

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
(formerly Eaton)

Brand: CORELITE

Report Number: P565148

Luminaire Tested: **SQ4-PW1-150U-100D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565148
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-150U-100D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

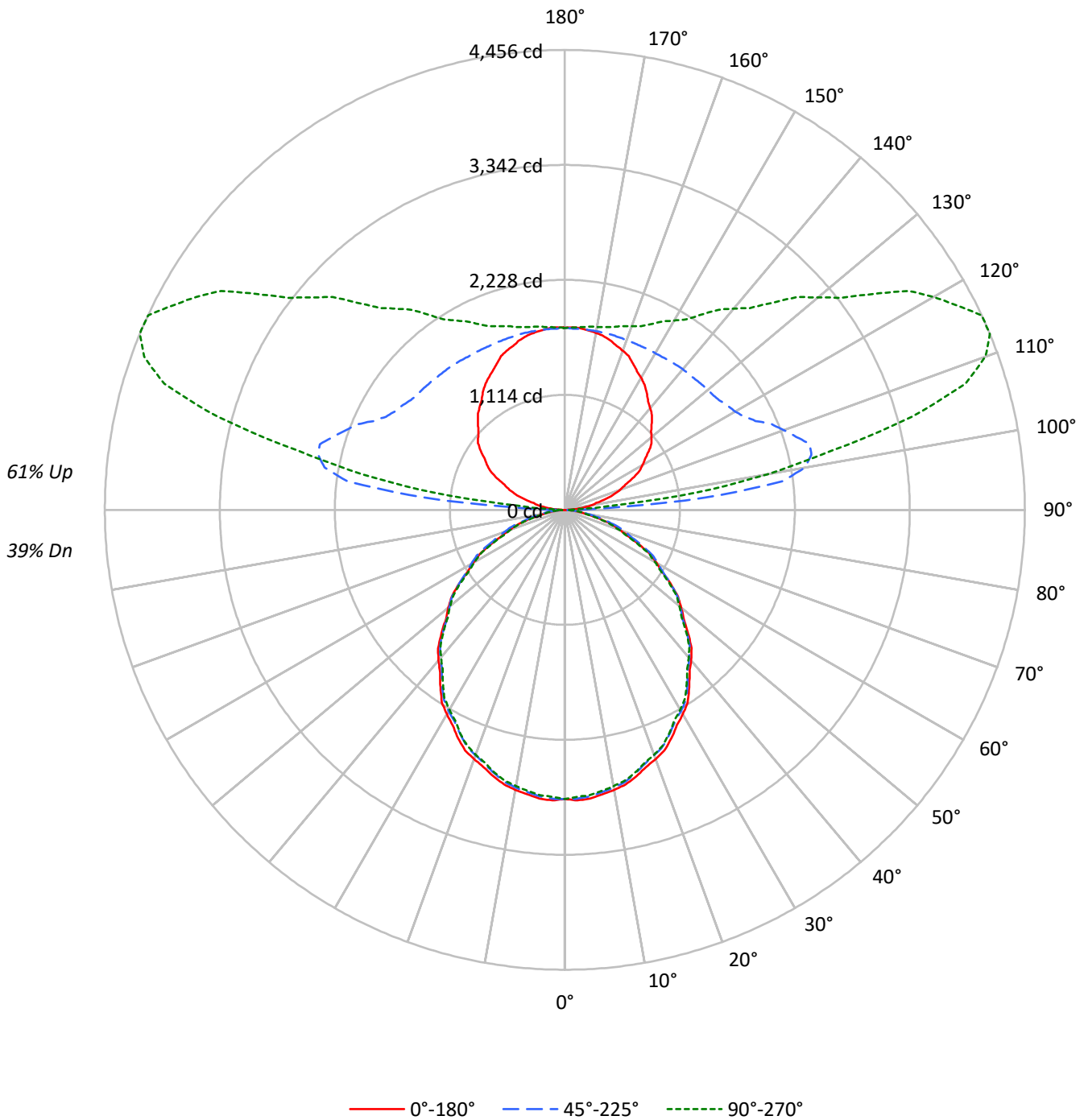
Lumens per Lamp: N/A
Luminaire Lumens: 18503.5 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 148.4
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





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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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	68	65	63	53	52	51	40	39	39	33
2	87	80	74	69	79	73	67	63	59	56	52	47	44	42	36	34	33	27
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28	23
4	72	62	54	48	66	57	50	45	46	41	38	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	27	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	29	25	27	23	20	21	18	16	14
8	52	40	33	27	47	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12924	12924	12924
5°	13008	12904	12847
10°	12904	12799	12730
15°	12767	12625	12578
20°	12614	12420	12396
25°	12438	12212	12174
30°	12175	11991	11912
35°	11829	11662	11593
40°	11460	11282	11238
45°	11014	10869	10821
50°	10558	10469	10398
55°	10065	10065	9906
60°	9451	9633	9292
65°	8648	9080	8433
70°	7623	8357	7424
75°	6511	7479	6335
80°	5050	6296	5114
85°	3266	4832	4314



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.8	1.4
10°-20°	744.8	4.0
20°-30°	1104.8	6.0
30°-40°	1292.7	7.0
40°-50°	1287.0	7.0
50°-60°	1111.3	6.0
60°-70°	800.0	4.3
70°-80°	419.5	2.3
80°-90°	107.7	0.6
90°-100°	819.7	4.4
100°-110°	2216.3	12.0
110°-120°	2330.1	12.6
120°-130°	1892.7	10.2
130°-140°	1484.7	8.0
140°-150°	1139.5	6.2
150°-160°	819.5	4.4
160°-170°	500.6	2.7
170°-180°	168.8	0.9
0°-30°	2113.4	11.4
0°-40°	3406.1	18.4
0°-60°	5804.4	31.4
0°-90°	7131.6	38.5
90°-120°	5366.2	29.0
90°-150°	9883.0	53.4
90°-180°	11372.0	61.5
0°-180°	18503.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2802	2802	2802	2802	2802	
5°	2809	2778	2787	2779	2774	266
15°	2673	2639	2644	2638	2634	753
25°	2444	2403	2399	2385	2392	1124
35°	2100	2072	2071	2051	2059	1313
45°	1688	1674	1666	1661	1659	1303
55°	1251	1249	1251	1234	1232	1117
65°	792	816	832	799	773	785
75°	365	399	420	392	355	392
85°	62	81	91	86	82	81
90°	4	11	25	26	25	11
95°	127	446	1363	706	420	133
105°	412	637	2459	3627	3478	434
115°	725	887	2039	3947	4456	716
125°	993	1138	1838	3101	3643	885
135°	1190	1332	1788	2504	2835	920
145°	1384	1488	1764	2143	2307	866
155°	1563	1624	1749	1923	1986	721
165°	1701	1718	1756	1825	1834	479
175°	1766	1764	1758	1781	1777	168
180°	1764	1764	1764	1764	1764	

TEST NUMBER: P565148

CATALOG NUMBER: SQ4-PW1-150U-100D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2801.6	2801.6	2801.6	2801.6	2801.6
2.5°	2817.4	2794.2	2801.6	2795.3	2781.8
5°	2809.0	2777.6	2786.7	2779.2	2774.4
7.5°	2780.3	2751.4	2758.1	2750.1	2747.3
10°	2754.7	2725.7	2732.4	2722.5	2717.6
12.5°	2725.0	2694.1	2700.8	2690.9	2688.0
15°	2673.2	2639.4	2643.6	2638.5	2633.7
17.5°	2613.0	2578.7	2579.4	2571.5	2570.5
20°	2569.5	2533.3	2530.0	2520.3	2525.1
22.5°	2522.1	2484.0	2480.7	2467.0	2473.8
25°	2443.6	2402.6	2399.2	2384.6	2391.8
27.5°	2352.8	2312.3	2312.3	2291.8	2299.5
30°	2285.7	2247.1	2251.1	2226.7	2236.3
32.5°	2214.6	2179.8	2182.0	2157.5	2167.2
35°	2100.5	2071.6	2070.9	2051.3	2058.6
37.5°	1984.0	1958.5	1954.4	1943.1	1945.0
40°	1903.1	1881.4	1873.5	1866.1	1866.1
42.5°	1818.2	1798.4	1790.5	1785.1	1783.1
45°	1688.3	1673.9	1666.1	1661.1	1658.7
47.5°	1560.0	1546.5	1539.7	1536.2	1533.8
50°	1471.1	1461.5	1458.8	1451.3	1448.9
52.5°	1382.3	1376.5	1373.9	1364.4	1362.0
55°	1251.4	1249.0	1251.4	1234.1	1231.7
57.5°	1115.2	1119.1	1127.0	1103.7	1097.9
60°	1024.4	1034.0	1044.1	1016.7	1007.1
62.5°	931.5	947.0	961.2	929.8	916.2
65°	792.3	816.5	831.8	799.1	772.6
67.5°	658.1	688.0	706.4	671.2	641.3
70°	565.2	599.0	619.6	584.2	550.4
72.5°	484.3	521.9	538.6	505.2	471.5
75°	365.3	399.1	419.6	391.6	355.4
77.5°	259.2	291.0	308.0	283.7	253.7
80°	190.1	223.9	237.0	216.7	192.5
82.5°	134.8	162.8	171.8	159.6	143.2
85°	61.7	81.0	91.3	86.3	81.5
87.5°	16.6	31.6	42.5	42.9	44.4
90°	3.8	11.2	24.7	26.5	24.7
92.5°	53.9	196.5	387.7	168.3	121.9
95°	127.2	446.5	1363.2	705.5	419.6
97.5°	204.3	512.1	2124.9	1758.5	1291.4
100°	262.0	538.6	2361.9	2463.2	1991.6
102.5°	315.2	575.4	2445.4	2997.5	2644.8
105°	412.0	636.6	2458.7	3626.8	3478.3
107.5°	501.6	706.6	2351.2	4019.3	4068.7
110°	571.5	757.1	2255.5	4124.7	4334.5



TEST NUMBER: P565148

CATALOG NUMBER: SQ4-PW1-150U-100D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	633.8	807.5	2167.5	4103.7	4456.0
115°	725.3	886.8	2039.1	3947.4	4456.0
117.5°	814.9	966.4	1954.4	3708.6	4285.2
120°	869.6	1018.1	1904.3	3537.2	4125.7
122.5°	921.2	1066.7	1873.9	3353.5	3946.4
125°	993.0	1137.8	1837.9	3101.4	3643.4
127.5°	1059.0	1201.2	1816.6	2895.6	3372.3
130°	1095.5	1242.2	1807.5	2768.5	3199.2
132.5°	1133.5	1278.6	1798.4	2653.8	3050.3
135°	1190.4	1331.5	1788.5	2504.2	2834.6
137.5°	1247.8	1381.1	1780.1	2382.8	2652.0
140°	1287.3	1411.6	1777.1	2304.7	2544.1
142.5°	1325.2	1442.2	1771.0	2234.1	2443.9
145°	1384.1	1488.0	1763.8	2143.4	2306.8
147.5°	1437.6	1529.7	1755.5	2061.3	2186.8
150°	1477.1	1558.8	1752.4	2016.7	2116.9
152.5°	1513.6	1584.9	1750.9	1975.3	2057.7
155°	1562.6	1623.8	1748.6	1922.8	1985.9
157.5°	1613.4	1656.1	1749.0	1886.3	1927.8
160°	1642.3	1677.6	1750.5	1863.2	1892.9
162.5°	1665.1	1694.4	1752.0	1844.8	1867.1
165°	1701.2	1717.9	1756.2	1824.8	1834.1
167.5°	1725.8	1737.3	1756.6	1807.6	1812.0
170°	1741.0	1746.6	1758.1	1799.9	1799.9
172.5°	1753.2	1754.3	1758.1	1790.7	1789.2
175°	1765.7	1763.9	1758.1	1780.8	1777.1
177.5°	1769.9	1765.4	1757.7	1772.8	1768.4
180°	1763.8	1763.8	1763.8	1763.8	1763.8

(END OF REPORT)