

RF EXPOSURE MEASUREMENT AND TEST REPORT

For

Phonetone Technology (Shenzhen) Co., Ltd.

Room 404, Building 12, Qianlong Garden, Minzhi Street, Bao'an District, Shenzhen, China

FCC ID: YYOPTENC980D

Report Type: Product Name: Original Report Cell Phone Signal Booster Lorin Dian Test Engineer: Lorin Bian Report Number: RDG160930003-MPE **Report Date: 2016-10-25 Henry Ding** Reviewed By: EMC Leader Bay Area Compliance Laboratories Corp. (Chengdu) 5040, HuiLongWan Plaza, No. 1, ShaWan Road, **Test Laboratory:** JinNiu District, ChengDu, China Tel: 028-65523123, Fax: 028-65525125 www.baclcorp.com

Note: This test report was prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Chengdu). Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. This report was valid only with a valid digital signature.

FCC §1.1307(b) & §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to 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/f²)	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 Band	Antenna Gain		Conducted Power		Evaluation Distance	Power Density	MPE Limit
		(dBi)	(numeric)	(dBm)	(mW)	(cm)	(mW/cm ²)	(mW/cm ²)
Uplink	824-849	9.00	7.94	20	100.00	20.00	0.1581	0.55
Downlink	869-894	7.00	5.01	20	100.00	20.00	0.0998	0.58

Note: the power was used for evaluation is rated power including tolerance.

The maximum authorized indoor antenna gain is 7.0dBi, outdoor antenna gain is 9.0dBi.

Result: The device meet FCC MPE at 20 cm distance for outdoor antenna and 20cm for indoor antenna.

Report No.: RDG160930003-MPE Page 2 of 2