

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: P579906

Luminaire Tested: **HC415D010-HM40525927-41MDC**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579906  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-4)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC415D010-HM40525927-41MDC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1174.6 lumens  
Efficiency: N/A  
Efficacy: 83.9 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1 / 0.96  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

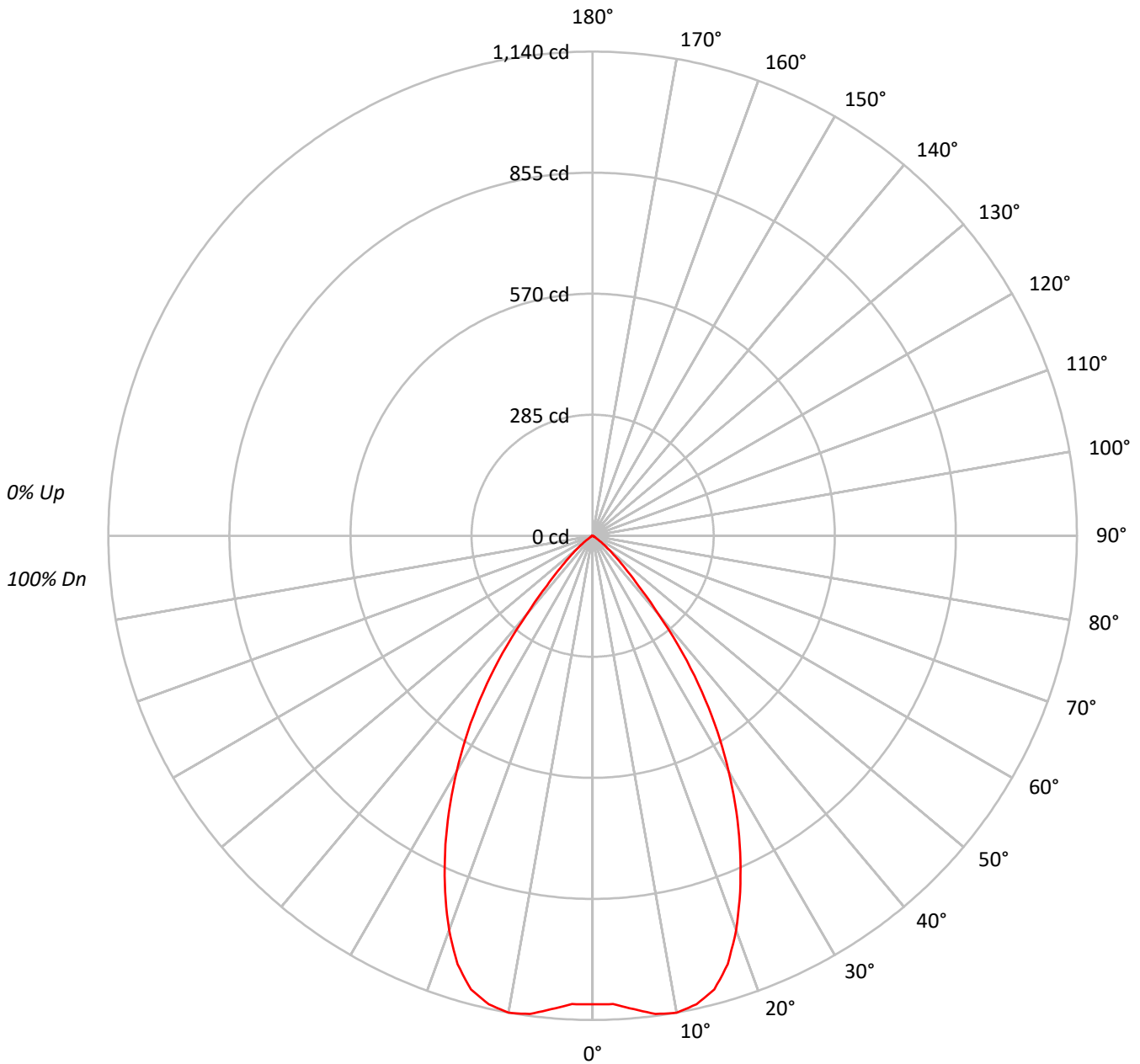
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93		
2	108	103	98	95	105	101	97	94	98	95	92	95	92	90	92	90	88	86		
3	102	95	90	86	100	94	89	86	91	87	84	89	86	83	87	84	82	80		
4	97	89	83	79	95	88	82	78	86	81	77	84	80	77	82	78	76	74		
5	91	83	77	72	90	82	76	72	80	75	72	78	74	71	77	73	70	69		
6	87	78	71	67	85	77	71	67	75	70	66	74	69	66	72	68	65	64		
7	82	73	66	62	81	72	66	62	71	65	62	69	65	61	68	64	61	60		
8	78	68	62	58	77	68	62	58	67	61	57	65	61	57	65	60	57	56		
9	74	64	58	54	73	64	58	54	63	57	54	62	57	54	61	57	53	52		
10	70	61	55	51	69	60	54	51	59	54	50	58	54	50	58	53	50	49		

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

	0°
0°	136050
5°	138551
10°	142821
15°	141245
20°	129700
25°	111899
30°	91182
35°	67504
40°	38741
45°	18717
50°	8904
55°	3097
60°	1110
65°	671
70°	541
75°	381
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.6	9.2
10°-20°	306.6	26.1
20°-30°	374.5	31.9
30°-40°	275.3	23.4
40°-50°	91.2	7.8
50°-60°	16.1	1.4
60°-70°	2.4	0.2
70°-80°	0.8	0.1
80°-90°	0.0	0.0
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°	788.7	67.1
0°-40°	1064.0	90.6
0°-60°	1171.3	99.7
0°-90°	1174.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1174.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1103	
5°	1119	108
15°	1106	307
25°	822	374
35°	448	275
45°	107	91
55°	14	16
65°	2	2
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1103.0
2.5°	1103.8
5°	1119.0
7.5°	1135.7
10°	1140.3
12.5°	1129.6
15°	1106.1
17.5°	1057.3
20°	988.1
22.5°	907.4
25°	822.2
27.5°	733.0
30°	640.2
32.5°	547.4
35°	448.3
37.5°	347.9
40°	240.6
42.5°	159.1
45°	107.3
47.5°	71.5
50°	46.4
52.5°	27.4
55°	14.4
57.5°	6.1
60°	4.5
62.5°	3.1
65°	2.3
67.5°	1.5
70°	1.5
72.5°	0.8
75°	0.8
77.5°	0.8
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)