

Reference levels for electric, magnetic and electromagnetic fields
(0 Hz to 300 GHz, unperturbed rms values)

Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (μT)	Equivalent plane wave power density S_{eq} (W/m ²)
0-1 Hz	—	$3,2 \times 10^4$	4×10^4	—
1-8 Hz	10 000	$3,2 \times 10^4/f^2$	$4 \times 10^4/f^2$	—
8-25 Hz	10 000	$4\,000/f$	$5\,000/f$	—
0,025-0,8 kHz	$250/f$	$4/f$	$5/f$	—
0,8-3 kHz	$250/f$	5	6,25	—
3-150 kHz	87	5	6,25	—
0,15-1 MHz	87	$0,73/f$	$0,92/f$	—
1-10 MHz	$87/f^{1/2}$	$0,73/f$	$0,92/f$	—
10-400 MHz	28	0,073	0,092	2
400-2 000 MHz	$1,375\ f^{1/2}$	$0,0037\ f^{1/2}$	$0,0046\ f^{1/2}$	$f/200$
2-300 GHz	61	0,16	0,20	10

Table 5
Exposure Limits for Persons Not Classified As RF and Microwave Exposed Workers (Including the General Public)

1 Frequency (MHz)	2 Electric Field Strength; rms (V/m)	3 Magnetic Field Strength; rms (A/m)	4 Power Density (W/m ²)	5 Averaging Time (min)
0.003–1	280	2.19		6
1–10	$280/f$	$2.19/f$		6
10–30	28	$2.19/f$		6
30–300	28	0.073	2*	6
300–1 500	$1.585f^{0.5}$	$0.0042f^{0.5}$	$f/150$	6
1 500–15 000	61.4	0.163	10	6
15 000–150 000	61.4	0.163	10	$616\,000/f^{1.2}$
150 000–300 000	$0.158f^{0.5}$	$4.21 \times 10^{-4}f^{0.5}$	$6.67 \times 10^{-5}f$	$616\,000/f^{1.2}$

* Power density limit is applicable at frequencies greater than 100 MHz.

Notes: 1. Frequency, f , is in MHz.
2. A power density of 10 W/m² is equivalent to 1 mW/cm².
3. A magnetic field strength of 1 A/m corresponds to 1.257 microtesla (μT) or 12.57 milligauss (mG).

**NIVELE DE REFERINȚĂ PENTRU EXPUNEREA PROFESIONALĂ
LA CÂMPURI ELECTRICE ȘI MAGNETICE VARIABILE ÎN TIMP
ȘI CÂMPURI ELECTROMAGNETICE (VALORI RMS
NEPERTURBATE)***

Domeniul de frecvență	Intensita- tea câmpului electric E (Vm^{-1})	Intensitatea câmpului magnetic H (Am^{-1})	Densitatea fluxului magnetic B (μT)	Densitatea de putere pentru undă plană echivalentă S_{ech} (Wm^{-2})
până la 1 Hz	-	$1,63 \times 10^3$	2×10^3	-
1 – 8 Hz	20 000	$1,63 \times 10^3/f^2$	$2 \times 10^3/f^2$	-
8 – 25 Hz	20 000	$2 \times 10^4/f$	$2,5 \times 10^4/f$	-
0,025– 0,82 kHz	$500/f$	$20/f$	$25/f$	-
0,82 – 65 kHz	610	24,4	30,7	-
0,065 – 1 MHz	610	$1,6/f$	$2,0/f$	-
1 – 10 MHz	$610/f$	$1,6/f$	$2,0/f$	-
10 – 400 MHz	61	0,16	0,2	10
400 –2000 MHz	$3 f^{1/2}$	$0,008 f^{1/2}$	$0,01 f^{1/2}$	$f/40$
2 – 300 GHz	137	0,36	0,45	50

(B) Limits for General Population/Uncontrolled Exposure

<i>Frequency Range (MHz)</i>	<i>Electric Field Strength (V/m)</i>	<i>Magnetic Field Strength (A/m)</i>	<i>Power Density (mW/cm²)</i>	<i>Averaging Time (minutes)</i>
0.3-1.34	614	1.63	(100)*	30
1.34-30	$824/f$	$2.19/f$	$(180/f^2)^*$	30
30-300	27.5	0.073	0.2	30
300-1500	—	—	$f/1500$	30
1500-100,000	—	—	1.0	30

f = frequency in MHz

* = Plane-wave equivalent power density (see Note 1).