

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: P584048

Luminaire Tested: **HC820D010-HM80520930-81MDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584048  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-4)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC820D010-HM80520930-81MDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2115.4 lumens  
Efficiency: N/A  
Efficacy: 105.8 lumens/watt  
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.67  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

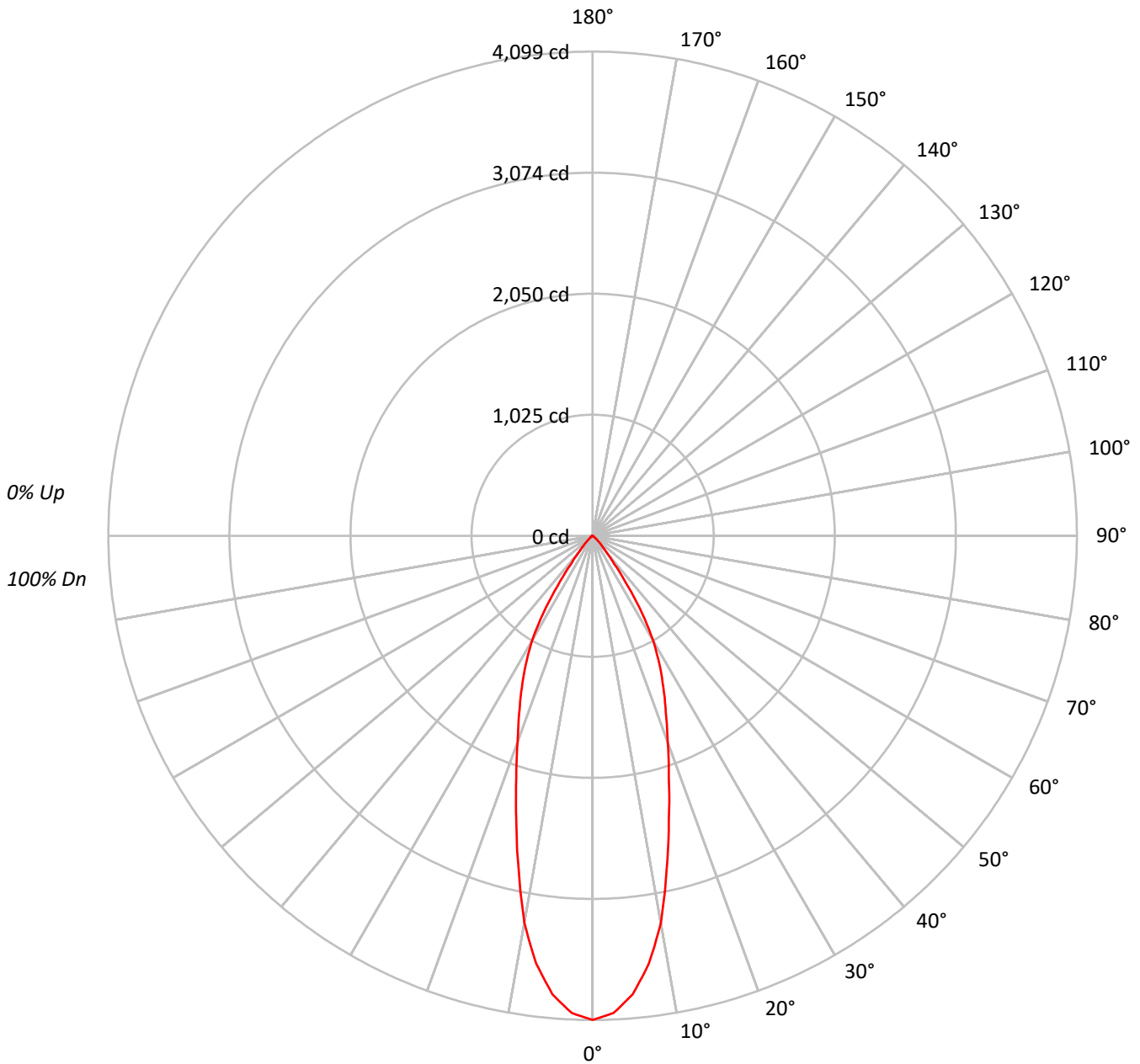
Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	114	111	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95			95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89			89
3	104	98	94	90	102	97	93	90	94	91	88	92	89	87	90	87	85	84			84
4	100	93	88	84	98	92	87	83	90	86	82	88	84	82	86	83	81	79			79
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75			75
6	91	83	78	74	90	82	77	74	81	76	73	79	76	73	78	75	72	71			71
7	87	79	73	70	86	78	73	69	77	72	69	76	72	69	75	71	68	67			67
8	84	75	70	66	82	74	69	66	73	69	65	72	68	65	71	68	65	64			64
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	65	62	61			61
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	66	62	59	58			58

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

	0°
0°	126392
5°	120594
10°	104116
15°	79616
20°	60915
25°	48195
30°	36404
35°	19368
40°	7379
45°	3541
50°	1506
55°	634
60°	241
65°	190
70°	117
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	353.6	16.7
10°-20°	696.2	32.9
20°-30°	648.4	30.7
30°-40°	334.6	15.8
40°-50°	68.2	3.2
50°-60°	11.6	0.6
60°-70°	2.2	0.1
70°-80°	0.5	0.0
80°-90°	0.0	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°	1698.3	80.3
0°-40°	2032.8	96.1
0°-60°	2112.6	99.9
0°-90°	2115.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2115.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4099	
5°	3896	354
15°	2494	696
25°	1416	648
35°	514	335
45°	81	68
55°	12	12
65°	3	2
75°	0	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	4098.8
2.5°	4043.9
5°	3895.9
7.5°	3652.4
10°	3325.1
12.5°	2895.8
15°	2493.9
17.5°	2145.7
20°	1856.3
22.5°	1620.6
25°	1416.5
27.5°	1222.7
30°	1022.4
32.5°	784.1
35°	514.5
37.5°	298.5
40°	183.3
42.5°	120.4
45°	81.2
47.5°	51.1
50°	31.4
52.5°	18.3
55°	11.8
57.5°	5.2
60°	3.9
62.5°	2.6
65°	2.6
67.5°	1.3
70°	1.3
72.5°	1.3
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)