

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: P520410

Luminaire Tested: **SQ4-F-150U-075D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520410  
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-940-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

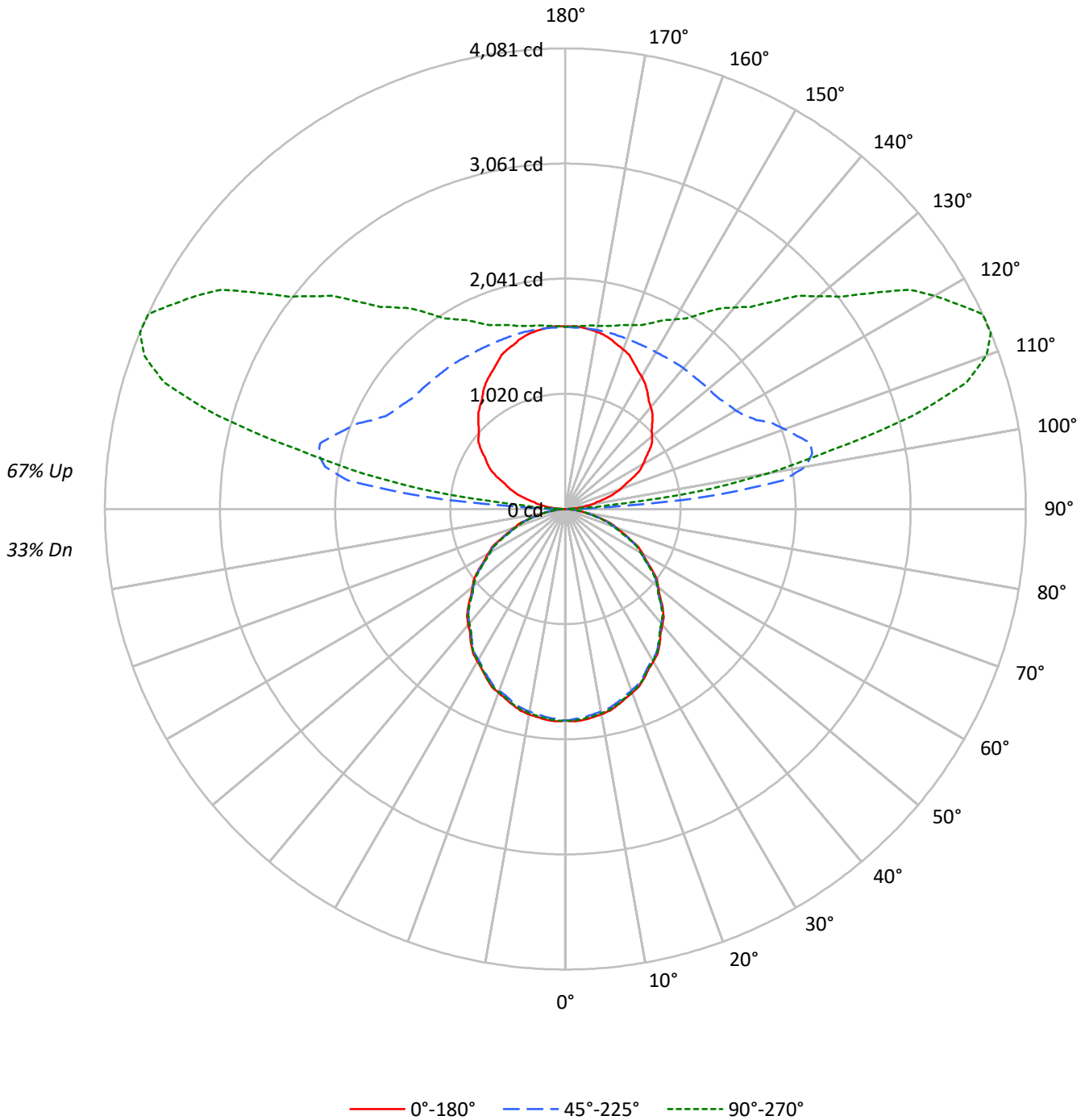
Lumens per Lamp: N/A  
Luminaire Lumens: 15541.6 lumens  
Efficiency: N/A  
Efficacy: 117.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 132.4  
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°	8657	8657	8657
5°	8690	8580	8643
10°	8656	8544	8607
15°	8589	8483	8556
20°	8511	8411	8478
25°	8418	8331	8392
30°	8311	8220	8266
35°	8202	8116	8153
40°	8063	7982	7971
45°	7925	7825	7848
50°	7705	7643	7643
55°	7526	7430	7362
60°	7283	7158	7095
65°	6890	6760	6667
70°	6471	6311	6150
75°	5823	5611	5488
80°	4657	4564	4519
85°	2789	3149	3239



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.1	1.1
10°-20°	504.3	3.2
20°-30°	757.6	4.9
30°-40°	904.0	5.8
40°-50°	927.1	6.0
50°-60°	826.1	5.3
60°-70°	616.0	4.0
70°-80°	334.0	2.1
80°-90°	80.1	0.5
90°-100°	750.7	4.8
100°-110°	2029.9	13.1
110°-120°	2134.1	13.7
120°-130°	1733.5	11.2
130°-140°	1359.8	8.7
140°-150°	1043.6	6.7
150°-160°	750.6	4.8
160°-170°	458.5	3.0
170°-180°	154.6	1.0
0°-30°	1439.1	9.3
0°-40°	2343.1	15.1
0°-60°	4096.3	26.4
0°-90°	5126.4	33.0
90°-120°	4914.7	31.6
90°-150°	9051.6	58.2
90°-180°	10415.0	67.0
0°-180°	15541.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1877	1877	1877	1877	1877	
5°	1877	1873	1853	1868	1866	178
15°	1798	1795	1776	1790	1792	507
25°	1654	1652	1637	1645	1649	762
35°	1456	1453	1441	1441	1448	910
45°	1215	1210	1200	1200	1203	935
55°	936	934	924	915	915	836
65°	631	631	619	612	611	628
75°	327	320	315	310	308	343
85°	53	56	60	60	61	73
90°	4	10	23	24	23	9
95°	116	409	1248	646	384	122
105°	377	583	2252	3322	3186	397
115°	664	812	1868	3615	4081	656
125°	909	1042	1683	2840	3337	811
135°	1090	1220	1638	2294	2596	843
145°	1268	1363	1615	1963	2113	793
155°	1431	1487	1602	1761	1819	660
165°	1558	1573	1608	1671	1680	439
175°	1617	1615	1610	1631	1628	154
180°	1615	1615	1615	1615	1615	



TEST NUMBER: P520410

CATALOG NUMBER: SQ4-F-150U-075D-940-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1876.6	1876.6	1876.6	1876.6	1876.6
2.5°	1883.5	1879.5	1863.0	1876.6	1875.3
5°	1876.6	1873.4	1852.8	1868.1	1866.5
7.5°	1861.4	1857.7	1837.5	1852.8	1852.5
10°	1847.8	1842.8	1823.9	1839.2	1837.5
12.5°	1830.1	1825.0	1806.2	1821.5	1819.8
15°	1798.4	1795.0	1776.2	1789.9	1791.6
17.5°	1762.4	1756.0	1739.1	1752.5	1754.2
20°	1733.7	1728.7	1713.3	1725.3	1726.9
22.5°	1703.8	1698.8	1683.3	1695.3	1697.0
25°	1653.8	1652.1	1636.8	1645.4	1648.7
27.5°	1599.7	1595.0	1582.7	1589.2	1592.5
30°	1560.2	1556.9	1543.2	1548.3	1551.7
32.5°	1519.4	1517.3	1505.0	1507.6	1512.2
35°	1456.4	1453.1	1441.1	1441.3	1447.8
37.5°	1386.6	1383.0	1373.1	1371.4	1374.0
40°	1339.0	1334.0	1325.4	1323.7	1323.7
42.5°	1290.0	1286.4	1275.0	1272.1	1276.0
45°	1214.8	1209.8	1199.5	1199.6	1202.9
47.5°	1133.4	1131.5	1119.6	1114.2	1115.4
50°	1073.6	1077.0	1065.0	1058.5	1065.0
52.5°	1021.8	1019.9	1009.3	1002.6	1005.2
55°	935.7	934.1	923.8	915.4	915.4
57.5°	849.3	845.0	834.4	828.0	833.0
60°	789.4	787.7	775.8	764.0	769.0
62.5°	729.6	726.5	714.6	706.9	710.5
65°	631.2	631.2	619.3	612.5	610.8
67.5°	545.2	537.1	530.5	522.2	520.0
70°	479.8	473.1	467.9	460.9	456.0
72.5°	415.9	411.8	404.0	397.1	396.1
75°	326.7	320.0	314.8	309.6	307.9
77.5°	232.4	231.1	226.3	223.6	224.6
80°	175.3	175.3	171.8	171.8	170.1
82.5°	123.5	124.9	124.2	121.4	121.1
85°	52.7	56.1	59.5	59.6	61.2
87.5°	10.2	18.2	19.4	19.7	19.4
90°	3.5	10.3	22.6	24.3	22.6
92.5°	49.4	180.0	355.1	154.1	111.7
95°	116.5	408.9	1248.5	646.1	384.3
97.5°	187.1	469.0	1946.2	1610.6	1182.7
100°	239.9	493.3	2163.2	2255.9	1824.1
102.5°	288.6	527.0	2239.6	2745.3	2422.2
105°	377.3	583.1	2251.8	3321.7	3185.7
107.5°	459.4	647.2	2153.4	3681.2	3726.4
110°	523.4	693.4	2065.8	3777.7	3969.8



TEST NUMBER: P520410

CATALOG NUMBER: SQ4-F-150U-075D-940-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	580.5	739.6	1985.1	3758.5	4081.2
115°	664.3	812.1	1867.5	3615.3	4081.2
117.5°	746.3	885.1	1790.0	3396.5	3924.7
120°	796.4	932.4	1744.1	3239.6	3778.6
122.5°	843.7	977.0	1716.3	3071.4	3614.4
125°	909.4	1042.0	1683.2	2840.4	3336.9
127.5°	970.0	1100.1	1663.8	2652.0	3088.6
130°	1003.4	1137.7	1655.5	2535.6	2930.0
132.5°	1038.1	1171.1	1647.1	2430.5	2793.7
135°	1090.3	1219.5	1638.0	2293.5	2596.1
137.5°	1142.8	1264.8	1630.4	2182.3	2428.9
140°	1178.9	1292.9	1627.6	2110.8	2330.1
142.5°	1213.7	1320.9	1622.1	2046.2	2238.3
145°	1267.6	1362.8	1615.4	1963.1	2112.8
147.5°	1316.6	1401.0	1607.8	1887.9	2002.8
150°	1352.9	1427.7	1605.0	1847.0	1938.8
152.5°	1386.2	1451.5	1603.5	1809.1	1884.6
155°	1431.1	1487.3	1601.5	1761.1	1818.8
157.5°	1477.7	1516.8	1601.8	1727.6	1765.6
160°	1504.2	1536.4	1603.2	1706.5	1733.6
162.5°	1525.0	1551.8	1604.6	1689.7	1710.0
165°	1558.1	1573.4	1608.5	1671.2	1679.8
167.5°	1580.6	1591.2	1608.8	1655.6	1659.6
170°	1594.6	1599.6	1610.2	1648.4	1648.4
172.5°	1605.7	1606.7	1610.2	1640.1	1638.8
175°	1617.1	1615.4	1610.2	1631.0	1627.6
177.5°	1620.9	1616.9	1609.9	1623.7	1619.6
180°	1615.4	1615.4	1615.4	1615.4	1615.4

(END OF REPORT)