Using the optional Flat Blade Louvers helps maximize glare reduction and source control.

- SAY NO TO GLARE

- STANDARD OR CUSTOM LENGTHS AVAILABLE TO MATCH ANY SPACE (CONSULT WITH FACTORY)
- MINIMAL HOUSING, EXPECTED PERFORMANCE FOR D3 OR D5
- FLAT BLADE LOUVERS AVAILABLE IN ANY INCREMENTS
- STANDARD ALIGHTANIUM™ FINISH, SATIN WHITE, AND SATIN BLACK. OTHER COLORS AVAILABLE.
Use our optional Drop Lens to spread the light while creating a graphical statement into your environment.
Integrations is a comprehensive product line comprised of nominal and exact length fixtures, continuous rows, and patterns comprised of 90° illuminated corners.

A completely custom ordering process allowing unique modifications and non-90° transitions is available through collaboration with Design Assist.

Elements is a simplified product line comprised of 4’, 8’, and 12’ nominal length fixtures that can be joined to create continuous rows.

For rows over 12’ (R) fixtures will be shipped in sections. Joining hardware for field installation is provided.
### LIGHT OUTPUT

#### DISTRIBUTION
Direct Symmetric

#### OUTPUT
- **LH**: High output - 9.5 W/ft
- **LS**: Standard output - 4.5 W/ft
- **C**: Custom tuned output - Specify Wattage

#### LIGHT LOSS FACTORS
- **80+CRI, 4000K**: Baseline
- **80+CRI, 3500K**: 99%
- **80+CRI, 3000K**: 95%
- **90+CRI, 4000K**: 83%
- **90+CRI, 3500K**: 83%
- **90+CRI, 3000K**: 84%

### PHOTOMETRIC DATA

#### DIRECT SYMMETRIC
- **LH - 4000K - HE TECH**
- **Lumens**: 762 lm/ft
- **Input watts**: 9.5 W/ft
- **Efficacy**: 80 lm/W

#### DIRECT ASYMMETRIC
- **LH - 4000K - WISP**
- **Lumens**: 754 lm/ft
- **Input watts**: 9.5 W/ft
- **Efficacy**: 79 lm/W

### SAMPLE INSTALLATION - WORKSPACE

**LH / HE / 4000K**

- **Room height**: 20 ft x 30 ft x 12 ft
- **Reflectance**: 80% / 50% / 20%
- **Mounting height**: 9 ft A.F.F.
- **Fixture length**: 4 ft
- **Calculation grid**: 2 ft x 2 ft
- **Calculation plane (horizontal)**: 2.5 ft A.F.F.
- **Average Illuminance**: 36 fc
- **Fixture spacing**: 8 ft x 10 ft
- **Uniformity**: 1.6:1 (avg/min)
MOUNTING LENGTHS

SUSPENSION 45.00
OVERALL 46.75

NOMINAL 4’

90.75

92.50

NOMINAL 8’

137.00

138.75

NOMINAL 12’

90.75

97.50

100.00

NOMINAL 16’

125.00

108.75

236.50

NOMINAL 20’
STANDARD PATTERNS

- **(PL)** Wall to ceiling
- **(PU)** Wall to wall
- **(PR)** Wall only
- **(PLCW)** Wall to ceiling
- **(PLWW)** Wall to wall
- **(PLW)** Wall only
- **(PLCW)** Wall to ceiling
- **(PLWW)** Wall to wall
- **(PLW)** Wall only

**CUSTOM PATTERNS**

- **(PLC)** Ceiling only
- **(PUW)** Wall only
- **(PUWW)** Wall to wall
- **(PUC)** Ceiling only
- **(PRW)** Wall only
- **(PRC)** Ceiling only
- **(PRWW)** Rectangle wall to wall

**CORNER DETAIL**

- Welded corner
- Joining pins

*Contact Design Assist*
LINEAR DIMENSIONS

Elements - 4′, 8′, and 12′ nominal length individual fixtures that can be joined to create continuous row lengths.

Integrations - Nominal or exact lengths to the nearest 1/8th of an inch available as individual fixtures or joined to create continuous row lengths, minimum fixture lengths is 12 inches. Patterns comprised of 90 degree precisely welded fully illuminated corners provide a multitude of geometric options and architectural transitions.

Custom - Contact Design Assist for modifications to product not detailed within Elements or Integrations specification sheets.

OPTICS

HE Tech™ patented high efficacy extruded diffuse acrylic lens technology with integrated opaque white reflector delivers superior lumen output with optimal uniform lens surface luminance for direct distribution. A rigid partially diffuse extruded dust cover lens optimized for indirect LED performance delivers 92% transmittance.

The a-wash kicker plus WISP™ diffuse white extruded acrylic lens produces a soft asymmetric distribution.

WISP™ is a three-dimensional diffuse white extruded acrylic lens optimized for use with LED. Drop lens with custom blended optical WISP acrylic hybrid material, extends 1”.

Drop Lens is a light diffuser option for D3 or D5 that turns the luminaire into a decorative graphical statement. The diffuser drops down from the luminaire’s main body of 1” and sits flush with the metal end caps. Once lit, the drop lens glows vividly and offers a wider diffusion pattern.

Flat Blade Louvers are used to cut down on glare and better control the light source on D3 or D5. This option includes a linear film diffuser (inserted between the louvers and the LEDs), that enhances glare control and lends light sources. The standard finish is satin aluminum. Other colors and custom finish options available, specify RAL# or contact factory regarding custom finish requirement.

LED LIGHT SOURCE

Custom manufactured linear board array uses high performance Nichia® LED in combination with a performance driven heat sink technology. Tested in accordance with LM79 and LM-80; L70>60,000hr; operated at reduced output for high efficacy and lumen maintenance. 3000K, 3500K, and 4000K with 80+ CRI standard; other color temperatures and 90+ CRI available upon request, contact factory. LED color variation maintained at a 3-step MacAdam ellipse (SDCM 3x). LEDs are available in Low, Standard, and High outputs. Refer to photometry for delivered lumens. Custom output in the range of 25% to 125% of high output, contact factory.

LED DIMMING DRIVER

Factory tuned constant current electronic 0-10V control dimming driver is standard. Specification grade dimming down to 1%. Driver life of 50,000 hrs with ambient operating temperature range of -30°C to 50°C, maximum case temperature of 75°C. Electrical specifications at maximum driver load: PF >0.9, THD <20%, >85% Efficiency. Other available drivers include Lutron Eco-system H-series (LDE1): Hi-lume™ 1% LED dimming driver with Soft On, Fade to Black; and DMX and DALI protocol drivers. Other Lutron and specialty drivers available, contact factory.

EMERGENCY

This luminaire is provided with a factory installed LED emergency lighting battery pack for both normal and emergency operation, 120-277v only. This fixture integrated unit contains long-life Ni- Cad recyclable battery, 24 hour charger, and converter circuit. Test switch and charge indicator provided. Test button to be remote located within 3 feet of the luminaire, by others in accordance with local code. Emergency mode provides constant power to a nominal 12W LED load for a period of 90 minutes, delivering 1200 lumens of unwavering illumination throughout the full 90 minute emergency duration. Unless otherwise specified, the emergency battery pack will illuminate one 2 foot end in the direct portion of the fixture.

Emergency circuiting provided as a separate circuit from normal power circuit according to NEC requirements, specify circuit length and location.

CONTROLS

Low-profile integral occupancy and daylight sensors are available to deliver high performance control in an architecturally pleasing package.

Integral occupancy sensor - the sleek Wattstopper FS-205 modular plug-in system utilizes a RJ45 connector, low voltage cord, and power pack. Automatic on/off passive infrared (PIR) occupancy sensing control covers a range of 200 square feet for a specified 30 second to 30 minute time delay with an optional ambient daylight sensing function to hold lights off when specified adequate daylight level is sensed. Factory default time delay of 30 minutes and 120fc light level. Settings can be adjusted at the factory or easily in the field.

Integral daylight sensor - the sophisticated Wattstopper FD-301 is a low voltage controller using 0-10VDC input to automatically dim the electric lighting system based on daylight contribution in a 70° field of view to achieve a target illuminance using a sliding setpoint algorithm. This single zone “closed loop” daylight harvesting control system utilizes a RJ45 connector, low voltage cord, and power pack. One (1) LSR-301-S setup remote control to adjust target let levels is provided per order.

 Combined occupancy and daylight sensing is achieved using both the FS-205 and FD-301 for more versatile control functionality including automatic on/off occupancy and daylight dimming response.

Other manufacturer controls may be available for product integration, contact factory.
MOUNTING
Suspension with aircraft cables or pendant stems, and full or partial span mounting available.

Aircraft cable set includes 48” standard length 1/16” stainless steel adjustable aircraft cables with secure micro grippers to field set suspension length, comes factory installed in fixture. 4-1/2” x 4-1/2” square white canopies. Cord strain also included. Power cord options available for aircraft cable. Black power cord provided for satin black and a-lightanium finish, white power cord provided for all other fixture finishes unless otherwise specified.

Rigid pendant stem set includes 1/4” hollow white threaded rod for suspension and power feed, standard specification length, 1” minimum. 5” square mono point white canopies.

Swivel stem set includes 1/4” hollow white threaded rod for suspension and power feed, standard specification length, 1” minimum. 5” square mono point white 45 degree angle swivel stem.

Specify if other suspension length is required. Canopies provided as required for quantity of power feed and non power feed locations (crossbar included). Specify if other shape, size, or color is required.

Direct wall mounting is ADA compliant. Fixture mounts directly to wall surface requiring field drilled mounting and power feed holes. Factory pre-drilled holes can be drilled and tapped for ½” chase nipple, submit dimension requirements when ordering.

Mullion blocks are used to mount fixture to a horizontal or vertical window mullion and can also be used to offset fixture from wall. ½” or 1” deep milled aluminum blocks are available standard, 3/8” and 2” deep blocks also available upon request. (2) blocks provided for fixtures 8ft or less, fixtures larger than 8ft provided with (3) blocks every 12ft. Quantity of power feed and non power feed blocks provided as required. Fixture mounting requires field drilled mounting and power feed holes. Factory pre-drilled holes can be drilled and tapped for ½” chase nipple, submit dimension requirements when ordering.

Horizontal Set-off brackets are used to offset fixture from a wall by 1” or ½”. Wall side bracket attaches to horizontal single gang box on wall. Outside horizontal box is factory-installed to fixture side. Fixture side box hinges over wall bracket and two brackets are fastened together with set screw to secure fixture to wall. (2) brackets per fixture up to 12”, on center spacing varies depending on overall fixture length.

Specify if other suspension length is required. Canopies provided as required for quantity of power feed and non power feed locations (crossbar included). Specify if other shape, size, or color is required.

Partial /Full span mounting conditions utilize special expansion joint end caps to mount fixture to wall (blocking required) and feed power through the end cap, specify end feed location. Additional attachment hardware provided as required depending on partial span condition. Provide architectural details at time of ordering for inclusion in factory shop drawings; field verified dimensions required for full span mounting.

STRUCTURE
Robust, high quality 60% recycled aluminum extruded housing. 0.040” thick aluminum internal gear trays. Flat or flanged aluminum end caps. Aluminum joiner brackets. 4 lbs/ft approximate fixture weight.

FINISH
Electrostatically applied powder coat finish. Standard finish options include a-lightanium™, satin white, and satin black. Other colors and custom finish options available, specify RAL# or contact factory regarding custom finish requirement.

LISTING
UL/CUL rated for Damp Locations. Tested in accordance with UL 1598 and certified to CEC/CSA C22.1, NEC, ANSI/NFPA 70, and NOM-001-SEDE.

UL Wet location label available. Complies with UL definition of wet locations to prevent accumulation of water on live parts, electrical components, or conductor not identified for use in contact with water through the provision of weep holes. Waterproof connector to be provided by others. Installing contractor responsible for properly sealing and waterproofing all field drilled mounting and power feed locations.

WARRANTY
Limited defect-free manufactured equipment warranty provided under normal use and proper storage for a period of one (1) year. LED products (LED boards and drivers) will be covered for a period of five (5) years. Wet location fixtures are not recommended for extreme wet weather conditions and must be installed according to factory drawings; there is a modified warranty for LED components installed in applications not in accordance with factory recommendations/drawings. Please refer to full terms and conditions on our website.

LED MODULES
Heavy-duty, milled aluminum plate module contains recessed cutouts for flush mounting of LED module (supplied). Specification and layout of modules and lamping per LED MODULE ADDENDUM.
### LED DOWNLIGHT MODULE

#### MODULE CONSTRUCTIONS:
- Heavy-duty, milled-aluminum plate module contains one recessed cutout and a flush mounted LED module.
- Internal gimbal device allows easy lamp adjustability, with continuous rotation greater than 360°, aimable vertically up to 15° angle on D (3.5") series and 30° on G (5") series.

#### CIRCUITING STANDARDS:
- LED downlight modules are on a separate circuit from linear section of the fixture. "D" dimming is required on the addendum if dimming is desired for LED downlight modules. If dimming is also desired for the linear section, "D" must be specified on the fixture cutsheet as well.

#### LAYOUT:
- Indicate quantity of modules per row after "MRL_" in fixture cutsheet nomenclature. i.e. MRL1, MRL2, MRL3, etc.
- Module length to be determined by factory and shown in submittal drawings for approval. Typical module length is approximately 6".
- All module lengths are approximate until ceiling and row configuration is known. Module lengths may be specially constructed for irregular row lengths in certain ceilings. Modules may be specified up to 48" long.

#### INTEGRAL DRIVER:
- Universal 120v - 277 or 347v driver.

#### FINISH:
- Electrostatically applied post powder coat module finish. Color will match luminaire unless otherwise specified.

#### LISTING:
- UL/CUL. Damp location is standard.

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### REQUIRED SPECIFICATION INFORMATION AS ADDENDUM TO CUT SHEET

#### Configuration

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<thead>
<tr>
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<tbody>
<tr>
<td>E</td>
<td>Modules located on fixture ends</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Modules located in center of fixture</td>
<td></td>
</tr>
<tr>
<td>EC</td>
<td>Modules located in center and on ends</td>
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<tr>
<td>P</td>
<td>Custom configuration</td>
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#### Wattage

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<tr>
<td>4</td>
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<td>8</td>
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#### Voltage

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<tbody>
<tr>
<td>U</td>
<td>Universal 120V - 277</td>
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<tr>
<td>3</td>
<td>347V</td>
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#### CCT

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<tbody>
<tr>
<td>30</td>
<td>3000K (ansi binned warm white)</td>
</tr>
<tr>
<td>40</td>
<td>4000K (ansi binned neutral white)</td>
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#### Beam Angle

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<tbody>
<tr>
<td>17</td>
<td>17° total beam angle (narrow spot)</td>
</tr>
<tr>
<td>48</td>
<td>48° total beam angle (wide flood)</td>
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#### Dimming

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<tbody>
<tr>
<td>D</td>
<td>Dimming for module (if dimming is desired for entire fixture and MR16 modules choose D on this sheet and under options on fixture cutsheet)</td>
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