

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: P521234

Luminaire Tested: **SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521234
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-125D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

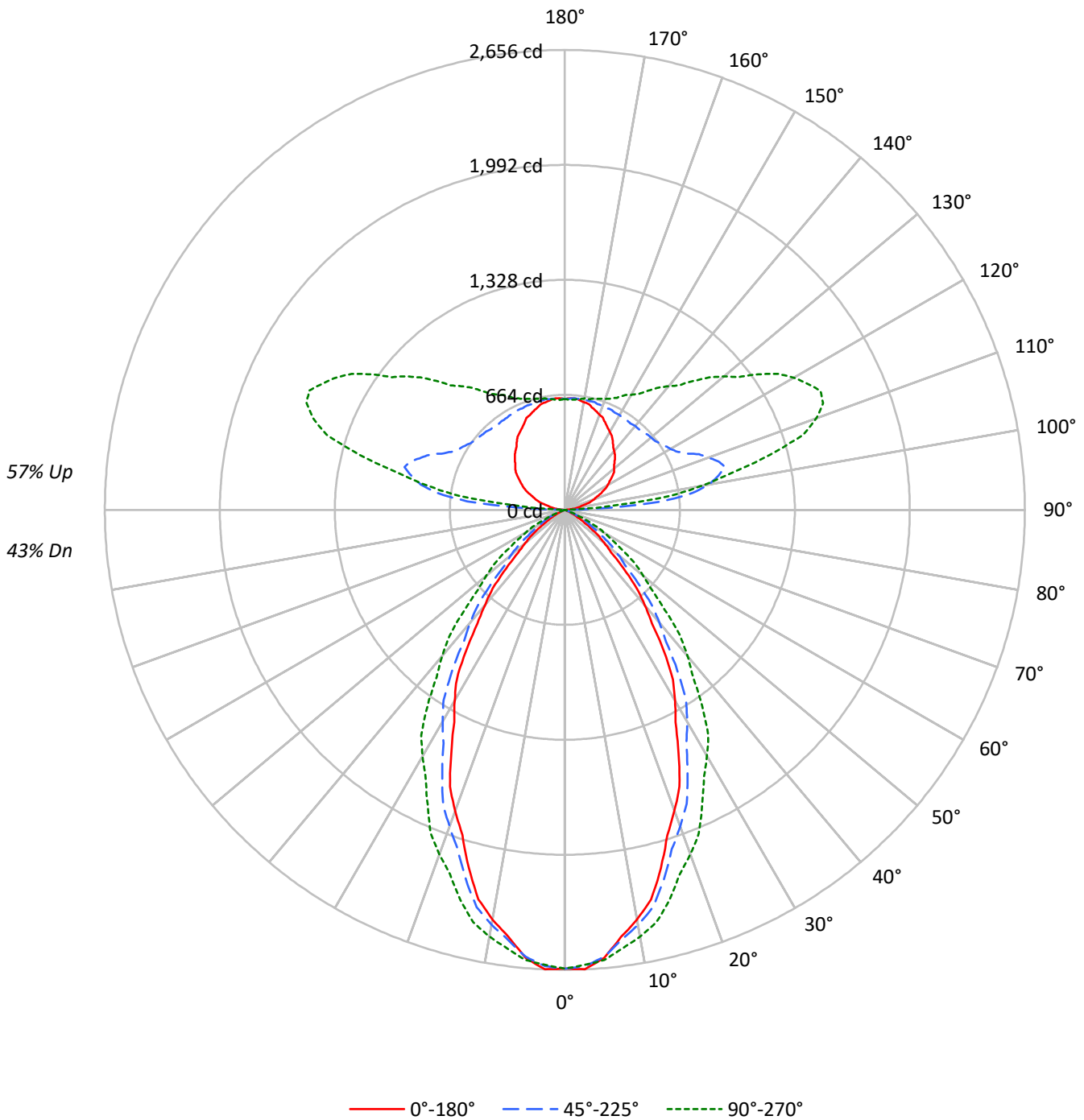
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7305.3 lumens
Efficiency: N/A
Efficacy: 83.2 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): 87.8
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: P521234
CATALOG NUMBER: SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (4500K)

Luminous Intensity Polar Plot





TEST NUMBER: P521234

CATALOG NUMBER: SQ4-BB-100U-125D-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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43
1	98	94	91	88	89	86	84	81	72	70	68	59	58	56	46	46	45	40
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40	36
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36	32
4	77	68	61	56	71	63	57	52	53	49	46	45	42	39	36	34	33	29
5	72	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30	26
6	66	56	48	43	61	52	45	41	44	40	36	38	34	32	31	29	27	24
7	62	51	44	39	57	47	41	37	41	36	33	35	31	29	29	27	25	22
8	58	47	40	35	53	43	37	33	38	33	29	32	29	26	27	25	23	20
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21	19
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24447	24447	24447
5°	24053	23994	24172
10°	22506	22806	23443
15°	20461	21109	22285
20°	18162	19105	20779
25°	15817	17069	19092
30°	13547	15036	17494
35°	11233	12763	15564
40°	8631	10205	13263
45°	6238	7727	10672
50°	4250	5759	8464
55°	2763	4165	6577
60°	1585	2934	4755
65°	419	1790	2406
70°	208	553	691
75°	93	46	0
80°	69	0	0
85°	0	0	0



TEST NUMBER: P521234

CATALOG NUMBER: SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (4500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.8	3.3
10°-20°	618.4	8.5
20°-30°	774.2	10.6
30°-40°	715.1	9.8
40°-50°	480.5	6.6
50°-60°	248.2	3.4
60°-70°	77.7	1.1
70°-80°	4.9	0.1
80°-90°	0.1	0.0
90°-100°	330.0	4.5
100°-110°	797.5	10.9
110°-120°	850.5	11.6
120°-130°	688.9	9.4
130°-140°	533.4	7.3
140°-150°	406.9	5.6
150°-160°	294.5	4.0
160°-170°	181.4	2.5
170°-180°	61.4	0.8
0°-30°	1634.4	22.4
0°-40°	2349.4	32.2
0°-60°	3078.1	42.1
0°-90°	3160.9	43.3
90°-120°	1978.0	27.1
90°-150°	3607.1	49.4
90°-180°	4144.0	56.7
0°-180°	7305.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2650	2650	2650	2650	2650	
5°	2597	2571	2591	2600	2610	241
15°	2142	2134	2210	2284	2333	597
25°	1554	1566	1677	1791	1875	712
35°	997	1022	1133	1267	1382	618
45°	478	507	592	708	818	376
55°	172	201	259	332	409	160
65°	19	37	82	99	110	32
75°	3	3	1	0	0	4
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: P521234

CATALOG NUMBER: SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2649.7	2649.7	2649.7	2649.7	2649.7
2.5°	2655.8	2630.8	2637.4	2637.2	2630.2
5°	2597.1	2570.8	2590.7	2599.9	2610.0
7.5°	2487.4	2466.8	2505.1	2533.8	2554.6
10°	2402.3	2384.7	2434.3	2473.4	2502.3
12.5°	2303.8	2290.3	2350.2	2403.9	2440.7
15°	2142.1	2134.5	2210.0	2284.2	2333.1
17.5°	1968.7	1968.5	2054.6	2146.7	2205.6
20°	1849.8	1853.5	1945.9	2047.5	2116.4
22.5°	1730.8	1739.6	1838.2	1944.1	2023.1
25°	1553.7	1566.2	1676.7	1791.4	1875.4
27.5°	1383.4	1401.7	1518.0	1637.3	1739.5
30°	1271.6	1293.0	1411.4	1536.8	1642.1
32.5°	1161.9	1187.2	1302.7	1435.3	1542.6
35°	997.3	1022.4	1133.2	1266.6	1381.9
37.5°	827.3	851.9	960.1	1091.4	1216.0
40°	716.6	744.2	847.3	974.6	1101.2
42.5°	616.1	643.7	740.7	865.7	985.3
45°	478.1	507.0	592.2	707.6	817.9
47.5°	363.8	395.1	469.9	574.3	674.8
50°	296.1	327.5	401.2	493.2	589.7
52.5°	241.8	272.1	338.7	425.3	513.8
55°	171.8	200.6	258.9	332.5	408.9
57.5°	118.7	143.5	195.9	257.2	317.1
60°	85.9	109.7	159.0	208.8	257.7
62.5°	57.2	79.0	127.2	165.3	198.2
65°	19.2	36.8	82.0	99.0	110.2
67.5°	9.7	11.7	43.1	45.5	49.2
70°	7.7	7.7	20.5	21.9	25.6
72.5°	5.6	5.6	8.2	10.5	11.3
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	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°	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: P521234

CATALOG NUMBER: SQ4-BB-100U-125D-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)