

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: P593454

Luminaire Tested: **HC805D010-HM80520850-81NDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593454  
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: HC805D010-HM80520850-81NDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 783.1 lumens  
Efficiency: N/A  
Efficacy: 130.5 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

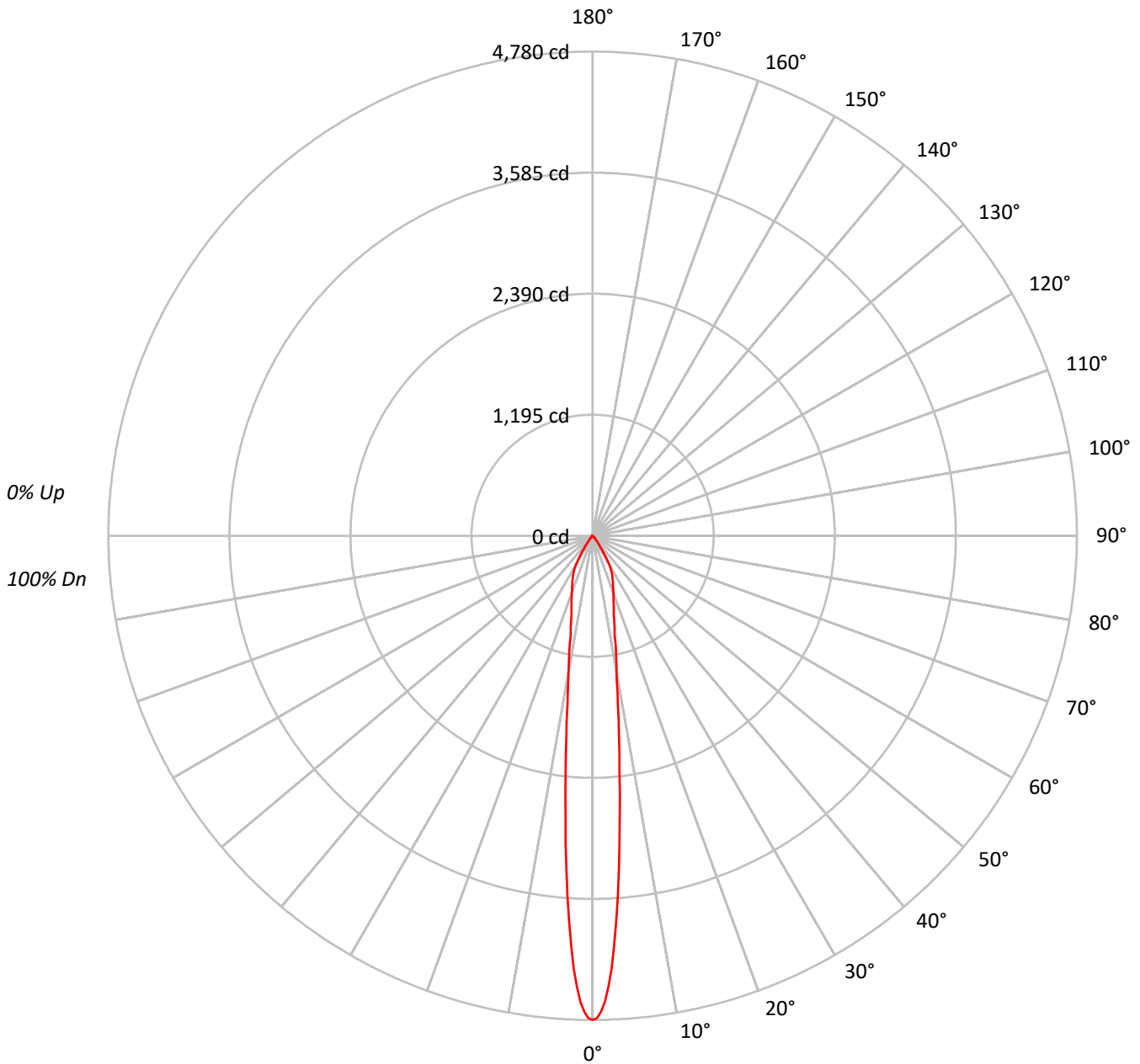
Input Watts (W): 6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	147394
5°	94543
10°	42710
15°	25766
20°	19637
25°	15859
30°	11618
35°	4209
40°	1570
45°	715
50°	230
55°	59
60°	31
65°	36
70°	0
75°	0
80°	89
85°	177



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	232.9	29.7
10°-20°	236.6	30.2
20°-30°	211.8	27.0
30°-40°	85.3	10.9
40°-50°	14.0	1.8
50°-60°	1.3	0.2
60°-70°	0.4	0.1
70°-80°	0.3	0.0
80°-90°	0.5	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°	681.3	87.0
0°-40°	766.6	97.9
0°-60°	781.9	99.9
0°-90°	783.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	783.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4780	
5°	3054	233
15°	807	237
25°	466	212
35°	112	85
45°	16	14
55°	1	1
65°	0	0
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4779.9
0.5°	4765.0
1°	4703.4
1.5°	4604.3
2°	4454.0
2.5°	4276.3
3°	4053.9
3.5°	3809.7
4°	3568.3
4.5°	3297.9
5°	3054.3
5.5°	2789.0
6°	2573.9
6.5°	2349.8
7°	2173.8
7.5°	1987.6
8°	1837.9
8.5°	1687.7
9°	1574.8
9.5°	1450.4
10°	1364.0
12.5°	1006.0
15°	807.1
17.5°	689.6
20°	598.4
22.5°	525.6
25°	466.1
27.5°	406.5
30°	326.3
32.5°	209.8
35°	111.8
37.5°	61.6
40°	39.0
42.5°	25.9
45°	16.4
47.5°	10.1
50°	4.8
52.5°	1.6
55°	1.1
57.5°	0.5
60°	0.5
62.5°	0.5
65°	0.5



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**CANDELA DISTRIBUTION (continued):**

	0°
72.5°	0.0
75°	0.0
77.5°	0.5
80°	0.5
82.5°	0.5
85°	0.5
87.5°	0.5
90°	0.0



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— 0°-180°







67.5°		0.5
70°		0.0



(END OF REPORT)