

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: P584153

Luminaire Tested: **HC825D010-HM82555840-81NDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584153  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC825D010-HM82555840-81NDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2749.1 lumens  
Efficiency: N/A  
Efficacy: 102.6 lumens/watt  
Spacing Criteria (0/90/45): 0.22 / 0.22 / 0.27  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

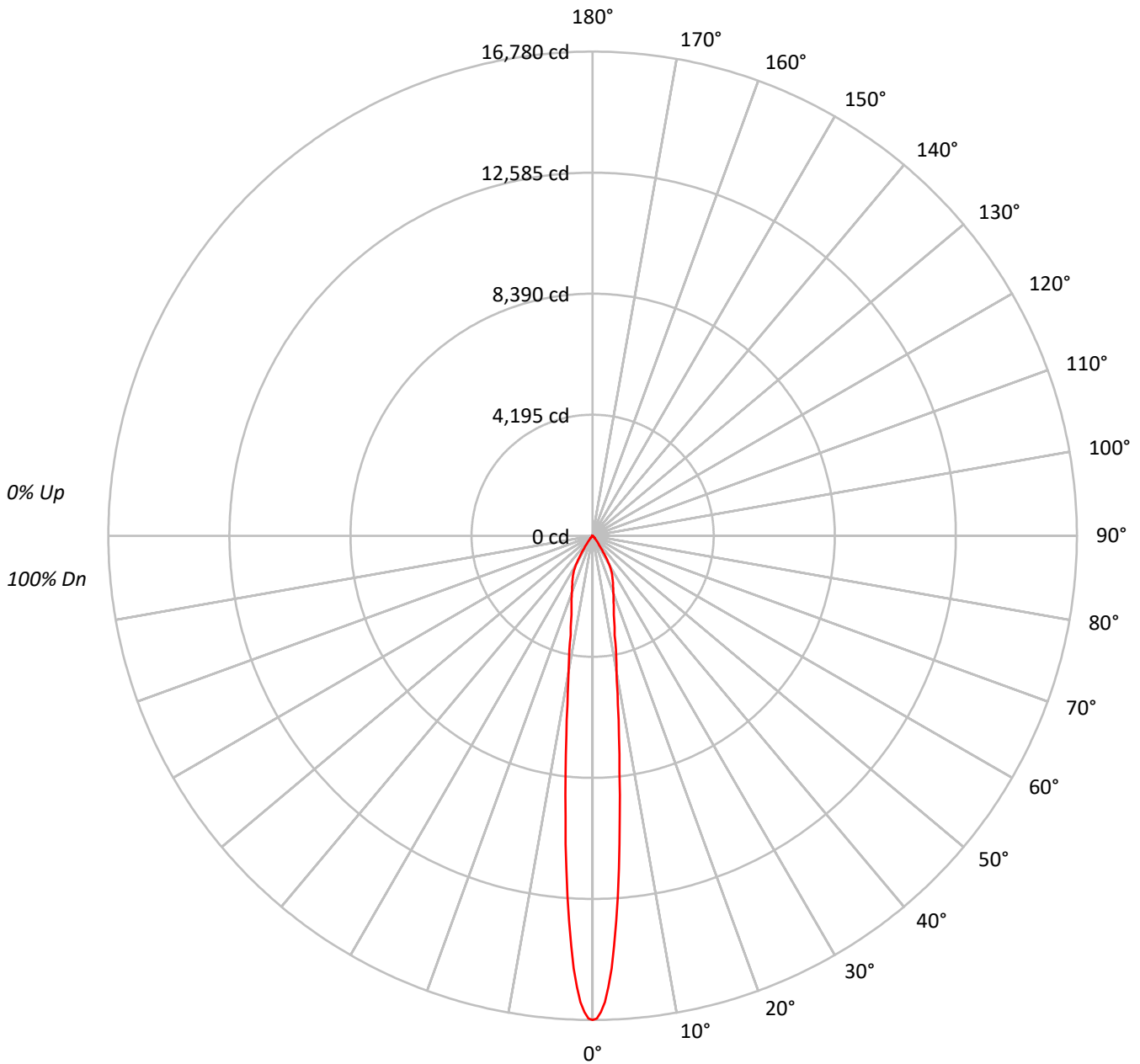
Input Watts (W): 26.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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CATALOG NUMBER: HC825D010-HM82555840-81NDC

### 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	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96	96	96	96
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	91	91	91
3	106	101	97	93	104	99	96	93	97	94	91	95	92	90	92	90	89	87	87	87	87
4	102	96	91	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83	83	83	83
5	98	92	87	83	97	91	86	83	89	85	82	87	84	82	86	83	81	80	80	80	80
6	95	88	83	79	93	87	82	79	86	82	79	84	81	78	83	80	78	76	76	76	76
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73	73	73	73
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71	71	71	71
9	85	78	73	70	84	77	73	70	76	72	70	76	72	69	75	72	69	68	68	68	68
10	83	75	70	67	82	75	70	67	74	70	67	73	69	67	73	69	67	66	66	66	66

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

	0°
0°	517440
5°	331899
10°	149928
15°	90463
20°	68935
25°	55670
30°	40798
35°	14772
40°	5515
45°	2503
50°	801
55°	199
60°	111
65°	131
70°	0
75°	0
80°	320
85°	637



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	817.8	29.7
10°-20°	830.6	30.2
20°-30°	743.6	27.0
30°-40°	299.5	10.9
40°-50°	49.1	1.8
50°-60°	4.5	0.2
60°-70°	1.6	0.1
70°-80°	1.2	0.0
80°-90°	1.7	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°	2391.9	87.0
0°-40°	2691.5	97.9
0°-60°	2745.1	99.9
0°-90°	2749.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2749.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	16780	
5°	10722	818
15°	2834	831
25°	1636	744
35°	392	300
45°	57	49
55°	4	4
65°	2	2
75°	0	1
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	16780.2
0.5°	16728.4
1°	16511.8
1.5°	16163.8
2°	15636.3
2.5°	15012.6
3°	14231.5
3.5°	13374.6
4°	12526.8
4.5°	11577.4
5°	10722.3
5.5°	9791.2
6°	9036.0
6.5°	8249.5
7°	7631.2
7.5°	6977.9
8°	6452.2
8.5°	5924.7
9°	5528.6
9.5°	5091.8
10°	4788.2
12.5°	3531.5
15°	2833.7
17.5°	2421.0
20°	2100.7
22.5°	1845.3
25°	1636.2
27.5°	1427.1
30°	1145.8
32.5°	736.7
35°	392.4
37.5°	216.6
40°	137.0
42.5°	90.7
45°	57.4
47.5°	35.2
50°	16.7
52.5°	5.6
55°	3.7
57.5°	1.8
60°	1.8
62.5°	1.8
65°	1.8



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**CANDELA DISTRIBUTION (continued):**

	0°
72.5°	0.0
75°	0.0
77.5°	1.8
80°	1.8
82.5°	1.8
85°	1.8
87.5°	1.8
90°	0.0



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— 0°-180°







67.5°		1.8
70°		0.0



(END OF REPORT)