

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: P564431

Luminaire Tested: **SQ4-PR1-150U-050D-835-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564431  
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-050D-835-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

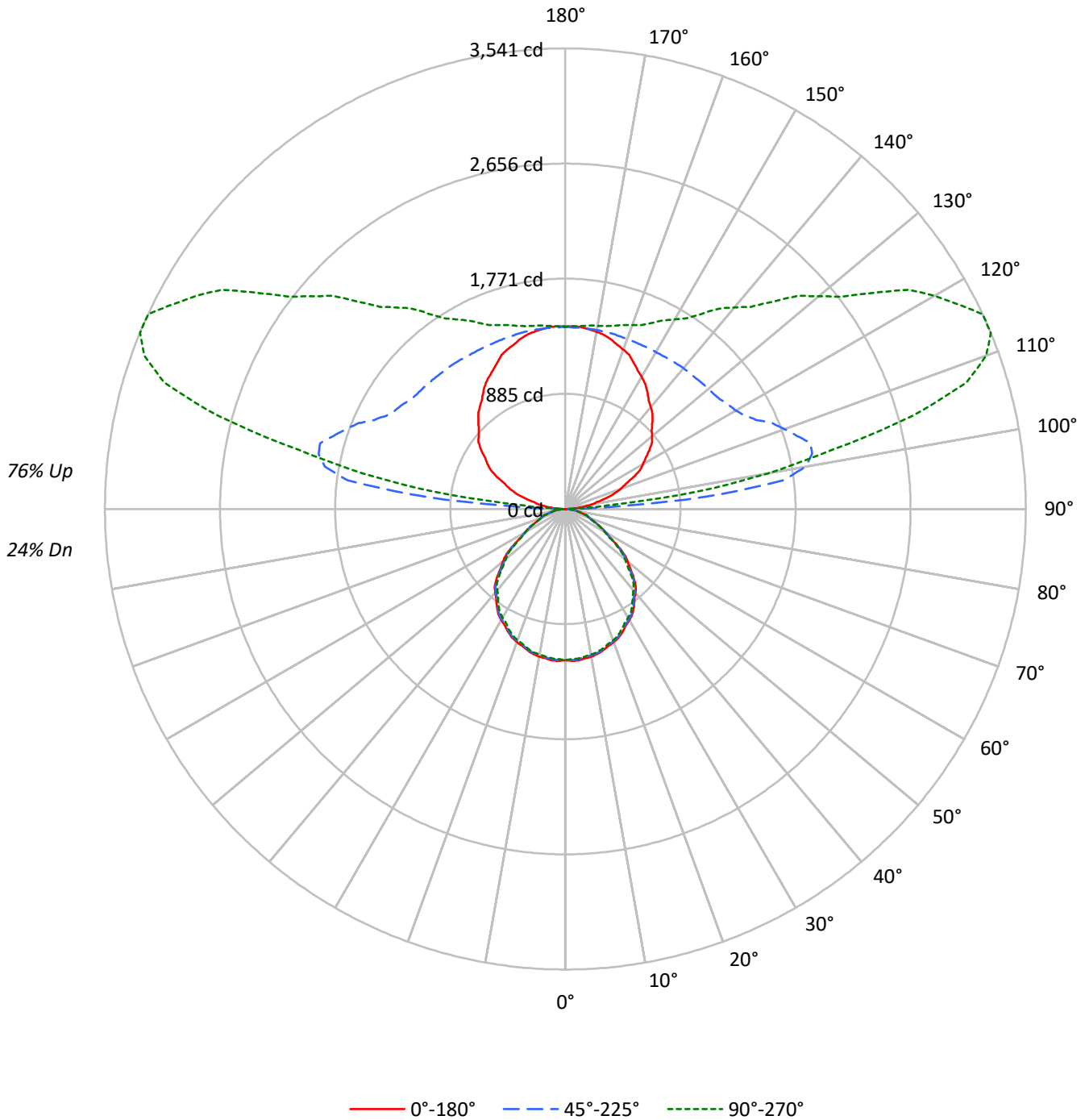
Lumens per Lamp: N/A  
Luminaire Lumens: 11945.6 lumens  
Efficiency: N/A  
Efficacy: 142.0 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 84.1  
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24
1	92	88	84	81	82	78	75	73	61	59	57	44	43	42	29	28	28	21
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	61	55	50	47	43	40	34	32	30	23	21	20	15
4	70	60	52	47	62	54	47	42	42	37	34	31	28	25	20	19	17	13
5	64	53	46	40	57	48	41	36	37	33	29	28	24	22	18	17	15	11
6	59	48	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13	10
7	54	43	35	30	48	38	32	27	30	26	22	22	19	17	15	13	12	9
8	50	39	31	26	45	35	28	24	27	23	19	20	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7
10	44	32	25	21	39	29	23	19	23	19	15	17	14	12	12	10	9	7

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

	0°	45°	90°
0°	7152	7152	7152
5°	7216	7160	7123
10°	7193	7143	7106
15°	7162	7117	7079
20°	7125	7080	7027
25°	7076	7028	6946
30°	6999	6950	6849
35°	6896	6836	6738
40°	6739	6666	6545
45°	6464	6351	6220
50°	5980	5836	5721
55°	5219	5101	4994
60°	4398	4361	4275
65°	3804	3819	3790
70°	3494	3512	3512
75°	3356	3356	3379
80°	3156	3191	3156
85°	2548	2830	2830



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.0	0.9
10°-20°	314.6	2.6
20°-30°	474.5	4.0
30°-40°	565.4	4.7
40°-50°	557.4	4.7
50°-60°	426.0	3.6
60°-70°	263.6	2.2
70°-80°	149.7	1.3
80°-90°	48.5	0.4
90°-100°	651.3	5.5
100°-110°	1761.1	14.7
110°-120°	1851.5	15.5
120°-130°	1503.9	12.6
130°-140°	1179.7	9.9
140°-150°	905.4	7.6
150°-160°	651.2	5.5
160°-170°	397.8	3.3
170°-180°	134.1	1.1
0°-30°	899.0	7.5
0°-40°	1464.4	12.3
0°-60°	2447.8	20.5
0°-90°	2909.6	24.4
90°-120°	4263.9	35.7
90°-150°	7852.9	65.7
90°-180°	9036.0	75.6
0°-180°	11945.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1163	1163	1163	1163	1163	
5°	1169	1156	1160	1156	1154	111
15°	1125	1113	1118	1114	1112	317
25°	1043	1030	1036	1024	1024	480
35°	918	908	910	898	897	573
45°	743	733	730	717	715	569
55°	487	479	476	468	466	436
65°	261	259	262	260	260	265
75°	141	141	141	142	142	149
85°	36	38	40	40	40	42
90°	3	9	20	21	20	8
95°	101	355	1083	561	333	106
105°	327	506	1954	2882	2764	345
115°	576	705	1620	3136	3541	569
125°	789	904	1460	2464	2895	703
135°	946	1058	1421	1990	2252	731
145°	1100	1182	1402	1703	1833	688
155°	1242	1290	1389	1528	1578	573
165°	1352	1365	1396	1450	1457	381
175°	1403	1402	1397	1415	1412	133
180°	1402	1402	1402	1402	1402	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1162.7	1162.7	1162.7	1162.7	1162.7
2.5°	1169.9	1159.8	1162.7	1160.2	1154.7
5°	1168.7	1156.0	1159.7	1155.7	1153.7
7.5°	1159.7	1147.2	1150.9	1146.9	1145.7
10°	1151.7	1140.0	1143.7	1139.7	1137.7
12.5°	1142.9	1130.4	1134.9	1130.0	1128.1
15°	1124.7	1112.9	1117.7	1113.6	1111.7
17.5°	1104.7	1092.1	1096.8	1092.2	1089.6
20°	1088.6	1076.9	1081.6	1074.6	1073.6
22.5°	1071.0	1059.2	1064.0	1054.6	1054.4
25°	1042.6	1029.8	1035.5	1024.5	1023.5
27.5°	1008.7	997.0	1001.7	990.5	989.3
30°	985.5	973.7	978.5	966.4	964.4
32.5°	959.0	948.1	952.0	940.0	938.8
35°	918.4	907.6	910.4	898.3	897.3
37.5°	872.1	862.3	863.9	850.6	849.7
40°	839.3	829.5	830.2	816.2	815.2
42.5°	803.2	793.4	792.6	778.5	777.6
45°	743.1	733.3	730.1	717.0	715.1
47.5°	674.6	664.8	658.8	648.1	646.8
50°	624.9	615.1	609.9	600.8	597.9
52.5°	571.3	561.5	557.0	548.8	545.8
55°	486.7	478.9	475.7	467.7	465.7
57.5°	406.4	401.1	400.2	392.4	391.6
60°	357.5	354.6	354.5	347.5	347.5
62.5°	315.9	313.7	315.3	310.6	309.9
65°	261.4	259.4	262.4	260.4	260.4
67.5°	218.3	218.3	220.1	219.3	219.3
70°	194.3	194.3	195.3	195.3	195.3
72.5°	172.7	171.9	174.5	174.4	173.7
75°	141.2	141.2	141.2	142.2	142.2
77.5°	110.0	110.2	111.0	110.7	110.0
80°	89.1	90.1	90.1	89.1	89.1
82.5°	68.3	69.3	69.3	69.1	68.3
85°	36.1	38.0	40.1	40.1	40.1
87.5°	11.0	15.3	19.9	20.2	19.1
90°	3.0	8.9	19.6	21.1	19.6
92.5°	42.8	156.1	308.1	133.7	96.9
95°	101.1	354.8	1083.2	560.6	333.4
97.5°	162.3	406.9	1688.4	1397.3	1026.2
100°	208.2	428.0	1876.7	1957.2	1582.5
102.5°	250.4	457.2	1943.1	2381.7	2101.5
105°	327.4	505.9	1953.6	2881.8	2763.8
107.5°	398.6	561.4	1868.3	3193.7	3232.9
110°	454.1	601.6	1792.2	3277.5	3444.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	503.6	641.6	1722.2	3260.7	3540.7
115°	576.3	704.6	1620.2	3136.5	3540.7
117.5°	647.5	767.9	1553.0	2946.8	3404.9
120°	690.9	808.9	1513.1	2810.6	3278.2
122.5°	732.0	847.6	1489.0	2664.6	3135.8
125°	789.0	904.1	1460.3	2464.3	2895.0
127.5°	841.5	954.5	1443.4	2300.8	2679.6
130°	870.5	987.0	1436.2	2199.8	2542.0
132.5°	900.6	1016.0	1428.9	2108.6	2423.7
135°	945.9	1058.0	1421.1	1989.8	2252.3
137.5°	991.5	1097.4	1414.5	1893.3	2107.2
140°	1022.8	1121.7	1412.1	1831.2	2021.5
142.5°	1053.0	1145.9	1407.2	1775.2	1941.9
145°	1099.8	1182.4	1401.5	1703.1	1833.0
147.5°	1142.3	1215.5	1394.9	1637.9	1737.6
150°	1173.7	1238.6	1392.4	1602.4	1682.1
152.5°	1202.7	1259.3	1391.2	1569.5	1635.0
155°	1241.6	1290.3	1389.4	1527.8	1578.0
157.5°	1282.0	1315.9	1389.7	1498.8	1531.8
160°	1304.9	1333.0	1390.9	1480.5	1504.1
162.5°	1323.0	1346.3	1392.1	1465.9	1483.6
165°	1351.7	1365.0	1395.5	1449.9	1457.3
167.5°	1371.3	1380.5	1395.8	1436.3	1439.8
170°	1383.4	1387.8	1397.0	1430.2	1430.2
172.5°	1393.0	1393.9	1397.0	1422.9	1421.7
175°	1403.0	1401.5	1397.0	1415.0	1412.1
177.5°	1406.3	1402.8	1396.7	1408.7	1405.1
180°	1401.5	1401.5	1401.5	1401.5	1401.5

(END OF REPORT)