

Modul-Aim™

MOD1

Modular Base Unit (Patent Pending)

DESCRIPTION

A true modular approach that will let you configure linear, L, cross, square, staggered units and even more configurations by assembling the units together in a fast and easy way (Patent Pending).

SPECIFICATIONS

HOUSING DETAILS
 Powder coated, 22 gauge 0.036" (0.91 mm) galvanized steel housing.
 Can be configured with butterfly brackets and mounting bars in regular or suspended ceilings or with remodeler installation supports (Patent Pending) in standard ceiling applications only when renovating.
 Perfect fit into ceiling. No light leakage.
 Each part of the housing should be at LEAST 3" (76 mm) from insulation.
 Can fit in ceilings up to 2" (51 mm) thick for Remodeler and 1" (51 mm) for New Construction.
 Junction box is also accessible from below the ceiling for ease of maintenance.

LIGHT ENGINE
Standard:
 Lumileds Luxeon CoB 1205 GEN3, 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.

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)

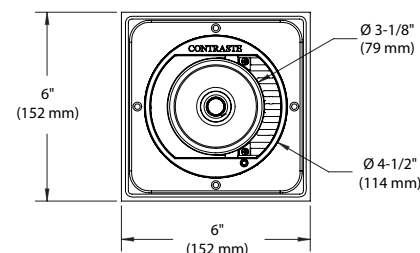
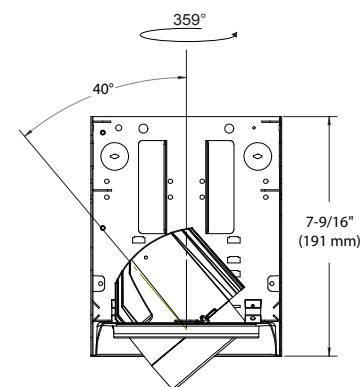
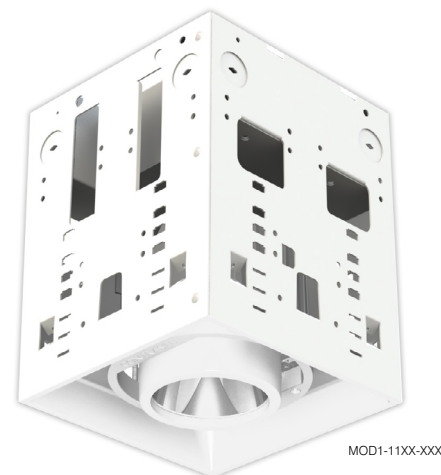
CrispWhite:
 Lumileds LUXEON CoB 1205 GEN2 with CrispWhite Technology delivers the warm saturated colors of high 90 + CRI solutions while creating the natural crisp whiteness required for merchandising. Offered in 3,000K only.

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)

Project	
Notes	
Fixture Type	
Date	



CONTRASTE

2019-01
 Revision 2

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Modul-Aim™**MOD1**

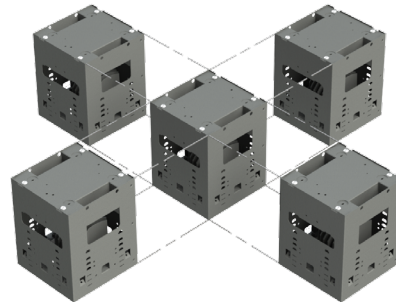
SPECIFICATIONS (CONT'D)

DELIVERED LUMENS	<p>Performance 1 (20W) Standard: 1,426 lumens @ 3,000K, 71 lm/W</p> <p>Performance 2 (40W) Standard: 2,361 lumens @ 3,000K, 59 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>	<i>* Average lumens output shown. Consult ies files on our Website for more details.</i>
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 (also sold separately):</p> <p>Standard: Clear</p> <p>Clear (C)</p> <p>Frosted (F)</p> <p>Honeycomb (H): the honeycomb louver reduces glare</p> <p>Linear (L): the linear lens directs the lamp beam to create a strip of light</p> <p>Prismatic (P): the prismatic lens diffuses and spreads the light in an even overall pattern</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>
	<i>* Average beams shown. Consult ies files on our Website for more details.</i>	
ADJUSTABILITY	<p>Swivel: 359°</p> <p>Tilt: 40°</p> <p>Locking device: Only one 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>	
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>	

MODULAR CONCEPT

The cubic shape of the MOD1 base unit allows you to configure it in almost any shape and any direction.

Use remodeler, new construction or suspension cable installation kits, depending on the application.

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Modul-Aim™

MOD1

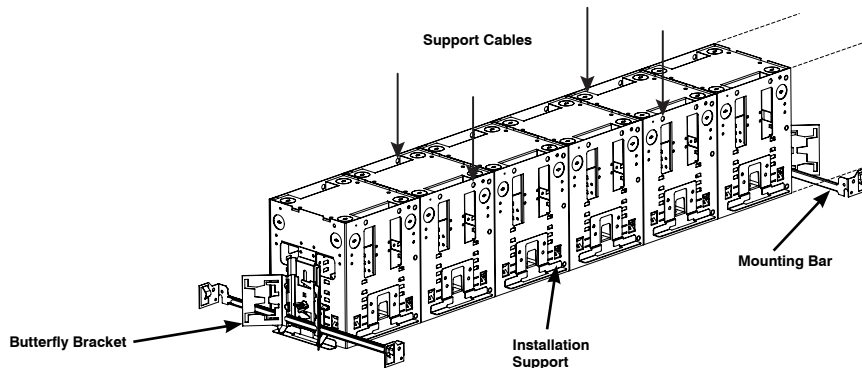
MODULAR CONCEPT (CONT'D)

General limitations

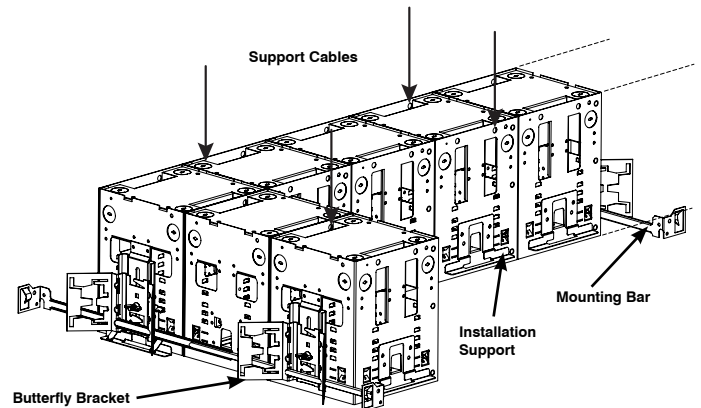
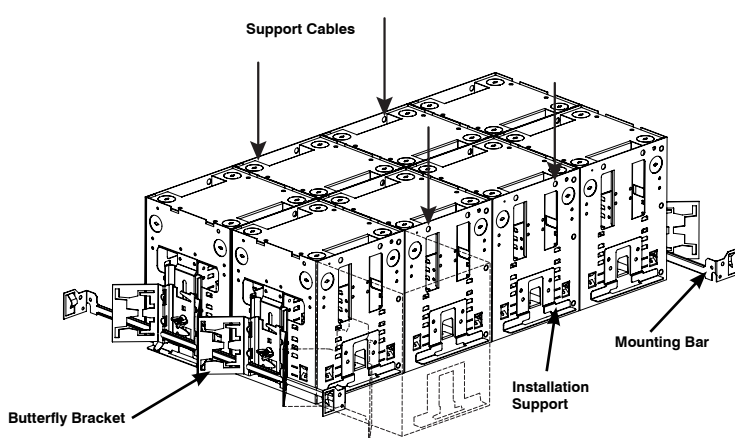
- Maximum of 20 units per electrical circuit
- 8-1/2" clearance in height required in the ceiling
- Each unit weighs 5 pounds. Respect your national and local building codes regarding weight permitted in a ceiling
- Modul-Aim product configurator is available on our Website to help you calculate required installation kits based on your configuration

New Construction Limitations

- Three rows maximum
- One new construction installation kit (INST-NW) including two butterfly brackets, 2 mounting bars and 6 installation supports to be installed on each row
- For more than 5 units in a row, cables (INST-SU) fixed to the building structure are required in addition to the New Construction installation kit (INST-NW)



- Two new construction installation kits (INST-NW) are required for double and triple rows. Position two butterfly brackets and one mounting bar on each side of the row. Install the installation supports along the row



Note: A triple row assembly requires a ceiling space of 20" between joists. Make sure you have enough room to install the unit.



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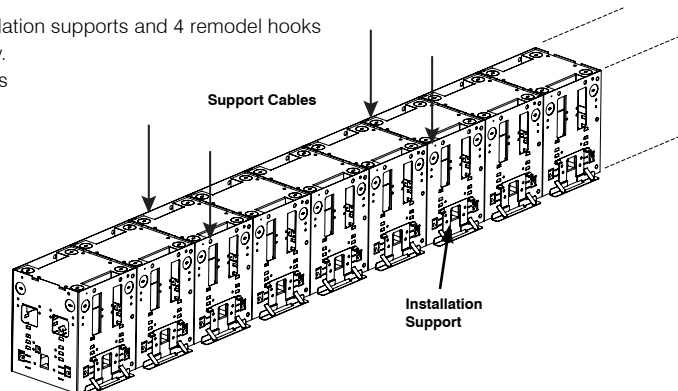
Modul-Aim™

MOD1

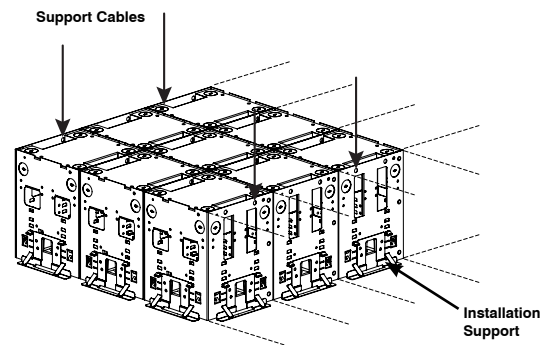
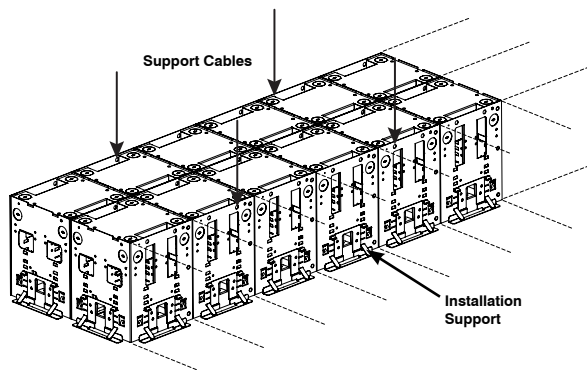
MODULAR CONCEPT (CONT'D)

Remodeler Limitations

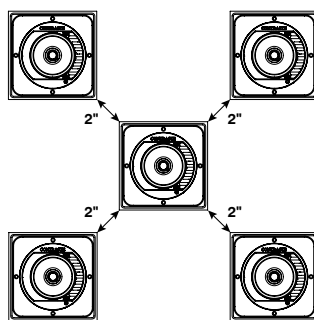
- Single or double rows: One remodeler installation kit (INST-RE) including 2 installation supports and 4 remodel hooks is required per 2 supporting faces and must be installed all around the assembly. Cables (INST-SU) fixed to the building structure are required for more than 9 units



- 3 rows, 4 rows and more: One remodeler installation kit (INST-RE) per 2 supporting faces is required and must be installed all around the assembly. Cables (INST-SU) fixed to the building structure are required for more than 8 units



- For a checkboard pattern, available in remodeler only, a space of 2" is required between each unit corners. Structural reinforcement may be required and is the installer responsibility



Suspension Installation

- Each unit weighs 5 pounds. Plan enough cables to fix to the structure to support your assembly
- Our suspension installation kit (INST-SU) sold as an accessory, supports a maximum of 20 units. For product configurations exceeding that limit, plan enough suspension cables
- Suspension installation kit (INST-SU) can act as support cables to complete remodeler (INST-RE) and new construction (INST-NW) installation kits



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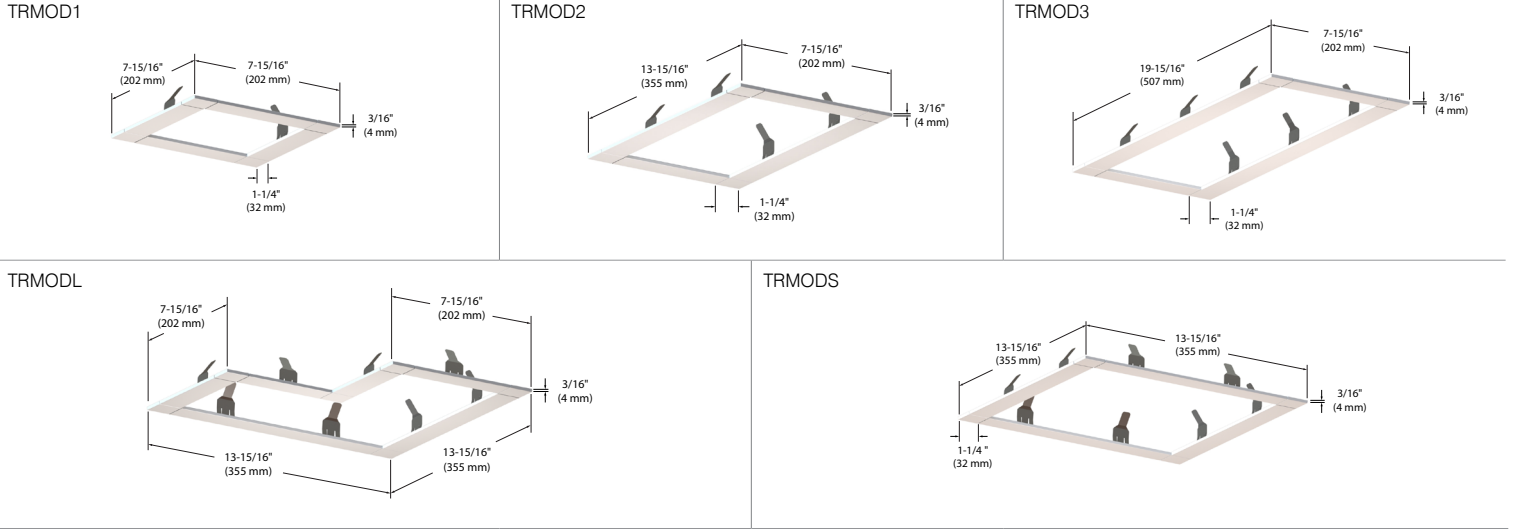
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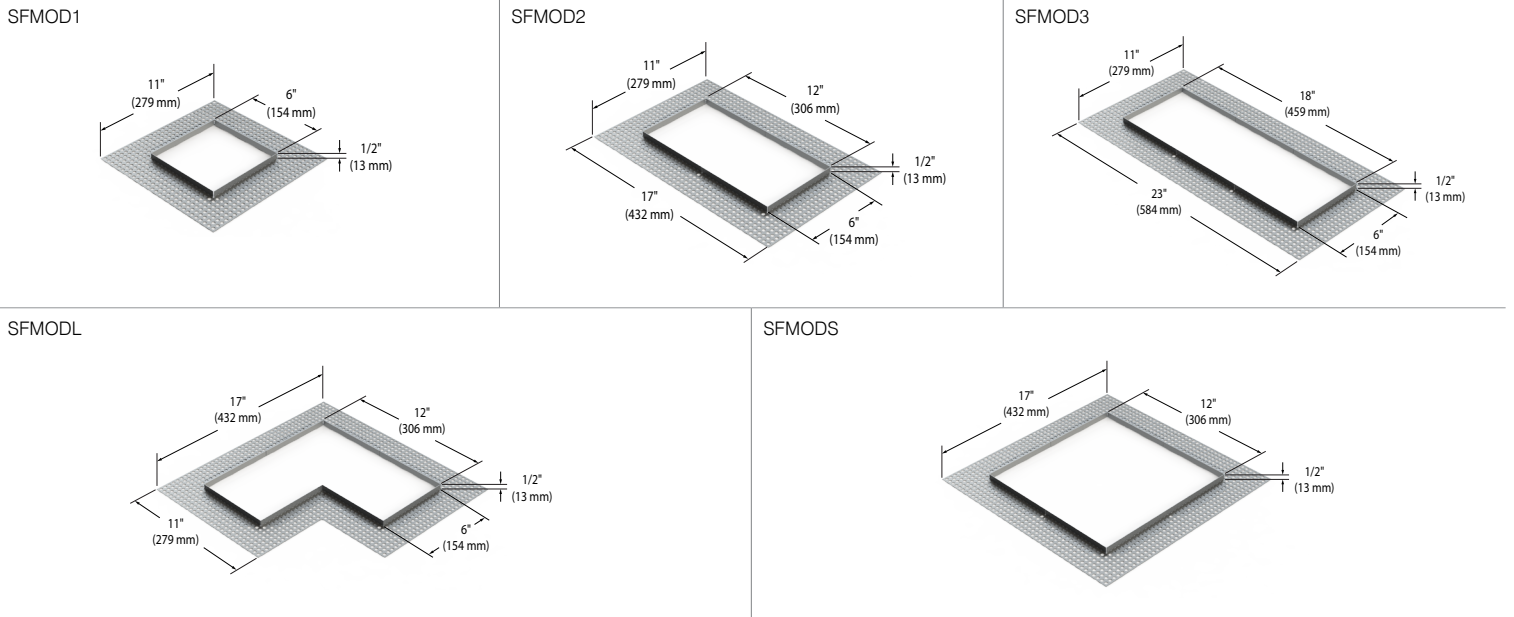
MOD1

TRIMS

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



MESH PLATE (Trimless)



Modul-Aim™**MOD1**

MASK

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

MASK1-11



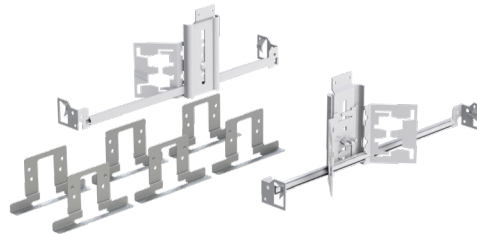
MASK1-22



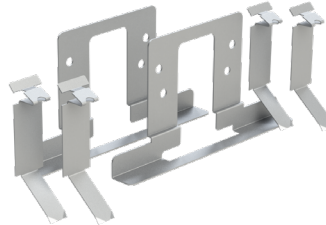
INSTALLATION KIT

New Construction Installation Kit
 INST-NW

- 6 Installation Supports
- 2 Butterfly Brackets
- 2 Adjustable Mounting Bars (14-1/4" to 26")
- Screws included


Remodel Installation Kit
 INST-RE

- 2 Installation Supports
- 4 Remodel Hooks
- Screws included


Suspension Installation Kit
 INST-SU

- 2 Cables 10'
- 2 Hooks per Cable
- 2 Adjustable Snap Hook



* Can act as support cables to complete remodeler (INST-RE) and new construction installation kit (INST-NW).

INSTALLATION ACCESSORIES

Support Bracket MOD
 103806

* Screws not included

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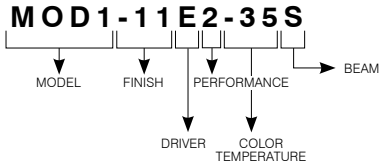
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MODULAR BASE UNIT WITH STANDARD LIGHT ENGINE CODIFICATION EXAMPLE

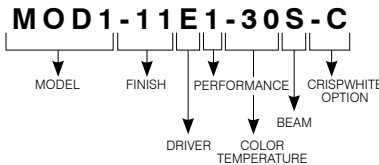


ORDERING CODES for Modular Base Unit with Standard Light Engine

MODEL	FINISHES	DRIVER	PERFORMANCE	COLOR TEMPERATURES	BEAMS	
MOD1						
MOD1	Modular Base Unit	-11 Matte White -22 Matte Black	E ELV D 0-10V A Lutron Ecosystem Addressable	1 20W (1,426 Lumens delivered) 2 40W (2,361 Lumens delivered)	-27 2,700K -30 3,000K -35 3,500K -40 4,000K	S Spot 15° MS Medium Spot 19° M Narrow Flood 32° W Flood 45°
(Available with Performance 1 only)						

Installation kits, trim, mask and trimless mesh plate to be ordered separately based on your configuration.

MODULAR BASE UNIT WITH CRISPWHITE TECHNOLOGY CODIFICATION EXAMPLE



ORDERING CODES for Modular Base Unit with CrispWhite Technology

MODEL	FINISHES	DRIVER	PERFORMANCE	COLOR TEMPERATURES	BEAMS	CRISPWHITE OPTION	
MOD1				-30		-C	
MOD1	Modular Base Unit	-11 Matte White -22 Matte Black	E ELV D 0-10V A Lutron Ecosystem Addressable	1 20W (1,195 Lumens delivered) 2 40W (2,075 Lumens delivered)	-30 3,000K	S Spot 15° MS Medium Spot 19° M Narrow Flood 32° W Flood 45°	-C CrispWhite Technology
(Available with Performance 1 only)							

Installation kits, trim, mask and trimless mesh plate to be ordered separately based on your configuration.

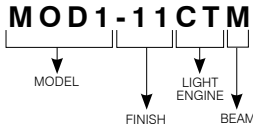


Modul-Aim™

MOD1

MODULAR BASE UNIT WITH LUMENETIX ENGINE

CODIFICATION EXAMPLE

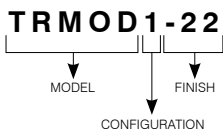


ORDERING CODES for Modular Base Unit with Lumenetix Engine

MODEL	FINISHES	LIGHT ENGINE	BEAMS
MOD1			
MOD1 Modular Base Unit	-11 Matte White -22 Matte Black	CT Color Tuning WD Warm Dimming	M Narrow Flood 26° W Flood 41°

Installation kits, trim, mask and trimless mesh plate to be ordered separately based on your configuration.

TRIM CODIFICATION EXAMPLE



ORDERING CODES for Trim

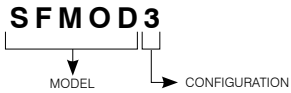
MODEL	CONFIGURATIONS	FINISHES
TRMOD		
TRMOD	1 1 unit 2 2 units 3 3 units L 3 units "L" shape S 4 units square shape	-11 Matte White -15 Metallic Grey -22 Matte Black



Modul-Aim™

MOD1

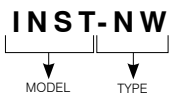
MESH PLATE (TRIMLESS) CODIFICATION EXAMPLE



ORDERING CODES for Mesh Plate (Trimless)

MODEL	CONFIGURATIONS
SF	
SF	1 1 unit
	2 2 units
	3 3 units
	L 3 units "L" shape
	S 4 units square shape

INSTALLATION KIT CODIFICATION EXAMPLE



ORDERING CODES for Installation Kit

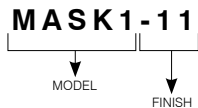
MODEL	TYPES
INST	
INST	-NW New Construction Installation Kit
	-RE Remodel Installation Kit
	-SU Suspension Installation Kit



Modul-Aim™

MOD1

MASK CODIFICATION EXAMPLE



ORDERING CODES for Mask

MODEL	FINISHES	
MASK1		
MASK1	-11	Matte White
	-22	Matte Black

INSTALLATION ACCESSORIES

New Construction Installation Kit: INST-NW

Remodel Installation Kit: INST-RE

Suspension Installation Kit: INST-SU

Support Bracket MOD: 103806

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**

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**

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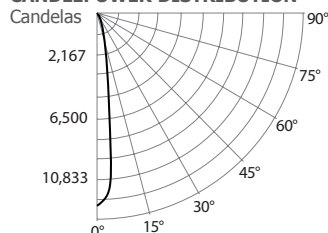
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MOD1

PHOTOMETRIC DATA

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	334.8	1.5'
08'	188.3	2.0'
10'	120.5	2.5'
12'	83.7	3.0'
14'	61.5	3.5'
16'	47.1	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	12,052 / 1,425.5
Watts	120V 277V 20.42W 21.92W
Operating AMPS	0.17A 0.07A
Lumen Maintenance	L70 @ 50,000 Hrs
CRI	90+
Lumens/Watt	69.8
Spacing Criteria	0.25

COEFFICIENT OF UTILIZATION - %

RCC %	80			50			30			
RWC %	50	30	50	30	50	30	50	30	50	30
RCR	0	119	119	111	111	106	106	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	1,288.4	90.4%
0-40	1,414.5	99.2%
0-60	1,425.5	100%
60-90	0	0%
0-90	1,425.5	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	72	0.90
6'	40	0.51
7'	28	0.35
8'	28	0.35
9'	18	0.23

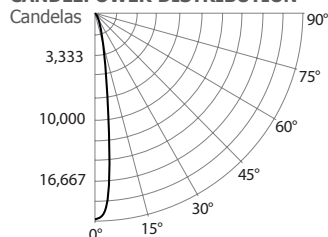
38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	12,052	40	20
5	9,111	50	3
10	3,082	60	0
15	1,168	70	0
20	704	80	0
25	613	90	0
30	526		

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	554.3	1.5'
08'	311.8	2.0'
10'	199.5	2.5'
12'	138.6	3.0'
14'	101.8	3.5'
16'	77.9	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	19,954 / 2,360.1
Watts	120V 277V 38.7W 39.2W
Operating AMPS	0.32A 0.14A
Lumen Maintenance	L70 @ 50,000 Hrs
CRI	90+
Lumens/Watt	60.9
Spacing Criteria	0.25

COEFFICIENT OF UTILIZATION - %

RCC %	80			50			30			
RWC %	50	30	50	30	50	30	50	30	50	30
RCR	0	119	119	111	111	106	106	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	2,133.1	90.4%
0-40	2,341.9	99.2%
0-60	2,360.1	100%
60-90	0	0%
0-90	2,360.1	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	119	1.72
6'	67	0.96
7'	46	0.67
8'	46	0.67
9'	30	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	19,954	40	33
5	15,084	50	5
10	5,103	60	0
15	1,934	70	0
20	1,165	80	0
25	1,016	90	0
30	871		



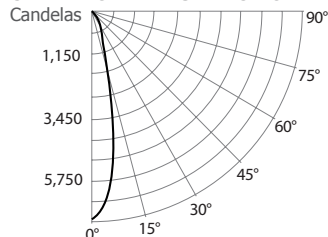
Modul-Aim™

MOD1

PHOTOMETRIC DATA

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	189.0	2.1'
08'	106.3	2.8'
10'	68.0	3.6'
12'	47.3	4.3'
14'	34.7	5.0'
16'	26.6	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	6,804	/ 1,371.5
Watts	120V	277V
	20.42W	20.92W
Operating AMPS	0.17A	0.07A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90+	
Lumens/Watt	67.2	
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	1,226.6	89.4%
0-40	1,357.5	99%
0-60	1,371.5	100%
60-90	0	0%
0-90	1,371.5	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	68	0.90
6'	38	0.51
7'	27	0.35
8'	27	0.35
9'	17	0.23

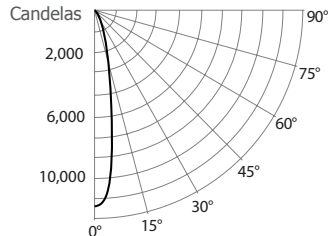
38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	6,804	40	31
5	5,901	50	4
10	3,448	60	0
15	1,477	70	0
20	851	80	0
25	626	90	0
30	520		

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	313.0	2.1'
08'	176.1	2.8'
10'	112.7	3.6'
12'	78.3	4.3'
14'	57.5	5.0'
16'	44.0	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	11,268	/ 2,271.3
Watts	120V	277V
	38.8W	39.3W
Operating AMPS	0.32A	0.14A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90+	
Lumens/Watt	58.5	
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	2,031.4	89.4%
0-40	2,248.2	99%
0-60	2,271.3	100%
60-90	0	0%
0-90	2,271.3	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	113	1.72
6'	64	0.97
7'	44	0.67
8'	44	0.67
9'	28	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	11,268	40	52
5	9,772	50	6
10	5,710	60	0
15	2,447	70	0
20	1,410	80	0
25	1,037	90	0
30	861		



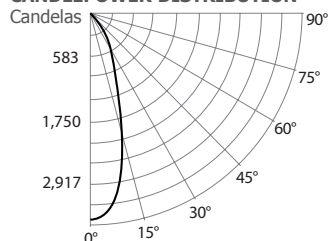
Modul-Aim™

MOD1

PHOTOMETRIC DATA

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	94.5	3.6'
08'	53.2	4.8'
10'	34.0	6.0'
12'	23.6	7.2'
14'	17.4	8.4'
16'	13.3	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	3,404	/ 1,365.5
Watts	120V	277V
	20.42W	20.92W
Operating AMPS	0.17A	0.07A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90 +	
Lumens/Watt	66.8	
Spacing Criteria	0.58	

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	106	102	101	98	98	96	96	
	4	95	91	92	88	90	87	87	
	6	86	82	84	80	83	79	79	
	8	79	74	78	73	77	73	73	
	10	73	68	72	68	71	67	67	

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,209.3	88.6%
0-40	1,347.5	98.7%
0-60	1,361.3	99.7%
60-90	4.2	0.3%
0-90	1,365.5	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	67	0.90
6'	38	0.51
7'	26	0.35
8'	26	0.35
9'	17	0.23

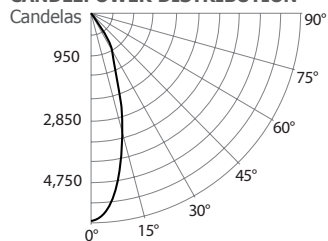
38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	3,404	40	27
5	3,226	50	5
10	2,696	60	3
15	1,977	70	2
20	1,223	80	1
25	821	90	0
30	576		

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	156.6	3.6'
08'	88.1	4.8'
10'	56.4	6.0'
12'	39.2	7.2'
14'	28.8	8.4'
16'	22.0	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	5,637	/ 2,261.7
Watts	120V	277V
	38.8W	39.3W
Operating AMPS	0.32A	0.14A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90 +	
Lumens/Watt	58.3	
Spacing Criteria	0.58	

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	106	102	101	98	98	96	96	
	4	95	91	92	88	90	87	87	
	6	86	82	84	80	83	79	79	
	8	79	74	78	73	77	73	73	
	10	73	68	72	68	71	67	67	

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	2,003.0	88.6%
0-40	2,232.0	98.7%
0-60	2,254.7	99.7%
60-90	7.0	0.3%
0-90	2,261.7	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	112	1.72
6'	63	0.97
7'	44	0.67
8'	44	0.67
9'	28	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	5,637	40	45
5	5,344	50	8
10	4,466	60	4
15	3,275	70	3
20	2,025	80	2
25	1,360	90	0
30	955		



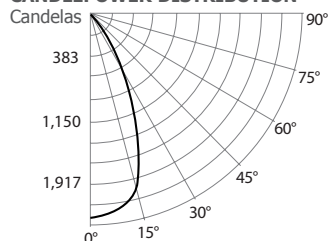
Modul-Aim™

MOD1

PHOTOMETRIC DATA

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	62.4	5.3'
08'	35.1	7.1'
10'	22.5	8.9'
12'	15.6	10.6'
14'	11.5	12.4'
16'	8.8	14.2'

Beam: 47.8°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Modul-Aim Performance 1 LED	3,000K Flood
CBCP / Lumens	2,247 / 1,392.2
Watts	120V 277V 20.42W 20.92W
Operating AMPS	0.17A 0.07A
Lumen Maintenance	L70 @ 50,000 Hrs
CRI	90 +
Lumens/Watt	68.2
Spacing Criteria	0.81

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	106	
2	105	101	100	98	97	95			
4	94	89	91	87	89	85			
6	84	79	82	78	81	77			
8	76	71	75	70	74	70			
10	70	64	68	64	68	64			

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

FLUX LUMINEUX ZONAL

ZONE	LUMENS	%LUMINAIRE
0-30	1,207.2	86.7%
0-40	1,378.9	99%
0-60	1,391.6	100%
60-90	0.6	0%
0-90	1,392.2	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	68	0.90
6'	38	0.51
7'	27	0.35
8'	27	0.35
9'	17	0.23

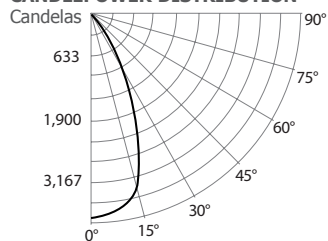
38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	2,247	40	38
5	2,189	50	4
10	2,107	60	1
15	1,936	70	0
20	1,493	80	0
25	1,029	90	0
30	684		

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	103.3	5.3'
08'	58.1	7.1'
10'	37.2	8.9'
12'	25.8	10.6'
14'	18.9	12.4'
16'	14.5	14.2'

Beam: 47.8°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Modul-Aim Performance 2 LED	3,000K Flood
CBCP / Lumens	3,719 / 2,304
Watts	120V 277V 37.7W 38.2W
Operating AMPS	0.31A 0.14A
Lumen Maintenance	L70 @ 50,000 Hrs
CRI	90 +
Lumens/Watt	61.1
Spacing Criteria	0.81

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	106	
2	105	101	100	98	97	95			
4	94	89	91	87	89	85			
6	84	79	82	78	81	77			
8	76	71	75	70	74	70			
10	70	64	68	64	68	64			

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

FLUX LUMINEUX ZONAL

ZONE	LUMENS	%LUMINAIRE
0-30	1,997.9	86.7%
0-40	2,282	99%
0-60	2,303	100%
60-90	1.0	0%
0-90	2,304	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	113	1.67
6'	64	0.94
7'	44	0.65
8'	44	0.65
9'	28	0.42

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	3,719	40	62
5	3,622	50	7
10	3,488	60	2
15	3,203	70	0
20	2,472	80	0
25	1,703	90	0
30	1,131		

