

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: P565108

Luminaire Tested: **SQ4-PW1-150U-050D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565108
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-PW1-150U-050D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

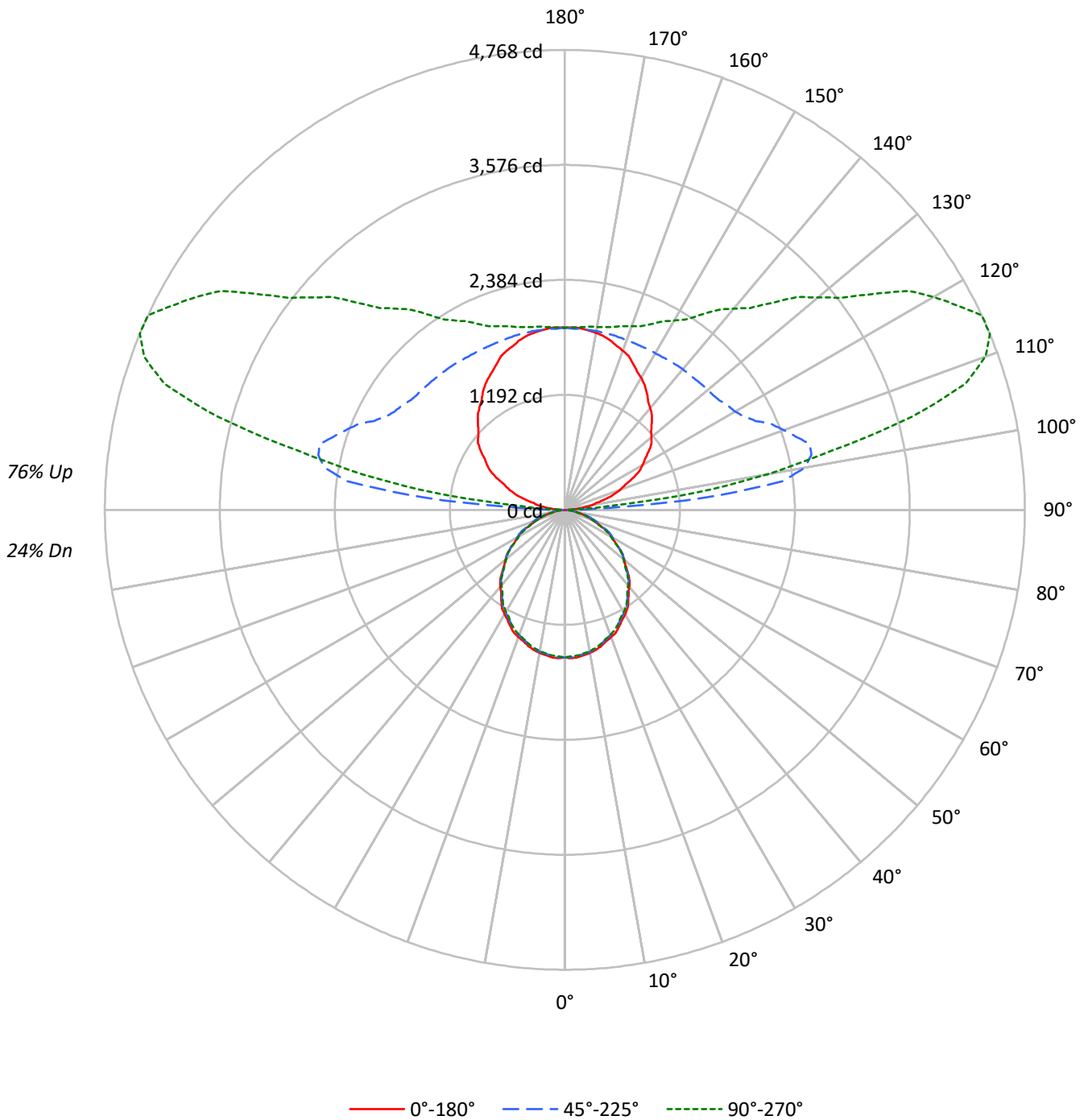
Lumens per Lamp: N/A
Luminaire Lumens: 16067.9 lumens
Efficiency: N/A
Efficacy: 143.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 111.9
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	57	44	43	42	29	28	27	21
2	84	77	71	66	74	68	64	59	53	50	47	39	37	35	25	24	23	17
3	76	67	60	55	68	60	54	50	47	43	39	34	32	29	22	21	20	15
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	40	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	11	9
8	50	38	31	26	45	35	28	24	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7062	7062	7062
5°	7108	7052	7020
10°	7051	6994	6956
15°	6976	6899	6873
20°	6893	6787	6774
25°	6797	6673	6653
30°	6653	6552	6509
35°	6464	6373	6335
40°	6262	6165	6141
45°	6019	5939	5913
50°	5769	5721	5682
55°	5500	5500	5413
60°	5164	5264	5077
65°	4726	4961	4609
70°	4166	4566	4057
75°	3558	4087	3461
80°	2760	3440	2795
85°	1784	2641	2355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.2	0.9
10°-20°	407.0	2.5
20°-30°	603.7	3.8
30°-40°	706.4	4.4
40°-50°	703.2	4.4
50°-60°	607.3	3.8
60°-70°	437.1	2.7
70°-80°	229.2	1.4
80°-90°	60.8	0.4
90°-100°	877.2	5.5
100°-110°	2371.7	14.8
110°-120°	2493.5	15.5
120°-130°	2025.4	12.6
130°-140°	1588.7	9.9
140°-150°	1219.4	7.6
150°-160°	877.0	5.5
160°-170°	535.7	3.3
170°-180°	180.6	1.1
0°-30°	1154.8	7.2
0°-40°	1861.2	11.6
0°-60°	3171.7	19.7
0°-90°	3898.8	24.3
90°-120°	5742.4	35.7
90°-150°	10575.8	65.8
90°-180°	12169.0	75.7
0°-180°	16067.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1531	1531	1531	1531	1531	
5°	1535	1518	1523	1519	1516	145
15°	1461	1442	1444	1442	1439	412
25°	1335	1313	1311	1303	1307	614
35°	1148	1132	1132	1121	1125	718
45°	923	915	910	908	906	712
55°	684	682	684	674	673	610
65°	433	446	454	437	422	429
75°	200	218	229	214	194	214
85°	34	44	50	47	44	45
90°	4	12	26	28	26	10
95°	136	478	1459	755	449	142
105°	441	681	2631	3881	3722	464
115°	776	949	2182	4224	4768	766
125°	1063	1218	1967	3319	3899	947
135°	1274	1425	1914	2680	3033	984
145°	1481	1592	1888	2294	2468	927
155°	1672	1738	1871	2058	2125	771
165°	1820	1838	1879	1953	1963	513
175°	1890	1888	1881	1906	1902	179
180°	1888	1888	1888	1888	1888	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1530.9	1530.9	1530.9	1530.9	1530.9
2.5°	1539.5	1526.8	1530.9	1527.4	1520.1
5°	1534.9	1517.8	1522.8	1518.7	1516.0
7.5°	1519.3	1503.4	1507.1	1502.8	1501.2
10°	1505.2	1489.4	1493.1	1487.6	1485.0
12.5°	1489.0	1472.2	1475.8	1470.4	1468.8
15°	1460.7	1442.3	1444.5	1441.8	1439.1
17.5°	1427.8	1409.1	1409.5	1405.1	1404.6
20°	1404.1	1384.3	1382.5	1377.2	1379.8
22.5°	1378.2	1357.3	1355.5	1348.0	1351.7
25°	1335.3	1312.9	1311.0	1303.0	1307.0
27.5°	1285.6	1263.5	1263.5	1252.3	1256.5
30°	1249.0	1227.9	1230.1	1216.7	1222.0
32.5°	1210.1	1191.1	1192.3	1178.9	1184.2
35°	1147.8	1132.0	1131.6	1120.9	1124.9
37.5°	1084.1	1070.2	1068.0	1061.8	1062.8
40°	1039.9	1028.0	1023.7	1019.7	1019.7
42.5°	993.5	982.7	978.4	975.4	974.4
45°	922.6	914.6	910.4	907.7	906.4
47.5°	852.4	845.0	841.4	839.4	838.1
50°	803.9	798.6	797.1	793.0	791.7
52.5°	755.3	752.1	750.7	745.6	744.3
55°	683.8	682.5	683.8	674.4	673.0
57.5°	609.4	611.5	615.8	603.1	599.9
60°	559.7	565.0	570.5	555.6	550.3
62.5°	509.0	517.5	525.2	508.0	500.7
65°	433.0	446.1	454.5	436.7	422.2
67.5°	359.6	375.9	386.0	366.8	350.4
70°	308.9	327.3	338.5	319.2	300.8
72.5°	264.6	285.2	294.3	276.1	257.6
75°	199.6	218.1	229.3	214.0	194.2
77.5°	141.6	159.0	168.3	155.0	138.7
80°	103.9	122.3	129.5	118.4	105.2
82.5°	73.6	88.9	93.9	87.2	78.2
85°	33.7	44.3	49.9	47.1	44.5
87.5°	9.4	18.4	25.8	26.2	26.9
90°	4.1	12.0	26.4	28.4	26.4
92.5°	57.7	210.3	414.9	180.1	130.4
95°	136.1	477.8	1458.8	754.9	449.0
97.5°	218.6	548.0	2273.9	1881.8	1382.0
100°	280.4	576.4	2527.4	2635.8	2131.3
102.5°	337.3	615.8	2616.8	3207.6	2830.2
105°	440.9	681.3	2631.1	3881.0	3722.1
107.5°	536.8	756.1	2516.1	4301.1	4354.0
110°	611.5	810.2	2413.7	4413.9	4638.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	678.2	864.1	2319.4	4391.4	4768.4
115°	776.1	948.9	2182.1	4224.1	4768.4
117.5°	872.0	1034.1	2091.4	3968.5	4585.6
120°	930.5	1089.4	2037.8	3785.2	4414.9
122.5°	985.8	1141.5	2005.3	3588.6	4223.1
125°	1062.6	1217.5	1966.7	3318.8	3898.8
127.5°	1133.3	1285.5	1943.9	3098.6	3608.7
130°	1172.3	1329.2	1934.2	2962.5	3423.4
132.5°	1212.9	1368.3	1924.4	2839.8	3264.1
135°	1273.9	1424.9	1913.9	2679.7	3033.3
137.5°	1335.2	1477.9	1904.9	2549.8	2837.9
140°	1377.5	1510.6	1901.7	2466.2	2722.5
142.5°	1418.1	1543.3	1895.2	2390.7	2615.2
145°	1481.1	1592.4	1887.5	2293.7	2468.5
147.5°	1538.4	1636.9	1878.5	2205.8	2340.1
150°	1580.7	1668.1	1875.3	2158.1	2265.4
152.5°	1619.7	1696.0	1873.6	2113.8	2202.0
155°	1672.1	1737.7	1871.2	2057.6	2125.2
157.5°	1726.5	1772.2	1871.6	2018.5	2063.0
160°	1757.4	1795.2	1873.2	1993.8	2025.6
162.5°	1781.8	1813.2	1874.9	1974.1	1998.0
165°	1820.4	1838.3	1879.3	1952.7	1962.6
167.5°	1846.8	1859.1	1879.7	1934.3	1939.1
170°	1863.1	1869.0	1881.4	1926.1	1926.1
172.5°	1876.1	1877.3	1881.4	1916.3	1914.7
175°	1889.5	1887.5	1881.4	1905.7	1901.7
177.5°	1894.0	1889.2	1881.0	1897.1	1892.3
180°	1887.5	1887.5	1887.5	1887.5	1887.5

(END OF REPORT)