

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: P845306

Luminaire Tested: **SQ4P-PW1-150U-100D-B35-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845306  
REPORT IS A COMBINATION OF REPORTS P700153 AND P700248  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PW1-150U-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**

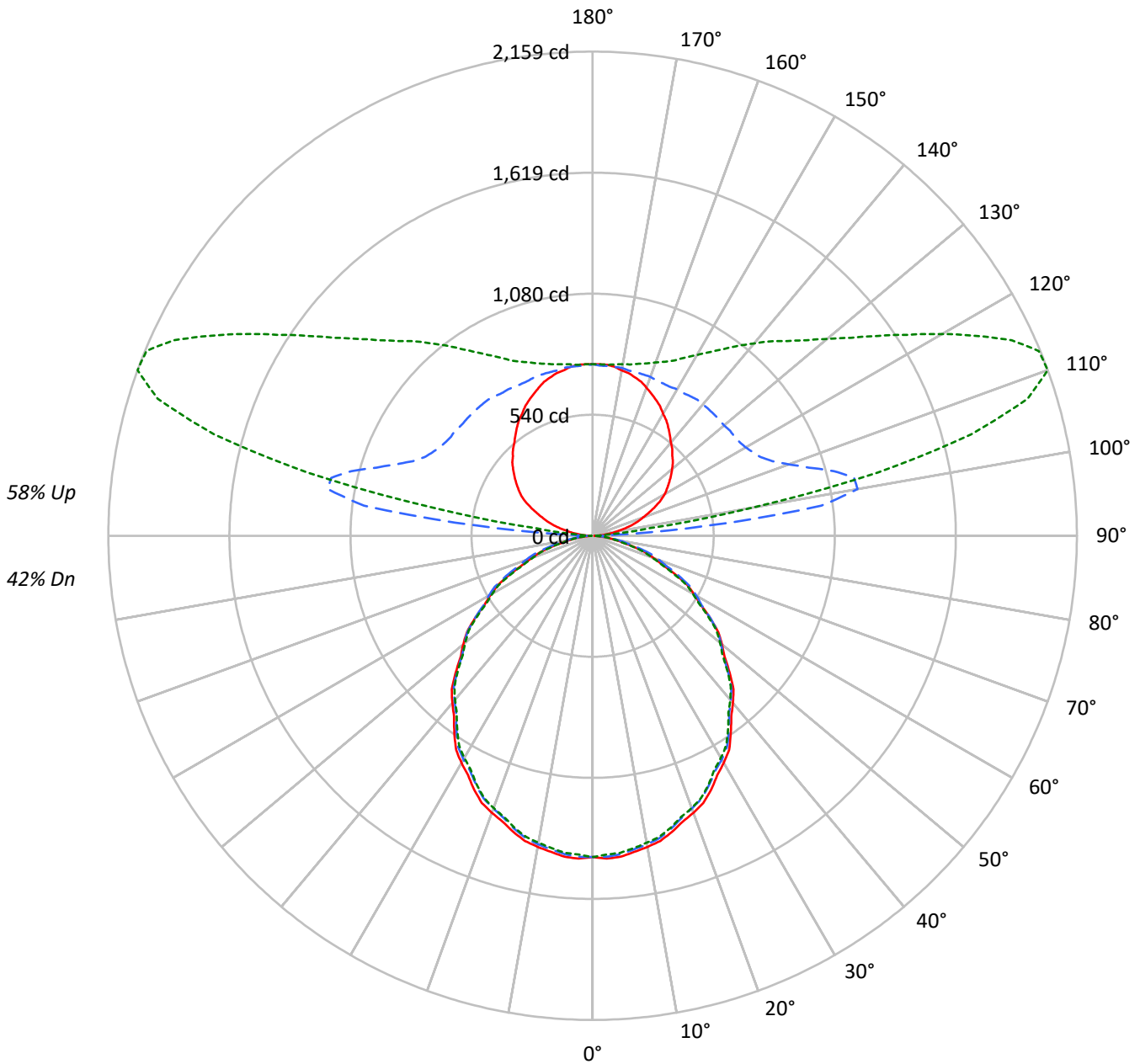
Lumens per Lamp: N/A  
Luminaire Lumens: 8613.8 lumens  
Efficiency: N/A  
Efficacy: 110.6 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

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					
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								
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	44	43	42	36								
2	88	80	74	69	80	74	68	64	61	57	54	49	47	44	38	37	35	30								
3	80	71	63	58	73	65	59	54	54	49	45	44	40	38	34	32	30	26								
4	73	62	55	49	66	57	51	45	48	43	39	39	35	32	30	28	26	22								
5	67	56	48	42	61	51	44	39	43	37	33	35	31	28	27	25	23	19								
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	25	22	20	17								
7	57	45	37	32	52	41	34	30	35	29	26	29	25	22	23	20	18	15								
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	21	18	16	13								
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12								
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	18	15	13	11								

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

	0°	45°	90°
0°	13217	13217	13217
5°	13304	13199	13141
10°	13197	13092	13020
15°	13058	12913	12865
20°	12901	12703	12679
25°	12721	12491	12451
30°	12453	12265	12184
35°	12100	11928	11856
40°	11722	11538	11494
45°	11265	11117	11066
50°	10800	10711	10634
55°	10293	10293	10132
60°	9667	9854	9503
65°	8844	9287	8625
70°	7796	8546	7594
75°	6662	7646	6477
80°	5170	6440	5233
85°	3335	4954	4404



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.9	1.6
10°-20°	380.9	4.4
20°-30°	565.0	6.6
30°-40°	661.1	7.7
40°-50°	658.1	7.6
50°-60°	568.3	6.6
60°-70°	409.1	4.7
70°-80°	214.5	2.5
80°-90°	55.1	0.6
90°-100°	304.6	3.5
100°-110°	1059.8	12.3
110°-120°	1026.6	11.9
120°-130°	805.3	9.3
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°	1080.8	12.5
0°-40°	1741.9	20.2
0°-60°	2968.3	34.5
0°-90°	3647.0	42.3
90°-120°	2391.0	27.8
90°-150°	4325.6	50.2
90°-180°	4967.0	57.7
0°-180°	8613.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1433	1433	1433	1433	1433	
5°	1436	1420	1425	1421	1419	136
15°	1367	1350	1352	1349	1347	385
25°	1250	1229	1227	1219	1223	575
35°	1074	1059	1059	1049	1053	672
45°	863	856	852	850	848	666
55°	640	639	640	631	630	571
65°	405	418	425	409	395	402
75°	187	204	214	200	182	200
85°	32	41	47	44	42	42
90°	11	17	17	11	6	8
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°	1432.6	1432.6	1432.6	1432.6	1432.6
2.5°	1440.8	1428.9	1432.6	1429.6	1422.5
5°	1436.5	1420.4	1425.2	1421.3	1418.9
7.5°	1422.0	1407.2	1410.4	1406.5	1404.9
10°	1408.6	1393.9	1397.4	1392.3	1389.8
12.5°	1393.7	1377.7	1381.2	1376.1	1374.7
15°	1367.1	1349.7	1351.9	1349.2	1346.9
17.5°	1336.2	1318.8	1319.0	1315.1	1314.4
20°	1314.0	1295.5	1293.8	1288.8	1291.4
22.5°	1289.8	1270.3	1268.5	1261.6	1265.1
25°	1249.6	1228.7	1227.0	1219.4	1223.1
27.5°	1203.2	1182.6	1182.6	1171.9	1175.8
30°	1168.9	1149.1	1151.3	1138.7	1143.7
32.5°	1132.6	1114.7	1115.8	1103.4	1108.4
35°	1074.3	1059.4	1059.0	1049.0	1052.6
37.5°	1014.6	1001.6	999.4	993.7	994.6
40°	973.3	962.1	958.0	954.3	954.3
42.5°	929.7	919.8	915.6	912.8	911.9
45°	863.4	856.0	852.0	849.5	848.1
47.5°	797.6	791.0	787.5	785.7	784.4
50°	752.4	747.4	746.2	742.1	740.9
52.5°	706.9	703.9	702.6	697.8	696.5
55°	639.9	638.8	639.9	631.2	629.9
57.5°	570.3	572.3	576.4	564.4	561.4
60°	523.9	528.7	534.0	520.0	515.0
62.5°	476.3	484.4	491.5	475.4	468.4
65°	405.1	417.6	425.4	408.6	395.1
67.5°	336.6	351.8	361.2	343.4	327.9
70°	289.0	306.4	316.8	298.8	281.5
72.5°	247.6	267.0	275.5	258.2	241.1
75°	186.9	204.1	214.5	200.2	181.7
77.5°	132.5	148.8	157.5	145.1	129.7
80°	97.3	114.5	121.2	110.8	98.5
82.5°	69.0	83.4	87.9	81.6	73.1
85°	31.5	41.3	46.8	44.1	41.6
87.5°	8.0	15.0	19.2	19.2	20.3
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)