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<p><b>Abstract</b></p> <p>The aim of the research was to find out the effect of dimming on lamp life, colour characteristics and blackening of the lamp ends of fluorescent lamps. In addition the aim of the research was to find out the optimum cathode heating provided by the electronic ballast. Lamp life was studied with a lamp life test. Lamps were dimmed statically to a 1 %, 5 % or 15 % luminous flux level or dimmed dynamically up and down thus simulating dimming according to daylight. The effect of cathode heating was studied with modified electronic ballasts. The cathode heating voltage was modified to -10 %, +10 % or +20 % from the nominal. When lamps burn continuously at low dimming levels, the lumen maintenance is larger than when lamps burn undimmed. Differences up to -10 % from the optimum in the measured cathode heating voltages had about 2 % difference in lamp life. When the measured cathode voltage differed by -50 % from the optimum, the lamp life was less than half of the maximum. Results show that neither the lamp nor the electronic ballast are obstacles for wider use of daylight with artificial lighting. With proper cathode heating level, the lamp will reach the nominal lamp life even if the lamp is dimmed according to daylight.</p>	
<p>Keywords</p> <p>Fluorescent lamp, dimming, electrode, electronic ballast</p>	
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