

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: P564916

Luminaire Tested: **SQ4-PW1-100U-050D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564916  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-100U-050D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

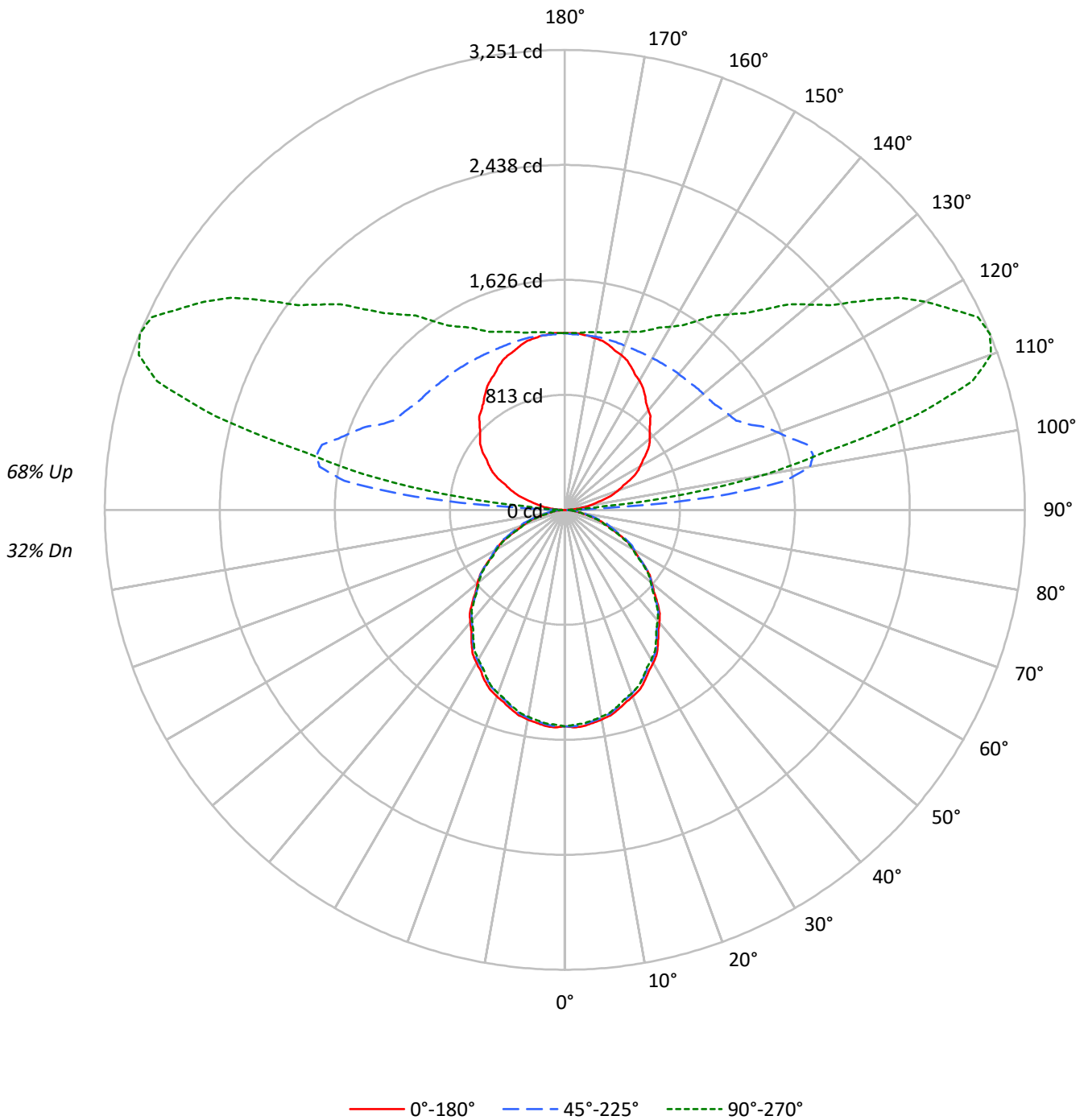
Lumens per Lamp: N/A  
Luminaire Lumens: 12010.9 lumens  
Efficiency: N/A  
Efficacy: 141.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 84.7  
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	35	34	27
2	86	78	72	67	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	49	43	44	40	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	35	31	31	27	24	22	20	18	15
6	60	48	41	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

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

	0°	45°	90°
0°	7062	7062	7062
5°	7108	7052	7020
10°	7051	6994	6956
15°	6976	6899	6873
20°	6893	6787	6774
25°	6797	6673	6653
30°	6653	6552	6509
35°	6464	6373	6335
40°	6262	6165	6141
45°	6019	5939	5913
50°	5769	5721	5682
55°	5500	5500	5413
60°	5164	5264	5077
65°	4726	4961	4609
70°	4166	4566	4057
75°	3558	4087	3461
80°	2760	3440	2795
85°	1784	2641	2355



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.2	1.2
10°-20°	407.0	3.4
20°-30°	603.7	5.0
30°-40°	706.4	5.9
40°-50°	703.2	5.9
50°-60°	607.3	5.1
60°-70°	437.1	3.6
70°-80°	229.2	1.9
80°-90°	59.4	0.5
90°-100°	584.8	4.9
100°-110°	1614.4	13.4
110°-120°	1664.9	13.9
120°-130°	1337.9	11.1
130°-140°	1051.5	8.8
140°-150°	806.4	6.7
150°-160°	579.6	4.8
160°-170°	354.4	3.0
170°-180°	119.5	1.0
0°-30°	1154.8	9.6
0°-40°	1861.2	15.5
0°-60°	3171.7	26.4
0°-90°	3897.5	32.4
90°-120°	3864.1	32.2
90°-150°	7060.0	58.8
90°-180°	8113.0	67.5
0°-180°	12010.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1531	1531	1531	1531	1531	
5°	1535	1518	1523	1519	1516	145
15°	1461	1442	1444	1442	1439	412
25°	1335	1313	1311	1303	1307	614
35°	1148	1132	1132	1121	1125	718
45°	923	915	910	908	906	712
55°	684	682	684	674	673	610
65°	433	446	454	437	422	429
75°	200	218	229	214	194	214
85°	34	44	50	47	44	45
90°	4	8	16	18	20	7
95°	86	316	1061	436	284	92
105°	288	444	1776	2712	2553	306
115°	516	623	1430	2832	3221	507
125°	707	805	1297	2194	2575	629
135°	851	943	1261	1777	2004	659
145°	987	1055	1245	1513	1628	618
155°	1113	1150	1235	1358	1401	513
165°	1205	1220	1241	1289	1299	340
175°	1249	1251	1243	1261	1257	119
180°	1249	1249	1249	1249	1249	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1530.9	1530.9	1530.9	1530.9	1530.9
2.5°	1539.5	1526.8	1530.9	1527.4	1520.1
5°	1534.9	1517.8	1522.8	1518.7	1516.0
7.5°	1519.3	1503.4	1507.1	1502.8	1501.2
10°	1505.2	1489.4	1493.1	1487.6	1485.0
12.5°	1489.0	1472.2	1475.8	1470.4	1468.8
15°	1460.7	1442.3	1444.5	1441.8	1439.1
17.5°	1427.8	1409.1	1409.5	1405.1	1404.6
20°	1404.1	1384.3	1382.5	1377.2	1379.8
22.5°	1378.2	1357.3	1355.5	1348.0	1351.7
25°	1335.3	1312.9	1311.0	1303.0	1307.0
27.5°	1285.6	1263.5	1263.5	1252.3	1256.5
30°	1249.0	1227.9	1230.1	1216.7	1222.0
32.5°	1210.1	1191.1	1192.3	1178.9	1184.2
35°	1147.8	1132.0	1131.6	1120.9	1124.9
37.5°	1084.1	1070.2	1068.0	1061.8	1062.8
40°	1039.9	1028.0	1023.7	1019.7	1019.7
42.5°	993.5	982.7	978.4	975.4	974.4
45°	922.6	914.6	910.4	907.7	906.4
47.5°	852.4	845.0	841.4	839.4	838.1
50°	803.9	798.6	797.1	793.0	791.7
52.5°	755.3	752.1	750.7	745.6	744.3
55°	683.8	682.5	683.8	674.4	673.0
57.5°	609.4	611.5	615.8	603.1	599.9
60°	559.7	565.0	570.5	555.6	550.3
62.5°	509.0	517.5	525.2	508.0	500.7
65°	433.0	446.1	454.5	436.7	422.2
67.5°	359.6	375.9	386.0	366.8	350.4
70°	308.9	327.3	338.5	319.2	300.8
72.5°	264.6	285.2	294.3	276.1	257.6
75°	199.6	218.1	229.3	214.0	194.2
77.5°	141.6	159.0	168.3	155.0	138.7
80°	103.9	122.3	129.5	118.4	105.2
82.5°	73.6	88.9	93.9	87.2	78.2
85°	33.7	44.3	49.9	47.1	44.5
87.5°	9.4	17.6	23.7	24.1	25.6
90°	4.0	7.9	16.0	18.0	20.0
92.5°	36.0	149.3	266.9	97.4	75.9
95°	85.9	316.4	1060.9	436.1	283.7
97.5°	142.3	354.4	1571.6	1210.0	876.3
100°	183.8	377.2	1760.2	1772.6	1440.5
102.5°	223.8	403.1	1796.9	2190.2	1875.3
105°	287.7	444.0	1776.2	2711.6	2553.4
107.5°	355.6	494.7	1677.1	2963.1	3020.9
110°	403.6	528.6	1600.3	3017.1	3204.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	446.7	567.1	1528.4	2974.4	3251.0
115°	515.5	622.9	1430.5	2831.9	3220.7
117.5°	575.4	682.5	1366.2	2631.3	3073.6
120°	615.4	720.9	1340.6	2495.6	2941.0
122.5°	653.7	754.5	1319.8	2368.8	2790.7
125°	707.3	804.9	1296.7	2194.4	2575.3
127.5°	752.8	850.5	1283.1	2047.0	2375.5
130°	783.2	880.9	1276.7	1956.8	2255.7
132.5°	812.0	904.9	1270.3	1881.0	2151.8
135°	851.1	942.9	1260.7	1777.3	2003.9
137.5°	895.1	978.7	1255.9	1690.3	1883.7
140°	919.1	1001.1	1252.7	1632.2	1802.1
142.5°	946.2	1022.0	1249.5	1580.6	1730.2
145°	987.0	1055.4	1244.7	1513.1	1628.3
147.5°	1026.1	1085.9	1240.3	1456.1	1545.6
150°	1054.9	1103.7	1238.7	1422.2	1494.5
152.5°	1077.3	1123.0	1237.1	1393.1	1452.9
155°	1112.9	1150.0	1234.7	1357.6	1400.6
157.5°	1145.6	1174.1	1235.1	1331.7	1361.0
160°	1164.8	1190.2	1236.7	1317.1	1338.6
162.5°	1180.8	1203.1	1238.3	1304.2	1321.0
165°	1204.8	1220.4	1240.7	1288.9	1298.7
167.5°	1223.1	1232.5	1242.7	1279.5	1282.7
170°	1232.7	1240.5	1242.7	1274.7	1274.7
172.5°	1240.7	1245.4	1242.7	1268.3	1266.7
175°	1248.7	1250.7	1242.7	1260.6	1256.7
177.5°	1251.9	1250.3	1242.3	1253.4	1250.3
180°	1248.7	1248.7	1248.7	1248.7	1248.7

(END OF REPORT)