

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: P580013

Luminaire Tested: **HCC4W20D010MW-HM40525835-41MDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580013  
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: HCC4W20D010MW-HM40525835-41MDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

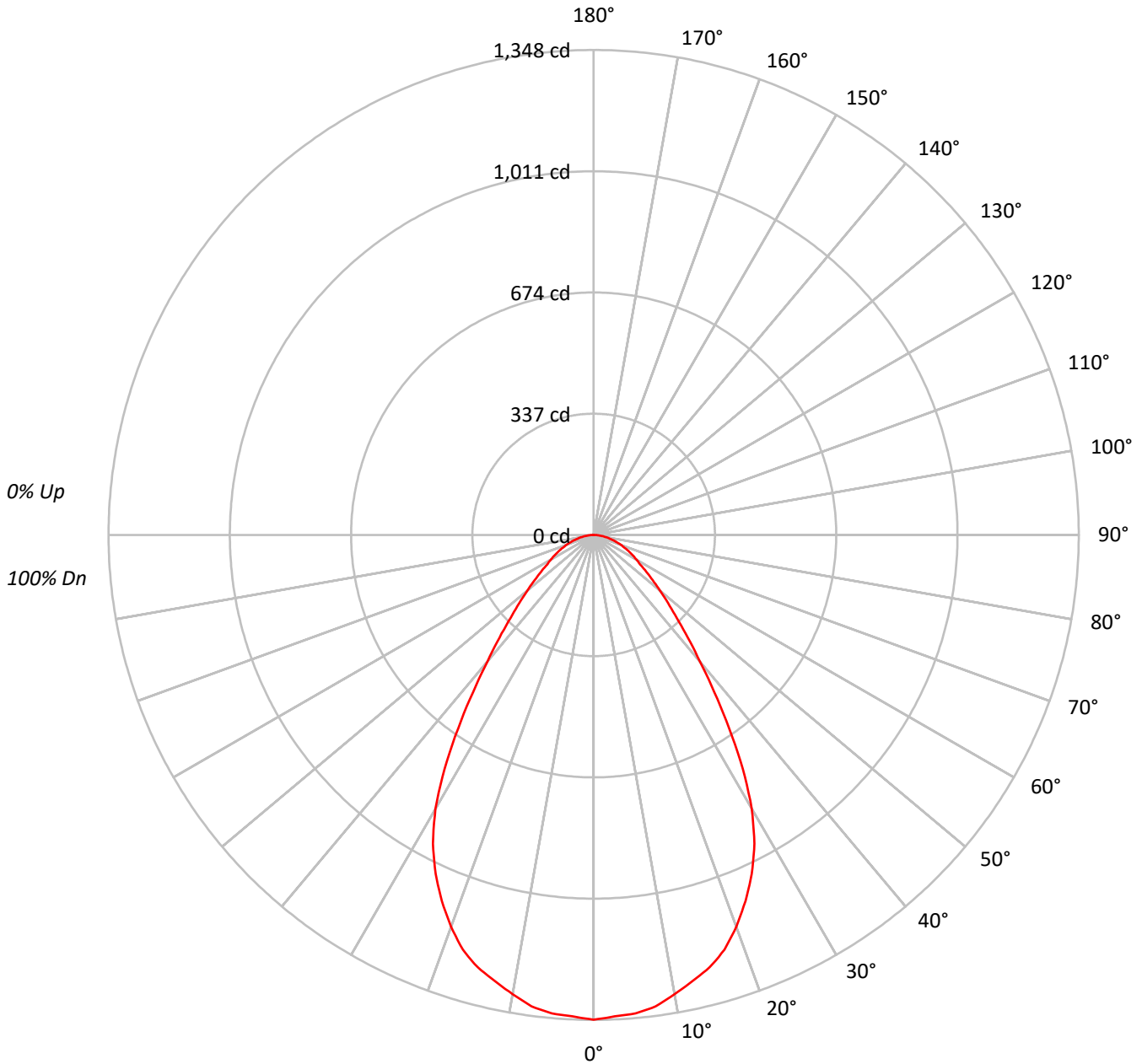
Lumens per Lamp: N/A  
Luminaire Lumens: 1960.6 lumens  
Efficiency: N/A  
Efficacy: 98.0 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.04 / 1.01  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P580013  
CATALOG NUMBER: HCC4W20D010MW-HM40525835-41MDW

### Luminous Intensity Polar Plot





TEST NUMBER: P580013  
 CATALOG NUMBER: HCC4W20D010MW-HM40525835-41MDW

**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	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°	166221
5°	165333
10°	162322
15°	158906
20°	152106
25°	141432
30°	125179
35°	98809
40°	73923
45°	56866
50°	46131
55°	38278
60°	33846
65°	31346
70°	28923
75°	26545
80°	24151
85°	19106



TEST NUMBER: P580013  
 CATALOG NUMBER: HCC4W20D010MW-HM40525835-41MDW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.2	6.4
10°-20°	349.0	17.8
20°-30°	473.8	24.2
30°-40°	410.5	20.9
40°-50°	257.7	13.1
50°-60°	162.1	8.3
60°-70°	106.5	5.4
70°-80°	58.7	3.0
80°-90°	16.0	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°	949.1	48.4
0°-40°	1359.5	69.3
0°-60°	1779.3	90.8
0°-90°	1960.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1960.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1348	
5°	1335	126
15°	1244	349
25°	1039	474
35°	656	410
45°	326	258
55°	178	162
65°	107	107
75°	56	59
85°	14	16
90°	0	



TEST NUMBER: P580013  
CATALOG NUMBER: HCC4W20D010MW-HM40525835-41MDW

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1347.6
2.5°	1339.5
5°	1335.3
7.5°	1321.8
10°	1296.0
12.5°	1270.2
15°	1244.4
17.5°	1209.1
20°	1158.8
22.5°	1101.7
25°	1039.2
27.5°	967.3
30°	878.9
32.5°	771.6
35°	656.2
37.5°	550.2
40°	459.1
42.5°	387.1
45°	326.0
47.5°	279.9
50°	240.4
52.5°	206.5
55°	178.0
57.5°	153.5
60°	137.2
62.5°	122.3
65°	107.4
67.5°	92.3
70°	80.2
72.5°	66.5
75°	55.7
77.5°	43.5
80°	34.0
82.5°	23.1
85°	13.5
87.5°	5.4
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)