

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: P584840

Luminaire Tested: **HC850D010-HM82555840-81WDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584840  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-7)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC850D010-HM82555840-81WDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6533.3 lumens  
Efficiency: N/A  
Efficacy: 136.1 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.05  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

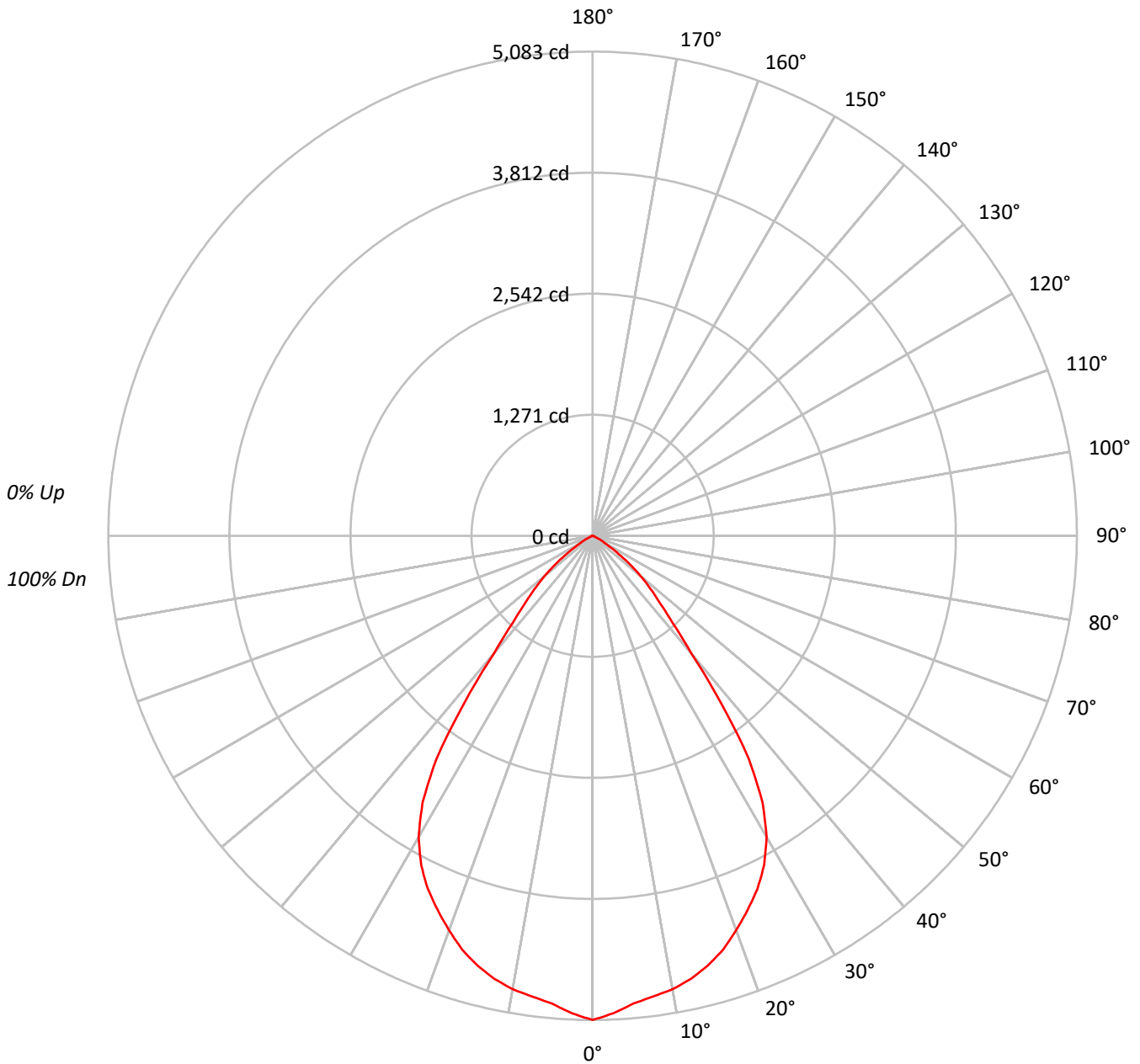
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92	92	92	92
2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86	84	84	84	84
3	100	93	87	83	98	91	86	82	89	84	81	86	83	79	84	81	78	77	77	77	77
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	71	70	70	70	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64	64	64	64
6	83	73	66	62	82	72	66	61	71	65	61	69	64	61	68	64	60	59	59	59	59
7	78	68	61	57	77	67	61	56	66	60	56	65	60	56	63	59	55	54	54	54	54
8	74	63	57	52	73	63	56	52	62	56	52	60	55	51	59	55	51	50	50	50	50
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46	46	46	46
10	66	55	49	45	65	55	49	45	54	48	44	53	48	44	52	48	44	43	43	43	43

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

	0°
0°	156747
5°	152529
10°	151372
15°	149117
20°	144597
25°	139206
30°	130036
35°	107610
40°	64970
45°	43762
50°	31533
55°	17983
60°	7919
65°	2838
70°	1055
75°	465
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	468.2	7.2
10°-20°	1312.7	20.1
20°-30°	1872.6	28.7
30°-40°	1705.2	26.1
40°-50°	804.4	12.3
50°-60°	316.4	4.8
60°-70°	50.4	0.8
70°-80°	3.6	0.1
80°-90°	0.0	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°	3653.4	55.9
0°-40°	5358.6	82.0
0°-60°	6479.4	99.2
0°-90°	6533.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6533.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5083	
5°	4928	468
15°	4671	1313
25°	4091	1873
35°	2859	1705
45°	1004	804
55°	334	316
65°	39	50
75°	4	4
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	5083.2
2.5°	5017.1
5°	4927.6
7.5°	4877.1
10°	4834.3
12.5°	4764.3
15°	4671.0
17.5°	4554.3
20°	4406.4
22.5°	4250.8
25°	4091.4
27.5°	3897.0
30°	3652.0
32.5°	3321.4
35°	2858.6
37.5°	2209.1
40°	1614.0
42.5°	1240.7
45°	1003.5
47.5°	824.5
50°	657.3
52.5°	493.9
55°	334.5
57.5°	210.1
60°	128.4
62.5°	77.7
65°	38.9
67.5°	19.4
70°	11.7
72.5°	3.9
75°	3.9
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)