

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: P511839

Luminaire Tested: **SQW-F-100U-025D-830-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P511839  
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-025D-830-1D-UNV-STD-W-4  
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE  
DOWNLIGHT 250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

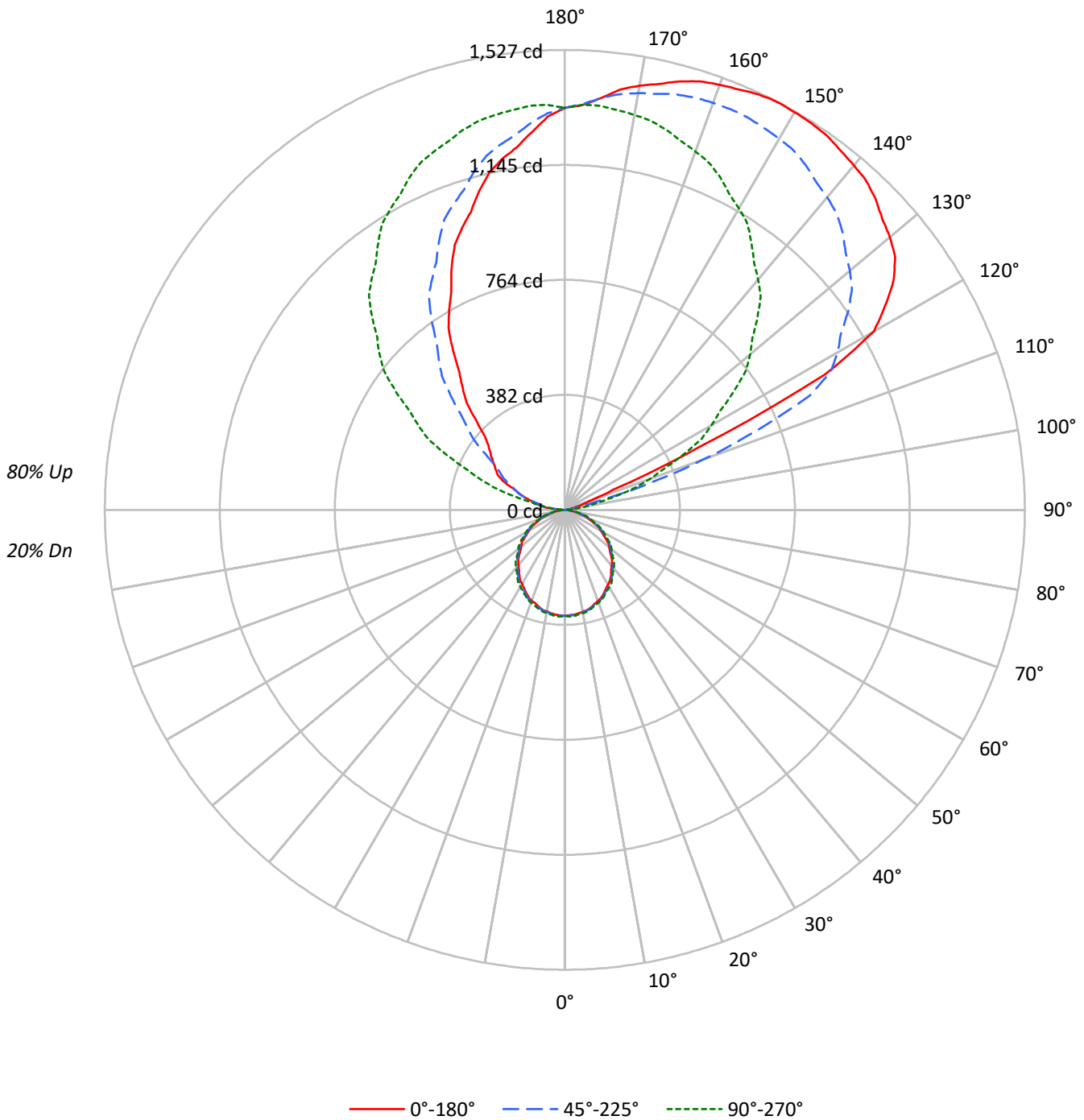
Lumens per Lamp: N/A  
Luminaire Lumens: 4690.7 lumens  
Efficiency: N/A  
Efficacy: 131.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 35.8  
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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	91	87	83	80	80	77	74	71	58	56	55	41	40	39	25	25	24	17
2	83	76	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	14
3	76	67	60	54	66	59	53	49	45	41	38	32	29	27	20	18	17	12
4	69	59	51	46	61	52	46	41	40	35	32	28	26	23	18	16	15	10
5	63	52	44	39	56	46	40	35	35	31	27	25	22	20	16	14	13	9
6	58	47	39	33	51	41	35	30	32	27	24	23	20	17	14	13	11	8
7	53	42	34	29	47	37	31	26	29	24	21	21	18	15	13	11	10	7
8	49	38	30	25	44	34	27	23	26	21	18	19	16	13	12	10	9	6
9	46	34	27	22	40	31	24	20	24	19	16	17	14	12	11	9	8	6
10	43	31	24	20	38	28	22	18	22	17	14	16	13	11	10	8	7	5

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	11373	11373	11373
5°	11326	11478	11326
10°	11270	11424	11240
15°	11209	11367	11146
20°	11069	11261	11034
25°	10906	11142	10803
30°	10675	11026	10605
35°	10506	10841	10395
40°	10201	10678	10083
45°	9933	10367	9805
50°	9651	10173	9510
55°	9278	9914	9278
60°	8880	9610	8880
65°	8420	9207	8420
70°	7827	8715	7733
75°	6812	7873	6937
80°	5597	6471	5783
85°	3149	4520	3853



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	33.3	0.7
10°-20°	94.8	2.0
20°-30°	142.0	3.0
30°-40°	168.5	3.6
40°-50°	171.2	3.6
50°-60°	152.5	3.3
60°-70°	113.9	2.4
70°-80°	62.6	1.3
80°-90°	15.5	0.3
90°-100°	32.8	0.7
100°-110°	155.0	3.3
110°-120°	455.3	9.7
120°-130°	661.9	14.1
130°-140°	708.2	15.1
140°-150°	675.0	14.4
150°-160°	557.0	11.9
160°-170°	364.8	7.8
170°-180°	126.5	2.7
0°-30°	270.0	5.8
0°-40°	438.4	9.3
0°-60°	762.2	16.2
0°-90°	954.1	20.3
90°-120°	643.1	13.7
90°-150°	2688.2	57.3
90°-180°	3737.0	79.7
0°-180°	4690.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	352	352	352	352	352	
5°	349	350	354	350	349	33
15°	335	337	340	335	333	94
25°	306	310	313	309	303	141
35°	266	272	275	270	264	166
45°	218	224	227	222	215	168
55°	165	172	176	170	165	148
65°	110	115	120	115	110	109
75°	55	58	63	58	56	59
85°	8	11	12	12	10	12
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	352.2	352.2	352.2	352.2	352.2	352.2	352.2	352.2	352.2
2.5°	350.0	351.4	351.5	351.5	354.5	351.5	351.5	351.4	350.7
5°	349.4	349.4	350.3	350.4	354.1	350.4	350.3	349.4	349.4
7.5°	346.8	346.9	347.9	347.8	350.7	346.8	346.9	346.7	346.6
10°	343.7	344.7	345.6	344.8	348.4	343.8	344.7	343.7	342.8
12.5°	340.7	341.6	342.6	341.7	345.4	341.6	341.7	340.7	340.5
15°	335.3	336.2	337.1	336.3	340.0	335.4	335.3	334.3	333.4
17.5°	327.4	329.0	330.4	329.5	333.0	328.6	329.4	327.1	325.7
20°	322.1	323.0	325.8	325.0	327.7	324.0	324.9	321.1	321.1
22.5°	316.0	317.0	319.8	319.0	322.5	318.0	318.9	315.1	314.4
25°	306.1	307.0	309.8	309.0	312.7	308.1	308.9	304.2	303.2
27.5°	294.6	295.7	300.2	299.4	303.2	297.7	298.5	293.8	292.7
30°	286.3	288.1	291.9	291.1	295.7	290.2	291.0	286.2	284.4
32.5°	278.8	280.6	283.7	284.3	287.4	282.6	282.7	278.0	276.1
35°	266.5	268.4	272.2	272.2	275.0	270.4	270.3	265.5	263.7
37.5°	252.6	254.2	258.4	259.6	261.6	257.4	256.3	251.6	249.8
40°	242.0	242.9	248.6	250.6	253.3	246.9	245.8	241.0	239.2
42.5°	232.2	233.9	238.8	240.0	242.0	237.8	236.0	231.3	229.4
45°	217.5	219.4	224.1	226.0	227.0	223.3	222.3	217.5	214.7
47.5°	202.7	204.5	209.3	211.3	212.3	209.5	206.6	202.6	199.8
50°	192.1	194.0	198.7	201.6	202.5	199.7	196.8	192.1	189.3
52.5°	182.3	183.4	188.2	191.7	191.9	189.9	186.3	181.5	179.5
55°	164.8	167.6	172.3	176.1	176.1	174.3	170.5	165.7	164.8
57.5°	149.5	150.7	155.4	159.2	159.3	158.2	154.4	149.7	148.8
60°	137.5	139.3	144.1	147.9	148.8	147.0	143.1	138.4	137.5
62.5°	127.7	128.1	132.8	136.6	137.5	135.7	131.8	127.9	126.2
65°	110.2	111.1	114.9	119.6	120.5	118.7	114.9	111.1	110.2
67.5°	93.4	94.3	97.9	102.5	103.6	101.8	97.0	94.2	93.2
70°	82.9	83.8	86.6	90.4	92.3	90.4	85.7	82.9	81.9
72.5°	71.6	72.5	75.3	79.1	80.2	78.4	74.4	72.3	71.4
75°	54.6	56.5	58.4	62.2	63.1	62.2	58.4	56.5	55.6
77.5°	39.9	40.9	42.8	45.4	46.1	45.4	43.7	40.9	40.9
80°	30.1	31.1	33.0	34.8	34.8	34.8	33.9	31.1	31.1
82.5°	21.1	22.0	23.2	25.8	25.1	25.8	24.9	22.8	22.0
85°	8.5	9.4	11.3	13.2	12.2	13.2	12.2	10.4	10.4
87.5°	1.3	2.0	2.1	4.1	4.1	5.1	3.8	3.6	3.7
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)