

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: P593330

Luminaire Tested: **HC645D010-HM64560950-61WDC**

Issue Date: 9/16/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593330  
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-HM64560950-61WDC  
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WIDE DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5102.6 lumens  
Efficiency: N/A  
Efficacy: 116.0 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

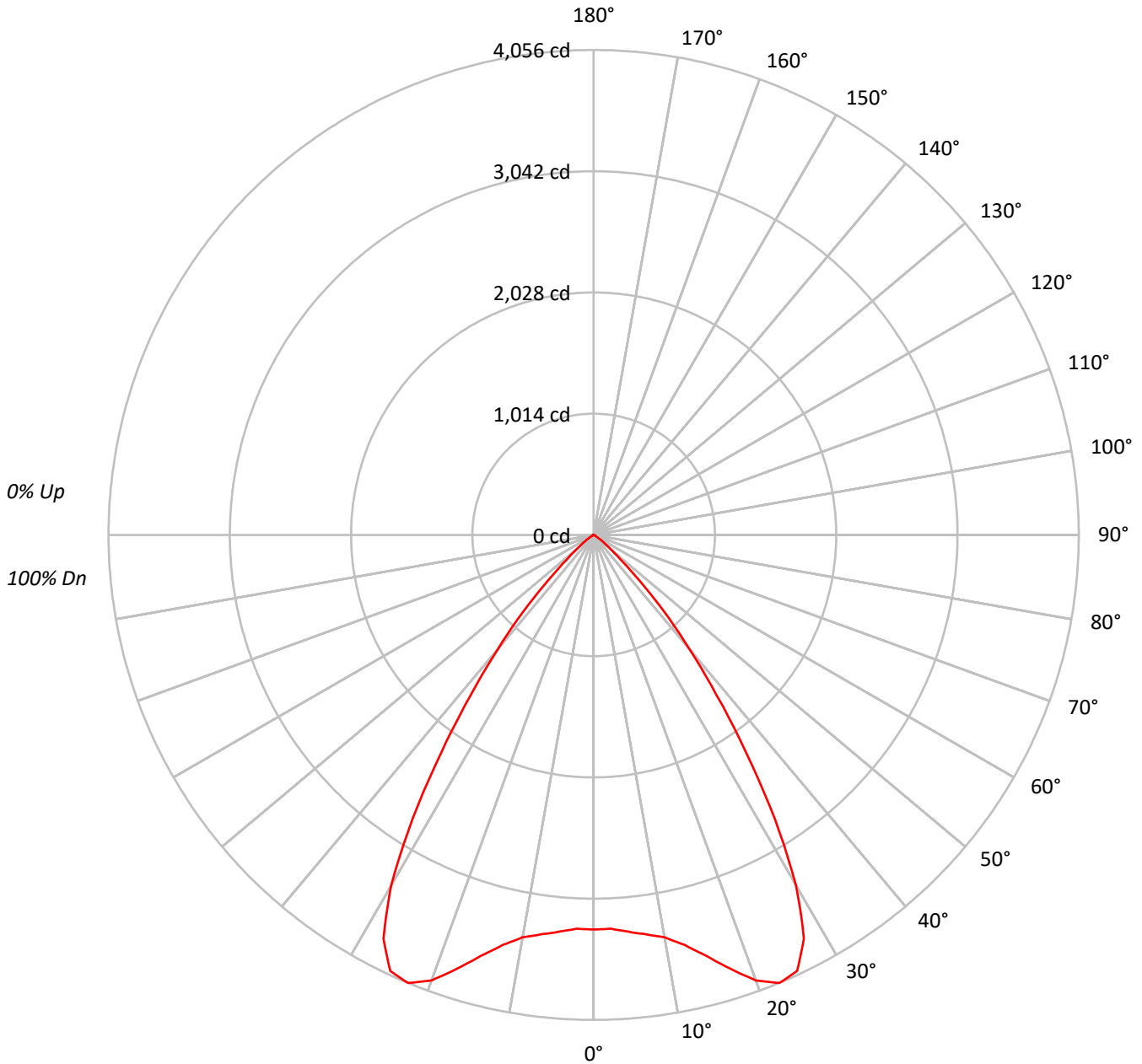
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°
0°	180896
5°	183326
10°	190199
15°	206846
20°	231265
25°	243419
30°	214292
35°	148636
40°	88752
45°	42190
50°	15914
55°	6652
60°	2083
65°	1647
70°	1010
75°	678
80°	1010
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	320.6	6.3
10°-20°	1046.5	20.5
20°-30°	1793.3	35.1
30°-40°	1392.7	27.3
40°-50°	460.4	9.0
50°-60°	70.6	1.4
60°-70°	12.5	0.2
70°-80°	4.6	0.1
80°-90°	1.3	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°	3160.5	61.9
0°-40°	4553.2	89.2
0°-60°	5084.2	99.6
0°-90°	5102.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5102.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3300	
5°	3331	321
15°	3645	1047
25°	4024	1793
35°	2221	1393
45°	544	460
55°	70	71
65°	13	12
75°	3	5
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3299.8
2.5°	3296.6
5°	3331.4
7.5°	3369.4
10°	3416.8
12.5°	3511.7
15°	3644.6
17.5°	3806.0
20°	3964.2
22.5°	4056.0
25°	4024.3
27.5°	3806.0
30°	3385.3
32.5°	2819.0
35°	2221.0
37.5°	1686.3
40°	1240.2
42.5°	876.3
45°	544.2
47.5°	303.7
50°	186.6
52.5°	113.9
55°	69.6
57.5°	34.8
60°	19.0
62.5°	15.8
65°	12.7
67.5°	9.5
70°	6.3
72.5°	6.3
75°	3.2
77.5°	3.2
80°	3.2
82.5°	3.2
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)