

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: P511857

Luminaire Tested: **SQW-F-100U-100D-830-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511857
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-830-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

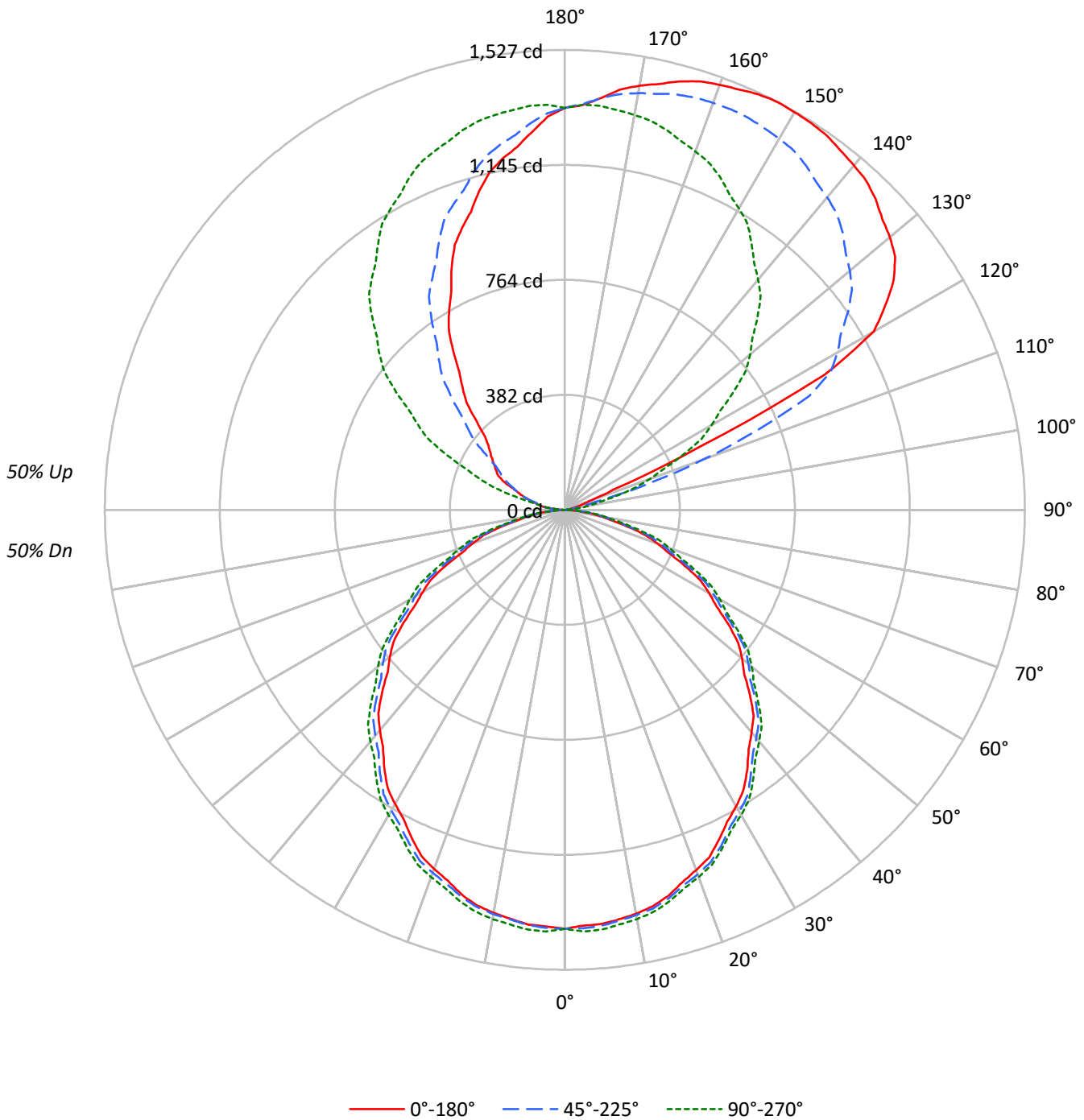
Lumens per Lamp: N/A
Luminaire Lumens: 7528.4 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

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°	44918	44918	44918
5°	44752	45362	44814
10°	44653	45240	44558
15°	44360	44958	44202
20°	43753	44595	43591
25°	43084	44124	42849
30°	42385	43649	42034
35°	41581	42989	41171
40°	40649	42318	40253
45°	39653	41544	39178
50°	38557	40687	38040
55°	37270	39550	36741
60°	35644	38376	35153
65°	33536	36844	33100
70°	30855	34764	30496
75°	26787	31491	27374
80°	21534	26090	22762
85°	11856	17784	15339



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.5	1.7
10°-20°	374.9	5.0
20°-30°	561.9	7.5
30°-40°	668.1	8.9
40°-50°	684.0	9.1
50°-60°	609.7	8.1
60°-70°	454.5	6.0
70°-80°	248.3	3.3
80°-90°	58.9	0.8
90°-100°	32.8	0.4
100°-110°	155.0	2.1
110°-120°	455.3	6.0
120°-130°	661.9	8.8
130°-140°	708.2	9.4
140°-150°	675.0	9.0
150°-160°	557.0	7.4
160°-170°	364.8	4.8
170°-180°	126.5	1.7
0°-30°	1068.3	14.2
0°-40°	1736.4	23.1
0°-60°	3030.1	40.2
0°-90°	3791.8	50.4
90°-120°	643.1	8.5
90°-150°	2688.2	35.7
90°-180°	3737.0	49.6
0°-180°	7528.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1391	1391	1391	1391	1391	
5°	1381	1386	1399	1383	1382	131
15°	1327	1334	1345	1329	1322	373
25°	1209	1229	1238	1222	1203	557
35°	1055	1076	1090	1069	1044	659
45°	868	895	910	884	858	670
55°	662	688	702	682	653	591
65°	439	460	482	457	433	434
75°	215	232	252	234	219	230
85°	32	44	48	49	41	47
90°	3	3	2	4	7	2
95°	9	11	25	40	35	11
105°	42	116	172	110	117	51
115°	490	896	434	207	226	556
125°	1333	1148	684	319	294	1181
135°	1459	1304	904	534	413	1126
145°	1516	1396	1081	770	647	950
155°	1522	1437	1219	987	888	703
165°	1473	1428	1306	1162	1096	418
175°	1372	1372	1346	1290	1258	133
180°	1334	1334	1334	1334	1334	



TEST NUMBER: P511857

CATALOG NUMBER: SQW-F-100U-100D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1391.0	1391.0	1391.0	1391.0	1391.0	1391.0	1391.0	1391.0	1391.0
2.5°	1381.9	1388.5	1390.2	1389.0	1401.5	1389.7	1389.4	1388.6	1384.2
5°	1380.6	1382.4	1386.2	1383.8	1399.4	1383.8	1383.4	1381.6	1382.5
7.5°	1371.6	1373.4	1375.5	1373.0	1388.7	1372.7	1372.5	1369.3	1370.2
10°	1361.8	1363.6	1366.5	1364.0	1379.7	1362.2	1362.7	1358.0	1358.9
12.5°	1348.2	1350.0	1355.2	1351.9	1366.8	1350.1	1350.6	1345.2	1345.4
15°	1326.9	1329.7	1334.5	1329.2	1344.8	1328.2	1328.8	1323.1	1322.2
17.5°	1296.6	1302.1	1307.9	1303.3	1317.3	1301.5	1302.2	1293.5	1291.1
20°	1273.2	1278.8	1288.3	1283.0	1297.7	1281.1	1282.7	1269.4	1268.5
22.5°	1249.9	1253.9	1265.7	1260.4	1275.1	1258.5	1259.3	1243.9	1243.7
25°	1209.2	1214.7	1229.0	1224.6	1238.4	1221.8	1222.4	1205.4	1202.6
27.5°	1167.6	1173.3	1187.7	1183.5	1197.7	1180.8	1181.9	1162.9	1157.4
30°	1136.7	1143.1	1158.3	1154.9	1170.6	1152.2	1151.8	1132.8	1127.3
32.5°	1103.5	1111.5	1126.7	1124.8	1138.9	1121.3	1119.4	1100.4	1094.9
35°	1054.8	1063.0	1076.4	1077.6	1090.5	1074.0	1068.9	1050.8	1044.4
37.5°	1002.0	1009.8	1024.2	1026.8	1039.3	1022.0	1014.8	998.5	991.1
40°	964.3	973.6	988.8	992.8	1003.9	987.3	979.4	962.3	954.9
42.5°	927.4	936.6	952.7	958.9	967.0	951.1	941.7	925.3	916.5
45°	868.3	877.5	894.7	903.3	909.7	895.0	884.3	867.1	857.9
47.5°	808.2	818.3	835.7	846.3	850.6	837.1	827.2	808.2	797.8
50°	767.5	777.7	795.8	807.1	809.9	797.9	787.3	768.2	757.2
52.5°	726.1	734.7	752.8	765.7	767.0	757.2	745.9	726.8	716.5
55°	662.0	671.3	688.4	703.5	702.5	696.1	681.8	662.8	652.6
57.5°	596.3	603.7	621.6	637.6	637.9	630.6	616.8	598.0	588.0
60°	551.9	559.2	576.3	592.4	594.2	586.9	571.6	553.5	544.3
62.5°	507.4	514.0	530.4	547.9	549.8	542.4	526.4	509.1	499.9
65°	438.9	444.4	460.5	478.5	482.2	473.9	456.7	441.5	433.2
67.5°	371.2	376.6	391.6	409.4	414.2	404.8	389.3	374.8	366.7
70°	326.8	331.4	345.6	362.7	368.2	358.1	345.6	330.4	323.0
72.5°	281.6	286.2	300.4	316.7	321.5	312.1	300.4	286.8	283.8
75°	214.7	219.3	231.7	248.7	252.4	244.1	233.6	221.3	219.4
77.5°	155.0	158.0	169.1	180.9	183.3	178.3	172.0	161.0	160.1
80°	115.8	119.5	130.0	139.4	140.3	137.6	132.8	123.3	122.4
82.5°	81.2	84.1	93.0	101.7	100.4	100.6	97.4	88.7	88.5
85°	32.0	34.8	44.3	51.7	48.0	50.8	49.0	42.4	41.4
87.5°	3.6	4.3	8.1	15.4	13.9	16.3	14.3	11.1	11.3
90°	2.8	2.8	2.8	1.9	1.9	2.8	3.7	6.5	7.4
92.5°	5.0	5.0	5.0	6.3	7.1	14.5	9.7	11.0	10.4
95°	9.3	10.2	11.2	28.7	25.1	36.9	40.0	38.0	35.3
97.5°	16.4	17.3	23.2	78.6	55.6	50.1	65.4	69.2	65.6
100°	22.3	23.2	34.4	127.2	80.8	64.5	74.3	86.4	86.4
102.5°	29.0	30.6	54.5	191.9	113.5	81.2	85.5	96.9	99.8
105°	41.8	46.4	116.1	324.5	171.9	108.3	109.6	114.4	117.1
107.5°	65.2	83.8	300.1	449.5	245.1	141.5	144.6	142.9	141.6
110°	92.0	133.8	493.4	526.4	300.1	167.5	165.4	164.4	161.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	172.3	286.0	691.9	593.7	354.4	196.3	181.7	192.6	187.7
115°	489.7	696.8	895.7	687.4	433.9	246.8	207.2	222.2	225.8
117.5°	972.1	1051.5	996.3	766.7	511.6	304.8	230.4	244.2	251.3
120°	1184.7	1167.4	1045.3	820.2	562.2	345.9	249.0	257.5	263.9
122.5°	1261.3	1220.8	1086.2	866.3	610.5	390.6	272.8	269.5	277.3
125°	1333.4	1280.7	1147.5	929.2	683.9	462.2	318.7	288.2	293.6
127.5°	1381.9	1326.8	1201.4	990.0	756.2	535.8	378.7	317.8	312.2
130°	1408.6	1355.0	1234.9	1024.5	803.7	584.8	421.8	344.4	330.8
132.5°	1429.5	1380.2	1263.9	1061.8	844.6	631.5	466.5	379.2	359.0
135°	1458.8	1412.5	1303.6	1111.2	904.1	700.6	534.3	441.6	412.6
137.5°	1481.3	1438.1	1335.4	1154.3	962.3	767.7	603.4	511.5	481.5
140°	1493.2	1451.4	1354.7	1180.6	997.9	809.9	649.5	556.8	526.8
142.5°	1503.6	1463.3	1371.1	1206.0	1032.1	851.3	698.6	602.9	574.4
145°	1516.4	1478.3	1395.6	1242.4	1080.6	912.6	770.3	673.1	646.7
147.5°	1522.6	1488.4	1414.6	1274.5	1127.7	971.0	839.6	746.6	718.3
150°	1524.8	1492.1	1423.5	1294.0	1155.9	1008.7	882.7	795.6	766.6
152.5°	1527.0	1492.9	1429.5	1310.6	1181.9	1043.5	925.1	842.5	816.4
155°	1522.0	1492.0	1437.4	1330.8	1219.1	1092.8	986.8	911.0	888.3
157.5°	1510.5	1490.3	1439.1	1347.3	1248.6	1137.6	1044.8	976.1	953.7
160°	1501.6	1484.3	1438.4	1356.4	1266.5	1165.6	1079.7	1017.0	996.1
162.5°	1491.9	1473.9	1434.7	1362.6	1283.6	1192.2	1113.9	1053.5	1037.0
165°	1472.8	1456.4	1428.2	1369.1	1305.5	1228.3	1162.4	1110.1	1096.4
167.5°	1447.9	1437.7	1414.6	1371.1	1322.6	1259.9	1203.7	1161.8	1149.8
170°	1430.0	1422.7	1404.9	1370.6	1331.5	1279.7	1231.2	1193.8	1184.7
172.5°	1407.0	1404.1	1392.3	1367.8	1339.0	1295.9	1255.0	1222.8	1214.4
175°	1371.5	1375.1	1371.5	1360.9	1346.4	1317.3	1289.7	1264.5	1258.1
177.5°	1344.7	1346.2	1348.4	1348.4	1346.2	1333.1	1318.0	1304.6	1306.1
180°	1334.3	1334.3	1334.3	1334.3	1334.3	1334.3	1334.3	1334.3	1334.3

(END OF REPORT)