

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: P593659

Luminaire Tested: **HC830D010-HM82555850-81WDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593659  
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-HM82555850-81WDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4184.7 lumens  
Efficiency: N/A  
Efficacy: 149.5 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

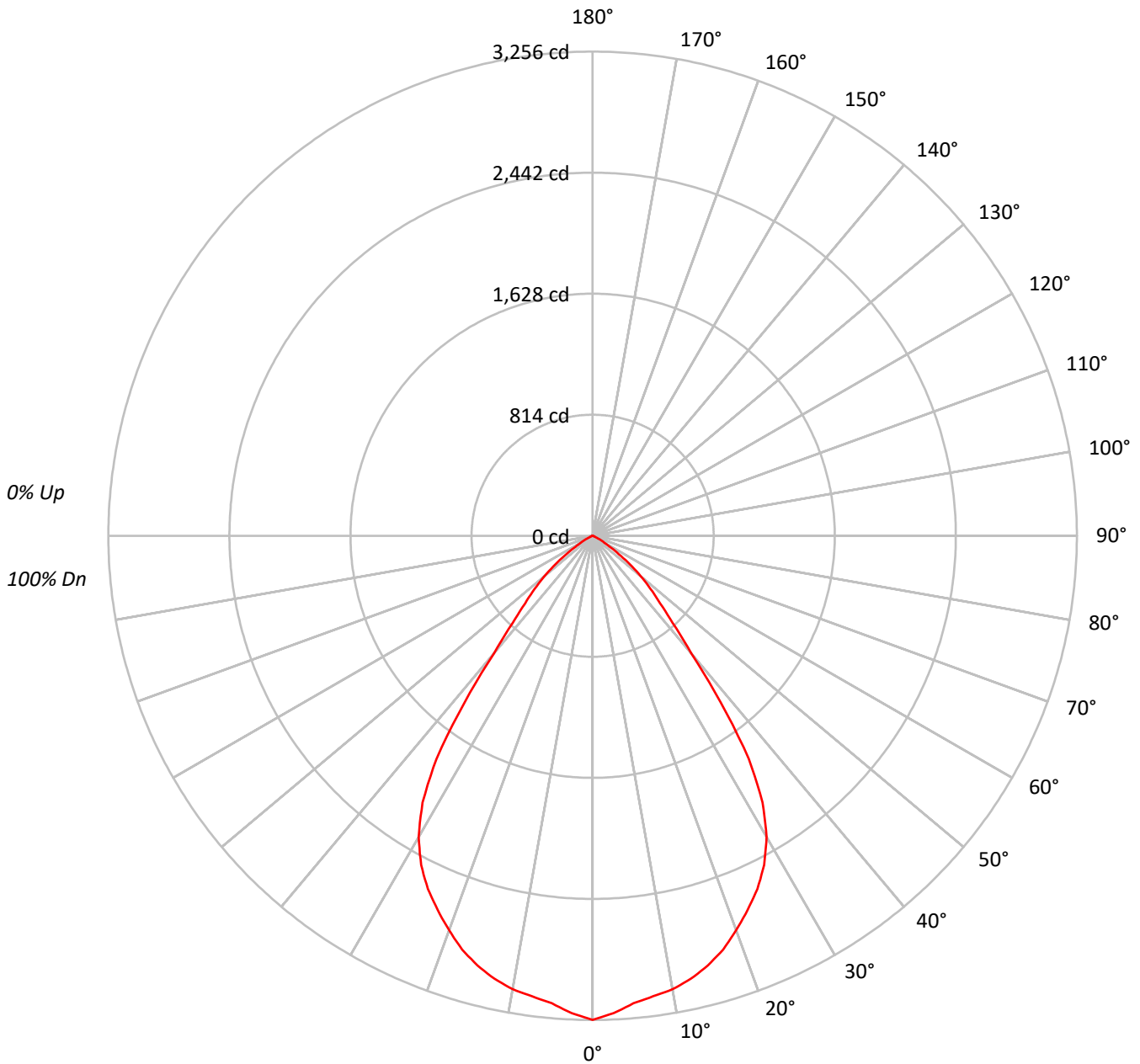
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			
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°	100397
5°	97697
10°	96955
15°	95511
20°	92618
25°	89167
30°	83288
35°	68923
40°	41615
45°	28028
50°	20197
55°	11521
60°	5069
65°	1824
70°	676
75°	298
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	299.9	7.2
10°-20°	840.8	20.1
20°-30°	1199.4	28.7
30°-40°	1092.2	26.1
40°-50°	515.2	12.3
50°-60°	202.6	4.8
60°-70°	32.3	0.8
70°-80°	2.3	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°	2340.1	55.9
0°-40°	3432.3	82.0
0°-60°	4150.1	99.2
0°-90°	4184.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4184.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3256	
5°	3156	300
15°	2992	841
25°	2621	1199
35°	1831	1092
45°	643	515
55°	214	203
65°	25	32
75°	2	2
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3255.8
2.5°	3213.5
5°	3156.2
7.5°	3123.9
10°	3096.4
12.5°	3051.6
15°	2991.8
17.5°	2917.1
20°	2822.4
22.5°	2722.8
25°	2620.7
27.5°	2496.1
30°	2339.1
32.5°	2127.4
35°	1830.9
37.5°	1414.9
40°	1033.8
42.5°	794.6
45°	642.7
47.5°	528.2
50°	421.0
52.5°	316.4
55°	214.3
57.5°	134.5
60°	82.2
62.5°	49.8
65°	25.0
67.5°	12.5
70°	7.5
72.5°	2.5
75°	2.5
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)