

RF exposure Estimation

1. Product Information

Product type: BEACON 2.0 Model name: BEACON 2.0 FCC ID: 2AJ3LA-BEACON2

2. Limit and Guidelines on Exposure to Electromagnetic Fields

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 ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB 447498 Mobile Portable RF Exposure, no SAR required if power is lower than the flowing threshold:

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

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] $\left[\sqrt{f(GHz)}\right] \le 3.0$ for 1-g SAR and ≤ 7.5 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 calculation25
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is \leq 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 is applied to determine SAR test exclusion.

3. Calculation method

[(max. power of` channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] $\cdot [\sqrt{f(GHz)}] \le 3.0$

Conducted Power + tune up tolerance = 2.7mW Distance = 5 mm f = 2.440 GHz

[2.7/5] * SQRT(2.44) = 0.35 $0.35 \le 3.0$ Therefore, excluded from SAR testing.

Reviewed by:

Oliver Lai/ RF Supervisor Date: 2019-10-15

Prepared By:

Fance theng

Bruce Zheng/Project Engineer Date: 2019-10-15

Test Report No.: EFGX19090040-IE-01-E01R Eurofins Electrical Testing Service (Shenzhen) Co., Ltd. 1st Floor, Building 2, Chungu, Meisheng Huigu Science and Technology Park, No. 83 Dabao Road, Bao'an District, Shenzhen. P.R.China. Telephone: +86-755-82911867, Fax : +86-755-82910749