

CATALOG #	TYPE	
JOB NAME	WATTAGE	VOLTAGE

12" x 12" 2 Triple 57 WATT MAXIMUM

FRV-12120

## Vandal Resistant Square: 100W MH Alternative

### 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, thermally protected. For lower wattages: Option -43.
- 120-277 multi-volt; 50/60 Hz, THD < 10%.
- Single circuit wiring or see Option -8.
- ClickQuick connectors for easy installation.
- Cold weather rating: -22°F (-30°C).
- End of lamp life protection circuit. RFI filter.
- Internally fused. Also see Options -FS, -FD.

#### Reflector

- Full size aluminum with 94% reflectivity (typical).
- Removable for servicing.

#### Trim / Lens Assembly

- Injection molded polycarbonate drop lens with bisymmetric distribution lens or see Options -43, -44.
- Permanent continuous extruded tempered aluminum white lens clamps; four flush mounted center pin tamperproof screws with captive nuts.

- Super-strong 6063-T6 tempered extruded.
- White enamel finish. Rustproof: exceeds 1000 hour ASTM 5% salt spray test.

- Tamperproof tools included. One per ten fixtures.

#### Mounting

- Two die-formed vertically adjustable 16 gauge steel mounting yokes supplied.

#### Outlet Box

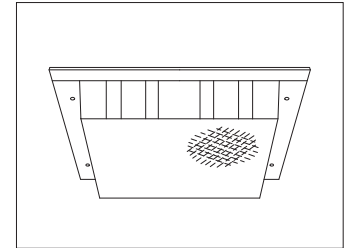
- Provides 4 x 1/2" EGC grounded lead-in conductors and 3/4" knockout.
- Stalls on 1/2" x 1/2" x 1/2" metal.

- Reduces inrush current to sensitive locations.

- Through-branch conductors (6 #12).

- Complete standard fixture and ballast.

- Three Year Limited Warranty



Recessed Square  
Vandal Resistant  
Drop Lens  
Shallow Plenum

# THIS PRODUCT IS NO LONGER AVAILABLE

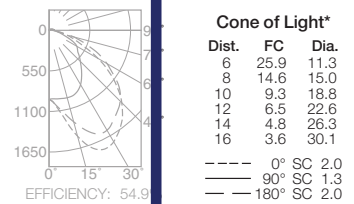
Please consult QUOTATIONS for the best alternative.

### Performance at a Glance

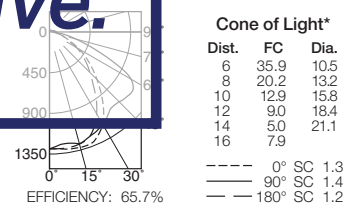
FRV-12120



FRV-12120 (2 Triple 57W)



FRV-12120-43 (2 Triple 42W)



#### 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.

## THE KIRLIN COMPANY

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RENAISSANCE SERIES  
COMPACT FLUORESCENT LIGHTING

MAXIMUM WATTAGE

2 Triple 57

CATALOG NUMBER

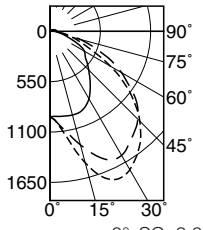
FRV-12120

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

Detailed Photometry - Installed Fixture

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

FRV-12120 (2 Triple 57)



CANDLEPOWER DISTRIBUTION					
	0.0	45.0	90.0	135.0	180.0
0	933	933	933	933	933
10	1218	1071	939	1050	1129
30	1745	1535	851	1310	1564
50	1201	1282	529	1202	1244
70	365	426	239	429	513
90	69	103	52	96	70
110	43	48	31	44	47
130	18	7	1	6	17
150	0	0	0	0	0
170	0	0	0	0	0
180	0	0	0	0	0

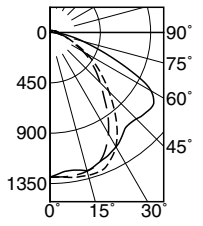
COEFFICIENTS OF UTILIZATION								
RF	20							
	80		50					
RC	70	50	30	10	50	30	10	
RW	1	59	56	54	52	52	50	49
	2	54	49	45	42	45	42	40
	3	49	43	38	34	40	36	33
	4	44	38	33	29	35	31	28
	5	41	33	28	24	31	27	24
	6	37	30	25	21	28	24	21
	7	34	27	22	18	25	21	18
	8	32	24	19	16	23	19	16
	9	30	22	17	14	21	17	14
	10	28	20	16	13	19	15	13

ITL TEST #55036 \*LER=38.7 •AEC=\$6.20

--- 0° SC 2.0  
 --- 90° SC 1.3  
 --- 180° SC 2.0

EFFICIENCY : 54.9%

FRV-12120-43 (2 Triple 42)



CANDLEPOWER DISTRIBUTION					
	0.0	45.0	90.0	135.0	180.0
0	1292	1292	1292	1292	1292
10	1314	1268	1249	1254	1295
30	1176	1195	1181	1078	1045
50	612	867	1116	745	535
70	192	334	496	288	180
90	48	87	74	77	39
110	50	63	43	56	43
130	37	24	14	21	33
150	12	4	0	3	10
170	0	0	0	0	0
180	0	0	0	0	0

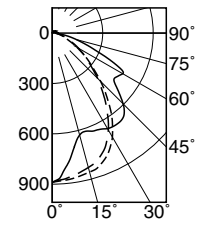
COEFFICIENTS OF UTILIZATION								
RF	20							
	80		50					
RC	70	50	30	10	50	30	10	
RW	1	70	67	64	62	62	60	58
	2	64	59	54	50	54	51	48
	3	58	51	46	42	48	43	40
	4	53	45	40	35	42	38	34
	5	49	40	35	30	38	33	29
	6	45	36	30	26	34	29	25
	7	42	33	27	23	31	26	22
	8	39	30	24	20	28	23	20
	9	36	27	22	18	26	21	18
	10	34	25	20	17	24	19	16

ITL TEST #52007 \*LER=46.8 •AEC=\$5.13

--- 0° SC 1.3  
 --- 90° SC 1.4  
 --- 180° SC 1.2

EFFICIENCY : 65.7%

FRV-12120-43 (2 Quad 26)



CANDLEPOWER DISTRIBUTION					
	0.0	45.0	90.0	135.0	180.0
0	888	888	888	888	888
10	870	791	711	767	852
30	715	561	657	559	667
50	310	423	498	434	297
70	84	142	238	157	95
90	22	39	33	41	22
110	26	31	19	32	26
130	17	12	6	13	17
150	6	4	0	3	6
170	0	0	0	0	0
180	0	0	0	0	0

COEFFICIENTS OF UTILIZATION								
RF	20							
	80		50					
RC	70	50	30	10	50	30	10	
RW	1	65	62	60	57	57	56	54
	2	59	55	50	47	50	47	45
	3	54	48	43	39	45	41	38
	4	50	43	37	33	40	36	32
	5	46	38	33	29	36	31	28
	6	42	34	29	25	32	28	25
	7	39	31	26	22	29	25	22
	8	36	28	23	20	27	23	19
	9	34	26	21	18	25	20	18
	10	32	24	19	16	23	19	16

ITL TEST #40935 \*LER=33.2 •AEC=\$7.24

--- 0° SC 1.2  
 --- 90° SC 1.1  
 --- 180° SC 1.1

EFFICIENCY : 60.5%

Options

Ballast, Wattage and Voltage

- 39 Consult factory for installed electronic dimming ballast. Indoor use. 10°C (50°F) minimum start. Specify wattage, voltage and brand. Not available with Option -75, -CR or -HR.
- 43 Lower wattage: for 4-pin 2x42/32/26W triple or 26W 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 Voltage<sup>1</sup>

Internal (factory installed) or remote (field mounted) 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 or -CR) -20° to 55°C (-4° to 131°F).
- 73 Internal 1-lamp EM (42W max.) ballast. Specify voltage.
- 75 Remote 1-lamp EM (57W) ballast. Specify voltage.
- CE Internal cold weather (-20° to 55°C) 1-lamp EM (42W max.) ballast. Specify voltage.
- CR Remote cold weather (-20° to 55°C) 1-lamp EM (57W) ballast. Specify voltage.
- HE<sup>1</sup> Internal higher lumen (up to 1250) 1-lamp EM ballast. 13-42W only. Specify voltage.
- HR<sup>1</sup> Remote higher lumen (up to 1250) 1-lamp EM ballast. 13-42W only. Specify voltage.

Lenses

- 13 Vandal resistant tempered prismatic C#73 spread lens above 1/8" flat polycarbonate.

- 15 Tempered prismatic C#73 glass lens.
- ML MicroLux tempered microprismatic lens.

Other

- 47 Wet plaster frame for wet plaster ceiling.
- 78 Housing modified for concrete pour.
- 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.

<sup>1</sup> Visit [www.kirlinlighting.com](http://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. INSTALLER 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 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.