

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: P845026

Luminaire Tested: **SQ4P-PC3-100U-050D-B50-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845026
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-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

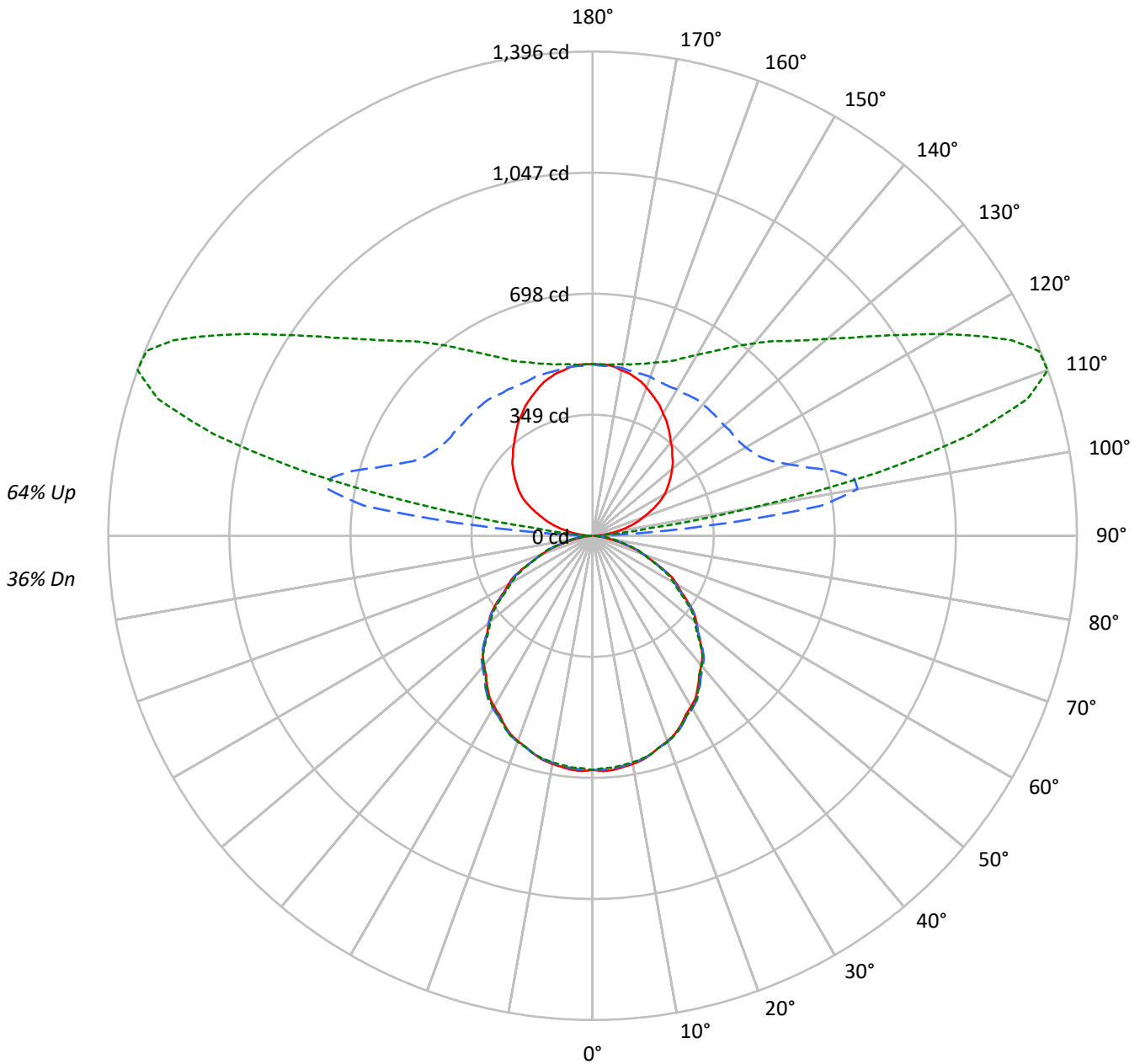
Lumens per Lamp: N/A
Luminaire Lumens: 5054.7 lumens
Efficiency: N/A
Efficacy: 118.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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

TEST NUMBER: P845026

CATALOG NUMBER: SQ4P-PC3-100U-050D-B50-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P845026

CATALOG NUMBER: SQ4P-PC3-100U-050D-B50-1D-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	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°	6227	6227	6227
5°	6276	6234	6211
10°	6259	6230	6212
15°	6227	6227	6221
20°	6187	6204	6204
25°	6127	6171	6152
30°	6052	6125	6099
35°	5963	6054	6011
40°	5864	5946	5887
45°	5758	5798	5708
50°	5606	5606	5517
55°	5429	5358	5279
60°	5167	5063	4982
65°	4774	4681	4639
70°	4181	4214	4200
75°	3362	3722	3743
80°	2391	3156	3188
85°	1461	2646	2646



TEST NUMBER: P845026

CATALOG NUMBER: SQ4P-PC3-100U-050D-B50-1D-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	1.3
10°-20°	183.3	3.6
20°-30°	277.6	5.5
30°-40°	332.8	6.6
40°-50°	339.4	6.7
50°-60°	296.3	5.9
60°-70°	212.1	4.2
70°-80°	109.2	2.2
80°-90°	28.8	0.6
90°-100°	196.9	3.9
100°-110°	685.2	13.6
110°-120°	663.7	13.1
120°-130°	520.7	10.3
130°-140°	412.1	8.2
140°-150°	318.0	6.3
150°-160°	228.0	4.5
160°-170°	139.4	2.8
170°-180°	47.2	0.9
0°-30°	524.8	10.4
0°-40°	857.6	17.0
0°-60°	1493.2	29.5
0°-90°	1843.4	36.5
90°-120°	1545.9	30.6
90°-150°	2796.7	55.3
90°-180°	3211.0	63.5
0°-180°	5054.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	675	675	675	675	675	
5°	678	671	673	671	671	64
15°	652	646	652	652	651	184
25°	602	598	606	604	604	277
35°	529	528	538	534	534	331
45°	441	440	444	439	438	340
55°	338	333	333	328	328	301
65°	219	214	214	212	212	216
75°	94	99	104	105	105	102
85°	14	21	25	26	25	19
90°	7	11	11	7	4	5
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: P845026

CATALOG NUMBER: SQ4P-PC3-100U-050D-B50-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	674.9	674.9	674.9	674.9	674.9
2.5°	679.0	673.1	674.9	673.5	671.0
5°	677.6	670.7	673.1	671.2	670.6
7.5°	672.6	665.8	669.0	667.8	667.1
10°	668.1	661.4	665.0	663.8	663.1
12.5°	662.1	655.8	659.9	658.8	658.5
15°	651.9	646.4	651.9	651.9	651.3
17.5°	639.0	634.0	639.9	640.2	639.9
20°	630.1	624.5	631.9	631.2	631.9
22.5°	619.0	614.5	622.3	620.7	621.4
25°	601.9	597.6	606.2	604.3	604.3
27.5°	581.7	578.5	588.0	586.0	586.0
30°	568.1	565.0	574.9	572.5	572.5
32.5°	553.1	551.0	560.6	557.5	557.5
35°	529.4	528.1	537.5	533.7	533.7
37.5°	504.9	503.7	512.3	507.7	506.2
40°	486.9	486.3	493.7	488.8	488.8
42.5°	468.9	468.2	474.8	468.8	468.8
45°	441.3	439.9	444.4	438.7	437.5
47.5°	411.1	409.9	412.6	406.5	405.8
50°	390.6	389.4	390.6	384.9	384.4
52.5°	369.7	367.4	367.6	362.0	361.9
55°	337.5	333.2	333.1	328.2	328.2
57.5°	303.5	297.9	298.5	294.1	293.4
60°	280.0	273.9	274.4	270.7	270.0
62.5°	257.0	249.9	251.3	247.1	247.1
65°	218.7	213.8	214.4	212.5	212.5
67.5°	181.9	177.5	180.8	179.3	179.2
70°	155.0	151.9	156.2	156.2	155.7
72.5°	130.0	130.0	135.2	135.2	135.7
75°	94.3	98.7	104.4	105.0	105.0
77.5°	63.0	70.5	76.9	77.1	77.0
80°	45.0	53.5	59.4	60.6	60.0
82.5°	30.5	39.5	44.4	45.6	45.0
85°	13.8	21.1	25.0	25.6	25.0
87.5°	4.0	8.4	10.0	10.0	9.0
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



TEST NUMBER: P845026

CATALOG NUMBER: SQ4P-PC3-100U-050D-B50-1D-UNV

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)