

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: P582440

Luminaire Tested: **HC640D010-HM63040830-61RWWC**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582440
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-14)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC640D010-HM63040830-61RWWC
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4514.9 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.15 / 1.2
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

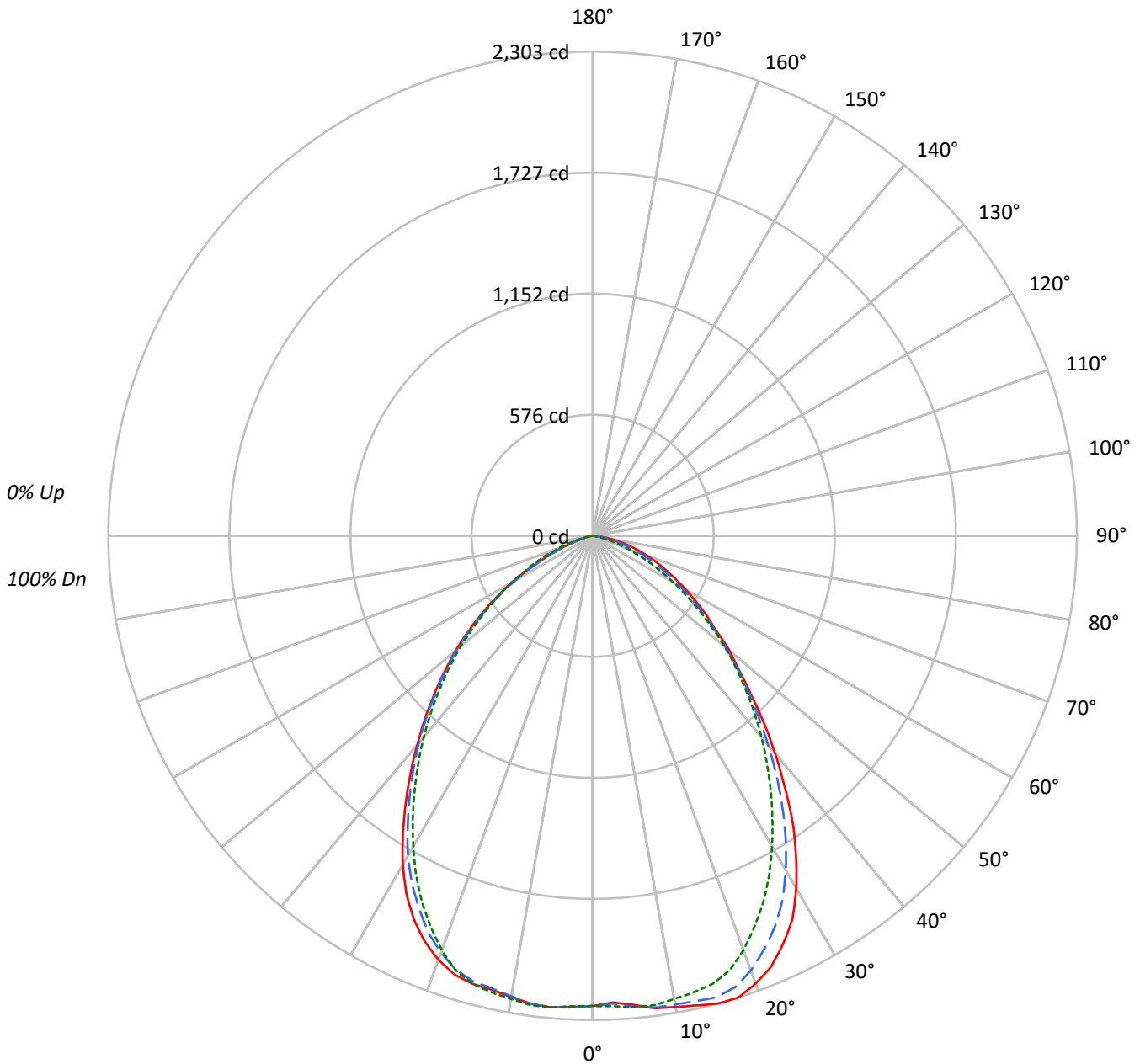
Input Watts (W): 41
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88			88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77			77
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	69	68			68
4	88	78	70	64	86	76	69	64	74	68	63	72	67	62	70	65	61	60			60
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53			53
6	76	64	56	50	74	63	56	50	62	55	50	60	54	49	58	53	49	47			47
7	71	59	51	45	69	58	50	45	56	50	45	55	49	45	54	48	44	42			42
8	66	54	46	41	65	53	46	41	52	45	41	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°	122600	122600	122600
5°	123233	123899	123899
10°	126679	124491	123985
15°	130704	125199	125199
20°	132230	122330	125159
25°	129594	116202	121707
30°	122569	107991	114321
35°	110932	98758	103630
40°	96495	89339	92817
45°	82458	79636	82458
50°	72364	69780	72620
55°	63138	58798	61102
60°	55818	48834	48176
65°	49538	38513	33026
70°	43725	27216	19907
75°	37215	15399	9637
80°	27718	4799	2873
85°	15284	1887	1887



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.5	4.8
10°-20°	627.6	13.9
20°-30°	916.7	20.3
30°-40°	961.4	21.3
40°-50°	809.9	17.9
50°-60°	567.4	12.6
60°-70°	304.2	6.7
70°-80°	102.0	2.3
80°-90°	11.1	0.2
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°	1758.8	39.0
0°-40°	2720.1	60.2
0°-60°	4097.5	90.8
0°-90°	4514.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4514.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2236	2236	2236	2236	2236	
5°	2239	2248	2252	2252	2252	215
15°	2303	2273	2206	2194	2206	650
25°	2142	2051	1921	1954	2012	981
35°	1658	1573	1476	1518	1548	1029
45°	1064	1045	1027	1054	1064	829
55°	661	639	615	627	639	595
65°	382	348	297	246	255	381
75°	176	136	73	46	46	186
85°	24	12	3	3	3	33
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°	2236.4	2236.4	2236.4	2236.4	2236.4	2236.4	2236.4	2236.4	2236.4
2.5°	2221.2	2221.2	2227.3	2233.3	2239.4	2239.4	2242.4	2245.5	2242.4
5°	2239.4	2239.4	2248.5	2251.5	2251.5	2248.5	2251.5	2251.5	2251.5
7.5°	2266.6	2260.5	2263.5	2257.6	2251.5	2248.5	2245.5	2245.5	2245.5
10°	2275.7	2269.6	2263.5	2251.5	2236.4	2227.3	2224.2	2227.3	2227.3
12.5°	2287.8	2281.7	2266.6	2242.4	2224.2	2209.1	2206.0	2212.1	2212.1
15°	2303.0	2296.9	2272.6	2233.3	2206.0	2190.9	2193.9	2200.0	2206.0
17.5°	2303.0	2290.8	2251.5	2200.0	2166.6	2151.4	2163.6	2178.7	2187.8
20°	2266.6	2254.6	2200.0	2136.4	2096.9	2087.8	2109.1	2136.4	2145.4
22.5°	2218.2	2193.9	2130.3	2054.5	2012.1	2012.1	2042.3	2075.7	2087.8
25°	2142.5	2124.2	2051.4	1963.6	1921.1	1918.1	1954.5	2000.0	2012.1
27.5°	2057.5	2033.2	1954.5	1863.6	1818.1	1821.1	1860.6	1906.1	1918.1
30°	1936.3	1906.1	1836.3	1748.5	1706.0	1718.1	1757.6	1790.9	1806.0
32.5°	1799.9	1772.7	1709.0	1627.3	1590.8	1603.0	1636.4	1666.7	1678.8
35°	1657.6	1627.3	1572.6	1500.0	1475.7	1487.8	1518.2	1542.4	1548.5
37.5°	1496.9	1475.7	1436.4	1378.8	1360.5	1375.7	1400.0	1415.2	1421.2
40°	1348.4	1330.3	1297.0	1254.5	1248.4	1260.6	1284.8	1293.9	1297.0
42.5°	1203.1	1187.9	1166.7	1136.3	1136.3	1148.5	1169.7	1175.8	1178.8
45°	1063.6	1054.5	1045.4	1021.2	1027.2	1042.4	1054.5	1063.6	1063.6
47.5°	942.4	945.5	933.3	915.1	921.2	936.4	945.5	954.6	954.6
50°	848.5	839.4	827.3	809.1	818.2	830.3	842.4	848.5	851.5
52.5°	739.4	736.4	727.3	706.1	712.1	718.2	730.3	739.4	742.5
55°	660.6	651.5	639.3	615.2	615.2	621.2	627.3	633.4	639.3
57.5°	584.8	575.7	557.5	530.2	527.2	527.2	524.2	530.2	539.3
60°	509.1	506.1	478.8	454.5	445.4	436.3	424.2	427.2	439.4
62.5°	442.4	436.3	412.1	381.9	363.6	348.5	333.3	330.3	342.4
65°	381.9	375.8	348.5	318.1	296.9	269.7	245.5	245.5	254.6
67.5°	327.2	315.1	290.8	257.6	230.3	196.9	172.8	178.7	181.8
70°	272.8	263.7	236.4	203.0	169.8	136.4	121.2	124.2	124.2
72.5°	224.2	212.1	184.8	151.6	118.2	87.8	81.8	78.7	78.7
75°	175.7	163.7	136.4	103.0	72.7	51.6	45.5	45.5	45.5
77.5°	127.3	118.2	93.9	63.6	39.4	24.3	21.2	18.2	18.2
80°	87.8	78.7	57.6	33.4	15.2	9.1	9.1	9.1	9.1
82.5°	51.6	42.5	27.3	15.2	6.1	3.0	3.0	3.0	3.0
85°	24.3	18.2	12.1	6.1	3.0	3.0	3.0	3.0	3.0
87.5°	3.0	3.0	3.0	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



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







(END OF REPORT)