

CATALOG #	TYPE
JOB NAME	WATTAGE VOLTAGE

9" x 9" 2 Triple 42 WATT MAXIMUM

FRS-09105

2 Lamp Square Regressed Lens Downlight

Features

Lamp

- Designed for two 4-pin triple tube amalgam or compact fluorescent lamps:
- 42/32/26W triple or 26W quad.

Ballast: Multi Wattage/Voltage

- Installed electronic high power factor, thermally protected. For lower wattages: Option -43.
- 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. For limited life protection circuit. For limited life protection circuit.
- Internally fused. Also see Options -FS, -FD.

Reflector

- Specular Alzak® aluminum.

Trim Assembly

- Tapered aluminum black OptiGroove with white flange or all white smooth self-flanged trim (Option -40) as shown in section view.
- Regressed temperate, pneumatic #183 trim.

Aluminum Housing

- Acrylic enameled. Rustproof: Exceeds 1000 hours ASTM 5 salt water test.
- Lightweight: Minimizes ceiling load.
- Cool operating: Exceeds 100,000 hours life.
- Entire hardware softened through aperture.
- Built-in plaster frame.

Outlet Box

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

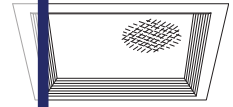
Installation

- For galvanized steel, use with suitable mounting brackets (2) supplied.
- For masonry, use with suitable mounting brackets (2) supplied.
- For concrete, use with suitable mounting brackets (2) supplied.
- For dry locations, use with suitable mounting brackets (2) supplied.
- For wet, damp or dry locations, covered ceilings.
- Through-branch conductors (6 #12).

Three Year Limited Warranty

- For wet, damp or dry locations, covered ceilings.
- Through-branch conductors (6 #12).

For wet, damp or dry locations, covered ceilings.



Recessed Square
Regressed Lens
Shallow Plenum

Selected Optional Trims:

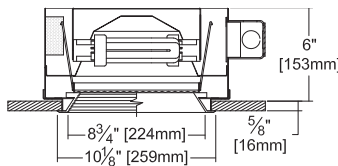
- White Grooveless Flare
- Option -40

**THIS PRODUCT
IS NO LONGER
AVAILABLE**

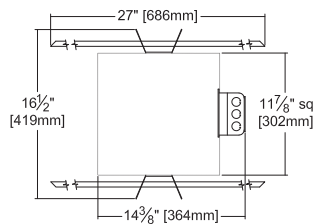
**Please consult
QUOTATIONS
for the best alternative.**

Performance at a Glance

FRS-09105



Option -40 Also Shown

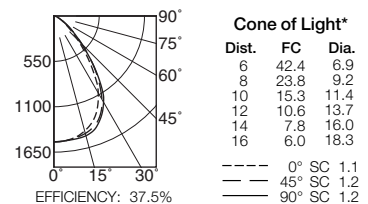


Ceiling Cut-out
9 1/2" Sq.

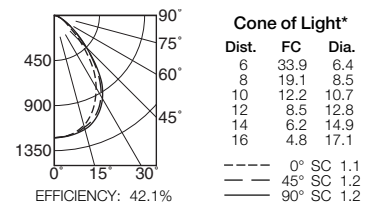
Cone of Light Key

- 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.

FRS-09105 (2 Triple 42W)



FRS-09105 (2 Triple 32W)



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 42

CATALOG NUMBER

FRS-09105

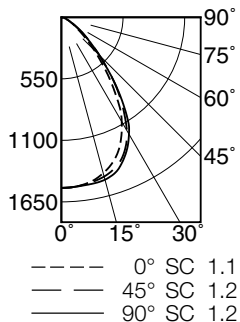
DUE TO OUR CONTINUING EFFORT TO IMPROVE PRODUCTS, TECHNICAL INFORMATION IS SUBJECT TO CHANGE WITHOUT NOTICE.

Alzak® is a registered trademark of ALCOA.

Detailed Photometry - Installed Fixture

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

FRS-09105 (2 Triple 42)



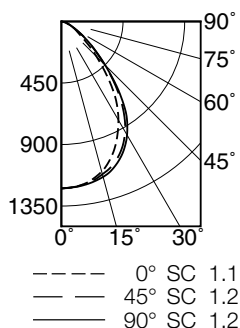
EFFICIENCY : 37.5%

CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	1525	1525	1525	1525	1525
5	1520	1518	1518	1520	1520
15	1442	1453	1474	1497	1503
25	1244	1274	1328	1362	1353
35	847	902	943	995	976
45	414	454	480	500	477
55	171	189	213	214	194
65	74	82	82	83	80
75	23	26	24	27	25
85	0	0	0	0	0
90	0	0	0	0	0

COEFFICIENTS OF UTILIZATION								
RF	20							
RC	80				50			
RW	70	50	30	10	50	30	10	
1	42	41	40	39	38	38	37	
2	39	37	35	34	35	34	32	
3	37	34	31	30	32	30	29	
4	34	31	28	26	30	27	26	
5	32	28	26	24	27	25	23	
6	30	26	23	21	25	23	21	
7	28	24	21	19	23	21	19	
8	27	22	20	18	22	19	18	
9	25	21	18	16	20	18	16	
10	24	19	17	15	19	17	15	

ITL TEST #55738 *LER=26.3 •AEC=\$9.12

FRS-09105 (2 Triple 32)



EFFICIENCY : 42.1%

CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	1221	1221	1221	1221	1221
5	1213	1212	1213	1214	1215
15	1137	1142	1157	1172	1177
25	955	981	1036	1059	1060
35	692	724	787	824	825
45	362	389	447	453	453
55	158	174	211	214	208
65	77	85	84	85	84
75	30	29	29	32	34
85	0	0	0	0	0
90	0	0	0	0	0

COEFFICIENTS OF UTILIZATION								
RF	20							
RC	80				50			
RW	70	50	30	10	50	30	10	
1	47	46	44	43	43	42	41	
2	44	41	39	37	39	37	36	
3	41	37	35	32	36	33	32	
4	38	34	31	29	32	30	28	
5	35	31	28	26	30	27	25	
6	33	28	25	23	27	25	23	
7	31	26	23	21	25	23	21	
8	29	24	21	19	23	21	19	
9	27	22	19	17	22	19	17	
10	26	21	18	16	20	18	16	

ITL TEST #45277 *LER=43.2 •AEC=\$5.56

* LER = Luminaire Efficiency Rating
 LER = Luminaire Efficacy x Total Lamp Lumens x Ballast Factor
 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 Lutron only, wattage and voltage. Consult factory for other brands.
- 43 Lower wattage: for either 4-pin electronic 2x18W triple/quad or 2x13W quad (only). 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.
- 17 .187" prismatic high strength acrylic lens.
- 18 Opal flat glass diffuser.
- 20 White aluminum 1/2" cube egg-crate louver.
- 21 White flat polycarbonate.
- 32 White oversize trim extender. Specify size.
- 40 White grooveless flare trim. (CP x 1.10)
- 45 Gasket between ceiling and trim flange.
- 46 Gasket between trim and lens.

- 79 Extension collar for ceilings up to 2" thick.
- 94 Custom color/finish. Specify. Consult factory.
- CF High temperature color filter. Specify color.
- FR Fresnel tempered glass lens.
- UV UV filter. 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

JOB NAME

TYPE

WATTAGE

VOLTAGE

CATALOG NUMBER

APPROVAL STAMP

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 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.