

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: P520210

Luminaire Tested: **SQ4-F-100U-075D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520210  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-075D-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

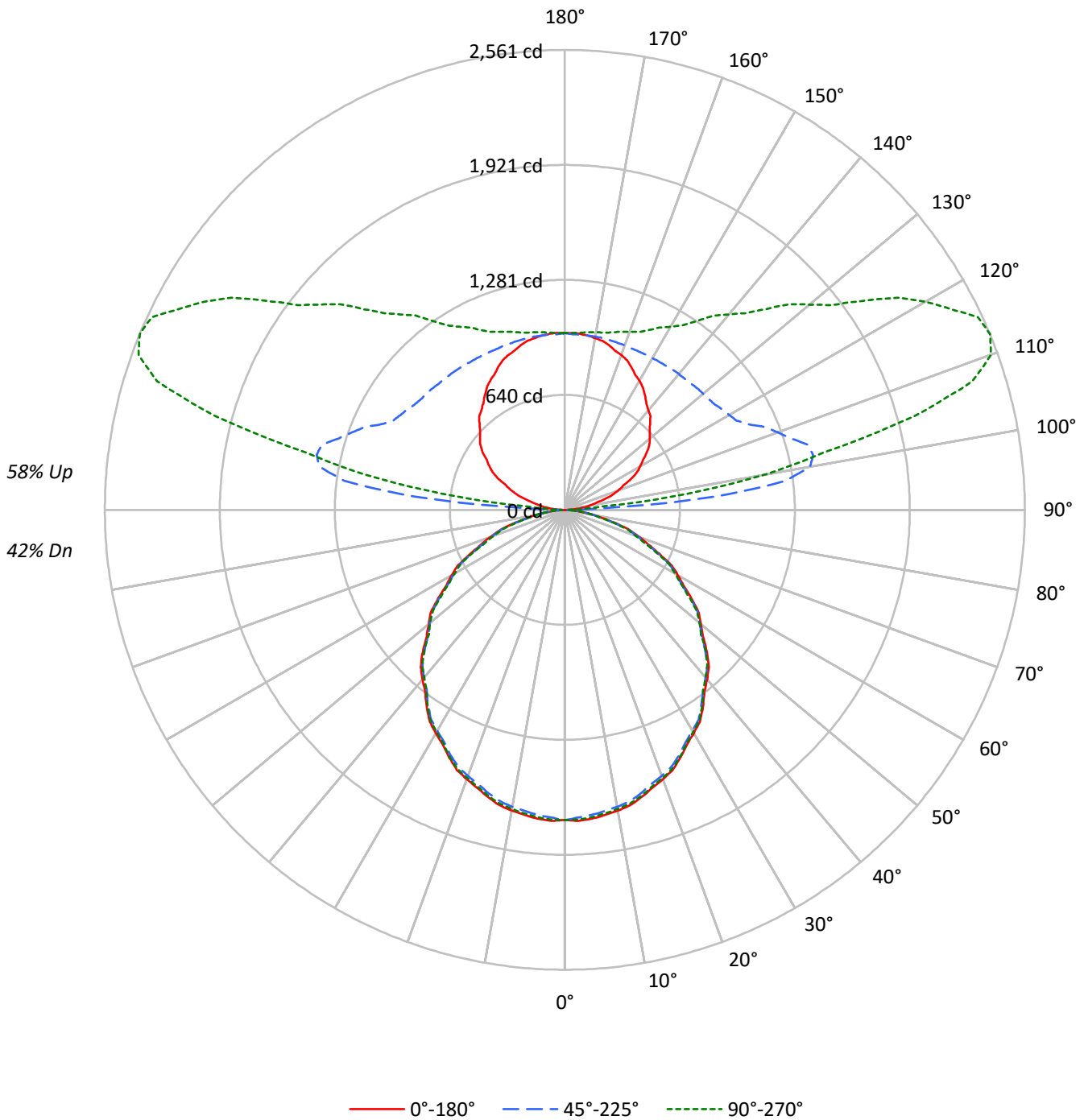
Lumens per Lamp: N/A  
Luminaire Lumens: 11109.8 lumens  
Efficiency: N/A  
Efficacy: 107.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 103.7  
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	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	42	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25	22
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	19
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	22	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	20	18	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10

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

	0°	45°	90°
0°	7969	7969	7969
5°	7999	7898	7956
10°	7967	7864	7923
15°	7906	7808	7876
20°	7835	7743	7804
25°	7748	7669	7725
30°	7650	7567	7609
35°	7550	7470	7506
40°	7422	7347	7338
45°	7295	7203	7224
50°	7092	7036	7036
55°	6927	6840	6777
60°	6705	6588	6531
65°	6343	6223	6138
70°	5956	5809	5661
75°	5360	5164	5053
80°	4285	4200	4163
85°	2567	2901	2985



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.1	1.5
10°-20°	464.2	4.2
20°-30°	697.4	6.3
30°-40°	832.2	7.5
40°-50°	853.4	7.7
50°-60°	760.5	6.8
60°-70°	567.0	5.1
70°-80°	307.5	2.8
80°-90°	72.7	0.7
90°-100°	460.7	4.1
100°-110°	1271.9	11.4
110°-120°	1311.7	11.8
120°-130°	1054.1	9.5
130°-140°	828.4	7.5
140°-150°	635.3	5.7
150°-160°	456.6	4.1
160°-170°	279.2	2.5
170°-180°	94.1	0.8
0°-30°	1324.7	11.9
0°-40°	2156.8	19.4
0°-60°	3770.7	33.9
0°-90°	4717.8	42.5
90°-120°	3044.3	27.4
90°-150°	5562.0	50.1
90°-180°	6392.0	57.5
0°-180°	11109.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1727	1727	1727	1727	1727	
5°	1727	1724	1706	1720	1718	164
15°	1655	1652	1635	1648	1649	467
25°	1522	1521	1507	1515	1518	701
35°	1341	1338	1326	1327	1333	837
45°	1118	1114	1104	1104	1107	861
55°	861	860	850	843	843	769
65°	581	581	570	564	562	578
75°	301	294	290	285	284	316
85°	48	52	55	55	56	67
90°	3	6	13	14	16	6
95°	68	249	836	344	224	72
105°	227	350	1399	2136	2012	241
115°	406	491	1127	2231	2537	399
125°	557	634	1022	1729	2029	496
135°	670	743	993	1400	1579	519
145°	778	831	981	1192	1283	487
155°	877	906	973	1070	1103	404
165°	949	961	977	1015	1023	268
175°	984	985	979	993	990	93
180°	984	984	984	984	984	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1727.4	1727.4	1727.4	1727.4	1727.4
2.5°	1733.7	1730.1	1714.9	1727.4	1726.2
5°	1727.4	1724.4	1705.6	1719.5	1718.1
7.5°	1713.3	1710.0	1691.4	1705.5	1705.2
10°	1700.9	1696.2	1678.9	1693.0	1691.4
12.5°	1684.5	1680.0	1662.6	1676.6	1675.2
15°	1655.4	1652.3	1635.0	1647.6	1649.2
17.5°	1622.2	1616.4	1600.9	1613.2	1614.6
20°	1596.0	1591.3	1577.2	1588.1	1589.7
22.5°	1568.3	1563.8	1549.5	1560.5	1562.1
25°	1522.2	1520.8	1506.6	1514.6	1517.6
27.5°	1472.5	1468.2	1456.8	1462.8	1466.0
30°	1436.1	1433.1	1420.5	1425.2	1428.4
32.5°	1398.5	1396.8	1385.5	1387.7	1392.0
35°	1340.6	1337.5	1326.5	1326.7	1332.8
37.5°	1276.4	1273.1	1263.8	1262.4	1264.8
40°	1232.5	1228.0	1220.0	1218.5	1218.5
42.5°	1187.5	1184.1	1173.7	1170.9	1174.6
45°	1118.2	1113.7	1104.1	1104.2	1107.3
47.5°	1043.4	1041.5	1030.5	1025.6	1026.8
50°	988.2	991.3	980.4	974.3	980.4
52.5°	940.7	938.8	929.1	922.9	925.3
55°	861.3	859.9	850.4	842.6	842.6
57.5°	781.8	777.8	768.1	762.2	766.8
60°	726.7	725.2	714.1	703.3	707.9
62.5°	671.5	668.8	657.7	650.7	654.0
65°	581.1	581.1	570.1	563.8	562.3
67.5°	501.8	494.5	488.3	480.7	478.6
70°	441.6	435.5	430.7	424.3	419.7
72.5°	382.8	379.1	371.8	365.5	364.6
75°	300.7	294.5	289.7	285.0	283.5
77.5°	213.9	212.8	208.3	205.8	206.8
80°	161.3	161.3	158.1	158.1	156.7
82.5°	113.7	114.9	114.3	111.8	111.5
85°	48.5	51.6	54.8	54.8	56.4
87.5°	9.3	16.1	16.3	16.6	16.9
90°	3.2	6.2	12.6	14.2	15.7
92.5°	28.3	117.6	210.3	76.8	59.8
95°	67.7	249.3	835.8	343.6	223.5
97.5°	112.1	279.3	1238.1	953.2	690.4
100°	144.8	297.2	1386.7	1396.5	1134.8
102.5°	176.3	317.5	1415.7	1725.5	1477.4
105°	226.6	349.8	1399.3	2136.3	2011.6
107.5°	280.1	389.8	1321.2	2334.4	2380.0
110°	317.9	416.5	1260.8	2377.0	2524.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	352.0	446.7	1204.2	2343.4	2561.3
115°	406.1	490.8	1127.0	2231.1	2537.3
117.5°	453.4	537.6	1076.4	2073.0	2421.5
120°	484.8	567.9	1056.2	1966.1	2316.9
122.5°	515.0	594.4	1039.8	1866.2	2198.6
125°	557.2	634.2	1021.6	1728.9	2028.9
127.5°	593.1	670.0	1010.9	1612.6	1871.5
130°	617.0	693.9	1005.8	1541.6	1777.0
132.5°	639.7	712.9	1000.8	1481.9	1695.2
135°	670.5	742.9	993.2	1400.2	1578.8
137.5°	705.2	771.0	989.4	1331.6	1484.0
140°	724.0	788.7	986.9	1285.9	1419.7
142.5°	745.5	805.2	984.4	1245.2	1363.1
145°	777.5	831.4	980.6	1192.0	1282.8
147.5°	808.4	855.5	977.1	1147.2	1217.6
150°	831.0	869.5	975.9	1120.4	1177.4
152.5°	848.7	884.8	974.7	1097.5	1144.6
155°	876.7	906.0	972.8	1069.5	1103.4
157.5°	902.6	925.0	973.1	1049.2	1072.2
160°	917.7	937.7	974.3	1037.7	1054.6
162.5°	930.3	947.8	975.6	1027.5	1040.8
165°	949.2	961.4	977.4	1015.4	1023.1
167.5°	963.6	971.0	979.0	1008.1	1010.5
170°	971.2	977.3	979.0	1004.3	1004.3
172.5°	977.4	981.2	979.0	999.2	997.9
175°	983.8	985.3	979.0	993.2	990.1
177.5°	986.3	985.1	978.7	987.5	985.1
180°	983.8	983.8	983.8	983.8	983.8

(END OF REPORT)