

### Kirlin Lensed Square Downlights

#### Features

##### Lamp

- Designed for:
  - 2 horizontal Twin Tube 13 watt: RS90862
  - 2 horizontal Quad 26 watt: RS91163
- 2 pin GX23 base: RS90862
- 2 pin G24d-3 base: RS91163
- See Option -43 for lower wattage.

##### Ballast

- Thermally protected, enclosed and protected standard.
- High performance ballast.
- Electronic ballast. Optional twin tube ballast (See Option -84)
- 120 volt standard or see optional voltages.
- Dimming optional for RS91163. (See -30)
- Electronic optional for RS91163. (See -30)
- Visible and easily serviced in all locations.

##### Fuse

- Available as Option -FS (single) or -FD (double).

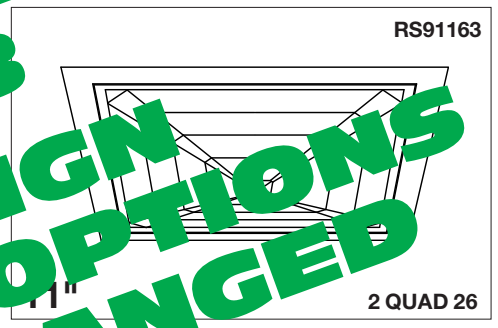
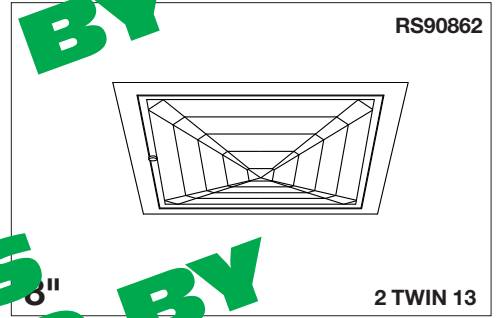
##### Reflector

- GlasSurfaced™ non-reflective molecular aluminum.

##### Trim Assemblies

- Tempered prismatic shock-resisting spread Kirlin lens.
- Rustfree polished nickel stainless door (304 L) and captive thumb screw. Slender concealed hinges for fast relamping.

- Attractively beveled aluminum frame.
- Tool-die pressure cast fit with door.
- Anti-finger pin.
- Anti-siphon valve.
- Instant-on screw available. (Optional)
- Optional trim C#73, anodized alloy and clear prismatic lens available. (See options)
- Acrylic lens of aluminum.
- Tool-die cast heat across entire surface.
- Mustproof: Exceeds 1000 hours in 5% salt spray test.
- Entirely enclosed through door.
- Wired outlet by 14Gauge galvanized steel. UL listed.
- 27 hanger bars.
- Fully adjustable mounting brackets.
- UL, C-UL (Canada) Listed.
- Wet and dry locations, covered.
- High-branch circuiting and code (6 #12).
- Three Year Limited Warranty.
- Complete fixture.



#### Performance at a Glance

RS90862

RS90862 S/MH 1.2

Ft.	FC	Dia.
6	11.9	6.4
8	6.7	8.5
10	4.3	10.6
12	3.0	12.8
14	2.2	14.9
16	1.7	17.0

RS90862

Multiple Fixture FC Calculator \*\*

RS91163

RS91163 S/MH 1.1

Ft.	FC	Dia.
6	23.1	6.3
8	13.0	8.5
10	8.3	10.6
12	5.8	12.7
14	4.3	14.8
16	3.3	16.9

RS91163

**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.  
 \*\* Based on RCR2; ceiling 70%; wall 50%; floor 20%. Use S/MH shown for each fixture. Distribution curves and S/MH data shown are 90° to lamp axis.

## THE KIRLIN COMPANY

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CENTURY SERIES  
ARCHITECTURAL  
COMPACT FLUORESCENT LIGHTING

MAXIMUM WATTAGE  
**2 Twin 13**  
**2 Quad 26**

CATALOG NUMBERS  
**RS90862**  
**RS91163**

THE KIRLIN COMPANY RESERVES THE RIGHT TO CHANGE, WITHOUT NOTICE, DETAILS OR SPECIFICATIONS IN PRODUCT DESIGN.

Detailed Photometry - Installed Fixture  
FROM I.T.L. (BOULDER, CO)

RS90862: TEST NUMBER 41108  
RS91163: TEST NUMBER 41109

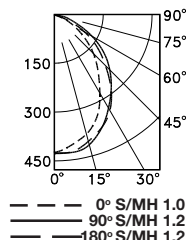
RS90862-15: TEST NUMBER 41107  
RS91163-15: TEST NUMBER 41110

RS90862

\*LER = 21.8 •AEC = \$11.02

RS90862

\*LER = 21.9 •AEC = \$11.49



CANDLEPOWER DISTRIBUTION	0.0 45.0 90.0 135.0 180.0					
	0	430	430	430	430	430
5	422	425	431	434	438	442
15	380	395	419	420	424	428
25	313	339	364	371	373	376
35	242	268	293	303	306	309
45	175	194	213	222	224	226
55	112	123	133	141	144	146
65	66	71	76	80	82	84
75	39	41	43	45	46	47
85	12	12	13	13	14	14
95	3	3	3	3	3	3

COEFFICIENTS OF UTILIZATION		0.0 45.0 90.0 135.0 180.0				
RF	RC	0	45	90	135	180
1	0.8	0.53	0.51	0.50	0.49	0.48
2	0.8	0.53	0.51	0.50	0.49	0.48
3	0.8	0.53	0.51	0.50	0.49	0.48
4	0.8	0.53	0.51	0.50	0.49	0.48
5	0.8	0.53	0.51	0.50	0.49	0.48
6	0.8	0.53	0.51	0.50	0.49	0.48
7	0.8	0.53	0.51	0.50	0.49	0.48
8	0.8	0.53	0.51	0.50	0.49	0.48
9	0.8	0.53	0.51	0.50	0.49	0.48
10	0.8	0.53	0.51	0.50	0.49	0.48



CANDLEPOWER DISTRIBUTION	0.0 45.0 90.0 135.0 180.0					
	0	497	497	497	497	497
5	489	492	495	498	498	498
15	458	468	483	490	488	488
25	386	419	451	463	463	463
35	274	317	356	374	373	373
45	158	177	202	212	216	216
55	85	93	95	108	101	101
65	42	48	53	57	48	48
75	27	29	29	32	31	31
85	9	10	10	11	11	11
95	0	0	0	0	0	0

COEFFICIENTS OF UTILIZATION		0.0 45.0 90.0 135.0 180.0				
RF	RC	0	45	90	135	180
1	0.8	0.57	0.55	0.53	0.51	0.50
2	0.8	0.57	0.55	0.53	0.51	0.50
3	0.8	0.57	0.55	0.53	0.51	0.50
4	0.8	0.57	0.55	0.53	0.51	0.50
5	0.8	0.57	0.55	0.53	0.51	0.50
6	0.8	0.57	0.55	0.53	0.51	0.50
7	0.8	0.57	0.55	0.53	0.51	0.50
8	0.8	0.57	0.55	0.53	0.51	0.50
9	0.8	0.57	0.55	0.53	0.51	0.50
10	0.8	0.57	0.55	0.53	0.51	0.50

EFFICIENCY = 53.5%

EFFICIENCY = 51.1%

LER = Luminaire Efficacy Rating  
LER = Luminaire X Total Lamp Lumens x Ballast Factor  
Input Watts

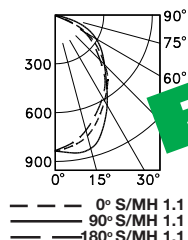
AEC = Annual Energy Cost per  
100 lumens (based on 3000  
hours use @ \$0.08 KWH).

RS91163

\*LER = 21.7 •AEC = \$8.58

RS91163

\*LER = 28.0 •AEC = \$8.58



CANDLEPOWER DISTRIBUTION	0.0 45.0 90.0 135.0 180.0					
	0	556	537	554	508	543
5	446	385	443	378	435	344
15	323	280	350	281	310	242
25	198	198	246	197	189	141
35	97	112	146	109	99	71
45	33	38	57	37	37	24
55	13	13	23	17	17	11

COEFFICIENTS OF UTILIZATION		0.0 45.0 90.0 135.0 180.0				
RF	RC	0	45	90	135	180
1	0.8	0.53	0.49	0.45	0.42	0.41
2	0.8	0.53	0.49	0.45	0.42	0.41
3	0.8	0.53	0.49	0.45	0.42	0.41
4	0.8	0.53	0.49	0.45	0.42	0.41
5	0.8	0.53	0.49	0.45	0.42	0.41
6	0.8	0.53	0.49	0.45	0.42	0.41
7	0.8	0.53	0.49	0.45	0.42	0.41
8	0.8	0.53	0.49	0.45	0.42	0.41
9	0.8	0.53	0.49	0.45	0.42	0.41
10	0.8	0.53	0.49	0.45	0.42	0.41



CANDLEPOWER DISTRIBUTION	0.0 45.0 90.0 135.0 180.0					
	0	1138	1138	1138	1138	1138
5	1134	1124	1115	1095	1074	1052
15	983	973	963	948	922	896
25	833	813	793	773	748	722
35	683	663	643	623	598	572
45	513	493	473	453	428	402
55	363	343	323	303	278	252
65	213	193	173	153	128	102
75	103	93	83	73	48	22
85	33	33	33	33	33	33
95	0	0	0	0	0	0

COEFFICIENTS OF UTILIZATION		0.0 45.0 90.0 135.0 180.0				
RF	RC	0	45	90	135	180
1	0.8	0.60	0.58	0.55	0.51	0.48
2	0.8	0.60	0.58	0.55	0.51	0.48
3	0.8	0.60	0.58	0.55	0.51	0.48
4	0.8	0.60	0.58	0.55	0.51	0.48
5	0.8	0.60	0.58	0.55	0.51	0.48
6	0.8	0.60	0.58	0.55	0.51	0.48
7	0.8	0.60	0.58	0.55	0.51	0.48
8	0.8	0.60	0.58	0.55	0.51	0.48
9	0.8	0.60	0.58	0.55	0.51	0.48
10	0.8	0.60	0.58	0.55	0.51	0.48

EFFICIENCY = 53.5%

EFFICIENCY = 51.1%

Options

- 13 Clear 1/8" flat glass. Tempered or untempered.
- 14 Dropped Anopal glass. 1-1/4" high. Not enameled.
- 15 Tempered prismatic flat C#73 glass instead.
- 17 Prismatic 3/16" high strength acrylic instead.
- 18 Anopal flat glass. Not enameled. Diffusing.
- 20 White 1/2" cube eggcrate louver instead.
- 21 White translucent flat polycarbonate instead.
- 26 Tamper-proof recessed hex, center pin, button door screw with key. One key per ten fixtures.
- 35 Silver enameled frame finish instead.
- 36 Gold enameled frame finish instead.
- 37 Dark Bronze enameled frame finish instead.
- 38 Black enameled frame finish instead.
- 39 Installed Quad electronic dimming ballast for RS91163. Consult factory for quantity and type required. Also see Options -LE and -WD.
- 43 Lower wattage: Specify 2TT9 watt (RS90862);
- 45 2016 trim for RS91163.
- 46 1/2" trim between trim and ceiling.
- 47 Wet plaster frame for RS91163 only.
- 58 277 volt 60 Hz. ballast instead.
- 73 Internal emergency "Ni-Cad" battery pack for RS91163 only. Concealed in housing. Controls one lamp. Switch and visible light located above lens. For indoor use.
- 74 Internal 2 lamp emergency "Ni-Cad" battery pack for use with 4-pin electronic lamps only (RS91163 only). Use with Option -96.
- 75 Remote emergency "Ni-Cad" battery pack for RS90862. Controls 1 lamp. Four feet of flex provided for maximum mounting distance. For indoor use.
- 84 Fixture wired for two circuits. See -FD and -RD.
- 94 Custom color frame finish. Consult factory.
- 96 Regulating electronic high power factor 0°F single circuit ballast (RS91163 only). See Options -74, -84 and -LE.
- 97 Other voltage ballast. Consult factory.
- 98 347 volt 60 Hz. ballast instead. Consult factory for use with -39.
- 99 Special modification. Consult factory.
- DG Drop Guard; prismatic C#73 flat glass (RS91163).
- DH Drop Holograph tempered lens instead.
- FD Double Fused primary. One per ballast. Replaceable. For use with Option -84.
- FS Fused primary. One per fixture. Replaceable. Aids servicing.
- LE With 4-pin electronic lamps for use with Options -39, -74 or -96. 2700°K or consult factory. Specify wattage and color temperature. (RS91163 only)
- LP With lamps. 2700°K or consult factory. Specify wattage and color temperature. Also see -LE.
- RD Double radio interference filter. For use with Option -84.
- RF Radio interference filter. Eliminates line feedback.
- WD Wall Dimmer for use with Option -39 (RS91163).

SUBMITTAL DATA

APPROVAL STAMP

JOB NAME \_\_\_\_\_  
 TYPE \_\_\_\_\_  
 WATTAGE \_\_\_\_\_ VOLTAGE \_\_\_\_\_  
 CATALOG NUMBER \_\_\_\_\_

LIMITED WARRANTY: CATALOGUED KIRLIN FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR THREE YEARS FROM DATE OF PURCHASE. INSTALLATION, NORMAL USE, MANUFACTURER AT HIS OPTION WILL REPAIR OR REPLACE SUCH FIXTURE OR RETURN THE PURCHASE PRICE OR PRESENTATION OF PROOF OF PURCHASE AND DEFECTIVE FIXTURE AT THE OFFICE OF MANUFACTURER WITHIN THE REAR YEARS OF ORIGINAL INSTALLMENT. 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 ON THE UNDERSTANDING THAT OTHER WARRANTIES, EXPRESS OR IMPLIED, SHALL NOT BE WAIVED BY THIS WARRANTY. SELLER DOES NOT WARRANT AS TO MERCHANTABILITY OR FITNESS FOR PARTICULAR USE, NOR WILL ANY STATEMENT CONSTITUTE A WARRANTY OR AID IN THE SPECIFIC WARRANTY. ABNORMAL USE, IMPROPER INSTALLATION, OR REPAIR OR MODIFICATION OF THE FIXTURE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE MANUFACTURER WILL VOID THIS WARRANTY.