

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: P518698

Luminaire Tested: **SQ4-BB-100U-050D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518698
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-050D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

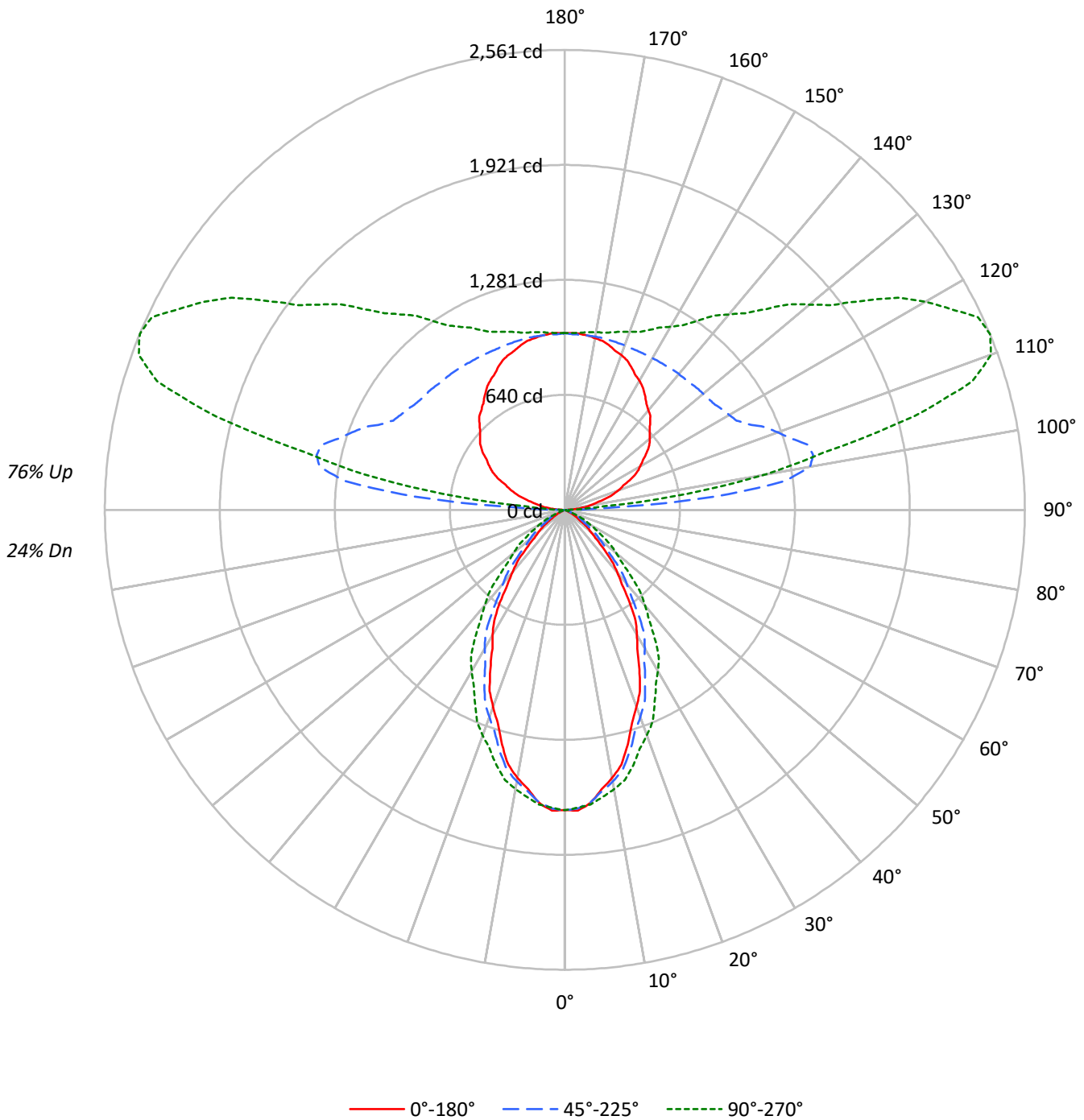
Lumens per Lamp: N/A
Luminaire Lumens: 8388.9 lumens
Efficiency: N/A
Efficacy: 99.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.7
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	93	89	86	82	82	79	77	74	61	60	58	45	44	43	30	29	29	22
2	85	79	73	69	76	70	66	62	55	52	49	40	39	37	27	26	25	20
3	78	70	63	58	70	63	57	53	49	45	42	36	34	32	25	24	23	18
4	72	62	55	50	64	56	50	45	44	40	37	33	31	28	23	21	20	16
5	66	56	49	43	59	50	44	39	40	36	32	30	27	25	21	19	18	15
6	61	50	43	38	55	45	39	35	36	32	28	27	25	22	19	18	17	13
7	57	46	38	33	51	41	35	31	33	29	25	25	22	20	18	16	15	12
8	53	41	34	30	47	38	31	27	30	26	23	23	20	18	17	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	19	17	16	14	13	10
10	46	35	28	24	41	32	26	22	26	21	19	20	17	15	15	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7714	7714	7714
5°	7590	7571	7628
10°	7102	7196	7397
15°	6456	6661	7032
20°	5731	6029	6557
25°	4991	5386	6025
30°	4275	4745	5521
35°	3545	4028	4911
40°	2723	3221	4185
45°	1969	2439	3368
50°	1341	1817	2671
55°	872	1314	2076
60°	500	925	1500
65°	132	565	760
70°	66	174	219
75°	29	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.6	1.8
10°-20°	390.3	4.7
20°-30°	488.6	5.8
30°-40°	451.3	5.4
40°-50°	303.3	3.6
50°-60°	156.6	1.9
60°-70°	49.1	0.6
70°-80°	3.1	0.0
80°-90°	2.1	0.0
90°-100°	460.7	5.5
100°-110°	1271.9	15.2
110°-120°	1311.7	15.6
120°-130°	1054.1	12.6
130°-140°	828.4	9.9
140°-150°	635.3	7.6
150°-160°	456.6	5.4
160°-170°	279.2	3.3
170°-180°	94.1	1.1
0°-30°	1031.5	12.3
0°-40°	1482.8	17.7
0°-60°	1942.6	23.2
0°-90°	1996.9	23.8
90°-120°	3044.3	36.3
90°-150°	5562.0	66.3
90°-180°	6392.0	76.2
0°-180°	8388.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1672	1672	1672	1672	1672	
5°	1639	1622	1635	1641	1647	152
15°	1352	1347	1395	1442	1472	377
25°	980	988	1058	1131	1184	450
35°	629	645	715	799	872	390
45°	302	320	374	446	516	237
55°	108	127	163	210	258	101
65°	12	23	52	62	70	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	3	6	13	14	16	5
95°	68	249	836	344	224	72
105°	227	350	1399	2136	2012	241
115°	406	491	1127	2231	2537	399
125°	557	634	1022	1729	2029	496
135°	670	743	993	1400	1579	519
145°	778	831	981	1192	1283	487
155°	877	906	973	1070	1103	404
165°	949	962	978	1015	1023	268
175°	984	985	979	993	990	93
180°	984	984	984	984	984	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1672.3	1672.3	1672.3	1672.3	1672.3
2.5°	1676.1	1660.3	1664.5	1664.4	1660.0
5°	1639.1	1622.5	1635.0	1640.8	1647.2
7.5°	1569.8	1556.9	1581.0	1599.1	1612.2
10°	1516.1	1505.0	1536.3	1561.0	1579.2
12.5°	1454.0	1445.4	1483.3	1517.1	1540.4
15°	1351.9	1347.1	1394.8	1441.6	1472.4
17.5°	1242.5	1242.3	1296.7	1354.8	1392.0
20°	1167.4	1169.8	1228.1	1292.2	1335.7
22.5°	1092.3	1097.9	1160.1	1227.0	1276.8
25°	980.5	988.5	1058.2	1130.6	1183.6
27.5°	873.1	884.7	958.0	1033.3	1097.8
30°	802.6	816.0	890.7	969.9	1036.4
32.5°	733.3	749.3	822.1	905.9	973.6
35°	629.4	645.2	715.2	799.4	872.1
37.5°	522.1	537.7	606.0	688.8	767.4
40°	452.2	469.6	534.8	615.1	695.0
42.5°	388.8	406.2	467.5	546.4	621.8
45°	301.8	320.0	373.8	446.5	516.2
47.5°	229.6	249.4	296.6	362.4	425.9
50°	186.9	206.7	253.2	311.2	372.2
52.5°	152.6	171.7	213.7	268.4	324.3
55°	108.4	126.6	163.4	209.8	258.1
57.5°	74.9	90.6	123.6	162.3	200.2
60°	54.2	69.2	100.3	131.8	162.6
62.5°	36.1	49.8	80.3	104.4	125.1
65°	12.1	23.2	51.8	62.5	69.6
67.5°	6.1	7.4	27.2	28.7	31.1
70°	4.9	4.9	12.9	13.8	16.2
72.5°	3.6	3.6	5.2	6.6	7.1
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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°	0.6	1.2	2.5	2.8	3.1
90°	3.1	6.2	12.6	14.2	15.7
92.5°	28.3	117.6	210.3	76.7	59.8
95°	67.7	249.3	835.8	343.6	223.5
97.5°	112.1	279.2	1238.1	953.2	690.4
100°	144.8	297.2	1386.7	1396.5	1134.9
102.5°	176.3	317.6	1415.7	1725.5	1477.4
105°	226.7	349.8	1399.3	2136.3	2011.6
107.5°	280.2	389.8	1321.2	2334.4	2379.9
110°	318.0	416.5	1260.8	2377.0	2524.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	352.0	446.8	1204.1	2343.3	2561.3
115°	406.1	490.7	1127.0	2231.1	2537.3
117.5°	453.3	537.7	1076.3	2073.0	2421.5
120°	484.8	567.9	1056.2	1966.1	2317.0
122.5°	515.0	594.4	1039.8	1866.2	2198.6
125°	557.2	634.2	1021.5	1728.8	2028.9
127.5°	593.1	670.0	1010.8	1612.7	1871.5
130°	617.0	694.0	1005.8	1541.6	1777.1
132.5°	639.7	712.9	1000.8	1481.9	1695.2
135°	670.5	742.9	993.2	1400.2	1578.8
137.5°	705.2	771.0	989.4	1331.6	1484.0
140°	724.1	788.7	986.9	1285.9	1419.8
142.5°	745.5	805.2	984.4	1245.2	1363.1
145°	777.6	831.4	980.6	1192.0	1282.8
147.5°	808.4	855.5	977.2	1147.2	1217.7
150°	831.1	869.6	975.9	1120.4	1177.4
152.5°	848.7	884.7	974.6	1097.5	1144.6
155°	876.7	906.0	972.7	1069.5	1103.4
157.5°	902.5	925.0	973.1	1049.1	1072.2
160°	917.7	937.7	974.3	1037.7	1054.6
162.5°	930.3	947.8	975.6	1027.5	1040.7
165°	949.1	961.5	977.5	1015.4	1023.1
167.5°	963.6	971.0	979.0	1008.1	1010.5
170°	971.2	977.3	979.0	1004.2	1004.2
172.5°	977.5	981.2	979.0	999.2	997.9
175°	983.8	985.3	979.0	993.1	990.1
177.5°	986.3	985.1	978.7	987.5	985.0
180°	983.8	983.8	983.8	983.8	983.8

(END OF REPORT)