

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: P579954

Luminaire Tested: **HC415D010-HM40525940-41WDBB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579954  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-11)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC415D010-HM40525940-41WDBB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1198.2 lumens  
Efficiency: N/A  
Efficacy: 85.6 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.03  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

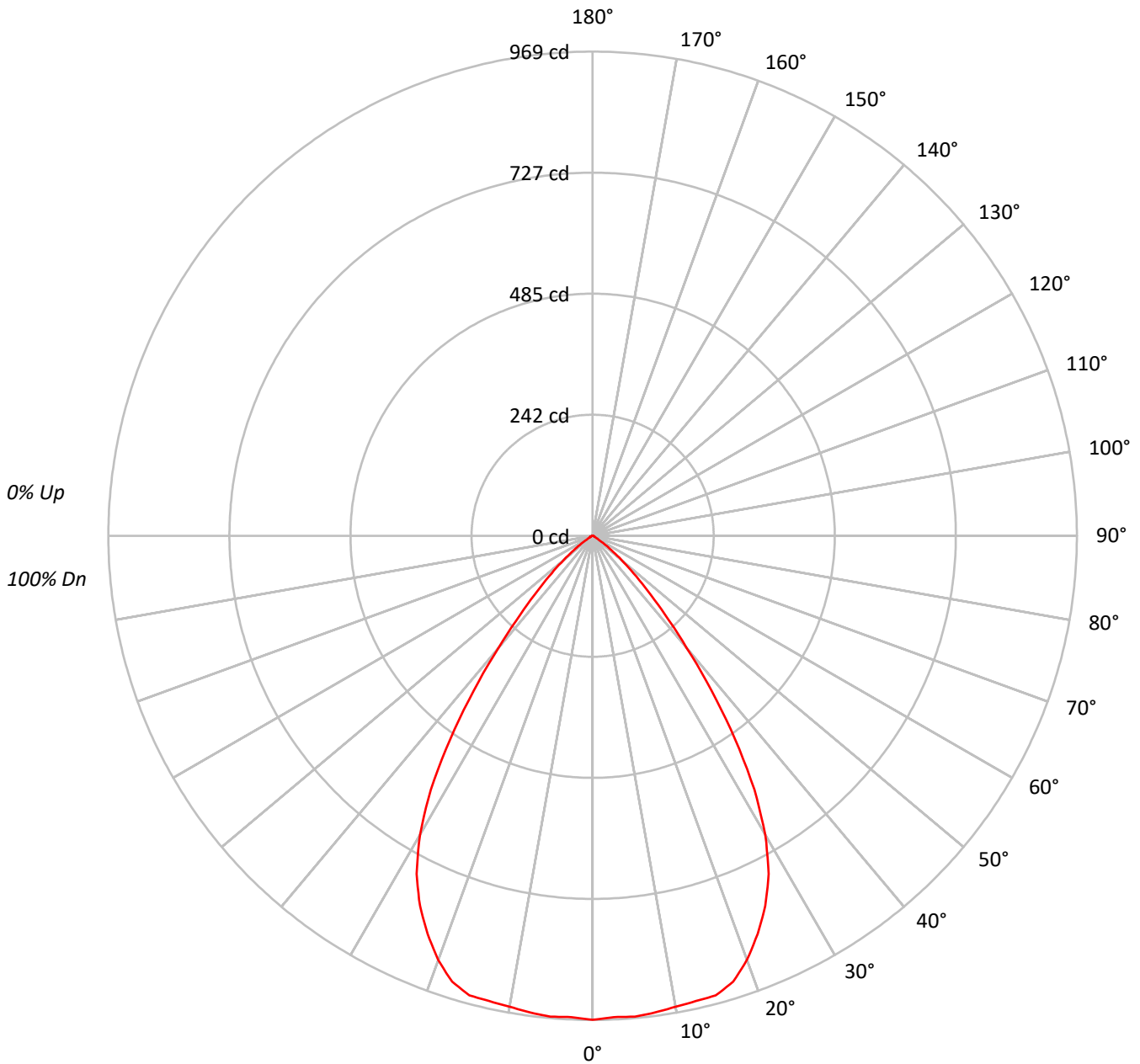
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93	93	93	93
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80	78	78	78	78
4	95	87	81	77	93	86	80	76	84	79	75	82	78	74	80	76	73	72	72	72	72
5	90	81	75	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66	66	66	66
6	85	75	69	64	83	74	68	64	73	67	63	71	67	63	70	66	62	61	61	61	61
7	80	70	64	59	79	69	63	59	68	63	59	67	62	58	66	61	58	56	56	56	56
8	76	65	59	55	74	65	59	54	64	58	54	63	58	54	62	57	54	52	52	52	52
9	72	61	55	51	71	61	55	51	60	54	50	59	54	50	58	53	50	49	49	49	49
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45	45	45	45

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

	0°
0°	119485
5°	119607
10°	119838
15°	121580
20°	118556
25°	111232
30°	98389
35°	74822
40°	47146
45°	27073
50°	14354
55°	5957
60°	1603
65°	1372
70°	974
75°	858
80°	639
85°	1274



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.9	7.7
10°-20°	266.6	22.3
20°-30°	372.1	31.1
30°-40°	306.2	25.6
40°-50°	126.2	10.5
50°-60°	28.4	2.4
60°-70°	4.6	0.4
70°-80°	1.7	0.1
80°-90°	0.6	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°	730.5	61.0
0°-40°	1036.8	86.5
0°-60°	1191.3	99.4
0°-90°	1198.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1198.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	969	
5°	966	92
15°	952	267
25°	817	372
35°	497	306
45°	155	126
55°	28	28
65°	5	5
75°	2	2
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	968.7
2.5°	964.2
5°	966.0
7.5°	962.2
10°	956.8
12.5°	953.9
15°	952.1
17.5°	935.5
20°	903.2
22.5°	862.5
25°	817.3
27.5°	762.8
30°	690.8
32.5°	602.2
35°	496.9
37.5°	390.7
40°	292.8
42.5°	213.3
45°	155.2
47.5°	110.9
50°	74.8
52.5°	47.1
55°	27.7
57.5°	13.9
60°	6.5
62.5°	5.6
65°	4.7
67.5°	3.6
70°	2.7
72.5°	1.8
75°	1.8
77.5°	0.9
80°	0.9
82.5°	0.9
85°	0.9
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)