

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: P519999

Luminaire Tested: **SQ4-F-075U-050D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519999
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-050D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12981.0 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

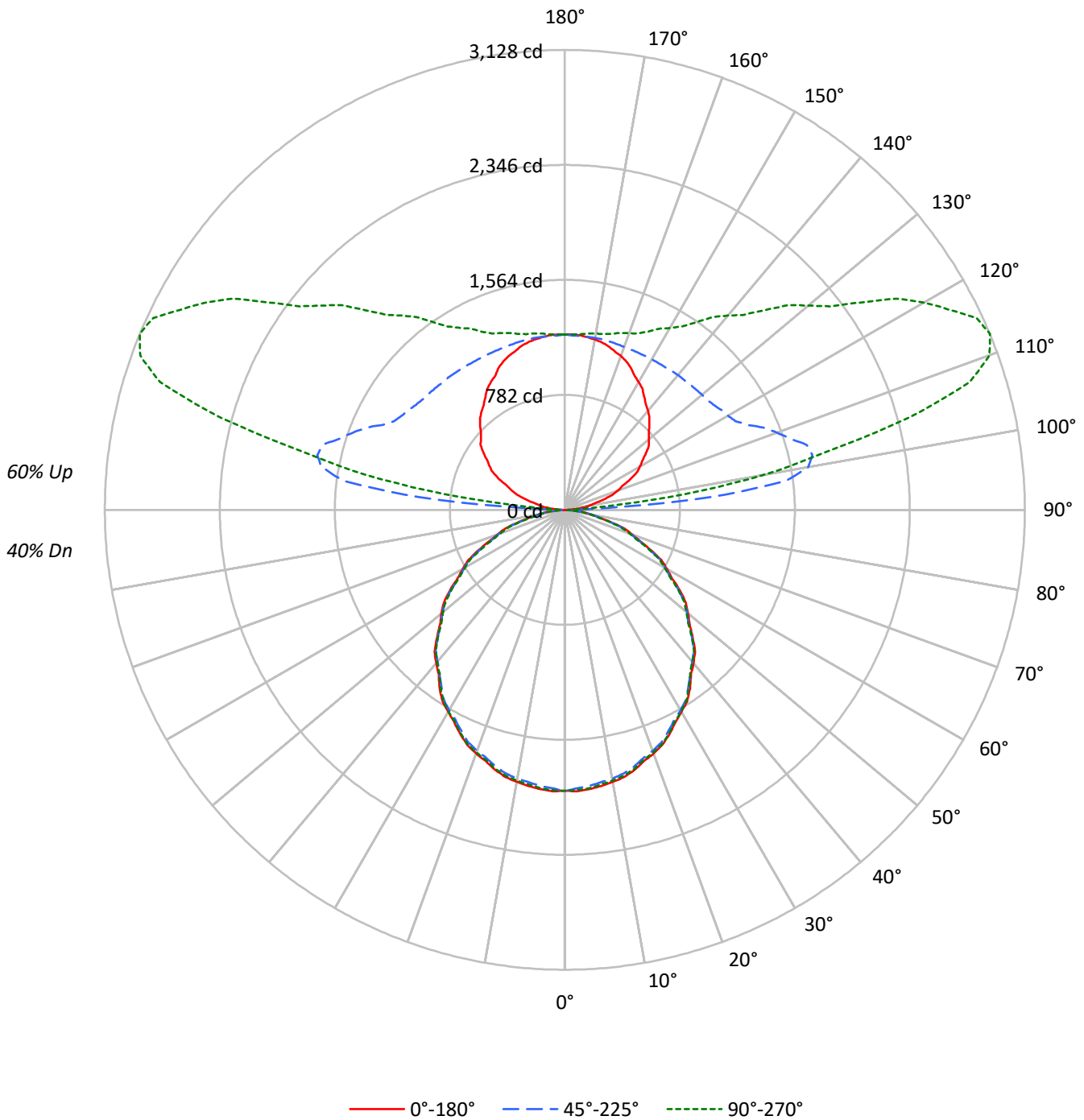
Input Watts (W): 109.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P519999

CATALOG NUMBER: SQ4-F-075U-050D-940-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P519999

CATALOG NUMBER: SQ4-F-075U-050D-940-1D-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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34
2	87	80	74	68	79	73	68	63	60	56	53	48	45	43	37	35	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24
4	72	62	54	48	66	56	50	44	47	42	38	37	34	31	29	26	24	20
5	66	55	47	41	60	50	43	38	42	36	32	33	30	27	26	23	21	18
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	21	19	15
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	19	16	14
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5875	5875	5875
5°	5889	5818	5866
10°	5870	5798	5838
15°	5830	5756	5805
20°	5775	5708	5750
25°	5710	5640	5693
30°	5630	5585	5621
35°	5568	5501	5530
40°	5462	5410	5421
45°	5350	5306	5306
50°	5237	5188	5163
55°	5115	5046	5019
60°	4923	4845	4813
65°	4689	4597	4541
70°	4369	4277	4185
75°	3920	3799	3707
80°	3170	3124	3036
85°	1895	2163	2255



TEST NUMBER: P519999

CATALOG NUMBER: SQ4-F-075U-050D-940-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.2	1.4
10°-20°	513.3	4.0
20°-30°	770.9	5.9
30°-40°	920.2	7.1
40°-50°	943.0	7.3
50°-60°	841.0	6.5
60°-70°	626.3	4.8
70°-80°	340.0	2.6
80°-90°	81.8	0.6
90°-100°	562.1	4.3
100°-110°	1546.5	11.9
110°-120°	1596.3	12.3
120°-130°	1278.9	9.9
130°-140°	1004.5	7.7
140°-150°	769.8	5.9
150°-160°	553.5	4.3
160°-170°	338.4	2.6
170°-180°	114.1	0.9
0°-30°	1464.4	11.3
0°-40°	2384.7	18.4
0°-60°	4168.7	32.1
0°-90°	5216.8	40.2
90°-120°	3704.9	28.5
90°-150°	6758.2	52.1
90°-180°	7764.0	59.8
0°-180°	12981.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1910	1910	1910	1910	1910	
5°	1908	1905	1885	1903	1900	181
15°	1831	1826	1808	1823	1823	516
25°	1683	1678	1662	1672	1678	775
35°	1483	1478	1465	1466	1473	926
45°	1230	1233	1220	1217	1220	949
55°	954	954	941	934	936	850
65°	644	642	632	624	624	638
75°	330	327	320	314	312	349
85°	54	59	61	64	64	75
90°	2	10	18	23	23	7
95°	84	307	994	425	271	88
105°	276	425	1704	2595	2422	291
115°	490	596	1367	2722	3089	483
125°	674	769	1240	2098	2457	602
135°	814	903	1204	1696	1920	628
145°	941	1005	1187	1445	1557	590
155°	1065	1100	1179	1299	1336	489
165°	1151	1166	1184	1232	1240	324
175°	1192	1194	1187	1202	1200	113
180°	1192	1192	1192	1192	1192	

TEST NUMBER: P519999

CATALOG NUMBER: SQ4-F-075U-050D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1910.3	1910.3	1910.3	1910.3	1910.3
2.5°	1916.4	1912.5	1896.0	1910.3	1908.2
5°	1907.7	1905.3	1884.7	1902.6	1900.0
7.5°	1893.9	1888.9	1868.9	1886.2	1883.7
10°	1879.6	1874.6	1856.5	1871.8	1869.4
12.5°	1861.2	1858.2	1838.2	1853.5	1853.0
15°	1831.0	1826.0	1808.0	1823.3	1823.3
17.5°	1791.1	1788.1	1770.7	1785.5	1783.5
20°	1764.5	1759.5	1744.0	1756.9	1756.9
22.5°	1731.8	1728.8	1713.4	1724.1	1726.2
25°	1682.7	1677.7	1662.2	1672.5	1677.6
27.5°	1628.5	1624.4	1611.6	1618.3	1621.9
30°	1585.5	1585.5	1572.8	1575.4	1582.9
32.5°	1546.6	1546.6	1531.8	1534.4	1538.0
35°	1483.2	1478.2	1465.3	1465.5	1473.0
37.5°	1409.6	1407.1	1398.8	1397.3	1399.3
40°	1360.5	1358.0	1347.6	1350.2	1350.2
42.5°	1311.4	1308.9	1298.5	1295.1	1299.1
45°	1230.0	1232.6	1219.9	1217.3	1219.9
47.5°	1149.7	1149.7	1139.5	1132.5	1136.4
50°	1094.5	1094.5	1084.3	1079.1	1079.1
52.5°	1037.2	1039.2	1027.0	1019.9	1021.9
55°	953.9	953.9	941.1	933.5	936.0
57.5°	861.8	861.8	849.0	841.4	845.9
60°	800.4	800.4	787.7	780.1	782.5
62.5°	739.0	739.0	726.2	718.6	719.1
65°	644.4	641.9	631.7	624.0	624.0
67.5°	553.4	546.9	539.1	528.8	528.8
70°	485.9	483.4	475.7	465.4	465.4
72.5°	424.5	420.0	412.3	404.1	404.1
75°	329.9	327.4	319.7	314.5	312.0
77.5°	236.3	234.3	233.7	226.6	228.7
80°	179.0	179.0	176.4	171.4	171.4
82.5°	127.9	129.9	125.3	124.2	122.3
85°	53.7	58.7	61.3	63.9	63.9
87.5°	10.7	18.2	17.9	21.0	21.0
90°	2.5	10.0	17.7	22.8	22.8
92.5°	35.0	149.6	259.2	99.5	81.7
95°	83.7	306.8	994.1	425.1	271.3
97.5°	136.4	340.2	1516.9	1168.8	824.7
100°	175.0	360.9	1681.2	1696.9	1384.5
102.5°	211.5	385.6	1723.8	2105.3	1818.6
105°	276.4	425.2	1704.1	2595.2	2421.6
107.5°	338.2	474.2	1607.1	2835.2	2886.7
110°	382.9	506.9	1534.2	2894.8	3073.3



TEST NUMBER: P519999

CATALOG NUMBER: SQ4-F-075U-050D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	423.4	543.4	1461.1	2856.4	3128.1
115°	489.5	596.1	1366.8	2721.6	3088.6
117.5°	552.2	650.4	1307.0	2532.5	2947.6
120°	590.9	685.1	1280.6	2390.8	2819.8
122.5°	625.3	719.5	1262.3	2266.6	2673.7
125°	674.5	768.7	1240.0	2097.7	2457.1
127.5°	721.2	811.0	1225.3	1956.6	2272.1
130°	745.5	837.3	1217.2	1872.9	2160.5
132.5°	773.9	865.6	1211.1	1799.2	2059.0
135°	814.0	903.3	1204.5	1696.4	1919.6
137.5°	851.6	934.3	1198.9	1613.4	1797.4
140°	879.9	956.8	1196.9	1558.2	1724.3
142.5°	904.3	975.2	1192.8	1508.9	1651.3
145°	940.8	1005.2	1186.8	1445.4	1557.0
147.5°	979.8	1035.3	1183.7	1389.1	1478.3
150°	1004.1	1053.7	1181.7	1358.2	1427.7
152.5°	1026.4	1072.1	1179.6	1331.6	1389.1
155°	1065.1	1099.7	1179.1	1299.1	1336.4
157.5°	1092.9	1121.2	1179.1	1272.5	1298.4
160°	1113.2	1135.5	1179.1	1258.2	1278.0
162.5°	1129.4	1147.8	1181.2	1245.9	1261.8
165°	1151.2	1166.1	1184.2	1232.5	1240.0
167.5°	1166.5	1177.9	1186.8	1221.3	1223.2
170°	1176.6	1184.0	1186.8	1217.2	1217.2
172.5°	1184.7	1188.2	1186.8	1211.0	1209.1
175°	1191.8	1194.3	1186.8	1201.9	1199.5
177.5°	1193.9	1193.9	1185.8	1197.8	1193.9
180°	1191.8	1191.8	1191.8	1191.8	1191.8

(END OF REPORT)