

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: P844886

Luminaire Tested: **SQ4P-BB-150U-100D-B35-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844886  
REPORT IS A COMBINATION OF REPORTS P700133 AND P700248  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-BB-150U-100D-B35-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT  
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

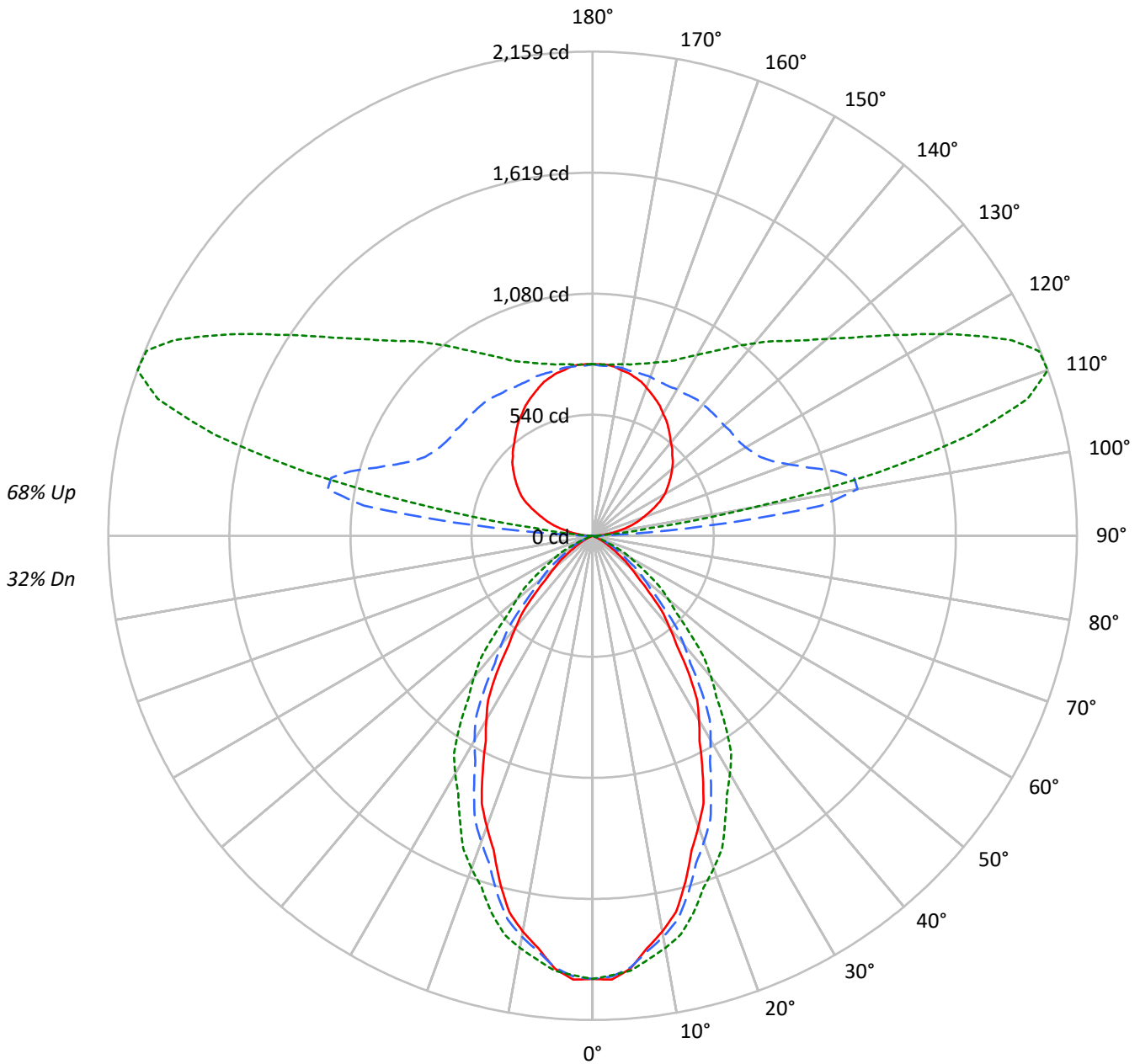
Lumens per Lamp: N/A  
Luminaire Lumens: 7326.1 lumens  
Efficiency: N/A  
Efficacy: 94.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 77.9  
Input Voltage (V): NR  
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: 25 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									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32																			
1	95	91	88	85	85	82	80	77	66	64	62	51	50	49	37	36	36	29																			
2	87	81	76	71	79	73	69	65	59	56	54	46	44	43	34	33	32	27																			
3	80	72	66	61	73	66	60	56	53	50	46	42	39	37	31	30	29	24																			
4	74	65	58	52	67	59	53	48	48	44	41	38	35	33	29	27	26	22																			
5	68	58	51	46	62	53	47	42	44	39	36	35	32	29	26	25	23	20																			
6	63	53	45	40	57	48	42	37	40	35	32	32	29	26	24	23	21	18																			
7	59	48	41	36	53	44	38	33	36	32	28	29	26	24	23	21	19	16																			
8	55	44	37	32	50	40	34	30	33	29	26	27	24	22	21	19	18	15																			
9	51	40	33	29	46	37	31	27	31	26	23	25	22	20	20	18	16	14																			
10	48	37	30	26	44	34	28	24	29	24	21	23	20	18	18	16	15	13																			

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

	0°	45°	90°
0°	18233	18233	18233
5°	17939	17896	18028
10°	16785	17009	17484
15°	15260	15744	16621
20°	13546	14249	15496
25°	11795	12729	14239
30°	10105	11213	13047
35°	8376	9520	11607
40°	6436	7613	9890
45°	4654	5763	7958
50°	3169	4293	6314
55°	2061	3106	4906
60°	1183	2188	3547
65°	312	1338	1797
70°	159	415	515
75°	71	32	0
80°	48	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.3	2.5
10°-20°	461.2	6.3
20°-30°	577.4	7.9
30°-40°	533.3	7.3
40°-50°	358.3	4.9
50°-60°	185.1	2.5
60°-70°	58.0	0.8
70°-80°	3.7	0.0
80°-90°	1.9	0.0
90°-100°	304.6	4.2
100°-110°	1059.8	14.5
110°-120°	1026.6	14.0
120°-130°	805.3	11.0
130°-140°	637.4	8.7
140°-150°	491.9	6.7
150°-160°	352.6	4.8
160°-170°	215.7	2.9
170°-180°	73.0	1.0
0°-30°	1218.9	16.6
0°-40°	1752.2	23.9
0°-60°	2295.7	31.3
0°-90°	2359.2	32.2
90°-120°	2391.0	32.6
90°-150°	4325.6	59.0
90°-180°	4967.0	67.8
0°-180°	7326.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1976	1976	1976	1976	1976	
5°	1937	1917	1932	1939	1947	180
15°	1598	1592	1648	1704	1740	445
25°	1159	1168	1250	1336	1399	531
35°	744	763	845	945	1030	461
45°	357	378	442	528	610	280
55°	128	150	193	248	305	120
65°	14	28	61	74	82	24
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	11	17	17	11	6	7
95°	51	177	514	131	80	54
105°	177	251	1114	1879	1748	186
115°	308	371	828	1748	2062	305
125°	417	514	771	1302	1554	373
135°	503	565	765	1085	1228	390
145°	588	628	760	937	1017	368
155°	668	691	748	834	862	308
165°	731	737	754	788	794	206
175°	765	765	760	771	765	72
180°	765	765	765	765	765	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1976.2	1976.2	1976.2	1976.2	1976.2
2.5°	1980.7	1962.1	1966.9	1966.9	1961.6
5°	1937.0	1917.3	1932.3	1938.9	1946.6
7.5°	1855.2	1839.8	1868.4	1889.6	1905.2
10°	1791.6	1778.5	1815.5	1844.6	1866.2
12.5°	1718.2	1708.0	1752.8	1792.8	1820.3
15°	1597.6	1592.0	1648.3	1703.5	1740.1
17.5°	1468.4	1468.1	1532.2	1601.0	1645.0
20°	1379.7	1382.4	1451.3	1527.1	1578.3
22.5°	1290.9	1297.4	1371.0	1450.0	1508.9
25°	1158.6	1167.9	1250.4	1336.1	1398.7
27.5°	1031.8	1045.5	1132.2	1221.0	1297.4
30°	948.5	964.3	1052.5	1146.1	1224.7
32.5°	866.4	885.5	971.4	1070.6	1150.4
35°	743.7	762.6	845.2	944.6	1030.5
37.5°	617.1	635.3	716.0	814.1	906.9
40°	534.4	554.9	632.1	726.9	821.2
42.5°	459.5	480.1	552.4	645.7	734.8
45°	356.7	378.1	441.7	527.7	609.9
47.5°	271.5	294.5	350.4	428.3	503.3
50°	220.8	244.2	299.1	367.7	439.9
52.5°	180.3	203.1	252.6	317.1	383.1
55°	128.1	149.5	193.1	248.1	305.0
57.5°	88.6	107.2	146.1	191.8	236.6
60°	64.1	81.8	118.6	155.6	192.2
62.5°	42.7	58.9	94.8	123.4	147.9
65°	14.3	27.5	61.3	73.8	82.3
67.5°	7.3	8.6	32.0	34.0	36.8
70°	5.9	5.9	15.4	16.2	19.1
72.5°	4.1	4.1	6.1	7.8	8.4
75°	2.0	2.0	0.9	0.0	0.0
77.5°	0.9	0.9	0.9	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°	0.0	0.0	0.0	0.0	0.0
90°	11.4	17.1	17.1	11.4	5.7
92.5°	28.6	85.6	79.9	34.2	28.6
95°	51.4	177.0	514.0	131.3	79.9
97.5°	79.9	199.9	1028.1	468.3	251.3
100°	108.5	211.3	1199.4	1125.2	725.3
102.5°	142.8	228.5	1193.7	1582.0	1302.2
105°	177.0	251.3	1113.7	1879.0	1747.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	274.1	337.0	868.1	1890.5	2153.1
115°	308.4	371.3	828.2	1747.7	2061.8
117.5°	342.7	411.2	805.3	1616.3	1930.4
120°	371.3	445.4	788.1	1490.6	1799.1
122.5°	394.1	479.8	776.8	1387.9	1667.7
125°	417.0	514.0	771.0	1302.2	1553.5
127.5°	439.8	536.8	771.0	1239.4	1450.7
130°	462.7	548.3	765.3	1176.5	1365.0
132.5°	485.5	554.0	765.3	1130.8	1290.7
135°	502.6	565.4	765.3	1085.1	1227.9
137.5°	525.5	576.9	765.3	1045.2	1176.5
140°	542.6	594.0	765.3	1005.2	1119.4
142.5°	565.4	611.1	765.3	965.3	1068.0
145°	588.3	628.2	759.6	936.7	1016.6
147.5°	611.1	645.4	753.9	908.1	970.9
150°	628.2	662.5	753.9	879.5	930.9
152.5°	651.1	679.6	748.2	851.0	896.7
155°	668.3	691.1	748.2	833.8	862.4
157.5°	685.4	708.2	748.2	816.7	839.6
160°	702.5	719.6	753.9	805.3	822.4
162.5°	719.6	731.1	753.9	793.9	805.3
165°	731.1	736.8	753.9	788.1	793.9
167.5°	742.4	748.2	753.9	782.5	782.5
170°	748.2	753.9	759.6	776.8	776.8
172.5°	759.6	759.6	759.6	771.0	771.0
175°	765.3	765.3	759.6	771.0	765.3
177.5°	765.3	765.3	759.6	771.0	765.3
180°	765.3	765.3	765.3	765.3	765.3



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







107.5°	211.3	279.9	1011.0	2010.4	2033.3
110°	239.8	308.4	930.9	1993.2	2158.9



(END OF REPORT)