

RF exposure information

Product description

Test item	: Bluetooth Low Energy Wireless Module
Applicant	: LAPIS Semiconductor Co., Ltd.
Address	: 2-4-8 Shinyokohama, Kouhoku-ku, Yokohama 222-8575 Japan
Model	: MK71351
FCC ID	: 2ACIJ71351
ISED Cert. No.	: 20971-71351
Operating frequency range	: 2402 - 2480 MHz
TX output power (Cond)	: -0.7 dBm @2402 MHz, -0.9 dBm @2440 MHz, -0.9 dBm @2480 MHz
Maximum Antenna Gain	: -0.8 dBi

Analysis for portable use

Standalone SAR test exclusion considerations are defined in the KDB 447498 Chapter 4.3.1. 1-g head or body SAR exclusion threshold is defined with formula.

$[(\text{Max. power of channel, mW}) / (\text{Min. test separation distance, mm})] * [\sqrt{f} (\text{GHz})] \leq 3.0$ for 1-g SAR

The maximum Conducted Peak Output Power is -0.7 dBm (2.402 GHz).
-0.7 dBm logarithmic terms covert to numeric result is nearby 0.85 mW

$$\text{General RF Exposure} = (0.85 \text{ mW} / 5\text{mm}) * \sqrt{2.402 \text{ GHz}} = 0.26 \leq 3.0$$

Other frequency results are

$$\text{General RF Exposure} = (0.81 \text{ mW} / 5\text{mm}) * \sqrt{2.440 \text{ GHz}} = 0.25 \leq 3.0$$

$$\text{General RF Exposure} = (0.81 \text{ mW} / 5\text{mm}) * \sqrt{2.480 \text{ GHz}} = 0.26 \leq 3.0$$

Bluetooth Low Energy Wireless Module (MK71351) meets the SAR exclusion. So SAR evaluation is not needed.

This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at <http://www.sgs.com>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Unless otherwise stated the results shown in this Test Report refer only to the sample(s) tested. This Test Report cannot be reproduced expert, in full, without prior approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this test report is unlawful and offenders may be prosecuted to the fullest extent of the law.

この試験報告書は裏面に記載された、もしくは <http://www.sgs.com> で入手が可能なサービスに関する一般的条件に則して発行されます。そちらに明記されている弊社の負うべき債務・補償の範囲及び司法管轄の項目をご確認ください。他に特に明記のない限り、この試験報告書に記載された結果は、試験サンプルのみに属します。この書面全体の複製以外には、弊社からの事前の許可を得ること無く複製することを禁じます。この試験報告書を無断で変更、偽造、改ざんすることは違法であり、違反者に対しては法的手段を講ずることとなります。