

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: P519991

Luminaire Tested: **SQ4-F-075U-050D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519991
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

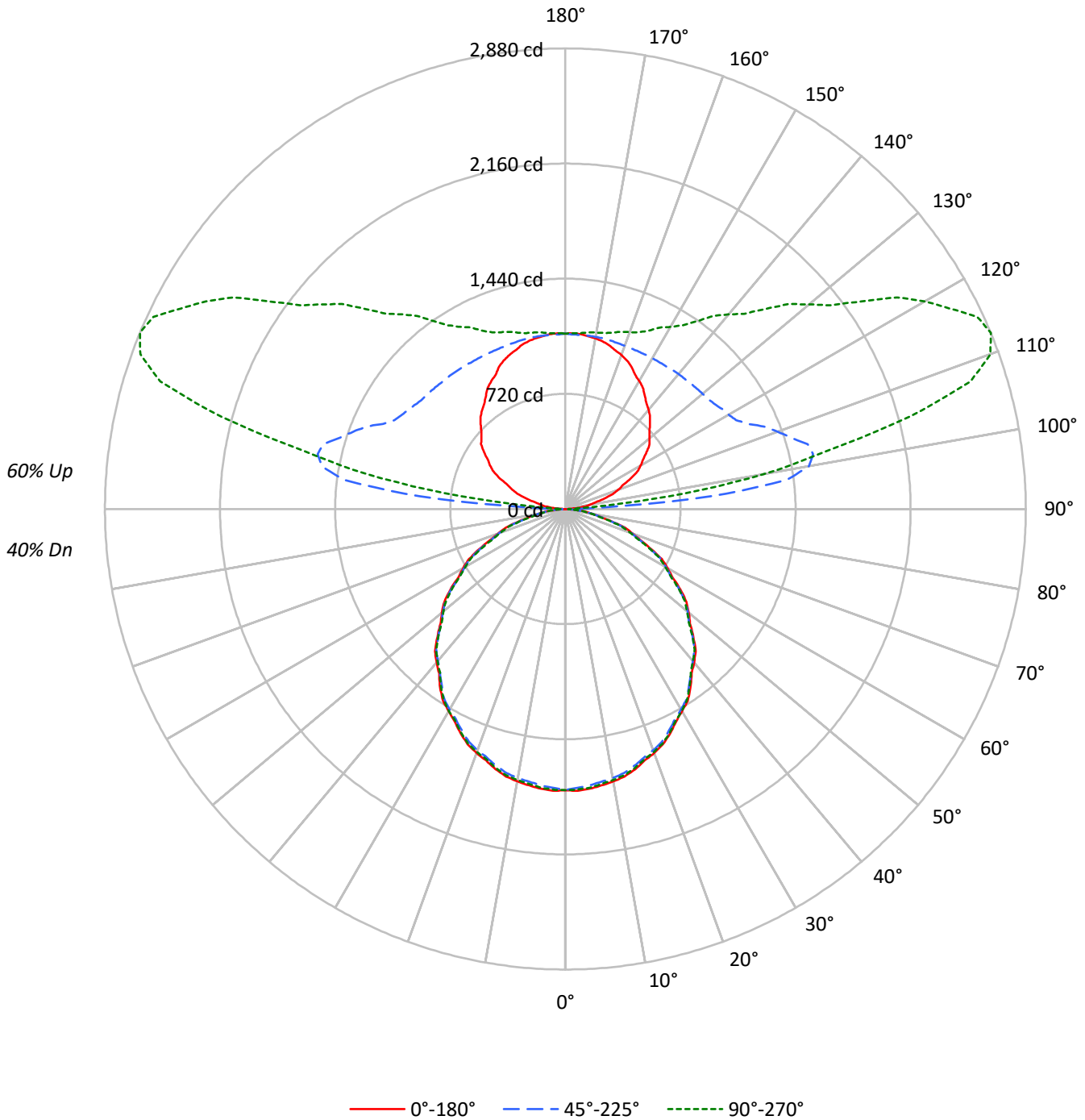
Lumens per Lamp: N/A
Luminaire Lumens: 11949.0 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 109.7
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34
2	87	80	74	68	79	73	68	63	60	56	53	48	45	43	37	35	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24
4	72	62	54	48	66	56	50	44	47	42	38	37	34	31	29	26	24	20
5	66	55	47	41	60	50	43	38	42	36	32	33	30	27	26	23	21	18
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	21	19	15
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	19	16	14
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5408	5408	5408
5°	5421	5356	5399
10°	5403	5337	5374
15°	5366	5299	5344
20°	5316	5254	5292
25°	5256	5192	5240
30°	5183	5141	5174
35°	5126	5064	5091
40°	5028	4981	4990
45°	4925	4883	4883
50°	4820	4775	4753
55°	4708	4645	4619
60°	4532	4459	4430
65°	4317	4232	4180
70°	4022	3937	3852
75°	3609	3496	3411
80°	2919	2876	2793
85°	1743	1994	2078



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.9	1.4
10°-20°	472.5	4.0
20°-30°	709.6	5.9
30°-40°	847.1	7.1
40°-50°	868.0	7.3
50°-60°	774.1	6.5
60°-70°	576.5	4.8
70°-80°	313.0	2.6
80°-90°	75.3	0.6
90°-100°	517.4	4.3
100°-110°	1423.6	11.9
110°-120°	1469.4	12.3
120°-130°	1177.3	9.9
130°-140°	924.7	7.7
140°-150°	708.6	5.9
150°-160°	509.5	4.3
160°-170°	311.5	2.6
170°-180°	105.0	0.9
0°-30°	1348.0	11.3
0°-40°	2195.1	18.4
0°-60°	3837.3	32.1
0°-90°	4802.0	40.2
90°-120°	3410.4	28.5
90°-150°	6220.9	52.1
90°-180°	7147.0	59.8
0°-180°	11949.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1758	1758	1758	1758	1758	
5°	1756	1754	1735	1751	1749	167
15°	1686	1681	1664	1678	1678	475
25°	1549	1544	1530	1540	1544	713
35°	1365	1361	1349	1349	1356	852
45°	1132	1135	1123	1121	1123	874
55°	878	878	866	859	862	782
65°	593	591	582	574	574	587
75°	304	301	294	290	287	321
85°	49	54	56	59	59	69
90°	2	9	16	21	21	6
95°	77	282	915	391	250	81
105°	254	391	1569	2389	2229	268
115°	450	549	1258	2505	2843	445
125°	621	708	1142	1931	2262	554
135°	749	831	1109	1562	1767	578
145°	866	925	1092	1330	1433	543
155°	980	1012	1085	1196	1230	450
165°	1060	1073	1090	1135	1142	299
175°	1097	1099	1092	1106	1104	104
180°	1097	1097	1097	1097	1097	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1758.4	1758.4	1758.4	1758.4	1758.4
2.5°	1764.1	1760.4	1745.2	1758.3	1756.6
5°	1756.1	1753.8	1734.9	1751.3	1749.0
7.5°	1743.3	1738.7	1720.3	1736.2	1734.0
10°	1730.1	1725.6	1709.0	1723.0	1720.8
12.5°	1713.2	1710.4	1692.1	1706.2	1705.7
15°	1685.5	1680.8	1664.3	1678.4	1678.4
17.5°	1648.7	1645.9	1629.9	1643.5	1641.7
20°	1624.2	1619.6	1605.4	1617.1	1617.1
22.5°	1594.2	1591.4	1577.2	1587.1	1588.9
25°	1548.9	1544.3	1530.1	1539.6	1544.2
27.5°	1499.0	1495.4	1483.5	1489.6	1492.9
30°	1459.5	1459.5	1447.7	1450.2	1457.1
32.5°	1423.7	1423.7	1410.1	1412.4	1415.7
35°	1365.3	1360.7	1348.8	1349.0	1355.9
37.5°	1297.6	1295.2	1287.6	1286.2	1288.1
40°	1252.3	1250.0	1240.6	1242.9	1242.9
42.5°	1207.1	1204.9	1195.4	1192.1	1195.8
45°	1132.3	1134.6	1122.8	1120.6	1122.8
47.5°	1058.3	1058.3	1049.0	1042.5	1046.1
50°	1007.5	1007.5	998.1	993.4	993.4
52.5°	954.8	956.6	945.3	938.8	940.6
55°	878.0	878.0	866.3	859.2	861.5
57.5°	793.3	793.3	781.5	774.5	778.7
60°	736.8	736.8	725.0	718.0	720.3
62.5°	680.3	680.3	668.5	661.4	661.9
65°	593.2	590.9	581.5	574.4	574.4
67.5°	509.4	503.4	496.2	486.8	486.8
70°	447.3	444.9	437.8	428.4	428.4
72.5°	390.8	386.6	379.4	371.9	371.9
75°	303.7	301.3	294.2	289.5	287.1
77.5°	217.5	215.7	215.2	208.6	210.4
80°	164.8	164.8	162.4	157.7	157.7
82.5°	117.7	119.5	115.4	114.4	112.5
85°	49.4	54.0	56.5	58.9	58.9
87.5°	9.9	16.8	16.5	19.3	19.3
90°	2.3	9.2	16.3	21.0	21.0
92.5°	32.2	137.6	238.6	91.6	75.1
95°	77.1	282.5	915.0	391.2	249.7
97.5°	125.6	313.2	1396.3	1075.8	759.1
100°	161.1	332.3	1547.6	1562.1	1274.5
102.5°	194.6	354.9	1586.8	1937.9	1674.1
105°	254.4	391.3	1568.6	2389.0	2229.1
107.5°	311.3	436.4	1479.4	2609.7	2657.3
110°	352.4	466.6	1412.2	2664.7	2829.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	389.8	500.3	1344.9	2629.3	2879.5
115°	450.5	548.6	1258.2	2505.3	2843.0
117.5°	508.4	598.8	1203.1	2331.2	2713.3
120°	543.8	630.6	1178.7	2200.8	2595.6
122.5°	575.6	662.4	1162.0	2086.4	2461.1
125°	620.9	707.7	1141.5	1930.9	2261.8
127.5°	663.8	746.5	1127.9	1801.1	2091.4
130°	686.2	770.7	1120.4	1723.9	1988.7
132.5°	712.4	796.9	1114.8	1656.2	1895.4
135°	749.2	831.4	1108.7	1561.6	1767.0
137.5°	783.9	860.1	1103.6	1485.1	1654.5
140°	810.0	880.7	1101.8	1434.3	1587.3
142.5°	832.4	897.6	1098.0	1389.0	1520.0
145°	866.0	925.3	1092.4	1330.4	1433.2
147.5°	901.9	953.1	1089.6	1278.7	1360.9
150°	924.3	970.0	1087.8	1250.2	1314.1
152.5°	944.9	986.8	1085.9	1225.7	1278.7
155°	980.4	1012.4	1085.4	1195.8	1230.1
157.5°	1006.0	1032.0	1085.4	1171.4	1195.1
160°	1024.7	1045.2	1085.4	1158.2	1176.4
162.5°	1039.6	1056.6	1087.3	1146.8	1161.5
165°	1059.7	1073.4	1090.1	1134.6	1141.5
167.5°	1073.7	1084.2	1092.4	1124.2	1126.0
170°	1083.1	1089.9	1092.4	1120.4	1120.4
172.5°	1090.5	1093.7	1092.4	1114.8	1112.9
175°	1097.1	1099.3	1092.4	1106.4	1104.1
177.5°	1098.9	1098.9	1091.5	1102.6	1098.9
180°	1097.1	1097.1	1097.1	1097.1	1097.1

(END OF REPORT)