

Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P580636

Luminaire Tested: **HCC4S40D010BZ-HM43040930-41NDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580636  
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: HCC4S40D010BZ-HM43040930-41NDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

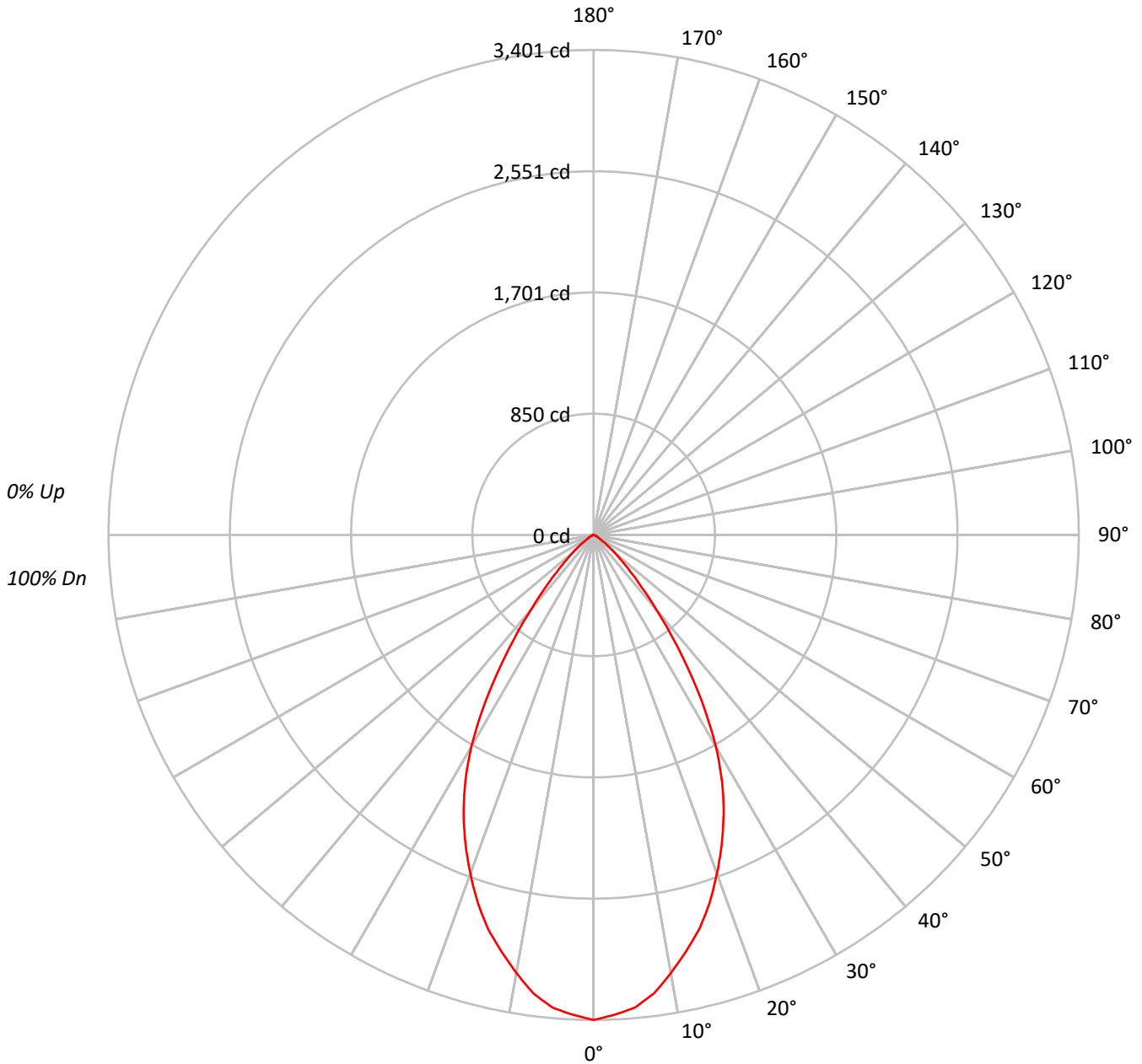
Lumens per Lamp: N/A  
Luminaire Lumens: 3234.4 lumens  
Efficiency: N/A  
Efficacy: 78.9 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.91  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (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	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93	93	93	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86	86	86	86
3	101	95	89	85	99	93	88	84	91	86	83	88	85	82	86	83	81	79	79	79	79
4	96	88	82	78	94	87	81	77	85	80	76	82	79	75	81	77	74	73	73	73	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67	67	67	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	63	63	63	63
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58	58	58	58
8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54	54	54	54
9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51	51	51	51
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	48	48	48	48

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

	0°
0°	419498
5°	411877
10°	390662
15°	365289
20°	331751
25°	293561
30°	244192
35°	176070
40°	109894
45°	63390
50°	35749
55°	17053
60°	9769
65°	7501
70°	5049
75°	3336
80°	3339
85°	3397



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	310.9	9.6
10°-20°	798.0	24.7
20°-30°	981.4	30.3
30°-40°	728.9	22.5
40°-50°	296.3	9.2
50°-60°	82.0	2.5
60°-70°	25.6	0.8
70°-80°	8.6	0.3
80°-90°	2.6	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°	2090.3	64.6
0°-40°	2819.2	87.2
0°-60°	3197.6	98.9
0°-90°	3234.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3234.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3401	
5°	3326	311
15°	2861	798
25°	2157	981
35°	1169	729
45°	363	296
55°	79	82
65°	26	26
75°	7	9
85°	2	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3401.0
2.5°	3368.4
5°	3326.5
7.5°	3242.5
10°	3119.1
12.5°	2990.9
15°	2860.6
17.5°	2704.4
20°	2527.4
22.5°	2348.0
25°	2157.0
27.5°	1949.8
30°	1714.5
32.5°	1446.5
35°	1169.3
37.5°	908.5
40°	682.5
42.5°	498.5
45°	363.4
47.5°	260.9
50°	186.3
52.5°	128.1
55°	79.3
57.5°	51.2
60°	39.6
62.5°	32.6
65°	25.7
67.5°	18.6
70°	14.0
72.5°	11.7
75°	7.0
77.5°	4.7
80°	4.7
82.5°	2.4
85°	2.4
87.5°	2.4
90°	0.0

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Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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(END OF REPORT)