

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: P579984

Luminaire Tested: **HCC4W20D010MW-HM40525827-41WDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579984  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W20D010MW-HM40525827-41WDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

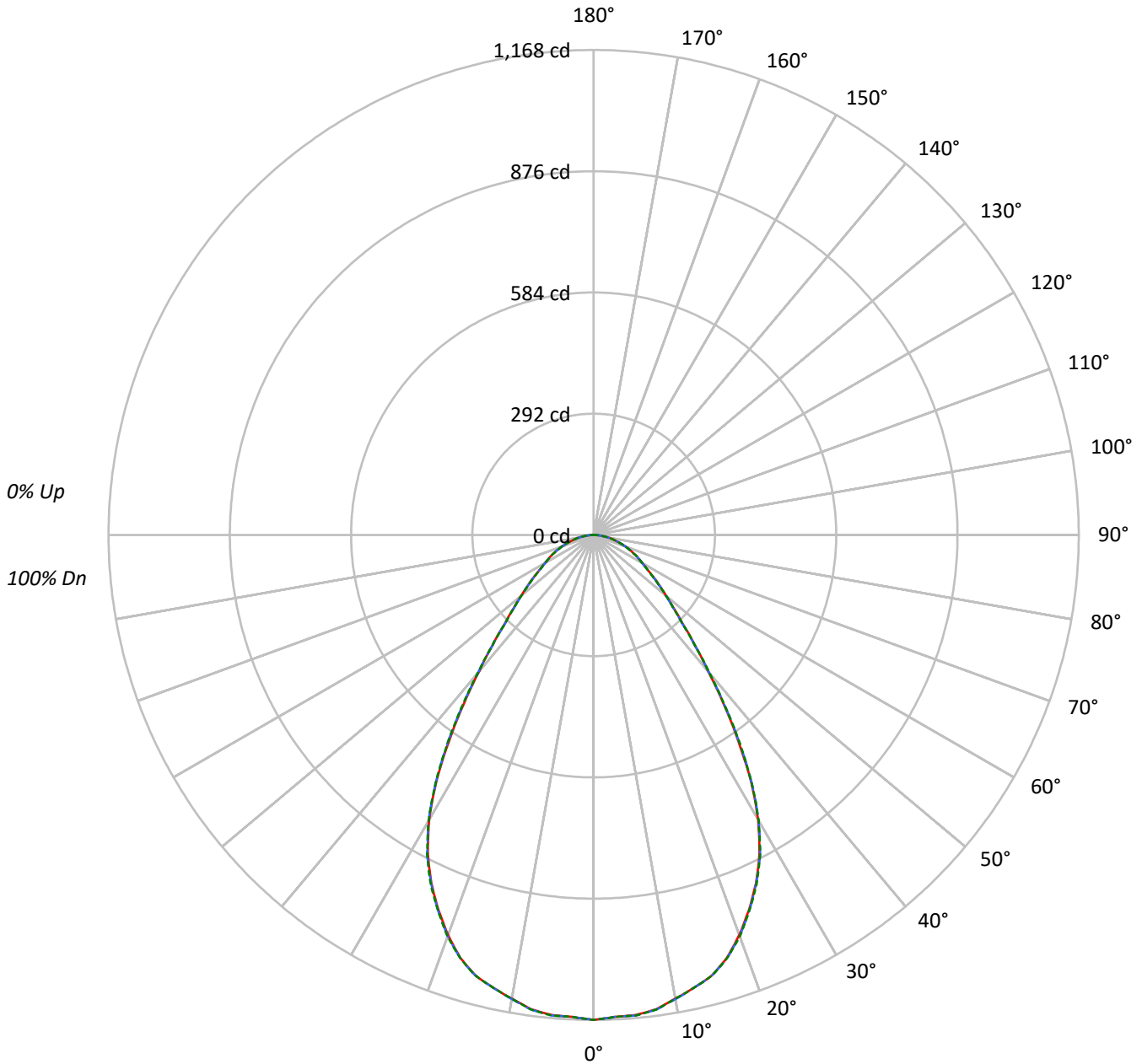
Lumens per Lamp: N/A  
Luminaire Lumens: 1802.0 lumens  
Efficiency: N/A  
Efficacy: 90.1 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.07 / 1.04  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P579984  
CATALOG NUMBER: HCC4W20D010MW-HM40525827-41WDW

### Luminous Intensity Polar Plot



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



TEST NUMBER: P579984

CATALOG NUMBER: HCC4W20D010MW-HM40525827-41WDW

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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																			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89																			
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78																			
3	96	87	81	76	94	86	80	75	83	78	74	81	76	72	78	74	71	69																			
4	90	80	72	67	87	78	72	66	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51																			
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46																			
8	69	57	50	45	68	57	50	45	55	49	45	54	49	44	53	48	44	42																			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39																			
10	61	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36																			

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

	0°	45°	90°
0°	144068	144068	144068
5°	143702	143863	143863
10°	142032	142195	142032
15°	140352	140352	140352
20°	134583	134898	135055
25°	125876	126039	126366
30°	112788	113130	113130
35°	91566	92304	92485
40°	69108	69495	69704
45°	52942	52715	52715
50°	43617	43387	43387
55°	37440	37182	37182
60°	33427	33106	33106
65°	31404	31404	31404
70°	29212	29212	29212
75°	26497	27069	26497
80°	24932	24009	24932
85°	20521	20521	20521



TEST NUMBER: P579984  
 CATALOG NUMBER: HCC4W20D010MW-HM40525827-41WDW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.0	6.1
10°-20°	308.0	17.1
20°-30°	423.1	23.5
30°-40°	380.5	21.1
40°-50°	240.4	13.3
50°-60°	157.0	8.7
60°-70°	106.3	5.9
70°-80°	59.8	3.3
80°-90°	16.8	0.9
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°	841.1	46.7
0°-40°	1221.6	67.8
0°-60°	1619.0	89.8
0°-90°	1802.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1802.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1168	1168	1168	1168	1168	
5°	1161	1161	1162	1162	1162	110
15°	1099	1099	1099	1099	1099	308
25°	925	926	926	928	928	422
35°	608	610	613	615	614	379
45°	304	302	302	302	302	241
55°	174	174	173	174	173	158
65°	108	108	108	108	108	107
75°	56	57	57	57	56	60
85°	14	14	14	14	14	17
90°	0	0	0	0	0	



TEST NUMBER: P579984

CATALOG NUMBER: HCC4W20D010MW-HM40525827-41WDW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1168.0	1168.0	1168.0	1168.0	1168.0
2.5°	1161.9	1161.9	1161.9	1161.9	1161.9
5°	1160.6	1160.6	1161.9	1161.9	1161.9
7.5°	1152.3	1153.4	1153.4	1153.4	1153.4
10°	1134.0	1134.0	1135.3	1135.3	1134.0
12.5°	1117.2	1117.2	1117.2	1118.3	1117.2
15°	1099.1	1099.1	1099.1	1099.1	1099.1
17.5°	1067.6	1068.8	1068.8	1068.8	1068.8
20°	1025.3	1027.7	1027.7	1028.9	1028.9
22.5°	976.9	978.2	979.3	980.6	979.3
25°	924.9	926.1	926.1	928.5	928.5
27.5°	864.5	865.6	868.0	868.0	868.0
30°	791.9	793.2	794.3	794.3	794.3
32.5°	706.1	706.1	708.5	709.8	708.5
35°	608.1	610.5	613.0	615.4	614.2
37.5°	515.0	517.5	518.7	518.7	519.9
40°	429.2	431.6	431.6	434.0	432.9
42.5°	361.5	360.3	360.3	362.7	361.5
45°	303.5	302.2	302.2	302.2	302.2
47.5°	261.2	259.9	259.9	259.9	259.9
50°	227.3	226.1	226.1	226.1	226.1
52.5°	199.5	198.3	198.3	198.3	197.1
55°	174.1	174.1	172.9	174.1	172.9
57.5°	151.2	151.2	151.2	151.2	151.2
60°	135.5	134.2	134.2	134.2	134.2
62.5°	120.9	120.9	120.9	120.9	120.9
65°	107.6	107.6	107.6	107.6	107.6
67.5°	94.3	93.1	94.3	94.3	93.1
70°	81.0	79.8	81.0	81.0	81.0
72.5°	67.7	67.7	67.7	68.9	67.7
75°	55.6	56.8	56.8	56.8	55.6
77.5°	44.7	46.0	44.7	44.7	44.7
80°	35.1	33.8	33.8	33.8	35.1
82.5°	24.2	24.2	24.2	24.2	24.2
85°	14.5	14.5	14.5	14.5	14.5
87.5°	6.1	6.1	6.1	6.1	6.1
90°	0.0	0.0	0.0	0.0	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°    - - 45°-225°    - - - - 90°-270°

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)