

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: P845196

Luminaire Tested: **SQ4P-PR1-100U-075D-B40-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845196
REPORT IS A COMBINATION OF REPORTS P700092 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-100U-075D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

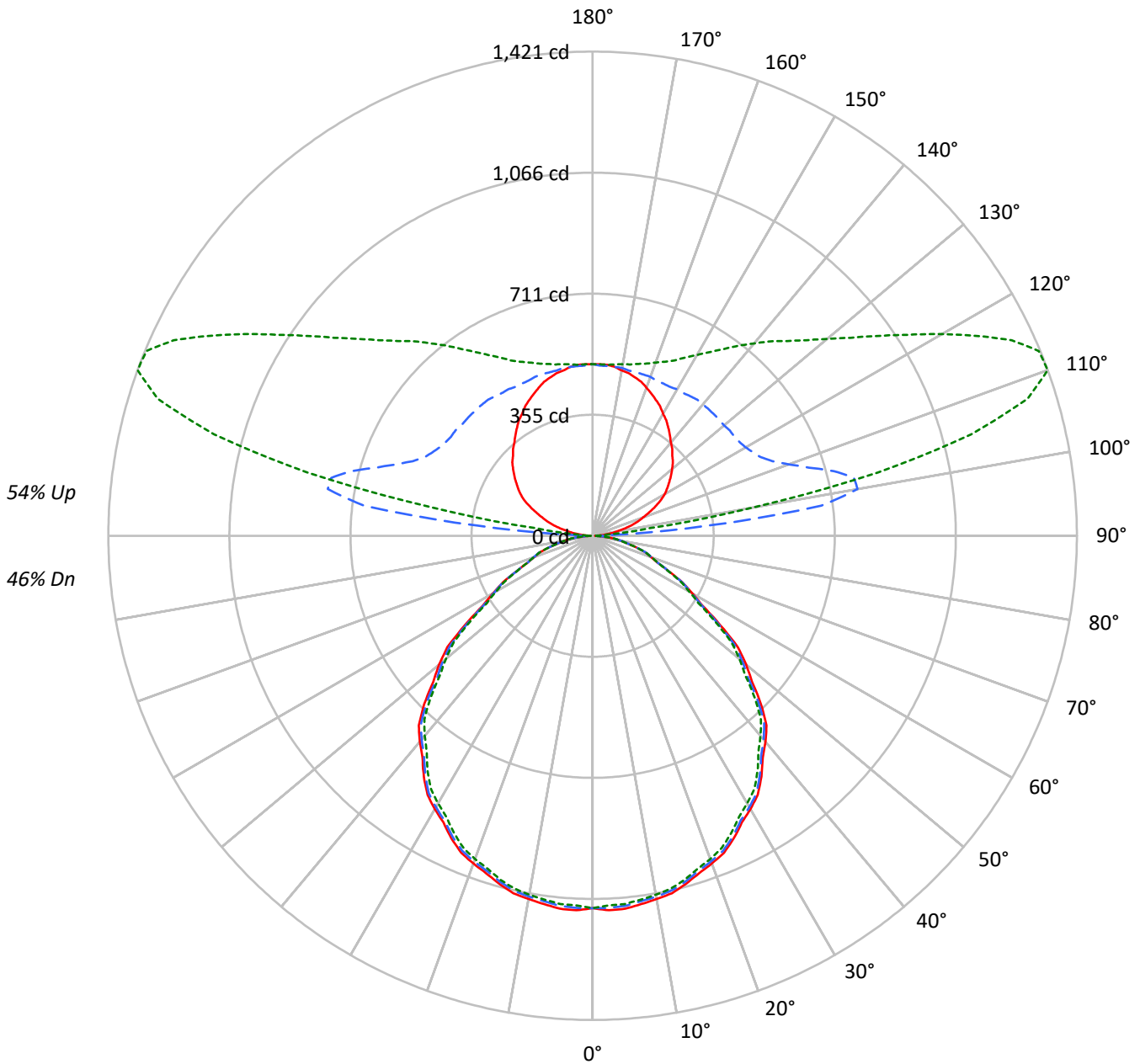
Lumens per Lamp: N/A
Luminaire Lumens: 6002.7 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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

TEST NUMBER: P845196

CATALOG NUMBER: SQ4P-PR1-100U-075D-B40-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P845196

CATALOG NUMBER: SQ4P-PR1-100U-075D-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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46			46
1	97	93	89	86	89	85	82	79	71	69	67	58	57	55	46	45	44	39			39
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	41	39	38	33			33
3	81	72	65	59	74	66	60	55	56	51	47	46	42	40	37	34	32	28			28
4	74	64	56	50	68	59	52	47	49	44	40	41	37	34	33	30	28	24			24
5	68	57	49	43	62	52	45	40	44	39	35	37	33	30	30	27	25	21			21
6	63	51	43	37	57	47	40	35	40	35	30	33	29	26	27	24	22	19			19
7	58	46	38	33	53	43	36	31	36	31	27	30	26	23	25	22	19	17			17
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	17	15			15
9	50	38	31	26	46	35	29	24	30	25	21	25	21	19	21	18	16	14			14
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	19	16	14	12			12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10085	10085	10085
5°	10176	10099	10046
10°	10143	10074	10021
15°	10100	10037	9981
20°	10049	9983	9911
25°	9977	9911	9796
30°	9869	9800	9661
35°	9725	9640	9503
40°	9501	9400	9230
45°	9117	8956	8771
50°	8433	8230	8068
55°	7359	7195	7044
60°	6204	6152	6028
65°	5366	5386	5344
70°	4926	4950	4950
75°	4734	4734	4766
80°	4447	4500	4447
85°	3589	3991	3991



TEST NUMBER: P845196

CATALOG NUMBER: SQ4P-PR1-100U-075D-B40-1D-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.4	1.7
10°-20°	295.8	4.9
20°-30°	446.1	7.4
30°-40°	531.5	8.9
40°-50°	524.0	8.7
50°-60°	400.5	6.7
60°-70°	247.8	4.1
70°-80°	140.8	2.3
80°-90°	44.0	0.7
90°-100°	200.5	3.3
100°-110°	697.4	11.6
110°-120°	675.6	11.3
120°-130°	530.0	8.8
130°-140°	419.5	7.0
140°-150°	323.7	5.4
150°-160°	232.1	3.9
160°-170°	141.9	2.4
170°-180°	48.0	0.8
0°-30°	845.3	14.1
0°-40°	1376.8	22.9
0°-60°	2301.4	38.3
0°-90°	2734.0	45.5
90°-120°	1573.5	26.2
90°-150°	2846.7	47.4
90°-180°	3269.0	54.5
0°-180°	6002.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1093	1093	1093	1093	1093	
5°	1099	1087	1090	1086	1085	104
15°	1057	1046	1051	1047	1045	298
25°	980	968	974	963	962	451
35°	863	853	856	845	844	539
45°	699	690	686	674	672	535
55°	458	450	447	440	438	410
65°	246	244	247	245	245	249
75°	133	133	133	134	134	140
85°	34	36	38	38	38	39
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: P845196

CATALOG NUMBER: SQ4P-PR1-100U-075D-B40-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1093.1	1093.1	1093.1	1093.1	1093.1
2.5°	1100.0	1090.4	1093.1	1090.9	1085.6
5°	1098.8	1086.8	1090.4	1086.4	1084.7
7.5°	1090.4	1078.5	1082.1	1078.2	1077.2
10°	1082.7	1071.7	1075.3	1071.5	1069.6
12.5°	1074.5	1062.8	1067.0	1062.5	1060.6
15°	1057.4	1046.4	1050.8	1047.1	1045.0
17.5°	1038.5	1026.7	1031.3	1026.9	1024.5
20°	1023.5	1012.5	1016.8	1010.3	1009.4
22.5°	1007.0	995.9	1000.3	991.5	991.4
25°	980.1	968.2	973.6	963.2	962.3
27.5°	948.3	937.3	941.7	931.2	930.2
30°	926.4	915.4	919.9	908.6	906.8
32.5°	901.6	891.3	895.1	883.8	882.6
35°	863.4	853.3	855.9	844.6	843.7
37.5°	819.9	810.7	812.2	799.7	798.9
40°	788.9	779.9	780.5	767.4	766.4
42.5°	755.2	746.0	745.1	732.0	731.1
45°	698.7	689.5	686.4	674.1	672.2
47.5°	634.3	625.0	619.3	609.2	608.0
50°	587.5	578.3	573.4	564.9	562.1
52.5°	537.1	527.8	523.8	515.9	513.2
55°	457.5	450.2	447.3	439.7	437.9
57.5°	382.1	377.2	376.2	368.9	368.1
60°	336.2	333.4	333.4	326.7	326.7
62.5°	297.0	294.9	296.3	292.0	291.3
65°	245.8	243.9	246.7	244.8	244.8
67.5°	205.3	205.3	206.9	206.1	206.1
70°	182.6	182.6	183.5	183.5	183.5
72.5°	162.3	161.6	164.1	164.0	163.3
75°	132.8	132.8	132.8	133.7	133.7
77.5°	103.4	103.6	104.4	104.2	103.4
80°	83.7	84.7	84.7	83.7	83.7
82.5°	64.2	65.1	65.1	64.9	64.2
85°	33.9	35.7	37.7	37.7	37.7
87.5°	9.7	12.7	15.1	15.1	14.2
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



TEST NUMBER: P845196

CATALOG NUMBER: SQ4P-PR1-100U-075D-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)