

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: P583533

Luminaire Tested: **HC805D010-HM80520935-81RWWH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583533
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-HM80520935-81RWWH
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 623.5 lumens
Efficiency: N/A
Efficacy: 103.9 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

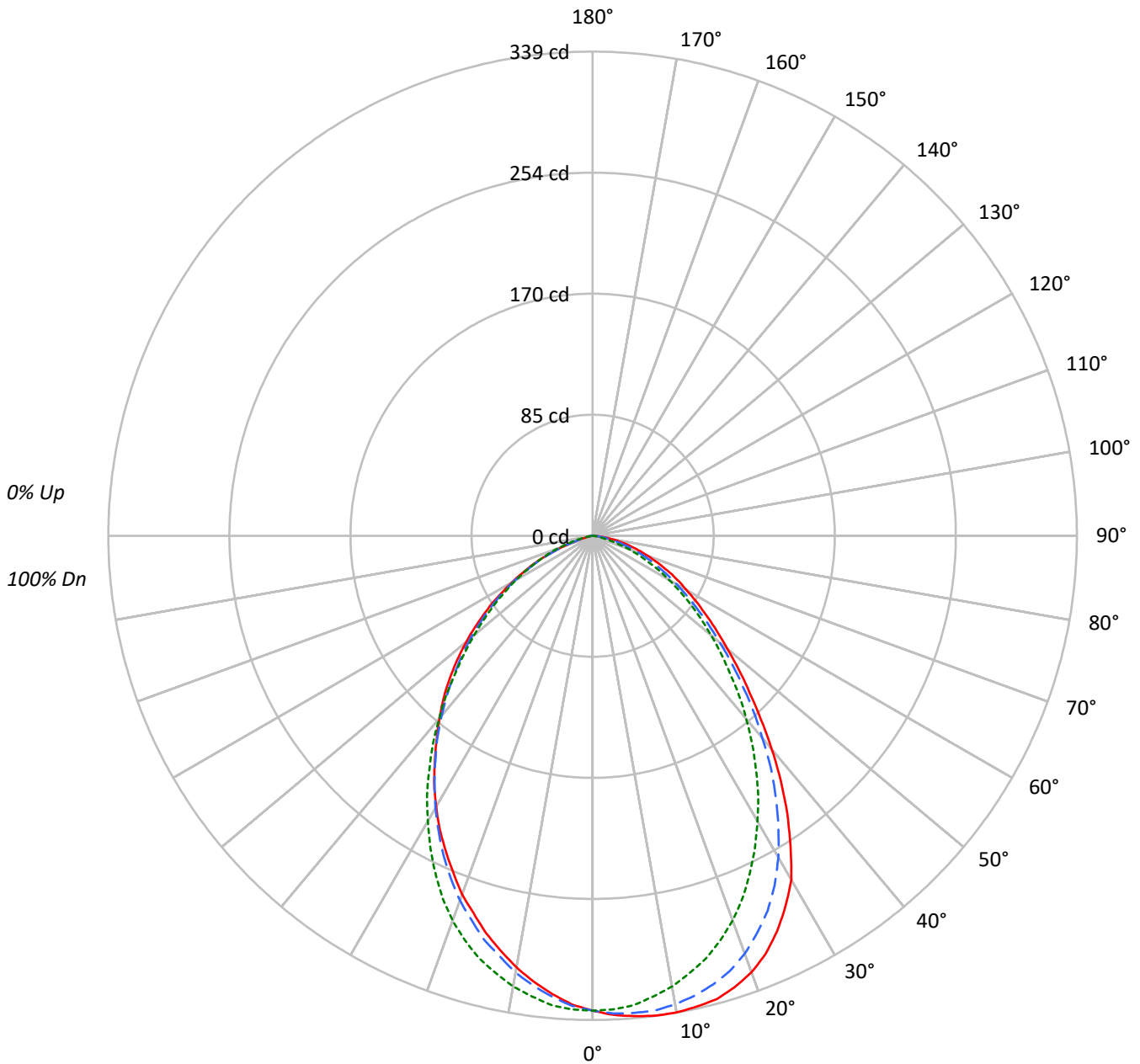
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	10253	10253	10253
5°	10450	10212	9973
10°	10612	10032	9610
15°	10720	9782	9194
20°	10675	9405	8768
25°	10394	8863	8281
30°	9902	8214	7801
35°	8940	7499	7243
40°	7854	6730	6710
45°	6781	5913	6171
50°	5905	5186	5536
55°	5231	4505	4822
60°	4669	3811	4003
65°	4210	3094	3152
70°	3733	2317	1866
75°	3229	1346	798
80°	2486	497	231
85°	1592	177	177



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.2	5.0
10°-20°	86.9	13.9
20°-30°	122.9	19.7
30°-40°	129.5	20.8
40°-50°	110.1	17.7
50°-60°	79.3	12.7
60°-70°	45.7	7.3
70°-80°	15.6	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°	241.0	38.7
0°-40°	370.6	59.4
0°-60°	559.9	89.8
0°-90°	623.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	623.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	332	332	332	332	332	
5°	338	335	330	324	322	32
15°	336	325	306	293	288	95
25°	306	290	260	247	243	140
35°	238	224	199	192	192	148
45°	156	148	136	137	142	121
55°	97	90	84	87	90	88
65°	58	50	42	41	43	57
75°	27	20	11	7	7	29
85°	4	3	0	0	0	6
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°	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5
2.5°	335.8	336.1	335.8	335.8	335.3	334.8	334.3	334.0	333.0	332.0	332.0
5°	337.6	338.4	337.6	337.6	336.1	335.3	334.3	333.0	331.2	329.9	329.9
7.5°	338.9	338.9	338.9	337.6	336.6	335.3	333.0	330.7	328.5	326.3	325.3
10°	338.9	338.9	338.4	336.6	335.8	333.0	330.7	327.6	324.4	321.3	320.4
12.5°	337.6	337.9	337.1	335.3	333.0	329.9	326.7	322.6	319.0	315.4	313.6
15°	335.8	335.3	334.3	332.0	329.4	325.3	322.2	317.7	312.8	308.2	306.4
17.5°	331.2	331.2	329.9	327.6	324.0	319.5	314.6	309.5	304.2	299.2	297.0
20°	325.3	325.3	323.5	320.8	317.2	311.3	306.0	300.1	293.7	288.8	286.6
22.5°	316.7	317.2	314.9	311.8	307.7	301.0	295.7	288.4	282.1	276.3	274.5
25°	305.5	306.4	304.2	301.0	295.7	289.8	283.0	276.3	269.0	263.1	260.5
27.5°	292.4	292.9	290.6	287.5	282.1	275.8	269.0	261.8	255.1	248.7	246.0
30°	278.1	276.3	275.3	271.2	265.4	260.0	252.3	246.5	239.3	233.9	230.7
32.5°	257.7	258.7	255.9	252.8	248.3	242.0	235.7	228.9	222.2	218.1	215.8
35°	237.5	238.3	237.0	233.9	228.9	223.5	217.3	212.2	206.4	201.5	199.2
37.5°	216.3	216.3	215.3	213.5	210.0	205.0	198.7	193.8	188.8	184.7	183.4
40°	195.1	194.3	193.8	192.4	189.2	184.7	180.7	176.7	171.6	169.0	167.2
42.5°	174.4	174.4	173.4	172.1	169.0	166.7	162.7	158.1	154.5	151.9	151.9
45°	155.5	156.0	154.5	153.7	151.9	148.3	144.6	141.5	138.4	136.6	135.6
47.5°	138.7	138.7	137.4	136.6	134.8	131.6	128.4	125.7	123.4	122.1	121.6
50°	123.1	123.1	123.1	120.8	118.5	116.2	114.0	110.8	109.5	108.6	108.1
52.5°	109.5	109.0	109.0	107.3	105.0	102.3	100.1	97.3	96.0	95.0	95.5
55°	97.3	97.3	96.8	94.7	92.4	89.7	87.4	85.1	84.3	83.3	83.8
56°	92.4	92.4	91.9	90.1	87.4	85.1	82.5	80.2	78.9	79.4	79.4
57°	88.8	87.9	87.9	85.6	83.3	80.2	77.9	75.7	74.8	74.3	74.3
58°	84.3	83.8	83.3	81.2	78.9	76.1	73.9	71.7	70.3	70.3	69.9
59°	79.7	79.7	78.9	77.1	74.8	72.1	69.9	67.6	66.2	65.8	65.8
60°	75.7	76.1	74.8	73.0	71.2	68.0	65.4	63.6	62.2	61.8	61.8
61°	72.1	72.1	71.2	68.9	66.7	64.4	61.8	59.5	58.5	57.7	57.7
62°	68.9	68.0	67.6	65.4	63.1	60.3	58.2	55.9	54.6	53.6	54.1
63°	64.9	64.4	63.6	61.8	59.5	56.7	54.1	52.3	50.9	49.6	50.0
64°	61.8	61.3	60.0	58.2	55.9	53.1	50.5	48.7	47.8	46.4	46.0
65°	57.7	57.2	56.7	54.6	52.3	49.6	47.3	45.5	44.2	43.2	42.4
66°	54.1	54.6	53.6	51.8	49.1	46.9	43.7	41.9	41.1	39.6	38.8
67°	50.9	50.9	50.0	48.2	45.5	43.2	41.1	38.8	37.3	36.0	35.6
67.5°	49.1	49.1	48.2	46.0	44.2	41.4	39.3	37.3	35.6	34.7	33.8
68°	47.3	47.3	46.9	45.0	42.9	40.1	37.8	35.6	33.8	32.4	32.0
69°	44.2	44.6	43.7	41.9	39.6	37.0	34.7	32.9	31.1	29.7	28.8
70°	41.4	41.1	40.1	38.3	36.0	34.2	32.0	29.7	27.9	26.1	25.7
71°	37.8	37.8	37.0	35.6	33.4	31.1	28.8	27.1	25.3	23.0	22.5
72°	35.2	35.2	34.2	32.4	30.6	28.4	26.1	23.9	22.5	20.2	19.4
72.5°	33.4	33.8	32.9	31.1	29.3	26.6	24.8	23.0	20.7	18.9	18.1
73°	32.4	32.0	31.6	29.7	27.5	25.7	23.5	21.7	19.4	17.6	16.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	20.2	20.2	19.9	18.1	16.3	14.4	12.6	10.8	9.0	7.2	6.3
80°	14.0	14.4	13.5	12.6	11.3	9.5	7.7	6.3	4.5	3.6	2.8
82.5°	9.0	9.0	8.6	7.7	6.7	5.4	4.5	3.1	2.3	1.8	1.3
85°	4.5	4.9	4.5	4.1	3.1	2.8	2.3	1.3	1.0	0.5	0.5
87.5°	1.8	1.8	1.8	1.3	1.3	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°	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5
2.5°	331.2	331.2	330.3	329.9	329.4	328.9	328.5	328.1	328.1	328.5
5°	328.5	327.6	325.8	325.3	324.0	323.5	322.6	322.2	322.6	322.2
7.5°	324.4	322.6	320.4	319.5	317.7	316.7	315.4	315.4	314.6	314.9
10°	319.0	316.4	313.6	311.8	310.5	309.1	308.2	307.3	306.9	306.9
12.5°	312.3	309.1	306.4	303.7	301.4	300.6	298.8	298.8	297.8	297.5
15°	304.6	300.6	297.5	294.7	292.9	291.1	289.8	288.8	288.0	288.0
17.5°	294.7	291.1	288.0	284.8	282.1	280.7	279.4	278.1	278.1	277.1
20°	283.9	279.9	277.1	274.0	271.7	269.4	267.6	267.6	266.8	267.2
22.5°	271.7	266.8	264.1	261.8	259.5	257.7	255.9	255.9	255.4	255.1
25°	258.2	254.1	251.0	248.3	246.9	245.1	244.7	243.8	243.4	243.4
27.5°	243.8	240.6	236.5	235.2	233.4	232.5	232.5	232.1	231.1	231.6
30°	228.5	224.9	222.6	221.7	219.9	219.9	219.4	218.6	218.6	219.1
32.5°	213.5	210.0	208.2	207.7	205.9	205.9	205.5	205.9	205.9	206.4
35°	197.4	194.3	193.8	192.4	192.0	192.0	192.0	192.8	193.8	192.4
37.5°	182.1	179.8	178.5	178.0	178.5	178.5	179.0	180.3	179.8	179.3
40°	166.3	164.5	163.6	163.6	164.5	165.4	165.4	166.7	167.2	166.7
42.5°	150.5	149.1	149.1	149.6	150.5	150.9	152.3	153.7	154.1	154.5
45°	135.6	135.6	135.6	136.1	136.6	137.4	139.2	140.6	141.0	141.5
47.5°	121.3	120.8	122.1	122.6	123.9	124.4	125.7	127.5	128.0	128.4
50°	107.7	108.6	109.0	110.4	111.3	111.3	113.1	114.0	115.4	115.4
52.5°	95.0	96.5	96.8	98.3	98.6	99.1	100.1	101.4	102.3	102.3
55°	83.8	84.3	85.1	85.6	87.0	87.4	88.3	88.8	90.1	89.7
56°	78.9	79.7	80.2	81.2	82.0	82.5	83.3	83.8	84.7	85.1
57°	74.3	74.8	76.1	76.6	77.4	77.4	77.9	79.4	79.4	79.7
58°	69.9	70.7	71.2	71.7	72.5	73.0	73.9	74.3	74.8	74.3
59°	65.8	66.2	66.7	66.7	67.6	67.6	68.9	69.9	70.3	70.3
60°	61.8	61.8	62.2	62.6	63.6	64.0	64.0	64.9	64.9	64.9
61°	57.7	57.7	58.2	58.5	59.0	59.0	60.0	60.0	60.3	60.8
62°	54.1	53.6	53.6	54.1	54.1	54.9	55.4	55.9	56.4	55.9
63°	50.0	49.6	49.6	49.6	49.6	50.5	50.5	50.9	51.8	51.4
64°	45.5	45.5	45.5	45.5	46.0	46.0	46.9	47.3	47.8	48.2
65°	42.4	41.4	41.1	41.1	41.4	41.9	42.4	42.9	43.2	43.2
66°	38.8	37.8	37.3	37.3	37.3	37.3	38.3	38.3	39.3	39.3
67°	34.7	33.8	33.4	32.9	32.9	32.9	34.2	33.8	33.8	33.8
67.5°	33.4	32.0	31.6	31.1	30.6	31.6	31.1	31.6	31.6	31.1
68°	31.6	30.6	29.7	28.8	28.8	28.8	29.3	29.7	29.3	28.8
69°	27.9	27.5	26.1	25.3	24.8	25.3	24.8	25.3	24.8	25.3
70°	24.8	23.5	22.0	21.7	21.2	21.2	21.2	20.7	21.2	20.7
71°	21.7	20.2	18.9	18.1	17.6	17.6	17.1	17.6	17.1	17.6
72°	18.4	17.1	15.3	14.4	14.4	14.4	14.4	14.0	14.4	14.0
72.5°	17.1	15.3	14.0	13.0	12.6	12.6	12.6	12.6	12.2	12.6
73°	15.8	14.0	12.2	11.7	11.7	11.7	11.3	10.8	11.3	11.3



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	5.4	4.1	3.6	3.6	3.6	3.6	3.6	3.6	3.1	3.1
80°	2.3	1.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
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°	29.3	29.3	28.4	27.1	24.8	22.5	20.7	18.9	16.6	14.4	13.5
75°	27.1	26.6	25.7	24.3	22.5	20.2	18.4	16.3	14.4	12.2	11.3





74°	13.0	10.8	9.9	9.0	9.0	9.0	8.6	8.6	8.6	9.0
75°	10.4	8.6	7.7	6.7	7.2	6.7	7.2	6.7	6.7	6.7



(END OF REPORT)