



# KT-ALED290-L1-X-NM-8XX-VDIM

## LED AREA LIGHT FIXTURES

### DESCRIPTION

Compact 290W High-Performance LED Area Light |  
120–277V Input | Bronze Housing |  
Multiple Mounting, Optics, and Control options

### APPLICATION

Pole-mount or structure-mount outdoor illumination needs (including parking lots, auto dealerships, pathways, roadways, recreational venues, and other general area lighting requirements)



### PRODUCT FEATURES

- Compact, low-profile design delivers high-performance illumination and improves application site aesthetics
- Heavy-duty, die-cast aluminum housing with ample heat sinking for enhanced thermal performance
- True U0 design for Dark Sky compliant performance eliminates undesirable sky glow
- Integrated NEMA/ANSI C136.10 3-pin twist-lock receptacle with shorting cap, standard on all fixtures, simplifies ordering requirements for photo control needs
- Precision-crafted optics, available with type II, III, IV, and V patterns, to meet diverse requirements from general purpose to specification-grade applications
- Integral latch design for hassle-free, hinged access to driver compartment
- Four contractor-friendly mounting options available (sold separately): slip fitter mount, adjustable pole mount for square and round poles, fixed pole mount for square and round poles, and trunnion mount
- Bi-level occupancy sensors and twist-lock photocell accessories available
- Reversible glare shield available, suitable for backside (house-side) or frontside (street-side) shielding
- Powered by Keystone 0–10V dimming LED driver featuring 12V AUX power tap, 6kV surge protection
- Ambient operating temperature: –40°C/–40°F to 50°C/122°F
- UL Certified for wet locations, IP65
- 0–10V dimming, 10% min
- Power factor: >0.95
- THD: <20%
- LED chip lifetime: L70 >100,000 hrs @ 25°C/77°F ambient fixture temp
- Meets FCC Part 15, Part B, Class A standards for conducted and radiated emissions

### ELECTRICAL SPECIFICATIONS

| Catalog Number              | Wattage | Lumens    | Efficacy | Dimming | Color Temp | CRI | Dist Type* | Input Voltage | Rated Life | Legacy Equivalent | Housing Color** | Additional Feature                      |
|-----------------------------|---------|-----------|----------|---------|------------|-----|------------|---------------|------------|-------------------|-----------------|-----------------------------------------|
| KT-ALED290-L1-3-NM-840-VDIM | 290W    | 40,310 lm | 139 lm/W | 0–10V   | 4000K      | >80 | III        | 120–277V      | 50,000 hrs | 1000W             | Bronze          | 10kV external surge protection included |
| KT-ALED290-L1-3-NM-850-VDIM |         | 40,890 lm | 141 lm/W |         | 5000K      |     | III        |               |            |                   |                 |                                         |
| KT-ALED290-L1-5-NM-840-VDIM |         | 40,600 lm | 140 lm/W |         | 4000K      |     | V          |               |            |                   |                 |                                         |
| KT-ALED290-L1-5-NM-850-VDIM |         | 41,180 lm | 142 lm/W |         | 5000K      |     | V          |               |            |                   |                 |                                         |

\* Fixtures with Type 2 (II) and Type 4 (IV) optics are available and assembled to order. Lead times may apply. Please see catalog number breakdown for full ordering code details.

\*\* Fixtures (and mounts) with alternate housing colors are available and made to order. Extended lead times apply. Please see catalog number breakdown for full ordering code details.

# KT-ALED290-L1-X-NM-8XX-VDIM

## LED AREA LIGHT FIXTURES

### MOUNTING BRACKET OPTIONS (SOLD SEPARATELY)

#### SLIP FITTER MOUNT

Fits 2 3/8" tenon; Bronze

| Catalog Number   | UPC          | Easy Code |
|------------------|--------------|-----------|
| KT-ALED-SF-1-KIT | 843654131641 | JRH-74    |



#### ADJUSTABLE POLE MOUNT

For round or square pole; Bronze

| Catalog Number    | UPC          | Easy Code |
|-------------------|--------------|-----------|
| KT-ALED-PMA-1-KIT | 843654131634 | DAQ-87    |



#### FIXED POLE MOUNT

For round or square pole; Bronze

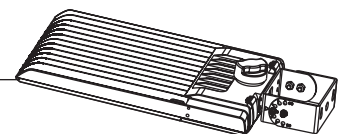
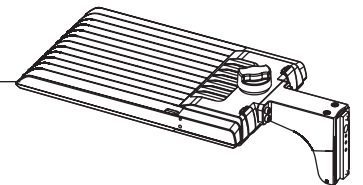
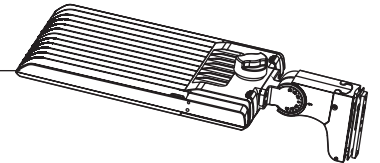
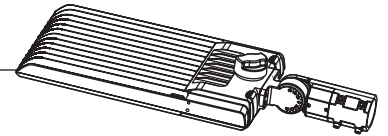
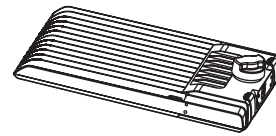
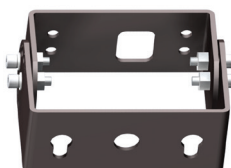
| Catalog Number   | UPC          | Easy Code |
|------------------|--------------|-----------|
| KT-ALED-PM-1-KIT | 843654131627 | QVG-29    |



#### TRUNNION MOUNT

Bronze

| Catalog Number   | UPC          | Easy Code |
|------------------|--------------|-----------|
| KT-ALED-TM-1-KIT | 843654131658 | GTH-37    |

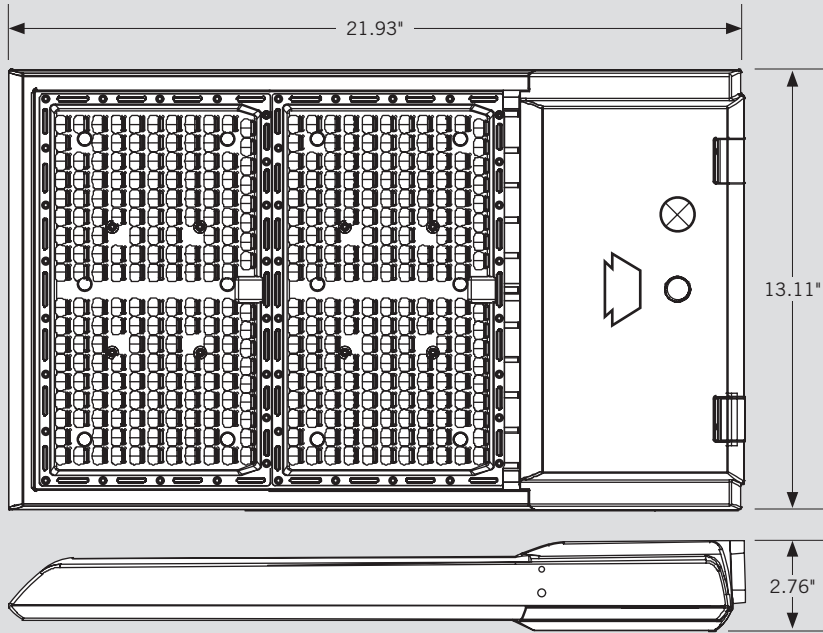


# KT-ALED290-L1-X-NM-8XX-VDIM

## LED AREA LIGHT FIXTURES

### PHYSICAL SPECIFICATIONS

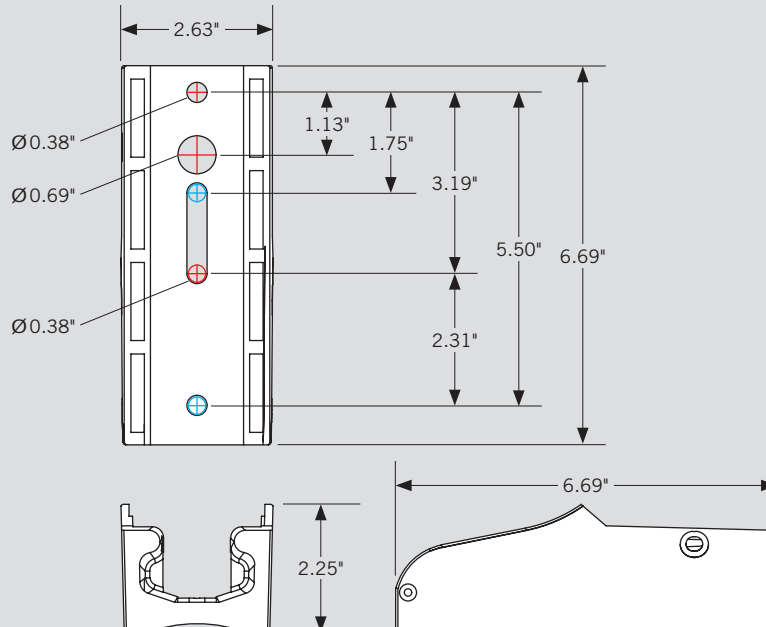
#### LED AREA LIGHT FIXTURE



#### PACKAGING

|                   |                           |
|-------------------|---------------------------|
| Carton Quantity   | 1 piece                   |
| Carton Dimensions | 6.1"H x 15.15"W x 27.36"L |
| Carton Weight     | 15.87 lbs                 |

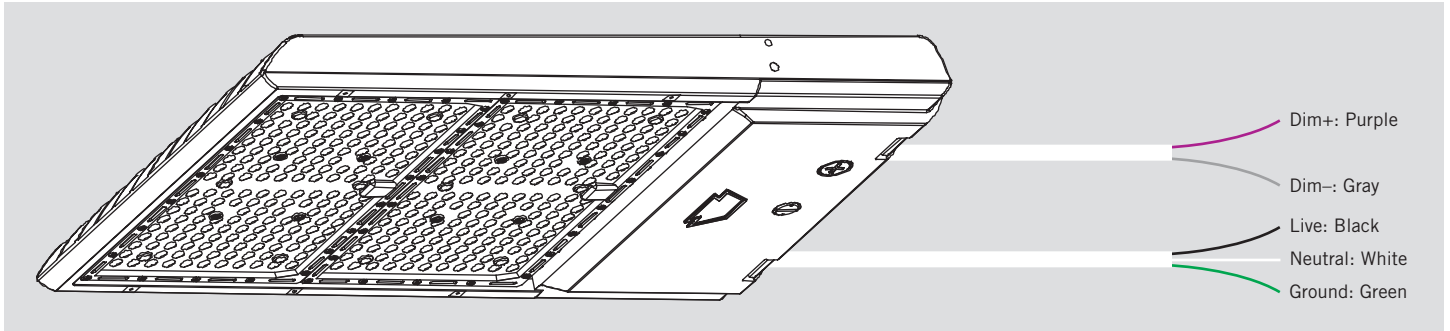
#### POLE MOUNT (ADJUSTABLE OR FIXED) DRILLING HOLES



# KT-ALED290-L1-X-NM-8XX-VDIM

## LED AREA LIGHT FIXTURES

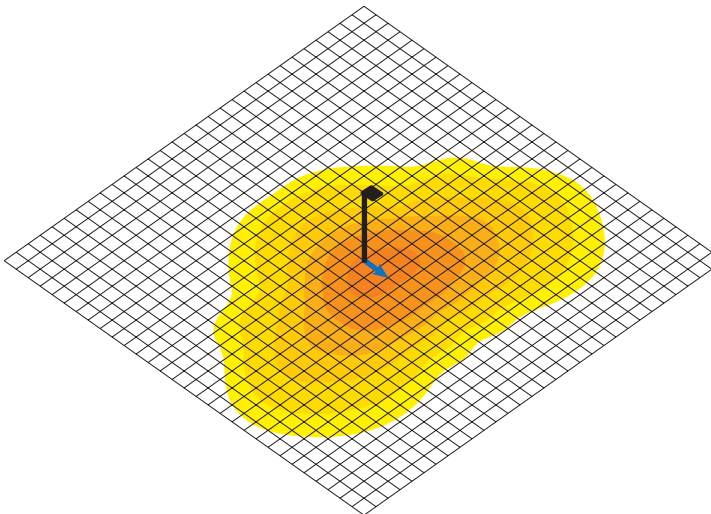
### WIRING DIAGRAM



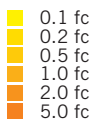
### LIGHT DISTRIBUTION PATTERN

#### TYPE 3 (III)

Pole-mount view from above; Area light mounted at 35'

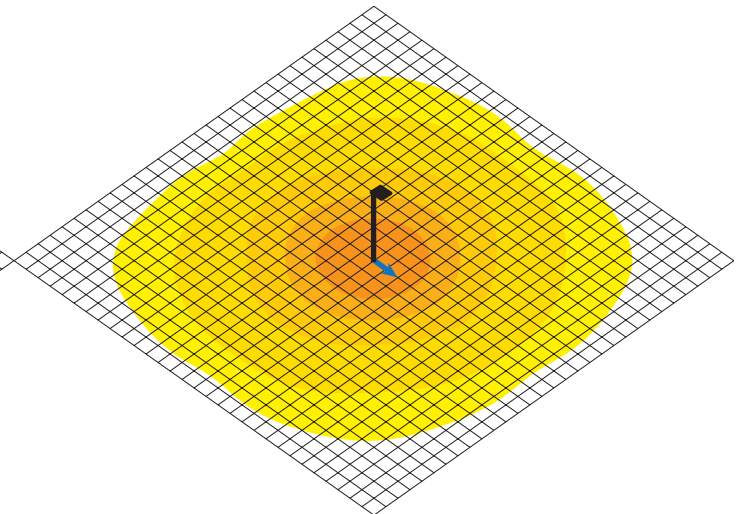


- Photometric layout for general reference only
- Grid dimension: 10 x 10 sq ft

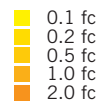


#### TYPE 5 (V)

Pole-mount view from above; Area light mounted at 35'



- Photometric layout for general reference only
- Grid dimension: 10 x 10 sq ft

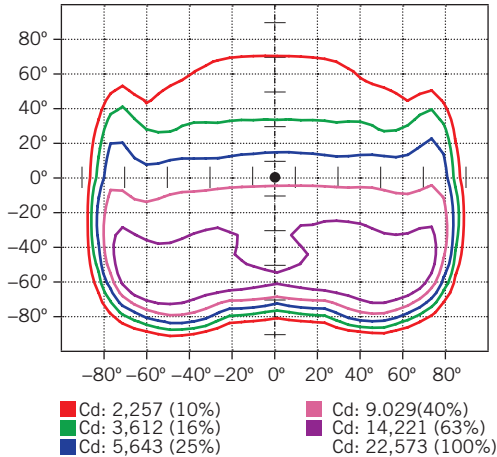


# KT-ALED290-L1-X-NM-8XX-VDIM

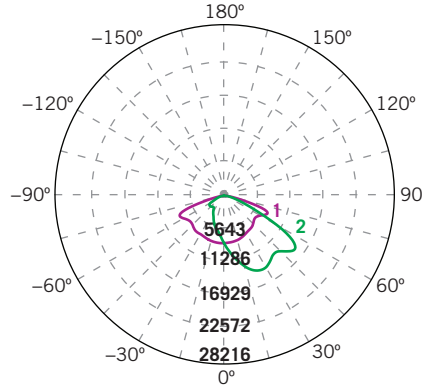
## LED AREA LIGHT FIXTURES

### PHOTOMETRIC SPECIFICATIONS (TYPE 3 [III])

#### ISOCANDELA PLOT



#### LUMINOUS INTENSITY DISTRIBUTION



Average diffuse angle (50%): **107.1°**

**1 Violet** C0-C180

**2 Green** C90-C270

Unit: cd

#### FLUX DISTRIBUTION

| Zone                 | Lumens    | % Luminaire |
|----------------------|-----------|-------------|
| <b>Forward Light</b> | 32,023 lm | 78.3%       |
| 0°-30°               | 4,668 lm  | 11.4%       |
| 30°-60°              | 15,785 lm | 38.6%       |
| 60°-80°              | 10,911 lm | 26.7%       |
| 80°-90°              | 659 lm    | 1.6%        |
| <b>Back Light</b>    | 8,879 lm  | 21.7%       |
| 0°-30°               | 2,381 lm  | 5.8%        |
| 30°-60°              | 4,201 lm  | 10.3%       |
| 60°-80°              | 2,134 lm  | 5.2%        |
| 80°-90°              | 163 lm    | 0.4%        |
| <b>Up Light</b>      | 0 lm      | 0.0%        |
| 90°-100°             | 0 lm      | 0.0%        |
| 100°-180°            | 0 lm      | 0.0%        |

#### BUG\* Rating

##### Asymmetrical Luminaire Types

Type I, II, III, IV B3 U0 G4

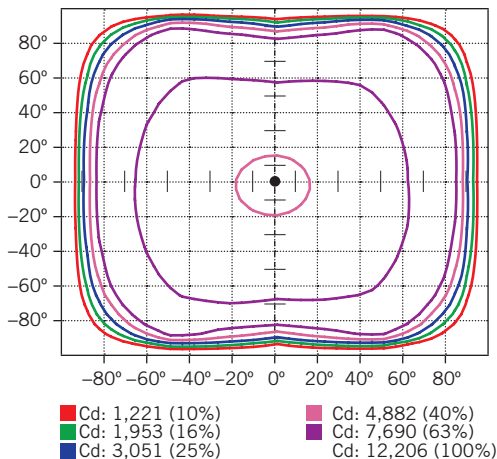
##### Quadrilateral Symmetrical Luminaire Types

Type V, Area Light B3 U0 G4

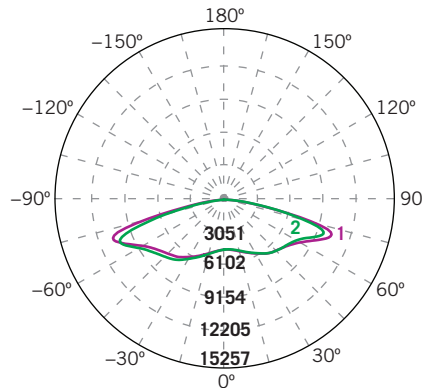
\* Backlight, Uplight, Glare

### PHOTOMETRIC SPECIFICATIONS (TYPE 5 [V])

#### ISOCANDELA PLOT



#### LUMINOUS INTENSITY DISTRIBUTION



Average diffuse angle (50%): **155.6°**

**1 Violet** C0-C180

**2 Green** C90-C270

Unit: cd

#### FLUX DISTRIBUTION

| Zone                 | Lumens    | % Luminaire |
|----------------------|-----------|-------------|
| <b>Forward Light</b> | 20,184 lm | 49.1%       |
| 0°-30°               | 2,131 lm  | 5.2%        |
| 30°-60°              | 7,519 lm  | 18.3%       |
| 60°-80°              | 8,851 lm  | 21.6%       |
| 80°-90°              | 1,683 lm  | 4.1%        |
| <b>Back Light</b>    | 20,884 lm | 50.9%       |
| 0°-30°               | 2,231 lm  | 5.4%        |
| 30°-60°              | 8,135 lm  | 19.8%       |
| 60°-80°              | 9,332 lm  | 22.7%       |
| 80°-90°              | 1,186 lm  | 2.9%        |
| <b>Up Light</b>      | 0 lm      | 0.0%        |
| 90°-100°             | 0 lm      | 0.0%        |
| 100°-180°            | 0 lm      | 0.0%        |

#### BUG\* Rating

##### Asymmetrical Luminaire Types

Type I, II, III, IV B5 U0 G5

##### Quadrilateral Symmetrical Luminaire Types

Type V, Area Light B5 U0 G5

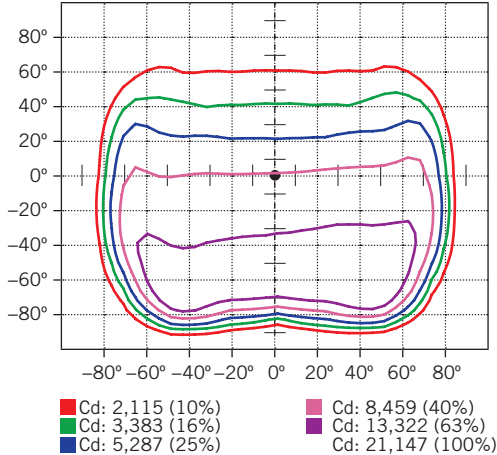
\* Backlight, Uplight, Glare

# KT-ALED290-L1-X-NM-8XX-VDIM

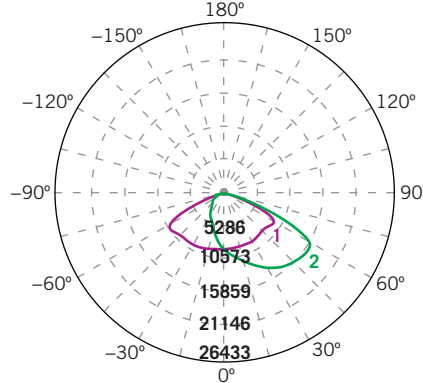
## LED AREA LIGHT FIXTURES

### PHOTOMETRIC SPECIFICATIONS (TYPE 4 [IV])

#### ISOCANDELA PLOT



#### LUMINOUS INTENSITY DISTRIBUTION



Average diffuse angle (50%): **105.4°**

**1 Violet** C0-C180

**2 Green** C90-C270

Unit: cd

#### FLUX DISTRIBUTION

| Zone                 | Lumens    | % Luminaire |
|----------------------|-----------|-------------|
| <b>Forward Light</b> | 31,215 lm | 75.7%       |
| 0°-30°               | 4,469 lm  | 10.8%       |
| 30°-60°              | 15,484 lm | 37.6%       |
| 60°-80°              | 10,658 lm | 25.9%       |
| 80°-90°              | 603 lm    | 1.5%        |
| <b>Back Light</b>    | 9,996 lm  | 24.3%       |
| 0°-30°               | 2,730 lm  | 6.6%        |
| 30°-60°              | 4,942 lm  | 12.0%       |
| 60°-80°              | 2,099 lm  | 5.1%        |
| 80°-90°              | 225 lm    | 0.5%        |
| <b>Up Light</b>      | 0 lm      | 0.0%        |
| 90°-100°             | 0 lm      | 0.0%        |
| 100°-180°            | 0 lm      | 0.0%        |

#### BUG\* Rating

##### Asymmetrical Luminaire Types

Type I, II, III, IV B4 U0 G4

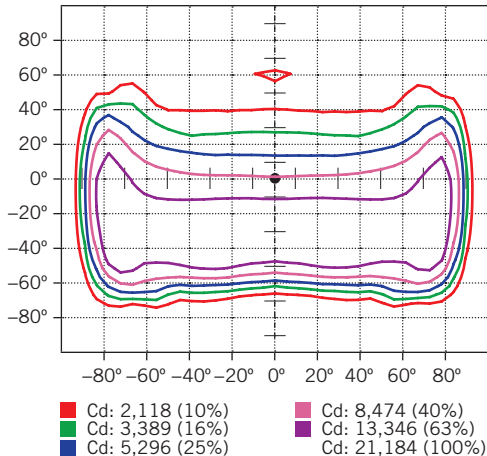
##### Quadrilateral Symmetrical Luminaire Types

Type V, Area Light B4 U0 G4

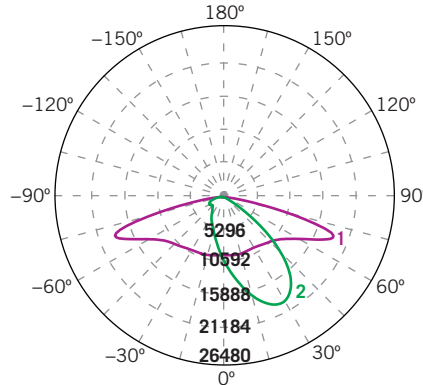
\* Backlight, Uplight, Glare

### PHOTOMETRIC SPECIFICATIONS (TYPE 2 [III])

#### ISOCANDELA PLOT



#### LUMINOUS INTENSITY DISTRIBUTION



Average diffuse angle (50%): **103.0°**

**1 Violet** C0-C180

**2 Green** C90-C270

Unit: cd

#### FLUX DISTRIBUTION

| Zone                 | Lumens    | % Luminaire |
|----------------------|-----------|-------------|
| <b>Forward Light</b> | 31,323 lm | 76.3%       |
| 0°-30°               | 5,979 lm  | 14.6%       |
| 30°-60°              | 17,587 lm | 42.8%       |
| 60°-80°              | 7,335 lm  | 17.9%       |
| 80°-90°              | 422 lm    | 1.0%        |
| <b>Back Light</b>    | 9,727 lm  | 23.7%       |
| 0°-30°               | 2,462 lm  | 6.0%        |
| 30°-60°              | 4,158 lm  | 10.1%       |
| 60°-80°              | 2,882 lm  | 7.0%        |
| 80°-90°              | 226 lm    | 0.5%        |
| <b>Up Light</b>      | 0 lm      | 0.0%        |
| 90°-100°             | 0 lm      | 0.0%        |
| 100°-180°            | 0 lm      | 0.0%        |

#### BUG\* Rating

##### Asymmetrical Luminaire Types

Type I, II, III, IV B4 U0 G4

##### Quadrilateral Symmetrical Luminaire Types

Type V, Area Light B4 U0 G3

\* Backlight, Uplight, Glare

# KT-ALED290-L1-X-NM-8XX-VDIM

## LED AREA LIGHT FIXTURES

### EPA SPECIFICATIONS

#### Large-Size Fixture Housing

*Conditions:* Horizontal winds only for calculations. Worst case total projected area used for calculations. All drag coefficients are set as worst case 1.2.  
For details on exact EPA calculations and assumptions, please contact [productsupport@keystonetech.com](mailto:productsupport@keystonetech.com)

| EPA Calcs (1.2*ft <sup>2</sup>   View)                                                                      |                  | Single Fixture                                                                    | 2 Fixtures at 90°                                                                 | 2 Fixtures at 180°                                                                | 3 Fixtures at 90°                                                                 | 3 Fixtures at 120°                                                                | 4 Fixtures at 90°                                                                   | 2 Fixtures Side-by-Side                                                             | 3 Fixtures Side-by-Side                                                             | 4 Fixtures Side-by-Side                                                             |
|-------------------------------------------------------------------------------------------------------------|------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Mounting Application                                                                                        | Fixture Position |  |  |  |  |  |  |  |  |  |
| Adjustable Pole Mount<br>  | Horizontal       | 0.62 sq. ft.                                                                      | 0.90 sq. ft.                                                                      | 1.24 sq. ft.                                                                      | 1.42 sq. ft.                                                                      | 1.48 sq. ft.                                                                      | 1.42 sq. ft.                                                                        | 0.74 sq. ft.                                                                        | 1.11 sq. ft.                                                                        | 1.48 sq. ft.                                                                        |
| Adjustable Pole Mount<br> | 45°              | 1.85 sq. ft.                                                                      | 2.43 sq. ft.                                                                      | 1.85 sq. ft.                                                                      | 3.01 sq. ft.                                                                      | 4.42 sq. ft.                                                                      | 3.01 sq. ft.                                                                        | 3.70 sq. ft.                                                                        | 5.55 sq. ft.                                                                        | 7.40 sq. ft.                                                                        |
| Slip Fitter Mount<br>    | Horizontal       | 0.60 sq. ft.                                                                      | 0.98 sq. ft.                                                                      | 1.20 sq. ft.                                                                      | 1.53 sq. ft.                                                                      | 1.57 sq. ft.                                                                      | 1.53 sq. ft.                                                                        | 0.86 sq. ft.                                                                        | 1.30 sq. ft.                                                                        | 1.73 sq. ft.                                                                        |
| Slip Fitter Mount<br>    | 45°              | 1.92 sq. ft.                                                                      | 2.51 sq. ft.                                                                      | 1.92 sq. ft.                                                                      | 3.09 sq. ft.                                                                      | 4.39 sq. ft.                                                                      | 3.09 sq. ft.                                                                        | 3.84 sq. ft.                                                                        | 5.76 sq. ft.                                                                        | 7.68 sq. ft.                                                                        |
| Slip Fitter Mount<br>    | Vertical         | 2.59 sq. ft.                                                                      | 3.19 sq. ft.                                                                      | 2.59 sq. ft.                                                                      | 3.80 sq. ft.                                                                      | 4.07 sq. ft.                                                                      | 3.80 sq. ft.                                                                        | 5.18 sq. ft.                                                                        | 7.77 sq. ft.                                                                        | 10.35 sq. ft.                                                                       |

# KT-ALED290-L1-X-NM-8XX-VDIM

## LED AREA LIGHT FIXTURES

### ACCESSORIES (SOLD SEPARATELY)

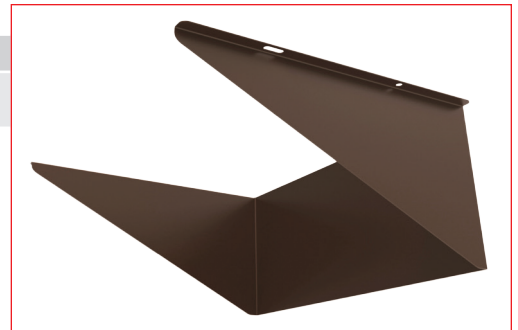
#### TWIST-LOCK AREA LIGHT CONTROL

| Catalog Number | Description                                                             | UPC          | Easy Code |
|----------------|-------------------------------------------------------------------------|--------------|-----------|
| KT-TLP-UV-3PN  | NEMA Type Twist-Lock 3-Pin Photocell 120-277V, 1800VA Max; Blue Housing | 843654131825 | NQT-46    |



#### GLARE SHIELD

| Catalog Number    | Description                                                                   | UPC          | Easy Code |
|-------------------|-------------------------------------------------------------------------------|--------------|-----------|
| KT-ALED-GS-L1-KIT | Reversible Glare Shield Kit; Large (fits "L1" fixture bodies); Bronze Housing | 843654131818 | LAI-36    |



#### MICROWAVE OCCUPANCY SENSOR

| Catalog Number  | Description                    | UPC          | Easy Code |
|-----------------|--------------------------------|--------------|-----------|
| KTS-MW3-12V-PKO | 12V Microwave Occupancy Sensor | 843654130637 | TRM-32    |



#### REMOTE CONTROL

| Catalog Number        | Description                                                                               | UPC          | Easy Code |
|-----------------------|-------------------------------------------------------------------------------------------|--------------|-----------|
| KTS-MW3-REMOTECONTROL | Remote Control for KTS-MW3-12V-XX Sensors, Sets/adjusts all sensor performance parameters | 843654132020 | XSR-61    |





# KT-ALED290-L1-X-NM-8XX-VDIM

## LED AREA LIGHT FIXTURES

### ORDERING INFORMATION

| ORDER CODE                  | PACK QTY. | UPC          | Easy Code |
|-----------------------------|-----------|--------------|-----------|
| KT-ALED290-L1-3-NM-840-VDIM | 1         | 843654131528 | GFU-80    |
| KT-ALED290-L1-3-NM-850-VDIM | 1         | 843654131535 | YGC-54    |
| KT-ALED290-L1-5-NM-840-VDIM | 1         | 843654131542 | WKK-76    |
| KT-ALED290-L1-5-NM-850-VDIM | 1         | 843654131559 | NDW-15    |

### CATALOG NUMBER BREAKDOWN

# KT-ALED290-L1-X-NM-8XX-VDIM

|   |   |   |   |   |   |   |   |   |    |    |    |    |
|---|---|---|---|---|---|---|---|---|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|

- 1 Keystone Technologies
- 2 Fixture Type
- 3 LED Technology
- 4 Wattage
- 5 Size/Shape
- 6 Style/Design Designation
- 7 Distribution Type
- 8 Mounting
- 9 CRI
- 10 Color Temp
- 11 Dimming
- 12 Housing Color
- 13 Options

#### 2 Fixture Type

|   |            |
|---|------------|
| A | Area Light |
|---|------------|

#### 5 Size/Shape

|   |       |
|---|-------|
| L | Large |
|---|-------|

#### 6 Style/Design Designation

|   |          |
|---|----------|
| 1 | Series 1 |
|---|----------|

#### 7 Distribution Type

|   |              |
|---|--------------|
| 2 | Type 2 (II)  |
| 3 | Type 3 (III) |
| 4 | Type 4 (IV)  |
| 5 | Type 5 (V)   |

#### 8 Mounting

|    |             |
|----|-------------|
| NM | No Mounting |
|----|-------------|

#### 9 CRI

|   |     |
|---|-----|
| 8 | >80 |
|---|-----|

#### 10 Color Temp

|    |       |
|----|-------|
| 40 | 4000K |
| 50 | 5000K |

#### 11 Dimming

|      |       |
|------|-------|
| VDIM | 0-10V |
|------|-------|

#### 12 Housing Color

|       |        |
|-------|--------|
| Blank | Bronze |
| B     | Black  |
| W     | White  |

#### 13 Options

|       |                                             |
|-------|---------------------------------------------|
| Blank | No Options                                  |
| /7PRS | 7-Pin Receptacle and Shorting Cap installed |
| /MW3  | Factory-installed Microwave Sensor          |