LIGHT LOSS FACTORS OF LED PRODUCTS
LENA LIGHTING
SELECTED LUMINAIRES

Light loss factor represents degradation of the effective luminous flux due to ageing and pollution. The light loss factor (also called the maintenance factor) is calculated by means of four parameters in accordance with AS/NZS1680.4.

LLF = LLMF x LSF x LMF x RSMF

- LLMF: Lamp Lumen Maintenance Factor. LLMF are calculated based on LM-80 reports with projected and interpolated according to TM-21 projection method.
- LSF: Lamp Survival Factor. LSF = 1 is based on immediate replacement of the luminaire.
- LMF: Luminaire Maintenance Factor. LMF = 0.95 for office spaces. LMF = 0.89 for normal industrial environments. LMF is determined based on experimental testing, as recommended in a note available below table B1 of AS/NZS1680.4.
- RSMF: Room Surface Maintenance Factor. RSMF = 0.96 for office spaces. RSMF = 0.94 for industrial spaces. RSMF is determined based on Table B3 of AS/NZS1680 for the clean surface (office) and for dirty surface (industry) with 3 year cleaning cycle. The room size considered is Medium and Large (RI > 2.5).

All data is calculated for an ambient temperature T = 25°C.

	LLMF		**LLF (MF)**
LUMINAIRE	**50,000h**	**APPLICATION**	**50,000h**
BARIS 52 LED	0.90	Office	0.82
CAPELLA LED PLUS Z	0.83	Office	0.76
COMPACT LED EVO N (<40W)	0.91	Office	0.83
COMPACT LED EVO N (40W to 50W)	0.90	Office	0.82
COMPACT LED EVO N (> 50W)	0.88	Office	0.80
COMPACT LED EVO P (<40W)	0.91	Office	0.83
COMPACT LED EVO P (40W to 50W)	0.90	Office	0.82
COMPACT LED EVO P (> 50W)	0.88	Office	0.80
COMPACT LED EVO P IP65 (<40W)	0.91	Office	0.83
COMPACT LED EVO P IP65 (40W to 50W)	0.90	Office	0.82
COMPACT LED EVO P IP65 (> 50W)	0.88	Office	0.80
COMPACT LED HYGIENIC (<40W)	0.91	Office	0.83
COMPACT LED HYGIENIC (40W to 50W)	0.90	Office	0.82
COMPACT LED HYGIENIC (> 50W)	0.88	Office	0.80
COMPACT SOLID LED (<40W)	0.91	Office	0.83
COMPACT SOLID LED (40W to 50W)	0.90	Office	0.82
COMPACT SOLID LED (> 50W)	0.88	Office	0.80
DIONE LED PLUS	0.87	Office	0.79
EXPO LED 2	0.75	Office	0.68
EXPO LED 2 MINI	0.75	Office	0.68
HULK 2 LED BASIC	0.92	Industry	0.77
INDUSTRY IP66 LED ENDURA	0.85	Industry	0.71
LINEA 2 LED	0.83	Industry	0.69
NECTRA LED PLUS	0.82	Office	0.75

MADERA 3 LED	0.83	Office	0.76
OCULUS LED UGR	0.96	Industry	0.80
OCULUS LED UGR MINI	0.96	Industry	0.80
OCULUS LED	0.96	Industry	0.80
OCULUS LED ENDURA	0.86	Industry	0.72
OCULUS LED MINI	0.85	Industry	0.71
OCULUS LED POLE	0.86	Industry	0.72
PHOBOS LED (<50W)	0.82	Office	0.75
PHOBOS LED (>50W)	0.79	Office	0.72
QUEST 2 LED	0.89	Industry	0.74
QUEST 2 LED HB	0.88	Industry	0.74
RQ 100 LED PLUS P	0.91	Office	0.83
RQ 160 LED PLUS N	0.90	Office	0.82
RQ 160 LED PLUS P	0.90	Office	0.82
SHOP SYSTEM T LED EVO	0.72	Office	0.66
SQ 100 LED PLUS N	0.90	Office	0.82
SQ 300 LED PLUS	0.89	Office	0.81
SQ 600 LED OPAL	0.70	Office	0.64
SQ 600 LED PRM	0.90	Office	0.82
TERRA 2 LED LONG MULTI	0.90	Office	0.82
TERRA 2 LED MULTI	0.90	Office	0.82
TYTAN 2 LED BASIC	0.85	Industry	0.71
TYTAN 2 LED CHEMO	0.85	Industry	0.71
TYTAN LED PRO (<50W)	0.96	Industry	0.80
TYTAN LED PRO (>50W)	0.92	Industry	0.77
UP LED	0.71	Office	0.65
VIGO M LED	0.70	Industry	0.59