

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: HALO

Report Number: P645640

Luminaire Tested: LCR630WW9FSE010-30W-6500K

Issue Date: 3/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P645640
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-759-117)
Test Lab: INNOVATION CENTER
Issue Date: 3/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: LCR630WW9FSE010-30W-6500K
Description: LCR 6 Wall Wash
Light Source: 6500K CCT, 93 CRI LEDS
Ballast/Driver: -

Summary

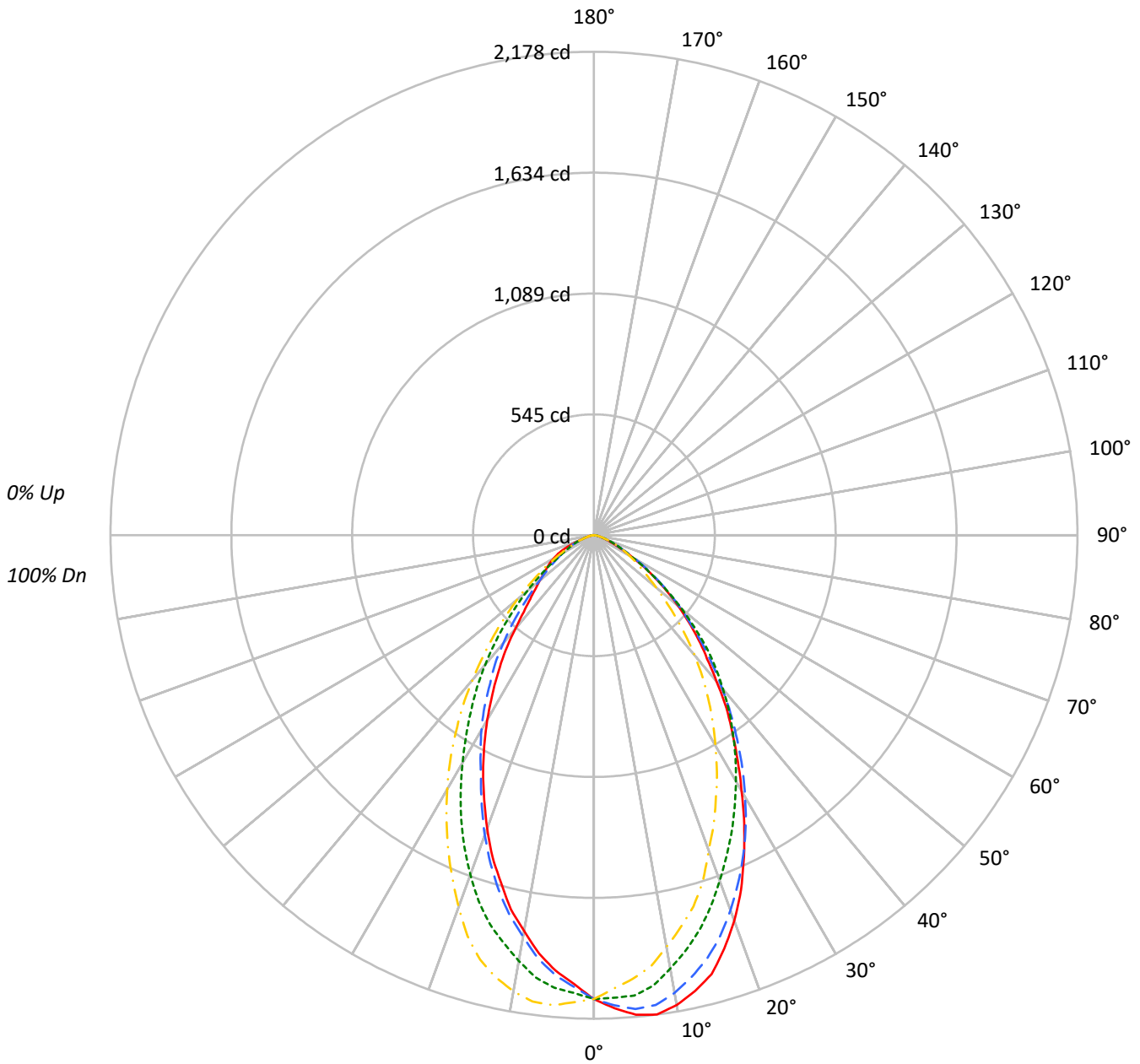
Lumens per Lamp: N/A
Luminaire Lumens: 2855.0 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.95 / 1.01
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 30.1
Input Voltage (V): 120
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: 24 FT



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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - · - · 90°-270° - · - · 135°-315°



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64
5	85	74	67	62	83	73	67	61	71	65	61	70	64	60	68	63	60	58
6	79	68	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53
7	75	63	56	51	73	62	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	51	46	69	58	51	46	57	51	46	56	50	46	55	49	46	44
9	66	55	48	43	65	54	47	43	53	47	43	52	46	42	51	46	42	41
10	62	51	44	40	61	51	44	39	50	44	39	49	43	39	48	43	39	38

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	114536	114536	114536	114536
5°	119315	114539	108403	112635
10°	119598	110313	100761	108393
15°	116164	104410	91868	102901
20°	107844	96620	82006	94952
25°	96659	88844	71423	85559
30°	84234	80924	60819	74929
35°	72685	73013	50172	64561
40°	61487	64664	39317	54495
45°	51695	55672	31430	43896
50°	42233	44084	27257	33816
55°	32333	32429	24888	24697
60°	22169	22279	22816	17849
65°	14463	15994	19963	14334
70°	9954	12021	11220	10755
75°	6693	7519	7096	7307
80°	6219	6219	6219	6851
85°	5598	4969	4969	5598

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°

Vertical Angle: 45°

Luminance: 55905 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.5	6.8
10°-20°	511.6	17.9
20°-30°	649.4	22.7
30°-40°	611.1	21.4
40°-50°	450.5	15.8
50°-60°	264.7	9.3
60°-70°	123.0	4.3
70°-80°	40.4	1.4
80°-90°	9.8	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°	1355.5	47.5
0°-40°	1966.6	68.9
0°-60°	2681.8	93.9
0°-90°	2855.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2855.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2089	2089	2089	2089	2089	
5°	2168	2081	1970	2047	2168	206
15°	2047	1840	1619	1813	2047	570
25°	1598	1469	1181	1414	1598	732
35°	1086	1091	750	965	1086	680
45°	667	718	405	566	667	514
55°	338	339	260	258	338	304
65°	112	123	154	110	112	118
75°	32	36	34	34	32	38
85°	9	8	8	9	9	10
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°	202.5°	225°
0°	2089.3	2089.3	2089.3	2089.3	2089.3	2089.3	2089.3	2089.3	2089.3	2089.3	2089.3
2.5°	2132.7	2124.8	2119.8	2107.0	2085.3	2062.6	2043.9	2035.0	2024.2	2035.0	2037.0
5°	2168.2	2158.3	2142.5	2116.9	2081.4	2044.9	2006.4	1988.6	1969.9	1975.8	1989.6
7.5°	2178.0	2166.2	2134.6	2096.2	2046.8	2003.4	1959.1	1927.5	1899.9	1912.7	1923.5
10°	2148.5	2133.7	2093.2	2039.0	1981.7	1930.5	1883.1	1842.7	1810.1	1821.0	1836.7
12.5°	2103.1	2085.3	2037.0	1979.8	1914.7	1865.3	1808.1	1756.8	1727.2	1728.2	1752.9
15°	2046.8	2019.2	1972.9	1911.7	1839.7	1788.4	1731.2	1664.1	1618.7	1629.6	1655.2
17.5°	1952.2	1929.5	1893.0	1828.8	1751.9	1700.6	1632.5	1556.6	1520.1	1518.1	1549.7
20°	1848.6	1821.9	1798.3	1734.2	1656.2	1607.9	1510.2	1440.2	1405.7	1388.9	1437.2
22.5°	1730.2	1706.5	1696.7	1636.5	1562.5	1509.2	1409.6	1325.8	1291.2	1276.4	1319.8
25°	1598.0	1595.1	1591.1	1536.9	1468.8	1410.6	1301.1	1217.3	1180.8	1169.9	1204.4
27.5°	1465.8	1477.7	1480.6	1435.3	1374.1	1325.8	1199.5	1106.8	1070.3	1065.3	1105.8
30°	1330.7	1351.4	1362.3	1327.7	1278.4	1223.2	1094.9	997.3	960.8	962.8	1014.1
32.5°	1205.4	1227.1	1243.9	1220.2	1186.7	1123.5	996.3	901.6	852.3	865.1	917.4
35°	1086.1	1103.8	1124.5	1116.6	1091.0	1026.9	895.7	789.1	749.7	766.5	815.8
37.5°	980.5	989.4	1011.1	1016.0	1001.2	930.2	803.0	692.5	655.0	676.7	732.9
40°	859.2	877.9	896.7	916.4	903.6	831.6	705.3	605.7	549.4	585.9	635.3
42.5°	754.6	771.4	790.1	817.8	811.8	733.9	609.6	506.0	467.6	489.3	545.5
45°	666.8	673.7	688.5	721.1	718.1	634.3	518.9	430.1	405.4	417.3	460.7
47.5°	578.1	583.0	593.8	624.4	612.6	539.6	436.0	371.9	357.1	361.0	384.7
50°	495.2	499.1	506.0	520.8	516.9	449.8	364.0	326.5	319.6	310.7	323.6
52.5°	413.3	421.2	424.2	433.0	425.2	367.0	305.8	288.0	286.1	273.2	272.3
55°	338.3	346.2	348.2	350.2	339.3	295.9	259.4	257.5	260.4	243.6	230.8
57.5°	267.3	277.2	280.1	282.1	267.3	236.7	221.0	229.8	236.7	209.1	194.3
60°	202.2	212.1	219.0	216.0	203.2	190.4	185.4	201.2	208.1	182.5	164.7
62.5°	149.9	158.8	165.7	162.8	156.8	154.9	154.9	174.6	182.5	153.9	137.1
65°	111.5	117.4	124.3	124.3	123.3	124.3	126.3	145.0	153.9	126.3	111.5
67.5°	83.8	86.8	91.7	95.7	96.7	99.6	98.6	109.5	109.5	96.7	88.8
70°	62.1	63.1	67.1	72.0	75.0	75.0	73.0	73.0	70.0	70.0	68.1
72.5°	45.4	44.4	46.4	50.3	53.3	52.3	50.3	48.3	49.3	48.3	49.3
75°	31.6	32.6	33.5	34.5	35.5	34.5	34.5	33.5	33.5	33.5	34.5
77.5°	25.6	25.6	25.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	27.6
80°	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	20.7
82.5°	13.8	13.8	13.8	13.8	13.8	13.8	13.8	12.8	13.8	13.8	14.8
85°	8.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	8.9
87.5°	3.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2089.3	2089.3	2089.3	2089.3	2089.3	2089.3
2.5°	2047.8	2063.6	2090.3	2106.0	2124.8	2132.7
5°	2015.3	2046.8	2092.2	2124.8	2158.3	2168.2
7.5°	1965.0	2009.4	2073.5	2118.9	2163.2	2178.0
10°	1883.1	1947.2	2024.2	2086.3	2133.7	2148.5
12.5°	1807.1	1881.1	1970.9	2039.9	2089.3	2103.1
15°	1732.2	1813.1	1912.7	1979.8	2028.1	2046.8
17.5°	1631.6	1727.2	1834.8	1893.0	1944.3	1952.2
20°	1511.2	1627.6	1735.1	1781.5	1827.9	1848.6
22.5°	1406.7	1523.1	1631.6	1668.1	1713.4	1730.2
25°	1294.2	1414.5	1523.1	1554.6	1597.0	1598.0
27.5°	1186.7	1300.1	1413.6	1438.2	1469.8	1465.8
30°	1079.2	1183.7	1299.1	1322.8	1333.7	1330.7
32.5°	979.5	1071.3	1179.8	1206.4	1207.4	1205.4
35°	881.9	964.7	1058.4	1084.1	1084.1	1086.1
37.5°	793.1	865.1	942.0	970.7	965.7	980.5
40°	695.4	761.5	825.6	850.3	854.3	859.2
42.5°	599.8	661.9	711.2	737.9	748.7	754.6
45°	513.9	566.2	594.8	637.2	649.1	666.8
47.5°	431.1	475.5	498.1	536.6	558.3	578.1
50°	357.1	396.5	416.3	450.8	473.5	495.2
52.5°	292.0	320.6	347.2	372.9	393.6	413.3
55°	238.7	258.4	280.1	301.8	320.6	338.3
57.5°	194.3	203.2	225.9	243.6	254.5	267.3
60°	161.8	162.8	172.6	190.4	195.3	202.2
62.5°	135.1	134.2	137.1	147.0	148.0	149.9
65°	112.5	110.5	110.5	113.4	111.5	111.5
67.5°	90.8	88.8	86.8	86.8	83.8	83.8
70°	70.0	67.1	67.1	66.1	62.1	62.1
72.5°	49.3	49.3	48.3	47.3	44.4	45.4
75°	34.5	34.5	34.5	33.5	32.6	31.6
77.5°	27.6	27.6	27.6	27.6	26.6	25.6
80°	20.7	21.7	21.7	20.7	19.7	19.7
82.5°	14.8	14.8	14.8	14.8	14.8	13.8
85°	8.9	8.9	8.9	8.9	8.9	8.9
87.5°	3.9	3.9	3.9	3.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)