

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: P580748

Luminaire Tested: **HC445D010-HM44560840-41NDC**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580748  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC445D010-HM44560840-41NDC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5021.7 lumens  
Efficiency: N/A  
Efficacy: 114.1 lumens/watt  
Spacing Criteria (0/90/45): 0.84 / 0.84 / 0.85  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

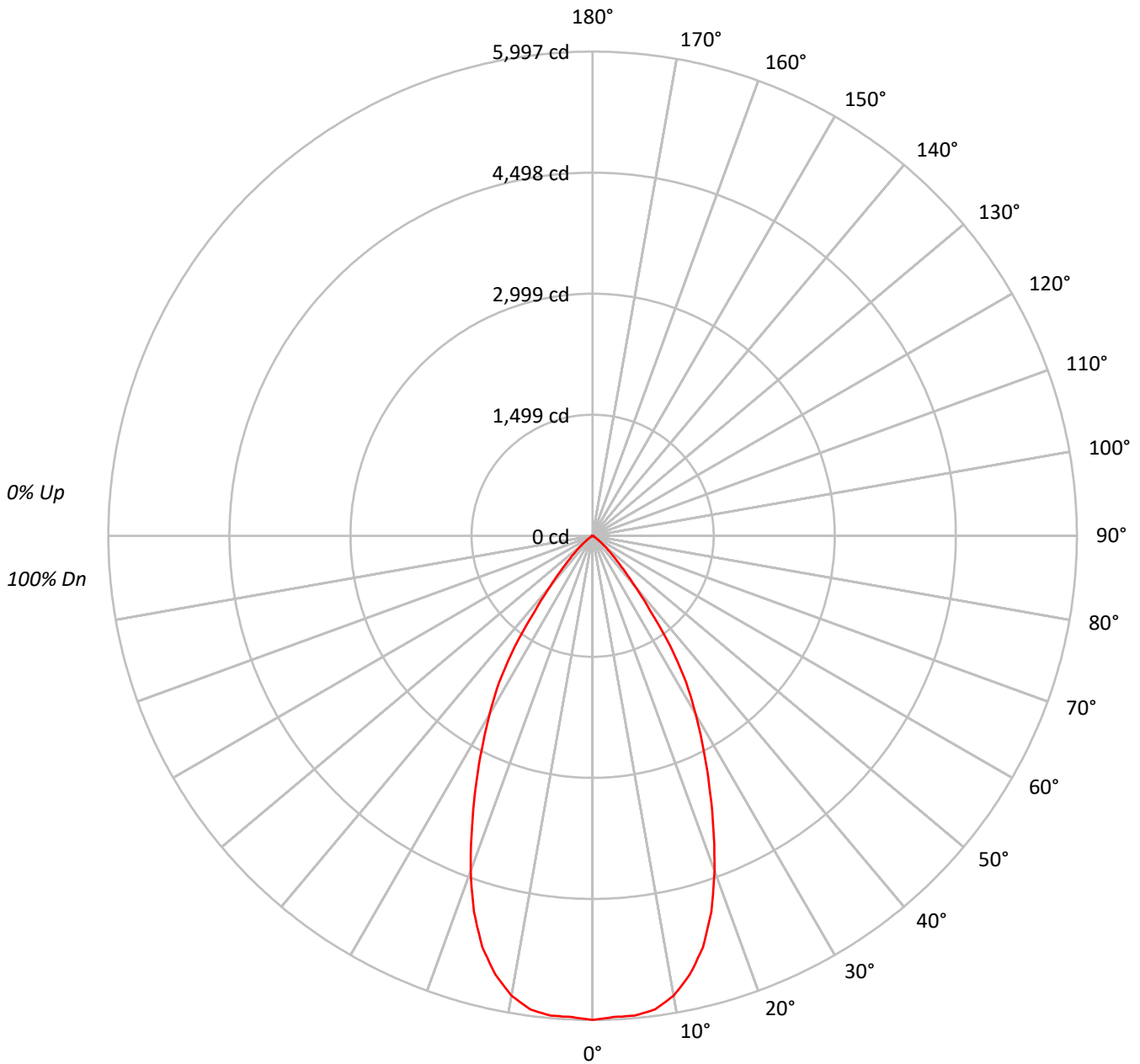
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P580748

CATALOG NUMBER: HC445D010-HM44560840-41NDC

### Luminous Intensity Polar Plot





TEST NUMBER: P580748

CATALOG NUMBER: HC445D010-HM44560840-41NDC

**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	108	106	111	109	106	104	105	103	101	101	100	98	97	96	95	94			
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	93	91	89	87			
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	88	85	83	81			
4	97	90	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76			
5	93	84	79	74	91	83	78	74	82	77	73	80	76	73	78	75	72	71			
6	88	79	73	69	87	78	73	69	77	72	68	75	71	68	74	70	67	66			
7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63	62			
8	80	70	64	60	78	70	64	60	69	64	60	68	63	60	67	62	59	58			
9	76	66	61	57	75	66	60	57	65	60	56	64	59	56	63	59	56	55			
10	72	63	57	53	71	62	57	53	62	57	53	61	56	53	60	56	53	51			

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

	0°
0°	739654
5°	738691
10°	724299
15°	673498
20°	579205
25°	465288
30°	363261
35°	254340
40°	130520
45°	66269
50°	33197
55°	12408
60°	5008
65°	3969
70°	2416
75°	1620
80°	2415
85°	0



TEST NUMBER: P580748

CATALOG NUMBER: HC445D010-HM44560840-41NDC

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	564.1	11.2
10°-20°	1455.8	29.0
20°-30°	1568.4	31.2
30°-40°	1030.5	20.5
40°-50°	320.4	6.4
50°-60°	62.9	1.3
60°-70°	13.4	0.3
70°-80°	4.9	0.1
80°-90°	1.4	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°	3588.3	71.5
0°-40°	4618.8	92.0
0°-60°	5002.1	99.6
0°-90°	5021.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5021.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5997	
5°	5966	564
15°	5274	1456
25°	3419	1568
35°	1689	1030
45°	380	320
55°	58	63
65°	14	13
75°	3	5
85°	0	1
90°	0	



TEST NUMBER: P580748

CATALOG NUMBER: HC445D010-HM44560840-41NDC

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	5996.6
2.5°	5966.0
5°	5966.0
7.5°	5918.6
10°	5782.9
12.5°	5565.8
15°	5274.2
17.5°	4884.1
20°	4412.6
22.5°	3903.9
25°	3418.8
27.5°	2967.8
30°	2550.5
32.5°	2157.2
35°	1689.1
37.5°	1177.0
40°	810.6
42.5°	559.7
45°	379.9
47.5°	257.7
50°	173.0
52.5°	108.5
55°	57.7
57.5°	23.8
60°	20.3
62.5°	16.9
65°	13.6
67.5°	10.2
70°	6.7
72.5°	6.7
75°	3.4
77.5°	3.4
80°	3.4
82.5°	3.4
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)