

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: P581025

Luminaire Tested: **HC405D010-HM40525835-41RWWH**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P581025
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: HC405D010-HM40525835-41RWWH
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 687.6 lumens
Efficiency: N/A
Efficacy: 114.6 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

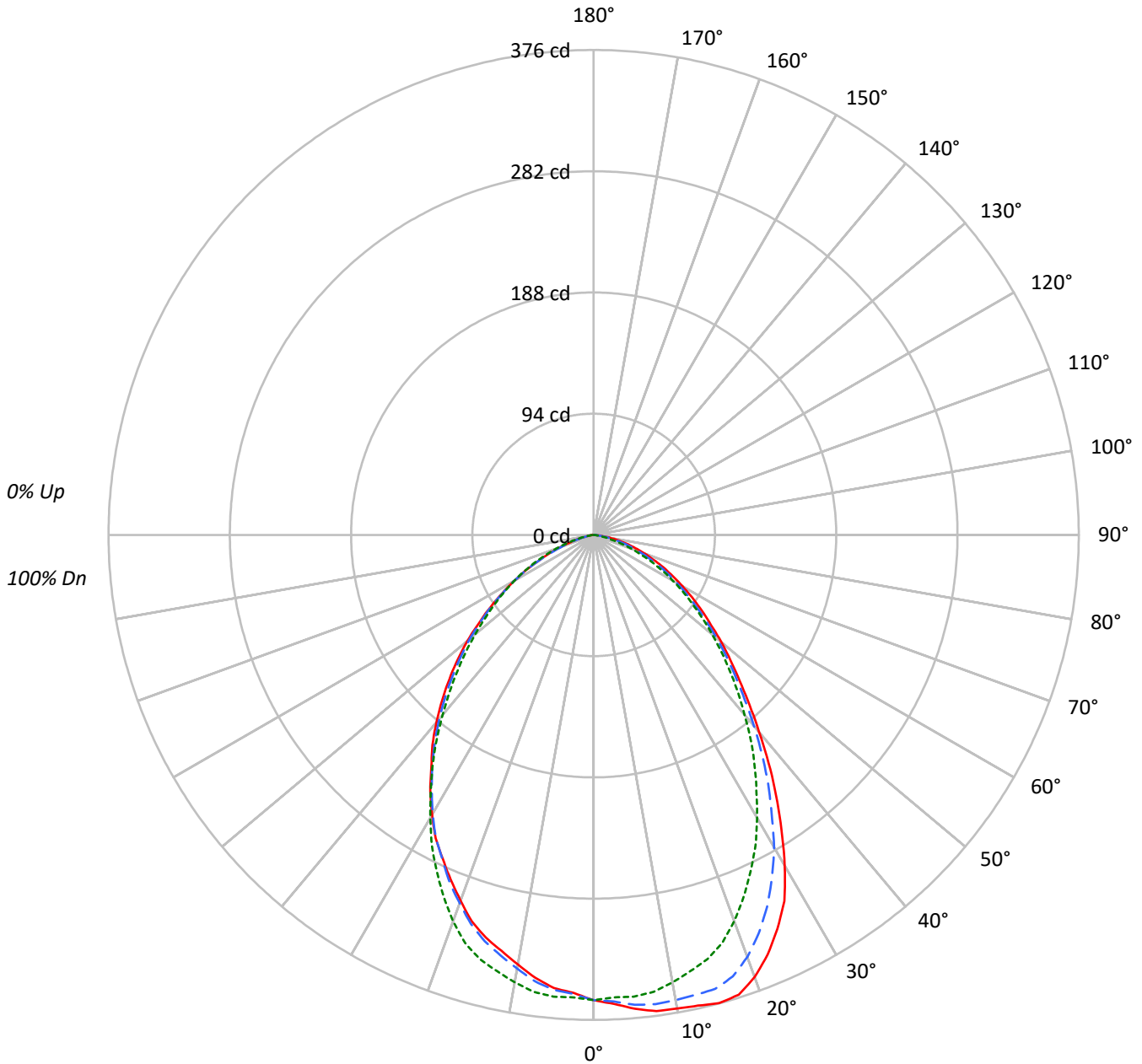
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88																			
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77																			
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67																			
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59																			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52																			
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47																			
7	71	58	51	45	69	58	50	45	56	49	45	55	49	44	54	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	41	37	47	41	37	46	41	37	35																			
10	58	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°	44491	44491	44491
5°	45664	44487	43658
10°	46693	44112	42372
15°	48001	43494	41259
20°	47884	41820	39589
25°	45865	39155	37685
30°	42187	36063	35678
35°	37102	32735	33007
40°	32107	29289	30513
45°	27892	26043	27596
50°	24754	22950	24505
55°	21978	20128	21010
60°	19563	17466	17466
65°	17395	14505	13601
70°	15039	10963	9701
75°	12581	7244	6005
80°	9518	3481	3125
85°	5095	1274	1274



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.2	5.0
10°-20°	96.9	14.1
20°-30°	136.6	19.9
30°-40°	141.1	20.5
40°-50°	119.6	17.4
50°-60°	87.0	12.7
60°-70°	50.8	7.4
70°-80°	18.9	2.7
80°-90°	2.5	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°	267.6	38.9
0°-40°	408.7	59.4
0°-60°	615.3	89.5
0°-90°	687.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	687.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	361	361	361	361	361	
5°	369	366	359	354	353	35
15°	376	364	341	326	323	106
25°	337	318	288	277	277	154
35°	246	236	217	218	219	154
45°	160	156	149	155	158	124
55°	102	97	94	97	98	92
65°	60	55	50	47	47	59
75°	26	22	15	12	13	28
85°	4	2	1	1	1	5
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°	360.7	360.7	360.7	360.7	360.7	360.7	360.7	360.7	360.7
2.5°	363.9	363.0	362.1	360.7	358.9	357.6	356.3	355.4	355.4
5°	368.8	367.4	365.7	362.5	359.3	356.7	354.0	352.6	352.6
7.5°	372.4	370.6	366.9	362.5	357.2	353.1	349.1	347.3	346.4
10°	372.8	371.0	366.2	359.3	352.2	345.9	341.4	338.8	338.3
12.5°	373.8	371.5	365.2	355.8	346.4	338.8	333.8	331.2	330.3
15°	375.9	372.8	364.3	352.2	340.6	331.6	326.2	323.9	323.1
17.5°	373.8	369.2	358.9	344.6	331.6	321.8	316.3	314.2	314.2
20°	364.8	360.2	348.2	332.4	318.6	309.2	303.8	302.5	301.6
22.5°	352.2	347.3	334.3	317.7	303.8	295.3	291.7	289.9	289.4
25°	337.0	332.0	318.1	301.1	287.7	280.5	277.4	277.4	276.9
27.5°	320.0	313.7	299.3	284.5	271.6	266.2	264.8	264.8	265.2
30°	296.2	291.7	279.7	265.2	253.2	249.6	249.6	250.5	250.5
32.5°	270.7	267.5	256.7	244.3	234.8	232.6	233.5	235.3	235.7
35°	246.4	242.9	235.7	224.5	217.4	216.4	217.8	219.2	219.2
37.5°	222.7	219.2	214.2	205.2	199.9	200.3	202.1	203.8	205.2
40°	199.4	196.7	193.2	185.9	181.9	183.8	185.9	187.7	189.5
42.5°	178.8	176.2	173.4	168.1	165.4	167.6	170.2	172.1	173.9
45°	159.9	158.2	155.5	151.0	149.3	151.4	154.6	156.4	158.2
47.5°	143.8	142.9	139.4	135.3	134.4	136.7	139.4	141.6	142.9
50°	129.0	127.7	124.6	120.5	119.6	123.3	125.1	126.3	127.7
52.5°	114.7	113.4	109.8	106.2	106.2	108.8	110.2	110.7	112.0
55°	102.2	100.8	97.3	94.5	93.6	95.9	96.8	96.8	97.7
57.5°	90.6	89.2	85.6	82.4	81.9	83.3	83.3	83.3	83.8
60°	79.3	78.0	74.3	71.7	70.8	71.3	70.8	70.4	70.8
62.5°	69.0	67.6	64.1	60.9	60.0	60.0	58.7	58.2	58.7
65°	59.6	57.3	54.7	51.5	49.7	48.4	46.6	46.6	46.6
67.5°	50.2	48.4	45.3	42.1	39.8	37.7	35.0	35.9	36.3
70°	41.7	40.3	36.8	33.6	30.4	27.8	25.5	26.4	26.9
72.5°	34.0	32.2	29.2	25.5	22.8	19.3	17.9	18.8	18.8
75°	26.4	24.6	21.9	18.4	15.2	12.1	12.1	12.6	12.6
77.5°	19.7	17.9	15.2	12.1	9.4	7.2	7.6	7.6	7.6
80°	13.4	12.1	9.9	7.2	4.9	4.1	4.1	4.1	4.4
82.5°	7.6	6.7	5.3	3.6	2.3	2.3	2.3	2.3	2.3
85°	3.6	2.7	2.3	1.4	0.9	0.9	0.9	0.9	0.9
87.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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)