

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: P520417

Luminaire Tested: **SQ4-F-150U-100D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520417  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-100D-835-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

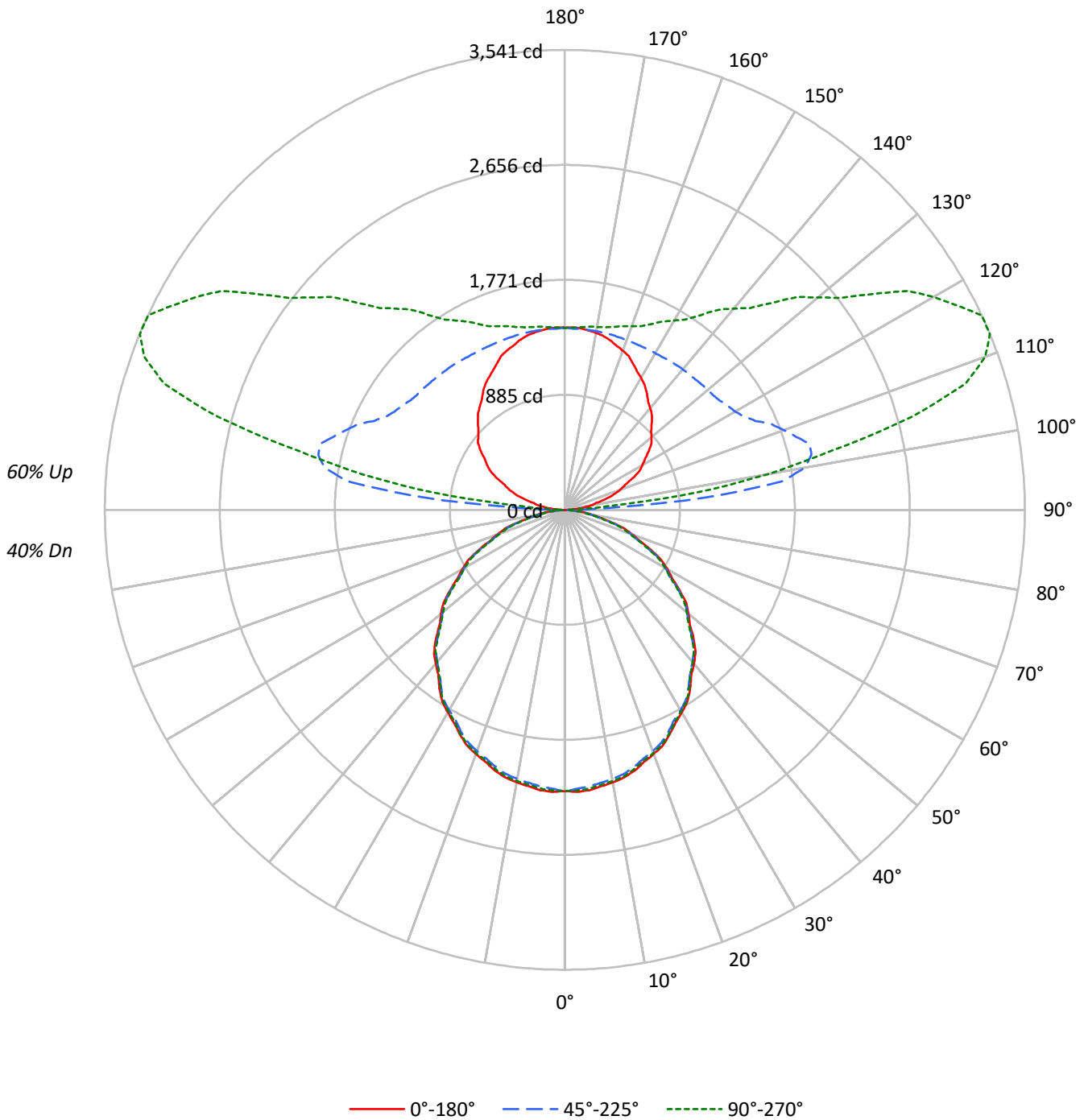
Lumens per Lamp: N/A  
Luminaire Lumens: 14944.9 lumens  
Efficiency: N/A  
Efficacy: 135.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 110.6  
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



TEST NUMBER: P520417  
CATALOG NUMBER: SQ4-F-150U-100D-835-1D-UNV-STD-W-6

### Luminous Intensity Polar Plot





TEST NUMBER: P520417

CATALOG NUMBER: SQ4-F-150U-100D-835-1D-UNV-STD-W-6

**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	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

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

	0°	45°	90°
0°	13319	13319	13319
5°	13379	13196	13297
10°	13311	13144	13246
15°	13231	13051	13155
20°	13094	12939	13045
25°	12951	12800	12901
30°	12793	12656	12720
35°	12633	12477	12543
40°	12423	12279	12291
45°	12204	12036	11997
50°	11889	11747	11719
55°	11539	11411	11332
60°	11190	10988	10952
65°	10642	10405	10317
70°	9889	9648	9461
75°	8831	8548	8370
80°	7265	7003	6687
85°	4298	4721	4827



TEST NUMBER: P520417

CATALOG NUMBER: SQ4-F-150U-100D-835-1D-UNV-STD-W-6

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.4	1.4
10°-20°	582.0	3.9
20°-30°	874.0	5.8
30°-40°	1043.1	7.0
40°-50°	1069.2	7.2
50°-60°	952.1	6.4
60°-70°	709.7	4.7
70°-80°	384.3	2.6
80°-90°	90.4	0.6
90°-100°	651.3	4.4
100°-110°	1761.0	11.8
110°-120°	1851.5	12.4
120°-130°	1503.9	10.1
130°-140°	1179.7	7.9
140°-150°	905.4	6.1
150°-160°	651.2	4.4
160°-170°	397.8	2.7
170°-180°	134.1	0.9
0°-30°	1660.4	11.1
0°-40°	2703.5	18.1
0°-60°	4724.7	31.6
0°-90°	5909.0	39.5
90°-120°	4263.8	28.5
90°-150°	7852.8	52.5
90°-180°	9036.0	60.5
0°-180°	14944.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2165	2165	2165	2165	2165	
5°	2167	2163	2137	2156	2154	205
15°	2078	2070	2050	2066	2066	585
25°	1908	1904	1886	1896	1901	879
35°	1682	1675	1662	1665	1670	1050
45°	1403	1396	1384	1376	1379	1079
55°	1076	1078	1064	1054	1057	963
65°	731	728	715	707	709	723
75°	372	367	360	352	352	396
85°	61	67	67	68	68	85
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	

TEST NUMBER: P520417

CATALOG NUMBER: SQ4-F-150U-100D-835-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2165.4	2165.4	2165.4	2165.4	2165.4
2.5°	2173.8	2169.1	2150.0	2165.3	2163.1
5°	2166.9	2162.6	2137.2	2156.4	2153.6
7.5°	2146.7	2142.4	2120.0	2137.7	2135.1
10°	2131.3	2126.9	2104.5	2122.3	2120.9
12.5°	2111.0	2106.7	2084.3	2102.1	2100.6
15°	2077.8	2070.5	2049.5	2065.9	2065.9
17.5°	2033.8	2028.2	2008.8	2022.5	2022.8
20°	2000.5	1996.1	1976.7	1991.6	1993.0
22.5°	1967.2	1962.8	1941.0	1954.8	1957.4
25°	1908.3	1904.0	1886.0	1896.5	1900.9
27.5°	1847.7	1841.2	1823.6	1832.9	1836.1
30°	1801.3	1798.4	1782.0	1786.6	1790.9
32.5°	1752.6	1749.7	1735.6	1737.9	1745.7
35°	1682.4	1675.2	1661.6	1664.7	1670.5
37.5°	1599.5	1596.0	1582.8	1581.2	1586.7
40°	1547.2	1541.3	1529.3	1526.5	1530.8
42.5°	1490.1	1484.3	1469.9	1467.0	1472.6
45°	1403.0	1395.8	1383.7	1376.4	1379.2
47.5°	1305.5	1305.5	1293.0	1284.5	1288.9
50°	1242.5	1242.5	1227.6	1220.3	1224.7
52.5°	1177.1	1178.3	1162.2	1158.4	1156.9
55°	1076.0	1077.5	1064.1	1053.8	1056.7
57.5°	978.5	975.4	959.8	953.0	954.5
60°	909.6	905.2	893.2	883.0	890.3
62.5°	839.4	837.3	825.5	813.9	813.0
65°	731.2	728.4	714.9	707.4	708.9
67.5°	623.6	620.2	607.9	597.3	601.0
70°	549.9	549.9	536.5	530.5	526.1
72.5°	482.1	476.3	466.4	458.0	454.8
75°	371.6	367.2	359.7	352.2	352.2
77.5°	270.5	266.7	261.9	256.8	255.3
80°	205.1	203.6	197.7	196.0	188.8
82.5°	144.5	144.2	140.6	136.7	136.4
85°	60.9	66.8	66.9	68.4	68.4
87.5°	11.3	19.4	20.5	18.4	18.1
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

TEST NUMBER: P520417

CATALOG NUMBER: SQ4-F-150U-100D-835-1D-UNV-STD-W-6

**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)