

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: P520207

Luminaire Tested: **SQ4-F-100U-075D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520207
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-075D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

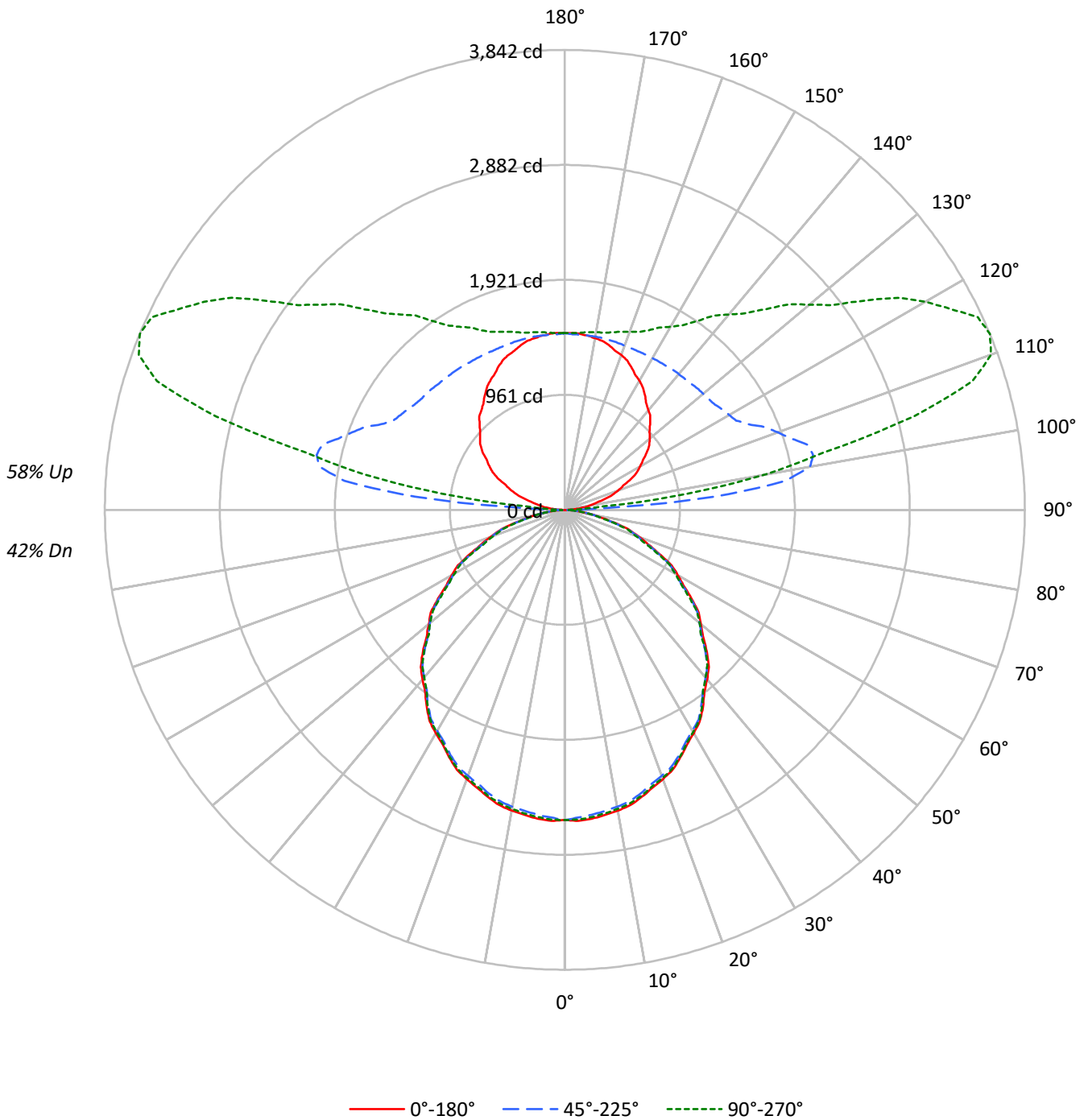
Lumens per Lamp: N/A
Luminaire Lumens: 16664.8 lumens
Efficiency: N/A
Efficacy: 106.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 156
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	42	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25	22
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	19
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	22	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	20	18	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7969	7969	7969
5°	7999	7898	7956
10°	7967	7865	7923
15°	7906	7809	7876
20°	7834	7742	7804
25°	7748	7669	7725
30°	7650	7567	7608
35°	7550	7470	7506
40°	7423	7347	7338
45°	7295	7203	7224
50°	7093	7036	7036
55°	6928	6840	6776
60°	6704	6589	6531
65°	6343	6223	6137
70°	5957	5809	5661
75°	5360	5164	5052
80°	4286	4203	4160
85°	2569	2904	2982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.6	1.5
10°-20°	696.3	4.2
20°-30°	1046.1	6.3
30°-40°	1248.2	7.5
40°-50°	1280.1	7.7
50°-60°	1140.7	6.8
60°-70°	850.5	5.1
70°-80°	461.2	2.8
80°-90°	109.0	0.7
90°-100°	691.0	4.1
100°-110°	1907.8	11.4
110°-120°	1967.5	11.8
120°-130°	1581.1	9.5
130°-140°	1242.6	7.5
140°-150°	953.0	5.7
150°-160°	684.9	4.1
160°-170°	418.9	2.5
170°-180°	141.2	0.8
0°-30°	1987.0	11.9
0°-40°	3235.2	19.4
0°-60°	5656.0	33.9
0°-90°	7076.8	42.5
90°-120°	4566.4	27.4
90°-150°	8343.0	50.1
90°-180°	9588.0	57.5
0°-180°	16664.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2591	2591	2591	2591	2591	
5°	2591	2587	2558	2579	2577	246
15°	2483	2479	2453	2472	2474	700
25°	2283	2281	2260	2272	2276	1052
35°	2011	2006	1990	1990	1999	1256
45°	1677	1670	1656	1656	1661	1291
55°	1292	1290	1276	1264	1264	1154
65°	872	872	855	846	843	868
75°	451	442	435	428	425	474
85°	73	77	82	82	84	101
90°	5	9	19	21	24	9
95°	102	374	1254	515	335	109
105°	340	525	2099	3204	3017	362
115°	609	736	1690	3347	3806	599
125°	836	951	1532	2593	3043	744
135°	1006	1114	1490	2100	2368	778
145°	1166	1247	1471	1788	1924	730
155°	1315	1359	1459	1604	1655	606
165°	1424	1442	1466	1523	1535	401
175°	1476	1478	1469	1490	1485	140
180°	1476	1476	1476	1476	1476	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2591.2	2591.2	2591.2	2591.2	2591.2
2.5°	2600.6	2595.1	2572.4	2591.1	2589.3
5°	2591.2	2586.6	2558.3	2579.4	2577.1
7.5°	2570.1	2565.0	2537.1	2558.3	2557.9
10°	2551.3	2544.4	2518.4	2539.5	2537.1
12.5°	2526.8	2519.9	2493.9	2515.1	2512.7
15°	2483.1	2478.6	2452.6	2471.5	2473.7
17.5°	2433.3	2424.6	2401.4	2419.7	2422.1
20°	2393.8	2386.9	2365.7	2382.1	2384.5
22.5°	2352.5	2345.6	2324.4	2340.8	2343.1
25°	2283.4	2281.2	2260.0	2271.8	2276.4
27.5°	2208.7	2202.3	2185.2	2194.3	2198.9
30°	2154.2	2149.7	2130.8	2137.9	2142.5
32.5°	2097.8	2095.1	2078.1	2081.6	2088.0
35°	2010.9	2006.3	1989.8	1990.0	1999.2
37.5°	1914.6	1909.6	1895.8	1893.5	1897.3
40°	1848.9	1842.0	1830.1	1827.7	1827.7
42.5°	1781.2	1776.1	1760.5	1756.4	1762.0
45°	1677.3	1670.4	1656.2	1656.3	1660.9
47.5°	1565.1	1562.3	1545.8	1538.3	1540.2
50°	1482.4	1486.9	1470.6	1461.4	1470.6
52.5°	1410.9	1408.2	1393.5	1384.3	1387.9
55°	1292.1	1289.8	1275.6	1263.8	1263.8
57.5°	1172.7	1166.8	1152.0	1143.3	1150.2
60°	1090.0	1087.8	1071.2	1054.9	1061.8
62.5°	1007.4	1003.3	986.7	976.0	981.0
65°	871.6	871.6	855.1	845.7	843.3
67.5°	752.7	741.7	732.4	721.1	717.9
70°	662.5	653.3	646.0	636.5	629.6
72.5°	574.1	568.6	557.7	548.3	546.9
75°	451.1	441.8	434.6	427.5	425.2
77.5°	320.9	319.0	312.4	308.7	310.1
80°	242.0	242.0	237.3	237.3	234.9
82.5°	170.5	172.4	171.5	167.7	167.3
85°	72.8	77.4	82.3	82.3	84.5
87.5°	14.1	24.2	24.4	24.9	25.4
90°	4.7	9.3	18.9	21.3	23.6
92.5°	42.5	176.4	315.5	115.1	89.7
95°	101.5	373.9	1253.7	515.4	335.2
97.5°	168.1	418.8	1857.2	1429.8	1035.5
100°	217.2	445.7	2080.0	2094.8	1702.3
102.5°	264.4	476.4	2123.6	2588.2	2216.0
105°	340.0	524.7	2098.9	3204.4	3017.4
107.5°	420.2	584.6	1981.9	3501.5	3569.9
110°	476.9	624.7	1891.2	3565.5	3787.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	527.9	670.1	1806.2	3515.0	3841.9
115°	609.2	736.1	1690.5	3346.6	3806.0
117.5°	680.0	806.5	1614.5	3109.6	3632.2
120°	727.2	851.8	1584.2	2949.1	3475.4
122.5°	772.6	891.7	1559.7	2799.3	3297.9
125°	835.8	951.2	1532.3	2593.2	3043.4
127.5°	889.6	1005.0	1516.3	2418.9	2807.3
130°	925.5	1041.0	1508.8	2312.4	2665.6
132.5°	959.5	1069.4	1501.1	2222.9	2542.9
135°	1005.8	1114.4	1489.9	2100.3	2368.1
137.5°	1057.8	1156.6	1484.1	1997.4	2226.0
140°	1086.1	1183.0	1480.4	1928.8	2129.7
142.5°	1118.2	1207.7	1476.6	1867.8	2044.6
145°	1166.4	1247.1	1471.0	1788.0	1924.2
147.5°	1212.6	1283.3	1465.7	1720.7	1826.5
150°	1246.6	1304.4	1463.8	1680.7	1766.1
152.5°	1273.0	1327.1	1462.0	1646.4	1717.0
155°	1315.1	1359.0	1459.1	1604.3	1655.1
157.5°	1353.8	1387.6	1459.6	1573.7	1608.4
160°	1376.5	1406.5	1461.5	1556.5	1581.9
162.5°	1395.4	1421.7	1463.4	1541.3	1561.1
165°	1423.7	1442.2	1466.2	1523.1	1534.7
167.5°	1445.4	1456.5	1468.6	1512.1	1515.8
170°	1456.7	1466.0	1468.6	1506.4	1506.4
172.5°	1466.2	1471.8	1468.6	1498.8	1496.9
175°	1475.6	1478.0	1468.6	1489.7	1485.1
177.5°	1479.5	1477.6	1468.1	1481.3	1477.5
180°	1475.6	1475.6	1475.6	1475.6	1475.6

(END OF REPORT)