

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: P580632

Luminaire Tested: **HCC4W40D010MB-HM43040927-41WWWB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580632
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC4W40D010MB-HM43040927-41WWWB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

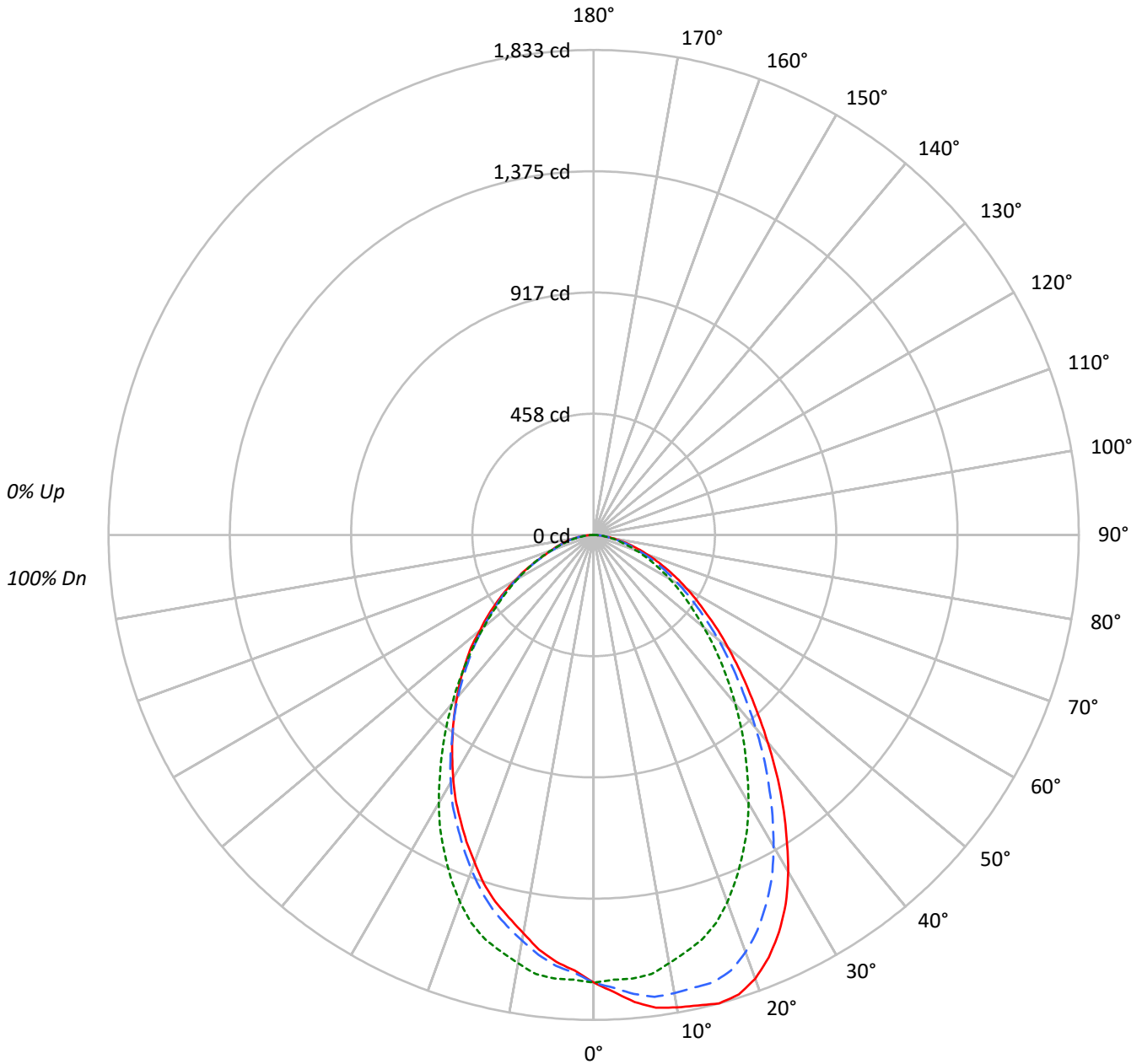
Lumens per Lamp: N/A
Luminaire Lumens: 3280.6 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P580632
CATALOG NUMBER: HCC4W40D010MB-HM43040927-41WWWB

Luminous Intensity Polar Plot



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



TEST NUMBER: P580632

CATALOG NUMBER: HCC4W40D010MB-HM43040927-41WWWB

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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87								
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66								
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	58								
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51								
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46								
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41								
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37								
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34								
10	58	45	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	208651	208651	208651
5°	219403	208384	200583
10°	227100	205883	191467
15°	234030	202144	183283
20°	234302	193821	172727
25°	225485	181159	161942
30°	209382	166697	151229
35°	187679	150080	139946
40°	164687	133917	129360
45°	143945	118565	119315
50°	127090	103756	107517
55°	112082	91997	96663
60°	100157	81408	84640
65°	88726	71623	71623
70°	77537	61092	61092
75°	66243	51756	57951
80°	52493	46242	52493
85°	33824	39910	49250



TEST NUMBER: P580632
 CATALOG NUMBER: HCC4W40D010MB-HM43040927-41WWWB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.3	4.9
10°-20°	451.3	13.8
20°-30°	632.3	19.3
30°-40°	651.4	19.9
40°-50°	554.6	16.9
50°-60°	410.9	12.5
60°-70°	257.9	7.9
70°-80°	128.1	3.9
80°-90°	33.6	1.0
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°	1243.9	37.9
0°-40°	1895.4	57.8
0°-60°	2860.9	87.2
0°-90°	3280.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3280.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1692	1692	1692	1692	1692	
5°	1772	1742	1683	1635	1620	170
15°	1833	1750	1583	1468	1435	515
25°	1657	1542	1331	1216	1190	758
35°	1246	1153	997	932	929	777
45°	825	769	680	667	684	640
55°	521	480	428	436	450	471
65°	304	274	245	241	245	303
75°	139	124	109	117	122	149
85°	24	24	28	33	35	31
90°	0	0	0	0	0	



TEST NUMBER: P580632

CATALOG NUMBER: HCC4W40D010MB-HM43040927-41WWWB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1691.6	1691.6	1691.6	1691.6	1691.6	1691.6	1691.6	1691.6	1691.6
2.5°	1728.5	1722.0	1713.3	1698.1	1683.0	1669.8	1656.8	1650.3	1648.2
5°	1772.0	1759.0	1741.6	1713.3	1683.0	1656.8	1635.1	1624.3	1620.0
7.5°	1802.3	1789.3	1761.1	1717.6	1674.2	1635.1	1600.3	1585.2	1580.8
10°	1813.2	1798.0	1759.0	1700.3	1643.8	1596.1	1557.0	1537.5	1528.7
12.5°	1821.8	1802.3	1752.3	1683.0	1613.5	1554.8	1513.6	1487.5	1481.0
15°	1832.7	1811.0	1750.2	1665.6	1583.0	1513.6	1467.9	1444.1	1435.3
17.5°	1821.8	1798.0	1726.3	1630.8	1537.5	1461.4	1411.5	1389.7	1381.1
20°	1785.0	1759.0	1678.6	1576.5	1476.6	1398.4	1348.5	1326.8	1315.9
22.5°	1728.5	1700.3	1617.7	1509.2	1407.1	1331.1	1283.3	1261.7	1255.1
25°	1656.8	1628.6	1541.7	1431.1	1331.1	1257.3	1216.1	1196.4	1189.9
27.5°	1572.2	1544.0	1459.2	1350.7	1255.1	1185.7	1153.1	1133.6	1129.2
30°	1470.1	1441.8	1359.3	1259.4	1170.4	1105.3	1079.2	1064.1	1061.8
32.5°	1357.2	1333.3	1257.3	1166.1	1081.4	1027.1	1007.6	996.7	994.6
35°	1246.4	1220.4	1153.1	1070.6	996.7	948.9	931.6	929.4	929.4
37.5°	1133.6	1107.4	1053.2	977.2	914.2	870.8	864.3	866.4	866.4
40°	1022.8	998.9	951.2	888.2	831.7	799.2	796.9	801.3	803.4
42.5°	918.5	899.0	855.5	801.3	753.5	727.4	729.7	738.3	744.8
45°	825.2	807.8	768.7	720.9	679.7	660.2	666.7	677.5	684.0
47.5°	740.5	725.3	688.4	644.9	610.2	597.2	605.9	618.9	627.5
50°	662.3	649.3	614.5	568.9	540.7	532.0	542.9	555.9	560.3
52.5°	592.8	579.8	542.9	503.8	482.0	477.8	488.5	499.4	505.9
55°	521.2	510.3	479.9	445.1	427.8	425.6	436.5	445.1	449.5
57.5°	462.5	451.7	423.4	393.0	377.9	375.6	386.5	393.0	395.3
60°	406.0	395.3	369.1	340.9	330.0	330.0	336.6	340.9	343.1
62.5°	353.9	343.1	319.3	295.3	286.6	286.6	286.6	288.8	295.3
65°	304.0	295.3	273.6	251.9	245.4	241.0	241.0	241.0	245.4
67.5°	258.4	249.8	232.4	212.8	206.3	199.8	197.6	202.0	202.0
70°	215.0	208.5	191.1	175.9	169.4	162.9	160.6	169.4	169.4
72.5°	175.9	169.4	158.5	143.3	136.8	134.6	139.0	143.3	145.5
75°	139.0	132.5	123.8	115.1	108.6	110.8	117.3	119.4	121.6
77.5°	104.3	102.0	93.4	86.9	86.9	89.0	93.4	97.8	99.9
80°	73.9	71.6	67.4	63.0	65.1	69.5	71.6	76.0	73.9
82.5°	45.6	45.6	43.4	43.4	45.6	50.0	52.1	54.3	56.5
85°	23.9	23.9	23.9	26.0	28.2	30.4	32.6	34.8	34.8
87.5°	6.5	8.6	8.6	10.9	13.0	13.0	15.2	15.2	15.2
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)