RF EXPOSURE EVALUATION

FCC ID: BCE-HSC110W

The maximum peak RF output power is 8.91 mW (GFSK modulation). In the case of GFSK modulation the peak RF output power is virtual identical to average RF output power.

KDB 447498 D01 General RF Exposure Guidance v05r02, section 4.3.1 1) provides the following equation for proving that a device may be excluded from stand-alone SAR tests (1 gram SAR test exclusion threshold):

$$\frac{(maximum\ power\ of\ channel\ including\ tune-up\ tolerance\ (mW))}{(minimum\ test\ separation\ distance\ (mm))} \times \sqrt{f(GHz)} \leq 3.0$$

- 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;
- 3.0 is referred to as the numeric threshold.

Maximum RF output power of channel: 8.91 mW at 2441 MHz.

For a worst-case prediction it is assumed that this maximum RF output power may occur at 2500 MHz. This device is intended to be worn in the ear which implies a minimum test separation distance of less than 5 mm.

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 of KDB 447498 D01 General RF Exposure Guidance v05r02 is applied to determine SAR test exclusion.

$$\frac{(8.91\ mW)}{(5\ mm)} \times \sqrt{2.5} = 2.82\ \leq 3.0$$

The device with FCC ID: BCE-HSC110W may be excluded from standalone SAR tests.

Yours sincerely,

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