

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: P520413

Luminaire Tested: **SQ4-F-150U-100D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520413
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-100D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

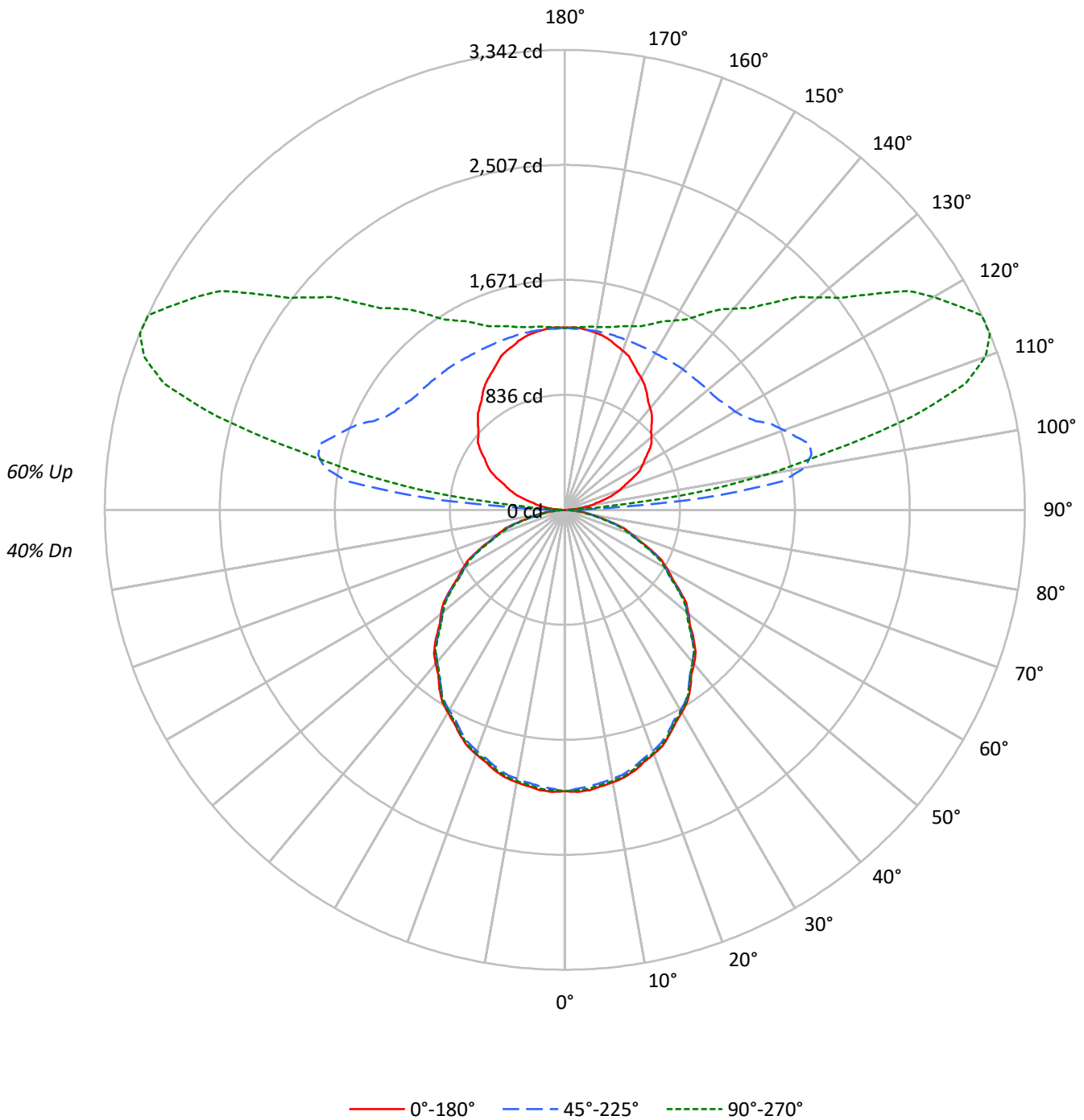
Lumens per Lamp: N/A
Luminaire Lumens: 14106.5 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 110.6
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	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12572	12572	12572
5°	12629	12455	12551
10°	12564	12406	12503
15°	12488	12318	12417
20°	12359	12213	12313
25°	12224	12082	12177
30°	12076	11946	12006
35°	11924	11777	11840
40°	11726	11590	11602
45°	11519	11360	11324
50°	11222	11088	11062
55°	10892	10771	10697
60°	10561	10371	10337
65°	10045	9821	9740
70°	9335	9107	8931
75°	8337	8068	7902
80°	6858	6610	6308
85°	4058	4453	4552



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.9	1.4
10°-20°	549.3	3.9
20°-30°	825.0	5.8
30°-40°	984.5	7.0
40°-50°	1009.2	7.2
50°-60°	898.7	6.4
60°-70°	669.9	4.7
70°-80°	362.7	2.6
80°-90°	85.3	0.6
90°-100°	614.8	4.4
100°-110°	1662.2	11.8
110°-120°	1747.6	12.4
120°-130°	1419.5	10.1
130°-140°	1113.5	7.9
140°-150°	854.6	6.1
150°-160°	614.6	4.4
160°-170°	375.5	2.7
170°-180°	126.6	0.9
0°-30°	1567.2	11.1
0°-40°	2551.8	18.1
0°-60°	4459.6	31.6
0°-90°	5577.5	39.5
90°-120°	4024.6	28.5
90°-150°	7412.3	52.5
90°-180°	8529.0	60.5
0°-180°	14106.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2044	2044	2044	2044	2044	
5°	2045	2041	2017	2035	2033	194
15°	1961	1954	1934	1950	1950	552
25°	1801	1797	1780	1790	1794	830
35°	1588	1581	1568	1571	1577	991
45°	1324	1317	1306	1299	1302	1019
55°	1016	1017	1004	995	998	909
65°	690	687	675	668	669	683
75°	351	347	340	332	332	374
85°	58	63	63	64	64	80
90°	3	8	18	20	18	8
95°	95	335	1022	529	315	100
105°	309	477	1844	2720	2609	325
115°	544	665	1529	2960	3342	537
125°	745	853	1378	2326	2733	664
135°	893	999	1341	1878	2126	690
145°	1038	1116	1323	1608	1730	649
155°	1172	1218	1312	1442	1490	541
165°	1276	1288	1317	1368	1376	359
175°	1324	1323	1318	1336	1333	126
180°	1323	1323	1323	1323	1323	



TEST NUMBER: P520413

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2044.0	2044.0	2044.0	2044.0	2044.0
2.5°	2051.8	2047.4	2029.4	2043.9	2041.7
5°	2045.4	2041.2	2017.3	2035.4	2032.8
7.5°	2026.2	2022.2	2001.1	2017.8	2015.3
10°	2011.7	2007.6	1986.4	2003.2	2001.9
12.5°	1992.6	1988.5	1967.4	1984.1	1982.7
15°	1961.1	1954.3	1934.5	1949.9	1949.9
17.5°	1919.6	1914.5	1896.0	1909.0	1909.3
20°	1888.2	1884.1	1865.8	1879.9	1881.2
22.5°	1856.8	1852.7	1832.1	1845.1	1847.6
25°	1801.2	1797.2	1780.2	1790.1	1794.3
27.5°	1744.0	1738.0	1721.3	1730.1	1733.0
30°	1700.3	1697.5	1682.0	1686.3	1690.4
32.5°	1654.3	1651.5	1638.2	1640.4	1647.7
35°	1588.0	1581.2	1568.4	1571.3	1576.8
37.5°	1509.7	1506.4	1494.1	1492.5	1497.6
40°	1460.4	1454.9	1443.5	1440.9	1444.9
42.5°	1406.5	1401.0	1387.4	1384.8	1389.9
45°	1324.3	1317.4	1306.0	1299.1	1301.8
47.5°	1232.3	1232.3	1220.5	1212.5	1216.5
50°	1172.7	1172.7	1158.8	1151.8	1156.0
52.5°	1111.0	1112.2	1097.0	1093.4	1092.0
55°	1015.7	1017.1	1004.4	994.7	997.5
57.5°	923.6	920.6	905.9	899.6	901.0
60°	858.5	854.4	843.1	833.5	840.3
62.5°	792.4	790.4	779.2	768.2	767.4
65°	690.2	687.4	674.8	667.8	669.2
67.5°	588.6	585.4	573.8	563.8	567.3
70°	519.1	519.1	506.4	500.8	496.6
72.5°	455.1	449.6	440.2	432.3	429.2
75°	350.8	346.6	339.5	332.5	332.5
77.5°	255.3	251.8	247.2	242.4	241.0
80°	193.6	192.2	186.6	185.0	178.1
82.5°	136.3	136.0	132.7	129.1	128.8
85°	57.5	63.0	63.1	64.5	64.5
87.5°	10.7	18.3	19.3	17.3	17.1
90°	2.8	8.5	18.5	19.9	18.5
92.5°	40.4	147.4	290.7	126.3	91.4
95°	95.4	334.9	1022.4	529.1	314.7
97.5°	153.2	384.1	1593.7	1318.8	968.6
100°	196.5	404.0	1771.4	1847.4	1493.7
102.5°	236.4	431.6	1834.0	2248.1	1983.6
105°	309.0	477.4	1844.1	2720.1	2608.7
107.5°	376.2	530.0	1763.4	3014.5	3051.6
110°	428.7	567.9	1691.7	3093.6	3250.8



TEST NUMBER: P520413

CATALOG NUMBER: SQ4-F-150U-100D-830-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	475.3	605.6	1625.6	3077.8	3342.0
115°	543.9	665.1	1529.3	2960.5	3342.0
117.5°	611.1	724.8	1465.8	2781.5	3213.8
120°	652.2	763.5	1428.2	2652.9	3094.2
122.5°	690.9	800.1	1405.5	2515.2	2959.8
125°	744.7	853.4	1378.4	2326.0	2732.6
127.5°	794.3	901.0	1362.4	2171.7	2529.3
130°	821.6	931.6	1355.6	2076.4	2399.4
132.5°	850.1	959.0	1348.7	1990.3	2287.7
135°	892.8	998.6	1341.4	1878.2	2126.0
137.5°	935.9	1035.8	1335.1	1787.1	1988.9
140°	965.4	1058.7	1332.8	1728.5	1908.1
142.5°	993.9	1081.6	1328.3	1675.6	1832.9
145°	1038.1	1116.0	1322.9	1607.6	1730.1
147.5°	1078.2	1147.3	1316.6	1546.0	1640.2
150°	1107.8	1169.1	1314.3	1512.5	1587.7
152.5°	1135.2	1188.7	1313.2	1481.5	1543.3
155°	1171.9	1217.8	1311.5	1442.1	1489.5
157.5°	1210.1	1242.1	1311.7	1414.7	1445.9
160°	1231.7	1258.2	1312.9	1397.4	1419.6
162.5°	1248.8	1270.8	1314.0	1383.6	1400.3
165°	1275.9	1288.4	1317.1	1368.5	1375.6
167.5°	1294.4	1303.1	1317.4	1355.7	1359.0
170°	1305.8	1310.0	1318.5	1349.9	1349.9
172.5°	1314.9	1315.7	1318.5	1343.1	1342.0
175°	1324.3	1322.9	1318.5	1335.6	1332.8
177.5°	1327.4	1324.1	1318.3	1329.6	1326.3
180°	1322.9	1322.9	1322.9	1322.9	1322.9

(END OF REPORT)