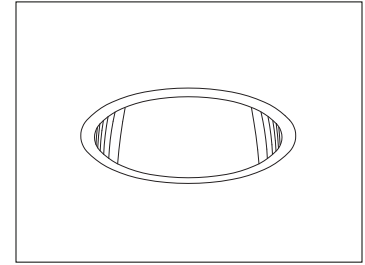


CATALOG #	TYPE	
JOB NAME	WATTAGE	VOLTAGE

4" 1 Triple 32 WATT MAXIMUM

FRR-04001

Inconspicuous Open Downlight with Super Narrow Recessed Housing



Features

Lamp

- Designed for one compact fluorescent lamp: 32/26W triple.

Ballast: Multi-Wattage/Voltage

- Installed electronic high power factor, thermally protected. For lower wattage: Option -18.
- 120-277 multi-voltage; 50/60 Hz. HD-110.
- ClickQuick connectors for easy service.
- Cold weather -20°F (-30°C).
- End of lamp life protection circuit. RFI filter. T
- Internally fused. Also see Option -FS.

Reflector

- Low iridescence (L.I.) Alzak® aluminum one piece, self-flanged.
- See Options for other finishes.

Aluminum Housing: Only 7" Wide

- Acrylic enameled. Rustproof: Exceeds 1000 hour ASTM 5% salt spray test.

- Lightweight: Minimizes ceiling load.
- Cool operation: Extends component life.
- Entire luminaire serviced through aperture.

Built-in Protection

- Air Tight design. See Option -AT.

Outlet Box

- Prewired 14 GA (NEC) galvanized steel, UL listed, 1/2" and 3/4" knockouts.

Installation

- Legal mechanical access available. Mounting back (2) supplied.
- Recesses indoor or outdoor in covered locations.

UL C-UL (Canada) Listings

- UL Type, lamp dry location, surface ceiling type, type approved for duct, and insulation.

Through-branch conductors (6 #12)

Free Rear Limited Warranty

- Complete standard finish and ballast.

Recessed Round
Open
Single Reflector
Type IC

Selected Optional Trims:

- Glow Ring Option -33
- SoTex Dune Option -71
- SoTex Gold Option -90
- SoTex Wheat Option -91

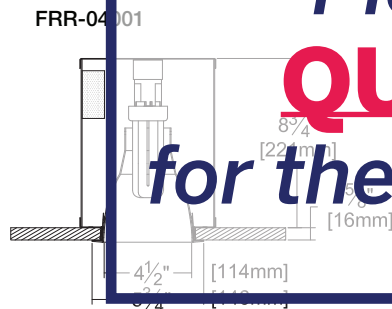
THIS PRODUCT IS NO LONGER AVAILABLE

Performance at a Glance

Please consult

QUOTATIONS

for the best alternative.



Ceiling Cut-out
5" Dia.

FRR-04001 (1 Triple 32W)

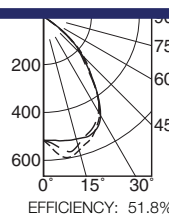


Cone of Light*

Dist.	FC	Dia.
6	16.6	7.7
8	9.4	10.3
10	6.0	12.9
12	4.2	15.4
14	3.1	18.0
16	2.3	20.6

---	0° SC	1.3
---	45° SC	1.3
---	90° SC	1.3

FRR-04001 (1 Triple 26W)



Cone of Light*

Dist.	FC	Dia.
6	14.3	7.8
8	8.1	10.4
10	5.2	12.9
12	3.6	15.5
14	2.6	18.1
16	2.0	20.7

---	0° SC	1.3
---	45° SC	1.3
---	90° SC	1.3

Cone of Light Key

- Ft. Distance from fixture
- FC Footcandles at nadir (0°)
- Dia. Circle of light at 50% of FC
- * Dia. (in ft.) shown is where FC value is half the FC at nadir.

THE KIRLIN COMPANY

3401 EAST JEFFERSON AVENUE • DETROIT, MICHIGAN 48207-4232
(313) 259-6400 • Fax: (313) 259-9409 OR (313) 259-3121 • www.kirlinlighting.com

RENAISSANCE SERIES
COMPACT FLUORESCENT LIGHTING

MAXIMUM WATTAGE

1 Triple 32

CATALOG NUMBER

FRR-04001

DUE TO OUR CONTINUING EFFORT TO IMPROVE PRODUCTS, TECHNICAL INFORMATION IS SUBJECT TO CHANGE WITHOUT NOTICE.

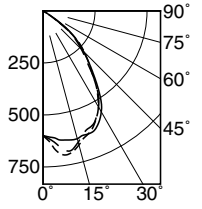
Alzak® is a registered trademark of ALCOA.

Detailed Photometry - Installed Fixture

Photometry from I.T.L., Boulder, CO

FRR-04001 (1 Triple 32)

FRR-04001 (1 Triple 26)



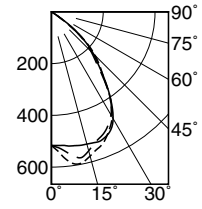
	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	599	599	599	599	599
5	669	653	634	615	612
15	667	680	653	627	636
25	591	614	588	611	613
35	448	470	451	458	467
45	281	280	261	264	274
55	73	81	80	103	104
65	3	3	3	3	3
75	2	2	2	2	2
85	0	0	0	0	0
90	0	0	0	0	0

RF	COEFFICIENTS OF UTILIZATION						
	20						
	80		50		10		
RC	70	50	30	10	50	30	10
1	52	50	49	48	47	46	46
2	49	46	44	42	44	42	40
3	45	42	39	37	40	38	36
4	42	38	35	33	37	34	32
5	40	35	32	29	34	31	29
6	37	32	29	27	31	28	26
7	35	30	26	24	29	26	24
8	33	27	24	22	27	24	22
9	31	25	22	20	25	22	20
10	29	24	21	18	23	20	18

ITL TEST #54822 *LER=30.7 •AEC=\$7.81

EFFICIENCY : 46.0%

--- 0° SC 1.3
--- 45° SC 1.3
--- 90° SC 1.3



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	516	516	516	516	516
5	566	547	537	521	518
15	577	581	556	526	529
25	517	538	501	516	520
35	390	424	391	399	392
45	239	249	216	228	229
55	46	61	42	73	58
65	1	2	1	2	2
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

RF	COEFFICIENTS OF UTILIZATION						
	20						
	80		50		10		
RC	70	50	30	10	50	30	10
1	58	57	55	54	53	52	51
2	55	52	49	47	49	47	46
3	51	47	44	42	45	43	41
4	48	43	40	37	42	39	37
5	45	40	36	33	38	35	33
6	42	37	33	30	35	32	30
7	39	34	30	27	33	29	27
8	37	31	27	25	30	27	25
9	35	29	25	23	28	25	23
10	33	27	23	21	26	23	21

ITL TEST #54937 *LER=35.4 •AEC=\$6.78

EFFICIENCY : 51.8%

--- 0° SC 1.3
--- 45° SC 1.3
--- 90° SC 1.3

* LER = Luminaire Efficiency Rating

$$LER = \frac{\text{Luminaire Effic.} \times \text{Total Lamp Lumens} \times \text{Ballast Factor}}{\text{Input Watts}}$$

• AEC = Annual Energy Cost per 1000 lumens (based on 3000 hours use @ \$0.08 KWH).

Options

Ballast, Wattage and Voltage

- 39 Installed electronic dimming ballast. Not Type IC listed. Indoor use. 10°C (50°F) minimum start. Specify wattage, voltage and brand.
- 43 Lower wattage: for either 4-pin electronic 18W triple/quad or 13W quad (only). Specify wattage.
- 97 Specify other voltage. Consult factory.
- 98 347 volt, 50/60 Hz. input. Consult factory.

Emergency Ballast - Specify Voltage¹

Internal (factory installed) ballast, test switch and indicator light. Suitable for damp locations from 0° to 50°C (32° to 122°F) or with Cold Weather

- version (see -CE) -20° to 55°C (-4° to 131°F).
- 73 Internal 1-lamp EM ballast. Specify voltage.
- CE Internal cold weather (-20° to 55°C) 1-lamp EM ballast. Specify voltage.
- HE¹ Internal higher lumen (up to 1250) 1-lamp EM ballast. 13-42W only. Specify voltage.

Trims

- 31 White acrylic enameled reflector flange.
- 32 White oversize trim ring. Specify O.D.
- 45 Gasket between ceiling and reflector flange.
- 70 SofTex Clear reflector. (CP x .89)
- 71 SofTex Dune reflector. (CP x .85)
- 79 Extension collar for ceilings up to 2" thick.
- 90 SofTex Champagne Gold reflector. (CP x .88)

- 91 SofTex Wheat reflector. (CP x .83)
- 94 Custom color/finish. Specify. Consult factory.

Top Access

- TA Top access for servicing from above.

Other

- 99 Special modification. Consult factory.
- AT Air tight with Type IC. Meets / exceeds ASTM E283 restricted airflow of 2 CFM maximum.
- FS Additional in-line fuse. Not available with Option -98 (347V).
- LE With 4-pin electronic lamp. 3500°K standard. 82 CRI and 12,000 hour life. Specify wattage, style and color temperature.

¹ Visit www.kirlinlighting.com for most current performance / specifications.

SUBMITTAL DATA

APPROVAL STAMP

JOB NAME _____
 TYPE _____
 WATTAGE _____ VOLTAGE _____
 CATALOG NUMBER _____

LIMITED WARRANTY: CATALOGED KIRLIN FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR THREE YEARS FROM DATE OF PURCHASE. INSTALLATION TO N.E.C. IN NORMAL USE. Manufacturer at this option will replace or repair such fixture or refund the purchase price on presentation of proof of purchase and defective fixture at the office of manufacturer within three years of original shipment. Liability of manufacturer is limited to the foregoing, and manufacturer shall not be liable for any other damages, direct or indirect, sustained or suffered or repair, or modification of the fixture without prior written authorization from the manufacturer. This warranty is void where prohibited by law. Abnormal use, abuse of the fixture, improper installation, or modification of the fixture without prior written authorization from the manufacturer will render the warranty void.