

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: P580009

Luminaire Tested: **HCC4S20D010MB-HM40525835-41WDWB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580009  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-10)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S20D010MB-HM40525835-41WDWB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

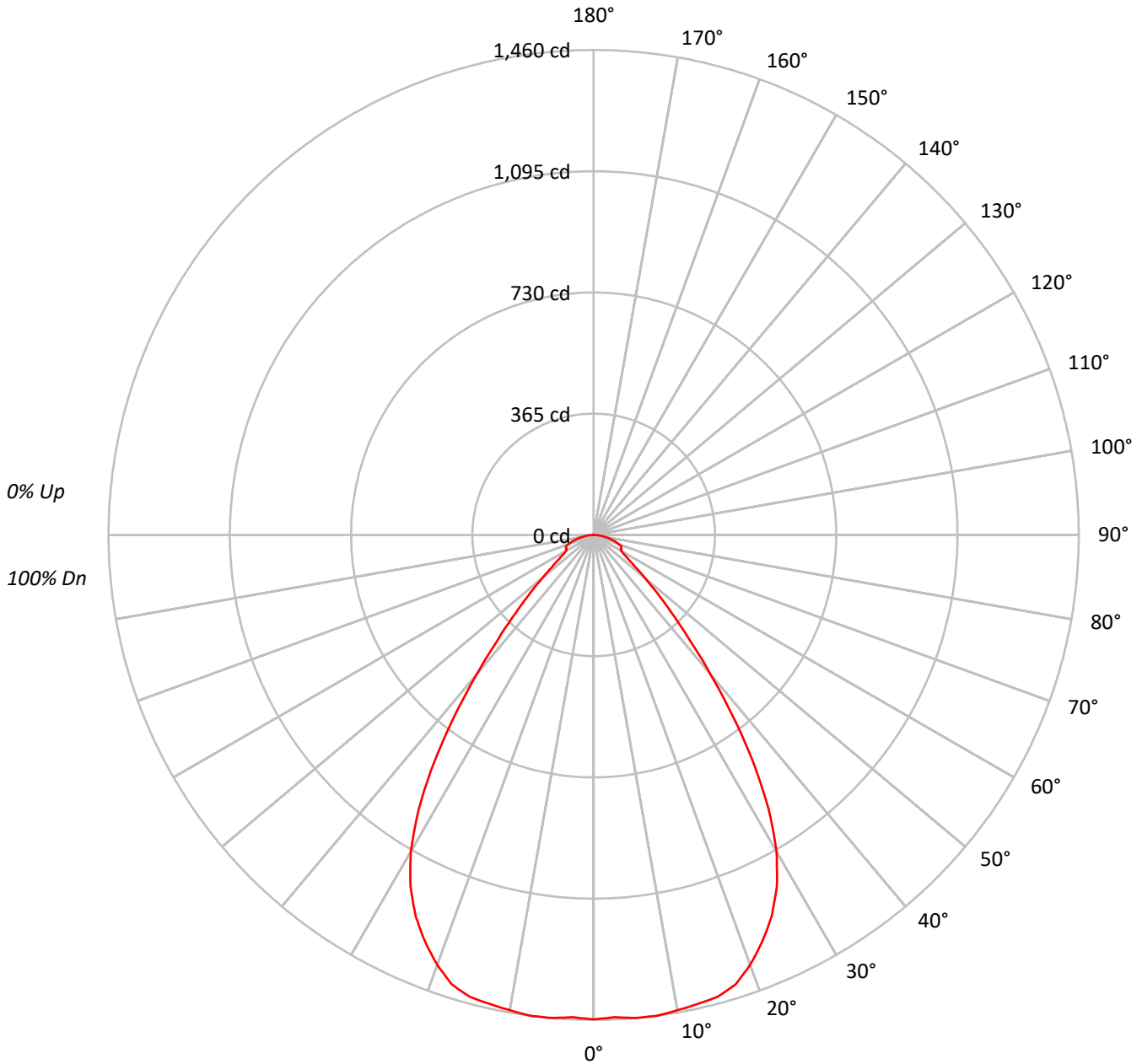
Lumens per Lamp: N/A  
Luminaire Lumens: 2191.5 lumens  
Efficiency: N/A  
Efficacy: 109.6 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.14 / 1.07  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90			90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80			80
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72			72
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65			65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59			59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54			54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	49			49
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46			46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42			42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39			39

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

	0°
0°	179900
5°	180760
10°	181998
15°	183832
20°	180760
25°	172448
30°	156684
35°	126379
40°	87689
45°	57564
50°	38570
55°	27461
60°	23460
65°	26939
70°	28923
75°	27832
80°	25074
85°	23068



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.1	6.3
10°-20°	404.4	18.5
20°-30°	577.8	26.4
30°-40°	516.2	23.6
40°-50°	264.7	12.1
50°-60°	120.3	5.5
60°-70°	89.7	4.1
70°-80°	61.1	2.8
80°-90°	18.1	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°	1121.3	51.2
0°-40°	1637.5	74.7
0°-60°	2022.6	92.3
0°-90°	2191.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2191.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1458	
5°	1460	139
15°	1440	404
25°	1267	578
35°	839	516
45°	330	265
55°	128	120
65°	92	90
75°	58	61
85°	16	18
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1458.5
2.5°	1453.1
5°	1459.9
7.5°	1459.9
10°	1453.1
12.5°	1446.4
15°	1439.6
17.5°	1419.2
20°	1377.1
22.5°	1325.5
25°	1267.1
27.5°	1193.8
30°	1100.1
32.5°	980.6
35°	839.3
37.5°	688.5
40°	544.6
42.5°	425.1
45°	330.0
47.5°	258.1
50°	201.0
52.5°	157.5
55°	127.7
57.5°	107.2
60°	95.1
62.5°	92.3
65°	92.3
67.5°	89.6
70°	80.2
72.5°	69.3
75°	58.4
77.5°	46.2
80°	35.3
82.5°	25.8
85°	16.3
87.5°	6.8
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)