

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: P581193

Luminaire Tested: **HC455D010-HM44560927-41MDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581193  
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: HC455D010-HM44560927-41MDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3761.4 lumens  
Efficiency: N/A  
Efficacy: 72.3 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

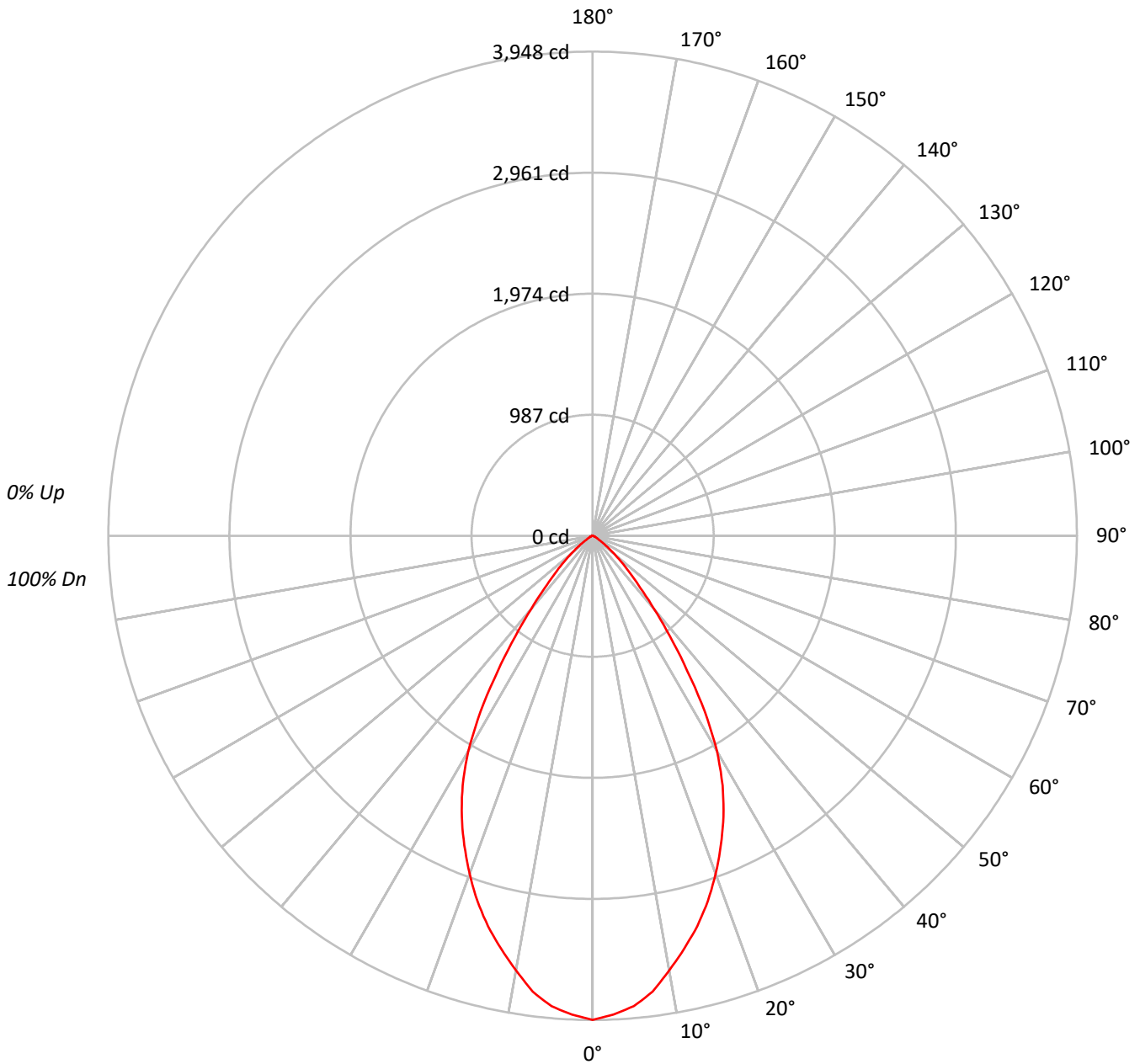
Input Watts (W): 52  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	82	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°	486944
5°	476769
10°	450556
15°	420825
20°	384872
25°	343685
30°	288615
35°	203023
40°	125238
45°	74990
50°	44193
55°	22021
60°	11348
65°	7442
70°	4616
75°	3622
80°	1847
85°	3680



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	359.6	9.6
10°-20°	921.2	24.5
20°-30°	1148.8	30.5
30°-40°	846.2	22.5
40°-50°	348.0	9.3
50°-60°	101.7	2.7
60°-70°	26.1	0.7
70°-80°	8.1	0.2
80°-90°	1.8	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°	2429.6	64.6
0°-40°	3275.7	87.1
0°-60°	3725.5	99.0
0°-90°	3761.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3761.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3948	
5°	3851	360
15°	3296	921
25°	2525	1149
35°	1348	846
45°	430	348
55°	102	102
65°	26	26
75°	8	8
85°	3	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3947.8
2.5°	3906.9
5°	3850.6
7.5°	3748.3
10°	3597.3
12.5°	3448.9
15°	3295.5
17.5°	3124.0
20°	2932.1
22.5°	2732.5
25°	2525.3
27.5°	2295.0
30°	2026.4
32.5°	1701.4
35°	1348.3
37.5°	1036.2
40°	777.8
42.5°	575.7
45°	429.9
47.5°	317.2
50°	230.3
52.5°	158.6
55°	102.4
57.5°	61.4
60°	46.0
62.5°	33.3
65°	25.5
67.5°	17.9
70°	12.8
72.5°	10.2
75°	7.6
77.5°	5.1
80°	2.6
82.5°	2.6
85°	2.6
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)