

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: P518770

Luminaire Tested: **SQ4-BB-100U-125D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518770
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-125D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

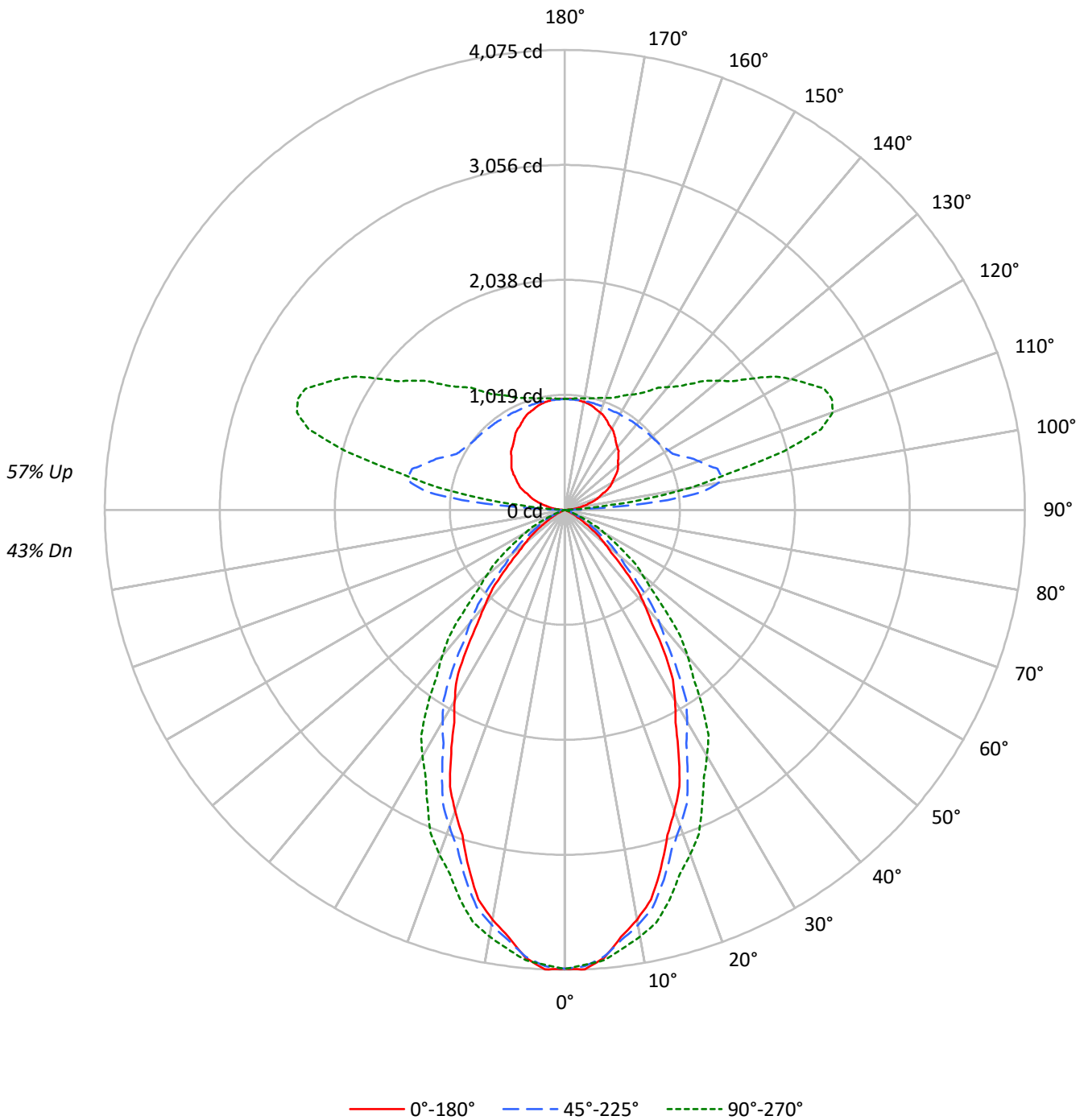
Lumens per Lamp: N/A
Luminaire Lumens: 11244.4 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 140.6
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	50	30	10	0	
RCR																						
0	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43				43
1	98	94	91	88	89	86	84	81	72	70	68	59	57	56	46	46	45	39				39
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40	36				36
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36	32				32
4	77	68	61	56	71	63	57	52	53	49	45	44	41	39	36	34	33	29				29
5	71	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30	26				26
6	66	56	48	43	61	52	45	41	44	40	36	38	34	31	31	29	27	24				24
7	62	51	44	39	57	47	41	37	41	36	32	35	31	29	29	27	25	22				22
8	58	46	39	35	53	43	37	33	38	33	29	32	29	26	27	24	23	20				20
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21	19				19
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19	17				17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18756	18756	18756
5°	18455	18409	18546
10°	17268	17498	17986
15°	15698	16196	17098
20°	13935	14659	15943
25°	12135	13096	14648
30°	10394	11536	13422
35°	8619	9793	11942
40°	6622	7830	10175
45°	4787	5929	8188
50°	3261	4419	6494
55°	2120	3195	5047
60°	1216	2250	3648
65°	322	1374	1847
70°	159	425	530
75°	70	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	371.1	3.3
10°-20°	948.9	8.4
20°-30°	1188.0	10.6
30°-40°	1097.3	9.8
40°-50°	737.3	6.6
50°-60°	380.8	3.4
60°-70°	119.3	1.1
70°-80°	7.6	0.1
80°-90°	2.2	0.0
90°-100°	460.7	4.1
100°-110°	1271.9	11.3
110°-120°	1311.7	11.7
120°-130°	1054.1	9.4
130°-140°	828.4	7.4
140°-150°	635.3	5.7
150°-160°	456.6	4.1
160°-170°	279.2	2.5
170°-180°	94.1	0.8
0°-30°	2507.9	22.3
0°-40°	3605.2	32.1
0°-60°	4723.4	42.0
0°-90°	4852.4	43.2
90°-120°	3044.3	27.1
90°-150°	5562.0	49.5
90°-180°	6392.0	56.8
0°-180°	11244.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4066	4066	4066	4066	4066	
5°	3985	3945	3976	3990	4005	369
15°	3287	3275	3391	3505	3580	915
25°	2384	2403	2573	2749	2878	1093
35°	1530	1569	1739	1944	2120	948
45°	734	778	909	1086	1255	576
55°	264	308	397	510	628	246
65°	30	56	126	152	169	50
75°	4	4	2	0	0	6
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°	4065.9	4065.9	4065.9	4065.9	4065.9
2.5°	4075.4	4036.9	4047.1	4046.8	4036.0
5°	3985.3	3944.9	3975.5	3989.6	4005.0
7.5°	3816.9	3785.4	3844.1	3888.1	3920.0
10°	3686.3	3659.4	3735.5	3795.5	3839.7
12.5°	3535.2	3514.5	3606.4	3688.8	3745.3
15°	3287.0	3275.4	3391.2	3505.1	3580.1
17.5°	3021.0	3020.6	3152.8	3294.1	3384.5
20°	2838.5	2844.3	2986.0	3141.9	3247.6
22.5°	2655.9	2669.4	2820.8	2983.3	3104.4
25°	2384.1	2403.3	2572.9	2749.0	2877.8
27.5°	2122.9	2150.9	2329.4	2512.4	2669.3
30°	1951.3	1984.0	2165.7	2358.3	2519.8
32.5°	1783.0	1821.8	1998.9	2202.5	2367.2
35°	1530.4	1568.9	1738.9	1943.6	2120.5
37.5°	1269.5	1307.2	1473.3	1674.8	1866.0
40°	1099.6	1141.9	1300.2	1495.5	1689.7
42.5°	945.4	987.7	1136.6	1328.4	1511.9
45°	733.7	778.0	908.8	1085.7	1255.0
47.5°	558.3	606.3	721.1	881.2	1035.5
50°	454.4	502.5	615.7	756.8	904.9
52.5°	371.0	417.5	519.7	652.6	788.4
55°	263.6	307.8	397.3	510.2	627.5
57.5°	182.2	220.2	300.6	394.7	486.7
60°	131.8	168.3	243.9	320.4	395.4
62.5°	87.7	121.2	195.1	253.7	304.1
65°	29.5	56.4	125.9	151.9	169.2
67.5°	14.9	18.0	66.1	69.8	75.5
70°	11.8	11.8	31.5	33.6	39.3
72.5°	8.7	8.7	12.6	16.2	17.3
75°	3.9	3.9	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°	0.6	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)