

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: P592639

Luminaire Tested: **HC415D010-HM40525950-41WDWB**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P592639  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-10)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC415D010-HM40525950-41WDWB  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1491.1 lumens  
Efficiency: N/A  
Efficacy: 106.5 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.14 / 1.07  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

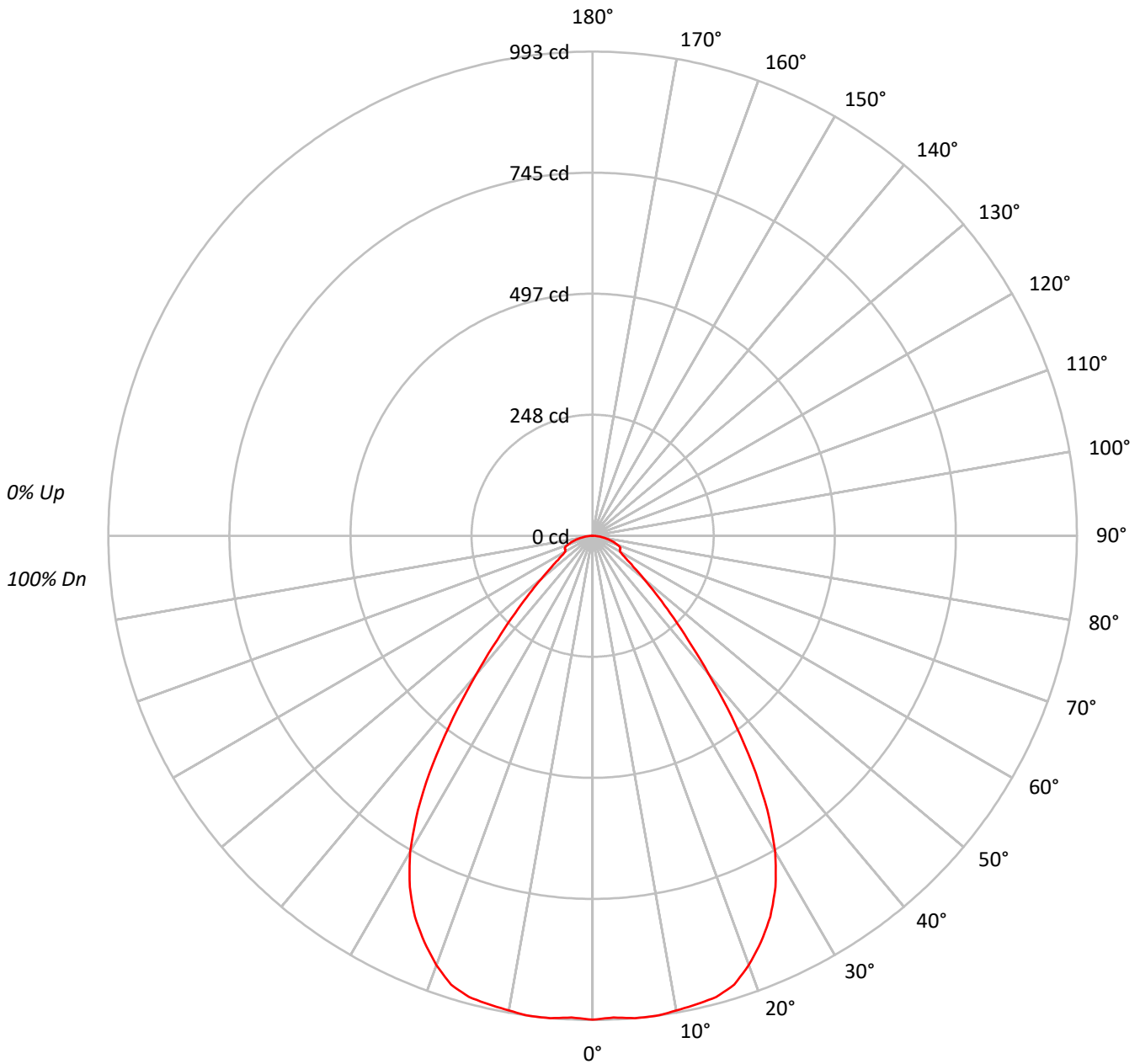
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90			90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80			80
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72			72
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65			65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59			59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54			54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	49			49
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46			46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42			42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39			39

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

	0°
0°	122408
5°	122987
10°	123833
15°	125066
20°	122992
25°	117329
30°	106607
35°	85980
40°	59657
45°	39179
50°	26251
55°	18688
60°	15961
65°	18358
70°	19655
75°	18920
80°	17048
85°	15709



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.7	6.3
10°-20°	275.1	18.5
20°-30°	393.1	26.4
30°-40°	351.2	23.6
40°-50°	180.2	12.1
50°-60°	81.9	5.5
60°-70°	61.1	4.1
70°-80°	41.5	2.8
80°-90°	12.3	0.8
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°	762.9	51.2
0°-40°	1114.1	74.7
0°-60°	1376.2	92.3
0°-90°	1491.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1491.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	992	
5°	993	95
15°	979	275
25°	862	393
35°	571	351
45°	225	180
55°	87	82
65°	63	61
75°	40	42
85°	11	12
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	992.4
2.5°	988.7
5°	993.3
7.5°	993.3
10°	988.7
12.5°	984.1
15°	979.4
17.5°	965.5
20°	937.0
22.5°	901.9
25°	862.1
27.5°	812.2
30°	748.5
32.5°	667.2
35°	571.0
37.5°	468.4
40°	370.5
42.5°	289.3
45°	224.6
47.5°	175.6
50°	136.8
52.5°	107.2
55°	86.9
57.5°	73.0
60°	64.7
62.5°	62.9
65°	62.9
67.5°	60.9
70°	54.5
72.5°	47.1
75°	39.7
77.5°	31.4
80°	24.0
82.5°	17.5
85°	11.1
87.5°	4.7
90°	0.0



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— 0°-180°







(END OF REPORT)