

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: P518699

Luminaire Tested: **SQ4-BB-100U-050D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518699
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-100U-050D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

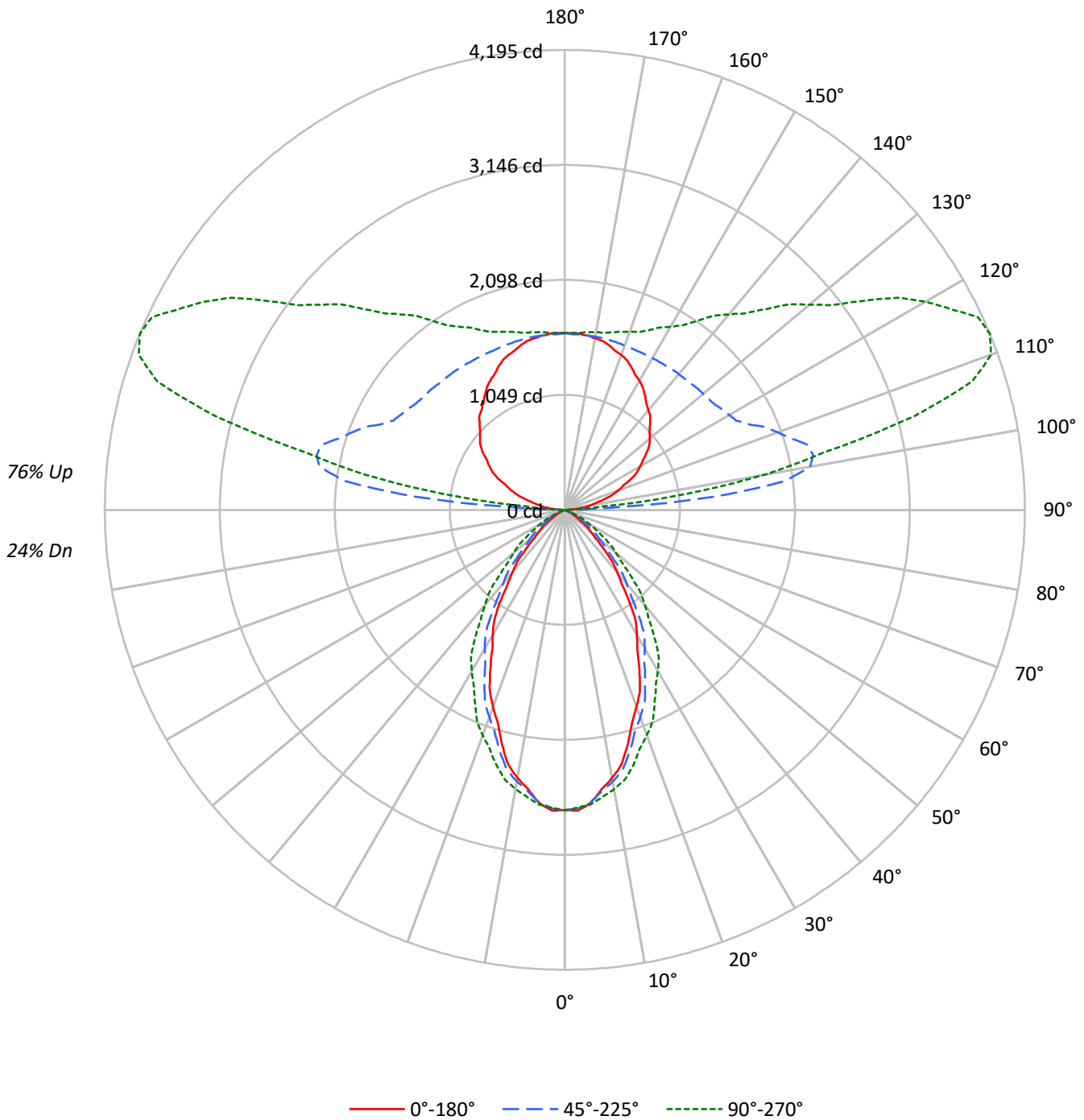
Lumens per Lamp: N/A
Luminaire Lumens: 13739.9 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	93	89	86	82	82	79	77	74	61	60	58	45	44	43	30	29	29	22
2	85	79	73	69	76	70	66	62	55	52	49	40	39	37	27	26	25	20
3	78	70	63	58	70	63	57	53	49	45	42	36	34	32	25	24	23	18
4	72	62	55	50	64	56	50	45	44	40	37	33	31	28	23	21	20	16
5	66	56	49	43	59	50	44	39	40	36	32	30	27	25	21	19	18	15
6	61	50	43	38	55	45	39	35	36	32	28	27	25	22	19	18	17	13
7	57	46	38	33	51	41	35	31	33	29	25	25	22	20	18	16	15	12
8	53	41	34	30	47	38	31	27	30	26	23	23	20	18	17	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	19	17	16	14	13	10
10	46	35	28	24	41	32	26	22	26	21	19	20	17	15	15	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8423	8423	8423
5°	8288	8267	8329
10°	7755	7858	8077
15°	7050	7273	7678
20°	6258	6583	7160
25°	5450	5881	6578
30°	4668	5181	6028
35°	3870	4398	5363
40°	2974	3516	4569
45°	2150	2663	3677
50°	1465	1984	2916
55°	952	1435	2266
60°	546	1011	1638
65°	145	617	830
70°	72	191	238
75°	32	15	0
80°	23	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.0	1.8
10°-20°	639.2	4.7
20°-30°	800.2	5.8
30°-40°	739.2	5.4
40°-50°	496.7	3.6
50°-60°	256.6	1.9
60°-70°	80.3	0.6
70°-80°	5.1	0.0
80°-90°	3.4	0.0
90°-100°	754.6	5.5
100°-110°	2083.1	15.2
110°-120°	2148.4	15.6
120°-130°	1726.4	12.6
130°-140°	1356.8	9.9
140°-150°	1040.6	7.6
150°-160°	747.9	5.4
160°-170°	457.3	3.3
170°-180°	154.2	1.1
0°-30°	1689.4	12.3
0°-40°	2428.6	17.7
0°-60°	3181.8	23.2
0°-90°	3270.7	23.8
90°-120°	4986.1	36.3
90°-150°	9109.9	66.3
90°-180°	10469.0	76.2
0°-180°	13739.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2739	2739	2739	2739	2739	
5°	2685	2657	2678	2688	2698	249
15°	2214	2206	2284	2361	2412	617
25°	1606	1619	1733	1852	1939	736
35°	1031	1057	1171	1309	1428	639
45°	494	524	612	731	845	388
55°	178	207	268	344	423	166
65°	20	38	85	102	114	34
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	5	10	21	23	26	8
95°	111	408	1369	563	366	119
105°	371	573	2292	3499	3295	395
115°	665	804	1846	3654	4156	654
125°	913	1039	1673	2832	3323	812
135°	1098	1217	1627	2293	2586	850
145°	1274	1362	1606	1952	2101	797
155°	1436	1484	1593	1752	1807	662
165°	1555	1575	1601	1663	1676	438
175°	1611	1614	1604	1627	1622	153
180°	1611	1611	1611	1611	1611	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2738.9	2738.9	2738.9	2738.9	2738.9
2.5°	2745.3	2719.4	2726.2	2726.0	2718.8
5°	2684.6	2657.4	2678.0	2687.5	2697.9
7.5°	2571.2	2549.9	2589.5	2619.1	2640.6
10°	2483.2	2465.1	2516.3	2556.7	2586.5
12.5°	2381.4	2367.4	2429.4	2484.9	2522.9
15°	2214.2	2206.4	2284.4	2361.1	2411.6
17.5°	2035.1	2034.8	2123.8	2219.0	2279.9
20°	1912.1	1916.0	2011.5	2116.4	2187.7
22.5°	1789.1	1798.2	1900.2	2009.6	2091.2
25°	1606.0	1618.9	1733.2	1851.8	1938.6
27.5°	1430.0	1448.9	1569.2	1692.4	1798.1
30°	1314.5	1336.5	1458.9	1588.6	1697.4
32.5°	1201.0	1227.2	1346.5	1483.7	1594.6
35°	1030.9	1056.8	1171.4	1309.2	1428.4
37.5°	855.2	880.6	992.5	1128.2	1257.0
40°	740.7	769.2	875.9	1007.4	1138.2
42.5°	636.8	665.3	765.6	894.9	1018.5
45°	494.3	524.1	612.2	731.4	845.4
47.5°	376.1	408.4	485.8	593.6	697.5
50°	306.1	338.5	414.7	509.8	609.5
52.5°	249.9	281.3	350.1	439.6	531.1
55°	177.6	207.4	267.7	343.7	422.7
57.5°	122.7	148.4	202.5	265.9	327.8
60°	88.8	113.4	164.3	215.8	266.3
62.5°	59.1	81.6	131.4	170.9	204.9
65°	19.9	38.0	84.8	102.3	114.0
67.5°	10.1	12.1	44.5	47.0	50.9
70°	8.0	8.0	21.2	22.6	26.5
72.5°	5.8	5.8	8.5	10.9	11.7
75°	2.7	2.7	1.3	0.0	0.0
77.5°	1.3	1.3	1.1	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	2.0	4.1	4.7	5.2
90°	5.2	10.2	20.6	23.3	25.8
92.5°	46.4	192.6	344.4	125.7	98.0
95°	110.9	408.3	1368.9	562.7	366.1
97.5°	183.6	457.3	2027.9	1561.3	1130.7
100°	237.2	486.7	2271.3	2287.3	1858.8
102.5°	288.7	520.1	2318.7	2826.1	2419.8
105°	371.2	572.9	2291.9	3498.9	3294.7
107.5°	458.9	638.4	2164.0	3823.4	3898.0
110°	520.8	682.1	2065.0	3893.2	4135.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	576.5	731.7	1972.2	3838.1	4195.0
115°	665.1	803.8	1845.9	3654.2	4155.8
117.5°	742.5	880.6	1762.9	3395.4	3966.1
120°	794.0	930.2	1729.9	3220.2	3794.9
122.5°	843.5	973.6	1703.1	3056.5	3601.0
125°	912.6	1038.7	1673.2	2831.6	3323.1
127.5°	971.4	1097.4	1655.6	2641.3	3065.3
130°	1010.6	1136.6	1647.4	2524.9	2910.6
132.5°	1047.7	1167.7	1639.1	2427.2	2776.6
135°	1098.2	1216.7	1626.7	2293.4	2585.8
137.5°	1155.0	1262.9	1620.6	2181.0	2430.6
140°	1185.9	1291.8	1616.4	2106.1	2325.4
142.5°	1221.0	1318.8	1612.3	2039.5	2232.6
145°	1273.6	1361.8	1606.1	1952.4	2101.1
147.5°	1324.1	1401.2	1600.5	1878.9	1994.4
150°	1361.2	1424.2	1598.4	1835.1	1928.4
152.5°	1390.1	1449.1	1596.3	1797.6	1874.8
155°	1436.0	1483.9	1593.2	1751.8	1807.2
157.5°	1478.3	1515.1	1593.7	1718.4	1756.2
160°	1503.0	1535.8	1595.8	1699.6	1727.3
162.5°	1523.6	1552.4	1597.9	1682.9	1704.6
165°	1554.6	1574.7	1601.0	1663.1	1675.7
167.5°	1578.3	1590.4	1603.5	1651.1	1655.1
170°	1590.7	1600.7	1603.5	1644.8	1644.8
172.5°	1601.0	1607.0	1603.5	1636.5	1634.5
175°	1611.3	1613.8	1603.5	1626.6	1621.6
177.5°	1615.4	1613.4	1603.0	1617.4	1613.3
180°	1611.3	1611.3	1611.3	1611.3	1611.3

(END OF REPORT)