

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: P511840

Luminaire Tested: **SQW-F-100U-025D-835-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511840
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-025D-835-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

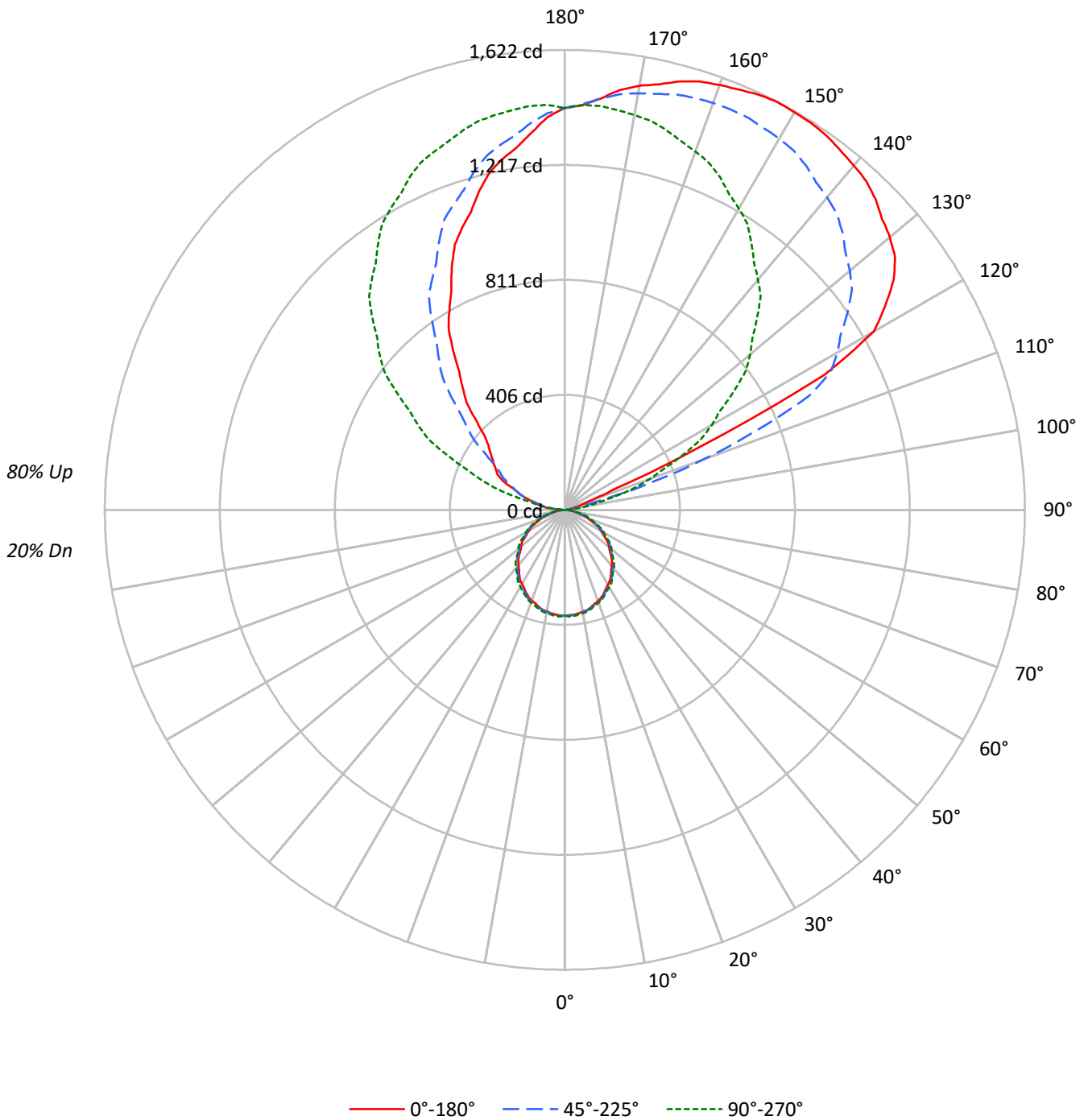
Lumens per Lamp: N/A
Luminaire Lumens: 4980.9 lumens
Efficiency: N/A
Efficacy: 139.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 35.8
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				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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	91	87	83	80	80	77	74	71	58	56	55	41	40	39	25	25	24	17
2	83	76	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	14
3	76	67	60	54	66	59	53	49	45	41	38	32	29	27	20	18	17	12
4	69	59	51	46	61	52	46	41	40	35	32	28	26	23	18	16	15	10
5	63	52	44	39	56	46	40	35	35	31	27	25	22	20	16	14	13	9
6	58	47	39	33	51	41	35	30	32	27	24	23	20	17	14	13	11	8
7	53	42	34	29	47	37	31	26	29	24	21	21	18	15	13	11	10	7
8	49	38	30	25	44	34	27	23	26	21	18	19	16	13	12	10	9	6
9	46	34	27	22	40	31	24	20	24	19	16	17	14	12	11	9	8	6
10	43	31	24	20	38	28	22	18	22	17	14	16	13	11	10	8	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	12077	12077	12077
5°	12026	12188	12026
10°	11968	12132	11936
15°	11901	12069	11835
20°	11753	11959	11718
25°	11580	11829	11473
30°	11335	11708	11261
35°	11156	11511	11038
40°	10834	11339	10707
45°	10549	11006	10412
50°	10248	10801	10098
55°	9852	10528	9852
60°	9429	10204	9429
65°	8940	9780	8940
70°	8309	9253	8214
75°	7236	8359	7361
80°	5951	6881	6137
85°	3335	4817	4076



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.3	0.7
10°-20°	100.6	2.0
20°-30°	150.7	3.0
30°-40°	178.9	3.6
40°-50°	181.8	3.6
50°-60°	162.0	3.3
60°-70°	120.9	2.4
70°-80°	66.5	1.3
80°-90°	16.4	0.3
90°-100°	34.8	0.7
100°-110°	164.5	3.3
110°-120°	483.5	9.7
120°-130°	702.9	14.1
130°-140°	752.0	15.1
140°-150°	716.8	14.4
150°-160°	591.4	11.9
160°-170°	387.4	7.8
170°-180°	134.4	2.7
0°-30°	286.7	5.8
0°-40°	465.6	9.3
0°-60°	809.3	16.2
0°-90°	1013.2	20.3
90°-120°	682.8	13.7
90°-150°	2854.5	57.3
90°-180°	3968.0	79.7
0°-180°	4980.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	374	374	374	374	374	
5°	371	372	376	372	371	35
15°	356	358	361	356	354	100
25°	325	329	332	328	322	149
35°	283	289	292	287	280	176
45°	231	238	241	236	228	178
55°	175	183	187	181	175	157
65°	117	122	128	122	117	116
75°	58	62	67	62	59	62
85°	9	12	13	13	11	13
90°	3	3	2	4	8	2
95°	10	12	27	42	38	11
105°	44	123	182	116	124	54
115°	520	951	461	220	240	590
125°	1416	1218	726	338	312	1254
135°	1549	1384	960	567	438	1196
145°	1610	1482	1148	818	687	1009
155°	1616	1526	1294	1048	943	747
165°	1564	1516	1386	1234	1164	444
175°	1456	1456	1430	1370	1336	141
180°	1417	1417	1417	1417	1417	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	374.0	374.0	374.0	374.0	374.0	374.0	374.0	374.0	374.0
2.5°	371.6	373.2	373.2	373.3	376.4	373.3	373.2	373.2	372.4
5°	371.0	371.0	372.0	372.1	376.0	372.1	372.0	371.0	371.0
7.5°	368.2	368.4	369.4	369.3	372.4	368.3	368.4	368.2	368.0
10°	365.0	366.0	367.0	366.1	370.0	365.1	366.0	365.0	364.0
12.5°	361.8	362.8	363.8	362.9	366.8	362.7	362.8	361.8	361.6
15°	356.0	357.0	358.0	357.1	361.0	356.1	356.0	355.0	354.0
17.5°	347.6	349.4	350.8	349.9	353.6	348.9	349.8	347.4	345.8
20°	342.0	343.0	346.0	345.1	348.0	344.1	345.0	341.0	341.0
22.5°	335.6	336.6	339.6	338.7	342.4	337.7	338.6	334.6	333.8
25°	325.0	326.0	329.0	328.1	332.0	327.1	328.0	323.0	322.0
27.5°	312.8	314.0	318.8	317.9	322.0	316.1	317.0	312.0	310.8
30°	304.0	306.0	310.0	309.1	314.0	308.1	309.0	304.0	302.0
32.5°	296.0	298.0	301.2	301.9	305.2	300.1	300.2	295.2	293.2
35°	283.0	285.0	289.0	289.1	292.0	287.1	287.0	282.0	280.0
37.5°	268.2	270.0	274.4	275.6	277.8	273.3	272.2	267.2	265.2
40°	257.0	258.0	264.0	266.1	269.0	262.2	261.0	256.0	254.0
42.5°	246.6	248.4	253.6	254.8	257.0	252.5	250.6	245.6	243.6
45°	231.0	233.0	238.0	240.0	241.0	237.1	236.0	230.9	228.0
47.5°	215.2	217.2	222.2	224.4	225.4	222.5	219.4	215.1	212.2
50°	204.0	206.0	211.0	214.0	215.0	212.1	209.0	203.9	201.0
52.5°	193.6	194.8	199.8	203.6	203.8	201.6	197.8	192.8	190.6
55°	175.0	177.9	183.0	187.0	187.0	185.0	181.0	176.0	175.0
57.5°	158.8	160.0	165.0	169.0	169.2	168.0	164.0	159.0	158.0
60°	146.0	148.0	153.0	157.0	158.0	156.0	152.0	147.0	146.0
62.5°	135.6	136.0	141.0	145.0	146.0	144.0	140.0	135.8	134.0
65°	117.0	118.0	122.0	127.0	128.0	126.0	122.0	118.0	117.0
67.5°	99.2	100.2	104.0	108.8	110.0	108.0	103.0	100.0	99.0
70°	88.0	89.0	92.0	96.0	98.0	96.0	91.0	88.0	87.0
72.5°	76.0	77.0	80.0	84.0	85.2	83.2	79.0	76.8	75.8
75°	58.0	60.0	62.0	66.0	67.0	66.0	62.0	60.0	59.0
77.5°	42.4	43.4	45.4	48.2	49.0	48.2	46.4	43.4	43.4
80°	32.0	33.0	35.0	37.0	37.0	37.0	36.0	33.0	33.0
82.5°	22.4	23.4	24.6	27.4	26.6	27.4	26.4	24.2	23.4
85°	9.0	10.0	12.0	14.0	13.0	14.0	13.0	11.0	11.0
87.5°	1.4	2.2	2.2	4.4	4.4	5.4	4.0	3.8	4.0
90°	3.0	3.0	3.0	2.0	2.0	2.9	3.9	6.9	7.9
92.5°	5.3	5.3	5.3	6.7	7.5	15.4	10.3	11.6	11.1
95°	9.9	10.8	11.8	30.5	26.6	39.2	42.4	40.4	37.5
97.5°	17.4	18.3	24.7	83.5	59.0	53.2	69.5	73.5	69.7
100°	23.7	24.6	36.5	135.0	85.8	68.5	78.9	91.8	91.8
102.5°	30.8	32.5	57.8	203.7	120.6	86.2	90.8	102.9	106.0
105°	44.4	49.2	123.3	344.6	182.5	115.0	116.4	121.4	124.3
107.5°	69.3	88.9	318.7	477.3	260.3	150.3	153.5	151.7	150.4
110°	97.7	142.1	523.9	558.9	318.7	177.8	175.6	174.6	171.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	182.9	303.7	734.7	630.4	376.3	208.4	193.0	204.5	199.3
115°	520.0	739.9	951.1	729.9	460.8	262.0	220.0	235.9	239.8
117.5°	1032.2	1116.6	1057.9	814.2	543.3	323.7	244.7	259.3	266.8
120°	1258.0	1239.7	1110.0	870.9	596.9	367.3	264.4	273.5	280.2
122.5°	1339.3	1296.3	1153.4	919.9	648.2	414.8	289.7	286.1	294.4
125°	1415.9	1359.9	1218.5	986.7	726.2	490.8	338.4	306.0	311.8
127.5°	1467.4	1408.9	1275.8	1051.3	802.9	568.9	402.2	337.5	331.5
130°	1495.8	1438.9	1311.3	1087.9	853.5	621.0	447.9	365.7	351.3
132.5°	1517.9	1465.6	1342.1	1127.4	896.9	670.5	495.3	402.7	381.2
135°	1549.1	1499.9	1384.3	1180.0	960.0	743.9	567.3	469.0	438.1
137.5°	1572.9	1527.0	1418.0	1225.7	1021.8	815.1	640.7	543.1	511.3
140°	1585.6	1541.2	1438.6	1253.6	1059.7	860.0	689.7	591.3	559.4
142.5°	1596.6	1553.8	1455.9	1280.6	1096.0	904.0	741.8	640.2	610.0
145°	1610.2	1569.7	1482.0	1319.2	1147.5	969.0	817.9	714.7	686.7
147.5°	1616.7	1580.5	1502.1	1353.3	1197.4	1031.1	891.5	792.8	762.7
150°	1619.1	1584.4	1511.6	1374.0	1227.4	1071.1	937.3	844.9	814.0
152.5°	1621.5	1585.2	1517.9	1391.6	1255.0	1108.0	982.3	894.7	866.9
155°	1616.2	1584.3	1526.4	1413.2	1294.5	1160.4	1047.8	967.4	943.2
157.5°	1603.9	1582.5	1528.1	1430.6	1325.9	1208.0	1109.4	1036.4	1012.7
160°	1594.4	1576.1	1527.4	1440.3	1344.8	1237.7	1146.5	1079.9	1057.7
162.5°	1584.2	1565.1	1523.4	1446.9	1363.0	1265.9	1182.8	1118.7	1101.1
165°	1563.9	1546.5	1516.5	1453.8	1386.3	1304.3	1234.3	1178.7	1164.3
167.5°	1537.4	1526.6	1502.1	1455.9	1404.4	1337.8	1278.1	1233.6	1220.9
170°	1518.5	1510.8	1491.8	1455.4	1413.9	1358.9	1307.3	1267.6	1258.0
172.5°	1494.0	1490.9	1478.4	1452.5	1421.8	1376.1	1332.6	1298.4	1289.6
175°	1456.3	1460.2	1456.3	1445.1	1429.7	1398.8	1369.5	1342.7	1335.9
177.5°	1427.9	1429.4	1431.8	1431.8	1429.5	1415.6	1399.5	1385.3	1386.9
180°	1416.8	1416.8	1416.8	1416.8	1416.8	1416.8	1416.8	1416.8	1416.8

(END OF REPORT)