

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: P520382

Luminaire Tested: **SQ4-F-150U-050D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520382  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-935-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

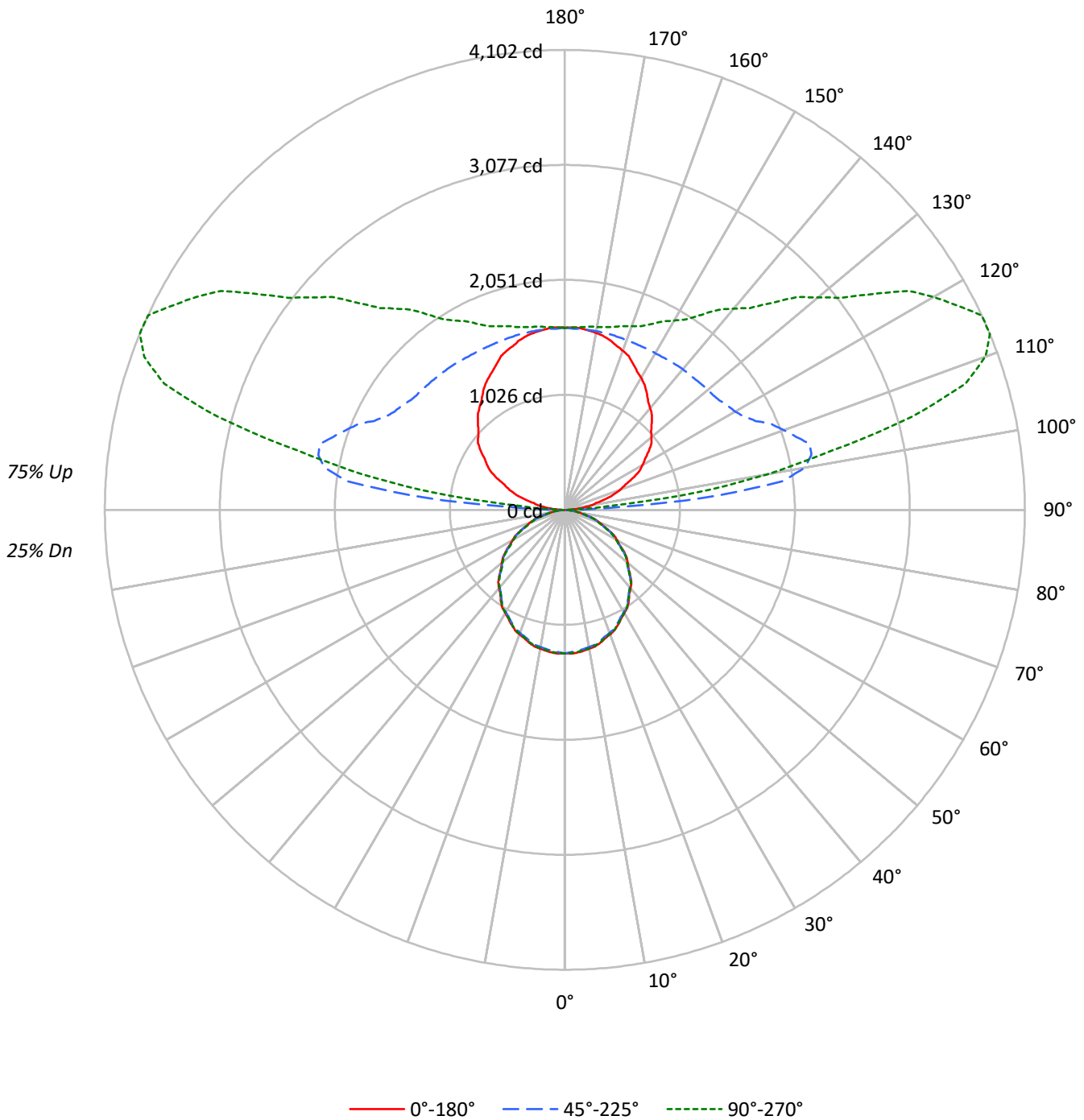
Lumens per Lamp: N/A  
Luminaire Lumens: 13965.3 lumens  
Efficiency: N/A  
Efficacy: 122.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 114.4  
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	101	101	101	101	90	90	90	90	69	69	69	51	51	51	33	33	33	25
1	92	88	84	81	82	79	75	73	61	59	57	44	43	42	29	29	28	21
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	26	25	23	18
3	76	67	60	55	68	60	54	49	47	43	39	34	32	29	23	21	20	15
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	8	6

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5905	5905	5905
5°	5919	5848	5896
10°	5900	5827	5868
15°	5860	5786	5835
20°	5805	5737	5780
25°	5739	5669	5722
30°	5659	5613	5650
35°	5597	5529	5558
40°	5490	5438	5448
45°	5377	5332	5332
50°	5263	5214	5189
55°	5141	5072	5044
60°	4948	4869	4838
65°	4713	4619	4564
70°	4392	4299	4207
75°	3941	3818	3725
80°	3185	3140	3050
85°	1905	2175	2265



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.8	0.9
10°-20°	343.9	2.5
20°-30°	516.6	3.7
30°-40°	616.6	4.4
40°-50°	631.9	4.5
50°-60°	563.5	4.0
60°-70°	419.7	3.0
70°-80°	227.8	1.6
80°-90°	56.1	0.4
90°-100°	754.6	5.4
100°-110°	2040.2	14.6
110°-120°	2145.0	15.4
120°-130°	1742.3	12.5
130°-140°	1366.7	9.8
140°-150°	1049.0	7.5
150°-160°	754.4	5.4
160°-170°	460.8	3.3
170°-180°	155.4	1.1
0°-30°	981.3	7.0
0°-40°	1597.9	11.4
0°-60°	2793.3	20.0
0°-90°	3496.9	25.0
90°-120°	4939.8	35.4
90°-150°	9097.8	65.1
90°-180°	10468.0	75.0
0°-180°	13965.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1280	1280	1280	1280	1280	
5°	1278	1277	1263	1275	1273	121
15°	1227	1224	1212	1222	1222	346
25°	1128	1124	1114	1121	1124	519
35°	994	990	982	982	987	620
45°	824	826	817	816	817	636
55°	639	639	631	626	627	569
65°	432	430	423	418	418	428
75°	221	219	214	211	209	234
85°	36	39	41	43	43	50
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°	1280.0	1280.0	1280.0	1280.0	1280.0
2.5°	1284.1	1281.5	1270.4	1280.0	1278.6
5°	1278.3	1276.6	1262.8	1274.9	1273.2
7.5°	1269.1	1265.7	1252.3	1263.9	1262.3
10°	1259.5	1256.1	1244.0	1254.3	1252.6
12.5°	1247.2	1245.1	1231.7	1241.9	1241.6
15°	1227.0	1223.6	1211.5	1221.7	1221.7
17.5°	1200.1	1198.2	1186.4	1196.4	1195.0
20°	1182.4	1179.0	1168.7	1177.3	1177.3
22.5°	1160.4	1158.4	1148.1	1155.3	1156.6
25°	1127.6	1124.2	1113.8	1120.8	1124.1
27.5°	1091.2	1088.5	1079.9	1084.4	1086.7
30°	1062.4	1062.4	1053.8	1055.7	1060.7
32.5°	1036.3	1036.3	1026.4	1028.2	1030.5
35°	993.8	990.5	981.8	982.0	987.0
37.5°	944.5	942.9	937.3	936.4	937.6
40°	911.6	909.9	903.0	904.7	904.7
42.5°	878.7	877.0	870.1	867.8	870.5
45°	824.2	825.9	817.3	815.7	817.3
47.5°	770.4	770.4	763.6	758.9	761.5
50°	733.4	733.4	726.5	723.1	723.1
52.5°	695.0	696.4	688.2	683.4	684.7
55°	639.2	639.2	630.6	625.5	627.1
57.5°	577.4	577.4	568.9	563.8	566.9
60°	536.3	536.3	527.7	522.7	524.4
62.5°	495.2	495.2	486.6	481.5	481.9
65°	431.8	430.1	423.2	418.1	418.1
67.5°	370.9	366.4	361.2	354.4	354.4
70°	325.6	323.9	318.7	311.9	311.9
72.5°	284.5	281.4	276.2	270.8	270.8
75°	221.1	219.4	214.2	210.7	209.0
77.5°	158.4	157.0	156.6	151.9	153.2
80°	119.9	119.9	118.2	114.8	114.8
82.5°	85.7	87.0	84.0	83.2	81.9
85°	36.0	39.3	41.1	42.8	42.8
87.5°	7.5	12.9	14.0	15.8	15.4
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)