

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: P521323

Luminaire Tested: **SQ4-BB-150U-100D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521323  
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-100D-93050-1D-UNV-STD-W-4 (3500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

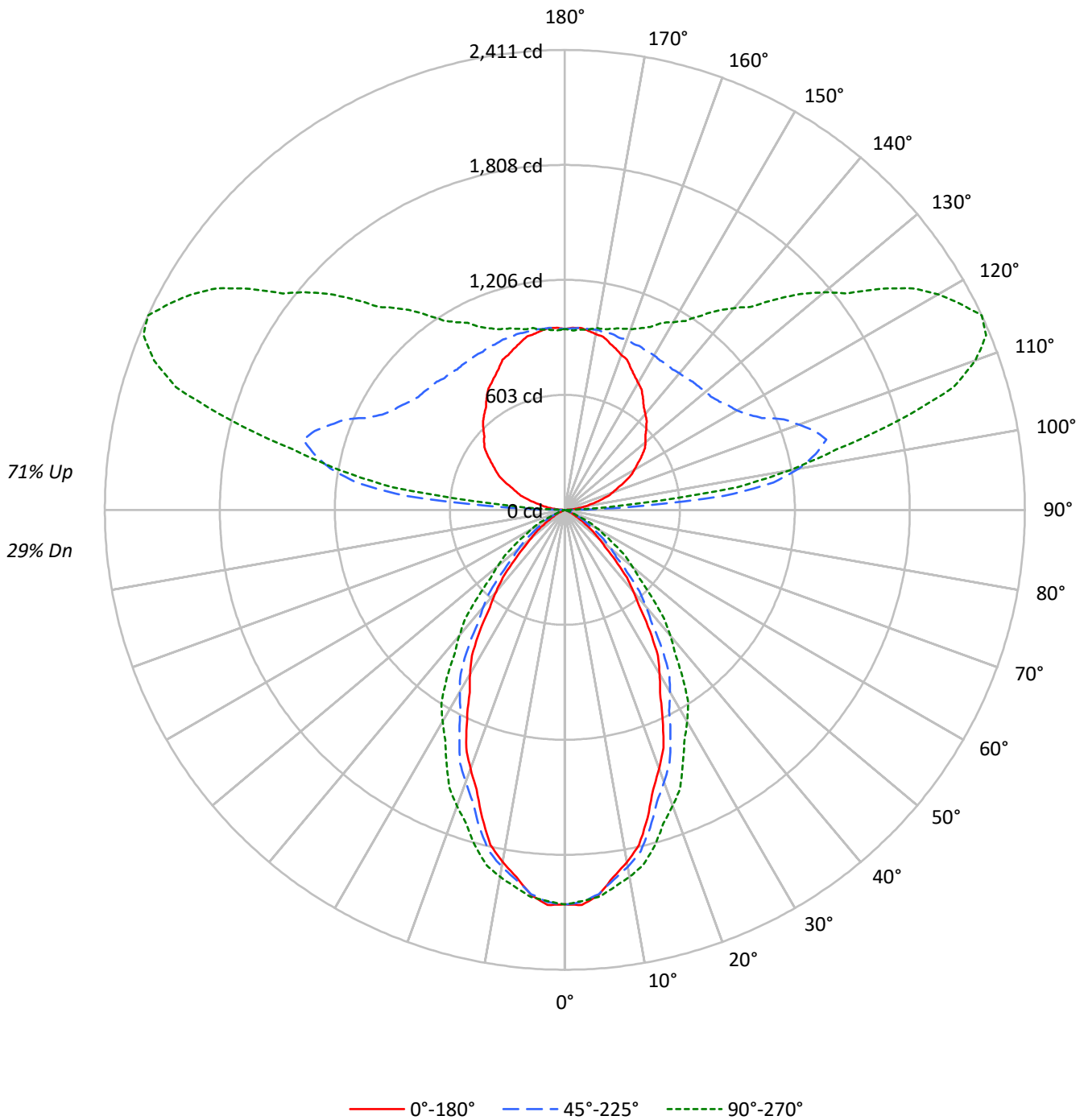
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8603.7 lumens  
Efficiency: N/A  
Efficacy: 92.0 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): 93.5  
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				
RC	80					70					50					30				
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	71	71	71	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	51	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	23	19		
5	68	57	50	45	61	52	46	41	42	38	34	33	30	28	24	22	21	18		
6	62	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	17	15		
8	54	43	36	31	49	39	33	29	32	28	24	25	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	42	33	27	23	27	23	20	22	19	17	17	15	14	12		

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

	0°	45°	90°
0°	19083	19083	19083
5°	18776	18729	18869
10°	17568	17803	18300
15°	15971	16478	17395
20°	14178	14914	16221
25°	12346	13325	14904
30°	10576	11737	13657
35°	8768	9963	12150
40°	6737	7966	10353
45°	4869	6032	8330
50°	3319	4495	6607
55°	2157	3251	5134
60°	1236	2290	3711
65°	327	1397	1880
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.8	2.2
10°-20°	482.7	5.6
20°-30°	604.3	7.0
30°-40°	558.2	6.5
40°-50°	375.1	4.4
50°-60°	193.7	2.3
60°-70°	60.7	0.7
70°-80°	3.8	0.0
80°-90°	0.1	0.0
90°-100°	488.5	5.7
100°-110°	1180.8	13.7
110°-120°	1259.3	14.6
120°-130°	1020.0	11.9
130°-140°	789.7	9.2
140°-150°	602.4	7.0
150°-160°	436.1	5.1
160°-170°	268.6	3.1
170°-180°	90.9	1.1
0°-30°	1275.8	14.8
0°-40°	1834.0	21.3
0°-60°	2402.8	27.9
0°-90°	2467.4	28.7
90°-120°	2928.6	34.0
90°-150°	5340.7	62.1
90°-180°	6136.0	71.3
0°-180°	8603.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2068	2068	2068	2068	2068	
5°	2027	2007	2022	2030	2037	188
15°	1672	1666	1725	1783	1821	466
25°	1213	1223	1309	1398	1464	556
35°	778	798	885	989	1079	482
45°	373	396	462	552	638	293
55°	134	157	202	260	319	125
65°	15	29	64	77	86	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	48	244	837	544	381	54
105°	189	326	1419	1836	1813	199
115°	345	441	1140	2162	2411	341
125°	492	566	990	1719	2019	439
135°	604	675	949	1356	1560	466
145°	715	768	931	1152	1242	447
155°	819	854	943	1020	1058	378
165°	905	919	956	970	984	255
175°	958	954	958	949	947	90
180°	947	947	947	947	947	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2068.4	2068.4	2068.4	2068.4	2068.4
2.5°	2073.2	2053.6	2058.8	2058.6	2053.2
5°	2027.3	2006.8	2022.3	2029.5	2037.4
7.5°	1941.7	1925.6	1955.5	1977.9	1994.1
10°	1875.2	1861.5	1900.3	1930.8	1953.3
12.5°	1798.4	1787.8	1834.6	1876.5	1905.3
15°	1672.1	1666.2	1725.1	1783.1	1821.2
17.5°	1536.8	1536.6	1603.9	1675.8	1721.7
20°	1444.0	1446.9	1519.0	1598.3	1652.1
22.5°	1351.1	1357.9	1435.0	1517.6	1579.3
25°	1212.8	1222.6	1308.9	1398.4	1464.0
27.5°	1079.9	1094.2	1185.0	1278.1	1357.9
30°	992.7	1009.3	1101.7	1199.7	1281.9
32.5°	907.0	926.8	1016.9	1120.4	1204.2
35°	778.5	798.1	884.6	988.7	1078.7
37.5°	645.8	665.0	749.5	852.0	949.2
40°	559.4	580.9	661.4	760.8	859.6
42.5°	480.9	502.4	578.2	675.8	769.1
45°	373.2	395.8	462.3	552.3	638.4
47.5°	284.0	308.4	366.8	448.3	526.8
50°	231.2	255.6	313.2	385.0	460.3
52.5°	188.7	212.4	264.4	332.0	401.1
55°	134.1	156.6	202.1	259.5	319.2
57.5°	92.7	112.0	152.9	200.8	247.6
60°	67.0	85.6	124.1	163.0	201.1
62.5°	44.6	61.7	99.3	129.1	154.7
65°	15.0	28.7	64.0	77.3	86.1
67.5°	7.6	9.2	33.6	35.5	38.4
70°	6.0	6.0	16.0	17.1	20.0
72.5°	4.4	4.4	6.4	8.2	8.8
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.1	132.2	311.5	151.4	102.8
95°	48.2	244.4	837.0	544.3	381.4
97.5°	85.5	270.8	1102.4	1062.0	911.7
100°	114.4	287.1	1248.5	1318.0	1194.3
102.5°	141.7	301.9	1344.9	1531.1	1457.7
105°	188.7	326.1	1419.1	1836.1	1812.6
107.5°	234.9	354.6	1375.4	2080.8	2136.1
110°	267.0	378.8	1304.7	2186.3	2290.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	299.1	403.1	1242.1	2212.0	2389.9
115°	345.3	441.4	1140.1	2161.5	2410.7
117.5°	391.0	481.7	1080.3	2045.2	2337.3
120°	421.5	505.9	1041.8	1954.0	2260.2
122.5°	453.6	531.8	1017.7	1860.8	2162.2
125°	491.8	566.4	989.6	1719.0	2019.3
127.5°	529.5	599.8	969.9	1599.0	1862.7
130°	552.0	620.7	963.5	1515.4	1774.4
132.5°	572.9	644.7	953.9	1455.0	1674.9
135°	604.2	674.8	949.4	1355.5	1559.6
137.5°	633.9	704.9	935.4	1288.2	1442.0
140°	656.4	721.1	935.4	1239.7	1381.0
142.5°	678.9	743.6	927.4	1197.4	1316.8
145°	714.6	767.6	931.4	1152.2	1242.5
147.5°	747.9	799.3	929.0	1100.1	1174.7
150°	768.8	813.9	935.4	1077.2	1136.1
152.5°	791.3	834.8	933.8	1053.0	1105.6
155°	819.0	854.3	943.4	1020.5	1057.8
157.5°	852.3	882.5	941.4	1008.1	1030.1
160°	865.1	890.6	949.4	991.9	1007.7
162.5°	886.0	908.4	946.2	987.0	996.4
165°	905.3	919.0	955.5	969.8	983.6
167.5°	929.0	938.0	953.1	968.7	969.1
170°	935.4	941.3	959.5	957.7	967.5
172.5°	946.6	950.9	954.7	958.9	953.1
175°	957.5	953.5	957.5	949.4	947.4
177.5°	955.5	955.5	952.2	948.9	941.0
180°	947.4	947.4	947.4	947.4	947.4

(END OF REPORT)