

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: P845202

Luminaire Tested: **SQ4P-PR1-100U-125D-B40-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845202
REPORT IS A COMBINATION OF REPORTS P700094 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-100U-125D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT
UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

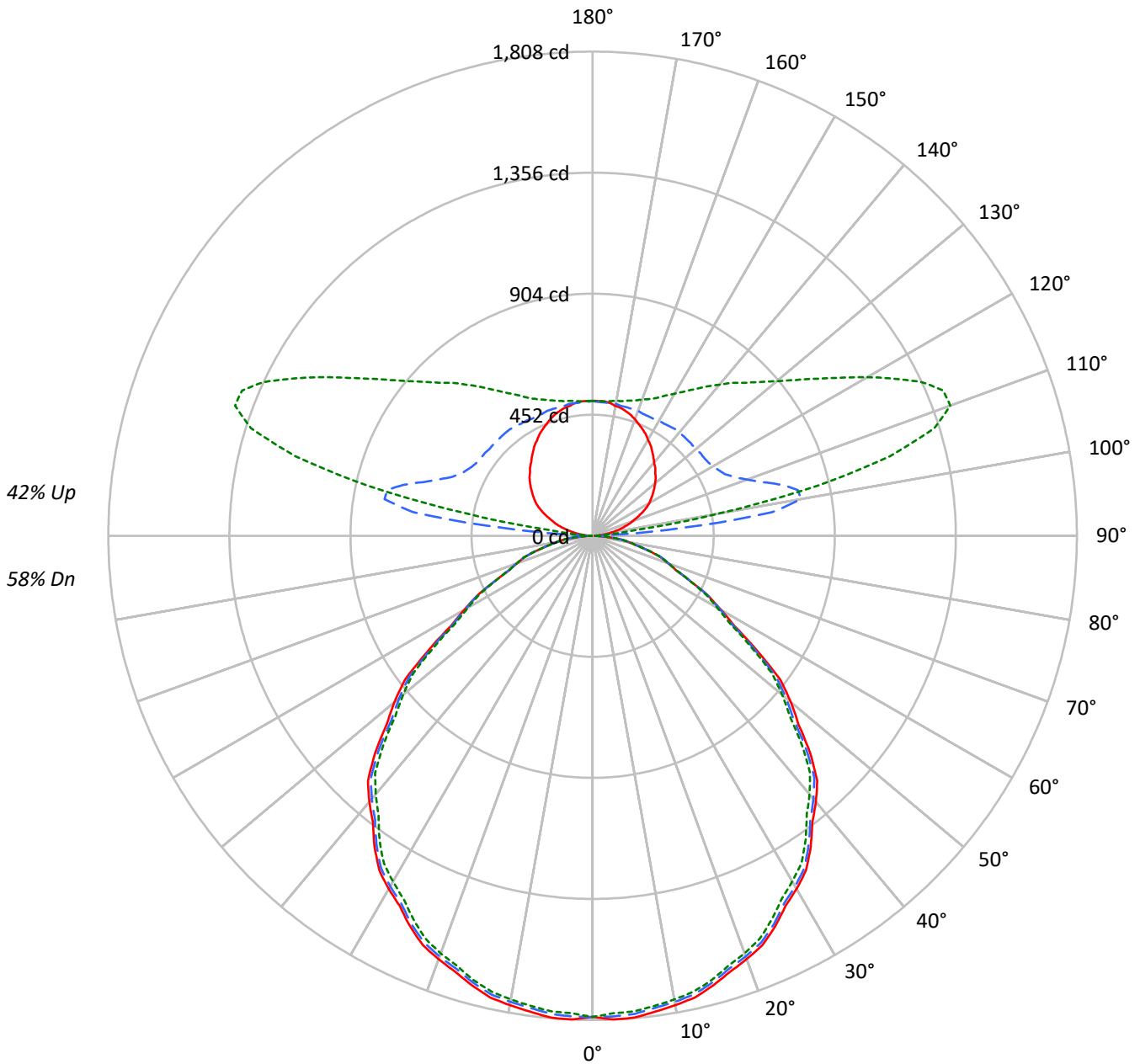
Lumens per Lamp: N/A
Luminaire Lumens: 7761.5 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 71.8
Input Voltage (V): NR
Input Current (A_{in}): 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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58																			
1	100	96	92	88	93	89	86	83	77	75	73	67	65	63	57	55	54	49																			
2	91	84	78	73	85	78	73	69	68	64	61	59	56	53	50	48	46	42																			
3	83	74	67	61	78	69	63	58	61	56	52	52	49	45	45	42	40	36																			
4	76	66	58	52	71	62	55	49	54	49	44	47	43	39	40	37	34	31																			
5	70	59	51	45	65	55	48	43	48	43	38	42	38	34	36	33	30	27																			
6	65	53	45	39	60	50	42	37	44	38	34	38	34	30	33	29	27	24																			
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	30	27	24	21																			
8	56	43	36	30	52	41	34	29	36	31	26	32	27	24	28	24	21	19																			
9	52	40	32	27	48	38	31	26	33	28	24	29	25	21	26	22	19	17																			
10	49	36	29	24	45	35	28	23	31	25	21	27	23	19	24	20	18	16																			

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	2.2
10°-20°	486.1	6.3
20°-30°	733.2	9.4
30°-40°	873.6	11.3
40°-50°	861.3	11.1
50°-60°	658.3	8.5
60°-70°	407.3	5.2
70°-80°	231.4	3.0
80°-90°	71.6	0.9
90°-100°	200.5	2.6
100°-110°	697.4	9.0
110°-120°	675.6	8.7
120°-130°	530.0	6.8
130°-140°	419.5	5.4
140°-150°	323.7	4.2
150°-160°	232.1	3.0
160°-170°	141.9	1.8
170°-180°	48.0	0.6
0°-30°	1389.3	17.9
0°-40°	2262.9	29.2
0°-60°	3782.5	48.7
0°-90°	4492.8	57.9
90°-120°	1573.5	20.3
90°-150°	2846.7	36.7
90°-180°	3269.0	42.1
0°-180°	7761.5	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°	8	11	11	8	4	7
95°	34	116	338	86	53	36
105°	116	165	733	1237	1150	122
115°	203	244	545	1150	1357	200
125°	274	338	507	857	1022	246
135°	331	372	504	714	808	256
145°	387	414	500	616	669	242
155°	440	455	492	549	568	203
165°	481	485	496	519	522	136
175°	504	504	500	507	504	48
180°	504	504	504	504	504	



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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°	7.6	11.2	11.2	7.6	3.8
92.5°	18.8	56.4	52.6	22.6	18.8
95°	33.8	116.5	338.3	86.4	52.6
97.5°	52.6	131.6	676.6	308.3	165.4
100°	71.4	139.1	789.3	740.5	477.4
102.5°	94.0	150.3	785.5	1041.2	856.9
105°	116.5	165.4	732.9	1236.6	1150.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.4	221.7	571.4	1244.1	1417.1
115°	202.9	244.3	545.0	1150.2	1356.9
117.5°	225.5	270.7	530.0	1063.7	1270.4
120°	244.3	293.1	518.7	981.0	1184.0
122.5°	259.3	315.7	511.2	913.3	1097.6
125°	274.3	338.3	507.4	856.9	1022.4
127.5°	289.5	353.3	507.4	815.7	954.7
130°	304.5	360.9	503.6	774.3	898.3
132.5°	319.5	364.6	503.6	744.2	849.5
135°	330.7	372.1	503.6	714.2	808.1
137.5°	345.8	379.6	503.6	687.8	774.3
140°	357.1	390.9	503.6	661.5	736.7
142.5°	372.1	402.2	503.6	635.2	702.9
145°	387.1	413.5	499.9	616.4	669.0
147.5°	402.2	424.7	496.2	597.6	639.0
150°	413.5	436.0	496.2	578.8	612.6
152.5°	428.5	447.3	492.4	560.0	590.2
155°	439.8	454.8	492.4	548.8	567.6
157.5°	451.0	466.1	492.4	537.5	552.6
160°	462.3	473.6	496.2	530.0	541.2
162.5°	473.6	481.1	496.2	522.4	530.0
165°	481.1	484.9	496.2	518.7	522.4
167.5°	488.6	492.4	496.2	515.0	515.0
170°	492.4	496.2	499.9	511.2	511.2
172.5°	499.9	499.9	499.9	507.4	507.4
175°	503.6	503.6	499.9	507.4	503.6
177.5°	503.6	503.6	499.9	507.4	503.6
180°	503.6	503.6	503.6	503.6	503.6



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	139.1	184.2	665.3	1323.1	1338.1
110°	157.9	202.9	612.6	1311.8	1420.7



(END OF REPORT)