

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: P584366

Luminaire Tested: **HC830D010-HM82555940-81WDW**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584366  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC830D010-HM82555940-81WDW  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3641.4 lumens  
Efficiency: N/A  
Efficacy: 130.1 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.06  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

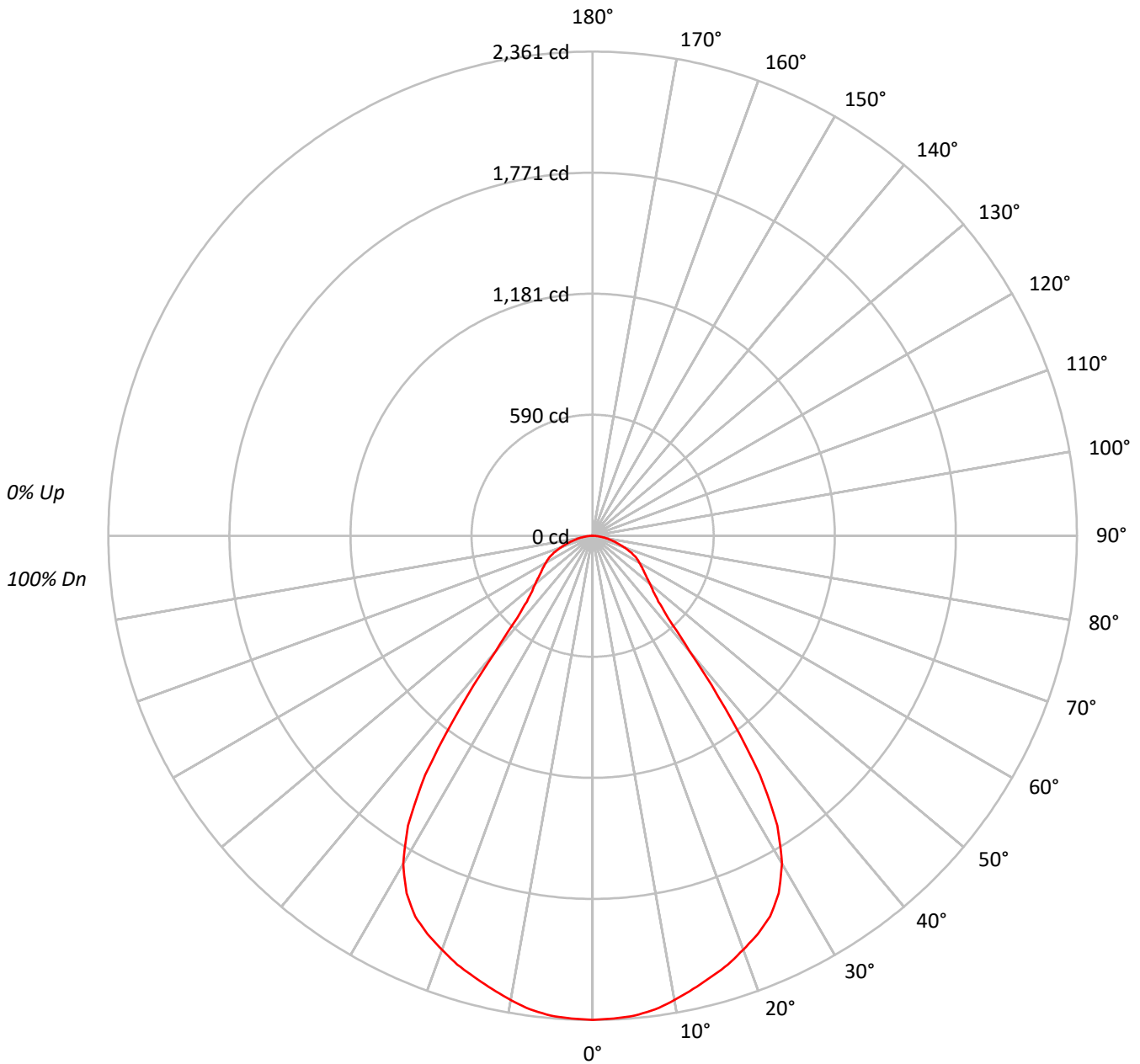
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89			89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79			79
3	97	88	82	76	94	87	81	76	84	79	75	81	77	73	79	75	72	70			70
4	90	80	73	68	88	79	73	67	77	71	67	75	70	66	73	68	65	63			63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57			57
6	79	68	61	55	77	67	60	55	65	59	55	64	58	54	62	58	54	52			52
7	74	63	56	50	73	62	55	50	61	54	50	59	54	50	58	53	49	48			48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44			44
9	66	54	47	43	65	54	47	42	53	47	42	52	46	42	51	46	42	40			40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37			37

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

	0°
0°	72801
5°	72711
10°	71993
15°	71130
20°	70474
25°	69678
30°	65748
35°	53538
40°	29579
45°	19746
50°	17510
55°	16440
60°	16226
65°	16081
70°	14534
75°	12987
80°	11365
85°	10048



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	222.6	6.1
10°-20°	629.1	17.3
20°-30°	934.8	25.7
30°-40°	841.9	23.1
40°-50°	373.2	10.2
50°-60°	276.4	7.6
60°-70°	214.9	5.9
70°-80°	116.5	3.2
80°-90°	31.9	0.9
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°	1786.5	49.1
0°-40°	2628.4	72.2
0°-60°	3278.0	90.0
0°-90°	3641.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3641.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2361	
5°	2349	223
15°	2228	629
25°	2048	935
35°	1422	842
45°	453	373
55°	306	276
65°	220	215
75°	109	117
85°	28	32
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2360.9
2.5°	2356.1
5°	2349.0
7.5°	2330.1
10°	2299.2
12.5°	2263.6
15°	2228.1
17.5°	2192.5
20°	2147.6
22.5°	2102.5
25°	2047.9
27.5°	1964.9
30°	1846.5
32.5°	1675.8
35°	1422.2
37.5°	1061.9
40°	734.8
42.5°	542.8
45°	452.8
47.5°	400.6
50°	365.0
52.5°	331.8
55°	305.8
57.5°	284.4
60°	263.1
62.5°	244.1
65°	220.4
67.5°	192.0
70°	161.2
72.5°	135.1
75°	109.0
77.5°	85.4
80°	64.0
82.5°	45.1
85°	28.4
87.5°	11.9
90°	0.0



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— 0°-180°







(END OF REPORT)