



Liwa

DAMP-PROOF | DALI SERIES

Liwa is a high-impact resistance luminaire suitable for very wet or for very cold environments such as freeze warehouses. Its adjustable beam angle (30/60/90 degrees) makes it suitable for very tall warehouses where the beam can be adjusted to shine the light precisely on the shelves. With an IP68 protection factor.

Liwa damp-proof luminaires come in several series, with various add-on and controls:

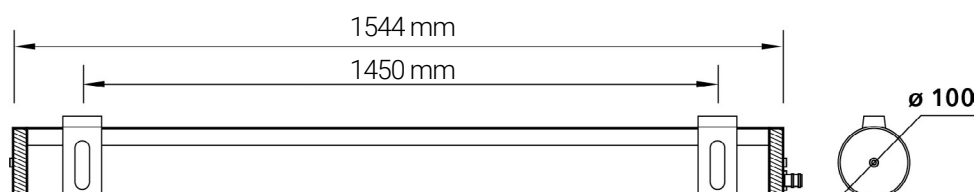
- Liwa Non-DALI – the standard for any project in the retail sectors
- Liwa Non-DALI EM – with emergency kit
- Liwa DALI – with DALI controls for dimming

FEATURES & BENEFITS

- CRI 80 as standard
- 4 color temperatures: 3000K, 4000K, 5000K and 6500K
- Long rated life – L90/B10 at 50.000h
- High luminaire efficiency: 157 lm/W @4000K

APPLICATION

Grocery & Supermarket | Industrial & Logistic | Parking



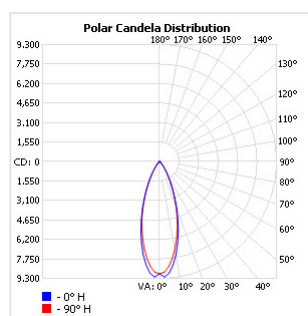
SPECIFICATIONS

Power consumption	33W, 42W, 51W, 60W
Dimensions	Ø100 x 1544mm±1mm
Weight	4.0 - 4.1Kg
Housing materials	Polycarbonate & Stainless stell
IK code	IK10
THD (at 230V, 50Hz, Full load)	<8%
Protection class	Safety class 1
Operating temperature [°C]	-28°C ... +45°C / -18.4F ... +113F
Operating humidity [%]	10 ÷ 85
Power factor	≥0.95
AC Input [Vac]	220 - 240 VAC
Lens angle [°]	30°, 60°, 90°
Lifespan [h]	50.000
Housing color	● Grey
Lumen maintenance	L90/B10@50.000h at 25°C
IP factor	IP68
Control optional	DALI
Warranty [years]	5
Storage temperature range [°C]	-20°C ... +55°C / -4F ... +131F
Emergency option	-

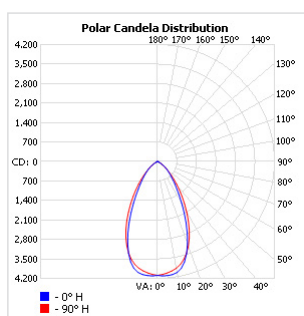
Light application	Standard
CRI	CRI 80
CCT [K]	3000K/4000K/5000K/6500K
MacAdam	4

CRI - Color rendering, CCT - Color temperature, MacAdam - Color consistency

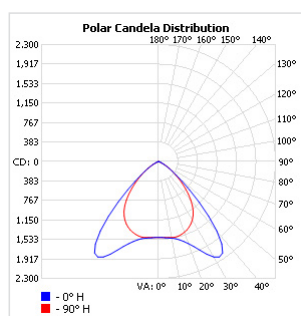
LIGHT DISTRIBUTION



A30



A60



A90

RISK GROUP**RG1**

The evaluation of photobiological safety is carried out according to the standard IEC 62471:2008 ("Photobiological safety of lamps and lamp systems"). Following the definition of the risk grouping system of the mentioned IEC standard, the LEDs mounted on this family fall into the class "Low Risk (RG1 – No photobiological hazard under normal behavioral limitations)". Under real circumstances (regarding exposure time, pupils, observation distance), it is assumed that there is no endangerment to the eye from these devices. As a matter of principle, however, it should be mentioned that intense light sources have a high secondary exposure potential due to their blinding effect.

TOLERANCES

Luminous flux tolerances: -/+ 5%

Consumption tolerance: -/+ 5% for Non-DALI | -/+ 10% for Non-DALI & KIT EM | -/+ 10% for DALI | -/+ 15% for DALI & KIT EM

BATTERY WARRANTY

Non-DALI EM & DALI EM: 12 months warranty

Non-DALI & DALI: -

MAXIMUM NO. OF LUMINAIRES ON A CIRCUIT

Luminaire Power(W)	Control type	Circuit Breaker Type					
		B			C		
		20	16	10	20	16	10
< 50W	Non-DALI	37	30	18	62	51	31
≥ 50W	Non-DALI	37	30	18	62	51	31
< 80W	DALI	27	21	13	45	35	21

SKU SPECIFICATIONS

Product Code	Dimensions (mm)	CCT (K)	Lumens (lm)	Power (W)	Eff. (lm/watt)	Lens Angle (°)
CRI 80						
229400 Liwa 150/3000/33W/80/A30	Ø100 x 1544± 1mm	3000	4715	33W	143	30°
229401 Liwa 150/4000/33W/80/A30	Ø100 x 1544± 1mm	4000	4915	33W	149	30°
229402 Liwa 150/5000/33W/80/A30	Ø100 x 1544± 1mm	5000	5045	33W	153	30°
229403 Liwa 150/6500/33W/80/A30	Ø100 x 1544± 1mm	6500	4915	33W	149	30°
229404 Liwa 150/3000/33W/80/A60	Ø100 x 1544± 1mm	3000	4680	33W	142	60°
229405 Liwa 150/4000/33W/80/A60	Ø100 x 1544± 1mm	4000	4875	33W	148	60°
229406 Liwa 150/5000/33W/80/A60	Ø100 x 1544± 1mm	5000	5010	33W	152	60°
229407 Liwa 150/6500/33W/80/A60	Ø100 x 1544± 1mm	6500	4875	33W	148	60°
229408 Liwa 150/3000/33W/80/A90	Ø100 x 1544± 1mm	3000	4700	33W	143	90°
229409 Liwa 150/4000/33W/80/A90	Ø100 x 1544± 1mm	4000	4900	33W	149	90°
229410 Liwa 150/5000/33W/80/A90	Ø100 x 1544± 1mm	5000	5030	33W	153	90°
229411 Liwa 150/6500/33W/80/A90	Ø100 x 1544± 1mm	6500	4900	33W	149	90°
229412 Liwa 150/3000/42W/80/A30	Ø100 x 1544± 1mm	3000	6285	42W	150	30°
229413 Liwa 150/4000/42W/80/A30	Ø100 x 1544± 1mm	4000	6555	42W	157	30°
229414 Liwa 150/5000/42W/80/A30	Ø100 x 1544± 1mm	5000	6730	42W	161	30°
229415 Liwa 150/6500/42W/80/A30	Ø100 x 1544± 1mm	6500	6555	42W	157	30°
229416 Liwa 150/3000/42W/80/A60	Ø100 x 1544± 1mm	3000	6240	42W	149	60°
229417 Liwa 150/4000/42W/80/A60	Ø100 x 1544± 1mm	4000	6505	42W	155	60°
229418 Liwa 150/5000/42W/80/A60	Ø100 x 1544± 1mm	5000	6680	42W	160	60°
229419 Liwa 150/6500/42W/80/A60	Ø100 x 1544± 1mm	6500	6505	42W	155	60°
229420 Liwa 150/3000/42W/80/A90	Ø100 x 1544± 1mm	3000	6270	42W	150	90°
229421 Liwa 150/4000/42W/80/A90	Ø100 x 1544± 1mm	4000	6535	42W	156	90°
229422 Liwa 150/5000/42W/80/A90	Ø100 x 1544± 1mm	5000	6710	42W	160	90°
229423 Liwa 150/6500/42W/80/A90	Ø100 x 1544± 1mm	6500	6535	42W	156	90°
229424 Liwa 150/3000/51W/80/A30	Ø100 x 1544± 1mm	3000	7400	51W	146	30°
229425 Liwa 150/4000/51W/80/A30	Ø100 x 1544± 1mm	4000	7710	51W	152	30°
229426 Liwa 150/5000/51W/80/A30	Ø100 x 1544± 1mm	5000	7920	51W	156	30°
229427 Liwa 150/6500/51W/80/A30	Ø100 x 1544± 1mm	6500	7710	51W	152	30°
229428 Liwa 150/3000/51W/80/A60	Ø100 x 1544± 1mm	3000	7345	51W	145	60°
229429 Liwa 150/4000/51W/80/A60	Ø100 x 1544± 1mm	4000	7655	51W	151	60°
229430 Liwa 150/5000/51W/80/A60	Ø100 x 1544± 1mm	5000	7860	51W	155	60°
229431 Liwa 150/6500/51W/80/A60	Ø100 x 1544± 1mm	6500	7655	51W	151	60°
229432 Liwa 150/3000/51W/80/A90	Ø100 x 1544± 1mm	3000	7380	51W	145	90°
229433 Liwa 150/4000/51W/80/A90	Ø100 x 1544± 1mm	4000	7690	51W	151	90°
229434 Liwa 150/5000/51W/80/A90	Ø100 x 1544± 1mm	5000	7895	51W	155	90°
229435 Liwa 150/6500/51W/80/A90	Ø100 x 1544± 1mm	6500	7690	51W	151	90°
229436 Liwa 150/3000/60W/80/A30	Ø100 x 1544± 1mm	3000	8220	60W	137	30°
229437 Liwa 150/4000/60W/80/A30	Ø100 x 1544± 1mm	4000	8570	60W	143	30°
229438 Liwa 150/5000/60W/80/A30	Ø100 x 1544± 1mm	5000	8800	60W	147	30°
229439 Liwa 150/6500/60W/80/A30	Ø100 x 1544± 1mm	6500	8570	60W	143	30°
229440 Liwa 150/3000/60W/80/A60	Ø100 x 1544± 1mm	3000	8160	60W	136	60°
229441 Liwa 150/4000/60W/80/A60	Ø100 x 1544± 1mm	4000	8510	60W	142	60°
229442 Liwa 150/5000/60W/80/A60	Ø100 x 1544± 1mm	5000	8735	60W	146	60°
229443 Liwa 150/6500/60W/80/A60	Ø100 x 1544± 1mm	6500	8510	60W	142	60°
229444 Liwa 150/3000/60W/80/A90	Ø100 x 1544± 1mm	3000	8200	60W	137	90°
229445 Liwa 150/4000/60W/80/A90	Ø100 x 1544± 1mm	4000	8545	60W	143	90°
229446 Liwa 150/5000/60W/80/A90	Ø100 x 1544± 1mm	5000	8775	60W	147	90°
229447 Liwa 150/6500/60W/80/A90	Ø100 x 1544± 1mm	6500	8545	60W	143	90°
229688 Liwa 150/3000/33W/80/A30/DSPC	Ø100 x 1544± 1mm	3000	4715	33W	143	30°
229689 Liwa 150/4000/33W/80/A30/DSPC	Ø100 x 1544± 1mm	4000	4915	33W	149	30°

SKU SPECIFICATIONS

Product Code	Dimensions (mm)	CCT (K)	Lumens (lm)	Power (W)	Eff. (lm/watt)	Lens Angle (°)
CRI 80						
229690 Liwa 150/5000/33W/80/A30/DSPC	Ø100 x 1544± 1mm	5000	5045	33W	153	30°
229691 Liwa 150/6500/33W/80/A30/DSPC	Ø100 x 1544± 1mm	6500	4915	33W	149	30°
229692 Liwa 150/3000/33W/80/A60/DSPC	Ø100 x 1544± 1mm	3000	4680	33W	142	60°
229693 Liwa 150/4000/33W/80/A60/DSPC	Ø100 x 1544± 1mm	4000	4875	33W	148	60°
229694 Liwa 150/5000/33W/80/A60/DSPC	Ø100 x 1544± 1mm	5000	5010	33W	152	60°
229695 Liwa 150/6500/33W/80/A60/DSPC	Ø100 x 1544± 1mm	6500	4875	33W	148	60°
229696 Liwa 150/3000/33W/80/A90/DSPC	Ø100 x 1544± 1mm	3000	4700	33W	143	90°
229697 Liwa 150/4000/33W/80/A90/DSPC	Ø100 x 1544± 1mm	4000	4900	33W	149	90°
229698 Liwa 150/5000/33W/80/A90/DSPC	Ø100 x 1544± 1mm	5000	5030	33W	153	90°
229699 Liwa 150/6500/33W/80/A90/DSPC	Ø100 x 1544± 1mm	6500	4900	33W	149	90°
229700 Liwa 150/3000/42W/80/A30/DSPC	Ø100 x 1544± 1mm	3000	6285	42W	150	30°
229701 Liwa 150/4000/42W/80/A30/DSPC	Ø100 x 1544± 1mm	4000	6555	42W	157	30°
229702 Liwa 150/5000/42W/80/A30/DSPC	Ø100 x 1544± 1mm	5000	6730	42W	161	30°
229703 Liwa 150/6500/42W/80/A30/DSPC	Ø100 x 1544± 1mm	6500	6555	42W	157	30°
229704 Liwa 150/3000/42W/80/A60/DSPC	Ø100 x 1544± 1mm	3000	6240	42W	149	60°
229705 Liwa 150/4000/42W/80/A60/DSPC	Ø100 x 1544± 1mm	4000	6505	42W	155	60°
229706 Liwa 150/5000/42W/80/A60/DSPC	Ø100 x 1544± 1mm	5000	6680	42W	160	60°
229707 Liwa 150/6500/42W/80/A60/DSPC	Ø100 x 1544± 1mm	6500	6505	42W	155	60°
229708 Liwa 150/3000/42W/80/A90/DSPC	Ø100 x 1544± 1mm	3000	6270	42W	150	90°
229709 Liwa 150/4000/42W/80/A90/DSPC	Ø100 x 1544± 1mm	4000	6535	42W	156	90°
229710 Liwa 150/5000/42W/80/A90/DSPC	Ø100 x 1544± 1mm	5000	6710	42W	160	90°
229711 Liwa 150/6500/42W/80/A90/DSPC	Ø100 x 1544± 1mm	6500	6535	42W	156	90°
229712 Liwa 150/3000/51W/80/A30/DSPC	Ø100 x 1544± 1mm	3000	7400	51W	146	30°
229713 Liwa 150/4000/51W/80/A30/DSPC	Ø100 x 1544± 1mm	4000	7710	51W	152	30°
229714 Liwa 150/5000/51W/80/A30/DSPC	Ø100 x 1544± 1mm	5000	7920	51W	156	30°
229715 Liwa 150/6500/51W/80/A30/DSPC	Ø100 x 1544± 1mm	6500	7710	51W	152	30°
229716 Liwa 150/3000/51W/80/A60/DSPC	Ø100 x 1544± 1mm	3000	7345	51W	145	60°
229717 Liwa 150/4000/51W/80/A60/DSPC	Ø100 x 1544± 1mm	4000	7655	51W	151	60°
229718 Liwa 150/5000/51W/80/A60/DSPC	Ø100 x 1544± 1mm	5000	7860	51W	155	60°
229719 Liwa 150/6500/51W/80/A60/DSPC	Ø100 x 1544± 1mm	6500	7655	51W	151	60°
229720 Liwa 150/3000/51W/80/A90/DSPC	Ø100 x 1544± 1mm	3000	7380	51W	145	90°
229721 Liwa 150/4000/51W/80/A90/DSPC	Ø100 x 1544± 1mm	4000	7690	51W	151	90°
229722 Liwa 150/5000/51W/80/A90/DSPC	Ø100 x 1544± 1mm	5000	7895	51W	155	90°
229723 Liwa 150/6500/51W/80/A90/DSPC	Ø100 x 1544± 1mm	6500	7690	51W	151	90°
229724 Liwa 150/3000/60W/80/A30/DSPC	Ø100 x 1544± 1mm	3000	8220	60W	137	30°
229725 Liwa 150/4000/60W/80/A30/DSPC	Ø100 x 1544± 1mm	4000	8570	60W	143	30°
229726 Liwa 150/5000/60W/80/A30/DSPC	Ø100 x 1544± 1mm	5000	8800	60W	147	30°
229727 Liwa 150/6500/60W/80/A30/DSPC	Ø100 x 1544± 1mm	6500	8570	60W	143	30°
229728 Liwa 150/3000/60W/80/A60/DSPC	Ø100 x 1544± 1mm	3000	8160	60W	136	60°
229729 Liwa 150/4000/60W/80/A60/DSPC	Ø100 x 1544± 1mm	4000	8510	60W	142	60°
229730 Liwa 150/5000/60W/80/A60/DSPC	Ø100 x 1544± 1mm	5000	8735	60W	146	60°
229731 Liwa 150/6500/60W/80/A60/DSPC	Ø100 x 1544± 1mm	6500	8510	60W	142	60°
229732 Liwa 150/3000/60W/80/A90/DSPC	Ø100 x 1544± 1mm	3000	8200	60W	137	90°
229733 Liwa 150/4000/60W/80/A90/DSPC	Ø100 x 1544± 1mm	4000	8545	60W	143	90°
229734 Liwa 150/5000/60W/80/A90/DSPC	Ø100 x 1544± 1mm	5000	8775	60W	147	90°
229735 Liwa 150/6500/60W/80/A90/DSPC	Ø100 x 1544± 1mm	6500	8545	60W	143	90°

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