

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: P583516

Luminaire Tested: **HC805D010-HM80520930-81RWWH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583516
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-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: 590.4 lumens
Efficiency: N/A
Efficacy: 98.4 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

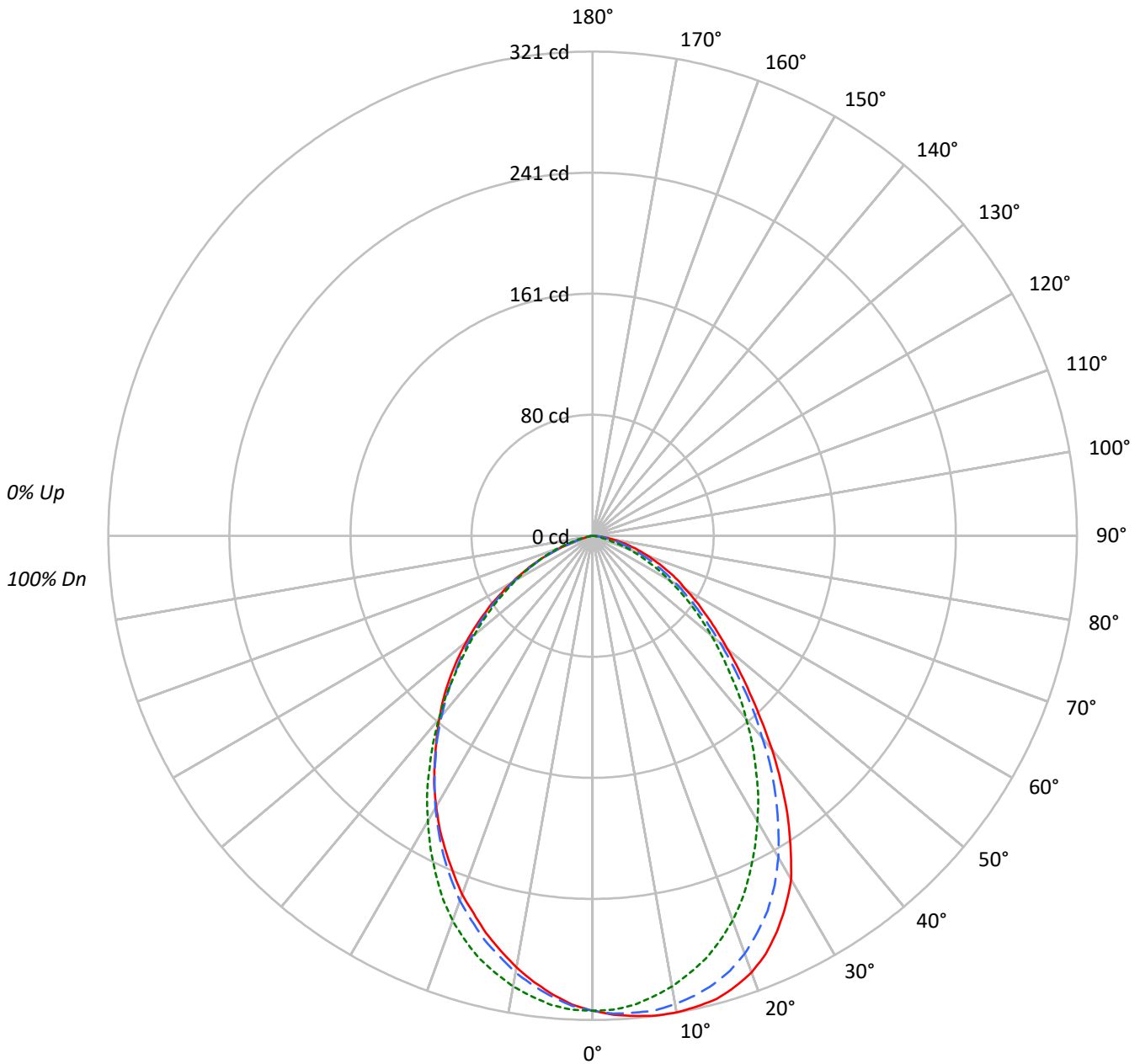
Input Watts (W): 6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P583516

CATALOG NUMBER: HC805D010-HM80520930-81RWWH

Luminous Intensity Polar Plot





TEST NUMBER: P583516

CATALOG NUMBER: HC805D010-HM80520930-81RWWH

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°	9710	9710	9710
5°	9893	9667	9444
10°	10048	9500	9099
15°	10149	9264	8706
20°	10110	8906	8302
25°	9843	8390	7839
30°	9372	7780	7381
35°	8466	7100	6859
40°	7439	6376	6356
45°	6419	5599	5839
50°	5589	4917	5243
55°	4957	4269	4564
60°	4422	3602	3787
65°	3984	2926	2984
70°	3543	2191	1767
75°	3050	1275	751
80°	2362	444	231
85°	1521	177	177



TEST NUMBER: P583516

CATALOG NUMBER: HC805D010-HM80520930-81RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.6	5.0
10°-20°	82.3	13.9
20°-30°	116.4	19.7
30°-40°	122.7	20.8
40°-50°	104.2	17.7
50°-60°	75.1	12.7
60°-70°	43.3	7.3
70°-80°	14.8	2.5
80°-90°	2.0	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°	228.2	38.7
0°-40°	350.9	59.4
0°-60°	530.2	89.8
0°-90°	590.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	590.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	315	315	315	315	315	
5°	320	317	312	307	305	31
15°	318	308	290	277	273	90
25°	289	274	247	234	230	133
35°	225	212	189	182	182	140
45°	147	140	128	129	134	114
55°	92	85	79	82	85	83
65°	55	47	40	39	41	54
75°	26	19	11	7	6	27
85°	4	2	0	0	0	6
90°	0	0	0	0	0	



TEST NUMBER: P583516

CATALOG NUMBER: HC805D010-HM80520930-81RWWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	314.9	314.9	314.9	314.9	314.9	314.9	314.9	314.9	314.9	314.9	314.9
2.5°	317.9	318.3	317.9	317.9	317.4	317.1	316.6	316.1	315.3	314.5	314.5
5°	319.6	320.4	319.6	319.6	318.3	317.4	316.6	315.3	313.6	312.3	312.3
7.5°	320.9	320.9	320.9	319.6	318.8	317.4	315.3	313.1	311.1	308.9	308.1
10°	320.9	320.9	320.4	318.8	317.9	315.3	313.1	310.3	307.3	304.3	303.4
12.5°	319.6	320.1	319.1	317.4	315.3	312.3	309.3	305.5	302.1	298.7	297.0
15°	317.9	317.4	316.6	314.5	311.9	308.1	305.1	300.8	296.1	291.8	290.2
17.5°	313.6	313.6	312.3	310.3	306.8	302.5	297.8	293.1	288.0	283.3	281.2
20°	308.1	308.1	306.3	303.8	300.4	294.8	289.7	284.2	278.2	273.5	271.4
22.5°	300.0	300.4	298.3	295.3	291.5	285.0	279.9	273.0	267.2	261.5	259.9
25°	289.3	290.2	288.0	285.0	279.9	274.4	268.0	261.5	254.7	249.2	246.6
27.5°	276.9	277.3	275.2	272.2	267.2	261.2	254.7	247.9	241.6	235.6	232.9
30°	263.2	261.5	260.7	256.9	251.4	246.2	238.9	233.4	226.6	221.4	218.5
32.5°	244.1	244.9	242.4	239.4	235.1	229.1	223.1	216.8	210.3	206.5	204.3
35°	224.9	225.8	224.4	221.4	216.8	211.6	205.6	201.0	195.5	190.7	188.6
37.5°	204.8	204.8	204.0	202.3	198.8	194.2	188.2	183.5	178.8	175.0	173.7
40°	184.8	183.9	183.5	182.2	179.2	175.0	171.1	167.2	162.6	160.0	158.4
42.5°	165.2	165.2	164.2	163.0	160.0	157.9	154.1	149.7	146.4	143.8	143.8
45°	147.2	147.6	146.4	145.6	143.8	140.4	136.9	133.9	131.0	129.3	128.4
47.5°	131.4	131.4	130.1	129.3	127.6	124.6	121.6	119.1	116.9	115.6	115.2
50°	116.5	116.5	116.5	114.3	112.3	110.1	108.0	105.0	103.7	102.8	102.5
52.5°	103.7	103.3	103.3	101.5	99.5	96.8	94.7	92.2	90.9	90.0	90.5
55°	92.2	92.2	91.7	89.7	87.5	84.9	82.8	80.7	79.8	78.9	79.4
56°	87.5	87.5	87.0	85.3	82.8	80.7	78.0	76.0	74.7	75.1	75.1
57°	84.0	83.2	83.2	81.0	78.9	76.0	73.9	71.7	70.9	70.4	70.4
58°	79.8	79.4	78.9	76.8	74.7	72.1	70.0	67.9	66.6	66.6	66.2
59°	75.5	75.5	74.7	73.0	70.9	68.2	66.2	64.0	62.7	62.2	62.2
60°	71.7	72.1	70.9	69.1	67.4	64.4	61.9	60.2	58.9	58.4	58.4
61°	68.2	68.2	67.4	65.2	63.2	61.0	58.4	56.4	55.4	54.6	54.6
62°	65.2	64.4	64.0	61.9	59.7	57.2	55.1	52.9	51.6	50.8	51.2
63°	61.4	61.0	60.2	58.4	56.4	53.7	51.2	49.6	48.2	46.9	47.4
64°	58.4	58.1	56.7	55.1	52.9	50.4	47.8	46.1	45.2	43.9	43.6
65°	54.6	54.2	53.7	51.6	49.6	46.9	44.8	43.1	41.8	40.9	40.1
66°	51.2	51.6	50.8	49.1	46.6	44.4	41.4	39.7	38.8	37.6	36.7
67°	48.2	48.2	47.4	45.6	43.1	40.9	38.8	36.7	35.4	34.1	33.8
67.5°	46.6	46.6	45.6	43.6	41.8	39.3	37.1	35.4	33.8	32.8	32.0
68°	44.8	44.8	44.4	42.6	40.6	37.9	35.8	33.8	32.0	30.8	30.3
69°	41.8	42.3	41.4	39.7	37.6	35.0	32.8	31.1	29.4	28.1	27.3
70°	39.3	38.8	37.9	36.3	34.1	32.4	30.3	28.1	26.5	24.8	24.3
71°	35.8	35.8	35.0	33.8	31.6	29.4	27.3	25.6	23.9	21.8	21.3
72°	33.3	33.3	32.4	30.8	29.0	26.9	24.8	22.6	21.3	19.2	18.3
72.5°	31.6	32.0	31.1	29.4	27.8	25.1	23.5	21.8	19.6	18.0	17.1
73°	30.8	30.3	29.9	28.1	26.0	24.3	22.1	20.5	18.3	16.6	15.8



TEST NUMBER: P583516

CATALOG NUMBER: HC805D010-HM80520930-81RWWH

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	19.2	19.2	18.8	17.1	15.3	13.6	12.0	10.3	8.5	6.8	6.0
80°	13.3	13.6	12.8	12.0	10.7	9.0	7.3	6.0	4.3	3.5	2.5
82.5°	8.5	8.5	8.1	7.3	6.3	5.1	4.3	3.0	2.2	1.7	1.3
85°	4.3	4.7	4.3	3.8	3.0	2.5	2.2	1.3	0.8	0.5	0.5
87.5°	1.7	1.7	1.7	1.3	1.3	0.8	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



TEST NUMBER: P583516

CATALOG NUMBER: HC805D010-HM80520930-81RWWH

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	314.9	314.9	314.9	314.9	314.9	314.9	314.9	314.9	314.9	314.9
2.5°	313.6	313.6	312.8	312.3	311.9	311.5	311.1	310.6	310.6	311.1
5°	311.1	310.3	308.5	308.1	306.8	306.3	305.5	305.1	305.5	305.1
7.5°	307.3	305.5	303.4	302.5	300.8	300.0	298.7	298.7	297.8	298.3
10°	302.1	299.5	297.0	295.3	294.0	292.7	291.8	291.0	290.6	290.6
12.5°	295.7	292.7	290.2	287.6	285.5	284.6	282.9	282.9	282.0	281.7
15°	288.5	284.6	281.7	279.0	277.3	275.7	274.4	273.5	272.7	272.7
17.5°	279.0	275.7	272.7	269.7	267.2	265.9	264.5	263.2	263.2	262.4
20°	268.8	265.0	262.4	259.4	257.4	255.2	253.4	253.4	252.6	253.0
22.5°	257.4	252.6	250.1	247.9	245.7	244.1	242.4	242.4	241.9	241.6
25°	244.5	240.6	237.7	235.1	233.8	232.1	231.7	230.9	230.4	230.4
27.5°	230.9	227.9	224.0	222.8	221.1	220.1	220.1	219.8	218.9	219.3
30°	216.3	212.9	210.8	210.0	208.3	208.3	207.8	207.0	207.0	207.3
32.5°	202.3	198.8	197.1	196.7	195.0	195.0	194.6	195.0	195.0	195.5
35°	186.9	183.9	183.5	182.2	181.8	181.8	181.8	182.7	183.5	182.2
37.5°	172.4	170.2	169.0	168.5	169.0	169.0	169.4	170.7	170.2	169.9
40°	157.4	155.7	154.9	154.9	155.7	156.6	156.6	157.9	158.4	157.9
42.5°	142.6	141.2	141.2	141.6	142.6	142.9	144.2	145.6	145.9	146.4
45°	128.4	128.4	128.4	128.9	129.3	130.1	131.8	133.1	133.6	133.9
47.5°	114.8	114.3	115.6	116.1	117.3	117.8	119.1	120.8	121.1	121.6
50°	102.0	102.8	103.3	104.5	105.3	105.3	107.1	108.0	109.3	109.3
52.5°	90.0	91.3	91.7	93.0	93.5	93.8	94.7	96.0	96.8	96.8
55°	79.4	79.8	80.7	81.0	82.4	82.8	83.7	84.0	85.3	84.9
56°	74.7	75.5	76.0	76.8	77.7	78.0	78.9	79.4	80.2	80.7
57°	70.4	70.9	72.1	72.5	73.4	73.4	73.9	75.1	75.1	75.5
58°	66.2	67.0	67.4	67.9	68.7	69.1	70.0	70.4	70.9	70.4
59°	62.2	62.7	63.2	63.2	64.0	64.0	65.2	66.2	66.6	66.6
60°	58.4	58.4	58.9	59.3	60.2	60.6	60.6	61.4	61.4	61.4
61°	54.6	54.6	55.1	55.4	55.9	55.9	56.7	56.7	57.2	57.6
62°	51.2	50.8	50.8	51.2	51.2	52.1	52.4	52.9	53.4	52.9
63°	47.4	46.9	46.9	46.9	46.9	47.8	47.8	48.2	49.1	48.6
64°	43.1	43.1	43.1	43.1	43.6	43.6	44.4	44.8	45.2	45.6
65°	40.1	39.3	38.8	38.8	39.3	39.7	40.1	40.6	40.9	40.9
66°	36.7	35.8	35.4	35.4	35.4	35.4	36.3	36.3	37.1	37.1
67°	32.8	32.0	31.6	31.1	31.1	31.1	32.4	32.0	32.0	32.0
67.5°	31.6	30.3	29.9	29.4	29.0	29.9	29.4	29.9	29.9	29.4
68°	29.9	29.0	28.1	27.3	27.3	27.3	27.8	28.1	27.8	27.3
69°	26.5	26.0	24.8	23.9	23.5	23.9	23.5	23.9	23.5	23.9
70°	23.5	22.1	20.9	20.5	20.1	20.1	20.1	19.6	20.1	19.6
71°	20.5	19.2	18.0	17.1	16.6	16.6	16.2	16.6	16.2	16.6
72°	17.5	16.2	14.5	13.6	13.6	13.6	13.6	13.3	13.6	13.3
72.5°	16.2	14.5	13.3	12.3	12.0	12.0	12.0	12.0	11.5	12.0
73°	15.0	13.3	11.5	11.1	11.1	11.1	10.7	10.3	10.7	10.7



TEST NUMBER: P583516

CATALOG NUMBER: HC805D010-HM80520930-81RWWH

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	5.1	3.8	3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.0
80°	2.2	1.7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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°	27.8	27.8	26.9	25.6	23.5	21.3	19.6	18.0	15.8	13.6	12.8
75°	25.6	25.1	24.3	23.0	21.3	19.2	17.5	15.3	13.6	11.5	10.7





74°	12.3	10.3	9.3	8.5	8.5	8.5	8.1	8.1	8.1	8.5
75°	9.8	8.1	7.3	6.3	6.8	6.3	6.8	6.3	6.3	6.3



(END OF REPORT)