

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: P583635

Luminaire Tested: **HC807D010-HM80520927-81RWWH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583635
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-HM80520927-81RWWH
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 703.3 lumens
Efficiency: N/A
Efficacy: 87.9 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

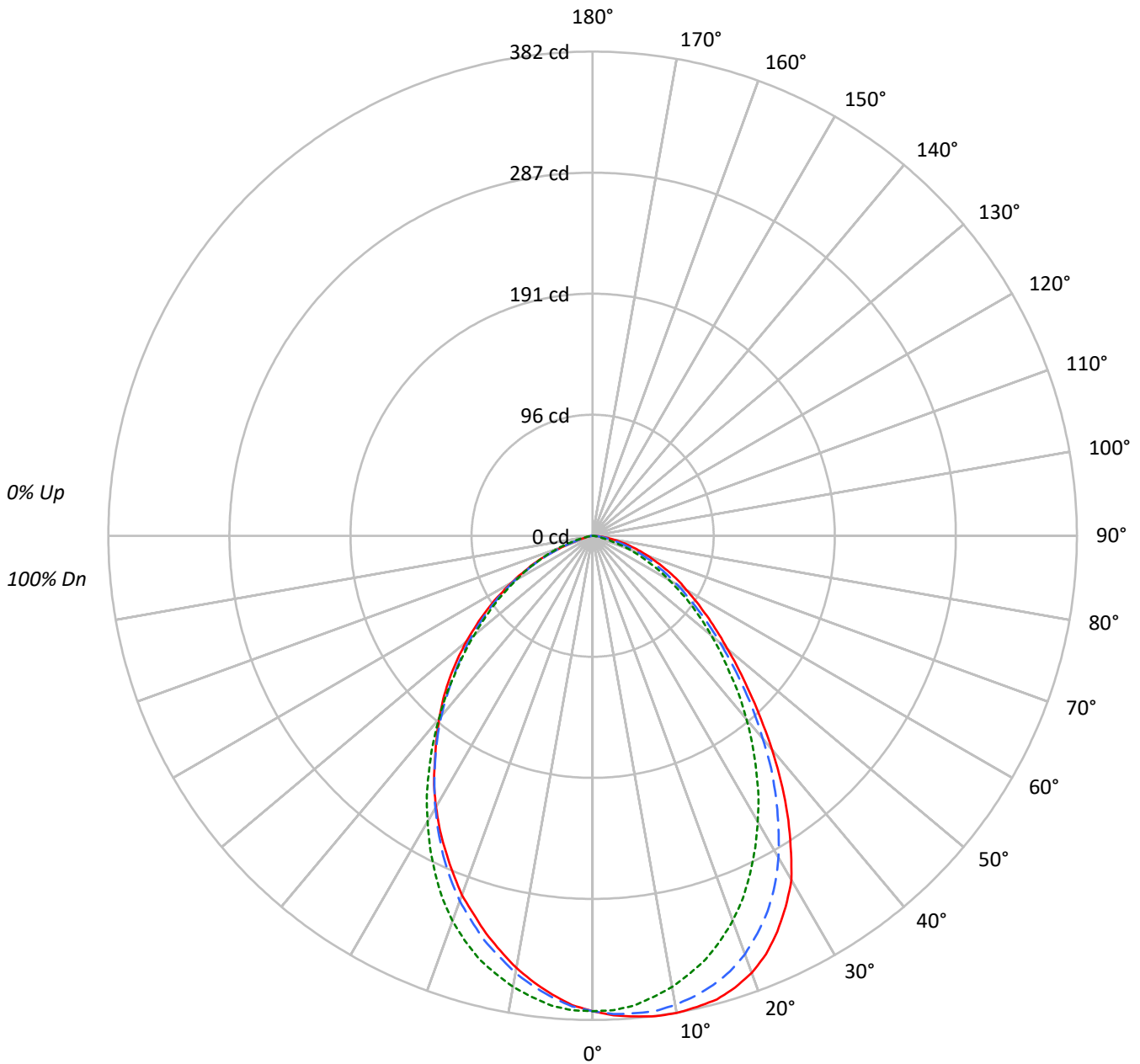
Input Watts (W): 8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	11567	11567	11567
5°	11784	11518	11249
10°	11971	11316	10840
15°	12090	11036	10369
20°	12043	10606	9894
25°	11725	10000	9340
30°	11170	9268	8795
35°	10085	8459	8169
40°	8860	7592	7572
45°	7649	6672	6964
50°	6654	5853	6241
55°	5903	5080	5441
60°	5267	4299	4521
65°	4743	3488	3561
70°	4210	2606	2110
75°	3634	1513	905
80°	2806	550	284
85°	1804	177	177



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.2	5.0
10°-20°	98.0	13.9
20°-30°	138.7	19.7
30°-40°	146.1	20.8
40°-50°	124.2	17.7
50°-60°	89.4	12.7
60°-70°	51.6	7.3
70°-80°	17.7	2.5
80°-90°	2.4	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°	271.9	38.7
0°-40°	418.0	59.4
0°-60°	631.6	89.8
0°-90°	703.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	703.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	375	375	375	375	375	
5°	381	378	372	366	363	36
15°	379	367	346	330	325	107
25°	345	327	294	279	274	158
35°	268	252	225	216	217	167
45°	175	167	153	154	160	136
55°	110	101	94	98	101	99
65°	65	56	48	47	49	65
75°	30	23	13	8	8	32
85°	5	3	0	0	0	7
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°	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1
2.5°	378.7	379.2	378.7	378.7	378.2	377.7	377.1	376.7	375.7	374.6	374.6
5°	380.7	381.8	380.7	380.7	379.2	378.2	377.1	375.7	373.7	372.1	372.1
7.5°	382.3	382.3	382.3	380.7	379.8	378.2	375.7	373.1	370.6	368.1	367.0
10°	382.3	382.3	381.8	379.8	378.7	375.7	373.1	369.6	366.0	362.4	361.4
12.5°	380.7	381.2	380.2	378.2	375.7	372.1	368.5	364.0	359.9	355.9	353.8
15°	378.7	378.2	377.1	374.6	371.6	367.0	363.4	358.4	352.8	347.7	345.7
17.5°	373.7	373.7	372.1	369.6	365.6	360.4	354.8	349.2	343.1	337.6	335.0
20°	367.0	367.0	365.0	362.0	357.9	351.2	345.1	338.5	331.5	325.9	323.2
22.5°	357.3	357.9	355.3	351.8	347.1	339.6	333.5	325.3	318.2	311.7	309.6
25°	344.6	345.7	343.1	339.6	333.5	326.8	319.2	311.7	303.5	296.8	293.9
27.5°	329.9	330.4	327.9	324.3	318.2	311.1	303.5	295.3	287.8	280.6	277.6
30°	313.7	311.7	310.6	306.0	299.5	293.3	284.6	278.1	270.0	263.9	260.3
32.5°	290.7	291.8	288.7	285.1	280.1	272.9	265.9	258.2	250.6	246.1	243.5
35°	267.9	268.9	267.4	263.9	258.2	252.1	245.0	239.5	232.8	227.2	224.7
37.5°	244.0	244.0	242.9	240.9	236.8	231.2	224.2	218.6	212.9	208.4	206.9
40°	220.1	219.0	218.6	217.0	213.5	208.4	203.9	199.3	193.7	190.6	188.6
42.5°	196.7	196.7	195.7	194.2	190.6	188.1	183.6	178.4	174.4	171.4	171.4
45°	175.4	175.9	174.4	173.4	171.4	167.3	163.1	159.7	156.1	154.0	153.0
47.5°	156.5	156.5	155.0	154.0	152.0	148.4	144.8	141.8	139.3	137.8	137.3
50°	138.7	138.7	138.7	136.2	133.7	131.1	128.6	125.0	123.6	122.5	122.0
52.5°	123.6	123.0	123.0	120.9	118.4	115.4	112.8	109.8	108.3	107.3	107.8
55°	109.8	109.8	109.3	106.7	104.2	101.2	98.6	96.1	95.0	94.0	94.5
56°	104.2	104.2	103.7	101.7	98.6	96.1	93.0	90.5	88.9	89.5	89.5
57°	100.1	99.1	99.1	96.6	94.0	90.5	88.0	85.4	84.4	83.9	83.9
58°	95.0	94.5	94.0	91.5	88.9	85.9	83.4	80.8	79.3	79.3	78.8
59°	90.0	90.0	88.9	86.9	84.4	81.4	78.8	76.2	74.7	74.2	74.2
60°	85.4	85.9	84.4	82.3	80.3	76.7	73.7	71.7	70.1	69.7	69.7
61°	81.4	81.4	80.3	77.8	75.3	72.7	69.7	67.2	66.1	65.0	65.0
62°	77.8	76.7	76.2	73.7	71.2	68.1	65.6	63.0	61.5	60.5	60.9
63°	73.3	72.7	71.7	69.7	67.2	64.1	60.9	58.9	57.5	55.9	56.4
64°	69.7	69.2	67.6	65.6	63.0	60.0	56.9	54.9	53.9	52.3	51.9
65°	65.0	64.5	64.1	61.5	58.9	55.9	53.4	51.4	49.8	48.8	47.8
66°	60.9	61.5	60.5	58.4	55.4	52.8	49.4	47.3	46.2	44.7	43.7
67°	57.5	57.5	56.4	54.4	51.4	48.8	46.2	43.7	42.2	40.6	40.2
67.5°	55.4	55.4	54.4	51.9	49.8	46.7	44.2	42.2	40.2	39.2	38.1
68°	53.4	53.4	52.8	50.8	48.3	45.3	42.7	40.2	38.1	36.6	36.1
69°	49.8	50.3	49.4	47.3	44.7	41.7	39.2	37.2	35.1	33.6	32.5
70°	46.7	46.2	45.3	43.3	40.6	38.6	36.1	33.6	31.5	29.5	28.9
71°	42.7	42.7	41.7	40.2	37.6	35.1	32.5	30.5	28.4	25.9	25.5
72°	39.7	39.7	38.6	36.6	34.5	32.0	29.5	26.9	25.5	22.8	21.9
72.5°	37.6	38.1	37.2	35.1	33.0	30.0	28.0	25.9	23.4	21.4	20.3
73°	36.6	36.1	35.6	33.6	31.0	28.9	26.4	24.4	21.9	19.8	18.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	22.8	22.8	22.3	20.3	18.3	16.3	14.2	12.2	10.2	8.1	7.2
80°	15.8	16.3	15.3	14.2	12.7	10.6	8.6	7.2	5.1	4.1	3.1
82.5°	10.2	10.2	9.7	8.6	7.6	6.1	5.1	3.6	2.5	2.0	1.6
85°	5.1	5.6	5.1	4.5	3.6	3.1	2.5	1.6	1.1	0.5	0.5
87.5°	2.0	2.0	2.0	1.6	1.6	1.1	0.5	0.5	0.5	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°	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1
2.5°	373.7	373.7	372.6	372.1	371.6	371.0	370.6	370.1	370.1	370.6
5°	370.6	369.6	367.6	367.0	365.6	365.0	364.0	363.4	364.0	363.4
7.5°	366.0	364.0	361.4	360.4	358.4	357.3	355.9	355.9	354.8	355.3
10°	359.9	356.8	353.8	351.8	350.3	348.7	347.7	346.7	346.2	346.2
12.5°	352.3	348.7	345.7	342.6	340.1	339.0	337.0	337.0	336.0	335.6
15°	343.7	339.0	335.6	332.4	330.4	328.4	326.8	325.9	324.8	324.8
17.5°	332.4	328.4	324.8	321.2	318.2	316.7	315.1	313.7	313.7	312.6
20°	320.3	315.7	312.6	309.0	306.5	304.0	302.0	302.0	300.9	301.5
22.5°	306.5	300.9	297.9	295.3	292.8	290.7	288.7	288.7	288.2	287.8
25°	291.2	286.7	283.1	280.1	278.6	276.5	276.0	275.0	274.5	274.5
27.5°	275.0	271.5	266.8	265.4	263.3	262.3	262.3	261.8	260.7	261.2
30°	257.8	253.7	251.1	250.1	248.1	248.1	247.6	246.5	246.5	247.0
32.5°	240.9	236.8	234.8	234.3	232.3	232.3	231.8	232.3	232.3	232.8
35°	222.6	219.0	218.6	217.0	216.5	216.5	216.5	217.6	218.6	217.0
37.5°	205.4	202.8	201.4	200.8	201.4	201.4	201.8	203.4	202.8	202.3
40°	187.6	185.6	184.5	184.5	185.6	186.5	186.5	188.1	188.6	188.1
42.5°	169.8	168.3	168.3	168.7	169.8	170.3	171.8	173.4	173.9	174.4
45°	153.0	153.0	153.0	153.6	154.0	155.0	157.0	158.6	159.1	159.7
47.5°	136.7	136.2	137.8	138.3	139.8	140.3	141.8	143.9	144.4	144.8
50°	121.5	122.5	123.0	124.5	125.6	125.6	127.6	128.6	130.1	130.1
52.5°	107.3	108.7	109.3	110.8	111.4	111.9	112.8	114.4	115.4	115.4
55°	94.5	95.0	96.1	96.6	98.1	98.6	99.7	100.1	101.7	101.2
56°	88.9	90.0	90.5	91.5	92.5	93.0	94.0	94.5	95.6	96.1
57°	83.9	84.4	85.9	86.4	87.5	87.5	88.0	89.5	89.5	90.0
58°	78.8	79.8	80.3	80.8	81.9	82.3	83.4	83.9	84.4	83.9
59°	74.2	74.7	75.3	75.3	76.2	76.2	77.8	78.8	79.3	79.3
60°	69.7	69.7	70.1	70.6	71.7	72.2	72.2	73.3	73.3	73.3
61°	65.0	65.0	65.6	66.1	66.6	66.6	67.6	67.6	68.1	68.6
62°	60.9	60.5	60.5	60.9	60.9	62.0	62.5	63.0	63.6	63.0
63°	56.4	55.9	55.9	55.9	55.9	56.9	56.9	57.5	58.4	58.0
64°	51.4	51.4	51.4	51.4	51.9	51.9	52.8	53.4	53.9	54.4
65°	47.8	46.7	46.2	46.2	46.7	47.3	47.8	48.3	48.8	48.8
66°	43.7	42.7	42.2	42.2	42.2	42.2	43.3	43.3	44.2	44.2
67°	39.2	38.1	37.6	37.2	37.2	37.2	38.6	38.1	38.1	38.1
67.5°	37.6	36.1	35.6	35.1	34.5	35.6	35.1	35.6	35.6	35.1
68°	35.6	34.5	33.6	32.5	32.5	32.5	33.0	33.6	33.0	32.5
69°	31.5	31.0	29.5	28.4	28.0	28.4	28.0	28.4	28.0	28.4
70°	28.0	26.4	24.9	24.4	23.9	23.9	23.9	23.4	23.9	23.4
71°	24.4	22.8	21.4	20.3	19.8	19.8	19.4	19.8	19.4	19.8
72°	20.8	19.4	17.3	16.3	16.3	16.3	16.3	15.8	16.3	15.8
72.5°	19.4	17.3	15.8	14.7	14.2	14.2	14.2	14.2	13.7	14.2
73°	17.8	15.8	13.7	13.3	13.3	13.3	12.7	12.2	12.7	12.7



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	6.1	4.5	4.1	4.1	4.1	4.1	4.1	4.1	3.6	3.6
80°	2.5	2.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
85°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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°	33.0	33.0	32.0	30.5	28.0	25.5	23.4	21.4	18.8	16.3	15.3
75°	30.5	30.0	28.9	27.5	25.5	22.8	20.8	18.3	16.3	13.7	12.7





74°	14.7	12.2	11.2	10.2	10.2	10.2	9.7	9.7	9.7	10.2
75°	11.7	9.7	8.6	7.6	8.1	7.6	8.1	7.6	7.6	7.6



(END OF REPORT)