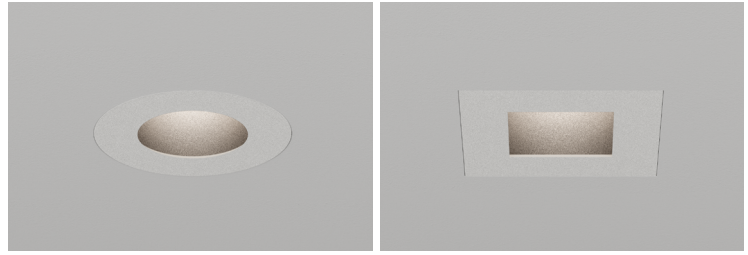


ATOMOS™ 1 PINHOLE LVS

UNIVERSAL AND SLIM

A miniature downlight range offering impressive performance in an extremely small profile with a 1" aperture and 2" overall diameter.

PROJECT NAME:	TYPE:
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ORDERING INFORMATION - TRIM / HOUSING

TRIM	TRIM TYPE	RATING	TRIM FINISH	BAFFLE FINISH	FIXTURE TYPE	INSTALL TYPE	LUMEN PACKAGE	CCT	OPTIC	MEDIA	DRIVER
				BK							LVS
A2RP	1" Round Pinhole	T Zero-Sightline Drywall	WH White AG Satin Silver	BK Black	5.52" UNIVERSAL HOUSING (SEPARATE TRIM AND HOUSING) 1/2" - 2" MAX CEILING THICKNESS		STATIC WHITE	24 2400K* *(90+CRI Only)	15 15° 25 25°	STANDARD	LVS Low Voltage System
A2SP	1" Square Pinhole	W Zero-Sightline Millwork* *(Not available for Square A2SP, or remodel installations)	BK Black CF Custom Finish* *(Consult Factory)		AD Adjustable, 30° Max Tilt	IC N Non-IC A IC, Airtight* *(Chicago Plenum & Airtight compliant housing)	8008D 80+ CRI AD/FD Lm. Delivered - 257 SF Lm. Delivered - 375	27 2700K 30 3000K	35 35° 50 50°	4 Soft Focus Film	
					FD Fixed	IC, Remote N Non-IC, Remote K IC, Airtight, Remote* *(Chicago Plenum & Airtight compliant housing)	8012D 80+ CRI AD/FD Lm. Delivered - 440 SF Lm. Delivered - 641	35 3500K 40 4000K		ALTERNATE	
						REMODEL R Remodel	8016D 80+ CRI Max Flux SF Lm. Delivered - 775* *(SF Fixture Type Only)			0 No Media* *(Not available for Wet Location, Warm Dim, or Airtight Housings)	
						REMOTE REMODEL M Remote Remodel	9007D 90+ CRI AD/FD Lm. Delivered - 218 SF Lm. Delivered - 317			2 Honeycomb Louver* *(Not available for Wet Location, Warm Dim, or Airtight Housings)	
							WARM DIM		15 15° 25 25° 35 35°	3 Clear Film* *(Not available for Warm Dim)	
							9010D 90+ CRI AD/FD Lm. Delivered - 373 SF Lm. Delivered - 543			5 Honeycomb Louver w/ Soft Focus Film	
							9014D 90+ CRI Max Flux SF Lm. Delivered - 659* *(SF Fixture Type Only)		50 50°	C Honeycomb Louver w/ Clear Film* *(Not available for Warm Dim)	
							3.4" SLIM HIGH OUTPUT HOUSING (INTEGRATED LED HOUSING) 1/2" - 1" MAX CEILING THICKNESS				
					SF Fixed	IC Y NIC C IC, Airtight* *(Chicago Plenum & Airtight compliant housing)	TUNABLE WHITE		35 35° 50 50°		
						REMODEL V IC, Remote W NIC, Remote D IC, Airtight, Remote* *(Chicago Plenum & Airtight compliant housing)	9009D 90+ CRI, AD/FD Lm. Delivered - 320 SF Lm. Delivered - 508	TR 4000K-1800K			
							Cool Profile AD/FD Lm. Delivered - 328 SF Lm. Delivered - 478	TH 5000K-2700K			
							*All Lm. Delivered reflect 3000K, 50° optic, and Soft Focus Media.				



PART NUMBER NOTES

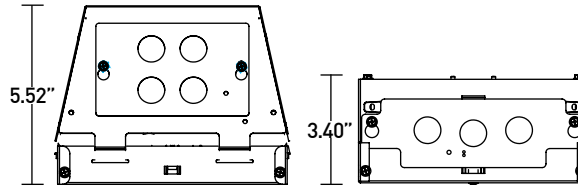
- Universal trims ship as e.g: A2RPTAD1AGBK-9010D30-AZS-LVS4
- Universal housings ship as e.g: IFR-A2I-280A-LVS
- Slim fixtures ship as e.g: A2RPTSF1AGBK-9010D30-AZV-LVS4



Declare.

ATOMOS1 PINHOLE LVS UNIVERSAL AND SLIM

HOUSING COMPARISON



HOUSING COMPARISON	UNIVERSAL HOUSING	SLIM HIGH OUTPUT HOUSING
FIXTURE TYPES	AD FD	SF
HOUSING DEPTH	5.52"	3.4"
MAX DELIVERED LUMENS	AD - 469 FD - 469	SF - 632
MAX CEILING THICKNESS	2"	1"
ROTATING COLLAR	NO	YES
OPTICS	15°, 25°, 35°, 50°, & ADJUSTABLE ZOOM	15°, 25°, 35°, & 50°

ACCESSORIES

ALTERNATE EFFECTS DEVICES

Consult factory for additional configurations.

- CGL-AR** Clear Film*
*(Not available for Warm Dim. Consult factory for Wet locations.)
- SFL-AR** Soft Focus Film*
*(Consult factory for Wet locations.)
- HCL-AR** Honeycomb Louver*
*(Not available for Warm Dim unless paired with Soft Focus Film. Not available for wet location unless paired with film.)

HANGER BAR EXTENDER KIT

Extends hanger bars from 24.0" to 46.0" maximum.

- FRX-HBE-46** Extender, Hanger Bar.

T-GRID ACCESSORY KIT

Recommended for installations in T-Grid up to 1.5" tall.

- DHA-TG-KIT**

INSTALLATION / REMOVAL TOOL

Required for installation. One provided for every 10 fixtures.

- A2-TOOL-INSTALL** Installation Tool

REPLACEMENT OPTICS

Interchangeable optics accessible through fixture aperture.

- RO-A-15-1** 15° optic *
*(Not available for Tunable White.)
- RO-A-25-1** 25° optic*
*(Not available for Tunable White.)
- RO-A-35-1** 35° optic
- RO-A-50-1** 50° optic
- RO-A-AZ-1** Adjustable zoom optic*
*(24°, 30°, 36°, 42° and 48° beam spreads. Not available for Warm Dim or Tunable White.)

ADJUSTMENT TOOL

One provided for every 10 adjustable fixtures.

- TOOL-HEX-050** Adjustment Tool

FURRING CHANNEL ACCESSORY KIT

Recommended for installations in furring channel.




- DHA-FC-KIT**

ATOMOS1 PINHOLE LVS UNIVERSAL AND SLIM

APPLICATION NOTES

- Lucifer Lighting will not supply a fixture with a POE node or power supply inside the fixture. This allows for easier site install with nodes of 2 or more outputs.
- Consult node manufacturer for maximum remote wiring distances.
- Housing and Fixture feature 18 Gauge wiring.
- Wiring connections are made in the splicing compartment or on the fixture using customer supplied connectors, ex. wire nuts, push-in connectors, or terminal blocks.
- Confirm node compatibility with factory if it is not listed.
- Customers are responsible for ensuring POE node drive current is set to correct values shown below.
- Customers must ensure voltage range of the proposed POE node encompasses the fixtures complete Vf range, both maximum and minimum. If assistance is required contact LLC rep or factory.

NODE COMPATIBILITY

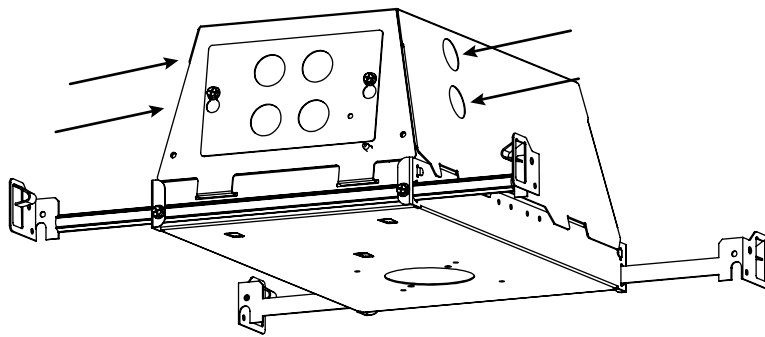
Manufacturer	Model Number
 Igor® Enabling Smart Buildings™	NP50-60-C-F-5
 molex	180996-5107 180996-5101
 PLATFORMATICS	1 Channel Node, POE-LN2-1U-E 2 Channel Node, POE-LN2-2U-E 4 Channel Node, POE-LN2-4U-E

DRIVE CURRENT SPECIFICS

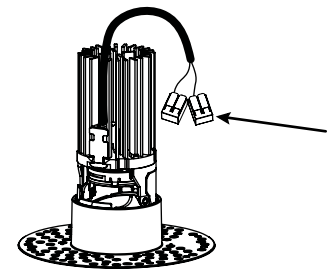
	8006D	8012D	8016D	9007D	9010D	9014D	9005D	9009D	9010DTH	9010DTR
Minimum Vf	31	31	31	31	31	31	31	31	31	31
Maximum Vf	37	37	37	37	37	37	37	37	37	37
Current mA	150	280	350	150	280	350	150	280	225	225
Wattage W	5.1	9.3	12.7	5.1	9.3	12.7	4.9	9.3	8.3	8.3

WIRING DIAGRAM AND HOUSING/REMODEL ENTRY/ EXIT POINTS

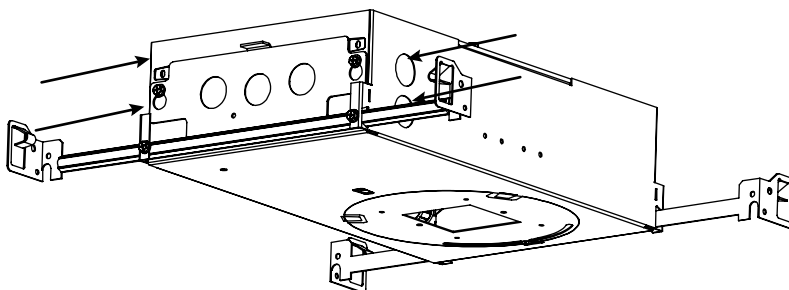
UNIVERSAL



REMODEL

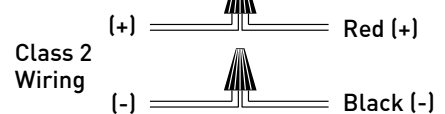


SLIM HIGH OUTPUT



LV CONSTANT
CURRENT SOURCE:
POE NODE OR
REMOTE DRIVER

HOUSING OR
REMODEL
FIXTURE



ATOMOS1 PINHOLE LVS UNIVERSAL AND SLIM

STATIC WHITE PERFORMANCE - 3000K

UNIVERSAL HOUSING (AD, FD, WW)

LUMEN PACKAGE	WATTS	15° OPTIC SOFT FOCUS FILM		25° OPTIC SOFT FOCUS FILM		35° OPTIC SOFT FOCUS FILM		50° OPTIC SOFT FOCUS FILM	
		DLVD.	LPW	DLVD.	LPW	DLVD.	LPW	DLVD.	LPW
		8008D	6	276	46	274	46	243	46
8012D	12	473	39	469	39	415	35	440	37
9007D	6	234	39	232	39	206	34	218	36
9010D	12	400	33	397	33	352	29	373	31
9005D (27K-18K)	6	201	33	199	33	177	29	187	31
9009D (30K-18K)	12	343	29	341	28	302	25	320	27
9010DTR (40K-18K)	10	-	-	-	-	281	28	373	37
9010DTH (50K-27K)	10	-	-	-	-	248	25	328	33

LUMEN PACKAGE	WATTS	24° Zoom - Position 1 SOFT FOCUS FILM		30° Zoom - Position 2 SOFT FOCUS FILM		36° Zoom - Position 3 SOFT FOCUS FILM		42° Zoom - Position 4 SOFT FOCUS FILM		48° Zoom - Position 5 SOFT FOCUS FILM	
		DLVD.	LPW	DLVD.	LPW	DLVD.	LPW	DLVD.	LPW	DLVD.	LPW
		8008D	6	284	47	287	48	271	45	259	43
8012D	12	487	41	491	41	462	39	443	37	437	36
9007D	6	241	40	243	41	229	38	219	37	217	36
9010D	12	412	34	416	35	392	33	375	31	371	31

FINISH LIGHT LOSS FACTOR

BAFFLE FINISH	LLF
WHITE	1.00
CASHMERE GOLD	0.96
SATIN SILVER	0.95
BURNT BRONZE	0.93
BLACK	0.92

OUTPUT MULTIPLIER

CCT	CCT SCALE
2400K	0.76
2700K	0.95
3000K	1.00
3500K	1.05
4000K	1.06

LIGHT LOSS FACTOR

NO MEDIA	1.11
SOFT FOCUS	1
CLEAR	1
HONEYCOMB	0.77
HONEYCOMB W/ SOFT FOCUS	0.77
HONEYCOMB W/ CLEAR	0.76

TUNABLE WHITE MULTIPLIER

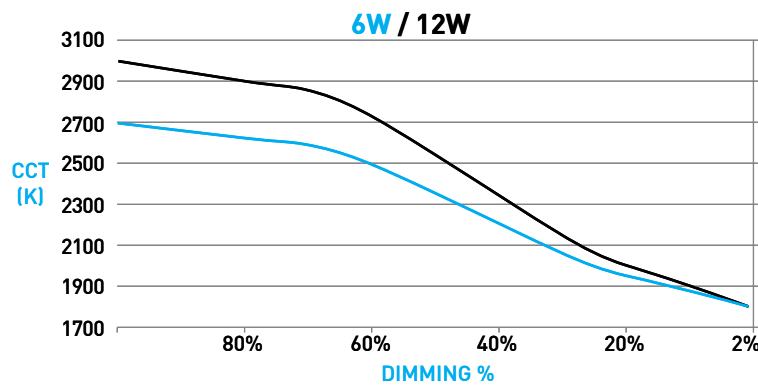
CCT	5000K-2700K	4000K-1800K
5000K	1.16	-
4000K	1.08	1.14
3500K	1.04	1.07
3000K	1.00	1.00
2700K	0.96	0.92
2400K	-	0.84
1800K	-	0.69

WARM DIM PERFORMANCE - SOFT FOCUS FILM - 15° OPTIC

UNIVERSAL ADJUSTABLE & FIXED

9009D 3000K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	3000	2950	2900	2800	2400	2000	1800
Light Output (Lm)	343	274	240	172	69	34	7
Power (W)	12	9.6	8.4	6	2.4	1.2	0.2
Efficacy (LPW)	28	28	28	28	28	28	28

9005D 2700K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	2700	2160	1890	1350	540	270	54
Light Output (Lm)	201	161	141	101	40	20	4
Power (W)	6	4.8	4.2	3	1.2	0.6	0.1
Efficacy (LPW)	33	33	33	33	33	33	33



ATOMOS1 PINHOLE LVS UNIVERSAL AND SLIM

STATIC WHITE PERFORMANCE - 3000K

SLIM HIGH OUTPUT HOUSING (SF, SW ONLY)

LUMEN PACKAGE	WATTAGE	15° OPTIC SOFT FOCUS FILM		25° OPTIC SOFT FOCUS FILM		35° OPTIC SOFT FOCUS FILM		50° OPTIC SOFT FOCUS FILM	
		DLVD.	LPW	DLVD.	LPW	DLVD.	LPW	DLVD.	LPW
		8008D	6	369	62	338	56	291	48
8012D	12	632	53	578	48	497	41	641	53
8016D	15	764	51	699	47	601	40	775	52
9007D	6	313	52	287	48	246	41	317	53
9010D	12	535	45	490	41	421	35	543	45
9014D	15	649	43	594	40	511	34	659	44
9005D (27K-18K)	6	281	47	265	44	231	38	297	50
9009D (30K-18K)	12	480	40	454	38	395	33	508	42
9010DTR (40K-18K)	10	-	-	-	-	337	34	543	54
9010DTH (50K-27K)	10	-	-	-	-	297	30	478	48

FINISH LIGHT LOSS FACTOR

BAFFLE FINISH	LLF
WHITE	1.00
CASHMERE GOLD	0.96
SATIN SILVER	0.95
BURNT BRONZE	0.93
BLACK	0.92

OUTPUT MULTIPLIER

CCT	CCT SCALE
2400K	0.76
2700K	0.95
3000K	1.00
3500K	1.05
4000K	1.06

LIGHT LOSS FACTOR

NO MEDIA	1.11
SOFT FOCUS	1
CLEAR	1
HONEYCOMB	0.77
HONEYCOMB W/ SOFT FOCUS	0.77
HONEYCOMB W/ CLEAR	0.76

TUNABLE WHITE MULTIPLIER

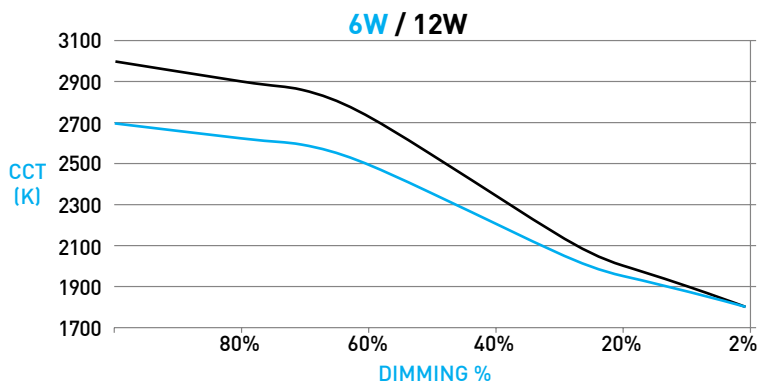
CCT	5000K-2700K	4000K-1800K
5000K	1.16	-
4000K	1.08	1.14
3500K	1.04	1.07
3000K	1.00	1.00
2700K	0.96	0.92
2400K	-	0.84
1800K	-	0.69

WARM DIM PERFORMANCE - SOFT FOCUS FILM - 50° OPTIC

SLIM FIXED

9009D 3000K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	3000	2900	2850	2550	2000	1900	1800
Light Output (Lm)	508	406	356	254	102	51	10
Power (W)	12	9.6	8.4	6	2.4	1.2	0.2
Efficacy (LPW)	42	42	42	42	42	42	42

9005D 2700K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	2700	2160	1890	1350	540	270	54
Light Output (Lm)	297	238	208	149	59	30	6
Power (W)	6	4.8	4.2	3	1.2	0.6	0.1
Efficacy (LPW)	73	73	73	73	73	73	73



ATOMOS1 PINHOLE LVS UNIVERSAL AND SLIM

DOWNLIGHT

A1 UNIVERSAL TRIMS
Adjustable (AD) - Hot-aim tilt up to 30° and 362° rotation. Offset pivot point optimizes center beam. Max ceiling thickness for 30° tilt is 1-3/8".

Fixed (FD) - Trim based fixed downlight.

A2 UNIVERSAL HOUSING

- For IC or Non-IC ceilings.
- Chicago Plenum and Airtight listed.
- Requires 2-5/16" cutout for flange overlay and trimless drywall applications.
- Accommodates max 469 delivered lumens.
- No setback from polycell spray foam insulation having max R-Value of 60 on all sides and top.

B SLIM HIGH OUTPUT HOUSING
Integral LED module design enables field service / replacement through housing aperture.

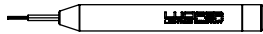
- For IC or Non-IC ceilings.
- Chicago Plenum and Airtight listed.
- Requires 2-5/16" cutout for flange overlay and trimless drywall applications.
- Accommodates max 632 delivered lumens.
- No setback from polycell spray foam insulation having max R-Value of 60 on all sides and top.

HOUSING NOTES

- Do not install in environments where ambient temperatures exceed 40°C (104°F).
- All splice connections may be serviced from room side.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.
- Hanger bars can be fitted to long or short side of housing; extend from 14.0" to 24.0", but may be field cut to accommodate narrow stud spacing. Can be extended up to 46" maximum with FRX-HBE-46 kit.
- Hanger bars and brackets add 3.16" to the overall dimension but are exclusive of the setback requirements.
- Housings feature a round or square aperture accommodating ceiling thicknesses between 0.50" and 2.00".

ADJUSTMENT

- **ADJUSTMENT TOOL**
Minimum 1 provided for every 10 adjustable fixtures. Utilizes a 0.050" Allen key driver.

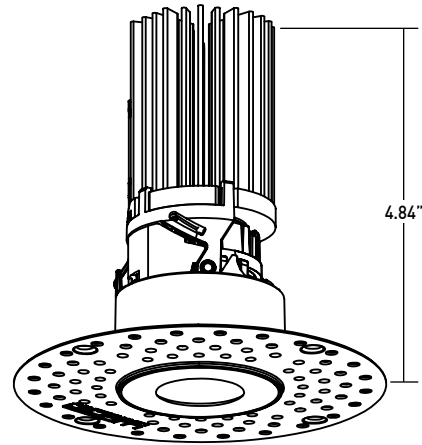


TILT CHART

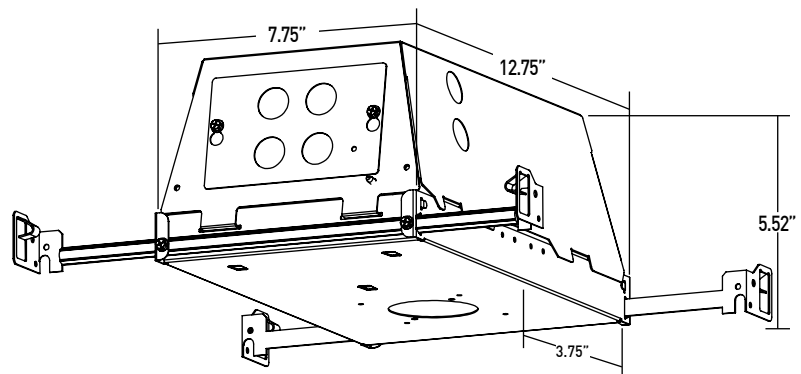
CEILING THICKNESS	≤1-1/2"	≤1-5/8"	≤1-3/4"	≤1-7/8"	≤2"
MAX TILT	30°	24°	18°	15°	13°

DIMENSIONS / DRAWINGS

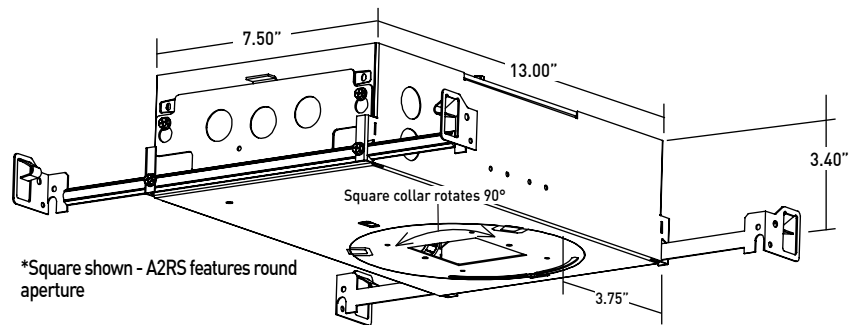
A1 UNIVERSAL ADJUSTABLE (AD) & FIXED (FD) TRIM



A2 UNIVERSAL ADJUSTABLE (AD) AND FIXED (FD) HOUSING



B SLIM FIXED (SF) FIXTURE

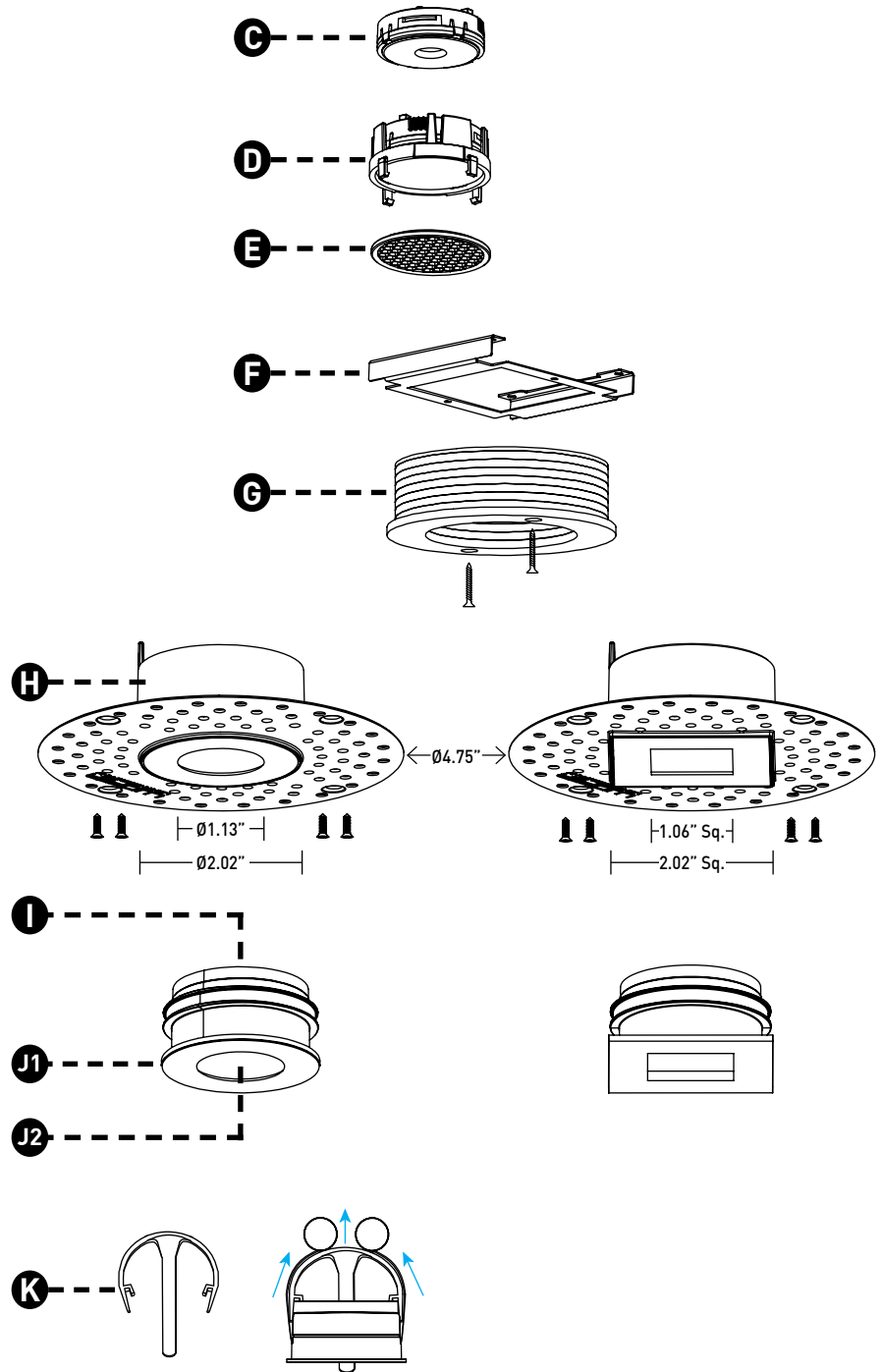


ATOMOS1 PINHOLE LVS UNIVERSAL AND SLIM

HOUSING

- C STANDARD OPTICS**
Proprietary optic integrates Reflection, Refraction and TIR offering 15°, 25°, 35°, and 50° beams.
- D ADJUSTABLE ZOOM OPTIC**
Proprietary optic integrates Refraction and TIR. Allows precision tuning to beam spreads of 24°, 30°, 36°, 42°, and 48°. Not Available with Slim Fixed (SF)
- E HONEYCOMB LOUVER**
Clips onto optic.
- F ZERO-SIGHTLINE MILLWORK HOUSING ADAPTOR**
Ships with housing when trimless millwork is specified and provides attachment point for spacers. Requires 3.50" x 3.50" cutout.
- G ZERO-SIGHTLINE MILLWORK SPACERS**
Ship with housing when trimless millwork is specified; includes (1) 1/16" spacer and (8) 1/8" spacers.
- H ZERO-SIGHTLINE DRYWALL**
Installs totally flush with the ceiling with no visible trim. Appliqué includes screws for mounting and has 0.06" plaster stop. Not recommended for stucco applications.
- I EFFECTS DEVICES**
Soft focus film standard and sealed to baffle. Fixture is limited to 1 film and the honeycomb louver.
- J BAFFLE**
Die-cast removable baffle features 35° glare cutoff. Minimizes aperture glare and conceals view into housing or ceiling; includes silicone gasket.
Exterior finish **J1** is specified in "Trim Finish" section.
Interior finish **J2** is specified in "Baffle Finish" section and is only available in black.
- K INSTALLATION TOOL**
Minimum 1 provided for every 10 flange overlay and trimless millwork fixtures.

DIMENSIONS / DRAWINGS



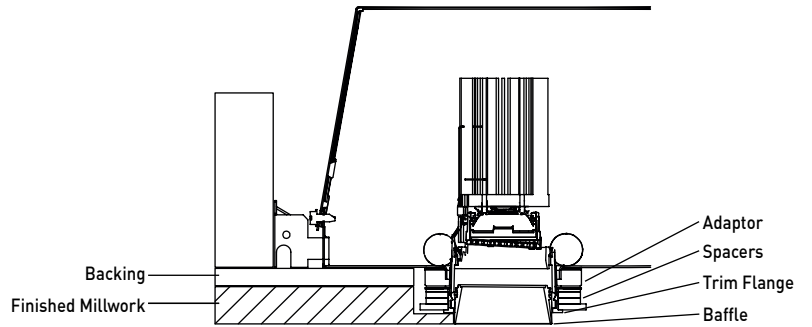
ATOMOS1 PINHOLE UNIVERSAL AND SLIM

HOUSING

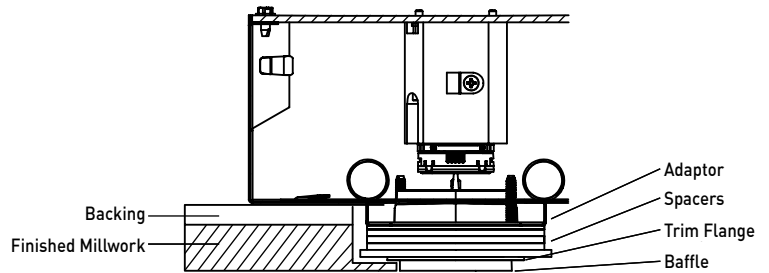
- L TRIMLESS MILLWORK**
Installs totally flush with the ceiling with no visible trim. Utilizes the A2RS or A2SS standard configuration installed behind the ceiling.
- M ADJUSTABLE HANGER BAR HEIGHT ACCESSORY**
Specified as DHA-TG-KIT and recommended for installations in T-Grid. Hanger bars are installed to adjustable bracket. Allows housing to be raised and lowered; ceiling thickness remains 0.50" to 1.00" (SLIM) or 2.00" (Universal) max.

DIMENSIONS / DRAWINGS

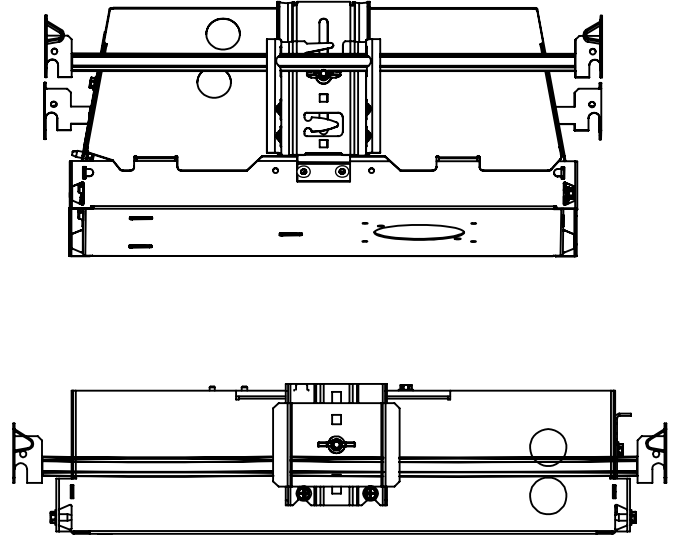
L UNIVERSAL ZERO-SIGHTLINE MILLWORK DETAIL (EXAMPLE)



SLIM ZERO-SIGHTLINE MILLWORK DETAIL (EXAMPLE)



M

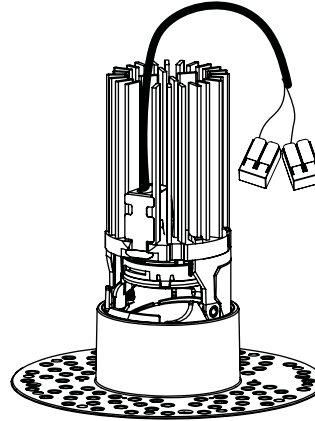


ATOMOS1 PINHOLE UNIVERSAL AND SLIM

REMOTE REMODEL

- **N** REMOTE REMODEL
- Included with "M" Install Type.
- UL2043 listed for air-handling plenum.
- Fixture mounts without conventional housing.
- Minimum 9.25" (235mm) clearance from top of the ceiling plane to allow for driver installation and servicing if necessary.
- Minimum setback from combustible and non-combustible materials of 6.63" (168mm) radius from fixture centerline.
- Minimum additional 3.00" (76mm) setback from insulation material with max R-Value 30 from any surface of downlight fixture assembly.
- Minimum additional 6.00" (152mm) setback from polycell spray foam insulation with max R-Value 60 from any surface of downlight fixture assembly.

N



REMODEL NOTES

- Do not install in environments where ambient temperatures exceed 40°C (104°F).
- All splice connections may be serviced from room side.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.

ATOMOS1 PINHOLE LVS UNIVERSAL AND SLIM

TECHNICAL

CONSTRUCTION

Downlight: Painted finishes are granulated powder coat.

Housing: Aluminum and 22 Gauge galvanized steel.

Appliqué: High strength fiber reinforced polymer.

STATIC WHITE LED

2-step MacAdam ellipse LED module available in 80+ and 90+ CRI configurations in color temperatures of 2700K, 3000K, 3500K and 4000K.

3-step MacAdam ellipse LED module available in 80+ and 90+ CRI configuration in color temperature of 2400K. Average rated lamp life: 50,000 hours. LED and driver assemblies are field-replaceable.

WARM DIM LED

3-step MacAdam ellipse warm dim LED module available in 90+ CRI configuration. 3000K or 2700K at full brightness, warming to 1800K at full dim. Average rated lamp life of 50,000 hours. LED and driver assemblies are field-replaceable.

TUNABLE WHITE LED

3-step MacAdam ellipse tunable white LED module available in 90+ CRI configuration. Features tuning range of 2700K to 5000K and 1800K to 4000K. Average rated lamp life of 50,000 hours. Driver assemblies are field-replaceable.

LISTING

UL listed to UL1598 standard for Dry / Damp and Wet locations. Chicago Plenum and Airtight listed.

BUY AMERICAN ACT

All IC and Non-IC Atomos configurations are Buy American Act compliant.

DECLARE

LBC Red List Approved.

LIMITED WARRANTY

Manufacturer's 1-year warranty guarantees product(s) listed to be free from defects in material and workmanship under normal use and service. 5-year warranty on LED to operate with 70% of the original flux and remain within a range of 3 duv. Warranty period begins from the date of shipment. Consult website for full warranty terms and conditions.



Declare. 