

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: P518742

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518742
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-840-1D-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

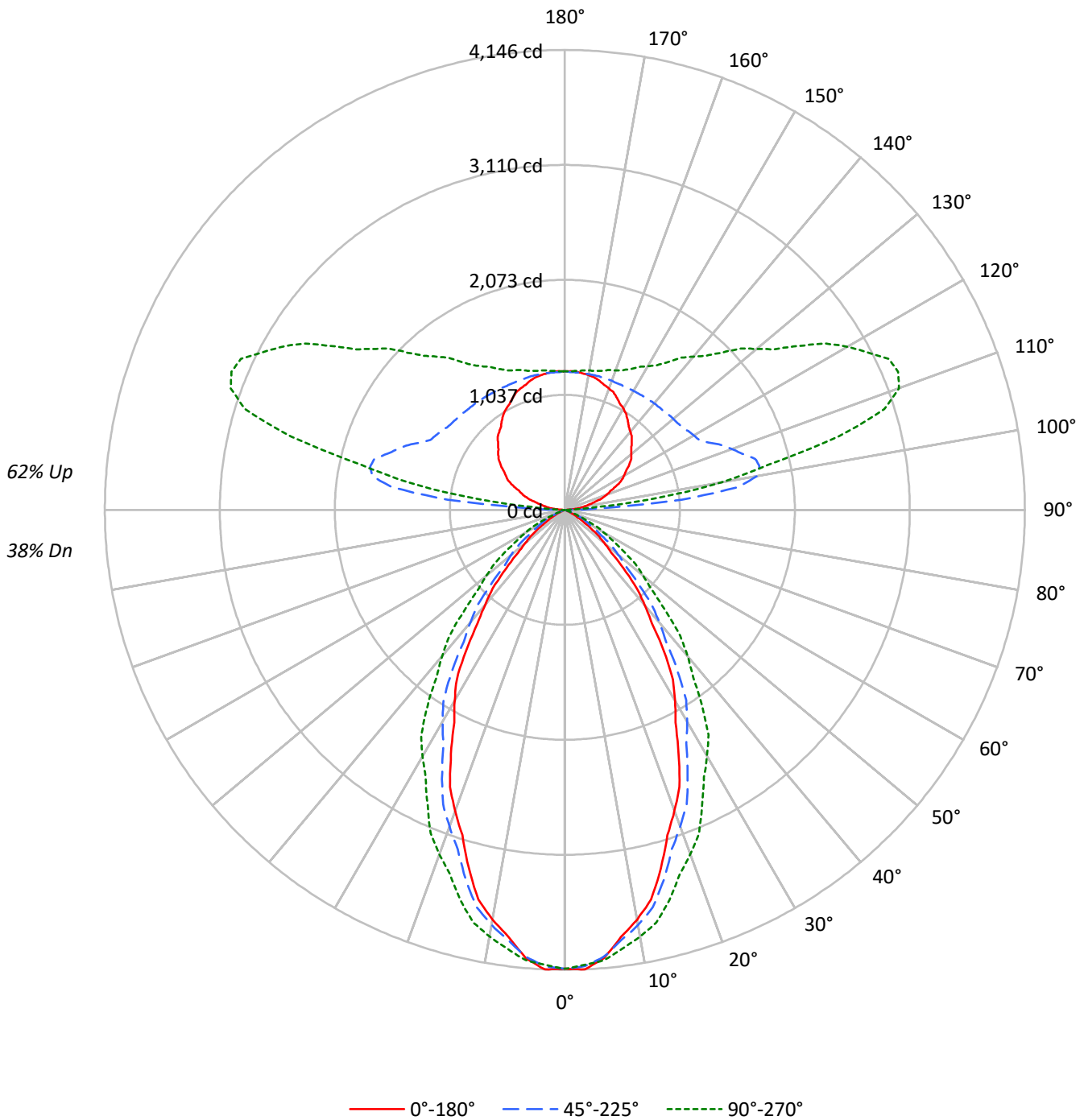
Lumens per Lamp: N/A
Luminaire Lumens: 13050.9 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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°	19083	19083	19083
5°	18777	18730	18869
10°	17569	17803	18300
15°	15972	16479	17396
20°	14178	14915	16221
25°	12347	13325	14904
30°	10576	11737	13657
35°	8769	9963	12150
40°	6737	7966	10353
45°	4870	6032	8330
50°	3318	4495	6607
55°	2157	3252	5134
60°	1237	2290	3712
65°	327	1398	1879
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	377.5	2.9
10°-20°	965.5	7.4
20°-30°	1208.7	9.3
30°-40°	1116.4	8.6
40°-50°	750.2	5.7
50°-60°	387.5	3.0
60°-70°	121.4	0.9
70°-80°	7.7	0.1
80°-90°	2.7	0.0
90°-100°	584.8	4.5
100°-110°	1614.4	12.4
110°-120°	1664.9	12.8
120°-130°	1337.9	10.3
130°-140°	1051.5	8.1
140°-150°	806.4	6.2
150°-160°	579.6	4.4
160°-170°	354.4	2.7
170°-180°	119.5	0.9
0°-30°	2551.7	19.6
0°-40°	3668.1	28.1
0°-60°	4805.7	36.8
0°-90°	4937.5	37.8
90°-120°	3864.1	29.6
90°-150°	7060.0	54.1
90°-180°	8113.0	62.2
0°-180°	13050.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4137	4137	4137	4137	4137	
5°	4055	4014	4045	4059	4075	376
15°	3344	3333	3450	3566	3642	931
25°	2426	2445	2618	2797	2928	1112
35°	1557	1596	1769	1977	2158	965
45°	746	792	925	1105	1277	586
55°	268	313	404	519	638	250
65°	30	57	128	154	172	51
75°	4	4	2	0	0	6
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°	4136.8	4136.8	4136.8	4136.8	4136.8
2.5°	4146.5	4107.3	4117.6	4117.4	4106.4
5°	4054.8	4013.7	4044.8	4059.1	4074.8
7.5°	3883.5	3851.4	3911.1	3955.9	3988.3
10°	3750.6	3723.2	3800.6	3861.7	3906.7
12.5°	3596.9	3575.7	3669.3	3753.1	3810.6
15°	3344.3	3332.6	3450.4	3566.2	3642.5
17.5°	3073.7	3073.3	3207.8	3351.6	3443.6
20°	2888.0	2893.9	3038.1	3196.6	3304.3
22.5°	2702.3	2716.0	2870.0	3035.3	3158.6
25°	2425.7	2445.2	2617.8	2796.9	2928.0
27.5°	2159.9	2188.5	2370.0	2556.2	2715.9
30°	1985.4	2018.6	2203.5	2399.4	2563.8
32.5°	1814.0	1853.6	2033.8	2240.9	2408.5
35°	1557.1	1596.2	1769.2	1977.4	2157.5
37.5°	1291.7	1330.0	1499.0	1704.0	1898.5
40°	1118.8	1161.8	1322.9	1521.5	1719.2
42.5°	961.9	1004.9	1156.4	1351.6	1538.3
45°	746.5	791.5	924.6	1104.7	1276.9
47.5°	568.0	616.9	733.7	896.6	1053.5
50°	462.3	511.2	626.4	770.0	920.6
52.5°	377.5	424.8	528.8	664.0	802.2
55°	268.2	313.2	404.3	519.1	638.4
57.5°	185.3	224.1	305.8	401.6	495.1
60°	134.1	171.3	248.2	326.0	402.3
62.5°	89.3	123.3	198.5	258.1	309.4
65°	30.0	57.4	128.1	154.5	172.1
67.5°	15.2	18.3	67.2	71.0	76.9
70°	12.0	12.0	32.0	34.2	40.0
72.5°	8.8	8.8	12.8	16.4	17.6
75°	4.0	4.0	2.0	0.0	0.0
77.5°	2.0	2.0	1.6	0.0	0.0
80°	2.0	2.0	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°	0.8	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)