

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: E429-125

Luminaire Tested: **HPQD-GO/GAS/A-400**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: E429-125
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: HPQD-GO/GAS/A-400
Description: RECESSED COMMERCIAL WITH DROP LENS
Light Source: 400 WATT HPS COATED ED-37
Ballast/Driver: -

Summary

Lumens per Lamp: 47500 (1 lamp)
Luminaire Lumens: 37833.4 lumens
Efficiency: 79.6%
Efficacy: 81.4 lumens/watt
Luminous Opening: Rectangular (W 1.75' x L: 1.75' x H: 0')
IES Classification: Type V - Short - Cutoff
BUG Rating: B5 - U4 - G4

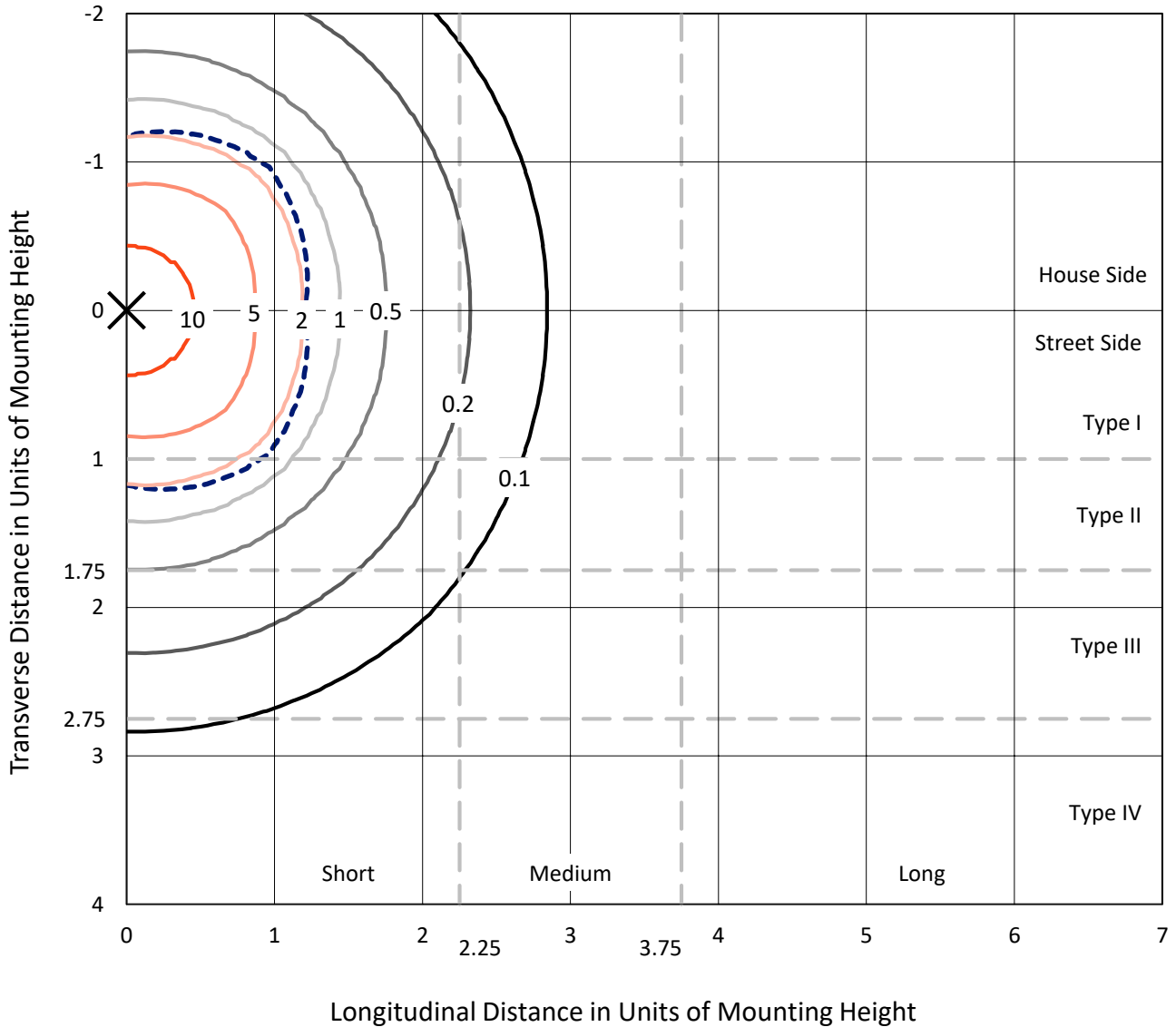
Input Watts (W): 465
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

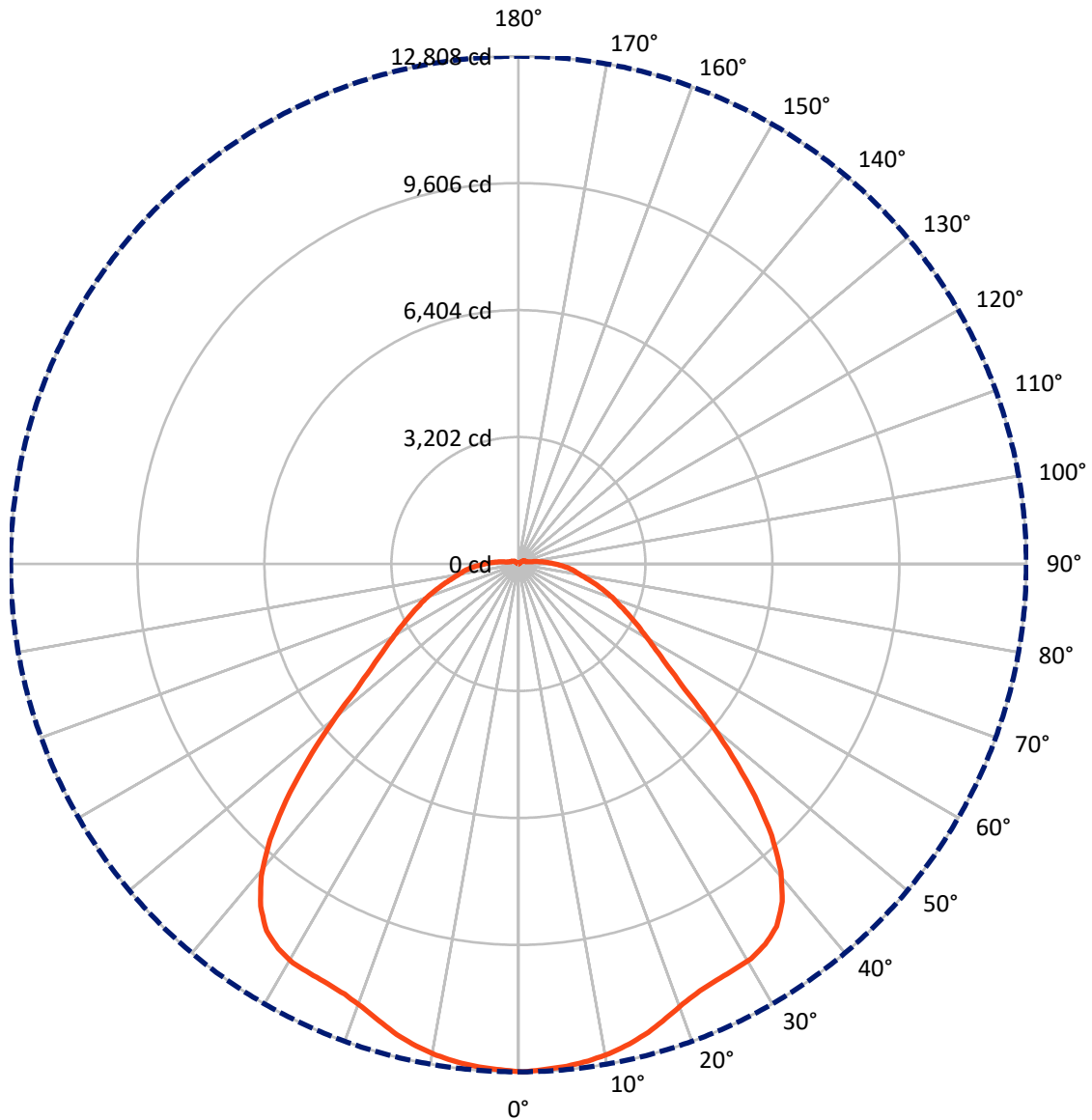
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 14.2 fc
 Type V - Short - Cutoff

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Luminous Intensity Polar Plot



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

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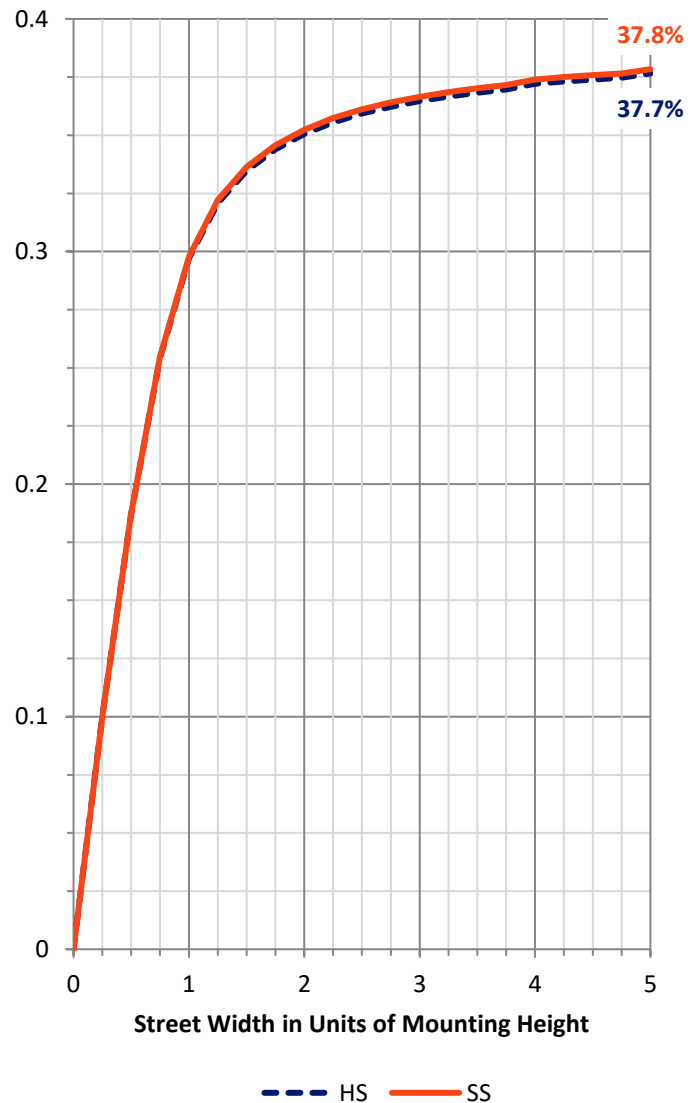
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18332.8	583.9	18916.7
	% Lamp	38.6	1.2	39.8
Street Side	Lumens	18332.8	583.9	18916.7
	% Lamp	38.6	1.2	39.8
Total	Lumens	36665.7	1167.7	37833.4
	% Lamp	77.2	2.5	79.6

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	1209.3	3.2	2.5
10°-20°	3441.1	9.1	7.2
20°-30°	5515.3	14.6	11.6
30°-40°	7522.5	19.9	15.8
40°-50°	7445.1	19.7	15.7
50°-60°	4770.0	12.6	10.0
60°-70°	3135.1	8.3	6.6
70°-80°	2203.3	5.8	4.6
80°-90°	1424.0	3.8	3.0
90°-100°	676.9	1.8	1.4
100°-110°	265.7	0.7	0.6
110°-120°	161.4	0.4	0.3
120°-130°	60.7	0.2	0.1
130°-140°	3.0	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°	36665.7	96.9	77.2
0°-180°	37833.4	100.0	79.6

Coefficient of Utilization



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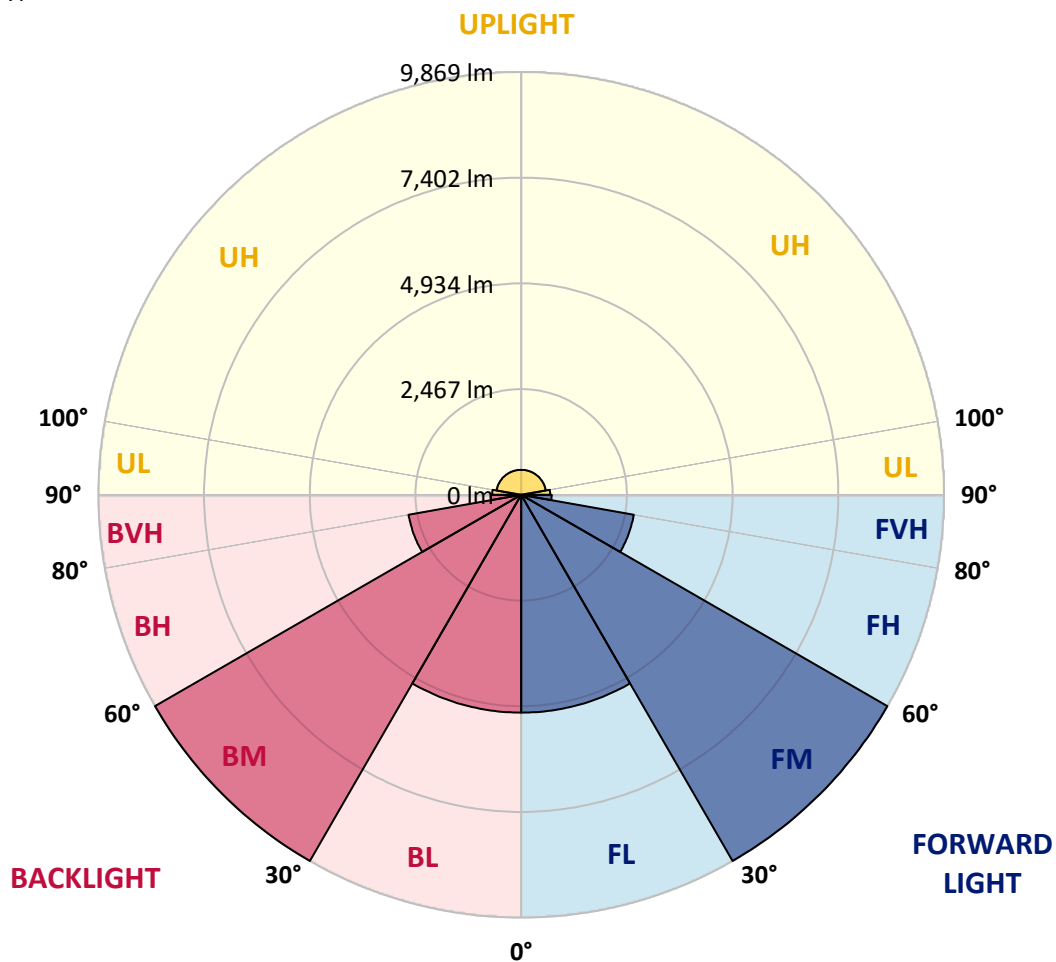
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5082.8	10.7			
FM (30°-60°)	9868.8	20.8			
FH (60°-80°)	2669.2	5.6			G2/5000
FVH (80°-90°)	712.0	1.5			G4/750
BL (0°-30°)	5082.8	10.7	B5		
BM (30°-60°)	9868.8	20.8	B5		
BH (60°-80°)	2669.2	5.6	B4/5000		G2/5000
BVH (80°-90°)	712.0	1.5			G4/750
UL (90°-100°)	676.9	1.4		U4/1000	
UH (100°-180°)	583.9	1.2		U4/1000	
Trapped Light	9666.6	20.4			

BUG Rating: B5-U4-G4

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	12808	12808	12808	12808	12808	12808	12808	12808	12808
2.5°	12765	12793	12787	12806	12799	12806	12787	12793	12765
5°	12723	12738	12731	12746	12738	12746	12731	12738	12723
7.5°	12655	12658	12625	12658	12667	12658	12625	12658	12655
10°	12558	12542	12494	12527	12565	12527	12494	12542	12558
12.5°	12425	12360	12286	12362	12437	12362	12286	12360	12425
15°	12256	12152	12063	12179	12277	12179	12063	12152	12256
17.5°	12044	11958	11867	12015	12128	12015	11867	11958	12044
20°	11842	11815	11786	11917	11993	11917	11786	11815	11842
22.5°	11699	11754	11818	11910	11917	11910	11818	11754	11699
25°	11623	11777	11947	11985	11932	11985	11947	11777	11623
27.5°	11586	11842	12151	12109	11970	12109	12151	11842	11586
30°	11556	11910	12396	12240	11982	12240	12396	11910	11556
32.5°	11434	11974	12600	12319	11917	12319	12600	11974	11434
35°	11220	11940	12731	12282	11676	12282	12731	11940	11220
37.5°	10807	11767	12753	12090	11254	12090	12753	11767	10807
40°	10192	11361	12582	11657	10582	11657	12582	11361	10192
42.5°	9364	10686	11994	10918	9770	10918	11994	10686	9364
45°	8362	9754	11226	9913	8723	9913	11226	9754	8362
47.5°	7269	8536	9916	8607	7565	8607	9916	8536	7269
50°	6215	7242	8440	7349	6396	7349	8440	7242	6215
52.5°	5243	6145	6930	6185	5574	6185	6930	6145	5243
55°	4582	5097	5755	5178	4821	5178	5755	5097	4582
57.5°	4090	4398	4803	4422	4211	4422	4803	4398	4090
60°	3685	3884	4018	3893	3751	3893	4018	3884	3685
62.5°	3345	3512	3495	3474	3367	3474	3495	3512	3345
65°	3028	3167	3152	3156	3096	3156	3152	3167	3028
67.5°	2742	2850	2906	2850	2802	2850	2906	2850	2742
70°	2502	2575	2667	2561	2516	2561	2667	2575	2502
72.5°	2240	2316	2418	2298	2260	2298	2418	2316	2240
75°	1996	2090	2160	2066	2010	2066	2160	2090	1996
77.5°	1755	1846	1919	1841	1785	1841	1919	1846	1755
80°	1562	1623	1669	1627	1582	1627	1669	1623	1562
85°	1264	1317	1357	1323	1299	1323	1357	1317	1264
90°	877	955	1020	970	922	970	1020	955	877
95°	591	597	603	600	606	600	603	597	591
100°	301	316	328	321	319	321	328	316	301
105°	211	232	288	234	218	234	288	232	211
110°	193	178	247	181	197	181	247	178	193
115°	176	152	179	152	176	152	179	152	176
120°	152	122	81	121	151	121	81	122	152
125°	116	77	2	74	113	74	2	77	116
130°	45	9	0	5	47	5	0	9	45
135°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)