

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: E429-109

Luminaire Tested: **MHQF-GS/C73-175**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: E429-109  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: MHQF-GS/C73-175  
Description: RECESSED COMMERCIAL WITH FLAT LENS  
Light Source: 175 WATT MH COATED ED-28  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 15000 (1 lamp)  
Luminaire Lumens: 11076.7 lumens  
Efficiency: 73.8%  
Efficacy: 52.7 lumens/watt  
Luminous Opening: Rectangular (W 1.79' x L: 1.79' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G1

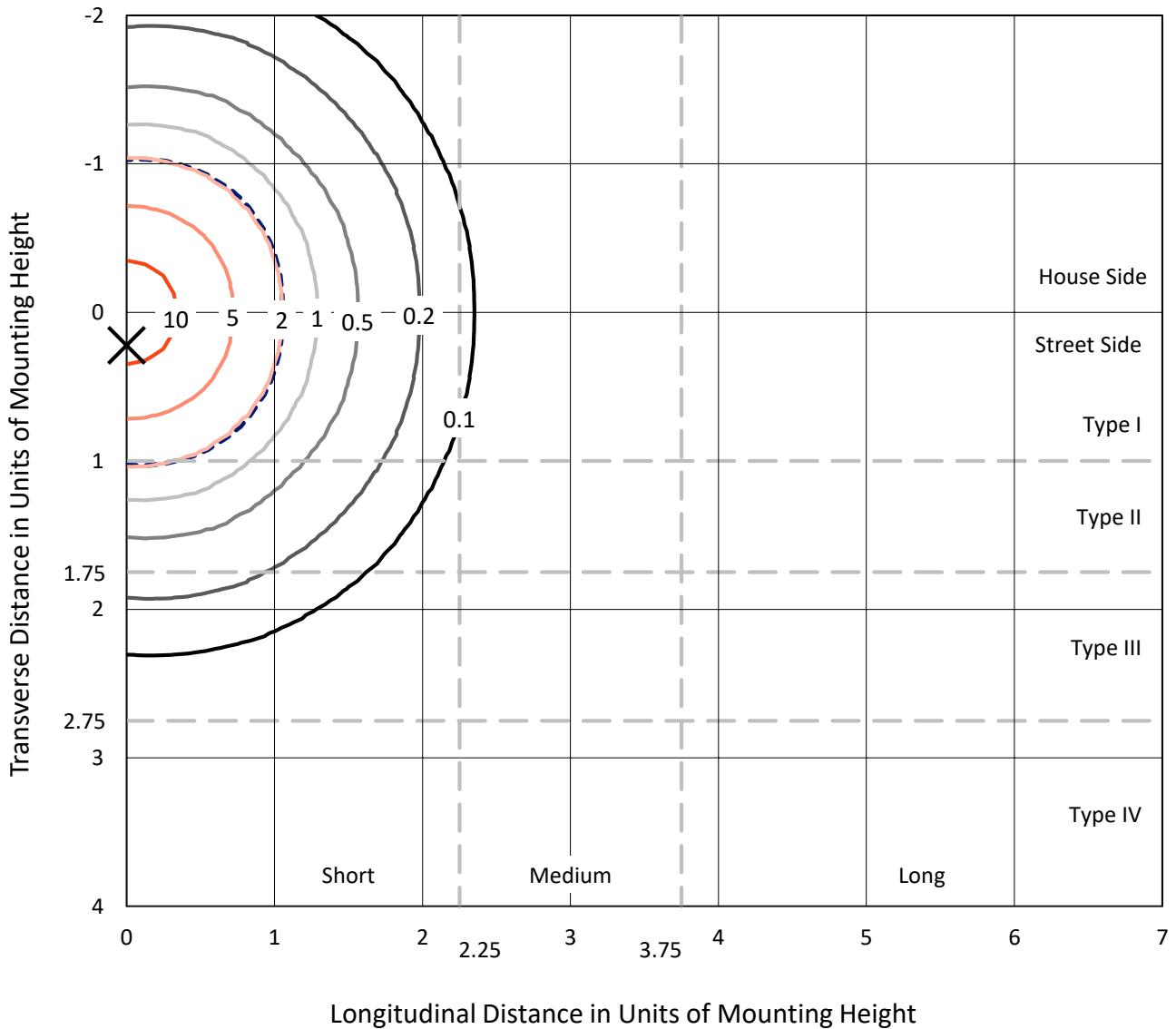
Input Watts (W): 210  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: E429-109  
 CATALOG NUMBER: MHQF-GS/C73-175

### Iso-Footcandle Lines of Horizontal Illumination

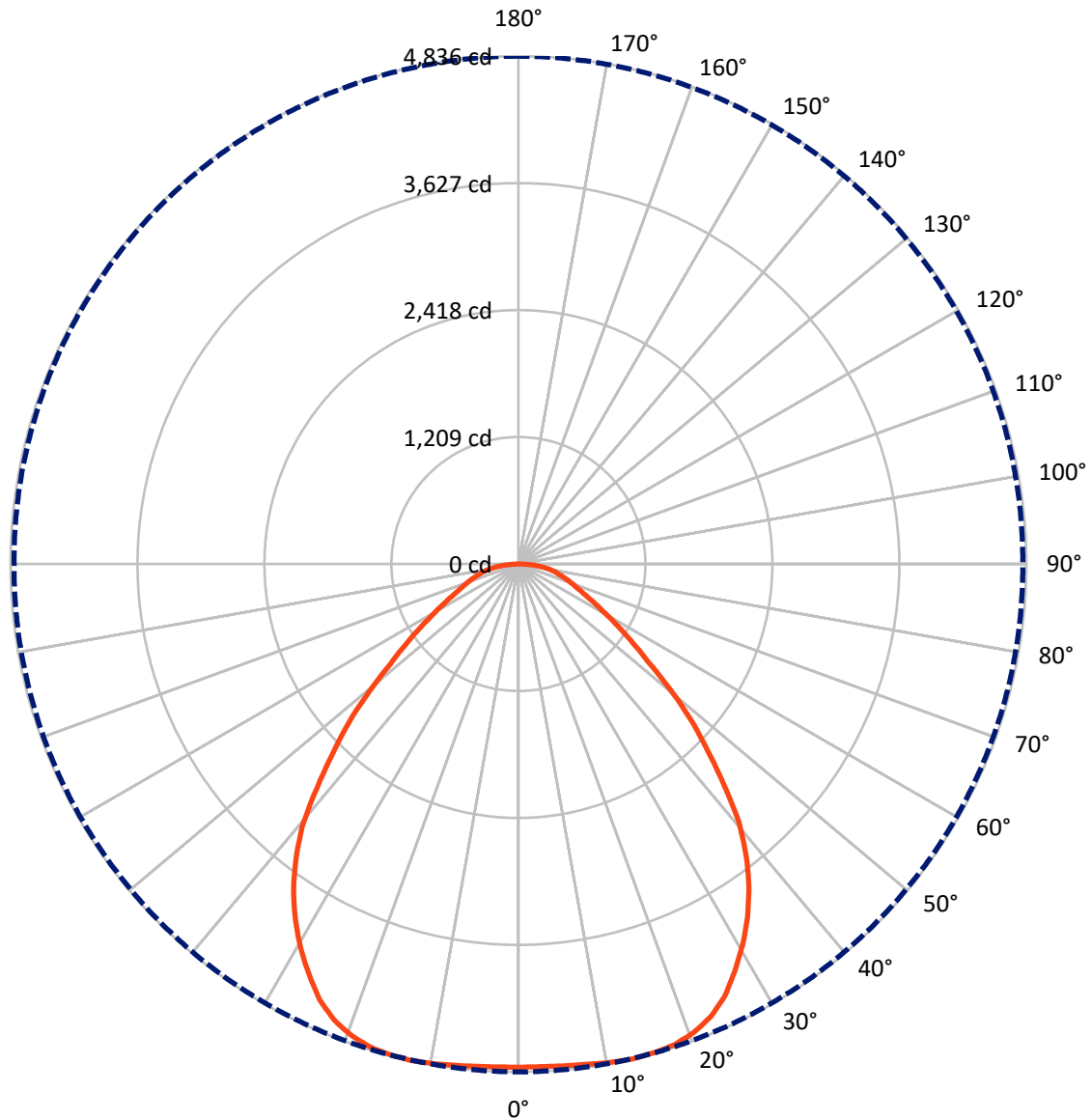
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 12 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: E429-109  
CATALOG NUMBER: MHQF-GS/C73-175

### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 12.5-Deg Vertical

REPORT NUMBER: E429-109

CATALOG NUMBER: MHQF-GS/C73-175

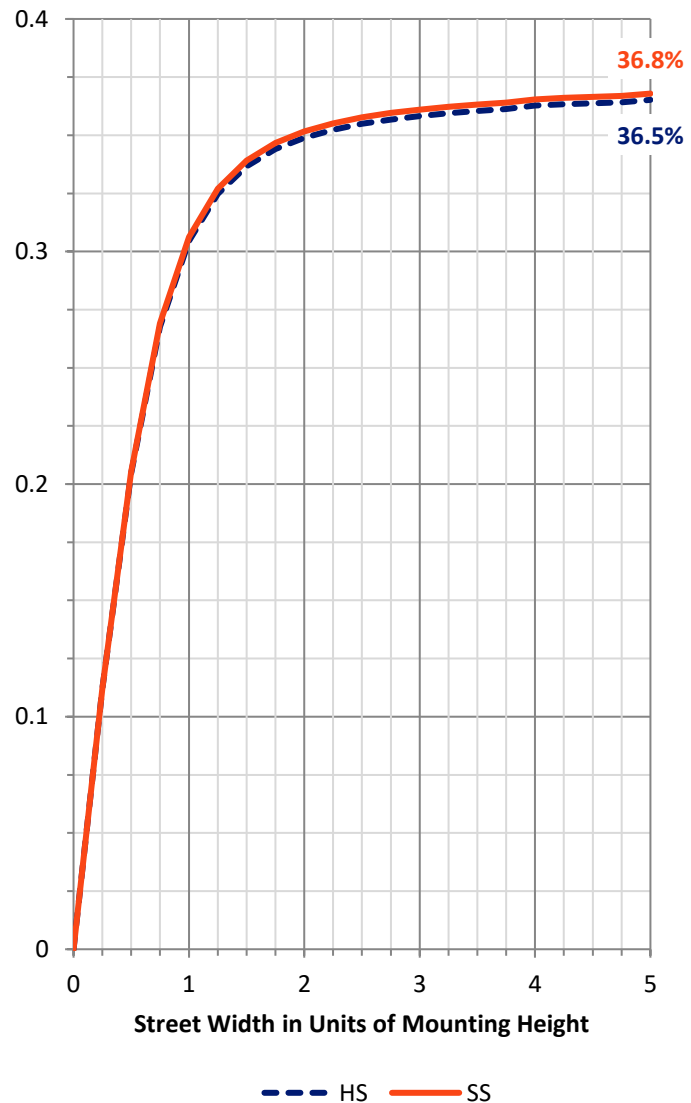
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5538.4	0.0	5538.4
	% Lamp	36.9	0.0	36.9
<b>Street Side</b>	Lumens	5538.4	0.0	5538.4
	% Lamp	36.9	0.0	36.9
<b>Total</b>	Lumens	11076.7	0.0	11076.7
	% Lamp	73.8	0.0	73.8

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	458.4	4.1	3.1
10°-20°	1359.6	12.3	9.1
20°-30°	2096.6	18.9	14.0
30°-40°	2395.9	21.6	16.0
40°-50°	2050.3	18.5	13.7
50°-60°	1326.8	12.0	8.8
60°-70°	776.7	7.0	5.2
70°-80°	441.9	4.0	2.9
80°-90°	170.5	1.5	1.1
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°	11076.7	100.0	73.8
0°-180°	11076.7	100.0	73.8

**Coefficient of Utilization**



REPORT NUMBER: E429-109

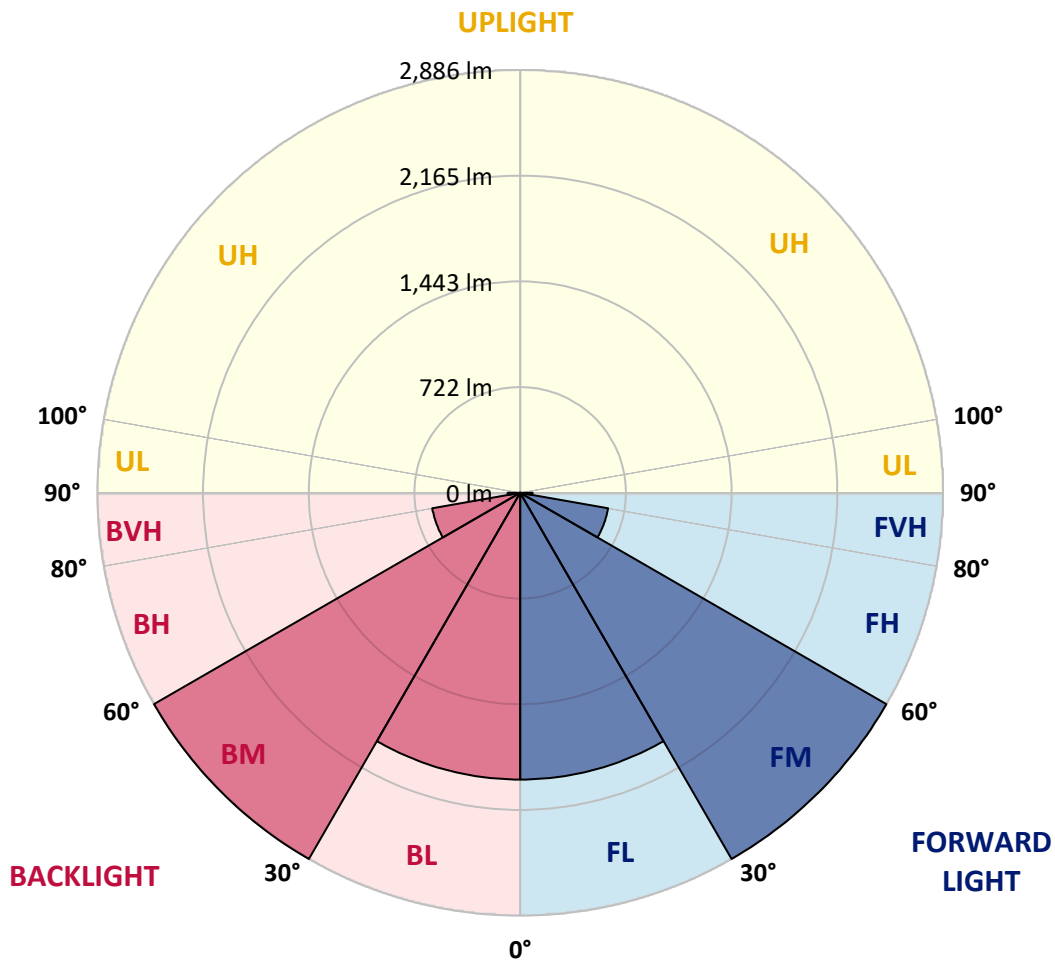
CATALOG NUMBER: MHQF-GS/C73-175

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

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1957.3	13.0			
FM	(30°-60°)	2886.5	19.2			
FH	(60°-80°)	609.3	4.1			G0/660
FVH	(80°-90°)	85.3	0.6			G1/100
BL	(0°-30°)	1957.3	13.0	B3/2500		
BM	(30°-60°)	2886.5	19.2	B3/5000		
BH	(60°-80°)	609.3	4.1	B2/1000		G0/660
BVH	(80°-90°)	85.3	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		3923.3	26.2			

**BUG Rating: B3-U0-G1**

Type V Short





REPORT NUMBER: E429-109

CATALOG NUMBER: MHQF-GS/C73-175

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	4791	4791	4791	4791	4791	4791	4791	4791	4791
2.5°	4792	4790	4791	4787	4786	4787	4791	4790	4792
5°	4799	4797	4796	4790	4786	4790	4796	4797	4799
7.5°	4810	4808	4807	4799	4794	4799	4807	4808	4810
10°	4826	4822	4817	4809	4803	4809	4817	4822	4826
12.5°	4836	4829	4823	4813	4803	4813	4823	4829	4836
15°	4830	4822	4817	4800	4790	4800	4817	4822	4830
17.5°	4812	4800	4790	4773	4763	4773	4790	4800	4812
20°	4763	4757	4742	4725	4716	4725	4742	4757	4763
22.5°	4684	4685	4673	4666	4654	4666	4673	4685	4684
25°	4561	4570	4578	4576	4563	4576	4578	4570	4561
27.5°	4389	4421	4458	4438	4410	4438	4458	4421	4389
30°	4207	4243	4304	4285	4223	4285	4304	4243	4207
32.5°	4005	4031	4111	4079	4018	4079	4111	4031	4005
35°	3780	3839	3921	3853	3802	3853	3921	3839	3780
37.5°	3523	3579	3689	3648	3568	3648	3689	3579	3523
40°	3233	3282	3424	3390	3307	3390	3424	3282	3233
42.5°	2865	2976	3101	3052	2945	3052	3101	2976	2865
45°	2514	2644	2764	2706	2579	2706	2764	2644	2514
47.5°	2202	2310	2390	2354	2287	2354	2390	2310	2202
50°	1862	2001	2035	2014	1956	2014	2035	2001	1862
52.5°	1548	1757	1743	1740	1671	1740	1743	1757	1548
55°	1316	1495	1468	1499	1464	1499	1468	1495	1316
57.5°	1115	1272	1238	1296	1255	1296	1238	1272	1115
60°	939	1078	1078	1107	1063	1107	1078	1078	939
62.5°	805	918	926	945	906	945	926	918	805
65°	685	772	789	783	761	783	789	772	685
67.5°	596	658	683	655	636	655	683	658	596
70°	527	554	584	560	545	560	584	554	527
72.5°	467	470	501	480	464	480	501	470	467
75°	403	405	431	412	396	412	431	405	403
77.5°	353	351	365	356	349	356	365	351	353
80°	296	294	303	298	294	298	303	294	296
82.5°	222	231	240	237	225	237	240	231	222
85°	151	166	166	166	153	166	166	166	151
87.5°	73	89	83	84	74	84	83	89	73
90°	0	0	0	0	0	0	0	0	0

(END OF REPORT)