

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: P593559

Luminaire Tested: **HC815D010-HM80520850-81NDW**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593559  
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: HC815D010-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: 1591.2 lumens  
Efficiency: N/A  
Efficacy: 113.7 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

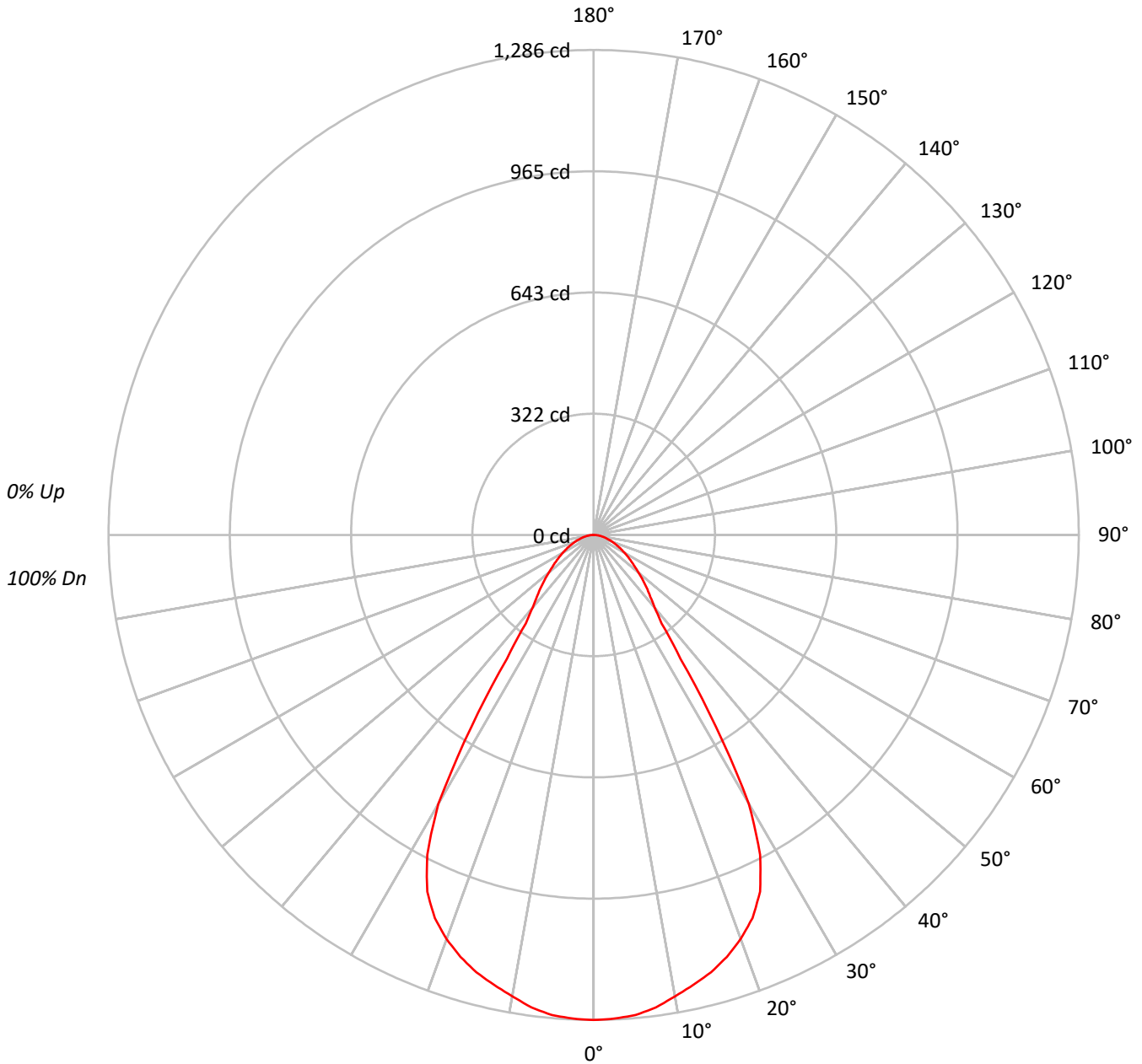
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	39662
5°	39556
10°	38896
15°	38331
20°	37413
25°	35514
30°	29294
35°	15084
40°	10100
45°	8656
50°	7469
55°	6516
60°	5791
65°	5202
70°	4715
75°	4253
80°	3800
85°	3786



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.8	7.6
10°-20°	337.8	21.2
20°-30°	468.1	29.4
30°-40°	281.1	17.7
40°-50°	153.9	9.7
50°-60°	109.3	6.9
60°-70°	71.0	4.5
70°-80°	38.0	2.4
80°-90°	11.3	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°	926.7	58.2
0°-40°	1207.8	75.9
0°-60°	1471.0	92.4
0°-90°	1591.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1591.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1286	
5°	1278	121
15°	1201	338
25°	1044	468
35°	401	281
45°	198	154
55°	121	109
65°	71	71
75°	36	38
85°	11	11
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1286.2
2.5°	1283.8
5°	1277.9
7.5°	1263.7
10°	1242.2
12.5°	1222.0
15°	1200.7
17.5°	1173.3
20°	1140.1
22.5°	1099.6
25°	1043.8
27.5°	955.8
30°	822.7
32.5°	602.7
35°	400.7
37.5°	295.9
40°	250.9
42.5°	222.3
45°	198.5
47.5°	175.9
50°	155.7
52.5°	136.6
55°	121.2
57.5°	107.0
60°	93.9
62.5°	82.1
65°	71.3
67.5°	60.6
70°	52.3
72.5°	42.8
75°	35.7
77.5°	28.6
80°	21.4
82.5°	15.4
85°	10.7
87.5°	4.7
90°	0.0



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— 0°-180°







(END OF REPORT)