

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: P580449

Luminaire Tested: **HCC4S35D010BZ-HM43040835-41RWWH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580449  
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: HCC4S35D010BZ-HM43040835-41RWWH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

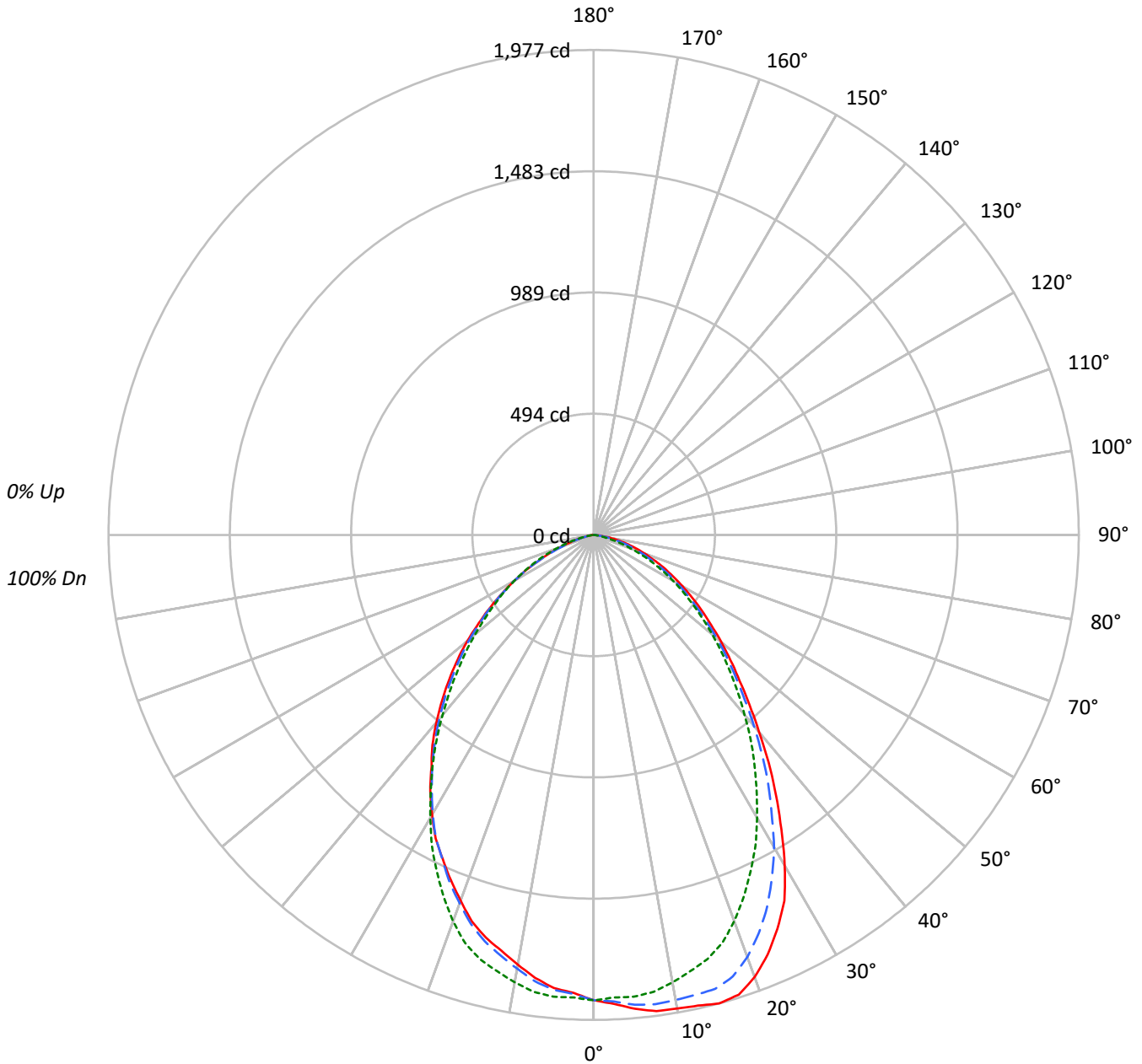
Lumens per Lamp: N/A  
Luminaire Lumens: 3615.4 lumens  
Efficiency: N/A  
Efficacy: 107.3 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.7  
Input Voltage (V): NR  
Input Current (A<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: P580449  
CATALOG NUMBER: HCC4S35D010BZ-HM43040835-41RWWH

### Luminous Intensity Polar Plot





TEST NUMBER: P580449

CATALOG NUMBER: HCC4S35D010BZ-HM43040835-41RWWH

**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°	233974	233974	233974
5°	240106	233989	229606
10°	245550	231960	222817
15°	252444	228679	216944
20°	251760	219903	208142
25°	241164	205887	198171
30°	221830	189613	187605
35°	195148	172080	173495
40°	168842	154028	160501
45°	146736	136881	145097
50°	130218	120719	128874
55°	115545	105889	110469
60°	102895	91843	91843
65°	91469	76351	71506
70°	79052	57810	50994
75°	66243	38173	31454
80°	50220	18468	16764
85°	26748	6652	6652



TEST NUMBER: P580449  
 CATALOG NUMBER: HCC4S35D010BZ-HM43040835-41RWWH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	179.6	5.0
10°-20°	509.3	14.1
20°-30°	718.2	19.9
30°-40°	741.9	20.5
40°-50°	628.9	17.4
50°-60°	457.6	12.7
60°-70°	267.4	7.4
70°-80°	99.4	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°	1407.1	38.9
0°-40°	2149.0	59.4
0°-60°	3235.6	89.5
0°-90°	3615.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3615.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1897	1897	1897	1897	1897	
5°	1939	1923	1890	1862	1854	186
15°	1977	1916	1791	1715	1699	556
25°	1772	1673	1513	1458	1456	810
35°	1296	1239	1143	1145	1152	809
45°	841	818	785	813	832	655
55°	537	511	492	509	514	483
65°	313	288	262	245	245	311
75°	139	115	80	64	66	149
85°	19	12	5	5	5	26
90°	0	0	0	0	0	

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



TEST NUMBER: P580449

CATALOG NUMBER: HCC4S35D010BZ-HM43040835-41RWWH

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1896.9	1896.9	1896.9	1896.9	1896.9	1896.9	1896.9	1896.9	1896.9
2.5°	1913.3	1908.6	1903.8	1896.9	1887.4	1880.3	1873.3	1868.5	1868.5
5°	1939.2	1932.2	1922.7	1906.2	1889.8	1875.6	1861.5	1854.4	1854.4
7.5°	1958.1	1948.7	1929.8	1906.2	1878.0	1856.7	1835.6	1826.2	1821.4
10°	1960.5	1951.0	1925.1	1889.8	1852.0	1819.1	1795.5	1781.3	1779.0
12.5°	1965.2	1953.4	1920.4	1870.9	1821.4	1781.3	1755.5	1741.3	1736.6
15°	1976.9	1960.5	1915.6	1852.0	1790.8	1743.7	1715.3	1703.6	1698.9
17.5°	1965.2	1941.6	1887.4	1812.0	1743.7	1691.8	1663.5	1651.7	1651.7
20°	1918.0	1894.5	1830.9	1748.4	1675.3	1625.9	1597.5	1590.5	1585.7
22.5°	1852.0	1826.2	1757.8	1670.6	1597.5	1552.8	1533.9	1524.5	1522.1
25°	1772.0	1746.0	1673.0	1583.4	1512.8	1475.0	1458.5	1458.5	1456.1
27.5°	1682.4	1649.4	1574.0	1496.3	1427.9	1399.6	1392.5	1392.5	1394.9
30°	1557.5	1533.9	1470.3	1394.9	1331.3	1312.5	1312.5	1317.2	1317.2
32.5°	1423.2	1406.7	1350.1	1284.2	1234.7	1222.9	1227.6	1237.1	1239.4
35°	1296.0	1277.1	1239.4	1180.5	1142.8	1138.1	1145.1	1152.2	1152.2
37.5°	1171.1	1152.2	1126.4	1079.2	1050.9	1053.3	1062.7	1072.1	1079.2
40°	1048.6	1034.4	1015.5	977.9	956.6	966.1	977.9	987.3	996.8
42.5°	940.1	926.1	911.9	883.6	869.5	881.2	895.4	904.8	914.3
45°	841.2	831.8	817.6	794.1	784.7	796.5	812.9	822.3	831.8
47.5°	756.3	751.6	732.8	711.6	706.9	718.7	732.8	744.5	751.6
50°	678.6	671.6	655.1	633.8	629.1	648.0	657.4	664.5	671.6
52.5°	603.3	596.2	577.3	558.4	558.4	572.6	579.6	582.0	589.1
55°	537.3	530.2	511.3	497.1	492.4	504.2	508.9	508.9	513.7
57.5°	476.0	468.9	450.0	433.5	431.2	438.2	438.2	438.2	440.6
60°	417.1	410.0	391.2	377.0	372.3	374.6	372.3	369.9	372.3
62.5°	362.8	355.7	337.0	320.5	315.7	315.7	308.7	306.3	308.7
65°	313.4	301.6	287.5	271.0	261.6	254.5	245.0	245.0	245.0
67.5°	263.9	254.5	238.0	221.5	209.7	197.9	183.8	188.5	190.9
70°	219.2	212.1	193.2	176.7	160.3	146.1	134.3	139.0	141.4
72.5°	179.1	169.6	153.2	134.3	120.2	101.3	94.3	98.9	98.9
75°	139.0	129.6	115.4	96.7	80.1	63.6	63.6	66.0	66.0
77.5°	103.6	94.3	80.1	63.6	49.5	37.7	40.0	40.0	40.0
80°	70.7	63.6	51.8	37.7	26.0	21.2	21.2	21.2	23.6
82.5°	40.0	35.3	28.3	18.9	11.8	11.8	11.8	11.8	11.8
85°	18.9	14.2	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)