

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: P518918

Luminaire Tested: **SQ4-BB-150U-075D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518918  
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-075D-935-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

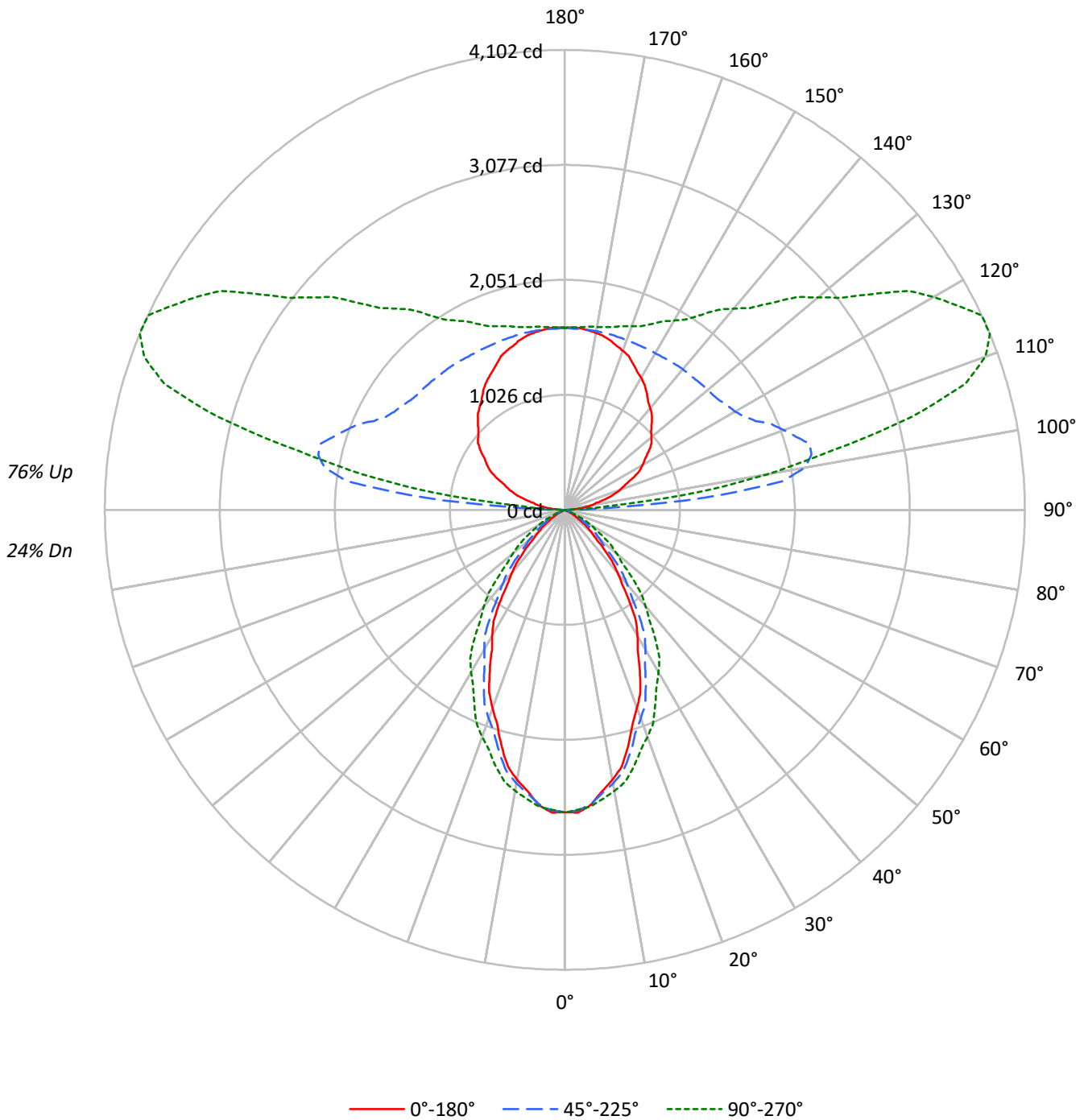
Lumens per Lamp: N/A  
Luminaire Lumens: 13688.6 lumens  
Efficiency: N/A  
Efficacy: 104.4 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 131.1  
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	49	49	49	32	32	32	24
1	93	89	85	82	82	79	76	74	61	59	58	45	44	43	29	29	28	21
2	85	79	73	69	76	70	66	62	55	52	49	40	38	37	27	26	25	19
3	78	70	63	58	69	63	57	53	49	45	42	36	34	32	25	23	23	17
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	23	21	20	16
5	66	56	48	43	59	50	44	39	40	35	32	30	27	25	21	19	18	14
6	61	50	43	38	54	45	39	35	36	32	28	27	24	22	19	18	16	13
7	57	45	38	33	50	41	35	31	33	28	25	25	22	20	18	16	15	12
8	53	41	34	30	47	37	31	27	30	26	23	23	20	18	16	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	18	16	15	14	13	10
10	46	35	28	24	41	32	26	22	26	21	18	20	17	15	14	13	12	10

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

	0°	45°	90°
0°	12440	12440	12440
5°	12240	12210	12301
10°	11453	11605	11929
15°	10412	10742	11340
20°	9242	9723	10574
25°	8048	8686	9715
30°	6894	7651	8903
35°	5716	6495	7920
40°	4392	5193	6749
45°	3175	3932	5431
50°	2163	2931	4307
55°	1406	2119	3347
60°	806	1493	2419
65°	214	911	1225
70°	105	282	352
75°	46	23	0
80°	35	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	246.1	1.8
10°-20°	629.4	4.6
20°-30°	787.9	5.8
30°-40°	727.8	5.3
40°-50°	489.0	3.6
50°-60°	252.6	1.8
60°-70°	79.1	0.6
70°-80°	5.0	0.0
80°-90°	3.5	0.0
90°-100°	754.6	5.5
100°-110°	2040.2	14.9
110°-120°	2145.0	15.7
120°-130°	1742.3	12.7
130°-140°	1366.7	10.0
140°-150°	1049.0	7.7
150°-160°	754.4	5.5
160°-170°	460.8	3.4
170°-180°	155.4	1.1
0°-30°	1663.4	12.2
0°-40°	2391.1	17.5
0°-60°	3132.7	22.9
0°-90°	3220.3	23.5
90°-120°	4939.8	36.1
90°-150°	9097.7	66.5
90°-180°	10468.0	76.5
0°-180°	13688.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2697	2697	2697	2697	2697	
5°	2643	2616	2637	2646	2656	245
15°	2180	2172	2249	2325	2374	607
25°	1581	1594	1706	1823	1909	725
35°	1015	1040	1153	1289	1406	629
45°	487	516	603	720	832	382
55°	175	204	264	338	416	163
65°	20	37	84	101	112	33
75°	3	3	1	0	0	4
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2696.7	2696.7	2696.7	2696.7	2696.7
2.5°	2703.0	2677.5	2684.2	2684.0	2676.9
5°	2643.2	2616.4	2636.7	2646.1	2656.3
7.5°	2531.5	2510.6	2549.5	2578.7	2599.9
10°	2444.9	2427.0	2477.5	2517.3	2546.7
12.5°	2344.7	2330.9	2391.9	2446.5	2484.0
15°	2180.1	2172.4	2249.2	2324.7	2374.5
17.5°	2003.7	2003.4	2091.1	2184.8	2244.8
20°	1882.6	1886.4	1980.5	2083.8	2154.0
22.5°	1761.5	1770.5	1870.9	1978.6	2059.0
25°	1581.2	1594.0	1706.5	1823.2	1908.7
27.5°	1408.0	1426.6	1545.0	1666.3	1770.4
30°	1294.2	1315.9	1436.4	1564.1	1671.3
32.5°	1182.5	1208.3	1325.8	1460.8	1570.0
35°	1015.0	1040.5	1153.3	1289.0	1406.4
37.5°	842.0	867.0	977.2	1110.8	1237.6
40°	729.3	757.4	862.4	991.8	1120.7
42.5°	627.0	655.1	753.8	881.1	1002.8
45°	486.6	516.0	602.7	720.1	832.4
47.5°	370.3	402.1	478.3	584.5	686.8
50°	301.4	333.3	408.4	501.9	600.1
52.5°	246.1	276.9	344.7	432.8	522.9
55°	174.8	204.2	263.5	338.4	416.2
57.5°	120.8	146.1	199.3	261.8	322.8
60°	87.4	111.6	161.8	212.5	262.2
62.5°	58.2	80.4	129.4	168.3	201.7
65°	19.6	37.4	83.5	100.7	112.2
67.5°	9.9	12.0	43.8	46.3	50.1
70°	7.8	7.8	20.9	22.3	26.1
72.5°	5.7	5.7	8.3	10.7	11.5
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	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°	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

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**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)