

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: P580051

Luminaire Tested: **HCC4S20D010SL-HM40525927-41WDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580051  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S20D010SL-HM40525927-41WDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

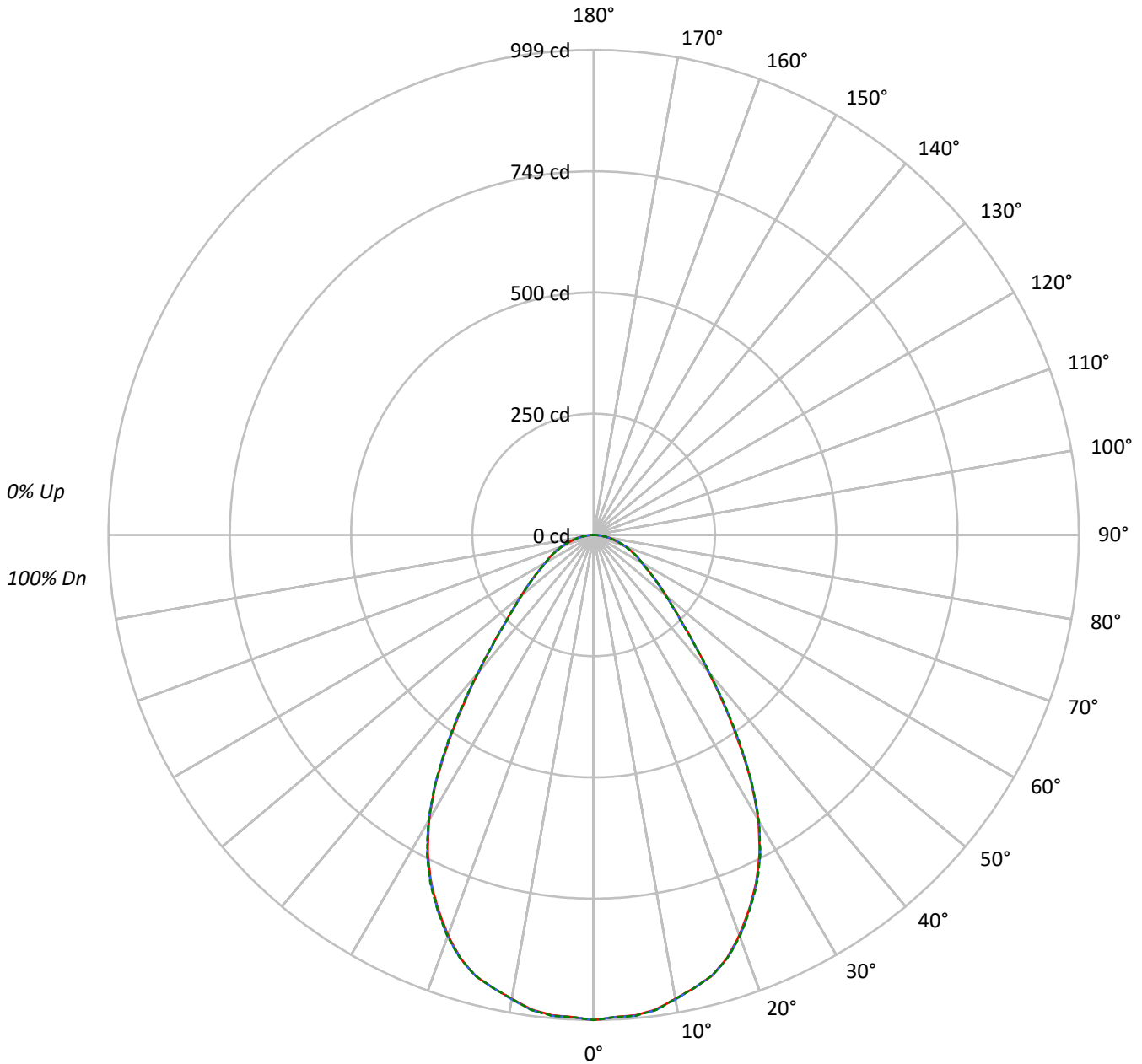
Lumens per Lamp: N/A  
Luminaire Lumens: 1541.7 lumens  
Efficiency: N/A  
Efficacy: 77.1 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.07 / 1.04  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 20  
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: P580051  
CATALOG NUMBER: HCC4S20D010SL-HM40525927-41WDW

### Luminous Intensity Polar Plot



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



TEST NUMBER: P580051

CATALOG NUMBER: HCC4S20D010SL-HM40525927-41WDW

**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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89								
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78								
3	96	87	81	76	94	86	80	75	83	78	74	81	76	72	78	74	71	69								
4	90	80	72	67	87	78	72	66	76	70	66	74	69	65	72	68	64	62								
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56								
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51								
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46								
8	69	57	50	45	68	57	50	45	55	49	45	54	49	44	53	48	44	42								
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39								
10	61	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36								

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

	0°	45°	90°
0°	123259	123259	123259
5°	122950	123086	123086
10°	121516	121654	121516
15°	120073	120073	120073
20°	115130	115405	115550
25°	107693	107830	108115
30°	96494	96794	96794
35°	78345	78963	79113
40°	59125	59463	59640
45°	45301	45109	45109
50°	37304	37112	37112
55°	32042	31827	31827
60°	28567	28320	28320
65°	26880	26880	26880
70°	24992	24992	24992
75°	22685	23161	22685
80°	21381	20599	21381
85°	17549	17549	17549



TEST NUMBER: P580051  
 CATALOG NUMBER: HCC4S20D010SL-HM40525927-41WDW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.1	6.1
10°-20°	263.5	17.1
20°-30°	362.0	23.5
30°-40°	325.5	21.1
40°-50°	205.7	13.3
50°-60°	134.3	8.7
60°-70°	91.0	5.9
70°-80°	51.2	3.3
80°-90°	14.4	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°	719.6	46.7
0°-40°	1045.2	67.8
0°-60°	1385.1	89.8
0°-90°	1541.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1541.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	999	999	999	999	999	
5°	993	993	994	994	994	94
15°	940	940	940	940	940	263
25°	791	792	792	794	794	361
35°	520	522	524	526	525	324
45°	260	259	259	259	259	206
55°	149	149	148	149	148	135
65°	92	92	92	92	92	91
75°	48	49	49	49	48	51
85°	12	12	12	12	12	14
90°	0	0	0	0	0	



TEST NUMBER: P580051

CATALOG NUMBER: HCC4S20D010SL-HM40525927-41WDW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	999.3	999.3	999.3	999.3	999.3
2.5°	994.1	994.1	994.1	994.1	994.1
5°	993.0	993.0	994.1	994.1	994.1
7.5°	985.7	986.8	986.8	986.8	986.8
10°	970.2	970.2	971.3	971.3	970.2
12.5°	955.8	955.8	955.8	956.8	955.8
15°	940.3	940.3	940.3	940.3	940.3
17.5°	913.4	914.4	914.4	914.4	914.4
20°	877.1	879.2	879.2	880.3	880.3
22.5°	835.8	836.9	837.9	838.9	837.9
25°	791.3	792.3	792.3	794.4	794.4
27.5°	739.6	740.6	742.7	742.7	742.7
30°	677.5	678.6	679.6	679.6	679.6
32.5°	604.1	604.1	606.2	607.2	606.2
35°	520.3	522.3	524.4	526.5	525.4
37.5°	440.7	442.7	443.8	443.8	444.8
40°	367.2	369.3	369.3	371.4	370.4
42.5°	309.2	308.2	308.2	310.3	309.2
45°	259.7	258.6	258.6	258.6	258.6
47.5°	223.4	222.4	222.4	222.4	222.4
50°	194.4	193.4	193.4	193.4	193.4
52.5°	170.7	169.6	169.6	169.6	168.6
55°	149.0	149.0	148.0	149.0	148.0
57.5°	129.3	129.3	129.3	129.3	129.3
60°	115.8	114.8	114.8	114.8	114.8
62.5°	103.5	103.5	103.5	103.5	103.5
65°	92.1	92.1	92.1	92.1	92.1
67.5°	80.6	79.6	80.6	80.6	79.6
70°	69.3	68.2	69.3	69.3	69.3
72.5°	57.9	57.9	57.9	59.0	57.9
75°	47.6	48.6	48.6	48.6	47.6
77.5°	38.3	39.3	38.3	38.3	38.3
80°	30.1	29.0	29.0	29.0	30.1
82.5°	20.6	20.6	20.6	20.6	20.6
85°	12.4	12.4	12.4	12.4	12.4
87.5°	5.2	5.2	5.2	5.2	5.2
90°	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)