



RF Exposure Requirements

1 General Information

Client Information

Applicant : Zhongshan Jiaweidi EnergySaving Technology Co.,Ltd.
Address of applicant : A Card No. 142, Dongcheng Road, Dongsheng , Xiaolan Town,
Zhongshan City, Guangdong Province, China
Manufacturer..... : The same as above
Address of manufacturer..... : The same as above

General Description of E.U.T

FCC ID..... : 2BUOC-US8K
Product Name : Wall Control
Model No. : US-8K
Model Description : ---
Rated Voltage..... : Input: 120VAC, 50/60Hz
Output: 120VAC, 50/60Hz
Battery Capacity : ---
Power Adapter : ---

Technical Characteristics of EUT

Operating Frequency : 433.96 MHz
Max. Field Strength : 82.09 dBuV/m (at 3m distance)
Modulation : ASK
Type of Antenna : PCB Antenna
Antenna Gain : 3 dBi



2 Applicable Standard

According to the KDB 447498 D01 v07 and part 2.1093:

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

3 EIRP Evaluation

Calculated the EIRP from the radiated field strength in the far field using Equation:

$$\text{EIRP} = E_{\text{Meas}} + 20 \log(d_{\text{Meas}}) - 104.7$$

Where

EIRP is the equivalent isotropically radiated power, in dBm

E_{Meas} is the field strength of the emission at the measurement distance, in dB μ V/m

d_{Meas} is the measurement distance, in m

4 Calculation Result

Frequency (MHz)	Max. Field Strength (dB μ V/m)	EIRP (dBm)	Max. Tune-up power		Min. Separation Distance (mm)	Calculation Result	Limit
			(dBm)	(mW)			
433.92	82.09	-13.07	-13	0.0501	5	0.0066	3

The exclusion thresholds is $0.0066 < 3$, so the transmitter complies with the RF exposure requirements and the SAR is not required.

=====End of Report=====