

R4406 G8.5 Base, T4.5 Metal Halide
R4607 G12 Base, T4.5, T6 Metal Halide
R4306 PGJ5 Base, T3.5 Metal Halide

Narrow Beam Downlights
 20W to 70W
 4 1/8" Conoid Apertures

Optics and Applications

This generation of high efficient, low brightness metal halide fixtures features precise new optics. Each lamp and base combination has a unique reflector system designed to optimize performance. A full line of downlights, wall washers, directionals and sloped ceiling products maximize design flexibility. Narrow beam patterns range from 24° to 30°. Companion fixtures on page R52 have medium beams (44° - 54°) and wide beams on page R53 (68° - 75°).

Design Features

Kurt Versen downlight primary reflectors produce smooth patterns with feathered edges. The shielding cone achieves unparalleled control of brightness and is held by two torsion springs. A rigid steel housing protects and positions all internal components. A fine microprism glass lamp shield is standard. Maximum ceiling thickness 1 1/2". Top or bottom service.

Finish

Housings and structural parts are painted matte black to suppress light leaks. The shielding cone is specular clear. A variety of special finishes and colors are available.

Ballasts

Electronic metal halide ballasts provide constant output. Thermal protection with auto reset, quiet operation and automatic shutdown at end of life. For emergency back-up system contact factory.

Bases

Product performance is dependant on quality sockets to provide reliable contact to the lamp. Kurt Versen uses sockets with redundant spring systems to retain the lamps.

General

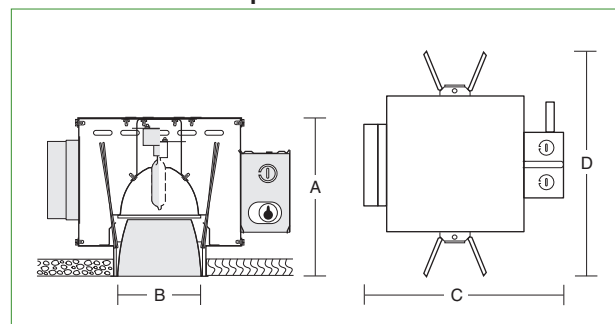
Fixtures are pre-wired, thermally protected, UL and C-UL listed for eight wire 75°C branch circuit wiring. All products are union made IBEW. Suitable for damp locations.

Accessories

- B Black cone.
- G Gold cone.
- H Mocha cone.
- P Graphite cone.
- T Titanium cone.
- W Wheat cone.
- Y Pewter cone.
- Z Bronze cone.
- F Fuse.
- S Softglow® add S to color, e.g. SC, Softglow® clear.
- GU For GU6.5 base, T4 MH lamp.
- EC Emergency circuit, mini-can socket, 75W max.
- AOE1 Ballast 120V, auto-on restrike system, 75W max.
- AOE2 Ballast 277V, auto-on restrike system, 75W max.
- FMR4 For flush mount construction contact factory.
- GG Upper gold reflector.
- R2 26" support rails.
- R5 52" support rails.
- LL Linear spread lens.
- UV UV lens.
- FR Frosted lens.
- WT White trim flange.
- WHT White complete cone.



Dimensions and Lamps



Number	A Depth	B Aperture	C Width	D Length	Lamps*
R4406	8 1/8" 206mm	4 1/8" 105mm	13 3/4" 349mm	14 1/8" 359mm	20 to 70W MH T4.5 Lamp, G8.5 Base
R4607	8 1/8" 206mm	4 1/8" 105mm	13 3/4" 349mm	14 1/8" 359mm	20 to 70W MH T4.5, T6 Lamp, G12 Base
R4306	8 1/8" 206mm	4 1/8" 105mm	14 3/8" 365mm	14 1/8" 359mm	22 to 39W MH T3.5 Lamp, PGJ5 Base

*To specify add watts and volts for proper ballast, e.g. R4406-20277.

Matching Units

Direct./Slope downlights [Pages R2, R61, R62, R63](#)
 Wall washers [Pages R31, R71, R72](#)
 Downlights [Pages R1, R52, R53](#)

Brightness Data

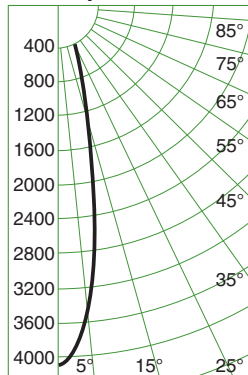
R51 R4406 R4607 R4306

Performance Datachart

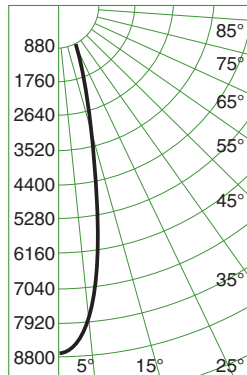
Single Unit Initial Footcandles, 30" Work Plane						Ceiling to Floor	Multiple Units Initial Footcandles, 30" Work Plane			
R4406 20W T4.5 G8.5 MH GE Read Top Data						12'	Ceiling 80% Walls 50% Floor 20%			
R4406 39W T4.5 G8.5 MH Syl Read Middle Data							Spacing is Maximum Over Work Plane			
R4406 70W T4.5 G8.5 MH GE Read Bottom Data							Spacing	RCR 1	RCR 3	RCR 8
Nadir	10°		15°		20°					
FC	FC	Diam	FC	Diam	FC	Diam				
46	23	3'	13	5'	8	7'	3'	112	100	79
96	56	3'	31	5'	18	7'	4'	205	184	146
120	86	3'	55	5'	35	7'	5'	223	198	154
31	16	4'	9	6'	6	8'	4'	77	68	54
66	38	4'	21	6'	13	8'	5'	140	125	100
82	59	4'	37	6'	24	8'	6'	152	135	105
23	12	5'	7	7'	4	10'	5'	56	49	39
48	28	5'	15	7'	9	10'	5'	101	91	72
59	43	5'	27	7'	17	10'	7'	110	98	76
17	9	5'	5	8'	3	11'	6'	42	38	30
36	21	5'	12	8'	7	11'	6'	77	69	55
45	32	5'	21	8'	13	11'	8'	84	74	58
13	7	6'	4	9'	2	13'	6'	33	29	23
28	16	6'	9	9'	5	13'	7'	60	54	43
35	25	6'	16	9'	10	13'	9'	66	58	45

Single Unit Initial Footcandles, 30" Work Plane						Ceiling to Floor	Multiple Units Initial Footcandles, 30" Work Plane			
R4607 20W T4.5 G12 MH GE Read Top Data						12'	Ceiling 80% Walls 50% Floor 20%			
R4607 39W T6 G12 MH Syl Read Middle Data							Spacing is Maximum Over Work Plane			
R4607 70W T6 G12 MH Philips Read Bottom Data							Spacing	RCR 1	RCR 3	RCR 8
Nadir	10°		15°		20°					
FC	FC	Diam	FC	Diam	FC	Diam				
47	25	3'	13	5'	8	7'	3'	105	94	77
106	57	3'	29	5'	16	7'	4'	217	195	160
191	104	3'	56	5'	31	7'	4'	390	352	285
32	17	4'	9	6'	5	8'	4'	71	64	53
73	39	4'	20	6'	11	8'	4'	148	133	109
130	71	4'	38	6'	21	8'	4'	266	240	195
23	12	5'	6	7'	4	10'	5'	52	47	38
53	28	5'	14	7'	8	10'	5'	108	97	79
94	51	5'	28	7'	16	10'	5'	193	174	141
18	9	5'	5	8'	3	11'	6'	39	35	29
40	21	5'	11	8'	6	11'	6'	82	73	60
72	39	5'	21	8'	12	11'	6'	147	132	107
14	7	6'	4	9'	2	13'	6'	31	28	23
31	17	6'	8	9'	5	13'	6'	64	58	47
56	31	6'	17	9'	9	13'	7'	115	104	84

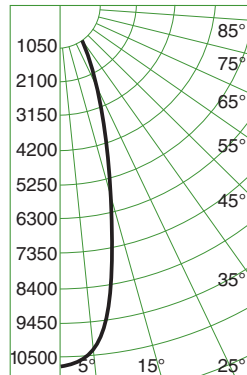
Candlepower Distribution



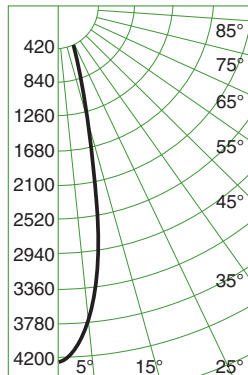
R4406 20W T4.5 G8.5 Clear GE
Eff. 72% S/M .36



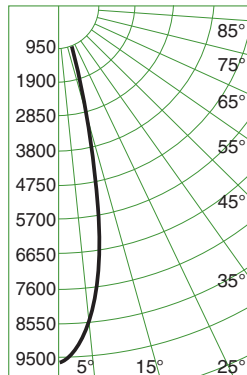
R4406 39W T4.5 G8.5 Clear Syl
Eff. 76% S/M .40



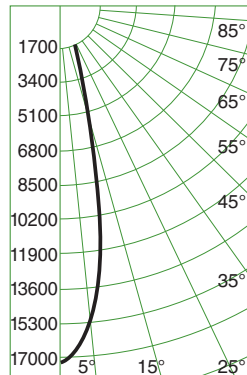
R4406 70W T4.5 G8.5 Clear GE
Eff. 73% S/M .50



R4607 20W T4.5 G12 Clear GE
Eff. 64% S/M .36



R4607 39W T6 G12 Clear Syl
Eff. 69% S/M .37



R4607 70W T6 G12 Clear Philips
Eff. 72% S/M .38

Candelas at Nadir

o	20W	39W	70W
	1600*	3400*	6200*
0	4117	8697	10805
5	3503	7934	10316
10	2213	5260	8153
15	1320	3122	5468
20	880	1997	3816
25	546	1193	2384
30	345	721	1492
35	217	451	881
40	148	312	582
45	95	209	368
50	41	90	176
55	4	8	15
60	0	0	0
65	0	0	0
70	0	0	0
75	0	0	0
80	0	0	0

o Vertical Angles
* Initial Lamp Lumens

o	20W	39W	70W
	1700*	3400*	6200*
0	4235	9610	17219
5	3726	8482	14997
10	2377	5360	9807
15	1283	2872	5632
20	833	1734	3412
25	468	945	1896
30	280	558	1115
35	166	334	649
40	109	222	429
45	69	135	265
50	30	67	177
55	3	7	11
60	0	0	0
65	0	0	0
70	0	0	0
75	0	0	0
80	0	0	0

o Vertical Angles
* Initial Lamp Lumens

Notes

- Data with clear specular cones.
- Data Chart degree headings show one side of nadir. Diameter data includes both sides. Therefore the 10° column shows a 20° pattern diameter at the work plane. Footcandle values are at the diameter edge.
- Specular colored cone multipliers:
Gold x .97,
Wheat x .95,
Bronze x .92,
Pewter x .89,
Graphite x .84,
Mocha x .83,
Titanium x .82,
Black x .81.
- Softglow® cone multipliers:
Clear x .94,
Gold x .91,
Wheat x .91,
Pewter x .89,
Bronze x .85,
Graphite x .85,
Titanium x .83,
Black x .82,
Mocha x .81.
- Additional photometry on website.