

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: P579868

Luminaire Tested: **HC415D010-HM40525835-41WDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579868  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-8)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC415D010-HM40525835-41WDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1594.2 lumens  
Efficiency: N/A  
Efficacy: 113.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.11  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

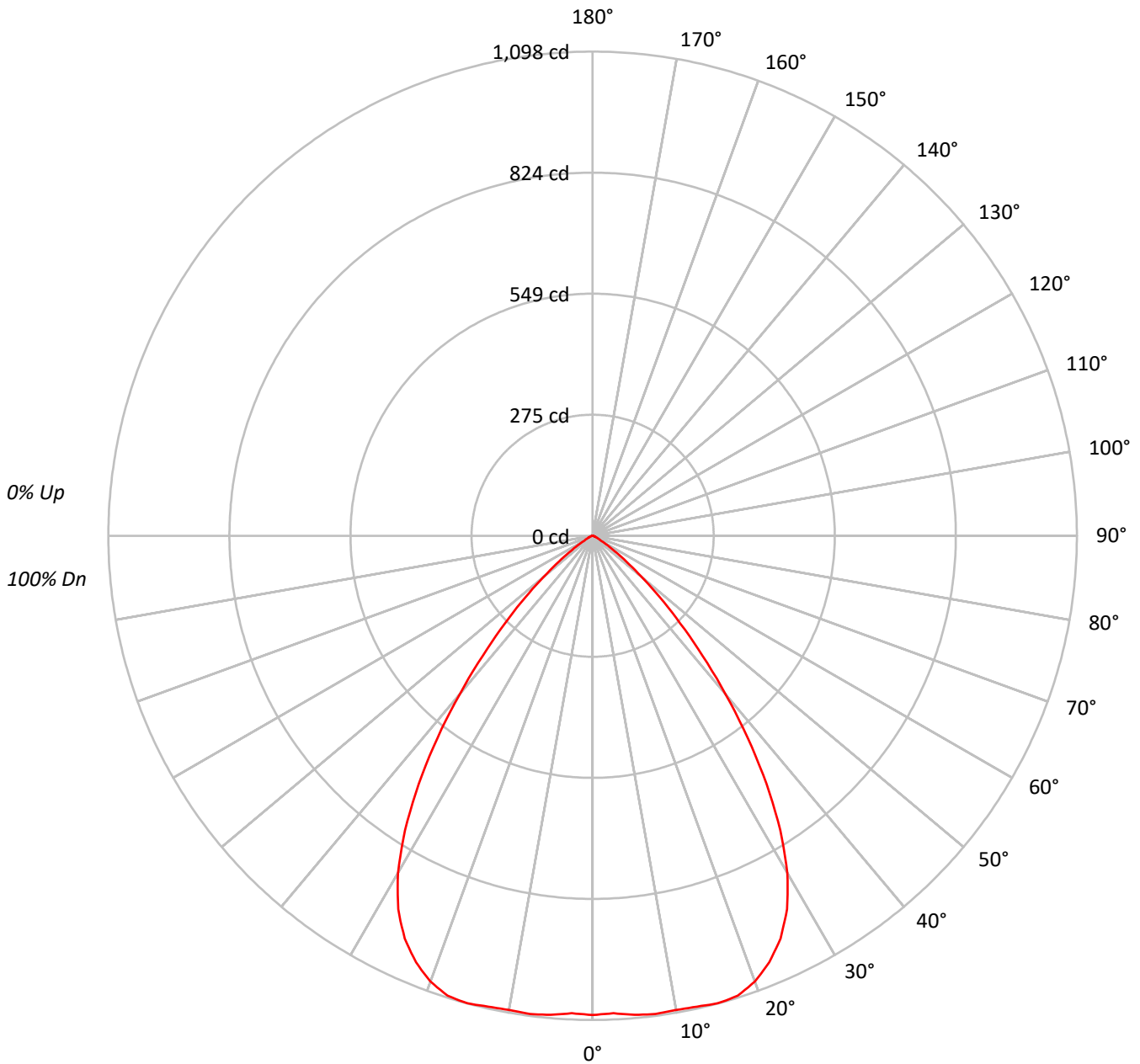
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	110	108	105	103	103	101	100	100	98	97	96	95	94	92	92	92	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	86	84	84	84	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	81	78	76	76	76	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69	69	69	69
5	88	79	72	67	86	78	72	67	76	70	66	74	69	66	72	68	65	63	63	63	63
6	83	73	66	61	81	72	66	61	70	65	61	69	64	60	68	63	60	58	58	58	58
7	78	68	61	56	77	67	60	56	65	60	55	64	59	55	63	58	55	53	53	53	53
8	74	63	56	51	72	62	56	51	61	55	51	60	55	51	59	54	51	49	49	49	49
9	69	59	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47	45	45	45	45
10	66	55	48	44	65	54	48	44	53	48	44	53	47	44	52	47	43	42	42	42	42

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

	0°
0°	134040
5°	135047
10°	136734
15°	140173
20°	141198
25°	137158
30°	125763
35°	103477
40°	75420
45°	48964
50°	27594
55°	13096
60°	5156
65°	3210
70°	2164
75°	1430
80°	710
85°	1415



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.1	6.5
10°-20°	309.5	19.4
20°-30°	459.0	28.8
30°-40°	424.0	26.6
40°-50°	221.4	13.9
50°-60°	60.6	3.8
60°-70°	11.7	0.7
70°-80°	3.3	0.2
80°-90°	0.7	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°	872.6	54.7
0°-40°	1296.6	81.3
0°-60°	1578.6	99.0
0°-90°	1594.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1594.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1087	
5°	1091	104
15°	1098	309
25°	1008	459
35°	687	424
45°	281	221
55°	61	61
65°	11	12
75°	3	3
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1086.7
2.5°	1083.7
5°	1090.7
7.5°	1093.7
10°	1091.7
12.5°	1093.7
15°	1097.7
17.5°	1093.7
20°	1075.7
22.5°	1046.7
25°	1007.8
27.5°	954.9
30°	883.0
32.5°	792.0
35°	687.2
37.5°	577.4
40°	468.4
42.5°	368.6
45°	280.7
47.5°	205.8
50°	143.8
52.5°	95.8
55°	60.9
57.5°	35.9
60°	20.9
62.5°	15.0
65°	11.0
67.5°	8.0
70°	6.0
72.5°	4.0
75°	3.0
77.5°	2.0
80°	1.0
82.5°	1.0
85°	1.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)