

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: P584791

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

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584791  
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-HM82555827-81WDW  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5328.0 lumens  
Efficiency: N/A  
Efficacy: 111.0 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

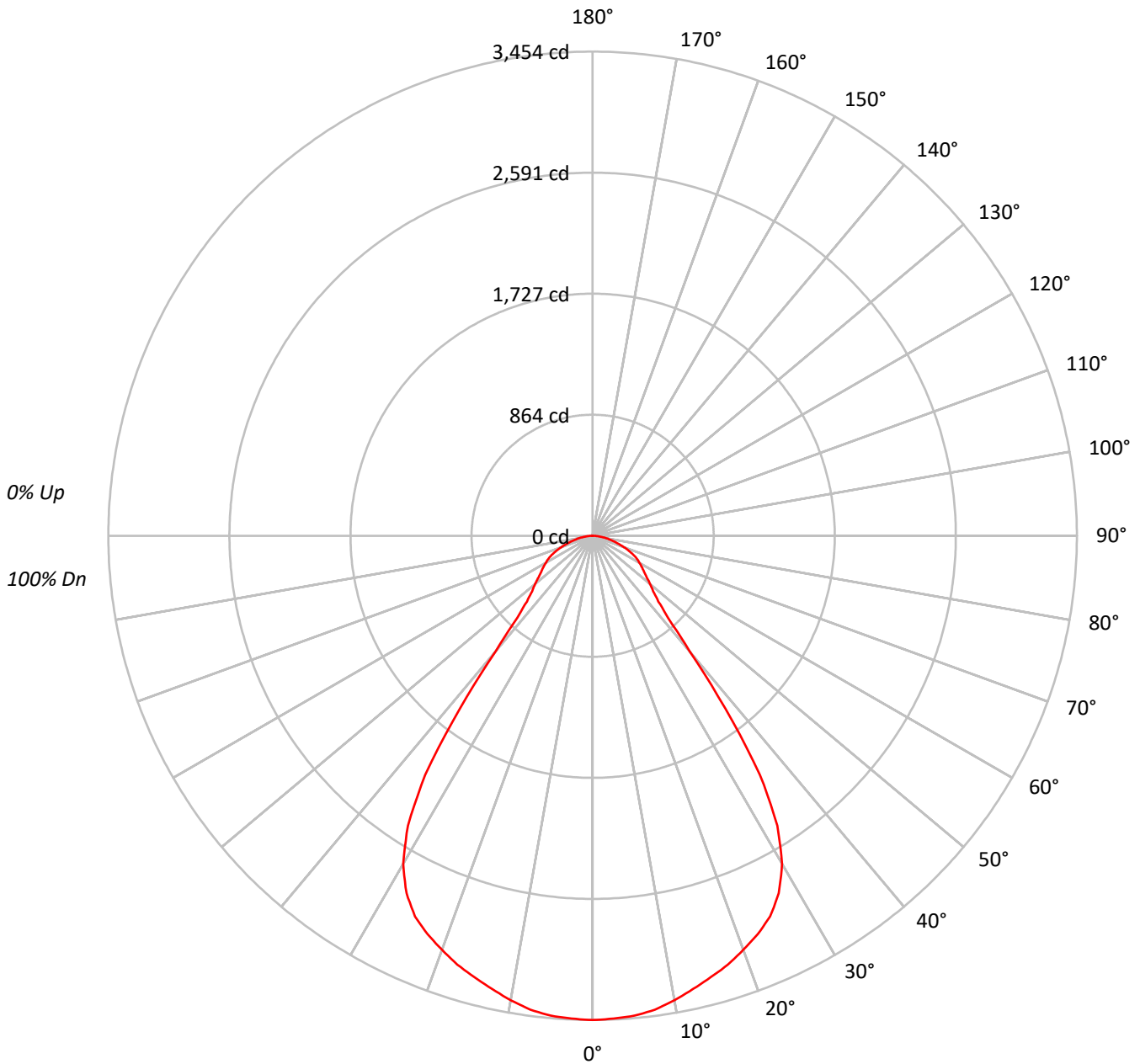
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P584791

CATALOG NUMBER: HC850D010-HM82555827-81WDW

### Luminous Intensity Polar Plot





TEST NUMBER: P584791

CATALOG NUMBER: HC850D010-HM82555827-81WDW

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

RF	20									20									20									20									
RC	80									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°	106521
5°	106389
10°	105337
15°	104076
20°	103116
25°	101953
30°	96202
35°	78334
40°	43277
45°	28891
50°	25622
55°	24053
60°	23744
65°	23531
70°	21260
75°	19015
80°	16621
85°	14718



TEST NUMBER: P584791

CATALOG NUMBER: HC850D010-HM82555827-81WDW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	325.7	6.1
10°-20°	920.5	17.3
20°-30°	1367.8	25.7
30°-40°	1231.8	23.1
40°-50°	546.1	10.2
50°-60°	404.4	7.6
60°-70°	314.5	5.9
70°-80°	170.5	3.2
80°-90°	46.7	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°	2614.1	49.1
0°-40°	3845.9	72.2
0°-60°	4796.4	90.0
0°-90°	5328.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5328.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3454	
5°	3437	326
15°	3260	921
25°	2996	1368
35°	2081	1232
45°	662	546
55°	447	404
65°	322	314
75°	160	171
85°	42	47
90°	0	



TEST NUMBER: P584791

CATALOG NUMBER: HC850D010-HM82555827-81WDW

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3454.4
2.5°	3447.4
5°	3437.0
7.5°	3409.3
10°	3364.1
12.5°	3312.1
15°	3260.1
17.5°	3208.1
20°	3142.3
22.5°	3076.3
25°	2996.5
27.5°	2875.2
30°	2701.8
32.5°	2452.1
35°	2080.9
37.5°	1553.7
40°	1075.1
42.5°	794.2
45°	662.5
47.5°	586.1
50°	534.1
52.5°	485.6
55°	447.4
57.5°	416.2
60°	385.0
62.5°	357.2
65°	322.5
67.5°	280.9
70°	235.8
72.5°	197.7
75°	159.6
77.5°	124.8
80°	93.6
82.5°	65.9
85°	41.6
87.5°	17.3
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)