

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: P564925

Luminaire Tested: **SQ4-PW1-100U-050D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564925
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-940-1D-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15419.6 lumens
Efficiency: N/A
Efficacy: 121.0 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

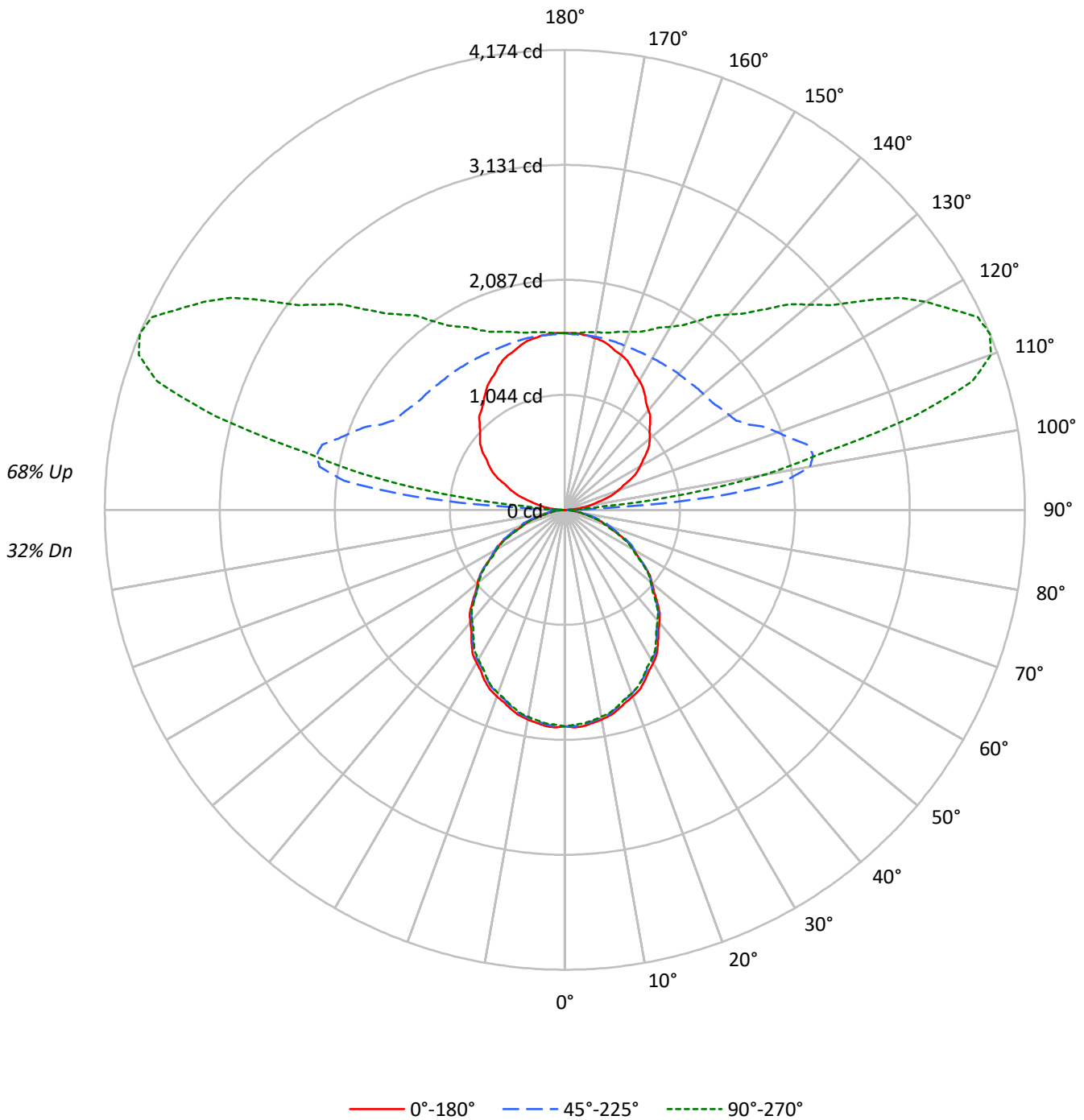
Input Watts (W): 127.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	6044	6044	6044
5°	6083	6035	6009
10°	6035	5986	5953
15°	5971	5905	5883
20°	5899	5809	5797
25°	5817	5711	5694
30°	5694	5608	5571
35°	5532	5454	5422
40°	5360	5276	5256
45°	5151	5083	5061
50°	4938	4896	4863
55°	4707	4707	4633
60°	4420	4505	4346
65°	4045	4246	3944
70°	3565	3908	3472
75°	3045	3498	2962
80°	2361	2943	2393
85°	1528	2262	2015



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.1	1.2
10°-20°	522.5	3.4
20°-30°	775.0	5.0
30°-40°	906.9	5.9
40°-50°	902.8	5.9
50°-60°	779.6	5.1
60°-70°	561.2	3.6
70°-80°	294.3	1.9
80°-90°	76.3	0.5
90°-100°	750.7	4.9
100°-110°	2072.5	13.4
110°-120°	2137.5	13.9
120°-130°	1717.6	11.1
130°-140°	1349.9	8.8
140°-150°	1035.3	6.7
150°-160°	744.1	4.8
160°-170°	455.0	3.0
170°-180°	153.4	1.0
0°-30°	1482.6	9.6
0°-40°	2389.4	15.5
0°-60°	4071.9	26.4
0°-90°	5003.6	32.4
90°-120°	4960.7	32.2
90°-150°	9063.6	58.8
90°-180°	10416.0	67.6
0°-180°	15419.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1965	1965	1965	1965	1965	
5°	1970	1948	1955	1950	1946	187
15°	1875	1852	1854	1851	1848	529
25°	1714	1686	1683	1673	1678	788
35°	1474	1453	1453	1439	1444	921
45°	1184	1174	1169	1165	1164	914
55°	878	876	878	866	864	783
65°	556	573	584	561	542	551
75°	256	280	294	275	249	275
85°	43	57	64	60	57	57
90°	5	10	20	23	26	9
95°	110	406	1362	560	364	118
105°	369	570	2280	3481	3278	393
115°	662	800	1836	3636	4135	650
125°	908	1033	1665	2817	3306	808
135°	1093	1210	1618	2282	2573	845
145°	1267	1355	1598	1942	2090	793
155°	1429	1476	1585	1743	1798	658
165°	1547	1567	1593	1655	1667	436
175°	1603	1606	1595	1618	1613	152
180°	1603	1603	1603	1603	1603	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1965.3	1965.3	1965.3	1965.3	1965.3
2.5°	1976.4	1960.1	1965.3	1960.9	1951.5
5°	1970.5	1948.5	1954.9	1949.7	1946.3
7.5°	1950.4	1930.1	1934.8	1929.3	1927.2
10°	1932.4	1912.1	1916.8	1909.8	1906.4
12.5°	1911.6	1890.0	1894.7	1887.7	1885.7
15°	1875.3	1851.6	1854.5	1851.0	1847.6
17.5°	1833.0	1809.0	1809.5	1803.9	1803.2
20°	1802.5	1777.2	1774.8	1768.0	1771.4
22.5°	1769.3	1742.6	1740.2	1730.6	1735.4
25°	1714.2	1685.5	1683.1	1672.8	1677.9
27.5°	1650.5	1622.1	1622.1	1607.7	1613.1
30°	1603.4	1576.3	1579.2	1562.0	1568.8
32.5°	1553.6	1529.2	1530.7	1513.5	1520.3
35°	1473.6	1453.2	1452.8	1439.0	1444.1
37.5°	1391.8	1373.9	1371.0	1363.1	1364.5
40°	1335.0	1319.8	1314.2	1309.1	1309.1
42.5°	1275.5	1261.6	1256.1	1252.2	1250.9
45°	1184.4	1174.2	1168.8	1165.3	1163.6
47.5°	1094.3	1084.9	1080.1	1077.7	1076.0
50°	1032.0	1025.2	1023.3	1018.1	1016.4
52.5°	969.7	965.6	963.8	957.2	955.5
55°	877.9	876.2	877.9	865.7	864.0
57.5°	782.3	785.0	790.6	774.3	770.2
60°	718.6	725.4	732.4	713.2	706.5
62.5°	653.5	664.3	674.3	652.2	642.8
65°	555.8	572.8	583.5	560.6	542.0
67.5°	461.6	482.6	495.6	470.9	449.9
70°	396.5	420.2	434.6	409.8	386.1
72.5°	339.7	366.1	377.8	354.4	330.7
75°	256.3	280.0	294.4	274.7	249.3
77.5°	181.8	204.2	216.1	199.0	178.0
80°	133.3	157.0	166.2	152.0	135.1
82.5°	94.5	114.2	120.5	111.9	100.4
85°	43.3	56.8	64.1	60.5	57.1
87.5°	12.1	22.6	30.4	31.0	32.8
90°	5.1	10.1	20.5	23.1	25.6
92.5°	46.2	191.6	342.7	125.1	97.5
95°	110.3	406.2	1362.0	559.8	364.2
97.5°	182.6	455.0	2017.6	1553.3	1125.0
100°	236.0	484.3	2259.7	2275.7	1849.3
102.5°	287.3	517.5	2306.9	2811.8	2407.5
105°	369.4	570.0	2280.2	3481.2	3278.0
107.5°	456.6	635.1	2153.0	3804.0	3878.2
110°	518.1	678.6	2054.5	3873.4	4114.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	573.5	728.0	1962.2	3818.6	4173.7
115°	661.8	799.7	1836.5	3635.6	4134.7
117.5°	738.7	876.1	1753.9	3378.1	3945.9
120°	790.0	925.4	1721.1	3203.8	3775.6
122.5°	839.3	968.7	1694.4	3041.0	3582.7
125°	908.0	1033.4	1664.7	2817.2	3306.2
127.5°	966.5	1091.9	1647.2	2627.9	3049.7
130°	1005.5	1130.9	1639.0	2512.1	2895.8
132.5°	1042.4	1161.8	1630.8	2414.9	2762.5
135°	1092.7	1210.5	1618.5	2281.7	2572.7
137.5°	1149.1	1256.4	1612.3	2170.0	2418.2
140°	1179.9	1285.2	1608.2	2095.4	2313.6
142.5°	1214.8	1312.1	1604.1	2029.1	2221.3
145°	1267.1	1354.9	1598.0	1942.5	2090.4
147.5°	1317.4	1394.1	1592.3	1869.4	1984.2
150°	1354.3	1417.0	1590.3	1825.8	1918.6
152.5°	1383.0	1441.7	1588.2	1788.5	1865.2
155°	1428.7	1476.3	1585.1	1742.9	1798.0
157.5°	1470.7	1507.4	1585.7	1709.6	1747.2
160°	1495.4	1528.0	1587.7	1690.9	1718.5
162.5°	1515.9	1544.5	1589.8	1674.4	1695.9
165°	1546.7	1566.7	1592.8	1654.7	1667.2
167.5°	1570.3	1582.3	1595.4	1642.7	1646.7
170°	1582.6	1592.6	1595.4	1636.4	1636.4
172.5°	1592.8	1598.9	1595.4	1628.2	1626.2
175°	1603.1	1605.6	1595.4	1618.4	1613.4
177.5°	1607.2	1605.2	1594.9	1609.2	1605.1
180°	1603.1	1603.1	1603.1	1603.1	1603.1

(END OF REPORT)