

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: P580629

Luminaire Tested: **HCC4S40D010MB-HM43040927-41RWWH**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580629
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: HCC4S40D010MB-HM43040927-41RWWH
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

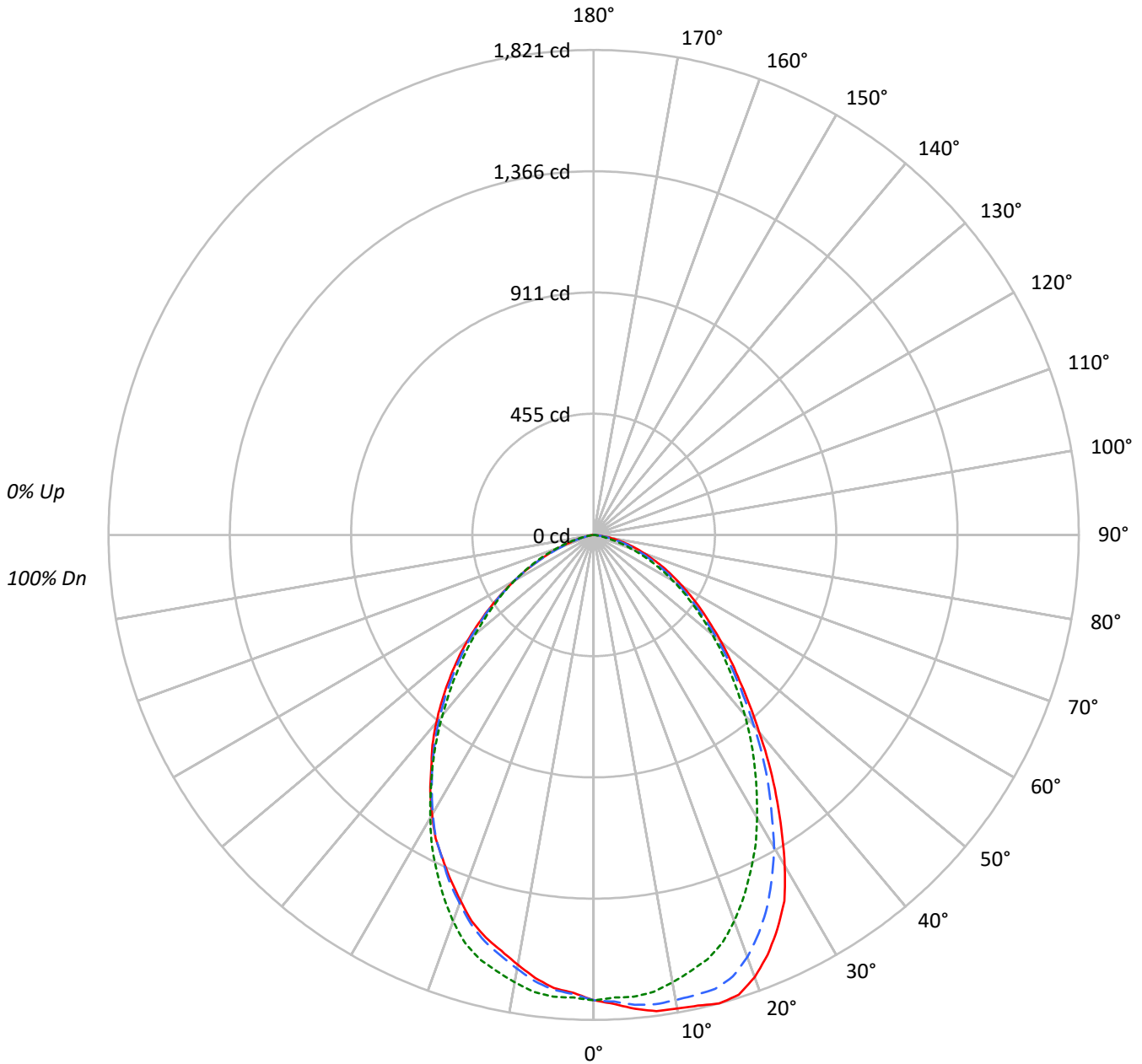
Lumens per Lamp: N/A
Luminaire Lumens: 3330.5 lumens
Efficiency: N/A
Efficacy: 81.2 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 41
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: P580629
CATALOG NUMBER: HCC4S40D010MB-HM43040927-41RWWH

Luminous Intensity Polar Plot



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



TEST NUMBER: P580629

CATALOG NUMBER: HCC4S40D010MB-HM43040927-41RWWH

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	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	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77					77			
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67					67			
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59					59			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52					52			
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47					47			
7	71	58	51	45	69	58	50	45	56	49	45	55	49	44	54	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	41	37	47	41	37	46	41	37	35					35			
10	58	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°	215534	215534	215534
5°	221186	215540	211516
10°	226186	213699	205257
15°	232561	210661	199845
20°	231926	202576	191760
25°	222151	189651	182574
30°	204355	174673	172821
35°	179774	158513	159838
40°	155542	141904	147845
45°	135171	126083	133654
50°	119971	111220	118723
55°	106427	97567	101760
60°	94779	84590	84590
65°	84260	70309	65902
70°	72813	53230	46991
75°	61001	35171	28976
80°	46242	16977	15414
85°	24625	6227	6227



TEST NUMBER: P580629

CATALOG NUMBER: HCC4S40D010MB-HM43040927-41RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.5	5.0
10°-20°	469.1	14.1
20°-30°	661.6	19.9
30°-40°	683.5	20.5
40°-50°	579.4	17.4
50°-60°	421.6	12.7
60°-70°	246.3	7.4
70°-80°	91.6	2.7
80°-90°	12.0	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°	1296.2	38.9
0°-40°	1979.7	59.4
0°-60°	2980.7	89.5
0°-90°	3330.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3330.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1747	1747	1747	1747	1747	
5°	1786	1771	1741	1715	1708	171
15°	1821	1765	1650	1580	1565	512
25°	1632	1541	1394	1344	1342	747
35°	1194	1142	1053	1055	1062	746
45°	775	753	723	749	766	603
55°	495	471	454	469	473	445
65°	289	265	241	226	226	286
75°	128	106	74	59	61	138
85°	17	11	4	4	4	24
90°	0	0	0	0	0	



TEST NUMBER: P580629

CATALOG NUMBER: HCC4S40D010MB-HM43040927-41RWWH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1747.4	1747.4	1747.4	1747.4	1747.4	1747.4	1747.4	1747.4	1747.4
2.5°	1762.5	1758.2	1753.9	1747.4	1738.7	1732.2	1725.7	1721.3	1721.3
5°	1786.4	1779.9	1771.3	1756.0	1740.8	1727.8	1714.8	1708.3	1708.3
7.5°	1803.8	1795.2	1777.8	1756.0	1730.0	1710.4	1690.9	1682.3	1677.9
10°	1805.9	1797.3	1773.4	1740.8	1706.2	1675.8	1654.0	1641.0	1638.8
12.5°	1810.3	1799.4	1769.1	1723.5	1677.9	1641.0	1617.2	1604.2	1599.8
15°	1821.2	1805.9	1764.7	1706.2	1649.7	1606.3	1580.3	1569.4	1565.0
17.5°	1810.3	1788.6	1738.7	1669.2	1606.3	1558.5	1532.5	1521.6	1521.6
20°	1766.9	1745.2	1686.5	1610.7	1543.3	1497.8	1471.6	1465.1	1460.9
22.5°	1706.2	1682.3	1619.3	1539.0	1471.6	1430.4	1413.1	1404.4	1402.3
25°	1632.3	1608.4	1541.2	1458.6	1393.5	1358.9	1343.6	1343.6	1341.5
27.5°	1549.8	1519.4	1450.0	1378.4	1315.4	1289.4	1282.9	1282.9	1285.0
30°	1434.8	1413.1	1354.5	1285.0	1226.4	1209.0	1209.0	1213.4	1213.4
32.5°	1311.1	1295.9	1243.7	1183.0	1137.4	1126.6	1130.9	1139.6	1141.7
35°	1193.9	1176.5	1141.7	1087.5	1052.7	1048.5	1055.0	1061.5	1061.5
37.5°	1078.9	1061.5	1037.6	994.1	968.1	970.2	979.0	987.6	994.1
40°	966.0	953.0	935.6	900.8	881.3	890.0	900.8	909.5	918.2
42.5°	866.1	853.1	840.1	814.0	801.0	811.8	824.8	833.6	842.2
45°	774.9	766.2	753.2	731.5	722.8	733.7	748.8	757.6	766.2
47.5°	696.8	692.4	675.1	655.6	651.2	662.1	675.1	685.9	692.4
50°	625.2	618.7	603.4	583.9	579.6	596.9	605.6	612.1	618.7
52.5°	555.7	549.2	531.8	514.4	514.4	527.4	533.9	536.2	542.7
55°	494.9	488.4	471.0	458.0	453.7	464.5	468.8	468.8	473.2
57.5°	438.4	431.9	414.5	399.4	397.3	403.8	403.8	403.8	405.9
60°	384.2	377.7	360.3	347.3	342.9	345.2	342.9	340.8	342.9
62.5°	334.3	327.8	310.4	295.2	290.9	290.9	284.4	282.2	284.4
65°	288.7	277.9	264.8	249.6	240.9	234.4	225.8	225.8	225.8
67.5°	243.1	234.4	219.3	204.0	193.1	182.4	169.3	173.6	175.8
70°	201.9	195.4	178.0	162.8	147.6	134.6	123.8	128.0	130.3
72.5°	165.0	156.3	141.1	123.8	110.8	93.4	86.9	91.1	91.1
75°	128.0	119.4	106.4	89.0	73.8	58.6	58.6	60.8	60.8
77.5°	95.5	86.9	73.8	58.6	45.6	34.8	36.9	36.9	36.9
80°	65.1	58.6	47.8	34.8	23.9	19.5	19.5	19.5	21.7
82.5°	36.9	32.5	26.0	17.4	10.9	10.9	10.9	10.9	10.9
85°	17.4	13.0	10.9	6.5	4.4	4.4	4.4	4.4	4.4
87.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
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)