

10" x 10" 2 Triple 57 WATT MAXIMUM

FRS-10109

Versatile 2 Lamp "K" Lens Downlight

Features

Lamp

- Designed for two 4-pin triple/four tube amalgam compact fluorescent lamps: 57W triple/four tube.

Ballast: Multi-Voltage

- Installed electronic high power factor ballast protected. For lower wattages: Option -13.
- 120-277 multi-volt; 50/60 Hz. THD < 10%.
- ClickQuick connectors for easy service.
- Single circuit wiring or see Option -84.
- Cold weather -22°F (-30°C).
- End of lamp life protection circuit. RFI filter.
- Internally fused. Also see Options -15, -16.

Reflector

- GlasSurface™ multi-faceted specular aluminum.

Trim Assembly

- Shock-resistant, UV absorbing prismatic lens.
- Widespread Kirlin lens. See Options for other lens.
- Rustfree polished nickel stainless steel (304 L).
- and captive thumb screw. Concealed hinges for fast relamping.

- Attractively developed aluminum housing to ensure a seal with the acrylic lens.

Aluminum Housing

- Acrylic enameled. Rustproof: Exceeds 1000 hour.
- Absorbs 5% salt spray.
- Lightweight; minimizes ceiling load.
- Only operating methods prolong life.
- Ensure secure service through replace.
- Built-in plaster frame.

Outlet Box

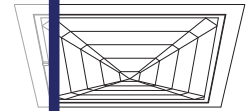
- Prewired 14 GA (NEC) galvanized steel, UL listed.
- 1/2" and 3/4" knockouts.

Installation

- Galvanized mounting plate with adjustable mounting brackets (2) supplied.
- Recesses indoor or outdoor in covered locations.
- UL, -UL and listing.
- Volt, or any means of ceiling.
- Through branch conductors (3 in 2).

Three Year Limited Warranty

- Complete standard fixture and ballast.



Recessed Square
Kirlin Lens

Selected Optional Lens:

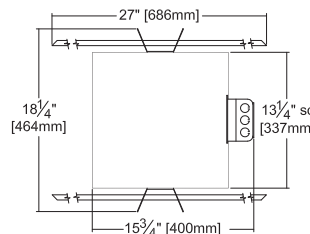
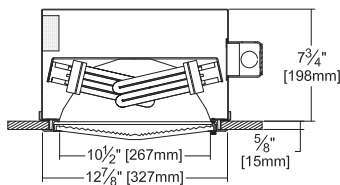
- Tempered Prismatic C#73
- Option -15

**THIS PRODUCT
IS NO LONGER
AVAILABLE**

**Please consult
QUOTATIONS
for the best alternative.**

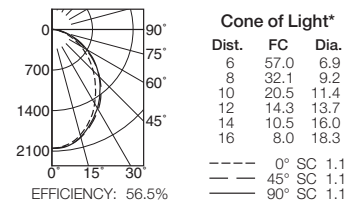
Performance at a Glance

FRS-10109



Ceiling Cut-out
12 1/4" Sq.

FRS-10109 (2 Triple 57W)



Cone of Light Key

- Ft. Distance from fixture
- FC Footcandles (average)
- 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

2 Triple 57

CATALOG NUMBER

FRS-10109

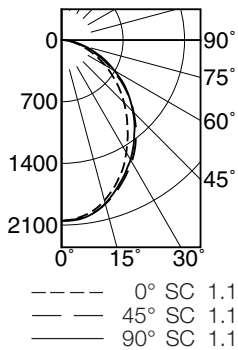
DUE TO OUR CONTINUING EFFORT TO IMPROVE PRODUCTS, TECHNICAL INFORMATION IS SUBJECT TO CHANGE WITHOUT NOTICE.

Alzak® is a registered trademark of ALCOA.

Detailed Photometry - Installed Fixture

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

FRS-10109 (2 Triple 57)



EFFICIENCY : 56.5%

CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	2052	2052	2052	2052	2052
5	2028	2030	2038	2045	2047
15	1885	1912	1926	1926	1920
25	1633	1684	1714	1710	1691
35	1314	1397	1464	1445	1434
45	1006	1101	1161	1152	1149
55	709	794	834	842	861
65	441	493	516	534	553
75	220	243	251	267	280
85	68	77	74	85	91
90	25	24	24	27	33

COEFFICIENTS OF UTILIZATION							
RF	20						
RC	80						
RW	70	50	30	10	50	30	10
1	62	59	57	55	56	54	52
2	56	52	48	45	49	46	44
3	52	46	42	38	43	40	37
4	48	41	36	33	39	35	32
5	44	37	32	28	35	31	28
6	41	33	28	25	32	28	25
7	38	30	25	22	29	25	22
8	35	28	23	20	27	23	20
9	33	26	21	18	25	21	18
10	31	24	19	16	23	19	16

ITL TEST #55739 *LER=36.3 •AEC=\$6.61

* 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. Indoor use. 10°C (50°F) minimum start. Specify wattage, voltage and brand.
- 43 Lower wattage. For 4-pin 2x42/32/26W triple or 2x26W quad (multi-wattage/voltage). Specify wattage.
- 84 Wired for two circuits. Also see -FD.
- 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.

Lenses and Trims

- 13 Vandal resistant tempered prismatic C#73 spread lens above 1/8" flat polycarbonate.
- 14 Drop opal glass diffuser.
- 15 Prismatic C#73 tempered glass lens.
- 18 Opal flat glass diffuser.
- 20 White aluminum 1/2" cube egg-crate louver.
- 26 Tamper-resistant button head recessed hex screw with center pin and 1 key / 10 fixtures.
- 32 White oversize trim extender. Specify size.

- 45 Gasket between ceiling and trim flange.
- 46 Gasket between trim and lens.
- 94 Custom color/finish. Specify. Consult factory.
- CF High temperature color filter. Specify color. For use with Options -13, -15, -18.
- DG Drop Guard with C#73 tempered lens.
- DH Drop Holophane tempered lens.
- UV UV filter. For use with Options -13, -15, -18. Consult factory.

Other

- 99 Special modification. Consult factory.
- FD Two additional in-line fuses. One per ballast. Use with Option -84. Not available with Option -98 (347V).
- 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 his option will replace or repair such fixture or refund the purchase price on presentation of proof of purchase and defective fixture at the offices 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 by purchaser or any person. This warranty is supplied to the buyer in place of all other warranties, expressed or implied. Seller does not warrant as to merchantability or fitness for a particular use, nor will any oral statement constitute a warranty or amend this specific warranty. Abuse of the fixture, improper installation, or repair, or modification of the fixture without prior written authorization from the manufacturer will render the warranty void.