

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: P580096

Luminaire Tested: **HCC4S20D010BZ-HM40525940-41NDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580096  
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: HCC4S20D010BZ-HM40525940-41NDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

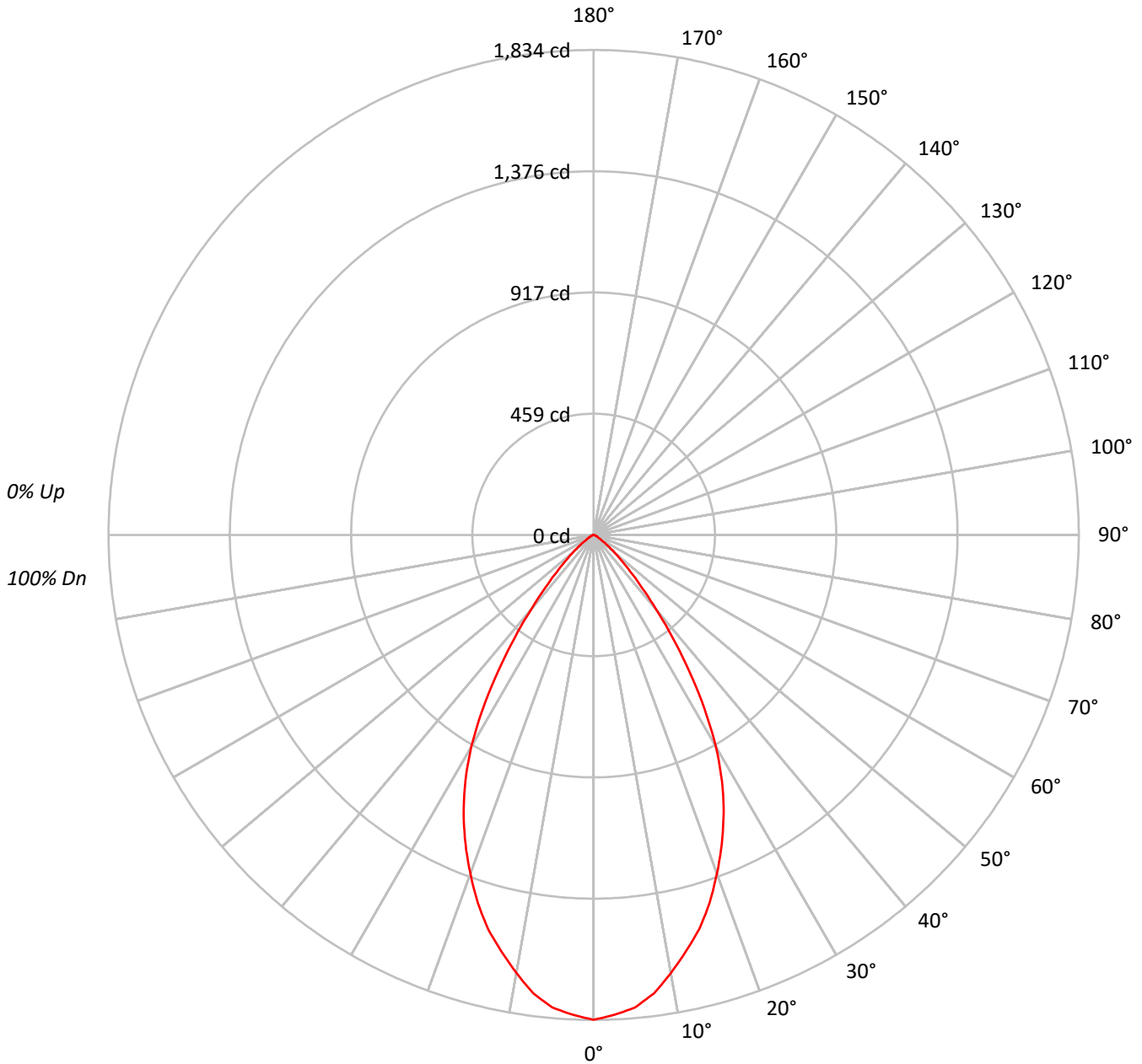
Lumens per Lamp: N/A  
Luminaire Lumens: 1744.0 lumens  
Efficiency: N/A  
Efficacy: 87.2 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.91  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 20  
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°	226191
5°	222090
10°	210643
15°	196972
20°	178897
25°	158294
30°	131674
35°	94939
40°	59270
45°	34172
50°	19285
55°	9182
60°	5255
65°	4028
70°	2741
75°	1811
80°	1776
85°	1840



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.7	9.6
10°-20°	430.3	24.7
20°-30°	529.2	30.3
30°-40°	393.0	22.5
40°-50°	159.8	9.2
50°-60°	44.2	2.5
60°-70°	13.8	0.8
70°-80°	4.6	0.3
80°-90°	1.4	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°	1127.2	64.6
0°-40°	1520.2	87.2
0°-60°	1724.1	98.9
0°-90°	1744.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1744.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1834	
5°	1794	168
15°	1542	430
25°	1163	529
35°	630	393
45°	196	160
55°	43	44
65°	14	14
75°	4	5
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1833.8
2.5°	1816.3
5°	1793.7
7.5°	1748.5
10°	1681.8
12.5°	1612.8
15°	1542.5
17.5°	1458.3
20°	1362.9
22.5°	1266.1
25°	1163.1
27.5°	1051.3
30°	924.5
32.5°	780.0
35°	630.5
37.5°	489.9
40°	368.1
42.5°	268.7
45°	195.9
47.5°	140.6
50°	100.5
52.5°	69.0
55°	42.7
57.5°	27.6
60°	21.3
62.5°	17.5
65°	13.8
67.5°	10.1
70°	7.6
72.5°	6.3
75°	3.8
77.5°	2.5
80°	2.5
82.5°	1.3
85°	1.3
87.5°	1.3
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)