

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: P579858

Luminaire Tested: **HC415D010-HM40525830-41WDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P579858
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: HC415D010-HM40525830-41WDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1435.1 lumens
Efficiency: N/A
Efficacy: 102.5 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

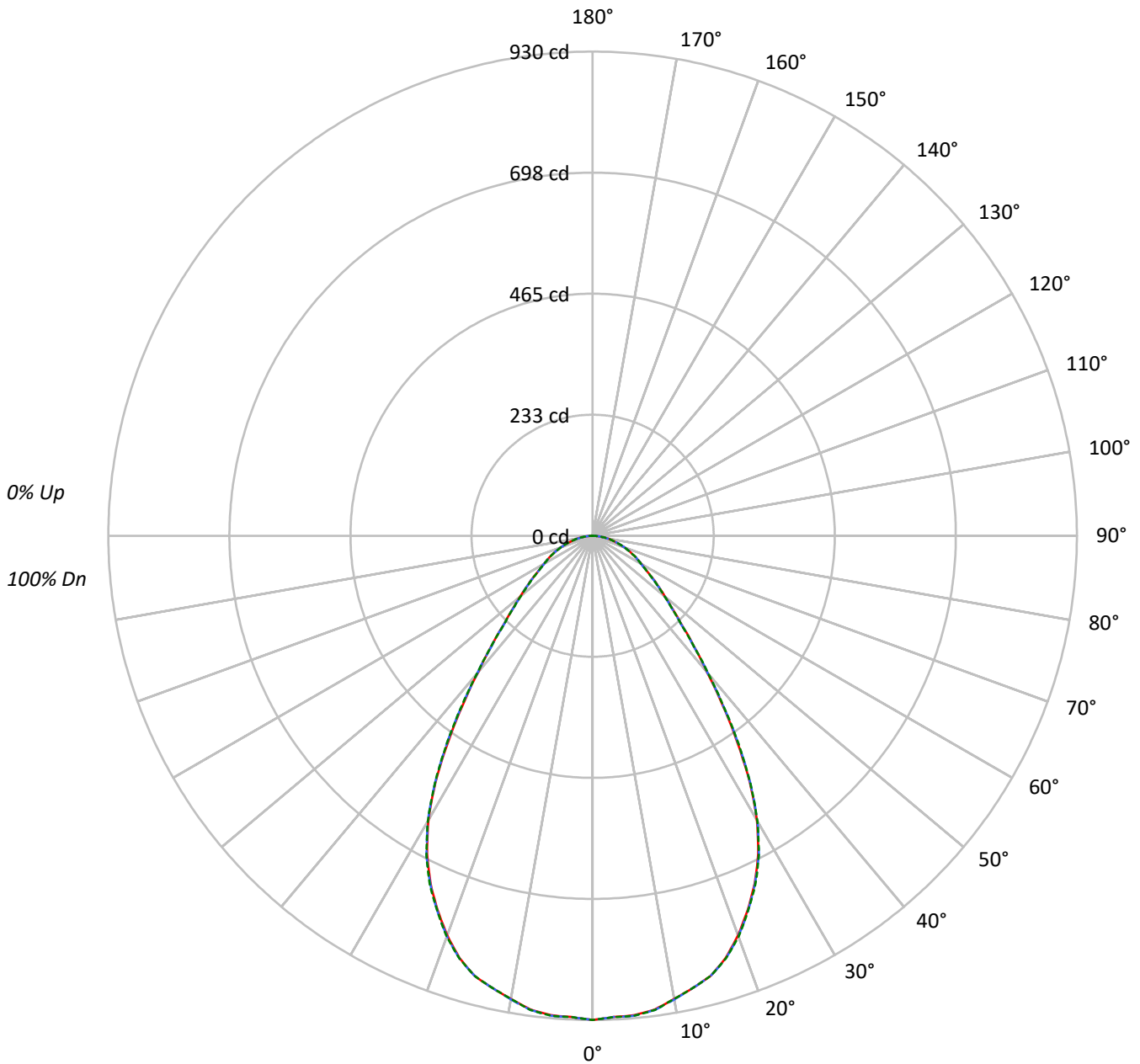
Input Watts (W): 14
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	114724	114724	114724
5°	114444	114568	114568
10°	113112	113237	113112
15°	111773	111773	111773
20°	107175	107425	107543
25°	100235	100385	100644
30°	89829	90099	90099
35°	72909	73497	73647
40°	55035	55341	55502
45°	42161	41987	41987
50°	34732	34560	34560
55°	29805	29612	29612
60°	26593	26371	26371
65°	25012	25012	25012
70°	23261	23261	23261
75°	21112	21589	21112
80°	19889	19108	19889
85°	16417	16417	16417



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.6	6.1
10°-20°	245.2	17.1
20°-30°	337.0	23.5
30°-40°	303.0	21.1
40°-50°	191.5	13.3
50°-60°	125.0	8.7
60°-70°	84.7	5.9
70°-80°	47.7	3.3
80°-90°	13.4	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°	669.9	46.7
0°-40°	972.8	67.8
0°-60°	1289.3	89.8
0°-90°	1435.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1435.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	930	930	930	930	930	
5°	924	924	925	925	925	88
15°	875	875	875	875	875	245
25°	736	738	738	740	740	336
35°	484	486	488	490	489	301
45°	242	241	241	241	241	192
55°	139	139	138	139	138	125
65°	86	86	86	86	86	85
75°	44	45	45	45	44	47
85°	12	12	12	12	12	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	930.1	930.1	930.1	930.1	930.1
2.5°	925.3	925.3	925.3	925.3	925.3
5°	924.3	924.3	925.3	925.3	925.3
7.5°	917.6	918.6	918.6	918.6	918.6
10°	903.1	903.1	904.1	904.1	903.1
12.5°	889.7	889.7	889.7	890.6	889.7
15°	875.3	875.3	875.3	875.3	875.3
17.5°	850.1	851.2	851.2	851.2	851.2
20°	816.5	818.4	818.4	819.3	819.3
22.5°	777.9	779.0	779.9	780.9	779.9
25°	736.5	737.6	737.6	739.5	739.5
27.5°	688.5	689.4	691.3	691.3	691.3
30°	630.7	631.6	632.6	632.6	632.6
32.5°	562.2	562.2	564.2	565.2	564.2
35°	484.2	486.2	488.1	490.0	489.1
37.5°	410.1	412.0	413.1	413.1	414.0
40°	341.8	343.7	343.7	345.6	344.7
42.5°	287.9	287.0	287.0	288.8	287.9
45°	241.7	240.7	240.7	240.7	240.7
47.5°	208.0	207.0	207.0	207.0	207.0
50°	181.0	180.1	180.1	180.1	180.1
52.5°	158.8	157.9	157.9	157.9	156.9
55°	138.6	138.6	137.7	138.6	137.7
57.5°	120.4	120.4	120.4	120.4	120.4
60°	107.8	106.9	106.9	106.9	106.9
62.5°	96.3	96.3	96.3	96.3	96.3
65°	85.7	85.7	85.7	85.7	85.7
67.5°	75.2	74.1	75.2	75.2	74.1
70°	64.5	63.6	64.5	64.5	64.5
72.5°	53.9	53.9	53.9	54.9	53.9
75°	44.3	45.3	45.3	45.3	44.3
77.5°	35.6	36.6	35.6	35.6	35.6
80°	28.0	26.9	26.9	26.9	28.0
82.5°	19.2	19.2	19.2	19.2	19.2
85°	11.6	11.6	11.6	11.6	11.6
87.5°	4.8	4.8	4.8	4.8	4.8
90°	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)