

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: P519995

Luminaire Tested: **SQ4-F-075U-050D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519995  
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-935-1D-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**

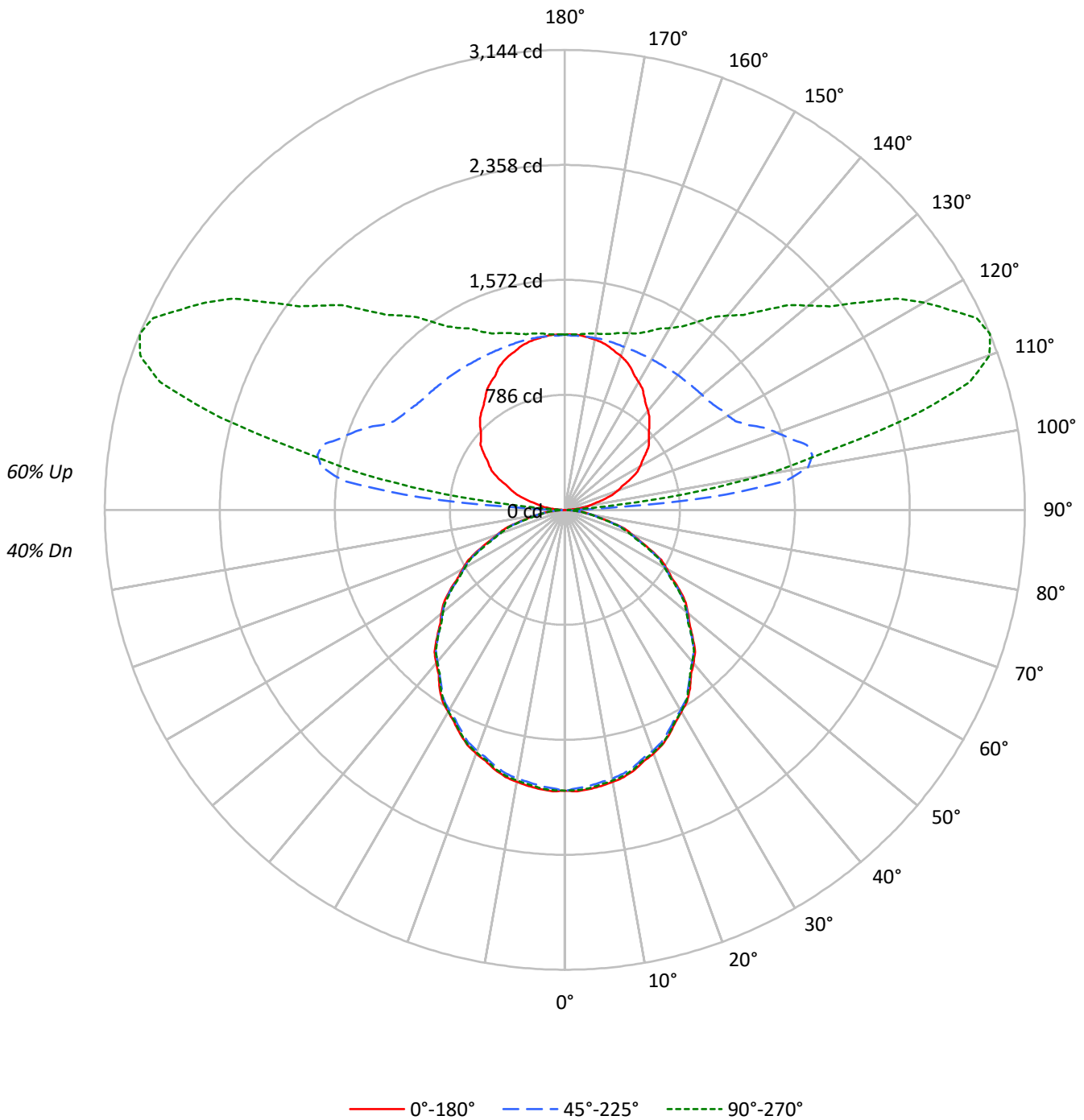
Lumens per Lamp: N/A  
Luminaire Lumens: 13047.2 lumens  
Efficiency: N/A  
Efficacy: 118.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

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



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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	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°	5905	5905	5905
5°	5920	5848	5896
10°	5900	5827	5868
15°	5860	5786	5835
20°	5804	5737	5779
25°	5739	5669	5722
30°	5659	5613	5650
35°	5597	5529	5558
40°	5490	5438	5448
45°	5377	5333	5333
50°	5263	5214	5190
55°	5140	5072	5044
60°	4948	4870	4838
65°	4713	4619	4563
70°	4392	4298	4206
75°	3940	3818	3726
80°	3188	3142	3050
85°	1902	2177	2269



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.1	1.4
10°-20°	515.9	4.0
20°-30°	774.9	5.9
30°-40°	924.9	7.1
40°-50°	947.8	7.3
50°-60°	845.3	6.5
60°-70°	629.5	4.8
70°-80°	341.7	2.6
80°-90°	82.2	0.6
90°-100°	565.0	4.3
100°-110°	1554.4	11.9
110°-120°	1604.4	12.3
120°-130°	1285.5	9.9
130°-140°	1009.6	7.7
140°-150°	773.8	5.9
150°-160°	556.3	4.3
160°-170°	340.2	2.6
170°-180°	114.7	0.9
0°-30°	1471.9	11.3
0°-40°	2396.8	18.4
0°-60°	4189.9	32.1
0°-90°	5243.4	40.2
90°-120°	3723.8	28.5
90°-150°	6792.7	52.1
90°-180°	7804.0	59.8
0°-180°	13047.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1920	1920	1920	1920	1920	
5°	1918	1915	1894	1912	1910	182
15°	1840	1835	1817	1833	1833	519
25°	1691	1686	1671	1681	1686	779
35°	1491	1486	1473	1473	1480	930
45°	1236	1239	1226	1224	1226	954
55°	959	959	946	938	941	854
65°	648	645	635	627	627	641
75°	332	329	321	316	314	350
85°	54	59	62	64	64	75
90°	2	10	18	23	23	7
95°	84	308	999	427	273	89
105°	278	427	1713	2608	2434	293
115°	492	599	1374	2736	3104	485
125°	678	773	1246	2108	2470	605
135°	818	908	1211	1705	1929	631
145°	946	1010	1193	1453	1565	593
155°	1070	1105	1185	1306	1343	492
165°	1157	1172	1190	1239	1246	326
175°	1198	1200	1193	1208	1206	114
180°	1198	1198	1198	1198	1198	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1920.0	1920.0	1920.0	1920.0	1920.0
2.5°	1926.2	1922.2	1905.7	1920.0	1918.0
5°	1917.5	1914.9	1894.3	1912.3	1909.8
7.5°	1903.6	1898.6	1878.4	1895.8	1893.3
10°	1889.2	1884.2	1866.0	1881.4	1878.9
12.5°	1870.6	1867.7	1847.6	1863.0	1862.5
15°	1840.4	1835.3	1817.2	1832.7	1832.7
17.5°	1800.2	1797.3	1779.7	1794.5	1792.6
20°	1773.5	1768.5	1753.0	1765.8	1765.8
22.5°	1740.6	1737.6	1722.1	1733.0	1735.0
25°	1691.3	1686.3	1670.7	1681.1	1686.2
27.5°	1636.8	1632.8	1619.8	1626.6	1630.1
30°	1593.6	1593.6	1580.7	1583.5	1591.0
32.5°	1554.5	1554.5	1539.6	1542.3	1545.8
35°	1490.8	1485.8	1472.8	1473.0	1480.5
37.5°	1416.8	1414.3	1406.0	1404.4	1406.5
40°	1367.5	1364.9	1354.5	1357.1	1357.1
42.5°	1318.1	1315.6	1305.2	1301.7	1305.7
45°	1236.3	1238.9	1226.1	1223.5	1226.1
47.5°	1155.7	1155.7	1145.3	1138.2	1142.2
50°	1100.1	1100.1	1089.8	1084.7	1084.7
52.5°	1042.6	1044.5	1032.2	1025.1	1027.1
55°	958.7	958.7	945.9	938.2	940.7
57.5°	866.2	866.2	853.3	845.7	850.3
60°	804.5	804.5	791.7	784.0	786.5
62.5°	742.8	742.8	730.0	722.3	722.8
65°	647.7	645.2	634.8	627.1	627.1
67.5°	556.2	549.7	541.8	531.6	531.6
70°	488.4	485.8	478.0	467.8	467.8
72.5°	426.7	422.1	414.3	406.2	406.2
75°	331.6	329.0	321.3	316.1	313.6
77.5°	237.5	235.5	235.0	227.8	229.8
80°	180.0	180.0	177.4	172.2	172.2
82.5°	128.5	130.6	125.9	124.8	122.9
85°	53.9	59.0	61.7	64.3	64.3
87.5°	10.7	18.3	17.9	21.1	21.1
90°	2.5	10.0	17.8	23.0	23.0
92.5°	35.2	150.3	260.5	100.0	82.1
95°	84.1	308.4	999.1	427.2	272.7
97.5°	137.1	342.0	1524.7	1174.7	828.9
100°	175.9	362.8	1689.8	1705.6	1391.6
102.5°	212.5	387.5	1732.6	2116.1	1827.9
105°	277.8	427.3	1712.8	2608.4	2434.0
107.5°	340.0	476.5	1615.4	2849.7	2901.5
110°	384.9	509.5	1542.0	2909.6	3089.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	425.7	546.3	1468.5	2871.0	3144.1
115°	491.9	599.1	1373.8	2735.5	3104.4
117.5°	555.1	653.8	1313.6	2545.5	2962.6
120°	593.8	688.6	1287.1	2403.0	2834.2
122.5°	628.5	723.2	1268.7	2278.1	2687.4
125°	677.9	772.6	1246.3	2108.3	2469.7
127.5°	724.9	815.1	1231.5	1966.7	2283.6
130°	749.3	841.6	1223.4	1882.4	2171.5
132.5°	777.9	870.0	1217.3	1808.3	2069.6
135°	818.1	907.9	1210.6	1705.1	1929.3
137.5°	855.9	939.1	1205.0	1621.6	1806.5
140°	884.4	961.7	1203.0	1566.2	1733.1
142.5°	908.9	980.2	1198.9	1516.7	1659.8
145°	945.5	1010.4	1192.8	1452.8	1564.9
147.5°	984.9	1040.6	1189.8	1396.2	1485.9
150°	1009.3	1059.1	1187.7	1365.2	1434.9
152.5°	1031.7	1077.6	1185.7	1338.4	1396.2
155°	1070.5	1105.4	1185.2	1305.8	1343.2
157.5°	1098.5	1126.9	1185.2	1279.0	1304.9
160°	1118.9	1141.3	1185.2	1264.6	1284.6
162.5°	1135.2	1153.6	1187.2	1252.3	1268.2
165°	1157.1	1172.1	1190.3	1238.9	1246.3
167.5°	1172.4	1183.9	1192.8	1227.5	1229.5
170°	1182.6	1190.1	1192.8	1223.4	1223.4
172.5°	1190.8	1194.3	1192.8	1217.3	1215.2
175°	1197.9	1200.3	1192.8	1208.1	1205.5
177.5°	1200.0	1200.0	1191.7	1204.0	1200.0
180°	1197.9	1197.9	1197.9	1197.9	1197.9

(END OF REPORT)