

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: P592580

Luminaire Tested: **HC407D010-HM40525850-41RWWH**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P592580
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC407D010-HM40525850-41RWWH
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 934.4 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

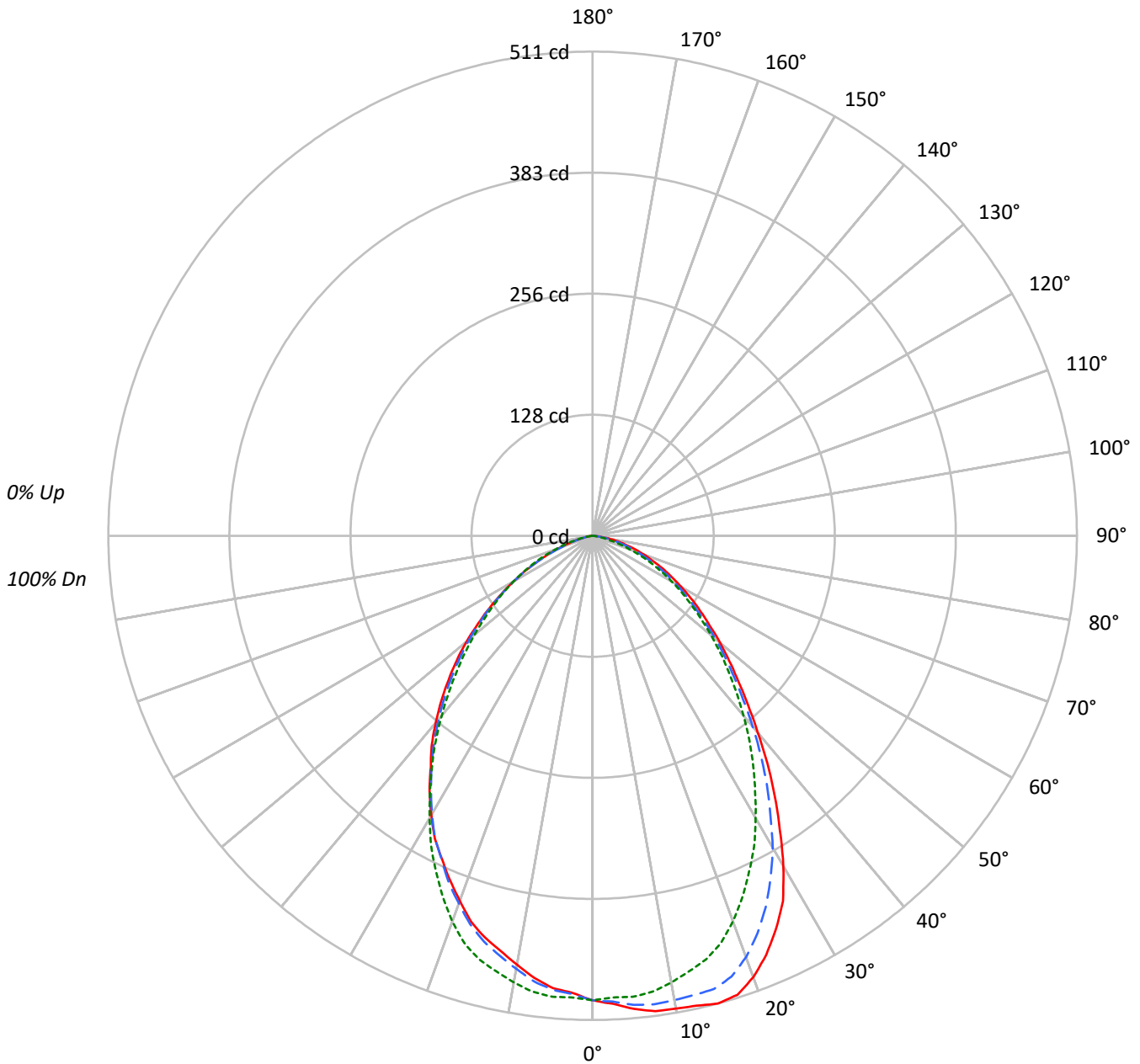
Input Watts (W): 8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88				
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77				77				
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67				67				
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59				59				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				52				
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47				47				
7	71	58	51	45	69	58	50	45	56	49	45	55	49	44	54	48	44	42				42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38				
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35				35				
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				32				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	60476	60476	60476
5°	62057	60472	59333
10°	63451	59944	57589
15°	65253	59098	56059
20°	65066	56836	53791
25°	62319	53200	51213
30°	57327	48995	48482
35°	50428	44465	44842
40°	43635	39819	41478
45°	37923	35376	37504
50°	33658	31202	33293
55°	29848	27354	28558
60°	26593	23732	23732
65°	23641	19730	18504
70°	20448	14930	13163
75°	17157	9865	8149
80°	12999	4759	4333
85°	6935	1840	1840



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.4	5.0
10°-20°	131.6	14.1
20°-30°	185.6	19.9
30°-40°	191.7	20.5
40°-50°	162.5	17.4
50°-60°	118.3	12.7
60°-70°	69.1	7.4
70°-80°	25.7	2.7
80°-90°	3.4	0.4
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°	363.7	38.9
0°-40°	555.4	59.4
0°-60°	836.2	89.5
0°-90°	934.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	934.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	490	490	490	490	490	
5°	501	497	488	481	479	48
15°	511	495	463	443	439	144
25°	458	432	391	377	376	209
35°	335	320	295	296	298	209
45°	217	211	203	210	215	169
55°	139	132	127	132	133	125
65°	81	74	68	63	63	80
75°	36	30	21	16	17	39
85°	5	3	1	1	1	7
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°	490.3	490.3	490.3	490.3	490.3	490.3	490.3	490.3	490.3
2.5°	494.5	493.2	492.1	490.3	487.7	485.9	484.1	482.9	482.9
5°	501.2	499.4	497.0	492.6	488.4	484.8	481.0	479.2	479.2
7.5°	506.1	503.6	498.8	492.6	485.4	479.9	474.4	471.9	470.7
10°	506.6	504.2	497.5	488.4	478.6	470.1	464.1	460.4	459.8
12.5°	507.9	504.8	496.3	483.5	470.7	460.4	453.7	450.1	448.8
15°	511.0	506.6	495.1	478.6	462.8	450.6	443.4	440.3	439.0
17.5°	507.9	501.7	487.7	468.3	450.6	437.2	429.9	426.9	426.9
20°	495.7	489.6	473.2	451.9	433.0	420.1	412.9	411.0	409.8
22.5°	478.6	471.9	454.3	431.8	412.9	401.3	396.5	394.0	393.4
25°	457.9	451.2	432.3	409.2	390.9	381.2	376.9	376.9	376.3
27.5°	434.8	426.3	406.8	386.7	369.1	361.8	359.9	359.9	360.5
30°	402.5	396.5	380.0	360.5	344.0	339.2	339.2	340.4	340.4
32.5°	367.8	363.6	348.9	331.8	319.1	316.0	317.3	319.7	320.3
35°	334.9	330.0	320.3	305.1	295.3	294.2	296.0	297.8	297.8
37.5°	302.7	297.8	291.1	278.9	271.6	272.2	274.6	277.1	278.9
40°	271.0	267.3	262.4	252.7	247.3	249.7	252.7	255.1	257.6
42.5°	243.0	239.3	235.7	228.4	224.8	227.7	231.4	233.9	236.2
45°	217.4	215.0	211.3	205.2	202.8	205.9	210.1	212.6	215.0
47.5°	195.5	194.3	189.4	183.9	182.6	185.7	189.4	192.4	194.3
50°	175.4	173.5	169.3	163.8	162.6	167.5	169.9	171.7	173.5
52.5°	155.9	154.1	149.2	144.3	144.3	147.9	149.8	150.4	152.3
55°	138.8	137.0	132.1	128.5	127.2	130.3	131.6	131.6	132.8
57.5°	123.0	121.2	116.3	112.1	111.4	113.2	113.2	113.2	113.9
60°	107.8	105.9	101.1	97.4	96.2	96.8	96.2	95.6	96.2
62.5°	93.8	92.0	87.1	82.8	81.6	81.6	79.8	79.2	79.8
65°	81.0	78.0	74.3	70.0	67.6	65.8	63.4	63.4	63.4
67.5°	68.2	65.8	61.5	57.2	54.2	51.2	47.5	48.7	49.3
70°	56.7	54.9	50.0	45.6	41.4	37.8	34.7	36.0	36.5
72.5°	46.3	43.8	39.6	34.7	31.1	26.2	24.4	25.6	25.6
75°	36.0	33.5	29.8	24.9	20.7	16.4	16.4	17.1	17.1
77.5°	26.7	24.4	20.7	16.4	12.7	9.8	10.4	10.4	10.4
80°	18.3	16.4	13.4	9.8	6.7	5.5	5.5	5.5	6.1
82.5°	10.4	9.1	7.3	4.9	3.1	3.1	3.1	3.1	3.1
85°	4.9	3.6	3.1	1.8	1.3	1.3	1.3	1.3	1.3
87.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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)