

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: P584256

Luminaire Tested: **HC830D010-HM82555830-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584256  
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: HC830D010-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: 2937.5 lumens  
Efficiency: N/A  
Efficacy: 104.9 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

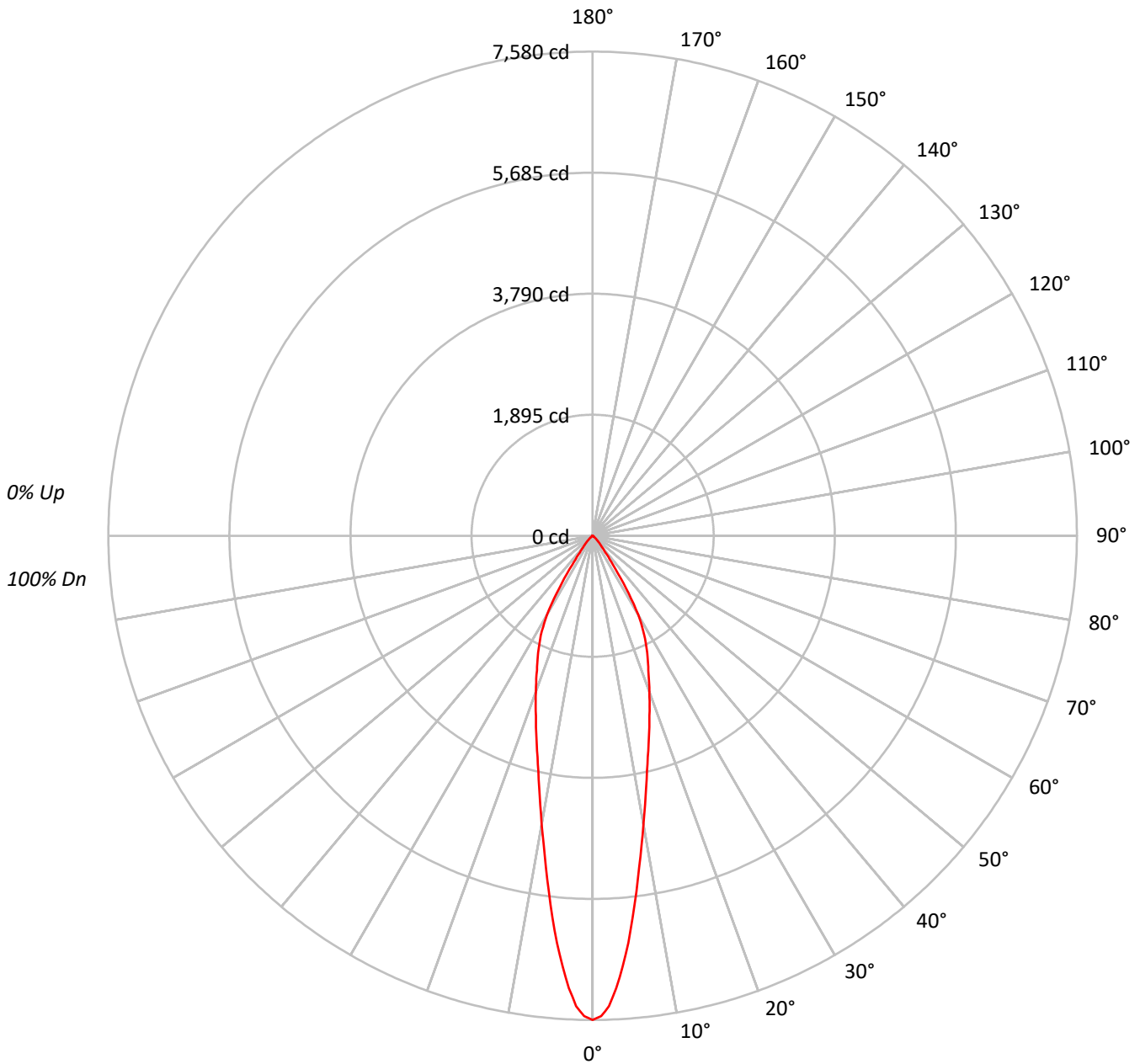
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°
0°	233755
5°	198038
10°	143685
15°	107903
20°	85136
25°	68674
30°	50889
35°	20618
40°	8695
45°	4662
50°	2092
55°	1054
60°	672
65°	474
70°	397
75°	250
80°	373
85°	743



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	549.3	18.7
10°-20°	949.3	32.3
20°-30°	917.8	31.2
30°-40°	403.1	13.7
40°-50°	87.1	3.0
50°-60°	19.5	0.7
60°-70°	6.7	0.2
70°-80°	2.5	0.1
80°-90°	2.0	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°	2416.5	82.3
0°-40°	2819.6	96.0
0°-60°	2926.3	99.6
0°-90°	2937.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2937.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	7580	
5°	6398	549
15°	3380	949
25°	2018	918
35°	548	403
45°	107	87
55°	20	20
65°	6	7
75°	2	3
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	7580.5
1°	7523.6
2°	7368.7
3°	7089.4
4°	6755.7
5°	6397.8
6°	6007.2
7°	5614.3
8°	5245.6
9°	4903.1
10°	4588.8
11°	4292.1
12°	4025.8
13°	3783.6
14°	3569.9
15°	3380.0
17.5°	2954.4
20°	2594.4
22.5°	2278.0
25°	2018.4
27.5°	1754.4
30°	1429.2
32.5°	971.1
35°	547.7
37.5°	322.9
40°	216.0
42.5°	152.8
45°	106.9
47.5°	69.8
50°	43.6
52.5°	26.2
55°	19.6
57.5°	15.2
60°	10.9
62.5°	8.7
65°	6.5
67.5°	4.4
70°	4.4
72.5°	2.1
75°	2.1
77.5°	2.1
80°	2.1
82.5°	2.1



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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



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— 0°-180°







85°	2.1
87.5°	2.1



(END OF REPORT)