

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: P584408

Luminaire Tested: **HC835D010-HM82555835-81NDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584408  
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: HC835D010-HM82555835-81NDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4104.5 lumens  
Efficiency: N/A  
Efficacy: 121.8 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

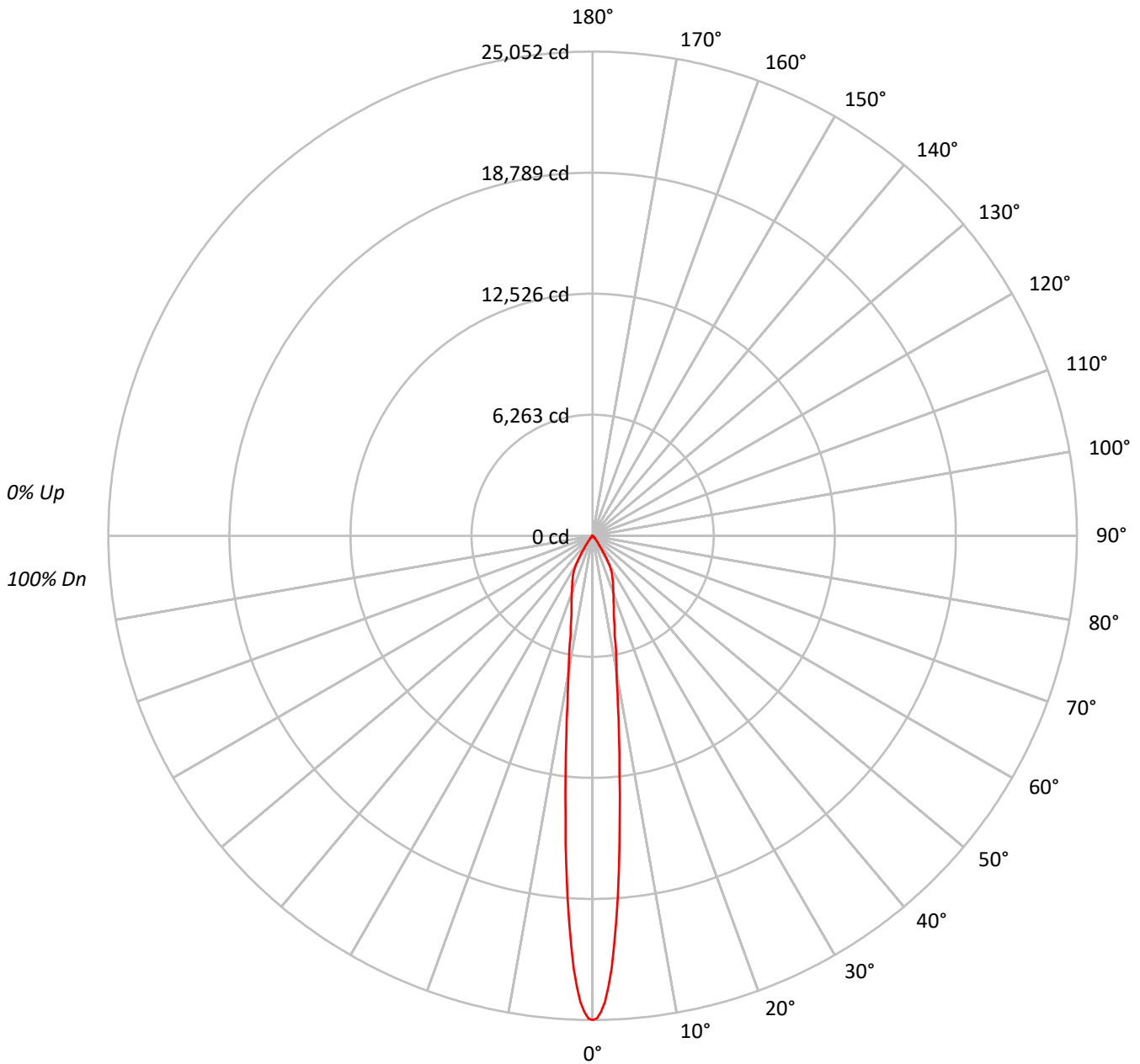
Input Watts (W): 33.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	106	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°	772521
5°	495513
10°	223840
15°	135058
20°	102922
25°	83114
30°	60905
35°	22052
40°	8232
45°	3737
50°	1195
55°	296
60°	173
65°	204
70°	0
75°	0
80°	497
85°	991



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1220.9	29.7
10°-20°	1240.1	30.2
20°-30°	1110.1	27.0
30°-40°	447.2	10.9
40°-50°	73.3	1.8
50°-60°	6.7	0.2
60°-70°	2.4	0.1
70°-80°	1.9	0.0
80°-90°	2.7	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°	3571.1	87.0
0°-40°	4018.2	97.9
0°-60°	4098.2	99.8
0°-90°	4105.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4104.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	25052	
5°	16008	###
15°	4231	1240
25°	2443	1110
35°	586	447
45°	86	73
55°	6	7
65°	3	2
75°	0	2
85°	3	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	25052.3
0.5°	24974.9
1°	24651.7
1.5°	24132.2
2°	23344.6
2.5°	22413.4
3°	21247.2
3.5°	19967.8
4°	18702.2
4.5°	17284.6
5°	16008.0
5.5°	14618.0
6°	13490.6
6.5°	12316.2
7°	11393.2
7.5°	10417.8
8°	9633.0
8.5°	8845.4
9°	8254.1
9.5°	7601.9
10°	7148.7
12.5°	5272.4
15°	4230.6
17.5°	3614.5
20°	3136.4
22.5°	2755.0
25°	2442.8
27.5°	2130.5
30°	1710.5
32.5°	1099.8
35°	585.8
37.5°	323.3
40°	204.5
42.5°	135.4
45°	85.7
47.5°	52.5
50°	24.9
52.5°	8.3
55°	5.5
57.5°	2.8
60°	2.8
62.5°	2.8
65°	2.8



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**CANDELA DISTRIBUTION (continued):**

	0°
72.5°	0.0
75°	0.0
77.5°	2.8
80°	2.8
82.5°	2.8
85°	2.8
87.5°	2.8
90°	0.0



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— 0°-180°







67.5°		2.8
70°		0.0



(END OF REPORT)