

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: P593805

Luminaire Tested: **HC850D010-HM82555950-81WDBB**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593805  
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-HM82555950-81WDBB  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5544.4 lumens  
Efficiency: N/A  
Efficacy: 115.5 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

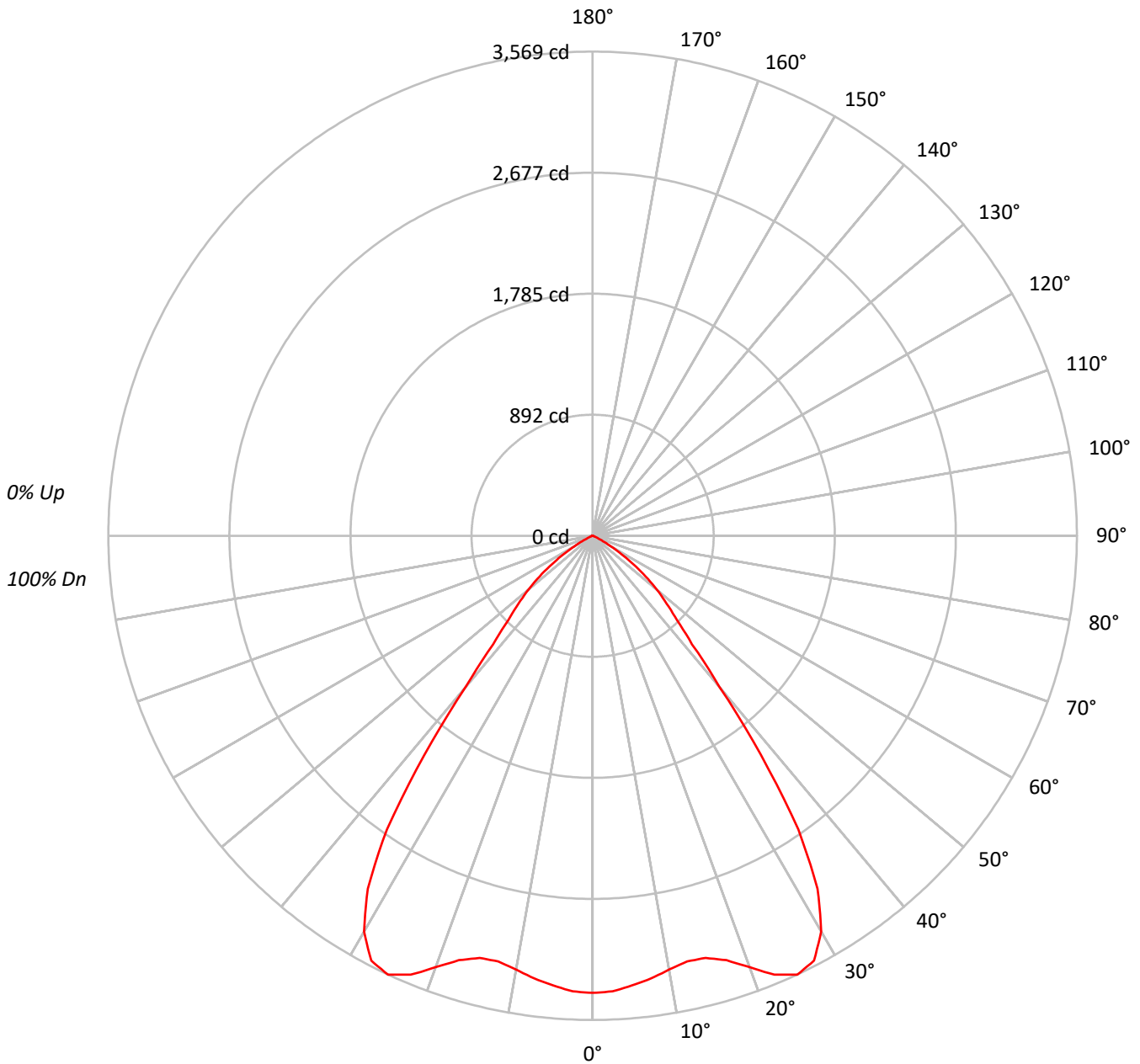
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	103881
5°	103018
10°	101661
15°	102821
20°	111037
25°	121422
30°	119952
35°	99501
40°	58565
45°	38258
50°	29662
55°	19704
60°	9590
65°	2970
70°	1001
75°	882
80°	657
85°	1309



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	315.2	5.7
10°-20°	925.3	16.7
20°-30°	1617.8	29.2
30°-40°	1573.7	28.4
40°-50°	715.7	12.9
50°-60°	331.8	6.0
60°-70°	55.6	1.0
70°-80°	6.8	0.1
80°-90°	2.5	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°	2858.3	51.6
0°-40°	4432.0	79.9
0°-60°	5479.5	98.8
0°-90°	5544.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5544.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3369	
5°	3328	315
15°	3221	925
25°	3569	1618
35°	2643	1574
45°	877	716
55°	366	332
65°	41	56
75°	7	7
85°	4	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3368.8
2.5°	3361.5
5°	3328.1
7.5°	3291.1
10°	3246.7
12.5°	3213.3
15°	3220.8
17.5°	3280.0
20°	3383.7
22.5°	3502.1
25°	3568.7
27.5°	3531.8
30°	3368.8
32.5°	3083.8
35°	2643.2
37.5°	2036.2
40°	1454.9
42.5°	1084.7
45°	877.3
47.5°	740.4
50°	618.3
52.5°	492.4
55°	366.5
57.5°	251.7
60°	155.5
62.5°	85.1
65°	40.7
67.5°	18.5
70°	11.1
72.5°	7.4
75°	7.4
77.5°	3.7
80°	3.7
82.5°	3.7
85°	3.7
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)