

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: P581046

Luminaire Tested: **HCC4W05D010BZ-HM40525840-41WWWB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581046  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-18)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W05D010BZ-HM40525840-41WWWB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

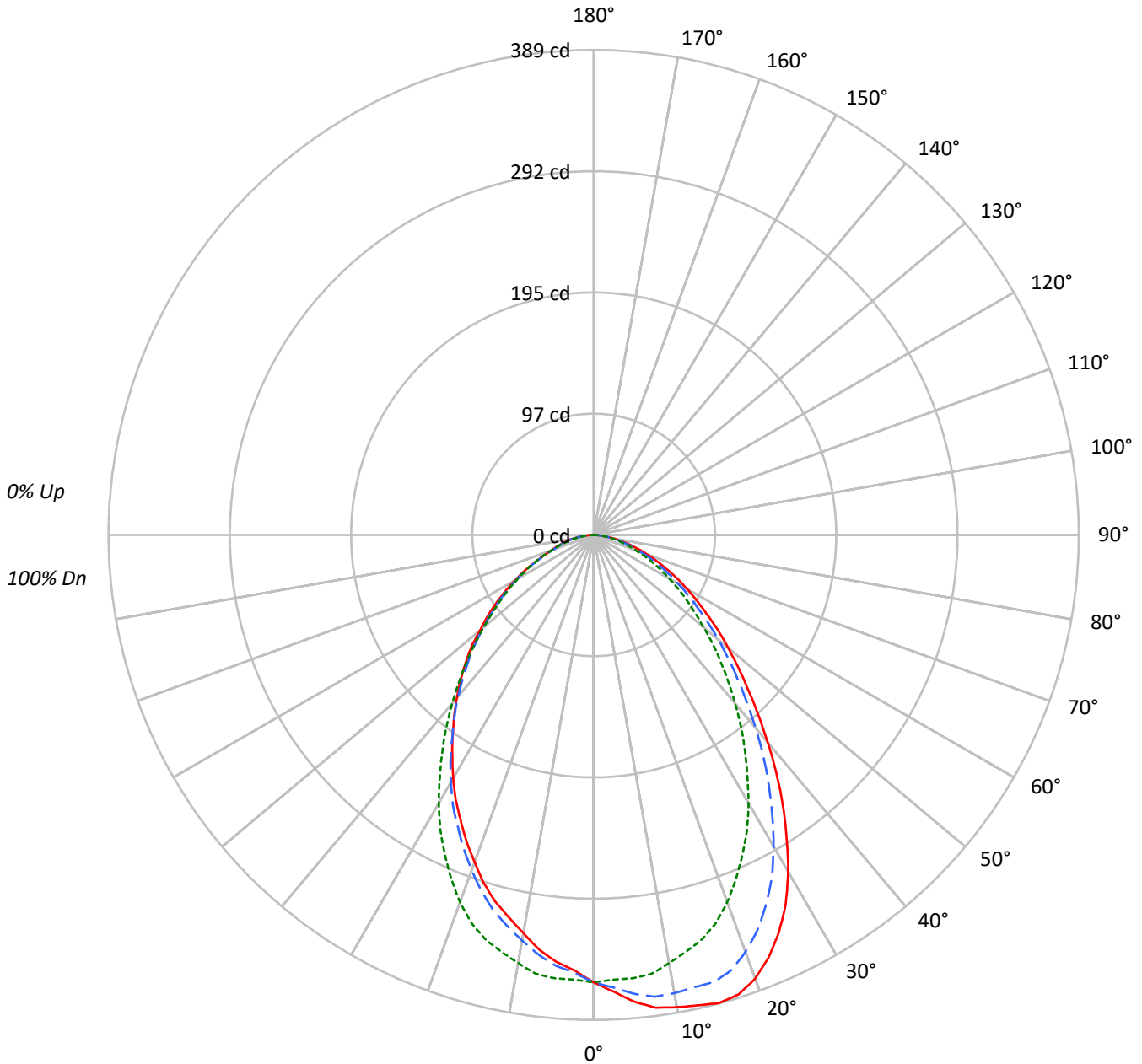
Lumens per Lamp: N/A  
Luminaire Lumens: 696.0 lumens  
Efficiency: N/A  
Efficacy: 116.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P581046  
CATALOG NUMBER: HCC4W05D010BZ-HM40525840-41WWWB

### Luminous Intensity Polar Plot



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



TEST NUMBER: P581046

CATALOG NUMBER: HCC4W05D010BZ-HM40525840-41WWWB

**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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87								
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66								
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	58								
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51								
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46								
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41								
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37								
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34								
10	58	45	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31								

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

	0°	90°	180°
0°	44269	44269	44269
5°	46543	44203	42556
10°	48183	43674	40618
15°	49636	42881	38884
20°	49696	41124	36648
25°	47838	38434	34351
30°	44423	35365	32089
35°	39828	31847	29679
40°	34941	28403	27453
45°	30526	25136	25311
50°	26961	22010	22797
55°	23763	19526	20494
60°	21240	17268	17959
65°	18825	15206	15206
70°	16445	12983	12983
75°	14059	10961	12296
80°	11152	9802	11152
85°	7218	8491	10473



TEST NUMBER: P581046  
 CATALOG NUMBER: HCC4W05D010BZ-HM40525840-41WWWB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.0	4.9
10°-20°	95.7	13.8
20°-30°	134.1	19.3
30°-40°	138.2	19.9
40°-50°	117.7	16.9
50°-60°	87.2	12.5
60°-70°	54.7	7.9
70°-80°	27.2	3.9
80°-90°	7.1	1.0
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°	263.9	37.9
0°-40°	402.1	57.8
0°-60°	606.9	87.2
0°-90°	696.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	696.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	359	359	359	359	359	
5°	376	369	357	347	344	36
15°	389	371	336	311	304	109
25°	352	327	282	258	252	161
35°	264	245	212	198	197	165
45°	175	163	144	141	145	136
55°	110	102	91	93	95	100
65°	64	58	52	51	52	64
75°	30	26	23	25	26	32
85°	5	5	6	7	7	7
90°	0	0	0	0	0	

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



TEST NUMBER: P581046

CATALOG NUMBER: HCC4W05D010BZ-HM40525840-41WWWB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9
2.5°	366.7	365.4	363.4	360.2	357.0	354.2	351.5	350.1	349.7
5°	375.9	373.2	369.4	363.4	357.0	351.5	346.9	344.6	343.7
7.5°	382.4	379.5	373.6	364.3	355.1	346.9	339.5	336.3	335.4
10°	384.7	381.5	373.2	360.7	348.7	338.6	330.3	326.2	324.3
12.5°	386.5	382.4	371.7	357.0	342.3	329.8	321.1	315.5	314.2
15°	388.7	384.2	371.3	353.3	335.8	321.1	311.4	306.3	304.5
17.5°	386.5	381.5	366.3	345.9	326.2	310.0	299.4	294.9	292.9
20°	378.6	373.2	356.0	334.5	313.3	296.7	286.0	281.5	279.2
22.5°	366.7	360.7	343.2	320.2	298.5	282.4	272.3	267.6	266.3
25°	351.5	345.5	327.1	303.6	282.4	266.7	258.0	253.8	252.4
27.5°	333.5	327.6	309.5	286.5	266.3	251.5	244.6	240.5	239.5
30°	311.9	305.9	288.4	267.2	248.3	234.5	228.9	225.8	225.3
32.5°	287.9	282.8	266.7	247.3	229.4	217.9	213.7	211.5	211.0
35°	264.5	258.9	244.6	227.1	211.5	201.3	197.6	197.1	197.1
37.5°	240.5	234.9	223.4	207.3	194.0	184.8	183.3	183.8	183.8
40°	217.0	211.9	201.8	188.4	176.4	169.6	169.1	170.0	170.5
42.5°	194.9	190.7	181.5	170.0	159.8	154.4	154.8	156.6	158.0
45°	175.0	171.4	163.1	152.9	144.1	140.1	141.4	143.7	145.1
47.5°	157.1	153.9	146.1	136.8	129.4	126.7	128.5	131.3	133.1
50°	140.5	137.8	130.4	120.7	114.7	112.8	115.2	117.9	118.8
52.5°	125.8	123.0	115.2	106.9	102.3	101.4	103.6	105.9	107.4
55°	110.5	108.3	101.8	94.4	90.8	90.2	92.6	94.4	95.3
57.5°	98.1	95.8	89.8	83.4	80.1	79.7	81.9	83.4	83.9
60°	86.1	83.9	78.3	72.3	70.0	70.0	71.4	72.3	72.8
62.5°	75.1	72.8	67.8	62.7	60.8	60.8	60.8	61.3	62.7
65°	64.5	62.7	58.0	53.5	52.1	51.2	51.2	51.2	52.1
67.5°	54.8	53.0	49.3	45.2	43.8	42.3	41.9	42.8	42.8
70°	45.6	44.3	40.5	37.3	36.0	34.5	34.0	36.0	36.0
72.5°	37.3	36.0	33.6	30.4	29.1	28.6	29.5	30.4	30.9
75°	29.5	28.1	26.2	24.4	23.0	23.5	24.9	25.3	25.8
77.5°	22.1	21.7	19.9	18.4	18.4	18.8	19.9	20.8	21.2
80°	15.7	15.2	14.3	13.4	13.8	14.8	15.2	16.1	15.7
82.5°	9.6	9.6	9.2	9.2	9.6	10.6	11.0	11.5	12.0
85°	5.1	5.1	5.1	5.6	6.0	6.5	6.9	7.4	7.4
87.5°	1.4	1.8	1.8	2.3	2.7	2.7	3.2	3.2	3.2
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)