

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: P584805

Luminaire Tested: **HC850D010-HM82555830-81WDBB**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584805  
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: HC850D010-HM82555830-81WDBB  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5074.3 lumens  
Efficiency: N/A  
Efficacy: 105.7 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

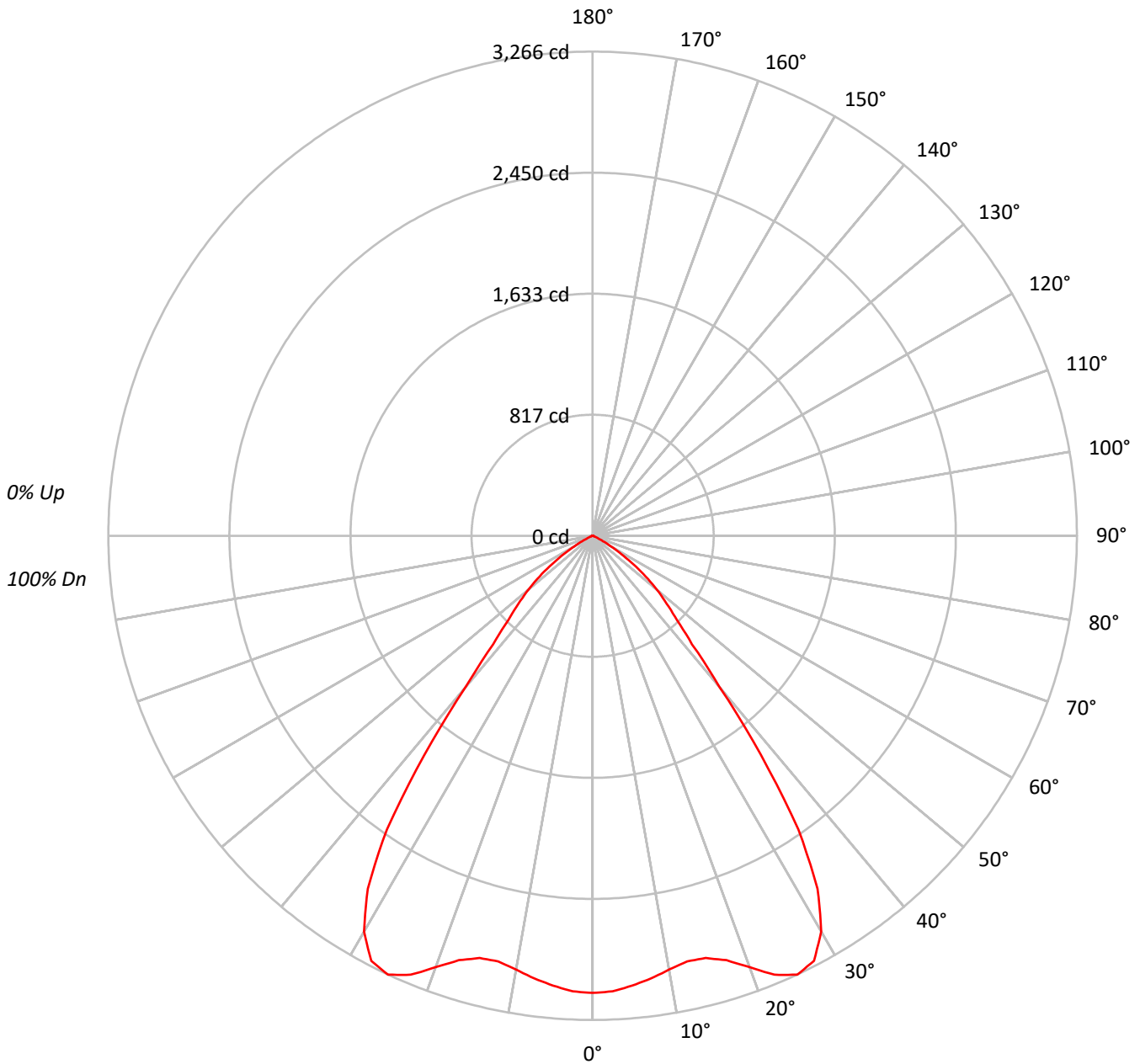
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			
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°	95071
5°	94280
10°	93041
15°	94099
20°	101619
25°	111126
30°	109779
35°	91061
40°	53598
45°	35018
50°	27143
55°	18032
60°	8776
65°	2722
70°	920
75°	810
80°	604
85°	1203



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	288.5	5.7
10°-20°	846.8	16.7
20°-30°	1480.6	29.2
30°-40°	1440.2	28.4
40°-50°	655.0	12.9
50°-60°	303.7	6.0
60°-70°	50.9	1.0
70°-80°	6.3	0.1
80°-90°	2.3	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°	2615.9	51.6
0°-40°	4056.1	79.9
0°-60°	5014.7	98.8
0°-90°	5074.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5074.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3083	
5°	3046	288
15°	2948	847
25°	3266	1481
35°	2419	1440
45°	803	655
55°	335	304
65°	37	51
75°	7	6
85°	3	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3083.1
2.5°	3076.3
5°	3045.8
7.5°	3011.9
10°	2971.4
12.5°	2940.9
15°	2947.6
17.5°	3001.8
20°	3096.7
22.5°	3205.0
25°	3266.1
27.5°	3232.2
30°	3083.1
32.5°	2822.2
35°	2419.0
37.5°	1863.4
40°	1331.5
42.5°	992.7
45°	803.0
47.5°	677.6
50°	565.8
52.5°	450.6
55°	335.4
57.5°	230.4
60°	142.3
62.5°	78.0
65°	37.3
67.5°	17.0
70°	10.2
72.5°	6.8
75°	6.8
77.5°	3.4
80°	3.4
82.5°	3.4
85°	3.4
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)