

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: P584513

Luminaire Tested: **HC840D010-HM82555827-81PSMDW**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584513  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC840D010-HM82555827-81PSMDW  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" PLASTIC TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4600.4 lumens  
Efficiency: N/A  
Efficacy: 112.2 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.06 / 0.97  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

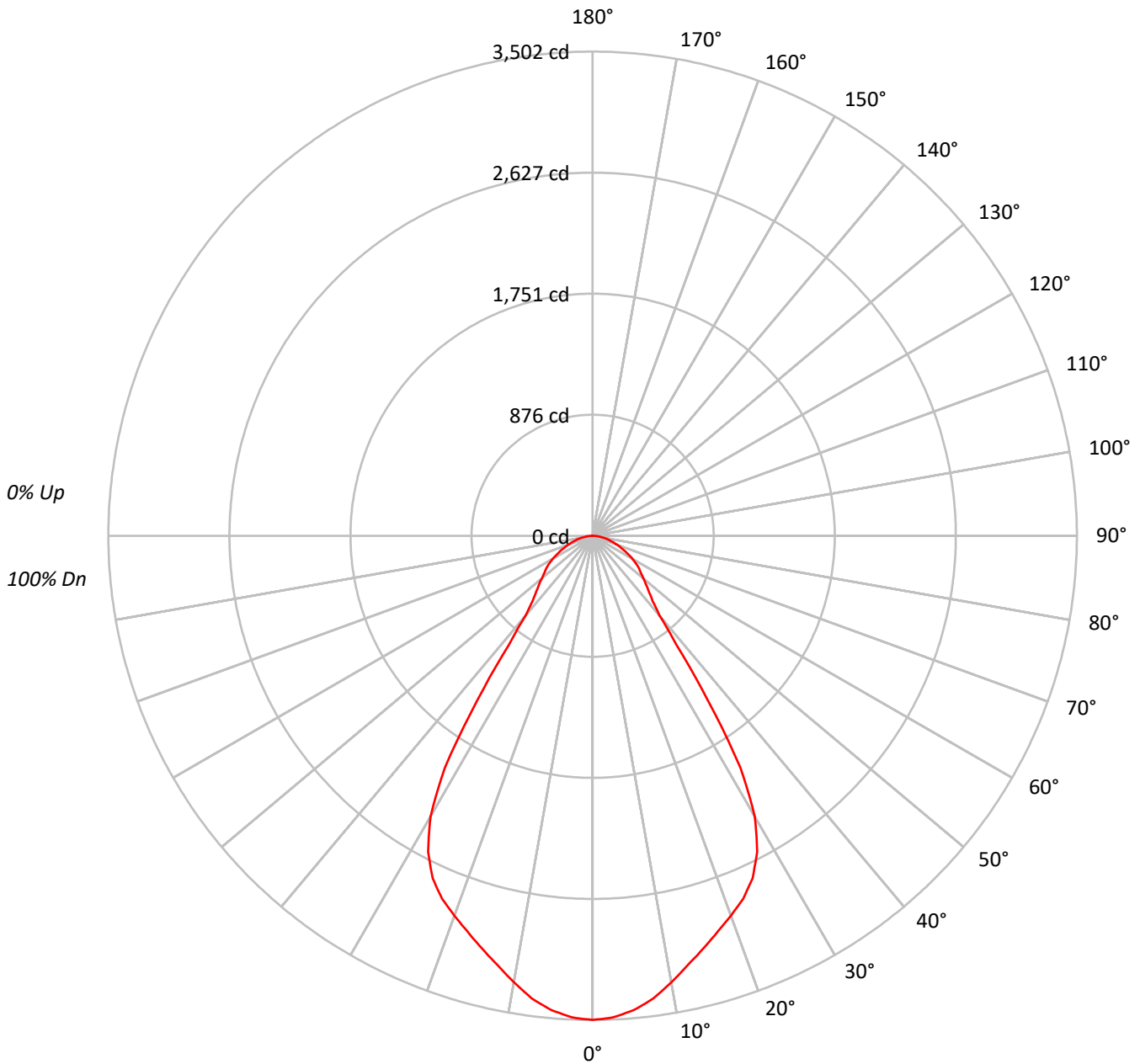
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89			89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79			79
3	97	89	83	77	95	87	82	77	85	80	76	82	78	74	80	76	73	71			71
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64			64
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58			58
6	80	69	62	57	78	68	61	56	67	61	56	65	60	56	64	59	55	53			53
7	75	64	57	52	74	63	57	52	62	56	51	61	55	51	60	55	51	49			49
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45			45
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°	107983
5°	106575
10°	102672
15°	98658
20°	95932
25°	93042
30°	83494
35°	54731
40°	30259
45°	25228
50°	23003
55°	21951
60°	20420
65°	18511
70°	16734
75°	15119
80°	13745
85°	13126



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	323.5	7.0
10°-20°	871.9	19.0
20°-30°	1240.8	27.0
30°-40°	918.4	20.0
40°-50°	454.9	9.9
50°-60°	363.0	7.9
60°-70°	252.1	5.5
70°-80°	135.8	3.0
80°-90°	40.0	0.9
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°	2436.2	53.0
0°-40°	3354.6	72.9
0°-60°	4172.5	90.7
0°-90°	4600.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4600.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3502	
5°	3443	323
15°	3090	872
25°	2735	1241
35°	1454	918
45°	578	455
55°	408	363
65°	254	252
75°	127	136
85°	37	40
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3501.8
2.5°	3486.3
5°	3443.0
7.5°	3375.0
10°	3279.0
12.5°	3180.0
15°	3090.4
17.5°	3003.8
20°	2923.4
22.5°	2842.9
25°	2734.6
27.5°	2576.8
30°	2344.9
32.5°	1989.1
35°	1453.9
37.5°	993.1
40°	751.7
42.5°	643.4
45°	578.5
47.5°	525.9
50°	479.5
52.5°	439.2
55°	408.3
57.5°	371.2
60°	331.1
62.5°	290.8
65°	253.7
67.5°	216.6
70°	185.6
72.5°	154.7
75°	126.9
77.5°	102.1
80°	77.4
82.5°	55.7
85°	37.1
87.5°	15.5
90°	0.0



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— 0°-180°







(END OF REPORT)