

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: P522531

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

Issue Date: 5/11/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522531  
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 (4500K)  
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 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

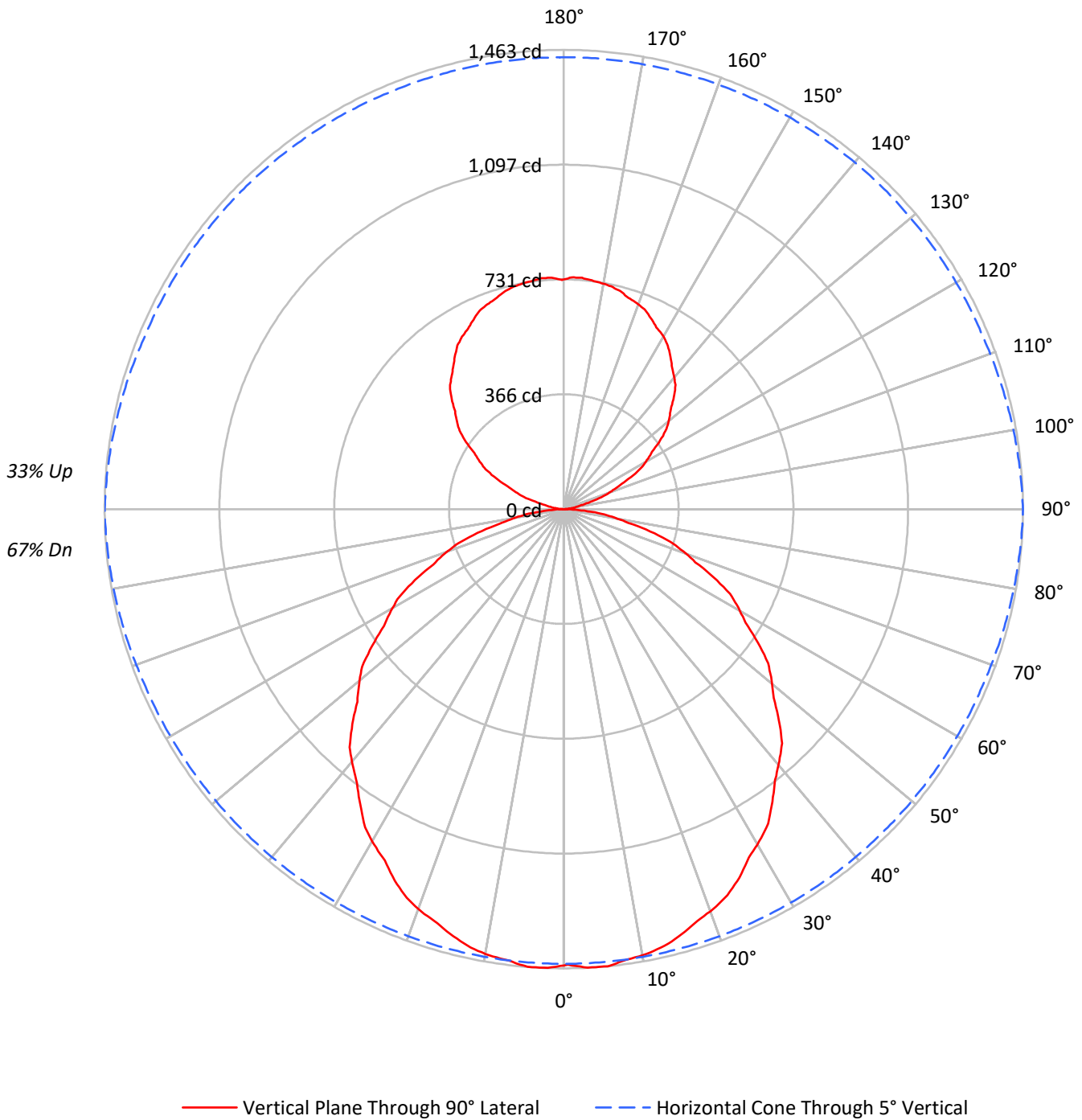
Lumens per Lamp: N/A  
Luminaire Lumens: 6085.3 lumens  
Efficiency: N/A  
Efficacy: 99.4 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 61.2  
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°	23434	23434	23434
5°	23473	23705	23324
10°	23428	23628	23145
15°	23443	23495	22967
20°	23240	23364	22629
25°	22990	23154	22265
30°	22751	22883	21860
35°	22488	22549	21484
40°	22181	22268	21043
45°	21776	21939	20543
50°	21346	21552	19967
55°	20715	21115	19310
60°	20114	20641	18535
65°	19366	20065	17616
70°	18354	19076	16287
75°	17080	17779	14410
80°	15332	15137	11920
85°	11875	12060	7540



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.3	2.3
10°-20°	392.3	6.4
20°-30°	590.1	9.7
30°-40°	705.0	11.6
40°-50°	724.8	11.9
50°-60°	652.5	10.7
60°-70°	496.9	8.2
70°-80°	283.3	4.7
80°-90°	74.4	1.2
90°-100°	18.4	0.3
100°-110°	81.8	1.3
110°-120°	235.0	3.9
120°-130°	357.9	5.9
130°-140°	388.5	6.4
140°-150°	371.5	6.1
150°-160°	306.0	5.0
160°-170°	200.3	3.3
170°-180°	69.3	1.1
0°-30°	1119.8	18.4
0°-40°	1824.8	30.0
0°-60°	3202.2	52.6
0°-90°	4056.7	66.7
90°-120°	335.1	5.5
90°-150°	1452.9	23.9
90°-180°	2029.0	33.3
0°-180°	6085.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1451	1451	1451	1451	1451	
5°	1448	1446	1463	1442	1439	138
15°	1402	1402	1406	1385	1374	395
25°	1290	1302	1300	1272	1250	595
35°	1141	1154	1144	1116	1090	713
45°	954	961	961	924	900	735
55°	736	752	750	712	686	660
65°	507	520	525	482	461	501
75°	274	282	285	251	231	290
85°	64	69	65	54	41	75
90°	0	0	0	0	0	2
95°	3	4	13	29	28	4
105°	18	50	94	65	69	21
115°	176	463	237	111	124	243
125°	700	609	378	187	159	614
135°	771	698	501	310	247	596
145°	807	752	597	441	377	506
155°	816	782	669	554	505	377
165°	798	778	717	644	613	226
175°	752	754	739	706	689	73
180°	730	730	730	730	730	



TEST NUMBER: P522531

CATALOG NUMBER: SQW-F-050U-100D-93050-1D-UNV-STD-W-4 (4500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1451.4	1451.4	1451.4	1451.4	1451.4	1451.4	1451.4	1451.4	1451.4
2.5°	1449.7	1452.9	1451.4	1449.2	1461.9	1447.6	1449.7	1447.9	1440.0
5°	1448.3	1447.3	1446.3	1447.6	1462.6	1443.6	1442.2	1439.1	1439.1
7.5°	1442.8	1441.8	1440.6	1436.4	1448.5	1429.8	1430.4	1427.2	1423.1
10°	1429.0	1432.0	1430.0	1428.2	1441.2	1419.3	1419.8	1416.6	1411.7
12.5°	1422.5	1422.3	1421.0	1415.2	1427.3	1405.4	1405.2	1401.2	1397.8
15°	1402.5	1401.5	1402.5	1392.6	1405.6	1385.7	1385.2	1377.0	1374.0
17.5°	1373.8	1375.4	1376.9	1366.7	1378.5	1354.8	1354.5	1344.9	1343.1
20°	1352.6	1352.6	1359.8	1348.8	1359.8	1336.9	1337.4	1318.0	1317.0
22.5°	1327.4	1329.0	1337.0	1326.0	1335.3	1311.6	1310.5	1294.3	1290.1
25°	1290.5	1291.5	1301.7	1288.8	1299.7	1274.8	1272.2	1250.8	1249.8
27.5°	1250.4	1250.0	1262.3	1247.2	1255.9	1233.9	1230.7	1208.1	1206.7
30°	1220.3	1218.3	1234.6	1219.5	1227.4	1204.6	1203.0	1175.5	1172.5
32.5°	1188.6	1187.4	1202.0	1189.3	1194.9	1173.6	1165.6	1142.9	1141.5
35°	1140.9	1137.0	1154.2	1141.0	1144.0	1124.1	1115.5	1092.0	1090.0
37.5°	1086.6	1084.8	1097.4	1089.1	1093.9	1073.0	1058.7	1036.3	1035.1
40°	1052.4	1047.4	1061.5	1052.5	1056.5	1035.6	1022.9	1000.4	998.4
42.5°	1010.9	1010.7	1022.5	1015.0	1019.8	998.1	982.2	960.5	957.7
45°	953.7	950.7	960.8	958.8	960.8	937.9	924.1	899.7	899.7
47.5°	890.6	888.6	902.2	896.7	899.5	879.6	861.9	840.0	836.4
50°	849.8	847.9	859.0	856.0	858.0	838.1	820.3	796.9	794.9
52.5°	807.5	805.5	817.5	813.6	814.8	797.3	778.0	756.9	753.4
55°	735.9	740.8	752.1	751.1	750.1	732.2	712.4	691.0	686.0
57.5°	674.2	676.2	684.2	685.7	682.3	670.6	646.5	625.6	620.4
60°	622.9	628.9	640.2	640.2	639.2	624.2	598.5	580.0	574.0
62.5°	575.7	582.4	592.1	594.6	593.6	575.5	553.7	536.0	528.4
65°	506.9	511.8	520.1	525.2	525.2	505.3	482.4	466.0	461.1
67.5°	435.2	441.2	448.8	454.9	452.1	433.6	413.8	399.0	390.6
70°	388.8	394.8	400.0	406.1	404.1	387.1	367.4	351.0	345.0
72.5°	341.6	348.3	352.8	358.0	355.2	338.3	321.0	306.2	298.6
75°	273.8	275.8	281.9	286.0	285.0	268.1	251.4	239.0	231.0
77.5°	207.2	208.0	213.1	214.8	210.1	199.3	185.8	176.1	168.1
80°	164.9	164.9	170.0	170.8	162.8	156.9	143.5	136.2	128.2
82.5°	121.7	122.5	129.3	129.3	122.9	116.2	106.9	98.8	94.0
85°	64.1	65.1	69.2	72.1	65.1	61.2	53.9	45.7	40.7
87.5°	17.1	17.9	23.6	26.7	20.4	20.4	13.0	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	1.7	2.7	10.2	11.4	10.3	9.8
95°	2.7	2.7	4.1	12.9	12.9	20.9	28.6	27.9	27.9
97.5°	6.1	6.8	9.5	39.4	29.4	28.6	40.8	44.9	45.3
100°	8.8	9.5	15.0	64.1	43.5	36.9	43.5	53.1	55.1
102.5°	12.1	13.3	23.7	101.3	61.5	44.2	51.1	58.0	60.0
105°	18.4	20.4	49.7	169.7	93.9	58.6	64.6	68.0	68.7
107.5°	27.6	35.1	135.9	238.6	133.2	77.6	81.1	83.4	84.2
110°	37.4	53.4	236.0	280.3	162.6	92.1	89.8	95.9	94.5

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	63.0	109.8	346.5	314.4	191.9	109.2	97.9	107.9	108.7
115°	176.2	302.5	463.2	363.0	236.7	138.9	110.9	120.5	124.5
117.5°	442.1	526.0	524.7	408.0	279.7	173.9	126.4	131.0	135.5
120°	594.4	607.1	555.7	438.4	307.4	199.0	139.4	137.5	141.5
122.5°	651.0	640.8	579.1	465.1	335.7	225.2	156.3	144.5	148.0
125°	699.9	679.9	609.4	503.2	377.5	263.8	187.0	159.8	159.2
127.5°	726.9	706.1	639.1	536.2	415.8	303.8	222.0	181.5	175.3
130°	740.0	720.7	659.7	556.5	441.4	331.0	247.6	200.4	191.1
132.5°	755.8	734.9	674.4	577.2	465.9	356.6	273.1	223.2	212.3
135°	771.3	752.0	698.5	604.3	500.6	394.2	310.1	260.9	246.9
137.5°	785.2	767.5	720.5	625.6	531.9	431.2	349.3	301.3	284.3
140°	794.4	775.1	729.8	642.0	550.9	454.5	375.4	327.5	314.2
142.5°	797.7	785.8	739.6	655.8	572.1	476.8	401.6	352.0	339.8
145°	807.3	799.3	751.6	672.3	597.2	510.0	441.4	390.1	376.8
147.5°	813.6	801.6	762.6	690.1	621.6	539.9	477.6	428.3	416.0
150°	814.1	804.8	771.3	701.2	638.0	561.5	499.9	453.4	442.1
152.5°	818.5	807.0	775.6	710.5	649.9	579.8	522.2	478.9	466.6
155°	815.5	807.5	782.2	722.4	668.6	603.4	553.6	515.3	504.7
157.5°	815.5	805.6	783.0	731.8	686.5	629.3	583.0	547.6	539.6
160°	810.0	806.1	783.5	738.3	695.8	643.9	602.6	570.4	559.8
162.5°	807.9	801.2	784.6	742.8	703.9	655.8	619.5	589.0	581.0
165°	798.5	792.5	778.1	744.8	716.9	677.0	644.1	616.8	612.8
167.5°	787.7	783.1	773.6	748.1	725.4	692.9	665.2	643.2	637.7
170°	780.1	772.8	769.2	749.7	729.8	702.5	678.8	658.9	652.9
172.5°	767.1	766.1	763.3	745.6	733.6	711.1	691.3	673.1	669.3
175°	751.6	751.6	753.6	742.6	738.6	720.0	706.0	695.0	689.0
177.5°	733.6	734.1	738.5	738.0	738.5	727.9	723.8	713.4	712.4
180°	729.8	729.8	729.8	729.8	729.8	729.8	729.8	729.8	729.8

(END OF REPORT)