

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: P518718

Luminaire Tested: **SQ4-BB-100U-075D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518718
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-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

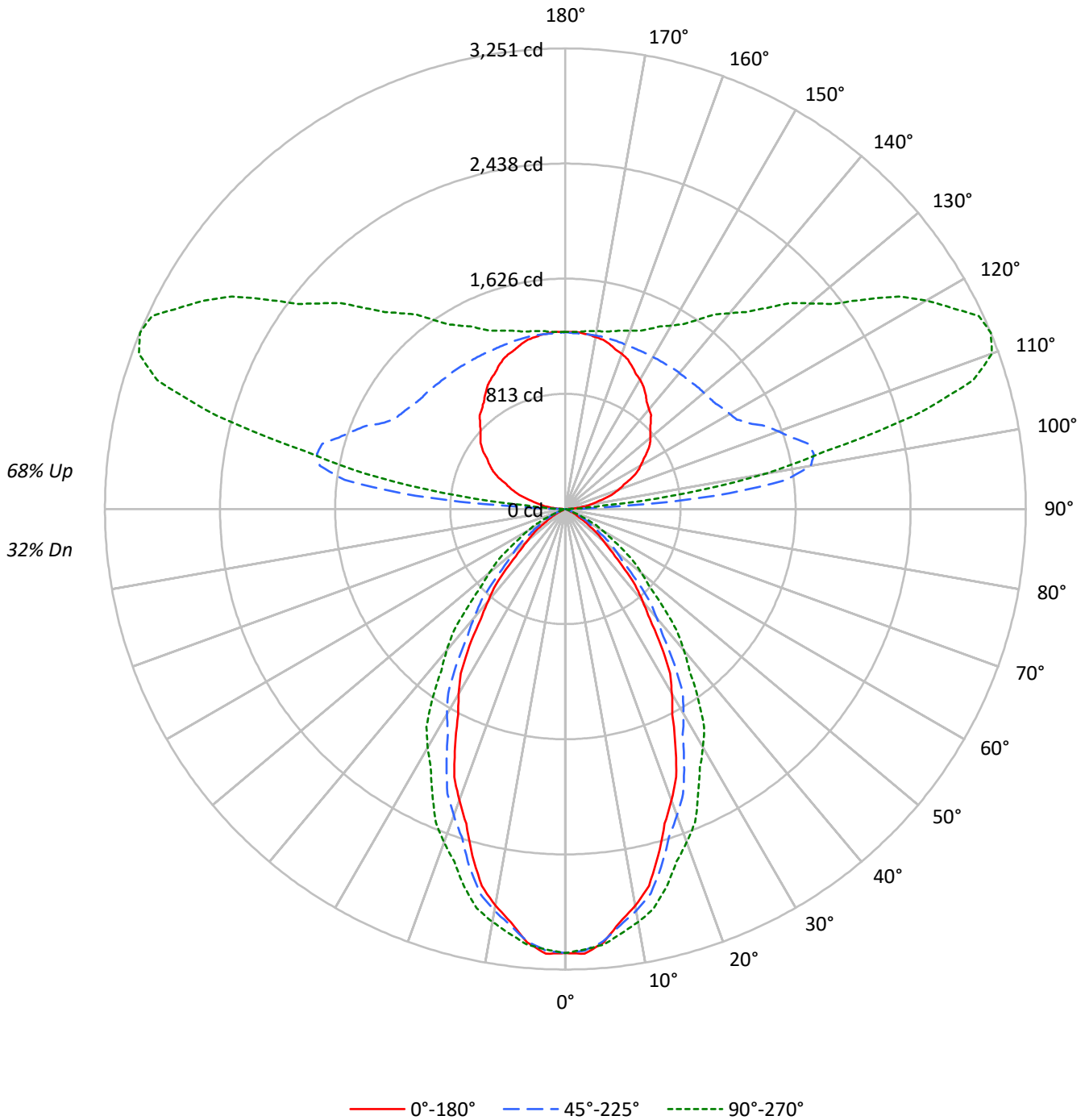
Lumens per Lamp: N/A
Luminaire Lumens: 11855.6 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 103.9
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	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°	14461	14461	14461
5°	14229	14194	14299
10°	13313	13491	13867
15°	12103	12487	13182
20°	10744	11302	12292
25°	9356	10097	11294
30°	8014	8895	10349
35°	6645	7550	9207
40°	5105	6037	7845
45°	3691	4571	6313
50°	2514	3407	5006
55°	1634	2464	3891
60°	937	1735	2812
65°	248	1060	1423
70°	123	328	409
75°	53	27	0
80°	40	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	286.1	2.4
10°-20°	731.6	6.2
20°-30°	915.9	7.7
30°-40°	846.0	7.1
40°-50°	568.5	4.8
50°-60°	293.6	2.5
60°-70°	92.0	0.8
70°-80°	5.8	0.0
80°-90°	2.7	0.0
90°-100°	584.8	4.9
100°-110°	1614.4	13.6
110°-120°	1664.9	14.0
120°-130°	1337.9	11.3
130°-140°	1051.5	8.9
140°-150°	806.4	6.8
150°-160°	579.6	4.9
160°-170°	354.4	3.0
170°-180°	119.5	1.0
0°-30°	1933.6	16.3
0°-40°	2779.6	23.4
0°-60°	3641.7	30.7
0°-90°	3742.2	31.6
90°-120°	3864.1	32.6
90°-150°	7060.0	59.5
90°-180°	8113.0	68.4
0°-180°	11855.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3135	3135	3135	3135	3135	
5°	3073	3042	3065	3076	3088	285
15°	2534	2525	2615	2702	2760	706
25°	1838	1853	1984	2119	2219	843
35°	1180	1210	1341	1498	1635	731
45°	566	600	701	837	968	444
55°	203	237	306	393	484	190
65°	23	44	97	117	130	38
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
90°	4	8	16	18	20	6
95°	86	316	1061	436	284	92
105°	288	444	1776	2712	2553	306
115°	516	623	1430	2832	3221	507
125°	707	805	1297	2194	2575	629
135°	851	943	1261	1777	2004	659
145°	987	1055	1245	1513	1628	618
155°	1113	1150	1235	1358	1401	513
165°	1205	1220	1241	1289	1299	340
175°	1249	1251	1243	1261	1257	119
180°	1249	1249	1249	1249	1249	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3134.8	3134.8	3134.8	3134.8	3134.8
2.5°	3142.1	3112.5	3120.3	3120.1	3111.8
5°	3072.7	3041.5	3065.1	3076.0	3087.8
7.5°	2942.8	2918.5	2963.8	2997.7	3022.3
10°	2842.1	2821.4	2880.0	2926.3	2960.4
12.5°	2725.7	2709.6	2780.6	2844.0	2887.6
15°	2534.3	2525.4	2614.6	2702.4	2760.2
17.5°	2329.2	2328.9	2430.8	2539.8	2609.5
20°	2188.5	2192.9	2302.2	2422.4	2503.9
22.5°	2047.7	2058.1	2174.8	2300.1	2393.5
25°	1838.1	1853.0	1983.7	2119.4	2218.8
27.5°	1636.7	1658.4	1796.0	1937.0	2058.0
30°	1504.5	1529.7	1669.8	1818.2	1942.8
32.5°	1374.7	1404.6	1541.2	1698.2	1825.1
35°	1179.9	1209.6	1340.7	1498.5	1634.9
37.5°	978.8	1007.9	1135.9	1291.3	1438.7
40°	847.8	880.4	1002.5	1153.0	1302.8
42.5°	728.9	761.5	876.3	1024.2	1165.7
45°	565.7	599.8	700.7	837.1	967.6
47.5°	430.4	467.5	556.0	679.4	798.3
50°	350.3	387.4	474.7	583.5	697.6
52.5°	286.0	321.9	400.7	503.2	607.9
55°	203.2	237.3	306.4	393.3	483.8
57.5°	140.4	169.8	231.7	304.3	375.2
60°	101.6	129.8	188.1	247.0	304.8
62.5°	67.6	93.4	150.4	195.6	234.5
65°	22.7	43.5	97.1	117.1	130.4
67.5°	11.5	13.9	51.0	53.8	58.2
70°	9.1	9.1	24.3	25.9	30.3
72.5°	6.7	6.7	9.7	12.5	13.3
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	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°	0.8	1.6	3.2	3.6	4.0
90°	4.0	7.9	16.0	18.0	20.0
92.5°	36.0	149.3	266.9	97.4	75.9
95°	85.9	316.4	1060.9	436.1	283.7
97.5°	142.3	354.4	1571.6	1210.0	876.3
100°	183.8	377.2	1760.2	1772.6	1440.5
102.5°	223.8	403.1	1796.9	2190.2	1875.3
105°	287.7	444.0	1776.2	2711.6	2553.4
107.5°	355.6	494.7	1677.1	2963.1	3020.9
110°	403.6	528.6	1600.3	3017.1	3204.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	446.7	567.1	1528.4	2974.4	3251.0
115°	515.5	622.9	1430.5	2831.9	3220.7
117.5°	575.4	682.5	1366.2	2631.3	3073.6
120°	615.4	720.9	1340.6	2495.6	2941.0
122.5°	653.7	754.5	1319.8	2368.8	2790.7
125°	707.3	804.9	1296.7	2194.4	2575.3
127.5°	752.8	850.5	1283.1	2047.0	2375.5
130°	783.2	880.9	1276.7	1956.8	2255.7
132.5°	812.0	904.9	1270.3	1881.0	2151.8
135°	851.1	942.9	1260.7	1777.3	2003.9
137.5°	895.1	978.7	1255.9	1690.3	1883.7
140°	919.1	1001.1	1252.7	1632.2	1802.1
142.5°	946.2	1022.0	1249.5	1580.6	1730.2
145°	987.0	1055.4	1244.7	1513.1	1628.3
147.5°	1026.1	1085.9	1240.3	1456.1	1545.6
150°	1054.9	1103.7	1238.7	1422.2	1494.5
152.5°	1077.3	1123.0	1237.1	1393.1	1452.9
155°	1112.9	1150.0	1234.7	1357.6	1400.6
157.5°	1145.6	1174.1	1235.1	1331.7	1361.0
160°	1164.8	1190.2	1236.7	1317.1	1338.6
162.5°	1180.8	1203.1	1238.3	1304.2	1321.0
165°	1204.8	1220.4	1240.7	1288.9	1298.7
167.5°	1223.1	1232.5	1242.7	1279.5	1282.7
170°	1232.7	1240.5	1242.7	1274.7	1274.7
172.5°	1240.7	1245.4	1242.7	1268.3	1266.7
175°	1248.7	1250.7	1242.7	1260.6	1256.7
177.5°	1251.9	1250.3	1242.3	1253.4	1250.3
180°	1248.7	1248.7	1248.7	1248.7	1248.7

(END OF REPORT)