

CATALOG #	TYPE	
JOB NAME	WATTAGE	VOLTAGE

9" 1 Triple 70 WATT MAXIMUM

FRR-09017

High Wattage Dual Reflector Downlight
See Options for Air-Tight with Type I

THIS PRODUCT IS NO LONGER AVAILABLE

Features

Lamp

- Designed for one 4-pin triple/four tube amalgam compact fluorescent lamp:
- 70W triple/four tube.

Ballast: Multi Voltage

- Installed electronic high power factor ballast protected. For lower wattages: Option -4.
- 120-277 multi-volt; 50/60 Hz. THD < 10%.
- ClickQuick connectors for easy service.
- Cold weather -22°F (-30°C).
- End of lamp life protection circuit. RFI filter.
- Internally fused. Also see Option -FS.

Reflector

- Upper: Specular Alzak® aluminum.
- Lower: Low-meridescence (L.I.) Alzak aluminum, one piece, self-flanged.
- See Options for other finishes.

Aluminum Housing

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

- Lightweight: Minimizes ceiling load.
- Cool operation. Extra responsive.
- EMI/RFI shielding through aperture.
- Built-in plastic trim.
- Available in 120V and 277V.

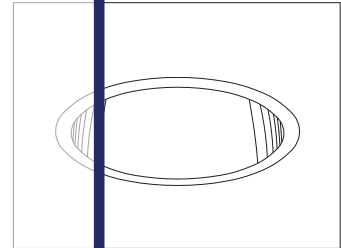
Outlet Box

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

Installation

- 27" galvanized hanger bars with adjustable mounting plate.
- Resesses into standard ceiling joist locations.

- UL Listed.
- Three Year Limited Warranty
- Complete standard fixture and ballast.



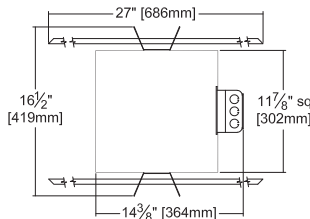
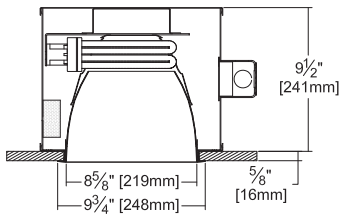
Selected Optional Trims:

- All White Option -30
- Sofluxe Titanium Option -57
- Sofluxe Dune Option -71
- Sofluxe Pewter Option -77
- Sofluxe Wheat Option -91
- Black OptiGroove Option -OG

Please consult QUOTATIONS for the best alternative.

Performance at a Glance

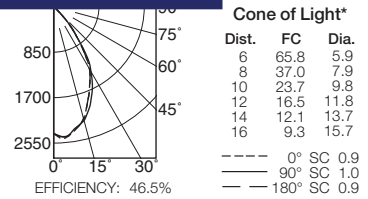
FRR-09017



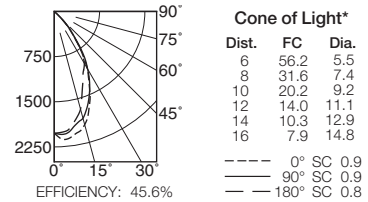
Ceiling Cut-out 9" Dia.

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.

FRR-09017 (1 Triple 70W)



FRR-09017-43 (1 Triple 57W)



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 70

CATALOG NUMBER

FRR-09017

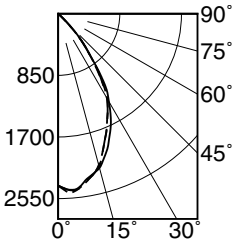
DUE TO OUR CONTINUING EFFORT TO IMPROVE PRODUCTS, TECHNICAL INFORMATION IS SUBJECT TO CHANGE WITHOUT NOTICE.

Alzak® is a registered trademark of ALCOA.

Detailed Photometry - Installed Fixture

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

FRR-09017 (1 Triple 70)



----- 0° SC 0.9
 _____ 90° SC 1.0
 - - - - - 180° SC 0.9

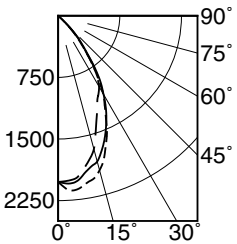
EFFICIENCY : 46.5%

	CANDLEPOWER DISTRIBUTION				
	0.0	45.0	90.0	135.0	180.0
0	2370	2370	2370	2370	2370
5	2465	2451	2444	2451	2437
15	2181	2147	2202	2117	2160
25	1599	1702	1716	1710	1606
35	920	943	996	950	952
45	153	179	210	220	178
55	7	5	7	7	7
65	4	4	4	4	4
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

RF	COEFFICIENTS OF UTILIZATION								
	RC	20				50			
		80		30		10		50	
RW	70	50	30	10	50	30	10		
1	53	51	50	49	49	48	47		
2	50	48	46	44	46	44	43		
3	48	44	42	40	43	41	39		
4	45	41	39	37	40	38	36		
5	43	39	36	34	37	35	33		
6	40	36	33	31	35	33	31		
7	38	34	31	29	33	31	29		
8	36	32	29	27	31	29	27		
9	35	30	27	25	29	27	25		
10	33	28	26	24	28	25	24		

ITL TEST #55116 *LER=28.8 •AEC=\$8.34

FRR-09017-43 (1 Triple 57)



----- 0° SC 0.9
 _____ 90° SC 0.9
 - - - - - 180° SC 0.8

EFFICIENCY : 45.6%

	CANDLEPOWER DISTRIBUTION				
	0.0	45.0	90.0	135.0	180.0
0	2023	2023	2023	2023	2023
5	2134	2088	2043	2038	2002
15	1946	1873	1837	1706	1680
25	1375	1465	1388	1227	1129
35	731	761	785	767	754
45	161	185	200	197	175
55	5	5	5	5	5
65	2	2	3	3	2
75	0	1	2	1	2
85	0	0	0	0	0
90	0	0	0	0	0

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

ITL TEST #55117 *LER=28.3 •AEC=\$8.47

* LER = Luminaire Efficiency Rating
 LER = Luminaire Effic. x Total Lamp Lumens x Ballast Factor
 Input Watts

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

LIMITED WARRANTY: CATALOGED KIRLIN FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR THREE YEARS FROM DATE OF PURCHASE. INSTALLED TO N.E.C. IN NORMAL USE. Manufacturer at his option will inspect 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. Abnormal use, 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.

Options

Ballast, Wattage and Voltage

- 39 Installed electronic dimming ballast. Indoor use only. 10°C (50°F) minimum start. Please specify wattage and voltage; consult factory to request brand.
- 43 Lower wattage: for 4-pin 57W triple/four tube or 42/32/26W triple or 26W quad (multi-wattage/voltage). Specify wattage. Also see Option -AT.
- 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

- 30 All white lower cone. (CP x .95)
- 31 White acrylic enameled lower cone flange.
- 32 White oversize trim ring. Specify O.D.
- 45 Gasket between ceiling and cone flange.
- 57 SofTex Titanium lower cone. (CP x .80)
- 70 SofTex Clear lower cone. (CP x .92)
- 71 SofTex Dune lower cone. (CP x .88)
- 77 SofTex Pewter lower cone. (CP x .85)
- 79 Extension collar for ceilings up to 2" thick.
- 82 Sloped ceiling adapter. Specify slope in 5° increments up to 30°.
- 90 SofTex Champagne Gold lower cone. (CP x .91)

- 91 SofTex Wheat lower cone. (CP x .87)
- 94 Custom color/finish. Specify. Consult factory.
- OG OptiGroove black seamless tapered aluminum cone with white flange. (CP x .70)

Top Access

- TA Top access for servicing from above.

Other

- 99 Special modification. Consult factory.
- AT Air tight with Type IC for FRR-09017-43 (42W). Meets / exceeds ASTM E283 restricted airflow of 2 CFM maximum. (Use with -43)
- 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