RF Exposure Evaluation
47 CFR § 1.1310
47 CFR § 2.1091
47 CFR § 2.1093
KDB 447498 D04 Interim General RF Exposure Guidance v01

FCC-ID: 2AAAS-TL01

KDB 447498 D04 Interim General RF Exposure Guidance v01, Section 2.1.2:

Per § 1.1307(b)(3)(i)(A), a single RF source is exempt RF device (from the requirement to show data demonstrating compliance to RF exposure limits, as previously mentioned) if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption applies to all operating configurations and exposure conditions, for the frequency range 100 kHz to 100 GHz, regardless of fixed, mobile, or portable device exposure conditions. This is a standalone exemption, and it cannot be applied in conjunction with any other test exemption.

The following formula was used to convert dBuV/m to EIRP in dBm:

$$\mathbf{P_{dBm} = E_{dB\mu V/m} - 95.2}$$

Where:
P_{dBm} = EIRP in dBm
$E_{dBuV/m}$ = Field Strength @ 3m

Conversion from dBm to mW used the following formula:

$$\mathbf{P_{mW} = 1W \times 10^{(PdBm/10)}}$$

Where:
P_{mW} = EIRP in mW
P_{dBm} = EIRP in dBm

Frequency in MHz	Field Strength dBuV/m @ 3m	Calculated EIRP in dBm	Calculated EIRP in mW	Exemption Limit in mW	Delta
345.0	74.5	-20.7	0.0085mW	1mW	0.9915

Because the transmitter has less than 1mW power it is exempted from RF Exposure Evaluation.