

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: E429-106

Luminaire Tested: **MHQP-S3/9/GL-175**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: E429-106  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: MHQP-S3/9/GL-175  
Description: RECESSED COMMERCIAL W/SPECULAR LOUVERS  
Light Source: 175 WATT MH COATED ED-28  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 15000 (1 lamp)  
Luminaire Lumens: 8711.6 lumens  
Efficiency: 58.1%  
Efficacy: 41.5 lumens/watt  
Luminous Opening: Rectangular (W 1.75' x L: 1.75' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G0

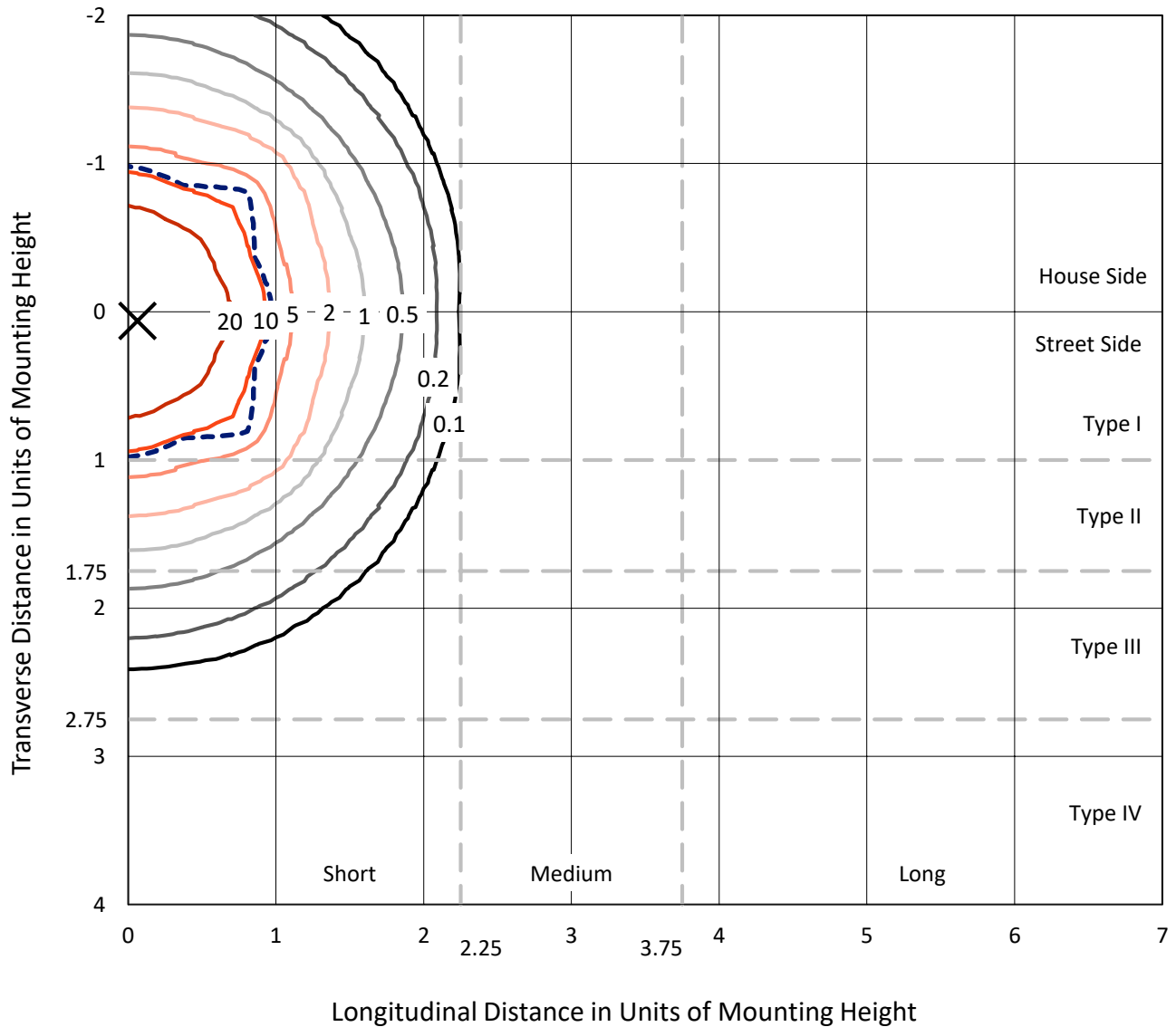
Input Watts (W): 210  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: E429-106  
 CATALOG NUMBER: MHQP-S3/9/GL-175

### Iso-Footcandle Lines of Horizontal Illumination

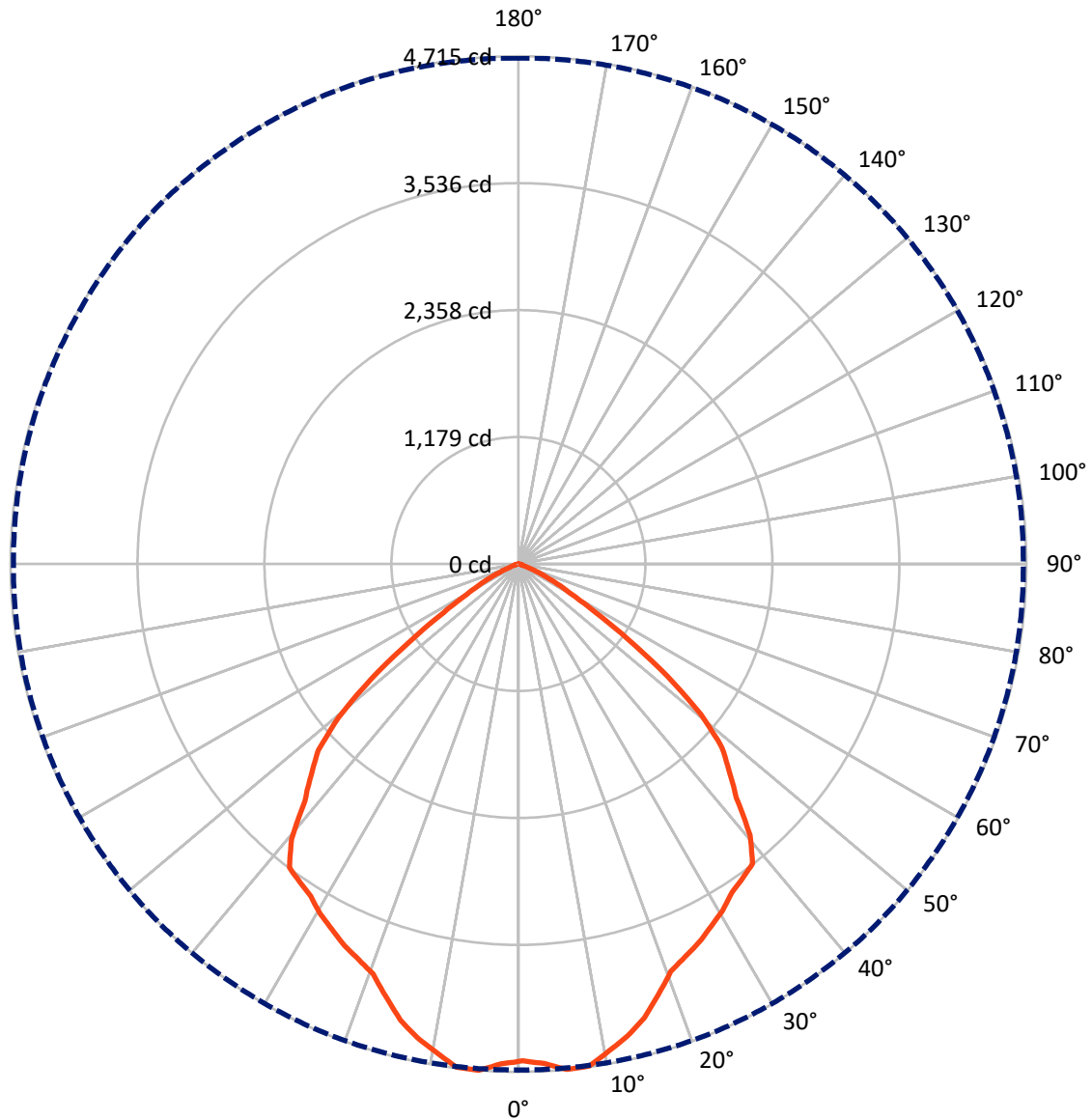
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 46.1 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: E429-106  
CATALOG NUMBER: MHQP-S3/9/GL-175

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 5-Deg Vertical

REPORT NUMBER: E429-106

CATALOG NUMBER: MHQP-S3/9/GL-175

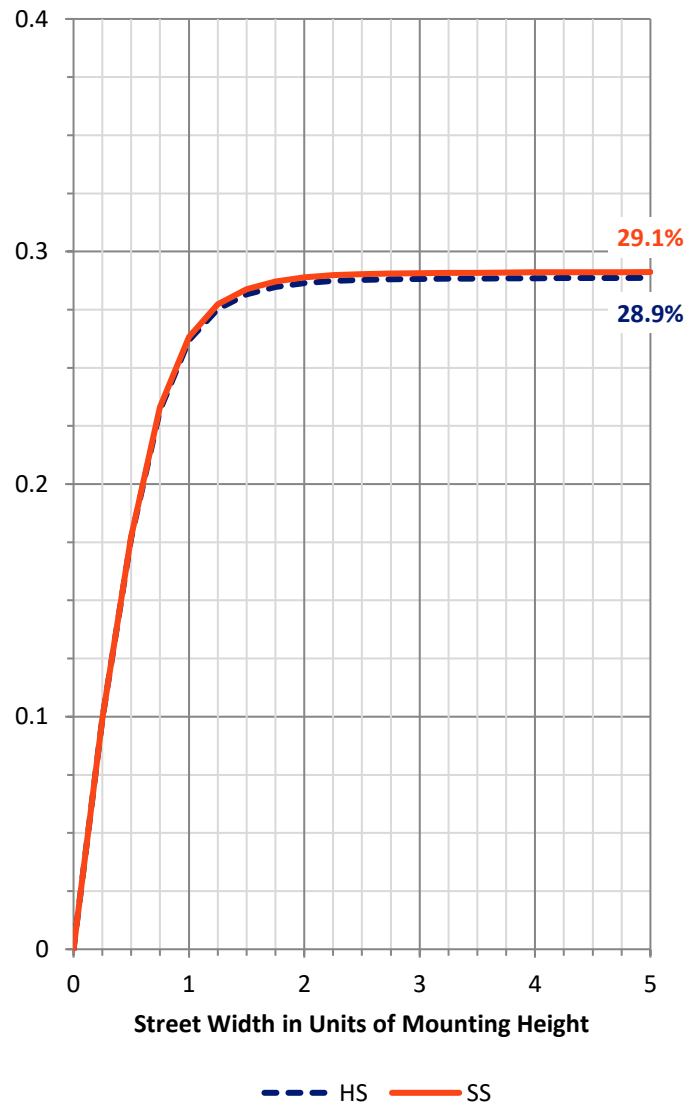
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4355.8	0.0	4355.8
	% Lamp	29.0	0.0	29.0
<b>Street Side</b>	Lumens	4355.8	0.0	4355.8
	% Lamp	29.0	0.0	29.0
<b>Total</b>	Lumens	8711.6	0.0	8711.6
	% Lamp	58.1	0.0	58.1

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	445.3	5.1	3.0
10°-20°	1266.1	14.5	8.4
20°-30°	1898.5	21.8	12.7
30°-40°	2152.0	24.7	14.3
40°-50°	1730.4	19.9	11.5
50°-60°	893.0	10.3	6.0
60°-70°	277.8	3.2	1.9
70°-80°	39.9	0.5	0.3
80°-90°	8.7	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°	8711.6	100.0	58.1
0°-180°	8711.6	100.0	58.1



REPORT NUMBER: E429-106

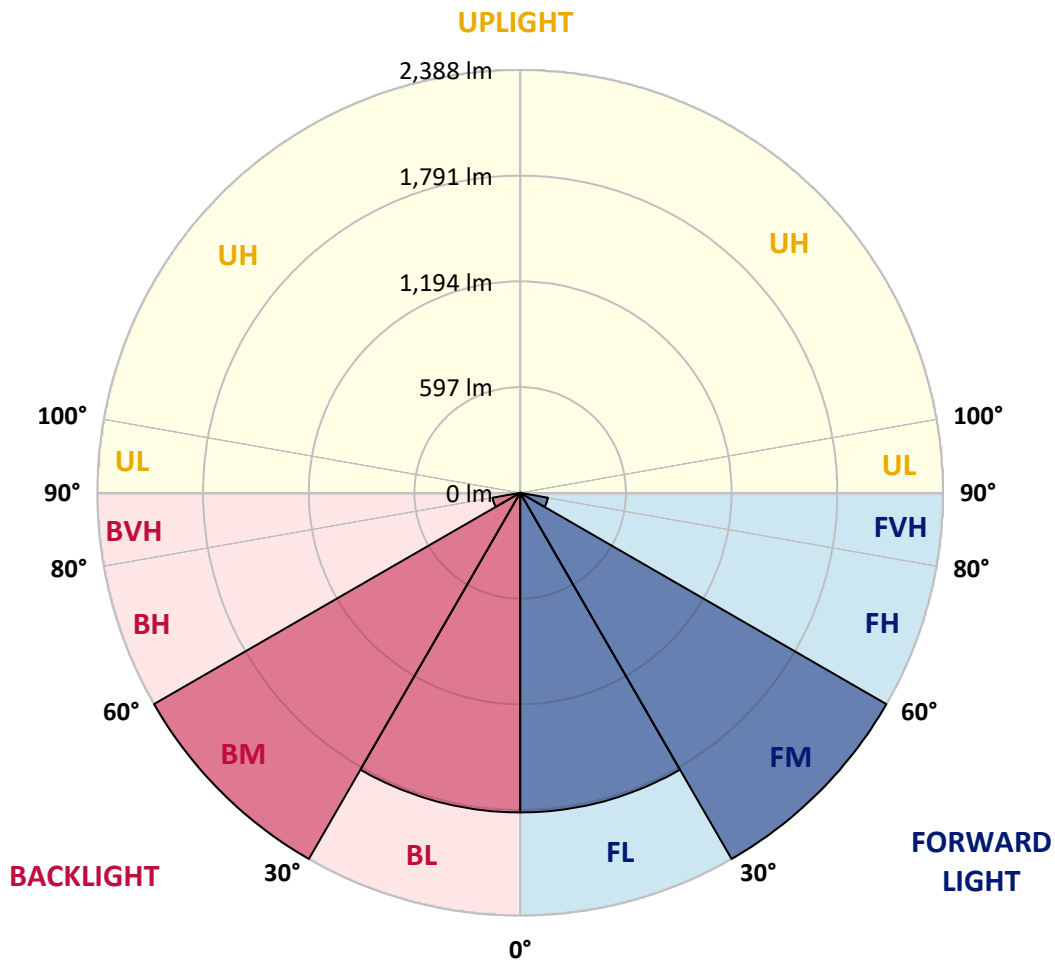
CATALOG NUMBER: MHQP-S3/9/GL-175

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

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1805.0	12.0			
FM (30°-60°)	2387.7	15.9			
FH (60°-80°)	158.8	1.1			G0/660
FVH (80°-90°)	4.4	0.0			G0/10
BL (0°-30°)	1805.0	12.0	B3/2500		
BM (30°-60°)	2387.7	15.9	B2/2500		
BH (60°-80°)	158.8	1.1	B1/500		G0/660
BVH (80°-90°)	4.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	6288.4	41.9			

**BUG Rating: B3-U0-G0**

Type V Short





REPORT NUMBER: E429-106

CATALOG NUMBER: MHQP-S3/9/GL-175

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	4613	4613	4613	4613	4613	4613	4613	4613	4613
2.5°	4654	4645	4643	4643	4641	4643	4643	4645	4654
5°	4697	4710	4715	4701	4688	4701	4715	4710	4697
7.5°	4663	4687	4707	4674	4641	4674	4707	4687	4663
10°	4639	4656	4600	4600	4571	4600	4600	4656	4639
12.5°	4623	4607	4498	4523	4510	4523	4498	4607	4623
15°	4616	4558	4373	4458	4505	4458	4373	4558	4616
17.5°	4610	4493	4203	4424	4525	4424	4203	4493	4610
20°	4547	4370	4038	4338	4476	4338	4038	4370	4547
22.5°	4470	4183	3960	4175	4410	4175	3960	4183	4470
25°	4454	4024	3893	4038	4413	4038	3893	4024	4454
27.5°	4516	3922	3809	3929	4430	3929	3809	3922	4516
30°	4531	3840	3734	3767	4318	3767	3734	3840	4531
32.5°	4177	3664	3637	3512	3958	3512	3637	3664	4177
35°	3746	3373	3583	3206	3528	3206	3583	3373	3746
37.5°	3391	3010	3531	2871	3259	2871	3531	3010	3391
40°	3112	2690	3310	2607	3016	2607	3310	2690	3112
42.5°	2696	2379	2964	2381	2678	2381	2964	2379	2696
45°	2241	2013	2743	2054	2212	2054	2743	2013	2241
47.5°	1757	1629	2541	1669	1757	1669	2541	1629	1757
50°	1401	1377	2195	1372	1382	1372	2195	1377	1401
52.5°	1123	1115	1734	1097	1057	1097	1734	1115	1123
55°	905	899	1235	854	843	854	1235	899	905
57.5°	708	715	830	675	683	675	830	715	708
60°	574	547	552	533	578	533	552	547	574
62.5°	441	422	406	408	420	408	406	422	441
65°	313	290	266	250	187	250	266	290	313
67.5°	171	176	155	104	73	104	155	176	171
70°	74	85	84	58	56	58	84	85	74
72.5°	50	50	47	44	43	44	47	50	50
75°	35	27	34	34	34	34	34	27	35
77.5°	25	27	26	27	26	27	26	27	25
80°	18	19	19	19	20	19	19	19	18
82.5°	11	12	12	13	13	13	12	12	11
85°	6	7	7	8	8	8	7	7	6
87.5°	3	3	3	3	3	3	3	3	3
90°	0	0	0	0	0	0	0	0	0

(END OF REPORT)