

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: P582538

Luminaire Tested: **HC640D010-HM63040935-61WWW**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582538
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC640D010-HM63040935-61WWW
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" 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: 3887.3 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1.06 / 1.14
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

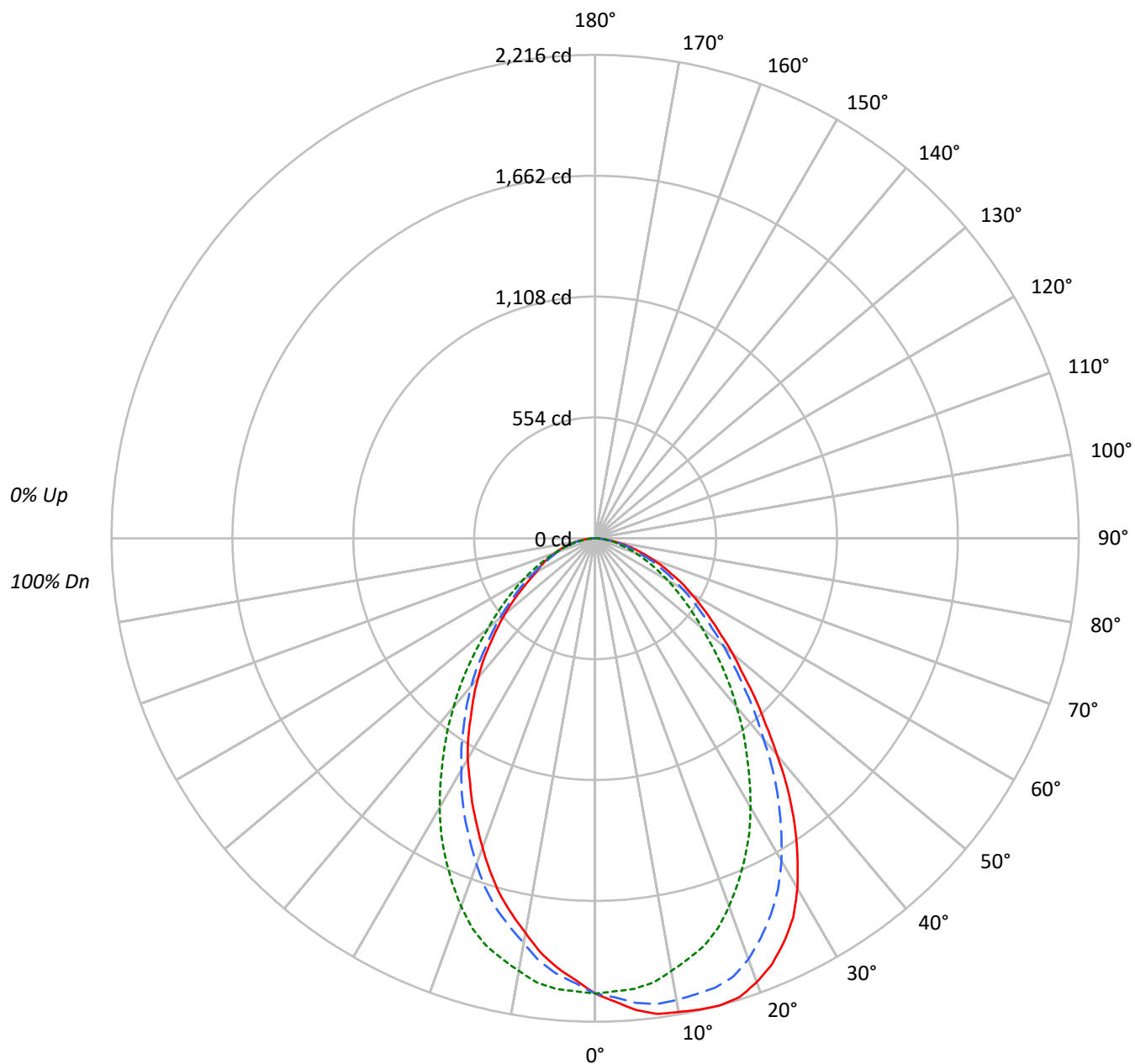
Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87		
2	102	95	89	84	99	93	88	83	90	85	81	86	83	79	83	80	78	76		
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66		
4	87	76	69	63	85	75	68	62	73	67	62	71	65	61	69	64	60	58		
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	51		
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46		
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42		
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38		
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34		
10	58	46	39	34	57	45	38	34	44	38	33	44	38	33	43	37	33	32		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	114399	114399	114399
5°	119475	114065	108810
10°	122732	112100	102247
15°	125773	109666	95806
20°	126326	104706	87992
25°	123679	98020	80702
30°	117341	90140	73961
35°	106582	81017	66354
40°	92860	72149	59690
45°	80342	63146	52478
50°	70181	54378	45986
55°	62010	47778	39454
60°	55730	41883	34186
65°	49915	36424	33155
70°	44559	31063	31063
75°	38655	26180	29145
80°	31033	22162	26613
85°	21260	19436	22958



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.1	5.0
10°-20°	545.2	14.0
20°-30°	759.8	19.5
30°-40°	782.9	20.1
40°-50°	648.8	16.7
50°-60°	466.3	12.0
60°-70°	296.9	7.6
70°-80°	152.5	3.9
80°-90°	38.8	1.0
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°	1501.1	38.6
0°-40°	2284.0	58.8
0°-60°	3399.1	87.4
0°-90°	3887.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3887.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2087	2087	2087	2087	2087	
5°	2171	2137	2073	2005	1977	208
15°	2216	2132	1932	1756	1688	625
25°	2045	1904	1620	1413	1334	937
35°	1593	1463	1211	1050	992	989
45°	1036	963	814	710	677	802
55°	649	595	500	444	413	584
65°	385	343	281	244	256	385
75°	182	157	124	129	138	195
85°	34	31	31	34	36	43
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°	2086.8	2086.8	2086.8	2086.8	2086.8	2086.8	2086.8	2086.8	2086.8
2.5°	2126.1	2117.7	2106.4	2095.2	2078.3	2058.7	2041.9	2036.3	2027.8
5°	2171.1	2159.9	2137.3	2109.3	2072.8	2036.3	2005.4	1985.8	1977.3
7.5°	2199.2	2185.1	2154.2	2106.4	2053.2	1999.7	1954.8	1926.7	1915.5
10°	2204.8	2190.7	2148.7	2084.0	2013.8	1940.8	1884.6	1851.0	1836.8
12.5°	2213.2	2193.5	2140.2	2064.4	1974.4	1890.3	1820.0	1777.9	1763.8
15°	2216.1	2193.5	2131.8	2039.0	1932.3	1831.2	1755.5	1704.8	1688.1
17.5°	2204.8	2179.5	2106.4	1994.2	1873.4	1766.7	1676.7	1623.4	1600.9
20°	2165.4	2137.3	2053.2	1926.7	1794.8	1682.4	1589.7	1533.5	1508.3
22.5°	2114.9	2078.3	1982.9	1848.1	1710.5	1592.6	1499.8	1443.6	1418.3
25°	2044.7	2010.9	1904.2	1761.0	1620.5	1497.1	1412.8	1353.8	1334.2
27.5°	1963.2	1923.9	1814.4	1671.2	1527.9	1404.3	1322.8	1269.5	1244.2
30°	1853.7	1817.2	1707.7	1564.5	1424.0	1308.8	1224.6	1179.6	1168.4
32.5°	1724.5	1693.6	1586.9	1452.1	1317.3	1210.6	1140.3	1092.5	1081.3
35°	1592.6	1556.0	1463.3	1336.9	1210.6	1115.1	1050.5	1008.2	991.5
37.5°	1449.3	1415.6	1336.9	1224.6	1112.2	1022.4	966.2	929.6	912.7
40°	1297.6	1272.3	1199.2	1109.4	1008.2	929.6	881.9	851.0	834.1
42.5°	1157.2	1131.8	1081.3	997.0	912.7	842.6	800.5	772.4	758.3
45°	1036.3	1013.9	963.4	890.3	814.5	755.5	710.5	690.9	676.9
47.5°	915.6	904.4	859.5	792.1	721.8	671.2	640.4	618.0	606.6
50°	822.9	808.9	766.7	696.6	637.6	598.3	570.2	550.6	539.2
52.5°	727.4	713.4	674.0	615.0	567.3	530.9	502.8	485.9	474.7
55°	648.8	637.6	595.4	542.1	499.9	469.0	443.7	424.1	412.8
57.5°	575.7	564.5	525.2	474.7	438.2	410.1	387.7	370.8	356.7
60°	508.3	499.9	460.6	412.8	382.0	353.9	334.2	320.1	311.8
62.5°	449.4	432.5	398.9	356.7	328.6	306.1	286.5	278.0	283.7
65°	384.8	376.3	342.7	306.1	280.8	258.4	244.4	250.0	255.6
67.5°	331.5	320.1	292.2	258.4	236.0	219.1	210.6	221.9	224.6
70°	278.0	266.8	241.5	213.4	193.8	182.5	182.5	191.0	193.8
72.5°	227.5	219.1	196.7	174.1	160.1	151.7	157.2	162.9	165.7
75°	182.5	174.1	157.2	137.6	123.6	123.6	129.3	134.8	137.6
77.5°	140.5	134.8	117.9	103.9	98.3	98.3	103.9	106.7	109.5
80°	98.3	92.7	84.3	75.8	70.2	75.8	81.5	81.5	84.3
82.5°	64.6	61.7	56.2	50.5	50.5	53.4	56.2	59.0	59.0
85°	33.8	33.8	30.9	28.1	30.9	33.8	33.8	36.5	36.5
87.5°	11.2	11.2	11.2	11.2	14.0	14.0	14.0	14.0	14.0
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)