

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: P579982

Luminaire Tested: **HCC4W20D010BZ-HM40525827-41NDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579982  
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: HCC4W20D010BZ-HM40525827-41NDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

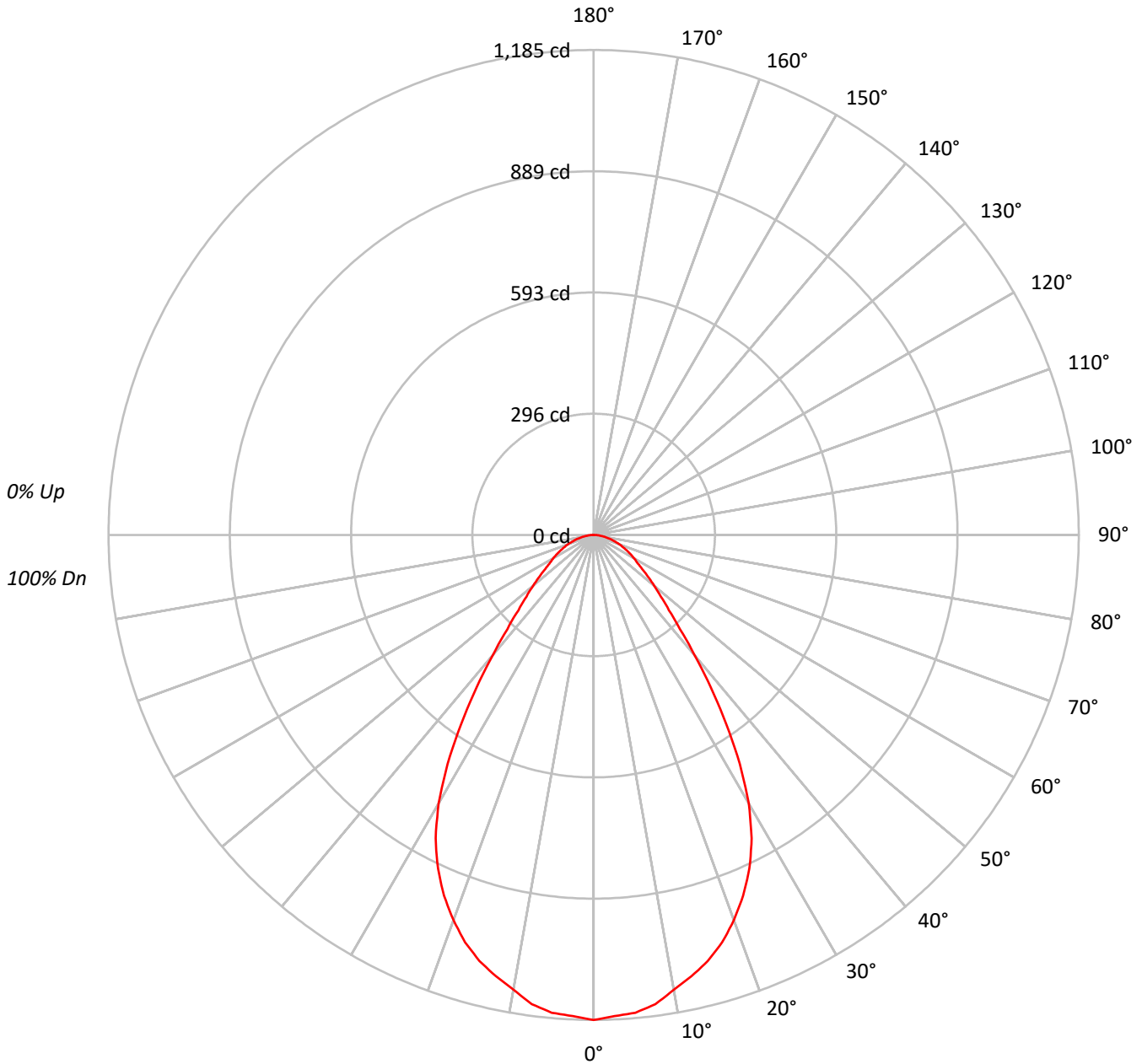
Lumens per Lamp: N/A  
Luminaire Lumens: 1664.0 lumens  
Efficiency: N/A  
Efficacy: 83.2 lumens/watt  
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1.01  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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



TEST NUMBER: P579982  
CATALOG NUMBER: HCC4W20D010BZ-HM40525827-41NDW

### Luminous Intensity Polar Plot





TEST NUMBER: P579982  
 CATALOG NUMBER: HCC4W20D010BZ-HM40525827-41NDW

**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
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°	146202
5°	145113
10°	141330
15°	137606
20°	131445
25°	122460
30°	107832
35°	85046
40°	61734
45°	45354
50°	36920
55°	30945
60°	28049
65°	25771
70°	23982
75°	21922
80°	19818
85°	16983



TEST NUMBER: P579982  
 CATALOG NUMBER: HCC4W20D010BZ-HM40525827-41NDW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.5	6.6
10°-20°	302.3	18.2
20°-30°	409.7	24.6
30°-40°	351.6	21.1
40°-50°	207.6	12.5
50°-60°	131.6	7.9
60°-70°	88.4	5.3
70°-80°	48.8	2.9
80°-90°	13.6	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°	822.5	49.4
0°-40°	1174.1	70.6
0°-60°	1513.2	90.9
0°-90°	1664.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1664.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1185	
5°	1172	111
15°	1078	302
25°	900	410
35°	565	352
45°	260	208
55°	144	132
65°	88	88
75°	46	49
85°	12	14
90°	0	



TEST NUMBER: P579982  
CATALOG NUMBER: HCC4W20D010BZ-HM40525827-41NDW

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1185.3
2.5°	1176.8
5°	1172.0
7.5°	1156.3
10°	1128.4
12.5°	1104.2
15°	1077.6
17.5°	1043.8
20°	1001.4
22.5°	954.3
25°	899.8
27.5°	835.7
30°	757.1
32.5°	664.0
35°	564.8
37.5°	469.2
40°	383.4
42.5°	312.1
45°	260.0
47.5°	222.5
50°	192.4
52.5°	166.9
55°	143.9
57.5°	125.8
60°	113.7
62.5°	101.6
65°	88.3
67.5°	77.4
70°	66.5
72.5°	55.6
75°	46.0
77.5°	36.2
80°	27.9
82.5°	19.4
85°	12.0
87.5°	4.8
90°	0.0

Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report





Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



— 0°-180°

Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)