

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: P579826

Luminaire Tested: **HCC4S10D010MW-HM40525940-41WWW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579826  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-16)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S10D010MW-HM40525940-41WWW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

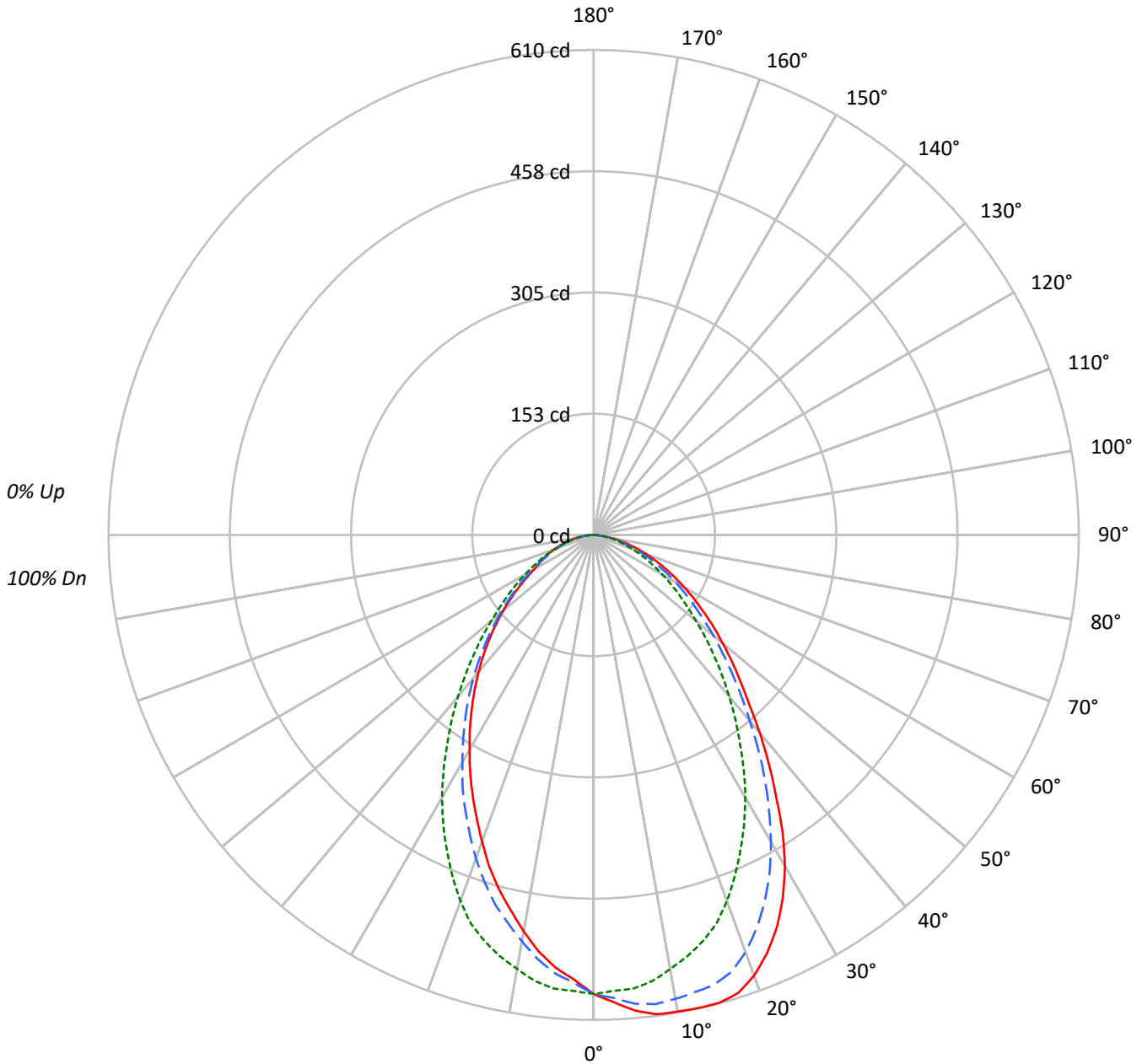
Lumens per Lamp: N/A  
Luminaire Lumens: 1031.4 lumens  
Efficiency: N/A  
Efficacy: 104.2 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.03 / 1.1  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P579826  
CATALOG NUMBER: HCC4S10D010MW-HM40525940-41WWW

### Luminous Intensity Polar Plot





TEST NUMBER: P579826

CATALOG NUMBER: HCC4S10D010MW-HM40525940-41WWW

**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	100	100	100
1	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87	87	87	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76	76	76	76
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66	66	66	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58	58	58	58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52	52	52	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47	47	47	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42	42	42	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38	38	38	38
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35	35	35	35
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32	32	32	32

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

	0°	90°	180°
0°	71232	71232	71232
5°	74364	70922	67653
10°	76251	69438	63401
15°	77831	67590	58830
20°	77418	64305	53870
25°	74173	59461	49022
30°	68508	54293	44423
35°	60065	48290	40219
40°	52298	42669	36213
45°	45511	37225	32358
50°	40547	32084	28573
55°	36235	28193	24687
60°	32341	24644	21289
65°	28777	21627	20226
70°	25245	18645	18861
75°	21350	15870	17442
80°	16408	13496	15911
85°	9624	10614	13586



TEST NUMBER: P579826  
 CATALOG NUMBER: HCC4S10D010MW-HM40525940-41WWW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.1	5.2
10°-20°	149.3	14.5
20°-30°	204.0	19.8
30°-40°	204.9	19.9
40°-50°	169.5	16.4
50°-60°	122.8	11.9
60°-70°	77.8	7.5
70°-80°	39.3	3.8
80°-90°	9.6	0.9
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°	407.5	39.5
0°-40°	612.4	59.4
0°-60°	904.7	87.7
0°-90°	1031.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1031.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	578	578	578	578	578	
5°	601	592	573	554	546	58
15°	610	586	529	480	461	171
25°	545	509	437	382	360	249
35°	399	375	321	281	267	250
45°	261	246	213	192	186	203
55°	168	154	131	120	115	152
65°	99	88	74	67	69	98
75°	45	39	33	35	37	48
85°	7	7	8	9	10	9
90°	0	0	0	0	0	

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



TEST NUMBER: P579826

CATALOG NUMBER: HCC4S10D010MW-HM40525940-41WWW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	577.5	577.5	577.5	577.5	577.5	577.5	577.5	577.5	577.5
2.5°	588.5	586.4	583.0	578.9	574.1	568.8	564.0	561.3	559.9
5°	600.6	597.9	591.9	583.0	572.8	562.6	553.8	548.4	546.4
7.5°	608.1	604.1	595.2	581.6	566.0	551.0	538.2	530.6	528.6
10°	608.8	604.1	592.6	574.1	554.4	534.7	519.2	508.2	506.2
12.5°	609.5	603.4	589.1	567.4	542.9	518.5	499.5	486.5	483.1
15°	609.5	603.4	585.7	559.9	529.3	501.5	480.3	465.4	460.7
17.5°	604.1	597.2	576.2	546.4	513.0	481.7	457.2	441.7	436.9
20°	589.8	582.3	558.5	525.9	489.9	457.2	432.8	416.5	410.4
22.5°	569.5	560.6	535.4	500.2	464.1	430.8	407.1	390.0	384.6
25°	545.0	536.1	508.9	474.3	436.9	405.7	381.9	366.2	360.2
27.5°	515.1	505.5	479.0	444.4	409.7	378.5	356.8	342.4	336.4
30°	481.0	470.9	445.8	412.4	381.2	351.3	330.2	318.6	311.9
32.5°	441.7	432.8	410.4	380.5	351.3	322.7	305.1	294.9	289.5
35°	398.9	394.1	375.1	349.3	320.7	296.9	281.3	271.8	267.1
37.5°	360.9	356.1	339.7	318.0	292.8	271.1	258.2	250.0	245.9
40°	324.8	320.7	305.1	286.8	265.0	245.9	235.1	229.0	224.9
42.5°	289.5	287.5	274.5	257.5	238.5	222.1	213.4	208.6	205.2
45°	260.9	258.2	245.9	229.6	213.4	199.7	192.3	188.9	185.5
47.5°	235.8	232.4	219.5	205.2	190.3	178.0	171.3	167.9	166.5
50°	211.3	207.9	196.4	182.1	167.2	158.3	152.8	149.5	148.9
52.5°	189.6	186.2	173.3	159.7	148.2	140.7	135.9	132.5	131.1
55°	168.5	164.4	153.5	140.7	131.1	124.4	119.6	116.2	114.8
57.5°	149.5	145.4	135.9	123.7	114.8	108.7	104.7	101.3	99.9
60°	131.1	127.8	118.9	107.3	99.9	94.5	90.4	87.6	86.3
62.5°	114.1	111.4	102.6	92.4	86.3	81.6	78.2	75.4	76.8
65°	98.6	95.8	87.6	78.9	74.1	69.3	66.6	66.6	69.3
67.5°	83.5	80.9	74.1	66.6	62.5	59.1	57.1	59.1	61.1
70°	70.0	67.3	61.1	55.1	51.7	48.9	48.9	51.0	52.3
72.5°	57.1	54.4	49.6	44.8	42.1	40.1	42.1	43.5	44.8
75°	44.8	42.8	38.7	35.3	33.3	32.7	34.7	36.0	36.6
77.5°	33.3	32.0	29.2	26.5	25.1	25.8	27.9	28.6	29.2
80°	23.1	22.4	20.4	19.0	19.0	19.7	21.1	21.7	22.4
82.5°	14.2	14.2	12.9	12.2	12.9	14.2	14.9	15.6	15.6
85°	6.8	7.5	6.8	6.8	7.5	8.9	8.9	9.6	9.6
87.5°	2.0	2.0	2.7	2.7	3.4	3.4	3.4	3.4	4.1
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)