

Luminaire maintenance factor determination tables(example)

Table C.1 — Recommended inspection intervals of lighting systems in different working environments (from CIE 097:2005, Table 2.1)

Inspection interval	Environment	Activity or task area
3 years	Very Clean (VC)	Clean rooms, semiconductor plants, hospital clinical areas , computer centres
	Clean (C)	Offices, schools, hospital wards
2 years	Normal (N)	Shops, laboratories, restaurants, warehouses, assembly areas, workshops
1 years	Dirty (D)	Steelworks, chemical works, foundries, welding, polishing, woodwork

a. For reason of hygiene control, more frequent inspection may be required.

Table C.2 — Approximate cleaning intervals (marked X) for luminaires used in various

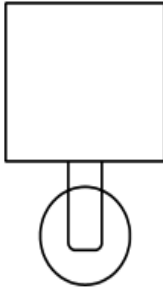

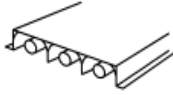
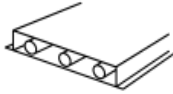
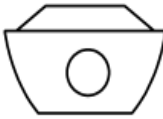


Luminaire type		Cleaning intervals								
		3 years			2 years			1 year		
		VCC	N	D	VCC	N	D	VCC	N	D
A, Bare batten		X				X				X
B, Open top housing (natural ventilated)		X				X				X
C, Closed top housing (unventilated)		X			(X)				X	
D, Enclosed IP2X		X			(X)				X	
E, Dust proof IP5X		X	X						X	
F, Enclosed indirect (uplight)					X			(X)	X	
G, Air handling, forced ventilated		X	X						X	

Table C.3 — Examples of luminaire types (CIE 097:2005, Table 2.3)

Type	Luminaire types in Table C.2	Luminaire descriptions
A	Bare batten	Bare lamp luminaires
B	Open top housing (natural ventilated and so called "self cleaning" types)	Direct-indirect luminaires without cover Direct-indirect luminaires with indirect reflector and closed optical device Wall washing luminaires (vertical opening) Wall mounted luminaires open top and base Downlights with open top
C	Closed top housing (unventilated)	Recessed and surface mounted luminaires (e.g. with louvers) Downlights, spotlights
D	Enclosed IP2X	General purpose luminaires with closed covers and optics
E	Dust proof IP5X	Dust proof IP5X (protected, clean room luminaires)
F	Indirect lighting and uplight	Free standing, pendent, wall mounted uplighters with closed base, cove lights
G	Air handling and forced ventilated	Air handling body and optic used with air-conditioning or ventilation systems

Table C.4 -Example of indoor luminaire maintenance factors fLM (CIE 097:2005, Table 3.4)

Luminaire type (see Table C.2)	Elapsed time between cleanings years												
	0	0.5				1				1.5			
	Environment												
	Any	VC	C	N	D	VC	C	N	D	VC	C	N	D
A	1.00	0.98	0.95	0.92	0.88	0.96	0.93	0.89	0.83	0.95	0.91	0.87	0.80
B	1.00	0.96	0.95	0.91	0.88	0.95	0.91	0.86	0.83	0.94	0.87	0.83	0.79
C	1.00	0.95	0.93	0.89	0.85	0.94	0.89	0.81	0.75	0.93	0.84	0.74	0.66
D	1.00	0.94	0.92	0.87	0.83	0.94	0.88	0.82	0.77	0.93	0.85	0.79	0.73
E	1.00	0.96	0.94	0.93	0.91	0.96	0.94	0.90	0.86	0.92	0.92	0.88	0.83
F	1.00	0.94	0.92	0.89	0.85	0.93	0.86	0.81	0.74	0.91	0.81	0.73	0.65
G	1.00	1.00	1.00	0.99	0.98	1.00	0.99	0.96	0.93	0.99	0.97	0.94	0.89

Luminaire type (see Table C.2)	Elapsed time between cleanings years												
	0	2				2.5				3			
	Environment												
	Any	VC	C	N	D	VC	C	N	D	VC	C	N	D
A	1.00	0.94	0.89	0.84	0.78	0.93	0.87	0.82	0.75	0.92	0.85	0.79	0.73
B	1.00	0.92	0.84	0.80	0.75	0.91	0.82	0.76	0.71	0.89	0.79	0.74	0.68
C	1.00	0.91	0.80	0.69	0.59	0.89	0.77	0.64	0.54	0.87	0.74	0.61	0.52
D	1.00	0.91	0.83	0.77	0.71	0.90	0.81	0.75	0.68	0.89	0.79	0.73	0.65
E	1.00	0.93	0.91	0.86	0.81	0.92	0.90	0.85	0.80	0.92	0.90	0.84	0.79
F	1.00	0.88	0.77	0.66	0.57	0.86	0.73	0.60	0.51	0.85	0.70	0.55	0.45
G	1.00	0.99	0.96	0.92	0.87	0.98	0.95	0.91	0.86	0.98	0.95	0.90	0.85