

RF exposure information

FCC ID: YAV11HH06L

1. Introduction:

The EUT is designed to be used in portable exposure conditions.

This product integrates a transmitter operated in 433.92 MHz frequency band.

2. Output power considerations:

Worst case output power transmitter ($E_{\max}$): 72.11 dB μ V/m@3m

$$P_t = (E \cdot d) / (30 \times g_t) = 0.48 \text{ mW}$$

P_t = transmitter output power in watts = 0.04 V/m

g_t = numeric gain of the transmitting antenna (unitless) = 1

E = electric field strength in V/m = 72.11 dB μ V/m

d = measurement distance in meters (m) = 3 (m)

3. Compliance criteria:

According to 447498 D01 General RF Exposure Guidance v05 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:

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

where

$f(\text{GHz})$ is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

Calculate:

$$(0.48/5) / \sqrt{f(0.43392)} = 0.146 < 3 \text{ for 1g SAR}$$

Then SAR evaluation is not required.