

400 Watt Maximum Downlight Atrium / Church / Auditorium

Features

Lamp

- Designed for:
400 watt clear ED/BT-28 metal halide.
- See Option -43 for lower wattage.
- Option -23 for Mercury, Option -24 for HPS.

Socket

- Vertical. Mogul base. Glazed porcelain.
- Nickel-plated brass screw shell. Silicone leads.

Reflectors

- Upper: Parabolic specular Alzak® aluminum.
- Lower: Low brightness parabolic specular Alzak aluminum, self-flanged. Thirteen optional specular Alzak or SofTex aluminum finishes available. See Options.

Lens

- UV absorbing tempered Industrix mounted to upper reflector. (Medium distribution)
- UV absorbing tempered prismatic C#73 glass instead (Option -15). (Wider distribution)
- UV absorbing clear tempered glass instead (Option -28). (Narrower distribution)

Ballast Assembly

- WhisperPack™ fully encapsulated 180°C rated HPF ballast: 3 year warranty.
- Premium Class H; CWA 10:10 regulation.

- Capacitor 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

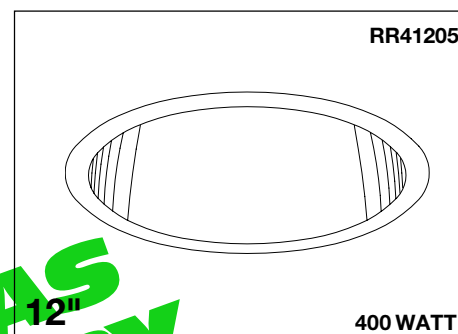
- Acrylic enameled aluminum.
- Cool. Dissipates heat across entire surface area. Ventilated.
- Rustproof. Exceeds 1000 hour ASTM 5% salt spray test.
- Entire luminaire serviced through removable reflector. For top access, see Option -TA.
- Built-in plaster frame.

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.



12"

59% Efficiency
250 watt available: Option -43

**3 beam spreads available
through lens selection
(See Performance-at-a-Glance)**

UL, C-UL (Canada) Listings

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

Three Year Limited Warranty

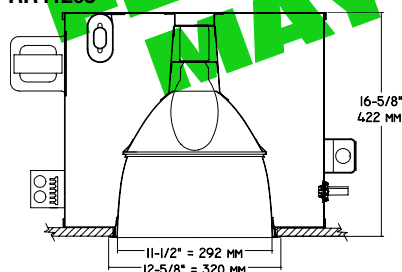
- Complete standard fixture.

Thermal Protection

- Per current NEC.

Performance at a Glance

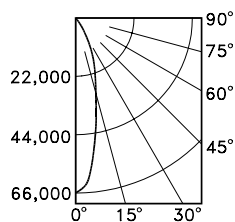
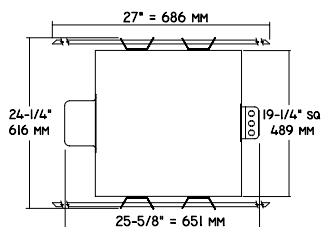
RR41205



Cone of Light Key

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

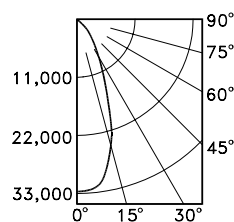
* Dia. (in ft.) shown is where FC value is half the FC at nadir.



RR41205 S/MH 0.4

Cone of Light*

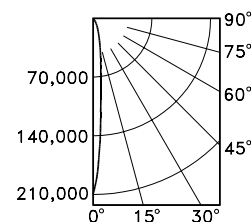
Ft.	FC	Dia.
6	1823.7	2.5
8	1025.8	3.3
10	656.5	4.1
12	455.9	5.0
14	335.0	5.8
16	256.5	6.6



RR41205-15 S/MH 0.7

Cone of Light*

Ft.	FC	Dia.
6	910.0	4.2
8	511.9	5.6
10	327.6	7.0
12	227.5	8.4
14	167.1	9.8
16	128.0	11.2



RR41205-28 S/MH 0.2

Cone of Light*

Ft.	FC	Dia.
6	5786.9	1.0
8	3255.2	1.3
10	2083.3	1.6
12	1446.7	1.9
14	1062.9	2.3
16	813.8	2.6

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

MAXIMUM WATTAGE

CATALOG NUMBER

**PRECISION LIGHTING
METAL HALIDE**

400 ED/BT-28

RR41205

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Alzak® is a registered trademark of ALCOA.

RR41205

RECESSED ROUND: 400 WATT ED/BT-28 MOGUL BASE METAL HALIDE

Detailed Photometry - Installed Fixture

FROM I.T.L. (BOULDER, CO)

RR41205: TEST NUMBER 41287

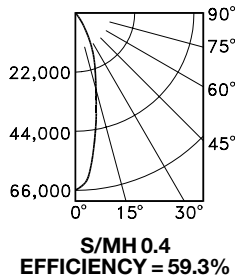
RR41205-15: TEST NUMBER 41288

RR41205-28: TEST NUMBER 41289

RR41205

*LER = 44.3

•AEC = \$5.42



CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	65653	65653	65653	65653	65653
5	56665	56665	56665	56665	56665
15	27912	27912	27912	27912	27912
25	11618	11618	11618	11618	11618
35	3473	3473	3473	3473	3473
45	1022	1022	1022	1022	1022
55	191	191	191	191	191
65	1	1	1	1	1
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

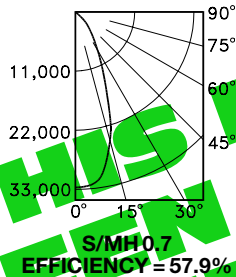
COEFFICIENTS OF UTILIZATION					
RF	20				
RC	80				
RW	70	50	30	10	50
1	68	66	65	64	63
2	65	63	61	59	60
3	62	59	57	55	57
4	60	56	53	51	54
5	58	53	51	48	52
6	55	51	48	46	50
7	53	49	46	44	48
8	51	47	44	42	46
9	49	45	42	40	44
10	48	43	40	38	42

* LER = Luminaire Efficacy Rating
LER = Luminaire Efficacy x Total Lamp Lumens x Ballast Factor
Input Watts

RR41205-15

*LER = 43.2

•AEC = \$5.55



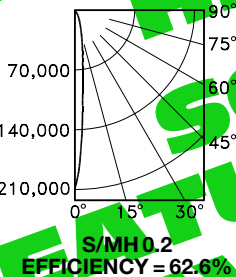
CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	32759	32759	32759	32759	32759
5	31909	31909	31909	31909	31909
15	24932	24932	24932	24932	24932
25	13031	13031	13031	13031	13031
35	5012	5012	5012	5012	5012
45	1855	1855	1855	1855	1855
55	234	234	234	234	234
65	2	2	2	2	2
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

COEFFICIENTS OF UTILIZATION					
RF	20				
RC	80				
RW	70	50	30	10	50
1	66	64	63	62	61
2	63	60	58	56	57
3	60	56	54	52	54
4	57	53	50	48	51
5	54	50	47	44	48
6	52	47	44	41	46
7	50	45	41	39	43
8	47	42	39	37	41
9	45	40	37	35	39
10	43	38	35	33	37

RR41205-28

*LER = 46.7

•AEC = \$5.13



CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	208330	208330	208330	208330	208330
5	97540	97540	97540	97540	97540
15	27990	27990	27990	27990	27990
25	10640	10640	10640	10640	10640
35	1570	1570	1570	1570	1570
45	390	390	390	390	390
55	140	140	140	140	140
65	0	0	0	0	0
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

COEFFICIENTS OF UTILIZATION					
RF	20				
RC	80				
RW	70	50	30	10	50
1	72	71	69	68	67
2	69	67	65	64	64
3	67	64	62	60	62
4	65	61	59	57	60
5	63	59	56	54	58
6	61	57	54	52	56
7	59	55	52	50	54
8	57	53	51	49	52
9	56	52	49	47	51
10	54	50	47	46	49

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 SoftTex Clear: CP x .98
-71 SoftTex Dune: CP x .95

-72 Black Alzak: CP x .80
-90 SoftTex Champagne Gold: CP x .96
-91 SoftTex Wheat: CP x .95

-92 Umber Alzak: CP x .90
-93 Pewter Alzak: CP x .95
-OG Black OptiGroove: CP x .82

Options

- 15 UV absorbing tempered prismatic C#73 flat glass instead. Wider distribution. (S/MH = 0.7)
- 16 Champagne Gold anodized Alzak lower reflector. (CP x .98)
- 23 Mercury ballast instead. 250 watt standard or see Option -43. Specify voltage.
- 24 HPS ballast instead. 250W standard or see Option -43. Specify voltage. (NOT FOR G.E. LAMPS)
- 28 UV absorbing clear tempered glass instead. Narrower distribution. (S/MH = 0.2)
- 30 White self-flanged lower reflector. (CP x .98)
- 31 White flange (only) on lower Alzak reflector.
- 32 Trim extender. Broadens trim flange O.D. by 1" to cover larger ceiling opening.
- 43 Lower wattage mogul base - specify voltage and wattage for: Metal Halide: 250, 175MO; Mercury: 175MO; HPS: 150MO.

- 45 Gasket above reflector flange.
- 49 Extra circuit DCB socket (150W max.) Must not be energized simultaneously with main source.
- 58 277 volt 60 Hz. ballast instead.
- 63 Dune specular Alzak lower reflector. (CP x .98)
- 65 Standby relay and DCB socket. (150W max.) With fixture energized, provides immediate light during HID outage. Also see Option -66.
- 66 Time delay standby relay and DCB socket. (150 watt max.) When energized, provides light until HID reaches 70% output.
- 69 Wheat specular Alzak lower reflector. (CP x .97)
- 70 SoftTex Clear lower reflector. (CP x .98)
- 71 SoftTex Dune lower reflector. (CP x .95)
- 72 Black anodized Alzak lower reflector. (CP x .80)
- 79 Extension collar for up to 2" thick ceilings.
- 90 SoftTex Champagne Gold lower reflector. (CP x .96)
- 91 SoftTex Wheat lower reflector. (CP x .95)
- 92 Umber Alzak self-flanged reflector. (CP x .90)

- 93 Pewter Alzak self-flanged reflector. (CP x .95)
- 94 Specular or SoftTex custom color/finish lower reflector, self-flanged. Consult factory.
- 97 Other voltage ballast. Consult factory.
- 99 Special modification. Consult factory.
- HL High to Low light output - provides 100% to 50% bi-level lighting for energy savings and adjustable light levels. 120 or 277V only for 400, 250, 175 MH or 400, 250, 150 HPS only. Requires separate control circuit.
- LP With clear lamp. Specify source, wattage and color temperature (3700°K standard for MH). Consult factory for other color temperatures.
- LS With tungsten halogen standby lamp. (150 watt max.) Use only with Options -49, -65 or -66.
- OG OptiGroove black seamless aluminum lower reflector. White trim, self-flanged. (CP x .82)
- TA Top access modification for servicing from above.

Note: All optional lower reflectors are self-flanged.

SUBMITTAL DATA

APPROVAL STAMP

JOB NAME _____

TYPE _____

WATTAGE _____ VOLTAGE _____

CATALOG NUMBER _____