

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: P584291

Luminaire Tested: **HC830D010-HM82555840-81NDW**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584291  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-3)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC830D010-HM82555840-81NDW  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3335.3 lumens  
Efficiency: N/A  
Efficacy: 119.1 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.06 / 0.92  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

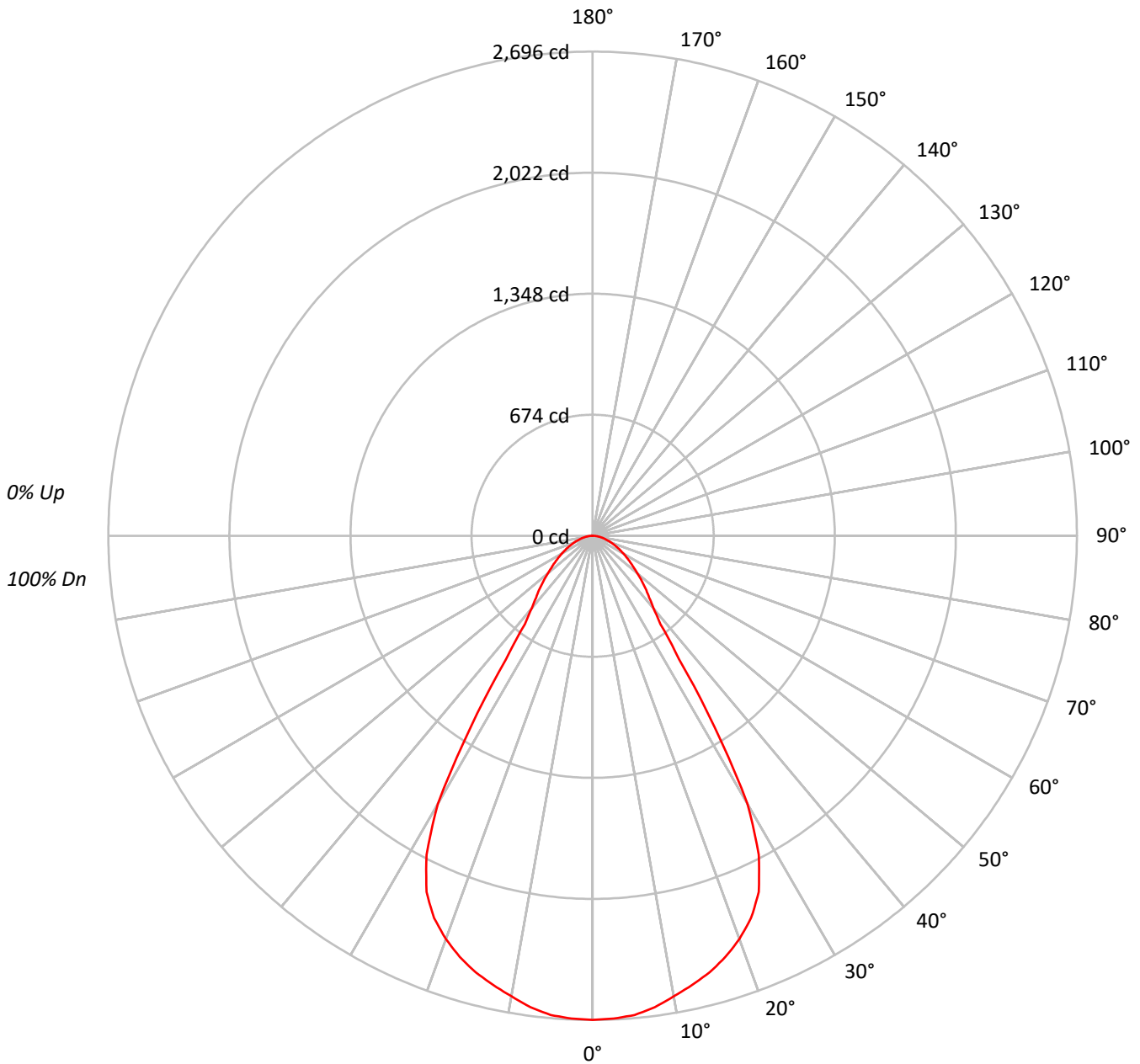
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90			
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81			
3	98	90	84	79	96	89	83	79	86	81	77	84	80	76	81	78	75	73			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	75	72	68	67			
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61			
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56			
7	77	66	59	54	76	66	59	54	64	58	54	63	58	54	62	57	53	52			
8	73	62	55	50	71	61	55	50	60	54	50	59	54	50	58	53	49	48			
9	69	58	51	47	68	57	51	47	56	51	46	55	50	46	55	50	46	45			
10	65	55	48	44	64	54	48	44	53	47	43	52	47	43	52	47	43	42			

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

	0°
0°	83132
5°	82914
10°	81530
15°	80340
20°	78412
25°	74431
30°	61397
35°	31610
40°	21166
45°	18150
50°	15658
55°	13666
60°	12143
65°	10908
70°	9881
75°	8912
80°	7956
85°	7961



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	253.3	7.6
10°-20°	708.0	21.2
20°-30°	981.0	29.4
30°-40°	589.3	17.7
40°-50°	322.6	9.7
50°-60°	229.2	6.9
60°-70°	148.8	4.5
70°-80°	79.5	2.4
80°-90°	23.7	0.7
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°	1942.3	58.2
0°-40°	2531.6	75.9
0°-60°	3083.3	92.4
0°-90°	3335.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3335.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2696	
5°	2679	253
15°	2517	708
25°	2188	981
35°	840	589
45°	416	323
55°	254	229
65°	150	149
75°	75	79
85°	22	24
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2695.9
2.5°	2690.9
5°	2678.6
7.5°	2648.6
10°	2603.8
12.5°	2561.5
15°	2516.6
17.5°	2459.3
20°	2389.5
22.5°	2304.8
25°	2187.6
27.5°	2003.3
30°	1724.3
32.5°	1263.3
35°	839.7
37.5°	620.4
40°	525.8
42.5°	466.0
45°	416.2
47.5°	368.7
50°	326.4
52.5°	286.5
55°	254.2
57.5°	224.2
60°	196.9
62.5°	171.9
65°	149.5
67.5°	127.1
70°	109.6
72.5°	89.7
75°	74.8
77.5°	59.8
80°	44.8
82.5°	32.3
85°	22.5
87.5°	10.0
90°	0.0



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— 0°-180°







(END OF REPORT)