

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: P592832

Luminaire Tested: **HCC4S40D010BZ-HM43040950-41RWWH**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P592832
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: HCC4S40D010BZ-HM43040950-41RWWH
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

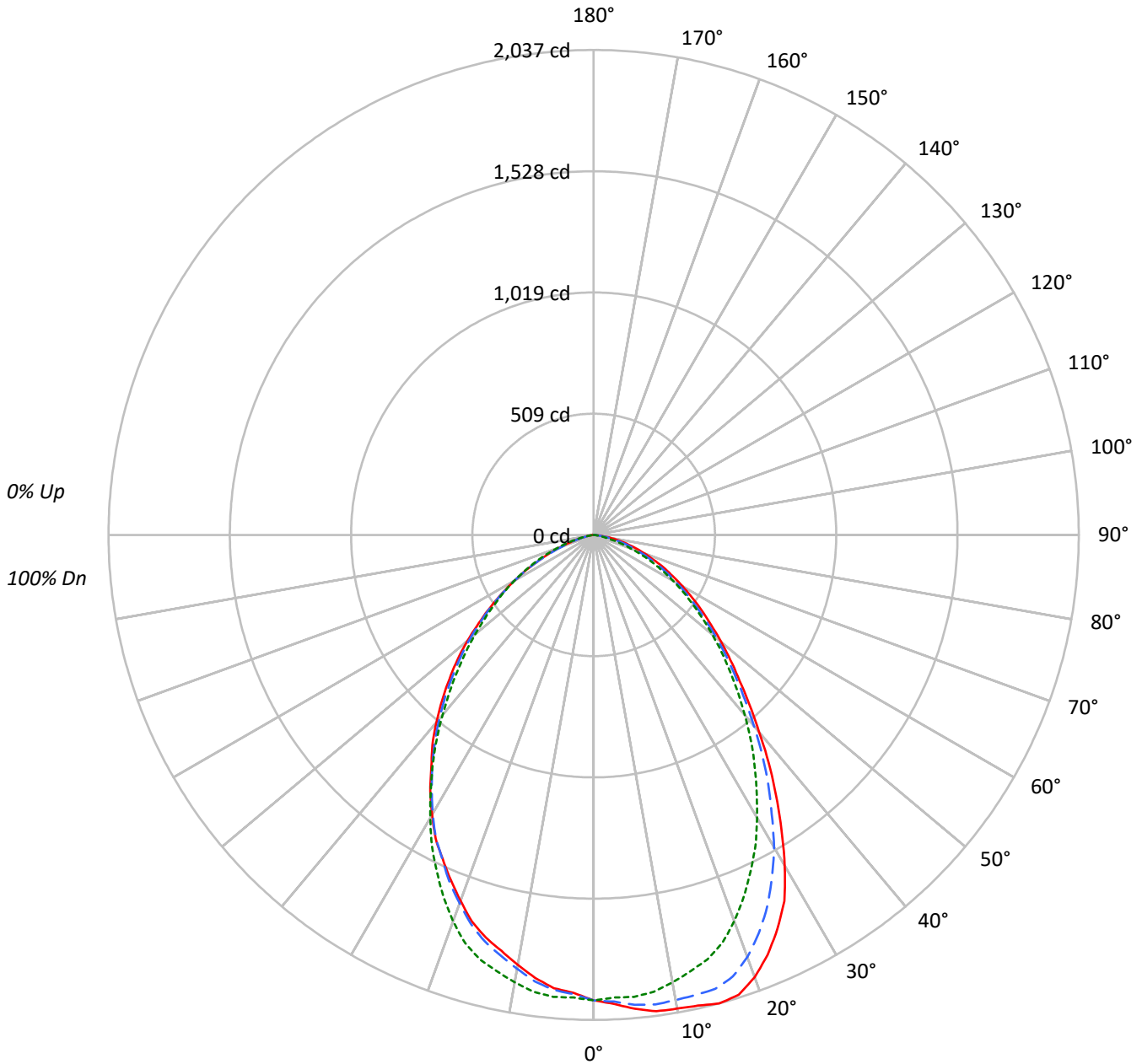
Lumens per Lamp: N/A
Luminaire Lumens: 3725.6 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P592832
CATALOG NUMBER: HCC4S40D010BZ-HM43040950-41RWWH

Luminous Intensity Polar Plot



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



TEST NUMBER: P592832

CATALOG NUMBER: HCC4S40D010BZ-HM43040950-41RWWH

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			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°	241104	241104	241104
5°	247435	241121	236614
10°	253039	239037	229618
15°	260144	235652	223559
20°	259439	226623	214508
25°	248513	212161	204227
30°	228596	195396	193317
35°	201081	177320	178795
40°	173978	158730	165380
45°	151219	141050	149510
50°	134190	124403	132789
55°	119071	109136	113824
60°	106028	94631	94631
65°	94271	78656	73724
70°	81432	59541	52545
75°	68293	39317	32359
80°	51782	18966	17261
85°	27456	6793	6793



TEST NUMBER: P592832
 CATALOG NUMBER: HCC4S40D010BZ-HM43040950-41RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.1	5.0
10°-20°	524.8	14.1
20°-30°	740.1	19.9
30°-40°	764.6	20.5
40°-50°	648.1	17.4
50°-60°	471.6	12.7
60°-70°	275.6	7.4
70°-80°	102.4	2.7
80°-90°	13.4	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°	1450.0	38.9
0°-40°	2214.6	59.4
0°-60°	3334.3	89.5
0°-90°	3725.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3725.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1955	1955	1955	1955	1955	
5°	1998	1981	1947	1918	1911	191
15°	2037	1974	1845	1768	1751	573
25°	1826	1724	1559	1503	1501	835
35°	1335	1277	1178	1180	1187	834
45°	867	842	809	838	857	675
55°	554	527	508	524	529	498
65°	323	296	270	253	253	321
75°	143	119	82	66	68	154
85°	19	12	5	5	5	27
90°	0	0	0	0	0	



TEST NUMBER: P592832

CATALOG NUMBER: HCC4S40D010BZ-HM43040950-41RWWH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1954.7	1954.7	1954.7	1954.7	1954.7	1954.7	1954.7	1954.7	1954.7
2.5°	1971.6	1966.8	1962.0	1954.7	1944.9	1937.6	1930.4	1925.5	1925.5
5°	1998.4	1991.1	1981.4	1964.3	1947.4	1932.8	1918.3	1911.0	1911.0
7.5°	2017.8	2008.0	1988.7	1964.3	1935.2	1913.3	1891.6	1881.8	1877.0
10°	2020.3	2010.5	1983.8	1947.4	1908.5	1874.5	1850.2	1835.6	1833.3
12.5°	2025.1	2013.0	1978.9	1927.9	1877.0	1835.6	1809.0	1794.4	1789.6
15°	2037.2	2020.3	1974.1	1908.5	1845.4	1796.9	1767.7	1755.6	1750.7
17.5°	2025.1	2000.8	1944.9	1867.2	1796.9	1743.4	1714.2	1702.1	1702.1
20°	1976.5	1952.2	1886.6	1801.7	1726.5	1675.4	1646.3	1639.0	1634.2
22.5°	1908.5	1881.8	1811.4	1721.5	1646.3	1600.1	1580.7	1571.0	1568.6
25°	1826.0	1799.2	1724.0	1631.7	1558.9	1520.0	1503.0	1503.0	1500.6
27.5°	1733.7	1699.7	1622.0	1541.8	1471.4	1442.3	1435.0	1435.0	1437.5
30°	1605.0	1580.7	1515.1	1437.5	1371.9	1352.5	1352.5	1357.3	1357.3
32.5°	1466.6	1449.6	1391.3	1323.3	1272.3	1260.2	1265.0	1274.8	1277.2
35°	1335.4	1316.1	1277.2	1216.5	1177.6	1172.8	1180.1	1187.4	1187.4
37.5°	1206.8	1187.4	1160.7	1112.1	1083.0	1085.4	1095.1	1104.9	1112.1
40°	1080.5	1066.0	1046.6	1007.7	985.8	995.6	1007.7	1017.4	1027.1
42.5°	968.9	954.3	939.7	910.6	896.0	908.1	922.7	932.4	942.1
45°	866.9	857.1	842.5	818.3	808.6	820.7	837.7	847.5	857.1
47.5°	779.4	774.6	755.1	733.2	728.4	740.5	755.1	767.3	774.6
50°	699.3	692.0	675.1	653.2	648.3	667.8	677.4	684.7	692.0
52.5°	621.6	614.3	594.9	575.5	575.5	590.1	597.3	599.7	607.0
55°	553.7	546.4	526.9	512.3	507.5	519.6	524.5	524.5	529.3
57.5°	490.4	483.2	463.8	446.8	444.4	451.7	451.7	451.7	454.1
60°	429.8	422.5	403.1	388.5	383.6	386.1	383.6	381.3	383.6
62.5°	374.0	366.7	347.2	330.2	325.4	325.4	318.1	315.7	318.1
65°	323.0	310.9	296.3	279.2	269.5	262.2	252.6	252.6	252.6
67.5°	272.0	262.2	245.3	228.2	216.1	203.9	189.4	194.3	196.7
70°	225.8	218.5	199.1	182.2	165.1	150.6	138.4	143.3	145.7
72.5°	184.5	174.9	157.8	138.4	123.9	104.4	97.1	102.0	102.0
75°	143.3	133.5	118.9	99.5	82.5	65.6	65.6	67.9	67.9
77.5°	106.8	97.1	82.5	65.6	51.0	38.9	41.3	41.3	41.3
80°	72.9	65.6	53.5	38.9	26.7	21.9	21.9	21.9	24.3
82.5°	41.3	36.4	29.1	19.4	12.1	12.1	12.1	12.1	12.1
85°	19.4	14.6	12.1	7.3	4.8	4.8	4.8	4.8	4.8
87.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
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)