

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: P579696

Luminaire Tested: **HC410D010-HM40525827-41WDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P579696  
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: HC410D010-HM40525827-41WDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 974.4 lumens  
Efficiency: N/A  
Efficacy: 98.4 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

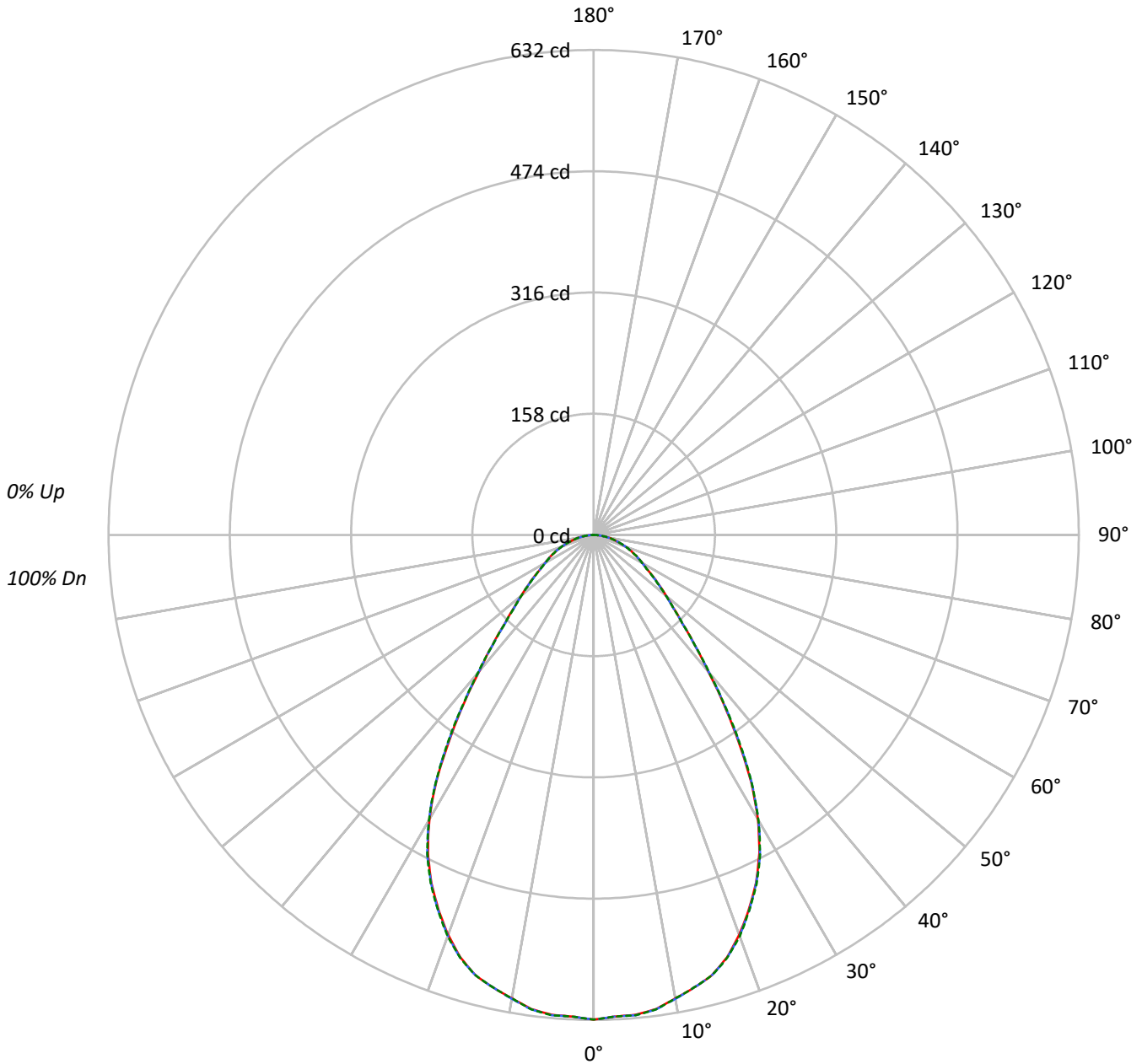
Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	77905	77905	77905
5°	77707	77794	77794
10°	76815	76903	76815
15°	75890	75890	75890
20°	72771	72942	73034
25°	68076	68157	68334
30°	60987	61187	61187
35°	49525	49916	50022
40°	37388	37581	37694
45°	28625	28503	28503
50°	23583	23449	23449
55°	20236	20107	20107
60°	18058	17910	17910
65°	16986	16986	16986
70°	15796	15796	15796
75°	14297	14631	14297
80°	13496	12999	13496
85°	11180	11180	11180



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.5	6.1
10°-20°	166.5	17.1
20°-30°	228.8	23.5
30°-40°	205.8	21.1
40°-50°	130.0	13.3
50°-60°	84.9	8.7
60°-70°	57.5	5.9
70°-80°	32.3	3.3
80°-90°	9.1	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°	454.9	46.7
0°-40°	660.6	67.8
0°-60°	875.4	89.8
0°-90°	974.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	974.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	628	628	628	628	628	59
15°	594	594	594	594	594	166
25°	500	501	501	502	502	228
35°	329	330	332	333	332	205
45°	164	163	163	163	163	130
55°	94	94	94	94	94	85
65°	58	58	58	58	58	58
75°	30	31	31	31	30	32
85°	8	8	8	8	8	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	631.6	631.6	631.6	631.6	631.6
2.5°	628.3	628.3	628.3	628.3	628.3
5°	627.6	627.6	628.3	628.3	628.3
7.5°	623.1	623.7	623.7	623.7	623.7
10°	613.3	613.3	614.0	614.0	613.3
12.5°	604.2	604.2	604.2	604.7	604.2
15°	594.3	594.3	594.3	594.3	594.3
17.5°	577.3	578.0	578.0	578.0	578.0
20°	554.4	555.7	555.7	556.4	556.4
22.5°	528.3	528.9	529.6	530.2	529.6
25°	500.2	500.8	500.8	502.1	502.1
27.5°	467.5	468.2	469.4	469.4	469.4
30°	428.2	428.9	429.6	429.6	429.6
32.5°	381.8	381.8	383.2	383.7	383.2
35°	328.9	330.1	331.5	332.8	332.2
37.5°	278.5	279.8	280.5	280.5	281.1
40°	232.2	233.4	233.4	234.8	234.1
42.5°	195.5	194.8	194.8	196.2	195.5
45°	164.1	163.4	163.4	163.4	163.4
47.5°	141.2	140.5	140.5	140.5	140.5
50°	122.9	122.2	122.2	122.2	122.2
52.5°	107.9	107.2	107.2	107.2	106.5
55°	94.1	94.1	93.5	94.1	93.5
57.5°	81.7	81.7	81.7	81.7	81.7
60°	73.2	72.6	72.6	72.6	72.6
62.5°	65.4	65.4	65.4	65.4	65.4
65°	58.2	58.2	58.2	58.2	58.2
67.5°	51.0	50.3	51.0	51.0	50.3
70°	43.8	43.1	43.8	43.8	43.8
72.5°	36.6	36.6	36.6	37.2	36.6
75°	30.0	30.7	30.7	30.7	30.0
77.5°	24.2	24.8	24.2	24.2	24.2
80°	19.0	18.3	18.3	18.3	19.0
82.5°	13.1	13.1	13.1	13.1	13.1
85°	7.9	7.9	7.9	7.9	7.9
87.5°	3.3	3.3	3.3	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







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







(END OF REPORT)