

Modul-Aim™

REMOD

Project

Notes

Fixture Type

Date

**Assembled Remodel Housings
(Patent Pending)**

DESCRIPTION

Assembled Modul-Aim units for remodeler installations. Offered in 1, 2, 3, "L" or 4 "square" head configurations.



REM01-11XX-XXX

SPECIFICATIONS

HOUSING
DETAILS

Powder coated, 22 gauge 0.036" (0.91 mm) galvanized steel housing.
Remodeler mounting brackets (Patent Pending) (included).
Perfect fit into ceiling. No light leakage.
Each part of the housing should be at LEAST 3" (76 mm) from insulation (non-IC configuration).
Can fit in ceilings up to 2" (51 mm) thick.
Junction box is accessible from below the ceiling for ease of maintenance.

LED ENGINE

Standard:

Lumileds Luxeon CoB 1205, delivers a lumen maintenance greater than 70% after 50,000 hours of operation (L_{70}). Provides a high quality true color and a clean white light without hot spots. Color binning within 3 steps on MacAdam ellipse which surpasses ANSI binning requirements.

Offered in 2,700K, 3,000K, 3,500K and 4,000K. 90+ CRI (97 nominal).

Several driver models available offering 3 dimming options:

ELV: 120V to 277V (20W and 40W)

0-10V: 120V to 277V (20W and 40W)

Lutron Ecosystem addressable: 120V to 277V (20W)

CrispWhite:

Lumileds LUXEON CoB 1205 with CrispWhite Technology delivers the warm saturated colors of high 90+ CRI solutions while creating the natural crisp whiteness required for merchandising. Offered in 3,000K only.

Several driver models available offering 3 dimming options:

ELV: 120V to 277V (20W and 40W)

0-10V: 120V to 277V (20W and 40W)

Lutron Ecosystem addressable: 120V to 277V (20W)

Lumenetix Warm Dimming:

Lumenetix Araya DDM1 Dynamic Dimming Module delivers dimmable white light that warms as it dims reproducing dimming conditions of a halogen lamp. It allows the user to change the color temperature from 3,050K at full intensity to 1,800K at minimum intensity all this while ensuring a 90+ CRI over the full dimming range.

Lumenetix: 100V to 240V (20W)

Lumenetix Color Tuning:

Lumenetix Araya CTM1 Color Tuning Module allows the user to program millions of color combinations using a user friendly Bluetooth application available on iOS mobile devices. The application allows programming of different scenes, colors, and color temperatures while the day-to-day control is ensured by standard 0-10V wall mounted dimmers. 90+ CRI.

Lumenetix: 100V to 240V (20W)



CONTRAST
LIGHTING

2015-12

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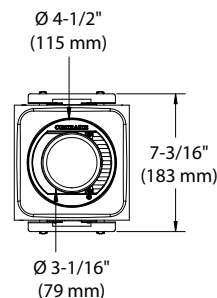
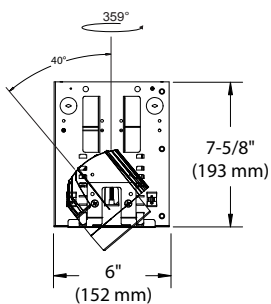
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SPECIFICATIONS (CONT'D)

| | | |
|------------------|---|--|
| DELIVERED LUMENS | <p>Performance 1 (20W) Standard: 1,267 lumens @ 3,000K, 63 lm/W</p> <p>Performance 2 (40W) Standard: 2,180 lumens @ 3,000K, 55 lm/W</p> <p>Performance 1 (20W) "CrispWhite": 1,195 lumens @ 3,000K, 56 lm/W</p> <p>Performance 2 (40W) "CrispWhite": 2,075 lumens @ 3,000K, 52 lm/W</p> <p>Warm Dimming (20W): 936 lumens @ 3,000K, 47 lm/W</p> <p>Color Tuning (20W): 936 lumens @ 4,000K, 47 lm/W</p> | <p><i>* Average lumens output shown. Consult ies files on our Website for more details.</i></p> |
| UNIT FINISH | Powder coated: Matte White (-11) or Matte Black (-22) | |
| OPTIC SYSTEM | Interchangeable optional optical reflectors and lenses available to customize your lighting. | |
| | <p>Choice of available lenses:</p> <p>Standard: No lens</p> <p>Accessories (sold separately): Clear (C), Frosted (F), Honeycombs (H), Linear (L), Prismatic (P) and Solite (S) (Color lenses available upon request.)</p> | |
| | <p>Optical reflectors available: (Standard and CrispWhite)</p> <p>S: Spot → 15°</p> <p>MS: Medium Spot → 19°</p> <p>M: Narrow Flood → 32°</p> <p>W: Flood → 45°</p> | <p>Optical reflectors available: (Lumenetix)</p> <p>M: Narrow Flood → 26°</p> <p>W: Flood → 41°</p> |
| | <p><i>* Average beams shown. Consult ies files on our Website for more details.</i></p> | |
| ADJUSTABILITY | <p>Swivel: 360°</p> <p>40° aiming</p> <p>Locking device: choose aiming angle then tighten a screw to lock both axis into position.</p> | |
| HEAT SINK | High quality aluminum injected heat sink ensuring maximum heat dissipation. | |
| CEILING CUTOUT | <p>For a simple unit:</p> <p>6-1/4" x 6-1/4" (159 mm x 159 mm)</p> <p>Refer to installation guide for other configurations.</p> | |
| CERTIFICATION | <ul style="list-style-type: none"> cULus for damp locations Energy Star® certified | |
| WARRANTY | <p>1 year on components against manufacturing defects.</p> <p>5 years on LED modules and drivers.</p> | |

ASSEMBLED MODELS

REM0D1

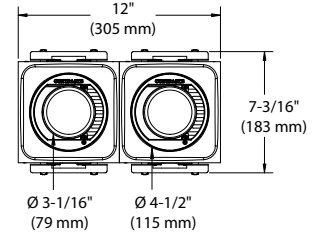
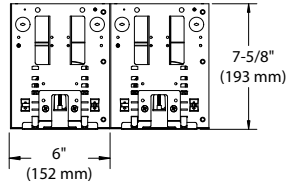


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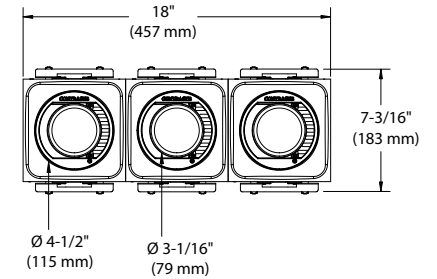
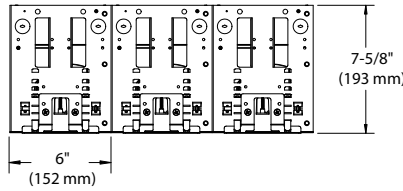
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ASSEMBLED MODELS (CONT'D)

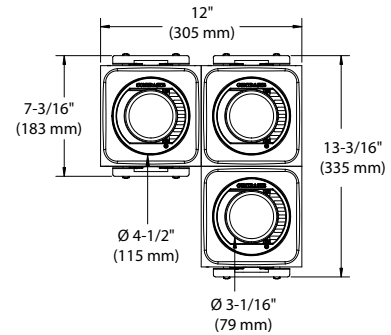
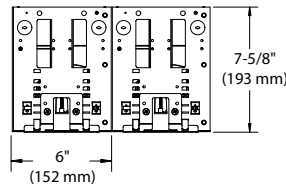
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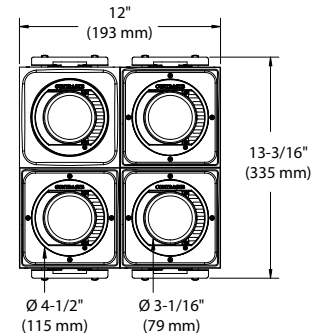
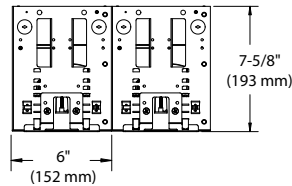
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REM0DL



REM0DS



Modul-Aim™

REMOD

TRIMS

Available finishes: Matte White (-11), Metallic Grey (-15) and Matte Black (-22)

| | | |
|---------------|---------------|---------------|
| <p>TRMOD1</p> | <p>TRMOD2</p> | <p>TRMOD3</p> |
| <p>TRMODL</p> | <p>TRMODS</p> | |

MESH PLATE (Trimless)

| | | |
|---------------|---------------|---------------|
| <p>SFMOD1</p> | <p>SFMOD2</p> | <p>SFMOD3</p> |
| <p>SFMODL</p> | <p>SFMODS</p> | |

MASK

Available finishes: Matte White (-11) and Matte Black (-22)

| | |
|-----------------|-----------------|
| <p>MASK1-11</p> | <p>MASK1-22</p> |
|-----------------|-----------------|



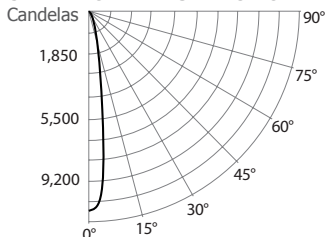
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PHOTOMETRIC DATA

3,000K, 90 + of CRI, Spot, Performance 1

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|-------|-----|
| 06' | 291.4 | 1.5 |
| 08' | 163.9 | 2.0 |
| 10' | 104.9 | 2.5 |
| 12' | 72.9 | 3.0 |
| 14' | 53.5 | 3.5 |
| 16' | 41.0 | 4.0 |

Beam: 14.2"
Beam Edge defined as 50% of Maximum Nadir Candlepower.

LUMINAIRE

| | |
|-----------------------------|--------------------------|
| Modul-Aim Performance 1 LED | 3,000K Spot |
| CBCP / Lumens | 10,492 / 1,241 |
| Watts | 120V 277V 20.9W 21.4W |
| Operating AMPS | 0.17A 0.07A |
| Lumen Maintenance | L70 @ 50,000 Hrs |
| CRI | 90 + |
| Lumens/Watt | 59.3 |
| Spacing Criteria | 0.24 |

COEFFICIENT OF UTILIZATION - %

| RCC % | 80 | | | 50 | | | 30 | | |
|-------|----|-----|-----|-----|-----|-----|-----|-----|--|
| RWC % | 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 | |
| RCR | 0 | 119 | 119 | 111 | 111 | 106 | 106 | 106 | |
| | 2 | 108 | 105 | 103 | 101 | 100 | 98 | | |
| | 4 | 99 | 95 | 96 | 93 | 94 | 92 | | |
| | 6 | 92 | 88 | 90 | 87 | 89 | 86 | | |
| | 8 | 87 | 82 | 85 | 82 | 84 | 81 | | |
| | 10 | 82 | 78 | 81 | 77 | 80 | 77 | | |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|---------|------------|
| 0-30 | 1,121.7 | 90.4% |
| 0-40 | 1,231.5 | 99.2% |
| 0-60 | 1,241.0 | 100% |
| 60-90 | 0 | 0% |
| 0-90 | 1,241.0 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5' | 62 | 0.93 |
| 6' | 35 | 0.52 |
| 7' | 24 | 0.36 |
| 8' | 24 | 0.36 |
| 9' | 16 | 0.23 |

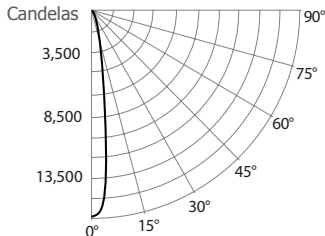
38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

| DEGREES/VERTICAL | CANDELAS | DEGREES/VERTICAL | CANDELAS |
|------------------|----------|------------------|----------|
| 0 | 10,492 | 40 | 17 |
| 5 | 7,932 | 50 | 3 |
| 10 | 2,683 | 60 | 0 |
| 15 | 1,017 | 70 | 0 |
| 20 | 613 | 80 | 0 |
| 25 | 534 | 90 | 0 |
| 30 | 458 | | |

3,000K, 90 + of CRI, Spot, Performance 2

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|-------|-----|
| 06' | 458.1 | 1.5 |
| 08' | 257.7 | 2.0 |
| 10' | 164.9 | 2.5 |
| 12' | 114.5 | 3.0 |
| 14' | 84.1 | 3.5 |
| 16' | 64.4 | 4.0 |

Beam: 14.2"
Beam Edge defined as 50% of Maximum Nadir Candlepower.

LUMINAIRE

| | |
|-----------------------------|--------------------------|
| Modul-Aim Performance 2 LED | 3,000K Spot |
| CBCP / Lumens | 16,491 / 1,950.5 |
| Watts | 120V 277V 38.7W 39.2W |
| Operating AMPS | 0.32A 0.14A |
| Lumen Maintenance | L70 @ 50,000 Hrs |
| CRI | 90 + |
| Lumens/Watt | 50.4 |
| Spacing Criteria | 0.24 |

COEFFICIENT OF UTILIZATION - %

| RCC % | 80 | | | 50 | | | 30 | | |
|-------|----|-----|-----|-----|-----|-----|-----|-----|--|
| RWC % | 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 | |
| RCR | 0 | 119 | 119 | 111 | 111 | 106 | 106 | 106 | |
| | 2 | 108 | 105 | 103 | 101 | 100 | 98 | | |
| | 4 | 99 | 95 | 96 | 93 | 94 | 92 | | |
| | 6 | 92 | 88 | 90 | 87 | 89 | 86 | | |
| | 8 | 87 | 82 | 85 | 82 | 84 | 81 | | |
| | 10 | 82 | 78 | 81 | 77 | 80 | 77 | | |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|---------|------------|
| 0-30 | 1,762.9 | 90.4% |
| 0-40 | 1,935.5 | 99.2% |
| 0-60 | 1,950.5 | 100% |
| 60-90 | 0 | 0% |
| 0-90 | 1,950.5 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5' | 98 | 1.72 |
| 6' | 55 | 0.96 |
| 7' | 38 | 0.67 |
| 8' | 38 | 0.67 |
| 9' | 24 | 0.43 |

38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

| DEGREES/VERTICAL | CANDELAS | DEGREES/VERTICAL | CANDELAS |
|------------------|----------|------------------|----------|
| 0 | 16,491 | 40 | 27 |
| 5 | 12,466 | 50 | 4 |
| 10 | 4,217 | 60 | 0 |
| 15 | 1,598 | 70 | 0 |
| 20 | 963 | 80 | 0 |
| 25 | 839 | 90 | 0 |
| 30 | 720 | | |



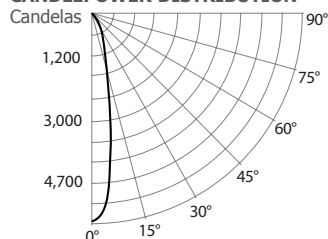
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PHOTOMETRIC DATA

3,000K, 90 + of CRI, Medium Spot, Performance 1

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|-------|-----|
| 06' | 164.6 | 2.1 |
| 08' | 92.6 | 2.9 |
| 10' | 59.3 | 3.6 |
| 12' | 41.2 | 4.3 |
| 14' | 30.2 | 5.0 |
| 16' | 23.1 | 5.7 |

Beam: 20.2°
Beam Edge defined as 50% of Maximum Nadir Candlepower.

LUMINAIRE

| | | |
|-----------------------------|--------------------|-----------|
| Modul-Aim Performance 1 LED | 3,000K Medium Spot | |
| CBCP / Lumens | 5,926 | / 1,194.4 |
| Watts | 120V | 277V |
| | 20.9W | 21.4W |
| Operating AMPS | 0.17A | 0.07A |
| Lumen Maintenance | L70 @ 50,000 Hrs | |
| CRI | 90 + | |
| Lumens/Watt | 57.1 | |
| Spacing Criteria | 0.35 | |

COEFFICIENT OF UTILIZATION - %

| RCC % | 80 | | | 50 | | | 30 | | |
|-------|----|-----|-----|-----|-----|-----|-----|-----|--|
| RWC % | 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 | |
| RCR | 0 | 119 | 119 | 111 | 111 | 106 | 106 | 106 | |
| | 2 | 107 | 104 | 102 | 100 | 99 | 97 | | |
| | 4 | 98 | 93 | 94 | 91 | 93 | 90 | | |
| | 6 | 90 | 86 | 88 | 84 | 87 | 83 | | |
| | 8 | 84 | 79 | 82 | 79 | 81 | 78 | | |
| | 10 | 78 | 74 | 77 | 74 | 77 | 73 | | |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|---------|------------|
| 0-30 | 1,068.3 | 89.4% |
| 0-40 | 1,182.3 | 99% |
| 0-60 | 1,194.4 | 100% |
| 60-90 | 0 | 0% |
| 0-90 | 1,194.4 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5' | 60 | 0.93 |
| 6' | 34 | 0.52 |
| 7' | 23 | 0.36 |
| 8' | 23 | 0.36 |
| 9' | 15 | 0.23 |

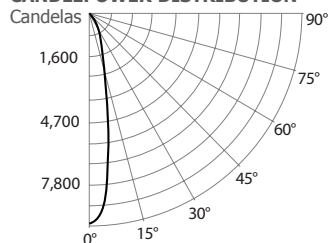
38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

| DEGREES/VERTICAL | CANDELAS | DEGREES/VERTICAL | CANDELAS |
|------------------|----------|------------------|----------|
| 0 | 5,926 | 40 | 27 |
| 5 | 5,139 | 50 | 3 |
| 10 | 3,003 | 60 | 0 |
| 15 | 1,287 | 70 | 0 |
| 20 | 741 | 80 | 0 |
| 25 | 545 | 90 | 0 |
| 30 | 453 | | |

3,000K, 90 + of CRI, Medium Spot, Performance 2

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|-------|-----|
| 06' | 258.7 | 2.1 |
| 08' | 145.5 | 2.9 |
| 10' | 93.1 | 3.6 |
| 12' | 64.7 | 4.3 |
| 14' | 47.5 | 5.0 |
| 16' | 36.4 | 5.7 |

Beam: 20.2°
Beam Edge defined as 50% of Maximum Nadir Candlepower.

LUMINAIRE

| | | |
|-----------------------------|--------------------|-----------|
| Modul-Aim Performance 2 LED | 3,000K Medium Spot | |
| CBCP / Lumens | 9,313 | / 1,877.1 |
| Watts | 120V | 277V |
| | 38.8W | 39.3W |
| Operating AMPS | 0.32A | 0.14A |
| Lumen Maintenance | L70 @ 50,000 Hrs | |
| CRI | 90 + | |
| Lumens/Watt | 48.4 | |
| Spacing Criteria | 0.35 | |

COEFFICIENT OF UTILIZATION - %

| RCC % | 80 | | | 50 | | | 30 | | |
|-------|----|-----|-----|-----|-----|-----|-----|-----|--|
| RWC % | 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 | |
| RCR | 0 | 119 | 119 | 111 | 111 | 106 | 106 | 106 | |
| | 2 | 107 | 104 | 102 | 100 | 99 | 97 | | |
| | 4 | 98 | 93 | 94 | 91 | 93 | 90 | | |
| | 6 | 90 | 86 | 88 | 84 | 87 | 83 | | |
| | 8 | 84 | 79 | 82 | 79 | 81 | 78 | | |
| | 10 | 78 | 74 | 77 | 74 | 77 | 73 | | |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|---------|------------|
| 0-30 | 1,678.8 | 89.4% |
| 0-40 | 1,858.0 | 99% |
| 0-60 | 1,877.1 | 100% |
| 60-90 | 0 | 0% |
| 0-90 | 1,877.1 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5' | 94 | 1.72 |
| 6' | 53 | 0.97 |
| 7' | 37 | 0.67 |
| 8' | 37 | 0.67 |
| 9' | 23 | 0.43 |

38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

| DEGREES/VERTICAL | CANDELAS | DEGREES/VERTICAL | CANDELAS |
|------------------|----------|------------------|----------|
| 0 | 9,313 | 40 | 43 |
| 5 | 8,076 | 50 | 5 |
| 10 | 4,719 | 60 | 0 |
| 15 | 2,022 | 70 | 0 |
| 20 | 1,165 | 80 | 0 |
| 25 | 857 | 90 | 0 |
| 30 | 711 | | |



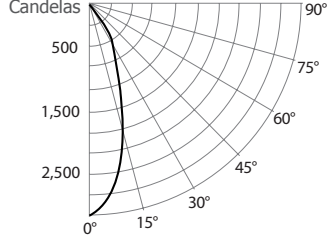
Modul-Aim™

REM0D

PHOTOMETRIC DATA

3,000K, 90 + of CRI, Narrow Flood, Performance 1

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|------|-----|
| 06' | 82.4 | 3.6 |
| 08' | 46.3 | 4.8 |
| 10' | 29.7 | 6.0 |
| 12' | 20.6 | 7.2 |
| 14' | 15.1 | 8.4 |
| 16' | 11.6 | 9.6 |

Beam: 33.5"
Beam Edge defined as 50% of Maximum Nadir Candlepower.

LUMINAIRE

| | | |
|-----------------------------|------------------|--------------|
| Modul-Aim Performance 1 LED | 3,000K | Narrow Flood |
| CBCP / Lumens | 2,965 | / 1,189.5 |
| Watts | 120V | 277V |
| | 20.9W | 21.4W |
| Operating AMPS | 0.17A | 0.07A |
| Lumen Maintenance | L70 @ 50,000 Hrs | |
| CRI | 90 + | |
| Lumens/Watt | 56.9 | |
| Spacing Criteria | 0.58 | |

COEFFICIENT OF UTILIZATION - %

| RCC % | 80 | | 50 | | 30 | | |
|-------|----|-----|-----|-----|-----|-----|-----|
| RWC % | 50 | 30 | 50 | 30 | 50 | 30 | |
| RCR | 0 | 119 | 119 | 111 | 111 | 106 | 106 |
| | 2 | 106 | 102 | 101 | 98 | 98 | 96 |
| | 4 | 95 | 91 | 92 | 88 | 90 | 87 |
| | 6 | 86 | 82 | 84 | 80 | 83 | 79 |
| | 8 | 79 | 74 | 78 | 73 | 77 | 73 |
| | 10 | 73 | 68 | 72 | 68 | 71 | 67 |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|---------|------------|
| 0-30 | 1,053.4 | 88.6% |
| 0-40 | 1,173.8 | 98.7% |
| 0-60 | 1,185.8 | 99.7% |
| 60-90 | 3.7 | 0.3% |
| 0-90 | 1,189.5 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5' | 59 | 0.93 |
| 6' | 33 | 0.52 |
| 7' | 23 | 0.36 |
| 8' | 23 | 0.36 |
| 9' | 15 | 0.23 |

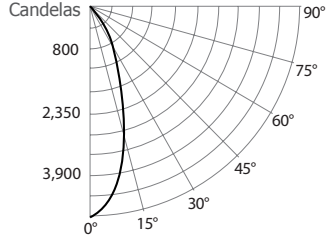
38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

| DEGREES/VERTICAL | CANDELAS | DEGREES/VERTICAL | CANDELAS |
|------------------|----------|------------------|----------|
| 0 | 2,965 | 40 | 23 |
| 5 | 2,810 | 50 | 4 |
| 10 | 2,348 | 60 | 2 |
| 15 | 1,722 | 70 | 1 |
| 20 | 1,065 | 80 | 1 |
| 25 | 715 | 90 | 0 |
| 30 | 502 | | |

3,000K, 90 + of CRI, Narrow Flood, Performance 2

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|-------|-----|
| 06' | 129.4 | 3.6 |
| 08' | 72.8 | 4.8 |
| 10' | 46.6 | 6.0 |
| 12' | 32.4 | 7.2 |
| 14' | 23.8 | 8.4 |
| 16' | 18.2 | 9.6 |

Beam: 33.5"
Beam Edge defined as 50% of Maximum Nadir Candlepower.

LUMINAIRE

| | | |
|-----------------------------|------------------|--------------|
| Modul-Aim Performance 2 LED | 3,000K | Narrow Flood |
| CBCP / Lumens | 4,659 | / 1,869.2 |
| Watts | 120V | 277V |
| | 38.8W | 39.3W |
| Operating AMPS | 0.32A | 0.14A |
| Lumen Maintenance | L70 @ 50,000 Hrs | |
| CRI | 90 + | |
| Lumens/Watt | 48.1 | |
| Spacing Criteria | 0.58 | |

COEFFICIENT OF UTILIZATION - %

| RCC % | 80 | | 50 | | 30 | | |
|-------|----|-----|-----|-----|-----|-----|-----|
| RWC % | 50 | 30 | 50 | 30 | 50 | 30 | |
| RCR | 0 | 119 | 119 | 111 | 111 | 106 | 106 |
| | 2 | 106 | 102 | 101 | 98 | 98 | 96 |
| | 4 | 95 | 91 | 92 | 88 | 90 | 87 |
| | 6 | 86 | 82 | 84 | 80 | 83 | 79 |
| | 8 | 79 | 74 | 78 | 73 | 77 | 73 |
| | 10 | 73 | 68 | 72 | 68 | 71 | 67 |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|---------|------------|
| 0-30 | 1,655.4 | 88.6% |
| 0-40 | 1,844.6 | 98.7% |
| 0-60 | 1,863.4 | 99.7% |
| 60-90 | 5.8 | 0.3% |
| 0-90 | 1,869.2 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5' | 92 | 1.72 |
| 6' | 52 | 0.97 |
| 7' | 36 | 0.67 |
| 8' | 36 | 0.67 |
| 9' | 23 | 0.43 |

38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

| DEGREES/VERTICAL | CANDELAS | DEGREES/VERTICAL | CANDELAS |
|------------------|----------|------------------|----------|
| 0 | 4,659 | 40 | 37 |
| 5 | 4,416 | 50 | 6 |
| 10 | 3,690 | 60 | 4 |
| 15 | 2,707 | 70 | 2 |
| 20 | 1,674 | 80 | 2 |
| 25 | 1,124 | 90 | 0 |
| 30 | 789 | | |



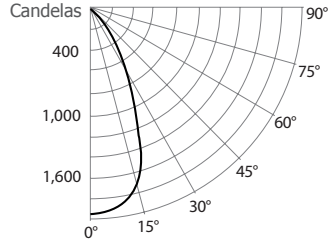
Modul-Aim™

REM0D

PHOTOMETRIC DATA

3,000K, 90 + of CRI, Flood, Performance 1

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|------|------|
| 06' | 54.4 | 5.4 |
| 08' | 30.6 | 7.2 |
| 10' | 19.6 | 8.9 |
| 12' | 13.6 | 10.7 |
| 14' | 10.0 | 12.5 |
| 16' | 7.6 | 14.3 |

Beam: 48.2"
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

| | |
|-----------------------------|--------------------------|
| Modul-Aim Performance 1 LED | 3,000K Flood |
| CBCP / Lumens | 1,958 / 1,225.9 |
| Watts | 120V 277V 20.9W 21.4W |
| Operating AMPS | 0.17A 0.07A |
| Lumen Maintenance | L70 @ 50,000 Hrs |
| CRI | 90 + |
| Lumens/Watt | 58.7 |
| Spacing Criteria | 0.82 |

COEFFICIENT OF UTILIZATION - %

| RCC % | 80 | | | 50 | | | 30 | | |
|-------|----|-----|-----|-----|-----|-----|-----|-----|--|
| RWC % | 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 | |
| RCR | 0 | 119 | 119 | 111 | 111 | 106 | 106 | 106 | |
| | 2 | 105 | 101 | 100 | 98 | 97 | 95 | 95 | |
| | 4 | 94 | 89 | 90 | 87 | 89 | 85 | 85 | |
| | 6 | 84 | 79 | 82 | 78 | 81 | 77 | 77 | |
| | 8 | 76 | 71 | 75 | 70 | 74 | 70 | 70 | |
| | 10 | 69 | 64 | 68 | 64 | 68 | 63 | 63 | |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|---------|------------|
| 0-30 | 1,061.0 | 86.6% |
| 0-40 | 1,212.8 | 98.9% |
| 0-60 | 1,224.7 | 99.9% |
| 60-90 | 1.1 | 0.1% |
| 0-90 | 1,225.9 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5' | 60 | 0.93 |
| 6' | 34 | 0.52 |
| 7' | 23 | 0.36 |
| 8' | 23 | 0.36 |
| 9' | 15 | 0.23 |

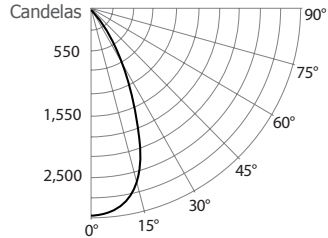
38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

| DEGREES/VERTICAL | CANDELAS | DEGREES/VERTICAL | CANDELAS |
|------------------|----------|------------------|----------|
| 0 | 1,958 | 40 | 34 |
| 5 | 1,910 | 50 | 4 |
| 10 | 1,845 | 60 | 2 |
| 15 | 1,697 | 70 | 0 |
| 20 | 1,316 | 80 | 0 |
| 25 | 910 | 90 | 0 |
| 30 | 600 | | |

3,000K, 90 + of CRI, Flood, Performance 2

CANDLEPOWER DISTRIBUTION



LIGHT CONE

| Distance | FC | DIA |
|----------|------|------|
| 06' | 85.5 | 5.4 |
| 08' | 48.1 | 7.2 |
| 10' | 30.8 | 8.9 |
| 12' | 21.4 | 10.7 |
| 14' | 15.7 | 12.5 |
| 16' | 12.0 | 14.3 |

Beam: 48.2"
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

| | |
|-----------------------------|--------------------------|
| Modul-Aim Performance 2 LED | 3,000K Flood |
| CBCP / Lumens | 3,078 / 1,926.8 |
| Watts | 120V 277V 39.0W 39.5W |
| Operating AMPS | 0.33A 0.14A |
| Lumen Maintenance | L70 @ 50,000 Hrs |
| CRI | 90 + |
| Lumens/Watt | 49.4 |
| Spacing Criteria | 0.82 |

COEFFICIENT OF UTILIZATION - %

| RCC % | 80 | | | 50 | | | 30 | | |
|-------|----|-----|-----|-----|-----|-----|-----|-----|--|
| RWC % | 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 | |
| RCR | 0 | 119 | 119 | 111 | 111 | 106 | 106 | 106 | |
| | 2 | 105 | 101 | 100 | 98 | 97 | 95 | 95 | |
| | 4 | 94 | 89 | 90 | 87 | 89 | 85 | 85 | |
| | 6 | 84 | 79 | 82 | 78 | 81 | 77 | 77 | |
| | 8 | 76 | 71 | 75 | 70 | 74 | 70 | 70 | |
| | 10 | 69 | 64 | 68 | 64 | 68 | 63 | 63 | |

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LUMINAIRE |
|-------|---------|------------|
| 0-30 | 1,667.7 | 86.6% |
| 0-40 | 1,906.2 | 98.9% |
| 0-60 | 1,925.0 | 99.9% |
| 60-90 | 1.8 | 0.1% |
| 0-90 | 1,926.8 | 100% |

MULTIPLE UNIT DATA - (RCR 2)

| SPACING ON CENTER | INITIAL FOOTCANDLES | WATTS/SQ. FT. |
|-------------------|---------------------|---------------|
| 5' | 94 | 1.73 |
| 6' | 53 | 0.97 |
| 7' | 37 | 0.68 |
| 8' | 37 | 0.68 |
| 9' | 24 | 0.43 |

38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

| DEGREES/VERTICAL | CANDELAS | DEGREES/VERTICAL | CANDELAS |
|------------------|----------|------------------|----------|
| 0 | 3,078 | 40 | 54 |
| 5 | 3,002 | 50 | 7 |
| 10 | 2,901 | 60 | 3 |
| 15 | 2,667 | 70 | 1 |
| 20 | 2,068 | 80 | 0 |
| 25 | 1,430 | 90 | 0 |
| 30 | 943 | | |



Modul-Aim™

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LIGHTING FACTS

LED lighting facts
A Program of the U.S. DOE

| | |
|----------------------------|------|
| Light Output (Lumens) | 1905 |
| Watts | 42.3 |
| Lumens per Watt (Efficacy) | 45 |

| | |
|---|----|
| Color Accuracy Color Rendering Index (CRI) | 96 |
|---|----|

Light Color
Correlated Color Temperature (CCT) **2735 (Warm White)**

Warm White Bright White Daylight
2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008, Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: LVBP-MODHYZ (6/22/2015)
Model Number: MOD1-XX-D2-27M
Type: Luminaire - Downlight

LED lighting facts
A Program of the U.S. DOE

| | |
|----------------------------|-------|
| Light Output (Lumens) | 1957 |
| Watts | 42.45 |
| Lumens per Watt (Efficacy) | 46.1 |

| | |
|---|----|
| Color Accuracy Color Rendering Index (CRI) | 96 |
|---|----|

Light Color
Correlated Color Temperature (CCT) **2735 (Warm White)**

Warm White Bright White Daylight
2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008, Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: LVBP-4QLVXX (6/22/2015)
Model Number: MOD1-XX-D2-27MS
Type: Luminaire - Downlight

LED lighting facts
A Program of the U.S. DOE

| | |
|----------------------------|-------|
| Light Output (Lumens) | 2048 |
| Watts | 42.28 |
| Lumens per Watt (Efficacy) | 48.4 |

| | |
|---|----|
| Color Accuracy Color Rendering Index (CRI) | 96 |
|---|----|

Light Color
Correlated Color Temperature (CCT) **2738 (Warm White)**

Warm White Bright White Daylight
2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008, Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: LVBP-CDK109 (6/22/2015)
Model Number: MOD1-XX-D2-27S
Type: Luminaire - Downlight

LED lighting facts
A Program of the U.S. DOE

| | |
|----------------------------|------|
| Light Output (Lumens) | 1999 |
| Watts | 42.3 |
| Lumens per Watt (Efficacy) | 47.3 |

| | |
|---|----|
| Color Accuracy Color Rendering Index (CRI) | 96 |
|---|----|

Light Color
Correlated Color Temperature (CCT) **2730 (Warm White)**

Warm White Bright White Daylight
2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008, Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: LVBP-JP-JUBZ (6/22/2015)
Model Number: MOD1-XX-D2-27W
Type: Luminaire - Downlight

LED lighting facts
A Program of the U.S. DOE

| | |
|----------------------------|-------|
| Light Output (Lumens) | 1155 |
| Watts | 20.98 |
| Lumens per Watt (Efficacy) | 55.1 |

| | |
|---|----|
| Color Accuracy Color Rendering Index (CRI) | 97 |
|---|----|

Light Color
Correlated Color Temperature (CCT) **2763 (Warm White)**

Warm White Bright White Daylight
2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008, Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: LVBP-33Q5KS (6/22/2015)
Model Number: MOD1-XX-E1-27M
Type: Luminaire - Downlight

LED lighting facts
A Program of the U.S. DOE

| | |
|----------------------------|-------|
| Light Output (Lumens) | 1155 |
| Watts | 20.98 |
| Lumens per Watt (Efficacy) | 55.05 |

| | |
|---|----|
| Color Accuracy Color Rendering Index (CRI) | 97 |
|---|----|

Light Color
Correlated Color Temperature (CCT) **2763 (Warm White)**

Warm White Bright White Daylight
2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008, Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: LVBP-8K2QLE (6/22/2015)
Model Number: MOD1-XX-E1-27MS
Type: Luminaire - Downlight



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LIGHTING FACTS (CONT'D)

LED lighting facts
A Program of the U.S. DOE

| | |
|----------------------------|-------|
| Light Output (Lumens) | 1249 |
| Watts | 20.99 |
| Lumens per Watt (Efficacy) | 59.5 |

| | |
|---|----|
| Color Accuracy Color Rendering Index (CRI) | 97 |
|---|----|

Light Color
Correlated Color Temperature (CCT) **2767 (Warm White)**

Warm White Bright White Daylight
2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008, Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: LVBP-L7FQVM (8/22/2015)
Model Number: MOD1-XX-E1-276
Type: Luminaire - Downright

LED lighting facts
A Program of the U.S. DOE

| | |
|----------------------------|-------|
| Light Output (Lumens) | 1208 |
| Watts | 20.99 |
| Lumens per Watt (Efficacy) | 57.6 |

| | |
|---|----|
| Color Accuracy Color Rendering Index (CRI) | 97 |
|---|----|

Light Color
Correlated Color Temperature (CCT) **2760 (Warm White)**

Warm White Bright White Daylight
2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008, Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: LVBP-QXM5Q2 (8/22/2015)
Model Number: MOD1-XX-E1-27W
Type: Luminaire - Downright

LED lighting facts
A Program of the U.S. DOE

| | |
|----------------------------|-------|
| Light Output (Lumens) | 1981 |
| Watts | 39.05 |
| Lumens per Watt (Efficacy) | 50.7 |

| | |
|---|----|
| Color Accuracy Color Rendering Index (CRI) | 90 |
|---|----|

Light Color
Correlated Color Temperature (CCT) **3010 (Bright White)**

Warm White Bright White Daylight
2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008, Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: LVBP-QBFDCE (8/22/2015)
Model Number: MOD1-XX-D2-30W
Type: Luminaire - Downright

LED lighting facts
A Program of the U.S. DOE

| | |
|----------------------------|------|
| Light Output (Lumens) | 1268 |
| Watts | 20.9 |
| Lumens per Watt (Efficacy) | 60.7 |

| | |
|---|----|
| Color Accuracy Color Rendering Index (CRI) | 91 |
|---|----|

Light Color
Correlated Color Temperature (CCT) **2995 (Warm White)**

Warm White Bright White Daylight
2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008, Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

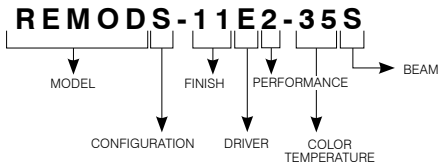
Registration Number: LVBP-Q211AA (8/22/2015)
Model Number: MOD1-XX-E1-30W
Type: Luminaire - Downright



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REM0D

REMODEL UNIT WITH STANDARD LED ENGINE CODIFICATION EXAMPLE

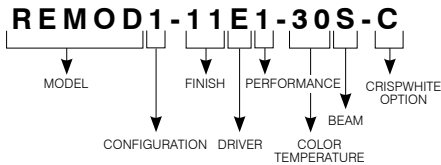


ORDERING CODE for Remodel Unit with Standard LED Engine

| MODEL | CONFIGURATION | FINISH | DRIVER | PERFORMANCE | COLOR TEMPERATURE | BEAM |
|----------------------|-------------------------------|------------------------|--|-----------------------------------|-------------------|---------------------------|
| REM0D | | | | | | |
| REM0D Remodel | 1 1 unit | -11 Matte White | E ELV | 1 1,267 Lumens (delivered) | -27 2,700K | S Spot 15° |
| | 2 2 units | -22 Matte Black | D 0-10V | | -30 3,000K | MS Medium Spot 19° |
| | 3 3 units | | A Lutron Ecosystem Addressable (Available with Performance 1 only) | 2 2,180 Lumens (delivered) | -35 3,500K | M Narrow Flood 32° |
| | L 3 units "L" shape | | | | | |
| | S 4 units square shape | | | | | |
| | | | | | | |

Trim, mask and trimless mesh plate to be ordered separately based on your configuration.

REMODEL UNIT WITH CRISPWHITE TECHNOLOGY CODIFICATION EXAMPLE



ORDERING CODE for Remodel Unit with CrispWhite Technology

| MODEL | CONFIGURATION | FINISH | DRIVER | PERFORMANCE | COLOR TEMPERATURE | BEAM | CRISPWHITE OPTION |
|----------------------|-------------------------------|------------------------|--|-----------------------------------|---------------------------|---------------------------|---------------------------------|
| REM0D | | | | | -30 | | -C |
| REM0D Remodel | 1 1 unit | -11 Matte White | E ELV | 1 1,195 Lumens (delivered) | -30 3,000K | S Spot 15° | -C CrispWhite Technology |
| | 2 2 units | | D 0-10V | | | MS Medium Spot 19° | |
| | 3 3 units | -22 Matte Black | A Lutron Ecosystem Addressable (Available with Performance 1 only) | 2 2,075 Lumens (delivered) | M Narrow Flood 32° | | |
| | L 3 units "L" shape | | | | W Flood 45° | | |
| | S 4 units square shape | | | | | | |
| | | | | | | | |

Trim, mask and trimless mesh plate to be ordered separately based on your configuration.

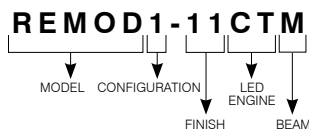


Modul-Aim™

REM0D

REMODEL UNIT WITH LUMENETIX ENGINE

CODIFICATION EXAMPLE

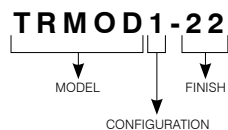


ORDERING CODE for Remodel Unit with Lumenetix Engine

| MODEL | CONFIGURATION | FINISH | LED ENGINE | BEAM |
|----------------------|--|--|--|---|
| REM0D | | | | |
| REM0D Remodel | 1 1 unit 2 2 units 3 3 units L 3 units "L" shape S 4 units square shape | -11 Matte White -22 Matte Black | CT Color Tuning WD Warm Dimming | M Narrow Flood 26° W Flood 41° |

Trim, mask and trimless mesh plate to be ordered separately based on your configuration.

TRIM CODIFICATION EXAMPLE



ORDERING CODE for Trim

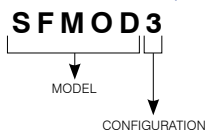
| MODEL | CONFIGURATION | FINISH |
|--------------|--|--|
| TRM0D | | |
| TRM0D | 1 1 unit 2 2 units 3 3 units L 3 units "L" shape S 4 units square shape | -11 Matte White -15 Metallic Grey -22 Matte Black |



Modul-Aim™

REMOD

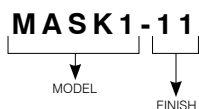
MESH PLATE (TRIMLESS) CODIFICATION EXAMPLE



ORDERING CODE for Mesh Plate (Trimless)

| MODEL | CONFIGURATION |
|--------------|-------------------------------|
| SFMOD | |
| SFMOD | 1 1 unit |
| | 2 2 units |
| | 3 3 units |
| | L 3 units "L" shape |
| | S 4 units square shape |

MASK CODIFICATION EXAMPLE



ORDERING CODE for Mask

| MODEL | FINISH |
|--------------|------------------------|
| MASK1 | |
| MASK1 | -11 Matte White |
| | -22 Matte Black |

ORDERING CODES for replacement lenses and reflectors

For future on site modifications of the light distribution.

Lenses (to modify light diffusion)

- Clear: **103105**
- Frosted: **103189**
- Honeycombs: **103822**
- Linear: **103823**
- Prismatic: **103824**
- Solite: **100741**

Reflectors (to modify the beam angle)

*** Only with standard engine and CrispWhite technology**

- For a Spot: **103737**
- For a Medium Spot: **103738**
- For a Narrow Flood: **103739**
- For a Flood: **316545**

