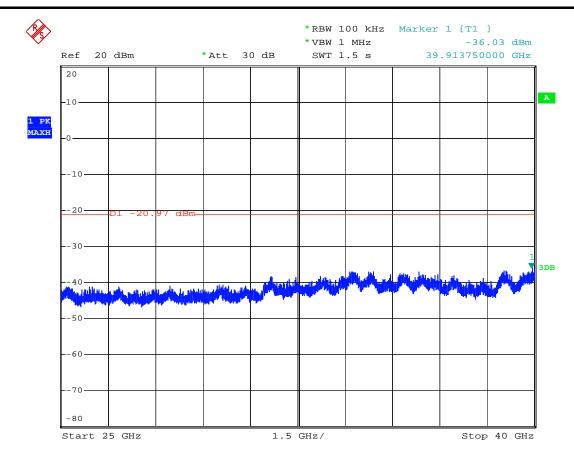
AC	SENSE:INT	ALIGN AUTO	09:55:31 AM Nov 03, 2	
PNO: East Trig: F	ree Run	\vg Type: Log-Pwr	TRACE 1 2 3 4 TYPE MWWW DET P N N N	
		MI	kr1 659.53 MH -55.83 dB	
				Center Fr
				515.000000 M
				Start Fr
				30.000000 M
			-20.97	Stop Fr
				1.00000000 G
				CF St
		_1		97.000000 M <u>Auto</u> N
	Jonan Marina da	He Nofishallow warrawal days	monther and spensor and	Freq Offs
and of the off of the second o			1.1.4	0
#VBW 1.0 MI	iz	Sweep	Stop 1.0000 Gi 89.5 ms (1001 pi	
	MHZ PNO: Fast IFGain:Low Atten: Atten:	Impose Impose <td>MHz Avg Type: Log-Pwr PN0: Fast Trig: Free Run IFGain:Low Atten: 30 dB MI Image: State of the stat</td> <td>MHz Trig: Free Run Avg Type: Log-Pwr Trace [1:2:4 PN0: Fast Trig: Free Run Mkr1 659.53 Ml IFGain: Low Mkr1 659.53 Ml -55.83 dB -55.83 dB -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.000</td>	MHz Avg Type: Log-Pwr PN0: Fast Trig: Free Run IFGain:Low Atten: 30 dB MI Image: State of the stat	MHz Trig: Free Run Avg Type: Log-Pwr Trace [1:2:4 PN0: Fast Trig: Free Run Mkr1 659.53 Ml IFGain: Low Mkr1 659.53 Ml -55.83 dB -55.83 dB -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.007 -0.000

Channel 157 (5785MHz) 30MHz -40GHz-Chain A



💴 Agilent Spect		wept SA								
Center Fre	^{50 ຊ} cq 6.50000			1	NSE:INT	Avg Typ	ALIGN AUTO e: Log-Pwr	TRAC	MNov 03, 2011 E 1 2 3 4 5 6 E MWWWWW	Frequency
10 dB/div	Inp Ref 20.00 d	IFG	IO: Fast 🍙 ain:Low	Trig: Free Atten: 30			Μ	⊳ 1kr1 5.7	85 GHz 97 dBm	Auto Tune
10.0				1						Center Freq 6.50000000 GHz
-10.0										Start Freq 1.000000000 GHz
-20.0									-20.97.dBm	Stop Fred 12.000000000 GHz
-40.0			A Mart							CF Step 1.100000000 GHz <u>Auto</u> Mar
-60.0 Marchuser and Refer	photoge applied of the	mulun	~~	"Welving	harman	m.M. WY weilway	han and the	photosimusium	he but have the	Freq Offse 0 Ha
-70.0										
Start 1.000 #Res BW 1			#VBW	1.0 MHz	1	1	Sweep		.000 GHz 1001 pts)	
MSG							STATUS			

RL 50 Ω	AC SENSE:INT	ALIGN AUTO	09:56:07 AM Nov 03, 2011	Frequency
enter Freq 18.50000		Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	
dB/div Ref 20.00 dB	m	Mł	r1 23.180 GHz -47.84 dBm	Auto Tu
g				Center Fr
1.0				18.500000000 G
00				Start Fr
.0				12.000000000 G
.0			-20.97 dBm	Stop Fr
.0				25.000000000 G
.0			-	CF St
.0		white and the of the second stronger	A A AND A A A A A A A A A A A A A A A A	1.300000000 G <u>Auto</u> M
O mapping the phone was	or work of the second of the second of the second on the second of the second of the second of the second of the	for the for the second	1 miles	Freq Offs
				0
.0				
art 12.000 GHz les BW 100 kHz	#VBW 1.0 MHz	Sweep	Stop 25.000 GHz 1.20 s (1001 pts)	



Date: 30.NOV.2011 08:26:21

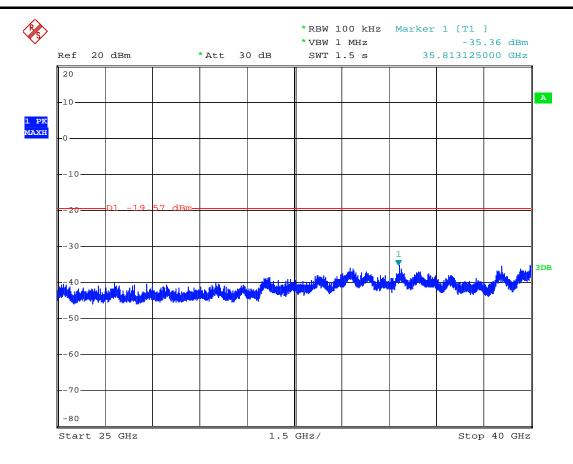
Frequency	10:03:57 AMNov 03, 2011 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	ALIGNAUTO Type: Log-Pwr] Trig: Free F	Z IO: Fast 😱	100000 MH	50 Ω Freq 515.0	enter F
Auto Tu	1 728.206 MHz -56.13 dBm	Mkr	 Atten: 30 d	ain:Low	IFO	Ref 20.0) dB/div
Center Fr 515.000000 M							
Start Fr 30.000000 M							0.00
Stop Fr 1.000000000 G	-19.57 dBm						0.0
CF St 97.000000 M <u>Auto</u> M							0.0
Freq Offs 0				layong ay tek gana ^{ka} lana Ng masa dag dista dalam	aley and so are supply a		0.0
	Stop 1.0000 GHz						tart 30.0
	0.0 ms (10001 pts)	Sweep 90	1.0 MHz	#VBW		100 kHz	

Channel 165 (5825MHz) 30MHz -40GHz-Chain A



	ectrum Analyzer - :	Swept SA								
Center F	50 Ω req 6.5000	00000 G			NSE:INT	Avg Type	ALIGNAUTO : Log-Pwr	TRAC	MNov 03, 2011	Frequency
	in In	put: RF PI	NO: Fast 😱 Gain:Low	Trig: Free Atten: 30				D		Auto Tune
10 dB/div	Ref 20.00 (dBm	03 O	e		<i>6</i> .	IVIK		9 1 GHz 43 dBm	
										Center Freq
10.0				▲1						6.500000000 GHz
0.00										Start Freq
-10.0			2			·				1.000000000 GHz
-20.0		5	8						-19.57 dBm	Stop Freq
-30.0										12.000000000 GHz
-40.0										CF Step
			. Aug							1.100000000 GHz <u>Auto</u> Man
-50.0	والم المالي والم		N	NY WALL	a, la deba du na amilantes	a pittele a particula	in here	-	المحدولة المتحالين وروادا	-
-60.0 adjorations	And a second second second				an a					Freq Offset 0 Hz
-70.0										
Start 1.00									.000 GHz	
#Res BW	100 kHz		#VBW	1.0 MHz			-		0001 pts)	
MSG							STATUS	5		

RL 50 Ω enter Freq 18	NO: East 🕟 Trig	Free Run	ALIGNAUTO	10:04:33 AM Nov 03, 2011 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	Frequency
)dB/div Ref 2	Gain:Low Atte	n: 30 dB	Mkr	1 21.241 7 GHz -47.70 dBm	Auto Tun
					Center Fre 18.50000000 GH
0.0					Start Fre 12.000000000 Gi
D.0				-19.57 dBm	Stop Fr 25.000000000 G
0.0			↓ 1		CF Ste 1.300000000 G <u>Auto</u> M
					Freq Offs 0
0.0 tart 12.000 GH: Res BW 100 kH	#VBW 1.0 P	ЛНz	Sweep	Stop 25.000 GHz 1.20 s (10001 pts)	



Date: 30.NOV.2011 08:27:48

Product	:	MOXA IEEE 802.11 a/b/g/n PCI-e
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	No.3 OATS
Test Mode	:	Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)

Channel 01 (2412MHz) 30MHz -25GHz-Chain A

	IFGain:Lov	Atten: 30	dB				······	
-og	Input: RF PNO: Fast IFGain:Low Trig: Free Run Atten: 30 dB Iffee Run Der P NNNN 0 dB/div Ref 20.00 dBm -58.31 dBm							
10.0								Center Fre 5.000000 MH
10.0							3	Start Fre 0.000000 MH
30.0						2	1.00	Stop Fre
10.0							9 [.] Auto	CF Ste 7.000000 Mi Mi
50.0 Hand has all her than shorth he	er frei Innier waaren en bere Kangeberen k	an film for the film of the fi	a talah generati ya kata ya kat Wana wakata kata kata kata kata kata kata k	a an an tao an	an alaysis maintain and	יישראל איז	nit des de la com	Freq Offs 0 H
70.0						Stop 1.0000		