

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: P564476

Luminaire Tested: **SQ4-PR1-150U-100D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564476
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-150U-100D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

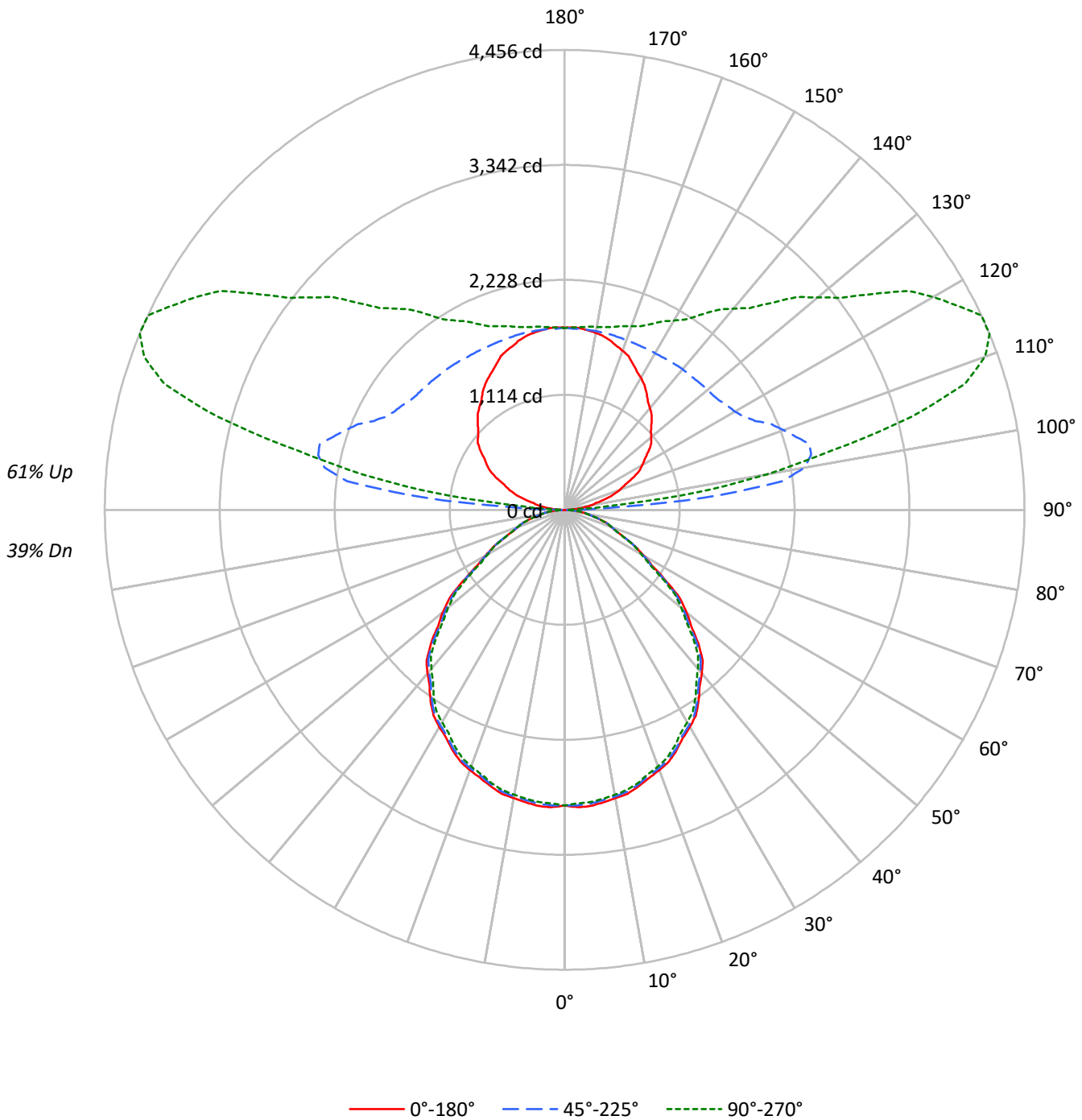
Lumens per Lamp: N/A
Luminaire Lumens: 18539.6 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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



TEST NUMBER: P564476
CATALOG NUMBER: SQ4-PR1-150U-100D-830-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P564476

CATALOG NUMBER: SQ4-PR1-150U-100D-830-1D-UNV-STD-W-8

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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39				
1	95	91	88	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33				
2	87	80	74	69	79	73	68	64	60	56	53	47	45	43	36	35	33	28				
3	80	70	63	58	72	64	58	53	53	48	45	42	39	36	32	30	28	24				
4	73	62	55	49	66	57	50	45	47	42	38	38	34	31	29	27	25	21				
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	26	24	22	18				
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16				
7	57	45	37	32	52	41	34	30	34	29	25	28	24	21	22	19	17	14				
8	53	41	33	28	48	37	31	26	31	26	22	25	22	19	20	17	15	13				
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	18	16	14	11				
10	46	34	27	22	42	31	25	21	26	21	18	21	18	15	17	14	12	10				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13220	13220	13220
5°	13339	13236	13167
10°	13297	13204	13135
15°	13238	13156	13085
20°	13172	13087	12990
25°	13079	12991	12840
30°	12938	12846	12662
35°	12747	12636	12455
40°	12456	12322	12099
45°	11949	11739	11498
50°	11054	10788	10576
55°	9648	9430	9231
60°	8130	8062	7902
65°	7032	7059	7006
70°	6459	6492	6492
75°	6203	6203	6247
80°	5837	5900	5837
85°	4705	5224	5224



TEST NUMBER: P564476

CATALOG NUMBER: SQ4-PR1-150U-100D-830-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.0	1.5
10°-20°	775.3	4.2
20°-30°	1169.5	6.3
30°-40°	1393.4	7.5
40°-50°	1373.8	7.4
50°-60°	1049.9	5.7
60°-70°	649.7	3.5
70°-80°	369.0	2.0
80°-90°	115.9	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	6.1
150°-160°	819.5	4.4
160°-170°	500.6	2.7
170°-180°	168.8	0.9
0°-30°	2215.8	12.0
0°-40°	3609.2	19.5
0°-60°	6033.0	32.5
0°-90°	7167.6	38.7
90°-120°	5366.2	28.9
90°-150°	9883.0	53.3
90°-180°	11372.0	61.3
0°-180°	18539.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2866	2866	2866	2866	2866	
5°	2880	2849	2858	2848	2844	273
15°	2772	2743	2755	2745	2740	782
25°	2570	2538	2552	2525	2523	1182
35°	2264	2237	2244	2214	2212	1413
45°	1832	1807	1799	1767	1762	1403
55°	1200	1180	1172	1153	1148	1075
65°	644	639	647	642	642	653
75°	348	348	348	350	350	368
85°	89	94	99	99	99	103
90°	4	11	25	26	25	12
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: P564476

CATALOG NUMBER: SQ4-PR1-150U-100D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2865.7	2865.7	2865.7	2865.7	2865.7
2.5°	2883.5	2858.4	2865.7	2859.5	2846.0
5°	2880.5	2849.2	2858.3	2848.3	2843.5
7.5°	2858.3	2827.4	2836.6	2826.7	2823.8
10°	2838.6	2809.6	2818.8	2808.8	2804.0
12.5°	2816.8	2786.0	2797.1	2785.1	2780.3
15°	2771.9	2743.0	2754.6	2744.7	2739.8
17.5°	2722.6	2691.7	2703.3	2691.8	2685.5
20°	2683.1	2654.1	2665.8	2648.5	2646.0
22.5°	2639.6	2610.7	2622.3	2599.1	2598.6
25°	2569.5	2538.1	2552.2	2525.0	2522.6
27.5°	2486.1	2457.1	2468.8	2441.1	2438.2
30°	2428.8	2399.9	2411.6	2381.8	2377.0
32.5°	2363.7	2336.6	2346.4	2316.7	2313.8
35°	2263.5	2236.9	2243.7	2214.0	2211.6
37.5°	2149.4	2125.3	2129.2	2096.5	2094.1
40°	2068.5	2044.3	2046.2	2011.6	2009.2
42.5°	1979.6	1955.5	1953.4	1918.8	1916.4
45°	1831.5	1807.4	1799.4	1767.2	1762.4
47.5°	1662.7	1638.5	1623.7	1597.4	1594.0
50°	1540.2	1516.1	1503.2	1480.8	1473.6
52.5°	1407.9	1383.8	1372.9	1352.5	1345.2
55°	1199.6	1180.3	1172.5	1152.6	1147.8
57.5°	1001.6	988.6	986.3	967.0	965.1
60°	881.2	874.0	873.8	856.5	856.5
62.5°	778.5	773.2	777.0	765.6	763.7
65°	644.2	639.4	646.7	641.8	641.8
67.5°	538.1	538.1	542.5	540.6	540.6
70°	478.9	478.9	481.3	481.3	481.3
72.5°	425.5	423.6	430.0	429.9	428.0
75°	348.0	348.0	348.0	350.5	350.5
77.5°	271.0	271.5	273.5	273.0	271.0
80°	219.7	222.1	222.1	219.7	219.7
82.5°	168.3	170.8	170.8	170.3	168.3
85°	88.9	93.7	98.7	98.7	98.7
87.5°	26.4	35.6	44.4	44.8	42.5
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: P564476

CATALOG NUMBER: SQ4-PR1-150U-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)