

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: P511852

Luminaire Tested: **SQW-F-100U-075D-835-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511852
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-075D-835-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

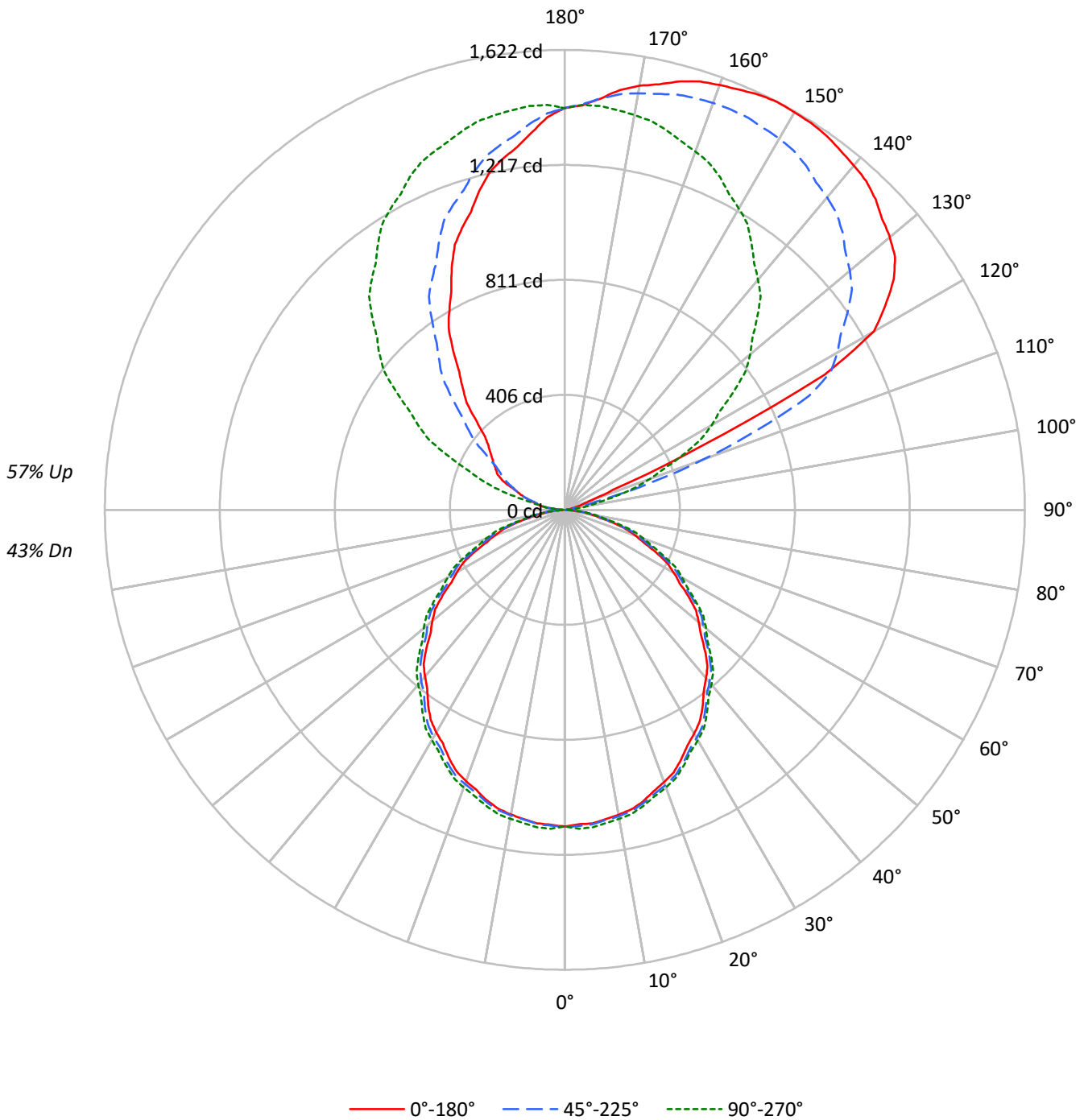
Lumens per Lamp: N/A
Luminaire Lumens: 7011.8 lumens
Efficiency: N/A
Efficacy: 129.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 54.2
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



TEST NUMBER: P511852
CATALOG NUMBER: SQW-F-100U-075D-835-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P511852

CATALOG NUMBER: SQW-F-100U-075D-835-1D-UNV-STD-W-4

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	80	80	80	64	64	64	50	50	50	43
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42	37
2	88	80	74	69	80	74	68	64	61	57	54	50	47	44	39	37	35	30
3	80	70	63	57	73	65	58	53	54	49	45	44	40	38	34	32	30	26
4	73	62	54	48	66	57	50	45	48	43	38	39	35	32	31	28	26	22
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	22	19
6	62	50	42	36	56	46	39	33	38	33	29	31	27	24	25	22	20	17
7	57	45	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17	15
8	53	40	33	28	48	37	31	26	32	26	22	26	22	19	21	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	27	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	36070	36070	36070
5°	35981	36435	35981
10°	35807	36299	35774
15°	35604	36072	35470
20°	35120	35808	34983
25°	34597	35416	34419
30°	34006	34976	33782
35°	33390	34454	33114
40°	32669	33892	32332
45°	31876	33292	31511
50°	30946	32604	30594
55°	29951	31753	29557
60°	28675	30806	28352
65°	26972	29570	26743
70°	24926	27852	24737
75°	21709	24953	21709
80°	17480	20828	18038
85°	10004	14079	11856



TEST NUMBER: P511852

CATALOG NUMBER: SQW-F-100U-075D-835-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.6	1.5
10°-20°	300.9	4.3
20°-30°	450.9	6.4
30°-40°	536.1	7.6
40°-50°	548.8	7.8
50°-60°	489.3	7.0
60°-70°	365.6	5.2
70°-80°	199.3	2.8
80°-90°	47.6	0.7
90°-100°	34.8	0.5
100°-110°	164.5	2.3
110°-120°	483.5	6.9
120°-130°	702.9	10.0
130°-140°	752.0	10.7
140°-150°	716.8	10.2
150°-160°	591.4	8.4
160°-170°	387.4	5.5
170°-180°	134.4	1.9
0°-30°	857.4	12.2
0°-40°	1393.5	19.9
0°-60°	2431.6	34.7
0°-90°	3044.1	43.4
90°-120°	682.8	9.7
90°-150°	2854.5	40.7
90°-180°	3968.0	56.6
0°-180°	7011.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1117	1117	1117	1117	1117	
5°	1110	1113	1124	1111	1110	105
15°	1065	1071	1079	1067	1061	300
25°	971	986	994	982	966	447
35°	847	864	874	859	840	529
45°	698	719	729	711	690	538
55°	532	553	564	547	525	475
65°	353	371	387	369	350	350
75°	174	187	200	188	174	186
85°	27	35	38	39	32	39
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	



TEST NUMBER: P511852

CATALOG NUMBER: SQW-F-100U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1117.0	1117.0	1117.0	1117.0	1117.0	1117.0	1117.0	1117.0	1117.0
2.5°	1109.8	1115.3	1116.2	1114.8	1125.8	1115.6	1115.4	1115.3	1111.4
5°	1110.0	1110.0	1113.0	1111.3	1124.0	1111.3	1111.0	1109.0	1110.0
7.5°	1100.8	1102.0	1104.2	1102.3	1114.2	1101.3	1102.0	1099.0	1100.6
10°	1092.0	1094.0	1097.0	1094.3	1107.0	1093.3	1094.0	1091.0	1091.0
12.5°	1082.4	1084.4	1088.2	1084.7	1097.4	1084.5	1084.4	1080.6	1080.6
15°	1065.0	1067.0	1071.0	1067.3	1079.0	1065.3	1067.0	1062.0	1061.0
17.5°	1040.4	1044.5	1049.8	1046.1	1058.0	1044.1	1045.0	1038.2	1036.4
20°	1022.0	1026.9	1033.0	1029.3	1042.0	1027.3	1029.0	1019.0	1018.0
22.5°	1002.8	1006.9	1015.4	1011.7	1023.6	1009.7	1011.4	998.2	998.0
25°	971.0	974.9	986.0	983.2	994.0	980.3	982.0	967.0	966.0
27.5°	936.8	941.9	953.0	950.4	961.2	946.5	948.2	932.0	930.0
30°	912.0	917.9	929.0	927.2	938.0	923.3	925.0	908.0	906.0
32.5°	885.6	893.0	904.2	903.2	913.2	899.3	898.6	882.3	879.6
35°	847.0	852.9	864.0	865.2	874.0	861.3	859.0	842.9	840.0
37.5°	804.6	810.7	821.8	824.4	832.0	819.5	815.8	799.7	796.6
40°	775.0	781.8	793.0	797.2	804.0	792.3	787.0	770.9	767.0
42.5°	744.6	752.2	764.2	768.3	774.4	762.7	756.6	741.3	736.6
45°	698.0	705.8	719.0	724.1	729.0	718.2	711.0	694.9	690.0
47.5°	649.6	657.4	671.0	677.3	681.0	672.2	663.8	647.7	641.8
50°	616.0	623.8	639.0	646.1	649.0	640.2	631.0	614.9	609.0
52.5°	583.2	590.2	605.4	613.2	615.4	608.2	598.2	582.8	576.2
55°	532.0	538.8	553.0	562.0	564.0	558.1	547.0	530.9	525.0
57.5°	479.2	486.0	500.0	510.0	512.2	506.3	494.2	480.0	473.4
60°	444.0	450.8	464.0	474.1	477.0	471.1	459.0	444.9	439.0
62.5°	408.0	413.3	427.2	437.3	441.8	436.7	423.8	408.1	403.0
65°	353.0	358.9	371.0	383.1	387.0	383.1	369.0	354.9	350.0
67.5°	300.0	303.9	315.0	326.9	331.8	327.5	314.8	300.3	297.2
70°	264.0	267.9	279.0	290.1	295.0	289.1	278.0	265.9	262.0
72.5°	226.4	230.3	240.6	251.7	255.8	249.9	240.4	229.9	225.2
75°	174.0	177.9	187.0	196.1	200.0	196.1	188.0	178.9	174.0
77.5°	125.2	128.9	136.8	144.6	146.4	143.9	138.2	130.3	126.6
80°	94.0	96.9	104.0	111.0	112.0	111.0	107.0	99.9	97.0
82.5°	66.0	68.2	75.2	80.6	80.0	82.2	78.2	72.0	69.8
85°	27.0	29.0	35.0	40.9	38.0	42.9	39.0	34.9	32.0
87.5°	3.8	3.8	7.0	11.6	10.8	14.1	11.2	9.4	8.0
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



TEST NUMBER: P511852

CATALOG NUMBER: SQW-F-100U-075D-835-1D-UNV-STD-W-4

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)