

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: P582641

Luminaire Tested: **HC645D010-HM64560927-61WDC**

Issue Date: 9/16/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P582641  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-7)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC645D010-HM64560927-61WDC  
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WIDE DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4092.4 lumens  
Efficiency: N/A  
Efficacy: 93.0 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.09  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

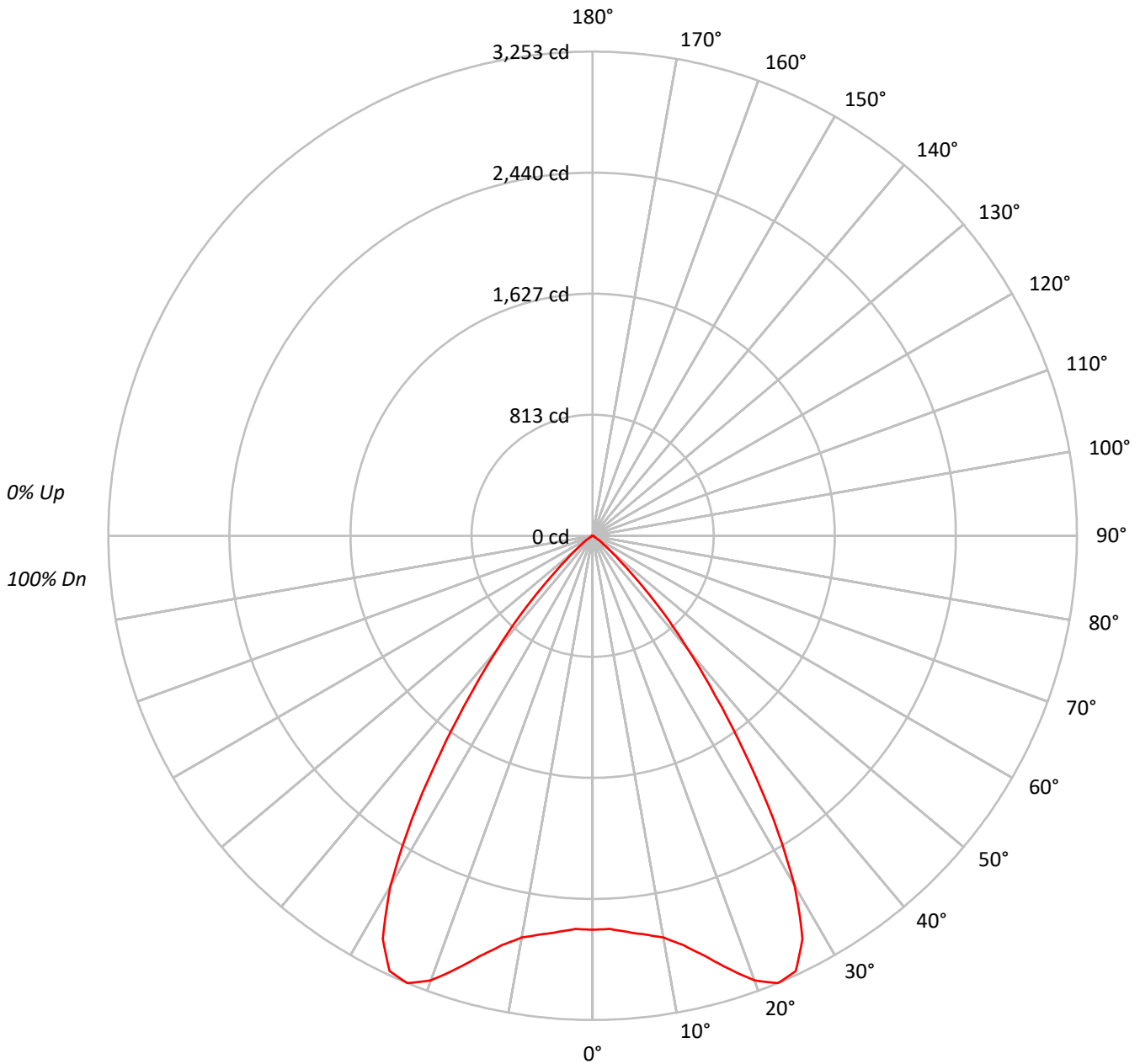
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100
1	113	110	108	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93	93	93	93
2	107	102	97	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	85	99	93	88	84	90	86	82	88	84	81	85	82	80	78	78	78	78
4	95	87	81	77	93	86	80	76	84	79	75	82	78	74	80	76	74	72	72	72	72
5	90	81	75	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66	66	66	66
6	85	75	69	64	83	74	68	64	73	67	63	71	67	63	70	66	62	61	61	61	61
7	80	70	63	59	79	69	63	59	68	62	58	67	62	58	66	61	58	56	56	56	56
8	76	65	59	54	74	65	59	54	64	58	54	62	57	54	61	57	53	52	52	52	52
9	71	61	55	50	70	60	54	50	60	54	50	59	53	50	58	53	50	48	48	48	48
10	68	57	51	47	67	57	51	47	56	50	46	55	50	46	54	50	46	45	45	45	45

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

	0°
0°	145082
5°	147034
10°	152547
15°	165892
20°	185475
25°	195223
30°	171862
35°	119203
40°	71183
45°	33841
50°	12767
55°	5333
60°	1667
65°	1323
70°	801
75°	551
80°	821
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	257.1	6.3
10°-20°	839.3	20.5
20°-30°	1438.2	35.1
30°-40°	1117.0	27.3
40°-50°	369.3	9.0
50°-60°	56.6	1.4
60°-70°	10.0	0.2
70°-80°	3.7	0.1
80°-90°	1.1	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°	2534.7	61.9
0°-40°	3651.7	89.2
0°-60°	4077.6	99.6
0°-90°	4092.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4092.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2646	
5°	2672	257
15°	2923	839
25°	3228	1438
35°	1781	1117
45°	436	369
55°	56	57
65°	10	10
75°	3	4
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2646.5
2.5°	2643.9
5°	2671.9
7.5°	2702.2
10°	2740.4
12.5°	2816.5
15°	2923.0
17.5°	3052.5
20°	3179.3
22.5°	3252.8
25°	3227.5
27.5°	3052.5
30°	2715.0
32.5°	2260.8
35°	1781.2
37.5°	1352.5
40°	994.7
42.5°	702.9
45°	436.5
47.5°	243.6
50°	149.7
52.5°	91.4
55°	55.8
57.5°	27.9
60°	15.2
62.5°	12.7
65°	10.2
67.5°	7.6
70°	5.0
72.5°	5.0
75°	2.6
77.5°	2.6
80°	2.6
82.5°	2.6
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)