

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: P580377

Luminaire Tested: **HCC4S30D010MW-HM43040935-41RWWH**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580377
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: HCC4S30D010MW-HM43040935-41RWWH
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

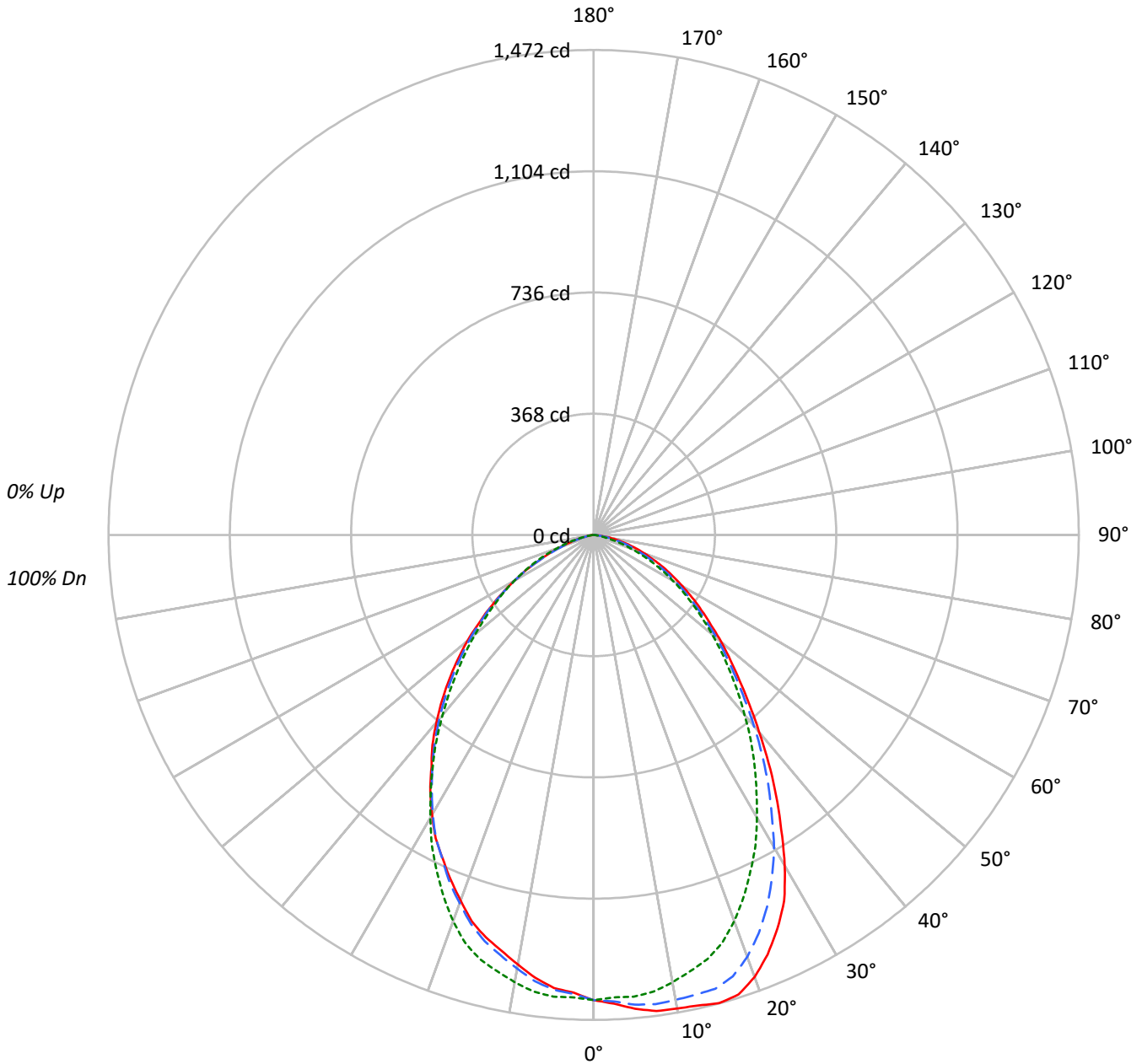
Lumens per Lamp: N/A
Luminaire Lumens: 2691.2 lumens
Efficiency: N/A
Efficacy: 96.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 28
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: P580377
CATALOG NUMBER: HCC4S30D010MW-HM43040935-41RWWH

Luminous Intensity Polar Plot



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



TEST NUMBER: P580377

CATALOG NUMBER: HCC4S30D010MW-HM43040935-41RWWH

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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°	174152	174152	174152
5°	178730	174173	170904
10°	182775	172667	165866
15°	187919	170233	161485
20°	187402	163696	154954
25°	179512	153259	147529
30°	165130	141131	139650
35°	145262	128081	129150
40°	125673	114660	119458
45°	109232	101889	108011
50°	96925	89863	95927
55°	85997	78836	82234
60°	76573	68358	68358
65°	68091	56825	53235
70°	58820	42988	37939
75°	49277	28451	23400
80°	37363	13709	12431
85°	19813	4953	4953



TEST NUMBER: P580377
 CATALOG NUMBER: HCC4S30D010MW-HM43040935-41RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.7	5.0
10°-20°	379.1	14.1
20°-30°	534.6	19.9
30°-40°	552.3	20.5
40°-50°	468.2	17.4
50°-60°	340.6	12.7
60°-70°	199.0	7.4
70°-80°	74.0	2.7
80°-90°	9.7	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°	1047.4	38.9
0°-40°	1599.7	59.4
0°-60°	2408.5	89.5
0°-90°	2691.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2691.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1412	1412	1412	1412	1412	
5°	1444	1431	1407	1386	1380	138
15°	1472	1426	1333	1277	1265	414
25°	1319	1245	1126	1086	1084	603
35°	965	923	851	852	858	602
45°	626	609	584	605	619	487
55°	400	381	367	379	382	360
65°	233	214	195	182	182	232
75°	103	86	60	47	49	111
85°	14	9	4	4	4	20
90°	0	0	0	0	0	

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



TEST NUMBER: P580377

CATALOG NUMBER: HCC4S3D010MW-HM43040935-41RWWH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1411.9	1411.9	1411.9	1411.9	1411.9	1411.9	1411.9	1411.9	1411.9
2.5°	1424.2	1420.7	1417.2	1411.9	1404.9	1399.6	1394.4	1390.9	1390.9
5°	1443.5	1438.2	1431.2	1418.9	1406.7	1396.1	1385.6	1380.3	1380.3
7.5°	1457.6	1450.5	1436.5	1418.9	1397.9	1382.1	1366.3	1359.4	1355.9
10°	1459.3	1452.3	1433.0	1406.7	1378.6	1354.1	1336.6	1326.0	1324.3
12.5°	1462.8	1454.0	1429.5	1392.6	1355.9	1326.0	1306.7	1296.2	1292.7
15°	1471.6	1459.3	1426.0	1378.6	1333.1	1298.0	1276.9	1268.1	1264.6
17.5°	1462.8	1445.3	1404.9	1348.7	1298.0	1259.3	1238.3	1229.5	1229.5
20°	1427.7	1410.2	1362.8	1301.5	1247.1	1210.2	1189.1	1183.9	1180.5
22.5°	1378.6	1359.4	1308.5	1243.6	1189.1	1155.9	1141.9	1134.8	1133.1
25°	1319.0	1299.7	1245.3	1178.6	1126.1	1098.0	1085.7	1085.7	1084.0
27.5°	1252.3	1227.8	1171.7	1113.8	1062.9	1041.8	1036.6	1036.6	1038.3
30°	1159.4	1141.9	1094.5	1038.3	990.9	977.0	977.0	980.5	980.5
32.5°	1059.4	1047.1	1005.0	955.9	919.1	910.3	913.8	920.8	922.6
35°	964.7	950.7	922.6	878.7	850.6	847.1	852.4	857.7	857.7
37.5°	871.7	857.7	838.4	803.4	782.3	784.1	791.1	798.1	803.4
40°	780.5	770.0	756.0	727.9	712.1	719.1	727.9	734.9	741.9
42.5°	699.8	689.3	678.8	657.7	647.2	655.9	666.5	673.5	680.5
45°	626.2	619.2	608.7	591.1	584.1	592.9	605.2	612.2	619.2
47.5°	563.0	559.5	545.5	529.7	526.2	535.0	545.5	554.3	559.5
50°	505.1	499.9	487.6	471.8	468.3	482.3	489.3	494.6	499.9
52.5°	449.1	443.8	429.8	415.7	415.7	426.2	431.5	433.3	438.5
55°	399.9	394.7	380.6	370.1	366.6	375.4	378.9	378.9	382.4
57.5°	354.3	349.0	335.0	322.7	321.0	326.2	326.2	326.2	328.0
60°	310.4	305.2	291.1	280.6	277.1	278.8	277.1	275.3	277.1
62.5°	270.2	264.9	250.9	238.6	235.1	235.1	229.8	228.0	229.8
65°	233.3	224.5	214.0	201.7	194.7	189.4	182.4	182.4	182.4
67.5°	196.5	189.4	177.1	164.9	156.1	147.3	136.8	140.3	142.0
70°	163.1	157.8	143.8	131.5	119.2	108.7	99.9	103.4	105.2
72.5°	133.3	126.3	114.0	99.9	89.5	75.5	70.2	73.7	73.7
75°	103.4	96.4	86.0	72.0	59.7	47.4	47.4	49.1	49.1
77.5°	77.2	70.2	59.7	47.4	36.9	28.1	29.8	29.8	29.8
80°	52.6	47.4	38.6	28.1	19.3	15.8	15.8	15.8	17.5
82.5°	29.8	26.3	21.1	14.0	8.8	8.8	8.8	8.8	8.8
85°	14.0	10.5	8.8	5.3	3.5	3.5	3.5	3.5	3.5
87.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
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)