ATOMOS[™]1 PINHOLE LVS

PROJECT NAME:

TYPE:

UNIVERSAL AND SLIM

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





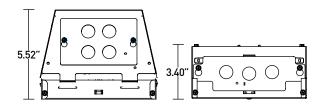
ORDERING INFORMATION - TRIM / HOUSING

	TRIM	TRIM TYPE	RATING	TRIM FINISH	BAFFLE FINISH	FIXTURE TYPE	INSTALLTYPE	LUMEN PACKAGE	CCT	OPTIC	MEDIA	DRIVER
					вк							LVS
A2RP A2SP	Pinhole	T Zero-Sightline Drywall W Zero-Sightline Millwork * *INot available for Square AZSP, or remodel installations] CONSULT FACTORY FOR ROUND FLANGE OVERLAY	1 Dry / Damp (IP20) 2 Wet (IP44)	WH White AB Architectural Bronze AG Satin Silver AU Cashmere Gold BB Burnt Bronze BK Black PR Primer CF Custom Finish* * (Consult Factory)	BK Black	(SEPARATE TF 1/2" - 2" MAX (SEE PAGE 2 FOR AD Adjustable, 30° Max Tilt FD Fixed 3.4" SLIM HIGH (INTEGRATE 1/2" - 1" MAX (Remote* (Chicago Plenum & Airtight compliant housing. Prevents light leak in transparent ceilings) REMOTE REMODEL M. Remote Remodel H. OUTPUT HOUSING: DLED HOUSING; DEILING THICKNESS R. T-GRID ACCESSORY	STATIC WHITE 8008D 80+ CRI AD/FD Im delivered - 276 SF Im delivered - 369 8009H 80+ CRI* *IFor use with 10° Optic onlyI AD/FD Im delivered - 197 SF Im delivered - 214 8012D 80+ CRI AD/FD Im delivered - 473 SF Im delivered - 632 8016D 80+ CRI Max Flux SF Im delivered - 764* *ISF Fixture Type OnlyI 9007D 90+ CRI AD/FD Im delivered - 234 SF Im delivered - 313 9009H 90+ CRI* *IFor use with 10° Optic onlyI AD/FD Im delivered - 167 SF Im delivered - 181 9010D 90+ CRI AD/FD Im delivered - 400 SF Im delivered - 400 SF Im delivered - 535	24 2400K* *(90+CRI Only) 27 2700K 30 3000K 35 3500K 40 4000K	10 10°* *(For use with 09H lumen package only) 15 15° 25 25° 35 35° 50 50°	STANDARD 4 Soft Focus Film* * (Required for 10°optic) ALTERNATE 0 No Media* * (Not available for Wet Location or Warm Dim) 2 Honeycomb Louver * * (Not available for Wet Location or Warm Dim) 3 Clear Film* * (Not available for Warm Dim) S Honeycomb Louver w/ Soft Focus Film C Honeycomb Louver w/ Clear Film* * (Not available for Warm Dim) C Honeycomb Louver w/ Clear Film* * (Not available for Warm Dim)	LVS LowVoltage System
						SF Fixed	REMOTE V IC, Remote W NIC, Remote D IC, Airtight, Remote* *(Chicago Plenum & Airtight compliant housing)	9014D 90+ CRI Max Flux SF Im delivered - 649* *(SF Fixture Type Only) WARM DIM 9005D 90+ CRI, AD/FD Im delivered - 201 SF Im delivered - 281	WL 2700K - 1800K	15 15° 25 25° 35 35°	-	
	Pov	(AU)	(AB) ctural Bronze vder Coat (BB) rnt Bronze	Powder Coa (BK) Black	t			909D 90+ CRI, AD/FD Im delivered - 343 SF Im delivered - 480 TUNABLE WHITE 9010D 90+ CRI, Warm Profile AD/FD Im delivered - 327 SF Im delivered - 437 Cool Profile AD/FD Im delivered - 288 SF Im delivered - 384	WD 3000K- 1800K TR 4000K- 1800K TH 5000K- 2700K	15 15° 25 25° 35 35° 50 50°		
	Pow F NUMB Univers 9010D3 Univers 280A-L' Slim fix	wder Coat Po BER NOTES Sal trims ship 10-AZS-LVS4 Sal housings	wder Coat as e.g: ship as e.g: se.g: A2	Powder Coa A2RPTAD e.g: IFR-A2	1AGBK- 2I-			*All Im delivered reflect 3000K, 50° optic, and Soft Focus Media.				





HOUSING COMPARISION



HOUSING COMPARISION	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-AP Clear Film*
*(Not available for Warm Dim)
□ SFL-AP Soft Focus Film
□ HCL-AP Honeycomb Louver

☐ HCL-AP 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 □ RO-A-25-1 25° optic □ RO-A-35-1 35° optic

□ RO-A-50-1 50° optic
□ RO-A-AZ-1 Adjustable zoom optic*

 $^*\text{[}24^\circ\text{,}\,30^\circ\text{,}\,36^\circ\text{,}\,42^\circ\text{ and}\,48^\circ\text{ beam spreads.}$ 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

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
- 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

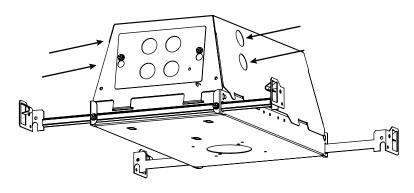
Manufacturer	Model Number
1900° trading from State of the	NP50-60-C-F-5
molex	180996-5107 180996-5101
PLATFORMATICS	1 Channel Node, POE-LN2-1U-E 2 Channel Node, POE-LN2-2U-E 4 Channel Node, POE-LN2-4U-E

DRIVE CURRENT SPECIFICS

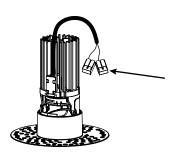
	8006D	8012D	8016D	9007D	9010D	9014D	9005D	9009D	9010DTH	9010DTR
Minimum Vf	31	31	31	31	31	31	31	31	31	31
Maximum Vf	37	37	37	37	37	37	37	37	37	37
Current mA	150	280	350	150	280	350	150	280	225	225
Wattage W	5.1	9.3	12.7	5.1	9.3	12.7	4.9	9.3	8.3	8.3

WIRING DIAGRAM AND HOUSING/REMODEL ENTRY/ EXIT POINTS

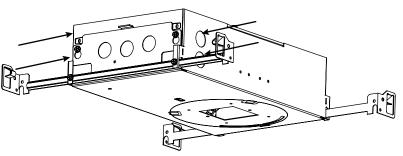


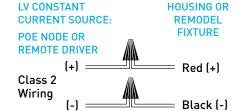


REMODEL



SLIM HIGH OUTPUT





reserves the right to change or withdraw specifications without prior notice.

STATIC WHITE PERFORMANCE - 3000K

UNIVERSAL HOUSING (AD, FD, WW)

LUMEN	WATTS	15° C SOFT FO	PTIC CUS FILM		25° OPTIC 35° OPTIC SOFT FOCUS FILM SOFT FOCUS FILM			50° OPTIC SOFT FOCUS FILM	
PACKAGE	WAITS	DLVD.	LPW	DLVD.	LPW	DLVD.	LPW	DLVD.	LPW
8008D	6	276	46	274	46	243	46	257	43
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	327	33	303	30	242	24	298	30
9010DTH (50K-27K)	10	288	29	267	27	213	21	262	26

LUMEN	WATTS	10° OPTIC SOFT FOCUS FILM			
PACKAGE		DLVD.	LPW		
80S09H	9	197	22		
90S09H	9	167	19		

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

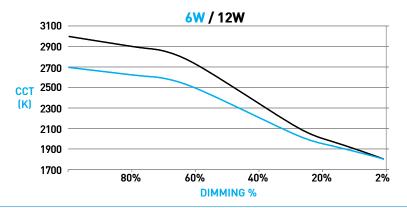
CCT	5000K- 2700K	4000K- 1800K
5000K	1.16	ı
4000K	1.08	1.14
3500K	1.04	1.07
3000K	1.00	1.00
2700K	0.96	0.92
2400K	-	0.84
1800K	ı	0.69

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





STATIC WHITE PERFORMANCE - 3000K

SLIM HIGH OUTPUT HOUSING (SF, SW ONLY)

LUMEN	WATTAGE	15° OPTIC SOFT FOCUS FILM		25° OPTIC SOFT FOCUS FILM		35° OPTIC SOFT FOCUS FILM		50° OPTIC SOFT FOCUS FILM	
PACKAGE	WATTAGE	DLVD.	LPW	DLVD.	LPW	DLVD.	LPW	DLVD.	LPW
8008D	6	369	62	338	56	291	48	375	62
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	437	44	374	37	290	29	434	43
9010DTH (50K-27K)	10	384	38	329	33	255	26	382	38

LUMEN	WATTS	10° OPTIC SOFT FOCUS FILM			
PACKAGE		DLVD.	LPW		
80S09H	9	214	24		
90S09H	9	181	20		

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

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

LIGHT LOSS FACTOR

NO	NO MEDIA					
SOFT	SOFT FOCUS					
CL	.EAR	1				
HONE	ҮСОМВ	0.77				
	COMB W/ FOCUS	0.77				
	COMB W/ .EAR	0.76				

TUNABLE WHITE MULTIPLIER

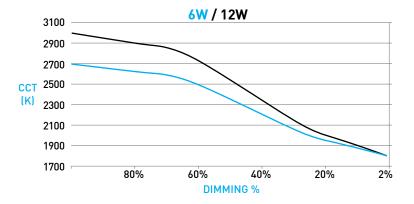
ССТ	5000K- 2700K	4000K- 1800K	
5000K	1.16	-	
4000K	1.08	1.14	
3500K	1.04	1.07	
3000K	1.00	1.00	
2700K	0.96	0.92	
2400K	-	0.84	
1800K	-	0.69	

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





DOWNLIGHT

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.

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.
- "J" Light Tight housing ensures there is no light leak through fabric or transparent ceilings.

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
- 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.



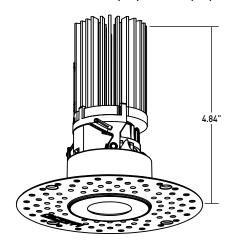
TILT CHART

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

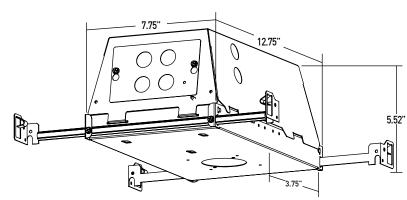
DIMENSIONS / DRAWINGS

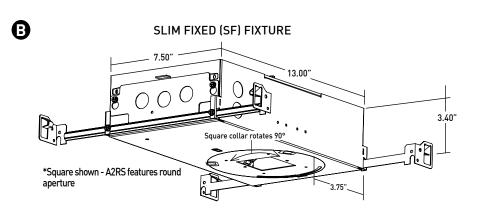


UNIVERSAL ADJUSTABLE (AD) & FIXED (FD) TRIM



UNIVERSAL ADJUSTABLE (AD) AND FIXED (FD) HOUSING





reserves the right to change or withdraw specifications without prior notice.

HOUSING

STANDARD OPTICS

Proprietary optic integrates Reflection, Refraction and TIR offering 15°, 25°, 35°, and 50° beams.

10° FIELD REDUCER

Included with 10° optic.

HONEYCOMB LOUVER

Clips onto optic.

E 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.

ZERO-SIGHTLINE MILLWORK SPACERS

Ship with housing when trimless millwork is specified; includes (1) 1/16" spacer and (8) 1/8" spacers.

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.

MEDIA

Soft focus film standard and sealed to baffle. Fixture is limited to 1 film and the honeycomb louver.

BAFFLE

Die-cast removable baffle features 35° glare cutoff. Minimizes aperture glare and conceals view into housing or ceiling; includes silicone gasket.

Exterior finish (1) is specified in "Trim Finish" section.

Interior finish p is specified in "Baffle Finish" section and is only available in black.

NSTALLATION TOOL

Minimum 1 provided for every 10 trimless millwork fixtures.

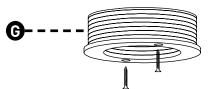
DIMENSIONS / DRAWINGS

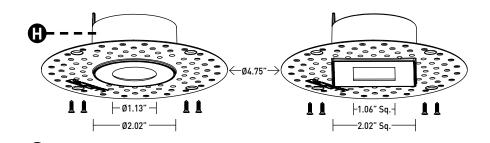


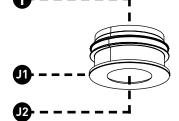




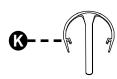
















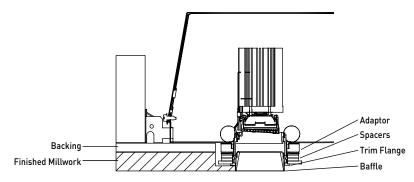
HOUSING

- TRIMLESS MILLWORK Installs totally flush with the ceiling with no visible trim. Útilizes the A2RS or A2SS standard configuration installed behind the ceiling.
- 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.

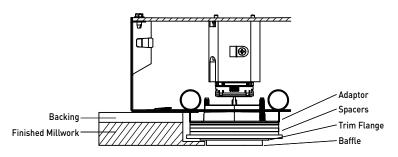
DIMENSIONS / DRAWINGS



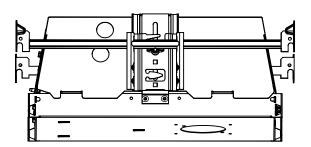
UNIVERSAL ZERO-SIGHTLINE MILLWORK DETAIL (EXAMPLE)

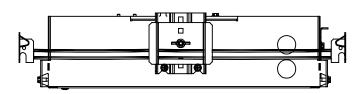


SLIM ZERO-SIGHTLINE MILLWORK DETAIL (EXAMPLE)









reserves the right to change or withdraw specifications without prior notice.

pg. 8

REMOTE REMODEL

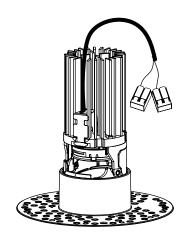
N REMOTE REMODEL

- 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 noncombustible 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.

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.







TECHNICAL

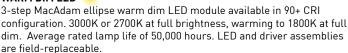
CONSTRUCTION

<u>Downlight</u>: Painted finishes are granulated powder coat. <u>Housing</u>: Aluminum and 22 Gauge galvanized steel. <u>Appliqué</u>: 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 I FD



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 ato 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.



reserves the right to change or withdraw specifications without prior notice.