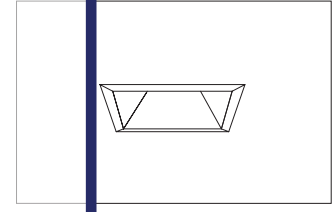


CATALOG #	TYPE	
JOB NAME	WATTAGE	VOLTAGE

6" T4.5 CERAMIC METAL HALIDE 70 WATT MAXIMUM HRS-06311

T4.5 Square 6" Downlight: High Efficiency
70, 39 or 20 Watt available in three Distributions

THIS PRODUCT IS NO LONGER AVAILABLE



6" Dual Reflector Design (Optional T4)

Specifications

Lamp

- Designed for vertical T4.5 bi-pin T4 twist-and-lock (see Option -T4) ceramic metal halide lamp.
- Up to 95 CFM, 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 square specular Alzak® aluminum, self-flanged.
- Optional reflector finishes / colors available.

Lens: UV Absorbing

- Tempered prismatic glass mounted to aluminum reflector. Standard MFL distribution (0.1 SC) or with Option -43: 39W, 0.9 SC).
- See Options -SPT (0.1 SC) and -NFL (0.3 SC) for distribution details.

Electronic Ballast

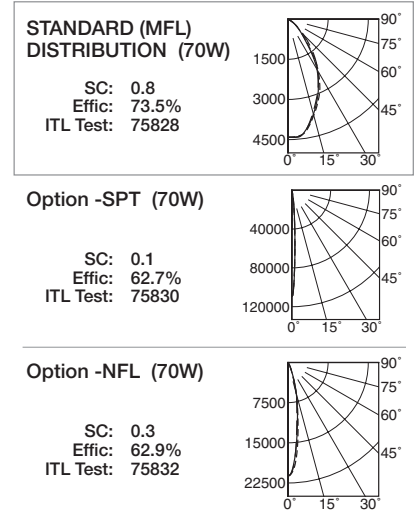
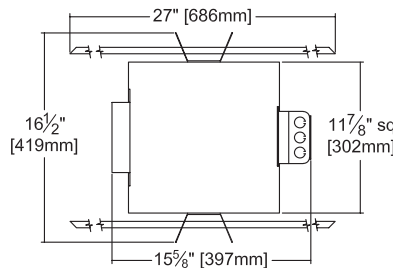
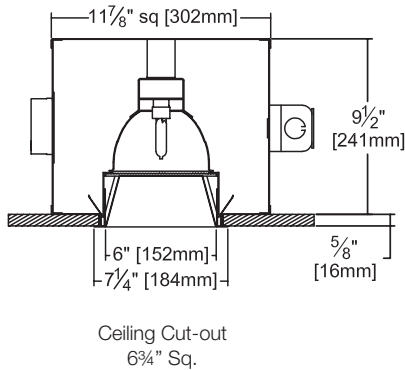
- Full electronic circuitry provides constant

- and constant wattage resulting in consistent performance in all applications.
- Input voltage: 120, 208, 240, 277, 300, 347, 480V. For other voltages, see Options.
- 70 watt standard. Add Option -43 and specify for 39 or 20 Watt. (See Option -T4, 39 watt and Option -43 for 39 watt, IC 20 watt).
- 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 99%.
- Compliance with FCC Class B, CE Mark, Maximum 90°C operation, Sound Rated A.
- Includes lamp end-of-life detection and salt spray testing.
- Aluminum Housing: Corrosion resistant: Exceeds 1000 hour ASTM 5% salt spray test.
- Minimums on line.
- 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), 20 watt only.
- ### Three Year Limited Warranty
- Complete standard fixture, including ballast.

Please consult QUOTATIONS for the best alternative.

Performance at a Glance



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
HRS-06311

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

Alzak® is a registered trademark of ALCOA.

CMH APRIL 2013

Detailed Photometry - Installed Fixture

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

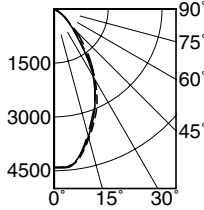
STANDARD (MFL) (70W)

SC: 0.8
Effic: 73.5%
ITL Test: 75828



Cone of Light ▲

Dist.	FC	Dia.
6	122.5	5.2
8	68.9	7.0
10	44.1	8.7
12	30.6	10.5
14	22.5	12.2
16	17.2	13.9



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	4409	4409	4409	4409	4409
5	4383	4389	4404	4421	4422
10	3718	3679	3610	3642	3674
15	2818	2765	2681	2693	2680
20	1629	1735	1749	1648	1518
25	675	708	816	694	654
30	259	280	290	282	260
35	1	1	24	1	1
40	0	0	0	0	0
45	0	0	0	0	0
90	0	0	0	0	0

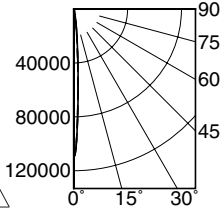
Option -SPT (70W)

SC: 0.1
Effic: 62.7%
ITL Test: 75830



Cone of Light ▲

Dist.	FC	Dia.
6	3045.2	0.7
8	1712.9	0.9
10	196.3	1.2
12	761.3	1.4
14	559.3	1.6
16	428.2	1.9



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	10963	10963	10963	10963	10963
5	3146	3195	3295	3358	3364
10	261	272	287	287	280
15	64	76	63	77	67
20	8	11	36	11	9
25	1	1	1	2	3
30	0	0	0	0	0
35	0	0	0	0	0
40	0	0	0	0	0
45	0	0	0	0	0
90	0	0	0	0	0

MULTIPLY ALL CANDELA VALUES BY 10

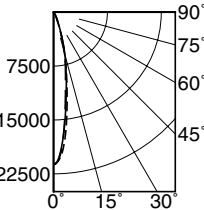
Option -NFL (70W)

SC: 0.3
Effic: 62.9%
ITL Test: 75832



Cone of Light ▲

Dist.	FC	Dia.
6	587.8	1.9
8	330.7	2.6
10	211.6	3.2
12	147.0	3.9
14	108.0	4.5
16	82.7	5.1



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	21162	21162	21162	21162	21162
5	17893	17374	16573	16468	16600
10	5879	5920	5881	5941	6055
15	1129	1216	1277	1284	1224
20	237	306	455	311	237
25	60	71	97	71	60
30	19	21	20	19	17
35	1	2	3	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

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

▲ 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. (0.1 SC)
- NFL Narrow flood distribution. (0.3 SC)

Lower Reflector (Self-Flanged)

- 30 All White. (CP x 1.1)
- 31 White flange (only).
- 32 White trim extender to cover larger ceiling opening. Specify outer square dimension.
- 45 Gasket above flange. Stops dust streaks on ceiling.
- 70 Clear SofTex. (CP x .92)
- 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

LIMITED WARRANTY: CATALOGED KIRLIN FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR THREE YEARS FROM DATE OF PURCHASE. INSTALLATION TO BE IN ACCORDANCE WITH ALL APPLICABLE ELECTRICAL CODES AND REGULATIONS. MANUFACTURER'S WARRANTY IS LIMITED TO THE ORIGINAL PURCHASER AND DOES NOT COVER DAMAGE TO THE FIXTURES CAUSED BY IMPROPER INSTALLATION, REPAIR, OR MODIFICATION OF THE FIXTURES WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE MANUFACTURER. THIS WARRANTY IS VOID IF THE FIXTURES ARE USED IN ANY MANNER NOT SPECIFIED IN THE ORIGINAL WARRANTY DOCUMENTATION. KIRLIN LIGHTING, INC. 10000 W. 14TH AVENUE, BOULDER, CO 80501. TEL: 303.440.1111. WWW.KIRLINLIGHTING.COM