

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: P521247

Luminaire Tested: **SQ4-BB-125U-050D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521247
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-125U-050D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

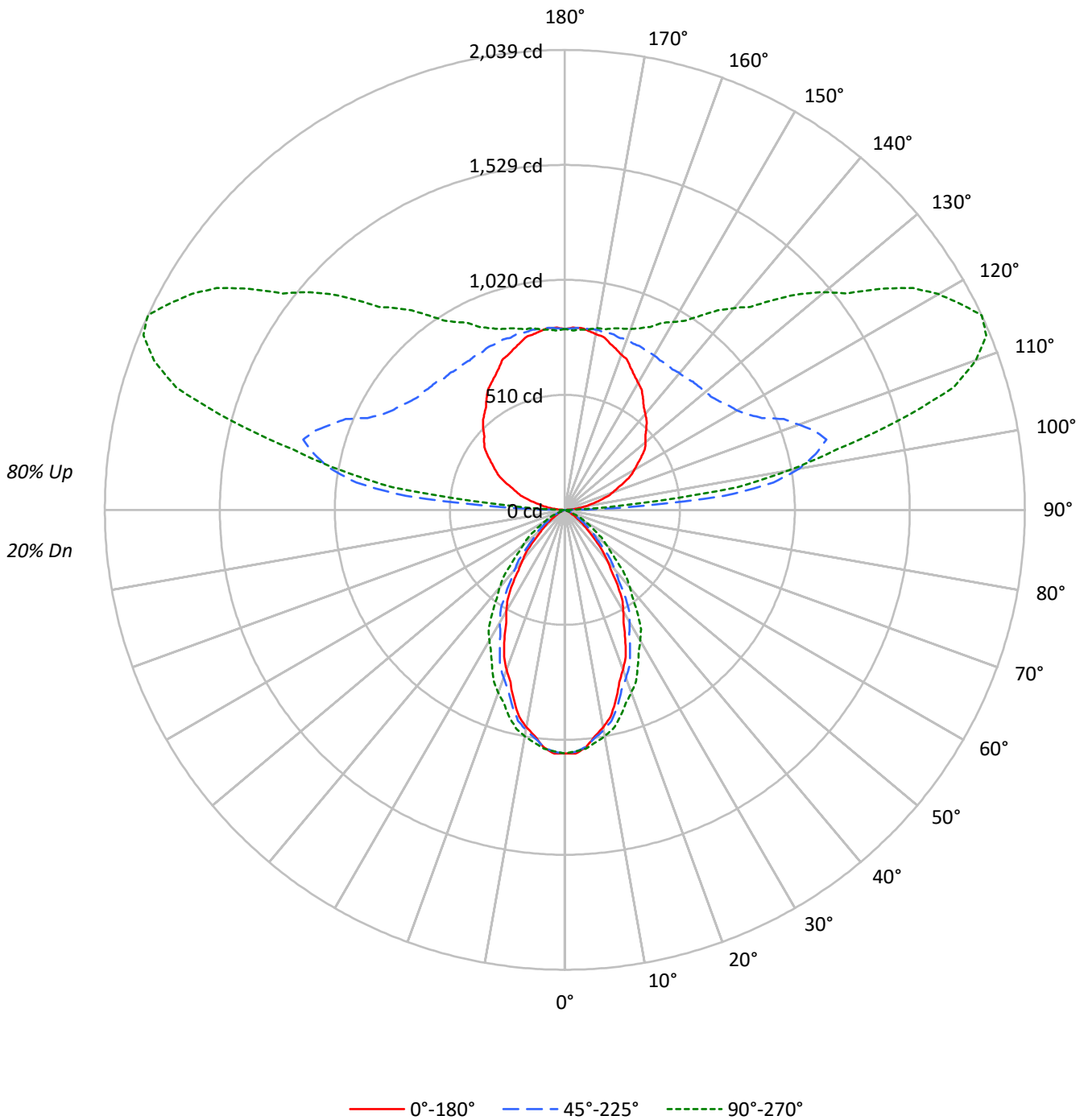
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6478.7 lumens
Efficiency: N/A
Efficacy: 104.3 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): 62.1
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: P521247
CATALOG NUMBER: SQ4-BB-125U-050D-93050-1D-UNV-STD-W-4 (4500K)

Luminous Intensity Polar Plot





TEST NUMBER: P521247

CATALOG NUMBER: SQ4-BB-125U-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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	28	28	28	20
1	92	88	84	81	81	78	75	73	59	57	56	42	41	40	26	26	25	18
2	84	78	72	68	74	69	64	61	53	50	47	38	36	35	24	23	22	16
3	77	69	62	57	68	61	56	51	47	44	41	34	32	30	22	21	20	15
4	71	61	54	49	63	55	49	44	42	38	35	31	28	26	20	19	18	13
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	18	17	16	12
6	60	49	42	37	53	44	38	33	34	30	27	25	23	21	17	16	14	11
7	56	45	37	32	49	40	34	29	31	27	24	23	21	18	16	14	13	10
8	52	40	33	29	46	36	30	26	29	24	21	21	19	17	15	13	12	9
9	48	37	30	25	43	33	27	23	26	22	19	20	17	15	14	12	11	9
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10	8

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: P521247

CATALOG NUMBER: SQ4-BB-125U-050D-93050-1D-UNV-STD-W-4 (4500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.5	1.5
10°-20°	251.9	3.9
20°-30°	315.3	4.9
30°-40°	291.3	4.5
40°-50°	195.7	3.0
50°-60°	101.1	1.6
60°-70°	31.7	0.5
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	413.3	6.4
100°-110°	998.9	15.4
110°-120°	1065.4	16.4
120°-130°	862.9	13.3
130°-140°	668.1	10.3
140°-150°	509.6	7.9
150°-160°	368.9	5.7
160°-170°	227.2	3.5
170°-180°	76.9	1.2
0°-30°	665.7	10.3
0°-40°	957.0	14.8
0°-60°	1253.8	19.4
0°-90°	1287.5	19.9
90°-120°	2477.6	38.2
90°-150°	4518.2	69.7
90°-180°	5191.0	80.1
0°-180°	6478.7	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	2
95°	41	207	708	460	323	46
105°	160	276	1201	1553	1533	169
115°	292	373	964	1829	2039	289
125°	416	479	837	1454	1708	371
135°	511	571	803	1147	1319	395
145°	604	649	788	975	1051	378
155°	693	723	798	863	895	320
165°	766	778	808	820	832	216
175°	810	807	810	803	802	77
180°	802	802	802	802	802	



TEST NUMBER: P521247

CATALOG NUMBER: SQ4-BB-125U-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°	13.6	111.9	263.5	128.1	86.9
95°	40.8	206.8	708.1	460.5	322.6
97.5°	72.3	229.1	932.6	898.5	771.3
100°	96.8	242.9	1056.2	1115.0	1010.4
102.5°	119.9	255.4	1137.7	1295.3	1233.2
105°	159.6	275.8	1200.6	1553.3	1533.4
107.5°	198.7	300.0	1163.5	1760.3	1807.1
110°	225.8	320.5	1103.8	1849.6	1937.6



TEST NUMBER: P521247

CATALOG NUMBER: SQ4-BB-125U-050D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	253.0	341.0	1050.8	1871.3	2021.8
115°	292.1	373.4	964.5	1828.6	2039.4
117.5°	330.8	407.5	913.9	1730.2	1977.3
120°	356.6	428.0	881.3	1653.1	1912.1
122.5°	383.8	449.9	860.9	1574.2	1829.2
125°	416.0	479.1	837.2	1454.3	1708.3
127.5°	448.0	507.4	820.5	1352.7	1575.9
130°	467.0	525.1	815.1	1282.0	1501.1
132.5°	484.6	545.4	806.9	1230.9	1416.9
135°	511.1	570.9	803.2	1146.8	1319.4
137.5°	536.3	596.4	791.3	1089.8	1219.9
140°	555.3	610.1	791.3	1048.8	1168.3
142.5°	574.3	629.1	784.5	1013.0	1114.0
145°	604.5	649.4	787.9	974.8	1051.1
147.5°	632.7	676.2	785.9	930.6	993.7
150°	650.4	688.6	791.3	911.3	961.1
152.5°	669.4	706.3	790.0	890.8	935.3
155°	692.8	722.7	798.1	863.4	894.9
157.5°	721.0	746.6	796.4	852.9	871.5
160°	731.9	753.5	803.2	839.2	852.5
162.5°	749.5	768.5	800.5	835.0	842.9
165°	765.9	777.5	808.3	820.5	832.1
167.5°	785.9	793.5	806.3	819.5	819.9
170°	791.3	796.3	811.7	810.2	818.5
172.5°	800.8	804.5	807.6	811.2	806.3
175°	810.0	806.7	810.0	803.2	801.5
177.5°	808.3	808.3	805.6	802.7	796.1
180°	801.5	801.5	801.5	801.5	801.5

(END OF REPORT)