

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: P519231

Luminaire Tested: **SQ4-WB-075U-100D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519231
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-100D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

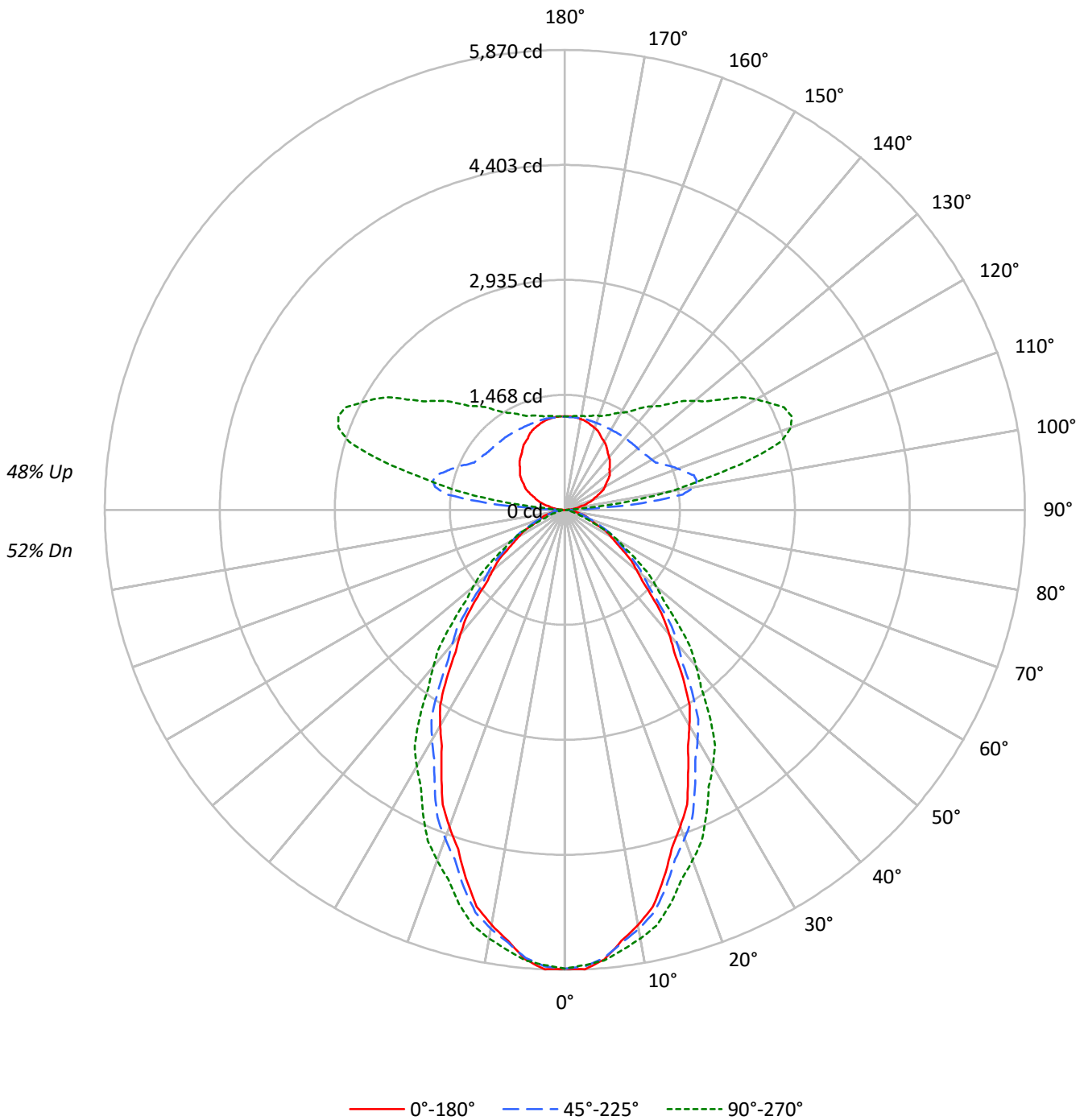
Lumens per Lamp: N/A
Luminaire Lumens: 16300.6 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	52
1	99	96	92	89	92	89	86	83	76	74	72	64	63	61	53	52	52	46
2	92	85	79	75	85	79	74	70	68	65	62	58	55	53	48	47	45	41
3	84	76	69	64	78	71	65	60	61	57	53	52	49	47	44	42	40	36
4	78	68	61	55	72	64	57	52	55	50	47	48	44	41	40	38	36	32
5	72	61	54	48	67	57	51	46	50	45	41	43	40	37	37	34	32	29
6	67	56	48	43	62	52	45	41	46	41	37	40	36	33	34	31	29	26
7	62	51	43	38	58	48	41	36	42	37	33	37	33	30	32	29	26	24
8	58	46	39	34	54	44	37	33	39	33	30	34	30	27	29	26	24	22
9	54	43	36	31	51	40	34	30	36	31	27	31	27	24	27	24	22	20
10	51	39	33	28	47	37	31	27	33	28	25	29	25	22	26	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18010	18010	18010
5°	17785	17722	17825
10°	16803	16956	17349
15°	15512	15872	16584
20°	14086	14616	15583
25°	12635	13323	14518
30°	11297	12036	13414
35°	9879	10593	12107
40°	8315	8975	10481
45°	6862	7454	8751
50°	5729	6246	7291
55°	4864	5360	6021
60°	4157	4647	4805
65°	3310	3908	3104
70°	2934	3050	1895
75°	2718	2473	1160
80°	2502	2276	1001
85°	2265	2085	815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	537.1	3.3
10°-20°	1397.1	8.6
20°-30°	1809.7	11.1
30°-40°	1772.1	10.9
40°-50°	1356.5	8.3
50°-60°	903.9	5.5
60°-70°	493.2	3.0
70°-80°	205.5	1.3
80°-90°	61.2	0.4
90°-100°	562.1	3.4
100°-110°	1546.5	9.5
110°-120°	1596.3	9.8
120°-130°	1279.0	7.8
130°-140°	1004.5	6.2
140°-150°	769.8	4.7
150°-160°	553.5	3.4
160°-170°	338.4	2.1
170°-180°	114.1	0.7
0°-30°	3744.0	23.0
0°-40°	5516.1	33.8
0°-60°	7776.5	47.7
0°-90°	8536.5	52.4
90°-120°	3704.9	22.7
90°-150°	6758.2	41.5
90°-180°	7764.0	47.6
0°-180°	16300.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5856	5856	5856	5856	5856	
5°	5761	5703	5740	5754	5774	536
15°	4872	4854	4985	5121	5209	1361
25°	3723	3733	3926	4098	4278	1712
35°	2631	2644	2821	3011	3225	1636
45°	1578	1608	1714	1844	2012	1230
55°	907	945	1000	1038	1123	822
65°	455	492	537	469	427	473
75°	229	229	208	143	98	244
85°	64	64	59	38	23	70
90°	2	10	18	23	23	9
95°	84	307	994	425	271	88
105°	276	425	1704	2595	2422	291
115°	489	596	1367	2722	3089	483
125°	674	769	1240	2098	2457	602
135°	814	903	1204	1696	1920	628
145°	941	1005	1187	1445	1557	590
155°	1065	1100	1179	1299	1336	489
165°	1151	1166	1184	1233	1240	324
175°	1192	1194	1187	1202	1199	113
180°	1192	1192	1192	1192	1192	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5856.1	5856.1	5856.1	5856.1	5856.1
2.5°	5870.5	5818.2	5831.4	5831.1	5815.0
5°	5761.0	5703.3	5740.5	5753.8	5773.9
7.5°	5547.3	5503.5	5571.4	5621.7	5662.4
10°	5380.7	5343.1	5429.6	5502.7	5555.5
12.5°	5187.5	5155.9	5263.1	5361.2	5430.1
15°	4872.0	4854.4	4985.0	5120.6	5208.6
17.5°	4534.3	4525.8	4675.6	4833.9	4946.5
20°	4304.1	4301.6	4466.0	4630.8	4761.5
22.5°	4071.8	4077.3	4250.1	4421.6	4570.3
25°	3723.4	3733.4	3926.3	4097.5	4278.4
27.5°	3401.1	3405.6	3605.1	3785.8	3978.8
30°	3181.2	3193.7	3389.3	3576.3	3777.3
32.5°	2961.2	2975.8	3167.3	3360.6	3565.6
35°	2631.3	2643.8	2821.4	3011.3	3224.8
37.5°	2291.1	2308.1	2465.8	2645.3	2855.3
40°	2071.1	2096.2	2235.6	2404.7	2610.7
42.5°	1859.4	1890.5	2019.7	2180.2	2366.1
45°	1577.7	1607.9	1713.9	1843.7	2012.0
47.5°	1335.2	1369.8	1451.3	1563.0	1706.7
50°	1197.4	1230.1	1305.4	1388.1	1523.8
52.5°	1076.1	1108.8	1175.8	1239.6	1355.2
55°	907.1	944.8	999.6	1037.5	1122.9
57.5°	768.3	804.5	848.0	865.1	916.8
60°	675.8	716.0	755.5	753.5	781.2
62.5°	591.5	625.7	665.0	637.8	639.3
65°	454.8	492.5	537.0	469.3	426.6
67.5°	367.5	375.5	421.4	327.2	276.5
70°	326.3	326.3	339.2	253.4	210.7
72.5°	287.3	287.3	275.5	206.1	161.4
75°	228.7	228.7	208.1	142.9	97.6
77.5°	176.3	174.3	159.3	106.6	70.9
80°	141.3	141.3	128.5	84.2	56.5
82.5°	110.5	110.5	99.7	65.8	42.1
85°	64.2	64.2	59.1	38.2	23.1
87.5°	23.1	24.6	24.1	16.9	14.8
90°	2.5	10.0	17.8	22.8	22.8
92.5°	35.0	149.5	259.2	99.5	81.7
95°	83.7	306.8	994.0	425.1	271.3
97.5°	136.4	340.2	1516.9	1168.8	824.6
100°	175.0	360.9	1681.2	1696.9	1384.5
102.5°	211.5	385.5	1723.8	2105.3	1818.7
105°	276.4	425.2	1704.0	2595.2	2421.7
107.5°	338.3	474.1	1607.2	2835.2	2886.7
110°	382.9	506.9	1534.1	2894.8	3073.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	423.5	543.5	1461.1	2856.4	3128.1
115°	489.4	596.0	1366.8	2721.6	3088.6
117.5°	552.3	650.5	1306.9	2532.5	2947.6
120°	590.8	685.1	1280.6	2390.8	2819.8
122.5°	625.3	719.5	1262.3	2266.6	2673.7
125°	674.5	768.7	1240.0	2097.7	2457.2
127.5°	721.2	810.9	1225.3	1956.7	2272.1
130°	745.5	837.3	1217.2	1872.9	2160.5
132.5°	773.9	865.7	1211.1	1799.2	2059.1
135°	814.0	903.2	1204.5	1696.4	1919.6
137.5°	851.5	934.3	1198.9	1613.4	1797.4
140°	879.9	956.8	1196.9	1558.2	1724.3
142.5°	904.3	975.2	1192.8	1509.0	1651.3
145°	940.8	1005.2	1186.7	1445.4	1557.0
147.5°	979.8	1035.4	1183.7	1389.1	1478.4
150°	1004.2	1053.8	1181.7	1358.2	1427.6
152.5°	1026.5	1072.1	1179.6	1331.6	1389.1
155°	1065.0	1099.7	1179.1	1299.2	1336.4
157.5°	1092.9	1121.2	1179.1	1272.5	1298.3
160°	1113.2	1135.5	1179.1	1258.2	1278.0
162.5°	1129.4	1147.8	1181.2	1245.9	1261.8
165°	1151.2	1166.1	1184.2	1232.6	1240.0
167.5°	1166.5	1177.9	1186.7	1221.3	1223.3
170°	1176.6	1184.0	1186.7	1217.2	1217.2
172.5°	1184.7	1188.2	1186.7	1211.0	1209.1
175°	1191.8	1194.3	1186.7	1201.9	1199.4
177.5°	1193.8	1193.8	1185.7	1197.8	1193.8
180°	1191.8	1191.8	1191.8	1191.8	1191.8

(END OF REPORT)