

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: P511853

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

Issue Date: 4/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P511853  
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-840-1D-UNV-STD-W-4  
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

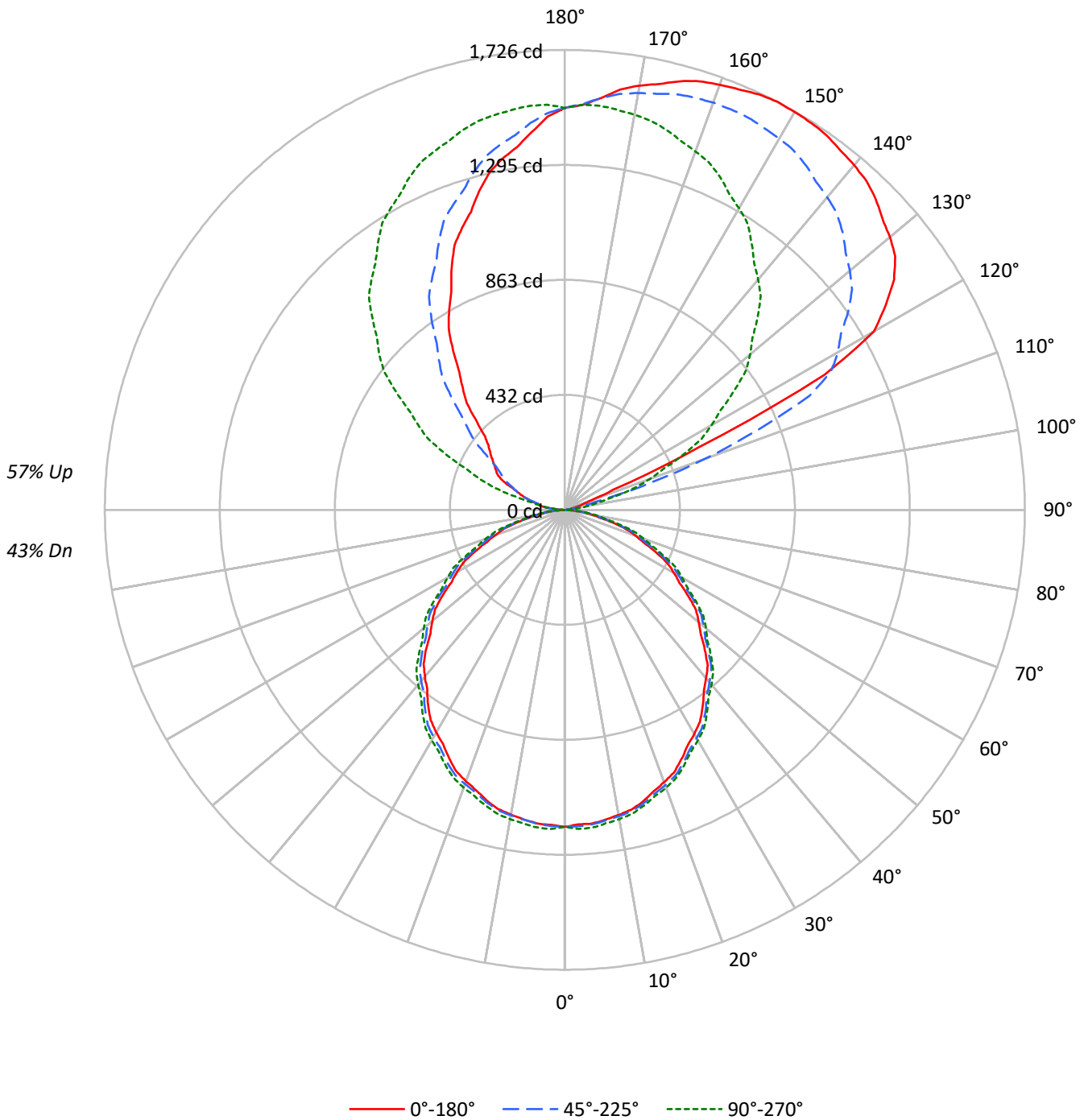
Lumens per Lamp: N/A  
Luminaire Lumens: 7465.8 lumens  
Efficiency: N/A  
Efficacy: 137.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')  
CIE Type: General Diffuse

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°	38405	38405	38405
5°	38312	38795	38312
10°	38125	38650	38089
15°	37907	38409	37767
20°	37395	38127	37247
25°	36838	37707	36646
30°	36206	37239	35971
35°	35550	36685	35258
40°	34786	36084	34427
45°	33940	35447	33552
50°	32951	34714	32574
55°	31888	33808	31471
60°	30529	32802	30186
65°	28722	31488	28478
70°	26540	29656	26342
75°	23119	26563	23119
80°	18615	22185	19210
85°	10634	15006	12634



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.4	1.5
10°-20°	320.4	4.3
20°-30°	480.1	6.4
30°-40°	570.8	7.6
40°-50°	584.3	7.8
50°-60°	521.0	7.0
60°-70°	389.3	5.2
70°-80°	212.2	2.8
80°-90°	50.7	0.7
90°-100°	37.1	0.5
100°-110°	175.2	2.3
110°-120°	514.8	6.9
120°-130°	748.3	10.0
130°-140°	800.7	10.7
140°-150°	763.2	10.2
150°-160°	629.7	8.4
160°-170°	412.5	5.5
170°-180°	143.0	1.9
0°-30°	912.9	12.2
0°-40°	1483.7	19.9
0°-60°	2589.0	34.7
0°-90°	3241.2	43.4
90°-120°	727.1	9.7
90°-150°	3039.3	40.7
90°-180°	4225.0	56.6
0°-180°	7465.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1189	1189	1189	1189	1189	
5°	1182	1185	1197	1183	1182	112
15°	1134	1140	1149	1136	1130	319
25°	1034	1050	1058	1046	1028	476
35°	902	920	931	915	894	563
45°	743	766	776	757	735	573
55°	566	589	600	582	559	506
65°	376	395	412	393	373	373
75°	185	199	213	200	185	198
85°	29	37	40	42	34	41
90°	3	3	2	4	8	2
95°	10	13	28	45	40	12
105°	47	131	194	124	132	57
115°	554	1013	491	234	255	628
125°	1508	1297	773	360	332	1335
135°	1649	1474	1022	604	466	1273
145°	1714	1578	1222	871	731	1074
155°	1721	1625	1378	1116	1004	795
165°	1665	1615	1476	1314	1240	472
175°	1551	1551	1522	1458	1422	150
180°	1509	1509	1509	1509	1509	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3	1189.3
2.5°	1181.6	1187.5	1188.5	1187.0	1198.7	1187.9	1187.6	1187.5	1183.3
5°	1181.9	1181.9	1185.1	1183.2	1196.8	1183.2	1182.9	1180.8	1181.9
7.5°	1172.1	1173.3	1175.7	1173.6	1186.3	1172.6	1173.3	1170.2	1171.9
10°	1162.7	1164.8	1168.0	1165.1	1178.7	1164.1	1164.8	1161.6	1161.6
12.5°	1152.5	1154.6	1158.6	1154.9	1168.4	1154.7	1154.6	1150.6	1150.6
15°	1133.9	1136.0	1140.3	1136.4	1148.9	1134.3	1136.1	1130.7	1129.7
17.5°	1107.8	1112.1	1117.8	1113.8	1126.5	1111.7	1112.7	1105.4	1103.5
20°	1088.2	1093.4	1099.9	1095.9	1109.5	1093.8	1095.6	1084.9	1083.9
22.5°	1067.7	1072.1	1081.1	1077.2	1089.9	1075.1	1076.9	1062.8	1062.6
25°	1033.9	1038.0	1049.8	1046.9	1058.3	1043.8	1045.6	1029.6	1028.5
27.5°	997.4	1002.9	1014.7	1012.0	1023.4	1007.8	1009.6	992.3	990.2
30°	971.0	977.3	989.1	987.3	998.7	983.1	984.9	966.7	964.7
32.5°	942.9	950.8	962.7	961.7	972.3	957.5	956.8	939.5	936.5
35°	901.8	908.1	919.9	921.2	930.6	917.0	914.6	897.5	894.4
37.5°	856.7	863.1	875.0	877.7	885.9	872.5	868.6	851.5	848.2
40°	825.2	832.5	844.3	848.8	856.0	843.6	837.9	820.8	816.7
42.5°	792.8	800.9	813.7	818.1	824.5	812.0	805.6	789.3	784.3
45°	743.2	751.5	765.5	771.0	776.2	764.7	757.0	739.9	734.7
47.5°	691.7	700.0	714.4	721.1	725.1	715.7	706.8	689.6	683.3
50°	655.9	664.2	680.4	687.9	691.0	681.6	671.8	654.7	648.4
52.5°	621.0	628.5	644.6	652.9	655.2	647.5	636.9	620.6	613.5
55°	566.4	573.7	588.8	598.4	600.5	594.3	582.4	565.2	559.0
57.5°	510.2	517.5	532.4	543.1	545.4	539.1	526.2	511.1	504.0
60°	472.7	480.0	494.0	504.8	507.9	501.6	488.7	473.7	467.4
62.5°	434.4	440.0	454.9	465.6	470.4	465.0	451.2	434.5	429.1
65°	375.9	382.1	395.0	407.9	412.1	407.9	392.9	377.9	372.7
67.5°	319.4	323.6	335.4	348.1	353.3	348.7	335.2	319.8	316.4
70°	281.1	285.3	297.1	308.9	314.1	307.9	296.0	283.1	279.0
72.5°	241.1	245.2	256.2	268.0	272.4	266.1	256.0	244.8	239.8
75°	185.3	189.4	199.1	208.8	212.9	208.8	200.2	190.5	185.3
77.5°	133.3	137.3	145.7	154.0	155.9	153.2	147.1	138.8	134.8
80°	100.1	103.2	110.7	118.2	119.3	118.2	113.9	106.4	103.3
82.5°	70.3	72.6	80.1	85.8	85.2	87.5	83.3	76.6	74.3
85°	28.7	30.8	37.3	43.6	40.5	45.7	41.5	37.2	34.1
87.5°	4.0	4.0	7.4	12.3	11.5	15.0	11.9	10.0	8.5
90°	3.2	3.2	3.2	2.1	2.1	3.1	4.2	7.4	8.4
92.5°	5.7	5.7	5.7	7.2	8.0	16.4	10.9	12.4	11.8
95°	10.5	11.5	12.6	32.5	28.4	41.7	45.2	43.0	39.9
97.5°	18.5	19.5	26.3	88.9	62.8	56.7	74.0	78.3	74.2
100°	25.2	26.2	38.9	143.8	91.4	72.9	84.0	97.7	97.7
102.5°	32.8	34.6	61.6	216.9	128.4	91.8	96.6	109.5	112.8
105°	47.3	52.4	131.3	366.9	194.3	122.4	124.0	129.3	132.4
107.5°	73.7	94.7	339.3	508.3	277.1	160.0	163.5	161.5	160.1
110°	104.0	151.3	557.8	595.1	339.3	189.4	187.0	185.9	182.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	194.8	323.4	782.2	671.2	400.7	221.9	205.5	217.8	212.2
115°	553.6	787.8	1012.7	777.2	490.6	279.0	234.3	251.2	255.3
117.5°	1099.1	1188.8	1126.4	866.9	578.4	344.6	260.5	276.1	284.1
120°	1339.4	1319.9	1181.9	927.3	635.6	391.1	281.5	291.2	298.4
122.5°	1426.0	1380.2	1228.1	979.5	690.2	441.6	308.4	304.6	313.5
125°	1507.5	1447.9	1297.4	1050.5	773.2	522.6	360.3	325.8	332.0
127.5°	1562.4	1500.1	1358.3	1119.3	854.9	605.7	428.2	359.3	353.0
130°	1592.6	1532.0	1396.2	1158.3	908.7	661.2	476.9	389.4	374.0
132.5°	1616.1	1560.5	1428.9	1200.4	954.9	714.0	527.4	428.7	405.9
135°	1649.3	1597.0	1473.9	1256.4	1022.2	792.1	604.1	499.3	466.4
137.5°	1674.8	1625.9	1509.8	1305.1	1087.9	867.9	682.2	578.3	544.4
140°	1688.2	1641.0	1531.7	1334.7	1128.3	915.6	734.3	629.6	595.7
142.5°	1700.0	1654.4	1550.2	1363.5	1166.9	962.5	789.8	681.7	649.4
145°	1714.5	1671.3	1577.9	1404.6	1221.8	1031.7	870.9	761.0	731.2
147.5°	1721.4	1682.8	1599.3	1440.9	1274.9	1097.8	949.3	844.1	812.1
150°	1723.9	1687.0	1609.4	1463.0	1306.9	1140.5	998.0	899.6	866.7
152.5°	1726.5	1687.8	1616.1	1481.7	1336.3	1179.7	1045.9	952.6	923.0
155°	1720.8	1686.9	1625.2	1504.7	1378.3	1235.5	1115.7	1030.0	1004.3
157.5°	1707.8	1685.0	1627.1	1523.3	1411.7	1286.2	1181.2	1103.5	1078.3
160°	1697.7	1678.2	1626.2	1533.6	1431.9	1317.9	1220.7	1149.8	1126.2
162.5°	1686.7	1666.4	1622.0	1540.6	1451.2	1347.9	1259.4	1191.1	1172.4
165°	1665.1	1646.6	1614.7	1547.9	1476.0	1388.7	1314.2	1255.0	1239.6
167.5°	1636.9	1625.4	1599.3	1550.2	1495.3	1424.5	1360.9	1313.5	1299.9
170°	1616.8	1608.6	1588.4	1549.6	1505.4	1446.9	1392.0	1349.7	1339.4
172.5°	1590.7	1587.4	1574.1	1546.5	1513.8	1465.1	1418.9	1382.5	1373.1
175°	1550.6	1554.7	1550.6	1538.7	1522.2	1489.4	1458.1	1429.6	1422.4
177.5°	1520.3	1522.0	1524.5	1524.5	1522.0	1507.2	1490.1	1475.0	1476.6
180°	1508.6	1508.6	1508.6	1508.6	1508.6	1508.6	1508.6	1508.6	1508.6

(END OF REPORT)