

Analysis Report

Report No.: 13030039HKG-003

FCC ID: OQH-000000-13-01

The equipment under test (EUT) is the Remote Sensor transmitter of the Radio Controlled Projector Clock With Weather Forecast operating at 433.92MHz. The EUT is powered by 3.0VDC (2X 1.5V "AA" batteries). The EUT will transmit RF signal to the corresponding receiver and the receiver will display the humidity and temperature on the screen.

Antenna Type: Internal, integral

Antenna Gain: -1dBi

Nominal rated field strength: 76.0dBμV/m at 3m

Allowed field strength of production tolerance: +4dB and -3 dB

Maximum allowed field strength of production: 80.0dBuV/m @ 3m

According to the KDB 447498:

Based on the Maximum allowed field strength of production was 80.0dBμV/m at 3m in frequency 433.917MHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / (30 \cdot 1.64)] = 0.03mW$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.04mW.

Threshold = $3.0 \cdot (\text{min. test separation distance, mm}) / \text{SQRT}(f \text{ in GHz})$
= $3.0 \cdot (5 / \text{SQRT}(0.43392)) = 23mW$

Since the above maximum output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.