

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: P582501

Luminaire Tested: **HC640D010-HM63040927-61WWBB**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582501
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC640D010-HM63040927-61WWBB
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3021.5 lumens
Efficiency: N/A
Efficacy: 73.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.06 / 1.14
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

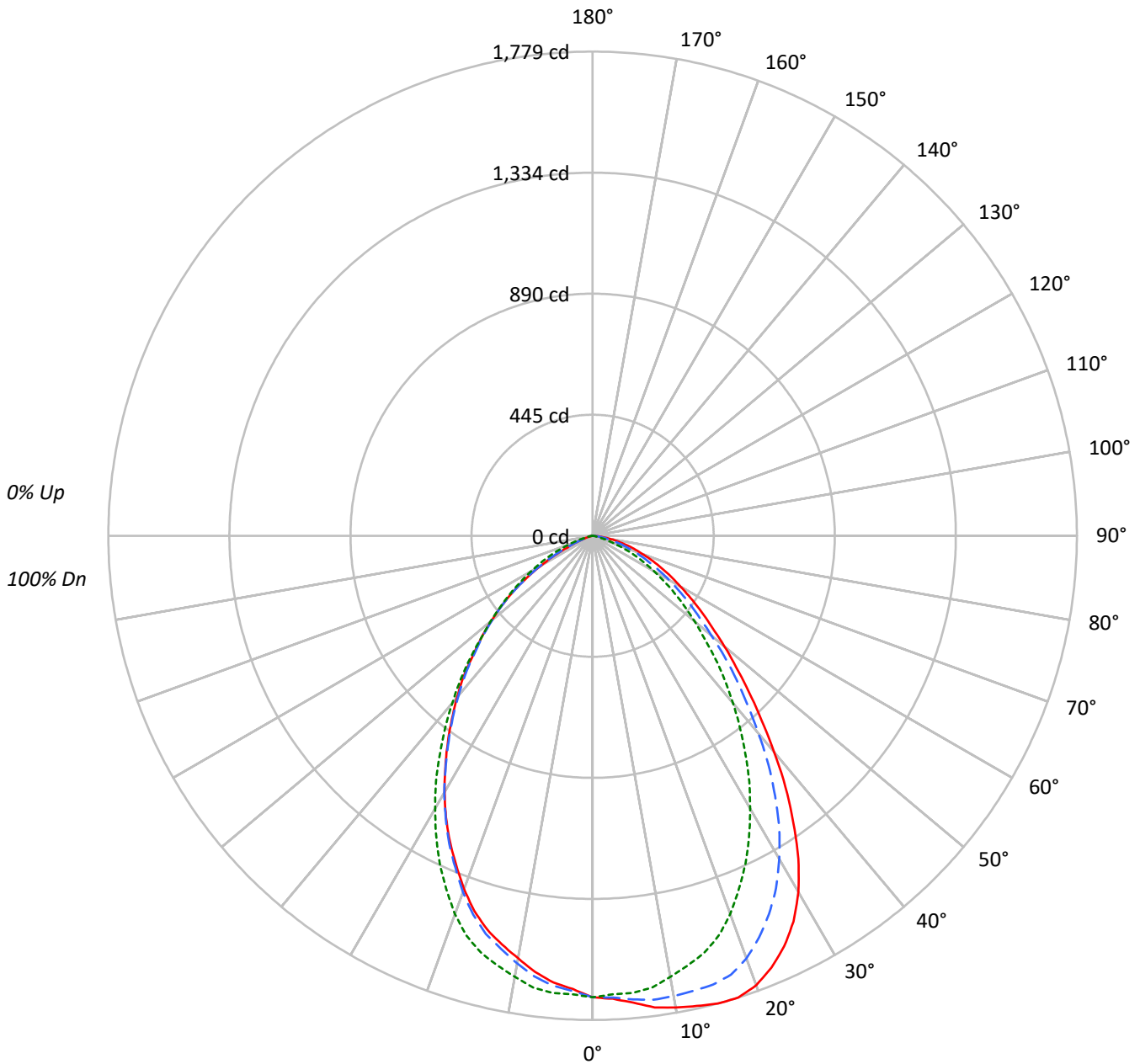
Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				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	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89			89
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78			78
3	96	87	80	75	93	86	79	74	83	77	73	80	76	72	78	74	71	69			69
4	89	79	71	66	87	78	71	65	75	69	64	73	68	64	71	67	63	61			61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54			54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	49			49
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44			44
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40			40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37			37
10	60	48	40	36	58	47	40	36	46	40	36	45	40	35	45	39	35	34			34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	92953	92953	92953
5°	94750	92785	90689
10°	97966	91598	87746
15°	100971	90001	84995
20°	102536	86259	80560
25°	100687	80351	75010
30°	95711	73214	68840
35°	86023	65437	62085
40°	74239	57343	55461
45°	62859	49362	48075
50°	53892	41687	41286
55°	46718	35096	33738
60°	40797	28506	24044
65°	35879	21974	13296
70°	30967	14522	6491
75°	26264	7074	2521
80°	20331	2999	1484
85°	12014	1510	1510



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.0	5.3
10°-20°	452.5	15.0
20°-30°	637.2	21.1
30°-40°	651.0	21.5
40°-50°	524.9	17.4
50°-60°	352.1	11.7
60°-70°	178.1	5.9
70°-80°	56.9	1.9
80°-90°	8.8	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°	1249.7	41.4
0°-40°	1900.7	62.9
0°-60°	2777.7	91.9
0°-90°	3021.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3021.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1696	1696	1696	1696	1696	
5°	1722	1710	1686	1660	1648	166
15°	1779	1708	1586	1514	1498	502
25°	1665	1534	1328	1247	1240	762
35°	1285	1168	978	923	928	800
45°	811	746	637	615	620	631
55°	489	434	367	351	353	440
65°	277	229	169	112	102	276
75°	124	88	33	12	12	133
85°	19	10	2	2	2	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1695.6	1695.6	1695.6	1695.6	1695.6	1695.6	1695.6	1695.6	1695.6
2.5°	1702.7	1700.3	1697.9	1693.2	1686.1	1679.0	1674.1	1669.3	1667.0
5°	1721.8	1717.1	1710.0	1700.3	1686.1	1669.3	1659.8	1650.3	1648.0
7.5°	1748.1	1738.6	1719.4	1697.9	1674.1	1650.3	1633.6	1624.1	1616.8
10°	1759.9	1743.3	1717.1	1681.3	1645.5	1616.8	1595.5	1581.1	1576.3
12.5°	1769.6	1750.4	1712.3	1664.6	1616.8	1578.7	1554.8	1543.0	1538.2
15°	1779.1	1759.9	1707.6	1645.5	1585.8	1540.6	1514.3	1502.5	1497.6
17.5°	1779.1	1752.8	1690.8	1612.1	1540.6	1485.7	1459.5	1447.6	1445.2
20°	1757.6	1728.9	1652.7	1559.7	1478.6	1416.6	1392.7	1385.6	1380.9
22.5°	1717.1	1683.7	1597.8	1492.8	1404.6	1345.0	1318.7	1314.0	1309.2
25°	1664.6	1631.2	1533.5	1421.4	1328.4	1268.7	1247.2	1242.5	1240.1
27.5°	1597.8	1562.1	1459.5	1345.0	1244.9	1187.6	1168.5	1168.5	1166.1
30°	1512.0	1471.5	1371.2	1256.7	1156.6	1104.1	1089.9	1089.9	1087.5
32.5°	1407.0	1366.5	1275.9	1166.1	1070.8	1015.9	1004.0	1008.8	1006.4
35°	1285.4	1252.0	1168.5	1061.3	977.8	927.7	922.9	927.7	927.7
37.5°	1163.8	1132.8	1061.3	968.3	889.5	844.2	844.2	851.4	849.0
40°	1037.4	1013.5	946.8	865.7	801.3	770.3	765.5	772.7	775.0
42.5°	918.2	899.0	841.8	775.0	717.8	686.8	693.9	698.8	701.2
45°	810.8	791.8	746.4	677.3	636.7	615.3	615.3	622.4	620.1
47.5°	715.4	701.2	655.8	589.1	553.3	543.7	548.4	553.3	553.3
50°	631.9	610.6	567.6	515.1	488.8	477.0	481.7	484.1	484.1
52.5°	553.3	538.9	496.1	448.3	424.5	417.3	417.3	419.7	419.7
55°	488.8	472.2	434.1	386.3	367.2	357.7	350.6	348.2	353.0
57.5°	426.8	412.6	376.8	331.5	310.0	300.5	286.2	281.3	286.2
60°	372.1	360.1	324.3	281.3	260.0	240.8	224.2	214.6	219.3
62.5°	324.3	310.0	274.2	238.5	214.6	193.2	167.0	152.6	159.7
65°	276.6	264.7	229.0	193.2	169.4	143.1	112.1	102.5	102.5
67.5°	233.7	221.7	188.4	157.4	128.7	97.7	69.1	66.7	69.1
70°	193.2	181.2	152.6	121.6	90.6	59.6	40.5	40.5	40.5
72.5°	159.7	145.5	119.2	88.2	57.2	31.0	21.5	23.9	23.9
75°	124.0	112.1	88.2	59.6	33.4	14.2	11.9	11.9	11.9
77.5°	93.0	83.5	62.0	38.1	16.8	4.7	4.7	4.7	4.7
80°	64.4	54.9	40.5	23.9	9.5	4.7	4.7	4.7	4.7
82.5°	38.1	33.4	23.9	11.9	4.7	2.4	2.4	2.4	2.4
85°	19.1	16.8	9.5	4.7	2.4	2.4	2.4	2.4	2.4
87.5°	4.7	4.7	2.4	2.4	0.0	2.4	2.4	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)