

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: P518841

Luminaire Tested: **SQ4-BB-125U-100D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518841  
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-6  
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**

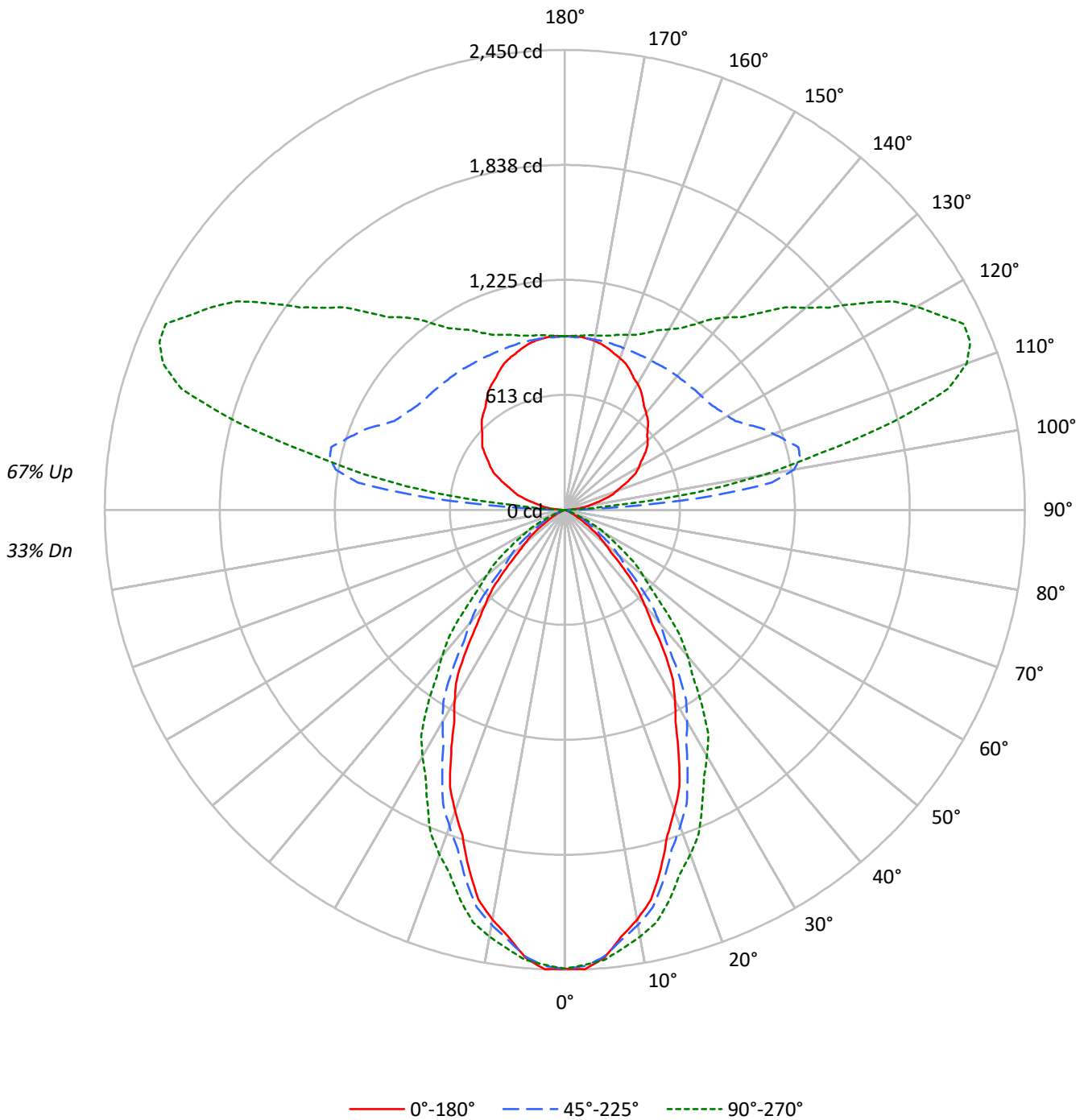
Lumens per Lamp: N/A  
Luminaire Lumens: 8885.4 lumens  
Efficiency: N/A  
Efficacy: 86.4 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 102.8  
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	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°	15034	15034	15034
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	7850	9572
40°	5307	6277	8156
45°	3837	4752	6563
50°	2614	3541	5206
55°	1700	2562	4045
60°	974	1803	2924
65°	258	1102	1480
70°	128	340	426
75°	57	29	0
80°	43	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	223.1	2.5
10°-20°	570.5	6.4
20°-30°	714.2	8.0
30°-40°	659.7	7.4
40°-50°	443.3	5.0
50°-60°	228.9	2.6
60°-70°	71.7	0.8
70°-80°	4.5	0.1
80°-90°	2.3	0.0
90°-100°	432.4	4.9
100°-110°	1164.8	13.1
110°-120°	1222.5	13.8
120°-130°	992.0	11.2
130°-140°	778.0	8.8
140°-150°	597.3	6.7
150°-160°	429.5	4.8
160°-170°	262.4	3.0
170°-180°	88.5	1.0
0°-30°	1507.7	17.0
0°-40°	2167.4	24.4
0°-60°	2839.6	32.0
0°-90°	2918.1	32.8
90°-120°	2819.7	31.7
90°-150°	5187.0	58.4
90°-180°	5967.0	67.2
0°-180°	8885.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2444	2444	2444	2444	2444	
5°	2396	2372	2390	2398	2408	222
15°	1976	1969	2039	2107	2152	550
25°	1433	1445	1547	1653	1730	657
35°	920	943	1045	1168	1275	570
45°	441	468	546	653	754	346
55°	158	185	239	307	377	148
65°	18	34	76	91	102	30
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	7	14	15	15	5
95°	66	235	709	362	251	69
105°	216	335	1288	1927	1809	227
115°	380	466	1073	2073	2344	374
125°	519	596	963	1628	1916	464
135°	625	698	936	1313	1487	483
145°	723	779	924	1123	1206	453
155°	821	851	916	1008	1040	378
165°	890	901	920	956	961	251
175°	926	924	921	934	931	88
180°	924	924	924	924	924	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2444.3	2444.3	2444.3	2444.3	2444.3
2.5°	2450.0	2426.9	2433.0	2432.8	2426.4
5°	2395.9	2371.6	2389.9	2398.4	2407.7
7.5°	2294.6	2275.7	2310.9	2337.4	2356.6
10°	2216.1	2199.9	2245.7	2281.8	2308.3
12.5°	2125.3	2112.8	2168.1	2217.6	2251.6
15°	1976.0	1969.1	2038.7	2107.2	2152.2
17.5°	1816.2	1815.9	1895.4	1980.4	2034.7
20°	1706.4	1709.9	1795.1	1888.8	1952.4
22.5°	1596.7	1604.8	1695.8	1793.5	1866.3
25°	1433.3	1444.8	1546.8	1652.6	1730.1
27.5°	1276.2	1293.1	1400.4	1510.4	1604.7
30°	1173.1	1192.8	1302.0	1417.7	1514.9
32.5°	1071.9	1095.2	1201.7	1324.1	1423.1
35°	920.0	943.2	1045.4	1168.4	1274.8
37.5°	763.2	785.9	885.7	1006.8	1121.8
40°	661.0	686.5	781.7	899.0	1015.8
42.5°	568.3	593.8	683.3	798.6	908.9
45°	441.1	467.7	546.3	652.7	754.5
47.5°	335.6	364.5	433.5	529.8	622.5
50°	273.2	302.1	370.1	454.9	544.0
52.5°	223.0	251.0	312.4	392.3	474.0
55°	158.5	185.1	238.9	306.7	377.2
57.5°	109.5	132.4	180.7	237.3	292.6
60°	79.2	101.2	146.6	192.6	237.7
62.5°	52.7	72.9	117.3	152.5	182.8
65°	17.7	33.9	75.7	91.3	101.7
67.5°	9.0	10.8	39.7	41.9	45.4
70°	7.1	7.1	18.9	20.2	23.7
72.5°	5.2	5.2	7.6	9.7	10.4
75°	2.4	2.4	1.2	0.0	0.0
77.5°	1.2	1.2	0.9	0.0	0.0
80°	1.2	1.2	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°	0.5	1.4	2.8	3.1	3.1
90°	2.4	7.0	14.1	15.3	15.3
92.5°	28.7	101.5	200.7	96.6	67.1
95°	65.9	235.2	708.9	362.5	250.8
97.5°	105.3	269.2	1111.8	928.8	700.4
100°	135.4	282.8	1240.0	1297.3	1076.3
102.5°	164.6	301.9	1282.3	1573.3	1391.9
105°	215.5	335.2	1288.2	1927.3	1808.7
107.5°	263.5	370.4	1233.4	2109.2	2139.8
110°	295.6	396.9	1183.4	2165.7	2277.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	329.5	423.4	1135.4	2153.2	2336.7
115°	380.3	465.5	1072.7	2072.8	2344.5
117.5°	426.7	506.6	1024.2	1944.4	2247.0
120°	456.9	534.0	999.7	1852.3	2163.1
122.5°	483.3	559.5	981.8	1758.0	2068.0
125°	519.3	596.4	963.2	1628.0	1915.9
127.5°	553.9	629.9	951.5	1513.3	1770.3
130°	574.6	650.6	946.7	1447.6	1673.3
132.5°	595.4	670.4	942.0	1389.7	1597.0
135°	625.3	697.8	936.1	1313.4	1487.2
137.5°	653.8	723.3	933.1	1248.6	1391.4
140°	673.6	740.3	930.3	1208.7	1337.7
142.5°	694.3	756.5	928.4	1171.5	1280.2
145°	723.0	779.4	924.4	1122.9	1205.8
147.5°	754.1	803.1	920.4	1082.0	1147.2
150°	774.8	817.4	918.5	1056.3	1110.4
152.5°	793.7	830.7	917.5	1035.4	1079.3
155°	820.7	850.7	916.1	1007.5	1039.8
157.5°	844.5	867.8	916.4	988.0	1009.6
160°	859.6	879.2	917.3	976.5	992.7
162.5°	872.8	888.7	918.2	967.0	978.5
165°	890.2	900.6	919.7	956.3	960.9
167.5°	904.4	910.3	920.8	948.0	949.8
170°	913.8	916.1	920.8	943.2	943.2
172.5°	919.4	919.9	921.8	938.5	938.5
175°	925.5	924.4	920.8	933.7	931.4
177.5°	928.1	926.3	921.5	929.0	927.2
180°	924.4	924.4	924.4	924.4	924.4

(END OF REPORT)