

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: P579885

Luminaire Tested: **HC415D010-HM40525840-41NDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579885  
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-HM40525840-41NDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1423.8 lumens  
Efficiency: N/A  
Efficacy: 101.7 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

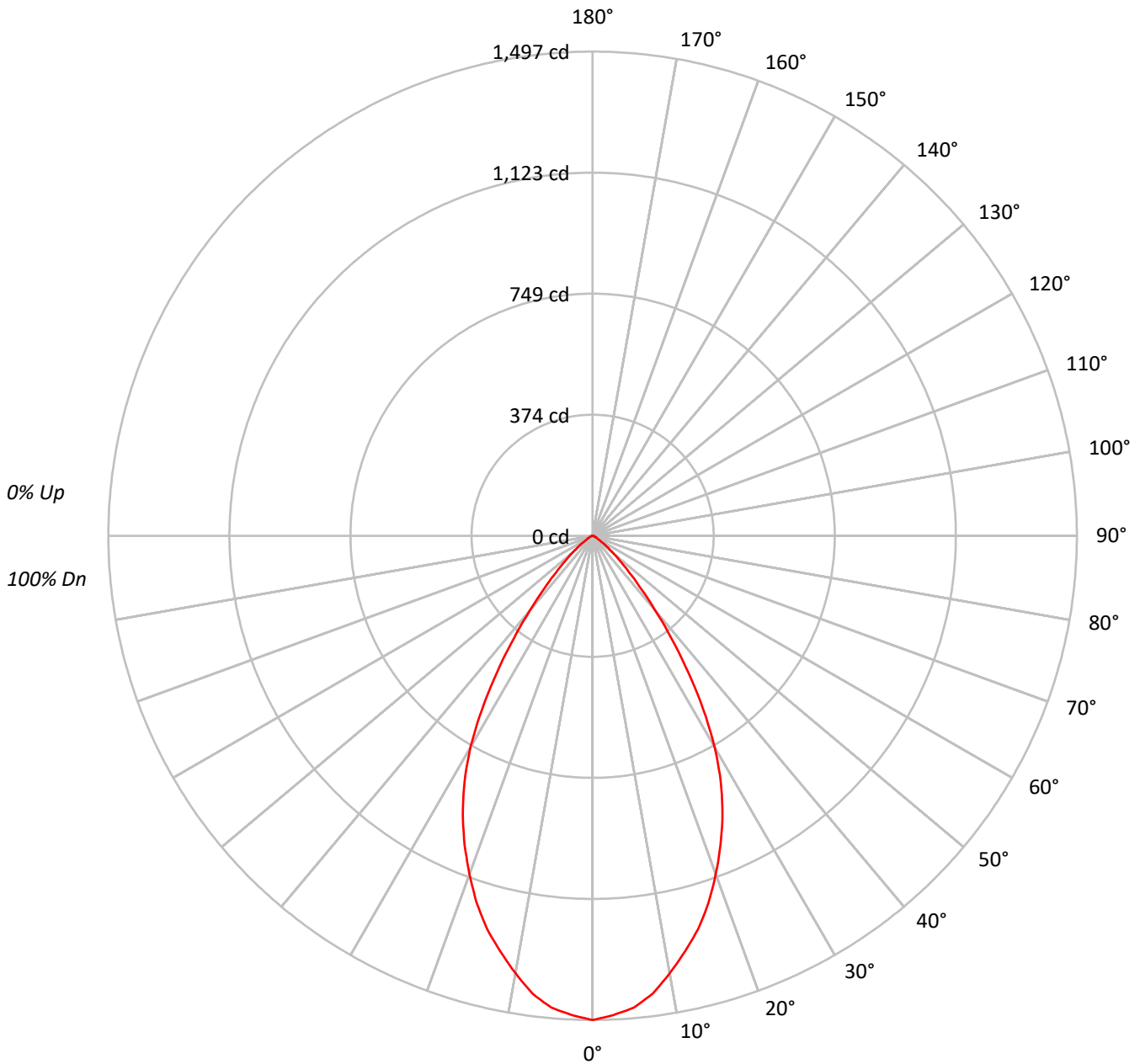
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	184685
5°	181330
10°	171991
15°	160809
20°	146055
25°	129238
30°	107490
35°	77517
40°	48385
45°	27910
50°	15754
55°	7505
60°	4292
65°	3298
70°	2200
75°	1477
80°	1421
85°	1415



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.9	9.6
10°-20°	351.3	24.7
20°-30°	432.1	30.3
30°-40°	320.9	22.5
40°-50°	130.4	9.2
50°-60°	36.1	2.5
60°-70°	11.2	0.8
70°-80°	3.7	0.3
80°-90°	1.1	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°	920.3	64.6
0°-40°	1241.1	87.2
0°-60°	1407.7	98.9
0°-90°	1423.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1423.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1497	
5°	1464	137
15°	1259	351
25°	950	432
35°	515	321
45°	160	130
55°	35	36
65°	11	11
75°	3	4
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1497.3
2.5°	1482.9
5°	1464.5
7.5°	1427.5
10°	1373.2
12.5°	1316.8
15°	1259.3
17.5°	1190.7
20°	1112.7
22.5°	1033.8
25°	949.6
27.5°	858.3
30°	754.7
32.5°	636.8
35°	514.8
37.5°	400.0
40°	300.5
42.5°	219.4
45°	160.0
47.5°	114.8
50°	82.1
52.5°	56.4
55°	34.9
57.5°	22.5
60°	17.4
62.5°	14.3
65°	11.3
67.5°	8.2
70°	6.1
72.5°	5.1
75°	3.1
77.5°	2.0
80°	2.0
82.5°	1.0
85°	1.0
87.5°	1.0
90°	0.0



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— 0°-180°







(END OF REPORT)