

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: P579952

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

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P579952
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC415D010-HM40525935-41WWW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1353.3 lumens
Efficiency: N/A
Efficacy: 96.7 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.03 / 1.1
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

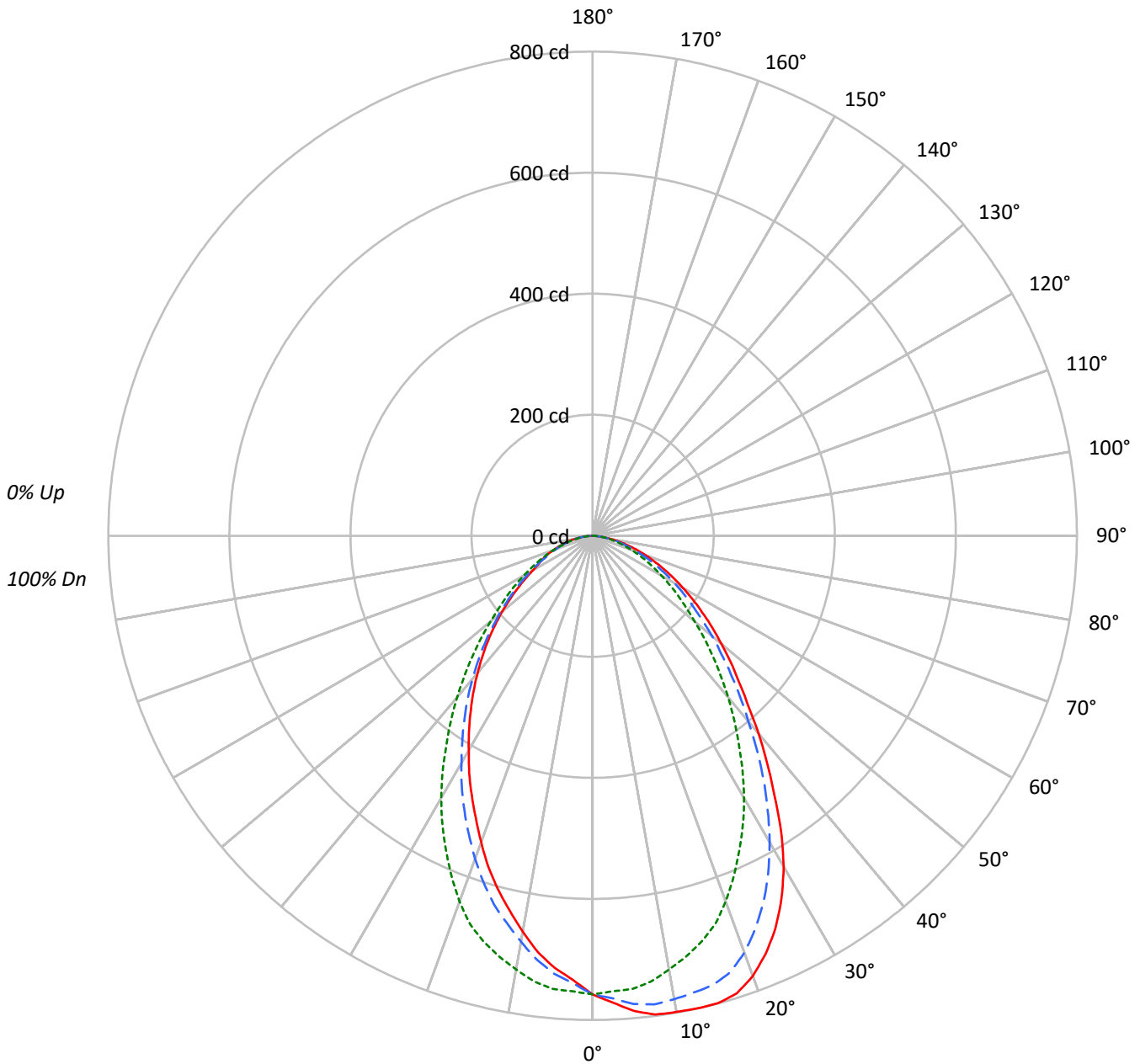
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76																			
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66																			
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58																			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52																			
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47																			
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42																			
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38																			
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35																			
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	93471	93471	93471
5°	97592	93061	88764
10°	100061	91131	83190
15°	102132	88698	77193
20°	101597	84388	70684
25°	97323	78024	64306
30°	89914	71242	58281
35°	78812	63363	52762
40°	68609	55985	47532
45°	59727	48825	42458
50°	53212	42082	37457
55°	47547	36988	32408
60°	42431	32341	27925
65°	37738	28369	26559
70°	33143	24451	24776
75°	28070	20826	22923
80°	21594	17758	20883
85°	12596	13869	17690



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.0	5.2
10°-20°	195.9	14.5
20°-30°	267.7	19.8
30°-40°	268.8	19.9
40°-50°	222.4	16.4
50°-60°	161.1	11.9
60°-70°	102.1	7.5
70°-80°	51.6	3.8
80°-90°	12.6	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°	534.7	39.5
0°-40°	803.5	59.4
0°-60°	1187.0	87.7
0°-90°	1353.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1353.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	758	758	758	758	758	
5°	788	777	752	727	717	76
15°	800	768	695	630	604	225
25°	715	668	573	501	472	327
35°	523	492	421	369	350	328
45°	342	323	280	252	243	266
55°	221	202	172	157	151	199
65°	129	115	97	87	91	129
75°	59	51	44	46	48	63
85°	9	9	10	12	12	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	757.8	757.8	757.8	757.8	757.8	757.8	757.8	757.8	757.8
2.5°	772.1	769.4	765.0	759.6	753.4	746.2	740.1	736.4	734.6
5°	788.2	784.6	776.6	765.0	751.6	738.3	726.7	719.5	716.9
7.5°	797.9	792.6	781.0	763.2	742.7	723.1	706.2	696.3	693.7
10°	798.9	792.6	777.5	753.4	727.6	701.6	681.2	667.0	664.2
12.5°	799.8	791.7	773.0	744.5	712.3	680.3	655.4	638.4	633.9
15°	799.8	791.7	768.5	734.6	694.6	658.0	630.4	610.7	604.5
17.5°	792.6	783.7	756.1	716.9	673.1	632.2	600.0	579.5	573.3
20°	774.0	764.1	732.9	690.0	642.9	600.0	567.9	546.6	538.5
22.5°	747.1	735.5	702.6	656.2	609.0	565.3	534.0	511.8	504.6
25°	715.1	703.5	667.8	622.3	573.3	532.2	501.1	480.6	472.5
27.5°	675.8	663.3	628.5	583.1	537.6	496.6	468.1	449.3	441.4
30°	631.3	617.8	584.9	541.2	500.2	460.9	433.3	418.2	409.2
32.5°	579.5	567.9	538.5	499.3	460.9	423.5	400.3	386.9	379.9
35°	523.4	517.1	492.2	458.3	420.8	389.6	369.1	356.7	350.4
37.5°	473.4	467.2	445.8	417.3	384.3	355.8	338.8	328.1	322.8
40°	426.1	420.8	400.3	376.2	347.7	322.8	308.5	300.5	295.2
42.5°	379.9	377.1	360.2	337.9	312.9	291.5	279.9	273.7	269.2
45°	342.4	338.8	322.8	301.3	279.9	262.1	252.3	247.9	243.4
47.5°	309.4	304.9	288.0	269.2	249.7	233.5	224.7	220.2	218.4
50°	277.3	272.9	257.6	239.0	219.3	207.7	200.6	196.1	195.2
52.5°	248.8	244.3	227.4	209.5	194.3	184.5	178.3	173.8	172.0
55°	221.1	215.8	201.5	184.5	172.0	163.2	156.9	152.5	150.7
57.5°	196.1	190.8	178.3	162.2	150.7	142.7	137.3	132.8	131.1
60°	172.0	167.6	156.0	140.9	131.1	123.9	118.6	115.1	113.2
62.5°	149.7	146.2	134.6	121.2	113.2	107.0	102.6	98.9	100.7
65°	129.3	125.8	115.1	103.5	97.2	91.0	87.3	87.3	91.0
67.5°	109.7	106.1	97.2	87.3	82.0	77.5	74.9	77.5	80.3
70°	91.9	88.2	80.3	72.2	67.8	64.2	64.2	66.9	68.7
72.5°	74.9	71.3	65.0	58.9	55.3	52.6	55.3	57.1	58.9
75°	58.9	56.2	50.8	46.4	43.7	42.8	45.5	47.3	48.1
77.5°	43.7	42.0	38.3	34.8	33.0	33.9	36.6	37.4	38.3
80°	30.4	29.4	26.7	25.0	25.0	25.8	27.6	28.5	29.4
82.5°	18.8	18.8	16.9	16.0	16.9	18.8	19.7	20.5	20.5
85°	8.9	9.8	8.9	8.9	9.8	11.6	11.6	12.5	12.5
87.5°	2.7	2.7	3.5	3.5	4.4	4.4	4.4	4.4	5.3
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)