

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: P518894

Luminaire Tested: **SQ4-BB-150U-050D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518894  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-935-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

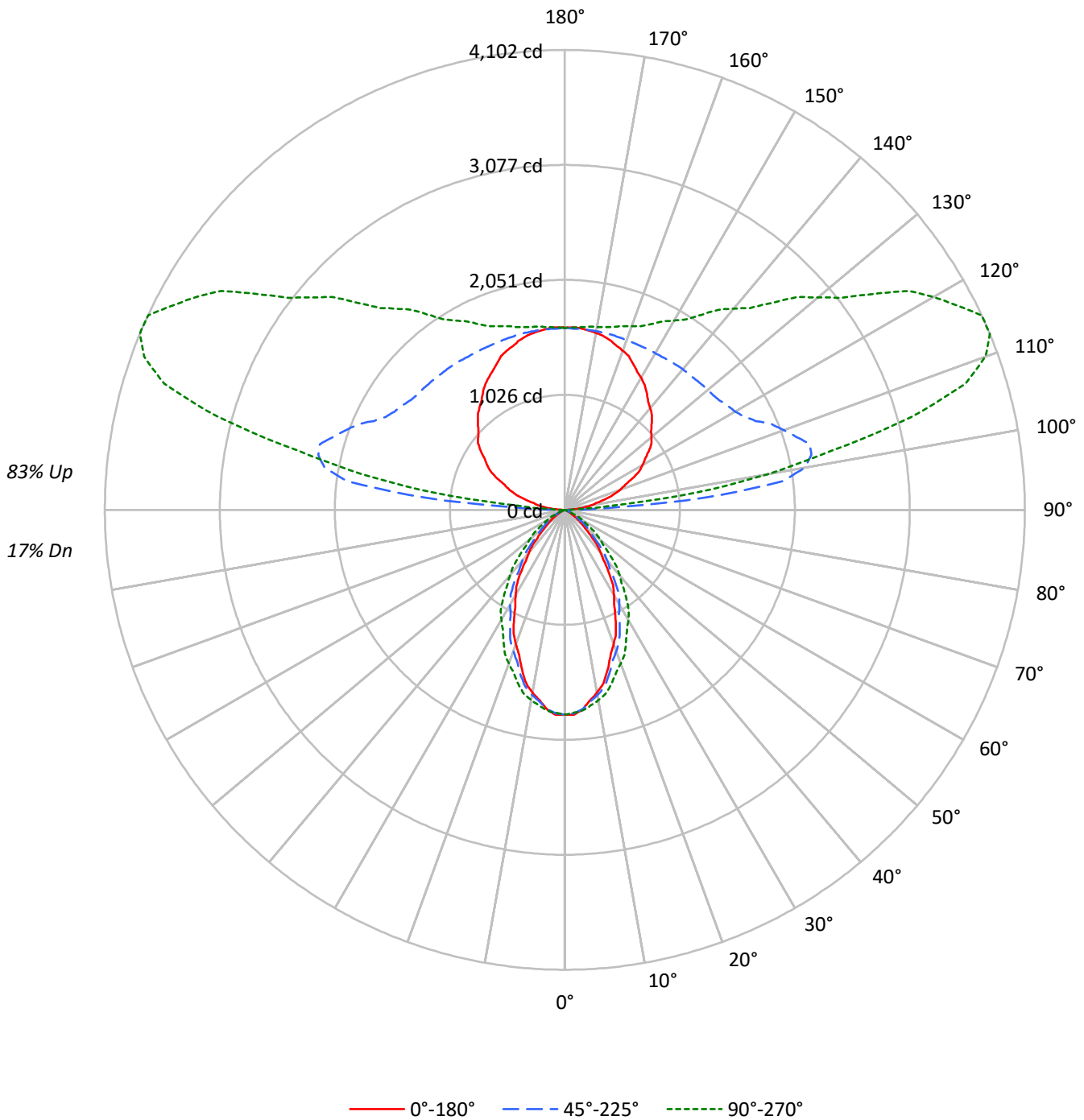
Lumens per Lamp: N/A  
Luminaire Lumens: 12649.9 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 111.9  
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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26	17
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23	16
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20	14
3	76	68	61	56	67	60	55	51	46	42	39	32	30	29	20	19	18	13
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16	12
5	64	54	47	41	57	48	42	37	37	33	30	26	24	22	17	15	14	11
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10
7	55	44	37	32	48	39	33	29	30	26	23	22	19	17	14	13	12	9
8	51	40	33	28	45	36	30	25	28	23	20	20	18	16	13	12	11	8
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	8
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9	7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8424	8424	8424
5°	8288	8267	8329
10°	7755	7858	8078
15°	7050	7274	7679
20°	6258	6583	7160
25°	5450	5881	6578
30°	4668	5181	6028
35°	3871	4398	5363
40°	2974	3516	4569
45°	2150	2662	3677
50°	1465	1984	2917
55°	952	1435	2266
60°	546	1010	1639
65°	145	617	830
70°	71	190	239
75°	32	16	0
80°	24	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.6	1.3
10°-20°	426.2	3.4
20°-30°	533.5	4.2
30°-40°	492.8	3.9
40°-50°	331.1	2.6
50°-60°	171.0	1.4
60°-70°	53.6	0.4
70°-80°	3.4	0.0
80°-90°	3.4	0.0
90°-100°	754.6	6.0
100°-110°	2040.2	16.1
110°-120°	2145.0	17.0
120°-130°	1742.3	13.8
130°-140°	1366.7	10.8
140°-150°	1049.0	8.3
150°-160°	754.4	6.0
160°-170°	460.8	3.6
170°-180°	155.4	1.2
0°-30°	1126.3	8.9
0°-40°	1619.1	12.8
0°-60°	2121.2	16.8
0°-90°	2181.6	17.2
90°-120°	4939.8	39.0
90°-150°	9097.7	71.9
90°-180°	10468.0	82.8
0°-180°	12649.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1826	1826	1826	1826	1826	
5°	1790	1772	1785	1792	1799	166
15°	1476	1471	1523	1574	1608	411
25°	1071	1079	1156	1234	1292	491
35°	687	704	781	873	952	426
45°	330	349	408	488	564	259
55°	118	138	178	229	282	110
65°	13	25	56	68	76	22
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	4	10	23	24	23	8
95°	117	411	1255	649	386	123
105°	379	586	2263	3339	3202	399
115°	668	816	1877	3634	4102	659
125°	914	1047	1692	2855	3354	815
135°	1096	1226	1646	2305	2609	847
145°	1274	1370	1624	1973	2124	797
155°	1438	1495	1610	1770	1828	663
165°	1566	1581	1617	1680	1688	441
175°	1625	1624	1618	1639	1636	154
180°	1624	1624	1624	1624	1624	

TEST NUMBER: P518894

CATALOG NUMBER: SQ4-BB-150U-050D-935-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1826.0	1826.0	1826.0	1826.0	1826.0
2.5°	1830.2	1812.9	1817.5	1817.4	1812.5
5°	1789.7	1771.6	1785.3	1791.7	1798.6
7.5°	1714.1	1700.0	1726.3	1746.1	1760.4
10°	1655.5	1643.4	1677.5	1704.5	1724.4
12.5°	1587.6	1578.3	1619.6	1656.6	1682.0
15°	1476.1	1471.0	1523.0	1574.1	1607.8
17.5°	1356.7	1356.5	1415.9	1479.4	1520.0
20°	1274.7	1277.3	1341.0	1411.0	1458.5
22.5°	1192.7	1198.8	1266.8	1339.7	1394.2
25°	1070.7	1079.3	1155.5	1234.5	1292.4
27.5°	953.3	966.0	1046.1	1128.3	1198.8
30°	876.3	891.0	972.6	1059.1	1131.6
32.5°	800.7	818.1	897.7	989.1	1063.1
35°	687.3	704.5	780.9	872.8	952.3
37.5°	570.1	587.1	661.7	752.1	838.0
40°	493.8	512.8	583.9	671.6	758.8
42.5°	424.6	443.6	510.4	596.6	679.0
45°	329.5	349.4	408.1	487.6	563.6
47.5°	250.7	272.3	323.8	395.7	465.0
50°	204.1	225.7	276.5	339.8	406.4
52.5°	166.6	187.5	233.4	293.1	354.1
55°	118.4	138.2	178.4	229.1	281.8
57.5°	81.8	98.9	135.0	177.3	218.5
60°	59.2	75.6	109.5	143.9	177.6
62.5°	39.4	54.4	87.6	113.9	136.6
65°	13.3	25.3	56.5	68.2	76.0
67.5°	6.7	8.1	29.7	31.3	33.9
70°	5.3	5.3	14.1	15.1	17.7
72.5°	3.9	3.9	5.7	7.3	7.8
75°	1.8	1.8	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.7	2.1	4.5	4.9	4.5
90°	3.5	10.3	22.7	24.4	22.7
92.5°	49.6	180.9	356.9	154.9	112.2
95°	117.1	411.0	1254.9	649.4	386.3
97.5°	188.1	471.4	1956.1	1618.8	1188.8
100°	241.2	495.8	2174.2	2267.5	1833.4
102.5°	290.1	529.7	2251.1	2759.3	2434.6
105°	379.3	586.0	2263.3	3338.6	3201.9
107.5°	461.8	650.4	2164.4	3700.0	3745.4
110°	526.1	697.0	2076.3	3797.0	3990.1

TEST NUMBER: P518894

CATALOG NUMBER: SQ4-BB-150U-050D-935-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	583.4	743.4	1995.2	3777.6	4102.0
115°	667.6	816.3	1877.1	3633.7	4102.0
117.5°	750.1	889.6	1799.1	3413.9	3944.7
120°	800.5	937.2	1753.0	3256.1	3797.9
122.5°	848.0	982.0	1725.0	3087.0	3632.9
125°	914.1	1047.4	1691.8	2854.9	3353.9
127.5°	974.9	1105.8	1672.2	2665.5	3104.4
130°	1008.5	1143.5	1663.9	2548.5	2945.0
132.5°	1043.4	1177.0	1655.5	2442.9	2807.9
135°	1095.8	1225.7	1646.4	2305.2	2609.4
137.5°	1148.6	1271.3	1638.7	2193.5	2441.3
140°	1185.0	1299.5	1635.9	2121.5	2342.0
142.5°	1219.9	1327.6	1630.3	2056.6	2249.7
145°	1274.1	1369.8	1623.7	1973.1	2123.5
147.5°	1323.4	1408.2	1616.0	1897.5	2013.1
150°	1359.7	1434.9	1613.2	1856.5	1948.7
152.5°	1393.3	1458.9	1611.8	1818.3	1894.2
155°	1438.4	1494.8	1609.7	1770.0	1828.1
157.5°	1485.2	1524.5	1610.0	1736.4	1774.7
160°	1511.8	1544.3	1611.4	1715.2	1742.5
162.5°	1532.8	1559.8	1612.8	1698.2	1718.7
165°	1566.0	1581.4	1616.7	1679.8	1688.3
167.5°	1588.7	1599.3	1617.0	1664.0	1668.1
170°	1602.7	1607.8	1618.4	1656.9	1656.9
172.5°	1613.9	1614.9	1618.4	1648.4	1647.1
175°	1625.4	1623.7	1618.4	1639.3	1635.9
177.5°	1629.3	1625.2	1618.1	1632.0	1627.9
180°	1623.7	1623.7	1623.7	1623.7	1623.7

(END OF REPORT)