

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: P592563

Luminaire Tested: **HCC4S05D010BZ-HM40525950-41WWBB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P592563  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-17)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S05D010BZ-HM40525950-41WWBB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

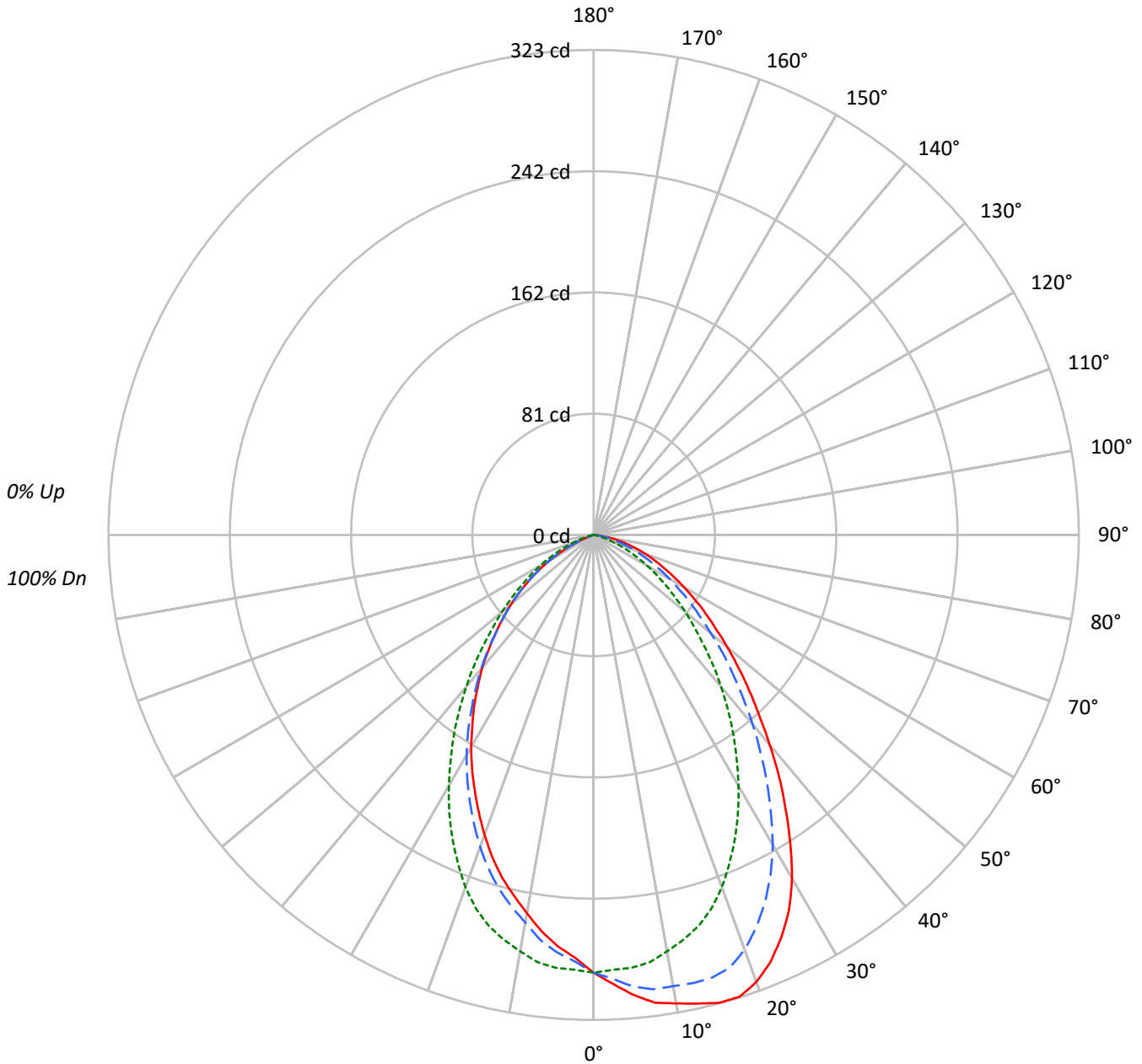
Lumens per Lamp: N/A  
Luminaire Lumens: 503.6 lumens  
Efficiency: N/A  
Efficacy: 83.9 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.04 / 1.12  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P592563  
CATALOG NUMBER: HCC4S05D010BZ-HM40525950-41WWBB

### Luminous Intensity Polar Plot



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



TEST NUMBER: P592563

CATALOG NUMBER: HCC4S05D010BZ-HM40525950-41WWBB

**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	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89					89			
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	85	83	80	78					78			
3	96	87	80	75	94	86	79	74	83	78	73	80	76	72	78	74	71	69					69			
4	89	79	72	66	87	78	71	65	75	69	65	73	68	64	71	67	63	61					61			
5	83	72	64	58	81	71	64	58	69	62	58	67	61	57	65	60	56	55					55			
6	77	66	58	52	75	65	57	52	63	57	52	61	56	51	60	55	51	49					49			
7	72	60	53	47	71	59	52	47	58	51	47	57	51	46	55	50	46	44					44			
8	68	56	48	43	66	55	48	43	54	47	42	53	47	42	51	46	42	40					40			
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	36	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	35955	35955	35955
5°	38098	35833	34037
10°	39679	35270	32039
15°	41195	34427	30136
20°	41584	32763	27880
25°	40244	30309	25505
30°	37615	27460	23216
35°	33534	24409	20855
40°	29321	21238	18565
45°	25538	18019	16048
50°	22279	15275	13759
55°	19526	12666	11161
60°	17071	10213	8165
65°	14885	7618	4611
70°	13019	4941	1515
75°	10675	2526	381
80°	7956	1208	355
85°	4670	708	708



TEST NUMBER: P592563  
 CATALOG NUMBER: HCC4S05D010BZ-HM40525950-41WWBB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.5	5.5
10°-20°	77.0	15.3
20°-30°	106.5	21.1
30°-40°	107.0	21.3
40°-50°	86.4	17.2
50°-60°	58.4	11.6
60°-70°	29.7	5.9
70°-80°	9.5	1.9
80°-90°	1.5	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°	211.0	41.9
0°-40°	318.0	63.2
0°-60°	462.8	91.9
0°-90°	503.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	503.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	292	292	292	292	292	
5°	308	302	289	279	275	30
15°	323	305	270	244	236	91
25°	296	270	223	195	187	135
35°	223	201	162	142	138	139
45°	146	131	103	92	92	113
55°	91	78	59	51	52	82
65°	51	41	26	17	16	51
75°	22	16	5	1	1	24
85°	3	2	0	0	0	4
90°	0	0	0	0	0	



TEST NUMBER: P592563

CATALOG NUMBER: HCC4S05D010BZ-HM40525950-41WWBB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	291.5	291.5	291.5	291.5	291.5	291.5	291.5	291.5	291.5
2.5°	299.4	297.7	296.0	293.2	289.9	286.5	284.4	282.8	281.9
5°	307.7	305.7	301.9	295.7	289.4	283.6	279.1	276.1	274.9
7.5°	314.3	311.4	305.2	296.5	286.9	277.8	272.1	267.9	266.2
10°	316.8	313.5	305.2	293.6	281.6	270.4	262.1	257.9	255.8
12.5°	319.7	316.0	305.7	291.1	276.1	262.9	253.3	248.0	245.8
15°	322.6	317.6	305.2	287.4	269.6	254.2	243.8	238.5	236.0
17.5°	322.6	316.8	301.9	281.1	260.8	244.6	233.0	226.8	224.7
20°	316.8	310.2	294.0	271.2	249.6	232.2	221.0	214.7	212.4
22.5°	307.7	300.2	282.8	259.1	236.3	219.4	208.2	202.4	199.9
25°	295.7	288.2	269.9	245.5	222.7	205.7	195.3	189.9	187.4
27.5°	281.6	273.3	255.0	230.5	208.2	192.0	182.4	177.5	175.4
30°	264.1	256.3	238.5	214.4	192.8	177.9	169.2	164.6	163.0
32.5°	243.8	237.2	219.7	197.4	177.1	163.3	155.5	151.7	150.2
35°	222.7	216.4	201.1	180.4	162.1	149.3	141.8	139.4	138.5
37.5°	202.7	197.4	182.4	163.3	146.8	135.6	128.9	127.3	126.4
40°	182.1	178.3	164.6	147.2	131.9	121.9	116.6	115.3	115.3
42.5°	163.3	159.2	147.2	131.4	117.8	107.8	104.1	102.8	103.3
45°	146.4	142.2	131.0	116.6	103.3	95.0	92.0	92.0	92.0
47.5°	130.6	126.9	116.6	101.6	90.8	84.2	81.3	81.3	81.7
50°	116.1	113.6	102.0	89.1	79.6	73.4	71.3	70.9	71.7
52.5°	102.4	99.5	89.1	77.5	68.4	63.4	61.4	60.9	61.4
55°	90.8	87.5	78.3	67.2	58.9	53.9	51.4	51.0	51.9
57.5°	79.6	77.2	67.5	57.7	49.7	44.8	42.7	41.9	42.3
60°	69.2	66.7	58.0	48.5	41.4	36.4	33.6	32.8	33.1
62.5°	59.7	57.7	49.4	40.2	33.1	28.6	25.8	23.6	24.5
65°	51.0	48.9	41.4	32.3	26.1	21.1	17.0	15.3	15.8
67.5°	43.6	41.1	34.0	25.8	19.5	14.1	9.5	8.7	8.7
70°	36.1	33.6	27.4	19.9	13.7	7.5	4.2	4.2	4.2
72.5°	29.1	26.9	21.1	15.0	8.7	3.3	1.7	1.7	1.7
75°	22.4	20.8	15.8	10.3	5.3	1.7	1.2	0.8	0.8
77.5°	16.6	15.0	11.2	7.0	3.3	0.8	0.8	0.8	0.8
80°	11.2	10.0	7.5	4.2	1.7	0.5	0.5	0.5	0.5
82.5°	6.6	5.8	4.2	2.0	0.8	0.5	0.5	0.5	0.5
85°	3.3	2.5	1.7	0.8	0.5	0.5	0.5	0.5	0.5
87.5°	0.8	0.5	0.5	0.5	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)