

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521309

Luminaire Tested: **SQ4-BB-150U-075D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521309  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-150U-075D-93050-1D-UNV-STD-W-4 (3000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

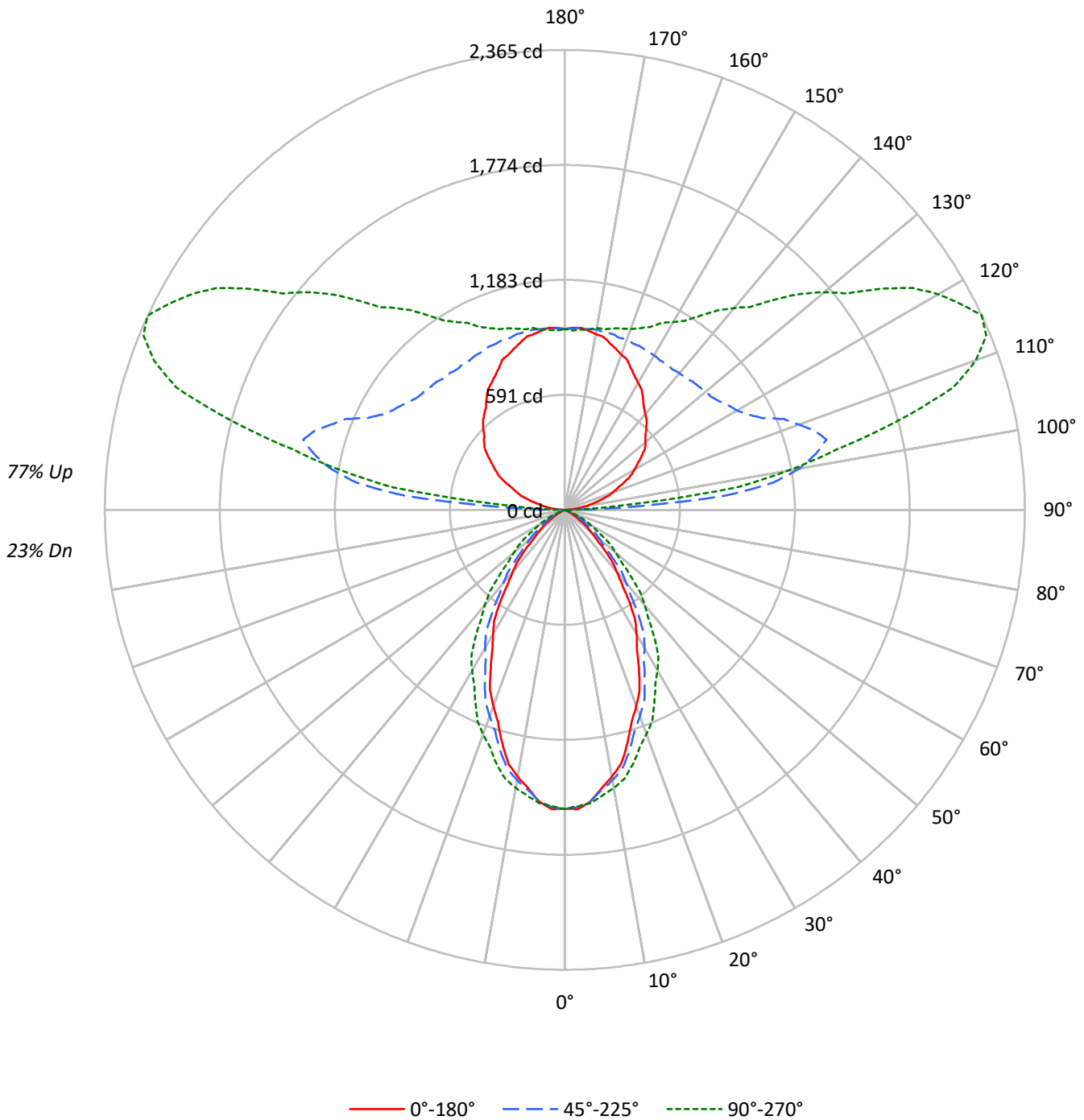
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7854.8 lumens  
Efficiency: N/A  
Efficacy: 95.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 82.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	23
1	93	89	85	82	82	79	76	74	61	59	58	44	43	43	29	29	28	21
2	85	78	73	69	75	70	66	62	55	52	49	40	38	37	27	26	25	19
3	78	70	63	58	69	62	57	53	49	45	42	36	34	32	24	23	22	17
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	22	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	29	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	12	10
10	46	35	28	24	41	32	26	22	25	21	18	20	17	15	14	13	11	9

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

	0°	45°	90°
0°	14183	14183	14183
5°	13954	13920	14024
10°	13057	13231	13600
15°	11870	12246	12928
20°	10536	11084	12055
25°	9176	9902	11076
30°	7859	8723	10150
35°	6517	7404	9030
40°	5007	5921	7694
45°	3619	4483	6191
50°	2466	3341	4910
55°	1604	2416	3815
60°	919	1701	2759
65°	245	1039	1397
70°	121	321	402
75°	53	25	0
80°	37	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.3	1.8
10°-20°	358.8	4.6
20°-30°	449.1	5.7
30°-40°	414.8	5.3
40°-50°	278.8	3.5
50°-60°	144.0	1.8
60°-70°	45.1	0.6
70°-80°	2.8	0.0
80°-90°	0.0	0.0
90°-100°	479.4	6.1
100°-110°	1158.6	14.7
110°-120°	1235.7	15.7
120°-130°	1000.8	12.7
130°-140°	774.9	9.9
140°-150°	591.1	7.5
150°-160°	427.9	5.4
160°-170°	263.5	3.4
170°-180°	89.2	1.1
0°-30°	948.2	12.1
0°-40°	1363.0	17.4
0°-60°	1785.8	22.7
0°-90°	1833.7	23.3
90°-120°	2873.6	36.6
90°-150°	5240.4	66.7
90°-180°	6021.0	76.7
0°-180°	7854.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1537	1537	1537	1537	1537	
5°	1507	1491	1503	1508	1514	140
15°	1243	1238	1282	1325	1354	346
25°	901	909	973	1039	1088	413
35°	579	593	657	735	802	358
45°	277	294	344	410	474	218
55°	100	116	150	193	237	93
65°	11	21	48	57	64	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	47	240	821	534	374	53
105°	185	320	1392	1802	1778	196
115°	339	433	1119	2121	2365	335
125°	482	556	971	1687	1981	431
135°	593	662	932	1330	1530	458
145°	701	753	914	1131	1219	438
155°	804	838	926	1001	1038	371
165°	888	902	938	952	965	251
175°	940	936	940	932	930	89
180°	930	930	930	930	930	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1537.2	1537.2	1537.2	1537.2	1537.2
2.5°	1540.8	1526.2	1530.1	1530.0	1525.9
5°	1506.7	1491.4	1503.0	1508.3	1514.2
7.5°	1443.1	1431.1	1453.3	1470.0	1482.0
10°	1393.7	1383.5	1412.3	1435.0	1451.7
12.5°	1336.6	1328.7	1363.5	1394.6	1416.0
15°	1242.7	1238.3	1282.1	1325.2	1353.5
17.5°	1142.2	1142.0	1192.0	1245.4	1279.6
20°	1073.1	1075.3	1128.9	1187.8	1227.8
22.5°	1004.1	1009.2	1066.4	1127.9	1173.7
25°	901.4	908.6	972.7	1039.3	1088.0
27.5°	802.6	813.2	880.7	949.8	1009.2
30°	737.7	750.1	818.8	891.6	952.7
32.5°	674.1	688.8	755.7	832.7	895.0
35°	578.6	593.1	657.4	734.8	801.7
37.5°	480.0	494.2	557.0	633.2	705.5
40°	415.7	431.7	491.6	565.4	638.8
42.5°	357.4	373.4	429.7	502.2	571.6
45°	277.4	294.1	343.6	410.5	474.5
47.5°	211.1	229.2	272.6	333.2	391.5
50°	171.8	190.0	232.8	286.1	342.1
52.5°	140.3	157.9	196.5	246.7	298.1
55°	99.7	116.4	150.2	192.9	237.2
57.5°	68.9	83.3	113.6	149.2	184.0
60°	49.8	63.6	92.2	121.1	149.5
62.5°	33.2	45.8	73.8	95.9	115.0
65°	11.2	21.3	47.6	57.4	64.0
67.5°	5.7	6.8	25.0	26.4	28.6
70°	4.5	4.5	11.9	12.7	14.9
72.5°	3.3	3.3	4.8	6.1	6.5
75°	1.5	1.5	0.7	0.0	0.0
77.5°	0.7	0.7	0.6	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	15.8	129.8	305.7	148.6	100.8
95°	47.3	239.8	821.3	534.1	374.2
97.5°	83.9	265.7	1081.7	1042.1	894.6
100°	112.3	281.7	1225.1	1293.2	1171.9
102.5°	139.1	296.2	1319.6	1502.3	1430.3
105°	185.1	319.9	1392.5	1801.6	1778.5
107.5°	230.4	347.9	1349.5	2041.7	2096.0
110°	262.0	371.7	1280.2	2145.2	2247.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	293.5	395.5	1218.8	2170.5	2345.0
115°	338.8	433.1	1118.7	2120.9	2365.4
117.5°	383.7	472.6	1060.0	2006.8	2293.4
120°	413.6	496.4	1022.2	1917.3	2217.7
122.5°	445.1	521.8	998.6	1825.8	2121.6
125°	482.5	555.7	971.0	1686.7	1981.4
127.5°	519.6	588.5	951.7	1568.9	1827.7
130°	541.6	609.0	945.4	1486.9	1741.1
132.5°	562.1	632.6	935.9	1427.7	1643.4
135°	592.8	662.2	931.6	1330.1	1530.3
137.5°	622.0	691.7	917.8	1263.9	1414.9
140°	644.0	707.6	917.8	1216.4	1355.1
142.5°	666.1	729.7	909.9	1174.9	1292.0
145°	701.2	753.2	913.9	1130.6	1219.2
147.5°	733.9	784.3	911.5	1079.4	1152.6
150°	754.3	798.6	917.8	1057.0	1114.8
152.5°	776.4	819.2	916.2	1033.2	1084.8
155°	803.6	838.2	925.7	1001.4	1038.0
157.5°	836.3	865.9	923.7	989.2	1010.8
160°	848.9	873.9	931.6	973.3	988.7
162.5°	869.4	891.3	928.4	968.4	977.7
165°	888.3	901.8	937.5	951.6	965.1
167.5°	911.5	920.4	935.1	950.5	950.9
170°	917.8	923.6	941.4	939.7	949.3
172.5°	928.8	933.1	936.7	940.9	935.1
175°	939.5	935.6	939.5	931.6	929.6
177.5°	937.5	937.5	934.4	931.0	923.3
180°	929.6	929.6	929.6	929.6	929.6

(END OF REPORT)