

DESCRIPTION

The RSA-MRZ family of fixtures is a multi-head, recessed group of products with an integral LED dedicated head. Each head offers four different light levels and lumen packages, with 25°, 40°, and 55° beam spreads. Four color temperatures, 2700K, 3000K, 3500K, 4000K in both 80+ and 97+ CRI are also part of the standard offering. Each head can tilt 45° out of the fixture, and rotate 365° around. The RSA-MRZ family now includes intelligent wireless controls (Enlighted) or simplified wireless controls (WaveLinx) options. Accessories include hex louver, linear spread lens, or soft focus lens. A snoot is also available for high angle glare cutoff.

SPECIFICATION FEATURES

Construction

Housing is 6063-T5 extruded aluminum, 20 gauge cold rolled steel. Each head construction is die cast metal. Flanged trim and mud-in trim available. New construction housings equivalent to remodel. Housing constructed by fasteners.

Weights of full fixture assembly:

Flange Trim Weight: 8 lbs
Mud-In Trim Weight: 8.5 lbs
Flange Trim with Sensor Weight: 9 lbs

Electrical

Standard drivers feature electronic universal voltage (120-277V/ 50-60 Hz), greater than 0.9 power factor, less than 20% harmonic distortion, and features ambient temperature of 25°C (77°F). 0-10V dimming standard.

LED Optics

Each fixture head features precision molded TIR optics made of virgin optical grade acrylic with 95% efficiency and is field changeable. Each lens is injection molded for precision optics with the

choice of 25°, 40°, 55° beam spreads. The LEDs are also offered in 80+ CRI and 97+ CRI in 2700K, 3000K, 3500K, and 4000K CCT.

Mounting

Housing includes holes for tie back to structure. Knockouts are provided for threaded rods (by others) to secure fixture to structure. Provide flexible whip or conduit to fixture, and attach to fixture via knock outs on junction box side.

Finish

Fixture housing is coated using electrostatically charged polyester powder coat paint for superior protection against fade and wear. Paint Colors:
B = (All Black) Black Housing/ Black Trim,
W = (All White) White Housing/ White Trim.
BW = Black Housing/ White Trim. Consult factory for other color options.

Compliance

Components are UL recognized and luminaires are cULus listed for 25°C ambient environments, IC rated, Chicago plenum rated, and NYC compliant. Dry listed.

Environment

Suited for indoor only, dry listing. 25° C ambient temperature.

Control

Standard offering is 0-10V dimming and energy saving integral sensor device available. Enlighted sensors are available for building management applications. WaveLinx sensors are available for simplified controls solutions. Addressable Lighting Interface (DALI) driver option can be used with Fifth Light Technology.

Life and Warranty

Standard five-year limited warranty on all parts.



RSA-MRZ

LED Multi-Head Fixture

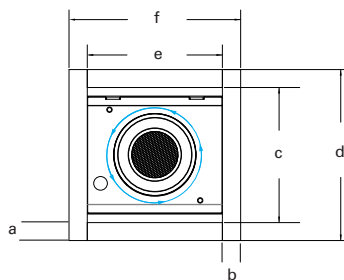
Recessed

LED Multi-head Configuration
1-Head

CERTIFICATION DATA
UL/cUL Dry Location Listed
LM-79, LM-80, TM-30, TM-21

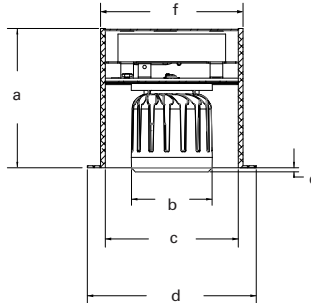
ENERGY & CONNECTED SOLUTIONS
WaveLinx
Enlighted

Top View - Flanged Trim



| | | |
|---|-------|--------|
| a | 0.75" | 20 mm |
| b | 0.75" | 20 mm |
| c | 5.25" | 134 mm |
| d | 6.75" | 172 mm |
| e | 5.25" | 134 mm |
| f | 6.75" | 172 mm |

Side View - Flanged Trim



| | | |
|---|-------|--------|
| a | 5.5" | 140 mm |
| b | 3.17" | 81 mm |
| c | 5.25" | 134 mm |
| d | 6.75" | 172 mm |
| e | 0.16" | 5 mm |
| f | 5.66" | 144 mm |

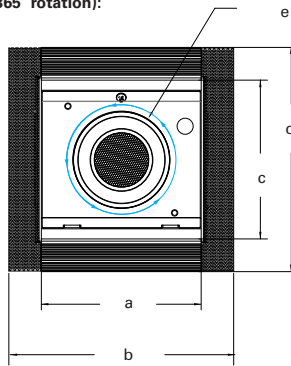
ORDERING INFORMATION

Sample Number: MRZ-1-REC-MUD-1-L30-80-WFL-UNV-BW-HCD-SWPD1-K1

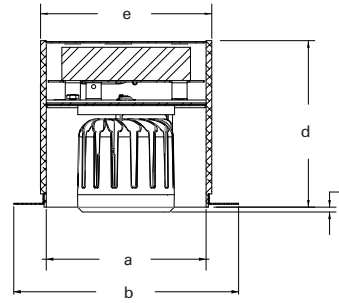
| Series | Size | Mounting | Trim Type ⁽¹⁾ | Light Level/ Head ⁽⁸⁾ (@ 4000 K) | Color Temp./ Wattage | CRI | Beam Angle | Voltage ⁽⁹⁾ |
|--|--|---|-------------------------------|--|--|---|--|------------------------|
| MRZ = Multi-Head Integral LED | 1 = 1 Integral LED Head | REC = Recessed | FLN = Flanged MUD = Mud-In | 1 = 700 lumens @7W @80CRI, 550 lumens @7W @ 97CRI 2 = 900 lumens @9W @80CRI, 700 lumens @9W @ 97CRI 3 = 1300 lumens @12W @80CRI, 1000 lumens @12W @ 97CRI 4 = 1700 lumens @16W @80CRI, 1300 lumens @16W @ 97CRI | L27 = 2700K L30 = 3000K L35 = 3500K L40 = 4000K | 80+ 97+ | NFL = 25° Narrow Flood FL = 40° Flood WFL = 55° Wide Flood | UNV = 120-277V |
| Finish ⁽²⁾ | Drivers ⁽¹⁰⁾ | | | Integral Control (Optional) ⁽¹⁾⁽⁵⁾⁽⁷⁾ | Options (Optional) ⁽³⁾⁽⁶⁾ | Accessories ⁽⁴⁾ (Optional Optics Kit) | | |
| W = White Housing/ White Trim B = Black Housing/ Black Trim BW = Black Housing/ White Trim | STD = Standard 0-10V (10%-100%) ELV = Electronic Low Voltage Dimming HCD = 0-10V (1%-100%) DCD = 0-10V (0.1%-100%) 5LT = Fifth Light DALI (5-100%) | 5LTHD = Fifth Light DALI (1-100%) LUH = Lutron H-Series Ecosystem (1-100% Fade to Black) | | WAA = WaveLinx Wireless Integral Sensor WAB = WaveLinx Lite Wireless Integral Sensor LWIPD1 = Enlighted Wireless Integral Sensor | REM = Remote Emergency Battery CP = Chicago Plenum HEX = Hex Louver LSL = Linear Spread Lens SFL = Soft Focus Lens SNT = Snoot BF = Butterfly Brackets | K1 = (1) 25°, (1) 40°, (1) 55° lens kit | | |

ADDITIONAL OPTIONS AND VIEWS

Mud-in Trim (showing 365° rotation):

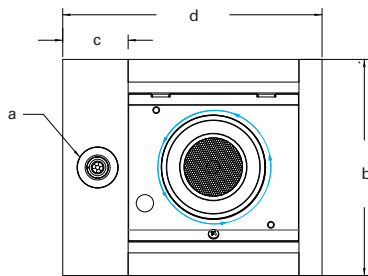


| | | |
|---|-------|--------------|
| a | 5.25" | 134 mm |
| b | 7.41" | 189 mm |
| c | 5.25" | 134 mm |
| d | 7.41" | 189 mm |
| e | 3.17" | 81 mm (diam) |

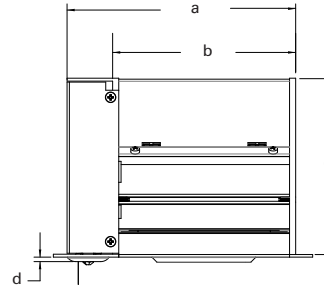


| | | |
|---|-------|--------|
| a | 5.25" | 134 mm |
| b | 7.41" | 189 mm |
| c | 0.16" | 5 mm |
| d | 5.5" | 140 mm |
| e | 5.66" | 144 mm |

Flange Trim with Enlighted (LWIPD1) or WaveLinX (WAA) sensor

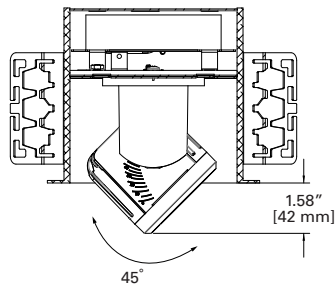


| | | |
|---|-------|--------------|
| a | 1.26" | 32 mm (diam) |
| b | 6.64" | 169 mm |
| c | 2.0" | 52 mm |
| d | 7.97" | 203 mm |



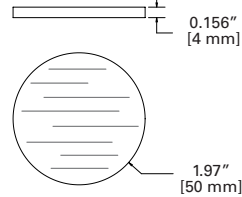
| | | |
|---|-------|---------------|
| a | 7.03" | 179 mm (diam) |
| b | 5.63" | 143 mm |
| c | 5.5" | 140 mm |
| d | 0.16" | 5 mm |

Rotation of 45° per fixture head, and 365° in plan view.

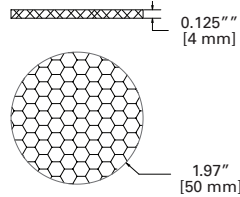


Accessories - Linear Spread lens, Hex Louver, Soft Focus Lens, Snoot.
(Note: Only one lens can be used at a time. And, only one lens can be used with snoot)

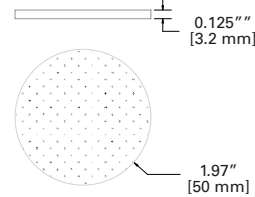
LSL Linear Spread Lens



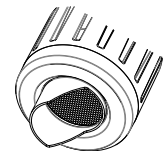
HEX Hex Louver



SFL Soft Focus Lens



SNT Snoot - (Shown with Hex Louver)



LUMEN MAINTENANCE

| AMBIENT TEMPERATURE | TM-21 LUMEN MAINTENANCE (60,000 Hours) | THEORETICAL L70 (Hours) |
|---------------------|--|-------------------------|
| 25°C | > 86% | > 90,000 |

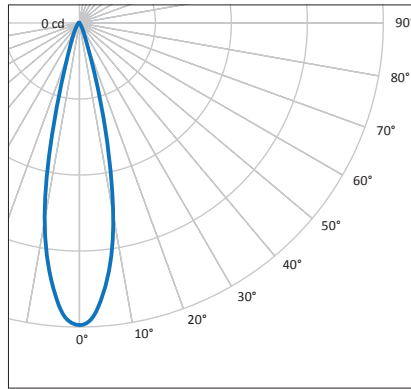
CONNECTED CONTROL

Enlighted Intelligent (LWIPD1) and WaveLinX (WAA, WAB) Wireless Sensor Ordering Information:

- WAA, WAB and LW sensors must be used with 0-10V drivers (STD, HCD, DCD)
- The WaveLinX integrated sensors (WAA, WAB) offer passive infrared (PIR) occupancy and a photocell for closed loop daylighting.
- See RSA MRZ brochure for systems information and application.

PHOTOMETRY

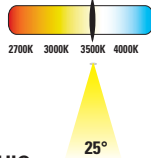
| MRZ 1-HEAD - NARROW FLOOD (25°) | |
|---------------------------------|--|
| Filename | MRZ-1-REC-X-4-L35-97-NFL-UNV-X-STD.ies |
| Test No. | P219571 |
| Lumcat | MRZ-1-REC-X-4-L35-97-NFL-UNV-X-STD |
| Lumens | 1276 Lm |
| Watts | 15.8 W |
| LPW | 80.8 Lm/W |
| CCT | 3500K |
| SC (0/90/45) | 0.41 / 0.41 / 0.37 |
| Beam Angle | 24.1° |
| CBCP | 6600 cd |



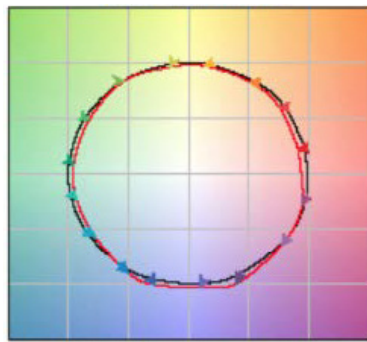
| ZONAL LUMENS SUMMARY | | |
|----------------------|--------|-----------|
| Zone | Lumens | % Fixture |
| 0-30° | 1190 | 93.2 |
| 0-40° | 1248 | 97.8 |
| 0-60° | 1273 | 99.8 |
| 0-90° | 1276 | 100 |
| 90-180° | 0 | 0 |
| 0-180° | 1276 | 100 |

| LUMINANCE DATA (cd/m²) | | | | |
|------------------------|-------|-------|-------|--|
| Angle | 0° | 45° | 90° | |
| 45 | 18351 | 18351 | 18351 | |
| 55 | 4989 | 4989 | 4989 | |
| 65 | 1751 | 1751 | 1751 | |
| 75 | 2859 | 2859 | 2859 | |
| 85 | 0 | 0 | 0 | |

| | |
|----------|-----------------------|
| TM-30-15 | R _f = 90.1 |
| | R _g = 97.2 |
| CRI/CIE | R _a = 97.3 |
| | R _g = 94.4 |



COLOR VECTOR GRAPHIC



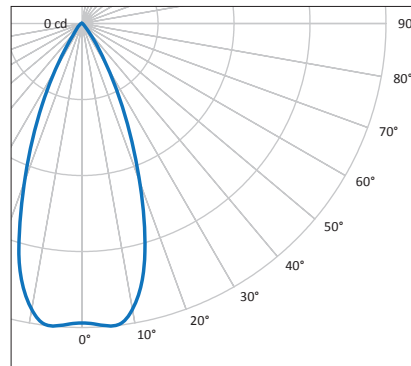
CONE OF LIGHT

| 0° AIMING ANGLE HORIZONTAL ILLUMINANCE ON FLOOR | | | | |
|--|-------|-----|-----|--|
| MH | FC | L | W | |
| 1' | | | | |
| 5' | 264 | 2 | 2 | |
| 5.5' | 218.2 | 2.2 | 2.2 | |
| 6.5' | 156.2 | 2.6 | 2.6 | |
| 7.5' | 117.3 | 3 | 3 | |

| 30° AIMING ANGLE HORIZONTAL ILLUMINANCE ON FLOOR | | | | | |
|---|-------|-----|-----|-----|--|
| MH | FC | L | W | CB | |
| 1' | | | | | |
| 5' | 180 | 2.5 | 2.2 | 2.9 | |
| 5.5' | 148.8 | 2.7 | 2.4 | 3.2 | |
| 6.5' | 106.5 | 3.2 | 3 | 3.8 | |
| 7.5' | 80 | 3.7 | 3.4 | 4.3 | |

| 30° AIMING ANGLE VERTICAL ILLUMINANCE ON WALL | | | | |
|--|--------|-----|-----|-----|
| MH | FC | L | W | CB |
| 1' | 1177.3 | 0.9 | 0.6 | 1.7 |
| 1.5' | 523.3 | 1.4 | 1 | 2.6 |
| 2' | 294.3 | 1.9 | 1.2 | 3.5 |
| 2.5' | 188.4 | 2.4 | 1.6 | 4.3 |
| 3' | 130.8 | 2.9 | 2 | 5.2 |
| 3.5' | 96.1 | 3.3 | 2.4 | 6.1 |

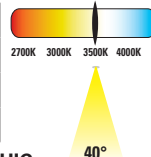
| MRZ 1-HEAD - FLOOD (40°) | |
|--------------------------|---------------------------------------|
| Filename | MRZ-1-REC-X-4-L35-97-FL-UNV-X-STD.ies |
| Test No. | P219726 |
| Lumcat | MRZ-1-REC-X-4-L35-97-FL-UNV-X-STD |
| Lumens | 1283 Lm |
| Watts | 15.8 W |
| LPW | 81.2 Lm/W |
| CCT | 3500K |
| SC (0/90/45) | 0.7 / 0.7 / 0.66 |
| Beam Angle | 42.3° |
| CBCP | 2347 cd |



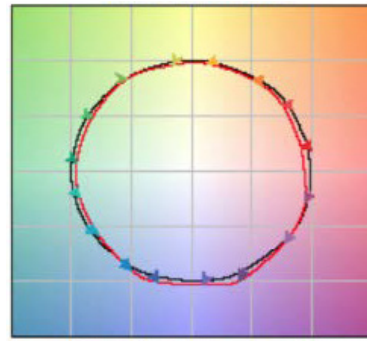
| ZONAL LUMENS SUMMARY | | |
|----------------------|--------|-----------|
| Zone | Lumens | % Fixture |
| 0-30° | 1103 | 86 |
| 0-40° | 1229 | 95.8 |
| 0-60° | 1275 | 99.4 |
| 0-90° | 1283 | 100 |
| 90-180° | 0 | 0 |
| 0-180° | 1283 | 100 |

| LUMINANCE DATA (cd/m²) | | | | |
|------------------------|-------|-------|-------|--|
| Angle | 0° | 45° | 90° | |
| 45 | 28538 | 28538 | 28538 | |
| 55 | 11354 | 11354 | 11354 | |
| 65 | 5137 | 5137 | 5137 | |
| 75 | 2859 | 2859 | 2859 | |
| 85 | 0 | 0 | 0 | |

| | |
|----------|-----------------------|
| TM-30-15 | R _f = 90.1 |
| | R _g = 97.2 |
| CRI/CIE | R _a = 97.3 |
| | R _g = 94.4 |



COLOR VECTOR GRAPHIC



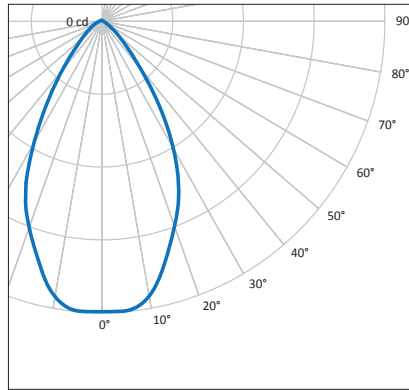
CONE OF LIGHT

| 0° AIMING ANGLE HORIZONTAL ILLUMINANCE ON FLOOR | | | | |
|--|------|-----|-----|--|
| MH | FC | L | W | |
| 1' | | | | |
| 5' | 94.3 | 3.4 | 3.4 | |
| 5.5' | 77.9 | 3.8 | 3.8 | |
| 6.5' | 55.8 | 4.4 | 4.4 | |
| 7.5' | 41.9 | 5.2 | 5.2 | |

| 30° AIMING ANGLE HORIZONTAL ILLUMINANCE ON FLOOR | | | | | |
|---|------|-----|-----|-----|--|
| MH | FC | L | W | CB | |
| 1' | | | | | |
| 5' | 75.7 | 3.7 | 3.6 | 2.9 | |
| 5.5' | 62.6 | 4 | 3.8 | 3.2 | |
| 6.5' | 44.8 | 4.8 | 4.6 | 3.8 | |
| 7.5' | 33.7 | 5.6 | 5.4 | 4.3 | |

| 30° AIMING ANGLE VERTICAL ILLUMINANCE ON WALL | | | | |
|--|-------|-----|-----|-----|
| MH | FC | L | W | CB |
| 1' | 674.3 | 0.9 | 0.8 | 1.7 |
| 1.5' | 299.7 | 1.4 | 1.2 | 2.6 |
| 2' | 168.6 | 1.9 | 1.8 | 3.5 |
| 2.5' | 107.9 | 2.4 | 2.2 | 4.3 |
| 3' | 74.9 | 2.9 | 2.6 | 5.2 |
| 3.5' | 55 | 3.4 | 3 | 6.1 |

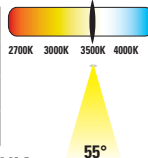
| MRZ 1-HEAD - WIDE FLOOD (55°) | |
|-------------------------------|--|
| Filename | MRZ-1-REC-X-4-L35-97-WFL-UNV-X-STD.ies |
| Test No. | P219850 |
| Lumcat | MRZ-1-REC-X-4-L35-97-WFL-UNV-X-STD |
| Lumens | 1194 Lm |
| Watts | 15.8 W |
| LPW | 75.6 Lm/W |
| CCT | 3500K |
| SC (0/90/45) | 0.91 / 0.91 / 0.91 |
| Beam Angle | 60.7° |
| CBCP | 1198 cd |



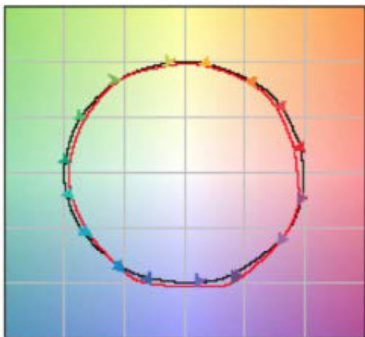
| ZONAL LUMENS SUMMARY | | |
|----------------------|--------|-----------|
| Zone | Lumens | % Fixture |
| 0-30° | 755 | 63.2 |
| 0-40° | 1016 | 85.1 |
| 0-60° | 1180 | 98.8 |
| 0-90° | 1194 | 100 |
| 90-180° | 0 | 0 |
| 0-180° | 1194 | 100 |

| LUMINANCE DATA (CD/M ²) | | | |
|-------------------------------------|--------|--------|--------|
| Angle | 0° | 45° | 90° |
| 45 | 105010 | 105010 | 105010 |
| 55 | 40256 | 40256 | 40256 |
| 65 | 11908 | 11908 | 11908 |
| 75 | 5528 | 5528 | 5528 |
| 85 | 0 | 0 | 0 |

| | |
|----------|-----------------------|
| TM-30-15 | R _f = 90.1 |
| | R _g = 97.2 |
| CRI/CIE | R _a = 97.3 |
| | R _g = 94.4 |



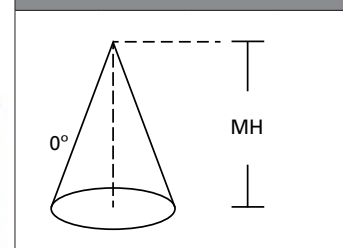
COLOR VECTOR GRAPHIC



Reference Illuminant Test Source

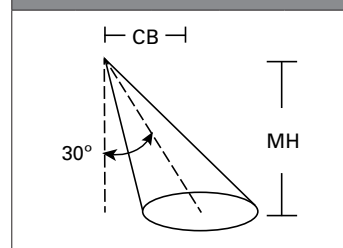
CONE OF LIGHT

0° AIMING ANGLE
HORIZONTAL ILLUMINANCE ON FLOOR



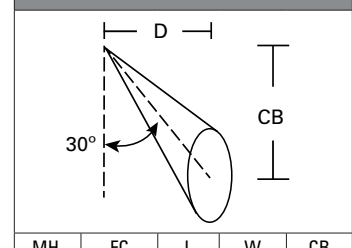
| MH | FC | L | W |
|------|------|-----|-----|
| 5' | 47.9 | 4.4 | 4.4 |
| 5.5' | 39.6 | 5 | 5 |
| 6.5' | 28.4 | 5.8 | 5.8 |
| 7.5' | 21.3 | 6.8 | 6.8 |

30° AIMING ANGLE
HORIZONTAL ILLUMINANCE ON FLOOR



| MH | FC | L | W | CB |
|------|------|-----|-----|-----|
| 5' | 38.3 | 4.5 | 4.6 | 2.9 |
| 5.5' | 31.6 | 5.1 | 5.2 | 3.2 |
| 6.5' | 22.6 | 6 | 6 | 3.8 |
| 7.5' | 17 | 6.9 | 7 | 4.3 |

30° AIMING ANGLE
VERTICAL ILLUMINANCE ON WALL



| MH | FC | L | W | CB |
|------|-------|-----|-----|-----|
| 1' | 429 | 1 | 1 | 1.7 |
| 1.5' | 190.6 | 1.5 | 1.6 | 2.6 |
| 2' | 107.2 | 2.1 | 2.2 | 3.5 |
| 2.5' | 68.6 | 2.6 | 2.8 | 4.3 |
| 3' | 47.7 | 3.2 | 3.2 | 5.2 |
| 3.5' | 35 | 3.8 | 3.8 | 6.1 |

| MULTIPLIER TABLE | | | | | | | | |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| CRI | 80+ | | | | 97+ | | | |
| CCT | 2700K | 3000K | 3500K | 4000K | 2700K | 3000K | 3500K | 4000K |
| MULTIPLIER | 1.226 | 1.246 | 1.314 | 1.332 | 0.875 | 0.957 | 1.000 | 1.039 |

TECHNICAL NOTES

- Sensor only available for Flange Trim.
- W = (White) White Housing, White Trim. B = (Black) Black Housing, Black Trim. BW = Black Housing, White Trim. Consult factory for custom colors.
- When SFL, LSL, HEX, or SNT are selected, all fixture heads receive this option. Only one shielding media can be used at a time. However, the SNT (snoot) option can take one hex louver, linear spread, or soft focus lens media.
- K1 is a kit that contains one 25°, one 40°, and one 55° lens in one box for field changeable optic distributions. K2 is a kit that contains two 25°, two 40°, and two 55° lenses in one box for field changeable optic distributions. K3 is a kit that contains three 25°, three 40°, and three 55° lenses in one box for field changeable optic distributions. K4 is a kit that contains four 25°, four 40°, and four 55° lenses in one box for field changeable optic distributions.
- See CONNECTED CONTROL for detailed information and full specification.
- No remote Emergency Battery option available for 1-head
- Integral sensors are only compatible with 0-10V dimming drivers. They must be used with their respective wireless control systems.
- Refer to "IES Files" section for all options of color temperatures, CRIs, optical distributions, and shielding media.
- 347 V not available
- Driver Table availability for 1-Head:

| DRIVER AVAILABILITY TABLE - 1 HEAD | | | | | | | |
|------------------------------------|---------------------------|----------------------------------|-----------------|-------------------|-------------------------------------|---------------------------------------|----------------------------------|
| LIGHT LEVEL | STD 0-10V (10-100%) | ELV Electronic Low Voltage | HCD (1-100%) | DCD (0.1-100%) | 5LT Fifth Light Dali (5-100%) | 5LTHD Fifth Light Dali (1-100%) | LUH Lutron-EcoSys (1-100%) |
| 1 | YES | NO | NO | YES | NO | NO | NO |
| 2 | YES | YES | NO | YES | NO | YES | YES |
| 3 | YES | YES | NO | YES | NO | YES | YES |
| 4 | YES | YES | YES | YES | NO | YES | YES |