

CONSTELLATION

MINI 1.5 - RECESSED DOWNLIGHT



Lighting Products



PERFORMANCE - WHITE STATIC - STANDARD

CONFIGURATION	3000K	APPROX. LM/W
Round Fixed	888 lm	104.4
Round Adjustable	842 lm	99.0
Round Wallwash	544 lm	64.0
Square Fixed	877 lm	103.1
Square Adjustable	780 lm	91.7
Square Wallwash	535 lm	62.9

PERFORMANCE - DIM TO WARM - STANDARD

CONFIGURATION	DW	APPROX. LM/W
Round Fixed	464 lm	46.4
Round Adjustable	406 lm	40.6
Round Wallwash	273 lm	27.3
Square Fixed	455 lm	45.5
Square Adjustable	401 lm	40.1
Square Wallwash	268 lm	26.8

PERFORMANCE - WHITE STATIC - SUPER OUTPUT

CONFIGURATION	3000K	APPROX. LM/W
Round Fixed	1,032 lm	121.4
Round Adjustable	995 lm	117.5
Round Wallwash	608 lm	71.5
Square Fixed	1,062 lm	124.9
Square Adjustable	911 lm	107.1
Square Wallwash	608 lm	71.5

LENS BEAM ANGLE



15°
Spot



24°
Narrow Flood



36°
Flood



60°
Wide Flood

TRIM FINISH



Black



White



Trim white with
black reflector
insert



Custom

SOURCE INFORMATION

DELIVERED LUMENS	Up to 1062 lm
CONSUMPTION	Up to 10W
CURRENT	Up to 500mA
EFFICACY	Up to 121.4 lm/W
INPUT VOLTAGE	120VAC-277VAC
DIMMING	TRIAC/ELV / 0-10V (1%) / 10V PWM
CRI	90+ CRI, 3-Step SDCM
COLOR TEMP-CCT	2700K/3000K/3500K/4000K/ Dim to Warm: 1800K-3000K
LIFE EXPECTANCY	L80 50,000 hrs.
ADJUSTABLE TILT	30°, 360° Rotation
OPERATING TEMP	32°F to 77°F

OPERATING TEMPERATURE Luminaire should be installed and operated ONLY in dry environments where the ambient temperature ranges from 32°F to 77°F. Luminaire operation in environments outside the listed temperature range voids the warranty AND may damage the product or adversely impact lamp life, lumen output and color consistency.

OPTICS ACESORY

Honeycomb louver & Linear Spread Lens

MATERIAL

Aluminum Die-Casting, Electrostatic Powder Coating

MINIMUM PLENUM SPACE

The minimum plenum space required is 4.5 inches.

CEILING THICKNESS

From 1/32" (1mm) up to 1 3/16" (30mm)

COMPATIBLE CEILING TYPES

Drywall, T-Bar Grid, Acoustic Tile, Metal Ceiling.
And any material within the compatible thickness.

ORDERING MATRIX INFORMATION

Ex: CTL-M-1.5-RD-TF-FX-SG-30K-15-WH-30M-1-U-EM10-RM-HL

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	

1	2	3	4
SERIES	LIGHT ENGINE TYPE	TRIM SHAPE	MOUNTING PAN
☐ CTL-M Constellation Mini	☐ 1.5 1.5 High Efficiency Standard ☐ 1.5S 1.5 Super Output Light Engine	☐ RD Round ☐ SQ Square	☐ TF Flanged Trim ☐ TL Flangeless Trim

5	6	7	8
APPLICATION TYPE	LIGHT ENGINES	COLOR TEMP-CCT (90 CRI)	LENS BEAM ANGLE
☐ FX Fixed ☐ AD Adjustable ☐ WW Wall Wash (Available only with 15° Lens Beam Angle)	☐ SG Single	☐ 27K 2700K ☐ 30K 3000K ☐ 35K 3500K ☐ 40K 4000K ☐ DW Dim to Warm: 1800K–3000K (Only available in standard Light Engine)	☐ 15 15° Spot ☐ 24 24° Narrow ☐ 36 36° Flood ☐ 60 60° Wide Flood

9	10	11	12
TRIM FINISH	LUMEN PACKAGE	DRIVER	VOLTAGE
☐ WH White ☐ BK Black ☐ BW Trim white with black reflector insert (This applies to Wall Wash Reflector only) ☐ CS Custom RAL No. _____	☐ 30M ☐ 35M ☐ 40M ☐ 45M ☐ 50M See pages 4 to 11 for Available Light Engine Lumen packages Check mA to Lumen values in the charts	☐ 1 0-10V 1% Dimming ☐ TLV TRIAC/ELV 1% Dimming ☐ PWM 10V PWM 1% Dimming Remote Constant Current Driver Max distance: 196-ft using 12 AWG wire 100-ft using 16 AWG wire 50-ft using 18 AWG wire	☐ U Uni 120-277V

13	14	15
STANDBY MODULES	INSTALLATION TYPE	OPTIC MEDIA
☐ EM10 Emergency Battery Pack 10W ☐ EM12 Emergency Battery Pack 12W ☐ NO No Option Remote Emergency Battery Pack, for field install Max distance with EM = 50 ft	☐ RM Remote ☐ NC New Construction Non-IC Frame ☐ IC New Construction IC Box	☐ HL Honeycomb louver ☐ LS Linear Spread Lens Accessories are not suitable for wallwash fixtures   Honeycomb louver Linear Spread Lens



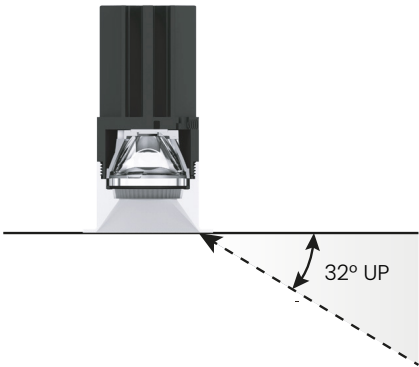
ROUND
FLANGED TRIM



SQUARE
FLANGED TRIM



CUTOFF ANGLE



OPTIC MEDIA LIST

OPTIC	
1.5-HL	Honeycomb Louver
1.5-LS	Linear Spread Lens
1.5-15	Standard light-engine lens; provides 15° beam angle
1.5-24	Standard light-engine lens; provides 24° beam angle
1.5-36	Standard light-engine lens; provides 36° beam angle
1.5-60	Standard light-engine lens; provides 60° beam angle
1.5-15DW	Dim-to-warm lens; provides 15° beam angle
1.5-24DW	Dim-to-warm lens; provides 24° beam angle
1.5-36DW	Dim-to-warm lens; provides 36° beam angle
1.5-60DW	Dim-to-warm lens; provides 60° beam angle

INSTALLATION	
1.5-NC	New Construction Frame
1.5-IC	IC BOX for 1 and 2 Light engines
1.5-RM	Remote driver box with driver

CUT OUT PLATE	
1.5-CP-TF	Coutout plate - for Flanged Trim
1.5-CP-TL	Coutout plate - for Flangeless Trim
1.5-CP-TF-TW	Coutout plate - for Twin Flanged Trim
1.5-CP-TL-TW	Coutout plate - for Twin Flangeless Trim

TL FRAME	
1.5-RD-WH-SP	Spackle for white round flangeless trim
1.5-RD-BK-SP	Spackle for black round flangeless trim
1.5-SQ-WH-SP	Spackle for white square flangeless trim
1.5-SQ-BK-SP	Spackle for black square flangeless trim

ROUND FLANGED TRIM (STANDARD LIGHT ENGINE)



FIXED CTL-M-1.5-RD-TF-FX-SG

CRI	90+
LENS BEAM ANGLE	15°/24°/36°/60°

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	549 lm	4.9W
IC/NON-IC	35M	350	637 lm	5.8W
IC	40M	400	723 lm	6.7W
NON-IC	45M	450	807 lm	7.6W
NON-IC	50M	500	888 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

DIM TO WARM

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	279 lm	4W
IC/NON-IC	35M	350	325 lm	6W
IC	40M	400	371 lm	8W
NON-IC	45M	450	418 lm	9W
NON-IC	50M	500	464 lm	10W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K	90%
3500K	110%
4000K	120%

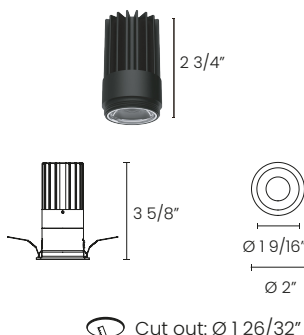
Multiplier for Optics Accessories

Clear (None)	100%
Honeycomb louver	67%
Linear Spread Lens	72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



ADJUSTABLE (30°) CTL-M-1.5-RD-TF-AD-SG

CRI	90+
LENS BEAM ANGLE	15°/24°/36°/60°

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	521 lm	4.9W
IC/NON-IC	35M	350	604 lm	5.8W
IC	40M	400	686 lm	6.7W
NON-IC	45M	450	765 lm	7.6W
NON-IC	50M	500	842 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

DIM TO WARM

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	244 lm	4W
IC/NON-IC	35M	350	284 lm	6W
IC	40M	400	325 lm	8W
NON-IC	45M	450	366 lm	9W
NON-IC	50M	500	406 lm	10W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K	90%
3500K	110%
4000K	120%

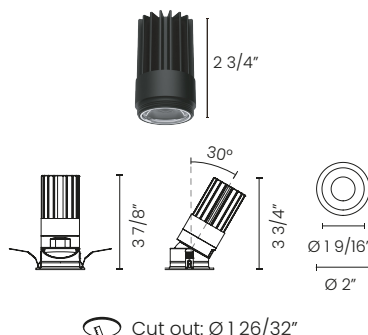
Multiplier for Optics Accessories

Clear (None)	100%
Honeycomb louver	67%
Linear Spread Lens	72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



WALLWASH CTL-M-1.5-RD-TF-WW-SG

CRI	90+
LENS BEAM ANGLE	15° only

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	336 lm	4.9W
IC/NON-IC	35M	350	390 lm	5.8W
IC	40M	400	443 lm	6.7W
NON-IC	45M	450	494 lm	7.6W
NON-IC	50M	500	544 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

DIM TO WARM

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	164 lm	4W
IC/NON-IC	35M	350	191 lm	6W
IC	40M	400	219 lm	8W
NON-IC	45M	450	246 lm	9W
NON-IC	50M	500	273 lm	10W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K	90%
3500K	110%
4000K	120%

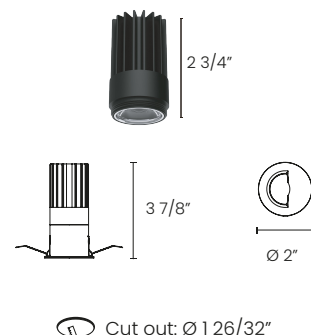
Multiplier for Optics Accessories

Clear (None)	100%
Honeycomb louver	67%
Linear Spread Lens	72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS





ROUND FLANGED TRIM (SUPER OUTPUT)



FIXED CTL-M-1.5S-RD-TF-FX-SG

CRI 90+

LENS BEAM ANGLE 15°/24°/36°/60°

ADJUSTABLE (30°) CTL-M-1.5S-RD-TF-AD-SG

CRI 90+

LENS BEAM ANGLE 15°/24°/36°/60°

WALLWASH CTL-M-1.5S-RD-TF-WW-SG

CRI 90+

LENS BEAM ANGLE 15° only

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	638 lm	4.9W
IC/NON-IC	35M	350	740 lm	5.8W
IC	40M	400	840 lm	6.7W
NON-IC	45M	450	937 lm	7.6W
NON-IC	50M	500	1032 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K 90%
3500K 110%
4000K 120%

Multiplier for Optics Accessories

Clear (None) 100%
Honeycomb louver 67%
Linear Spread Lens 72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	615 lm	4.9W
IC/NON-IC	35M	350	714 lm	5.8W
IC	40M	400	810 lm	6.7W
NON-IC	45M	450	904 lm	7.6W
NON-IC	50M	500	995 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K 90%
3500K 110%
4000K 120%

Multiplier for Optics Accessories

Clear (None) 100%
Honeycomb louver 67%
Linear Spread Lens 72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	376 lm	4.9W
IC/NON-IC	35M	350	436 lm	5.8W
IC	40M	400	495 lm	6.7W
NON-IC	45M	450	553 lm	7.6W
NON-IC	50M	500	608 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K 90%
3500K 110%
4000K 120%

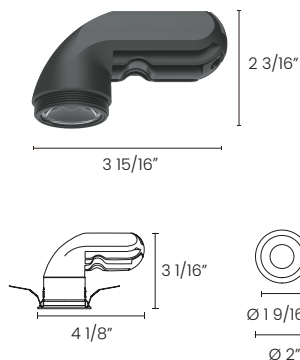
Multiplier for Optics Accessories

Clear (None) 100%
Honeycomb louver 67%
Linear Spread Lens 72%

UGR

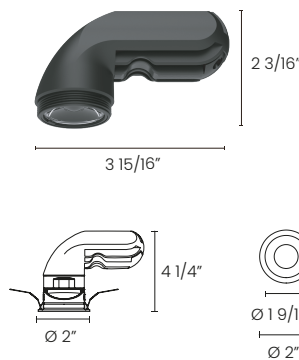
CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



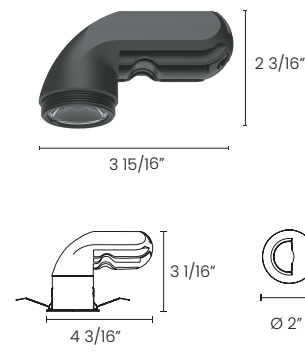
⌀ 1 26/32"

DIMENSIONS



⌀ 1 26/32"

DIMENSIONS



⌀ 1 26/32"

ROUND FLANGELESS TRIM (STANDARD LIGHT ENGINE)



FIXED CTL-M-1.5-RD-TL-FX-SG

CRI 90+

LENS BEAM ANGLE 15°/24°/36°/60°

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	549 lm	4.9W
IC/NON-IC	35M	350	637 lm	5.8W
IC	40M	400	723 lm	6.7W
NON-IC	45M	450	807 lm	7.6W
NON-IC	50M	500	888 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

DIM TO WARM

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	279 lm	4W
IC/NON-IC	35M	350	325 lm	6W
IC	40M	400	371 lm	8W
NON-IC	45M	450	418 lm	9W
NON-IC	50M	500	464 lm	10W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K 90%
3500K 110%
4000K 120%

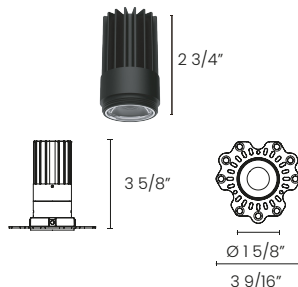
Multiplier for Optics Accessories

Clear (None) 100%
Honeycomb louver 67%
Linear Spread Lens 72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



① Cut out: Ø 2 4/32"

ADJUSTABLE (30°) CTL-M-1.5-RD-TL-AD-SG

CRI 90+

LENS BEAM ANGLE 15°/24°/36°/60°

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	521 lm	4.9W
IC/NON-IC	35M	350	604 lm	5.8W
IC	40M	400	686 lm	6.7W
NON-IC	45M	450	765 lm	7.6W
NON-IC	50M	500	842 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

DIM TO WARM

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	244 lm	4W
IC/NON-IC	35M	350	284 lm	6W
IC	40M	400	325 lm	8W
NON-IC	45M	450	366 lm	9W
NON-IC	50M	500	406 lm	10W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K 90%
3500K 110%
4000K 120%

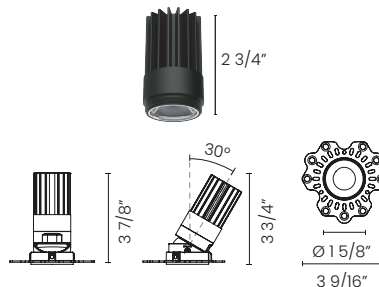
Multiplier for Optics Accessories

Clear (None) 100%
Honeycomb louver 67%
Linear Spread Lens 72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



① Cut out: Ø 2 4/32"

WALLWASH CTL-M-1.5-RD-TL-WW-SG

CRI 90+

LENS BEAM ANGLE 15° only

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	336 lm	4.9W
IC/NON-IC	35M	350	390 lm	5.8W
IC	40M	400	443 lm	6.7W
NON-IC	45M	450	494 lm	7.6W
NON-IC	50M	500	544 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

DIM TO WARM

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	164 lm	4W
IC/NON-IC	35M	350	191 lm	6W
IC	40M	400	219 lm	8W
NON-IC	45M	450	246 lm	9W
NON-IC	50M	500	273 lm	10W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K 90%
3500K 110%
4000K 120%

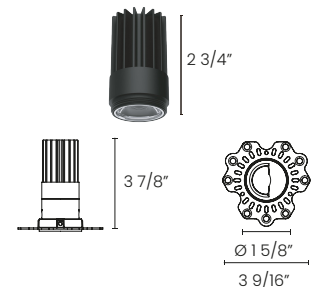
Multiplier for Optics Accessories

Clear (None) 100%
Honeycomb louver 67%
Linear Spread Lens 72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



① Cut out: Ø 2 4/32"

ROUND FLANGELESS TRIM (SUPER OUTPUT)



FIXED CTL-M-1.5S-RD-TL-FX-SG

CRI 90+

LENS BEAM ANGLE 15°/24°/36°/60°

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	638 lm	4.9W
IC/NON-IC	35M	350	740 lm	5.8W
IC	40M	400	840 lm	6.7W
NON-IC	45M	450	937 lm	7.6W
NON-IC	50M	500	1032 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K	90%
3500K	110%
4000K	120%

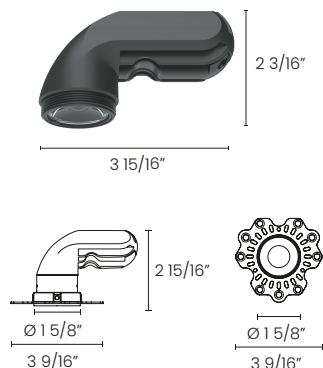
Multiplier for Optics Accessories

Clear (None)	100%
Honeycomb louver	67%
Linear Spread Lens	72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



① Cut out: Ø 2 4/32"

ADJUSTABLE (30°) CTL-M-1.5S-RD-TL-AD-SG

CRI 90+

LENS BEAM ANGLE 15°/24°/36°/60°

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	615 lm	4.9W
IC/NON-IC	35M	350	714 lm	5.8W
IC	40M	400	810 lm	6.7W
NON-IC	45M	450	904 lm	7.6W
NON-IC	50M	500	995 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K	90%
3500K	110%
4000K	120%

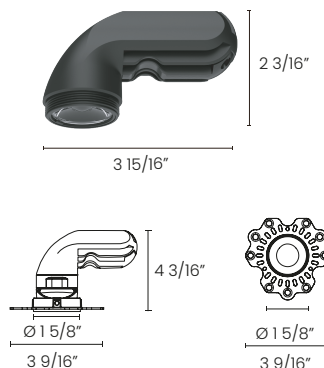
Multiplier for Optics Accessories

Clear (None)	100%
Honeycomb louver	67%
Linear Spread Lens	72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



① Cut out: Ø 2 4/32"

WALLWASH CTL-M-1.5S-RD-TL-WW-SG

CRI 90+

LENS BEAM ANGLE 15° only

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	376 lm	4.9W
IC/NON-IC	35M	350	436 lm	5.8W
IC	40M	400	495 lm	6.7W
NON-IC	45M	450	553 lm	7.6W
NON-IC	50M	500	608 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K	90%
3500K	110%
4000K	120%

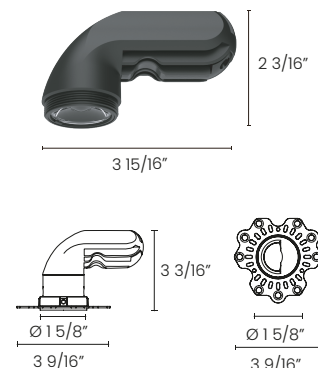
Multiplier for Optics Accessories

Clear (None)	100%
Honeycomb louver	67%
Linear Spread Lens	72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



① Cut out: Ø 2 4/32"

SQUARE FLANGED TRIM (STANDARD LIGHT ENGINE)



FIXED CTL-M-1.5-SQ-TF-FX-SG

CRI	90+
LENS BEAM ANGLE	15°/24°/36°/60°

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	542 lm	4.9W
IC/NON-IC	35M	350	629 lm	5.8W
IC/NON-IC	40M	400	714 lm	6.7W
IC	45M	450	796 lm	7.6W
NON-IC	50M	500	877 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

DIM TO WARM

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	273 lm	4W
IC/NON-IC	35M	350	319 lm	6W
IC	40M	400	364 lm	8W
NON-IC	45M	450	410 lm	9W
NON-IC	50M	500	455 lm	10W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K	90%
3500K	110%
4000K	120%

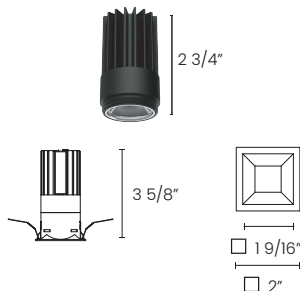
Multiplier for Optics Accessories

Clear (None)	100%
Honeycomb louver	67%
Linear Spread Lens	72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



△ Cut out: 1 26/32" x 1 26/32"

ADJUSTABLE (30°) CTL-M-1.5-SQ-TF-AD-SG

CRI	90+
LENS BEAM ANGLE	15°/24°/36°/60°

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	482 lm	4.9W
IC/NON-IC	35M	350	559 lm	5.8W
IC	40M	400	635 lm	6.7W
NON-IC	45M	450	708 lm	7.6W
NON-IC	50M	500	780 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

DIM TO WARM

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	241 lm	4W
IC/NON-IC	35M	350	281 lm	6W
IC	40M	400	321 lm	8W
NON-IC	45M	450	362 lm	9W
NON-IC	50M	500	401 lm	10W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K	90%
3500K	110%
4000K	120%

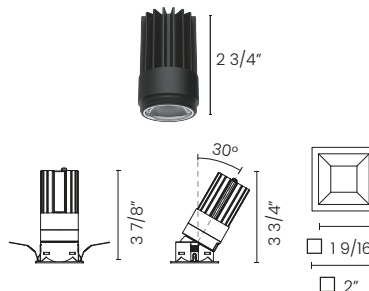
Multiplier for Optics Accessories

Clear (None)	100%
Honeycomb louver	67%
Linear Spread Lens	72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



△ Cut out: 1 26/32" x 1 26/32"

WALLWASH CTL-M-1.5-SQ-TF-WW-SG

CRI	90+
LENS BEAM ANGLE	15° only

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	331 lm	4.9W
IC/NON-IC	35M	350	384 lm	5.8W
IC	40M	400	435 lm	6.7W
NON-IC	45M	450	486 lm	7.6W
NON-IC	50M	500	535 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

DIM TO WARM

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	161 lm	4W
IC/NON-IC	35M	350	188 lm	6W
IC	40M	400	214 lm	8W
NON-IC	45M	450	241 lm	9W
NON-IC	50M	500	268 lm	10W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K	90%
3500K	110%
4000K	120%

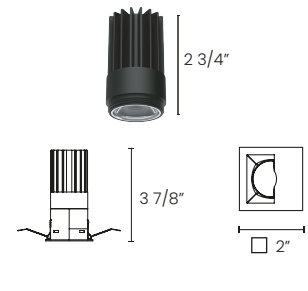
Multiplier for Optics Accessories

Clear (None)	100%
Honeycomb louver	67%
Linear Spread Lens	72%

UGR

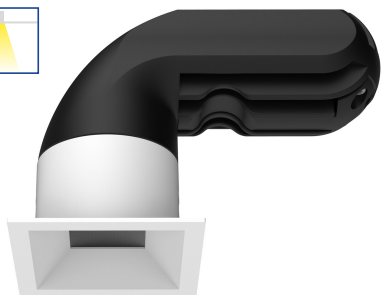
CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



△ Cut out: 1 26/32" x 1 26/32"

SQUARE FLANGED TRIM (SUPER OUTPUT)



FIXED CTL-M-1.5S-SQ-TF-FX-SG

CRI 90+

LENS BEAM ANGLE 15°/24°/36°/60°

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	657 lm	4.9W
IC/NON-IC	35M	350	761 lm	5.8W
IC	40M	400	864 lm	6.7W
NON-IC	45M	450	964 lm	7.6W
NON-IC	50M	500	1062 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K 90%
3500K 110%
4000K 120%

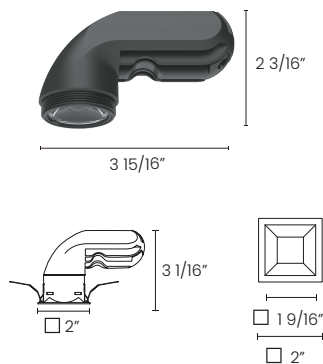
Multiplier for Optics Accessories

Clear (None) 100%
Honeycomb louver 67%
Linear Spread Lens 72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



⚠ Cut out: 1 26/32" x 1 26/32"

ADJUSTABLE (30°) CTL-M-1.5S-SQ-TF-AD-SG

CRI 90+

LENS BEAM ANGLE 15°/24°/36°/60°

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	564 lm	4.9W
IC/NON-IC	35M	350	654 lm	5.8W
IC	40M	400	742 lm	6.7W
NON-IC	45M	450	828 lm	7.6W
NON-IC	50M	500	911 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K 90%
3500K 110%
4000K 120%

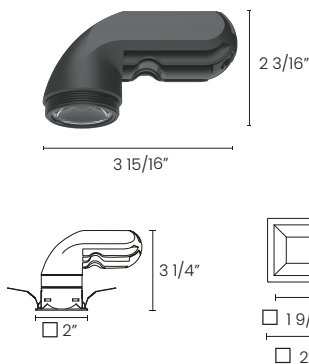
Multiplier for Optics Accessories

Clear (None) 100%
Honeycomb louver 67%
Linear Spread Lens 72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



⚠ Cut out: 1 26/32" x 1 26/32"

WALLWASH CTL-M-1.5S-SQ-TF-WW-SG

CRI 90+

LENS BEAM ANGLE 15° only

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	376 lm	4.9W
IC/NON-IC	35M	350	436 lm	5.8W
IC	40M	400	495 lm	6.7W
NON-IC	45M	450	553 lm	7.6W
NON-IC	50M	500	608 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K 90%
3500K 110%
4000K 120%

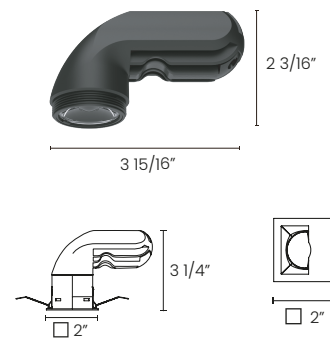
Multiplier for Optics Accessories

Clear (None) 100%
Honeycomb louver 67%
Linear Spread Lens 72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



⚠ Cut out: 1 26/32" x 1 26/32"

SQUARE FLANGELESS TRIM (STANDARD LIGHT ENGINE)



FIXED CTL-M-1.5-SQ-TL-FX-SG

CRI	90+
LENS BEAM ANGLE	15°/24°/36°/60°

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	542 lm	4.9W
IC/NON-IC	35M	350	629 lm	5.8W
IC/NON-IC	40M	400	714 lm	6.7W
IC	45M	450	796 lm	7.6W
NON-IC	50M	500	877 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

DIM TO WARM

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	273 lm	4W
IC/NON-IC	35M	350	319 lm	6W
IC	40M	400	364 lm	8W
NON-IC	45M	450	410 lm	9W
NON-IC	50M	500	455 lm	10W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K	90%
3500K	110%
4000K	120%

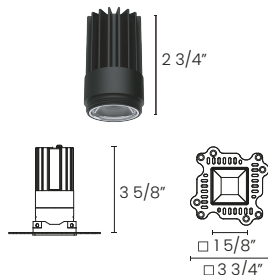
Multiplier for Optics Accessories

Clear (None)	100%
Honeycomb louver	67%
Linear Spread Lens	72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



□ Cut out: 1 31/32" x 1 31/32"

ADJUSTABLE (30°) CTL-M-1.5-SQ-TL-AD-SG

CRI	90+
LENS BEAM ANGLE	15°/24°/36°/60°

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	482 lm	4.9W
IC/NON-IC	35M	350	559 lm	5.8W
IC	40M	400	635 lm	6.7W
NON-IC	45M	450	708 lm	7.6W
NON-IC	50M	500	780 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

DIM TO WARM

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	241 lm	4W
IC/NON-IC	35M	350	281 lm	6W
IC	40M	400	321 lm	8W
NON-IC	45M	450	362 lm	9W
NON-IC	50M	500	401 lm	10W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K	90%
3500K	110%
4000K	120%

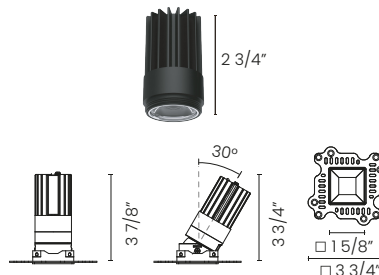
Multiplier for Optics Accessories

Clear (None)	100%
Honeycomb louver	67%
Linear Spread Lens	72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



□ Cut out: 1 31/32" x 1 31/32"

WALLWASH CTL-M-1.5-SQ-TL-WW-SG

CRI	90+
LENS BEAM ANGLE	15° only

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	331 lm	4.9W
IC/NON-IC	35M	350	384 lm	5.8W
IC	40M	400	435 lm	6.7W
NON-IC	45M	450	486 lm	7.6W
NON-IC	50M	500	535 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

DIM TO WARM

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	161 lm	4W
IC/NON-IC	35M	350	188 lm	6W
IC	40M	400	214 lm	8W
NON-IC	45M	450	241 lm	9W
NON-IC	50M	500	268 lm	10W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K	90%
3500K	110%
4000K	120%

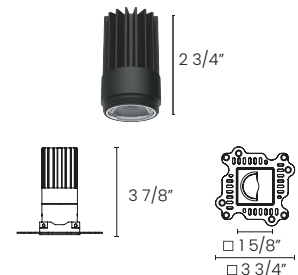
Multiplier for Optics Accessories

Clear (None)	100%
Honeycomb louver	67%
Linear Spread Lens	72%

UGR

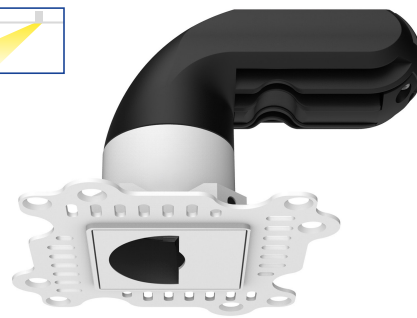
CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



□ Cut out: 1 31/32" x 1 31/32"

SQUARE FLANGELESS TRIM (SUPER OUTPUT)



FIXED CTL-M-1.5S-SQ-TL-FX-SG

CRI 90+

LENS BEAM ANGLE 15°/24°/36°/60°

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	657 lm	4.9W
IC/NON-IC	35M	350	761 lm	5.8W
IC	40M	400	864 lm	6.7W
NON-IC	45M	450	964 lm	7.6W
NON-IC	50M	500	1062 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K 90%
3500K 110%
4000K 120%

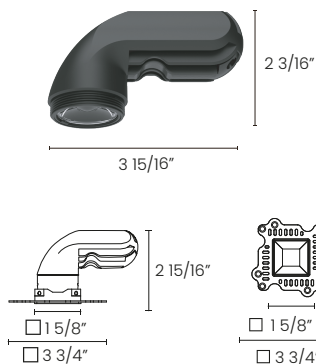
Multiplier for Optics Accessories

Clear (None) 100%
Honeycomb louver 67%
Linear Spread Lens 72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



Cut out: 1 31/32" x 1 31/32"

ADJUSTABLE (30°) CTL-M-1.5S-SQ-TL-AD-SG

CRI 90+

LENS BEAM ANGLE 15°/24°/36°/60°

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	564 lm	4.9W
IC/NON-IC	35M	350	654 lm	5.8W
IC	40M	400	742 lm	6.7W
NON-IC	45M	450	828 lm	7.6W
NON-IC	50M	500	911 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K 90%
3500K 110%
4000K 120%

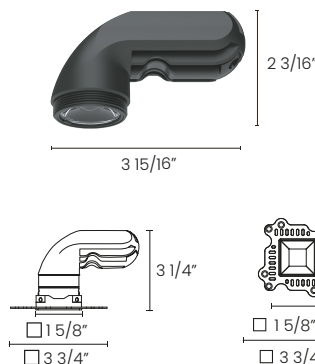
Multiplier for Optics Accessories

Clear (None) 100%
Honeycomb louver 67%
Linear Spread Lens 72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

DIMENSIONS



Cut out: 1 31/32" x 1 31/32"

WALLWASH CTL-M-1.5S-SQ-TL-WW-SG

CRI 90+

LENS BEAM ANGLE 15° only

3000K

IC/NON-IC	LUMEN OUTPUT CODE	CURRENT (mA)	DELIVERED LUMEN (lm)	FIXTURE CONSUMPTION (W)
IC/NON-IC	30M	300	376 lm	4.9W
IC/NON-IC	35M	350	436 lm	5.8W
IC	40M	400	495 lm	6.7W
NON-IC	45M	450	553 lm	7.6W
NON-IC	50M	500	608 lm	8.5W

Actual performance may differ by +/- 15% when operating between 120V-277V +/- 10%.

Multiplier for other Color Temp (K)

2700K 90%
3500K 110%
4000K 120%

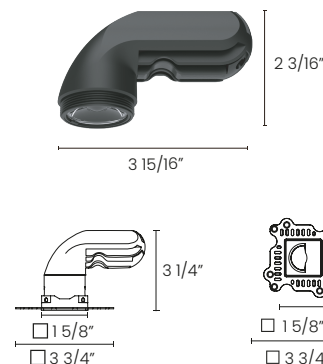
Multiplier for Optics Accessories

Clear (None) 100%
Honeycomb louver 67%
Linear Spread Lens 72%

UGR

CCT	2700K	3000K	3500K	4000K
UGR 20°	<16	<19	<16	<16
UGR 30°	<13	<16	<13	<13
UGR 40°	<19	<16	<19	<19
UGR 50°	<22	<19	<22	<22

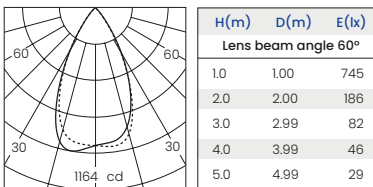
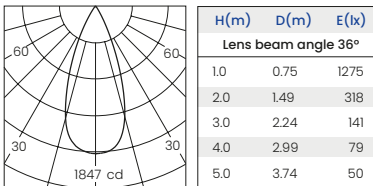
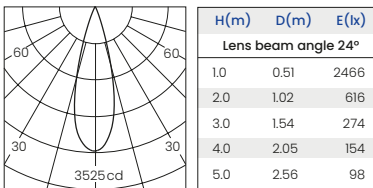
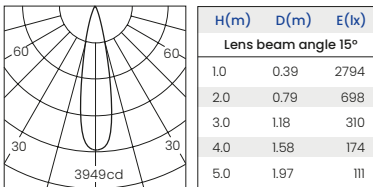
DIMENSIONS



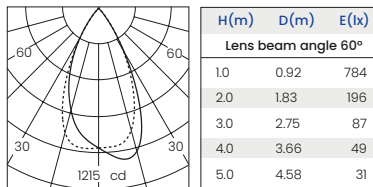
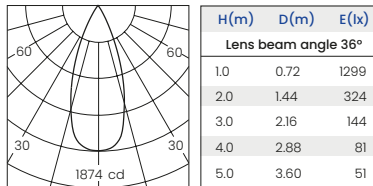
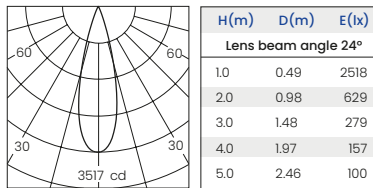
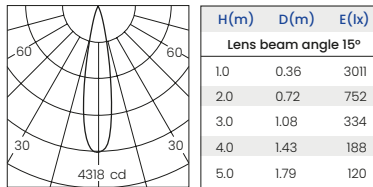
Cut out: 1 31/32" x 1 31/32"

PHOTOMETRICS – FOR STANDARD LIGHT ENGINE FLANGED TRIM AND FLANGELESS TRIM

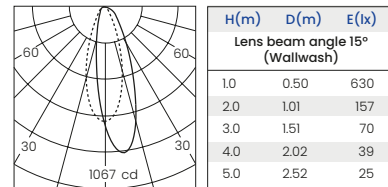
ROUND FIXED



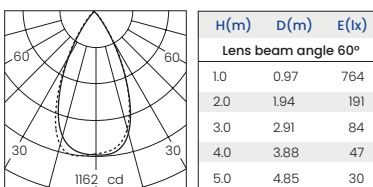
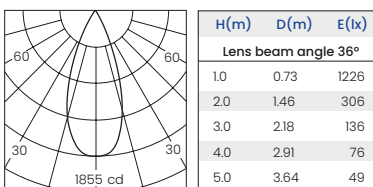
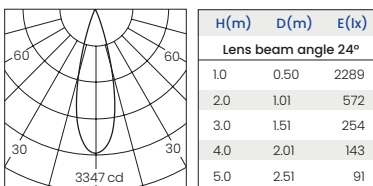
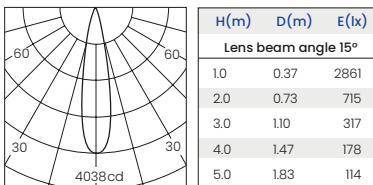
ROUND ADJUSTABLE



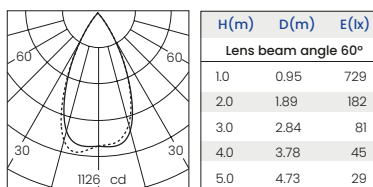
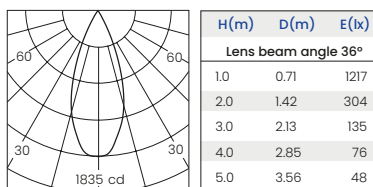
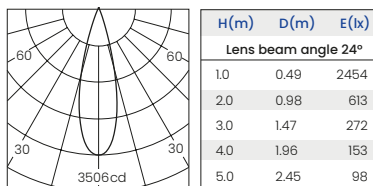
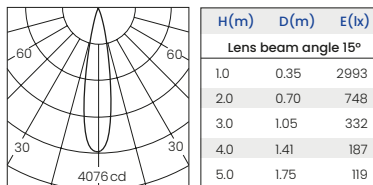
ROUND WALLWASH



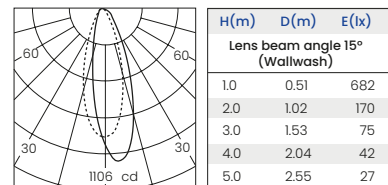
SQUARE FIXED



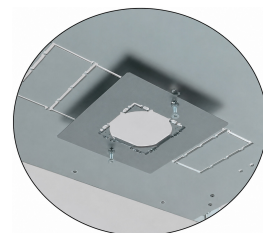
SQUARE ADJUSTABLE



SQUARE WALLWASH



HOUSING



REMODEL/REMOTE ENCLOSED DRIVER

For Constellation Mini 1.5 round and square flanged and flangeless trim

Installs from below, service from below

Type: Remote driver box

1 light engine flanged and flangeless trim

Flanged trim cut out:

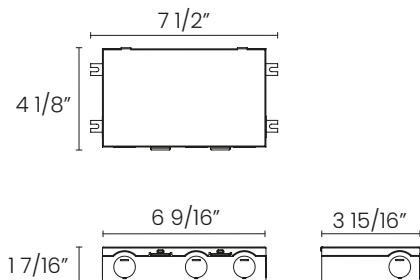
Round: $\varnothing 1 \frac{26}{32}$ "

Square: $\square 1 \frac{26}{32}$ " x $1 \frac{26}{32}$ "

Flangeless trim cut out:

Round: $\varnothing 2 \frac{4}{32}$ "

Square: $\square 1 \frac{31}{32}$ " x $1 \frac{31}{32}$ "



NEW CONSTRUCTION IC BOX

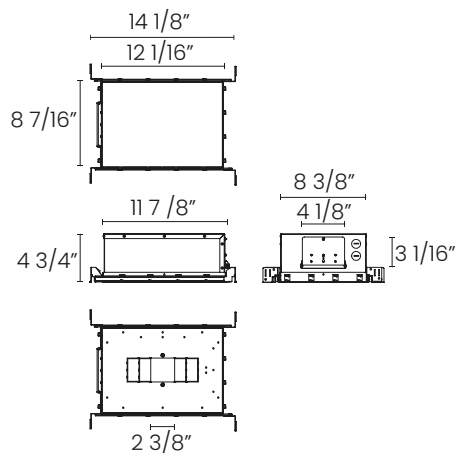
For Constellation Mini 1.5 round and square flanged and flangeless trim

Installs from above, service from below

Type: IC Box

1 light engine flanged and flangeless trim

Cut out: $2 \frac{13}{32}$ " x $4 \frac{24}{32}$ "



CUTOUT ACCESSORIES FOR IC BOX



ACCESSORY CUT OUT PLATE FOR FLANGED TRIM

For Constellation Mini 1.5 flanged trim

Cut out:

Round : $\varnothing 1 \frac{26}{32}$ "

Square : $\square 1 \frac{26}{32}$ "



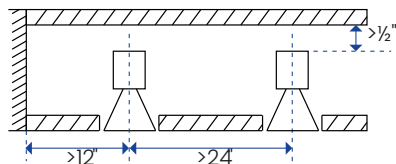
ACCESSORY CUT OUT PLATE FOR FLANGELESS TRIM

For Constellation Mini 1.5 flangeless trim

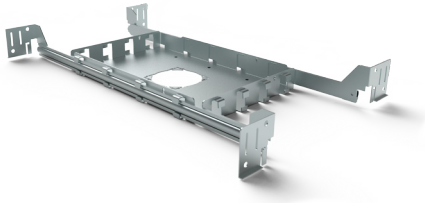
Cut out:

Round : $\varnothing 2 \frac{4}{32}$ "

Square : $\square 1 \frac{31}{32}$ "



HOUSING



NEW CONSTRUCTION NON-IC FRAME

For Constellation Mini 1.5 round and square flanged and flangeless trim

Installs from above, service from below

Type: New construction frame

1 light engine flanged and flangeless trim

Flanged trim cut out:

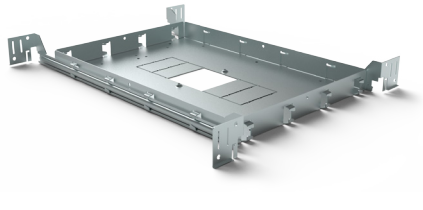
Round: $\varnothing 1 \frac{26}{32}$ "

Square: $\square 1 \frac{26}{32}$ " x $1 \frac{26}{32}$ "

Flangeless trim cut out:

Round: $\varnothing 2 \frac{4}{32}$ "

Square: $\square 1 \frac{31}{32}$ " x $1 \frac{31}{32}$ "



ACCESSORIAL NEW CONSTRUCTION FRAME TO MOUNT 2 LIGHT ENGINES

For Constellation Mini 1.5 round and square flanged and flangeless trim

Installs from above, service from below

Type: New construction frame

2 light engine flanged and flangeless trim

Flanged trim cut out:

$2 \frac{13}{32}$ " x $4 \frac{24}{32}$ "

Flangeless trim cut out:

$2 \frac{13}{32}$ " x $4 \frac{24}{32}$ "

CUTOUT ACCESSORIES FOR IC BOX



ACCESSORIAL MOUNTING PLATE FOR 2 FLANGED LIGHT ENGINES

For Constellation Mini 1.5 flanged trim

Cut out:

Round : $\varnothing 1 \frac{26}{32}$ "

Square : $\square 1 \frac{26}{32}$ "



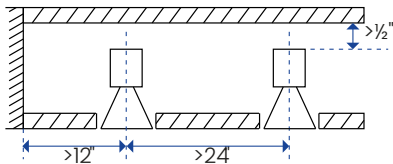
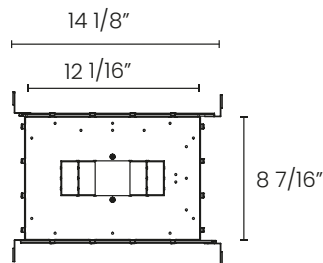
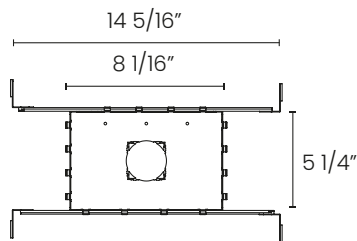
ACCESSORIAL MOUNTING PLATE FOR 2 FLANGELESS LIGHT ENGINES

For Constellation Mini 1.5 flangeless trim

Cut out:

Round : $\varnothing 2 \frac{4}{32}$ "

Square : $\square 1 \frac{31}{32}$ "



KIG-C-DWJ Series 40W



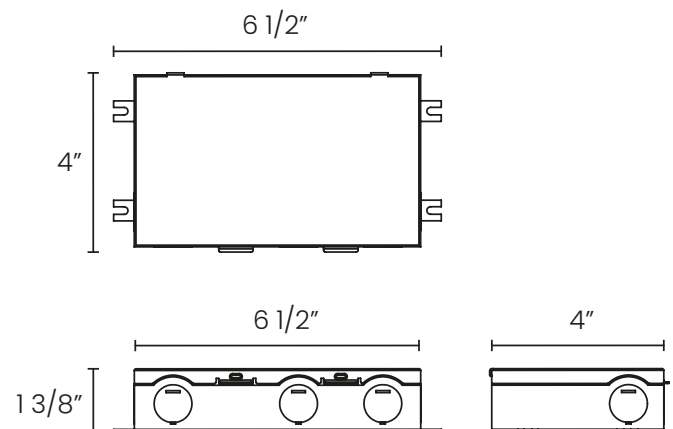
ICES-005 Class P SELV RoHS



FEATURES

- Output: Constant Current
- Range: 100-277VAC
- PFC design: Built-in active PFC function
- Efficiency: Up to 81%
- Protections: Short circuit / Over temperature
- Heat dissipation: Cooling by free air convection
- Waterproof performance: Driver built-in Junction box, for dry and damp locations.
- Dimming function:
 - Phase dimming: work with Forward phase, MLV and Reverse phase, ELV, TRIAC dimmers
 - 0-10V dimming: 0-10V/1-10V/Potentiometer/10V PWM 4 in 1
- Dimming range: 1-100%
- Application: Suitable for the application of indoor LED lighting
- Warranty: 5 years warranty

DIMENSIONS



STANDBY MODULE

An emergency battery pack is available as an option for field installation by others. AC Electronics emergency battery is California Title 20 Compliant and provides backup power for 90 minutes. EM fixtures are provided with an integral emergency battery that requires above ceiling access for service, and a remote test switch, which comes with a 24" lead length for location of the test switch. Remote EM test switch is dry/damp only.

DRIVER

KIG-C-DWJ Series 40W

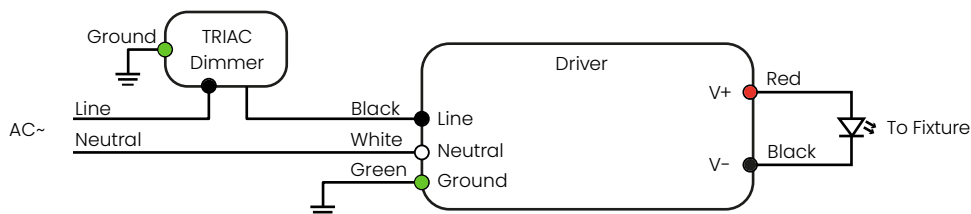
TECHNICAL PARAMATERS

Certificate		UL / cUL / FCC / ICES-005 / Class P / SELV / ROHS / REACH																
Output	Rated current (A) T ON L OFF	0.3	0.35	0.4	0.45	0.5	0.55	0.6	0.65	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	
	DIP Code	1111		1111		1111		1111		1111		1111		1111		1111		
	DIP Code		1111		1111		1111		1111		1111		1111		1111		1111	
	Current Tolerance	±5%																
	No-Load Voltage	58V max																
	DC Voltage (V)	3-50											3-45	3-40	3-37	3-34	3-31	3-29
	Rated power (W)	15	17.5	20	22.5	25	27.5	30	32.5	35	40							
Input	Rated Voltage	100-277VAC																
	Rated Frequency	50 / 60HZ																
	Power Factor	>0.9																
	THD@full load	≤20%																
	Efficiency (Typ.)	≥81% @120VAC 60Hz ≥81% @277VAC 60Hz																
	AC Current (Max.)	0.52A																
	Inrush Current (Typ.)	3.12A, 36us@50% Ipeak 120VAC 9.2A, 34us@50% Ipeak 277VAC																
	Leakage current	<0.50mA																
Protection	Short Circuit	Constant current mode, recovers automatically after fault condition is removed																
	Over temperature	Ambient temp. over 122°F±41°F, output current will be reduced to 50% ; Ambient temp. over 140°F±41°F, recovers automatically after the temp.drops.																
Enviroment	Working TEMP.	-40 - +140°F																
	Working Humidity	20-95% RH, non-condensing																
	Storage TEMP. Humidity	-40 - +176°F, 10-95% RH																
	TEMP. coefficient	±0.03% /°C (0-122°F)																
	Vibration	10-500Hz, 5G 12min./1 cycle,period for 72min.each along X,Y,Z axes																
Safety & EMC	Safety standards	UL 8750 CAN/CSA-C22.2 No. 250.13																
	Withstand voltage	I/P-O/P:1.88KVAC I/P-F/G:1.88KVAC O/P-F/G:0.5KVAC																
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 77°F / 70% RH																
	EMC Immunity	FCC/ICES do not request this test.																
	EMC Emission	FCC Part 15 Subpart B; ICES-005 Issue 5; ANSI C63.4a-2017																
Others	Net Weight	1.25 lb																
	Dimension	7.5" x 4" x 1.4" (L *W*H)																
	Packing	21.26" x 9.25" x 9.25" 20pcs/CTN																
Notes	1. All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25°Cof ambient temperature. 2. Tolerance: includes set us tolerance, line regulation and load regulation.																	

DIMMING WIRING DIAGRAM

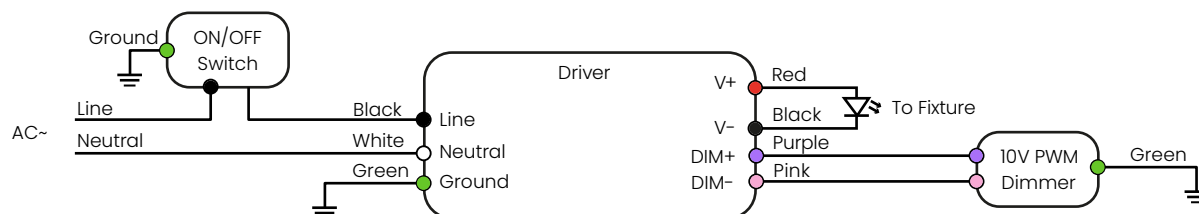
TRIAC / FORWARD PHASE / LEADING EDGE DIMMING (TRI)

1. The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase /Triac dimmer or lighting system.
2. Working with forward phase, MLV and Reverse phase, ELV, TRIAC dimmers or light system.
3. Min. loading is about 10%
4. Please try to use dimmers with power at least 2 times as the output power of the driver.



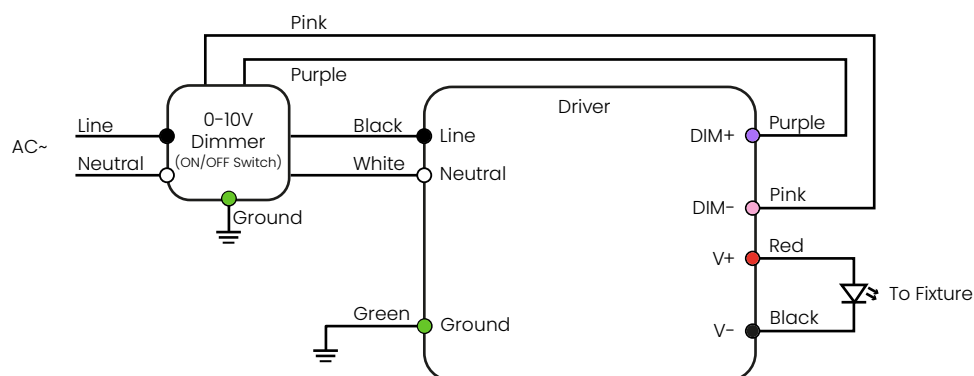
10V PWM

1. This driver should be installed by qualified and professional person.
2. Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
3. Ensure that wiring is correct before test in order to avoid light and power supply damage.
4. If driver Cannot work normally, don't maintain privately.



0-10V DIMMING (010)

1. This driver should be installed by qualified and professional person.
2. Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
3. Ensure that wiring is correct before test in order to avoid light and power supply damage.
4. If driver Cannot work normally, don't maintain privately.



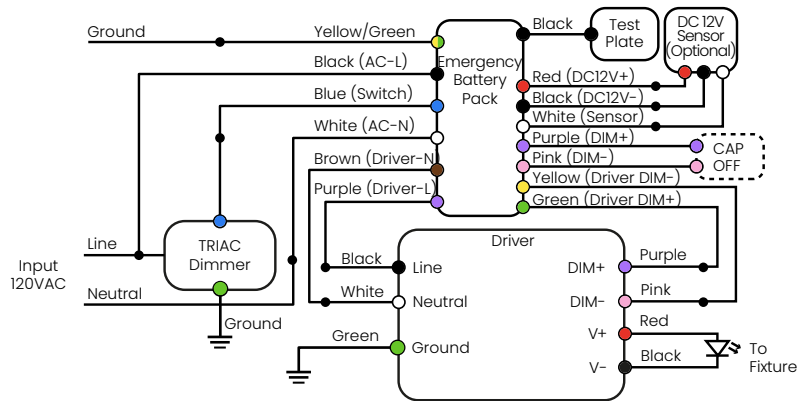
EMERGENCY BATTERY PACK WIRING DIAGRAM

TRIAC / FORWARD PHASE / LEADING EDGE DIMMING (TRI)

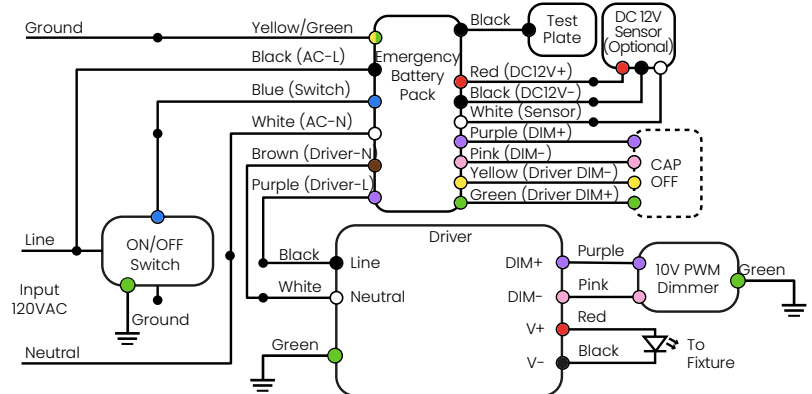
Input 120VAC 50/60Hz Range 3%-100%

NOTE: Cap off unused wires individually. DO NOT cap together.

EMERGENCY BATTERY ACCESS Above ceiling access is required for service. An access panel in the ceiling (or other form of access) adjacent to the installation location of the Emergency Battery is required.



10V PWM



0-10V DIMMING (010)

Input 120VAC-277VAC 50/60Hz Range 0.1%-100% dim to off

NOTE: Cap off unused wires individually. DO NOT cap together. Wall Switch and 0-10V dimmer may be one unit or two separate units.

EMERGENCY BATTERY ACCESS Above ceiling access is required for service. An access panel in the ceiling (or other form of access) adjacent to the installation location of the Emergency Battery is required.

