

FCC 47 CFR PART 15 SUBPART E

Product Type : Play-Fi Receiver

Applicant : Phorus, Inc.

Address : 16255 Ventura Boulevard, Suite 310, Encino, United States,

91436

Trade Name : Phorus

Model Number : PR2 Receiver

Test Specification : FCC 47 CFR PART 15 SUBPART E: Oct., 2012

Canada RSS-210 ISSUE 8: Dec., 2010 Canada RSS-Gen ISSUE 3: Dec., 2010

ANSI C63.4-2009

Application Purpose : Original

Receive Date : Apr. 18, 2013

Test Period : May 02 ~ 03, 2013

Issue Date : Sep. 02, 2013

Issue by

A Test Lab Techno Corp.

No. 140-1, Changan Street, Bade City, Taoyuan County 334, Taiwan R.O.C.

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ilac MRA



Taiwan Accreditation Foundation accreditation number: 1330

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Revision History

Rev.	Issue Date	Revisions	Revised By
00	Sep. 02, 2013	Initial Issue	

Verification of Compliance

Issued Date: 09/02/2013

Product Type : Play-Fi Receiver

Applicant : Phorus, Inc.

Address : 16255 Ventura Boulevard, Suite 310, Encino , United

States, 91436

Trade Name : Phorus

Model Number : PR2 Receiver

FCC ID : 2AAWQ-PR2RECEIVER

IC : 11138A-PR2RECEIVER

EUT Rated Voltage : DC 12V, 2A

Test Voltage : 120 Vac / 60 Hz

Applicable Standard : FCC 47 CFR PART 15 SUBPART E: Oct., 2012

Canada RSS-210 ISSUE 8: Dec., 2010 Canada RSS-Gen ISSUE 3: Dec., 2010

ANSI C63.10-2009 ANSI C63.4-2009

Test Result : Complied Application Purpose : Original

Performing Lab. : A Test Lab Techno Corp.

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Taoyuan County 334, Taiwan R.O.C.

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http://www.atl-lab.com.tw/e-index.htm

A Test Lab Techno Corp. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by A Test Lab Techno Corp. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Approved By : 2

Reviewed By

(Fly Lu)

1330

(Manager)

(Murphy Wang)

(Testing Engineer)



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1 General Information

1.1. Summary of Test Result

Stan	dard	ltem	Result	Remark
FCC	IC	пеш	Result	Kemark
15.407(b)(6) 15.207	RSS-Gen 7.2.4	AC Power Conducted Emission	PASS	
15.407(b) 15.205 / 15.209	RSS-210 A9.2	Radiated Emission	PASS	
15.407(a)	RSS-210 A9.2	Maximum Conducted Output Power	PASS	
15.407(a)	RSS-210 A9.2	26dB RF Bandwidth	Reference	
15.407(a)(6)	RSS-210 A9.3	Peak Excursion Ratio	PASS	
15.407(a)	RSS-210 A9.2	Peak Power Spectral Density	PASS	
15.407(g)	RSS-210 A9.5	Frequency Stability	PASS	
15.407(a) 15.203	RSS-210 A9.2	Antenna Requirement	PASS	

The test results of this report relate only to the tested sample(s) identified in this report. Manufacturer or whom it may concern should recognize the pass or fail of the test result.

1.2. Measurement Uncertainty

Measurement Item	Frequency Ra	Uncertainty (dB)		
Conducted Emission	9kHz ~ 30MH	± 2.020		
	30MHz ~ 1000MHz	Horizontal	± 3.960	
	301VII 12 ~ 10001VII 12	Vertical	± 3.570	
Radiated Emission	1000MHz ~ 18000MHz	Horizontal	± 3.072	
Naulateu Emission	1000Wil 12 ~ 10000Wil 12	Vertical	± 3.028	
	18000MHz ~ 40000MHz	Horizontal	± 3.622	
	10000IVII 12 ~ 40000IVIH2	Vertical	± 3.506	

2 **EUT Description**

Product Type	Play-Fi Receiver									
Trade Name	Phoru	S								
Model No.	PR2 F	Receiver								
Applicant	Phoru 16255	,	oulevar	d, Suite 3	310, Er	ncin	no , United States, 91	436		
Manufacturer		Wistron InfoComm (Zhongshan) Corporation Linhai Branch Kiyiwei, Ma'an Cun, Zhongshan Torch Development Zone, Zhongshan City, Guangdong, China								
FCC ID	2AAW	Q-PR2REC	CEIVEF	3						
IC	11138	A-PR2REC	EIVER							
Frequency Range		Band		Mode			Frequency Range (MHz)	Numbe	r of Channels	
			IEEE	802.11a			5180 – 5240	4 (Channels	
	U-NII Band I U-NII Band II		IEEE	802.11n 2	20 MHz	z	5180 – 5240	4 (Channels	
			IEEE	802.11n 4	10 MHz	z	5190 – 5230	2 (Channels	
			IEEE	802.11a			5260 - 5320	4 (Channels	
			IEEE	802.11n 2	20 MHz	z	5260 - 5320 4 0		4 Channels	
			IEEE	IEEE 802.11n 40 MHz		z	5270 – 5310	2 Channels		
			IEEE 802.11a				5500 – 5700	11 Channels		
	U-NI	I Band III	IEEE 802.11n 20 Mł		20 MHz	z	z 5500 – 5700 11		Channels	
			IEEE	802.11n 4	10 MHz	z 5510 – 5670 5 (Channels		
Modulation Type	OFDM	1								
Antenna Used	Item	Anteni	na	Type			Band		Max. Gain	
	1	Main A (ANTI		PIFA		802.11a / IEEE 802.11n (5GHz) Hz / 40MHz		3.05 dBi		
	2	Aux Ai (ANTI		PIFA		E 802.11a / IEEE 802.11n (5GHz) Hz / 40MHz			5.38 dBi	
Antenna Delivery	1*Tx +	- 1*Rx								
RF Output Power /		В	and			RF Conducted Output Power (W)		Power	EIRP (W)	
EIRP	IEEE :	802.11a U-l	VII Ban	nd I		0.149			0.080	
	IEEE	802.11a U-	NII Ban	nd II		0.147			0.077	
	IEEE 8	802.11a U-	NII Ban	nd III		0.126			0.056	
	IEEE :	802.11n 20	MHz U	-NII Band	П		0.116		0.056	
	IEEE	802.11n 20	MHz U	-NII Band	I II		0.107		0.051	
	IEEE 8	802.11n 20	MHz U	-NII Band	H	0.082			0.036	
	IEEE 8	802.11n 40	MHz U	-NII Band	П		0.110		0.047	
	IEEE	802.11n 40	MHz U	-NII Band	I II		0.098		0.046	
	IEEE	802.11n 40	MHz Ū	-NII Band	H		0.096		0.046	

Report Number: 1305FR19

3 Test Methodology

3.1. Mode of Operation

Decision of Test ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode	
Mode 1: Normal Operation Mode	
Mode 2: IEEE 802.11a Link Mode	
Mode 3: IEEE 802.11n 20MHz Link Mode	
Mode 4: IEEE 802.11n 40MHz Link Mode	
Mode 5: Receiver Mode	

Software used to control the EUT for staying in continuous transmitting mode was programmed.

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in normal link mode only.

IEEE 802.11a mode / 5180 ~ 5240MHz:

Channel Low (5180MHz), Channel Mid (5220MHz) and Channel High (5240MHz) with 6Mbps data rate were chosen for full testing.

IEEE 802.11a mode / 5260 ~ 5320MHz:

Channel Low (5260MHz), Channel Mid (5280MHz) and Channel High (5320MHz) with 6Mbps data rate were chosen for full testing.

IEEE 802.11a mode / 5500 ~ 5700MHz:

Channel Low (5500MHz), Channel Mid (5580MHz) and Channel High (5700MHz) with 6Mbps data rate were chosen for full testing.

IEEE 802.11n 20 MHz Channel mode / 5180 ~ 5240MHz:

Channel Low (5180MHz), Channel Mid (5220MHz) and Channel High (5240MHz) with 6.5Mbps data rate were chosen for full testing.

IEEE 802.11n 20 MHz Channel mode / 5260 ~ 5320MHz:

Channel Low (5260MHz), Channel Mid (5280MHz) and Channel High (5320MHz) with 6.5Mbps data rate were chosen for full testing.

IEEE 802.11n 20 MHz Channel mode / 5500 ~ 5700MHz:

Channel Low (5500MHz), Channel Mid (5580MHz) and Channel High (5700MHz) with 6.5Mbps data rate were chosen for full testing.

IEEE 802.11n 40 MHz Channel mode / 5190 ~ 5230MHz:

Channel Low (5190MHz) and Channel High (5230MHz) with 6.5Mbps data rate were chosen for full testing.

IEEE 802.11n 40 MHz Channel mode / 5270 ~ 5310MHz:

Channel Low (5270MHz) and Channel High (5310MHz) with 6.5Mbps data rate were chosen for full testing.

IEEE 802.11n 40 MHz Channel mode / 5510 ~ 5670MHz:

Channel Low (5510MHz), Channel Mid (5590MHz) and Channel High (5670MHz) with 6.5Mbps data rate were chosen for full testing.

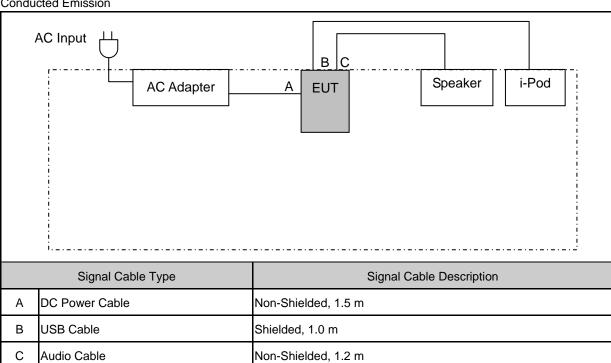
3.2. **EUT Exercise Software**

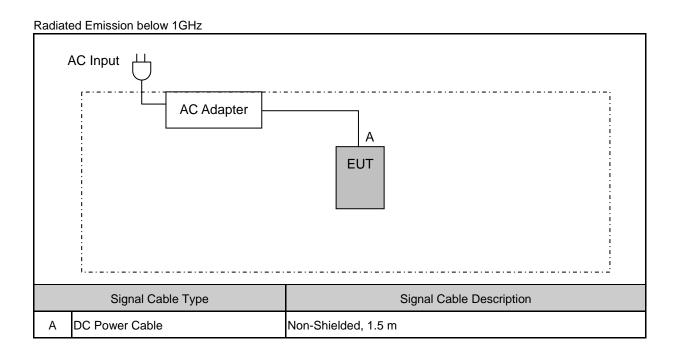
The EUT is operated in the engineering mode to fix the TX frequency for the purposes of measurement. According to its specifications, the EUT must comply with the requirements of Section 15.407 under the FCC Rules Part 15 Subpart E.

	· · · · · · · · · · · · · · · · · · ·
1.	Setup the EUT shown on 3.3.
2.	Turn on the power of all equipment.
3.	Turn on Wi-Fi function link to Notebook.
4.	EUT run test program.

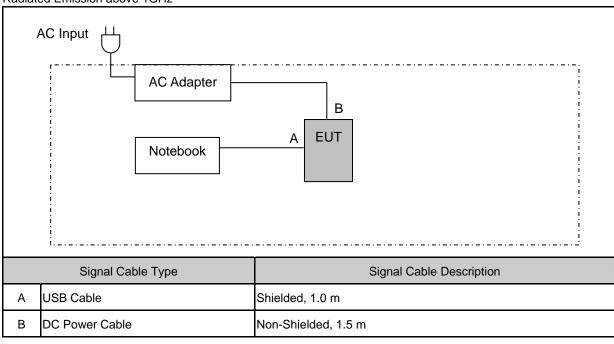
Configuration of Test System Details 3.3.

Conducted Emission





Radiated Emission above 1GHz





3.4. Test Site Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	26
Humidity (%RH)	25-75	60
Barometric pressure (mbar)	860-1060	950

4 AC Power Conducted Emission Measurement

4.1. **Limit**

Frequency (MHz)	Quasi-peak	Average
0.15 - 0.5	66 to 56	56 to 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

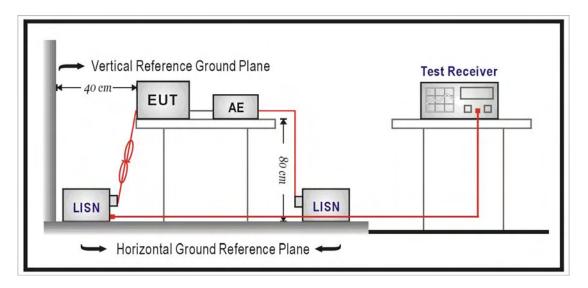
4.2. Test Instruments

Describe	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Test Receiver	R&S	ESCI	100367	06/18/2012	(1)
LISN	R&S	ENV216	101040	03/04/2013	(1)
LISN	R&S	ENV216	101041	03/04/2013	(1)
Test Site	ATL	TE05	TE05	N.C.R.	

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

4.3. Test Setup



4.4. Test Procedure

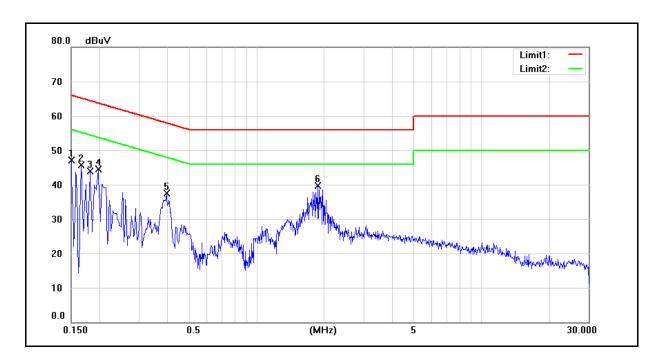
The power line conducted emission measurements were performed in a shielded enclosure. The EUT was assembled on a wooden table which is 80 centimeters high, was placed 40 centimeters from the back wall and at least 1 meter from the sidewall.

Power was fed to the EUT from the public utility power grid through a line filter and EMCO Model 3162/2 SH Line Impedance Stabilization Networks (LISN). The LISN housing, measuring instrumentation case, ground plane, etc., were electrically bonded together at the same RF potential. The Spectrum analyzer was connected to the AC line through an isolation transformer. The 50-ohm output of the LISN was connected to the spectrum analyzer directly. Conducted emission levels were in the CISPR quasi-peak detection mode. The analyzer's 6 dB bandwidth was set to 9 KHz. No post-detector video filter was used.

The spectrum was scanned from 150 KHz to 30 MHz. The physical arrangement of the test system and associated cabling was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude and frequency. All spurious emission frequencies were observed. The highest emission amplitudes relative to the appropriate limit were measured and have been recorded in paragraph 4.1.

4.5. **Test Result**

Standard: FCC Part 15E Line: Test item: Conducted Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26(°C)/60%RH Test Mode: Mode 1 Date: 05/02/2013 Test By: Fly Lu Description:



No.	Frequency	QP	AVG	Correction	QP	AVG	QP	AVG	QP	AVG	Remark
		reading	reading	factor	result	result	limit	limit	margin	margin	
	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(dB)	
1	0.1500	34.32	17.71	9.62	43.94	27.33	66.00	56.00	-22.06	-28.67	Pass
2	0.1660	29.71	11.03	9.62	39.33	20.65	65.16	55.16	-25.83	-34.51	Pass
3	0.1820	29.41	11.96	9.62	39.03	21.58	64.39	54.39	-25.36	-32.81	Pass
4	0.1980	28.42	14.16	9.62	38.04	23.78	63.69	53.69	-25.65	-29.91	Pass
5	0.3980	26.00	18.04	9.62	35.62	27.66	57.90	47.90	-22.28	-20.24	Pass
6	1.8820	27.10	17.26	9.70	36.80	26.96	56.00	46.00	-19.20	-19.04	Pass

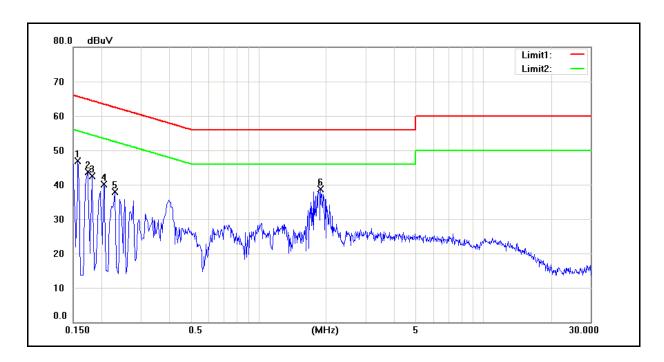
Standard: FCC Part 15E Line: N

Test item: Conducted Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp. ($^{\circ}$ C)/Hum. ($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 1 Date: 05/02/2013

Test By: Fly Lu

Description:



No.	Frequency	QP	AVG	Correction	QP	AVG	QP	AVG	QP	AVG	Remark
		reading	reading	factor	result	result	limit	limit	margin	margin	
	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(dB)	
1	0.1580	31.17	10.45	9.63	40.80	20.08	65.57	55.57	-24.77	-35.49	Pass
2	0.1740	30.39	13.26	9.63	40.02	22.89	64.77	54.77	-24.75	-31.88	Pass
3	0.1820	28.17	9.23	9.63	37.80	18.86	64.39	54.39	-26.59	-35.53	Pass
4	0.2060	25.69	7.75	9.63	35.32	17.38	63.37	53.37	-28.05	-35.99	Pass
5	0.2300	22.22	5.68	9.63	31.85	15.31	62.45	52.45	-30.60	-37.14	Pass
6	1.8940	23.54	14.04	9.70	33.24	23.74	56.00	46.00	-22.76	-22.26	Pass

5 Radiated Emission Measurement

5.1. Limit

Limits of Radiated Emission Measurement

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequency Range (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	10	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Note: 1. The lower limit shall apply at the transition frequencies.

- 2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
- 3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

5.2. Test Instruments

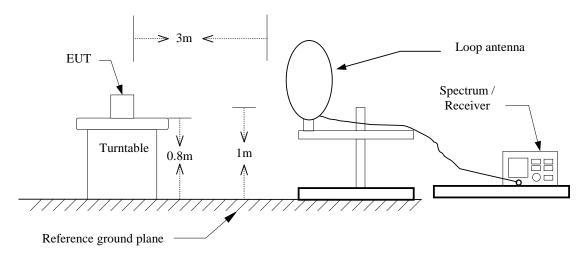
	3 Meter Chamber											
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark							
RF Pre-selector	Agilent	N9039A	MY46520256	01/21/2013	(1)							
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/21/2013	(1)							
Pre Amplifier	Agilent	8449B	3008A02237	02/21/2013	(1)							
Pre Amplifier	Agilent	8447D	2944A10961	02/21/2013	(1)							
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	06/29/2012	(1)							
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/15/2012	(1)							
Horn Antenna (18~40GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	06/21/2012	(1)							
Test Site	ATL	TE01	888001	08/28/2012	(1)							

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

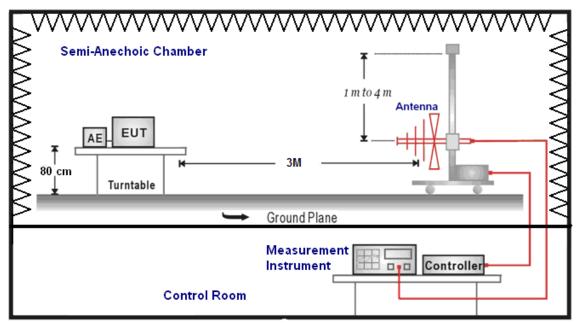
Note: N.C.R. = No Calibration Request.

5.3. Setup

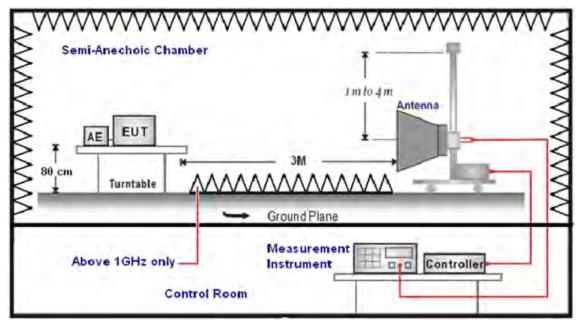
9kHz ~ 30MHz



30MHz ~ 1GHz



Above 1GHz



5.4. Test Procedure

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 9 kHz to 40 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 3 MHz for peak measurements and 3 MHz for average measurements.

A nonconductive material surrounded the EUT to supporting the EUT for standing on tree orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Trilog-Broadband Antenna (mode SB AC VULB) at 3 Meter and the ETS-Lindgren Double-Ridged Waveguide Horn antnna (model 3117) Schwarzbeck Mess-Elektronik Broadband Horn Antenna (BBHA 9170) was used in frequencies 1 – 40 GHz at a distance of 1 meter. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade). For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts pre meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro colts per meter (dBuV/m).

The actual field is intensity in referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

(1) Amplitude (dBuV/m) = FI (dBuV) +AF (dBuV) +CL (dBuV)-Gain (dB)

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

(2) Actual Amplitude (dBuV/m) = Amplitude (dBuV)-Dis(dB)

The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

- (a) For fundamental frequency: Transmitter Output < +30dBm
- (b) For spurious frequency: Spurious emission limits = fundamental emission limit /10

5.5. Test Result

Below 1GHz

799.0000

6

31.25

Delow	10112							
Stanc	dard:	FCC Part 15E		Test	Distance:	3m		
Test i	tem:	Radiated Emi	ssion	Powe	er:	AC 120\	//60Hz	
Mode	Model Number: PR2 Receiver				o.(°ℂ)/Hum.(%R	H): 26(°ℂ)/6	0%RH	
Test I	Mode:	Mode 1		Date	:	05/03/20	013	
Ant.P	olar.:	Horizontal		Test	Ву:	Fly Lu	Fly Lu	
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark	
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		
1	120.0000	45.20	-16.06	29.14	43.50	-14.36	QP	
2	240.0000	36.06	-12.25	23.81	46.00	-22.19	QP	
3	399.5000	42.93	-8.60	34.33	46.00	-11.67	QP	
4	584.0000	26.39	9 -5.52 20.87		46.00	-25.13	QP	
5	750.0000	750.0000 32.08 -2.46		29.62	46.00	-16.38	QP	
6	940.5000	26.51	0.92	27.43	46.00	-18.57	QP	

Standard: FCC Part 15E Test Distance: 3m Test item: Radiated Emission Power: AC 120V/60Hz PR2 Receiver Temp.(°C)/Hum.(%RH): 26(°C)/60%RH Model Number: Test Mode: Mode 1 Date: 05/03/2013 Ant.Polar.: Vertical Test By: Fly Lu Limit No. Frequency Reading Correct Result Margin Remark (MHz) (dBuV) Factor(dB/m) (dBuV/m) (dBuV/m) (dB) 1 120.0000 42.23 -16.06 26.17 43.50 -17.33 QP 206.5000 41.75 -14.00 43.50 2 27.75 -15.75 QΡ 399.5000 47.10 -8.60 38.50 46.00 -7.50 3 QΡ 4 530.0000 39.26 -6.65 32.61 46.00 -13.39 QP 701.5000 30.04 26.39 5 -3.65 46.00 -19.61 QΡ

29.68

46.00

-16.32

QP

Note: No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).

-1.57

peak

Above 1GHz

Standard: FCC Part 15E Test Distance: 3m Test item: Radiated Emission Power: AC 120V/60Hz Temp.(°C)/Hum.(%RH): 26(°C)/60%RH Model Number: PR2 Receiver Mode 2 Test Mode: Date: 05/02/2013 5180MHz Frequency: Test By: Fly Lu Frequency Correct Ant.Polar. Reading Result Limit Margin Remark (MHz) (dBuV) Factor(dB/m) (dBuV/m) (dBuV/m) (dB) H/V 2799.000 33.66 5.40 39.06 74.00 -34.94 peak Н 4647.000 30.68 11.25 41.93 74.00 -32.07 peak Η 7503.000 27.76 20.81 48.57 74.00 -25.43 peak Н 2722.000 33.26 5.19 38.45 74.00 -35.55 peak V 4703.000 29.37 11.40 40.77 74.00 -33.23 V peak 7517.000 27.87 20.82 48.69 74.00 -25.31 ٧

Standard: FCC Part 15E Test Distance: 3m Test item: Radiated Emission Power: AC 120V/60Hz Temp.(°C)/Hum.(%RH): Model Number: PR2 Receiver 26(°C)/60%RH Test Mode: Mode 2 05/02/2013 Date: Frequency: 5220MHz Test By: Fly Lu Frequency Correct Result Limit Remark Ant.Polar. Reading Margin H/V (MHz) (dBuV) Factor(dB/m) (dBuV/m) (dBuV/m) (dB) 2757.000 30.36 5.28 35.64 74.00 -38.36 Н peak 4605.000 29.92 11.15 41.07 74.00 -32.93 Н peak 7559.000 26.10 20.84 46.94 74.00 -27.06 Н peak 2778.000 33.71 5.34 39.05 74.00 -34.95 ٧ peak 4689.000 29.87 11.37 41.24 74.00 -32.76 peak ٧ 7377.000 27.17 20.57 47.74 74.00 -26.26 peak

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 2 Date: 05/02/2013

Frequency: 5240MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2757.000	32.51	5.28	37.79	74.00	-36.21	peak	Н
4661.000	31.38	11.29	42.67	74.00	-31.33	peak	Н
7454.000	28.16	20.73	48.89	74.00	-25.11	peak	Н
2785.000	32.31	5.36	37.67	74.00	-36.33	peak	V
4647.000	30.77	11.25	42.02	74.00	-31.98	peak	V
7433.000	27.08	20.69	47.77	74.00	-26.23	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 2 Date: 05/02/2013

Frequency: 5260MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2743.000	32.58	5.25	37.83	74.00	-36.17	peak	Н
4591.000	31.18	11.11	42.29	74.00	-31.71	peak	Н
7370.000	27.30	20.57	47.87	74.00	-26.13	peak	Н
2792.000	32.82	5.38	38.20	74.00	-35.80	peak	V
4654.000	30.92	11.27	42.19	74.00	-31.81	peak	V
7475.000	27.74	20.76	48.50	74.00	-25.50	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 2 Date: 05/02/2013

Frequency: 5280MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2785.000	32.55	5.36	37.91	74.00	-36.09	peak	Н
4696.000	30.38	11.38	41.76	74.00	-32.24	peak	Н
7454.000	28.15	20.73	48.88	74.00	-25.12	peak	Н
2743.000	32.73	5.25	37.98	74.00	-36.02	peak	V
4647.000	30.11	11.25	41.36	74.00	-32.64	peak	V
7433.000	28.02	20.69	48.71	74.00	-25.29	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 2 Date: 05/02/2013

Frequency: 5320MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2806.000	33.13	5.41	38.54	74.00	-35.46	peak	Н
4626.000	30.22	11.20	41.42	74.00	-32.58	peak	Н
7517.000	26.95	20.82	47.77	74.00	-26.23	peak	Н
2841.000	31.70	5.49	37.19	74.00	-36.81	peak	V
4703.000	30.51	11.40	41.91	74.00	-32.09	peak	V
7510.000	26.61	20.82	47.43	74.00	-26.57	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 2 Date: 05/02/2013

Frequency: 5500MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2771.000	33.91	5.32	39.23	74.00	-34.77	peak	Н
4696.000	31.23	11.38	42.61	74.00	-31.39	peak	Н
7447.000	28.97	20.71	49.68	74.00	-24.32	peak	Н
2743.000	32.01	5.25	37.26	74.00	-36.74	peak	V
4654.000	29.01	11.27	40.28	74.00	-33.72	peak	V
7489.000	29.19	20.79	49.98	74.00	-24.02	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 2 Date: 05/02/2013

Frequency: 5580MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2729.000	32.99	5.21	38.20	74.00	-35.80	peak	Н
4675.000	30.24	11.33	41.57	74.00	-32.43	peak	Н
7475.000	28.87	20.76	49.63	74.00	-24.37	peak	Н
2757.000	32.65	5.28	37.93	74.00	-36.07	peak	V
4661.000	30.97	11.29	42.26	74.00	-31.74	peak	V
7398.000	28.00	20.63	48.63	74.00	-25.37	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 2 Date: 05/02/2013

Frequency: 5700MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2757.000	32.86	5.28	38.14	74.00	-35.86	peak	Н
4661.000	30.38	11.29	41.67	74.00	-32.33	peak	Н
7433.000	27.60	20.69	48.29	74.00	-25.71	peak	Н
2750.000	31.98	5.27	37.25	74.00	-36.75	peak	V
4759.000	30.45	11.54	41.99	74.00	-32.01	peak	V
7447.000	28.41	20.71	49.12	74.00	-24.88	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 3 Date: 05/02/2013

Frequency: 5180MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2729.000	33.46	5.21	38.67	74.00	-35.33	peak	Н
4717.000	31.53	11.43	42.96	74.00	-31.04	peak	Н
7405.000	29.19	20.63	49.82	74.00	-24.18	peak	Н
2722.000	33.34	5.19	38.53	74.00	-35.47	peak	V
4682.000	30.80	11.34	42.14	74.00	-31.86	peak	V
7391.000	27.78	20.61	48.39	74.00	-25.61	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 3 Date: 05/02/2013

Frequency: 5220MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2778.000	32.48	5.34	37.82	74.00	-36.18	peak	Н
4647.000	30.58	11.25	41.83	74.00	-32.17	peak	Н
7510.000	28.54	20.82	49.36	74.00	-24.64	peak	Н
2806.000	35.06	5.41	40.47	74.00	-33.53	peak	V
4605.000	30.73	11.15	41.88	74.00	-32.12	peak	V
7419.000	28.71	20.66	49.37	74.00	-24.63	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 3 Date: 05/02/2013

Frequency: 5240MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2806.000	33.14	5.41	38.55	74.00	-35.45	peak	Н
4591.000	31.18	11.11	42.29	74.00	-31.71	peak	Н
7461.000	28.13	20.73	48.86	74.00	-25.14	peak	Н
2806.000	33.14	5.41	38.55	74.00	-35.45	peak	V
4591.000	31.18	11.11	42.29	74.00	-31.71	peak	V
7461.000	28.13	20.73	48.86	74.00	-25.14	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 3 Date: 05/02/2013

Frequency: 5260MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2771.000	33.78	5.32	39.10	74.00	-34.90	peak	Н
4675.000	31.46	11.33	42.79	74.00	-31.21	peak	Н
7454.000	29.97	20.73	50.70	74.00	-23.30	peak	Н
2771.000	34.63	5.32	39.95	74.00	-34.05	peak	V
4766.000	31.16	11.56	42.72	74.00	-31.28	peak	V
7482.000	28.54	20.78	49.32	74.00	-24.68	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 3 Date: 05/02/2013

Frequency: 5280MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2729.000	34.80	5.21	40.01	74.00	-33.99	peak	Н
4591.000	30.96	11.11	42.07	74.00	-31.93	peak	Н
7454.000	28.75	20.73	49.48	74.00	-24.52	peak	Н
2869.000	32.90	5.57	38.47	74.00	-35.53	peak	V
4675.000	31.10	11.33	42.43	74.00	-31.57	peak	V
7503.000	28.10	20.81	48.91	74.00	-25.09	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 3 Date: 05/02/2013

Frequency: 5320MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2729.000	32.99	5.21	38.20	74.00	-35.80	peak	Н
4654.000	30.75	11.27	42.02	74.00	-31.98	peak	Н
7377.000	28.07	20.57	48.64	74.00	-25.36	peak	Н
2771.000	33.63	5.32	38.95	74.00	-35.05	peak	V
4633.000	30.95	11.22	42.17	74.00	-31.83	peak	V
7405.000	28.29	20.63	48.92	74.00	-25.08	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 3 Date: 05/02/2013

Frequency: 5500MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2785.000	32.64	5.36	38.00	74.00	-36.00	peak	Н
4661.000	29.89	11.29	41.18	74.00	-32.82	peak	Н
7419.000	27.91	20.66	48.57	74.00	-25.43	peak	Н
2750.000	33.21	5.27	38.48	74.00	-35.52	peak	V
4703.000	30.93	11.40	42.33	74.00	-31.67	peak	V
7426.000	28.49	20.67	49.16	74.00	-24.84	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 3 Date: 05/02/2013

Frequency: 5580MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2799.000	32.67	5.40	38.07	74.00	-35.93	peak	Н
4577.000	29.86	11.07	40.93	74.00	-33.07	peak	Н
7405.000	27.93	20.63	48.56	74.00	-25.44	peak	Н
2785.000	34.00	5.36	39.36	74.00	-34.64	peak	V
4668.000	31.02	11.32	42.34	74.00	-31.66	peak	V
7433.000	29.43	20.69	50.12	74.00	-23.88	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 3 Date: 05/02/2013

Frequency: 5700MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2771.000	32.07	5.32	37.39	74.00	-36.61	peak	Н
4752.000	30.40	11.52	41.92	74.00	-32.08	peak	Н
7412.000	28.51	20.64	49.15	74.00	-24.85	peak	Н
2827.000	33.09	5.46	38.55	74.00	-35.45	peak	V
4717.000	30.06	11.43	41.49	74.00	-32.51	peak	V
7454.000	29.62	20.73	50.35	74.00	-23.65	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 4 Date: 05/02/2013

Frequency: 5190MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2701.000	30.98	5.13	36.11	74.00	-37.89	peak	Н
4703.000	28.39	11.40	39.79	74.00	-34.21	peak	Н
7559.000	29.32	20.84	50.16	74.00	-23.84	peak	Н
2778.000	32.33	5.34	37.67	74.00	-36.33	peak	V
4675.000	31.27	11.33	42.60	74.00	-31.40	peak	V
7559.000	27.69	20.84	48.53	74.00	-25.47	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 4 Date: 05/02/2013

Frequency: 5210MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2778.000	32.29	5.34	37.63	74.00	-36.37	peak	Н
4710.000	30.44	11.41	41.85	74.00	-32.15	peak	Н
7370.000	28.27	20.57	48.84	74.00	-25.16	peak	Н
2645.000	32.74	4.99	37.73	68.20	-30.47	peak	V
4605.000	31.49	11.15	42.64	74.00	-31.36	peak	V
7489.000	29.64	20.79	50.43	74.00	-23.57	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 4 Date: 05/02/2013

Frequency: 5230MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2827.000	32.31	5.46	37.77	74.00	-36.23	peak	Н
4738.000	30.29	11.50	41.79	74.00	-32.21	peak	Н
7370.000	28.83	20.57	49.40	74.00	-24.60	peak	Н
2743.000	32.44	5.25	37.69	74.00	-36.31	peak	V
4675.000	31.66	11.33	42.99	74.00	-31.01	peak	V
7454.000	28.76	20.73	49.49	74.00	-24.51	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 4 Date: 05/02/2013

Frequency: 5270MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2757.000	31.71	5.28	36.99	74.00	-37.01	peak	Н
4689.000	30.31	11.37	41.68	74.00	-32.32	peak	Н
7419.000	28.75	20.66	49.41	74.00	-24.59	peak	Н
2785.000	32.24	5.36	37.60	74.00	-36.40	peak	V
4717.000	31.24	11.43	42.67	74.00	-31.33	peak	V
7475.000	28.14	20.76	48.90	74.00	-25.10	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 4 Date: 05/02/2013

Frequency: 5310MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2785.000	33.83	5.36	39.19	74.00	-34.81	peak	Н
4710.000	30.52	11.41	41.93	74.00	-32.07	peak	Н
7454.000	27.52	20.73	48.25	74.00	-25.75	peak	Н
2736.000	32.59	5.22	37.81	74.00	-36.19	peak	V
4766.000	30.59	11.56	42.15	74.00	-31.85	peak	V
7510.000	27.36	20.82	48.18	74.00	-25.82	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 4 Date: 05/02/2013

Frequency: 5510MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2750.000	32.39	5.27	37.66	74.00	-36.34	peak	Н
4661.000	29.55	11.29	40.84	74.00	-33.16	peak	Н
7489.000	29.83	20.79	50.62	74.00	-23.38	peak	Н
2806.000	31.51	5.41	36.92	74.00	-37.08	peak	V
4633.000	30.25	11.22	41.47	74.00	-32.53	peak	V
7475.000	27.45	20.76	48.21	74.00	-25.79	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 4 Date: 05/02/2013

Frequency: 5590MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2743.000	34.01	5.25	39.26	74.00	-34.74	peak	Н
4661.000	29.71	11.29	41.00	74.00	-33.00	peak	Н
7538.000	27.20	20.83	48.03	74.00	-25.97	peak	Н
2750.000	33.00	5.27	38.27	74.00	-35.73	peak	V
4675.000	30.49	11.33	41.82	74.00	-32.18	peak	V
7573.000	28.39	20.84	49.23	74.00	-24.77	peak	V

Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26($^{\circ}$ C)/60%RH

Test Mode: Mode 4 Date: 05/02/2013

Frequency: 5670MHz Test By: Fly Lu

Frequency	Reading	Correct	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2771.000	32.01	5.32	37.33	74.00	-36.67	peak	Н
4661.000	29.23	11.29	40.52	74.00	-33.48	peak	Н
7573.000	27.64	20.84	48.48	74.00	-25.52	peak	Н
2799.000	33.91	5.40	39.31	74.00	-34.69	peak	V
4626.000	31.56	11.20	42.76	74.00	-31.24	peak	V
7538.000	28.94	20.83	49.77	74.00	-24.23	peak	V

Mode 5

Report Number: 1305FR19

05/01/2013

Standard: RSS-Gen Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{PR2 Receiver} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \qquad \mbox{26($^{\circ}_{\mathbb{C}}$)/60$\%RH}$

Date:

Modulation: IEEE 802.11a Test By: Fly Lu

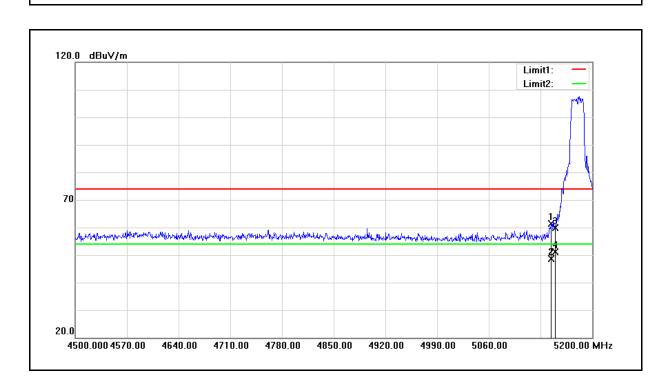
Frequency: 5260 MHz

Test Mode:

Frequency	Reading	Correct	Result	Peak Limit	AVG. Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)		H/V
2778.000	33.56	5.34	38.90	74.00	54.00	-35.10	peak	Н
4759.000	30.47	11.54	42.01	74.00	54.00	-31.99	peak	Н
7370.000	27.49	20.57	48.06	74.00	54.00	-25.94	peak	Н
2806.000	33.15	5.41	38.56	74.00	54.00	-35.44	peak	V
4626.000	30.59	11.20	41.79	74.00	54.00	-32.21	peak	V
7475.000	27.39	20.76	48.15	74.00	54.00	-25.85	peak	V

Band Edge

Standard: FCC Part 15E Test Distance: Test item: Radiated Emission Power: AC 120V/60Hz Model Number: PR2 Receiver Temp.($^{\circ}$ C)/Hum.($^{\circ}$ RH): 26(°C)/60%RH 05/02/2013 Test Mode: Mode 2 Date: Frequency: 5180 MHz Test By: Fly Lu Ant.Polar.: Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5144.700	48.59	12.80	61.39	74.00	-12.61	peak
2	5144.700	35.87	12.80	48.67	54.00	-5.33	AVG
3	5150.000	47.17	12.81	59.98	74.00	-14.02	peak
4	5150.000	38.25	12.81	51.06	54.00	-2.94	AVG

Standard: FCC Part 15E Test Distance: 3m

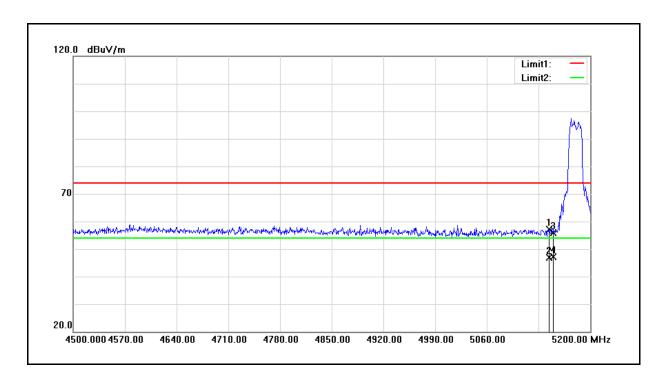
Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 2 Date: 05/02/2013

Frequency: 5180 MHz Test By: Fly Lu

Ant.Polar.: Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5144.700	44.22	12.80	57.02	74.00	-16.98	peak
2	5144.700	34.05	12.80	46.85	54.00	-7.15	AVG
3	5150.000	42.97	12.81	55.78	74.00	-18.22	peak
4	5150.000	34.22	12.81	47.03	54.00	-6.97	AVG

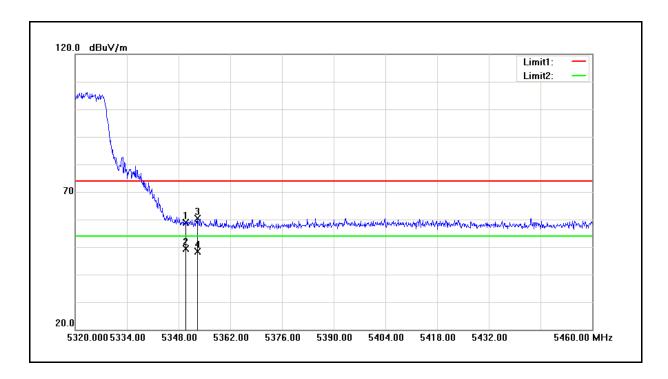
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 2 Date: 05/02/2013

Frequency: 5320 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	45.30	13.70	59.00	74.00	-15.00	peak
2	5350.000	35.63	13.70	49.33	54.00	-4.67	AVG
3	5353.040	46.63	13.70	60.33	74.00	-13.67	peak
4	5353.040	34.80	13.70	48.50	54.00	-5.50	AVG

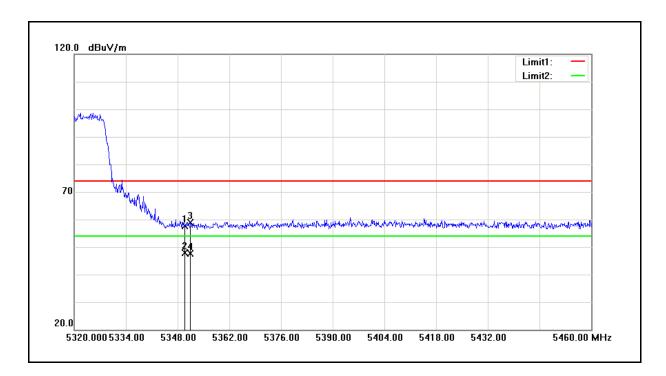
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 2 Date: 05/02/2013

Frequency: 5320 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	43.84	13.70	57.54	74.00	-16.46	peak
2	5350.000	34.30	13.70	48.00	54.00	-6.00	AVG
3	5351.500	45.21	13.70	58.91	74.00	-15.09	peak
4	5351.500	34.05	13.70	47.75	54.00	-6.25	AVG

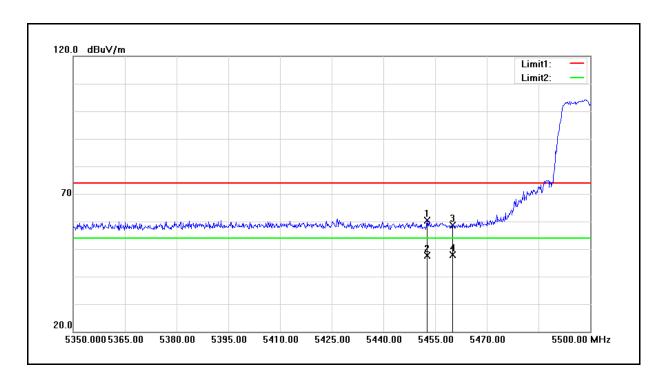
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 2 Date: 05/02/2013

Frequency: 5500 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5452.750	46.17	14.14	60.31	74.00	-13.69	peak
2	5452.750	33.51	14.14	47.65	54.00	-6.35	AVG
3	5460.000	44.40	14.18	58.58	74.00	-15.42	peak
4	5460.000	33.58	14.18	47.76	54.00	-6.24	AVG

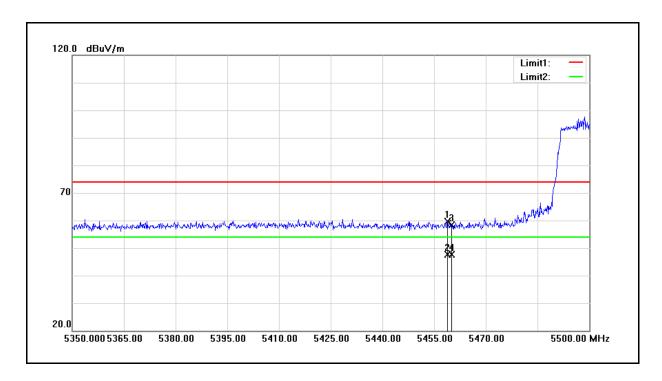
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 2 Date: 05/02/2013

Frequency: 5500 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5458.900	45.41	14.17	59.58	74.00	-14.42	peak
2	5458.900	33.40	14.17	47.57	54.00	-6.43	AVG
3	5460.000	44.12	14.18	58.30	74.00	-15.70	peak
4	5460.000	33.43	14.18	47.61	54.00	-6.39	AVG

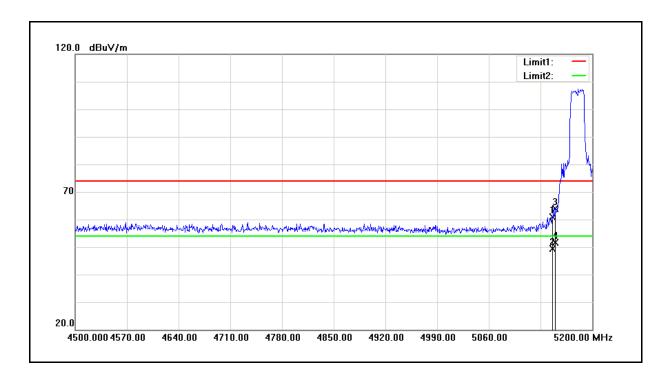
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 3 Date: 05/02/2013

Frequency: 5180 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5146.100	48.02	12.80	60.82	74.00	-13.18	peak
2	5146.100	36.57	12.80	49.37	54.00	-4.63	AVG
3	5150.000	51.01	12.81	63.82	74.00	-10.18	peak
4	5150.000	38.78	12.81	51.59	54.00	-2.41	AVG

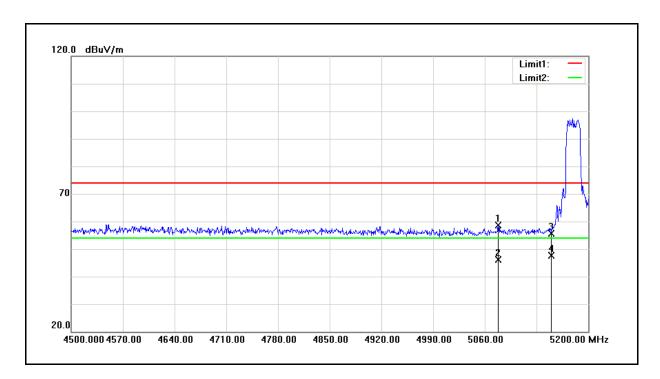
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 3 Date: 05/02/2013

Frequency: 5180 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5078.200	46.21	12.50	58.71	74.00	-15.29	peak
2	5078.200	33.53	12.50	46.03	54.00	-7.97	AVG
3	5150.000	42.91	12.81	55.72	74.00	-18.28	peak
4	5150.000	34.76	12.81	47.57	54.00	-6.43	AVG

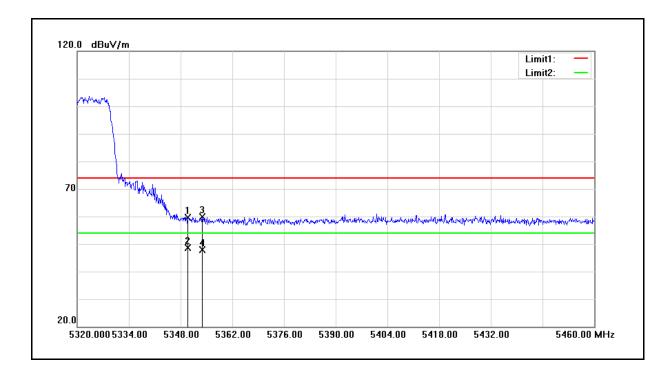
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 3 Date: 05/02/2013

Frequency: 5320 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	45.98	13.70	59.68	74.00	-14.32	peak
2	5350.000	34.98	13.70	48.68	54.00	-5.32	AVG
3	5353.880	46.20	13.71	59.91	74.00	-14.09	peak
4	5353.880	34.11	13.71	47.82	54.00	-6.18	AVG

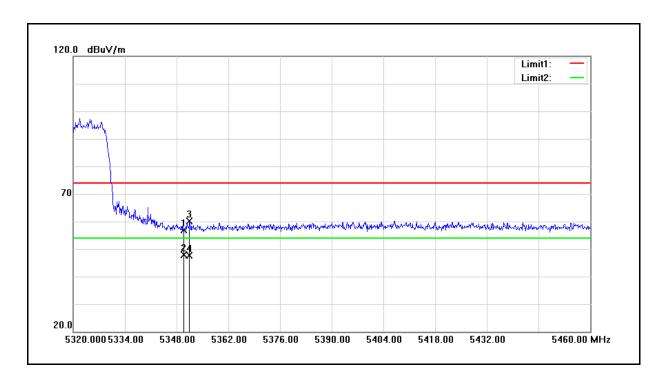
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 3 Date: 05/02/2013

Frequency: 5320 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	43.21	13.70	56.91	74.00	-17.09	peak
2	5350.000	34.21	13.70	47.91	54.00	-6.09	AVG
3	5351.500	46.45	13.70	60.15	74.00	-13.85	peak
4	5351.500	34.00	13.70	47.70	54.00	-6.30	AVG

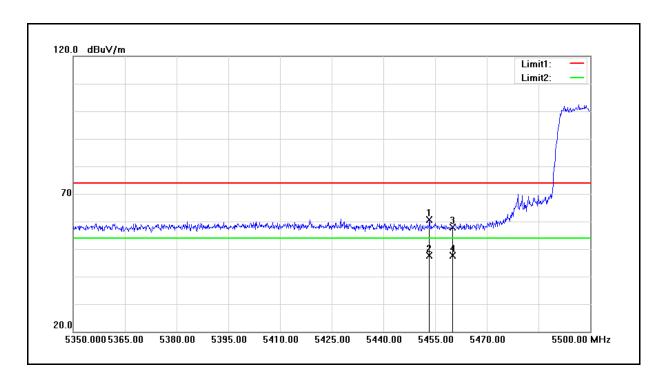
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 3 Date: 05/02/2013

Frequency: 5500 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5453.350	46.48	14.14	60.62	74.00	-13.38	peak
2	5453.350	33.53	14.14	47.67	54.00	-6.33	AVG
3	5460.000	43.77	14.18	57.95	74.00	-16.05	peak
4	5460.000	33.48	14.18	47.66	54.00	-6.34	AVG

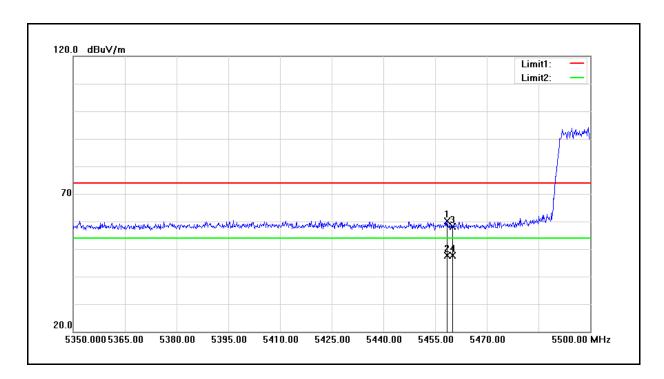
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 3 Date: 05/02/2013

Frequency: 5500 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5458.450	46.05	14.17	60.22	74.00	-13.78	peak
2	5458.450	33.41	14.17	47.58	54.00	-6.42	AVG
3	5460.000	43.95	14.18	58.13	74.00	-15.87	peak
4	5460.000	33.37	14.18	47.55	54.00	-6.45	AVG

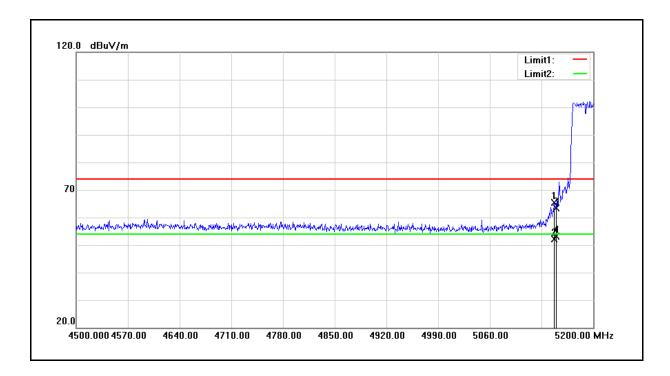
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 4 Date: 05/02/2013

Frequency: 5190 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5147.500	52.47	12.81	65.28	74.00	-8.72	peak
2	5147.500	39.40	12.81	52.21	54.00	-1.79	AVG
3	5150.000	50.56	12.81	63.37	74.00	-10.63	peak
4	5150.000	40.32	12.81	53.13	54.00	-0.87	AVG

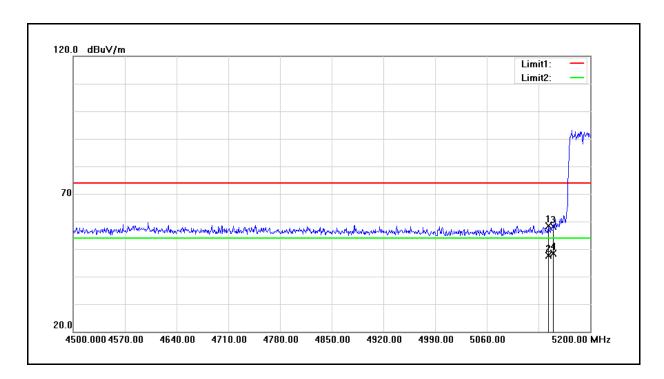
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 4 Date: 05/02/2013

Frequency: 5190 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5143.300	45.66	12.78	58.44	74.00	-15.56	peak
2	5143.300	34.81	12.78	47.59	54.00	-6.41	AVG
3	5150.000	45.22	12.81	58.03	74.00	-15.97	peak
4	5150.000	35.63	12.81	48.44	54.00	-5.56	AVG

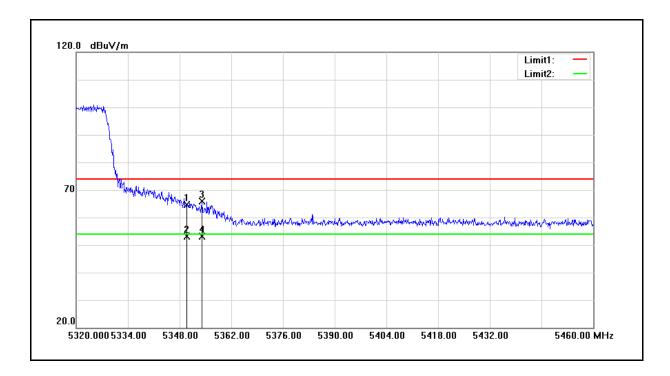
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 4 Date: 05/02/2013

Frequency: 5310 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	50.84	13.70	64.54	74.00	-9.46	peak
2	5350.000	39.46	13.70	53.16	54.00	-0.84	AVG
3	5354.020	52.05	13.71	65.76	74.00	-8.24	peak
4	5354.020	39.31	13.71	53.02	54.00	-0.98	AVG

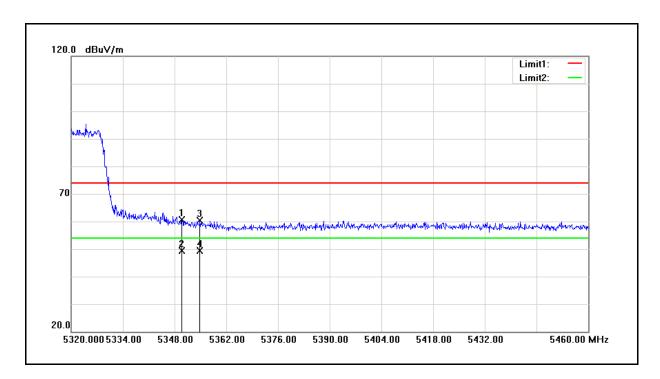
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 4 Date: 05/02/2013

Frequency: 5310 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	46.83	13.70	60.53	74.00	-13.47	peak
2	5350.000	35.64	13.70	49.34	54.00	-4.66	AVG
3	5354.860	46.63	13.71	60.34	74.00	-13.66	peak
4	5354.860	35.56	13.71	49.27	54.00	-4.73	AVG

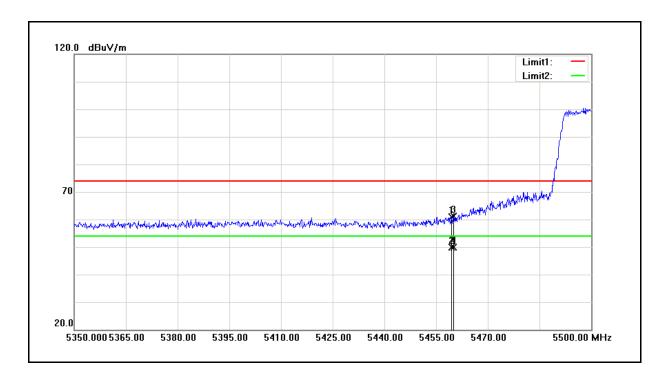
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 4 Date: 05/02/2013

Frequency: 5510 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5459.500	46.75	14.17	60.92	74.00	-13.08	peak
2	5459.500	35.67	14.17	49.84	54.00	-4.16	AVG
3	5460.000	46.87	14.18	61.05	74.00	-12.95	peak
4	5460.000	35.76	14.18	49.94	54.00	-4.06	AVG

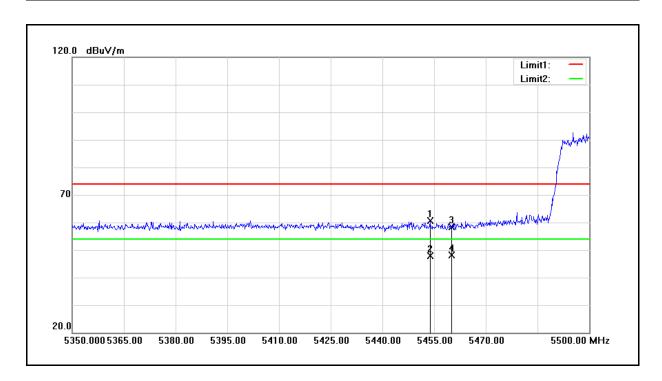
Standard: FCC Part 15E Test Distance: 3m

Test item: Radiated Emission Power: AC 120V/60Hz

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ PR2 Receiver} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ $26($^{\circ}$C)/60$\%RH}$

Test Mode: Mode 4 Date: 05/02/2013

Frequency: 5510 MHz Test By: Fly Lu



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5453.800	46.50	14.14	60.64	74.00	-13.36	peak
2	5453.800	33.64	14.14	47.78	54.00	-6.22	AVG
3	5460.000	44.25	14.18	58.43	74.00	-15.57	peak
4	5460.000	33.93	14.18	48.11	54.00	-5.89	AVG

6 Maximum Conducted Output Power / EIRP Measurement

6.1. Limit

FCC

Frequency Range (MHz)	Limit			
5.150 ~ 5.250 GHz	The lesser of 50mW (17dBm) or 4dBm + 10logB			
5.250 ~ 5.350 GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB			
5.470 ~ 5.725 GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB			

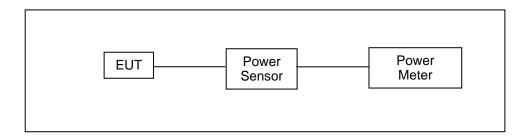
Note: Where B is the 26dB emission bandwidth in MHz.

CANADA

Frequency Range (MHz)	EIRP Limit			
5.150 ~ 5.250 GHz	The lesser of 200mW (23dBm) or 10 + 10 log10 B, dBm			
5.250 ~ 5.350 GHz	The lesser of 250 mW (24dBm) or 11 + 10 log10 B, dBm			
5.470 ~ 5.725 GHz	The lesser of 250 mW (24dBm) or 11 + 10 log10 B, dBm			

Note: Where B is the 99% emission bandwidth in MHz

6.2. Test Setup



6.3. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Power Sensor	Anritsu	MA2411B	1126022	08/14/2012	(1)
Power Meter	Anritsu	ML2495A	1135009	08/14/2012	(1)
Test Site	ATL	TE02	TE02	N.C.R.	

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

6.4. Test Procedure

The test is performed in accordance with KDB789033: D01 General UNII Test Procedures v01r03, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E.

6.5. Test Result

i est ivesuit											
Model Numb	er	PR2 Rec									
Test Item		Maximun	n Conduct	ed Output	Power						
Test Mode		Mode 2:	IEEE 802.	11a Link I	Mode						
Date of Test		04/29/20	13				Test Site	е	TE02		
Frequency	Data		Average	e Power		Limit		EI	RP		Limit
(MHz)	Rate	CO	N 1	CO	N 2	(dBm)	CO	N 1	CON 2		(dBm)
(1711 12)	raio	(dBm)	(W)	(dBm)	(W)	(GDIII)	(dBm)	(W)	(dBm)	(W)	(GDIII)
5180.0		13.35	0.022	13.20	0.021	< 17	16.40	0.044	18.58	0.072	< 23
5200.0		13.79	0.024	13.64	0.023	< 17	16.84	0.048	19.02	0.080	< 23
5220.0		13.20	0.021	13.05	0.020	< 17	16.25	0.042	18.43	0.070	< 23
5240.0		13.34	0.022	13.19	0.021	< 17	16.39	0.044	18.57	0.072	< 23
5260.0		13.60	0.023	13.46	0.022	< 24	16.65	0.046	18.84	0.077	< 30
5280.0		13.52	0.022	13.38	0.022	< 24	16.57	0.045	18.76	0.075	< 30
5300.0		13.08	0.020	12.94	0.020	< 24	16.13	0.041	18.32	0.068	< 30
5320.0		12.25	0.017	12.11	0.016	< 24	15.30	0.034	17.49	0.056	< 30
5500.0		12.10	0.016	12.02	0.016	< 24	15.15	0.033	17.40	0.055	< 30
5520.0	6M	12.05	0.016	11.97	0.016	< 24	15.10	0.032	17.35	0.054	< 30
5540.0		12.14	0.016	12.06	0.016	< 24	15.19	0.033	17.44	0.055	< 30
5560.0		12.09	0.016	12.01	0.016	< 24	15.14	0.033	17.39	0.055	< 30
5580.0		12.04	0.016	11.96	0.016	< 24	15.09	0.032	17.34	0.054	< 30
5600.0		11.84	0.015	11.76	0.015	< 24	14.89	0.031	17.14	0.052	< 30
5620.0		11.83	0.015	11.75	0.015	< 24	14.88	0.031	17.13	0.052	< 30
5640.0		11.81	0.015	11.73	0.015	< 24	14.86	0.031	17.11	0.051	< 30
5660.0		11.85	0.015	11.77	0.015	< 24	14.90	0.031	17.15	0.052	< 30
5680.0		11.78	0.015	11.70	0.015	< 24	14.83	0.030	17.08	0.051	< 30
5700.0		12.22	0.017	12.14	0.016	< 24	15.27	0.034	17.52	0.056	< 30
5180.0		13.23	0.021	13.09	0.020	< 17	16.28	0.042	18.47	0.070	< 23
5200.0		13.67	0.023	13.53	0.023	< 17	16.72	0.047	18.91	0.078	< 23
5220.0		13.08	0.020	12.94	0.020	< 17	16.13	0.041	18.32	0.068	< 23
5240.0		13.22	0.021	13.08	0.020	< 17	16.27	0.042	18.46	0.070	< 23
5260.0		13.49	0.022	13.35	0.022	< 24	16.54	0.045	18.73	0.075	< 30
5280.0		13.41	0.022	13.27	0.021	< 24	16.46	0.044	18.65	0.073	< 30
5300.0		12.97	0.020	12.83	0.019	< 24	16.02	0.040	18.21	0.066	< 30
5320.0		12.14	0.016	12.00	0.016	< 24	15.19	0.033	17.38	0.055	< 30
5500.0		11.97	0.016	11.91	0.016	< 24	15.02	0.032	17.29	0.054	< 30
5520.0	54M	11.92	0.016	11.86	0.015	< 24	14.97	0.031	17.24	0.053	< 30
5540.0		12.01	0.016	11.95	0.016	< 24	15.06	0.032	17.33	0.054	< 30
5560.0		12.01	0.016	11.90	0.015	< 24	15.06	0.032	17.28	0.053	< 30
5580.0		11.96	0.016	11.85	0.015	< 24	15.01	0.032	17.23	0.053	< 30
5600.0		11.76	0.015	11.65	0.015	< 24	14.81	0.030	17.03	0.050	< 30
5620.0		11.75	0.015	11.64	0.015	< 24	14.80	0.030	17.02	0.050	< 30
5640.0		11.73	0.015	11.62	0.015	< 24	14.78	0.030	17.00	0.050	< 30
5660.0		11.77	0.015	11.66	0.015	< 24	14.82	0.030	17.04	0.051	< 30
5680.0		11.70	0.015	11.59	0.014	< 24	14.75	0.030	16.97	0.050	< 30
5700.0		12.09	0.016	12.03	0.016	< 24	15.14	0.033	17.41	0.055	< 30

EIRP = Conducted Average Power + Antenna Gain

Model Numb	er	PR2 Rec	eiver								
Test Item		Maximur	n Conduct	ed Output	Power						
Test Mode			IEEE 802.	•		de					
Date of Test		04/29/20					Test Site	9	TE02		
				e Power			EIRP				
Frequency	Data	CO	N 1		N 2	Limit	CC	N 1		N 2	Limit
(MHz)	Rate	(dBm)	(W)	(dBm)	(W)	(dBm)	(dBm)	(W)	(dBm)	(W)	(dBm)
5180.0		11.68	0.015	11.61	0.014	< 17	14.73	0.030	16.99	0.050	< 23
5200.0		12.16	0.016	12.09	0.016	< 17	15.21	0.033	17.47	0.056	< 23
5220.0		12.01	0.016	11.94	0.016	< 17	15.06	0.032	17.32	0.054	< 23
5240.0		11.89	0.015	11.82	0.015	< 17	14.94	0.031	17.20	0.052	< 23
5260.0		11.82	0.015	11.72	0.015	< 24	14.87	0.031	17.10	0.051	< 30
5280.0		11.74	0.015	11.64	0.015	< 24	14.79	0.030	17.02	0.050	< 30
5300.0		10.58	0.011	10.48	0.011	< 24	13.63	0.023	15.86	0.039	< 30
5320.0		10.23	0.011	10.13	0.010	< 24	13.28	0.021	15.51	0.036	< 30
5500.0		10.22	0.011	10.13	0.010	< 24	13.27	0.021	15.51	0.036	< 30
5520.0	6.5M	10.13	0.010	10.04	0.010	< 24	13.18	0.021	15.42	0.035	< 30
5540.0		10.18	0.010	10.09	0.010	< 24	13.23	0.021	15.47	0.035	< 30
5560.0		10.08	0.010	9.99	0.010	< 24	13.13	0.021	15.37	0.034	< 30
5580.0		9.76	0.009	9.67	0.009	< 24	12.81	0.019	15.05	0.032	< 30
5600.0		10.18	0.010	10.09	0.010	< 24	13.23	0.021	15.47	0.035	< 30
5620.0		10.09	0.010	10.00	0.010	< 24	13.14	0.021	15.38	0.035	< 30
5640.0		10.12	0.010	10.03	0.010	< 24	13.17	0.021	15.41	0.035	< 30
5660.0		9.99	0.010	9.90	0.010	< 24	13.04	0.020	15.28	0.034	< 30
5680.0		9.72	0.009	9.63	0.009	< 24	12.77	0.019	15.01	0.032	< 30
5700.0		9.61	0.009	9.56	0.009	< 24	12.66	0.018	14.94	0.031	< 30
5180.0		11.58	0.014	11.51	0.014	< 17	14.63	0.029	16.89	0.049	< 23
5200.0		12.06	0.016	11.99	0.016	< 17	15.11	0.032	17.37	0.055	< 23
5220.0		11.91	0.016	11.84	0.015	< 17	14.96	0.031	17.22	0.053	< 23
5240.0		11.79	0.015	11.72	0.015	< 17	14.84	0.030	17.10	0.051	< 23
5260.0		11.69	0.015	11.59	0.014	< 24	14.74	0.030	16.97	0.050	< 30
5280.0		11.61	0.014	11.51	0.014	< 24	14.66	0.029	16.89	0.049	< 30
5300.0		10.45	0.011	10.35	0.011	< 24	13.50	0.022	15.73	0.037	< 30
5320.0		10.10	0.010	10.00	0.010	< 24	13.15	0.021	15.38	0.035	< 30
5500.0		10.10	0.010	10.07	0.010	< 24	13.15	0.021	15.45	0.035	< 30
5520.0	65M	10.01	0.010	9.98	0.010	< 24	13.06	0.020	15.36	0.034	< 30
5540.0		10.06	0.010	10.03	0.010	< 24	13.11	0.020	15.41	0.035	< 30
5560.0		9.96	0.010	9.93	0.010	< 24	13.01	0.020	15.31	0.034	< 30
5580.0		9.64	0.009	9.61	0.009	< 24	12.69	0.019	14.99	0.032	< 30
5600.0		10.06	0.010	10.03	0.010	< 24	13.11	0.020	15.41	0.035	< 30
5620.0		9.97	0.010	9.94	0.010	< 24	13.02	0.020	15.32	0.034	< 30
5640.0		10.00	0.010	9.97	0.010	< 24	13.05	0.020	15.35	0.034	< 30
5660.0		9.87	0.010	9.84	0.010	< 24	12.92	0.020	15.22	0.033	< 30
5680.0		9.60	0.009	9.57	0.009	< 24	12.65	0.018	14.95	0.031	< 30
5700.0		9.59	0.009	9.52	0.009	< 24	12.64	0.018	14.90	0.031	< 30

EIRP = Conducted Average Power + Antenna Gain

Model Number PR2 Receiver											
	Jei			0	D						
Test Item			n Conduct	· ·							
Test Mode			IEEE 802.	11n 40MF	Iz Link Mo	de					
Date of Test		04/29/20	13				Test Site	9	TE02		
Frequency	Data		Averag	e Power		Limit		El	RP		Limit
(MHz)	Rate	CO	N 1	CC	N 2	12 (dBm)		N 1	CO	N 2	(dBm)
(1711 12)	rtato	(dBm)	(W)	(dBm)	(W)	(ubiii)	(dBm)	(W)	(dBm)	(W)	(aBiii)
5190.0		11.10	0.013	10.99	0.013	< 17	14.15	0.026	16.37	0.043	< 23
5230.0		11.47	0.014	11.36	0.014	< 17	14.52	0.028	16.74	0.047	< 23
5270.0		11.39	0.014	11.26	0.013	< 24	14.44	0.028	16.64	0.046	< 30
5310.0	5310.0	10.13	0.010	10.00	0.010	< 24	13.18	0.021	15.38	0.035	< 30
5510.0	6.5M	11.11	0.013	10.98	0.013	< 24	14.16	0.026	16.36	0.043	< 30
5550.0		11.41	0.014	11.28	0.013	< 24	14.46	0.028	16.66	0.046	< 30
5590.0		10.87	0.012	10.74	0.012	< 24	13.92	0.025	16.12	0.041	< 30
5630.0		11.05	0.013	10.92	0.012	< 24	14.10	0.026	16.30	0.043	< 30
5670.0		10.84	0.012	10.71	0.012	< 24	13.89	0.024	16.09	0.041	< 30
5190.0		10.99	0.013	10.91	0.012	< 17	14.04	0.025	16.29	0.043	< 23
5230.0		11.36	0.014	11.28	0.013	< 17	14.41	0.028	16.66	0.046	< 23
5270.0		11.26	0.013	11.15	0.013	< 24	14.31	0.027	16.53	0.045	< 30
5310.0		10.00	0.010	9.89	0.010	< 24	13.05	0.020	15.27	0.034	< 30
5510.0	65M	11.00	0.013	10.89	0.012	< 24	14.05	0.025	16.27	0.042	< 30
5550.0		11.30	0.013	11.19	0.013	< 24	14.35	0.027	16.57	0.045	< 30
5590.0		10.76	0.012	10.65	0.012	< 24	13.81	0.024	16.03	0.040	< 30
5630.0		10.94	0.012	10.83	0.012	< 24	13.99	0.025	16.21	0.042	< 30
5670.0		10.73	0.012	10.62	0.012	< 24	13.78	0.024	16.00	0.040	< 30

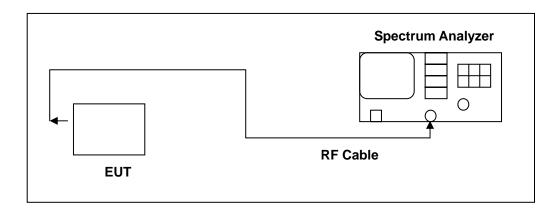
EIRP = Conducted Average Power + Antenna Gain

7 26dB RF Bandwidth Measurement

7.1. Limit

N/A

7.2. Test Setup



7.3. Test Instruments

Equipment	Manufacturer	Model Number Serial Number		Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY45300744	12/19/2012	(1)
Test Site	ATL	TE02	TE02	N.C.R.	

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

7.4. Test Procedure

The test is performed in accordance with KDB789033: D01 General UNII Test Procedures v01r03, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E.

7.5. Test Result

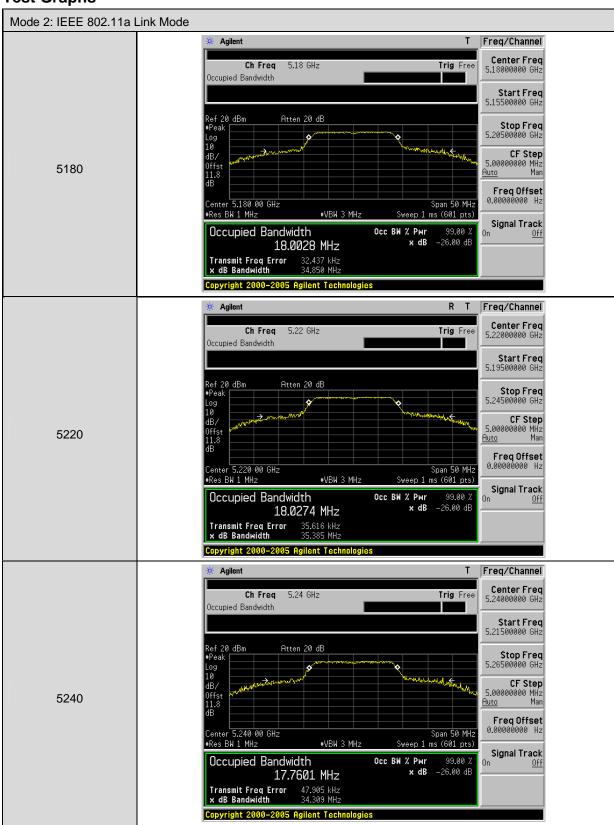
Model Number	PR2 Receiver						
Test Item	26dB RF Bandwidt	h					
Test Mode	Mode 2: IEEE 802.11a Link Mode						
Date of Test	04/29/2013		Test Site	TE02			
	quency MHz)		Measure (MHz				
5	5180	34.850					
5	5220		35.38	35			
5	5240	34.309					
5	5260	33.226					
5	5280	35.617					
5	5320	24.099					
5	5500	21.796					
5	5580	21.778					
5	5700	25.691					

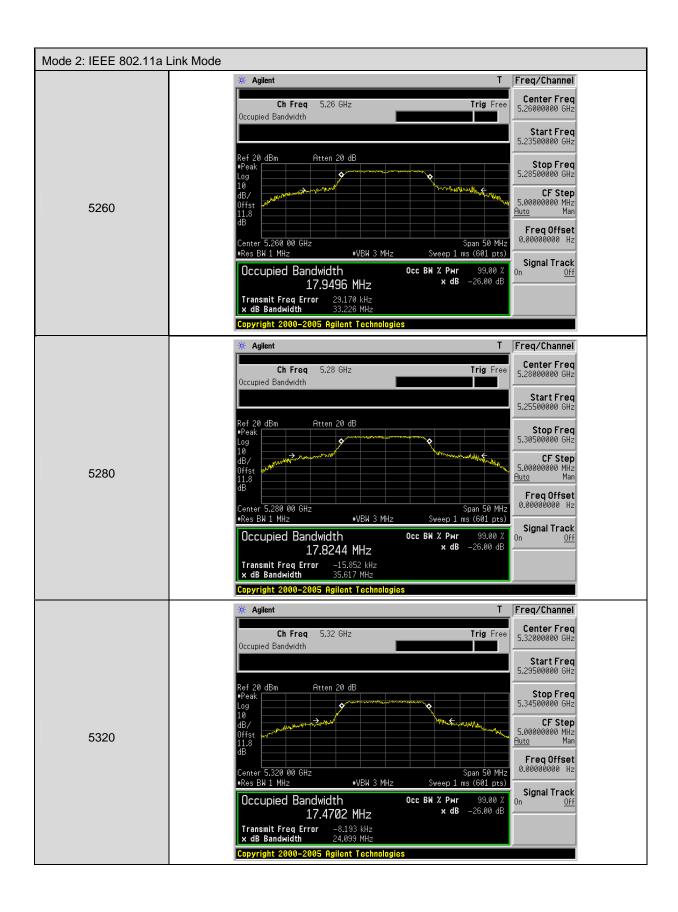
Model Number	PR2 Receiver			
Test Item	26dB RF Bandwidth			
Test Mode	Mode 3: IEEE 802.11n 20MHz Link Mode			
Date of Test	04/29/2013		Test Site	TE02
	quency MHz)	Measurement (MHz)		
5180		28.797		
5220		26.893		
5240		27.602		
5260		28.434		
5280		26.316		
5320		22.749		
5500		21.208		
5580		21.125		
5700		21.211		

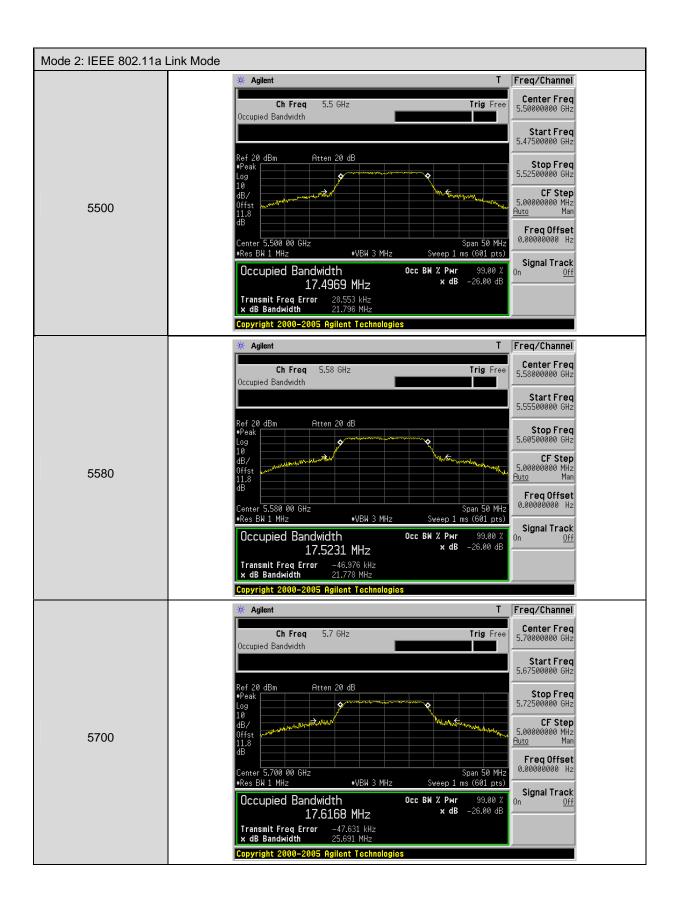
Model Number	PR2 Receiver				
Test Item	26dB RF Bandwidth				
Test Mode	Mode 4: IEEE 802.	11n 40MHz Link M	1ode		
Date of Test	04/29/2013	Test Site TE06			
Frequency (MHz)			Measurement (MHz)		
5190		57.141			
5230		51.491			
5270		42.113			
5310		41.581			
5510		41.521			
5590		41.553			
5670		41.732			

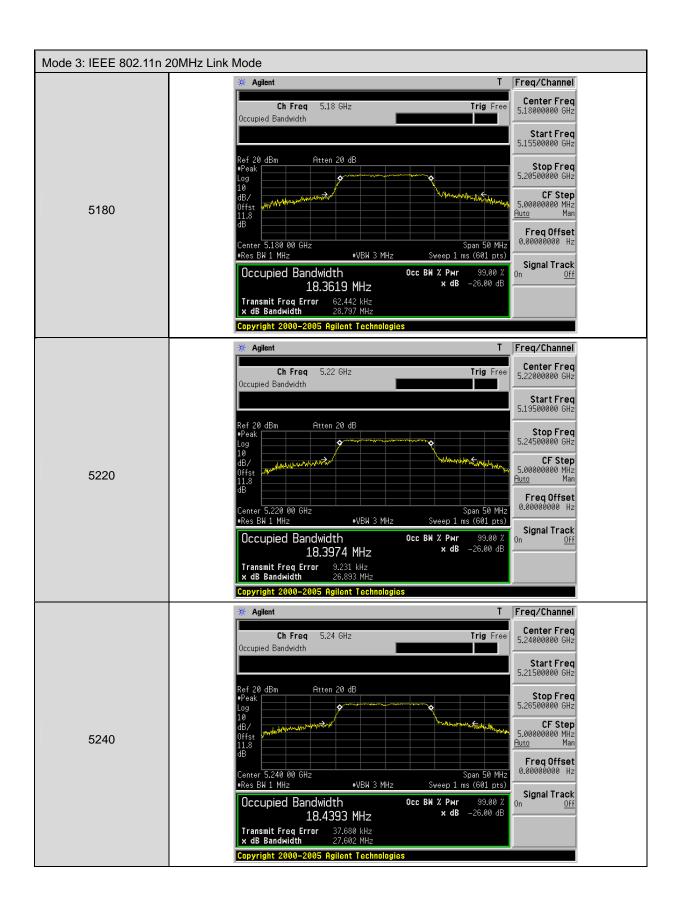


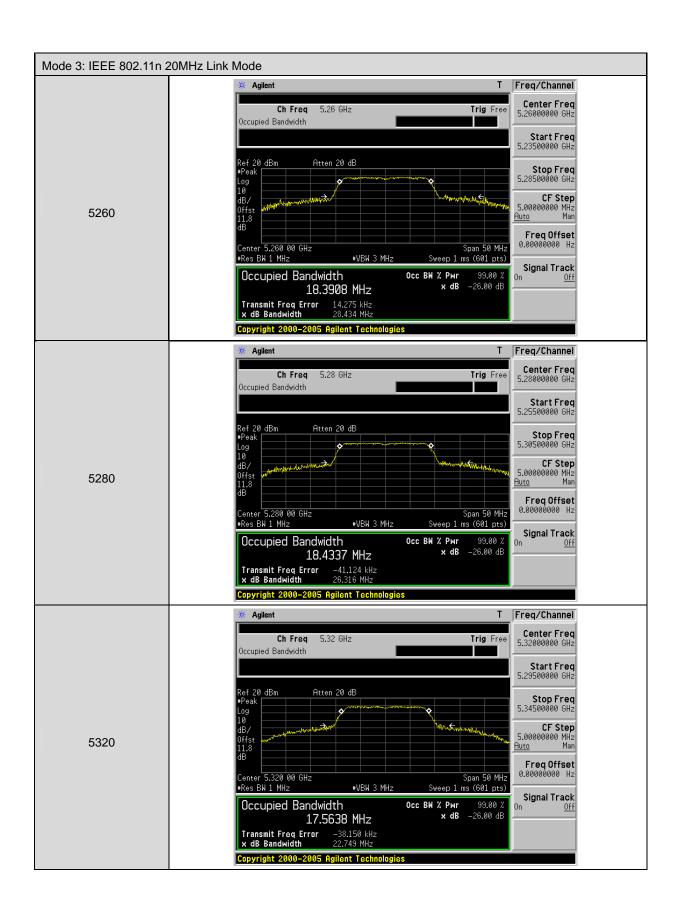
7.6. Test Graphs

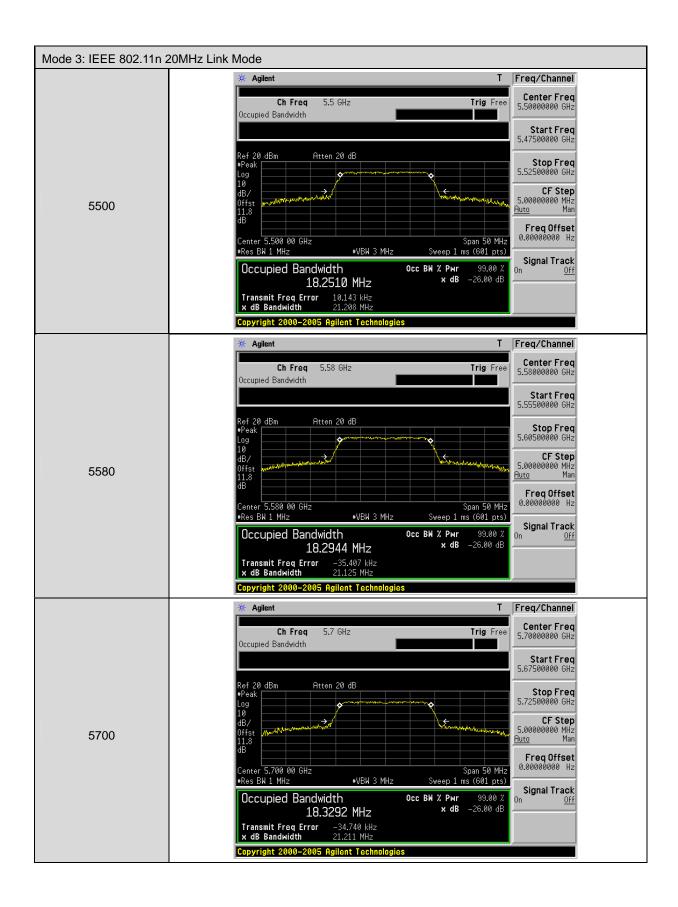






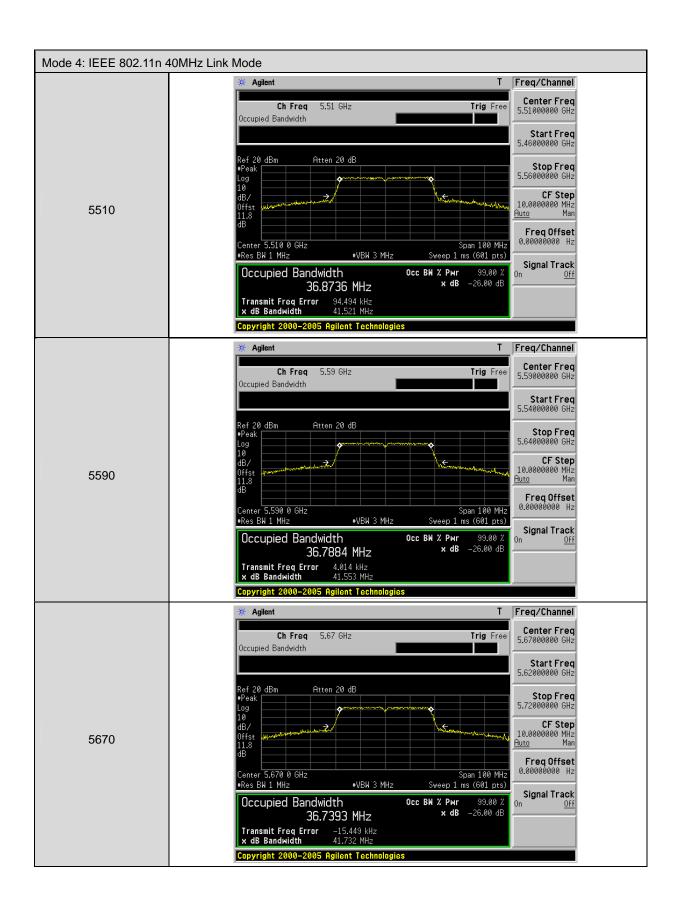










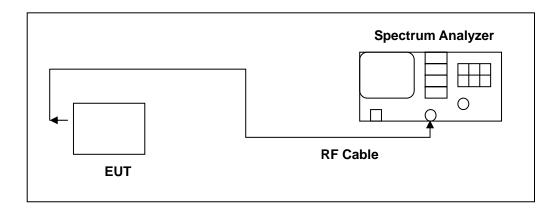


8 Peak Excursion Ratio Measurement

8.1. **Limit**

Frequency Range (MHz)	Limit
5.150 ~ 5.250 GHz	13 dB
5.250 ~ 5.350 GHz	13 dB
5.470 ~ 5.725 GHz	13 dB

8.2. Test Setup



8.3. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY45300744	12/19/2012	(1)
Test Site	ATL	TE02	TE02	N.C.R.	

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

8.4. Test Procedure

The test is performed in accordance with KDB789033: D01 General UNII Test Procedures v01r03, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E.



8.5. Test Result

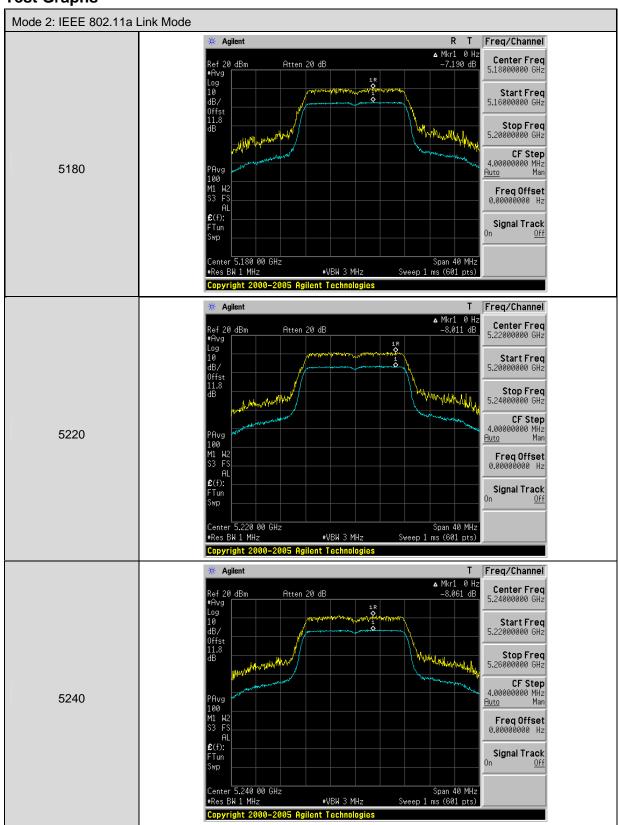
Model Number	PR2 Receiver					
Test Item	Peak Excursion Ratio					
Test Mode	Mode 2: IEEE 802.11a Link Mode					
Date of Test	04/29/2013 Test Site TE02					
	, ,		surement (dB)	Limit (dB)		
5180		-7.190		< 13		
5220		-8.011		< 13		
5240		-	-8.061	< 13		
5260		-8.275		< 13		
5280		-7.925		< 13		
5320		-7.692		< 13		
5500		-7.722		< 13		
5580		-7.875		< 13		
5700		-7.741		< 13		

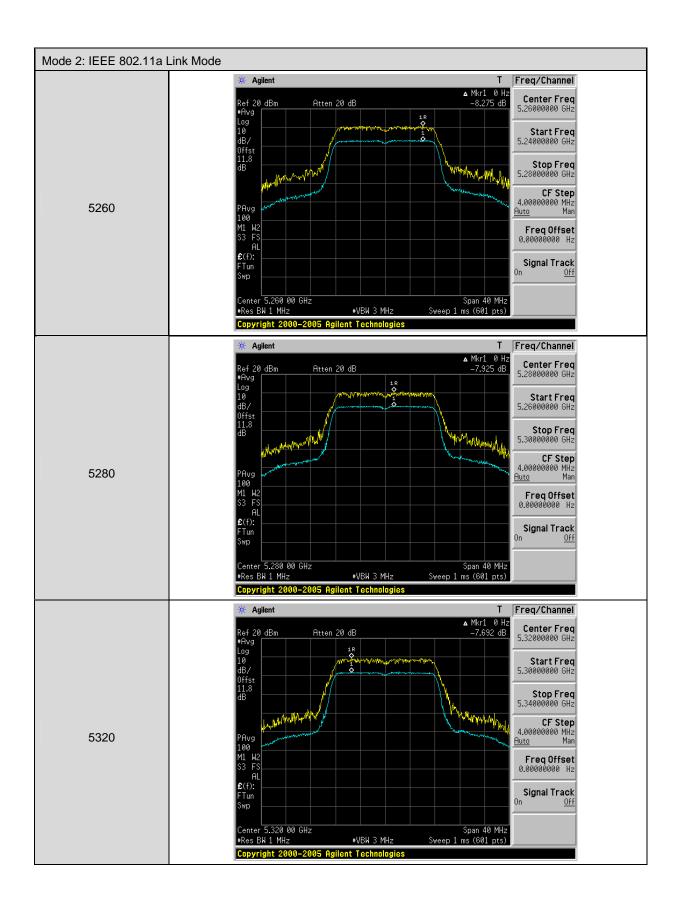
Model Number	PR2 Receiver					
Test Item	Peak Excursion Ratio					
Test Mode	Mode 3: IEEE 802.11n 20MHz Link Mode					
Date of Test	04/29/2013	04/29/2013 Test Site TE02				
	Frequency Measurement (MHz) (dB)			Limit (dB)		
5180			-8.069		< 13	
5220		-7.897			< 13	
5240		-7.743			< 13	
5260		-7.813			< 13	
5280		-8.267			< 13	
5320		-7.795			< 13	
5500		-7.766			< 13	
5580		-8.128			< 13	
5700		-8.207			< 13	

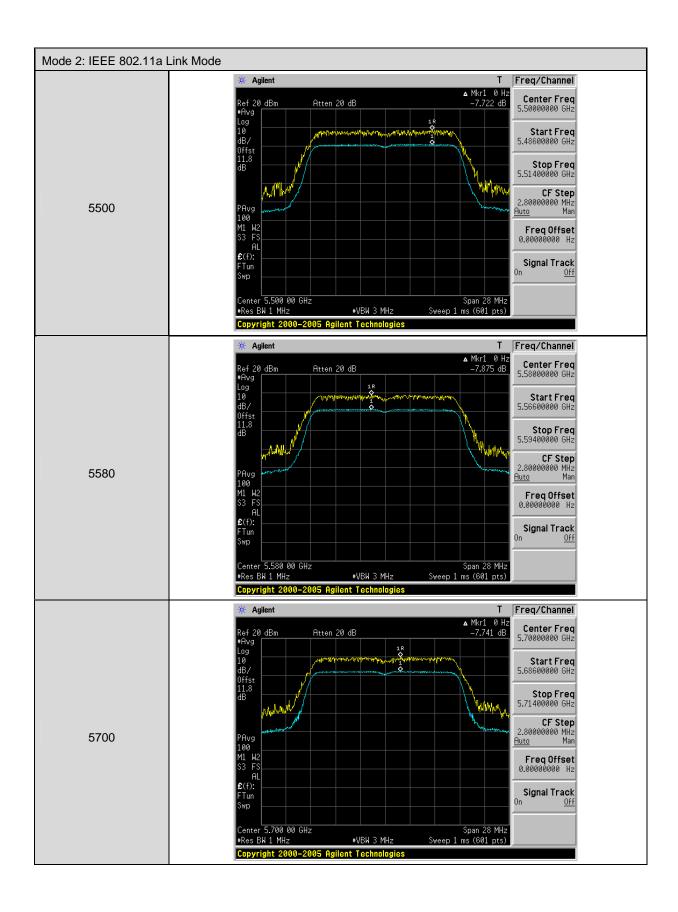
Model Number	PR2 Receiver					
Test Item	Peak Excursion Ratio					
Test Mode	Mode 4: IEEE 802.	11n 40MHz Link M	ode			
Date of Test	04/29/2013	04/29/2013 Test Site TE06				
Frequency M (MHz)		Mea	surement (dB)	Limit (dB)		
5190		-7.876		< 13		
5230		-8.021		< 13		
5270		-8.023		< 13		
5310		-8.104		< 13		
5510		-8.089		< 13		
5590		-7.920		< 13		
5670		-8.113		< 13		

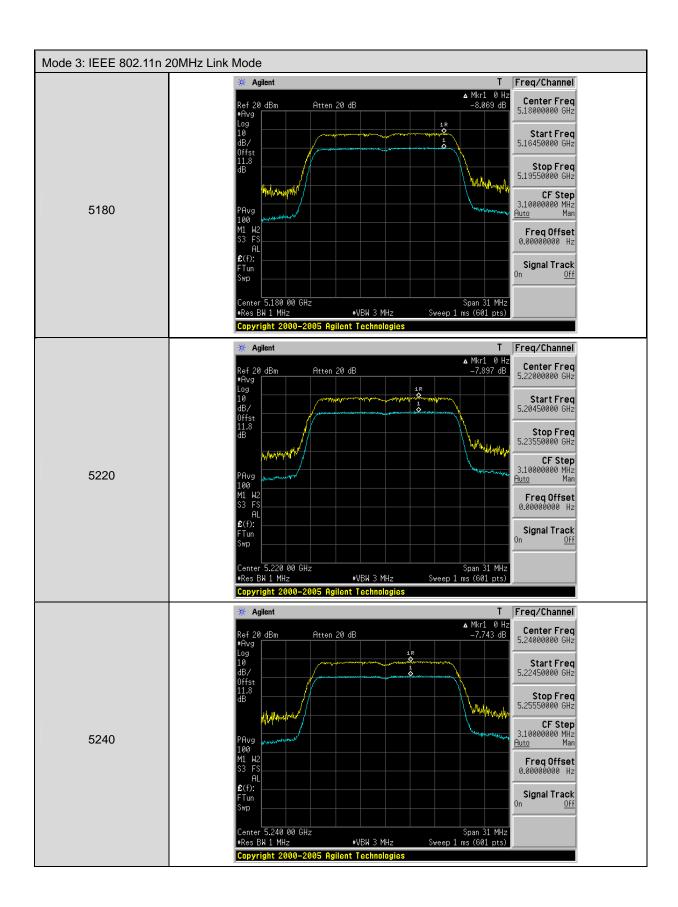


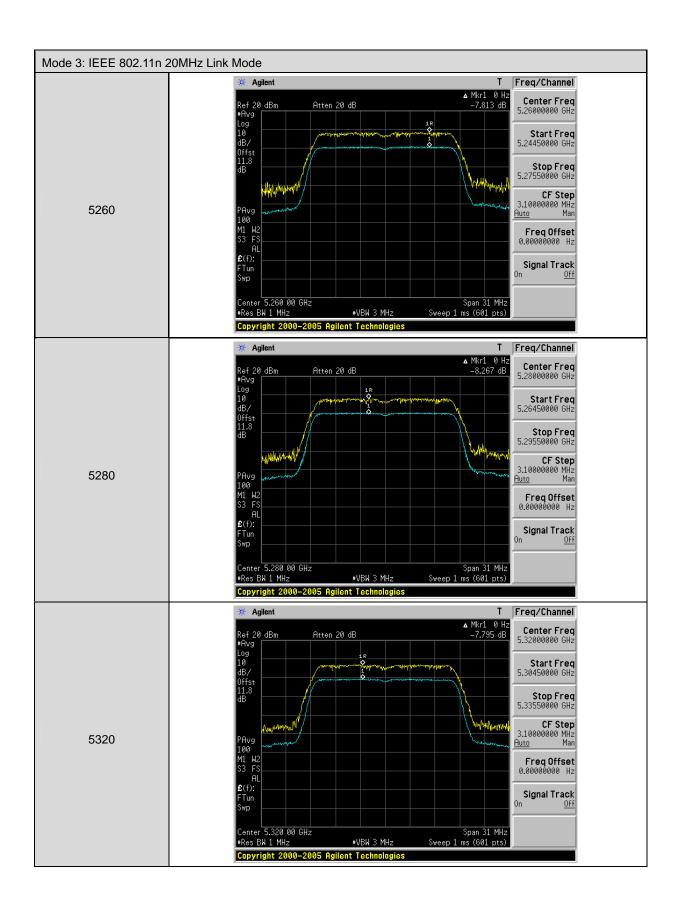
8.6. Test Graphs

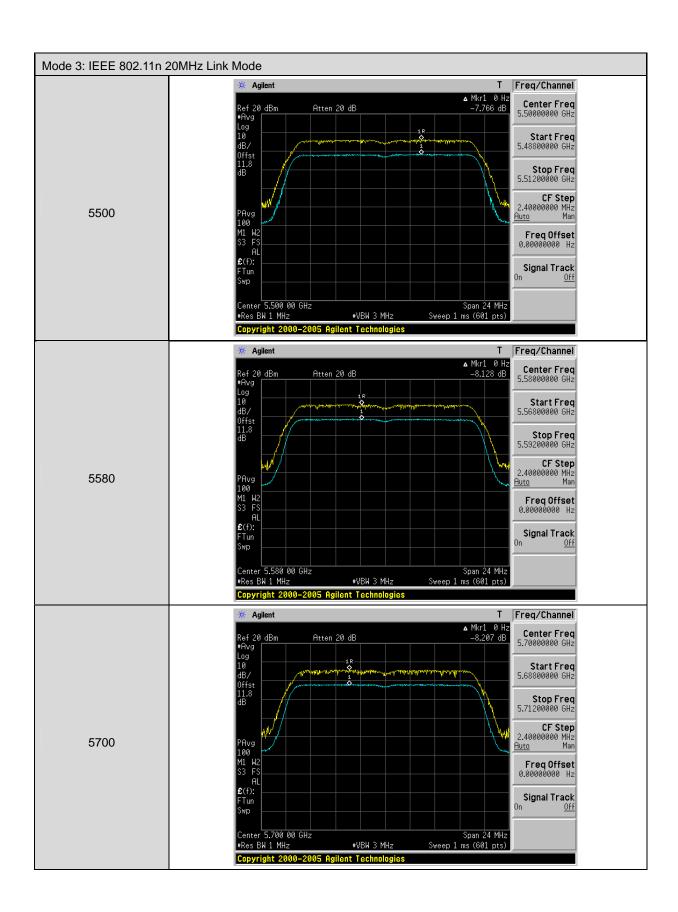


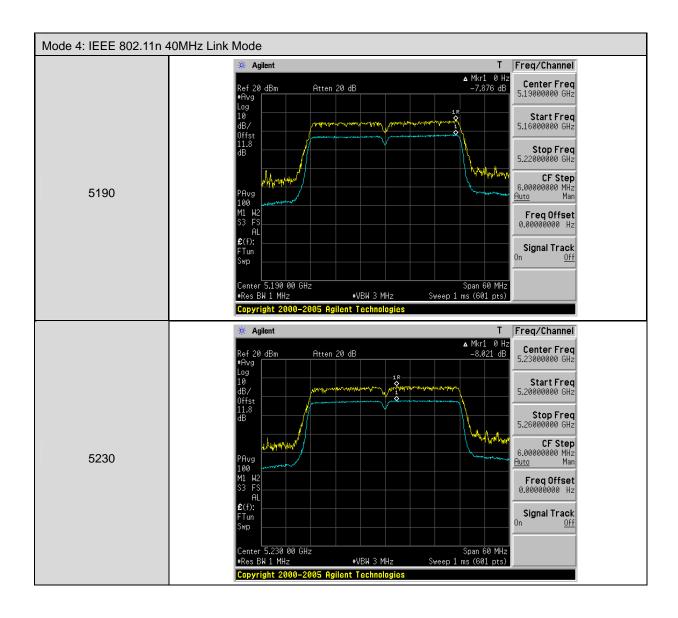


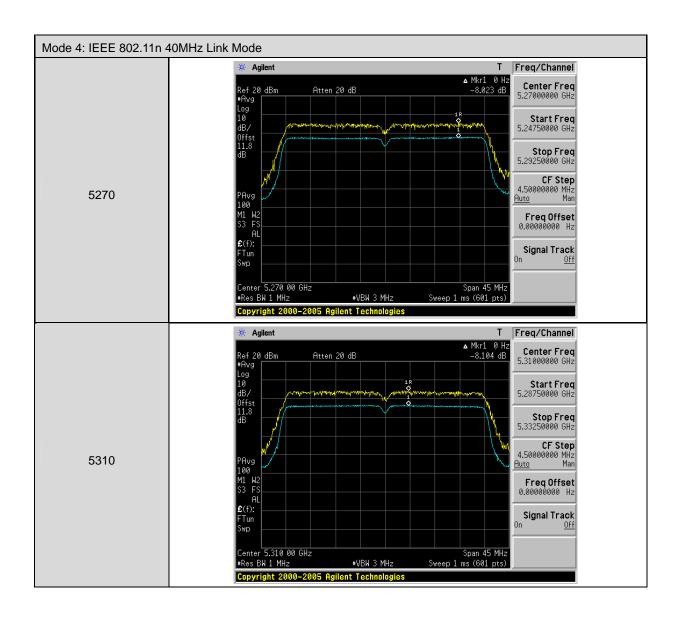


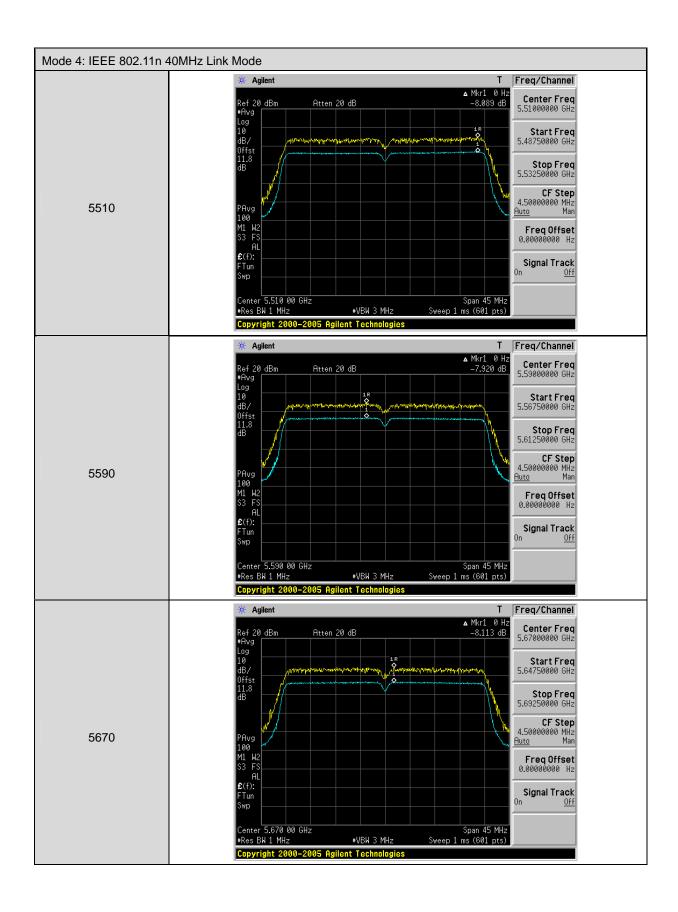










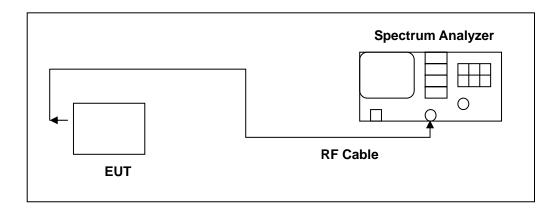


9 Peak Power Spectral Density Measurement

9.1. **Limit**

Frequency Range (MHz)	FCC Limit	CANADA EIRP Limit
5.150 ~ 5.250 GHz	4 dBm	10 dBm
5.250 ~ 5.350 GHz	11 dBm	11 dBm
5.470 ~ 5.725 GHz	11 dBm	11 dBm

9.2. Test Setup



9.3. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY45300744	12/19/2012	(1)
Test Site	ATL	TE02	TE02	N.C.R.	

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

9.4. Test Procedure

The test is performed in accordance with KDB789033: D01 General UNII Test Procedures v01r03, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E.

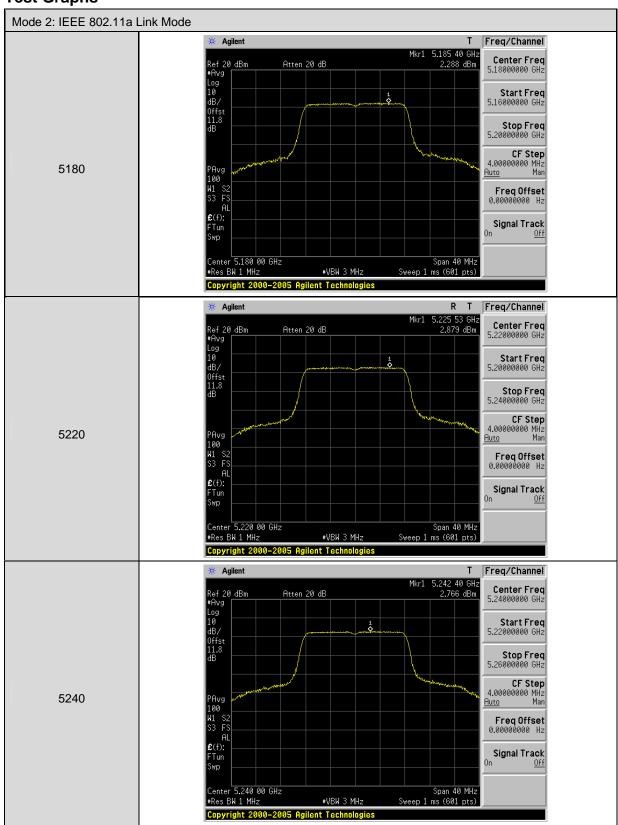
9.5. Test Result

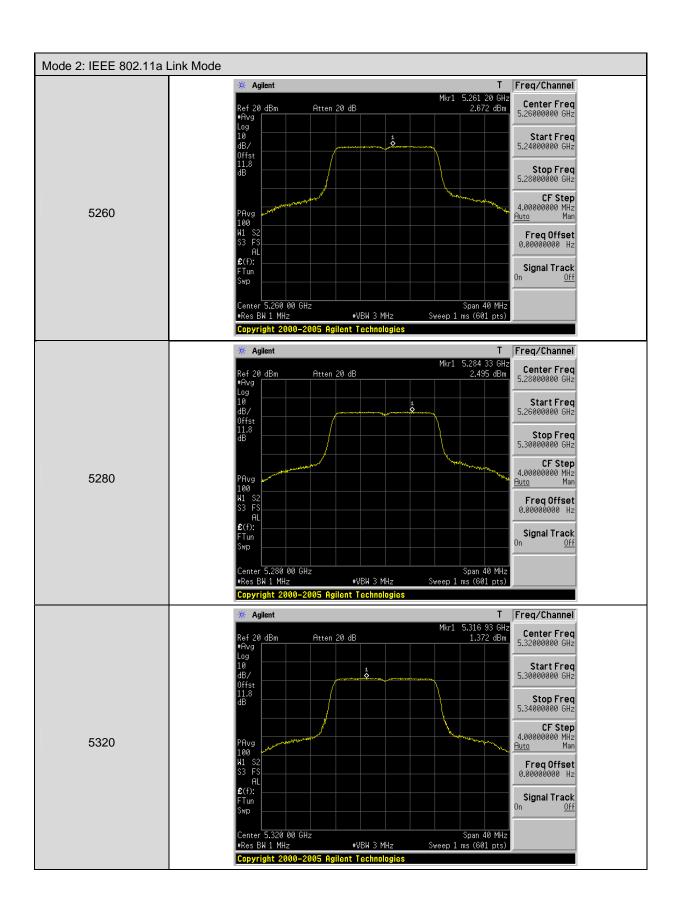
Model Number	PR2 Receiver						
Test Item	Peak Power Spectral D	ensity					
Test Mode	Mode 2: IEEE 802.11a	Link Mode					
Date of Test	04/29/2013			Test Site	TE02		
Fraguenay	F	cc	CAN	NADA			
Frequency (MHz)	Measurement (dBm)	Limit (dBm)	EIRP (dBm)	Lir (dE	nit Bm)		
5180	2.288	< 4	7.668	<	10		
5220	2.879	< 4	8.259	<	10		
5240	2.766	< 4	8.146	< '	10		
5260	2.672	< 11	8.052	<	11		
5280	2.495	< 11	7.875	<	11		
5320	1.372	< 11	6.752	<	11		
5500	1.077	< 11	6.457	<	11		
5580	1.395	< 11	6.775	<	11		
5700	2.243	< 11	7.623	<	11		

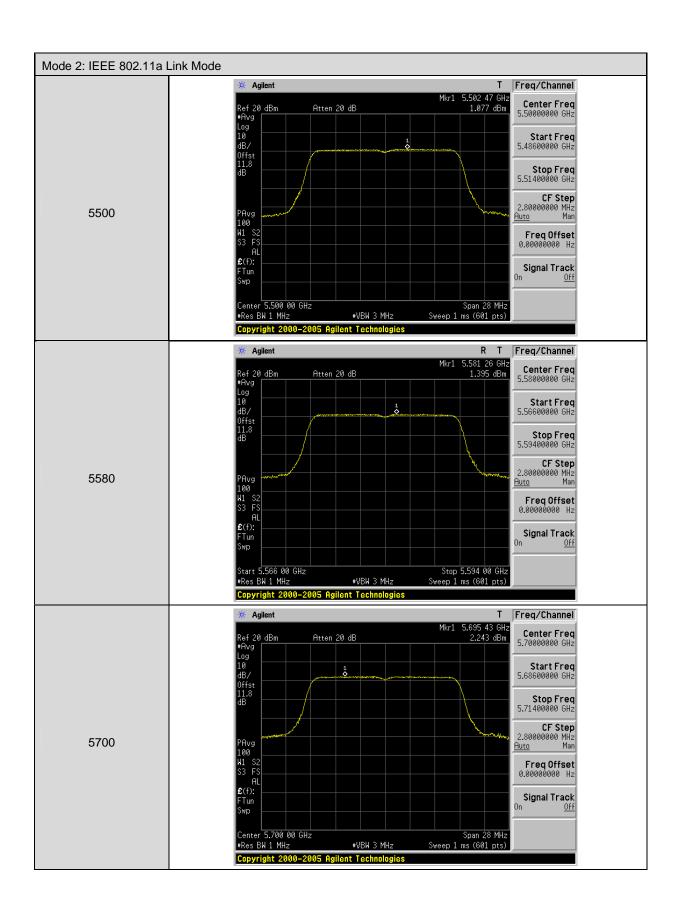
Model Number	PR2 Receiver	PR2 Receiver						
Test Item	Peak Power Spectral D	ensity						
Test Mode	Mode 3: IEEE 802.11n	20MHz Link Mode						
Date of Test	04/29/2013			Test Site	TE02			
Fraguenay	F	CC	CA	ANADA				
Frequency (MHz)	Measurement (dBm)	Limit (dBm)	EIRP (dBm)	Lir (dE	nit Bm)			
5180	0.026	< 4	5.406	<	10			
5220	0.747	< 4	6.127	<	10			
5240	0.390	< 4	5.770	<	10			
5260	0.264	< 11	5.644	<	11			
5280	0.043	< 11	5.423	<	11			
5320	-1.181	< 11	4.199	<	11			
5500	-1.476	< 11	3.904	<	11			
5580	-1.129	< 11	4.251	<	11			
5700	-1.952	< 11	3.428	<	11			

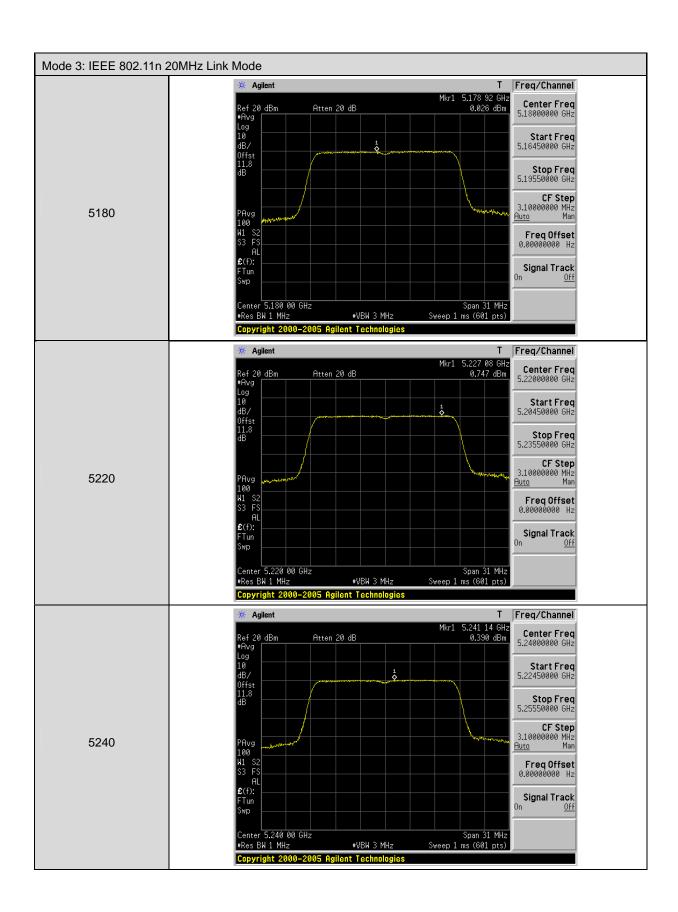
Model Number	PR2 Receiver	PR2 Receiver							
Test Item	Peak Power Spectral D	Density							
Test Mode	Mode 4: IEEE 802.11n	40MHz Link Mode							
Date of Test	04/29/2013			Test Site	TE02				
F	F	СС	CAN	NADA					
Frequency (MHz)	Measurement (dBm)	Limit (dBm)	EIRP (dBm)	Limit (dBm					
5190	-2.190	< 4	3.190	< 10					
5230	-2.265	< 4	3.115	< 10					
5270	-2.582	< 11	2.798	< 11					
5310	-3.901	< 11	1.479	< 11					
5510	-2.684	< 11	2.696	< 11					
5590	-2.813	< 11	2.567	< 11					
5670	-3.203	< 11	2.177	< 11					

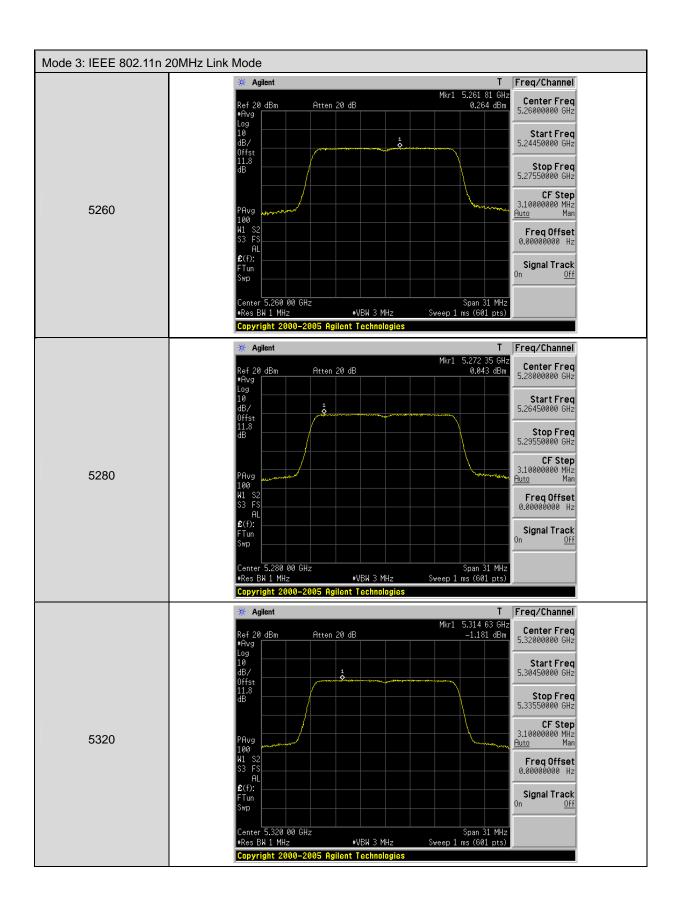
9.6. Test Graphs

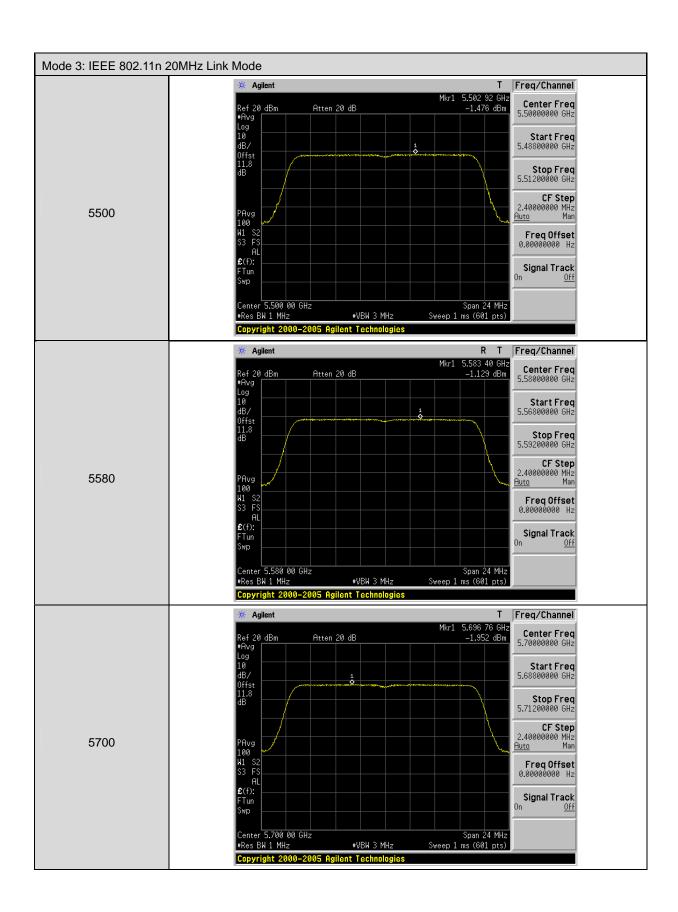


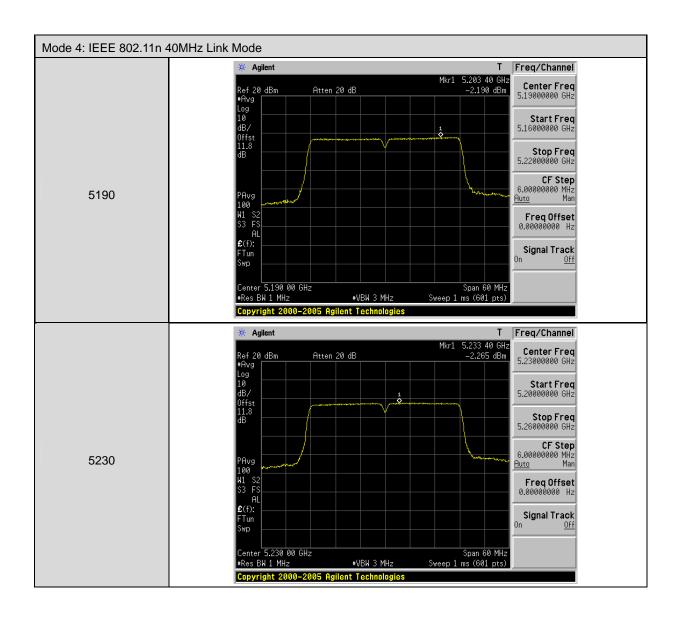


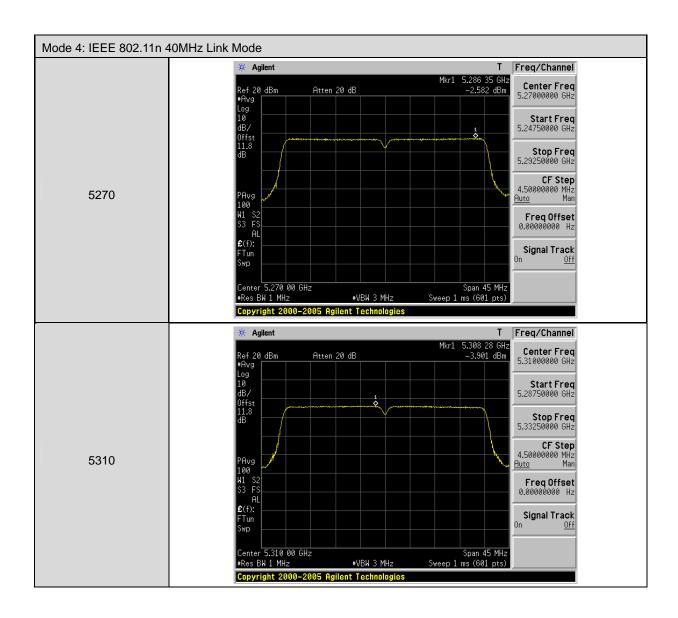


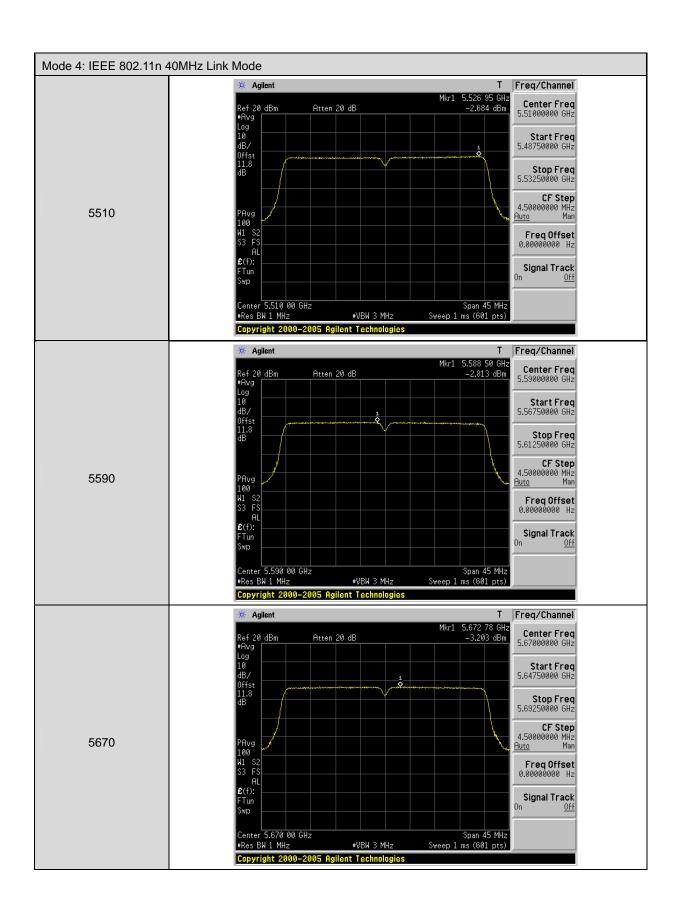










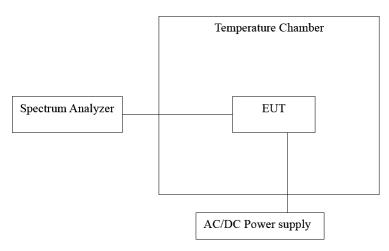


10 Frequency Stability Measurement

10.1. Limit

The frequency tolerance of the carrier signal shall be maintained within the band of operation frequency over a temperature variation of –30 degrees to 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

10.2. Test Setup



10.3. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4408B	MY45107753	07/09/2012	(1)
Temperature & Humidity Chamber	TAICHY	MHU-225LA	980729	08/07/2012	(1)
Test Site	ATL	TE02	TE02	N.C.R.	

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

10.4. Test Procedure

- 1. The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
- 2. Turn the EUT on and couple its output to a spectrum analyzer.
- 3. Turn the EUT off and set the chamber to the highest temperature specified.
- 4. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize.
- 5. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
- 6. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

10.5. Test Result

Temperature Variations

Model Number	PR2 Receiv	PR2 Receiver				
Test Mode	Mode 2					
Frequency	5220 MHz					
Date of Test	04/29/2013			Test Site	TE02	
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)	
-30		5219.9583	-41700	7.989	Pass	
-20		5219.9697	-30300	5.805	Pass	
-10		5220.0096	9600	-1.839	Pass	
0		5219.9632	-36800	7.050	Pass	
10	120	5220.0394	39400	-7.548	Pass	
20		5219.9909	-9100	1.743	Pass	
30		5219.9744	-25600	4.904	Pass	
40		5219.9762	-23800	4.559	Pass	
50		5220.0048	4800	-0.920	Pass	



Model Number	PR2 Receiv	PR2 Receiver				
Test Mode	Mode 2					
Frequency	5280 MHz					
Date of Test	04/29/2013			Test Site	TE02	
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)	
-30		5280.0212	21200	-4.015	Pass	
-20		5279.9554	-44600	8.447	Pass	
-10		5279.9576	-42400	8.030	Pass	
0		5280.0245	24500	-4.640	Pass	
10	120	5279.9627	-37300	7.064	Pass	
20		5280.0086	8600	-1.629	Pass	
30		5279.9551	-44900	8.504	Pass	
40		5279.9766	-23400	4.432	Pass	
50		5280.0238	23800	-4.508	Pass	

Model Number	PR2 Receiv	PR2 Receiver				
Test Mode	Mode 2					
Frequency	5580 MHz					
Date of Test	04/29/2013			Test Site	TE02	
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)	
-30		5579.9538	-46200	8.280	Pass	
-20		5579.9932	-6800	1.219	Pass	
-10		5580.0288	28800	-5.161	Pass	
0		5580.0371	37100	-6.649	Pass	
10	120	5580.0064	6400	-1.147	Pass	
20		5580.0119	11900	-2.133	Pass	
30		5580.0399	39900	-7.151	Pass	
40		5579.9959	-4100	0.735	Pass	
50		5579.9813	-18700	3.351	Pass	

Model Number	PR2 Receiv	PR2 Receiver				
Test Mode	Mode 3					
Frequency	5220 MHz					
Date of Test	04/29/2013			Test Site	TE02	
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)	
-30		5220.0115	11500	-2.203	Pass	
-20		5220.0015	1500	-0.287	Pass	
-10		5219.9597	-40300	7.720	Pass	
0		5220.0481	48100	-9.215	Pass	
10	120	5219.9698	-30200	5.785	Pass	
20		5220.0398	39800	-7.625	Pass	
30		5219.9835	-16500	3.161	Pass	
40		5220.0017	1700	-0.326	Pass	
50		5219.9872	-12800	2.452	Pass	

Model Number	PR2 Receiv	PR2 Receiver				
Test Mode	Mode 3					
Frequency	5280 MHz					
Date of Test	04/29/2013			Test Site	TE02	
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)	
-30		5279.9884	-11600	2.197	Pass	
-20		5280.0259	25900	-4.905	Pass	
-10		5279.9577	-42300	8.011	Pass	
0		5280.0015	1500	-0.284	Pass	
10	120	5279.9672	-32800	6.212	Pass	
20		5279.9504	-49600	9.394	Pass	
30		5280.0237	23700	-4.489	Pass	
40		5279.9597	-40300	7.633	Pass	
50		5280.0096	9600	-1.818	Pass	



Model Number	PR2 Receiv	PR2 Receiver				
Test Mode	Mode 3					
Frequency	5580 MHz					
Date of Test	04/29/2013			Test Site	TE02	
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)	
-30		5579.9859	-14100	2.527	Pass	
-20		5580.0287	28700	-5.143	Pass	
-10		5579.9806	-19400	3.477	Pass	
0		5580.0363	36300	-6.505	Pass	
10	120	5580.0179	17900	-3.208	Pass	
20		5580.0262	26200	-4.695	Pass	
30		5579.9797	-20300	3.638	Pass	
40		5580.0068	6800	-1.219	Pass	
50		5579.9661	-33900	6.075	Pass	

Model Number	PR2 Receiv	PR2 Receiver					
Test Mode	Mode 4	Mode 4					
Frequency	5190 MHz						
Date of Test	04/29/2013			Test Site	TE02		
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)		
-30		5190.0498	49800	-9.595	Pass		
-20		5190.0228	22800	-4.393	Pass		
-10		5189.9504	-49600	9.557	Pass		
0		5189.9580	-42000	8.092	Pass		
10	120	5190.0174	17400	-3.353	Pass		
20		5189.9830	-17000	3.276	Pass		
30		5189.9657	-34300	6.609	Pass		
40		5190.0079	7900	-1.522	Pass		
50		5190.0091	9100	-1.753	Pass		

Model Number	PR2 Receiv	PR2 Receiver					
Test Mode	Mode 4						
Frequency	5270 MHz						
Date of Test	04/29/2013			Test Site	TE02		
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)		
-30		5270.0495	49500	-9.393	Pass		
-20		5270.0173	17300	-3.283	Pass		
-10		5269.9857	-14300	2.713	Pass		
0		5269.9541	-45900	8.710	Pass		
10	120	5270.0130	13000	-2.467	Pass		
20		5269.9502	-49800	9.450	Pass		
30		5269.9994	-600	0.114	Pass		
40		5269.9934	-6600	1.252	Pass		
50		5269.9664	-33600	6.376	Pass		

Model Number	PR2 Receiv	PR2 Receiver					
Test Mode	Mode 4	Mode 4					
Frequency	5590 MHz						
Date of Test	04/29/2013			Test Site	TE02		
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)		
-30		5589.9739	-26100	4.669	Pass		
-20		5590.0040	4000	-0.716	Pass		
-10		5590.0342	34200	-6.118	Pass		
0		5590.0094	9400	-1.682	Pass		
10	120	5589.9544	-45600	8.157	Pass		
20		5590.0191	19100	-3.417	Pass		
30		5589.9884	-11600	2.075	Pass		
40		5590.0055	5500	-0.984	Pass		
50		5590.0259	25900	-4.633	Pass		

Voltage Variations

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Model Number	PR2 Receiv	PR2 Receiver						
Test Mode	Mode 2							
Frequency	5220 MHz							
Date of Test	04/29/2013			Test Site	TE02			
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)			
	138.00	5220.0364	36400	-6.973	Pass			
20	120.00	5220.0239	23900	-4.579	Pass			
	102.00	5220.0039	3900	-0.747	Pass			

Model Number	PR2 Receiv	PR2 Receiver					
Test Mode	Mode 2						
Frequency	5280 MHz						
Date of Test	04/29/2013			Test Site	TE02		
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)		
	138.00	5279.9892	-10800	2.045	Pass		
20	120.00	5279.9893	-10700	2.027	Pass		
	102.00	5279.9837	-16300	3.087	Pass		

Model Number	PR2 Receiv	PR2 Receiver					
Test Mode	Mode 2						
Frequency	5580 MHz						
Date of Test	04/29/2013			Test Site	TE02		
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)		
	138.00	5579.9782	-21800	3.907	Pass		
20	120.00	5579.9863	-13700	2.455	Pass		
	102.00	5579.9546	-45400	8.136	Pass		

Model Number	PR2 Receiv	PR2 Receiver					
Test Mode	Mode 3						
Frequency	5220 MHz						
Date of Test	04/29/2013			Test Site	TE02		
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)		
	138.00	5219.9943	-5700	1.092	Pass		
20	120.00	5219.9558	-44200	8.467	Pass		
	102.00	5220.0267	26700	-5.115	Pass		

Model Number	PR2 Receiv	PR2 Receiver						
Test Mode	Mode 3							
Frequency	5280 MHz							
Date of Test	04/29/2013			Test Site	TE02			
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)			
	138.00	5279.9576	-42400	8.030	Pass			
20	120.00	5280.0291	29100	-5.511	Pass			
	102.00	5279.9759	-24100	4.564	Pass			

Model Number	PR2 Receiv	PR2 Receiver					
Test Mode	Mode 3						
Frequency	5580 MHz						
Date of Test	04/29/2013			Test Site	TE02		
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)		
	138.00	5579.9562	-43800	7.849	Pass		
20	120.00	5580.0209	20900	-3.746	Pass		
	102.00	5579.9633	-36700	6.577	Pass		

Model Number	PR2 Receiv	PR2 Receiver					
Test Mode	Mode 4						
Frequency	5190 MHz						
Date of Test	04/29/2013			Test Site	TE02		
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)		
	138.00	5190.0472	47200	-9.094	Pass		
20	120.00	5189.9811	-18900	3.642	Pass		
	102.00	5189.9698	-30200	5.819	Pass		

Model Number	PR2 Receiv	PR2 Receiver						
Test Mode	Mode 4							
Frequency	5270 MHz							
Date of Test	04/29/2013			Test Site	TE02			
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)			
	138.00	5270.0135	13500	-2.562	Pass			
20	120.00	5270.0018	1800	-0.342	Pass			
	102.00	5270.0275	27500	-5.218	Pass			

Model Number	PR2 Receiv	PR2 Receiver					
Test Mode	Mode 4						
Frequency	5590 MHz						
Date of Test	04/29/2013			Test Site	TE02		
Temp. (°C)	Voltage (Vac)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)		
	138.00	5589.9917	-8300	1.485	Pass		
20	120.00	5590.0158	15800	-2.826	Pass		
	102.00	5589.9855	-14500	2.594	Pass		

11 Antenna Requirement

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11.1. Limit

For intentional device, according to 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

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And According to 15.407 (a), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

11.2. Antenna Connector Construction

The antenna used in this product is PIFA antenna. And the maximum gain of the antenna is listed below.

Frequency Band	ANTL	ANTR
IEEE 802.11a / IEEE 802.11n (5GHz) 20MHz / 40MHz	3.05 dBi	5.38 dBi