



The TOMAR Ladder-2 System features the HELIOBE™ lightbar—the most visible, durable warning light ever devised for public safety use. HELIOBE™ lightbars use TOMAR's NEOBE® technology, providing the look of neon with the power of strobe. The NEOBE® design produces more light per watt than any strobe power supply on the market. Optional traffic preemption mode is available to activate TOMAR STROBECOM 1™ or 3M OPTICOM® systems. The TOMAR Ladder-2 System meets and exceeds all SAE and NFPA 1901-1999 requirements.

**ORDERING INDEX**

Catalog No. LADDER-2

**Material List**

Qty. Item

Zone A

- 2 930N-3203-LS02
- 2 RECT-46WBWP-R

Zone B

- 2 RECT-37SWP-R

Zone C

- 2 RECT-37SWP-R
- 2 824-1228-R

Zone D

- 2 RECT-37SWP-R
- 2 780-1228-WP

**SPECIFICATIONS**

**Clearing the Right of Way**

Zone A	Provided	Required
Upper	1,905,000	1,000,000
Lower	155,000	150,000

Zone B	Provided	Required
Upper	470,000	400,000
Lower	235,000	150,000

Zone C	Provided	Required
Upper	1,460,000	400,000
Lower	255,000	150,000

Zone D	Provided	Required
Upper	470,000	400,000
Lower	235,000	150,000

Average amperage: 43.9

**Blocking the Right of Way**

Zone A	Provided	Required
Upper	595,000	400,000
Lower	190,000	150,000

Zone B	Provided	Required
Upper	435,000	400,000
Lower	305,000	150,000

Zone C	Provided	Required
Upper	1,460,000	800,000
Lower	325,000	150,000

Zone D	Provided	Required
Upper	435,000	400,000
Lower	305,000	150,000

Average amperage: 39.4

**Note:** The photometric data provided is for the complete lighting system. Additional lighting may be added, provided the average amperage draw does not exceed NFPA guidelines of 45 amps for one midship light, 50 amps for two midship lights and 55 amps for three midship lights.

# TOMAR LADDER-2 SYSTEM

## Emergency Fire Apparatus Warning Light System in accordance with NFPA-1901-1999

### System:

Zone Placement	Qty.	Tomar Part #	Description
Zone A - Upper	2	930N-3203-LS02	930N-3203-LS02 Red Lightbar Each Lightbar has 10 Lamps Total - 6 Strobe, 2 Halogen-Flashers, 2 Halogen-Flasher/Strobes as Follows: 1 Clear Halogen-Flasher - Front Center 2 Red Strobes - Front 1 Red Strobe - 45 Degree Front Corner - Driver Side 1 Red Strobe - 45 Degree Front Corner - Passenger Side 1 Red Halogen-Flasher/Strobe - Alley Driver Side 1 Red Halogen-Flasher/Strobe - Alley Passenger Side 1 Amber Halogen-Flasher - Rear Center 2 Red Strobes - Rear 2 925-Flasher-12V Installed in Above Lightbar
Zone C - Upper	2	824-1228-R	824-1228-Red Maxistrobe
Zone A - Lower	2	RECT-46WBWP-R	RECT-46 Wide Beam Red Waterproof Strobe Lamp
Zone B - Lower	2	RECT-37SWP-R	RECT-37S-Red Waterproof Strobe Lamp
Zone C - Lower	2	RECT-37SWP-R	RECT-37S-Red Waterproof Strobe Lamp
Zone D - Lower	2	RECT-37SWP-R	RECT-37S-Red Waterproof Strobe Lamp
	2	780-1228-WP	780-1228 4 Head NEOBE® Waterproof Power Supply

### Operating Description:

The TOMAR Ladder-2 System is operated in the following modes:

For "Clearing the Right of Way"

- Upper Level All of the lamps on the 930N-3203-LS02 Lightbars operating in High Intensity with Front and Rear Halogen-Flasher Takedowns and Alley's operating.  
The 824-1228's operating.
- Lower Level The 780-1228 Power Supplies operating in **Pursuit** (Hyper) Flash Rate, High Intensity.

For "Blocking the Right of Way"

- Upper Level All of the lamps, except for the Front Halogen-Flasher Takedown, on the 930N-3203-LS02 Lightbars operating in High Intensity.  
The 824-1228's operating.
- Lower Level The 780-1228 Power Supplies operating in **Normal** (Neobe) Flash Rate, High Intensity.

Substitutions permissible to the Upper Level warning light system to comply with NFPA standards include but are not limited to the following selections:

1. Red lamps may be substituted with Blue or Amber (if zone permissible).
2. The Lightbar length may be increased to add additional strobes (with additional power supplies as needed) or halogen lamps (with or without 925-Flasher-12V), provided that the additional amperage draw does not exceed NFPA guidelines.
3. The 824-1228-Red may be substituted with either Blue or Amber.
4. The 824-1228 may be substituted with an 840-1228.

Substitutions permissible to Lower Level warning light system to comply with NFPA standards include but are not limited to the following selections:

1. The 780-1228 Power Supplies in the Lower Level may be operated in either Normal or Pursuit Flash Rate.
2. The RECT-37SWP-Red may be substituted with any other zone permissible color(s).
3. The RECT-37SWP-Red may be substituted with a RECT-79SWP-Red or any other zone permissible color(s).
4. The use of Bezels (RECT-37-TSMF and RECT-79-TSMF) on Lower Level optical sources.
5. The RECT-46WBWP-Red may be substituted with a RECT-46WBWP-Blue or any other zone permissible color(s).
6. The RECT-46WBWP's may be substituted with RECT-46NBWP's.
7. The RECT-WBWP's may be substituted with RECT-SWP or RECT-79SWP.
8. The 780-1228 Power Supply operating the Lower Level optical sources may be substituted with any of the following:  
770P-1228 Power Supply 782-1228 Power Supply 772-1228 Power Supply  
776-1228 Power Supply
  - a) May be used to operate RECT-37SWP's and RECT-79SWP's.
  - b) May be used to operate RECT-46WBWP and RECT-46NBWP only in Normal Flash Rate.
- 786-1228 Power Supply
  - a) May be used with RECT-37SWP's, RECT-79SWP's, and RECT-46NBWP's.
  - b) May be used with a pair of RECT-46WBWP-R (in one zone only) if three RECT-37SWP's (note substitutions above) are used in both adjacent zones.