

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: P564249

Luminaire Tested: **SQ4-PR1-100U-050D-935-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564249
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PR1-100U-050D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15523.8 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

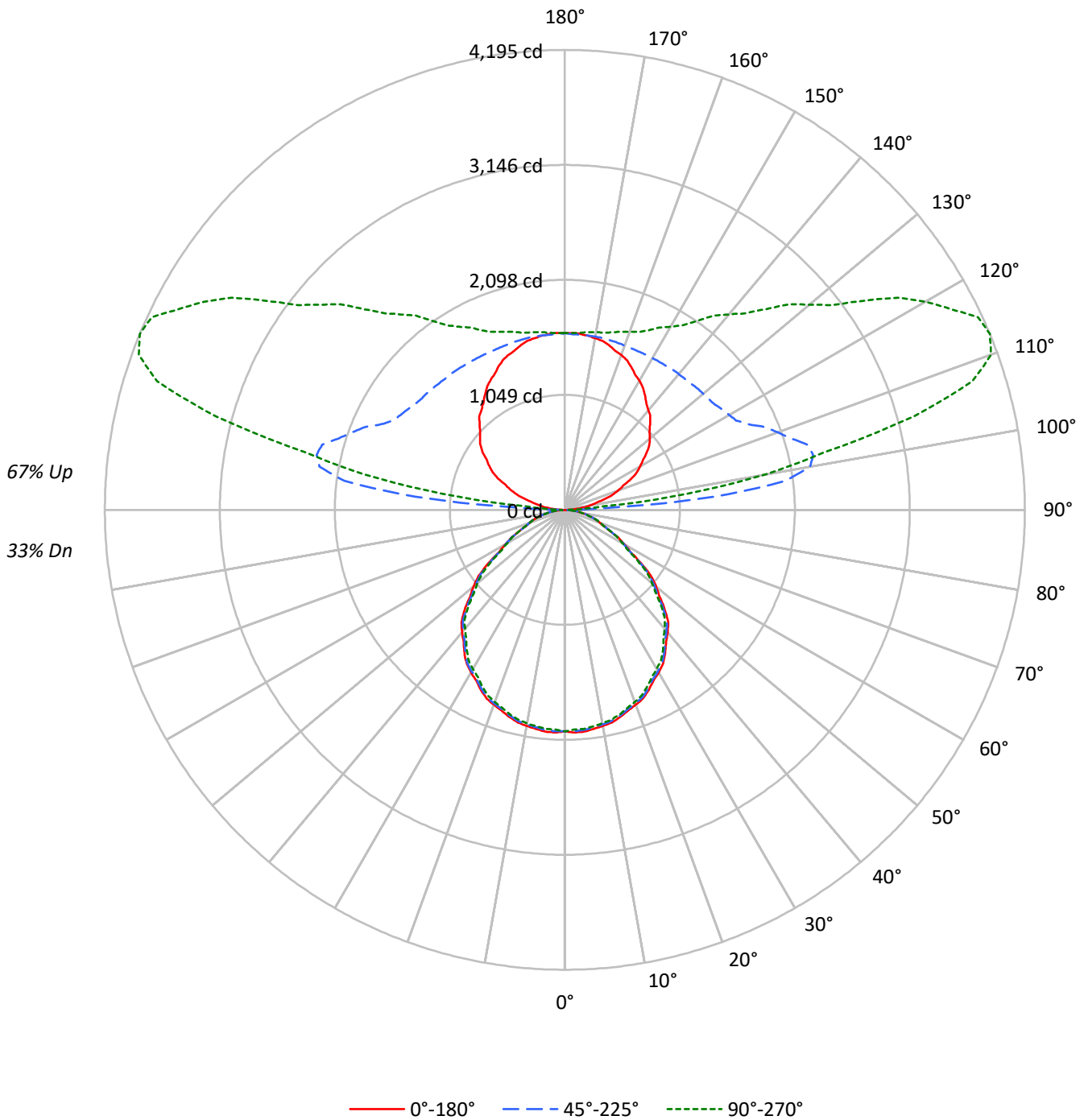
Input Watts (W): 127.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P564249

CATALOG NUMBER: SQ4-PR1-100U-050D-935-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P564249

CATALOG NUMBER: SQ4-PR1-100U-050D-935-1D-UNV-STD-W-12

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	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	79	73	68	77	71	66	62	57	53	50	44	42	40	32	30	29	24
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	26	25	20
4	72	61	54	48	64	56	49	44	45	40	36	35	31	29	25	23	22	17
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	38	33	36	31	27	28	25	22	21	18	17	13
7	56	44	36	31	50	40	33	29	33	28	24	25	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6214	6214	6214
5°	6270	6222	6189
10°	6250	6207	6174
15°	6223	6184	6151
20°	6191	6152	6106
25°	6148	6107	6036
30°	6081	6038	5952
35°	5992	5939	5855
40°	5855	5792	5688
45°	5617	5518	5404
50°	5196	5071	4971
55°	4535	4433	4339
60°	3821	3790	3714
65°	3305	3318	3293
70°	3036	3052	3052
75°	2916	2916	2936
80°	2743	2773	2743
85°	2212	2456	2456



TEST NUMBER: P564249

CATALOG NUMBER: SQ4-PR1-100U-050D-935-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.1	1.2
10°-20°	546.7	3.5
20°-30°	824.6	5.3
30°-40°	982.5	6.3
40°-50°	968.6	6.2
50°-60°	740.3	4.8
60°-70°	458.1	3.0
70°-80°	260.2	1.7
80°-90°	82.5	0.5
90°-100°	754.6	4.9
100°-110°	2083.1	13.4
110°-120°	2148.4	13.8
120°-130°	1726.4	11.1
130°-140°	1356.8	8.7
140°-150°	1040.6	6.7
150°-160°	747.9	4.8
160°-170°	457.3	2.9
170°-180°	154.2	1.0
0°-30°	1562.4	10.1
0°-40°	2544.8	16.4
0°-60°	4253.8	27.4
0°-90°	5054.6	32.6
90°-120°	4986.1	32.1
90°-150°	9109.9	58.7
90°-180°	10469.0	67.4
0°-180°	15523.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2021	2021	2021	2021	2021	
5°	2031	2009	2015	2008	2005	193
15°	1954	1934	1942	1935	1932	552
25°	1812	1790	1800	1780	1779	834
35°	1596	1577	1582	1561	1559	996
45°	1291	1274	1269	1246	1243	989
55°	846	832	827	813	809	758
65°	454	451	456	452	452	460
75°	245	245	245	247	247	259
85°	63	66	70	70	70	73
90°	5	10	21	23	26	10
95°	111	408	1369	563	366	119
105°	371	573	2292	3499	3295	395
115°	665	804	1846	3654	4156	654
125°	913	1039	1673	2832	3323	812
135°	1098	1217	1627	2293	2586	850
145°	1274	1362	1606	1952	2101	797
155°	1436	1484	1593	1752	1807	662
165°	1555	1575	1601	1663	1676	438
175°	1611	1614	1604	1627	1622	153
180°	1611	1611	1611	1611	1611	



TEST NUMBER: P564249

CATALOG NUMBER: SQ4-PR1-100U-050D-935-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2020.6	2020.6	2020.6	2020.6	2020.6
2.5°	2033.1	2015.4	2020.6	2016.2	2006.7
5°	2031.0	2008.9	2015.4	2008.3	2004.9
7.5°	2015.4	1993.6	2000.1	1993.0	1991.0
10°	2001.4	1981.0	1987.5	1980.5	1977.1
12.5°	1986.1	1964.3	1972.2	1963.8	1960.4
15°	1954.5	1934.0	1942.3	1935.2	1931.8
17.5°	1919.6	1897.9	1906.1	1898.0	1893.5
20°	1891.8	1871.4	1879.6	1867.4	1865.7
22.5°	1861.2	1840.7	1849.0	1832.6	1832.3
25°	1811.7	1789.6	1799.6	1780.4	1778.7
27.5°	1752.9	1732.5	1740.7	1721.2	1719.2
30°	1712.5	1692.1	1700.4	1679.4	1676.0
32.5°	1666.6	1647.5	1654.4	1633.5	1631.4
35°	1595.9	1577.2	1582.0	1561.1	1559.4
37.5°	1515.5	1498.5	1501.3	1478.2	1476.5
40°	1458.4	1441.4	1442.8	1418.4	1416.7
42.5°	1395.8	1378.8	1377.3	1352.9	1351.2
45°	1291.4	1274.3	1268.7	1246.0	1242.6
47.5°	1172.3	1155.3	1144.8	1126.3	1123.9
50°	1086.0	1069.0	1059.9	1044.1	1039.0
52.5°	992.7	975.7	968.0	953.6	948.5
55°	845.8	832.2	826.7	812.7	809.3
57.5°	706.2	697.1	695.5	681.9	680.5
60°	621.3	616.2	616.1	603.9	603.9
62.5°	548.9	545.2	547.9	539.8	538.5
65°	454.2	450.8	456.0	452.5	452.5
67.5°	379.4	379.4	382.5	381.1	381.1
70°	337.6	337.6	339.4	339.4	339.4
72.5°	300.0	298.7	303.2	303.1	301.8
75°	245.4	245.4	245.4	247.1	247.1
77.5°	191.1	191.4	192.8	192.5	191.1
80°	154.9	156.6	156.6	154.9	154.9
82.5°	118.7	120.4	120.4	120.1	118.7
85°	62.7	66.1	69.6	69.6	69.6
87.5°	19.1	25.6	32.0	32.5	31.6
90°	5.2	10.2	20.6	23.3	25.8
92.5°	46.4	192.6	344.4	125.7	98.0
95°	110.9	408.3	1368.9	562.7	366.1
97.5°	183.6	457.3	2027.9	1561.3	1130.7
100°	237.2	486.7	2271.3	2287.3	1858.8
102.5°	288.7	520.1	2318.7	2826.1	2419.8
105°	371.2	572.9	2291.9	3498.9	3294.7
107.5°	458.9	638.4	2164.0	3823.4	3898.0
110°	520.8	682.1	2065.0	3893.2	4135.2



TEST NUMBER: P564249

CATALOG NUMBER: SQ4-PR1-100U-050D-935-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	576.5	731.7	1972.2	3838.1	4195.0
115°	665.1	803.8	1845.9	3654.2	4155.8
117.5°	742.5	880.6	1762.9	3395.4	3966.1
120°	794.0	930.2	1729.9	3220.2	3794.9
122.5°	843.5	973.6	1703.1	3056.5	3601.0
125°	912.6	1038.7	1673.2	2831.6	3323.1
127.5°	971.4	1097.4	1655.6	2641.3	3065.3
130°	1010.6	1136.6	1647.4	2524.9	2910.6
132.5°	1047.7	1167.7	1639.1	2427.2	2776.6
135°	1098.2	1216.7	1626.7	2293.4	2585.8
137.5°	1155.0	1262.9	1620.6	2181.0	2430.6
140°	1185.9	1291.8	1616.4	2106.1	2325.4
142.5°	1221.0	1318.8	1612.3	2039.5	2232.6
145°	1273.6	1361.8	1606.1	1952.4	2101.1
147.5°	1324.1	1401.2	1600.5	1878.9	1994.4
150°	1361.2	1424.2	1598.4	1835.1	1928.4
152.5°	1390.1	1449.1	1596.3	1797.6	1874.8
155°	1436.0	1483.9	1593.2	1751.8	1807.2
157.5°	1478.3	1515.1	1593.7	1718.4	1756.2
160°	1503.0	1535.8	1595.8	1699.6	1727.3
162.5°	1523.6	1552.4	1597.9	1682.9	1704.6
165°	1554.6	1574.7	1601.0	1663.1	1675.7
167.5°	1578.3	1590.4	1603.5	1651.1	1655.1
170°	1590.7	1600.7	1603.5	1644.8	1644.8
172.5°	1601.0	1607.0	1603.5	1636.5	1634.5
175°	1611.3	1613.8	1603.5	1626.6	1621.6
177.5°	1615.4	1613.4	1603.0	1617.4	1613.3
180°	1611.3	1611.3	1611.3	1611.3	1611.3

(END OF REPORT)