

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P520187

Luminaire Tested: **SQ4-F-100U-050D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520187
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-050D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

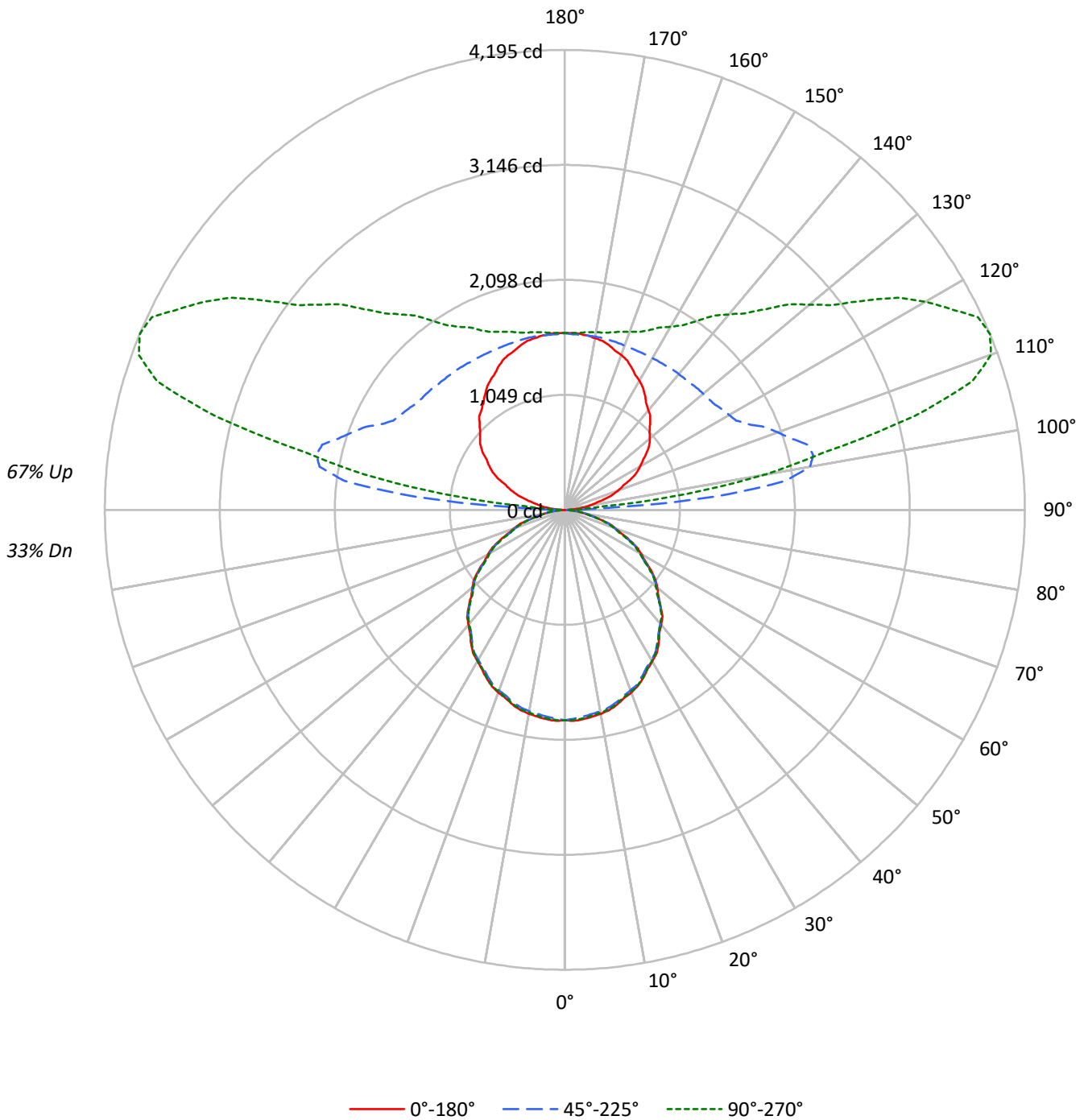
Lumens per Lamp: N/A
Luminaire Lumens: 15712.9 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 131.2
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	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	20	23	19	17	17	14	13	10
9	48	36	28	23	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°	45°	90°
0°	5905	5905	5905
5°	5920	5848	5896
10°	5900	5827	5868
15°	5860	5786	5835
20°	5804	5737	5779
25°	5739	5669	5722
30°	5659	5613	5650
35°	5597	5529	5558
40°	5490	5438	5448
45°	5377	5333	5333
50°	5263	5214	5190
55°	5140	5072	5044
60°	4948	4870	4838
65°	4713	4619	4563
70°	4392	4298	4206
75°	3940	3818	3726
80°	3188	3142	3050
85°	1902	2177	2269



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.1	1.2
10°-20°	515.9	3.3
20°-30°	774.9	4.9
30°-40°	924.9	5.9
40°-50°	947.8	6.0
50°-60°	845.3	5.4
60°-70°	629.5	4.0
70°-80°	341.7	2.2
80°-90°	82.5	0.5
90°-100°	754.6	4.8
100°-110°	2083.1	13.3
110°-120°	2148.4	13.7
120°-130°	1726.4	11.0
130°-140°	1356.8	8.6
140°-150°	1040.6	6.6
150°-160°	747.9	4.8
160°-170°	457.4	2.9
170°-180°	154.2	1.0
0°-30°	1471.9	9.4
0°-40°	2396.8	15.3
0°-60°	4189.9	26.7
0°-90°	5243.7	33.4
90°-120°	4986.1	31.7
90°-150°	9109.8	58.0
90°-180°	10469.0	66.6
0°-180°	15712.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1920	1920	1920	1920	1920	
5°	1918	1915	1894	1912	1910	182
15°	1840	1835	1817	1833	1833	519
25°	1691	1686	1671	1681	1686	779
35°	1491	1486	1473	1473	1480	930
45°	1236	1239	1226	1224	1226	954
55°	959	959	946	938	941	854
65°	648	645	635	627	627	641
75°	332	329	321	316	314	350
85°	54	59	62	64	64	76
90°	5	10	21	23	26	9
95°	111	408	1369	563	366	119
105°	371	573	2292	3499	3295	395
115°	665	804	1846	3654	4156	654
125°	913	1039	1673	2832	3323	812
135°	1098	1217	1627	2293	2586	850
145°	1274	1362	1606	1952	2101	797
155°	1436	1484	1593	1752	1807	662
165°	1555	1575	1601	1663	1676	438
175°	1611	1614	1604	1627	1622	153
180°	1611	1611	1611	1611	1611	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1920.0	1920.0	1920.0	1920.0	1920.0
2.5°	1926.2	1922.2	1905.7	1920.0	1918.0
5°	1917.5	1914.9	1894.3	1912.3	1909.8
7.5°	1903.6	1898.6	1878.4	1895.8	1893.3
10°	1889.2	1884.2	1866.0	1881.4	1878.9
12.5°	1870.6	1867.7	1847.6	1863.0	1862.5
15°	1840.4	1835.3	1817.2	1832.7	1832.7
17.5°	1800.2	1797.3	1779.7	1794.5	1792.6
20°	1773.5	1768.5	1753.0	1765.8	1765.8
22.5°	1740.6	1737.6	1722.1	1733.0	1735.0
25°	1691.3	1686.3	1670.7	1681.1	1686.2
27.5°	1636.8	1632.8	1619.8	1626.6	1630.1
30°	1593.6	1593.6	1580.7	1583.5	1591.0
32.5°	1554.5	1554.5	1539.6	1542.3	1545.8
35°	1490.8	1485.8	1472.8	1473.0	1480.5
37.5°	1416.8	1414.3	1406.0	1404.4	1406.5
40°	1367.5	1364.9	1354.5	1357.1	1357.1
42.5°	1318.1	1315.6	1305.2	1301.7	1305.7
45°	1236.3	1238.9	1226.1	1223.5	1226.1
47.5°	1155.7	1155.7	1145.3	1138.2	1142.2
50°	1100.1	1100.1	1089.8	1084.7	1084.7
52.5°	1042.6	1044.5	1032.2	1025.1	1027.1
55°	958.7	958.7	945.9	938.2	940.7
57.5°	866.2	866.2	853.3	845.7	850.3
60°	804.5	804.5	791.7	784.0	786.5
62.5°	742.8	742.8	730.0	722.3	722.8
65°	647.7	645.2	634.8	627.1	627.1
67.5°	556.2	549.7	541.8	531.6	531.6
70°	488.4	485.8	478.0	467.8	467.8
72.5°	426.7	422.1	414.3	406.2	406.2
75°	331.6	329.0	321.3	316.1	313.6
77.5°	237.5	235.5	235.0	227.8	229.8
80°	180.0	180.0	177.4	172.2	172.2
82.5°	128.5	130.6	125.9	124.8	122.9
85°	53.9	59.0	61.7	64.3	64.3
87.5°	11.3	18.3	18.5	21.1	21.6
90°	5.1	10.2	20.6	23.2	25.8
92.5°	46.4	192.6	344.4	125.7	97.9
95°	110.9	408.3	1369.0	562.7	366.1
97.5°	183.6	457.3	2027.9	1561.3	1130.8
100°	237.2	486.7	2271.2	2287.3	1858.7
102.5°	288.8	520.1	2318.7	2826.1	2419.7
105°	371.3	572.9	2291.9	3499.0	3294.8
107.5°	458.9	638.3	2164.0	3823.4	3898.0
110°	520.7	682.1	2065.0	3893.2	4135.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	576.4	731.7	1972.2	3838.1	4195.0
115°	665.2	803.7	1845.9	3654.2	4155.8
117.5°	742.5	880.6	1762.9	3395.4	3966.1
120°	794.0	930.2	1729.8	3220.1	3794.8
122.5°	843.5	973.6	1703.0	3056.5	3601.1
125°	912.7	1038.7	1673.2	2831.5	3323.1
127.5°	971.4	1097.4	1655.7	2641.3	3065.3
130°	1010.6	1136.6	1647.3	2525.0	2910.6
132.5°	1047.7	1167.7	1639.1	2427.1	2776.5
135°	1098.2	1216.7	1626.8	2293.4	2585.8
137.5°	1155.0	1262.8	1620.5	2181.0	2430.6
140°	1185.9	1291.8	1616.5	2106.0	2325.4
142.5°	1221.0	1318.7	1612.3	2039.5	2232.6
145°	1273.5	1361.8	1606.1	1952.4	2101.1
147.5°	1324.1	1401.2	1600.5	1878.9	1994.4
150°	1361.2	1424.3	1598.4	1835.1	1928.4
152.5°	1390.0	1449.1	1596.3	1797.6	1874.8
155°	1435.9	1483.8	1593.2	1751.7	1807.2
157.5°	1478.3	1515.1	1593.7	1718.4	1756.2
160°	1503.0	1535.8	1595.8	1699.6	1727.3
162.5°	1523.6	1552.4	1597.9	1683.0	1704.6
165°	1554.6	1574.7	1601.0	1663.2	1675.7
167.5°	1578.3	1590.4	1603.5	1651.1	1655.1
170°	1590.7	1600.8	1603.5	1644.8	1644.8
172.5°	1601.0	1607.0	1603.5	1636.5	1634.5
175°	1611.2	1613.8	1603.5	1626.7	1621.6
177.5°	1615.4	1613.4	1603.0	1617.4	1613.3
180°	1611.2	1611.2	1611.2	1611.2	1611.2

(END OF REPORT)