# **2 SERIES LVS**

# **DEEP REGRESS**

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

PROJECT NAME:	TYPE:







#### ORDERING INFORMATION

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

					1	1	ī	up to quantities of		
TRIM	RATING	FLANGE FINISH	CRI/WATTAGE PACKAGE	CCT	OPTIC (UGR)	INSTALL TYPE	CEILING THICKNESS	POWER SUPPLY	MEDIA	FLANGE CONFIGURATION
								LVS		
2RD Round Expanded Deep 2PD Round Pinhole Deep 2SD Square Expanded Deep	1 Dry/Damp 2 Wet* *(Lens sealed in place)	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)  CH Chrome* *(Increased lead time)  PB Polished Bronze* *(Increased lead time)  PR Primer  CF Custom* *(Iconsult Factory)  FINISH IMAGES ON PAGE 2	LOW FLUX STATIC WHITE 3.73" TALL HOUSING 80506A 80+ CRI, 6 Watts [Delivered - 2RD/2SD 677, 2PD 615] 80511A 80+ CRI, 11 Watts [Delivered - 2RD/2SD 1109, 2PD 998] 80515A 80+ CRI, 15 Watts [Delivered - 2RD/2SD 1488, 2PD 1349] 90506A 90+ CRI, 6 Watts [Delivered - 2RD/2SD 584, 2PD 530] 90511A 90+ CRI, 11 Watts [Delivered - 2RD/2SD 1281, 2PD 1163] 97506A 97+ CRI, 15 Watts [Delivered - 2RD/2SD 1281, 2PD 1163] 97506A 97+ CRI, 15 Watts [Delivered - 2RD/2SD 1281, 2PD 1163] 97515A 97+ CRI, 15 Watts [Delivered - 2RD/2SD 814, 2PD 466] 97511A 97+ CRI, 15 Watts [Delivered - 2RD/2SD 81, 2PD 1023] HIGH FLUX STATIC WHITE 6.5" TALL HOUSING 80521A 90+ CRI, 21 Watts [Delivered - 2RD/2SD 1746, 2PD 1576] 97521A 97+ CRI, 21 Watts [Delivered - 2RD/2SD 1746, 2PD 1576] 97521A 97+ CRI, 21 Watts [Delivered - 2RD/2SD 1746, 2PD 1387]  WARM DIM 6.5" TALL HOUSING 90W11A 90+ CRI, 11 Watts Incandescent Profile: 2700K - 1800K [Delivered - 2RD/2SD 688, 2PD 628] 90W15A 90+ CRI, 15 Watts Incandescent Profile: 2700K - 1800K [Delivered - 2RD/2SD 968, 2PD 613] Halogen Profile: 3000K - 1800K [Delivered - 2RD/2SD 975, 2PD 857] Halogen Profile: 3000K - 1800K [Delivered - 2RD/2SD 975, 2PD 879] **SEE PAGE 4 FOR DETAILED WARM DIM PROFILE COMPARISON.	24 2400K* *(90-CRI only, 15W max) 27 2700K 30 3000K 35 3500K 40 4000K  WL 2700K - 1800K  WL 2700K - 1800K  WD 3000K - 1800K  WD 3000K - 1800K	10	(HR)	0 0.125" - 0.49"* *(RR Install Type only) 1 0.50" - 0.75" 2 0.776" - 1.25" 3 1.26" - 2.00" 4 2.01" - 3.00"	LVS LowVoltage System	Standard Media  04 Soft Focus Lens *(Required for 10° optic)  Alternate Media  NL No Lens* *(Not available for wet location or Warm Dim)  02 Honeycomb Louver* *(Not available for wet location or Warm Dim)  03 Clear Glass Lens* *(Not 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* *(Not available for wet location)	F Flange Overlay (No Applique) G Zero Sightline Gypsum (1/16" Applique)* *Inot available for wet location) P Zero Sightline Plaster [1/8" Applique)* *Inot available for wet location)
			TUNABLE WHITE 6.5" TALL HOUSING 90T17A 90+ CRI, 17 Watts, Warm Profile: 4000K - 1800K [Delivered - 2RD 1222, 2PD 1052, 2SD 1100] Cool Profile: 5000K - 2700K [Delivered - 2RD 1058, 2PD 1043, 2SD 952]	TR 4000K - 1800K TH 5000K - 2700K	15 15° (<13) 20 20° (<13) 25 25° (<13) 40 40° (<13) 60 60°* (<13) *(Not recommended for 2PD)					
			*ALL DELIVERED LUMEN OUTPUTS REF PAIRED WITH 20° OPTIC AND SOFT FOCU	LECT 3000K JS LENS.	*SEE PAGE 4 FOR UGR RATINGS.					

### **PART NUMBER NOTES**

- Trims ships as e.g., 2RD1-WH-80S15A2-2HR1-LVS04
- Housing ships as e.g., NCL-2RF-1-LED-01-LVS Appliqué ships with housing



#### **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™



(WH) White Powder Coat

(AG) Satin Silver Powder Coat

(IG) Industrial Gray Bead-Blasted

(AU) Cashmere Gold Powder Coat

(AB) Architectural Bronze Powder Coat

(BB) **Burnt Bronze** Powder Coat



Powder Coat









(PB) Polished Bronze

Plated Finish

[DATE OF REV: 02072024]

pg. 2

#### **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	180996-5107 180996-5101 180996-5102 180996-5103 180996-5106 180996-5104
PLATFORMATICS	1 Channel Node, POE-LN2-1U-E 2 Channel Node, POE-LN2-2U-E 4 Channel Node, POE-LN2-4U-E

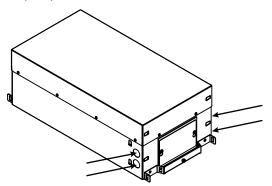
#### **DRIVE CURRENT SPECIFICS**

		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

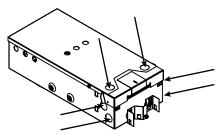
	10 🛭	EGREE OF	PTIC			
	80S15C 90S15C 97S15C					
Minimum Vf	30.5	30.5	30.5			
Maximum Vf	36.2	36.2	36.2			
Current mA	350	350	350			
Wattage W	15 15 15					

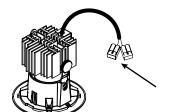
#### WIRING DIAGRAM AND HOUSING ENTRY/ EXIT POINTS

#### ICH/NCH/WARM DIM HOUSING









**REMODEL** 

LV CONSTANT **HOUSING OR CURRENT SOURCE:** POE NODE OR REMOTE DRIVER (+)Class 2 Wiring

**(-)** =



**REMODEL FIXTURE** 

Red (+)

Black (-)

### PERFORMANCE - 3000K

CRI/		D	EEP REGR	ESS - 20° OP	TIC - SOFT	FOCUS LENS	5
WATTAGE	WATTAGE	2R	D	2P	סי	25	D
PACKAGE		DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW
80S06A	6	677	112	615	102	677	112
80S11A	11	1109	101	998	91	1109	101
80S15A	15	1486	99	1349	90	1486	99
80S21A	21	2025	96	1828	87	2025	96
90S06A	6	584	97	530	88	584	97
90S11A	11	956	87	860	78	956	87
90S15A	15	1281	85	1163	77	1281	85
90S21A	21	1746	83	1576	75	1746	83
97S06A	6	514	85	466	77	514	85
97S11A	11	841	76	757	69	841	76
97S15A	15	1127	75	1023	68	1127	75
97S21A	21	1536	73	1387	66	1536	73
90W11AWL (2700K-1800K)	11	654	59	613	55	654	59
90W11AWD (3000K-1800K)	11	673	61	628	57	673	61
90W15AWL (2700K-1800K)	15	915	61	857	57	915	61
90W15AWD (3000K-1800K)	15	943	63	879	59	943	63
90T17ATR (4000K-1800K)	17	1222	57	1052	62	1222	57
90T17ATH (5000K-2700K)	17	1058	54	1043	62	1058	54

CRI/	WATTAGE	DEEP REGRESS - 10° OPTIC - SOFT FOCUS LENS							
WATTAGE		2F	≀D	2F	סי	2SD			
PACKAGE		DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW		
80S15C	15	585	39	483	32	587	39		
90S15C	15	504	34	416	28	506	34		
97S15C	15	435	29	359	24	436	29		

#### **OUTPUT MULTIPLIER**

#### MEDIA LIGHT LOSS FACTOR

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

MEDIA	LIGHT LOSS FACTOR			
NO LENS	1.08			
CGL	1.02			
SFL	1.00			
FGL	0.85			
FSFL	0.76			
FLSL	0.73			
HCL	0.74			
	0.7.4			

#### UNIFIED GLARE RATIING

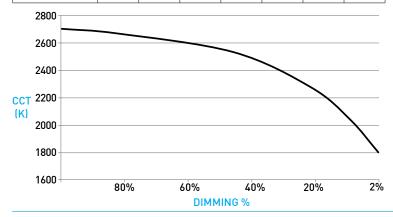
10° OPTIC	20° OPTIC	25° OPTIC	40° OPTIC	60° OPTIC
SOFT FOCUS LENS				
<13	<13	<13	<13	

### WARM DIM PERFORMANCE - 20° 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)	654	523	458	327	131	65	13
Power (W)	11	9	8	6	2.2	1.1	.2
Efficacy (LPW)	59	59	59	59	59	59	59

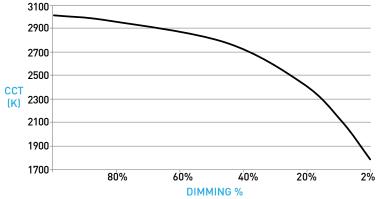
90W15AL 2700K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	2700	2650	2625	2550	2200	1900	1800
Light Output (Lm)	915	732	641	458	184	92	19
Power (W)	15	12	11	8	3	1.5	0.3
Efficacy (LPW)	61	61	61	61	61	61	61



#### 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)	673	538	471	337	135	67	13
Power (W)	11	9	8	6	2.2	1.1	.2
Efficacy (LPW)	61	61	61	61	61	61	61

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)	943	754	660	472	187	94	19
Power (W)	15	12	11	8	3	1.5	0.3
Efficacy (LPW)	62	62	62	62	62	62	62



#### **DOWNLIGHT**

Die-cast deep baffle minimizes aperture glare and conceals view into housing; black finish standard.

#### **A** 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. 10° field reducer included with 10° optic.

#### 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

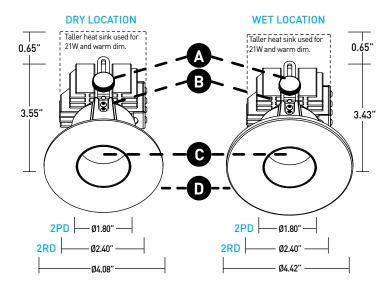
Included with fixture and required for installation. Provides required alignment with trim, ensuring fixture aim integrity is maintained Uses (2) #6-32 flat-head screws with varying lengths to accommodate ceiling depth. Installed after ceiling is complete.

#### RETENTION

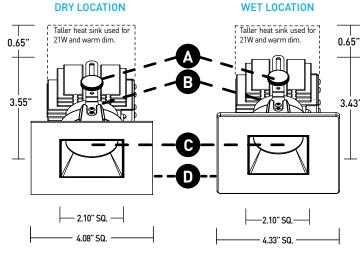
Integral ball plungers correspond to trim adapter ensuring snug fit against finished ceiling.

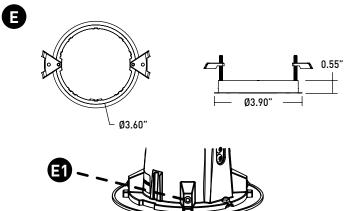
#### **DIMENSIONS / DRAWINGS**

#### ROUND



#### SQUARE







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#### **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.

#### G 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.

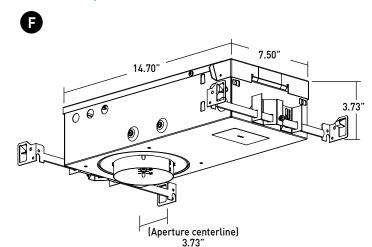
#### **HOUSING MOUNTING NOTES**

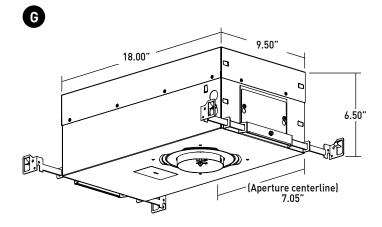
- AR install type is required for CCEA, Airtight and Title 24 (JA8) applications.
- Do not install in environments where ambient temperatures exceed 40°C (104°F).
- Splice connections may be serviced from room side.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.
- 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**







#### **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.

#### APPLIQUÉ

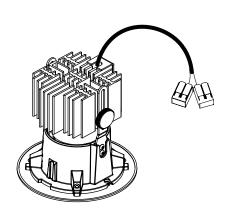
- Specified on Flange Configuration and ships with housing; ships separately on remodel installations.
- For use in sheetrock ceiling applications.
  - 1/16" Appliqué (G Flange Configuration) recommended for gypsum ceiling installations and has plaster stop thickness of 1/16". Recommended for painted 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.

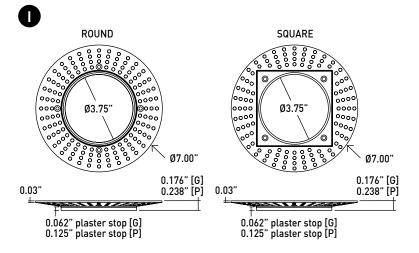
#### ROUTER TOOL GUIDE

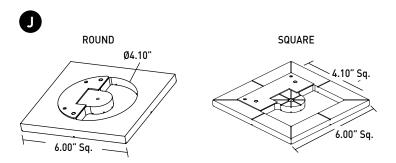
- Specified separately and used with Flange Overlay configurations.
- For use in wood ceiling applications.
- DLA-RTG-2S-RD or DLA-RTG-2S-SQ required for wood Zero-Sightline ceiling installations.
- Router tool guide is reusable and suitable for multiple fixtures.

#### **DIMENSIONS / DRAWINGS**









#### **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

2-step MacAdam ellipse LED module available in 80+, 90+ and 97+ CRI configurations in color temperatures of 2700K, 3000K, 3500K and 4000K. 3-step MacAdam ellipse LED module available in 90+ CRI configuration in color temperatures of 2400K. Average rated lamp life of 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.

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.

#### 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.

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