

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: P580610

Luminaire Tested: **HCC4S40D010BZ-HM43040840-41RWWC**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580610
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-14)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC4S40D010BZ-HM43040840-41RWWC
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

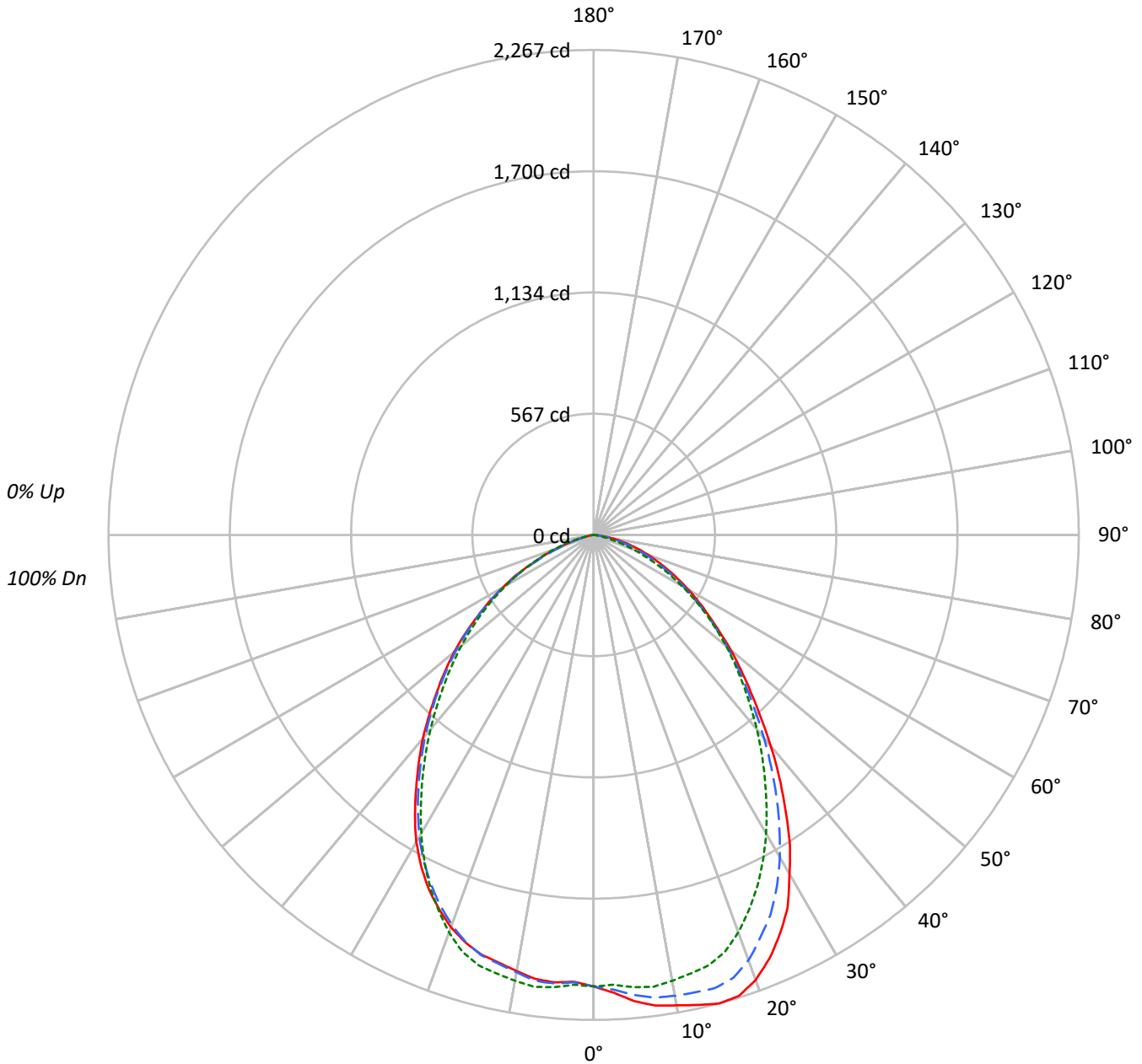
Lumens per Lamp: N/A
Luminaire Lumens: 4398.1 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.15 / 1.21
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P580610
CATALOG NUMBER: HCC4S40D010BZ-HM43040840-41RWWC

Luminous Intensity Polar Plot



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



TEST NUMBER: P580610

CATALOG NUMBER: HCC4S40D010BZ-HM43040840-41RWWC

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	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78	76					76			
3	95	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	69	67					67			
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58					58			
5	81	70	61	56	79	68	61	55	66	60	55	65	59	54	63	58	54	52					52			
6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	52	48	46					46			
7	70	58	50	44	69	57	49	44	56	49	44	54	48	44	53	47	43	41					41			
8	66	53	45	40	64	53	45	40	51	44	40	50	44	39	49	43	39	37					37			
9	62	49	42	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34					34			
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31					31			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	260321	260321	260321
5°	270849	262727	259916
10°	279692	265051	259339
15°	289540	265865	259314
20°	290508	259439	256078
25°	280251	246485	248418
30°	260784	229507	236016
35°	234916	209995	217735
40°	207115	191046	199757
45°	181101	172134	180612
50°	160364	154876	163089
55°	141071	136791	142296
60°	125936	116784	120311
65°	110703	94884	93249
70°	96687	69928	63761
75°	80207	42129	33980
80°	60732	16266	10087
85°	28305	3963	3963



TEST NUMBER: P580610
 CATALOG NUMBER: HCC4S40D010BZ-HM43040840-41RWWC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.6	4.6
10°-20°	594.1	13.5
20°-30°	860.4	19.6
30°-40°	907.7	20.6
40°-50°	785.6	17.9
50°-60°	581.9	13.2
60°-70°	335.5	7.6
70°-80°	117.2	2.7
80°-90°	12.3	0.3
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°	1658.0	37.7
0°-40°	2565.7	58.3
0°-60°	3933.2	89.4
0°-90°	4398.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4398.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2110	2110	2110	2110	2110	
5°	2188	2159	2122	2105	2099	210
15°	2267	2193	2082	2034	2031	638
25°	2059	1957	1811	1800	1825	942
35°	1560	1489	1395	1426	1446	974
45°	1038	1010	987	1024	1035	806
55°	656	642	636	659	662	592
65°	379	356	325	308	320	379
75°	168	143	88	71	71	181
85°	20	11	3	3	3	31
90°	0	0	0	0	0	

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



TEST NUMBER: P580610

CATALOG NUMBER: HCC4S40D010BZ-HM43040840-41RWWC

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5
2.5°	2141.9	2136.2	2127.7	2116.2	2104.9	2096.3	2093.5	2090.6	2090.6
5°	2187.5	2176.2	2159.0	2136.2	2121.9	2113.4	2104.9	2099.2	2099.2
7.5°	2218.9	2207.5	2181.9	2150.5	2130.6	2113.4	2102.0	2093.5	2093.5
10°	2233.1	2218.9	2187.5	2147.6	2116.2	2093.5	2076.3	2070.6	2070.6
12.5°	2250.3	2233.1	2190.4	2139.1	2099.2	2070.6	2053.6	2047.8	2047.8
15°	2267.4	2247.5	2193.2	2133.4	2082.0	2047.8	2033.6	2030.7	2030.7
17.5°	2258.8	2233.1	2170.5	2099.2	2042.1	2007.9	1993.6	1993.6	1996.5
20°	2213.2	2187.5	2116.2	2036.4	1976.5	1950.9	1939.4	1945.2	1950.9
22.5°	2144.8	2113.4	2036.4	1959.4	1896.6	1873.9	1873.9	1882.4	1890.9
25°	2059.2	2030.7	1956.6	1870.9	1811.1	1793.9	1799.7	1813.9	1825.3
27.5°	1962.2	1930.9	1853.9	1774.0	1714.1	1705.6	1719.8	1739.8	1745.5
30°	1831.0	1805.4	1739.8	1662.8	1611.4	1608.6	1628.6	1642.8	1657.1
32.5°	1705.6	1677.0	1614.2	1540.1	1503.0	1506.0	1528.7	1545.9	1554.4
35°	1560.1	1534.4	1488.8	1428.9	1394.6	1400.4	1426.0	1443.2	1446.0
37.5°	1423.2	1406.1	1360.4	1314.8	1289.2	1300.6	1323.3	1343.3	1343.3
40°	1286.3	1272.0	1237.8	1200.7	1186.5	1200.7	1223.6	1240.6	1240.6
42.5°	1155.1	1146.6	1118.0	1092.3	1083.8	1103.7	1123.7	1138.0	1135.1
45°	1038.2	1029.6	1009.7	989.7	986.8	1006.8	1023.9	1032.4	1035.4
47.5°	932.7	927.0	909.8	895.6	895.6	915.5	929.8	938.4	941.2
50°	835.7	830.0	815.8	804.3	807.1	827.1	838.5	847.0	849.9
52.5°	738.7	735.8	724.4	710.2	718.8	733.0	747.3	753.0	755.8
55°	656.0	656.0	641.8	630.3	636.1	650.3	658.8	661.7	661.7
57.5°	581.8	579.0	561.8	550.4	553.3	567.6	573.3	576.1	576.1
60°	510.5	507.7	490.5	473.4	473.4	482.0	484.8	487.7	487.7
62.5°	442.1	439.2	419.3	405.0	399.3	396.5	396.5	402.1	413.5
65°	379.3	376.4	356.5	333.7	325.1	316.6	308.1	313.8	319.5
67.5°	322.3	316.6	296.6	276.7	256.7	242.5	228.1	236.8	248.1
70°	268.1	262.4	239.6	216.8	193.9	171.2	159.7	171.2	176.8
72.5°	216.8	211.1	188.2	165.5	136.9	114.1	111.2	114.1	116.9
75°	168.3	165.5	142.6	116.9	88.4	71.3	71.3	71.3	71.3
77.5°	125.4	119.8	97.0	74.2	51.3	39.9	37.1	37.1	37.1
80°	85.5	79.8	59.9	42.8	22.9	17.2	17.2	14.2	14.2
82.5°	48.5	45.6	31.4	17.2	8.5	5.7	5.7	5.7	5.7
85°	20.0	17.2	11.4	5.7	2.8	2.8	2.8	2.8	2.8
87.5°	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0
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)