

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: P521195

Luminaire Tested: **SQ4-BB-100U-050D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521195
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-100U-050D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

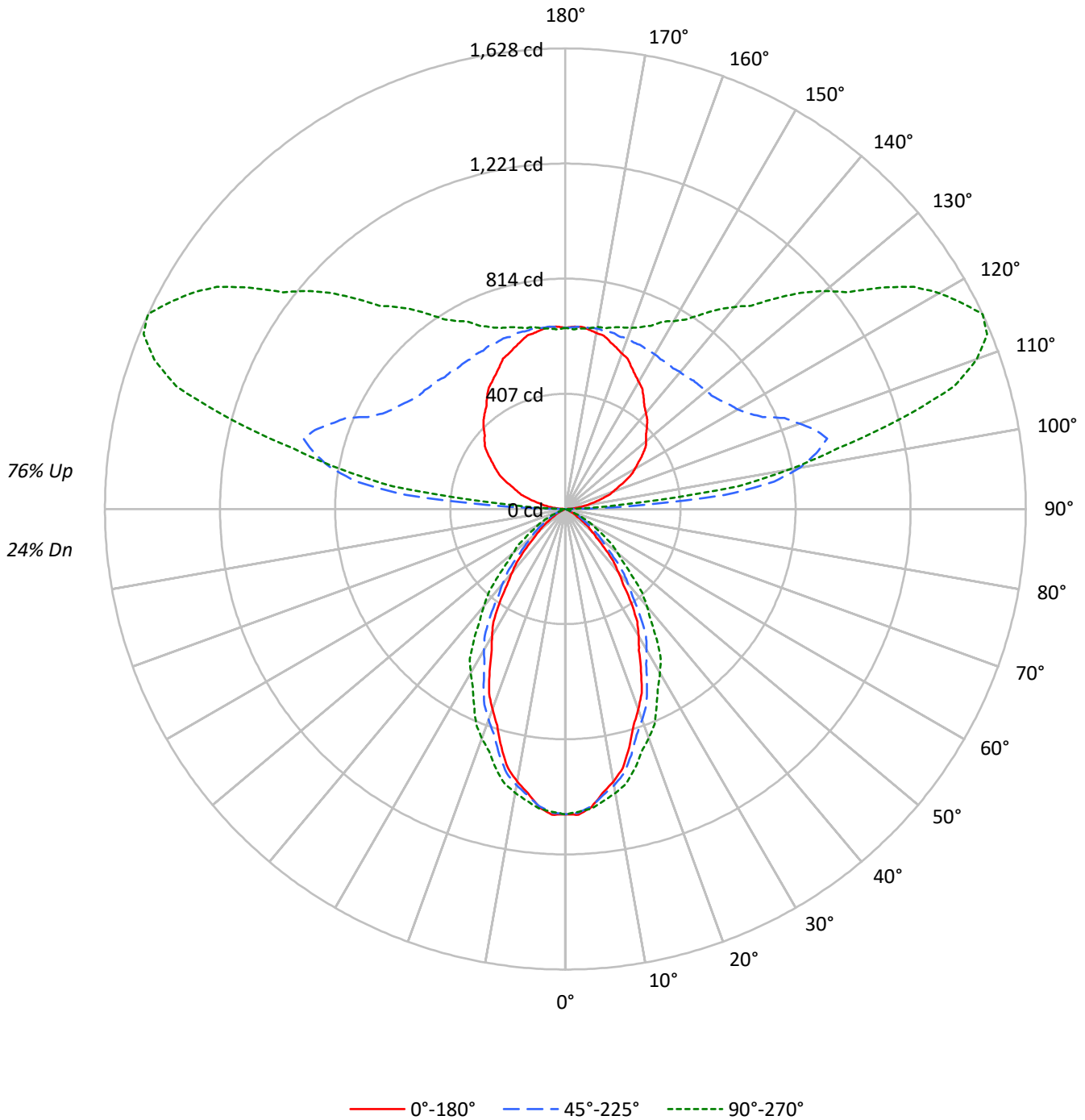
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5431.9 lumens
Efficiency: N/A
Efficacy: 102.1 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): 53.2
Input Voltage (V): 120
Input Current (Ain): 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: 24 FT

TEST NUMBER: P521195
CATALOG NUMBER: SQ4-BB-100U-050D-93050-1D-UNV-STD-W-4 (4500K)

Luminous Intensity Polar Plot





TEST NUMBER: P521195

CATALOG NUMBER: SQ4-BB-100U-050D-93050-1D-UNV-STD-W-4 (4500K)

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	93	89	86	82	82	79	77	74	61	60	58	45	44	43	29	29	29	22
2	85	79	73	69	76	70	66	62	55	52	49	40	39	37	27	26	25	20
3	78	70	63	58	69	63	57	53	49	45	42	36	34	32	25	24	23	18
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	23	21	20	16
5	66	56	49	43	59	50	44	39	40	36	32	30	27	25	21	19	18	15
6	61	50	43	38	54	45	39	35	36	32	28	27	25	22	19	18	17	13
7	57	46	38	33	51	41	35	31	33	29	25	25	22	20	18	16	15	12
8	53	41	34	30	47	38	31	27	30	26	23	23	20	18	17	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	19	16	15	14	13	10
10	46	35	28	24	41	32	26	22	26	21	19	20	17	15	14	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9958	9958	9958
5°	9798	9774	9846
10°	9167	9290	9548
15°	8334	8598	9077
20°	7398	7782	8464
25°	6442	6953	7776
30°	5519	6125	7126
35°	4575	5199	6340
40°	3516	4156	5402
45°	2542	3147	4346
50°	1731	2345	3448
55°	1126	1697	2680
60°	646	1194	1938
65°	170	729	980
70°	84	227	281
75°	36	18	0
80°	27	0	0
85°	0	0	0



TEST NUMBER: P521195

CATALOG NUMBER: SQ4-BB-100U-050D-93050-1D-UNV-STD-W-4 (4500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.5	1.8
10°-20°	251.9	4.6
20°-30°	315.3	5.8
30°-40°	291.3	5.4
40°-50°	195.7	3.6
50°-60°	101.1	1.9
60°-70°	31.7	0.6
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	330.0	6.1
100°-110°	797.5	14.7
110°-120°	850.5	15.7
120°-130°	688.9	12.7
130°-140°	533.4	9.8
140°-150°	406.9	7.5
150°-160°	294.5	5.4
160°-170°	181.4	3.3
170°-180°	61.4	1.1
0°-30°	665.7	12.3
0°-40°	957.0	17.6
0°-60°	1253.8	23.1
0°-90°	1287.5	23.7
90°-120°	1978.0	36.4
90°-150°	3607.1	66.4
90°-180°	4144.0	76.3
0°-180°	5431.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1079	1079	1079	1079	1079	
5°	1058	1047	1055	1059	1063	98
15°	872	869	900	930	950	243
25°	633	638	683	730	764	290
35°	406	416	462	516	563	252
45°	195	206	241	288	333	153
55°	70	82	106	135	167	65
65°	8	15	33	40	45	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	32	165	565	368	258	37
105°	127	220	958	1240	1224	135
115°	233	298	770	1460	1628	231
125°	332	382	668	1161	1364	296
135°	408	456	641	916	1053	315
145°	483	518	629	778	839	302
155°	553	577	637	689	714	255
165°	611	621	645	655	664	173
175°	647	644	647	641	640	61
180°	640	640	640	640	640	



TEST NUMBER: P521195

CATALOG NUMBER: SQ4-BB-100U-050D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1079.3	1079.3	1079.3	1079.3	1079.3
2.5°	1081.8	1071.6	1074.3	1074.2	1071.3
5°	1057.9	1047.1	1055.3	1059.0	1063.1
7.5°	1013.2	1004.8	1020.4	1032.1	1040.5
10°	978.5	971.4	991.6	1007.5	1019.2
12.5°	938.4	932.9	957.3	979.2	994.2
15°	872.5	869.4	900.2	930.4	950.3
17.5°	801.9	801.8	836.9	874.4	898.4
20°	753.5	755.0	792.6	834.0	862.1
22.5°	705.0	708.6	748.8	791.9	824.0
25°	632.8	637.9	683.0	729.7	763.9
27.5°	563.5	571.0	618.3	666.9	708.5
30°	518.0	526.6	574.9	626.0	668.9
32.5°	473.3	483.6	530.6	584.6	628.3
35°	406.2	416.4	461.6	515.9	562.9
37.5°	337.0	347.0	391.1	444.6	495.3
40°	291.9	303.1	345.1	397.0	448.5
42.5°	250.9	262.2	301.7	352.6	401.3
45°	194.8	206.5	241.2	288.2	333.1
47.5°	148.2	160.9	191.4	233.9	274.9
50°	120.6	133.4	163.4	200.9	240.2
52.5°	98.5	110.8	138.0	173.2	209.3
55°	70.0	81.7	105.5	135.4	166.6
57.5°	48.4	58.5	79.8	104.8	129.2
60°	35.0	44.7	64.7	85.0	105.0
62.5°	23.3	32.2	51.8	67.3	80.7
65°	7.8	15.0	33.4	40.3	44.9
67.5°	4.0	4.8	17.5	18.5	20.1
70°	3.1	3.1	8.4	8.9	10.4
72.5°	2.3	2.3	3.3	4.3	4.6
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	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°	0.0	0.0	0.0	0.0	0.0
92.5°	10.8	89.3	210.4	102.3	69.4
95°	32.5	165.1	565.3	367.6	257.6
97.5°	57.8	182.9	744.6	717.3	615.8
100°	77.3	193.9	843.3	890.2	806.6
102.5°	95.7	203.9	908.3	1034.1	984.5
105°	127.4	220.2	958.5	1240.1	1224.2
107.5°	158.6	239.5	928.9	1405.4	1442.7
110°	180.3	255.9	881.2	1476.6	1546.9

TEST NUMBER: P521195

CATALOG NUMBER: SQ4-BB-100U-050D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	202.0	272.3	838.9	1494.0	1614.1
115°	233.2	298.1	770.0	1459.9	1628.2
117.5°	264.1	325.3	729.6	1381.3	1578.6
120°	284.7	341.7	703.6	1319.7	1526.5
122.5°	306.4	359.1	687.3	1256.8	1460.4
125°	332.1	382.5	668.4	1161.0	1363.8
127.5°	357.6	405.1	655.1	1079.9	1258.1
130°	372.8	419.2	650.7	1023.5	1198.4
132.5°	386.9	435.4	644.2	982.7	1131.2
135°	408.1	455.8	641.2	915.5	1053.4
137.5°	428.1	476.1	631.8	870.0	973.9
140°	443.3	487.1	631.8	837.3	932.7
142.5°	458.5	502.2	626.3	808.7	889.3
145°	482.6	518.4	629.0	778.2	839.2
147.5°	505.1	539.9	627.4	743.0	793.4
150°	519.2	549.7	631.8	727.6	767.3
152.5°	534.4	563.8	630.7	711.2	746.7
155°	553.1	577.0	637.2	689.3	714.5
157.5°	575.6	596.0	635.8	680.9	695.7
160°	584.3	601.5	641.2	670.0	680.6
162.5°	598.4	613.5	639.1	666.6	673.0
165°	611.4	620.7	645.3	655.0	664.3
167.5°	627.4	633.5	643.7	654.3	654.5
170°	631.8	635.7	648.0	646.8	653.5
172.5°	639.4	642.3	644.8	647.7	643.7
175°	646.7	644.0	646.7	641.2	639.9
177.5°	645.3	645.3	643.1	640.9	635.6
180°	639.9	639.9	639.9	639.9	639.9

(END OF REPORT)