

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: P580042

Luminaire Tested: **HCC4S20D010MW-HM40525927-41NDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580042  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S20D010MW-HM40525927-41NDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

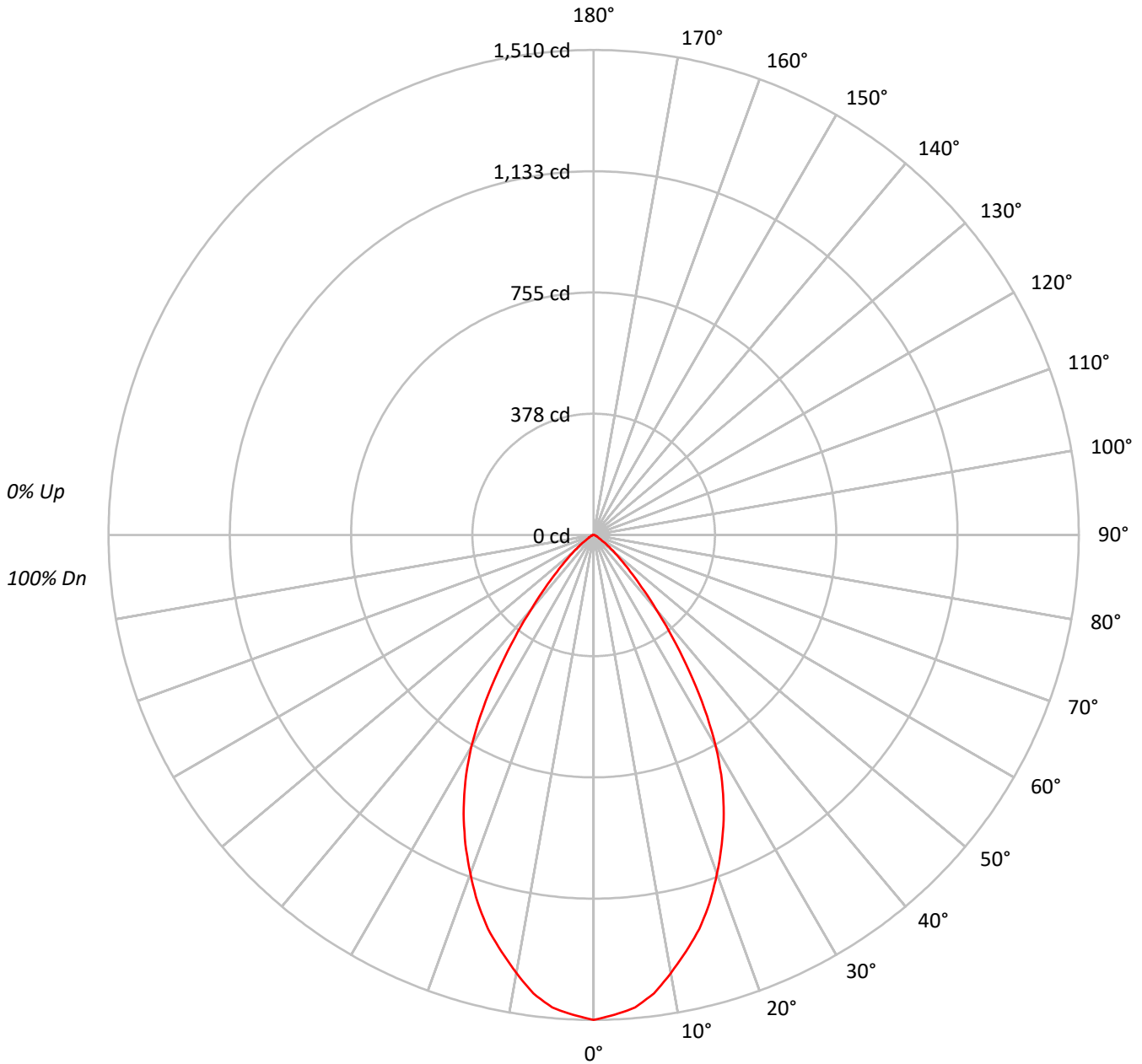
Lumens per Lamp: N/A  
Luminaire Lumens: 1436.1 lumens  
Efficiency: N/A  
Efficacy: 71.8 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.91  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93		
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86		
3	101	95	89	85	99	93	88	84	91	86	83	88	85	82	86	83	81	79		
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	74	73		
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67		
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	63		
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58		
8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54		
9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51		
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	48		

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

	0°
0°	186264
5°	182890
10°	173469
15°	162200
20°	147302
25°	130367
30°	108430
35°	78180
40°	48788
45°	28154
50°	15869
55°	7570
60°	4317
65°	3327
70°	2236
75°	1477
80°	1492
85°	1415



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.1	9.6
10°-20°	354.3	24.7
20°-30°	435.8	30.3
30°-40°	323.6	22.5
40°-50°	131.6	9.2
50°-60°	36.4	2.5
60°-70°	11.4	0.8
70°-80°	3.8	0.3
80°-90°	1.1	0.1
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°	928.2	64.6
0°-40°	1251.8	87.2
0°-60°	1419.8	98.9
0°-90°	1436.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1436.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1510	
5°	1477	138
15°	1270	354
25°	958	436
35°	519	324
45°	161	132
55°	35	36
65°	11	11
75°	3	4
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1510.1
2.5°	1495.7
5°	1477.1
7.5°	1439.8
10°	1385.0
12.5°	1328.1
15°	1270.2
17.5°	1200.9
20°	1122.2
22.5°	1042.6
25°	957.9
27.5°	865.8
30°	761.3
32.5°	642.3
35°	519.2
37.5°	403.4
40°	303.0
42.5°	221.4
45°	161.4
47.5°	115.8
50°	82.7
52.5°	56.9
55°	35.2
57.5°	22.7
60°	17.5
62.5°	14.5
65°	11.4
67.5°	8.3
70°	6.2
72.5°	5.2
75°	3.1
77.5°	2.1
80°	2.1
82.5°	1.0
85°	1.0
87.5°	1.0
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)