

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: P580077

Luminaire Tested: **HCC4S20D010MB-HM40525935-41MDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580077  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-5)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S20D010MB-HM40525935-41MDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

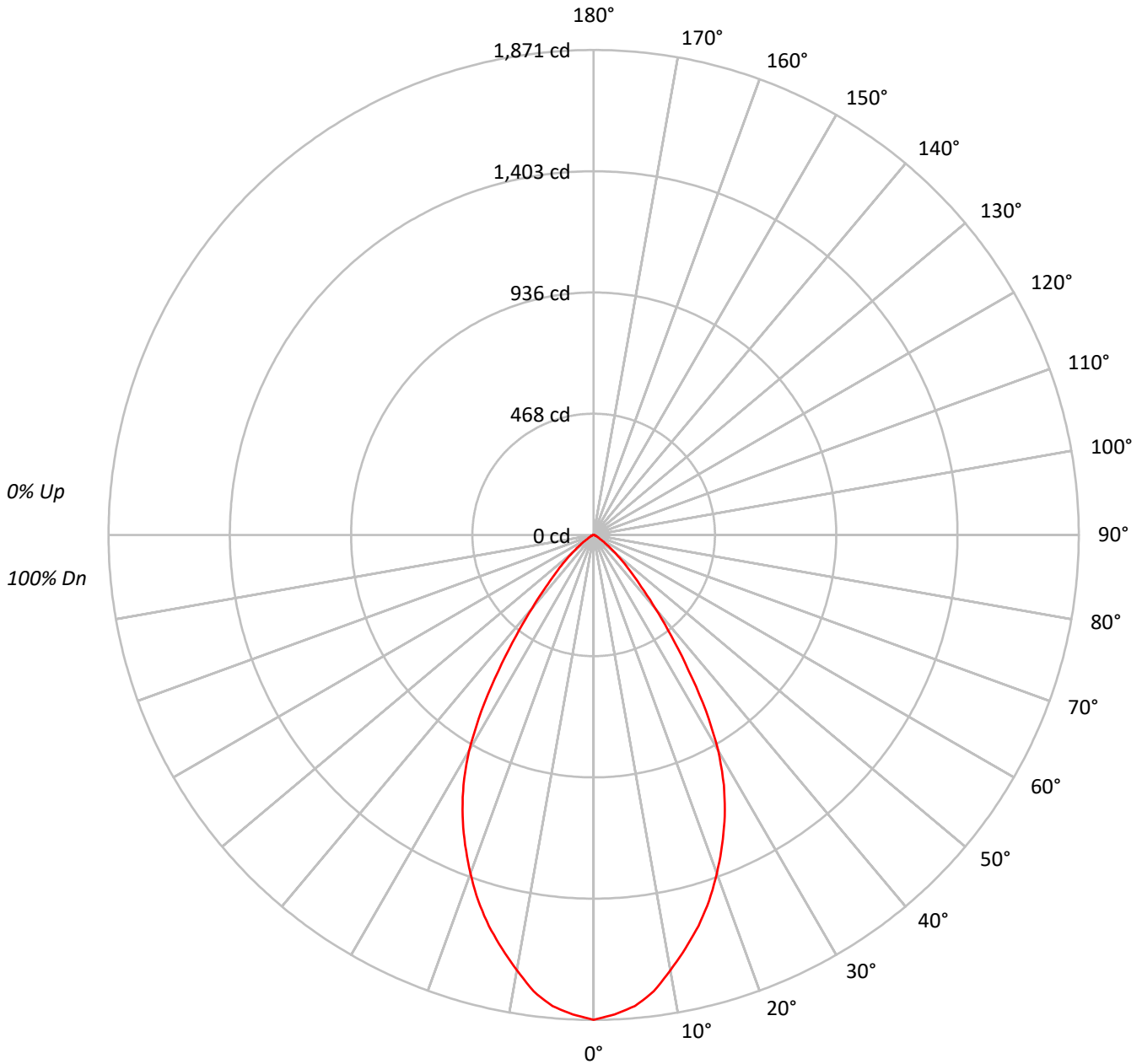
Lumens per Lamp: N/A  
Luminaire Lumens: 1782.6 lumens  
Efficiency: N/A  
Efficacy: 89.1 lumens/watt  
Spacing Criteria (0/90/45): 0.9 / 0.9 / 0.91  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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	82	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	62		
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58		
8	77	67	61	56	76	66	60	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	47		

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

	0°
0°	230767
5°	225941
10°	213524
15°	199411
20°	182388
25°	162867
30°	136773
35°	96219
40°	59351
45°	35533
50°	20935
55°	10430
60°	5378
65°	3561
70°	2200
75°	1763
80°	923
85°	1840



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.4	9.6
10°-20°	436.5	24.5
20°-30°	544.4	30.5
30°-40°	401.0	22.5
40°-50°	164.9	9.3
50°-60°	48.2	2.7
60°-70°	12.4	0.7
70°-80°	3.8	0.2
80°-90°	0.9	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°	1151.3	64.6
0°-40°	1552.4	87.1
0°-60°	1765.4	99.0
0°-90°	1782.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1782.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1871	
5°	1825	170
15°	1562	437
25°	1197	544
35°	639	401
45°	204	165
55°	48	48
65°	12	12
75°	4	4
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1870.9
2.5°	1851.5
5°	1824.8
7.5°	1776.2
10°	1704.8
12.5°	1634.4
15°	1561.6
17.5°	1480.4
20°	1389.5
22.5°	1295.0
25°	1196.7
27.5°	1087.6
30°	960.3
32.5°	806.3
35°	639.0
37.5°	491.0
40°	368.6
42.5°	272.8
45°	203.7
47.5°	150.4
50°	109.1
52.5°	75.1
55°	48.5
57.5°	29.1
60°	21.8
62.5°	15.7
65°	12.2
67.5°	8.5
70°	6.1
72.5°	4.8
75°	3.7
77.5°	2.4
80°	1.3
82.5°	1.3
85°	1.3
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)