

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: P592663

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

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P592663  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S20D010BZ-HM40525850-41NDC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

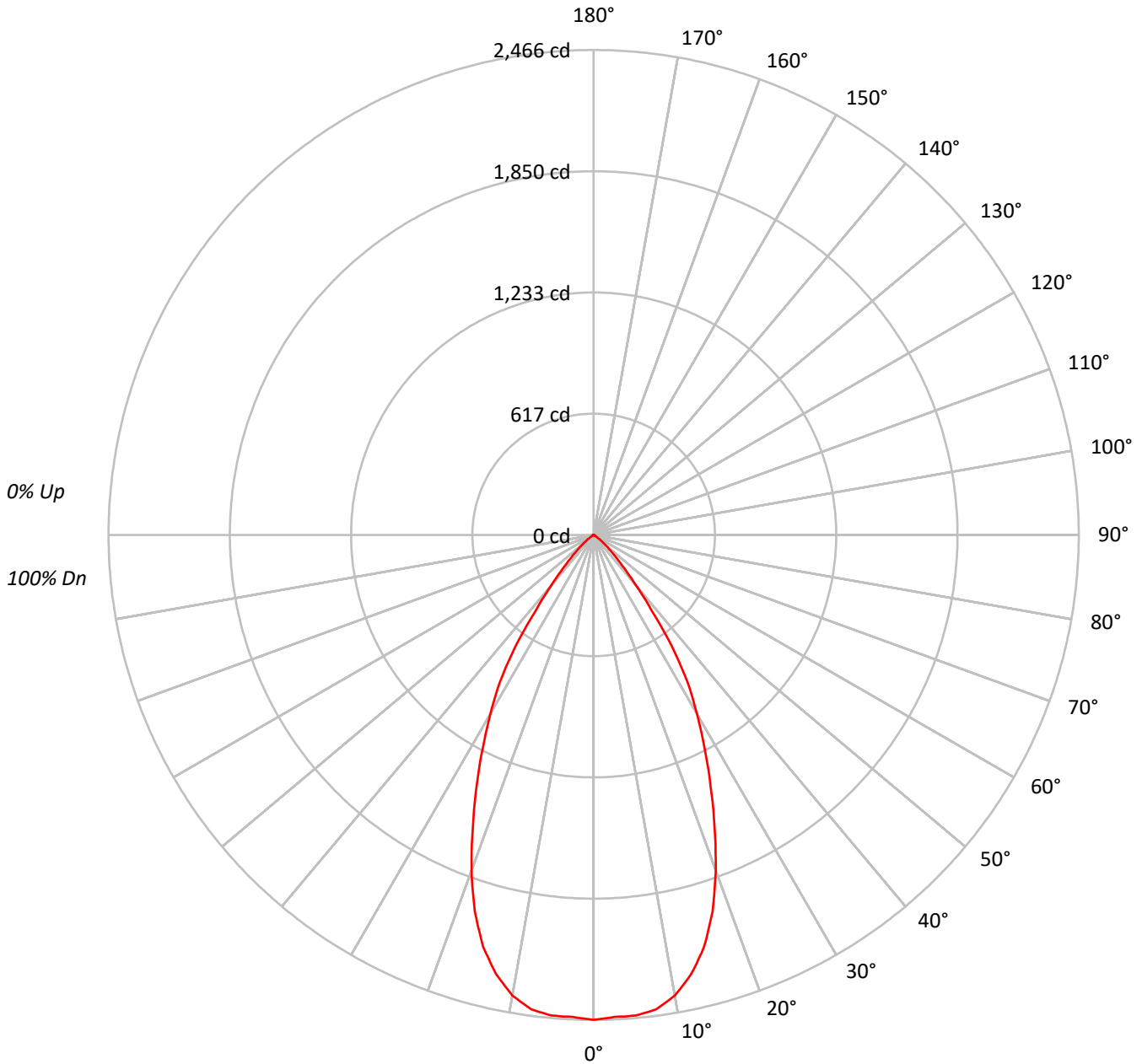
Lumens per Lamp: N/A  
Luminaire Lumens: 2065.0 lumens  
Efficiency: N/A  
Efficacy: 103.2 lumens/watt  
Spacing Criteria (0/90/45): 0.84 / 0.84 / 0.85  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P592663  
CATALOG NUMBER: HCC4S20D010BZ-HM40525850-41NDC

### Luminous Intensity Polar Plot



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



TEST NUMBER: P592663

CATALOG NUMBER: HCC4S20D010BZ-HM40525850-41NDC

**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
1	114	111	108	106	111	109	106	104	105	103	101	101	100	98	97	96	95	94			94
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	93	91	89	87			87
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	88	85	83	81			81
4	97	90	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76			76
5	93	84	79	74	91	83	78	74	82	77	73	80	76	73	78	75	72	71			71
6	88	79	73	69	87	78	73	69	77	72	68	75	71	68	74	70	67	66			66
7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63	62			62
8	80	70	64	60	78	70	64	60	69	64	60	68	63	60	67	62	59	58			58
9	76	66	61	57	75	66	60	57	65	60	56	64	59	56	63	59	56	55			55
10	72	63	57	53	71	62	57	53	62	57	53	61	56	53	60	56	53	51			51

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

	0°
0°	304146
5°	303760
10°	297841
15°	276936
20°	238187
25°	191339
30°	149378
35°	104591
40°	53667
45°	27247
50°	13644
55°	5097
60°	2072
65°	1634
70°	1010
75°	667
80°	994
85°	0



TEST NUMBER: P592663  
 CATALOG NUMBER: HCC4S20D010BZ-HM40525850-41NDC

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	232.0	11.2
10°-20°	598.7	29.0
20°-30°	644.9	31.2
30°-40°	423.7	20.5
40°-50°	131.7	6.4
50°-60°	25.8	1.3
60°-70°	5.5	0.3
70°-80°	2.0	0.1
80°-90°	0.6	0.0
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°	1475.5	71.5
0°-40°	1899.3	92.0
0°-60°	2056.9	99.6
0°-90°	2065.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2065.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2466	
5°	2453	232
15°	2169	599
25°	1406	645
35°	695	424
45°	156	132
55°	24	26
65°	6	5
75°	1	2
85°	0	1
90°	0	



TEST NUMBER: P592663  
CATALOG NUMBER: HCC4S20D010BZ-HM40525850-41NDC

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2465.8
2.5°	2453.3
5°	2453.3
7.5°	2433.8
10°	2378.0
12.5°	2288.7
15°	2168.7
17.5°	2008.4
20°	1814.6
22.5°	1605.3
25°	1405.9
27.5°	1220.4
30°	1048.8
32.5°	887.1
35°	694.6
37.5°	483.9
40°	333.3
42.5°	230.1
45°	156.2
47.5°	106.0
50°	71.1
52.5°	44.6
55°	23.7
57.5°	9.7
60°	8.4
62.5°	7.0
65°	5.6
67.5°	4.1
70°	2.8
72.5°	2.8
75°	1.4
77.5°	1.4
80°	1.4
82.5°	1.4
85°	0.0
87.5°	0.0
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)