

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: P520393

Luminaire Tested: **SQ4-F-150U-075D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520393  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-075D-835-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

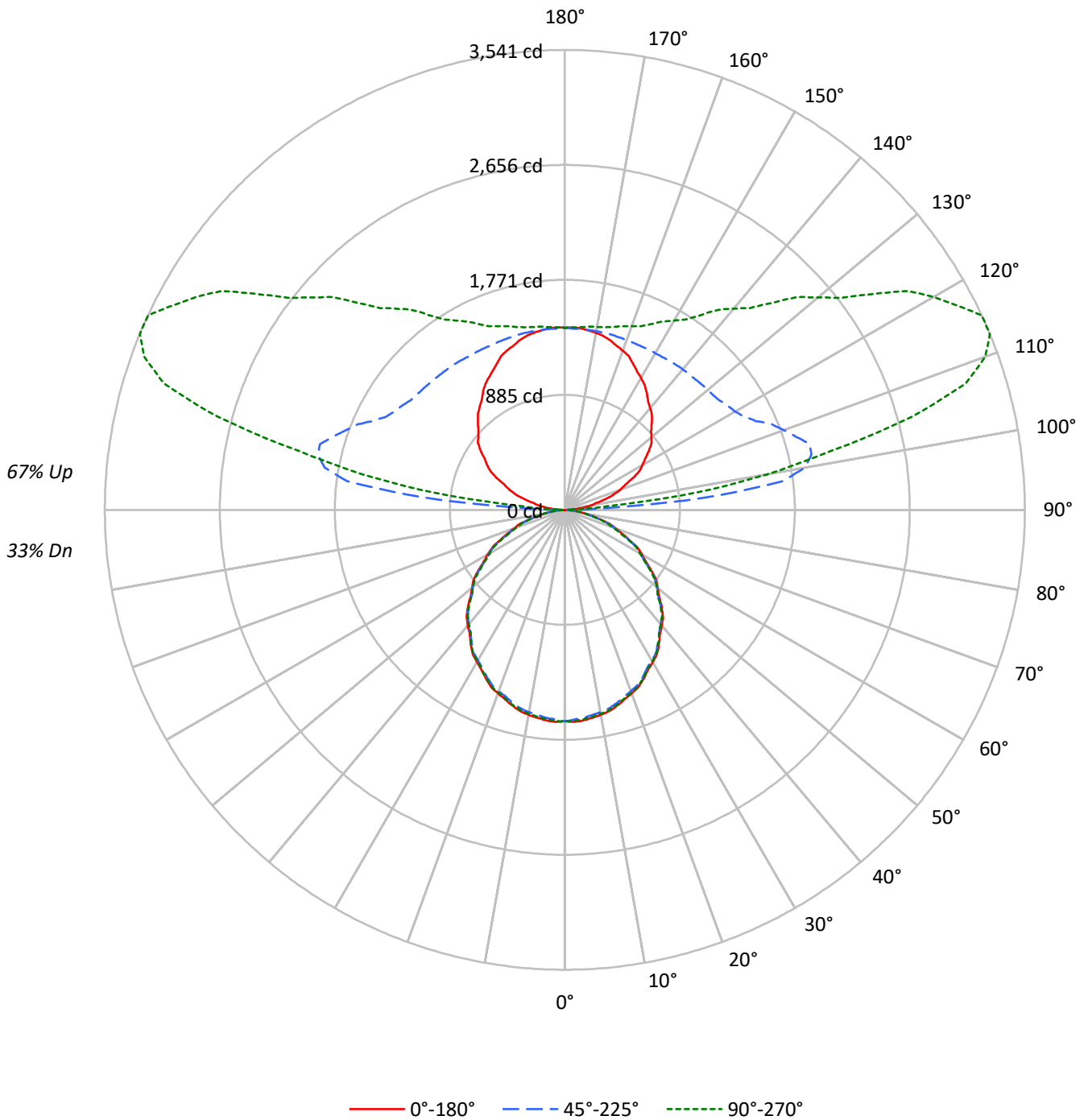
Lumens per Lamp: N/A  
Luminaire Lumens: 13483.4 lumens  
Efficiency: N/A  
Efficacy: 139.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 96.9  
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	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	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	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	13	10
9	48	36	28	23	43	33	26	22	26	22	18	21	17	15	15	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°	10014	10014	10014
5°	10052	9925	9998
10°	10012	9883	9957
15°	9935	9813	9897
20°	9845	9729	9807
25°	9737	9637	9707
30°	9614	9509	9561
35°	9487	9387	9432
40°	9328	9233	9221
45°	9167	9052	9078
50°	8913	8842	8842
55°	8706	8595	8516
60°	8425	8280	8208
65°	7970	7820	7712
70°	7487	7300	7114
75°	6735	6490	6350
80°	5384	5281	5228
85°	3232	3649	3747



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.7	1.1
10°-20°	437.5	3.2
20°-30°	657.3	4.9
30°-40°	784.3	5.8
40°-50°	804.3	6.0
50°-60°	716.7	5.3
60°-70°	534.4	4.0
70°-80°	289.8	2.1
80°-90°	69.5	0.5
90°-100°	651.3	4.8
100°-110°	1761.0	13.1
110°-120°	1851.5	13.7
120°-130°	1503.9	11.2
130°-140°	1179.7	8.7
140°-150°	905.4	6.7
150°-160°	651.2	4.8
160°-170°	397.8	3.0
170°-180°	134.1	1.0
0°-30°	1248.5	9.3
0°-40°	2032.8	15.1
0°-60°	3553.9	26.4
0°-90°	4447.6	33.0
90°-120°	4263.8	31.6
90°-150°	7852.8	58.2
90°-180°	9036.0	67.0
0°-180°	13483.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1628	1628	1628	1628	1628	
5°	1628	1625	1608	1621	1619	154
15°	1560	1557	1541	1553	1554	440
25°	1435	1433	1420	1428	1430	661
35°	1264	1261	1250	1250	1256	789
45°	1054	1050	1041	1041	1044	811
55°	812	810	802	794	794	725
65°	548	548	537	531	530	545
75°	283	278	273	269	267	298
85°	46	49	52	52	53	63
90°	3	9	20	21	20	8
95°	101	355	1083	560	333	106
105°	327	506	1954	2882	2764	345
115°	576	705	1620	3137	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	1390	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°	1628.1	1628.1	1628.1	1628.1	1628.1
2.5°	1634.0	1630.6	1616.3	1628.1	1626.9
5°	1628.1	1625.3	1607.5	1620.7	1619.3
7.5°	1614.8	1611.7	1594.2	1607.5	1607.2
10°	1603.0	1598.7	1582.4	1595.7	1594.2
12.5°	1587.7	1583.4	1567.0	1580.3	1578.8
15°	1560.2	1557.4	1541.0	1552.8	1554.3
17.5°	1528.9	1523.4	1508.9	1520.4	1521.9
20°	1504.1	1499.8	1486.4	1496.8	1498.2
22.5°	1478.2	1473.8	1460.4	1470.8	1472.3
25°	1434.8	1433.3	1420.0	1427.5	1430.3
27.5°	1387.8	1383.8	1373.1	1378.8	1381.6
30°	1353.6	1350.7	1338.8	1343.3	1346.2
32.5°	1318.1	1316.4	1305.8	1307.9	1312.0
35°	1263.5	1260.7	1250.2	1250.3	1256.2
37.5°	1203.0	1199.9	1191.2	1189.8	1192.1
40°	1161.7	1157.4	1149.9	1148.4	1148.4
42.5°	1119.2	1116.0	1106.2	1103.6	1107.1
45°	1053.9	1049.6	1040.6	1040.7	1043.6
47.5°	983.4	981.6	971.3	966.5	967.7
50°	931.4	934.3	924.0	918.2	924.0
52.5°	886.5	884.8	875.6	869.8	872.1
55°	811.9	810.4	801.5	794.1	794.1
57.5°	736.9	733.1	723.9	718.4	722.7
60°	684.9	683.4	673.1	662.9	667.2
62.5°	632.9	630.4	620.0	613.3	616.4
65°	547.6	547.6	537.3	531.4	529.9
67.5°	472.9	466.1	460.2	453.2	451.1
70°	416.3	410.5	405.9	399.9	395.6
72.5°	360.8	357.3	350.4	344.5	343.6
75°	283.4	277.6	273.1	268.6	267.2
77.5°	201.6	200.5	196.3	194.0	194.8
80°	152.0	152.0	149.1	149.1	147.6
82.5°	107.2	108.3	107.8	105.4	105.1
85°	45.8	48.6	51.7	51.7	53.1
87.5°	8.9	15.7	16.8	17.1	16.8
90°	3.0	9.0	19.6	21.1	19.6
92.5°	42.9	156.1	308.0	133.7	96.9
95°	101.1	354.8	1083.1	560.5	333.4
97.5°	162.4	406.9	1688.4	1397.3	1026.1
100°	208.1	427.9	1876.7	1957.1	1582.5
102.5°	250.4	457.2	1943.1	2381.8	2101.5
105°	327.3	505.8	1953.6	2881.7	2763.7
107.5°	398.6	561.4	1868.2	3193.7	3232.9
110°	454.1	601.6	1792.3	3277.4	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	3136.6	3540.7
117.5°	647.5	767.9	1552.9	2946.7	3405.0
120°	690.9	808.9	1513.1	2810.6	3278.2
122.5°	732.0	847.6	1489.0	2664.7	3135.8
125°	789.0	904.1	1460.3	2464.3	2895.0
127.5°	841.5	954.5	1443.4	2300.8	2679.5
130°	870.5	987.0	1436.1	2199.8	2542.0
132.5°	900.7	1015.9	1428.9	2108.6	2423.7
135°	945.9	1058.0	1421.1	1989.7	2252.3
137.5°	991.5	1097.3	1414.4	1893.4	2107.2
140°	1022.8	1121.7	1412.0	1831.2	2021.5
142.5°	1053.0	1145.9	1407.2	1775.2	1941.9
145°	1099.7	1182.3	1401.5	1703.1	1832.9
147.5°	1142.3	1215.4	1394.9	1637.8	1737.6
150°	1173.7	1238.6	1392.5	1602.4	1682.1
152.5°	1202.7	1259.3	1391.3	1569.5	1635.0
155°	1241.6	1290.3	1389.5	1527.9	1578.0
157.5°	1282.0	1315.9	1389.8	1498.8	1531.8
160°	1305.0	1332.9	1391.0	1480.5	1504.1
162.5°	1323.1	1346.3	1392.2	1465.8	1483.5
165°	1351.7	1365.0	1395.5	1449.9	1457.3
167.5°	1371.4	1380.4	1395.8	1436.2	1439.8
170°	1383.4	1387.9	1397.0	1430.1	1430.1
172.5°	1393.1	1393.9	1397.0	1422.9	1421.7
175°	1403.0	1401.5	1397.0	1415.0	1412.0
177.5°	1406.3	1402.7	1396.7	1408.7	1405.1
180°	1401.5	1401.5	1401.5	1401.5	1401.5

(END OF REPORT)