

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: P581114

Luminaire Tested: **HCC4S05D010BZ-HM40525940-41RWWC**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581114  
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: HCC4S05D010BZ-HM40525940-41RWWC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

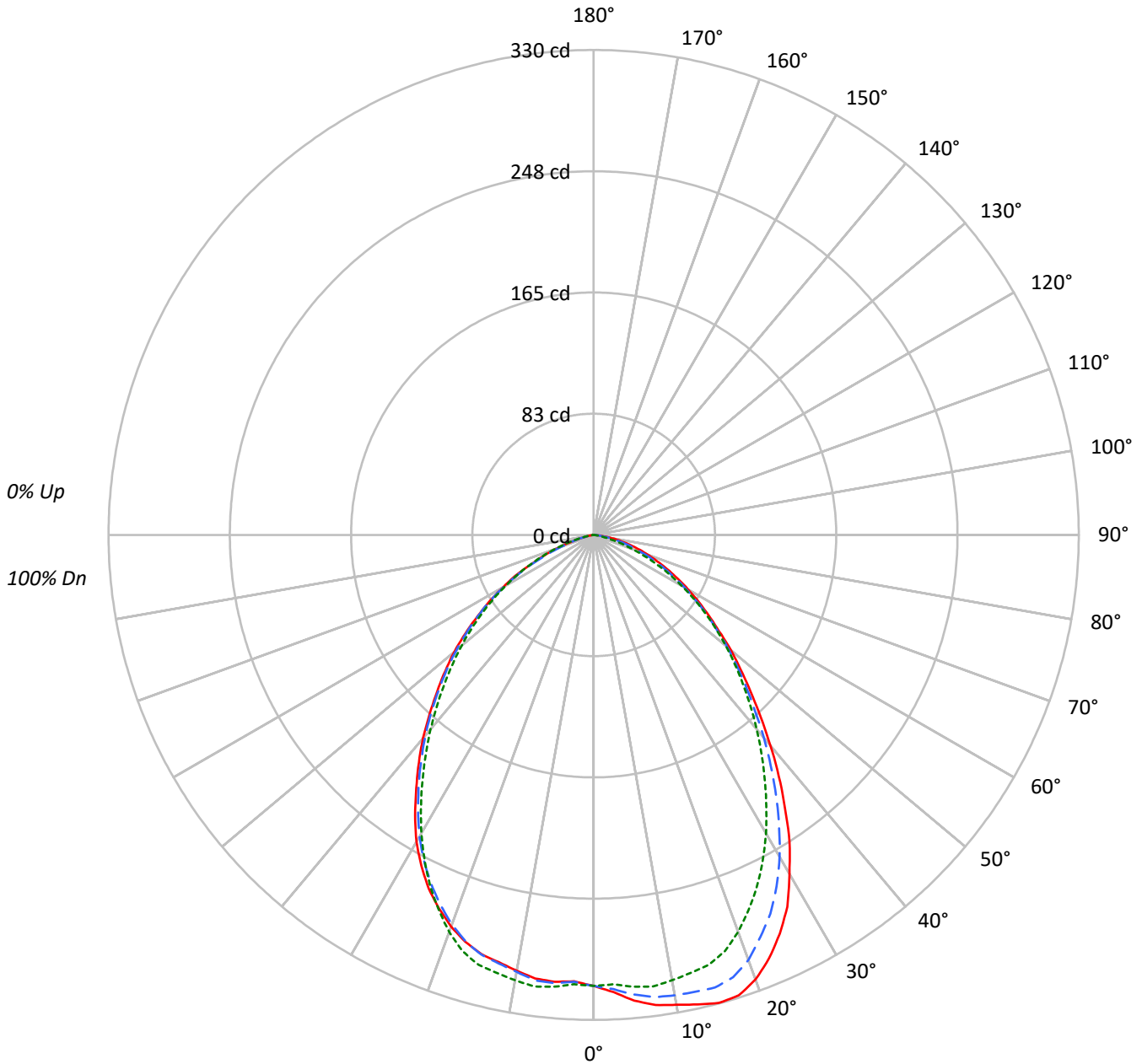
Lumens per Lamp: N/A  
Luminaire Lumens: 639.6 lumens  
Efficiency: N/A  
Efficacy: 106.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.15 / 1.21  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 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: P581114  
CATALOG NUMBER: HCC4S05D010BZ-HM40525940-41RWWC

### Luminous Intensity Polar Plot



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



TEST NUMBER: P581114

CATALOG NUMBER: HCC4S05D010BZ-HM40525940-41RWWC

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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°	37855	37855	37855
5°	39386	38210	37789
10°	40668	38539	37712
15°	42102	38667	37709
20°	42253	37725	37226
25°	40747	35834	36134
30°	37928	33385	34325
35°	34166	30537	31666
40°	30110	27775	29063
45°	26340	25032	26253
50°	23334	22528	23718
55°	20494	19892	20687
60°	18304	16997	17490
65°	16111	13805	13542
70°	14029	10134	9304
75°	11676	6100	4909
80°	8879	2344	1421
85°	4246	708	708



TEST NUMBER: P581114  
 CATALOG NUMBER: HCC4S05D010BZ-HM40525940-41RWWC

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.6	4.6
10°-20°	86.4	13.5
20°-30°	125.1	19.6
30°-40°	132.0	20.6
40°-50°	114.2	17.9
50°-60°	84.6	13.2
60°-70°	48.8	7.6
70°-80°	17.0	2.7
80°-90°	1.8	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°	241.1	37.7
0°-40°	373.1	58.3
0°-60°	571.9	89.4
0°-90°	639.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	639.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	307	307	307	307	307	
5°	318	314	309	306	305	31
15°	330	319	303	296	295	93
25°	299	284	263	262	266	137
35°	227	216	203	207	210	142
45°	151	147	144	149	150	117
55°	95	93	92	96	96	86
65°	55	52	47	45	46	55
75°	24	21	13	10	10	26
85°	3	2	0	0	0	5
90°	0	0	0	0	0	

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



TEST NUMBER: P581114

CATALOG NUMBER: HCC4S05D010BZ-HM40525940-41RWWC

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9
2.5°	311.4	310.6	309.4	307.7	306.1	304.9	304.4	304.0	304.0
5°	318.1	316.4	313.9	310.6	308.6	307.4	306.1	305.2	305.2
7.5°	322.7	321.0	317.2	312.7	309.9	307.4	305.7	304.4	304.4
10°	324.7	322.7	318.1	312.4	307.7	304.4	301.9	301.1	301.1
12.5°	327.2	324.7	318.5	311.1	305.2	301.1	298.6	297.8	297.8
15°	329.7	326.8	318.9	310.2	302.8	297.8	295.7	295.3	295.3
17.5°	328.5	324.7	315.6	305.2	296.9	292.0	289.9	289.9	290.3
20°	321.9	318.1	307.7	296.1	287.4	283.6	282.0	282.8	283.6
22.5°	311.9	307.4	296.1	284.9	275.8	272.5	272.5	273.8	275.0
25°	299.4	295.3	284.5	272.1	263.3	260.8	261.7	263.8	265.5
27.5°	285.3	280.8	269.6	258.0	249.2	248.0	250.0	253.0	253.8
30°	266.3	262.5	253.0	241.8	234.4	233.9	236.9	238.9	241.0
32.5°	248.0	243.9	234.7	223.9	218.6	218.9	222.3	224.8	226.1
35°	226.9	223.1	216.4	207.8	202.8	203.6	207.4	209.9	210.3
37.5°	206.9	204.4	197.8	191.2	187.5	189.1	192.5	195.3	195.3
40°	187.0	185.0	180.0	174.6	172.5	174.6	178.0	180.5	180.5
42.5°	168.0	166.7	162.5	158.9	157.7	160.5	163.4	165.5	165.0
45°	151.0	149.7	146.9	143.9	143.5	146.4	148.9	150.2	150.5
47.5°	135.6	134.8	132.3	130.2	130.2	133.1	135.2	136.4	136.9
50°	121.6	120.7	118.6	116.9	117.4	120.3	121.9	123.1	123.6
52.5°	107.4	107.0	105.3	103.3	104.5	106.6	108.6	109.5	109.9
55°	95.3	95.3	93.3	91.7	92.5	94.5	95.8	96.2	96.2
57.5°	84.6	84.2	81.7	80.0	80.5	82.5	83.3	83.8	83.8
60°	74.2	73.8	71.4	68.9	68.9	70.1	70.5	70.9	70.9
62.5°	64.2	63.9	60.9	58.9	58.1	57.7	57.7	58.5	60.2
65°	55.2	54.7	51.9	48.6	47.3	46.1	44.8	45.6	46.4
67.5°	46.9	46.1	43.1	40.2	37.3	35.3	33.1	34.4	36.1
70°	38.9	38.1	34.8	31.6	28.1	24.9	23.3	24.9	25.8
72.5°	31.6	30.6	27.4	24.1	19.9	16.6	16.2	16.6	17.0
75°	24.5	24.1	20.8	17.0	12.8	10.3	10.3	10.3	10.3
77.5°	18.3	17.4	14.1	10.8	7.5	5.8	5.4	5.4	5.4
80°	12.5	11.6	8.7	6.2	3.3	2.5	2.5	2.0	2.0
82.5°	7.0	6.6	4.5	2.5	1.2	0.8	0.8	0.8	0.8
85°	3.0	2.5	1.7	0.8	0.5	0.5	0.5	0.5	0.5
87.5°	0.5	0.5	0.5	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)