

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: P520183

Luminaire Tested: **SQ4-F-100U-050D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520183  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-050D-930-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

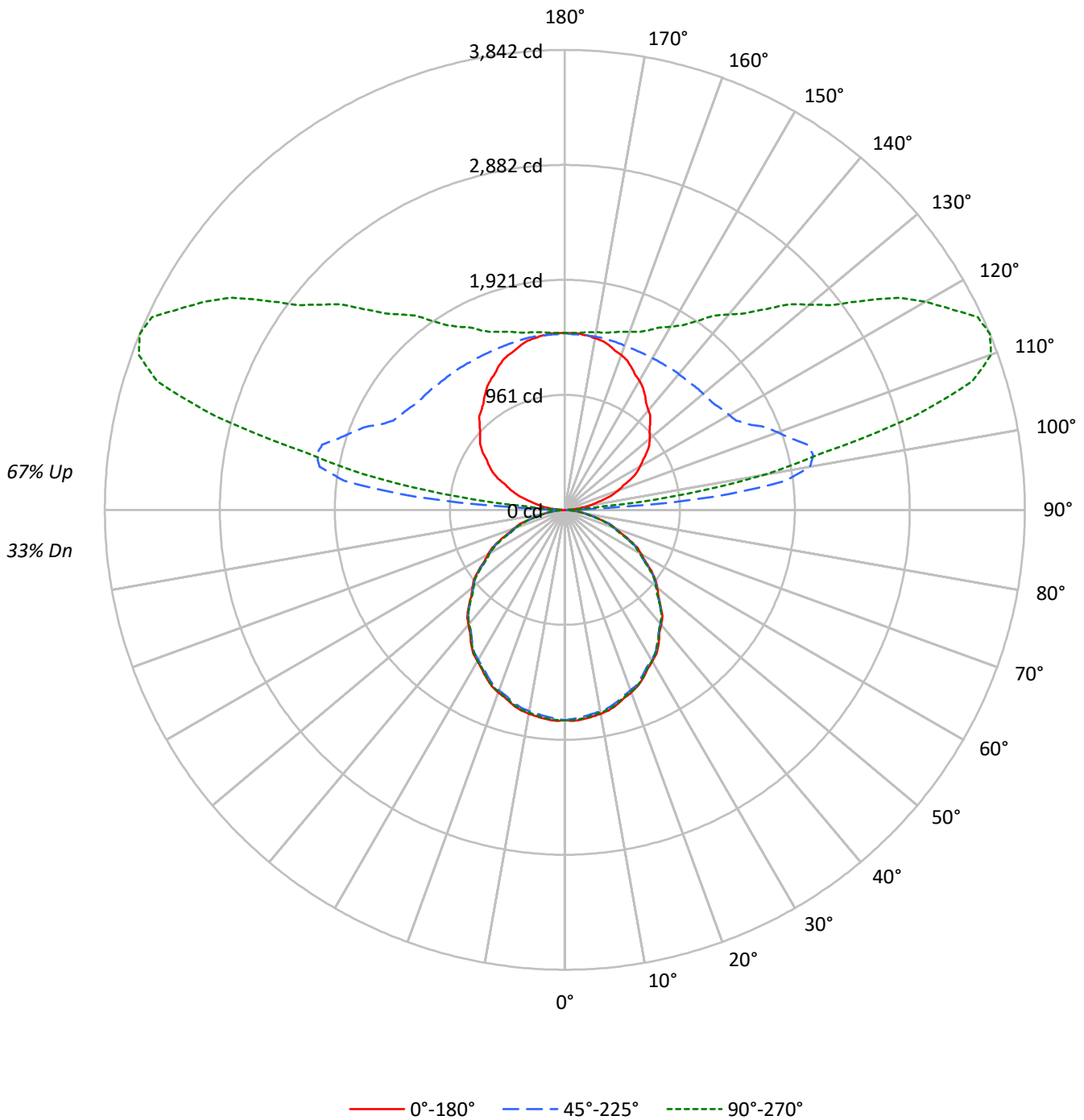
Lumens per Lamp: N/A  
Luminaire Lumens: 14390.3 lumens  
Efficiency: N/A  
Efficacy: 109.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 131.2  
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	57	57	57	41	41	41	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	32	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25	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	59	49	42	37	39	34	31	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	27	28	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	27	46	36	29	25	29	24	20	23	19	17	17	14	13	10
9	48	36	28	23	43	33	26	22	27	22	18	21	17	15	16	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°	5408	5408	5408
5°	5421	5356	5399
10°	5403	5337	5374
15°	5366	5299	5344
20°	5316	5254	5292
25°	5256	5192	5240
30°	5183	5141	5174
35°	5126	5064	5091
40°	5028	4981	4990
45°	4925	4883	4883
50°	4820	4775	4753
55°	4708	4645	4619
60°	4532	4459	4430
65°	4317	4232	4180
70°	4022	3937	3852
75°	3609	3496	3411
80°	2919	2876	2793
85°	1743	1994	2078



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.9	1.2
10°-20°	472.5	3.3
20°-30°	709.6	4.9
30°-40°	847.1	5.9
40°-50°	868.0	6.0
50°-60°	774.1	5.4
60°-70°	576.5	4.0
70°-80°	313.0	2.2
80°-90°	75.5	0.5
90°-100°	691.0	4.8
100°-110°	1907.8	13.3
110°-120°	1967.5	13.7
120°-130°	1581.1	11.0
130°-140°	1242.6	8.6
140°-150°	953.0	6.6
150°-160°	684.9	4.8
160°-170°	418.9	2.9
170°-180°	141.2	1.0
0°-30°	1348.0	9.4
0°-40°	2195.1	15.3
0°-60°	3837.3	26.7
0°-90°	4802.3	33.4
90°-120°	4566.4	31.7
90°-150°	8343.0	58.0
90°-180°	9588.0	66.6
0°-180°	14390.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1758	1758	1758	1758	1758	
5°	1756	1754	1735	1751	1749	167
15°	1686	1681	1664	1678	1678	475
25°	1549	1544	1530	1540	1544	713
35°	1365	1361	1349	1349	1356	852
45°	1132	1135	1123	1121	1123	874
55°	878	878	866	859	862	782
65°	593	591	582	574	574	587
75°	304	301	294	290	287	321
85°	49	54	56	59	59	69
90°	5	9	19	21	24	9
95°	102	374	1254	515	335	109
105°	340	525	2099	3204	3017	362
115°	609	736	1690	3347	3806	599
125°	836	951	1532	2593	3043	744
135°	1006	1114	1490	2100	2368	778
145°	1166	1247	1471	1788	1924	730
155°	1315	1359	1459	1604	1655	606
165°	1424	1442	1466	1523	1535	401
175°	1476	1478	1469	1490	1485	140
180°	1476	1476	1476	1476	1476	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1758.4	1758.4	1758.4	1758.4	1758.4
2.5°	1764.1	1760.4	1745.2	1758.3	1756.6
5°	1756.1	1753.8	1734.9	1751.3	1749.0
7.5°	1743.3	1738.7	1720.3	1736.2	1734.0
10°	1730.1	1725.6	1709.0	1723.0	1720.8
12.5°	1713.2	1710.4	1692.1	1706.2	1705.7
15°	1685.5	1680.8	1664.3	1678.4	1678.4
17.5°	1648.7	1645.9	1629.9	1643.5	1641.7
20°	1624.2	1619.6	1605.4	1617.1	1617.1
22.5°	1594.2	1591.4	1577.2	1587.1	1588.9
25°	1548.9	1544.3	1530.1	1539.6	1544.2
27.5°	1499.0	1495.4	1483.5	1489.6	1492.9
30°	1459.5	1459.5	1447.7	1450.2	1457.1
32.5°	1423.7	1423.7	1410.1	1412.4	1415.7
35°	1365.3	1360.7	1348.8	1349.0	1355.9
37.5°	1297.6	1295.2	1287.6	1286.2	1288.1
40°	1252.3	1250.0	1240.6	1242.9	1242.9
42.5°	1207.1	1204.9	1195.4	1192.1	1195.8
45°	1132.3	1134.6	1122.8	1120.6	1122.8
47.5°	1058.3	1058.3	1049.0	1042.5	1046.1
50°	1007.5	1007.5	998.1	993.4	993.4
52.5°	954.8	956.6	945.3	938.8	940.6
55°	878.0	878.0	866.3	859.2	861.5
57.5°	793.3	793.3	781.5	774.5	778.7
60°	736.8	736.8	725.0	718.0	720.3
62.5°	680.3	680.3	668.5	661.4	661.9
65°	593.2	590.9	581.5	574.4	574.4
67.5°	509.4	503.4	496.2	486.8	486.8
70°	447.3	444.9	437.8	428.4	428.4
72.5°	390.8	386.6	379.4	371.9	371.9
75°	303.7	301.3	294.2	289.5	287.1
77.5°	217.5	215.7	215.2	208.6	210.4
80°	164.8	164.8	162.4	157.7	157.7
82.5°	117.7	119.5	115.4	114.4	112.5
85°	49.4	54.0	56.5	58.9	58.9
87.5°	10.4	16.8	17.0	19.3	19.8
90°	4.7	9.3	18.9	21.3	23.6
92.5°	42.5	176.4	315.5	115.1	89.7
95°	101.5	373.9	1253.7	515.4	335.2
97.5°	168.1	418.8	1857.2	1429.8	1035.5
100°	217.2	445.7	2080.0	2094.8	1702.3
102.5°	264.4	476.4	2123.6	2588.2	2216.0
105°	340.0	524.7	2098.9	3204.4	3017.4
107.5°	420.2	584.6	1981.9	3501.5	3569.9
110°	476.9	624.7	1891.2	3565.5	3787.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	527.9	670.1	1806.2	3515.0	3841.9
115°	609.2	736.1	1690.5	3346.6	3806.0
117.5°	680.0	806.5	1614.5	3109.6	3632.2
120°	727.2	851.8	1584.2	2949.1	3475.4
122.5°	772.6	891.7	1559.7	2799.3	3297.9
125°	835.8	951.2	1532.3	2593.2	3043.4
127.5°	889.6	1005.0	1516.3	2418.9	2807.3
130°	925.5	1041.0	1508.8	2312.4	2665.6
132.5°	959.5	1069.4	1501.1	2222.9	2542.9
135°	1005.8	1114.4	1489.9	2100.3	2368.1
137.5°	1057.8	1156.6	1484.1	1997.4	2226.0
140°	1086.1	1183.0	1480.4	1928.8	2129.7
142.5°	1118.2	1207.7	1476.6	1867.8	2044.6
145°	1166.4	1247.1	1471.0	1788.0	1924.2
147.5°	1212.6	1283.3	1465.7	1720.7	1826.5
150°	1246.6	1304.4	1463.8	1680.7	1766.1
152.5°	1273.0	1327.1	1462.0	1646.4	1717.0
155°	1315.1	1359.0	1459.1	1604.3	1655.1
157.5°	1353.8	1387.6	1459.6	1573.7	1608.4
160°	1376.5	1406.5	1461.5	1556.5	1581.9
162.5°	1395.4	1421.7	1463.4	1541.3	1561.1
165°	1423.7	1442.2	1466.2	1523.1	1534.7
167.5°	1445.4	1456.5	1468.6	1512.1	1515.8
170°	1456.7	1466.0	1468.6	1506.4	1506.4
172.5°	1466.2	1471.8	1468.6	1498.8	1496.9
175°	1475.6	1478.0	1468.6	1489.7	1485.1
177.5°	1479.5	1477.6	1468.1	1481.3	1477.5
180°	1475.6	1475.6	1475.6	1475.6	1475.6

(END OF REPORT)