

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: P593678

Luminaire Tested: **HC830D010-HM82555950-81NDW**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593678  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-3)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC830D010-HM82555950-81NDW  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3174.4 lumens  
Efficiency: N/A  
Efficacy: 113.4 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.06 / 0.92  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

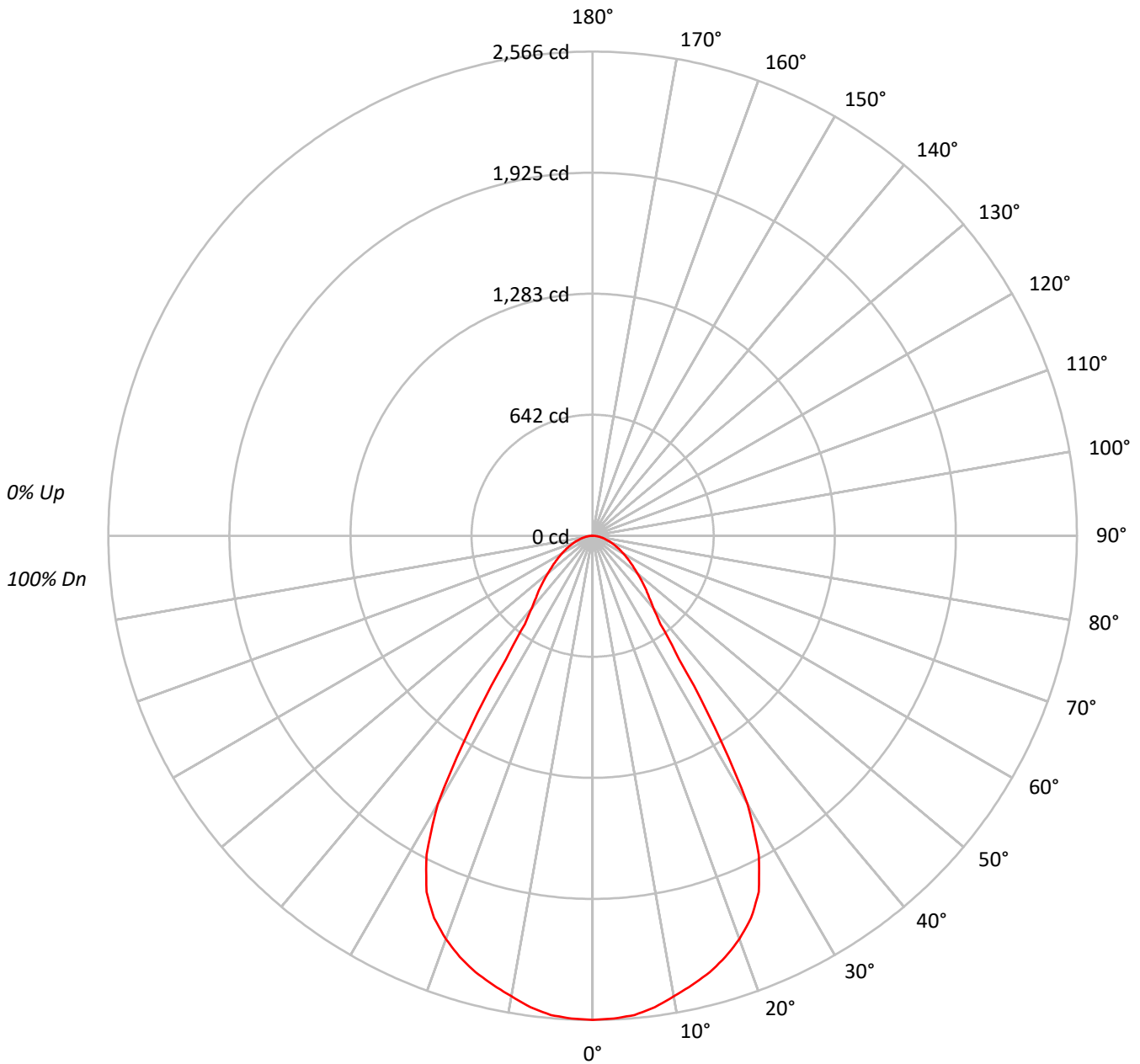
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P593678

CATALOG NUMBER: HC830D010-HM82555950-81NDW

### Luminous Intensity Polar Plot





TEST NUMBER: P593678

CATALOG NUMBER: HC830D010-HM82555950-81NDW

**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			
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90			
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81			
3	98	90	84	79	96	89	83	79	86	81	77	84	80	76	81	78	75	73			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	75	72	68	67			
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61			
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56			
7	77	66	59	54	76	66	59	54	64	58	54	63	58	54	62	57	53	52			
8	73	62	55	50	71	61	55	50	60	54	50	59	54	50	58	53	49	48			
9	69	58	51	47	68	57	51	47	56	51	46	55	50	46	55	50	46	45			
10	65	55	48	44	64	54	48	44	53	47	43	52	47	43	52	47	43	42			

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

	0°
0°	79123
5°	78911
10°	77597
15°	76461
20°	74629
25°	70845
30°	58434
35°	30081
40°	20139
45°	17274
50°	14905
55°	13000
60°	11557
65°	10383
70°	9413
75°	8471
80°	7583
85°	7571



TEST NUMBER: P593678

CATALOG NUMBER: HC830D010-HM82555950-81NDW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.0	7.6
10°-20°	673.9	21.2
20°-30°	933.7	29.4
30°-40°	560.8	17.7
40°-50°	307.0	9.7
50°-60°	218.1	6.9
60°-70°	141.6	4.5
70°-80°	75.7	2.4
80°-90°	22.6	0.7
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°	1848.6	58.2
0°-40°	2409.4	75.9
0°-60°	2934.6	92.4
0°-90°	3174.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3174.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2566	
5°	2549	241
15°	2395	674
25°	2082	934
35°	799	561
45°	396	307
55°	242	218
65°	142	142
75°	71	76
85°	21	23
90°	0	



TEST NUMBER: P593678

CATALOG NUMBER: HC830D010-HM82555950-81NDW

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2565.9
2.5°	2561.2
5°	2549.3
7.5°	2520.9
10°	2478.2
12.5°	2437.8
15°	2395.1
17.5°	2340.7
20°	2274.2
22.5°	2193.6
25°	2082.2
27.5°	1906.7
30°	1641.1
32.5°	1202.3
35°	799.1
37.5°	590.5
40°	500.3
42.5°	443.5
45°	396.1
47.5°	351.0
50°	310.7
52.5°	272.8
55°	241.8
57.5°	213.4
60°	187.4
62.5°	163.6
65°	142.3
67.5°	120.9
70°	104.4
72.5°	85.4
75°	71.1
77.5°	57.0
80°	42.7
82.5°	30.8
85°	21.4
87.5°	9.5
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)