

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: P522530

Luminaire Tested: **SQW-F-050U-100D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/11/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522530  
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 (4000K)  
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 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

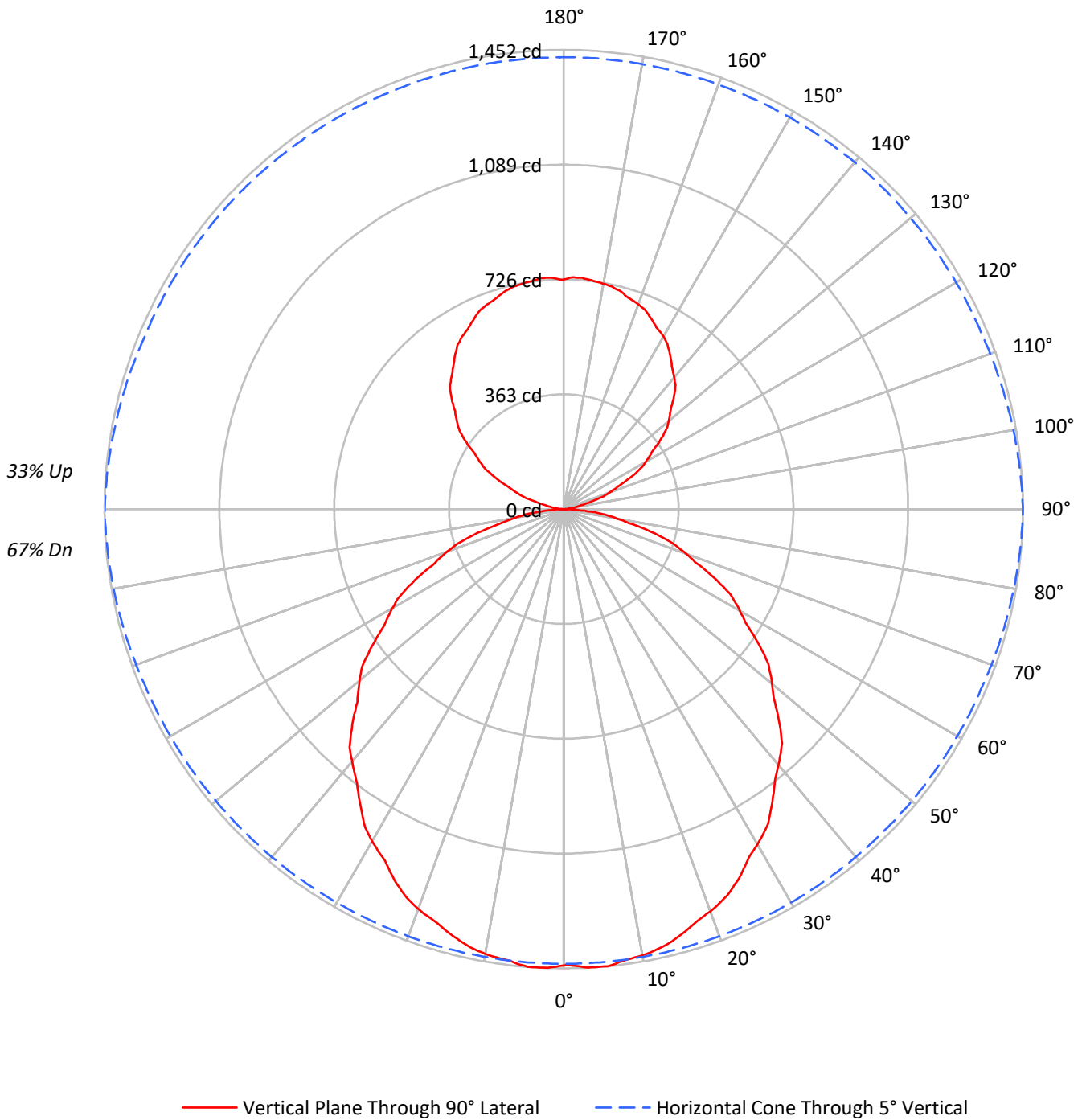
Lumens per Lamp: N/A  
Luminaire Lumens: 6042.5 lumens  
Efficiency: N/A  
Efficacy: 98.6 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Direct

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°	23269	23269	23269
5°	23308	23538	23161
10°	23263	23463	22982
15°	23280	23330	22806
20°	23077	23199	22471
25°	22830	22992	22110
30°	22592	22723	21707
35°	22330	22391	21335
40°	22025	22110	20896
45°	21623	21783	20400
50°	21197	21401	19826
55°	20569	20966	19175
60°	19972	20496	18406
65°	19228	19924	17490
70°	18227	18940	16173
75°	16962	17654	14311
80°	15221	15035	11836
85°	11801	11986	7484



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.4	2.3
10°-20°	389.6	6.4
20°-30°	586.0	9.7
30°-40°	700.1	11.6
40°-50°	719.8	11.9
50°-60°	648.0	10.7
60°-70°	493.4	8.2
70°-80°	281.3	4.7
80°-90°	73.8	1.2
90°-100°	18.3	0.3
100°-110°	81.2	1.3
110°-120°	233.3	3.9
120°-130°	355.3	5.9
130°-140°	385.7	6.4
140°-150°	368.9	6.1
150°-160°	303.9	5.0
160°-170°	198.9	3.3
170°-180°	68.8	1.1
0°-30°	1111.9	18.4
0°-40°	1812.0	30.0
0°-60°	3179.7	52.6
0°-90°	4028.3	66.7
90°-120°	332.8	5.5
90°-150°	1442.7	23.9
90°-180°	2014.0	33.3
0°-180°	6042.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1441	1441	1441	1441	1441	
5°	1438	1436	1452	1432	1429	137
15°	1393	1393	1396	1376	1364	392
25°	1282	1293	1291	1263	1241	590
35°	1133	1146	1136	1108	1082	708
45°	947	954	954	918	893	729
55°	731	747	745	707	681	656
65°	503	516	522	479	458	497
75°	272	280	283	250	229	288
85°	64	69	65	54	40	75
90°	0	0	0	0	0	2
95°	3	4	13	28	28	4
105°	18	49	93	64	68	21
115°	175	460	235	110	124	242
125°	695	605	375	186	158	610
135°	766	694	497	308	245	591
145°	802	746	593	438	374	502
155°	810	777	664	550	501	375
165°	793	773	712	640	608	225
175°	746	748	734	701	684	72
180°	725	725	725	725	725	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1441.2	1441.2	1441.2	1441.2	1441.2	1441.2	1441.2	1441.2	1441.2
2.5°	1439.6	1442.7	1441.2	1439.0	1451.7	1437.5	1439.6	1437.8	1429.9
5°	1438.1	1437.2	1436.1	1437.5	1452.3	1433.5	1432.1	1429.0	1429.0
7.5°	1432.7	1431.7	1430.5	1426.3	1438.3	1419.8	1420.4	1417.2	1413.1
10°	1418.9	1421.9	1420.0	1418.2	1431.1	1409.3	1409.8	1406.7	1401.8
12.5°	1412.5	1412.3	1411.1	1405.3	1417.3	1395.6	1395.3	1391.4	1388.0
15°	1392.7	1391.7	1392.7	1382.8	1395.7	1375.9	1375.5	1367.3	1364.4
17.5°	1364.2	1365.7	1367.2	1357.2	1368.8	1345.3	1345.0	1335.4	1333.6
20°	1343.1	1343.1	1350.2	1339.3	1350.2	1327.5	1328.0	1308.8	1307.8
22.5°	1318.1	1319.7	1327.6	1316.7	1326.0	1302.4	1301.3	1285.2	1281.1
25°	1281.5	1282.5	1292.6	1279.7	1290.6	1265.9	1263.3	1242.1	1241.1
27.5°	1241.7	1241.3	1253.4	1238.4	1247.1	1225.2	1222.1	1199.6	1198.2
30°	1211.8	1209.8	1225.9	1210.9	1218.8	1196.1	1194.6	1167.2	1164.3
32.5°	1180.2	1179.0	1193.6	1181.0	1186.5	1165.3	1157.4	1134.9	1133.5
35°	1132.9	1129.0	1146.1	1133.0	1136.0	1116.2	1107.7	1084.4	1082.4
37.5°	1079.0	1077.2	1089.7	1081.5	1086.2	1065.5	1051.3	1029.0	1027.8
40°	1045.0	1040.1	1054.1	1045.1	1049.0	1028.3	1015.7	993.4	991.4
42.5°	1003.8	1003.6	1015.3	1007.9	1012.7	991.1	975.3	953.8	951.0
45°	947.0	944.0	954.0	952.1	954.0	931.3	917.7	893.4	893.4
47.5°	884.3	882.3	895.8	890.4	893.2	873.4	855.8	834.1	830.5
50°	843.9	841.9	853.0	850.0	852.0	832.2	814.6	791.3	789.3
52.5°	801.8	799.9	811.7	807.9	809.1	791.7	772.5	751.6	748.1
55°	730.7	735.6	746.9	745.8	744.8	727.1	707.4	686.1	681.2
57.5°	669.4	671.4	679.4	680.9	677.5	665.9	642.0	621.2	616.1
60°	618.5	624.4	635.7	635.7	634.7	619.9	594.3	575.9	570.0
62.5°	571.6	578.3	588.0	590.4	589.4	571.4	549.8	532.2	524.7
65°	503.3	508.2	516.4	521.5	521.5	501.7	479.0	462.8	457.8
67.5°	432.2	438.1	445.7	451.7	448.9	430.5	410.9	396.2	387.9
70°	386.1	392.0	397.2	403.2	401.2	384.4	364.8	348.5	342.6
72.5°	339.2	345.9	350.3	355.5	352.7	335.9	318.8	304.0	296.5
75°	271.9	273.8	279.9	284.0	283.0	266.2	249.6	237.3	229.4
77.5°	205.8	206.6	211.6	213.3	208.6	197.9	184.5	174.9	167.0
80°	163.7	163.7	168.8	169.6	161.7	155.8	142.5	135.2	127.3
82.5°	120.9	121.7	128.4	128.4	122.1	115.4	106.1	98.1	93.4
85°	63.7	64.7	68.7	71.6	64.7	60.7	53.6	45.4	40.4
87.5°	17.0	17.8	23.4	26.5	20.2	20.2	12.9	8.9	7.3
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	10.1	11.3	10.3	9.7
95°	2.7	2.7	4.1	12.8	12.8	20.8	28.4	27.7	27.7
97.5°	6.1	6.7	9.5	39.1	29.2	28.4	40.5	44.6	45.0
100°	8.8	9.4	14.9	63.7	43.2	36.6	43.2	52.7	54.7
102.5°	12.0	13.2	23.5	100.5	61.1	43.9	50.8	57.6	59.6
105°	18.2	20.2	49.3	168.5	93.2	58.2	64.2	67.6	68.2
107.5°	27.4	34.8	134.9	237.0	132.2	77.0	80.5	82.8	83.6
110°	37.1	53.0	234.4	278.3	161.4	91.4	89.1	95.2	93.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	62.5	109.0	344.0	312.2	190.6	108.4	97.3	107.1	107.9
115°	174.9	300.4	459.9	360.5	235.0	138.0	110.1	119.6	123.6
117.5°	439.0	522.3	521.0	405.2	277.7	172.7	125.5	130.0	134.5
120°	590.3	602.8	551.8	435.4	305.3	197.6	138.5	136.5	140.5
122.5°	646.5	636.3	575.0	461.9	333.4	223.6	155.2	143.5	147.0
125°	695.0	675.1	605.1	499.6	374.8	261.9	185.7	158.7	158.0
127.5°	721.8	701.1	634.6	532.4	412.9	301.7	220.4	180.2	174.1
130°	734.8	715.7	655.1	552.6	438.3	328.7	245.8	199.0	189.8
132.5°	750.5	729.7	669.7	573.2	462.6	354.1	271.2	221.7	210.9
135°	765.9	746.7	693.6	600.1	497.1	391.4	308.0	259.0	245.2
137.5°	779.6	762.1	715.5	621.2	528.1	428.2	346.9	299.2	282.3
140°	788.8	769.7	724.7	637.5	547.0	451.3	372.8	325.2	312.0
142.5°	792.1	780.3	734.4	651.2	568.1	473.4	398.7	349.6	337.4
145°	801.7	793.7	746.3	667.6	593.0	506.5	438.3	387.4	374.2
147.5°	807.9	796.0	757.2	685.3	617.3	536.1	474.2	425.3	413.1
150°	808.4	799.2	765.9	696.2	633.5	557.6	496.4	450.2	439.0
152.5°	812.7	801.4	770.2	705.5	645.4	575.8	518.5	475.6	463.3
155°	809.8	801.8	776.7	717.4	663.9	599.2	549.8	511.7	501.1
157.5°	809.8	800.0	777.5	726.6	681.7	624.9	578.9	543.8	535.8
160°	804.4	800.4	778.0	733.2	690.9	639.4	598.4	566.4	555.8
162.5°	802.2	795.6	779.1	737.6	699.0	651.2	615.1	584.8	576.9
165°	792.9	786.9	772.6	739.6	711.8	672.2	639.6	612.5	608.5
167.5°	782.2	777.6	768.2	742.8	720.3	688.0	660.5	638.6	633.2
170°	774.6	767.4	763.8	744.5	724.7	697.6	674.0	654.3	648.4
172.5°	761.7	760.8	757.9	740.3	728.5	706.1	686.4	668.4	664.6
175°	746.3	746.3	748.3	737.4	733.5	715.0	701.0	690.1	684.1
177.5°	728.5	729.0	733.3	732.8	733.3	722.8	718.7	708.4	707.4
180°	724.7	724.7	724.7	724.7	724.7	724.7	724.7	724.7	724.7

(END OF REPORT)