

# RF Exposure Evaluation

## FCC ID: 2AUPF-RWF-108

### 1. Client Information

<b>Applicant</b>	:	Maxtalent Industrial Limited
<b>Address</b>	:	25E, King Palace Plaza, 55 King Yip Street, Kwun Tong, Kowloon, HK
<b>Manufacturer</b>	:	Shenzhen Qiuyu Electronic Co., Ltd
<b>Address</b>	:	F3, E Building, Hongzhuyongqi Industrial Park, Lezhujiao village, Xixiang town, Bao'an district, Shenzhen, China

### 2. General Description of EUT

<b>EUT Name</b>	:	KODAK 10-Inch Touchscreen Digital Photo Frame / Wi-Fi Enabled
<b>Models No.</b>	:	RWF-108, RCF-106, CF802, CF102, CF106, CF103
<b>Model Different</b>	:	All these models are in the same PCB, layout and electrical circuit, the only difference is Appearance.
<b>Product Description</b>	Operation Frequency:	802.11b/g/n(HT20): 2412MHz~2462MHz
	RF Output Power:	802.11b: 13.63dBm 802.11g: 13.39dBm 802.11n (HT20):13.68dBm
	Antenna Gain:	1.21dBi PIFA Antenna
<b>Power Supply</b>	:	Input: AC 100~240V, 50/60Hz Output: DC 5V, 2A DC 3.7V by Li-ion Battery.
<b>Software Version</b>	:	android4.4
<b>Hardware Version</b>	:	V1.1
<b>Connecting I/O Port(S)</b>	:	Please refer to the User's Manual

**Note:** More test information about the EUT please refer the RF Test Report.

## MPE Calculations for WIFI

### 1. Antenna Gain:

PCB Antenna: 1.21dBi.

### 2. EUT Operation Condition:

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

### 3. Exposure Evaluation:

Equation from page 18 of OET Bulletin 65, Edition 97-01

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

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

### 4. Test Result:

Mode	Conducted Power(max) (dBm)	Turn-up Power (dB)	Max tune up power (dBm) [P]	ANT Gain (dBi) [G]	Distance (cm) [R]	Power Density (mW/ cm <sup>2</sup> ) [S]
802.11b	13.63	13±1	14	1.21	20	0.00660
802.11g	13.39	13±1	14	1.21	20	0.00660
802.11n (HT20)	13.68	13±1	14	1.21	20	0.00660

**5. Conclusion:**

As specified in Table 1B of 47 CFR 1.1310- Limits for Maximum Permissible Exposure (MPE),

**Limits for General Population/ Uncontrolled Exposure**

Frequency Range (MHz)	Power density (mW/ cm <sup>2</sup> )
300-1,500	F/1500
1,500-100,000	1.0

For 802.11b/g/n(HT20):2412~2462 MHz

MPE limit S: 1mW/ cm<sup>2</sup>

The MPE is calculated as **0.00660mW / cm<sup>2</sup> < limit 1mW / cm<sup>2</sup>**. So, RF exposure limit warning or SAR test are not required.

The EUT will only be used with a separation of 20cm or greater between the antenna and nearby persons and can therefore be considered a mobile transmitter per 47 CFR2.1091 (b).

The RF Exposure Information page from the manual is included here for reference.

**Note**

For a more detailed features description, please refer to the RF Test Report.

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