

Magnetic Field Comparison Chart



Table 1: Common Sources of Magnetic Fields (mG)

Sources*	Distance from Source	
	6 Inches (mG)	24 Inches (mG)
Microwave Ovens	100 - 300	1 - 30
Dishwashers	10 - 100	2 - 7
Refrigerators	Ambient - 40	Ambient - 10
Fluorescent Lights	20 - 100	Ambient - 8
Copy Machines	4 - 200	1 - 13
Drills	100 - 200	3 - 6
Power Saws	50 - 1,000	1 - 40

*Different makes and models of appliances, tools, or fixtures will produce different levels of magnetic fields. These are generally accepted ranges.
Source: National Institutes of Health - National Institute of Environmental Health Sciences

Table 2: Typical US Magnetic Field Levels Associated with Overhead Transmission Lines

	Nominal Voltage Class (kV)	Right-of-Way Width (ROW)(ft.)	Value	Maximum within ROW	At Edge of ROW	Distance from Edge of ROW (ft.)		
						100	200	300
EPRI-EMF	138	100	E Field (kV/m)	2.5	0.2	0.1	0.03	0.01
			M Field (mG)	34.8	16.8	2.7	1	0.5
	230	130	E Field (kV/m)	3.2	0.2	0.1	0.04	0.02
			M Field (mG)	47.7	21.3	4.6	1.8	0.9
	345	150	E Field (kV/m)	5.6	0.6	0.2	0.1	0.1
			M Field (mG)	77.7	43.7	11	4.5	2.3
	500	130	E Field (kV/m)	5.9	2.9	0.3	0.1	0.05
			M Field (mG)	121.8	49.8	10.7	4.2	2.2
	765	200	E Field (kV/m)	8.4	4.4	0.7	0.2	0.1
			M Field (mG)	217	82.5	23.6	10.9	6.3

NOTE: These values are for general information and not for a specific line.
Source: Electric and magnetic fields are representative values provided by American Electric Power.