

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: P518940

Luminaire Tested: **SQ4-BB-150U-100D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518940  
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-100D-935-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

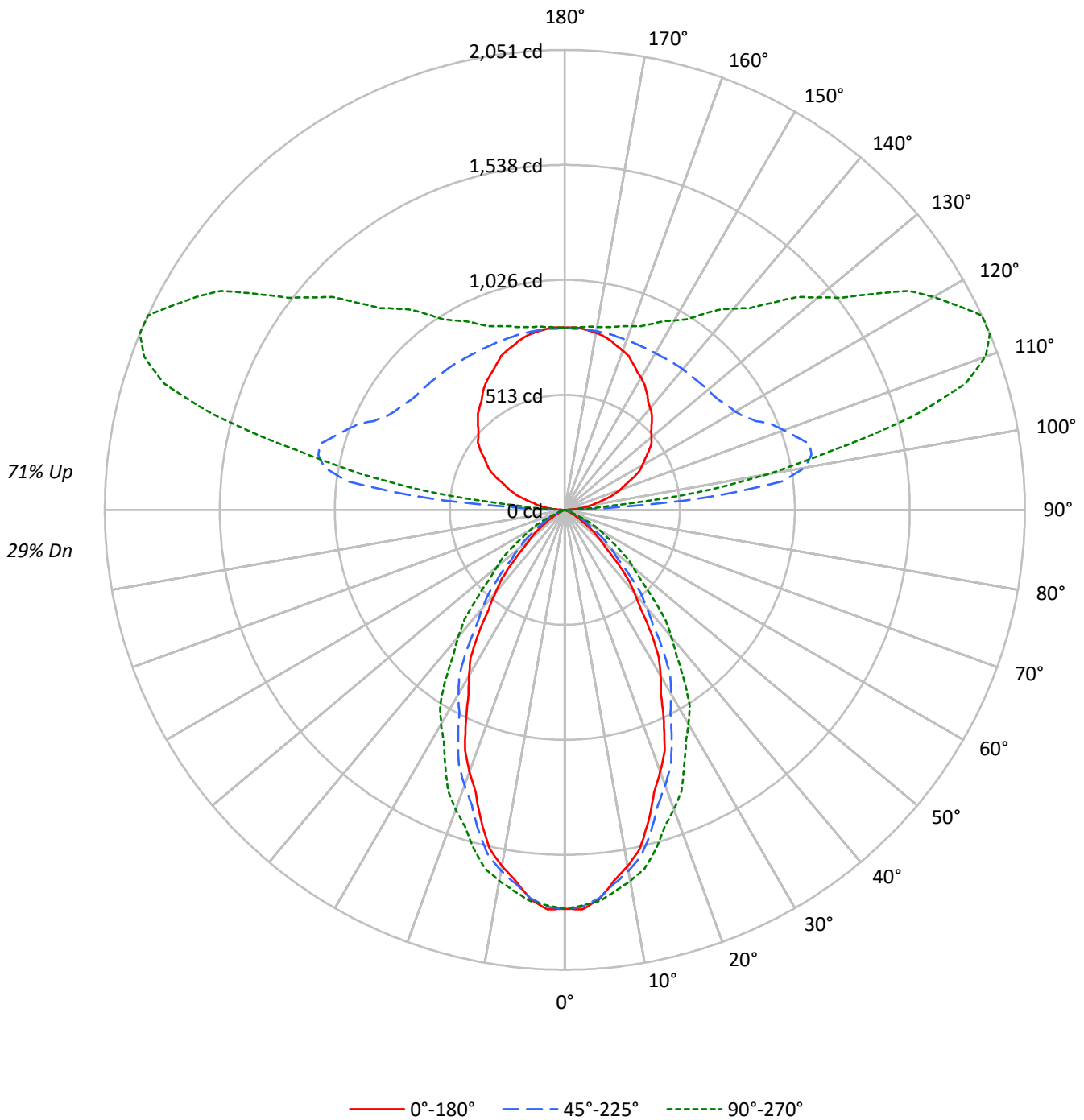
Lumens per Lamp: N/A  
Luminaire Lumens: 7358.5 lumens  
Efficiency: N/A  
Efficacy: 101.8 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 72.3  
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	91	91	91	91	72	72	72	53	53	53	37	37	37	29
1	94	90	87	84	84	81	78	76	64	62	61	48	47	46	34	33	33	26
2	86	80	75	70	77	72	68	64	57	54	52	44	42	40	31	30	29	24
3	80	71	65	60	71	64	59	55	52	48	45	40	37	35	29	27	26	21
4	73	64	57	51	66	58	52	47	46	42	39	36	33	31	26	25	24	19
5	68	57	50	45	61	52	46	41	42	38	34	33	30	28	24	23	21	18
6	63	52	44	39	56	47	41	36	38	34	30	30	27	25	22	21	19	16
7	58	47	40	35	52	43	37	32	35	30	27	28	25	22	21	19	18	15
8	54	43	36	31	49	39	33	29	32	28	24	26	22	20	19	17	16	14
9	50	39	32	28	45	36	30	26	30	25	22	24	21	18	18	16	15	13
10	47	36	29	25	43	33	27	23	27	23	20	22	19	17	17	15	14	12

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

	0°	45°	90°
0°	16416	16416	16416
5°	16152	16112	16232
10°	15113	15315	15742
15°	13739	14176	14965
20°	12196	12830	13954
25°	10621	11463	12821
30°	9097	10097	11748
35°	7543	8571	10452
40°	5796	6853	8907
45°	4190	5189	7166
50°	2855	3867	5684
55°	1856	2797	4417
60°	1065	1969	3192
65°	282	1203	1615
70°	140	372	464
75°	61	32	0
80°	48	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.4	2.2
10°-20°	415.3	5.6
20°-30°	519.9	7.1
30°-40°	480.2	6.5
40°-50°	322.6	4.4
50°-60°	166.7	2.3
60°-70°	52.2	0.7
70°-80°	3.3	0.0
80°-90°	1.8	0.0
90°-100°	377.3	5.1
100°-110°	1020.1	13.9
110°-120°	1072.5	14.6
120°-130°	871.2	11.8
130°-140°	683.3	9.3
140°-150°	524.5	7.1
150°-160°	377.2	5.1
160°-170°	230.4	3.1
170°-180°	77.7	1.1
0°-30°	1097.5	14.9
0°-40°	1577.7	21.4
0°-60°	2067.0	28.1
0°-90°	2124.3	28.9
90°-120°	2469.9	33.6
90°-150°	4548.9	61.8
90°-180°	5234.0	71.1
0°-180°	7358.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1779	1779	1779	1779	1779	
5°	1744	1726	1740	1746	1753	162
15°	1438	1433	1484	1534	1567	401
25°	1043	1052	1126	1203	1259	478
35°	670	687	761	850	928	415
45°	321	340	398	475	549	252
55°	115	135	174	223	275	108
65°	13	25	55	66	74	22
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	2	5	11	12	11	4
95°	58	206	627	325	193	61
105°	190	293	1132	1669	1601	200
115°	334	408	938	1817	2051	330
125°	457	524	846	1428	1677	407
135°	548	613	823	1153	1305	423
145°	637	685	812	987	1062	399
155°	719	747	805	885	914	332
165°	783	791	808	840	844	221
175°	813	812	809	820	818	77
180°	812	812	812	812	812	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1779.3	1779.3	1779.3	1779.3	1779.3
2.5°	1783.5	1766.6	1771.1	1771.0	1766.2
5°	1744.0	1726.4	1739.7	1745.9	1752.6
7.5°	1670.4	1656.5	1682.2	1701.5	1715.5
10°	1613.2	1601.4	1634.7	1661.0	1680.3
12.5°	1547.1	1538.0	1578.2	1614.3	1639.0
15°	1438.4	1433.4	1484.1	1533.9	1566.7
17.5°	1322.1	1321.9	1379.7	1441.6	1481.1
20°	1242.2	1244.7	1306.7	1374.9	1421.2
22.5°	1162.3	1168.2	1234.4	1305.5	1358.6
25°	1043.3	1051.7	1126.0	1203.0	1259.4
27.5°	929.0	941.3	1019.4	1099.5	1168.1
30°	853.9	868.3	947.8	1032.0	1102.7
32.5°	780.3	797.3	874.8	963.9	1035.9
35°	669.7	686.6	761.0	850.5	928.0
37.5°	555.6	572.1	644.8	732.9	816.6
40°	481.2	499.7	569.0	654.4	739.5
42.5°	413.7	432.2	497.4	581.3	661.6
45°	321.1	340.4	397.7	475.1	549.2
47.5°	244.3	265.3	315.6	385.6	453.1
50°	198.9	219.9	269.4	331.2	396.0
52.5°	162.4	182.7	227.4	285.6	345.0
55°	115.4	134.7	173.9	223.3	274.6
57.5°	79.7	96.4	131.5	172.7	213.0
60°	57.7	73.7	106.7	140.2	173.0
62.5°	38.4	53.0	85.4	111.0	133.1
65°	12.9	24.7	55.1	66.5	74.0
67.5°	6.5	7.9	28.9	30.5	33.1
70°	5.2	5.2	13.8	14.7	17.2
72.5°	3.8	3.8	5.5	7.1	7.6
75°	1.7	1.7	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°	0.3	1.0	2.3	2.4	2.3
90°	1.7	5.2	11.4	12.2	11.4
92.5°	24.8	90.4	178.4	77.5	56.1
95°	58.5	205.5	627.4	324.7	193.1
97.5°	94.0	235.7	978.0	809.4	594.4
100°	120.6	247.9	1087.1	1133.7	916.7
102.5°	145.1	264.9	1125.6	1379.7	1217.3
105°	189.6	293.0	1131.7	1669.3	1600.9
107.5°	230.9	325.2	1082.2	1850.0	1872.7
110°	263.0	348.5	1038.2	1898.5	1995.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	291.7	371.7	997.6	1888.8	2051.0
115°	333.8	408.2	938.5	1816.9	2051.0
117.5°	375.1	444.8	899.6	1706.9	1972.3
120°	400.2	468.6	876.5	1628.1	1898.9
122.5°	424.0	491.0	862.5	1543.5	1816.4
125°	457.0	523.7	845.9	1427.5	1677.0
127.5°	487.4	552.9	836.1	1332.8	1552.2
130°	504.2	571.7	831.9	1274.2	1472.5
132.5°	521.7	588.5	827.7	1221.5	1404.0
135°	547.9	612.9	823.2	1152.6	1304.7
137.5°	574.3	635.7	819.3	1096.7	1220.6
140°	592.5	649.7	817.9	1060.8	1171.0
142.5°	610.0	663.8	815.2	1028.3	1124.9
145°	637.1	684.9	811.8	986.6	1061.8
147.5°	661.7	704.1	808.0	948.8	1006.5
150°	679.9	717.5	806.6	928.2	974.4
152.5°	696.7	729.5	805.9	909.2	947.1
155°	719.2	747.4	804.8	885.0	914.1
157.5°	742.6	762.3	805.0	868.2	887.3
160°	755.9	772.1	805.7	857.6	871.3
162.5°	766.4	779.9	806.4	849.1	859.4
165°	783.0	790.7	808.3	839.9	844.2
167.5°	794.4	799.7	808.5	832.0	834.0
170°	801.3	803.9	809.2	828.4	828.4
172.5°	806.9	807.4	809.2	824.2	823.5
175°	812.7	811.8	809.2	819.7	817.9
177.5°	814.6	812.6	809.0	816.0	813.9
180°	811.8	811.8	811.8	811.8	811.8

(END OF REPORT)