# **2 SERIES LVS**

ORDERING INFORMATION

# **SHALLOW REGRESS**

High-output, low profile, and infinite adjustment -- these small aperture downlights make elegant design statements in discerning residential, retail, and hospitality environments.









Quick Ship Product. All rough in components ship within 10 days up to quantities of 100.

TRIM RATING	FLANGE FINISH	CRI/WATTAGE PACKAGE	CCT	OPTIC (UGR)	INSTALL TYPE	CEILING THICKNESS	POWER SUPPLY	MEDIA	FLANGE CONFIGURATION
							LVS		
2RS Round Expanded Shallow 2PS Round Pinhole Shallow 2SS Square Expanded Shallow 2R	WH White  AG Satin Silver  IG Industrial Gray  AU Cashmere Gold  AB Arch Bronze  BB Burnt Bronze  BK Black  SS Stainless Steel* *(Increased lead time)  MB Matte Bronze* *(Increased lead time)  PB Polished Bronze* *(Increased lead time)  PR Primer  CF Custom* *(Consult Factory)  FINISH IMAGES ON PAGE 2	LOW FLUX STATIC WHITE 3.73" TALL HOUSING 80S06A 80+ CRI, 6 Watts [Delivered - 2RS 709, 2PS 687, 2SS 638] 80S11A 80+ CRI, 11 Watts [Delivered - 2RS 1152, 2PS 1111, 2SS 1163] 80515A 80+ CRI, 15 Watts [Delivered - 2RS 1554, 2PS 1504, 2SS 1569] 90S06A 90+ CRI, 6 Watts [Delivered - 2RS 611, 2PS 592, 2SS 550] 90S11A 90+ CRI, 11 Watts [Delivered - 2RS 1340, 2PS 1297, 2SS 1353] 90S15A 90+ CRI, 15 Watts [Delivered - 2RS 1340, 2PS 1297, 2SS 1353] 97S06A 97+ CRI, 6 Watts [Delivered - 2RS 538, 2PS 521, 2SS 484] 97S11A 97+ CRI, 11 Watts [Delivered - 2RS 538, 2PS 521, 2SS 484] 97S15A 97+ CRI, 11 Watts [Delivered - 2RS 874, 2PS 843, 2SS 883] 97S15A 97+ CRI, 11 Watts [Delivered - 2RS 1179, 2PS 1411, 2SS 1191] HIGH FLUX STATIC WHITE 6.5" TALL HOUSING 80S21A 90+ CRI, 21 Watts [Delivered - 2RS 1633, 2PS 1743, 2SS 1851] 97S21A 97+ CRI, 21 Watts [Delivered - 2RS 1613, 2PS 1534, 2SS 1629] WARM DIM 6.5" TALL HOUSING 90W11A 90+ CRI, 21 Watts [Delivered - 2RS 686, 2PS 690, 2SS 617] Halogen Profile: 3000K - 1800K [Delivered - 2RS 688, 2PS 693, 2SS 619] 90W15A 90+ CRI, 15 Watts Incandescent Profile: 2700K - 1800K [Delivered - 2RS 688, 2PS 693, 2SS 984] Halogen Profile: 3000K - 1800K [Delivered - 2RS 969, 2PS 974, 2SS 984] Halogen Profile: 2700K - 1800K [Delivered - 2RS 963, 2PS 970, 2SS 980] **SEE PAGE 4 FOR DETAILED WARM DIM PROFILE COMPARISON.	## 2700K - 1800K   WL 2700K - 1800K   WD 3000K   WD 3000K - 1800K   WD 3000K   WD 300K   WD 3	*(15W packages only) 15 15° (<13)	→ Housing → (HR) NR NIC, Remote IR IC, Remote AR IC, Airtight* (ICEA and Airtight compliant housing) Remodel RR Remote-Remodel	*(RR Install Type only)	LVS Low Voltage System	Standard Media  04 Soft Focus Lens NL No Lens*  *IStandard for 10° optic, Not available for wet location or Warm Dim)  Alternate Media  02 Honeycomb Louver*  *INot available for wet location or Warm Dim)  03 Clear Glass Lens*  *INot available for Warm Dim)  05 Frosted Glass Lens  09 Ultra Violet Lens  11 Shatterproof Soft Focus Lens  12 Shatterproof Frosted Lens  26 Frosted Linear Spread Lens*  *INot available for wet location)	F Flange Overlay (No Applique) G Zero Sightline Gypsum (1/16" Applique) *(Not available for wet location) P Zero Sightline Plaster (1/8" Applique)* *(Not available for wet location)
		TUNABLE WHITE 6.5" TALL HOUSING 90T17A 90+ CRI, 17 Watts, Warm Profile: 4000K - 1800K [Delivered - 2RS 1280, 2PS 1162, 2SS 1293] Cool Profile: 5000K - 2700K [Delivered - 2RS 1137, 2PS 1152, 2SS 1148]	TR 4000K - 1800K TH 5000K - 2700K	15 15° (<13) 20 20° (<13) 25 25° (<13) 40 40° (<13) *(Not recommended for 2PS)					

#### **PART NUMBER NOTES**

- Trims ships as e.g., 2RS1-WH-80S15A2-2HR1-LVS04
- Housing ships as e.g., NCL-2RF-1-LED-01-LVS Appliqué ships with housing



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

#### **ACCESSORIES**

#### **SECONDARY MEDIA**

☐ **HCL-2** Honeycomb Louver\* \*(Not available for Warm Dim)

□ CGL-2 Clear Glass Lens\* \*(Not available for Warm Dim)

☐ **SFL-2** Soft Focus Lens

☐ FGL-2 Frosted Glass Lens □ UVL-2 Ultra Violet Lens

☐ FLSL-2 Frosted Linear Spread Lens ☐ **SFL-2-SP** Shatterproof Soft Focus Lens

☐ FGL-2-SP Shatterproof Frosted Lens

**ROUTER TOOL GUIDE** (Dry / Damp locations only) Recommended for Zero-Sightline installations in wood ceilings.

□ DLA-RTG-2S-RD Tool, router quide, round; reusable

□ DLA-RTG-2S-SQ Tool, router guide, square; reusable

#### STATIC WHITE REPLACEMENT OPTICS

☐ **RO-50-15-S** 15° optic

☐ **RO-50-20-S** 20° optic

☐ **RO-50-25-S** 25° optic

□ **RO-50-40-S** 40° optic

□ **RO-50-60-S** 60° optic\*

\*(Not recommended for 2PA)

#### WARM DIM REPLACEMENT OPTICS

□ **R0-50-20-W** 20° optic

□ **RO-50-25-W** 25° optic

□ **RO-50-40-W** 40° optic

□ **RO-50-60-W** 60° optic\*

\*(Not recommended for 2PA)

#### **TUNABLE WHITE REPLACEMENT OPTICS**

□ **RO-50-15-T** 15° optic □ **RO-50-20-T** 20° optic

□ **RO-50-25-T** 25° optic

□ **RO-50-40-T** 40° optic

□ **RO-50-60-T** 60° optic\*

\*(Not recommended for 2PA)

#### HANGER BAR EXTENDER KIT

Extends hanger bars from 24.0" to 46.0" maximum.

□ 2S-HBE-46 Extender, Hanger Bar

#### FURRING CHANNEL ACCESSORY KIT

Recommended for installations in furring channel. Available for ceiling thicknesses from 0.125" - 1.25".

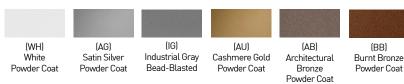
☐ DHA-FC-KIT

#### **ADJUSTMENT TOOL**

One included with every four fixtures.

☐ T00L-HEX-050

#### FINISHES BY LUCIFER LIGHTING™













Stainless Steel Black Chrome Matte Bronze Powder Coat Orbital Brushed Plated Finish Plated Finish 304 Stainless Steel

(PB) Polished Bronze Plated Finish

#### **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
<b>I © © </b> Enabling Smart Buildings ™	NP50-60-C-F-5
molex	180996-1001 180996-1002 180996-2001 180996-2002
PLATFORMATICS	1 Channel Node, POE-LN2-1U-E 2 Channel Node, POE-LN2-2U-E 4 Channel Node, POE-LN2-4U-E

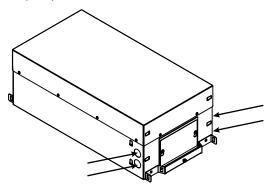
#### **DRIVE CURRENT SPECIFICS**

		80	)S			90S			97S			90W			90T			
	06A	11A	15A	21A	06A	11A	15A	21A	06A	11A	15A	21A	11AD	11AL	15AD	15AL	17AH	17AR
Minimum Vf	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
Maximum Vf	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	37.6	37.6	37.6	37.6	37.6	37.6
Current mA	150	250	350	500	150	250	350	500	150	250	350	500	250	250	350	350	400	400
Wattage W	6	11	15	21	6	11	15	21	6	11	15	21	8	8	15	15	14	14

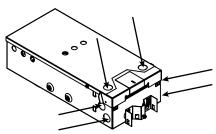
	10 E	EGREE OF	PTIC		
	80S15C	90S15C	97S15C		
Minimum Vf	30.5	30.5	30.5		
Maximum Vf	36.2	36.2	36.2		
Current mA	350	350	350		
Wattage W	15 15 1				

### WIRING DIAGRAM AND HOUSING ENTRY/ EXIT POINTS

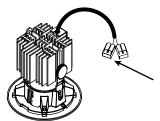
#### ICH/NCH/WARM DIM HOUSING



### **ICL/NCL HOUSING**





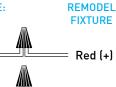


LV CONSTANT **CURRENT SOURCE:** POE NODE OR REMOTE DRIVER

(+)

**(-)** =

Class 2 Wiring



**HOUSING OR** 

Black (-)



#### PERFORMANCE - 3000K

001/		SHALLOW REGRESS - 20° OPTIC - SOFT FOCUS LENS									
CRI/ WATTAGE	WATTAGE	2R	!S	2F	PS .	29	SS				
PACKAGE		DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW				
80S06A	6	709	118	687	114	638	106				
80S11A	11	1152	105	1111	101	1163	106				
80S15A	15	1554	104	1504	100	1569	105				
80S21A	21	2126	101	2022	96	2147	102				
90S06A	6	611	101	592	98	550	91				
90S11A	11	993	90	958	87	1003	91				
90S15A	15	1340	89	1297	86	1353	90				
90S21A	21	1833	87	1743	83	1851	88				
97S06A	6	538	89	521	86	484	80				
97S11A	11	874	79	843	77	883	80				
97S15A	15	1179	79	1141	76	1191	79				
97S21A	21	1613	77	1534	73	1629	77				
90W11AWL (2700K-1800K)	11	686	62	690	62	693	56				
90W11AWD (3000K-1800K)	11	688	62	693	63	695	56				
90W15AWL (2700K-1800K)	15	959	64	965	64	969	65				
90W15AWD (3000K-1800K)	15	963	64	971	65	973	65				
90T17ATR (4000K-1800K)	17	1280	60	1162	68	1293	68				
90T17ATH (5000K-2700K)	17	1137	58	1152	69	1148	60				

	CRI/ WATTAGE PACKAGE	WATTAGE	SHALLOW REGRESS - 10° OPTIC - NO LENS									
			2F	RS	2F	PS	255					
			DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW				
	80S15C	15	1131	75	1095	73	1135	76				
	90S15C	15	975	65	944	63	978	65				
	97S15C	15	841	56	815	54	844	56				

LIGHT LOSS FACTOR

1.04

1.01

1.00

0.89

0.80

0.79

0.67

#### **OUTPUT MULTIPLIER**

CCT	CCT SCALE
2400K	0.76
2700K	0.97
3000K	1.000
3500K	1.03
4000K	1.08

#### MEDIA LIGHT LOSS FACTOR

MEDIA

NO LENS

CGL

SFL

FGL

FSFL

FLSL

HCL

TUNABLE	WHITE MU	LTIPLIER
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

#### UNIFIED GLARE RATIING

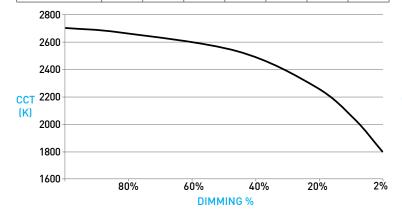
10° OPTIC	20° OPTIC	25° OPTIC	40° OPTIC	60° OPTIC
NO LENS	SOFT FOCUS LENS	SOFT FOCUS LENS	SOFT FOCUS LENS	SOFT FOCUS LENS
<19	<16	<16	<19	

#### WARM DIM PERFORMANCE - 25° OPTIC - SOFT FOCUS LENS

#### INCANDESCENT PROFILE

90W11AL 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	2650	2625	2550	2200	1900	1800
Light Output (Lm)	686	549	480	343	137	69	14
Power (W)	11	9	8	6	2.2	1.1	.2
Efficacy (LPW)	62	62	62	62	62	62	62

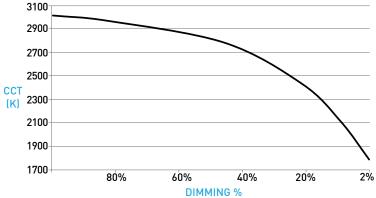
90W15AL 2700K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	2700	2650	2625	2550	2200	1900	1800
Light Output (Lm)	970	776	679	485	194	97	19
Power (W)	15	12	11	8	3	1.5	0.3
Efficacy (LPW)	64	64	64	64	64	64	64



#### HALOGEN PROFILE

90W11AD 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	2920	2775	2375	2000	1800
Light Output (Lm)	688	550	482	344	138	69	14
Power (W)	11	9	8	6	2.2	1.1	.2
Efficacy (LPW)	62	62	62	62	62	62	62

90W15AD 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	2920	2775	2375	2000	1800
Light Output (Lm)	974	779	682	487	195	97	19
Power (W)	15	12	11	8	3	1.5	0.3
Efficacy (LPW)	64	64	64	64	64	64	64



#### **DOWNLIGHT**

Die-cast shallow baffle minimizes aperture glare and conceals view into housing. Black finish standard.

#### ADJUSTABLE YOKE

Adjustable yoke allows for quick exchange of optics and media. Accommodates up to 2 media; add 0.16" to fixture height with use of each media.

#### OPTICS

Robust light engine with optimized optic pairing integrates Reflection, Refraction, and TIR offering 10°, 15°, 20°, 25°, 40° & 60° beams.

#### MEDIA

Soft Focus Lens standard; media must be specified. Lens is sealed in place on Wet location fixture. Secondary media available.

#### TRIM PLATE

Wet location features integral silicone gasket.

- Dry / Damp Location: Thickness measures 0.065".
- Wet Location: 0.15" return, installed as flange overlay only.

#### DOWNLIGHT TRIM ADAPTER

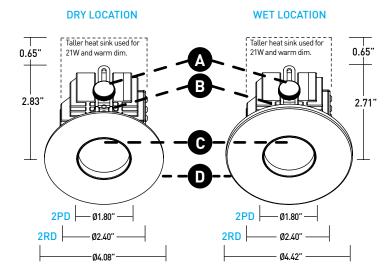
Included with fixture and required for installation. Provides required alignment with trim, ensuring fixture aim integrity is maintained Uses [2] #6-32 flat-head screws with varying lengths to accommodate ceiling depth. Installed after ceiling is complete.

#### RETENTION

Integral ball plungers correspond to trim adapter ensuring snug fit against finished ceiling.

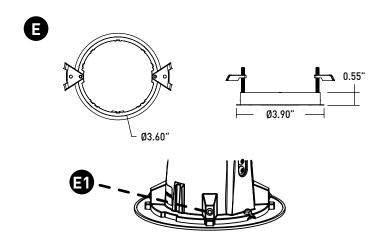
#### **DIMENSIONS / DRAWINGS**

#### ROUND



#### **SQUARE**

# 



4.08" SQ.



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4.33" SQ.

#### **HOUSING**

#### LOW FLUX NO INSULATION CONTACT (NON-IC) HOUSING (NCL)

- Included with NR Low Flux wattage packages.
- Minimum 0.50" setback from combustible and non-combustible materials on all sides and top of housing.
- Minimum 3.00" setback from insulation material having max R-Value 30 on all sides and top of housing.
- Minimum 6.00" setback from polycell spray foam insulation having max R-Value 60.

### LOW FLUX INSULATION CONTACT (IC) HOUSING (ICL)

- Included with IR and AR LOW Flux wattage packages.
- No setback from polycell spray foam insulation having max R-Value of 60 on all sides and top of housing.

#### HIGH FLUX IC / NON-IC / WARM DIM HOUSING (ICH/NCH)

- Included with all HIGH Flux and Warm Dim wattage packages.
- No setback from polycell spray foam insulation having max R-Value of 60 on all sides and top of IC housing.

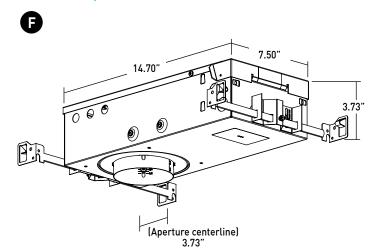
#### HOUSING MOUNTING NOTES

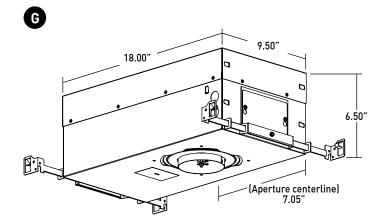
- AR install type is required for CCEA, Airtight and Title 24 (JA8) applications.
- Do not install in environments where ambient temperatures exceed 40°C (104°F).
- Splice connections may be serviced from room side.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.
- Hanger bars fitted to short and long side of low flux housing, and short side only of High Flux 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 2S-HBE-46 kit.
- Hanger bars and brackets add 4.00" to the overall dimension, but are exclusive of the setback requirements.
- Driver assembly ships with trim, not housing. Housing and trim feature push nuts and lever nuts for ease of installation.

#### **REMODEL NOTES**

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

#### **DIMENSIONS / DRAWINGS**





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#### **REMODEL**

#### REMODEL

- Provided with RR install type.
- UL2043 listed for air-handling plenum.
- Installs without conventional housing using integral mounting clamps.
- Requires plenum rated Class 2 cable between fixture and power supply. Cable supplied by others.
- Minimum 2.75" clearance from top of trim.
- Minimum setback from combustible and noncombustible materials of 6.63" radius from fixture centerline
- Minimum additional 3.00" setback from insulation material with max R-Value 30 from any surface of downlight fixture assembly.
- Minimum additional 6.00" setback from polycell spray foam insulation with max R-Value 60 from any surface of downlight fixture assembly.
- Do not install in environments where ambient temperatures exceed 40°C (104°F).
- All splice connections serviceable from room side.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.



Fixture regresses flush with the finished ceiling plane when installed according to manufacturer instructions and finished ceiling conditions are met. Consult 2-Series Installation Guidelines for appropriate ceiling cutouts and instructions for proper Zero-Sightline installations.

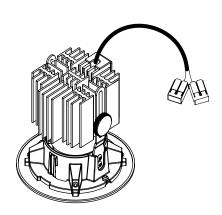
- Specified on Flange Configuration and ships with housing; ships separately on remodel installations.
- For use in sheetrock ceiling applications.
  - 1/16" Appliqué (G Flange Configuration) recommended for gypsum ceiling installations and has plaster stop thickness of 1/16". Recommended for painted ceiling applications.
  - 1/8" Appliqué (P Flange Configuration) offers double thick plaster stop of 1/8" where a heavier application of mud is preferred. Recommended for colorfast and venetian plaster applications.
- Not recommended for stucco applications.

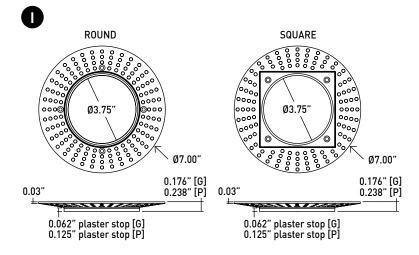
#### **ROUTER TOOL GUIDE**

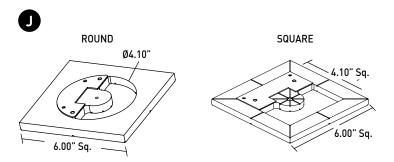
- Specified separately and used with Flange Overlay configurations.
- For use in wood ceiling applications.
- DLA-RTG-2S-RD or DLA-RTG-2S-SQ required for wood Zero-Sightline ceiling installations.
- Router tool guide is reusable and suitable for multiple fixtures.

#### **DIMENSIONS / DRAWINGS**









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### **TECHNICAL INFORMATION**

#### CONSTRUCTION

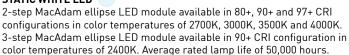
Downlight: Steel and aluminum; extruded aluminum heat-sink; painted finishes are granulated powder coat. 304 corrosion resistant stainless steel faceplate for wet location fixtures.

<u>Trim Adapter</u>: High-impact composite and stainless steel.

Housing: 22 Gauge galvanized steel.

Appliqué: Zinc alloy.

#### STATIC WHITE LED



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.

cTUVus listed to UL1598 standard for Dry / Damp and Wet locations. CCEA, Airtight and Title 24 JA8-2022 Listed. NEMA 410 Compliant.

## **DECLARE**

LBC Red List Approved.

#### **FIXTURE WEIGHT**

Trim - 2 lbs max Low Flux Housing - 4.2 lbs High Flux Housing - 7.4 lbs Remote / Remodel Driver - 1.4 lbs

#### LIMITED WARRANTY

Manufacturer's Limited Warranty guarantees product(s) listed to be free from defects in material and workmanship under normal use and service for 1-year. LED and power supplies are warranted to operate with 70% of original flux and remain within a range of 3 duv for a period of 5-years. 10-year Lutron Advantage limited warranty available on Lutron equipped systems. Warranty period begins from the date of shipment by Seller. Consult website for full warranty terms and conditions.

#### **CHANGE LOG**

- 1.01/12/2021: ADDED 2200K, 2700K-1800K WARM DIM AND 10 DEGREE OPTIC OFFERINGS.
- 2.04/06/2022: REMOVED REMOTE REMODEL ACCESSORY KIT DLA2-RMT-AK.
- 3.10/17/2022: REMOVED 90WA13H 3200K-1800K WARM DIM AND ADDED 90WA12H 3000K-1800K WARM DIM.
- 4.08/08/2023: UPDATED WITH NEW LED AND OPTIC SYSTEM.
- 5.02/07/2024: ADDED 2400K, LOW WATTAGE, AND TUNABLE WHITE OFFERINGS.



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