

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: P511847

Luminaire Tested: **SQW-F-100U-050D-840-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511847
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-050D-840-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

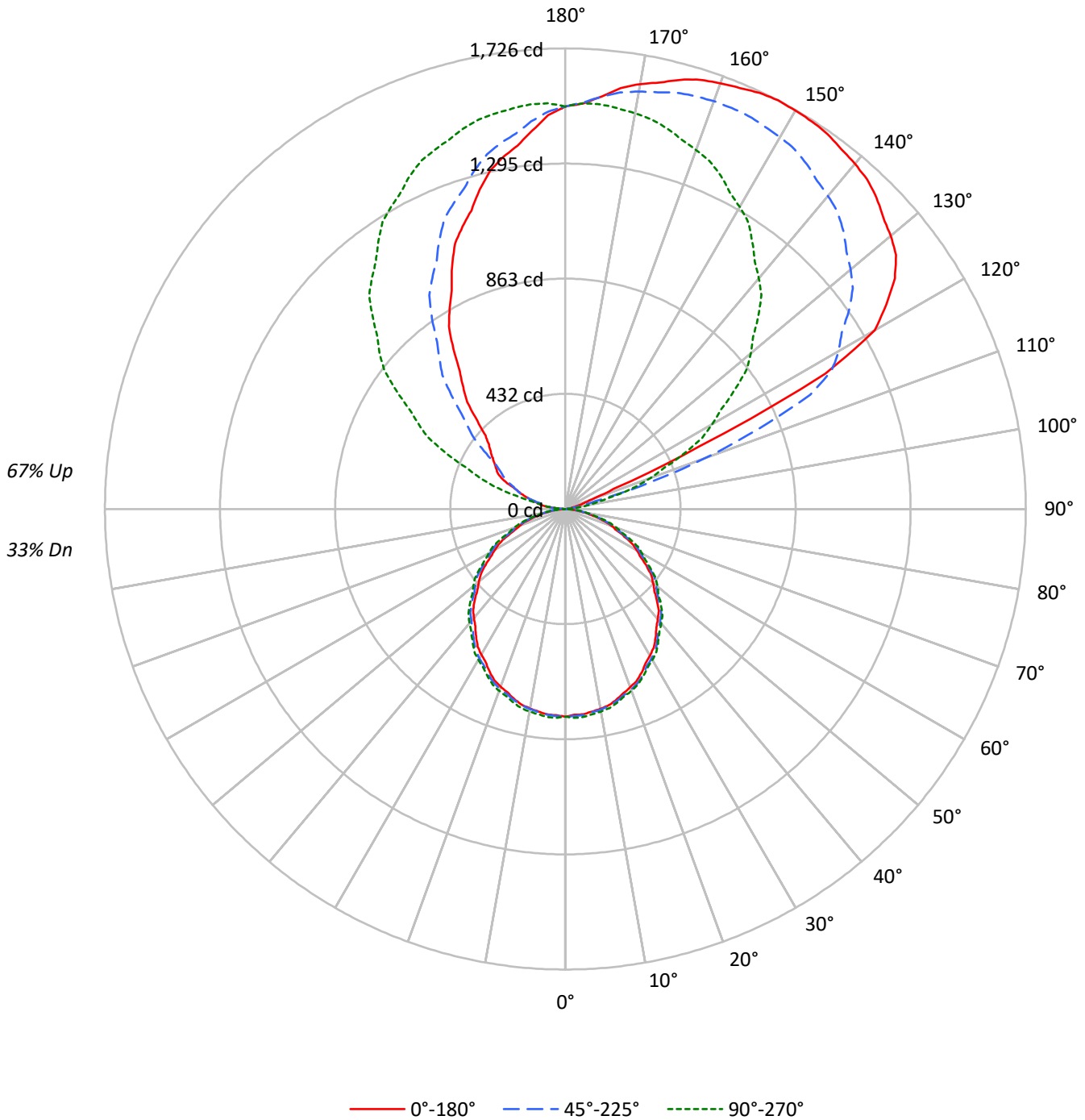
Lumens per Lamp: N/A
Luminaire Lumens: 6340.6 lumens
Efficiency: N/A
Efficacy: 144.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 44
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	32	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	14	13	10
9	48	36	28	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	25133	25133	25133
5°	25021	25368	25057
10°	24927	25278	24894
15°	24739	25130	24669
20°	24440	24918	24368
25°	24090	24620	23940
30°	23663	24338	23502
35°	23255	23925	23002
40°	22713	23564	22485
45°	22126	23144	21879
50°	21557	22627	21235
55°	20859	22058	20560
60°	19943	21384	19666
65°	18629	20340	18384
70°	17193	19204	16985
75°	15147	17405	15009
80°	12273	14654	12478
85°	7114	9856	8299



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.5	1.2
10°-20°	209.4	3.3
20°-30°	313.8	4.9
30°-40°	372.9	5.9
40°-50°	381.7	6.0
50°-60°	340.4	5.4
60°-70°	252.5	4.0
70°-80°	138.3	2.2
80°-90°	33.5	0.5
90°-100°	37.1	0.6
100°-110°	175.2	2.8
110°-120°	514.8	8.1
120°-130°	748.3	11.8
130°-140°	800.7	12.6
140°-150°	763.2	12.0
150°-160°	629.7	9.9
160°-170°	412.5	6.5
170°-180°	143.0	2.3
0°-30°	596.7	9.4
0°-40°	969.7	15.3
0°-60°	1691.7	26.7
0°-90°	2116.1	33.4
90°-120°	727.1	11.5
90°-150°	3039.3	47.9
90°-180°	4225.0	66.6
0°-180°	6340.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	778	778	778	778	778	
5°	772	775	783	774	773	73
15°	740	745	752	742	738	209
25°	676	687	691	685	672	311
35°	590	600	607	598	584	368
45°	484	499	507	495	479	374
55°	370	383	392	382	365	330
65°	244	256	266	254	241	242
75°	121	130	140	130	120	129
85°	19	26	27	28	22	27
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°	778.3	778.3	778.3	778.3	778.3	778.3	778.3	778.3	778.3
2.5°	772.4	775.7	776.6	775.9	783.4	776.8	776.6	775.7	774.1
5°	771.9	773.0	775.1	773.2	782.6	773.2	774.1	772.0	773.0
7.5°	766.2	767.2	768.5	767.4	776.0	767.4	768.1	766.0	766.0
10°	760.2	761.3	763.4	761.5	770.9	761.5	761.3	759.2	759.2
12.5°	753.4	754.5	756.6	754.7	764.1	754.7	754.5	751.5	752.3
15°	740.0	743.1	745.3	742.3	751.7	742.3	742.1	739.9	737.9
17.5°	724.0	727.1	730.8	727.6	736.2	726.6	727.6	722.9	721.0
20°	711.2	714.4	719.8	715.7	725.1	714.7	716.6	710.2	709.1
22.5°	697.6	699.9	707.8	703.8	712.3	702.7	703.8	695.7	694.6
25°	676.1	678.2	686.8	683.7	691.0	681.6	684.6	672.9	671.9
27.5°	651.6	654.7	662.5	660.5	668.9	658.5	661.4	649.2	647.4
30°	634.6	637.7	646.3	644.4	652.7	642.3	645.2	631.4	630.3
32.5°	615.8	620.6	628.4	628.1	634.8	625.2	626.5	613.5	611.6
35°	589.9	593.0	600.5	600.7	606.9	598.6	598.4	585.6	583.5
37.5°	560.1	564.2	572.2	573.4	579.4	570.3	568.8	557.2	553.9
40°	538.8	542.9	552.6	553.8	559.0	550.7	548.3	537.6	533.4
42.5°	518.3	522.5	532.2	533.3	538.5	531.0	527.0	517.1	511.3
45°	484.5	489.7	499.4	502.7	506.8	499.5	495.1	483.3	479.1
47.5°	452.1	456.3	466.1	471.5	473.4	468.4	462.7	450.1	445.7
50°	429.1	433.3	444.0	449.3	450.4	446.2	439.7	427.9	422.7
52.5°	405.2	409.4	421.0	426.3	427.4	423.2	416.7	404.9	399.7
55°	370.5	374.7	383.3	391.8	391.8	389.7	382.2	369.4	365.2
57.5°	333.5	337.4	348.2	355.6	355.8	352.9	345.2	333.4	329.2
60°	308.8	311.9	322.6	330.1	331.1	329.1	320.5	308.7	304.5
62.5°	281.5	285.5	296.2	304.6	306.4	303.5	294.1	283.1	277.3
65°	243.8	245.9	255.5	264.1	266.2	263.1	254.5	243.8	240.6
67.5°	206.8	208.0	217.2	225.8	228.1	224.7	216.1	208.8	203.8
70°	182.1	184.2	191.7	200.2	203.4	199.2	190.6	184.1	179.9
72.5°	157.4	159.5	167.0	174.7	177.8	174.5	166.7	160.3	156.1
75°	121.4	122.4	129.9	137.4	139.5	136.4	129.9	124.5	120.3
77.5°	87.3	88.3	96.3	100.8	102.6	100.8	95.6	90.4	87.5
80°	66.0	67.1	72.4	77.7	78.8	77.7	73.5	69.2	67.1
82.5°	45.6	46.6	52.8	56.4	56.6	57.3	53.9	50.4	47.5
85°	19.2	20.2	25.6	28.7	26.6	29.7	27.7	24.4	22.4
87.5°	3.2	3.2	5.7	8.1	8.1	9.1	7.7	7.4	5.9
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)