

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: P518719

Luminaire Tested: **SQ4-BB-100U-075D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518719  
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-075D-930-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

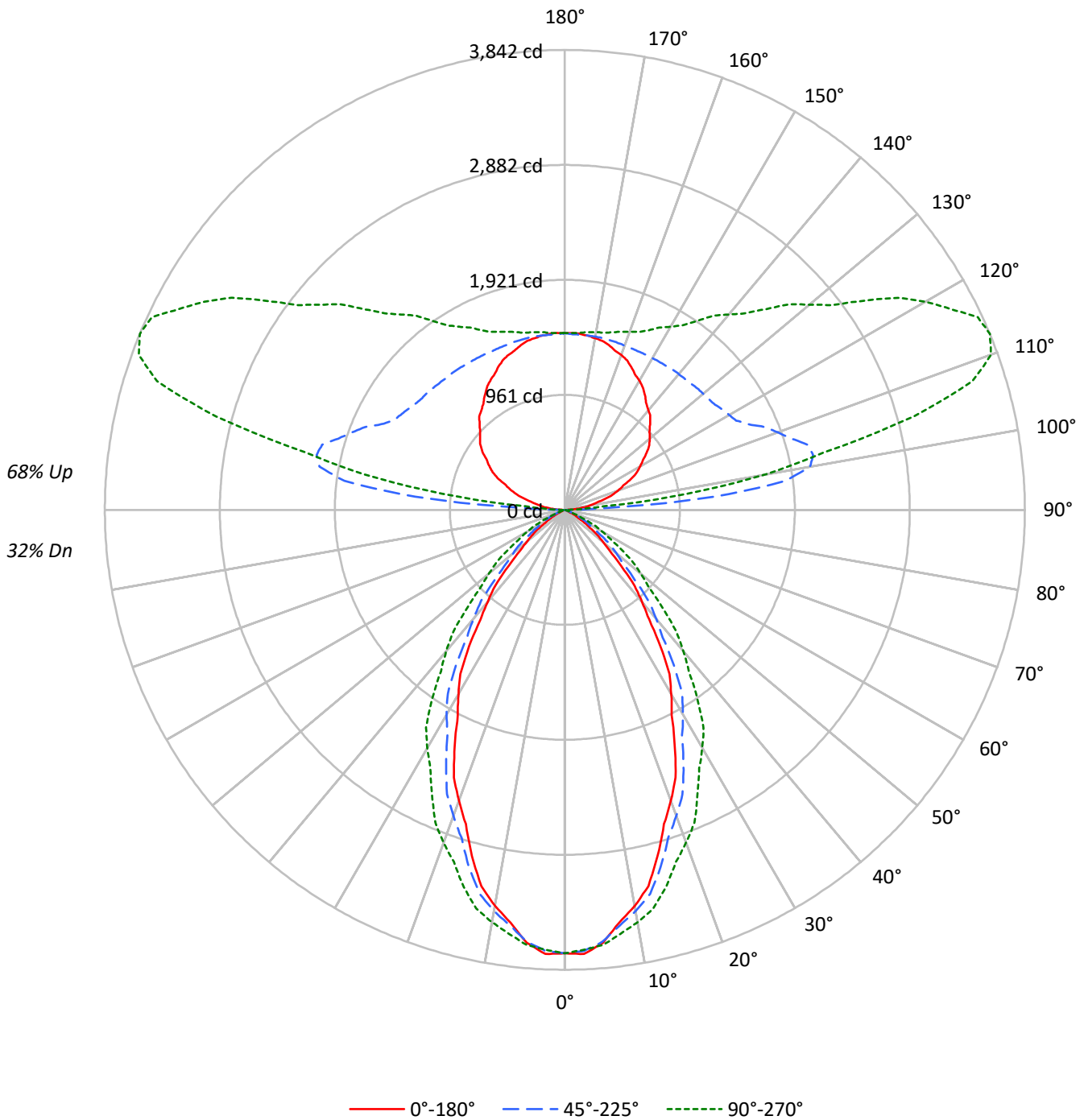
Lumens per Lamp: N/A  
Luminaire Lumens: 14010.3 lumens  
Efficiency: N/A  
Efficacy: 91.3 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 153.4  
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	92	92	92	92	73	73	73	55	55	55	39	39	39	32
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21
5	68	58	51	45	62	53	47	42	43	39	36	34	31	29	26	24	23	19
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18
7	59	48	40	35	53	44	37	33	36	32	28	29	26	24	22	20	19	16
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13

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

	0°	45°	90°
0°	11393	11393	11393
5°	11210	11182	11265
10°	10489	10629	10925
15°	9535	9838	10386
20°	8464	8904	9684
25°	7371	7955	8898
30°	6314	7008	8153
35°	5235	5948	7253
40°	4022	4756	6181
45°	2907	3601	4973
50°	1981	2684	3944
55°	1288	1941	3065
60°	739	1367	2216
65°	196	835	1121
70°	97	258	322
75°	43	21	0
80°	32	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	338.1	2.4
10°-20°	864.6	6.2
20°-30°	1082.4	7.7
30°-40°	999.8	7.1
40°-50°	671.8	4.8
50°-60°	347.0	2.5
60°-70°	108.7	0.8
70°-80°	6.9	0.0
80°-90°	3.2	0.0
90°-100°	691.1	4.9
100°-110°	1907.8	13.6
110°-120°	1967.5	14.0
120°-130°	1581.1	11.3
130°-140°	1242.6	8.9
140°-150°	953.0	6.8
150°-160°	684.9	4.9
160°-170°	418.9	3.0
170°-180°	141.2	1.0
0°-30°	2285.0	16.3
0°-40°	3284.8	23.4
0°-60°	4303.6	30.7
0°-90°	4422.3	31.6
90°-120°	4566.4	32.6
90°-150°	8343.0	59.5
90°-180°	9588.0	68.4
0°-180°	14010.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3705	3705	3705	3705	3705	
5°	3631	3594	3622	3635	3649	337
15°	2995	2984	3090	3194	3262	834
25°	2172	2190	2344	2505	2622	996
35°	1394	1429	1584	1771	1932	864
45°	668	709	828	989	1144	525
55°	240	280	362	465	572	224
65°	27	51	115	138	154	45
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	5	9	19	21	24	7
95°	102	374	1254	515	335	109
105°	340	525	2099	3204	3017	362
115°	609	736	1690	3347	3806	599
125°	836	951	1532	2593	3043	744
135°	1006	1114	1490	2100	2368	778
145°	1166	1247	1471	1788	1924	730
155°	1315	1359	1459	1604	1655	606
165°	1424	1442	1466	1523	1535	401
175°	1476	1478	1469	1490	1485	140
180°	1476	1476	1476	1476	1476	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3704.6	3704.6	3704.6	3704.6	3704.6
2.5°	3713.2	3678.1	3687.4	3687.1	3677.3
5°	3631.1	3594.3	3622.1	3635.0	3649.0
7.5°	3477.7	3448.9	3502.4	3542.5	3571.6
10°	3358.7	3334.1	3403.5	3458.2	3498.5
12.5°	3221.0	3202.1	3285.9	3360.9	3412.4
15°	2994.8	2984.3	3089.8	3193.5	3261.9
17.5°	2752.5	2752.2	2872.6	3001.4	3083.7
20°	2586.2	2591.5	2720.6	2862.6	2959.0
22.5°	2419.9	2432.2	2570.1	2718.1	2828.5
25°	2172.2	2189.7	2344.3	2504.6	2622.1
27.5°	1934.2	1959.8	2122.4	2289.1	2432.1
30°	1777.9	1807.7	1973.3	2148.7	2295.9
32.5°	1624.5	1659.9	1821.3	2006.8	2156.8
35°	1394.4	1429.4	1584.3	1770.8	1932.0
37.5°	1156.7	1191.1	1342.4	1525.9	1700.1
40°	1001.9	1040.4	1184.7	1362.5	1539.5
42.5°	861.4	899.9	1035.6	1210.3	1377.5
45°	668.5	708.8	828.0	989.2	1143.5
47.5°	508.6	552.4	657.0	802.9	943.4
50°	414.0	457.8	561.0	689.5	824.4
52.5°	338.0	380.4	473.5	594.6	718.3
55°	240.2	280.5	362.0	464.8	571.7
57.5°	166.0	200.7	273.9	359.6	443.4
60°	120.1	153.4	222.2	291.9	360.2
62.5°	79.9	110.4	177.8	231.2	277.1
65°	26.9	51.4	114.7	138.4	154.1
67.5°	13.6	16.4	60.2	63.6	68.8
70°	10.8	10.8	28.7	30.6	35.8
72.5°	7.9	7.9	11.5	14.7	15.8
75°	3.6	3.6	1.8	0.0	0.0
77.5°	1.8	1.8	1.4	0.0	0.0
80°	1.8	1.8	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	1.9	3.8	4.3	4.7
90°	4.7	9.3	18.9	21.3	23.6
92.5°	42.5	176.4	315.4	115.1	89.7
95°	101.5	373.9	1253.7	515.3	335.3
97.5°	168.1	418.8	1857.2	1429.9	1035.6
100°	217.2	445.8	2080.1	2094.8	1702.3
102.5°	264.4	476.4	2123.5	2588.2	2216.1
105°	340.0	524.7	2099.0	3204.4	3017.4
107.5°	420.3	584.6	1981.9	3501.6	3569.9
110°	476.9	624.7	1891.2	3565.5	3787.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	527.9	670.1	1806.2	3515.0	3841.9
115°	609.1	736.1	1690.5	3346.6	3806.0
117.5°	680.0	806.5	1614.5	3109.6	3632.2
120°	727.2	851.9	1584.3	2949.1	3475.5
122.5°	772.5	891.7	1559.7	2799.3	3297.9
125°	835.8	951.2	1532.3	2593.2	3043.4
127.5°	889.6	1005.1	1516.3	2419.0	2807.3
130°	925.5	1041.0	1508.7	2312.4	2665.6
132.5°	959.5	1069.4	1501.2	2222.9	2542.8
135°	1005.8	1114.3	1489.8	2100.3	2368.1
137.5°	1057.7	1156.6	1484.2	1997.4	2226.0
140°	1086.1	1183.0	1480.4	1928.8	2129.7
142.5°	1118.2	1207.8	1476.6	1867.8	2044.7
145°	1166.4	1247.2	1470.9	1788.0	1924.3
147.5°	1212.6	1283.3	1465.7	1720.8	1826.5
150°	1246.6	1304.3	1463.8	1680.6	1766.1
152.5°	1273.1	1327.1	1462.0	1646.3	1717.0
155°	1315.1	1359.0	1459.1	1604.3	1655.1
157.5°	1353.8	1387.5	1459.6	1573.7	1608.3
160°	1376.5	1406.5	1461.5	1556.5	1581.9
162.5°	1395.4	1421.7	1463.4	1541.3	1561.1
165°	1423.7	1442.2	1466.2	1523.1	1534.7
167.5°	1445.4	1456.5	1468.6	1512.1	1515.8
170°	1456.8	1466.0	1468.6	1506.3	1506.3
172.5°	1466.2	1471.7	1468.6	1498.7	1496.9
175°	1475.7	1478.0	1468.6	1489.7	1485.1
177.5°	1479.4	1477.6	1468.1	1481.2	1477.5
180°	1475.7	1475.7	1475.7	1475.7	1475.7

(END OF REPORT)