

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: P845025

Luminaire Tested: **SQ4P-PC3-100U-050D-B40-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845025
REPORT IS A COMBINATION OF REPORTS P700083 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PC3-100U-050D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

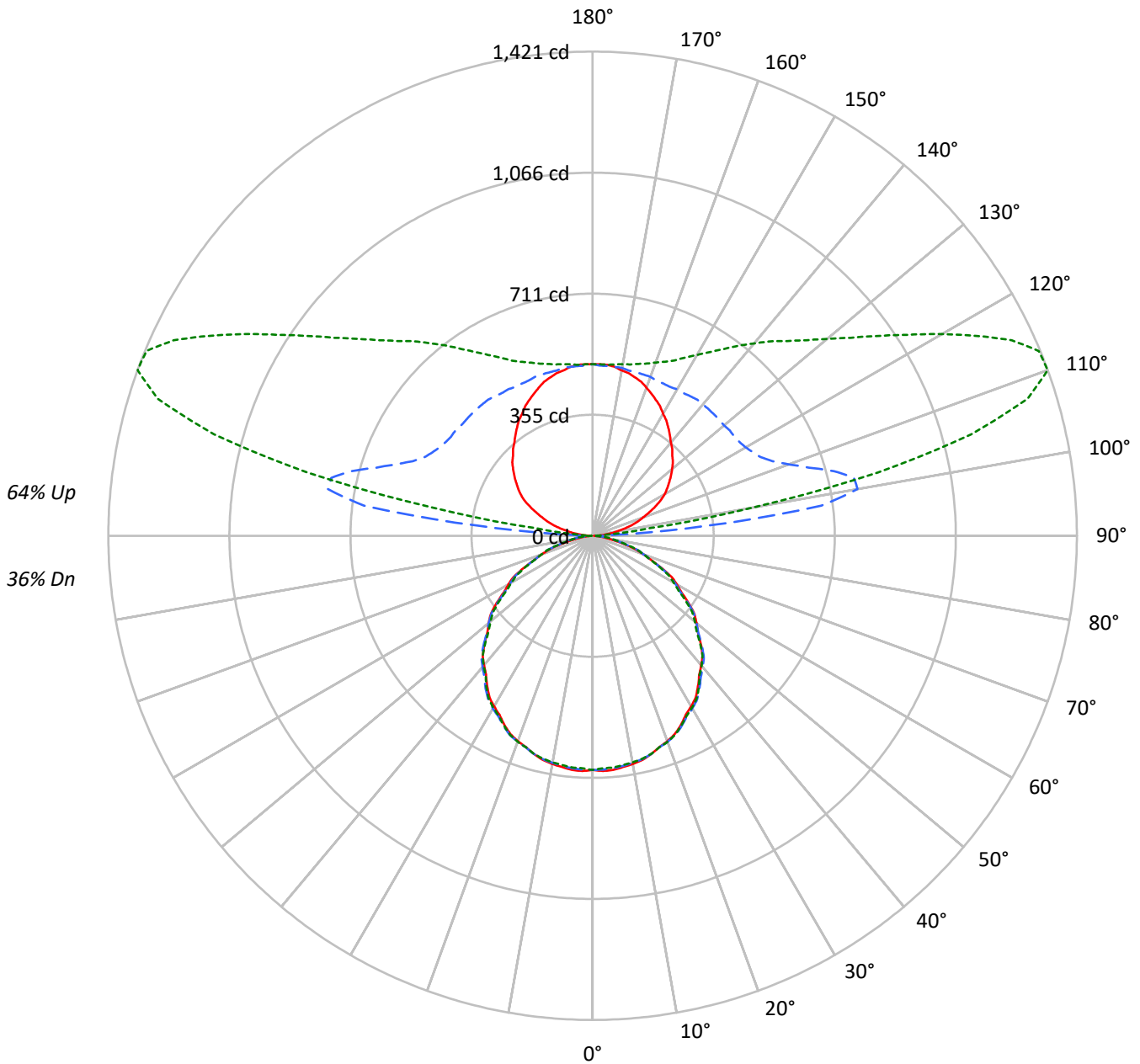
Lumens per Lamp: N/A
Luminaire Lumens: 5145.1 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 42.8
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				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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	36				36
1	95	91	87	83	86	82	79	76	66	64	62	52	51	49	39	38	37	31				31
2	86	79	73	68	78	72	67	62	58	55	51	46	43	41	34	32	31	26				26
3	79	69	62	57	71	63	57	52	51	47	43	40	37	35	30	28	26	22				22
4	72	61	54	48	65	56	49	44	45	41	37	36	32	30	27	25	23	19				19
5	66	55	47	41	59	50	43	38	41	35	32	32	28	26	24	22	20	16				16
6	61	49	41	35	55	45	38	33	36	31	27	29	25	22	22	19	17	14				14
7	56	44	36	31	51	40	33	28	33	28	24	26	22	20	20	17	15	13				13
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14	11				11
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12	10				10
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	9				9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6338	6338	6338
5°	6388	6345	6322
10°	6372	6342	6324
15°	6338	6338	6332
20°	6296	6315	6315
25°	6236	6282	6263
30°	6160	6234	6208
35°	6070	6162	6119
40°	5969	6053	5992
45°	5861	5903	5810
50°	5707	5707	5616
55°	5525	5455	5373
60°	5259	5154	5071
65°	4860	4764	4722
70°	4257	4289	4273
75°	3422	3789	3811
80°	2433	3214	3246
85°	1493	2699	2699



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	1.3
10°-20°	186.6	3.6
20°-30°	282.6	5.5
30°-40°	338.8	6.6
40°-50°	345.4	6.7
50°-60°	301.5	5.9
60°-70°	215.9	4.2
70°-80°	111.2	2.2
80°-90°	29.4	0.6
90°-100°	200.5	3.9
100°-110°	697.4	13.6
110°-120°	675.6	13.1
120°-130°	530.0	10.3
130°-140°	419.5	8.2
140°-150°	323.7	6.3
150°-160°	232.1	4.5
160°-170°	141.9	2.8
170°-180°	48.0	0.9
0°-30°	534.2	10.4
0°-40°	873.0	17.0
0°-60°	1520.0	29.5
0°-90°	1876.4	36.5
90°-120°	1573.5	30.6
90°-150°	2846.7	55.3
90°-180°	3269.0	63.5
0°-180°	5145.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	687	687	687	687	687	
5°	690	683	685	683	683	65
15°	664	658	664	664	663	187
25°	613	608	617	615	615	282
35°	539	538	547	543	543	337
45°	449	448	452	446	445	346
55°	344	339	339	334	334	306
65°	223	218	218	216	216	220
75°	96	100	106	107	107	104
85°	14	22	26	26	26	19
90°	8	11	11	8	4	5
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°	687.0	687.0	687.0	687.0	687.0
2.5°	691.1	685.1	687.0	685.5	683.0
5°	689.7	682.7	685.1	683.2	682.6
7.5°	684.6	677.8	681.0	679.7	679.0
10°	680.1	673.2	676.9	675.6	675.0
12.5°	674.0	667.6	671.8	670.6	670.3
15°	663.5	658.0	663.5	663.5	662.9
17.5°	650.4	645.3	651.3	651.7	651.3
20°	641.3	635.7	643.2	642.5	643.2
22.5°	630.1	625.5	633.5	631.8	632.5
25°	612.6	608.3	617.1	615.2	615.2
27.5°	592.1	588.9	598.5	596.5	596.5
30°	578.2	575.1	585.2	582.7	582.7
32.5°	563.0	560.9	570.6	567.5	567.5
35°	538.9	537.5	547.1	543.3	543.3
37.5°	513.9	512.7	521.5	516.8	515.3
40°	495.6	495.0	502.6	497.5	497.5
42.5°	477.3	476.6	483.3	477.2	477.2
45°	449.2	447.8	452.4	446.5	445.3
47.5°	418.4	417.3	420.0	413.8	413.1
50°	397.6	396.3	397.6	391.8	391.3
52.5°	376.3	374.0	374.2	368.4	368.3
55°	343.5	339.2	339.1	334.0	334.0
57.5°	308.9	303.2	303.8	299.3	298.7
60°	285.0	278.8	279.3	275.5	274.8
62.5°	261.6	254.4	255.8	251.6	251.5
65°	222.6	217.7	218.2	216.3	216.3
67.5°	185.2	180.6	184.0	182.5	182.4
70°	157.8	154.7	159.0	159.0	158.4
72.5°	132.4	132.3	137.6	137.6	138.1
75°	96.0	100.5	106.3	106.9	106.9
77.5°	64.2	71.8	78.3	78.5	78.4
80°	45.8	54.5	60.5	61.7	61.1
82.5°	31.0	40.2	45.2	46.4	45.8
85°	14.1	21.5	25.5	26.1	25.5
87.5°	4.1	8.5	10.2	10.2	9.2
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)