

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: P583652

Luminaire Tested: **HC807D010-HM80520930-81RWWH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583652
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-HM80520930-81RWWH
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 778.9 lumens
Efficiency: N/A
Efficacy: 97.4 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

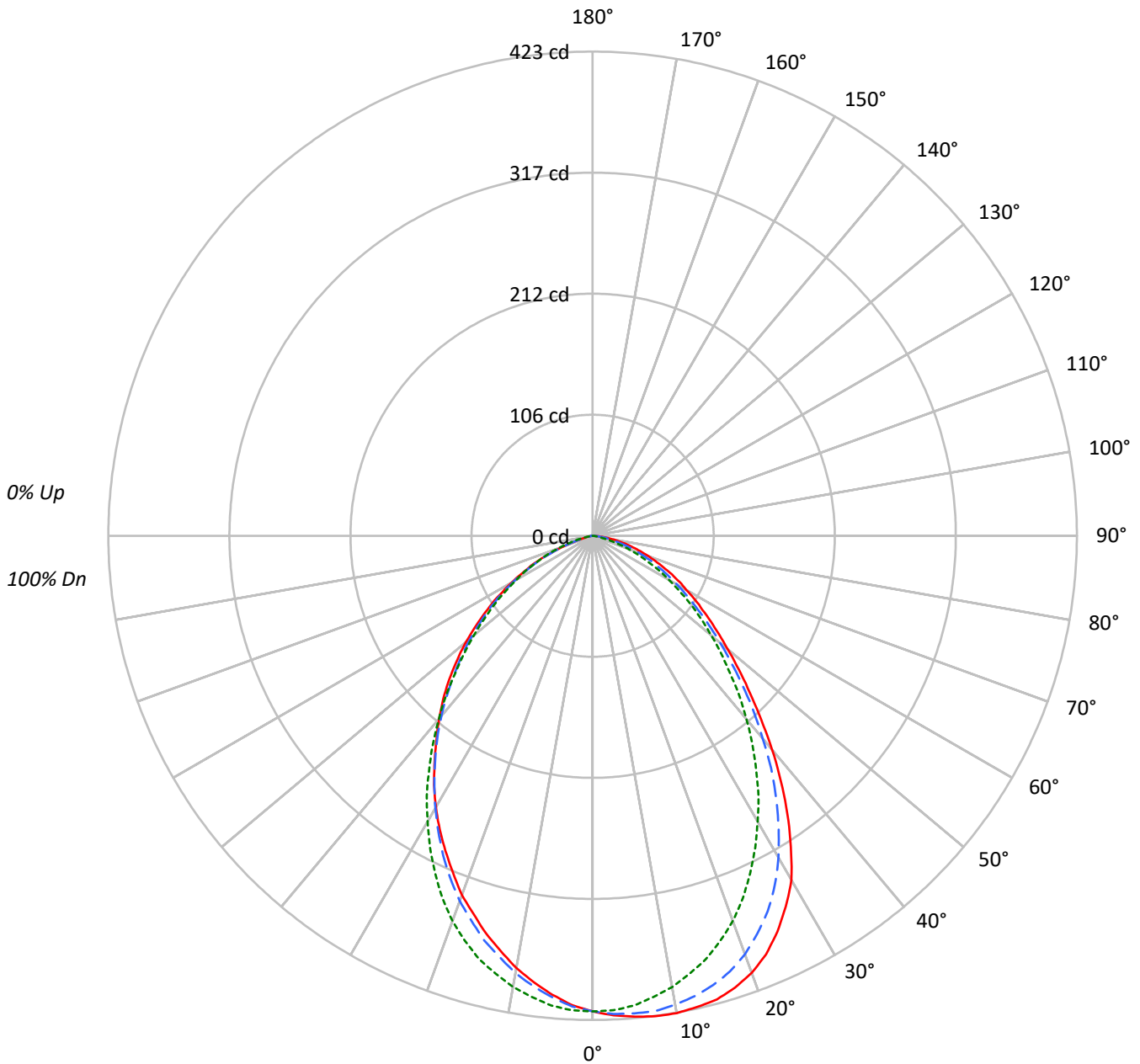
Input Watts (W): 8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	12812	12812	12812
5°	13053	12753	12459
10°	13258	12534	12005
15°	13389	12221	11483
20°	13336	11748	10957
25°	12987	11071	10343
30°	12370	10262	9746
35°	11169	9366	9050
40°	9814	8409	8385
45°	8469	7392	7706
50°	7373	6486	6913
55°	6543	5629	6021
60°	5828	4755	4995
65°	5261	3860	3940
70°	4661	2894	2335
75°	4027	1680	1013
80°	3090	586	302
85°	1981	212	212



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	5.0
10°-20°	108.6	13.9
20°-30°	153.6	19.7
30°-40°	161.8	20.8
40°-50°	137.5	17.7
50°-60°	99.0	12.7
60°-70°	57.1	7.3
70°-80°	19.5	2.5
80°-90°	2.7	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°	301.1	38.7
0°-40°	463.0	59.4
0°-60°	699.5	89.8
0°-90°	778.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	778.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	416	416	416	416	416	
5°	422	419	412	405	402	40
15°	419	406	383	366	360	118
25°	382	362	325	308	304	175
35°	297	279	249	240	240	185
45°	194	185	170	170	177	151
55°	122	112	105	109	112	109
65°	72	62	53	52	54	72
75°	34	25	14	9	8	36
85°	6	3	1	1	1	8
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°	415.5	415.5	415.5	415.5	415.5	415.5	415.5	415.5	415.5	415.5	415.5
2.5°	419.4	419.9	419.4	419.4	418.8	418.2	417.8	417.2	416.0	414.9	414.9
5°	421.7	422.8	421.7	421.7	419.9	418.8	417.8	416.0	413.8	412.0	412.0
7.5°	423.4	423.4	423.4	421.7	420.5	418.8	416.0	413.2	410.4	407.6	406.4
10°	423.4	423.4	422.8	420.5	419.4	416.0	413.2	409.3	405.3	401.4	400.3
12.5°	421.7	422.2	421.1	418.8	416.0	412.0	408.1	403.1	398.5	394.1	391.8
15°	419.4	418.8	417.8	414.9	411.6	406.4	402.5	396.9	390.6	385.0	382.8
17.5°	413.8	413.8	412.0	409.3	404.7	399.1	392.9	386.7	380.0	373.8	371.0
20°	406.4	406.4	404.3	400.8	396.4	389.0	382.3	375.0	367.1	360.9	358.0
22.5°	395.8	396.4	393.5	389.6	384.6	376.1	369.3	360.3	352.4	345.1	342.8
25°	381.7	382.8	380.0	376.1	369.3	362.0	353.6	345.1	336.0	328.7	325.4
27.5°	365.3	365.9	363.2	359.2	352.4	344.5	336.0	327.1	318.6	310.7	307.4
30°	347.4	345.1	343.9	338.9	331.6	324.8	315.2	308.0	299.0	292.2	288.2
32.5°	322.1	323.1	319.8	315.8	310.2	302.3	294.4	286.0	277.6	272.5	269.7
35°	296.7	297.8	296.1	292.2	286.0	279.3	271.4	265.2	257.9	251.7	248.8
37.5°	270.2	270.2	269.1	266.8	262.3	256.2	248.3	242.1	235.9	230.9	229.1
40°	243.8	242.6	242.1	240.4	236.5	230.9	225.7	220.7	214.5	211.2	208.9
42.5°	217.8	217.8	216.8	215.1	211.2	208.3	203.3	197.7	193.1	189.8	189.8
45°	194.2	194.8	193.1	191.9	189.8	185.2	180.7	176.7	172.8	170.5	169.5
47.5°	173.4	173.4	171.7	170.5	168.4	164.4	160.5	157.0	154.3	152.6	152.0
50°	153.7	153.7	153.7	150.9	148.1	145.2	142.4	138.5	136.8	135.6	135.2
52.5°	136.8	136.2	136.2	134.0	131.2	127.7	125.0	121.7	119.9	118.8	119.4
55°	121.7	121.7	121.1	118.2	115.4	112.0	109.2	106.4	105.3	104.2	104.7
56°	115.4	115.4	114.8	112.6	109.2	106.4	103.0	100.3	98.5	99.1	99.1
57°	110.9	109.8	109.8	107.0	104.2	100.3	97.4	94.5	93.4	92.9	92.9
58°	105.3	104.7	104.2	101.3	98.5	95.1	92.4	89.5	87.8	87.8	87.2
59°	99.7	99.7	98.5	96.3	93.4	90.1	87.2	84.5	82.8	82.2	82.2
60°	94.5	95.1	93.4	91.2	88.9	85.0	81.6	79.3	77.7	77.1	77.1
61°	90.1	90.1	88.9	86.2	83.3	80.5	77.1	74.3	73.1	72.1	72.1
62°	86.2	85.0	84.5	81.6	78.9	75.4	72.7	69.8	68.1	67.0	67.5
63°	81.0	80.5	79.3	77.1	74.3	71.0	67.5	65.2	63.6	61.9	62.5
64°	77.1	76.6	74.9	72.7	69.8	66.4	63.1	60.8	59.6	58.0	57.5
65°	72.1	71.5	71.0	68.1	65.2	61.9	59.2	56.9	55.2	54.0	52.9
66°	67.5	68.1	67.0	64.8	61.4	58.6	54.6	52.3	51.3	49.6	48.4
67°	63.6	63.6	62.5	60.2	56.9	54.0	51.3	48.4	46.7	45.1	44.5
67.5°	61.4	61.4	60.2	57.5	55.2	51.7	49.0	46.7	44.5	43.4	42.2
68°	59.2	59.2	58.6	56.3	53.5	50.1	47.3	44.5	42.2	40.5	39.9
69°	55.2	55.7	54.6	52.3	49.6	46.1	43.4	41.1	38.8	37.2	36.1
70°	51.7	51.3	50.1	47.8	45.1	42.8	39.9	37.2	34.9	32.6	32.1
71°	47.3	47.3	46.1	44.5	41.7	38.8	36.1	33.8	31.5	28.7	28.2
72°	43.9	43.9	42.8	40.5	38.2	35.5	32.6	29.9	28.2	25.3	24.3
72.5°	41.7	42.2	41.1	38.8	36.6	33.2	31.0	28.7	25.9	23.7	22.5
73°	40.5	39.9	39.4	37.2	34.3	32.1	29.3	27.0	24.3	22.0	20.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	25.3	25.3	24.7	22.5	20.3	18.0	15.8	13.5	11.2	9.0	7.9
80°	17.4	18.0	16.8	15.8	14.1	11.8	9.6	7.9	5.6	4.5	3.3
82.5°	11.2	11.2	10.8	9.6	8.5	6.8	5.6	3.9	2.9	2.3	1.7
85°	5.6	6.2	5.6	5.0	3.9	3.3	2.9	1.7	1.1	0.6	0.6
87.5°	2.3	2.3	2.3	1.7	1.7	1.1	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°	415.5	415.5	415.5	415.5	415.5	415.5	415.5	415.5	415.5	415.5
2.5°	413.8	413.8	412.6	412.0	411.6	411.0	410.4	409.9	409.9	410.4
5°	410.4	409.3	407.0	406.4	404.7	404.3	403.1	402.5	403.1	402.5
7.5°	405.3	403.1	400.3	399.1	396.9	395.8	394.1	394.1	392.9	393.5
10°	398.5	395.2	391.8	389.6	387.9	386.2	385.0	384.0	383.4	383.4
12.5°	390.2	386.2	382.8	379.4	376.7	375.5	373.2	373.2	372.1	371.5
15°	380.6	375.5	371.5	368.2	365.9	363.6	362.0	360.9	359.7	359.7
17.5°	368.2	363.6	359.7	355.8	352.4	350.7	349.1	347.4	347.4	346.2
20°	354.7	349.7	346.2	342.2	339.5	336.6	334.4	334.4	333.3	333.9
22.5°	339.5	333.3	329.9	327.1	324.3	322.1	319.8	319.8	319.2	318.6
25°	322.5	317.5	313.6	310.2	308.5	306.3	305.7	304.6	304.0	304.0
27.5°	304.6	300.7	295.5	293.9	291.6	290.5	290.5	289.9	288.8	289.3
30°	285.4	280.9	278.1	277.0	274.7	274.7	274.1	273.1	273.1	273.7
32.5°	266.8	262.3	260.0	259.6	257.3	257.3	256.7	257.3	257.3	257.9
35°	246.5	242.6	242.1	240.4	239.8	239.8	239.8	240.9	242.1	240.4
37.5°	227.4	224.7	223.0	222.4	223.0	223.0	223.5	225.1	224.7	224.1
40°	207.7	205.5	204.3	204.3	205.5	206.6	206.6	208.3	208.9	208.3
42.5°	188.0	186.3	186.3	186.9	188.0	188.6	190.2	191.9	192.5	193.1
45°	169.5	169.5	169.5	170.0	170.5	171.7	174.0	175.7	176.3	176.7
47.5°	151.4	150.9	152.6	153.1	154.9	155.4	157.0	159.3	159.9	160.5
50°	134.6	135.6	136.2	137.9	139.1	139.1	141.2	142.4	144.1	144.1
52.5°	118.8	120.5	121.1	122.7	123.3	123.8	125.0	126.7	127.7	127.7
55°	104.7	105.3	106.4	107.0	108.6	109.2	110.3	110.9	112.6	112.0
56°	98.5	99.7	100.3	101.3	102.4	103.0	104.2	104.7	105.9	106.4
57°	92.9	93.4	95.1	95.7	96.8	96.8	97.4	99.1	99.1	99.7
58°	87.2	88.4	88.9	89.5	90.6	91.2	92.4	92.9	93.4	92.9
59°	82.2	82.8	83.3	83.3	84.5	84.5	86.2	87.2	87.8	87.8
60°	77.1	77.1	77.7	78.3	79.3	79.9	79.9	81.0	81.0	81.0
61°	72.1	72.1	72.7	73.1	73.7	73.7	74.9	74.9	75.4	76.0
62°	67.5	67.0	67.0	67.5	67.5	68.7	69.2	69.8	70.4	69.8
63°	62.5	61.9	61.9	61.9	61.9	63.1	63.1	63.6	64.8	64.2
64°	56.9	56.9	56.9	56.9	57.5	57.5	58.6	59.2	59.6	60.2
65°	52.9	51.7	51.3	51.3	51.7	52.3	52.9	53.5	54.0	54.0
66°	48.4	47.3	46.7	46.7	46.7	46.7	47.8	47.8	49.0	49.0
67°	43.4	42.2	41.7	41.1	41.1	41.1	42.8	42.2	42.2	42.2
67.5°	41.7	39.9	39.4	38.8	38.2	39.4	38.8	39.4	39.4	38.8
68°	39.4	38.2	37.2	36.1	36.1	36.1	36.6	37.2	36.6	36.1
69°	34.9	34.3	32.6	31.5	31.0	31.5	31.0	31.5	31.0	31.5
70°	31.0	29.3	27.6	27.0	26.4	26.4	26.4	25.9	26.4	25.9
71°	27.0	25.3	23.7	22.5	22.0	22.0	21.4	22.0	21.4	22.0
72°	23.1	21.4	19.1	18.0	18.0	18.0	18.0	17.4	18.0	17.4
72.5°	21.4	19.1	17.4	16.4	15.8	15.8	15.8	15.8	15.2	15.8
73°	19.7	17.4	15.2	14.6	14.6	14.6	14.1	13.5	14.1	14.1



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	6.8	5.0	4.5	4.5	4.5	4.5	4.5	4.5	3.9	3.9
80°	2.9	2.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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°	36.6	36.6	35.5	33.8	31.0	28.2	25.9	23.7	20.8	18.0	16.8
75°	33.8	33.2	32.1	30.4	28.2	25.3	23.1	20.3	18.0	15.2	14.1





74°	16.4	13.5	12.4	11.2	11.2	11.2	10.8	10.8	10.8	11.2
75°	12.9	10.8	9.6	8.5	9.0	8.5	9.0	8.5	8.5	8.5



(END OF REPORT)