

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: P593652

Luminaire Tested: **HC830D010-HM82555850-81WDBB**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593652  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-11)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC830D010-HM82555850-81WDBB  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3731.3 lumens  
Efficiency: N/A  
Efficacy: 133.3 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 1.32 / 1.13  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

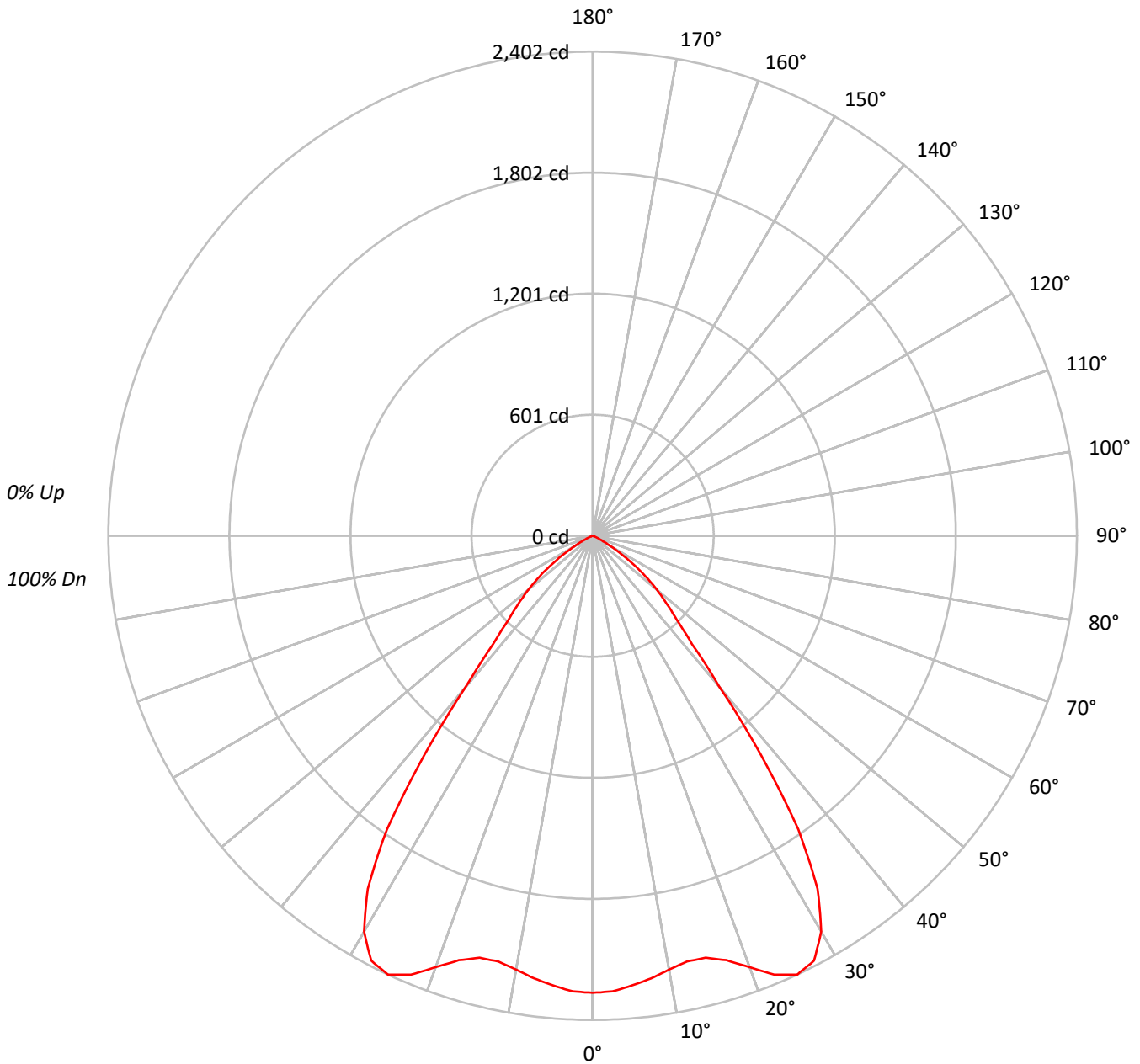
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	109	107	104	110	107	105	102	103	101	99	99	98	96	96	95	93	92			
2	106	100	95	92	104	98	94	91	95	92	89	92	89	87	89	87	85	83			
3	99	92	86	81	97	90	85	81	88	83	79	85	81	78	83	80	77	75			
4	93	84	78	73	91	83	77	72	81	76	71	79	74	71	77	73	70	68			
5	87	77	71	66	85	76	70	65	74	69	65	73	68	64	71	67	63	62			
6	82	71	64	59	80	70	64	59	69	63	59	67	62	58	66	61	58	56			
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	61	57	53	51			
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47			
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43			
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40			

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

	0°
0°	69912
5°	69328
10°	68414
15°	69195
20°	74727
25°	81716
30°	80728
35°	66965
40°	39413
45°	25751
50°	19957
55°	13258
60°	6451
65°	1992
70°	676
75°	596
80°	444
85°	885



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.1	5.7
10°-20°	622.7	16.7
20°-30°	1088.7	29.2
30°-40°	1059.1	28.4
40°-50°	481.6	12.9
50°-60°	223.3	6.0
60°-70°	37.4	1.0
70°-80°	4.6	0.1
80°-90°	1.7	0.0
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°	1923.6	51.6
0°-40°	2982.7	79.9
0°-60°	3687.6	98.8
0°-90°	3731.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3731.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2267	
5°	2240	212
15°	2168	623
25°	2402	1089
35°	1779	1059
45°	590	482
55°	247	223
65°	27	37
75°	5	5
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2267.2
2.5°	2262.2
5°	2239.7
7.5°	2214.9
10°	2184.9
12.5°	2162.6
15°	2167.5
17.5°	2207.4
20°	2277.2
22.5°	2356.8
25°	2401.7
27.5°	2376.8
30°	2267.2
32.5°	2075.4
35°	1778.9
37.5°	1370.3
40°	979.1
42.5°	729.9
45°	590.5
47.5°	498.3
50°	416.0
52.5°	331.4
55°	246.6
57.5°	169.4
60°	104.6
62.5°	57.3
65°	27.3
67.5°	12.5
70°	7.5
72.5°	5.0
75°	5.0
77.5°	2.5
80°	2.5
82.5°	2.5
85°	2.5
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)