

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: P580048

Luminaire Tested: **HCC4S20D010BZ-HM40525927-41MDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580048  
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: HCC4S20D010BZ-HM40525927-41MDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

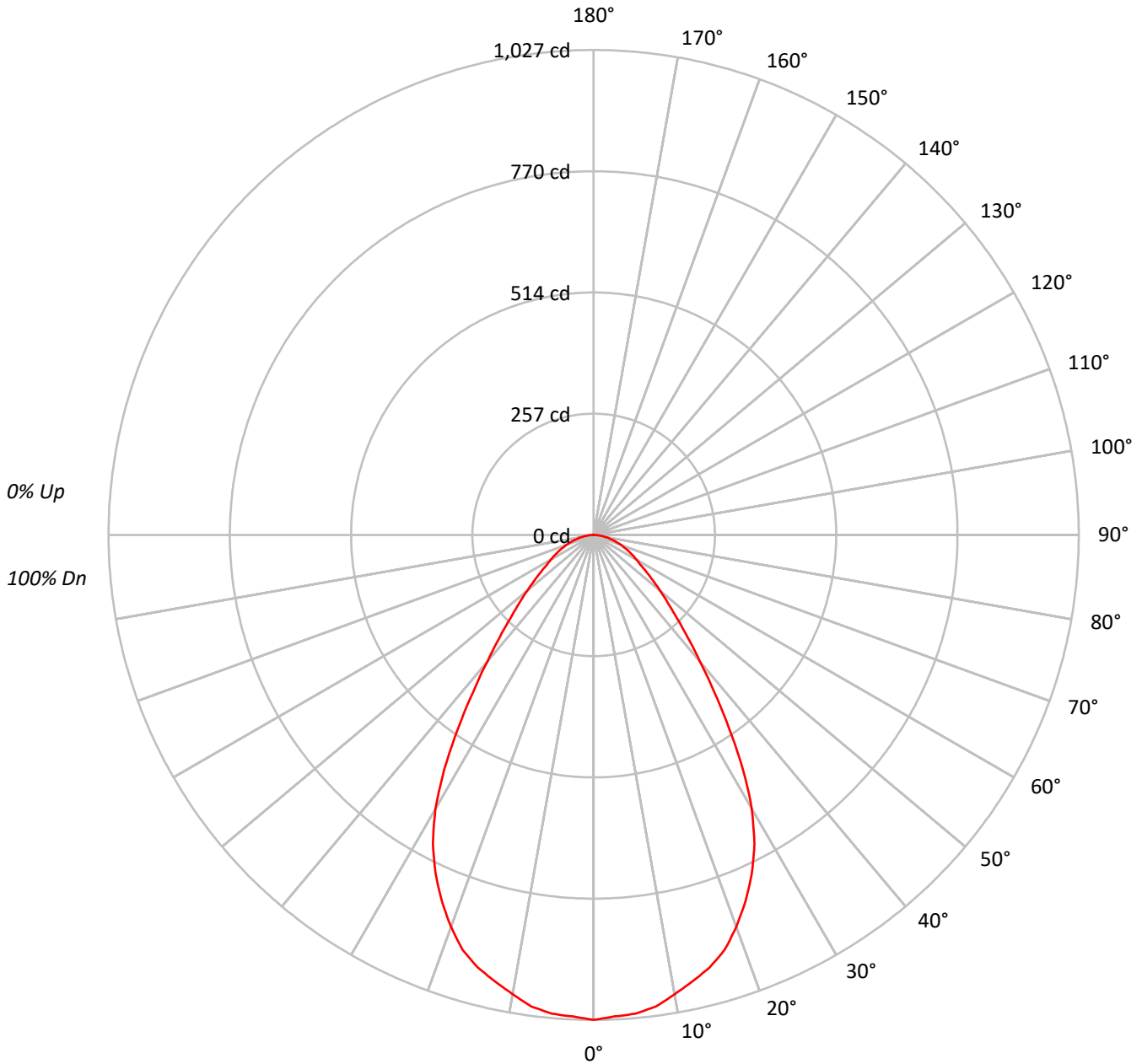
Lumens per Lamp: N/A  
Luminaire Lumens: 1494.0 lumens  
Efficiency: N/A  
Efficacy: 74.7 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.04 / 1.01  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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			100
1	111	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89			89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79			79
3	97	88	82	76	94	87	81	76	84	79	75	81	77	73	79	75	72	70			70
4	90	80	73	68	88	79	73	67	77	71	67	75	70	66	73	68	65	63			63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57			57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52			52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47			47
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44			44
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40			40
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37			37

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

	0°
0°	126664
5°	125996
10°	123695
15°	121082
20°	115917
25°	107775
30°	95384
35°	75289
40°	56340
45°	43330
50°	35174
55°	29160
60°	25804
65°	23874
70°	22035
75°	20207
80°	18397
85°	14577



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.2	6.4
10°-20°	265.9	17.8
20°-30°	361.1	24.2
30°-40°	312.8	20.9
40°-50°	196.4	13.1
50°-60°	123.6	8.3
60°-70°	81.2	5.4
70°-80°	44.7	3.0
80°-90°	12.2	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°	723.2	48.4
0°-40°	1036.0	69.3
0°-60°	1355.9	90.8
0°-90°	1494.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1494.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1027	
5°	1018	96
15°	948	266
25°	792	361
35°	500	313
45°	248	196
55°	136	124
65°	82	81
75°	42	45
85°	10	12
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1026.9
2.5°	1020.7
5°	1017.6
7.5°	1007.3
10°	987.6
12.5°	968.0
15°	948.2
17.5°	921.4
20°	883.1
22.5°	839.6
25°	791.9
27.5°	737.1
30°	669.7
32.5°	588.0
35°	500.0
37.5°	419.2
40°	349.9
42.5°	295.0
45°	248.4
47.5°	213.2
50°	183.3
52.5°	157.4
55°	135.6
57.5°	117.0
60°	104.6
62.5°	93.1
65°	81.8
67.5°	70.4
70°	61.1
72.5°	50.7
75°	42.4
77.5°	33.1
80°	25.9
82.5°	17.5
85°	10.3
87.5°	4.1
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)