

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: E429-97

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: E429-97
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: MHQP-S3/9-175
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: 9078.8 lumens
Efficiency: 60.5%
Efficacy: 43.2 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

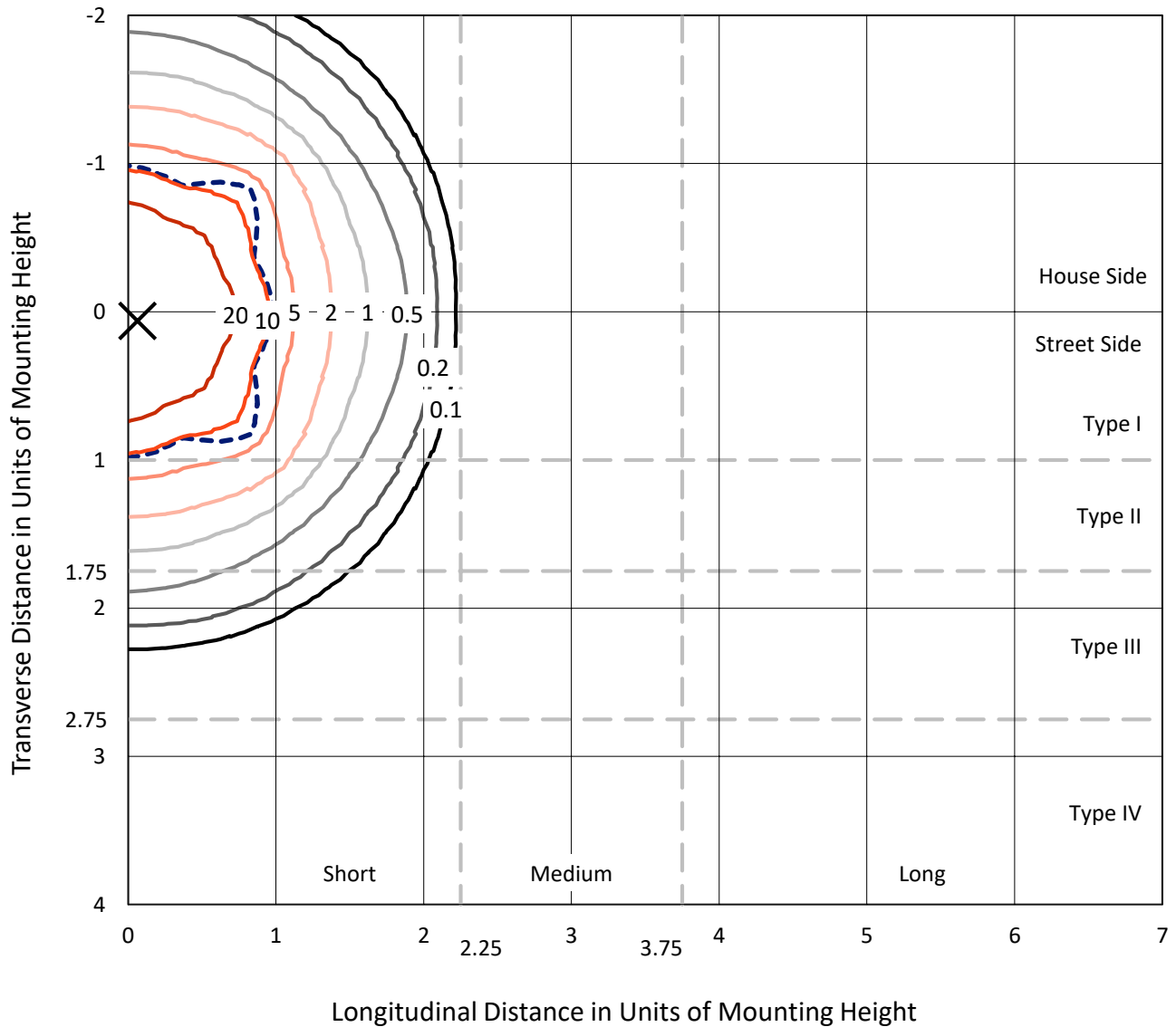
Input Watts (W): 210
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: E429-97
 CATALOG NUMBER: MHQP-S3/9-175

Iso-Footcandle Lines of Horizontal Illumination

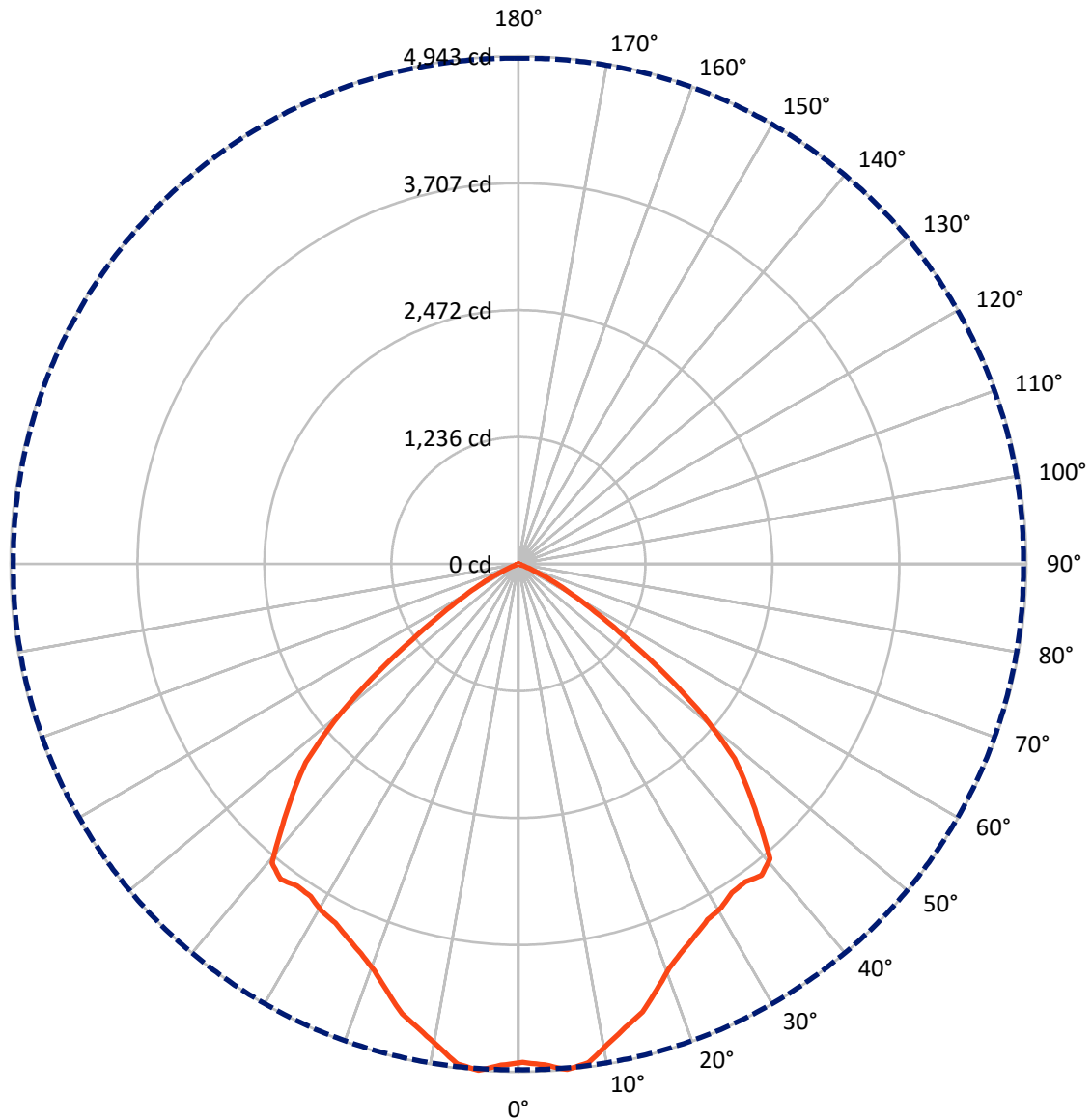
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 48.5 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: E429-97
CATALOG NUMBER: MHQP-S3/9-175

Luminous Intensity Polar Plot



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

REPORT NUMBER: E429-97
 CATALOG NUMBER: MHQP-S3/9-175

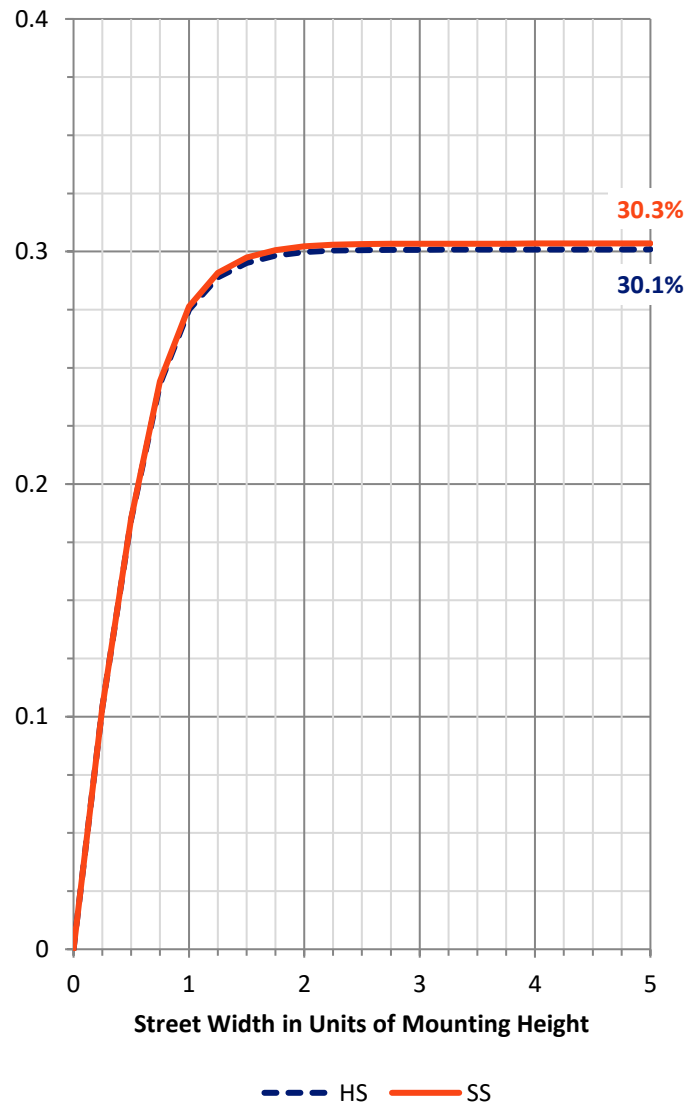
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4539.4	0.0	4539.4
	% Lamp	30.3	0.0	30.3
Street Side	Lumens	4539.4	0.0	4539.4
	% Lamp	30.3	0.0	30.3
Total	Lumens	9078.8	0.0	9078.8
	% Lamp	60.5	0.0	60.5

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	464.8	5.1	3.1
10°-20°	1310.4	14.4	8.7
20°-30°	1956.3	21.5	13.0
30°-40°	2286.6	25.2	15.2
40°-50°	1854.1	20.4	12.4
50°-60°	936.4	10.3	6.2
60°-70°	255.2	2.8	1.7
70°-80°	12.6	0.1	0.1
80°-90°	2.4	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°	9078.8	100.0	60.5
0°-180°	9078.8	100.0	60.5

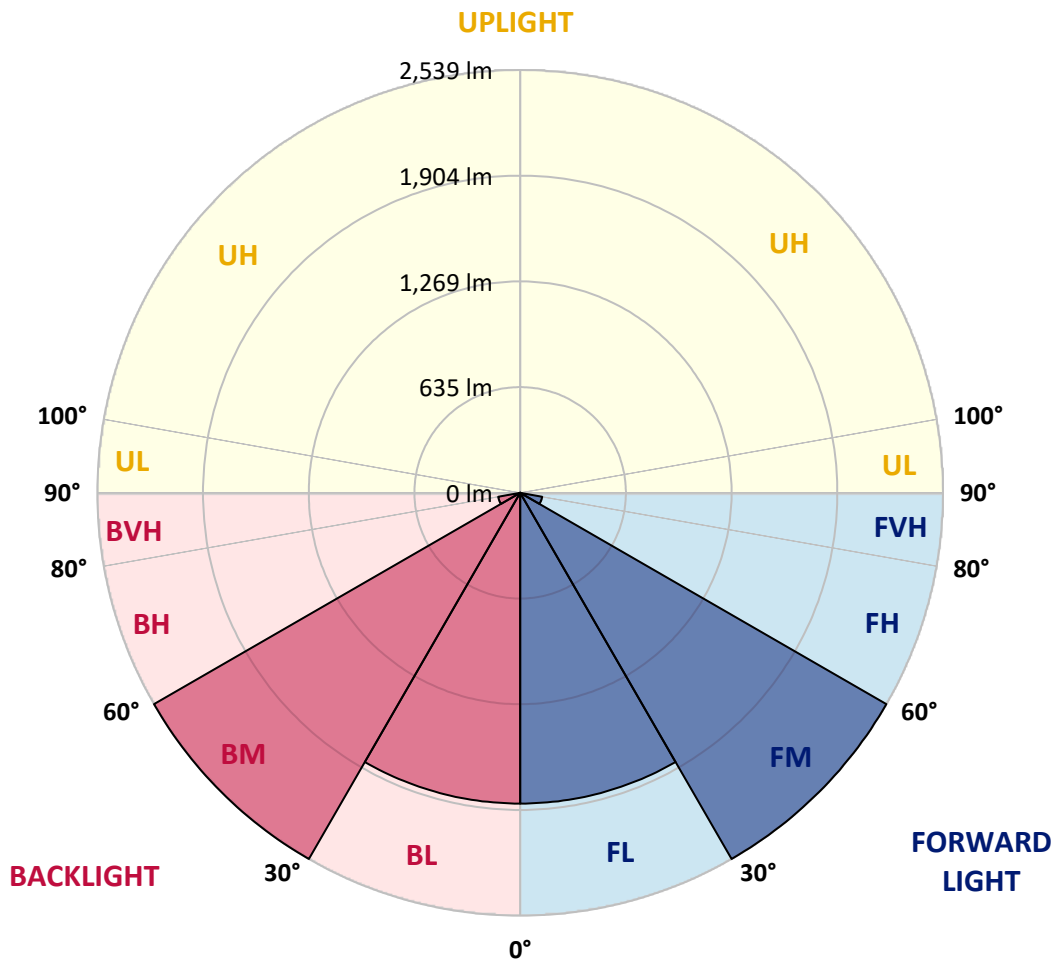


REPORT NUMBER: E429-97
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1865.7	12.4			
FM (30°-60°)	2538.6	16.9			
FH (60°-80°)	133.9	0.9			G0/660
FVH (80°-90°)	1.2	0.0			G0/10
BL (0°-30°)	1865.7	12.4	B3/2500		
BM (30°-60°)	2538.6	16.9	B3/5000		
BH (60°-80°)	133.9	0.9	B1/500		G0/660
BVH (80°-90°)	1.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	5921.2	39.5			

BUG Rating: B3-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°	4850	4850	4850	4850	4850	4850	4850	4850	4850
2.5°	4890	4883	4881	4882	4880	4882	4881	4883	4890
5°	4923	4940	4943	4933	4916	4933	4943	4940	4923
7.5°	4849	4883	4900	4879	4840	4879	4900	4883	4849
10°	4791	4803	4755	4772	4760	4772	4755	4803	4791
12.5°	4776	4741	4629	4726	4756	4726	4629	4741	4776
15°	4771	4685	4523	4680	4778	4680	4523	4685	4771
17.5°	4720	4598	4355	4610	4762	4610	4355	4598	4720
20°	4631	4414	4196	4438	4651	4438	4196	4414	4631
22.5°	4590	4228	4090	4246	4610	4246	4090	4228	4590
25°	4615	4126	4002	4149	4614	4149	4002	4126	4615
27.5°	4648	4031	3921	4034	4660	4034	3921	4031	4648
30°	4677	3915	3884	3940	4724	3940	3884	3915	4677
32.5°	4403	3715	3815	3778	4389	3778	3815	3715	4403
35°	4030	3398	3801	3462	4002	3462	3801	3398	4030
37.5°	3696	3071	3844	3072	3636	3072	3844	3071	3696
40°	3363	2760	3771	2744	3263	2744	3771	2760	3363
42.5°	2865	2449	3434	2428	2859	2428	3434	2449	2865
45°	2350	2077	3132	2079	2343	2079	3132	2077	2350
47.5°	1857	1755	2830	1741	1839	1741	2830	1755	1857
50°	1473	1428	2356	1449	1473	1449	2356	1428	1473
52.5°	1147	1167	1808	1156	1120	1156	1808	1167	1147
55°	910	938	1268	910	890	910	1268	938	910
57.5°	712	733	879	725	729	725	879	733	712
60°	596	571	601	574	619	574	601	571	596
62.5°	469	428	399	418	471	418	399	428	469
65°	229	258	235	218	178	218	235	258	229
67.5°	79	87	106	65	38	65	106	87	79
70°	26	29	40	18	17	18	40	29	26
72.5°	17	16	15	12	11	12	15	16	17
75°	12	12	10	9	8	9	10	12	12
77.5°	9	8	7	7	6	7	7	8	9
80°	6	6	5	5	4	5	5	6	6
82.5°	4	4	3	3	3	3	3	4	4
85°	2	2	2	2	1	2	2	2	2
87.5°	1	1	1	1	0	1	1	1	1
90°	0	0	0	0	0	0	0	0	0

(END OF REPORT)