

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: P584103

Luminaire Tested: **HC825D010-HM82555827-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584103  
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-HM82555827-81NDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2236.0 lumens  
Efficiency: N/A  
Efficacy: 83.4 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

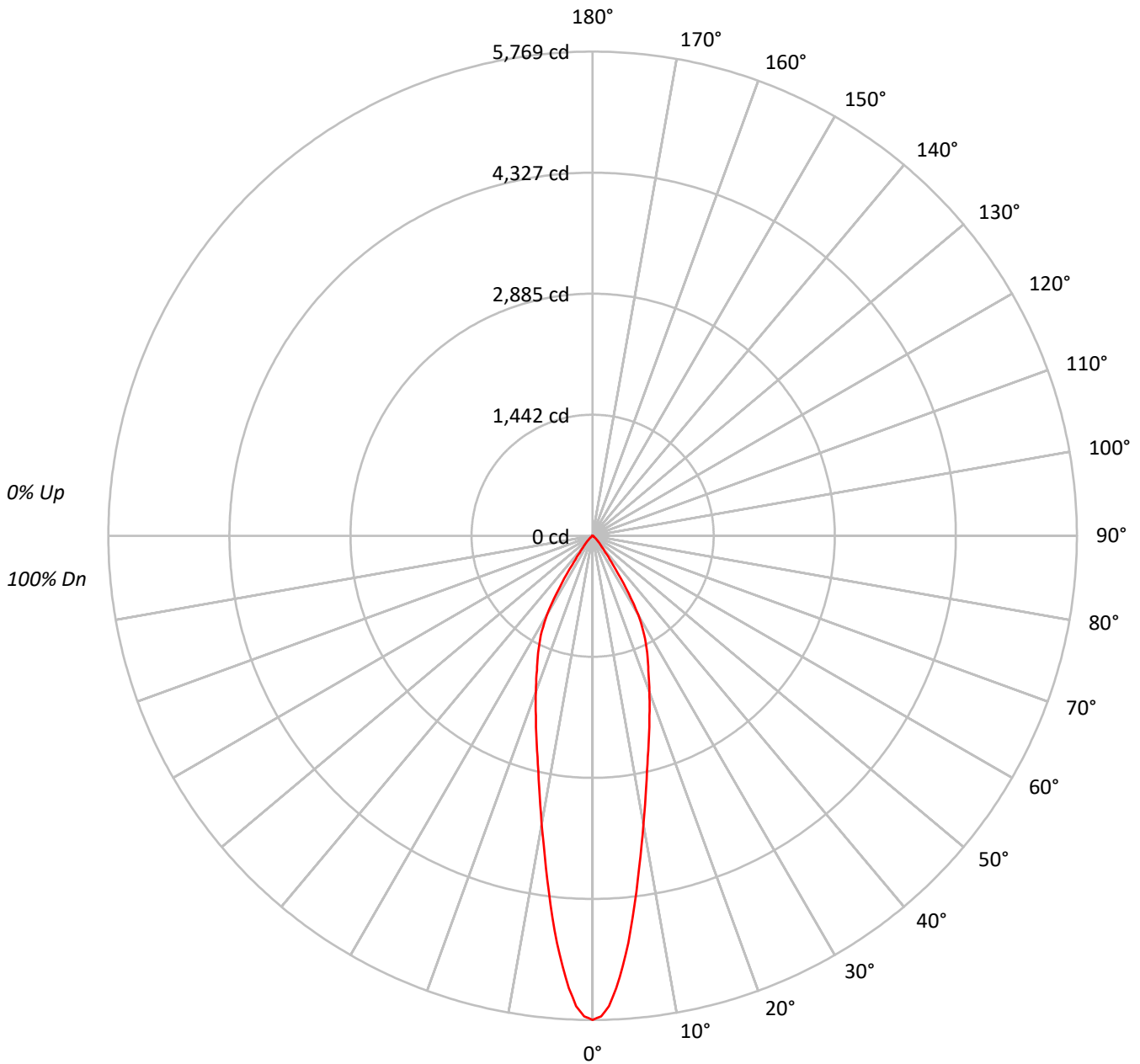
Input Watts (W): 26.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100
1	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95	95	95	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89	89	89	89
3	104	99	94	91	102	97	93	90	95	91	88	92	90	87	90	88	86	84	84	84	84
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80	80	80	80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75	75	75	75
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	76	73	72	72	72	72
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	76	72	69	68	68	68	68
8	84	76	70	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65	65	65	65
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62	62	62	62
10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59	59	59	59

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

	0°
0°	177907
5°	150722
10°	109357
15°	82125
20°	64797
25°	52268
30°	38733
35°	15694
40°	6622
45°	3550
50°	1593
55°	806
60°	512
65°	365
70°	298
75°	203
80°	302
85°	601



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	418.1	18.7
10°-20°	722.5	32.3
20°-30°	698.6	31.2
30°-40°	306.8	13.7
40°-50°	66.3	3.0
50°-60°	14.9	0.7
60°-70°	5.1	0.2
70°-80°	2.0	0.1
80°-90°	1.6	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°	1839.2	82.3
0°-40°	2146.0	96.0
0°-60°	2227.2	99.6
0°-90°	2236.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2236.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5769	
5°	4869	418
15°	2572	723
25°	1536	699
35°	417	307
45°	81	66
55°	15	15
65°	5	5
75°	2	2
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	5769.4
1°	5726.2
2°	5608.3
3°	5395.7
4°	5141.7
5°	4869.2
6°	4572.0
7°	4273.0
8°	3992.4
9°	3731.6
10°	3492.5
11°	3266.7
12°	3064.1
13°	2879.7
14°	2716.9
15°	2572.5
17.5°	2248.6
20°	1974.6
22.5°	1733.8
25°	1536.2
27.5°	1335.3
30°	1087.8
32.5°	739.0
35°	416.9
37.5°	245.8
40°	164.5
42.5°	116.2
45°	81.4
47.5°	53.2
50°	33.2
52.5°	19.9
55°	15.0
57.5°	11.7
60°	8.3
62.5°	6.6
65°	5.0
67.5°	3.3
70°	3.3
72.5°	1.7
75°	1.7
77.5°	1.7
80°	1.7
82.5°	1.7



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CANDELA DISTRIBUTION (continued):

0°  
90° | 0.0



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— 0°-180°







85°		1.7
87.5°		1.7



(END OF REPORT)