

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: P580060

Luminaire Tested: **HCC4W20D010MW-HM40525930-41NDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580060  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W20D010MW-HM40525930-41NDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

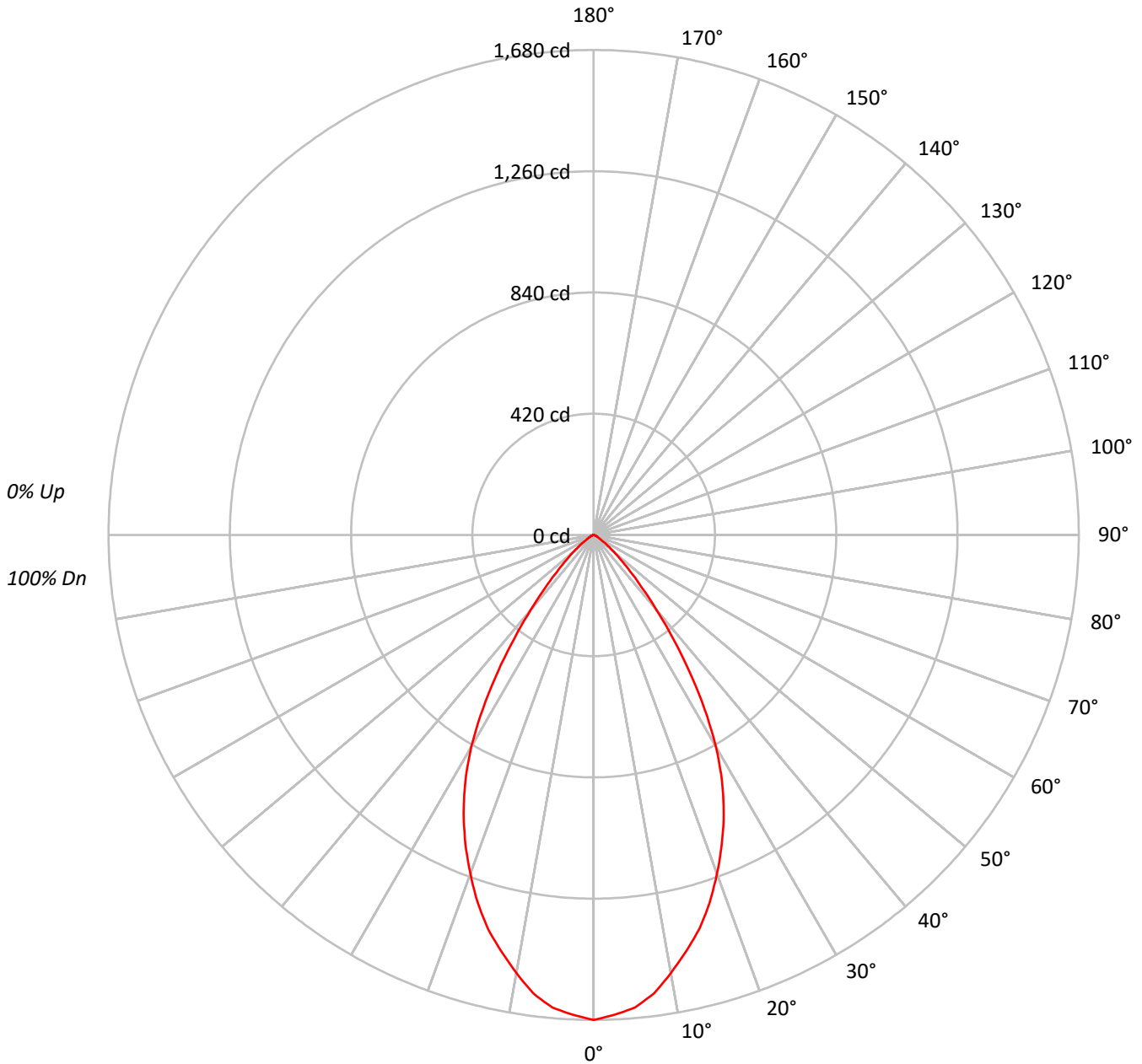
Lumens per Lamp: N/A  
Luminaire Lumens: 1597.7 lumens  
Efficiency: N/A  
Efficacy: 79.9 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.91  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P580060  
CATALOG NUMBER: HCC4W20D010MW-HM40525930-41NDH

### Luminous Intensity Polar Plot





TEST NUMBER: P580060

CATALOG NUMBER: HCC4W20D010MW-HM40525930-41NDH

**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	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93	93	93	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86	86	86	86
3	101	95	89	85	99	93	88	84	91	86	83	88	85	82	86	83	81	79	79	79	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	74	73	73	73	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67	67	67	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	63	63	63	63
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58	58	58	58
8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54	54	54	54
9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51	51	51	51
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	48	48	48	48

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

	0°
0°	207233
5°	203468
10°	192995
15°	180461
20°	163893
25°	145038
30°	120622
35°	86988
40°	54295
45°	31311
50°	17673
55°	8408
60°	4835
65°	3677
70°	2488
75°	1620
80°	1634
85°	1557



TEST NUMBER: P580060  
 CATALOG NUMBER: HCC4W20D010MW-HM40525930-41NDH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.6	9.6
10°-20°	394.2	24.7
20°-30°	484.9	30.3
30°-40°	360.1	22.5
40°-50°	146.4	9.2
50°-60°	40.5	2.5
60°-70°	12.6	0.8
70°-80°	4.2	0.3
80°-90°	1.2	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°	1032.7	64.6
0°-40°	1392.8	87.2
0°-60°	1579.7	98.9
0°-90°	1597.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1597.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1680	
5°	1643	154
15°	1413	394
25°	1066	485
35°	578	360
45°	180	146
55°	39	41
65°	13	13
75°	3	4
85°	1	1
90°	0	



TEST NUMBER: P580060  
CATALOG NUMBER: HCC4W20D010MW-HM40525930-41NDH

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1680.1
2.5°	1664.1
5°	1643.3
7.5°	1601.9
10°	1540.9
12.5°	1477.6
15°	1413.2
17.5°	1336.0
20°	1248.6
22.5°	1160.0
25°	1065.7
27.5°	963.3
30°	846.9
32.5°	714.7
35°	577.7
37.5°	448.8
40°	337.2
42.5°	246.3
45°	179.5
47.5°	128.9
50°	92.1
52.5°	63.3
55°	39.1
57.5°	25.3
60°	19.6
62.5°	16.1
65°	12.6
67.5°	9.2
70°	6.9
72.5°	5.7
75°	3.4
77.5°	2.3
80°	2.3
82.5°	1.1
85°	1.1
87.5°	1.1
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)