

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: P845178

Luminaire Tested: **SQ4P-PR1-075U-125D-B40-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845178  
REPORT IS A COMBINATION OF REPORTS P700234 AND P700245  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PR1-075U-125D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

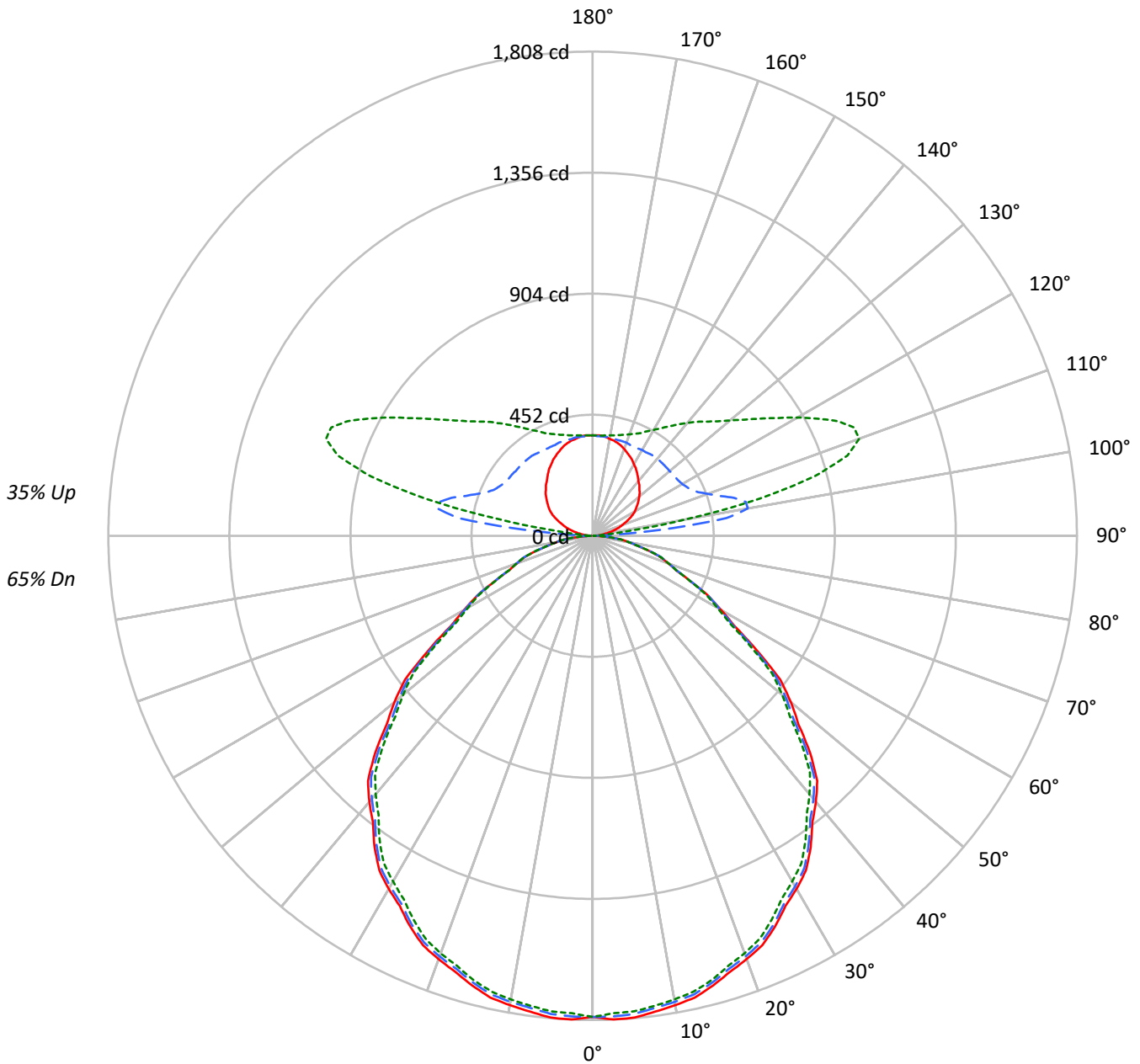
Lumens per Lamp: N/A  
Luminaire Lumens: 6929.0 lumens  
Efficiency: N/A  
Efficacy: 106.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 64.8  
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									
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	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70	70	70	70	65																
1	101	97	93	90	95	92	88	85	81	78	76	71	69	68	62	61	60	60	60	60	55																
2	93	85	79	74	87	80	75	71	71	67	64	63	60	57	55	53	51	51	51	51	47																
3	85	75	68	62	80	71	65	59	63	58	54	56	52	49	49	46	44	44	44	44	40																
4	78	67	59	53	73	63	56	51	57	51	46	50	46	42	44	41	38	38	38	38	35																
5	72	60	52	46	67	57	49	44	51	45	40	45	40	37	40	36	33	33	33	33	30																
6	66	54	46	40	62	51	44	38	46	40	35	41	36	32	36	32	29	29	29	29	27																
7	61	49	41	35	57	46	39	34	42	36	31	37	32	29	33	29	26	26	26	26	24																
8	57	44	37	31	53	42	35	30	38	32	28	34	29	26	31	27	24	24	24	24	21																
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	28	24	21	21	21	21	19																
10	50	37	30	25	47	36	29	24	32	27	23	29	24	21	26	22	19	19	19	19	17																

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

	0°	45°	90°
0°	16576	16576	16576
5°	16726	16597	16511
10°	16672	16557	16470
15°	16601	16497	16407
20°	16516	16408	16289
25°	16400	16291	16101
30°	16222	16108	15878
35°	15985	15844	15617
40°	15617	15450	15172
45°	14984	14721	14417
50°	13861	13528	13260
55°	12096	11826	11577
60°	10195	10110	9909
65°	8818	8852	8783
70°	8095	8139	8139
75°	7778	7778	7835
80°	7311	7401	7311
85°	5896	6553	6553



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.9	2.5
10°-20°	486.1	7.0
20°-30°	733.2	10.6
30°-40°	873.6	12.6
40°-50°	861.3	12.4
50°-60°	658.3	9.5
60°-70°	407.3	5.9
70°-80°	231.4	3.3
80°-90°	71.3	1.0
90°-100°	149.4	2.2
100°-110°	519.9	7.5
110°-120°	503.6	7.3
120°-130°	395.1	5.7
130°-140°	312.7	4.5
140°-150°	241.3	3.5
150°-160°	173.0	2.5
160°-170°	105.8	1.5
170°-180°	35.8	0.5
0°-30°	1389.3	20.1
0°-40°	2262.9	32.7
0°-60°	3782.5	54.6
0°-90°	4492.5	64.8
90°-120°	1172.9	16.9
90°-150°	2122.0	30.6
90°-180°	2437.0	35.2
0°-180°	6929.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1797	1797	1797	1797	1797	
5°	1806	1786	1792	1786	1783	171
15°	1738	1720	1727	1721	1718	490
25°	1611	1591	1600	1583	1582	741
35°	1419	1402	1407	1388	1387	886
45°	1148	1133	1128	1108	1105	880
55°	752	740	735	723	720	674
65°	404	401	406	402	402	409
75°	218	218	218	220	220	230
85°	56	59	62	62	62	65
90°	6	8	8	6	3	6
95°	25	87	252	64	39	27
105°	87	123	546	922	857	91
115°	151	182	406	857	1011	149
125°	205	252	378	639	762	183
135°	246	277	375	532	602	191
145°	289	308	373	460	499	181
155°	328	339	367	409	423	151
165°	359	362	370	387	390	101
175°	375	375	373	378	375	36
180°	375	375	375	375	375	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1796.6	1796.6	1796.6	1796.6	1796.6
2.5°	1807.9	1792.1	1796.6	1793.0	1784.4
5°	1806.0	1786.3	1792.1	1785.7	1782.8
7.5°	1792.1	1772.7	1778.5	1772.1	1770.5
10°	1779.6	1761.5	1767.3	1761.2	1758.0
12.5°	1766.0	1746.7	1753.7	1746.3	1743.3
15°	1738.0	1719.8	1727.1	1720.9	1717.7
17.5°	1707.0	1687.5	1695.0	1687.8	1683.8
20°	1682.2	1664.1	1671.2	1660.6	1659.0
22.5°	1655.1	1636.8	1644.1	1629.7	1629.4
25°	1611.0	1591.3	1600.3	1583.3	1581.6
27.5°	1558.7	1540.6	1547.8	1530.4	1528.8
30°	1522.7	1504.6	1512.0	1493.3	1490.4
32.5°	1481.9	1465.1	1471.2	1452.5	1450.7
35°	1419.2	1402.4	1406.7	1388.3	1386.6
37.5°	1347.7	1332.5	1334.9	1314.3	1313.0
40°	1296.7	1281.8	1282.8	1261.2	1259.7
42.5°	1241.3	1226.1	1224.7	1203.1	1201.5
45°	1148.4	1133.2	1128.2	1107.8	1104.9
47.5°	1042.5	1027.3	1018.0	1001.4	999.3
50°	965.7	950.5	942.5	928.4	923.8
52.5°	882.7	867.5	860.8	848.0	843.5
55°	752.0	740.0	735.2	722.6	719.7
57.5°	628.0	620.0	618.4	606.3	605.0
60°	552.5	547.9	547.9	537.0	537.0
62.5°	488.2	484.7	487.1	479.9	478.8
65°	403.9	400.9	405.5	402.3	402.3
67.5°	337.4	337.4	340.1	338.8	338.8
70°	300.1	300.1	301.7	301.7	301.7
72.5°	266.8	265.7	269.7	269.4	268.3
75°	218.2	218.2	218.2	219.8	219.8
77.5°	170.0	170.2	171.5	171.2	170.0
80°	137.6	139.3	139.3	137.6	137.6
82.5°	105.6	107.0	107.0	106.7	105.6
85°	55.7	58.7	61.9	61.9	61.9
87.5°	16.0	20.8	24.8	24.8	23.5
90°	5.6	8.4	8.4	5.6	2.8
92.5°	14.1	42.1	39.2	16.8	14.1
95°	25.2	86.8	252.2	64.4	39.2
97.5°	39.2	98.1	504.3	229.8	123.3
100°	53.2	103.7	588.3	552.0	355.8
102.5°	70.1	112.0	585.6	776.1	638.8
105°	86.8	123.3	546.4	921.8	857.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	134.5	165.3	425.9	927.4	1056.3
115°	151.3	182.1	406.2	857.3	1011.4
117.5°	168.1	201.8	395.1	792.9	947.0
120°	182.1	218.5	386.7	731.3	882.5
122.5°	193.3	235.4	381.0	680.9	818.1
125°	204.6	252.2	378.2	638.8	762.1
127.5°	215.7	263.4	378.2	608.0	711.7
130°	227.0	269.0	375.4	577.2	669.6
132.5°	238.1	271.7	375.4	554.8	633.2
135°	246.5	277.3	375.4	532.3	602.4
137.5°	257.8	283.0	375.4	512.7	577.2
140°	266.2	291.4	375.4	493.1	549.2
142.5°	277.3	299.8	375.4	473.5	523.9
145°	288.6	308.2	372.6	459.5	498.7
147.5°	299.8	316.6	369.8	445.5	476.3
150°	308.2	325.0	369.8	431.4	456.7
152.5°	319.4	333.4	367.0	417.5	439.9
155°	327.8	339.0	367.0	409.0	423.1
157.5°	336.2	347.4	367.0	400.6	411.9
160°	344.6	353.0	369.8	395.1	403.4
162.5°	353.0	358.7	369.8	389.5	395.1
165°	358.7	361.5	369.8	386.7	389.5
167.5°	364.3	367.0	369.8	383.8	383.8
170°	367.0	369.8	372.6	381.0	381.0
172.5°	372.6	372.6	372.6	378.2	378.2
175°	375.4	375.4	372.6	378.2	375.4
177.5°	375.4	375.4	372.6	378.2	375.4
180°	375.4	375.4	375.4	375.4	375.4



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	103.7	137.3	495.9	986.2	997.5
110°	117.6	151.3	456.7	977.8	1059.1



(END OF REPORT)