

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: P584614

Luminaire Tested: **HC840D010-HM82555935-81NDW**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584614  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-3)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC840D010-HM82555935-81NDW  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3998.7 lumens  
Efficiency: N/A  
Efficacy: 97.5 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.06 / 0.92  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

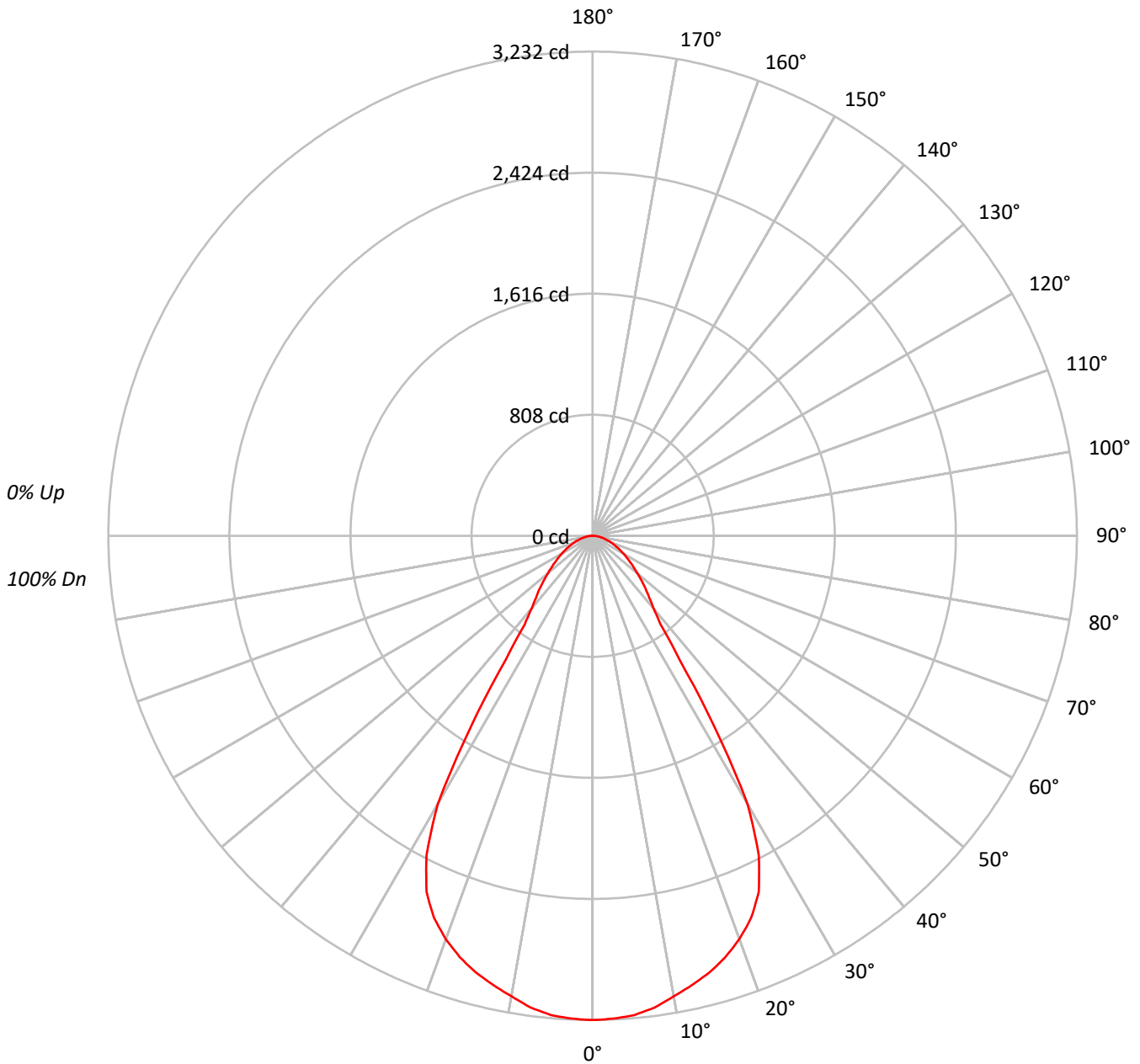
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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																			
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81																			
3	98	90	84	79	96	89	83	79	86	81	77	84	80	76	81	78	75	73																			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	75	72	68	67																			
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61																			
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56																			
7	77	66	59	54	76	66	59	54	64	58	54	63	58	54	62	57	53	52																			
8	73	62	55	50	71	61	55	50	60	54	50	59	54	50	58	53	49	48																			
9	69	58	51	47	68	57	51	47	56	51	46	55	50	46	55	50	46	45																			
10	65	55	48	44	64	54	48	44	53	47	43	52	47	43	52	47	43	42																			

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

	0°
0°	99672
5°	99403
10°	97747
15°	96318
20°	94009
25°	89242
30°	73603
35°	37896
40°	25372
45°	21752
50°	18777
55°	16386
60°	14555
65°	13075
70°	11856
75°	10675
80°	9554
85°	9517



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	303.6	7.6
10°-20°	848.9	21.2
20°-30°	1176.2	29.4
30°-40°	706.4	17.7
40°-50°	386.7	9.7
50°-60°	274.8	6.9
60°-70°	178.3	4.5
70°-80°	95.3	2.4
80°-90°	28.4	0.7
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°	2328.7	58.2
0°-40°	3035.1	75.9
0°-60°	3696.6	92.4
0°-90°	3998.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3998.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3232	
5°	3211	304
15°	3017	849
25°	2623	1176
35°	1007	706
45°	499	387
55°	305	275
65°	179	178
75°	90	95
85°	27	28
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3232.3
2.5°	3226.2
5°	3211.3
7.5°	3175.5
10°	3121.7
12.5°	3070.9
15°	3017.1
17.5°	2948.5
20°	2864.8
22.5°	2763.2
25°	2622.9
27.5°	2401.8
30°	2067.1
32.5°	1514.5
35°	1006.7
37.5°	743.9
40°	630.3
42.5°	558.6
45°	498.8
47.5°	442.1
50°	391.4
52.5°	343.6
55°	304.8
57.5°	268.8
60°	236.0
62.5°	206.1
65°	179.2
67.5°	152.3
70°	131.5
72.5°	107.6
75°	89.6
77.5°	71.6
80°	53.8
82.5°	38.8
85°	26.9
87.5°	11.9
90°	0.0



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— 0°-180°







(END OF REPORT)