

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: P581099

Luminaire Tested: **HC405D010-HM40525935-41WWW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P581099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC405D010-HM40525935-41WWW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 607.6 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.03 / 1.1
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

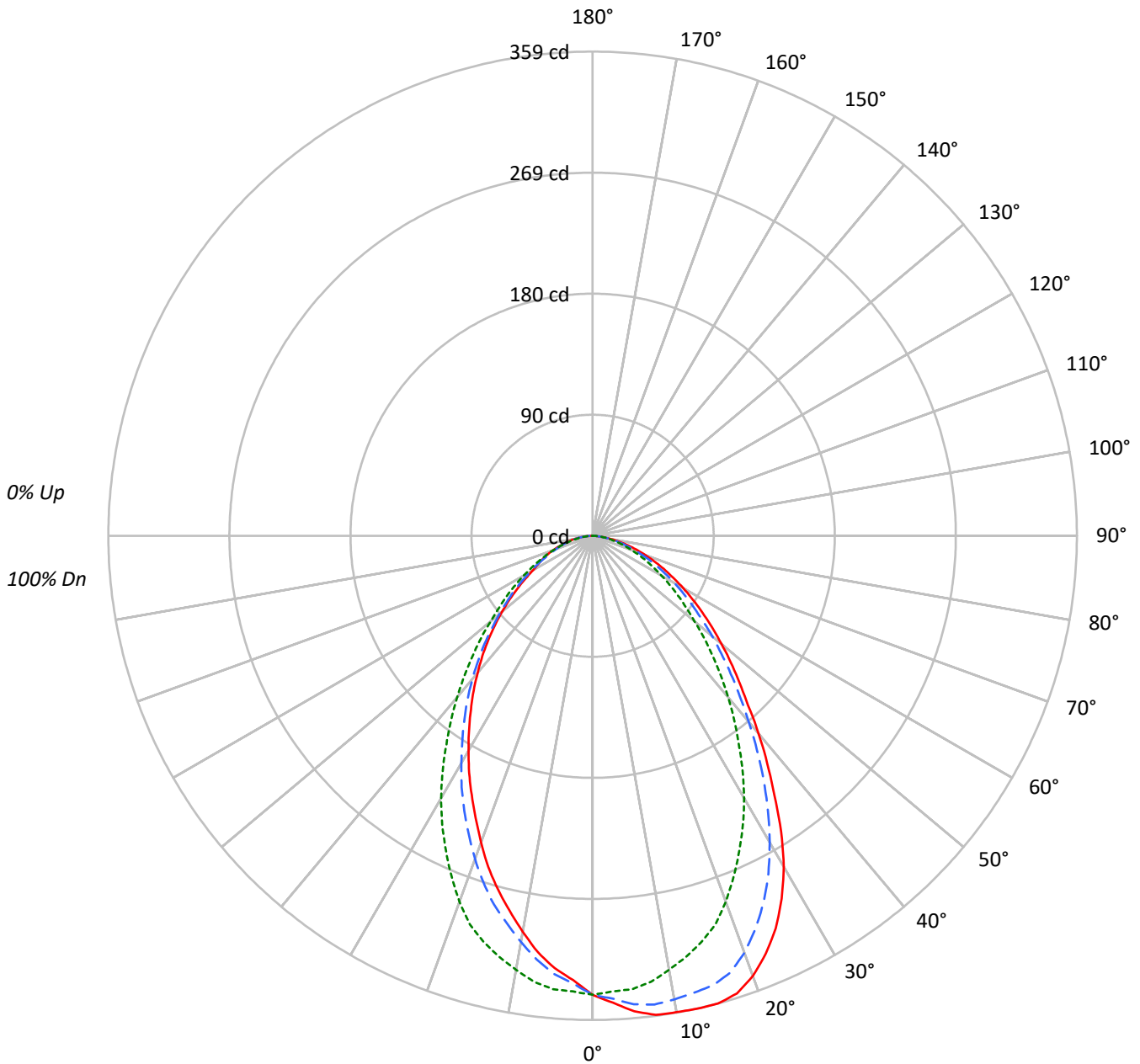
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P581099

CATALOG NUMBER: HC405D010-HM40525935-41WWW

Luminous Intensity Polar Plot





TEST NUMBER: P581099

CATALOG NUMBER: HC405D010-HM40525935-41WWW

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				100															
1	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87				87															
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				76															
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66				66															
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58				58															
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52				52															
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47				47															
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	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	42	37	47	41	37	46	41	37	35				35															
10	59	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°	41975	41975	41975
5°	43819	41776	39857
10°	44927	40919	37349
15°	45856	39816	34657
20°	45600	37882	31739
25°	43701	35031	28866
30°	40364	31989	26178
35°	35371	28459	23686
40°	30819	25135	21335
45°	26811	21909	19066
50°	23891	18901	16810
55°	21354	16623	14537
60°	19069	14505	12532
65°	16928	12725	11937
70°	14858	10963	11144
75°	12581	9341	10294
80°	9660	7956	9376
85°	5661	6227	7925



TEST NUMBER: P581099

CATALOG NUMBER: HC405D010-HM40525935-41WWW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.9	5.2
10°-20°	88.0	14.5
20°-30°	120.2	19.8
30°-40°	120.7	19.9
40°-50°	99.8	16.4
50°-60°	72.3	11.9
60°-70°	45.8	7.5
70°-80°	23.2	3.8
80°-90°	5.7	0.9
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°	240.1	39.5
0°-40°	360.8	59.4
0°-60°	532.9	87.7
0°-90°	607.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	607.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	340	340	340	340	340	
5°	354	349	337	326	322	34
15°	359	345	312	283	271	101
25°	321	300	257	225	212	147
35°	235	221	189	166	157	147
45°	154	145	126	113	109	120
55°	99	90	77	70	68	89
65°	58	52	44	39	41	58
75°	26	23	20	20	22	28
85°	4	4	4	5	6	6
90°	0	0	0	0	0	



TEST NUMBER: P581099

CATALOG NUMBER: HC405D010-HM40525935-41WWW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	340.3	340.3	340.3	340.3	340.3	340.3	340.3	340.3	340.3
2.5°	346.6	345.5	343.5	341.1	338.2	335.1	332.2	330.6	329.8
5°	353.9	352.3	348.7	343.5	337.4	331.4	326.2	323.0	321.9
7.5°	358.3	355.8	350.6	342.7	333.5	324.6	317.0	312.6	311.4
10°	358.7	355.8	349.0	338.2	326.7	315.1	305.8	299.4	298.2
12.5°	359.1	355.5	347.1	334.3	319.8	305.4	294.2	286.6	284.7
15°	359.1	355.5	345.0	329.8	311.8	295.4	283.0	274.2	271.4
17.5°	355.8	351.8	339.5	321.9	302.3	283.9	269.4	260.1	257.4
20°	347.4	343.0	329.0	309.9	288.6	269.4	255.0	245.4	241.8
22.5°	335.4	330.3	315.4	294.6	273.4	253.8	239.8	229.7	226.5
25°	321.1	315.9	299.9	279.4	257.4	239.0	225.0	215.8	212.1
27.5°	303.4	297.8	282.2	261.8	241.4	222.9	210.2	201.8	198.2
30°	283.4	277.4	262.6	243.0	224.6	206.9	194.5	187.7	183.8
32.5°	260.1	255.0	241.8	224.2	206.9	190.1	179.8	173.8	170.5
35°	234.9	232.2	221.0	205.8	189.0	174.9	165.7	160.1	157.3
37.5°	212.6	209.7	200.1	187.4	172.5	159.7	152.1	147.3	144.9
40°	191.4	189.0	179.8	168.9	156.1	144.9	138.5	135.0	132.5
42.5°	170.5	169.3	161.7	151.7	140.5	130.9	125.6	122.9	120.9
45°	153.7	152.1	144.9	135.3	125.6	117.7	113.3	111.2	109.3
47.5°	138.9	136.9	129.3	120.9	112.1	104.9	100.9	98.9	98.1
50°	124.5	122.5	115.7	107.3	98.5	93.3	90.1	88.1	87.6
52.5°	111.7	109.6	102.0	94.1	87.3	82.9	80.0	78.1	77.3
55°	99.3	96.8	90.5	82.9	77.3	73.2	70.5	68.4	67.6
57.5°	88.1	85.7	80.0	72.9	67.6	64.0	61.6	59.6	58.8
60°	77.3	75.3	70.0	63.2	58.8	55.6	53.2	51.6	50.8
62.5°	67.3	65.6	60.5	54.5	50.8	48.0	46.1	44.4	45.3
65°	58.0	56.4	51.6	46.4	43.6	40.9	39.3	39.3	40.9
67.5°	49.3	47.7	43.6	39.3	36.8	34.8	33.6	34.8	36.0
70°	41.2	39.6	36.0	32.5	30.4	28.8	28.8	30.1	30.9
72.5°	33.6	32.0	29.2	26.4	24.9	23.6	24.9	25.7	26.4
75°	26.4	25.2	22.8	20.8	19.6	19.2	20.4	21.2	21.6
77.5°	19.6	18.8	17.3	15.7	14.8	15.2	16.5	16.8	17.3
80°	13.6	13.2	12.0	11.2	11.2	11.6	12.4	12.8	13.2
82.5°	8.4	8.4	7.6	7.2	7.6	8.4	8.9	9.2	9.2
85°	4.0	4.4	4.0	4.0	4.4	5.2	5.2	5.6	5.6
87.5°	1.2	1.2	1.6	1.6	2.0	2.0	2.0	2.0	2.4
90°	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°







(END OF REPORT)