

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: P845032

Luminaire Tested: **SQ4P-PC3-100U-100D-B50-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P845032  
REPORT IS A COMBINATION OF REPORTS P700085 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-100D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT  
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

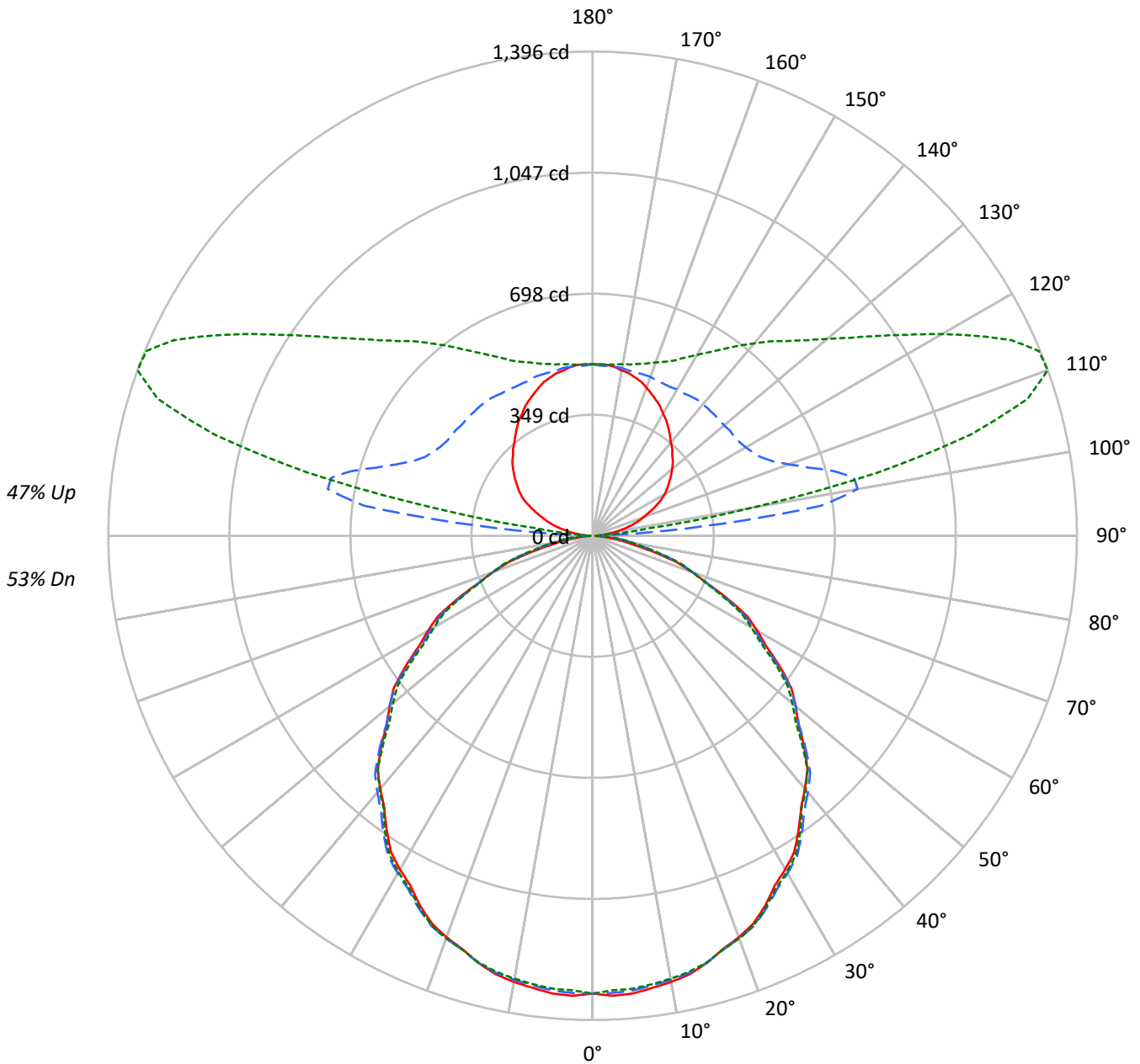
Lumens per Lamp: N/A  
Luminaire Lumens: 6814.0 lumens  
Efficiency: N/A  
Efficacy: 111.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 60.9  
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				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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53			
1	99	94	90	87	91	87	84	81	75	72	70	63	61	60	52	51	50	45			
2	90	82	76	71	83	76	71	66	65	61	58	55	52	50	46	44	42	37			
3	82	72	65	59	75	67	61	56	58	53	49	49	45	42	41	38	36	32			
4	75	64	56	50	69	60	52	47	51	46	41	43	39	36	36	33	31	27			
5	69	57	49	43	63	53	46	40	46	40	36	39	35	31	33	29	27	23			
6	63	51	43	37	58	48	40	35	41	35	31	35	31	27	30	26	23	21			
7	58	46	38	32	54	43	36	31	37	32	27	32	27	24	27	23	21	18			
8	54	42	34	29	50	39	32	27	34	28	24	29	25	21	25	21	19	16			
9	50	38	31	26	47	36	29	24	31	26	22	27	22	19	23	19	17	15			
10	47	35	28	23	44	33	26	22	29	23	20	25	20	17	21	18	15	13			

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

	0°	45°	90°
0°	12174	12174	12174
5°	12268	12188	12143
10°	12238	12181	12145
15°	12174	12174	12160
20°	12093	12129	12129
25°	11979	12065	12029
30°	11832	11976	11923
35°	11656	11834	11752
40°	11462	11626	11508
45°	11256	11336	11160
50°	10962	10962	10787
55°	10613	10476	10320
60°	10101	9900	9739
65°	9335	9152	9069
70°	8176	8238	8211
75°	6577	7276	7322
80°	4681	6169	6232
85°	2848	5166	5166



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.9	1.8
10°-20°	358.4	5.3
20°-30°	542.7	8.0
30°-40°	650.7	9.5
40°-50°	663.5	9.7
50°-60°	579.2	8.5
60°-70°	414.6	6.1
70°-80°	213.6	3.1
80°-90°	55.2	0.8
90°-100°	196.9	2.9
100°-110°	685.2	10.1
110°-120°	663.7	9.7
120°-130°	520.7	7.6
130°-140°	412.1	6.0
140°-150°	318.0	4.7
150°-160°	228.0	3.3
160°-170°	139.4	2.0
170°-180°	47.2	0.7
0°-30°	1026.0	15.1
0°-40°	1676.7	24.6
0°-60°	2919.3	42.8
0°-90°	3602.7	52.9
90°-120°	1545.9	22.7
90°-150°	2796.7	41.0
90°-180°	3211.0	47.1
0°-180°	6814.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1320	1320	1320	1320	1320	
5°	1325	1311	1316	1312	1311	126
15°	1274	1264	1274	1274	1273	359
25°	1177	1168	1185	1182	1182	542
35°	1035	1032	1051	1043	1043	647
45°	863	860	869	858	855	664
55°	660	652	651	642	642	588
65°	428	418	419	415	415	423
75°	184	193	204	205	205	199
85°	27	41	49	50	49	37
90°	7	11	11	7	4	6
95°	33	114	332	85	52	35
105°	114	162	720	1215	1130	120
115°	199	240	535	1130	1333	197
125°	270	332	498	842	1004	241
135°	325	366	495	702	794	252
145°	380	406	491	606	657	238
155°	432	447	484	539	558	199
165°	473	476	487	510	513	133
175°	495	495	491	498	495	47
180°	495	495	495	495	495	



TEST NUMBER: P845032

CATALOG NUMBER: SQ4P-PC3-100U-100D-B50-1D-UNV

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1319.5	1319.5	1319.5	1319.5	1319.5
2.5°	1327.5	1316.0	1319.5	1316.6	1311.7
5°	1324.6	1311.3	1316.0	1312.2	1311.1
7.5°	1314.9	1301.8	1308.0	1305.4	1304.2
10°	1306.3	1292.9	1300.2	1297.6	1296.4
12.5°	1294.5	1282.3	1290.3	1287.9	1287.5
15°	1274.5	1263.7	1274.5	1274.5	1273.1
17.5°	1249.2	1239.5	1250.9	1251.7	1250.9
20°	1231.7	1221.0	1235.3	1234.0	1235.3
22.5°	1210.2	1201.4	1216.8	1213.5	1214.9
25°	1176.7	1168.3	1185.2	1181.6	1181.6
27.5°	1137.1	1131.0	1149.6	1145.6	1145.6
30°	1110.6	1104.7	1124.1	1119.2	1119.2
32.5°	1081.3	1077.3	1095.9	1090.0	1090.0
35°	1034.9	1032.5	1050.7	1043.4	1043.4
37.5°	987.0	984.9	1001.5	992.7	989.7
40°	951.7	950.7	965.3	955.5	955.5
42.5°	916.6	915.4	928.2	916.4	916.4
45°	862.7	860.2	868.8	857.7	855.3
47.5°	803.7	801.4	806.7	794.7	793.4
50°	763.7	761.1	763.7	752.6	751.5
52.5°	722.6	718.2	718.6	707.6	707.4
55°	659.8	651.5	651.3	641.6	641.6
57.5°	593.3	582.4	583.4	575.0	573.7
60°	547.4	535.4	536.5	529.0	527.8
62.5°	502.3	488.7	491.3	483.2	483.0
65°	427.6	418.0	419.2	415.4	415.4
67.5°	355.8	346.9	353.4	350.4	350.2
70°	303.1	296.9	305.4	305.4	304.4
72.5°	254.2	254.0	264.3	264.3	265.1
75°	184.5	192.9	204.1	205.4	205.4
77.5°	123.2	137.9	150.4	150.8	150.6
80°	88.1	104.7	116.1	118.6	117.3
82.5°	59.6	77.3	86.7	89.1	88.1
85°	26.9	41.3	48.8	50.2	48.8
87.5°	7.8	16.5	19.6	19.6	17.7
90°	7.4	11.0	11.0	7.4	3.7
92.5°	18.5	55.4	51.7	22.2	18.5
95°	33.2	114.4	332.4	84.9	51.7
97.5°	51.7	129.3	664.7	302.8	162.5
100°	70.2	136.6	775.4	727.4	469.0
102.5°	92.3	147.7	771.7	1022.9	841.9
105°	114.4	162.5	720.0	1214.9	1130.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	177.3	217.8	561.3	1222.2	1392.1
115°	199.4	240.0	535.4	1130.0	1333.0
117.5°	221.5	265.9	520.7	1045.0	1248.1
120°	240.0	288.0	509.6	963.7	1163.2
122.5°	254.8	310.2	502.2	897.3	1078.3
125°	269.5	332.4	498.5	841.9	1004.4
127.5°	284.4	347.1	498.5	801.3	937.9
130°	299.1	354.5	494.8	760.7	882.5
132.5°	313.9	358.2	494.8	731.2	834.5
135°	324.9	365.6	494.8	701.6	793.9
137.5°	339.7	372.9	494.8	675.7	760.7
140°	350.8	384.0	494.8	649.9	723.7
142.5°	365.6	395.1	494.8	624.1	690.5
145°	380.3	406.2	491.1	605.6	657.3
147.5°	395.1	417.3	487.4	587.1	627.8
150°	406.2	428.3	487.4	568.6	601.9
152.5°	421.0	439.5	483.7	550.2	579.8
155°	432.0	446.8	483.7	539.1	557.6
157.5°	443.1	457.9	483.7	528.1	542.8
160°	454.2	465.3	487.4	520.7	531.7
162.5°	465.3	472.7	487.4	513.2	520.7
165°	472.7	476.4	487.4	509.6	513.2
167.5°	480.0	483.7	487.4	505.9	505.9
170°	483.7	487.4	491.1	502.2	502.2
172.5°	491.1	491.1	491.1	498.5	498.5
175°	494.8	494.8	491.1	498.5	494.8
177.5°	494.8	494.8	491.1	498.5	494.8
180°	494.8	494.8	494.8	494.8	494.8



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	136.6	181.0	653.6	1299.8	1314.6
110°	155.1	199.4	601.9	1288.8	1395.8



(END OF REPORT)