

Open Fixture PAR 38 Directionals

PAR 30 / PAR 20-35 Watt Available. See Option -43

Features

Lamp

- Designed for:
 - 100 watt PAR 38 metal halide: RR40609.
 - 150 watt PAR 38 metal halide: RR40710.
- 20° spot standard. As options, 35° flood or 65° wide flood beam spreads available.
- See Option -43 for lower wattage PAR 38, PAR 30, PAR 20.

Socket Assembly

- Adjustable. 358° rotation with 30° maximum tilt.
- Medium base. Pulse rated. Glazed porcelain.
- Nickel-plated brass screw shell. Silicone leads.

Reflector

- Self-flanged specular Alzak® aluminum.
- Thirteen optional specular Alzak or SofTex aluminum finishes available. See Options.

Ballast Assembly

- WhisperPack™ fully encapsulated 180°C rated HPF ballast: 3 year warranty.
- Premium Class H high reactance 5:12 regulation.
- Capacitor and ignitor supplied.
- 120 volt standard or see optional voltages.
- Cool, quiet, long-life. Silicone leads.

- Visible and easily serviced in all ceilings including dry wall.

Fuse

- Fused primary. Renewable. Aids servicing.

Housing

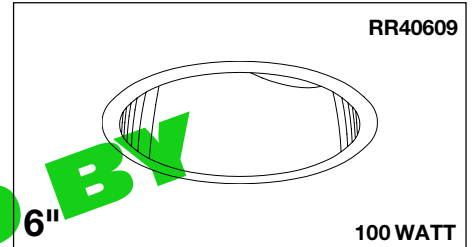
- Acrylic enameled aluminum.
- Cool: Dissipates heat across entire surface area. Ventilated.
- Rustproof: Exceeds 1000 hour ASTM 5% salt spray test.
- Entire luminaire serviced through removable reflector. For top access, See Option -TA.
- Built-in plaster frame.

Outlet Box

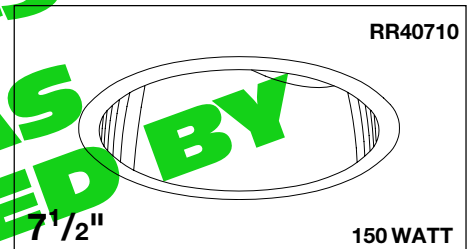
- Prewired 14 GA (NEC) galvanized steel, UL listed.
- Removable insulated cover.
- 1/2" and 3/4" knockouts.

Installation

- 27" galvanized hanger bars supplied (2).
- Fully adjustable universal mounting brackets supplied (2).
- Recesses indoor or outdoor in covered locations.



Accent Lighting
Three Optional Beam Spreads



Directional Highlighting
20° to 65° Beams Available

UL, C-UL (Canada) Listings

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

Three Year Limited Warranty

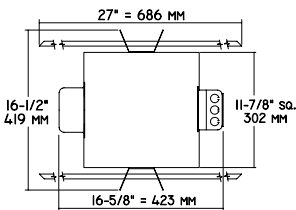
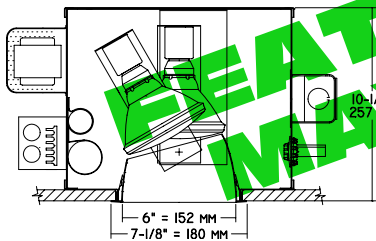
- Complete standard fixture.

Thermal Protection

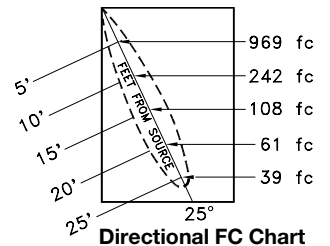
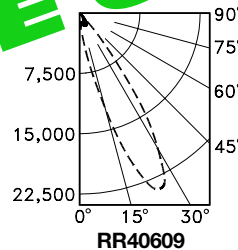
- Per current NEC.

Performance at a Glance

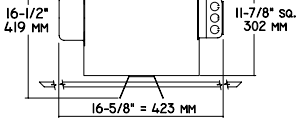
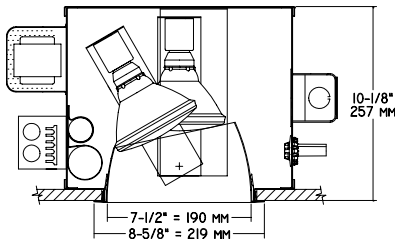
RR40609



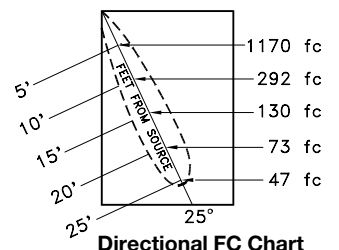
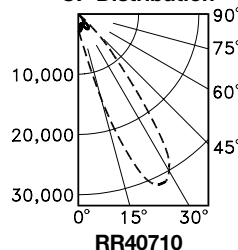
CP Distribution



RR40710



CP Distribution



THE KIRLIN COMPANY

3401 EAST JEFFERSON AVENUE • DETROIT, MICHIGAN 48207-4232
(313) 259-6400 • Fax: (313) 259-9409 OR (313) 259-3121 • www.light-link.com/kirlin

PRECISION LIGHTING
METAL HALIDE

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

MAXIMUM WATTAGE

100 PAR 38
150 PAR 38

CATALOG NUMBERS

RR40609
RR40710

Detailed Photometry - Installed Fixture

FROM I.T.L. (BOULDER, CO) RR40609: TEST NUMBER 43903
RR40710: TEST NUMBER 43905

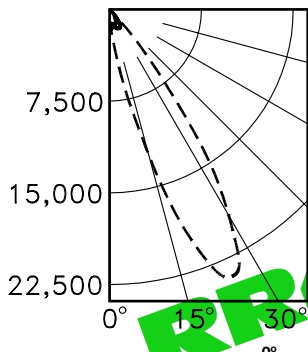
RR40609 *LER = 35.1
•AEC = \$6.83

CANDLEPOWER DISTRIBUTION

| | 0.0 | 45.0 | 90.0 | 135.0 | 180.0 |
|----|-------|------|------|-------|-------|
| 0 | 1223 | 1223 | 1223 | 1223 | 1223 |
| 5 | 2271 | 1778 | 1165 | 956 | 911 |
| 15 | 10427 | 2995 | 964 | 822 | 747 |
| 25 | 24215 | 3406 | 1128 | 859 | 851 |
| 35 | 11383 | 1471 | 717 | 635 | 523 |
| 45 | 1972 | 306 | 105 | 209 | 254 |
| 5 | 120 | 22 | 15 | 37 | 134 |
| 75 | 0 | 0 | 0 | 0 | 15 |
| 8 | 0 | 0 | 0 | 0 | 0 |
| 9 | 0 | 0 | 0 | 0 | 0 |
| 10 | 0 | 0 | 0 | 0 | 0 |

COEFFICIENTS OF UTILIZATION

| RF | 20 | | | | | | |
|----|----|----|----|----|----|----|----|
| | 80 | | | 50 | | | |
| RC | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| 1 | 98 | 95 | 93 | 91 | 90 | 88 | 87 |
| 2 | 93 | 88 | 84 | 81 | 84 | 81 | 78 |
| 3 | 87 | 81 | 77 | 73 | 78 | 74 | 71 |
| 4 | 82 | 75 | 70 | 66 | 72 | 68 | 65 |
| 5 | 77 | 69 | 64 | 60 | 67 | 62 | 59 |
| 6 | 73 | 64 | 59 | 54 | 62 | 57 | 54 |
| 7 | 69 | 60 | 54 | 50 | 58 | 53 | 49 |
| 8 | 65 | 55 | 50 | 46 | 54 | 49 | 45 |
| 9 | 61 | 52 | 46 | 42 | 50 | 45 | 42 |
| 10 | 57 | 48 | 42 | 39 | 47 | 42 | 39 |



EFFICIENCY = 86.7%

* LER = 35.1 Efficacy Rating

AEC = Annual General Cost per 1000 lumens based on 3000 hours use @ \$0.08 KWH.

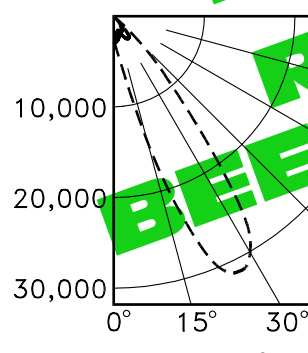
RR40710 *LER = 41.4
•AEC = \$5.79

CANDLEPOWER DISTRIBUTION

| | 0.0 | 45.0 | 90.0 | 135.0 | 180.0 |
|----|-------|------|------|-------|-------|
| 0 | 2764 | 2764 | 2764 | 2764 | 2764 |
| 5 | 4192 | 3740 | 2701 | 2186 | 2024 |
| 15 | 16911 | 5854 | 2051 | 1418 | 1265 |
| 25 | 31420 | 3926 | 1671 | 1138 | 885 |
| 35 | 23054 | 4770 | 2385 | 1382 | 1463 |
| 45 | 5041 | 1463 | 542 | 759 | 867 |
| 55 | 994 | 163 | 81 | 145 | 343 |
| 65 | 36 | 27 | 18 | 27 | 36 |
| 75 | 0 | 9 | 9 | 9 | 0 |
| 8 | 0 | 9 | 9 | 0 | 0 |
| 9 | 0 | 0 | 0 | 0 | 0 |
| 10 | 0 | 0 | 0 | 0 | 0 |

COEFFICIENTS OF UTILIZATION

| RF | 20 | | | | | | |
|----|-----|-----|----|----|----|----|----|
| | 80 | | | 50 | | | |
| RC | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| 1 | 103 | 100 | 98 | 96 | 95 | 93 | 91 |
| 2 | 97 | 92 | 88 | 84 | 87 | 84 | 81 |
| 3 | 91 | 84 | 79 | 75 | 81 | 76 | 73 |
| 4 | 85 | 77 | 71 | 67 | 74 | 69 | 66 |
| 5 | 80 | 71 | 65 | 60 | 68 | 63 | 59 |
| 6 | 75 | 65 | 59 | 54 | 63 | 58 | 54 |
| 7 | 70 | 60 | 54 | 49 | 58 | 53 | 49 |
| 8 | 66 | 56 | 49 | 45 | 54 | 48 | 45 |
| 9 | 62 | 52 | 45 | 41 | 50 | 45 | 41 |
| 10 | 58 | 48 | 42 | 38 | 47 | 41 | 37 |



EFFICIENCY = 91.7%

Estimated Multipliers

- 16 Champagne Gold Alzak®: CP x .98
- 30 White: CP x .98
- 63 Dune Alzak: CP x .97
- 69 Wheat Alzak: CP x .97
- 70 SofTex Clear: CP x .98
- 71 SofTex Dune: CP x .95
- 72 Black Alzak: CP x .80
- 90 SofTex Champagne Gold: CP x .96
- 91 SofTex Wheat: CP x .95
- 92 Umber Alzak: CP x .90
- 93 Pewter Alzak: CP x .95
- 99 Special modification. Consult factory.
- OG OptiGroove black seamless tapered aluminum reflector. White trim, self-flanged. (CP x .82)
- TA Top access modification for servicing from above ceiling.

Options

- 16 Champagne Gold anodized specular Alzak self-flanged reflector. (CP x .98)
- 30 White self-flanged reflector. (CP x .90)
- 31 White flange (only) on Alzak reflector.
- 32 Trim extender. Broadens trim flange O.D. by 1" to cover larger ceiling opening.
- 43 Lower wattage - specify voltage and wattage: PAR 38: 70 watt; PAR 30 or PAR 20: 35 watt (RR40609 and RR40710); 100 watt PAR 38 (RR40710 only).
- 45 Gasket above reflector flange. Stops dust streaks on ceiling.
- 58 277 volt 60 Hz. ballast instead.

- 63 Dune specular Alzak reflector. (CP x .97)
- 69 Wheat specular Alzak reflector. (CP x .97)
- 70 SofTex Clear self-flanged reflector. (CP x .98)
- 71 SofTex Dune self-flanged reflector. (CP x .95)
- 72 Black specular Alzak reflector. (CP x .80)
- 82 Sloped ceiling adapter. Specify slope in 5° increments up to 30°. Increases total slope adaptability to 60°.
- 90 SofTex Champagne Gold reflector. (CP x .96)
- 91 SofTex Wheat self-flanged reflector. (CP x .95)
- 92 Umber specular Alzak reflector. (CP x .90)
- 93 Pewter Alzak self-flanged reflector. (CP x .95)
- 94 Specular Alzak or SofTex custom color / finish self-flanged reflector. Consult factory.
- 97 Other voltage ballast. Consult factory.

- LP With 20° spot PAR 38 lamp. Specify wattage. 3200°K standard or consult factory. 75 CRI, 7500 hour life. For 35° flood or 65° wide flood, consult factory. With Option -43, 35 watt 10° spot PAR 30 (85CRI, 9000 hour life) or PAR 20 (85 CRI, 6000 hour life). For 35 watt 30° flood PAR 30 or PAR 20, consult factory.
- OG OptiGroove black seamless tapered aluminum reflector. White trim, self-flanged. (CP x .82)
- TA Top access modification for servicing from above ceiling.

Note: All optional reflectors are self-flanged.

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 BE DONE IN ACCORDANCE WITH THE INSTRUCTIONS PROVIDED WITH THE FIXTURE. THE WARRANTY DOES NOT COVER THE COST OF REPAIR OR REPLACEMENT OF THE FIXTURE OR THE COST OF LABOR TO REPAIR OR REPLACE THE FIXTURE. THE WARRANTY IS VOID IF THE FIXTURE IS USED IN AN UNAUTHORIZED MANNER OR IF THE FIXTURE IS REPAIRED OR REPLACED BY ANY OTHER PERSON. THIS WARRANTY IS APPLIED TO THE ORIGINAL PURCHASER OF THE FIXTURE. THE WARRANTY IS VOID IF THE FIXTURE IS REPAIRED OR REPLACED BY ANY OTHER PERSON. THIS WARRANTY IS APPLIED TO THE ORIGINAL PURCHASER OF THE FIXTURE.

Directional Fixtures Note: The zonal cavity calculation technique is accurate when luminaires with symmetric candle distributions are employed and when the luminaires are located symmetrically throughout the room. These units have special characteristics and therefore the coefficients should be used with caution.