

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: P579808

Luminaire Tested: **HC410D010-HM40525935-41WWW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P579808
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: HC410D010-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: 995.4 lumens
Efficiency: N/A
Efficacy: 100.5 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

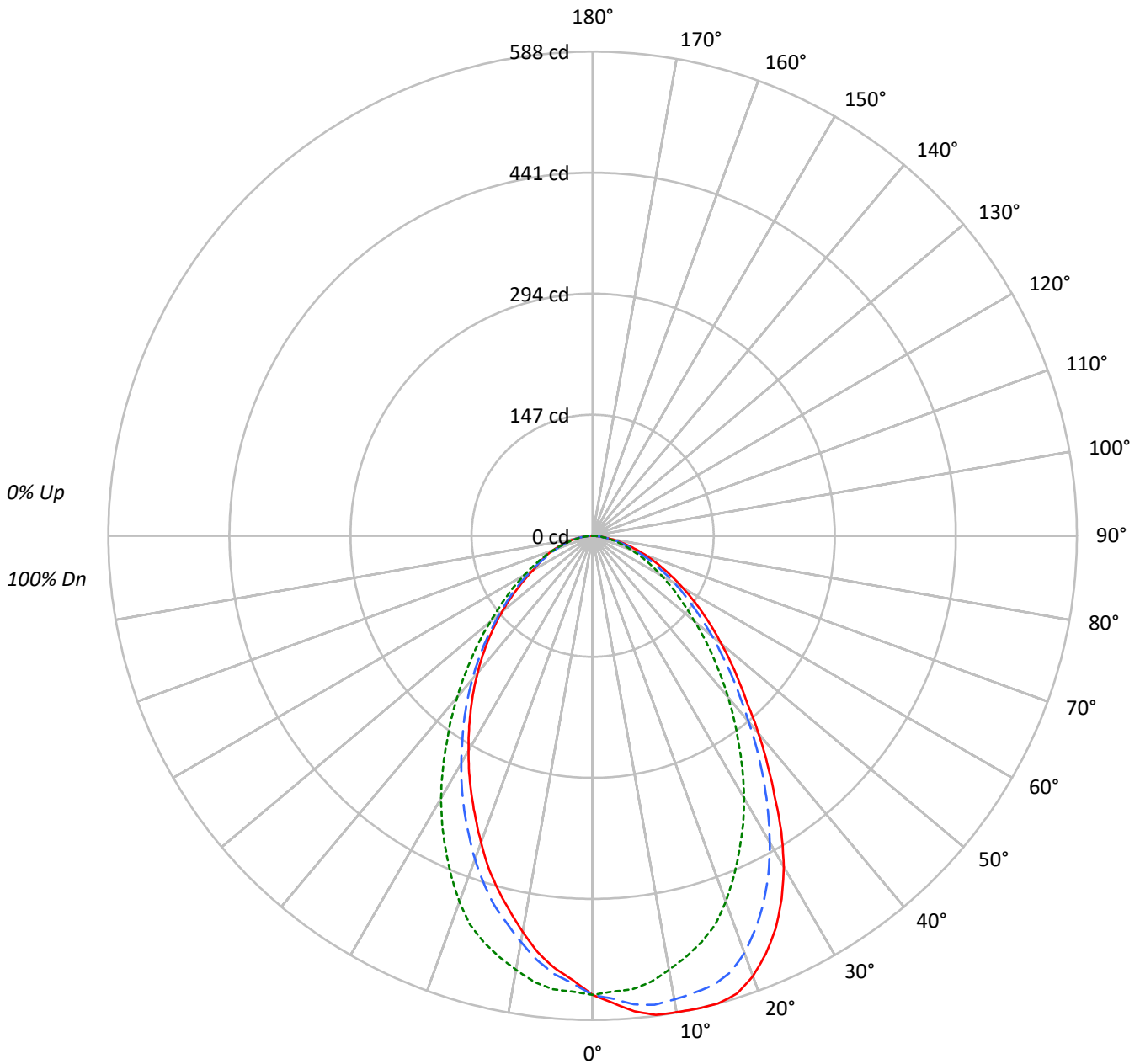
Input Watts (W): 9.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	100	100
1	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87	87	87	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76	76	76	76
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66	66	66	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58	58	58	58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52	52	52	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47	47	47	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42	42	42	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38	38	38	38
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35	35	35	35
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32	32	32	32

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	68753	68753	68753
5°	71777	68446	65276
10°	73583	67020	61184
15°	75111	65228	56774
20°	74714	62061	51980
25°	71573	57378	47294
30°	66129	52399	42871
35°	57972	46604	38819
40°	50463	41172	34941
45°	43923	35917	31224
50°	39127	30971	27556
55°	34967	27203	23827
60°	31206	23781	20549
65°	27756	20868	19525
70°	24379	17960	18212
75°	20588	15298	16871
80°	15840	12999	15343
85°	9341	10190	13020



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.2	5.2
10°-20°	144.1	14.5
20°-30°	196.9	19.8
30°-40°	197.7	19.9
40°-50°	163.6	16.4
50°-60°	118.5	11.9
60°-70°	75.1	7.5
70°-80°	37.9	3.8
80°-90°	9.3	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°	393.3	39.5
0°-40°	591.0	59.4
0°-60°	873.1	87.7
0°-90°	995.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	995.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	557	557	557	557	557	
5°	580	571	553	534	527	56
15°	588	565	511	464	445	165
25°	526	491	422	368	348	240
35°	385	362	310	272	258	241
45°	252	237	206	186	179	196
55°	163	148	126	115	111	146
65°	95	85	72	64	67	95
75°	43	37	32	34	35	46
85°	7	7	7	8	9	9
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°	557.4	557.4	557.4	557.4	557.4	557.4	557.4	557.4	557.4
2.5°	567.9	565.9	562.6	558.8	554.1	548.9	544.3	541.7	540.3
5°	579.7	577.1	571.2	562.6	552.8	542.9	534.4	529.2	527.2
7.5°	586.9	583.0	574.5	561.4	546.2	531.8	519.4	512.1	510.2
10°	587.5	583.0	571.8	554.1	535.1	516.1	500.9	490.5	488.5
12.5°	588.2	582.3	568.5	547.6	523.9	500.4	481.9	469.5	466.2
15°	588.2	582.3	565.2	540.3	510.8	484.0	463.6	449.2	444.6
17.5°	583.0	576.4	556.0	527.2	495.1	465.0	441.3	426.3	421.6
20°	569.2	561.9	539.1	507.5	472.8	441.3	417.8	401.9	396.0
22.5°	549.5	541.0	516.8	482.6	447.9	415.7	392.8	376.5	371.2
25°	525.9	517.4	491.2	457.7	421.6	391.5	368.5	353.5	347.5
27.5°	497.1	487.9	462.3	428.9	395.5	365.3	344.2	330.5	324.6
30°	464.3	454.4	430.2	398.1	367.9	339.0	318.8	307.6	301.0
32.5°	426.3	417.8	396.0	367.2	339.0	311.5	294.4	284.6	279.4
35°	385.0	380.3	362.0	337.1	309.5	286.5	271.5	262.3	257.8
37.5°	348.2	343.6	327.9	306.9	282.7	261.6	249.2	241.4	237.4
40°	313.4	309.5	294.4	276.8	255.7	237.4	226.9	221.0	217.0
42.5°	279.4	277.3	264.9	248.5	230.2	214.4	205.9	201.3	198.0
45°	251.8	249.2	237.4	221.7	205.9	192.8	185.6	182.3	179.0
47.5°	227.6	224.3	211.8	198.0	183.6	171.8	165.2	161.9	160.7
50°	203.9	200.6	189.5	175.7	161.4	152.8	147.6	144.3	143.6
52.5°	183.0	179.7	167.2	154.1	142.9	135.8	131.1	127.9	126.5
55°	162.6	158.6	148.2	135.8	126.5	120.1	115.4	112.1	110.8
57.5°	144.3	140.3	131.1	119.4	110.8	104.9	100.9	97.8	96.4
60°	126.5	123.2	114.7	103.6	96.4	91.2	87.2	84.6	83.3
62.5°	110.2	107.5	99.0	89.2	83.3	78.6	75.4	72.8	74.1
65°	95.1	92.4	84.6	76.0	71.5	66.9	64.3	64.3	66.9
67.5°	80.7	78.1	71.5	64.3	60.3	57.0	55.1	57.0	59.1
70°	67.6	64.9	59.1	53.1	49.8	47.2	47.2	49.2	50.5
72.5°	55.1	52.5	47.9	43.2	40.6	38.7	40.6	42.0	43.2
75°	43.2	41.3	37.3	34.1	32.1	31.5	33.5	34.7	35.4
77.5°	32.1	30.8	28.2	25.6	24.2	24.9	26.9	27.5	28.2
80°	22.3	21.6	19.7	18.3	18.3	19.0	20.4	20.9	21.6
82.5°	13.8	13.8	12.4	11.8	12.4	13.8	14.5	15.1	15.1
85°	6.6	7.2	6.6	6.6	7.2	8.5	8.5	9.2	9.2
87.5°	1.9	1.9	2.6	2.6	3.3	3.3	3.3	3.3	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)