

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: P580060

Luminaire Tested: **HCC4W20D010BZ-HM40525930-41NDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580060  
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: HCC4W20D010BZ-HM40525930-41NDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

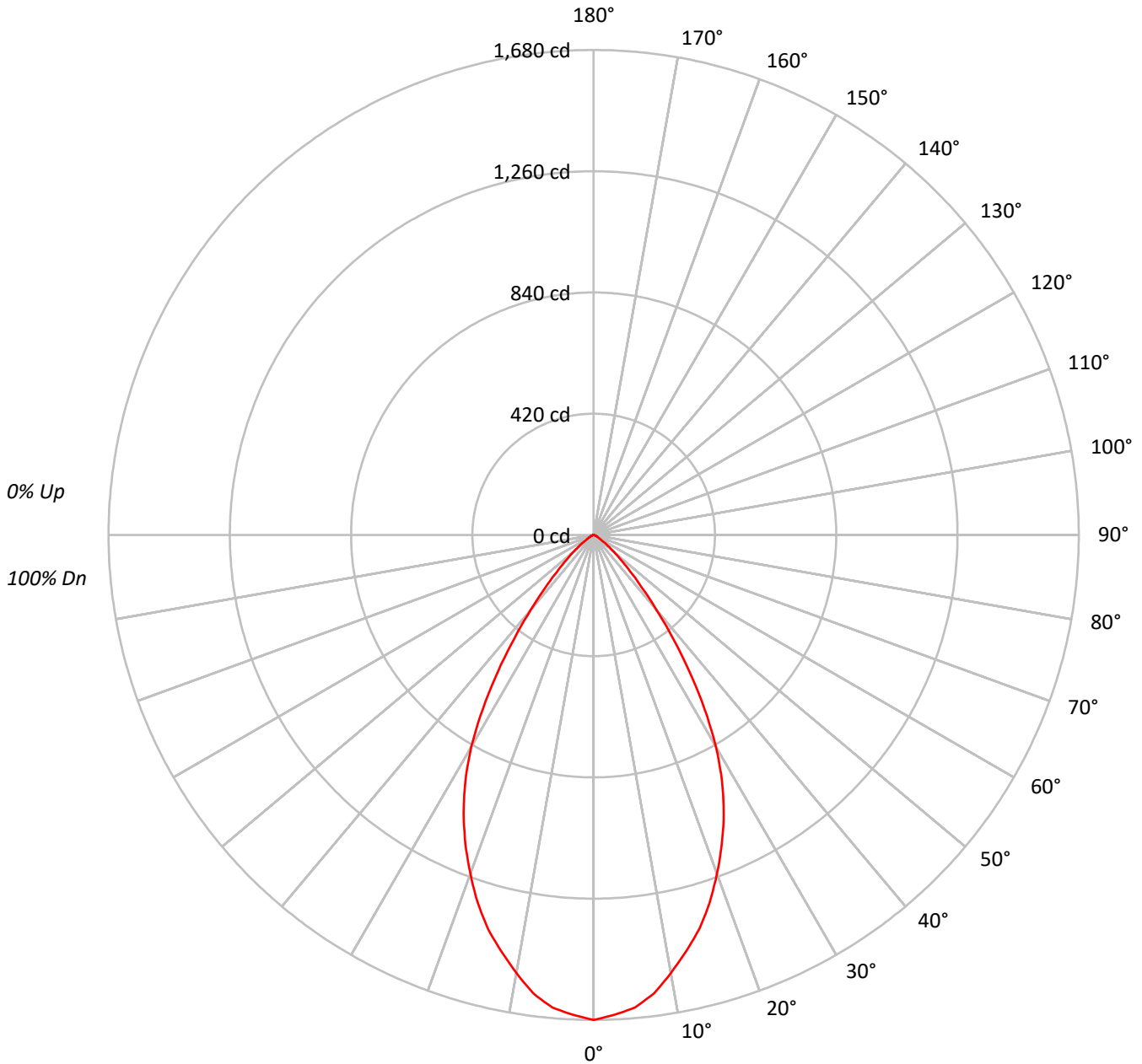
Lumens per Lamp: N/A  
Luminaire Lumens: 1597.7 lumens  
Efficiency: N/A  
Efficacy: 79.9 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.91  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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

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

	0°
0°	207233
5°	203468
10°	192995
15°	180461
20°	163893
25°	145038
30°	120622
35°	86988
40°	54295
45°	31311
50°	17673
55°	8408
60°	4835
65°	3677
70°	2488
75°	1620
80°	1634
85°	1557



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.6	9.6
10°-20°	394.2	24.7
20°-30°	484.9	30.3
30°-40°	360.1	22.5
40°-50°	146.4	9.2
50°-60°	40.5	2.5
60°-70°	12.6	0.8
70°-80°	4.2	0.3
80°-90°	1.2	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°	1032.7	64.6
0°-40°	1392.8	87.2
0°-60°	1579.7	98.9
0°-90°	1597.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1597.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1680	
5°	1643	154
15°	1413	394
25°	1066	485
35°	578	360
45°	180	146
55°	39	41
65°	13	13
75°	3	4
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1680.1
2.5°	1664.1
5°	1643.3
7.5°	1601.9
10°	1540.9
12.5°	1477.6
15°	1413.2
17.5°	1336.0
20°	1248.6
22.5°	1160.0
25°	1065.7
27.5°	963.3
30°	846.9
32.5°	714.7
35°	577.7
37.5°	448.8
40°	337.2
42.5°	246.3
45°	179.5
47.5°	128.9
50°	92.1
52.5°	63.3
55°	39.1
57.5°	25.3
60°	19.6
62.5°	16.1
65°	12.6
67.5°	9.2
70°	6.9
72.5°	5.7
75°	3.4
77.5°	2.3
80°	2.3
82.5°	1.1
85°	1.1
87.5°	1.1
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)