

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: P844858

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844858
REPORT IS A COMBINATION OF REPORTS P700075 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-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

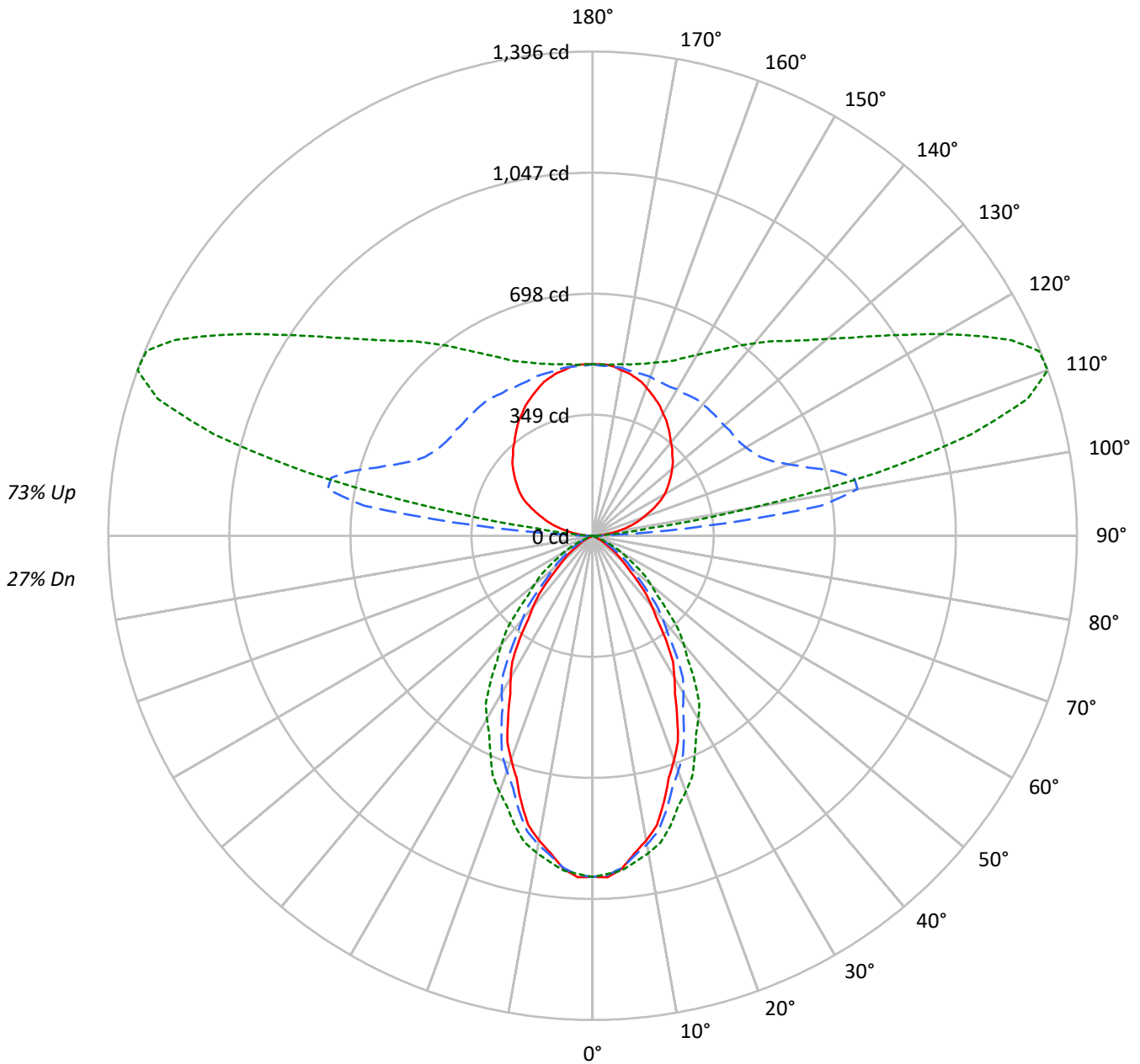
Lumens per Lamp: N/A
Luminaire Lumens: 4385.4 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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: P844858

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

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	102	102	102	102	91	91	91	91	70	70	70	52	52	52	35	35	35				27
1	94	90	86	83	83	80	78	75	63	61	60	47	46	45	32	32	31				24
2	86	79	74	70	77	71	67	63	56	53	51	42	41	39	29	29	28				22
3	79	71	64	59	71	64	58	54	51	47	44	38	36	34	27	26	25				20
4	73	63	56	51	65	57	51	47	46	41	38	35	32	30	25	23	22				18
5	67	57	49	44	60	51	45	40	41	37	34	32	29	27	23	21	20				16
6	62	51	44	39	56	46	40	36	37	33	30	29	26	24	21	19	18				15
7	57	46	39	34	52	42	36	32	34	30	26	27	24	21	20	18	17				14
8	53	42	35	30	48	38	32	28	31	27	24	25	22	19	18	16	15				13
9	50	39	32	27	45	35	29	25	29	24	21	23	20	18	17	15	14				12
10	47	36	29	25	42	32	27	23	27	22	19	21	18	16	16	14	13				11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9072	9072	9072
5°	8925	8904	8970
10°	8351	8464	8699
15°	7592	7833	8270
20°	6739	7090	7710
25°	5869	6333	7084
30°	5027	5579	6491
35°	4168	4736	5776
40°	3202	3788	4921
45°	2316	2868	3960
50°	1577	2136	3142
55°	1026	1546	2442
60°	589	1089	1766
65°	155	666	893
70°	81	205	256
75°	36	18	0
80°	27	0	0
85°	0	0	0



TEST NUMBER: P844858

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.7	2.0
10°-20°	229.5	5.2
20°-30°	287.3	6.6
30°-40°	265.3	6.1
40°-50°	178.3	4.1
50°-60°	92.1	2.1
60°-70°	28.8	0.7
70°-80°	1.8	0.0
80°-90°	1.2	0.0
90°-100°	196.9	4.5
100°-110°	685.2	15.6
110°-120°	663.7	15.1
120°-130°	520.7	11.9
130°-140°	412.1	9.4
140°-150°	318.0	7.3
150°-160°	228.0	5.2
160°-170°	139.4	3.2
170°-180°	47.2	1.1
0°-30°	606.5	13.8
0°-40°	871.8	19.9
0°-60°	1142.2	26.0
0°-90°	1174.1	26.8
90°-120°	1545.9	35.3
90°-150°	2796.7	63.8
90°-180°	3211.0	73.2
0°-180°	4385.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	983	983	983	983	983	
5°	964	954	961	965	968	89
15°	795	792	820	848	866	221
25°	576	581	622	665	696	264
35°	370	379	420	470	513	229
45°	178	188	220	263	304	139
55°	64	74	96	123	152	60
65°	7	14	30	37	41	12
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
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: P844858

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	983.3	983.3	983.3	983.3	983.3
2.5°	985.5	976.2	978.6	978.6	976.0
5°	963.7	953.9	961.4	964.7	968.5
7.5°	923.1	915.4	929.7	940.1	947.9
10°	891.4	884.9	903.4	917.8	928.5
12.5°	854.8	849.8	872.1	892.0	905.7
15°	794.8	792.1	820.1	847.6	865.8
17.5°	730.6	730.5	762.4	796.7	818.5
20°	686.4	687.8	722.1	759.8	785.3
22.5°	642.2	645.5	682.1	721.4	750.8
25°	576.5	581.1	622.1	664.8	695.9
27.5°	513.3	520.2	563.3	607.5	645.5
30°	471.9	479.8	523.7	570.3	609.3
32.5°	431.1	440.6	483.3	532.7	572.4
35°	370.1	379.4	420.5	470.0	512.8
37.5°	307.0	316.1	356.2	405.0	451.3
40°	265.9	276.1	314.5	361.7	408.6
42.5°	228.7	238.9	274.8	321.2	365.6
45°	177.5	188.1	219.8	262.6	303.5
47.5°	135.1	146.6	174.3	213.2	250.4
50°	109.9	121.5	148.8	183.0	218.9
52.5°	89.7	101.0	125.7	157.8	190.6
55°	63.8	74.4	96.1	123.4	151.8
57.5°	44.1	53.3	72.7	95.4	117.7
60°	31.9	40.7	59.0	77.4	95.7
62.5°	21.2	29.3	47.1	61.4	73.6
65°	7.1	13.7	30.5	36.7	40.9
67.5°	3.6	4.3	15.9	16.9	18.3
70°	3.0	3.0	7.6	8.1	9.5
72.5°	2.0	2.0	3.0	3.9	4.2
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.5	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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°	7.4	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: P844858

CATALOG NUMBER: SQ4P-BB-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)