

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: P521271

Luminaire Tested: **SQ4-BB-125U-100D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521271  
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-100D-93050-1D-UNV-STD-W-4 (3500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

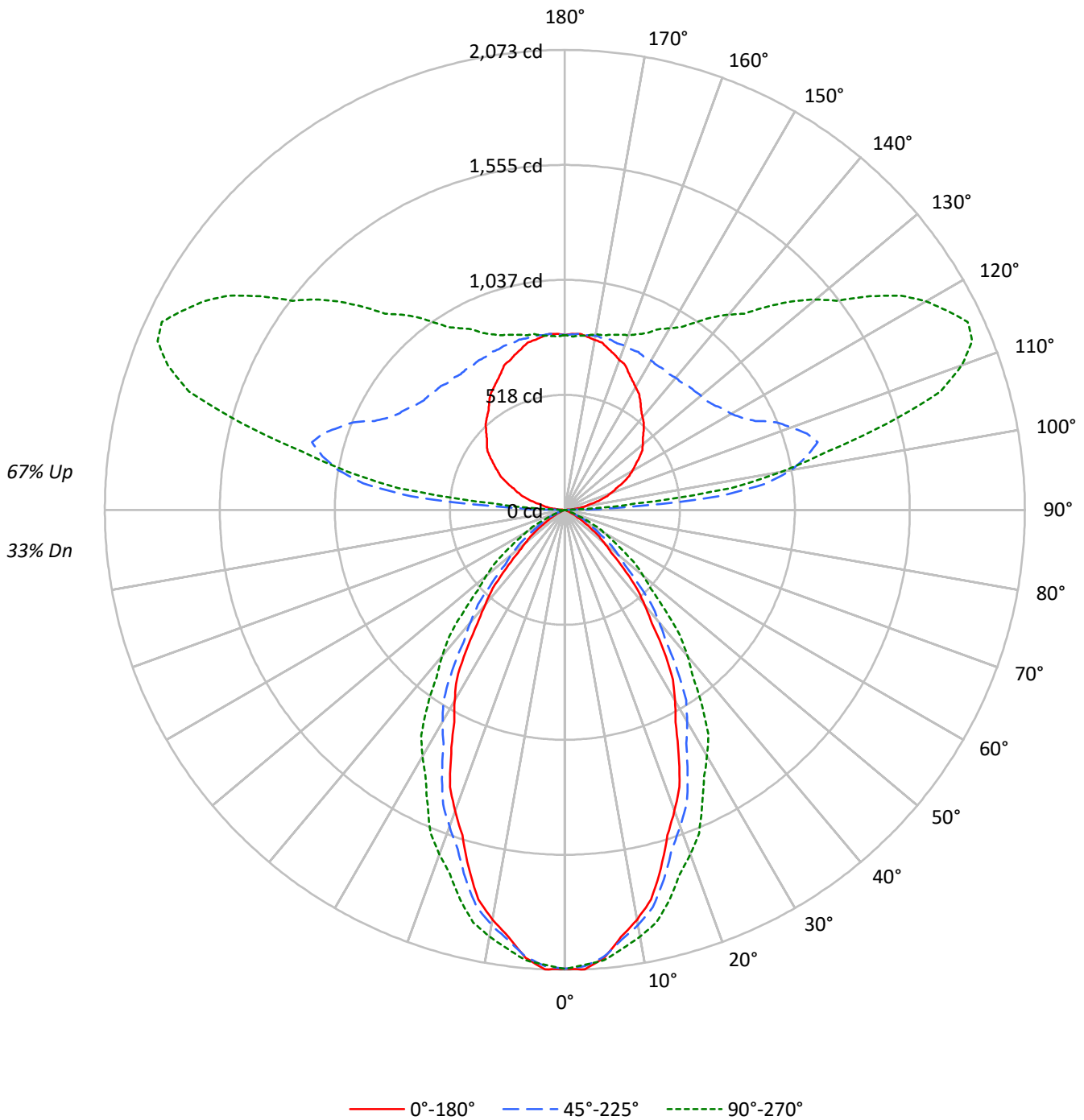
Lumens per Lamp: N/A  
Luminaire Lumens: 7567.9 lumens  
Efficiency: N/A  
Efficacy: 90.3 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 83.8  
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

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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	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	95	91	88	85	86	83	80	77	66	64	63	51	50	49	37	37	36	30
2	87	81	76	71	79	74	69	65	59	56	54	46	44	43	34	33	32	27
3	81	72	66	61	73	66	60	56	53	50	47	42	40	38	31	30	29	24
4	74	65	58	52	67	59	53	49	48	44	41	38	36	33	29	27	26	22
5	69	58	51	46	62	53	47	42	44	39	36	35	32	30	27	25	23	20
6	64	53	45	40	57	48	42	37	40	35	32	32	29	27	25	23	21	18
7	59	48	41	36	53	44	38	33	37	32	29	30	26	24	23	21	19	17
8	55	44	37	32	50	40	34	30	34	29	26	27	24	22	21	19	18	15
9	51	40	33	29	47	37	31	27	31	26	23	25	22	20	20	18	16	14
10	48	37	30	26	44	34	28	24	29	24	21	24	20	18	19	17	15	13

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

	0°	45°	90°
0°	19083	19083	19083
5°	18776	18729	18869
10°	17568	17803	18300
15°	15971	16478	17395
20°	14178	14914	16221
25°	12346	13325	14904
30°	10576	11737	13657
35°	8768	9963	12150
40°	6737	7966	10353
45°	4869	6032	8330
50°	3319	4495	6607
55°	2157	3251	5134
60°	1236	2290	3711
65°	327	1397	1880
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.8	2.5
10°-20°	482.7	6.4
20°-30°	604.3	8.0
30°-40°	558.2	7.4
40°-50°	375.1	5.0
50°-60°	193.7	2.6
60°-70°	60.7	0.8
70°-80°	3.8	0.1
80°-90°	0.1	0.0
90°-100°	406.1	5.4
100°-110°	981.4	13.0
110°-120°	1046.8	13.8
120°-130°	847.8	11.2
130°-140°	656.4	8.7
140°-150°	500.7	6.6
150°-160°	362.5	4.8
160°-170°	223.3	2.9
170°-180°	75.6	1.0
0°-30°	1275.8	16.9
0°-40°	1834.0	24.2
0°-60°	2402.8	31.7
0°-90°	2467.4	32.6
90°-120°	2434.3	32.2
90°-150°	4439.2	58.7
90°-180°	5101.0	67.4
0°-180°	7567.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2068	2068	2068	2068	2068	
5°	2027	2007	2022	2030	2037	188
15°	1672	1666	1725	1783	1821	466
25°	1213	1223	1309	1398	1464	556
35°	778	798	885	989	1079	482
45°	373	396	462	552	638	293
55°	134	157	202	260	319	125
65°	15	29	64	77	86	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	40	203	696	452	317	45
105°	157	271	1180	1526	1507	166
115°	287	367	948	1797	2004	284
125°	409	471	822	1429	1678	365
135°	502	561	789	1127	1296	388
145°	594	638	774	958	1033	371
155°	681	710	784	848	879	314
165°	752	764	794	806	818	212
175°	796	793	796	789	788	75
180°	788	788	788	788	788	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2068.4	2068.4	2068.4	2068.4	2068.4
2.5°	2073.2	2053.6	2058.8	2058.6	2053.2
5°	2027.3	2006.8	2022.3	2029.5	2037.4
7.5°	1941.7	1925.6	1955.5	1977.9	1994.1
10°	1875.2	1861.5	1900.3	1930.8	1953.3
12.5°	1798.4	1787.8	1834.6	1876.5	1905.3
15°	1672.1	1666.2	1725.1	1783.1	1821.2
17.5°	1536.8	1536.6	1603.9	1675.8	1721.7
20°	1444.0	1446.9	1519.0	1598.3	1652.1
22.5°	1351.1	1357.9	1435.0	1517.6	1579.3
25°	1212.8	1222.6	1308.9	1398.4	1464.0
27.5°	1079.9	1094.2	1185.0	1278.1	1357.9
30°	992.7	1009.3	1101.7	1199.7	1281.9
32.5°	907.0	926.8	1016.9	1120.4	1204.2
35°	778.5	798.1	884.6	988.7	1078.7
37.5°	645.8	665.0	749.5	852.0	949.2
40°	559.4	580.9	661.4	760.8	859.6
42.5°	480.9	502.4	578.2	675.8	769.1
45°	373.2	395.8	462.3	552.3	638.4
47.5°	284.0	308.4	366.8	448.3	526.8
50°	231.2	255.6	313.2	385.0	460.3
52.5°	188.7	212.4	264.4	332.0	401.1
55°	134.1	156.6	202.1	259.5	319.2
57.5°	92.7	112.0	152.9	200.8	247.6
60°	67.0	85.6	124.1	163.0	201.1
62.5°	44.6	61.7	99.3	129.1	154.7
65°	15.0	28.7	64.0	77.3	86.1
67.5°	7.6	9.2	33.6	35.5	38.4
70°	6.0	6.0	16.0	17.1	20.0
72.5°	4.4	4.4	6.4	8.2	8.8
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°	13.3	109.9	258.9	125.9	85.4
95°	40.0	203.2	695.7	452.4	317.0
97.5°	71.1	225.1	916.3	882.8	757.8
100°	95.1	238.7	1037.8	1095.5	992.7
102.5°	117.8	250.9	1117.9	1272.6	1211.6
105°	156.8	271.0	1179.6	1526.2	1506.6
107.5°	195.2	294.7	1143.2	1729.6	1775.6
110°	221.9	314.9	1084.5	1817.2	1903.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	248.6	335.1	1032.4	1838.7	1986.5
115°	287.0	366.9	947.7	1796.6	2003.8
117.5°	325.0	400.4	898.0	1700.0	1942.7
120°	350.4	420.5	865.9	1624.2	1878.7
122.5°	377.1	442.0	845.9	1546.7	1797.3
125°	408.8	470.8	822.5	1428.9	1678.5
127.5°	440.1	498.5	806.2	1329.1	1548.3
130°	458.8	515.9	800.9	1259.6	1474.9
132.5°	476.2	535.9	792.8	1209.4	1392.2
135°	502.2	560.9	789.2	1126.7	1296.4
137.5°	526.9	586.0	777.5	1070.7	1198.6
140°	545.6	599.4	777.5	1030.4	1147.9
142.5°	564.3	618.1	770.8	995.3	1094.5
145°	594.0	638.0	774.2	957.7	1032.8
147.5°	621.7	664.4	772.2	914.4	976.4
150°	639.0	676.5	777.5	895.4	944.3
152.5°	657.7	693.9	776.2	875.3	919.0
155°	680.7	710.1	784.2	848.3	879.3
157.5°	708.4	733.5	782.5	838.0	856.2
160°	719.1	740.3	789.2	824.5	837.6
162.5°	736.5	755.0	786.5	820.4	828.2
165°	752.5	763.9	794.2	806.1	817.5
167.5°	772.2	779.7	792.2	805.2	805.5
170°	777.5	782.4	797.5	796.0	804.2
172.5°	786.8	790.4	793.5	797.1	792.2
175°	795.8	792.6	795.8	789.1	787.5
177.5°	794.2	794.2	791.5	788.7	782.2
180°	787.5	787.5	787.5	787.5	787.5

(END OF REPORT)