

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: P645635

Luminaire Tested: LCR630WW9FSE010-30W-2700K

Issue Date: 3/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P645635
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-759-97)
Test Lab: INNOVATION CENTER
Issue Date: 3/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: LCR630WW9FSE010-30W-2700K
Description: LCR 6 Wall Wash
Light Source: 2700K CCT, 93 CRI LEDS
Ballast/Driver: -

Summary

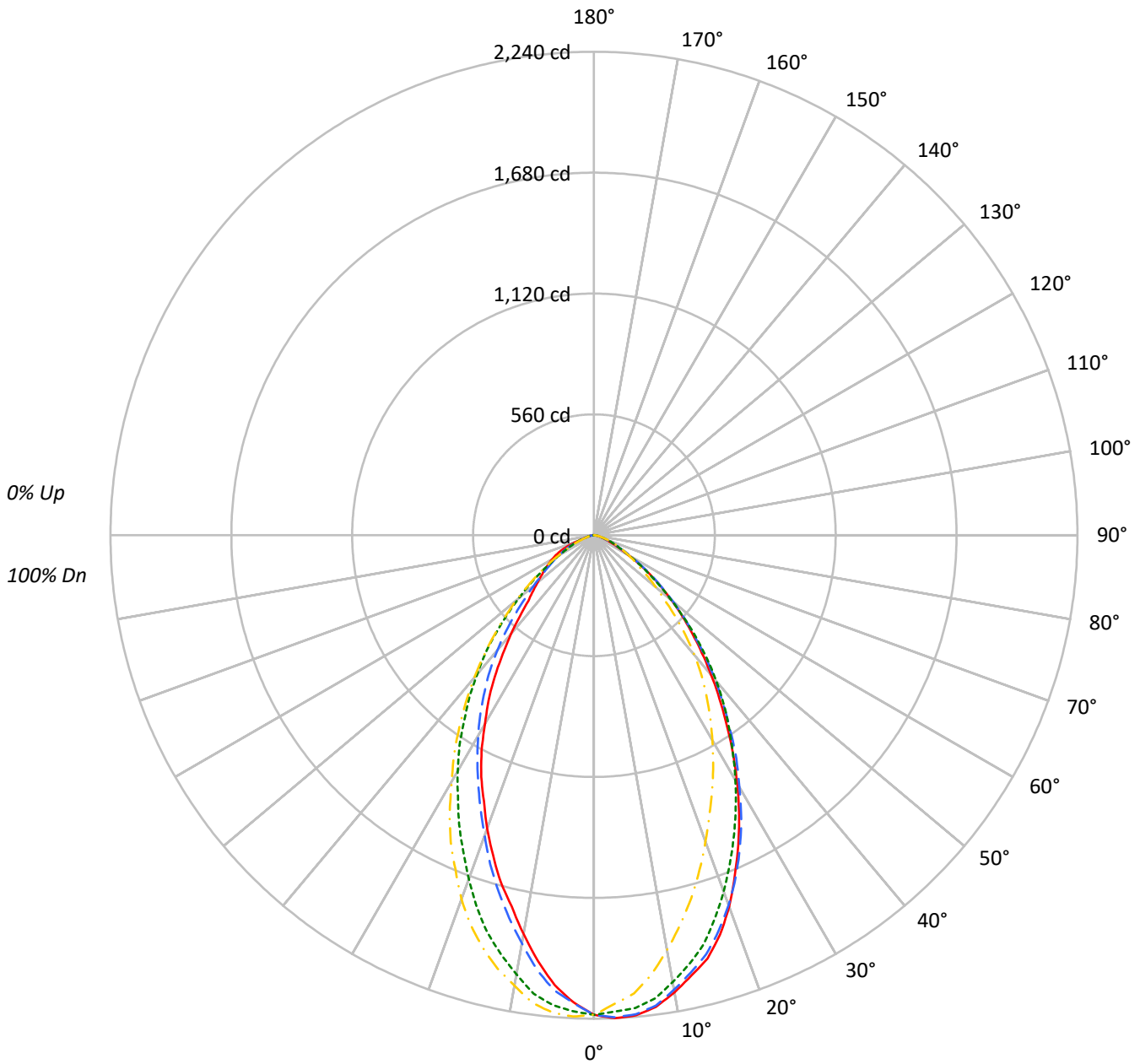
Lumens per Lamp: N/A
Luminaire Lumens: 2915.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.94 / 0.99
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 29.6
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



TEST NUMBER: P645635
CATALOG NUMBER: LCR630WW9FSE010-30W-2700K

Luminous Intensity Polar Plot



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



TEST NUMBER: P645635

CATALOG NUMBER: LCR630WW9FSE010-30W-2700K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	121816	121816	121816	121816
5°	122870	120994	115100	120245
10°	119682	117026	104446	115017
15°	115279	111408	94490	108202
20°	106847	102466	84398	98831
25°	95751	92806	74720	89388
30°	84051	83000	63826	79917
35°	71782	73020	53592	70082
40°	60442	63161	42802	60234
45°	49997	51889	33306	49850
50°	40212	39965	29082	38796
55°	30259	29418	26446	28673
60°	20404	20612	24669	20185
65°	13516	15293	21857	15293
70°	9377	11556	13111	11556
75°	6397	7625	7837	7625
80°	5840	6472	7072	6756
85°	4277	5535	6101	5535

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 52114 cd/sqm



TEST NUMBER: P645635
 CATALOG NUMBER: LCR630WW9FSE010-30W-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.4	7.0
10°-20°	523.4	18.0
20°-30°	661.0	22.7
30°-40°	623.3	21.4
40°-50°	459.4	15.8
50°-60°	267.7	9.2
60°-70°	125.2	4.3
70°-80°	41.6	1.4
80°-90°	10.1	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°	1387.7	47.6
0°-40°	2011.0	69.0
0°-60°	2738.1	93.9
0°-90°	2915.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2915.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2222	2222	2222	2222	2222	
5°	2233	2199	2092	2185	2233	210
15°	2031	1963	1665	1906	2031	566
25°	1583	1534	1235	1478	1583	725
35°	1073	1091	801	1047	1073	671
45°	645	669	430	643	645	499
55°	317	308	277	300	317	286
65°	104	118	168	118	104	110
75°	30	36	37	36	30	35
85°	7	9	10	9	7	8
90°	0	0	0	0	0	



TEST NUMBER: P645635

CATALOG NUMBER: LCR630WW9FSE010-30W-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1
2.5°	2239.6	2236.7	2235.7	2228.9	2208.5	2183.1	2173.4	2164.6	2166.6	2172.4	2169.5
5°	2232.8	2234.8	2227.9	2227.0	2198.7	2160.7	2130.5	2103.3	2091.6	2105.2	2115.9
7.5°	2203.6	2204.6	2197.7	2196.8	2164.6	2107.2	2050.6	2010.7	1990.2	2001.9	2029.2
10°	2150.0	2148.1	2138.3	2132.5	2102.3	2029.2	1951.3	1892.8	1876.3	1887.0	1921.1
12.5°	2088.6	2085.7	2075.0	2073.1	2036.0	1942.5	1847.0	1784.7	1761.3	1773.0	1814.9
15°	2031.2	2025.3	2009.7	1999.0	1963.0	1855.8	1740.9	1682.4	1664.9	1673.6	1707.7
17.5°	1941.5	1938.6	1922.1	1902.6	1862.6	1747.7	1626.9	1571.4	1554.8	1560.6	1597.7
20°	1831.5	1831.5	1823.7	1793.5	1756.4	1634.7	1511.0	1460.3	1446.7	1446.7	1480.8
22.5°	1705.8	1712.6	1715.5	1680.5	1645.4	1518.7	1398.9	1350.2	1331.7	1333.7	1371.6
25°	1583.0	1591.8	1599.6	1559.7	1534.3	1408.7	1296.6	1247.9	1235.3	1239.2	1268.4
27.5°	1455.4	1470.0	1477.8	1445.7	1422.3	1301.5	1196.3	1137.8	1127.1	1131.0	1170.0
30°	1327.8	1345.3	1347.3	1333.7	1311.2	1197.3	1096.9	1040.4	1008.3	1028.7	1072.6
32.5°	1197.3	1215.8	1227.5	1214.8	1198.2	1091.1	1001.5	942.0	908.9	925.5	978.1
35°	1072.6	1089.1	1098.9	1103.7	1091.1	994.6	907.9	838.8	800.8	823.2	882.6
37.5°	955.7	972.2	982.9	996.6	987.8	901.1	819.3	744.3	692.6	727.7	793.0
40°	844.6	859.2	874.8	884.6	882.6	802.7	723.8	640.0	598.1	628.3	695.6
42.5°	740.4	753.0	761.8	775.4	774.5	702.4	626.4	550.4	506.6	531.9	602.0
45°	644.9	654.6	657.6	672.2	669.3	604.0	532.9	464.7	429.6	451.0	512.4
47.5°	556.3	566.0	567.9	569.9	562.1	509.5	444.2	392.6	382.9	388.7	432.5
50°	471.5	479.3	477.3	475.4	468.6	424.7	375.1	342.9	341.0	339.0	363.4
52.5°	391.6	397.5	396.5	390.6	384.8	348.8	312.7	301.0	305.9	300.0	305.9
55°	316.6	320.5	324.4	318.6	307.8	283.5	261.1	266.0	276.7	266.9	260.1
57.5°	247.4	256.2	257.2	254.3	244.5	228.9	222.1	232.8	250.4	237.7	223.1
60°	186.1	193.9	200.7	196.8	188.0	184.1	185.1	202.6	225.0	207.5	187.0
62.5°	138.3	144.2	153.9	151.0	147.1	151.0	154.9	174.4	197.8	179.2	156.8
65°	104.2	109.1	115.0	116.9	117.9	123.7	126.6	144.2	168.5	149.0	128.6
67.5°	79.9	80.9	86.7	90.6	94.5	98.4	100.3	113.0	130.5	115.9	99.4
70°	58.5	59.4	63.3	67.2	72.1	77.9	77.0	81.8	81.8	80.9	75.0
72.5°	40.9	41.9	43.8	47.7	50.7	55.5	55.5	55.5	55.5	55.5	55.5
75°	30.2	31.2	33.1	34.1	36.0	36.0	37.0	37.0	37.0	37.0	37.0
77.5°	24.4	24.4	25.3	27.3	28.3	29.2	29.2	29.2	29.2	29.2	29.2
80°	18.5	18.5	19.5	20.5	20.5	21.4	21.4	22.4	22.4	22.4	22.4
82.5°	12.7	12.7	13.6	13.6	14.6	15.6	15.6	15.6	15.6	15.6	15.6
85°	6.8	7.8	7.8	7.8	8.8	9.7	9.7	9.7	9.7	9.7	9.7
87.5°	1.9	2.9	2.9	2.9	2.9	3.9	3.9	3.9	4.9	4.9	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P645635

CATALOG NUMBER: LCR630WW9FSE010-30W-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1
2.5°	2189.0	2207.5	2221.1	2231.8	2227.0	2239.6
5°	2150.0	2185.1	2210.4	2219.2	2217.2	2232.8
7.5°	2086.7	2142.2	2176.3	2185.1	2188.0	2203.6
10°	1997.1	2066.2	2110.1	2118.8	2126.6	2150.0
12.5°	1900.6	1988.3	2039.0	2057.5	2063.3	2088.6
15°	1804.2	1906.5	1957.1	1981.5	2001.9	2031.2
17.5°	1696.0	1805.2	1856.8	1895.8	1922.1	1941.5
20°	1581.1	1694.1	1742.8	1794.4	1816.8	1831.5
22.5°	1468.1	1583.0	1631.8	1676.6	1699.9	1705.8
25°	1364.8	1477.8	1514.8	1569.4	1577.2	1583.0
27.5°	1261.6	1364.8	1405.7	1446.7	1456.4	1455.4
30°	1160.2	1262.5	1297.6	1316.1	1334.6	1327.8
32.5°	1061.9	1159.3	1187.5	1206.0	1208.0	1197.3
35°	962.5	1047.2	1075.5	1086.2	1082.3	1072.6
37.5°	868.0	947.9	973.2	975.2	963.5	955.7
40°	773.5	841.7	865.1	862.1	850.5	844.6
42.5°	675.1	747.2	760.8	753.0	744.3	740.4
45°	579.6	643.0	657.6	651.7	644.9	644.9
47.5°	492.9	546.5	555.3	557.2	555.3	556.3
50°	409.2	454.9	461.8	469.6	469.6	471.5
52.5°	337.1	374.1	378.0	387.7	389.7	391.6
55°	273.7	300.0	307.8	314.7	316.6	316.6
57.5°	225.0	236.7	245.5	250.4	249.4	247.4
60°	183.1	184.1	189.0	193.9	190.0	186.1
62.5°	151.0	147.1	145.2	149.0	143.2	138.3
65°	123.7	117.9	113.0	114.0	107.2	104.2
67.5°	99.4	94.5	88.7	85.7	81.8	79.9
70°	76.0	72.1	69.2	63.3	59.4	58.5
72.5°	54.6	50.7	48.7	43.8	42.9	40.9
75°	36.0	36.0	35.1	33.1	32.1	30.2
77.5°	29.2	28.3	27.3	26.3	24.4	24.4
80°	21.4	21.4	20.5	19.5	18.5	18.5
82.5°	15.6	14.6	14.6	13.6	12.7	12.7
85°	9.7	8.8	8.8	7.8	6.8	6.8
87.5°	3.9	3.9	2.9	2.9	2.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)