

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P511858

Luminaire Tested: **SQW-F-100U-100D-835-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511858
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-18,
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQW-F-100U-100D-835-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

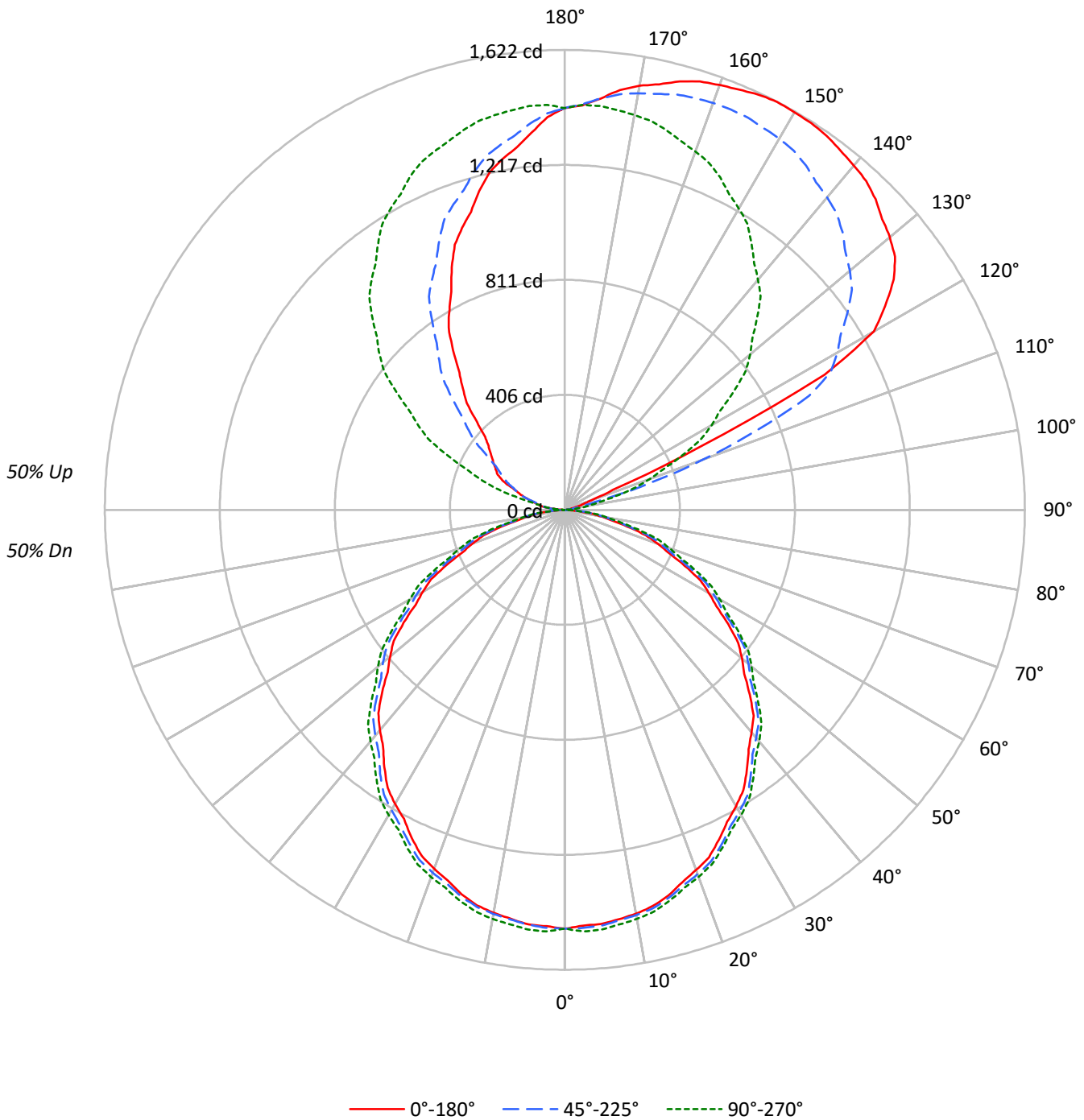
Lumens per Lamp: N/A
Luminaire Lumens: 7994.1 lumens
Efficiency: N/A
Efficacy: 126.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 63.4
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50
1	98	94	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42
2	89	82	75	70	82	75	70	66	64	60	57	54	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	52	48	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	35	32	29	26
5	68	56	48	42	63	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	35	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	34	28	49	39	32	27	33	28	24	28	24	21	24	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	47695	47695	47695
5°	47521	48169	47586
10°	47414	48037	47316
15°	47104	47739	46937
20°	46461	47354	46289
25°	45749	46854	45500
30°	45006	46348	44633
35°	44152	45650	43718
40°	43166	44936	42744
45°	42106	44115	41603
50°	40943	43204	40391
55°	39578	41999	39015
60°	37846	40752	37329
65°	35607	39121	35148
70°	32762	36916	32384
75°	28447	33437	29071
80°	22873	27708	24175
85°	12597	18896	16302



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.6	1.7
10°-20°	398.1	5.0
20°-30°	596.7	7.5
30°-40°	709.4	8.9
40°-50°	726.3	9.1
50°-60°	647.4	8.1
60°-70°	482.6	6.0
70°-80°	263.7	3.3
80°-90°	62.6	0.8
90°-100°	34.8	0.4
100°-110°	164.5	2.1
110°-120°	483.5	6.0
120°-130°	702.9	8.8
130°-140°	752.0	9.4
140°-150°	716.8	9.0
150°-160°	591.4	7.4
160°-170°	387.4	4.8
170°-180°	134.4	1.7
0°-30°	1134.4	14.2
0°-40°	1843.8	23.1
0°-60°	3217.5	40.2
0°-90°	4026.4	50.4
90°-120°	682.8	8.5
90°-150°	2854.5	35.7
90°-180°	3968.0	49.6
0°-180°	7994.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1477	1477	1477	1477	1477	
5°	1466	1472	1486	1469	1468	139
15°	1409	1417	1428	1411	1404	397
25°	1284	1305	1315	1298	1277	592
35°	1120	1143	1158	1135	1109	700
45°	922	950	966	939	911	711
55°	703	731	746	724	693	628
65°	466	489	512	485	460	461
75°	228	246	268	248	233	244
85°	34	47	51	52	44	50
90°	3	3	2	4	8	2
95°	10	12	27	42	38	11
105°	44	123	182	116	124	54
115°	520	951	461	220	240	590
125°	1416	1218	726	338	312	1254
135°	1549	1384	960	567	438	1196
145°	1610	1482	1148	818	687	1009
155°	1616	1526	1294	1048	943	747
165°	1564	1516	1386	1234	1164	444
175°	1456	1456	1430	1370	1336	141
180°	1417	1417	1417	1417	1417	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1477.0	1477.0	1477.0	1477.0	1477.0	1477.0	1477.0	1477.0	1477.0
2.5°	1467.4	1474.4	1476.2	1474.9	1488.2	1475.7	1475.4	1474.5	1469.8
5°	1466.0	1468.0	1472.0	1469.4	1486.0	1469.4	1469.0	1467.0	1468.0
7.5°	1456.4	1458.4	1460.6	1458.0	1474.6	1457.6	1457.4	1454.0	1455.0
10°	1446.0	1448.0	1451.0	1448.4	1465.0	1446.4	1447.0	1442.0	1443.0
12.5°	1431.6	1433.6	1439.0	1435.6	1451.4	1433.6	1434.2	1428.4	1428.6
15°	1409.0	1411.9	1417.0	1411.4	1428.0	1410.4	1411.0	1405.0	1404.0
17.5°	1376.8	1382.7	1388.8	1383.9	1398.8	1382.0	1382.8	1373.5	1371.0
20°	1352.0	1357.9	1368.0	1362.4	1378.0	1360.4	1362.0	1348.0	1347.0
22.5°	1327.2	1331.5	1344.0	1338.4	1354.0	1336.4	1337.2	1320.8	1320.6
25°	1284.0	1289.9	1305.0	1300.3	1315.0	1297.4	1298.0	1279.9	1277.0
27.5°	1239.8	1245.9	1261.2	1256.7	1271.8	1253.8	1255.0	1234.9	1229.0
30°	1207.0	1213.8	1230.0	1226.4	1243.0	1223.4	1223.0	1202.9	1197.0
32.5°	1171.8	1180.2	1196.4	1194.3	1209.4	1190.6	1188.6	1168.5	1162.6
35°	1120.0	1128.8	1143.0	1144.3	1158.0	1140.4	1135.0	1115.8	1109.0
37.5°	1064.0	1072.2	1087.6	1090.3	1103.6	1085.2	1077.6	1060.2	1052.4
40°	1024.0	1033.8	1050.0	1054.3	1066.0	1048.4	1040.0	1021.8	1014.0
42.5°	984.8	994.6	1011.6	1018.2	1026.8	1010.0	1000.0	982.6	973.2
45°	922.0	931.8	950.0	959.2	966.0	950.4	939.0	920.8	911.0
47.5°	858.2	869.0	887.4	898.7	903.2	888.9	878.4	858.2	847.2
50°	815.0	825.8	845.0	857.1	860.0	847.3	836.0	815.7	804.0
52.5°	771.0	780.2	799.4	813.0	814.4	804.0	792.0	771.8	760.8
55°	703.0	712.8	731.0	747.0	746.0	739.2	724.0	703.8	693.0
57.5°	633.2	641.0	660.0	677.0	677.4	669.6	655.0	635.0	624.4
60°	586.0	593.8	612.0	629.0	631.0	623.2	607.0	587.8	578.0
62.5°	538.8	545.8	563.2	581.8	583.8	576.0	559.0	540.6	530.8
65°	466.0	471.9	489.0	508.1	512.0	503.2	485.0	468.8	460.0
67.5°	394.2	399.9	415.8	434.7	439.8	429.8	413.4	398.0	389.4
70°	347.0	351.9	367.0	385.1	391.0	380.2	367.0	350.8	343.0
72.5°	299.0	303.9	319.0	336.3	341.4	331.4	319.0	304.5	301.4
75°	228.0	232.9	246.0	264.1	268.0	259.2	248.0	235.0	233.0
77.5°	164.6	167.7	179.6	192.1	194.6	189.3	182.6	171.0	170.0
80°	123.0	126.9	138.0	148.0	149.0	146.1	141.0	131.0	130.0
82.5°	86.2	89.3	98.8	108.0	106.6	106.8	103.4	94.2	94.0
85°	34.0	36.9	47.0	54.9	51.0	53.9	52.0	45.0	44.0
87.5°	3.8	4.6	8.6	16.4	14.8	17.3	15.2	11.8	12.0
90°	3.0	3.0	3.0	2.0	2.0	2.9	3.9	6.9	7.9
92.5°	5.3	5.3	5.3	6.7	7.5	15.4	10.3	11.6	11.1
95°	9.9	10.8	11.8	30.5	26.6	39.2	42.4	40.4	37.5
97.5°	17.4	18.3	24.7	83.5	59.0	53.2	69.5	73.5	69.7
100°	23.7	24.6	36.5	135.0	85.8	68.5	78.9	91.8	91.8
102.5°	30.8	32.5	57.8	203.7	120.6	86.2	90.8	102.9	106.0
105°	44.4	49.2	123.3	344.6	182.5	115.0	116.4	121.4	124.3
107.5°	69.3	88.9	318.7	477.3	260.3	150.3	153.5	151.7	150.4
110°	97.7	142.1	523.9	558.9	318.7	177.8	175.6	174.6	171.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	182.9	303.7	734.7	630.4	376.3	208.4	193.0	204.5	199.3
115°	520.0	739.9	951.1	729.9	460.8	262.0	220.0	235.9	239.8
117.5°	1032.2	1116.6	1057.9	814.2	543.3	323.7	244.7	259.3	266.8
120°	1258.0	1239.7	1110.0	870.9	596.9	367.3	264.4	273.5	280.2
122.5°	1339.3	1296.3	1153.4	919.9	648.2	414.8	289.7	286.1	294.4
125°	1415.9	1359.9	1218.5	986.7	726.2	490.8	338.4	306.0	311.8
127.5°	1467.4	1408.9	1275.8	1051.3	802.9	568.9	402.2	337.5	331.5
130°	1495.8	1438.9	1311.3	1087.9	853.5	621.0	447.9	365.7	351.3
132.5°	1517.9	1465.6	1342.1	1127.4	896.9	670.5	495.3	402.7	381.2
135°	1549.1	1499.9	1384.3	1180.0	960.0	743.9	567.3	469.0	438.1
137.5°	1572.9	1527.0	1418.0	1225.7	1021.8	815.1	640.7	543.1	511.3
140°	1585.6	1541.2	1438.6	1253.6	1059.7	860.0	689.7	591.3	559.4
142.5°	1596.6	1553.8	1455.9	1280.6	1096.0	904.0	741.8	640.2	610.0
145°	1610.2	1569.7	1482.0	1319.2	1147.5	969.0	817.9	714.7	686.7
147.5°	1616.7	1580.5	1502.1	1353.3	1197.4	1031.1	891.5	792.8	762.7
150°	1619.1	1584.4	1511.6	1374.0	1227.4	1071.1	937.3	844.9	814.0
152.5°	1621.5	1585.2	1517.9	1391.6	1255.0	1108.0	982.3	894.7	866.9
155°	1616.2	1584.3	1526.4	1413.2	1294.5	1160.4	1047.8	967.4	943.2
157.5°	1603.9	1582.5	1528.1	1430.6	1325.9	1208.0	1109.4	1036.4	1012.7
160°	1594.4	1576.1	1527.4	1440.3	1344.8	1237.7	1146.5	1079.9	1057.7
162.5°	1584.2	1565.1	1523.4	1446.9	1363.0	1265.9	1182.8	1118.7	1101.1
165°	1563.9	1546.5	1516.5	1453.8	1386.3	1304.3	1234.3	1178.7	1164.3
167.5°	1537.4	1526.6	1502.1	1455.9	1404.4	1337.8	1278.1	1233.6	1220.9
170°	1518.5	1510.8	1491.8	1455.4	1413.9	1358.9	1307.3	1267.6	1258.0
172.5°	1494.0	1490.9	1478.4	1452.5	1421.8	1376.1	1332.6	1298.4	1289.6
175°	1456.3	1460.2	1456.3	1445.1	1429.7	1398.8	1369.5	1342.7	1335.9
177.5°	1427.9	1429.4	1431.8	1431.8	1429.5	1415.6	1399.5	1385.3	1386.9
180°	1416.8	1416.8	1416.8	1416.8	1416.8	1416.8	1416.8	1416.8	1416.8

(END OF REPORT)