

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: P845160

Luminaire Tested: **SQ4P-PR1-050U-075D-B40-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845160
REPORT IS A COMBINATION OF REPORTS P700204 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-050U-075D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

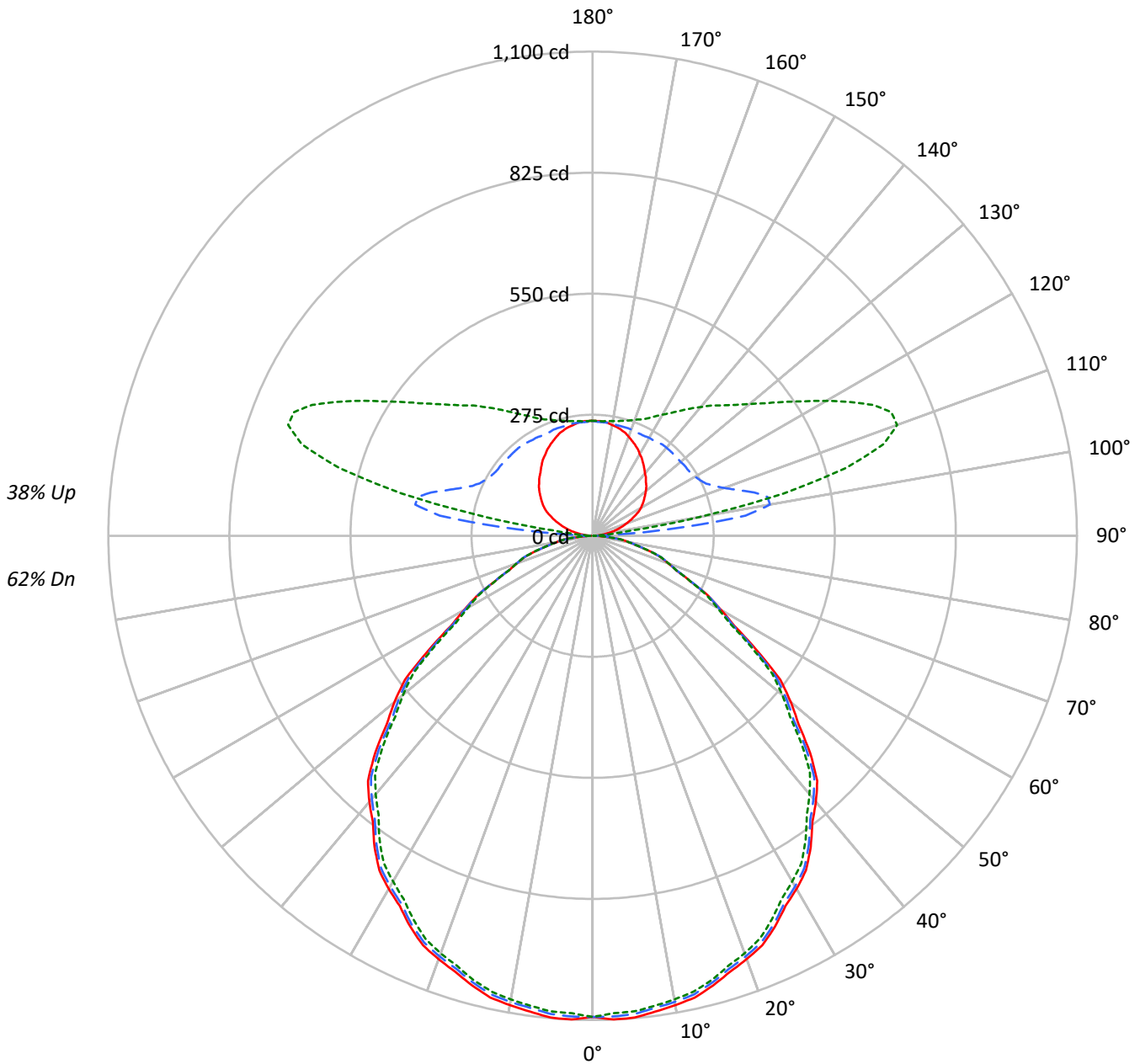
Lumens per Lamp: N/A
Luminaire Lumens: 4426.9 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 38.6
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: P845160

CATALOG NUMBER: SQ4P-PR1-050U-075D-B40-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P845160

CATALOG NUMBER: SQ4P-PR1-050U-075D-B40-1D-UNV

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62																			
1	101	96	93	89	94	91	87	84	79	77	75	69	67	66	60	58	57	53																			
2	92	85	79	73	86	80	74	70	70	66	62	61	58	55	53	51	49	45																			
3	84	75	67	62	79	70	64	59	62	57	53	54	51	47	47	44	42	38																			
4	77	66	59	52	72	63	56	50	55	50	45	49	44	41	42	39	36	33																			
5	71	59	51	45	66	56	49	43	50	44	39	44	39	36	38	35	32	29																			
6	66	53	45	39	61	50	43	38	45	39	35	40	35	31	35	31	28	25																			
7	61	48	40	35	57	46	38	33	41	35	31	36	31	28	32	28	25	23																			
8	56	44	36	31	53	42	35	30	37	31	27	33	28	25	29	25	23	20																			
9	53	40	33	28	49	38	31	27	34	29	24	31	26	22	27	23	20	18																			
10	49	37	30	25	46	35	28	24	32	26	22	28	24	20	25	21	19	17																			

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: P845160

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.4	2.3
10°-20°	295.8	6.7
20°-30°	446.1	10.1
30°-40°	531.5	12.0
40°-50°	524.0	11.8
50°-60°	400.5	9.0
60°-70°	247.8	5.6
70°-80°	140.8	3.2
80°-90°	43.4	1.0
90°-100°	103.8	2.3
100°-110°	361.4	8.2
110°-120°	350.0	7.9
120°-130°	274.6	6.2
130°-140°	217.3	4.9
140°-150°	167.7	3.8
150°-160°	120.2	2.7
160°-170°	73.5	1.7
170°-180°	24.9	0.6
0°-30°	845.3	19.1
0°-40°	1376.8	31.1
0°-60°	2301.4	52.0
0°-90°	2733.4	61.7
90°-120°	815.2	18.4
90°-150°	1474.9	33.3
90°-180°	1694.0	38.3
0°-180°	4426.9	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°	4	6	6	4	2	4
95°	18	60	175	45	27	19
105°	60	86	380	641	596	63
115°	105	127	282	596	703	104
125°	142	175	263	444	530	127
135°	171	193	261	370	419	133
145°	201	214	259	319	347	125
155°	228	236	255	284	294	105
165°	249	251	257	269	271	70
175°	261	261	259	263	261	25
180°	261	261	261	261	261	



TEST NUMBER: P845160

CATALOG NUMBER: SQ4P-PR1-050U-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°	3.9	5.8	5.8	3.9	1.9
92.5°	9.7	29.2	27.2	11.7	9.7
95°	17.5	60.4	175.3	44.8	27.2
97.5°	27.2	68.1	350.5	159.7	85.7
100°	37.0	72.1	408.9	383.7	247.3
102.5°	48.6	77.9	407.0	539.4	444.0
105°	60.4	85.7	379.8	640.6	595.9



TEST NUMBER: P845160

CATALOG NUMBER: SQ4P-PR1-050U-075D-B40-1D-UNV

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	93.5	114.9	296.0	644.6	734.2
115°	105.1	126.6	282.4	595.9	703.0
117.5°	116.9	140.2	274.5	551.1	658.2
120°	126.6	151.9	268.7	508.3	613.4
122.5°	134.4	163.6	264.8	473.2	568.6
125°	142.2	175.3	262.9	444.0	529.7
127.5°	149.9	183.1	262.9	422.6	494.6
130°	157.8	186.9	261.0	401.2	465.4
132.5°	165.5	188.9	261.0	385.6	440.1
135°	171.3	192.7	261.0	370.0	418.7
137.5°	179.2	196.7	261.0	356.3	401.2
140°	185.0	202.5	261.0	342.8	381.7
142.5°	192.7	208.3	261.0	329.1	364.2
145°	200.6	214.3	259.0	319.4	346.6
147.5°	208.3	220.1	257.1	309.6	331.0
150°	214.3	225.9	257.1	299.9	317.5
152.5°	222.0	231.7	255.2	290.1	305.7
155°	227.8	235.7	255.2	284.3	294.0
157.5°	233.6	241.5	255.2	278.5	286.3
160°	239.6	245.4	257.1	274.5	280.4
162.5°	245.4	249.2	257.1	270.7	274.5
165°	249.2	251.2	257.1	268.7	270.7
167.5°	253.1	255.2	257.1	266.8	266.8
170°	255.2	257.1	259.0	264.8	264.8
172.5°	259.0	259.0	259.0	262.9	262.9
175°	261.0	261.0	259.0	262.9	261.0
177.5°	261.0	261.0	259.0	262.9	261.0
180°	261.0	261.0	261.0	261.0	261.0



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	72.1	95.5	344.7	685.5	693.3
110°	81.8	105.1	317.5	679.6	736.1



(END OF REPORT)