

# ML-300

## MaxLumina® Marine Signal Lantern



TIDELAND SIGNAL CORPORATION

The lightweight and durable ML-300 is suitable for a wide range of marine applications such as lighthouses, landfall beacons, offshore platforms, drilling barges and channel markers. ML-300 produces luminous intensity levels with lower current consumption than other manufacturers' lanterns equipped with moulded lenses. The ML-300 utilises Tideland's 300 mm Fresnel lens, introduced in 1967 as the world's largest single-piece acrylic optic for marine lanterns. Today, the ML-300 is the most efficient injection moulded 300 mm lens available producing greater required effective intensities from smaller wattage lamps than any other lens of comparable size.

### FEATURES:

- Accommodates all Tideland Signal standard incandescent flasher/lampchangers, MLED-RETRO, and MaxiHALO-60 LED replacement light sources
- Supports all industry standard flasher/lampchangers
- Lenses available in all approved IALA colours
- Tideland Signal's patented leveling and focusing system
- Easy twist-and-lift tabs allow lens to be removed quickly for maintenance
- Cable glands and connectors factory supplied
- For applications requiring a sectored light, one or more coloured acrylic inserts (including opaque) can be added
- Excellent for all marine environments
- Full monitor and control access with Tideland Signal flasher



Tideland Signal's ML-300 is providing reliable service on tens of thousands of fixed structures around the world.

**EFFECTIVE INTENSITY TABLES (Schmidt-Clausen Method)  
ML-300 MaxLumina Lantern with Clear Lens and Selected Lamps**

| Electrical Rating/<br>Lamp Type | Incandescent<br>Time<br>(sec) | Fixed<br>Intensity<br>(cd) | EFFECTIVE INTENSITY IN CANDELAS – FLASHING WHITE |                |                |                |                |                |                |                |                |  |
|---------------------------------|-------------------------------|----------------------------|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--|
|                                 |                               |                            | CCT<br>0.1 sec                                   | CCT<br>0.2 sec | CCT<br>0.3 sec | CCT<br>0.4 sec | CCT<br>0.5 sec | CCT<br>0.6 sec | CCT<br>1.0 sec | CCT<br>1.2 sec | CCT<br>2.0 sec |  |
| 6.2V, 0.125A / C-8, S-8         | 0.030                         | 21                         | 6  | 10             | 12             | 14             | 15             | 16             | 17             | 18             | 19             |  |
| 6.2V, 0.25A / C-8, S-8          | 0.050                         | 51                         | 14   | 24             | 30             | 33             | 36             | 38             | 42             | 44             | 46             |  |
| 6.2V, 0.46A / C-8, S-8          | 0.076                         | 135                        | 34   | 62             | 77             | 86             | 95             | 100            | 112            | 115            | 123            |  |
| 6.2V, 0.70A / C-8, S-8          | 0.100                         | 180                        | —  | 78             | 101            | 115            | 125            | 132            | 149            | 153            | 163            |  |
| 6.2V, 0.92A / C-8, S-8          | 0.130                         | 245                        | —  | 104            | 135            | 155            | 169            | 179            | 202            | 209            | 222            |  |
| 6.2V, 1.40A / C-8, S-8          | 0.170                         | 440                        | —  | 176            | 236            | 274            | 301            | 320            | 362            | 374            | 399            |  |
| 12V, 0.25A / C-8, S-8           | 0.050                         | 100                        | 28   | 47             | 58             | 65             | 71             | 74             | 83             | 85             | 91             |  |
| 12V, 0.55A / C-8, S-8           | 0.088                         | 260                        | 67   | 119            | 149            | 168            | 182            | 192            | 215            | 222            | 236            |  |
| 12V, 0.77A / C-8, S-8           | 0.110                         | 400                        | —  | 175            | 224            | 256            | 278            | 294            | 331            | 341            | 363            |  |
| 12V, 1.15A / C-8, S-8           | 0.150                         | 550                        | —  | 220            | 294            | 342            | 375            | 399            | 453            | 467            | 498            |  |
| 12V, 1.35A / C-8, S-8           | 0.170                         | 642                        | —  | 248            | 336            | 395            | 435            | 464            | 527            | 545            | 581            |  |
| 12V, 2.03A / C-8, S-8           | 0.230                         | 1050                       | —  | —              | 544            | 642            | 709            | 756            | 862            | 890            | 951            |  |
| 12V, 3.05A / C-8, S-11          | 0.310                         | 1500                       | —  | —              | —              | 880            | 976            | 1054           | 1220           | 1264           | 1355           |  |
| 12V, 1.90A / CC-8, S-11         | 0.220                         | 1920                       | —  | —              | 974            | 1207           | 1318           | 1400           | 1583           | 1633           | 1740           |  |
| 12V, 3.00A / CC-8, S-11         | 0.305                         | 2660                       | —  | —              | —              | 1534           | 1727           | 1866           | 2162           | 2241           | 2403           |  |
| 12V, 20W / C-8, T-3.50          | 0.190                         | 1783                       | —  | 660            | 927            | 1097           | 1212           | 1284           | 1462           | 1516           | 1623           |  |
| 12V, 35W / C-8, T-3.50          | 0.290                         | 2986                       | —  | —              | 1403           | 1747           | 1971           | 2120           | 2434           | 2514           | 2702           |  |
| 12V, 50W / C-8, T-3.50          | 0.380                         | 4099                       | —  | —              | —              | 2254           | 2603           | 2828           | 3320           | 3443           | 3689           |  |
| 12V, 75W / C-8, T-3.50          | 0.510                         | 5642                       | —  | —              | —              | —              | —              | 3724           | 4491           | 4683           | 5078           |  |
| 12V, 100W / C-8, T-3.50         | 0.630                         | 7288                       | —  | —              | —              | —              | —              | —              | 5721           | 5976           | 6486           |  |
| 12V, 20W / C-8, T-2.60 HP       | 0.190                         | 2205                       | —  | 816            | 1147           | 1356           | 1499           | 1588           | 1808           | 1874           | 2007           |  |
| 12V, 35W / C-8, T-2.60 HP       | 0.290                         | 3576                       | —  | —              | 1681           | 2092           | 2360           | 2539           | 2914           | 3011           | 3236           |  |
| 12V, 50W / C-8, T-2.60 HP       | 0.380                         | 5356                       | —  | —              | —              | 2946           | 3401           | 3696           | 4338           | 4499           | 4820           |  |
| 12V, 10W / C-8, T-2.60 HG       | 0.120                         | 662                        | —  | 285            | 367            | 422            | 457            | 485            | 549            | 563            | 602            |  |
| *120V, 250W                     | 0.235                         | 5800                       | —  | —              | 2971           | 3506           | 3885           | 4156           | 4751           | 4911           | 5249           |  |

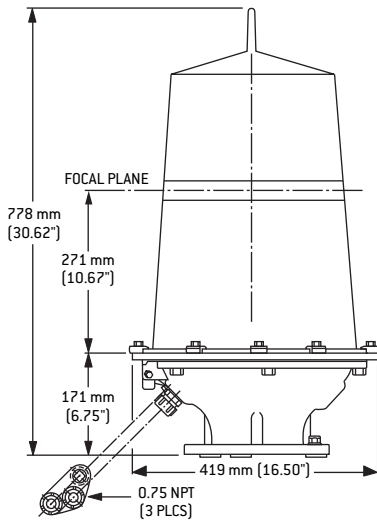
\*Double-contact bayonet base. All other lamps are prefocused single-contact base.

**ML-300 MaxLumina Lantern with Ex Twin-Filament Lamp  
(10-Mile Main Light 40W/40W, 10.3V Lamp)**

| Incandescent<br>Time<br>(sec) | Fixed<br>Intensity<br>(cd) | EFFECTIVE INTENSITY IN CANDELAS – FLASHING WHITE |                |                |                |                |                |                |                |                |  |
|-------------------------------|----------------------------|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--|
|                               |                            | CCT<br>0.4 sec                                   | CCT<br>0.5 sec | CCT<br>0.6 sec | CCT<br>0.7 sec | CCT<br>0.8 sec | CCT<br>0.9 sec | CCT<br>1.0 sec | CCT<br>1.2 sec | CCT<br>2.0 sec |  |
| 0.392                         | 2123                       | 1104   | 1359           | 1465           | 1554           | 1618           | 1677           | 1720           | 1783           | 1921           |  |

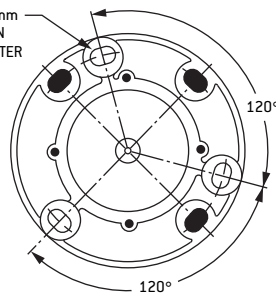
NOTE: For red or green lens, multiply intensity by 0.30; for yellow lens, multiply intensity by 0.65. For lanterns in biform configuration, multiply listed values by two. Lamp limitations apply to UL-listed and EEX-certified models.

Effective Intensity Tables for LED Replacement Light Sources  
can be found on our website at [www.tidelandsignal.com](http://www.tidelandsignal.com)



Weight: 9.1 kg (20 lb)

15.9 mm (0.63") x 25.4 mm (1.00") SLOT 3 PLACES ON 200.2 mm (7.88") DIAMETER BOLT CIRCLE



Bottom View



ATEX Category 2 or 3

ML-300 is available in four versions: General Marine Use (GMU); UL listed for Class I, Division 2, Group D Hazardous Locations; Certified for Zone 1; Ex II 3G.

**TIDELAND SIGNAL CORPORATION  
CORPORATE HEADQUARTERS**

P.O. Box 52430  
Houston, Texas 77052-2430, USA  
4310 Directors Row  
Houston, Texas 77092 USA  
PH: + 1 713-681-6101  
FAX: + 1 713-681-6233  
E-MAIL: [hq@tidelandsignal.com](mailto:hq@tidelandsignal.com)

P.O. Box 52370, O.C.S.  
Lafayette, Louisiana 70505-2370, USA  
PH: + 1 337-269-9113  
FAX: + 1 337-269-9052  
E-MAIL: [lafayettesales@tidelandsignal.com](mailto:lafayettesales@tidelandsignal.com)

TIDELAND SIGNAL CANADA LTD.  
#2170—21331 Gordon Way  
Richmond, B.C., Canada V6W 1J9  
PH: + 1 604-247-0988  
FAX: + 1 604-247-0987  
E-MAIL: [sales@tidelandsignalcanada.com](mailto:sales@tidelandsignalcanada.com)

TIDELAND SIGNAL PTE. LTD.  
Crystal Time Building  
16 Tannery Lane #04-00  
Singapore 347778  
PH: + 65 6333-0078  
FAX: + 65 6333-0079  
E-MAIL: [sales@tidelandsignal.com.sg](mailto:sales@tidelandsignal.com.sg)

TIDELAND SIGNAL LIMITED  
Kendal House  
Victoria Way  
Burgess Hill, Sussex, RH15 9NF, UK  
PH: + 44 (0) 1444 872240  
FAX: + 44 (0) 1444 872241  
E-MAIL: [sales@tidelandsignal.ltd.uk](mailto:sales@tidelandsignal.ltd.uk)

TIDELAND SIGNAL LTD. (UAE)  
FZS1 BB03, JAFZA South  
Jebel Ali Free Zone, Dubai, U.A.E.  
PH: + 971 4-886-0180  
FAX: + 971 4-886-0181  
E-MAIL: [sales@tidelandsignal.ltd.uk](mailto:sales@tidelandsignal.ltd.uk)

WEB SITE: [www.tidelandsignal.com](http://www.tidelandsignal.com)



Tideland Signal Corporation maintains ISO 9001:2000 accreditation. It is company policy to provide products and services that meet the highest standards of quality in the industry.

Membership Organisations



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