

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: P579983

Luminaire Tested: **HCC4W20D010BZ-HM40525827-41PSMDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579983  
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-HM40525827-41PSMDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" PLASTIC TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

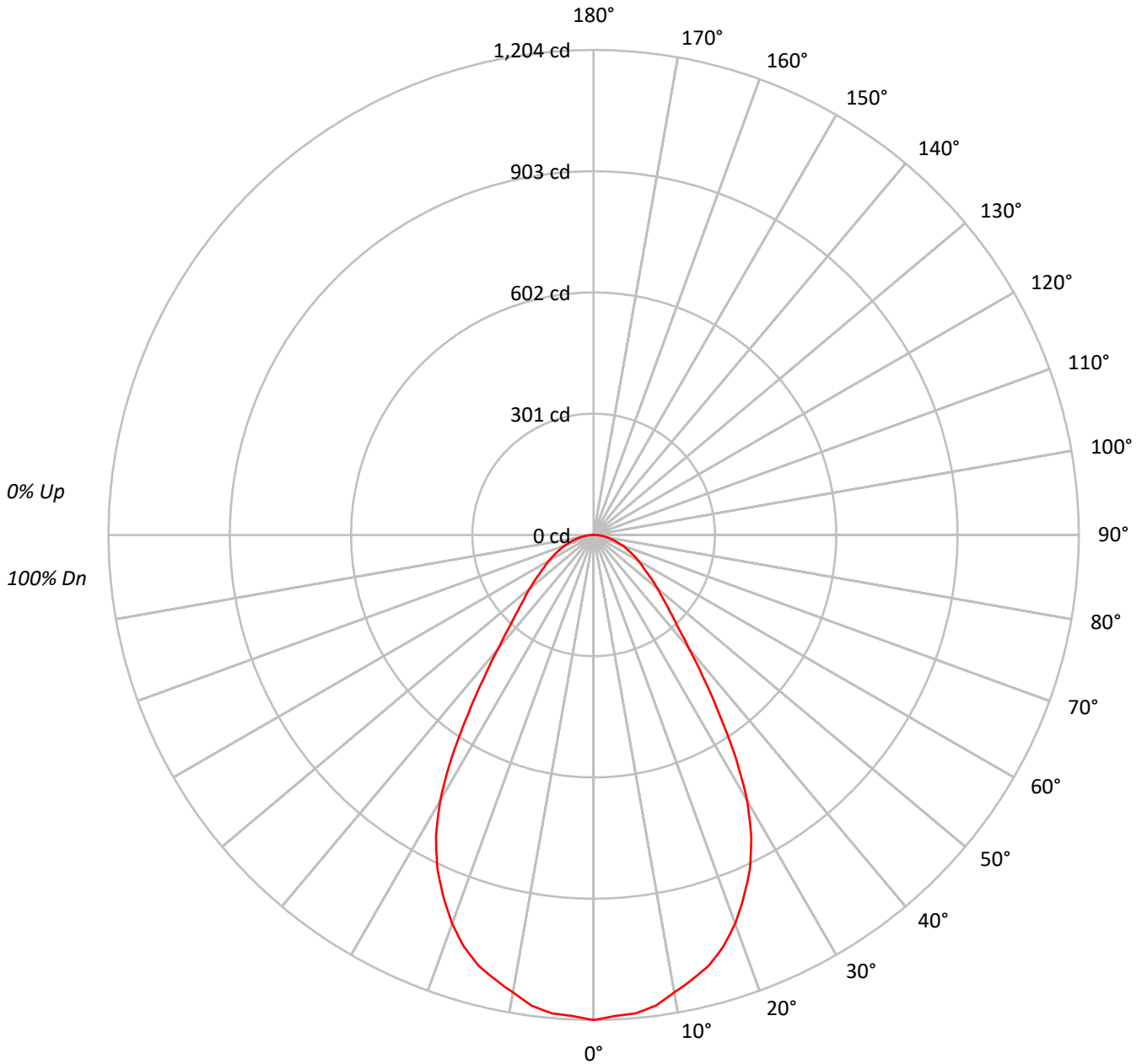
Lumens per Lamp: N/A  
Luminaire Lumens: 1710.1 lumens  
Efficiency: N/A  
Efficacy: 85.5 lumens/watt  
Spacing Criteria (0/90/45): 1.03 / 1.03 / 0.99  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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	50	30	10
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°	148533
5°	147614
10°	144462
15°	141271
20°	134753
25°	124733
30°	108487
35°	81929
40°	59383
45°	46400
50°	39683
55°	34300
60°	31601
65°	28923
70°	27048
75°	24782
80°	23227
85°	22219



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.6	6.6
10°-20°	309.9	18.1
20°-30°	416.7	24.4
30°-40°	342.6	20.0
40°-50°	210.4	12.3
50°-60°	145.6	8.5
60°-70°	99.3	5.8
70°-80°	55.3	3.2
80°-90°	17.6	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°	839.2	49.1
0°-40°	1181.8	69.1
0°-60°	1537.9	89.9
0°-90°	1710.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1710.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1204	
5°	1192	113
15°	1106	310
25°	916	417
35°	544	343
45°	266	210
55°	160	146
65°	99	99
75°	52	55
85°	16	18
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1204.2
2.5°	1195.7
5°	1192.2
7.5°	1178.9
10°	1153.4
12.5°	1130.5
15°	1106.3
17.5°	1071.3
20°	1026.6
22.5°	973.3
25°	916.5
27.5°	847.5
30°	761.7
32.5°	656.5
35°	544.1
37.5°	447.3
40°	368.8
42.5°	308.3
45°	266.0
47.5°	233.3
50°	206.8
52.5°	182.6
55°	159.5
57.5°	142.7
60°	128.1
62.5°	113.7
65°	99.1
67.5°	87.1
70°	75.0
72.5°	62.9
75°	52.0
77.5°	41.1
80°	32.7
82.5°	24.2
85°	15.7
87.5°	8.5
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)