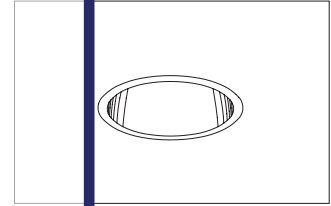


CATALOG #	TYPE	
JOB NAME	WATTAGE	VOLTAGE

6" T4.5 CERAMIC METAL HALIDE 70 WATT MAXIMUM HRR-06301

T4.5 Downlight: Exceptional Efficiencies
70, 39 or 20 Watt Available in the Distribution

THIS PRODUCT IS NO LONGER AVAILABLE



6" Dual Reflector Design (Optional T4)

Specifications

Lamp

- Designed for vertical T4.5 base or T4 twist-and-lock (see Option -T4) ceramic metal halide lamp.
- Up to 95 CRI, 12,000-15,000 hour life.
- For lower wattages, see Option -43.

Socket (5kV rated)

- G8.5 base. U6.5 base for T4 (Option -T4).
- Porcelain body. Silicone leads.

Reflectors

- Upper: Ellipsoidal specular Alzak® aluminum. With Option -SPT or -NFL: Parabolic instead.
- Lower: Low brightness specular Alzak® aluminum, self-flanged.
- Optional reflector finishes / colors available.

Lens: UV Absorbing

- Tempered prismatic glass mounted to upper reflector. Standard MFL distribution, or with Option -43: 39W, 0.8 SC).
- See Options for -SPT (0.2 SC) and -NFL (0.4 SC) distributions.

Electronic Ballast

- Full electronic circuitry provides constant

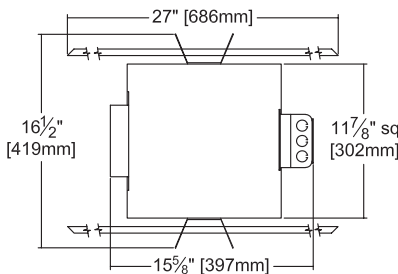
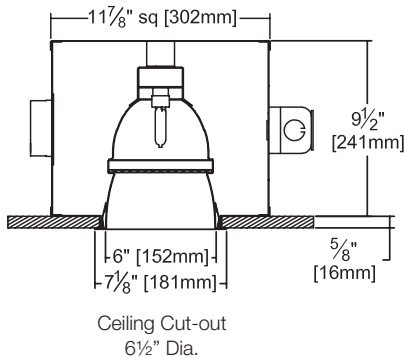
color and constant ballast, providing consistent performance and long life. Output voltage: 120V, 277V, 500V. For other voltages, see Options.

- 70 watt standard. Add Option -43 and specify for 39 or 20 watt. For 39 watt standard, add Option -43 for the IC socket.
- Minimum starting temperature -20 C / -4 F.
- Lamp Current Crest Factor less than 1.5.
- Thermally protected. Provides automatic shut-off if rated temperature is exceeded.
- Internally fused.
- Power factor greater than 90%.
- Temperature (T_{max}) less than 100 C.
- Maximum 90° C operation, Sound Rated A.
- Includes lamp end-of-life detection and shut-off.
- Aluminum housing.
- Acrylic sealed. Rust, shock, fire, and corrosion resistant: Exceeds 1000 hour ASTM 5% salt spray test.
- Lighting fixture. Mounts to ceiling or wall.
- Cool operation: Extends component life. Minimizes HVAC load.

- Entire luminaire serviced from below through removable trim.
- Built-in plaster frame.
- Outlet Box**
- Prewired 14 GA (NEC) galvanized steel, UL listed; with removable insulated cover.
- 1/2" and 3/4" knockouts.
- Installation**
- 27" galvanized hanger bars with adjustable mounting brackets (2) supplied.
- Recesses indoor or outdoor in covered locations.
- UL, C-UL (Canada) Listings**
- Wet, damp or dry locations, covered ceilings.
- Through-brand circuit conductors (6 #12).
- For 20 watt only.
- Three Year Limited Warranty**
- Complete standard fixture, including ballast.

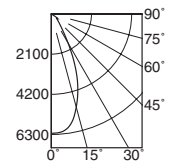
Please consult **QUOTATIONS** for the best alternative.

Performance at a Glance



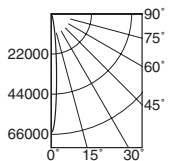
STANDARD (MFL) DISTRIBUTION

SC: 0.7
Effic: 74.4%
ITL Test: 70928



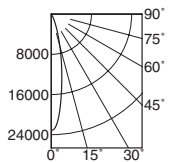
Option -SPT (70W)

SC: 0.2
Effic: 66.9%
ITL Test: 71394



Option -NFL (70W)

SC: 0.4
Effic: 69.9%
ITL Test: 71395



THE KIRLIN COMPANY

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

COMPACT PULSE START
METAL HALIDE LIGHTING

MAXIMUM WATTAGE

70

CATALOG NUMBER

HRR-06301

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

Alzak® is a registered trademark of ALCOA.

Detailed Photometry - Installed Fixture

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

LIMITED WARRANTY: CATALOGED KIRLIN FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR THREE YEARS FROM DATE OF PURCHASE. INSTALLATION TO N.E.C. (NORMAL USE). Manufacturer at the option will replace or repair such fixture or refund the purchase price or proportion of profit of purchase and related labor at the option of manufacturer within three years of original shipment. Liability of manufacturer is limited to the lamp, and manufacturer shall not be liable for any other damages, direct or indirect, sustained or suffered by purchaser or any person. This warranty is subject 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.

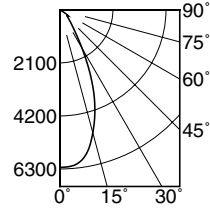
STANDARD (MFL) (70W)

SC: 0.7
Effic: 74.4%
ITL Test: 70928



Cone of Light ▲

Dist.	FC	Dia.
6	173.3	4.6
8	97.5	6.1
10	62.4	7.7
12	43.3	9.2
14	31.8	10.7
16	24.4	12.3



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	6238	6238	6238	6238	6238
5	6186	6186	6186	6186	6186
10	5040	5040	5040	5040	5040
15	2878	2878	2878	2878	2878
20	1029	1029	1029	1029	1029
25	482	482	482	482	482
30	386	386	386	386	386
35	7	7	7	7	7
40	2	2	2	2	2
45	0	0	0	0	0
90	0	0	0	0	0

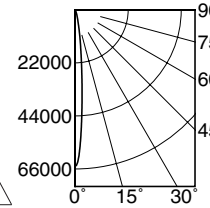
Option -SPT (70W)

SC: 0.2
Effic: 66.9%
ITL Test: 71394



Cone of Light ▲

Dist.	FC	Dia.
6	1802.4	1.1
8	1013.8	1.4
10	648.8	1.8
12	450.6	2.1
14	331.0	2.5
16	253.5	2.8



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	64885	64885	64885	64885	64885
5	33038	33038	33038	33038	33038
10	3959	3959	3959	3959	3959
15	681	681	681	681	681
20	79	79	79	79	79
25	29	29	29	29	29
30	17	17	17	17	17
35	0	0	0	0	0
40	0	0	0	0	0
45	0	0	0	0	0
90	0	0	0	0	0

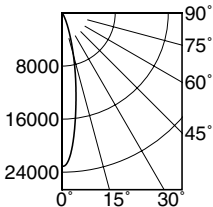
Option -NFL (70W)

SC: 0.4
Effic: 69.9%
ITL Test: 71395



Cone of Light ▲

Dist.	FC	Dia.
6	642.1	2.1
8	361.2	2.8
10	231.1	3.5
12	160.5	4.2
14	117.9	4.9
16	90.3	5.6



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	23114	23114	23114	23114	23114
5	19271	19271	19271	19271	19271
10	6558	6558	6558	6558	6558
15	1397	1397	1397	1397	1397
20	192	192	192	192	192
25	63	63	63	63	63
30	41	41	41	41	41
35	1	1	1	1	1
40	0	0	0	0	0
45	0	0	0	0	0
90	0	0	0	0	0

See following page for
Option -43: Lower Wattage
performance for 39W and 20W

Photometry based on: 6200 lumens - 70W
3400 lumens - 39W
1650 lumens - 20W

▲ **Cone of Light Key**
(Dia. (in ft.) shown is where FC value is half the FC at nadir)

Ft. Distance from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

Options

Distributions

- SPT Spot distribution. (0.2 SC; 0.1 with -43)
- NFL Narrow flood distribution. (0.4 SC; or 0.3 SC with Option -43)

Lower Reflector (Self-Flanged)

- 30 All White. (CP x 1.1)
- 31 White flange (only).
- 32 White trim ring to cover larger ceiling opening. Specify outer diameter of ring.
- 45 Gasket above flange. Stops dust streaks on ceiling.
- 69 Wheat specular Alzak. (CP x .92) Consult factory.
- 70 Clear SofTex. (CP x .92)
- 77 Pewter SofTex. (CP x .85) Consult factory.
- 91 Wheat SofTex. (CP x .88) Consult factory.
- 93 Pewter specular Alzak. (CP x .88) Consult

- factory.
- 94 Custom color. Consult factory.

Relays, Standbys, Lamps

- 49 Extra circuit DCB socket (up to 75W). Do not energize simultaneously with main source. Also see Option -LS.
- 65 Electronic standby system and DCB socket (up to 75W). Provides immediate light until CMH restrikes. Also see Options -66 and -LS.
- 66 Electronic time delay standby system and DCB socket (up to 75W). Provides light until CMH reaches 70% output. Also see Option -LS.
- LP With lamp. Specify source, wattage, color temperature / brand. 3000°K standard; consult factory for others.

- LS With T4 DCB tungsten halogen standby lamp (75W). Use only with Options -49, -65 or -66.

Wattage and Voltage

- 43 Lower wattage:
T4.5: specify 39W or Type IC 20W
With Option -T4: Type IC 20W only
- 347 347 volt.
- 97 Other input voltage instead. Consult factory.
- T4 Converted to GU6.5 base for twist-and-lock T4 lamp. 39W standard. Add Option -43 for 20 watt Type IC.

Other

- 79 Extension collar for up to 2" thick ceilings.
- 99 Special modification. Consult factory.
- TA Top access; for servicing from above ceiling.

SUBMITTAL DATA

JOB NAME _____

TYPE _____

WATTAGE _____ VOLTAGE _____

CATALOG NUMBER _____

APPROVAL STAMP

Detailed Photometry - Installed Fixture

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

OPTION -43: LOWER WATTAGE 39 WATT

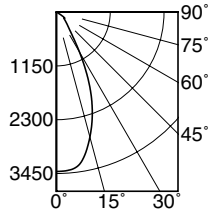
Option -43(39W) (MFL)

SC: 0.8
Effic: 75.5%
ITL Test: 70929



Cone of Light ▲

Dist.	FC	Dia.
6	94.6	4.7
8	53.2	6.2
10	34.1	7.8
12	23.7	9.3
14	17.4	10.9
16	13.3	12.4



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	3407	3407	3407	3407	3407
5	3385	3385	3385	3385	3385
10	2765	2765	2765	2765	2765
15	1627	1627	1627	1627	1627
20	558	558	558	558	558
25	277	277	277	277	277
30	209	209	209	209	209
35	3	3	3	3	3
40	1	1	1	1	1
45	0	0	0	0	0
90	0	0	0	0	0

OPTION -43: LOWER WATTAGE 20 WATT

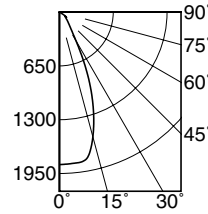
Option -43(20W) (MFL)

SC: 0.7
Effic: 77.0%
ITL Test: 70930



Cone of Light ▲

Dist.	FC	Dia.
6	51.2	4.5
8	28.8	6.0
10	18.4	7.6
12	12.8	9.1
14	9.4	10.6
16	7.2	12.1



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	1842	1842	1842	1842	1842
5	1835	1835	1835	1835	1835
10	1560	1560	1560	1560	1560
15	763	763	763	763	763
20	234	234	234	234	234
25	123	123	123	123	123
30	99	99	99	99	99
35	2	2	2	2	2
40	0	0	0	0	0
45	0	0	0	0	0
90	0	0	0	0	0

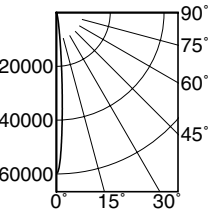
Options -43(39W)-SPT

SC: 0.1
Effic: 68.9%
ITL Test: 71397



Cone of Light ▲

Dist.	FC	Dia.
6	1660.1	0.9
8	933.8	1.1
10	597.6	1.4
12	415.0	1.7
14	304.9	2.0
16	233.4	2.3



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	59763	59763	59763	59763	59763
5	22820	22820	22820	22820	22820
10	1495	1495	1495	1495	1495
15	388	388	388	388	388
20	44	44	44	44	44
25	19	19	19	19	19
30	6	6	6	6	6
35	0	0	0	0	0
40	0	0	0	0	0
45	0	0	0	0	0
90	0	0	0	0	0

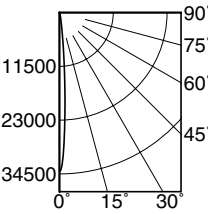
Options -43(20W)-SPT

SC: 0.1
Effic: 69.7%
ITL Test: 71400



Cone of Light ▲

Dist.	FC	Dia.
6	945.9	0.8
8	532.1	1.1
10	340.5	1.4
12	236.5	1.6
14	173.7	1.9
16	133.0	2.2



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	34053	34053	34053	34053	34053
5	11968	11968	11968	11968	11968
10	563	563	563	563	563
15	185	185	185	185	185
20	23	23	23	23	23
25	11	11	11	11	11
30	4	4	4	4	4
35	0	0	0	0	0
40	0	0	0	0	0
45	0	0	0	0	0
90	0	0	0	0	0

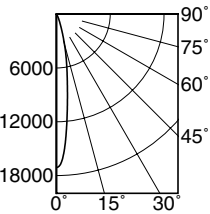
Options -43(39W)-NFL

SC: 0.3
Effic: 70.5%
ITL Test: 71398



Cone of Light ▲

Dist.	FC	Dia.
6	475.3	1.7
8	267.3	2.3
10	171.1	2.8
12	118.8	3.4
14	87.3	3.9
16	66.8	4.5



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	17110	17110	17110	17110	17110
5	12866	12866	12866	12866	12866
10	3454	3454	3454	3454	3454
15	619	619	619	619	619
20	92	92	92	92	92
25	32	32	32	32	32
30	19	19	19	19	19
35	0	0	0	0	0
40	0	0	0	0	0
45	0	0	0	0	0
90	0	0	0	0	0

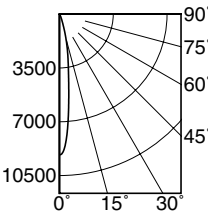
Options -43(20W)-NFL

SC: 0.3
Effic: 68.6%
ITL Test: 71401



Cone of Light ▲

Dist.	FC	Dia.
6	253.8	1.6
8	142.8	2.1
10	91.4	2.6
12	63.5	3.1
14	46.6	3.6
16	35.7	4.2



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	9137	9137	9137	9137	9137
5	6642	6642	6642	6642	6642
10	1607	1607	1607	1607	1607
15	242	242	242	242	242
20	40	40	40	40	40
25	15	15	15	15	15
30	10	10	10	10	10
35	0	0	0	0	0
40	0	0	0	0	0
45	0	0	0	0	0
90	0	0	0	0	0

Photometry based on: 6200 lumens - 70W
3400 lumens - 39W
1650 lumens - 20W

▲ Cone of Light Key
(Dia. (in ft.) shown is where FC value is half the FC at nadir.)
Ft. Distance from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

THE KIRLIN COMPANY

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