

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: P584581

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

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584581  
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-HM82555927-81PSMDW  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" PLASTIC TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3709.2 lumens  
Efficiency: N/A  
Efficacy: 90.5 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

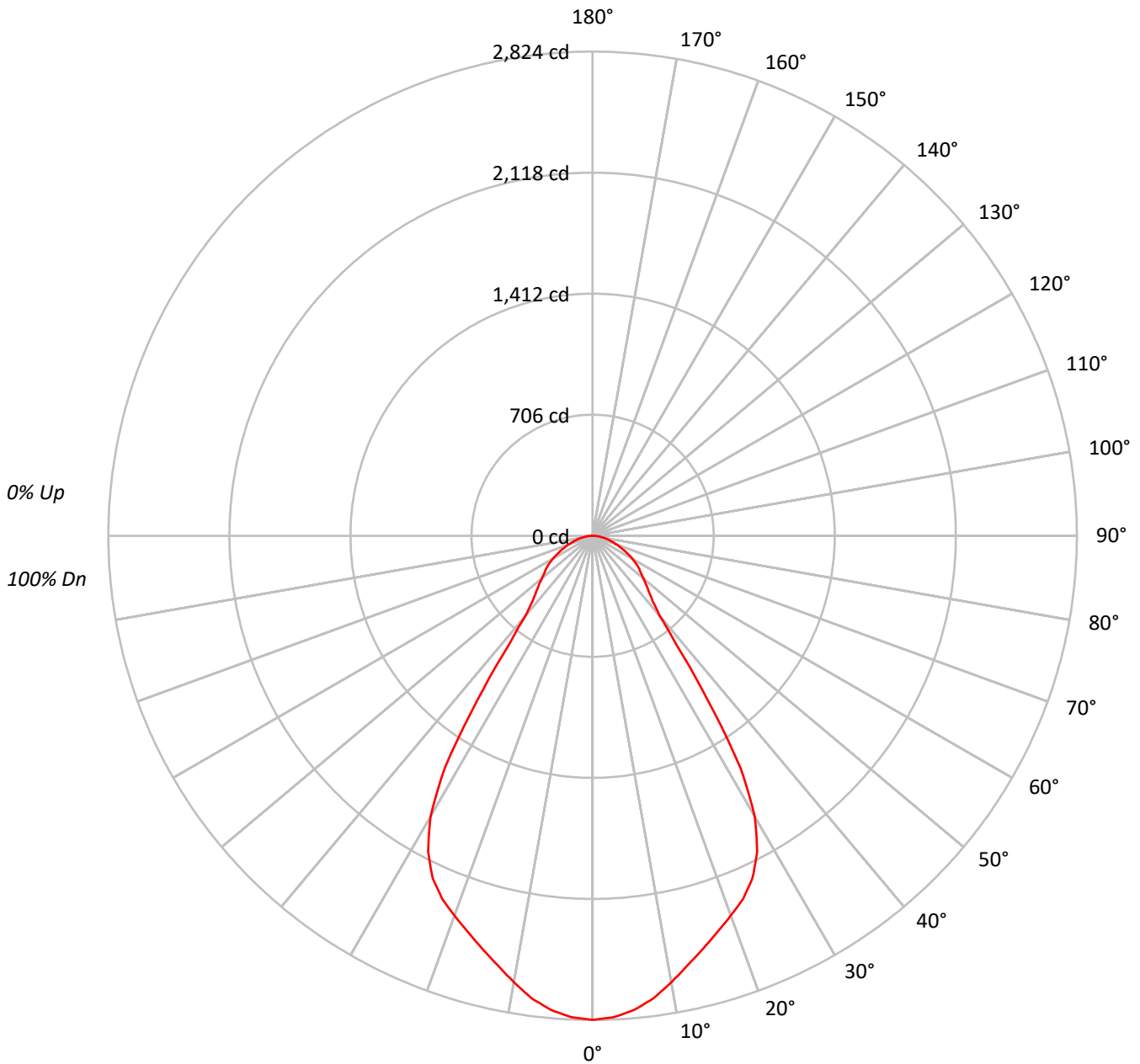
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89		
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79		
3	97	89	83	77	95	87	82	77	85	80	76	82	78	74	80	76	73	71		
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64		
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58		
6	80	69	62	57	78	68	61	56	67	61	56	65	60	56	64	59	55	53		
7	75	64	57	52	74	63	57	52	62	56	51	61	55	51	60	55	51	49		
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45		
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42		
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39		

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

	0°
0°	87066
5°	85929
10°	82786
15°	79545
20°	77346
25°	75023
30°	67322
35°	44130
40°	24398
45°	20344
50°	18546
55°	17704
60°	16460
65°	14929
70°	13497
75°	12176
80°	11081
85°	10614



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	260.8	7.0
10°-20°	703.0	19.0
20°-30°	1000.5	27.0
30°-40°	740.5	20.0
40°-50°	366.8	9.9
50°-60°	292.7	7.9
60°-70°	203.2	5.5
70°-80°	109.5	3.0
80°-90°	32.3	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°	1964.3	53.0
0°-40°	2704.8	72.9
0°-60°	3364.2	90.7
0°-90°	3709.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3709.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2824	
5°	2776	261
15°	2492	703
25°	2205	1000
35°	1172	740
45°	466	367
55°	329	293
65°	205	203
75°	102	109
85°	30	32
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2823.5
2.5°	2811.0
5°	2776.0
7.5°	2721.2
10°	2643.9
12.5°	2564.1
15°	2491.7
17.5°	2421.9
20°	2357.0
22.5°	2292.2
25°	2205.0
27.5°	2077.7
30°	1890.7
32.5°	1603.8
35°	1172.3
37.5°	800.6
40°	606.1
42.5°	518.8
45°	466.5
47.5°	424.0
50°	386.6
52.5°	354.1
55°	329.3
57.5°	299.3
60°	266.9
62.5°	234.4
65°	204.6
67.5°	174.6
70°	149.7
72.5°	124.7
75°	102.2
77.5°	82.3
80°	62.4
82.5°	44.9
85°	30.0
87.5°	12.5
90°	0.0



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— 0°-180°







(END OF REPORT)