

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

The results of power measurement and intended use/proximity are compared against the requirements for safety of RF exposure.

1.2 Criteria

Section Reference	Date
KDB 447498 D01 Mobile Portable RF Exposure v05r01 // RSS-102 Issue 4 March 2010, Notice 2013 DRS0911	2014-07-07

1.3 Procedure

Using measurement of peak power and intended application, determine the permissible exposure level or whether additional exposure tests (SAR) are indicated. Justify conclusion for selected exposure area and separation distance.

1.4 Power to Exposure Calculation

A separation distance of 20 mm was selected for the exclusion determination. The applicant-supplied user manual for the final integrator has detailed information on satisfying exposure requirements and recommends 20 cm separation. Highest operating frequency was rounded to 928 MHz.

Power is determined from the measured EIRP and with maximum antenna gain applied. Source duty cycle factor for exposure was not evaluated. The factor is then assumed to be zero dB.

POWER CALCULATION

Measured EIRP* dBm	Source Duty Cycle Factor dB	Maximum Antenna Gain dBi	Total EIRP dBm	Total EIRP mW
15.09	0	2.8	17.89	61.52

*This is the peak measurement.

1.5 SAR Exemption Calculation – 3.0 Criteria

Calculation (max power including tune up tolerance = 61.52 mW):

$$[(61.52\text{mW})/(20\text{ mm})] \cdot [\sqrt{0.928(\text{GHz})}] \leq 2.96$$

$$2.96 \leq 3.0$$

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

This device meets the SAR Evaluation Exemption criteria in RSS-102 Clause 2.5.1, based on the output power being less than 200mW for general public use (3 kHz – 1 GHz).
