

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: P521270

Luminaire Tested: **SQ4-BB-125U-100D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021



**Test Information**

Test Method: LM-79-08  
Report Number: P521270  
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 (3000K)  
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 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

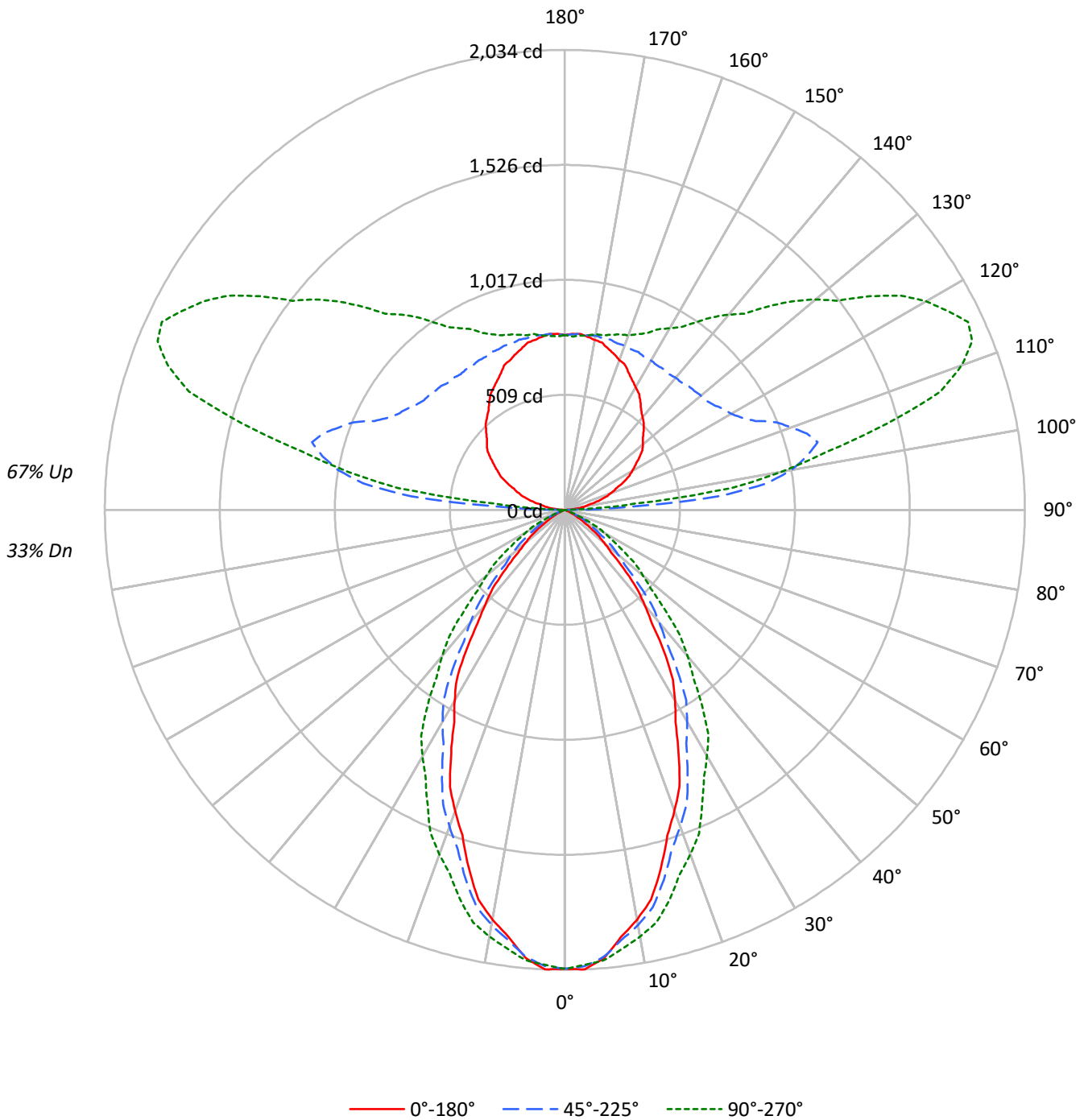
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7425.8 lumens  
Efficiency: N/A  
Efficacy: 88.6 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): 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°	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	2.5
10°-20°	473.7	6.4
20°-30°	593.0	8.0
30°-40°	547.7	7.4
40°-50°	368.0	5.0
50°-60°	190.1	2.6
60°-70°	59.5	0.8
70°-80°	3.8	0.1
80°-90°	0.1	0.0
90°-100°	398.5	5.4
100°-110°	963.0	13.0
110°-120°	1027.1	13.8
120°-130°	831.9	11.2
130°-140°	644.1	8.7
140°-150°	491.3	6.6
150°-160°	355.7	4.8
160°-170°	219.1	2.9
170°-180°	74.2	1.0
0°-30°	1251.8	16.9
0°-40°	1799.5	24.2
0°-60°	2357.7	31.7
0°-90°	2421.0	32.6
90°-120°	2388.6	32.2
90°-150°	4355.8	58.7
90°-180°	5005.0	67.4
0°-180°	7425.8	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	2
95°	39	199	683	444	311	44
105°	154	266	1157	1498	1478	163
115°	282	360	930	1763	1966	278
125°	401	462	807	1402	1647	358
135°	493	550	774	1106	1272	380
145°	583	626	760	940	1013	364
155°	668	697	769	832	863	308
165°	738	750	779	791	802	208
175°	781	778	781	774	773	74
180°	773	773	773	773	773	



TEST NUMBER: P521270

CATALOG NUMBER: SQ4-BB-125U-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°	13.1	107.9	254.1	123.5	83.8
95°	39.3	199.4	682.7	443.9	311.0
97.5°	69.7	220.8	899.1	866.2	743.6
100°	93.3	234.2	1018.3	1074.9	974.1
102.5°	115.6	246.2	1096.9	1248.7	1188.9
105°	153.9	265.9	1157.4	1497.5	1478.3
107.5°	191.5	289.2	1121.7	1697.1	1742.2
110°	217.7	309.0	1064.1	1783.1	1867.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	243.9	328.8	1013.0	1804.1	1949.1
115°	281.6	360.0	929.9	1762.9	1966.2
117.5°	318.9	392.9	881.1	1668.1	1906.2
120°	343.8	412.6	849.7	1593.7	1843.4
122.5°	370.0	433.7	830.0	1517.6	1763.5
125°	401.1	461.9	807.1	1402.0	1646.9
127.5°	431.9	489.2	791.0	1304.1	1519.2
130°	450.2	506.2	785.8	1235.9	1447.2
132.5°	467.2	525.8	777.9	1186.7	1366.0
135°	492.8	550.4	774.3	1105.6	1272.0
137.5°	517.0	574.9	762.9	1050.6	1176.1
140°	535.3	588.2	762.9	1011.1	1126.3
142.5°	553.7	606.5	756.3	976.6	1073.9
145°	582.8	626.0	759.6	939.7	1013.4
147.5°	610.0	651.9	757.6	897.2	958.0
150°	627.0	663.8	762.9	878.6	926.6
152.5°	645.3	680.9	761.6	858.8	901.7
155°	667.9	696.7	769.4	832.3	862.8
157.5°	695.1	719.8	767.8	822.2	840.2
160°	705.6	726.4	774.3	809.0	821.8
162.5°	722.6	740.9	771.7	805.0	812.7
165°	738.3	749.5	779.3	791.0	802.2
167.5°	757.6	765.0	777.3	790.1	790.4
170°	762.9	767.7	782.5	781.1	789.1
172.5°	772.1	775.6	778.6	782.1	777.3
175°	780.9	777.7	780.9	774.3	772.7
177.5°	779.3	779.3	776.6	773.9	767.5
180°	772.7	772.7	772.7	772.7	772.7

(END OF REPORT)