

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: P583499

Luminaire Tested: **HC805D010-HM80520927-81RWWH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583499
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-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: 533.1 lumens
Efficiency: N/A
Efficacy: 88.8 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

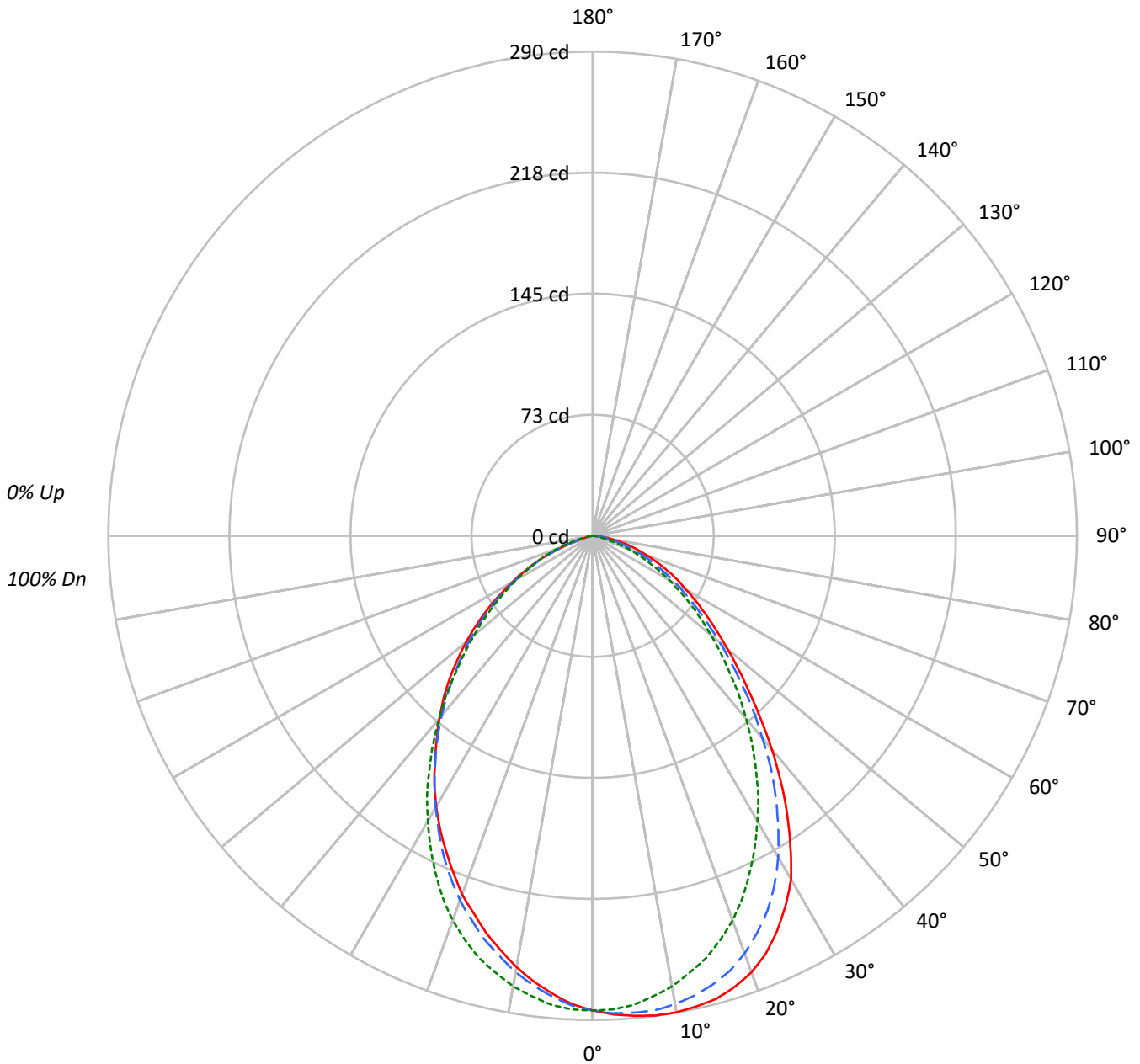
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P583499

CATALOG NUMBER: HC805D010-HM80520927-81RWWH

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°	8767	8767	8767
5°	8933	8729	8525
10°	9074	8579	8216
15°	9162	8364	7860
20°	9129	8040	7498
25°	8887	7574	7077
30°	8464	7025	6666
35°	7642	6411	6192
40°	6718	5752	5740
45°	5796	5059	5277
50°	5047	4437	4730
55°	4473	3855	4124
60°	3996	3256	3423
65°	3597	2649	2700
70°	3192	1974	1596
75°	2752	1144	679
80°	2131	408	213
85°	1344	142	142



TEST NUMBER: P583499

CATALOG NUMBER: HC805D010-HM80520927-81RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.7	5.0
10°-20°	74.3	13.9
20°-30°	105.1	19.7
30°-40°	110.8	20.8
40°-50°	94.1	17.7
50°-60°	67.8	12.7
60°-70°	39.1	7.3
70°-80°	13.4	2.5
80°-90°	1.8	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°	206.1	38.7
0°-40°	316.9	59.4
0°-60°	478.7	89.8
0°-90°	533.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	533.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	284	284	284	284	284	
5°	289	287	282	277	275	28
15°	287	278	262	250	246	81
25°	261	248	223	211	208	120
35°	203	191	170	164	164	126
45°	133	127	116	117	121	103
55°	83	77	72	74	77	75
65°	49	42	36	35	37	49
75°	23	17	10	6	6	24
85°	4	2	0	0	0	5
90°	0	0	0	0	0	



TEST NUMBER: P583499

CATALOG NUMBER: HC805D010-HM80520927-81RWWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	284.3	284.3	284.3	284.3	284.3	284.3	284.3	284.3	284.3	284.3	284.3
2.5°	287.0	287.4	287.0	287.0	286.7	286.3	285.8	285.5	284.8	283.9	283.9
5°	288.6	289.3	288.6	288.6	287.4	286.7	285.8	284.8	283.2	282.0	282.0
7.5°	289.8	289.8	289.8	288.6	287.8	286.7	284.8	282.9	280.8	278.9	278.2
10°	289.8	289.8	289.3	287.8	287.0	284.8	282.9	280.1	277.5	274.7	274.0
12.5°	288.6	289.0	288.2	286.7	284.8	282.0	279.4	275.9	272.8	269.7	268.1
15°	287.0	286.7	285.8	283.9	281.7	278.2	275.4	271.6	267.4	263.6	262.0
17.5°	283.2	283.2	282.0	280.1	277.0	273.2	269.0	264.7	260.1	255.8	253.9
20°	278.2	278.2	276.6	274.4	271.2	266.2	261.7	256.6	251.3	246.9	245.0
22.5°	270.9	271.2	269.3	266.6	263.1	257.4	252.8	246.6	241.2	236.2	234.6
25°	261.2	262.0	260.1	257.4	252.8	247.8	241.9	236.2	230.1	225.0	222.6
27.5°	250.1	250.4	248.5	245.9	241.2	235.8	230.1	223.8	218.1	212.7	210.3
30°	237.7	236.2	235.4	232.0	227.0	222.3	215.8	210.8	204.6	200.0	197.3
32.5°	220.4	221.2	218.8	216.2	212.3	206.8	201.5	195.7	190.0	186.5	184.6
35°	203.0	203.8	202.7	200.0	195.7	191.2	185.7	181.5	176.4	172.2	170.3
37.5°	184.9	184.9	184.2	182.7	179.6	175.4	169.9	165.7	161.5	158.0	156.8
40°	166.9	166.0	165.7	164.5	161.8	158.0	154.5	151.1	146.8	144.5	142.9
42.5°	149.1	149.1	148.3	147.2	144.5	142.6	139.1	135.3	132.1	129.9	129.9
45°	132.9	133.3	132.1	131.4	129.9	126.8	123.7	121.0	118.3	116.7	116.0
47.5°	118.6	118.6	117.5	116.7	115.2	112.5	109.8	107.5	105.6	104.4	104.0
50°	105.2	105.2	105.2	103.3	101.4	99.4	97.4	94.8	93.6	92.9	92.5
52.5°	93.6	93.2	93.2	91.7	89.8	87.5	85.6	83.2	82.1	81.3	81.6
55°	83.2	83.2	82.8	80.9	79.0	76.7	74.7	72.8	72.1	71.2	71.7
56°	79.0	79.0	78.6	77.1	74.7	72.8	70.5	68.6	67.4	67.9	67.9
57°	75.9	75.2	75.2	73.3	71.2	68.6	66.7	64.8	63.9	63.6	63.6
58°	72.1	71.7	71.2	69.3	67.4	65.1	63.2	61.3	60.1	60.1	59.7
59°	68.2	68.2	67.4	65.8	63.9	61.6	59.7	57.8	56.6	56.3	56.3
60°	64.8	65.1	63.9	62.4	60.9	58.2	55.9	54.3	53.1	52.8	52.8
61°	61.6	61.6	60.9	58.9	57.0	55.1	52.8	50.9	50.0	49.3	49.3
62°	58.9	58.2	57.8	55.9	54.0	51.6	49.7	47.8	46.6	45.8	46.2
63°	55.5	55.1	54.3	52.8	50.9	48.6	46.2	44.6	43.6	42.4	42.7
64°	52.8	52.4	51.2	49.7	47.8	45.5	43.2	41.7	40.8	39.7	39.3
65°	49.3	49.0	48.6	46.6	44.6	42.4	40.5	38.9	37.7	37.0	36.3
66°	46.2	46.6	45.8	44.3	42.0	40.1	37.3	35.8	35.1	33.9	33.2
67°	43.6	43.6	42.7	41.2	38.9	37.0	35.1	33.2	32.0	30.9	30.4
67.5°	42.0	42.0	41.2	39.3	37.7	35.4	33.5	32.0	30.4	29.7	28.8
68°	40.5	40.5	40.1	38.5	36.6	34.2	32.3	30.4	28.8	27.8	27.4
69°	37.7	38.2	37.3	35.8	33.9	31.6	29.7	28.1	26.6	25.4	24.7
70°	35.4	35.1	34.2	32.8	30.9	29.3	27.4	25.4	23.9	22.4	21.9
71°	32.3	32.3	31.6	30.4	28.5	26.6	24.7	23.1	21.5	19.6	19.3
72°	30.0	30.0	29.3	27.8	26.2	24.3	22.4	20.5	19.3	17.4	16.5
72.5°	28.5	28.8	28.1	26.6	25.0	22.7	21.2	19.6	17.7	16.2	15.4
73°	27.8	27.4	26.9	25.4	23.5	21.9	20.0	18.6	16.5	15.1	14.2



TEST NUMBER: P583499

CATALOG NUMBER: HC805D010-HM80520927-81RWWH

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	17.4	17.4	17.0	15.4	13.9	12.3	10.8	9.2	7.7	6.2	5.4
80°	12.0	12.3	11.6	10.8	9.6	8.1	6.6	5.4	3.8	3.1	2.3
82.5°	7.7	7.7	7.3	6.6	5.7	4.7	3.8	2.8	1.9	1.6	1.2
85°	3.8	4.2	3.8	3.5	2.8	2.3	1.9	1.2	0.7	0.4	0.4
87.5°	1.6	1.6	1.6	1.2	1.2	0.7	0.4	0.4	0.4	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°	284.3	284.3	284.3	284.3	284.3	284.3	284.3	284.3	284.3	284.3
2.5°	283.2	283.2	282.4	282.0	281.7	281.3	280.8	280.5	280.5	280.8
5°	280.8	280.1	278.5	278.2	277.0	276.6	275.9	275.4	275.9	275.4
7.5°	277.5	275.9	274.0	273.2	271.6	270.9	269.7	269.7	269.0	269.3
10°	272.8	270.5	268.1	266.6	265.5	264.3	263.6	262.7	262.4	262.4
12.5°	267.1	264.3	262.0	259.6	257.7	257.0	255.4	255.4	254.7	254.2
15°	260.5	257.0	254.2	252.0	250.4	248.9	247.8	246.9	246.2	246.2
17.5°	252.0	248.9	246.2	243.5	241.2	240.0	238.9	237.7	237.7	237.0
20°	242.8	239.3	237.0	234.3	232.3	230.4	228.9	228.9	228.1	228.5
22.5°	232.3	228.1	225.8	223.8	221.9	220.4	218.8	218.8	218.5	218.1
25°	220.7	217.3	214.6	212.3	211.2	209.6	209.2	208.4	208.0	208.0
27.5°	208.4	205.8	202.3	201.1	199.5	198.8	198.8	198.5	197.6	198.0
30°	195.4	192.2	190.3	189.6	188.0	188.0	187.7	186.9	186.9	187.2
32.5°	182.7	179.6	178.0	177.6	176.1	176.1	175.7	176.1	176.1	176.4
35°	168.8	166.0	165.7	164.5	164.1	164.1	164.1	164.9	165.7	164.5
37.5°	155.6	153.7	152.6	152.1	152.6	152.6	153.0	154.2	153.7	153.3
40°	142.2	140.6	139.8	139.8	140.6	141.4	141.4	142.6	142.9	142.6
42.5°	128.7	127.5	127.5	128.0	128.7	129.0	130.2	131.4	131.8	132.1
45°	116.0	116.0	116.0	116.3	116.7	117.5	119.1	120.2	120.5	121.0
47.5°	103.7	103.3	104.4	104.9	105.9	106.3	107.5	109.0	109.4	109.8
50°	92.0	92.9	93.2	94.4	95.2	95.2	96.7	97.4	98.6	98.6
52.5°	81.3	82.5	82.8	84.0	84.4	84.7	85.6	86.7	87.5	87.5
55°	71.7	72.1	72.8	73.3	74.3	74.7	75.5	75.9	77.1	76.7
56°	67.4	68.2	68.6	69.3	70.1	70.5	71.2	71.7	72.4	72.8
57°	63.6	63.9	65.1	65.5	66.3	66.3	66.7	67.9	67.9	68.2
58°	59.7	60.4	60.9	61.3	62.0	62.4	63.2	63.6	63.9	63.6
59°	56.3	56.6	57.0	57.0	57.8	57.8	58.9	59.7	60.1	60.1
60°	52.8	52.8	53.1	53.5	54.3	54.7	54.7	55.5	55.5	55.5
61°	49.3	49.3	49.7	50.0	50.5	50.5	51.2	51.2	51.6	52.1
62°	46.2	45.8	45.8	46.2	46.2	47.0	47.4	47.8	48.1	47.8
63°	42.7	42.4	42.4	42.4	42.4	43.2	43.2	43.6	44.3	43.9
64°	38.9	38.9	38.9	38.9	39.3	39.3	40.1	40.5	40.8	41.2
65°	36.3	35.4	35.1	35.1	35.4	35.8	36.3	36.6	37.0	37.0
66°	33.2	32.3	32.0	32.0	32.0	32.0	32.8	32.8	33.5	33.5
67°	29.7	28.8	28.5	28.1	28.1	28.1	29.3	28.8	28.8	28.8
67.5°	28.5	27.4	26.9	26.6	26.2	26.9	26.6	26.9	26.9	26.6
68°	26.9	26.2	25.4	24.7	24.7	24.7	25.0	25.4	25.0	24.7
69°	23.9	23.5	22.4	21.5	21.2	21.5	21.2	21.5	21.2	21.5
70°	21.2	20.0	18.9	18.6	18.1	18.1	18.1	17.7	18.1	17.7
71°	18.6	17.4	16.2	15.4	15.1	15.1	14.6	15.1	14.6	15.1
72°	15.8	14.6	13.0	12.3	12.3	12.3	12.3	12.0	12.3	12.0
72.5°	14.6	13.0	12.0	11.1	10.8	10.8	10.8	10.8	10.4	10.8
73°	13.5	12.0	10.4	10.1	10.1	10.1	9.6	9.2	9.6	9.6



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	4.7	3.5	3.1	3.1	3.1	3.1	3.1	3.1	2.8	2.8
80°	1.9	1.6	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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°	25.0	25.0	24.3	23.1	21.2	19.3	17.7	16.2	14.2	12.3	11.6
75°	23.1	22.7	21.9	20.8	19.3	17.4	15.8	13.9	12.3	10.4	9.6





74°	11.1	9.2	8.5	7.7	7.7	7.7	7.3	7.3	7.3	7.7
75°	8.9	7.3	6.6	5.7	6.2	5.7	6.2	5.7	5.7	5.7



(END OF REPORT)