

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: P584856

Luminaire Tested: **HC850D010-HM82555927-81WDBB**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584856  
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-HM82555927-81WDBB  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4189.6 lumens  
Efficiency: N/A  
Efficacy: 87.3 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

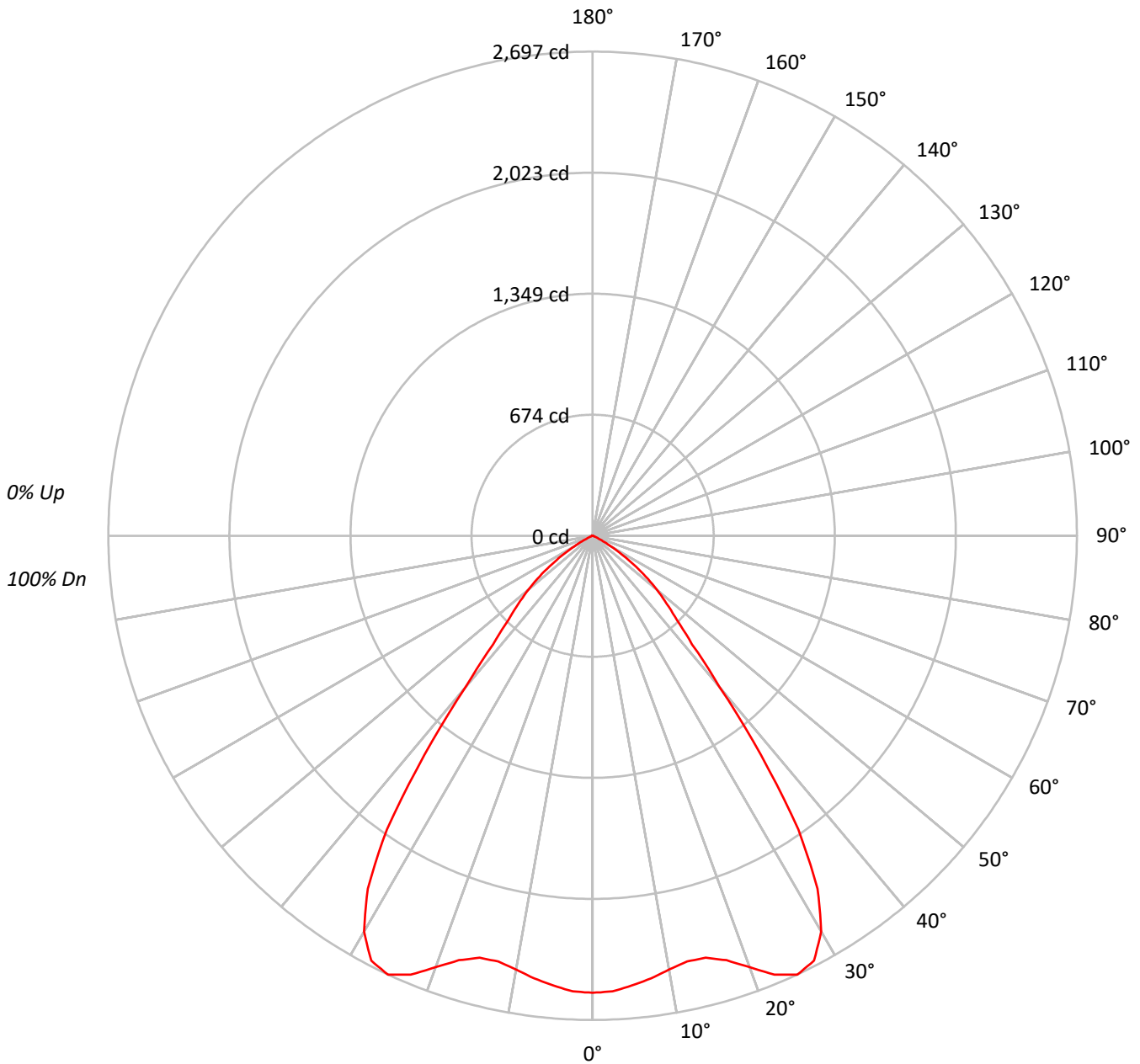
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	78500
5°	77846
10°	76821
15°	77694
20°	83902
25°	91756
30°	90644
35°	75191
40°	44255
45°	28908
50°	22408
55°	14887
60°	7247
65°	2240
70°	757
75°	667
80°	497
85°	991



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	238.2	5.7
10°-20°	699.2	16.7
20°-30°	1222.5	29.2
30°-40°	1189.2	28.4
40°-50°	540.8	12.9
50°-60°	250.7	6.0
60°-70°	42.0	1.0
70°-80°	5.2	0.1
80°-90°	1.9	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°	2159.9	51.6
0°-40°	3349.1	79.9
0°-60°	4140.6	98.8
0°-90°	4189.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4189.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2546	
5°	2515	238
15°	2434	699
25°	2697	1223
35°	1997	1189
45°	663	541
55°	277	251
65°	31	42
75°	6	5
85°	3	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2545.7
2.5°	2540.1
5°	2514.9
7.5°	2486.9
10°	2453.4
12.5°	2428.2
15°	2433.7
17.5°	2478.5
20°	2556.8
22.5°	2646.4
25°	2696.8
27.5°	2668.8
30°	2545.7
32.5°	2330.3
35°	1997.4
37.5°	1538.6
40°	1099.4
42.5°	819.7
45°	662.9
47.5°	559.5
50°	467.1
52.5°	372.1
55°	276.9
57.5°	190.2
60°	117.5
62.5°	64.3
65°	30.7
67.5°	14.0
70°	8.4
72.5°	5.6
75°	5.6
77.5°	2.8
80°	2.8
82.5°	2.8
85°	2.8
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)