

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: P584577

Luminaire Tested: **HC840D010-HM82555927-81MDW**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584577  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-6)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC840D010-HM82555927-81MDW  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3694.3 lumens  
Efficiency: N/A  
Efficacy: 90.1 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1 / 0.95  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

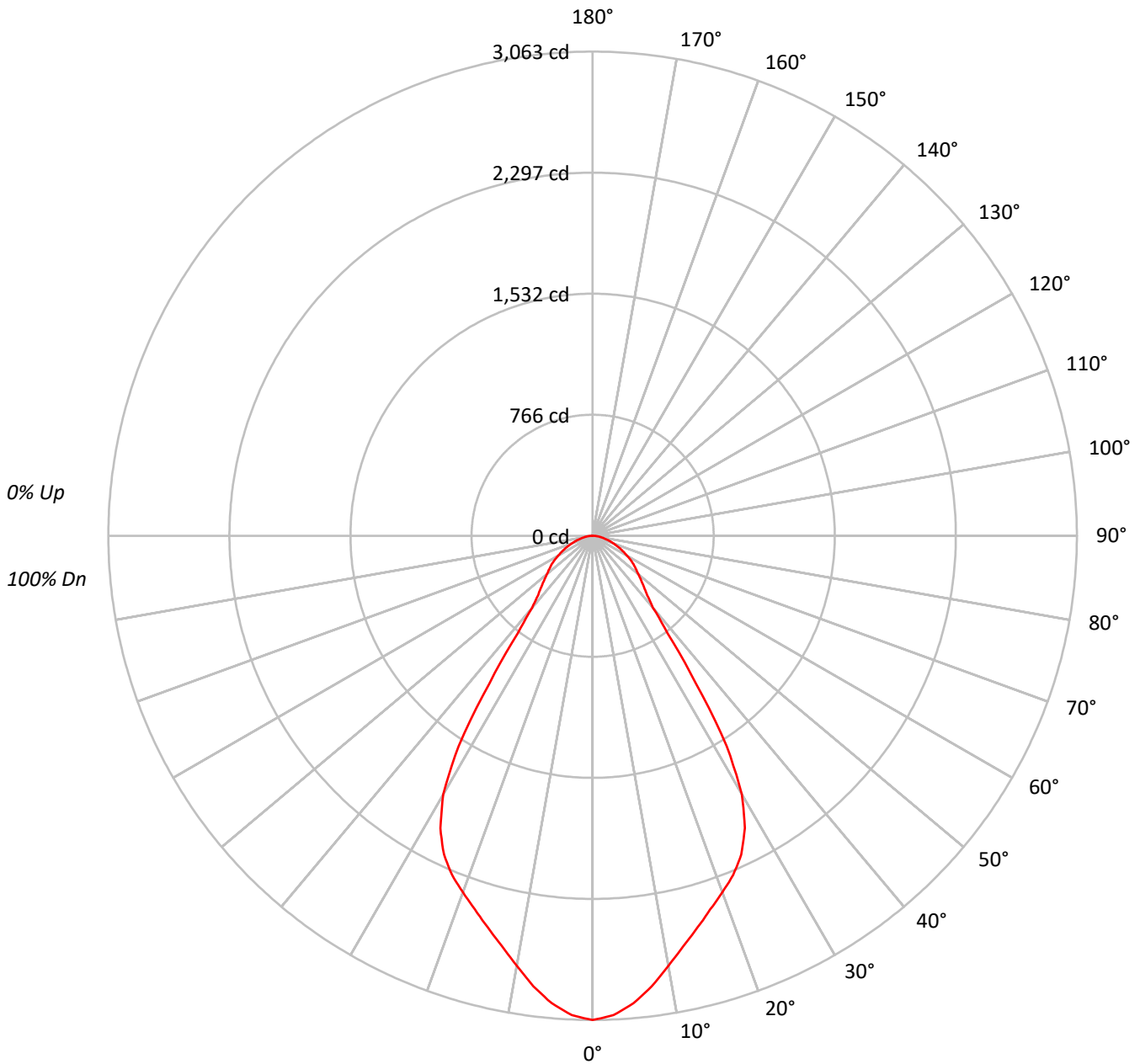
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72			
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65			
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59			
6	81	70	63	58	79	69	62	57	67	61	57	66	61	56	64	60	56	54			
7	76	65	58	53	74	64	57	53	63	57	52	62	56	52	60	55	52	50			
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46			
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43			
10	64	53	46	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40			

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

	0°
0°	94461
5°	91887
10°	86465
15°	81863
20°	78750
25°	75710
30°	67240
35°	42820
40°	23899
45°	20017
50°	18067
55°	17032
60°	15535
65°	14017
70°	12370
75°	10997
80°	9749
85°	8845



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	276.7	7.5
10°-20°	723.2	19.6
20°-30°	1009.0	27.3
30°-40°	726.0	19.7
40°-50°	359.8	9.7
50°-60°	281.5	7.6
60°-70°	190.6	5.2
70°-80°	99.0	2.7
80°-90°	28.5	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°	2008.9	54.4
0°-40°	2734.9	74.0
0°-60°	3376.1	91.4
0°-90°	3694.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3694.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3063	
5°	2968	277
15°	2564	723
25°	2225	1009
35°	1138	726
45°	459	360
55°	317	281
65°	192	191
75°	92	99
85°	25	29
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3063.3
2.5°	3035.8
5°	2968.5
7.5°	2873.7
10°	2761.4
12.5°	2656.7
15°	2564.3
17.5°	2477.1
20°	2399.8
22.5°	2322.4
25°	2225.2
27.5°	2085.5
30°	1888.4
32.5°	1579.0
35°	1137.5
37.5°	775.8
40°	593.7
42.5°	511.3
45°	459.0
47.5°	414.1
50°	376.6
52.5°	344.3
55°	316.8
57.5°	284.4
60°	251.9
62.5°	219.6
65°	192.1
67.5°	164.7
70°	137.2
72.5°	114.7
75°	92.3
77.5°	72.4
80°	54.9
82.5°	39.9
85°	25.0
87.5°	12.5
90°	0.0



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— 0°-180°







(END OF REPORT)