

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: P564932

Luminaire Tested: **SQ4-PW1-100U-075D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564932
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-075D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

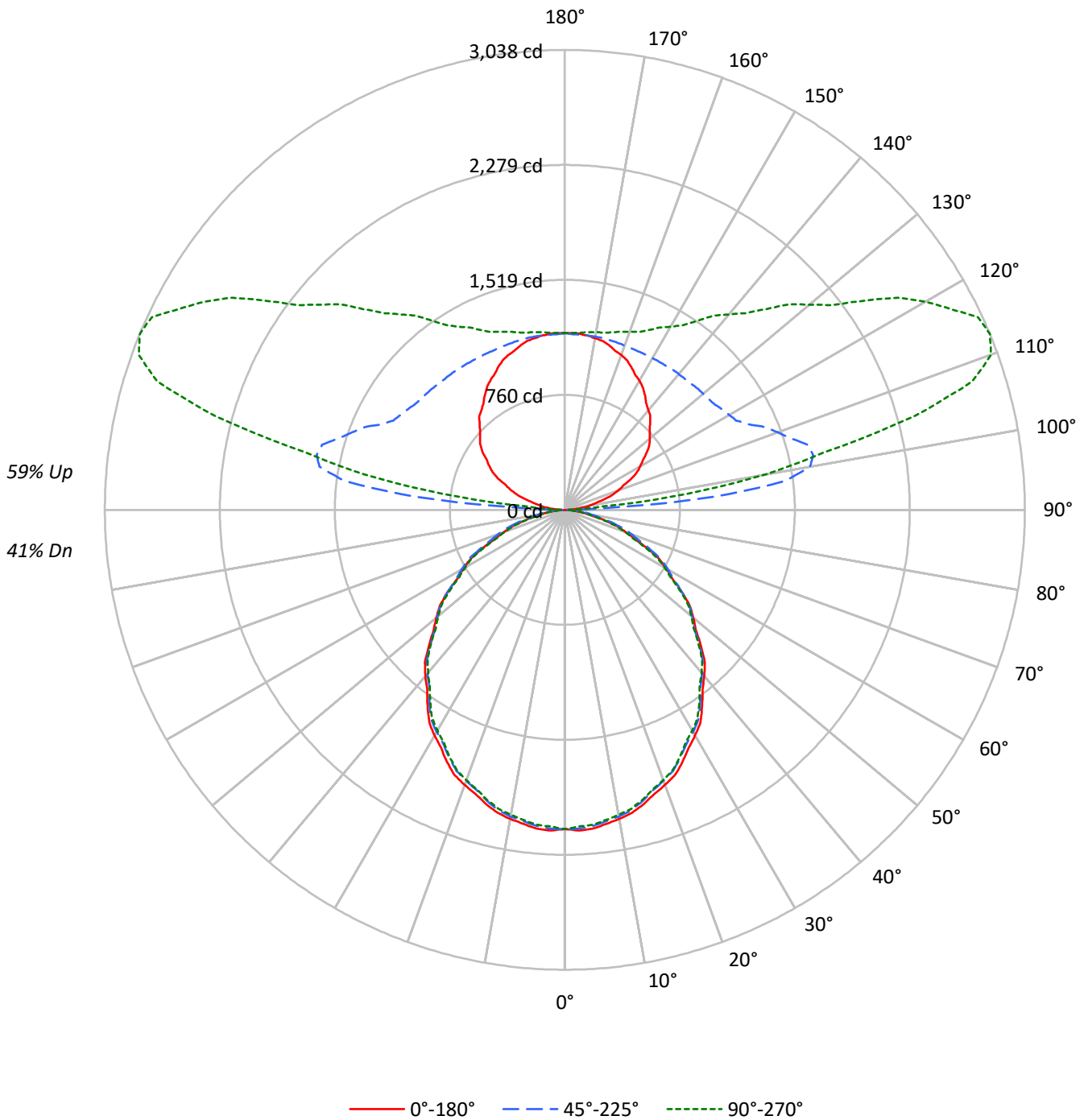
Lumens per Lamp: N/A
Luminaire Lumens: 12948.9 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 103.9
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	63	63	63	48	48	48	41
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	43	42	41	35
2	87	80	74	69	79	73	68	64	60	57	54	49	46	44	38	36	35	30
3	80	70	63	58	72	65	58	53	53	49	45	43	40	37	33	31	29	25
4	73	62	55	49	66	57	50	45	47	42	38	38	35	32	30	27	25	22
5	67	55	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	19	16
7	57	45	37	32	52	41	34	29	35	29	25	28	24	21	22	19	17	15
8	53	41	33	28	48	37	31	26	31	26	22	26	22	19	20	18	15	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9727	9727	9727
5°	9790	9712	9669
10°	9711	9633	9581
15°	9608	9502	9467
20°	9494	9348	9329
25°	9361	9191	9162
30°	9163	9025	8965
35°	8903	8777	8725
40°	8625	8491	8457
45°	8290	8180	8144
50°	7946	7879	7826
55°	7575	7575	7456
60°	7112	7250	6993
65°	6509	6833	6347
70°	5738	6289	5588
75°	4900	5629	4768
80°	3799	4737	3849
85°	2456	3636	3245



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.5	1.5
10°-20°	560.6	4.3
20°-30°	831.5	6.4
30°-40°	972.9	7.5
40°-50°	968.6	7.5
50°-60°	836.4	6.5
60°-70°	602.1	4.6
70°-80°	315.7	2.4
80°-90°	80.7	0.6
90°-100°	546.5	4.2
100°-110°	1508.6	11.7
110°-120°	1555.9	12.0
120°-130°	1250.3	9.7
130°-140°	982.6	7.6
140°-150°	753.6	5.8
150°-160°	541.6	4.2
160°-170°	331.2	2.6
170°-180°	111.7	0.9
0°-30°	1590.6	12.3
0°-40°	2563.5	19.8
0°-60°	4368.5	33.7
0°-90°	5367.0	41.4
90°-120°	3611.0	27.9
90°-150°	6597.5	50.9
90°-180°	7582.0	58.6
0°-180°	12948.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2108	2108	2108	2108	2108	
5°	2114	2090	2097	2092	2088	200
15°	2012	1986	1990	1986	1982	567
25°	1839	1808	1806	1795	1800	846
35°	1581	1559	1559	1544	1549	988
45°	1271	1260	1254	1250	1248	980
55°	942	940	942	929	927	840
65°	596	614	626	601	582	591
75°	275	300	316	295	268	295
85°	46	61	69	65	61	61
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	577
155°	1040	1075	1154	1269	1309	479
165°	1126	1140	1159	1204	1214	317
175°	1167	1169	1161	1178	1174	111
180°	1167	1167	1167	1167	1167	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2108.5	2108.5	2108.5	2108.5	2108.5
2.5°	2120.4	2102.9	2108.5	2103.8	2093.6
5°	2114.1	2090.4	2097.3	2091.7	2088.1
7.5°	2092.5	2070.7	2075.8	2069.8	2067.6
10°	2073.2	2051.4	2056.5	2049.0	2045.3
12.5°	2050.9	2027.6	2032.7	2025.2	2023.0
15°	2011.9	1986.5	1989.6	1985.8	1982.2
17.5°	1966.6	1940.8	1941.3	1935.3	1934.6
20°	1933.9	1906.6	1904.1	1896.8	1900.4
22.5°	1898.2	1869.5	1867.0	1856.7	1861.8
25°	1839.1	1808.2	1805.7	1794.7	1800.1
27.5°	1770.8	1740.2	1740.3	1724.8	1730.6
30°	1720.2	1691.2	1694.2	1675.8	1683.1
32.5°	1666.7	1640.6	1642.2	1623.8	1631.1
35°	1580.9	1559.1	1558.6	1543.9	1549.3
37.5°	1493.2	1474.0	1470.9	1462.4	1463.9
40°	1432.3	1415.9	1410.0	1404.4	1404.4
42.5°	1368.4	1353.5	1347.6	1343.5	1342.0
45°	1270.7	1259.8	1253.9	1250.2	1248.4
47.5°	1174.1	1163.9	1158.8	1156.2	1154.4
50°	1107.2	1099.9	1097.9	1092.3	1090.5
52.5°	1040.3	1036.0	1034.0	1026.9	1025.1
55°	941.9	940.0	941.9	928.8	927.0
57.5°	839.3	842.2	848.2	830.7	826.3
60°	770.9	778.2	785.8	765.2	757.9
62.5°	701.1	712.7	723.4	699.7	689.6
65°	596.3	614.5	626.0	601.4	581.5
67.5°	495.3	517.8	531.7	505.2	482.6
70°	425.4	450.8	466.3	439.7	414.3
72.5°	364.5	392.8	405.3	380.3	354.8
75°	274.9	300.4	315.8	294.8	267.5
77.5°	195.1	219.0	231.8	213.5	191.0
80°	143.0	168.5	178.3	163.1	144.9
82.5°	101.4	122.5	129.3	120.1	107.7
85°	46.4	61.0	68.7	64.9	61.3
87.5°	12.6	23.5	31.2	31.6	33.5
90°	3.7	7.4	14.9	16.8	18.7
92.5°	33.6	139.5	249.4	91.0	70.9
95°	80.3	295.7	991.4	407.5	265.1
97.5°	132.9	331.2	1468.6	1130.7	818.9
100°	171.8	352.5	1644.9	1656.5	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°	332.3	462.3	1567.2	2768.9	2823.0
110°	377.1	494.0	1495.5	2819.5	2994.7



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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	637.8	1276.7	2459.0	2872.3
120°	575.1	673.6	1252.8	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	2406.6
127.5°	703.5	794.8	1199.0	1912.9	2219.9
130°	731.9	823.2	1193.0	1828.6	2107.9
132.5°	758.8	845.7	1187.1	1757.8	2010.8
135°	795.4	881.2	1178.1	1660.9	1872.7
137.5°	836.4	914.6	1173.6	1579.5	1760.3
140°	858.8	935.5	1170.6	1525.3	1684.1
142.5°	884.2	955.1	1167.7	1477.0	1616.9
145°	922.3	986.2	1163.2	1413.9	1521.6
147.5°	958.9	1014.8	1159.1	1360.7	1444.3
150°	985.8	1031.4	1157.6	1329.0	1396.6
152.5°	1006.7	1049.4	1156.1	1301.9	1357.7
155°	1039.9	1074.6	1153.8	1268.6	1308.8
157.5°	1070.6	1097.2	1154.2	1244.5	1271.8
160°	1088.5	1112.2	1155.7	1230.8	1250.9
162.5°	1103.4	1124.2	1157.2	1218.8	1234.5
165°	1125.8	1140.4	1159.4	1204.5	1213.6
167.5°	1143.0	1151.8	1161.3	1195.7	1198.6
170°	1152.0	1159.3	1161.3	1191.2	1191.2
172.5°	1159.4	1163.8	1161.3	1185.2	1183.7
175°	1166.9	1168.7	1161.3	1178.0	1174.4
177.5°	1169.9	1168.4	1160.9	1171.3	1168.4
180°	1166.9	1166.9	1166.9	1166.9	1166.9

(END OF REPORT)