



# Limits of Human Exposure to Radiofrequency Electromagnetic Energy in the Frequency Range from 3 kHz to 300 GHz

<https://www.canada.ca/en/health-canada/services/publications/health-risks-safety/limits-human-exposure-radiofrequency-electromagnetic-energy-range-3-300.html>

**Table 5. Reference Levels for Electric Field Strength, Magnetic Field Strength and Power Density in Uncontrolled Environments**

Frequency (MHz)	Electric Field Strength (E <sub>RL</sub> ), (V/m, RMS)	Magnetic Field Strength (H <sub>RL</sub> ), (A/m, RMS)	Power Density (S <sub>RL</sub> ), (W/m <sup>2</sup> )	Reference Period (minutes)
10 - 20	27.46	0.0728	2	6
20 - 48	58.07 / $f^{0.25}$	0.1540 / $f^{0.25}$	8.944 / $f^{0.5}$	6
48 - 300	22.06	0.05852	1.291	6
300 - 6000	3.142 $f^{0.3417}$	0.008335 $f^{0.3417}$	0.02619 $f^{0.6834}$	6
6000 - 15000	61.4	0.163	10	6
15000 - 150000	61.4	0.163	10	616000 / $f^{1.2}$
150000 - 300000	0.158 $f^{0.5}$	4.21 × 10 <sup>-4</sup> $f^{0.5}$	6.67 × 10 <sup>-5</sup> $f$	616000 / $f^{1.2}$

Frequency,  $f$ , is in MHz.

