

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: P584171

Luminaire Tested: **HC825D010-HM82555927-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584171  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC825D010-HM82555927-81NDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1802.9 lumens  
Efficiency: N/A  
Efficacy: 67.3 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.57  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

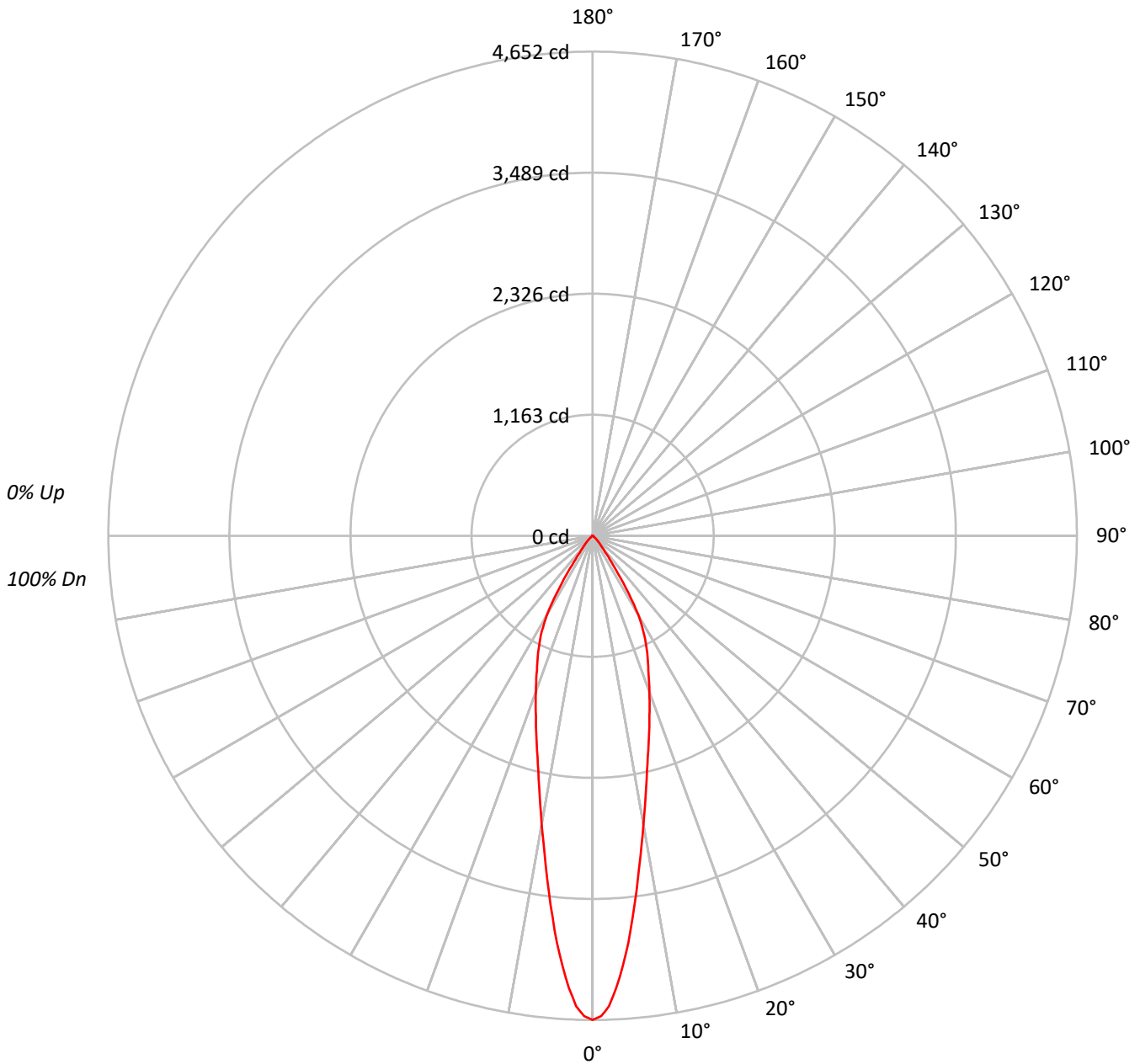
Input Watts (W): 26.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	114	112	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95			95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89			89
3	104	99	94	91	102	97	93	90	95	91	88	92	90	87	90	88	86	84			84
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80			80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75			75
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	76	73	72			72
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	76	72	69	68			68
8	84	76	70	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65			65
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62			62
10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59			59

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

	0°
0°	143444
5°	121526
10°	88175
15°	66217
20°	52249
25°	42142
30°	31231
35°	12652
40°	5338
45°	2861
50°	1286
55°	651
60°	413
65°	299
70°	243
75°	167
80°	249
85°	495



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	337.1	18.7
10°-20°	582.6	32.3
20°-30°	563.3	31.2
30°-40°	247.4	13.7
40°-50°	53.5	3.0
50°-60°	12.0	0.7
60°-70°	4.2	0.2
70°-80°	1.6	0.1
80°-90°	1.3	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°	1482.9	82.2
0°-40°	1730.3	96.0
0°-60°	1795.8	99.6
0°-90°	1802.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1802.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4652	
5°	3926	337
15°	2074	583
25°	1239	563
35°	336	247
45°	66	53
55°	12	12
65°	4	4
75°	1	2
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4651.8
1°	4617.0
2°	4521.9
3°	4350.5
4°	4145.7
5°	3926.0
6°	3686.4
7°	3445.4
8°	3219.1
9°	3008.8
10°	2816.0
11°	2633.9
12°	2470.5
13°	2321.9
14°	2190.7
15°	2074.2
17.5°	1813.0
20°	1592.2
22.5°	1398.0
25°	1238.6
27.5°	1076.6
30°	877.1
32.5°	595.9
35°	336.1
37.5°	198.2
40°	132.6
42.5°	93.7
45°	65.6
47.5°	42.8
50°	26.8
52.5°	16.0
55°	12.1
57.5°	9.4
60°	6.7
62.5°	5.4
65°	4.1
67.5°	2.7
70°	2.7
72.5°	1.4
75°	1.4
77.5°	1.4
80°	1.4
82.5°	1.4



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CANDELA DISTRIBUTION (continued):

0°  
90° | 0.0



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— 0°-180°







85°		1.4
87.5°		1.4



(END OF REPORT)