

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: P518844

Luminaire Tested: **SQ4-BB-125U-100D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518844  
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-100D-935-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

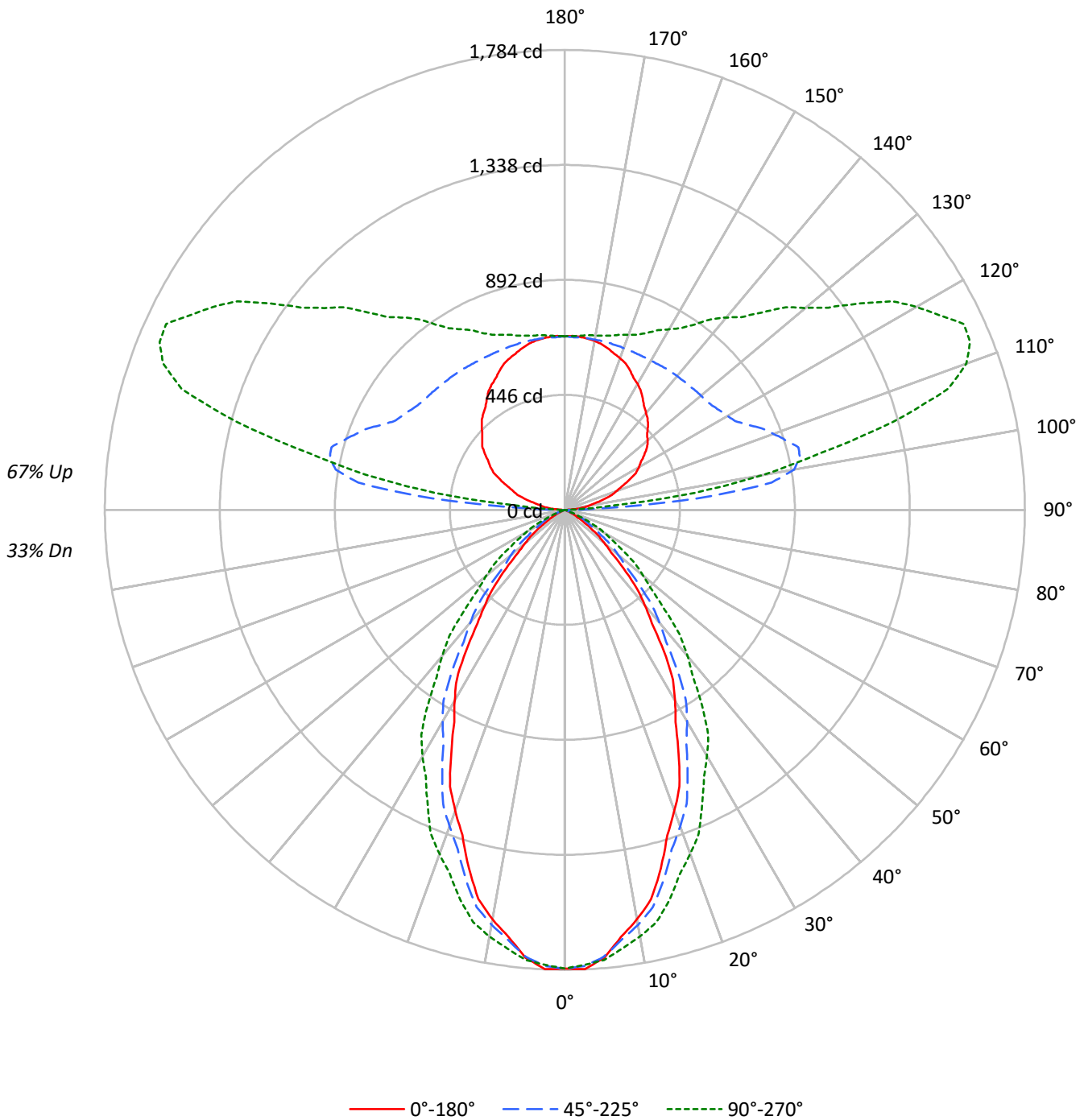
Lumens per Lamp: N/A  
Luminaire Lumens: 6468.0 lumens  
Efficiency: N/A  
Efficacy: 100.3 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 64.5  
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	88	81	76	71	79	74	69	65	59	56	54	46	45	43	34	33	32	27
3	81	72	66	61	73	66	60	56	54	50	47	42	40	38	32	30	29	24
4	74	65	58	53	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	24	20
6	64	53	45	40	58	48	42	38	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	20	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	27	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°	16416	16416	16416
5°	16152	16112	16232
10°	15113	15315	15742
15°	13739	14176	14965
20°	12196	12830	13954
25°	10621	11463	12821
30°	9097	10097	11748
35°	7543	8571	10452
40°	5796	6853	8907
45°	4190	5189	7166
50°	2855	3867	5684
55°	1856	2797	4417
60°	1065	1969	3192
65°	282	1203	1615
70°	140	372	464
75°	61	32	0
80°	48	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.4	2.5
10°-20°	415.3	6.4
20°-30°	519.9	8.0
30°-40°	480.2	7.4
40°-50°	322.6	5.0
50°-60°	166.7	2.6
60°-70°	52.2	0.8
70°-80°	3.3	0.1
80°-90°	1.6	0.0
90°-100°	314.8	4.9
100°-110°	847.9	13.1
110°-120°	889.9	13.8
120°-130°	722.1	11.2
130°-140°	566.3	8.8
140°-150°	434.8	6.7
150°-160°	312.6	4.8
160°-170°	191.0	3.0
170°-180°	64.4	1.0
0°-30°	1097.5	17.0
0°-40°	1577.7	24.4
0°-60°	2067.0	32.0
0°-90°	2124.2	32.8
90°-120°	2052.6	31.7
90°-150°	3775.9	58.4
90°-180°	4344.0	67.2
0°-180°	6468.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1779	1779	1779	1779	1779	
5°	1744	1726	1740	1746	1753	162
15°	1438	1433	1484	1534	1567	401
25°	1043	1052	1126	1203	1259	478
35°	670	687	761	850	928	415
45°	321	340	398	475	549	252
55°	115	135	174	223	275	108
65°	13	25	55	66	74	22
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	2	5	10	11	11	3
95°	48	171	516	264	183	50
105°	157	244	938	1403	1317	165
115°	277	339	781	1509	1707	272
125°	378	434	701	1185	1395	338
135°	455	508	682	956	1083	351
145°	526	567	673	817	878	330
155°	598	619	667	733	757	275
165°	648	656	670	696	700	183
175°	674	673	670	680	678	64
180°	673	673	673	673	673	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1779.3	1779.3	1779.3	1779.3	1779.3
2.5°	1783.5	1766.6	1771.1	1771.0	1766.2
5°	1744.0	1726.4	1739.7	1745.9	1752.6
7.5°	1670.4	1656.5	1682.2	1701.5	1715.5
10°	1613.2	1601.4	1634.7	1661.0	1680.3
12.5°	1547.1	1538.0	1578.2	1614.3	1639.0
15°	1438.4	1433.4	1484.1	1533.9	1566.7
17.5°	1322.1	1321.9	1379.7	1441.6	1481.1
20°	1242.2	1244.7	1306.7	1374.9	1421.2
22.5°	1162.3	1168.2	1234.4	1305.5	1358.6
25°	1043.3	1051.7	1126.0	1203.0	1259.4
27.5°	929.0	941.3	1019.4	1099.5	1168.1
30°	853.9	868.3	947.8	1032.0	1102.7
32.5°	780.3	797.3	874.8	963.9	1035.9
35°	669.7	686.6	761.0	850.5	928.0
37.5°	555.6	572.1	644.8	732.9	816.6
40°	481.2	499.7	569.0	654.4	739.5
42.5°	413.7	432.2	497.4	581.3	661.6
45°	321.1	340.4	397.7	475.1	549.2
47.5°	244.3	265.3	315.6	385.6	453.1
50°	198.9	219.9	269.4	331.2	396.0
52.5°	162.4	182.7	227.4	285.6	345.0
55°	115.4	134.7	173.9	223.3	274.6
57.5°	79.7	96.4	131.5	172.7	213.0
60°	57.7	73.7	106.7	140.2	173.0
62.5°	38.4	53.0	85.4	111.0	133.1
65°	12.9	24.7	55.1	66.5	74.0
67.5°	6.5	7.9	28.9	30.5	33.1
70°	5.2	5.2	13.8	14.7	17.2
72.5°	3.8	3.8	5.5	7.1	7.6
75°	1.7	1.7	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	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°	0.3	1.0	2.1	2.2	2.2
90°	1.7	5.1	10.3	11.1	11.1
92.5°	20.9	73.9	146.1	70.3	48.9
95°	48.0	171.2	516.0	263.9	182.6
97.5°	76.6	196.0	809.3	676.1	509.9
100°	98.6	205.9	902.6	944.4	783.5
102.5°	119.8	219.7	933.5	1145.3	1013.2
105°	156.9	244.0	937.8	1403.0	1316.6
107.5°	191.8	269.6	897.8	1535.4	1557.7
110°	215.2	288.9	861.5	1576.5	1657.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	239.8	308.2	826.5	1567.4	1701.0
115°	276.9	338.9	780.9	1508.8	1706.6
117.5°	310.6	368.8	745.6	1415.4	1635.7
120°	332.6	388.7	727.7	1348.3	1574.6
122.5°	351.8	407.3	714.7	1279.8	1505.4
125°	378.0	434.2	701.2	1185.1	1394.6
127.5°	403.2	458.5	692.6	1101.6	1288.7
130°	418.3	473.6	689.2	1053.8	1218.1
132.5°	433.4	488.0	685.7	1011.6	1162.5
135°	455.2	508.0	681.5	956.1	1082.6
137.5°	475.9	526.5	679.2	908.9	1012.8
140°	490.3	538.9	677.2	879.9	973.8
142.5°	505.4	550.7	675.8	852.8	931.9
145°	526.3	567.4	672.9	817.4	877.8
147.5°	548.9	584.6	670.0	787.6	835.1
150°	564.0	595.0	668.6	768.9	808.3
152.5°	577.7	604.7	667.9	753.7	785.7
155°	597.5	619.2	666.9	733.4	756.9
157.5°	614.8	631.7	667.1	719.2	734.9
160°	625.7	640.0	667.7	710.9	722.6
162.5°	635.3	646.9	668.4	703.9	712.3
165°	648.0	655.6	669.5	696.1	699.5
167.5°	658.3	662.7	670.3	690.1	691.4
170°	665.2	666.8	670.3	686.6	686.6
172.5°	669.3	669.6	671.0	683.2	683.2
175°	673.7	672.9	670.3	679.7	678.0
177.5°	675.6	674.3	670.8	676.3	674.9
180°	672.9	672.9	672.9	672.9	672.9

(END OF REPORT)