

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: P592674

Luminaire Tested: **HCC4W20D010SL-HM40525950-41WDBB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P592674  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-11)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W20D010SL-HM40525950-41WDBB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

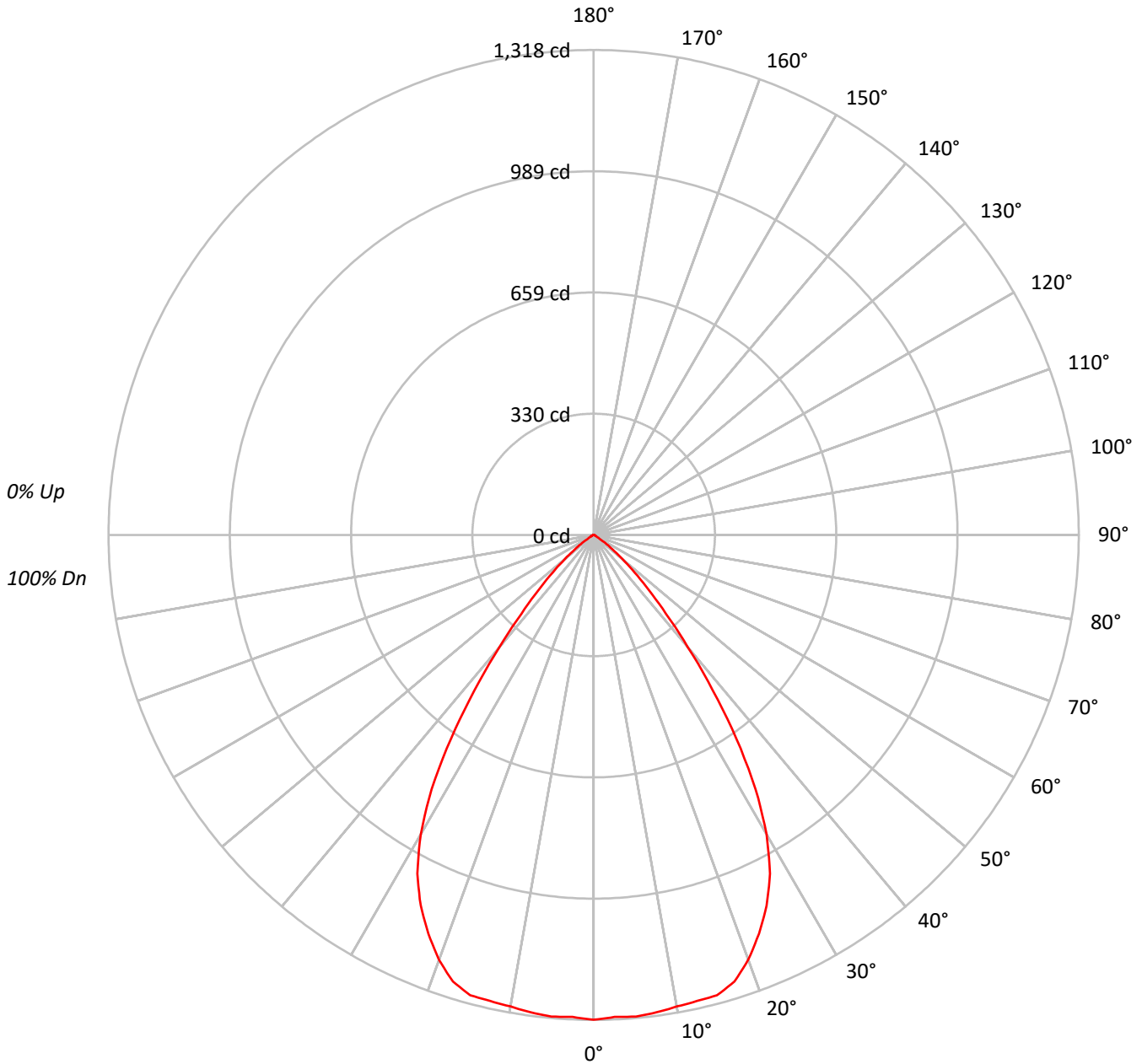
Lumens per Lamp: N/A  
Luminaire Lumens: 1629.7 lumens  
Efficiency: N/A  
Efficacy: 81.5 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.03  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P592674  
CATALOG NUMBER: HCC4W20D010SL-HM40525950-41WDBB

### Luminous Intensity Polar Plot





TEST NUMBER: P592674  
 CATALOG NUMBER: HCC4W20D010SL-HM40525950-41WDBB

**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	100	100
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93	93	93	93
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80	78	78	78	78
4	95	87	81	77	93	86	80	76	84	79	75	82	78	74	80	76	73	72	72	72	72
5	90	81	75	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66	66	66	66
6	85	75	69	64	83	74	68	64	73	67	63	71	67	63	70	66	62	61	61	61	61
7	80	70	64	59	79	69	63	59	68	63	59	67	62	58	66	61	58	56	56	56	56
8	76	65	59	55	74	65	59	54	64	58	54	63	58	54	62	57	54	52	52	52	52
9	72	61	55	51	71	61	55	51	60	54	50	59	54	50	58	53	50	49	49	49	49
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45	45	45	45

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

	0°
0°	162520
5°	162683
10°	162986
15°	165367
20°	161242
25°	151299
30°	133810
35°	101760
40°	64101
45°	36806
50°	19515
55°	8107
60°	2171
65°	1839
70°	1370
75°	1191
80°	923
85°	1840



TEST NUMBER: P592674  
 CATALOG NUMBER: HCC4W20D010SL-HM40525950-41WDBB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.0	7.7
10°-20°	362.6	22.3
20°-30°	506.1	31.1
30°-40°	416.4	25.6
40°-50°	171.5	10.5
50°-60°	38.6	2.4
60°-70°	6.2	0.4
70°-80°	2.3	0.1
80°-90°	0.9	0.1
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°	993.6	61.0
0°-40°	1410.1	86.5
0°-60°	1620.2	99.4
0°-90°	1629.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1629.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1318	
5°	1314	125
15°	1295	363
25°	1112	506
35°	676	416
45°	211	172
55°	38	39
65°	6	6
75°	2	2
85°	1	1
90°	0	



TEST NUMBER: P592674  
CATALOG NUMBER: HCC4W20D010SL-HM40525950-41WDBB

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1317.6
2.5°	1311.4
5°	1313.9
7.5°	1308.8
10°	1301.3
12.5°	1297.5
15°	1295.0
17.5°	1272.4
20°	1228.4
22.5°	1173.2
25°	1111.7
27.5°	1037.5
30°	939.5
32.5°	819.0
35°	675.8
37.5°	531.3
40°	398.1
42.5°	290.2
45°	211.0
47.5°	150.7
50°	101.7
52.5°	64.0
55°	37.7
57.5°	18.8
60°	8.8
62.5°	7.6
65°	6.3
67.5°	5.0
70°	3.8
72.5°	2.5
75°	2.5
77.5°	1.3
80°	1.3
82.5°	1.3
85°	1.3
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)