

Regressed Lens: 400 Watt ED/BT-28 Large Area Illumination

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.

Reflector

- Specular Alzak® aluminum.

Trim Assembly

- Seamless tapered black OptiGroove with white flange. Self-flanged trim.
- UV absorbing tempered prismatic low brightness C#7/3 flat glass.
- Torsion springs retain snug fit to ceiling.
- Optional trims and lenses available.
- UV absorbing tempered Industrix instead, see Option -IN. 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

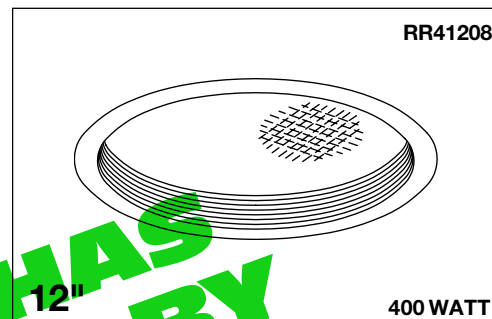
- Acrylic enameled aluminum.
- Cool: Dissipates heat across entire surface area. Ventilated.
- Rustproof: Exceeds 1000 hour ASTM 5% salt spray test.
- Entire luminaire serviced through removable trim assembly. For top access see Option -TA.
- Built-in plaster frame.

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 supplied (2).
- Fully adjustable universal mounting brackets supplied (2).
- Recesses indoor or outdoor in covered locations.



57% Efficiency

**Optional Industrix Lens
for Narrow Distribution**

UL, C-UL (Canada) Listings

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

Three Year Limited Warranty

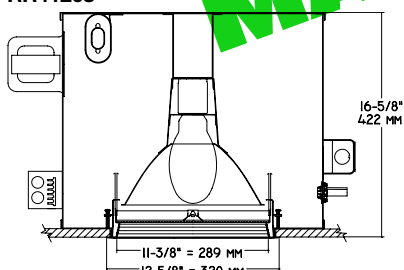
- Complete standard fixture.

Thermal Protection

- Per current NEC.

Performance at a Glance

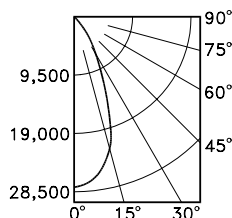
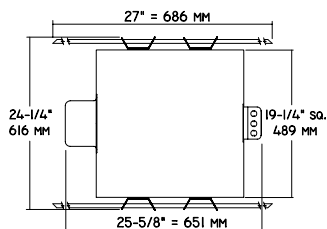
RR41208



Cone of Light Key

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

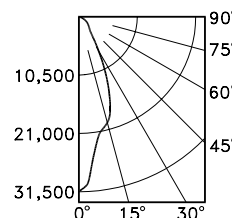
* Dia. (in ft.) shown is where FC value is half the FC at nadir.



RR41208 S/MH 0.7

Cone of Light*

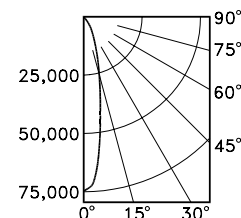
Ft.	FC	Dia.
6	760.9	4.4
8	428.0	5.9
10	273.9	7.4
12	190.2	8.9
14	139.8	10.4
16	107.0	11.9



RR41208-FR S/MH 0.6

Cone of Light*

Ft.	FC	Dia.
6	867.0	3.5
8	487.7	4.7
10	312.1	5.9
12	216.8	7.0
14	159.2	8.2
16	121.9	9.4



RR41208-IN S/MH 0.4

Cone of Light*

Ft.	FC	Dia.
6	2076.2	2.2
8	1167.8	3.0
10	747.4	3.7
12	519.0	4.5
14	381.3	5.2
16	292.0	6.0

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

RR41208

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Alzak® is a registered trademark of ALCOA.

RR41208

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

Detailed Photometry - Installed Fixture

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

RR41208: TEST NUMBER 44002

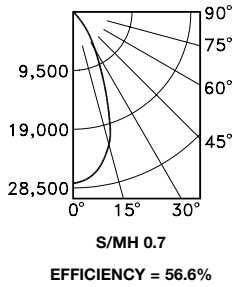
RR41208-FR: TEST NUMBER 43889

RR41208-IN: TEST NUMBER 43888

RR41208

*LER = 42.3

•AEC = \$5.68



CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	27391	27391	27391	27391	27391
5	27008	27008	27008	27008	27008
15	22236	22236	22236	22236	22236
25	12553	12553	12553	12553	12553
35	4788	4788	4788	4788	4788
45	1853	1853	1853	1853	1853
55	803	803	803	803	803
65	449	449	449	449	449
75	200	200	200	200	200
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	64	62	61	60	59
2	61	58	55	53	55
3	58	54	51	48	51
4	55	50	47	44	48
5	52	47	44	41	45
6	49	44	41	38	43
7	47	42	38	36	40
8	45	39	36	34	38
9	43	37	34	32	36
10	41	35	32	30	35

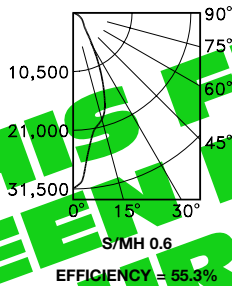
* LER = Luminaire Efficacy Rating
LER = Luminaire Efficacy x Total Lamp Lumens x Ballast Factor
Input Watts

* AEC = Annual Energy Cost per
Lumens (based on 3000
hours use @ \$0.08 KWH).

RR41208-FR

*LER = 41.3

•AEC = \$5.81



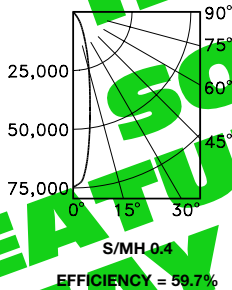
CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	31212	31212	31212	31212	31212
5	25808	25808	25808	25808	25808
15	19265	19265	19265	19265	19265
25	11300	11300	11300	11300	11300
35	4134	4134	4134	4134	4134
45	2098	2098	2098	2098	2098
55	1480	1480	1480	1480	1480
65	928	928	928	928	928
75	466	466	466	466	466
85	8	8	8	8	8
90	0	0	0	0	0

COEFFICIENTS OF UTILIZATION					
RF	20				
RC	80				
RW	70	50	30	10	50
1	62	60	59	57	57
2	58	55	53	50	52
3	55	51	48	45	49
4	52	47	44	41	45
5	49	44	40	38	42
6	46	41	37	35	40
7	44	39	35	32	37
8	42	36	33	30	35
9	40	34	31	28	33
10	38	32	29	27	32

RR41208-IN

*LER = 44.6

•AEC = \$5.38



CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	74742	74742	74742	74742	74742
5	63527	63527	63527	63527	63527
15	25568	25568	25568	25568	25568
25	8861	8861	8861	8861	8861
35	3784	3784	3784	3784	3784
45	1604	1604	1604	1604	1604
55	623	623	623	623	623
65	323	323	323	323	323
75	150	150	150	150	150
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	62	60	58	59
3	62	59	56	54	56
4	60	55	52	50	54
5	57	53	49	47	51
6	55	50	47	45	49
7	53	48	45	42	47
8	51	46	43	41	44
9	49	44	41	39	43
10	47	42	39	37	42

Options

- 23 Mercury ballast instead. 250 watt standard or see -43. Specify voltage.
- 24 HPS ballast instead. 250 watt standard or see Option -43. Specify voltage. (NOT FOR G.E. LAMPS)
- 27 Clear 1/4" tempered glass beneath prismatic flat C#73 glass instead, for vandal resistance.
- 32 Trim extender. Broadens trim flange O.D. by 1".
- 40 White grooveless regressed flare trim instead.
- 43 Lower wattage mogul base- specify wattage and voltage for: Metal Halide: 250, 175MO; Mercury: 175MO; HPS: 150MO.
- 45 Gasket above trim flange (between trim and ceiling).
- 46 Gasket between trim and lens.
- 49 Extra circuit DCB socket. (150 watt max.) Must not be energized simultaneously with main source.
- 58 277 volt 60 Hz. ballast instead.
- 65 Standby relay and DCB socket. (150 watt 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.
- 94 Custom color trim assembly. Consult factory.
- 97 Other voltage ballast. Consult factory.
- 99 Special modification. Consult factory.
- FR Fresnel tempered concentric lens instead.
- FT Flat white trim instead. Standard with UV absorbing tempered prismatic glass or add Option -IN or -FR.
- 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.
- IN UV absorbing tempered Industrix glass instead - concentrates distribution.
- 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. (150W max.) Use only with Options -49, -65 or -66.
- TA Top Access modification for servicing from above ceiling.

SUBMITTAL DATA

APPROVAL STAMP

JOB NAME _____

TYPE _____

WATTAGE _____ VOLTAGE _____

CATALOG NUMBER _____