

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: P579770

Luminaire Tested: **HCC4S10D010MW-HM40525927-41RWWH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579770  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-15)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S10D010MW-HM40525927-41RWWH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

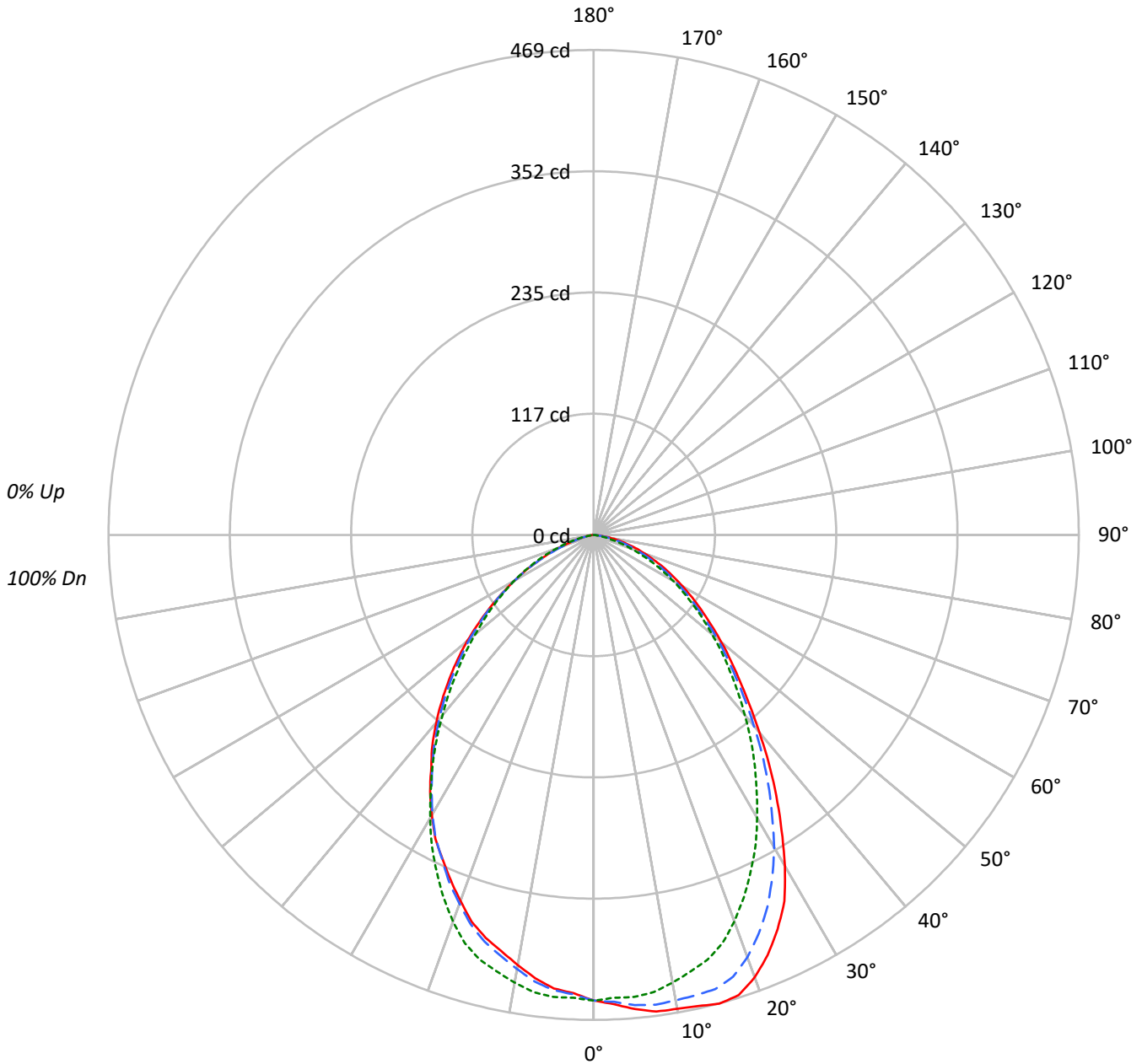
Lumens per Lamp: N/A  
Luminaire Lumens: 858.3 lumens  
Efficiency: N/A  
Efficacy: 86.7 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 9.9  
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: P579770  
CATALOG NUMBER: HCC4S10D010MW-HM40525927-41RWWH

### Luminous Intensity Polar Plot



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



TEST NUMBER: P579770

CATALOG NUMBER: HCC4S10D010MW-HM40525927-41RWWH

**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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77								
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67								
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59								
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52								
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47								
7	71	58	51	45	69	58	50	45	56	49	45	55	49	44	54	48	44	42								
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38								
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35								
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32								

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

	0°	90°	180°
0°	55543	55543	55543
5°	57005	55544	54517
10°	58291	55072	52892
15°	59928	54297	51500
20°	59763	52203	49420
25°	57256	48886	47049
30°	52655	45007	44537
35°	46333	40852	41198
40°	40077	36567	38096
45°	34835	32498	34434
50°	30914	28649	30588
55°	27440	25139	26236
60°	24422	21808	21808
65°	21714	18125	16986
70°	18753	13704	12117
75°	15727	9055	7482
80°	11862	4333	3978
85°	6227	1557	1557



TEST NUMBER: P579770  
 CATALOG NUMBER: HCC4S10D010MW-HM40525927-41RWWH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.6	5.0
10°-20°	120.9	14.1
20°-30°	170.5	19.9
30°-40°	176.1	20.5
40°-50°	149.3	17.4
50°-60°	108.6	12.7
60°-70°	63.5	7.4
70°-80°	23.6	2.7
80°-90°	3.1	0.4
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°	334.1	38.9
0°-40°	510.2	59.4
0°-60°	768.2	89.5
0°-90°	858.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	858.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	450	450	450	450	450	
5°	460	456	449	442	440	44
15°	469	455	425	407	403	132
25°	421	397	359	346	346	192
35°	308	294	271	272	274	192
45°	200	194	186	193	197	155
55°	128	121	117	121	122	115
65°	74	68	62	58	58	74
75°	33	27	19	15	16	35
85°	4	3	1	1	1	6
90°	0	0	0	0	0	

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



TEST NUMBER: P579770

CATALOG NUMBER: HCC4S10D010MW-HM40525927-41RWWH

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	450.3	450.3	450.3	450.3	450.3	450.3	450.3	450.3	450.3
2.5°	454.2	453.2	452.0	450.3	448.0	446.4	444.7	443.6	443.6
5°	460.4	458.7	456.5	452.6	448.6	445.3	441.9	440.3	440.3
7.5°	464.9	462.6	458.2	452.6	445.9	440.9	435.7	433.6	432.4
10°	465.4	463.2	457.0	448.6	439.7	431.9	426.3	422.9	422.3
12.5°	466.6	463.7	455.9	444.2	432.4	422.9	416.7	413.4	412.3
15°	469.3	465.4	454.7	439.7	425.2	414.0	407.3	404.4	403.3
17.5°	466.6	460.9	448.0	430.2	414.0	401.6	394.9	392.2	392.2
20°	455.3	449.7	434.6	415.0	397.7	386.0	379.3	377.6	376.5
22.5°	439.7	433.6	417.3	396.6	379.3	368.6	364.2	361.9	361.3
25°	420.7	414.5	397.2	375.9	359.2	350.2	346.3	346.3	345.7
27.5°	399.4	391.6	373.7	355.2	339.0	332.3	330.6	330.6	331.2
30°	369.7	364.2	349.0	331.2	316.0	311.6	311.6	312.7	312.7
32.5°	337.9	334.0	320.6	304.9	293.1	290.3	291.4	293.7	294.3
35°	307.7	303.2	294.3	280.3	271.3	270.2	271.9	273.6	273.6
37.5°	278.0	273.6	267.4	256.2	249.4	250.0	252.3	254.6	256.2
40°	248.9	245.6	241.1	232.2	227.1	229.3	232.2	234.4	236.6
42.5°	223.2	219.9	216.4	209.7	206.4	209.2	212.6	214.9	217.0
45°	199.7	197.4	194.1	188.6	186.3	189.0	193.0	195.3	197.4
47.5°	179.6	178.4	174.0	169.0	167.9	170.6	174.0	176.7	178.4
50°	161.1	159.4	155.6	150.4	149.3	153.9	156.0	157.7	159.4
52.5°	143.2	141.6	137.0	132.6	132.6	135.9	137.6	138.2	139.9
55°	127.6	125.9	121.4	118.0	116.9	119.7	120.9	120.9	122.0
57.5°	113.0	111.3	106.9	102.9	102.4	104.0	104.0	104.0	104.6
60°	99.0	97.3	92.9	89.6	88.4	89.0	88.4	87.9	88.4
62.5°	86.1	84.4	80.0	76.1	75.0	75.0	73.3	72.7	73.3
65°	74.4	71.6	68.3	64.3	62.1	60.4	58.2	58.2	58.2
67.5°	62.7	60.4	56.4	52.6	49.7	47.0	43.6	44.7	45.3
70°	52.0	50.3	45.9	42.0	38.0	34.7	31.9	33.0	33.6
72.5°	42.6	40.3	36.4	31.9	28.6	24.0	22.4	23.4	23.4
75°	33.0	30.7	27.4	23.0	19.0	15.1	15.1	15.7	15.7
77.5°	24.6	22.4	19.0	15.1	11.7	9.0	9.6	9.6	9.6
80°	16.7	15.1	12.3	9.0	6.1	5.0	5.0	5.0	5.6
82.5°	9.6	8.4	6.7	4.4	2.8	2.8	2.8	2.8	2.8
85°	4.4	3.3	2.8	1.7	1.1	1.1	1.1	1.1	1.1
87.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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)