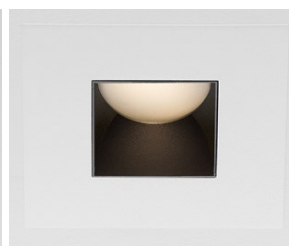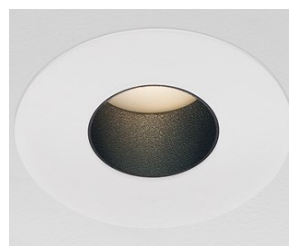# 2 SERIES LED INT
DEEP REGRESS

PROJECT NAME:		TYPE:

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

ORDERING INFORMATION

FITTING	RATING	FLANGE FINISH	CRI / WATTAGE PACKAGE	CCT	OPTIC (UGR)	INSTALL TYPE	CEILING THICKNESS	POWER SUPPLY	MEDIA	FLANGE CONFIGURATION
						EX				
2RD Round Expanded Deep **2PD** Round Pinhole Deep **2SD** Square Expanded Deep	**1** IP20 Dry / Damp **2** IP64 Wet * *(Lens sealed in place)	**WH** White **AG** Satin Silver **IG** Industrial Gray **AU** Cashmere Gold **AB** Arch Bronze **BB** Burnt Bronze **BK** Black **PR** Primer **SS** Stainless Steel* *(Increased lead time) **CF** Custom* *(Consult Factory) **FINISH IMAGES ON PAGE 2**	**LOW FLUX STATIC WHITE** **80S06A** 80+ CRI, 6 Watts (Delivered - 2RD/2SD 677, 2PD 615) **80S11A** 80+ CRI, 11 Watts (Delivered - 2RD/2SD 1109, 2PD 998) **80S15A** 80+ CRI, 15 Watts (Delivered - 2RD/2SD 1486, 2PD 1349) **90S06A** 90+ CRI, 6 Watts (Delivered - 2RD/2SD 584, 2PD 530) **90S11A** 90+ CRI, 11 Watts (Delivered - 2RD/2SD 956, 2PD 860) **90S15A** 90+ CRI, 15 Watts (Delivered - 2RD/2SD 1281, 2PD 1163) **97S06A** 97+ CRI, 6 Watts (Delivered - 2RD/2SD 514, 2PD 466) **97S11A** 97+ CRI, 11 Watts (Delivered - 2RD/2SD 841, 2PD 757) **97S15A** 97+ CRI, 15 Watts (Delivered - 2RD/2SD 1127, 2PD 1023) **HIGH FLUX STATIC WHITE** **80S21A** 80+ CRI, 21 Watts (Delivered - 2RD/2SD 2025, 2PD 1828) **90S21A** 90+ CRI, 21 Watts (Delivered - 2RD/2SD 1746, 2PD 1576) **97S21A** 97+ CRI, 21 Watts (Delivered - 2RD/2SD 1536, 2PD 1387)	**24** 2400K* *(90+CRI only, 15W max) **27** 2700K **30** 3000K **35** 3500K **40** 4000K	**10** 10°*(<13) *(15W packages only) **15** 15° (<13) **20** 20°*(<13) **25** 25° (<13) **40** 40° (<13) **60** 60°**(<13) **(Not recommended for 2PD)	**EX** Export	**0** 3mm-13mm **1** 13mm-20mm **2** 20mm-32mm **3** 32mm-51mm **4** 51mm-76mm	**(120-277V)** **AN3** eldoLED, ECOdrive 1.0% 0-10V, LOG **LN1** eldoLED, ECOdrive 1.0% 0-10V, LIN **EA1** eldoLED, SOLOdrive 0.1% 0-10V, LOG **LA1** eldoLED, SOLOdrive 0.1% 0-10V, LIN **ED1** eldoLED, SOLOdrive 0.1% DALI-2, LOG **LD1** eldoLED, SOLOdrive 0.1% DALI-2, LIN **NOD** Driver Supplied by Others **TUNABLE WHITE REMOTE (0.1%, 120-277V)** **DD1** eldoLED, DUALdrive DALI-2, LOG	**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)* *(Required for Zero-Sightline wood applications) **G** Zero Sightline Gypsum (1.57mm Applique)* *(Not available for wet location) **P** Zero Sightline Plaster (3.18mm Applique)* *(Not available for wet location)
			WARM DIM **90W11A** 90+ CRI, 11 Watts Incandescent Profile: 2600K - 1800K (Delivered - 2RD/2SD 686, 2PD 613) Halogen Profile: 2900K - 1800K (Delivered - 2RD/2SD 688, 2PD 628) **90W15A** 90+ CRI, 15 Watts Incandescent Profile: 2700K - 1800K (Delivered - 2RD/2SD 915, 2PD 857) Halogen Profile: 3000K - 1800K (Delivered - 2RD/2SD 943, 2PD 879) *SEE PAGE 3 FOR DETAILED WARM DIM PROFILE COMPARISON.	**WL** 2600K - 1800K **WD** 2900K - 1800K **WL** 2700K - 1800K **WD** 3000K - 1800K	**20** 20° (<13) **25** 25° (<13) **40** 40° (<13) **60** 60°* (<13) *(Not recommended for 2PD) *SEE PAGE 3 FOR UGR RATINGS.					
			TUNABLE WHITE **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) *ALL DELIVERED LUMEN OUTPUTS REFLECT 3000K PAIRED WITH 20° OPTIC AND SOFT FOCUS LENS.	**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)					

PART NUMBER NOTES
- Fittings ships as e.g., 2RD1-WH-80S15A2-2EX1-AN304
- Driver ships with fitting
- Appliqué ships with fitting

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ACCESSORIES

ALTERNATE MEDIA
☐ **HCL-2** Honeycomb Louver*
*(Not available for IP64 wet location or 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*
*(Not available for IP64 wet location)
☐ **SFL-2-SP** Shatterproof Soft Focus Lens
☐ **FGL-2-SP** Shatterproof Frosted Lens

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
☐ **RO-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)

ROUTER TOOL GUIDE (IP10 Dry / Damp locations only)
Recommended for Zero-Sightline installations in wood ceilings.
☐ **DLA-RTG-2S-RD** Tool, router guide, round; reusable
☐ **DLA-RTG-2S-SQ** Tool, router guide, square; reusable

ADJUSTMENT TOOL
One included with every four fittings.
☐ **TOOL-HEX-050**

FINISHES BY LUCIFER LIGHTING

(WH) White Powder Coat
(AG) Satin Silver Powder Coat
(IG) Industrial Gray
(AU) Cashmere Gold Powder Coat

(AB) Architectural Bronze Powder Coat
(BB) Burnt Bronze Powder Coat
(BK) Black Powder Coat
(SS) Stainless Steel Orbital Brushed 304 Stainless Steel

DRIVE CURRENT SPECIFICS

	80S				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 DEGREE OPTIC		
	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

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2 SERIES LED INT DEEP REGRESS

◎ PERFORMANCE - 3000K

CRI / WATTAGE PACKAGE	WATTAGE	DEEP REGRESS - 20° OPTIC - SOFT FOCUS LENS					
		2RD		2PD		2SD	
		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 (2600K-1800K)	11	654	59	613	55	654	59
90W11AWD (2900K-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 PACKAGE	WATTAGE	DEEP REGRESS - 10° OPTIC - FIELD REDUCER					
		2RD		2PD		2SD	
		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

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

MEDIA LIGHT LOSS FACTOR

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

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

UNIFIED GLARE RATIING

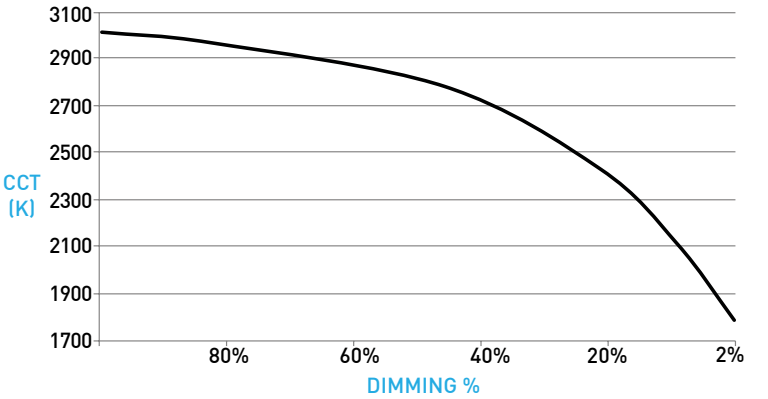| 10° OPTIC FIELD REDUCER	20° OPTIC SOFT FOCUS LENS	25° OPTIC SOFT FOCUS LENS	40° OPTIC SOFT FOCUS LENS	60° OPTIC SOFT FOCUS LENS
<13	<13	<13	<13	<13

Part L — 75+ LPW configurations comply with residential Part L
95+ LPW configurations comply with commercial Part L

◉ WARM DIM PERFORMANCE - 20° OPTIC - SOFT FOCUS LENS

INCANDESCENT PROFILE

90W11AL 2600K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	2600	2550	2520	2450	2200	1925	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
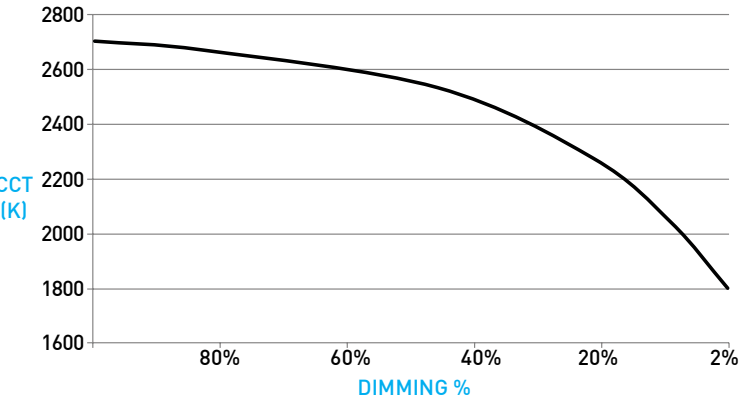
HALOGEN PROFILE

90W11AD 2900K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	2900	2850	2800	2720	2350	1975	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

CCT (K) vs DIMMING % — Incandescent profile curve from 2700 (80%) down to 1800 (2%)

CCT (K) vs DIMMING % — Halogen profile curve from ~3000 (80%) down to ~1750 (2%)

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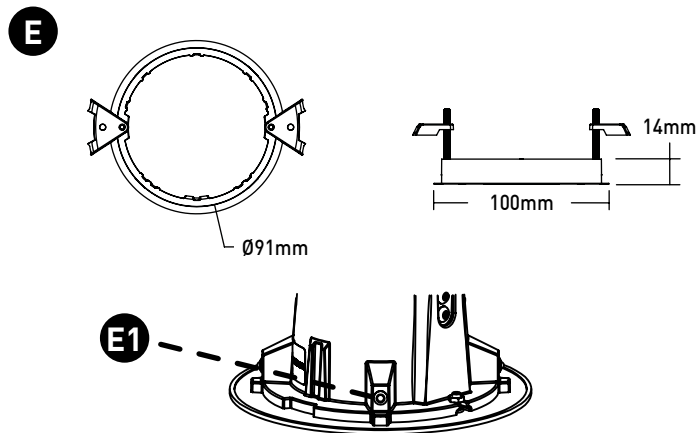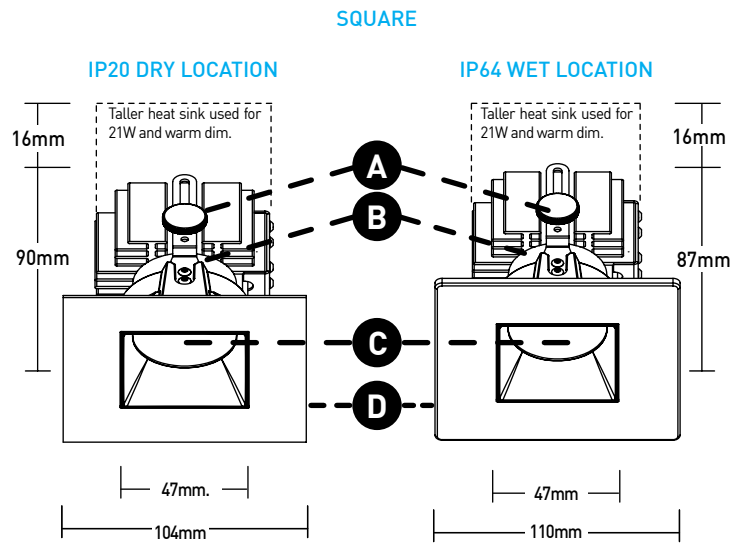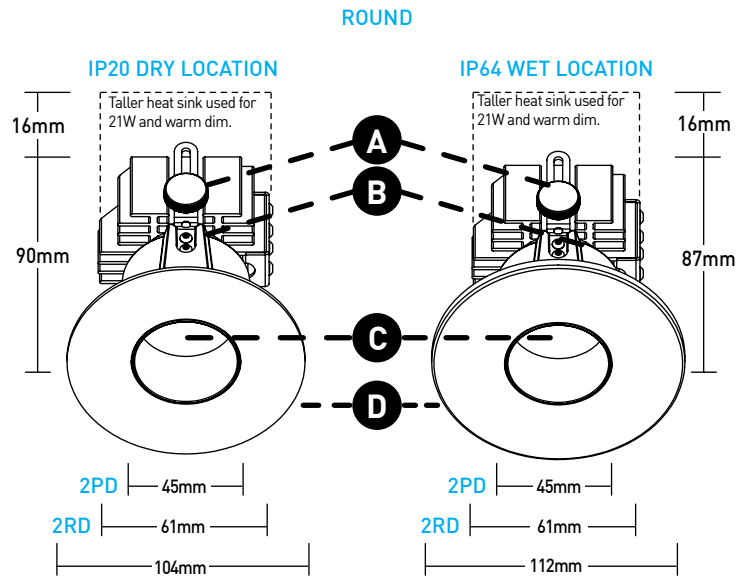
[DATE OF REV: 02142025]

2 SERIES LED INT DEEP REGRESS

DOWNLIGHT FITTING

Die-cast deep 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 4.1mm to fitting 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. Soft Focus Lens, Honeycomb Louver, and Field Reducer provided with 10° optic.

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

Ⓓ FITTING PLATE
IP64 Wet location features integral silicone gasket.

- IP20 Dry / Damp Location: Thickness measures 1.7mm

- IP64 Wet Location: 3.8mm return, installed as flange overlay only.

Ⓔ DOWNLIGHT FITTING ADAPTER
Included with fitting and required for installation. Uses (2) #6-32 flat-head screws with varying lengths to accommodate ceiling depth. Installed after ceiling is complete. Requires 92mm diameter cutout for flange overlay applications.

Ⓔ1 RETENTION
Engineered integral ball plungers correspond to fitting adapter ensuring snug fit against finished ceiling.
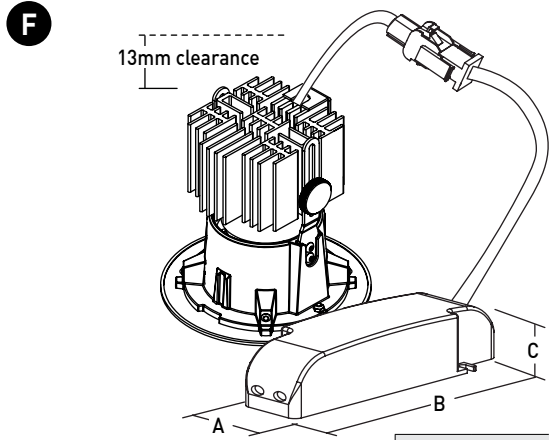
DIMENSIONS / DRAWINGS

ROUND

IP20 DRY LOCATION

Taller heat sink used for 21W and warm dim.

16mm
90mm

2PD — 45mm
2RD — 61mm
104mm

IP64 WET LOCATION

Taller heat sink used for 21W and warm dim.

16mm
87mm

2PD — 45mm
2RD — 61mm
112mm

SQUARE

IP20 DRY LOCATION

Taller heat sink used for 21W and warm dim.

16mm
90mm

47mm.
104mm

IP64 WET LOCATION

Taller heat sink used for 21W and warm dim.

16mm
87mm

47mm
110mm

Ⓔ

Ø91mm

14mm
100mm

Ⓔ1

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2 SERIES LED INT DEEP REGRESS

POWER SUPPLY

F FITTING WITH TETHERED POWER SUPPLY
- Requires 113mm diameter cutout.
- Tethered power supply protected wiring and quick-connect plug between fitting and power supply.
- Minimum 13mm clearance from top of fitting.
- Minimum setback from combustible and non-combustible materials of 168mm radius from fitting centerline; minimum 76mm from surfaces of power supply if not situated within above noted radius from fitting centerline.
- Minimum additional 76mm setback from insulation material with max R-Value 30 from any surface of fitting assembly.
- Minimum additional 152mm setback from polycell spray foam insulation with max R-Value 60 from any surface of fitting assembly.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.
- Do not install in environments where ambient temperatures exceed 40°C (104°F).

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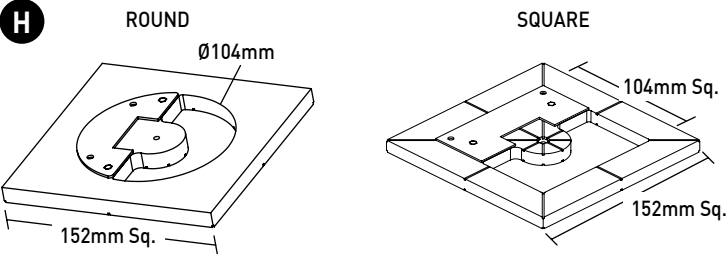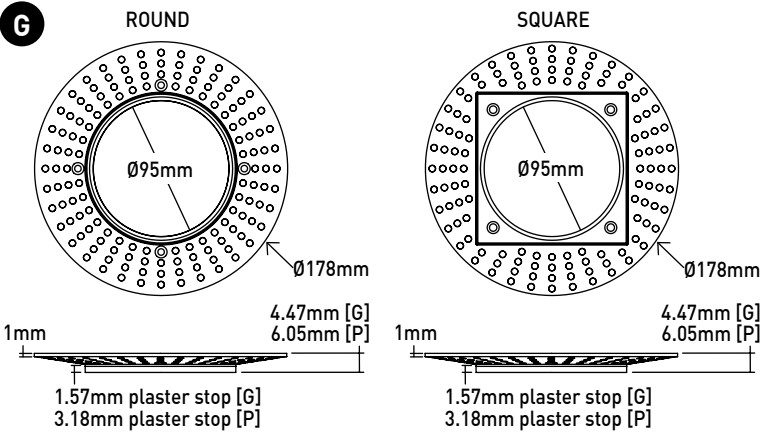
Fixture regresses flush with the finished ceiling plane when installed according to manufacturer instructions and finished ceiling conditions are met. Consult 2-Series Installation Guidelines for appropriate ceiling cutouts and instructions for proper Zero-Sightline installations.

G APPLIQUÉ
- Specified on Flange Configuration and ships with housing; ships separately on remodel installations.
- For use in sheetrock ceiling applications.
  - 1.57mm Appliqué (G Flange Configuration) recommended for gypsum ceiling installations and has plaster stop thickness of 1.57mm.
  - Recommended for painted ceiling applications.
  - 3.18mm Appliqué (P Flange Configuration) offers double thick plaster stop of 3.18mm where a heavier application of mud is preferred. Recommended for colorfast and venetian plaster applications.
- Not recommended for stucco applications.

H 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, minimum one per installer required.

DIMENSIONS / DRAWINGS

F 13mm clearance

POWER SUPPLY DIMENSIONS

Model	A	B	C
AN3			
LN1			
EA1	41mm	210mm	34mm
LA1			
ED1			
LD1	76mm	152mm	31mm

G ROUND / SQUARE

Ø95mm — Ø178mm

1mm — 4.47mm [G] / 6.05mm [P]

1.57mm plaster stop [G]
3.18mm plaster stop [P]

H ROUND / SQUARE

Ø104mm — 152mm Sq.

104mm Sq. — 152mm Sq.

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TECHNICAL INFORMATION

CONSTRUCTION

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

Downlight Fitting Adapter: High-impact composite and stainless steel.

Appliqué: Zinc alloy.

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.

POWER SUPPLY PERFORMANCE AND DIMMING INFORMATION

Power Supply	0-10V				DALI-2		
	EA1	LA1	AN3	LN1	ED1	LD1	DD1
Minimum °C	-20 °C	-20 °C	-20 °C	-20 °C	-20 °C	-20 °C	-20 °C
Maximum °C	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
Dimming %	0.1%	0.1%	1.0%	1.0%	0.1%	0.1%	0.1%

Note: For EA1 and LA1 drivers consult chart on page 7 to confirm appropriate dimming curve for compatibility with selected control.

LISTING

CE Listed for IP20 Dry / Damp and IP64 Wet locations. NOM Certified.

DECLARE

LBC Red List Approved.

PART L

Part L compliant for all 75+ LPW residential and 95+ LPW commercial configurations.

WEIGHT

Fitting - 1.4 lbs max
Driver - 0.4 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. 10/08/2019: NEW CONSOLIDATED SPEC SHEETS WITH SINGLE NOMENCLATURE FOR SPECIFICATION.
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.
6. 2/15/2024: PART L COMPLIANCE ADDED
7. 3/15/2024: ADDED 10 DEGREE FIELD REDUCER, UPDATED 10 DEGREE PERFORMANCE DATA
8. 2/14/2025: UPDATED FINISH OFFERINGS

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[DATE OF REV: 02142025]

DIMMING COMPATIBILITY

eldoLED DRIVER COMPATIBILITY

Power supply **EA1 / LA1** **Dimmer / Switch Control Manufacturer**	Family/Model #
Busch-Jaeger	2112U-101
Jung	240-10
Leviton Lighting Controls	IP710-DLX
Lightolier Controls	ZP600FAM120
Lutron Electronics	Nova T® - NTFTV
Lutron Electronics	Diva® - DVTV
Lutron Electronics	Nova® - NFTV
Merten	5729
Pass & Seymour	CD4FB-W
The Watt Stopper	DCLV1
Sensor Switch	nIO EZ
Synergy	ISD BC
Power supply EA1 / LA1 Lighting Control Systems	**Family/Model #**
Lutron Electronics	GrafixEye® GRX-TVI w GRX3503
Lutron Electronics	Energy Savr Node™ - QSN-4T16-S
Lutron Electronics	TVM2 Module
Crestron®	GLX-DIMFLV8
Crestron®	GLXP-DIMFLV8
Crestron®	GLPAC-DIMFLV4-*
Crestron®	GLPAC-DIMFLV8-*
Crestron®	GLPP-DIMFLVEX-PM
Crestron®	GLPP-1DIMFLV2EX-PM
Crestron®	GLPP-1DIMFLV3EX-PM
Crestron®	DIN-A08
Crestron®	DIN-4DIMFLV4
Crestron®	CLS-EXP-DIMFLV
Crestron®	CLCI-1DIMFLV2EX
ABB	SD/S 2.16.1

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[DATE OF REV: 02142025]