

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: P521208

Luminaire Tested: **SQ4-BB-100U-075D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521208  
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-075D-93050-1D-UNV-STD-W-4 (4500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

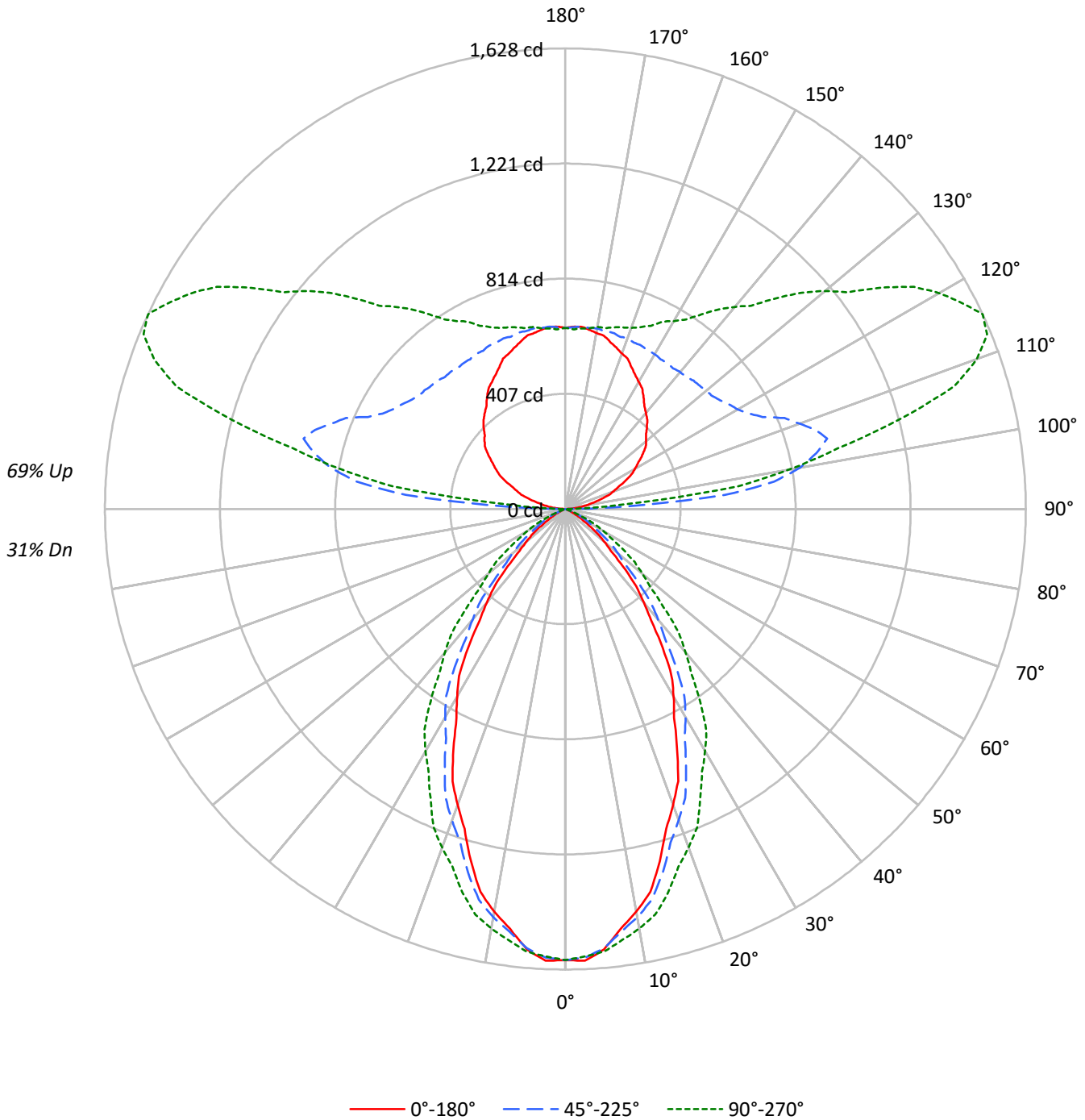
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6046.5 lumens  
Efficiency: N/A  
Efficacy: 94.6 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): 63.9  
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

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### Luminous Intensity Polar Plot





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**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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21
5	68	58	51	45	62	53	47	42	43	39	35	34	31	29	26	24	23	19
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18
7	59	48	40	35	53	44	37	33	36	31	28	29	26	23	22	20	19	16
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	14711	14711	14711
5°	14475	14439	14546
10°	13543	13724	14107
15°	12312	12703	13411
20°	10929	11497	12505
25°	9517	10272	11489
30°	8152	9048	10528
35°	6760	7680	9366
40°	5193	6141	7980
45°	3754	4650	6422
50°	2558	3466	5093
55°	1663	2506	3959
60°	954	1766	2862
65°	253	1078	1447
70°	124	332	415
75°	53	29	0
80°	43	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.5	2.4
10°-20°	372.1	6.2
20°-30°	465.9	7.7
30°-40°	430.3	7.1
40°-50°	289.1	4.8
50°-60°	149.4	2.5
60°-70°	46.8	0.8
70°-80°	3.0	0.0
80°-90°	0.1	0.0
90°-100°	330.0	5.5
100°-110°	797.5	13.2
110°-120°	850.5	14.1
120°-130°	688.9	11.4
130°-140°	533.4	8.8
140°-150°	406.9	6.7
150°-160°	294.5	4.9
160°-170°	181.4	3.0
170°-180°	61.4	1.0
0°-30°	983.5	16.3
0°-40°	1413.8	23.4
0°-60°	1852.3	30.6
0°-90°	1902.1	31.5
90°-120°	1978.0	32.7
90°-150°	3607.1	59.7
90°-180°	4144.0	68.5
0°-180°	6046.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1563	1547	1559	1565	1571	145
15°	1289	1284	1330	1374	1404	359
25°	935	942	1009	1078	1129	429
35°	600	615	682	762	832	372
45°	288	305	356	426	492	226
55°	103	121	156	200	246	96
65°	12	22	49	60	66	20
75°	2	2	1	0	0	2
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: P521208

CATALOG NUMBER: SQ4-BB-100U-075D-93050-1D-UNV-STD-W-4 (4500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1594.5	1594.5	1594.5	1594.5	1594.5
2.5°	1598.2	1583.1	1587.1	1587.0	1582.8
5°	1562.9	1547.0	1559.0	1564.6	1570.6
7.5°	1496.8	1484.5	1507.5	1524.7	1537.3
10°	1445.6	1435.1	1464.9	1488.4	1505.8
12.5°	1386.4	1378.2	1414.3	1446.6	1468.8
15°	1289.0	1284.5	1329.9	1374.5	1404.0
17.5°	1184.7	1184.6	1236.4	1291.8	1327.3
20°	1113.1	1115.4	1171.0	1232.1	1273.6
22.5°	1041.6	1046.8	1106.2	1169.9	1217.4
25°	934.9	942.5	1009.0	1078.0	1128.6
27.5°	832.5	843.5	913.5	985.3	1046.8
30°	765.2	778.1	849.3	924.8	988.2
32.5°	699.2	714.4	783.9	863.7	928.3
35°	600.2	615.2	681.9	762.2	831.6
37.5°	497.9	512.7	577.8	656.8	731.8
40°	431.2	447.8	509.9	586.5	662.6
42.5°	370.7	387.3	445.7	520.9	592.9
45°	287.7	305.1	356.4	425.8	492.2
47.5°	218.9	237.8	282.8	345.6	406.1
50°	178.2	197.1	241.5	296.8	354.8
52.5°	145.5	163.7	203.8	255.9	309.2
55°	103.4	120.7	155.8	200.1	246.1
57.5°	71.4	86.4	117.9	154.8	190.8
60°	51.7	66.0	95.7	125.6	155.1
62.5°	34.4	47.5	76.5	99.5	119.3
65°	11.6	22.1	49.4	59.6	66.3
67.5°	5.9	7.1	25.9	27.4	29.6
70°	4.6	4.6	12.3	13.2	15.4
72.5°	3.4	3.4	4.9	6.3	6.8
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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

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**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)