

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: P522606

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

Issue Date: 5/11/2021

Test Information

Test Method: LM-79-08
Report Number: P522606
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-100D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1000 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

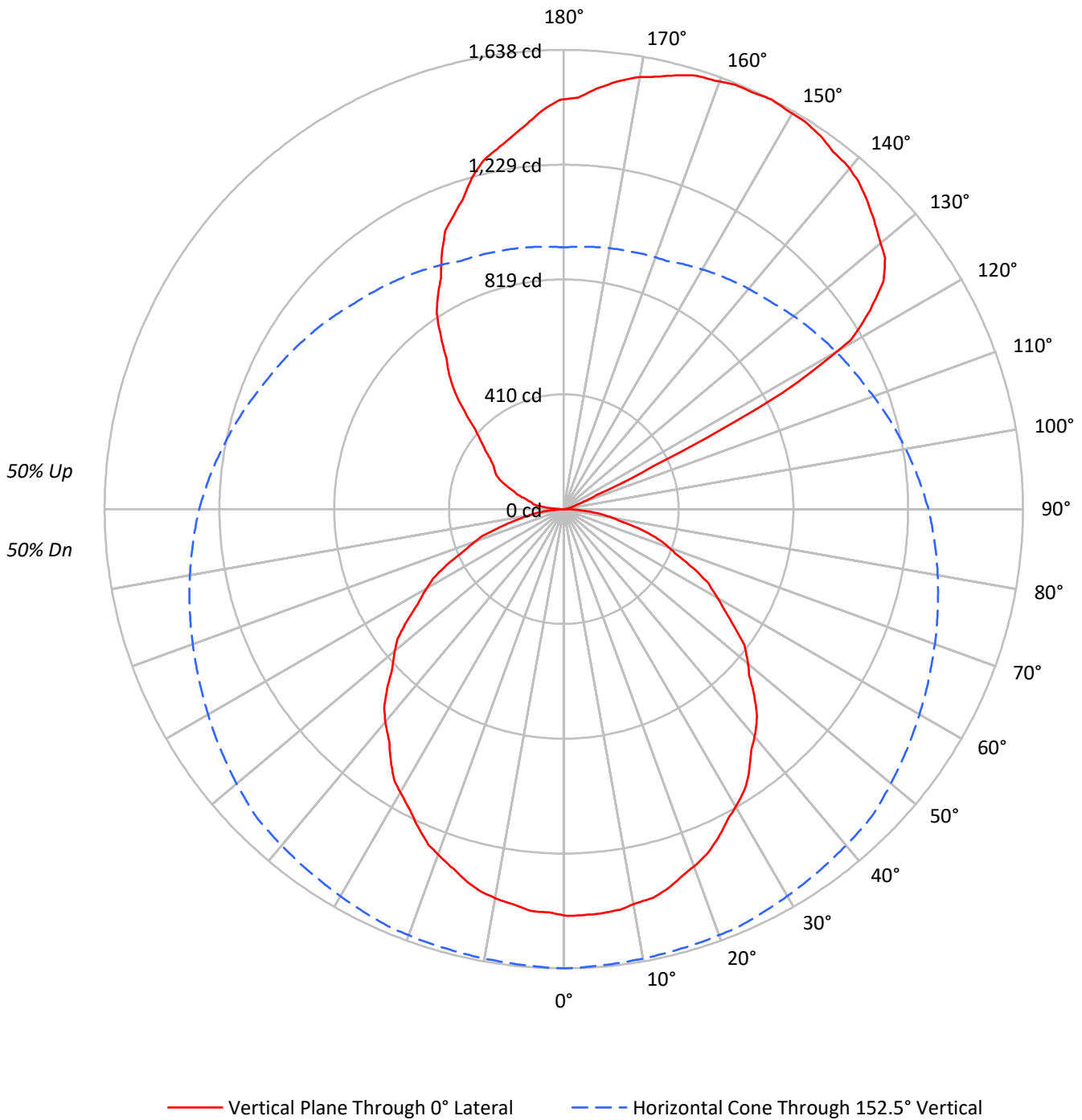
Lumens per Lamp: N/A
Luminaire Lumens: 8117.4 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.26 / 1.36
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 78.5
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	70	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	39	35
3	81	71	64	58	74	66	60	54	56	51	47	47	43	40	38	36	33	29
4	74	63	55	49	68	58	51	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	39	44	39	34	37	33	30	31	27	25	22
6	62	50	42	36	57	47	39	34	40	34	30	34	29	26	28	24	22	19
7	58	45	37	32	53	42	35	30	36	30	26	31	26	23	25	22	19	17
8	53	41	33	28	49	38	31	26	33	27	23	28	23	20	23	20	17	15
9	50	37	30	25	46	35	28	23	30	25	21	26	21	18	21	18	16	13
10	46	34	27	22	43	32	25	21	28	22	19	24	19	16	20	17	14	12

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	1.7
10°-20°	392.3	4.8
20°-30°	590.1	7.3
30°-40°	705.0	8.7
40°-50°	724.8	8.9
50°-60°	652.5	8.0
60°-70°	496.9	6.1
70°-80°	283.3	3.5
80°-90°	74.4	0.9
90°-100°	36.9	0.5
100°-110°	163.6	2.0
110°-120°	470.3	5.8
120°-130°	716.3	8.8
130°-140°	777.6	9.6
140°-150°	743.6	9.2
150°-160°	612.6	7.5
160°-170°	400.9	4.9
170°-180°	138.7	1.7
0°-30°	1119.8	13.8
0°-40°	1824.8	22.5
0°-60°	3202.2	39.4
0°-90°	4056.7	50.0
90°-120°	670.9	8.3
90°-150°	2908.4	35.8
90°-180°	4061.0	50.0
0°-180°	8117.4	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°	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°	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°	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)