

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: P521221

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

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521221
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-100D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

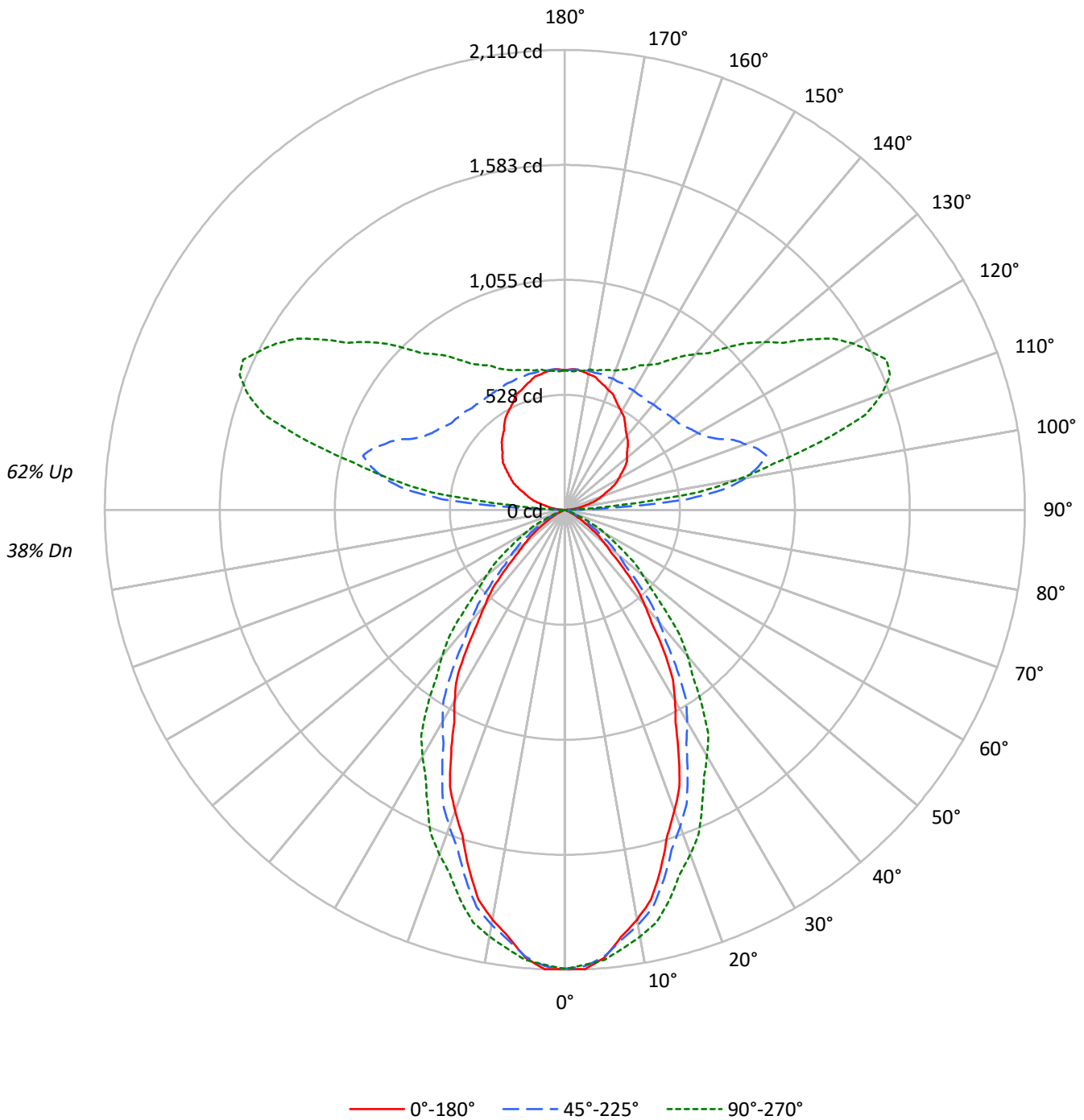
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6655.7 lumens
Efficiency: N/A
Efficacy: 89.1 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): 74.7
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: P521221
CATALOG NUMBER: SQ4-BB-100U-100D-93050-1D-UNV-STD-W-4 (4500K)

Luminous Intensity Polar Plot





TEST NUMBER: P521221

CATALOG NUMBER: SQ4-BB-100U-100D-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	50	30	10	0	
RCR																						
0	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38				
1	96	93	89	86	87	84	82	79	69	67	65	55	54	53	42	41	40	34				
2	89	82	77	73	81	75	71	67	62	59	56	50	48	46	38	37	36	31				
3	82	74	67	62	74	68	62	58	56	52	49	45	43	41	35	34	32	28				
4	76	66	59	54	69	61	55	50	51	46	43	41	38	36	33	31	29	25				
5	70	60	52	47	64	55	49	44	46	42	38	38	35	32	30	28	26	23				
6	65	54	47	42	59	50	44	39	42	37	34	35	31	29	28	26	24	21				
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19				
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18				
9	53	41	35	30	48	38	32	28	33	28	25	28	24	22	23	20	19	16				
10	49	38	32	27	45	36	30	26	30	26	23	26	22	20	21	19	17	15				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19423	19423	19423
5°	19110	19063	19205
10°	17881	18120	18625
15°	16255	16771	17705
20°	14429	15179	16510
25°	12566	13561	15168
30°	10763	11946	13899
35°	8925	10140	12366
40°	6857	8108	10537
45°	4957	6139	8478
50°	3377	4576	6725
55°	2196	3309	5226
60°	1258	2331	3777
65°	334	1423	1912
70°	165	440	550
75°	71	36	0
80°	53	0	0
85°	0	0	0



TEST NUMBER: P521221

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.1	2.9
10°-20°	491.3	7.4
20°-30°	615.1	9.2
30°-40°	568.1	8.5
40°-50°	381.8	5.7
50°-60°	197.2	3.0
60°-70°	61.8	0.9
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	330.0	5.0
100°-110°	797.5	12.0
110°-120°	850.5	12.8
120°-130°	688.9	10.4
130°-140°	533.4	8.0
140°-150°	406.9	6.1
150°-160°	294.5	4.4
160°-170°	181.4	2.7
170°-180°	61.4	0.9
0°-30°	1298.5	19.5
0°-40°	1866.6	28.0
0°-60°	2445.5	36.7
0°-90°	2511.3	37.7
90°-120°	1978.0	29.7
90°-150°	3607.1	54.2
90°-180°	4144.0	62.3
0°-180°	6655.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2105	2105	2105	2105	2105	
5°	2063	2042	2058	2066	2074	191
15°	1702	1696	1756	1815	1854	474
25°	1234	1244	1332	1423	1490	566
35°	792	812	900	1006	1098	491
45°	380	403	470	562	650	298
55°	136	159	206	264	325	127
65°	15	29	65	79	88	26
75°	2	2	1	0	0	3
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: P521221

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2105.2	2105.2	2105.2	2105.2	2105.2
2.5°	2110.0	2090.1	2095.4	2095.3	2089.7
5°	2063.4	2042.5	2058.3	2065.6	2073.6
7.5°	1976.2	1959.9	1990.3	2013.1	2029.6
10°	1908.6	1894.7	1934.1	1965.1	1988.0
12.5°	1830.4	1819.6	1867.2	1909.9	1939.1
15°	1701.8	1695.9	1755.8	1814.8	1853.6
17.5°	1564.2	1564.0	1632.4	1705.6	1752.4
20°	1469.6	1472.6	1546.0	1626.7	1681.5
22.5°	1375.1	1382.1	1460.5	1544.6	1607.3
25°	1234.4	1244.3	1332.1	1423.3	1490.0
27.5°	1099.1	1113.7	1206.1	1300.8	1382.1
30°	1010.3	1027.2	1121.3	1221.0	1304.6
32.5°	923.1	943.2	1035.0	1140.4	1225.6
35°	792.4	812.3	900.3	1006.3	1097.9
37.5°	657.3	676.8	762.8	867.1	966.1
40°	569.3	591.2	673.2	774.3	874.9
42.5°	489.5	511.4	588.5	687.8	782.8
45°	379.9	402.8	470.5	562.1	649.8
47.5°	289.0	313.9	373.4	456.3	536.1
50°	235.3	260.2	318.8	391.8	468.5
52.5°	192.1	216.2	269.1	337.9	408.2
55°	136.5	159.4	205.7	264.1	324.9
57.5°	94.3	114.0	155.6	204.4	252.0
60°	68.2	87.2	126.3	165.9	204.7
62.5°	45.4	62.8	101.0	131.4	157.5
65°	15.3	29.2	65.2	78.6	87.6
67.5°	7.7	9.3	34.2	36.1	39.1
70°	6.1	6.1	16.3	17.4	20.4
72.5°	4.5	4.5	6.5	8.4	9.0
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	0.0	0.0	0.0
82.5°	0.2	0.2	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: P521221

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