

Exceptional Efficiency and Type IC

Features

Lamp

- Designed for: 2 horizontal Twin Tube 13 watt.
- 2 pin GX23 base.
- See Option -43 for lower wattage.

Ballast

- Thermally protected, encased and potted standard.
- High power factor standard.
- Single circuit wiring. Optional two-circuit wiring. (See Option -84)
- 120 volt standard or see optional voltages.

- Visible and easily serviced in all ceilings.

Fuse

- Available as One (1) or -FD (double).

Reflector

- Anodized low irid. reflector.
- Alzak® aluminum reflector.
- Optional S/MH textured. Etched. Chalk Dune, Champagne Gold or other finishes available.
- Optional One (1) or -FD assembly available.

House

- Acrylic enameled aluminum.

- Cool: Dissipates heat across entire surface area. Ventilated.
- Rustproof: Exceeds 1000 hour ASTM 5% salt spray test.
- Entire luminaire serviced through removable reflector.
- Prewired outlet box; 14GA (NEC) galvanized steel. UL listed. Access through fixture opening.
- Built-in plastic (see Option -43) or metal (see Option -44) cover (see Option -45).

- Fully adjustable, vinyl, mounting brackets supplied (2).
- Pre-drilled for an outlet bracket (see Option -46) in case of installation in non-covered locations.

UL (Canada) Listing

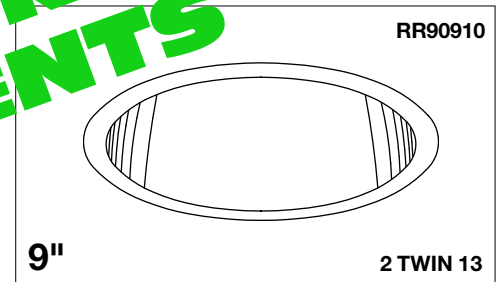
- Wet/damp or dry locations, covered ceilings.
- Through hole for circuit conductors (see Option -84).
- Type IC. Approved for direct contact with insulation.

Three Year Limited Warranty

- Complete standard fixture.



RR90909
9" 2 TWIN 13
Type IC Downlight
72% Efficiency

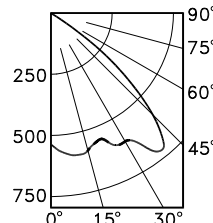
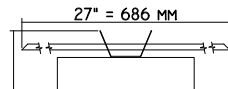
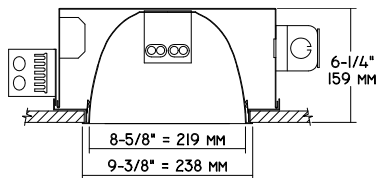


RR90910
9" 2 TWIN 13
Type IC Downlight
72% Efficiency

THESE FIXTURES ARE NO LONGER AVAILABLE FOR REPLACEMENTS

Performance at a Glance

RR90909

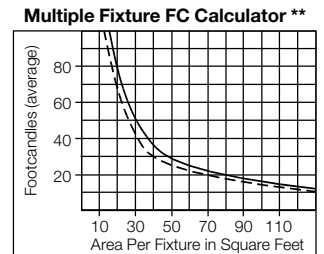


RR90909 S/MH 1.8

Cone of Light*

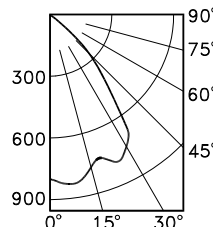
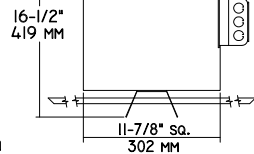
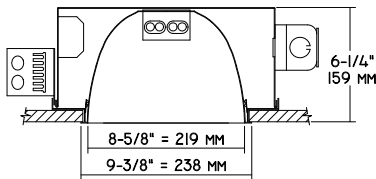
Ft.	FC	Dia.
6	15.2	16
8	8.5	22
10	5.5	27
12	3.8	33
14	2.8	38
16	2.1	43

RR90909



RR90909 — RR90910 - - -

RR90910



RR90910 S/MH 1.3

Cone of Light*

Ft.	FC	Dia.
6	22.5	11
8	12.6	14
10	8.1	18
12	5.6	21
14	4.1	25
16	3.2	28

RR90910

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

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

CENTURY SERIES
 ARCHITECTURAL
 COMPACT FLUORESCENT LIGHTING

MAXIMUM WATTAGE

2 Twin 13
 2 Twin 13

CATALOG NUMBERS

RR90909
 RR90910

Detailed Photometry - Installed Fixture

FROM I.T.L. (BOULDER, CO) RR90909: TEST NUMBER 30493
RR90910: TEST NUMBER 35738

RR90909

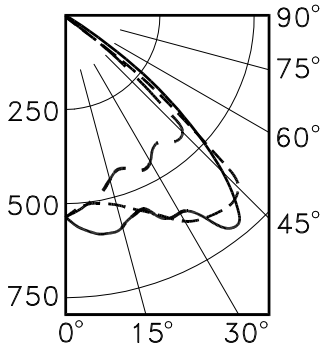
*LER = 35.8
•AEC = \$6.70

CANDLEPOWER DISTRIBUTION

	0.0	45.0	90.0	135.0	180.0
0	547	547	547	547	547
5	552	576	601	584	540
15	556	628	627	622	506
25	635	666	618	620	489
35	676	811	669	712	446
45	676	611	596	574	446
55	205	178	211	186	85
65	5	5	6	6	2
75	2	2	2	2	
85	0	0	0	0	
90	0	0	0	0	

COEFFICIENTS OF UTILIZATION

RF	20						
	80			50			
	70	50	30	10	50	30	10
1	99	96	93	91	90	89	87
2	93	88	84	80	84	81	77
3	87	80	75	71	77	74	69
4	81	73	67	63	70	65	62
5	76	67	61	57	64	59	55
6	71	60	54	49	56	51	48
7	66	54	47	43	50	45	42
8	59	48	41	37	44	41	37
9	54	42	35	32	42	38	34
10	50	38	32	28	38	34	30



--- 0° S/MH 1.8
--- 90° S/MH 1.8
--- 180° S/MH 1.3

EFFICIENCY = 88.0%

* LER = Luminaire Efficiency Ratio
• AEC = Annual Energy Cost per
lumens (based on 3000 hours use @ \$0.08/kWh).

RR90910

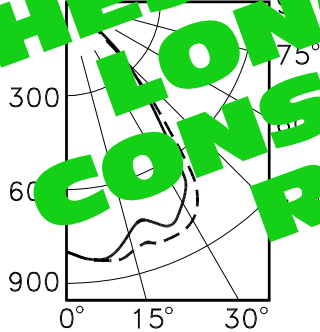
*LER = 29.1
•AEC = \$8.24

CANDLEPOWER DISTRIBUTION

	0.0	45.0	90.0	135.0	180.0
0	809	809	809	809	809
5	809	835	809	809	828
15	856	799	789	789	834
25	824	762	767	767	832
35	808	608	640	633	688
45	214	284	303	300	216
55	26	14	8	10	16
65	2	2	2	1	2
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

COEFFICIENTS OF UTILIZATION

RF	20						
	80			50			
	70	50	30	10	50	30	10
1	81	79	77	76	75	73	72
2	77	74	71	69	70	68	66
3	73	69	65	62	66	63	61
4	69	64	60	57	62	59	56
5	66	60	55	52	58	54	52
6	62	56	51	48	54	50	48
7	58	51	47	44	50	46	43
8	55	48	43	40	46	42	40
9	51	44	39	36	43	39	36
10	48	40	36	33	39	35	33



--- 0° S/MH 1.4
--- 90° S/MH 1.3
--- 180° S/MH 1.4

EFFICIENCY = 71.5%

Estimated Multipliers
-70 SofTex Clear: CP x .93
-71 SofTex Dune: CP x .87
-90 SofTex Champagne Gold: CP x .90
-91 SofTex Wheat: CP x .87CP x .85
-92 Black OptiGroove: CP x .75

THESE FIXTURES ARE NO LONGER AVAILABLE FOR CONSULT FACTORY REPLACEMENTS

Options

- 31 White reflector trim, self-flanged.
- 32 Trim extender. Broadens trim flange O.D. by 1" to cover larger ceiling opening.
- 43 Lower wattage: Specify 2T19 watt.
- 45 Gasket above reflector flange. Stops dust streaks on ceiling.
- 58 277 volt 60 Hz. ballast instead.
- 70 SofTex Clear softly etched self-flanged reflector. Resists smudges. (CP x .93)
- 71 SofTex Dune softly etched self-flanged reflector. Resists smudges. (CP x .87)
- 73 Internal emergency "Ni-Cad" battery pack concealed in housing. Controls one lamp.

- Switch and light unobtrusively located inside reflector. For indoor use.
- 79 Extension collar for up to 2" thick ceilings.
- 82 Sloped ceiling adapter. Specify slope up to 30° in 5° increments.
- 84 Fixture wired for two circuits. See Options -FD and -RD.
- 90 SofTex Champagne Gold softly etched self-flanged reflector. Resists smudges. (CP x .90)
- 91 SofTex Wheat softly etched self-flanged reflector. Resists smudges. (CP x .87)
- 94 Specular Pewter or other specified custom color self-flanged reflector. Consult factory.
- 97 Other voltage ballast. Consult factory.
- 98 347 volt 60 Hz. ballast instead. Consult factory

- for dimming.
- 99 Special modification. Consult factory.
- FD Double Fused primary. One per ballast. Replaceable. For use with Option -84.
- FS Fused primary. One per fixture. Replaceable. Aids servicing.
- LP With lamps. 2700°K or consult factory. Specify wattage and color temperature.
- OG OptiGroove black seamless tapered aluminum assembly. White trim, self-flanged. (CP x .75)
- RD Double radio interference filter. For use with Option -84.
- RF Radio interference filter. Eliminates line feedback.

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 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 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 by purchaser or any person. This warranty is supplied to the buyer without charge, 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, repair, or modification of the fixture without prior written authorization from the manufacturer or distributor voids the warranty.