

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: P518726

Luminaire Tested: **SQ4-BB-100U-075D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518726  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-075D-935-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

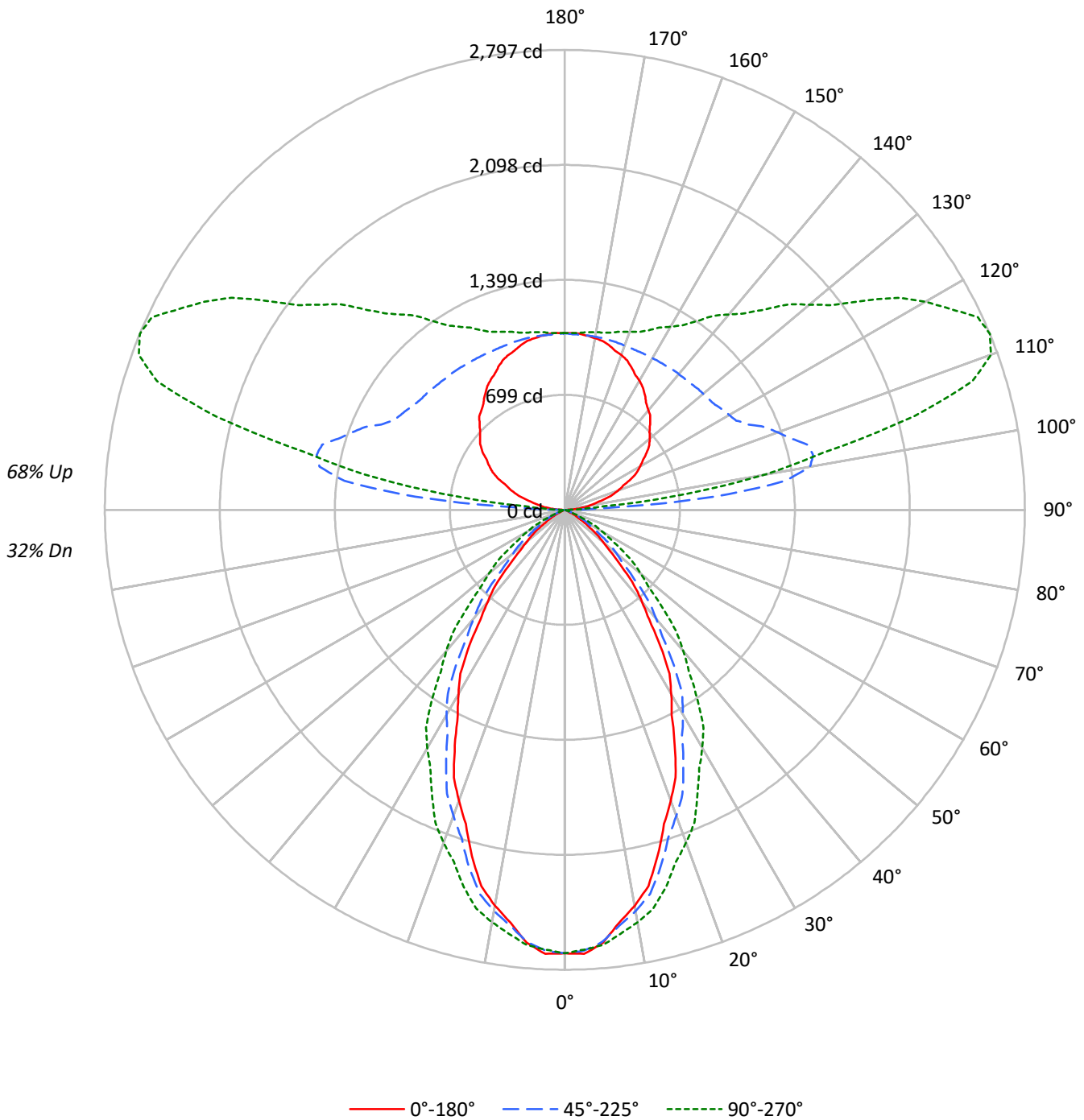
Lumens per Lamp: N/A  
Luminaire Lumens: 10198.6 lumens  
Efficiency: N/A  
Efficacy: 98.2 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 103.9  
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



TEST NUMBER: P518726  
CATALOG NUMBER: SQ4-BB-100U-075D-935-1D-UNV-STD-W-8

### Luminous Intensity Polar Plot





TEST NUMBER: P518726

CATALOG NUMBER: SQ4-BB-100U-075D-935-1D-UNV-STD-W-8

**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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	32
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21
5	68	58	51	45	62	53	47	42	43	39	36	34	31	29	26	24	23	19
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18
7	59	48	40	35	53	44	37	33	36	32	28	29	26	24	22	20	19	16
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13

**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



TEST NUMBER: P518726

CATALOG NUMBER: SQ4-BB-100U-075D-935-1D-UNV-STD-W-8

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	246.1	2.4
10°-20°	629.4	6.2
20°-30°	787.9	7.7
30°-40°	727.8	7.1
40°-50°	489.0	4.8
50°-60°	252.6	2.5
60°-70°	79.1	0.8
70°-80°	5.0	0.0
80°-90°	2.3	0.0
90°-100°	503.0	4.9
100°-110°	1388.8	13.6
110°-120°	1432.3	14.0
120°-130°	1150.9	11.3
130°-140°	904.5	8.9
140°-150°	693.7	6.8
150°-160°	498.6	4.9
160°-170°	304.9	3.0
170°-180°	102.8	1.0
0°-30°	1663.4	16.3
0°-40°	2391.1	23.4
0°-60°	3132.7	30.7
0°-90°	3219.2	31.6
90°-120°	3324.1	32.6
90°-150°	6073.2	59.5
90°-180°	6979.0	68.4
0°-180°	10198.6	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°	3	7	14	16	17	5
95°	74	272	913	375	244	79
105°	248	382	1528	2333	2196	263
115°	443	536	1231	2436	2770	436
125°	608	692	1115	1888	2215	541
135°	732	811	1084	1529	1724	566
145°	849	908	1071	1302	1401	532
155°	957	989	1062	1168	1205	441
165°	1036	1050	1067	1109	1117	292
175°	1074	1076	1069	1084	1081	102
180°	1074	1074	1074	1074	1074	

TEST NUMBER: P518726

CATALOG NUMBER: SQ4-BB-100U-075D-935-1D-UNV-STD-W-8

**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	1.4	2.7	3.1	3.4
90°	3.4	6.8	13.7	15.5	17.2
92.5°	30.9	128.4	229.6	83.8	65.3
95°	73.9	272.2	912.6	375.1	244.1
97.5°	122.4	304.9	1351.9	1040.9	753.8
100°	158.1	324.5	1514.2	1524.9	1239.2
102.5°	192.5	346.8	1545.8	1884.1	1613.2
105°	247.5	381.9	1527.9	2332.6	2196.5
107.5°	305.9	425.6	1442.7	2548.9	2598.7
110°	347.2	454.7	1376.7	2595.5	2756.8



TEST NUMBER: P518726

CATALOG NUMBER: SQ4-BB-100U-075D-935-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	384.3	487.8	1314.8	2558.7	2796.7
115°	443.4	535.9	1230.6	2436.1	2770.5
117.5°	495.0	587.1	1175.2	2263.6	2644.0
120°	529.4	620.1	1153.2	2146.8	2529.9
122.5°	562.4	649.1	1135.4	2037.7	2400.7
125°	608.4	692.4	1115.4	1887.7	2215.4
127.5°	647.6	731.6	1103.7	1760.9	2043.5
130°	673.7	757.8	1098.2	1683.3	1940.4
132.5°	698.5	778.5	1092.7	1618.1	1851.0
135°	732.2	811.1	1084.5	1528.9	1723.9
137.5°	770.0	841.9	1080.4	1454.0	1620.4
140°	790.6	861.2	1077.6	1404.1	1550.3
142.5°	814.0	879.2	1074.9	1359.7	1488.4
145°	849.0	907.9	1070.7	1301.6	1400.7
147.5°	882.7	934.1	1067.0	1252.6	1329.6
150°	907.5	949.5	1065.6	1223.4	1285.6
152.5°	926.7	966.0	1064.2	1198.4	1249.8
155°	957.3	989.2	1062.2	1167.8	1204.8
157.5°	985.5	1010.0	1062.5	1145.6	1170.8
160°	1002.0	1023.8	1063.9	1133.0	1151.5
162.5°	1015.8	1034.9	1065.2	1122.0	1136.4
165°	1036.4	1049.8	1067.3	1108.8	1117.2
167.5°	1052.2	1060.3	1069.0	1100.7	1103.4
170°	1060.4	1067.2	1069.0	1096.5	1096.5
172.5°	1067.3	1071.3	1069.0	1091.0	1089.7
175°	1074.2	1075.9	1069.0	1084.4	1081.1
177.5°	1076.9	1075.6	1068.7	1078.2	1075.6
180°	1074.2	1074.2	1074.2	1074.2	1074.2

(END OF REPORT)