

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: P592665

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

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P592665  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-6)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S20D010BZ-HM40525850-41MDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

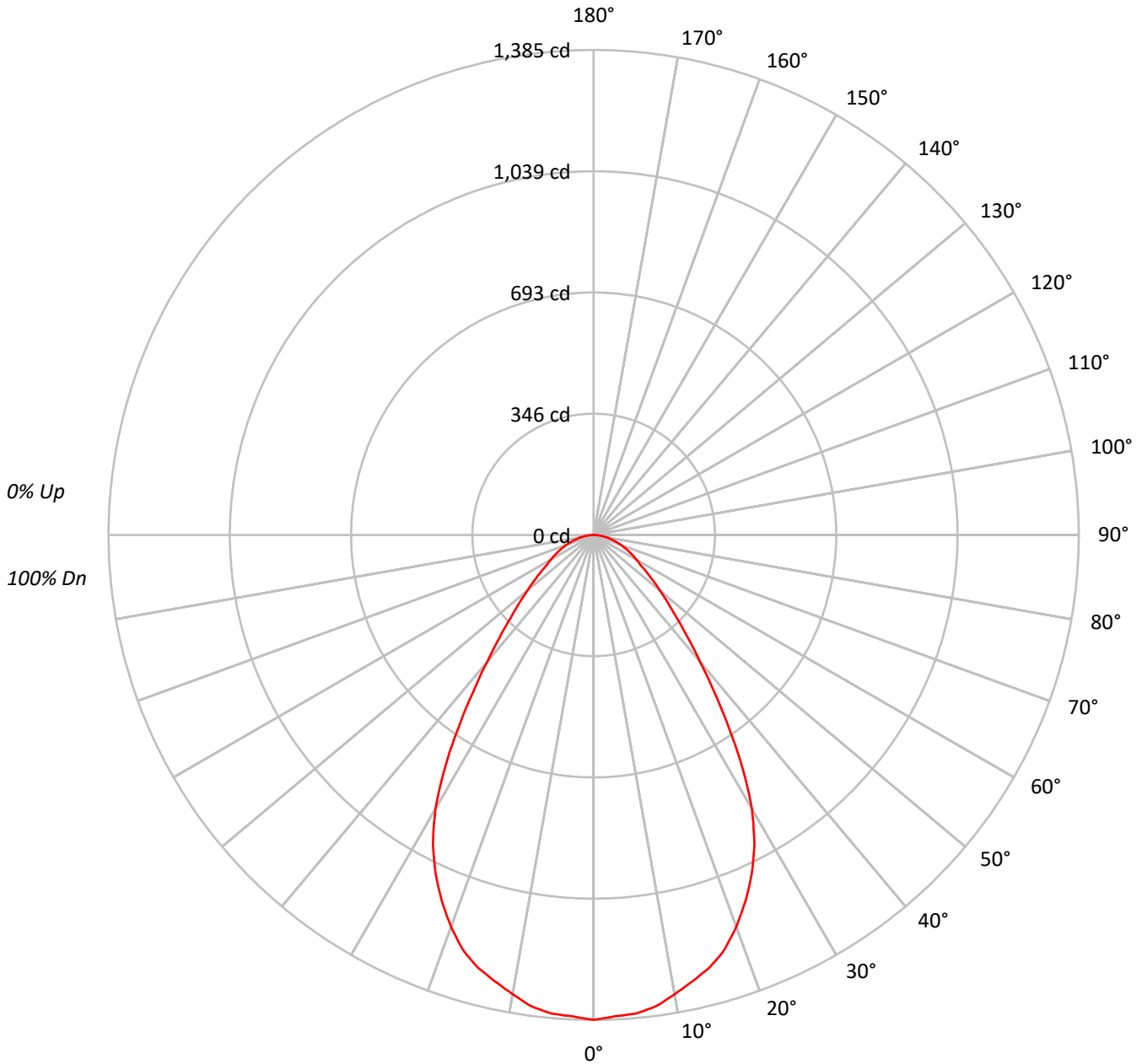
Lumens per Lamp: N/A  
Luminaire Lumens: 2014.8 lumens  
Efficiency: N/A  
Efficacy: 100.7 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.04 / 1.01  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P592665  
CATALOG NUMBER: HCC4S20D010BZ-HM40525850-41MDW

### Luminous Intensity Polar Plot





TEST NUMBER: P592665  
 CATALOG NUMBER: HCC4S20D010BZ-HM40525850-41MDW

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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																			
1	111	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89																			
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79																			
3	97	88	82	76	94	87	81	76	84	79	75	81	77	73	79	75	72	70																			
4	90	80	73	68	88	79	73	67	77	71	67	75	70	66	73	68	65	63																			
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57																			
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	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	46	42	52	46	42	51	46	42	40																			
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37																			

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

	0°
0°	170809
5°	169914
10°	166806
15°	163286
20°	156306
25°	145351
30°	128655
35°	101519
40°	75984
45°	58436
50°	47416
55°	39311
60°	34783
65°	32163
70°	29717
75°	27260
80°	24790
85°	19813



TEST NUMBER: P592665  
 CATALOG NUMBER: HCC4S20D010BZ-HM40525850-41MDW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.7	6.4
10°-20°	358.6	17.8
20°-30°	487.0	24.2
30°-40°	421.8	20.9
40°-50°	264.8	13.1
50°-60°	166.6	8.3
60°-70°	109.4	5.4
70°-80°	60.3	3.0
80°-90°	16.5	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°	975.3	48.4
0°-40°	1397.1	69.3
0°-60°	1828.5	90.8
0°-90°	2014.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2014.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1385	
5°	1372	130
15°	1279	359
25°	1068	487
35°	674	422
45°	335	265
55°	183	167
65°	110	109
75°	57	60
85°	14	17
90°	0	



TEST NUMBER: P592665  
CATALOG NUMBER: HCC4S20D010BZ-HM40525850-41MDW

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1384.8
2.5°	1376.4
5°	1372.3
7.5°	1358.3
10°	1331.8
12.5°	1305.3
15°	1278.7
17.5°	1242.4
20°	1190.8
22.5°	1132.2
25°	1068.0
27.5°	994.0
30°	903.3
32.5°	792.9
35°	674.2
37.5°	565.4
40°	471.9
42.5°	397.9
45°	335.0
47.5°	287.6
50°	247.1
52.5°	212.2
55°	182.8
57.5°	157.7
60°	141.0
62.5°	125.6
65°	110.2
67.5°	95.0
70°	82.4
72.5°	68.4
75°	57.2
77.5°	44.6
80°	34.9
82.5°	23.7
85°	14.0
87.5°	5.6
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)