

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: P519367

Luminaire Tested: **SQ4-WB-100U-050D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519367
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-12
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

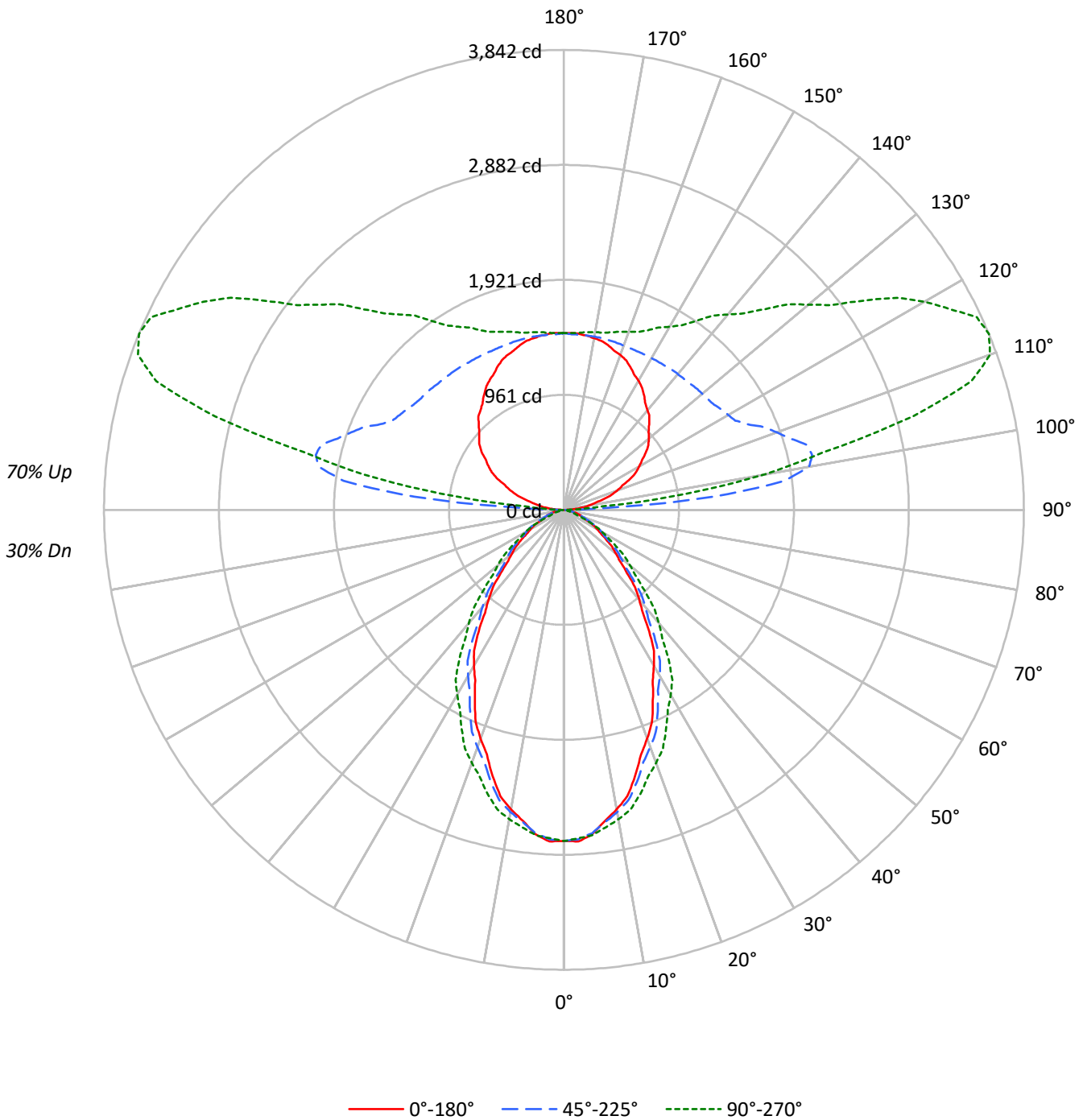
Lumens per Lamp: N/A
Luminaire Lumens: 13621.5 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 127.4
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	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°	7936	8008	8194
15°	7326	7496	7833
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	2269
65°	1563	1846	1466
70°	1386	1440	895
75°	1283	1168	548
80°	1183	1075	473
85°	1069	984	385



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.7	1.9
10°-20°	659.9	4.8
20°-30°	854.7	6.3
30°-40°	837.0	6.1
40°-50°	640.7	4.7
50°-60°	426.9	3.1
60°-70°	233.0	1.7
70°-80°	97.1	0.7
80°-90°	30.5	0.2
90°-100°	691.1	5.1
100°-110°	1907.8	14.0
110°-120°	1967.5	14.4
120°-130°	1581.1	11.6
130°-140°	1242.6	9.1
140°-150°	953.0	7.0
150°-160°	684.9	5.0
160°-170°	418.9	3.1
170°-180°	141.2	1.0
0°-30°	1768.3	13.0
0°-40°	2605.3	19.1
0°-60°	3672.9	27.0
0°-90°	4033.5	29.6
90°-120°	4566.4	33.5
90°-150°	8343.0	61.2
90°-180°	9588.0	70.4
0°-180°	13621.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2766	2766	2766	2766	2766	
5°	2721	2694	2711	2718	2727	253
15°	2301	2293	2354	2418	2460	643
25°	1759	1763	1854	1935	2021	809
35°	1243	1249	1333	1422	1523	773
45°	745	759	810	871	950	581
55°	428	446	472	490	530	388
65°	215	233	254	222	202	223
75°	108	108	98	68	46	115
85°	30	30	28	18	11	33
90°	5	9	19	21	24	9
95°	102	374	1254	515	335	109
105°	340	525	2099	3204	3017	362
115°	609	736	1690	3347	3806	599
125°	836	951	1532	2593	3043	744
135°	1006	1114	1490	2100	2368	778
145°	1166	1247	1471	1788	1924	730
155°	1315	1359	1459	1604	1655	606
165°	1424	1442	1466	1523	1535	401
175°	1476	1478	1469	1490	1485	140
180°	1476	1476	1476	1476	1476	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2765.9	2765.9	2765.9	2765.9	2765.9
2.5°	2772.7	2748.0	2754.3	2754.1	2746.5
5°	2721.0	2693.7	2711.3	2717.6	2727.1
7.5°	2620.0	2599.4	2631.4	2655.2	2674.4
10°	2541.4	2523.6	2564.4	2599.0	2623.9
12.5°	2450.1	2435.2	2485.8	2532.2	2564.7
15°	2301.1	2292.8	2354.5	2418.5	2460.1
17.5°	2141.6	2137.6	2208.4	2283.1	2336.3
20°	2032.9	2031.7	2109.3	2187.2	2248.9
22.5°	1923.1	1925.8	2007.4	2088.3	2158.6
25°	1758.6	1763.3	1854.5	1935.3	2020.7
27.5°	1606.4	1608.5	1702.7	1788.1	1879.2
30°	1502.5	1508.4	1600.8	1689.1	1784.1
32.5°	1398.6	1405.5	1495.9	1587.2	1684.1
35°	1242.8	1248.7	1332.6	1422.3	1523.1
37.5°	1082.1	1090.2	1164.6	1249.4	1348.6
40°	978.2	990.1	1055.9	1135.8	1233.1
42.5°	878.2	892.9	953.9	1029.7	1117.5
45°	745.2	759.4	809.5	870.8	950.3
47.5°	630.6	647.0	685.5	738.2	806.1
50°	565.6	581.0	616.5	655.6	719.7
52.5°	508.3	523.7	555.4	585.5	640.1
55°	428.4	446.2	472.1	490.0	530.4
57.5°	362.9	380.0	400.5	408.6	433.0
60°	319.2	338.2	356.8	355.9	368.9
62.5°	279.4	295.5	314.1	301.2	302.0
65°	214.8	232.6	253.7	221.6	201.5
67.5°	173.6	177.3	199.0	154.6	130.6
70°	154.1	154.1	160.2	119.7	99.5
72.5°	135.7	135.7	130.1	97.3	76.2
75°	108.0	108.0	98.3	67.5	46.1
77.5°	83.3	82.3	75.2	50.3	33.5
80°	66.8	66.8	60.7	39.8	26.7
82.5°	52.2	52.2	47.1	31.1	19.9
85°	30.3	30.3	27.9	18.0	10.9
87.5°	11.6	12.5	13.5	10.1	9.6
90°	4.7	9.3	18.9	21.3	23.6
92.5°	42.5	176.4	315.4	115.1	89.7
95°	101.5	373.9	1253.7	515.3	335.3
97.5°	168.1	418.8	1857.2	1429.9	1035.6
100°	217.2	445.8	2080.1	2094.8	1702.3
102.5°	264.4	476.4	2123.5	2588.2	2216.1
105°	340.0	524.7	2099.0	3204.4	3017.4
107.5°	420.3	584.6	1981.9	3501.6	3569.9
110°	476.9	624.7	1891.2	3565.5	3787.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	527.9	670.1	1806.2	3515.0	3841.9
115°	609.1	736.1	1690.5	3346.6	3806.0
117.5°	680.0	806.5	1614.5	3109.6	3632.2
120°	727.2	851.9	1584.3	2949.1	3475.5
122.5°	772.5	891.7	1559.7	2799.3	3297.9
125°	835.8	951.2	1532.3	2593.2	3043.4
127.5°	889.6	1005.1	1516.3	2419.0	2807.3
130°	925.5	1041.0	1508.7	2312.4	2665.6
132.5°	959.5	1069.4	1501.2	2222.9	2542.8
135°	1005.8	1114.3	1489.8	2100.3	2368.1
137.5°	1057.7	1156.6	1484.2	1997.4	2226.0
140°	1086.1	1183.0	1480.4	1928.8	2129.7
142.5°	1118.2	1207.8	1476.6	1867.8	2044.7
145°	1166.4	1247.2	1470.9	1788.0	1924.3
147.5°	1212.6	1283.3	1465.7	1720.8	1826.5
150°	1246.6	1304.3	1463.8	1680.6	1766.1
152.5°	1273.1	1327.1	1462.0	1646.3	1717.0
155°	1315.1	1359.0	1459.1	1604.3	1655.1
157.5°	1353.8	1387.5	1459.6	1573.7	1608.3
160°	1376.5	1406.5	1461.5	1556.5	1581.9
162.5°	1395.4	1421.7	1463.4	1541.3	1561.1
165°	1423.7	1442.2	1466.2	1523.1	1534.7
167.5°	1445.4	1456.5	1468.6	1512.1	1515.8
170°	1456.8	1466.0	1468.6	1506.3	1506.3
172.5°	1466.2	1471.7	1468.6	1498.7	1496.9
175°	1475.7	1478.0	1468.6	1489.7	1485.1
177.5°	1479.4	1477.6	1468.1	1481.2	1477.5
180°	1475.7	1475.7	1475.7	1475.7	1475.7

(END OF REPORT)