

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: P584936

Luminaire Tested: **HC855D010-HM82555830-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584936  
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: HC855D010-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: 4800.8 lumens  
Efficiency: N/A  
Efficacy: 92.3 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

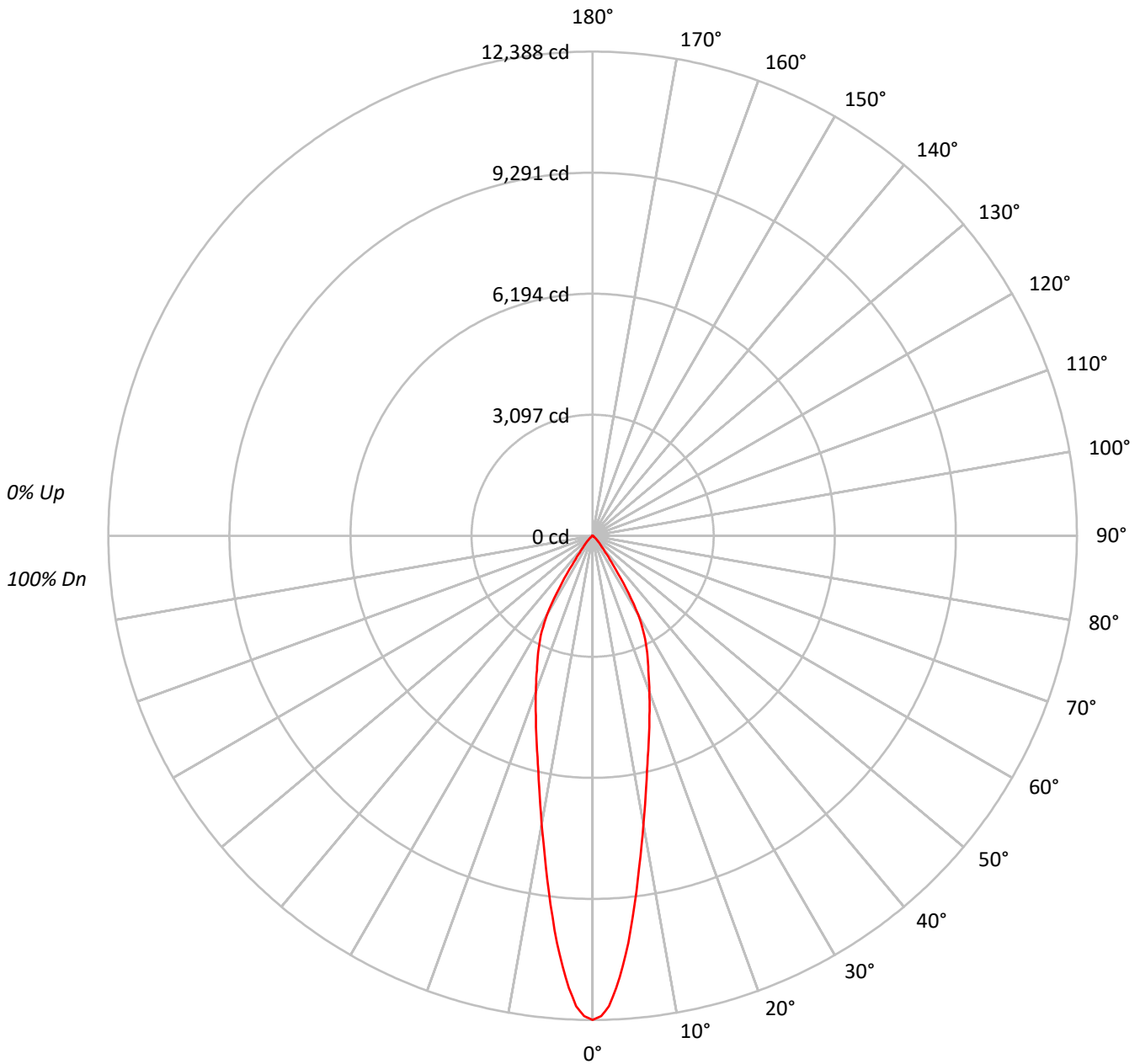
Input Watts (W): 52  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P584936

CATALOG NUMBER: HC855D010-HM82555830-81NDH

### Luminous Intensity Polar Plot





TEST NUMBER: P584936

CATALOG NUMBER: HC855D010-HM82555830-81NDH

**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
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°	382010
5°	323641
10°	234818
15°	176342
20°	139134
25°	112232
30°	83167
35°	33695
40°	14210
45°	7619
50°	3425
55°	1726
60°	1098
65°	781
70°	640
75°	417
80°	622
85°	1238



TEST NUMBER: P584936

CATALOG NUMBER: HC855D010-HM82555830-81NDH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	897.7	18.7
10°-20°	1551.4	32.3
20°-30°	1500.0	31.2
30°-40°	658.8	13.7
40°-50°	142.4	3.0
50°-60°	32.0	0.7
60°-70°	11.0	0.2
70°-80°	4.2	0.1
80°-90°	3.3	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°	3949.1	82.3
0°-40°	4607.9	96.0
0°-60°	4782.4	99.6
0°-90°	4800.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4800.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	12388	
5°	10456	898
15°	5524	1551
25°	3299	1500
35°	895	659
45°	175	142
55°	32	32
65°	11	11
75°	4	4
85°	4	3
90°	0	



TEST NUMBER: P584936

CATALOG NUMBER: HC855D010-HM82555830-81NDH

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	12388.3
1°	12295.6
2°	12042.4
3°	11585.9
4°	11040.4
5°	10455.5
6°	9817.1
7°	9175.4
8°	8572.7
9°	8012.8
10°	7499.3
11°	7014.3
12°	6579.3
13°	6183.5
14°	5834.0
15°	5523.8
17.5°	4828.4
20°	4239.9
22.5°	3722.9
25°	3298.6
27.5°	2867.1
30°	2335.7
32.5°	1586.9
35°	895.1
37.5°	527.8
40°	353.0
42.5°	249.6
45°	174.7
47.5°	114.2
50°	71.4
52.5°	42.8
55°	32.1
57.5°	25.0
60°	17.8
62.5°	14.3
65°	10.7
67.5°	7.1
70°	7.1
72.5°	3.5
75°	3.5
77.5°	3.5
80°	3.5
82.5°	3.5



TEST NUMBER: P584936

CATALOG NUMBER: HC855D010-HM82555830-81NDH

**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







85°	3.5
87.5°	3.5



(END OF REPORT)