

S35

Medium Wide Distribution
50-70-100W Metal Halide
Conoid Aperture

Optics and Applications

The lamp is mounted horizontally to reduce cylinder depth for use in low to medium ceiling heights. The primary reflector is elliptical for broad uniform distribution. The shielding cone is parabolic with excellent brightness control. Use for general, area, transient or task lighting.

Design Features

Thermal design protects the capacitor from lamp and ballast heat for full rated operation. Generous housing dimensions keep operating temperature low.

Finish

A specular clear Alzak cone is standard. Optional colors and Softglow® finishes available. The cylinder is satin brushed then sprayed and baked matte white enamel. The interior is optical matte black.



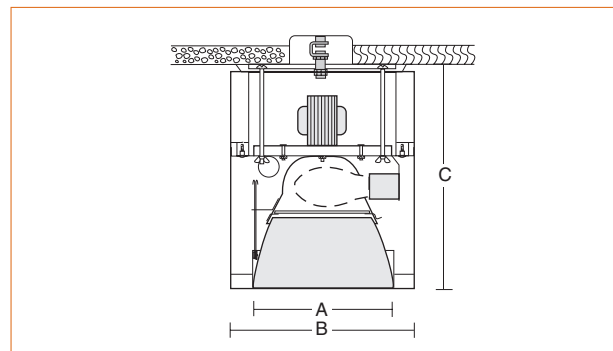
Ballasts

Magnetic core and coil with capacitor correction to 95% high power factor. HX up to 150W. CWA for 175W. Standard voltages 120 or 277. Inrush current is controlled and lamp wattage regulated for line voltage variations up to 10%. Class H 180°C insulation and 90°C capacitors are standard. Replace failed lamps immediately. Ballast is dual voltage 120-277, shipped for 277V. Simple field correction to 120V. Optional electronic metal halide ballast provides more constant lumen and wattage output. It features thermal protection with auto reset, quiet operation and automatic shutdown at end of life.

General

Fixtures are wired and ready for installation. They are listed with UL and C-UL. Union made IBEW. Luminaire Efficiency Rating (LER) data is in the photometric directory located in Section Z.

Dimensions and Lamps



Number	A Aperture	B Diameter	C Depth	Lamps
S35-50	8"	10 ⁵ / ₈ "	12 ³ / ₄ "	50W ED-17 MH/C
S35-70	203 mm	270 mm	324 mm	70W ED-17 MH/C
S35-100				100W ED-17 MH/C

Accessories

- B Black cone.
 - G Gold cone.
 - H Mocha cone.
 - P Graphite cone.
 - S Softglow® finishes: add S before color letters. e.g. SW for Softglow® wheat cone, SC for Softglow® clear cone.
 - T Titanium cone.
 - W Wheat cone.
 - Y Pewter cone.
 - Z Bronze cone.
 - U Ballast fuse.
 - M Wall mount.
 - OP Open construction.
 - P5 Pendant mount, 21" length.
 - ES Extra stem length, specify length.
 - YK Yoke mounting, remote magnetic ballast.
 - YKE Yoke mounting, integral electronic ballast.
 - EBH Electronic ballast 50-70-100W only, specify watts.
 - V347 347 volt magnetic ballast, 50-70-100W, specify watts.
 - EC Emergency circuit with mini-can socket and leads*
 - AO Magnetic ballast restrike system. Maximum aux. lamp 100W T-4. For electronic ballast AO contact factory.
- *Use open rated 60W max. auxiliary incandescent lamp.

Brightness

Number	Lamps	85°	75°	65°	55°	45°
S35	50W ED-17 MH/C	6	20	32	938	15687
S35	100W ED-17 MH/C	18	55	89	2599	43554

Data in footlamberts. Photometer readings, Maximum Brightness Method.



Kurt Versen Company Point Source Lighting
 Westwood, New Jersey 07675

S4 S35

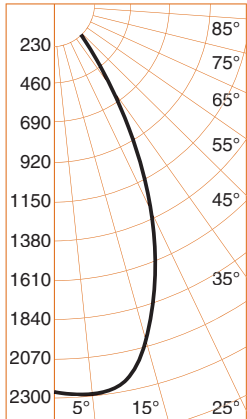
Performance Datachart

Single Unit - Initial Footcandles at Work Plane						Ceiling to Floor	Multiple Units - Initial Footcandles at Work Plane			
S35-50W ED-17 MH/C Read Top Data							Ceiling 80% Walls 50% Floor 20%			
S35 70W ED-17 MH/C Read Bottom Data							Spacing is Maximum Over Work Plane			
Nadir		10°	20°	30°			Spacing	RCR 1	RCR 3	RCR 8
FC	FC	Diam	FC	Diam	FC	Diam				
75	73	2'	47	4'	21	6'	5'	98	85	61
103	102	2'	64	4'	28	6'	5'	134	117	84
54	52	2'	33	5'	15	8'	6'	70	61	44
74	73	2'	46	5'	20	8'	6'	96	84	60
40	39	3'	25	5'	11	9'	7'	53	46	33
55	55	3'	35	5'	15	9'	7'	72	63	45
25	24	3'	16	7'	7	11'	8'	33	28	20
35	34	3'	22	7'	10	11'	8'	45	39	28
17	17	4'	11	8'	5	13'	10'	22	19	14
24	23	4'	15	8'	6	13'	10'	31	27	19

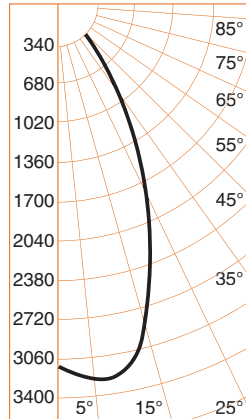
Single Unit - Initial Footcandles at Work Plane						Ceiling to Floor	Multiple Units - Initial Footcandles at Work Plane			
S35 100W ED-17 MH/C							Ceiling 80% Walls 50% Floor 20%			
Nadir							Spacing is Maximum Over Work Plane			
10°		20°	30°		Spacing		RCR 1	RCR 3	RCR 8	
FC	FC	Diam	FC	Diam	FC	Diam				
96	93	3'	60	5'	27	9'	7'	126	109	79
60	58	3'	37	7'	17	11'	8'	78	68	49
35	34	4'	22	9'	10	14'	11'	45	39	28
22	22	5'	14	11'	6	18'	13'	29	26	18
18	17	6'	11	13'	5	20'	15'	23	20	14

See note 1. Colored cone multipliers: Gold x .97, Wheat x .96, Pewter x .92, Mocha x .91, Graphite x .90, Titanium x .89, Bronze x .86, Black x .68.

Candlepower Distribution



S35 50W ED-17 MH/C
Eff. 59% S/M .87



S35 70W ED-17 MH/C
Eff. 58% S/M .87

Candelas

o	50W	70W
	3400*	4800*
0	2263	3114
5	2342	3234
10	2299	3218
15	2016	2783
20	1704	2348
25	1356	1867
30	963	1323
35	663	941
40	390	534
45	196	264
50	69	98
55	25	34
60	21	28
65	18	25
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

o Vertical Angles
* Initial Lamp Lumens

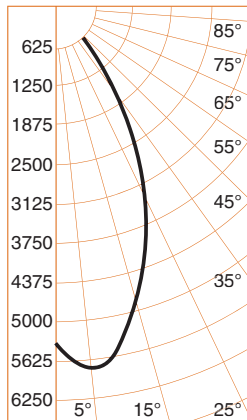
Coefficients of Utilization

Ceiling	80%				70%				50%				30%				0			
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10		
Wall %	Zonal Cavity Method - Floor Reflectance 20%																			
RCR																				
1	.67	.66	.64	.63	.64	.62	.62	.60	.60	.58	.58	.56	.56	.53	.49	.48				
2	.64	.61	.59	.57	.60	.56	.58	.55	.56	.53	.51	.46	.50	.46	.44					
3	.61	.57	.54	.51	.56	.51	.54	.50	.53	.49	.48	.46	.44	.42	.41					
4	.58	.53	.50	.47	.52	.47	.51	.46	.50	.46	.44	.42	.41	.40	.38					
5	.55	.50	.46	.43	.49	.43	.48	.43	.47	.42	.42	.41	.40	.38	.36					
6	.52	.46	.43	.40	.46	.40	.45	.40	.44	.40	.38	.37	.36	.35	.34					
7	.49	.44	.40	.38	.43	.37	.42	.37	.42	.37	.36	.35	.34	.33	.32					
8	.47	.41	.38	.35	.41	.35	.40	.35	.39	.35	.34	.33	.32	.31	.30					
9	.45	.39	.35	.33	.38	.33	.38	.33	.37	.33	.32	.31	.30	.29	.28					
10	.42	.37	.33	.31	.36	.31	.36	.31	.35	.31	.30	.29	.28	.27	.26					

S35 50W ED-17 MH/C
S35 70W ED-17 MH/C

Notes

- Single unit Datachart pattern diameters are determined by the number of degrees from each side of nadir. Therefore a 15° diameter represents a total 30° pattern width at the work plane 30" above the floor. Footcandle values are at the edge of that diameter.
- Datachart spacing is rounded off to the nearest foot.
- Fixtures accept ED-17 or B-17 lamps.
- Kurt Versen believes data computed from the Average Luminance Method are inaccurate for small aperture downlights. They are theoretical calculations derived for large surfaces such as troffers.



S35 100W ED-17 MH/C
Eff. 60% S/M .87

o	100W
	8000*
0	5392
5	5701
10	5497
15	4821
20	4072
25	3240
30	2295
35	1557
40	925
45	469
50	165
55	59
60	49
65	45
70	0
75	0
80	0
85	0
90	0

o Vertical Angles
* Initial Lamp Lumens

Ceiling	80%				70%				50%				30%				0			
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10		
Wall %	Zonal Cavity Method - Floor Reflectance 20%																			
RCR																				
1	.68	.67	.65	.64	.65	.63	.63	.61	.61	.59	.59	.57	.57	.54	.52					
2	.65	.62	.59	.57	.61	.57	.59	.55	.57	.54	.52	.48	.51	.46	.45					
3	.62	.58	.55	.52	.57	.52	.55	.51	.54	.50	.48	.46	.44	.42	.41					
4	.58	.54	.50	.48	.53	.48	.52	.47	.51	.46	.44	.42	.41	.40	.38					
5	.55	.50	.47	.44	.50	.44	.49	.44	.48	.44	.42	.41	.40	.38	.37					
6	.53	.47	.44	.41	.47	.41	.46	.41	.45	.41	.40	.38	.37	.36	.35					
7	.50	.44	.41	.38	.44	.38	.43	.38	.42	.38	.37	.36	.35	.34	.33					
8	.48	.42	.38	.36	.41	.36	.41	.35	.40	.35	.34	.33	.32	.31	.30					
9	.45	.39	.36	.33	.39	.33	.39	.33	.38	.33	.32	.31	.30	.29	.28					
10	.43	.37	.34	.31	.37	.31	.37	.31	.36	.31	.30	.29	.28	.27	.26					

S35 100W ED-17 MH/C