

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: P585123

Luminaire Tested: **HC860D010-HM86080927-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P585123  
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: HC860D010-HM86080927-81NDH  
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: 4111.6 lumens  
Efficiency: N/A  
Efficacy: 73.4 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

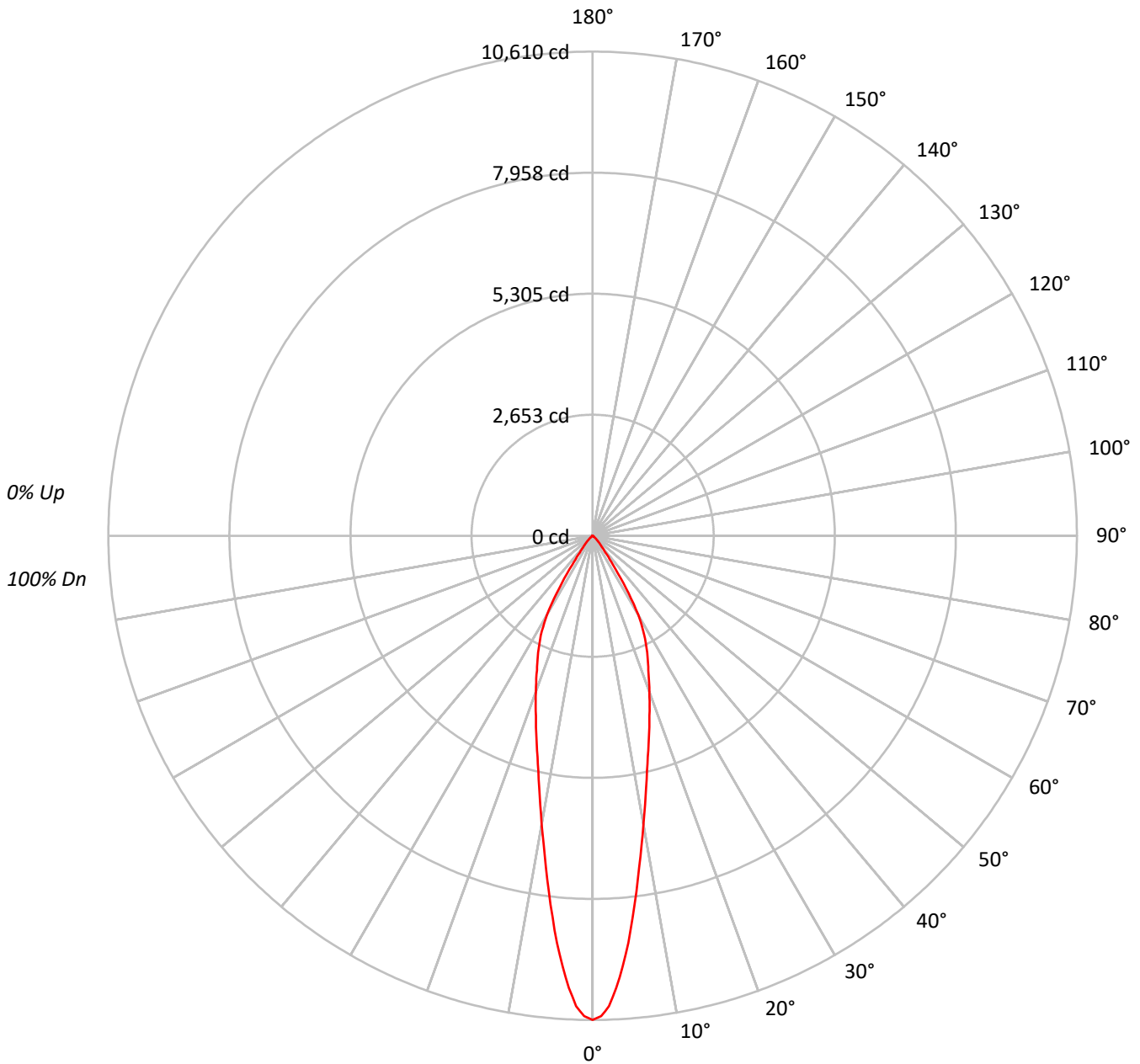
Input Watts (W): 56  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°
0°	327170
5°	277179
10°	201108
15°	151027
20°	119159
25°	96118
30°	71231
35°	28854
40°	12169
45°	6524
50°	2931
55°	1478
60°	937
65°	664
70°	550
75°	357
80°	533
85°	1061



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	768.8	18.7
10°-20°	1328.7	32.3
20°-30°	1284.7	31.2
30°-40°	564.2	13.7
40°-50°	121.9	3.0
50°-60°	27.4	0.7
60°-70°	9.4	0.2
70°-80°	3.6	0.1
80°-90°	2.9	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°	3382.2	82.3
0°-40°	3946.4	96.0
0°-60°	4095.7	99.6
0°-90°	4111.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4111.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	10610	
5°	8954	769
15°	4731	1329
25°	2825	1285
35°	766	564
45°	150	122
55°	28	27
65°	9	9
75°	3	4
85°	3	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	10609.9
1°	10530.4
2°	10313.6
3°	9922.7
4°	9455.5
5°	8954.5
6°	8407.8
7°	7858.1
8°	7342.0
9°	6862.5
10°	6422.7
11°	6007.4
12°	5634.8
13°	5295.7
14°	4996.5
15°	4730.8
17.5°	4135.2
20°	3631.2
22.5°	3188.5
25°	2825.0
27.5°	2455.5
30°	2000.5
32.5°	1359.1
35°	766.5
37.5°	452.0
40°	302.3
42.5°	213.8
45°	149.6
47.5°	97.7
50°	61.1
52.5°	36.7
55°	27.5
57.5°	21.3
60°	15.2
62.5°	12.2
65°	9.1
67.5°	6.1
70°	6.1
72.5°	3.0
75°	3.0
77.5°	3.0
80°	3.0
82.5°	3.0



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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



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— 0°-180°







85°		3.0
87.5°		3.0



(END OF REPORT)