

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: P511863

Luminaire Tested: **SQW-F-100U-125D-830-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511863
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-18,
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQW-F-100U-125D-830-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

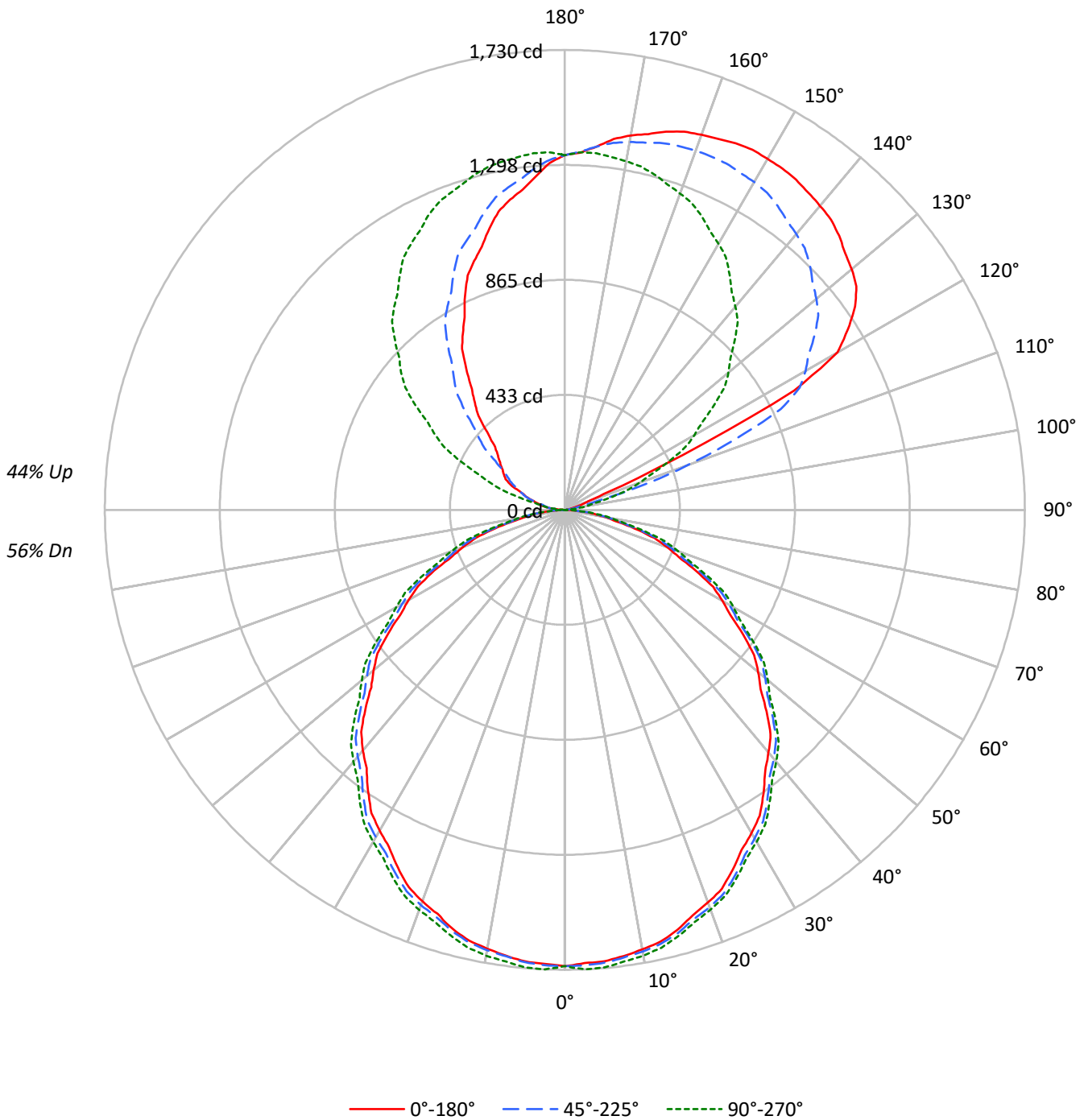
Lumens per Lamp: N/A
Luminaire Lumens: 8418.7 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 73.8
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56		
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47		
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39		
3	82	72	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33		
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28		
5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24		
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21		
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19		
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17		
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15		
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	55439	55439	55439
5°	55255	55988	55284
10°	55058	55832	54966
15°	54686	55442	54559
20°	54045	55017	53852
25°	53217	54457	52914
30°	52355	53761	51934
35°	51342	52939	50861
40°	50218	52123	49780
45°	48983	51180	48467
50°	47690	50056	47123
55°	46126	48727	45647
60°	44156	47256	43730
65°	41666	45402	41376
70°	38502	42770	38229
75°	33837	38653	33961
80°	27318	32041	28024
85°	15710	21971	18859



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	1.9
10°-20°	462.5	5.5
20°-30°	693.1	8.2
30°-40°	824.4	9.8
40°-50°	844.1	10.0
50°-60°	752.6	8.9
60°-70°	562.2	6.7
70°-80°	308.0	3.7
80°-90°	72.8	0.9
90°-100°	32.8	0.4
100°-110°	155.0	1.8
110°-120°	455.3	5.4
120°-130°	661.9	7.9
130°-140°	708.2	8.4
140°-150°	675.0	8.0
150°-160°	557.0	6.6
160°-170°	364.8	4.3
170°-180°	126.5	1.5
0°-30°	1317.9	15.7
0°-40°	2142.3	25.4
0°-60°	3739.0	44.4
0°-90°	4682.1	55.6
90°-120°	643.1	7.6
90°-150°	2688.2	31.9
90°-180°	3737.0	44.4
0°-180°	8418.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1717	1717	1717	1717	1717	
5°	1705	1710	1727	1708	1706	162
15°	1636	1647	1658	1640	1632	461
25°	1494	1516	1528	1509	1485	688
35°	1302	1329	1343	1320	1290	814
45°	1073	1106	1121	1093	1061	827
55°	819	851	866	842	811	731
65°	545	572	594	567	542	540
75°	271	292	310	289	272	289
85°	42	56	59	58	51	60
90°	3	3	2	4	7	2
95°	9	11	25	40	35	11
105°	42	116	172	110	117	51
115°	490	896	434	207	226	556
125°	1333	1148	684	319	294	1181
135°	1459	1304	904	534	413	1126
145°	1516	1396	1081	770	647	950
155°	1522	1437	1219	987	888	703
165°	1473	1428	1306	1162	1096	418
175°	1372	1372	1346	1290	1258	133
180°	1334	1334	1334	1334	1334	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1716.8	1716.8	1716.8	1716.8	1716.8	1716.8	1716.8	1716.8	1716.8
2.5°	1706.3	1714.4	1715.3	1714.2	1730.4	1714.9	1715.3	1713.7	1709.3
5°	1704.6	1706.4	1710.2	1707.8	1727.2	1706.9	1708.3	1704.6	1705.5
7.5°	1692.7	1694.0	1698.2	1693.7	1713.2	1693.5	1694.0	1690.1	1692.1
10°	1679.1	1681.9	1687.6	1682.4	1702.7	1681.5	1682.0	1677.2	1676.3
12.5°	1664.1	1665.3	1672.5	1667.3	1686.1	1665.7	1666.9	1659.9	1660.5
15°	1635.8	1640.4	1647.1	1639.1	1658.4	1638.2	1639.6	1633.0	1632.0
17.5°	1599.1	1607.2	1614.0	1605.9	1625.1	1604.3	1605.5	1596.4	1593.4
20°	1572.7	1580.1	1590.6	1582.5	1601.0	1577.9	1582.1	1567.1	1567.1
22.5°	1543.3	1547.7	1562.7	1553.9	1573.1	1550.1	1553.5	1534.7	1535.4
25°	1493.6	1500.1	1516.2	1509.1	1528.4	1504.5	1508.7	1487.0	1485.1
27.5°	1441.1	1448.6	1465.4	1458.8	1478.0	1454.2	1457.3	1433.5	1430.5
30°	1404.1	1412.4	1427.7	1423.4	1441.8	1418.8	1421.1	1396.5	1392.8
32.5°	1363.5	1373.2	1388.5	1387.9	1403.4	1382.6	1382.7	1357.3	1352.9
35°	1302.4	1311.6	1328.8	1329.1	1342.9	1321.7	1320.3	1295.7	1290.2
37.5°	1237.3	1247.8	1265.3	1267.7	1280.2	1260.5	1254.8	1230.2	1225.4
40°	1191.3	1203.3	1222.4	1225.5	1236.5	1215.3	1211.1	1186.5	1180.9
42.5°	1145.3	1157.3	1176.4	1181.0	1190.6	1173.1	1164.4	1139.7	1133.5
45°	1072.6	1085.5	1106.5	1113.3	1120.7	1105.0	1093.4	1068.7	1061.3
47.5°	999.0	1011.0	1032.9	1042.2	1046.8	1033.6	1021.4	995.8	987.7
50°	949.3	961.2	983.2	991.8	996.4	985.3	970.9	945.3	938.0
52.5°	897.3	909.3	931.2	941.3	945.1	935.6	921.2	895.6	888.3
55°	819.3	829.4	851.3	863.6	865.5	859.0	841.9	817.3	810.8
57.5°	738.0	747.9	769.6	782.8	786.0	779.5	761.3	736.9	731.4
60°	683.7	692.9	713.8	727.1	731.7	725.3	706.3	682.6	677.1
62.5°	628.7	637.2	657.3	671.4	677.5	670.3	650.6	627.6	622.1
65°	545.3	552.6	571.6	590.6	594.2	586.0	566.9	545.2	541.5
67.5°	462.8	468.3	486.1	504.7	509.5	501.0	481.4	462.9	458.4
70°	407.8	413.3	430.4	447.5	453.0	443.8	425.7	408.6	404.9
72.5°	352.8	357.6	374.6	390.2	395.7	388.0	369.9	354.4	350.7
75°	271.2	276.7	291.9	306.2	309.8	304.3	289.1	275.8	272.2
77.5°	195.1	198.6	211.7	222.7	225.8	221.8	210.2	198.5	196.6
80°	146.9	149.7	162.0	171.4	172.3	170.5	162.0	152.5	150.7
82.5°	102.5	106.0	117.5	125.4	123.4	124.5	118.3	109.6	108.5
85°	42.4	44.2	56.5	63.9	59.3	63.9	58.4	51.8	50.9
87.5°	5.1	5.8	10.4	18.4	16.2	20.1	16.6	12.6	12.8
90°	2.8	2.8	2.8	1.9	1.9	2.8	3.7	6.5	7.4
92.5°	5.0	5.0	5.0	6.3	7.1	14.5	9.7	11.0	10.4
95°	9.3	10.2	11.2	28.7	25.1	36.9	40.0	38.0	35.3
97.5°	16.4	17.3	23.2	78.6	55.6	50.1	65.4	69.2	65.6
100°	22.3	23.2	34.4	127.2	80.8	64.5	74.3	86.4	86.4
102.5°	29.0	30.6	54.5	191.9	113.5	81.2	85.5	96.9	99.8
105°	41.8	46.4	116.1	324.5	171.9	108.3	109.6	114.4	117.1
107.5°	65.2	83.8	300.1	449.5	245.1	141.5	144.6	142.9	141.6
110°	92.0	133.8	493.4	526.4	300.1	167.5	165.4	164.4	161.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	172.3	286.0	691.9	593.7	354.4	196.3	181.7	192.6	187.7
115°	489.7	696.8	895.7	687.4	433.9	246.8	207.2	222.2	225.8
117.5°	972.1	1051.5	996.3	766.7	511.6	304.8	230.4	244.2	251.3
120°	1184.7	1167.4	1045.3	820.2	562.2	345.9	249.0	257.5	263.9
122.5°	1261.3	1220.8	1086.2	866.3	610.5	390.6	272.8	269.5	277.3
125°	1333.4	1280.7	1147.5	929.2	683.9	462.2	318.7	288.2	293.6
127.5°	1381.9	1326.8	1201.4	990.0	756.2	535.8	378.7	317.8	312.2
130°	1408.6	1355.0	1234.9	1024.5	803.7	584.8	421.8	344.4	330.8
132.5°	1429.5	1380.2	1263.9	1061.8	844.6	631.5	466.5	379.2	359.0
135°	1458.8	1412.5	1303.6	1111.2	904.1	700.6	534.3	441.6	412.6
137.5°	1481.3	1438.1	1335.4	1154.3	962.3	767.7	603.4	511.5	481.5
140°	1493.2	1451.4	1354.7	1180.6	997.9	809.9	649.5	556.8	526.8
142.5°	1503.6	1463.3	1371.1	1206.0	1032.1	851.3	698.6	602.9	574.4
145°	1516.4	1478.3	1395.6	1242.4	1080.6	912.6	770.3	673.1	646.7
147.5°	1522.6	1488.4	1414.6	1274.5	1127.7	971.0	839.6	746.6	718.3
150°	1524.8	1492.1	1423.5	1294.0	1155.9	1008.7	882.7	795.6	766.6
152.5°	1527.0	1492.9	1429.5	1310.6	1181.9	1043.5	925.1	842.5	816.4
155°	1522.0	1492.0	1437.4	1330.8	1219.1	1092.8	986.8	911.0	888.3
157.5°	1510.5	1490.3	1439.1	1347.3	1248.6	1137.6	1044.8	976.1	953.7
160°	1501.6	1484.3	1438.4	1356.4	1266.5	1165.6	1079.7	1017.0	996.1
162.5°	1491.9	1473.9	1434.7	1362.6	1283.6	1192.2	1113.9	1053.5	1037.0
165°	1472.8	1456.4	1428.2	1369.1	1305.5	1228.3	1162.4	1110.1	1096.4
167.5°	1447.9	1437.7	1414.6	1371.1	1322.6	1259.9	1203.7	1161.8	1149.8
170°	1430.0	1422.7	1404.9	1370.6	1331.5	1279.7	1231.2	1193.8	1184.7
172.5°	1407.0	1404.1	1392.3	1367.8	1339.0	1295.9	1255.0	1222.8	1214.4
175°	1371.5	1375.1	1371.5	1360.9	1346.4	1317.3	1289.7	1264.5	1258.1
177.5°	1344.7	1346.2	1348.4	1348.4	1346.2	1333.1	1318.0	1304.6	1306.1
180°	1334.3	1334.3	1334.3	1334.3	1334.3	1334.3	1334.3	1334.3	1334.3

(END OF REPORT)