

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: P584245

Luminaire Tested: **HC830D010-HM82555827-81WDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584245  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-7)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC830D010-HM82555827-81WDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3732.8 lumens  
Efficiency: N/A  
Efficacy: 133.3 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.05  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

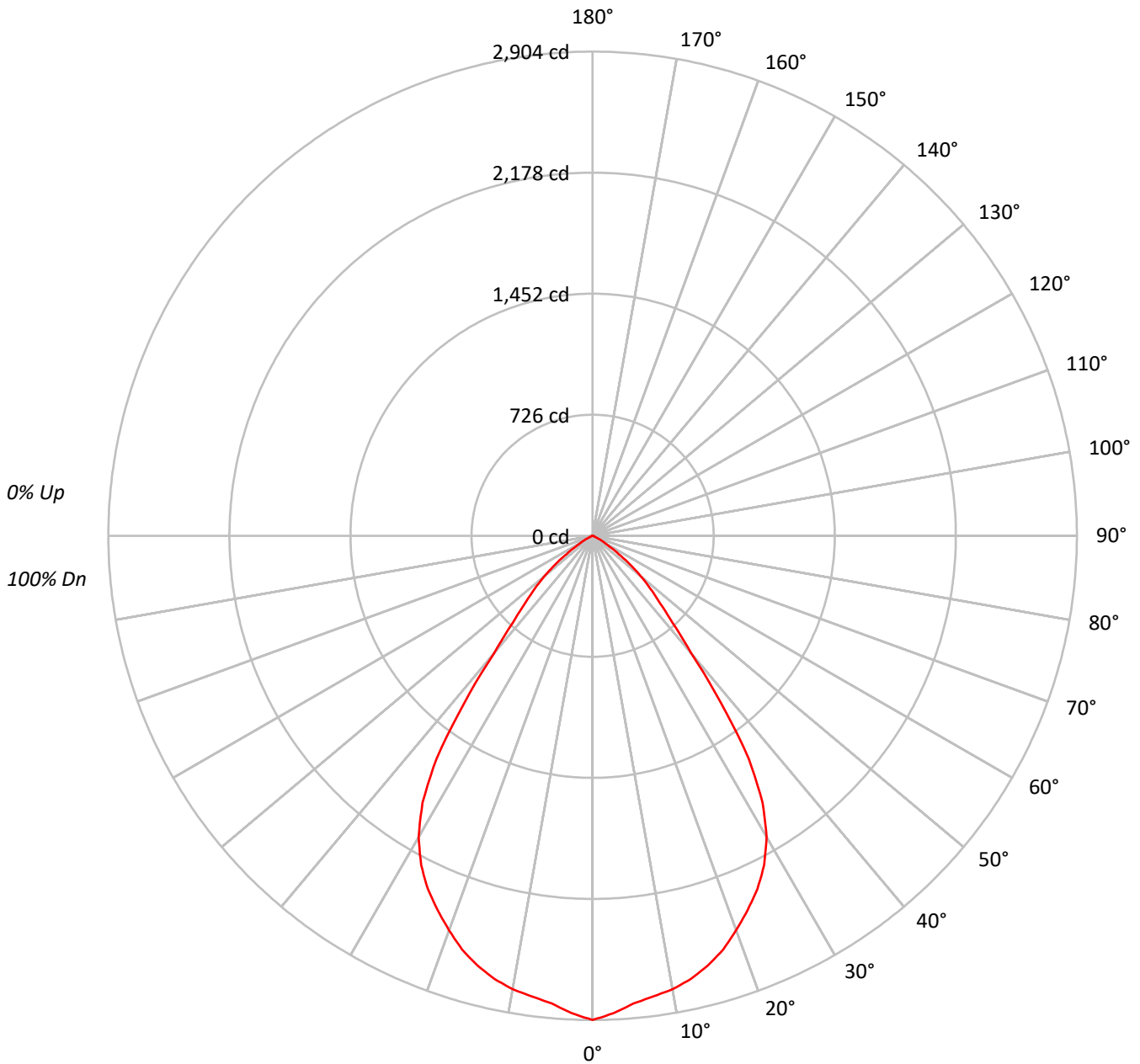
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92		
2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86	84		
3	100	93	87	83	98	91	86	82	89	84	81	86	83	79	84	81	78	77		
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	71	70		
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64		
6	83	73	66	62	82	72	66	61	71	65	61	69	64	61	68	64	60	59		
7	78	68	61	57	77	67	61	56	66	60	56	65	60	56	63	59	55	54		
8	74	63	57	52	73	63	56	52	62	56	52	60	55	51	59	55	51	50		
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46		
10	66	55	49	45	65	55	49	45	54	48	44	53	48	44	52	48	44	43		

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

	0°
0°	89552
5°	87145
10°	86481
15°	85193
20°	82616
25°	79535
30°	74293
35°	61480
40°	37122
45°	25001
50°	18014
55°	10274
60°	4527
65°	1620
70°	604
75°	274
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	267.5	7.2
10°-20°	750.0	20.1
20°-30°	1069.9	28.7
30°-40°	974.2	26.1
40°-50°	459.6	12.3
50°-60°	180.7	4.8
60°-70°	28.8	0.8
70°-80°	2.1	0.1
80°-90°	0.0	0.0
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°	2087.3	55.9
0°-40°	3061.5	82.0
0°-60°	3701.9	99.2
0°-90°	3732.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3732.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2904	
5°	2815	267
15°	2669	750
25°	2338	1070
35°	1633	974
45°	573	460
55°	191	181
65°	22	29
75°	2	2
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2904.1
2.5°	2866.4
5°	2815.3
7.5°	2786.4
10°	2761.9
12.5°	2722.0
15°	2668.6
17.5°	2602.0
20°	2517.6
22.5°	2428.7
25°	2337.6
27.5°	2226.5
30°	2086.5
32.5°	1897.6
35°	1633.2
37.5°	1262.1
40°	922.2
42.5°	708.9
45°	573.3
47.5°	471.1
50°	375.5
52.5°	282.1
55°	191.1
57.5°	120.0
60°	73.4
62.5°	44.5
65°	22.2
67.5°	11.1
70°	6.7
72.5°	2.3
75°	2.3
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)