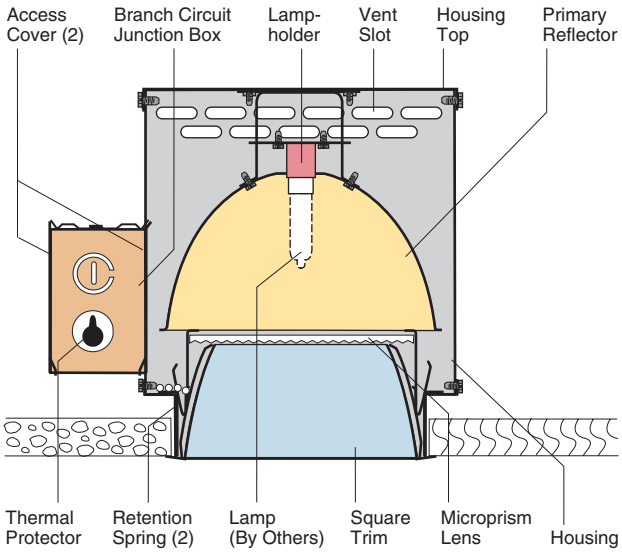
H8604

Downlight
100-150-250W T-4 Tungsten Halogen Lamps
6" Square Parabolic Trim



Optics and Applications
The lamp mounts vertically in a parabolic hydroformed reflector, producing a medium distribution pattern. A microprism spread lens satisfies code requirements and provides brightness control. Use for general or task lighting in low to medium height ceilings. Suitable for damp locations.

Design Features
A sturdy steel housing protects the optical system and assures proper focal position. The trim is stabilized to prevent racking and is held to the ceiling by constant pressure springs. Maximum ceiling thickness 1 1/2". Top or bottom service.

Finish
Housing and structural parts are painted matte black to suppress stray light leaks. Standard trim is anodized Softglow® clear. Special finishes, textures and colors are available, see below under Accessories.

Trim Textures
Textured trims create a subtle new aperture appearance. Select among different embossed patterns to match the ambiance of the space being illuminated. Refer to Squares brochure for descriptive photos.

General
Fixtures are pre-wired, thermally protected, UL and C-UL listed for eight wire 75°C branch circuit wiring. Union made IBEW. Suitable for protected damp locations. Luminaire Efficiency Rating (LER) data is in the photometric directory located in Section Z.

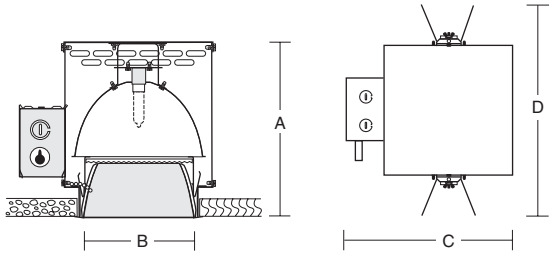
Accessories

R2	26" support rails.	WT	White trim flange.
R5	52" support rails.	WHT	White complete trim.
SB	Softglow black.	BP	Ball Peen texture.
SG	Softglow gold.	CG	Corrugated texture.
SH	Softglow mocha.	DS	Distressed texture.
SP	Softglow graphite.	WV	Woven texture.
ST	Softglow titanium.	LL	Linear spread lens.
SW	Softglow wheat.	LP	Large prism lens.
SY	Softglow pewter.	FC	Four cell cross baffle.
SZ	Softglow bronze.	FR	Frosting on lens, specify lens type.
BR	Bright trim finish.		
WRL	Wattage restriction label, specify wattage.		

Matching Square Units

Compact fluorescent	Pages H22, H23
Directionals	Pages H5, H6, H9
Halogena, A lamps	Page H10
Low voltage	Pages H5, H6
Metal halide	Pages H26, H27, H28
Wall washer	Page H41

Dimensions and Lamps



Number	A Depth	B Aperture	C Width	D Length	Lamps
H8604	9 1/4" 235mm	6" sq. 153mm	11" 279mm	13 3/4" 350mm	100-150W T-4 Frosted Mini-candelabra base
H8604-250*	9 1/4" 235mm	6" sq. 153mm	13 3/4" 350mm	16 1/2" 419mm	250W T-4 Frosted Mini-candelabra base

*H8604 has a larger footprint and a higher rated thermal protector.

* Click for link to pages in blue.

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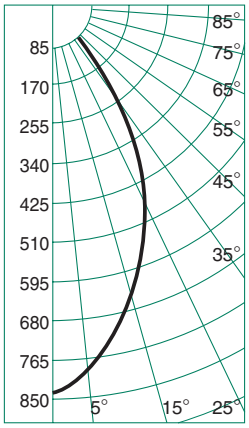
Performance Datachart

Single Unit, Initial Footcandles, 30" Work Plane							Ceiling to Floor	Multiple Units, Initial Footcandles, 30" Work Plane			
H8604 100W T-4 MC Frosted Read Top Data H8604 150W T-4 MC Frosted Read Bottom Data								Ceiling 80% Walls 50% Floor 20%			
Nadir	10°		20°		30°			Spacing is Maximum Over Work Plane			
FC	FC	Diam	FC	Diam	FC	Diam		Spacing	RCR 1	RCR 3	RCR 8
28 39	22 35	2' 2'	15 28	4' 4'	7 17	6' 6'	8'	4' 6'	40 47	34 40	25 28
20 28	16 25	2' 2'	11 20	5' 5'	5 12	8' 8'	9'	5' 7'	29 34	25 29	18 20
15 21	12 19	3' 3'	8 15	5' 5'	4 9	9' 9'	10'	6' 8'	22 25	19 22	13 15
12 16	9 15	3' 3'	6 12	6' 6'	3 7	10' 10'	11'	7' 9'	17 20	14 17	10 12
9 13	7 12	3' 3'	5 9	7' 7'	3 6	11' 11'	12'	8' 10'	13 16	12 14	8 9

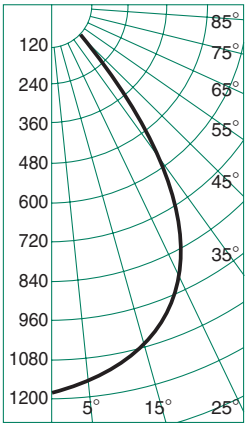
Single Unit Initial Footcandles, 30" Work Plane							Ceiling to Floor	Multiple Units Initial Footcandles, 30" Work Plane			
H8604 250W T-4 MC Frosted								Ceiling 80% Walls 50% Floor 20%			
Nadir	10°		20°		30°			Spacing is Maximum Over Work Plane			
FC	FC	Diam	FC	Diam	FC	Diam		Spacing	RCR 1	RCR 3	RCR 8
51	44	3'	32	5'	17	9'	10'	7'	69	59	41
32	27	3'	20	7'	10	11'	12'	8'	43	37	26
22	19	4'	14	8'	7	13'	14'	10'	29	25	18
16	14	5'	10	10'	5	16'	16'	12'	21	18	13
12	10	5'	7	11'	4	18'	18'	14'	16	14	10

See note 1.

Candlepower Distribution



H8604 100W T-4 G.E.
Eff. 44% S/M .79



H8604 150W T-4 Osram/Syl
Eff. 53% S/M 1.05

Candelas

○	100W 1550*	150W 2700*
0	836	1186
5	795	1169
10	704	1113
15	618	1067
20	548	1029
25	456	944
30	348	785
35	226	560
40	142	372
45	81	221
50	43	116
55	20	52
60	8	19
65	0	8
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

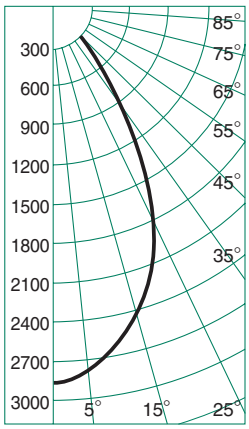
○ Vertical Angles
* Initial Lamp Lumens

Coefficients of Utilization

Ceiling	80%				70%		50%		30%		0
Wall %	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal Cavity Method - Floor Reflectance 20%										
1	.65	.63	.62	.60	.62	.59	.60	.58	.57	.56	.53
2	.61	.58	.56	.54	.57	.53	.56	.52	.54	.51	.49
3	.58	.54	.51	.49	.53	.48	.52	.48	.50	.47	.45
4	.55	.50	.47	.44	.50	.44	.48	.44	.47	.43	.42
5	.52	.47	.43	.41	.46	.41	.45	.40	.44	.40	.39
6	.49	.44	.40	.38	.43	.37	.42	.37	.42	.37	.36
7	.46	.41	.37	.35	.40	.35	.40	.34	.39	.34	.33
8	.44	.38	.35	.32	.38	.32	.37	.32	.37	.32	.31
9	.42	.36	.32	.30	.36	.30	.35	.30	.35	.30	.29
10	.40	.34	.30	.28	.34	.28	.33	.28	.33	.28	.27

H8604 100W T-4 x .77
H8604 250W T-4

H8604 150W T-4 x .92



H8604 250W T-4 G.E.
Eff. 57% S/M .89

○	250W 4850*
0	2874
5	2796
10	2584
15	2361
20	2152
25	1839
30	1443
35	977
40	625
45	363
50	193
55	90
60	33
65	14
70	0
75	0
80	0
85	0
90	0

○ Vertical Angles
* Initial Lamp Lumens

Brightness

Number	Lamps	85°	75°	65°	55°	45°
H8604	100W T-4 MC Frosted	7	28	54	1793	6868
	150W T-4 MC Frosted	20	75	135	5096	20604
	250W T-4 MC Frosted	43	165	311	11660	49873

Data in footlamberts. Photometer readings. Maximum Brightness Method. See note 5.

Notes

1 All data calculated using clear Softglow® trims. Products from other lamp companies will vary. Contact our factory for precise data.

2 Colored trim multipliers: Gold x .90, Wheat x .85, Mocha x .80, Pewter x .80, Graphite x .75, Titanium x .75, Bronze x .70.

3 Datachart spacing is rounded off to the nearest foot.

4 Datachart degree headings measure one side from nadir. Diameter data includes both sides. Therefore the 5° column value describes a 10° pattern diameter at the work plane 30" above the floor. Footcandle values are at the diameter edge.

5 Our brightness data derives from direct photometer readings which approximate what the eye perceives when evaluating glare. For a complete discussion refer to Z section brochure Z1.