

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: P584800

Luminaire Tested: **HC850D010-HM82555830-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584800  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC850D010-HM82555830-81NDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4586.5 lumens  
Efficiency: N/A  
Efficacy: 95.6 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.57  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

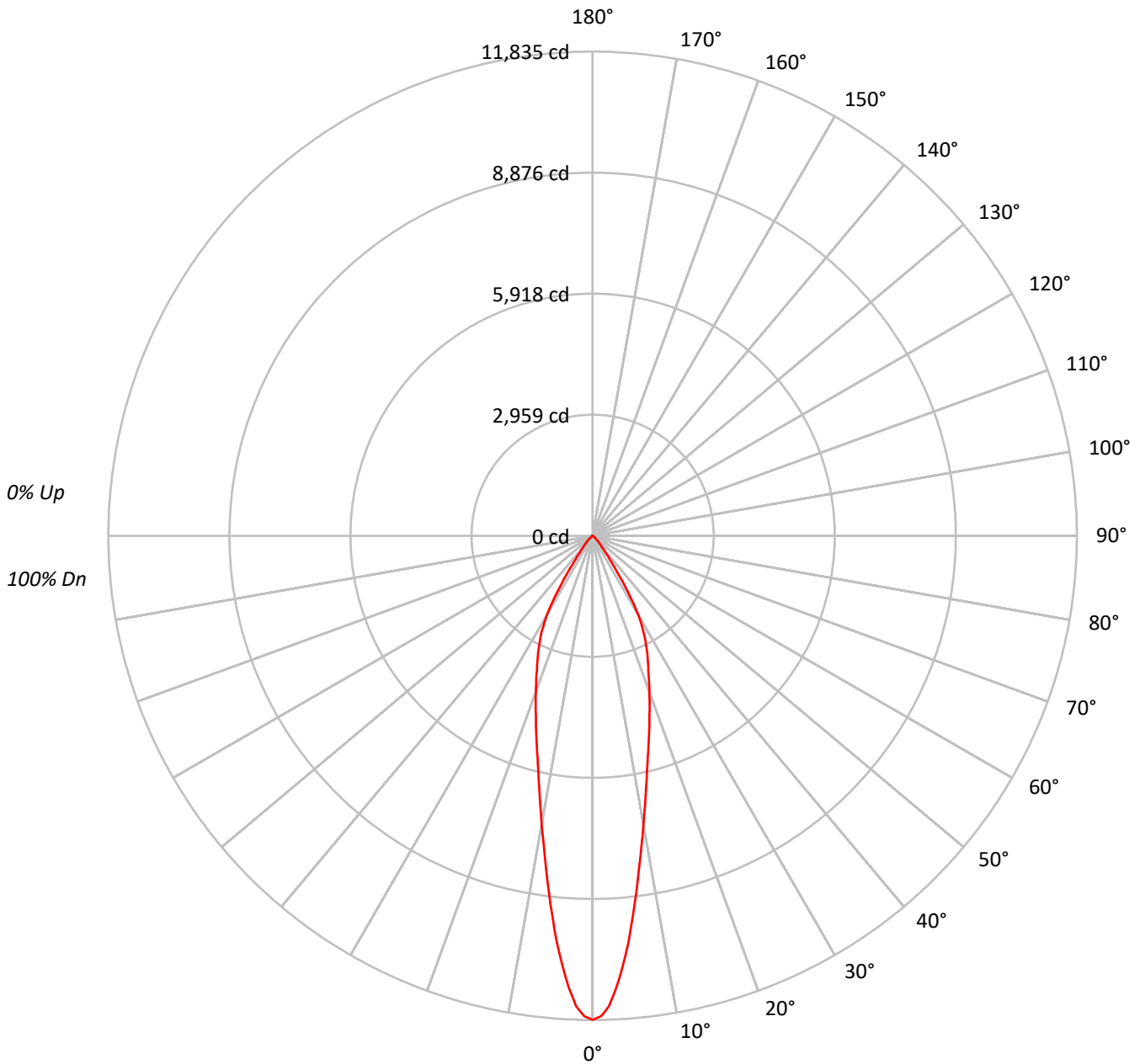
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P584800

CATALOG NUMBER: HC850D010-HM82555830-81NDH

### Luminous Intensity Polar Plot





TEST NUMBER: P584800

CATALOG NUMBER: HC850D010-HM82555830-81NDH

**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	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95				95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89				89
3	104	99	94	91	102	97	93	90	95	91	88	92	90	87	90	88	86	84				84
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80				80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75				75
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	76	73	72				72
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	76	72	69	68				68
8	84	76	71	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65				65
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62				62
10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59				59

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

	0°
0°	364942
5°	309182
10°	224326
15°	168463
20°	132922
25°	107217
30°	79453
35°	32190
40°	13578
45°	7278
50°	3272
55°	1645
60°	1055
65°	744
70°	613
75°	405
80°	604
85°	1203



TEST NUMBER: P584800

CATALOG NUMBER: HC850D010-HM82555830-81NDH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	857.6	18.7
10°-20°	1482.1	32.3
20°-30°	1433.0	31.2
30°-40°	629.4	13.7
40°-50°	136.1	3.0
50°-60°	30.6	0.7
60°-70°	10.5	0.2
70°-80°	4.0	0.1
80°-90°	3.2	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°	3772.7	82.3
0°-40°	4402.1	96.0
0°-60°	4568.7	99.6
0°-90°	4586.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4586.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	11835	
5°	9988	858
15°	5277	1482
25°	3151	1433
35°	855	629
45°	167	136
55°	31	31
65°	10	11
75°	3	4
85°	3	3
90°	0	



TEST NUMBER: P584800

CATALOG NUMBER: HC850D010-HM82555830-81NDH

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	11834.8
1°	11746.2
2°	11504.4
3°	11068.3
4°	10547.1
5°	9988.4
6°	9378.7
7°	8765.4
8°	8189.7
9°	7654.8
10°	7164.2
11°	6700.9
12°	6285.4
13°	5907.2
14°	5573.3
15°	5277.0
17.5°	4612.6
20°	4050.6
22.5°	3556.6
25°	3151.2
27.5°	2739.0
30°	2231.4
32.5°	1516.0
35°	855.1
37.5°	504.2
40°	337.3
42.5°	238.5
45°	166.9
47.5°	109.1
50°	68.2
52.5°	40.9
55°	30.6
57.5°	23.8
60°	17.1
62.5°	13.7
65°	10.2
67.5°	6.8
70°	6.8
72.5°	3.4
75°	3.4
77.5°	3.4
80°	3.4
82.5°	3.4



TEST NUMBER: P584800

CATALOG NUMBER: HC850D010-HM82555830-81NDH

**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







85°	3.4
87.5°	3.4



(END OF REPORT)