



## FA-14 RANGE LIGHT LONG RANGE SIGNALING LANTERN

The FA-14 range light is designed to provide a high peak intensity output for long range nighttime and daytime signaling applications. It provides reliable output under varying environmental conditions, adaptability to different signaling requirements including wireless synchronization, simple logistics, and long service life with reduced spare parts requirements.

With the increase in development in port areas, it is becoming increasingly more difficult to distinguish the leading lights from the background lighting. Increasing the candlepower of the light and rhythmically flashing the lights give some improvement but the random nature of the flashing limits effectiveness. Synchronization of the flashing leading lights is known to greatly increase the conspicuity of the lights but it is costly to have a hardwire synchronization connection between the two lights.

A two station range makes it possible for the mariner to navigate the center of a restricted channel. The lights of each station, front and rear, are aligned when the ship is on the channel's centerline. The lights separate when the ship drifts to either side. This feature gives the pilot a "feel" for his position off the range since he can tell the direction and degree of drift. Course correction can be evaluated immediately by whether the lights begin to "close" or continue to "open."

However, with a single station polychrome range, the pilot knows only if he is in the center of the channel or to one side or the other. There is no indication of degree of navigation error. Also, he's unable to determine if the ship's position is improving or worsening.

### Features

- Lantern opens to the front with the mirror attached, giving access to the flashchanger
- Electrical access is through ¾" NPT threaded entries in the back of the lantern
- Ample space inside to mount a TR-3 Power Supply for AC applications, where 12 Volt 0.25-3.05 amp lamps are required

### Optional Accessories

- Uniflash-III GPS synchronization
- Rifle-type aiming sights
- Leveling & aligning adjustments to the base
- Flat pad on top of unit for spirit level
- Photocell\*

\*Note: Also available as a special feature is reverse photocell action. The photo sensor on the lantern will detect the day/night transition and can be loaded with a special "optional" firmware to change the intensity of the light so it will produce, for example 4,600 cd during the day (for a 1NM range), switching at night to a low intensity of 100 cd for a 5NM range. The maximum intensity to be used during the day time is of course limited by the lantern capacities.

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**SPECIFICATIONS**

<b>Dimensions:</b>	533.4 mm x 381 mm x 406.4 mm (21" x 15" x 16")
<b>Weight:</b>	12.7 kg (28 lbs.)
<b>Shipping Weight:</b>	20 kg (44 lbs.)
<b>Lens Type:</b>	Flatlite, 3.5°, 8°, 11°, 20°, or 30° Spreadlite
<b>Available Colors:</b>	White, Green, Red, Yellow
<b>Lantern Housing:</b>	Anodized Aluminum
<b>Synchronization:</b>	Uniflash-III Wireless, Optional
<b>Lamps:</b>	Pre-focused T3.5, S-8, or S-11 envelope and C-8 or CC-8 filament, incandescent or tungsten halogen lamps to 120 watts

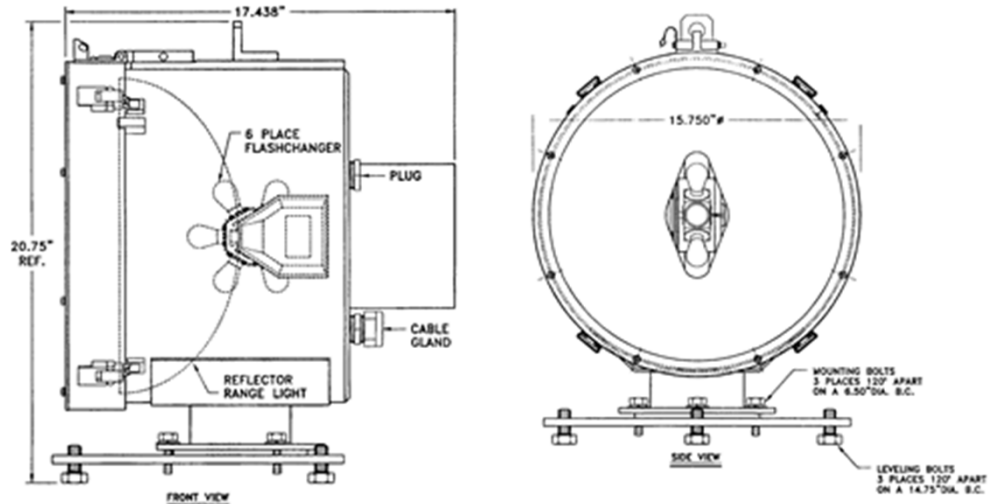
**PERFORMANCE**

LAMP			FIXED INTENSITIES (Candela)
Filament	Volts	Amperes	Flatlite*
CC-8	12.0	1.0	197,000
CC-8	12.0	2.0	396,000
CC-8	12.0	3.0	491,000
C-8	12.0	9.0	1,400,000
C-8	12.0	35W	904,000
C-8	12.0	50W	551,000
C-8	12.0	75W	1,209,000
C-8	24.0	150W	880,000
Arc***	120	150W	1,875,000

Note: For red lens multiply above by 0.30. For green lens multiply above by 0.32. For yellow lens multiply above by 0.68. \*Candela measured on axis.

\*\*\*Fixed Burning Only.

Vertical Divergence is 0.50-1.20 to 10%. 3-degree, 8-degree, 11-degree, 20-degree, and 28-degree Spread Lenses for this optic are available. Average peak intensity reductions factors for the Spread Lenses are as follows: 3-degree is 0.40; 8-degree is 0.22; 11-degree is 0.17; 20-degree is 0.08, and 28-degree is 0.065. For example, an 11-degree green spread lens with a 35 watt lamp produces (904,000 X 0.32 X 0.17) = 49100 candela.



\*Specifications subject to change without notice.

