

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: P844866

Luminaire Tested: **SQ4P-BB-100U-125D-B40-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844866
REPORT IS A COMBINATION OF REPORTS P700078 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-BB-100U-125D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT
UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

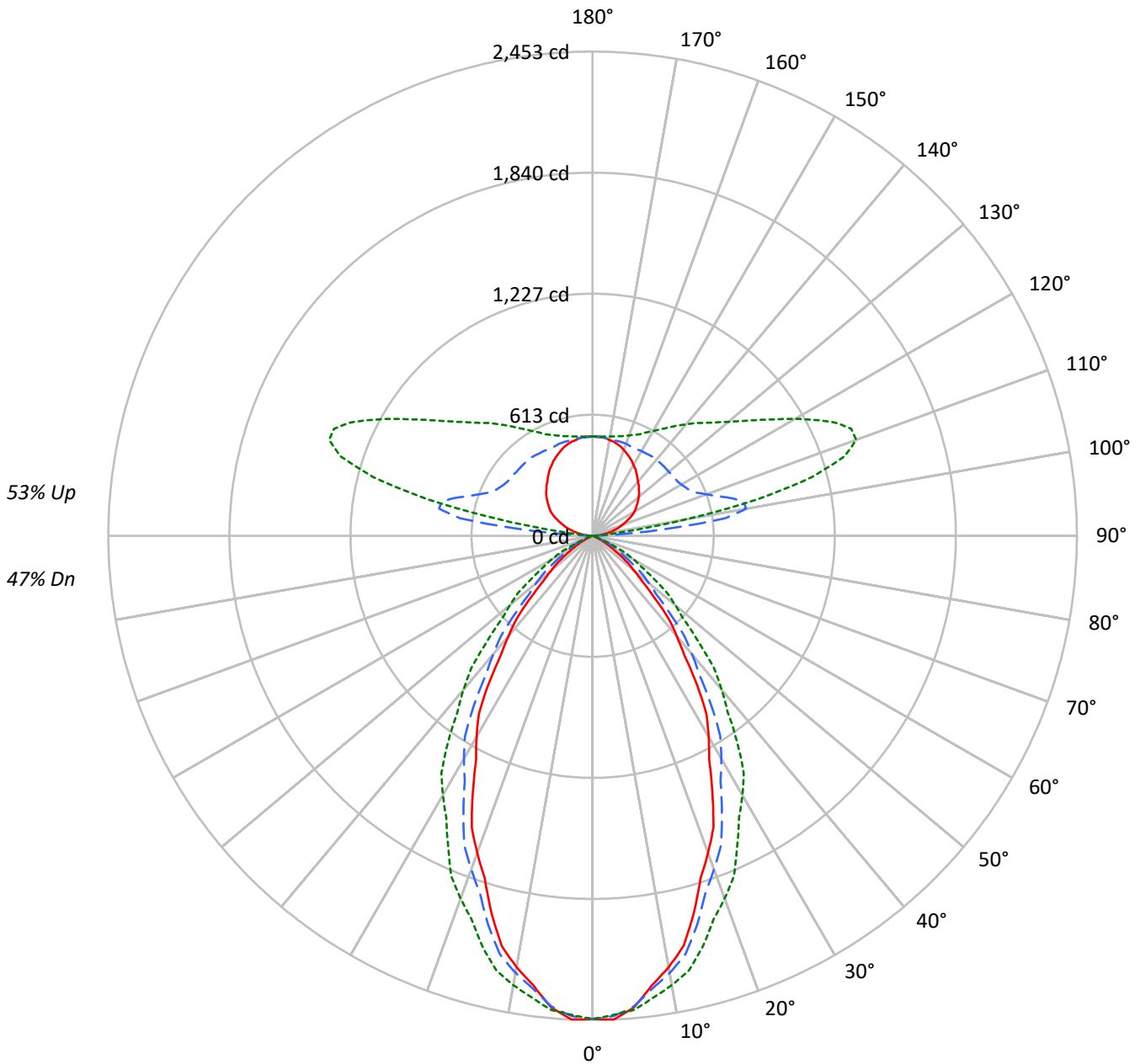
Lumens per Lamp: N/A
Luminaire Lumens: 6189.8 lumens
Efficiency: N/A
Efficacy: 86.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 71.8
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: P844866

CATALOG NUMBER: SQ4P-BB-100U-125D-B40-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P844866

CATALOG NUMBER: SQ4P-BB-100U-125D-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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	54	54	54	47				47															
1	99	95	92	89	91	88	85	83	74	72	71	62	60	59	50	49	48				43																
2	91	85	80	76	84	79	74	71	67	64	61	56	54	52	46	45	44				39																
3	85	76	70	65	78	71	66	61	61	57	54	51	49	46	42	41	39				35																
4	78	69	62	57	72	64	58	54	55	51	47	47	44	41	39	37	35				32																
5	73	62	55	50	67	58	52	47	50	46	42	43	40	37	36	34	32				29																
6	67	57	49	44	62	53	47	42	46	41	38	40	36	33	34	31	29				26																
7	63	52	45	40	58	49	42	38	42	38	34	37	33	30	31	29	27				24																
8	59	48	41	36	54	45	38	34	39	34	31	34	30	28	29	26	24				22																
9	55	44	37	32	51	41	35	31	36	31	28	32	28	25	27	25	23				21																
10	52	41	34	30	48	38	32	28	34	29	26	30	26	23	26	23	21				19																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22583	22583	22583
5°	22219	22164	22328
10°	20789	21067	21655
15°	18900	19500	20586
20°	16778	17648	19194
25°	14609	15767	17636
30°	12516	13889	16160
35°	10376	11791	14376
40°	7972	9428	12250
45°	5765	7138	9858
50°	3926	5318	7820
55°	2553	3848	6075
60°	1465	2711	4394
65°	386	1657	2222
70°	197	513	634
75°	86	39	0
80°	58	0	0
85°	0	0	0



TEST NUMBER: P844866

CATALOG NUMBER: SQ4P-BB-100U-125D-B40-1D-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.4	3.6
10°-20°	571.2	9.2
20°-30°	715.1	11.6
30°-40°	660.5	10.7
40°-50°	443.8	7.2
50°-60°	229.3	3.7
60°-70°	71.8	1.2
70°-80°	4.5	0.1
80°-90°	1.3	0.0
90°-100°	200.5	3.2
100°-110°	697.4	11.3
110°-120°	675.6	10.9
120°-130°	530.0	8.6
130°-140°	419.5	6.8
140°-150°	323.7	5.2
150°-160°	232.1	3.7
160°-170°	141.9	2.3
170°-180°	48.0	0.8
0°-30°	1509.7	24.4
0°-40°	2170.3	35.1
0°-60°	2843.4	45.9
0°-90°	2921.0	47.2
90°-120°	1573.5	25.4
90°-150°	2846.7	46.0
90°-180°	3269.0	52.8
0°-180°	6189.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2448	2448	2448	2448	2448	
5°	2399	2375	2393	2402	2411	222
15°	1979	1972	2042	2110	2155	551
25°	1435	1447	1549	1655	1732	658
35°	921	944	1047	1170	1276	571
45°	442	468	547	654	756	347
55°	159	185	239	307	378	148
65°	18	34	76	91	102	30
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	8	11	11	8	4	5
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: P844866

CATALOG NUMBER: SQ4P-BB-100U-125D-B40-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2447.7	2447.7	2447.7	2447.7	2447.7
2.5°	2453.3	2430.2	2436.1	2436.1	2429.7
5°	2399.1	2374.8	2393.2	2401.5	2410.9
7.5°	2297.8	2278.8	2314.1	2340.4	2359.8
10°	2219.0	2202.9	2248.7	2284.7	2311.5
12.5°	2128.1	2115.5	2171.0	2220.6	2254.6
15°	1978.7	1971.8	2041.5	2109.8	2155.2
17.5°	1818.7	1818.4	1897.8	1983.1	2037.5
20°	1708.8	1712.3	1797.5	1891.4	1954.9
22.5°	1598.9	1606.9	1698.1	1796.0	1868.8
25°	1435.1	1446.6	1548.8	1655.0	1732.4
27.5°	1278.0	1294.9	1402.4	1512.3	1606.9
30°	1174.8	1194.4	1303.7	1419.6	1516.9
32.5°	1073.1	1096.8	1203.2	1326.0	1424.9
35°	921.2	944.4	1046.9	1169.9	1276.4
37.5°	764.3	786.9	886.9	1008.3	1123.3
40°	661.9	687.4	782.8	900.3	1017.1
42.5°	569.1	594.6	684.2	799.7	910.1
45°	441.8	468.3	547.1	653.6	755.5
47.5°	336.2	364.9	434.0	530.6	623.3
50°	273.5	302.4	370.5	455.5	544.8
52.5°	223.3	251.5	312.8	392.8	474.6
55°	158.7	185.3	239.2	307.2	377.7
57.5°	109.6	132.7	180.9	237.5	293.0
60°	79.4	101.4	146.9	192.7	238.1
62.5°	52.8	72.9	117.5	152.8	183.2
65°	17.7	34.0	75.9	91.4	101.8
67.5°	9.1	10.8	39.6	42.1	45.5
70°	7.3	7.3	19.0	20.1	23.5
72.5°	5.1	5.1	7.5	9.7	10.5
75°	2.4	2.4	1.1	0.0	0.0
77.5°	1.1	1.1	1.1	0.0	0.0
80°	1.1	1.1	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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: P844866

CATALOG NUMBER: SQ4P-BB-100U-125D-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)