

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: P579839

Luminaire Tested: **HC415D010-HM40525827-41PSMDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579839  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC415D010-HM40525827-41PSMDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" PLASTIC TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1257.4 lumens  
Efficiency: N/A  
Efficacy: 89.8 lumens/watt  
Spacing Criteria (0/90/45): 1.03 / 1.03 / 0.99  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

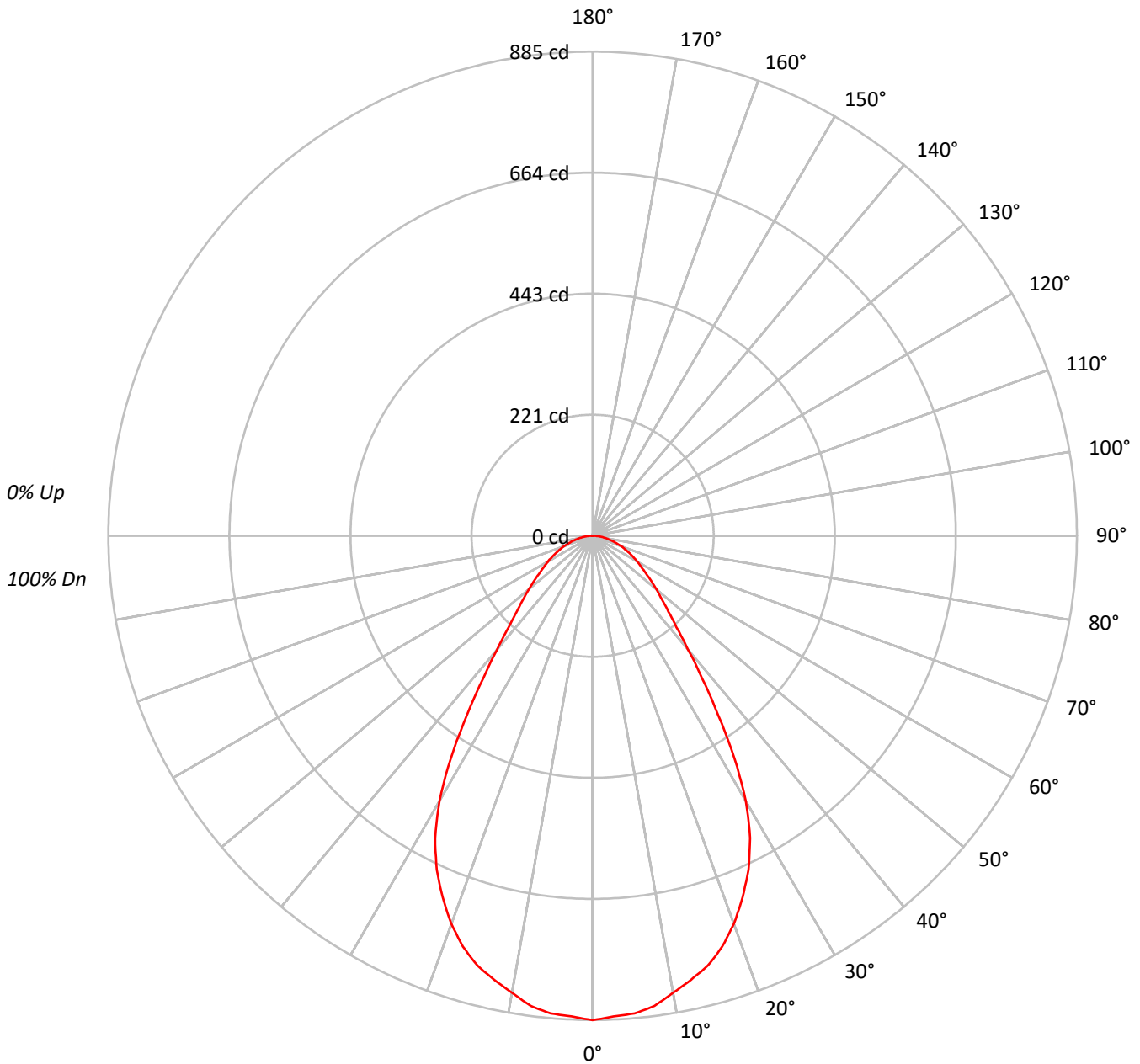
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89			
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70			
4	90	80	73	68	88	79	72	67	77	71	66	74	69	65	72	68	65	63			
5	84	74	66	61	82	72	66	60	71	64	60	69	63	59	67	62	59	57			
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47			
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44			
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40			
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37			

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

	0°
0°	109210
5°	108525
10°	106223
15°	103869
20°	99063
25°	91702
30°	79774
35°	60231
40°	43668
45°	34120
50°	29168
55°	25225
60°	23263
65°	21277
70°	19871
75°	18205
80°	17048
85°	16417



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.8	6.6
10°-20°	227.8	18.1
20°-30°	306.4	24.4
30°-40°	251.9	20.0
40°-50°	154.7	12.3
50°-60°	107.1	8.5
60°-70°	73.0	5.8
70°-80°	40.7	3.2
80°-90°	13.0	1.0
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°	617.0	49.1
0°-40°	868.9	69.1
0°-60°	1130.7	89.9
0°-90°	1257.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1257.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	885	
5°	876	83
15°	813	228
25°	674	306
35°	400	252
45°	196	155
55°	117	107
65°	73	73
75°	38	41
85°	12	13
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	885.4
2.5°	879.2
5°	876.5
7.5°	866.7
10°	848.1
12.5°	831.1
15°	813.4
17.5°	787.6
20°	754.7
22.5°	715.6
25°	673.8
27.5°	623.2
30°	560.1
32.5°	482.7
35°	400.0
37.5°	328.9
40°	271.2
42.5°	226.7
45°	195.6
47.5°	171.6
50°	152.0
52.5°	134.3
55°	117.3
57.5°	104.9
60°	94.3
62.5°	83.6
65°	72.9
67.5°	64.0
70°	55.1
72.5°	46.3
75°	38.2
77.5°	30.2
80°	24.0
82.5°	17.7
85°	11.6
87.5°	6.3
90°	0.0



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— 0°-180°







(END OF REPORT)