



The TOMAR Ladder-1 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. The TOMAR Ladder-1 System meets and exceeds all SAE and NFPA 1901-1999 requirements.

ORDERING INDEX

Catalog No. LADDER-1

Material List

Qty. Item

Zone A

- 2 930N-2402-LS01
- 1 RECT-46WBWP-R
- 1 RECT-46WBWP-B

Zone B

- 1 RECT-37SWP-B
- 1 RECT-37SWP-R

Zone C

- 1 RECT-37SWP-B
- 1 RECT-37SWP-R
- 1 824-1228-R
- 1 824-1228-B

Zone D

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

SPECIFICATIONS

Clearing the Right of Way

Zone A	Provided	Required
Upper	1,015,000	1,000,000
Lower	235,000	150,000

Zone B	Provided	Required
Upper	600,000	400,000
Lower	355,000	150,000

Zone C	Provided	Required
Upper	810,000	400,000
Lower	380,000	150,000

Zone D	Provided	Required
Upper	490,000	400,000
Lower	355,000	150,000

Average amperage: 30.4

Blocking the Right of Way

Zone A	Provided	Required
Upper	850,000	400,000
Lower	300,000	150,000

Zone B	Provided	Required
Upper	710,000	400,000
Lower	455,000	150,000

Zone C	Provided	Required
Upper	810,000	800,000
Lower	485,000	150,000

Zone D	Provided	Required
Upper	495,000	400,000
Lower	455,000	150,000

Average amperage: 30.4

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-1 SYSTEM

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

System:

<u>Zone Placement</u>	<u>Qty.</u>	<u>Tomar Part #</u>	<u>Description</u>
Zone A - Upper	2	930N-2402-LS01	930N-2402-LS01 Red/Blue Lightbar Each Lightbar has 8 Strobe Lamps Total, as Follows: 1 Red Strobe - Front Driver Side 1 Blue Strobe - Front Passenger Side 1 Clear Strobe - 45 Degree Front Corner - Driver Side 1 Clear Strobe - 45 Degree Front Corner - Passenger Side 1 Red Strobe - Alley Driver Side 1 Blue Strobe - Alley Passenger Side 1 Red Strobe - Rear Driver Side 1 Blue Strobe - Rear Passenger Side
Zone C - Upper	1	824-1228-R	824-1228-Red Maxistrobe
	1	824-1228-B	824-1228-Blue Maxistrobe
Zone A - Lower	1	RECT-46WBWP-R	RECT-46 Wide Beam Red Waterproof Strobe Lamp
	1	RECT-46WBWP-B	RECT-46 Wide Beam Blue Waterproof Strobe Lamp
Zone B - Lower	1	RECT-37SWP-R	RECT-37S Red Waterproof Strobe Lamp
	1	RECT-37SWP-B	RECT-37S Blue Waterproof Strobe Lamp
Zone C - Lower	1	RECT-37SWP-R	RECT-37S Red Waterproof Strobe Lamp
	1	RECT-37SWP-B	RECT-37S Blue Waterproof Strobe Lamp
Zone D - Lower	1	RECT-37SWP-R	RECT-37S Red Waterproof Strobe Lamp
	1	RECT-37SWP-B	RECT-37S Blue Waterproof Strobe Lamp
	2	780-1228-WP	780-1228 4 Head NEOBE® Waterproof Power Supply

Operating Description:

The TOMAR Ladder System 1 is operated in the following modes:

For "Clearing the Right of Way"

- Upper Level All of the lamps on the 930N-2402-LS01 Lightbars operating in High Intensity.
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 Clear corners, on the 930N-2402-LS01 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 and the 800-1228-Blue may be substituted with 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-Blue may be substituted with a RECT-46WBWP-Red 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 782-1228
772-1228 786-1228
776-1228

