Rubidium

CABLE SUSPENDED (CS)

EXTRUDED ALUMINUM HOUSING PREMIUM LEDS WITH VARIOUS COLOR TEMPERATURES AND LIGHT OUTPUT HIGH EFFICACY REFLECTOR 2-1/2 "LIGHT STREAM" SIDE LIGHT OR LINEAR DETAIL MACHINED END CAPS SOFT GLOW FROSTED LENS

FEATURES:

- Powered Suspension System No power cord
- High transmission frosted lenses with no diode imaging
- No visible fasteners
- · Extruded aluminum housing
- Dimmable/Programmable drivers for controllable light output
- High efficacy LEDs with 5 year warranty
- Under 2 steps MacAdams Ellipse Binning
- 3/8" thick machined end caps
- Bi-directional fixture
- \bullet 360° rotation option- with mechanical locking
- Unique "light stream" side light detail

NOTES:

- REQUIRES REMOTE DRIVER(S) (see page 4 for more info)
- Continuous Run requires the rotational option







PRODUCT SPECIFICATION _

NOTE: All options italicized in gray may increase lead times and/or incur higher costs - please consult factory with questions.

| FIXTURE TYPE Rb2 | | OUNTING/ RIENTATION | | NOMINAL LENGTH* | COLOR TEMP | | DIRECT PO | ORIVI WER | INDIRECT* | V | OLTAGE | | DRIVER | | HOUSING FINISH |
|-------------------|--------|---|--|--|---|-------|---|------------------------------|---|-----|-------------------------|-----------------------------------|--|----------------|--|
| Rb2 Rubidium 2 | CS CSD | Cable Suspended - BI-DIRECTIONAL Cable Suspended - DIRECT ONLY Cable Suspended - ROTATIONAL | 2' 3' 4' 5' 6' 7' 8' CR' *Dimen referent factory shop dr **Odd I higher pr | (Specify length in nominal feet)*** usions are for the only. Contact for specific info or awings. lengths may incur per foot pricing. | 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K | SO HO | O Very Low Output 300 lumens/ft. (4w/ft.) Low Output 450 lumens/ft. (6w/ft.) Standard Output 590 lumens/ft. (8w/ft.) High Output 740 lumens/ft. (10w/ft.) Very High Output 860 lumens/ft. (12w/ft.) Custom Power Output Consult factory | LO SO HO VHO CPO | Very Low Output 455 lumens/ft. (4w/ft.) Low Output 690 lumens/ft. (6w/ft.) Standard Output 900 lumens/ft. (8w/ft.) High Output 1,130 lumens/ft. (10w/ft.) Very High Output 1,315 lumens/ft. (12w/ft.) Custom Power Output Consult factory | UNV | Universal (120-277v) | 10D 1D LTEA LDE1 LDE5 | Non-Dimming - 0-10v DIMMING — 10% DIM 1% DIM LUTRON — Lutron Hi-Lume 1% (2-Wire) Lutron EcoSystem 1% "Soft on" (Digital) Lutron EcoSystem 5% 5-Series (Digital) DALI Digital Addressable Lighting Interface | SW MB CF | (Powder Coat) Matte Black (Powder Coat) Custom Finish* (Consult factory) |
| | | | | ntinuous Run s rotational option | | | | | Applicable with CSD option. F ONLY. | | | | | *RAL avail | and color match are able. |

| | RDWARE* | | DRIVER SING FINISH | | CANOPY SIZE OPTIONS* | CANOPY FINISH | HTSTREAM LOR/FINISH | PO | WER CORD COLOR | | AIRCRAFT BLE LENGTH* | | OPTIONS/ CUSTOMIZATION* |
|--|--|----------|--|--------------------------------------|---|--|--------------------------------|-----|--|-------------|---|-------------------------------------|--|
| NOTE: option recom Other result costs a longer | Machined Finish (Standard) Custom Finish (Consult factory) The MF is strongly mended. options will in higher in higher lead times. dware" refers | SW SB | Mill Aluminum* Satin Clear Satin White Satin Black Custom Finish (Consult factory) | 52 50 | 5" Power feed canopy 5" Non-power feed canopy 5" Power feed canopy 2" Non-power feed canopy 5" Power feed canopy Canopy only at power feed | CANOPY SW Satin White (Standard) CPC Custom Powder Coat canopy finish* CANOPY MF Machine Finish (Standard) SW Satin White CF Custom Finish* *Just about any finish is | Clear Frost Custom Color | w | | 4 6 8 | 2' 4' 6' 8' Custom Length Specify in feet (IE: CL10 for 10') Consult factory to confirm specification | EMB7 EMB12 90 CD CR DUAL *Consult f | No EMB or Customization 7 Watt battery back-up** (Approximately 600 lumens) 12 Watt battery back-up** (Approximately 1,000 lumens) 90+ CRI LED BOARDS (2700K - 4000K only) Custom Driver* Customization Requested* Dual switching/dimming actory for all custom options or need requests. |
| | ional" | *Mos | it cost effective. | 55 " (FACT *See | NTINUOUS RUNS REQUIRE THE OR THE 44" OPTION. CONSULT FORTY WITH QUESTIONS. options section and installation uctions for more information. | possible. For the 4" machined canopies, MF is strongly recommended. Contact the factory with questions or requests. | | **0 | nsult factory. nly available Continuous Runs | | oles are field stable. | NOTE: Cus and/or inc **The EM | tomization may incur higher costs reased lead times. B12 is slightly more expensive MB7 option (BOTH OPTIONS ARE |

SPECIFICATION INFORMATION _

GENERAL NOTES:

All fixtures are **UL listed** for **dry** and **damp** locations. **REMOTE DRIVER** for all options.

Please contact the factory with any specification questions. Italicized grayed out options may incur additional costs and/or extended lead times. Please consult the factory.

FIXTURE ORIENTATION:

Bi-directional (CS) for downlight and uplight applications. Direct (CSD) for ONLY downlight applications.
Rotational (CSR) for adjustable applications: 360 degree rotational capacity with locking mechanism.

DRIVER: [REMOTE]

1) NON-DIMMING: As described... this fixture will not dim.

2) DIMMING: 0-10v: 1%, 10% :: Lutron: 2-wire Forward phase (Hi-Lume 1%), Ecosystem to 1% (Soft On), Ecosystem to 5% (5 Series). "DALI" - Specify driver. See "Dimming Options" on subsequent pages for more information. For other dimming options, consult the factory. 3) EMERGENCY: Specify EMB under the Options/Customization category at the end of the cut sheet along with the desired lumen output (600 or 1,000 lumens - the latter is slightly more costly).

4) Drivers are programmed according to our standard lumen packages or to custom watt/lumen package requirements.

5) Consult factory with any questions or specification requirements.

FINISHES:

The standard finish is a Satin Clear anodized housing with Machine Finished hardware. Machined finish is preferable for machined components (Hardware Detail)- Powder coating these parts may result in additional costs. Consult the factory with any questions about standard or custom finishing options.

CUSTOMIZATION:

We have numerous custom options available. However, if there is something unique required for a project, from simple options to complete custom requests, we are more than willing to entertain any creative notions you might have. Just ask



Rubidium

ROTATIONAL ARM MOUNT (RAM)

EXTRUDED ALUMINUM HOUSING PREMIUM LEDS WITH VARIOUS COLOR TEMPERATURES AND LIGHT OUTPUT HIGH EFFICACY REFLECTOR "LIGHT STREAM" SIDE LIGHT OR LINEAR DETAIL MACHINED END CAPS SOFT GLOW FROSTED LENS

FEATURES:

- 5/8" diameter rigid tube mounting system
- · High transmission frosted lenses with no diode imaging
- No visible fasteners
- · Extruded aluminum housing
- Dimmable/Programmable drivers for controllable light output
- High efficacy LEDs with 5 year warranty
- Under 2 steps MacAdams Ellipse Binning
- 3/8" thick machined end caps
- Bi-directional fixture
- $\bullet~360^{\circ}$ rotation option- with mechanical locking
- Unique "light-stream" side light detail

NOTES:

• **REQUIRES REMOTE DRIVER(S)** (see page 4 for more info)







PRODUCT SPECIFICATION _

NOTE: All options italicized in gray may increase lead times and/or incur higher costs - please consult factory with questions.

| FIXTURE TYPE Rb2 | MOUNTING RAM | NOMINAL LENGTH* | COLOR TEMP | DIRECT POV | DRIVE VER INDIRECT | VOLTAGE | DRIVER | HOUSING FINISH |
|-------------------|--------------------------------|---|---|---|---|-----------------------------|---|---|
| Rb2 Rubidium 2 | RAM Rotational Arm Mount | 1' 1' 1-3/8"** 2' 2' 1-3/8" 3' 3' 1-3/8"** 4' 4' 1-3/8" 5' 5' 1-3/8"** 6' 6' 1-3/8" 7' 7' 1-3/8"** 8' 8' 1-3/8" CR' Continuous Run (Specify length in nominal feet) | 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K | VLO Very Low Output 300 lumens/ft. (4w/ft.) Low Output 450 lumens/ft. (6w/ft.) SO Standard Output 590 lumens/ft. (8w/ft.) HO High Output 740 lumens/ft. (10w/ft.) VHO Very High Output 860 lumens/ft. (12w/ft.) CPO Custom Power Output Consult factory | VLO Very Low Output 455 lumens/ft. (4w/ft.) LOW Output 690 lumens/ft. (6w/ft.) SO Standard Output 900 lumens/ft. (8w/ft.) HO High Output 1,130 lumens/ft. (10w/ft.) VHO Very High Output 1,315 lumens/ft. (12w/ft.) CPO Custom Power Output Consult factory | UNV Universal (120-277v) | ND Non-Dimming | SC Satin Clear Anodize (Standard) SW Satin White (Powder Coat) MB Matte Black (Powder Coat) CF Custom Finish* (Consult factory) |
| | | *Dimensions are for reference only. Contact factory for specific info or shop drawings. **Odd lengths may incur higher per foot pricing. | | | | | DALI Digital Addressable Lighting Interface | *RAL and color match are available. |

| MF Machined Finish (Standard) CF Custom Finish (Consult factory) NOTE: The MF option is strongly recommended. Other options | MA Mill Aluminum* | CF Clear Frost CC Custom Color 1 | ARM LENGTH* 3 3" 6 6" 9 9" 12 12"** 18 18"** AL Custom Arm Length- Consult foctory | MOUNTING/ COVER PLATE COVER PLATE Cover Plate - For use with a 3-0 mud ring 1TR 1" Trim Ring - for use when mounting to finished surface IE. furniture NCP No Cover Plate CCP Custom Cover Plate (Consult factory) | OPTIONS/ CUSTOMIZATION XX No EMB or Customization EMB7 7 Watt battery back-up** (Approximately 600 lumens) 12 Watt battery back-up** (Approximately 1,000 lumens) 90 90+ CRI LED BOARDS (2700K - 4000K only) CD Custom Driver* CR Customization Requested* DUAL Dual switching/dimming | PRECISION MACHINED | |
|---|-------------------|---|---|---|---|--------------------|------|
| option is strongly recommended. | (Consult | mea the surf cent fixtu **Li | Consult | CCP Custom Cover Plate | | | TION |

SPECIFICATION INFORMATION_

GENERAL NOTES:

All fixtures are **UL listed** for **dry** and **damp** locations. **REMOTE DRIVER** for all options.

Please contact the factory with any specification questions. *Italicized grayed* out options may incur additional costs and/or extended lead times. Please consult the factory.

DRIVER: [REMOTE]

1) NON-DIMMING: As described... this fixture will not dim.

2) DIMMING: 0-10v: 1%, 10% :: Lutron: 2-wire Forward phase (Hi-Lume 1%), Ecosystem to 1% (Soft On), Ecosystem to 5% (5 Series). "DALI"- Specify driver. See "Dimming Options" on subsequent pages for more information. For other dimming options, consult the factory. 3) EMERGENCY: Specify EMB under the Options/Customization category at the end of the cut sheet along with the desired lumen

category at the end of the cut sheet along with the desired lumen output (600 or 1,000 lumens - the latter is slightly more costly).

4) Drivers are programmed according to our standard lumen

packages or to custom watt/lumen package requirements.
5) Consult factory with any questions or specification requirements.

FINISHES:

The standard finish is a Satin Clear anodized housing with Machine Finished hardware. Machined finish is preferable for machined components (Hardware Detail)- Powder coating these parts may result in additional costs. Consult the factory with any questions about standard or custom finishing options.

CUSTOMIZATION:

We have numerous custom options available. However, if there is something unique required for a project, from simple options to complete custom requests, we are more than willing to entertain any creative notions you might have. Just ask.



Rubidium ₂ LED

LED COMPONENT INFORMATION

- Fixture delivered light potential: 95 Lumens/Watt*
- Uniform light distribution
- 90+ CRI LED diode options
- Exceptional binning- less than 2 step MacAdams Elipse
- Minimum 70% initial lumen output at 70,000 hours
- Standard 0-10v dimming to %10
- Lutron, Eldoled, Dali, and other dimming options
- 5 year system warranty

*Actual fixture efficacy will be dependent on specification. Higher lumens per watt are achieved with lower drive powers. Please contact the factory with questions or for

LUMEN OUTPUT*

LUMEN OUTPUT (PER FOOT)

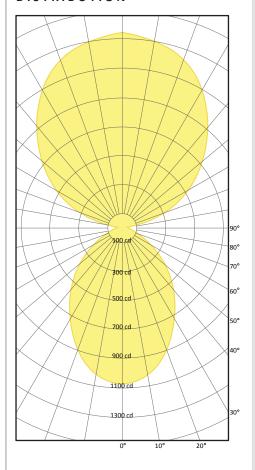
| DRIVER | DIR | ECT—— | INDIRECT | | | |
|-----------|---------|--------|----------|--------|--|--|
| OUTPUT | WATTAGE | LUMENS | WATTAGE | LUMENS | | |
| VERY LOW | 4 | 300 | 4 | 455 | | |
| LOW | 6 | 450 | 6 | 690 | | |
| STANDARD | 8 | 590 | 8 | 900 | | |
| нібн | 10 | 740 | 10 | 1,130 | | |
| VERY HIGH | 12 | 860 | 12 | 1,315 | | |

PER 4' FIXTURE (TOTAL DELIVERED LUMENS)

| DRIVER | DIR | ECT—— | INDIRECT | | | |
|-----------|---------|--------|----------|--------|--|--|
| OUTPUT | WATTAGE | LUMENS | WATTAGE | LUMENS | | |
| VERY LOW | 16 | 1,200 | 16 | 1,820 | | |
| LOW | 24 | 1,800 | 24 | 2,760 | | |
| STANDARD | 32 | 2,360 | 32 | 3,600 | | |
| HIGH | 40 | 2,960 | 40 | 4,520 | | |
| VERY HIGH | 48 | 3,440 | 48 | 5,260 | | |

- VERY LOW: Considerably underdrives the LEDs to maximize fixture efficacy potential and limit wattage use.
- LOW: Underdrives the LEDs for reasonable light output while maintaining low wattage use.
- STANDARD: Drives the LEDs for the best combination of lumen output and fixture efficacy.
- HIGH: Drive the LEDs at higher capacity for highest lumen output with good efficacy.
- VERY HIGH: Drives the LEDs at the highest capacity for the highest lumen output with the best efficacy.

LUMINOUS INTENSITY DISTRIBUTION



FIXTURE PROPERTIES (AS TESTED)

- 4' nominal length fixture
- Standard Output (SO)
- Total system energy consumption: 64 Watt
- 95 Lumens/Watt
- 4000K 80 CRI LED

ZONAL LUMEN SUMMARY

| ZONE | LUMEN | %LAMP | %FIXTURE |
|----------|-------|-------|----------|
| 0 - 30 | 1,109 | 12.1% | 15.3% |
| 0 - 40 | 1,804 | 19.6% | 24.8% |
| 0 - 60 | 3,121 | 34% | 43% |
| 0 - 90 | 3,908 | 42.5% | 53.8% |
| 90 - 120 | 618 | 6.7% | 8.5% |
| 90 - 150 | 2,313 | 25.2% | 31.8% |
| 90 - 180 | 3,367 | 36.6% | 46.3% |
| 0 - 180 | 7,265 | 79.1% | 100% |













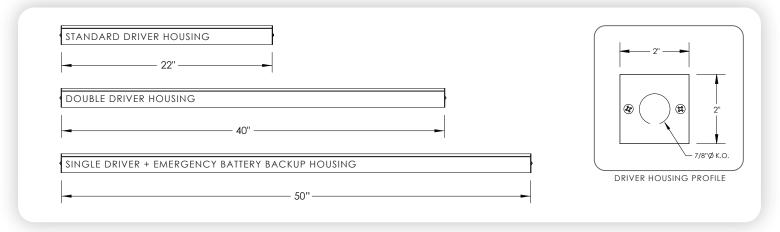
^{*}Lumen output will vary depending on ambient temperature. Cooler ambient and LED color temperatures result in higher luminaire performance. Calculations are based on 3500K LEDs.

REMOTE DRIVER HOUSING INFORMATION

REMOTE DRIVER HOUSING SIZES.

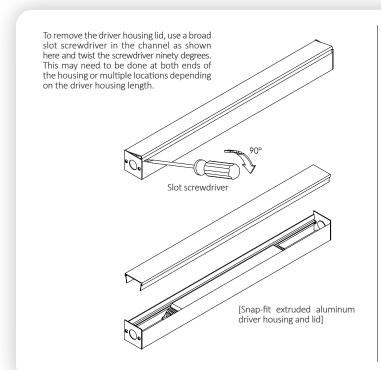
The driver housing length is typically dictated by the options selected. Standard driver housing lengths are as shown. Non standard driver requests may increase or decrease the driver housing length. Specifications are subject to change without notice. Consult factory with questions, requests, or size limitations and we will do our best to accommodate your needs.

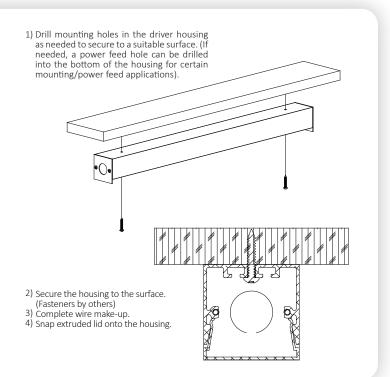




INSTRUCTIONS

See below for lid removal and installation instructions.





FINISHES

Mill Aluminum (MA) is the standard finish. Satin White and Satin Black powder coat and Satin Clear anodized finishes can be done for a small charge. Custom finishes are possible. Contact the factory for specific finish options, specific requests, RAL colors, or any other questions.



Satin White (SW) (Upgrade finish)





Custom Finish (CF)



NOTES

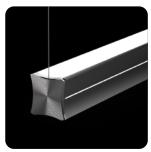
Other options are possible. Please contact the factory with custom requests.



OPTIONS GUIDE

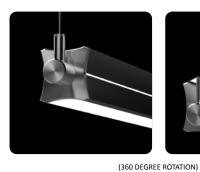
MOUNTING





CABLE SUSPENDED (CS)

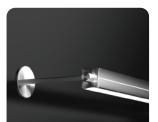
Powered Suspension System. Rubidium 2 (Rb2) can be static down-light and up-light: Bi-Directional (CS), only static down-light: Direct Only (CSD), or Rotational (see below). Standard and custom power cord finishes, sleeve options, and canopy colors offer options to match almost any space. Stainless steel cables come in various lengths (4' is standard) and are field adjustable.





CABLE SUSPENDED ROTATIONAL (CS-R)

Using a similar setup to the Cable Suspended system above, the Cable Suspended-Rotational system has 360 degree rotational capacity with mechanical fasteners to lock fixtures in place if desired. This system offers incredible flexibility, light direction control, and a dynamic aesthetic.





(360 DEGREE ROTATION)

ROTATIONAL ARM MOUNT (RAM)

This system uses 5/8" diameter aluminum arms and subtle details in combination with a 360 degree rotational capacity to create some of the most versatile linear fixtures in the architectural market. Standard mounting uses 3-0 mud rings (supplied by others) or a 1" optional trim ring for furniture mounted applications. Engineered with no visible fasteners, smooth rotation, and mechanical locking, the RAM system reveals an impressive aesthetic with exceptional versatility.



OPTIONS GUIDE

CONTINUOUS RUN

Continuous runs are available with all fixtures and have several connection options. Single Seam continuous run options offer smooth section transitions while Component Seams lend to a more dramatic visual statement. The 360 Rotational option enables individual sections to rotate independently of each other, which offers adjustable asymmetric light distribution capacity along with striking appearances such as alternating up/down fixtures or spiral transitions. The flexibility within the rotational option makes for infinite design and functional possibilities.



CONTINUOUS RUN ROTATIONAL (SPIRAL EFFECT)



CONTINUOUS RUN ROTATIONAL



RUBIDIUM 2 (Rb2) WITH A ROTATIONAL CONTINUOUS RUN

CANOPIES.

55

STANDARD

Canopies have several standard options to suit various environment aesthetics. The standard cable suspension system has 5" Satin White canopies. However, other standard options include a 2" non-power feed canopy option as well as no canopy at all. Both of these include a 5" diameter power feed canopy.





5" diameter power feed and 5" diameter non-pow feed canopy. Most common canopy layout. Creates a consistent ceiling aesthetic.





5" diameter power feed and 2" diameter non-power feed canopy. Offers a more minimal ceiling treatment while maintaining the ability to cover up mistakes. Requires a 1/4-20 stud securely fastened to the ceiling.





5" diameter power feed canopy and no canopy on the non-power feed side. Minimal aesthetic. Requires a 1/4-20 stud securely attached to ceiling. Works well with continuous runs where the power can be carried inside the fixture.

MACHINED

Machined canopies are 4" in diameter and can be anodized as well as powder coated to match a desired color or they can be left with a mill finish for a more striking look. Similar non-power feed options are available with this aesthetic as well. These options do carry a higher cost than standard canopies, but also have an impressive appearance.





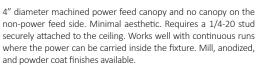
4" diameter machined power feed and 4" diameter machined non-power feed canopy. Offers a consistent ceiling aesthetic with smaller machined canopies. Mill, anodized, and powder coat finishes available.





4" diameter machined power feed and 1-1/4" diameter machined non-power feed canopy. Offers minimal ceiling treatment while maintaining the ability to cover mistakes. Requires a 1/4-20 stud securely fastened to the ceiling, Mill, anodized, and powder coat finishes available.





CUSTOM

Custom canopies options are available and can look spectacular in certain applications. Contact the factory with all custom requests or with any questions.



CUSTOM POWDER COAT



CUSTOM ANODIZE

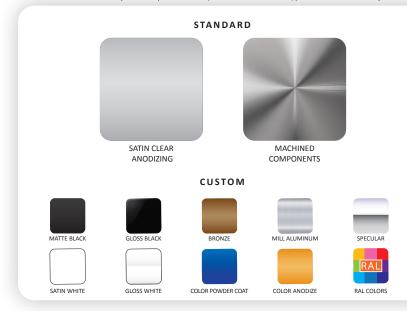


CUSTOM SHAPE

OPTIONS GUIDE

COLOR AND FINISH.

Standard finish configurations are Satin Clear (SC) housing with Machined Finish (MF) machined components (end caps, knuckles, cover plates, etc.). The incredibly clean detail within all of the machined components lends to an incredibly high end aesthetic with two tone finish. Numerous custom anodizing and powder coated finishes are available as well. If you have a particular color/finish treatment in mind, please contact the factory and we will do our best to accommodate your project needs.



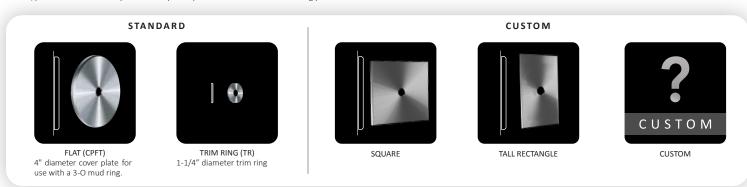


THALLIUM 2 (Th2)

Cable Suspended Rotational mount system with two-tone finish, Satin Clear housing and Machined Finish components.

COVER PLATES

Cover plates are standard for Rotational Arm Mounting (RAM) Systems. Standard options are Flat (FT), Curved (CV), or Trim Ring (TR). With certain applications, cover plates or trim rings may not be necessary. Contact factory with questions or for more information. Custom cover plates are also available. If a certain aesthetic is desired, please contact the factory to review any concepts and we will do our best to bring your vision to life.



LIGHTSTREAM

Lightstream is our unique 1/16" aperture lens that creates a striking light accent. Clear Frost (CF) is standard, but colored gels can be utilized to create custom color Lightstream accents. In addition, matching or two-tone metal accents can be used in lieu of an emissive lens. Please contact the factory or your local rep agency with any questions, color requests, or for specification assistance.



