

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: P579822

Luminaire Tested: **HC410D010-HM40525940-41WDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P579822
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-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: 1012.4 lumens
Efficiency: N/A
Efficacy: 102.3 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

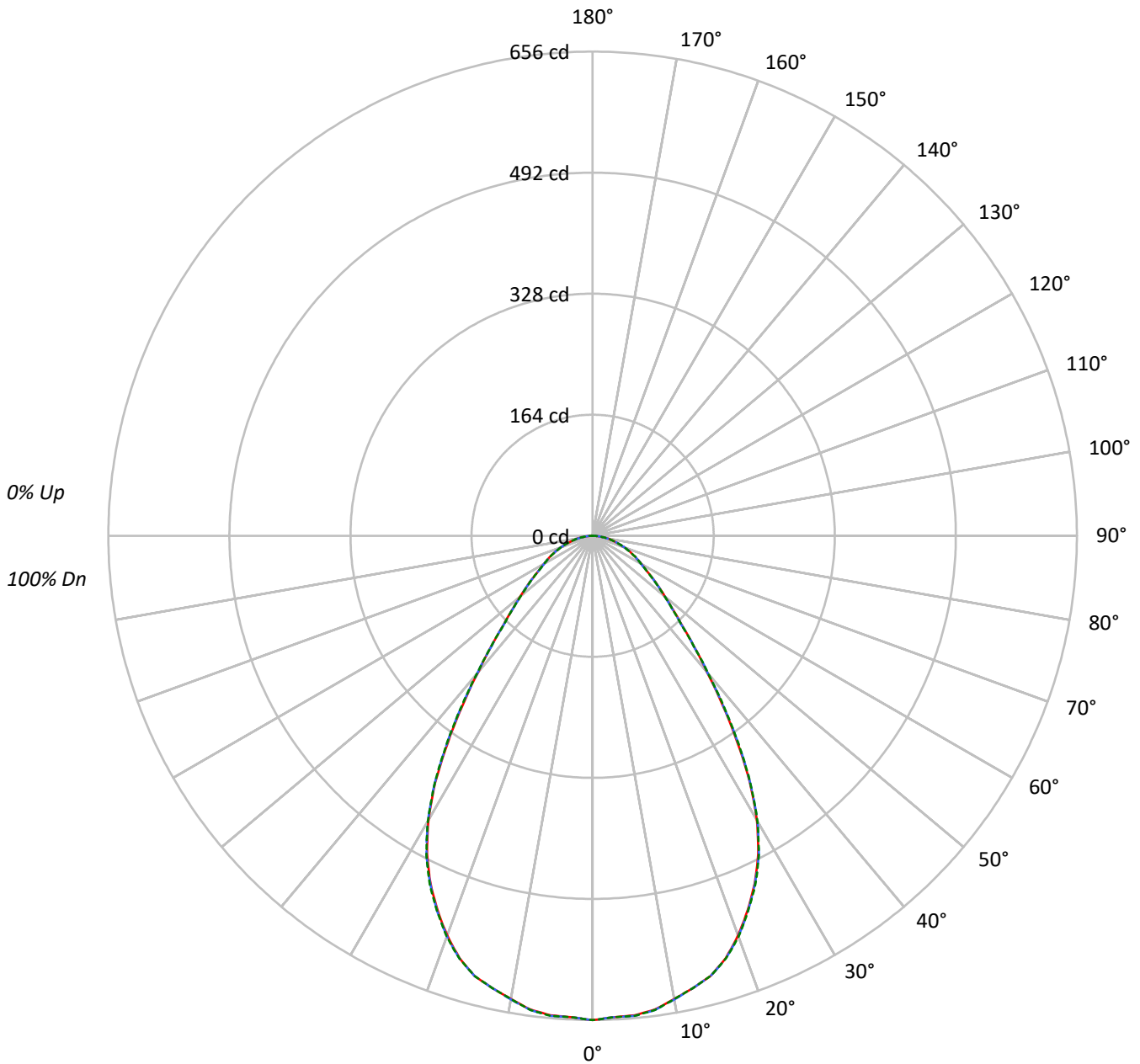
Input Watts (W): 9.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	80939	80939	80939
5°	80741	80828	80828
10°	79808	79883	79808
15°	78853	78853	78853
20°	75620	75790	75882
25°	70716	70811	71002
30°	63380	63565	63565
35°	51437	51859	51949
40°	38821	39046	39159
45°	29742	29619	29619
50°	24505	24370	24370
55°	21053	20903	20903
60°	18773	18601	18601
65°	17628	17628	17628
70°	16409	16409	16409
75°	14917	15250	14917
80°	13993	13496	13993
85°	11605	11605	11605



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.8	6.1
10°-20°	173.0	17.1
20°-30°	237.7	23.5
30°-40°	213.8	21.1
40°-50°	135.1	13.3
50°-60°	88.2	8.7
60°-70°	59.7	5.9
70°-80°	33.6	3.3
80°-90°	9.4	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°	472.6	46.7
0°-40°	686.3	67.8
0°-60°	909.6	89.8
0°-90°	1012.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1012.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	656	656	656	656	656	
5°	652	652	653	653	653	62
15°	618	618	618	618	618	173
25°	520	520	520	522	522	237
35°	342	343	344	346	345	213
45°	170	170	170	170	170	135
55°	98	98	97	98	97	89
65°	60	60	60	60	60	60
75°	31	32	32	32	31	33
85°	8	8	8	8	8	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	656.2	656.2	656.2	656.2	656.2
2.5°	652.8	652.8	652.8	652.8	652.8
5°	652.1	652.1	652.8	652.8	652.8
7.5°	647.3	648.0	648.0	648.0	648.0
10°	637.2	637.2	637.8	637.8	637.2
12.5°	627.6	627.6	627.6	628.3	627.6
15°	617.5	617.5	617.5	617.5	617.5
17.5°	599.8	600.4	600.4	600.4	600.4
20°	576.1	577.4	577.4	578.1	578.1
22.5°	548.9	549.5	550.2	550.9	550.2
25°	519.6	520.3	520.3	521.7	521.7
27.5°	485.7	486.4	487.7	487.7	487.7
30°	445.0	445.6	446.3	446.3	446.3
32.5°	396.7	396.7	398.1	398.8	398.1
35°	341.6	343.0	344.4	345.7	345.0
37.5°	289.4	290.8	291.4	291.4	292.1
40°	241.1	242.5	242.5	243.9	243.2
42.5°	203.1	202.5	202.5	203.8	203.1
45°	170.5	169.8	169.8	169.8	169.8
47.5°	146.7	146.0	146.0	146.0	146.0
50°	127.7	127.0	127.0	127.0	127.0
52.5°	112.1	111.4	111.4	111.4	110.7
55°	97.9	97.9	97.2	97.9	97.2
57.5°	84.9	84.9	84.9	84.9	84.9
60°	76.1	75.4	75.4	75.4	75.4
62.5°	67.9	67.9	67.9	67.9	67.9
65°	60.4	60.4	60.4	60.4	60.4
67.5°	53.0	52.3	53.0	53.0	52.3
70°	45.5	44.8	45.5	45.5	45.5
72.5°	38.0	38.0	38.0	38.7	38.0
75°	31.3	32.0	32.0	32.0	31.3
77.5°	25.1	25.8	25.1	25.1	25.1
80°	19.7	19.0	19.0	19.0	19.7
82.5°	13.5	13.5	13.5	13.5	13.5
85°	8.2	8.2	8.2	8.2	8.2
87.5°	3.4	3.4	3.4	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)