

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: P564451

Luminaire Tested: **SQ4-PR1-150U-075D-830-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564451  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PR1-150U-075D-830-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

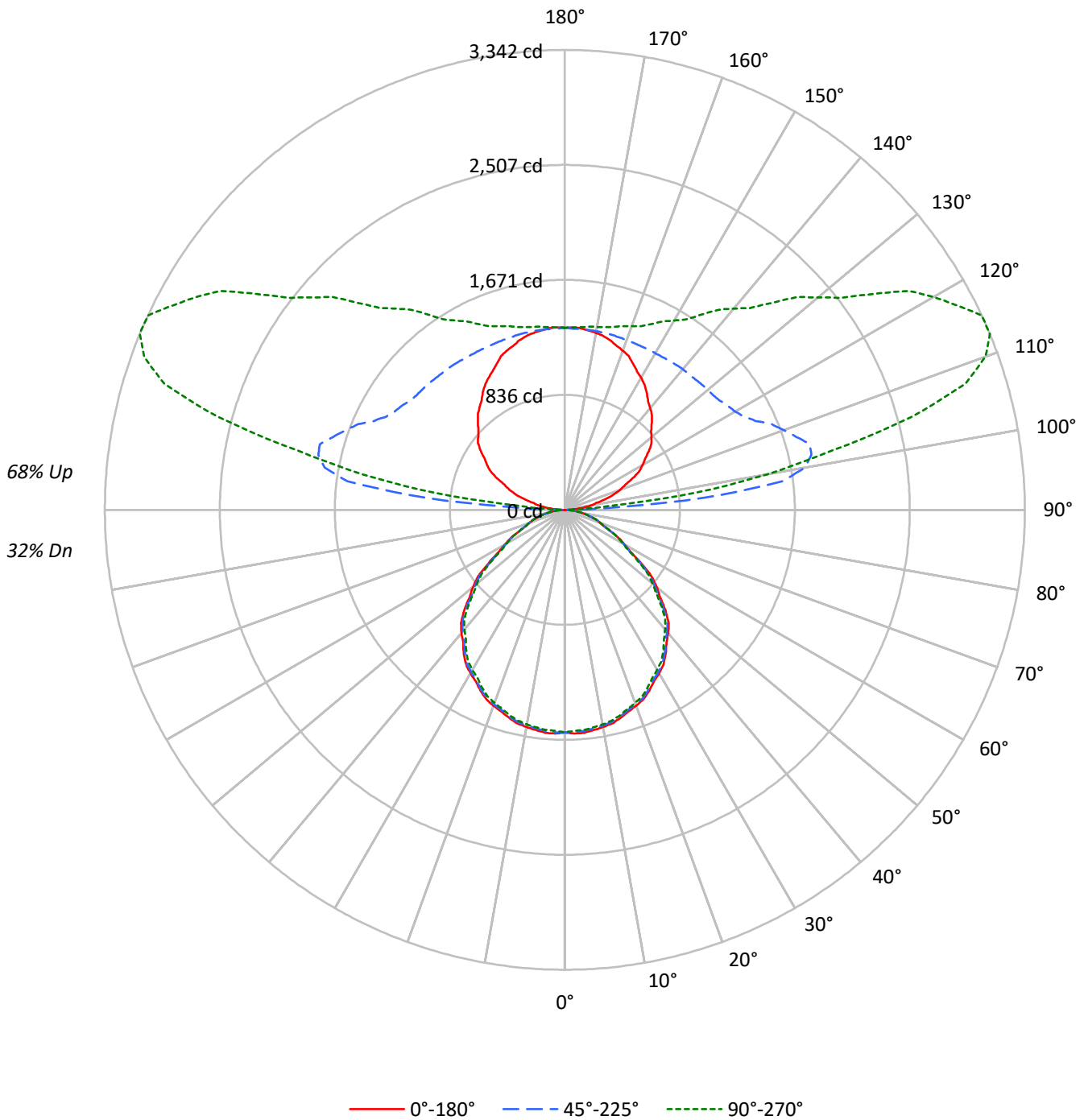
Lumens per Lamp: N/A  
Luminaire Lumens: 12575.5 lumens  
Efficiency: N/A  
Efficacy: 128.6 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 97.8  
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	73	73	73	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	65	62	60	49	48	47	35	35	34	27
2	86	79	73	68	77	71	66	62	57	53	50	44	41	39	31	30	29	23
3	78	69	62	57	70	63	57	52	50	46	42	39	36	33	28	26	25	20
4	72	61	54	48	64	55	49	44	45	40	36	34	31	29	25	23	21	17
5	66	55	47	41	59	49	43	38	40	35	31	31	28	25	23	20	19	15
6	60	49	41	35	54	44	38	33	36	31	27	28	24	22	20	18	16	13
7	56	44	36	31	50	40	33	29	32	27	24	25	22	19	19	16	15	12
8	52	40	32	27	46	36	30	25	30	25	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11	9

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

	0°	45°	90°
0°	9950	9950	9950
5°	10039	9962	9910
10°	10007	9938	9886
15°	9963	9901	9848
20°	9913	9849	9776
25°	9843	9777	9664
30°	9737	9668	9529
35°	9593	9510	9374
40°	9375	9274	9106
45°	8993	8835	8653
50°	8319	8119	7959
55°	7261	7097	6948
60°	6119	6067	5948
65°	5292	5312	5273
70°	4861	4886	4886
75°	4670	4670	4701
80°	4392	4442	4392
85°	3543	3931	3931



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.0	1.2
10°-20°	437.7	3.5
20°-30°	660.1	5.2
30°-40°	786.5	6.3
40°-50°	775.5	6.2
50°-60°	592.6	4.7
60°-70°	366.7	2.9
70°-80°	208.3	1.7
80°-90°	66.1	0.5
90°-100°	614.8	4.9
100°-110°	1662.2	13.2
110°-120°	1747.6	13.9
120°-130°	1419.5	11.3
130°-140°	1113.5	8.9
140°-150°	854.6	6.8
150°-160°	614.6	4.9
160°-170°	375.5	3.0
170°-180°	126.6	1.0
0°-30°	1250.7	9.9
0°-40°	2037.3	16.2
0°-60°	3405.4	27.1
0°-90°	4046.5	32.2
90°-120°	4024.6	32.0
90°-150°	7412.3	58.9
90°-180°	8529.0	67.8
0°-180°	12575.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1618	1618	1618	1618	1618	
5°	1626	1608	1613	1608	1605	154
15°	1565	1548	1555	1549	1546	442
25°	1450	1433	1441	1425	1424	667
35°	1278	1263	1266	1250	1248	797
45°	1034	1020	1016	998	995	792
55°	677	666	662	651	648	607
65°	364	361	365	362	362	368
75°	196	196	196	198	198	207
85°	50	53	56	56	56	58
90°	3	8	18	20	18	8
95°	95	335	1022	529	315	100
105°	309	478	1844	2720	2609	325
115°	544	665	1529	2960	3342	537
125°	745	853	1378	2326	2733	664
135°	893	999	1341	1878	2126	690
145°	1038	1116	1323	1608	1730	649
155°	1172	1218	1312	1442	1490	541
165°	1276	1288	1317	1369	1376	359
175°	1324	1323	1319	1336	1333	126
180°	1323	1323	1323	1323	1323	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1617.6	1617.6	1617.6	1617.6	1617.6
2.5°	1627.6	1613.4	1617.6	1614.1	1606.4
5°	1625.9	1608.2	1613.4	1607.8	1605.0
7.5°	1613.4	1596.0	1601.1	1595.5	1593.9
10°	1602.3	1585.9	1591.1	1585.5	1582.8
12.5°	1590.0	1572.6	1578.9	1572.1	1569.4
15°	1564.6	1548.3	1554.9	1549.3	1546.5
17.5°	1536.8	1519.3	1525.9	1519.4	1515.9
20°	1514.5	1498.1	1504.7	1494.9	1493.6
22.5°	1490.0	1473.6	1480.2	1467.1	1466.8
25°	1450.4	1432.7	1440.6	1425.3	1423.9
27.5°	1403.3	1387.0	1393.5	1377.9	1376.3
30°	1371.0	1354.6	1361.2	1344.4	1341.7
32.5°	1334.2	1318.9	1324.4	1307.7	1306.1
35°	1277.6	1262.6	1266.5	1249.7	1248.4
37.5°	1213.3	1199.6	1201.8	1183.4	1182.1
40°	1167.6	1153.9	1155.0	1135.5	1134.1
42.5°	1117.4	1103.8	1102.6	1083.1	1081.7
45°	1033.8	1020.2	1015.7	997.5	994.8
47.5°	938.5	924.9	916.5	901.7	899.8
50°	869.4	855.8	848.5	835.9	831.8
52.5°	794.7	781.1	774.9	763.4	759.3
55°	677.1	666.2	661.8	650.6	647.9
57.5°	565.4	558.0	556.8	545.9	544.8
60°	497.4	493.3	493.2	483.5	483.5
62.5°	439.4	436.4	438.6	432.2	431.1
65°	363.6	360.9	365.0	362.3	362.3
67.5°	303.7	303.7	306.2	305.1	305.1
70°	270.3	270.3	271.7	271.7	271.7
72.5°	240.2	239.1	242.7	242.7	241.6
75°	196.5	196.5	196.5	197.8	197.8
77.5°	153.0	153.3	154.4	154.1	153.0
80°	124.0	125.4	125.4	124.0	124.0
82.5°	95.0	96.4	96.4	96.1	95.0
85°	50.2	52.9	55.7	55.7	55.7
87.5°	15.1	20.5	26.0	26.2	24.9
90°	2.8	8.4	18.5	19.9	18.5
92.5°	40.4	147.4	290.8	126.2	91.4
95°	95.4	334.9	1022.4	529.1	314.7
97.5°	153.2	384.1	1593.7	1318.9	968.6
100°	196.5	404.0	1771.4	1847.4	1493.7
102.5°	236.4	431.6	1834.1	2248.1	1983.6
105°	309.0	477.5	1844.0	2720.1	2608.7
107.5°	376.2	529.9	1763.4	3014.5	3051.5
110°	428.6	567.8	1691.7	3093.6	3250.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	475.3	605.6	1625.6	3077.8	3342.0
115°	544.0	665.1	1529.3	2960.5	3342.0
117.5°	611.2	724.8	1465.8	2781.4	3213.9
120°	652.2	763.6	1428.2	2652.9	3094.3
122.5°	690.9	800.1	1405.4	2515.1	2959.8
125°	744.7	853.3	1378.4	2326.0	2732.6
127.5°	794.3	900.9	1362.4	2171.7	2529.2
130°	821.6	931.6	1355.6	2076.4	2399.4
132.5°	850.1	959.0	1348.8	1990.3	2287.7
135°	892.8	998.6	1341.4	1878.1	2126.0
137.5°	935.8	1035.8	1335.1	1787.1	1989.0
140°	965.4	1058.7	1332.8	1728.5	1908.1
142.5°	993.9	1081.6	1328.3	1675.6	1832.9
145°	1038.1	1116.0	1322.9	1607.6	1730.1
147.5°	1078.2	1147.3	1316.6	1546.0	1640.1
150°	1107.8	1169.1	1314.3	1512.5	1587.7
152.5°	1135.2	1188.6	1313.2	1481.5	1543.3
155°	1171.9	1217.9	1311.5	1442.1	1489.5
157.5°	1210.1	1242.1	1311.7	1414.7	1445.9
160°	1231.7	1258.2	1312.9	1397.4	1419.7
162.5°	1248.8	1270.8	1314.0	1383.6	1400.3
165°	1275.9	1288.4	1317.2	1368.6	1375.5
167.5°	1294.4	1303.0	1317.4	1355.7	1359.0
170°	1305.8	1309.9	1318.6	1349.9	1349.9
172.5°	1314.9	1315.7	1318.6	1343.1	1341.9
175°	1324.3	1322.9	1318.6	1335.6	1332.8
177.5°	1327.4	1324.1	1318.3	1329.6	1326.3
180°	1322.9	1322.9	1322.9	1322.9	1322.9

(END OF REPORT)