

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: P584986

Luminaire Tested: **HC855D010-HM82555927-81NDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584986  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC855D010-HM82555927-81NDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4347.6 lumens  
Efficiency: N/A  
Efficacy: 83.6 lumens/watt  
Spacing Criteria (0/90/45): 0.22 / 0.22 / 0.27  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

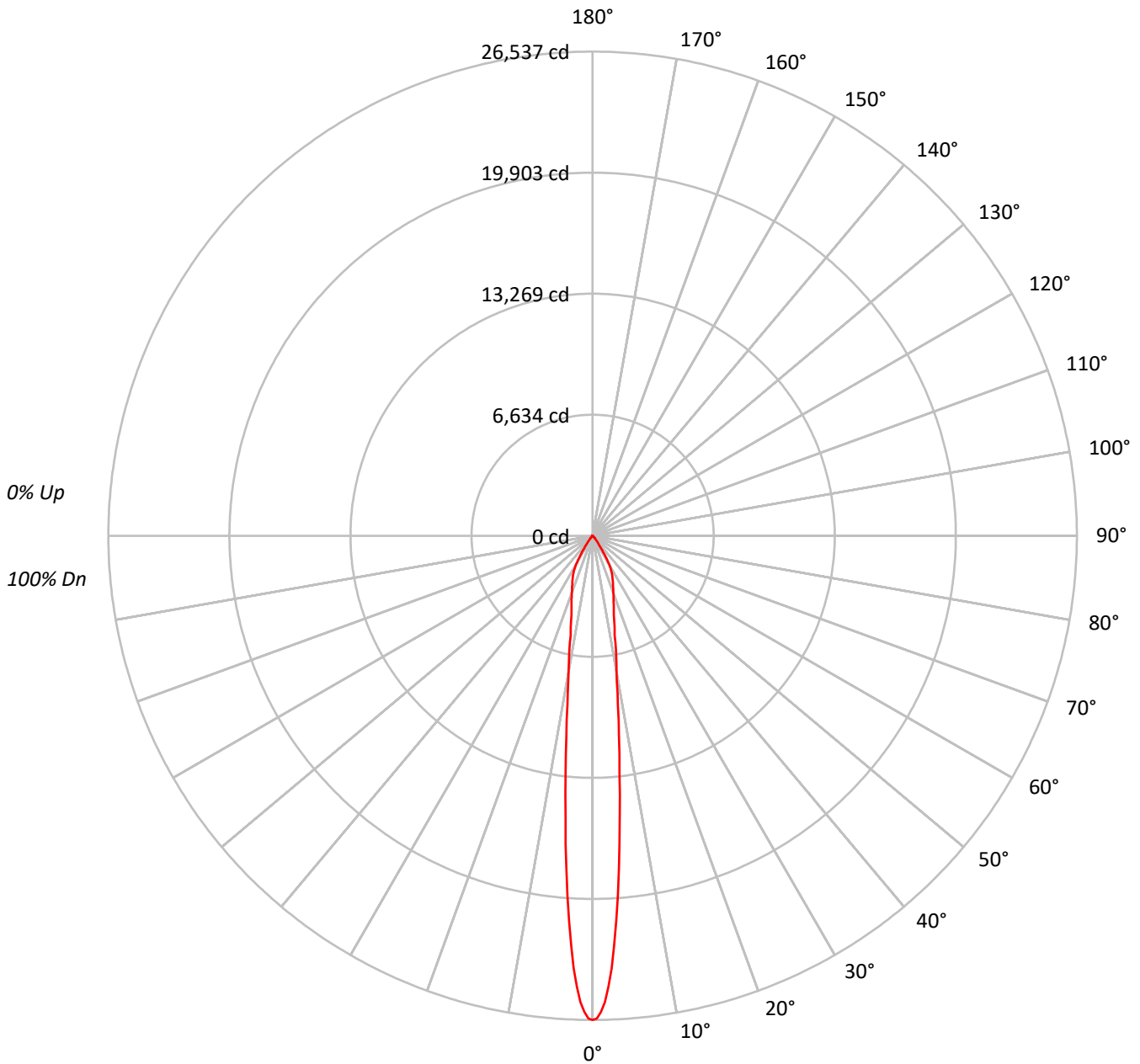
Input Watts (W): 52  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96	96	96	96
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	91	91	91
3	106	101	97	93	104	99	96	93	97	94	91	95	92	90	92	90	89	87	87	87	87
4	102	96	91	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83	83	83	83
5	98	92	87	83	97	91	86	83	89	85	82	87	84	82	86	83	81	80	80	80	80
6	95	88	83	79	93	87	82	79	86	82	79	84	81	78	83	80	78	76	76	76	76
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73	73	73	73
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71	71	71	71
9	85	78	73	70	84	77	73	70	76	72	70	76	72	69	75	72	69	68	68	68	68
10	83	75	70	67	82	75	70	67	74	70	67	73	69	67	73	69	67	66	66	66	66

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

	0°
0°	818300
5°	524873
10°	237104
15°	143065
20°	109022
25°	88037
30°	64516
35°	23362
40°	8719
45°	3955
50°	1266
55°	317
60°	179
65°	212
70°	0
75°	0
80°	515
85°	1026



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1293.2	29.7
10°-20°	1313.6	30.2
20°-30°	1175.9	27.0
30°-40°	473.7	10.9
40°-50°	77.7	1.8
50°-60°	7.1	0.2
60°-70°	2.5	0.1
70°-80°	1.9	0.0
80°-90°	2.8	0.1
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°	3782.7	87.0
0°-40°	4256.4	97.9
0°-60°	4341.1	99.9
0°-90°	4348.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4347.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	26537	
5°	16956	###
15°	4481	1314
25°	2588	1176
35°	621	474
45°	91	78
55°	6	7
65°	3	3
75°	0	2
85°	3	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	26536.9
0.5°	26454.9
1°	26112.4
1.5°	25562.1
2°	24727.9
2.5°	23741.4
3°	22506.3
3.5°	21151.0
4°	19810.4
4.5°	18308.9
5°	16956.5
5.5°	15484.2
6°	14290.0
6.5°	13046.0
7°	12068.3
7.5°	11035.1
8°	10203.8
8.5°	9369.6
9°	8743.1
9.5°	8052.3
10°	7572.3
12.5°	5584.8
15°	4481.4
17.5°	3828.6
20°	3322.3
22.5°	2918.3
25°	2587.5
27.5°	2256.8
30°	1811.9
32.5°	1165.0
35°	620.6
37.5°	342.5
40°	216.6
42.5°	143.5
45°	90.7
47.5°	55.7
50°	26.4
52.5°	8.8
55°	5.9
57.5°	2.9
60°	2.9
62.5°	2.9
65°	2.9



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**CANDELA DISTRIBUTION (continued):**

	0°
72.5°	0.0
75°	0.0
77.5°	2.9
80°	2.9
82.5°	2.9
85°	2.9
87.5°	2.9
90°	0.0



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— 0°-180°







67.5°		2.9
70°		0.0



(END OF REPORT)