

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: P845167

Luminaire Tested: **SQ4P-PR1-050U-125D-B50-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P845167  
REPORT IS A COMBINATION OF REPORTS P700206 AND P700244  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PR1-050U-125D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT  
UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

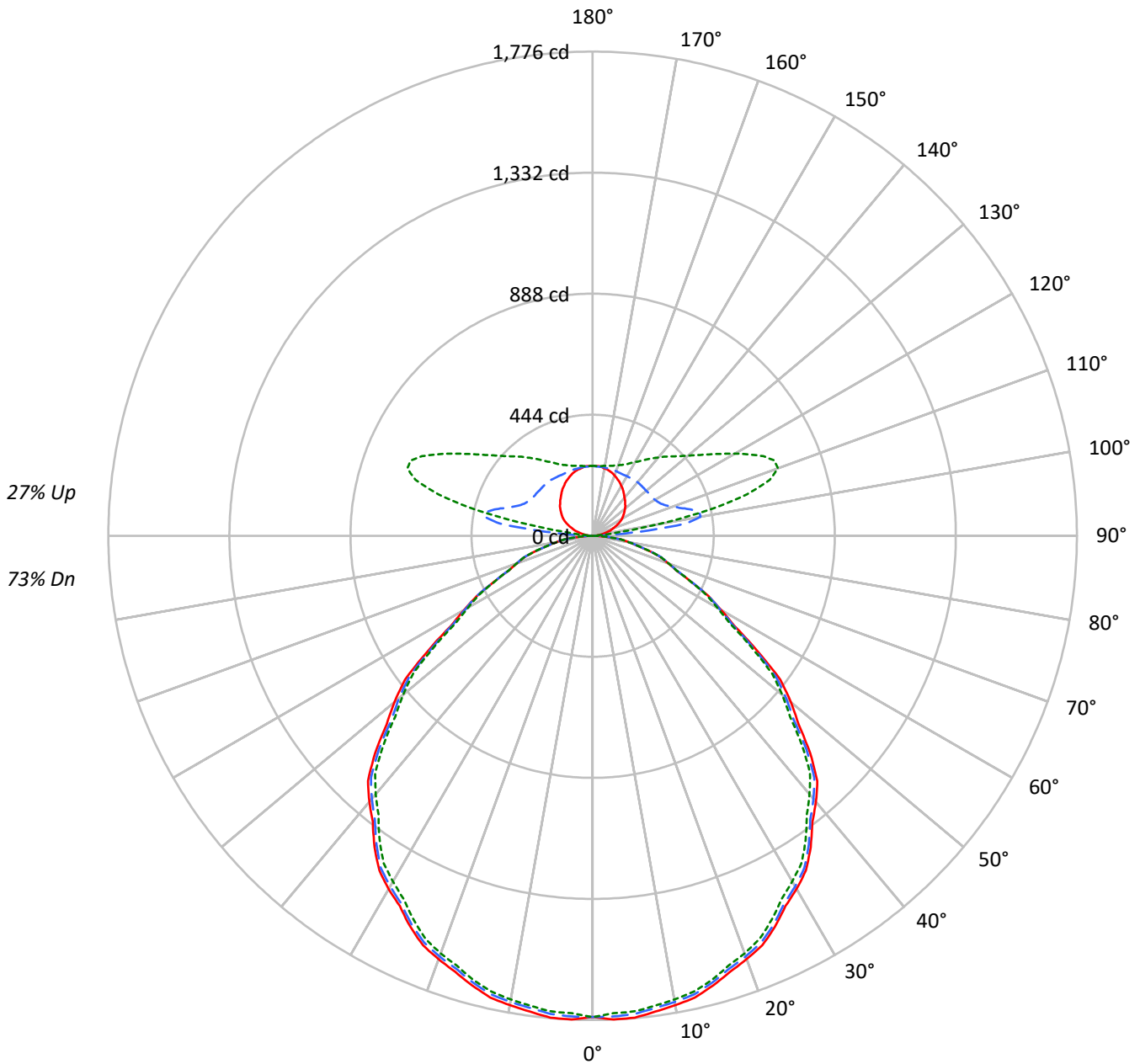
Lumens per Lamp: N/A  
Luminaire Lumens: 6077.0 lumens  
Efficiency: N/A  
Efficacy: 103.4 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 58.8  
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	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	77	77	77	73
1	103	99	95	92	98	94	91	88	85	82	80	76	74	73	69	67	66	66	66	66	62
2	94	87	81	76	89	83	77	73	75	71	67	68	64	61	61	58	56	56	56	56	53
3	86	77	69	64	82	73	67	61	66	61	57	60	56	52	54	51	48	48	48	48	45
4	79	68	60	54	75	65	58	52	59	53	49	54	49	45	49	45	42	42	42	42	39
5	73	61	53	47	69	58	51	45	53	47	42	49	44	40	44	40	37	37	37	37	34
6	67	55	47	41	64	53	45	40	48	42	37	44	39	35	40	36	32	32	32	32	30
7	63	50	42	36	59	48	40	35	44	38	33	40	35	31	37	32	29	29	29	29	27
8	58	46	38	32	55	44	36	31	40	34	29	37	32	28	34	29	26	26	26	26	24
9	54	42	34	29	51	40	33	28	37	31	27	34	29	25	31	27	24	24	24	24	22
10	51	38	31	26	48	37	30	25	34	28	24	31	26	23	29	25	21	21	21	21	20

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

	0°	45°	90°
0°	16285	16285	16285
5°	16433	16306	16220
10°	16379	16266	16180
15°	16309	16206	16118
20°	16226	16121	16003
25°	16111	16005	15818
30°	15937	15825	15599
35°	15703	15566	15344
40°	15343	15179	14904
45°	14721	14461	14163
50°	13617	13290	13027
55°	11884	11618	11374
60°	10014	9933	9734
65°	8663	8695	8628
70°	7952	7996	7996
75°	7643	7643	7696
80°	7183	7268	7183
85°	5790	6436	6436



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.9	2.7
10°-20°	477.6	7.9
20°-30°	720.3	11.9
30°-40°	858.3	14.1
40°-50°	846.2	13.9
50°-60°	646.7	10.6
60°-70°	400.2	6.6
70°-80°	227.3	3.7
80°-90°	69.7	1.1
90°-100°	102.0	1.7
100°-110°	355.0	5.8
110°-120°	343.9	5.7
120°-130°	269.8	4.4
130°-140°	213.5	3.5
140°-150°	164.8	2.7
150°-160°	118.1	1.9
160°-170°	72.3	1.2
170°-180°	24.4	0.4
0°-30°	1364.8	22.5
0°-40°	2223.1	36.6
0°-60°	3716.0	61.1
0°-90°	4413.2	72.6
90°-120°	800.9	13.2
90°-150°	1449.0	23.8
90°-180°	1664.0	27.4
0°-180°	6077.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1765	1765	1765	1765	1765	
5°	1774	1755	1761	1754	1751	168
15°	1708	1690	1697	1691	1688	482
25°	1583	1563	1572	1555	1554	728
35°	1394	1378	1382	1364	1362	870
45°	1128	1113	1108	1088	1086	864
55°	739	727	722	710	707	662
65°	397	394	398	395	395	402
75°	214	214	214	216	216	226
85°	55	58	61	61	61	64
90°	4	6	6	4	2	4
95°	17	59	172	44	27	18
105°	59	84	373	629	585	62
115°	103	124	277	585	691	102
125°	140	172	258	436	520	125
135°	168	189	256	364	411	130
145°	197	210	254	314	340	123
155°	224	232	251	279	289	103
165°	245	247	253	264	266	69
175°	256	256	254	258	256	24
180°	256	256	256	256	256	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1765.1	1765.1	1765.1	1765.1	1765.1
2.5°	1776.1	1760.6	1765.1	1761.4	1753.1
5°	1774.3	1754.9	1760.6	1754.3	1751.4
7.5°	1760.6	1741.5	1747.3	1741.0	1739.3
10°	1748.3	1730.5	1736.2	1730.2	1727.1
12.5°	1735.0	1716.0	1722.9	1715.5	1712.7
15°	1707.5	1689.6	1696.7	1690.6	1687.5
17.5°	1677.0	1657.9	1665.2	1658.1	1654.2
20°	1652.6	1634.8	1641.9	1631.4	1629.9
22.5°	1626.0	1608.1	1615.2	1601.0	1600.7
25°	1582.6	1563.3	1572.2	1555.4	1553.8
27.5°	1531.3	1513.5	1520.6	1503.5	1501.9
30°	1495.9	1478.1	1485.4	1467.1	1464.2
32.5°	1455.8	1439.4	1445.4	1427.0	1425.2
35°	1394.2	1377.8	1382.0	1363.9	1362.3
37.5°	1324.0	1309.0	1311.4	1291.2	1289.9
40°	1273.9	1259.2	1260.3	1239.1	1237.5
42.5°	1219.4	1204.5	1203.2	1181.9	1180.4
45°	1128.2	1113.3	1108.3	1088.4	1085.5
47.5°	1024.2	1009.2	1000.1	983.8	981.7
50°	948.7	933.7	925.9	912.0	907.6
52.5°	867.2	852.3	845.7	833.1	828.6
55°	738.8	727.0	722.3	709.9	707.1
57.5°	616.9	609.1	607.5	595.7	594.3
60°	542.7	538.3	538.3	527.5	527.5
62.5°	479.6	476.2	478.6	471.4	470.4
65°	396.8	393.9	398.3	395.2	395.2
67.5°	331.5	331.5	334.2	332.8	332.8
70°	294.8	294.8	296.4	296.4	296.4
72.5°	262.1	261.0	264.9	264.7	263.6
75°	214.4	214.4	214.4	215.9	215.9
77.5°	167.0	167.2	168.5	168.2	167.0
80°	135.2	136.8	136.8	135.2	135.2
82.5°	103.8	105.1	105.1	104.8	103.8
85°	54.7	57.7	60.8	60.8	60.8
87.5°	15.7	20.5	24.4	24.4	23.0
90°	3.8	5.7	5.7	3.8	1.9
92.5°	9.5	28.7	26.8	11.5	9.5
95°	17.2	59.3	172.2	44.0	26.8
97.5°	26.8	66.9	344.3	156.9	84.2
100°	36.4	70.8	401.8	376.9	243.0
102.5°	47.8	76.5	399.9	529.9	436.2
105°	59.3	84.2	373.1	629.4	585.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	91.9	112.9	290.8	633.3	721.3
115°	103.3	124.3	277.4	585.4	690.6
117.5°	114.8	137.8	269.7	541.4	646.6
120°	124.3	149.2	264.0	499.3	602.6
122.5°	132.0	160.7	260.2	464.9	558.6
125°	139.7	172.2	258.3	436.2	520.4
127.5°	147.3	179.8	258.3	415.2	485.9
130°	155.0	183.6	256.4	394.1	457.3
132.5°	162.6	185.5	256.4	378.8	432.4
135°	168.3	189.4	256.4	363.5	411.4
137.5°	176.0	193.3	256.4	350.1	394.1
140°	181.7	199.0	256.4	336.7	375.0
142.5°	189.4	204.7	256.4	323.3	357.8
145°	197.1	210.5	254.5	313.8	340.5
147.5°	204.7	216.2	252.6	304.2	325.2
150°	210.5	221.9	252.6	294.7	311.9
152.5°	218.1	227.6	250.7	285.0	300.4
155°	223.8	231.5	250.7	279.3	288.8
157.5°	229.5	237.2	250.7	273.6	281.2
160°	235.3	241.1	252.6	269.7	275.5
162.5°	241.1	244.9	252.6	265.9	269.7
165°	244.9	246.8	252.6	264.0	265.9
167.5°	248.7	250.7	252.6	262.1	262.1
170°	250.7	252.6	254.5	260.2	260.2
172.5°	254.5	254.5	254.5	258.3	258.3
175°	256.4	256.4	254.5	258.3	256.4
177.5°	256.4	256.4	254.5	258.3	256.4
180°	256.4	256.4	256.4	256.4	256.4



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	70.8	93.8	338.6	673.5	681.1
110°	80.4	103.3	311.9	667.7	723.2



(END OF REPORT)