

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: P564940

Luminaire Tested: **SQ4-PW1-100U-075D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564940
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-840-1D-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

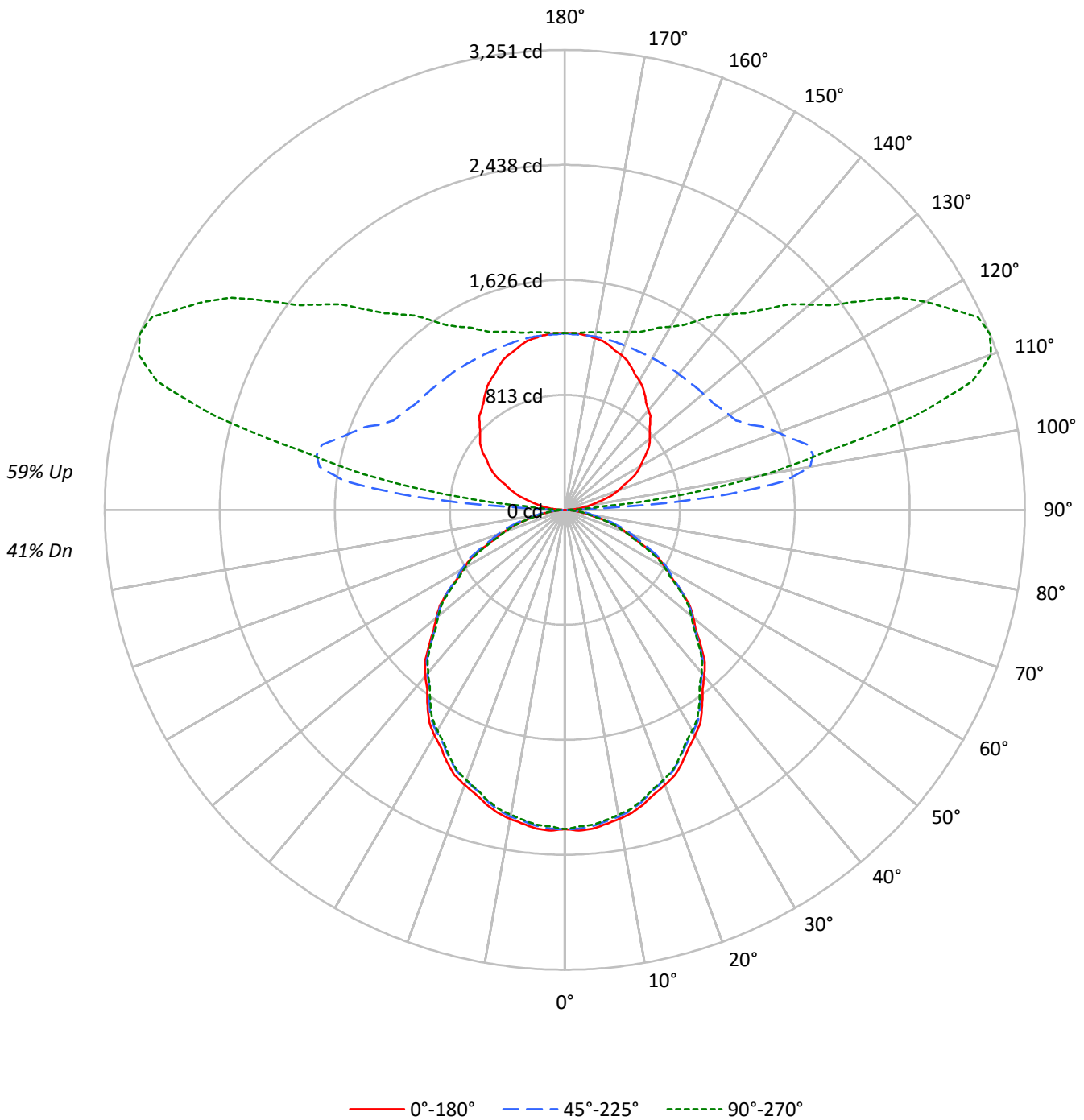
Lumens per Lamp: N/A
Luminaire Lumens: 13856.7 lumens
Efficiency: N/A
Efficacy: 133.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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°	10409	10409	10409
5°	10476	10393	10347
10°	10392	10308	10252
15°	10282	10168	10130
20°	10159	10003	9984
25°	10018	9835	9805
30°	9805	9657	9594
35°	9527	9393	9337
40°	9230	9086	9050
45°	8871	8754	8715
50°	8503	8432	8375
55°	8106	8106	7978
60°	7612	7758	7483
65°	6965	7312	6792
70°	6140	6730	5979
75°	5244	6023	5103
80°	4067	5069	4120
85°	2631	3896	3472



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.5	1.5
10°-20°	599.8	4.3
20°-30°	889.8	6.4
30°-40°	1041.1	7.5
40°-50°	1036.5	7.5
50°-60°	895.0	6.5
60°-70°	644.3	4.6
70°-80°	337.9	2.4
80°-90°	86.4	0.6
90°-100°	584.8	4.2
100°-110°	1614.4	11.7
110°-120°	1664.9	12.0
120°-130°	1337.9	9.7
130°-140°	1051.5	7.6
140°-150°	806.4	5.8
150°-160°	579.6	4.2
160°-170°	354.4	2.6
170°-180°	119.5	0.9
0°-30°	1702.1	12.3
0°-40°	2743.2	19.8
0°-60°	4674.7	33.7
0°-90°	5743.2	41.4
90°-120°	3864.1	27.9
90°-150°	7060.0	50.9
90°-180°	8113.0	58.5
0°-180°	13856.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2256	2256	2256	2256	2256	
5°	2262	2237	2244	2238	2234	214
15°	2153	2126	2129	2125	2121	607
25°	1968	1935	1932	1920	1926	905
35°	1692	1668	1668	1652	1658	1058
45°	1360	1348	1342	1338	1336	1049
55°	1008	1006	1008	994	992	899
65°	638	658	670	644	622	632
75°	294	321	338	315	286	315
85°	50	65	74	70	66	66
90°	4	8	16	18	20	8
95°	86	316	1061	436	284	92
105°	288	444	1776	2712	2553	306
115°	516	623	1430	2832	3221	507
125°	707	805	1297	2194	2575	629
135°	851	943	1261	1777	2004	659
145°	987	1055	1245	1513	1628	618
155°	1113	1150	1235	1358	1401	513
165°	1205	1220	1241	1289	1299	340
175°	1249	1251	1243	1261	1257	119
180°	1249	1249	1249	1249	1249	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2256.3	2256.3	2256.3	2256.3	2256.3
2.5°	2269.0	2250.4	2256.3	2251.3	2240.4
5°	2262.3	2237.0	2244.4	2238.3	2234.4
7.5°	2239.2	2215.9	2221.3	2214.9	2212.6
10°	2218.5	2195.2	2200.6	2192.6	2188.7
12.5°	2194.7	2169.8	2175.2	2167.2	2164.9
15°	2152.9	2125.7	2129.1	2125.0	2121.1
17.5°	2104.4	2076.8	2077.4	2071.0	2070.2
20°	2069.4	2040.3	2037.6	2029.8	2033.7
22.5°	2031.3	2000.6	1997.9	1986.9	1992.3
25°	1968.1	1935.0	1932.3	1920.5	1926.3
27.5°	1894.9	1862.2	1862.3	1845.7	1852.0
30°	1840.8	1809.7	1813.0	1793.3	1801.1
32.5°	1783.6	1755.6	1757.3	1737.6	1745.4
35°	1691.7	1668.4	1667.9	1652.1	1657.9
37.5°	1597.9	1577.3	1574.0	1564.9	1566.5
40°	1532.7	1515.2	1508.8	1502.9	1502.9
42.5°	1464.3	1448.4	1442.0	1437.6	1436.1
45°	1359.7	1348.1	1341.9	1337.8	1335.9
47.5°	1256.4	1245.5	1240.1	1237.2	1235.3
50°	1184.8	1177.0	1174.9	1168.9	1166.9
52.5°	1113.2	1108.6	1106.5	1098.9	1096.9
55°	1007.9	1005.9	1007.9	993.9	992.0
57.5°	898.1	901.3	907.7	888.9	884.2
60°	825.0	832.8	840.9	818.9	811.1
62.5°	750.2	762.7	774.1	748.8	737.9
65°	638.1	657.6	669.9	643.6	622.2
67.5°	530.0	554.1	568.9	540.6	516.5
70°	455.2	482.4	499.0	470.5	443.3
72.5°	390.0	420.4	433.8	406.9	379.7
75°	294.2	321.4	337.9	315.4	286.3
77.5°	208.7	234.4	248.1	228.5	204.4
80°	153.1	180.3	190.8	174.5	155.1
82.5°	108.5	131.1	138.4	128.5	115.3
85°	49.7	65.2	73.6	69.5	65.6
87.5°	13.5	25.2	33.4	33.9	35.8
90°	4.0	7.9	16.0	18.0	20.0
92.5°	36.0	149.3	266.9	97.4	75.9
95°	85.9	316.4	1060.9	436.1	283.7
97.5°	142.3	354.4	1571.6	1210.0	876.3
100°	183.8	377.2	1760.2	1772.6	1440.5
102.5°	223.8	403.1	1796.9	2190.2	1875.3
105°	287.7	444.0	1776.2	2711.6	2553.4
107.5°	355.6	494.7	1677.1	2963.1	3020.9
110°	403.6	528.6	1600.3	3017.1	3204.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	446.7	567.1	1528.4	2974.4	3251.0
115°	515.5	622.9	1430.5	2831.9	3220.7
117.5°	575.4	682.5	1366.2	2631.3	3073.6
120°	615.4	720.9	1340.6	2495.6	2941.0
122.5°	653.7	754.5	1319.8	2368.8	2790.7
125°	707.3	804.9	1296.7	2194.4	2575.3
127.5°	752.8	850.5	1283.1	2047.0	2375.5
130°	783.2	880.9	1276.7	1956.8	2255.7
132.5°	812.0	904.9	1270.3	1881.0	2151.8
135°	851.1	942.9	1260.7	1777.3	2003.9
137.5°	895.1	978.7	1255.9	1690.3	1883.7
140°	919.1	1001.1	1252.7	1632.2	1802.1
142.5°	946.2	1022.0	1249.5	1580.6	1730.2
145°	987.0	1055.4	1244.7	1513.1	1628.3
147.5°	1026.1	1085.9	1240.3	1456.1	1545.6
150°	1054.9	1103.7	1238.7	1422.2	1494.5
152.5°	1077.3	1123.0	1237.1	1393.1	1452.9
155°	1112.9	1150.0	1234.7	1357.6	1400.6
157.5°	1145.6	1174.1	1235.1	1331.7	1361.0
160°	1164.8	1190.2	1236.7	1317.1	1338.6
162.5°	1180.8	1203.1	1238.3	1304.2	1321.0
165°	1204.8	1220.4	1240.7	1288.9	1298.7
167.5°	1223.1	1232.5	1242.7	1279.5	1282.7
170°	1232.7	1240.5	1242.7	1274.7	1274.7
172.5°	1240.7	1245.4	1242.7	1268.3	1266.7
175°	1248.7	1250.7	1242.7	1260.6	1256.7
177.5°	1251.9	1250.3	1242.3	1253.4	1250.3
180°	1248.7	1248.7	1248.7	1248.7	1248.7

(END OF REPORT)