

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: P511865

Luminaire Tested: **SQW-F-100U-125D-840-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511865
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-125D-840-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

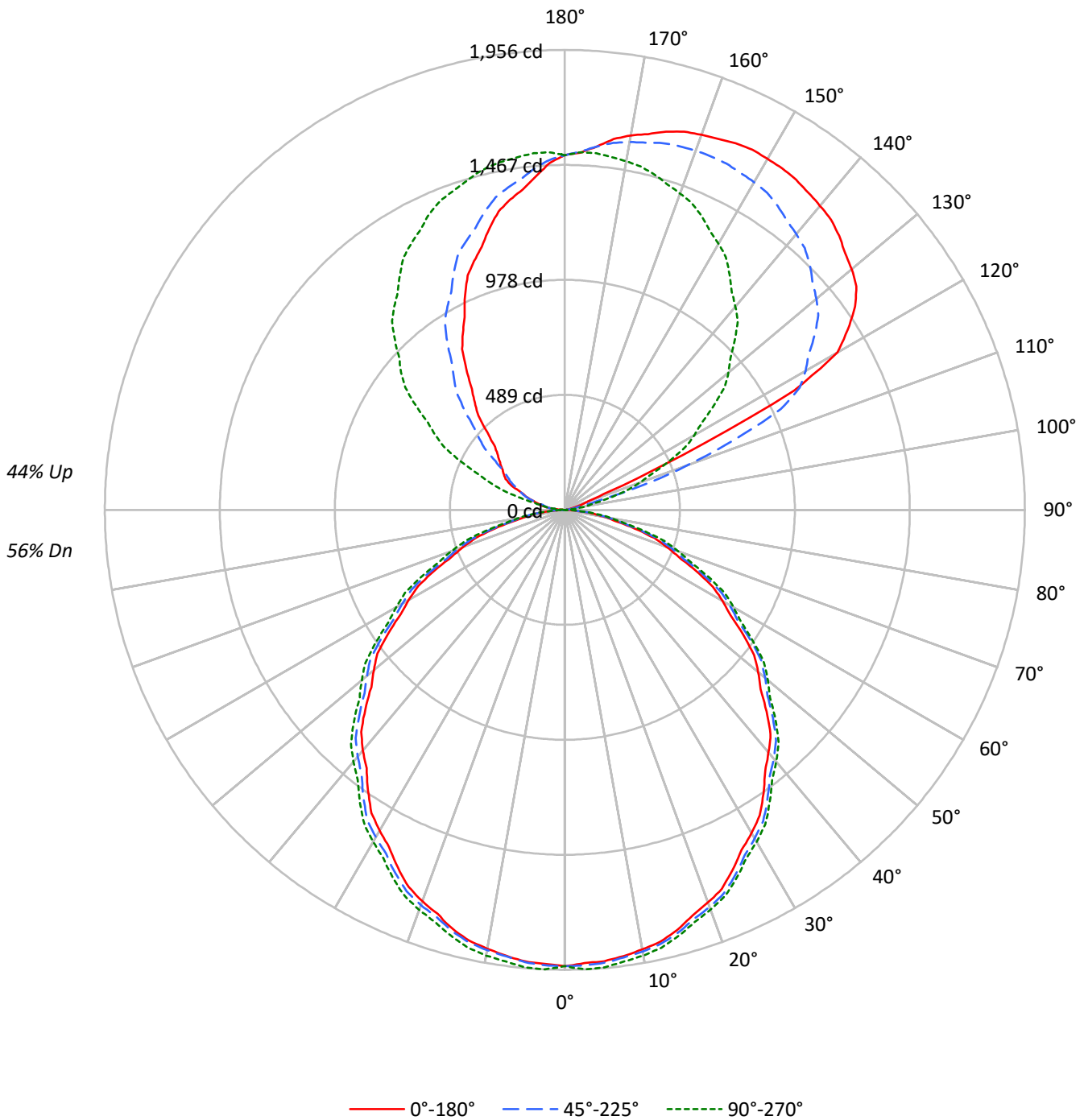
Lumens per Lamp: N/A
Luminaire Lumens: 9518.2 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 73.8
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	50	30	10	0	
RCR																						
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56				
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47				
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39				
3	82	72	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33				
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28				
5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24				
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21				
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19				
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17				
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15				
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	62679	62679	62679
5°	62471	63297	62503
10°	62249	63121	62144
15°	61827	62683	61687
20°	61103	62203	60883
25°	60169	61572	59827
30°	59194	60782	58717
35°	58048	59853	57504
40°	56777	58931	56284
45°	55381	57861	54801
50°	53920	56592	53277
55°	52150	55089	51609
60°	49923	53430	49439
65°	47106	51332	46778
70°	43525	48350	43223
75°	38253	43706	38391
80°	30888	36225	31688
85°	17747	24861	21304



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.5	1.9
10°-20°	522.9	5.5
20°-30°	783.7	8.2
30°-40°	932.0	9.8
40°-50°	954.4	10.0
50°-60°	850.9	8.9
60°-70°	635.7	6.7
70°-80°	348.3	3.7
80°-90°	82.3	0.9
90°-100°	37.1	0.4
100°-110°	175.2	1.8
110°-120°	514.8	5.4
120°-130°	748.3	7.9
130°-140°	800.7	8.4
140°-150°	763.2	8.0
150°-160°	629.7	6.6
160°-170°	412.5	4.3
170°-180°	143.0	1.5
0°-30°	1490.0	15.7
0°-40°	2422.1	25.4
0°-60°	4227.4	44.4
0°-90°	5293.6	55.6
90°-120°	727.1	7.6
90°-150°	3039.3	31.9
90°-180°	4225.0	44.4
0°-180°	9518.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1941	1941	1941	1941	1941	
5°	1927	1934	1953	1931	1928	183
15°	1849	1862	1875	1854	1845	521
25°	1689	1714	1728	1706	1679	778
35°	1472	1502	1518	1493	1459	920
45°	1213	1251	1267	1236	1200	935
55°	926	962	978	952	917	827
65°	616	646	672	641	612	610
75°	307	330	350	327	308	327
85°	48	64	67	66	58	68
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	



TEST NUMBER: P511865

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1941.0	1941.0	1941.0	1941.0	1941.0	1941.0	1941.0	1941.0	1941.0
2.5°	1929.1	1938.3	1939.3	1938.0	1956.3	1938.9	1939.3	1937.5	1932.5
5°	1927.2	1929.3	1933.6	1930.9	1952.7	1929.8	1931.4	1927.2	1928.2
7.5°	1913.8	1915.2	1919.9	1914.9	1937.0	1914.7	1915.3	1910.8	1913.1
10°	1898.4	1901.6	1908.0	1902.1	1925.0	1901.1	1901.6	1896.3	1895.2
12.5°	1881.4	1882.8	1891.0	1885.1	1906.3	1883.2	1884.6	1876.7	1877.3
15°	1849.4	1854.7	1862.2	1853.1	1875.0	1852.1	1853.7	1846.2	1845.2
17.5°	1807.9	1817.1	1824.7	1815.7	1837.3	1813.8	1815.2	1804.9	1801.5
20°	1778.1	1786.4	1798.3	1789.2	1810.1	1784.0	1788.8	1771.7	1771.7
22.5°	1744.9	1749.9	1766.8	1756.9	1778.5	1752.5	1756.4	1735.1	1735.9
25°	1688.7	1696.0	1714.2	1706.2	1728.1	1701.0	1705.7	1681.2	1679.1
27.5°	1629.3	1637.8	1656.7	1649.3	1671.0	1644.1	1647.6	1620.7	1617.3
30°	1587.5	1596.9	1614.1	1609.3	1630.1	1604.1	1606.7	1578.9	1574.7
32.5°	1541.5	1552.6	1569.8	1569.2	1586.7	1563.1	1563.2	1534.6	1529.6
35°	1472.5	1482.9	1502.3	1502.7	1518.3	1494.4	1492.8	1464.9	1458.7
37.5°	1398.9	1410.7	1430.6	1433.2	1447.4	1425.1	1418.7	1390.9	1385.4
40°	1346.9	1360.4	1382.0	1385.5	1398.0	1374.1	1369.3	1341.4	1335.2
42.5°	1294.9	1308.5	1330.1	1335.2	1346.0	1326.3	1316.4	1288.6	1281.5
45°	1212.7	1227.3	1251.1	1258.7	1267.0	1249.3	1236.2	1208.3	1200.0
47.5°	1129.5	1143.0	1167.8	1178.4	1183.6	1168.6	1154.8	1125.9	1116.7
50°	1073.3	1086.8	1111.6	1121.3	1126.5	1114.0	1097.7	1068.8	1060.5
52.5°	1014.5	1028.0	1052.8	1064.2	1068.6	1057.7	1041.5	1012.6	1004.3
55°	926.3	937.8	962.5	976.4	978.5	971.2	951.9	924.0	916.7
57.5°	834.3	845.6	870.1	885.1	888.6	881.3	860.7	833.1	826.9
60°	773.0	783.4	807.1	822.1	827.3	820.0	798.6	771.8	765.5
62.5°	710.8	720.4	743.2	759.1	766.0	757.9	735.5	709.6	703.4
65°	616.5	624.8	646.3	667.7	671.8	662.5	641.0	616.4	612.2
67.5°	523.2	529.5	549.6	570.6	576.0	566.4	544.3	523.3	518.3
70°	461.0	467.3	486.6	505.9	512.1	501.7	481.3	462.0	457.8
72.5°	398.9	404.3	423.6	441.2	447.4	438.7	418.2	400.7	396.5
75°	306.6	312.9	330.1	346.1	350.3	344.1	326.9	311.9	307.7
77.5°	220.6	224.6	239.4	251.8	255.3	250.7	237.6	224.4	222.3
80°	166.1	169.2	183.1	193.8	194.8	192.8	183.1	172.4	170.4
82.5°	115.8	119.8	132.9	141.8	139.5	140.7	133.7	123.9	122.7
85°	47.9	50.0	63.9	72.3	67.1	72.3	66.0	58.5	57.5
87.5°	5.7	6.6	11.7	20.8	18.3	22.7	18.7	14.3	14.5
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)