

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: P579850

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

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579850  
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-HM40525830-41WDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1538.0 lumens  
Efficiency: N/A  
Efficacy: 109.9 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

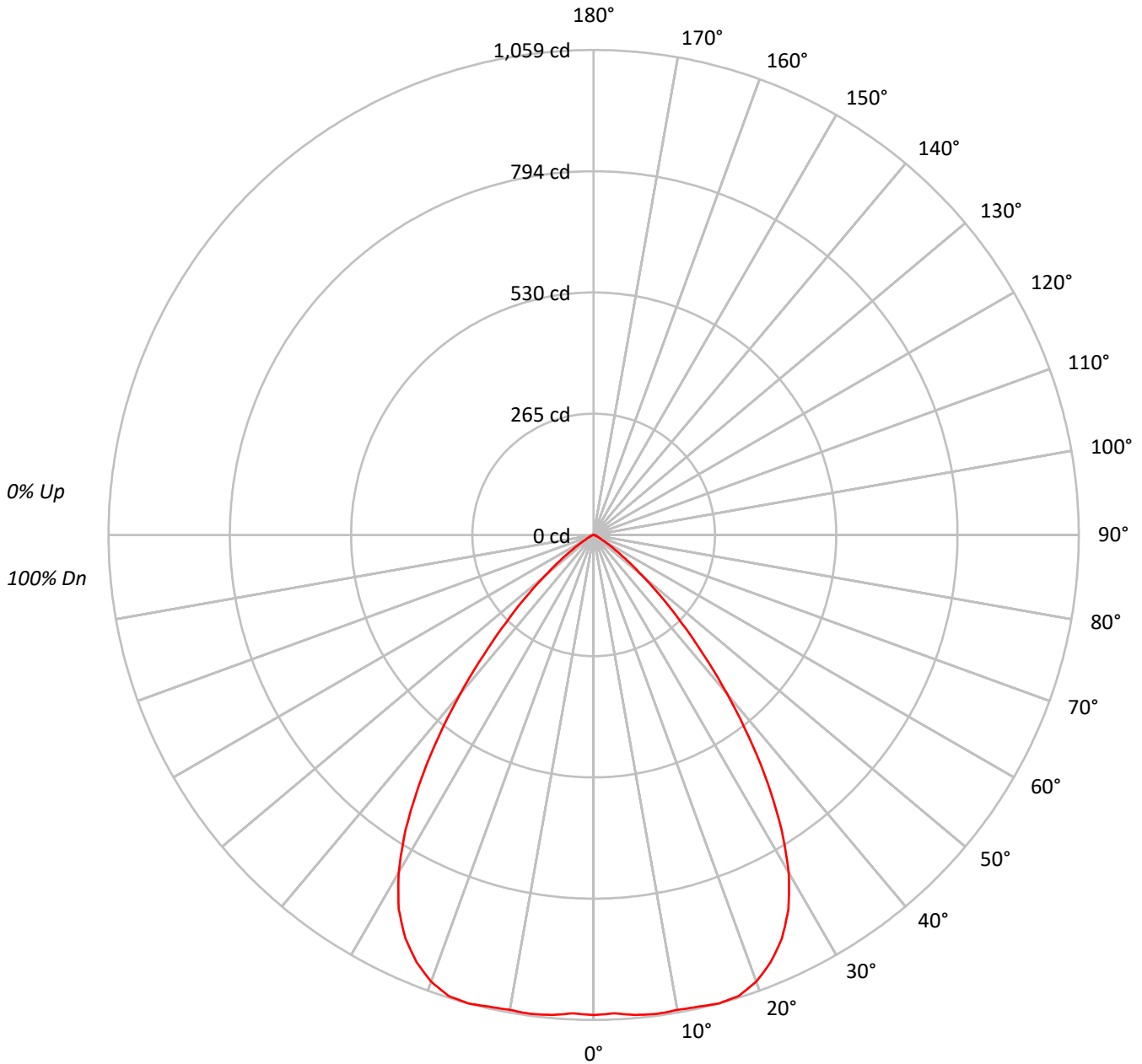
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	129316
5°	130292
10°	131912
15°	135231
20°	136236
25°	132313
30°	121320
35°	99833
40°	72779
45°	47220
50°	26615
55°	12645
60°	4983
65°	3094
70°	2092
75°	1334
80°	639
85°	1274



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.5	6.5
10°-20°	298.6	19.4
20°-30°	442.8	28.8
30°-40°	409.0	26.6
40°-50°	213.5	13.9
50°-60°	58.5	3.8
60°-70°	11.3	0.7
70°-80°	3.1	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°	841.9	54.7
0°-40°	1250.9	81.3
0°-60°	1523.0	99.0
0°-90°	1538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1538.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1048	
5°	1052	100
15°	1059	299
25°	972	443
35°	663	409
45°	271	214
55°	59	59
65°	11	11
75°	3	3
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1048.4
2.5°	1045.5
5°	1052.3
7.5°	1055.1
10°	1053.2
12.5°	1055.1
15°	1059.0
17.5°	1055.1
20°	1037.9
22.5°	1009.9
25°	972.2
27.5°	921.2
30°	851.8
32.5°	764.2
35°	663.0
37.5°	557.0
40°	452.0
42.5°	355.5
45°	270.7
47.5°	198.5
50°	138.7
52.5°	92.6
55°	58.8
57.5°	34.7
60°	20.2
62.5°	14.4
65°	10.6
67.5°	7.7
70°	5.8
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)