

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: P511774

Luminaire Tested: **SQW-F-050U-125D-835-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P511774  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-16,  
Test Lab: INNOVATION CENTER  
Issue Date: 4/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQW-F-050U-125D-835-1D-UNV-STD-W-4  
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

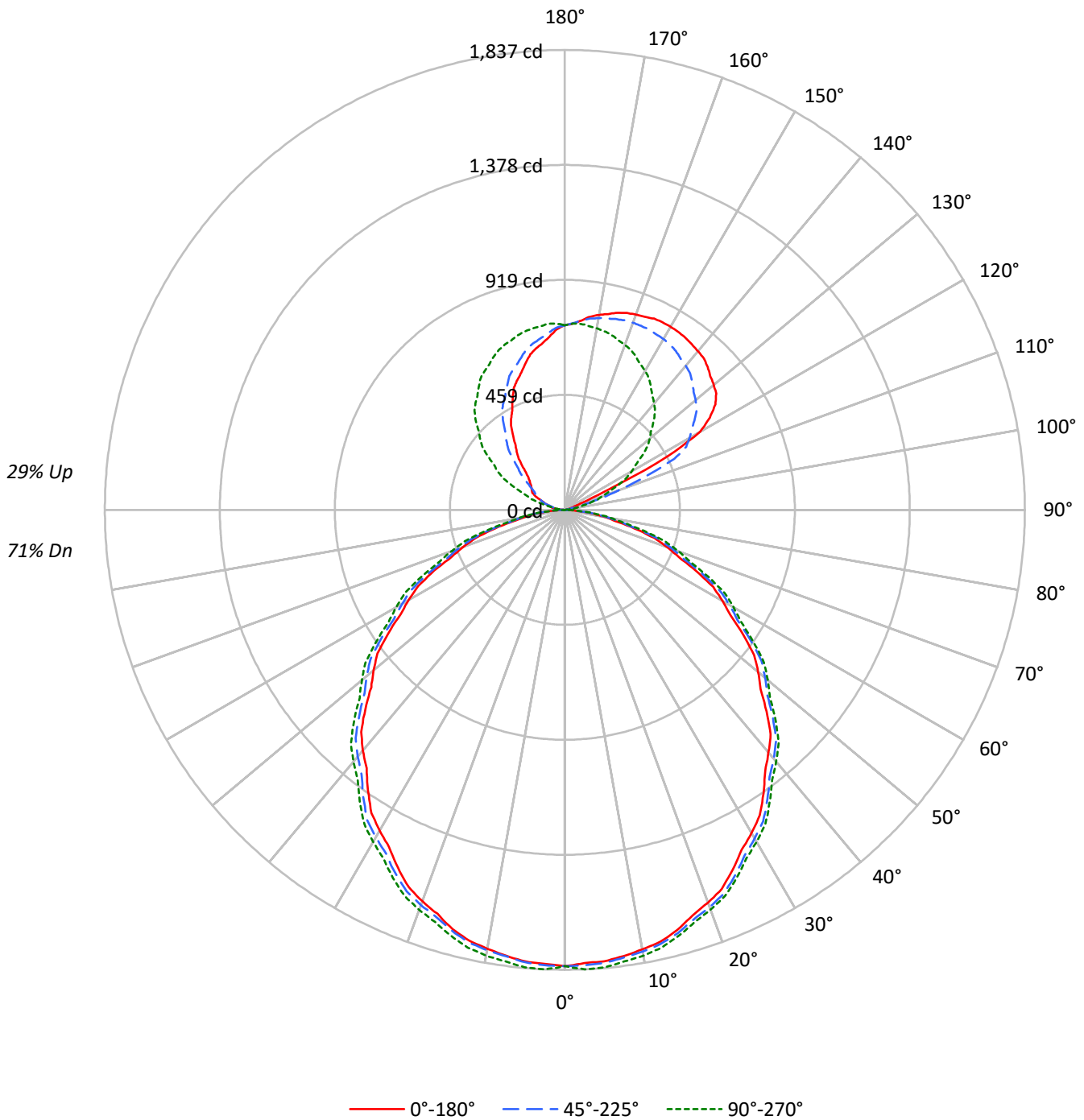
Lumens per Lamp: N/A  
Luminaire Lumens: 7027.4 lumens  
Efficiency: N/A  
Efficacy: 114.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 61.2  
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	71	71	71	71	
1	102	98	94	90	97	93	89	86	83	81	78	75	72	71	66	65	63	60	60	60	60	
2	93	85	79	74	88	81	75	71	73	68	64	65	62	59	58	56	53	50	50	50	50	
3	85	75	67	61	80	71	64	59	64	59	54	58	53	50	52	48	45	42	42	42	42	
4	78	66	58	52	73	63	56	50	57	51	46	51	46	42	46	42	39	36	36	36	36	
5	71	59	51	44	67	56	49	43	51	45	40	46	41	37	41	37	34	31	31	31	31	
6	66	53	45	39	62	51	43	37	46	40	35	42	36	32	38	33	30	27	27	27	27	
7	61	48	40	34	57	46	38	33	42	35	31	38	33	29	34	30	26	24	24	24	24	
8	57	44	36	30	53	42	34	29	38	32	27	35	29	25	31	27	24	21	21	21	21	
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	21	19	19	19	19	
10	49	37	29	24	47	35	28	24	32	26	22	30	24	21	27	23	19	17	17	17	17	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	58868	58868	58868
5°	58672	59450	58704
10°	58465	59284	58366
15°	58070	58872	57936
20°	57388	58419	57182
25°	56509	57828	56189
30°	55596	57087	55148
35°	54519	56214	54007
40°	53325	55348	52861
45°	52015	54344	51467
50°	50639	53151	50036
55°	48980	51739	48474
60°	46888	50182	46436
65°	44241	48214	43935
70°	40882	45414	40599
75°	35933	41048	36057
80°	29010	34031	29754
85°	16673	23342	20007



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.3	2.5
10°-20°	491.1	7.0
20°-30°	736.0	10.5
30°-40°	875.4	12.5
40°-50°	896.3	12.8
50°-60°	799.2	11.4
60°-70°	597.0	8.5
70°-80°	327.1	4.7
80°-90°	76.9	1.1
90°-100°	18.1	0.3
100°-110°	82.8	1.2
110°-120°	242.8	3.5
120°-130°	365.4	5.2
130°-140°	392.4	5.6
140°-150°	374.5	5.3
150°-160°	308.2	4.4
160°-170°	201.8	2.9
170°-180°	70.0	1.0
0°-30°	1399.5	19.9
0°-40°	2274.8	32.4
0°-60°	3970.4	56.5
0°-90°	4971.4	70.7
90°-120°	343.7	4.9
90°-150°	1476.0	21.0
90°-180°	2056.0	29.3
0°-180°	7027.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1823	1823	1823	1823	1823	
5°	1810	1816	1834	1814	1811	172
15°	1737	1749	1761	1741	1733	489
25°	1586	1610	1623	1602	1577	730
35°	1383	1411	1426	1402	1370	864
45°	1139	1175	1190	1161	1127	878
55°	870	904	919	894	861	776
65°	579	607	631	602	575	573
75°	288	310	329	307	289	307
85°	45	60	63	62	54	64
90°	1	1	1	2	4	1
95°	5	6	13	23	22	6
105°	23	54	95	63	67	26
115°	195	483	236	118	131	260
125°	734	634	376	177	164	645
135°	806	721	503	299	230	623
145°	839	774	599	428	360	526
155°	842	795	674	547	492	389
165°	815	789	723	644	607	231
175°	759	759	746	713	695	74
180°	737	737	737	737	737	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1823.0	1823.0	1823.0	1823.0	1823.0	1823.0	1823.0	1823.0	1823.0
2.5°	1811.8	1820.4	1821.4	1820.2	1837.4	1821.0	1821.4	1819.7	1815.0
5°	1810.0	1812.0	1816.0	1813.5	1834.0	1812.5	1814.0	1810.0	1811.0
7.5°	1797.4	1798.8	1803.2	1798.5	1819.2	1798.3	1798.8	1794.6	1796.8
10°	1783.0	1785.9	1792.0	1786.5	1808.0	1785.5	1786.0	1781.0	1780.0
12.5°	1767.0	1768.4	1776.0	1770.5	1790.4	1768.7	1770.0	1762.6	1763.2
15°	1737.0	1741.9	1749.0	1740.5	1761.0	1739.5	1741.0	1734.0	1733.0
17.5°	1698.0	1706.6	1713.8	1705.3	1725.6	1703.5	1704.8	1695.1	1692.0
20°	1670.0	1677.8	1689.0	1680.4	1700.0	1675.6	1680.0	1664.0	1664.0
22.5°	1638.8	1643.5	1659.4	1650.1	1670.4	1646.0	1649.6	1629.6	1630.4
25°	1586.0	1592.8	1610.0	1602.5	1623.0	1597.6	1602.0	1579.0	1577.0
27.5°	1530.2	1538.2	1556.0	1549.1	1569.4	1544.2	1547.4	1522.1	1519.0
30°	1491.0	1499.8	1516.0	1511.4	1531.0	1506.6	1509.0	1482.9	1479.0
32.5°	1447.8	1458.2	1474.4	1473.8	1490.2	1468.1	1468.2	1441.3	1436.6
35°	1383.0	1392.8	1411.0	1411.3	1426.0	1403.5	1402.0	1375.9	1370.0
37.5°	1313.8	1324.9	1343.6	1346.1	1359.4	1338.5	1332.4	1306.3	1301.2
40°	1265.0	1277.7	1298.0	1301.3	1313.0	1290.5	1286.0	1259.9	1254.0
42.5°	1216.2	1228.9	1249.2	1254.0	1264.2	1245.6	1236.4	1210.2	1203.6
45°	1139.0	1152.7	1175.0	1182.2	1190.0	1173.4	1161.0	1134.8	1127.0
47.5°	1060.8	1073.5	1096.8	1106.7	1111.6	1097.5	1084.6	1057.4	1048.8
50°	1008.0	1020.7	1044.0	1053.1	1058.0	1046.3	1031.0	1003.8	996.0
52.5°	952.8	965.5	988.8	999.5	1003.6	993.4	978.2	951.0	943.2
55°	870.0	880.8	904.0	917.0	919.0	912.2	894.0	867.8	861.0
57.5°	783.6	794.2	817.2	831.3	834.6	827.8	808.4	782.5	776.6
60°	726.0	735.8	758.0	772.1	777.0	770.2	750.0	724.9	719.0
62.5°	667.6	676.6	698.0	712.9	719.4	711.8	690.8	666.5	660.6
65°	579.0	586.8	607.0	627.1	631.0	622.2	602.0	578.9	575.0
67.5°	491.4	497.3	516.2	535.9	541.0	532.0	511.2	491.5	486.8
70°	433.0	438.9	457.0	475.1	481.0	471.2	452.0	433.9	430.0
72.5°	374.6	379.7	397.8	414.3	420.2	412.0	392.8	376.3	372.4
75°	288.0	293.9	310.0	325.1	329.0	323.1	307.0	292.9	289.0
77.5°	207.2	210.9	224.8	236.5	239.8	235.5	223.2	210.8	208.8
80°	156.0	158.9	172.0	182.0	183.0	181.0	172.0	162.0	160.0
82.5°	108.8	112.5	124.8	133.2	131.0	132.2	125.6	116.4	115.2
85°	45.0	47.0	60.0	67.9	63.0	67.9	62.0	55.0	54.0
87.5°	5.0	5.8	10.6	19.4	17.0	20.9	17.2	12.6	12.8
90°	1.0	1.0	1.0	1.0	1.0	1.0	2.1	3.1	4.1
92.5°	2.7	2.7	2.7	3.5	3.5	8.3	6.2	5.6	6.6
95°	5.1	5.1	6.2	15.4	13.4	20.4	22.7	21.6	21.6
97.5°	9.1	9.1	11.7	41.0	30.3	27.9	38.1	39.3	38.9
100°	12.4	12.4	17.5	65.4	44.3	36.2	42.2	48.5	50.5
102.5°	15.7	16.5	26.6	101.3	62.4	46.3	48.0	54.2	56.2
105°	22.7	24.7	53.6	170.3	94.8	61.5	62.8	63.9	66.9
107.5°	33.6	41.0	135.7	243.1	133.7	80.7	83.4	80.1	80.3
110°	44.3	61.4	229.7	289.6	161.7	94.2	95.8	91.7	92.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	72.3	121.6	349.2	326.5	191.4	110.2	104.8	108.9	106.7
115°	194.7	317.5	483.0	379.9	235.9	137.2	118.4	127.8	130.8
117.5°	465.1	548.1	546.1	425.0	280.1	169.8	131.0	139.8	144.8
120°	624.2	636.2	575.7	453.0	309.0	192.2	140.1	146.4	151.4
122.5°	686.0	671.4	600.5	478.6	336.2	216.1	152.4	151.3	157.2
125°	734.4	708.2	634.5	513.9	375.9	256.1	177.2	160.7	163.8
127.5°	761.8	732.8	663.7	547.0	416.3	296.1	209.9	176.3	174.5
130°	776.6	748.4	681.8	567.7	441.9	324.0	233.8	189.4	184.4
132.5°	788.9	763.2	698.3	587.6	466.6	351.2	259.3	209.1	200.0
135°	806.5	782.3	721.0	614.4	502.6	389.8	298.7	242.8	229.7
137.5°	821.3	796.7	740.1	639.9	533.7	427.6	337.0	283.9	268.6
140°	827.1	804.9	750.8	654.8	555.1	451.4	362.5	308.7	296.6
142.5°	832.8	811.5	760.7	669.8	573.3	474.4	388.9	335.1	322.2
145°	839.4	818.3	773.5	689.1	599.4	507.8	428.5	373.6	360.5
147.5°	842.9	824.0	783.0	705.3	625.0	538.6	467.4	412.1	400.2
150°	844.6	826.4	787.9	716.2	640.6	559.1	491.3	438.5	427.4
152.5°	844.6	825.6	790.4	724.5	653.8	577.9	514.4	464.1	453.8
155°	842.5	824.4	795.1	735.0	673.6	605.1	546.9	503.4	492.3
157.5°	834.3	823.4	795.1	744.7	690.7	630.5	578.6	539.9	530.0
160°	830.1	820.1	795.1	749.7	701.4	646.0	598.4	562.2	553.1
162.5°	824.4	814.3	793.5	753.2	710.5	659.9	617.4	582.0	575.3
165°	814.7	804.6	788.9	756.3	723.0	679.7	643.7	613.7	606.6
167.5°	800.9	795.3	782.6	757.2	730.7	697.4	666.0	641.9	636.3
170°	791.0	787.0	777.6	756.6	736.4	707.2	680.8	660.1	656.1
172.5°	778.6	776.2	770.2	755.8	740.5	717.0	694.8	675.0	671.7
175°	759.1	761.1	759.1	752.7	745.7	729.6	712.7	698.2	695.2
177.5°	744.0	744.0	745.7	745.7	744.9	736.8	729.2	721.0	722.6
180°	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4

(END OF REPORT)