

**8.0 Road Lighting Luminaires**

**8.1 Luminous Intensity Distribution**

Road lighting luminaires have traditionally been classified as full-cutoff or semi-cutoff, according to their luminous intensity distribution. BS EN 13201: Part 2: 2003 has introduced a finer classification designed to give better control of disability glare and obtrusive light. This classification uses the maximum luminous

intensity per 1000 lamp lumens at different angles from the downward vertical in any direction as a criterion.

Table 18 shows the limits based on EU Standards for each of the six classes (G levels) and their relationship to the traditional semi-cutoff and full-cutoff terms:

**BS EN 13201: Part 2: 2003 road lighting luminaire classification**

Cutoff classification	G level	Maximum luminous intensity/1000 lamp lumens, at 70° from downward vertical	Maximum luminous intensity/1000 lamp lumens, at 80° from downward vertical	Maximum luminous intensity/1000 lamp lumens, at 90° from downward vertical	Other requirements
	G1	-	200	50	None
	G2	-	150	30	None
Semi-cutoff	G3	-	100	20	None
	G4	500	100	10	0 at greater than 95°
	G5	350	100	10	0 at greater than 95°
Full cutoff	G6	350	100	0	0 at greater than 95°

Table 18  
BS EN 13201: Part 2: 2003 road lighting luminaire classification.

NOTE 1 The 'G'-Classes are to be found in manufacturer's data sheets or catalogues, in case missing the manufacturer to provide the correct classification.