

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: E429-134_400MP

Luminaire Tested: **MPQP-S3/9/GL-400VBU**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: E429-134_400MP
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: MPQP-S3/9/GL-400VBU
Description: RECESSED COMMERCIAL W/SPECULAR LOUVERS
Light Source: 400 WATT PULSE-START COATED ED-37 VBU BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 42000 (1 lamp)
Luminaire Lumens: 24433.7 lumens
Efficiency: 58.2%
Efficacy: 54.1 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 - G1

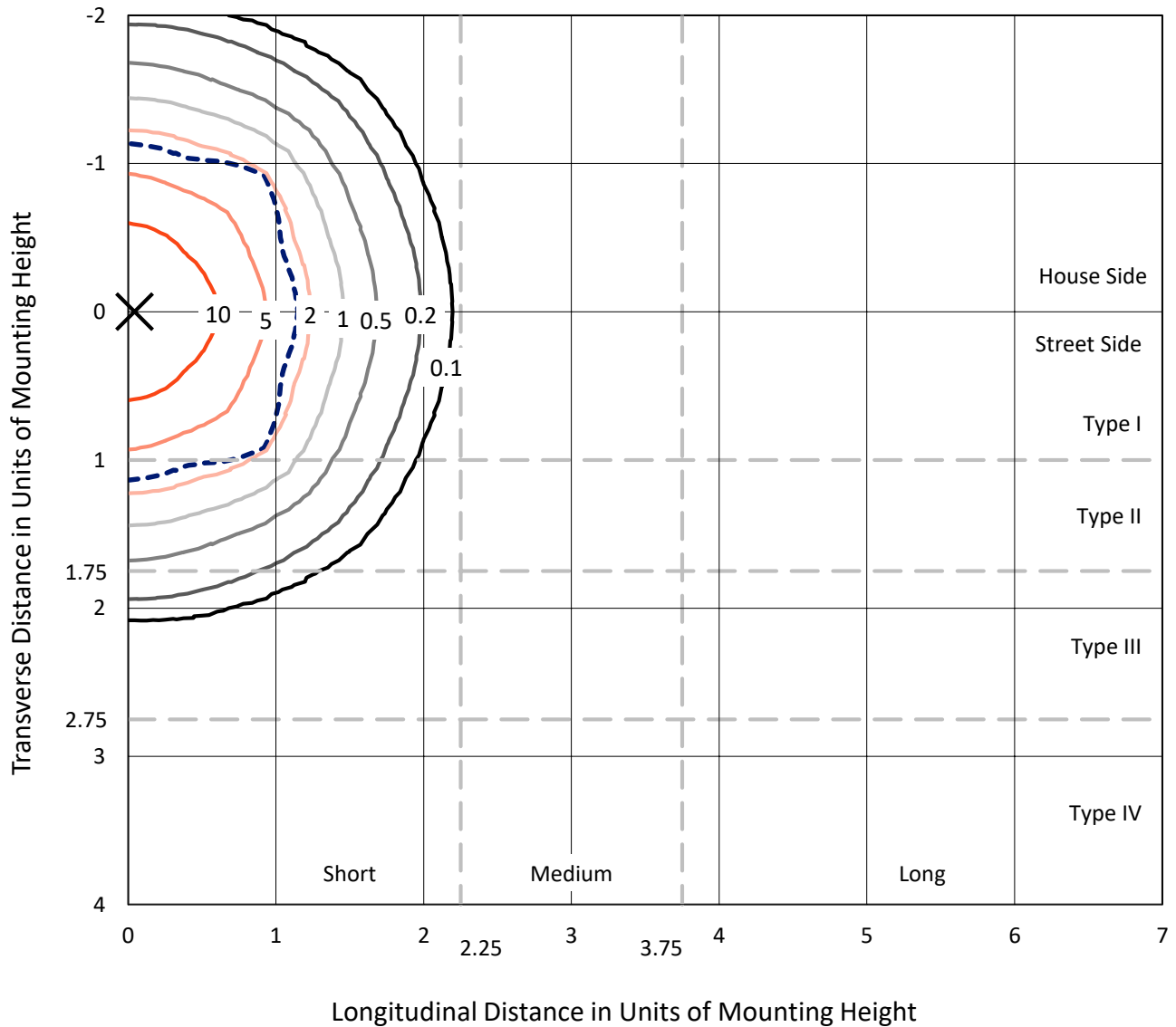
Input Watts (W): 452
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

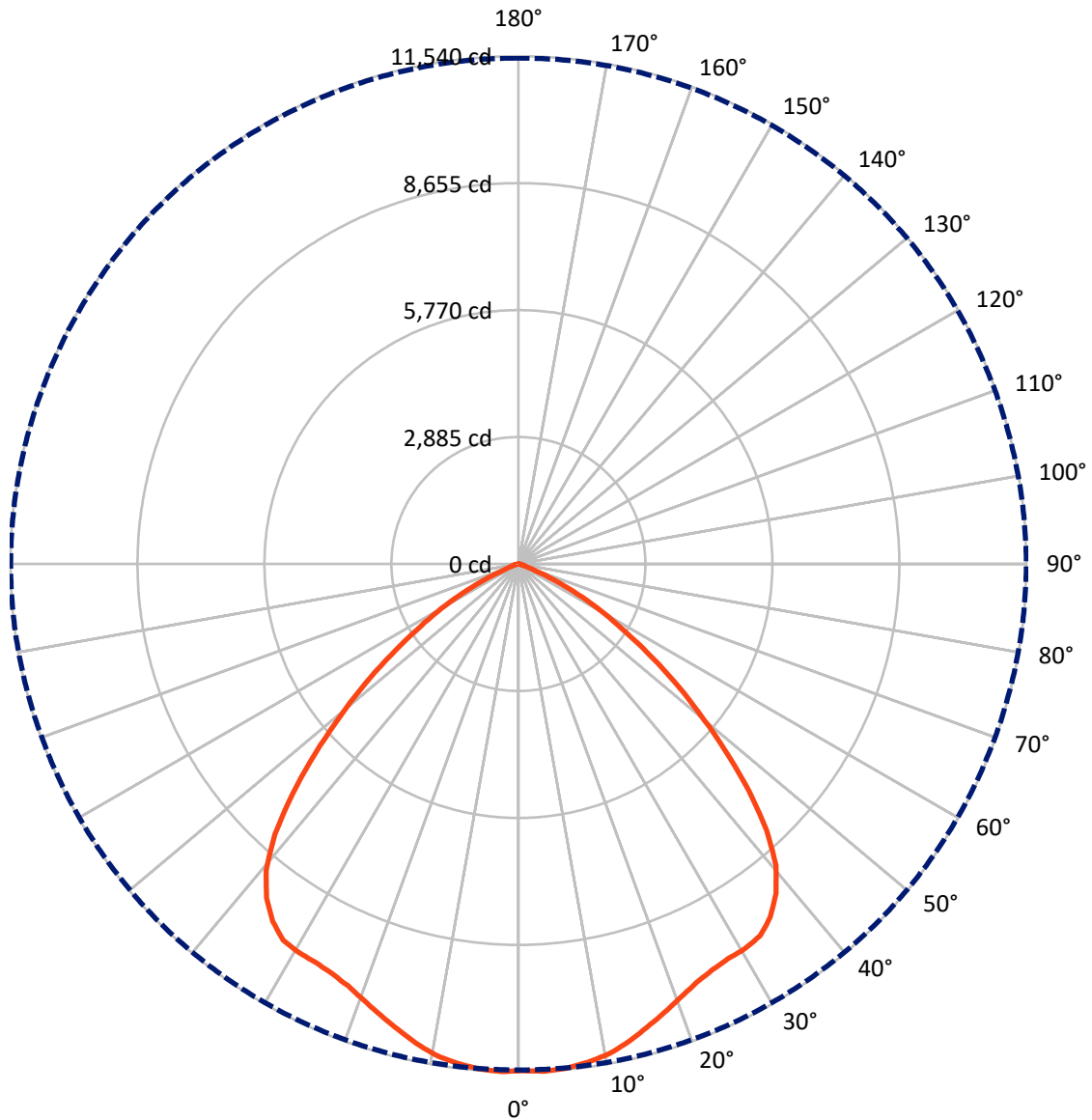
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 18.4 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 2.5-Deg Vertical

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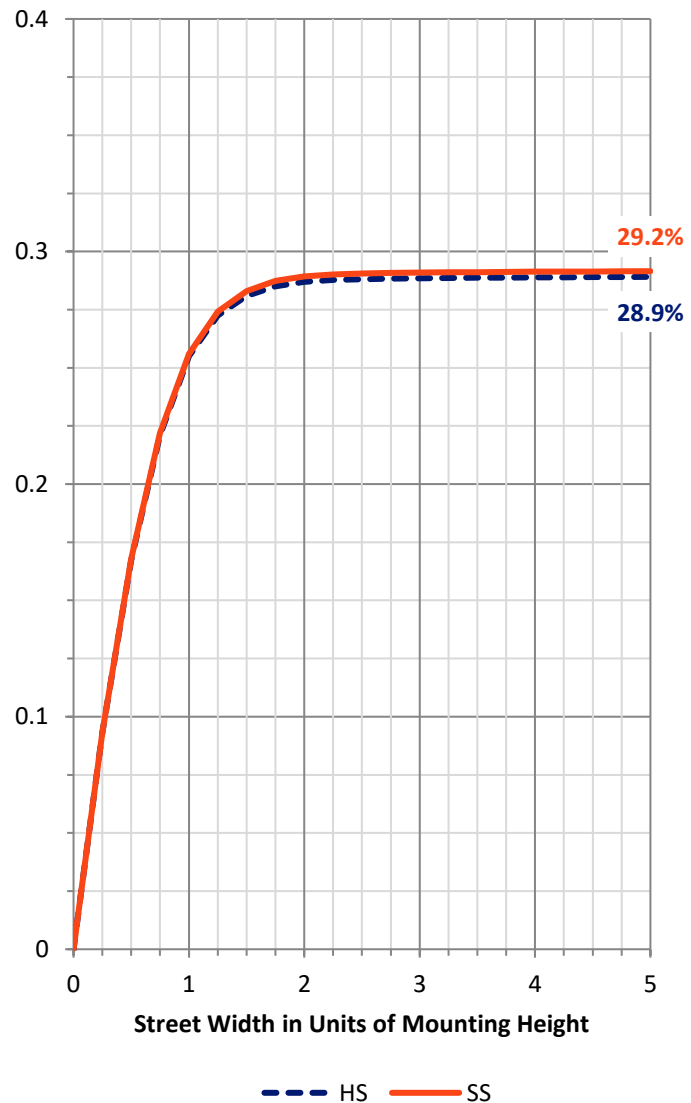
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12216.8	0.0	12216.8
	% Lamp	29.1	0.0	29.1
Street Side	Lumens	12216.8	0.0	12216.8
	% Lamp	29.1	0.0	29.1
Total	Lumens	24433.7	0.0	24433.7
	% Lamp	58.2	0.0	58.2

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	1091.0	4.5	2.6
10°-20°	3081.6	12.6	7.3
20°-30°	4637.0	19.0	11.0
30°-40°	5681.1	23.3	13.5
40°-50°	5460.0	22.3	13.0
50°-60°	3350.7	13.7	8.0
60°-70°	968.4	4.0	2.3
70°-80°	135.7	0.6	0.3
80°-90°	28.2	0.1	0.1
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°	24433.7	100.0	58.2
0°-180°	24433.7	100.0	58.2

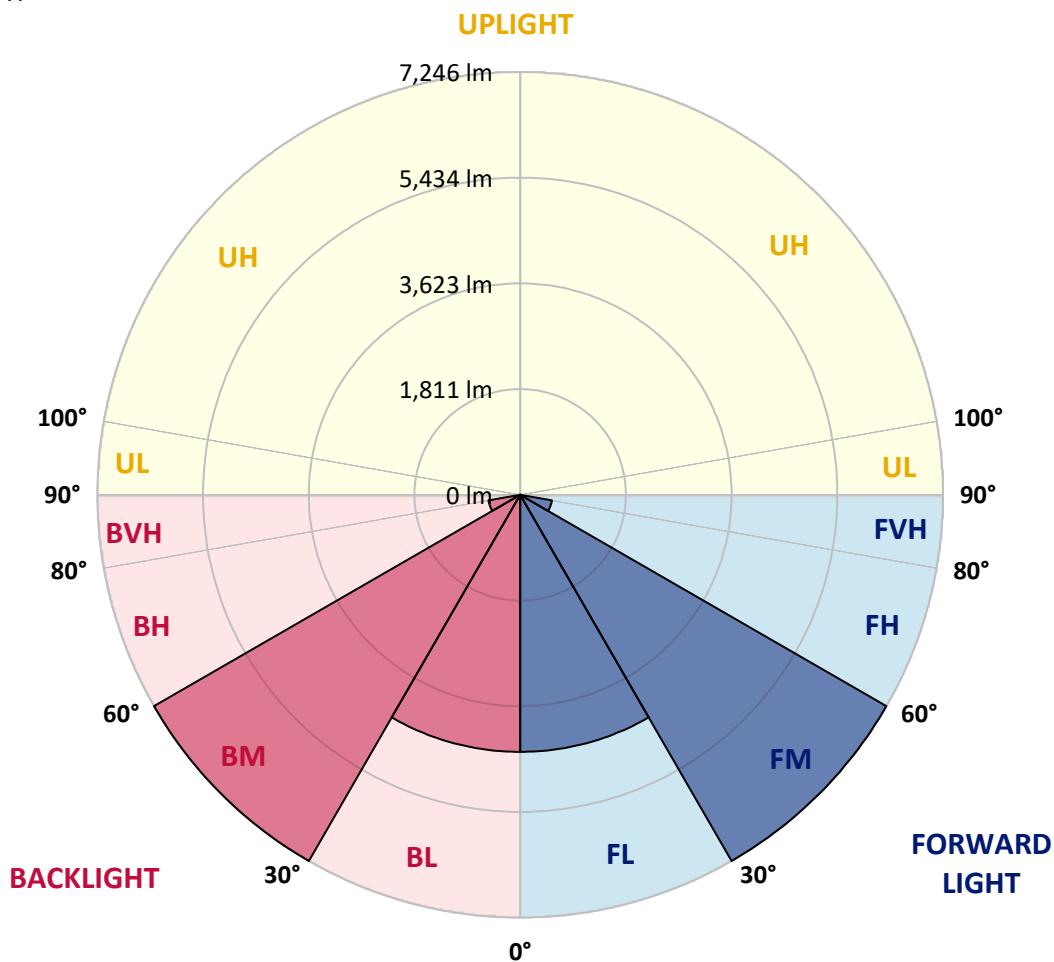


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4404.8	10.5			
FM	(30°-60°)	7245.9	17.3			
FH	(60°-80°)	552.1	1.3			G0/660
FVH	(80°-90°)	14.1	0.0			G1/100
BL	(0°-30°)	4404.8	10.5	B4/5000		
BM	(30°-60°)	7245.9	17.3	B4/8500		
BH	(60°-80°)	552.1	1.3	B2/1000		G0/660
BVH	(80°-90°)	14.1	0.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		17566.3	41.8			

BUG Rating: B4-U0-G1
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	11511.5	11511.5	11511.5	11511.5	11511.5	11511.5	11511.5	11511.5	11511.5
2.5°	11496.3	11506.8	11523.2	11522.0	11539.5	11522.0	11523.2	11506.8	11496.3
5°	11470.7	11489.3	11506.8	11494.0	11505.7	11494.0	11506.8	11489.3	11470.7
7.5°	11394.8	11420.5	11420.5	11424.0	11428.7	11424.0	11420.5	11420.5	11394.8
10°	11296.8	11320.2	11289.8	11317.8	11317.8	11317.8	11289.8	11320.2	11296.8
12.5°	11156.8	11156.8	11145.2	11144.0	11139.3	11144.0	11145.2	11156.8	11156.8
15°	10973.7	10952.7	10930.5	10901.3	10923.5	10901.3	10930.5	10952.7	10973.7
17.5°	10766.0	10721.7	10663.3	10654.0	10719.3	10654.0	10663.3	10721.7	10766.0
20°	10582.8	10489.5	10377.5	10427.7	10515.2	10427.7	10377.5	10489.5	10582.8
22.5°	10409.0	10267.8	10087.0	10199.0	10336.7	10199.0	10087.0	10267.8	10409.0
25°	10306.3	10077.7	9789.5	9999.5	10221.2	9999.5	9789.5	10077.7	10306.3
27.5°	10179.2	9924.8	9448.8	9858.3	10154.7	9858.3	9448.8	9924.8	10179.2
30°	9983.2	9706.7	9132.7	9668.2	10140.7	9668.2	9132.7	9706.7	9983.2
32.5°	9728.8	9346.2	8899.3	9464.0	10077.7	9464.0	8899.3	9346.2	9728.8
35°	9460.5	8902.8	8737.2	9143.2	9856.0	9143.2	8737.2	8902.8	9460.5
37.5°	9172.3	8449.0	8597.2	8680.0	9503.7	8680.0	8597.2	8449.0	9172.3
40°	8746.5	7950.8	8450.2	8108.3	9010.2	8108.3	8450.2	7950.8	8746.5
42.5°	8079.2	7401.3	8262.3	7507.5	8267.0	7507.5	8262.3	7401.3	8079.2
45°	7211.2	6679.2	7954.3	6762.0	7327.8	6762.0	7954.3	6679.2	7211.2
47.5°	6196.2	5877.7	7505.2	5965.2	6311.7	5965.2	7505.2	5877.7	6196.2
50°	5210.3	5062.2	6800.5	5104.2	5308.3	5104.2	6800.5	5062.2	5210.3
52.5°	4182.5	4219.8	5730.7	4287.5	4428.7	4287.5	5730.7	4219.8	4182.5
55°	3362.3	3403.2	4545.3	3486.0	3549.0	3486.0	4545.3	3403.2	3362.3
57.5°	2692.7	2632.0	3402.0	2696.2	2754.5	2696.2	3402.0	2632.0	2692.7
60°	2144.3	1996.2	2423.2	2012.5	2133.8	2012.5	2423.2	1996.2	2144.3
62.5°	1341.7	1389.5	1642.7	1418.7	1521.3	1418.7	1642.7	1389.5	1341.7
65°	536.7	743.2	1006.8	910.0	960.2	910.0	1006.8	743.2	536.7
67.5°	257.8	320.8	568.2	499.3	474.8	499.3	568.2	320.8	257.8
70°	201.8	203.0	283.5	252.0	242.7	252.0	283.5	203.0	201.8
72.5°	149.3	154.0	157.5	169.2	168.0	169.2	157.5	154.0	149.3
75°	114.3	117.8	113.2	120.2	120.2	120.2	113.2	117.8	114.3
77.5°	86.3	87.5	85.2	89.8	85.2	89.8	85.2	87.5	86.3
80°	64.2	65.3	63.0	61.8	58.3	61.8	63.0	65.3	64.2
82.5°	44.3	43.2	42.0	39.7	36.2	39.7	42.0	43.2	44.3
85°	24.5	23.3	22.2	22.2	19.8	22.2	22.2	23.3	24.5
87.5°	9.3	9.3	8.2	8.2	7.0	8.2	8.2	9.3	9.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)