

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: P583465

Luminaire Tested: **HC805D010-HM80520835-81RWWH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583465
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: HC805D010-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: 679.3 lumens
Efficiency: N/A
Efficacy: 113.2 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

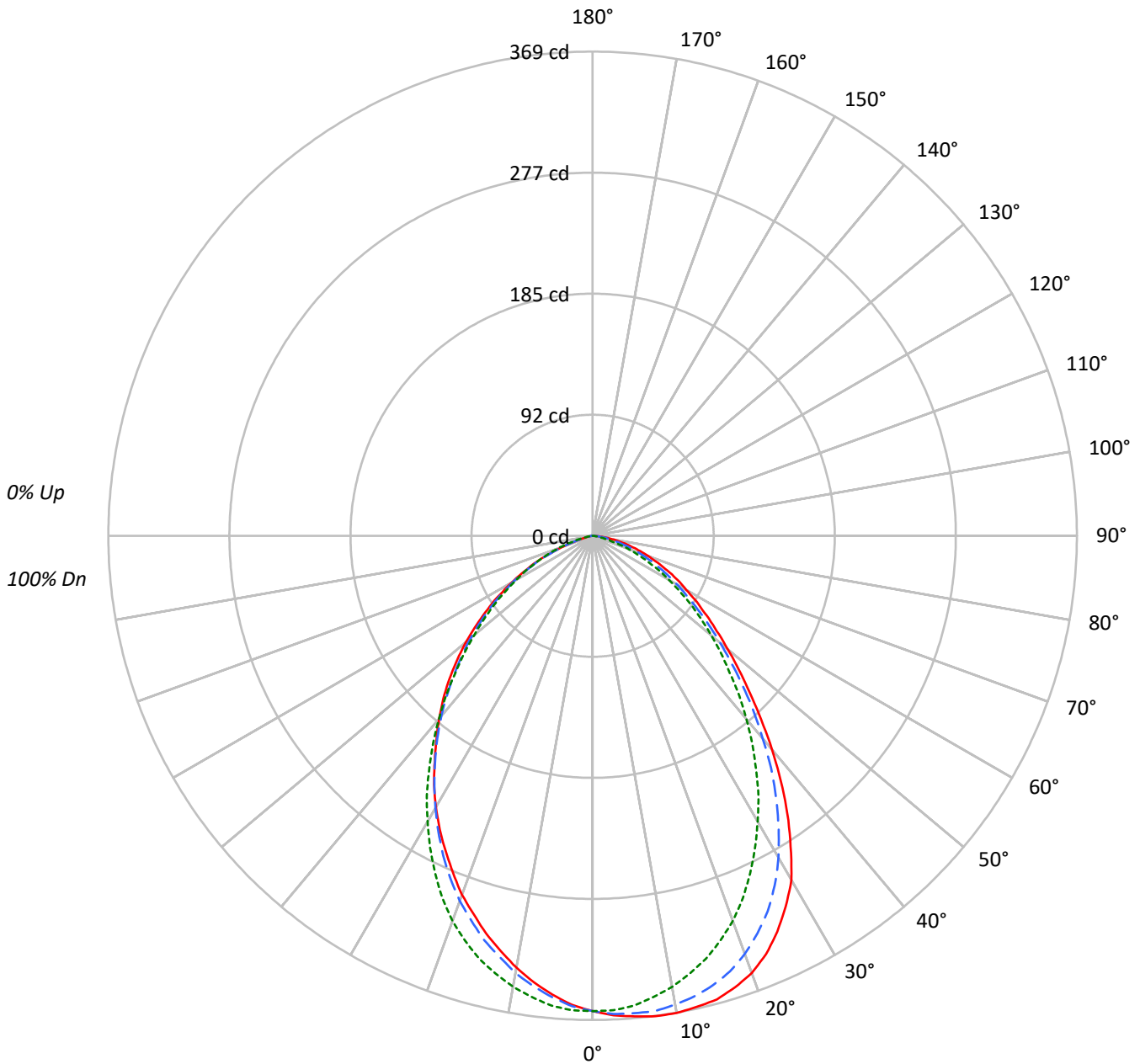
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: HC805D010-HM80520835-81RWWH

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	63	71	66	62	69	65	61	59				59
5	81	70	62	56	79	69	62	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	36	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°	11172	11172	11172
5°	11382	11128	10868
10°	11564	10928	10468
15°	11678	10656	10015
20°	11636	10248	9553
25°	11327	9656	9020
30°	10789	8952	8499
35°	9742	8169	7894
40°	8558	7334	7314
45°	7387	6445	6725
50°	6433	5651	6030
55°	5704	4908	5252
60°	5088	4151	4360
65°	4582	3371	3444
70°	4066	2524	2038
75°	3503	1465	882
80°	2699	533	249
85°	1734	177	177



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.0	5.0
10°-20°	94.7	13.9
20°-30°	133.9	19.7
30°-40°	141.1	20.8
40°-50°	119.9	17.7
50°-60°	86.4	12.7
60°-70°	49.8	7.3
70°-80°	17.1	2.5
80°-90°	2.3	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°	262.6	38.7
0°-40°	403.8	59.4
0°-60°	610.1	89.8
0°-90°	679.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	679.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	362	362	362	362	362	
5°	368	365	360	353	351	35
15°	366	355	334	319	314	103
25°	333	316	284	269	265	153
35°	259	244	217	209	210	161
45°	169	162	148	149	154	132
55°	106	98	91	95	98	95
65°	63	54	46	45	47	63
75°	29	22	12	8	7	31
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°	362.3	362.3	362.3	362.3	362.3	362.3	362.3	362.3	362.3	362.3	362.3
2.5°	365.8	366.3	365.8	365.8	365.3	364.8	364.4	363.8	362.8	361.9	361.9
5°	367.7	368.8	367.7	367.7	366.3	365.3	364.4	362.8	360.9	359.5	359.5
7.5°	369.3	369.3	369.3	367.7	366.8	365.3	362.8	360.4	357.9	355.5	354.6
10°	369.3	369.3	368.8	366.8	365.8	362.8	360.4	356.9	353.5	350.1	349.0
12.5°	367.7	368.2	367.2	365.3	362.8	359.5	356.0	351.6	347.6	343.7	341.7
15°	365.8	365.3	364.4	361.9	358.9	354.6	351.1	346.2	340.8	335.9	333.8
17.5°	360.9	360.9	359.5	356.9	353.0	348.1	342.7	337.3	331.4	326.1	323.5
20°	354.6	354.6	352.5	349.6	345.7	339.2	333.4	327.0	320.1	314.7	312.3
22.5°	345.2	345.7	343.2	339.8	335.4	328.0	322.1	314.2	307.4	300.9	299.0
25°	332.9	333.8	331.4	328.0	322.1	315.8	308.3	300.9	293.1	286.7	283.8
27.5°	318.6	319.1	316.7	313.3	307.4	300.4	293.1	285.2	277.9	271.0	268.1
30°	303.0	300.9	300.0	295.5	289.2	283.3	275.0	268.6	260.7	254.8	251.4
32.5°	280.8	281.8	278.9	275.4	270.5	263.7	256.8	249.5	242.0	237.6	235.2
35°	258.8	259.7	258.3	254.8	249.5	243.6	236.6	231.3	224.9	219.5	217.0
37.5°	235.7	235.7	234.7	232.7	228.7	223.4	216.5	211.2	205.8	201.3	199.8
40°	212.6	211.6	211.2	209.7	206.2	201.3	196.9	192.5	187.1	184.1	182.2
42.5°	190.0	190.0	189.0	187.6	184.1	181.7	177.3	172.4	168.4	165.4	165.4
45°	169.4	169.9	168.4	167.5	165.4	161.6	157.6	154.2	150.7	148.8	147.8
47.5°	151.2	151.2	149.7	148.8	146.8	143.4	139.9	136.9	134.5	133.1	132.6
50°	134.1	134.1	134.1	131.6	129.2	126.6	124.2	120.8	119.3	118.4	117.8
52.5°	119.3	118.9	118.9	116.8	114.4	111.4	109.0	106.1	104.6	103.5	104.1
55°	106.1	106.1	105.6	103.1	100.7	97.7	95.3	92.8	91.8	90.9	91.3
56°	100.7	100.7	100.2	98.2	95.3	92.8	89.9	87.4	85.9	86.4	86.4
57°	96.7	95.8	95.8	93.2	90.9	87.4	85.0	82.5	81.5	81.0	81.0
58°	91.8	91.3	90.9	88.3	85.9	83.0	80.6	78.0	76.6	76.6	76.1
59°	86.9	86.9	85.9	83.9	81.5	78.5	76.1	73.6	72.2	71.7	71.7
60°	82.5	83.0	81.5	79.6	77.6	74.1	71.2	69.2	67.8	67.3	67.3
61°	78.5	78.5	77.6	75.2	72.7	70.3	67.3	64.8	63.8	62.8	62.8
62°	75.2	74.1	73.6	71.2	68.7	65.8	63.3	60.9	59.4	58.4	58.9
63°	70.7	70.3	69.2	67.3	64.8	61.9	58.9	57.0	55.5	54.0	54.5
64°	67.3	66.8	65.4	63.3	60.9	57.9	54.9	53.0	52.1	50.5	50.0
65°	62.8	62.4	61.9	59.4	57.0	54.0	51.6	49.6	48.1	47.2	46.2
66°	58.9	59.4	58.4	56.5	53.5	51.1	47.6	45.6	44.6	43.2	42.3
67°	55.5	55.5	54.5	52.5	49.6	47.2	44.6	42.3	40.7	39.3	38.8
67.5°	53.5	53.5	52.5	50.0	48.1	45.1	42.7	40.7	38.8	37.8	36.9
68°	51.6	51.6	51.1	49.1	46.7	43.7	41.3	38.8	36.9	35.3	34.8
69°	48.1	48.6	47.6	45.6	43.2	40.2	37.8	35.8	33.9	32.4	31.5
70°	45.1	44.6	43.7	41.8	39.3	37.3	34.8	32.4	30.4	28.5	28.0
71°	41.3	41.3	40.2	38.8	36.4	33.9	31.5	29.4	27.5	25.0	24.5
72°	38.3	38.3	37.3	35.3	33.4	30.9	28.5	26.0	24.5	22.1	21.1
72.5°	36.4	36.9	35.8	33.9	32.0	29.0	27.1	25.0	22.6	20.6	19.6
73°	35.3	34.8	34.4	32.4	29.9	28.0	25.5	23.6	21.1	19.2	18.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	22.1	22.1	21.5	19.6	17.7	15.7	13.8	11.7	9.8	7.9	6.8
80°	15.2	15.7	14.7	13.8	12.3	10.3	8.4	6.8	4.9	4.0	3.0
82.5°	9.8	9.8	9.3	8.4	7.4	5.9	4.9	3.5	2.5	1.9	1.4
85°	4.9	5.4	4.9	4.4	3.5	3.0	2.5	1.4	1.0	0.5	0.5
87.5°	1.9	1.9	1.9	1.4	1.4	1.0	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°	362.3	362.3	362.3	362.3	362.3	362.3	362.3	362.3	362.3	362.3
2.5°	360.9	360.9	359.9	359.5	358.9	358.4	357.9	357.4	357.4	357.9
5°	357.9	356.9	355.0	354.6	353.0	352.5	351.6	351.1	351.6	351.1
7.5°	353.5	351.6	349.0	348.1	346.2	345.2	343.7	343.7	342.7	343.2
10°	347.6	344.7	341.7	339.8	338.3	336.8	335.9	334.8	334.3	334.3
12.5°	340.3	336.8	333.8	331.0	328.5	327.5	325.6	325.6	324.5	324.0
15°	331.9	327.5	324.0	321.2	319.1	317.2	315.8	314.7	313.7	313.7
17.5°	321.2	317.2	313.7	310.3	307.4	305.8	304.4	303.0	303.0	302.0
20°	309.3	304.9	302.0	298.5	296.0	293.6	291.7	291.7	290.6	291.1
22.5°	296.0	290.6	287.8	285.2	282.9	280.8	278.9	278.9	278.4	277.9
25°	281.3	276.9	273.5	270.5	269.1	267.1	266.6	265.6	265.1	265.1
27.5°	265.6	262.1	257.7	256.3	254.4	253.4	253.4	252.8	251.8	252.3
30°	249.0	245.0	242.5	241.6	239.6	239.6	239.2	238.1	238.1	238.7
32.5°	232.7	228.7	226.8	226.4	224.4	224.4	223.8	224.4	224.4	224.9
35°	215.1	211.6	211.2	209.7	209.1	209.1	209.1	210.2	211.2	209.7
37.5°	198.3	195.9	194.4	193.9	194.4	194.4	194.9	196.4	195.9	195.5
40°	181.2	179.2	178.2	178.2	179.2	180.1	180.1	181.7	182.2	181.7
42.5°	164.0	162.6	162.6	163.0	164.0	164.5	165.9	167.5	167.9	168.4
45°	147.8	147.8	147.8	148.3	148.8	149.7	151.7	153.2	153.7	154.2
47.5°	132.0	131.6	133.1	133.6	135.0	135.5	136.9	139.0	139.5	139.9
50°	117.3	118.4	118.9	120.3	121.3	121.3	123.3	124.2	125.7	125.7
52.5°	103.5	105.1	105.6	107.0	107.5	108.0	109.0	110.5	111.4	111.4
55°	91.3	91.8	92.8	93.2	94.8	95.3	96.2	96.7	98.2	97.7
56°	85.9	86.9	87.4	88.3	89.4	89.9	90.9	91.3	92.3	92.8
57°	81.0	81.5	83.0	83.4	84.5	84.5	85.0	86.4	86.4	86.9
58°	76.1	77.1	77.6	78.0	79.0	79.6	80.6	81.0	81.5	81.0
59°	71.7	72.2	72.7	72.7	73.6	73.6	75.2	76.1	76.6	76.6
60°	67.3	67.3	67.8	68.2	69.2	69.7	69.7	70.7	70.7	70.7
61°	62.8	62.8	63.3	63.8	64.3	64.3	65.4	65.4	65.8	66.3
62°	58.9	58.4	58.4	58.9	58.9	59.8	60.4	60.9	61.4	60.9
63°	54.5	54.0	54.0	54.0	54.0	54.9	54.9	55.5	56.5	56.0
64°	49.6	49.6	49.6	49.6	50.0	50.0	51.1	51.6	52.1	52.5
65°	46.2	45.1	44.6	44.6	45.1	45.6	46.2	46.7	47.2	47.2
66°	42.3	41.3	40.7	40.7	40.7	40.7	41.8	41.8	42.7	42.7
67°	37.8	36.9	36.4	35.8	35.8	35.8	37.3	36.9	36.9	36.9
67.5°	36.4	34.8	34.4	33.9	33.4	34.4	33.9	34.4	34.4	33.9
68°	34.4	33.4	32.4	31.5	31.5	31.5	32.0	32.4	32.0	31.5
69°	30.4	29.9	28.5	27.5	27.1	27.5	27.1	27.5	27.1	27.5
70°	27.1	25.5	24.1	23.6	23.1	23.1	23.1	22.6	23.1	22.6
71°	23.6	22.1	20.6	19.6	19.2	19.2	18.7	19.2	18.7	19.2
72°	20.1	18.7	16.6	15.7	15.7	15.7	15.7	15.2	15.7	15.2
72.5°	18.7	16.6	15.2	14.2	13.8	13.8	13.8	13.8	13.3	13.8
73°	17.2	15.2	13.3	12.8	12.8	12.8	12.3	11.7	12.3	12.3



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	5.9	4.4	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5
80°	2.5	1.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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°	32.0	32.0	30.9	29.4	27.1	24.5	22.6	20.6	18.2	15.7	14.7
75°	29.4	29.0	28.0	26.6	24.5	22.1	20.1	17.7	15.7	13.3	12.3





74°	14.2	11.7	10.8	9.8	9.8	9.8	9.3	9.3	9.3	9.8
75°	11.3	9.3	8.4	7.4	7.9	7.4	7.9	7.4	7.4	7.4



(END OF REPORT)