

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: P564917

Luminaire Tested: **SQ4-PW1-100U-050D-930-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564917
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PW1-100U-050D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14193.8 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

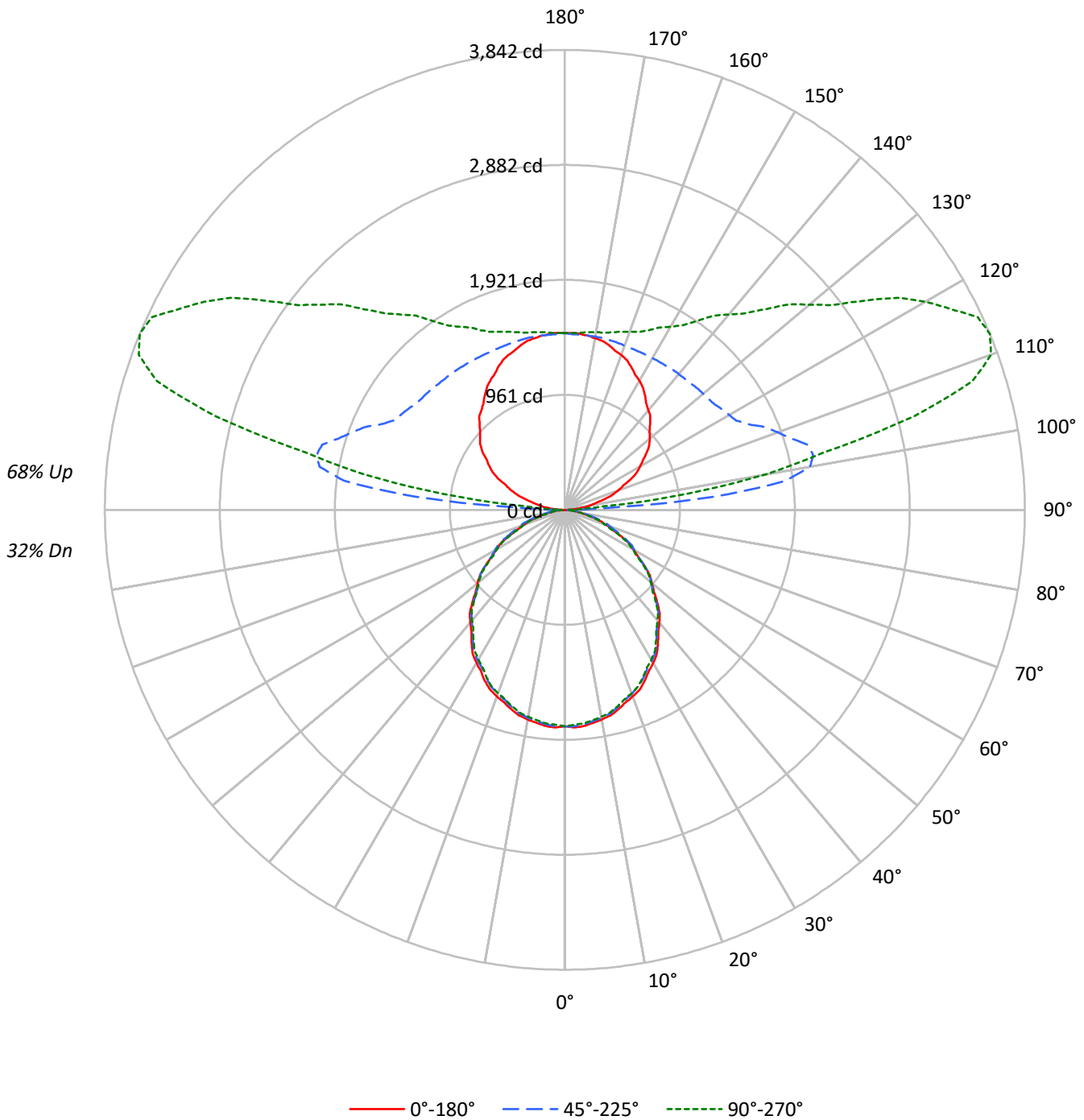
Input Watts (W): 127.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	35	34	27
2	86	78	72	67	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	49	43	44	40	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	35	31	31	27	24	22	20	18	15
6	60	48	41	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5564	5564	5564
5°	5600	5555	5531
10°	5555	5510	5480
15°	5496	5435	5415
20°	5430	5347	5337
25°	5355	5257	5241
30°	5241	5162	5128
35°	5092	5021	4991
40°	4934	4857	4838
45°	4742	4679	4659
50°	4545	4507	4476
55°	4333	4333	4265
60°	4069	4147	4000
65°	3723	3908	3631
70°	3282	3598	3196
75°	2803	3220	2727
80°	2173	2710	2201
85°	1404	2082	1856



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.4	1.2
10°-20°	481.0	3.4
20°-30°	713.4	5.0
30°-40°	834.8	5.9
40°-50°	831.0	5.9
50°-60°	717.6	5.1
60°-70°	516.6	3.6
70°-80°	270.9	1.9
80°-90°	70.2	0.5
90°-100°	691.1	4.9
100°-110°	1907.8	13.4
110°-120°	1967.5	13.9
120°-130°	1581.1	11.1
130°-140°	1242.6	8.8
140°-150°	953.0	6.7
150°-160°	684.9	4.8
160°-170°	418.9	3.0
170°-180°	141.2	1.0
0°-30°	1364.7	9.6
0°-40°	2199.5	15.5
0°-60°	3748.1	26.4
0°-90°	4605.8	32.4
90°-120°	4566.4	32.2
90°-150°	8343.0	58.8
90°-180°	9588.0	67.6
0°-180°	14193.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1809	1809	1809	1809	1809	
5°	1814	1794	1800	1795	1792	172
15°	1726	1704	1707	1704	1701	487
25°	1578	1552	1549	1540	1544	726
35°	1356	1338	1337	1325	1329	848
45°	1090	1081	1076	1073	1071	841
55°	808	806	808	797	795	721
65°	512	527	537	516	499	507
75°	236	258	271	253	230	253
85°	40	52	59	56	53	53
90°	5	9	19	21	24	9
95°	102	374	1254	515	335	109
105°	340	525	2099	3204	3017	362
115°	609	736	1690	3347	3806	599
125°	836	951	1532	2593	3043	744
135°	1006	1114	1490	2100	2368	778
145°	1166	1247	1471	1788	1924	730
155°	1315	1359	1459	1604	1655	606
165°	1424	1442	1466	1523	1535	401
175°	1476	1478	1469	1490	1485	140
180°	1476	1476	1476	1476	1476	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1809.1	1809.1	1809.1	1809.1	1809.1
2.5°	1819.3	1804.3	1809.1	1805.0	1796.3
5°	1813.9	1793.6	1799.5	1794.7	1791.5
7.5°	1795.4	1776.7	1781.0	1775.9	1774.0
10°	1778.8	1760.1	1764.4	1758.0	1754.9
12.5°	1759.7	1739.7	1744.0	1737.6	1735.8
15°	1726.2	1704.4	1707.1	1703.8	1700.7
17.5°	1687.3	1665.2	1665.6	1660.5	1659.9
20°	1659.2	1635.9	1633.7	1627.4	1630.6
22.5°	1628.6	1604.0	1601.9	1593.0	1597.4
25°	1578.0	1551.5	1549.3	1539.8	1544.5
27.5°	1519.3	1493.1	1493.2	1479.9	1484.9
30°	1475.9	1451.0	1453.6	1437.8	1444.1
32.5°	1430.0	1407.6	1409.0	1393.2	1399.4
35°	1356.4	1337.7	1337.3	1324.6	1329.3
37.5°	1281.2	1264.7	1262.0	1254.7	1256.0
40°	1228.9	1214.9	1209.8	1205.0	1205.0
42.5°	1174.1	1161.3	1156.2	1152.7	1151.4
45°	1090.2	1080.9	1075.9	1072.7	1071.1
47.5°	1007.3	998.6	994.3	992.0	990.4
50°	950.0	943.7	942.0	937.2	935.6
52.5°	892.6	888.8	887.2	881.1	879.5
55°	808.1	806.5	808.1	796.9	795.4
57.5°	720.1	722.6	727.8	712.7	709.0
60°	661.5	667.7	674.2	656.5	650.3
62.5°	601.5	611.5	620.7	600.4	591.7
65°	511.6	527.2	537.1	516.0	498.9
67.5°	424.9	444.3	456.2	433.4	414.1
70°	365.0	386.8	400.1	377.3	355.4
72.5°	312.7	337.0	347.8	326.3	304.4
75°	235.9	257.7	271.0	252.9	229.5
77.5°	167.4	187.9	198.9	183.2	163.9
80°	122.7	144.5	153.0	139.9	124.3
82.5°	87.0	105.1	110.9	103.0	92.4
85°	39.8	52.3	59.0	55.7	52.6
87.5°	11.1	20.8	28.0	28.5	30.2
90°	4.7	9.3	18.9	21.3	23.6
92.5°	42.5	176.4	315.4	115.1	89.7
95°	101.5	373.9	1253.7	515.3	335.3
97.5°	168.1	418.8	1857.2	1429.9	1035.6
100°	217.2	445.8	2080.1	2094.8	1702.3
102.5°	264.4	476.4	2123.5	2588.2	2216.1
105°	340.0	524.7	2099.0	3204.4	3017.4
107.5°	420.3	584.6	1981.9	3501.6	3569.9
110°	476.9	624.7	1891.2	3565.5	3787.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	527.9	670.1	1806.2	3515.0	3841.9
115°	609.1	736.1	1690.5	3346.6	3806.0
117.5°	680.0	806.5	1614.5	3109.6	3632.2
120°	727.2	851.9	1584.3	2949.1	3475.5
122.5°	772.5	891.7	1559.7	2799.3	3297.9
125°	835.8	951.2	1532.3	2593.2	3043.4
127.5°	889.6	1005.1	1516.3	2419.0	2807.3
130°	925.5	1041.0	1508.7	2312.4	2665.6
132.5°	959.5	1069.4	1501.2	2222.9	2542.8
135°	1005.8	1114.3	1489.8	2100.3	2368.1
137.5°	1057.7	1156.6	1484.2	1997.4	2226.0
140°	1086.1	1183.0	1480.4	1928.8	2129.7
142.5°	1118.2	1207.8	1476.6	1867.8	2044.7
145°	1166.4	1247.2	1470.9	1788.0	1924.3
147.5°	1212.6	1283.3	1465.7	1720.8	1826.5
150°	1246.6	1304.3	1463.8	1680.6	1766.1
152.5°	1273.1	1327.1	1462.0	1646.3	1717.0
155°	1315.1	1359.0	1459.1	1604.3	1655.1
157.5°	1353.8	1387.5	1459.6	1573.7	1608.3
160°	1376.5	1406.5	1461.5	1556.5	1581.9
162.5°	1395.4	1421.7	1463.4	1541.3	1561.1
165°	1423.7	1442.2	1466.2	1523.1	1534.7
167.5°	1445.4	1456.5	1468.6	1512.1	1515.8
170°	1456.8	1466.0	1468.6	1506.3	1506.3
172.5°	1466.2	1471.7	1468.6	1498.7	1496.9
175°	1475.7	1478.0	1468.6	1489.7	1485.1
177.5°	1479.4	1477.6	1468.1	1481.2	1477.5
180°	1475.7	1475.7	1475.7	1475.7	1475.7

(END OF REPORT)