

FCC PART 15.247

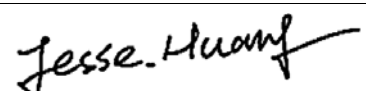
TEST REPORT

For

**SHANGHAI PETKIT NETWORK TECHNOLOGY
CO., LTD.**

Room 201, No.22 Boxia Road Shanghai China

FCC ID: 2AEDGP311

Report Type: Original Report	Product Type: Multifunctional Pet Remote Monitor
Test Engineer: Matt Yao	
Report Number: RKS151231001-00C	
Report Date: 2016-01-26	
Reviewed By: EMC Manager	Jesse Huang 
Prepared By:	Bay Area Compliance Laboratories Corp. (Kunshan) Chenghu Road, Kunshan Development Zone No.248, Kunshan, Jiangsu, China Tel: +86-0512-86175000 Fax: +86-0512-88934268 www.baclcorp.com.cn

Note: This test report is prepared for the customer shown above and for the equipment described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp.

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The SHANGHAI PETKIT NETWORK TECHNOLOGY CO., LTD.'s product, model number: Multifunctional Pet Remote Monitor-Pro (P311) (FCC ID: 2AEDGP311) or the "EUT" in this report was a Multifunctional Pet Remote Monitor, which was measured approximately: 190 mm (L) x90 mm (D) .Weight: 598.7g.

MODEL: TEKA012-0502000CH
Input: 100-240V 50/60Hz 0.35A Max
Output: 5V-2A

**All measurement and test data in this report was gathered from production sample serial number: 20151230003 (Assigned by the BACL. The EUT supplied by the applicant was received on 2015-12-30)*

Objective

This report is prepared on behalf of SHANGHAI PETKIT NETWORK TECHNOLOGY CO., LTD. in accordance with Part 2-Subpart J, Part 15-Subparts A, B and C of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

Related Submittal(s)/Grant(s)

N/A

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices and FCC KDB558074 D01 DTS Meas Guidance v03r04.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Kunshan). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement uncertainty with RF radiated emission is 5.91 dB for 30MHz-1GHz.and 4.92 dB for above 1GHz, 1.95dB for conducted measurement.

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the Chenghu Lake Road, Kunshan Development Zone No.248, Kunshan, Jiangsu, China

Test site at Bay Area Compliance Laboratories Corp. (Kunshan) 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 November 06, 2014. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 815570. 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

For 802.11b, 802.11g and 802.11n-HT20 mode, 11 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	8	2447
2	2417	9	2452
3	2422	10	2457
4	2427	11	2462
5	2432	/	/
6	2437	/	/
7	2442	/	/

For 802.11b, 802.11g, 802.11n-HT20 mode, EUT was tested with Channel 1, 6 and 11.

For 802.11n-HT40 mode, 9 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	8	2447
4	2427	9	2452
5	2432	/	/
6	2437	/	/
7	2442	/	/

EUT was tested with Channel 3, 6 and 9.

For BLE mode, 40 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2402	21	2442
2	2404	22	2444
3	2406	23	2446
4	2408	24	2448
5	2410	25	2450
6	2412	26	2452
7	2414	27	2454
8	2416	28	2456
9	2418	29	2458
10	2420	30	2460
11	2422	31	2462
12	2424	32	2464
13	2426	33	2466
14	2428	34	2468
15	2430	35	2470
16	2432	36	2472
17	2434	37	2474
18	2436	38	2476
19	2438	39	2478
20	2440	40	2480

EUT was tested with Channel 1, 20 and 40.

Equipment Modifications

No modification was made to the EUT tested.

EUT Exercise Software

RF test tool built-in the EUT.

The worst case was performed under:

802.11b: Data rate: 1 Mbps, Power level: 15

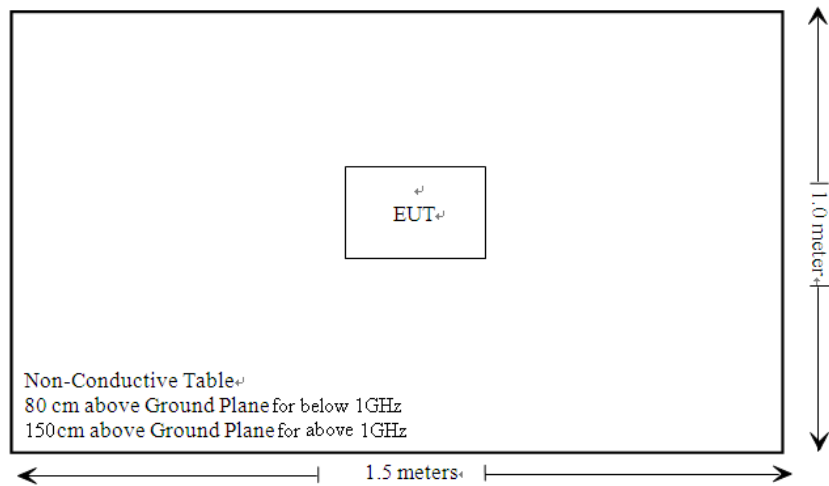
802.11g: Data rate: 6 Mbps, Power level: 12

802.11n-HT20: Data rate: MCS0, Power level: 12

802.11n-HT40: Data rate: MCS0, Power level: 12

Block Diagram of Test Setup

For Radiation emission



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.247 (i), §1.1307 (b) (1)& §2.1091	RF Exposure	Compliance*
§15.203	Antenna Requirement	Compliance
§15.207 (a)	AC Line Conducted Emissions	Compliance*
§15.247(d)	Spurious Emissions at Antenna Port	Compliance*
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliance
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliance*
§15.247(b)(3)	Maximum Conducted Output Power	Compliance*
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliance*
§15.247(e)	Power Spectral Density	Compliance*

Note*: Based on the Declaration of the difference which provided by customer, The differences between the FCC ID: 2AEDGP311 and FCC ID: 2AEDGP310 as below:

	FCC ID:2AEDGP311	FCC ID: 2AEDGP310
Weight	1.32lbs	0.98lbs
Shell	Aluminium Alloy	PC
Antenna	FPC	PCB
Process	CNC+ Anodizing	Heat transfer printing
LED Light Base	Have LED light Base	No LED light Base

Except the above differences, others are the same.

Please see the Wi-Fi and Bluetooth module as below:

FCC ID: 2AEDGP311



FCC ID: 2AEDGP310



Based on the above difference, in addition to Spurious Emission, The other test data refer to the report RKS151231001-00A (FCC ID: 2AEDGP310) which issued on the 2016-04-08.

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 user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
 - b. Antenna must use a unique type of connector to attach to the EUT.
- Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

The EUT has an internal permanently attached antenna arrangement for wifi, which the antenna gain is -1 dBi, fulfill the requirement of this section. Please refer to the EUT photos.

The EUT has an internal permanently attached antenna arrangement for Bluetooth, which the antenna gain is -1 dBi, fulfill the requirement of this section. Please refer to the EUT photos.

Result: Compliance.

FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

Applicable Standard

FCC §15.247 (d); §15.209; §15.205;

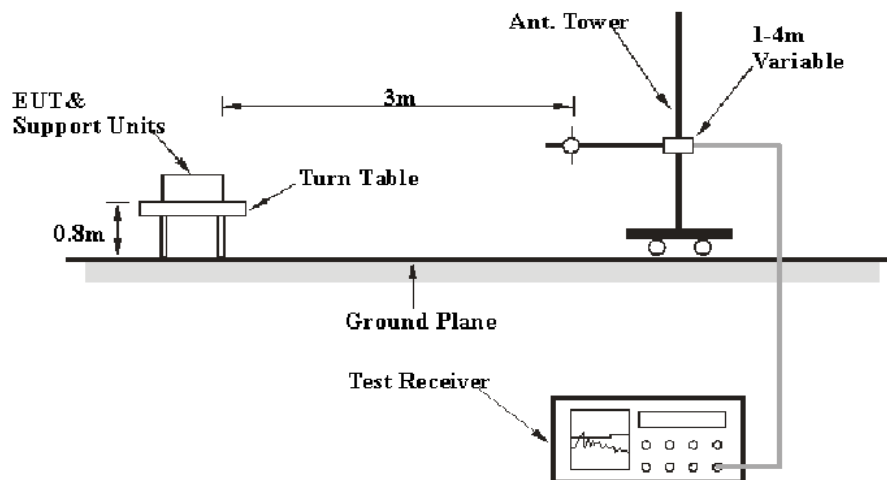
Measurement Uncertainty

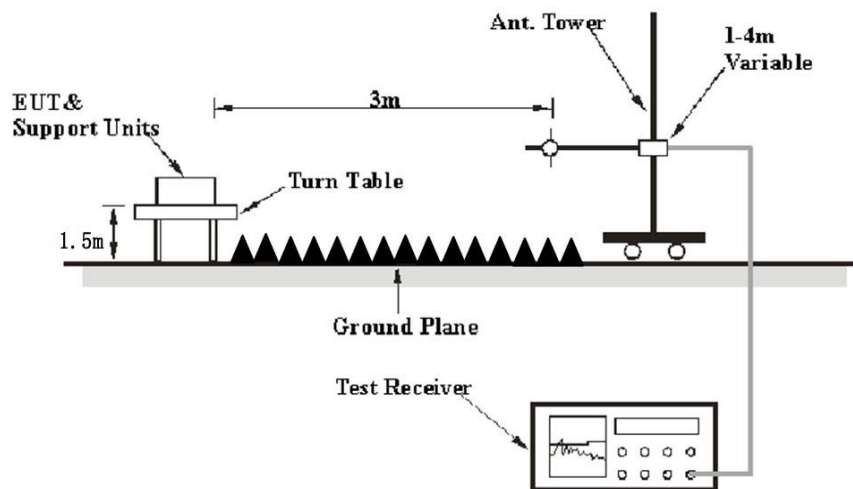
All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on CISPR 16-4-2:2011, the expanded combined standard uncertainty of radiation emissions at Bay Area Compliance Laboratories Corp. (Kunshan) is 5.91 dB for 30MHz-1GHz and 4.92 dB for above 1GHz, 1.95dB for conducted measurement at antenna port. And the uncertainty will not be taken into consideration for the test data recorded in the report

EUT Setup

Below 1 GHz:



Above 1GHz:

The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209, and FCC 15.247 limits.

The adapter was connected to a 120 VAC/60 Hz power source.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 25 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
30 MHz – 1000 MHz	100 kHz	300 kHz	120 kHz	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-1 GHz, peak and Average detection modes for frequencies above 1 GHz.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sonoma Instrunent	Amplifier	330	171377	2015-09-16	2016-09-16
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2015-11-12	2016-11-11
Sunol Sciences	Broadband Antenna	JB3	A090314-2	2015-11-07	2016-11-06
ETS	Horn Antenna	3115	6229	2015-11-07	2016-11-06
EMCO	Horn Antenna	3116	9510-2384	2015-11-07	2016-11-06
Rohde & Schwarz	Signal Analyzer	FSIQ26	100048	2015-11-12	2016-11-11
Mini	Pre-amplifier	ZVA-183-S+	857001418	2015-09-16	2016-09-16
DUCOMMUN	Pre-amplifier	ALN-22093530-01	990147	2015-09-16	2016-09-16
champrotek	Chamber	Chamber A	1#	2015-09-17	2016-09-17
R&S	Auto test Software	EMC32	V 09.10.0	-	-
BACL	RF cable	KS-LAB-012	KS-LAB-012	2015-06-16	2016-12-15
BACL	RF cable	KS-LAB-010	KS-LAB-010	2015-06-16	2016-12-15

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

Corrected Amplitude & Margin Calculation

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

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

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:

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

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 15.247.

3.37 dB at 220MHz in the Horizontal polarization for 802.11b Mode

Refer to CISPR16-4-2:2011 and CISPR 16-4-1:2009, the measured level complies with the limit if

$$L_m + U_{(L_m)} \leq L_{\text{lim}} + U_{\text{cispr}}$$

In BACL, $U_{(L_m)}$ is less than U_{cispr} , if L_m is less than L_{lim} , it implies that the EUT complies with the limit.

Test Data**Environmental Conditions**

Temperature:	25 °C
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

The testing was performed by Matt Yao on 2016-01-25.

EUT operation mode: Transmitting

30MHz-25GHz**802.11b Mode:**

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dB μ V/m)	Margin (dB)
Low Channel (2412 MHz)									
2412	94.71	PK	246.00	150.00	V	3.00	97.71	/	/
2412	87.35	Ave	246.00	150.00	V	3.00	90.35	/	/
2412	93.99	PK	167.00	150.00	H	3.00	96.99	/	/
2412	86.34	Ave	167.00	150.00	H	3.00	89.34	/	/
2367	33.06	PK	173.00	200.00	V	2.50	35.56	74.00	38.44
2367	21.72	Ave	173.00	200.00	V	2.50	24.22	54.00	29.78
2390	37.59	PK	219.00	200.00	V	2.90	40.49	74.00	33.51
2390	21.86	Ave	219.00	200.00	V	2.90	24.76	54.00	29.24
4824	36.93	PK	14.00	150.00	H	13.80	50.73	74.00	23.27
4824	26.27	Ave	14.00	150.00	H	13.80	40.07	54.00	13.93
6608	29.42	PK	89.00	150.00	V	18.80	48.22	74.00	25.78
6608	21.05	Ave	89.00	150.00	V	18.80	39.85	54.00	14.15
7236	33.56	PK	160.00	200.00	H	18.80	52.36	74.00	21.64
7236	21.33	Ave	160.00	200.00	H	18.80	40.13	54.00	13.87
220	45.33	QP	200	100	H	-5.2	40.13	43.5	3.37

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/205/209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBµV/m)	Margin (dB)
Middle Channel (2437MHz)									
2437	93.18	PK	221.00	150.00	V	3.00	96.18	/	/
2437	87.28	Ave	221.00	150.00	V	3.00	90.28	/	/
2437	93.21	PK	193.00	200.00	H	3.00	96.21	/	/
2437	86.36	Ave	193.00	200.00	H	3.00	89.36	/	/
1495	37.85	PK	135.00	200.00	V	0.00	37.85	74.00	36.15
1495	24.46	Ave	135.00	200.00	V	0.00	24.46	54.00	29.54
1698	42.33	PK	174.00	200.00	H	0.70	43.03	74.00	30.97
1698	24.22	Ave	174.00	200.00	H	0.70	24.92	54.00	29.08
4874	40.41	PK	12.00	150.00	V	13.90	54.31	74.00	19.69
4874	28.94	Ave	12.00	150.00	V	13.90	42.84	54.00	11.16
6627	32.46	PK	346.00	150.00	H	18.80	51.26	74.00	22.74
6627	19.46	Ave	346.00	150.00	H	18.80	38.26	54.00	15.74
7311	25.72	PK	233.00	150.00	H	18.90	44.62	74.00	29.38
7311	18.37	Ave	233.00	150.00	H	18.90	37.27	54.00	16.73
220	44.95	QP	200	100	H	-5.2	39.75	43.5	3.75
Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/205/209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBµV/m)	Margin (dB)
High Channel (2462 MHz)									
2462	93.87	PK	172.00	200.00	V	3.00	96.87	/	/
2462	85.23	Ave	172.00	200.00	V	3.00	88.23	/	/
2462	93.76	PK	129.00	150.00	H	3.00	96.76	/	/
2462	85.78	Ave	129.00	150.00	H	3.00	88.78	/	/
2483.5	51.48	PK	165.00	200.00	V	3.20	54.68	74.00	19.32
2483.5	38.43	Ave	165.00	200.00	V	3.20	41.63	54.00	12.37
2674	39.58	PK	320.00	200.00	V	4.20	43.78	74.00	30.22
2674	28.07	Ave	320.00	200.00	V	4.20	32.27	54.00	21.73
4924	44.41	PK	69.00	200.00	H	14.00	58.41	74.00	15.59
4924	35.88	Ave	69.00	200.00	H	14.00	49.88	54.00	4.12
6686	34.77	PK	129.00	150.00	H	18.80	53.57	74.00	20.43
6686	16.68	Ave	129.00	150.00	H	18.80	35.48	54.00	18.52
7386	29.67	PK	282.00	200.00	H	19.80	49.47	74.00	24.53
7386	13.54	Ave	282.00	200.00	H	19.80	33.34	54.00	20.66
192	43.43	QP	200	100	H	-5.2	38.23	43.5	5.27

802.11g Mode:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
Low Channel (2412 MHz)									
2412	92.98	PK	170.0	200.00	V	3.00	95.98	/	/
2412	85.02	Ave	170.0	200.00	V	3.00	88.02	/	/
2412	92.85	PK	72.0	150.00	H	3.00	95.85	/	/
2412	85.13	Ave	72.0	150.00	H	3.00	88.13	/	/
2145	33.86	PK	167.0	200.00	V	2.50	36.36	74.00	37.64
2145	19.85	Ave	167.0	200.00	V	2.50	22.35	54.00	31.65
2390	37.45	PK	69.0	200.00	H	2.90	40.35	74.00	33.65
2390	18.66	Ave	69.0	200.00	H	2.90	21.56	54.00	32.44
4824	35.98	PK	98.0	200.00	H	13.80	49.78	74.00	24.22
4824	22.02	Ave	98.0	200.00	H	13.80	35.82	54.00	18.18
6786	31.47	PK	231.0	150.00	V	18.80	50.27	74.00	23.73
6786	17.34	Ave	231.0	150.00	V	18.80	36.14	54.00	17.86
7236	32.63	PK	177.0	150.00	H	18.80	51.43	74.00	22.57
7236	21.31	Ave	177.0	150.00	H	18.80	40.11	54.00	13.89
220	43.75	QP	200	100	H	-5.2	38.55	43.5	4.95
Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
Middle Channel (2437 MHz)									
2437	92.37	PK	121.0	150.00	V	3.00	95.37	/	/
2437	84.39	Ave	121.0	150.00	V	3.00	87.39	/	/
2437	92.29	PK	63.0	150.00	H	3.00	95.29	/	/
2437	84.18	Ave	63.0	150.00	H	3.00	87.18	/	/
1373	39.67	PK	191.0	200.00	V	0.00	39.67	74.00	34.33
1373	21.38	Ave	191.0	200.00	V	0.00	21.38	54.00	32.62
1534	41.28	PK	83.0	200.00	H	0.70	41.98	74.00	32.02
1534	26.46	Ave	83.0	200.00	H	0.70	27.16	54.00	26.84
4874	40.38	PK	7.0	200.00	V	13.90	54.28	74.00	19.72
4874	28.97	Ave	7.0	200.00	V	13.90	42.87	54.00	11.13
6639	32.07	PK	319.0	150.00	H	18.80	50.87	74.00	23.13
6639	18.99	Ave	319.0	150.00	H	18.80	37.79	54.00	16.21
7311	28.38	PK	198.0	200.00	H	18.90	47.28	74.00	26.72
7311	19.31	Ave	198.0	200.00	H	18.90	38.21	54.00	15.79
220	43.76	QP	200	100	H	-5.2	38.56	43.5	4.94

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
High Channel (2462 MHz)									
2462	92.79	PK	160.0	200.0	V	3.00	95.79	/	/
2462	84.18	Ave	160.0	200.0	V	3.00	87.18	/	/
2462	92.21	PK	220.0	150.0	H	3.00	95.21	/	/
2462	84.27	Ave	220.0	150.0	H	3.00	87.27	/	/
2483.5	50.99	PK	163.0	150.0	V	3.20	54.19	74.00	19.81
2483.5	41.47	Ave	163.0	150.0	V	3.20	44.67	54.00	9.33
2627	38.67	PK	64.0	200.0	H	4.20	42.87	74.00	31.13
2627	27.61	Ave	64.0	200.0	H	4.20	31.81	54.00	22.19
4924	41.28	PK	21.0	200.0	V	14.00	55.28	74.00	18.72
4924	30.28	Ave	21.0	200.0	V	14.00	44.28	54.00	9.72
6629	31.97	PK	289.0	150.0	H	18.70	50.67	74.00	23.33
6629	19.08	Ave	289.0	150.0	H	18.70	37.78	54.00	16.22
7386	27.76	PK	172.0	200.0	V	19.80	47.56	74.00	26.44
7386	16.98	Ave	172.0	200.0	V	19.80	36.78	54.00	17.22
220	43.33	QP	200	100	H	-5.2	38.13	43.5	5.37

802.11n-HT20 Mode:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
Low Channel (2412 MHz)									
2412	91.63	PK	160.0	150.00	V	3.00	94.63	/	/
2412	84.43	Ave	160.0	150.00	V	3.00	87.43	/	/
2412	91.98	PK	89.0	200.00	H	3.00	94.98	/	/
2412	83.30	Ave	89.0	200.00	H	3.00	86.30	/	/
2364	30.88	PK	290.0	200.00	H	2.90	33.78	74.00	40.22
2364	21.39	Ave	290.0	200.00	H	2.90	24.29	54.00	29.71
2390	40.32	PK	119.0	150.00	V	2.90	43.22	74.00	30.78
2390	20.92	Ave	119.0	150.00	V	2.90	23.82	54.00	30.18
4824	28.10	PK	61.0	200.00	H	13.80	41.90	74.00	32.10
4824	22.98	Ave	61.0	200.00	H	13.80	36.78	54.00	17.22
6676	29.49	PK	322.0	150.00	V	18.80	48.29	74.00	25.71
6676	16.52	Ave	322.0	150.00	V	18.80	35.32	54.00	18.68
7236	32.94	PK	188.0	200.00	H	18.80	51.74	74.00	22.26
7236	25.41	Ave	188.0	200.00	H	18.80	44.21	54.00	9.79
220	44.06	QP	200	100	H	-5.2	38.86	43.5	4.64

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
Middle Channel (2437 MHz)									
2437	91.89	PK	170.0	200.00	V	3.00	94.89	/	/
2437	84.54	Ave	170.0	200.00	V	3.00	87.54	/	/
2437	91.19	PK	110.0	200.00	H	3.00	94.19	/	/
2437	83.76	Ave	110.0	200.00	H	3.00	86.76	/	/
1569	35.78	PK	220.0	150.00	V	0.00	35.78	74.00	38.22
1569	25.56	Ave	220.0	150.00	V	0.00	25.56	54.00	28.44
2269	37.75	PK	130.0	200.00	H	0.70	38.45	74.00	35.55
2269	25.76	Ave	130.0	200.00	H	0.70	26.46	54.00	27.54
4874	37.42	PK	80.0	200.00	V	13.90	51.32	74.00	22.68
4874	30.53	Ave	80.0	200.00	V	13.90	44.43	54.00	9.57
6723	31.41	PK	320.0	150.00	H	18.80	50.21	74.00	23.79
6723	16.48	Ave	320.0	150.00	H	18.80	35.28	54.00	18.72
7311	26.64	PK	214.0	150.00	H	18.90	45.54	74.00	28.46
7311	22.88	Ave	214.0	150.00	H	18.90	41.78	54.00	12.22
220	44.41	QP	200	100	H	-5.2	39.21	43.5	4.29

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/205/209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBµV/m)	Margin (dB)
High Channel (2462 MHz)									
2462	91.47	PK	160.0	200.0	V	3.00	94.47	/	/
2462	83.23	Ave	160.0	200.0	V	3.00	86.23	/	/
2462	91.98	PK	100.0	150.0	H	3.00	94.98	/	/
2462	83.65	Ave	100.0	150.0	H	3.00	86.65	/	/
2483.5	51.69	PK	180.0	200.0	V	3.20	54.89	74.00	19.11
2483.5	38.97	Ave	180.0	200.0	V	3.20	42.17	54.00	11.83
2498	37.47	PK	90.0	150.0	H	4.20	41.67	74.00	32.33
2498	21.23	Ave	90.0	150.0	H	4.20	25.43	54.00	28.57
4924	41.78	PK	231.0	200.0	V	14.00	55.78	74.00	18.22
4924	30.78	Ave	231.0	200.0	V	14.00	44.78	54.00	9.22
6678	29.64	PK	289.0	150.0	H	18.70	48.34	74.00	25.66
6678	16.99	Ave	289.0	150.0	H	18.70	35.69	54.00	18.31
7386	25.66	PK	188.0	200.0	V	19.80	45.46	74.00	28.54
7386	23.19	Ave	188.0	200.0	V	19.80	42.99	54.00	11.01
220	4.54	QP	200	100	H	-5.2	38.96	43.5	4.54

802.11n-HT40 Mode:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
Low Channel (2422 MHz)									
2412	91.48	PK	132.0	200.00	V	3.00	94.48	/	/
2412	83.41	Ave	132.0	200.00	V	3.00	86.41	/	/
2412	91.06	PK	80.0	200.00	H	3.00	94.06	/	/
2412	83.90	Ave	80.0	200.00	H	3.00	86.90	/	/
2343	29.62	PK	250.0	150.00	H	2.90	32.52	74.00	41.48
2343	22.49	Ave	250.0	150.00	H	2.90	25.39	54.00	28.61
2390	38.75	PK	168.0	150.00	V	2.90	41.65	74.00	32.35
2390	20.97	Ave	168.0	150.00	V	2.90	23.87	54.00	30.13
4824	26.52	PK	330.0	200.00	H	13.80	40.32	74.00	33.68
4824	21.56	Ave	330.0	200.00	H	13.80	35.36	54.00	18.64
6643	26.31	PK	123.0	150.00	V	18.80	45.11	74.00	28.89
6643	15.98	Ave	123.0	150.00	V	18.80	34.78	54.00	19.22
7236	32.13	PK	215.0	200.00	H	18.80	50.93	74.00	23.07
7236	22.98	Ave	215.0	200.00	H	18.80	41.78	54.00	12.22
220	43.84	QP	200	100	H	-5.2	38.64	43.5	4.86

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
Middle Channel (2437 MHz)									
2437	91.16	PK	128.0	200.00	V	3.00	94.16	/	/
2437	83.54	Ave	128.0	200.00	V	3.00	86.54	/	/
2437	90.32	PK	69.0	150.00	H	3.00	93.32	/	/
2437	83.39	Ave	69.0	150.00	H	3.00	86.39	/	/
1538	34.78	PK	159.0	150.00	V	0.00	34.78	74.00	39.22
1538	23.02	Ave	159.0	150.00	V	0.00	23.02	54.00	30.98
2289	36.72	PK	120.0	150.00	H	0.70	37.42	74.00	36.58
2289	28.21	Ave	120.0	150.00	H	0.70	28.91	54.00	25.09
4874	36.89	PK	49.0	200.00	V	13.90	50.79	74.00	23.21
4874	29.73	Ave	49.0	200.00	V	13.90	43.63	54.00	10.37
6643	30.07	PK	356.0	200.00	H	18.80	48.87	74.00	25.13
6643	14.92	Ave	356.0	200.00	H	18.80	33.72	54.00	20.28
7311	27.79	PK	254.0	150.00	H	18.90	46.69	74.00	27.31
7311	22.05	Ave	254.0	150.00	H	18.90	40.95	54.00	13.05
220	43.06	QP	200	100	H	-5.2	37.86	43.5	5.64

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
High Channel (2452 MHz)									
2462	91.78	PK	118.0	200.0	V	3.00	94.78	/	/
2462	83.54	Ave	118.0	200.0	V	3.00	86.54	/	/
2462	90.42	PK	88.0	150.0	H	3.00	93.42	/	/
2462	83.43	Ave	88.0	150.0	H	3.00	86.43	/	/
2483.5	50.69	PK	180.0	150.0	V	3.20	53.89	74.00	20.11
2483.5	38.39	Ave	180.0	150.0	V	3.20	41.59	54.00	12.41
2495	34.74	PK	164.0	150.0	H	4.20	38.94	74.00	35.06
2495	21.32	Ave	164.0	150.0	H	4.20	25.52	54.00	28.48
4924	38.87	PK	257.0	200.0	V	14.00	52.87	74.00	21.13
4924	28.33	Ave	257.0	200.0	V	14.00	42.33	54.00	11.67
6656	27.27	PK	289.0	150.0	H	18.70	45.97	74.00	28.03
6656	15.66	Ave	289.0	150.0	H	18.70	34.36	54.00	19.64
7386	24.73	PK	188.0	200.0	V	19.80	44.53	74.00	29.47
7386	19.92	Ave	188.0	200.0	V	19.80	39.72	54.00	14.28
220	43.97	QP	200	100	H	-5.2	38.77	43.5	4.73

BLE Mode:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dB μ V/m)	Margin (dB)
Low Channel (2402 MHz)									
2402	90.32	PK	169	150	V	3	93.32	/	/
2402	81.67	Ave	169	150	V	3	84.67	/	/
2402	90.36	PK	109	150	H	3	93.36	/	/
2402	81.63	Ave	109	150	H	3	84.63	/	/
2362	29.22	Ave	70	200	H	4.1	33.32	54	20.68
2362	38.77	PK	70	200	H	4.1	42.87	74	31.13
2390	23.66	Ave	96	150	V	4.1	27.76	54	26.24
2390	34.43	PK	96	150	V	4.1	38.53	74	35.47
4804	31.94	Ave	124	150	H	13.7	45.64	54	8.36
4804	41.26	PK	124	150	H	13.7	54.96	74	19.04
6634	33.53	PK	189	250	V	18.8	52.33	74	21.67
6634	20.05	Ave	189	250	V	18.8	38.85	54	15.15
7206	31.92	PK	287	150	V	20.5	52.42	74	21.58
7206	25.24	Ave.	287	150	V	20.5	45.74	54	8.26
220	44.03	QP	200	100	H	-5.2	38.83	43.5	4.67

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dB μ V/m)	Margin (dB)
Middle Channel (2440MHz)									
2440	90.72	PK	176	150	V	2.6	93.32	/	/
2440	82.24	Ave	176	150	V	2.6	84.84	/	/
2440	90.61	PK	168	150	H	2.6	93.21	/	/
2440	82.07	Ave	168	150	H	2.6	84.67	/	/
1498	30.54	Ave	97	150	V	0	30.54	54	23.46
1498	45.63	PK	97	150	V	0	45.63	74	28.37
2243	35.24	Ave	320	200	V	0.7	35.94	54	18.06
2243	45.03	PK	320	200	V	0.7	45.73	74	28.27
4880	39.39	PK	49	150	H	13.9	53.29	74	20.71
4880	33.73	Ave	49	150	H	13.9	47.63	54	6.37
6687	34.59	PK	153	250	H	18.8	53.39	74	20.61
6687	20.84	Ave	153	250	H	18.8	39.64	54	14.36
7320	34.95	PK	266	150	V	20.8	55.75	74	18.25
7320	23.49	Ave.	266	150	V	20.8	44.29	54	9.71
220	43.64	QP	200	100	H	-5.2	38.44	43.5	5.06

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dB μ V/m)	Margin (dB)
High Channel (2480 MHz)									
2480	91.16	PK	139	150	V	3.2	94.36	/	/
2480	81.23	Ave	139	150	V	3.2	84.43	/	/
2480	91.48	PK	199	150	H	3.2	94.68	/	/
2480	80.55	Ave	199	150	H	3.2	83.75	/	/
2483.5	41.08	PK	50	249	H	4.2	45.28	74	28.72
2483.5	38.06	Ave	50	249	H	4.2	42.26	54	11.74
2585	37.98	PK	38	200	H	4.4	42.38	74	31.62
2585	29.56	Ave	38	200	H	4.4	33.96	54	20.04
4960	31.53	Ave	321	150	H	14.1	45.63	54	8.37
4960	38.57	PK	321	150	H	14.1	52.67	74	21.33
6647	31.52	PK	82	250	V	18.8	50.32	74	23.68
6647	16.62	Ave	82	250	V	18.8	35.42	54	18.58
7440	34.01	PK	208	150	V	21.2	55.21	74	18.79
7440	22.64	Ave	208	150	V	21.2	43.84	54	10.16
220	42.86	QP	200	100	H	-5.2	37.66	43.5	6.25

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