

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: P518810

Luminaire Tested: **SQ4-BB-125U-075D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518810  
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-075D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

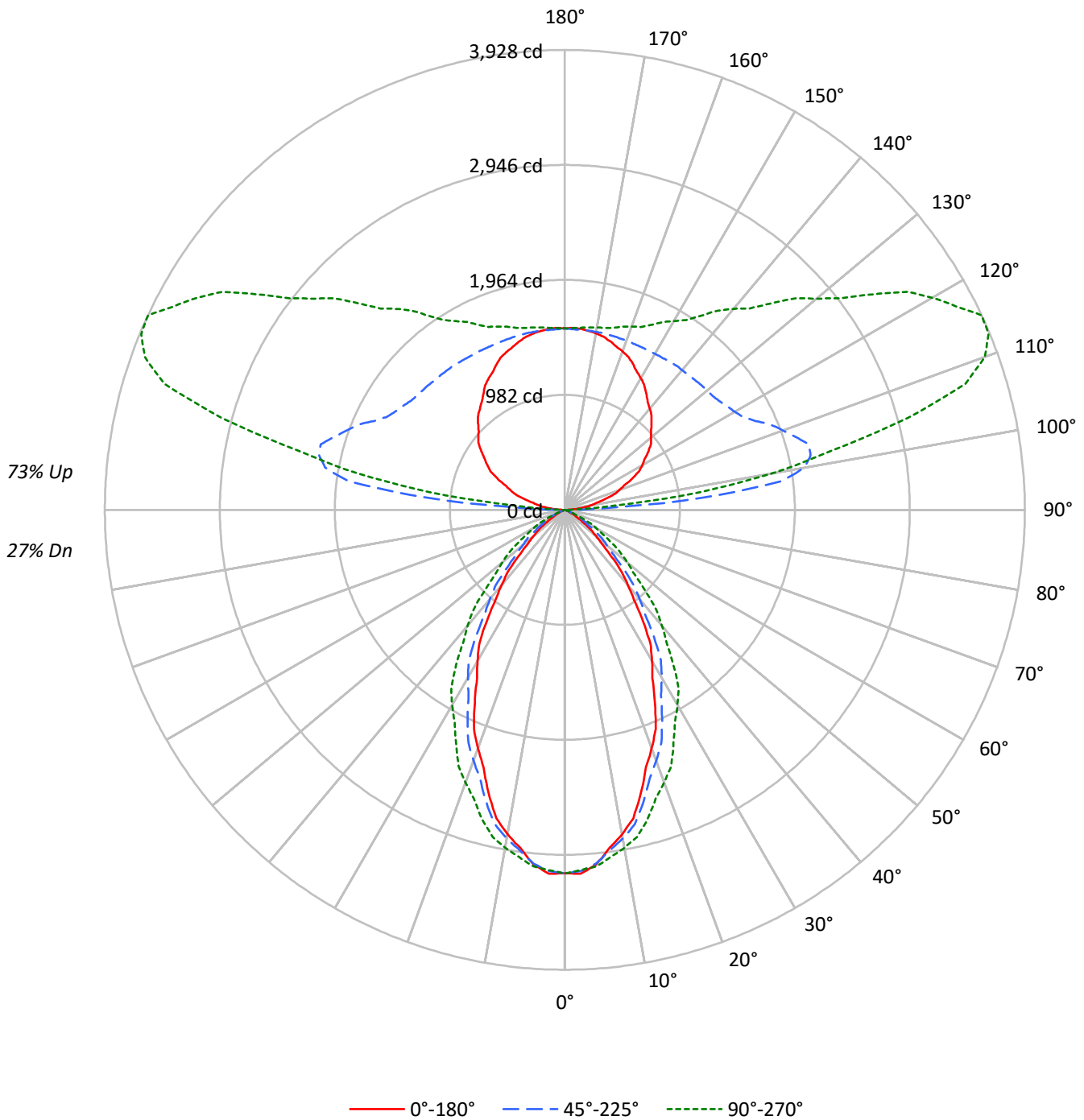
Lumens per Lamp: N/A  
Luminaire Lumens: 13704.6 lumens  
Efficiency: N/A  
Efficacy: 118.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 116  
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	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35	27
1	94	90	86	83	84	81	78	75	63	61	60	47	46	45	32	32	31	25
2	86	80	74	70	77	71	67	63	56	53	51	43	41	39	30	29	28	22
3	79	71	64	59	71	64	58	54	51	47	44	39	36	34	27	26	25	20
4	73	63	56	51	65	57	51	47	46	42	38	35	32	30	25	24	22	18
5	67	57	49	44	60	51	45	41	41	37	34	32	29	27	23	21	20	17
6	62	51	44	39	56	46	40	36	37	33	30	29	26	24	21	20	18	15
7	58	46	39	34	52	42	36	32	34	30	27	27	24	22	20	18	17	14
8	53	42	35	30	48	39	32	28	31	27	24	25	22	20	18	17	15	13
9	50	39	32	27	45	35	29	25	29	25	22	23	20	18	17	15	14	12
10	47	36	29	25	42	33	27	23	27	22	20	21	18	16	16	14	13	11

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

	0°	45°	90°
0°	14317	14317	14317
5°	14087	14052	14157
10°	13181	13357	13729
15°	11983	12363	13051
20°	10637	11189	12170
25°	9263	9997	11181
30°	7934	8806	10245
35°	6579	7475	9115
40°	5054	5977	7767
45°	3654	4526	6250
50°	2489	3373	4957
55°	1618	2439	3852
60°	928	1718	2784
65°	246	1049	1409
70°	121	324	405
75°	53	27	0
80°	40	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	283.2	2.1
10°-20°	724.3	5.3
20°-30°	906.8	6.6
30°-40°	837.6	6.1
40°-50°	562.8	4.1
50°-60°	290.7	2.1
60°-70°	91.1	0.7
70°-80°	5.7	0.0
80°-90°	3.7	0.0
90°-100°	724.6	5.3
100°-110°	1951.8	14.2
110°-120°	2048.3	14.9
120°-130°	1662.1	12.1
130°-140°	1303.6	9.5
140°-150°	1000.8	7.3
150°-160°	719.6	5.3
160°-170°	439.6	3.2
170°-180°	148.3	1.1
0°-30°	1914.4	14.0
0°-40°	2751.9	20.1
0°-60°	3605.4	26.3
0°-90°	3706.0	27.0
90°-120°	4724.6	34.5
90°-150°	8691.2	63.4
90°-180°	9999.0	73.0
0°-180°	13704.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3104	3104	3104	3104	3104	
5°	3042	3011	3034	3045	3057	282
15°	2509	2500	2589	2676	2733	699
25°	1820	1834	1964	2098	2197	834
35°	1168	1198	1327	1484	1619	724
45°	560	594	694	829	958	440
55°	201	235	303	389	479	188
65°	22	43	96	116	129	38
75°	3	3	2	0	0	4
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3103.6	3103.6	3103.6	3103.6	3103.6
2.5°	3110.8	3081.5	3089.2	3089.0	3080.8
5°	3042.0	3011.2	3034.5	3045.3	3057.1
7.5°	2913.5	2889.4	2934.2	2967.8	2992.2
10°	2813.8	2793.3	2851.4	2897.2	2930.9
12.5°	2698.5	2682.6	2752.9	2815.7	2858.9
15°	2509.0	2500.2	2588.6	2675.5	2732.7
17.5°	2306.0	2305.7	2406.6	2514.5	2583.5
20°	2166.7	2171.1	2279.3	2398.2	2479.0
22.5°	2027.3	2037.6	2153.2	2277.2	2369.7
25°	1819.8	1834.5	1964.0	2098.3	2196.7
27.5°	1620.4	1641.9	1778.1	1917.7	2037.5
30°	1489.5	1514.5	1653.2	1800.1	1923.4
32.5°	1361.0	1390.6	1525.8	1681.2	1806.9
35°	1168.2	1197.5	1327.3	1483.6	1618.6
37.5°	969.1	997.8	1124.6	1278.4	1424.3
40°	839.3	871.6	992.5	1141.5	1289.8
42.5°	721.6	753.9	867.6	1014.0	1154.1
45°	560.1	593.8	693.7	828.8	958.0
47.5°	426.1	462.8	550.5	672.6	790.4
50°	346.8	383.6	470.0	577.6	690.7
52.5°	283.2	318.7	396.7	498.2	601.8
55°	201.2	235.0	303.3	389.4	479.0
57.5°	139.0	168.1	229.4	301.3	371.5
60°	100.6	128.5	186.2	244.5	301.8
62.5°	67.0	92.5	148.9	193.7	232.1
65°	22.5	43.1	96.1	115.9	129.1
67.5°	11.4	13.8	50.5	53.3	57.7
70°	9.0	9.0	24.0	25.6	30.0
72.5°	6.6	6.6	9.6	12.3	13.2
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	0.0	0.0	0.0
82.5°	0.3	0.3	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



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**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)