

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: P522529

Luminaire Tested: **SQW-F-050U-100D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/11/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522529  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-53,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/11/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQW-F-050U-100D-93050-1D-UNV-STD-W-4 (3500K)  
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

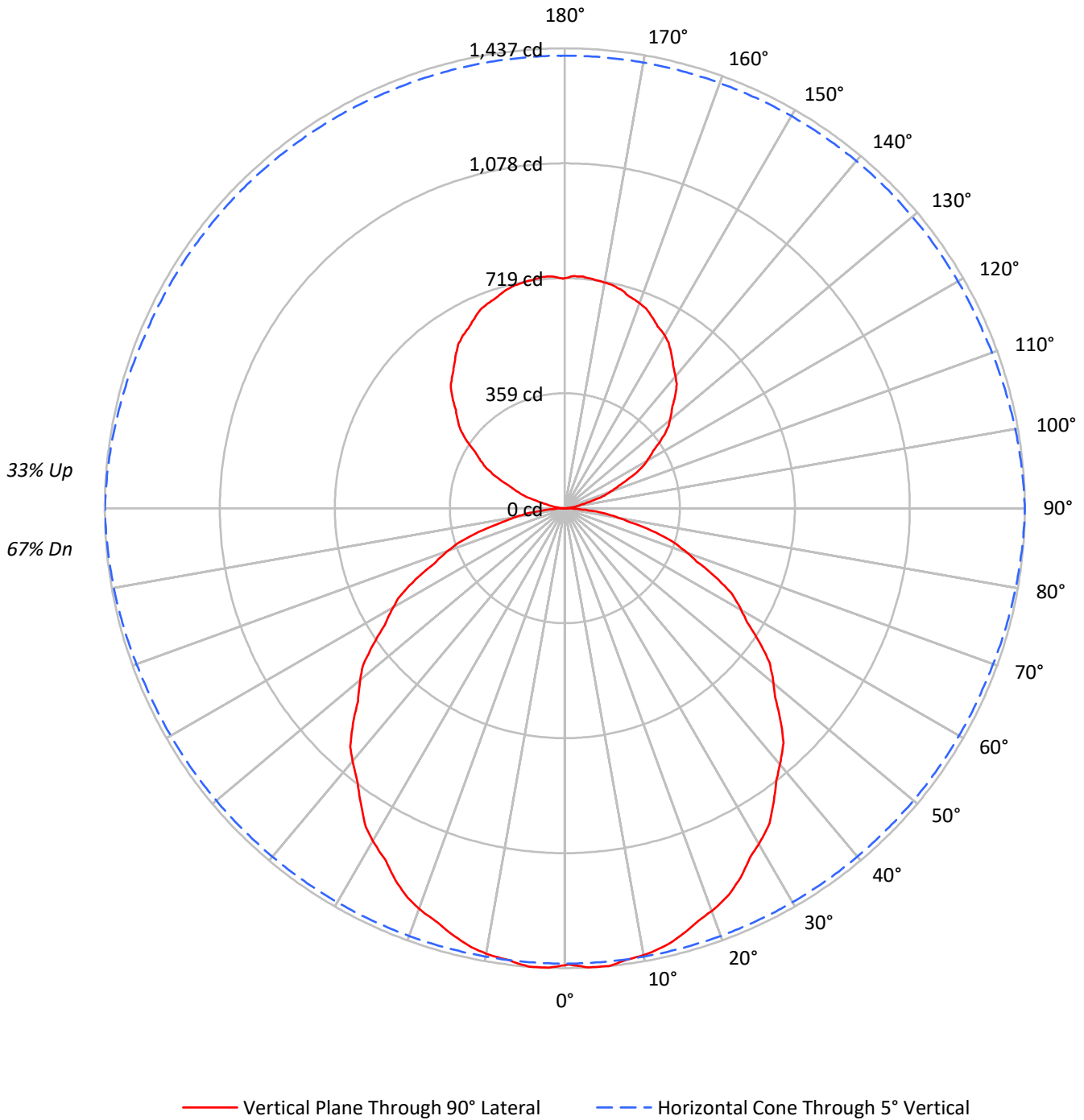
Lumens per Lamp: N/A  
Luminaire Lumens: 5978.9 lumens  
Efficiency: N/A  
Efficacy: 97.5 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 61.3  
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	71	71	71	67
1	101	97	93	89	95	91	88	85	81	78	76	72	70	68	63	61	60	56
2	92	84	78	73	86	80	74	69	71	66	63	63	59	56	55	53	50	46
3	84	74	66	60	79	70	63	58	62	57	52	55	51	47	49	45	43	39
4	77	65	57	51	72	62	55	49	55	49	45	49	44	40	43	40	37	33
5	70	58	50	44	66	55	48	42	49	43	38	44	39	35	39	35	32	29
6	65	52	44	38	61	50	42	36	45	38	33	40	35	31	35	31	28	25
7	60	47	39	33	56	45	37	32	40	34	30	36	31	27	32	28	25	22
8	56	43	35	29	52	41	34	28	37	31	26	33	28	24	30	25	22	20
9	52	39	32	26	49	37	30	25	34	28	24	30	25	22	27	23	20	18
10	49	36	29	24	46	34	28	23	31	25	21	28	23	20	25	21	18	16

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

	0°	90°	180°
0°	23024	23024	23024
5°	23063	23290	22917
10°	23018	23215	22740
15°	23034	23084	22566
20°	22835	22955	22234
25°	22589	22750	21877
30°	22354	22484	21477
35°	22095	22155	21110
40°	21794	21878	20676
45°	21395	21555	20185
50°	20974	21175	19618
55°	20352	20746	18973
60°	19763	20279	18213
65°	19026	19713	17307
70°	18033	18741	16003
75°	16781	17467	14161
80°	15063	14877	11716
85°	11671	11856	7410



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.9	2.3
10°-20°	385.5	6.4
20°-30°	579.8	9.7
30°-40°	692.7	11.6
40°-50°	712.2	11.9
50°-60°	641.1	10.7
60°-70°	488.2	8.2
70°-80°	278.4	4.7
80°-90°	73.1	1.2
90°-100°	18.1	0.3
100°-110°	80.3	1.3
110°-120°	230.8	3.9
120°-130°	351.6	5.9
130°-140°	381.7	6.4
140°-150°	365.0	6.1
150°-160°	300.7	5.0
160°-170°	196.8	3.3
170°-180°	68.1	1.1
0°-30°	1100.2	18.4
0°-40°	1792.9	30.0
0°-60°	3146.2	52.6
0°-90°	3985.9	66.7
90°-120°	329.3	5.5
90°-150°	1427.5	23.9
90°-180°	1993.0	33.3
0°-180°	5978.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1426	1426	1426	1426	1426	
5°	1423	1421	1437	1417	1414	135
15°	1378	1378	1381	1361	1350	388
25°	1268	1279	1277	1250	1228	584
35°	1121	1134	1124	1096	1071	700
45°	937	944	944	908	884	722
55°	723	739	737	700	674	649
65°	498	511	516	474	453	492
75°	269	277	280	247	227	285
85°	63	68	64	53	40	74
90°	0	0	0	0	0	2
95°	3	4	13	28	27	4
105°	18	49	92	64	68	21
115°	173	455	233	109	122	239
125°	688	599	371	184	156	604
135°	758	686	492	305	243	585
145°	793	738	587	434	370	497
155°	801	768	657	544	496	371
165°	784	764	704	633	602	223
175°	738	740	726	694	677	71
180°	717	717	717	717	717	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1426.0	1426.0	1426.0	1426.0	1426.0	1426.0	1426.0	1426.0	1426.0
2.5°	1424.4	1427.5	1426.0	1423.9	1436.4	1422.3	1424.4	1422.6	1414.8
5°	1423.0	1422.0	1421.0	1422.3	1437.0	1418.4	1417.0	1414.0	1414.0
7.5°	1417.6	1416.6	1415.4	1411.3	1423.2	1404.8	1405.4	1402.3	1398.2
10°	1404.0	1406.9	1405.0	1403.3	1416.0	1394.5	1395.0	1391.9	1387.0
12.5°	1397.6	1397.4	1396.2	1390.5	1402.4	1380.9	1380.6	1376.7	1373.4
15°	1378.0	1377.0	1378.0	1368.3	1381.0	1361.4	1361.0	1352.9	1350.0
17.5°	1349.8	1351.4	1352.8	1342.9	1354.4	1331.1	1330.8	1321.4	1319.6
20°	1329.0	1329.0	1336.0	1325.2	1336.0	1313.5	1314.0	1295.0	1294.0
22.5°	1304.2	1305.8	1313.6	1302.8	1312.0	1288.7	1287.6	1271.7	1267.6
25°	1268.0	1269.0	1279.0	1266.2	1277.0	1252.6	1250.0	1229.0	1228.0
27.5°	1228.6	1228.2	1240.2	1225.4	1234.0	1212.3	1209.2	1187.0	1185.6
30°	1199.0	1197.0	1213.0	1198.2	1206.0	1183.5	1182.0	1154.9	1152.0
32.5°	1167.8	1166.6	1181.0	1168.5	1174.0	1153.1	1145.2	1123.0	1121.6
35°	1121.0	1117.1	1134.0	1121.1	1124.0	1104.4	1096.0	1073.0	1071.0
37.5°	1067.6	1065.8	1078.2	1070.1	1074.8	1054.3	1040.2	1018.2	1017.0
40°	1034.0	1029.1	1043.0	1034.1	1038.0	1017.5	1005.0	983.0	981.0
42.5°	993.2	993.0	1004.6	997.3	1002.0	980.7	965.0	943.7	941.0
45°	937.0	934.1	944.0	942.0	944.0	921.5	908.0	884.0	884.0
47.5°	875.0	873.0	886.4	881.1	883.8	864.2	846.8	825.3	821.8
50°	835.0	833.0	844.0	841.0	843.0	823.4	806.0	783.0	781.0
52.5°	793.4	791.4	803.2	799.4	800.6	783.4	764.4	743.7	740.2
55°	723.0	727.9	739.0	738.0	737.0	719.4	700.0	678.9	674.0
57.5°	662.4	664.4	672.2	673.7	670.4	658.9	635.2	614.7	609.6
60°	612.0	617.9	629.0	629.0	628.0	613.3	588.0	569.9	564.0
62.5°	565.6	572.2	581.8	584.2	583.2	565.4	544.0	526.6	519.2
65°	498.0	502.9	511.0	516.0	516.0	496.4	474.0	457.9	453.0
67.5°	427.6	433.5	441.0	446.9	444.2	426.0	406.6	392.0	383.8
70°	382.0	387.9	393.0	399.0	397.0	380.4	361.0	344.9	339.0
72.5°	335.6	342.2	346.6	351.7	349.0	332.4	315.4	300.8	293.4
75°	269.0	271.0	277.0	281.0	280.0	263.4	247.0	234.8	227.0
77.5°	203.6	204.4	209.4	211.1	206.4	195.8	182.6	173.0	165.2
80°	162.0	162.0	167.0	167.8	160.0	154.1	141.0	133.8	126.0
82.5°	119.6	120.4	127.0	127.1	120.8	114.2	105.0	97.1	92.4
85°	63.0	64.0	68.0	70.8	64.0	60.1	53.0	44.9	40.0
87.5°	16.8	17.6	23.2	26.3	20.0	20.0	12.8	8.8	7.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.5	0.5	1.1	1.6	2.7	10.0	11.2	10.1	9.6
95°	2.7	2.7	4.0	12.7	12.7	20.5	28.1	27.4	27.4
97.5°	6.0	6.7	9.4	38.7	28.9	28.1	40.1	44.1	44.5
100°	8.7	9.3	14.7	63.0	42.8	36.2	42.8	52.2	54.1
102.5°	11.9	13.1	23.3	99.5	60.4	43.4	50.3	57.0	58.9
105°	18.0	20.0	48.8	166.7	92.2	57.6	63.5	66.8	67.5
107.5°	27.1	34.4	133.5	234.5	130.8	76.2	79.7	81.9	82.7
110°	36.8	52.4	231.9	275.4	159.7	90.5	88.2	94.2	92.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	61.9	107.9	340.4	308.9	188.6	107.3	96.2	106.0	106.8
115°	173.1	297.2	455.1	356.7	232.6	136.5	108.9	118.4	122.3
117.5°	434.4	516.8	515.5	400.9	274.8	170.9	124.2	128.7	133.1
120°	584.1	596.5	546.0	430.8	302.1	195.5	137.0	135.1	139.0
122.5°	639.7	629.6	569.0	457.0	329.9	221.3	153.6	142.0	145.4
125°	687.6	668.0	598.8	494.4	370.9	259.2	183.8	157.0	156.4
127.5°	714.2	693.7	627.9	526.8	408.6	298.5	218.1	178.3	172.3
130°	727.1	708.1	648.2	546.7	433.7	325.2	243.2	196.9	187.8
132.5°	742.6	722.1	662.6	567.1	457.8	350.3	268.4	219.3	208.6
135°	757.8	738.9	686.3	593.8	491.8	387.3	304.7	256.3	242.6
137.5°	771.4	754.1	708.0	614.7	522.6	423.7	343.2	296.1	279.3
140°	780.5	761.6	717.0	630.8	541.3	446.5	368.9	321.8	308.7
142.5°	783.7	772.1	726.7	644.3	562.1	468.4	394.5	345.9	333.9
145°	793.2	785.4	738.4	660.6	586.7	501.1	433.7	383.3	370.2
147.5°	799.4	787.6	749.3	678.1	610.8	530.4	469.3	420.9	408.7
150°	799.9	790.8	757.8	688.9	626.8	551.7	491.2	445.5	434.4
152.5°	804.2	792.9	762.1	698.0	638.6	569.7	513.1	470.6	458.4
155°	801.2	793.4	768.5	709.8	656.9	592.9	544.0	506.3	495.8
157.5°	801.2	791.6	769.3	719.0	674.5	618.3	572.8	538.0	530.2
160°	795.9	792.0	769.8	725.4	683.6	632.7	592.1	560.4	550.0
162.5°	793.8	787.2	770.9	729.8	691.6	644.3	608.6	578.7	570.8
165°	784.5	778.7	764.5	731.8	704.3	665.1	632.8	606.0	602.1
167.5°	774.0	769.4	760.1	735.0	712.8	680.7	653.6	631.9	626.6
170°	766.5	759.3	755.8	736.6	717.0	690.3	666.9	647.4	641.5
172.5°	753.7	752.7	749.9	732.5	720.8	698.7	679.2	661.4	657.6
175°	738.4	738.4	740.4	729.6	725.7	707.4	693.7	682.8	676.9
177.5°	720.8	721.3	725.6	725.1	725.6	715.1	711.2	701.0	699.9
180°	717.0	717.0	717.0	717.0	717.0	717.0	717.0	717.0	717.0

(END OF REPORT)