

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: P581064

Luminaire Tested: **HCC4S05D010MB-HM40525927-41WWWB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581064  
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: HCC4S05D010MB-HM40525927-41WWWB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

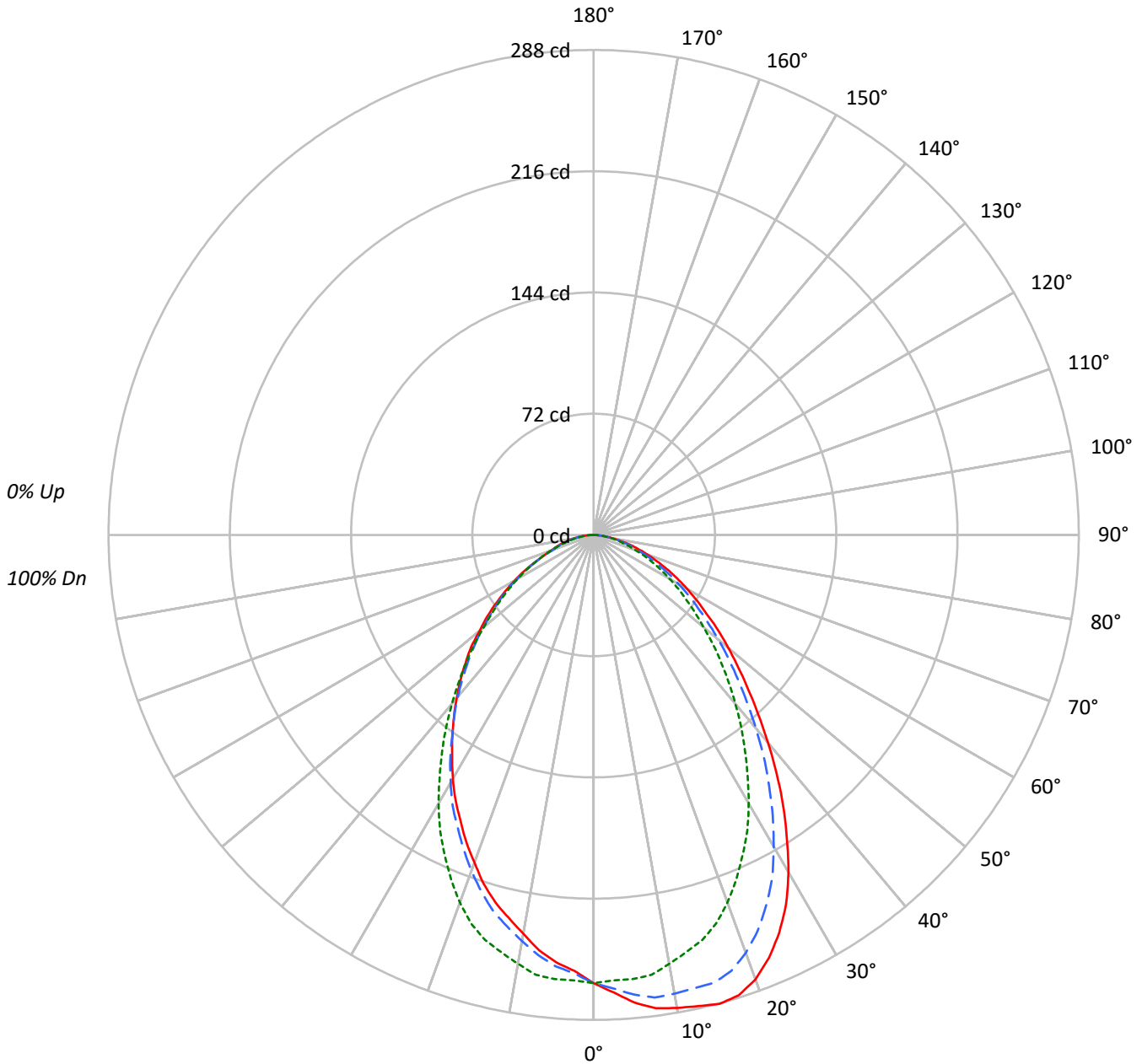
Lumens per Lamp: N/A  
Luminaire Lumens: 516.1 lumens  
Efficiency: N/A  
Efficacy: 86.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P581064  
CATALOG NUMBER: HCC4S05D010MB-HM40525927-41WWWB

### Luminous Intensity Polar Plot





TEST NUMBER: P581064

CATALOG NUMBER: HCC4S05D010MB-HM40525927-41WWWB

**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								
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	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31								

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

	0°	90°	180°
0°	32835	32835	32835
5°	34520	32787	31549
10°	35721	32389	30122
15°	36815	31797	28834
20°	36858	30492	27171
25°	35467	28499	25477
30°	32943	26221	23800
35°	29528	23595	22014
40°	25908	21077	20352
45°	22642	18647	18769
50°	19995	16311	16925
55°	17612	14473	15204
60°	15764	12803	13321
65°	13951	11266	11266
70°	12190	9629	9629
75°	10437	8102	9150
80°	8240	7245	8240
85°	5236	6227	7642



TEST NUMBER: P581064  
 CATALOG NUMBER: HCC4S05D010MB-HM40525927-41WWWB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.2	4.9
10°-20°	71.0	13.8
20°-30°	99.5	19.3
30°-40°	102.5	19.9
40°-50°	87.3	16.9
50°-60°	64.7	12.5
60°-70°	40.6	7.9
70°-80°	20.2	3.9
80°-90°	5.3	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°	195.7	37.9
0°-40°	298.2	57.8
0°-60°	450.1	87.2
0°-90°	516.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	516.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	266	266	266	266	266	
5°	279	274	265	257	255	27
15°	288	275	249	231	226	81
25°	261	242	209	191	187	119
35°	196	181	157	146	146	122
45°	130	121	107	105	108	101
55°	82	76	67	69	71	74
65°	48	43	39	38	39	48
75°	22	20	17	18	19	23
85°	4	4	4	5	5	5
90°	0	0	0	0	0	

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



TEST NUMBER: P581064

CATALOG NUMBER: HCC4S05D010MB-HM40525927-41WWWB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	266.2	266.2	266.2	266.2	266.2	266.2	266.2	266.2	266.2
2.5°	271.9	270.9	269.6	267.2	264.8	262.8	260.6	259.6	259.2
5°	278.8	276.7	274.0	269.6	264.8	260.6	257.2	255.5	254.8
7.5°	283.5	281.5	277.1	270.2	263.4	257.2	251.7	249.4	248.7
10°	285.2	282.8	276.7	267.5	258.6	251.1	244.9	241.9	240.5
12.5°	286.6	283.5	275.7	264.8	253.8	244.6	238.1	234.0	233.0
15°	288.3	284.9	275.4	262.0	249.0	238.1	231.0	227.1	225.8
17.5°	286.6	282.8	271.6	256.5	241.9	230.0	222.0	218.6	217.2
20°	280.8	276.7	264.1	248.0	232.3	220.0	212.1	208.7	207.0
22.5°	271.9	267.5	254.5	237.4	221.3	209.4	201.9	198.5	197.5
25°	260.6	256.2	242.5	225.1	209.4	197.8	191.2	188.2	187.2
27.5°	247.3	242.9	229.6	212.5	197.5	186.5	181.4	178.3	177.6
30°	231.3	226.8	213.8	198.2	184.1	173.9	169.8	167.4	167.1
32.5°	213.5	209.7	197.8	183.4	170.1	161.6	158.6	156.7	156.4
35°	196.1	191.9	181.4	168.4	156.7	149.3	146.5	146.2	146.2
37.5°	178.3	174.2	165.7	153.7	143.8	137.0	136.0	136.3	136.3
40°	160.9	157.1	149.6	139.7	130.9	125.8	125.4	126.1	126.4
42.5°	144.5	141.4	134.6	126.1	118.5	114.4	114.7	116.1	117.1
45°	129.8	127.1	120.9	113.4	106.9	103.9	104.9	106.6	107.6
47.5°	116.5	114.1	108.3	101.5	96.0	94.0	95.3	97.4	98.7
50°	104.2	102.2	96.7	89.6	85.0	83.6	85.4	87.4	88.2
52.5°	93.3	91.3	85.4	79.2	75.8	75.1	76.8	78.5	79.6
55°	81.9	80.2	75.5	70.0	67.3	67.0	68.7	70.0	70.7
57.5°	72.8	71.1	66.6	61.9	59.5	59.1	60.8	61.9	62.2
60°	63.9	62.2	58.1	53.7	51.9	51.9	53.0	53.7	54.0
62.5°	55.7	54.0	50.2	46.4	45.1	45.1	45.1	45.4	46.4
65°	47.8	46.4	43.0	39.6	38.6	37.9	37.9	37.9	38.6
67.5°	40.6	39.3	36.5	33.5	32.5	31.4	31.1	31.8	31.8
70°	33.8	32.8	30.1	27.7	26.7	25.7	25.3	26.7	26.7
72.5°	27.7	26.7	25.0	22.6	21.6	21.2	21.9	22.6	22.9
75°	21.9	20.9	19.5	18.2	17.0	17.4	18.5	18.8	19.2
77.5°	16.3	16.0	14.6	13.6	13.6	14.0	14.6	15.3	15.7
80°	11.6	11.2	10.6	9.9	10.2	10.9	11.2	11.9	11.6
82.5°	7.2	7.2	6.8	6.8	7.2	7.8	8.2	8.5	8.9
85°	3.7	3.7	3.7	4.1	4.4	4.8	5.1	5.4	5.4
87.5°	1.0	1.4	1.4	1.7	2.0	2.0	2.4	2.4	2.4
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)