

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: P593478

Luminaire Tested: **HC805D010-HM80520950-81RWWH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P593478
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-HM80520950-81RWWH
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 642.0 lumens
Efficiency: N/A
Efficacy: 107.0 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

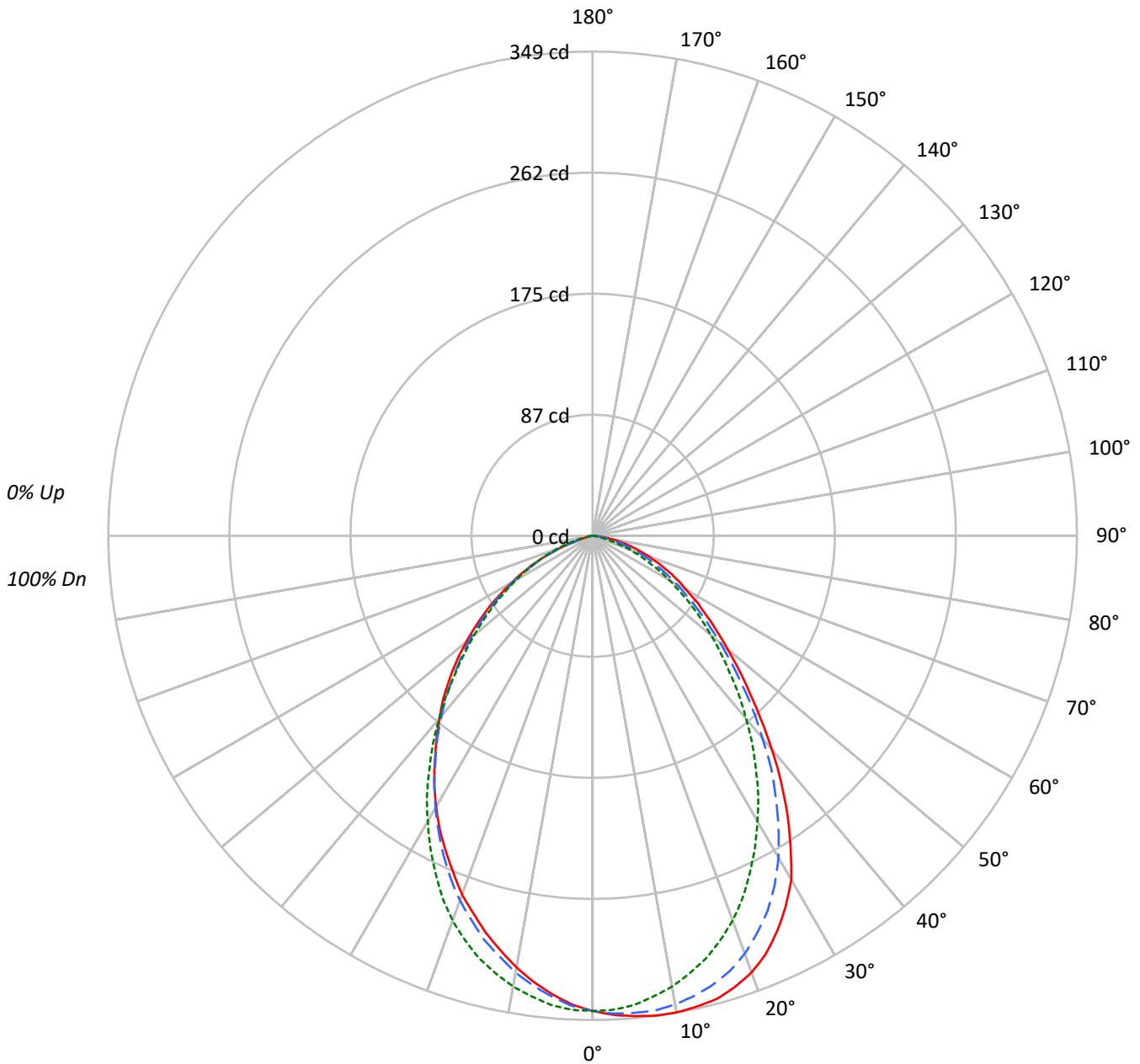
Input Watts (W): 6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P593478

CATALOG NUMBER: HC805D010-HM80520950-81RWWH

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°	10561	10561	10561
5°	10757	10512	10271
10°	10925	10330	9895
15°	11036	10072	9465
20°	10993	9684	9031
25°	10704	9122	8523
30°	10194	8460	8029
35°	9204	7717	7457
40°	8087	6928	6908
45°	6977	6092	6354
50°	6073	5339	5694
55°	5387	4640	4962
60°	4804	3922	4120
65°	4334	3181	3247
70°	3850	2389	1920
75°	3324	1382	822
80°	2557	497	249
85°	1663	177	177



TEST NUMBER: P593478

CATALOG NUMBER: HC805D010-HM80520950-81RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.1	5.0
10°-20°	89.5	13.9
20°-30°	126.6	19.7
30°-40°	133.4	20.8
40°-50°	113.3	17.7
50°-60°	81.6	12.7
60°-70°	47.1	7.3
70°-80°	16.1	2.5
80°-90°	2.2	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°	248.2	38.7
0°-40°	381.6	59.4
0°-60°	576.5	89.8
0°-90°	642.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	642.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	342	342	342	342	342	
5°	348	345	340	334	332	33
15°	346	335	316	302	296	97
25°	315	298	268	254	250	144
35°	244	230	205	198	198	152
45°	160	153	140	141	146	124
55°	100	92	86	90	92	90
65°	59	51	44	43	44	59
75°	28	21	12	7	7	29
85°	5	3	0	0	0	6
90°	0	0	0	0	0	



TEST NUMBER: P593478

CATALOG NUMBER: HC805D010-HM80520950-81RWWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	342.5	342.5	342.5	342.5	342.5	342.5	342.5	342.5	342.5	342.5	342.5
2.5°	345.7	346.2	345.7	345.7	345.2	344.7	344.3	343.8	342.9	342.0	342.0
5°	347.5	348.4	347.5	347.5	346.2	345.2	344.3	342.9	341.0	339.6	339.6
7.5°	348.9	348.9	348.9	347.5	346.7	345.2	342.9	340.5	338.3	335.9	335.0
10°	348.9	348.9	348.4	346.7	345.7	342.9	340.5	337.3	334.1	330.9	329.9
12.5°	347.5	348.0	347.0	345.2	342.9	339.6	336.4	332.2	328.5	324.7	323.0
15°	345.7	345.2	344.3	342.0	339.2	335.0	331.8	327.1	322.0	317.3	315.5
17.5°	341.0	341.0	339.6	337.3	333.6	328.9	323.9	318.8	313.1	308.1	305.7
20°	335.0	335.0	333.1	330.4	326.7	320.6	315.1	309.1	302.5	297.5	295.1
22.5°	326.2	326.7	324.4	321.0	316.8	309.9	304.4	297.0	290.5	284.4	282.6
25°	314.6	315.5	313.1	309.9	304.4	298.3	291.3	284.4	277.0	271.0	268.1
27.5°	301.2	301.6	299.2	296.0	290.5	283.9	277.0	269.6	262.6	256.2	253.3
30°	286.3	284.4	283.4	279.4	273.3	267.8	259.9	253.8	246.3	240.8	237.6
32.5°	265.4	266.3	263.6	260.3	255.7	249.2	242.6	235.7	228.7	224.6	222.3
35°	244.5	245.5	244.1	240.8	235.7	230.2	223.6	218.6	212.5	207.4	205.0
37.5°	222.8	222.8	221.8	219.9	216.2	211.2	204.6	199.5	194.4	190.2	188.9
40°	200.9	200.0	199.5	198.1	194.9	190.2	186.0	181.8	176.8	174.0	172.1
42.5°	179.6	179.6	178.6	177.3	174.0	171.6	167.5	162.9	159.2	156.3	156.3
45°	160.0	160.5	159.2	158.2	156.3	152.6	148.9	145.7	142.4	140.6	139.7
47.5°	142.9	142.9	141.5	140.6	138.7	135.5	132.3	129.4	127.1	125.7	125.3
50°	126.6	126.6	126.6	124.4	122.0	119.7	117.4	114.2	112.8	111.8	111.3
52.5°	112.8	112.3	112.3	110.5	108.1	105.3	103.1	100.2	98.9	97.9	98.4
55°	100.2	100.2	99.7	97.4	95.2	92.3	90.0	87.7	86.8	85.8	86.3
56°	95.2	95.2	94.7	92.8	90.0	87.7	84.9	82.6	81.2	81.6	81.6
57°	91.5	90.5	90.5	88.1	85.8	82.6	80.3	77.9	77.0	76.6	76.6
58°	86.8	86.3	85.8	83.6	81.2	78.4	76.1	73.7	72.4	72.4	71.9
59°	82.1	82.1	81.2	79.4	77.0	74.2	71.9	69.5	68.2	67.8	67.8
60°	77.9	78.4	77.0	75.2	73.3	70.0	67.3	65.5	64.0	63.6	63.6
61°	74.2	74.2	73.3	71.0	68.7	66.3	63.6	61.3	60.3	59.4	59.4
62°	71.0	70.0	69.5	67.3	65.0	62.1	59.8	57.6	56.1	55.2	55.7
63°	66.8	66.3	65.5	63.6	61.3	58.4	55.7	53.9	52.4	51.0	51.5
64°	63.6	63.1	61.8	59.8	57.6	54.7	51.9	50.2	49.2	47.8	47.3
65°	59.4	58.9	58.4	56.1	53.9	51.0	48.7	46.9	45.5	44.5	43.6
66°	55.7	56.1	55.2	53.4	50.6	48.2	45.0	43.1	42.3	40.8	39.9
67°	52.4	52.4	51.5	49.7	46.9	44.5	42.3	39.9	38.5	37.1	36.6
67.5°	50.6	50.6	49.7	47.3	45.5	42.7	40.3	38.5	36.6	35.7	34.8
68°	48.7	48.7	48.2	46.4	44.0	41.3	39.0	36.6	34.8	33.4	32.9
69°	45.5	46.0	45.0	43.1	40.8	38.1	35.7	33.9	32.0	30.6	29.7
70°	42.7	42.3	41.3	39.4	37.1	35.3	32.9	30.6	28.7	26.9	26.5
71°	39.0	39.0	38.1	36.6	34.4	32.0	29.7	27.9	26.0	23.7	23.2
72°	36.1	36.1	35.3	33.4	31.6	29.2	26.9	24.5	23.2	20.8	20.0
72.5°	34.4	34.8	33.9	32.0	30.2	27.4	25.5	23.7	21.3	19.5	18.6
73°	33.4	32.9	32.4	30.6	28.2	26.5	24.2	22.3	20.0	18.1	17.1



TEST NUMBER: P593478

CATALOG NUMBER: HC805D010-HM80520950-81RWWH

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	20.8	20.8	20.5	18.6	16.8	14.8	13.0	11.1	9.3	7.4	6.5
80°	14.4	14.8	13.9	13.0	11.6	9.7	7.9	6.5	4.7	3.7	2.8
82.5°	9.3	9.3	8.9	7.9	6.9	5.6	4.7	3.2	2.3	1.9	1.4
85°	4.7	5.1	4.7	4.2	3.2	2.8	2.3	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°	342.5	342.5	342.5	342.5	342.5	342.5	342.5	342.5	342.5	342.5
2.5°	341.0	341.0	340.1	339.6	339.2	338.8	338.3	337.8	337.8	338.3
5°	338.3	337.3	335.5	335.0	333.6	333.1	332.2	331.8	332.2	331.8
7.5°	334.1	332.2	329.9	328.9	327.1	326.2	324.7	324.7	323.9	324.4
10°	328.5	325.7	323.0	321.0	319.7	318.3	317.3	316.5	316.0	316.0
12.5°	321.5	318.3	315.5	312.8	310.4	309.4	307.6	307.6	306.7	306.2
15°	313.6	309.4	306.2	303.4	301.6	299.7	298.3	297.5	296.5	296.5
17.5°	303.4	299.7	296.5	293.3	290.5	289.1	287.6	286.3	286.3	285.4
20°	292.3	288.1	285.4	282.1	279.7	277.5	275.7	275.7	274.7	275.2
22.5°	279.7	274.7	271.8	269.6	267.3	265.4	263.6	263.6	263.1	262.6
25°	265.9	261.7	258.4	255.7	254.2	252.4	252.0	251.0	250.5	250.5
27.5°	251.0	247.8	243.6	242.2	240.4	239.4	239.4	238.9	238.1	238.4
30°	235.2	231.5	229.2	228.3	226.5	226.5	226.0	225.0	225.0	225.5
32.5°	219.9	216.2	214.4	213.9	212.0	212.0	211.6	212.0	212.0	212.5
35°	203.3	200.0	199.5	198.1	197.6	197.6	197.6	198.6	199.5	198.1
37.5°	187.5	185.2	183.7	183.3	183.7	183.7	184.2	185.7	185.2	184.7
40°	171.2	169.4	168.4	168.4	169.4	170.3	170.3	171.6	172.1	171.6
42.5°	155.0	153.6	153.6	154.1	155.0	155.5	156.8	158.2	158.7	159.2
45°	139.7	139.7	139.7	140.2	140.6	141.5	143.4	144.7	145.2	145.7
47.5°	124.8	124.4	125.7	126.2	127.6	128.1	129.4	131.3	131.8	132.3
50°	110.8	111.8	112.3	113.7	114.6	114.6	116.5	117.4	118.7	118.7
52.5°	97.9	99.4	99.7	101.1	101.6	102.1	103.1	104.4	105.3	105.3
55°	86.3	86.8	87.7	88.1	89.5	90.0	91.0	91.5	92.8	92.3
56°	81.2	82.1	82.6	83.6	84.4	84.9	85.8	86.3	87.3	87.7
57°	76.6	77.0	78.4	78.9	79.8	79.8	80.3	81.6	81.6	82.1
58°	71.9	72.9	73.3	73.7	74.7	75.2	76.1	76.6	77.0	76.6
59°	67.8	68.2	68.7	68.7	69.5	69.5	71.0	71.9	72.4	72.4
60°	63.6	63.6	64.0	64.5	65.5	65.8	65.8	66.8	66.8	66.8
61°	59.4	59.4	59.8	60.3	60.8	60.8	61.8	61.8	62.1	62.6
62°	55.7	55.2	55.2	55.7	55.7	56.6	57.1	57.6	58.1	57.6
63°	51.5	51.0	51.0	51.0	51.0	51.9	51.9	52.4	53.4	52.9
64°	46.9	46.9	46.9	46.9	47.3	47.3	48.2	48.7	49.2	49.7
65°	43.6	42.7	42.3	42.3	42.7	43.1	43.6	44.0	44.5	44.5
66°	39.9	39.0	38.5	38.5	38.5	38.5	39.4	39.4	40.3	40.3
67°	35.7	34.8	34.4	33.9	33.9	33.9	35.3	34.8	34.8	34.8
67.5°	34.4	32.9	32.4	32.0	31.6	32.4	32.0	32.4	32.4	32.0
68°	32.4	31.6	30.6	29.7	29.7	29.7	30.2	30.6	30.2	29.7
69°	28.7	28.2	26.9	26.0	25.5	26.0	25.5	26.0	25.5	26.0
70°	25.5	24.2	22.7	22.3	21.8	21.8	21.8	21.3	21.8	21.3
71°	22.3	20.8	19.5	18.6	18.1	18.1	17.6	18.1	17.6	18.1
72°	19.0	17.6	15.8	14.8	14.8	14.8	14.8	14.4	14.8	14.4
72.5°	17.6	15.8	14.4	13.4	13.0	13.0	13.0	13.0	12.6	13.0
73°	16.3	14.4	12.6	12.1	12.1	12.1	11.6	11.1	11.6	11.6



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	5.6	4.2	3.7	3.7	3.7	3.7	3.7	3.7	3.2	3.2
80°	2.3	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°	30.2	30.2	29.2	27.9	25.5	23.2	21.3	19.5	17.1	14.8	13.9
75°	27.9	27.4	26.5	25.0	23.2	20.8	19.0	16.8	14.8	12.6	11.6





74°	13.4	11.1	10.2	9.3	9.3	9.3	8.9	8.9	8.9	9.3
75°	10.7	8.9	7.9	6.9	7.4	6.9	7.4	6.9	6.9	6.9



(END OF REPORT)