

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: P511737

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

Issue Date: 4/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P511737  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-15,  
Test Lab: INNOVATION CENTER  
Issue Date: 4/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQW-F-025U-100D-830-1D-UNV-STD-W-4  
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

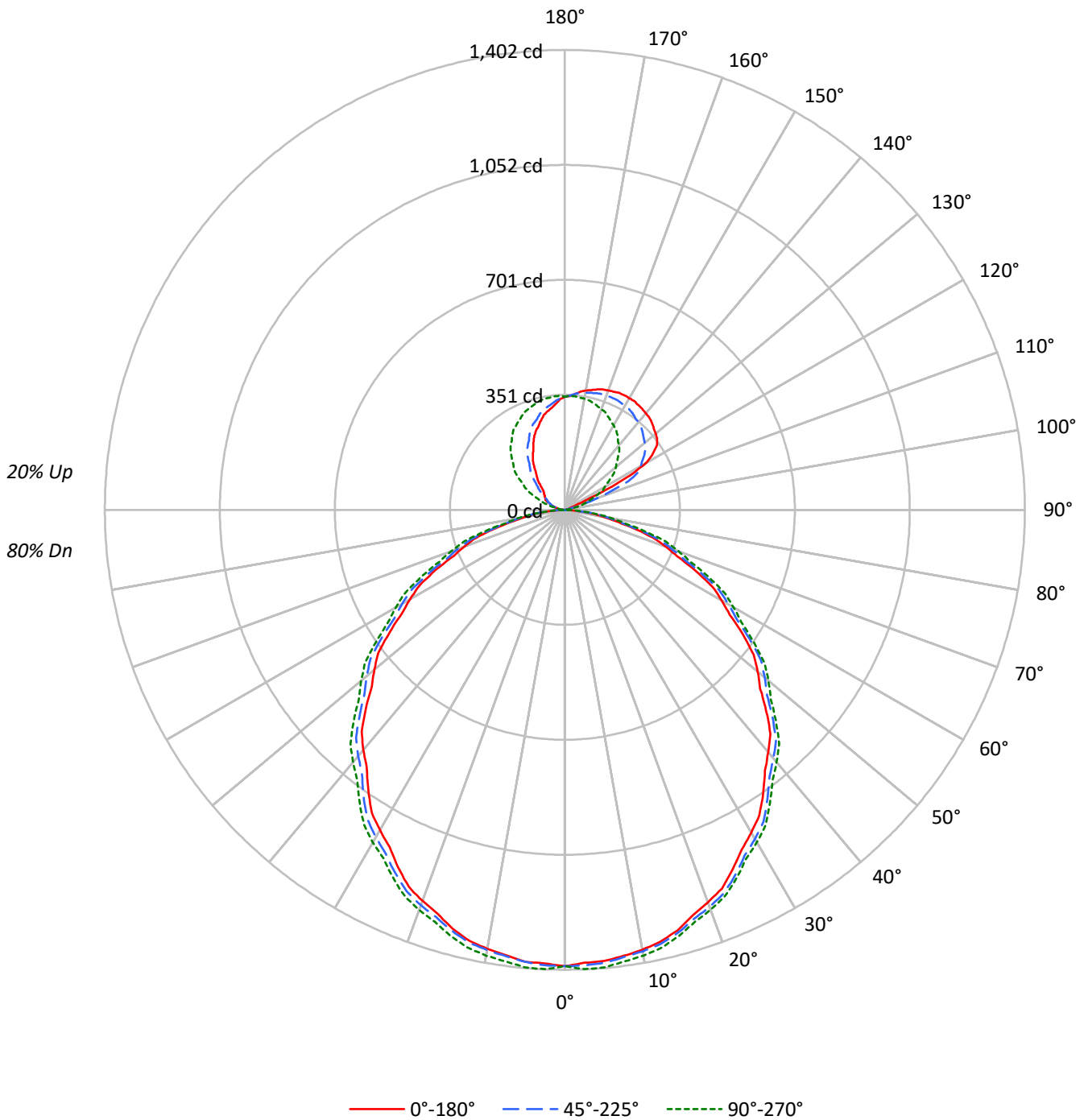
Lumens per Lamp: N/A  
Luminaire Lumens: 4743.9 lumens  
Efficiency: N/A  
Efficacy: 107.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 44  
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	50	30	10	0	
RCR																						
0	114	114	114	114	109	109	109	109	100	100	100	91	91	91	84	84	84	80				
1	104	100	96	92	100	96	92	89	88	85	82	81	78	76	74	72	71	67				
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	59	56				
3	87	77	69	63	83	74	66	61	68	62	57	62	58	54	57	54	50	47				
4	79	68	59	53	76	65	57	52	60	54	49	56	50	46	51	47	43	41				
5	73	61	52	46	69	58	50	44	54	47	42	50	44	40	46	41	38	35				
6	67	54	46	40	64	52	44	39	49	42	37	45	39	35	42	37	33	31				
7	62	49	41	35	59	48	40	34	44	37	33	41	35	31	38	33	29	27				
8	58	45	37	31	55	43	36	30	40	34	29	38	32	28	35	30	26	24				
9	54	41	33	28	52	40	32	27	37	31	26	35	29	25	32	27	24	22				
10	51	38	30	25	48	37	29	25	34	28	24	32	27	23	30	25	22	20				

**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	2.8
10°-20°	374.9	7.9
20°-30°	561.9	11.8
30°-40°	668.1	14.1
40°-50°	684.0	14.4
50°-60°	609.7	12.9
60°-70°	454.5	9.6
70°-80°	248.3	5.2
80°-90°	58.4	1.2
90°-100°	8.4	0.2
100°-110°	38.6	0.8
110°-120°	112.1	2.4
120°-130°	169.2	3.6
130°-140°	181.1	3.8
140°-150°	173.1	3.6
150°-160°	143.3	3.0
160°-170°	94.1	2.0
170°-180°	32.6	0.7
0°-30°	1068.3	22.5
0°-40°	1736.4	36.6
0°-60°	3030.1	63.9
0°-90°	3791.3	79.9
90°-120°	159.2	3.4
90°-150°	682.6	14.4
90°-180°	953.0	20.1
0°-180°	4743.9	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°	1	1	0	1	2	1
95°	3	3	7	11	10	3
105°	10	26	45	29	31	12
115°	88	224	110	55	60	119
125°	343	296	174	82	75	300
135°	375	335	230	136	104	290
145°	390	360	279	196	163	245
155°	393	371	313	254	226	181
165°	380	368	337	300	282	108
175°	354	354	348	332	324	34
180°	345	345	345	345	345	



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**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°	3.2	3.9	7.7	15.0	13.6	15.8	13.8	10.0	10.2
90°	0.9	0.9	0.9	0.0	0.0	0.0	0.9	1.0	1.9
92.5°	0.9	1.7	0.9	1.5	1.5	3.7	3.2	2.5	2.7
95°	2.8	2.8	2.8	6.6	6.6	9.4	11.4	10.4	9.5
97.5°	4.2	4.2	5.5	18.7	14.8	12.6	17.7	18.2	18.2
100°	5.7	5.7	8.5	29.2	20.9	17.2	19.9	22.8	22.8
102.5°	7.2	8.0	13.1	45.8	29.2	21.1	23.0	25.1	25.8
105°	10.4	11.4	25.6	78.0	44.6	28.8	29.4	30.4	31.3
107.5°	15.6	19.3	64.4	111.5	63.2	37.2	39.3	37.6	37.6
110°	20.9	28.3	109.2	132.6	76.9	43.5	44.6	43.7	43.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	33.0	55.3	163.1	150.0	90.6	51.2	49.2	51.2	49.8
115°	88.3	144.0	224.1	174.2	110.1	63.7	55.1	58.9	59.8
117.5°	210.4	251.8	254.1	194.5	130.3	77.7	59.8	64.2	66.1
120°	288.6	295.1	267.8	207.4	142.4	87.6	63.6	66.5	68.4
122.5°	318.3	312.1	279.9	219.6	154.6	99.1	69.7	69.5	71.4
125°	342.8	329.8	296.2	237.8	173.8	117.1	81.7	74.1	75.0
127.5°	354.9	341.9	309.7	252.9	191.8	136.3	96.7	80.5	79.8
130°	361.8	348.8	318.1	263.5	203.2	148.4	107.3	87.3	83.6
132.5°	367.8	355.6	325.7	272.0	214.6	159.8	118.7	95.6	90.4
135°	375.0	363.0	335.2	284.5	229.8	177.8	135.8	110.9	103.5
137.5°	381.5	370.4	343.9	295.9	245.7	193.9	153.1	128.9	120.8
140°	384.5	373.4	348.5	302.8	256.4	205.3	165.2	140.4	132.9
142.5°	387.6	377.2	353.0	309.7	265.5	216.6	177.4	152.5	145.1
145°	390.2	381.0	359.9	319.1	279.1	232.7	196.5	170.7	163.3
147.5°	393.1	383.2	364.2	327.1	290.4	248.6	213.8	189.0	181.7
150°	393.1	384.7	366.5	332.5	297.2	259.1	226.0	201.1	194.6
152.5°	393.8	384.7	368.8	337.1	304.8	268.9	237.4	213.3	207.6
155°	393.1	384.7	371.2	343.0	313.3	281.8	254.5	231.5	226.0
157.5°	389.7	384.3	371.2	346.6	322.1	293.1	269.3	251.2	243.4
160°	387.4	382.7	371.2	348.9	326.6	300.6	279.1	261.9	256.4
162.5°	385.1	380.5	370.5	351.2	331.2	307.4	287.5	271.1	267.0
165°	379.8	376.1	368.4	352.8	337.1	316.6	300.0	285.7	282.0
167.5°	373.9	371.3	365.0	353.9	341.4	325.5	311.0	299.9	295.7
170°	369.3	367.5	362.7	353.9	343.7	330.7	317.1	307.6	304.8
172.5°	363.3	362.2	359.7	352.5	345.2	334.5	324.0	315.2	312.4
175°	354.2	354.2	354.2	351.2	347.5	340.1	332.3	325.6	323.8
177.5°	346.9	347.7	348.5	347.7	347.7	344.0	340.1	336.3	337.1
180°	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7

(END OF REPORT)