

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: P579978

Luminaire Tested: **HCC4S20D010BZ-HM40525827-41MDC**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579978  
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-HM40525827-41MDC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

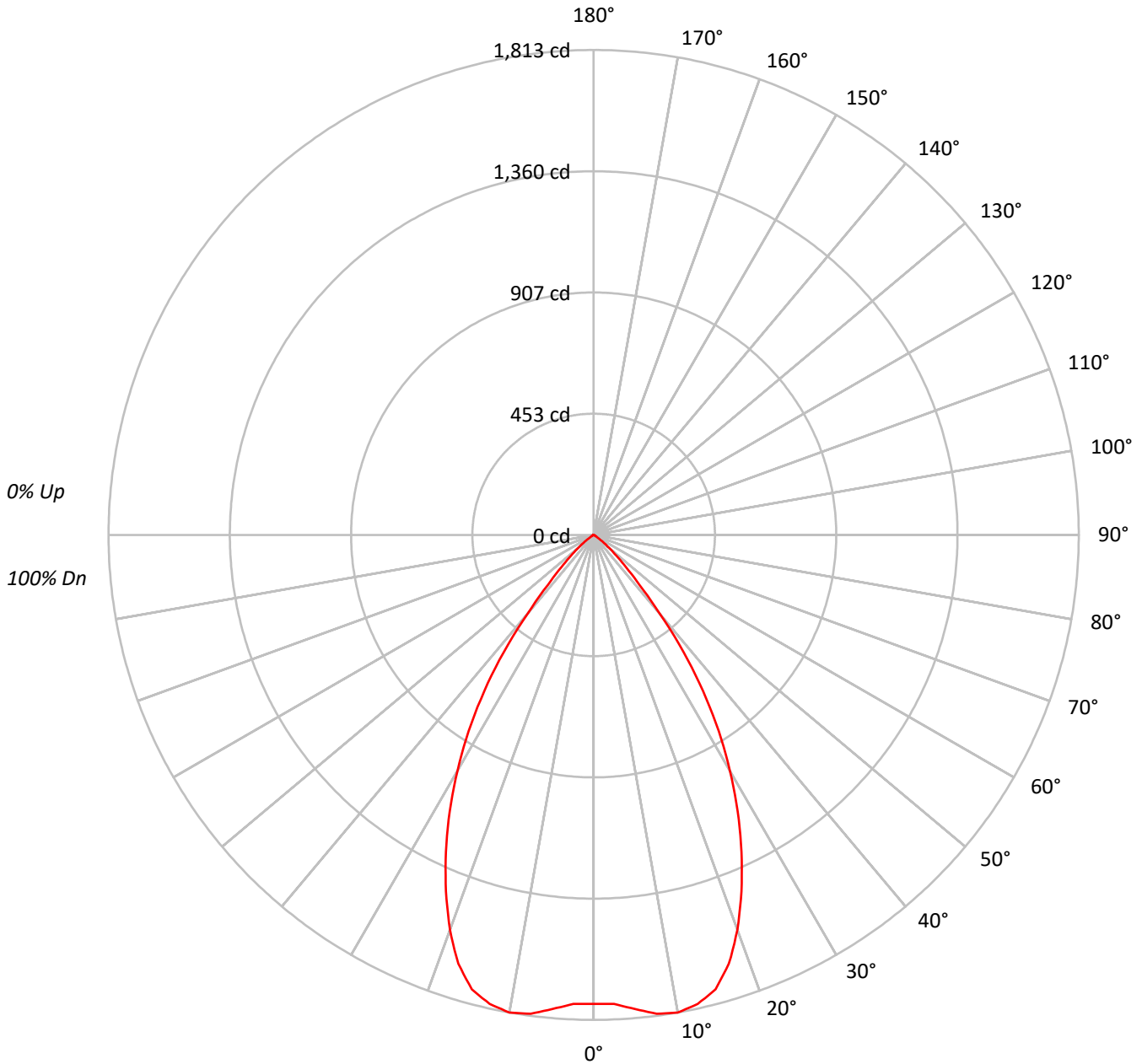
Lumens per Lamp: N/A  
Luminaire Lumens: 1867.4 lumens  
Efficiency: N/A  
Efficacy: 93.4 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1 / 0.96  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (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



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### Luminous Intensity Polar Plot



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**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	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°	216287
5°	220270
10°	227050
15°	224542
20°	206186
25°	177879
30°	144948
35°	107316
40°	61573
45°	29776
50°	14181
55°	4925
60°	1776
65°	1080
70°	866
75°	620
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	171.1	9.2
10°-20°	487.5	26.1
20°-30°	595.3	31.9
30°-40°	437.6	23.4
40°-50°	145.1	7.8
50°-60°	25.6	1.4
60°-70°	3.9	0.2
70°-80°	1.3	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°	1253.9	67.1
0°-40°	1691.5	90.6
0°-60°	1862.1	99.7
0°-90°	1867.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1867.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1754	
5°	1779	171
15°	1758	487
25°	1307	595
35°	713	438
45°	171	145
55°	23	26
65°	4	4
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1753.5
2.5°	1754.7
5°	1779.0
7.5°	1805.6
10°	1812.8
12.5°	1795.9
15°	1758.4
17.5°	1680.9
20°	1570.8
22.5°	1442.5
25°	1307.0
27.5°	1165.4
30°	1017.7
32.5°	870.1
35°	712.7
37.5°	553.1
40°	382.4
42.5°	252.9
45°	170.7
47.5°	113.8
50°	73.9
52.5°	43.6
55°	22.9
57.5°	9.6
60°	7.2
62.5°	4.8
65°	3.7
67.5°	2.4
70°	2.4
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

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Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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(END OF REPORT)