

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: P584788

Luminaire Tested: **HC850D010-HM82555827-81WDBB**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584788  
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-HM82555827-81WDBB  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5196.2 lumens  
Efficiency: N/A  
Efficacy: 108.3 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

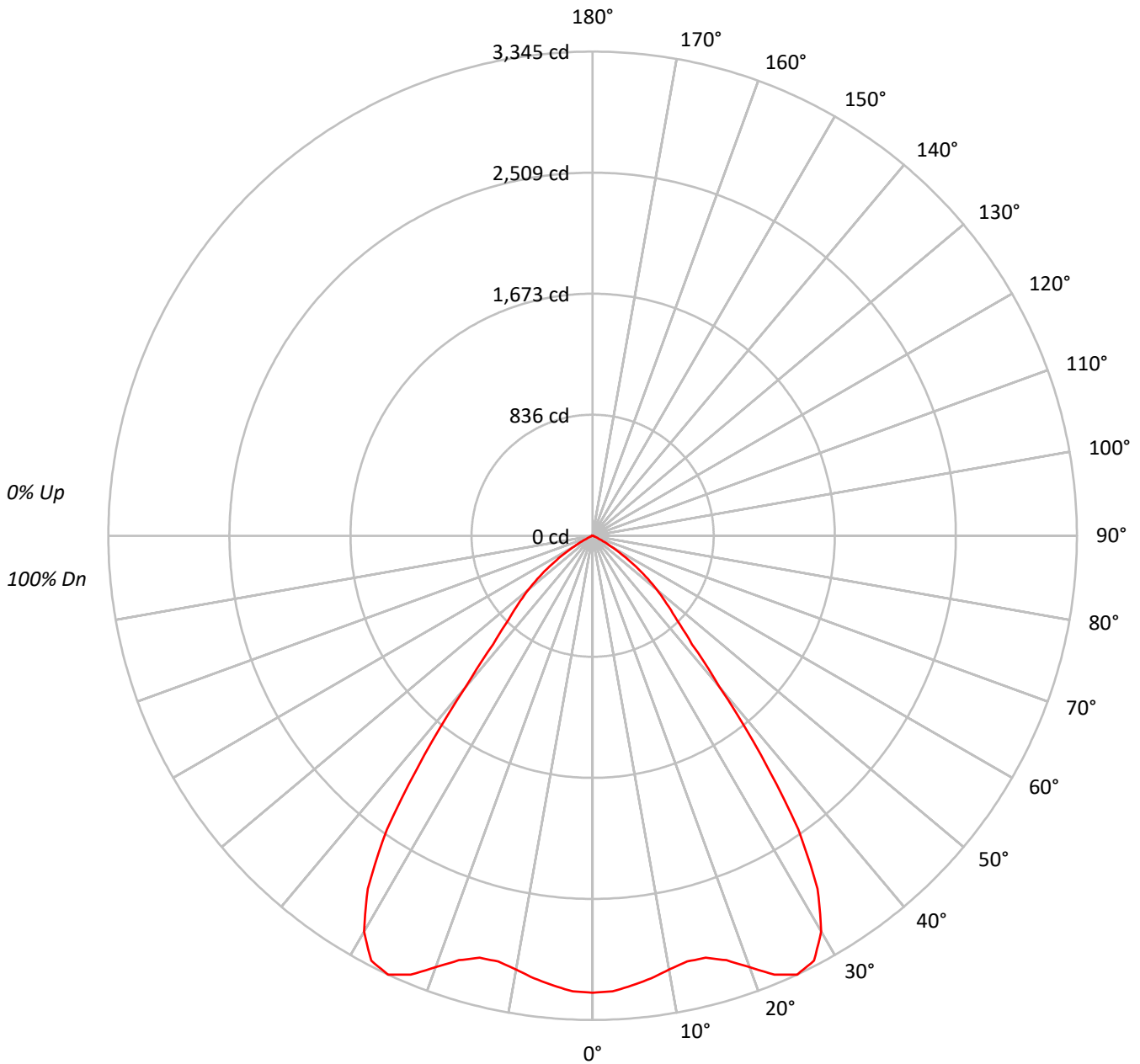
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				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
1	113	109	107	104	110	107	105	102	103	101	99	99	98	96	96	95	93	92				92
2	106	100	95	92	104	98	94	91	95	92	89	92	89	87	89	87	85	83				83
3	99	92	86	81	97	90	85	81	88	83	79	85	81	78	83	80	77	75				75
4	93	84	78	73	91	83	77	72	81	76	71	79	74	71	77	73	70	68				68
5	87	77	71	66	85	76	70	65	74	69	65	73	68	64	71	67	63	62				62
6	82	71	64	59	80	70	64	59	69	63	59	67	62	58	66	61	58	56				56
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	61	57	53	51				51
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47				47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40				40

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

	0°
0°	97356
5°	96549
10°	95276
15°	96363
20°	104061
25°	113797
30°	112418
35°	93252
40°	54886
45°	35860
50°	27795
55°	18467
60°	8992
65°	2780
70°	938
75°	822
80°	622
85°	1238



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	295.4	5.7
10°-20°	867.2	16.7
20°-30°	1516.2	29.2
30°-40°	1474.9	28.4
40°-50°	670.7	12.9
50°-60°	311.0	6.0
60°-70°	52.1	1.0
70°-80°	6.4	0.1
80°-90°	2.4	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°	2678.8	51.6
0°-40°	4153.6	79.9
0°-60°	5135.4	98.8
0°-90°	5196.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5196.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3157	
5°	3119	295
15°	3018	867
25°	3345	1516
35°	2477	1475
45°	822	671
55°	344	311
65°	38	52
75°	7	6
85°	4	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3157.2
2.5°	3150.3
5°	3119.1
7.5°	3084.4
10°	3042.8
12.5°	3011.6
15°	3018.5
17.5°	3074.0
20°	3171.1
22.5°	3282.2
25°	3344.6
27.5°	3309.9
30°	3157.2
32.5°	2890.1
35°	2477.2
37.5°	1908.3
40°	1363.5
42.5°	1016.6
45°	822.3
47.5°	693.9
50°	579.4
52.5°	461.4
55°	343.5
57.5°	235.9
60°	145.8
62.5°	79.8
65°	38.1
67.5°	17.3
70°	10.4
72.5°	6.9
75°	6.9
77.5°	3.5
80°	3.5
82.5°	3.5
85°	3.5
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)