

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: P518749

Luminaire Tested: **SQ4-BB-100U-100D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518749
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-935-1D-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

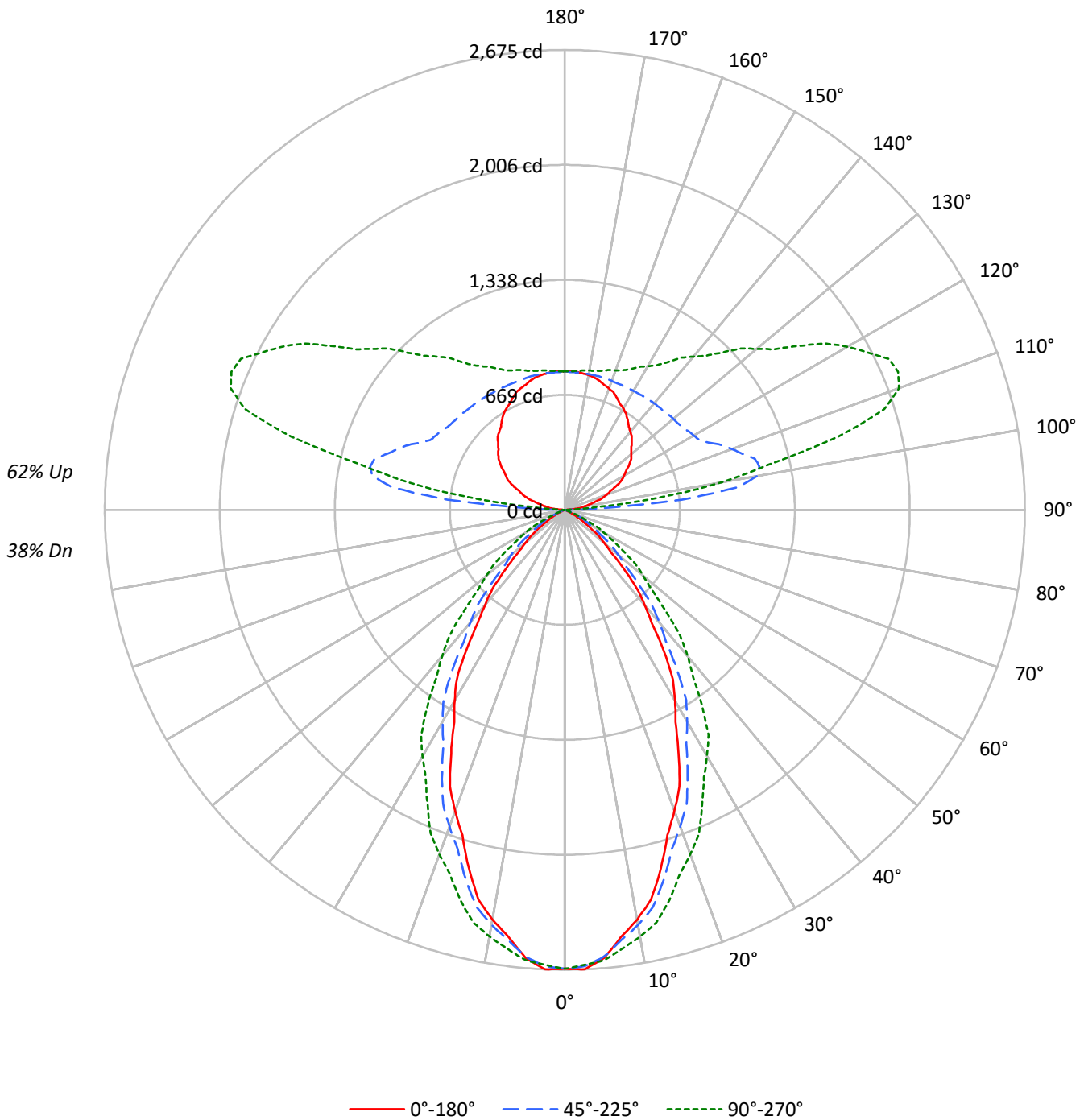
Lumens per Lamp: N/A
Luminaire Lumens: 8420.2 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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°	16416	16416	16416
5°	16153	16112	16232
10°	15113	15315	15742
15°	13740	14175	14965
20°	12196	12830	13954
25°	10621	11462	12821
30°	9097	10097	11748
35°	7543	8571	10452
40°	5796	6853	8906
45°	4189	5190	7166
50°	2854	3868	5684
55°	1855	2797	4417
60°	1064	1969	3192
65°	282	1202	1615
70°	138	372	464
75°	62	31	0
80°	46	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.6	2.9
10°-20°	622.9	7.4
20°-30°	779.8	9.3
30°-40°	720.3	8.6
40°-50°	484.0	5.7
50°-60°	250.0	3.0
60°-70°	78.3	0.9
70°-80°	5.0	0.1
80°-90°	1.8	0.0
90°-100°	377.3	4.5
100°-110°	1041.6	12.4
110°-120°	1074.2	12.8
120°-130°	863.2	10.3
130°-140°	678.4	8.1
140°-150°	520.3	6.2
150°-160°	373.9	4.4
160°-170°	228.7	2.7
170°-180°	77.1	0.9
0°-30°	1646.3	19.6
0°-40°	2366.6	28.1
0°-60°	3100.6	36.8
0°-90°	3185.6	37.8
90°-120°	2493.0	29.6
90°-150°	4554.9	54.1
90°-180°	5235.0	62.2
0°-180°	8420.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2669	2669	2669	2669	2669	
5°	2616	2590	2610	2619	2629	243
15°	2158	2150	2226	2301	2350	601
25°	1565	1578	1689	1804	1889	717
35°	1005	1030	1142	1276	1392	622
45°	482	511	597	713	824	378
55°	173	202	261	335	412	161
65°	19	37	83	100	111	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	3	5	10	12	13	4
95°	55	204	684	281	183	59
105°	186	286	1146	1750	1647	197
115°	333	402	923	1827	2078	327
125°	456	519	837	1416	1662	406
135°	549	608	813	1147	1293	425
145°	637	681	803	976	1051	399
155°	718	742	797	876	904	331
165°	777	787	800	832	838	219
175°	806	807	802	813	811	77
180°	806	806	806	806	806	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2669.0	2669.0	2669.0	2669.0	2669.0
2.5°	2675.2	2649.9	2656.6	2656.4	2649.4
5°	2616.1	2589.5	2609.6	2618.9	2629.0
7.5°	2505.5	2484.8	2523.3	2552.2	2573.2
10°	2419.8	2402.1	2452.1	2491.5	2520.5
12.5°	2320.6	2307.0	2367.4	2421.4	2458.5
15°	2157.7	2150.1	2226.1	2300.8	2350.1
17.5°	1983.1	1982.8	2069.6	2162.4	2221.7
20°	1863.3	1867.1	1960.1	2062.4	2131.8
22.5°	1743.4	1752.3	1851.6	1958.3	2037.8
25°	1565.0	1577.6	1688.9	1804.5	1889.1
27.5°	1393.5	1411.9	1529.1	1649.2	1752.2
30°	1280.9	1302.4	1421.7	1548.0	1654.1
32.5°	1170.4	1195.9	1312.2	1445.8	1553.9
35°	1004.6	1029.8	1141.5	1275.8	1392.0
37.5°	833.4	858.1	967.1	1099.4	1224.9
40°	721.8	749.6	853.5	981.7	1109.2
42.5°	620.6	648.3	746.1	872.0	992.4
45°	481.6	510.7	596.6	712.7	823.8
47.5°	366.5	398.0	473.4	578.5	679.7
50°	298.3	329.8	404.2	496.8	594.0
52.5°	243.5	274.1	341.1	428.4	517.5
55°	173.0	202.1	260.8	334.9	411.9
57.5°	119.6	144.6	197.3	259.1	319.5
60°	86.5	110.5	160.1	210.3	259.5
62.5°	57.6	79.6	128.1	166.5	199.6
65°	19.4	37.0	82.6	99.7	111.0
67.5°	9.8	11.8	43.4	45.8	49.6
70°	7.7	7.7	20.7	22.0	25.8
72.5°	5.7	5.7	8.3	10.6	11.4
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	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°	0.5	1.0	2.1	2.3	2.6
90°	2.6	5.1	10.3	11.6	12.9
92.5°	23.2	96.3	172.2	62.8	49.0
95°	55.4	204.2	684.5	281.4	183.0
97.5°	91.8	228.7	1013.9	780.6	565.4
100°	118.6	243.4	1135.6	1143.7	929.4
102.5°	144.4	260.1	1159.3	1413.1	1209.9
105°	185.6	286.4	1145.9	1749.5	1647.4
107.5°	229.4	319.2	1082.0	1911.7	1949.0
110°	260.4	341.0	1032.5	1946.6	2067.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	288.2	365.9	986.1	1919.0	2097.5
115°	332.6	401.9	922.9	1827.1	2077.9
117.5°	371.2	440.3	881.4	1697.7	1983.0
120°	397.0	465.1	864.9	1610.1	1897.4
122.5°	421.8	486.8	851.5	1528.3	1800.5
125°	456.3	519.3	836.6	1415.8	1661.6
127.5°	485.7	548.7	827.8	1320.7	1532.6
130°	505.3	568.3	823.7	1262.5	1455.3
132.5°	523.9	583.9	819.6	1213.6	1388.3
135°	549.1	608.4	813.4	1146.7	1292.9
137.5°	577.5	631.4	810.3	1090.5	1215.3
140°	593.0	645.9	808.2	1053.0	1162.7
142.5°	610.5	659.4	806.2	1019.7	1116.3
145°	636.8	680.9	803.1	976.2	1050.6
147.5°	662.0	700.6	800.2	939.5	997.2
150°	680.6	712.1	799.2	917.6	964.2
152.5°	695.0	724.5	798.2	898.8	937.4
155°	718.0	741.9	796.6	875.9	903.6
157.5°	739.1	757.5	796.9	859.2	878.1
160°	751.5	767.9	797.9	849.8	863.6
162.5°	761.8	776.2	798.9	841.5	852.3
165°	777.3	787.4	800.5	831.6	837.9
167.5°	789.1	795.2	801.8	825.5	827.6
170°	795.3	800.4	801.8	822.4	822.4
172.5°	800.5	803.5	801.8	818.2	817.2
175°	805.6	806.9	801.8	813.3	810.8
177.5°	807.7	806.7	801.5	808.7	806.7
180°	805.6	805.6	805.6	805.6	805.6

(END OF REPORT)