

Dual LED Beacon E8277

LED Beacon E8277 is intended for use in shore-based installations of visual aids to marine navigation (AtoN) infrastructure as a source of high intensity omnidirectional (360°, or 180°) lighthouse signal. Internal architecture with two separate Luxeon Rebel LED arrays and constant current generator (CCG) circuits that can be controlled independently enables provision of higher reliability and operational availability of the navigation light. Two separate power/control cables reduce the voltage drop and can be wired to independent power and control sources. In-house lens development and careful thermal design of the deep anodized aluminium body guarantee high efficiency and long operational lifetime.

Optionally, an E8277 can be supplied with integrated solid state flashers that have full control of output light signal intensity using pulse width modulation (PWM). The mounting flange is adaptable to customer needs. Luminous intensity shown below is achieved at factory settings for maximum drive current by simultaneously powering both LED arrays of a dual beacon. Versions for 24VDC or higher power supply voltage will be available upon request, as well as dual lens versions that allow to nearly double the luminous intensity.

Features

Signal colour	White or Red; Green and Blue coming
Sustained luminous intensity	≥ 30000 cd (White)* ≥ 12000 cd (Red)*
Vertical divergence (FWHM)	≥ 1.4° typical
Nominal range (T=0.74, 0.2 μlx)	up to 16 NM* (W)
Power supply voltage	12 (10 20) VDC
Power consumption in flash	$\leq 200 \text{ W (W)}^*$ $\leq 100 \text{ W (R)}^*$
Light source regulation	CCG, modulation input
Height with top spike	660 mm
Diameter at widest section	330 mm
Maximum weight with cables	< 24 kg
Ingress protection class	IP67
Operating environment	-30°C to +55°C
Estimated operational lifetime	> 50000 hours (L70)
Lens material	Optical grade UV-stable acrylic
Daylight control	2 integrated light sensors on top for flashers (for external installation)



^{*} Parameters depend on fixed factory settings made in accordance with AtoN site specific requirements.

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

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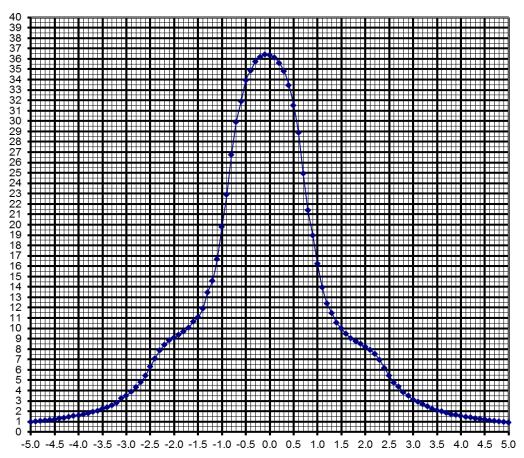


Figure 1. Measured vertical distribution in kcd of the white light signal of E8277.W S/N 11827702 (190 W @ 15 VDC)

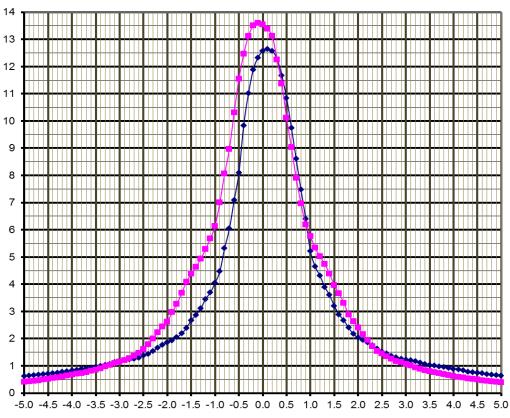


Figure 2. Measured vertical distribution in kcd of the red light signal of E8277.R S/N 11827703 (97 W @ 15 VDC). The red curve presents the results of the lantern version with optional reflectors.