

# **FCC CERTIFICATION TEST REPORT FOR**

FCC ID: X5B-904002R

Report Reference N	10:	14FAB10008 21
-		

Date of issue .....: 2014-10-15

Testing Laboratory ...... ATT Product Service Co., Ltd.

No. 3, ChangLianShan Industrial Park, ChangAn Town, Address .....:

DongGuan City, GuangDong, China.

Applicant's name...... PERFORMANCE DESIGNED PRODUCTS, LLC

14144 Ventura Blvd, Suite 200, Sherman Oaks, CA 91423 Address .....:

U.S.A

Manufacturer ...... PERFORMANCE DESIGNED PRODUCTS, LLC

Test specification:

Report No.: 14FAB10008 21

Test item description...... Rock Candy Wireless Dongle

Trade Mark....::

Model/Type reference .....: 904-002R

Ratings ...... DC 5V From USB Port Supply

Responsible Engineer Approved by

Rock Husing

(Rock Huang/ Engineer) (Tomy Wu /EMC Manager)



#### Report No.: 14FAB03040 21 2 of 23

TABLE OF CONTENTS	
TEST REPORT DECLARE	
1. Summary of test Standards and results	
2. General test information	
2.1 ACCREDITATIONS	
2.2Description of EUT5	
2.3 Accessories of EUT	
2.4 Assistant equipment used for test	
2.5 Block diagram of EUT configuration for test	
2.6 Test environment conditions	5
2.7 Measurement uncertainty	
3 20dB Bandwidth	
3.1 Test equipment	
3.2 Block diagram of test setup	
3.3 Applicable Standard	
3.4 Test Procedure	7
3.5 Test Result	
3.6 Original test data	
4 Radiated emission	
4.1 Test equipment	
4.2 Block diagram of test setup	
4.3 Limit	
4.4 Test Procedure	
4.5 Test result	
5 Antenna Requirements	
5.1 Limit	
5.2 Result	
6 Power Line Conducted Emission	
6.1 Test equipment	
6.2 Block diagram of test setup	
6.3 Power Line Conducted Emission Limits (Class B)	
6.4 Test Procedure	
6.5 Test Result	
7. EUT TEST PHOTO	)



Report No.: 14FAB10008 21 3 of 23

## **TEST REPORT DECLARE**

Applicant	:	PERFORMANCE DESIGNED PRODUCTS, LLC	
Address	:	14144 Ventura Blvd, Suite 200, Sherman Oaks, CA 91423 U.S.A	
Equipment under Test	:	Rock Candy Wireless Dongle	
Model No	:	904-002R	
Trade Mark	:		
Manufacturer	nufacturer : PERFORMANCE DESIGNED PRODUCTS, LLC		
Address		14144 Ventura Blvd, Suite 200, Sherman Oaks, CA 91423 U.S.A	

Test Standard Used: FCC Rules and Regulations Part 15 Subpart C: 2010

Test procedure used: ANSI C63.10:2009

FCC Public Notice DA 00-705

#### We Declare:

The equipment described above is tested by ATT Product Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and ATT Product Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

After test and evaluation X/Y/Z axis of the EUT. will record worst case in this report. our opinion is that the equipment provided for test compliance with the requirement of the above FCC standards.

Report No:	14FAB10008 21			
Date of Test:	2014-10-9 to 2014-10-14	Date of Report:	2014-10-15	

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of ATT Product Service Co., Ltd.

Phone: 86-769-8509 8000; Fax: 86-769-8509 8777 E-mail:att@attps.cn



Report No.: 14FAB10008 21 4 of 23

## 1. Summary of test Standards and results

The EUT have been tested according to the applicable standards as referenced below.

Description of Test Item	Standard	Results	
20dB Bandwidth	&15. 215(c) ANSI C63.10 :2009	PASS	
Radiated Emission	15.209,&15.205,&15.249 ANSI C63.10 :2009	PASS	
Conducted Emissions	&15.207(a) ANSI C63.10 :2009	PASS	
Antenna requirement	&15.203	PASS	
Outside of Band Emission (50dB attenuation)	&15.249(d)	PASS	



Report No.: 14FAB10008 21 5 of 23

## 2. General test information

#### 2.1 ACCREDITATIONS

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

**Registration Number:923232** USA **FCC** Canada **INDUSTRY CANADA Registration Number 11033A** 

## 2.2Description of EUT

EUT* Name	:	Rock Candy Wireless Dongle	
Model Number	:	904-002R	
Trade Mark	:	None	
EUT function description	:	Please reference user manual of this device	
Power supply	:	DC 5V From USB Port Supply	
Operation frequency		2402MHz - 2480MHz	
Modulation	:	GFSK	
Data rate	:	1Mpbs	
Antenna Type		PCB Antenna,Max gain 0 dBi.	
Date of Receipt	:	2014-10-08	
Sample Type	:	Single	

## 2.3 Accessories of EUT

Description of Accessories Manufacturer		Model number or Type	Other
1	1	1	1

## 2.4 Assistant equipment used for test

Description of Assistant equipment	Manufacturer	Model number or Type	FCCID / FCC DOC	Other
Notebook Computer	lenovo	7457	FCC DOC approved	7457A82
keyboard	Lenovo	JME7053	FCC DOC approved	2C087729
Printer	Epson	P952B	FCC DOC approved	AXQ0018586



Report No.: 14FAB10008 21 6 of 23

## 2.5 Block diagram of EUT configuration for test

Tested mode, channel, information				
Test Mode	Channel	Frequency (MHz)		
	Low	2402		
Tx Mode	Middle	2441		
	High	2480		

#### 2.6 Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature range:	<b>21-25</b> ℃
Humidity range:	40-75%
Pressure range:	86-106kPa

## 2.7 Measurement uncertainty

Test Item	Uncertainty	
Uncertainty for Conduction emission test	2.44dB	
Uncertainty for Radiation Emission test (150KHz-30MHz)	3.21dB	
Uncertainty for Radiation Emission test	3.42 dB (Polarize: V)	
(30MHz-200MHz)	3.52 dB (Polarize: H)	
Uncertainty for Radiation Emission test	3.52 dB (Polarize: V)	
(200MHz-1GHz)	3.54 dB (Polarize: H)	
Uncertainty for Rediction Emission toot (10Hz to 250Hz)	4.20 dB (Polarize: V)	
Uncertainty for Radiation Emission test (1GHz to 25GHz)	4.20 dB (Polarize: H)	
Uncertainty for radio frequency	1×10-9	
Uncertainty for conducted RF Power	0.65dB	

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



Report No.: 14FAB10008 21 7 of 23

#### 3 20dB Bandwidth

#### 3.1 Test equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Due.	Cal. Interval
1	EMI Test Receiver	R&S	ESCI	101307	2014/12/26	1Y
2	Attenuator	Mini-Circuits	BW-S10W2	101109	2014/12/27	1Y
3	RF Cable	Micable	C10-01-01-1	100309	2014/12/27	1Y

### 3.2 Block diagram of test setup



## 3.3 Applicable Standard

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated...

### 3.4 Test Procedure

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Position the EUT on the test table without connection to measurement instrument. Turn on the EUT. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- 3. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.
- 4. Repeat above procedures until all frequencies measured were complete...

No. 3, ChangLianShan Industrial Park, ChangAn Town, DongGuan City, GuangDong, China.

Phone: 86-769-8509 8000; Fax: 86-769-8509 8777 E-mail:att@attps.cn



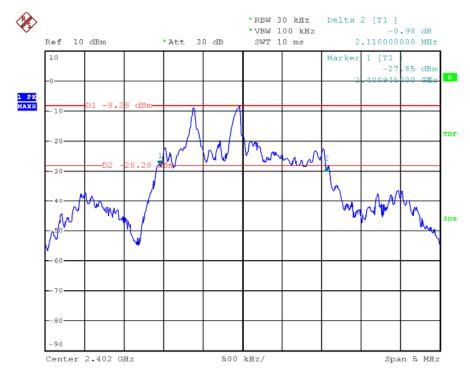
Report No.: 14FAB10008 21 8 of 23

## 3.5 Test Result

EUT: Rock Car	ndy Wireless Dongle	9	M/N: 904-002R		
Mode	Freq (MHz)	Result (MHz)	Limit (MHz)	Margin (MHz)	Conclusion
	2402	2.11	1	1	PASS
Tx	2441	2.16	1	1	PASS
	2480	2.13	1	1	PASS
Toot Date : 200	14 10 12		Toot Engine	\ /:to	

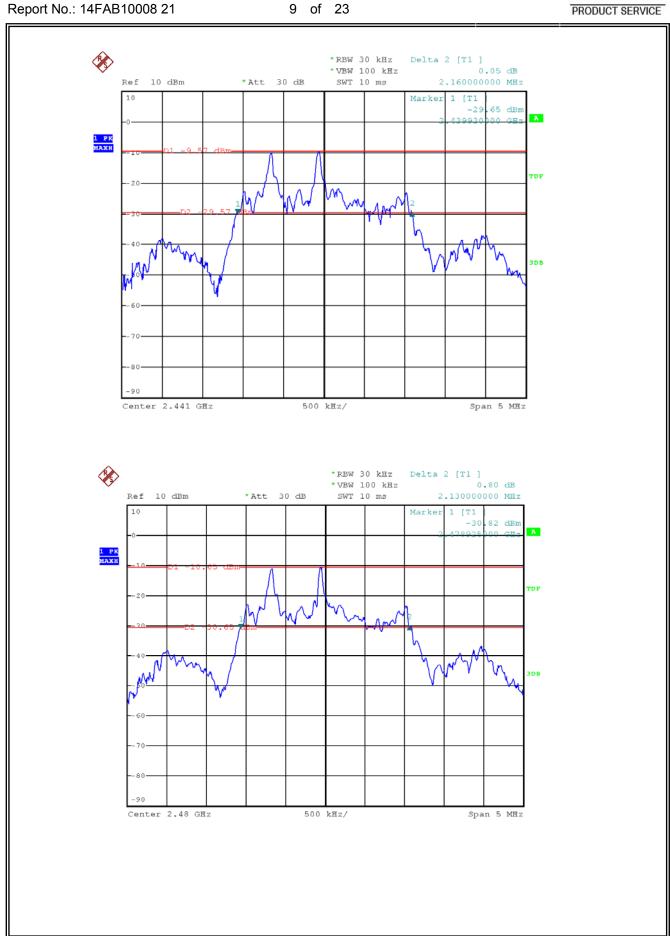
Test Date : 2014-10-13 Test Engineer : Vito

## 3.6 Original test data









Report No.: 14FAB10008 21 10 of 23



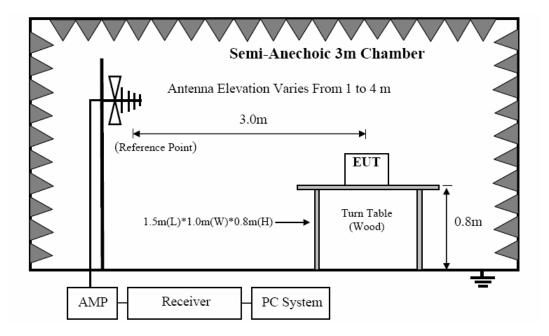
## 4 Radiated emission

## 4.1 Test equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Due.	Cal. Interval
1	EMI Test Receiver	R&S	ESCI	101307	2014/12/26	1Y
2	Spectrum analyzer	Adjient   E4407B   US402407081		2015/07/11	1Y	
3	Loop antenna	Chase	HLA6120 20129		2014/12/27	1Y
4	Trilog Broadband Antenna	Schwarzbeck	VULB9163	9163-462	2014/12/27	1Y
5	Double Ridged Horn Antenna	R&S	HF907	100276	2014/12/27	1Y
6	Pre-Amplifier	R&S	SCU-01	10049	2014/12/27	1Y
7	Pre-amplifier	A.H.	PAM0-0118	360	2014/12/27	1Y
8	RF Cable	R&S	R01	10403	2014/12/27	1Y
9	RF Cable	R&S	R02	10512	2014/12/27	1Y
10	Horn Antenna	EMCO	3116	9608-4877	2014/12/27	1Y

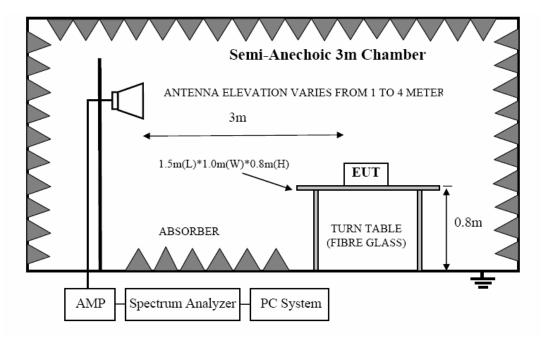
## 4.2 Block diagram of test setup

In 3m Anechoic Chamber Test Setup Diagram for below 1GHz



Report No.: 14FAB10008 21 11 of 23

In 3m Anechoic Chamber Test Setup Diagram for frequency above 1GHz



Note: For harmonic emissions test a appropriate high pass filter was inserted in the input port of AMP.

## 4.3 Limit

## 4.3.1 FCC 15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(2)



Report No.: 14FAB10008 21 12 of 23

#### 4.3.2 FCC 15.209 Limit

FREQUENCY	DISTANCE	FIELD STRENGTHS LIMIT		
MHz	Meters	μV/m	dB(μV)/m	
30 ~ 88	3	100	40.0	
88 ~ 216	3	150	43.5	
216 ~ 960	3	200	46.0	
960 ~ 1000	3	500	54.0	
Above 1000	2	74.0 dB(μV)/m (Peak)		
Above 1000	3	54.0 dB(μV)/m (Average)		

#### 4.3.2 FCC 15.249 Limit

Fundamental	Field strength of fundamental	Field strength of harmonics
frequency	(millivolts/meter)	(microvolts/meter)
902–928 MHz	50	500
2400–2483.5 MHz	50	500
5725–5875 MHz	50	500
24.0–24.25 GHz	250	2500

#### 4.3.3 Limit for this EUT

The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.4: 2009. The specification used was the FCC 15.209, and FCC 15.249 limits.



Report No.: 14FAB10008 21 13 of 23

#### 4.4 Test Procedure

- (1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber.
- (2) Setup EUT and assistant system according clause 2.4 and 8.2
- (3) Test antenna was located 3m from the EUT on an adjustable mast. Below pre-scan procedure was first performed in order to find prominent radiated emissions.
  - (a) Change work frequency or channel of device if practicable.
  - (b) Change modulation type of device if practicable.
  - (c) Change power supply range from 85% to 115% of the rated supply voltage
  - (d) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions
- (4) Spectrum frequency from 9MHz to 25GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 9KHz to 30MHz and 18GHz to 25GHz, so below final test was performed with frequency range from 30MHz to 18GHz.
- (5) For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10 2009 on Radiated Emission test.
- (6) For emissions from 30MHz to 1GHz, Quasi-Peak values were measured with EMI Receiver and the bandwidth of Receiver is 120 KHz.
- (7) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1MHz, VBW is set at 3MHz for Peak measure, Detector is at PK; RBW is set at 1MHz, VBW is set at 10Hz for Average measure, Detector is at PK..

#### 4.5 Test result

#### PASS. (See below detailed test result)

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C and section 15.205, 15.209 and 15.249, Vertical and Horizontal mode all have been tested ,Horizontal mode is the worse case .with the worst margin reading of:

ATT Product Service Co., Ltd. (CBTL Lab of UL/Demko)



Report No.: 14FAB10008 21

# **Radiated Emission Test Result**

Test Site	:	Bm Chamber							
Test Date	:	2014-10-13	Tested By	:	Vito				
EUT	:	Rock Candy Wireless Dongle	Model Number	:	904-002R				
Power Supply	:	DC 5V From USB Port Supply	Test Mode	:	Tx mode				
Condition	:	Temp:24°C,Humi:55%	Antenna/Distance	:	3m				

Frequency	Reo	eiver	RxA	ntenna	O-I-I-	A	D #	FCC 15	249	
1		Detector			Cable Loss	Amplifier Gain	Result Level	Limit		
(MHz)	Reading (dBµV)	(PK/QP/	Polar (HW)	Factor (dB)	(dB)	(dB)	(dBµV/m)	Limil (dBµV/m)	Margin (dB)	
	(αρμν)	AV)	, ,	` ′	` ,	` ′	(dbµ v/i ii)	(ασμν/ιτι)	(UD)	
	Low Channel (2402MHz)									
2402	61.24	PK	Н	28.00	3.65	0.00	92.89	114.00	-21.11	
2402	52.24	AV	Н	28.00	3.65	0.00	83.89	94.00	-10.11	
2402	58.90	PK	<b>V</b>	28.00	3.65	0.00	90.55	114.00	-23.45	
2402	50.32	AV	V	28.00	3.65	0.00	81.97	94.00	-12.03	
2390	13.51	PK	Ι	27.80	3.57	0.00	44.88	74.00	-29.12	
2390	7.78	AV	Τ	27.80	3.57	0.00	39.15	54.00	-14.85	
2390	9.65	PK	<b>\</b>	27.80	3.57	0.00	41.02	74.00	-32.98	
2390	4.88	AV	V	27.80	3.57	0.00	36.25	54.00	-17.75	
2400	9.83	PK	Н	28.00	3.57	0.00	41.40	74.00	-32.60	
2400	4.20	AV	Н	28.00	3.57	0.00	35.77	54.00	-18.23	
2400	8.55	PK	>	28.00	3.57	0.00	40.12	74.00	-33.88	
2400	2.28	AV	V	28.00	3.57	0.00	33.85	54.00	-20.15	
4804	48.52	PK	Н	32.30	5.91	31.78	54.95	74.00	-19.05	
4804	40.67	AV	Н	32.30	5.91	31.78	47.10	54.00	-6.90	
4804	49.20	PK	V	32.30	5.91	31.78	55.63	74.00	-18.37	
4804	37.99	AV	V	32.30	5.91	31.78	44.42	54.00	-9.58	
7206	38.97	PK	Ι	36.30	6.34	30.97	50.64	74.00	-23.36	
7206	30.26	AV	Ι	36.30	6.34	30.97	41.93	54.00	-12.07	
7206	41.43	PK	V	36.30	6.34	30.97	53.10	74.00	-20.90	
7206	32.06	AV	V	36.30	6.34	30.97	43.73	54.00	-10.27	
9608	37.50	PK	Ι	37.90	8.01	30.86	52.55	74.00	-21.45	
9608	28.70	AV	Ι	37.90	8.01	30.86	43.75	54.00	-10.25	
9608	41.10	PK	V	37.90	8.01	30.86	56.15	74.00	-17.85	
9608	32.43	AV	V	37.90	8.01	30.86	47.48	54.00	-6.52	
533	49.04	QP	Н	14.20	2.74	27.60	38.38	46.00	-7.62	
533	43.36	QP	V	14.20	2.74	27.60	32.70	46.00	-13.30	
				Middle Cha	annel (244	·1)				
2441	59.50	PK	Н	28.30	3.69	0.00	91.49	114.00	-22.51	
2441	51.83	AV	Н	28.30	3.69	0.00	83.82	94.00	-10.18	
2441	57.25	PK	V	28.30	3.69	0.00	89.24	114.00	-24.76	
2441	48.60	AV	V	28.30	3.69	0.00	80.59	94.00	-13.41	
4882	43.70	PK	Н	32.90	6.34	31.78	51.16	74.00	-22.84	
4882	35.11	AV	Н	32.90	6.34	31.78	42.57	54.00	-11.43	
4882	44.66	PK	V	32.90	6.34	31.78	52.12	74.00	-21.88	
4882	37.04	AV	V	32.90	6.34	31.78	44.50	54.00	-9.50	



15 of 23 Report No.: 14FAB10008 21

7323	43.83	PK	Н	37.10	6.72	30.97	56.68	74.00	-17.32
7323	33.15	AV	Н	37.10	6.72	30.97	46.00	54.00	-8.00
7323	42.05	PK	V	37.10	6.72	30.97	54.90	74.00	-19.10
7323	32.60	AV	V	37.10	6.72	30.97	45.45	54.00	-8.55
9764	38.05	PK	Н	38.60	8.43	30.86	54.22	74.00	-19.78
9764	28.91	AV	Н	38.60	8.43	30.86	45.08	54.00	-8.92
9764	42.79	PK	V	38.60	8.43	30.86	58.96	74.00	-15.04
9764	33.67	AV	V	38.60	8.43	30.86	49.84	54.00	<del>-4</del> .16
533	47.96	QP	Н	14.20	2.74	27.60	37.30	46.00	-8.70
533	43.01	QP	V	14.20	2.74	27.60	32.35	46.00	-13.65
				High Cha	nnel (2480	0)			
2480	57.24	PK	Н	28.70	3.72	0.00	89.66	114.00	-24.34
2480	47.84	AV	Н	28.70	3.72	0.00	80.26	94.00	-13.74
2480	55.25	PK	V	28.70	3.72	0.00	87.67	114.00	-26.33
2480	51.24	AV	V	28.70	3.72	0.00	83.66	94.00	-10.34
2483.5	11.00	PK	Н	28.70	3.72	0.00	43.42	74.00	-30.58
2483.5	6.13	AV	Н	28.70	3.72	0.00	38.55	54.00	-15.45
2483.5	10.13	PK	V	28.70	3.72	0.00	42.55	74.00	-31.45
2483.5	3.73	AV	V	28.70	3.72	0.00	36.15	54.00	-17.85
4960	44.67	PK	Н	33.10	6.39	31.78	52.38	74.00	-21.62
4960	34.36	AV	Н	33.10	6.39	31.78	42.07	54.00	-11.93
4960	43.65	PK	V	33.10	6.39	31.78	51.36	74.00	-22.64
4960	38.20	AV	V	33.10	6.39	31.78	45.91	54.00	-8.09
7440	44.50	PK	Н	37.20	6.77	30.97	57.50	74.00	-16.50
7440	35.33	AV	Н	37.20	6.77	30.97	48.33	54.00	-5.67
7440	40.47	PK	V	37.20	6.77	30.97	53.47	74.00	-20.53
7440	31.99	AV	V	37.20	6.77	30.97	44.99	54.00	-9.01
9920	37.91	PK	Н	38.70	8.48	30.86	54.23	74.00	-19.77
9920	27.16	AV	Н	38.70	8.48	30.86	43.48	54.00	-10.52
9920	39.95	PK	V	38.70	8.48	30.86	56.27	74.00	-17.73
9920	34.56	AV	V	38.70	8.48	30.86	50.88	54.00	-3.12
533	46.88	QP	Н	14.20	2.74	27.60	36.22	46.00	-9.78
533	42.41	QP	V	14.20	2.74	27.60	31.75	46.00	-14.25

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

- 2. If Peak Result comply with QP limit, QP Result is deemed to comply with QP limit
- 3. For fundamental frequency test: RBW=3MHz VBW=10MHz Peak detector for PK value , RBW=3MHz VBW=10MHz AV detector for AV value.



## **5 Antenna Requirements**

#### 5.1 Limit

For intentional device, according to FCC 47 CFR Section 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. And according to FCC 47 CFR Section 15.249 (b), if 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 6dBi.

#### 5.2 Result

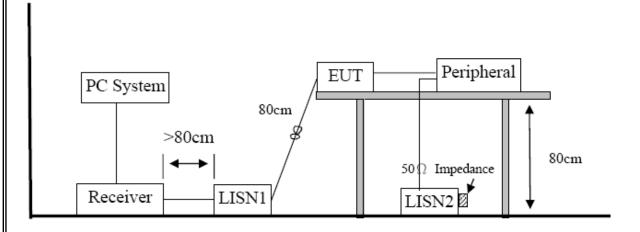
The EUT has an internal chip antenna permanently soldering on the printed circuit board, which complied with 15.203, the maximum gain was 0 dBi.

## **6 Power Line Conducted Emission**

## 6.1 Test equipment

Item	Equipment	Manufacturer Model No. Serial No.		Cal Due.	Cal. Interval	
1	Test Receiver	R&S	ESCI	101308	2014/11/26	1 Year
2	LISN 1	AFJ	LS16	16011103219	2014/12/28	1 Year
3	LISN 2	R&S	ESH2-Z5	100309	2014/12/28	1 Year
4	Pulse Limiter	MTS-systemtechnik	MTS-IMP-136	261115-010-0024	2014/12/28	1 Year

## 6.2 Block diagram of test setup



ATT Product Service Co., Ltd. (CBTL Lab of UL/Demko)



Report No.: 14FAB10008 21 17 of 23

## 6.3 Power Line Conducted Emission Limits (Class B)

Frequency	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Note 1: \* Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies

#### 6.4 Test Procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane. Configuration EUT to simulate typical usage as described in clause 2.4 and test equipment as described in clause 10.2 of this report. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4: 2009. All support equipment power received from a second LISN. Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT. The Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes. During the above scans, the emissions were maximized by cable manipulation. The test mode(s) described in clause 2.4 were scanned during the preliminary test. After the preliminary scan, we found the test mode producing the highest emission level. The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test. EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test. A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. The test data of the worst-case condition(s) was recorded. The bandwidth of test receiver is set at 9 KHz.

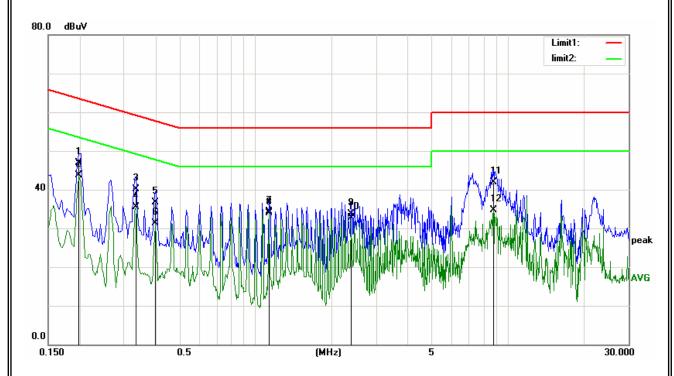
No. 3, ChangLianShan Industrial Park, ChangAn Town, DongGuan City, GuangDong, China.

Phone: 86-769-8509 8000; Fax: 86-769-8509 8777 E-mail:att@attps.cn

Report No.: 14FAB10008 21 18 of 23

## 6.5 Test Result

EUT:	Rock Candy Wireless Dongle	Model No.:	904-002R
Temperature:	<b>24</b> °C	Relative Humidity:	55%
Probe:	L1	Test Power:	DC 5V From USB port
			supply (AC 120V/60Hz)
Standard:	(CE)FCC PART 15_B	Test Result:	Pass
Test Mode:	Tx	Test By:	Vito
Note:	_	·	



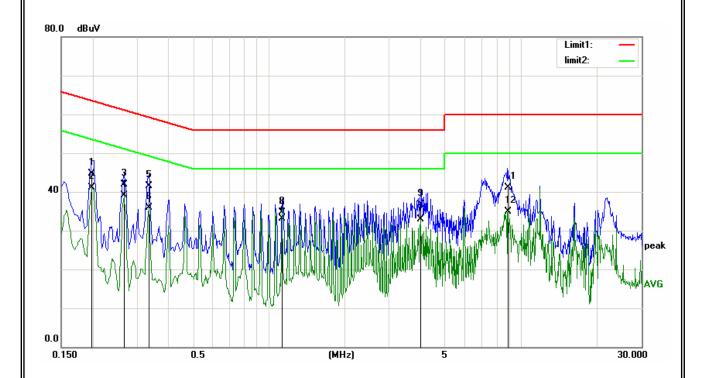
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1980	35.70	11.14	46.84	63.69	-16.85	QP
2	0.1980	32.53	11.14	43.67	53.69	-10.02	AVG
3	0.3339	29.69	10.40	40.09	59.35	-19.26	QP
4	0.3339	25.15	10.40	35.55	49.35	-13.80	AVG
5	0.3980	26.37	10.31	36.68	57.89	-21.21	QP
6	0.3980	21.02	10.31	31.33	47.89	-16.56	AVG
7	1.1300	24.30	10.10	34.40	56.00	-21.60	QP
8	1.1300	23.75	10.10	33.85	46.00	-12.15	AVG
9	2.3900	23.56	10.12	33.68	56.00	-22.32	QP
10	2.3900	22.55	10.12	32.67	46.00	-13.33	AVG
11	8.7660	31.85	10.14	41.99	60.00	-18.01	QP
12	8.7660	24.57	10.14	34.71	50.00	-15.29	AVG







EUT:	Rock Candy Wireless Dongle	Model No.:	904-002R	
Temperature:	<b>24</b> ℃	Relative Humidity:	55%	
Probe:	N	Test Power:	r: DC 5V From USB port	
			supply (AC 120V/60Hz)	
Standard:	(CE)FCC PART 15_B	Test Result:	Pass	
Test Mode:	Tx	Test By:	Vito	
Note:				



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1980	33.48	11.14	44.62	63.69	-19.07	QP
2	0.1980	29.91	11.14	41.05	53.69	-12.64	AVG
3	0.2660	31.31	10.67	41.98	61.24	-19.26	QP
4	0.2660	28.47	10.67	39.14	51.24	-12.10	AVG
5	0.3339	31.04	10.40	41.44	59.35	-17.91	QP
6	0.3339	25.41	10.40	35.81	49.35	-13.54	AVG
7	1.1300	22.93	10.10	33.03	56.00	-22.97	QP
8	1.1300	24.51	10.10	34.61	46.00	-11.39	AVG
9	3.9860	26.57	10.14	36.71	56.00	-19.29	QP
10	3.9860	22.76	10.14	32.90	46.00	-13.10	AVG
11	8.9020	30.92	10.14	41.06	60.00	-18.94	QP
12	8.9020	24.71	10.14	34.85	50.00	-15.15	AVG



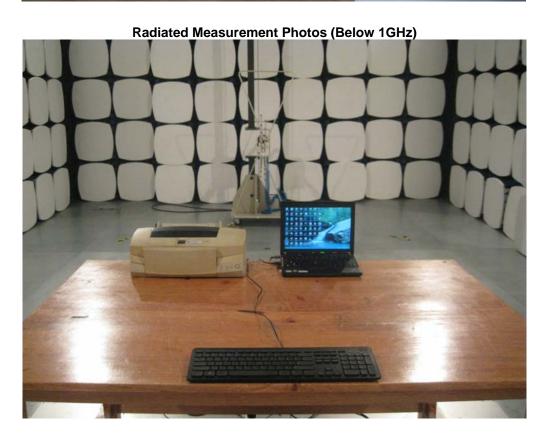
Report No.: 14FAB10008 21 20 of 23



## 7. EUT TEST PHOTO

#### **Conducted Measurement Photo**







Report No.: 14FAB10008 21 21 of 23

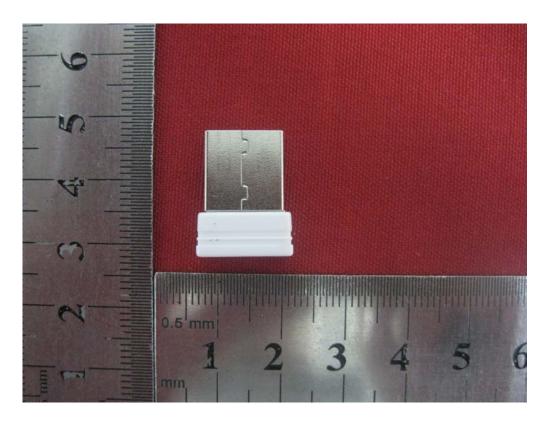
## Radiated Measurement Photos (Above1GHz)



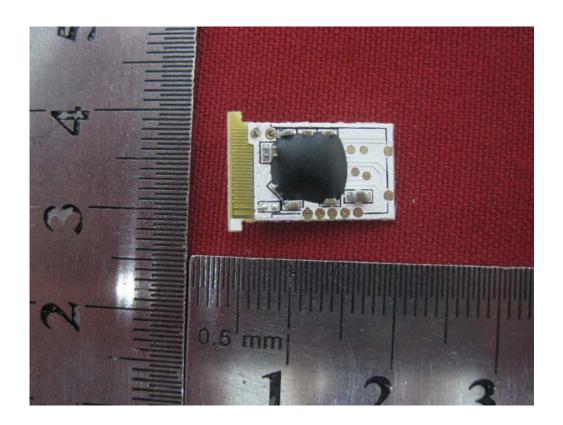


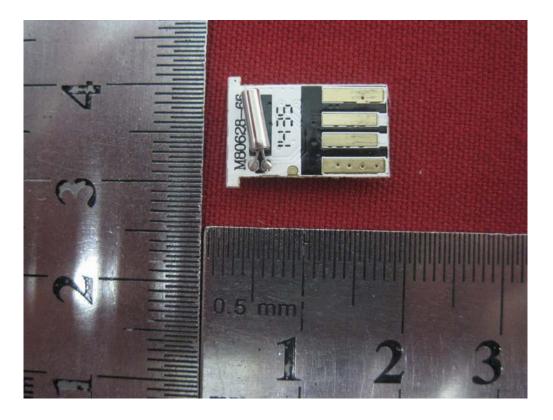
## **EUT Photos**











## THE END