

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: P520214

Luminaire Tested: **SQ4-F-100U-075D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520214
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-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

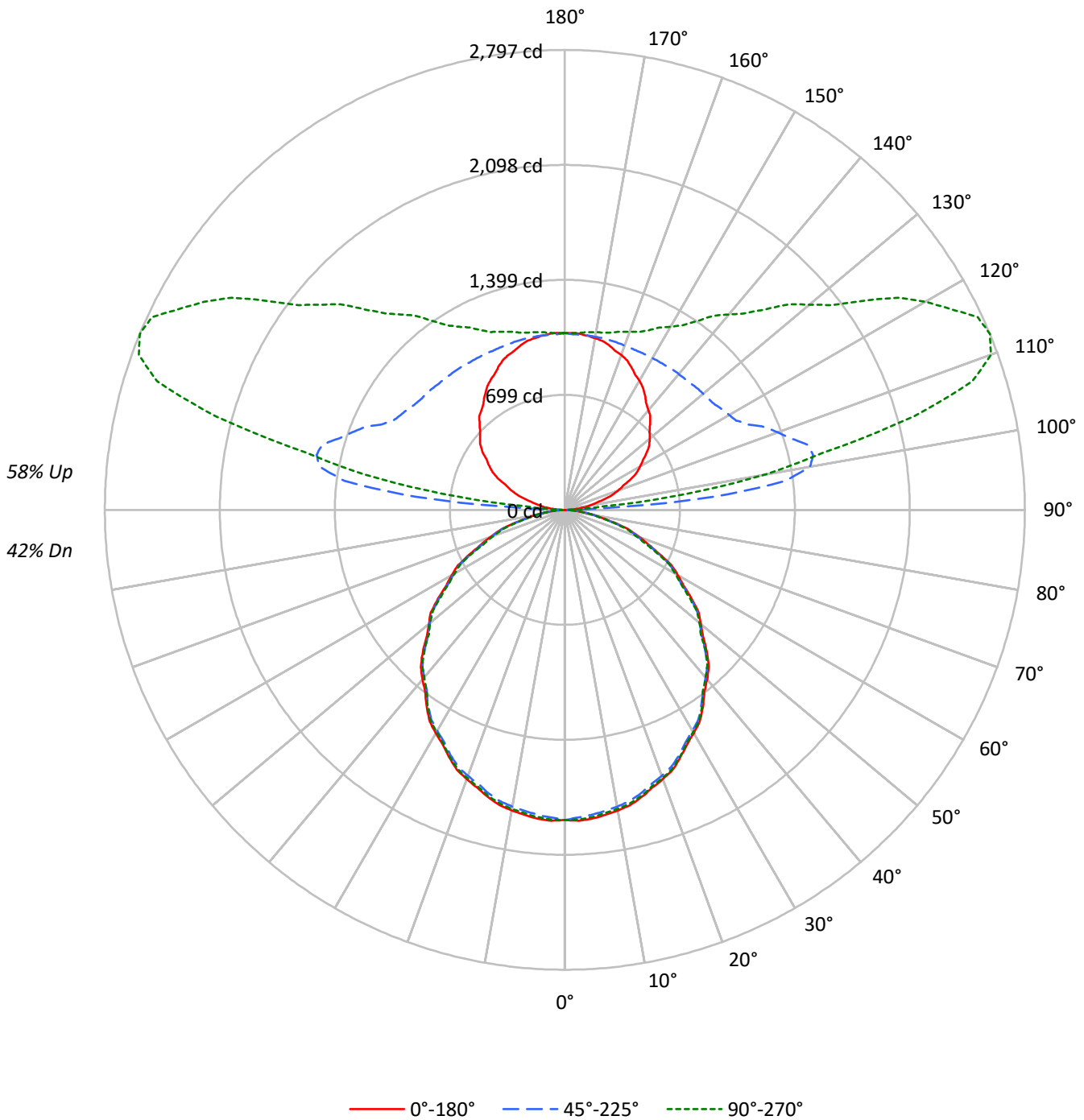
Lumens per Lamp: N/A
Luminaire Lumens: 12131.0 lumens
Efficiency: N/A
Efficacy: 117.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 103.7
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°	8701	8701	8701
5°	8734	8624	8687
10°	8699	8587	8651
15°	8632	8527	8600
20°	8555	8454	8521
25°	8461	8374	8435
30°	8353	8262	8308
35°	8243	8157	8196
40°	8104	8022	8012
45°	7966	7865	7887
50°	7744	7683	7683
55°	7565	7468	7399
60°	7320	7195	7132
65°	6925	6795	6702
70°	6505	6343	6181
75°	5853	5639	5516
80°	4678	4588	4543
85°	2805	3165	3260



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.0	1.5
10°-20°	506.9	4.2
20°-30°	761.5	6.3
30°-40°	908.6	7.5
40°-50°	931.9	7.7
50°-60°	830.3	6.8
60°-70°	619.1	5.1
70°-80°	335.7	2.8
80°-90°	79.4	0.7
90°-100°	503.1	4.1
100°-110°	1388.8	11.4
110°-120°	1432.3	11.8
120°-130°	1150.9	9.5
130°-140°	904.5	7.5
140°-150°	693.7	5.7
150°-160°	498.6	4.1
160°-170°	304.9	2.5
170°-180°	102.8	0.8
0°-30°	1446.4	11.9
0°-40°	2355.1	19.4
0°-60°	4117.3	33.9
0°-90°	5151.5	42.5
90°-120°	3324.1	27.4
90°-150°	6073.3	50.1
90°-180°	6980.0	57.5
0°-180°	12131.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1886	1886	1886	1886	1886	
5°	1886	1883	1862	1878	1876	179
15°	1808	1804	1785	1799	1801	510
25°	1662	1660	1645	1654	1657	766
35°	1464	1460	1448	1449	1455	914
45°	1221	1216	1206	1206	1209	940
55°	941	939	929	920	920	840
65°	634	634	622	616	614	632
75°	328	322	316	311	310	345
85°	53	56	60	60	62	73
90°	4	7	14	16	17	7
95°	74	272	913	375	244	79
105°	248	382	1528	2333	2196	263
115°	444	536	1231	2436	2770	436
125°	608	692	1115	1888	2215	541
135°	732	811	1084	1529	1724	566
145°	849	908	1071	1302	1401	532
155°	957	989	1062	1168	1205	441
165°	1036	1050	1067	1109	1117	292
175°	1074	1076	1069	1084	1081	102
180°	1074	1074	1074	1074	1074	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1886.2	1886.2	1886.2	1886.2	1886.2
2.5°	1893.0	1889.1	1872.6	1886.2	1884.9
5°	1886.2	1882.9	1862.3	1877.7	1876.0
7.5°	1870.8	1867.2	1846.9	1862.2	1861.9
10°	1857.1	1852.1	1833.2	1848.6	1846.9
12.5°	1839.4	1834.4	1815.4	1830.7	1829.1
15°	1807.5	1804.2	1785.4	1799.1	1800.7
17.5°	1771.3	1764.9	1748.1	1761.5	1763.1
20°	1742.6	1737.6	1722.1	1734.1	1735.8
22.5°	1712.5	1707.4	1692.0	1704.0	1705.7
25°	1662.2	1660.5	1645.2	1653.7	1657.1
27.5°	1607.9	1603.1	1590.7	1597.3	1600.7
30°	1568.2	1564.9	1551.1	1556.3	1559.6
32.5°	1527.1	1525.1	1512.7	1515.3	1519.9
35°	1463.8	1460.4	1448.4	1448.6	1455.3
37.5°	1393.7	1390.1	1380.0	1378.4	1381.0
40°	1345.8	1340.8	1332.1	1330.5	1330.5
42.5°	1296.6	1293.0	1281.5	1278.6	1282.5
45°	1221.0	1216.0	1205.6	1205.7	1209.0
47.5°	1139.2	1137.3	1125.3	1119.8	1121.1
50°	1079.0	1082.4	1070.6	1063.9	1070.6
52.5°	1027.1	1025.1	1014.5	1007.7	1010.3
55°	940.6	938.9	928.6	920.0	920.0
57.5°	853.7	849.3	838.6	832.2	837.2
60°	793.4	791.8	779.8	768.0	773.0
62.5°	733.3	730.3	718.3	710.5	714.1
65°	634.4	634.4	622.5	615.6	614.0
67.5°	547.9	539.9	533.2	524.9	522.6
70°	482.3	475.6	470.3	463.3	458.3
72.5°	417.9	413.9	406.0	399.1	398.2
75°	328.4	321.7	316.4	311.2	309.5
77.5°	233.6	232.2	227.4	224.8	225.7
80°	176.1	176.1	172.7	172.7	171.0
82.5°	124.2	125.5	124.9	122.1	121.7
85°	53.0	56.4	59.8	59.9	61.6
87.5°	10.2	17.6	17.8	18.1	18.5
90°	3.5	6.8	13.8	15.5	17.2
92.5°	31.0	128.4	229.6	83.8	65.3
95°	73.9	272.2	912.7	375.1	244.0
97.5°	122.4	304.9	1352.0	1040.9	753.8
100°	158.1	324.5	1514.2	1524.9	1239.2
102.5°	192.5	346.7	1545.8	1884.1	1613.2
105°	247.5	381.9	1527.9	2332.6	2196.5
107.5°	306.0	425.6	1442.7	2548.9	2598.7
110°	347.2	454.7	1376.7	2595.5	2756.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	384.3	487.8	1314.8	2558.7	2796.6
115°	443.5	535.9	1230.6	2436.1	2770.5
117.5°	495.0	587.1	1175.3	2263.5	2644.1
120°	529.3	620.1	1153.2	2146.8	2529.9
122.5°	562.4	649.0	1135.3	2037.7	2400.6
125°	608.5	692.5	1115.4	1887.7	2215.4
127.5°	647.6	731.6	1103.8	1760.9	2043.5
130°	673.8	757.7	1098.2	1683.3	1940.5
132.5°	698.5	778.5	1092.8	1618.2	1851.0
135°	732.1	811.2	1084.5	1528.9	1723.8
137.5°	770.0	841.9	1080.3	1454.1	1620.3
140°	790.6	861.2	1077.7	1404.1	1550.3
142.5°	813.9	879.2	1074.9	1359.7	1488.4
145°	849.0	907.8	1070.7	1301.6	1400.7
147.5°	882.7	934.1	1067.0	1252.6	1329.6
150°	907.5	949.5	1065.6	1223.4	1285.6
152.5°	926.7	966.1	1064.2	1198.4	1249.9
155°	957.3	989.2	1062.1	1167.9	1204.8
157.5°	985.5	1010.0	1062.5	1145.6	1170.7
160°	1002.0	1023.8	1063.9	1133.1	1151.5
162.5°	1015.7	1034.9	1065.3	1122.0	1136.4
165°	1036.4	1049.9	1067.3	1108.7	1117.1
167.5°	1052.2	1060.2	1069.0	1100.7	1103.4
170°	1060.4	1067.2	1069.0	1096.5	1096.5
172.5°	1067.3	1071.3	1069.0	1091.0	1089.6
175°	1074.2	1075.9	1069.0	1084.4	1081.0
177.5°	1077.0	1075.6	1068.7	1078.2	1075.6
180°	1074.2	1074.2	1074.2	1074.2	1074.2

(END OF REPORT)