

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: P522596

Luminaire Tested: **SQW-F-100U-050D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/11/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522596  
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-100U-050D-93050-1D-UNV-STD-W-4 (4500K)  
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

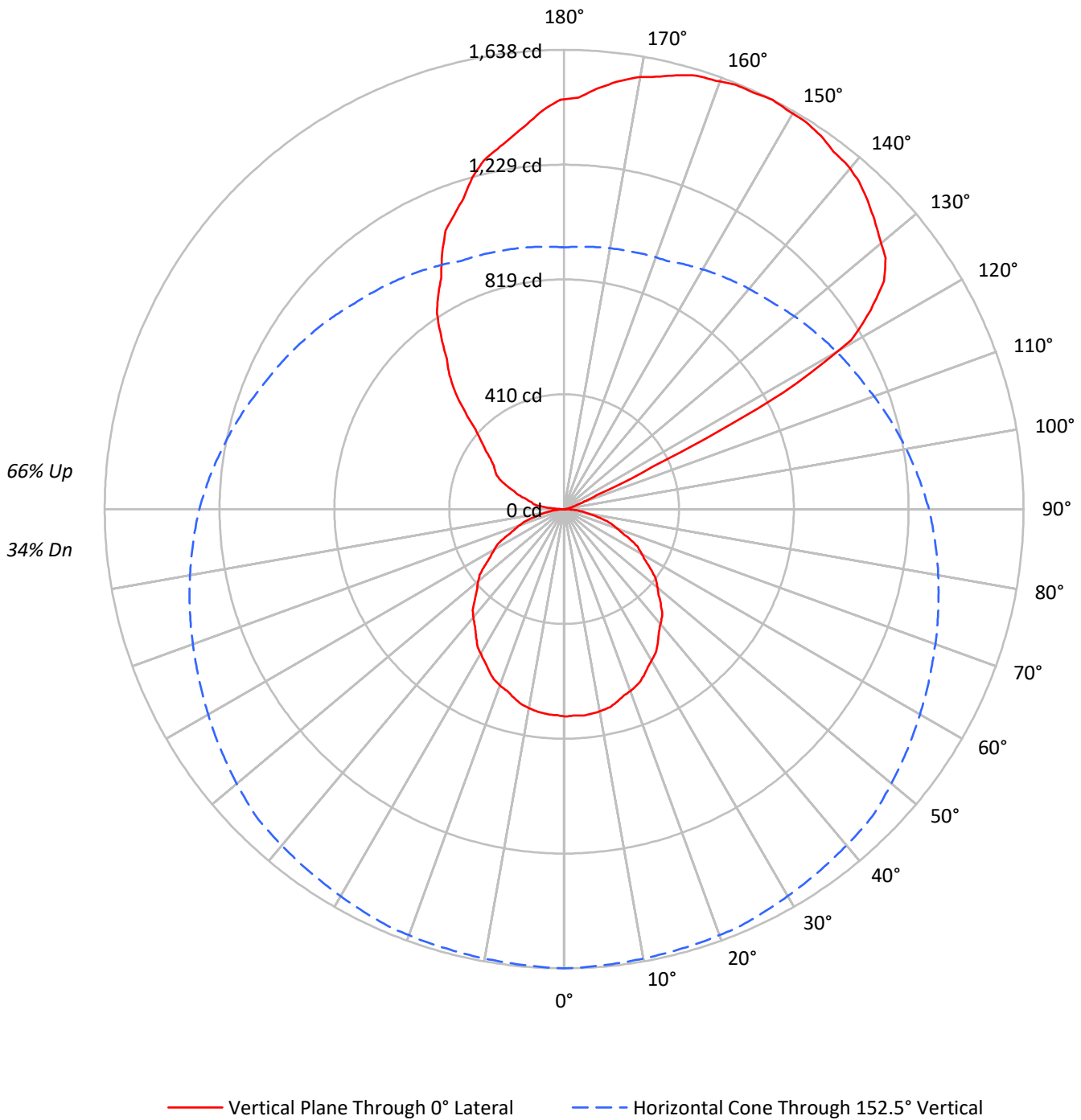
Lumens per Lamp: N/A  
Luminaire Lumens: 6120.3 lumens  
Efficiency: N/A  
Efficacy: 109.7 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 55.8  
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	94	90	86	83	85	81	78	75	65	63	61	50	49	47	36	35	35	28
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	32	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	34	30	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	26	28	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	13	10
9	48	36	28	23	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

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

	0°	90°	180°
0°	11946	11946	11946
5°	11992	12042	11909
10°	11998	12047	11847
15°	11908	12028	11687
20°	11838	11892	11541
25°	11749	11749	11405
30°	11574	11669	11158
35°	11375	11515	10914
40°	11198	11327	10705
45°	11038	11154	10387
50°	10814	10967	10150
55°	10514	10716	9799
60°	10188	10485	9368
65°	9838	10227	8905
70°	9323	9611	8167
75°	8634	8696	7367
80°	7662	7764	5960
85°	6039	5854	4150



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.1	1.1
10°-20°	200.0	3.3
20°-30°	300.8	4.9
30°-40°	359.1	5.9
40°-50°	368.7	6.0
50°-60°	331.4	5.4
60°-70°	251.2	4.1
70°-80°	141.7	2.3
80°-90°	36.8	0.6
90°-100°	36.9	0.6
100°-110°	163.6	2.7
110°-120°	470.3	7.7
120°-130°	716.3	11.7
130°-140°	777.6	12.7
140°-150°	743.6	12.1
150°-160°	612.6	10.0
160°-170°	400.9	6.5
170°-180°	138.7	2.3
0°-30°	570.9	9.3
0°-40°	929.9	15.2
0°-60°	1630.0	26.6
0°-90°	2059.7	33.7
90°-120°	670.9	11.0
90°-150°	2908.4	47.5
90°-180°	4061.0	66.4
0°-180°	6120.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	740	740	740	740	740	
5°	740	739	743	738	735	70
15°	712	716	720	703	699	201
25°	660	662	660	650	640	303
35°	577	586	584	569	554	361
45°	483	490	488	470	455	373
55°	374	381	381	362	348	334
65°	258	265	268	244	233	254
75°	138	140	139	126	118	147
85°	33	36	32	26	22	38
90°	0	0	0	0	0	1
95°	5	8	26	57	56	7
105°	37	99	188	129	138	43
115°	353	927	474	222	249	487
125°	1401	1220	756	374	319	1230
135°	1544	1398	1002	621	494	1192
145°	1616	1504	1195	884	754	1013
155°	1632	1566	1338	1108	1010	756
165°	1598	1558	1435	1289	1227	453
175°	1504	1508	1479	1413	1379	145
180°	1461	1461	1461	1461	1461	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	739.9	739.9	739.9	739.9	739.9	739.9	739.9	739.9	739.9
2.5°	736.7	739.9	739.1	738.5	745.6	739.3	739.9	739.0	735.9
5°	739.9	737.9	738.9	738.0	743.0	737.0	737.9	734.8	734.8
7.5°	736.7	733.5	734.4	733.7	738.1	731.3	730.2	726.4	730.0
10°	731.8	727.8	728.7	728.9	734.8	724.9	723.6	720.6	722.6
12.5°	725.3	722.9	723.0	721.6	730.0	716.8	716.3	714.1	714.5
15°	712.4	715.4	715.5	708.6	719.6	703.7	703.3	703.2	699.2
17.5°	697.2	701.4	704.9	696.1	703.5	690.2	689.9	686.3	681.5
20°	689.0	690.0	695.1	687.1	692.1	681.1	680.9	671.7	671.7
22.5°	677.6	677.8	683.7	674.9	679.9	668.9	669.5	658.7	659.5
25°	659.5	658.5	661.6	655.5	659.5	649.6	650.4	639.2	640.2
27.5°	637.1	638.3	643.0	633.8	639.8	627.6	628.0	617.8	616.4
30°	620.8	622.8	630.0	620.0	625.9	613.0	611.7	601.4	598.5
32.5°	603.7	605.7	612.9	605.3	610.5	598.3	595.4	583.5	581.4
35°	577.1	579.1	586.2	582.2	584.2	572.3	568.9	556.7	553.7
37.5°	550.0	552.0	557.9	555.1	556.9	544.4	539.6	528.8	526.6
40°	531.3	533.3	538.4	536.4	537.4	526.4	520.1	510.9	507.9
42.5°	513.4	514.6	518.9	515.3	517.8	507.7	500.5	491.3	486.7
45°	483.4	483.4	489.6	485.6	488.5	478.6	470.2	459.9	454.9
47.5°	452.5	450.7	457.8	456.4	457.8	447.1	438.7	428.0	424.4
50°	430.5	429.5	436.6	437.6	436.6	426.7	418.3	406.1	404.1
52.5°	406.9	408.3	413.8	414.8	414.6	404.7	395.5	384.1	382.1
55°	373.5	375.5	380.7	381.6	380.7	371.7	362.3	350.1	348.1
57.5°	338.3	343.1	347.5	348.5	349.1	339.5	327.9	318.7	314.5
60°	315.5	319.5	324.7	325.7	324.7	316.7	304.3	295.0	290.1
62.5°	292.7	295.1	300.2	302.8	300.2	292.3	279.9	271.5	269.7
65°	257.5	259.5	264.6	266.7	267.7	256.7	244.3	237.1	233.1
67.5°	219.4	221.8	224.7	227.6	228.8	217.3	207.0	199.4	195.0
70°	197.5	197.5	199.5	201.6	203.6	193.6	184.2	175.0	173.0
72.5°	173.8	173.8	176.7	177.9	178.3	169.2	160.6	152.3	151.9
75°	138.4	138.4	140.5	141.4	139.4	133.5	126.2	119.1	118.1
77.5°	105.2	104.6	106.5	107.3	106.3	99.5	92.4	87.5	86.1
80°	82.4	83.4	84.5	84.5	83.5	77.5	71.2	67.1	64.1
82.5°	61.3	62.3	64.1	64.1	61.5	57.9	52.5	47.6	47.0
85°	32.6	32.6	35.6	34.5	31.6	29.6	26.5	22.4	22.4
87.5°	8.1	8.9	10.6	12.9	9.0	9.8	5.7	3.2	2.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	1.1	1.1	2.2	3.3	5.4	20.4	22.9	20.7	19.6
95°	5.4	5.4	8.2	25.9	25.9	41.8	57.2	55.8	55.8
97.5°	12.3	13.6	19.1	78.8	58.8	57.2	81.7	89.9	90.7
100°	17.7	19.0	30.0	128.4	87.1	73.8	87.1	106.3	110.3
102.5°	24.2	26.6	47.4	202.7	123.1	88.5	102.4	116.1	120.1
105°	36.8	40.8	99.4	339.6	187.9	117.3	129.3	136.2	137.5
107.5°	55.3	70.2	272.0	477.7	266.6	155.3	162.3	167.0	168.6
110°	74.9	106.8	472.4	561.0	325.4	184.3	179.7	191.9	189.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	126.1	219.8	693.5	629.4	384.2	218.6	196.1	216.0	217.6
115°	352.6	605.6	927.2	726.7	473.8	278.1	221.9	241.2	249.2
117.5°	885.0	1053.0	1050.2	816.8	559.8	348.2	253.0	262.2	271.2
120°	1189.9	1215.2	1112.3	877.6	615.4	398.4	279.1	275.2	283.2
122.5°	1303.2	1282.7	1159.2	931.1	672.0	450.8	312.9	289.3	296.3
125°	1401.0	1361.0	1219.9	1007.2	755.6	528.0	374.4	319.9	318.6
127.5°	1455.1	1413.3	1279.2	1073.4	832.4	608.2	444.4	363.2	351.0
130°	1481.3	1442.7	1320.6	1113.9	883.6	662.6	495.6	401.2	382.6
132.5°	1512.9	1471.1	1350.0	1155.5	932.6	713.8	546.8	446.9	425.1
135°	1543.9	1505.3	1398.2	1209.7	1002.0	789.1	620.8	522.2	494.2
137.5°	1571.7	1536.3	1442.3	1252.4	1064.7	863.1	699.3	603.2	569.1
140°	1590.2	1551.6	1460.9	1285.2	1102.8	909.8	751.5	655.6	629.0
142.5°	1596.7	1573.0	1480.5	1312.7	1145.3	954.4	803.8	704.7	680.2
145°	1616.1	1600.1	1504.4	1345.8	1195.4	1021.0	883.6	780.9	754.3
147.5°	1628.6	1604.6	1526.5	1381.5	1244.4	1080.6	956.0	857.4	832.7
150°	1629.7	1611.1	1543.9	1403.5	1277.1	1124.0	1000.7	907.6	885.0
152.5°	1638.4	1615.5	1552.6	1422.2	1301.0	1160.7	1045.3	958.7	934.0
155°	1632.4	1616.4	1565.7	1446.2	1338.3	1207.9	1108.2	1031.5	1010.2
157.5°	1632.4	1612.7	1567.3	1464.8	1374.3	1259.8	1167.1	1096.2	1080.2
160°	1621.5	1613.5	1568.4	1478.0	1392.8	1289.0	1206.3	1141.8	1120.5
162.5°	1617.2	1603.9	1570.6	1486.9	1409.1	1312.7	1240.0	1178.9	1163.0
165°	1598.4	1586.4	1557.5	1490.9	1435.0	1355.1	1289.3	1234.7	1226.7
167.5°	1576.9	1567.5	1548.5	1497.4	1452.2	1386.9	1331.5	1287.4	1276.5
170°	1561.6	1547.0	1539.8	1500.8	1460.9	1406.3	1358.8	1319.0	1307.0
172.5°	1535.5	1533.6	1527.8	1492.5	1468.5	1423.5	1383.8	1347.4	1339.7
175°	1504.4	1504.4	1508.5	1486.6	1478.6	1441.3	1413.2	1391.2	1379.2
177.5°	1468.5	1469.6	1478.3	1477.2	1478.3	1457.0	1448.9	1428.1	1426.0
180°	1460.9	1460.9	1460.9	1460.9	1460.9	1460.9	1460.9	1460.9	1460.9

(END OF REPORT)