

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: P580672

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

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580672  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC440D010-HM43040940-41NDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3371.1 lumens  
Efficiency: N/A  
Efficacy: 82.2 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.91  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

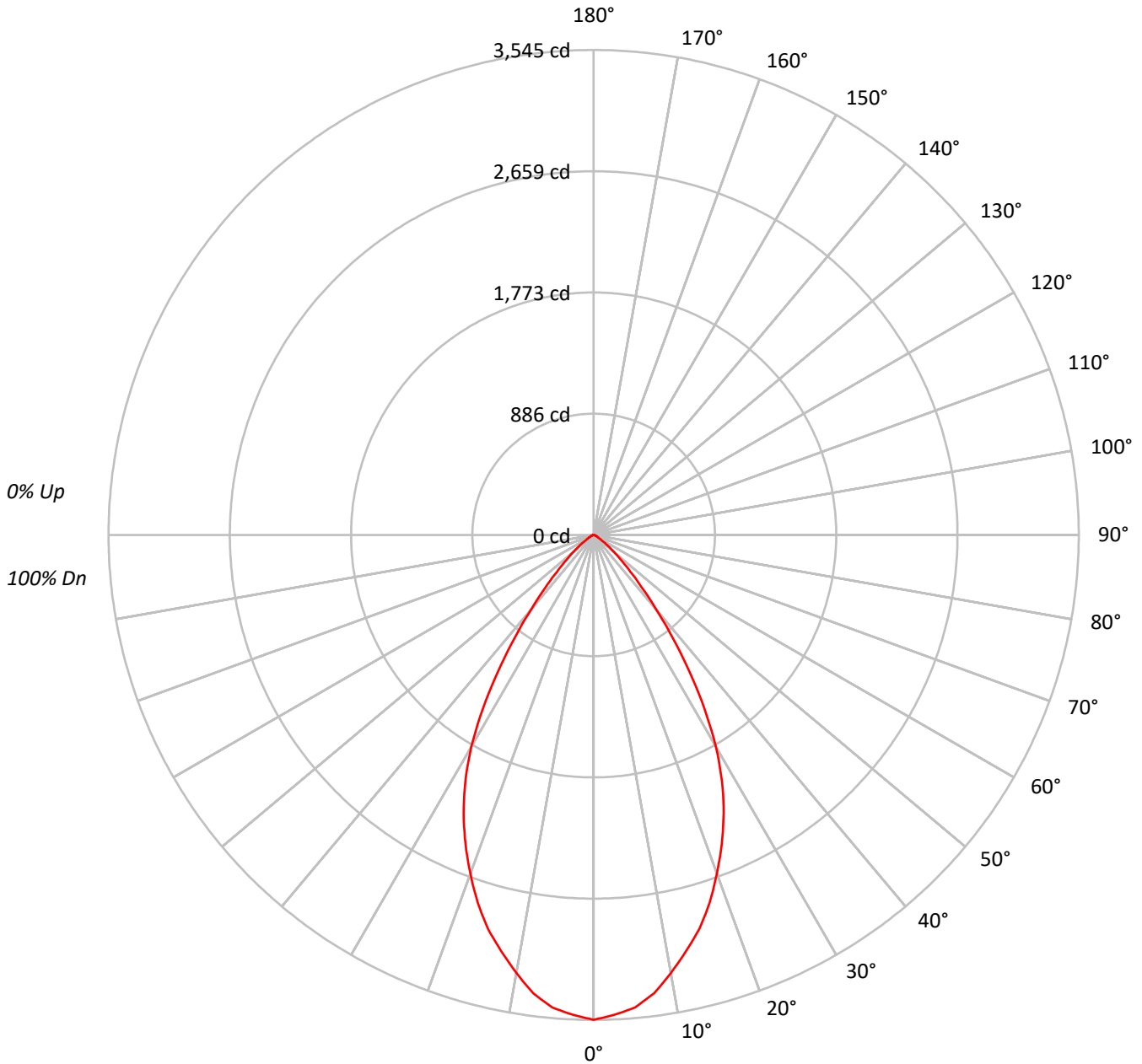
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P580672

CATALOG NUMBER: HC440D010-HM43040940-41NDH

### Luminous Intensity Polar Plot





TEST NUMBER: P580672

CATALOG NUMBER: HC440D010-HM43040940-41NDH

**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	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93			93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86			86
3	101	95	89	85	99	93	88	84	91	86	83	88	85	82	86	83	81	79			79
4	96	88	82	78	94	87	81	77	85	80	76	82	79	75	81	77	74	73			73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67			67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	63			63
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58			58
8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54			54
9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51			51
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	48			48

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

	0°
0°	437223
5°	429273
10°	407183
15°	380728
20°	345770
25°	305987
30°	254518
35°	183539
40°	114547
45°	66077
50°	37285
55°	17741
60°	10188
65°	7793
70°	5265
75°	3479
80°	3410
85°	3538



TEST NUMBER: P580672

CATALOG NUMBER: HC440D010-HM43040940-41NDH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	324.1	9.6
10°-20°	831.7	24.7
20°-30°	1022.9	30.3
30°-40°	759.7	22.5
40°-50°	308.9	9.2
50°-60°	85.5	2.5
60°-70°	26.6	0.8
70°-80°	8.9	0.3
80°-90°	2.7	0.1
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°	2178.7	64.6
0°-40°	2938.4	87.2
0°-60°	3332.8	98.9
0°-90°	3371.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3371.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3545	
5°	3467	324
15°	2982	832
25°	2248	1023
35°	1219	760
45°	379	309
55°	82	86
65°	27	27
75°	7	9
85°	2	3
90°	0	



TEST NUMBER: P580672

CATALOG NUMBER: HC440D010-HM43040940-41NDH

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3544.7
2.5°	3510.7
5°	3467.0
7.5°	3379.7
10°	3251.0
12.5°	3117.4
15°	2981.5
17.5°	2818.8
20°	2634.2
22.5°	2447.4
25°	2248.3
27.5°	2032.1
30°	1787.0
32.5°	1507.7
35°	1218.9
37.5°	946.9
40°	711.4
42.5°	519.6
45°	378.8
47.5°	272.0
50°	194.3
52.5°	133.5
55°	82.5
57.5°	53.4
60°	41.3
62.5°	34.0
65°	26.7
67.5°	19.4
70°	14.6
72.5°	12.1
75°	7.3
77.5°	4.8
80°	4.8
82.5°	2.5
85°	2.5
87.5°	2.5
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)