

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: P520430

Luminaire Tested: **SQ4-F-150U-100D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520430
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-100D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

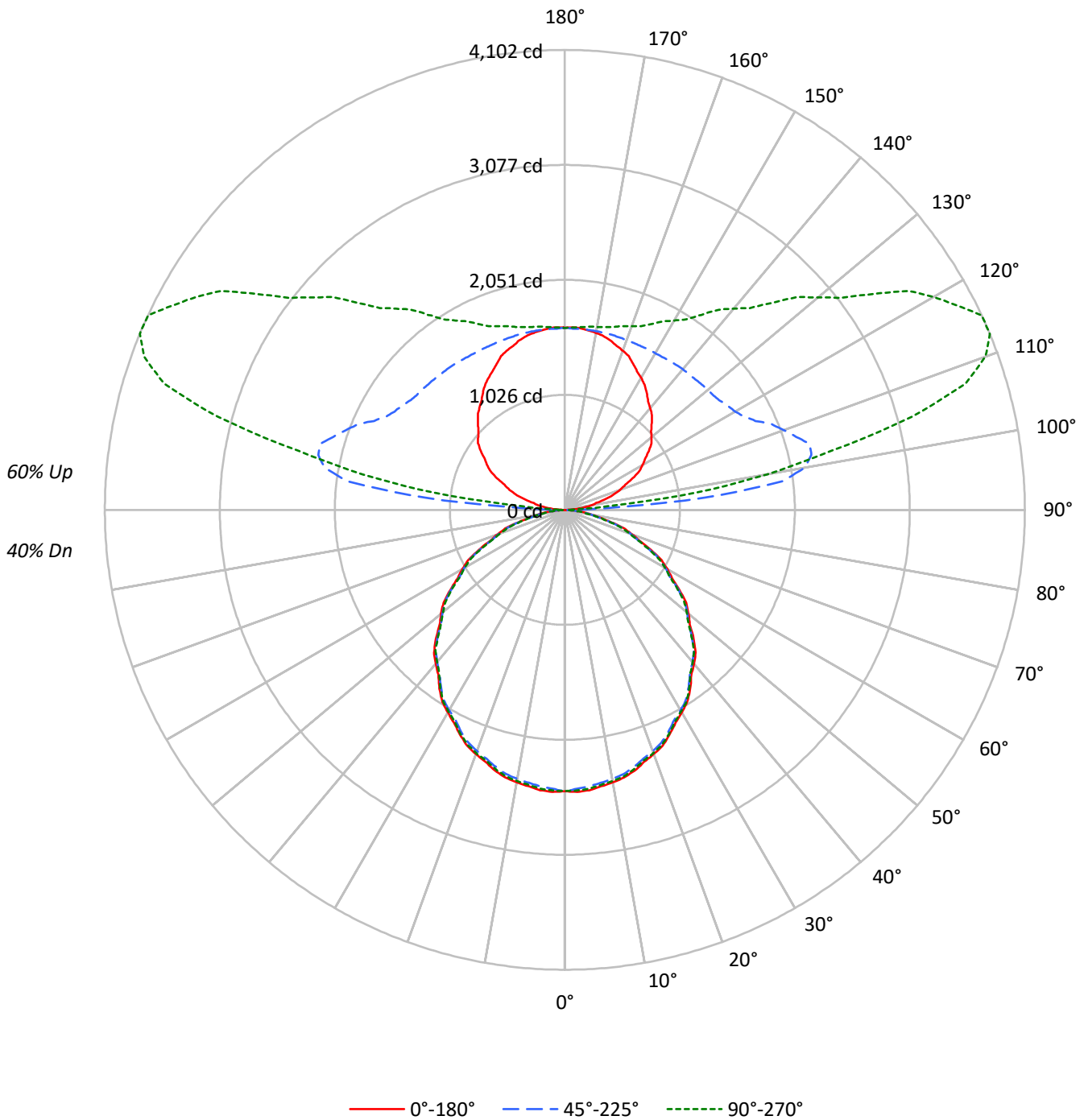
Lumens per Lamp: N/A
Luminaire Lumens: 17314.1 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 148.5
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	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11573	11573	11573
5°	11625	11466	11554
10°	11566	11421	11509
15°	11496	11340	11430
20°	11377	11242	11335
25°	11253	11122	11209
30°	11116	10997	11052
35°	10976	10841	10899
40°	10794	10670	10680
45°	10604	10458	10425
50°	10331	10207	10182
55°	10027	9916	9847
60°	9722	9547	9515
65°	9248	9040	8965
70°	8593	8383	8222
75°	7671	7425	7274
80°	6312	6084	5810
85°	3732	4102	4192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.8	1.4
10°-20°	674.3	3.9
20°-30°	1012.6	5.8
30°-40°	1208.4	7.0
40°-50°	1238.6	7.2
50°-60°	1103.0	6.4
60°-70°	822.2	4.7
70°-80°	445.2	2.6
80°-90°	104.7	0.6
90°-100°	754.6	4.4
100°-110°	2040.2	11.8
110°-120°	2145.0	12.4
120°-130°	1742.3	10.1
130°-140°	1366.7	7.9
140°-150°	1049.0	6.1
150°-160°	754.4	4.4
160°-170°	460.8	2.7
170°-180°	155.4	0.9
0°-30°	1923.6	11.1
0°-40°	3132.0	18.1
0°-60°	5473.7	31.6
0°-90°	6845.7	39.5
90°-120°	4939.8	28.5
90°-150°	9097.8	52.5
90°-180°	10468.0	60.5
0°-180°	17314.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2509	2509	2509	2509	2509	
5°	2510	2505	2476	2498	2495	238
15°	2407	2399	2374	2393	2393	678
25°	2211	2206	2185	2197	2202	1019
35°	1949	1941	1925	1929	1935	1217
45°	1625	1617	1603	1594	1598	1251
55°	1247	1248	1233	1221	1224	1116
65°	847	844	828	820	821	838
75°	430	425	417	408	408	458
85°	70	77	78	79	79	99
90°	4	10	23	24	23	10
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°	2508.8	2508.8	2508.8	2508.8	2508.8
2.5°	2518.4	2512.9	2490.8	2508.7	2506.0
5°	2510.4	2505.4	2476.0	2498.4	2495.0
7.5°	2487.1	2482.0	2456.1	2476.7	2473.6
10°	2469.1	2464.1	2438.1	2458.7	2457.0
12.5°	2445.7	2440.7	2414.7	2435.3	2433.7
15°	2407.1	2398.7	2374.4	2393.3	2393.3
17.5°	2356.2	2349.7	2327.2	2343.1	2343.4
20°	2317.6	2312.6	2290.1	2307.3	2309.0
22.5°	2279.0	2273.9	2248.7	2264.6	2267.7
25°	2210.8	2205.8	2185.1	2197.1	2202.2
27.5°	2140.6	2133.1	2112.7	2123.4	2127.2
30°	2086.9	2083.5	2064.5	2069.7	2074.8
32.5°	2030.4	2027.0	2010.8	2013.4	2022.5
35°	1949.1	1940.7	1925.0	1928.6	1935.4
37.5°	1853.0	1849.0	1833.7	1831.8	1838.3
40°	1792.4	1785.7	1771.8	1768.4	1773.5
42.5°	1726.3	1719.6	1702.9	1699.6	1706.0
45°	1625.4	1617.0	1603.1	1594.5	1597.9
47.5°	1512.5	1512.5	1498.0	1488.1	1493.2
50°	1439.5	1439.5	1422.2	1413.7	1418.8
52.5°	1363.7	1365.1	1346.4	1342.0	1340.3
55°	1246.7	1248.3	1232.9	1220.9	1224.3
57.5°	1133.7	1129.9	1112.0	1104.1	1105.8
60°	1053.7	1048.7	1034.8	1022.9	1031.3
62.5°	972.5	970.1	956.3	942.9	941.9
65°	847.2	843.8	828.2	819.6	821.3
67.5°	722.5	718.4	704.3	691.9	696.4
70°	637.1	637.1	621.5	614.6	609.6
72.5°	558.5	551.8	540.3	530.6	526.9
75°	430.4	425.4	416.6	408.1	408.1
77.5°	313.4	309.0	303.4	297.5	295.9
80°	237.6	235.9	229.0	227.1	218.7
82.5°	167.3	167.1	162.9	158.4	158.0
85°	70.5	77.3	77.5	79.2	79.2
87.5°	13.1	22.5	23.8	21.3	21.0
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)