

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: P518551

Luminaire Tested: **SQ4-BB-075U-100D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518551
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

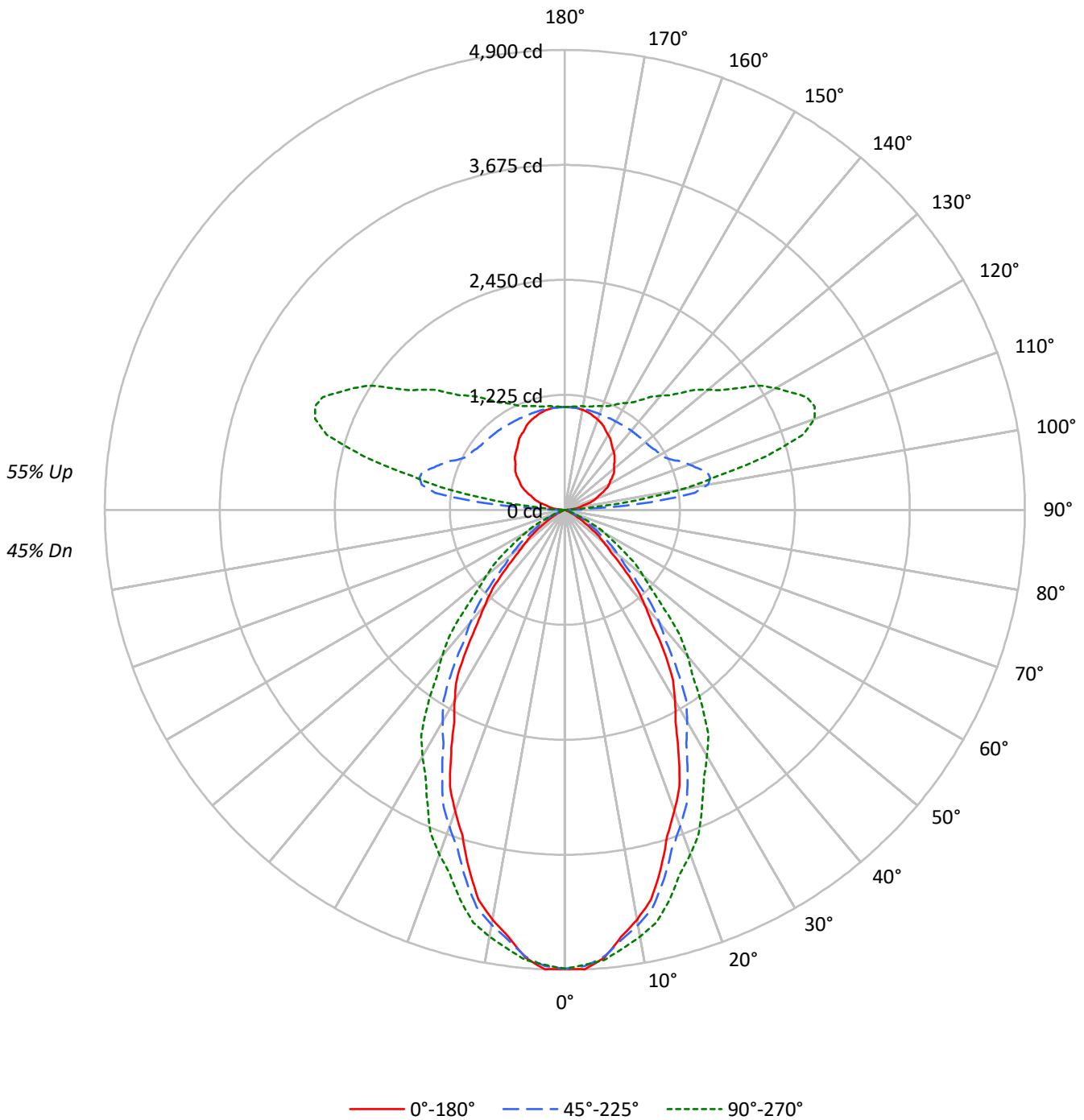
Lumens per Lamp: N/A
Luminaire Lumens: 12981.5 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 162.2
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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	58	48	47	47	41
2	91	84	79	75	83	78	74	70	66	63	60	55	53	51	44	43	42	37
3	84	76	69	64	77	70	65	60	60	56	52	50	47	45	41	39	38	33
4	78	68	61	56	71	63	57	53	54	50	46	46	42	40	38	36	34	30
5	72	62	55	49	66	57	51	46	49	45	41	42	38	36	35	32	31	28
6	67	56	49	44	62	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	42	37	41	37	33	36	32	29	30	27	26	23
8	58	47	40	35	54	44	38	33	38	33	30	33	29	27	28	25	23	21
9	54	43	36	32	50	41	34	30	35	31	27	31	27	25	26	24	22	20
10	51	40	33	29	47	38	32	28	33	28	25	29	25	23	24	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15035	15035	15035
5°	14793	14756	14866
10°	13841	14026	14417
15°	12583	12982	13705
20°	11170	11750	12780
25°	9727	10498	11742
30°	8332	9247	10759
35°	6908	7850	9572
40°	5308	6276	8156
45°	3837	4752	6563
50°	2614	3542	5205
55°	1699	2562	4045
60°	975	1804	2924
65°	258	1102	1480
70°	128	340	425
75°	56	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	446.1	3.4
10°-20°	1140.9	8.8
20°-30°	1428.3	11.0
30°-40°	1319.3	10.2
40°-50°	886.5	6.8
50°-60°	457.9	3.5
60°-70°	143.4	1.1
70°-80°	9.1	0.1
80°-90°	3.0	0.0
90°-100°	517.4	4.0
100°-110°	1423.6	11.0
110°-120°	1469.4	11.3
120°-130°	1177.3	9.1
130°-140°	924.7	7.1
140°-150°	708.6	5.5
150°-160°	509.5	3.9
160°-170°	311.5	2.4
170°-180°	105.0	0.8
0°-30°	3015.4	23.2
0°-40°	4334.7	33.4
0°-60°	5679.1	43.7
0°-90°	5834.6	44.9
90°-120°	3410.4	26.3
90°-150°	6220.9	47.9
90°-180°	7147.0	55.1
0°-180°	12981.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4889	4889	4889	4889	4889	
5°	4792	4743	4780	4797	4815	444
15°	3952	3938	4077	4214	4304	1101
25°	2866	2890	3094	3305	3460	1314
35°	1840	1886	2091	2337	2550	1140
45°	882	935	1093	1305	1509	693
55°	317	370	478	613	754	296
65°	36	68	151	183	203	60
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	2	9	16	21	21	5
95°	77	282	915	391	250	81
105°	254	391	1569	2389	2229	268
115°	450	549	1258	2505	2843	445
125°	621	708	1141	1931	2262	554
135°	749	831	1109	1562	1767	578
145°	866	925	1092	1330	1433	543
155°	980	1012	1085	1196	1230	450
165°	1060	1073	1090	1135	1141	299
175°	1097	1099	1092	1106	1104	104
180°	1097	1097	1097	1097	1097	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4888.7	4888.7	4888.7	4888.7	4888.7
2.5°	4900.0	4853.8	4866.0	4865.7	4852.7
5°	4791.7	4743.1	4779.9	4796.9	4815.4
7.5°	4589.3	4551.3	4621.9	4674.8	4713.2
10°	4432.2	4399.8	4491.3	4563.5	4616.7
12.5°	4250.6	4225.6	4336.2	4435.2	4503.2
15°	3952.1	3938.2	4077.4	4214.3	4304.5
17.5°	3632.3	3631.9	3790.8	3960.7	4069.4
20°	3412.9	3419.8	3590.2	3777.6	3904.8
22.5°	3193.4	3209.6	3391.6	3586.9	3732.6
25°	2866.5	2889.6	3093.6	3305.2	3460.2
27.5°	2552.4	2586.2	2800.8	3020.7	3209.5
30°	2346.2	2385.5	2604.0	2835.4	3029.7
32.5°	2143.7	2190.4	2403.4	2648.2	2846.2
35°	1840.1	1886.3	2090.8	2336.8	2549.6
37.5°	1526.4	1571.8	1771.5	2013.7	2243.5
40°	1322.1	1373.0	1563.3	1798.1	2031.6
42.5°	1136.7	1187.5	1366.6	1597.2	1817.8
45°	882.2	935.4	1092.7	1305.4	1508.9
47.5°	671.2	729.0	867.0	1059.5	1245.0
50°	546.3	604.2	740.3	909.9	1087.9
52.5°	446.1	502.0	624.9	784.7	947.9
55°	316.9	370.1	477.8	613.4	754.5
57.5°	219.0	264.8	361.4	474.6	585.1
60°	158.5	202.4	293.3	385.2	475.4
62.5°	105.5	145.7	234.6	305.1	365.6
65°	35.5	67.9	151.4	182.6	203.4
67.5°	18.0	21.7	79.5	83.9	90.8
70°	14.2	14.2	37.8	40.4	47.3
72.5°	10.4	10.4	15.1	19.4	20.8
75°	4.7	4.7	2.4	0.0	0.0
77.5°	2.4	2.4	1.9	0.0	0.0
80°	2.4	2.4	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	1.8	3.3	4.2	4.2
90°	2.3	9.2	16.3	21.0	21.0
92.5°	32.2	137.7	238.6	91.6	75.2
95°	77.0	282.4	915.0	391.3	249.8
97.5°	125.6	313.2	1396.3	1075.9	759.1
100°	161.1	332.2	1547.6	1562.0	1274.5
102.5°	194.7	354.9	1586.8	1937.9	1674.1
105°	254.4	391.4	1568.6	2388.9	2229.1
107.5°	311.4	436.5	1479.4	2609.8	2657.2
110°	352.5	466.6	1412.2	2664.7	2829.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	389.8	500.3	1345.0	2629.3	2879.5
115°	450.5	548.6	1258.1	2505.3	2843.0
117.5°	508.4	598.8	1203.0	2331.2	2713.3
120°	543.9	630.6	1178.8	2200.8	2595.6
122.5°	575.6	662.3	1162.0	2086.4	2461.2
125°	620.9	707.6	1141.4	1930.9	2261.8
127.5°	663.8	746.5	1127.9	1801.1	2091.4
130°	686.3	770.7	1120.4	1724.0	1988.7
132.5°	712.4	796.8	1114.8	1656.2	1895.4
135°	749.3	831.4	1108.7	1561.6	1767.0
137.5°	783.8	860.0	1103.6	1485.1	1654.5
140°	810.0	880.7	1101.7	1434.3	1587.2
142.5°	832.4	897.6	1098.0	1389.0	1520.0
145°	866.0	925.3	1092.4	1330.5	1433.2
147.5°	901.9	953.1	1089.6	1278.7	1360.8
150°	924.3	970.0	1087.7	1250.2	1314.1
152.5°	944.9	986.9	1085.9	1225.7	1278.7
155°	980.4	1012.3	1085.4	1195.9	1230.1
157.5°	1006.0	1032.1	1085.4	1171.4	1195.1
160°	1024.7	1045.2	1085.4	1158.2	1176.4
162.5°	1039.6	1056.5	1087.3	1146.9	1161.5
165°	1059.7	1073.4	1090.1	1134.6	1141.4
167.5°	1073.7	1084.2	1092.4	1124.2	1126.0
170°	1083.1	1089.9	1092.4	1120.4	1120.4
172.5°	1090.5	1093.7	1092.4	1114.8	1112.9
175°	1097.1	1099.3	1092.4	1106.4	1104.1
177.5°	1098.9	1098.9	1091.5	1102.6	1098.9
180°	1097.1	1097.1	1097.1	1097.1	1097.1

(END OF REPORT)