

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: P562892

Luminaire Tested: **SQ4-PC3-100U-050D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P562892  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PC3-100U-050D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

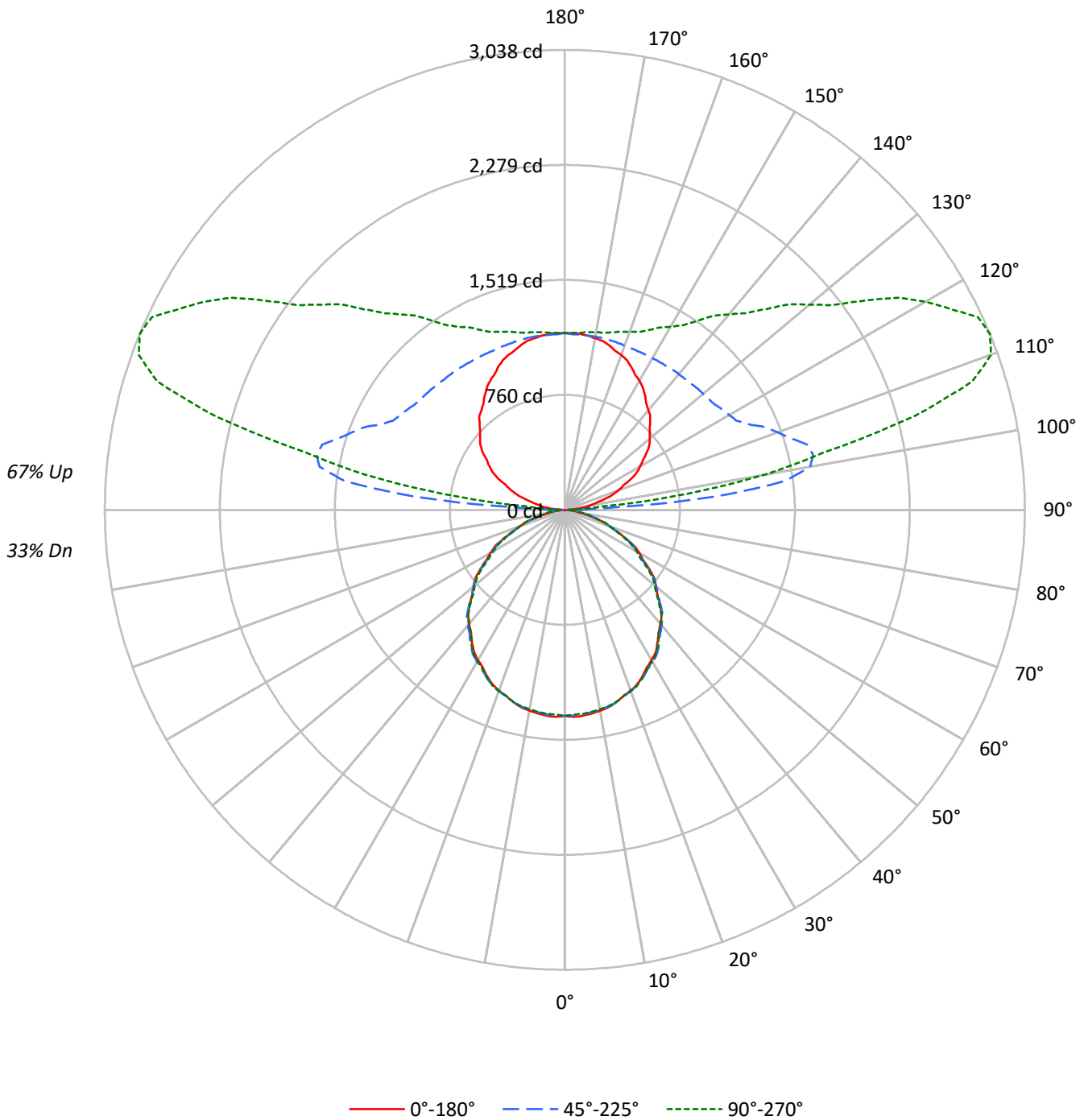
Lumens per Lamp: N/A  
Luminaire Lumens: 11299.4 lumens  
Efficiency: N/A  
Efficacy: 133.4 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

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	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	62	57	53	50	44	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	36	33	28	26	24	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	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	14	13	10
9	48	36	29	24	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°	6279	6279	6279
5°	6327	6286	6263
10°	6312	6282	6264
15°	6278	6278	6272
20°	6237	6256	6256
25°	6178	6223	6204
30°	6103	6177	6150
35°	6012	6105	6062
40°	5913	5996	5935
45°	5805	5847	5756
50°	5654	5654	5563
55°	5474	5403	5322
60°	5210	5105	5024
65°	4815	4719	4677
70°	4216	4250	4232
75°	3392	3752	3773
80°	2410	3180	3214
85°	1466	2668	2668



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.8	1.1
10°-20°	369.7	3.3
20°-30°	559.9	5.0
30°-40°	671.2	5.9
40°-50°	684.4	6.1
50°-60°	597.4	5.3
60°-70°	427.7	3.8
70°-80°	220.3	1.9
80°-90°	58.1	0.5
90°-100°	546.5	4.8
100°-110°	1508.6	13.4
110°-120°	1555.9	13.8
120°-130°	1250.3	11.1
130°-140°	982.6	8.7
140°-150°	753.6	6.7
150°-160°	541.6	4.8
160°-170°	331.2	2.9
170°-180°	111.7	1.0
0°-30°	1058.4	9.4
0°-40°	1729.6	15.3
0°-60°	3011.4	26.7
0°-90°	3717.5	32.9
90°-120°	3611.0	32.0
90°-150°	6597.5	58.4
90°-180°	7582.0	67.1
0°-180°	11299.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1361	1361	1361	1361	1361	
5°	1366	1353	1358	1354	1352	130
15°	1315	1304	1315	1315	1313	371
25°	1214	1205	1223	1219	1219	559
35°	1068	1065	1084	1076	1076	668
45°	890	887	896	885	882	685
55°	681	672	672	662	662	607
65°	441	431	432	428	428	436
75°	190	199	210	212	212	206
85°	28	42	50	52	50	38
90°	4	7	15	17	19	7
95°	80	296	991	408	265	86
105°	269	415	1660	2534	2386	286
115°	482	582	1337	2646	3010	473
125°	661	752	1212	2051	2407	588
135°	795	881	1178	1661	1873	615
145°	922	986	1163	1414	1522	577
155°	1040	1075	1154	1269	1309	479
165°	1126	1140	1159	1204	1214	317
175°	1167	1169	1161	1178	1174	111
180°	1167	1167	1167	1167	1167	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1361.2	1361.2	1361.2	1361.2	1361.2
2.5°	1369.3	1357.5	1361.2	1358.1	1353.2
5°	1366.3	1352.7	1357.5	1353.7	1352.4
7.5°	1356.5	1342.9	1349.1	1346.6	1345.4
10°	1347.4	1333.8	1341.1	1338.5	1337.3
12.5°	1335.3	1322.7	1331.0	1328.5	1328.2
15°	1314.6	1303.5	1314.6	1314.6	1313.3
17.5°	1288.6	1278.5	1290.4	1291.1	1290.4
20°	1270.5	1259.4	1274.3	1273.0	1274.3
22.5°	1248.3	1239.2	1255.1	1251.9	1253.1
25°	1213.8	1205.1	1222.6	1218.8	1218.8
27.5°	1172.9	1166.8	1185.8	1181.8	1181.8
30°	1145.7	1139.6	1159.6	1154.5	1154.5
32.5°	1115.5	1111.3	1130.3	1124.3	1124.3
35°	1067.6	1065.1	1084.0	1076.4	1076.4
37.5°	1018.2	1015.9	1033.0	1023.9	1020.9
40°	981.9	980.6	995.7	985.6	985.6
42.5°	945.6	944.3	957.4	945.3	945.3
45°	889.8	887.4	896.2	884.8	882.3
47.5°	829.1	826.6	832.1	819.7	818.5
50°	787.8	785.3	787.8	776.4	775.2
52.5°	745.4	741.0	741.4	730.0	729.8
55°	680.6	672.0	671.8	661.7	661.7
57.5°	612.1	600.7	601.7	593.1	591.9
60°	564.7	552.3	553.3	545.7	544.5
62.5°	518.3	504.0	506.9	498.4	498.1
65°	441.1	431.3	432.3	428.5	428.5
67.5°	367.0	357.9	364.5	361.5	361.2
70°	312.6	306.4	315.1	315.1	313.8
72.5°	262.2	261.9	272.8	272.8	273.5
75°	190.3	198.9	210.5	211.7	211.7
77.5°	127.0	142.3	155.0	155.5	155.3
80°	90.7	108.0	119.7	122.2	121.0
82.5°	61.5	79.7	89.5	92.0	90.7
85°	27.7	42.5	50.4	51.6	50.4
87.5°	8.8	18.4	23.2	23.5	21.9
90°	3.7	7.4	14.9	16.8	18.7
92.5°	33.6	139.5	249.4	91.0	70.9
95°	80.3	295.7	991.4	407.5	265.1
97.5°	132.9	331.2	1468.6	1130.7	818.9
100°	171.8	352.5	1644.9	1656.5	1346.1
102.5°	209.1	376.7	1679.2	2046.7	1752.4
105°	268.9	414.9	1659.8	2534.0	2386.1
107.5°	332.3	462.3	1567.2	2768.9	2823.0
110°	377.1	494.0	1495.5	2819.5	2994.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	417.5	529.9	1428.3	2779.6	3038.1
115°	481.7	582.1	1336.8	2646.4	3009.7
117.5°	537.7	637.8	1276.7	2459.0	2872.3
120°	575.1	673.6	1252.8	2332.1	2748.3
122.5°	610.9	705.1	1233.4	2213.6	2607.9
125°	660.9	752.2	1211.7	2050.6	2406.6
127.5°	703.5	794.8	1199.0	1912.9	2219.9
130°	731.9	823.2	1193.0	1828.6	2107.9
132.5°	758.8	845.7	1187.1	1757.8	2010.8
135°	795.4	881.2	1178.1	1660.9	1872.7
137.5°	836.4	914.6	1173.6	1579.5	1760.3
140°	858.8	935.5	1170.6	1525.3	1684.1
142.5°	884.2	955.1	1167.7	1477.0	1616.9
145°	922.3	986.2	1163.2	1413.9	1521.6
147.5°	958.9	1014.8	1159.1	1360.7	1444.3
150°	985.8	1031.4	1157.6	1329.0	1396.6
152.5°	1006.7	1049.4	1156.1	1301.9	1357.7
155°	1039.9	1074.6	1153.8	1268.6	1308.8
157.5°	1070.6	1097.2	1154.2	1244.5	1271.8
160°	1088.5	1112.2	1155.7	1230.8	1250.9
162.5°	1103.4	1124.2	1157.2	1218.8	1234.5
165°	1125.8	1140.4	1159.4	1204.5	1213.6
167.5°	1143.0	1151.8	1161.3	1195.7	1198.6
170°	1152.0	1159.3	1161.3	1191.2	1191.2
172.5°	1159.4	1163.8	1161.3	1185.2	1183.7
175°	1166.9	1168.7	1161.3	1178.0	1174.4
177.5°	1169.9	1168.4	1160.9	1171.3	1168.4
180°	1166.9	1166.9	1166.9	1166.9	1166.9

(END OF REPORT)