

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: P592619

Luminaire Tested: **HCC4S10D010SL-HM40525850-41WWWB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P592619  
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: HCC4S10D010SL-HM40525850-41WWWB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

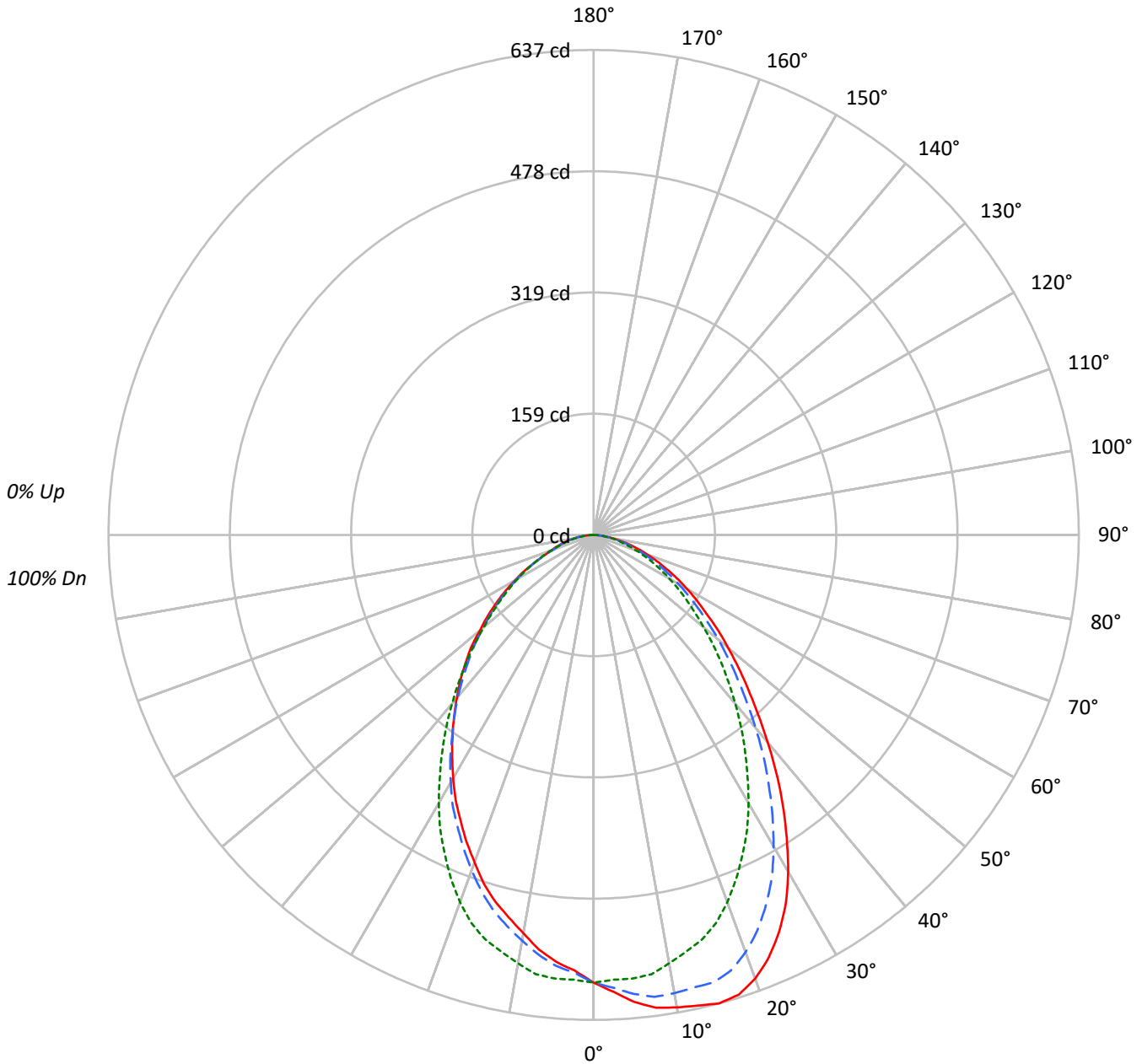
Lumens per Lamp: N/A  
Luminaire Lumens: 1140.1 lumens  
Efficiency: N/A  
Efficacy: 115.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (Ain): 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: P592619  
CATALOG NUMBER: HCC4S10D010SL-HM40525850-41WWWB

### Luminous Intensity Polar Plot





TEST NUMBER: P592619

CATALOG NUMBER: HCC4S10D010SL-HM40525850-41WWWB

**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	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°	72515	72515	72515
5°	76246	72408	69709
10°	78919	71554	66532
15°	81330	70246	63695
20°	81422	67350	60039
25°	78365	62958	56276
30°	72752	57925	52570
35°	65215	52160	48636
40°	57225	46550	44972
45°	50029	41202	41464
50°	44173	36056	37361
55°	38966	31956	33590
60°	34808	28295	29430
65°	30820	24867	24867
70°	26940	21206	21206
75°	23018	18014	20111
80°	18184	16053	18184
85°	11746	13869	17124



TEST NUMBER: P592619  
 CATALOG NUMBER: HCC4S10D010SL-HM40525850-41WWWB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.7	4.9
10°-20°	156.9	13.8
20°-30°	219.7	19.3
30°-40°	226.4	19.9
40°-50°	192.7	16.9
50°-60°	142.8	12.5
60°-70°	89.6	7.9
70°-80°	44.5	3.9
80°-90°	11.7	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°	432.3	37.9
0°-40°	658.7	57.8
0°-60°	994.2	87.2
0°-90°	1140.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1140.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	588	588	588	588	588	
5°	616	605	585	568	563	59
15°	637	608	550	510	499	179
25°	576	536	463	423	414	263
35°	433	401	346	324	323	270
45°	287	267	236	232	238	223
55°	181	167	149	152	156	164
65°	106	95	85	84	85	105
75°	48	43	38	41	42	52
85°	8	8	10	11	12	11
90°	0	0	0	0	0	

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



TEST NUMBER: P592619

CATALOG NUMBER: HCC4S10D010SL-HM40525850-41WWWB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	587.9	587.9	587.9	587.9	587.9	587.9	587.9	587.9	587.9
2.5°	600.8	598.5	595.4	590.2	584.8	580.3	575.8	573.6	572.8
5°	615.8	611.2	605.2	595.4	584.8	575.8	568.2	564.4	563.0
7.5°	626.4	621.8	612.0	596.9	581.9	568.2	556.1	550.9	549.4
10°	630.1	624.9	611.2	590.8	571.3	554.7	541.1	534.3	531.2
12.5°	633.2	626.4	608.9	584.8	560.7	540.3	526.0	516.9	514.7
15°	636.9	629.4	608.3	578.8	550.1	526.0	510.2	501.9	498.8
17.5°	633.2	624.9	600.0	566.7	534.3	507.9	490.5	483.0	480.0
20°	620.3	611.2	583.3	547.8	513.1	486.0	468.6	461.1	457.4
22.5°	600.8	590.8	562.2	524.5	489.0	462.6	446.0	438.5	436.2
25°	575.8	565.9	535.8	497.3	462.6	437.0	422.7	415.8	413.5
27.5°	546.4	536.6	507.1	469.4	436.2	412.1	400.7	394.0	392.4
30°	510.8	501.1	472.4	437.7	406.7	384.1	375.1	369.7	369.1
32.5°	471.7	463.4	437.0	405.2	375.8	357.0	350.2	346.4	345.6
35°	433.1	424.1	400.7	372.0	346.4	329.8	323.8	323.0	323.0
37.5°	394.0	384.9	366.0	339.6	317.7	302.6	300.3	301.1	301.1
40°	355.4	347.1	330.6	308.6	289.1	277.7	277.0	278.5	279.3
42.5°	319.2	312.4	297.4	278.5	261.9	252.7	253.5	256.6	258.9
45°	286.8	280.7	267.1	250.6	236.2	229.4	231.7	235.5	237.7
47.5°	257.3	252.1	239.2	224.1	212.0	207.6	210.5	215.1	218.0
50°	230.2	225.7	213.6	197.7	187.9	184.9	188.7	193.2	194.7
52.5°	206.0	201.5	188.7	175.0	167.5	166.0	169.8	173.5	175.8
55°	181.2	177.3	166.8	154.7	148.6	147.9	151.7	154.7	156.2
57.5°	160.7	156.9	147.1	136.6	131.3	130.5	134.3	136.6	137.4
60°	141.1	137.4	128.3	118.5	114.7	114.7	117.0	118.5	119.3
62.5°	123.0	119.3	111.0	102.6	99.6	99.6	99.6	100.4	102.6
65°	105.6	102.6	95.1	87.5	85.2	83.8	83.8	83.8	85.2
67.5°	89.8	86.8	80.8	74.0	71.7	69.4	68.6	70.2	70.2
70°	74.7	72.5	66.5	61.1	58.8	56.6	55.9	58.8	58.8
72.5°	61.1	58.8	55.1	49.8	47.6	46.8	48.3	49.8	50.5
75°	48.3	46.1	43.0	39.9	37.8	38.5	40.7	41.5	42.2
77.5°	36.2	35.5	32.4	30.2	30.2	31.0	32.4	33.9	34.7
80°	25.6	24.9	23.4	21.8	22.6	24.1	24.9	26.4	25.6
82.5°	15.8	15.8	15.1	15.1	15.8	17.4	18.1	18.9	19.6
85°	8.3	8.3	8.3	9.1	9.8	10.6	11.3	12.1	12.1
87.5°	2.3	3.1	3.1	3.8	4.6	4.6	5.2	5.2	5.2
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)