

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: P593859

Luminaire Tested: **HC860D010-HM86080850-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593859  
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-HM86080850-81NDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5903.1 lumens  
Efficiency: N/A  
Efficacy: 105.4 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

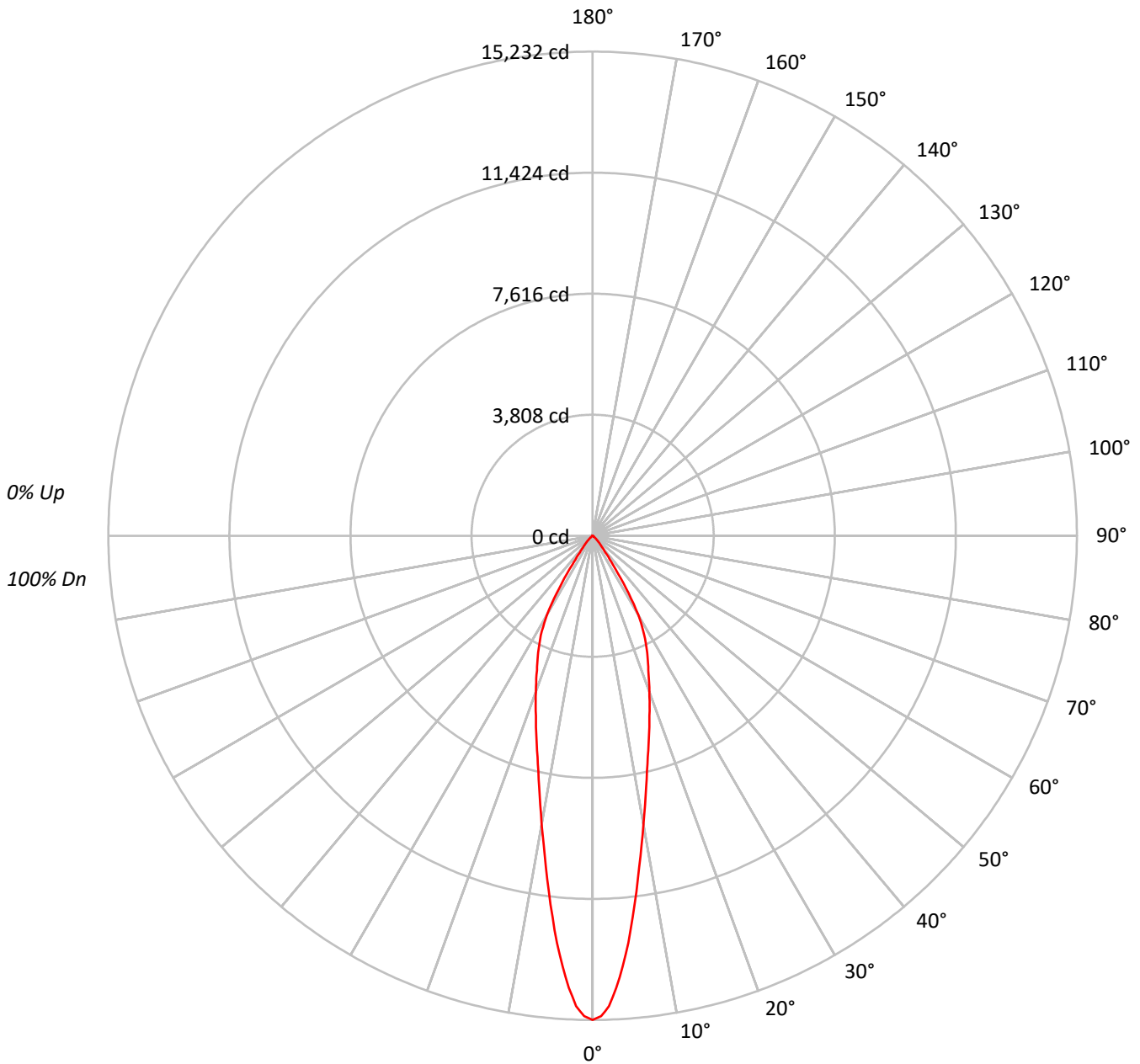
Input Watts (W): 56  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°
0°	469708
5°	397940
10°	288725
15°	216822
20°	171079
25°	137995
30°	102262
35°	41431
40°	17470
45°	9372
50°	4207
55°	2118
60°	1351
65°	956
70°	793
75°	524
80°	781
85°	1557



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1103.8	18.7
10°-20°	1907.6	32.3
20°-30°	1844.3	31.2
30°-40°	810.1	13.7
40°-50°	175.1	3.0
50°-60°	39.3	0.7
60°-70°	13.5	0.2
70°-80°	5.2	0.1
80°-90°	4.2	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°	4855.7	82.3
0°-40°	5665.8	96.0
0°-60°	5880.2	99.6
0°-90°	5903.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5903.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	15232	
5°	12856	###
15°	6792	1908
25°	4056	1844
35°	1101	810
45°	215	175
55°	39	39
65°	13	13
75°	4	5
85°	4	4
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	15232.3
1°	15118.3
2°	14806.9
3°	14245.8
4°	13574.8
5°	12855.8
6°	12070.9
7°	11281.6
8°	10540.7
9°	9852.3
10°	9220.9
11°	8624.5
12°	8089.7
13°	7603.0
14°	7173.2
15°	6791.8
17.5°	5936.8
20°	5213.4
22.5°	4577.6
25°	4055.8
27.5°	3525.3
30°	2872.0
32.5°	1951.2
35°	1100.6
37.5°	648.9
40°	434.0
42.5°	306.9
45°	214.9
47.5°	140.3
50°	87.7
52.5°	52.6
55°	39.4
57.5°	30.7
60°	21.9
62.5°	17.5
65°	13.1
67.5°	8.8
70°	8.8
72.5°	4.4
75°	4.4
77.5°	4.4
80°	4.4
82.5°	4.4



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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



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— 0°-180°







85°	4.4
87.5°	4.4



(END OF REPORT)