

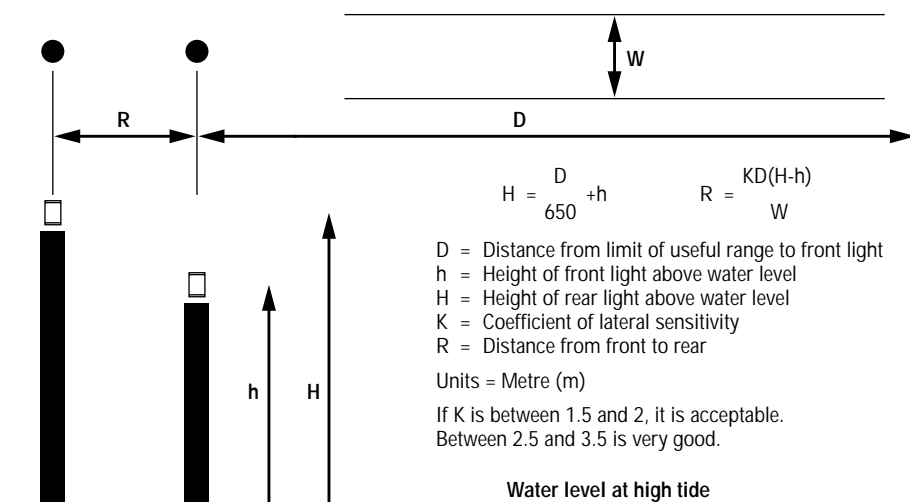
MaxLumina Range Lanterns

LEADING (RANGE) LIGHTS

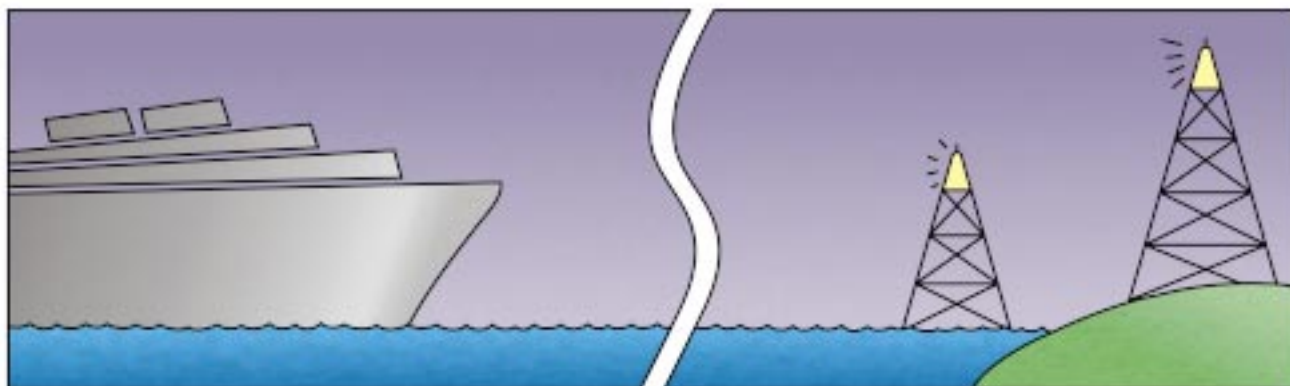
Range lights are normally used in pairs to guide vessels along channels.

When viewed the light beam of one lantern appears directly above the other. One lantern is installed at a given point. The other is located at a distance behind and at a higher level and in line with the intended channel centreline. Often the lanterns are synchronised.

Careful consideration must be given when designing the height and position of range lights.



THE OPTICAL RANGE



DAYMARKS

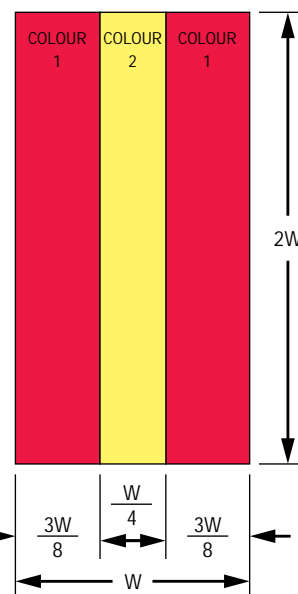
Often a visual dayboard is the ideal way to mark a channel for daytime use in conjunction with a range light for night time use.

They can also be used for various functions including the marking of a harbour entrance.

Typical dayboards are rectangular or triangular in shape. Striped colours assist in highlighting the board but also assist in lining up on a channel.

Minimum Width of a Standard Rectangular Dayboard versus Distance

Observation Distance (sea miles)	Minimum Width (metres) (feet)	
0.25	0.2	0.6
0.5	0.4	1.2
0.75	0.6	1.8
1	0.8	2.4
2	1.5	4.8
3	2.3	7.2
4	2.9	9.6
5	3.7	12



TIDELAND SIGNAL

PURCHASE INFORMATION

A typical range installation includes two range lanterns, each equipped with a flasher/lampchanger, four or six marine lamps, a sunswitch, and leveling and mounting hardware. Specifying the correct range lanterns for your application requires the following kinds of information: length of service channel, channel width, standoff distance, separation distance, eye height above waterline, atmospheric

transmissivity, height and intensity of front lantern, height and intensity of rear lantern. Tideland has available a computer programme for designing the most efficient range for a specific location. Tideland range lanterns contain MaxLumina optics that produce maximum beamed light for the lowest possible power consumption. They can be synchronised and offer multiple options for beam spread.

SPECIFICATIONS FOR RANGE LANTERNS

	RL-355	RL-125
Applications	leading light, short or long range; day or night port traffic signal	mark entrance to channels, rivers, canals and straight reaches of channel across bays
Optics	14-inch parabolic reflector of borosilicate glass	concave reflector, condenser, and beam spreader
Vertical Divergence	variable with choice of lamps	2-1/2 degrees
Horizontal Beam Spreaders	3, 8, 11, 20 or 28 degrees	3, 6, 12 or 20 degrees
Mounting	built-in leveling hardware and slip-ring mounting (3 bolt)	3 or 4 bolt
Flasher/Lampchanger	12 VDC TF-3B OMNIBUS II or 120 or 240 VAC TF-3AC or 120 VAC FLAC-300/LC-300	12 VDC TF-3B OMNIBUS II or 120 or 240 VAC TF-3AC or 120 VAC FLAC-300/LC-300
Lamps	standard marine lamps up to 250 watts	standard marine lamps up to 100 watts
Height	520.7 mm (20.5 in)	390.7 mm (15.38 in)
Weight	15.45 kg (34 lb) without flasher unit	6.3 kg (14 lb)
Options	lens colour: W,G,R,Y Specify spreader lens in degrees	lens colour: W,G,R,Y Specify spreader lens in degrees

NOTES: W = white, G = green, R = red, Y = yellow