

L		50 Ω					AC	SENSE:	INT		ALI	GNAUTO	11:47:20	AM Jun 20, 2012	
nter	Fre	eq t	5.580	00000 nput: RF	O GH	Z D: Fast (ig: Free Ru	n	#Avg	Type: L	og-Pwr	TR/ T	YPE MMWWWW DET P SNNN	Frequency
		D -6			IFGa	in:Low	***	illeni. oo ul				Mkr2	5.579	825 GHz	Auto Tu
Bidiv	/	Ref	20.00	aBm	-			1		101		-			
		-	-	Autobal Dra	A halled a	MR. Date Away	Line Arthur	2-	with a null	- Annow	ANTHIN AND	halles	-	-	Center F
-		-	what where	to in diland as		at of the life			and firsts the	and and he he	NI	a bereit der den	M. M.		5.580000000
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MW	NO T	ndan .												TT WINHWARD	
4														at.	Start F
															5.567500000
				-						-					
-		-													
-		_		-							_			-	Stop F
		_		2								_			5.592500000
_															
nter	5.5	8000	GHz										Span	25.00 MHz	CES
SB	W 1	.0 14	HZ			#VB	W 1.0	WHZ			#S	weep	500 ms	(1001 pts)	2.500000
MODE	TRC	SCL		×				Y	FUN	ICTION	FUNCTI	ON WIDTH	FUNCT	ION VALUE	Auto
N	1	f		5.58	2 825	GHz	-	<u>9.33 dBm</u>				_			
IN	2	-		0.07	3 020	GHZ									Eron Of
_															Frequi
-					_						-				
_						-									
-															
_					_						<u> </u>				

Channel 116:

Channel 140:

RL		RF 50 Ω	AC AC		SEI	VSE:INT		ALIGN AUTO	04:48:30 F	M May 22, 2012	
enter	Frec	5.7000	00000 G	Hz NO: Fast 🕞 Gain:Low	Trig: Free Atten: 30	Run dB	#Avg Ty	/pe: Log-Pwr	TRA TY D	CE 123456 PE MM WWWW ET P SNNNN	Frequency
dB/div	R	ef 20.00	dBm					Mkr2	5.693 7 3.	750 GHz 50 dBm	Auto Tun
	a la him	Marina	2 Mundeu Proffy	เป็นของสามาร์	Paulo and Alignada	and the second second	21 เกษาตรงรับสร้าง	when with here with the second	Mary Mary Carl	Wether Land	Center Fre 5.700000000 GH
0.0 444/1 0.0										1 and Market	Start Fr 5.687500000 GI
0.0 0.0 0.0											Stop Fr 5.712500000 G
enter Res Bl	5.700 N 1.0	000 GHz MHz		#VBV	/ 1.0 MHz		NETION	#Sweep	Span 2 500 ms (25.00 MHz (1001 pts)	CF St 2.500000 M
1 N 2 N	1 1	F	5.702 67 5.693 75	5 GHz 0 GHz	10.97 dl 3.50 dl	3m 3m		FORCHOR WIDTH	Tonen	ON VALUE	<u>Auto</u> W
3 4 5 6											Freq Offs 0
/ 3 9 0 1											
2											

:	MOXA IEEE802.11 a/b/g mini PCI module
:	Peak Excursion
:	No.3 OATS
:	Mode 2: Transmitter Turbo Mode (5GHz Band)
	: : :

Channal No.	Frequency	Measurement Level	Required Limit	Result	
Channel No.	(MHz)	(dB)	(dB)		
42	5210	9.160	<13	Pass	
58	5290	8.320	<13	Pass	

Channel 42:

							- Swept SA	alyzer	ctrum	nt Spe	Agile
Frequency	02:31:50 PM May 29, 2012 TRACE 1 2 3 4 5 6 TYPE MMWWWW	LIGNAUTO	#Avg Ty	g: Free Run) GHz	50 Ω AC	RF 5.21	Fre	nter	Cer
Auto Tun	DET ^{P SNNNN} 5.210 25 GHz -4.42 dBm	Mkr2		ten: 30 dB	ц.	IFGain:Low	00 dBm	ef 20.	F	B/div	10 d
Center Fre 5.210000000 GH	The second second	And the grad with the	1 Aleuna de J	April 2 - and a second	a truly and	and the second s	Antonion				10.0 0.00
Start Fre 5.185000000 GH	Andryway and a start				-			Adra"	HUMP	ANN M	-20.0 -30.0 -40.0
Stop Fre 5.235000000 GH											-50.0 -60.0 -70.0
CF Ste 5.000000 MH <u>Auto</u> Ma	Span 50.00 MHz 00 ms (1001 pts) FUNCTION VALUE	#Sweep 5	ICTION F	MHz	3W 3	#VE	lz ×	00 GH MHz	5.21 N 1.	nter : s B1 MODE	Cer #Re
Freq Offse 0 H				4.74 dBm 4.42 dBm		15 60 GHz 10 25 GHz	5.	7	1 2	NN	1 2 3 4 5 6
											7 8 9 10 11
		STATUS									MSG



Agilent Spectrum	ı Analyzer - Sw	rept SA								
LXI RL	RF 50 ດ	2 AC		SENS	E:INT		ALIGNAUTO	02:38:05 F	M May 29, 2012	Frequency
Center Fre	q 5.2900	100000 GI Pi IFG	HZ 10: Fast 🕞 Gain:Low	Trig: Free I Atten: 30 d	Run IB	#Avg Typ	e: Log-Pwr	TY D	→= 1 2 3 4 5 6 PE MM W///////////////////////////////////	
10 dB/div	Ref 20.00	dBm					Mkr	2 5.290 4.	30 GHz 09 dBm	Auto Tune
10.0 0.00 -10.0	Wind what when	a sure that a program	and a manufacture of the second s	an property like a la	2 employed	V1 		the stand	Charlen Marken	Center Freq 5.290000000 GHz
-20.0 -30.0 -40.0										Start Freq 5.265000000 GHz
-50.0										Stop Freq 5.315000000 GHz
Center 5.29 #Res BW 1.	000 GHz 0 MHz		#VBN	/ 3.0 MHz			#Sweep	Span 5 500 ms (0.00 MHz 1001 pts)	CF Step 5.000000 MHz
MKR MODE TRC 1 N 1 2 N 2	f f	× 5.295 0 5 290 3	5 GHz	12.41 dB	FU m	NCTION FL	INCTION WIDTH	FUNCTI	ON VALUE	<u>Auto</u> Man
3 4 5 6 7 8 9 10 11 10		0.230 0		4.03 05						Freq Offset 0 Hz
MSG							STATUS			

Channel 58:

6. Radiated Emission

6.1. Test Equipment

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

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 3	Х	Loop Antenna	Teseq	HLA6120 / 26739	Jul., 2011
	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
	X Pre-Amplifier X Pre-Amplifier		QTK	QTK-AMP-03 / 0003	May, 2012
			QTK	AP-180C / CHM_0906076	Sep., 2011
	Х	Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar, 2012
	Х	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2012
	Х	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2011
	Х	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2012
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	Χ	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.

6.2. Test Setup

Radiated Emission Below 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



6.3. 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)

6.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to FCC KDB-789033 test procedure for compliance to FCC 47CFR 15. 407 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 from 1 meter to 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 C63.4:2003 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 9kHz - 10th Harmonic of fundamental was investigated.

6.5. Uncertainty

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

6.6. Test Result of Radiated Emission

Product	: MOXA	: MOXA IEEE802.11 a/b/g mini PCI module								
Test Item	: Harmon	ic Radiated Emiss	sion Data							
Test Site	: No.3 OA	ATS								
Test Mode	: Mode 1	: Transmitter (802	.11a-6Mbps) (5180M	(Hz)						
Frequency	Correct	Reading	Measurement	Margin	Limit					
	Factor	Level	Level							
MHz	dB	dBuV	dBuV/m	dB	dBuV/m					
Horizontal										
Peak Detector:										
10360.000	8.932	38.490	47.422	-21.178	68.600					
15540.000					68.600					
20720.000					68.600					
25900.000					68.600					
31080.000					68.600					
36260.000					68.600					

- 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	: MOXA IEEE802.11 a/b/g mini PCI module								
Test Item	: Harmon	ic Radiated Emiss	sion Data							
Test Site	: No.3 OA	ATS								
Test Mode	: Mode 1:	Transmitter (802	.11a-6Mbps) (5180M	Hz)						
Frequency	Correct	Reading	Measurement	Margin	Limit					
	Factor	Level	Level							
MHz	dB	dBuV	dBuV/m	dB	dBuV/m					
Vertical										
Pools Dotootor										
I tak Delector.										
10360.000	10.436	38.960	49.395	-19.205	68.600					
10360.000 15540.000	10.436	38.960	49.395 	-19.205	68.600 68.600					
10360.000 15540.000 20720.000	10.436 	38.960 	49.395 	-19.205 	68.600 68.600 68.600					
10360.000 15540.000 20720.000 25900.000	10.436 	38.960 	49.395 	-19.205 	68.600 68.600 68.600 68.600					
10360.000 15540.000 20720.000 25900.000 31080.000	10.436 	38.960 	49.395 	-19.205 	68.600 68.600 68.600 68.600 68.600					

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- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
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- 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	: MOXA IEEE802.11 a/b/g mini PCI module								
Test Item	: Harmon	ic Radiated Emiss	sion Data							
Test Site	: No.3 OA	ATS								
Test Mode	: Mode 1:	Transmitter (802	.11a-6Mbps) (5220M	Hz)						
Frequency	Correct	Reading	Measurement	Margin	Limit					
	Factor	Level	Level							
MHz	dB	dBuV	dBuV/m	dB	dBuV/m					
Horizontal										
Peak Detector:										
10440.000	7.725	38.380	46.105	-22.495	68.600					
15600.000					68.600					
20800.000					68.600					
26000.000					68.600					
31200.000					68.600					
36400.000					68.600					

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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.
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- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: MOXA IEEE802.11 a/b/g mini PCI module								
Test Item	: Harmon	ic Radiated Emiss	sion Data						
Test Site	: No.3 OA	ATS							
Test Mode	: Mode 1:	Transmitter (802	.11a-6Mbps) (5220M	Hz)					
Frequency	Correct	Reading	Measurement	Margin	Limit				
	Factor	Level	Level						
MHz	dB	dBuV	dBuV/m	dB	dBuV/m				
Vertical									
Peak Detector:									
10440.000	9.505	38.480	47.985	-20.615	68.600				
15600.000					68.600				
20800.000					68.600				
26000.000					68.600				
31200.000					68.600				
36400.000					68.600				

- 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.

Floduct	: MOXA IEEE802.11 a/b/g mini PCI module						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	lode : Mode 1: Transmitter (802.11a-6Mbps) (5240MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Horizontal Peak Detector:							
Horizontal Peak Detector: 10480.000	8.464	38.400	46.863	-21.737	68.600		
Horizontal Peak Detector: 10480.000 15720.000	8.464 	38.400	46.863	-21.737	68.600 68.600		
Horizontal Peak Detector: 10480.000 15720.000 20960.000	8.464 	38.400 	46.863 	-21.737 	68.600 68.600 68.600		
Horizontal Peak Detector: 10480.000 15720.000 20960.000 26200.000	8.464 	38.400 	46.863 	-21.737 	68.600 68.600 68.600 68.600		
Horizontal Peak Detector: 10480.000 15720.000 20960.000 26200.000 31440000	8.464 	38.400 	46.863 	-21.737 	68.600 68.600 68.600 68.600 68.600		

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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 IEEE802.11 a/b/g mini PCI module						
Test Item	: Harmonic Radiated Emission Data						
Test Site	Test Site : No.3 OATS						
Test Mode	: Mode 1:	Transmitter (802	.11a-6Mbps) (5240M	(Hz)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Vertical							
Peak Detector:							
10480.000	10.399	38.460	48.859	-19.741	68.600		
15720.000					68.600		
20960.000					68.600		
26200.000					68.600		
31440000					68.600		
36680.000					68.600		

- 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 IEEE802.11 a/b/g mini PCI module						
Test Item	: Harmonic Radiated Emission Data						
Test Site	Test Site : No.3 OATS						
Test Mode	: Mode 1:	Transmitter (802	.11a-6Mbps) (5260M	Hz)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
10520.000	9.021	53.880	62.901	-5.699	68.600		
15780.000					68.600		
21040.000					68.600		
26300.000					68.600		
31560.000					68.600		
36820.000					68.600		

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- 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	: MOXA IEEE802.11 a/b/g mini PCI module						
Test Item	: Harmonic Radiated Emission Data							
Test Site	: No.3 OATS							
Test Mode	: Mode 1: Transmitter (802.11a-6Mbps) (5260MHz)							
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBuV	dBuV/m	dB	dBuV/m			
Vertical								
Peak Detector:								
Peak Detector: 10520.000	10.931	54.260	65.191	-3.409	68.600			
Peak Detector: 10520.000 15780.000	10.931	54.260	65.191 	-3.409	68.600 68.600			
Peak Detector: 10520.000 15780.000 21040.000	10.931 	54.260 	65.191 	-3.409 	68.600 68.600 68.600			
Peak Detector: 10520.000 15780.000 21040.000 26300.000	10.931 	54.260 	65.191 	-3.409 	68.600 68.600 68.600 68.600			
Peak Detector: 10520.000 15780.000 21040.000 26300.000 31560.000	10.931 	54.260 	65.191 	-3.409 	68.600 68.600 68.600 68.600 68.600			

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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 IEEE802.11 a/b/g mini PCI module						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OA	ATS					
Test Mode	: Mode 1:	Transmitter (802	.11a-6Mbps) (5300M	(Hz)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
10600.000	9.868	44.864	54.732	-19.268	74.000 **		
15900.000					68.600		
21200.000					68.600		
26500.000					68.600		
31800.000					68.600		
37100.000					68.600		
Average							
Detector:							
10600.000	9.868	26.484	36.352	-17.648	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.
- 8. "**", means restricted bands, limit=74dBuV/54dBuV

Product	Product : MOXA IEEE802.11 a/b/g mini PCI module						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 1: Transmitter (802.11a-6Mbps) (5300MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Vertical							
Peak Detector:							
10600.000	11.403	53.694	65.097	-8.903	74.000 **		
15900.000					68.600		
21200.000					68.600		
26500.000					68.600		
31800.000					68.600		
37100.000					68.600		
Average							
Detector:							
10600.000	11.403	38.844	50.247	-3.753	54.000 **		

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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.
- 8. "**", means restricted bands, limit=74dBuV/54dBuV

Product	: MOXA IEEE802.11 a/b/g mini PCI module							
Test Item	: Harmonic Radiated Emission Data							
Test Site	: No.3 OATS							
Test Mode	: Mode 1:	: Mode 1: Transmitter (802.11a-6Mbps) (5320MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBuV	dBuV/m	dB	dBuV/m			
Horizontal								
Peak Detector:								
10640.000	9.844	47.468	57.312	-16.688	74.000 **			
15960.000					68.600			
21280.000					68.600			
26600.000					68.600			
31920.000					68.600			
37240.000					68.600			
Average								
Detector:								
10640.000	9.844	31.488	41.332	-12.668	54.000 **			

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- 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.
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Product	: MOXA IEEE802.11 a/b/g mini PCI module								
Test Item	: Harmonic Radiated Emission Data								
Test Site	: No.3 OATS								
Test Mode	: Mode 1	: Mode 1: Transmitter (802.11a-6Mbps) (5320MHz)							
Frequency	Correct	Reading	Measurement	Margin	Limit				
	Factor	Level	Level						
MHz	dB	dBuV	dBuV/m	dB	dBuV/m				
Vertical									
Peak Detector:									
10640.000	11.517	47.718	59.235	-14.765	74.000 **				
15960.000					68.600				
21280.000					68.600				
26600.000					68.600				
31920.000					68.600				
37240.000					68.600				
Average									
Detector:									
10640.000	11.517	32.658	44.175	-9.825	54.000 **				

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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.
- 8. "**", means restricted bands, limit=74dBuV/54dBuV

Product	: MOXA IEEE802.11 a/b/g mini PCI module						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 1	Transmitter (802	.11a-6Mbps) (5500M	Hz)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11000.000	10.392	55.950	66.342	-7.658	74.000 **		
16500.000					68.600		
22000.000					68.600		
27500.000					68.600		
33000.000					68.600		
38500.000					68.600		
Average							
Detector:							
11000.000	10.392	40.650	51.042	-2.958	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.
- 8. "**", means restricted bands, limit= 74dBuV/54dBuV

Product	: MOXA IEEE802.11 a/b/g mini PCI module						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 1	: Transmitter (802	.11a-6Mbps) (5500M	Hz)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Vertical							
Peak Detector:							
11000.000	12.514	56.480	68.994	-5.006	74.000 **		
16500.000					68.600		
22000.000					68.600		
27500.000					68.600		
33000.000					68.600		
38500.000					68.600		
Average							
Detector:							
11000.000	12.514	40.650	53.164	-0.836	54.000 **		

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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.
- 8. "**", means restricted bands, limit=74dBuV/54dBuV

Product	: MOXA IEEE802.11 a/b/g mini PCI module						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 1:	Transmitter (802	.11a-6Mbps) (5580M	Hz)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11160.000	10.201	53.270	63.471	-10.529	74.000**		
16740.000					68.600		
22320.000					68.600		
27900.000					68.600		
33480.000					68.600		
39060.000					68.600		
Average							
Detector:							
11160.000	10.201	37.260	47.461	-6.539	54.000**		

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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.
- 8. "**", means restricted bands, limit=74dBuV/54dBuV

Product	uct : MOXA IEEE802.11 a/b/g mini PCI module						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 1	: Transmitter (802	.11a-6Mbps) (5580M	Hz)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Vertical							
Peak Detector:							
11160.000	12.445	56.720	69.165	-4.835	74.000 **		
16740.000					68.600		
22320.000					68.600		
27900.000					68.600		
33480.000					68.600		
39060.000					68.600		
Average							
Detector:							
11160.000	12.445	40.030	52.475	-1.525	54.000 **		

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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.
- 8. "**", means restricted bands, limit=74dBuV/54dBuV

Product	: MOXA IEEE802.11 a/b/g mini PCI module						
Test Item	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS						
Test Mode	: Mode 1:	: Transmitter (802	.11a-6Mbps) (5700M	(Hz)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector:							
11400.000	11.372	50.360	61.732	-12.268	74.000 **		
17100.000					68.600		
22800.000					68.600		
28500.000					68.600		
34200.000					68.600		
39900.000					68.600		
Average							
Detector:							
11400.000	11.372	36.720	48.092	-5.908	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.
- 8. "**", means restricted bands, limit=74dBuV/54dBuV

Product	: MOXA IEEE802.11 a/b/g mini PCI module					
Test Item	: Harmonic Radiated Emission Data					
Test Site	: No.3 OATS					
Test Mode	: Mode 1: Transmitter (802.11a-6Mbps) (5700MHz)					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Vertical						
Peak Detector:						
11400.000	12.922	52.800	65.722	-8.278	74.000 **	
17100.000					68.600	
22800.000					68.600	
28500.000					68.600	
34200.000					68.600	
39900.000					68.600	
Average						
Detector:						
11400.000	12.922	38.910	51.832	-2.168	54.000 **	

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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.
- 8. "**", means restricted bands, limit=74dBuV/54dBuV

Product	: MOXA IEEE802.11 a/b/g mini PCI module							
Test Item	: Harmon	: Harmonic Radiated Emission Data						
Test Site	: No.3 OATS							
Test Mode	: Mode 2: Transmitter Turbo Mode (5GHz Band)(5210MHz)							
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBuV	dBuV/m	dB	dBuV/m			
Horizontal								
Peak Detector:								
10420.000	7.711	39.310	47.022	-21.578	68.600			
15630.000					68.600			
20840.000					68.600			
26050.000					68.600			
31260.000					68.600			
36470.000					68.600			

- 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	: MOXA IEEE802.11 a/b/g mini PCI module						
Test Item	: Harmon	: Harmonic Radiated Emission Data						
Test Site	: No.3 O	: No.3 OATS						
Test Mode	: Mode 2: Transmitter Turbo Mode (5GHz Band)(5210MHz)							
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBuV	dBuV/m	dB	dBuV/m			
Vertical								
Peak Detector:								
10420.000	9.415	38.910	48.325	-20.275	68.600			
15630.000					68.600			
20840.000					68.600			
26050.000					68.600			
31260.000					68.600			
36470.000					68.600			

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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	: MOXA IEEE802.11 a/b/g mini PCI module						
Test Item	: Harmon	: Harmonic Radiated Emission Data						
Test Site	: No.3 O	: No.3 OATS						
Test Mode	: Mode 2: Transmitter Turbo Mode (5GHz Band)(5290MHz)							
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBuV	dBuV/m	dB	dBuV/m			
Horizontal								
Peak Detector:								
10580.000	9.823	44.640	54.464	-14.136	68.600			
15870.000					68.600			
21160.000					68.600			
26450.000					68.600			
31740.000					68.600			
37030.000					68.600			

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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	: MOXA IEEE802.11 a/b/g mini PCI module						
Test Item	: Harmor	: Harmonic Radiated Emission Data						
Test Site	: No.3 O.	: No.3 OATS						
Test Mode	: Mode 2: Transmitter Turbo Mode (5GHz Band)(5290MHz)							
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBuV	dBuV/m	dB	dBuV/m			
Vertical								
Peak Detector:								
10580.000	11.426	52.170	63.596	-5.004	68.600			
15870.000					68.600			
21160.000					68.600			
26450.000					68.600			
31740.000					68.600			
37030.000					68.600			

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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 IEEE802.11 a/b/g mini PCI module						
Test Item	: General R	: General Radiated Emission					
Test Site	: No.3 OAT	TS					
Test Mode	: Mode 1:7	Fransmitter (802	.11a-6Mbps) (5220M	Hz)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector							
165.800	-11.079	53.778	42.699	-0.801	43.500		
365.620	-1.329	40.616	39.287	-6.713	46.000		
464.560	0.526	37.415	37.941	-8.059	46.000		
699.300	2.875	39.166	42.041	-3.959	46.000		
800.180	5.141	33.163	38.304	-7.696	46.000		
930.160	7.187	30.145	37.332	-8.668	46.000		
Vertical							
Peak Detector							
165.800	-7.719	49.958	42.239	-1.261	43.500		
336.520	-4.630	46.055	41.425	-4.575	46.000		
666.320	-1.809	36.481	34.673	-11.327	46.000		
796.300	2.831	29.491	32.322	-13.678	46.000		
930.160	6.477	29.099	35.576	-10.424	46.000		
963.140	7.604	30.350	37.954	-16.046	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 9kHz~30MHz are very lower than the limit and not show in test report.

Product	: MOXA IEEE802.11 a/b/g mini PCI module						
Test Item	: General	: General Radiated Emission					
Test Site	: No.3 OATS						
Test Mode	: Mode 1:	Transmitter (802	11a-6Mbps) (5300M	Hz)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector							
165.800	-11.079	53.753	42.674	-0.826	43.500		
365.620	-1.329	40.892	39.563	-6.437	46.000		
474.260	0.024	39.116	39.139	-6.861	46.000		
796.300	5.161	33.324	38.485	-7.515	46.000		
864.200	5.671	32.091	37.762	-8.238	46.000		
930.160	7.187	29.619	36.806	-9.194	46.000		
Vertical							
Peak Detector							
165.800	-7.719	50.308	42.589	-0.911	43.500		
365.620	-2.179	41.984	39.805	-6.195	46.000		
749.740	2.510	25.993	28.503	-17.497	46.000		
840.920	2.961	30.339	33.300	-12.700	46.000		
930.160	6.477	28.795	35.272	-10.728	46.000		
967.020	8.071	29.530	37.601	-16.399	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 9kHz~30MHz are very lower than the limit and not show in test report.

Product	: MOXA IEEE802.11 a/b/g mini PCI module						
Test Item	: General Radiated Emission						
Test Site	: No.3 OATS						
Test Mode	: Mode 1: 7	Fransmitter (802	.11a-6Mbps) (5580M	Hz)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level	C			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector							
165.800	-11.079	53.711	42.632	-0.868	43.500		
365.620	-1.329	40.384	39.055	-6.945	46.000		
697.360	3.171	36.412	39.583	-6.417	46.000		
767.200	4.235	31.340	35.575	-10.425	46.000		
864.200	5.671	31.221	36.892	-9.108	46.000		
930.160	7.187	28.752	35.939	-10.061	46.000		
Vertical							
Peak Detector							
165.800	-7.719	50.158	42.439	-1.061	43.500		
365.620	-2.179	41.419	39.240	-6.760	46.000		
796.300	2.831	30.215	33.046	-12.954	46.000		
840.920	2.961	29.399	32.360	-13.640	46.000		
930.160	6.477	29.350	35.827	-10.173	46.000		
967.020	8.071	29.163	37.234	-16.766	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 9kHz~30MHz are very lower than the limit and not show in test report.

Product	: MOXA IEEE802.11 a/b/g mini PCI module						
Test Item	: General Radiated Emission						
Test Site	: No.3 OATS						
Test Mode	: Mode 2:	Transmitter Turbo	o Mode (5GHz Band))(5210MHz)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector							
165.800	-11.079	53.787	42.708	-0.792	43.500		
365.620	-1.329	41.234	39.905	-6.095	46.000		
464.560	0.526	40.330	40.856	-5.144	46.000		
763.320	4.301	33.660	37.962	-8.038	46.000		
864.200	5.671	32.898	38.569	-7.431	46.000		
949.560	6.695	30.678	37.373	-8.627	46.000		
Vertical							
Peak Detector							
165.800	-7.719	50.161	42.442	-1.058	43.500		
365.620	-2.179	42.068	39.889	-6.111	46.000		
464.560	-4.714	39.008	34.294	-11.706	46.000		
763.320	2.311	31.476	33.788	-12.212	46.000		
840.920	2.961	29.943	32.904	-13.096	46.000		
961.200	7.260	30.768	38.028	-15.972	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 9kHz~30MHz are very lower than the limit and not show in test report.

Product	: MOXA IEEE802.11 a/b/g mini PCI module						
Test Item	: General Radiated Emission						
Test Site	: No.3 OATS						
Test Mode	: Mode 2: 7	Fransmitter Turb	o Mode (5GHz Band)	(5290MHz)			
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBuV	dBuV/m	dB	dBuV/m		
Horizontal							
Peak Detector							
165.800	-11.079	53.756	42.677	-0.823	43.500		
340.400	-3.859	45.921	42.062	-3.938	46.000		
433.520	-1.972	40.965	38.993	-7.007	46.000		
786.600	4.712	33.149	37.861	-8.139	46.000		
864.200	5.671	31.775	37.446	-8.554	46.000		
961.200	6.450	30.768	37.218	-16.782	54.000		
Vertical							
Peak Detector							
165.800	-7.719	50.146	42.427	-1.073	43.500		
299.660	-6.855	45.954	39.099	-6.901	46.000		
338.460	-4.265	45.317	41.052	-4.948	46.000		
600.360	-2.833	43.072	40.239	-5.761	46.000		
930.160	6.477	29.243	35.720	-10.280	46.000		
961.200	7.260	30.297	37.557	-16.443	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 9kHz~30MHz are very lower than the limit and not show in test report.

7. Band Edge

7.1. Test Equipment

RF Conducted Measurement

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

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2012
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2012
Х	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2012

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.

RF Radiated Measurement:

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

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 3		Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2011
	Х	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2011
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2011
	Pre-Amplifier		QTK	QTK-AMP-03 / 0003	May, 2012
	X Pre-Amplifier		QTK	AP-180C / CHM_0906076	Sep., 2011
		Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar, 2012
	Х	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2012
		Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2011
	Х	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2012
	X Controller		QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	Χ	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Note: 1. All instruments are calibrated every one year.

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

7.2. Test Setup

RF Conducted Measurement



RF Radiated Measurement:



7.3. 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									

Remarks : 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.

7.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 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 C63.4:2003 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz. The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

7.5. Uncertainty

- \pm 3.8 dB below 1GHz
- \pm 3.9 dB above 1GHz

7.6. Test Result of Band Edge

Product	:	MOXA IEEE802.11 a/b/g mini PCI module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmitter (802.11a-6Mbps)-Channel 36

Fundamental Filed Strength

Antenna	Frequency	Reading Level	Correction Factor	Emission Level	Detector
Pole	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	
Horizontal	5180	37.073	55.18	92.254	Peak
Horizontal	5180	37.073	44.39	81.464	Average
Vertical	5180	37.073	69.7	106.774	Peak
Vertical	5180	37.073	58.5	95.574	Average

Note: 1: Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

Antenna Pole	Test Frequency	Fundamental	Δ (dB)	Band Edge Field Strength	Requiqment Limit	Detector
	(MHz)	(dBuV/m)		(dBuV/m)	(dBuV/m)	
Horizontal	5120	92.254	50.81	41.444	74.000	Peak
Horizontal	5120	81.464	49.43	32.034	54.000	Average
Vertical	5120	106.774	50.81	55.964	74.000	Peak
Vertical	5120	95.574	49.43	46.144	54.000	Average

Note:

The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = $F - \Delta$

F = Fundamental field Strength (Peak or Average)

 Δ = Conducted Band Edge Delta (Peak or Average)

Agilent S	ipectri	um An	alyzer - Sv	vept SA									
Cente	er Fr	RF eq	50 s	2 AC	0 GHz	Z	S Tria: Fra		Avg	ALIGNAUT Type: Log-Pw	0 03:26:5: r TF	5 PM May 22, 2012 RACE 1 2 3 4 5 6	Frequency
10 dB/	div	Rei	f 20.00	dBm	PNO IFGai	:Fast (n:Low	Atten: 3	0 dB		IV	lkr3 5.1: -43	20 0 GHz 3.45 dBm	Auto Tune
10.0 - 0.00 - -10.0 -										-			Center Freq 5.150000000 GHz
-20.0		estres	an west a descention	3		مالى بى كولى الم		2	NOT BEERRY A.P.			New York	Start Freq 5.100000000 GHz
-50.0 — -60.0 — -70.0 —													Stop Freq 5.200000000 GHz
Cente #Res	er 5.1 BW	500 1.0	0 GHz VIHz	×		#VBW	1.0 MH2	2	INCTION	#Swee	Span p 500 ms	100.0 MHz (1001 pts)	CF Step 10.000000 MHz Auto Man
1 N 2 N 3 N 4 5 6 7 8 9 10 11 11 12		f f f		<u>5</u> 5	.182 7 (.150 0 (.120 0 (GHz GHz GHz	7.36 (-45.00 (-43.45 (Freq Offset 0 Hz
MSG										STAT	rus		

Peak Detector of conducted Band Edge Delta

Average Detector of conducted Band Edge Delta

Center Freq 5.1500	2 AC 00000 GHz	SENSE:INT	ALIGNAUTO	03:27:41 PM May 22, 2012	2
		Tria: Free Run	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6	Frequency
10 dB/div Ref 20.00	IFGain:Low	Atten: 30 dB	Mk	tr3 5.120 0 GHz -53.40 dBm	Auto Tune
10.0 0.00 -10.0				Q1	Center Freq 5.150000000 GHz
-20.0 -30.0 -40.0	A3				Start Freq 5.100000000 GHz
-50.0 -60.0 -70.0					Stop Freq 5.20000000 GHz
Center 5.15000 GHz #Res BW 1.0 MHz	#VBW	(10 Hz	Sweep	Span 100.0 MHz 7.80 s (1001 pts)	CF Step 10.000000 MHz
N I F 1 N 1 f 2 N 1 f 3 N 1 f 4 - - - 6 - - - 7 - - - 8 - - - 9 - - - 11 - - - 12 - - -	5.182 2 GHz 5.150 0 GHz 5.120 0 GHz	-3.97 dBm -57.81 dBm -53.40 dBm			Freq Offset 0 Hz

Product	:	MOXA IEEE802.11 a/b/g mini PCI module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmitter (802.11a-6Mbps) -Channel 64

Fundamental Filed Strength

Antenna Frequency		Reading Level	Correction Factor	Emission Level	Detector
Pole	[MHz]	[dB(uV)]	[dB/m]	[dB(uV/m)]	
Horizontal	5320	35.635	61.08	96.714	Peak
Horizontal	5320	35.635	49.26	84.894	Average
Vertical	5320	37.552	76.76	114.311	Peak
Vertical	5320	37.552	65.13	102.681	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

Antenna Pole	Test Frequency	Test Frequency Fundamental		Band Edge Field Strength	Requiqment Limit	Detector	
	(MHz)	(dBuV/m)		(dBuV/m)	(dBuV/m)		
Horizontal	5350.6	96.714	43.762	52.952	74.000	Peak	
Horizontal	5350	84.894	52.442	32.452	54.000	Average	
Vertical	5350.6	114.311	43.762	70.549	74.000	Peak	
Vertical	5350	102.681	52.442	50.239	54.000	Average	

Note:

The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = $F - \Delta$

F = Fundamental field Strength (Peak or Average)

 Δ = Conducted Band Edge Delta (Peak or Average)

🗊 Agi	ilent S	opect	rum	Analyzer	- Swep	t SA												
⊯ Cen	ter	Fre	50 s 9	2 5.350	0000	000 G	iHz	AC	Si Tria: Fre	ENSE:INT		Avg T AvgIH	ype:	ALIGNAUTO	01:28:0 TF	4 PM May 25, 20	12	Frequency
10 di	B/div	,	Rei	f 20.00) dBn	кн р IF	'NO: Fas Gain:Lo	tuµ) w	Atten: 3	0 dB				Mk	r1 5.3 12.	15 3 GH 564 dBr	z	Auto Tune
Log 10.0 0.00 -10.0	uiler	and the second		1		1	Wanana	Wante .										Center Freq 5.35000000 GHz
-20.0 -30.0 -40.0									Ne line and a second se	28	lusher	Water Aug	ገቅ-ካ ይ-ጋ	han the there				Start Freq 5.30000000 GHz
-50.0 -60.0 -70.0																		Stop Freq 5.400000000 GHz
Cen #Re	ter : s Bl	5.3: W 1	500 .0 ľ	0 GHz VHz			#\	/BW	1.0 MHz	2			7	#Sweep	Span 500 ms	100.0 MH (1001 pts	iz s)	CF Step 10.000000 MHz
1 2 3 4 5 6 7 8 9 10 11 12			f f			5.315 5.350 5.350	3 GHz 0 GHz 6 GHz		<u>12.564 c</u> - <u>32.092 c</u> - <u>31.198 c</u>		FUNL		FUN					Freq Offset 0 Hz
MSG														STATUS				

Peak Detector of conducted Band Edge Delta

Average Detector of conducted Band Edge Delta

🅦 Agilent Spectrum Analyzer	- Swept SA				
Center Freq 5.350	000000 GHz	AC SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr AvgIHold: 2/100	01:28:55 PM May 25, 2012 TRACE 1 2 3 4 5 6 TYPE MWWWWW	Frequency
10 dB/div Ref 20.00) dBm	Atten: 30 dB	Mk	r1 5.315 3 GHz 0.772 dBm	Auto Tune
					Center Freq 5.350000000 GHz
-20.0		2			Start Freq 5.30000000 GHz
-50.0			~~ <u>~</u>		Stop Freq 5.40000000 GHz
Center 5.35000 GHz #Res BW 1.0 MHz	#VB	W 10 Hz	Sweep	Span 100.0 MHz 7.80 s (1001 pts)	CF Step 10.000000 MHz
MKR MODE TRC SCL 1 N 1 f 2 N 1 f	× 5.315 3 GHz 5.350 0 GHz	0.772 dBm -51.670 dBm	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
3 4 5 6 7					Freq Offset 0 Hz
8 9 10 11 12					
MSG			STATUS	•	

Product	:	MOXA IEEE802.11 a/b/g mini PCI module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmitter (802.11a-6Mbps) -Channel 100

Fundamental Filed Strength

Antenna	Frequency	Reading Level	Correction Factor	Emission Level	Detector
Pole	[MHz]	[dB(uV)]	[dB/m]	[dB(uV/m)]	
Horizontal	5500	36.684	54.52	91.204	Peak
Horizontal	5500	36.684	43.57	80.254	Average
Vertical	5500	38.145	69.99	108.135	Peak
Vertical	5500	38.145	59.18	97.325	Average

Note: 1: Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

Antenna Pole	Test Frequency	Fundamental	Δ (dB)	Band Edge Field Strength	Requiqment Limit	Detector
	(MHz)	(dBuV/m)		(dBuV/m)	(dBuV/m)	
Horizontal	5460	91.204	47.82	43.384	74.000	Peak
Horizontal	5439.9	80.254	55.27	24.984	54.000	Average
Vertical	5460	108.135	47.82	60.315	74.000	Peak
Vertical	5439.9	97.325	55.27	42.055	54.000	Average

Note:

The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements

per the Marker-Delta Method with the following formula:

Band Edge field Strength = $F - \Delta$

F = Fundamental field Strength (Peak or Average)

 Δ = Conducted Band Edge Delta (Peak or Average)



Agilent Spectrum Analyzer	- Swept SA			0	
LXI RL RF 5	50 Ω AC	SENSE:INT	ALIGN AUTO	04:35:19 PM May 22, 2012	Frequency
Center Freq 5.46	DOUDUOU GHZ PNO: Fast G IFGain:Low	Trig: Free Run Atten: 30 dB	Avg Type: Log-Pwr	TYPE MWWWWW DET P N N N N N	
10 dB/div Ref 20.0)0 dBm		Mk	r3 5.460 0 GHz -37.80 dBm	Auto Tune
10.0 0.00 -10.0					Center Frec 5.460000000 GHz
-20.0 -30.0 -40.0	- Byle g- Jac- all Lag & Tory & Salah - Sa	3	Marshammer of the second second		Start Frec 5.410000000 GH2
-50.0					Stop Fred 5.510000000 GHz
Center 5.46000 GH #Res BW 1.0 MHz	z #VBW	1.0 MHz	#Sweep	Span 100.0 MHz 500 ms (1001 pts)	CF Step 10.000000 MH
MKR MODE TRC SCL	× 5.502 6 GHz	10.02 dBm	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Mar
3 N 1 f 4 5 6	5.460 0 GHz	-37.80 dBm			Freq Offse 0 Hi
7 8 9 10 11					
MSG		I	STATUS		

Peak Detector of conducted Band Edge Delta

Average Detector of conducted Band Edge Delta

Agilent Spectrum Analyzer - Swept SA				
LXI RE 50 Q AC	SENSE:	INT ALIGN AUTO	04:36:03 PM May 22, 2012	Frequency
Center Freq 5.460000000 GH	Z Tria: Free Pu	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6	Trequency
PNC IFGa	in:Low Atten: 30 dB		DET P N N N N N	
		Mk	r3 5 / 39 9 CH7	Auto Tune
		IVIN	-56 00 dBm	
Log			-00.00 abiii	
10.0			.1	Center Fred
0.00			$\langle \rangle$	Center rieq
0.00				5.46000000 GHZ
-10.0			1	
-20.0				Ctort From
-30.0				StartFreq
-40.0				5.410000000 GHz
50.0	3 2			
-30.0	V V			Oton From
-60.0				StopFreq
-70.0				5.510000000 GHz
Center 5.46000 GHz	43/DW 40 11-	0	Span 100.0 MHz	CF Step
#Res BW 1.0 MHZ	#VBW 10 HZ	Sweep	7.80 S (1001 pts)	10.000000 MHz
MKR MODE TRC SCL X	Y	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
1 N 1 f 5.4977	GHz -0.73 dBm			
3 N 1 f 5.439 9	GHz -56.00 dBm			F 0#
4				FreqOffset
5				0 Hz
7				
8				
10				
11				
12				
MSG		STATUS		

Product	:	MOXA IEEE802.11 a/b/g mini PCI module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmitter (802.11a-6Mbps) -Channel 100

<u>RF</u> Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	18.334	-77.220	-58.886	-31.886	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5470.000	19.335	-69.540	-50.205	-23.205	-27.000	Pass

Product	:	MOXA IEEE802.11 a/b/g mini PCI module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmitter (802.11a-6Mbps) -Channel 140

<u>RF</u> Radiated Measurement:

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	18.649	-62.070	-43.421	-16.421	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5725.000	19.514	-55.930	-36.416	-9.416	-27.000	Pass

Product	:	MOXA IEEE802.11 a/b/g mini PCI module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmitter Turbo Mode (5GHz Band)-Channel 42

Test Frequency	Measurement Level (20dB BW)	Limit	Result
(MHz)	(MHz)	(MHz)	
5210	5228.10	<5250	PASS

NOTE: Accordance with 15.215 requirement.

Agilent Sp	ectrum Ar	alyzer - Sw	ept SA								
Center	r Freq	50 Ω 5.2100	AC 00000 G	Hz	Si Trig: Fre	e Run	Avg 1	ALIGN AUTO	02:30:39 F TRA TY	M May 29, 2012 CE 1 2 3 4 5 6 PE M WWWWWW	Frequency
10 dB/di	PNO: Fast C. The row Atten: 30 dB DET PNNNN IFGain:Low Atten: 30 dB Mkr2 5.228 1 GHz -19.34 dBm										Auto Tune
Log 10.0				pres	nature the	hardward	mansaly	2			Center Freq 5.210000000 GHz
-20.0	Low May 20th	and the state	hat the many manufacture					a mulanary	and the second	-18.93 dBm	Start Freq 5.160000000 GHz
-60.0											Stop Freq 5.260000000 GHz
Center #Res B	5.2100 3W 300	00 GHz kHz	×	#VE	3W 1.0 MHz		UNCTION	#Sweep	Span 1 500 ms (00.0 MHz 1001 pts)	CF Step 10.000000 MHz <u>Auto</u> Man
2 N 3 4 5 6	1 f		5.228	1 GHz	-19.34 d	Bm					Freq Offset 0 Hz
8 9 10 11 12											
7 8 9 10 11 12 MSG								STATUS			

Product	:	MOXA IEEE802.11 a/b/g mini PCI module
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmitter Turbo Mode (5GHz Band)-Channel 58

Test Frequency	Measurement Level (20dB BW)	Limit	Result
(MHz)	(MHz)	(MHz)	
5290	5262.30	>5250	PASS

NOTE: Accordance with 15.215 requirement.

Agile	nt Spe	ectrur	m Ana	lyzer - Sv	wept SA													
Ce	nter	Fre	RF P	50 s	Ω AC	00 G	Hz			SENSE:	INT	Avg	Туре	ALIGNAUTO	02:36:5 TF	1 PM May RACE 1 2	29, 2012 2 3 4 5 6	Frequency
10 0	IB/div	¥	Ref	20.00	dBm	P IF	'NO: Fas Gain:Lo	st ∟ _⊫ ow	Atten:	30 dB	7			Mk	r2 5.2 -1	_{рет} р м 62 3 1.99	GHz dBm	Auto Tune
10.0 0.0 -10.0					¢ ²	2	- Col	mh	1 Solvenson	m	- and - a	ale and and by	r have	du mattana		-	11.06 dBm	Center Freq 5.290000000 GHz
-20.0 -30.0 -40.0) 	W. Televil	y.an	ann			_								and the second	And subal	Whiteman	Start Freq 5.240000000 GHz
-50.0 -60.0 -70.0)))																	Stop Freq 5.34000000 GHz
Cei #Ri	nter es B	5.29 W 3	900 00 ECL) GHz (Hz	>	5 279	#\	VBW	1.0 MH	lz dBm	FUN	CTION	FUN	#Sweep	Span 500 ms	100.0 5 (100	0 MHz 1 pts) UE	CF Step 10.000000 MHz Auto Man
2 3 4 5 6 7 8	N	1	f			5.262	3 GHz	Z	-11.99	dBm								Freq Offset 0 Hz
9 10 11 12														CTATU				

8. Frequency Stability

8.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2012
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2012
Х	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2012

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.

8.2. Test Setup



8.3. Limits

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified

8.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

8.5. Uncertainty

± 150 Hz

8.6. Test Result of Frequency Stability

Product	:	MOXA IEEE802.11 a/b/g mini PCI module
Test Item	:	Frequency Stability
Test Site	:	Temperature Chamber
Test Mode	:	Carrier Wave

Test C	onditions	Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
		36	5180.0000	5180.0054	-0.0054
		38	5220.0000	5220.0018	-0.0018
		48	5240.0000	5240.0096	-0.0096
		52	5260.0000	5260.0078	-0.0078
Tnom (20) °C	Vnom (120)V	60	5300.0000	5300.0043	-0.0043
		64	5320.0000	5320.0076	-0.0076
		100	5500.0000	5500.0065	-0.0065
		116	5580.0000	5580.0048	-0.0048
		140	5700.0000	5700.0084	-0.0084
		36	5180.0000	5180.0065	-0.0065
	Vmax (138)V	38	5220.0000	5220.0028	-0.0028
		48	5240.0000	5240.0098	-0.0098
		52	5260.0000	5260.0084	-0.0084
Tmax (50) °C		60	5300.0000	5300.0054	-0.0054
		64	5320.0000	5320.0081	-0.0081
		100	5500.0000	5500.0058	-0.0058
		116	5580.0000	5580.0039	-0.0039
		140	5700.0000	5700.0079	-0.0079
		36	5180.0000	5180.0042	-0.0042
		38	5220.0000	5220.0005	-0.0005
		48	5240.0000	5240.0075	-0.0075
		52	5260.0000	5260.0061	-0.0061
Tmax (50) °C	Vmin (102)V	60	5300.0000	5300.0031	-0.0031
		64	5320.0000	5320.0058	-0.0058
		100	5500.0000	5500.0035	-0.0035
		116	5580.0000	5580.0016	-0.0016
		140	5700.0000	5700.0056	-0.0056

Test C	onditions	Channel	Channel Frequency (MHz) Frequency (MHz)		△F (MHz)
		36	5180.0000	5180.0050	-0.0050
		38	5220.0000	5220.0013	-0.0013
		48	5240.0000	5240.0083	-0.0083
		52	5260.0000	5260.0069	-0.0069
Tmin (0) °C	Vmax (138)V	60	5300.0000	5300.0039	-0.0039
		64	5320.0000	5320.0066	-0.0066
		100	5500.0000	5500.0043	-0.0043
		116	5580.0000	5580.0024	-0.0024
		140	5700.0000	5700.0064	-0.0064
		36	5180.0000	5180.0046	-0.0046
		38	5220.0000	5220.0009	-0.0009
		48	5240.0000	5240.0079	-0.0079
		52	5260.0000	5260.0065	-0.0065
Tmin (0) °C	Vmin (102)V	60	5300.0000	5300.0035	-0.0035
		64	5320.0000	5320.0062	-0.0062
		100	5500.0000	5500.0039	-0.0039
		116	5580.0000	5580.0020	-0.0020
		140	5700.0000	5700.0060	-0.0060

- Product : MOXA IEEE802.11 a/b/g mini PCI module
- Test Item : Frequency Stability
- Test Site : Temperature Chamber
- Test Mode : Carrier Wave

Test Co	onditions	Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
T (20) %		44	5210.0000	5210.0083	-0.0083
1 nom (20) °C	vnom (120)v	60	5290.0000	5290.0079	-0.0079
Tnom (50) °C	V (120)V	44	5210.0000	5210.0079	-0.0079
	vnom (138)v	60	5290.0000	5290.0075	-0.0075
T (50) %	Vnom (138)V	44	5210.0000	5210.0094	-0.0094
Thom (50) °C		60	5290.0000	5290.0090	-0.0090
$T_{2} = (0)^{2} C_{1}$	V	44	5210.0000	5210.0071	-0.0071
Thom (0) °C	vnom (138)v	60	5290.0000	5290.0067	-0.0067
$T_{2} = (0)^{2} C_{2}$		44	5210.0000	5210.0086	-0.0086
Thom (0) °C	v nom (102) V	60	5290.0000	5290.0082	-0.0082

9. EMI Reduction Method During Compliance Testing

No modification was made during testing.