

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: P581077

Luminaire Tested: **HC405D010-HM40525930-41WDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581077  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC405D010-HM40525930-41WDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 566.2 lumens  
Efficiency: N/A  
Efficacy: 94.4 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.07 / 1.04  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

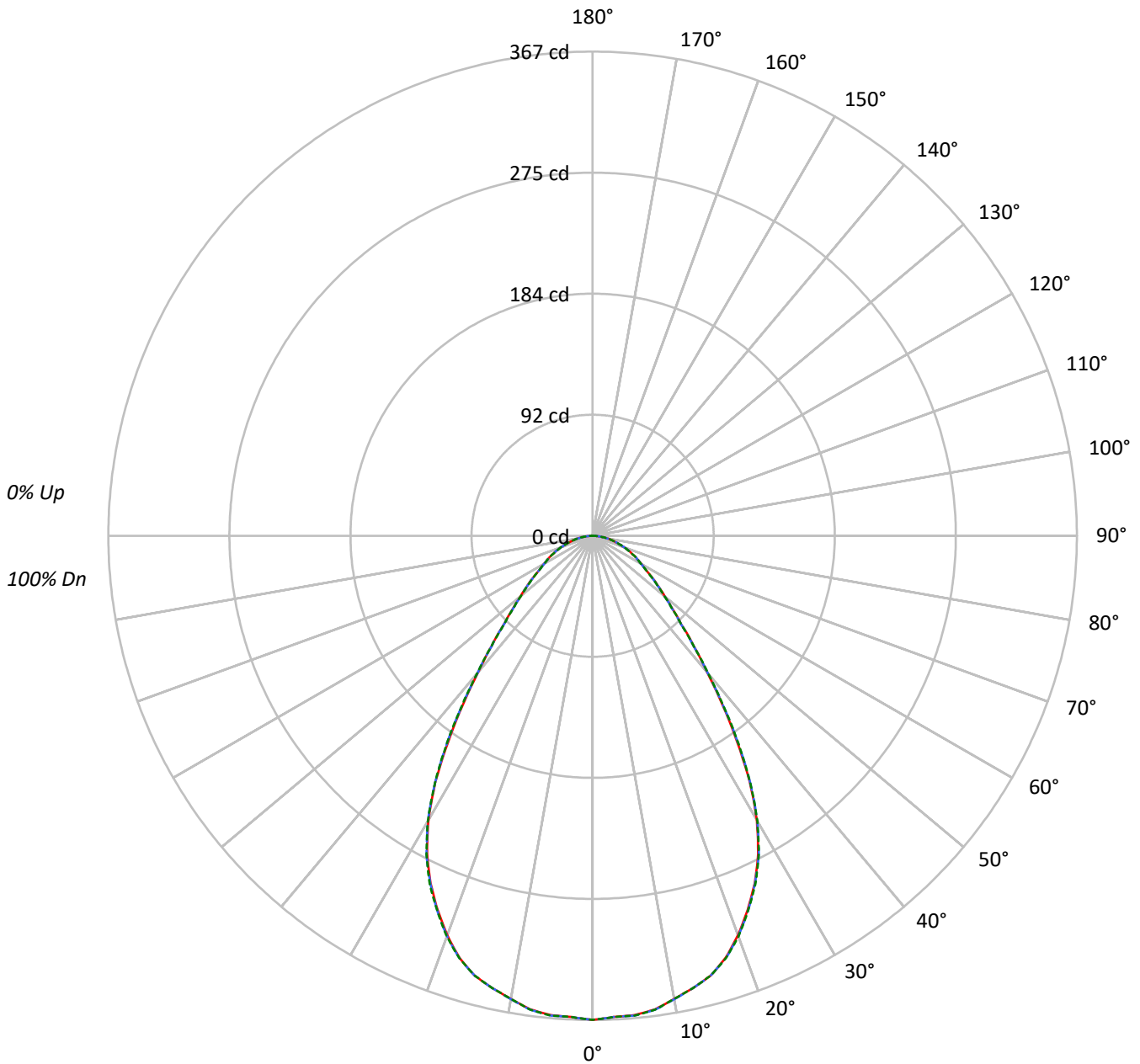
Input Watts (W): 6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	105	102	99	101	98	96	97	95	93	94	92	90	89								
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78								
3	96	87	81	76	94	86	80	75	83	78	74	81	76	72	78	74	71	69								
4	90	80	72	67	87	78	72	66	76	70	66	74	69	65	72	68	64	62								
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56								
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51								
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46								
8	69	57	50	45	68	57	50	45	55	49	45	54	49	44	53	48	44	42								
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39								
10	61	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36								

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

	0°	45°	90°
0°	45256	45256	45256
5°	45156	45206	45206
10°	44639	44676	44639
15°	44094	44094	44094
20°	42279	42384	42424
25°	39550	39604	39713
30°	35436	35550	35550
35°	28775	29001	29061
40°	21705	21834	21898
45°	16624	16572	16572
50°	13701	13644	13644
55°	11763	11699	11699
60°	10509	10410	10410
65°	9865	9865	9865
70°	9160	9160	9160
75°	8340	8483	8340
80°	7814	7600	7814
85°	6369	6369	6369



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.6	6.1
10°-20°	96.8	17.1
20°-30°	132.9	23.5
30°-40°	119.6	21.1
40°-50°	75.6	13.3
50°-60°	49.3	8.7
60°-70°	33.4	5.9
70°-80°	18.8	3.3
80°-90°	5.3	0.9
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°	264.3	46.7
0°-40°	383.8	67.8
0°-60°	508.7	89.8
0°-90°	566.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	566.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	367	367	367	367	367	
5°	365	365	365	365	365	35
15°	345	345	345	345	345	97
25°	291	291	291	292	292	133
35°	191	192	193	193	193	119
45°	95	95	95	95	95	76
55°	55	55	54	55	54	49
65°	34	34	34	34	34	33
75°	18	18	18	18	18	19
85°	4	4	4	4	4	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	366.9	366.9	366.9	366.9	366.9
2.5°	365.1	365.1	365.1	365.1	365.1
5°	364.7	364.7	365.1	365.1	365.1
7.5°	362.1	362.4	362.4	362.4	362.4
10°	356.4	356.4	356.7	356.7	356.4
12.5°	351.1	351.1	351.1	351.4	351.1
15°	345.3	345.3	345.3	345.3	345.3
17.5°	335.4	335.8	335.8	335.8	335.8
20°	322.1	322.9	322.9	323.2	323.2
22.5°	306.9	307.4	307.7	308.0	307.7
25°	290.6	291.0	291.0	291.8	291.8
27.5°	271.6	271.9	272.7	272.7	272.7
30°	248.8	249.2	249.6	249.6	249.6
32.5°	221.9	221.9	222.6	223.0	222.6
35°	191.1	191.8	192.6	193.4	193.0
37.5°	161.9	162.6	163.0	163.0	163.3
40°	134.8	135.6	135.6	136.4	136.0
42.5°	113.6	113.2	113.2	114.0	113.6
45°	95.3	95.0	95.0	95.0	95.0
47.5°	82.1	81.7	81.7	81.7	81.7
50°	71.4	71.1	71.1	71.1	71.1
52.5°	62.7	62.3	62.3	62.3	62.0
55°	54.7	54.7	54.4	54.7	54.4
57.5°	47.4	47.4	47.4	47.4	47.4
60°	42.6	42.2	42.2	42.2	42.2
62.5°	38.0	38.0	38.0	38.0	38.0
65°	33.8	33.8	33.8	33.8	33.8
67.5°	29.6	29.3	29.6	29.6	29.3
70°	25.4	25.1	25.4	25.4	25.4
72.5°	21.2	21.2	21.2	21.7	21.2
75°	17.5	17.8	17.8	17.8	17.5
77.5°	14.1	14.4	14.1	14.1	14.1
80°	11.0	10.7	10.7	10.7	11.0
82.5°	7.6	7.6	7.6	7.6	7.6
85°	4.5	4.5	4.5	4.5	4.5
87.5°	1.9	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)