

2 SERIES LED INT

SHALLOW 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:
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ORDERING INFORMATION

FITTING	RATING	FLANGE FINISH	CRI / WATTAGE PACKAGE	CCT	OPTIC (UGR)	INSTALL TYPE	CEILING THICKNESS	POWER SUPPLY	MEDIA	FLANGE CONFIGURATION
						EX				
2RS Round Expanded Shallow 2PS Round Pinhole Shallow 2SS Square Expanded Shallow	1 IP20 Dry/ Damp 2 IP64 Wet* *(Lens sealed in place)	WH White	LOW FLUX STATIC WHITE	24 2400K* *(90+CRI only, 15W max)	10 10° (<13)	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, SOLdrive 0.1% 0-10V, LOG LA1 eldoLED, SOLdrive 0.1% 0-10V, LIN ED1 eldoLED, SOLdrive 0.1% DALI-2, LOG LD1 eldoLED, SOLdrive 0.1% DALI-2, LIN NOD Driver Supplied by Others TUNABLE WHITE REMOTE (0.1%, 120-277V) eldoLED, DUALdrive DALI-2, LOG DD1	Standard Media	F Flange Overlay (No Applique) G Zero Sightline Gypsum (1.57mm Applique)* *(Not available for IP64 wet location) P Zero Sightline Plaster (3.18mm Applique)* *(Not available for IP64 wet location)
		AG Satin Silver	80S06A 80+ CRI, 6 Watts (Delivered - 2RS 709, 2PS 687, 2SS 638)	15 15° (<13)	04 Soft Focus Lens *(Required for 10° optic)					
		IG Industrial Gray	80S11A 80+ CRI, 11 Watts (Delivered - 2RS 1152, 2PS 1111, 2SS 1163)	20 20° (<13)	Alternate Media					
		AU Cashmere Gold	80S15A 80+ CRI, 15 Watts (Delivered - 2RS 1554, 2PS 1504, 2SS 1569)	25 25° (<13)	NL No Lens* *(Not available for wet location or Warm Dim)					
		AB Arch Bronze	90S06A 90+ CRI, 6 Watts (Delivered - 2RS 611, 2PS 592, 2SS 550)	30 3000K	02 Honeycomb Louver* *(Not available for wet location or Warm Dim)					
		BB Burnt Bronze	90S11A 90+ CRI, 11 Watts (Delivered - 2RS 993, 2PS 958, 2SS 1003)	35 3500K	03 Clear Glass Lens* *(Not available for Warm Dim)					
		BK Black	90S15A 90+ CRI, 15 Watts (Delivered - 2RS 1340, 2PS 1297, 2SS 1353)	40 40° (<13)	05 Frosted Glass Lens					
		SS Stainless Steel*	97S06A 97+ CRI, 6 Watts (Delivered - 2RS 538, 2PS 521, 2SS 484)	60 60° (<13) *(Not recommended for 2PS)	09 Ultra Violet Lens					
		CH Chrome*	97S11A 97+ CRI, 11 Watts (Delivered - 2RS 874, 2PS 843, 2SS 883)		11 Shatterproof Soft Focus Lens					
		MB Matte Bronze*	97S15A 97+ CRI, 15 Watts (Delivered - 2RS 1179, 2PS 1411, 2SS 1191)		12 Shatterproof Frosted Lens					
		PB Polished Bronze*	HIGH FLUX STATIC WHITE		26 Frosted Linear Spread Lens* *(Not available for wet location)					
		PR Primer	80S21A 80+ CRI, 21 Watts (Delivered - 2RS 2126, 2PS 2022, 2SS 2147)							
		CF Custom*	90S21A 90+ CRI, 21 Watts (Delivered - 2RS 1833, 2PS 1743, 2SS 1851)							
		FINISH IMAGES ON PAGE 2	97S21A 97+ CRI, 21 Watts (Delivered - 2RS 1613, 2PS 1534, 2SS 1629)							
			WARM DIM							
	90W11A 90+ CRI, 11 Watts Incandescent Profile: 2700K - 1800K (Delivered - 2RS 686, 2PS 690, 2SS 617)	WL 2700K - 1800K	20 20° (<13) 25 25° (<13) 40 40° (<13) 60 60° (<13) *(Not recommended for 2PS)							
	Halogen Profile: 3000K - 1800K (Delivered - 2RS 688, 2PS 693, 2SS 619)	WD 3000K - 1800K								
	90W15A 90+ CRI, 15 Watts Incandescent Profile: 2700K - 1800K (Delivered - 2RS 959, 2PS 974, 2SS 984)	WL 2700K - 1800K								
	Halogen Profile: 3000K - 1800K (Delivered - 2RS 963, 2PS 970, 2SS 980) *SEE PAGE 3 FOR DETAILED WARM DIM PROFILE COMPARISON.	WD 3000K - 1800K								
	TUNABLE WHITE									
	90T17A 90+ CRI, 17 Watts Warm Profile: 4000K - 1800K (Delivered - 2RS 1280, 2PS 1162, 2SS 1293)	TR 4000K - 1800K	15 15° (<13) 20 20° (<13) 25 25° (<13) 40 40° (<13) 60 60° (<13) *(Not recommended for 2PS)							
	Cool Profile: 5000K - 2700K (Delivered - 2RS 1137, 2PS 1152, 2SS 1148)	TH 5000K - 2700K								
	*ALL DELIVERED LUMEN OUTPUTS REFLECT 3000K PAIRED WITH 20° OPTIC AND SOFT FOCUS LENS.		*SEE PAGE 3 FOR UGR RATINGS.							

PART NUMBER NOTES

- Fittings ships as e.g., 2RS1-WH-80S15A2-2EX1-AN304
- Driver ships with fitting
- Applique 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]

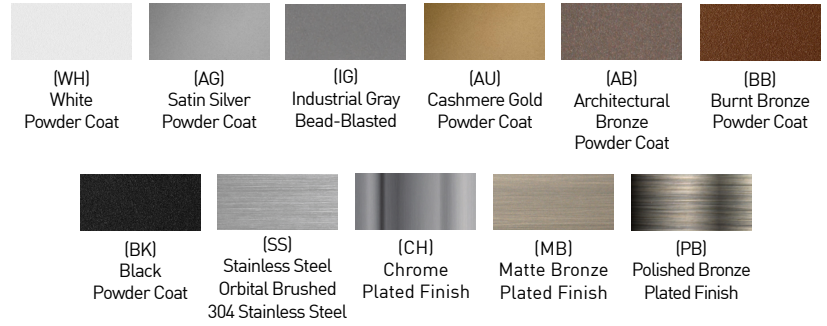
ROUTER TOOL GUIDE (IP10 Dry / Damp locations only)
Recommended for Zero-Sightline installations in wood ceilings.

- 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™



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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PERFORMANCE - 3000K

CRI / WATTAGE PACKAGE	WATTAGE	SHALLOW REGRESS - 20° OPTIC - SOFT FOCUS LENS					
		2RS		2PS		2SS	
		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 - SOFT FOCUS LENS					
		2RS		2PS		2SS	
		DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW
80S15C	15	494	33	447	30	493	33
90S15C	15	426	28	385	26	425	28
97S15C	15	368	25	332	22	367	24

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	1.04
CGL	1.01
SFL	1.00
FGL	0.89
FSFL	0.80
FLSL	0.79
HCL	0.67

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 RATING

10° OPTIC SOFT FOCUS LENS	20° OPTIC SOFT FOCUS LENS	25° OPTIC SOFT FOCUS LENS	40° OPTIC SOFT FOCUS LENS	60° OPTIC SOFT FOCUS LENS
<19	<16	<16	<19	<16

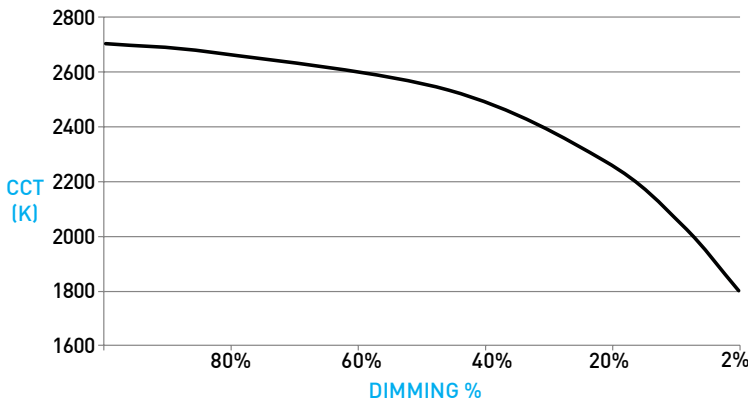
Part L 75+ LPW configurations comply with residential Part L
95+ LPW configurations comply with commercial Part L

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

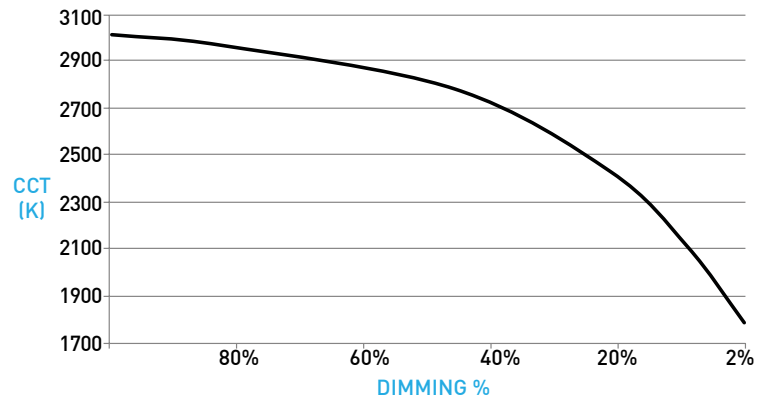
90W15AL 2700K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	2700	2650	2625	2550	2200	1900	1800
Light Output (Lm)	970	776	679	485	194	97	19
Power (W)	15	12	11	8	3	1.5	0.3
Efficacy (LPW)	64	64	64	64	64	64	64



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



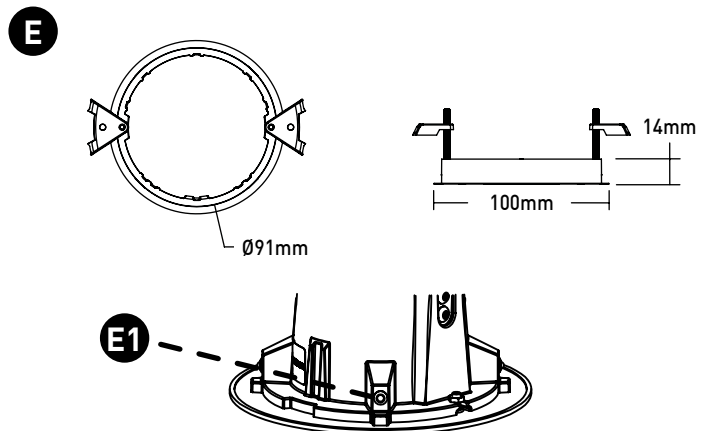
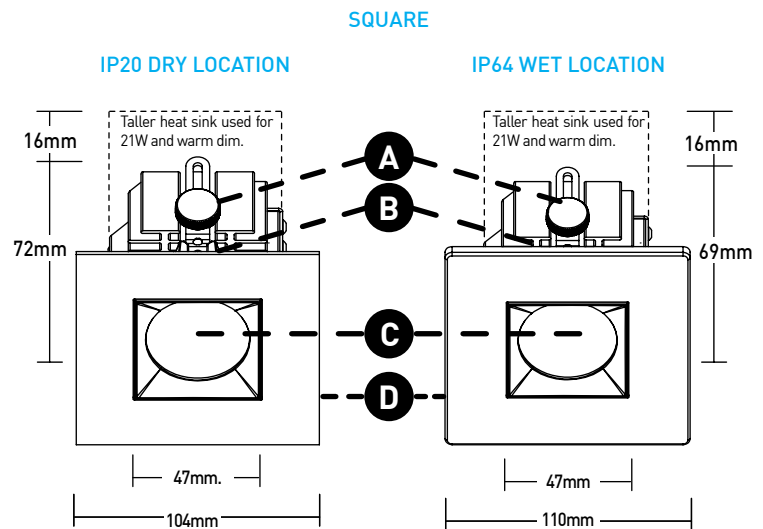
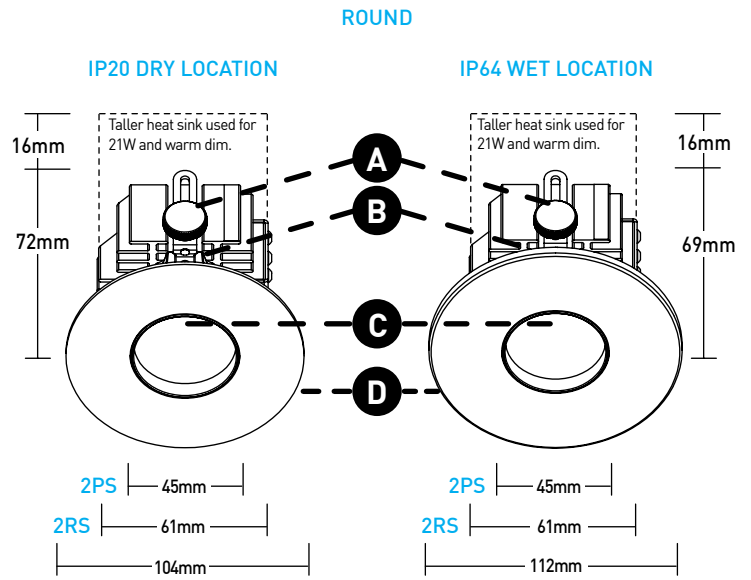
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DOWNLIGHT FITTING

Die-cast shallow 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 4.1mm to fitting height with use of each media.
- B 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.
- C MEDIA**
Soft Focus Lens standard; media must be specified. Lens is sealed in place on Wet location fitting. Secondary media available.
- D 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.
- E 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.
- E1 RETENTION**
Engineered integral ball plungers correspond to fitting adapter ensuring snug fit against finished ceiling.

DIMENSIONS / DRAWINGS



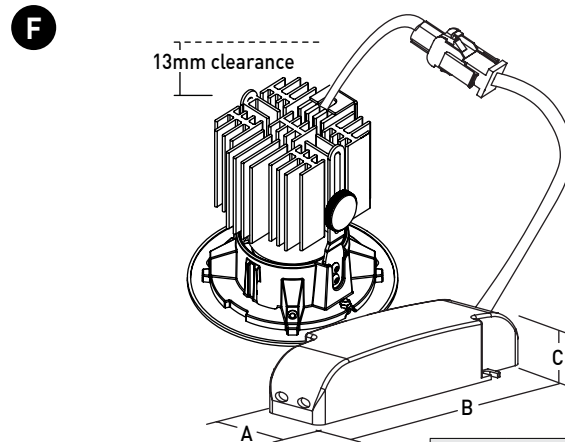
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POWER SUPPLY

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).

DIMENSIONS / DRAWINGS



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

ZERO-SIGHTLINE INSTALLATIONS

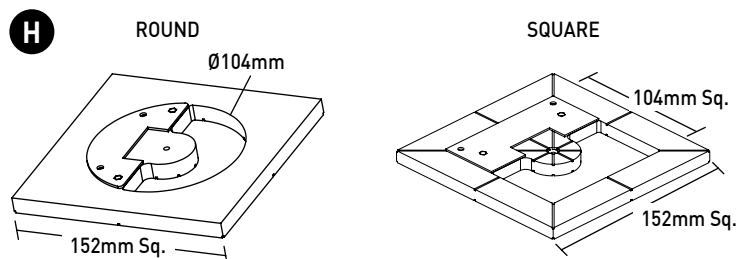
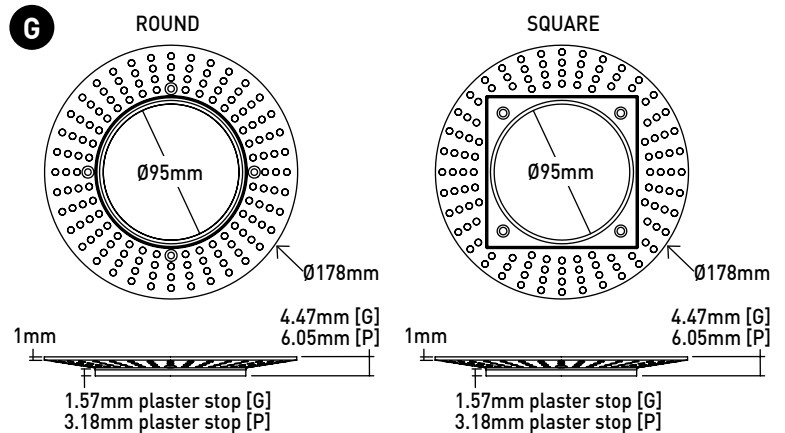
Fixture regresses flush with the finished ceiling plane when installed according to manufacturer instructions and finished ceiling conditions are met. Consult 2-Series Installation Guidelines for appropriate ceiling cutouts and instructions for proper Zero-Sightline installations.

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.

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 fittings.



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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

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.

PART L

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

FIXTURE 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



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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