

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: P580682

Luminaire Tested: **HCC4W40D010MB-HM43040940-41RWWC**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580682  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-14)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W40D010MB-HM43040940-41RWWC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

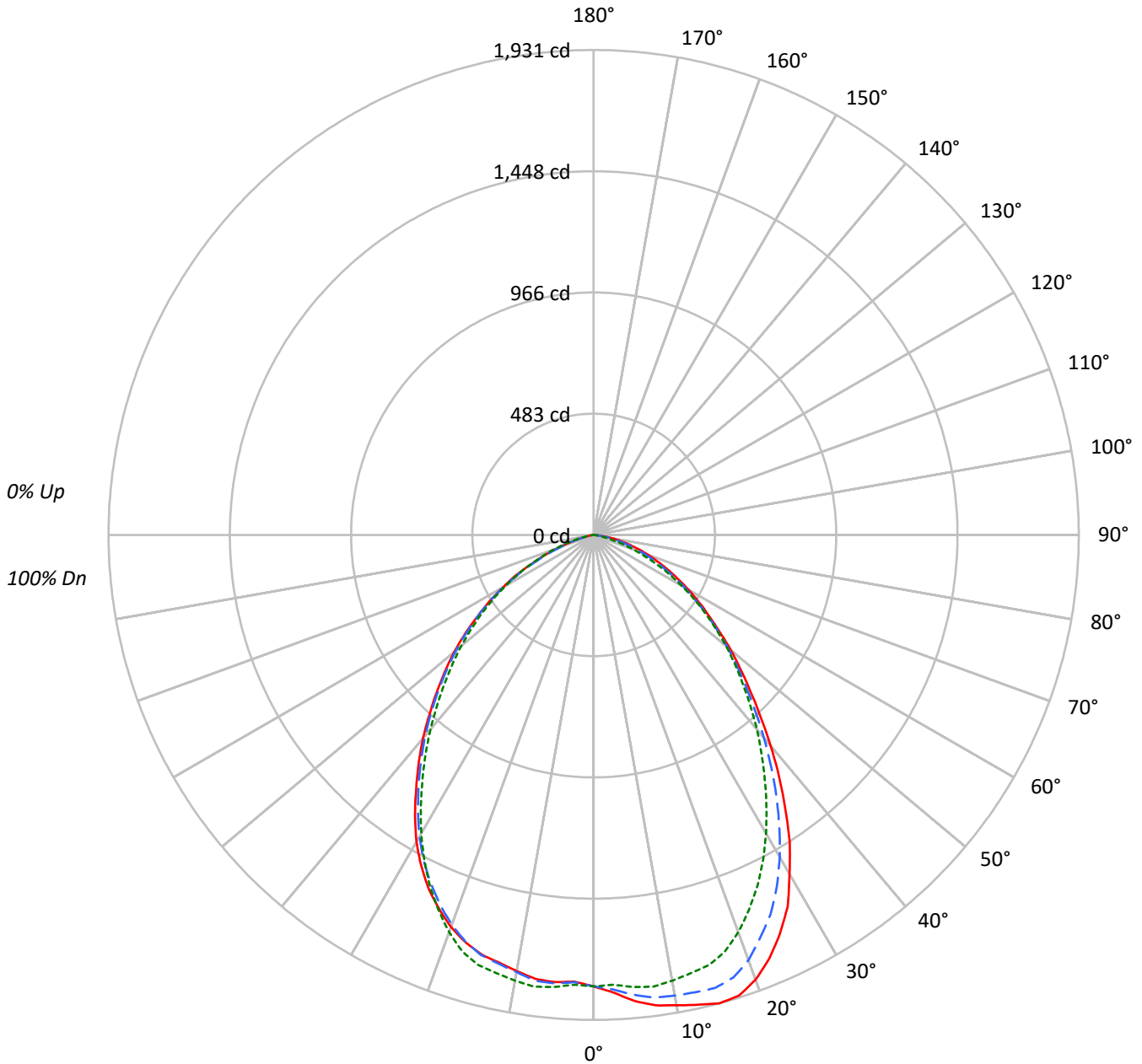
Lumens per Lamp: N/A  
Luminaire Lumens: 3745.1 lumens  
Efficiency: N/A  
Efficacy: 91.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.15 / 1.21  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 41  
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: P580682  
CATALOG NUMBER: HCC4W40D010MB-HM43040940-41RWWC

### Luminous Intensity Polar Plot



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



TEST NUMBER: P580682

CATALOG NUMBER: HCC4W40D010MB-HM43040940-41RWWC

**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	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78	76								
3	95	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	69	67								
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58								
5	81	70	61	56	79	68	61	55	66	60	55	65	59	54	63	58	54	52								
6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	52	48	46								
7	70	58	50	44	69	57	49	44	56	49	44	54	48	44	53	47	43	41								
8	66	53	45	40	64	53	45	40	51	44	40	50	44	39	49	43	39	37								
9	62	49	42	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34								
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31								

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

	0°	90°	180°
0°	221677	221677	221677
5°	230646	223725	221310
10°	238172	225698	220838
15°	246544	226394	220801
20°	247376	220927	218052
25°	238646	209889	211535
30°	222073	195439	200965
35°	200042	178825	185406
40°	176361	162691	170098
45°	154202	146579	153784
50°	136550	131887	138872
55°	120125	116469	121157
60°	107237	99441	102451
65°	94271	80816	79386
70°	82298	59541	54312
75°	68293	35886	28976
80°	51782	13780	8595
85°	24059	3538	3538



TEST NUMBER: P580682

CATALOG NUMBER: HCC4W40D010MB-HM43040940-41RWWC

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	173.3	4.6
10°-20°	505.9	13.5
20°-30°	732.6	19.6
30°-40°	772.9	20.6
40°-50°	668.9	17.9
50°-60°	495.5	13.2
60°-70°	285.6	7.6
70°-80°	99.8	2.7
80°-90°	10.5	0.3
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°	1411.8	37.7
0°-40°	2184.7	58.3
0°-60°	3349.2	89.4
0°-90°	3745.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3745.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1797	1797	1797	1797	1797	
5°	1863	1838	1807	1792	1787	179
15°	1931	1868	1773	1732	1729	543
25°	1754	1666	1542	1532	1554	803
35°	1328	1268	1188	1214	1231	830
45°	884	860	840	872	882	686
55°	559	546	542	561	563	504
65°	323	304	277	262	272	323
75°	143	121	75	61	61	154
85°	17	10	2	2	2	26
90°	0	0	0	0	0	

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



TEST NUMBER: P580682

CATALOG NUMBER: HCC4W40D010MB-HM43040940-41RWWC

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1797.2	1797.2	1797.2	1797.2	1797.2	1797.2	1797.2	1797.2	1797.2
2.5°	1823.9	1819.0	1811.8	1802.0	1792.4	1785.1	1782.6	1780.1	1780.1
5°	1862.8	1853.0	1838.4	1819.0	1806.9	1799.7	1792.4	1787.4	1787.4
7.5°	1889.4	1879.7	1857.8	1831.2	1814.2	1799.7	1789.9	1782.6	1782.6
10°	1901.6	1889.4	1862.8	1828.8	1802.0	1782.6	1768.0	1763.2	1763.2
12.5°	1916.1	1901.6	1865.1	1821.5	1787.4	1763.2	1748.6	1743.7	1743.7
15°	1930.7	1913.8	1867.6	1816.6	1772.9	1743.7	1731.6	1729.1	1729.1
17.5°	1923.4	1901.6	1848.2	1787.4	1738.9	1709.7	1697.6	1697.6	1700.0
20°	1884.6	1862.8	1802.0	1734.1	1683.1	1661.2	1651.5	1656.3	1661.2
22.5°	1826.3	1799.7	1734.1	1668.5	1615.0	1595.6	1595.6	1602.9	1610.2
25°	1753.5	1729.1	1666.0	1593.2	1542.2	1527.6	1532.4	1544.6	1554.3
27.5°	1670.9	1644.2	1578.6	1510.5	1459.5	1452.3	1464.5	1481.4	1486.3
30°	1559.2	1537.3	1481.4	1415.9	1372.2	1369.7	1386.8	1398.9	1411.0
32.5°	1452.3	1428.0	1374.6	1311.5	1279.8	1282.3	1301.7	1316.3	1323.6
35°	1328.5	1306.6	1267.7	1216.7	1187.6	1192.4	1214.3	1228.8	1231.3
37.5°	1211.9	1197.3	1158.4	1119.5	1097.7	1107.4	1126.8	1143.9	1143.9
40°	1095.3	1083.1	1054.0	1022.5	1010.4	1022.5	1041.9	1056.4	1056.4
42.5°	983.6	976.3	952.1	930.2	922.9	939.8	956.9	969.0	966.6
45°	884.0	876.7	859.7	842.8	840.3	857.3	871.9	879.2	881.6
47.5°	794.1	789.3	774.7	762.6	762.6	779.5	791.8	799.0	801.4
50°	711.6	706.7	694.6	684.8	687.3	704.3	714.0	721.3	723.7
52.5°	629.0	626.5	616.9	604.8	612.0	624.2	636.3	641.1	643.6
55°	558.6	558.6	546.5	536.7	541.6	553.8	561.1	563.4	563.4
57.5°	495.5	493.0	478.4	468.7	471.2	483.3	488.2	490.5	490.5
60°	434.7	432.3	417.7	403.1	403.1	410.4	412.9	415.3	415.3
62.5°	376.4	374.0	357.0	344.8	340.0	337.5	337.5	342.5	352.1
65°	323.0	320.6	303.6	284.2	276.9	269.6	262.3	267.1	272.0
67.5°	274.4	269.6	252.6	235.5	218.6	206.4	194.3	201.6	211.3
70°	228.2	223.4	204.0	184.6	165.1	145.7	136.0	145.7	150.6
72.5°	184.6	179.7	160.3	140.9	116.6	97.2	94.7	97.2	99.5
75°	143.3	140.9	121.4	99.5	75.3	60.8	60.8	60.8	60.8
77.5°	106.8	102.0	82.6	63.1	43.7	34.0	31.6	31.6	31.6
80°	72.9	68.0	51.0	36.4	19.4	14.6	14.6	12.1	12.1
82.5°	41.3	38.9	26.7	14.6	7.3	4.8	4.8	4.8	4.8
85°	17.0	14.6	9.8	4.8	2.5	2.5	2.5	2.5	2.5
87.5°	2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
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)