

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: P584630

Luminaire Tested: **HC840D010-HM82555940-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584630  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC840D010-HM82555940-81NDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4469.5 lumens  
Efficiency: N/A  
Efficacy: 109.0 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.57  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

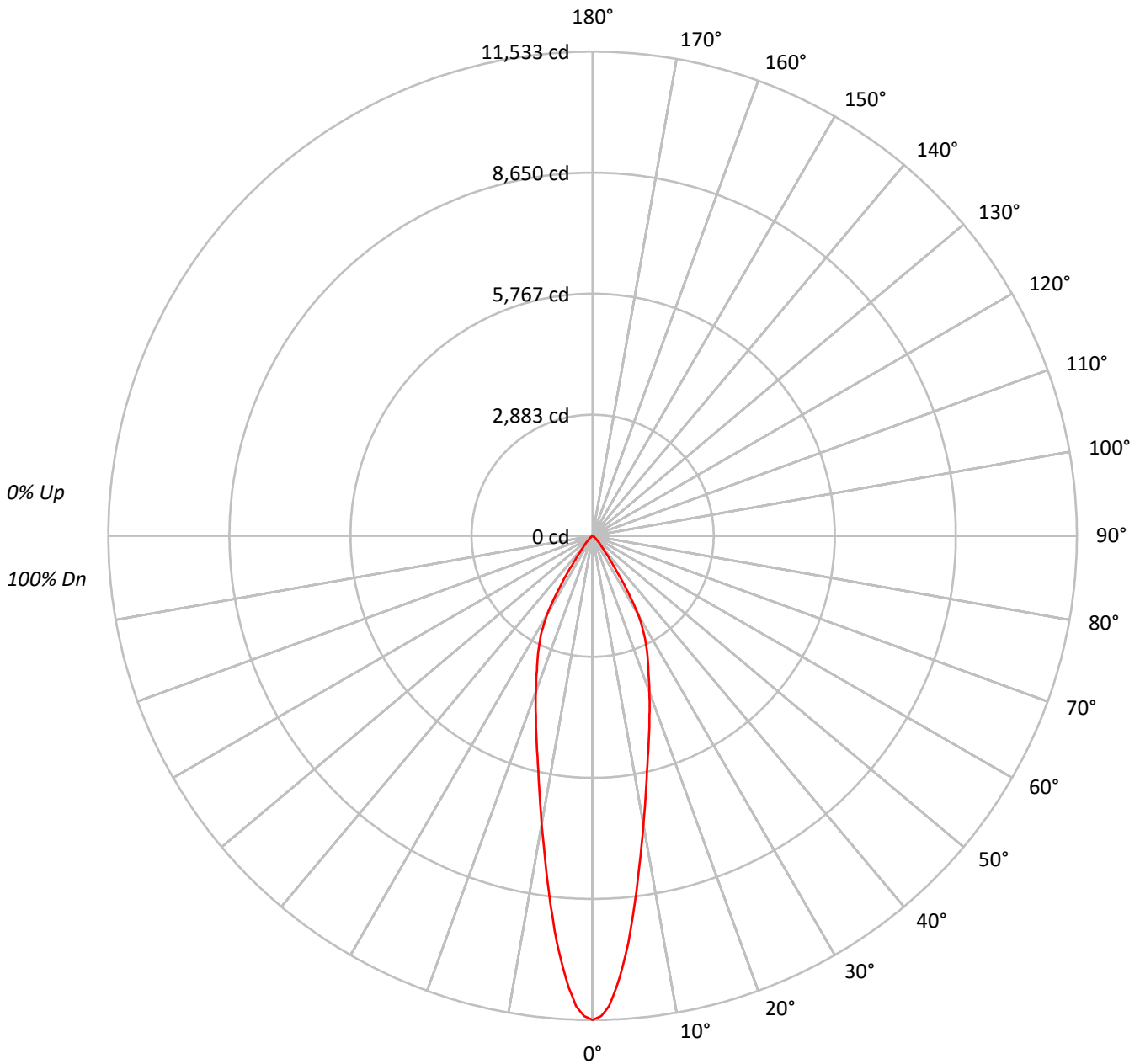
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	114	112	109	107	112	109	107	106	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	99	94	91	102	97	93	90	95	91	88	92	90	87	90	88	86	84			84
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80			80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75			75
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	76	73	72			72
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	76	72	69	68			68
8	84	76	71	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65			65
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62			62
10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59			59

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

	0°
0°	355638
5°	301298
10°	218608
15°	164170
20°	129529
25°	104481
30°	77427
35°	31365
40°	13231
45°	7095
50°	3185
55°	1607
60°	1018
65°	730
70°	604
75°	393
80°	586
85°	1168



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	835.7	18.7
10°-20°	1444.3	32.3
20°-30°	1396.4	31.2
30°-40°	613.3	13.7
40°-50°	132.6	3.0
50°-60°	29.8	0.7
60°-70°	10.3	0.2
70°-80°	3.9	0.1
80°-90°	3.1	0.1
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°	3676.5	82.3
0°-40°	4289.8	96.0
0°-60°	4452.2	99.6
0°-90°	4469.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4469.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	11533	
5°	9734	836
15°	5142	1444
25°	3071	1396
35°	833	613
45°	163	133
55°	30	30
65°	10	10
75°	3	4
85°	3	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	11533.1
1°	11446.8
2°	11211.1
3°	10786.2
4°	10278.3
5°	9733.7
6°	9139.6
7°	8541.9
8°	7980.9
9°	7459.6
10°	6981.6
11°	6530.1
12°	6125.0
13°	5756.6
14°	5431.3
15°	5142.5
17.5°	4495.1
20°	3947.2
22.5°	3465.9
25°	3070.8
27.5°	2669.2
30°	2174.5
32.5°	1477.4
35°	833.2
37.5°	491.4
40°	328.7
42.5°	232.4
45°	162.7
47.5°	106.3
50°	66.4
52.5°	39.9
55°	29.9
57.5°	23.2
60°	16.5
62.5°	13.3
65°	10.0
67.5°	6.7
70°	6.7
72.5°	3.3
75°	3.3
77.5°	3.3
80°	3.3
82.5°	3.3



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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



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— 0°-180°







85°	3.3
87.5°	3.3



(END OF REPORT)