

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: P583601

Luminaire Tested: **HC807D010-HM80520835-81RWWH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583601
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC807D010-HM80520835-81RWWH
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" 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: 896.2 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.16
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

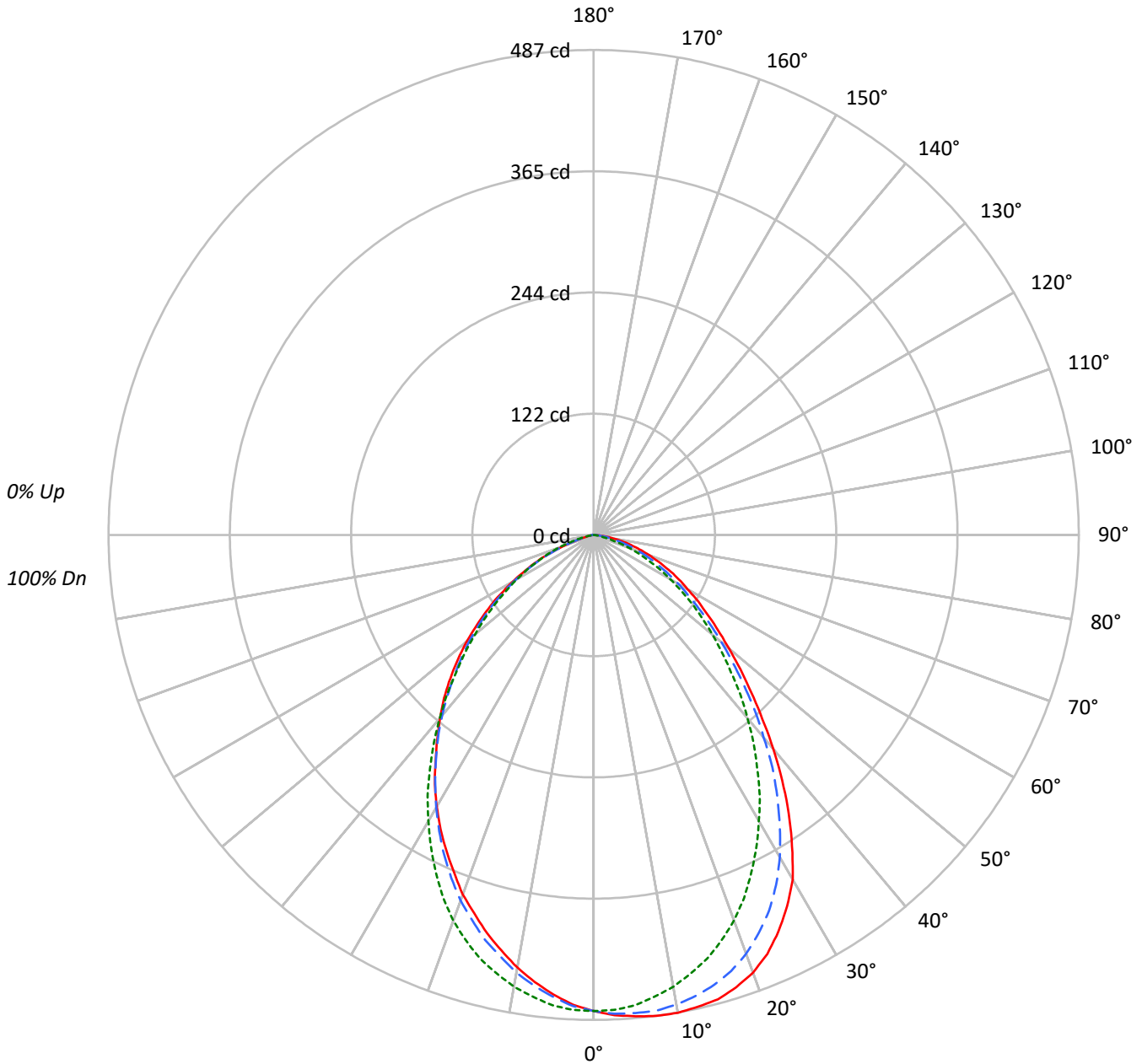
Input Watts (W): 8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	63	71	66	62	69	65	61	59																			
5	81	70	62	56	79	69	62	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	36	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°	14743	14743	14743
5°	15019	14678	14338
10°	15255	14422	13815
15°	15410	14063	13213
20°	15348	13520	12608
25°	14943	12739	11902
30°	14232	11811	11213
35°	12852	10778	10412
40°	11291	9673	9649
45°	9747	8504	8870
50°	8486	7460	7959
55°	7521	6478	6930
60°	6716	5477	5754
65°	6049	4444	4531
70°	5373	3327	2687
75°	4623	1942	1156
80°	3569	693	337
85°	2300	212	212



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.9	5.0
10°-20°	124.9	13.9
20°-30°	176.7	19.7
30°-40°	186.2	20.8
40°-50°	158.2	17.7
50°-60°	114.0	12.7
60°-70°	65.7	7.3
70°-80°	22.5	2.5
80°-90°	3.1	0.3
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°	346.5	38.7
0°-40°	532.7	59.4
0°-60°	804.9	89.8
0°-90°	896.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	896.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	478	478	478	478	478	
5°	485	482	474	466	463	46
15°	483	468	440	421	414	136
25°	439	417	374	355	350	201
35°	341	321	286	276	277	213
45°	224	213	195	196	203	174
55°	140	129	120	125	129	126
65°	83	71	61	60	62	82
75°	39	29	16	10	10	41
85°	6	4	1	1	1	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1
2.5°	482.7	483.3	482.7	482.7	481.9	481.3	480.6	480.0	478.7	477.4	477.4
5°	485.2	486.5	485.2	485.2	483.3	481.9	480.6	478.7	476.1	474.2	474.2
7.5°	487.2	487.2	487.2	485.2	483.9	481.9	478.7	475.5	472.3	469.0	467.7
10°	487.2	487.2	486.5	483.9	482.7	478.7	475.5	470.9	466.4	461.9	460.6
12.5°	485.2	485.9	484.6	481.9	478.7	474.2	469.6	463.8	458.6	453.5	450.9
15°	482.7	481.9	480.6	477.4	473.6	467.7	463.2	456.7	449.6	443.1	440.5
17.5°	476.1	476.1	474.2	470.9	465.8	459.2	452.2	445.0	437.3	430.2	426.9
20°	467.7	467.7	465.1	461.3	456.0	447.6	439.9	431.4	422.3	415.3	412.0
22.5°	455.4	456.0	452.8	448.2	442.5	432.7	424.9	414.5	405.6	397.1	394.5
25°	439.2	440.5	437.3	432.7	424.9	416.6	406.8	397.1	386.7	378.3	374.4
27.5°	420.4	421.1	417.9	413.4	405.6	396.5	386.7	376.4	366.6	357.5	353.7
30°	399.7	397.1	395.8	389.9	381.6	373.8	362.8	354.3	344.0	336.2	331.7
32.5°	370.6	371.9	367.9	363.4	356.9	347.9	338.8	329.1	319.4	313.6	310.3
35°	341.4	342.7	340.7	336.2	329.1	321.3	312.3	305.1	296.7	289.5	286.3
37.5°	310.9	310.9	309.6	307.1	301.9	294.8	285.7	278.6	271.4	265.6	263.6
40°	280.5	279.2	278.6	276.6	272.1	265.6	259.8	253.9	246.8	242.9	240.3
42.5°	250.7	250.7	249.4	247.5	242.9	239.7	233.9	227.4	222.2	218.3	218.3
45°	223.5	224.2	222.2	221.0	218.3	213.1	207.9	203.4	198.8	196.3	195.0
47.5°	199.6	199.6	197.5	196.3	193.7	189.2	184.6	180.7	177.5	175.5	174.9
50°	176.9	176.9	176.9	173.6	170.4	167.2	164.0	159.4	157.4	156.1	155.5
52.5°	157.4	156.8	156.8	154.2	150.9	147.1	143.8	139.9	138.0	136.7	137.3
55°	139.9	139.9	139.3	136.0	132.8	128.9	125.7	122.5	121.2	119.9	120.5
56°	132.8	132.8	132.2	129.5	125.7	122.5	118.5	115.3	113.4	114.0	114.0
57°	127.6	126.3	126.3	123.1	119.9	115.3	112.1	108.9	107.6	106.8	106.8
58°	121.2	120.5	119.9	116.6	113.4	109.5	106.2	103.0	101.1	101.1	100.4
59°	114.7	114.7	113.4	110.8	107.6	103.6	100.4	97.2	95.2	94.5	94.5
60°	108.9	109.5	107.6	104.9	102.4	97.9	93.9	91.3	89.4	88.8	88.8
61°	103.6	103.6	102.4	99.1	95.8	92.6	88.8	85.6	84.2	82.9	82.9
62°	99.1	97.9	97.2	93.9	90.7	86.8	83.5	80.3	78.4	77.1	77.8
63°	93.3	92.6	91.3	88.8	85.6	81.6	77.8	75.2	73.3	71.2	71.9
64°	88.8	88.1	86.2	83.5	80.3	76.5	72.5	69.9	68.7	66.7	66.1
65°	82.9	82.2	81.6	78.4	75.2	71.2	68.0	65.5	63.5	62.1	60.9
66°	77.8	78.4	77.1	74.4	70.6	67.4	62.9	60.2	58.9	57.0	55.7
67°	73.3	73.3	71.9	69.3	65.5	62.1	58.9	55.7	53.8	51.9	51.1
67.5°	70.6	70.6	69.3	66.1	63.5	59.6	56.4	53.8	51.1	49.8	48.6
68°	68.0	68.0	67.4	64.8	61.5	57.6	54.4	51.1	48.6	46.6	46.0
69°	63.5	64.2	62.9	60.2	57.0	53.2	49.8	47.3	44.7	42.8	41.5
70°	59.6	58.9	57.6	55.1	51.9	49.2	46.0	42.8	40.2	37.5	36.9
71°	54.4	54.4	53.2	51.1	47.9	44.7	41.5	38.8	36.3	33.0	32.4
72°	50.5	50.5	49.2	46.6	44.1	40.9	37.5	34.3	32.4	29.2	27.8
72.5°	47.9	48.6	47.3	44.7	42.1	38.2	35.6	33.0	29.8	27.2	25.9
73°	46.6	46.0	45.3	42.8	39.6	36.9	33.7	31.1	27.8	25.2	24.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	29.2	29.2	28.6	25.9	23.3	20.7	18.2	15.5	12.9	10.4	9.1
80°	20.1	20.7	19.5	18.2	16.3	13.6	11.0	9.1	6.5	5.1	3.9
82.5°	12.9	12.9	12.3	11.0	9.7	7.8	6.5	4.5	3.2	2.6	1.9
85°	6.5	7.2	6.5	5.9	4.5	3.9	3.2	1.9	1.3	0.6	0.6
87.5°	2.6	2.6	2.6	1.9	1.9	1.3	0.6	0.6	0.6	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1
2.5°	476.1	476.1	474.9	474.2	473.6	472.9	472.3	471.5	471.5	472.3
5°	472.3	470.9	468.3	467.7	465.8	465.1	463.8	463.2	463.8	463.2
7.5°	466.4	463.8	460.6	459.2	456.7	455.4	453.5	453.5	452.2	452.8
10°	458.6	454.8	450.9	448.2	446.3	444.4	443.1	441.8	441.2	441.2
12.5°	449.0	444.4	440.5	436.7	433.4	432.1	429.5	429.5	428.2	427.6
15°	438.0	432.1	427.6	423.6	421.1	418.5	416.6	415.3	413.9	413.9
17.5°	423.6	418.5	413.9	409.4	405.6	403.6	401.6	399.7	399.7	398.4
20°	408.1	402.2	398.4	393.9	390.6	387.4	384.8	384.8	383.5	384.2
22.5°	390.6	383.5	379.7	376.4	373.1	370.6	367.9	367.9	367.3	366.6
25°	371.2	365.3	360.8	356.9	355.0	352.4	351.8	350.5	349.8	349.8
27.5°	350.5	346.0	340.1	338.2	335.6	334.2	334.2	333.6	332.3	332.9
30°	328.4	323.2	320.0	318.7	316.1	316.1	315.5	314.2	314.2	314.9
32.5°	307.1	301.9	299.2	298.6	296.0	296.0	295.4	296.0	296.0	296.7
35°	283.7	279.2	278.6	276.6	275.9	275.9	275.9	277.2	278.6	276.6
37.5°	261.7	258.5	256.6	255.8	256.6	256.6	257.2	259.1	258.5	257.9
40°	239.0	236.5	235.2	235.2	236.5	237.7	237.7	239.7	240.3	239.7
42.5°	216.4	214.4	214.4	215.1	216.4	217.0	218.9	221.0	221.6	222.2
45°	195.0	195.0	195.0	195.6	196.3	197.5	200.2	202.1	202.8	203.4
47.5°	174.2	173.6	175.5	176.1	178.2	178.8	180.7	183.3	184.0	184.6
50°	154.9	156.1	156.8	158.7	160.0	160.0	162.6	164.0	165.9	165.9
52.5°	136.7	138.6	139.3	141.2	141.8	142.6	143.8	145.8	147.1	147.1
55°	120.5	121.2	122.5	123.1	125.0	125.7	127.0	127.6	129.5	128.9
56°	113.4	114.7	115.3	116.6	117.9	118.5	119.9	120.5	121.8	122.5
57°	106.8	107.6	109.5	110.2	111.4	111.4	112.1	114.0	114.0	114.7
58°	100.4	101.7	102.4	103.0	104.3	104.9	106.2	106.8	107.6	106.8
59°	94.5	95.2	95.8	95.8	97.2	97.2	99.1	100.4	101.1	101.1
60°	88.8	88.8	89.4	90.1	91.3	92.0	92.0	93.3	93.3	93.3
61°	82.9	82.9	83.5	84.2	84.8	84.8	86.2	86.2	86.8	87.5
62°	77.8	77.1	77.1	77.8	77.8	79.0	79.7	80.3	81.0	80.3
63°	71.9	71.2	71.2	71.2	71.2	72.5	72.5	73.3	74.4	73.9
64°	65.5	65.5	65.5	65.5	66.1	66.1	67.4	68.0	68.7	69.3
65°	60.9	59.6	58.9	58.9	59.6	60.2	60.9	61.5	62.1	62.1
66°	55.7	54.4	53.8	53.8	53.8	53.8	55.1	55.1	56.4	56.4
67°	49.8	48.6	47.9	47.3	47.3	47.3	49.2	48.6	48.6	48.6
67.5°	47.9	46.0	45.3	44.7	44.1	45.3	44.7	45.3	45.3	44.7
68°	45.3	44.1	42.8	41.5	41.5	41.5	42.1	42.8	42.1	41.5
69°	40.2	39.6	37.5	36.3	35.6	36.3	35.6	36.3	35.6	36.3
70°	35.6	33.7	31.8	31.1	30.5	30.5	30.5	29.8	30.5	29.8
71°	31.1	29.2	27.2	25.9	25.2	25.2	24.6	25.2	24.6	25.2
72°	26.5	24.6	22.0	20.7	20.7	20.7	20.7	20.1	20.7	20.1
72.5°	24.6	22.0	20.1	18.8	18.2	18.2	18.2	18.2	17.4	18.2
73°	22.7	20.1	17.4	16.8	16.8	16.8	16.3	15.5	16.3	16.3



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	7.8	5.9	5.1	5.1	5.1	5.1	5.1	5.1	4.5	4.5
80°	3.2	2.6	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
85°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	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°







74°	42.1	42.1	40.9	38.8	35.6	32.4	29.8	27.2	24.0	20.7	19.5
75°	38.8	38.2	36.9	35.0	32.4	29.2	26.5	23.3	20.7	17.4	16.3





74°	18.8	15.5	14.2	12.9	12.9	12.9	12.3	12.3	12.3	12.9
75°	14.9	12.3	11.0	9.7	10.4	9.7	10.4	9.7	9.7	9.7



(END OF REPORT)