

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: P579970

Luminaire Tested: **HCC4W15D010BZ-HM40525940-41WWW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579970  
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: HCC4W15D010BZ-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**

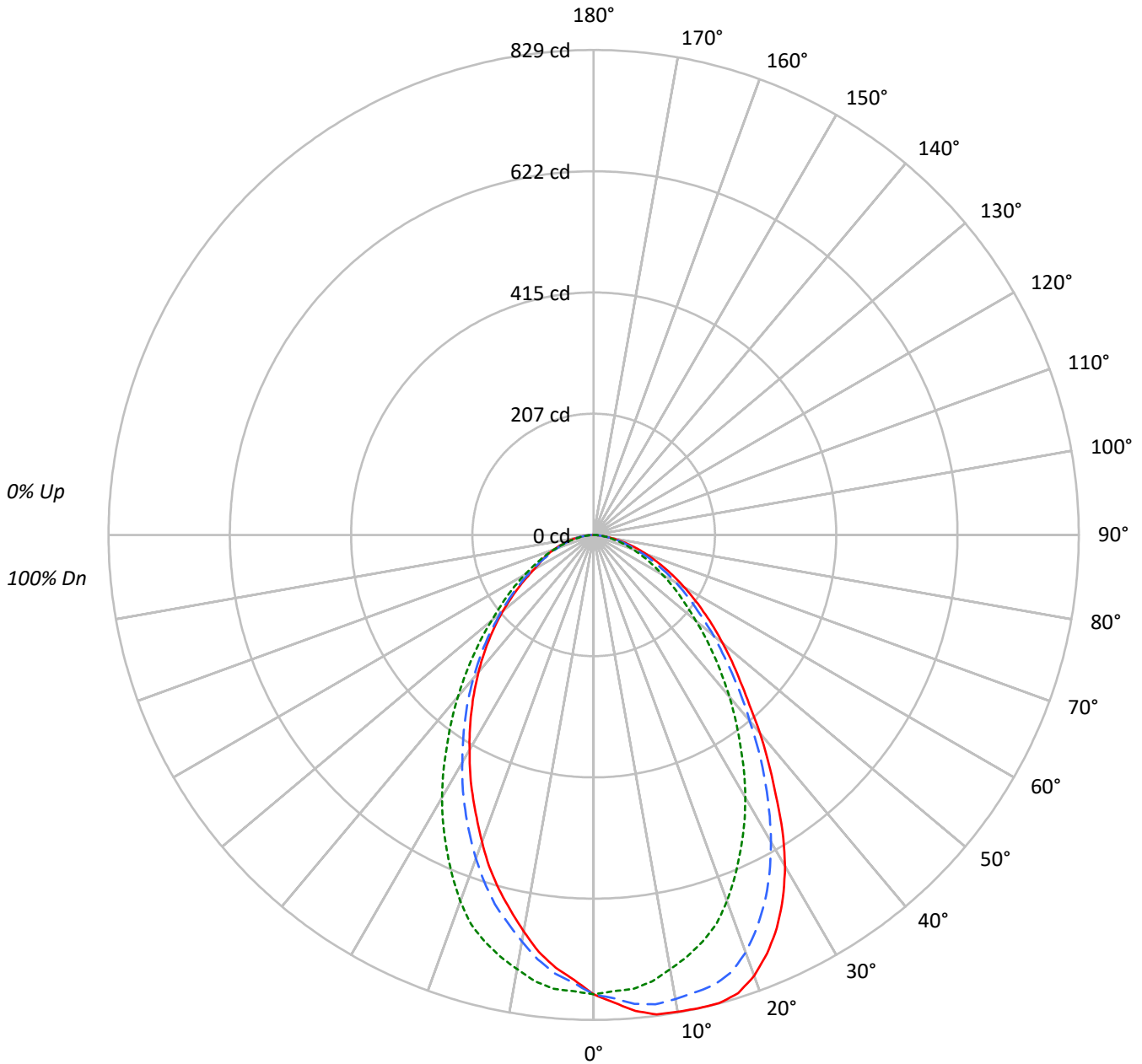
Lumens per Lamp: N/A  
Luminaire Lumens: 1402.3 lumens  
Efficiency: N/A  
Efficacy: 100.2 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.03 / 1.1  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 14  
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: P579970  
CATALOG NUMBER: HCC4W15D010BZ-HM40525940-41WWW

### Luminous Intensity Polar Plot



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



TEST NUMBER: P579970

CATALOG NUMBER: HCC4W15D010BZ-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	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	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87					87			
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76					76			
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66					66			
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58					58			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52					52			
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47					47			
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	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	42	37	47	41	37	46	41	37	35					35			
10	59	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°	96863	96863	96863
5°	101121	96429	91971
10°	103668	94412	86196
15°	105810	91903	79989
20°	105259	87433	73244
25°	100848	80855	66633
30°	93162	73806	60403
35°	81658	65652	54660
40°	71105	58014	49223
45°	61873	50587	43993
50°	55130	43617	38820
55°	49267	38343	33569
60°	43985	33501	28937
65°	39080	29390	27522
70°	34333	25353	25677
75°	29023	21589	23781
80°	22304	18397	21665
85°	13020	14294	18398



TEST NUMBER: P579970

CATALOG NUMBER: HCC4W15D010BZ-HM40525940-41WWW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.6	5.2
10°-20°	203.0	14.5
20°-30°	277.4	19.8
30°-40°	278.5	19.9
40°-50°	230.4	16.4
50°-60°	167.0	11.9
60°-70°	105.8	7.5
70°-80°	53.5	3.8
80°-90°	13.1	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°	554.0	39.5
0°-40°	832.6	59.4
0°-60°	1230.0	87.7
0°-90°	1402.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1402.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	785	785	785	785	785	
5°	817	805	779	753	743	78
15°	829	796	720	653	626	233
25°	741	692	594	519	490	339
35°	542	510	436	382	363	340
45°	355	334	290	261	252	276
55°	229	209	178	163	156	206
65°	134	119	101	90	94	133
75°	61	53	45	47	50	65
85°	9	9	10	12	13	13
90°	0	0	0	0	0	

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



TEST NUMBER: P579970

CATALOG NUMBER: HCC4W15D010BZ-HM40525940-41WWW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	785.3	785.3	785.3	785.3	785.3	785.3	785.3	785.3	785.3
2.5°	800.1	797.3	792.7	787.1	780.7	773.3	766.8	763.2	761.2
5°	816.7	813.0	804.7	792.7	778.8	765.0	752.9	745.5	742.8
7.5°	826.8	821.3	809.3	790.8	769.5	749.3	731.7	721.5	718.8
10°	827.7	821.3	805.6	780.7	753.8	727.1	705.8	691.1	688.2
12.5°	828.6	820.3	801.0	771.5	738.1	704.9	679.0	661.5	656.8
15°	828.6	820.3	796.4	761.2	719.7	681.9	653.2	632.9	626.4
17.5°	821.3	812.0	783.4	742.8	697.5	655.0	621.7	600.4	594.1
20°	801.9	791.7	759.4	715.1	666.1	621.7	588.5	566.3	558.0
22.5°	774.2	762.1	728.0	679.9	631.0	585.7	553.4	530.3	522.9
25°	741.0	728.9	692.0	644.8	594.1	551.6	519.2	498.0	489.6
27.5°	700.3	687.3	651.3	604.2	557.1	514.6	485.0	465.6	457.3
30°	654.1	640.2	606.0	560.8	518.2	477.7	449.0	433.3	424.1
32.5°	600.4	588.5	558.0	517.3	477.7	438.9	414.8	400.9	393.5
35°	542.3	535.9	509.9	474.8	436.0	403.7	382.5	369.5	363.0
37.5°	490.6	484.1	462.0	432.4	398.2	368.6	351.1	340.0	334.4
40°	441.6	436.0	414.8	389.9	360.3	334.4	319.6	311.3	305.7
42.5°	393.5	390.8	373.3	350.2	324.3	302.1	290.0	283.6	279.0
45°	354.7	351.1	334.4	312.2	290.0	271.6	261.4	256.8	252.2
47.5°	320.5	316.0	298.3	279.0	258.7	242.1	232.9	228.2	226.4
50°	287.3	282.7	267.0	247.6	227.3	215.2	207.8	203.3	202.3
52.5°	257.8	253.1	235.6	217.1	201.4	191.2	184.8	180.1	178.3
55°	229.1	223.5	208.8	191.2	178.3	169.1	162.6	157.9	156.1
57.5°	203.3	197.7	184.8	168.2	156.1	147.8	142.2	137.7	135.8
60°	178.3	173.7	161.7	146.0	135.8	128.4	122.9	119.2	117.3
62.5°	155.2	151.6	139.5	125.6	117.3	110.9	106.2	102.6	104.4
65°	133.9	130.3	119.2	107.2	100.7	94.3	90.5	90.5	94.3
67.5°	113.6	109.9	100.7	90.5	85.0	80.4	77.7	80.4	83.1
70°	95.2	91.4	83.1	74.8	70.3	66.5	66.5	69.2	71.2
72.5°	77.7	73.9	67.4	60.9	57.3	54.5	57.3	59.1	60.9
75°	60.9	58.2	52.6	48.1	45.3	44.3	47.1	49.0	49.9
77.5°	45.3	43.4	39.7	36.0	34.2	35.1	37.9	38.8	39.7
80°	31.4	30.5	27.7	25.9	25.9	26.8	28.7	29.6	30.5
82.5°	19.4	19.4	17.5	16.6	17.5	19.4	20.4	21.3	21.3
85°	9.2	10.1	9.2	9.2	10.1	12.1	12.1	13.0	13.0
87.5°	2.7	2.7	3.8	3.8	4.7	4.7	4.7	4.7	5.6
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)