

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: E429-92\_350MP

Luminaire Tested: **MPQP-S4/9/GL-350**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: E429-92\_350MP  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: MPQP-S4/9/GL-350  
Description: RECESSED COMMERCIAL W/SPECULAR LOUVERS  
Light Source: 350 WATT PULSE-START COATED ED-37 HORIZONTAL BURN  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 31000 (1 lamp)  
Luminaire Lumens: 18193 lumens  
Efficiency: 58.7%  
Efficacy: 45.8 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.75' x L: 1.75' x H: 0.1')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B4 - U0 - G0

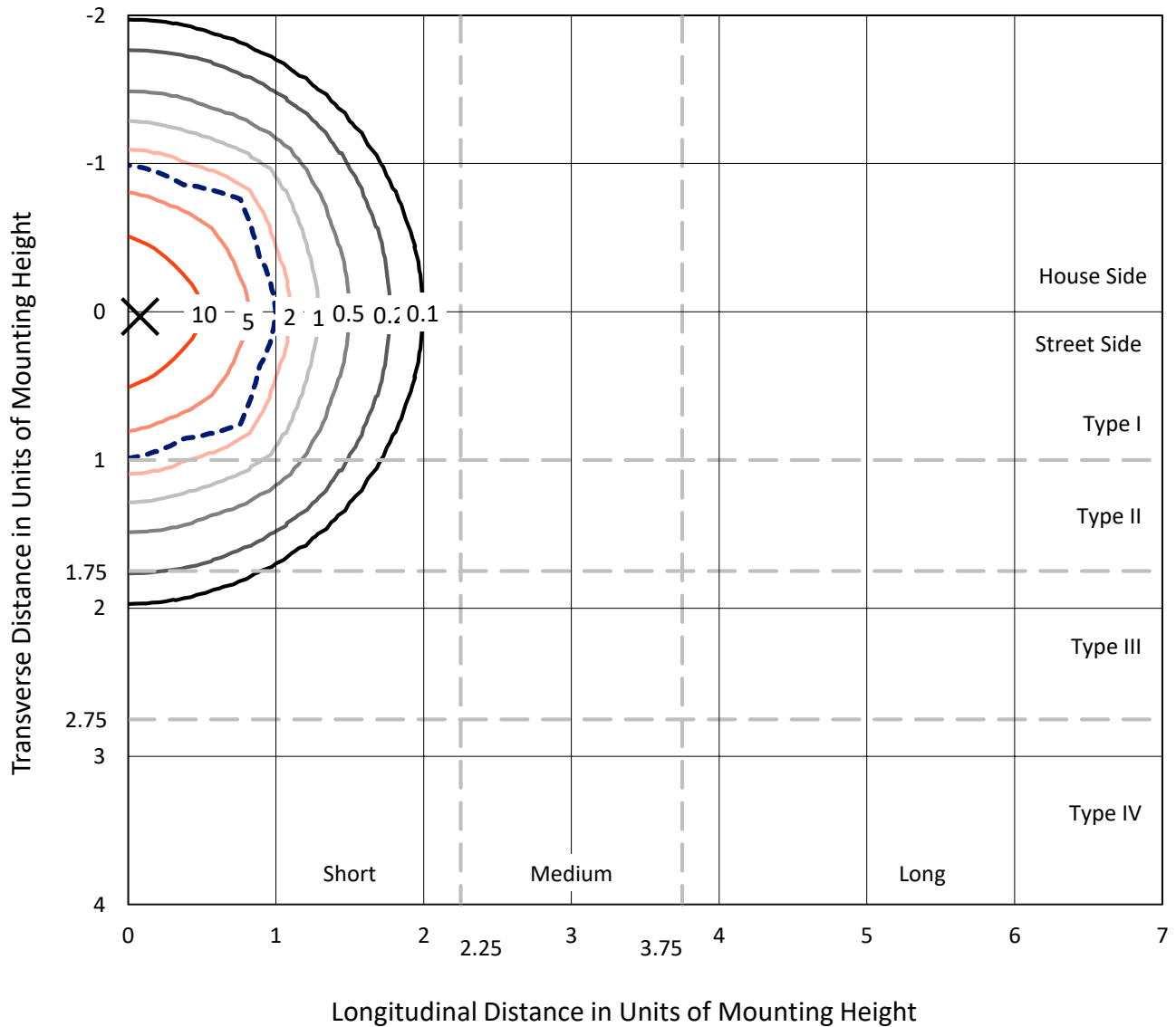
Input Watts (W): 397  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

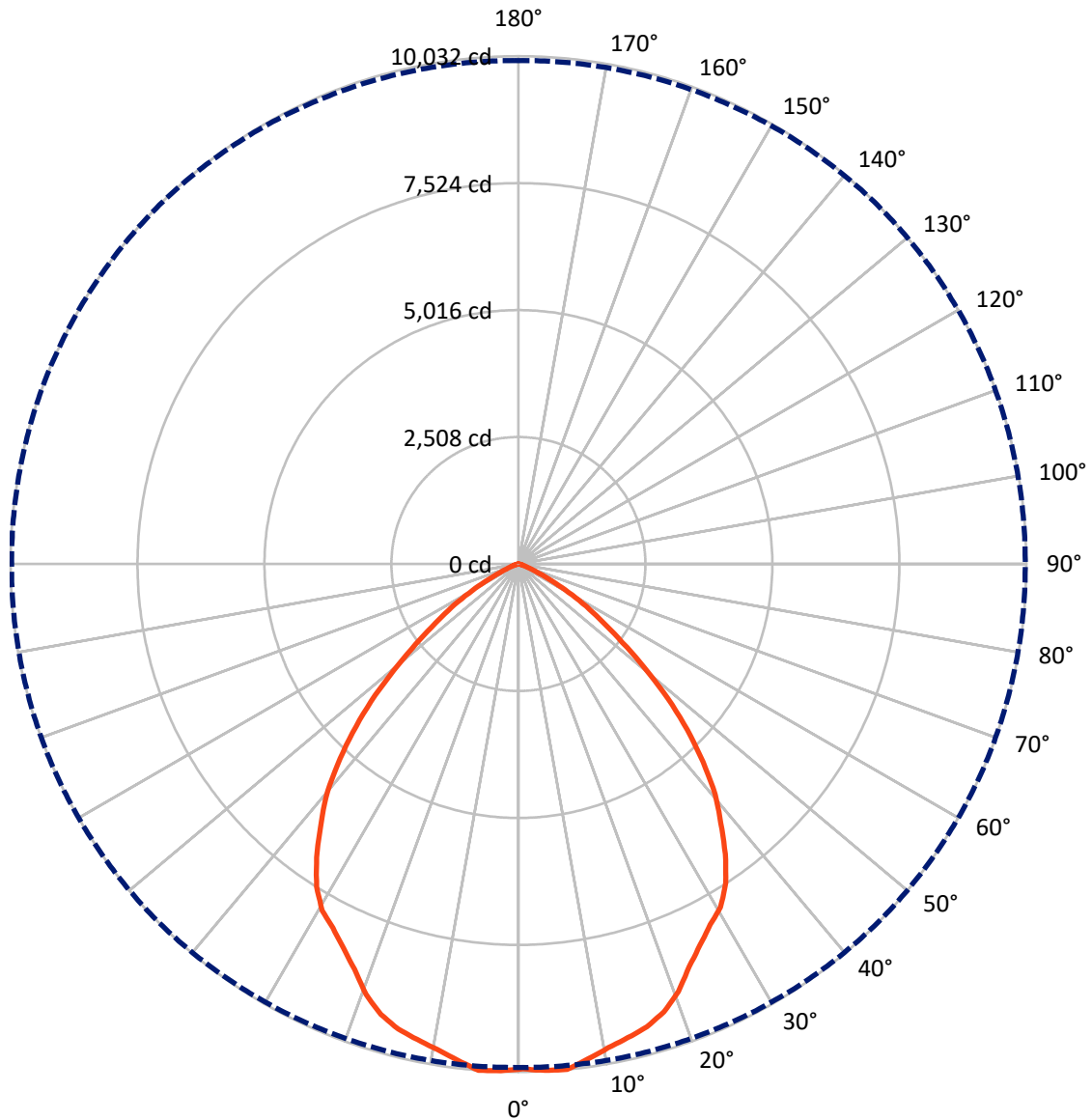
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral      - - - Horizontal Cone Through 5-Deg Vertical

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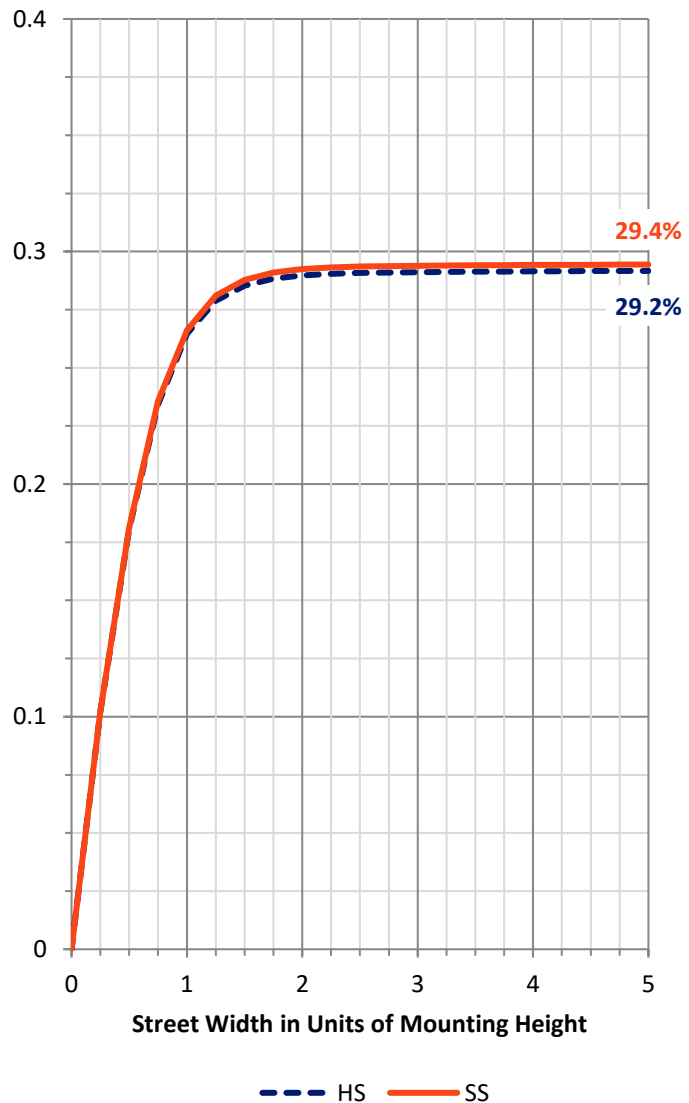
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9096.5	0.0	9096.5
	% Lamp	29.3	0.0	29.3
<b>Street Side</b>	Lumens	9096.5	0.0	9096.5
	% Lamp	29.3	0.0	29.3
<b>Total</b>	Lumens	18193.0	0.0	18193.0
	% Lamp	58.7	0.0	58.7

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	942.5	5.2	3.0
10°-20°	2644.2	14.5	8.5
20°-30°	3882.8	21.3	12.5
30°-40°	4426.1	24.3	14.3
40°-50°	3723.2	20.5	12.0
50°-60°	1956.0	10.8	6.3
60°-70°	517.0	2.8	1.7
70°-80°	92.2	0.5	0.3
80°-90°	9.0	0.0	0.0
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	18193.0	100.0	58.7
0°-180°	18193.0	100.0	58.7

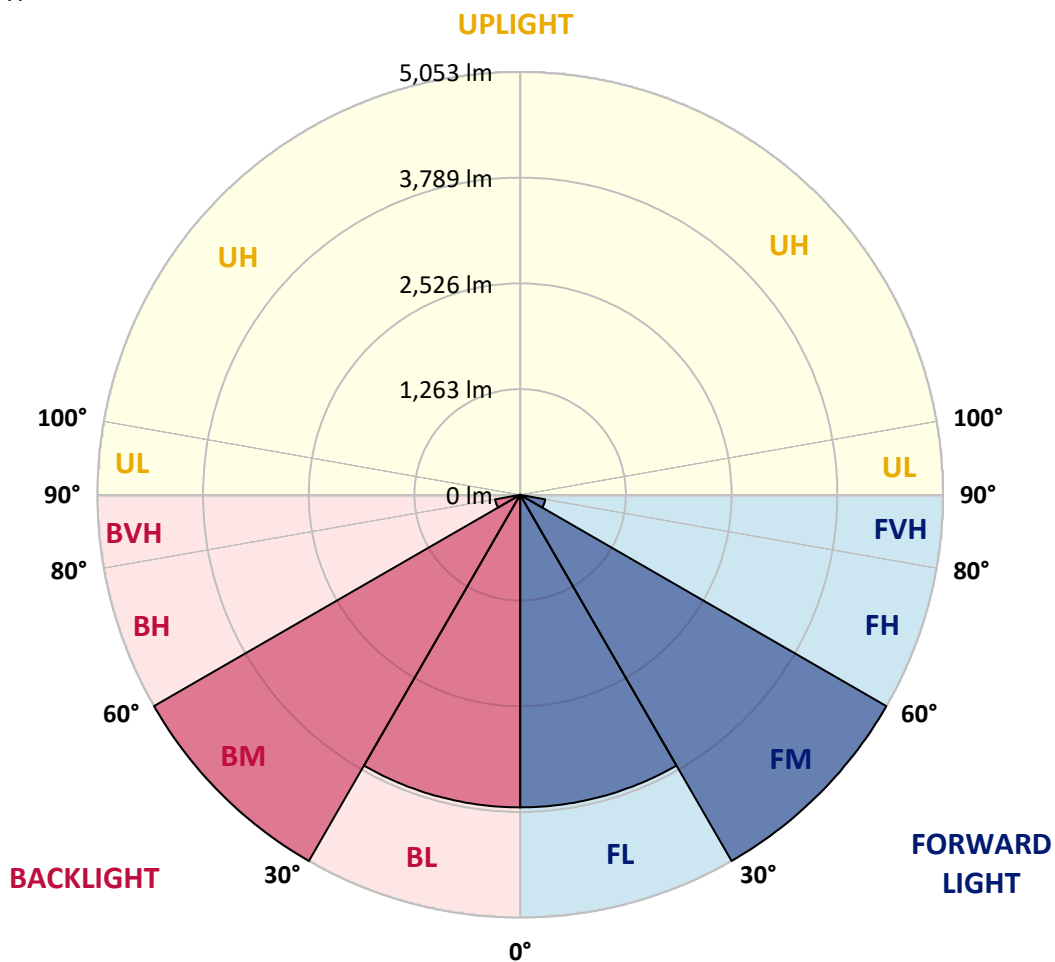


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3734.8	12.0			
FM	(30°-60°)	5052.7	16.3			
FH	(60°-80°)	304.6	1.0			G0/660
FVH	(80°-90°)	4.5	0.0			G0/10
BL	(0°-30°)	3734.8	12.0	B4/5000		
BM	(30°-60°)	5052.7	16.3	B4/8500		
BH	(60°-80°)	304.6	1.0	B1/500		G0/660
BVH	(80°-90°)	4.5	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		12807.0	41.3			

**BUG Rating: B4-U0-G0**  
 Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	9972.7	9972.7	9972.7	9972.7	9972.7	9972.7	9972.7	9972.7	9972.7
2.5°	9994.4	10006.0	10012.2	10016.1	10014.6	10016.1	10012.2	10006.0	9994.4
5°	9944.0	9977.4	10028.5	10031.6	10011.4	10031.6	10028.5	9977.4	9944.0
7.5°	9782.1	9846.4	9856.4	9873.5	9882.0	9873.5	9856.4	9846.4	9782.1
10°	9635.6	9647.2	9601.5	9719.3	9782.1	9719.3	9601.5	9647.2	9635.6
12.5°	9558.1	9507.7	9367.4	9603.0	9771.2	9603.0	9367.4	9507.7	9558.1
15°	9458.9	9346.5	9169.0	9487.6	9757.2	9487.6	9169.0	9346.5	9458.9
17.5°	9334.1	9138.0	8903.2	9300.8	9674.3	9300.8	8903.2	9138.0	9334.1
20°	9185.3	8861.4	8579.2	9016.4	9422.4	9016.4	8579.2	8861.4	9185.3
22.5°	9023.3	8559.1	8265.4	8635.1	9204.7	8635.1	8265.4	8559.1	9023.3
25°	8903.2	8234.4	7987.2	8334.4	9122.5	8334.4	7987.2	8234.4	8903.2
27.5°	8869.9	7953.8	7738.4	8067.0	8998.5	8067.0	7738.4	7953.8	8869.9
30°	8762.2	7771.7	7457.8	7867.0	8842.8	7867.0	7457.8	7771.7	8762.2
32.5°	8135.2	7369.5	7214.5	7519.0	8293.3	7519.0	7214.5	7369.5	8135.2
35°	7450.8	6803.7	6999.0	7036.2	7704.3	7036.2	6999.0	6803.7	7450.8
37.5°	6870.4	6205.4	6696.0	6495.3	7251.7	6495.3	6696.0	6205.4	6870.4
40°	6272.8	5678.4	6216.3	5983.0	6700.6	5983.0	6216.3	5678.4	6272.8
42.5°	5638.1	5111.1	5804.0	5349.0	5940.4	5349.0	5804.0	5111.1	5638.1
45°	4903.4	4484.9	5417.2	4675.6	4982.5	4675.6	5417.2	4484.9	4903.4
47.5°	4053.2	3847.9	4903.4	3979.6	4051.7	3979.6	4903.4	3847.9	4053.2
50°	3256.6	3180.6	4238.5	3234.1	3252.7	3234.1	4238.5	3180.6	3256.6
52.5°	2537.4	2519.5	3362.0	2569.9	2555.2	2569.9	3362.0	2519.5	2537.4
55°	1957.6	1962.3	2490.1	2009.6	2003.4	2009.6	2490.1	1962.3	1957.6
57.5°	1551.6	1526.8	1836.8	1578.7	1606.6	1578.7	1836.8	1526.8	1551.6
60°	1107.5	1134.6	1257.0	1134.6	1114.4	1134.6	1257.0	1134.6	1107.5
62.5°	742.4	731.6	767.2	753.3	802.9	753.3	767.2	731.6	742.4
65°	422.4	411.5	419.3	465.0	497.6	465.0	419.3	411.5	422.4
67.5°	246.4	231.7	231.0	280.6	277.4	280.6	231.0	231.7	246.4
70°	164.3	159.6	155.8	175.2	181.4	175.2	155.8	159.6	164.3
72.5°	118.6	113.9	108.5	119.4	128.6	119.4	108.5	113.9	118.6
75°	82.9	79.8	75.2	81.4	86.8	81.4	75.2	79.8	82.9
77.5°	59.7	53.5	51.2	54.2	55.8	54.2	51.2	53.5	59.7
80°	35.6	34.1	31.8	32.6	34.1	32.6	31.8	34.1	35.6
82.5°	16.3	15.5	14.7	14.0	14.7	14.0	14.7	15.5	16.3
85°	2.3	1.6	0.8	1.6	1.6	1.6	0.8	1.6	2.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)