

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: P518734

Luminaire Tested: **SQ4-BB-100U-100D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518734
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

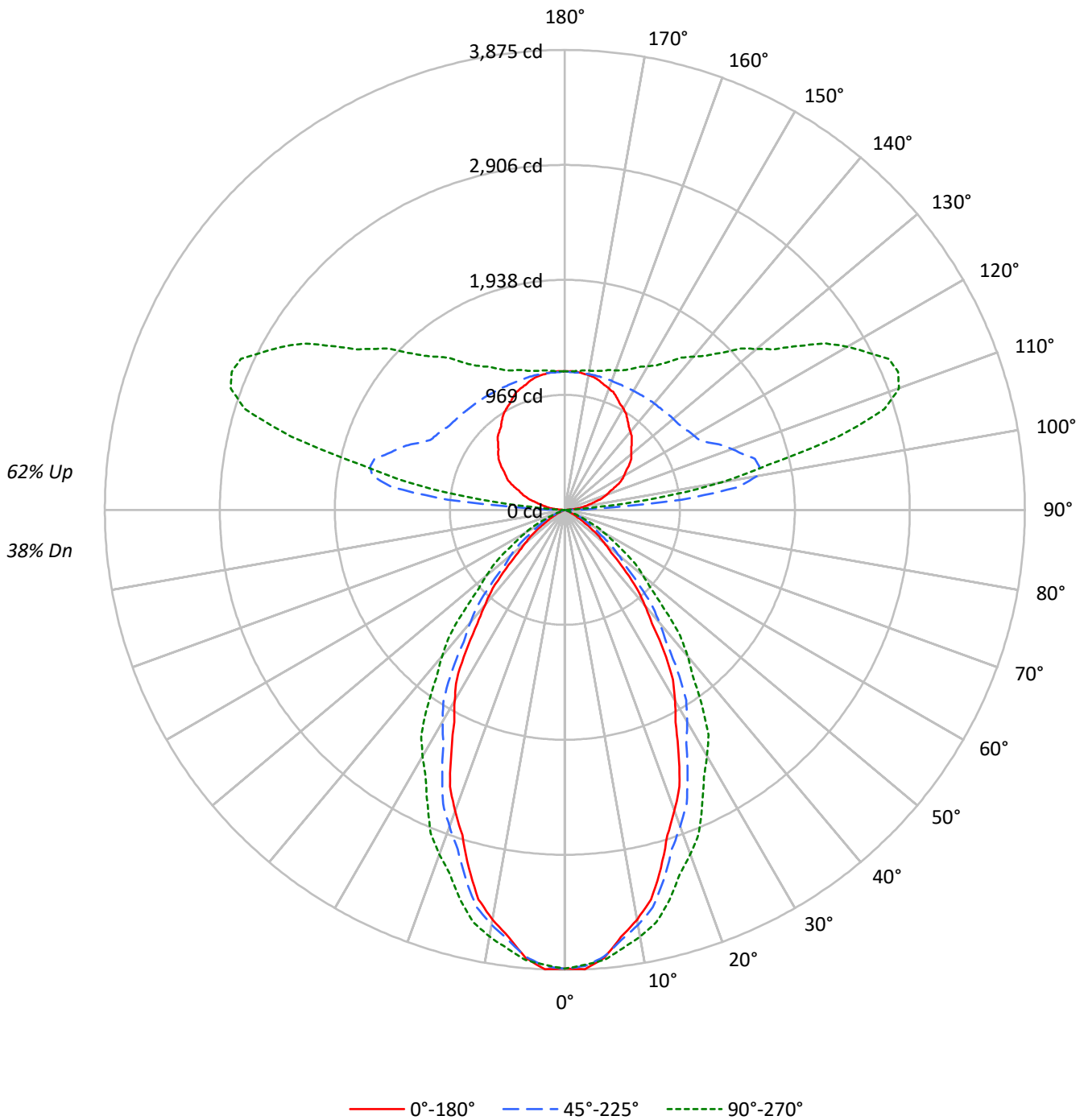
Lumens per Lamp: N/A
Luminaire Lumens: 12196.0 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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°	17833	17833	17833
5°	17547	17503	17633
10°	16418	16637	17101
15°	14925	15399	16256
20°	13249	13938	15159
25°	11538	12452	13927
30°	9883	10969	12762
35°	8194	9311	11354
40°	6296	7444	9675
45°	4551	5637	7784
50°	3100	4201	6174
55°	2015	3039	4798
60°	1156	2140	3468
65°	307	1307	1755
70°	151	403	504
75°	66	34	0
80°	50	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.8	2.9
10°-20°	902.2	7.4
20°-30°	1129.5	9.3
30°-40°	1043.3	8.6
40°-50°	701.0	5.7
50°-60°	362.1	3.0
60°-70°	113.4	0.9
70°-80°	7.2	0.1
80°-90°	2.6	0.0
90°-100°	546.5	4.5
100°-110°	1508.6	12.4
110°-120°	1555.9	12.8
120°-130°	1250.3	10.3
130°-140°	982.6	8.1
140°-150°	753.6	6.2
150°-160°	541.6	4.4
160°-170°	331.2	2.7
170°-180°	111.7	0.9
0°-30°	2384.5	19.6
0°-40°	3427.8	28.1
0°-60°	4490.9	36.8
0°-90°	4614.0	37.8
90°-120°	3611.0	29.6
90°-150°	6597.5	54.1
90°-180°	7582.0	62.2
0°-180°	12196.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3866	3866	3866	3866	3866	
5°	3789	3751	3780	3793	3808	351
15°	3125	3114	3224	3333	3404	870
25°	2267	2285	2446	2614	2736	1039
35°	1455	1492	1653	1848	2016	901
45°	698	740	864	1032	1193	548
55°	251	293	378	485	597	234
65°	28	54	120	144	161	47
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	4	7	15	17	19	6
95°	80	296	991	408	265	86
105°	269	415	1660	2534	2386	286
115°	482	582	1337	2646	3010	473
125°	661	752	1212	2051	2407	588
135°	795	881	1178	1661	1873	615
145°	922	986	1163	1414	1522	577
155°	1040	1075	1154	1269	1309	479
165°	1126	1140	1159	1204	1214	317
175°	1167	1169	1161	1178	1174	111
180°	1167	1167	1167	1167	1167	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3865.8	3865.8	3865.8	3865.8	3865.8
2.5°	3874.8	3838.2	3847.9	3847.6	3837.4
5°	3789.2	3750.8	3779.8	3793.2	3807.9
7.5°	3629.1	3599.1	3654.9	3696.7	3727.1
10°	3504.9	3479.3	3551.6	3608.7	3650.8
12.5°	3361.2	3341.5	3428.9	3507.2	3561.0
15°	3125.2	3114.2	3224.3	3332.6	3403.9
17.5°	2872.4	2872.0	2997.7	3132.0	3218.0
20°	2698.8	2704.3	2839.1	2987.2	3087.8
22.5°	2525.2	2538.0	2682.0	2836.4	2951.7
25°	2266.8	2285.0	2446.3	2613.7	2736.2
27.5°	2018.4	2045.1	2214.8	2388.7	2537.9
30°	1855.3	1886.4	2059.2	2242.2	2395.8
32.5°	1695.2	1732.1	1900.6	2094.1	2250.7
35°	1455.1	1491.6	1653.3	1847.9	2016.1
37.5°	1207.1	1242.9	1400.8	1592.4	1774.1
40°	1045.5	1085.7	1236.2	1421.9	1606.6
42.5°	898.8	939.1	1080.6	1263.0	1437.5
45°	697.6	739.7	864.1	1032.3	1193.2
47.5°	530.8	576.5	685.6	837.8	984.5
50°	432.0	477.7	585.4	719.5	860.3
52.5°	352.7	397.0	494.1	620.5	749.6
55°	250.6	292.7	377.8	485.1	596.6
57.5°	173.2	209.4	285.8	375.3	462.7
60°	125.3	160.1	231.9	304.6	375.9
62.5°	83.4	115.2	185.5	241.2	289.1
65°	28.1	53.7	119.7	144.4	160.8
67.5°	14.2	17.1	62.8	66.3	71.8
70°	11.2	11.2	29.9	31.9	37.4
72.5°	8.2	8.2	12.0	15.4	16.5
75°	3.7	3.7	1.9	0.0	0.0
77.5°	1.9	1.9	1.5	0.0	0.0
80°	1.9	1.9	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°	0.7	1.5	3.0	3.4	3.7
90°	3.7	7.4	14.9	16.8	18.7
92.5°	33.6	139.5	249.4	91.0	70.9
95°	80.3	295.7	991.4	407.5	265.1
97.5°	132.9	331.2	1468.6	1130.7	818.9
100°	171.8	352.5	1644.9	1656.5	1346.1
102.5°	209.1	376.7	1679.2	2046.7	1752.4
105°	268.9	414.9	1659.8	2534.0	2386.1
107.5°	332.3	462.3	1567.2	2768.9	2823.0
110°	377.1	494.0	1495.5	2819.5	2994.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	417.5	529.9	1428.3	2779.6	3038.1
115°	481.7	582.1	1336.8	2646.4	3009.7
117.5°	537.7	637.8	1276.7	2459.0	2872.3
120°	575.1	673.6	1252.8	2332.1	2748.3
122.5°	610.9	705.1	1233.4	2213.6	2607.9
125°	660.9	752.2	1211.7	2050.6	2406.6
127.5°	703.5	794.8	1199.0	1912.9	2219.9
130°	731.9	823.2	1193.0	1828.6	2107.9
132.5°	758.8	845.7	1187.1	1757.8	2010.8
135°	795.4	881.2	1178.1	1660.9	1872.7
137.5°	836.4	914.6	1173.6	1579.5	1760.3
140°	858.8	935.5	1170.6	1525.3	1684.1
142.5°	884.2	955.1	1167.7	1477.0	1616.9
145°	922.3	986.2	1163.2	1413.9	1521.6
147.5°	958.9	1014.8	1159.1	1360.7	1444.3
150°	985.8	1031.4	1157.6	1329.0	1396.6
152.5°	1006.7	1049.4	1156.1	1301.9	1357.7
155°	1039.9	1074.6	1153.8	1268.6	1308.8
157.5°	1070.6	1097.2	1154.2	1244.5	1271.8
160°	1088.5	1112.2	1155.7	1230.8	1250.9
162.5°	1103.4	1124.2	1157.2	1218.8	1234.5
165°	1125.8	1140.4	1159.4	1204.5	1213.6
167.5°	1143.0	1151.8	1161.3	1195.7	1198.6
170°	1152.0	1159.3	1161.3	1191.2	1191.2
172.5°	1159.4	1163.8	1161.3	1185.2	1183.7
175°	1166.9	1168.7	1161.3	1178.0	1174.4
177.5°	1169.9	1168.4	1160.9	1171.3	1168.4
180°	1166.9	1166.9	1166.9	1166.9	1166.9

(END OF REPORT)