

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: P579876

Luminaire Tested: **HC415D010-HM40525835-41WDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P579876
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-HM40525835-41WDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1487.5 lumens
Efficiency: N/A
Efficacy: 106.2 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

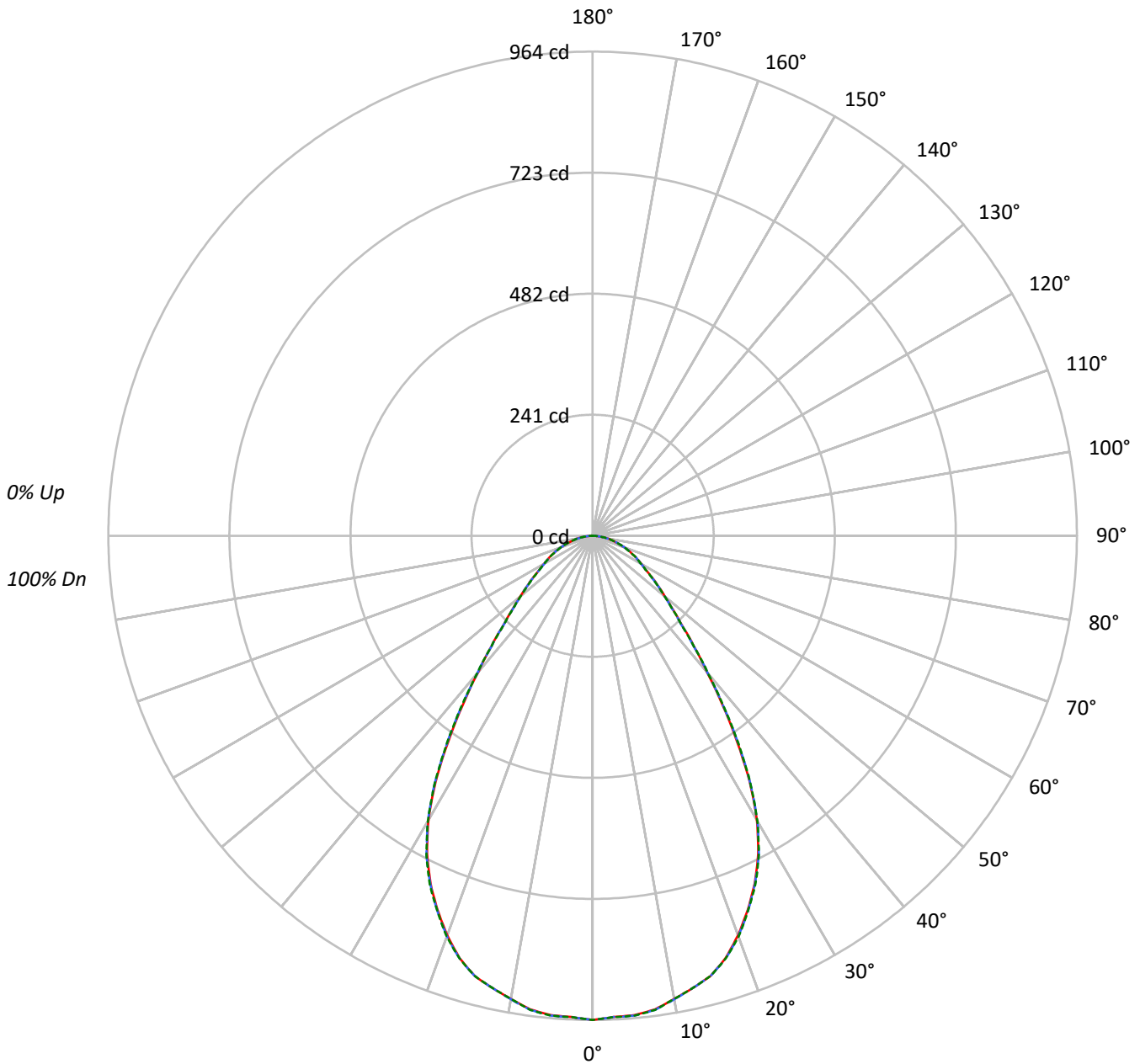
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P579876

CATALOG NUMBER: HC415D010-HM40525835-41WDW

Luminous Intensity Polar Plot





TEST NUMBER: P579876

CATALOG NUMBER: HC415D010-HM40525835-41WDW

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	67	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°	118918	118918	118918
5°	118616	118753	118753
10°	117245	117370	117245
15°	115847	115847	115847
20°	111087	111349	111481
25°	103910	104046	104318
30°	93105	93390	93390
35°	75590	76192	76343
40°	57048	57370	57515
45°	43696	43522	43522
50°	35999	35807	35807
55°	30902	30687	30687
60°	27580	27309	27309
65°	25917	25917	25917
70°	24127	24127	24127
75°	21875	22399	21875
80°	20599	19889	20599
85°	16841	16841	16841



TEST NUMBER: P579876

CATALOG NUMBER: HC415D010-HM40525835-41WDW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.8	6.1
10°-20°	254.2	17.1
20°-30°	349.3	23.5
30°-40°	314.1	21.1
40°-50°	198.4	13.3
50°-60°	129.5	8.7
60°-70°	87.8	5.9
70°-80°	49.5	3.3
80°-90°	13.9	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°	694.3	46.7
0°-40°	1008.4	67.8
0°-60°	1336.4	89.8
0°-90°	1487.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1487.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	964	964	964	964	964	
5°	958	958	959	959	959	91
15°	907	907	907	907	907	254
25°	764	764	764	766	766	348
35°	502	504	506	508	507	313
45°	250	250	250	250	250	199
55°	144	144	143	144	143	130
65°	89	89	89	89	89	88
75°	46	47	47	47	46	49
85°	12	12	12	12	12	14
90°	0	0	0	0	0	



TEST NUMBER: P579876

CATALOG NUMBER: HC415D010-HM40525835-41WDW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	964.1	964.1	964.1	964.1	964.1
2.5°	959.1	959.1	959.1	959.1	959.1
5°	958.0	958.0	959.1	959.1	959.1
7.5°	951.1	952.1	952.1	952.1	952.1
10°	936.1	936.1	937.1	937.1	936.1
12.5°	922.1	922.1	922.1	923.1	922.1
15°	907.2	907.2	907.2	907.2	907.2
17.5°	881.3	882.2	882.2	882.2	882.2
20°	846.3	848.3	848.3	849.3	849.3
22.5°	806.4	807.4	808.4	809.4	808.4
25°	763.5	764.5	764.5	766.5	766.5
27.5°	713.6	714.6	716.5	716.5	716.5
30°	653.7	654.7	655.7	655.7	655.7
32.5°	582.8	582.8	584.9	585.8	584.9
35°	502.0	504.0	506.0	508.0	507.0
37.5°	425.1	427.2	428.2	428.2	429.1
40°	354.3	356.3	356.3	358.3	357.2
42.5°	298.3	297.4	297.4	299.4	298.3
45°	250.5	249.5	249.5	249.5	249.5
47.5°	215.6	214.6	214.6	214.6	214.6
50°	187.6	186.6	186.6	186.6	186.6
52.5°	164.6	163.7	163.7	163.7	162.7
55°	143.7	143.7	142.7	143.7	142.7
57.5°	124.7	124.7	124.7	124.7	124.7
60°	111.8	110.7	110.7	110.7	110.7
62.5°	99.8	99.8	99.8	99.8	99.8
65°	88.8	88.8	88.8	88.8	88.8
67.5°	77.9	76.9	77.9	77.9	76.9
70°	66.9	65.8	66.9	66.9	66.9
72.5°	55.9	55.9	55.9	56.8	55.9
75°	45.9	47.0	47.0	47.0	45.9
77.5°	37.0	38.0	37.0	37.0	37.0
80°	29.0	28.0	28.0	28.0	29.0
82.5°	20.0	20.0	20.0	20.0	20.0
85°	11.9	11.9	11.9	11.9	11.9
87.5°	5.0	5.0	5.0	5.0	5.0
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P





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







(END OF REPORT)