

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: P580025

Luminaire Tested: **HCC4W20D010BZ-HM40525840-41WDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580025  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-8)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W20D010BZ-HM40525840-41WDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

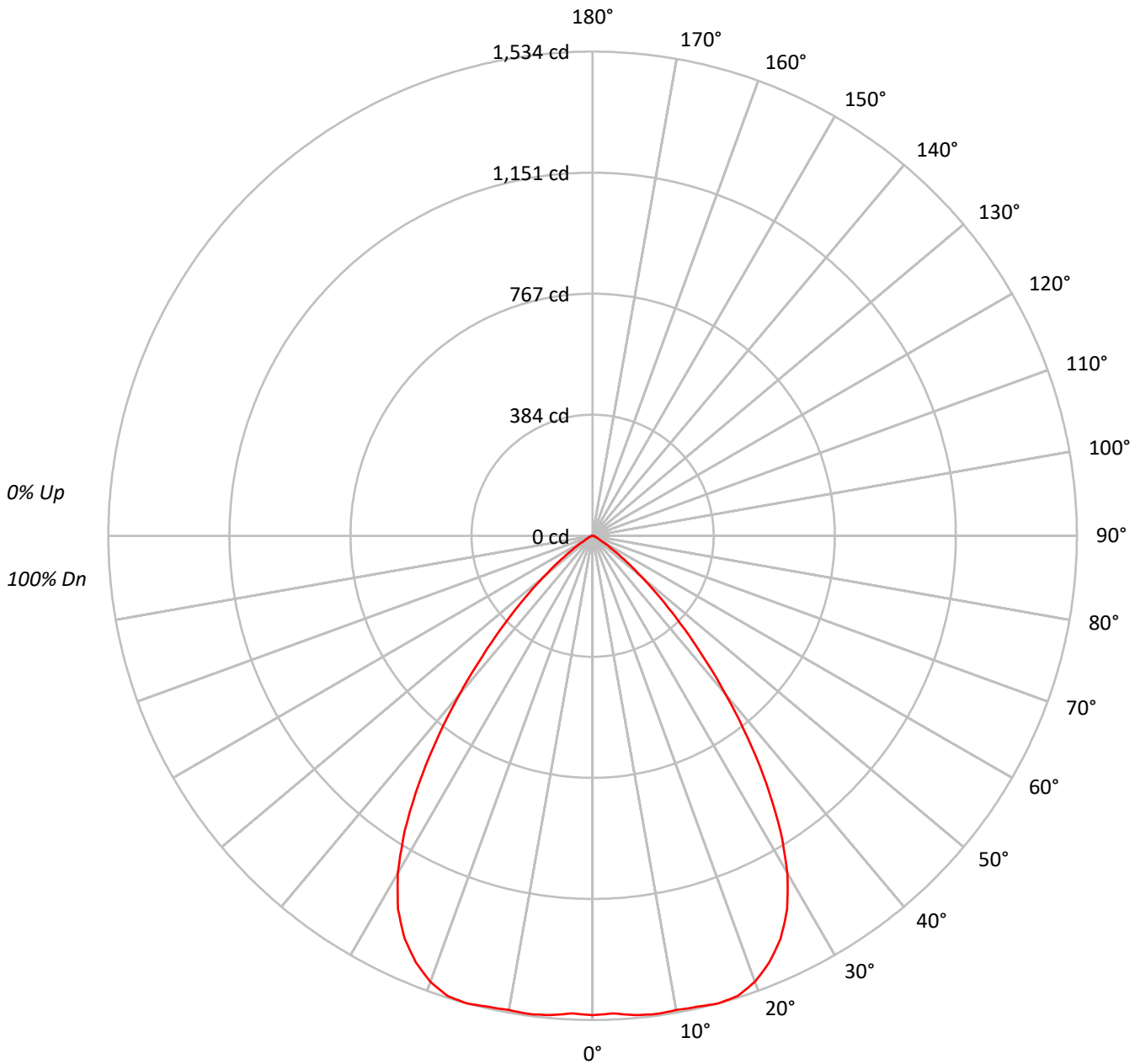
Lumens per Lamp: N/A  
Luminaire Lumens: 2228.3 lumens  
Efficiency: N/A  
Efficacy: 111.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.1  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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	100	100	100
1	113	110	107	104	110	108	105	103	103	101	100	100	98	97	96	95	94	92	92	92	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	86	84	84	84	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	81	78	76	76	76	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69	69	69	69
5	88	79	72	67	86	78	72	67	76	70	66	74	69	66	72	68	65	63	63	63	63
6	83	73	66	61	81	72	66	61	70	65	61	69	64	60	68	63	60	58	58	58	58
7	78	68	61	56	77	67	60	56	65	60	55	64	59	55	63	58	55	53	53	53	53
8	74	63	56	51	72	62	56	51	61	55	51	60	55	51	59	54	51	49	49	49	49
9	69	59	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47	45	45	45	45
10	66	55	48	44	65	54	48	44	53	48	44	53	47	44	52	47	43	42	42	42	42

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

	0°
0°	187350
5°	188759
10°	191117
15°	195912
20°	197352
25°	191706
30°	175769
35°	144629
40°	105417
45°	68432
50°	38589
55°	18300
60°	7253
65°	4495
70°	3029
75°	2002
80°	994
85°	1981



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.6	6.5
10°-20°	432.5	19.4
20°-30°	641.5	28.8
30°-40°	592.6	26.6
40°-50°	309.4	13.9
50°-60°	84.8	3.8
60°-70°	16.3	0.7
70°-80°	4.6	0.2
80°-90°	1.0	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°	1219.6	54.7
0°-40°	1812.2	81.3
0°-60°	2206.4	99.0
0°-90°	2228.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2228.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1519	
5°	1524	146
15°	1534	433
25°	1409	642
35°	960	593
45°	392	309
55°	85	85
65°	15	16
75°	4	5
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1518.9
2.5°	1514.7
5°	1524.5
7.5°	1528.6
10°	1525.9
12.5°	1528.6
15°	1534.2
17.5°	1528.6
20°	1503.5
22.5°	1463.0
25°	1408.6
27.5°	1334.5
30°	1234.1
32.5°	1107.1
35°	960.5
37.5°	806.9
40°	654.7
42.5°	515.1
45°	392.3
47.5°	287.6
50°	201.1
52.5°	134.0
55°	85.1
57.5°	50.2
60°	29.4
62.5°	21.0
65°	15.4
67.5°	11.1
70°	8.4
72.5°	5.6
75°	4.2
77.5°	2.8
80°	1.4
82.5°	1.4
85°	1.4
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)