

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: P579948

Luminaire Tested: **HC415D010-HM40525935-41WDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P579948
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-HM40525935-41WDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1328.4 lumens
Efficiency: N/A
Efficacy: 94.9 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

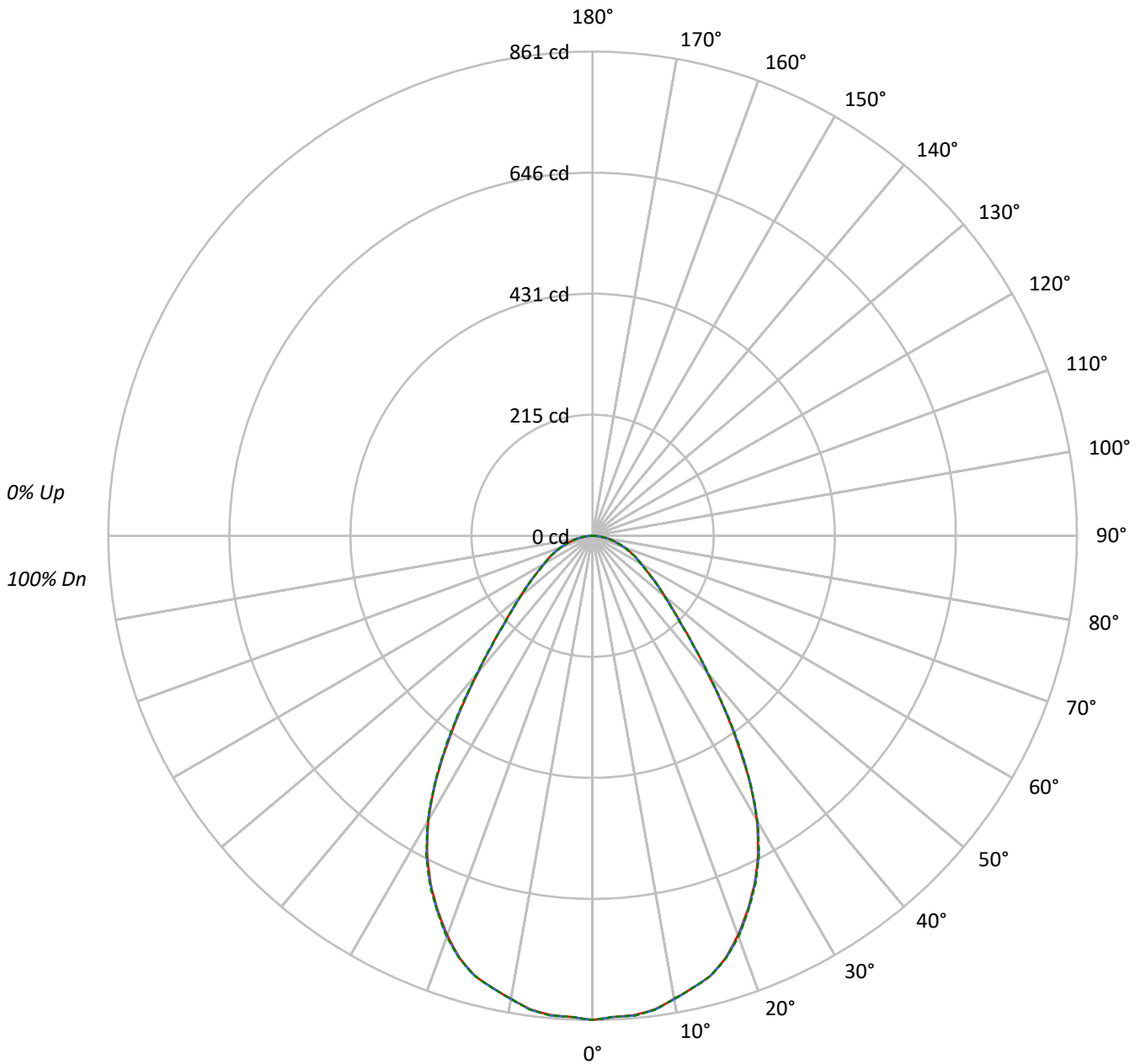
Input Watts (W): 14
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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°	106188	106188	106188
5°	105938	106049	106049
10°	104708	104820	104708
15°	103460	103460	103460
20°	99208	99444	99562
25°	92804	92927	93158
30°	83149	83405	83405
35°	67504	68031	68181
40°	50946	51235	51364
45°	39039	38882	38882
50°	32161	31988	31988
55°	27612	27418	27418
60°	24620	24398	24398
65°	23174	23174	23174
70°	21530	21530	21530
75°	19539	19921	19539
80°	18326	17687	18326
85°	15143	15143	15143



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.1	6.1
10°-20°	227.0	17.1
20°-30°	311.9	23.5
30°-40°	280.5	21.1
40°-50°	177.2	13.3
50°-60°	115.7	8.7
60°-70°	78.4	5.9
70°-80°	44.1	3.3
80°-90°	12.4	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°	620.1	46.7
0°-40°	900.6	67.8
0°-60°	1193.5	89.8
0°-90°	1328.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1328.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	861	861	861	861	861	
5°	856	856	856	856	856	81
15°	810	810	810	810	810	227
25°	682	683	683	684	684	311
35°	448	450	452	454	453	279
45°	224	223	223	223	223	177
55°	128	128	128	128	128	116
65°	79	79	79	79	79	79
75°	41	42	42	42	41	44
85°	11	11	11	11	11	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	860.9	860.9	860.9	860.9	860.9
2.5°	856.5	856.5	856.5	856.5	856.5
5°	855.6	855.6	856.5	856.5	856.5
7.5°	849.5	850.2	850.2	850.2	850.2
10°	836.0	836.0	836.9	836.9	836.0
12.5°	823.5	823.5	823.5	824.4	823.5
15°	810.2	810.2	810.2	810.2	810.2
17.5°	787.0	787.9	787.9	787.9	787.9
20°	755.8	757.6	757.6	758.5	758.5
22.5°	720.2	721.1	722.0	722.8	722.0
25°	681.9	682.8	682.8	684.5	684.5
27.5°	637.3	638.2	639.9	639.9	639.9
30°	583.8	584.6	585.6	585.6	585.6
32.5°	520.5	520.5	522.3	523.1	522.3
35°	448.3	450.1	451.8	453.7	452.8
37.5°	379.6	381.5	382.4	382.4	383.3
40°	316.4	318.2	318.2	320.0	319.0
42.5°	266.5	265.6	265.6	267.4	266.5
45°	223.8	222.9	222.9	222.9	222.9
47.5°	192.5	191.6	191.6	191.6	191.6
50°	167.6	166.7	166.7	166.7	166.7
52.5°	147.0	146.2	146.2	146.2	145.3
55°	128.4	128.4	127.5	128.4	127.5
57.5°	111.4	111.4	111.4	111.4	111.4
60°	99.8	98.9	98.9	98.9	98.9
62.5°	89.1	89.1	89.1	89.1	89.1
65°	79.4	79.4	79.4	79.4	79.4
67.5°	69.5	68.7	69.5	69.5	68.7
70°	59.7	58.8	59.7	59.7	59.7
72.5°	49.9	49.9	49.9	50.8	49.9
75°	41.0	41.8	41.8	41.8	41.0
77.5°	33.0	33.9	33.0	33.0	33.0
80°	25.8	24.9	24.9	24.9	25.8
82.5°	17.9	17.9	17.9	17.9	17.9
85°	10.7	10.7	10.7	10.7	10.7
87.5°	4.4	4.4	4.4	4.4	4.4
90°	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)