

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: P518721

Luminaire Tested: **SQ4-BB-100U-075D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518721  
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-6  
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**

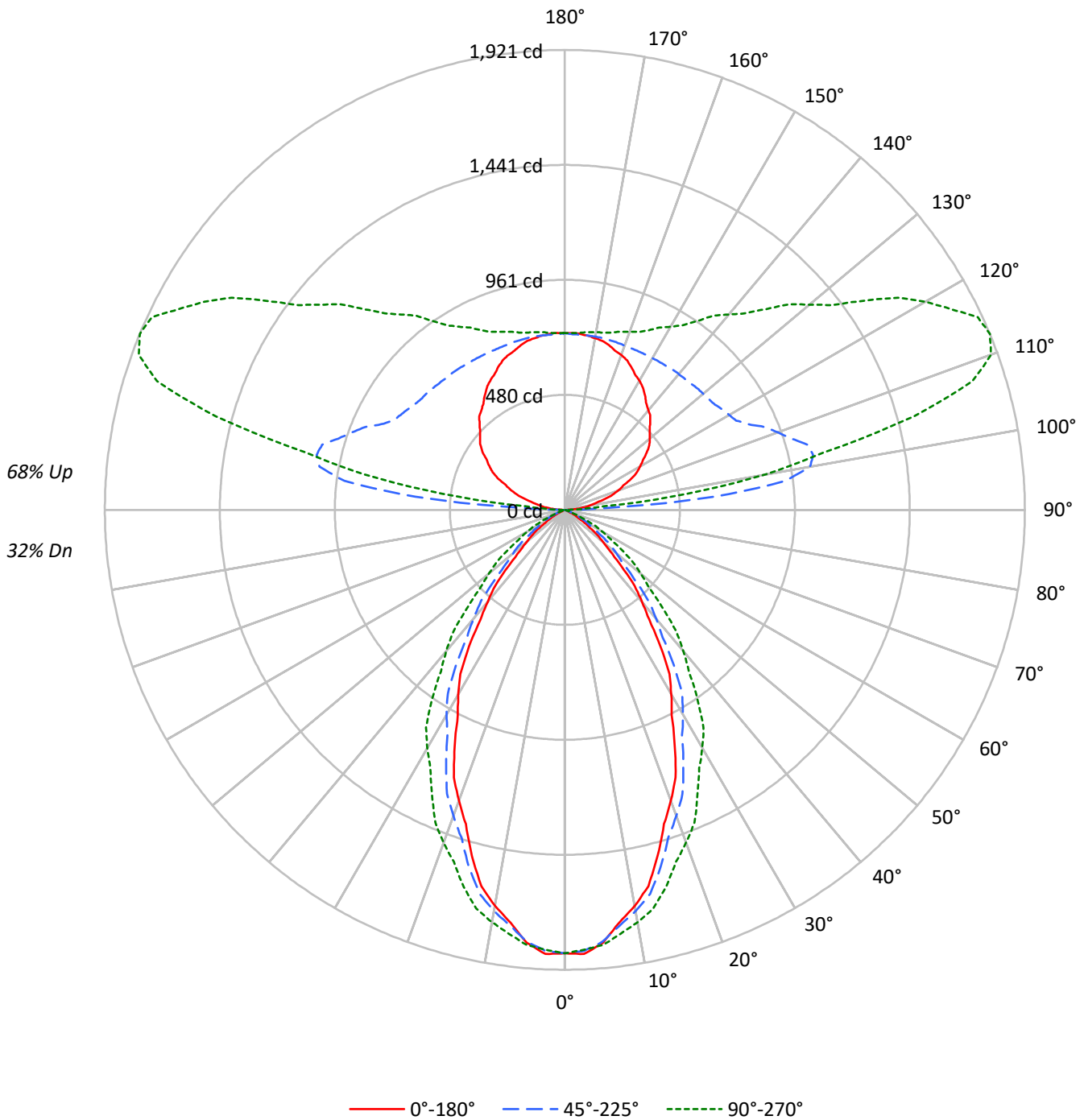
Lumens per Lamp: N/A  
Luminaire Lumens: 7005.1 lumens  
Efficiency: N/A  
Efficacy: 89.8 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 78  
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°	11209	11182	11265
10°	10488	10628	10925
15°	9535	9838	10385
20°	8464	8904	9684
25°	7371	7955	8897
30°	6314	7007	8153
35°	5235	5948	7253
40°	4022	4756	6181
45°	2908	3601	4973
50°	1981	2684	3944
55°	1288	1941	3066
60°	738	1367	2216
65°	195	835	1122
70°	97	257	322
75°	43	21	0
80°	32	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.0	2.4
10°-20°	432.3	6.2
20°-30°	541.2	7.7
30°-40°	499.9	7.1
40°-50°	335.9	4.8
50°-60°	173.5	2.5
60°-70°	54.3	0.8
70°-80°	3.4	0.0
80°-90°	1.6	0.0
90°-100°	345.5	4.9
100°-110°	953.9	13.6
110°-120°	983.8	14.0
120°-130°	790.5	11.3
130°-140°	621.3	8.9
140°-150°	476.5	6.8
150°-160°	342.5	4.9
160°-170°	209.4	3.0
170°-180°	70.6	1.0
0°-30°	1142.5	16.3
0°-40°	1642.4	23.4
0°-60°	2151.8	30.7
0°-90°	2211.1	31.6
90°-120°	2283.2	32.6
90°-150°	4171.5	59.5
90°-180°	4794.0	68.4
0°-180°	7005.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1852	1852	1852	1852	1852	
5°	1816	1797	1811	1818	1824	168
15°	1497	1492	1545	1597	1631	417
25°	1086	1095	1172	1252	1311	498
35°	697	715	792	885	966	432
45°	334	354	414	495	572	263
55°	120	140	181	232	286	112
65°	13	26	57	69	77	23
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°	1852.3	1852.3	1852.3	1852.3	1852.3
2.5°	1856.6	1839.1	1843.7	1843.6	1838.7
5°	1815.5	1797.1	1811.1	1817.5	1824.5
7.5°	1738.8	1724.5	1751.2	1771.2	1785.8
10°	1679.3	1667.1	1701.7	1729.1	1749.2
12.5°	1610.5	1601.0	1642.9	1680.5	1706.2
15°	1497.4	1492.2	1544.9	1596.8	1630.9
17.5°	1376.3	1376.1	1436.3	1500.7	1541.9
20°	1293.1	1295.7	1360.3	1431.3	1479.5
22.5°	1209.9	1216.1	1285.0	1359.1	1414.3
25°	1086.1	1094.9	1172.1	1252.3	1311.0
27.5°	967.1	979.9	1061.2	1144.5	1216.0
30°	889.0	903.8	986.6	1074.3	1147.9
32.5°	812.2	829.9	910.6	1003.4	1078.4
35°	697.2	714.7	792.2	885.4	966.0
37.5°	578.4	595.5	671.2	763.0	850.1
40°	500.9	520.2	592.3	681.3	769.8
42.5°	430.7	450.0	517.8	605.2	688.8
45°	334.3	354.4	414.0	494.6	571.7
47.5°	254.3	276.2	328.5	401.4	471.7
50°	207.0	228.9	280.5	344.7	412.2
52.5°	169.0	190.2	236.8	297.3	359.2
55°	120.1	140.2	181.0	232.4	285.9
57.5°	83.0	100.3	136.9	179.8	221.7
60°	60.0	76.7	111.1	145.9	180.1
62.5°	40.0	55.2	88.9	115.6	138.5
65°	13.4	25.7	57.4	69.2	77.1
67.5°	6.8	8.2	30.1	31.8	34.4
70°	5.4	5.4	14.3	15.3	17.9
72.5°	3.9	3.9	5.7	7.4	7.9
75°	1.8	1.8	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	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)