

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: P511841

Luminaire Tested: **SQW-F-100U-025D-840-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511841
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-840-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

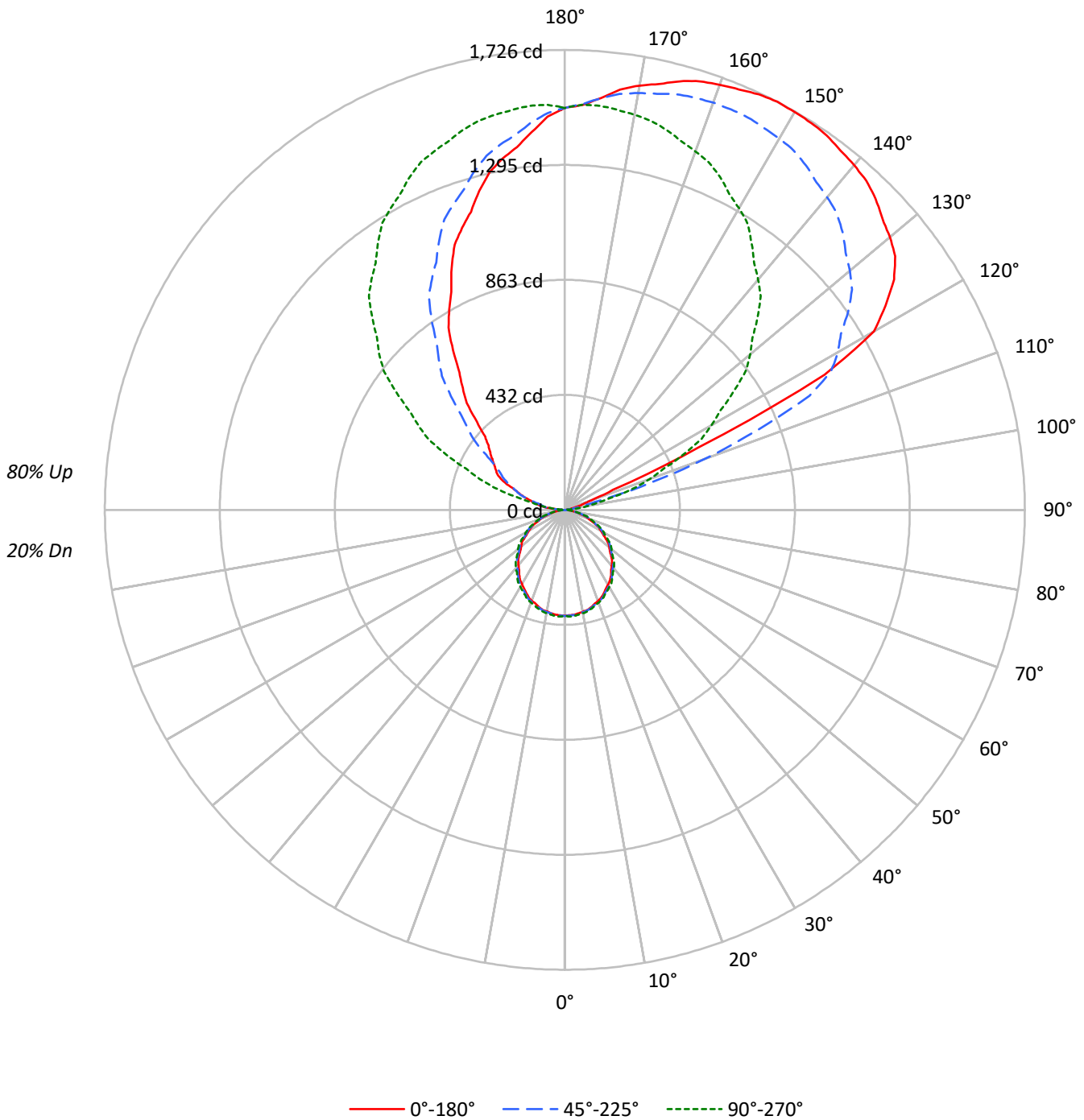
Lumens per Lamp: N/A
Luminaire Lumens: 5303.3 lumens
Efficiency: N/A
Efficacy: 148.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Indirect

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°	12859	12859	12859
5°	12804	12976	12804
10°	12742	12919	12709
15°	12670	12851	12600
20°	12512	12732	12478
25°	12328	12595	12214
30°	12070	12465	11992
35°	11878	12256	11751
40°	11533	12073	11398
45°	11234	11718	11088
50°	10912	11499	10751
55°	10489	11209	10489
60°	10043	10863	10043
65°	9521	10415	9521
70°	8847	9847	8743
75°	7711	8896	7835
80°	6341	7327	6527
85°	3557	5113	4335



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.6	0.7
10°-20°	107.1	2.0
20°-30°	160.5	3.0
30°-40°	190.5	3.6
40°-50°	193.5	3.6
50°-60°	172.5	3.3
60°-70°	128.7	2.4
70°-80°	70.8	1.3
80°-90°	17.5	0.3
90°-100°	37.1	0.7
100°-110°	175.2	3.3
110°-120°	514.8	9.7
120°-130°	748.3	14.1
130°-140°	800.7	15.1
140°-150°	763.2	14.4
150°-160°	629.7	11.9
160°-170°	412.5	7.8
170°-180°	143.0	2.7
0°-30°	305.2	5.8
0°-40°	495.7	9.3
0°-60°	861.7	16.2
0°-90°	1078.7	20.3
90°-120°	727.1	13.7
90°-150°	3039.3	57.3
90°-180°	4225.0	79.7
0°-180°	5303.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	398	398	398	398	398	
5°	395	396	400	396	395	37
15°	379	381	384	379	377	107
25°	346	350	354	349	343	159
35°	301	308	311	306	298	188
45°	246	253	257	251	243	190
55°	186	195	199	193	186	167
65°	125	130	136	130	125	123
75°	62	66	71	66	63	66
85°	10	13	14	14	12	14
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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CATALOG NUMBER: SQW-F-100U-025D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2
2.5°	395.7	397.3	397.4	397.4	400.8	397.4	397.4	397.3	396.5
5°	395.0	395.0	396.1	396.2	400.3	396.2	396.1	395.0	395.0
7.5°	392.0	392.2	393.3	393.2	396.5	392.1	392.2	392.0	391.8
10°	388.6	389.7	390.8	389.8	394.0	388.7	389.7	388.6	387.6
12.5°	385.2	386.3	387.4	386.4	390.5	386.2	386.3	385.2	385.0
15°	379.0	380.1	381.2	380.2	384.4	379.2	379.0	378.0	376.9
17.5°	370.1	372.0	373.5	372.5	376.5	371.5	372.4	369.9	368.2
20°	364.1	365.2	368.4	367.4	370.5	366.4	367.3	363.1	363.1
22.5°	357.3	358.4	361.6	360.6	364.6	359.6	360.5	356.2	355.4
25°	346.0	347.1	350.3	349.3	353.5	348.3	349.2	343.9	342.8
27.5°	333.1	334.3	339.4	338.5	342.8	336.6	337.5	332.2	330.9
30°	323.7	325.8	330.1	329.1	334.3	328.1	329.0	323.6	321.6
32.5°	315.2	317.2	320.7	321.4	325.0	319.5	319.6	314.3	312.2
35°	301.3	303.4	307.7	307.8	310.9	305.7	305.6	300.2	298.1
37.5°	285.6	287.4	292.2	293.5	295.8	291.0	289.8	284.5	282.4
40°	273.6	274.7	281.1	283.3	286.4	279.1	277.9	272.5	270.4
42.5°	262.6	264.4	270.0	271.3	273.6	268.8	266.8	261.5	259.4
45°	246.0	248.0	253.4	255.6	256.6	252.4	251.3	245.9	242.8
47.5°	229.1	231.2	236.6	239.0	240.0	236.9	233.6	229.1	225.9
50°	217.2	219.3	224.7	227.9	228.9	225.8	222.5	217.1	214.0
52.5°	206.1	207.4	212.7	216.8	217.0	214.7	210.6	205.2	202.9
55°	186.3	189.5	194.8	199.1	199.1	197.0	192.7	187.4	186.3
57.5°	169.1	170.3	175.7	179.9	180.2	178.9	174.6	169.3	168.2
60°	155.5	157.5	162.9	167.2	168.2	166.1	161.8	156.5	155.5
62.5°	144.4	144.8	150.1	154.4	155.5	153.4	149.1	144.5	142.7
65°	124.6	125.6	129.9	135.2	136.3	134.2	129.9	125.6	124.6
67.5°	105.6	106.7	110.7	115.9	117.1	115.0	109.7	106.5	105.4
70°	93.7	94.7	98.0	102.3	104.3	102.3	96.9	93.7	92.6
72.5°	80.9	82.0	85.2	89.5	90.7	88.6	84.1	81.7	80.7
75°	61.8	63.8	66.0	70.3	71.3	70.3	66.0	63.9	62.8
77.5°	45.1	46.2	48.3	51.3	52.2	51.3	49.4	46.2	46.2
80°	34.1	35.1	37.3	39.4	39.4	39.4	38.3	35.1	35.1
82.5°	23.9	24.9	26.2	29.2	28.3	29.2	28.1	25.7	24.9
85°	9.6	10.6	12.8	14.9	13.8	14.9	13.8	11.7	11.7
87.5°	1.5	2.3	2.3	4.7	4.7	5.7	4.2	4.0	4.2
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)