

ditions and will advise if they affect the life and/or light output of the lamp.

Lamp survival factor (LSF)

As with the lamp lumen maintenance factor, it is essential to consult manufacturers' data. These will give the percentage of lamp failures for a specific number of hours operation, which is only applicable where group lamp replacement, without spot replacement, is to be carried out. These data will also be based on assumptions such as switching cycle, supply voltage and control gear. Manufacturers should be made aware of these aspects and should advise if they will affect the lamp life or lamp survival. Typical lumen maintenance and lamp survival data are given in Table 3.4.

Table 3.4 Typical lumen maintenance and lamp survival data

Typical values of LLMF and LSF													
			Operation time (1000 h)										
			0.1	0.5	1.0	1.5	2.0	4.0	6.0	8.0	10.0	12.0	14.0
Fluorescent multi- and tri-phosphor	LLMF	1	0.98	0.96	0.95	0.94	0.91	0.87	0.86	0.85	0.84	0.83	
	LSF	1	1	1	1	1	1	0.99	0.95	0.85	0.75	0.64	
Fluorescent halophosphor	LLMF	1	0.97	0.94	0.91	0.89	0.83	0.80	0.78	0.76	0.74	0.72	
	LSF	1	1	1	1	1	1	0.99	0.95	0.85	0.75	0.64	
Mercury	LLMF	1	0.99	0.97	0.95	0.93	0.87	0.80	0.76	0.72	0.68	0.64	
	LSF	1	1	1	1	0.99	0.98	0.97	0.95	0.92	0.88	0.84	
High-pressure sodium	LLMF	1	1	0.98	0.97	0.96	0.93	0.91	0.89	0.88	0.87	0.86	
	LSF	1	1	1	1	0.99	0.98	0.96	0.94	0.92	0.89	0.85	
High-pressure sodium, improved colour	LLMF	1	0.99	0.97	0.95	0.94	0.89	0.84	0.81	0.79	0.78	—	
	LSF	1	1	1	0.99	0.98	0.96	0.9	0.79	0.65	0.50	—	

3.8.2.2 Luminaire Maintenance Factor (LMF)

(See also Luminaire cleaning interval – see CD.)

Dirt deposited on or in the luminaire will cause a reduction in light output from the luminaire. The rate at which dirt is deposited depends on the construction of the luminaire and on the extent to which dirt is present in the atmosphere, which in turn is related to the nature of the dirt generated in the specific environment. Table 3.5 gives a list of the luminaire categories and of typical locations where the various environmental conditions may be found.

Table 3.6 shows typical changes in light output from a luminaire caused by dirt deposition, for a number of luminaire and environment categories.