

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: P593799

Luminaire Tested: **HC850D010-HM82555850-81WDW**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593799  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC850D010-HM82555850-81WDW  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5973.3 lumens  
Efficiency: N/A  
Efficacy: 124.4 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.06  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

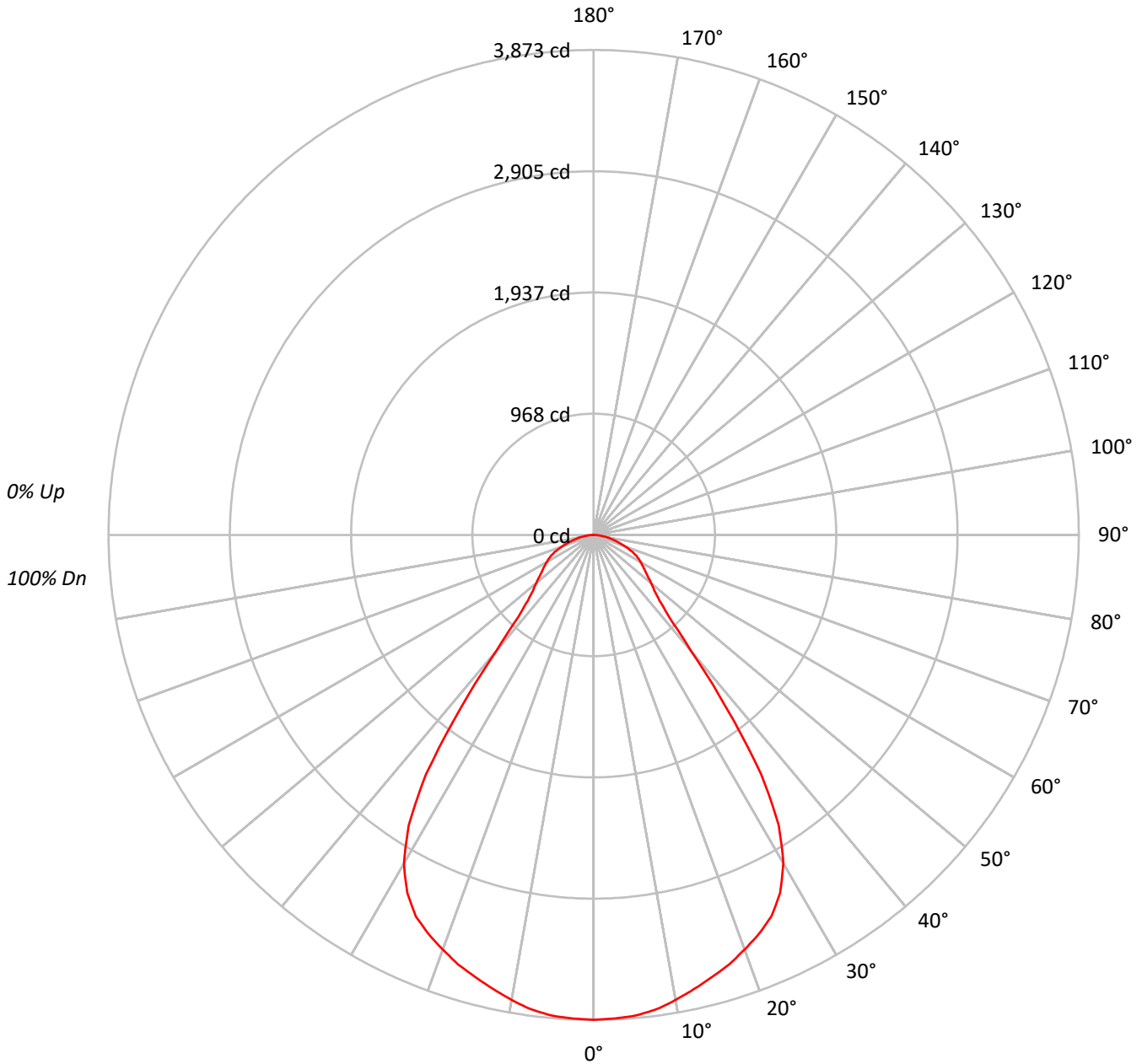
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89			
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79			
3	97	88	82	76	94	87	81	76	84	79	75	81	77	73	79	75	72	70			
4	90	80	73	68	88	79	73	67	77	71	67	75	70	66	73	68	65	63			
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57			
6	79	68	61	55	77	67	60	55	65	59	55	64	58	54	62	58	54	52			
7	74	63	56	50	73	62	55	50	61	54	50	59	54	50	58	53	49	48			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44			
9	66	54	47	43	65	54	47	42	53	47	42	52	46	42	51	46	42	40			
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37			

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

	0°
0°	119420
5°	119275
10°	118093
15°	116679
20°	115599
25°	114304
30°	107849
35°	87824
40°	48522
45°	32389
50°	28726
55°	26967
60°	26618
65°	26384
70°	23838
75°	21315
80°	18646
85°	16487



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	365.2	6.1
10°-20°	1032.0	17.3
20°-30°	1533.4	25.7
30°-40°	1381.0	23.1
40°-50°	612.2	10.2
50°-60°	453.4	7.6
60°-70°	352.6	5.9
70°-80°	191.1	3.2
80°-90°	52.3	0.9
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°	2930.6	49.1
0°-40°	4311.6	72.2
0°-60°	5377.2	90.0
0°-90°	5973.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5973.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3873	
5°	3853	365
15°	3655	1032
25°	3360	1533
35°	2333	1381
45°	743	612
55°	502	453
65°	362	353
75°	179	191
85°	47	52
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3872.7
2.5°	3864.8
5°	3853.3
7.5°	3822.2
10°	3771.5
12.5°	3713.2
15°	3654.9
17.5°	3596.5
20°	3522.7
22.5°	3448.9
25°	3359.5
27.5°	3223.3
30°	3028.9
32.5°	2749.0
35°	2333.0
37.5°	1741.9
40°	1205.4
42.5°	890.4
45°	742.7
47.5°	657.1
50°	598.8
52.5°	544.4
55°	501.6
57.5°	466.5
60°	431.6
62.5°	400.5
65°	361.6
67.5°	314.9
70°	264.4
72.5°	221.6
75°	178.9
77.5°	139.9
80°	105.0
82.5°	73.9
85°	46.6
87.5°	19.4
90°	0.0



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— 0°-180°







(END OF REPORT)