

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: P580099

Luminaire Tested: **HCC4S20D010BZ-HM40525940-41MDC**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580099  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-4)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S20D010BZ-HM40525940-41MDC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

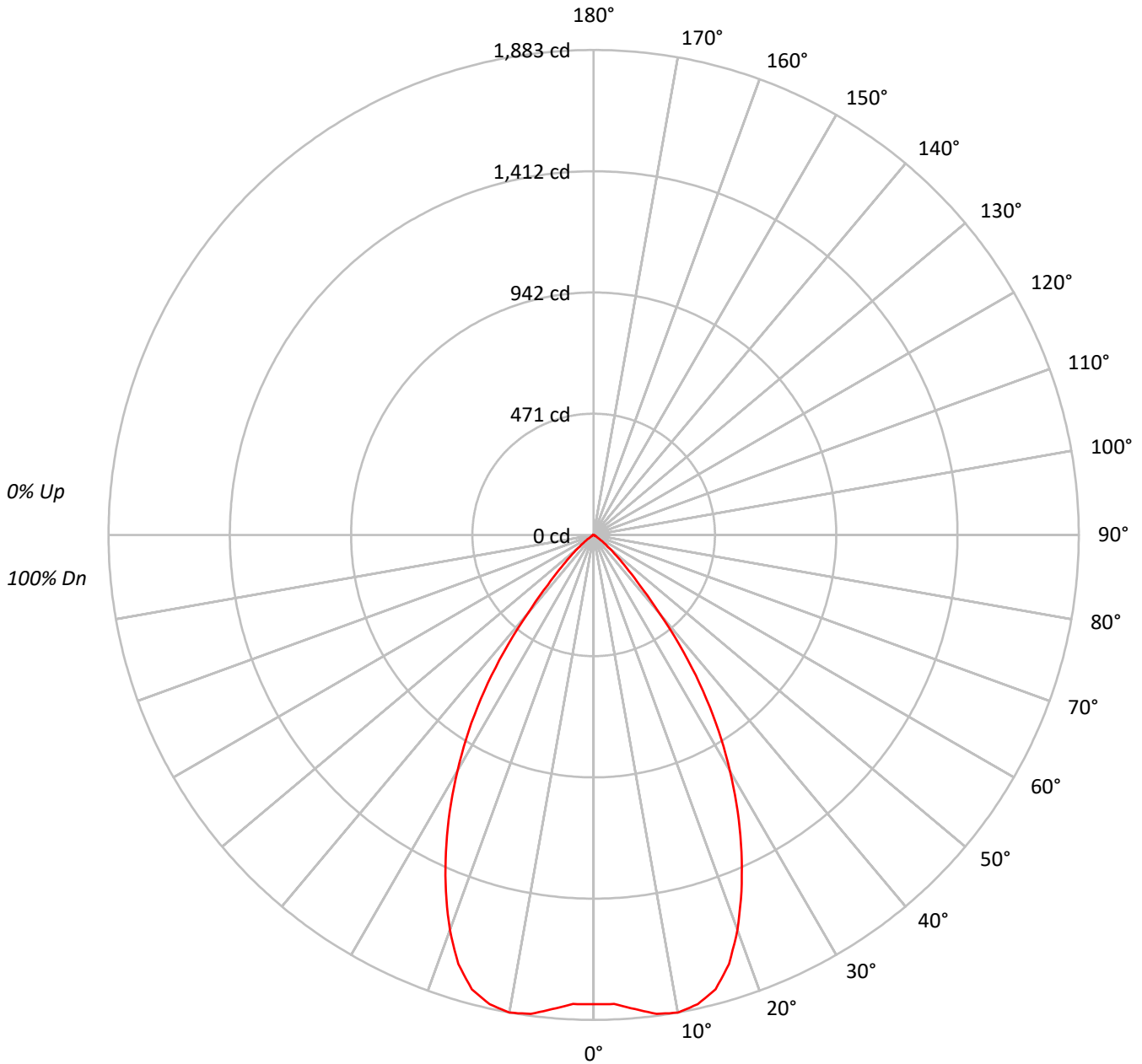
Lumens per Lamp: N/A  
Luminaire Lumens: 1940.0 lumens  
Efficiency: N/A  
Efficacy: 97.0 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1 / 0.96  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 20  
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: P580099  
CATALOG NUMBER: HCC4S20D010BZ-HM40525940-41MDC

### Luminous Intensity Polar Plot





TEST NUMBER: P580099

CATALOG NUMBER: HCC4S20D010BZ-HM40525940-41MDC

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	98	95	105	101	97	94	98	95	92	95	92	90	92	90	88	86																			
3	102	95	90	86	100	94	89	86	91	87	84	89	86	83	87	84	82	80																			
4	97	89	83	79	95	88	82	78	86	81	77	84	80	77	82	78	76	74																			
5	91	83	77	72	90	82	76	72	80	75	72	78	74	71	77	73	70	69																			
6	87	78	71	67	85	77	71	67	75	70	66	74	69	66	72	68	65	64																			
7	82	73	66	62	81	72	66	62	71	65	62	69	65	61	68	64	61	60																			
8	78	68	62	58	77	68	62	58	67	61	57	65	61	57	64	60	57	56																			
9	74	64	58	54	73	64	58	54	63	57	54	62	57	54	61	57	53	52																			
10	70	61	55	51	69	60	54	51	59	54	50	58	54	50	58	53	50	49																			

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

	0°
0°	224711
5°	228838
10°	235893
15°	233276
20°	214219
25°	184792
30°	150588
35°	111502
40°	63972
45°	30928
50°	14718
55°	5140
60°	1875
65°	1109
70°	902
75°	620
80°	0
85°	0



TEST NUMBER: P580099  
 CATALOG NUMBER: HCC4S20D010BZ-HM40525940-41MDC

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.8	9.2
10°-20°	506.4	26.1
20°-30°	618.5	31.9
30°-40°	454.6	23.4
40°-50°	150.7	7.8
50°-60°	26.6	1.4
60°-70°	4.0	0.2
70°-80°	1.4	0.1
80°-90°	0.0	0.0
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°	1302.7	67.1
0°-40°	1757.3	90.6
0°-60°	1934.6	99.7
0°-90°	1940.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1940.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1822	
5°	1848	178
15°	1827	506
25°	1358	618
35°	740	455
45°	177	151
55°	24	27
65°	4	4
75°	1	1
85°	0	0
90°	0	



TEST NUMBER: P580099  
CATALOG NUMBER: HCC4S20D010BZ-HM40525940-41MDC

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1821.8
2.5°	1823.0
5°	1848.2
7.5°	1875.8
10°	1883.4
12.5°	1865.8
15°	1826.8
17.5°	1746.3
20°	1632.0
22.5°	1498.7
25°	1357.8
27.5°	1210.8
30°	1057.3
32.5°	904.0
35°	740.5
37.5°	574.5
40°	397.3
42.5°	262.8
45°	177.3
47.5°	118.1
50°	76.7
52.5°	45.3
55°	23.9
57.5°	10.1
60°	7.6
62.5°	5.0
65°	3.8
67.5°	2.5
70°	2.5
72.5°	1.3
75°	1.3
77.5°	1.3
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	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°

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)