



FCC PART 15.407 TEST REPORT

For

PRO-X Co., Ltd

Unit 9, Building 6, No.289 West Third Ring Road,
Zhengzhou, Henan

FCC ID: 2ABGKRECONX5RX

Report Type: Original Report	Product Type: WIRELESS TRANSMISSION SYSTEM
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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *PRO-X Co., Ltd* 's product, model number: *Recon X5-RX (FCC ID: 2ABGKRECONX5RX)* or ("EUT") in this report is a *WIRELESS TRANSMISSION SYSTEM*, which was measured approximately: 100mm (L) x 180mm (W) x 32mm (H). Rated input voltage: DC 12 V. This equipment will be restricted to indoor operation only. The operating frequencies are 5150~5250MHz.

AC Adapter:

Manufacturer: LITE-ON POWER TECHNOLOGY (DONGGUAN) CO., LTD

Model: PA-1041-71

Input: 100-240V~, 50/60Hz 1.2A

Output: 12V, 3.33A

**All measurement and test data in this report was gathered from final production sample, serial number: 140102002(Assigned by BACL, Chengdu). It may have deviation from any other sample. The EUT supplied by the applicant was received on 2014-01-02, and EUT complied with test requirement.*

Objective

This type approval report is prepared on behalf of *PRO-X Co., Ltd* in accordance with Part 2-Subpart J, Part 15-Subparts A, B and E of the Federal Communications Commission rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

Related Submittal(s)/Grant(s)

FCC Part 15.247 submissions with FCC ID: 2ABGKRECONX5RX.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2003, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Chengdu).

Test Facility

The test site used by BACL to collect test data is located in the 5040, HuiLongWan Plaza, No. 1, ShaWan Road, JinNiu District, ChengDu, China

Test site at BACL has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on July 31, 2009. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2003. The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 560332. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The EUT was configured for testing in an engineering mode which was provided by the manufacturer.

The operating frequency range is 5150~5250 MHz.

The frequencies are 5180MHz, 5220MHz, 5190 MHz, 5230 MHz for 5150~5250 MHz band, which was provided by the manufacturer.

EUT Exercise Software

None

Equipment under Test (EUT) General Description

Applicant	Description	Model Number	Serial Number
PRO-X Co., Ltd	WIRELESS TRANSMISSION SYSTEM	Recon X5-RX	140102002

Support Equipment List and Details

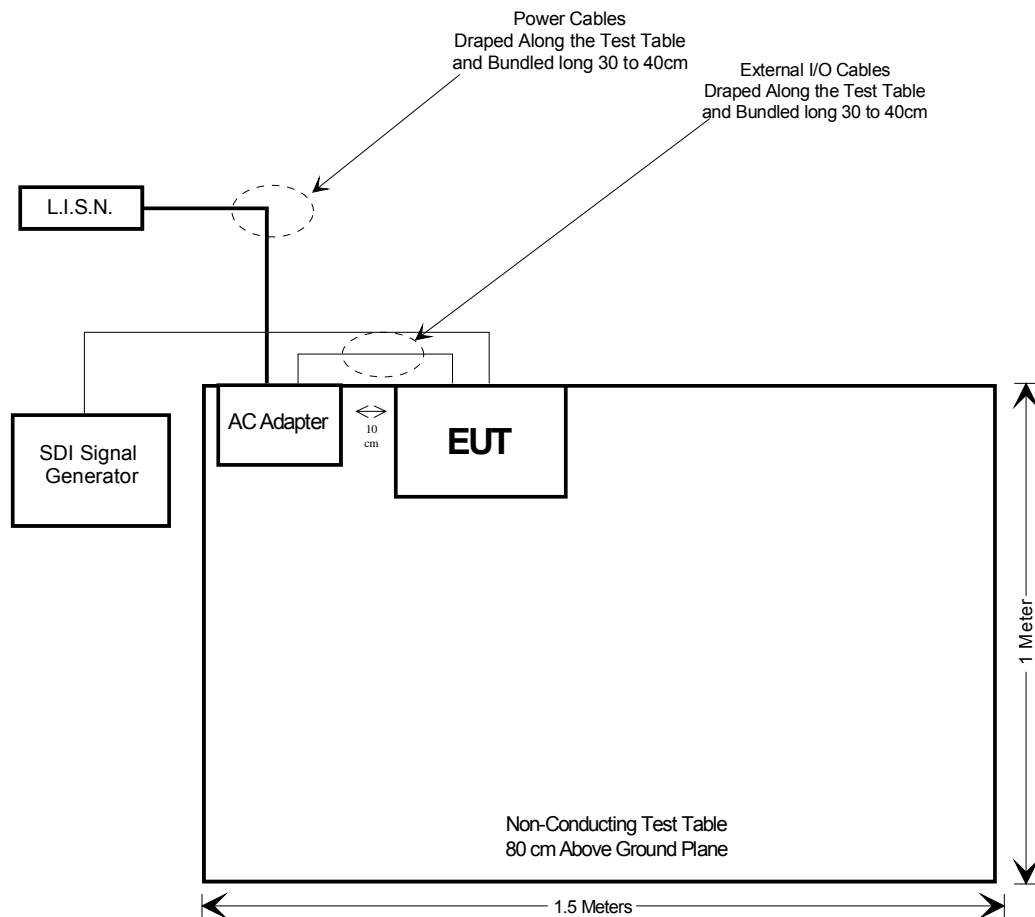
Manufacturer	Description	Model	Serial Number
None	SDI Signal Generator	None	None
PRO-X Co., Ltd	Wireless Transmission System	Recon X5-TX	140102001

External I/O Cable

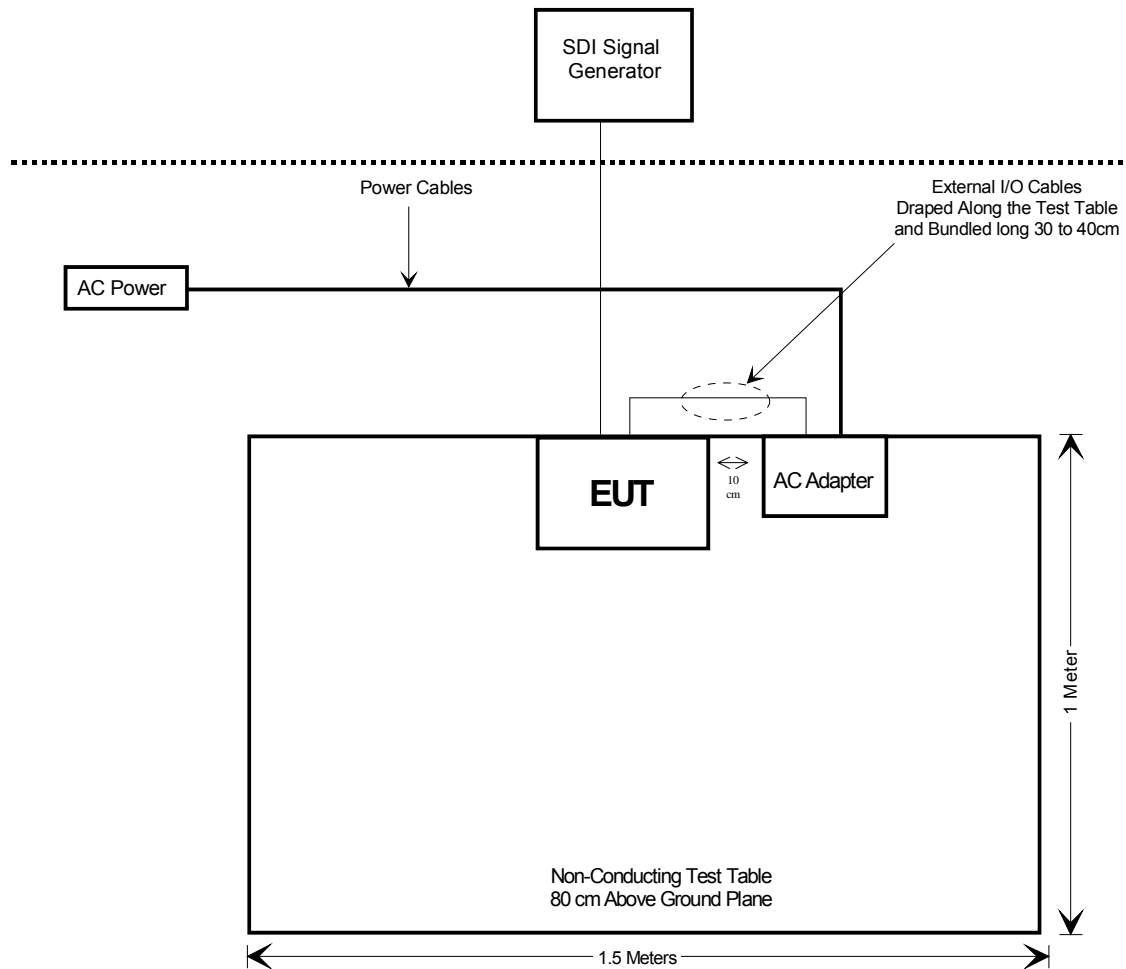
Cable Description	Length (m)	From	To
Unshielding Power Cable	1.8	EUT	AC Adapter
Shielding BNC Cable	10	EUT	SDI Signal Generator

Block Diagram of Test Setup

For Conducted Emissions:



For Undesirable Emission& Restricted Bands:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
FCC §15.407 (f) & §1.1310 & §2.1091	Maximum Permissible Exposure	Compliance
§15.203	Antenna Requirement	Compliance
§15.407(b)(6)& §15.207(a)	Conducted Emissions	Compliance
§15.205& §15.209 &§15.407(b) (1),(4),(6),(7)	Undesirable Emission& Restricted Bands	Compliance
§15.407(b) (1),(2),(3),(4)	Out of Band Emissions	Compliance*
§15.407(a) (1),(3)	Emission Bandwidth	Compliance*
§15.407(a)(1),(3)	Conducted Transmitter Output Power	Compliance*
§15.407 (a)(1),(3),(5)	Power Spectral Density	Compliance*
§15.407(a)(6)	Peak Excursion Ratio	Compliance*

Note:

Compliance*: Please refer to certified Wi-Fi module with FCC ID: QDS-BRCM1041.

FCC §15.407(f) & §1.1310 & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart 15.407(f) and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f ²)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Calculated Formulary:

Predication of MPE limit at a given distance

$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm²);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

Calculated Data:

Mode	Frequency	Antenna Gain		Conducted Power		Evaluation Distance	Power Density	Limit
	MHz	dBi	numeric	dBm	mW	cm	mW/cm ²	mW/cm ²
5G-802.11n HT20	5150-5250	0	1.00	10.50	11.22	20	0.002	1.0
5G-802.11n HT40	5150-5250	0	1.00	14.30	26.92	20	0.005	1.0

Result: The device meet FCC MPE at 20 cm distance

FCC §15.203 – ANTENNA REQUIREMENT

Applicable Standard

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

And according to FCC 47 CFR section 15.407 (a)(1),if transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

The EUT has two external antennas, which was used a unique type of connector to attach to the EUT, and complied with 15.203, the maximum gain is 0 dBi, in 5150-5250MHz band, please refer to the external photos.

Result: Compliance.

FCC §15.407 (b) (6) §15.207 (a) – CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207, §15.407(b) (6)

Measurement Uncertainty

Compliance or non-compliance with a disturbance limit shall be determined in the following manner:

If U_{lab} is less than or equal to U_{cispr} of Table 1, then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

If U_{lab} is greater than U_{cispr} of Table 1, then:

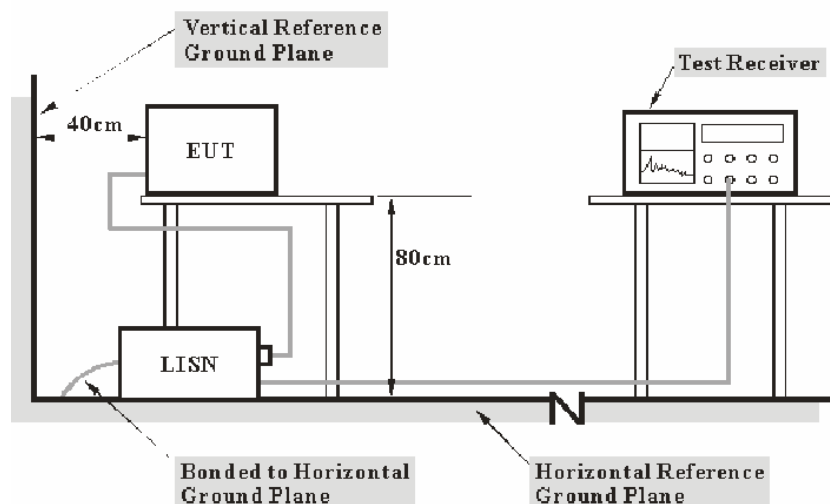
- compliance is deemed to occur if no measured disturbance level, increased by $(U_{lab} - U_{cispr})$, exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level, increased by $(U_{lab} - U_{cispr})$, exceeds the disturbance limit.

Based on CISPR 16-4-2: 2011, measurement uncertainty of conducted disturbance at mains port using AMN at Bay Area Compliance Laboratories Corp. (Chengdu) is 3.17 dB (150 kHz to 30 MHz).

Table 1 – Values of U_{cispr}

Measurement	U_{cispr}
Conducted disturbance at mains port using AMN (150 kHz to 30 MHz)	3.4 dB

EUT Setup



Note: 1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

DC 12 V was used by EUT through AC adapter.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Corrected Amplitude & Margin Calculation

The basic equation is as follows:

$$V_C = V_R + A_C + VDF$$

$$C_f = A_C + VDF$$

Herein,

V_C (cord. Reading): corrected voltage amplitude

V_R : reading voltage amplitude

A_C : attenuation caused by cable loss

VDF: voltage division factor of AMN

C_f : Correction Factor

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of 7dB means the emission is 7dB below the maximum limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100028	2013-08-22	2014-08-21
Rohde & Schwarz	L.I.S.N.	ENV216	3560.6550.06	2013-07-31	2014-07-30
Rohde & Schwarz	L.I.S.N.	ENV216	3560.6550.12	2014-02-08	2015-02-07

* **Statement of Traceability:** BACL (Chengdu) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Procedure

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207, with the worst margin reading of:

9.32 dB at **0.398 MHz** in the **Neutral** conducted mode

Test Data

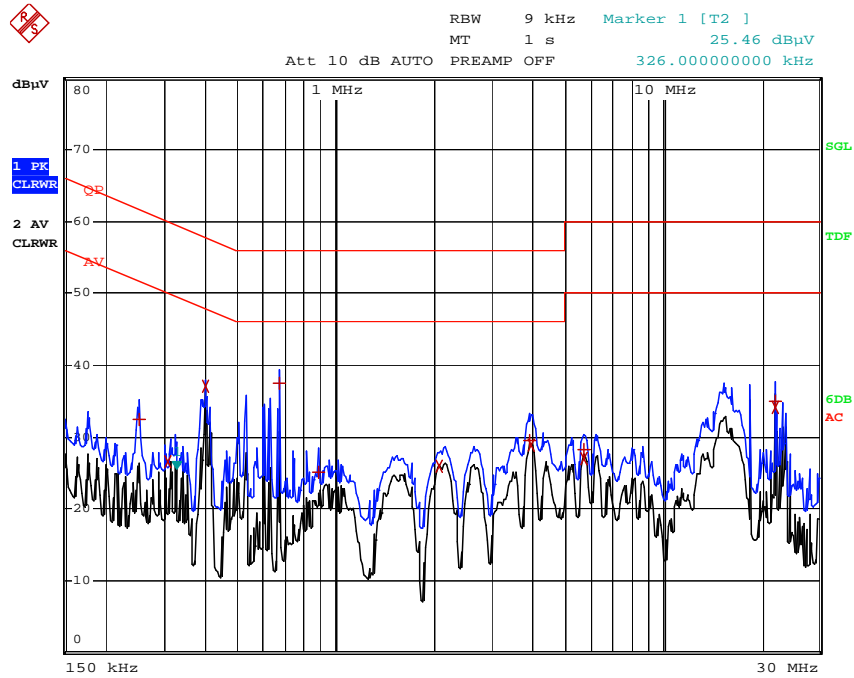
Environmental Conditions

Temperature:	28 °C
Relative Humidity:	54 %
ATM Pressure:	100.8 kPa

The testing was performed by Toby Ren on 2014-06-16.

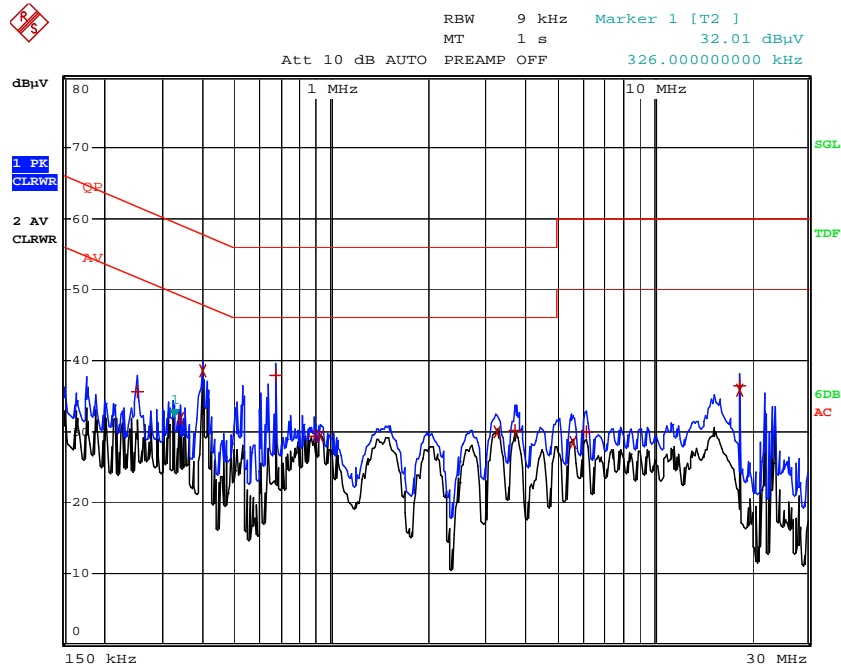
Test Mode: Transmitting

Line



Conducted Emissions					
Frequency (MHz)	Corrected Amplitude (dBμV)	Detector (QP/AV)	Phase (Line/Neutral)	Limit (dBμV)	Margin (dB)
0.250	32.37	QP	Line	61.76	29.39
0.670	37.47	QP	Line	56.00	18.53
0.882	25.15	QP	Line	56.00	30.85
3.934	29.43	QP	Line	56.00	26.57
5.738	28.16	QP	Line	60.00	31.84
22.118	34.95	QP	Line	60.00	25.05
0.310	26.49	AV	Line	49.97	23.48
0.398	37.03	AV	Line	47.90	10.87
2.078	25.93	AV	Line	46.00	20.07
3.946	28.89	AV	Line	46.00	17.11
5.738	27.00	AV	Line	50.00	23.00
22.118	34.10	AV	Line	50.00	15.90

Neutral



Conducted Emissions					
Frequency (MHz)	Corrected Amplitude (dBμV)	Detector (QP/AV)	Phase (Line/Neutral)	Limit (dBμV)	Margin (dB)
0.250	35.51	QP	Neutral	61.76	26.25
0.670	37.97	QP	Neutral	56.00	18.03
0.886	29.20	QP	Neutral	56.00	26.80
3.722	30.08	QP	Neutral	56.00	25.92
6.174	30.00	QP	Neutral	60.00	30.00
18.434	36.49	QP	Neutral	60.00	23.51
0.338	31.90	AV	Neutral	49.25	17.35
0.398	38.58	AV	Neutral	47.90	9.32
0.922	29.32	AV	Neutral	46.00	16.68
3.262	29.99	AV	Neutral	46.00	16.01
5.614	28.55	AV	Neutral	50.00	21.45
18.434	35.80	AV	Neutral	50.00	14.20

FCC §15.209, §15.205 & §15.407(b) (1) (4) (6) (7) – UNDESIRABLE EMISSION & RESTRICTED BANDS

Applicable Standard

FCC §15.407 (b) (1), (4), (6), (7); §15.209; §15.205;

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

According to KDB 789033 D01 General UNII Test Procedures v01, emission shall be computed as:

$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2$, for $d = 3$ meters.

Measurement Uncertainty

Compliance or non-compliance with a disturbance limit shall be determined in the following manner:

If U_{lab} is less than or equal to U_{cispr} of Table 1, then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

If U_{lab} is greater than U_{cispr} of Table 1, then:

- compliance is deemed to occur if no measured disturbance level, increased by $(U_{\text{lab}} - U_{\text{cispr}})$, exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level, increased by $(U_{\text{lab}} - U_{\text{cispr}})$, exceeds the disturbance limit.

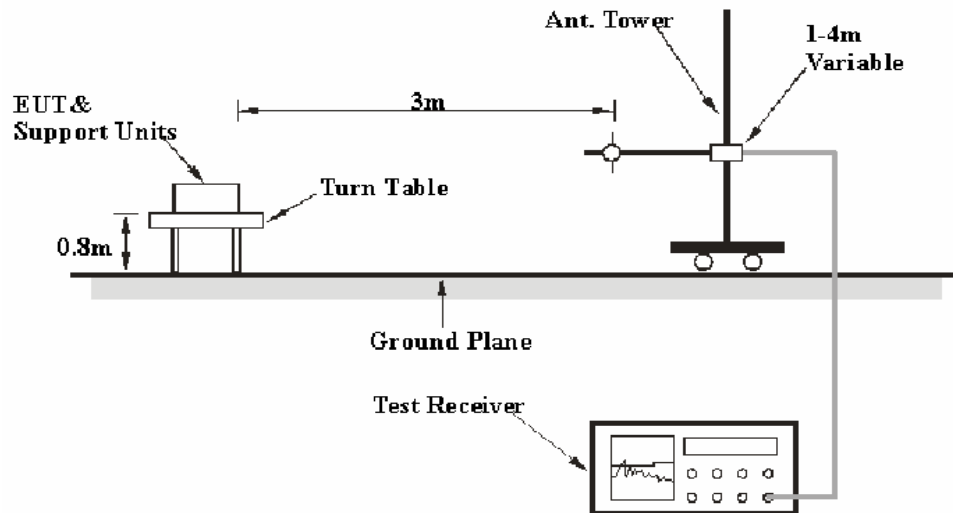
Based on CISPR 16-4-2: 2011, measurement uncertainty of radiated emission at a distance of 3m at Bay Area Compliance Laboratories Corp. (Chengdu) is: 30M~200MHz: ± 4.7 dB ; 200M~1GHz: ± 6.0 dB ; 1G-6GHz: ± 5.13 dB; 6G~40GHz: ± 5.47 dB;

Table 1 – Values of U_{cispr}

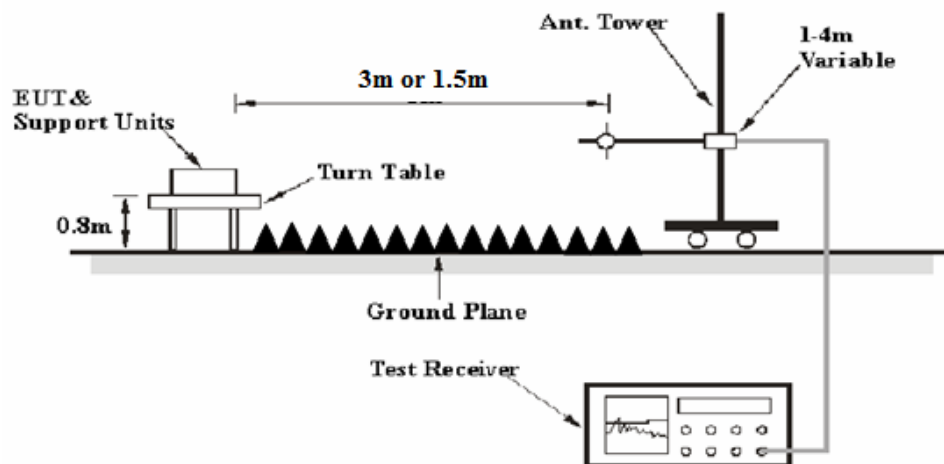
Measurement	U_{cispr}
Radiated disturbance (electric field strength at an OATS or in a SAC) (30 MHz to 1000 MHz)	6.3 dB
Radiated disturbance (electric field strength in a FAR) (1 GHz to 6 GHz)	5.2 dB
Radiated disturbance (electric field strength in a FAR) (6 GHz to 18 GHz)	5.5 dB

EUT Setup

Below 1 GHz:



Above 1 GHz:



The radiated emission tests were performed in the 3 meters Semi-Anechoic Chamber, using the setup accordance with the ANSI C63.4-2003. The specification used was the FCC 15.209 and FCC 15.407 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

DC 12 V was used by EUT through AC adapter.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 40 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector
30MHz – 1000 MHz	120 kHz	300 kHz	120kHz	QP
Above 1 GHz	1MHz	3 MHz	/	PK
	1MHz	10 Hz	/	Ave.

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1GHz, peak and Average detection modes for frequencies above 1 GHz.

According to ANSI C63.4-2003, the above 1GHz test result shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade from 3m or 1.5m.

Distance extrapolation factor = $20 \log (3\text{m}/1.5\text{m})$ dB

Extrapolation result (dB μ V/m) = Corrected Amplitude (dB μ V/m) -6dB

Test Equipment List and Details

Manufacturer	Description	Model Number	Serial Number	Calibration Date	Calibration Due Date
Agilent	Amplifier	8447D	2944A10442	2013-07-23	2014-07-22
Rohde & Schwarz	EMI Test Receiver	ESCI	100028	2013-08-22	2014-08-21
Sunol Sciences	Broadband Antenna	JB3	A101808	2014-04-10	2015-04-09
Rohde & Schwarz	Spectrum Analyzer	FSL18	100180	2013-07-31	2014-07-30
Rohde & Schwarz	Spectrum Analyzer	FSEM30	100018	2013-07-31	2014-07-30
Rohde&Schwarz	Spectrum Analyzer	FSP38	100478	2013-06-16	2014-06-15
EM TEST	Horn Antenna	3115	003-6076	2014-04-09	2015-04-08
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-01 1304	2013-06-16	2014-06-15
Ducommun Technologies	Horn Antenna	ARH-2823-02	1007726-01 1302	2013-06-16	2014-06-15
HP	Amplifier	8449B	3008A00277	2013-07-31	2014-07-30
EMCT	Semi-Anechoic Chamber	966	N/A	2013-03-13	2016-03-12

* **Statement of Traceability:** BACL (Chengdu) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Loss and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Loss} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Extrapolation result}$$

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C, Section 15.205, 15.209 and 15.407, with the worst margin reading of:

0.64 dB at 5150 MHz in the Vertical polarization mode

Test Data

Environmental Conditions

Temperature:	26 °C & 24 °C
Relative Humidity:	53 % & 55 %
ATM Pressure:	101.2 kPa & 100.9 kPa

The testing was performed by Toby Ren on 2014-06-12 & 2014-06-13.

Test Mode: Transmitting (above 1G test performed at 1.5m distance)

5150-5250 MHz: (802.11n HT20 Mode)

Frequency	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
(MHz)	Reading (dBµV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)						
Low Channel: 5180 MHz										
5180	38.56	AV	H	31.72	8.08	0.00	78.36	72.36	N/A	N/A
5180	55.26	PK	H	31.72	8.08	0.00	95.06	89.06	N/A	N/A
5180	54.26	AV	V	31.72	8.08	0.00	94.06	88.06	N/A	N/A
5180	70.26	PK	V	31.72	8.08	0.00	110.06	104.06	N/A	N/A
10360	40.02	PK	V	37.37	14.73	24.13	67.99	61.99	68.20	6.21
10360	26.25	AV	V	37.37	14.73	24.13	54.22	48.22	54.00	5.78
15540	30.12	PK	V	39.41	17.26	22.17	64.62	58.62	68.20	9.58
15540	15.02	AV	V	39.41	17.26	22.17	49.52	43.52	54.00	10.48
5150	33.69	PK	V	31.67	8.11	0.00	73.47	67.47	68.20	*0.73
5150	19.06	AV	V	31.67	8.11	0.00	58.84	52.84	54.00	*1.16
1554.26	48.58	PK	V	24.19	4.51	25.68	51.60	45.60	68.20	22.60
1554.26	37.26	AV	V	24.19	4.51	25.68	40.28	34.28	54.00	19.72
31.26	42.29	QP	V	22.01	0.33	28.13	36.50	36.50	40.00	*3.50
816.79	48.96	QP	H	22.04	1.58	28.46	44.11	44.11	46.00	*1.89
High Channel: 5220 MHz										
5220	40.14	AV	H	31.80	8.04	0.00	79.98	73.98	N/A	N/A
5220	54.26	PK	H	31.80	8.04	0.00	94.10	88.10	N/A	N/A
5220	56.89	AV	V	31.80	8.04	0.00	96.73	90.73	N/A	N/A
5220	71.26	PK	V	31.80	8.04	0.00	111.10	105.10	N/A	N/A
10440	34.59	PK	V	37.39	14.76	24.11	62.63	56.63	68.20	11.57
10440	22.26	AV	V	37.39	14.76	24.11	50.30	44.30	54.00	9.70
15660	25.69	PK	V	39.43	17.26	22.21	60.17	54.17	68.20	14.03
15660	14.15	AV	V	39.43	17.26	22.21	48.63	42.63	54.00	11.37
5350	33	PK	V	32.03	7.92	0.00	72.95	66.95	68.20	*1.25
5350	16.59	AV	V	32.03	7.92	0.00	56.54	50.54	54.00	*3.46
1554.26	50.26	PK	V	24.19	4.51	25.68	53.28	47.28	68.20	20.92
1554.26	48.15	AV	V	24.19	4.51	25.68	51.17	45.17	54.00	8.83
31.26	43.02	QP	V	22.01	0.33	28.13	37.23	37.23	40.00	*2.77
816.79	49.02	QP	H	22.04	1.58	28.46	44.17	44.17	46.00	*1.83

*Within measurement uncertainty!

5150-5250 MHz: (802.11n HT40 Mode)

Frequency	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)						
Low Channel: 5190 MHz										
5190	40.25	AV	H	31.74	8.07	0.00	80.06	74.06	N/A	N/A
5190	56.36	PK	H	31.74	8.07	0.00	96.17	90.17	N/A	N/A
5190	57.58	AV	V	31.74	8.07	0.00	97.39	91.39	N/A	N/A
5190	71.26	PK	V	31.74	8.07	0.00	111.07	105.07	N/A	N/A
10380	35.26	PK	V	37.38	14.74	24.12	63.25	57.25	68.20	10.95
10380	23.56	AV	V	37.38	14.74	24.12	51.55	45.55	54.00	8.45
15570	29.58	PK	V	39.41	17.26	22.18	64.08	58.08	68.20	10.12
15570	15.14	AV	V	39.41	17.26	22.18	49.64	43.64	54.00	10.36
5150	32.59	PK	V	31.67	8.11	0.00	72.37	66.37	68.20	*1.83
5150	19.58	AV	V	31.67	8.11	0.00	59.36	53.36	54.00	*0.64
1554.15	50.02	PK	V	24.19	4.51	25.68	53.04	47.04	68.20	21.16
1554.26	38.01	AV	V	24.19	4.51	25.68	41.03	35.03	54.00	18.97
31.02	42.96	QP	V	22.14	0.33	28.13	37.29	37.29	40.00	*2.71
816.12	49.02	QP	H	22.02	1.57	28.47	44.15	44.15	46.00	*1.85
High Channel: 5230 MHz										
5230	41.26	AV	H	31.81	8.04	0.00	81.11	75.11	N/A	N/A
5230	56.26	PK	H	31.81	8.04	0.00	96.11	90.11	N/A	N/A
5230	57.41	AV	V	31.81	8.04	0.00	97.26	91.26	N/A	N/A
5230	71.06	PK	V	31.81	8.04	0.00	110.91	104.91	N/A	N/A
10460	35.26	PK	V	37.39	14.77	24.10	63.32	57.32	68.20	10.88
10460	24.15	AV	V	37.39	14.77	24.10	52.21	46.21	54.00	7.79
15690	28.58	PK	V	39.44	17.26	22.23	63.05	57.05	68.20	11.15
15690	16.02	AV	V	39.44	17.26	22.23	50.49	44.49	54.00	9.51
5350	32.56	PK	V	32.03	7.92	0.00	72.51	66.51	68.20	*1.69
5350	18.98	AV	V	32.03	7.92	0.00	58.93	52.93	54.00	*1.07
1554.26	51.26	PK	V	24.19	4.51	25.68	54.28	48.28	68.20	19.92
1554.26	40.15	AV	V	24.19	4.51	25.68	43.17	37.17	54.00	16.83
31.54	42.87	QP	V	21.85	0.34	28.13	36.93	36.93	40.00	*3.07
816.96	48.47	QP	H	22.04	1.58	28.46	43.62	43.62	46.00	*2.38

*Within measurement uncertainty!

***** **END OF REPORT** *****