

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: P580078

Luminaire Tested: **HCC4S20D010BZ-HM40525935-41NDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580078  
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-HM40525935-41NDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

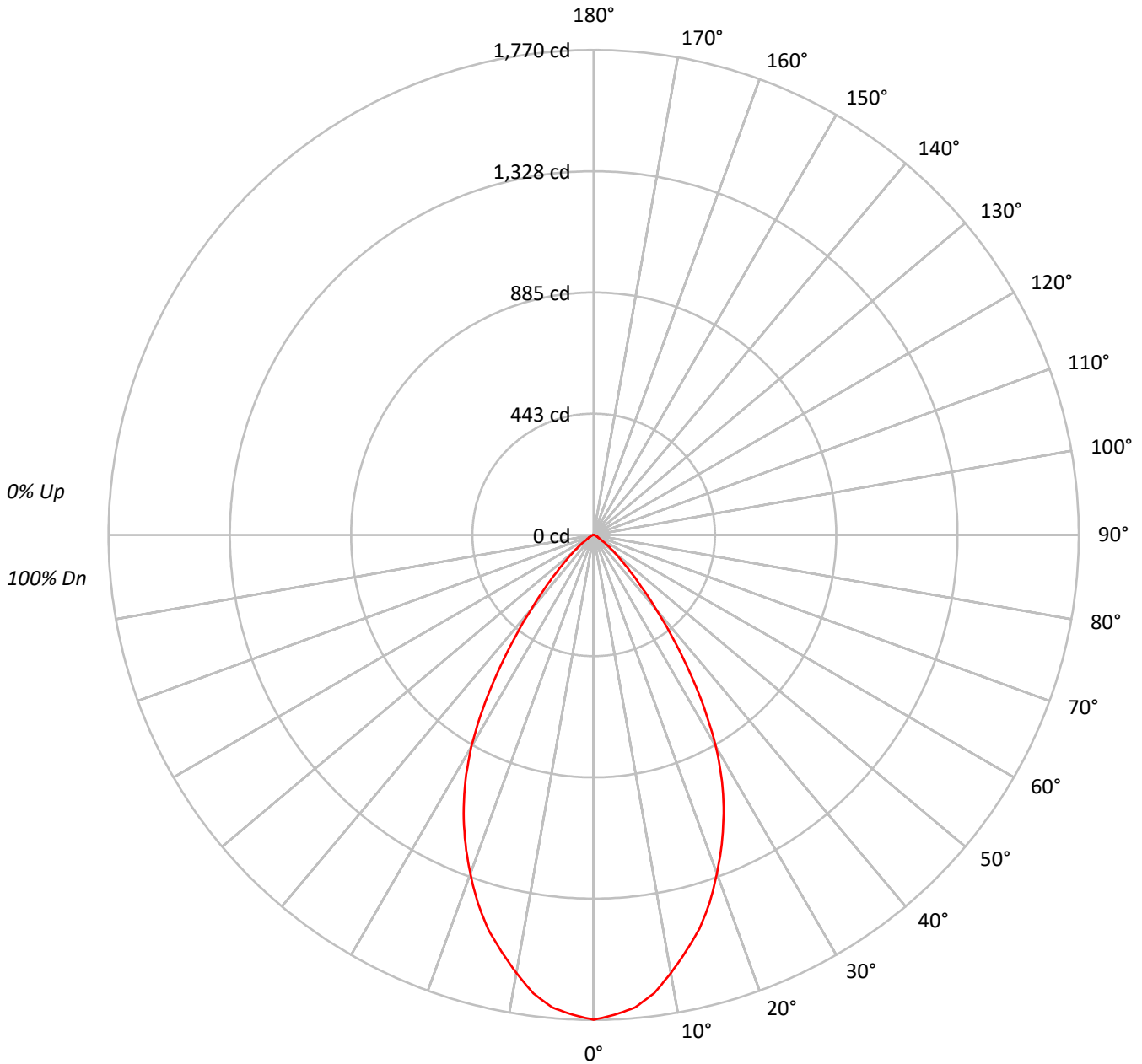
Lumens per Lamp: N/A  
Luminaire Lumens: 1683.1 lumens  
Efficiency: N/A  
Efficacy: 84.2 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.91  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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	
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°	218297
5°	214339
10°	203291
15°	190089
20°	172648
25°	152769
30°	127059
35°	91626
40°	57193
45°	32986
50°	18594
55°	8860
60°	5082
65°	3882
70°	2597
75°	1763
80°	1705
85°	1840



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.8	9.6
10°-20°	415.3	24.7
20°-30°	510.7	30.3
30°-40°	379.3	22.5
40°-50°	154.2	9.2
50°-60°	42.7	2.5
60°-70°	13.3	0.8
70°-80°	4.5	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°	1087.8	64.6
0°-40°	1467.1	87.2
0°-60°	1664.0	98.9
0°-90°	1683.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1683.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1770	
5°	1731	162
15°	1489	415
25°	1122	511
35°	608	379
45°	189	154
55°	41	43
65°	13	13
75°	4	4
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1769.8
2.5°	1752.8
5°	1731.1
7.5°	1687.4
10°	1623.1
12.5°	1556.5
15°	1488.6
17.5°	1407.4
20°	1315.3
22.5°	1221.9
25°	1122.5
27.5°	1014.6
30°	892.1
32.5°	752.8
35°	608.5
37.5°	472.8
40°	355.2
42.5°	259.5
45°	189.1
47.5°	135.8
50°	96.9
52.5°	66.6
55°	41.2
57.5°	26.7
60°	20.6
62.5°	17.0
65°	13.3
67.5°	9.7
70°	7.2
72.5°	6.1
75°	3.7
77.5°	2.4
80°	2.4
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)