

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: P592616

Luminaire Tested: **HCC4S10D010BZ-HM40525850-41RWWH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P592616  
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: HCC4S10D010BZ-HM40525850-41RWWH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

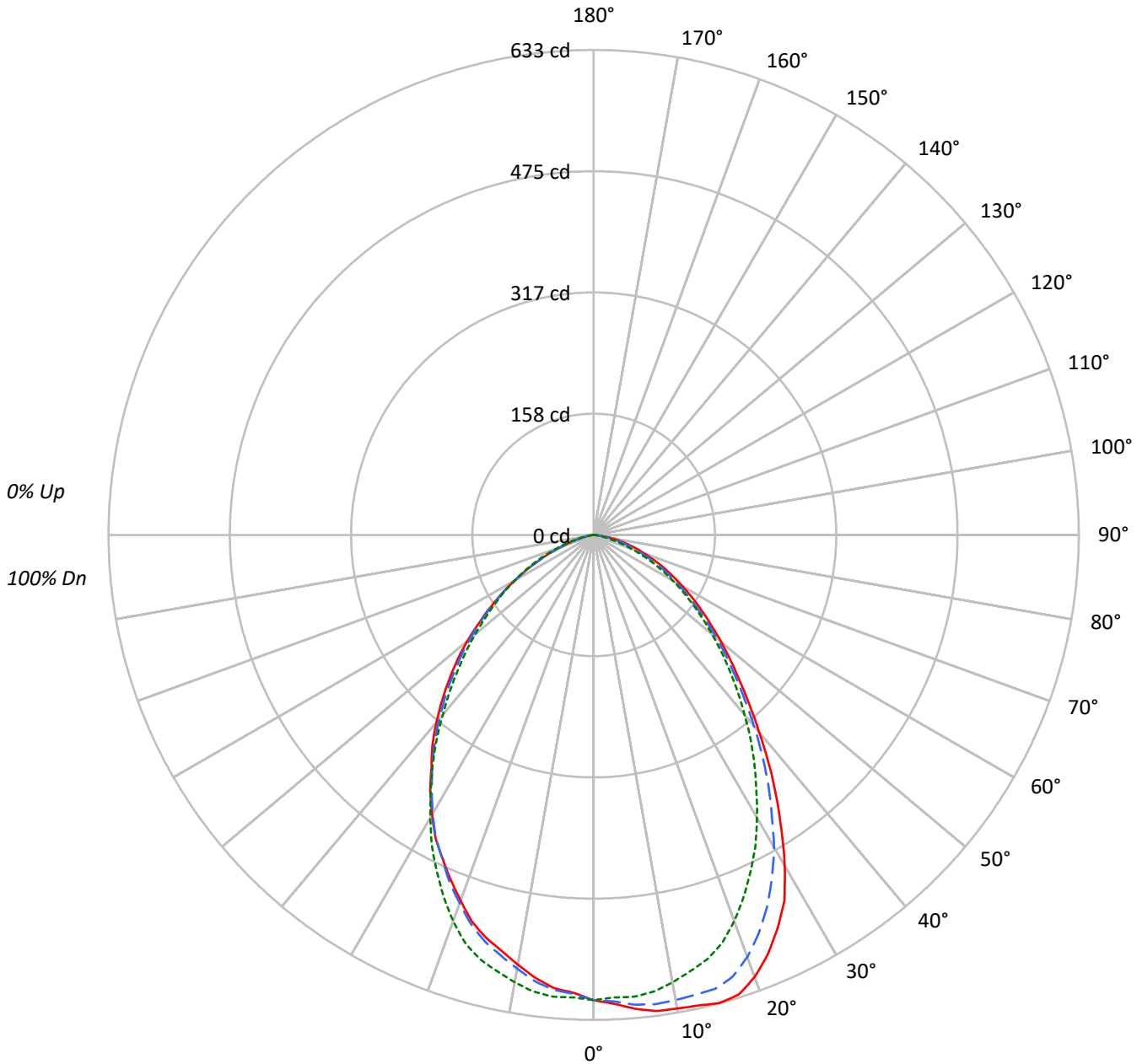
Lumens per Lamp: N/A  
Luminaire Lumens: 1157.4 lumens  
Efficiency: N/A  
Efficacy: 116.9 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P592616  
CATALOG NUMBER: HCC4S10D010BZ-HM40525850-41RWWH

### Luminous Intensity Polar Plot



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



TEST NUMBER: P592616

CATALOG NUMBER: HCC4S10D010BZ-HM40525850-41RWWH

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

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

	0°	90°	180°
0°	74895	74895	74895
5°	76865	74909	73510
10°	78606	74260	71342
15°	80807	73209	69454
20°	80608	70396	66642
25°	77208	65912	63448
30°	71028	60702	60047
35°	62474	55096	55533
40°	54053	49303	51380
45°	46976	43819	46453
50°	41679	38647	41257
55°	36988	33891	35354
60°	32933	29381	29381
65°	29303	24458	22882
70°	25281	18501	16337
75°	21207	12200	10103
80°	16053	5896	5327
85°	8491	2123	2123



TEST NUMBER: P592616  
 CATALOG NUMBER: HCC4S10D010BZ-HM40525850-41RWWH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.5	5.0
10°-20°	163.0	14.1
20°-30°	229.9	19.9
30°-40°	237.5	20.5
40°-50°	201.4	17.4
50°-60°	146.5	12.7
60°-70°	85.6	7.4
70°-80°	31.8	2.7
80°-90°	4.2	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°	450.5	38.9
0°-40°	688.0	59.4
0°-60°	1035.8	89.5
0°-90°	1157.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1157.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	607	607	607	607	607	
5°	621	616	605	596	594	59
15°	633	613	573	549	544	178
25°	567	536	484	467	466	259
35°	415	397	366	367	369	259
45°	269	262	251	260	266	210
55°	172	164	158	163	164	155
65°	100	92	84	78	78	100
75°	44	37	26	20	21	48
85°	6	4	2	2	2	8
90°	0	0	0	0	0	



TEST NUMBER: P592616

CATALOG NUMBER: HCC4S10D010BZ-HM40525850-41RWWH

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	607.2	607.2	607.2	607.2	607.2	607.2	607.2	607.2	607.2
2.5°	612.6	611.0	609.5	607.2	604.3	602.0	599.7	598.2	598.2
5°	620.8	618.6	615.5	610.3	605.0	600.4	596.0	593.7	593.7
7.5°	626.8	623.9	617.8	610.3	601.2	594.4	587.7	584.6	583.1
10°	627.6	624.6	616.3	605.0	592.9	582.3	574.8	570.3	569.6
12.5°	629.1	625.3	614.7	598.9	583.1	570.3	561.9	557.5	555.9
15°	632.8	627.6	613.3	592.9	573.3	558.2	549.2	545.4	543.9
17.5°	629.1	621.6	604.3	580.0	558.2	541.6	532.6	528.8	528.8
20°	614.1	606.4	586.2	559.8	536.3	520.5	511.4	509.1	507.7
22.5°	592.9	584.6	562.7	534.9	511.4	497.1	491.0	488.1	487.3
25°	567.3	559.0	535.5	506.9	484.3	472.3	466.9	466.9	466.2
27.5°	538.6	528.0	503.9	479.0	457.1	448.0	445.9	445.9	446.6
30°	498.7	491.0	470.7	446.6	426.2	420.1	420.1	421.6	421.6
32.5°	455.7	450.3	432.2	411.2	395.2	391.5	393.1	396.0	396.8
35°	414.9	408.9	396.8	377.9	365.9	364.4	366.7	368.8	368.8
37.5°	374.9	368.8	360.6	345.5	336.4	337.2	340.3	343.2	345.5
40°	335.7	331.2	325.1	313.1	306.2	309.3	313.1	316.0	319.1
42.5°	301.0	296.4	291.9	282.9	278.4	282.1	286.7	289.6	292.7
45°	269.3	266.3	261.7	254.2	251.2	255.0	260.3	263.2	266.3
47.5°	242.2	240.7	234.7	227.8	226.3	230.1	234.7	238.4	240.7
50°	217.2	215.0	209.7	202.9	201.4	207.5	210.4	212.7	215.0
52.5°	193.1	190.8	184.8	178.8	178.8	183.3	185.6	186.3	188.6
55°	172.0	169.7	163.6	159.2	157.6	161.5	163.0	163.0	164.4
57.5°	152.4	150.1	144.1	138.8	138.0	140.3	140.3	140.3	141.1
60°	133.5	131.2	125.2	120.7	119.1	119.9	119.1	118.5	119.1
62.5°	116.2	113.9	107.9	102.6	101.1	101.1	98.8	98.1	98.8
65°	100.4	96.5	92.1	86.7	83.8	81.5	78.4	78.4	78.4
67.5°	84.4	81.5	76.1	70.9	67.1	63.4	58.8	60.3	61.1
70°	70.1	67.9	61.9	56.6	51.3	46.8	43.0	44.5	45.3
72.5°	57.4	54.3	49.0	43.0	38.5	32.4	30.2	31.6	31.6
75°	44.5	41.5	37.0	31.0	25.6	20.4	20.4	21.2	21.2
77.5°	33.2	30.2	25.6	20.4	15.8	12.1	12.9	12.9	12.9
80°	22.6	20.4	16.6	12.1	8.3	6.8	6.8	6.8	7.5
82.5°	12.9	11.3	9.1	6.0	3.8	3.8	3.8	3.8	3.8
85°	6.0	4.6	3.8	2.3	1.5	1.5	1.5	1.5	1.5
87.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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)