Lumen Maintenance Factor (LMF)

Model	Watts *	Current	No. of LED's	Ambient Temp	Initial LMF	20K hours (real life)	35K hours	50K hours
SML500	12	110mA	32	Ta 25°C (77°F)	1.00	0.99	0.98	0.96
				Ta 30°C (86°F)	0.99	0.97	0.96	0.94
				Ta 40°C (104°F)	0.98	0.93	0.91	0.88
SML1000	24	75mA	96	Ta 25°C (77°F)	1.00	0.99	0.98	0.96
				Ta 30°C (86°F)	0.99	0.98	0.97	0.96
				Ta 40°C (104°F)	0.98	0.94	0.91	0.90
SML1500	38	100mA	108	Ta 25°C (77°F)	1.00	0.99	0.97	0.96
				Ta 30°C (86°F)	0.99	0.96	0.93	0.92
				Ta 40°C (104°F)	0.95	0.91	0.89	0.86

* Total watts are calculated by the average watts at 120 & 277VAC
NOTE: All Values Have ±7% Tolerance

All Light Emitting Designs light fixtures have a lumen maintenance factor (LMF) that takes into account the reduction of luminous flux due to the aging of the light fixture. LMF signifies the ratio of the light fixture lumens at a specific time and a new value.

Light Emitting Designs considers thermal management as the key factor in maintaining the highest possible luminous flux in all its fixtures. Displayed above is the lumen maintenance factor LMF for each specific product.

Light Emitting Designs' R&D team with its extensive experience has conducted numerous in-house tests with the specified finished fixtures on long term lumen maintenance. The tests were conducted at Light Emitting Designs' facility in real life environments for a period of over two years or 20,000 hours.

Real life lumen maintenance values were obtained for the period of 20,000 hours. Calculated test results were obtained for 35,000 hours and 50,000 hours by using industry applied standards such as IESNA LM-79, IESNA LM-80 and LED chip manufacturers data. LED chip package temperature measurement was acquired at the LED chip heat sink's soldered junction point to the printed circuit board in a given luminaire at a specific stabilized ambient temperature. LMF data was predicted by using the junction temperature (T_j) in direct relation to the LED chip manufacturers LM-80 data.