

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: P584120

Luminaire Tested: **HC825D010-HM82555830-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584120  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC825D010-HM82555830-81NDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2183.2 lumens  
Efficiency: N/A  
Efficacy: 81.5 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.57  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

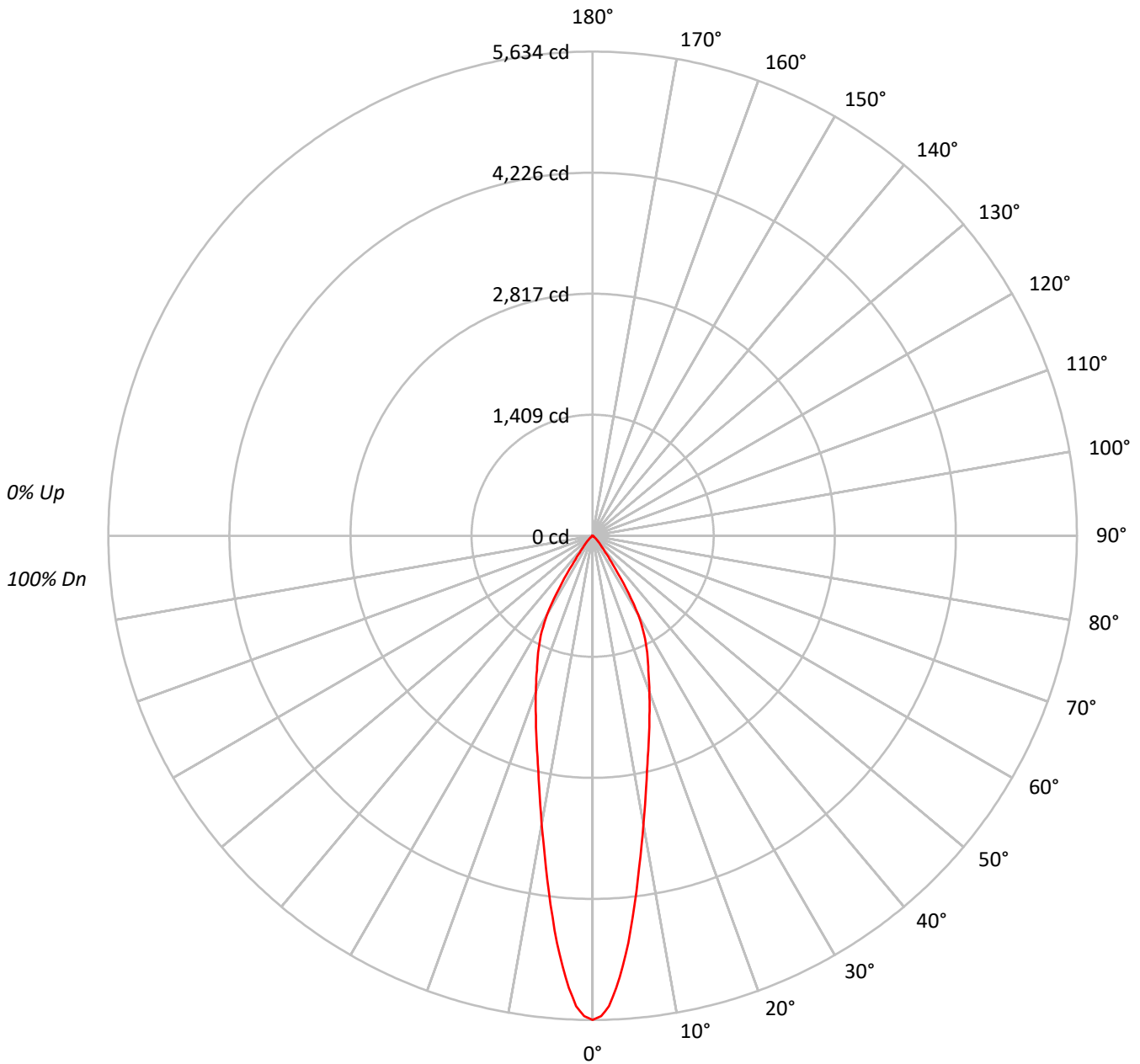
Input Watts (W): 26.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			100
1	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95			95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89			89
3	104	99	94	91	102	97	93	90	95	91	88	92	90	87	90	88	86	84			84
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80			80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75			75
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	76	73	72			72
7	88	80	74	71	87	79	74	70	78	73	70	77	73	70	76	72	69	68			68
8	84	76	71	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65			65
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62			62
10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59			59

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

	0°
0°	173729
5°	147187
10°	106790
15°	80193
20°	63275
25°	51040
30°	37821
35°	15321
40°	6461
45°	3467
50°	1554
55°	785
60°	500
65°	350
70°	289
75°	191
80°	284
85°	566



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	408.3	18.7
10°-20°	705.6	32.3
20°-30°	682.2	31.2
30°-40°	299.6	13.7
40°-50°	64.8	3.0
50°-60°	14.5	0.7
60°-70°	5.0	0.2
70°-80°	1.9	0.1
80°-90°	1.5	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°	1796.0	82.3
0°-40°	2095.6	96.0
0°-60°	2174.9	99.6
0°-90°	2183.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2183.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5634	
5°	4755	408
15°	2512	706
25°	1500	682
35°	407	300
45°	80	65
55°	15	15
65°	5	5
75°	2	2
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	5633.9
1°	5591.7
2°	5476.6
3°	5269.0
4°	5020.9
5°	4755.0
6°	4464.7
7°	4172.7
8°	3898.7
9°	3644.0
10°	3410.5
11°	3190.0
12°	2992.1
13°	2812.1
14°	2653.2
15°	2512.0
17.5°	2195.9
20°	1928.2
22.5°	1693.1
25°	1500.1
27.5°	1303.9
30°	1062.2
32.5°	721.7
35°	407.0
37.5°	240.0
40°	160.5
42.5°	113.5
45°	79.5
47.5°	51.9
50°	32.4
52.5°	19.5
55°	14.6
57.5°	11.3
60°	8.1
62.5°	6.5
65°	4.8
67.5°	3.2
70°	3.2
72.5°	1.6
75°	1.6
77.5°	1.6
80°	1.6
82.5°	1.6



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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



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— 0°-180°







85°	1.6
87.5°	1.6



(END OF REPORT)