

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: P511851

Luminaire Tested: **SQW-F-100U-075D-830-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511851
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-075D-830-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

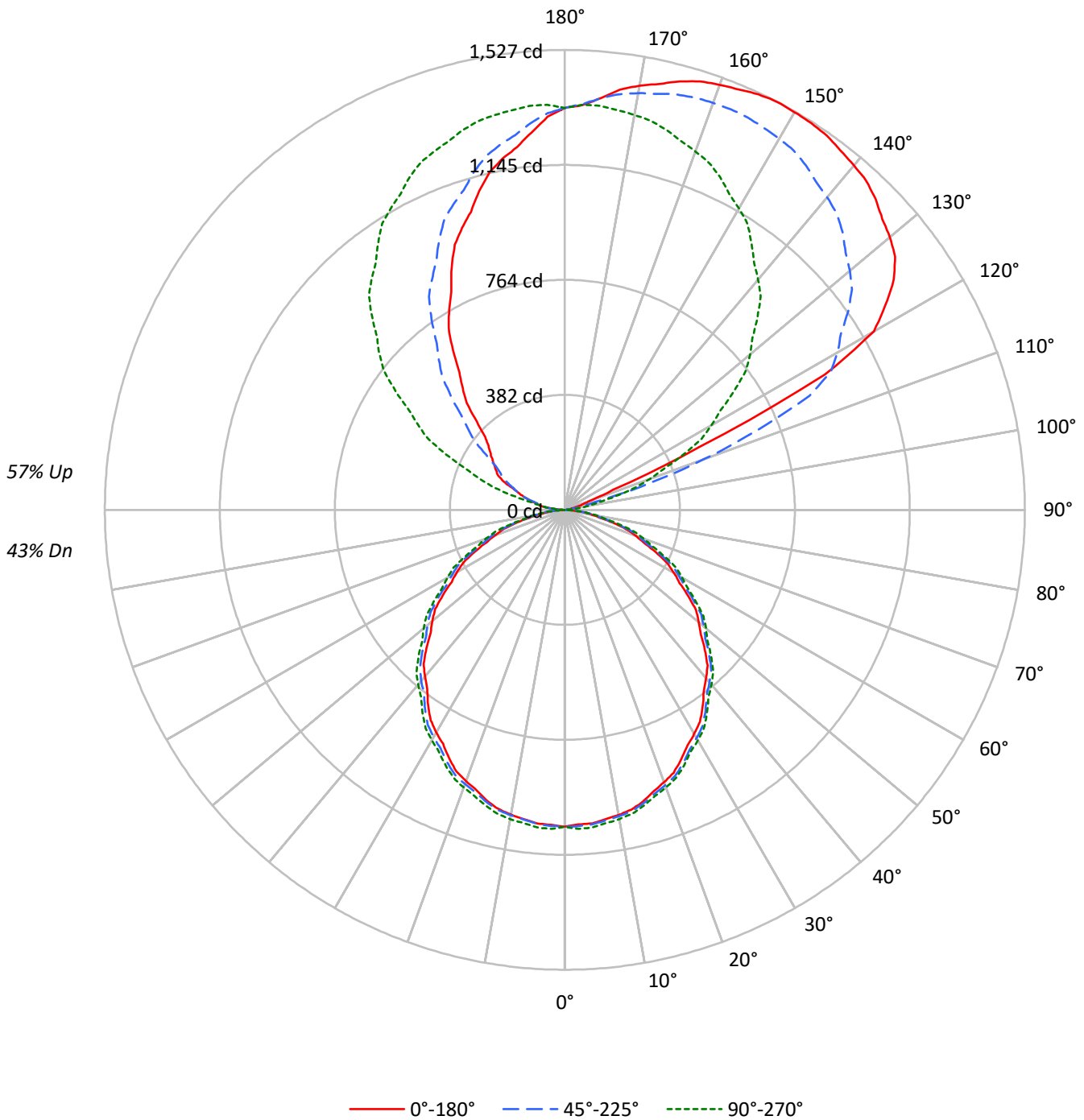
Lumens per Lamp: N/A
Luminaire Lumens: 6603.3 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 54.2
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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50	43
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42	37
2	88	80	74	69	80	74	68	64	61	57	54	50	47	44	39	37	35	30
3	80	70	63	57	73	65	58	53	54	49	45	44	40	38	34	32	30	26
4	73	62	54	48	66	57	50	45	48	43	38	39	35	32	31	28	26	22
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	22	19
6	62	50	42	36	56	46	39	33	38	33	29	31	27	24	25	22	20	17
7	57	45	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17	15
8	53	40	33	28	48	37	31	26	32	26	22	26	22	19	21	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	27	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	33968	33968	33968
5°	33884	34312	33884
10°	33721	34184	33688
15°	33531	33969	33404
20°	33076	33722	32945
25°	32580	33353	32413
30°	32026	32940	31814
35°	31446	32448	31186
40°	30768	31919	30448
45°	30017	31351	29675
50°	29143	30705	28811
55°	28206	29900	27834
60°	27002	29011	26699
65°	25398	27851	25184
70°	23472	26229	23292
75°	20449	23493	20449
80°	16458	19619	16978
85°	9411	13264	11152



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.4	1.5
10°-20°	283.4	4.3
20°-30°	424.7	6.4
30°-40°	504.9	7.6
40°-50°	516.8	7.8
50°-60°	460.8	7.0
60°-70°	344.3	5.2
70°-80°	187.7	2.8
80°-90°	44.8	0.7
90°-100°	32.8	0.5
100°-110°	155.0	2.3
110°-120°	455.3	6.9
120°-130°	661.9	10.0
130°-140°	708.2	10.7
140°-150°	675.0	10.2
150°-160°	557.0	8.4
160°-170°	364.8	5.5
170°-180°	126.5	1.9
0°-30°	807.4	12.2
0°-40°	1312.3	19.9
0°-60°	2290.0	34.7
0°-90°	2866.8	43.4
90°-120°	643.1	9.7
90°-150°	2688.2	40.7
90°-180°	3737.0	56.6
0°-180°	6603.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1052	1052	1052	1052	1052	
5°	1045	1048	1058	1046	1045	99
15°	1003	1009	1016	1005	999	282
25°	914	929	936	925	910	421
35°	798	814	823	809	791	498
45°	657	677	686	670	650	507
55°	501	521	531	515	494	447
65°	332	349	364	348	330	329
75°	164	176	188	177	164	175
85°	25	33	36	37	30	36
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°	1051.9	1051.9	1051.9	1051.9	1051.9	1051.9	1051.9	1051.9	1051.9
2.5°	1045.1	1050.3	1051.2	1049.9	1060.2	1050.6	1050.4	1050.3	1046.7
5°	1045.3	1045.3	1048.2	1046.5	1058.5	1046.5	1046.3	1044.4	1045.3
7.5°	1036.7	1037.8	1039.9	1038.1	1049.3	1037.1	1037.8	1035.0	1036.5
10°	1028.4	1030.2	1033.1	1030.5	1042.5	1029.6	1030.3	1027.4	1027.4
12.5°	1019.3	1021.2	1024.8	1021.5	1033.5	1021.3	1021.2	1017.6	1017.6
15°	1003.0	1004.8	1008.6	1005.1	1016.1	1003.2	1004.8	1000.1	999.2
17.5°	979.8	983.7	988.6	985.1	996.4	983.3	984.1	977.7	976.0
20°	962.5	967.1	972.8	969.3	981.3	967.5	969.1	959.6	958.7
22.5°	944.4	948.2	956.2	952.7	964.0	950.9	952.5	940.0	939.9
25°	914.4	918.1	928.6	926.0	936.1	923.2	924.8	910.6	909.7
27.5°	882.2	887.0	897.5	895.1	905.2	891.4	893.0	877.7	875.8
30°	858.9	864.4	874.9	873.2	883.4	869.5	871.1	855.1	853.2
32.5°	834.0	841.0	851.5	850.6	860.0	846.9	846.3	830.9	828.4
35°	797.7	803.2	813.7	814.8	823.1	811.1	809.0	793.8	791.1
37.5°	757.7	763.4	773.9	776.3	783.5	771.7	768.3	753.1	750.2
40°	729.9	736.3	746.8	750.7	757.2	746.1	741.2	726.0	722.3
42.5°	701.2	708.4	719.7	723.6	729.3	718.2	712.5	698.1	693.7
45°	657.3	664.7	677.1	681.9	686.5	676.4	669.6	654.4	649.8
47.5°	611.8	619.1	631.9	637.8	641.3	633.0	625.1	609.9	604.4
50°	580.1	587.5	601.8	608.4	611.2	602.9	594.2	579.0	573.5
52.5°	549.2	555.9	570.1	577.5	579.5	572.7	563.4	548.9	542.6
55°	501.0	507.5	520.8	529.3	531.1	525.6	515.1	499.9	494.4
57.5°	451.3	457.7	470.9	480.3	482.4	476.8	465.4	452.1	445.8
60°	418.1	424.6	437.0	446.4	449.2	443.7	432.3	419.0	413.4
62.5°	384.2	389.2	402.3	411.8	416.1	411.3	399.1	384.3	379.5
65°	332.4	338.0	349.4	360.8	364.5	360.8	347.5	334.2	329.6
67.5°	282.5	286.2	296.6	307.9	312.5	308.4	296.5	282.8	279.9
70°	248.6	252.3	262.7	273.2	277.8	272.3	261.8	250.4	246.7
72.5°	213.2	216.9	226.6	237.0	240.9	235.4	226.4	216.5	212.1
75°	163.9	167.5	176.1	184.7	188.3	184.7	177.0	168.5	163.9
77.5°	117.9	121.4	128.8	136.2	137.9	135.5	130.1	122.7	119.2
80°	88.5	91.3	97.9	104.6	105.5	104.6	100.8	94.1	91.3
82.5°	62.2	64.2	70.8	75.9	75.3	77.4	73.6	67.8	65.7
85°	25.4	27.3	33.0	38.5	35.8	40.4	36.7	32.9	30.1
87.5°	3.6	3.6	6.6	10.9	10.2	13.3	10.5	8.8	7.5
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)