

Clean area: IP20 Surface T5 teardrop clean room luminaire

Lamina T5

MOTIVATION

To provide a purpose designed and independently tested luminaire to ensure minimal disturbance in areas of uni-directional airflow with the low ownership costs associated with ease of maintenance features and the T5 lamp.

APPLICATION

- Clean rooms with uni-directional airflow, typically FS209D class 1, 10 and 100 or ISO Class 3, 4 and 5.



SPECIFICATION

- To suit 28W T5 HE and 54W T5 HO lamps
- Light output is affected by ambient air temperature and velocity. Based on uni-directional airflows of 0.5m per second at temperatures of 18°C we would expect similar efficiency from T5 and T8 Lamina luminaires. At 25°C T5 efficiency is likely to be >10% higher
- The 50mm wide body can be mounted directly on proprietary T bars of 50mm wide or greater with minimal disturbance to uni-directional airflow – independently tested by Diamond Scientific Limited
- Extruded aluminium body finished white to RAL 9016
- High frequency control gear and 3 hour integral emergency when required on rapidly detachable gear-tray retained by turnbuckles in the body profile
- Push fit Wieland connectors, females on gear tray and males on moulded cable for rapid maintenance and assembly
- Single (with knock out hole for end of row) and double (with cable hole for between 2 luminaires) moulded ABS end-caps
- Individual or continuous mounting (using intermediate connecting kit – LAMIK). Supply via knock out hole in end cap or via T bar cruciform into back of body – up to 30 luminaires off one feed
- UV absorbent internally reeded DEGALON diffuser (but if certain wavelengths of light must be removed for photosensitive applications the lamp must be appropriately UV sleeved and the diffuser dimensions accommodate this)
- Supplied without lamps



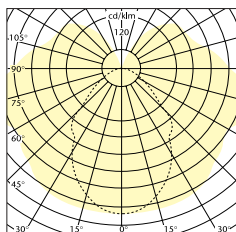
Lamina LAMD128

LAMINA T5

Clear Degalon
1 x 28W T5
LAMD128

- LOR = 98.1
- SHR MAX = 1.66
- DLOR = 0.696
- ULOR = 0.285

UTILISATION FACTORS UF(F)													SHR NOM=1.50
Room Reflectance			Room Index										
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00		
0.70	0.50	0.20	0.45	0.52	0.59	0.64	0.70	0.75	0.79	0.83	0.87		
0.50	0.30	0.20	0.34	0.41	0.46	0.51	0.57	0.62	0.65	0.70	0.74		
0.00	0.00	0.00	0.23	0.27	0.31	0.35	0.39	0.43	0.46	0.50	0.53		

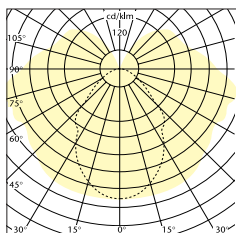


LAMINA T5

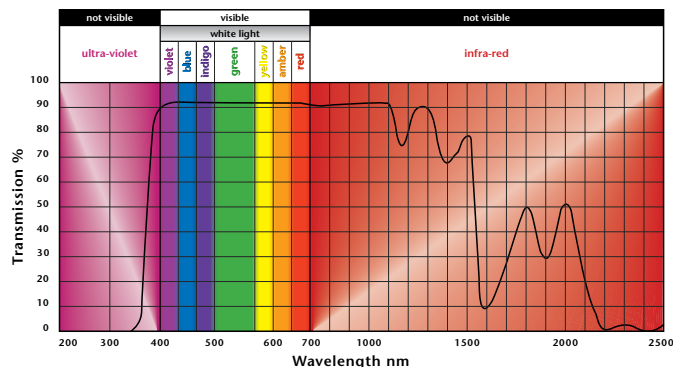
Clear Degalon
1 x 54W T5
LAMD154

- LOR = 88.3
- SHR MAX = 1.66
- DLOR = 0.626
- ULOR = 0.257

UTILISATION FACTORS UF(F)													SHR NOM=1.50
Room Reflectance			Room Index										
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00		
0.70	0.50	0.20	0.41	0.47	0.53	0.57	0.63	0.68	0.71	0.75	0.78		
0.50	0.30	0.20	0.31	0.36	0.42	0.46	0.52	0.56	0.59	0.63	0.66		
0.00	0.00	0.00	0.20	0.24	0.28	0.31	0.35	0.39	0.41	0.45	0.47		



UV Transmission ~ Standard Degalon Diffuser



DIMENSIONS



LAMP WAYS	LENGTH BETWEEN CENTRE LINES OF 2 DOUBLE END CAPS MM A	LENGTH OVER EXTRUSION MM B	END CAP WALL THICKNESS MM C
1 x 28 or 54W Standard	1200	1198	2
1 x 28 or 54W emergency	1500	1498	2

Note Individually mounted luminaires will be 2mm longer in overall length.

LAMP PERFORMANCE MATRIX

WATTAGE	IL@25°C	TOTAL CIRCUIT WATTS	LUMENS PER CIRCUIT WATT	LAMP LIFE TO 50% FAILURE
1 x 28W – T5	2800	32	88	20,000
1 x 54W – T5	4450	60	74	

Note Recommended scheduled lamp replacement at 80% of rated life = 16000 hours.

Lamina T5

ORDER CODES

IP20 SURFACE T5 TEARDROP CLEAN ROOM LUMINAIRE.

BODIES - Part codes cover luminaire body extrusion, gear tray and diffusers but exclude end caps and connecting cables

STANDARD	LAMP	EMERGENCY
LAMD128	1 x 28W T5	LAMD128E
LAMD154	1 x 54W T5	LAMD154E

CONNECTING KITS - order as separate items as needed

LAMIK	Intermediate kit – 1 x double end cap and 0.5m connecting cable with moulded Wieland plug both ends.
LAMEK	End kit – 2 x single end caps and 1.0m cable with moulded Wieland plug end and crimped wire at the other.

OPTION Add suffix to order codes above

I Individual luminaire e.g. LAMD128I



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To specify state:

Surface T5 teardrop luminaire with UV absorbent Degalon diffuser independently tested for minimum disturbance to uni-directional airflow. Extruded aluminium body, rapidly detachable gear-tray on turnbuckles, push fit Wieland connectors and moulded ABS end-caps. Width not to exceed 50mm and overall depth 115mm – as Whitecroft Lighting LAMINA T5.