

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: P519979

Luminaire Tested: **SQ4-F-075U-050D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519979
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-830-1D-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

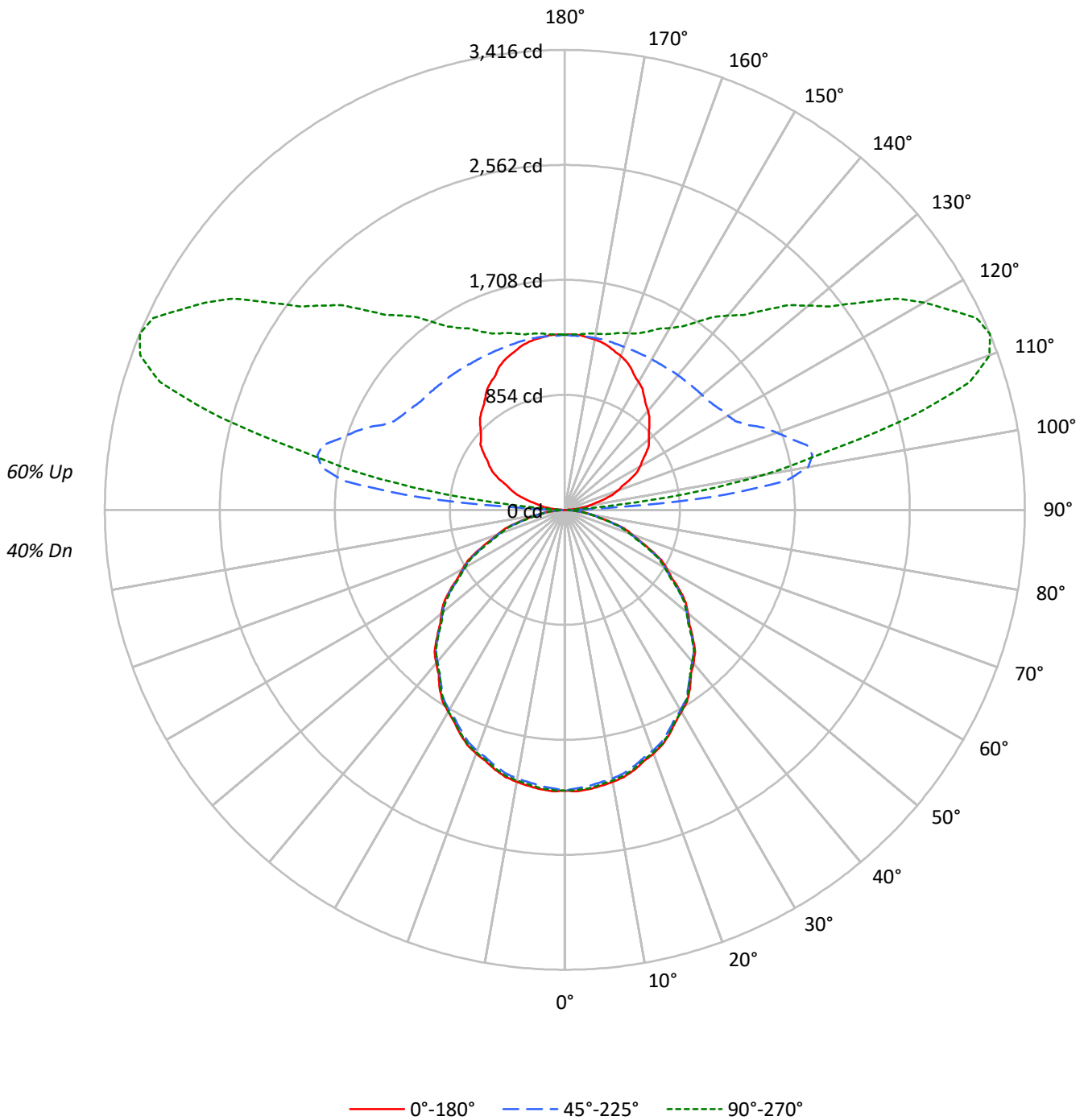
Lumens per Lamp: N/A
Luminaire Lumens: 14173.4 lumens
Efficiency: N/A
Efficacy: 129.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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°	6415	6415	6415
5°	6430	6353	6405
10°	6409	6330	6374
15°	6365	6285	6338
20°	6306	6232	6278
25°	6234	6159	6216
30°	6147	6098	6138
35°	6080	6007	6038
40°	5963	5908	5919
45°	5841	5793	5793
50°	5718	5664	5638
55°	5584	5510	5479
60°	5375	5290	5255
65°	5121	5018	4958
70°	4770	4670	4570
75°	4280	4148	4048
80°	3461	3413	3314
85°	2071	2368	2463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.8	1.4
10°-20°	560.4	4.0
20°-30°	841.7	5.9
30°-40°	1004.8	7.1
40°-50°	1029.6	7.3
50°-60°	918.3	6.5
60°-70°	683.9	4.8
70°-80°	371.2	2.6
80°-90°	89.3	0.6
90°-100°	613.7	4.3
100°-110°	1688.6	11.9
110°-120°	1742.9	12.3
120°-130°	1396.4	9.9
130°-140°	1096.8	7.7
140°-150°	840.5	5.9
150°-160°	604.3	4.3
160°-170°	369.5	2.6
170°-180°	124.6	0.9
0°-30°	1599.0	11.3
0°-40°	2603.7	18.4
0°-60°	4551.6	32.1
0°-90°	5696.0	40.2
90°-120°	4045.2	28.5
90°-150°	7379.0	52.1
90°-180°	8477.0	59.8
0°-180°	14173.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2086	2086	2086	2086	2086	
5°	2083	2080	2058	2077	2075	198
15°	1999	1994	1974	1991	1991	563
25°	1837	1832	1815	1826	1832	846
35°	1620	1614	1600	1600	1608	1011
45°	1343	1346	1332	1329	1332	1036
55°	1042	1042	1028	1019	1022	928
65°	704	701	690	681	681	697
75°	360	357	349	343	341	381
85°	59	64	67	70	70	82
90°	3	11	19	25	25	8
95°	91	335	1085	464	296	97
105°	302	464	1861	2834	2644	318
115°	534	651	1492	2972	3372	527
125°	736	839	1354	2290	2683	657
135°	889	986	1315	1852	2096	686
145°	1027	1098	1296	1578	1700	644
155°	1163	1201	1288	1418	1459	534
165°	1257	1273	1293	1346	1354	354
175°	1301	1304	1296	1312	1310	124
180°	1301	1301	1301	1301	1301	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2085.8	2085.8	2085.8	2085.8	2085.8
2.5°	2092.5	2088.1	2070.1	2085.7	2083.5
5°	2082.9	2080.3	2057.8	2077.3	2074.6
7.5°	2067.9	2062.4	2040.5	2059.5	2056.7
10°	2052.3	2046.8	2027.1	2043.8	2041.1
12.5°	2032.2	2028.9	2007.0	2023.8	2023.2
15°	1999.2	1993.7	1974.1	1990.8	1990.8
17.5°	1955.6	1952.4	1933.4	1949.4	1947.3
20°	1926.7	1921.1	1904.3	1918.3	1918.3
22.5°	1890.9	1887.6	1870.7	1882.6	1884.7
25°	1837.2	1831.8	1814.9	1826.2	1831.7
27.5°	1778.1	1773.7	1759.6	1767.0	1770.8
30°	1731.1	1731.1	1717.2	1720.2	1728.4
32.5°	1688.7	1688.7	1672.5	1675.4	1679.3
35°	1619.5	1614.0	1599.9	1600.1	1608.3
37.5°	1539.0	1536.3	1527.3	1525.7	1527.9
40°	1485.4	1482.7	1471.5	1474.3	1474.3
42.5°	1431.9	1429.1	1417.9	1414.1	1418.4
45°	1343.0	1345.8	1331.9	1329.1	1331.9
47.5°	1255.3	1255.3	1244.2	1236.5	1240.9
50°	1195.1	1195.1	1183.9	1178.3	1178.3
52.5°	1132.5	1134.7	1121.3	1113.6	1115.7
55°	1041.5	1041.5	1027.6	1019.2	1021.9
57.5°	941.0	941.0	927.0	918.7	923.6
60°	873.9	873.9	860.0	851.7	854.4
62.5°	807.0	807.0	793.0	784.6	785.2
65°	703.7	700.9	689.6	681.3	681.3
67.5°	604.3	597.2	588.6	577.4	577.4
70°	530.5	527.7	519.4	508.2	508.2
72.5°	463.5	458.6	450.1	441.2	441.2
75°	360.2	357.4	349.1	343.3	340.7
77.5°	258.0	255.8	255.2	247.4	249.7
80°	195.4	195.4	192.7	187.1	187.1
82.5°	139.6	141.8	136.9	135.7	133.5
85°	58.7	64.1	67.1	69.8	69.8
87.5°	11.7	19.9	19.5	22.9	22.9
90°	2.7	10.9	19.4	24.9	24.9
92.5°	38.2	163.2	283.0	108.7	89.1
95°	91.4	335.0	1085.3	464.1	296.3
97.5°	149.0	371.5	1656.2	1276.2	900.4
100°	191.0	394.1	1835.6	1852.9	1511.7
102.5°	230.9	421.0	1882.2	2298.7	1985.7
105°	301.7	464.2	1860.6	2833.6	2644.1
107.5°	369.3	517.7	1754.8	3095.6	3151.9
110°	418.0	553.4	1675.0	3160.8	3355.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	462.4	593.4	1595.3	3118.7	3415.5
115°	534.3	650.7	1492.3	2971.6	3372.3
117.5°	603.0	710.2	1427.0	2765.1	3218.4
120°	645.1	748.0	1398.2	2610.5	3078.8
122.5°	682.7	785.6	1378.3	2474.8	2919.3
125°	736.5	839.3	1353.9	2290.4	2682.9
127.5°	787.4	885.4	1337.9	2136.4	2480.8
130°	814.0	914.1	1329.0	2045.0	2358.9
132.5°	845.0	945.2	1322.3	1964.5	2248.2
135°	888.7	986.2	1315.2	1852.3	2095.9
137.5°	929.7	1020.2	1309.0	1761.6	1962.5
140°	960.7	1044.6	1306.9	1701.3	1882.7
142.5°	987.3	1064.8	1302.4	1647.6	1803.0
145°	1027.2	1097.5	1295.7	1578.2	1700.0
147.5°	1069.9	1130.5	1292.4	1516.7	1614.2
150°	1096.4	1150.6	1290.2	1483.0	1558.8
152.5°	1120.7	1170.6	1288.0	1453.9	1516.7
155°	1162.9	1200.7	1287.5	1418.5	1459.2
157.5°	1193.3	1224.2	1287.5	1389.4	1417.6
160°	1215.5	1239.9	1287.5	1373.8	1395.4
162.5°	1233.2	1253.3	1289.6	1360.4	1377.7
165°	1257.0	1273.2	1293.0	1345.8	1353.9
167.5°	1273.6	1286.0	1295.7	1333.5	1335.6
170°	1284.7	1292.8	1295.7	1329.0	1329.0
172.5°	1293.6	1297.4	1295.7	1322.3	1320.2
175°	1301.3	1304.0	1295.7	1312.3	1309.6
177.5°	1303.5	1303.5	1294.6	1307.8	1303.5
180°	1301.3	1301.3	1301.3	1301.3	1301.3

(END OF REPORT)