

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: P580676

Luminaire Tested: **HC440D010-HM43040940-41NDC**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580676  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC440D010-HM43040940-41NDC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3594.5 lumens  
Efficiency: N/A  
Efficacy: 87.7 lumens/watt  
Spacing Criteria (0/90/45): 0.84 / 0.84 / 0.85  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

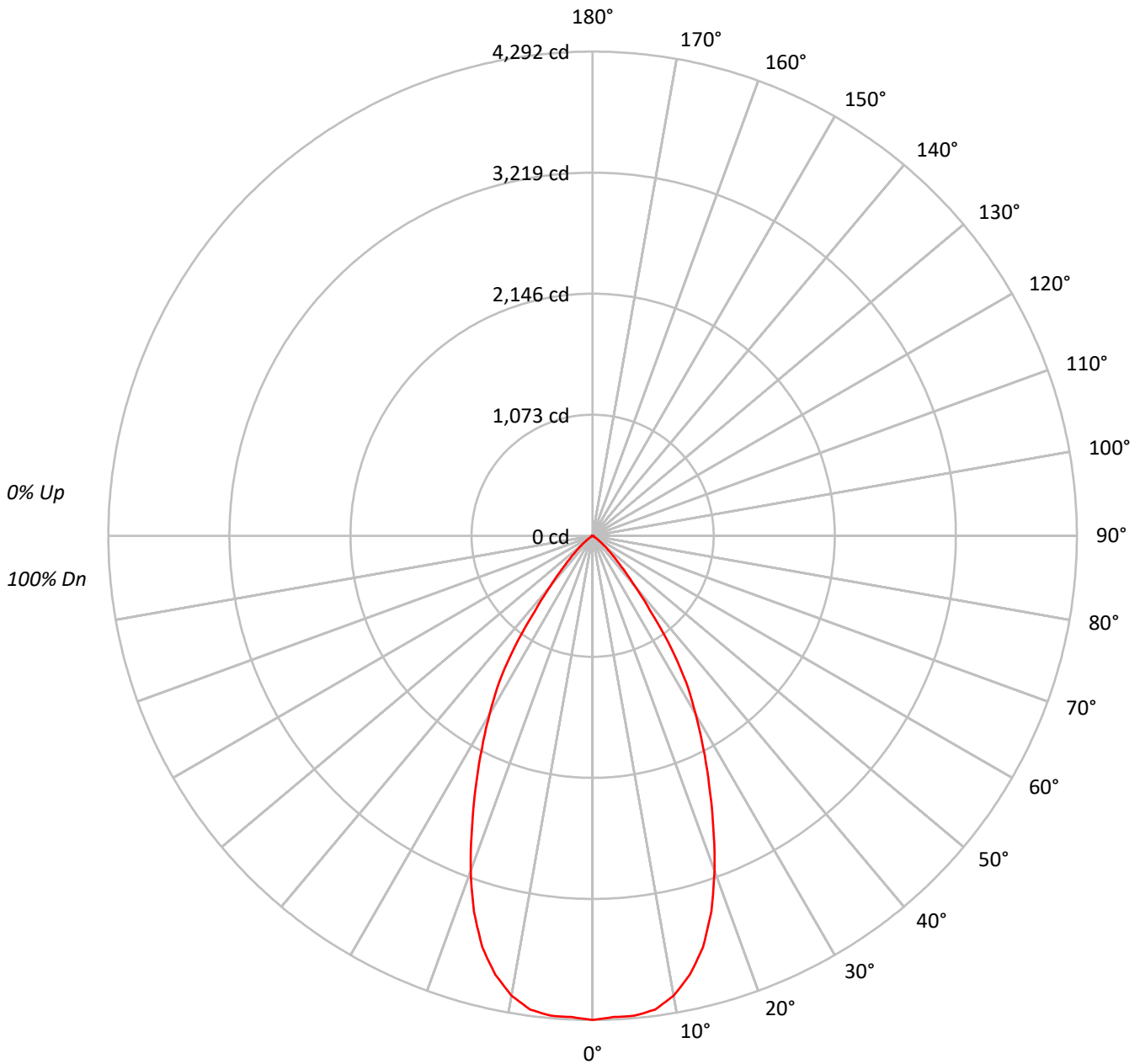
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	114	111	108	106	111	109	106	104	105	103	101	101	100	98	97	96	95	94			94
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	93	91	89	87			87
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	88	85	83	81			81
4	97	90	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76			76
5	93	84	79	74	91	83	78	74	82	77	73	80	76	73	78	75	72	71			71
6	88	79	73	69	87	78	73	69	77	72	68	75	71	68	74	70	67	66			66
7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63	62			62
8	80	70	64	60	78	70	64	60	69	64	60	68	63	60	67	62	59	58			58
9	76	66	61	57	75	66	60	57	65	60	56	64	59	56	63	59	56	55			55
10	72	63	57	53	71	62	57	53	62	57	53	61	56	53	60	56	53	51			51

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

	0°
0°	529424
5°	528735
10°	518441
15°	482068
20°	414590
25°	333043
30°	260029
35°	182048
40°	93422
45°	47447
50°	23756
55°	8881
60°	3602
65°	2860
70°	1731
75°	1191
80°	1776
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	403.7	11.2
10°-20°	1042.1	29.0
20°-30°	1122.6	31.2
30°-40°	737.6	20.5
40°-50°	229.3	6.4
50°-60°	45.0	1.3
60°-70°	9.6	0.3
70°-80°	3.5	0.1
80°-90°	1.0	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°	2568.4	71.5
0°-40°	3306.0	92.0
0°-60°	3580.4	99.6
0°-90°	3594.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3594.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4292	
5°	4270	404
15°	3775	1042
25°	2447	1123
35°	1209	738
45°	272	229
55°	41	45
65°	10	10
75°	2	4
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4292.2
2.5°	4270.3
5°	4270.3
7.5°	4236.4
10°	4139.3
12.5°	3983.9
15°	3775.1
17.5°	3496.0
20°	3158.5
22.5°	2794.3
25°	2447.1
27.5°	2124.3
30°	1825.7
32.5°	1544.1
35°	1209.0
37.5°	842.4
40°	580.2
42.5°	400.5
45°	272.0
47.5°	184.5
50°	123.8
52.5°	77.7
55°	41.3
57.5°	17.0
60°	14.6
62.5°	12.1
65°	9.8
67.5°	7.3
70°	4.8
72.5°	4.8
75°	2.5
77.5°	2.5
80°	2.5
82.5°	2.5
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)