

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: P580987

Luminaire Tested: **HC405D010-HM40525827-41WDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580987
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-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: 594.9 lumens
Efficiency: N/A
Efficacy: 99.1 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

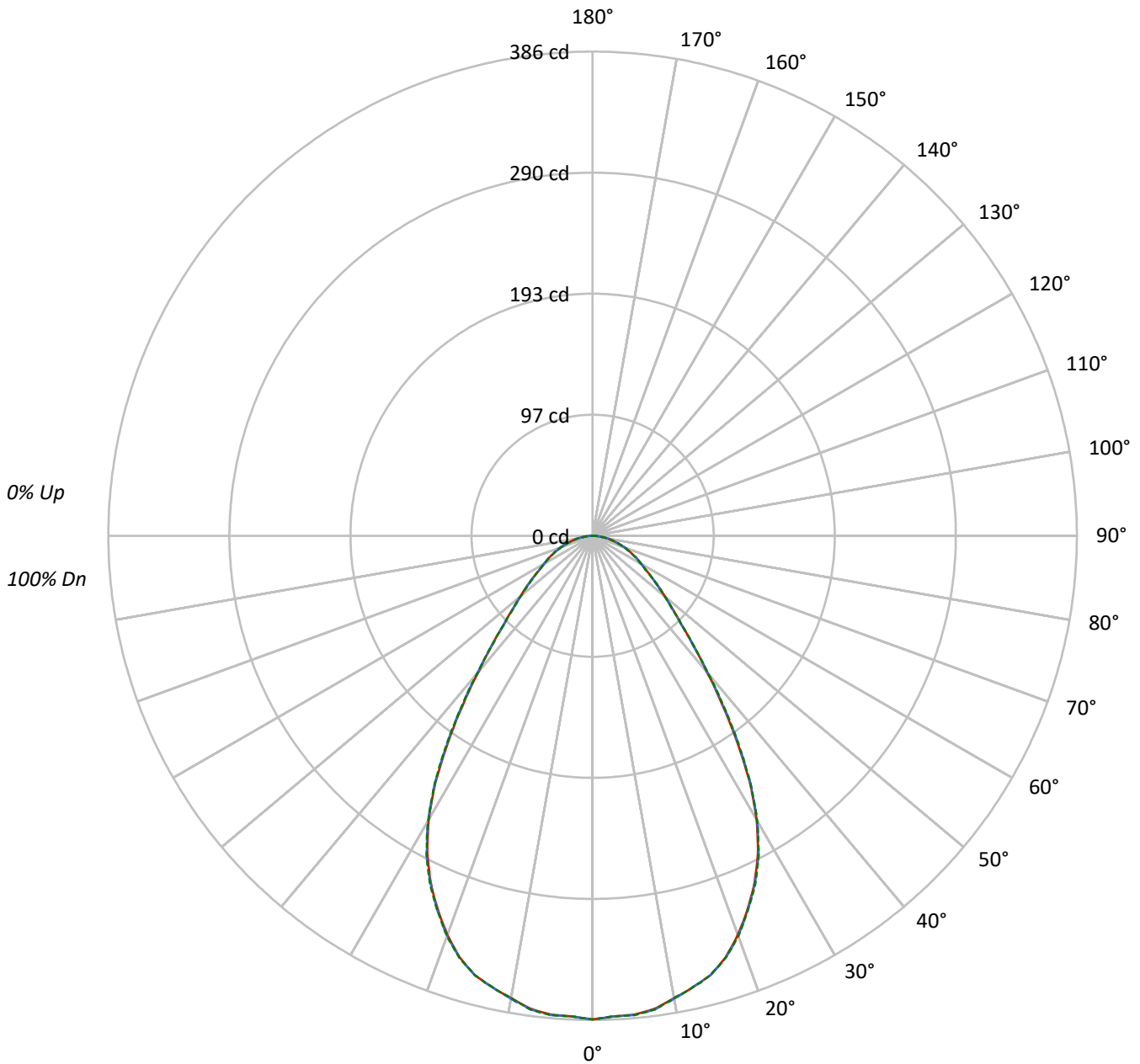
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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°	47562	47562	47562
5°	47447	47484	47484
10°	46880	46943	46880
15°	46316	46316	46316
20°	44432	44537	44576
25°	41550	41618	41727
30°	37230	37344	37344
35°	30236	30477	30522
40°	22800	22929	23009
45°	17479	17409	17409
50°	14392	14334	14334
55°	12344	12279	12279
60°	11027	10928	10928
65°	10361	10361	10361
70°	9665	9665	9665
75°	8769	8912	8769
80°	8240	7885	8240
85°	6793	6793	6793



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.3	6.1
10°-20°	101.6	17.1
20°-30°	139.7	23.5
30°-40°	125.6	21.1
40°-50°	79.4	13.3
50°-60°	51.8	8.7
60°-70°	35.1	5.9
70°-80°	19.8	3.3
80°-90°	5.5	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°	277.7	46.7
0°-40°	403.3	67.8
0°-60°	534.4	89.8
0°-90°	594.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	594.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	386	386	386	386	386	
5°	383	383	384	384	384	36
15°	363	363	363	363	363	102
25°	305	306	306	307	307	139
35°	201	202	202	203	203	125
45°	100	100	100	100	100	79
55°	57	57	57	57	57	52
65°	36	36	36	36	36	35
75°	18	19	19	19	18	20
85°	5	5	5	5	5	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	385.6	385.6	385.6	385.6	385.6
2.5°	383.5	383.5	383.5	383.5	383.5
5°	383.2	383.2	383.5	383.5	383.5
7.5°	380.3	380.8	380.8	380.8	380.8
10°	374.3	374.3	374.8	374.8	374.3
12.5°	368.8	368.8	368.8	369.2	368.8
15°	362.7	362.7	362.7	362.7	362.7
17.5°	352.4	352.8	352.8	352.8	352.8
20°	338.5	339.3	339.3	339.6	339.6
22.5°	322.5	322.9	323.2	323.7	323.2
25°	305.3	305.8	305.8	306.6	306.6
27.5°	285.3	285.8	286.6	286.6	286.6
30°	261.4	261.8	262.2	262.2	262.2
32.5°	233.1	233.1	233.9	234.3	233.9
35°	200.8	201.6	202.4	203.2	202.7
37.5°	170.0	170.8	171.3	171.3	171.6
40°	141.6	142.4	142.4	143.2	142.9
42.5°	119.3	118.9	118.9	119.7	119.3
45°	100.2	99.8	99.8	99.8	99.8
47.5°	86.3	85.8	85.8	85.8	85.8
50°	75.0	74.7	74.7	74.7	74.7
52.5°	65.8	65.5	65.5	65.5	65.0
55°	57.4	57.4	57.1	57.4	57.1
57.5°	49.9	49.9	49.9	49.9	49.9
60°	44.7	44.3	44.3	44.3	44.3
62.5°	40.0	40.0	40.0	40.0	40.0
65°	35.5	35.5	35.5	35.5	35.5
67.5°	31.1	30.8	31.1	31.1	30.8
70°	26.8	26.3	26.8	26.8	26.8
72.5°	22.4	22.4	22.4	22.7	22.4
75°	18.4	18.7	18.7	18.7	18.4
77.5°	14.8	15.2	14.8	14.8	14.8
80°	11.6	11.1	11.1	11.1	11.6
82.5°	7.9	7.9	7.9	7.9	7.9
85°	4.8	4.8	4.8	4.8	4.8
87.5°	2.0	2.0	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)