

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P518786

Luminaire Tested: **SQ4-BB-125U-050D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518786  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-125U-050D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

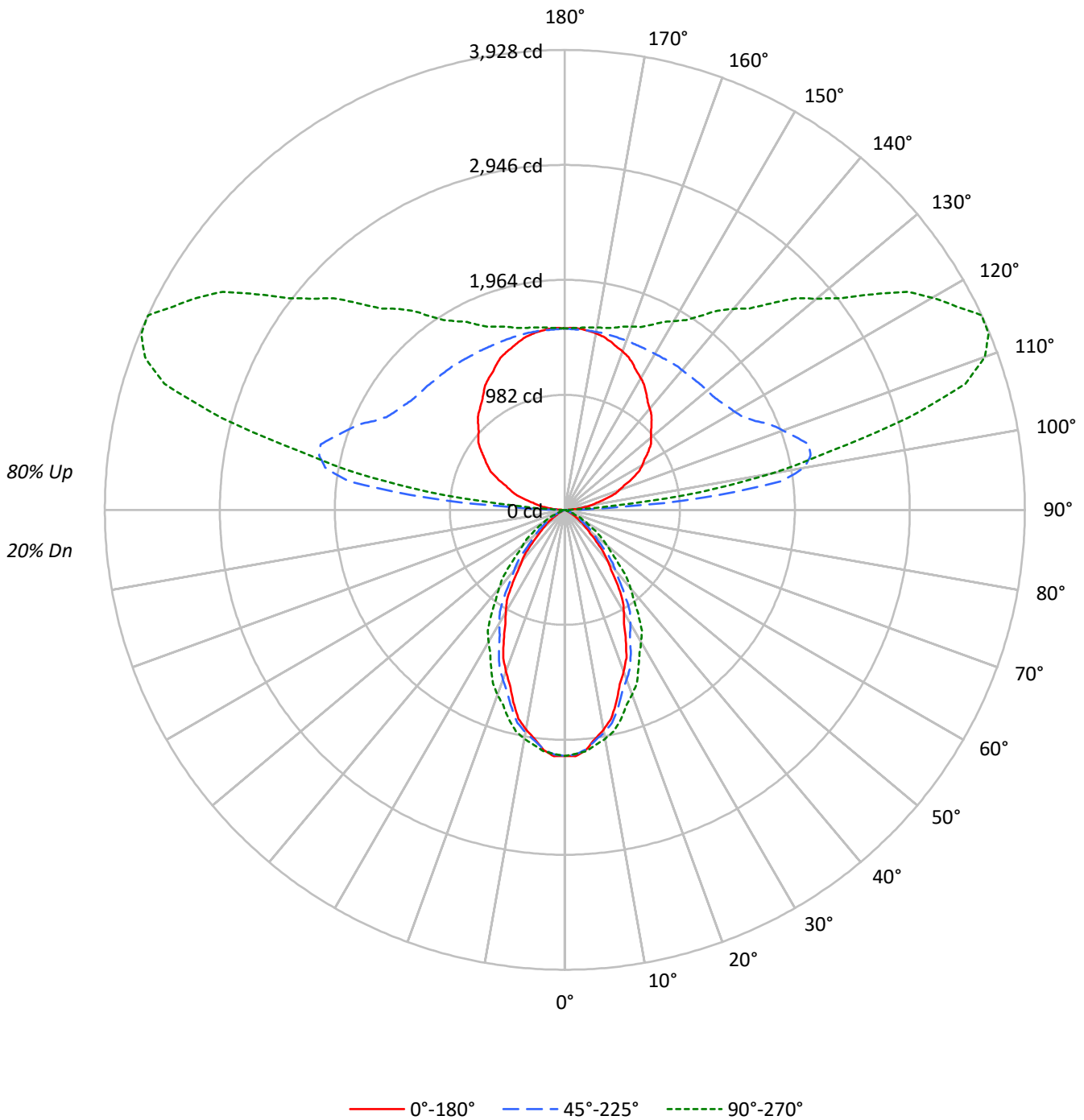
Lumens per Lamp: N/A  
Luminaire Lumens: 12509.1 lumens  
Efficiency: N/A  
Efficacy: 129.2 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 96.8  
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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	92	88	84	81	81	78	75	73	59	58	56	42	41	40	26	26	25	18
2	84	78	72	68	74	69	64	61	53	50	47	38	36	35	24	23	23	17
3	77	69	62	57	68	61	56	52	47	44	41	34	32	30	22	21	20	15
4	71	61	54	49	63	55	49	44	42	38	35	31	28	26	20	19	18	14
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	19	17	16	12
6	60	49	42	37	53	44	38	33	35	30	27	26	23	21	17	16	15	11
7	56	45	37	32	49	40	34	29	31	27	24	23	21	19	16	14	13	10
8	52	40	33	29	46	36	30	26	29	24	21	21	19	17	15	13	12	9
9	48	37	30	26	43	33	27	23	26	22	19	20	17	15	14	12	11	9
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10	8

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

	0°	45°	90°
0°	9694	9694	9694
5°	9538	9515	9586
10°	8925	9044	9296
15°	8114	8371	8837
20°	7202	7576	8240
25°	6272	6769	7571
30°	5372	5963	6938
35°	4455	5061	6172
40°	3422	4047	5259
45°	2474	3064	4231
50°	1686	2284	3357
55°	1095	1652	2608
60°	628	1163	1886
65°	167	711	954
70°	82	220	274
75°	36	18	0
80°	27	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.8	1.5
10°-20°	490.4	3.9
20°-30°	614.0	4.9
30°-40°	567.1	4.5
40°-50°	381.1	3.0
50°-60°	196.8	1.6
60°-70°	61.7	0.5
70°-80°	3.9	0.0
80°-90°	3.7	0.0
90°-100°	724.6	5.8
100°-110°	1951.8	15.6
110°-120°	2048.3	16.4
120°-130°	1662.1	13.3
130°-140°	1303.6	10.4
140°-150°	1000.8	8.0
150°-160°	719.6	5.8
160°-170°	439.6	3.5
170°-180°	148.3	1.2
0°-30°	1296.2	10.4
0°-40°	1863.3	14.9
0°-60°	2441.3	19.5
0°-90°	2510.5	20.1
90°-120°	4724.6	37.8
90°-150°	8691.2	69.5
90°-180°	9999.0	79.9
0°-180°	12509.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2102	2102	2102	2102	2102	
5°	2060	2039	2055	2062	2070	191
15°	1699	1693	1753	1812	1850	473
25°	1232	1242	1330	1421	1487	565
35°	791	811	899	1004	1096	490
45°	379	402	470	561	649	298
55°	136	159	205	264	324	127
65°	15	29	65	78	87	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	4	12	24	26	26	8
95°	110	394	1188	607	420	115
105°	361	562	2158	3229	3031	380
115°	637	780	1797	3473	3928	627
125°	870	999	1614	2728	3210	777
135°	1048	1169	1569	2201	2492	809
145°	1211	1306	1549	1882	2020	760
155°	1375	1425	1535	1688	1742	633
165°	1492	1509	1541	1602	1610	421
175°	1551	1549	1543	1564	1561	147
180°	1549	1549	1549	1549	1549	



TEST NUMBER: P518786

CATALOG NUMBER: SQ4-BB-125U-050D-835-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2101.5	2101.5	2101.5	2101.5	2101.5
2.5°	2106.4	2086.5	2091.7	2091.6	2086.0
5°	2059.8	2038.9	2054.7	2062.0	2070.0
7.5°	1972.8	1956.5	1986.8	2009.5	2026.0
10°	1905.3	1891.3	1930.7	1961.7	1984.6
12.5°	1827.2	1816.4	1864.0	1906.5	1935.8
15°	1698.9	1692.9	1752.8	1811.6	1850.4
17.5°	1561.4	1561.2	1629.5	1702.6	1749.3
20°	1467.1	1470.0	1543.3	1623.9	1678.5
22.5°	1372.7	1379.7	1457.9	1541.9	1604.5
25°	1232.2	1242.2	1329.8	1420.8	1487.4
27.5°	1097.2	1111.7	1203.9	1298.5	1379.6
30°	1008.5	1025.4	1119.4	1218.9	1302.4
32.5°	921.5	941.6	1033.1	1138.4	1223.5
35°	791.0	810.9	898.7	1004.5	1096.0
37.5°	656.2	675.6	761.5	865.6	964.4
40°	568.3	590.2	672.0	772.9	873.3
42.5°	488.6	510.5	587.4	686.6	781.4
45°	379.2	402.1	469.7	561.2	648.6
47.5°	288.5	313.4	372.7	455.5	535.2
50°	234.9	259.7	318.2	391.1	467.7
52.5°	191.7	215.8	268.6	337.3	407.5
55°	136.2	159.1	205.4	263.7	324.3
57.5°	94.1	113.8	155.3	204.0	251.5
60°	68.1	87.0	126.1	165.6	204.4
62.5°	45.3	62.6	100.9	131.1	157.2
65°	15.3	29.2	65.1	78.5	87.4
67.5°	7.7	9.3	34.2	36.1	39.0
70°	6.1	6.1	16.3	17.4	20.3
72.5°	4.5	4.5	6.5	8.4	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°	0.8	2.3	4.7	5.1	5.1
90°	3.9	11.7	23.7	25.6	25.6
92.5°	48.1	170.1	336.2	161.9	112.5
95°	110.5	394.1	1187.8	607.4	420.3
97.5°	176.4	451.1	1862.9	1556.3	1173.6
100°	226.9	473.8	2077.6	2173.8	1803.4
102.5°	275.8	505.8	2148.6	2636.2	2332.1
105°	361.1	561.7	2158.5	3229.3	3030.6
107.5°	441.6	620.6	2066.6	3534.1	3585.4
110°	495.2	665.0	1982.9	3628.7	3815.9

TEST NUMBER: P518786

CATALOG NUMBER: SQ4-BB-125U-050D-835-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	552.1	709.5	1902.4	3607.8	3915.3
115°	637.3	780.1	1797.4	3473.0	3928.3
117.5°	715.0	848.9	1716.2	3258.0	3765.0
120°	765.5	894.8	1675.1	3103.6	3624.5
122.5°	809.7	937.4	1645.1	2945.7	3465.1
125°	870.1	999.4	1613.9	2727.8	3210.1
127.5°	928.1	1055.4	1594.2	2535.7	2966.3
130°	962.8	1090.2	1586.3	2425.6	2803.7
132.5°	997.6	1123.4	1578.4	2328.6	2675.8
135°	1047.7	1169.2	1568.6	2200.6	2491.9
137.5°	1095.4	1212.0	1563.4	2092.1	2331.3
140°	1128.6	1240.5	1558.7	2025.3	2241.4
142.5°	1163.3	1267.5	1555.5	1963.0	2145.1
145°	1211.4	1306.0	1548.8	1881.5	2020.4
147.5°	1263.5	1345.7	1542.1	1812.9	1922.1
150°	1298.3	1369.6	1539.0	1769.9	1860.6
152.5°	1329.8	1391.9	1537.4	1734.8	1808.5
155°	1375.2	1425.4	1535.0	1688.2	1742.2
157.5°	1415.1	1454.0	1535.4	1655.4	1691.7
160°	1440.3	1473.1	1537.0	1636.3	1663.3
162.5°	1462.4	1489.0	1538.6	1620.3	1639.6
165°	1491.6	1509.0	1540.9	1602.3	1610.0
167.5°	1515.3	1525.3	1542.9	1588.4	1591.5
170°	1531.1	1534.9	1542.9	1580.4	1580.4
172.5°	1540.5	1541.3	1544.5	1572.5	1572.5
175°	1550.8	1548.9	1542.9	1564.5	1560.7
177.5°	1555.2	1552.1	1544.1	1556.7	1553.6
180°	1548.8	1548.8	1548.8	1548.8	1548.8

(END OF REPORT)