

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: P518750

Luminaire Tested: **SQ4-BB-100U-100D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518750  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-100D-935-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

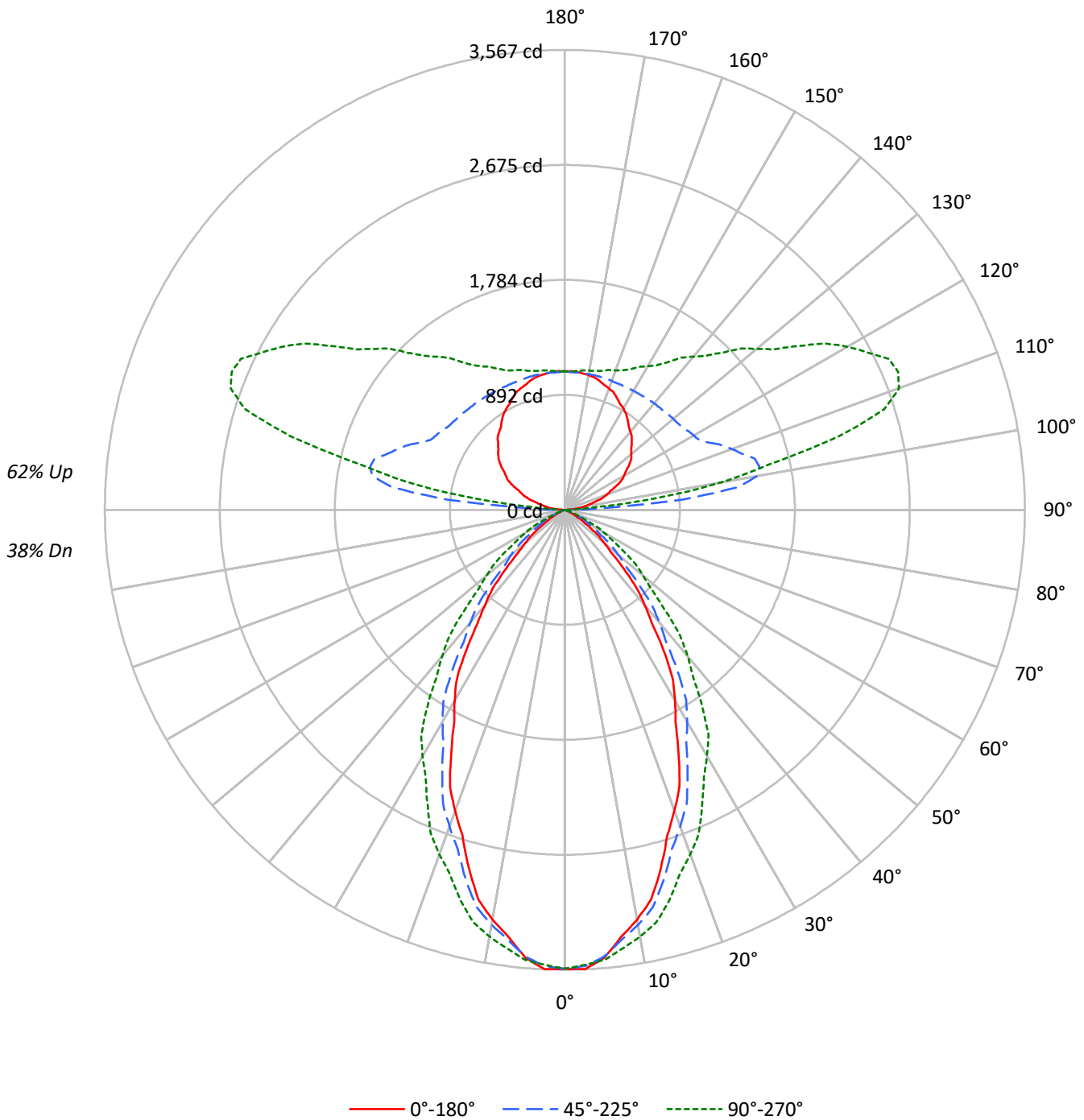
Lumens per Lamp: N/A  
Luminaire Lumens: 11226.9 lumens  
Efficiency: N/A  
Efficacy: 92.6 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 121.2  
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	87	84	82	79	69	67	65	55	54	53	42	41	41	35
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	38	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28
4	76	66	59	54	69	61	55	50	51	46	43	41	38	36	33	31	29	25
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	37	34	35	31	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	38	32	28	33	28	25	28	24	22	23	20	19	16
10	49	38	32	27	45	36	30	26	30	26	23	26	22	20	21	19	17	15

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

	0°	45°	90°
0°	16417	16417	16417
5°	16152	16113	16232
10°	15113	15315	15742
15°	13740	14175	14965
20°	12196	12830	13954
25°	10621	11462	12821
30°	9098	10097	11748
35°	7543	8571	10452
40°	5796	6853	8906
45°	4190	5189	7166
50°	2854	3868	5684
55°	1855	2797	4417
60°	1065	1970	3193
65°	282	1203	1617
70°	139	371	464
75°	61	30	0
80°	45	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	324.8	2.9
10°-20°	830.5	7.4
20°-30°	1039.7	9.3
30°-40°	960.4	8.6
40°-50°	645.3	5.7
50°-60°	333.3	3.0
60°-70°	104.4	0.9
70°-80°	6.6	0.1
80°-90°	2.3	0.0
90°-100°	503.0	4.5
100°-110°	1388.8	12.4
110°-120°	1432.3	12.8
120°-130°	1150.9	10.3
130°-140°	904.5	8.1
140°-150°	693.7	6.2
150°-160°	498.6	4.4
160°-170°	304.9	2.7
170°-180°	102.8	0.9
0°-30°	2195.0	19.6
0°-40°	3155.4	28.1
0°-60°	4134.1	36.8
0°-90°	4247.4	37.8
90°-120°	3324.1	29.6
90°-150°	6073.2	54.1
90°-180°	6979.0	62.2
0°-180°	11226.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3559	3559	3559	3559	3559	
5°	3488	3453	3480	3492	3505	323
15°	2877	2867	2968	3068	3133	801
25°	2087	2104	2252	2406	2519	957
35°	1339	1373	1522	1701	1856	830
45°	642	681	795	950	1098	504
55°	231	269	348	446	549	215
65°	26	49	110	133	148	44
75°	3	3	2	0	0	5
85°	0	0	0	0	0	0
90°	3	7	14	16	17	5
95°	74	272	913	375	244	79
105°	248	382	1528	2333	2196	263
115°	443	536	1231	2436	2770	436
125°	608	692	1115	1888	2215	541
135°	732	811	1084	1529	1724	566
145°	849	908	1071	1302	1401	532
155°	957	989	1062	1168	1205	441
165°	1036	1050	1067	1109	1117	292
175°	1074	1076	1069	1084	1081	102
180°	1074	1074	1074	1074	1074	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3558.7	3558.7	3558.7	3558.7	3558.7
2.5°	3566.9	3533.3	3542.1	3541.9	3532.5
5°	3488.1	3452.7	3479.5	3491.8	3505.3
7.5°	3340.7	3313.1	3364.5	3403.0	3430.9
10°	3226.4	3202.8	3269.4	3322.0	3360.7
12.5°	3094.2	3076.0	3156.5	3228.5	3278.0
15°	2876.9	2866.8	2968.1	3067.8	3133.4
17.5°	2644.1	2643.8	2759.5	2883.2	2962.3
20°	2484.4	2489.4	2613.5	2749.9	2842.5
22.5°	2324.6	2336.4	2468.9	2611.1	2717.1
25°	2086.6	2103.5	2251.9	2406.0	2518.8
27.5°	1858.0	1882.6	2038.8	2198.9	2336.3
30°	1707.9	1736.5	1895.5	2064.0	2205.4
32.5°	1560.5	1594.5	1749.5	1927.7	2071.8
35°	1339.4	1373.1	1521.9	1701.1	1855.9
37.5°	1111.2	1144.2	1289.5	1465.8	1633.2
40°	962.4	999.4	1138.0	1308.9	1478.9
42.5°	827.4	864.5	994.8	1162.7	1323.3
45°	642.2	680.9	795.4	950.3	1098.4
47.5°	488.6	530.7	631.2	771.3	906.3
50°	397.7	439.8	538.9	662.3	792.0
52.5°	324.7	365.4	454.9	571.2	690.0
55°	230.7	269.4	347.8	446.5	549.2
57.5°	159.4	192.8	263.1	345.5	425.9
60°	115.4	147.3	213.5	280.4	346.1
62.5°	76.8	106.1	170.8	222.1	266.2
65°	25.8	49.4	110.2	132.9	148.1
67.5°	13.1	15.8	57.8	61.1	66.1
70°	10.3	10.3	27.5	29.4	34.4
72.5°	7.6	7.6	11.0	14.1	15.2
75°	3.4	3.4	1.7	0.0	0.0
77.5°	1.7	1.7	1.4	0.0	0.0
80°	1.7	1.7	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°	0.7	1.4	2.7	3.1	3.4
90°	3.4	6.8	13.7	15.5	17.2
92.5°	30.9	128.4	229.6	83.8	65.3
95°	73.9	272.2	912.6	375.1	244.1
97.5°	122.4	304.9	1351.9	1040.9	753.8
100°	158.1	324.5	1514.2	1524.9	1239.2
102.5°	192.5	346.8	1545.8	1884.1	1613.2
105°	247.5	381.9	1527.9	2332.6	2196.5
107.5°	305.9	425.6	1442.7	2548.9	2598.7
110°	347.2	454.7	1376.7	2595.5	2756.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	384.3	487.8	1314.8	2558.7	2796.7
115°	443.4	535.9	1230.6	2436.1	2770.5
117.5°	495.0	587.1	1175.2	2263.6	2644.0
120°	529.4	620.1	1153.2	2146.8	2529.9
122.5°	562.4	649.1	1135.4	2037.7	2400.7
125°	608.4	692.4	1115.4	1887.7	2215.4
127.5°	647.6	731.6	1103.7	1760.9	2043.5
130°	673.7	757.8	1098.2	1683.3	1940.4
132.5°	698.5	778.5	1092.7	1618.1	1851.0
135°	732.2	811.1	1084.5	1528.9	1723.9
137.5°	770.0	841.9	1080.4	1454.0	1620.4
140°	790.6	861.2	1077.6	1404.1	1550.3
142.5°	814.0	879.2	1074.9	1359.7	1488.4
145°	849.0	907.9	1070.7	1301.6	1400.7
147.5°	882.7	934.1	1067.0	1252.6	1329.6
150°	907.5	949.5	1065.6	1223.4	1285.6
152.5°	926.7	966.0	1064.2	1198.4	1249.8
155°	957.3	989.2	1062.2	1167.8	1204.8
157.5°	985.5	1010.0	1062.5	1145.6	1170.8
160°	1002.0	1023.8	1063.9	1133.0	1151.5
162.5°	1015.8	1034.9	1065.2	1122.0	1136.4
165°	1036.4	1049.8	1067.3	1108.8	1117.2
167.5°	1052.2	1060.3	1069.0	1100.7	1103.4
170°	1060.4	1067.2	1069.0	1096.5	1096.5
172.5°	1067.3	1071.3	1069.0	1091.0	1089.7
175°	1074.2	1075.9	1069.0	1084.4	1081.1
177.5°	1076.9	1075.6	1068.7	1078.2	1075.6
180°	1074.2	1074.2	1074.2	1074.2	1074.2

(END OF REPORT)