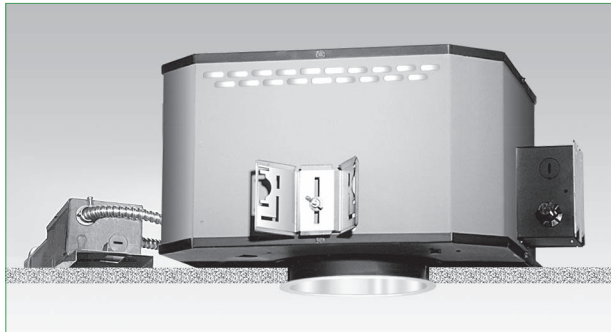
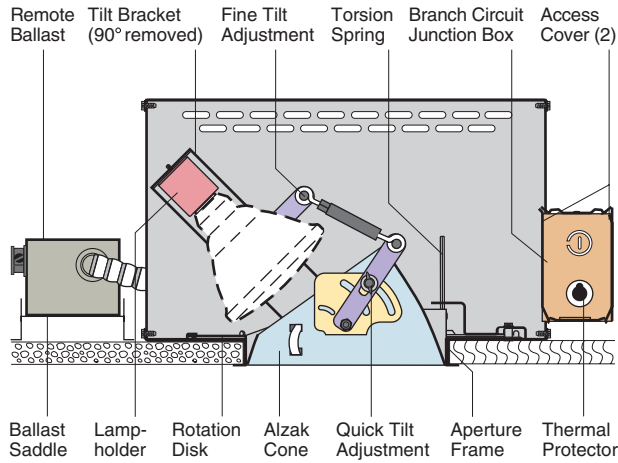


R7411



Directional
70-100-150W Par-38 Metal Halide
7 1/4" Conoid Aperture

Optics and Applications

For PAR lamps with beam spreads from 10° to 65°. Use in open bottom fixtures without a lamp shield as an HID directional to highlight display objects, plantings, architectural elements, mannequins, paintings, sculpture etc.

Design Features

The lamp-reflector assembly rotates 360° and tilts 45°. It locks in any selected position. The mechanism features quick movement for gross aiming, then precise fine adjustments are made by an insulated threaded turnbuckle. The lamp is always oriented to the center of the cone regardless of tilt or rotation. Maximum ceiling thickness 7/8". Aim or relamp from above or below.

Finish

A specular clear Alzak cone is standard. Optional colors and Softglow® finishes are available. Housing and structural parts are painted optical matte black to suppress stray light leaks.

Ballast

Standard ballast is encased and potted magnetic. Type HX, HPF, 120V or 277V taps. Shipped for 277V, field conversion to 120V. Thermally protected with auto reset. Temperature -20°F to 105°F. Comes mounted on a plate with 4" of flex. End of life protection not available, replace failed lamps immediately.

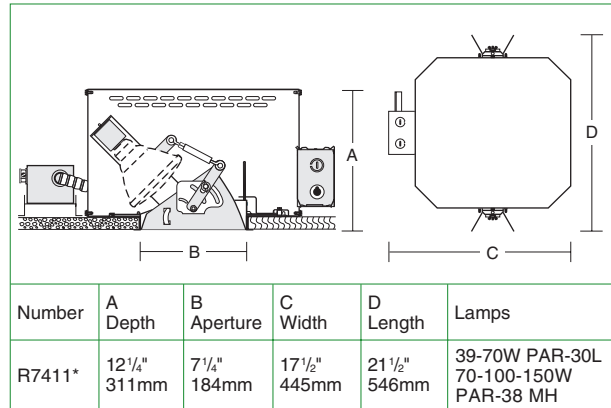
Optional electronic metal halide ballasts provide more constant lumen and wattage output. They feature thermal protection with auto reset, quiet operation and automatic shutdown at end of life. Service through the aperture.

Accessories

- R2 26" support rails.
- R5 52" support rails.
- B Specular black cone.
- G Specular gold cone.
- H Specular mocha cone.
- P Specular graphite cone.
- T Specular titanium cone.
- W Specular wheat cone.
- Y Specular pewter cone.
- Z Specular bronze cone.
- S Softglow® finishes: add S before color letters. e.g. SW for Softglow® wheat cone, SC for Softglow® clear cone.
- WT White trim flange.
- WHT White complete trim.
- F Ballast fuse.
- HL Hexcell louver.†
- LL Linear spread lens.†
- LP Large prism lens.†
- MP Microprism lens.†
- FR Frosting on lenses.†
- UV UV filter.†
- STC Straight top cone.

- EBH 70-100W electronic ballast, specify watts and volts.
- EBH5 150W electronic ballast, specify volts.
- V347 347 volt ballast, contact factory.
- EC Emergency circuit with mini-can socket and leads.*
- AO Magnetic ballast restrike Auto-On system.*
- AOE1 Electronic ballast Auto-On restrike system 120V.*
- AOE2 Electronic ballast Auto-On restrike system 277V.*
- FF30-2 Holder for PAR-30 lamps. Accepts two accessories.
- FF38-1 Holder for PAR-38 lamps. One accessory, 10° to 45° tilt.
- FF38-2 Holder for PAR-38 lamps. Two accessories, 10° to 45° tilt. †Requires accessory holder.
- *Use open rated 60W max. auxiliary incandescent lamp.

Dimensions and Lamps



*To specify add watts and volts for proper ballast, e.g. R7411-70277.

General

Fixtures are pre-wired and thermally protected, UL and C-UL listed for eight wire 75°C branch circuit wiring. Union made IBEW. Luminaire Efficiency Rating (LER) data do not apply to fixtures using reflector type lamps.

Matching Units

- Downlights Pages R8, R10, R11, R13
- Sloped ceiling downlight Page R12
- Wall washers Pages R33, R34, R35

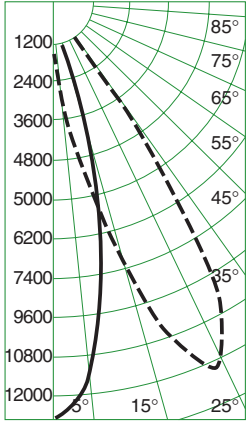
R9 R7411

Footcandle Values at Nadir

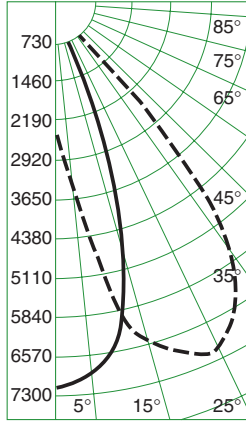
Distance	10'				15'				20'				25'							
	Nadir		5°	10°	Nadir		5°	10°	Nadir		5°	10°	Nadir		5°	10°				
Lamps Spot	FC	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam
R7411 70W PAR-38 MH SP	127	111	2	70	4	56	49	3	31	5	32	28	3	17	7	20	18	4	11	9
R7411 100W PAR-38 MH SP	208	182	2	114	4	92	81	3	51	5	52	45	3	29	7	33	29	4	18	9

Distance	10'				15'				20'				25'							
	Nadir		10°	15°	Nadir		10°	15°	Nadir		10°	15°	Nadir		10°	15°				
Lamps Flood	FC	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam
R7411 70W PAR-38 FL	72	62	4	44	5	32	28	5	20	8	18	16	7	11	11	12	10	9	7	13
R7411 70W PAR-38 VWFL	35	28	4	23	5	15	12	5	10	8	9	7	7	6	11	6	4	9	14	13
R7411 100W PAR-38 FL	113	98	4	69	5	50	43	5	31	8	28	24	7	17	11	18	16	9	11	13
R7411 100W PAR-38 VWFL	54	43	4	37	5	24	19	5	16	8	14	11	7	9	11	9	7	9	6	13

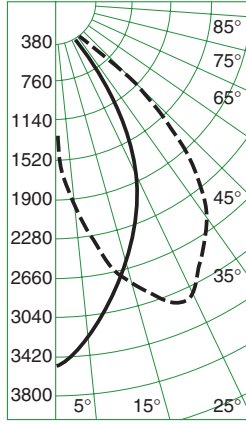
Candlepower Distribution



R7411 70W PAR-38 MH SP
Eff. 86% S/M .38



R7411 70W PAR-38 FL
Eff. 76% S/M .60



R7411 70W PAR-38 VWFL
Eff. 70% S/M .82

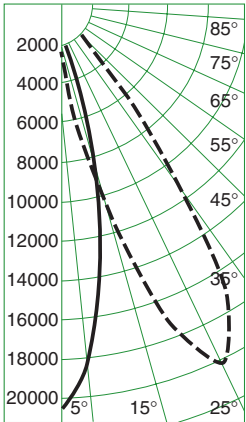
Candelas at Nadir

Vertical Angle (°)	70W SP	70W FL	70W WFL
	3200*	3500*	3600*
0	12692	7236	3458
5	11202	7122	3262
10	7299	6535	2899
15	3786	4929	2596
20	1996	2626	2412
25	1120	1150	1962
30	576	514	1317
35	222	183	770
40	52	50	376
45	17	17	107
50	8	6	10
55	0	4	4
60	0	0	0
65	0	0	0
70	0	0	0
75	0	0	0
80	0	0	0
85	0	0	0
90	0	0	0

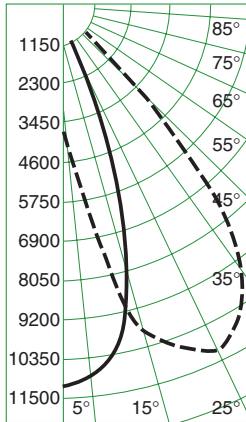
° Vertical Angles
* Initial Lamp Lumens

Notes

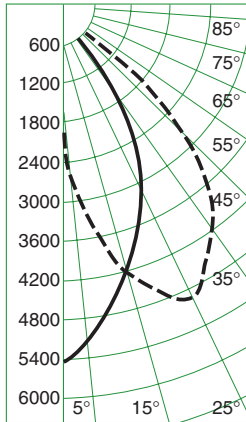
- Data derived with clear specular cones.
- Colored cone multipliers vary with lamp source, beam orientation and degree of angulation. Contact the factory for specific data.
- Candlepower distribution curves: solid lines show horizontal distribution at nadir, dotted lines show horizontal distribution at 25° lamp tilt.
- Pattern diameters are determined by the number of degrees from each side of nadir with lamp tilt at 0°. Angulation of lamp changes all data.
- Brightness data from the Average Luminance Method are inaccurate for downlights. They are theoretical calculations for large surfaces such as troffer lenses. We recommend the stricter standard of Maximum Brightness Method point data from direct photometer readings. They approximate what the human eye perceives when evaluating glare. For more information refer to Z section brochure Z1.



R7411 100W PAR-38 MH SP
Eff. 86% S/M .38



R7411 100W PAR-38 FL
Eff. 76% S/M .60



R7411 100W PAR-38 VWFL
Eff. 70% S/M .82

Vertical Angle (°)	100W SP	100W FL	VWFL
	5200*	5500*	5600*
0	20806	11306	5403
5	18364	11128	5097
10	11965	10211	4530
15	6207	7701	4056
20	3272	4103	3769
25	1836	1797	3066
30	945	803	2058
35	364	286	1203
40	86	78	587
45	28	26	167
50	13	10	16
55	0	7	7
60	0	0	0
65	0	0	0
70	0	0	0
75	0	0	0
80	0	0	0
85	0	0	0
90	0	0	0

° Vertical Angles
* Initial Lamp Lumens

Brightness

Number	Lamps	85°	75°	65°	55°	45°
R7411	70W PAR-38 MH SP	14	36	64	199	1892
	70W PAR-38 MH FL	13	30	54	177	2662
	70W PAR-38 MH VWFL	16	54	108	305	10818

Number	Lamps	85°	75°	65°	55°	45°
R7411	100W PAR-38 MH SP	24	55	97	310	2897
	100W PAR-38 MH FL	23	47	86	283	4263
	100W PAR-38 MH VWFL	25	80	163	467	16309

Data in footlamberts. Photometer readings, Maximum Brightness Method. See note 5. Data collected with lamps tilted 25°.