

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: P593520

Luminaire Tested: **HC810D010-HM80520850-81WDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593520  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-8)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC810D010-HM80520850-81WDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1377.3 lumens  
Efficiency: N/A  
Efficacy: 139.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.13 / 1.06  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

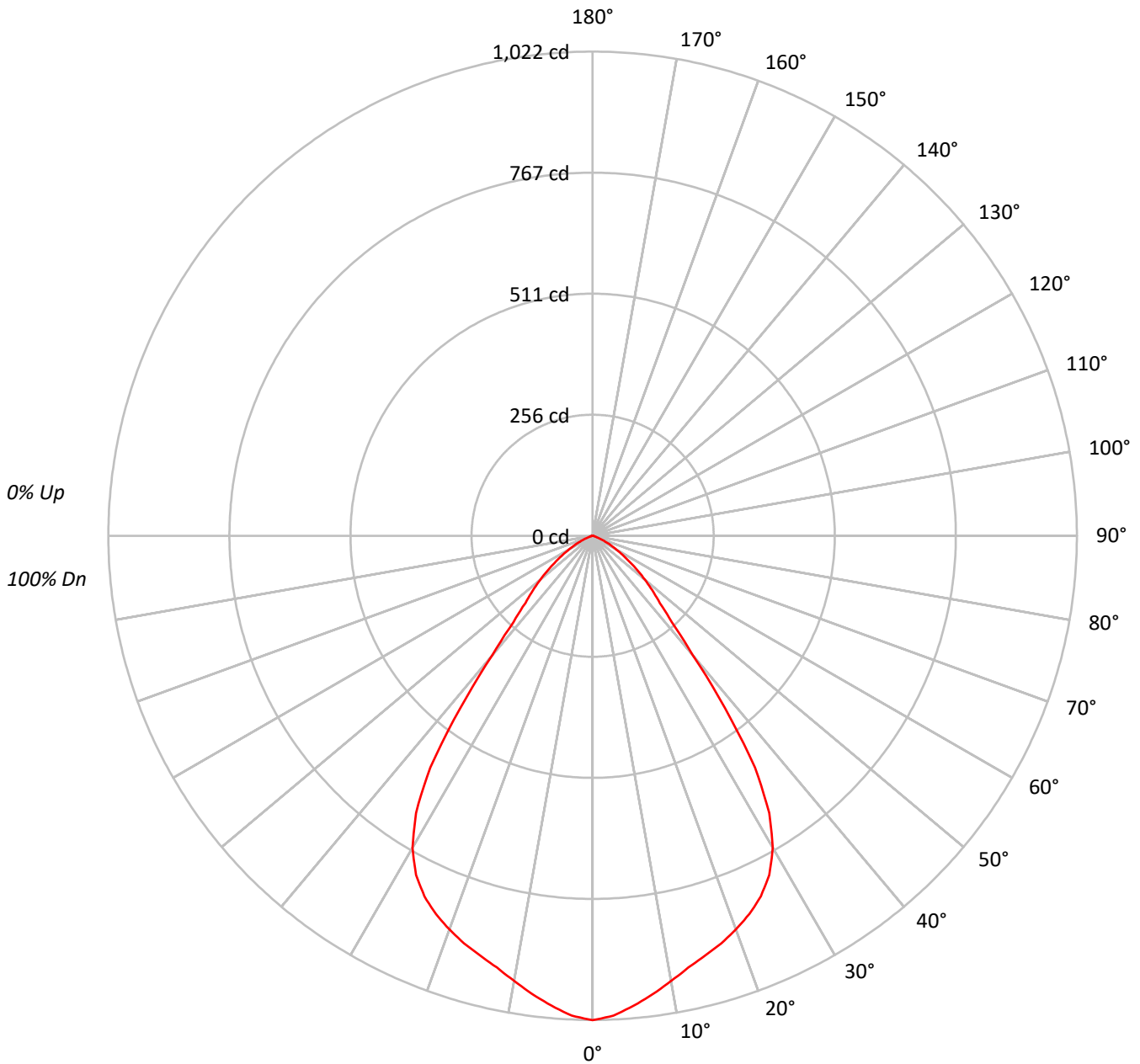
Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			
1	113	109	107	104	110	107	105	102	103	101	99	99	98	96	96	95	93	92			
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	85	83			
3	99	92	86	81	97	90	85	81	88	83	79	85	81	78	83	80	77	75			
4	93	84	78	73	91	83	77	72	81	76	72	79	74	71	77	73	70	68			
5	87	78	71	66	86	77	70	66	75	69	65	73	68	64	71	67	64	62			
6	82	72	65	60	80	71	64	60	69	64	59	68	63	59	66	62	58	57			
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52			
8	73	62	55	50	71	61	55	50	60	54	50	59	54	50	58	53	49	48			
9	69	58	51	46	67	57	51	46	56	50	46	55	50	46	54	49	46	44			
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41			

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

	0°
0°	31530
5°	30821
10°	29875
15°	29274
20°	29012
25°	28573
30°	27072
35°	22489
40°	13244
45°	8761
50°	6898
55°	5075
60°	3522
65°	2145
70°	929
75°	417
80°	302
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.8	6.8
10°-20°	259.2	18.8
20°-30°	384.1	27.9
30°-40°	354.9	25.8
40°-50°	163.7	11.9
50°-60°	86.1	6.3
60°-70°	30.4	2.2
70°-80°	4.8	0.3
80°-90°	0.4	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°	737.1	53.5
0°-40°	1092.0	79.3
0°-60°	1341.7	97.4
0°-90°	1377.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1377.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1022	
5°	996	94
15°	917	259
25°	840	384
35°	597	355
45°	201	164
55°	94	86
65°	29	30
75°	4	5
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1022.5
2.5°	1013.9
5°	995.7
7.5°	975.8
10°	954.1
12.5°	933.4
15°	917.0
17.5°	902.2
20°	884.1
22.5°	864.1
25°	839.8
27.5°	807.0
30°	760.3
32.5°	693.6
35°	597.4
37.5°	458.9
40°	329.0
42.5°	246.8
45°	200.9
47.5°	170.6
50°	143.8
52.5°	117.8
55°	94.4
57.5°	74.5
60°	57.1
62.5°	43.3
65°	29.4
67.5°	17.3
70°	10.3
72.5°	6.0
75°	3.5
77.5°	2.6
80°	1.7
82.5°	0.8
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)