

FRAXION[®]3

INTERNATIONAL

SHALLOW REGRESS

- Max output of 2435lm at 80+ CRI
- Baffle options in round and square featuring UGR as low as 4
- Now available for remodel and concrete pour applications

PROJECT NAME:	TYPE:
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ORDERING INFORMATION - DOWNLIGHT FITTING

SHAPE	RATING	TYPE	FINISH	BAFFLE FINISH	CRI	WATTAGE	CCT	OPTIC (UGR)	MEDIA	INSTALL TYPE	CEILING THICKNESS	DRIVER
F3RS Round Shallow Regress	1 IP20 Dry/Damp	A Adjustable	POWDERCOAT MICROFLANGE	POWDERCOAT	STATIC WHITE	 STATIC WHITE	24 2400K* * (190+ CRI 11A, 15A, and 15C only)	10 10° (<10) * (15C package only)	STANDARD MEDIA	EX Export	1 6mm-38mm	IG1 eldoLED, SOLDrive 0.1% 0-10V, LOG, 120V-277V IN1 eldoLED, SOLDrive 0.1% 0-10V, LIN, 120V-277V ID1 eldoLED, SOLDrive 0.1% DALI-2, LOG, 120V-277V TUNABLE WHITE MD2 0.1% DALI-2 DT8, LOG 120V-277V
F3SS Square Shallow Regress	2 IP64 Wet* * (Suction cup provided for aim and focus)	F Fixed	WH White	WH White	80S 80+	 WARM DIM	11A 11W - 1279 Lm 15A 15W - 1729Lm 15C 15W - 633 Lm* *(For use with 10° optic only) 21A 21W - 2435 Lm	15 15° (>19) 20 20° (<13) 25 25° (<13) 40 40° (<16) 60 60° (>19) 85 85° (>19) * (Requires -07 WDL media)	04 Soft Focus Lens* * (Required for 10° Optic) WW Wallwash Lens* * (Required for Wallwash)	KC Integral Driver KR Remote Driver		
F3TS Square Transitional Shallow Regress* * (Not available for wallwash)		W Wall-wash	AB Architectural Bronze AG Satin Silver AU Cashmere Gold BB Burnt Bronze BK Black PR Primer CF Custom Finish* * (Consult Factory)	AB Architectural Bronze AG Satin Silver AU Cashmere Gold BB Burnt Bronze BK Black PR Primer CF Custom Finish* * (Consult Factory)	90S 90+ 97S 97+ TRIMLESS TG Trimless Gypsum 1.5mm* * (Not available for concrete pour installations) TM Trimless Millwork* * (Not available for concrete pour installations)	11A 90+ CRI, 11 Watts 15A 90+ CRI, 15 Watts Incandescent Profile 11A Lumens Divd. - 757 15A Lumens Divd. - 1046 Halogen Profile 11A Lumens Divd. - 766 15A Lumens Divd. - 1071 SEE PAGE 4 FOR DETAILED WARM DIM PROFILE COMPARISON.	WL 2600K (11A) 2700K (15A) -1800K WD 2900K (11A) 3000K (15A) -1800K	20 20° (<10) 25 25° (<13) 40 40° (<16) 60 60° (<19) 85 85° (>19) * (Requires -07 WDL media)	ALTERNATE MEDIA 01 Honeycomb Louver* * (Not available for IP64 Wet Location, Adjustable Fittings, or Warm Dim) 02 Clear Glass Lens* * (Not available for Warm Dim) 03 Frosted Glass Lens 05 Frosted Soft Focus Lens 06 Frosted Linear Spread Lens 07 Wide Distribution Lens* * (Required and only available for 85° optic) HS Adjustable Honeycomb Louver and Soft Focus Lens* * (Not available for IP64 Wet Location, 21W, Fixed Fittings, or Warm Dim) NL No Lens* * (Not available for IP64 Wet Location or Warm Dim)	90T 90+ TUNABLE WHITE 17A 17W Warm Profile: 4000K - 1800K 1231 Lm Cool Profile: 5000K - 2700K 1235 Lm	TR 4000K - 1800K TH 5000K - 2700K	



LUMEN DELIVERED OUTPUTS REFLECT 80+ CRI / 3000K PAIRED WITH 20° OPTIC AND SOFT FOCUS LENS



FRAXION3 INTERNATIONAL SHALLOW REGRESS

ACCESSORIES

ROUND / SQUARE TRANSITIONAL ALTERNATE MEDIA

IP20 Dry / Damp location only.
IP64 Wet location requires alternate baffle.

- CGL-F3RS** Clear Glass Lens*
*(Not available for Warm Dim)
- FGL-F3RS** Frosted Glass Lens
- SFL-F3RS** Soft Focus Lens
- FSFL-F3RS** Frosted Soft Focus Lens
- WDL-F3RS** Wide Distribution Lens*
- *(Required and only available for 85° beam spread)
- FLSL-F3RS** Frosted Linear Spread Lens

SQUARE ALTERNATE MEDIA

IP20 Dry / Damp location only.
IP64 Wet location requires alternate baffle.

- CGL-F3SS** Clear Glass Lens*
*(Not available for Warm Dim)
- FGL-F3SS** Frosted Glass Lens
- SFL-F3SS** Soft Focus Lens
- FSFL-F3SS** Frosted Soft Focus Lens
- WDL-F3SS** Wide Distribution Lens*
- *(Required and only available for 85° beam spread)
- FLSL-F3SS** Frosted Linear Spread Lens

ADJUSTABLE HCL ASSEMBLY

Dry / Damp location only.

- OLR-F3RS1-SFL-HCL** Adjustable Honeycomb Louver and Soft Focus Lens*
*(Not available for IP64 Wet Location, 21W, Fixed Fixtures, or Warm Dim)

REPLACEMENT BAFFLE ASSEMBLY (INCLUDES MEDIA)

ASSEMBLY	SHAPE	RATING	FINISH	MEDIA
RBA				
REPLACEMENT BAFFLE ASSEMBLY	F3RS Round Shallow Regress F3RW Round Wallwash F3SS Square Shallow Regress F3SW Square Wallwash F3TS Square Transitional Shallow Regress	1 IP20 Dry/Damp 2 IP64 Wet* *(Requires provided suction cup to service or aim & focus)	WH White AB Architectural Bronze AG Satin Silver AU Cashmere Gold BB Burnt Bronze BK Black PR Primer CF Custom Finish* *(Consult Factory)	LEAVE BLANK FOR SOFT FOCUS LENS (SFL) OR WALLWASH (WW) HCL Honeycomb Louver* *(Not available for IP64 Wet Location, adjustable fixtures, or Warm Dim) CGL Clear Glass Lens* *(Not available for Warm Dim) FGL Frosted Glass Lens FSFL Frosted Soft Focus Lens FLSL Frosted Linear Spread Lens WDL Wide Distribution Lens* *(Required and only available for 85° optic) NL No Lens* *(Not available for IP64 Wet Location or Warm Dim)

SHALLOW REGRESS / WALLWASH REPLACEMENT OPTICS

Interchangeable optics accessible through fixture aperture.

STATIC WHITE

- 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
- RO-45-WW-S** Wallwash optic

WARM DIM

- RO-50-20-W** 20° optic
- RO-50-25-W** 25° optic
- RO-50-40-W** 40° optic
- RO-50-60-W** 60° optic
- RO-45-WW-W** Wallwash optic

TUNABLE WHITE

- 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-45-WW-T** Wallwash optic

REPLACEMENT SUCTION TOOL

One included with every six fixtures designated Wet location.

- F4-TOOL-SUCTION** Allows for removal of baffle with Wet location

FRACTION3 INTERNATIONAL SHALLOW REGRESS

 PERFORMANCE - 3000K

LUMEN PACKAGE	WATT-AGE	10° OPTIC FIELD REDUCER KIT		15° OPTIC SOFT FOCUS LENS		20° OPTIC SOFT FOCUS LENS		25° OPTIC SOFT FOCUS LENS		40° OPTIC SOFT FOCUS LENS		60° OPTIC SOFT FOCUS LENS		85° OPTIC WIDE DISTRIBUTION		WW OPTIC WALLWASH LENS	
		DLVD	LPW	DLVD	LPW	DLVD	LPW	DLVD	LPW	DLVD	LPW	DLVD	LPW	DLVD	LPW	DLVD	LPW
80S06A	06	-	-	740	110	795	123	779	120	678	113	727	121	549	92	634	106
80S11A	11	-	-	1190	97	1279	108	1254	106	1090	99	1169	106	883	80	1020	93
80S15A / C	15	633	42	1608	96	1729	107	1694	105	1474	98	1580	105	1194	80	1378	92
80S21A	21	-	-	2290	97	2435	107	2386	105	1474	98	1580	105	1194	80	1861	89
90S06A	06	-	-	635	95	683	105	669	103	582	97	624	104	472	79	545	91
90S11A	11	-	-	1022	83	1099	93	1077	91	937	85	1005	91	759	69	876	80
90S15A / C	15	544	36	1381	82	1485	92	1455	90	1266	84	1358	91	1025	68	1184	79
90S21A	21	-	-	1938	82	2092	92	2050	90	1783	85	1912	91	1384	66	1598	76
97S06A	06	-	-	558	83	600	93	588	91	511	85	548	91	414	69	478	80
97S11A	11	-	-	898	73	965	81	946	80	822	75	882	75	665	61	769	70
97S15A / C	15	469	31	1213	72	1304	80	1278	79	1111	74	1192	79	900	60	1040	69
97S21A	21	-	-	1701	72	1837	81	1800	79	1783	85	1912	91	1384	66	1403	67
90W11A (26K-18K)	11	-	-	-	-	757	69	707	64	688	63	698	63	530	48	592	54
90W11A (29K-18K)	11	-	-	-	-	772	70	721	66	702	64	712	65	541	49	600	55
90W15A (27K-18K)	15	-	-	-	-	1046	70	988	66	960	64	981	65	746	50	841	56
90W15A (30K-18K)	15	-	-	-	-	1071	71	1020	68	993	66	1030	69	783	52	852	57
90T17A (50K-27K)	17	-	-	1082	62	1231	69	1217	68	1241	63	1249	68	1005	51	1009	59
90T17A (40K-18K)	17	-	-	1086	62	1235	69	1221	68	1245	64	1254	68	1008	52	1012	60

Part L

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

MAX UNIFIED GLARE RATING

10° OPTIC NO LENS	15° OPTIC SOFT FOCUS LENS	20° OPTIC SOFT FOCUS LENS	25° OPTIC SOFT FOCUS LENS	40° OPTIC SOFT FOCUS LENS	60° OPTIC SOFT FOCUS LENS	85° OPTIC WIDE DISTRIBUTION	WW OPTIC WALLWASH LENS
<10	>19	<13	<13	<16	>19	>19	>19

*UGR VALUES REFLECT WHITE BAFFLE AND 21 WATTS, LOWER UGR VALUES AVAILABLE WITH DIFFERENT FINISHES AND LOWER WATTAGES.

OUTPUT MULTIPLIER

CCT	CCT SCALE
2400K	0.85
2700K	0.97
3000K	1.00
3500K	1.03
4000K	1.08

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

MEDIA LIGHT LOSS FACTOR

MEDIA	LIGHT LOSS FACTOR
NO LENS	1.06
CGL	1.00
SFL	1.00
FGL	0.89
FSFL	0.81
FLSL	0.82

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WARM DIM PERFORMANCE - 20° OPTIC - SOFT FOCUS LENS

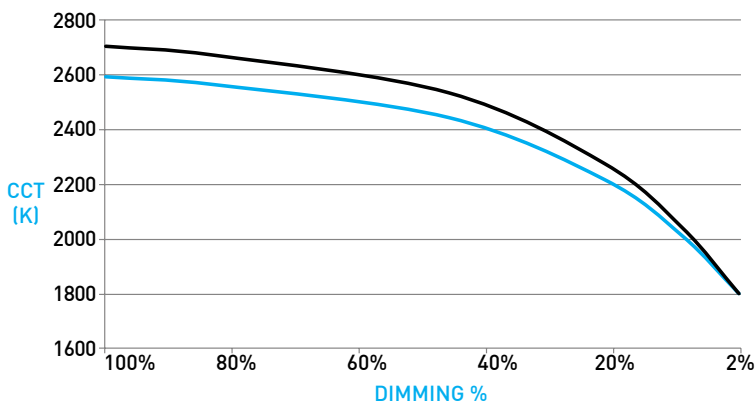
INCANDESCENT PROFILE

90W10AL 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)	757	605	529	378	151	75	15
Power (W)	10	8	7	5	2	1	.2
Efficacy (LPW)	69	69	69	69	69	69	69
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	2620	2520	2180	1950	1800
Light Output (Lm)	1046	836	732	523	209	104	20
Power (W)	15	12	10.5	7.5	3	1.5	0.3
Efficacy (LPW)	70	70	70	70	70	70	70

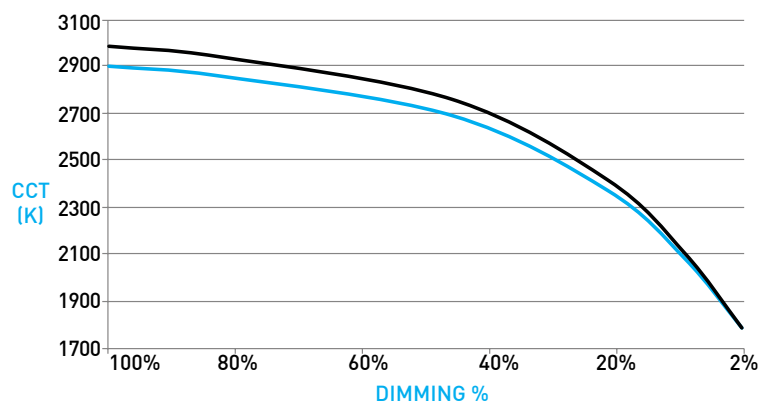
HALOGEN PROFILE

90W10AD 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)	766	612	536	383	153	76	15
Power (W)	10	8	7	5	2	1	.2
Efficacy (LPW)	70						
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)	1071	856	749	535	214	107	21
Power (W)	15	12	10.5	7.5	3	1.5	0.3
Efficacy (LPW)	71	71	71	71	71	71	71

10W / 15W



10W / 15W



NOTE: LIN-TO-LIN 0-10V PAIRING NOT COMPATIBLE WITH WARM DIM.

FRAXION3 INTERNATIONAL SHALLOW REGRESS

DOWNLIGHT FITTING

A ADJUSTABILITY

Hot-aim tilt up to 40° and 361° rotation with Philips screwdriver, features 5° tilt increment indicators. Sliding pivot point optimizes center beam, ensuring unclipped beam of 15° at 40° tilt and 25° at 30° tilt.

B RETENTION

Integrated metal arm clamps located within fixture body allow discreet flange design, while accommodating varying ceiling thicknesses from 6mm to 38mm. Snap-on spacer clips (2X) supplied for ceiling thickness below 13 mm only.

C OPTIC

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

D 10° FIELD REDUCER

Provided with 10° optic. Pairs Soft Focus Lens, Field Reducer, and Honeycomb Louver to deliver tight 10° beam while reducing field angle by 30%.

E ADJUSTABLE HCL ASSEMBLY

Honeycomb Louver and Soft Focus Lens attach directly to optic with clip-on lens retainer and adjusts with fixture. Only compatible with no lens baffle. Dry/Damp locations only. Specified as "HS" Effects Device

F MICROFLANGE PROFILE

Provides industry standard 11mm total contractor (goof) allowance with 7mm flange. Thickness measures 1.5mm. IP64 Wet location features integral silicone gasket.

G TRIMLESS GYPSUM PROFILE

Installs totally flush with the ceiling with no visible trim. Features integrated appliqué for plaster floating directly to the baffle. Not recommended for stucco applications.

H EFFECTS DEVICES / LENS RETAINER

Fixture is limited to 1 effects device installed on the baffle, see Section E for Adjustable HCL assembly. Wet location effects device is sealed in place on baffle, suction tool provided for removal of baffle. Lens retainer allows effects devices to be changed in Dry /Damp locations.

I ROUND / SQUARE BAFFLE

Die-cast removable baffle provides easy access to adjustment mechanisms for tilt and rotation. Features 64° glare cutoff, minimizing aperture glare and concealing view into housing. Includes gasket, mitigating light leak.

SQUARE TRANSITIONAL BAFFLE

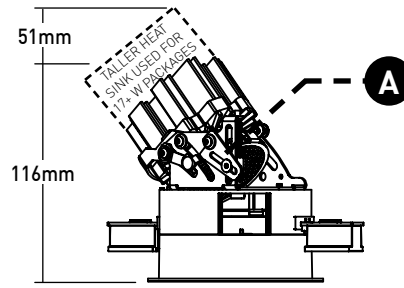
Transitions from square aperture at ceiling to round aperture at light source. Die-cast removable baffle provides easy access to adjustment mechanisms for tilt and rotation. Features 64° glare cutoff, minimizing aperture glare and concealing view into housing. Includes gasket, mitigating light leak.

J WALLWASH BAFFLE / MEDIA

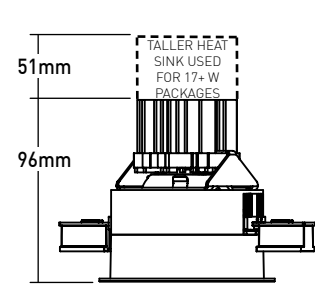
Die-cast baffle with angled wide aperture for enhanced uniformity. Features asymmetrical spread lens, sealed in place, combined with auxiliary reflector for optimum performance. Includes gasket, mitigating light leak, and Suction Tool to accommodate baffle removal.

DIMENSIONS / DRAWINGS

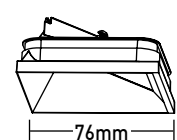
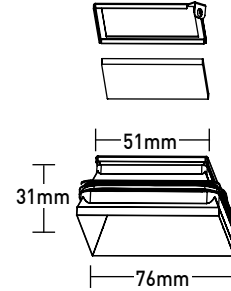
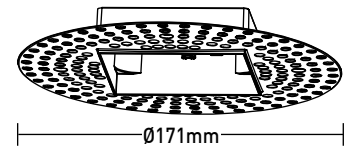
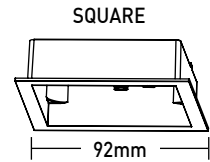
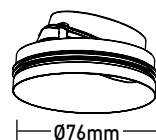
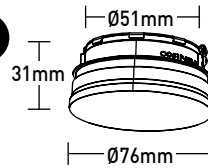
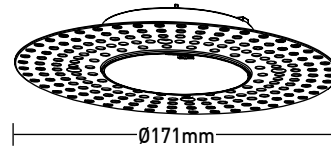
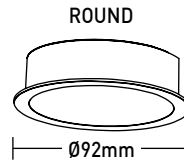
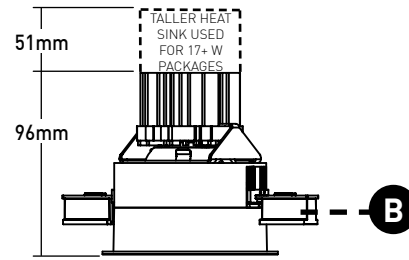
ADJUSTABLE SHALLOW REGRESS



FIXED SHALLOW REGRESS



WALLWASH



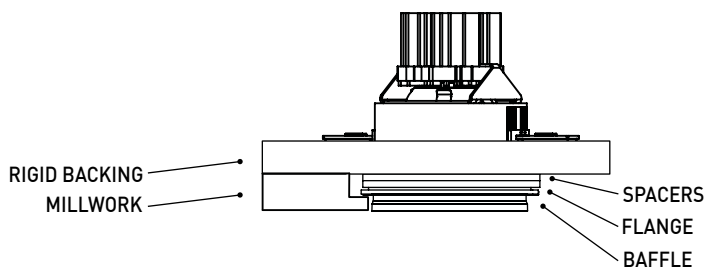
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DOWNLIGHT FITTING

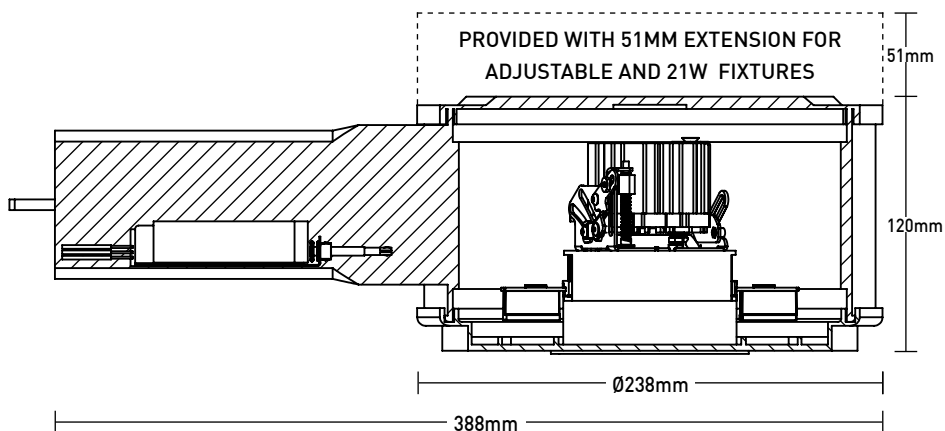
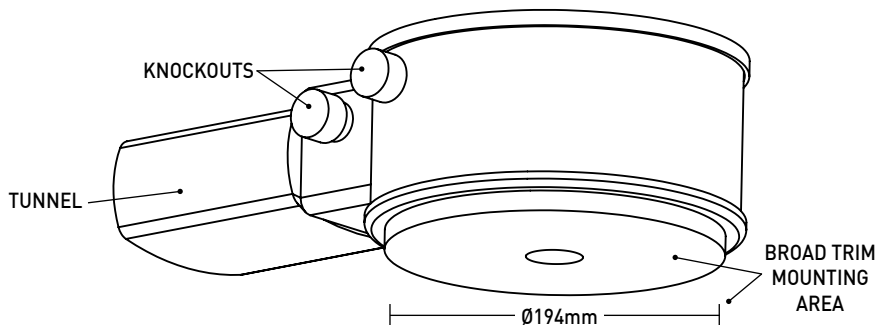
- K TRIMLESS MILLWORK PROFILE / SPACERS**
No visible flange, installs totally flush with millwork. Requires rigid backing for installation. Includes (1) 1.5mm spacer and (5) 3mm spacers.
- L CONCRETE POUR HOUSING / PROFILE**
 - Provided with install types "KC and KR".
 - Ships separate from downlight and power supply.
 - Features 4 conduit entries compatible with 20mm and 25mm ENT. Includes tunnel to accommodate installation of power supply.
 - Includes tunnel to accommodate installation of power supply.
 - Features broad mounting tolerance area for trim location.

DIMENSIONS / DRAWINGS

K



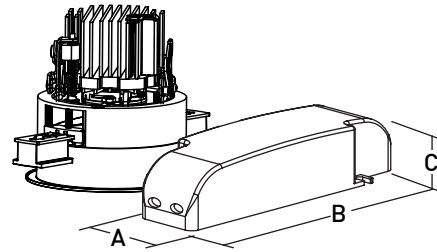
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POWER SUPPLY

- M** **FITTING WITH NON-IC TETHERED POWER SUPPLY**
- Requires 86mm cutout.
 - Features quick-connect plug between fitting and power supply.
 - Minimum 19mm 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 downlight fitting assembly.
 - Minimum additional 152mm setback from polycell spray foam insulation with max R-Value 60 from any surface of downlight 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).



POWER SUPPLY DIMENSIONS			
Model	A	B	C
IG1	41mm	210mm	34mm
IN1			
ID1			
MD2	43mm	150mm	26mm

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TECHNICAL

CONSTRUCTION

Downlight: Painted finishes are granulated powder coat. Forged aluminum heat-sink.

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 temperature 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 ranges of 1800K to 4000K and 2700K to 5000K. Average rated lamp life of 50,000 hours. LED and driver assemblies are field-replaceable.

POWER SUPPLY PERFORMANCE AND DIMMING INFORMATION

Power Supply	0-10V		DALI-2	
	IG1	IN1	ID1	MD2
Minimum °C	-20 °C	-20 °C	-20 °C	-40 °C
Maximum °C	40 °C	40 °C	40 °C	40 °C
Dimming %	0.1%	0.1%	0.1%	0.1%

Note: For IG1 and IN1 drivers consult chart on page 9 to confirm appropriate dimming curve for compatibility with selected control.

MAXIMUM ALLOWABLE REMOTE DRIVER WIRING DISTANCES

DRIVER	WIRE AWG				
	12	14	16	18	20
IG1, IN1, ID1	-	-	118'	72'	46'

WALLWASH SPACING

Recommended fixture spacing is 36" (914mm) on center with 36" (914mm) setback from wall plane.

LISTING

CE Listed for IP20 Dry / Damp and IP64 Wet locations. NEMA 410 Compliant.

DECLARE

LBC Red List Approved.

WEIGHT

Fixture - 3 lbs max
Remote 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.](#)



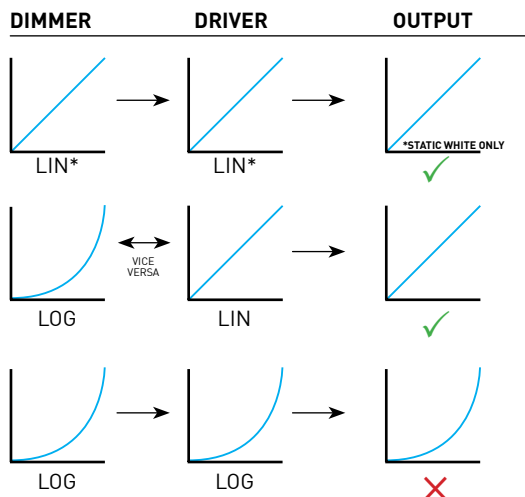
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DIMMING COMPATIBILITY

eldoLED DRIVER COMPATIBILITY

Power supply IG1 Manufacturer	Family/Model #
Busch-Jaeger	2112U-101
Jung	240-10
Leviton Lighting Controls	IP710-DLX
Lightolier Controls	ZP600FAM120
Merten	5729
Pass & Seymour	CD4FB-W
The Watt Stopper	DCLV1
Synergy	ISD BC
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
Power supply IN1	Family/Model #
Lutron Electronics	Nova T® - NTFTV
Lutron Electronics	Diva® - DDTV
Lutron Electronics	Nova® - NFTV
Lutron Electronics	GrafixEye® GRX-TVI w GRX3503
Lutron Electronics	Energy Savr Node™ - QSN-4T16-S
Lutron Electronics	TVM2 Module
Sensor Switch	nIO EZ
ABB	SD/S 2.16.1

ANALOG DRIVERS AND DIMMERS



LIN = LINEAR
 LOG = LOGARITHMIC
 *LIN-TO-LIN NOT COMPATIBLE FOR WARM-DIM