

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: P579997

Luminaire Tested: **HCC4S20D010MB-HM40525830-41NDC**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579997  
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: HCC4S20D010MB-HM40525830-41NDC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

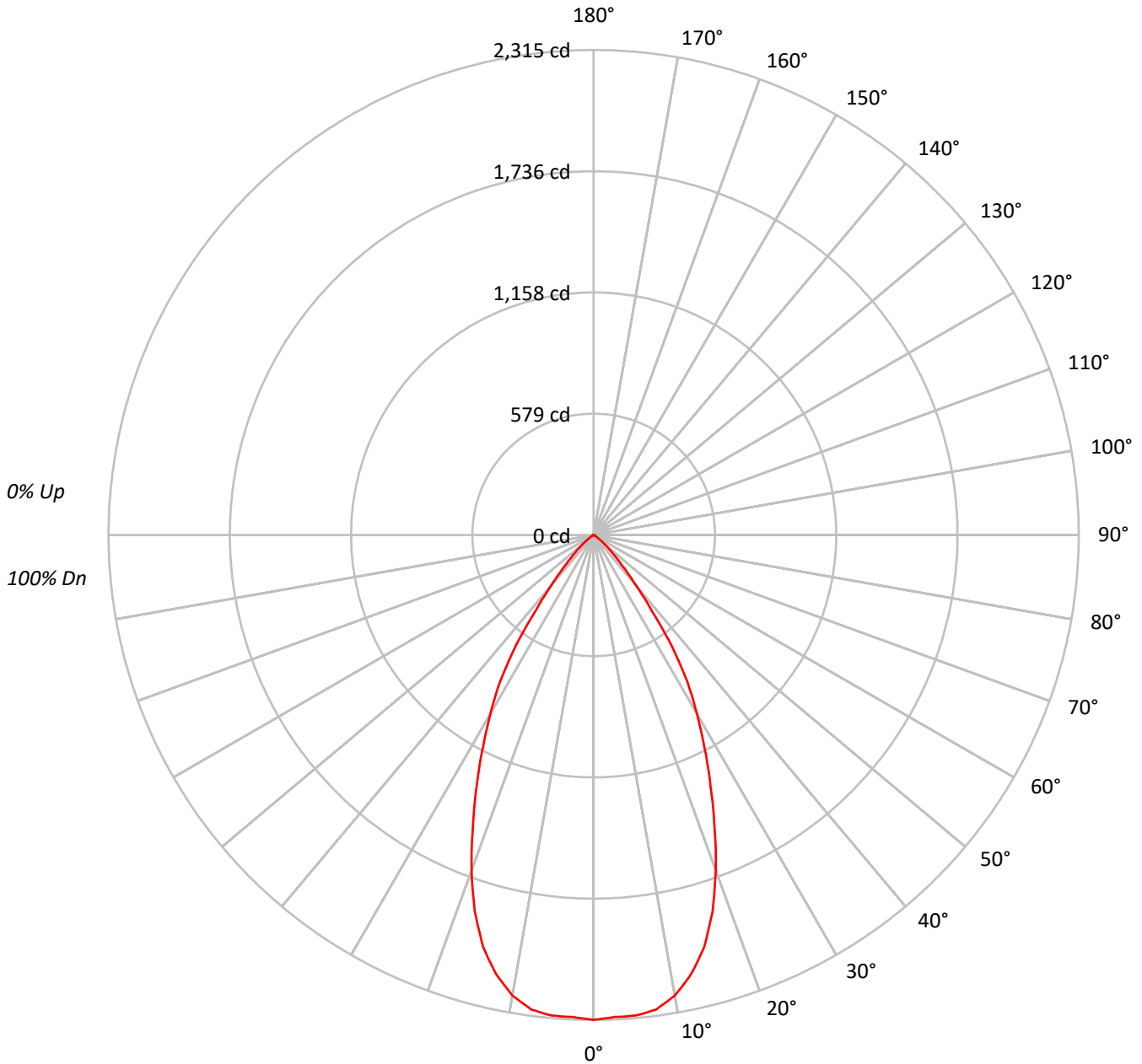
Lumens per Lamp: N/A  
Luminaire Lumens: 1938.7 lumens  
Efficiency: N/A  
Efficacy: 96.9 lumens/watt  
Spacing Criteria (0/90/45): 0.84 / 0.84 / 0.85  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P579997  
CATALOG NUMBER: HCC4S20D010MB-HM40525830-41NDC

### Luminous Intensity Polar Plot





TEST NUMBER: P579997  
 CATALOG NUMBER: HCC4S20D010MB-HM40525830-41NDC

**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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	114	111	108	106	111	109	106	104	105	103	101		101	100	98		97	96	95	94
2	108	103	99	96	106	101	98	95	98	95	93		95	93	91		93	91	89	87
3	103	96	91	87	101	95	90	87	92	88	85		90	87	84		88	85	83	81
4	97	90	85	80	96	89	84	80	87	82	79		85	81	78		83	80	77	76
5	93	84	79	74	91	83	78	74	82	77	73		80	76	73		78	75	72	71
6	88	79	73	69	87	78	73	69	77	72	68		75	71	68		74	70	67	66
7	84	75	69	64	82	74	68	64	73	68	64		71	67	64		70	66	63	62
8	80	70	64	60	78	70	64	60	69	64	60		68	63	60		67	62	59	58
9	76	66	61	57	75	66	60	57	65	60	56		64	59	56		63	59	56	55
10	72	63	57	53	71	62	57	53	62	57	53		61	56	53		60	56	53	51

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

	0°
0°	285545
5°	285175
10°	279617
15°	260016
20°	223604
25°	179634
30°	140248
35°	98191
40°	50382
45°	25590
50°	12818
55°	4796
60°	1924
65°	1547
70°	938
75°	620
80°	923
85°	0



TEST NUMBER: P579997  
 CATALOG NUMBER: HCC4S20D010MB-HM40525830-41NDC

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	217.8	11.2
10°-20°	562.0	29.0
20°-30°	605.5	31.2
30°-40°	397.8	20.5
40°-50°	123.7	6.4
50°-60°	24.3	1.3
60°-70°	5.2	0.3
70°-80°	1.9	0.1
80°-90°	0.5	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°	1385.3	71.5
0°-40°	1783.1	92.0
0°-60°	1931.1	99.6
0°-90°	1938.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1938.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2315	
5°	2303	218
15°	2036	562
25°	1320	605
35°	652	398
45°	147	124
55°	22	24
65°	5	5
75°	1	2
85°	0	1
90°	0	



TEST NUMBER: P579997  
CATALOG NUMBER: HCC4S20D010MB-HM40525830-41NDC

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2315.0
2.5°	2303.2
5°	2303.2
7.5°	2284.9
10°	2232.5
12.5°	2148.7
15°	2036.2
17.5°	1885.6
20°	1703.5
22.5°	1507.2
25°	1319.9
27.5°	1145.7
30°	984.7
32.5°	832.7
35°	652.1
37.5°	454.3
40°	312.9
42.5°	216.1
45°	146.7
47.5°	99.6
50°	66.8
52.5°	41.9
55°	22.3
57.5°	9.2
60°	7.8
62.5°	6.5
65°	5.3
67.5°	3.9
70°	2.6
72.5°	2.6
75°	1.3
77.5°	1.3
80°	1.3
82.5°	1.3
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)