

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: P583783

Luminaire Tested: **HC810D010-HM80520930-81NDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P583783  
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: HC810D010-HM80520930-81NDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1039.8 lumens  
Efficiency: N/A  
Efficacy: 105.0 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

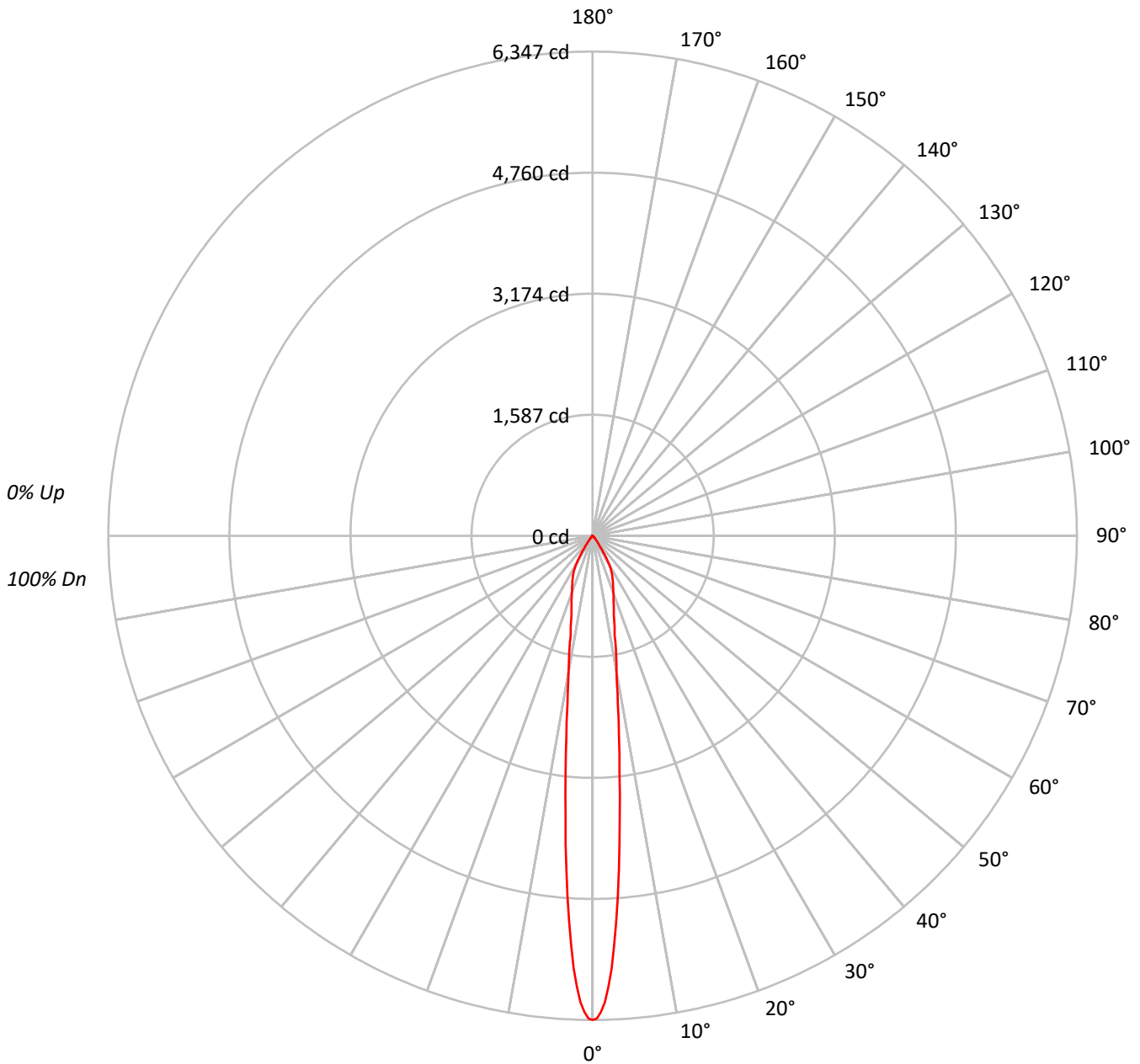
Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	195724
5°	125544
10°	56712
15°	34216
20°	26075
25°	21058
30°	15428
35°	5586
40°	2085
45°	951
50°	302
55°	75
60°	43
65°	51
70°	0
75°	0
80°	124
85°	248



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	309.3	29.7
10°-20°	314.2	30.2
20°-30°	281.2	27.0
30°-40°	113.3	10.9
40°-50°	18.6	1.8
50°-60°	1.7	0.2
60°-70°	0.6	0.1
70°-80°	0.5	0.0
80°-90°	0.7	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°	904.8	87.0
0°-40°	1018.0	97.9
0°-60°	1038.3	99.9
0°-90°	1040.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1039.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	6347	
5°	4056	309
15°	1072	314
25°	619	281
35°	148	113
45°	22	19
55°	1	2
65°	1	1
75°	0	0
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	6347.2
0.5°	6327.6
1°	6245.7
1.5°	6114.1
2°	5914.6
2.5°	5678.6
3°	5383.2
3.5°	5059.0
4°	4738.4
4.5°	4379.2
5°	4055.8
5.5°	3703.6
6°	3417.9
6.5°	3120.4
7°	2886.6
7.5°	2639.5
8°	2440.5
8.5°	2241.0
9°	2091.2
9.5°	1926.0
10°	1811.2
12.5°	1335.8
15°	1071.8
17.5°	915.8
20°	794.6
22.5°	698.0
25°	618.9
27.5°	539.8
30°	433.3
32.5°	278.6
35°	148.4
37.5°	81.9
40°	51.8
42.5°	34.3
45°	21.8
47.5°	13.3
50°	6.3
52.5°	2.0
55°	1.4
57.5°	0.7
60°	0.7
62.5°	0.7
65°	0.7



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**CANDELA DISTRIBUTION (continued):**

	0°
72.5°	0.0
75°	0.0
77.5°	0.7
80°	0.7
82.5°	0.7
85°	0.7
87.5°	0.7
90°	0.0



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— 0°-180°







67.5°		0.7
70°		0.0



(END OF REPORT)