

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: P592559

Luminaire Tested: **HC405D010-HM40525950-41PSMDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P592559  
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-HM40525950-41PSMDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" PLASTIC TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 586.5 lumens  
Efficiency: N/A  
Efficacy: 97.8 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

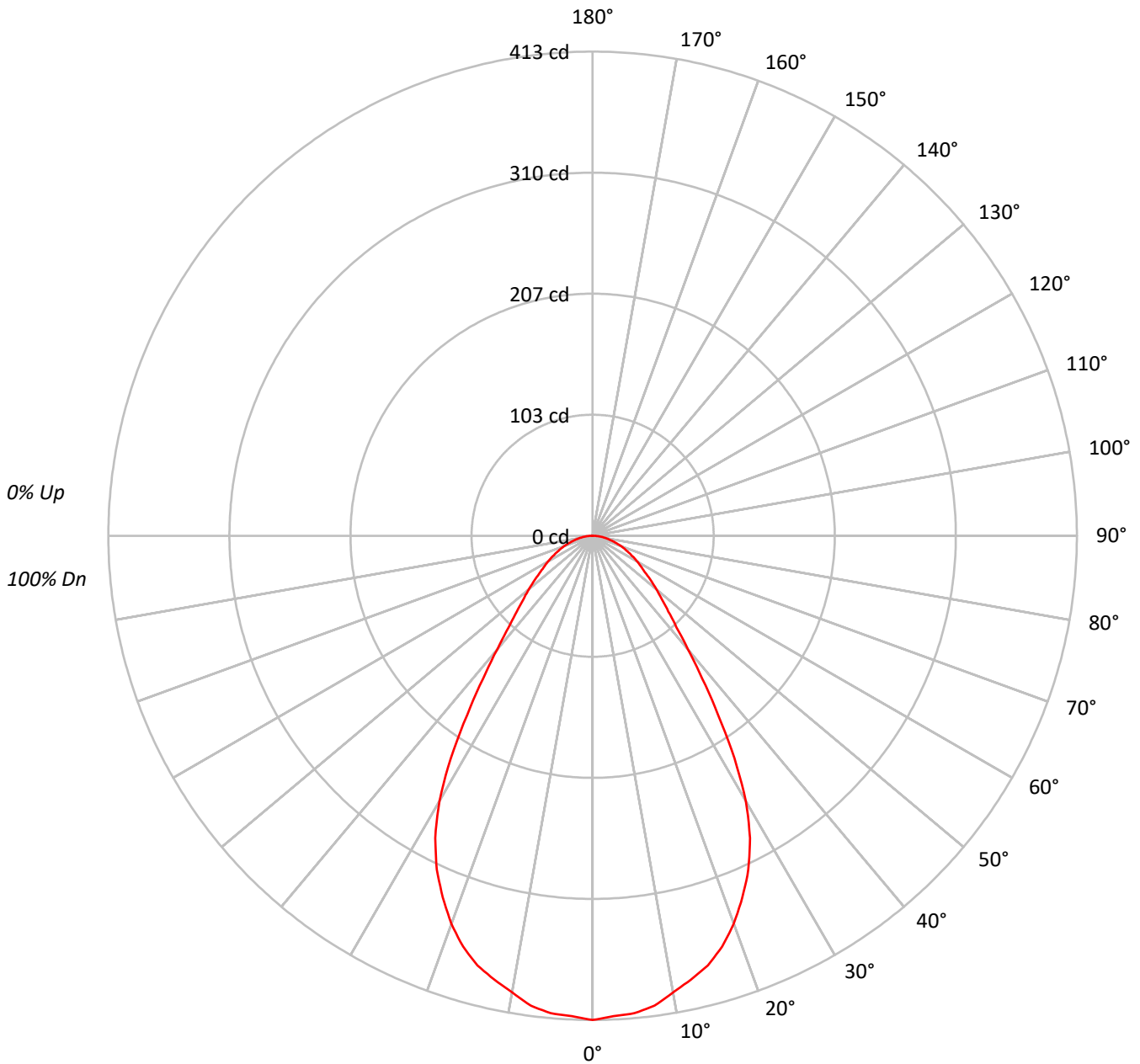
Input Watts (W): 6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			
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°	50942
5°	50616
10°	49536
15°	48448
20°	46217
25°	42775
30°	37216
35°	28098
40°	20352
45°	15926
50°	13605
55°	11763
60°	10830
65°	9923
70°	9304
75°	8483
80°	7956
85°	7501



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.6	6.6
10°-20°	106.3	18.1
20°-30°	142.9	24.4
30°-40°	117.5	20.0
40°-50°	72.2	12.3
50°-60°	49.9	8.5
60°-70°	34.0	5.8
70°-80°	19.0	3.2
80°-90°	6.0	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°	287.8	49.1
0°-40°	405.3	69.1
0°-60°	527.5	89.9
0°-90°	586.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	586.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	413	
5°	409	39
15°	379	106
25°	314	143
35°	187	118
45°	91	72
55°	55	50
65°	34	34
75°	18	19
85°	5	6
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	413.0
2.5°	410.1
5°	408.8
7.5°	404.3
10°	395.5
12.5°	387.7
15°	379.4
17.5°	367.4
20°	352.1
22.5°	333.8
25°	314.3
27.5°	290.7
30°	261.3
32.5°	225.2
35°	186.6
37.5°	153.5
40°	126.4
42.5°	105.8
45°	91.3
47.5°	80.0
50°	70.9
52.5°	62.7
55°	54.7
57.5°	48.9
60°	43.9
62.5°	38.9
65°	34.0
67.5°	29.9
70°	25.8
72.5°	21.6
75°	17.8
77.5°	14.1
80°	11.2
82.5°	8.3
85°	5.3
87.5°	3.0
90°	0.0



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— 0°-180°







(END OF REPORT)