

SQUERO COMBINATION

RECESSED PATTERN

STATIC WHITE



Project: _____

Type: _____

LUMENWERX

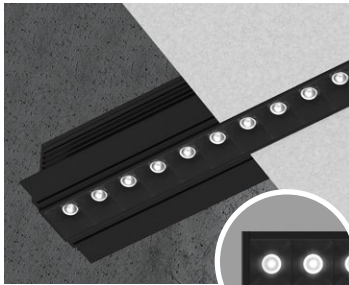
DESCRIPTION

Squero Combination Pattern brings style and flexibility to linear lighting systems. Less than 2" wide, Squero offers a variety of optics, each providing a different visual texture, as well as photometric performance. Squero Combination allows various optics to be combined in a single luminaire. Optional modules are also available for accent lighting. It can be installed as individual luminaires, in continuous runs, or as patterns. See separate spec sheets for Squero and Squero Combination.

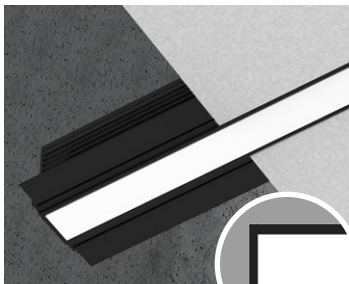
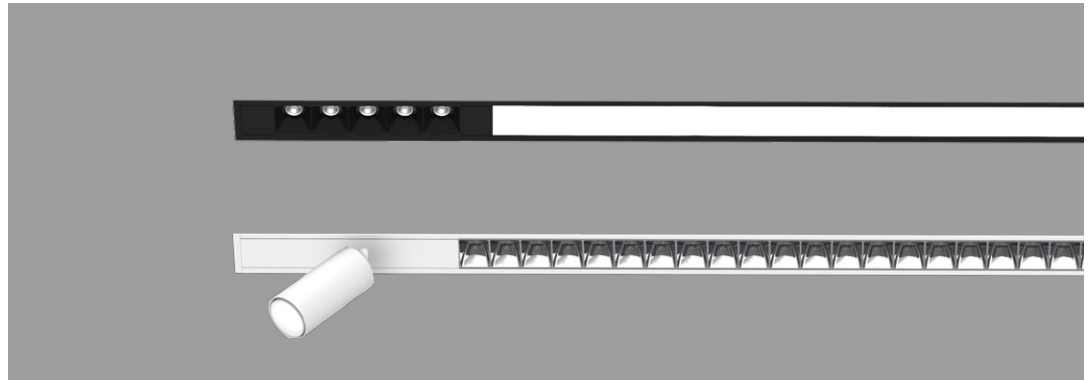
SENSORS
For latest
information
on sensors,
click [here](#).



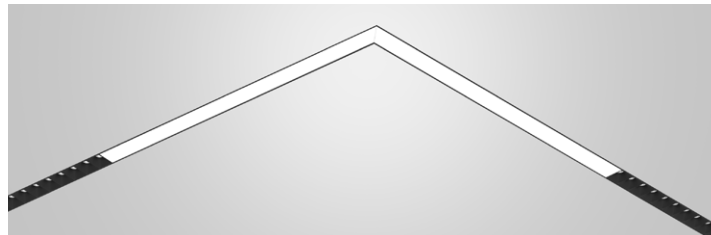
Up to 130 lm/W performance



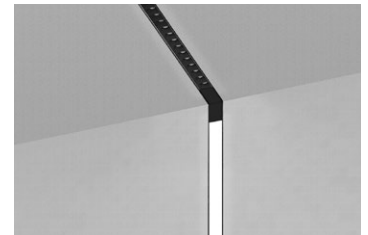
MRO
Miniature Reflector Optics



HLO
High-Efficiency Lambertian Optic



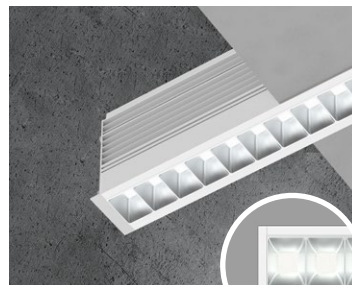
LIT CORNER ¹



UNLIT CORNER ¹



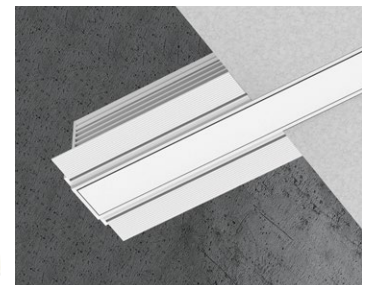
MBPL
Matte Black Parabolic Louver



MPL
Matte Parabolic Louver



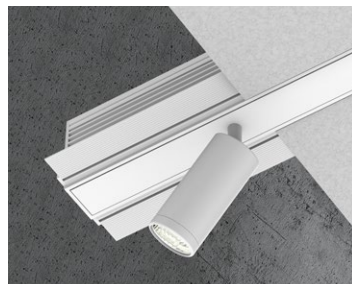
SPL
Specular Parabolic Louver



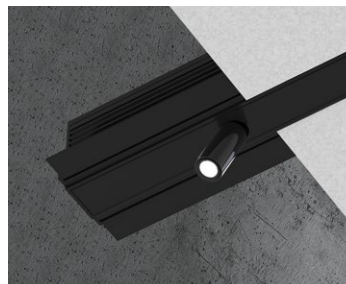
BLA
Blank



ITR ²
Integrated Track



AAM
Adjustable Accent Module



MS
Micro Spot

¹ Lit corners can only be available with HLO, min corner dimensions 2"x2". Unlit corner min dimensions 6"x6".

² Track and downlight by others.

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LUMENWERX

Project: _____

Type: _____

Order Guide

Example: SQUCOMRPAT-D-MRO18-2FT-HLO-2FT6IN-BLA-1FT6IN-WH-SW-80CRI-350LMF-27K-6FT-LEV-BLA-90COR(1)-120V-D1-1C-NA-TG9-W-NA-NA-1AAM21(80CRI-350LM-27K-W-NA)

A drawing of your combination pattern is required - anything from a line drawing to an architectural drawing. You can also use the grid on page 5 to sketch your layout.

| LUMINAIRE ID | DISTRIBUTION | OPTICS ^{1, 2, 3} Specify the total length for each required optic, including the corner lengths. | | | MRO COLOR | LIGHT SOURCE | CRI |
|---|--------------|---|----|----|---|---|--|
| SQUCOMRPAT | D | | | | | | |
| SQUCOMRPAT - Squero Combination Recessed Pattern | D - Direct | MRO18 - 18 degree Miniature Reflector Optic | FT | IN | WH ⁶ - White BK ⁶ - Black NA - Not applicable ⁶ Only available with MRO optics. | SW - Static white | 80CRI - 80 CRI 90CRI ⁸ - 90 CRI ⁸ Not available with BIOS. |
| | | MRO35 - 35 degree Miniature Reflector Optic | FT | IN | | BIOSST ⁷ - BIOS Biological Static BIOSDY ⁷ - BIOS Biological Dynamic BIOSTU ⁷ - BIOS Biological Tunable | |
| | | MRO55 - 55 degree Miniature Reflector Optic | FT | IN | | | |
| | | MBPL ⁴ - Matte Black Parabolic Louver | FT | | | | |
| | | MPL ⁴ - Matte Parabolic Louver | FT | | | | |
| | | SPL ⁴ - Specular Parabolic Louver | FT | | | | |
| | | HLO - High-Efficiency Lambertian Optic | FT | IN | | | |
| BLA ⁵ - Blank | FT | IN | | | | | |
| | | ¹ Specify MROs in 6" increments, Parabolic Louvers in 1" increments, HLO and Blank in 1" increments. ² The minimum total length per louver/optic must be 2' in each section of the fixture. ³ Minimum fixture length is 4'. ⁴ Not available with BIOSTU. ⁵ A minimum 6" blank section must be specified for each AAM or Micro Spot option. | | | ⁷ See page 8 for details. | | |

| LUMEN PACKAGE | COLOR TEMP. | TOTAL PATTERN LENGTH | CORNER TYPE | CORNER OPTIC | CORNER DEGREE | VOLTAGE |
|--|---|---|--|--|--|--|
| 350LMF - Eco low output 350 lm/ft 500LMF - Low output 500 lm/ft 750LMF - Medium output 750 lm/ft 1000LMF ^{9,10} - High output 1000 lm/ft | 27K ¹¹ - 2700K 30K - 3000K 35K - 3500K 40K - 4000K 50K ¹¹ - 5000K | #FT#IN ¹² - Specify the total nominal length (#) in 1' and/or 1" increments Continuous runs: lengths over 12' | INN - Inner corner LEV - Leveled corner | HLO - High-Efficiency Lambertian Optic leveled corner min 2'x2' BLA - Aluminum Blank leveled corner min 6"x6" | 90COR(#) - 90 degrees, specify the number of corners (#) | 120V - 120V 277V - 277V UNV - 120V-277V 347V ¹³ - 347V ¹³ Available with D1 driver only. |
| ⁹ Not available with MBPL optic. ¹⁰ Not available with BIOS. | ¹¹ Not available with BIOS. | ¹² Total luminaire length should equal the sum of all the optic lengths. | | | | |

| DRIVER ¹⁴ | ELECTRICAL | ELECTRICAL SECTIONS (optional) ^{19,20} | MOUNTING ²⁵ |
|---|---|--|---|
| D1 - 1% 0-10V DA ¹⁵ - DALI LDE1 ¹⁵ - Lutron Hi-lume 1% Eco ELD1 - eldoLED 1% ECODrive 0-10V ELDO - eldoLED 0.1% SOLOdrive 0-10V | 1C - 1 circuit #MC ¹⁶ - Multi circuit EC - Emergency-powered fixture NL - Night light fixture DL - Daylight fixture GTD ^{17,18} - Generator transfer device fixture | #EC## ²¹ - Emergency-powered section #NL## ²¹ - Night light section #DL## ²¹ - Daylight section #GTD## ^{21,22,23} - Generator transfer device section #EMB ^{23,24} - Emergency battery NA - None | TC9 - T-bar 9/16" TC15 - T-bar 15/16" TB9 - T-bar 9/16" TB15 - T-bar 15/16" ST - Screw slot T-bar DTR - Drywall trim DTL - Drywall trimless DMF - Drywall mud flange MFM ²⁶ - Multiple flange mounting |
| ¹⁴ PoE (Power-over-Ethernet) compatible. Consult factory for details. ¹⁵ On-site commissioning is required. | ¹⁶ Specify total number of circuits (#), including any required for electrical section, AAM, or Micro Spot options. Provide drawing or layout specifications. Minimum 4' section per circuit. ¹⁷ Minimum 4' fixture. ¹⁸ Not available with 347V. | ¹⁹ Specify with multi circuit (#MC) electrical option only. ²⁰ Provide drawing or layout specifications. Consult factory for other configurations. Default section length is 4'. ²¹ Specify quantity (#), and section length in inches (##). ²² Minimum 4' section. ²³ Not available with 347V. ²⁴ Specify quantity (#). All batteries will be on the same circuit. Each battery powers a 4' section. | ²⁵ Transition mounting options also available (e.g. Recessed to Pendant/Surface), consult factory for details. ²⁶ See page 4 for details. |

| FINISH ²⁷ | CONTROL ²⁸ | OPTIONS | MODULES (optional) ^{35,36} |
|--|--|---|---|
| W - Matte white AL - Aluminum B - Matte black CF# - Custom finish, specify RAL# | STANDALONE CONTROLS^{29,30} Specify the quantity (#) of sensors per fixture. #OMS ³¹ - Onboard Occupancy #OMS## ³² - Onboard Occupancy with bi-level dimming #ODS - Onboard Daylight #OCS - Onboard Occupancy & Daylight | CONNECTED CONTROLS³³ LU - Lutron AWN - Lutron Athena Wireless Node RF Only AWNS - Lutron Athena Wireless Node Sensor EN - Enlighted ENC - Encelium WL - Cooper Wavelinx AN - Acuity nLight CA - Casambi LG - Legrand | FU120 - Fuse 120V FU277 - Fuse 277V ITR ³⁴ - Integrated track FWC - Flexible whip cable (6' std) NA - None |
| ²⁷ Blank finish will match fixture finish. | NA - None | ³⁴ Consult factory for details. | #AAM21() - AAM 21° #AAM30() - AAM 30° #AAM36() - AAM 36° #MS25() - Micro Spot 25° #MS35() - Micro Spot 35° #MS50() - Micro Spot 50° NA - None |
| | ²⁸ Standalone and connected control options cannot be combined. ²⁹ Available with D1 driver and 1 circuit options only. ³⁰ Minimum 4' per zone. Provide control zone length. | ³¹ Fixture turns off when no occupancy. ³² Fixture dims to specified light level % (##). ³³ Consult factory for connected controls. | ³⁵ See page 3 for ordering details. ³⁶ If more than one option is specified, separate codes with a "+", e.g. 1AAM21(..)+1MS25(..). |

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Module

For a module, specify the options in the parentheses.

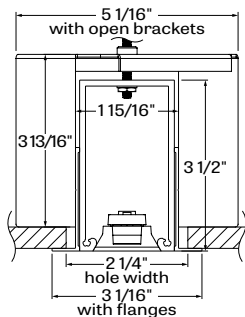
Example: 1AAM21(SW-80CRI-350LM-27K-W-NA)

MODULES (optional)

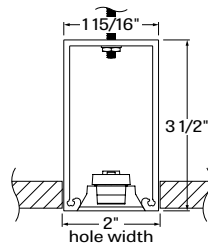
| MODULES ^{1,2,3} | LIGHT SOURCE | CRI | LUMEN PACKAGE | COLOR TEMP. | FINISH | OPTION |
|--|--------------------------|--|---|---|--|---|
| #AAM21() - AAM 21° #AAM30() - AAM 30° #AAM36() - AAM 36° NA - None ¹ Specify quantity (#). ² 6" blank per module. ³ If more than one option is specified, separate codes with a "+", e.g. 1AAM21(...)+1MS25(...). | SW - Static white | 80CRI - 80 CRI 90CRI - 90 CRI | AAM ⁴ 350LM - 350 lm 600LM - 600 lm ⁴ 5 W for 350 lm and 8 W for 600 lm. Wattages are for reference only. May change based on driver. | MS ⁵ 400LM - 400 lm ⁵ 5 W. Wattage is for reference only. May change based on driver. | 27K - 2700K 30K - 3000K 35K - 3500K 40K - 4000K 50K - 5000K | W - Matte white B - Matte black HCL ⁶ - Honeycomb louver NA - None ⁶ Not available with Micro Spot. |

Dimensions

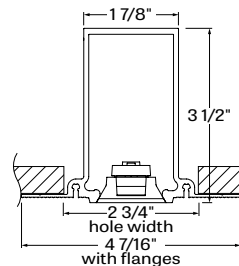
DRYWALL



DTR - Drywall Trim

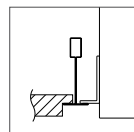
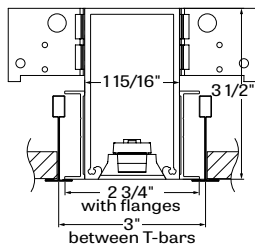


DTL - Drywall Trimless

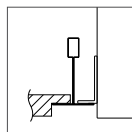


DMF - Drywall Mud Flange

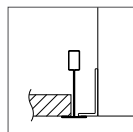
GRID



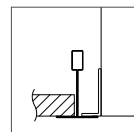
TG9
Tegular 9/16"



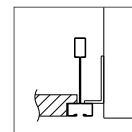
TG15
Tegular 15/16"



TB9
T-bar 9/16"

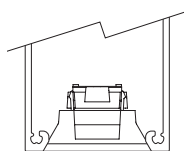


TB15
T-bar 15/16"

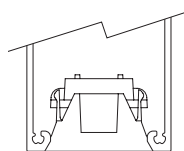


ST
Screw slot T-bar

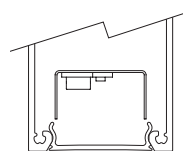
Section Views



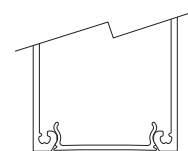
MRO
Miniature Reflector Optic



MBPL, MPL & SPL
Matte Black, Matte & Specular
Parabolic Louver



HLO
High-Efficiency Lambertian
Optic



BLA
Blank

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STATIC WHITE

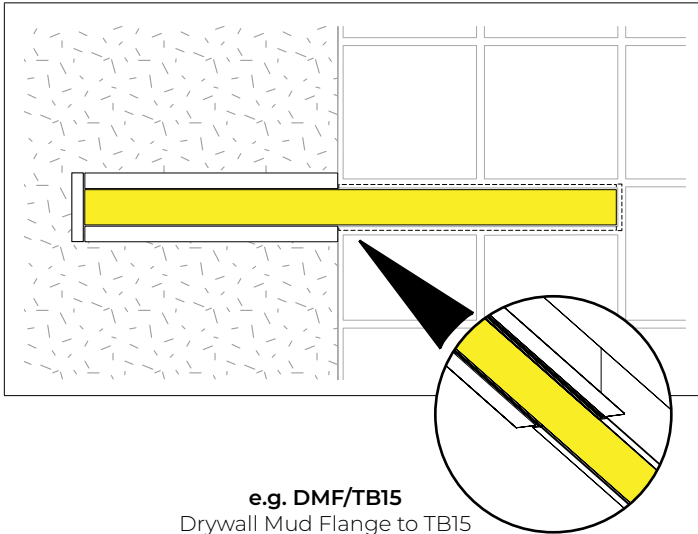
LUMENWERX

Multiple Flange Mounting Details

Multiple flange mounting can be specified when a fixture run needs to have a multiple flange recessed mounting detail. A drawing is required to clearly illustrate the application.

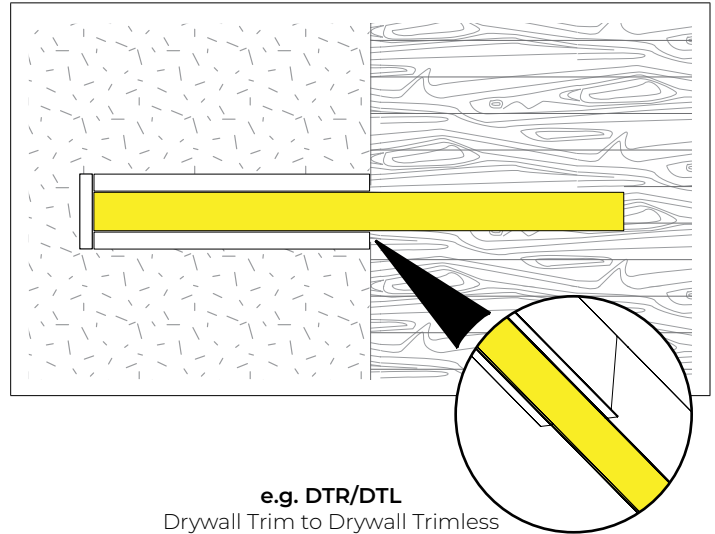
CEILING CONDITION EXAMPLES (consult factory for project specific ceiling conditions)

DRYWALL/GRID



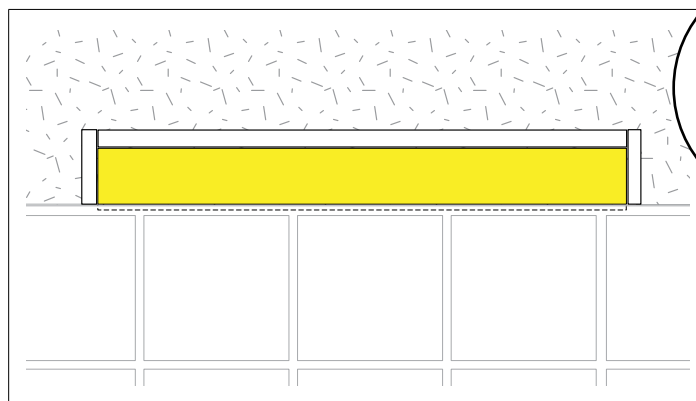
e.g. DMF/TB15
Drywall Mud Flange to TB15

DRYWALL/WOOD



e.g. DTR/DTL
Drywall Trim to Drywall Trimless

DRYWALL/GRID

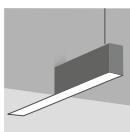


e.g. 1TG9/3DTR
1 long side TG9 and other
3 sides DTR

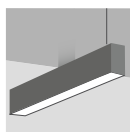
All drawings are for illustrative purposes only.

TRANSITION MOUNTING OPTIONS (consult factory for details)

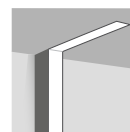
Mounting condition alters along the run of the fixture.



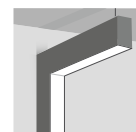
Recessed to Pendant



Surface to Pendant



Surface to Recessed in corner



Surface to Pendant in corner

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STATIC WHITE

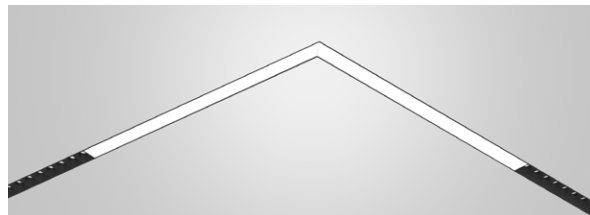
LUMENWERX

Squero Combination Pattern Layout

Use the grid below to sketch and label the layout of your combination pattern.

Make sure to follow the guidelines specified in the order code:

- MROs/AAM/Micro Spot in 6 inch increments;
Parabolic Louvers in 1 foot increments;
HLO/Blank in 1 inch increments.
- The minimum total length per louver/optic must be 2'
in each section of the fixture.
- Minimum fixture length is 4'.
- Maximum length for a section is 12'.



SQUERO COMBINATION

RECESSED PATTERN

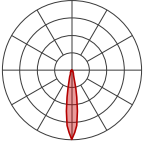
STATIC WHITE

LUMENWERX

Photometrics

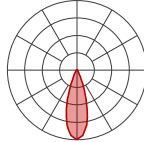
Values calculated based on a 4ft fixture at 35K and 80 CRI for all optics.

MRO18



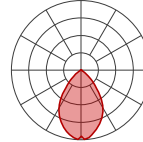
| LM/FT | W/FT | LPW |
|-------|------|-----|
| 350 | 2.7 | 130 |
| 500 | 4.0 | 125 |
| 750 | 6.4 | 118 |
| 1000 | 9.1 | 110 |

MRO35



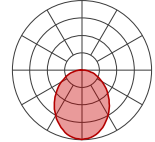
| LM/FT | W/FT | LPW |
|-------|------|-----|
| 350 | 2.9 | 121 |
| 500 | 4.3 | 116 |
| 750 | 6.9 | 108 |
| 1000 | 9.9 | 101 |

MRO55



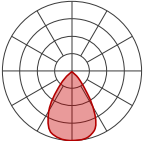
| LM/FT | W/FT | LPW |
|-------|------|-----|
| 350 | 3.2 | 109 |
| 500 | 4.8 | 104 |
| 750 | 7.7 | 97 |
| 1000 | 11.0 | 91 |

HLO



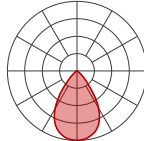
| LM/FT | W/FT | LPW |
|-------|------|-----|
| 350 | 3.1 | 112 |
| 500 | 4.6 | 108 |
| 750 | 7.3 | 103 |
| 1000 | 10.2 | 98 |

MBPL



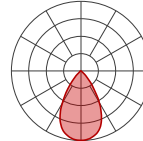
| LM/FT | W/FT | LPW |
|-------|------|-----|
| 350 | 5.2 | 67 |
| 500 | 7.5 | 66 |
| 750 | 11.7 | 64 |

MPL



| LM/FT | W/FT | LPW |
|-------|------|-----|
| 350 | 3.5 | 99 |
| 500 | 5.1 | 98 |
| 750 | 7.7 | 98 |
| 1000 | 10.6 | 95 |

SPL



| LM/FT | W/FT | LPW |
|-------|------|-----|
| 350 | 3.1 | 113 |
| 500 | 4.4 | 113 |
| 750 | 6.7 | 112 |
| 1000 | 9.1 | 109 |

MULTIPLIER TABLES - CCT/CRI

Use these tables to get results for different color temperatures and CRI for all photometric tables.

MRO18 / MRO35 / MRO55

| CCT (K) | WATTS | | LPW | |
|------------|--------|--------|--------|--------|
| | CRI 80 | CRI 90 | CRI 80 | CRI 90 |
| 2700 | 1.04 | 1.19 | 0.96 | 0.84 |
| 3000 | 1.00 | 1.15 | 1.00 | 0.87 |
| 3500 | 1.00 | 1.12 | 1.00 | 0.89 |
| 4000 | 0.99 | 1.10 | 1.01 | 0.91 |
| 5000 | 0.94 | 1.06 | 1.06 | 0.94 |

MBPL / MPL / SPL

| CCT (K) | WATTS | | LPW | |
|------------|--------|--------|--------|--------|
| | CRI 80 | CRI 90 | CRI 80 | CRI 90 |
| 2700 | 1.04 | 1.19 | 0.96 | 0.84 |
| 3000 | 1.00 | 1.15 | 1.00 | 0.87 |
| 3500 | 1.00 | 1.12 | 1.00 | 0.89 |
| 4000 | 0.99 | 1.10 | 1.01 | 0.91 |
| 5000 | 0.94 | 1.06 | 1.06 | 0.94 |

HLO

| CCT (K) | WATTS | | LPW | |
|------------|--------|--------|--------|--------|
| | CRI 80 | CRI 90 | CRI 80 | CRI 90 |
| 2700 | 1.05 | 1.27 | 0.95 | 0.79 |
| 3000 | 1.02 | 1.23 | 0.98 | 0.81 |
| 3500 | 1.00 | 1.19 | 1.00 | 0.84 |
| 4000 | 1.00 | 1.19 | 1.00 | 0.84 |
| 5000 | 0.96 | 1.12 | 1.04 | 0.89 |

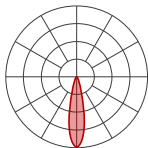
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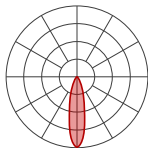
STATIC WHITE

LUMENWERX

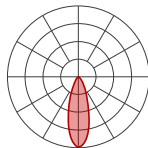
AAM



AAM 21°



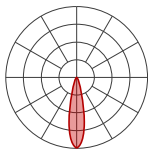
AAM 30°



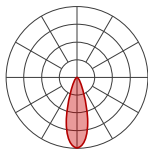
AAM 36°

| DELIVERED LUMENS | | | | | | | | | | |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Wattage | 5.0 | | | | | | | | | |
| CRI | 80 | | | | | 90 | | | | |
| CCT | 2700K | 3000K | 3500K | 4000K | 5000K | 2700K | 3000K | 3500K | 4000K | 5000K |
| Lumen | 323 | 340 | 350 | 357 | 364 | 265 | 279 | 289 | 299 | 312 |
| Wattage | 8.0 | | | | | | | | | |
| CRI | 80 | | | | | 90 | | | | |
| CCT | 2700K | 3000K | 3500K | 4000K | 5000K | 2700K | 3000K | 3500K | 4000K | 5000K |
| Lumen | 553 | 583 | 600 | 612 | 624 | 454 | 478 | 495 | 513 | 534 |

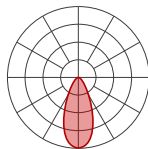
MICRO SPOT



Micro Spot 25°



Micro Spot 35°



Micro Spot 50°

| DELIVERED LUMENS | | | | | | | | | | |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Wattage | 5.0 | | | | | | | | | |
| CRI | 80 | | | | | 90 | | | | |
| CCT | 2700K | 3000K | 3500K | 4000K | 5000K | 2700K | 3000K | 3500K | 4000K | 5000K |
| Lumen | 373 | 400 | 400 | 432 | 432 | 324 | 344 | 344 | 345 | 372 |

SQUERO COMBINATION

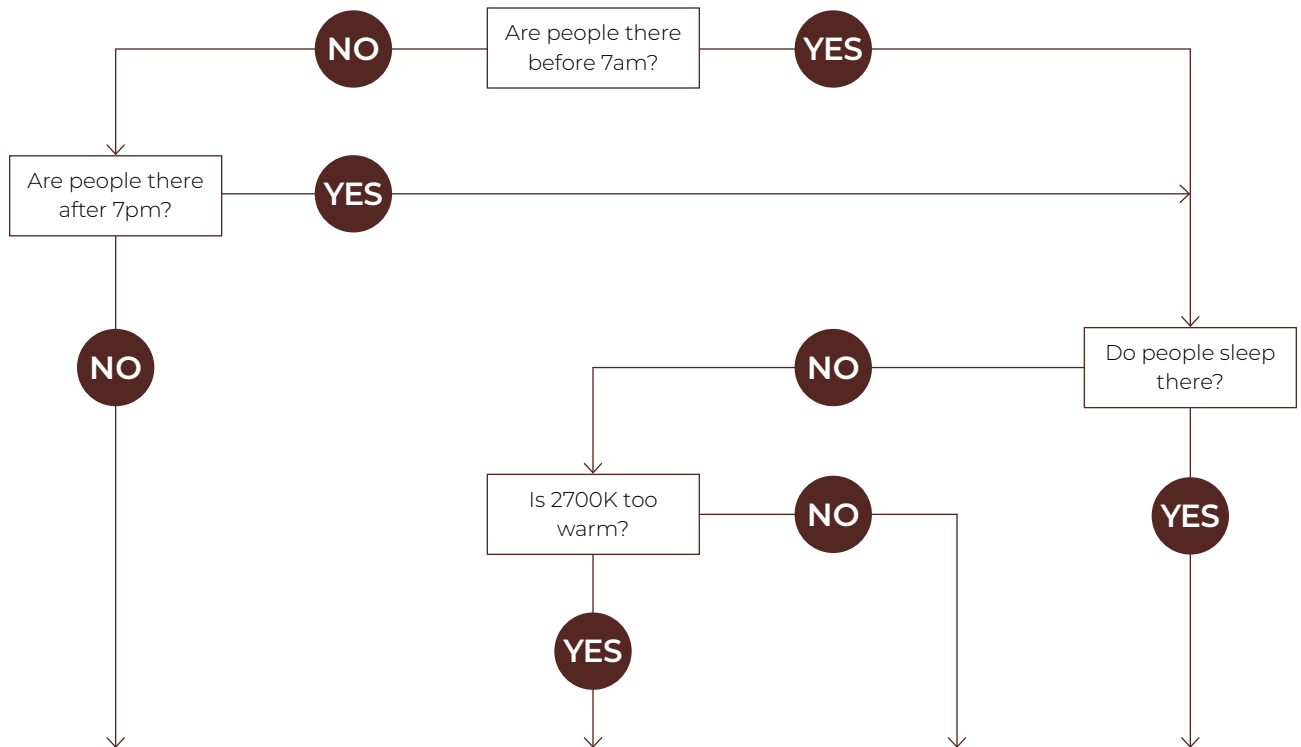
RECESSED PATTERN

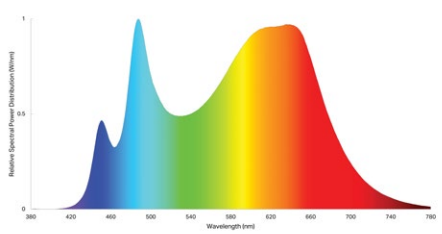
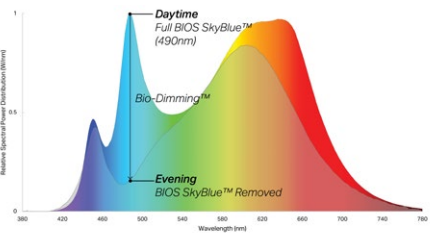
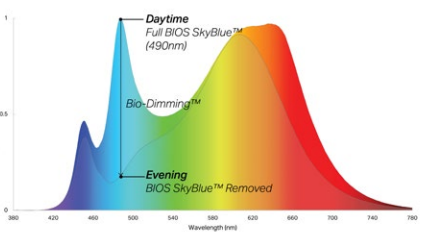
STATIC WHITE

LUMENWERX

BIOS

Three BIOS Circadian LED solutions are offered – Biological Static, Biological Dynamic, and Biological Tunable. Use the decision tree below to identify when and where to use BIOS Wellness LED Lighting Solutions.



| Biological Static BIOSST | Biological Dynamic BIOSDY | Biological Tunable BIOS TU |
|---|---|---|
| No CCT change when dimmed | 500K shift when dimmed | Dims to 2700K |
| Daytime solution | Daytime + evening solution | Daytime + evening solution |
| Spaces in operation during daytime hours, between 7am and 7pm | Spaces in operation overnight, after 7pm and before 7am, and when CCT color shift in the evening is not preferred | Suitable for spaces in operation overnight, after 7pm and before 7am, and where people do not sleep (CCT color shift in the evening is preferred) |
| E.g. offices, medical/dental offices | E.g. hospitals | E.g. offices, shiftwork |
|  |  |  |

SQUERO COMBINATION

RECESSED PATTERN

STATIC WHITE

LUMENWERX

Technical Specifications

OPTICS

Miniature Reflector Optic (MRO)

Locates individual, precisely molded TIR elements over each LED emitter, and further shield the source with precise parabolic reflectors. The controlled beam is remarkably comfortable – especially in a small LED luminaire.

MRO is available in a specular black or gloss white finish and creates a distinctive visual texture.

Different TIR elements offer a choice of beam spreads: narrow (18° with SC of 0.3), medium (35° with SC of 0.6), and wide (55° with SC of 0.9). These concentrated distributions can provide effective task illumination in a variety of applications.

Each MRO module is 6" long with five optical chambers.



Parabolic Louvers (MBPL, MPL & SPL)

Parabolic Louver Optics provide excellent shielding and a pleasing crisp visual texture. The precisely molded louvers consist of 1" deep blades and side reflectors with shielding of 50° lengthwise and 45° crosswise.

The parabolic contour of the blades and side reflectors direct light into a comfortable downlight distribution with a spacing criterion of 1.1, while minimizing shadows from the LED array above each cell.

Three finishes are available: matte black, matte, and specular. Specular (SPL) provides higher efficacy, sharper cut-off, and an ultra quiet appearance at shallow viewing angles. Matte (MPL) offers a softer appearance, a wider beam spread, and gentle brightness transition at cut-off. Matte black (MBPL) offers the highest UGR in Squero as the black parabolic louver is very quiet and glare free. The UGR is the best in class rating of under 10.



High-Efficiency Lambertian Optic (HLO)

The High-Efficiency Lambertian Optic (HLO) shielding of diffusing 0.075" thick acrylic with up to 88% transmission and good source obscuration is combined with matte white side reflectors to create an efficient optical chamber with uniform luminosity.

Luminaire brightness is controlled by the flux-to-shielding area ratio. For visual comfort, avoid high lumen output unless Squero is installed in a high ceiling application. Spacing criteria: 1.2 (longitudinal) x 1.1 (lateral).



Blank (BLA)

Aluminum Blank covers provide spacing – functional or rhythmic – in the direct component of a Squero Combination luminaire.

Covers are sized according to the Combination design, finished to match the luminaire housing, and snap into the aperture.

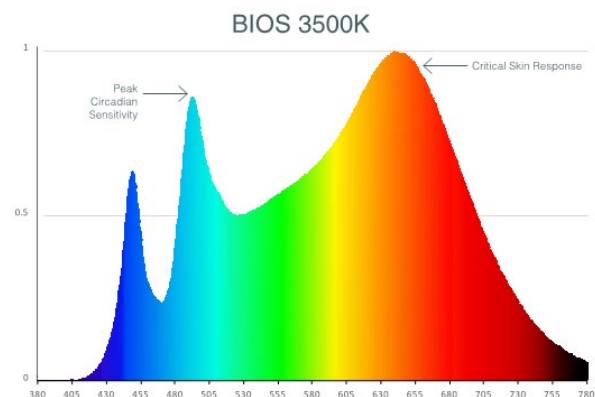


LIGHT SOURCE - STATIC WHITE

Custom linear array of high-flux LEDs mounted onto aluminum-backed circuitry with quick-connect wiring to facilitate service and optimize thermal management. Available in 2700K, 3000K, 3500K, 4000K, and 5000K with a minimum 80 CRI and an option for 90 CRI with elevated R9 value. Color consistency maintained to within 3 SDCM. All LEDs have been tested in accordance with IESNA LM-80-08 and the results have shown L80 lumen maintenance greater than 60,000 hours. Absolute product photometry is measured and presented in accordance with IESNA LM-79, unless otherwise indicated.

LIGHT SOURCE - BIOS

BIOS SkyBlue™ Technology is designed to provide the specific circadian stimulus to improve overall sleep quality, recovery during the night, and overall feelings of well-being. The non-visual light signals that stimulate our circadian system have peak intensity in the "sky blue" region. As the diagram below illustrates, BIOS SkyBlue technology shifts the peak LED spectral intensity (490 nm) to align better with the peak response of circadian stimulus. Also note the enhanced deep-red (near 660 nm) spectrum.



Three BIOS solutions are offered: BIOS Biological Static (BIOSST), BIOS Biological Dynamic (BIOSDY), and BIOS Biological Tunable (BIOSTU). See page 8 for details.

SQUERO COMBINATION

RECESSED PATTERN

STATIC WHITE

LUMENWERX

PATTERN LENGTH

Squero is made up of standard 4 to 12 foot sections that may be joined together to create longer continuous run lengths. Exact run lengths must be noted in the product code. The minimum individual section available is 4 feet.

All individual sections are joined together onsite using the joiner kits provided. Lumenwerx offers joiner kits that are extremely simple to work with in the field and result in a fixture that appears virtually seamless with no light leak at any connection.

ELECTRICAL

Factory-set, adjustable output current LED driver with universal (120-277VAC) input. Dimmable from 100% to 1% with 0-10V dimming control. Rated life (90% survivorship) of 50,000 hours at 50°C max. ambient (and 70°C max. case) temperature. At maximum driver load: Efficiency > 84%, PF > 0.9, THD < 20%. Other specifiable options include Lutron Hi-Lume 1% Eco, eidoLED 1% ECOdrive 0-10V, eidoLED 0.1% SOLOdrive 0-10V, and DALI protocol drivers. All of our standard 0-10V drivers are NEMA 410 compliant.

PoE

Depending on the PoE manufacturer selected, Lumenwerx will install the node in factory as either integral to the luminaire or as a remote module. Factory programming of the PoE node may or may not enable the following functionalities: lumen package, Duo (tunable white), emergency battery backup, and sensor integration. These must be addressed and evaluated on a case-by-case basis.

ELECTRICAL SECTION OPTIONS

Electrical section options are available for fixtures specified as multi circuit (#MC). With MC, specify the total number of circuits (#), including any circuits required for optional electrical sections. A drawing is required to specify the layout. Please consult factory for custom configurations.

Electrical sections

Options include emergency-powered (#EC##), night light (#NL##), daylight (#DL##), and generator transfer device (#GTD##) sections. Specify the quantity (#), as well as the section length in inches (##).

Example 1: A 32' Direct fixture with two 8' emergency-powered sections on a second circuit.
Code: 2MC-2EC96

Example 2: A 24' Direct fixture with one 4' generator transfer device section.
Code: 1MC-1GTD48

Battery

Each emergency battery (#EMB) powers a 4' section. All batteries will be on the same circuit. Specify the number of batteries (#) required.

Factory installed long life, high temperature, maintenance-free Lithium-Ion battery pack with self-test functionality, test switch and charge indicator. Minimum of 90 minutes operation, up to 1000 lumens per 4' (25°C) emergency lighting output and recharge time of 24 hours.

MOUNTING OPTIONS

Recessed fixtures can be mounted into exposed or concealed T-bar or tegular ceiling, as well as in drywall ceilings with trim, trimless, or mud flange options.

FINISH

Interior - 95%, reflective matte powder coated white paint

Exterior - Matte white, matte black, or aluminum powder coating. Custom finishes are also available.

CONTROLS

Lumenwerx offers several options for integrating occupancy and daylight harvesting controls in our luminaires.

For latest information on sensors, click [here](#).



STANDALONE CONTROLS

An integrated standalone sensor controls the luminaire in which it is installed. Depending on the length, more than one sensor may be necessary and may control the entire luminaire, or just a section of it. These controls operate independently. Unless otherwise agreed, sensor location, blank size, and functionality of the sensor within the luminaire are selected by Lumenwerx. See client drawings for details.

Three types are available:

OMS: An integral Passive InfraRed (PIR) sensor turns luminaires on and off automatically with field-adjustable time out period. No wall control is used. Coverage pattern for large motion has a 12' diameter with the sensor mounted 8' above the floor; for small motion, the pattern has an 8' diameter. Typically, one sensor is required for every 10' of a continuous luminaire run.

ODS: An integral, daylight harvesting sensor with closed-loop operation dims the luminaire in which it is installed in order to compensate for available daylight. The sensor measures the combination of daylight and luminaire light reflected from horizontal surfaces below the luminaire. Initial onsite calibration is required via the use of provided remote control.

OCS: Both an occupancy and a daylight sensor are installed in the luminaire.

SQUERO COMBINATION

RECESSED PATTERN

STATIC WHITE

LUMENWERX

CONNECTED CONTROLS

With connected controls, sensors or nodes installed in the luminaire form part of a larger control system infrastructure from manufacturers such as: Lutron, Enlighted, Encelium, Cooper Wavelinx, Acuity nLight, Casambi, Legrand, and others. These connected controls allow for a scalable system providing features like occupancy and daylight control, manual control, scheduling and configuration of various zones and scenes. Energy reporting and system monitoring are also possible. Specific capabilities depend on the control system being used.

Lumenwerx installs the components (sensors, nodes, power packs, etc) which may be supplied to us by a third party, or procured directly by Lumenwerx, depending on the control system manufacturer.

Lumenwerx is solely responsible for the installation of specified components; the controls manufacturer is responsible for performance of the control system.

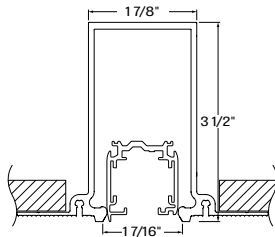
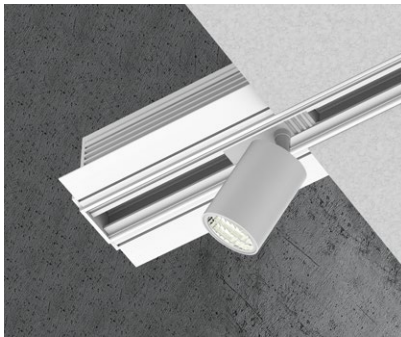
To indicate a Lumenwerx luminaire with connected controls, identify the specific onsite control system to be integrated into the luminaires using the ordering code. Due to the diversity of components, you must contact factory to assure complete compatibility with intended control system and to fully specify the luminaire.

Complete control specifications, sensor/node/power pack layout, and narrative for the control system are required for Lumenwerx to create shop drawings and submittals.

OPTIONS

ITR - Integrated track (track and downlight by others)

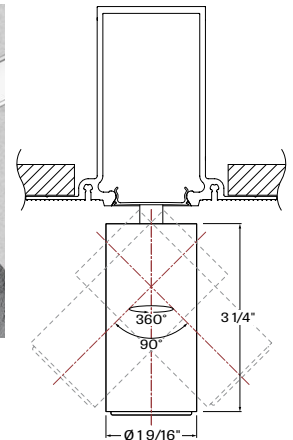
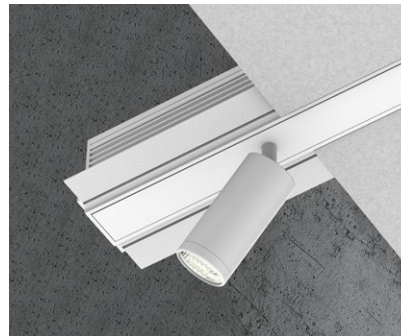
Multiple track systems manufactured by others, are offered in Squero direct, in individual, or runs, with or without LED integrated sections. Detailed specifications of the track system must be supplied. For other mounting options (please consult factory).



ADJUSTABLE LED ACCENT MODULE (AAM)

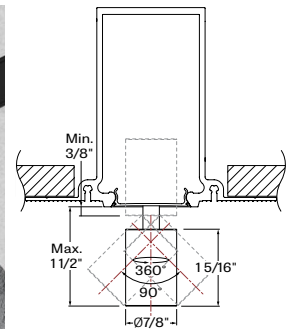
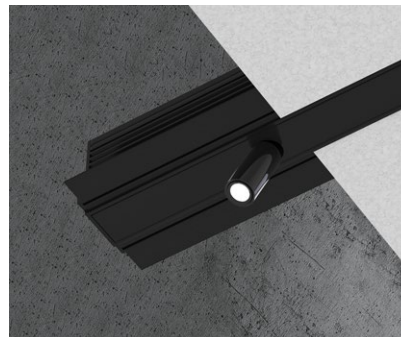
The Adjustable Accent Module (AAM) features a $\varnothing 1 9/16"$ x $3 1/4"$ cylinder that rotates 360° and tilts 90° . The LED light source is coupled with TIR optics to provide beam angles of 21° , 30° , and 36° while producing up to 600 lumens. LED light source CCT options are 2700K, 3000K, 3500K, 4000K, and 5000K, available in either 80 CRI or 90 CRI.

The AAM module can be selected in either a white or black finish and a honeycomb louver accessory is also available. The AAM driver is mounted above the cylinder, inside the SQUERO housing and accepts universal input voltage (120-277VAC) while providing 0-10V dimming control.



MICRO SPOT (MS)

The Micro Spot is a $\varnothing 7/8"$ x $1 5/16"$ adjustable spotlight that extends, retracts, rotates 360° , and tilts 90° . Its LED light source is coupled with a TIR refractor to provide beam angles of 25° , 35° , and 50° , while producing up to 400 lumens. LED light source CCT options are 2700K, 3000K, 3500K, 4000K, and 5000K, available in either 80 CRI or 90 CRI. The Micro Spot is offered in a white or black finish. The Micro Spot driver is mounted within the luminaire housing and accepts universal input voltage (120-277VAC) with 0-10 V dimming control.



SQUERO COMBINATION

RECESSED PATTERN

STATIC WHITE

LUMENWERX

CONSTRUCTION

Housing - Extruded aluminum (0.100" nominal) up to 90% recycled content

Interior brackets - Die formed cold rolled sheet steel 10 gauge thick

Joining system - Die cast aluminum

Louvers - Injection molded optical grade polycarbonate (0.100" nominal) up to 95% reflective

Recessed flanges - Extruded aluminum (0.075" nominal) up to 90% recycled content

End plate - Die formed cold rolled sheet steel 18 gauge thick

CERTIFICATION

ETL - Rated for Indoor Dry/Damp locations. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0.

WARRANTY

Lumenwerx provides a five-year limited warranty on electrical and mechanical performance of the luminaires, including the LED boards, drivers, and auxiliary electronics. Lumenwerx will repair or replace defective luminaires or components at our discretion, provided they have been installed and operated in accordance with our specifications. Other limitations apply, please refer to the full warranty on our website.