

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: P580542

Luminaire Tested: **HCC4S35D010MB-HM43040940-41WWWB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580542
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: HCC4S35D010MB-HM43040940-41WWWB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

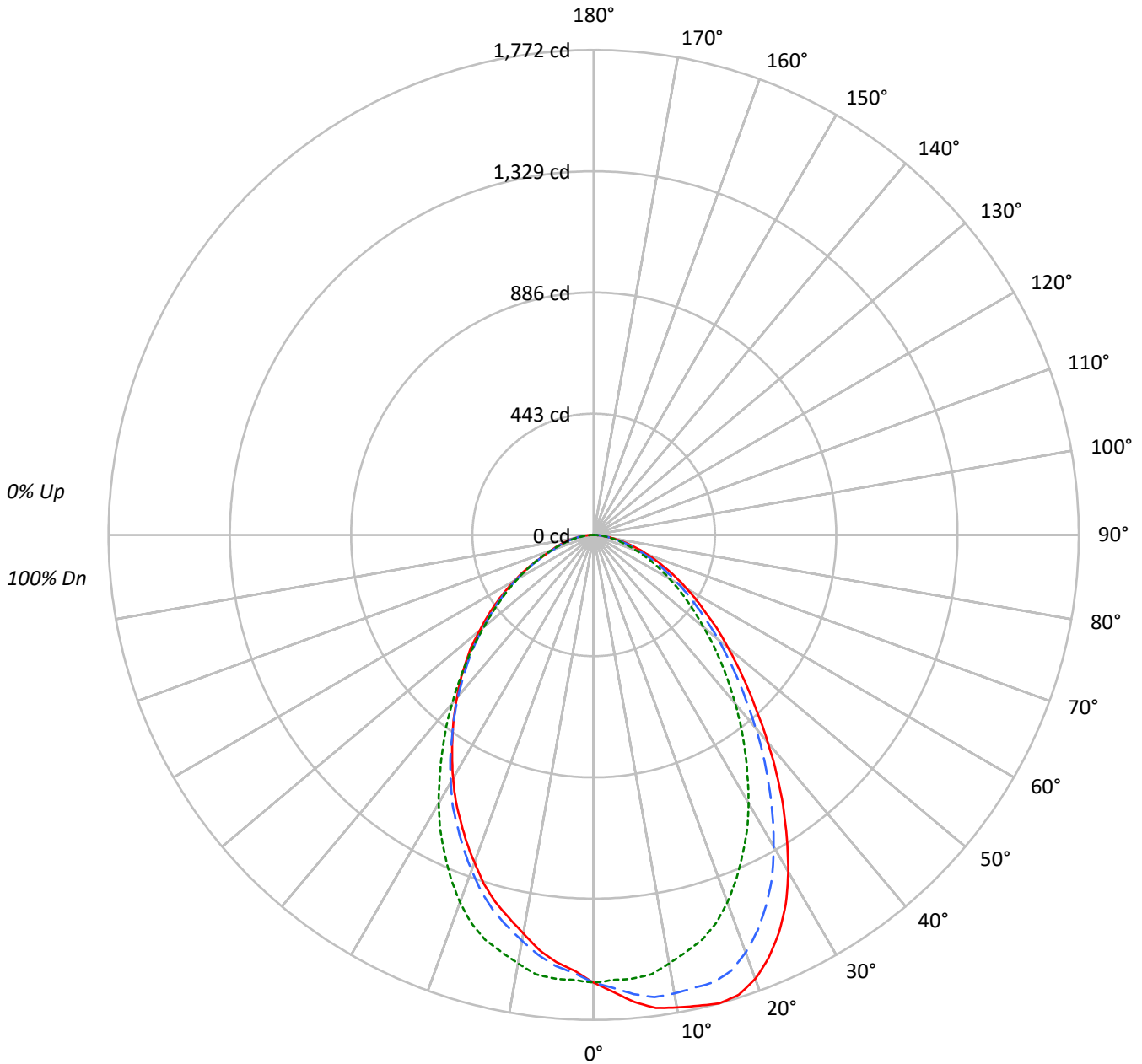
Lumens per Lamp: N/A
Luminaire Lumens: 3172.7 lumens
Efficiency: N/A
Efficacy: 94.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P580542
CATALOG NUMBER: HCC4S35D010MB-HM43040940-41WWWB

Luminous Intensity Polar Plot



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



TEST NUMBER: P580542

CATALOG NUMBER: HCC4S35D010MB-HM43040940-41WWWB

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	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°	201793	201793	201793
5°	212185	201524	193984
10°	219636	199120	185180
15°	226343	195504	177256
20°	226610	187442	167057
25°	218082	175211	156634
30°	202489	161228	146273
35°	181521	145141	135354
40°	159261	129505	125110
45°	139201	114657	115408
50°	122926	100340	103986
55°	108383	88965	93502
60°	96876	78744	81852
65°	85807	69259	69259
70°	74977	59073	59073
75°	64051	50040	56045
80°	50717	44821	50717
85°	32833	38636	47552



TEST NUMBER: P580542
 CATALOG NUMBER: HCC4S35D010MB-HM43040940-41WWWB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.0	4.9
10°-20°	436.5	13.8
20°-30°	611.5	19.3
30°-40°	630.0	19.9
40°-50°	536.4	16.9
50°-60°	397.4	12.5
60°-70°	249.4	7.9
70°-80°	123.9	3.9
80°-90°	32.5	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°	1203.0	37.9
0°-40°	1833.1	57.8
0°-60°	2766.9	87.2
0°-90°	3172.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3172.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1636	1636	1636	1636	1636	
5°	1714	1684	1628	1581	1567	165
15°	1772	1693	1531	1420	1388	498
25°	1602	1491	1287	1176	1151	733
35°	1206	1115	964	901	899	752
45°	798	743	657	645	662	619
55°	504	464	414	422	435	456
65°	294	265	237	233	237	293
75°	134	120	105	113	118	144
85°	23	23	27	32	34	30
90°	0	0	0	0	0	



TEST NUMBER: P580542

CATALOG NUMBER: HCC4S35D010MB-HM43040940-41WWWB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1636.0	1636.0	1636.0	1636.0	1636.0	1636.0	1636.0	1636.0	1636.0
2.5°	1671.7	1665.4	1657.0	1642.3	1627.6	1615.0	1602.4	1596.1	1593.9
5°	1713.7	1701.1	1684.3	1657.0	1627.6	1602.4	1581.4	1570.9	1566.7
7.5°	1743.1	1730.5	1703.2	1661.2	1619.2	1581.4	1547.7	1533.1	1528.9
10°	1753.6	1738.9	1701.1	1644.4	1589.8	1543.6	1505.8	1486.9	1478.5
12.5°	1762.0	1743.1	1694.8	1627.6	1560.3	1503.7	1463.8	1438.6	1432.3
15°	1772.5	1751.5	1692.7	1610.8	1531.0	1463.8	1419.7	1396.6	1388.1
17.5°	1762.0	1738.9	1669.6	1577.2	1486.9	1413.4	1365.1	1344.1	1335.6
20°	1726.4	1701.1	1623.4	1524.7	1428.0	1352.5	1304.2	1283.2	1272.7
22.5°	1671.7	1644.4	1564.6	1459.6	1360.8	1287.4	1241.1	1220.2	1213.9
25°	1602.4	1575.1	1491.1	1384.0	1287.4	1215.9	1176.0	1157.2	1150.9
27.5°	1520.4	1493.2	1411.3	1306.3	1213.9	1146.7	1115.1	1096.2	1092.1
30°	1421.7	1394.4	1314.6	1218.1	1132.0	1068.9	1043.7	1029.0	1027.0
32.5°	1312.6	1289.5	1215.9	1127.7	1045.9	993.4	974.5	963.9	961.8
35°	1205.5	1180.3	1115.1	1035.3	963.9	917.7	901.0	898.9	898.9
37.5°	1096.2	1071.1	1018.6	945.1	884.1	842.1	835.8	837.9	837.9
40°	989.1	966.1	919.9	859.0	804.3	772.9	770.7	775.0	777.0
42.5°	888.3	869.4	827.5	775.0	728.7	703.5	705.6	714.1	720.4
45°	798.0	781.3	743.4	697.2	657.3	638.4	644.7	655.3	661.6
47.5°	716.1	701.5	665.7	623.7	590.1	577.5	585.9	598.5	607.0
50°	640.6	628.0	594.4	550.2	522.9	514.6	525.0	537.6	541.9
52.5°	573.4	560.8	525.0	487.3	466.2	462.1	472.5	483.0	489.3
55°	504.0	493.5	464.1	430.5	413.7	411.6	422.2	430.5	434.8
57.5°	447.4	436.8	409.5	380.1	365.4	363.3	373.8	380.1	382.3
60°	392.7	382.3	357.0	329.7	319.2	319.2	325.5	329.7	331.8
62.5°	342.4	331.8	308.8	285.6	277.2	277.2	277.2	279.3	285.6
65°	294.0	285.6	264.6	243.6	237.3	233.1	233.1	233.1	237.3
67.5°	249.9	241.5	224.7	205.8	199.5	193.2	191.1	195.4	195.4
70°	207.9	201.6	184.8	170.1	163.8	157.5	155.4	163.8	163.8
72.5°	170.1	163.8	153.3	138.6	132.3	130.2	134.4	138.6	140.7
75°	134.4	128.1	119.7	111.3	105.0	107.1	113.4	115.5	117.6
77.5°	100.8	98.7	90.3	84.0	84.0	86.1	90.3	94.5	96.6
80°	71.4	69.4	65.1	60.9	63.1	67.2	69.4	73.5	71.4
82.5°	44.1	44.1	42.0	42.0	44.1	48.3	50.4	52.5	54.6
85°	23.2	23.2	23.2	25.2	27.3	29.4	31.5	33.6	33.6
87.5°	6.3	8.4	8.4	10.5	12.6	12.6	14.7	14.7	14.7
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)