

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: P580015

Luminaire Tested: **HCC4W20D010BZ-HM40525835-41PSMDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580015  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W20D010BZ-HM40525835-41PSMDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" PLASTIC TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

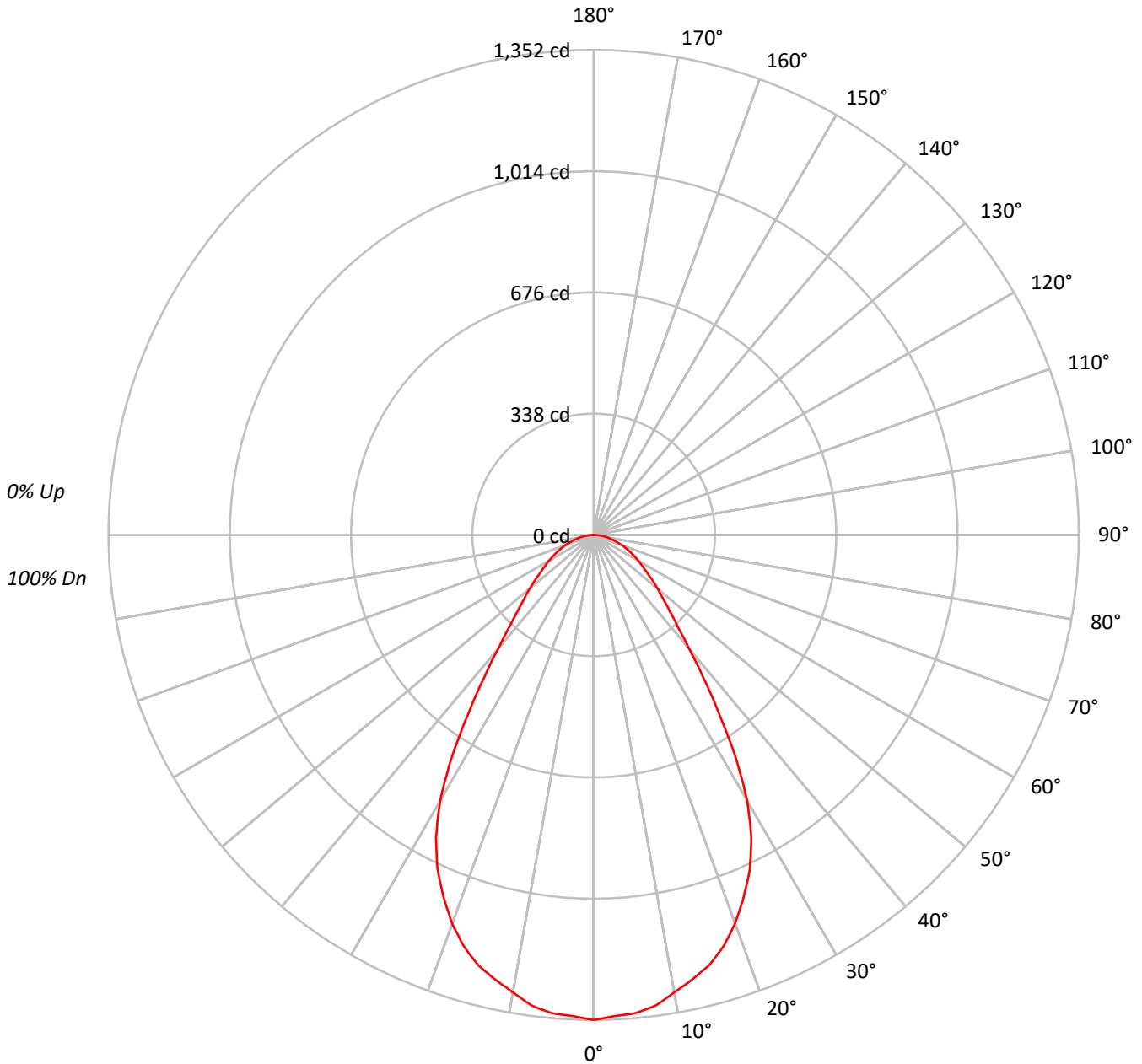
Lumens per Lamp: N/A  
Luminaire Lumens: 1920.0 lumens  
Efficiency: N/A  
Efficacy: 96.0 lumens/watt  
Spacing Criteria (0/90/45): 1.03 / 1.03 / 0.99  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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	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	109	105	102	99	101	99	96	97	95	93	94	92	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	66	74	69	65	72	68	65	63
5	84	74	66	61	82	72	66	60	71	64	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	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	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

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

	0°
0°	166763
5°	165716
10°	162197
15°	158612
20°	151279
25°	140044
30°	121804
35°	91988
40°	66677
45°	52104
50°	44557
55°	38536
60°	35474
65°	32484
70°	30366
75°	27832
80°	26069
85°	25050



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.4	6.6
10°-20°	347.9	18.1
20°-30°	467.9	24.4
30°-40°	384.7	20.0
40°-50°	236.3	12.3
50°-60°	163.5	8.5
60°-70°	111.4	5.8
70°-80°	62.1	3.2
80°-90°	19.8	1.0
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°	942.2	49.1
0°-40°	1326.9	69.1
0°-60°	1726.7	89.9
0°-90°	1920.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1920.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1352	
5°	1338	126
15°	1242	348
25°	1029	468
35°	611	385
45°	299	236
55°	179	163
65°	111	111
75°	58	62
85°	18	20
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1352.0
2.5°	1342.4
5°	1338.4
7.5°	1323.5
10°	1295.0
12.5°	1269.2
15°	1242.1
17.5°	1202.6
20°	1152.5
22.5°	1092.7
25°	1029.0
27.5°	951.6
30°	855.2
32.5°	737.1
35°	610.9
37.5°	502.3
40°	414.1
42.5°	346.2
45°	298.7
47.5°	262.0
50°	232.2
52.5°	205.0
55°	179.2
57.5°	160.1
60°	143.8
62.5°	127.5
65°	111.3
67.5°	97.7
70°	84.2
72.5°	70.5
75°	58.4
77.5°	46.1
80°	36.7
82.5°	27.2
85°	17.7
87.5°	9.5
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)