

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: P580061

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

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580061  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-8)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S20D010BZ-HM40525930-41WDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

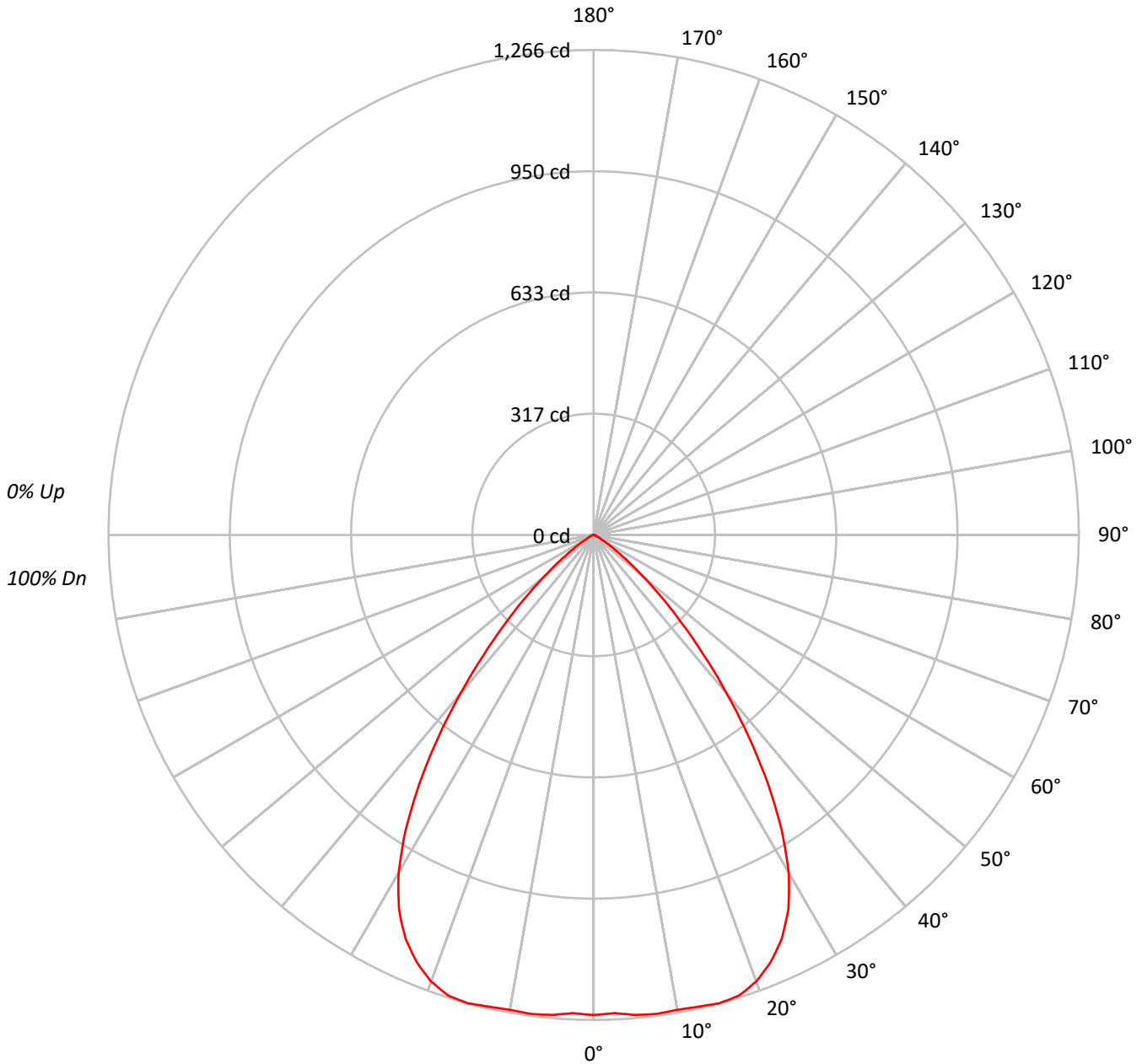
Lumens per Lamp: N/A  
Luminaire Lumens: 1838.4 lumens  
Efficiency: N/A  
Efficacy: 91.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.11  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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	107	104	110	108	105	103	103	101	100	100	98	97	96	95	94	92		
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	86	84		
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	81	78	76		
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69		
5	88	79	72	67	86	78	72	67	76	70	66	74	69	66	72	68	65	63		
6	83	73	66	61	81	72	66	61	70	65	61	69	64	60	68	63	60	58		
7	78	68	61	56	77	67	60	56	65	60	55	64	59	55	63	58	55	53		
8	74	63	56	51	72	62	56	51	61	55	51	60	55	51	59	54	51	49		
9	69	59	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47	45		
10	66	55	48	44	65	54	48	44	53	48	44	53	47	44	52	47	43	42		

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

	0°
0°	154564
5°	155724
10°	157663
15°	161639
20°	162830
25°	158158
30°	145019
35°	119332
40°	86981
45°	56465
50°	31835
55°	15118
60°	5970
65°	3677
70°	2488
75°	1620
80°	781
85°	1557



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.1	6.5
10°-20°	356.9	19.4
20°-30°	529.3	28.8
30°-40°	488.9	26.6
40°-50°	255.3	13.9
50°-60°	70.0	3.8
60°-70°	13.5	0.7
70°-80°	3.8	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°	1006.3	54.7
0°-40°	1495.2	81.3
0°-60°	1820.4	99.0
0°-90°	1838.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1838.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1253	
5°	1258	120
15°	1266	357
25°	1162	529
35°	792	489
45°	324	255
55°	70	70
65°	13	13
75°	3	4
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1253.1
2.5°	1249.7
5°	1257.7
7.5°	1261.2
10°	1258.8
12.5°	1261.2
15°	1265.8
17.5°	1261.2
20°	1240.5
22.5°	1207.1
25°	1162.1
27.5°	1101.1
30°	1018.2
32.5°	913.4
35°	792.5
37.5°	665.7
40°	540.2
42.5°	425.0
45°	323.7
47.5°	237.3
50°	165.9
52.5°	110.6
55°	70.3
57.5°	41.4
60°	24.2
62.5°	17.3
65°	12.6
67.5°	9.2
70°	6.9
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)