

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: P579737

Luminaire Tested: **HCC4S10D010BZ-HM40525835-41WWWB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579737  
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: HCC4S10D010BZ-HM40525835-41WWWB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

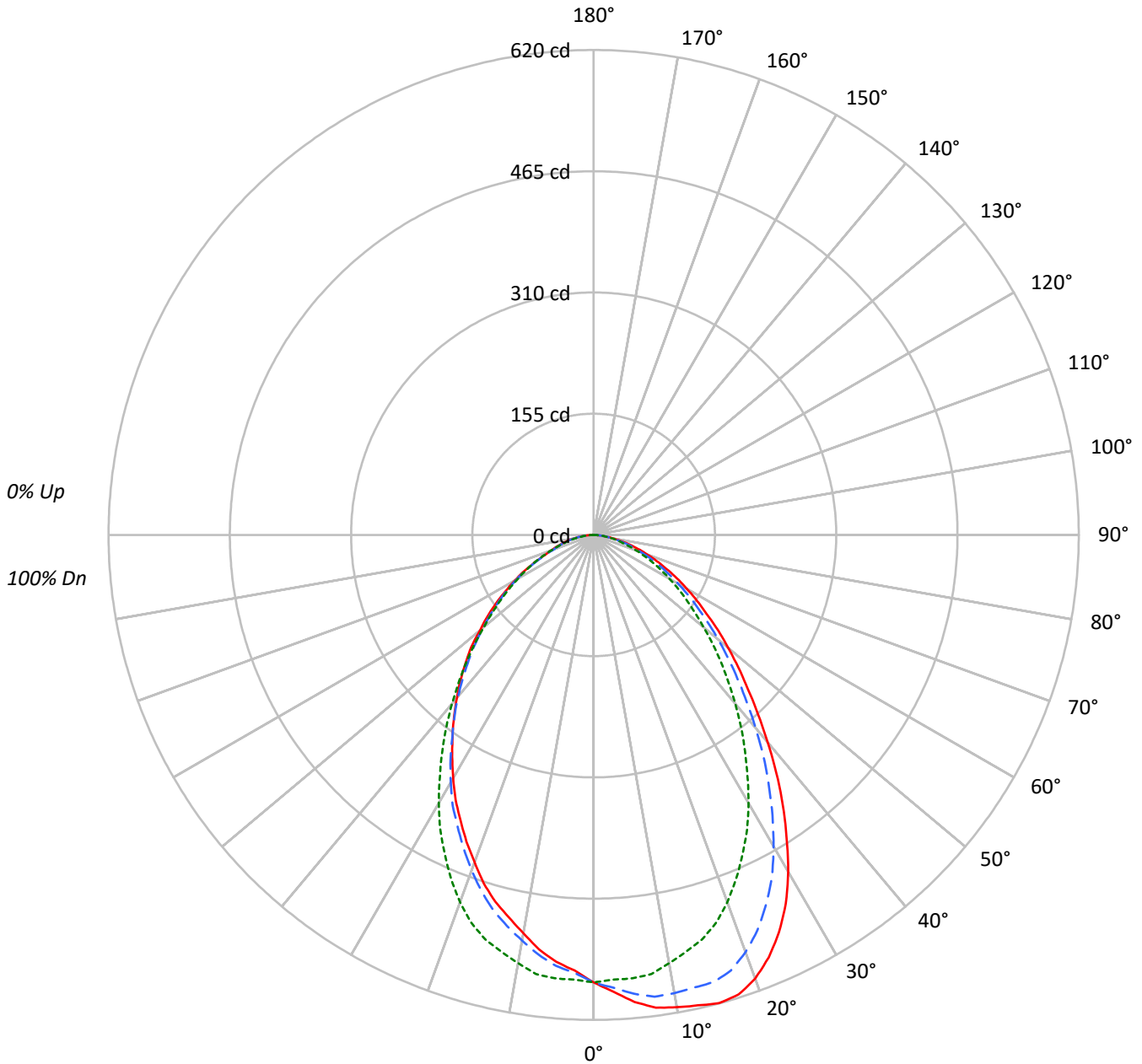
Lumens per Lamp: N/A  
Luminaire Lumens: 1109.4 lumens  
Efficiency: N/A  
Efficacy: 112.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (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: P579737  
CATALOG NUMBER: HCC4S10D010BZ-HM40525835-41WWWB

### Luminous Intensity Polar Plot



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



TEST NUMBER: P579737

CATALOG NUMBER: HCC4S10D010BZ-HM40525835-41WWWB

**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	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°	70566	70566	70566
5°	74203	70464	67827
10°	76802	69626	64753
15°	79146	68356	61997
20°	79230	65552	58425
25°	76269	61271	54765
30°	70815	56373	51160
35°	63468	50760	47326
40°	55679	45294	43764
45°	48668	40103	40365
50°	42984	35097	36363
55°	37913	31096	32687
60°	33895	27531	28641
65°	30003	24224	24224
70°	26218	20629	20629
75°	22399	17538	19587
80°	17687	15698	17687
85°	11463	13586	16558



TEST NUMBER: P579737  
 CATALOG NUMBER: HCC4S10D010BZ-HM40525835-41WWWB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.2	4.9
10°-20°	152.6	13.8
20°-30°	213.8	19.3
30°-40°	220.3	19.9
40°-50°	187.6	16.9
50°-60°	139.0	12.5
60°-70°	87.2	7.9
70°-80°	43.3	3.9
80°-90°	11.4	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°	420.7	37.9
0°-40°	641.0	57.8
0°-60°	967.5	87.2
0°-90°	1109.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1109.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	572	572	572	572	572	
5°	599	589	569	553	548	58
15°	620	592	535	496	486	174
25°	560	521	450	411	402	256
35°	422	390	337	315	314	263
45°	279	260	230	225	231	217
55°	176	162	145	148	152	159
65°	103	92	83	82	83	103
75°	47	42	37	40	41	50
85°	8	8	10	11	12	10
90°	0	0	0	0	0	



TEST NUMBER: P579737

CATALOG NUMBER: HCC4S10D010BZ-HM40525835-41WWWB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	572.1	572.1	572.1	572.1	572.1	572.1	572.1	572.1	572.1
2.5°	584.6	582.3	579.5	574.2	569.1	564.7	560.4	558.1	557.4
5°	599.3	594.8	588.9	579.5	569.1	560.4	553.0	549.3	547.8
7.5°	609.5	605.1	595.5	580.8	566.2	553.0	541.2	536.1	534.6
10°	613.2	608.0	594.8	575.0	555.9	539.8	526.6	520.0	517.0
12.5°	616.1	609.5	592.7	569.1	545.7	525.8	511.9	503.0	500.8
15°	619.8	612.5	591.9	563.3	535.3	511.9	496.4	488.3	485.5
17.5°	616.1	608.0	583.8	551.5	520.0	494.2	477.4	470.0	467.0
20°	603.6	594.8	567.6	533.2	499.4	473.0	456.0	448.7	445.1
22.5°	584.6	575.0	547.2	510.4	475.9	450.2	434.0	426.6	424.5
25°	560.4	550.8	521.4	484.0	450.2	425.2	411.3	404.7	402.4
27.5°	531.7	522.1	493.4	456.8	424.5	400.9	390.0	383.4	381.9
30°	497.2	487.6	459.8	426.0	395.8	373.8	365.0	359.8	359.2
32.5°	459.0	450.9	425.2	394.3	365.8	347.3	340.7	337.1	336.4
35°	421.5	412.8	390.0	362.0	337.1	320.9	315.0	314.3	314.3
37.5°	383.4	374.5	356.2	330.5	309.2	294.5	292.2	293.0	293.0
40°	345.8	337.8	321.6	300.3	281.3	270.3	269.5	271.0	271.8
42.5°	310.7	304.1	289.4	271.0	254.8	246.0	246.7	249.7	251.8
45°	279.0	273.2	259.9	243.8	229.9	223.3	225.4	229.1	231.4
47.5°	250.5	245.2	232.8	218.2	206.3	202.0	204.8	209.3	212.2
50°	224.0	219.5	207.8	192.4	182.9	179.9	183.6	188.0	189.5
52.5°	200.5	196.1	183.6	170.4	163.1	161.6	165.2	168.9	171.2
55°	176.3	172.5	162.3	150.6	144.6	144.0	147.6	150.6	152.0
57.5°	156.5	152.7	143.2	132.9	127.8	127.0	130.8	132.9	133.6
60°	137.4	133.6	124.8	115.3	111.6	111.6	113.8	115.3	116.1
62.5°	119.7	116.1	108.0	99.9	97.0	97.0	97.0	97.6	99.9
65°	102.8	99.9	92.5	85.2	83.0	81.5	81.5	81.5	83.0
67.5°	87.4	84.4	78.5	71.9	69.8	67.6	66.8	68.3	68.3
70°	72.7	70.4	64.6	59.5	57.2	55.1	54.4	57.2	57.2
72.5°	59.5	57.2	53.6	48.5	46.3	45.5	47.0	48.5	49.2
75°	47.0	44.8	41.9	38.9	36.8	37.4	39.6	40.4	41.1
77.5°	35.3	34.5	31.5	29.4	29.4	30.2	31.5	33.0	33.8
80°	24.9	24.2	22.8	21.3	22.1	23.4	24.2	25.7	24.9
82.5°	15.5	15.5	14.7	14.7	15.5	16.8	17.6	18.3	19.1
85°	8.1	8.1	8.1	8.8	9.6	10.2	11.0	11.7	11.7
87.5°	2.2	3.0	3.0	3.6	4.4	4.4	5.1	5.1	5.1
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)