

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: P580067

Luminaire Tested: **HCC4S20D010BZ-HM40525930-41NDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580067  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-3)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S20D010BZ-HM40525930-41NDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

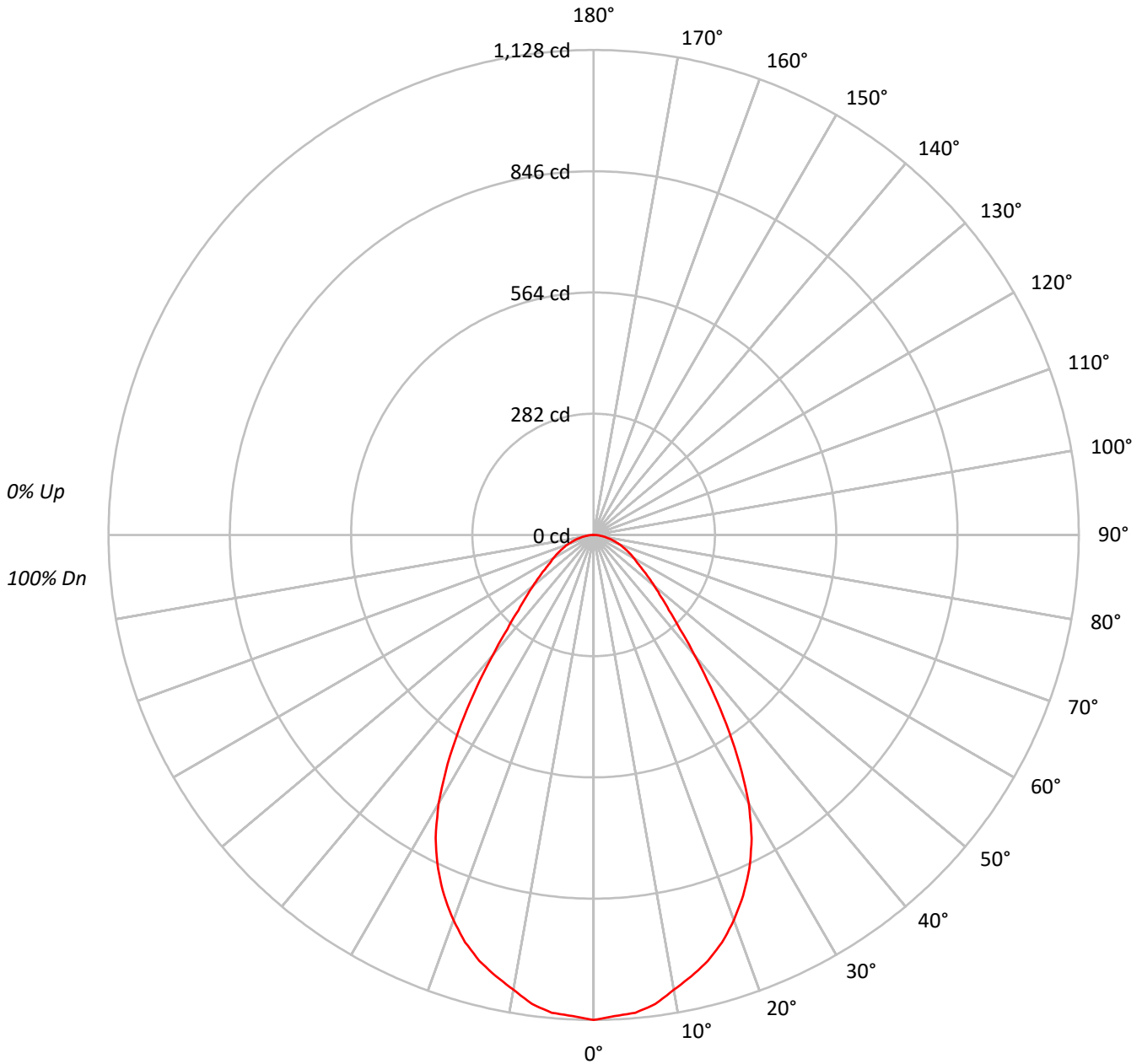
Lumens per Lamp: N/A  
Luminaire Lumens: 1584.0 lumens  
Efficiency: N/A  
Efficacy: 79.2 lumens/watt  
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1.01  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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									
RC	80									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																			
1	111	108	104	101	109	105	102	100	101	99	97	98	96	94	94	92	91	89																			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79																			
3	97	88	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71																			
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64																			
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58																			
6	79	68	61	56	78	67	60	55	66	60	55	64	59	55	63	58	54	52																			
7	75	63	56	51	73	62	56	51	61	55	50	60	54	50	59	53	50	48																			
8	70	59	52	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44																			
9	66	55	48	43	65	54	47	43	53	47	43	52	47	43	51	46	42	41																			
10	63	51	44	40	62	51	44	40	50	44	40	49	43	39	48	43	39	38																			

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

	0°
0°	139159
5°	138130
10°	134542
15°	130991
20°	125132
25°	116581
30°	102647
35°	80950
40°	58771
45°	43173
50°	35135
55°	29461
60°	26692
65°	24545
70°	22828
75°	20826
80°	18823
85°	16275



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.2	6.6
10°-20°	287.7	18.2
20°-30°	390.0	24.6
30°-40°	334.6	21.1
40°-50°	197.6	12.5
50°-60°	125.2	7.9
60°-70°	84.1	5.3
70°-80°	46.4	2.9
80°-90°	13.0	0.8
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°	782.9	49.4
0°-40°	1117.6	70.6
0°-60°	1440.5	90.9
0°-90°	1584.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1584.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1128	
5°	1116	105
15°	1026	288
25°	857	390
35°	538	335
45°	248	198
55°	137	125
65°	84	84
75°	44	46
85°	12	13
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1128.2
2.5°	1120.2
5°	1115.6
7.5°	1100.5
10°	1074.2
12.5°	1051.1
15°	1025.8
17.5°	993.5
20°	953.3
22.5°	908.3
25°	856.6
27.5°	795.6
30°	720.7
32.5°	632.0
35°	537.6
37.5°	446.6
40°	365.0
42.5°	297.1
45°	247.5
47.5°	211.9
50°	183.1
52.5°	158.9
55°	137.0
57.5°	119.7
60°	108.2
62.5°	96.7
65°	84.1
67.5°	73.6
70°	63.3
72.5°	53.0
75°	43.7
77.5°	34.5
80°	26.5
82.5°	18.5
85°	11.5
87.5°	4.6
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)