

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: P592659

Luminaire Tested: **HCC4S20D010BZ-HM40525850-41NDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P592659  
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-HM40525850-41NDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

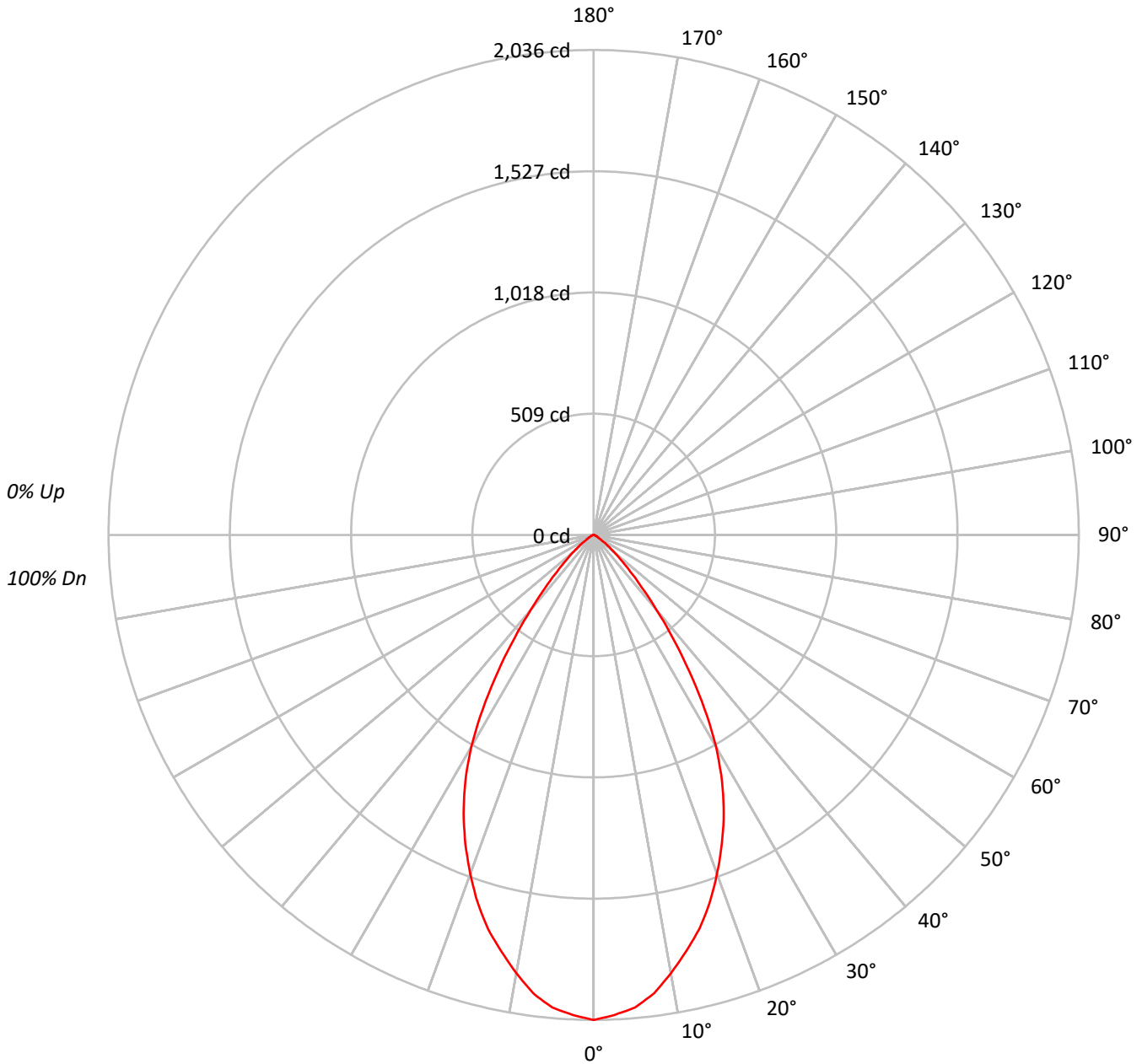
Lumens per Lamp: N/A  
Luminaire Lumens: 1936.6 lumens  
Efficiency: N/A  
Efficacy: 96.8 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.91  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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°	251193
5°	246618
10°	233926
15°	218719
20°	198651
25°	175783
30°	146216
35°	105434
40°	65807
45°	37958
50°	21415
55°	10193
60°	5847
65°	4495
70°	3029
75°	1954
80°	1989
85°	1981



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.2	9.6
10°-20°	477.8	24.7
20°-30°	587.7	30.3
30°-40°	436.4	22.5
40°-50°	177.4	9.2
50°-60°	49.1	2.5
60°-70°	15.3	0.8
70°-80°	5.1	0.3
80°-90°	1.5	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°	1251.7	64.6
0°-40°	1688.1	87.2
0°-60°	1914.6	98.9
0°-90°	1936.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1936.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2036	
5°	1992	186
15°	1713	478
25°	1292	588
35°	700	436
45°	218	177
55°	47	49
65°	15	15
75°	4	5
85°	1	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2036.5
2.5°	2016.9
5°	1991.8
7.5°	1941.6
10°	1867.7
12.5°	1790.9
15°	1712.8
17.5°	1619.4
20°	1513.4
22.5°	1406.0
25°	1291.6
27.5°	1167.4
30°	1026.6
32.5°	866.2
35°	700.2
37.5°	544.0
40°	408.7
42.5°	298.4
45°	217.6
47.5°	156.2
50°	111.6
52.5°	76.7
55°	47.4
57.5°	30.7
60°	23.7
62.5°	19.5
65°	15.4
67.5°	11.1
70°	8.4
72.5°	7.0
75°	4.1
77.5°	2.8
80°	2.8
82.5°	1.4
85°	1.4
87.5°	1.4
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)