

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: P518745

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518745  
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-930-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

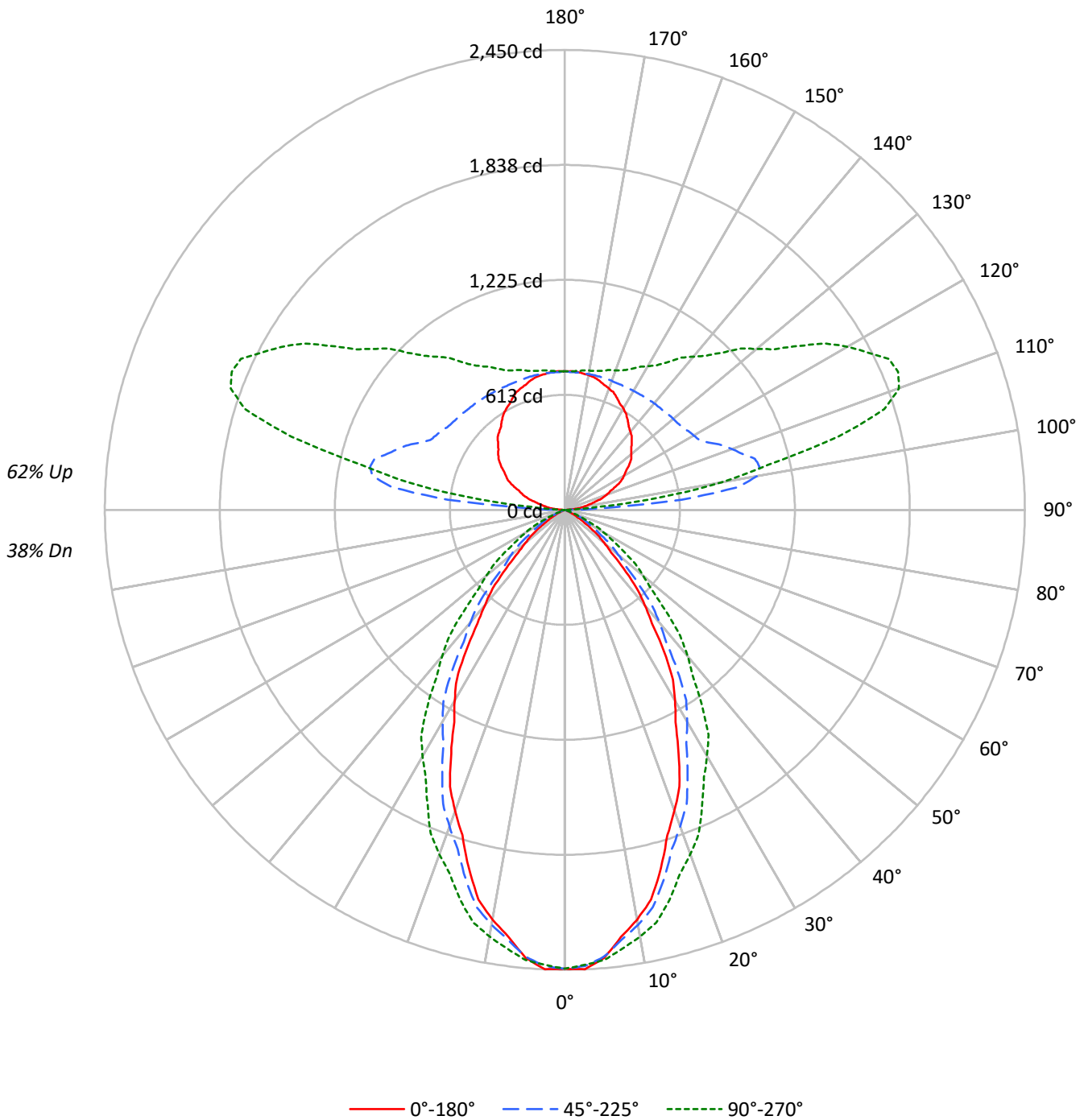
Lumens per Lamp: N/A  
Luminaire Lumens: 7711.4 lumens  
Efficiency: N/A  
Efficacy: 83.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 92.9  
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°	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	2.9
10°-20°	570.5	7.4
20°-30°	714.2	9.3
30°-40°	659.7	8.6
40°-50°	443.3	5.7
50°-60°	228.9	3.0
60°-70°	71.7	0.9
70°-80°	4.5	0.1
80°-90°	1.6	0.0
90°-100°	345.5	4.5
100°-110°	953.9	12.4
110°-120°	983.8	12.8
120°-130°	790.5	10.3
130°-140°	621.3	8.1
140°-150°	476.5	6.2
150°-160°	342.5	4.4
160°-170°	209.4	2.7
170°-180°	70.6	0.9
0°-30°	1507.7	19.6
0°-40°	2167.4	28.1
0°-60°	2839.6	36.8
0°-90°	2917.4	37.8
90°-120°	2283.2	29.6
90°-150°	4171.5	54.1
90°-180°	4794.0	62.2
0°-180°	7711.4	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	5	9	11	12	4
95°	51	187	627	258	168	54
105°	170	262	1050	1602	1509	181
115°	305	368	845	1673	1903	299
125°	418	476	766	1297	1522	372
135°	503	557	745	1050	1184	389
145°	583	624	736	894	962	365
155°	658	680	730	802	828	303
165°	712	721	733	762	767	201
175°	738	739	734	745	742	70
180°	738	738	738	738	738	

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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	0.9	1.9	2.1	2.4
90°	2.4	4.7	9.4	10.7	11.8
92.5°	21.2	88.2	157.7	57.6	44.9
95°	50.8	187.0	626.9	257.7	167.6
97.5°	84.1	209.4	928.6	714.9	517.8
100°	108.6	222.9	1040.0	1047.4	851.2
102.5°	132.2	238.2	1061.8	1294.1	1108.0
105°	170.0	262.3	1049.5	1602.2	1508.7
107.5°	210.1	292.3	990.9	1750.8	1784.9
110°	238.5	312.3	945.6	1782.7	1893.6

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	264.0	335.1	903.1	1757.5	1920.9
115°	304.6	368.1	845.3	1673.3	1903.0
117.5°	340.0	403.2	807.2	1554.8	1816.1
120°	363.6	425.9	792.1	1474.6	1737.7
122.5°	386.3	445.8	779.9	1399.6	1649.0
125°	417.9	475.6	766.2	1296.6	1521.7
127.5°	444.8	502.5	758.1	1209.5	1403.6
130°	462.8	520.5	754.4	1156.2	1332.8
132.5°	479.8	534.7	750.6	1111.4	1271.4
135°	502.9	557.2	744.9	1050.2	1184.1
137.5°	528.9	578.3	742.1	998.7	1113.0
140°	543.0	591.5	740.2	964.4	1064.8
142.5°	559.1	603.9	738.3	933.9	1022.3
145°	583.2	623.6	735.5	894.0	962.1
147.5°	606.3	641.6	732.9	860.4	913.3
150°	623.3	652.2	731.9	840.3	883.0
152.5°	636.5	663.5	731.0	823.2	858.5
155°	657.6	679.5	729.6	802.2	827.5
157.5°	676.9	693.8	729.8	786.9	804.2
160°	688.2	703.2	730.7	778.3	790.9
162.5°	697.7	710.8	731.7	770.6	780.6
165°	711.9	721.1	733.1	761.6	767.3
167.5°	722.7	728.3	734.3	756.0	757.9
170°	728.4	733.0	734.3	753.2	753.2
172.5°	733.1	735.9	734.3	749.4	748.5
175°	737.8	739.0	734.3	744.9	742.5
177.5°	739.7	738.8	734.0	740.6	738.8
180°	737.8	737.8	737.8	737.8	737.8

(END OF REPORT)