

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: P580451

Luminaire Tested: **HCC4W35D010MW-HM43040835-41WWW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580451  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-16)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W35D010MW-HM43040835-41WWW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

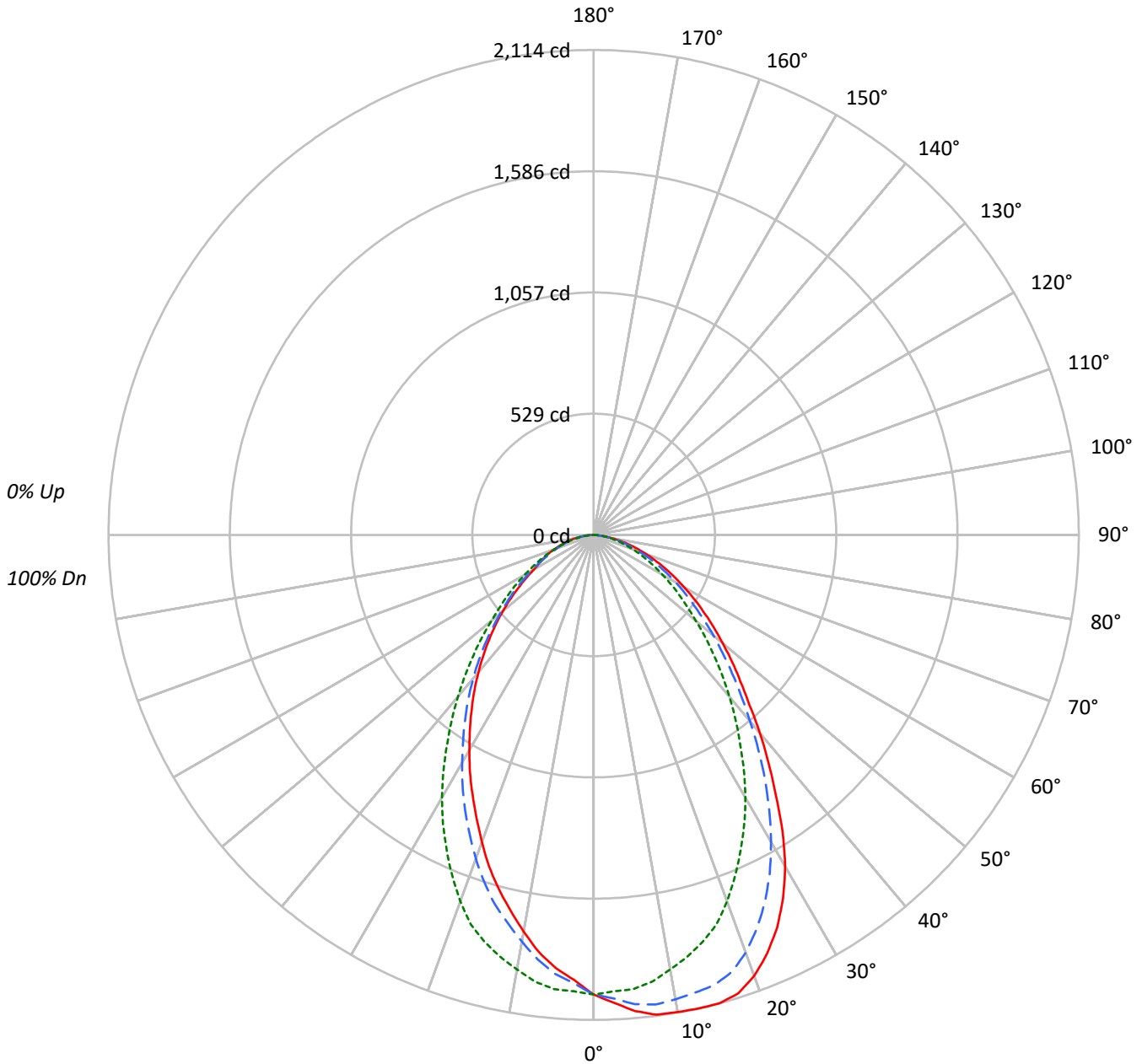
Lumens per Lamp: N/A  
Luminaire Lumens: 3577.6 lumens  
Efficiency: N/A  
Efficacy: 106.2 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.03 / 1.1  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.7  
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: P580451  
CATALOG NUMBER: HCC4W35D010MW-HM43040835-41WWW

### Luminous Intensity Polar Plot



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



TEST NUMBER: P580451

CATALOG NUMBER: HCC4W35D010MW-HM43040835-41WWW

**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	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			
1	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87					87			
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76					76			
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66					66			
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58					58			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52					52			
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47					47			
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42					42			
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38					38			
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35					35			
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32					32			

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

	0°	90°	180°
0°	247111	247111	247111
5°	257985	246012	234633
10°	264500	240890	219924
15°	269964	234464	204059
20°	268535	223066	186851
25°	257250	206255	170012
30°	237668	188332	154092
35°	208324	167502	139480
40°	181401	148006	125625
45°	157866	129083	112250
50°	140657	111259	99035
55°	125695	97825	85653
60°	112220	85454	73835
65°	99758	74979	70163
70°	87563	64626	65456
75°	74154	54996	60620
80°	56897	46881	55263
85°	33399	36796	46703



TEST NUMBER: P580451  
 CATALOG NUMBER: HCC4W35D010MW-HM43040835-41WWW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.8	5.2
10°-20°	518.0	14.5
20°-30°	707.7	19.8
30°-40°	710.6	19.9
40°-50°	587.9	16.4
50°-60°	426.0	11.9
60°-70°	269.8	7.5
70°-80°	136.4	3.8
80°-90°	33.4	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°	1413.5	39.5
0°-40°	2124.1	59.4
0°-60°	3138.0	87.7
0°-90°	3577.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3577.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2003	2003	2003	2003	2003	
5°	2084	2053	1987	1921	1895	200
15°	2114	2032	1836	1666	1598	595
25°	1890	1765	1516	1325	1249	864
35°	1384	1301	1112	976	926	867
45°	905	853	740	667	644	704
55°	584	533	455	415	398	526
65°	342	304	257	231	240	340
75°	156	134	115	120	127	166
85°	24	24	26	31	33	33
90°	0	0	0	0	0	

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



TEST NUMBER: P580451

CATALOG NUMBER: HCC4W35D010MW-HM43040835-41WWW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2003.4	2003.4	2003.4	2003.4	2003.4	2003.4	2003.4	2003.4	2003.4
2.5°	2041.1	2034.0	2022.3	2008.1	1991.6	1972.7	1956.2	1946.9	1942.2
5°	2083.6	2074.1	2052.9	2022.3	1986.9	1951.5	1920.9	1902.0	1895.0
7.5°	2109.4	2095.4	2064.7	2017.6	1963.3	1911.5	1866.7	1840.8	1833.7
10°	2111.8	2095.4	2055.2	1991.6	1923.3	1854.9	1800.6	1763.0	1755.9
12.5°	2114.1	2093.0	2043.4	1968.0	1883.1	1798.3	1732.3	1687.6	1675.8
15°	2114.1	2093.0	2031.6	1942.2	1836.1	1739.4	1666.3	1614.5	1598.0
17.5°	2095.4	2071.8	1998.7	1895.0	1779.5	1671.1	1586.2	1532.0	1515.5
20°	2045.8	2019.9	1937.4	1824.3	1699.4	1586.2	1501.3	1444.8	1423.5
22.5°	1975.1	1944.5	1857.3	1734.7	1609.8	1494.2	1411.9	1352.8	1334.1
25°	1890.2	1859.7	1765.4	1645.2	1515.5	1407.1	1324.6	1270.3	1249.2
27.5°	1786.6	1753.6	1661.6	1541.5	1421.2	1312.8	1237.4	1187.8	1166.7
30°	1668.7	1633.4	1546.2	1430.6	1322.3	1218.5	1145.5	1105.5	1081.9
32.5°	1532.0	1501.3	1423.5	1319.9	1218.5	1119.5	1058.2	1023.0	1004.1
35°	1383.5	1367.0	1301.0	1211.4	1112.4	1030.0	975.7	942.8	926.3
37.5°	1251.6	1235.1	1178.5	1103.1	1015.9	940.5	895.6	867.4	853.2
40°	1126.6	1112.4	1058.2	994.6	919.2	853.2	815.5	794.3	780.2
42.5°	1004.1	997.0	952.3	893.2	827.3	770.7	740.0	723.6	711.8
45°	905.0	895.6	853.2	796.7	740.0	692.9	667.0	655.2	643.5
47.5°	817.8	806.0	761.3	711.8	659.9	617.5	593.9	582.1	577.4
50°	733.0	721.3	681.1	631.7	579.8	549.2	530.3	518.5	516.1
52.5°	657.5	645.9	601.0	553.9	513.8	487.9	471.4	459.6	454.9
55°	584.5	570.4	532.7	487.9	454.9	431.3	414.9	403.1	398.3
57.5°	518.5	504.3	471.4	428.9	398.3	377.1	362.9	351.1	346.4
60°	454.9	443.1	412.5	372.4	346.4	327.6	313.5	304.0	299.3
62.5°	396.0	386.5	355.9	320.6	299.3	282.8	271.0	261.7	266.4
65°	341.8	332.4	304.0	273.4	256.9	240.4	231.0	231.0	240.4
67.5°	289.9	280.4	256.9	231.0	216.8	205.0	197.9	205.0	212.1
70°	242.8	233.3	212.1	191.0	179.2	169.7	169.7	176.8	181.5
72.5°	197.9	188.6	172.1	155.6	146.1	139.0	146.1	150.8	155.6
75°	155.6	148.5	134.3	122.5	115.4	113.2	120.2	124.9	127.2
77.5°	115.4	110.8	101.4	91.9	87.2	89.6	96.7	99.0	101.4
80°	80.1	77.8	70.7	66.0	66.0	68.3	73.1	75.4	77.8
82.5°	49.5	49.5	44.7	42.4	44.7	49.5	51.8	54.2	54.2
85°	23.6	26.0	23.6	23.6	26.0	30.7	30.7	33.0	33.0
87.5°	7.1	7.1	9.4	9.4	11.8	11.8	11.8	11.8	14.2
90°	0.0	0.0	0.0	0.0	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)