FOCUS OPTICS TECHNOLOGY 90 (F.O.T.®) Specification Sheet

F.O.T.® 90 is a collection of high performance precision optics distinguished by its industry leading size to efficacy ratio and ability to seamlessly interconnect. F.O.T.® 90 allows for surface mount solutions for beam control in wall washing, grazing, spot and asymmetric distributions for limitless design scenarios.

**ELECTRICAL**

<table>
<thead>
<tr>
<th>Input Voltage</th>
<th>24VDC</th>
</tr>
</thead>
</table>
| Dimming Options     | • PURE DC™  
|                     | • 0-10V  
|                     | • DMX  
|                     | • Lutron (2-WIRE, 3-WIRE, EcoSystem) |
| Power Consumption   | 9 Watts per foot |
| Wire Size           | 18AWG, 2 wire |
| Certification       | ETL - Conforms to UL Std. 2108; Certified to CSA Std. C22.2 No. 9.0; Title 24 - All models are JA8 2016 compliant when used with 0-10V, DMX, Lutron A-Series 2-Wire or Lutron Premier dimming. |

**PHYSICAL**

<table>
<thead>
<tr>
<th>Standard Lengths</th>
<th>6.00&quot; (152.40mm), 12.00&quot; (304.80mm), 24.00&quot; (609.60mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature</td>
<td>-20°C (-40°F) to +50°C (+122°F)</td>
</tr>
<tr>
<td>Environment</td>
<td>Indoor</td>
</tr>
<tr>
<td>Maximum Run Length</td>
<td>10.00'</td>
</tr>
</tbody>
</table>
| Dimensions          | Width: 0.72"(18.40mm)  
|                     | Height:  
|                     | Asymmetric: 0.38"(9.60mm)  
|                     | Narrow: 0.35"(9.00mm)  
|                     | Oval Grazing: 0.32"(8.30mm) |
| Optics              | Asymmetric  
|                     | Narrow: 15"x15" Distribution  
|                     | Oval Grazing: 20"x45" Distribution |

**LUMEN OUTPUT**

<table>
<thead>
<tr>
<th>Voltage</th>
<th>ASYMMETRIC</th>
<th>NARROW</th>
<th>OVAL GRAZ.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2700K</td>
<td>608.00 lm/ft</td>
<td>628.00 lm/ft</td>
<td>599.00 lm/ft</td>
</tr>
<tr>
<td>3000K</td>
<td>645.00 lm/ft</td>
<td>674.00 lm/ft</td>
<td>660.00 lm/ft</td>
</tr>
<tr>
<td>3500K</td>
<td>748.00 lm/ft</td>
<td>782.00 lm/ft</td>
<td>766.00 lm/ft</td>
</tr>
</tbody>
</table>

Note: Stated lumen values have a tolerance of +/- 10%.

**PERFORMANCE**

<table>
<thead>
<tr>
<th>CRI</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lumen Maintenance</td>
<td>50,000 Hours L70 at 25°C ambient</td>
</tr>
<tr>
<td>Binning Tolerance</td>
<td>+/- 60K</td>
</tr>
<tr>
<td>Warranty</td>
<td>5 years</td>
</tr>
</tbody>
</table>

**ACCESSORIES**

<table>
<thead>
<tr>
<th>Channel</th>
<th>Optic Arts® Channel (pg. 3-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Feed Connector</td>
<td>FOT-PFC (pg. 5)</td>
</tr>
<tr>
<td>Jumper, 4&quot;</td>
<td>FOT-J04 (pg. 6)</td>
</tr>
<tr>
<td>Jumper, 12&quot;</td>
<td>FOT-J12 (pg. 6)</td>
</tr>
</tbody>
</table>

**SERIES OPTICS COLOR**

| FOT     | AS = Asymmetric  
|         | NA = Narrow  
|         | OG = Oval Grazing |
| VOLTAGE | 24 = 24 VDC  
| WATTAGE | 90 = 9.0W |
| CONFIGURATION | FLC1 = FLEX Config 1  
|               | FLC2 = FLEX Config 2  
|               | FLC3 = FLEX Config 3 |
| LENGTH   | XX = Custom Length (6 Increments) |
| JA8      | Y = Yes  
|          | N = No |

Note: All models are JA8 when used with 0-10V, DMX, Lutron A-Series 2-Wire or Lutron Premier dimming. (Only available in configuration 3)

1: JA8 when used with 0-10V, DMX, Lutron A-Series 2-Wire or Lutron Premier dimming. (Only available in configuration 3)
FOCUS OPTICS TECHNOLOGY 90 (F.O.T.®) Specification Sheet

DIMENSIONS & OPTICS

- Due to the nature of the F.O.T.® product, run lengths may not fall exactly on specified length. In this case, Optic Arts® will always provide length to the smaller dimension unless otherwise specified.
- Unless otherwise specified, 1.00” per power feed is added to channel length.
- Some on-site assembly required. See installation guides for details.

Note: Supplied in 6”, 12”, 24” sizes. Field connected up to 10’ max.

Asymmetric

Narrow - 15°x15° Distribution

Oval Grazing - 20°x45° Distribution

DIMENSIONS

- Width: 0.72” (18.40mm), Asymmetric: 0.38” (9.60mm), Narrow: 0.35” (9.00mm), Oval Grazing: 0.32” (8.30mm).
- Height
- Standard Lengths: 6.00”, 12.00”, 24.00”
- Pitch Length: 0.86” (21.85mm)
- Max Run Length: 10.00’ (3048.00mm)

Beam angle

- Asymmetric: 97.9°
- Oval Grazing: 43.6°
- Narrow: 14°
**FOCUS OPTICS TECHNOLOGY 90 (F.O.T.®)** Specification Sheet

**MOUNTING OPTIONS - CHANNEL**

CH-FOT-SH-SF-SS

Anodized aluminum channel designed to fit Optic Arts® F.O.T.®.

**DIMENSIONS**

| CH-FOT-SH-SF-SS | A: 0.91" (23.10mm) | B: 0.44" (11.13mm) | C: 0.73" (18.55mm) |

**ACCESSORIES**

<table>
<thead>
<tr>
<th>Description</th>
<th>Material</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH-FOT-SH-SF-EC</td>
<td>End Cap</td>
<td>Channel: 7.00’</td>
</tr>
<tr>
<td>CH-MC</td>
<td>Mounting Clip</td>
<td></td>
</tr>
<tr>
<td>CH-MC-R</td>
<td>Rotating Mounting Clip</td>
<td></td>
</tr>
<tr>
<td>CH-FOT-SCREW</td>
<td>F.O.T. Mounting Screw</td>
<td></td>
</tr>
<tr>
<td>CH-PD-KIT</td>
<td>Pendant Kit</td>
<td></td>
</tr>
<tr>
<td>CH-AB-STA</td>
<td>Straight Aligner Bracket</td>
<td></td>
</tr>
<tr>
<td>CH-AB-90F</td>
<td>90 Degree Flat Aligner Bracket</td>
<td></td>
</tr>
<tr>
<td>CH-AB-90R</td>
<td>90 Degree Raised Aligner Bracket</td>
<td></td>
</tr>
</tbody>
</table>

**FINISH**

- Satin Silver
- Deep Bronze Anodized*
- Matte Black Anodized*
- White Powder Coat*
- Blue Powder Coat*
- Red Powder Coat*
- Gray Powder Coat*
- Chrome*
- Custom RAL Powder Coat*

*Special order finishes may increase order lead time and incur an added cost.
Anodized aluminum channel designed to fit Optic Arts® F.O.T.®.

### PHYSICAL

<table>
<thead>
<tr>
<th>Description</th>
<th>Deep channel for Narrow &amp; Oval Grazing F.O.T.®.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>Anodized Aluminum</td>
</tr>
<tr>
<td>Lens Cover</td>
<td>Polycarbonate</td>
</tr>
<tr>
<td>Length</td>
<td>Channel: 7.00'</td>
</tr>
</tbody>
</table>

### ACCESSORIES

<table>
<thead>
<tr>
<th>CH-MD-LN-FL-CC</th>
<th>Clear Flat Lens</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH-FOT-TL-SF-EC</td>
<td>End Cap (0.625&quot; added length)¹</td>
</tr>
<tr>
<td>CH-FOT-TL-SF-ECH</td>
<td>End Cap w/ hole (0.625&quot; added length)¹</td>
</tr>
<tr>
<td>CH-MC</td>
<td>Mounting Clip</td>
</tr>
<tr>
<td>CH-MC-R</td>
<td>Rotating Mounting Clip</td>
</tr>
<tr>
<td>CH-FOT-SCREW</td>
<td>F.O.T. Mounting Screw</td>
</tr>
<tr>
<td>CH-PD-KIT</td>
<td>Pendant Kit</td>
</tr>
<tr>
<td>CH-AB-STA</td>
<td>Straight Aligner Bracket</td>
</tr>
<tr>
<td>CH-AB-90F</td>
<td>90 Degree Flat Aligner Bracket</td>
</tr>
<tr>
<td>CH-AB-90R</td>
<td>90 Degree Raised Aligner Bracket</td>
</tr>
</tbody>
</table>

¹: Endcaps add 1.25" to total length of fixture.

### FINISH

- Satin Silver
- Deep Bronze Anodized* 
- Matte Black Anodized* 
- White Powder Coat* 
- Blue Powder Coat* 
- Red Powder Coat* 
- Gray Powder Coat* 
- Chrome* 
- Custom RAL Powder Coat* 

*Special order finishes may increase order lead time and incur an added cost.
FOCUS OPTICS TECHNOLOGY 90 (F.O.T.®) Specification Sheet

MOUNTING OPTIONS

MOUNTING CLIP

<table>
<thead>
<tr>
<th>CH-MC</th>
<th>CH-FOT-SH-SF-SS</th>
<th>CH-FOT-TL-SF-SS</th>
</tr>
</thead>
</table>

ROTATING MOUNTING CLIP

<table>
<thead>
<tr>
<th>CH-MC-R</th>
<th>CH-FOT-SH-SF-SS</th>
<th>CH-FOT-TL-SF-SS</th>
</tr>
</thead>
</table>

PENDANT

<table>
<thead>
<tr>
<th>CH-PD-KIT</th>
<th>CH-FOT-SH-SF-SS</th>
<th>CH-FOT-TL-SF-SS</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>CHANNEL TYPE</th>
<th>DIMENSIONS W/CLIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH-FOT-SH-SF-SS</td>
<td>H: 1.07&quot; (27.38mm); W: 1.44&quot; (36.58mm)</td>
</tr>
<tr>
<td>CH-FOT-TL-SF-SS</td>
<td>H: 1.67&quot; (42.41mm); W: 1.44&quot; (36.58mm)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHANNEL TYPE</th>
<th>SUSPENSION HEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH-FOT-SH-SF-SS</td>
<td>Up to 3' (914.40mm)</td>
</tr>
<tr>
<td>CH-FOT-TL-SF-SS</td>
<td>Up to 3' (914.40mm)</td>
</tr>
</tbody>
</table>

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ALIGNER OPTIONS

Compatible Channel: Tall

STRAIGHT

INSIDE/OUTSIDE CORNERS

FLAT CORNERS

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6 of 14
ACCESSORIES

6" POWERFEED CONNECTOR

FOT-PFC

4" JUMPER

FOT-J04
Only available with CH-FOT-SH-SF-SS

12" JUMPER

FOT-J12
Only available with CH-FOT-SH-SF-SS

F.O.T.® MOUNTING SCREW

CH+FOT-SCREW

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CONFIRMATION TYPES

1. F.O.T. Boards, Channel uncut for field cutting
   - Specify Config-1
   - Specify F.O.T. type and channel type
   - One power feed per F.O.T. run
   - Channel shipped uncut for field cutting.
   - JA8 2016 not available in Config-1
   - Config-1 is quick ship if run lengths are provided at time of order. Take offs, if needed, will add lead time.

2. Cut To Length With Soldered Leads, Assemble On-Site 1, 2, 3
   - Specify FLEXConfig-2
   - Specify FLEX type and channel type
   - Specify run lengths
   - IP68 only available in FLEXConfig-2
   - If no config is specified, and run lengths are provided, FLEXConfig-2 will be used

3. Pre-Assembled Factory Finished Fixtures 1
   - Specify Config-3
   - Fully assembled fixture
   - ETL stamped and listed as a fixture
   - 7' max length
   - Standard 6' power lead unless otherwise specified

NOTES:
1. Due to the nature of the FOT product, specific lengths do not factor in endcaps. Actual length of fixture is determined by which channel is used (see channel page for added endcap length).
COMPATIBLE DRIVERS

**PURE DC™ MLV (PDC)**

<table>
<thead>
<tr>
<th>PART</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDC.40.24</td>
<td>40W 120/277VAC PURE DC™ MLV DIMMABLE DRIVER</td>
</tr>
<tr>
<td>PDC.96.24</td>
<td>96W 120/277VAC PURE DC™ MLV DIMMABLE DRIVER</td>
</tr>
</tbody>
</table>

**DIMENSIONS**

<table>
<thead>
<tr>
<th>part</th>
<th>dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>40W</td>
<td>L 14.25&quot;; W 3.00&quot;; H 2.88&quot;</td>
</tr>
<tr>
<td>96W</td>
<td>L 14.75&quot;; W 4.31&quot;; H 4.81&quot;</td>
</tr>
</tbody>
</table>

**DIMMING PERFORMANCE**

PURE DC™ DRIVER Dims to 0.1% on most MLV dimmers
**COMPATIBLE DRIVERS**

**ELECTRONIC DRIVER - NON-DIM (ND)**

**PART** | **DESCRIPTION**
--- | ---
GG100E-24-UNV | 96W 120-277VAC ELECTRONIC DRIVER

**DIMENSIONS**

**ELECTRONIC DRIVER**

H 3.00", W 11.46", D 1.30"

**DIMMING PERFORMANCE**

Non Dim

**ELECTRONIC DRIVER W/0-10V MODULE (010)**

**PART** | **DESCRIPTION**
--- | ---
GG100E-24-UNV-010V | 96W 120-277VAC ELECTRONIC DRIVER WITH 0-10V DIMMING MODULE (SINK)

**DIMENSIONS**

**ELECTRONIC DRIVER - 0-10V**

H 3.00", W 11.46", D 1.30"

**DIMMING PERFORMANCE**

Dims below 1% on most 0-10V dimmers

**FIELD INSTALLED IN LOW VOLTAGE WIRING COMPARTMENT**

- Install DIM-010V Module in low voltage wiring compartment.
- Max number of 25 modules on one dimmer. Consult dimmer datasheet for maximum device limitation of a specific controller.

**GRAY WIRE TO 0-10V CONTROLLER**

- VIOLET WIRE TO 0-10V CONTROLLER

**BLACK WIRE TO DC - OUTPUT OF DRIVER**

- RED WIRE TO DC - OUTPUT OF DRIVER

**BLUE WIRE TO LED**

- YELLOW WIRE TO LED
**COMPATIBLE DRIVERS**

**ELECTRONIC DRIVER W/DMX MODULE (DMX)**

<table>
<thead>
<tr>
<th>PART</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>GG100E-24-UNV-DMX</td>
<td>96W 120-277VAC ELECTRONIC DRIVER WITH eldoLED DMX DIMMING MODULE</td>
</tr>
</tbody>
</table>

**DIMENSIONS**

- **DMX MODULE**
  - H: 3.00"; W: 11.46"; D: 1.30"
  - Must be installed in UL box (by others)

**DIMMING PERFORMANCE**

- ELECTRONIC DRIVER - DMX MODULE: Dims to 0.1% on most DMX systems

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For more options to wire DMX module, reference DMX System cut sheet.

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### COMPATIBLE DRIVERS

#### DIMMER WITH NEUTRAL

![Diagram of Lutron HI-LUME® 1% 2-Wire Dimmer with Neutral](image)

#### DIMMER WITHOUT NEUTRAL

![Diagram of Lutron HI-LUME® 1% 2-Wire Dimmer without Neutral](image)

### LUTRON HI-LUME® 1% 2-WIRE:

**2-WIRE CONTROL FORWARD PHASE**

<table>
<thead>
<tr>
<th>PART</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTEA4U1UKL-CV240</td>
<td>5-40W, 120VAC, 2-WIRE FORWARD PHASE DRIVER</td>
</tr>
</tbody>
</table>

**DIMENSIONS**

| LUTRON HI-LUME® 1% 2-WIRE | H 4.00", W 4.89", D 2.62" |

**DIMMING PERFORMANCE**

- **LUTRON HI-LUME® 1% 2-WIRE**: Dims to 1% with compatible Lutron controls

Optic Arts is a Lutron OEM Advantage Partner
COMPATIBLE DRIVERS

**3-WIRE**

- **LUTRON HI-LUME® 1% 3-WIRE/ECOSYSTEM**
  - **DIMENSIONS**
    - **LUTRON HI-LUME® 1% 3-WIRE/ECOSYSTEM**
      - H: 4.00"; W: 4.89"; D: 2.62"
  - **DIMMING PERFORMANCE**
    - Dims to 1% with compatible Lutron controls

**ECOSYSTEM**

- **LUTRON HI-LUME® 1% 3-WIRE**
  - **TO ECOSYSTEM DIGITAL LINK**
  - **DIMENSIONS**
    - **LUTRON HI-LUME® 1% 3-WIRE/ECOSYSTEM**
      - H: 4.00"; W: 4.89"; D: 2.62"
  - **DIMMING PERFORMANCE**
    - Dims to 1% with compatible Lutron controls

Optic Arts is a Lutron OEM Advantage Partner
COMPATIBLE DRIVERS

LUTRON HI-LUME® PREMIER:
3-WIRE/ECOSYSTEM

PART  | DESCRIPTION
L3DO-96W24V-U | 2-96W, 120-277VAC, 3-WIRE/ECOSYSTEM DRIVER

DIMENSIONS
LUTRON HI-LUME® PREMIER  | H 5.5", W 10.5", D 2.0"

DIMMING PERFORMANCE
LUTRON HI-LUME® PREMIER  | Dims to 0.1% with compatible Lutron controls

NOTE: Lutron soft-on, fade to black technology available with Ecosystem Digital Control only.

ECOSYSTEM

LUTRON HI-LUME® PREMIER DRIVER
(WITH ECOSYSTEM CONTROL & SOFT-ON FADE TO BLACK TECHNOLOGY)

TO ECOSYSTEM DIGITAL LINK
E1 (Purple)
E2 (Purple)

120-277 VAC