

# CTK Co., Ltd.

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### RF EXPOSURE EVALUATION

FCC ID: 2AFWN-EL026GFWRE

#### **Standard Requirement**

The following FCC Rule Parts and procedures are applicable:

Part 1.1310 Radiofrequency radiation exposure limits

Part 2.1091 Radiofrequency radiation exposure evaluation : Mobile device KDB447498 D01 v06 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies

Table 1 below sets forth limits for Maximum Permissible Exposure (MPE) to radiofrequency electromagnetic fields.

Table 1—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f <sup>2</sup>	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f <sup>2</sup>	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			<u>1.0</u>	30

f = frequency in MHz

<sup>\* =</sup> Plane-wave equivalent power density



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### MPE calculation

 $S = EIRP / (4\pi R^2)$ 

Where S: Power density

EIRP: PxG

P: Maximum transmitter power

G: Antenna gain

R: distance to the centre of radiation of the antenna

### **EUT RF Exposure**

P: 5.41 dBm (3.475 mW)

G: -0.8 (x 0.832)

R: 20 cm

 $S = 0.0005754 \text{ mW/cm}^2$ 

### **Conclusion**

This confirms compliance to the required Radio frequency radiation exposure limit.