

# **FCC RF EXPOSURE REPORT**

**FCC ID: 2AFG6-RK3288**

**Project No. : 1509C262**  
**Equipment : Android Main Board**  
**Model : B.RK3288.1**  
**Applicant : Guangzhou Shirui Electronics Co.,Ltd**  
**Address : 192Kezhu Road, Sciencetech Park, Guangzhou**  
**Economic & Technology Development**  
**District, Guangzhou, Guangdong, China**  
**According: : FCC Guidelines for Human Exposure IEEE**  
**C95.1**

**B T L I N C .**

No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, China.  
TEL: +86-769-8318-3000 FAX: +86-769-8319-6000

## MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi^2} = \frac{EIRP}{4\pi^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)
1	N/A	N/A	Dipole	N/A	3.87

# TEST RESULTS

UNII-1

EUT :	Android Main Board	Model Name :	B.RK3288.1
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	UNII-1/TX A Mode/ CH36, CH40, CH48		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3.87	2.4378	10.33	10.7895	0.00523541	1	Complies
3.87	2.4378	9.84	9.6383	0.00467682	1	Complies
3.87	2.4378	9.41	8.7297	0.00423595	1	Complies

EUT :	Android Main Board	Model Name :	B.RK3288.1
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	UNII-1/TX N20 Mode/ CH36, CH40, CH48		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3.87	2.4378	9.43	8.7700	0.00425550	1	Complies
3.87	2.4378	10.69	11.7220	0.00568788	1	Complies
3.87	2.4378	10.42	11.0154	0.00534503	1	Complies

EUT :	Android Main Board	Model Name :	B.RK3288.1
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	UNII-1/TX N40 Mode/ CH38, CH46		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3.87	2.4378	7.72	5.9156	0.00287045	1	Complies
3.87	2.4378	9.22	8.3560	0.00405462	1	Complies

EUT :	Android Main Board	Model Name :	B.RK3288.1
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	UNII-1/TX AC20 Mode/ CH36, CH40, CH48		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3.87	2.4378	10.10	10.2329	0.00496536	1	Complies
3.87	2.4378	11.07	12.7938	0.00620798	1	Complies
3.87	2.4378	10.87	12.2180	0.00592858	1	Complies

EUT :	Android Main Board	Model Name :	B.RK3288.1
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	UNII-1/TX AC40 Mode/ CH38, CH46		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3.87	2.4378	8.12	6.4863	0.00314739	1	Complies
3.87	2.4378	9.52	8.9536	0.00434461	1	Complies

EUT :	Android Main Board	Model Name :	B.RK3288.1
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	UNII-1/TX AC80 Mode/ CH42		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3.87	2.4378	10.94	12.4165	0.00602491	1	Complies

UNII-3:

EUT :	Android Main Board	Model Name :	B.RK3288.1
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	UNII-3/ TX A Mode/CH149, CH157, CH165		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3.87	2.4378	10.68	11.6950	0.00567480	1	Complies
3.87	2.4378	9.43	8.7700	0.00425550	1	Complies
3.87	2.4378	9.66	9.2470	0.00448694	1	Complies

EUT :	Android Main Board	Model Name :	B.RK3288.1
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	UNII-3/TX N20 Mode/ CH149, CH157, CH165		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3.87	2.4378	11.56	14.3219	0.00694945	1	Complies
3.87	2.4378	10.38	10.9144	0.00529603	1	Complies
3.87	2.4378	10.52	11.2720	0.00546953	1	Complies

EUT :	Android Main Board	Model Name :	B.RK3288.1
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	UNII-3/ TX N40 Mode/ CH151, CH159		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3.87	2.4378	10.48	11.1686	0.00541939	1	Complies
3.87	2.4378	9.23	8.3753	0.00406397	1	Complies

EUT :	Android Main Board	Model Name :	B.RK3288.1
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	UNII-3/TX AC20 Mode/ CH149, CH157, CH165		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3.87	2.4378	11.99	15.8125	0.00767274	1	Complies
3.87	2.4378	10.91	12.3310	0.00598343	1	Complies
3.87	2.4378	11.1	12.8825	0.00625101	1	Complies

EUT :	Android Main Board	Model Name :	B.RK3288.1
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	UNII-3/TX AC40 Mode/ CH149, CH157, CH165		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3.87	2.4378	10.71	11.7761	0.00571413	1	Complies
3.87	2.4378	9.56	9.0365	0.00438481	1	Complies

EUT :	Android Main Board	Model Name :	B.RK3288.1
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	UNII-3/TX AC80 Mode/ CH155		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3.87	2.4378	13.20	20.8930	0.01013796	1	Complies

Note: the calculated distance is 20 cm.