

Omnidirectional LED Lights E8272

Omnidirectional LED Lights E8272 are intended for use in shore-based installations of visual aids to marine navigation (AtoN) infrastructure as power efficient sources of low intensity omnidirectional light signals. A single Luxeon Rebel LED is employed under a specially designed lens that converts the upright light beam into the horizontal plane. The enclosure in form of a 40 mm aluminium pipe carries the lens on top and houses a constant current source with modulation input for external logic-level control of flashing. If supplied with an optional built-in flasher, a light sensor is integrated under the lens. The focal height depends on the height of the enclosure and may be specified within the range of 150 to 400 mm, limited at the shorter end by the space required for the built-in power supply and flasher modules.

Two main intensity configurations are standard, and increased (.H) as shown in Tables 1 and 2. Optionally, an E8272 can be supplied for operation using a **fixed-and-flashing** (F.Fl) rhythmic character with pre-set intensities. In such case, an external light sensor is required.

Versions for different power supply voltages are available upon request. Length of the power cable and mounting flange dimensions are adaptable to customer needs.

Features

Signal colour	White, Green, Red, Yellow or Blue
Luminous intensity	5 to 130 cd *
Vertical divergence (FWHM)	3° or 8°
Nominal range (T=0.74, 0.2 µlx)	up to 5 NM *
Power supply voltage	9..30VDC or 220VAC
Power consumption in flash	0.6 to 1.6 W *
Height (typical)	135 mm *
Lens diameter	59 mm
Weight without cables	< 2 kg *
Ingress protection class	IP67
Operating environment	-30°C to +55°C
Estimated operational lifetime	> 60000 hours (L70)
Lens material	UV-stable acrylic
Flashing control	Built-in or external
Daylight control	Built-in or external
Mounting arrangement (typ.)	3 holes on 80 mm circle



* Parameters depend on lens type and fixed factory settings made in accordance with customer requirements. Luminous intensities can be pre-set within the range of 5cd to 130cd (highest intensities can be achieved in case of white colour). Batches of E8272 manufactured with reduced or increased luminous intensity will operate at lower or higher power consumption.

Please contact ekta@ekta.ee for more information and price quotations.

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Parameter / Lantern model	Unit	Lights with 3° lens			Lights with 9° lens		
		E8272.W3	E8272.R3	E8272.G3	E8272.W9	E8272.R9	E8272.G9
LED driving current	mA	175	175	175	175	175	175
Luminous intensity, minimum	cd	65	40	55	22	10	18
Luminous intensity, typical	cd	75	48	70	25	12	24
Vertical divergence FWHM, minimum	°	3.0	2.6	2.6	9.0	8.0	8.0
Vertical divergence FWHM, typical	°	3.4	3.0	3.0	10.0	10.0	10.0
Vertical divergence FWTM, minimum	°	6.0	4.8	4.8			
Vertical divergence FWTM, typical	°	7.0	5.5	5.5			
Power consumption, typical	W	0.8	0.6	0.8	0.8	0.6	0.8

Table 1. Key parameters of most common E8272 Lanterns in standard intensity configuration

Parameter / Lantern model	Unit	Lights with 3° lens			Lights with 9° lens		
		E8272.W3.H	E8272.R3.H	E8272.G3.H	E8272.W9.H	E8272.R9.H	E8272.G9.H
LED driving current	mA	350	350	350	350	350	350
Luminous intensity, minimum	cd	130	80	110	44	20	35
Luminous intensity, typical	cd	150	96	130	50	24	42
Vertical divergence FWHM, minimum	°	3.0	2.6	2.6	9.0	8.0	8.0
Vertical divergence FWHM, typical	°	3.4	3.0	3.0	10.0	10.0	10.0
Vertical divergence FWTM, minimum	°	6.0	4.8	4.8			
Vertical divergence FWTM, typical	°	7.0	5.5	5.5			
Power consumption, typical	W	1.5	1.2	1.6	1.5	1.2	1.6

Table 2. Key parameters of most common E8272 Lanterns in increased intensity (.H) configuration