

RF exposure information

Product description

Applicant	:	Renesas Electronics Corporation
Applicant address	:	3-2-24 Toyosu Koto-ku Tokyo 135-0061 Japan
FCC ID	:	2AEMXRX23WSKB85
ISED ID	:	20194-RX23WSKB85
Hardware version ID number	:	RTK5523W8AC00001BJ/ RTK5523W8BC00001BJ
Product marketing name	:	RTK5523W8AC00001BJ/ RTK5523W8BC00001BJ
Product description	:	Microcomputer Board
Operating frequency range	:	2402 - 2480 MHz
Maximum transmission output power:	:	0 dBm (from User manual)
Maximum antenna gain	:	+2.5 dBi

Analysis for mobile use

The maximum peak output power is 0 dBm.

The best case gain of the antenna is +2.5 dBi.

E.I.R.P. = (0 dBm) + (2.5 dBi) = 2.5 dBm.

2.5 dBm logarithmic terms convert to numeric result is nearby 1.78 mW.

$$S = \frac{E. I. R. P.}{4\pi R^2} = \frac{1.78 \text{ mW}}{4\pi(20 \text{ cm})^2} = 0.000354 \text{ mW/cm}^2$$

For FCC

E.I.R.P. (mW)	Evaluation distance R (cm)	Power density S (mW/cm ²)	MPE limit (mW/cm ²)	Result
1.78	20	0.000354	1	Complied

For ISED

E.I.R.P. (W)	Evaluation distance R (cm)	Exemption limit (W)	Result
0.00178	20	1.31 x 10 ⁻² f ^{0.6834} 2.67 (@2402MHz)	Complied

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注意ください。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じることとなります。