

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: P593525

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

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593525  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-3)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC810D010-HM80520850-81NDW  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1159.1 lumens  
Efficiency: N/A  
Efficacy: 117.1 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.06 / 0.92  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

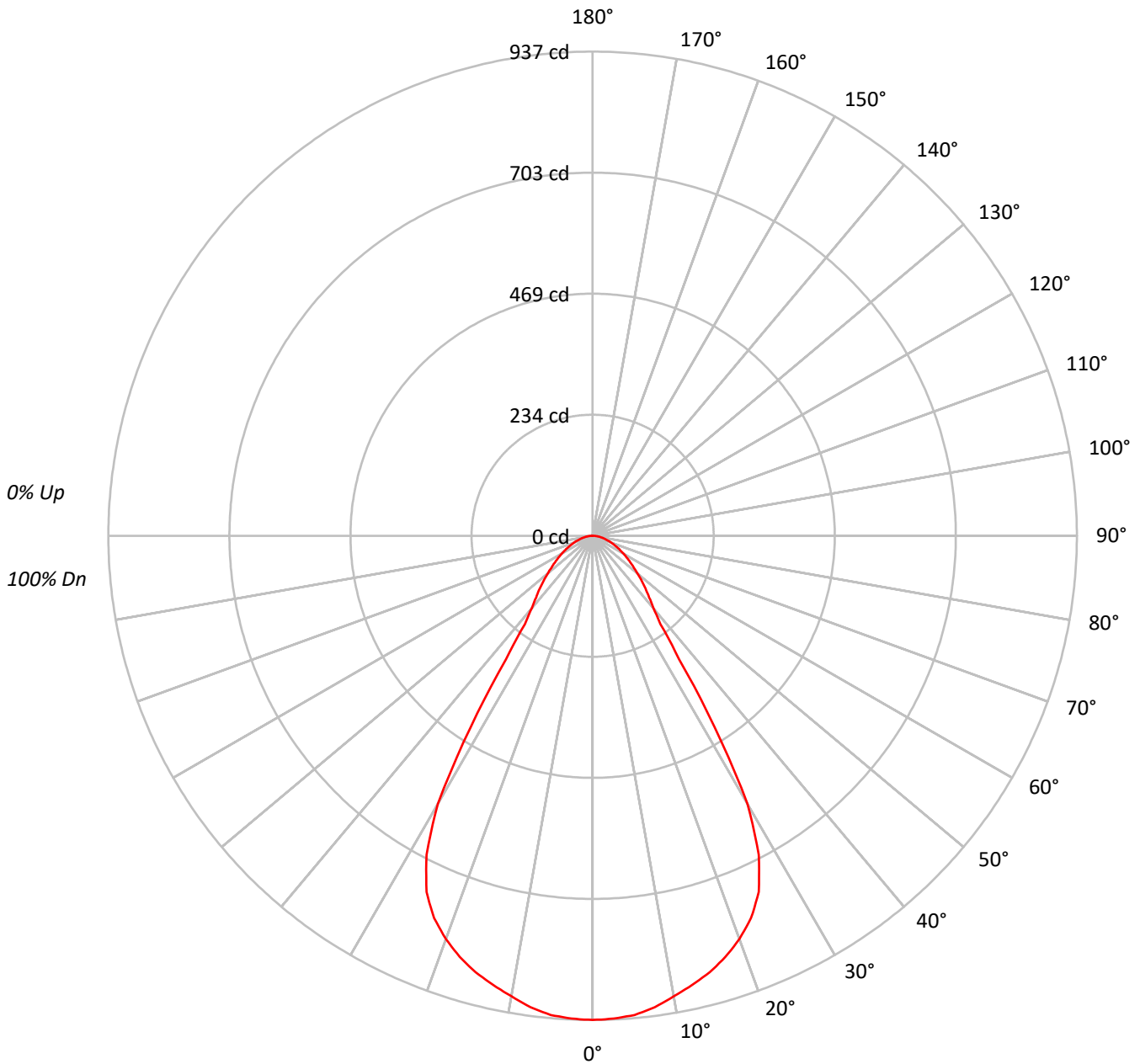
Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81																			
3	98	90	84	79	96	89	83	79	86	81	77	84	80	76	81	78	75	73																			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	75	72	68	67																			
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61																			
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56																			
7	77	66	59	54	76	66	59	54	64	58	54	63	58	54	62	57	53	52																			
8	73	62	55	50	71	61	55	50	60	54	50	59	54	50	58	53	49	48																			
9	69	58	51	47	68	57	51	47	56	51	46	55	50	46	55	50	46	45																			
10	65	55	48	44	64	54	48	44	53	47	43	52	47	43	52	47	43	42																			

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

	0°
0°	28894
5°	28815
10°	28337
15°	27924
20°	27253
25°	25872
30°	21339
35°	10985
40°	7354
45°	6306
50°	5445
55°	4747
60°	4218
65°	3787
70°	3435
75°	3098
80°	2770
85°	2760



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.0	7.6
10°-20°	246.1	21.2
20°-30°	341.0	29.4
30°-40°	204.8	17.7
40°-50°	112.1	9.7
50°-60°	79.6	6.9
60°-70°	51.7	4.5
70°-80°	27.6	2.4
80°-90°	8.3	0.7
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°	675.1	58.2
0°-40°	879.8	75.9
0°-60°	1071.6	92.4
0°-90°	1159.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1159.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	937	
5°	931	88
15°	875	246
25°	760	341
35°	292	205
45°	145	112
55°	88	80
65°	52	52
75°	26	28
85°	8	8
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	937.0
2.5°	935.3
5°	930.9
7.5°	920.5
10°	905.0
12.5°	890.2
15°	874.7
17.5°	854.7
20°	830.5
22.5°	801.0
25°	760.4
27.5°	696.2
30°	599.3
32.5°	439.1
35°	291.8
37.5°	215.6
40°	182.7
42.5°	161.9
45°	144.6
47.5°	128.1
50°	113.5
52.5°	99.6
55°	88.3
57.5°	77.9
60°	68.4
62.5°	59.7
65°	51.9
67.5°	44.1
70°	38.1
72.5°	31.1
75°	26.0
77.5°	20.8
80°	15.6
82.5°	11.3
85°	7.8
87.5°	3.5
90°	0.0



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— 0°-180°







(END OF REPORT)