

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: P593521

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

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593521  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-4)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC810D010-HM80520850-81MDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

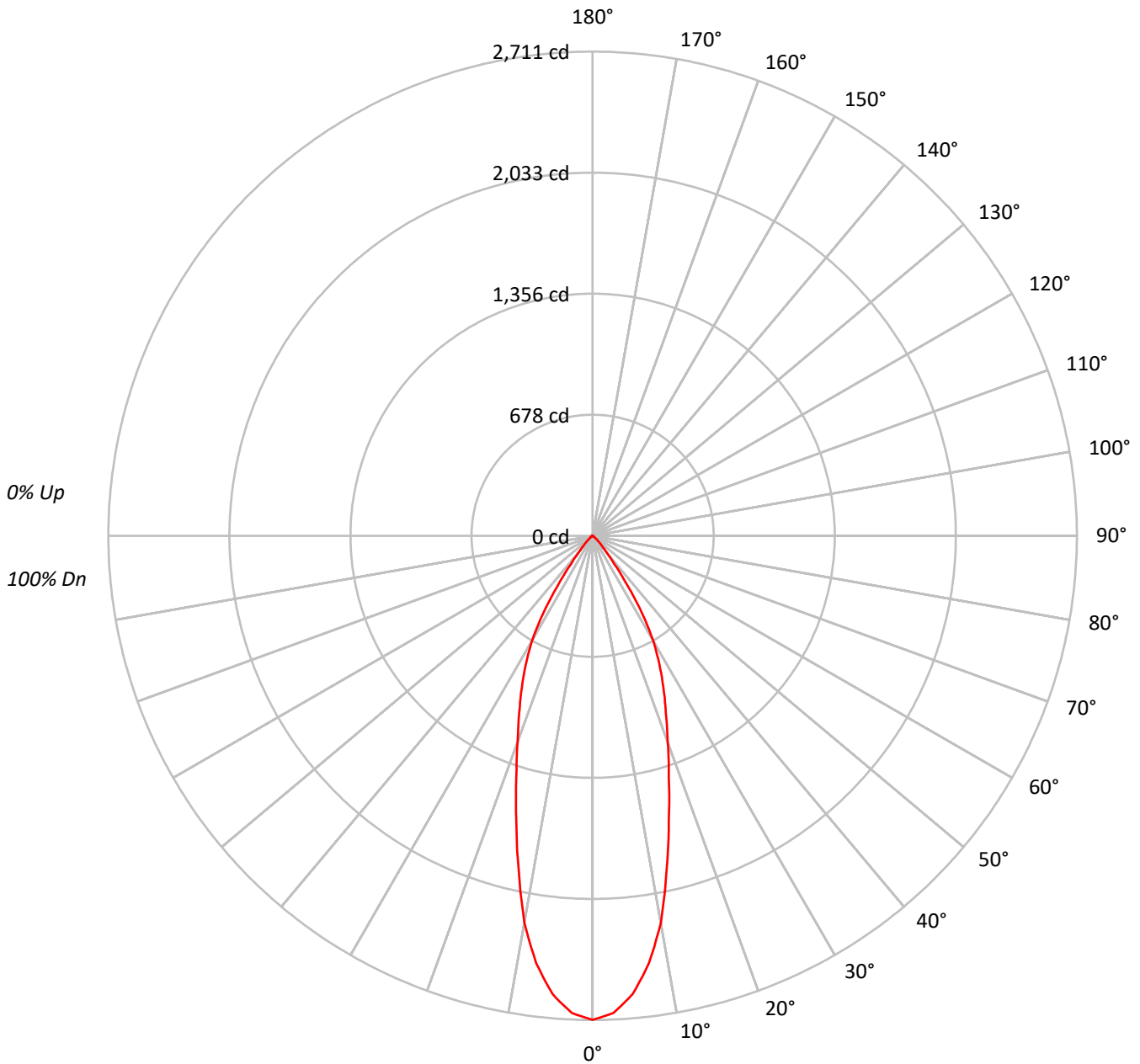
Lumens per Lamp: N/A  
Luminaire Lumens: 1398.9 lumens  
Efficiency: N/A  
Efficacy: 141.3 lumens/watt  
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.67  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

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	114	111	109	107	112	109	107	105	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	98	94	90	102	97	93	90	94	91	88	92	89	87	90	87	85	84			
4	100	93	88	84	98	92	87	83	90	86	82	88	84	82	86	83	81	79			
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75			
6	91	83	78	74	90	82	77	74	81	76	73	79	76	73	78	75	72	71			
7	87	79	73	70	86	78	73	69	77	72	69	76	72	69	75	71	68	67			
8	84	75	70	66	82	74	69	66	73	69	65	72	68	65	71	68	65	64			
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	65	62	61			
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	66	62	59	58			

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

	0°
0°	83585
5°	79753
10°	68858
15°	52652
20°	40284
25°	31870
30°	24074
35°	12810
40°	4879
45°	2342
50°	998
55°	419
60°	160
65°	124
70°	72
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	233.9	16.7
10°-20°	460.4	32.9
20°-30°	428.8	30.7
30°-40°	221.3	15.8
40°-50°	45.1	3.2
50°-60°	7.7	0.6
60°-70°	1.5	0.1
70°-80°	0.3	0.0
80°-90°	0.0	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°	1123.1	80.3
0°-40°	1344.4	96.1
0°-60°	1397.2	99.9
0°-90°	1398.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1398.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2711	
5°	2576	234
15°	1649	460
25°	937	429
35°	340	221
45°	54	45
55°	8	8
65°	2	1
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2710.6
2.5°	2674.3
5°	2576.5
7.5°	2415.4
10°	2199.1
12.5°	1915.0
15°	1649.3
17.5°	1419.0
20°	1227.6
22.5°	1071.8
25°	936.7
27.5°	808.6
30°	676.1
32.5°	518.5
35°	340.3
37.5°	197.4
40°	121.2
42.5°	79.7
45°	53.7
47.5°	33.8
50°	20.8
52.5°	12.1
55°	7.8
57.5°	3.5
60°	2.6
62.5°	1.7
65°	1.7
67.5°	0.8
70°	0.8
72.5°	0.8
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)