

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: P593654

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

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593654  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-5)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC830D010-HM82555850-81MDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3679.1 lumens  
Efficiency: N/A  
Efficacy: 131.4 lumens/watt  
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.81  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

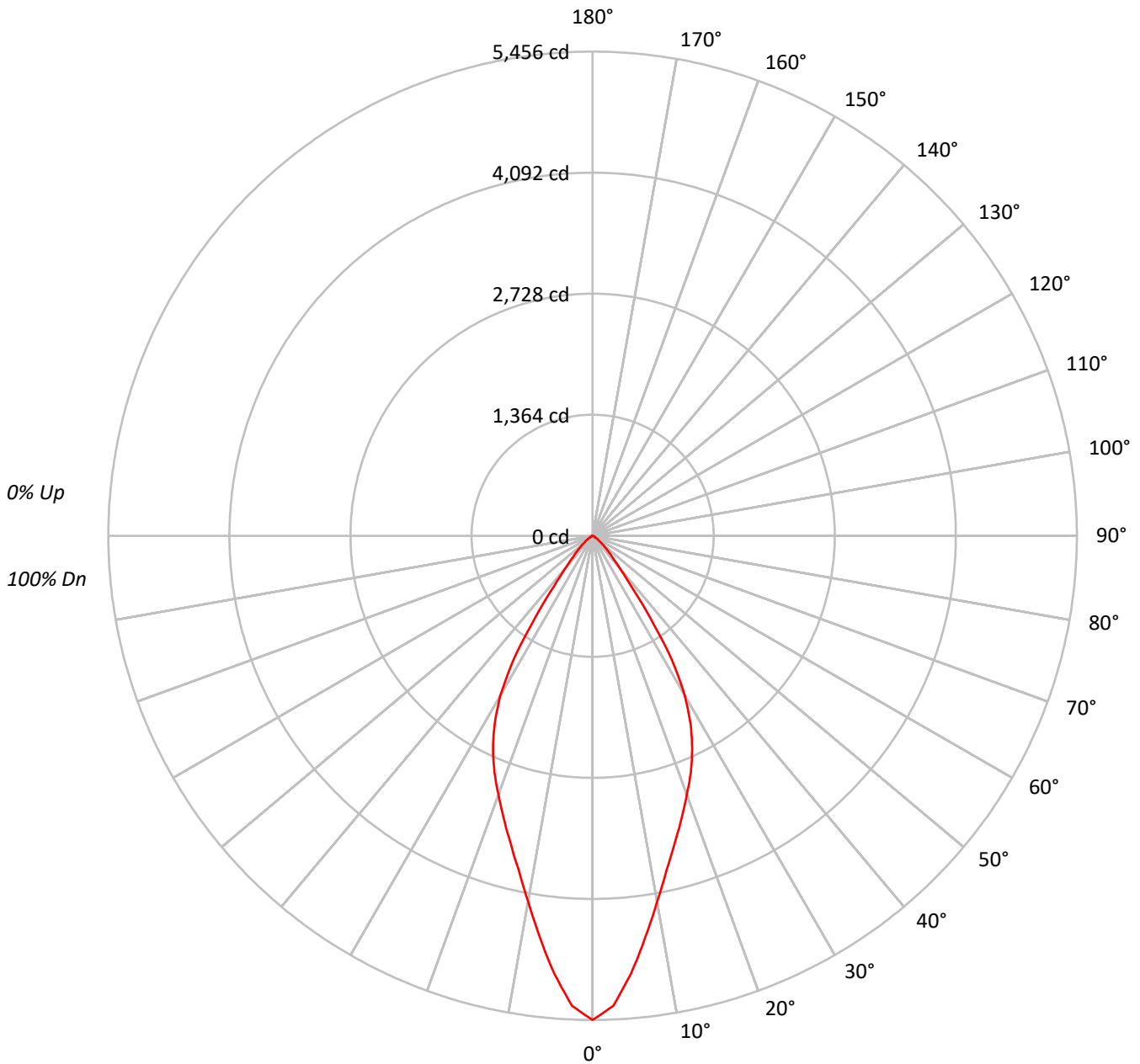
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	94			
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	92	90	89	87			
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	88	85	83	81			
4	97	90	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76			
5	93	84	79	74	91	83	78	74	82	77	73	80	76	73	78	75	72	71			
6	88	79	73	69	87	78	73	69	77	72	68	76	71	68	74	70	67	66			
7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63	62			
8	80	70	64	60	79	70	64	60	69	64	60	68	63	60	67	63	60	58			
9	76	67	61	57	75	66	61	57	65	60	56	64	60	56	63	59	56	55			
10	73	63	57	54	72	63	57	53	62	57	53	61	56	53	60	56	53	52			

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

	0°
0°	168252
5°	153325
10°	131000
15°	114240
20°	101823
25°	90324
30°	73952
35°	42466
40°	18847
45°	10968
50°	6332
55°	3618
60°	1992
65°	1277
70°	902
75°	596
80°	444
85°	885



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	448.4	12.2
10°-20°	1005.9	27.3
20°-30°	1204.1	32.7
30°-40°	728.4	19.8
40°-50°	204.1	5.5
50°-60°	63.4	1.7
60°-70°	18.1	0.5
70°-80°	4.9	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°	2658.4	72.3
0°-40°	3386.8	92.1
0°-60°	3654.3	99.3
0°-90°	3679.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3679.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5456	
5°	4953	448
15°	3578	1006
25°	2655	1204
35°	1128	728
45°	252	204
55°	67	63
65°	18	18
75°	5	5
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	5456.3
2.5°	5301.9
5°	4953.3
7.5°	4559.8
10°	4183.7
12.5°	3855.0
15°	3578.5
17.5°	3334.6
20°	3102.9
22.5°	2888.8
25°	2654.7
27.5°	2390.7
30°	2076.9
32.5°	1671.0
35°	1128.1
37.5°	702.2
40°	468.2
42.5°	336.2
45°	251.5
47.5°	184.3
50°	132.0
52.5°	92.1
55°	67.3
57.5°	44.8
60°	32.3
62.5°	22.5
65°	17.5
67.5°	12.5
70°	10.0
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)