

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: P580431

Luminaire Tested: **HCC4W35D010MB-HM43040830-41RWWH**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580431
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC4W35D010MB-HM43040830-41RWWH
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

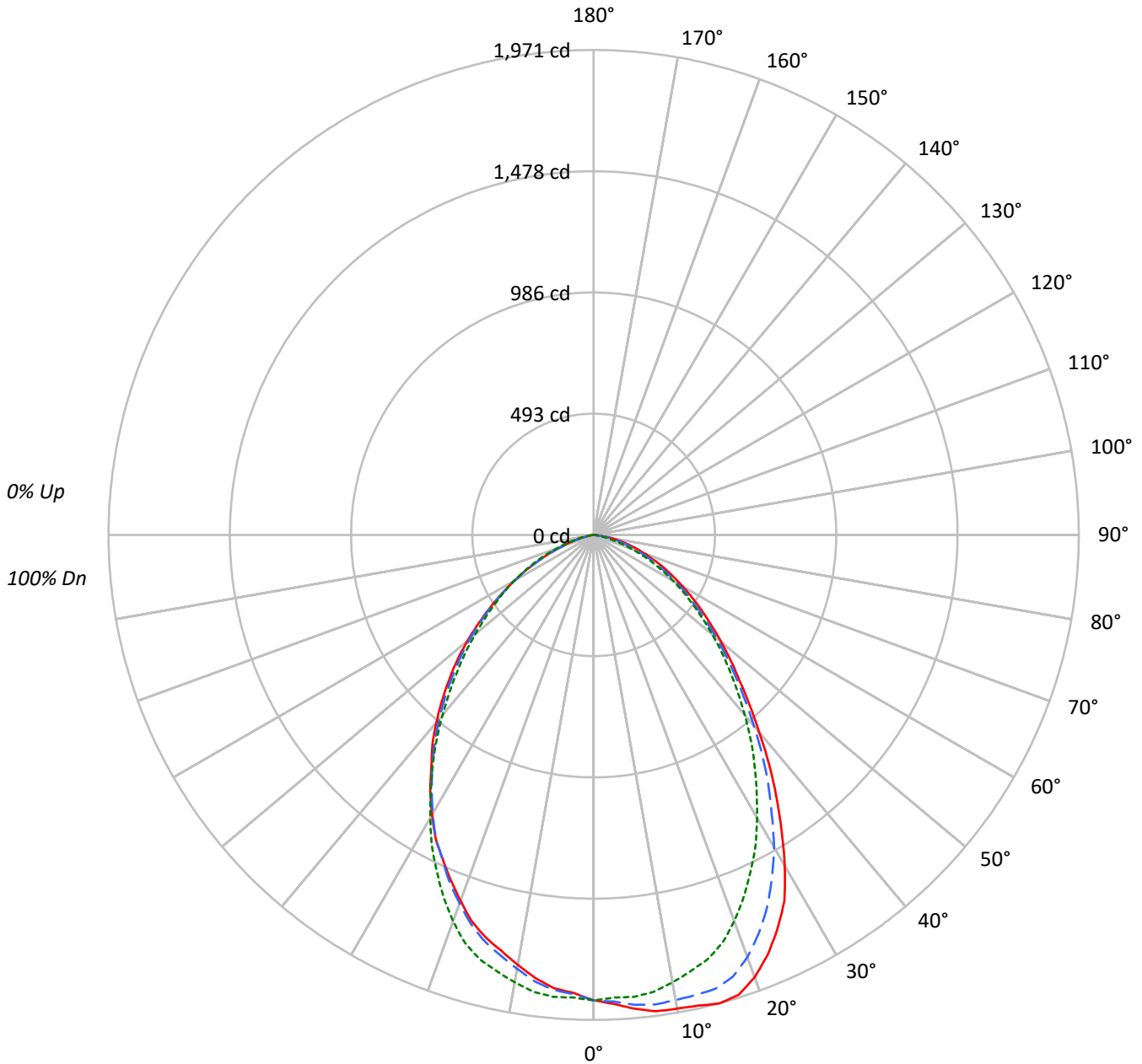
Lumens per Lamp: N/A
Luminaire Lumens: 3605.1 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 33.7
Input Voltage (V): NR
Input Current (A_{in}): 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: P580431
CATALOG NUMBER: HCC4W35D010MB-HM43040830-41RWWH

Luminous Intensity Polar Plot





TEST NUMBER: P580431

CATALOG NUMBER: HCC4W35D010MB-HM43040830-41RWWH

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								
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77								
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67								
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59								
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52								
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47								
7	71	58	51	45	69	58	50	45	56	49	45	55	49	44	54	48	44	42								
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38								
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35								
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	233296	233296	233296
5°	239425	233320	228950
10°	244848	231296	222178
15°	251729	228028	216331
20°	251051	219273	207551
25°	240470	205288	197613
30°	221190	189086	187064
35°	194591	171583	173013
40°	168343	153593	160018
45°	146318	136480	144678
50°	129834	120374	128510
55°	115200	105609	110147
60°	102599	91596	91596
65°	91206	76117	71331
70°	78800	57594	50814
75°	66053	38078	31358
80°	50078	18397	16693
85°	26606	6652	6652



TEST NUMBER: P580431
 CATALOG NUMBER: HCC4W35D010MB-HM43040830-41RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.1	5.0
10°-20°	507.8	14.1
20°-30°	716.2	19.9
30°-40°	739.8	20.5
40°-50°	627.2	17.4
50°-60°	456.3	12.7
60°-70°	266.6	7.4
70°-80°	99.1	2.7
80°-90°	13.0	0.4
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°	1403.1	38.9
0°-40°	2142.9	59.4
0°-60°	3226.4	89.5
0°-90°	3605.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3605.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1891	1891	1891	1891	1891	
5°	1934	1917	1884	1856	1849	185
15°	1971	1910	1786	1710	1694	554
25°	1767	1668	1508	1454	1452	808
35°	1292	1236	1140	1142	1149	807
45°	839	815	782	811	829	653
55°	536	510	491	508	512	482
65°	312	287	261	244	244	310
75°	139	115	80	63	66	149
85°	19	12	5	5	5	26
90°	0	0	0	0	0	



TEST NUMBER: P580431

CATALOG NUMBER: HCC4W35D010MB-HM43040830-41RWWH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1891.4	1891.4	1891.4	1891.4	1891.4	1891.4	1891.4	1891.4	1891.4
2.5°	1907.9	1903.2	1898.4	1891.4	1882.0	1874.9	1867.9	1863.3	1863.3
5°	1933.7	1926.6	1917.2	1900.8	1884.4	1870.2	1856.2	1849.1	1849.1
7.5°	1952.5	1943.1	1924.3	1900.8	1872.6	1851.5	1830.3	1820.9	1816.3
10°	1954.9	1945.4	1919.6	1884.4	1846.7	1813.9	1790.4	1776.3	1773.9
12.5°	1959.6	1947.8	1914.8	1865.5	1816.3	1776.3	1750.4	1736.4	1731.6
15°	1971.3	1954.9	1910.2	1846.7	1785.7	1738.7	1710.5	1698.7	1694.1
17.5°	1959.6	1936.1	1882.0	1806.8	1738.7	1687.0	1658.8	1647.0	1647.0
20°	1912.6	1889.1	1825.6	1743.4	1670.5	1621.3	1593.0	1586.0	1581.2
22.5°	1846.7	1820.9	1752.8	1665.9	1593.0	1548.4	1529.5	1520.2	1517.8
25°	1766.9	1741.1	1668.2	1578.9	1508.4	1470.9	1454.3	1454.3	1452.0
27.5°	1677.6	1644.7	1569.6	1492.0	1423.9	1395.7	1388.6	1388.6	1391.0
30°	1553.0	1529.5	1466.1	1391.0	1327.6	1308.7	1308.7	1313.4	1313.4
32.5°	1419.2	1402.6	1346.3	1280.5	1231.2	1219.4	1224.1	1233.5	1235.8
35°	1292.3	1273.5	1235.8	1177.2	1139.5	1134.8	1141.9	1149.0	1149.0
37.5°	1167.7	1149.0	1123.1	1076.1	1047.9	1050.3	1059.7	1069.0	1076.1
40°	1045.5	1031.5	1012.6	975.1	953.9	963.3	975.1	984.5	993.8
42.5°	937.5	923.4	909.3	881.1	866.9	878.7	892.8	902.2	911.7
45°	838.8	829.4	815.3	791.9	782.4	794.1	810.6	820.0	829.4
47.5°	754.2	749.5	730.7	709.6	704.9	716.7	730.7	742.5	749.5
50°	676.6	669.7	653.2	632.0	627.3	646.2	655.5	662.6	669.7
52.5°	601.5	594.5	575.6	556.8	556.8	571.0	578.0	580.3	587.4
55°	535.7	528.6	509.8	495.8	491.1	502.8	507.5	507.5	512.2
57.5°	474.7	467.6	448.8	432.3	429.9	437.0	437.0	437.0	439.4
60°	415.9	408.8	390.0	376.0	371.3	373.6	371.3	368.9	371.3
62.5°	361.8	354.7	336.0	319.6	314.8	314.8	307.8	305.4	307.8
65°	312.5	300.8	286.6	270.2	260.8	253.8	244.4	244.4	244.4
67.5°	263.1	253.8	237.3	220.9	209.1	197.4	183.2	187.9	190.3
70°	218.5	211.4	192.7	176.2	159.7	145.7	134.0	138.6	140.9
72.5°	178.6	169.2	152.8	134.0	119.8	101.0	94.0	98.7	98.7
75°	138.6	129.3	115.1	96.3	79.9	63.4	63.4	65.8	65.8
77.5°	103.4	94.0	79.9	63.4	49.3	37.5	39.9	39.9	39.9
80°	70.5	63.4	51.7	37.5	25.9	21.1	21.1	21.1	23.5
82.5°	39.9	35.3	28.2	18.8	11.8	11.8	11.8	11.8	11.8
85°	18.8	14.0	11.8	7.1	4.7	4.7	4.7	4.7	4.7
87.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
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)