

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: P519370

Luminaire Tested: **SQ4-WB-100U-050D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519370
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-050D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

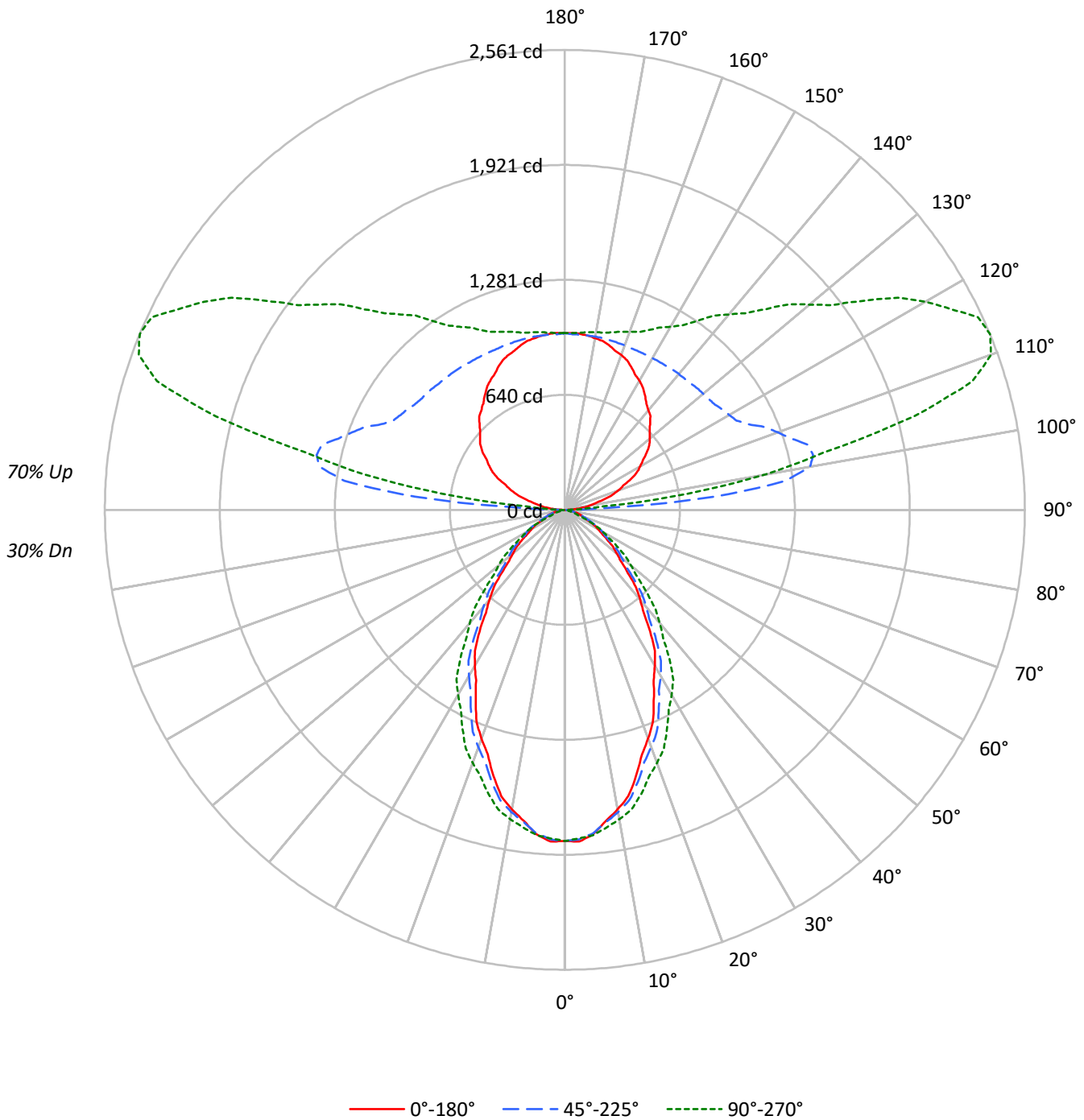
Lumens per Lamp: N/A
Luminaire Lumens: 9081.0 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.7
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	64	58	53	51	47	44	39	36	34	28	27	25	20
4	72	63	55	50	65	57	51	46	46	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	33	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	14	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8506	8506	8506
5°	8400	8370	8419
10°	7937	8008	8194
15°	7326	7497	7832
20°	6653	6903	7360
25°	5968	6293	6857
30°	5336	5685	6336
35°	4666	5003	5718
40°	3927	4239	4950
45°	3241	3521	4133
50°	2706	2950	3443
55°	2297	2531	2844
60°	1963	2195	2270
65°	1563	1846	1466
70°	1387	1440	894
75°	1283	1167	547
80°	1182	1076	473
85°	1069	984	386



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.1	1.9
10°-20°	439.9	4.8
20°-30°	569.8	6.3
30°-40°	558.0	6.1
40°-50°	427.1	4.7
50°-60°	284.6	3.1
60°-70°	155.3	1.7
70°-80°	64.7	0.7
80°-90°	20.4	0.2
90°-100°	460.7	5.1
100°-110°	1271.9	14.0
110°-120°	1311.7	14.4
120°-130°	1054.1	11.6
130°-140°	828.4	9.1
140°-150°	635.3	7.0
150°-160°	456.6	5.0
160°-170°	279.2	3.1
170°-180°	94.1	1.0
0°-30°	1178.9	13.0
0°-40°	1736.9	19.1
0°-60°	2448.6	27.0
0°-90°	2689.0	29.6
90°-120°	3044.3	33.5
90°-150°	5562.0	61.2
90°-180°	6392.0	70.4
0°-180°	9081.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1844	1844	1844	1844	1844	
5°	1814	1796	1808	1812	1818	169
15°	1534	1528	1570	1612	1640	428
25°	1172	1176	1236	1290	1347	539
35°	828	832	888	948	1015	515
45°	497	506	540	580	634	387
55°	286	298	315	327	354	259
65°	143	155	169	148	134	149
75°	72	72	66	45	31	77
85°	20	20	19	12	7	22
90°	3	6	13	14	16	6
95°	68	249	836	344	224	72
105°	227	350	1399	2136	2012	241
115°	406	491	1127	2231	2537	399
125°	557	634	1022	1729	2029	496
135°	670	743	993	1400	1579	519
145°	778	831	981	1192	1283	487
155°	877	906	973	1070	1103	404
165°	949	962	978	1015	1023	268
175°	984	985	979	993	990	93
180°	984	984	984	984	984	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1843.9	1843.9	1843.9	1843.9	1843.9
2.5°	1848.5	1832.0	1836.2	1836.1	1831.0
5°	1814.0	1795.8	1807.5	1811.7	1818.0
7.5°	1746.7	1732.9	1754.3	1770.1	1782.9
10°	1694.3	1682.4	1709.6	1732.7	1749.3
12.5°	1633.4	1623.4	1657.2	1688.1	1709.8
15°	1534.0	1528.5	1569.7	1612.4	1640.0
17.5°	1427.7	1425.0	1472.2	1522.1	1557.5
20°	1355.2	1354.4	1406.2	1458.1	1499.3
22.5°	1282.1	1283.8	1338.2	1392.2	1439.1
25°	1172.4	1175.5	1236.3	1290.2	1347.1
27.5°	1070.9	1072.3	1135.2	1192.0	1252.8
30°	1001.7	1005.6	1067.2	1126.1	1189.4
32.5°	932.4	937.0	997.3	1058.1	1122.7
35°	828.5	832.5	888.4	948.2	1015.4
37.5°	721.4	726.8	776.4	832.9	899.1
40°	652.1	660.0	703.9	757.2	822.0
42.5°	585.5	595.3	636.0	686.5	745.0
45°	496.8	506.3	539.7	580.5	633.5
47.5°	420.4	431.3	457.0	492.2	537.4
50°	377.0	387.3	411.0	437.1	479.8
52.5°	338.9	349.1	370.2	390.3	426.7
55°	285.6	297.5	314.7	326.7	353.6
57.5°	241.9	253.3	267.0	272.4	288.7
60°	212.8	225.5	237.9	237.3	246.0
62.5°	186.3	197.0	209.4	200.8	201.3
65°	143.2	155.1	169.1	147.8	134.3
67.5°	115.7	118.2	132.7	103.0	87.1
70°	102.8	102.8	106.8	79.8	66.3
72.5°	90.5	90.5	86.7	64.9	50.8
75°	72.0	72.0	65.5	45.0	30.7
77.5°	55.5	54.9	50.2	33.6	22.3
80°	44.5	44.5	40.5	26.5	17.8
82.5°	34.8	34.8	31.4	20.7	13.3
85°	20.2	20.2	18.6	12.0	7.3
87.5°	7.7	8.4	9.0	6.7	6.4
90°	3.1	6.2	12.6	14.2	15.7
92.5°	28.3	117.6	210.3	76.7	59.8
95°	67.7	249.3	835.8	343.6	223.5
97.5°	112.1	279.2	1238.1	953.2	690.4
100°	144.8	297.2	1386.7	1396.5	1134.9
102.5°	176.3	317.6	1415.7	1725.5	1477.4
105°	226.7	349.8	1399.3	2136.3	2011.6
107.5°	280.2	389.8	1321.2	2334.4	2379.9
110°	318.0	416.5	1260.8	2377.0	2524.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	352.0	446.8	1204.1	2343.3	2561.3
115°	406.1	490.7	1127.0	2231.1	2537.3
117.5°	453.3	537.7	1076.3	2073.0	2421.5
120°	484.8	567.9	1056.2	1966.1	2317.0
122.5°	515.0	594.4	1039.8	1866.2	2198.6
125°	557.2	634.2	1021.5	1728.8	2028.9
127.5°	593.1	670.0	1010.8	1612.7	1871.5
130°	617.0	694.0	1005.8	1541.6	1777.1
132.5°	639.7	712.9	1000.8	1481.9	1695.2
135°	670.5	742.9	993.2	1400.2	1578.8
137.5°	705.2	771.0	989.4	1331.6	1484.0
140°	724.1	788.7	986.9	1285.9	1419.8
142.5°	745.5	805.2	984.4	1245.2	1363.1
145°	777.6	831.4	980.6	1192.0	1282.8
147.5°	808.4	855.5	977.2	1147.2	1217.7
150°	831.1	869.6	975.9	1120.4	1177.4
152.5°	848.7	884.7	974.6	1097.5	1144.6
155°	876.7	906.0	972.7	1069.5	1103.4
157.5°	902.5	925.0	973.1	1049.1	1072.2
160°	917.7	937.7	974.3	1037.7	1054.6
162.5°	930.3	947.8	975.6	1027.5	1040.7
165°	949.1	961.5	977.5	1015.4	1023.1
167.5°	963.6	971.0	979.0	1008.1	1010.5
170°	971.2	977.3	979.0	1004.2	1004.2
172.5°	977.5	981.2	979.0	999.2	997.9
175°	983.8	985.3	979.0	993.1	990.1
177.5°	986.3	985.1	978.7	987.5	985.0
180°	983.8	983.8	983.8	983.8	983.8

(END OF REPORT)