

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: P565168

Luminaire Tested: **SQ4-PW1-150U-100D-940-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565168
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-100D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

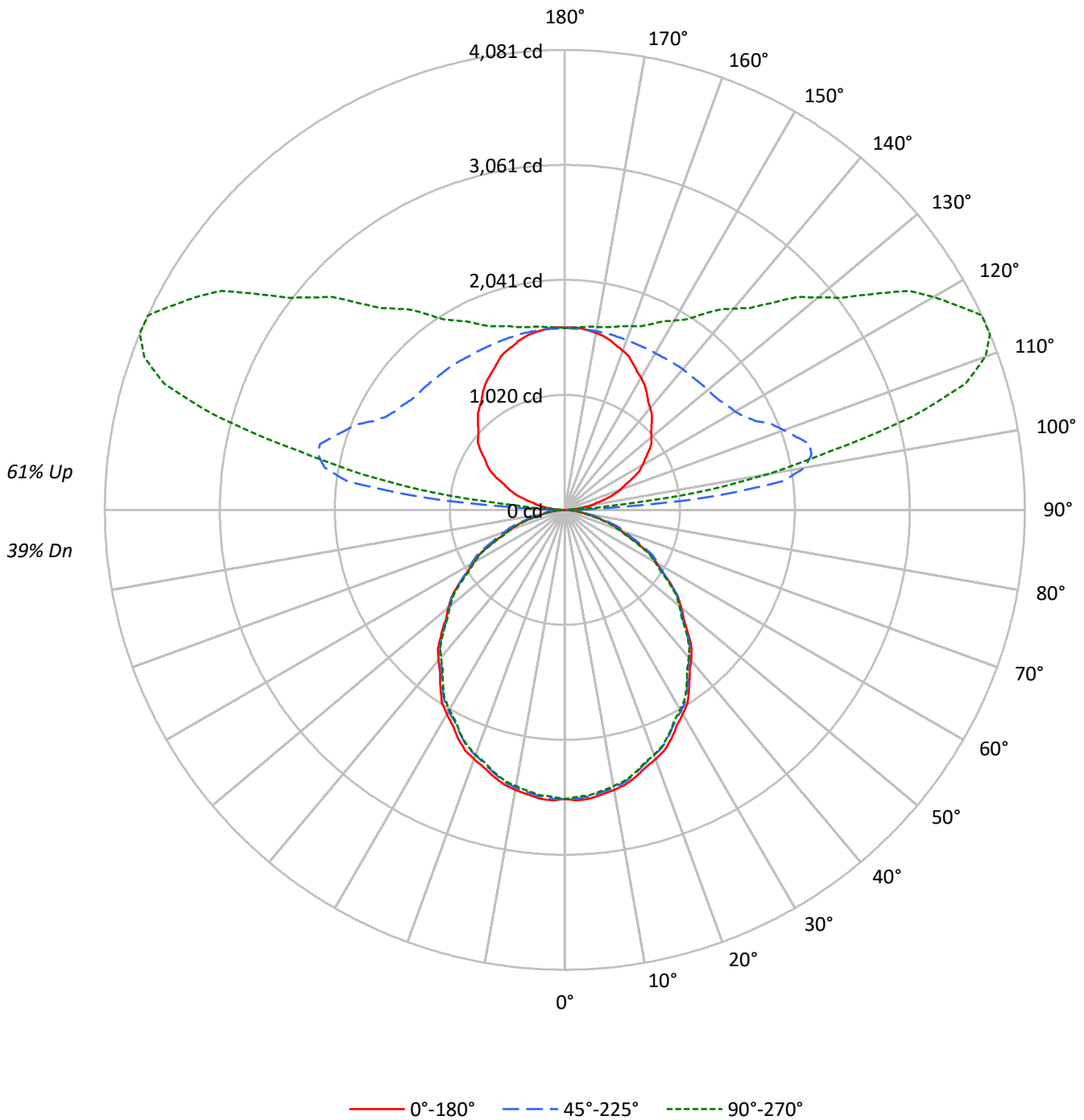
Lumens per Lamp: N/A
Luminaire Lumens: 16946.8 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 148.4
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	68	65	63	53	52	51	40	39	39	33
2	87	80	74	69	79	73	67	63	59	56	52	47	44	42	36	34	33	27
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28	23
4	72	62	54	48	66	57	50	45	46	41	38	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	27	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	29	25	27	23	20	21	18	16	14
8	52	40	33	27	47	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11837	11837	11837
5°	11913	11819	11767
10°	11818	11723	11659
15°	11693	11563	11520
20°	11553	11376	11353
25°	11392	11185	11150
30°	11151	10982	10910
35°	10834	10681	10618
40°	10496	10333	10292
45°	10088	9955	9911
50°	9670	9589	9523
55°	9219	9219	9073
60°	8656	8823	8510
65°	7921	8315	7724
70°	6983	7653	6799
75°	5964	6850	5802
80°	4625	5765	4684
85°	2991	4425	3949



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.6	1.4
10°-20°	682.1	4.0
20°-30°	1011.9	6.0
30°-40°	1184.0	7.0
40°-50°	1178.7	7.0
50°-60°	1017.8	6.0
60°-70°	732.7	4.3
70°-80°	384.2	2.3
80°-90°	98.6	0.6
90°-100°	750.7	4.4
100°-110°	2029.9	12.0
110°-120°	2134.1	12.6
120°-130°	1733.5	10.2
130°-140°	1359.8	8.0
140°-150°	1043.6	6.2
150°-160°	750.6	4.4
160°-170°	458.5	2.7
170°-180°	154.6	0.9
0°-30°	1935.6	11.4
0°-40°	3119.6	18.4
0°-60°	5316.1	31.4
0°-90°	6531.6	38.5
90°-120°	4914.7	29.0
90°-150°	9051.5	53.4
90°-180°	10415.0	61.5
0°-180°	16946.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2566	2566	2566	2566	2566	
5°	2573	2544	2552	2545	2541	244
15°	2448	2417	2421	2416	2412	690
25°	2238	2200	2197	2184	2191	1029
35°	1924	1897	1897	1879	1885	1203
45°	1546	1533	1526	1521	1519	1193
55°	1146	1144	1146	1130	1128	1023
65°	726	748	762	732	708	719
75°	335	366	384	359	326	359
85°	56	74	84	79	75	75
90°	4	10	23	24	23	10
95°	116	409	1248	646	384	122
105°	377	583	2252	3322	3186	397
115°	664	812	1868	3615	4081	656
125°	909	1042	1683	2840	3337	811
135°	1090	1220	1638	2294	2596	843
145°	1268	1363	1615	1963	2113	793
155°	1431	1487	1602	1761	1819	660
165°	1558	1573	1608	1671	1680	439
175°	1617	1616	1610	1631	1628	154
180°	1615	1615	1615	1615	1615	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2565.9	2565.9	2565.9	2565.9	2565.9
2.5°	2580.3	2559.1	2565.9	2560.1	2547.8
5°	2572.6	2543.9	2552.3	2545.4	2541.0
7.5°	2546.4	2519.9	2526.1	2518.8	2516.1
10°	2522.9	2496.4	2502.6	2493.4	2489.0
12.5°	2495.8	2467.5	2473.6	2464.5	2461.9
15°	2448.3	2417.4	2421.2	2416.5	2412.1
17.5°	2393.1	2361.8	2362.4	2355.1	2354.3
20°	2353.4	2320.2	2317.2	2308.2	2312.7
22.5°	2309.9	2275.0	2272.0	2259.4	2265.6
25°	2238.1	2200.5	2197.4	2184.0	2190.6
27.5°	2154.9	2117.7	2117.8	2099.0	2106.0
30°	2093.4	2058.0	2061.7	2039.3	2048.2
32.5°	2028.3	1996.4	1998.4	1976.0	1984.9
35°	1923.8	1897.3	1896.7	1878.8	1885.4
37.5°	1817.1	1793.7	1790.0	1779.6	1781.4
40°	1743.0	1723.1	1715.8	1709.1	1709.1
42.5°	1665.2	1647.1	1639.9	1634.9	1633.1
45°	1546.3	1533.0	1525.9	1521.4	1519.2
47.5°	1428.7	1416.4	1410.2	1407.0	1404.8
50°	1347.4	1338.5	1336.1	1329.2	1327.0
52.5°	1266.0	1260.7	1258.3	1249.6	1247.4
55°	1146.2	1143.9	1146.2	1130.3	1128.1
57.5°	1021.4	1024.9	1032.2	1010.8	1005.5
60°	938.2	947.0	956.3	931.2	922.4
62.5°	853.2	867.3	880.3	851.5	839.2
65°	725.7	747.8	761.8	731.9	707.6
67.5°	602.7	630.1	647.0	614.7	587.3
70°	517.7	548.6	567.4	535.1	504.1
72.5°	443.5	478.0	493.3	462.7	431.8
75°	334.6	365.5	384.3	358.7	325.5
77.5°	237.4	266.5	282.1	259.8	232.4
80°	174.1	205.0	217.0	198.4	176.3
82.5°	123.4	149.1	157.3	146.1	131.1
85°	56.5	74.2	83.6	79.0	74.6
87.5°	15.2	28.9	38.9	39.3	40.7
90°	3.5	10.3	22.6	24.3	22.6
92.5°	49.4	180.0	355.1	154.1	111.6
95°	116.5	408.9	1248.5	646.1	384.3
97.5°	187.1	469.0	1946.1	1610.6	1182.8
100°	240.0	493.3	2163.2	2255.9	1824.1
102.5°	288.7	527.0	2239.7	2745.3	2422.3
105°	377.3	583.1	2251.8	3321.6	3185.6
107.5°	459.4	647.1	2153.4	3681.2	3726.4
110°	523.4	693.4	2065.8	3777.7	3969.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	580.4	739.6	1985.1	3758.4	4081.1
115°	664.3	812.2	1867.6	3615.3	4081.1
117.5°	746.3	885.1	1790.0	3396.5	3924.6
120°	796.4	932.4	1744.1	3239.6	3778.6
122.5°	843.7	977.0	1716.3	3071.4	3614.4
125°	909.4	1042.1	1683.2	2840.4	3336.9
127.5°	969.9	1100.2	1663.8	2652.0	3088.6
130°	1003.3	1137.6	1655.4	2535.6	2930.0
132.5°	1038.1	1171.1	1647.1	2430.5	2793.7
135°	1090.3	1219.5	1638.0	2293.5	2596.1
137.5°	1142.8	1264.9	1630.4	2182.3	2428.9
140°	1179.0	1292.9	1627.6	2110.8	2330.1
142.5°	1213.7	1320.8	1622.0	2046.2	2238.3
145°	1267.6	1362.9	1615.4	1963.1	2112.7
147.5°	1316.7	1401.0	1607.8	1887.9	2002.8
150°	1352.8	1427.7	1605.0	1847.0	1938.8
152.5°	1386.2	1451.5	1603.6	1809.1	1884.6
155°	1431.1	1487.2	1601.5	1761.1	1818.9
157.5°	1477.7	1516.8	1601.9	1727.6	1765.7
160°	1504.1	1536.4	1603.2	1706.5	1733.7
162.5°	1525.0	1551.9	1604.6	1689.6	1710.0
165°	1558.0	1573.3	1608.5	1671.3	1679.8
167.5°	1580.6	1591.2	1608.8	1655.5	1659.6
170°	1594.5	1599.6	1610.2	1648.5	1648.5
172.5°	1605.7	1606.7	1610.2	1640.1	1638.7
175°	1617.2	1615.5	1610.2	1631.0	1627.6
177.5°	1621.0	1616.9	1609.9	1623.7	1619.6
180°	1615.4	1615.4	1615.4	1615.4	1615.4

(END OF REPORT)