

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: LUMARK

Report Number: BL243

Luminaire Tested: **MHSS-CW-400**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: BL243  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: MHSS-CW-400  
Description: INDUSTRIAL WORKLIGHT  
Light Source: 400 WATT MH COATED ED-37  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 34000 (1 lamp)  
Luminaire Lumens: 33994.5 lumens  
Efficiency: 100.0%  
Efficacy: 85.0 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B4 - U5 - G5

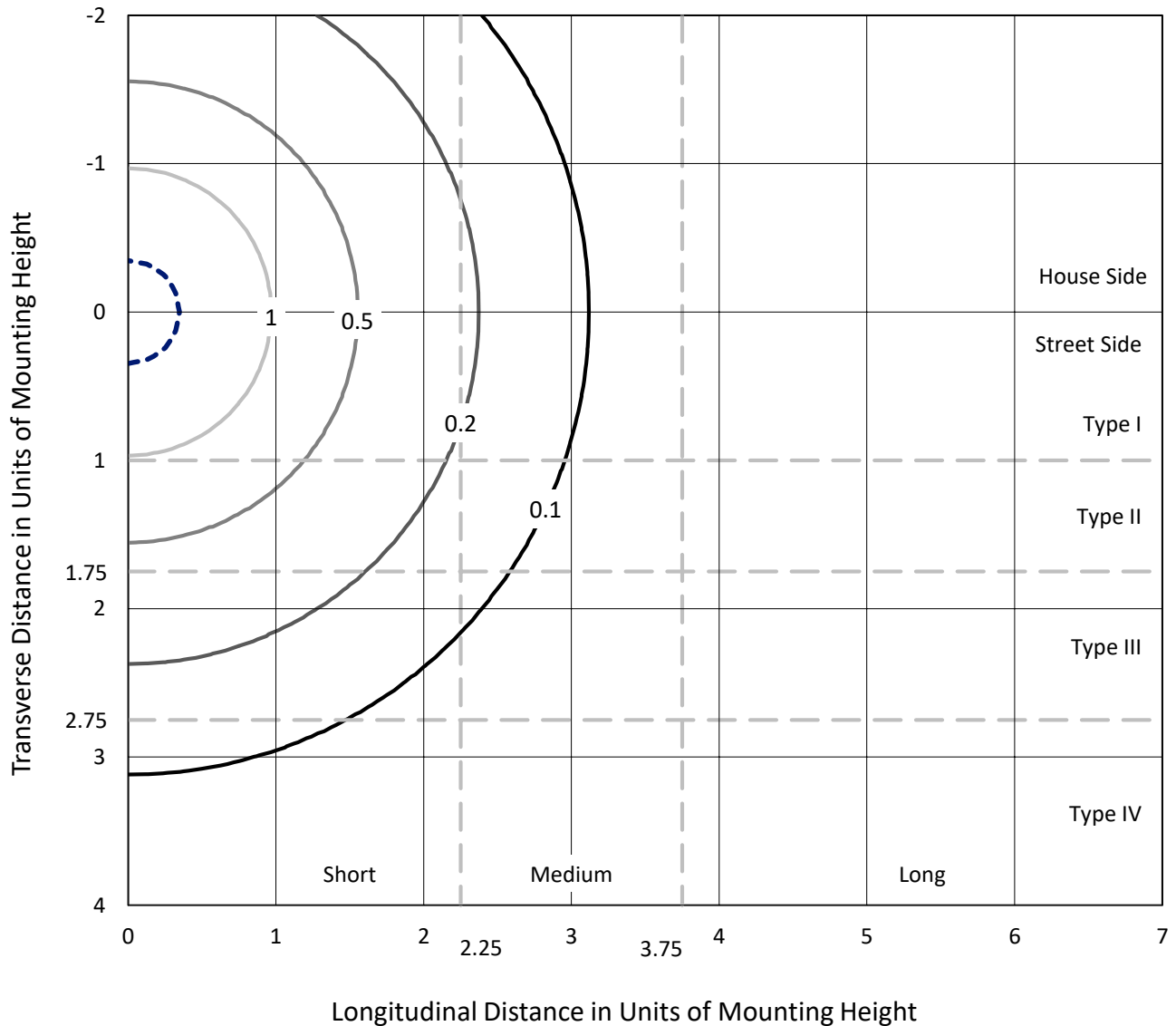
Input Watts (W): 400  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

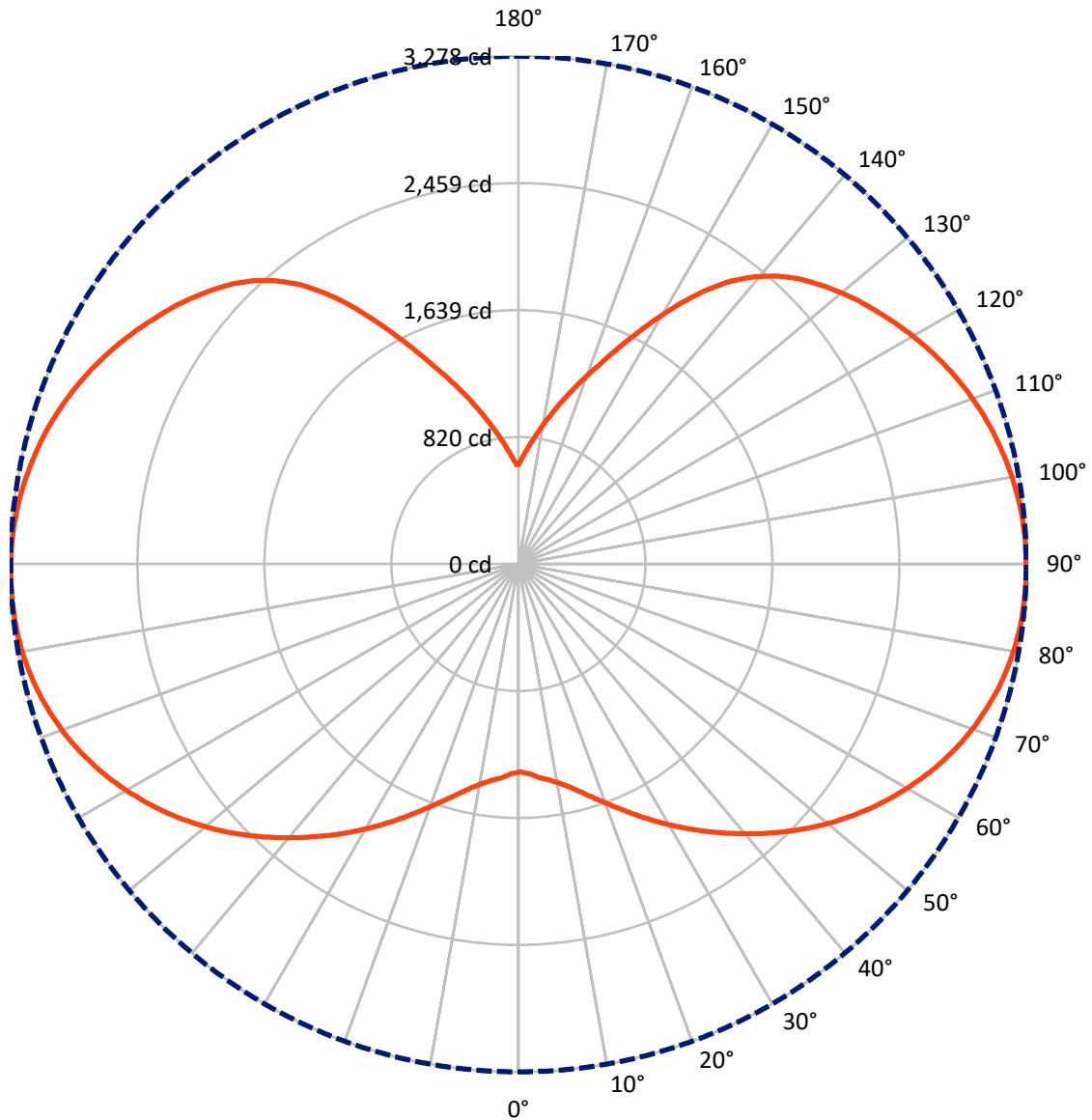
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 1.5 fc  
 Type V - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 87.5-Deg Vertical

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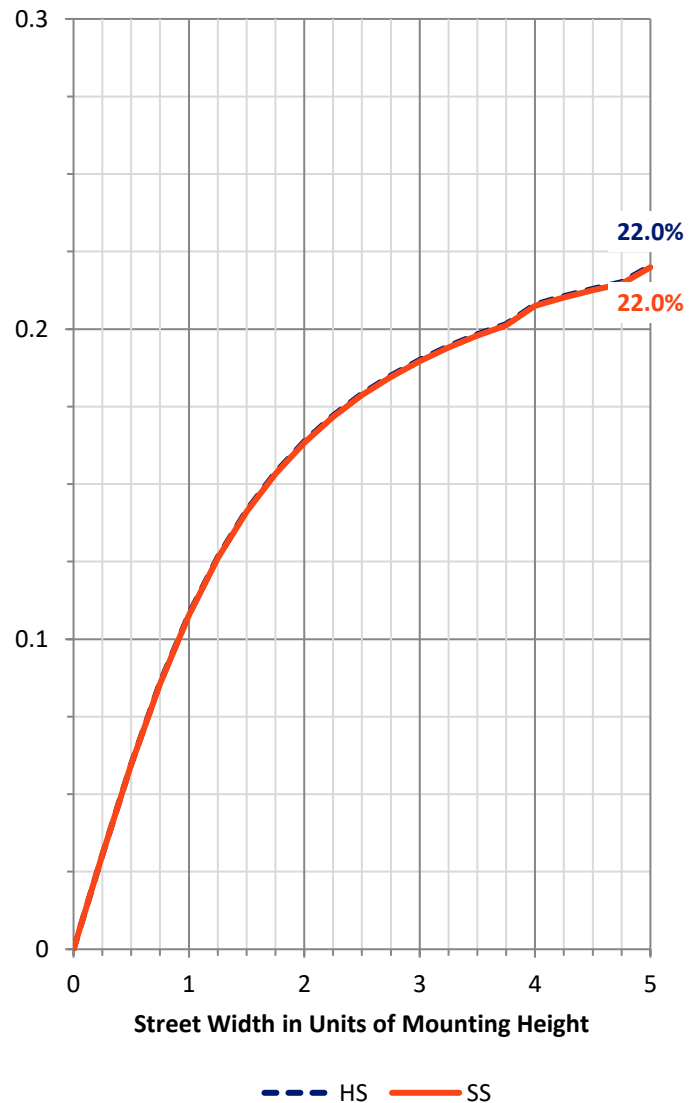
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8547.2	8450.0	16997.2
	% Lamp	25.1	24.9	50.0
<b>Street Side</b>	Lumens	8547.2	8450.0	16997.2
	% Lamp	25.1	24.9	50.0
<b>Total</b>	Lumens	17094.4	16900.1	33994.5
	% Lamp	50.3	49.7	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	133.5	0.4	0.4
10°-20°	438.3	1.3	1.3
20°-30°	838.2	2.5	2.5
30°-40°	1337.7	3.9	3.9
40°-50°	1907.1	5.6	5.6
50°-60°	2487.7	7.3	7.3
60°-70°	3004.0	8.8	8.8
70°-80°	3380.5	9.9	9.9
80°-90°	3567.3	10.5	10.5
90°-100°	3557.7	10.5	10.5
100°-110°	3361.7	9.9	9.9
110°-120°	3004.8	8.8	8.8
120°-130°	2534.5	7.5	7.5
130°-140°	1994.8	5.9	5.9
140°-150°	1347.7	4.0	4.0
150°-160°	713.8	2.1	2.1
160°-170°	309.4	0.9	0.9
170°-180°	75.7	0.2	0.2
0°-90°	17094.4	50.3	50.3
0°-180°	33994.5	100.0	100.0

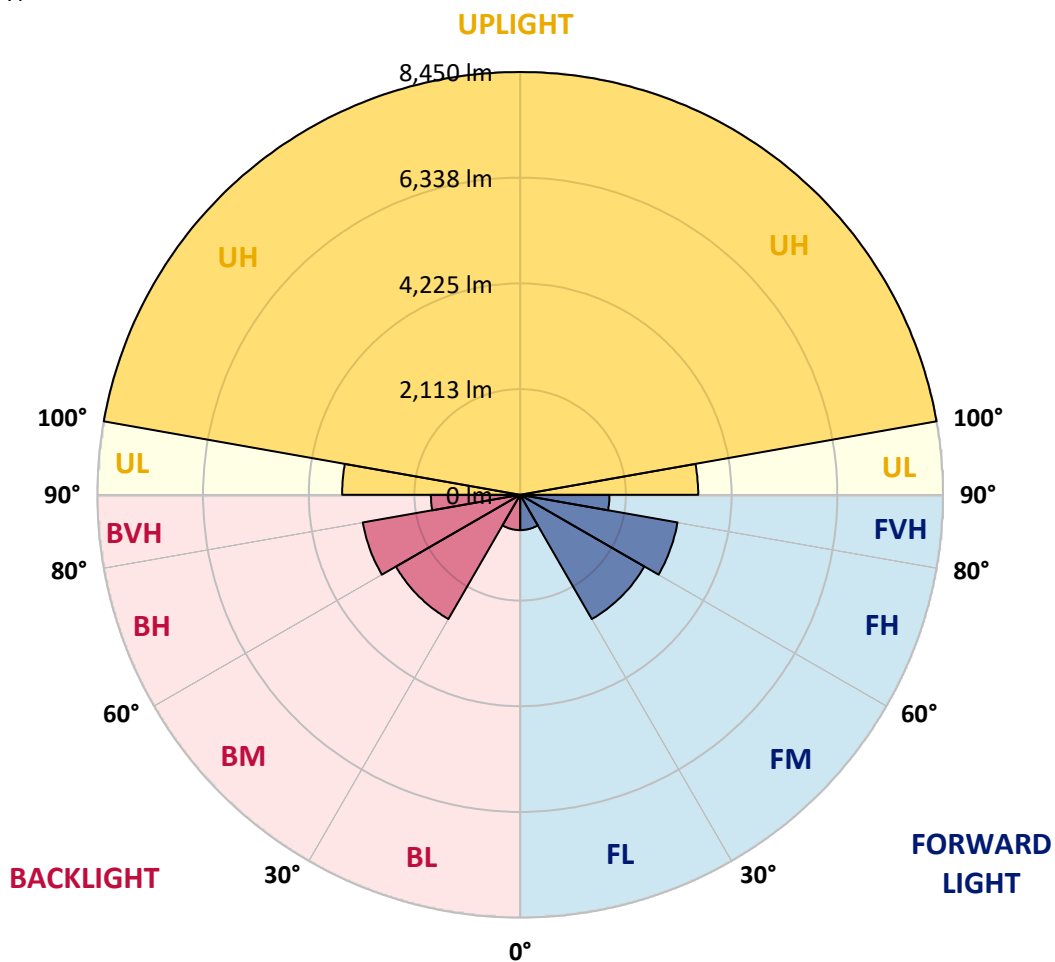


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	705.0	2.1			
FM	(30°-60°)	2866.3	8.4			
FH	(60°-80°)	3192.3	9.4			G2/5000
FVH	(80°-90°)	1783.6	5.2			G5
BL	(0°-30°)	705.0	2.1	B2/1000		
BM	(30°-60°)	2866.3	8.4	B3/5000		
BH	(60°-80°)	3192.3	9.4	B4/5000		G2/5000
BVH	(80°-90°)	1783.6	5.2			G5
UL	(90°-100°)	3557.7	10.5		U5	
UH	(100°-180°)	8450.0	24.9		U5	
Trapped Light		5.5	0.0			

**BUG Rating: B4-U5-G5**  
 Type V Short



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1342
2.5°	1355
5°	1384
7.5°	1406
10°	1437
12.5°	1478
15°	1529
17.5°	1589
20°	1653
22.5°	1724
25°	1800
27.5°	1878
30°	1958
32.5°	2040
35°	2123
37.5°	2205
40°	2290
42.5°	2375
45°	2459
47.5°	2542
50°	2622
52.5°	2699
55°	2773
57.5°	2843
60°	2909
62.5°	2972
65°	3029
67.5°	3081
70°	3127
72.5°	3165
75°	3200
77.5°	3227
80°	3249
82.5°	3264
85°	3273
87.5°	3278
90°	3277
92.5°	3274
95°	3265
97.5°	3250
100°	3231
102.5°	3207
105°	3181
107.5°	3149
110°	3113



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**CANDELA DISTRIBUTION (continued):**

	0°
112.5°	3072
115°	3029
117.5°	2981
120°	2931
122.5°	2878
125°	2823
127.5°	2770
130°	2710
132.5°	2648
135°	2581
137.5°	2501
140°	2403
142.5°	2288
145°	2146
147.5°	1989
150°	1822
152.5°	1661
155°	1515
157.5°	1382
160°	1270
162.5°	1165
165°	1067
167.5°	976
170°	892
172.5°	816
175°	746
177.5°	683
180°	628

(END OF REPORT)