

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: P845031

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845031
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-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

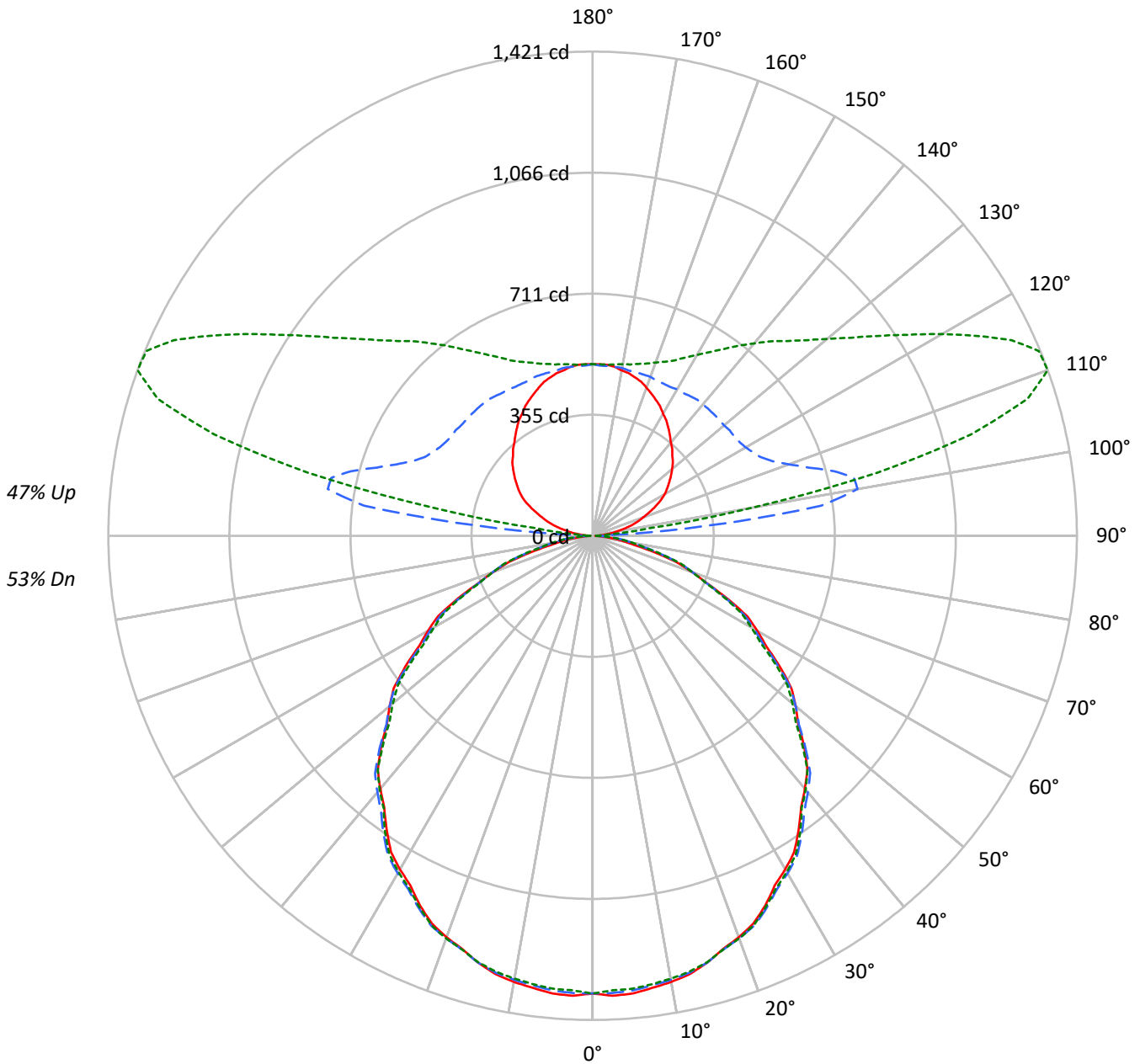
Lumens per Lamp: N/A
Luminaire Lumens: 6935.9 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 60.9
Input Voltage (V): NR
Input Current (A_{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

TEST NUMBER: P845031

CATALOG NUMBER: SQ4P-PC3-100U-100D-B40-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P845031

CATALOG NUMBER: SQ4P-PC3-100U-100D-B40-1D-UNV

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°	12392	12392	12392
5°	12487	12406	12360
10°	12457	12398	12363
15°	12391	12391	12378
20°	12310	12346	12346
25°	12194	12281	12243
30°	12044	12190	12136
35°	11866	12047	11963
40°	11668	11833	11714
45°	11459	11539	11359
50°	11158	11158	10980
55°	10805	10663	10505
60°	10282	10077	9913
65°	9501	9315	9230
70°	8322	8387	8357
75°	6695	7408	7450
80°	4761	6275	6344
85°	2901	5261	5261



TEST NUMBER: P845031

CATALOG NUMBER: SQ4P-PC3-100U-100D-B40-1D-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.1	1.8
10°-20°	364.8	5.3
20°-30°	552.5	8.0
30°-40°	662.3	9.5
40°-50°	675.3	9.7
50°-60°	589.5	8.5
60°-70°	422.0	6.1
70°-80°	217.4	3.1
80°-90°	56.2	0.8
90°-100°	200.5	2.9
100°-110°	697.4	10.1
110°-120°	675.6	9.7
120°-130°	530.0	7.6
130°-140°	419.5	6.0
140°-150°	323.7	4.7
150°-160°	232.1	3.3
160°-170°	141.9	2.0
170°-180°	48.0	0.7
0°-30°	1044.4	15.1
0°-40°	1706.7	24.6
0°-60°	2971.6	42.8
0°-90°	3667.2	52.9
90°-120°	1573.5	22.7
90°-150°	2846.7	41.0
90°-180°	3269.0	47.1
0°-180°	6935.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1343	1343	1343	1343	1343	
5°	1348	1335	1340	1336	1335	128
15°	1297	1286	1297	1297	1296	366
25°	1198	1189	1206	1203	1203	551
35°	1054	1051	1070	1062	1062	659
45°	878	876	884	873	871	676
55°	672	663	663	653	653	599
65°	435	426	427	423	423	430
75°	188	196	208	209	209	203
85°	27	42	50	51	50	37
90°	8	11	11	8	4	6
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	



TEST NUMBER: P845031

CATALOG NUMBER: SQ4P-PC3-100U-100D-B40-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1343.1	1343.1	1343.1	1343.1	<i>1343.1</i>
2.5°	1351.3	1339.5	1343.1	1340.1	<i>1335.2</i>
5°	1348.3	1334.8	1339.5	1335.7	<i>1334.6</i>
7.5°	1338.5	1325.1	1331.4	1328.8	<i>1327.5</i>
10°	1329.7	1316.1	1323.4	1320.8	<i>1319.6</i>
12.5°	1317.6	1305.2	1313.4	1310.9	<i>1310.6</i>
15°	1297.3	1286.3	1297.3	1297.3	<i>1295.9</i>
17.5°	1271.5	1261.7	1273.3	1274.1	<i>1273.3</i>
20°	1253.8	1242.8	1257.4	1256.1	<i>1257.4</i>
22.5°	1231.9	1222.9	1238.6	1235.3	<i>1236.6</i>
25°	1197.8	1189.2	1206.4	1202.7	<i>1202.7</i>
27.5°	1157.4	1151.2	1170.1	1166.1	<i>1166.1</i>
30°	1130.5	1124.5	1144.2	1139.2	<i>1139.2</i>
32.5°	1100.7	1096.6	1115.5	1109.5	<i>1109.5</i>
35°	1053.5	1050.9	1069.6	1062.1	<i>1062.1</i>
37.5°	1004.6	1002.5	1019.5	1010.4	<i>1007.4</i>
40°	968.8	967.7	982.5	972.6	<i>972.6</i>
42.5°	933.0	931.8	944.8	932.8	<i>932.8</i>
45°	878.2	875.5	884.4	873.0	<i>870.6</i>
47.5°	818.1	815.8	821.1	808.9	<i>807.6</i>
50°	777.4	774.8	777.4	766.0	<i>765.0</i>
52.5°	735.5	731.1	731.4	720.3	<i>720.1</i>
55°	671.7	663.1	662.9	653.1	<i>653.1</i>
57.5°	603.9	592.8	593.8	585.3	<i>584.0</i>
60°	557.2	545.0	546.1	538.5	<i>537.2</i>
62.5°	511.3	497.4	500.1	491.8	<i>491.6</i>
65°	435.2	425.5	426.7	422.8	<i>422.8</i>
67.5°	362.1	353.1	359.7	356.7	<i>356.5</i>
70°	308.5	302.3	310.9	310.9	<i>309.8</i>
72.5°	258.7	258.5	269.0	269.0	<i>269.9</i>
75°	187.8	196.3	207.8	209.0	<i>209.0</i>
77.5°	125.4	140.4	153.1	153.5	<i>153.3</i>
80°	89.6	106.6	118.1	120.7	<i>119.4</i>
82.5°	60.7	78.7	88.3	90.7	<i>89.6</i>
85°	27.4	42.1	49.7	51.1	<i>49.7</i>
87.5°	7.9	16.8	20.0	20.0	<i>18.0</i>
90°	7.6	11.2	11.2	7.6	<i>3.8</i>
92.5°	18.8	56.4	52.6	22.6	<i>18.8</i>
95°	33.8	116.5	338.3	86.4	<i>52.6</i>
97.5°	52.6	131.6	676.6	308.3	<i>165.4</i>
100°	71.4	139.1	789.3	740.5	<i>477.4</i>
102.5°	94.0	150.3	785.5	1041.2	<i>856.9</i>
105°	116.5	165.4	732.9	1236.6	<i>1150.2</i>



TEST NUMBER: P845031

CATALOG NUMBER: SQ4P-PC3-100U-100D-B40-1D-UNV

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)