

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: P581040

Luminaire Tested: **HC405D010-HM40525840-41PSMDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581040  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC405D010-HM40525840-41PSMDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" PLASTIC TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 651.3 lumens  
Efficiency: N/A  
Efficacy: 108.6 lumens/watt  
Spacing Criteria (0/90/45): 1.03 / 1.03 / 0.99  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

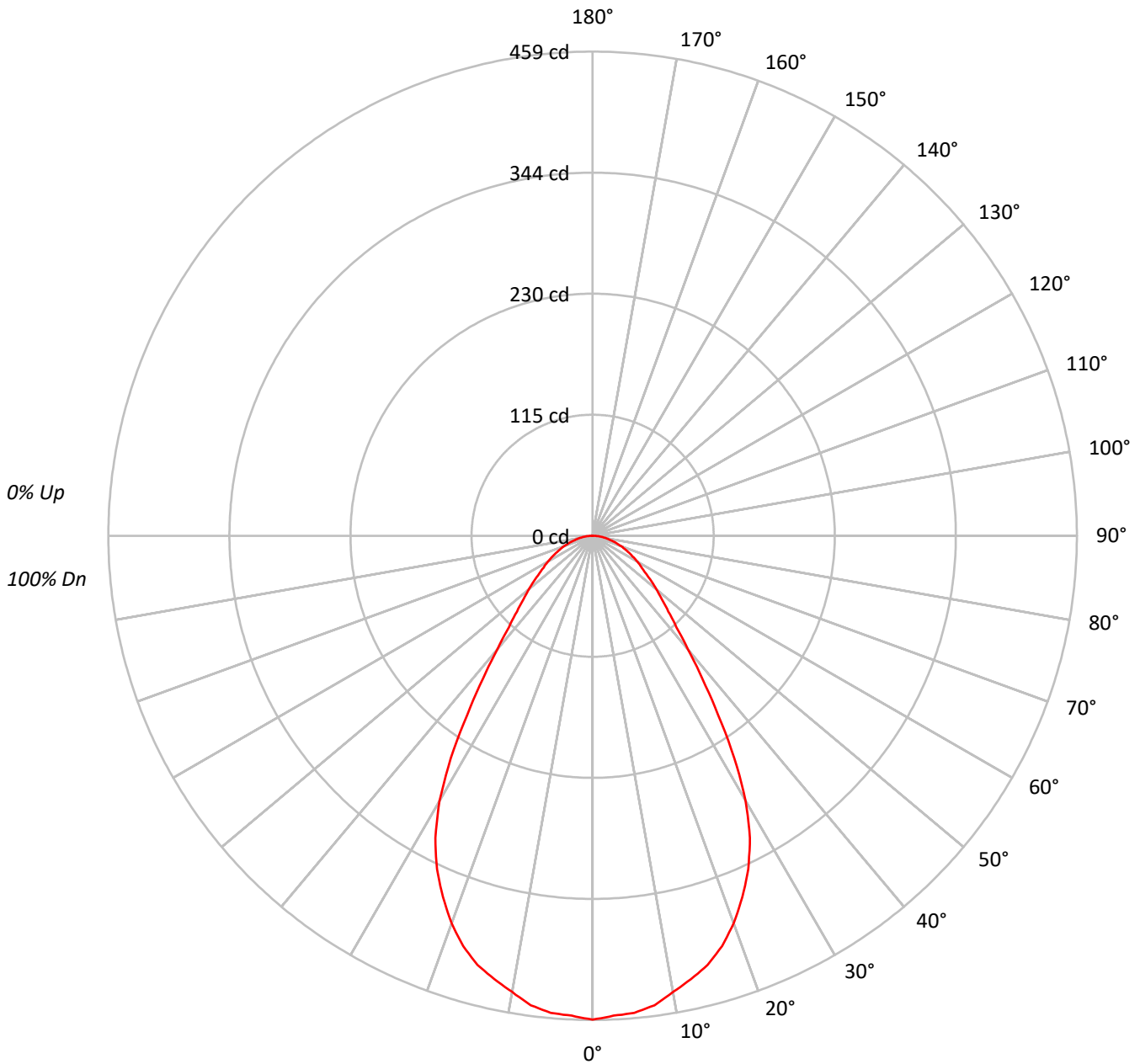
Input Watts (W): 6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89			
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70			
4	90	80	73	68	88	79	72	67	77	71	66	74	69	65	72	68	65	63			
5	84	74	66	61	82	72	66	60	71	64	60	69	63	59	67	62	59	57			
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47			
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44			
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40			
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37			

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

	0°
0°	56579
5°	56213
10°	55009
15°	53799
20°	51310
25°	47498
30°	41318
35°	31215
40°	22607
45°	17688
50°	15121
55°	13075
60°	12039
65°	11032
70°	10314
75°	9388
80°	8879
85°	8491



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.9	6.6
10°-20°	118.0	18.1
20°-30°	158.7	24.4
30°-40°	130.5	20.0
40°-50°	80.2	12.3
50°-60°	55.5	8.5
60°-70°	37.8	5.8
70°-80°	21.1	3.2
80°-90°	6.7	1.0
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°	319.6	49.1
0°-40°	450.1	69.1
0°-60°	585.8	89.9
0°-90°	651.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	651.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	459	
5°	454	43
15°	421	118
25°	349	159
35°	207	131
45°	101	80
55°	61	55
65°	38	38
75°	20	21
85°	6	7
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	458.7
2.5°	455.4
5°	454.0
7.5°	448.9
10°	439.2
12.5°	430.5
15°	421.3
17.5°	407.9
20°	390.9
22.5°	370.7
25°	349.0
27.5°	322.8
30°	290.1
32.5°	250.0
35°	207.3
37.5°	170.4
40°	140.4
42.5°	117.5
45°	101.4
47.5°	88.9
50°	78.8
52.5°	69.6
55°	60.8
57.5°	54.4
60°	48.8
62.5°	43.2
65°	37.8
67.5°	33.1
70°	28.6
72.5°	23.9
75°	19.7
77.5°	15.7
80°	12.5
82.5°	9.2
85°	6.0
87.5°	3.2
90°	0.0



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— 0°-180°







(END OF REPORT)