

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: P593747

Luminaire Tested: **HC840D010-HM82555950-81PSMDW**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593747  
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-HM82555950-81PSMDW  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" PLASTIC TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4908.5 lumens  
Efficiency: N/A  
Efficacy: 119.7 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

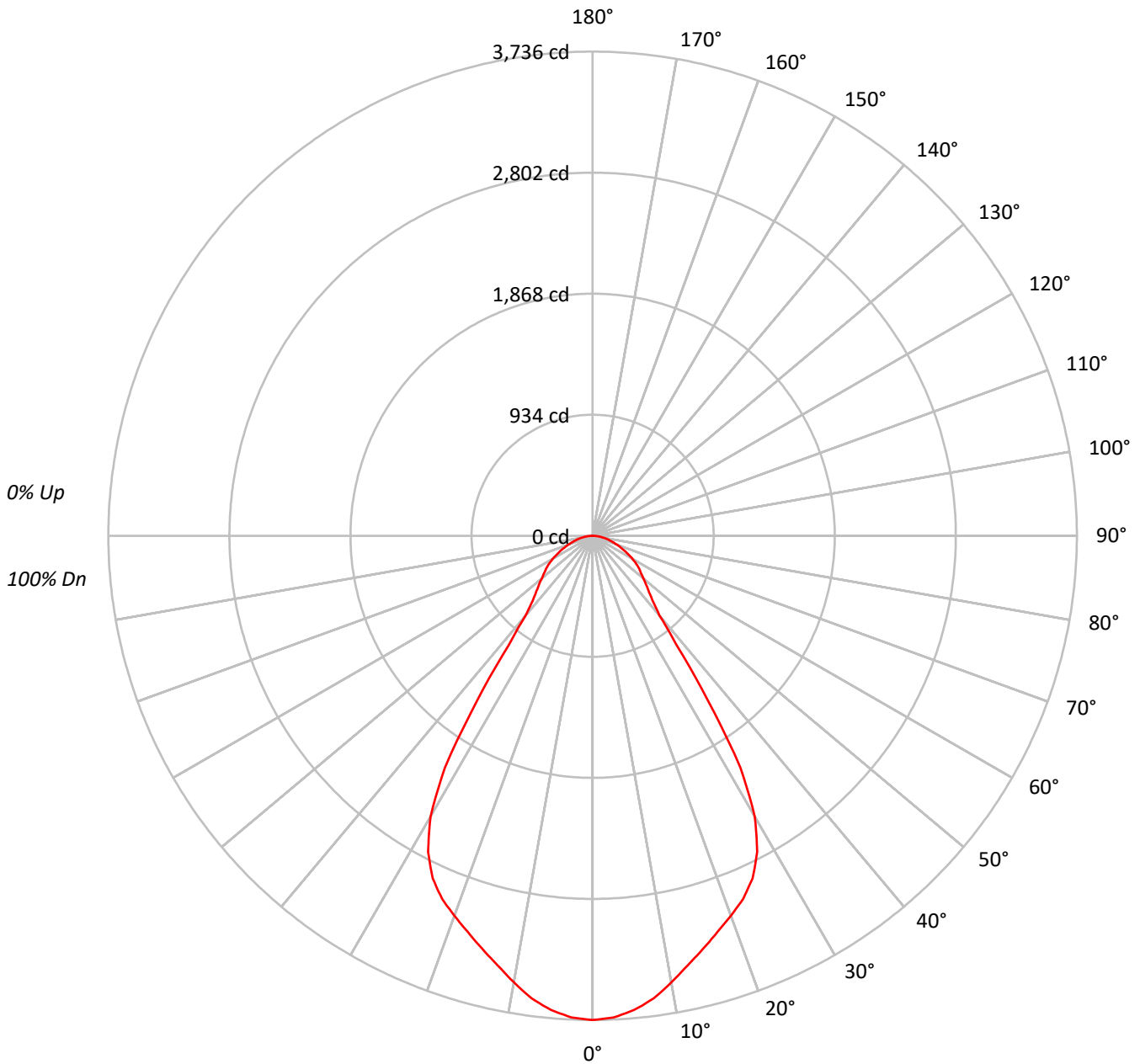
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	115220
5°	113719
10°	109554
15°	105270
20°	102358
25°	99279
30°	89088
35°	58401
40°	32288
45°	26920
50°	24543
55°	23424
60°	21783
65°	19744
70°	17852
75°	16120
80°	14650
85°	14011



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	345.2	7.0
10°-20°	930.3	19.0
20°-30°	1324.0	27.0
30°-40°	979.9	20.0
40°-50°	485.3	9.9
50°-60°	387.4	7.9
60°-70°	268.9	5.5
70°-80°	144.9	3.0
80°-90°	42.6	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°	2599.5	53.0
0°-40°	3579.4	72.9
0°-60°	4452.1	90.7
0°-90°	4908.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4908.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3736	
5°	3674	345
15°	3298	930
25°	2918	1324
35°	1551	980
45°	617	485
55°	436	387
65°	271	269
75°	135	145
85°	40	43
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3736.5
2.5°	3719.9
5°	3673.8
7.5°	3601.2
10°	3498.8
12.5°	3393.2
15°	3297.5
17.5°	3205.0
20°	3119.2
22.5°	3033.4
25°	2917.9
27.5°	2749.5
30°	2502.0
32.5°	2122.4
35°	1551.4
37.5°	1059.6
40°	802.1
42.5°	686.5
45°	617.3
47.5°	561.1
50°	511.6
52.5°	468.7
55°	435.7
57.5°	396.2
60°	353.2
62.5°	310.2
65°	270.6
67.5°	231.1
70°	198.0
72.5°	165.1
75°	135.3
77.5°	108.9
80°	82.5
82.5°	59.4
85°	39.6
87.5°	16.5
90°	0.0



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— 0°-180°







(END OF REPORT)