

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: P592864

Luminaire Tested: **HC445D010-HM44560950-41NDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P592864  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-3)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC445D010-HM44560950-41NDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3566.9 lumens  
Efficiency: N/A  
Efficacy: 81.1 lumens/watt  
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1.01  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

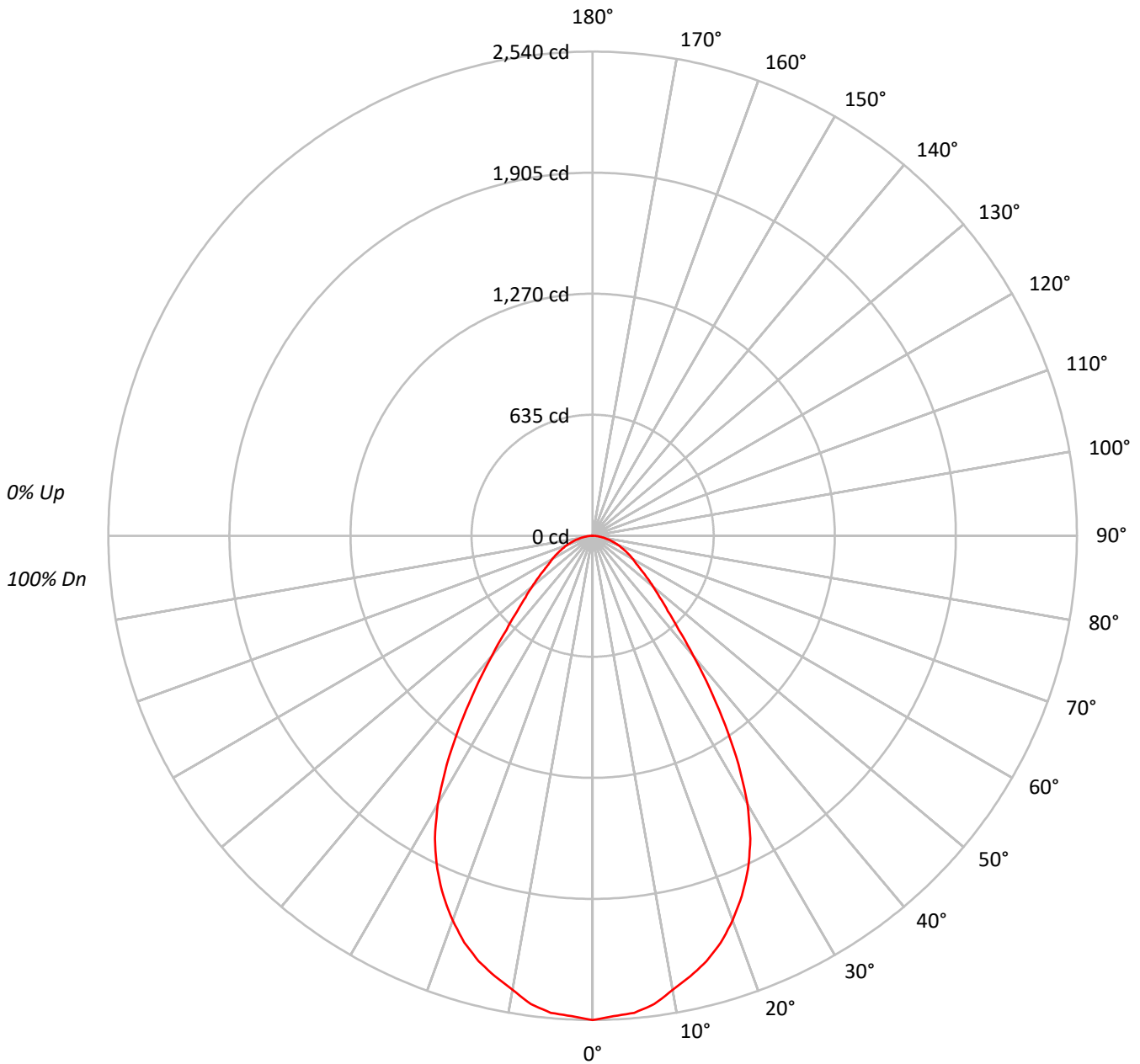
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P592864

CATALOG NUMBER: HC445D010-HM44560950-41NDW

### Luminous Intensity Polar Plot





TEST NUMBER: P592864

CATALOG NUMBER: HC445D010-HM44560950-41NDW

**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	97	98	96	94	94	92	91	89			89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79			79
3	97	88	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71			71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64			64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58			58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	55	63	58	54	52			52
7	75	63	56	51	73	62	56	51	61	55	50	60	54	50	59	53	50	48			48
8	70	59	52	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44			44
9	66	55	48	43	65	54	47	43	53	47	43	52	47	43	51	46	42	41			41
10	63	51	44	40	62	51	44	40	50	44	40	49	43	39	48	43	39	38			38

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

	0°
0°	313360
5°	311028
10°	302938
15°	294967
20°	281753
25°	262490
30°	231145
35°	182289
40°	132323
45°	97231
50°	79098
55°	66320
60°	60119
65°	55249
70°	51427
75°	46942
80°	42335
85°	36655



TEST NUMBER: P592864

CATALOG NUMBER: HC445D010-HM44560950-41NDW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	236.8	6.6
10°-20°	647.9	18.2
20°-30°	878.3	24.6
30°-40°	753.6	21.1
40°-50°	445.0	12.5
50°-60°	281.9	7.9
60°-70°	189.5	5.3
70°-80°	104.6	2.9
80°-90°	29.2	0.8
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°	1763.0	49.4
0°-40°	2516.6	70.6
0°-60°	3243.5	90.9
0°-90°	3566.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3566.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2540	
5°	2512	237
15°	2310	648
25°	1929	878
35°	1211	754
45°	557	445
55°	308	282
65°	189	189
75°	98	105
85°	26	29
90°	0	



TEST NUMBER: P592864

CATALOG NUMBER: HC445D010-HM44560950-41NDW

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2540.5
2.5°	2522.4
5°	2512.0
7.5°	2478.3
10°	2418.7
12.5°	2366.9
15°	2309.9
17.5°	2237.3
20°	2146.5
22.5°	2045.4
25°	1928.7
27.5°	1791.4
30°	1622.9
32.5°	1423.3
35°	1210.6
37.5°	1005.9
40°	821.8
42.5°	668.8
45°	557.4
47.5°	477.0
50°	412.2
52.5°	357.7
55°	308.4
57.5°	269.6
60°	243.7
62.5°	217.8
65°	189.3
67.5°	165.9
70°	142.6
72.5°	119.3
75°	98.5
77.5°	77.8
80°	59.6
82.5°	41.5
85°	25.9
87.5°	10.3
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)