

SCHEDULE

PART 2

Direct biophysical effects of exposure

Exposure limit values – thermal effects

Table ELV4 – Health effect ELVs for exposure to electromagnetic fields from 100 kHz to 6 GHz

<i>Area of exposure</i>	<i>Health effect ELVs – specific energy absorption rate (SAR) [Wkg⁻¹]</i>
Whole body	0.4 (averaged SAR in the body)
Head and trunk	10 (localised SAR in the head and trunk)
Limbs	20 (localised SAR in the limbs)

Notes

1. The ELVs correspond to the SAR values averaged over a six minute period.
2. Localised SAR in the body and limbs can be assessed by either computational dosimetry or physical measurement of 10 grams of tissue. For computational dosimetry, 10 grams of contiguous tissue with approximately homogeneous electrical properties must be used for the SAR average. For direct physical measurements a simple geometry, such as cubic or spherical tissue mass, may be used. The maximum value obtained must be assessed against the ELVs.

Table ELV5 – Sensory effect ELV for exposure to electromagnetic fields from 300 MHz to 6 GHz

<i>Frequency range</i>	<i>Sensory effect ELV – specific energy absorption in the head (SA) [mJkg⁻¹]</i>
300 MHz ≤ f ≤ 6GHz	10

Notes

1. When determining SA, energy absorption must be averaged over 10 grams of tissue.
2. The ELV may be exceeded during an employee's shift where the employer ensures that—
 - (a) it is only exceeded temporarily;
 - (b) adequate information is provided to the employee on the possibility of sensory effects related to pulsed microwave radiation, including auditory sensations; and
 - (c) where any of those sensory effects are reported to the employer, the risk assessment is updated where necessary.

Table ELV6 – Health effect ELV for exposure to electromagnetic fields from 6 to 300 GHz

<i>Frequency range</i>	<i>Health effect ELV – power density (S) [Wm⁻²]</i>
6 GHz ≤ f ≤ 300GHz	50

Status: This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

Notes

1. The power density is the maximum level averaged over any 20cm^2 of exposed area. Spatial maximum power densities averaged over 1cm^2 must not exceed 20 times the value of 50 Wm^{-2} .
2. From 6 to 10 GHz, power density must be averaged over a six minute period. Above 10 GHz, it must be averaged over a $68/f^{1.05}$ -minute period (where “f” is the frequency in GHz).