

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: P565166

Luminaire Tested: **SQ4-PW1-150U-100D-940-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P565166  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-PW1-150U-100D-940-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

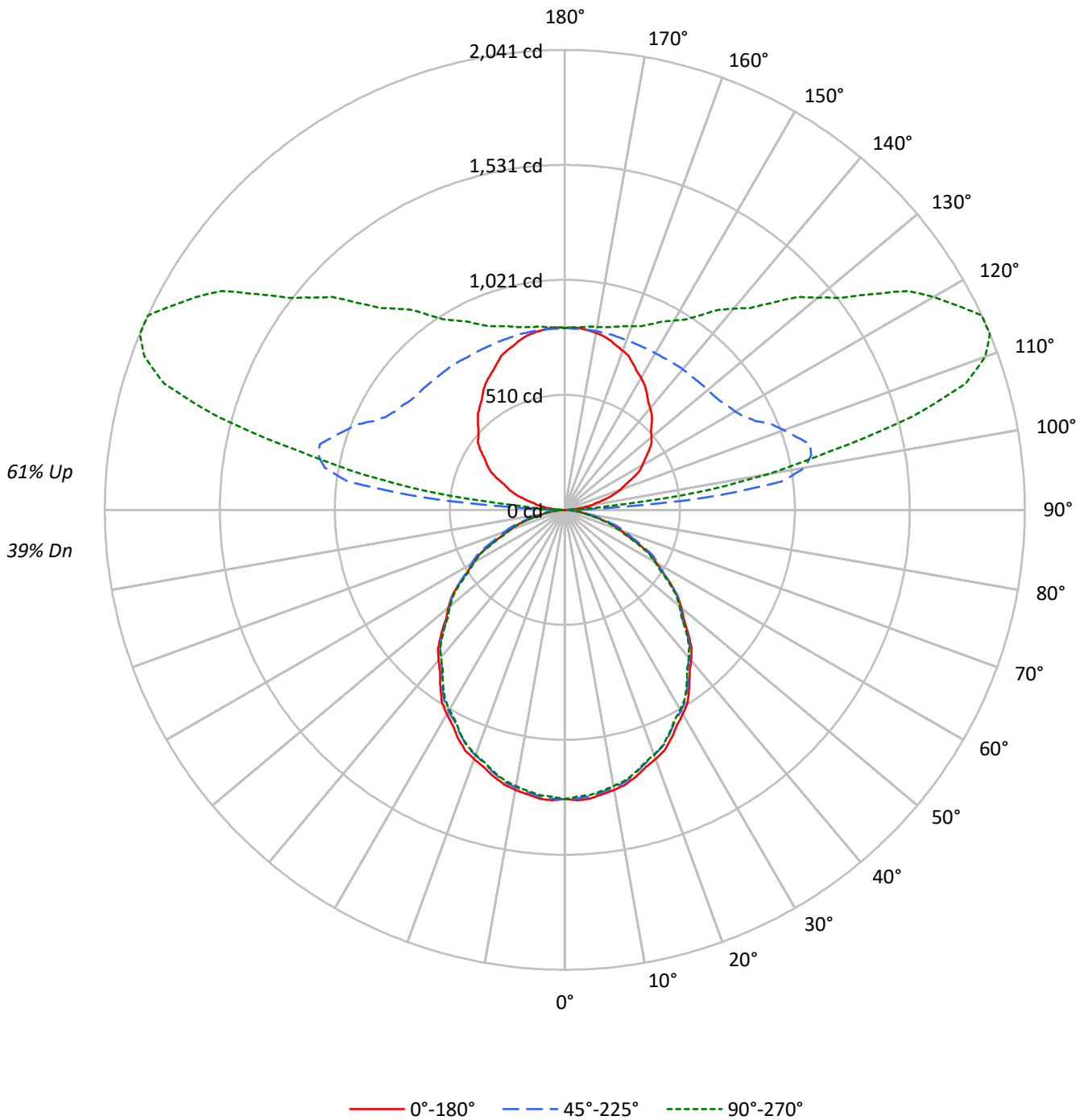
Lumens per Lamp: N/A  
Luminaire Lumens: 8473.4 lumens  
Efficiency: N/A  
Efficacy: 117.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 72.3  
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	68	65	63	53	52	51	40	39	39	33
2	87	80	74	69	79	73	67	63	59	56	52	47	44	42	36	34	33	27
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28	23
4	72	62	54	48	66	57	50	45	46	41	38	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	27	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	29	25	27	23	20	21	18	16	14
8	52	40	33	27	47	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

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

	0°	45°	90°
0°	11836	11836	11836
5°	11913	11819	11767
10°	11818	11723	11659
15°	11692	11563	11520
20°	11553	11376	11353
25°	11391	11185	11150
30°	11151	10983	10910
35°	10834	10681	10618
40°	10496	10333	10292
45°	10087	9955	9911
50°	9670	9588	9523
55°	9219	9219	9072
60°	8656	8822	8510
65°	7920	8315	7724
70°	6981	7653	6801
75°	5964	6851	5803
80°	4622	5765	4686
85°	2996	4425	3949



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.8	1.4
10°-20°	341.1	4.0
20°-30°	505.9	6.0
30°-40°	592.0	7.0
40°-50°	589.3	7.0
50°-60°	508.9	6.0
60°-70°	366.3	4.3
70°-80°	192.1	2.3
80°-90°	49.3	0.6
90°-100°	375.4	4.4
100°-110°	1014.9	12.0
110°-120°	1067.1	12.6
120°-130°	866.7	10.2
130°-140°	679.9	8.0
140°-150°	521.8	6.2
150°-160°	375.3	4.4
160°-170°	229.3	2.7
170°-180°	77.3	0.9
0°-30°	967.8	11.4
0°-40°	1559.8	18.4
0°-60°	2658.0	31.4
0°-90°	3265.8	38.5
90°-120°	2457.4	29.0
90°-150°	4525.8	53.4
90°-180°	5208.0	61.5
0°-180°	8473.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1286	1272	1276	1273	1270	122
15°	1224	1209	1211	1208	1206	345
25°	1119	1100	1099	1092	1095	515
35°	962	949	948	939	943	601
45°	773	766	763	761	760	597
55°	573	572	573	565	564	511
65°	363	374	381	366	354	360
75°	167	183	192	179	163	179
85°	28	37	42	40	37	37
90°	2	5	11	12	11	5
95°	58	204	624	323	192	61
105°	189	292	1126	1661	1593	199
115°	332	406	934	1808	2041	328
125°	455	521	842	1420	1668	405
135°	545	610	819	1147	1298	421
145°	634	681	808	982	1056	397
155°	716	744	801	880	909	330
165°	779	787	804	836	840	219
175°	809	808	805	816	814	77
180°	808	808	808	808	808	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1282.9	1282.9	1282.9	1282.9	1282.9
2.5°	1290.2	1279.6	1282.9	1280.1	1273.9
5°	1286.3	1271.9	1276.1	1272.7	1270.5
7.5°	1273.2	1259.9	1263.0	1259.4	1258.1
10°	1261.5	1248.2	1251.3	1246.7	1244.5
12.5°	1247.9	1233.7	1236.8	1232.3	1230.9
15°	1224.1	1208.7	1210.6	1208.3	1206.1
17.5°	1196.6	1180.9	1181.2	1177.6	1177.1
20°	1176.7	1160.1	1158.6	1154.1	1156.3
22.5°	1155.0	1137.5	1136.0	1129.7	1132.8
25°	1119.0	1100.2	1098.7	1092.0	1095.3
27.5°	1077.4	1058.9	1058.9	1049.5	1053.0
30°	1046.7	1029.0	1030.9	1019.7	1024.1
32.5°	1014.1	998.2	999.2	988.0	992.4
35°	961.9	948.6	948.3	939.4	942.7
37.5°	908.6	896.8	895.0	889.8	890.7
40°	871.5	861.5	857.9	854.5	854.5
42.5°	832.6	823.5	819.9	817.4	816.6
45°	773.1	766.5	763.0	760.7	759.6
47.5°	714.4	708.2	705.1	703.5	702.4
50°	673.7	669.3	668.0	664.6	663.5
52.5°	633.0	630.3	629.1	624.8	623.7
55°	573.1	572.0	573.1	565.1	564.0
57.5°	510.7	512.5	516.1	505.4	502.8
60°	469.1	473.5	478.1	465.6	461.2
62.5°	426.6	433.7	440.2	425.8	419.6
65°	362.8	373.9	380.9	366.0	353.8
67.5°	301.3	315.1	323.5	307.4	293.7
70°	258.8	274.3	283.7	267.5	252.1
72.5°	221.8	239.0	246.6	231.4	215.9
75°	167.3	182.8	192.2	179.3	162.8
77.5°	118.7	133.3	141.1	129.9	116.2
80°	87.0	102.5	108.5	99.2	88.2
82.5°	61.7	74.5	78.7	73.1	65.6
85°	28.3	37.1	41.8	39.5	37.3
87.5°	7.6	14.5	19.4	19.6	20.3
90°	1.7	5.1	11.3	12.2	11.3
92.5°	24.7	90.0	177.5	77.1	55.8
95°	58.3	204.5	624.3	323.1	192.1
97.5°	93.6	234.5	973.1	805.3	591.4
100°	120.0	246.6	1081.6	1128.0	912.0
102.5°	144.3	263.5	1119.8	1372.6	1211.1
105°	188.7	291.5	1125.9	1660.8	1592.8
107.5°	229.7	323.6	1076.7	1840.6	1863.2
110°	261.7	346.7	1032.9	1888.9	1984.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	290.2	369.8	992.6	1879.2	2040.6
115°	332.1	406.1	933.8	1807.6	2040.6
117.5°	373.2	442.5	895.0	1698.3	1962.3
120°	398.2	466.2	872.0	1619.8	1889.3
122.5°	421.9	488.5	858.1	1535.7	1807.2
125°	454.7	521.0	841.6	1420.2	1668.5
127.5°	485.0	550.1	831.9	1326.0	1544.3
130°	501.7	568.8	827.7	1267.8	1465.0
132.5°	519.1	585.5	823.5	1215.3	1396.8
135°	545.1	609.7	819.0	1146.7	1298.1
137.5°	571.4	632.4	815.2	1091.2	1214.4
140°	589.5	646.4	813.8	1055.4	1165.0
142.5°	606.9	660.4	811.0	1023.1	1119.1
145°	633.8	681.4	807.7	981.6	1056.4
147.5°	658.3	700.5	803.9	944.0	1001.4
150°	676.4	713.8	802.5	923.5	969.4
152.5°	693.1	725.8	801.8	904.6	942.3
155°	715.5	743.6	800.8	880.5	909.4
157.5°	738.8	758.4	800.9	863.8	882.8
160°	752.1	768.2	801.6	853.2	866.8
162.5°	762.5	775.9	802.3	844.8	855.0
165°	779.0	786.7	804.2	835.6	839.9
167.5°	790.3	795.6	804.4	827.8	829.8
170°	797.3	799.8	805.1	824.2	824.2
172.5°	802.8	803.3	805.1	820.0	819.4
175°	808.6	807.7	805.1	815.5	813.8
177.5°	810.5	808.4	804.9	811.8	809.8
180°	807.7	807.7	807.7	807.7	807.7

(END OF REPORT)