

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: P520406

Luminaire Tested: **SQ4-F-150U-075D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520406
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-075D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

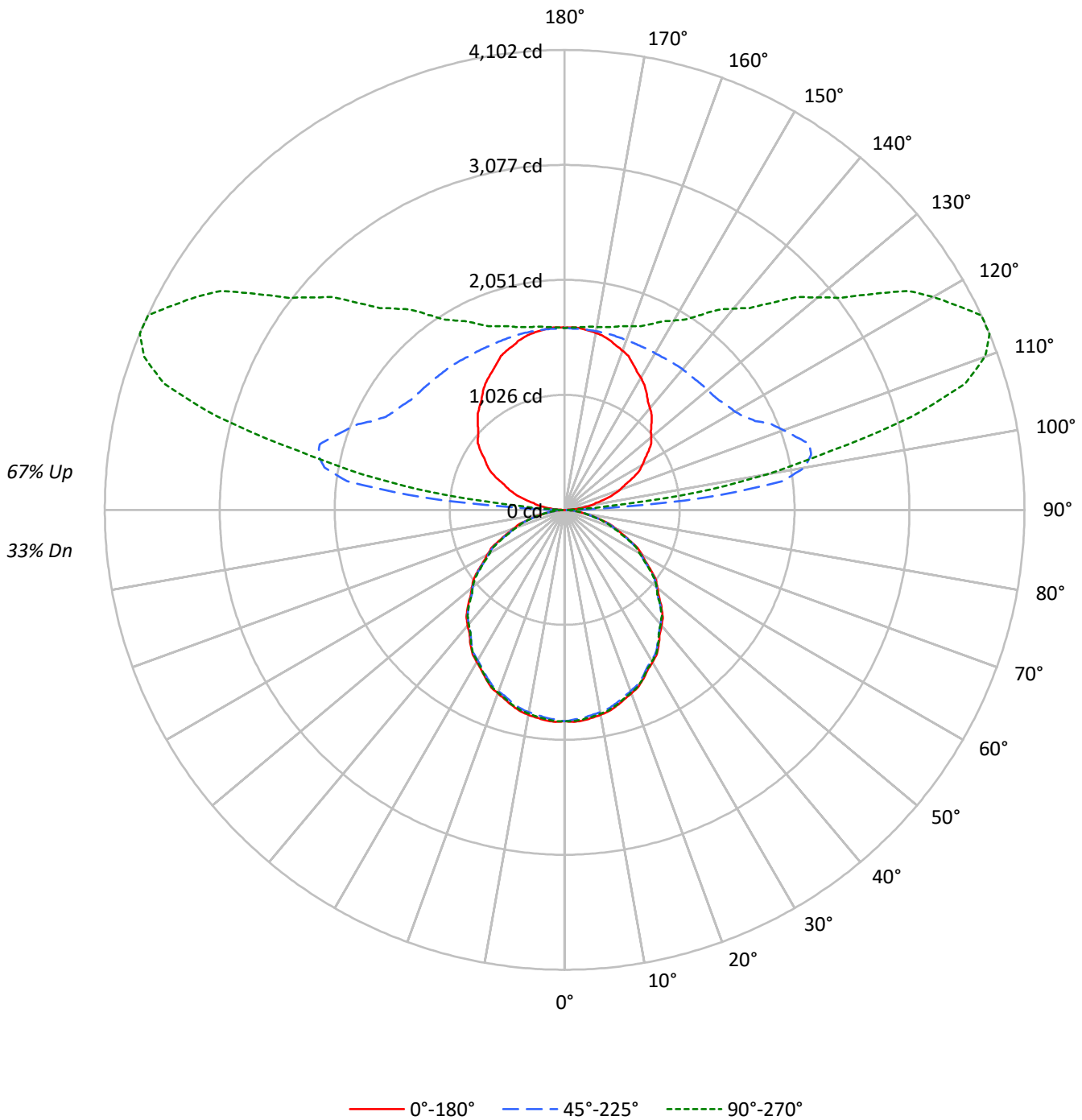
Lumens per Lamp: N/A
Luminaire Lumens: 15621.0 lumens
Efficiency: N/A
Efficacy: 118.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 132.4
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	33
1	94	90	86	83	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	13	10
9	48	36	28	23	43	33	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8701	8701	8701
5°	8734	8624	8687
10°	8699	8587	8651
15°	8632	8527	8600
20°	8555	8454	8521
25°	8461	8374	8435
30°	8353	8262	8308
35°	8243	8157	8196
40°	8104	8022	8012
45°	7966	7865	7887
50°	7744	7683	7683
55°	7565	7468	7399
60°	7320	7195	7132
65°	6925	6795	6702
70°	6505	6343	6181
75°	5853	5639	5516
80°	4678	4588	4543
85°	2805	3165	3260



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.0	1.1
10°-20°	506.9	3.2
20°-30°	761.5	4.9
30°-40°	908.6	5.8
40°-50°	931.9	6.0
50°-60°	830.3	5.3
60°-70°	619.1	4.0
70°-80°	335.7	2.1
80°-90°	80.5	0.5
90°-100°	754.6	4.8
100°-110°	2040.2	13.1
110°-120°	2145.0	13.7
120°-130°	1742.3	11.2
130°-140°	1366.7	8.7
140°-150°	1049.0	6.7
150°-160°	754.4	4.8
160°-170°	460.8	3.0
170°-180°	155.4	1.0
0°-30°	1446.4	9.3
0°-40°	2355.1	15.1
0°-60°	4117.3	26.4
0°-90°	5152.6	33.0
90°-120°	4939.8	31.6
90°-150°	9097.8	58.2
90°-180°	10468.0	67.0
0°-180°	15621.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1886	1886	1886	1886	1886	
5°	1886	1883	1862	1878	1876	179
15°	1808	1804	1785	1799	1801	510
25°	1662	1660	1645	1654	1657	766
35°	1464	1460	1448	1449	1455	914
45°	1221	1216	1206	1206	1209	940
55°	941	939	929	920	920	840
65°	634	634	622	616	614	632
75°	328	322	316	311	310	345
85°	53	56	60	60	62	73
90°	4	10	23	24	23	9
95°	117	411	1255	650	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°	1886.2	1886.2	1886.2	1886.2	1886.2
2.5°	1893.0	1889.1	1872.6	1886.2	1884.9
5°	1886.2	1882.9	1862.3	1877.7	1876.0
7.5°	1870.8	1867.2	1846.9	1862.2	1861.9
10°	1857.1	1852.1	1833.2	1848.6	1846.9
12.5°	1839.4	1834.4	1815.4	1830.7	1829.1
15°	1807.5	1804.2	1785.4	1799.1	1800.7
17.5°	1771.3	1764.9	1748.1	1761.5	1763.1
20°	1742.6	1737.6	1722.1	1734.1	1735.8
22.5°	1712.5	1707.4	1692.0	1704.0	1705.7
25°	1662.2	1660.5	1645.2	1653.7	1657.1
27.5°	1607.9	1603.1	1590.7	1597.3	1600.7
30°	1568.2	1564.9	1551.1	1556.3	1559.6
32.5°	1527.1	1525.1	1512.7	1515.3	1519.9
35°	1463.8	1460.4	1448.4	1448.6	1455.3
37.5°	1393.7	1390.1	1380.0	1378.4	1381.0
40°	1345.8	1340.8	1332.1	1330.5	1330.5
42.5°	1296.6	1293.0	1281.5	1278.6	1282.5
45°	1221.0	1216.0	1205.6	1205.7	1209.0
47.5°	1139.2	1137.3	1125.3	1119.8	1121.1
50°	1079.0	1082.4	1070.6	1063.9	1070.6
52.5°	1027.1	1025.1	1014.5	1007.7	1010.3
55°	940.6	938.9	928.6	920.0	920.0
57.5°	853.7	849.3	838.6	832.2	837.2
60°	793.4	791.8	779.8	768.0	773.0
62.5°	733.3	730.3	718.3	710.5	714.1
65°	634.4	634.4	622.5	615.6	614.0
67.5°	547.9	539.9	533.2	524.9	522.6
70°	482.3	475.6	470.3	463.3	458.3
72.5°	417.9	413.9	406.0	399.1	398.2
75°	328.4	321.7	316.4	311.2	309.5
77.5°	233.6	232.2	227.4	224.8	225.7
80°	176.1	176.1	172.7	172.7	171.0
82.5°	124.2	125.5	124.9	122.1	121.7
85°	53.0	56.4	59.8	59.9	61.6
87.5°	10.2	18.3	19.5	19.8	19.5
90°	3.5	10.4	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	649.5	386.3
97.5°	188.0	471.4	1956.0	1618.7	1188.8
100°	241.2	495.9	2174.2	2267.5	1833.4
102.5°	290.1	529.8	2251.1	2759.3	2434.6
105°	379.3	586.1	2263.4	3338.6	3201.9
107.5°	461.7	650.4	2164.4	3700.0	3745.4
110°	526.0	696.9	2076.4	3797.0	3990.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	583.4	743.3	1995.3	3777.6	4102.0
115°	667.7	816.4	1877.1	3633.7	4102.0
117.5°	750.2	889.6	1799.1	3413.9	3944.7
120°	800.5	937.2	1753.0	3256.2	3797.9
122.5°	848.0	981.9	1725.1	3087.1	3632.9
125°	914.0	1047.3	1691.9	2854.9	3354.0
127.5°	974.9	1105.8	1672.3	2665.5	3104.4
130°	1008.5	1143.5	1663.9	2548.5	2944.9
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	1271.4	1638.7	2193.5	2441.2
140°	1185.0	1299.4	1635.9	2121.5	2341.9
142.5°	1220.0	1327.6	1630.3	2056.6	2249.7
145°	1274.1	1369.9	1623.7	1973.1	2123.5
147.5°	1323.4	1408.2	1616.0	1897.5	2013.1
150°	1359.8	1434.9	1613.2	1856.4	1948.7
152.5°	1393.3	1458.9	1611.8	1818.3	1894.2
155°	1438.4	1494.8	1609.7	1770.0	1828.2
157.5°	1485.2	1524.6	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	1616.6	1679.8	1688.3
167.5°	1588.8	1599.3	1617.0	1663.9	1668.0
170°	1602.6	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	1639.4	1635.9
177.5°	1629.3	1625.2	1618.0	1631.9	1627.9
180°	1623.7	1623.7	1623.7	1623.7	1623.7

(END OF REPORT)