

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: P581113

Luminaire Tested: **HC405D010-HM40525940-41WDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P581113
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-HM40525940-41WDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 618.0 lumens
Efficiency: N/A
Efficacy: 103.0 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

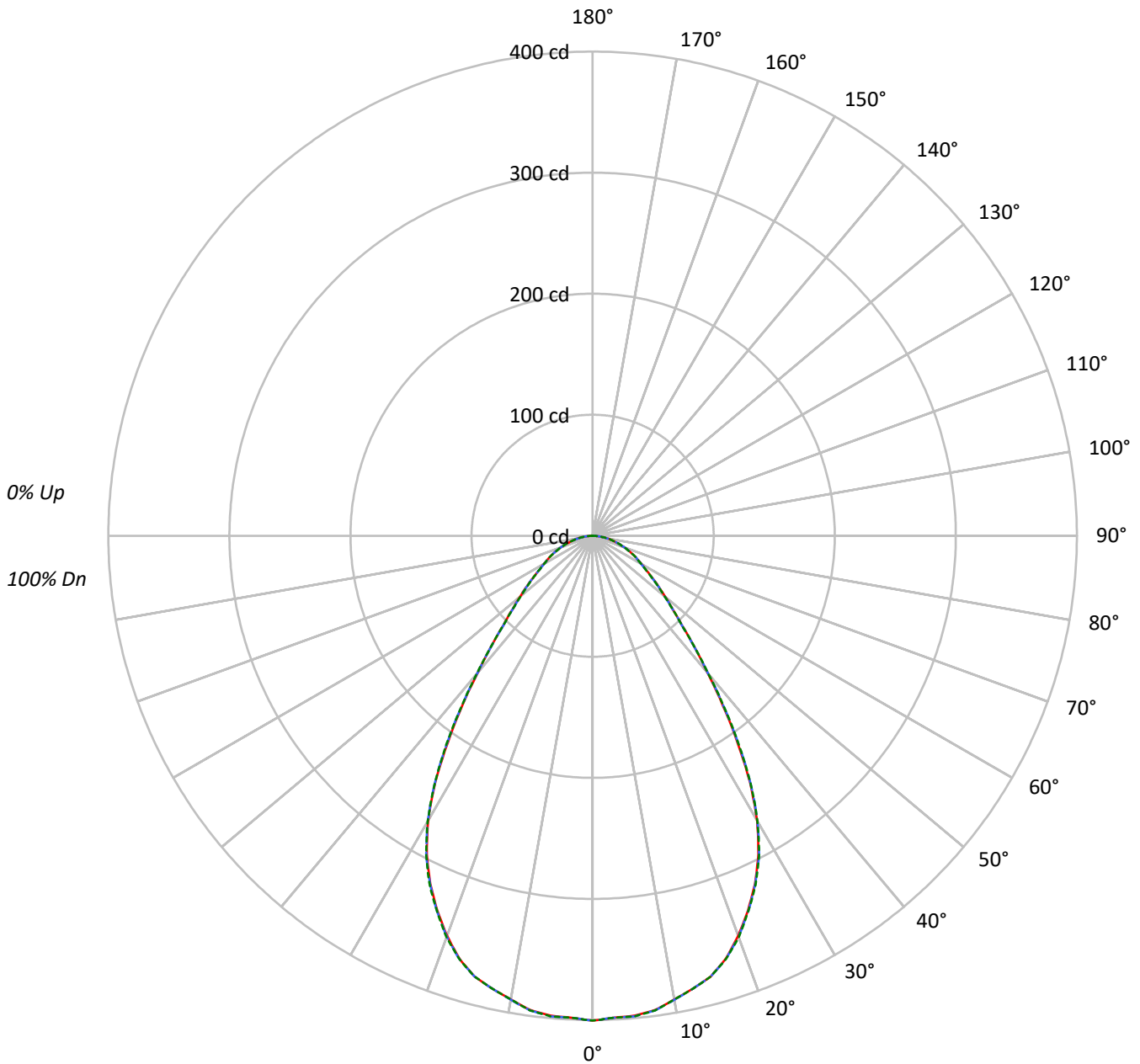
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	49400	49400	49400
5°	49279	49341	49341
10°	48722	48759	48722
15°	48129	48129	48129
20°	46152	46257	46322
25°	43170	43224	43347
30°	38683	38797	38797
35°	31410	31651	31727
40°	23702	23830	23911
45°	18159	18072	18072
50°	14968	14872	14872
55°	12838	12731	12731
60°	11446	11372	11372
65°	10770	10770	10770
70°	10026	10026	10026
75°	9103	9293	9103
80°	8524	8240	8524
85°	7076	7076	7076



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.7	6.1
10°-20°	105.6	17.1
20°-30°	145.1	23.5
30°-40°	130.5	21.1
40°-50°	82.4	13.3
50°-60°	53.8	8.7
60°-70°	36.5	5.9
70°-80°	20.5	3.3
80°-90°	5.8	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°	288.5	46.7
0°-40°	418.9	67.8
0°-60°	555.2	89.8
0°-90°	618.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	618.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	400	400	400	400	400	
5°	398	398	398	398	398	38
15°	377	377	377	377	377	106
25°	317	318	318	318	318	145
35°	209	209	210	211	211	130
45°	104	104	104	104	104	83
55°	60	60	59	60	59	54
65°	37	37	37	37	37	37
75°	19	20	20	20	19	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°	400.5	400.5	400.5	400.5	400.5
2.5°	398.5	398.5	398.5	398.5	398.5
5°	398.0	398.0	398.5	398.5	398.5
7.5°	395.2	395.5	395.5	395.5	395.5
10°	389.0	389.0	389.3	389.3	389.0
12.5°	383.2	383.2	383.2	383.5	383.2
15°	376.9	376.9	376.9	376.9	376.9
17.5°	366.2	366.5	366.5	366.5	366.5
20°	351.6	352.4	352.4	352.9	352.9
22.5°	335.1	335.4	335.8	336.3	335.8
25°	317.2	317.6	317.6	318.5	318.5
27.5°	296.5	296.9	297.7	297.7	297.7
30°	271.6	272.1	272.4	272.4	272.4
32.5°	242.1	242.1	243.0	243.3	243.0
35°	208.6	209.4	210.2	211.0	210.7
37.5°	176.6	177.5	177.9	177.9	178.3
40°	147.2	148.0	148.0	148.9	148.5
42.5°	123.9	123.6	123.6	124.4	123.9
45°	104.1	103.6	103.6	103.6	103.6
47.5°	89.6	89.1	89.1	89.1	89.1
50°	78.0	77.5	77.5	77.5	77.5
52.5°	68.4	68.0	68.0	68.0	67.5
55°	59.7	59.7	59.2	59.7	59.2
57.5°	51.9	51.9	51.9	51.9	51.9
60°	46.4	46.1	46.1	46.1	46.1
62.5°	41.4	41.4	41.4	41.4	41.4
65°	36.9	36.9	36.9	36.9	36.9
67.5°	32.3	31.9	32.3	32.3	31.9
70°	27.8	27.4	27.8	27.8	27.8
72.5°	23.3	23.3	23.3	23.6	23.3
75°	19.1	19.5	19.5	19.5	19.1
77.5°	15.3	15.8	15.3	15.3	15.3
80°	12.0	11.6	11.6	11.6	12.0
82.5°	8.3	8.3	8.3	8.3	8.3
85°	5.0	5.0	5.0	5.0	5.0
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)