

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: P584636

Luminaire Tested: **HC840D010-HM82555940-81WDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584636  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-7)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC840D010-HM82555940-81WDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5545.6 lumens  
Efficiency: N/A  
Efficacy: 135.3 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.05  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

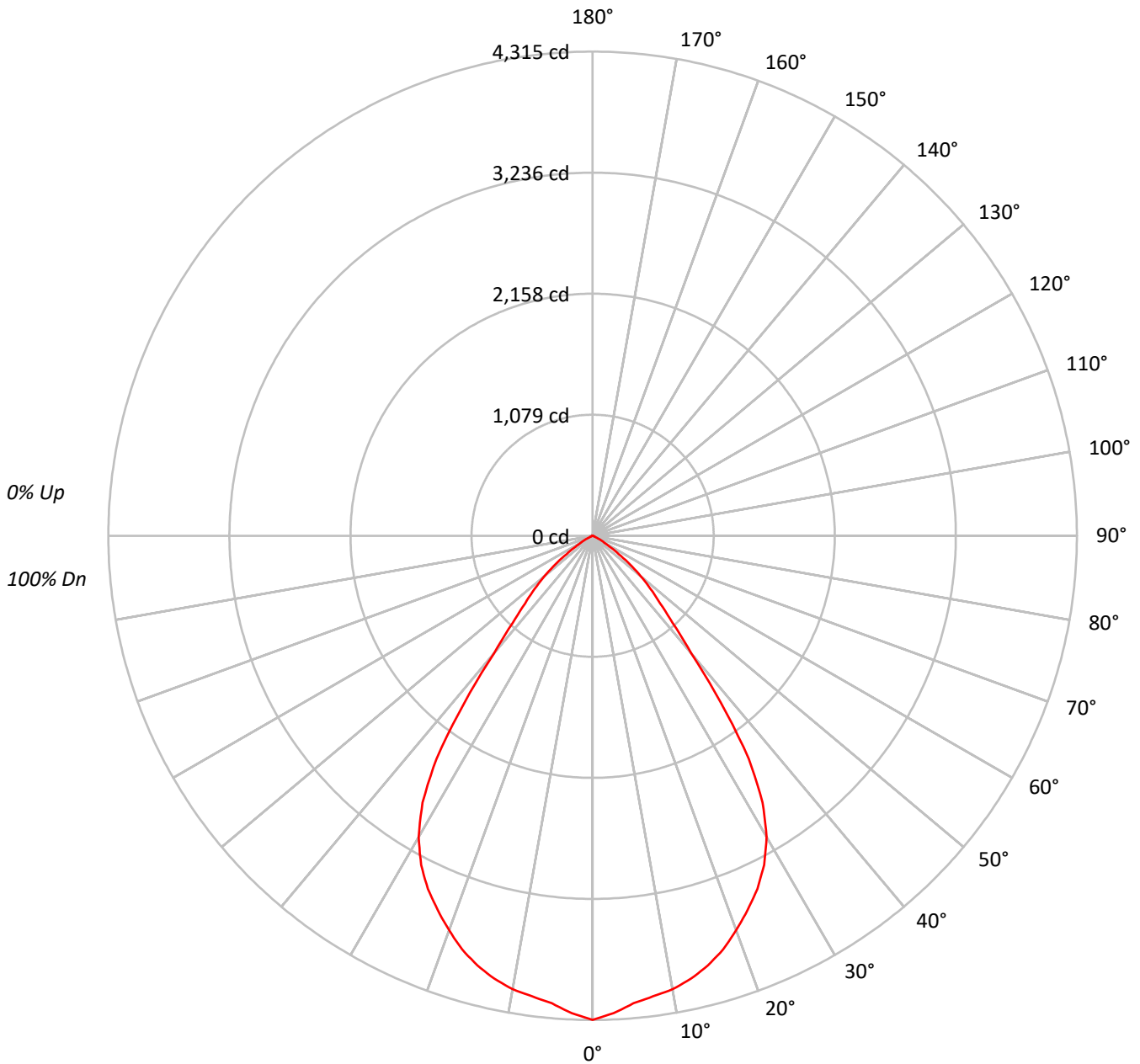
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P584636

CATALOG NUMBER: HC840D010-HM82555940-81WDC

### Luminous Intensity Polar Plot





TEST NUMBER: P584636

CATALOG NUMBER: HC840D010-HM82555940-81WDC

**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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92	92	92	92
2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86	84	84	84	84
3	100	93	87	83	98	91	86	82	89	84	81	86	83	79	84	81	78	77	77	77	77
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	71	70	70	70	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64	64	64	64
6	83	73	66	62	82	72	66	61	71	65	61	69	64	61	68	64	60	59	59	59	59
7	78	68	61	57	77	67	61	56	66	60	56	65	60	56	63	59	55	54	54	54	54
8	74	63	57	52	73	63	56	52	62	56	52	60	55	51	59	55	51	50	50	50	50
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46	46	46	46
10	66	55	49	45	65	55	49	45	54	48	44	53	48	44	52	48	44	43	43	43	43

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

	0°
0°	133049
5°	129472
10°	128489
15°	126573
20°	122739
25°	118162
30°	110381
35°	91340
40°	55148
45°	37142
50°	26764
55°	15263
60°	6716
65°	2408
70°	893
75°	393
80°	0
85°	0



TEST NUMBER: P584636

CATALOG NUMBER: HC840D010-HM82555940-81WDC

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	397.4	7.2
10°-20°	1114.3	20.1
20°-30°	1589.5	28.7
30°-40°	1447.4	26.1
40°-50°	682.8	12.3
50°-60°	268.5	4.8
60°-70°	42.8	0.8
70°-80°	3.0	0.1
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°	3101.1	55.9
0°-40°	4548.5	82.0
0°-60°	5499.8	99.2
0°-90°	5545.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5545.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4315	
5°	4183	397
15°	3965	1114
25°	3473	1589
35°	2426	1447
45°	852	683
55°	284	268
65°	33	43
75°	3	3
85°	0	0
90°	0	



TEST NUMBER: P584636

CATALOG NUMBER: HC840D010-HM82555940-81WDC

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	4314.7
2.5°	4258.7
5°	4182.7
7.5°	4139.8
10°	4103.5
12.5°	4044.1
15°	3964.8
17.5°	3865.8
20°	3740.3
22.5°	3608.3
25°	3472.9
27.5°	3307.8
30°	3100.0
32.5°	2819.2
35°	2426.4
37.5°	1875.1
40°	1370.0
42.5°	1053.1
45°	851.7
47.5°	699.8
50°	557.9
52.5°	419.2
55°	283.9
57.5°	178.3
60°	108.9
62.5°	66.0
65°	33.0
67.5°	16.5
70°	9.9
72.5°	3.3
75°	3.3
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)