

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: P584354

Luminaire Tested: **HC830D010-HM82555940-81MDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584354  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-4)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC830D010-HM82555940-81MDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3831.1 lumens  
Efficiency: N/A  
Efficacy: 136.8 lumens/watt  
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.67  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

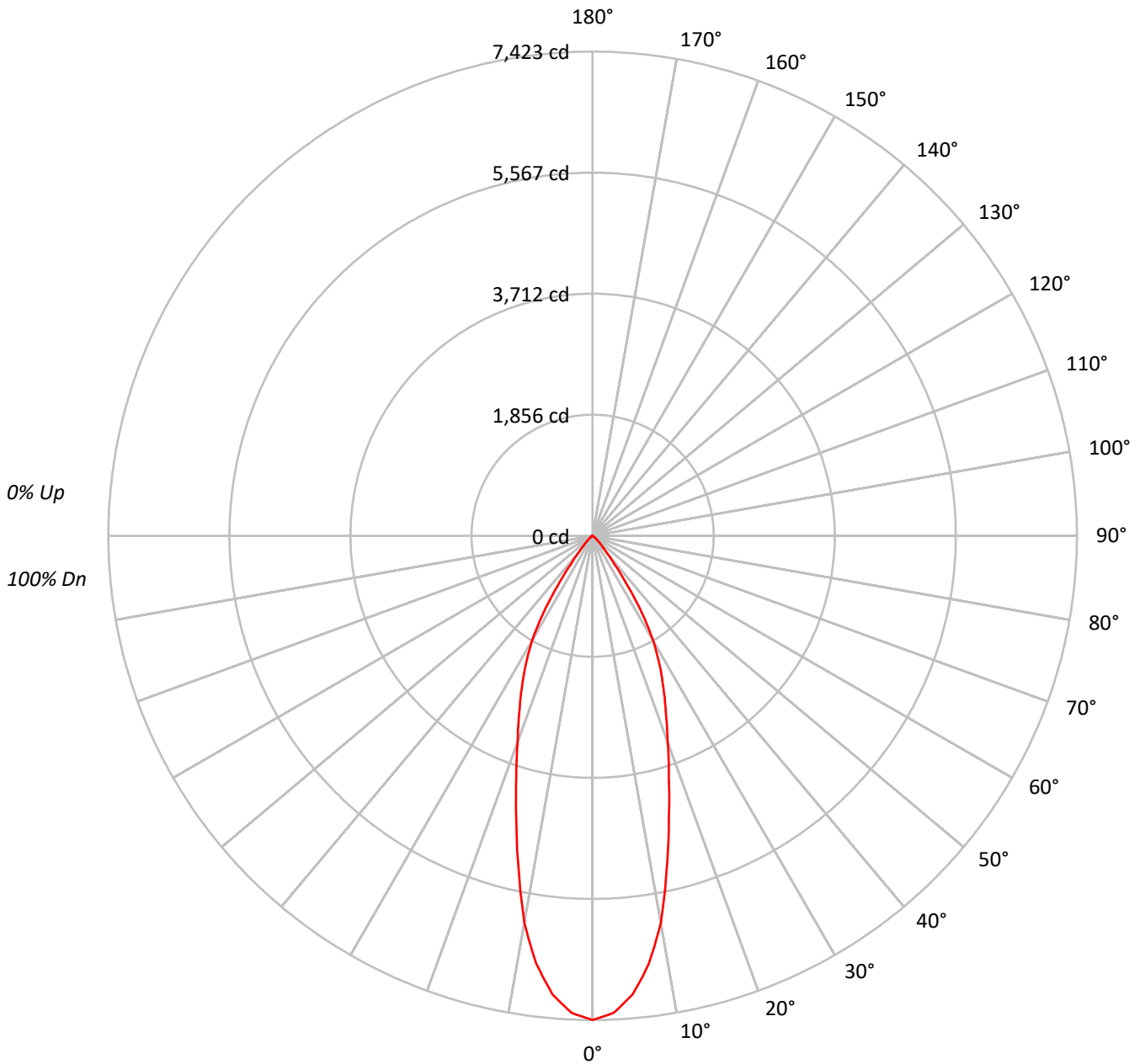
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			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	100	100
1	114	111	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95	95	95	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89	89	89	89
3	104	98	94	90	102	97	93	90	94	91	88	92	89	87	90	87	85	84	84	84	84
4	100	93	88	84	98	92	87	83	90	86	82	88	84	82	86	83	81	79	79	79	79
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75	75	75	75
6	91	83	78	74	90	82	77	73	81	76	73	79	76	73	78	75	72	71	71	71	71
7	87	79	73	70	86	78	73	69	77	72	69	76	72	69	75	71	68	67	67	67	67
8	84	75	70	66	82	74	69	66	73	69	65	72	68	65	71	68	65	64	64	64	64
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	65	62	61	61	61	61
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	65	62	59	58	58	58	58

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

	0°
0°	228898
5°	218400
10°	188558
15°	144182
20°	110322
25°	87282
30°	65929
35°	35073
40°	13364
45°	6411
50°	2734
55°	1145
60°	438
65°	350
70°	216
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	640.5	16.7
10°-20°	1260.8	32.9
20°-30°	1174.3	30.7
30°-40°	605.9	15.8
40°-50°	123.4	3.2
50°-60°	21.1	0.6
60°-70°	4.1	0.1
70°-80°	0.9	0.0
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°	3075.6	80.3
0°-40°	3681.5	96.1
0°-60°	3826.1	99.9
0°-90°	3831.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3831.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	7423	
5°	7056	640
15°	4516	1261
25°	2565	1174
35°	932	606
45°	147	123
55°	21	21
65°	5	4
75°	0	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	7423.0
2.5°	7323.5
5°	7055.6
7.5°	6614.6
10°	6021.9
12.5°	5244.3
15°	4516.4
17.5°	3885.8
20°	3361.9
22.5°	2935.0
25°	2565.3
27.5°	2214.4
30°	1851.6
32.5°	1420.1
35°	931.7
37.5°	540.5
40°	332.0
42.5°	218.1
45°	147.0
47.5°	92.5
50°	57.0
52.5°	33.2
55°	21.3
57.5°	9.5
60°	7.1
62.5°	4.8
65°	4.8
67.5°	2.4
70°	2.4
72.5°	2.4
75°	0.0
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)