

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: P520198

Luminaire Tested: **SQ4-F-100U-075D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520198
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-830-1D-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

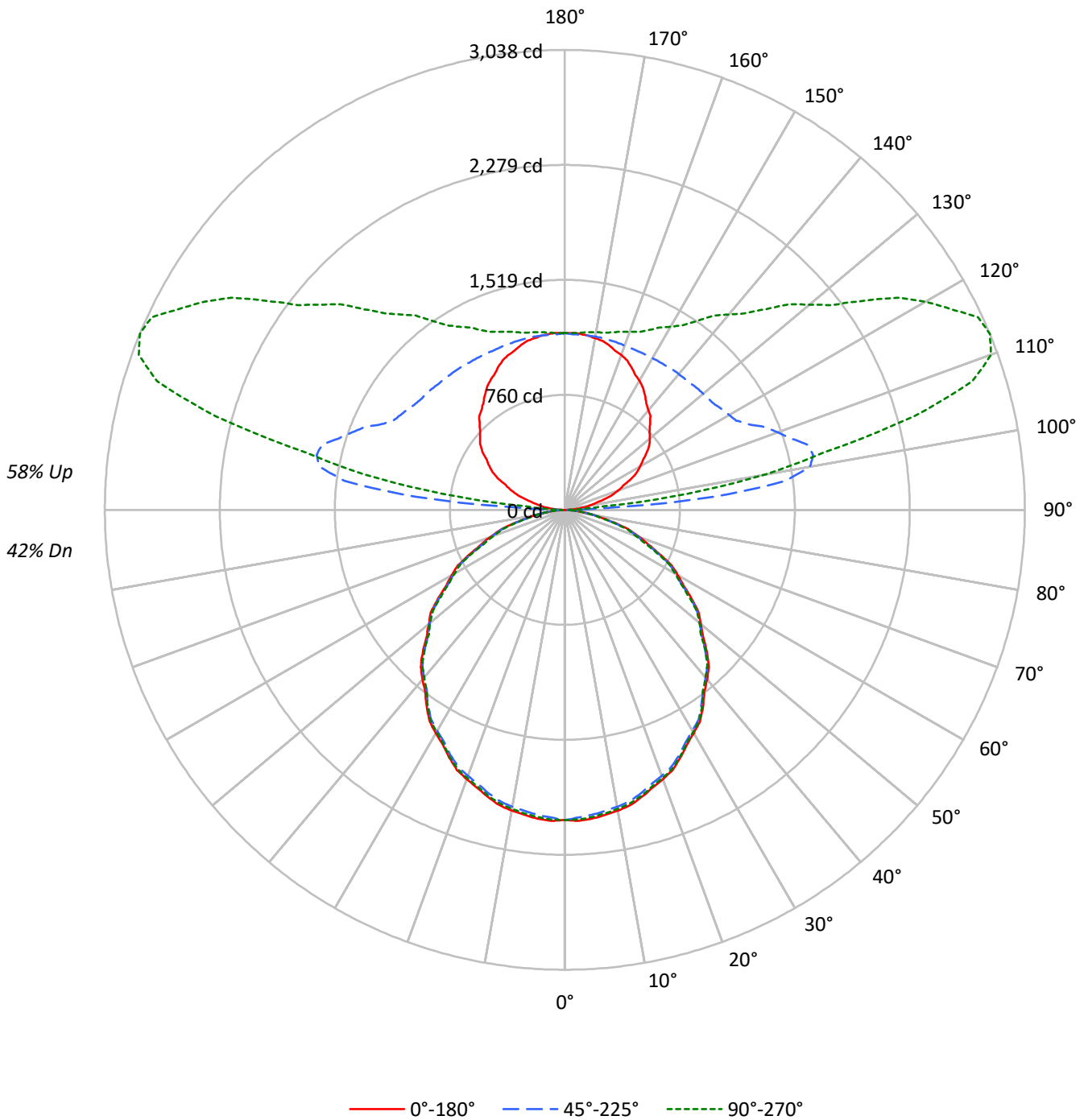
Lumens per Lamp: N/A
Luminaire Lumens: 13178.1 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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°	9452	9452	9452
5°	9488	9368	9437
10°	9450	9328	9398
15°	9378	9262	9342
20°	9293	9184	9257
25°	9191	9097	9162
30°	9074	8975	9025
35°	8955	8861	8903
40°	8804	8715	8704
45°	8653	8544	8569
50°	8413	8347	8347
55°	8218	8113	8038
60°	7952	7816	7747
65°	7523	7381	7280
70°	7066	6890	6714
75°	6358	6124	5994
80°	5082	4986	4936
85°	3049	3440	3541



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.4	1.5
10°-20°	550.6	4.2
20°-30°	827.2	6.3
30°-40°	987.1	7.5
40°-50°	1012.3	7.7
50°-60°	902.0	6.8
60°-70°	672.6	5.1
70°-80°	364.7	2.8
80°-90°	86.2	0.7
90°-100°	546.5	4.1
100°-110°	1508.6	11.4
110°-120°	1555.9	11.8
120°-130°	1250.3	9.5
130°-140°	982.6	7.5
140°-150°	753.6	5.7
150°-160°	541.6	4.1
160°-170°	331.2	2.5
170°-180°	111.7	0.8
0°-30°	1571.3	11.9
0°-40°	2558.3	19.4
0°-60°	4472.7	33.9
0°-90°	5596.1	42.5
90°-120°	3611.0	27.4
90°-150°	6597.4	50.1
90°-180°	7582.0	57.5
0°-180°	13178.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2049	2049	2049	2049	2049	
5°	2049	2045	2023	2040	2038	194
15°	1964	1960	1939	1954	1956	554
25°	1806	1804	1787	1796	1800	832
35°	1590	1587	1574	1574	1581	993
45°	1326	1321	1310	1310	1313	1021
55°	1022	1020	1009	999	999	913
65°	689	689	676	669	667	686
75°	357	349	344	338	336	375
85°	58	61	65	65	67	80
90°	4	7	15	17	19	7
95°	80	296	991	408	265	86
105°	269	415	1660	2534	2386	286
115°	482	582	1337	2646	3010	473
125°	661	752	1212	2051	2407	588
135°	795	881	1178	1661	1873	615
145°	922	986	1163	1414	1522	578
155°	1040	1075	1154	1269	1309	479
165°	1126	1140	1160	1204	1214	317
175°	1167	1169	1161	1178	1174	111
180°	1167	1167	1167	1167	1167	

TEST NUMBER: P520198

CATALOG NUMBER: SQ4-F-100U-075D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2049.0	2049.0	2049.0	2049.0	2049.0
2.5°	2056.5	2052.1	2034.2	2049.0	2047.5
5°	2049.0	2045.4	2023.0	2039.7	2037.9
7.5°	2032.3	2028.3	2006.3	2023.0	2022.6
10°	2017.4	2012.0	1991.4	2008.2	2006.3
12.5°	1998.1	1992.7	1972.2	1988.8	1987.0
15°	1963.6	1960.0	1939.4	1954.3	1956.1
17.5°	1924.2	1917.3	1898.9	1913.5	1915.3
20°	1893.0	1887.5	1870.7	1883.8	1885.6
22.5°	1860.3	1854.9	1838.0	1851.0	1852.9
25°	1805.7	1803.9	1787.2	1796.5	1800.1
27.5°	1746.6	1741.5	1728.0	1735.2	1738.8
30°	1703.5	1699.9	1684.9	1690.6	1694.3
32.5°	1658.9	1656.8	1643.3	1646.0	1651.2
35°	1590.1	1586.6	1573.5	1573.6	1580.9
37.5°	1514.0	1510.0	1499.1	1497.3	1500.3
40°	1462.0	1456.6	1447.2	1445.3	1445.3
42.5°	1408.5	1404.6	1392.2	1388.9	1393.2
45°	1326.4	1320.9	1309.7	1309.8	1313.4
47.5°	1237.6	1235.4	1222.4	1216.5	1217.9
50°	1172.2	1175.9	1163.0	1155.7	1163.0
52.5°	1115.7	1113.6	1102.0	1094.7	1097.5
55°	1021.8	1019.9	1008.8	999.4	999.4
57.5°	927.4	922.7	911.0	904.1	909.6
60°	861.9	860.2	847.1	834.2	839.7
62.5°	796.6	793.4	780.3	771.8	775.7
65°	689.2	689.2	676.2	668.8	666.9
67.5°	595.2	586.5	579.2	570.3	567.7
70°	523.9	516.6	510.8	503.3	497.8
72.5°	454.0	449.6	441.1	433.6	432.5
75°	356.7	349.4	343.6	338.0	336.3
77.5°	253.8	252.3	247.1	244.1	245.2
80°	191.3	191.3	187.7	187.6	185.8
82.5°	134.9	136.3	135.6	132.7	132.3
85°	57.6	61.2	65.0	65.0	66.9
87.5°	11.1	19.1	19.3	19.7	20.1
90°	3.8	7.4	14.9	16.8	18.7
92.5°	33.6	139.5	249.5	91.0	70.9
95°	80.3	295.7	991.4	407.6	265.1
97.5°	133.0	331.2	1468.6	1130.7	818.9
100°	171.7	352.5	1644.9	1656.4	1346.1
102.5°	209.1	376.7	1679.2	2046.7	1752.4
105°	268.9	414.9	1659.8	2534.0	2386.1
107.5°	332.4	462.4	1567.2	2768.9	2822.9
110°	377.2	494.0	1495.5	2819.5	2994.8



TEST NUMBER: P520198

CATALOG NUMBER: SQ4-F-100U-075D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	417.5	529.9	1428.3	2779.6	3038.1
115°	481.7	582.1	1336.8	2646.4	3009.7
117.5°	537.7	637.7	1276.7	2459.0	2872.3
120°	575.0	673.7	1252.7	2332.1	2748.3
122.5°	610.9	705.1	1233.4	2213.6	2607.9
125°	660.9	752.2	1211.7	2050.6	2406.7
127.5°	703.5	794.7	1199.0	1912.9	2219.9
130°	731.9	823.1	1193.0	1828.6	2107.9
132.5°	758.7	845.7	1187.1	1757.7	2010.8
135°	795.3	881.2	1178.1	1660.9	1872.7
137.5°	836.5	914.5	1173.6	1579.5	1760.2
140°	858.8	935.5	1170.6	1525.3	1684.0
142.5°	884.3	955.1	1167.7	1477.0	1616.9
145°	922.3	986.3	1163.1	1413.9	1521.6
147.5°	958.9	1014.7	1159.1	1360.8	1444.4
150°	985.8	1031.5	1157.6	1329.0	1396.6
152.5°	1006.7	1049.5	1156.1	1301.8	1357.7
155°	1040.0	1074.6	1153.8	1268.7	1308.8
157.5°	1070.5	1097.2	1154.2	1244.4	1271.8
160°	1088.5	1112.2	1155.7	1230.9	1251.0
162.5°	1103.5	1124.2	1157.2	1218.8	1234.4
165°	1125.8	1140.5	1159.5	1204.5	1213.6
167.5°	1143.0	1151.7	1161.3	1195.8	1198.6
170°	1151.9	1159.3	1161.3	1191.2	1191.2
172.5°	1159.5	1163.8	1161.3	1185.2	1183.7
175°	1166.9	1168.8	1161.3	1178.1	1174.4
177.5°	1169.8	1168.5	1160.9	1171.3	1168.4
180°	1166.9	1166.9	1166.9	1166.9	1166.9

(END OF REPORT)