

SAR Exemption Evaluation

FCC §1.1307

Requirements: Preparation of an EA is necessary only for facilities, operations and transmitters that fall into the categories listed in table 1 of FCC §1.1307, or those specified in paragraph (b)(2) of FCC §1.1307. All other facilities, operations and transmitters are categorically excluded from making such studies or preparing an EA, except as indicated in paragraphs (c) and (d) of FCC §1.1307.

Evaluation Results: Complies
The 433.94 MHz transmitter is categorically excluded from preparing an EA. It is not listed in table 1, nor specified in paragraph (b)(2) of FCC §1.1307.

ISED RSS-102 Issue 5, Clause 2.5.1

Exemption Limits for Routine Evaluation: 52 mW (450 MHz) at separation distance of ≤ 5 mm

Evaluation Results: Complies

Details: The EIRP power is determined by using the following equation:

$$P_{\text{EIRP}} = (E \cdot d)^2 / 30$$

where: P_{EIRP} = EIRP power in watts
E = electric field strength in V/m
d = measurement distance in meters

For E = 67.44 dBuV/m, d = 3 m,

$$P_{\text{EIRP}} = (((10^{(67.44/20)})/1000000) \times 3)^2 / 30 = 0.000002 \text{ W} = \mathbf{0.002 \text{ mW}}$$