

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: P580012

Luminaire Tested: **HCC4S20D010BZ-HM40525835-41WDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580012  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-8)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S20D010BZ-HM40525835-41WDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

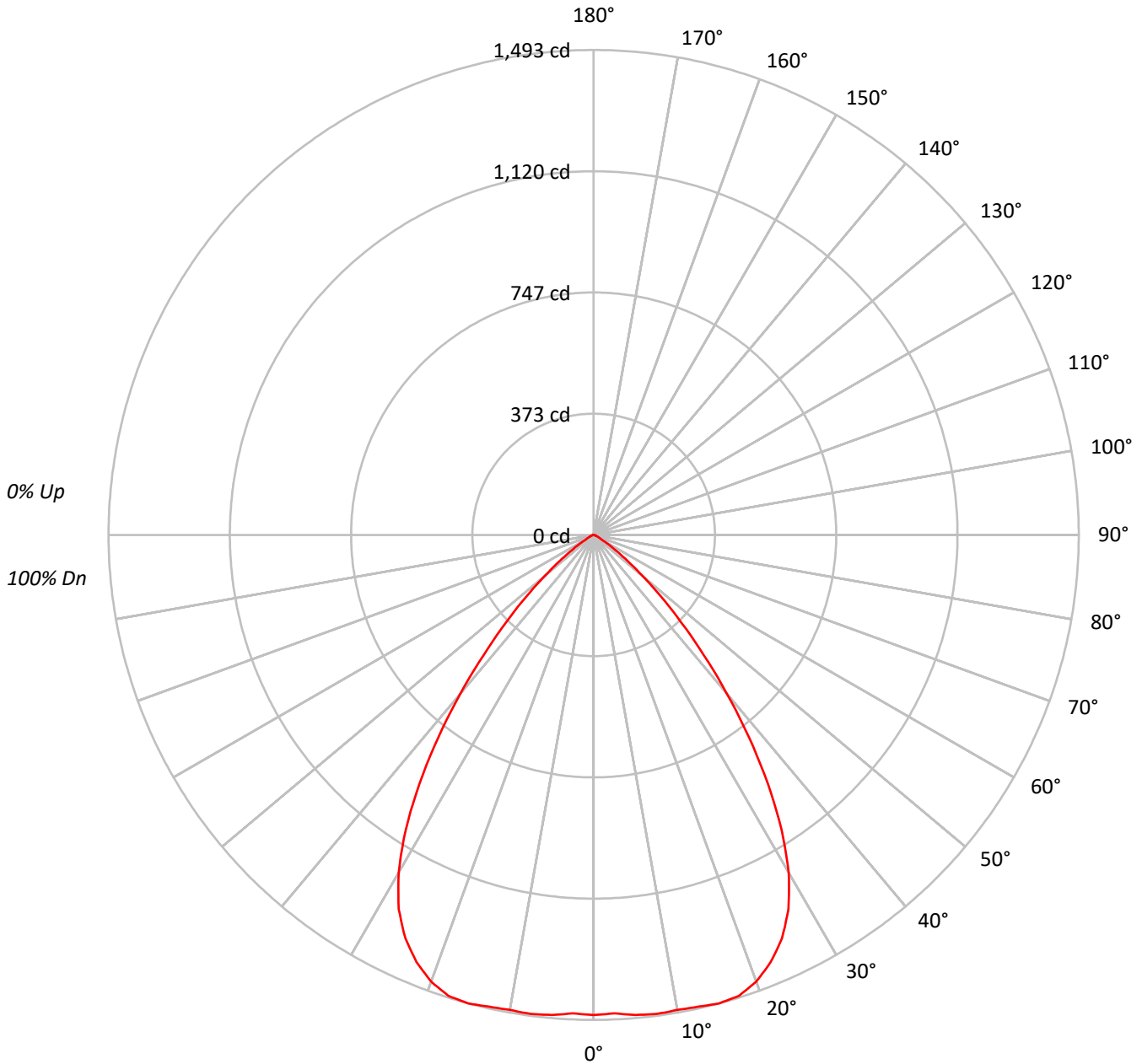
Lumens per Lamp: N/A  
Luminaire Lumens: 2168.4 lumens  
Efficiency: N/A  
Efficacy: 108.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.11  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	113	110	107	104	110	108	105	103	103	101	100		100	98	97		96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89		93	90	87		90	88	86	84
3	100	93	87	82	98	91	86	82	88	84	80		86	82	79		84	81	78	76
4	94	85	79	74	92	84	78	74	82	77	73		80	75	72		78	74	71	69
5	88	79	72	67	86	78	72	67	76	70	66		74	69	66		72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	61		69	64	60		68	63	60	58
7	78	68	61	56	77	67	60	56	65	60	55		64	59	55		63	58	55	53
8	74	63	56	51	72	62	56	51	61	55	51		60	55	51		59	54	51	49
9	69	59	52	47	68	58	52	47	57	51	47		56	51	47		55	50	47	45
10	66	55	48	44	65	54	48	44	53	48	44		53	47	44		52	47	43	42

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

	0°
0°	182305
5°	183682
10°	185969
15°	190651
20°	192049
25°	186562
30°	171041
35°	140745
40°	102600
45°	66583
50°	37553
55°	17806
60°	7055
65°	4349
70°	2921
75°	1954
80°	994
85°	1981



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.6	6.5
10°-20°	420.9	19.4
20°-30°	624.3	28.8
30°-40°	576.6	26.6
40°-50°	301.1	13.9
50°-60°	82.5	3.8
60°-70°	15.9	0.7
70°-80°	4.5	0.2
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°	1186.9	54.7
0°-40°	1763.5	81.3
0°-60°	2147.1	99.0
0°-90°	2168.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2168.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1478	
5°	1484	142
15°	1493	421
25°	1371	624
35°	935	577
45°	382	301
55°	83	83
65°	15	16
75°	4	4
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1478.0
2.5°	1474.0
5°	1483.5
7.5°	1487.5
10°	1484.8
12.5°	1487.5
15°	1493.0
17.5°	1487.5
20°	1463.1
22.5°	1423.7
25°	1370.8
27.5°	1298.7
30°	1200.9
32.5°	1077.3
35°	934.7
37.5°	785.2
40°	637.2
42.5°	501.2
45°	381.7
47.5°	279.9
50°	195.7
52.5°	130.4
55°	82.8
57.5°	48.9
60°	28.6
62.5°	20.4
65°	14.9
67.5°	10.9
70°	8.1
72.5°	5.4
75°	4.1
77.5°	2.8
80°	1.4
82.5°	1.4
85°	1.4
87.5°	0.0
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)