

FCC RF Exposure

EUT Description: Wakecap Asset

Model No.: WC-Asset

FCC ID: 2AVU5WC-ASSET

1. Test Procedure

According to §15.247(e)(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to KDB 447498 D01 General RF Exposure Guidance v06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

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

where

f(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

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

2. Test Result of RF Exposure Evaluation

Bluetooth	
CH/Frequency	Output power (dBm/ mW)
Low CH -2402MHZ	-4.22/0.38
Middle CH- 2442MHZ	-4.28/0.37
High CH- 2480MHZ	-4.38/0.36

Turn-up power	
Mode	Peak power range(dBm)
Bluetooth	-4.50-1.00

FCC exclusion condition as below: [2402MHz, 1dBm/1.26mW] output power]

$(1.26\text{mW}/5\text{mm}) \cdot [\sqrt{2.402 \text{ (GHz)}}] = 0.39 < 3.0$ for 1-g SAR

Conclusion: No SAR is required