

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: P521114

Luminaire Tested: **SQ4-BB-075U-100D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521114  
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-075U-100D-93050-1D-UNV-STD-W-4 (3000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

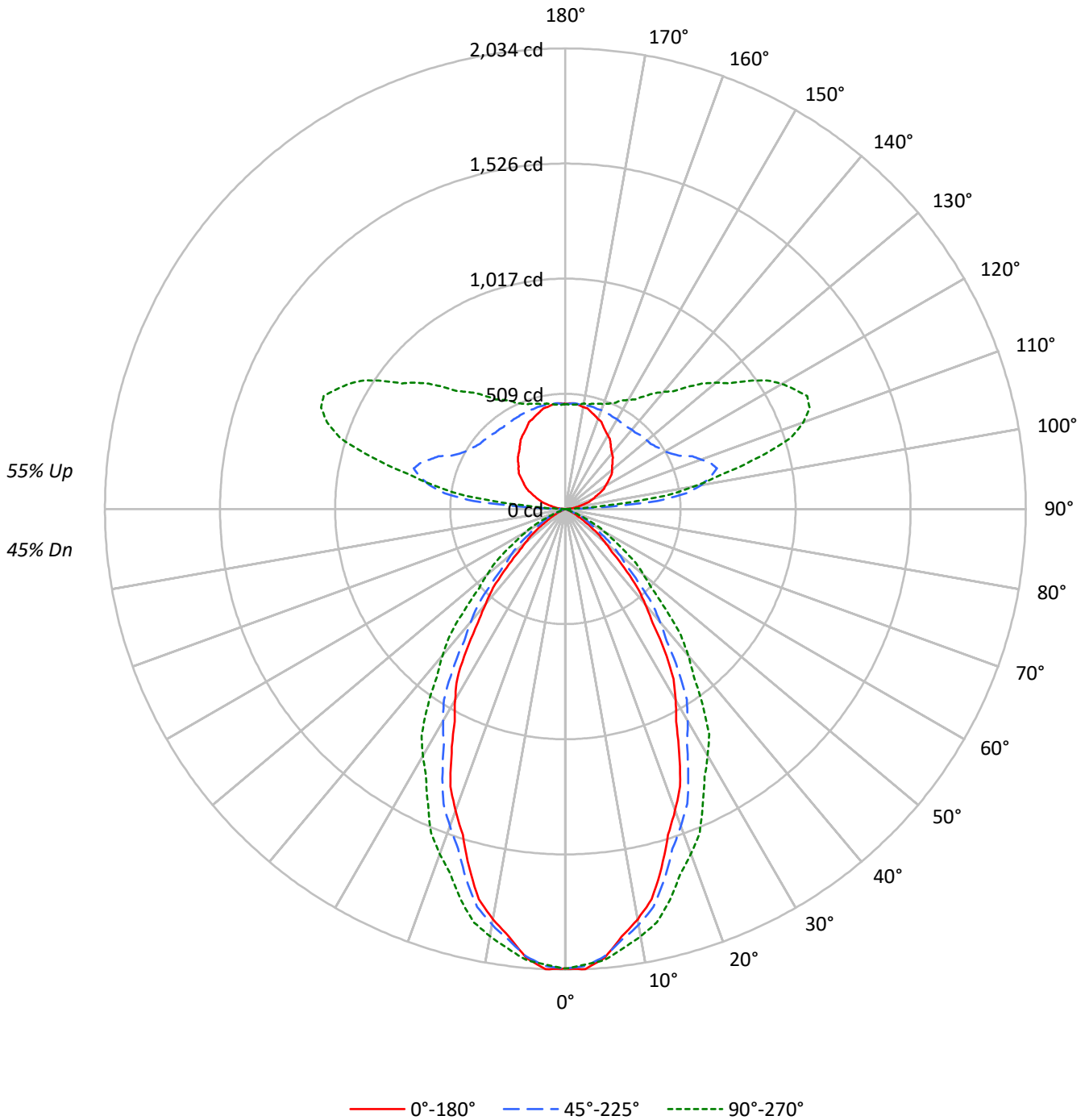
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5420.7 lumens  
Efficiency: N/A  
Efficacy: 82.0 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): 66.1  
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

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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	57	48	47	46	41
2	91	84	79	75	83	78	73	70	66	63	60	54	52	51	44	43	42	37
3	84	76	69	64	77	70	65	60	59	56	52	50	47	45	41	39	37	33
4	78	68	61	56	71	63	57	53	54	50	46	45	42	40	37	35	34	30
5	72	62	54	49	66	57	51	46	49	45	41	42	38	36	35	32	31	27
6	67	56	49	44	61	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	41	37	41	37	33	35	32	29	30	27	25	23
8	58	47	40	35	54	44	38	33	38	33	30	33	29	27	28	25	23	21
9	54	43	36	32	50	40	34	30	35	31	27	31	27	24	26	23	22	19
10	51	40	33	29	47	38	32	28	33	28	25	29	25	22	24	22	20	18

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

	0°	45°	90°
0°	18725	18725	18725
5°	18424	18377	18515
10°	17238	17469	17956
15°	15671	16168	17069
20°	13911	14634	15916
25°	12114	13074	14624
30°	10377	11516	13400
35°	8604	9776	11921
40°	6611	7817	10158
45°	4778	5918	8173
50°	3255	4411	6483
55°	2117	3190	5038
60°	1214	2248	3643
65°	321	1371	1843
70°	159	424	529
75°	71	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.2	3.4
10°-20°	473.7	8.7
20°-30°	593.0	10.9
30°-40°	547.7	10.1
40°-50°	368.0	6.8
50°-60°	190.1	3.5
60°-70°	59.5	1.1
70°-80°	3.8	0.1
80°-90°	0.1	0.0
90°-100°	238.8	4.4
100°-110°	577.2	10.6
110°-120°	615.6	11.4
120°-130°	498.6	9.2
130°-140°	386.0	7.1
140°-150°	294.5	5.4
150°-160°	213.2	3.9
160°-170°	131.3	2.4
170°-180°	44.5	0.8
0°-30°	1251.8	23.1
0°-40°	1799.5	33.2
0°-60°	2357.7	43.5
0°-90°	2421.0	44.7
90°-120°	1431.6	26.4
90°-150°	2610.7	48.2
90°-180°	3000.0	55.3
0°-180°	5420.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2030	2030	2030	2030	2030	
5°	1989	1969	1984	1991	1999	184
15°	1641	1635	1693	1750	1787	457
25°	1190	1200	1284	1372	1436	546
35°	764	783	868	970	1058	473
45°	366	388	454	542	626	288
55°	132	154	198	255	313	123
65°	15	28	63	76	84	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	24	120	409	266	186	26
105°	92	159	694	898	886	97
115°	169	216	557	1057	1178	167
125°	240	277	484	840	987	215
135°	295	330	464	663	762	228
145°	349	375	455	563	607	218
155°	400	418	461	499	517	185
165°	442	449	467	474	481	125
175°	468	466	468	464	463	44
180°	463	463	463	463	463	



TEST NUMBER: P521114

CATALOG NUMBER: SQ4-BB-075U-100D-93050-1D-UNV-STD-W-4 (3000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2029.5	2029.5	2029.5	2029.5	2029.5
2.5°	2034.2	2015.0	2020.1	2020.0	2014.6
5°	1989.3	1969.1	1984.3	1991.4	1999.1
7.5°	1905.2	1889.5	1918.8	1940.7	1956.7
10°	1840.0	1826.6	1864.6	1894.5	1916.6
12.5°	1764.6	1754.2	1800.2	1841.2	1869.5
15°	1640.7	1634.9	1692.7	1749.6	1787.0
17.5°	1507.9	1507.8	1573.7	1644.3	1689.4
20°	1416.8	1419.7	1490.5	1568.3	1621.1
22.5°	1325.7	1332.4	1408.0	1489.1	1549.6
25°	1190.0	1199.6	1284.3	1372.1	1436.5
27.5°	1059.6	1073.6	1162.7	1254.1	1332.4
30°	974.0	990.3	1081.0	1177.1	1257.8
32.5°	890.0	909.4	997.8	1099.4	1181.6
35°	763.9	783.1	868.0	970.1	1058.4
37.5°	633.7	652.5	735.4	836.0	931.4
40°	548.9	570.0	649.0	746.5	843.4
42.5°	471.9	493.0	567.3	663.1	754.7
45°	366.2	388.3	453.6	541.9	626.4
47.5°	278.7	302.7	360.0	439.9	516.9
50°	226.8	250.8	307.3	377.7	451.7
52.5°	185.2	208.4	259.4	325.8	393.5
55°	131.6	153.7	198.3	254.7	313.2
57.5°	90.9	109.9	150.0	197.0	242.9
60°	65.8	84.0	121.8	159.9	197.4
62.5°	43.8	60.5	97.4	126.6	151.8
65°	14.7	28.2	62.8	75.8	84.4
67.5°	7.5	9.0	33.0	34.8	37.7
70°	5.9	5.9	15.7	16.8	19.6
72.5°	4.3	4.3	6.3	8.1	8.6
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°	7.8	64.6	152.3	74.0	50.2
95°	23.5	119.5	409.2	266.1	186.4
97.5°	41.8	132.4	538.9	519.2	445.7
100°	55.9	140.4	610.3	644.3	583.8
102.5°	69.3	147.6	657.4	748.4	712.6
105°	92.2	159.4	693.7	897.5	886.0
107.5°	114.8	173.3	672.3	1017.2	1044.2
110°	130.5	185.2	637.8	1068.7	1119.6

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	146.2	197.0	607.2	1081.3	1168.2
115°	168.8	215.8	557.3	1056.6	1178.4
117.5°	191.1	235.5	528.1	999.8	1142.5
120°	206.1	247.3	509.2	955.2	1104.8
122.5°	221.8	259.9	497.5	909.6	1057.0
125°	240.4	276.9	483.7	840.3	987.1
127.5°	258.8	293.2	474.1	781.6	910.6
130°	269.8	303.4	471.0	740.8	867.4
132.5°	280.0	315.2	466.3	711.3	818.7
135°	295.3	329.9	464.1	662.6	762.4
137.5°	309.9	344.6	457.2	629.7	704.9
140°	320.9	352.5	457.2	606.0	675.1
142.5°	331.8	363.5	453.3	585.3	643.7
145°	349.3	375.2	455.3	563.2	607.4
147.5°	365.6	390.7	454.1	537.7	574.2
150°	375.8	397.9	457.2	526.6	555.4
152.5°	386.8	408.1	456.5	514.7	540.5
155°	400.3	417.6	461.2	498.9	517.1
157.5°	416.6	431.4	460.2	492.8	503.6
160°	422.9	435.4	464.1	484.9	492.6
162.5°	433.1	444.0	462.5	482.5	487.1
165°	442.5	449.2	467.1	474.1	480.8
167.5°	454.1	458.5	465.9	473.5	473.7
170°	457.2	460.1	469.0	468.1	472.9
172.5°	462.7	464.9	466.7	468.8	465.9
175°	468.0	466.1	468.0	464.1	463.1
177.5°	467.1	467.1	465.5	463.8	460.0
180°	463.1	463.1	463.1	463.1	463.1

(END OF REPORT)