

SPORTON International Inc.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. Ph: 886-3-327-3456 / FAX: 886-3-327-0973 / www.sporton.com.tw

Project No: CB10505032

Maximum Permissible Exposure Report

Applicant's company	Amped Wireless
Applicant Address	13089 Peyton Dr. #C307 Chino Hills CA 91709 USA
FCC ID	ZTT-LRC200
Manufacturer's company	Brickcom Corporation
Manufacturer Address	No.1 Jen Ai Road, Hsinchu Industrial Park, Hsinchu, Taiwan

Product Name	LRC200			
Brand Name	amped wireless			
Model Name	LRC200			
Ref. Standard(s)	47 CFR FCC Part 2 Subpart J, section 2.1091			
Received Date	Jan. 19, 2016			
Final Test Date	Apr. 19, 2016			
Submission Type	Original Equipment			

Sam Chen

SPORTON INTERNATIONAL INC.

Testing Laboratory

1190

Report Format Version: 01 FCC ID: ZTT-LRC200



Table of Contents

1.	GENER	RAL DESCRIPTION	. 1
		EUT General Information	
	1.2.	Testing Location	1
		JUM PERMISSIBLE EXPOSURE	
	2.1.	Limit of Maximum Permissible Exposure	2
	2.2.	MPE Calculation Method	2
		Calculated Popult and Limit	•



History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA611901	Rev. 01	Initial issue of report	May 13, 2016

Report Format Version: 01 Page No. : ii of ii
FCC ID : ZTT-LRC200 Issued Date : May 13, 2016



1. GENERAL DESCRIPTION

1.1. EUT General Information

	RF General Information					
Evaluation Mode	Panae I Freduei		Modulation Type			
2.4GHz WLAN	2400-2483.5	2412-2462	802.11b: DSSS (DBPSK, DQPSK, CCK) 802.11g/n: OFDM (BPSK, QPSK, 16QAM, 64QAM)			

1.2. Testing Location

	Testing Location							
	HWA YA ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.							
		TEL	:	886-3-327-3456				
\boxtimes	JHUBEI	ADD	:	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.				
		TEL	:	886-3-656-9065				

 Report Format Version: 01
 Page No.
 : 1 of 3

 FCC ID : ZTT-LRC200
 Issued Date
 : May 13, 2016

2. MAXIMUM PERMISSIBLE EXPOSURE

2.1. Limit of Maximum Permissible Exposure

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	<u> </u>		Power Density (S) (mW/ cm²)	Averaging Time E ² , H ² or S (minutes)	
0.3-3.0	614	1.63	(100)*	6	
3.0-30	1842 / f	4.89 / f	(900 / f)*	6	
30-300	61.4	0.163	1.0	6	
300-1500			F/300	6	
1500-100,000			5	6	

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time E ² , H ² or S (minutes)	
0.3-1.34	614	1.63	(100)*	30	
1.34-30	824/f	2.19/f	(180/f)*	30	
30-300	27.5	0.073	0.2	30	
300-1500			F/1500	30	
1500-100,000			1.0	30	

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

2.2. MPE Calculation Method

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

E (V/m) =
$$\frac{\sqrt{30 \times P \times G}}{d}$$
 Power Density: Pd (W/m²) = $\frac{E^2}{377}$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$

Report Format Version: 01 Page No. : 2 of 3
FCC ID: ZTT-LRC200 Issued Date : May 13, 2016



2.3. Calculated Result and Limit

Exposure Environment: General Population / Uncontrolled Exposure

Antenna Type: Dipole Antenna

Conducted Power for IEEE 802.11b: 23.43 dBm

stance (cm)	Test Freq. (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	The mo combined Output	d Average	Power Density (S) (mW/cm²)	Limit of Power Density (S)	Test Result
			(Hullielic)	(dBm)	(mW)	(IIIW/CIII-)	(mW/cm²)	
20	2437	3.50	2.2387	23.4300	220.2926	0.098164	1	Complies

Report Format Version: 01 Page No. : 3 of 3
FCC ID: ZTT-LRC200 Issued Date : May 13, 2016