

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: P521272

Luminaire Tested: **SQ4-BB-125U-100D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521272  
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 (4000K)  
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 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

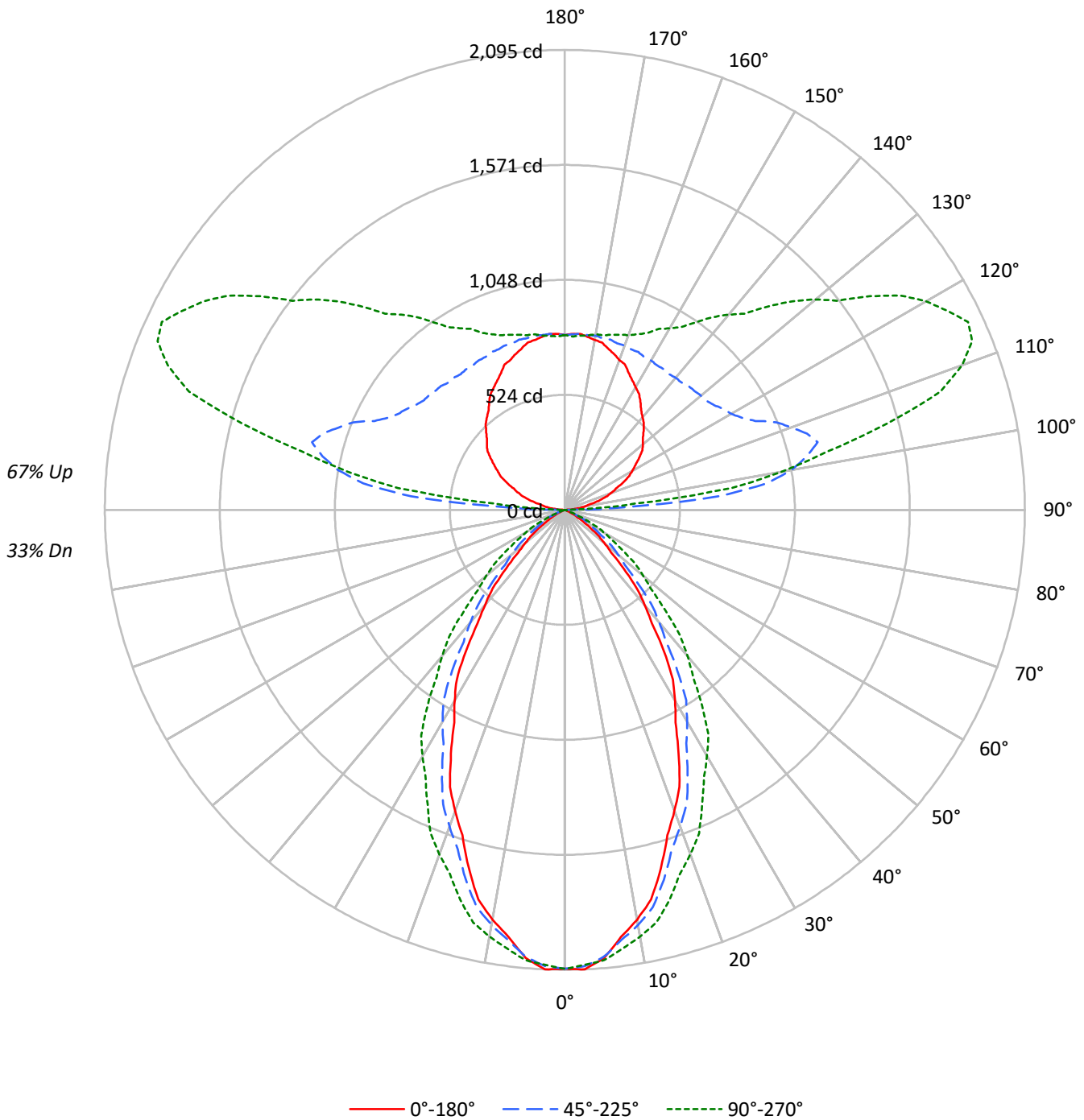
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7648.5 lumens  
Efficiency: N/A  
Efficacy: 91.3 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°	19286	19286	19286
5°	18976	18929	19069
10°	17755	17992	18494
15°	16141	16653	17581
20°	14328	15073	16394
25°	12478	13466	15062
30°	10688	11863	13802
35°	8862	10069	12279
40°	6808	8051	10463
45°	4922	6096	8418
50°	3353	4543	6677
55°	2180	3286	5189
60°	1251	2314	3751
65°	332	1412	1899
70°	165	437	545
75°	71	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	190.8	2.5
10°-20°	487.9	6.4
20°-30°	610.8	8.0
30°-40°	564.1	7.4
40°-50°	379.1	5.0
50°-60°	195.8	2.6
60°-70°	61.3	0.8
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	410.4	5.4
100°-110°	991.9	13.0
110°-120°	1057.9	13.8
120°-130°	856.8	11.2
130°-140°	663.4	8.7
140°-150°	506.1	6.6
150°-160°	366.3	4.8
160°-170°	225.6	2.9
170°-180°	76.4	1.0
0°-30°	1289.4	16.9
0°-40°	1853.5	24.2
0°-60°	2428.4	31.7
0°-90°	2493.6	32.6
90°-120°	2460.2	32.2
90°-150°	4486.5	58.7
90°-180°	5155.0	67.4
0°-180°	7648.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2090	2090	2090	2090	2090	
5°	2049	2028	2044	2051	2059	190
15°	1690	1684	1744	1802	1841	471
25°	1226	1236	1323	1413	1480	562
35°	787	807	894	999	1090	487
45°	377	400	467	558	645	296
55°	136	158	204	262	323	126
65°	15	29	65	78	87	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	40	205	703	457	320	45
105°	158	274	1192	1542	1523	167
115°	290	371	958	1816	2025	287
125°	413	476	831	1444	1696	369
135°	508	567	798	1139	1310	392
145°	600	645	782	968	1044	375
155°	688	718	792	857	889	318
165°	760	772	803	815	826	215
175°	804	801	804	798	796	76
180°	796	796	796	796	796	



TEST NUMBER: P521272

CATALOG NUMBER: SQ4-BB-125U-100D-93050-1D-UNV-STD-W-4 (4000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2090.4	2090.4	2090.4	2090.4	2090.4
2.5°	2095.2	2075.5	2080.7	2080.6	2075.0
5°	2048.9	2028.2	2043.9	2051.1	2059.0
7.5°	1962.4	1946.1	1976.3	1998.9	2015.3
10°	1895.2	1881.4	1920.5	1951.3	1974.1
12.5°	1817.5	1806.9	1854.1	1896.5	1925.5
15°	1689.9	1684.0	1743.5	1802.0	1840.6
17.5°	1553.2	1553.0	1620.9	1693.6	1740.1
20°	1459.3	1462.3	1535.2	1615.3	1669.7
22.5°	1365.5	1372.4	1450.2	1533.8	1596.1
25°	1225.7	1235.6	1322.8	1413.3	1479.6
27.5°	1091.4	1105.8	1197.6	1291.7	1372.4
30°	1003.2	1020.0	1113.5	1212.4	1295.5
32.5°	916.7	936.6	1027.7	1132.4	1217.0
35°	786.8	806.6	894.0	999.2	1090.2
37.5°	652.7	672.1	757.5	861.0	959.3
40°	565.3	587.1	668.5	768.8	868.7
42.5°	486.0	507.8	584.3	683.0	777.3
45°	377.2	400.0	467.2	558.2	645.2
47.5°	287.0	311.7	370.7	453.1	532.4
50°	233.6	258.3	316.5	389.1	465.2
52.5°	190.7	214.7	267.2	335.5	405.3
55°	135.5	158.3	204.3	262.3	322.6
57.5°	93.6	113.2	154.5	202.9	250.2
60°	67.8	86.5	125.4	164.7	203.3
62.5°	45.1	62.3	100.3	130.4	156.3
65°	15.2	29.0	64.7	78.1	87.0
67.5°	7.7	9.3	34.0	35.9	38.8
70°	6.1	6.1	16.2	17.3	20.2
72.5°	4.4	4.4	6.5	8.3	8.9
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°	13.5	111.1	261.7	127.2	86.3
95°	40.5	205.3	703.1	457.2	320.4
97.5°	71.8	227.5	926.1	892.2	765.9
100°	96.1	241.2	1048.8	1107.2	1003.3
102.5°	119.0	253.6	1129.8	1286.2	1224.5
105°	158.5	273.9	1192.1	1542.4	1522.6
107.5°	197.3	297.9	1155.4	1748.0	1794.5
110°	224.3	318.2	1096.0	1836.6	1924.0

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	251.2	338.6	1043.4	1858.2	2007.6
115°	290.0	370.8	957.8	1815.7	2025.1
117.5°	328.5	404.6	907.5	1718.1	1963.4
120°	354.1	425.0	875.1	1641.5	1898.7
122.5°	381.1	446.7	854.9	1563.1	1816.4
125°	413.1	475.8	831.3	1444.1	1696.3
127.5°	444.8	503.8	814.8	1343.2	1564.8
130°	463.7	521.4	809.4	1273.0	1490.6
132.5°	481.2	541.6	801.3	1222.3	1407.0
135°	507.5	566.9	797.6	1138.7	1310.2
137.5°	532.5	592.2	785.8	1082.1	1211.4
140°	551.4	605.8	785.8	1041.4	1160.1
142.5°	570.3	624.7	779.0	1005.9	1106.1
145°	600.3	644.8	782.4	967.9	1043.8
147.5°	628.3	671.5	780.4	924.1	986.8
150°	645.8	683.7	785.8	904.9	954.4
152.5°	664.7	701.3	784.4	884.6	928.8
155°	688.0	717.6	792.5	857.3	888.6
157.5°	716.0	741.4	790.8	846.9	865.4
160°	726.8	748.2	797.6	833.3	846.5
162.5°	744.3	763.1	794.9	829.1	837.0
165°	760.5	772.0	802.6	814.7	826.2
167.5°	780.4	788.0	800.6	813.8	814.1
170°	785.8	790.7	806.0	804.5	812.7
172.5°	795.2	798.8	802.0	805.6	800.6
175°	804.3	801.0	804.3	797.5	795.9
177.5°	802.6	802.6	799.9	797.1	790.5
180°	795.9	795.9	795.9	795.9	795.9

(END OF REPORT)