



1601 North A.W. Grimes Blvd., Suite B
 Round Rock, TX 78665
 e-mail: info@ptitest.com
 (512) 244-3371 Fax: (512) 244-1846

1.0 Maximum Permissible Exposure Evaluation (Supplements the test report.)

The measured power is considered for the intended use of the device and resulting RF exposure to the user.

1.2 Criteria

Section Reference	Date
KDB 447498 D01 Mobile Portable RF Exposure v05r01 // RSS-102 Issue 5 March 2015, Notice 2013 DRS0911	19 May 2017

1.3 Procedure

Using measurement of peak power and considering the intended application, determine the permissible exposure level, applicability of exclusion, or whether additional exposure tests (SAR) are indicated. When applicable justify conclusion for selected exposure level and separation distance.

1.4 Power to Exposure Calculation

Radio power is determined by conducted measurement. SAR exemption method was applied for general public exposure assuming a worse-case spacing of 5 mm (US) and 10 mm (Canada). Duty cycle for exposure is assumed zero to account for the effect on heating from the ranging operation feature.

Table 1.4.1 Power Calculation for Exposure, 2.4 GHz Radio (Highest frequency 2.480 GHz)

Conducted Peak Power mW	Conducted Peak In dBm	Source Duty Cycle Factor dB	Antenna Gain dBi	Calculated EIRP dBm	EIRP In Linear Terms mW
2.2	3.5	0	3.0	6.5	4.5

1.5 SAR Exemption Calculation – FCC

Applicable requirement: KDB 447498 Clause 4.3.1 Section 1

Calculation (max power including tune up tolerance = 4.5 mW):

$$[(4.5 \text{ mW}) / (5 \text{ mm})] \cdot [\sqrt{2.480 \text{ (GHz)}}] = 1.5$$

$$1.5 \leq 3.0$$

Therefore, the device meets the applicable FCC SAR exemption requirements.

1.6 SAR Exemption Calculation – IC

This device meets the clause **2.5 Exemption Limits for Routine Evaluation – SAR Evaluation** criteria in RSS-102 Clause 2.5.1, Table 1, for frequency row 3500 MHz. This is based on the output power of 4.5 mW being less than 6 mW at the exposure distance given of 10 mm in Table 1.

Signed:

A handwritten signature in black ink, appearing to read "Eric Lifsey". The signature is written in a cursive style with a large, looping initial "E".

Eric Lifsey
