

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P584527

Luminaire Tested: **HC840D010-HM82555830-81NDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584527  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC840D010-HM82555830-81NDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4486.1 lumens  
Efficiency: N/A  
Efficacy: 109.4 lumens/watt  
Spacing Criteria (0/90/45): 0.22 / 0.22 / 0.27  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

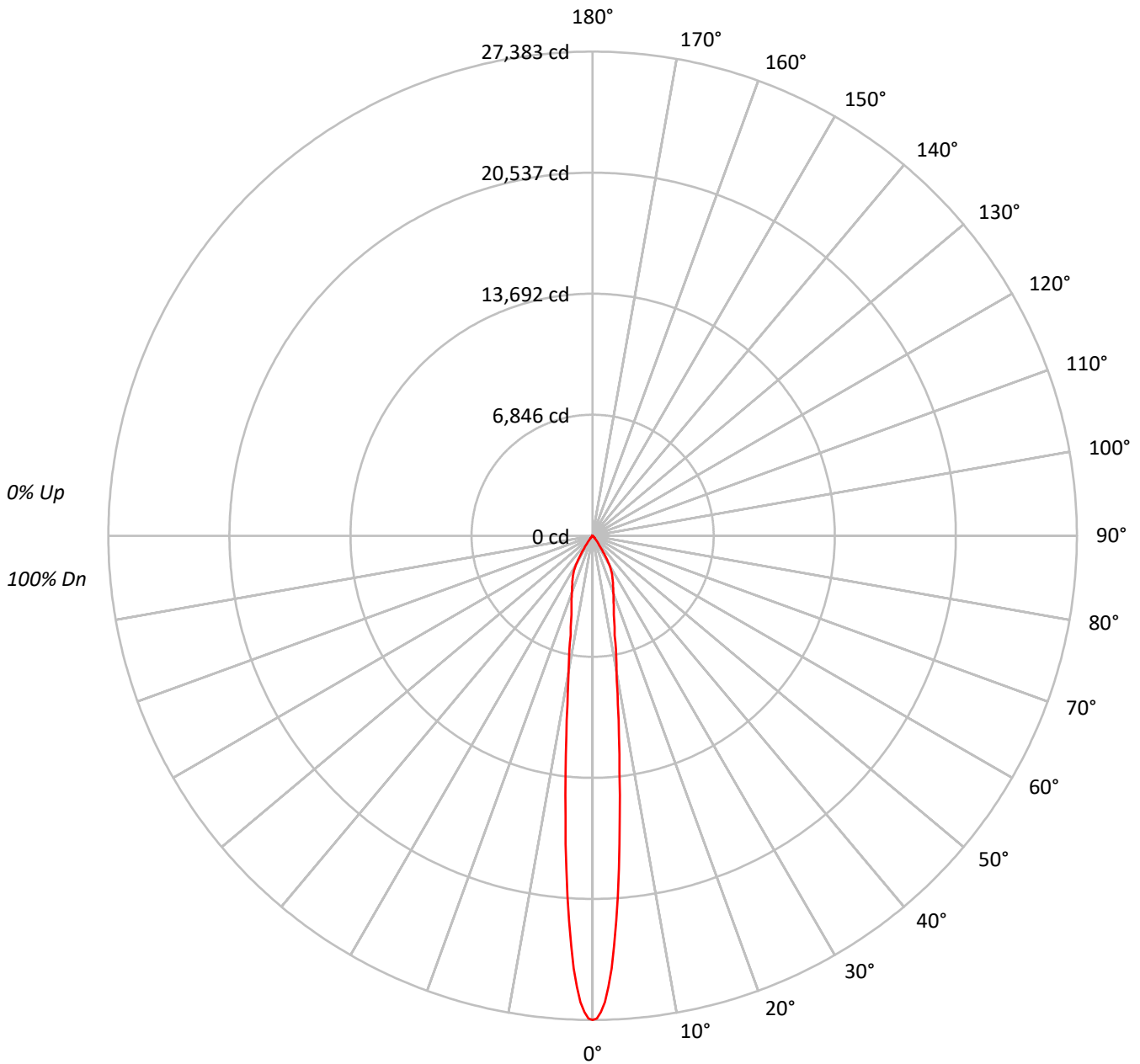
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				50				30				10		0		
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96			
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91			
3	106	101	97	93	104	99	96	93	97	94	91	95	92	90	92	90	89	87			
4	102	96	91	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83			
5	98	92	87	83	97	91	86	83	89	85	82	87	84	82	86	83	81	80			
6	95	88	83	79	93	87	82	79	86	82	79	84	81	78	83	80	78	76			
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73			
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71			
9	85	78	73	70	84	77	73	70	76	72	70	76	72	69	75	72	69	68			
10	83	75	70	67	82	75	70	67	74	70	67	73	69	67	73	69	67	66			

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	844391
5°	541610
10°	244666
15°	147623
20°	112497
25°	90844
30°	66570
35°	24104
40°	8997
45°	4086
50°	1300
55°	328
60°	185
65°	219
70°	0
75°	0
80°	533
85°	1061



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1334.5	29.7
10°-20°	1355.4	30.2
20°-30°	1213.4	27.0
30°-40°	488.8	10.9
40°-50°	80.2	1.8
50°-60°	7.3	0.2
60°-70°	2.6	0.1
70°-80°	2.0	0.0
80°-90°	2.9	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3903.3	87.0
0°-40°	4392.0	97.9
0°-60°	4479.4	99.9
0°-90°	4486.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4486.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	27383	
5°	17497	###
15°	4624	1355
25°	2670	1213
35°	640	489
45°	94	80
55°	6	7
65°	3	3
75°	0	2
85°	3	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	27383.0
0.5°	27298.4
1°	26945.1
1.5°	26377.2
2°	25516.3
2.5°	24498.5
3°	23223.9
3.5°	21825.4
4°	20442.1
4.5°	18892.6
5°	17497.2
5.5°	15977.9
6°	14745.6
6.5°	13461.9
7°	12453.1
7.5°	11386.9
8°	10529.1
8.5°	9668.3
9°	9022.0
9.5°	8309.2
10°	7813.8
12.5°	5762.9
15°	4624.2
17.5°	3950.7
20°	3428.2
22.5°	3011.3
25°	2670.0
27.5°	2328.7
30°	1869.6
32.5°	1202.1
35°	640.3
37.5°	353.4
40°	223.5
42.5°	148.0
45°	93.7
47.5°	57.4
50°	27.1
52.5°	9.0
55°	6.1
57.5°	3.0
60°	3.0
62.5°	3.0
65°	3.0



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**CANDELA DISTRIBUTION (continued):**

	0°
72.5°	0.0
75°	0.0
77.5°	3.0
80°	3.0
82.5°	3.0
85°	3.0
87.5°	3.0
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







67.5°		3.0
70°		0.0



(END OF REPORT)