

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: P511799

Luminaire Tested: **SQW-F-075U-100D-840-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511799
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-17,
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQW-F-075U-100D-840-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

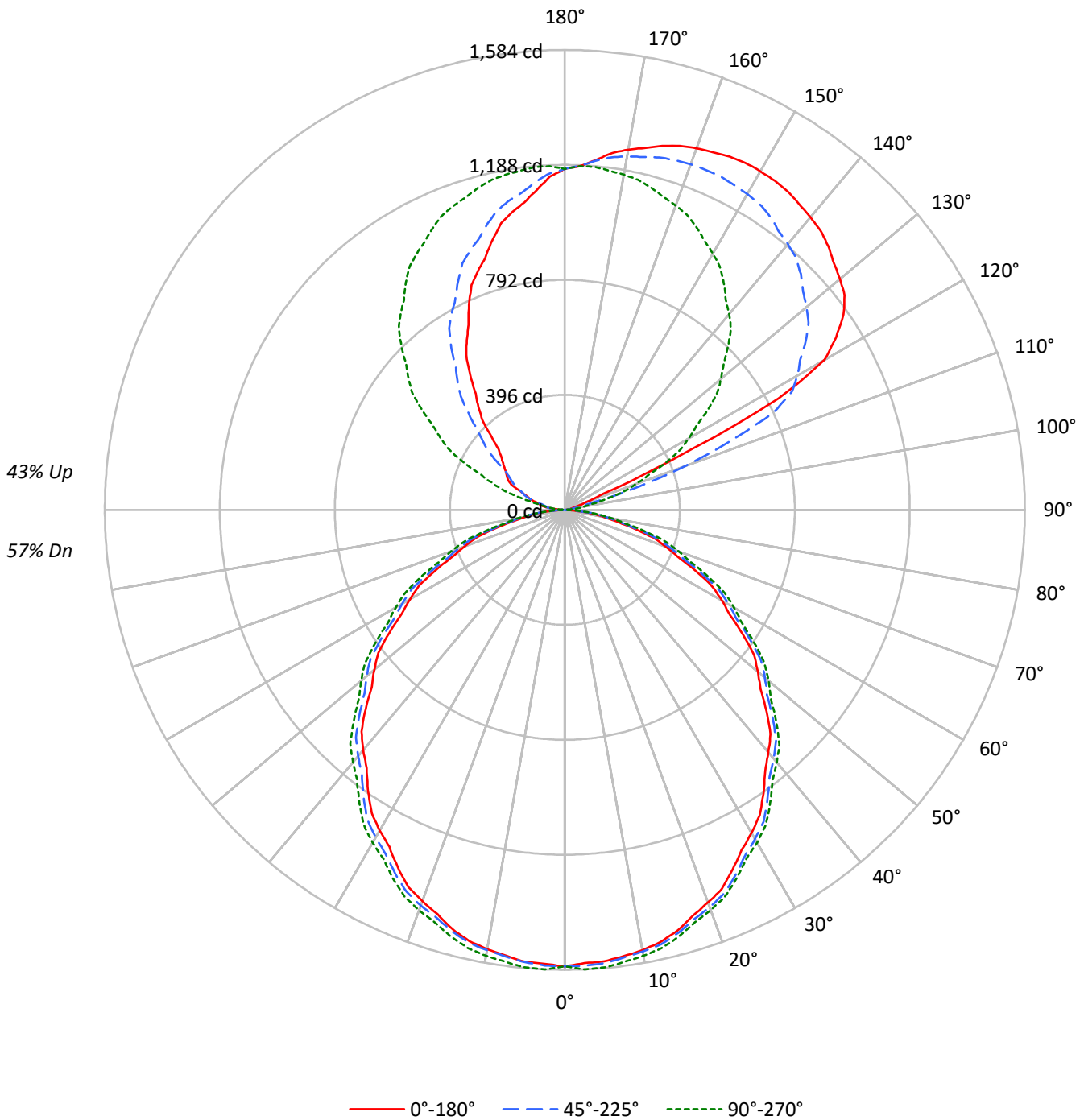
Lumens per Lamp: N/A
Luminaire Lumens: 7576.7 lumens
Efficiency: N/A
Efficacy: 132.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 57.2
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	50	30	10	0	
RCR																						
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57				57
1	99	95	91	87	92	88	85	82	76	74	71	65	63	62	55	54	52	48				48
2	90	83	77	71	84	77	72	67	67	63	59	57	54	51	48	46	44	40				40
3	82	73	65	59	76	68	61	56	59	54	50	50	47	43	43	40	37	34				34
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32	29				29
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28	25				25
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25	22				22
7	59	46	38	33	55	43	36	31	38	32	28	33	28	25	28	25	22	19				19
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	19	17				17
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18	15				15
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14				14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	50782	50782	50782
5°	50597	51287	50665
10°	50484	51146	50379
15°	50153	50829	49976
20°	49467	50419	49285
25°	48710	49886	48446
30°	47918	49350	47523
35°	47010	48606	46548
40°	45961	47845	45510
45°	44832	46969	44298
50°	43596	46002	43003
55°	42140	44718	41543
60°	40294	43394	39745
65°	37914	41651	37425
70°	34886	39305	34480
75°	30293	35596	30954
80°	24361	29493	25737
85°	13412	20119	17340



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.7	2.0
10°-20°	423.8	5.6
20°-30°	635.3	8.4
30°-40°	755.4	10.0
40°-50°	773.3	10.2
50°-60°	689.3	9.1
60°-70°	513.9	6.8
70°-80°	280.8	3.7
80°-90°	66.5	0.9
90°-100°	29.6	0.4
100°-110°	137.3	1.8
110°-120°	400.2	5.3
120°-130°	581.6	7.7
130°-140°	622.3	8.2
140°-150°	595.4	7.9
150°-160°	490.9	6.5
160°-170°	321.1	4.2
170°-180°	111.3	1.5
0°-30°	1207.8	15.9
0°-40°	1963.2	25.9
0°-60°	3425.8	45.2
0°-90°	4287.0	56.6
90°-120°	567.1	7.5
90°-150°	2366.4	31.2
90°-180°	3290.0	43.4
0°-180°	7576.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1573	1573	1573	1573	1573	
5°	1561	1567	1582	1564	1563	148
15°	1500	1509	1520	1502	1495	422
25°	1367	1390	1400	1382	1360	630
35°	1192	1217	1233	1208	1181	745
45°	982	1012	1028	1000	970	757
55°	748	778	794	771	738	668
65°	496	521	545	516	490	491
75°	243	262	285	264	248	260
85°	36	50	54	55	47	53
90°	2	2	1	4	9	2
95°	9	11	22	36	33	10
105°	36	106	152	97	105	44
115°	403	792	381	182	201	473
125°	1172	1013	600	278	254	1036
135°	1283	1149	794	468	359	990
145°	1339	1233	954	681	568	838
155°	1343	1267	1074	870	780	620
165°	1298	1257	1149	1022	962	368
175°	1208	1206	1185	1134	1106	117
180°	1174	1174	1174	1174	1174	



TEST NUMBER: P511799

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1572.6	1572.6	1572.6	1572.6	1572.6	1572.6	1572.6	1572.6	1572.6
2.5°	1562.4	1569.9	1571.8	1570.4	1584.5	1571.2	1570.9	1569.9	1565.0
5°	1560.9	1563.0	1567.3	1564.5	1582.2	1564.5	1564.1	1562.0	1563.0
7.5°	1550.7	1552.8	1555.2	1552.4	1570.1	1551.9	1551.7	1548.2	1549.2
10°	1539.6	1541.7	1544.9	1542.1	1559.8	1540.1	1540.7	1535.4	1536.4
12.5°	1524.3	1526.4	1532.2	1528.5	1545.4	1526.4	1527.0	1520.9	1521.1
15°	1500.2	1503.3	1508.7	1502.7	1520.4	1501.7	1502.3	1495.9	1494.9
17.5°	1465.9	1472.2	1478.7	1473.5	1489.4	1471.4	1472.3	1462.5	1459.8
20°	1439.5	1445.8	1456.6	1450.6	1467.2	1448.5	1450.2	1435.2	1434.2
22.5°	1413.1	1417.7	1431.0	1425.0	1441.7	1422.9	1423.8	1406.3	1406.1
25°	1367.1	1373.4	1389.5	1384.5	1400.1	1381.4	1382.0	1362.8	1359.7
27.5°	1320.1	1326.5	1342.8	1338.1	1354.1	1335.0	1336.2	1314.8	1308.6
30°	1285.1	1292.4	1309.6	1305.8	1323.5	1302.6	1302.2	1280.7	1274.5
32.5°	1247.7	1256.6	1273.9	1271.7	1287.7	1267.7	1265.5	1244.1	1237.9
35°	1192.5	1201.9	1217.0	1218.4	1233.0	1214.2	1208.5	1188.1	1180.8
37.5°	1132.9	1141.6	1158.0	1160.9	1175.0	1155.5	1147.4	1128.9	1120.5
40°	1090.3	1100.7	1118.0	1122.5	1135.0	1116.3	1107.3	1088.0	1079.6
42.5°	1048.6	1059.0	1077.1	1084.1	1093.3	1075.4	1064.7	1046.2	1036.2
45°	981.7	992.1	1011.5	1021.2	1028.5	1011.9	999.8	980.4	970.0
47.5°	913.8	925.2	944.8	956.9	961.7	946.5	935.3	913.7	902.0
50°	867.8	879.2	899.7	912.6	915.7	902.1	890.1	868.5	856.0
52.5°	820.9	830.7	851.2	865.7	867.1	856.1	843.3	821.7	810.1
55°	748.5	758.9	778.3	795.3	794.3	787.0	770.9	749.3	737.9
57.5°	674.2	682.5	702.7	720.8	721.3	712.9	697.4	676.1	664.8
60°	623.9	632.3	651.6	669.8	671.9	663.5	646.3	625.8	615.4
62.5°	573.7	581.2	599.7	619.5	621.6	613.3	595.2	575.6	565.2
65°	496.2	502.4	520.7	541.0	545.1	535.8	516.4	499.1	489.8
67.5°	419.7	425.8	442.7	462.9	468.3	457.7	440.2	423.8	414.6
70°	369.5	374.7	390.8	410.1	416.3	404.9	390.8	373.5	365.2
72.5°	318.4	323.6	339.7	358.1	363.5	352.9	339.7	324.2	320.9
75°	242.8	248.0	261.9	281.2	285.3	276.0	264.1	250.2	248.1
77.5°	175.3	178.6	191.2	204.5	207.2	201.6	194.4	182.0	181.0
80°	131.0	135.1	146.9	157.6	158.6	155.5	150.1	139.5	138.4
82.5°	91.8	95.1	105.2	115.0	113.5	113.7	110.1	100.3	100.1
85°	36.2	39.3	50.0	58.5	54.3	57.4	55.4	47.9	46.8
87.5°	3.8	4.7	9.0	17.2	15.6	18.3	16.2	12.6	12.8
90°	2.2	2.2	2.2	1.1	1.1	2.2	4.4	7.7	8.8
92.5°	4.0	4.8	4.9	5.5	6.4	12.7	8.8	10.4	10.6
95°	8.8	8.8	11.0	26.4	22.1	32.9	36.4	34.2	33.1
97.5°	14.6	15.6	21.4	69.3	49.7	44.0	60.0	64.1	60.3
100°	19.9	20.9	32.0	109.5	71.7	56.6	66.2	78.4	80.6
102.5°	26.0	28.0	49.7	168.8	100.9	71.9	75.9	87.2	90.3
105°	36.4	41.8	105.9	279.6	152.3	95.1	97.1	100.5	104.8
107.5°	56.5	75.9	269.0	396.9	215.6	124.8	129.1	126.0	126.2
110°	79.5	120.5	440.3	464.4	261.5	148.2	146.8	144.5	141.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	143.9	252.2	613.3	524.2	310.1	173.5	160.9	170.9	164.2
115°	402.8	611.0	792.3	606.2	380.7	216.7	182.1	196.5	200.8
117.5°	830.7	925.0	881.5	679.1	448.2	267.2	202.4	212.7	219.8
120°	1032.9	1029.6	924.7	724.2	493.3	304.4	217.4	224.1	229.5
122.5°	1107.0	1076.2	960.9	764.8	536.5	344.3	237.7	233.9	240.1
125°	1171.9	1129.8	1013.0	820.4	600.3	405.0	278.1	249.5	253.8
127.5°	1214.1	1167.9	1057.6	871.4	662.1	469.4	331.5	274.2	269.0
130°	1237.0	1191.7	1085.9	902.5	701.8	510.9	368.6	298.8	285.8
132.5°	1256.5	1213.7	1112.3	932.7	740.7	553.1	408.3	329.5	310.5
135°	1283.4	1242.4	1148.8	976.9	794.5	614.3	467.9	385.6	358.6
137.5°	1303.9	1266.6	1177.4	1016.4	846.8	674.6	530.3	447.6	420.0
140°	1315.4	1279.8	1195.1	1041.3	879.5	713.3	572.7	488.3	462.4
142.5°	1326.0	1291.2	1210.1	1063.6	910.4	750.3	616.0	529.8	503.9
145°	1338.6	1305.1	1232.6	1095.9	954.5	805.6	680.9	593.1	568.3
147.5°	1344.5	1313.7	1248.7	1124.6	994.0	856.8	741.1	656.9	631.9
150°	1346.3	1317.1	1255.8	1141.6	1019.6	890.2	779.1	700.1	674.2
152.5°	1347.2	1317.2	1261.1	1155.9	1042.6	920.0	816.2	741.7	717.5
155°	1343.0	1316.0	1266.8	1173.0	1073.7	962.6	869.6	801.8	780.2
157.5°	1333.3	1313.4	1267.7	1187.4	1099.8	1002.4	920.3	858.3	838.0
160°	1325.3	1308.0	1266.8	1195.5	1115.6	1026.1	951.2	894.5	875.1
162.5°	1314.7	1297.5	1262.4	1199.3	1129.8	1048.0	980.4	926.4	910.4
165°	1297.7	1281.5	1256.9	1204.9	1148.8	1080.8	1021.8	975.2	962.3
167.5°	1276.1	1266.0	1244.8	1207.1	1164.0	1109.0	1059.8	1021.8	1010.8
170°	1260.2	1252.7	1235.9	1206.5	1171.9	1125.5	1083.6	1049.3	1041.7
172.5°	1239.9	1235.8	1224.5	1203.1	1178.1	1140.3	1104.8	1074.9	1067.3
175°	1208.3	1210.5	1206.1	1198.1	1185.2	1159.3	1134.4	1113.3	1105.7
177.5°	1184.7	1184.7	1185.6	1186.5	1184.7	1173.5	1160.9	1148.6	1149.4
180°	1174.1	1174.1	1174.1	1174.1	1174.1	1174.1	1174.1	1174.1	1174.1

(END OF REPORT)