

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: P580001

Luminaire Tested: **HCC4W20D010BZ-HM40525830-41PSMDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580001  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W20D010BZ-HM40525830-41PSMDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" PLASTIC TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

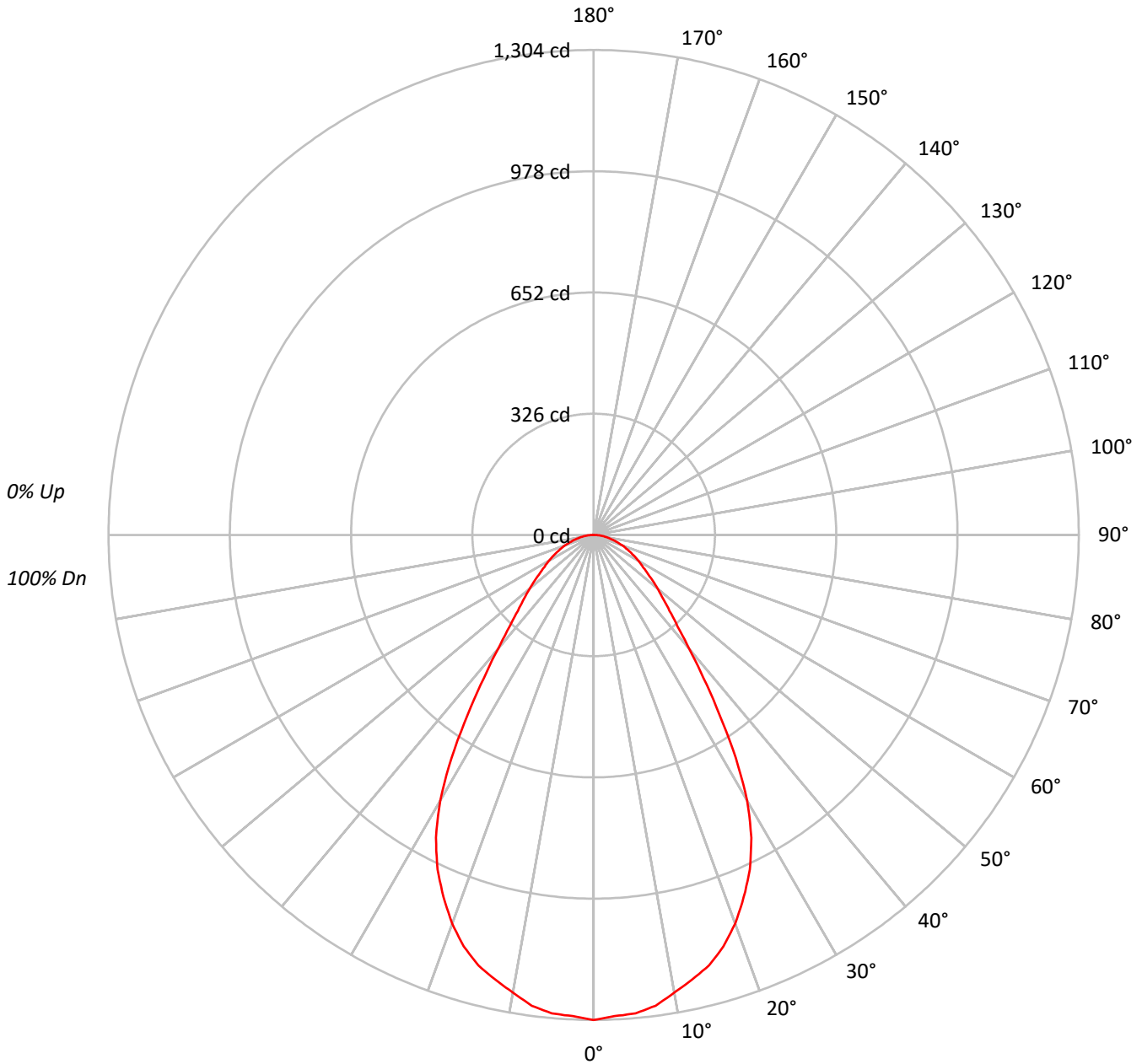
Lumens per Lamp: N/A  
Luminaire Lumens: 1852.2 lumens  
Efficiency: N/A  
Efficacy: 92.6 lumens/watt  
Spacing Criteria (0/90/45): 1.03 / 1.03 / 0.99  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P580001  
CATALOG NUMBER: HCC4W20D010BZ-HM40525830-41PSMDW

### Luminous Intensity Polar Plot





TEST NUMBER: P580001  
 CATALOG NUMBER: HCC4W20D010BZ-HM40525830-41PSMDW

**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	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	66	74	69	65	72	68	65	63
5	84	74	66	61	82	72	66	60	71	64	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

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

	0°
0°	160892
5°	159885
10°	156473
15°	153019
20°	145937
25°	135090
30°	117502
35°	88735
40°	64310
45°	50255
50°	42965
55°	37182
60°	34241
65°	31346
70°	29284
75°	26831
80°	25074
85°	24059



TEST NUMBER: P580001  
 CATALOG NUMBER: HCC4W20D010BZ-HM40525830-41PSMDW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.0	6.6
10°-20°	335.6	18.1
20°-30°	451.3	24.4
30°-40°	371.1	20.0
40°-50°	227.9	12.3
50°-60°	157.7	8.5
60°-70°	107.5	5.8
70°-80°	59.9	3.2
80°-90°	19.1	1.0
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°	908.9	49.1
0°-40°	1280.1	69.1
0°-60°	1665.7	89.9
0°-90°	1852.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1852.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1304	
5°	1291	122
15°	1198	336
25°	993	451
35°	589	371
45°	288	228
55°	173	158
65°	107	108
75°	56	60
85°	17	19
90°	0	



TEST NUMBER: P580001

CATALOG NUMBER: HCC4W20D010BZ-HM40525830-41PSMDW

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1304.4
2.5°	1295.2
5°	1291.3
7.5°	1276.8
10°	1249.3
12.5°	1224.4
15°	1198.3
17.5°	1160.3
20°	1111.8
22.5°	1054.2
25°	992.6
27.5°	918.1
30°	825.0
32.5°	711.1
35°	589.3
37.5°	484.5
40°	399.4
42.5°	333.9
45°	288.1
47.5°	252.8
50°	223.9
52.5°	197.7
55°	172.9
57.5°	154.5
60°	138.8
62.5°	123.1
65°	107.4
67.5°	94.3
70°	81.2
72.5°	68.1
75°	56.3
77.5°	44.5
80°	35.3
82.5°	26.2
85°	17.0
87.5°	9.2
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)