

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: P580059

Luminaire Tested: **HCC4S20D010BZ-HM40525930-41MDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580059  
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: HCC4S20D010BZ-HM40525930-41MDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

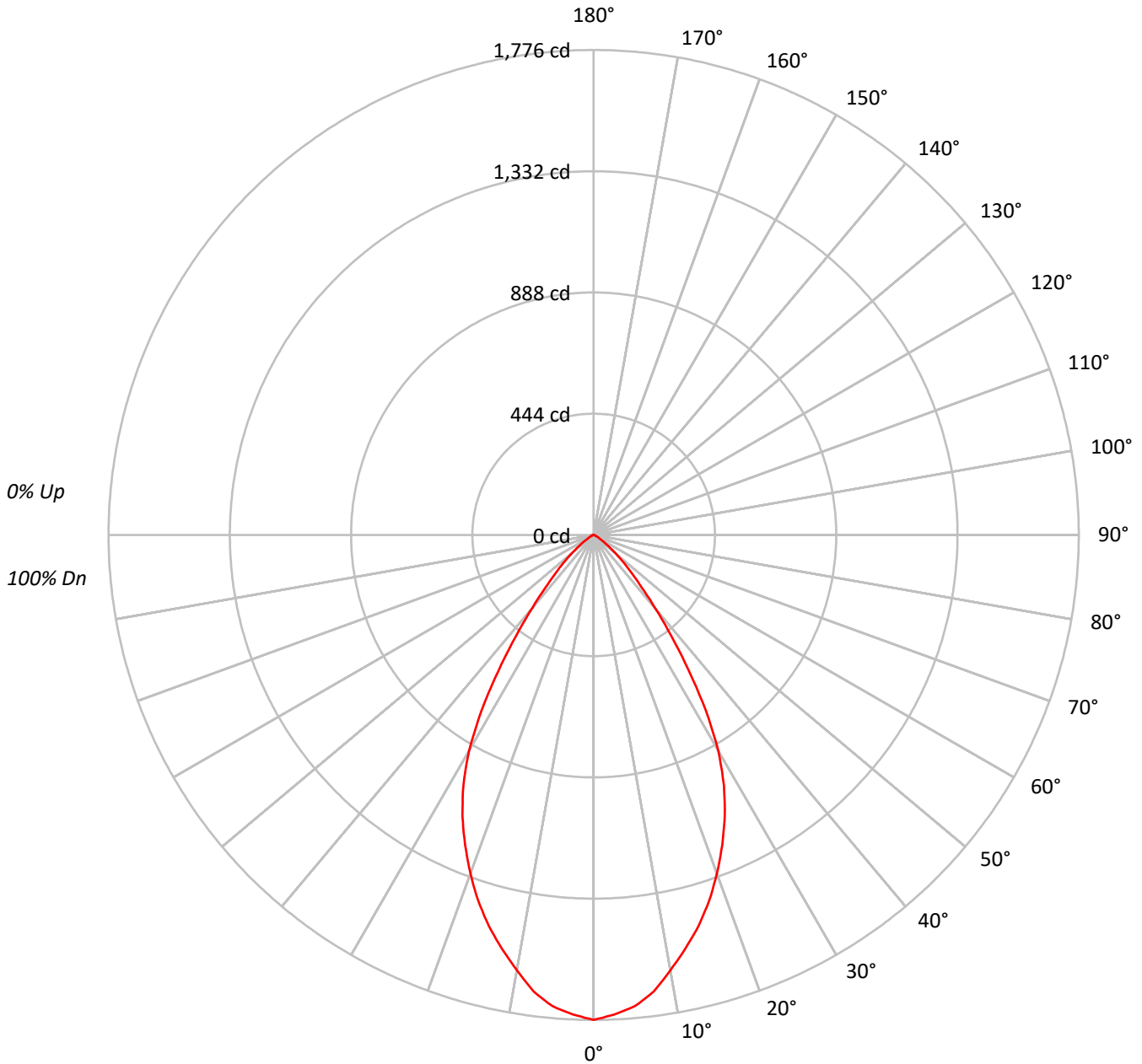
Lumens per Lamp: N/A  
Luminaire Lumens: 1692.1 lumens  
Efficiency: N/A  
Efficacy: 84.6 lumens/watt  
Spacing Criteria (0/90/45): 0.9 / 0.9 / 0.91  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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	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	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°	219074
5°	214488
10°	202702
15°	189323
20°	173134
25°	154620
30°	129837
35°	91340
40°	56340
45°	33736
50°	19880
55°	9892
60°	5131
65°	3356
70°	2056
75°	1620
80°	781
85°	1557



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.8	9.6
10°-20°	414.4	24.5
20°-30°	516.8	30.5
30°-40°	380.7	22.5
40°-50°	156.6	9.3
50°-60°	45.7	2.7
60°-70°	11.7	0.7
70°-80°	3.6	0.2
80°-90°	0.7	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°	1093.0	64.6
0°-40°	1473.7	87.1
0°-60°	1676.0	99.0
0°-90°	1692.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1692.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1776	
5°	1732	162
15°	1483	414
25°	1136	517
35°	607	381
45°	193	157
55°	46	46
65°	12	12
75°	3	4
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1776.1
2.5°	1757.7
5°	1732.3
7.5°	1686.3
10°	1618.4
12.5°	1551.7
15°	1482.6
17.5°	1405.4
20°	1319.0
22.5°	1229.4
25°	1136.1
27.5°	1032.5
30°	911.6
32.5°	765.4
35°	606.6
37.5°	466.1
40°	349.9
42.5°	259.0
45°	193.4
47.5°	142.7
50°	103.6
52.5°	71.3
55°	46.0
57.5°	27.6
60°	20.8
62.5°	14.9
65°	11.5
67.5°	8.0
70°	5.7
72.5°	4.6
75°	3.4
77.5°	2.3
80°	1.1
82.5°	1.1
85°	1.1
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)