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## INTERTEK TESTING SERVICES

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For Specific Absorption Rate (SAR) evaluation of the portable, with reference to TCB Exclusions List revised on July 17, 2002, portable transmitters with output power less than low threshold and operating more than 2.5cm from person's body can be certified by TCB without the SAR evaluation. The output power for portable transmitters is defined as the higher of the conducted or radiated (EIRP) source-based time averaging output power. And the low threshold is equal to  $(120/f_{\text{GHz}})$  mW for  $d > 2.5\text{cm}$ , where  $f_{\text{GHz}}$  is mid-band frequency in GHz, and  $d$  is the distance from the portable transmitter to a person's body, excluding hands, wrists, feet, and ankles.

For the portable of the tested model of URC7240, the maximum field strength measured (FS) was 90.0 dB $\mu$ V/m for the 900MHz Z-wave portion, the maximum conducted power measured was 27.4 mW for the 2.4 GHz WiFi portion. The distance (D) between the antenna and the equipment under test (EUT) was 3 meters. From these data, the exposed power can be calculated according to §1.1307(b)(3) as follow:

### WiFi portion:

The conducted power (peak value) = 27.4 mW

### Z-wave portion:

The radiated power (peak value) =  $(\text{FS} \cdot \text{D})^2 / 30$   
= 0.3 mW

Simultaneous transmission (WiFi portion + Z-wave portion):  $P_a/T_a + P_b/T_b < 1$   
=  $27.4 / 48.3 + 0.3 / 129.3$   
=  $0.57 + 0.0023$   
= 0.5723

P is higher of the conducted or radiated (EIRP) source-base time-averaged output power  
T is exclusion power threshold (Low threshold limit)

The low threshold in the 2400 - 2483.5MHz band is 48.3 mW, 902 - 928MHz band is 129.3 mW.

From the above calculation, output power obtained in both method is less than low threshold, it is concluded that the handset can be certified by TCB without the SAR evaluation.

The following RF exposure statement is proposed to be included in the user manual:

### **“ FCC RF Radiation Exposure Statement**

**Caution: “This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human's body proximity to the device should not be less than 2.5cm during normal operation.”**