# FRAXION®3 INTERNATIONAL

**DEEP REGRESS** 

Lots of light in a deep profile featuring high performance adjustability and a range if finish and installation options.

PROJECT NAME:	TYPE:





## **ORDERING INFORMATION - DOWNLIGHT FITTING**

## PRELIMINARY - SUBJECT TO CHANGE

!	SHAPE	RATING	TYPE	FINISH	BAFFLE FINISH	CRI	WATTAGE	ССТ	OPTIC (UGR)	MEDIA	INSTALL TYPE	CEILING THICKNESS	DRIVER
											EX	1	
F3RD F3SD F3TD	Square Deep Regress	Dry/Damp	A Adjust- able F Fixed	AG Satin Silver AU Cashmere Gold BB Burnt Bronze BK Black PR Primer	POWDERCOAT  WH White  AG Satin Silver  AU Cashmere Gold  BB Burnt Bronze  BK Black  PR Primer  CF Custom Finish*  * (Consult Factory)	STATIC WHITE 80S 80+ 90S 90+ 97S 97+	STATIC WHITE  06A 06W - 630 Lm  11A 11W - 1013 Lm  15A 15W - 1369 Lm  15C 15W - 539 Lm*  "(For use with 10" optic only)  21A 21W - 1848 Lm	24 2400K* *(90+CRI 11W and 15W only) 27 2700K 30 3000K 35 3500K 40 4000K	* (15C package only) 15 15° (<16) 25 25° (<13)	STANDARD MEDIA  04 Soft Focus Lens  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)	EX Export	1 0.125" - 1.00"	UNIVERSAL (120-277V)  IG eldoLED,
				TRIMLESS TG Trimless Gypsum 1/16" TM Trimless Millwork		<b>WARM DIM 90W</b> 90+	WARM DIM 90W10A 90+ CRI, 10 Watts 90W15A 90+ CRI, 15 Watts Incandescent Profile 11W Lumens Dlvd 454 15W Lumens Dlvd 635 HalogenProfile 11W Lumens Dlvd 460 15W Lumens Dlvd 644 SEE PAGE 4 FOR DETAILED WARM DIM PROFILE COMPARISON.	<b>WL</b> 2700K - 1800K <b>WD</b> 3000K - 1800K	media)	Focus Lens  06 Frosted Linear Spread Lens  07 Wide Distribution Lens*  * Required and only available for 85° optic)  HS Adjustable			SOLOdrive O.1% DALI-2, LOG  EX eldoLED, POWERdrive O.1% DMX, LOG  TUNABLE WHITE POWER SUPPLIES (120-277V)  DD eldoLED, DUALdrive O.1% DALI-2, LOG
						TUNABLE WHITE 90T 90+	TUNABLE WHITE  17A 17W  Cool Profile: 5000K - 2700K 763 Lm  Warm Profile: 4000K - 1800K 765 Lm  LUMEN DELIVERED OUTPUTS REFLECT 80+ CRI/3000K PAIRED WITH 50° OPTIC AND SOFT FOCUS LENS	TH 5000K - 2700K TR 4000K - 1800K	15 15° (-16) 25 25° (-13) 35 35° (-13) 50 50° (-13) 80 80°* (-19) * (Requires -7 WDL media)  SEE PAGE 3 FOR UGR RATINGS	Honeycomb Louver and Soft Focus Lens * * (Not available for IP64 Wet Location, fixed fit- Volume or Warm Dim) NL No Lens * *(Standard with 10° optic. Not available for IP44 Wet Location, or Warm Dim)			NO DRIVER  NOD No Driver, Supplied by Others. Confirm drive current information on page 4, for selected CRI / Wattage package.

## **PART NUMBER NOTES**

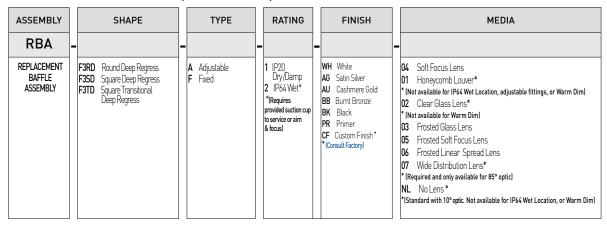
- Fixture as e.g., F3RD1AWHBK90S21A30354EX1IG1
- Driver ships with fitting



## **ACCESSORIES**

IP20 Dry / Damp l	TIONAL DEEP REGRESS ALTERNATE MEDIA ocation only. requires alternate baffle.	<b>SQUARE DEEP REGRESS MEDIA</b> IP20 Dry / Damp location only. IP64 Wet location requires alternate baffle.					
☐ CGL-F3R-2	Clear Glass Lens* *(Not available for Warm Dim)	□ CGL-F4S-2	Clear Glass Lens* *[Not available for Warm Dim]				
☐ FGL-F3R-2	Frosted Glass Lens	☐ FGL-F4S-2	Frosted Glass Lens				
☐ SFL-F3R-2	Soft Focus Lens	☐ SFL-F4S-2	Soft Focus Lens				
☐ FSFL-F3R-2	Frosted Soft Focus Lens	☐ FSFL-F4S-2	Frosted Soft Focus Lens				
□ WDL-F3R-2	Wide Distribution Lens*	□ WDL-F4S-2	Wide Distribution Lens*				
	*(Required and only available for 85° beam spread)		*(Required and only available for 85° beam spread)				
☐ FLSL-F3R-2	Frosted Linear Spread Lens	☐ FLSL-F4S-2	Frosted Linear Spread Lens				

## REPLACEMENT BAFFLE ASSEMBLY (INCLUDES MEDIA)



#### **DEEP REGRESS REPLACEMENT OPTICS**

Interchangeable optics accessible through fixture aperture.

STATIC W	HITE	WARM DIM	TUNABLE WHITE				
□ R0-35-15-S □ R0-35-25-S □ R0-35-40-S □ R0-35-60-S	25° optic 35° optic	□ R0-35-25-W 25° optic □ R0-35-35-W 35° optic □ R0-35-50-W 50° optic	□ RO-35-15-T 15° optic □ RO-35-25-T 25° optic □ RO-35-35-T 35° optic □ RO-35-50-T 50° optic				

## REPLACEMENT SUCTION TOOL

One included with every six fixtures designated Wet location.

☐ **F4-T00L-SUCTION** Allows for removal of baffle with Wet location

pg. 2



# PERFORMANCE - 3000K

LUMEN	WATT-	10° C NO SOFT FO	PTIC DCUS LENS	15° C SOFT FOO	PTIC CUS LENS		OPTIC CUS LENS		PTIC CUS LENS		PTIC CUS LENS		OPTIC CUS LENS
PACKAGE	AGE	DLVD	LPW	DLVD	LPW	DLVD	LPW	DLVD	LPW	DLVD	LPW	DLVD	LPW
80S06A	06	-	-	613	102	594	99	560	93	630	105	479	80
80S11A	11	-	-	986	90	955	87	900	82	1013	92	771	70
80S15A / C	15	539	49	1333	89	1291	86	1216	81	1369	91	1042	69
80S21A	21	-	-	1799	86	1743	83	1642	78	1848	88	1406	67
90S06A	06	-	-	527	88	510	85	481	80	541	90	412	69
90S11A	11	-	-	847	77	821	75	773	70	870	79	662	60
90S15A / C	15	463	31	1145	80	1109	77	1045	73	1176	82	895	63
90S21A	21	-	-	1546	74	1497	71	1411	67	1588	76	1208	58
97S06A	06	-	-	462	77	448	75	422	70	475	79	378	63
97S11A	11	-	-	744	68	721	66	679	62	764	69	608	55
97S15A / C	15	399	27	1005	67	974	65	918	61	1033	69	821	55
97S21A	21	-	-	1357	65	1314	63	1239	59	1394	66	1109	53
90W10A (27K-18K)	10	-	-	-	-	563	51	531	48	597	54	475	43
90W10A (30K-18K)	10	-	-	-	-	570	52	537	49	605	55	481	44
90W15A (27K-18K)	15	-	-	-	-	787	52	742	49	835	56	664	44
90W15A (30K-18K)	15	-	-	-	-	798	53	752	50	847	56	673	45
90T17A (50K-27K)	17	-	-	976	57	945	56	890	52	1002	59	797	47
90T17A (40K-18K)	17	-	-	979	58	948	56	893	53	1005	59	800	47

#### UNIFIED GLARE RATING

10° OPTIC NO LENS	15° OPTIC SOFT FOCUS LENS	20° OPTIC SOFT FOCUS LENS	35° OPTIC SOFT FOCUS LENS	50° OPTIC SOFT FOCUS LENS	80° OPTIC WIDE DISTRIBUTION
<13	<16	<13	<16	<13	>19

### OUTPUT MULTIPLIER

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

### TUNABLE WHITE MULTIPLIER

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				

### 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

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

## WARM DIM PERFORMANCE - 50° OPTIC - SOFT FOCUS LENS

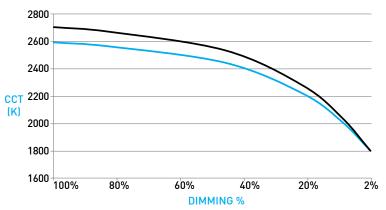
#### INCANDESCENT PROFILE

90W10AL 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)	2600	2550	2520	2450	2200	1925	1800	
Light Output (Lm)	597	477	417	298	119	59	12	
Power (W)	10	8	7	5	2	1	.2	
Efficacy (LPW)	54	54 54		54 54		54	54	
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)	835	668	584	417	167	83	16	
Power (W)	15	12	10.5	7.5	3	1.5	0.3	
Efficacy (LPW)	56	56	56	56	56	56	56	

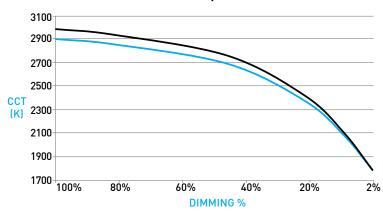
#### HALOGEN PROFILE

90W10AD 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)	2900	2850	2800	2720	2350	1975	1800
Light Output (Lm)	605	483	423	302	121	60	12
Power (W)	10	8	7	5	2	1	.2
Efficacy (LPW)	55	55	55	55	55	55	55
90W15AD 3000K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
3000K - 1800K	100%	to 80%	to 70%	to 50%	to 20%	to 10%	to 2%
3000K - 1800K CCT (K)	100% 3000	to 80% 2950	to 70% 2920	to 50% 2775	to 20% 2375	to 10% 2000	to 2% 1800





## 10W / 15W



## **DRIVE CURRENT SPECIFICS**

	80S					90S				97S					90W		90T	
	06A	11A	15A / C	21A	30B	06A	11A	15A / C	21A	30B	06A	11A	15A / C	21A	30B	10A	15A	17A
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	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
Current mA	150	250	350	500	700	150	250	350	500	700	150	250	350	500	700	250	350	400
Wattage W	8.2	8.2	11.8	17.4	25.4	8.2	8.2	11.8	17.4	25.4	8.2	8.2	11.8	17.4	25.4	8.2	11.8	13.6

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## **DOWNLIGHT FITTING**

### **A** ADJUSTABILITY

Hot-aim tilt up to 40° and 361° rotation with 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 7mm to 32mm. Snap-on spacer clips (2X) supplied for ceiling thickness below 13mm only.

## MICROFLANGE PROFILE

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

## **1** TRIMLESS GYPSUM PROFILE

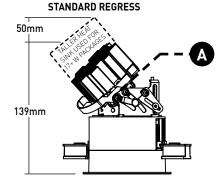
Installs totally flush with the ceiling with no visible trim. Features integrated appliqué for plaster floating directly to the baffle. Not recommended for stucco applications.

### ■ TRIMLESS MILLWORK PROFILE / SPACERS

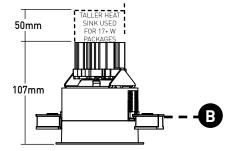
Provided for Trimless Millwork installations; includes (1) 1/16" spacer and (5) 1/8" spacers.

## **DIMENSIONS / DRAWINGS**

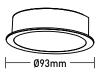
# ADJUSTABLE

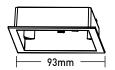


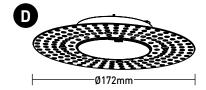
### FIXED STANDARD REGRESS

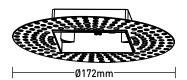


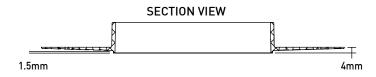


















## **DOWNLIGHT FITTING**

#### OPTIC

Robust light engine with optimized optic pairing integrates Reflection, Refraction, and TIR offering 10°, 15°, 25°, 35 & 50° beams.

## **6** 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. IP20 Dry/Damp locations only. Specified as -HS Effects Device

## MEDIA / LENS RETAINER

ADJUSTABLE / FIXED: Fixture is limited to 1 effects device. IP64 Wet location effects device is sealed in place. Suction tool provided for removal of baffle with wet location. Lens retainer allows effects devices to be changed in IP20 Dry /Damp locations.

## ■ ROUND / SQUARE BAFFLE

Die-cast removable baffle provides easy access to tilting mechanism and features 40° glare cutoff. Minimizes aperture glare and conceals view into housing; includes gasket.

### **1** TRANSITIONAL BAFFLE

Die-cast removable baffle provides easy access to tilting mechanism and features 40° glare cutoff. Transitions from square aperture at ceiling plane to round aperture at light source. Minimizes aperture glare and conceals view into housing; includes gasket.

## **CLEARANCE / POWER SUPPLY**

#### 

- Requires 86mm diameter cutout.
- Tethered power supply protected wiring and quickconnect plug between fitting and power supply.
- Minimum 19mm clearance from top of fitting.
- Minimum setback from combustible and noncombustible 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).

## **DIMENSIONS / DRAWINGS**









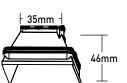




Ø77mm

77mm

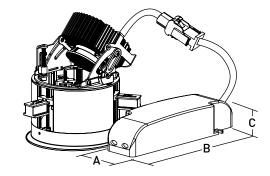




46mm







POWER SUPPLY DIMENSIONS							
Model	A	В	С				
IG							
IN			34mm				
EG	41mm	210mm					
EN							
ED							
EX	76mm	152mm	30mm				
DD	76mm	130mm	30mm				

## **TECHNICAL**

#### CONSTRUCTION

Downlight Fitting: Aluminum and steel. Extruded aluminum heat-sink. Painted finishes are granulated powder coat.

Remote Power Supply: 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 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

	0-10V			DALI-2			DMX	
Power Supply	AN3	LN1	EA1	LA1	ED1	LD1	DD1	EX1
Minimum °C	-20 °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	40 °C
Dimming %	1.0%	1.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

Note: For IG, IN, EG and EN drivers consult chart on page 8 to confirm appropriate dimming curve for compatibility with selected control.

#### LISTING

To be CE listed for IP20 Dry / Damp and IP64 Wet locations. Patent Pending.

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

## WEIGHT

Fitting - 2.8 lbs max

Driver - 0.4 lbs

#### LIMITED WARRANTY

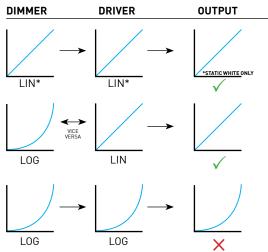
Manufacturer's Limited Warranty guarantees product(s) listed to be free from defects in material and workmanship under normal use and service for 1-year. LED and power supplies are warranted to operate with 70% of original flux and remain within a range of 3 duv for a period of 5-years. 10-year Lutron 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.

## **DIMMING COMPATIBILITY**

## eldoLED DRIVER COMPATIBILITY

EG / EN /IG / IN Drivers 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				
EG / EN /IG / IN Drivers Dimmer / Switch Control Manufacturer	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				

## **ANALOG DRIVERS AND DIMMERS**



LIN = LINEAR

LOG = LOGARITHMIC

\*LIN-TO-LIN NOT COMPATIBLE FOR WARM-DIM OR TUNABLE WHITE

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