

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: P584257

Luminaire Tested: **HC830D010-HM82555830-81NDW**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584257  
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-HM82555830-81NDW  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2905.1 lumens  
Efficiency: N/A  
Efficacy: 103.8 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

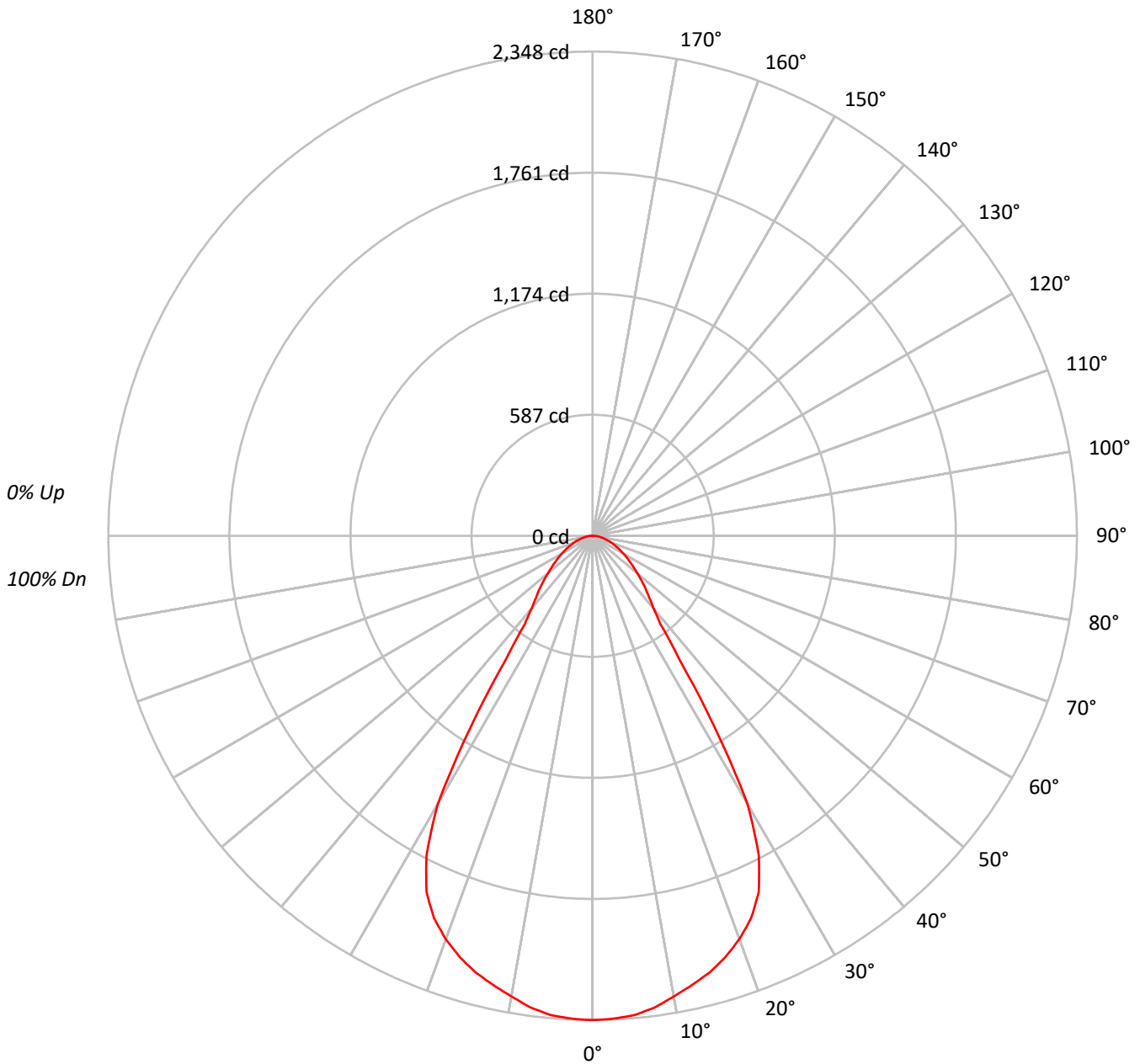
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

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

	0°
0°	72413
5°	72219
10°	71016
15°	69978
20°	68299
25°	64833
30°	53474
35°	27533
40°	18432
45°	15804
50°	13639
55°	11903
60°	10577
65°	9500
70°	8610
75°	7768
80°	6943
85°	6899



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	220.6	7.6
10°-20°	616.7	21.2
20°-30°	854.5	29.4
30°-40°	513.2	17.7
40°-50°	281.0	9.7
50°-60°	199.6	6.9
60°-70°	129.6	4.5
70°-80°	69.3	2.4
80°-90°	20.7	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°	1691.8	58.2
0°-40°	2205.0	75.9
0°-60°	2685.6	92.4
0°-90°	2905.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2905.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2348	
5°	2333	221
15°	2192	617
25°	1906	854
35°	731	513
45°	362	281
55°	221	200
65°	130	130
75°	65	69
85°	20	21
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2348.3
2.5°	2344.0
5°	2333.1
7.5°	2307.0
10°	2268.0
12.5°	2231.0
15°	2192.0
17.5°	2142.1
20°	2081.3
22.5°	2007.5
25°	1905.5
27.5°	1745.0
30°	1501.8
32.5°	1100.3
35°	731.4
37.5°	540.4
40°	457.9
42.5°	405.8
45°	362.4
47.5°	321.3
50°	284.3
52.5°	249.6
55°	221.4
57.5°	195.4
60°	171.5
62.5°	149.7
65°	130.2
67.5°	110.7
70°	95.5
72.5°	78.1
75°	65.2
77.5°	52.1
80°	39.1
82.5°	28.2
85°	19.5
87.5°	8.7
90°	0.0



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— 0°-180°







(END OF REPORT)