

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: P579935

Luminaire Tested: **HC415D010-HM40525930-41WWWB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P579935
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC415D010-HM40525930-41WWWB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1278.9 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

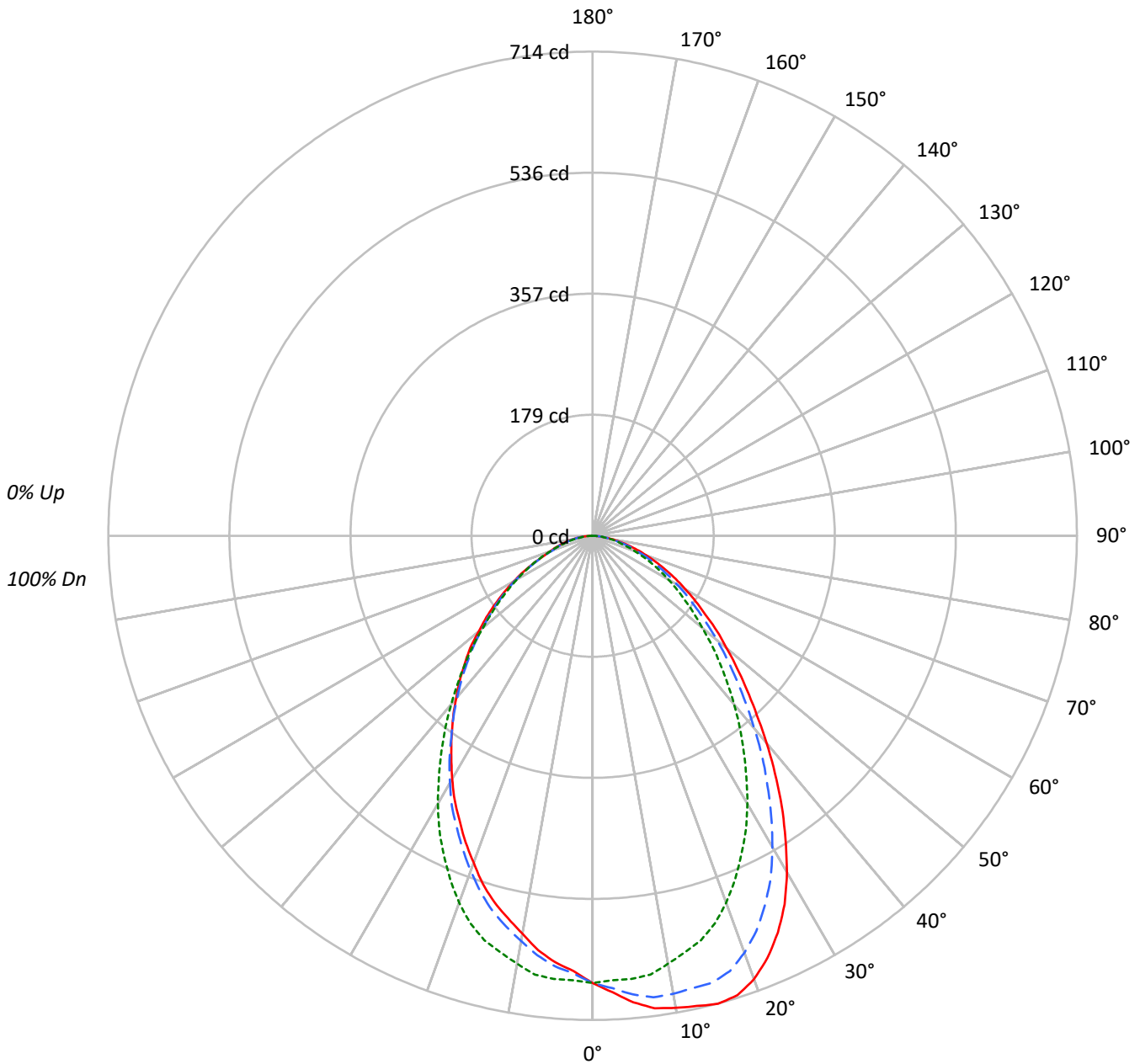
Input Watts (W): 14
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P579935

CATALOG NUMBER: HC415D010-HM40525930-41WWWB

Luminous Intensity Polar Plot





TEST NUMBER: P579935

CATALOG NUMBER: HC415D010-HM40525930-41WWWB

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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87								
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66								
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	58								
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51								
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46								
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41								
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37								
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34								
10	58	45	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	81346	81346	81346
5°	85520	81224	78190
10°	88538	80259	74636
15°	91239	78814	71446
20°	91332	75567	67337
25°	87905	70621	63135
30°	81611	64990	58965
35°	73181	58499	54569
40°	64197	52218	50430
45°	56116	46208	46505
50°	49546	40451	41909
55°	43697	35870	37676
60°	39051	31749	32983
65°	34585	27902	27902
70°	30222	23838	23838
75°	25782	20159	22589
80°	20457	18042	20457
85°	13162	15568	19106



TEST NUMBER: P579935

CATALOG NUMBER: HC415D010-HM40525930-41WWWB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.5	4.9
10°-20°	176.0	13.8
20°-30°	246.5	19.3
30°-40°	254.0	19.9
40°-50°	216.2	16.9
50°-60°	160.2	12.5
60°-70°	100.5	7.9
70°-80°	50.0	3.9
80°-90°	13.1	1.0
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°	484.9	37.9
0°-40°	738.9	57.8
0°-60°	1115.3	87.2
0°-90°	1278.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1278.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	660	660	660	660	660	
5°	691	679	656	637	632	66
15°	714	682	617	572	560	201
25°	646	601	519	474	464	295
35°	486	450	388	363	362	303
45°	322	300	265	260	267	250
55°	203	187	167	170	175	184
65°	118	107	96	94	96	118
75°	54	48	42	46	47	58
85°	9	9	11	13	14	12
90°	0	0	0	0	0	



TEST NUMBER: P579935

CATALOG NUMBER: HC415D010-HM40525930-41WWWB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	659.5	659.5	659.5	659.5	659.5	659.5	659.5	659.5	659.5
2.5°	673.8	671.3	667.9	662.0	656.0	650.9	645.9	643.3	642.5
5°	690.7	685.7	678.9	667.9	656.0	645.9	637.4	633.2	631.5
7.5°	702.7	697.5	686.5	669.6	652.6	637.4	623.9	618.0	616.3
10°	706.9	701.0	685.7	662.9	640.8	622.2	606.9	599.3	595.9
12.5°	710.3	702.7	683.1	656.0	629.0	606.1	590.0	579.9	577.4
15°	714.5	706.0	682.3	649.3	617.2	590.0	572.3	562.9	559.5
17.5°	710.3	701.0	673.0	635.7	599.3	569.8	550.2	541.8	538.4
20°	695.8	685.7	654.3	614.5	575.7	545.2	525.6	517.2	513.0
22.5°	673.8	662.9	630.7	588.3	548.6	518.9	500.3	491.9	489.3
25°	645.9	634.9	601.0	557.8	518.9	490.2	474.0	466.4	463.9
27.5°	612.8	601.9	568.8	526.5	489.3	462.2	449.5	441.8	440.2
30°	573.0	562.1	530.0	491.0	456.3	430.9	420.7	414.8	414.0
32.5°	529.0	519.7	490.2	454.6	421.6	400.5	392.8	388.5	387.7
35°	486.0	475.7	449.5	417.4	388.5	370.0	363.2	362.4	362.4
37.5°	441.8	431.7	410.6	380.9	356.3	339.5	336.9	337.8	337.8
40°	398.7	389.4	370.8	346.2	324.3	311.5	310.6	312.3	313.2
42.5°	358.0	350.4	333.5	312.3	293.7	283.6	284.5	287.8	290.4
45°	321.7	314.9	299.7	281.1	264.9	257.3	259.9	264.1	266.6
47.5°	288.7	282.8	268.3	251.4	237.9	232.7	236.2	241.3	244.7
50°	258.2	253.1	239.6	221.8	210.8	207.4	211.6	216.7	218.4
52.5°	231.2	226.0	211.6	196.4	187.9	186.2	190.4	194.7	197.3
55°	203.2	199.0	187.0	173.5	166.8	165.9	170.1	173.5	175.2
57.5°	180.3	176.1	165.1	153.3	147.2	146.4	150.7	153.3	154.1
60°	158.3	154.1	143.9	132.9	128.7	128.7	131.2	132.9	133.7
62.5°	138.0	133.7	124.4	115.2	111.8	111.8	111.8	112.6	115.2
65°	118.5	115.2	106.7	98.2	95.6	93.9	93.9	93.9	95.6
67.5°	100.7	97.3	90.6	83.0	80.4	77.9	77.1	78.7	78.7
70°	83.8	81.3	74.5	68.6	66.1	63.4	62.6	66.1	66.1
72.5°	68.6	66.1	61.9	55.8	53.3	52.5	54.1	55.8	56.7
75°	54.1	51.6	48.2	44.9	42.3	43.2	45.7	46.5	47.4
77.5°	40.6	39.8	36.4	33.9	33.9	34.7	36.4	38.1	38.9
80°	28.8	28.0	26.3	24.6	25.4	27.1	28.0	29.7	28.8
82.5°	17.7	17.7	16.9	16.9	17.7	19.4	20.4	21.1	22.1
85°	9.3	9.3	9.3	10.1	11.0	11.8	12.7	13.5	13.5
87.5°	2.5	3.4	3.4	4.2	5.1	5.1	5.9	5.9	5.9
90°	0.0	0.0	0.0	0.0	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)