

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: P579848

Luminaire Tested: **HC415D010-HM40525830-41MDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579848  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-5)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC415D010-HM40525830-41MDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1415.7 lumens  
Efficiency: N/A  
Efficacy: 101.1 lumens/watt  
Spacing Criteria (0/90/45): 0.9 / 0.9 / 0.91  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

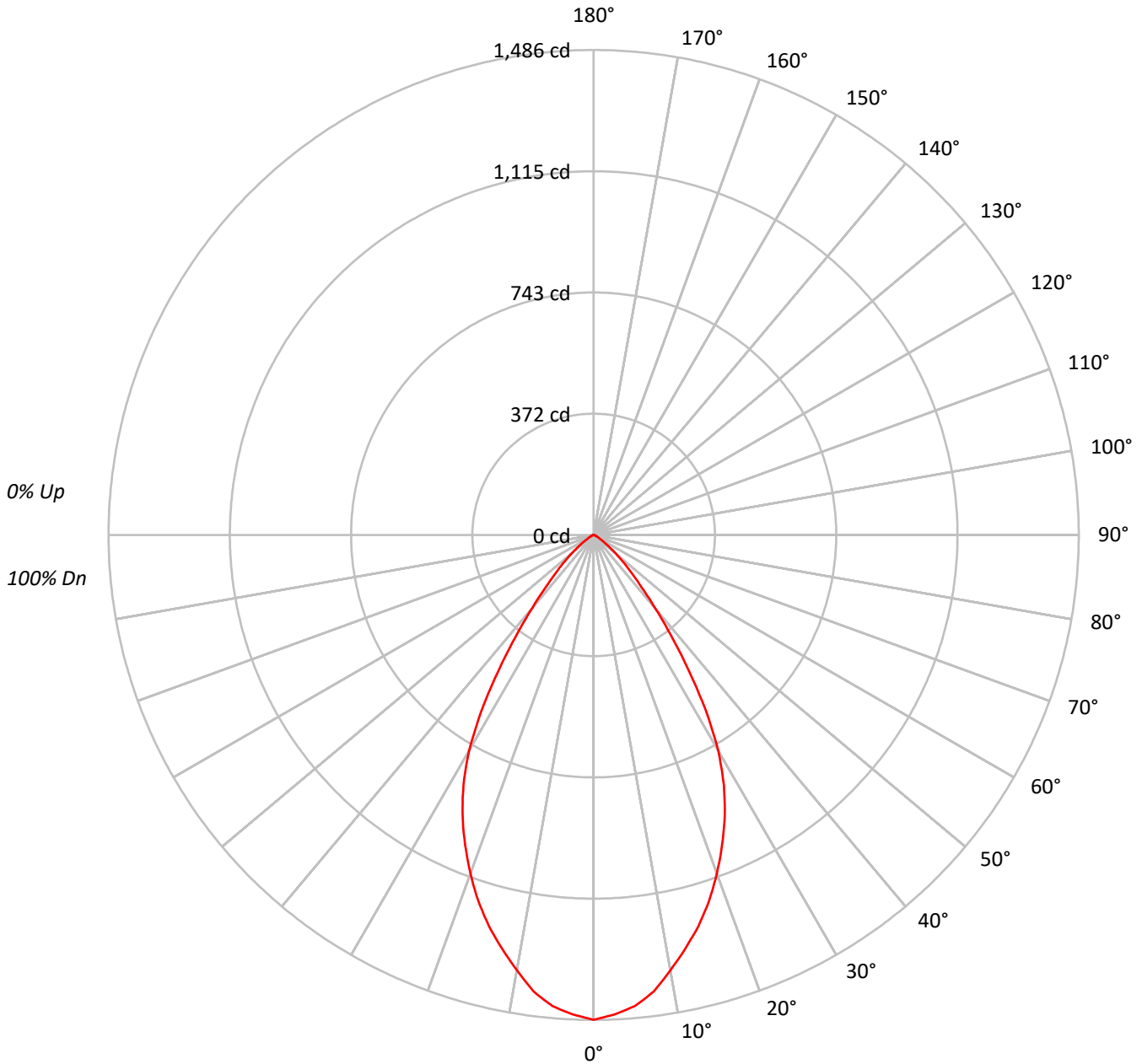
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	62	62	62	62
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58	58	58	58
8	77	67	61	56	76	66	60	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	47	47	47	47

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

	0°
0°	183279
5°	179448
10°	169599
15°	158395
20°	144860
25°	129360
30°	108629
35°	76433
40°	47146
45°	28224
50°	16618
55°	8279
60°	4268
65°	2831
70°	1731
75°	1334
80°	639
85°	1274



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.3	9.6
10°-20°	346.7	24.5
20°-30°	432.4	30.5
30°-40°	318.5	22.5
40°-50°	131.0	9.3
50°-60°	38.2	2.7
60°-70°	9.8	0.7
70°-80°	3.0	0.2
80°-90°	0.6	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°	914.5	64.6
0°-40°	1233.0	87.1
0°-60°	1402.2	99.0
0°-90°	1415.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1415.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1486	
5°	1449	135
15°	1240	347
25°	950	432
35°	508	319
45°	162	131
55°	38	38
65°	10	10
75°	3	3
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1485.9
2.5°	1470.5
5°	1449.3
7.5°	1410.8
10°	1354.1
12.5°	1298.1
15°	1240.4
17.5°	1175.9
20°	1103.6
22.5°	1028.5
25°	950.5
27.5°	863.8
30°	762.7
32.5°	640.4
35°	507.6
37.5°	390.0
40°	292.8
42.5°	216.7
45°	161.8
47.5°	119.4
50°	86.6
52.5°	59.7
55°	38.5
57.5°	23.1
60°	17.3
62.5°	12.5
65°	9.7
67.5°	6.7
70°	4.8
72.5°	3.9
75°	2.8
77.5°	1.9
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)