

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: P580066

Luminaire Tested: **HCC4W20D010BZ-HM40525930-41MDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580066  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-6)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W20D010BZ-HM40525930-41MDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

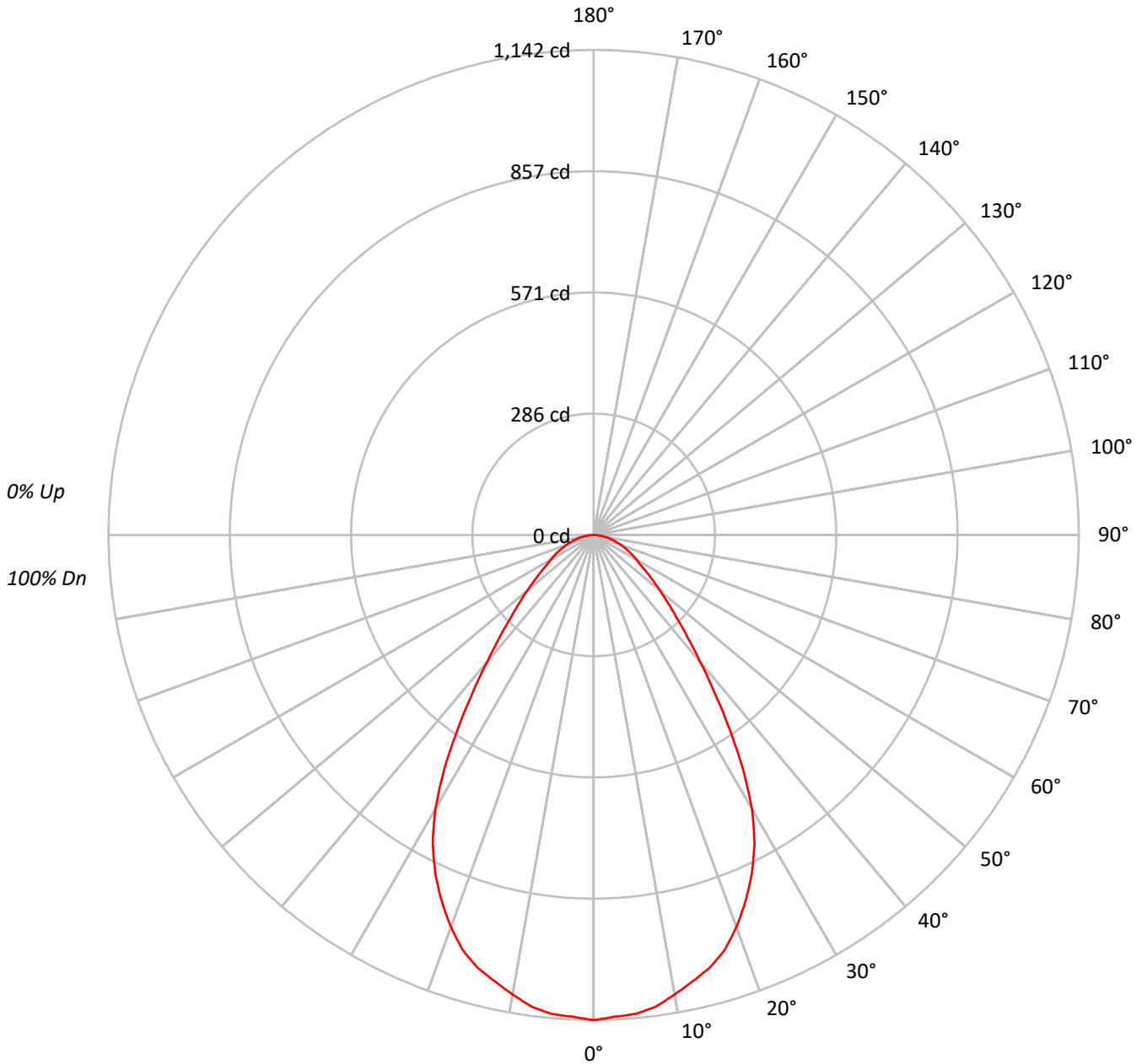
Lumens per Lamp: N/A  
Luminaire Lumens: 1662.3 lumens  
Efficiency: N/A  
Efficacy: 83.1 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.04 / 1.01  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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				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	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89			
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79			
3	97	88	82	76	94	87	81	76	84	79	75	81	77	73	79	75	72	70			
4	90	80	73	68	88	79	73	67	77	71	67	75	70	66	73	68	65	63			
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57			
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47			
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44			
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40			
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37			

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

	0°
0°	140922
5°	140185
10°	137623
15°	134720
20°	128951
25°	119915
30°	106137
35°	83766
40°	62684
45°	48214
50°	39108
55°	32429
60°	28690
65°	26559
70°	24487
75°	22542
80°	20457
85°	16275



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.0	6.4
10°-20°	295.9	17.8
20°-30°	401.7	24.2
30°-40°	348.0	20.9
40°-50°	218.5	13.1
50°-60°	137.4	8.3
60°-70°	90.3	5.4
70°-80°	49.8	3.0
80°-90°	13.6	0.8
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°	804.6	48.4
0°-40°	1152.6	69.3
0°-60°	1508.5	90.8
0°-90°	1662.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1662.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1142	
5°	1132	107
15°	1055	296
25°	881	402
35°	556	348
45°	276	218
55°	151	137
65°	91	90
75°	47	50
85°	12	14
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1142.5
2.5°	1135.6
5°	1132.2
7.5°	1120.6
10°	1098.8
12.5°	1076.9
15°	1055.0
17.5°	1025.1
20°	982.4
22.5°	934.1
25°	881.1
27.5°	820.1
30°	745.2
32.5°	654.2
35°	556.3
37.5°	466.5
40°	389.3
42.5°	328.3
45°	276.4
47.5°	237.3
50°	203.8
52.5°	175.0
55°	150.8
57.5°	130.2
60°	116.3
62.5°	103.7
65°	91.0
67.5°	78.3
70°	67.9
72.5°	56.4
75°	47.3
77.5°	36.8
80°	28.8
82.5°	19.6
85°	11.5
87.5°	4.6
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)