

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: P518842

Luminaire Tested: **SQ4-BB-125U-100D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518842  
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-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

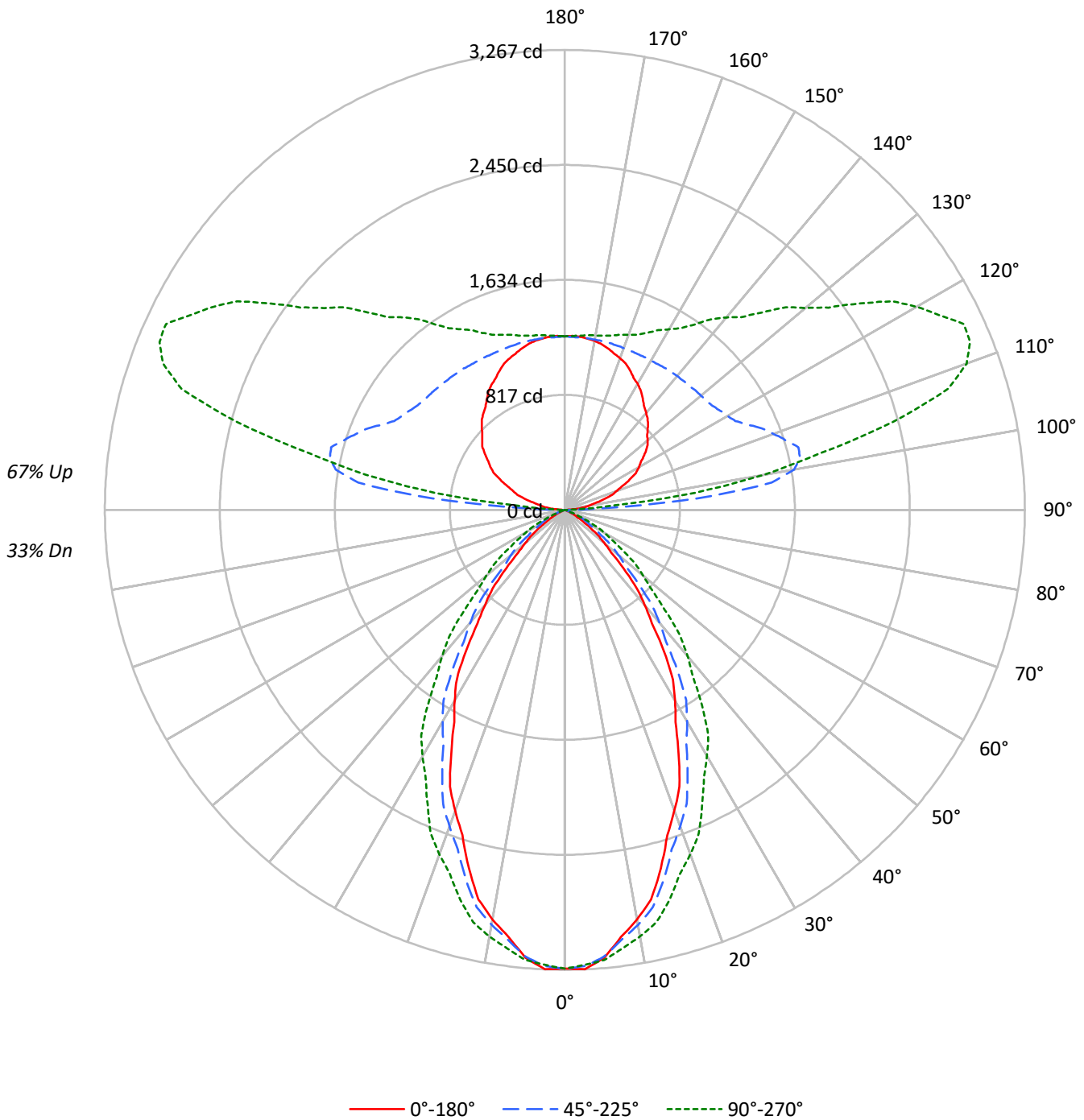
Lumens per Lamp: N/A  
Luminaire Lumens: 11847.2 lumens  
Efficiency: N/A  
Efficacy: 88.9 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 133.3  
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



TEST NUMBER: P518842  
CATALOG NUMBER: SQ4-BB-125U-100D-930-1D-UNV-STD-W-8

### Luminous Intensity Polar Plot





TEST NUMBER: P518842

CATALOG NUMBER: SQ4-BB-125U-100D-930-1D-UNV-STD-W-8

**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°	15035	15035	15035
5°	14793	14756	14866
10°	13841	14026	14417
15°	12583	12982	13705
20°	11169	11750	12780
25°	9727	10498	11742
30°	8332	9247	10759
35°	6908	7849	9572
40°	5308	6276	8156
45°	3837	4753	6563
50°	2614	3542	5205
55°	1699	2562	4045
60°	974	1804	2924
65°	259	1101	1480
70°	128	340	425
75°	57	29	0
80°	43	0	0
85°	0	0	0



TEST NUMBER: P518842

CATALOG NUMBER: SQ4-BB-125U-100D-930-1D-UNV-STD-W-8

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	297.4	2.5
10°-20°	760.6	6.4
20°-30°	952.2	8.0
30°-40°	879.5	7.4
40°-50°	591.0	5.0
50°-60°	305.3	2.6
60°-70°	95.6	0.8
70°-80°	6.1	0.1
80°-90°	3.0	0.0
90°-100°	576.6	4.9
100°-110°	1553.1	13.1
110°-120°	1629.9	13.8
120°-130°	1322.7	11.2
130°-140°	1037.3	8.8
140°-150°	796.4	6.7
150°-160°	572.6	4.8
160°-170°	349.8	3.0
170°-180°	118.0	1.0
0°-30°	2010.3	17.0
0°-40°	2889.8	24.4
0°-60°	3786.1	32.0
0°-90°	3890.7	32.8
90°-120°	3759.6	31.7
90°-150°	6916.0	58.4
90°-180°	7956.0	67.2
0°-180°	11847.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3259	3259	3259	3259	3259	
5°	3194	3162	3187	3198	3210	296
15°	2635	2626	2718	2810	2870	734
25°	1911	1926	2062	2204	2307	876
35°	1227	1258	1394	1558	1700	760
45°	588	624	728	870	1006	462
55°	211	247	318	409	503	197
65°	24	45	101	122	136	40
75°	3	3	2	0	0	5
85°	0	0	0	0	0	0
90°	3	9	19	20	20	6
95°	88	314	945	483	334	92
105°	287	447	1718	2570	2412	302
115°	507	621	1430	2764	3126	499
125°	692	795	1284	2171	2554	618
135°	834	930	1248	1751	1983	643
145°	964	1039	1232	1497	1608	605
155°	1094	1134	1222	1343	1386	504
165°	1187	1201	1226	1275	1281	335
175°	1234	1232	1228	1245	1242	117
180°	1232	1232	1232	1232	1232	



TEST NUMBER: P518842

CATALOG NUMBER: SQ4-BB-125U-100D-930-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3259.1	3259.1	3259.1	3259.1	3259.1
2.5°	3266.7	3235.9	3244.0	3243.8	3235.2
5°	3194.5	3162.1	3186.6	3197.9	3210.2
7.5°	3059.5	3034.2	3081.3	3116.5	3142.1
10°	2954.8	2933.2	2994.2	3042.3	3077.8
12.5°	2833.7	2817.1	2890.8	2956.8	3002.1
15°	2634.7	2625.5	2718.3	2809.5	2869.7
17.5°	2421.6	2421.2	2527.2	2640.5	2712.9
20°	2275.2	2279.9	2393.5	2518.4	2603.2
22.5°	2128.9	2139.7	2261.0	2391.3	2488.4
25°	1911.0	1926.4	2062.4	2203.5	2306.8
27.5°	1701.6	1724.1	1867.2	2013.8	2139.6
30°	1564.1	1590.3	1736.0	1890.3	2019.8
32.5°	1429.2	1460.3	1602.3	1765.5	1897.4
35°	1226.7	1257.5	1393.8	1557.9	1699.7
37.5°	1017.6	1047.8	1181.0	1342.4	1495.7
40°	881.4	915.3	1042.2	1198.7	1354.4
42.5°	757.8	791.7	911.0	1064.8	1211.9
45°	588.1	623.6	728.5	870.3	1006.0
47.5°	447.5	486.0	578.0	706.4	830.0
50°	364.2	402.8	493.5	606.6	725.3
52.5°	297.4	334.7	416.6	523.1	632.0
55°	211.3	246.7	318.5	408.9	503.0
57.5°	146.0	176.5	240.9	316.4	390.1
60°	105.6	134.9	195.5	256.8	316.9
62.5°	70.3	97.1	156.4	203.4	243.8
65°	23.7	45.2	100.9	121.7	135.6
67.5°	12.0	14.4	53.0	55.9	60.5
70°	9.5	9.5	25.2	26.9	31.5
72.5°	6.9	6.9	10.1	13.0	13.9
75°	3.2	3.2	1.6	0.0	0.0
77.5°	1.6	1.6	1.3	0.0	0.0
80°	1.6	1.6	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°	0.6	1.9	3.8	4.1	4.1
90°	3.1	9.3	18.8	20.4	20.4
92.5°	38.3	135.3	267.5	128.8	89.5
95°	87.9	313.6	945.2	483.3	334.4
97.5°	140.4	359.0	1482.4	1238.4	933.9
100°	180.6	377.1	1653.3	1729.8	1435.0
102.5°	219.5	402.5	1709.8	2097.7	1855.8
105°	287.3	447.0	1717.6	2569.7	2411.6
107.5°	351.4	493.8	1644.5	2812.3	2853.1
110°	394.1	529.2	1577.9	2887.6	3036.5

TEST NUMBER: P518842

CATALOG NUMBER: SQ4-BB-125U-100D-930-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	439.3	564.6	1513.8	2870.9	3115.6
115°	507.1	620.7	1430.3	2763.7	3126.0
117.5°	569.0	675.5	1365.6	2592.5	2996.0
120°	609.2	712.0	1333.0	2469.7	2884.2
122.5°	644.4	746.0	1309.1	2344.1	2757.3
125°	692.4	795.3	1284.3	2170.7	2554.5
127.5°	738.6	839.9	1268.6	2017.8	2360.4
130°	766.2	867.5	1262.3	1930.2	2231.1
132.5°	793.8	893.9	1256.0	1853.0	2129.3
135°	833.7	930.4	1248.2	1751.2	1983.0
137.5°	871.7	964.4	1244.1	1664.8	1855.2
140°	898.1	987.1	1240.3	1611.6	1783.6
142.5°	925.7	1008.6	1237.8	1562.0	1707.0
145°	964.0	1039.2	1232.5	1497.2	1607.7
147.5°	1005.5	1070.9	1227.2	1442.7	1529.5
150°	1033.1	1089.9	1224.6	1408.4	1480.6
152.5°	1058.2	1107.7	1223.4	1380.5	1439.1
155°	1094.3	1134.2	1221.5	1343.4	1386.4
157.5°	1126.0	1157.1	1221.8	1317.3	1346.2
160°	1146.1	1172.2	1223.1	1302.1	1323.6
162.5°	1163.7	1184.9	1224.3	1289.4	1304.7
165°	1187.0	1200.8	1226.2	1275.0	1281.2
167.5°	1205.8	1213.8	1227.8	1264.0	1266.4
170°	1218.4	1221.4	1227.8	1257.6	1257.6
172.5°	1225.9	1226.5	1229.0	1251.3	1251.3
175°	1234.1	1232.5	1227.8	1245.0	1241.9
177.5°	1237.5	1235.1	1228.7	1238.7	1236.3
180°	1232.5	1232.5	1232.5	1232.5	1232.5

(END OF REPORT)