

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: P582466

Luminaire Tested: **HC640D010-HM63040835-61WWW**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582466
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-HM63040835-61WWW
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4351.9 lumens
Efficiency: N/A
Efficacy: 106.1 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

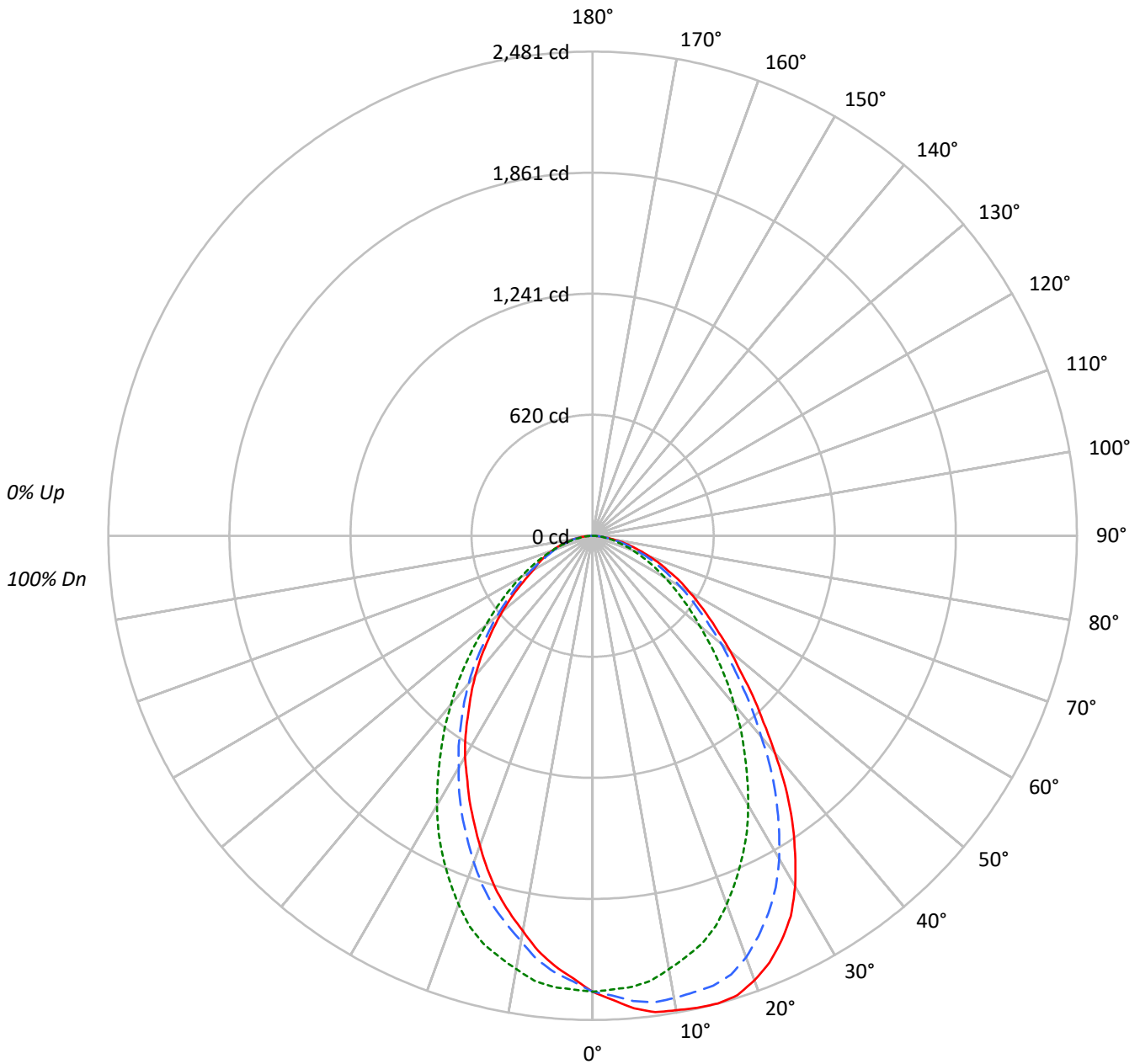
Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	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°	128071	128071	128071
5°	133760	127696	121819
10°	137406	125504	114477
15°	140801	122776	107248
20°	141430	117214	98510
25°	138462	109742	90344
30°	131368	100908	82804
35°	119317	90701	74278
40°	103959	80780	66832
45°	89955	70690	58750
50°	78573	60868	51487
55°	69426	53494	44175
60°	62396	46882	38264
65°	55881	40783	37112
70°	49896	34782	34782
75°	43294	29314	32640
80°	34727	24814	29770
85°	23713	21763	25726



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.6	5.0
10°-20°	610.4	14.0
20°-30°	850.6	19.5
30°-40°	876.4	20.1
40°-50°	726.4	16.7
50°-60°	522.0	12.0
60°-70°	332.4	7.6
70°-80°	170.7	3.9
80°-90°	43.4	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°	1680.5	38.6
0°-40°	2557.0	58.8
0°-60°	3805.4	87.4
0°-90°	4351.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4351.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2336	2336	2336	2336	2336	
5°	2431	2393	2320	2245	2214	233
15°	2481	2387	2163	1965	1890	699
25°	2289	2132	1814	1582	1494	1049
35°	1783	1638	1355	1176	1110	1107
45°	1160	1078	912	796	758	898
55°	726	667	560	497	462	654
65°	431	384	314	274	286	431
75°	204	176	138	145	154	218
85°	38	35	35	38	41	48
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°	2336.2	2336.2	2336.2	2336.2	2336.2	2336.2	2336.2	2336.2	2336.2
2.5°	2380.3	2370.9	2358.2	2345.7	2326.8	2304.8	2286.0	2279.6	2270.3
5°	2430.7	2418.0	2392.9	2361.4	2320.5	2279.6	2245.1	2223.0	2213.7
7.5°	2462.0	2446.3	2411.8	2358.2	2298.5	2238.7	2188.5	2157.1	2144.4
10°	2468.4	2452.5	2405.5	2333.2	2254.6	2172.8	2109.9	2072.1	2056.5
12.5°	2477.7	2455.7	2396.0	2311.2	2210.5	2116.2	2037.6	1990.4	1974.7
15°	2480.9	2455.7	2386.6	2282.8	2163.3	2050.1	1965.2	1908.6	1889.7
17.5°	2468.4	2440.0	2358.2	2232.5	2097.3	1977.8	1877.2	1817.5	1792.3
20°	2424.3	2392.9	2298.5	2157.1	2009.2	1883.5	1779.7	1716.8	1688.6
22.5°	2367.7	2326.8	2219.9	2069.0	1914.9	1782.9	1679.1	1616.2	1587.9
25°	2289.1	2251.4	2131.9	1971.5	1814.3	1675.9	1581.6	1515.5	1493.6
27.5°	2198.0	2153.9	2031.3	1870.9	1710.5	1572.2	1481.0	1421.2	1393.0
30°	2075.3	2034.4	1911.8	1751.4	1594.1	1465.3	1371.0	1320.6	1308.1
32.5°	1930.6	1896.1	1776.6	1625.7	1474.8	1355.3	1276.7	1223.1	1210.6
35°	1782.9	1742.0	1638.2	1496.7	1355.3	1248.3	1176.0	1128.8	1109.9
37.5°	1622.5	1584.8	1496.7	1371.0	1245.1	1144.5	1081.7	1040.8	1022.0
40°	1452.7	1424.4	1342.6	1242.0	1128.8	1040.8	987.3	952.7	933.9
42.5°	1295.5	1267.2	1210.6	1116.3	1022.0	943.3	896.1	864.7	849.0
45°	1160.3	1135.1	1078.5	996.8	911.8	845.9	795.5	773.5	757.8
47.5°	1025.1	1012.5	962.2	886.8	808.2	751.6	716.9	691.8	679.2
50°	921.3	905.6	858.4	779.8	713.7	669.8	638.3	616.2	603.7
52.5°	814.4	798.7	754.6	688.6	635.1	594.3	562.8	544.0	531.4
55°	726.4	713.7	666.6	606.9	559.7	525.1	496.9	474.8	462.2
57.5°	644.6	632.1	588.0	531.4	490.5	459.1	434.0	415.1	399.4
60°	569.1	559.7	515.7	462.2	427.6	396.2	374.2	358.5	349.0
62.5°	503.1	484.2	446.5	399.4	367.9	342.7	320.8	311.3	317.6
65°	430.8	421.3	383.6	342.7	314.4	289.3	273.6	279.9	286.1
67.5°	371.0	358.5	327.0	289.3	264.1	245.2	235.8	248.4	251.5
70°	311.3	298.8	270.4	239.0	217.0	204.4	204.4	213.8	217.0
72.5°	254.7	245.2	220.1	194.9	179.3	169.8	176.1	182.4	185.6
75°	204.4	194.9	176.1	154.1	138.4	138.4	144.7	150.9	154.1
77.5°	157.2	150.9	132.0	116.3	110.0	110.0	116.3	119.5	122.7
80°	110.0	103.8	94.3	84.9	78.6	84.9	91.1	91.1	94.3
82.5°	72.3	69.1	62.9	56.6	56.6	59.8	62.9	66.1	66.1
85°	37.7	37.7	34.6	31.4	34.6	37.7	37.7	40.9	40.9
87.5°	12.5	12.5	12.5	12.5	15.7	15.7	15.7	15.7	15.7
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)