

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: P845222

Luminaire Tested: **SQ4P-PR1-150U-100D-B35-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845222  
REPORT IS A COMBINATION OF REPORTS P700149 AND P700248  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PR1-150U-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**

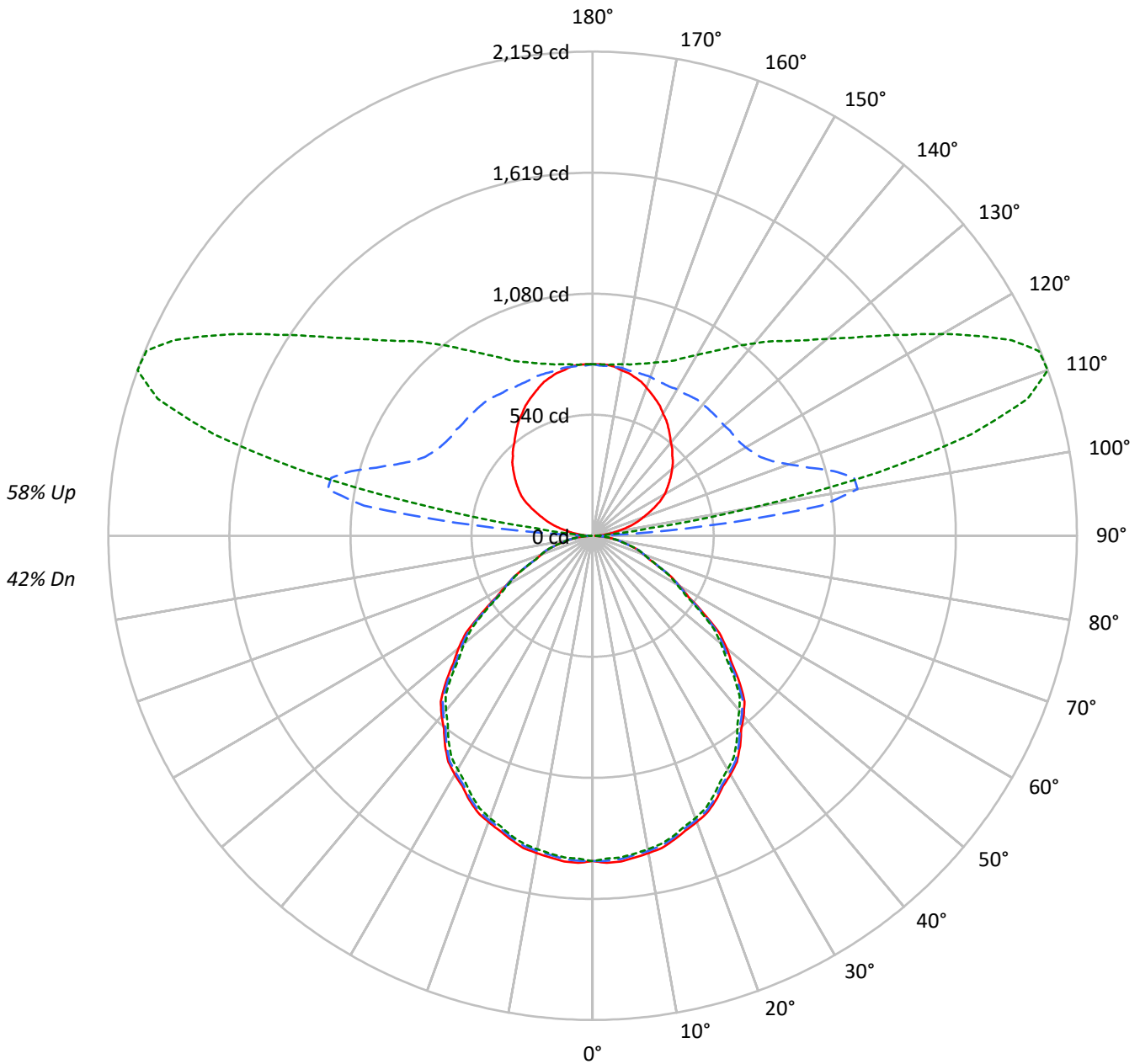
Lumens per Lamp: N/A  
Luminaire Lumens: 8595.2 lumens  
Efficiency: N/A  
Efficacy: 110.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

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				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	50	30	10	0	
RCR																						
0	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42				42
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42	36				36
2	88	81	75	70	80	74	69	65	61	58	54	50	47	45	39	37	36	31				31
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	34	32	31	26				26
4	73	63	55	49	67	58	51	46	48	43	39	39	36	33	31	28	26	23				23
5	67	56	48	42	61	52	45	40	43	38	34	35	31	29	28	25	23	20				20
6	62	50	42	37	57	46	39	34	39	34	30	32	28	25	25	23	20	17				17
7	57	45	38	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15				15
8	53	41	34	28	49	38	31	27	32	27	23	27	23	20	21	18	16	14				14
9	50	38	30	25	45	35	28	24	29	24	21	24	21	18	20	17	15	13				13
10	46	34	27	23	42	32	26	21	27	22	19	23	19	16	18	15	13	11				11

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

	0°	45°	90°
0°	13384	13384	13384
5°	13505	13401	13332
10°	13461	13368	13298
15°	13404	13320	13247
20°	13335	13249	13152
25°	13241	13154	13000
30°	13098	13007	12819
35°	12906	12792	12610
40°	12610	12475	12249
45°	12099	11884	11641
50°	11191	10922	10706
55°	9767	9548	9347
60°	8230	8163	8001
65°	7119	7147	7091
70°	6536	6571	6571
75°	6277	6277	6327
80°	5908	5972	5908
85°	4764	5293	5293



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.2	1.6
10°-20°	392.5	4.6
20°-30°	592.0	6.9
30°-40°	705.4	8.2
40°-50°	695.4	8.1
50°-60°	531.5	6.2
60°-70°	328.9	3.8
70°-80°	186.8	2.2
80°-90°	58.7	0.7
90°-100°	304.6	3.5
100°-110°	1059.8	12.3
110°-120°	1026.6	11.9
120°-130°	805.3	9.4
130°-140°	637.4	7.4
140°-150°	491.9	5.7
150°-160°	352.6	4.1
160°-170°	215.7	2.5
170°-180°	73.0	0.8
0°-30°	1121.7	13.1
0°-40°	1827.1	21.3
0°-60°	3054.0	35.5
0°-90°	3628.4	42.2
90°-120°	2391.0	27.8
90°-150°	4325.6	50.3
90°-180°	4967.0	57.8
0°-180°	8595.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1451	1451	1451	1451	1451	
5°	1458	1442	1447	1442	1440	138
15°	1403	1389	1394	1390	1387	396
25°	1301	1285	1292	1278	1277	599
35°	1146	1132	1136	1121	1120	715
45°	927	915	911	894	892	710
55°	607	598	594	584	581	544
65°	326	324	327	325	325	330
75°	176	176	176	178	178	186
85°	45	47	50	50	50	52
90°	11	17	17	11	6	9
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°	1450.6	1450.6	1450.6	1450.6	1450.6
2.5°	1459.7	1447.0	1450.6	1447.6	1440.7
5°	1458.2	1442.2	1447.0	1441.8	1439.5
7.5°	1447.0	1431.3	1436.0	1430.9	1429.6
10°	1436.8	1422.2	1426.9	1422.0	1419.4
12.5°	1425.9	1410.4	1416.0	1409.9	1407.6
15°	1403.3	1388.6	1394.5	1389.5	1386.9
17.5°	1378.3	1362.6	1368.6	1362.8	1359.5
20°	1358.2	1343.6	1349.4	1340.8	1339.5
22.5°	1336.2	1321.7	1327.4	1315.8	1315.6
25°	1300.7	1284.8	1292.1	1278.3	1277.0
27.5°	1258.5	1243.9	1249.7	1235.7	1234.4
30°	1229.5	1214.8	1220.9	1205.8	1203.3
32.5°	1196.5	1182.9	1187.9	1172.8	1171.2
35°	1145.9	1132.3	1135.7	1120.8	1119.6
37.5°	1088.2	1075.8	1077.8	1061.3	1060.2
40°	1047.0	1034.9	1035.8	1018.4	1017.0
42.5°	1002.2	989.9	988.8	971.4	970.2
45°	927.3	915.0	910.8	894.5	892.2
47.5°	841.8	829.4	821.9	808.6	806.8
50°	779.7	767.4	760.9	749.6	745.9
52.5°	712.7	700.5	695.1	684.7	681.1
55°	607.2	597.5	593.6	583.5	581.1
57.5°	507.0	500.5	499.3	489.6	488.5
60°	446.0	442.4	442.4	433.6	433.6
62.5°	394.2	391.3	393.3	387.5	386.6
65°	326.1	323.7	327.4	324.8	324.8
67.5°	272.4	272.4	274.6	273.5	273.5
70°	242.3	242.3	243.6	243.6	243.6
72.5°	215.4	214.5	217.7	217.5	216.7
75°	176.1	176.1	176.1	177.5	177.5
77.5°	137.2	137.4	138.5	138.3	137.2
80°	111.2	112.4	112.4	111.2	111.2
82.5°	85.3	86.4	86.4	86.1	85.3
85°	45.0	47.4	50.0	50.0	50.0
87.5°	12.9	16.8	20.1	20.1	19.0
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)