

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: P579921

Luminaire Tested: **HC415D010-HM40525930-41NDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579921  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC415D010-HM40525930-41NDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1174.7 lumens  
Efficiency: N/A  
Efficacy: 83.9 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.91  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

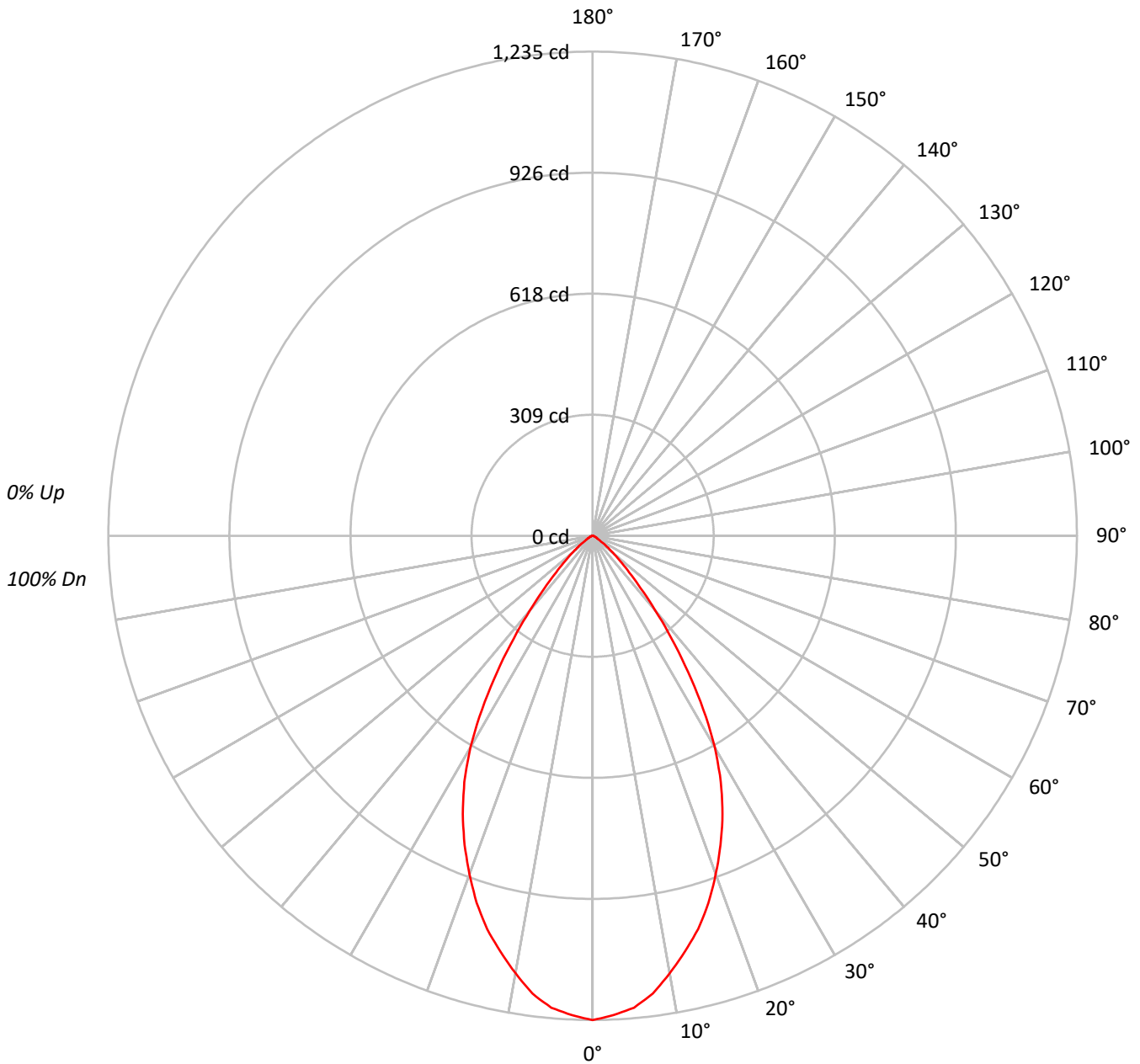
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100
1	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93	93	93	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86	86	86	86
3	101	95	89	85	99	93	88	84	91	86	83	88	85	82	86	83	81	79	79	79	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	74	73	73	73	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67	67	67	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	63	63	63	63
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58	58	58	58
8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54	54	54	54
9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51	51	51	51
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	48	48	48	48

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

	0°
0°	152381
5°	149608
10°	141894
15°	132677
20°	120498
25°	106632
30°	88689
35°	63965
40°	39916
45°	23026
50°	12991
55°	6193
60°	3552
65°	2714
70°	1839
75°	1191
80°	1208
85°	1132



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.9	9.6
10°-20°	289.8	24.7
20°-30°	356.5	30.3
30°-40°	264.8	22.5
40°-50°	107.6	9.2
50°-60°	29.8	2.5
60°-70°	9.3	0.8
70°-80°	3.1	0.3
80°-90°	0.9	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°	759.3	64.6
0°-40°	1024.0	87.2
0°-60°	1161.5	98.9
0°-90°	1174.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1174.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1235	
5°	1208	113
15°	1039	290
25°	784	356
35°	425	265
45°	132	108
55°	29	30
65°	9	9
75°	2	3
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1235.4
2.5°	1223.5
5°	1208.3
7.5°	1177.8
10°	1132.9
12.5°	1086.4
15°	1039.0
17.5°	982.4
20°	918.0
22.5°	852.9
25°	783.5
27.5°	708.2
30°	622.7
32.5°	525.4
35°	424.8
37.5°	330.0
40°	247.9
42.5°	181.1
45°	132.0
47.5°	94.7
50°	67.7
52.5°	46.5
55°	28.8
57.5°	18.6
60°	14.4
62.5°	11.8
65°	9.3
67.5°	6.8
70°	5.1
72.5°	4.2
75°	2.5
77.5°	1.7
80°	1.7
82.5°	0.8
85°	0.8
87.5°	0.8
90°	0.0



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— 0°-180°







(END OF REPORT)