

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: P845029

Luminaire Tested: **SQ4P-PC3-100U-075D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845029
REPORT IS A COMBINATION OF REPORTS P700084 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-075D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT
UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

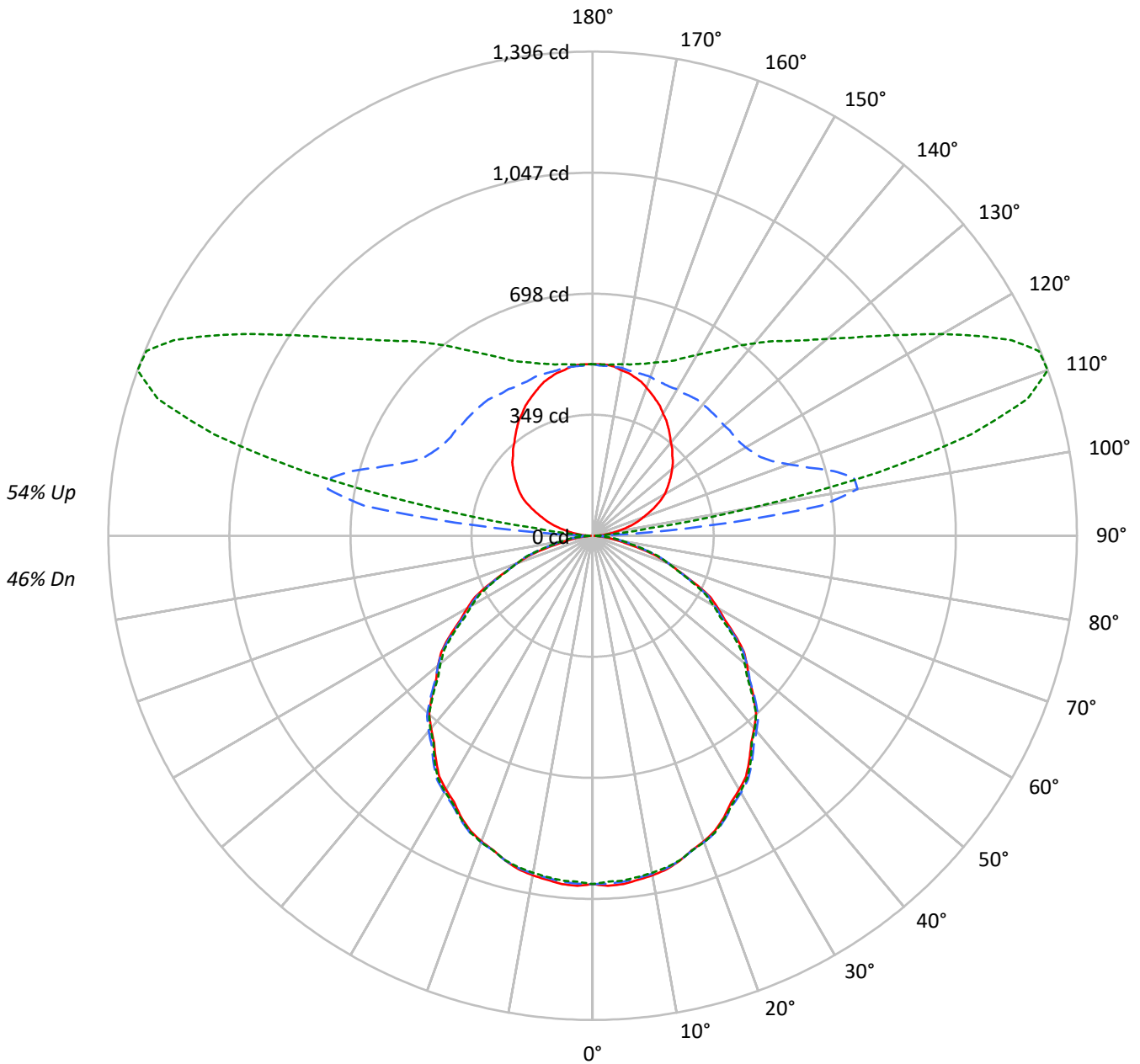
Lumens per Lamp: N/A
Luminaire Lumens: 5953.4 lumens
Efficiency: N/A
Efficacy: 115.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.6
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	53	53	53	46				46
1	97	93	89	85	89	85	82	79	71	69	67	58	57	55	46	45	44	39				39
2	88	81	75	70	81	74	69	65	62	59	55	51	49	46	41	39	37	33				33
3	81	71	64	58	74	66	59	54	55	50	46	45	42	39	36	34	32	28				28
4	74	63	55	49	67	58	51	46	49	44	39	40	36	33	32	30	27	24				24
5	68	56	48	42	62	52	45	39	44	38	34	36	32	29	29	26	24	20				20
6	62	50	42	36	57	46	39	34	39	34	30	33	28	25	26	23	21	18				18
7	57	45	37	32	53	42	35	30	36	30	26	30	25	22	24	21	19	16				16
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17	14				14
9	50	37	30	25	45	35	28	23	30	24	21	25	21	18	20	17	15	13				13
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	14	12				12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9265	9265	9265
5°	9336	9274	9241
10°	9313	9269	9243
15°	9264	9264	9256
20°	9204	9230	9230
25°	9117	9181	9154
30°	9004	9114	9075
35°	8871	9007	8944
40°	8723	8847	8760
45°	8566	8627	8493
50°	8342	8342	8209
55°	8078	7972	7853
60°	7687	7532	7412
65°	7104	6962	6901
70°	6223	6269	6248
75°	5005	5536	5572
80°	3560	4692	4745
85°	2181	3938	3938



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.0	1.6
10°-20°	272.7	4.6
20°-30°	413.0	6.9
30°-40°	495.2	8.3
40°-50°	504.9	8.5
50°-60°	440.8	7.4
60°-70°	315.5	5.3
70°-80°	162.5	2.7
80°-90°	42.3	0.7
90°-100°	196.9	3.3
100°-110°	685.2	11.5
110°-120°	663.7	11.1
120°-130°	520.7	8.7
130°-140°	412.1	6.9
140°-150°	318.0	5.3
150°-160°	228.0	3.8
160°-170°	139.4	2.3
170°-180°	47.2	0.8
0°-30°	780.8	13.1
0°-40°	1276.0	21.4
0°-60°	2221.7	37.3
0°-90°	2742.1	46.1
90°-120°	1545.9	26.0
90°-150°	2796.7	47.0
90°-180°	3211.0	53.9
0°-180°	5953.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1004	1004	1004	1004	1004	
5°	1008	998	1001	999	998	96
15°	970	962	970	970	969	273
25°	896	889	902	899	899	412
35°	788	786	800	794	794	493
45°	656	655	661	653	651	505
55°	502	496	496	488	488	448
65°	325	318	319	316	316	322
75°	140	147	155	156	156	152
85°	21	31	37	38	37	28
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1004.2	1004.2	1004.2	1004.2	1004.2
2.5°	1010.3	1001.4	1004.2	1002.0	998.3
5°	1008.1	997.9	1001.4	998.6	997.8
7.5°	1000.7	990.8	995.4	993.4	992.5
10°	994.1	984.0	989.4	987.5	986.6
12.5°	985.2	975.8	981.9	980.2	979.8
15°	969.9	961.7	969.9	969.9	969.0
17.5°	950.7	943.3	951.9	952.6	951.9
20°	937.4	929.2	940.1	939.2	940.1
22.5°	921.0	914.3	925.9	923.6	924.5
25°	895.6	889.1	901.9	899.2	899.2
27.5°	865.4	860.7	874.8	871.8	871.8
30°	845.2	840.7	855.5	851.8	851.8
32.5°	822.9	819.9	834.0	829.5	829.5
35°	787.6	785.7	799.7	794.1	794.1
37.5°	751.1	749.5	762.2	755.4	753.2
40°	724.3	723.5	734.6	727.3	727.3
42.5°	697.5	696.6	706.4	697.5	697.5
45°	656.5	654.6	661.2	652.7	650.9
47.5°	611.7	609.9	613.9	604.7	603.8
50°	581.2	579.3	581.2	572.7	571.9
52.5°	550.0	546.6	546.9	538.6	538.4
55°	502.2	495.8	495.6	488.2	488.2
57.5°	451.5	443.2	444.0	437.6	436.6
60°	416.6	407.5	408.2	402.6	401.7
62.5°	382.3	371.9	374.0	367.7	367.6
65°	325.4	318.2	318.9	316.1	316.1
67.5°	270.8	264.0	268.9	266.8	266.6
70°	230.7	226.0	232.4	232.4	231.6
72.5°	193.5	193.3	201.2	201.2	201.8
75°	140.4	146.8	155.3	156.3	156.3
77.5°	93.8	105.0	114.4	114.7	114.6
80°	67.0	79.7	88.3	90.3	89.3
82.5°	45.3	58.8	66.1	67.8	67.0
85°	20.6	31.4	37.2	38.2	37.2
87.5°	5.9	12.5	14.9	14.9	13.4
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)