

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: P565164

Luminaire Tested: **SQ4-PW1-150U-100D-935-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565164
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-935-1D-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

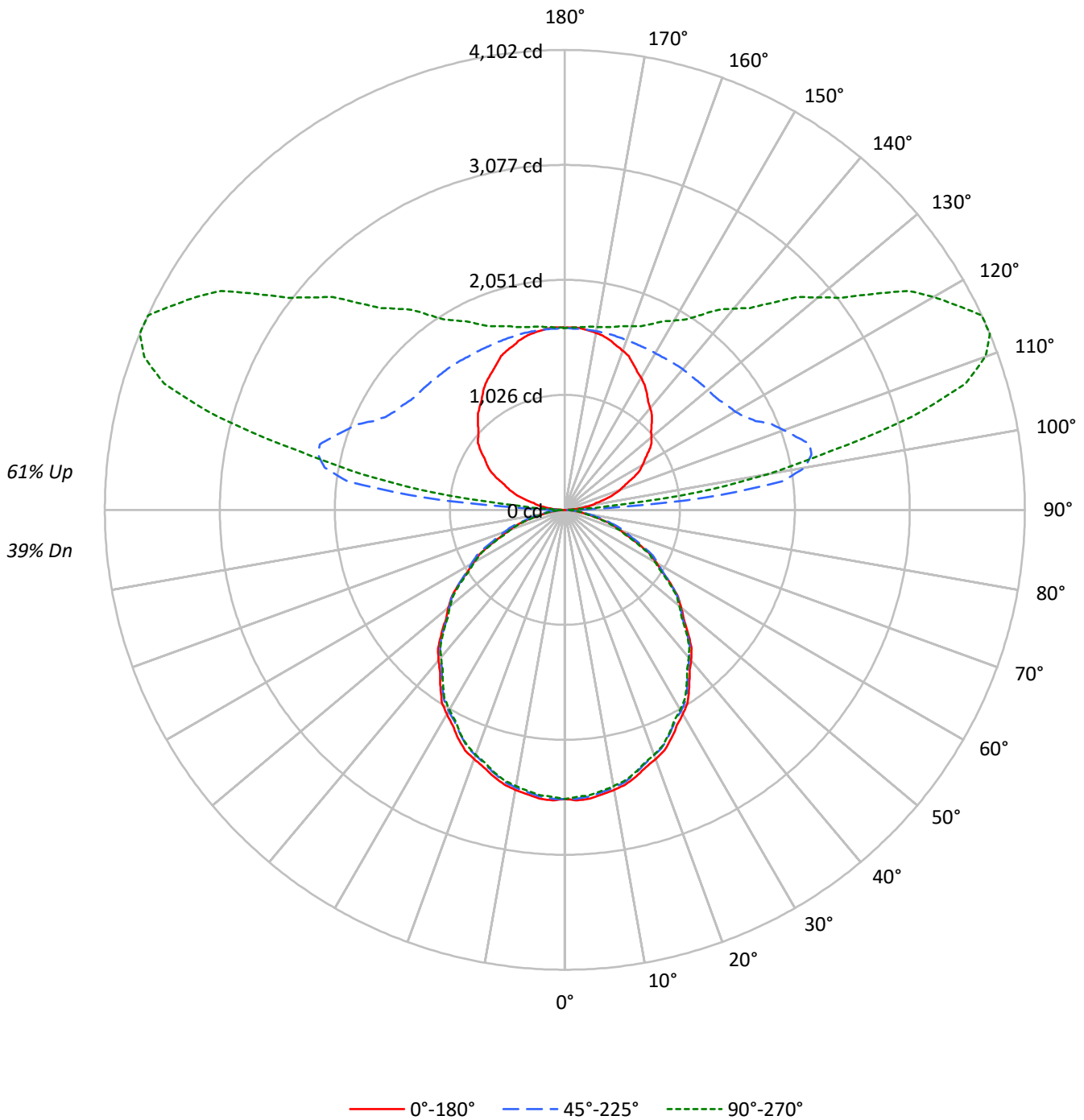
Lumens per Lamp: N/A
Luminaire Lumens: 17033.2 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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°	11897	11897	11897
5°	11974	11879	11827
10°	11878	11782	11719
15°	11752	11622	11579
20°	11612	11433	11411
25°	11450	11242	11207
30°	11208	11038	10966
35°	10889	10736	10672
40°	10550	10385	10345
45°	10139	10006	9961
50°	9719	9638	9572
55°	9265	9265	9119
60°	8700	8867	8554
65°	7962	8358	7763
70°	7018	7692	6834
75°	5994	6885	5832
80°	4649	5794	4707
85°	3006	4451	3970



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.8	1.4
10°-20°	685.6	4.0
20°-30°	1017.0	6.0
30°-40°	1190.0	7.0
40°-50°	1184.7	7.0
50°-60°	1023.0	6.0
60°-70°	736.4	4.3
70°-80°	386.2	2.3
80°-90°	99.1	0.6
90°-100°	754.6	4.4
100°-110°	2040.2	12.0
110°-120°	2145.0	12.6
120°-130°	1742.3	10.2
130°-140°	1366.7	8.0
140°-150°	1049.0	6.2
150°-160°	754.4	4.4
160°-170°	460.8	2.7
170°-180°	155.4	0.9
0°-30°	1945.5	11.4
0°-40°	3135.5	18.4
0°-60°	5343.2	31.4
0°-90°	6564.9	38.5
90°-120°	4939.8	29.0
90°-150°	9097.7	53.4
90°-180°	10468.0	61.5
0°-180°	17033.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2579	2579	2579	2579	2579	
5°	2586	2557	2565	2558	2554	245
15°	2461	2430	2434	2429	2424	694
25°	2250	2212	2209	2195	2202	1034
35°	1934	1907	1906	1888	1895	1209
45°	1554	1541	1534	1529	1527	1199
55°	1152	1150	1152	1136	1134	1028
65°	729	752	766	736	711	723
75°	336	367	386	360	327	360
85°	57	75	84	79	75	75
90°	4	10	23	24	23	10
95°	117	411	1255	649	386	123
105°	379	586	2263	3339	3202	399
115°	668	816	1877	3634	4102	659
125°	914	1047	1692	2855	3354	815
135°	1096	1226	1646	2305	2609	847
145°	1274	1370	1624	1973	2124	797
155°	1438	1495	1610	1770	1828	663
165°	1566	1581	1617	1680	1688	441
175°	1625	1624	1618	1639	1636	154
180°	1624	1624	1624	1624	1624	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2578.9	2578.9	2578.9	2578.9	2578.9
2.5°	2593.5	2572.2	2578.9	2573.2	2560.8
5°	2585.8	2556.9	2565.3	2558.4	2554.0
7.5°	2559.4	2532.7	2539.0	2531.6	2529.0
10°	2535.8	2509.1	2515.3	2506.1	2501.7
12.5°	2508.5	2480.1	2486.2	2477.1	2474.4
15°	2460.8	2429.7	2433.5	2428.9	2424.4
17.5°	2405.4	2373.8	2374.5	2367.2	2366.3
20°	2365.4	2332.0	2329.0	2320.0	2324.5
22.5°	2321.7	2286.6	2283.6	2271.0	2277.2
25°	2249.5	2211.7	2208.6	2195.1	2201.8
27.5°	2165.9	2128.5	2128.6	2109.7	2116.8
30°	2104.1	2068.5	2072.2	2049.7	2058.6
32.5°	2038.6	2006.6	2008.6	1986.1	1995.0
35°	1933.6	1907.0	1906.4	1888.4	1895.0
37.5°	1826.4	1802.8	1799.1	1788.7	1790.5
40°	1751.9	1731.9	1724.6	1717.8	1717.8
42.5°	1673.7	1655.5	1648.3	1643.2	1641.4
45°	1554.2	1540.9	1533.7	1529.1	1526.9
47.5°	1436.0	1423.6	1417.4	1414.2	1411.9
50°	1354.2	1345.3	1342.9	1336.0	1333.8
52.5°	1272.4	1267.1	1264.7	1256.0	1253.8
55°	1152.0	1149.8	1152.0	1136.1	1133.8
57.5°	1026.6	1030.1	1037.5	1016.0	1010.7
60°	943.0	951.9	961.1	935.9	927.1
62.5°	857.5	871.7	884.8	855.9	843.4
65°	729.4	751.6	765.7	735.6	711.2
67.5°	605.8	633.3	650.3	617.9	590.3
70°	520.3	551.4	570.3	537.8	506.7
72.5°	445.8	480.5	495.8	465.1	434.0
75°	336.3	367.4	386.3	360.5	327.2
77.5°	238.6	267.9	283.6	261.1	233.6
80°	175.0	206.1	218.1	199.4	177.2
82.5°	124.1	149.8	158.1	146.9	131.8
85°	56.8	74.6	84.1	79.4	75.0
87.5°	15.2	29.0	39.1	39.5	40.9
90°	3.5	10.3	22.7	24.4	22.7
92.5°	49.6	180.9	356.9	154.9	112.2
95°	117.1	411.0	1254.9	649.4	386.3
97.5°	188.1	471.4	1956.1	1618.8	1188.8
100°	241.2	495.8	2174.2	2267.5	1833.4
102.5°	290.1	529.7	2251.1	2759.3	2434.6
105°	379.3	586.0	2263.3	3338.6	3201.9
107.5°	461.8	650.4	2164.4	3700.0	3745.4
110°	526.1	697.0	2076.3	3797.0	3990.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	583.4	743.4	1995.2	3777.6	4102.0
115°	667.6	816.3	1877.1	3633.7	4102.0
117.5°	750.1	889.6	1799.1	3413.9	3944.7
120°	800.5	937.2	1753.0	3256.1	3797.9
122.5°	848.0	982.0	1725.0	3087.0	3632.9
125°	914.1	1047.4	1691.8	2854.9	3353.9
127.5°	974.9	1105.8	1672.2	2665.5	3104.4
130°	1008.5	1143.5	1663.9	2548.5	2945.0
132.5°	1043.4	1177.0	1655.5	2442.9	2807.9
135°	1095.8	1225.7	1646.4	2305.2	2609.4
137.5°	1148.6	1271.3	1638.7	2193.5	2441.3
140°	1185.0	1299.5	1635.9	2121.5	2342.0
142.5°	1219.9	1327.6	1630.3	2056.6	2249.7
145°	1274.1	1369.8	1623.7	1973.1	2123.5
147.5°	1323.4	1408.2	1616.0	1897.5	2013.1
150°	1359.7	1434.9	1613.2	1856.5	1948.7
152.5°	1393.3	1458.9	1611.8	1818.3	1894.2
155°	1438.4	1494.8	1609.7	1770.0	1828.1
157.5°	1485.2	1524.5	1610.0	1736.4	1774.7
160°	1511.8	1544.3	1611.4	1715.2	1742.5
162.5°	1532.8	1559.8	1612.8	1698.2	1718.7
165°	1566.0	1581.4	1616.7	1679.8	1688.3
167.5°	1588.7	1599.3	1617.0	1664.0	1668.1
170°	1602.7	1607.8	1618.4	1656.9	1656.9
172.5°	1613.9	1614.9	1618.4	1648.4	1647.1
175°	1625.4	1623.7	1618.4	1639.3	1635.9
177.5°	1629.3	1625.2	1618.1	1632.0	1627.9
180°	1623.7	1623.7	1623.7	1623.7	1623.7

(END OF REPORT)