

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: P520402

Luminaire Tested: **SQ4-F-150U-075D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520402
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-075D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

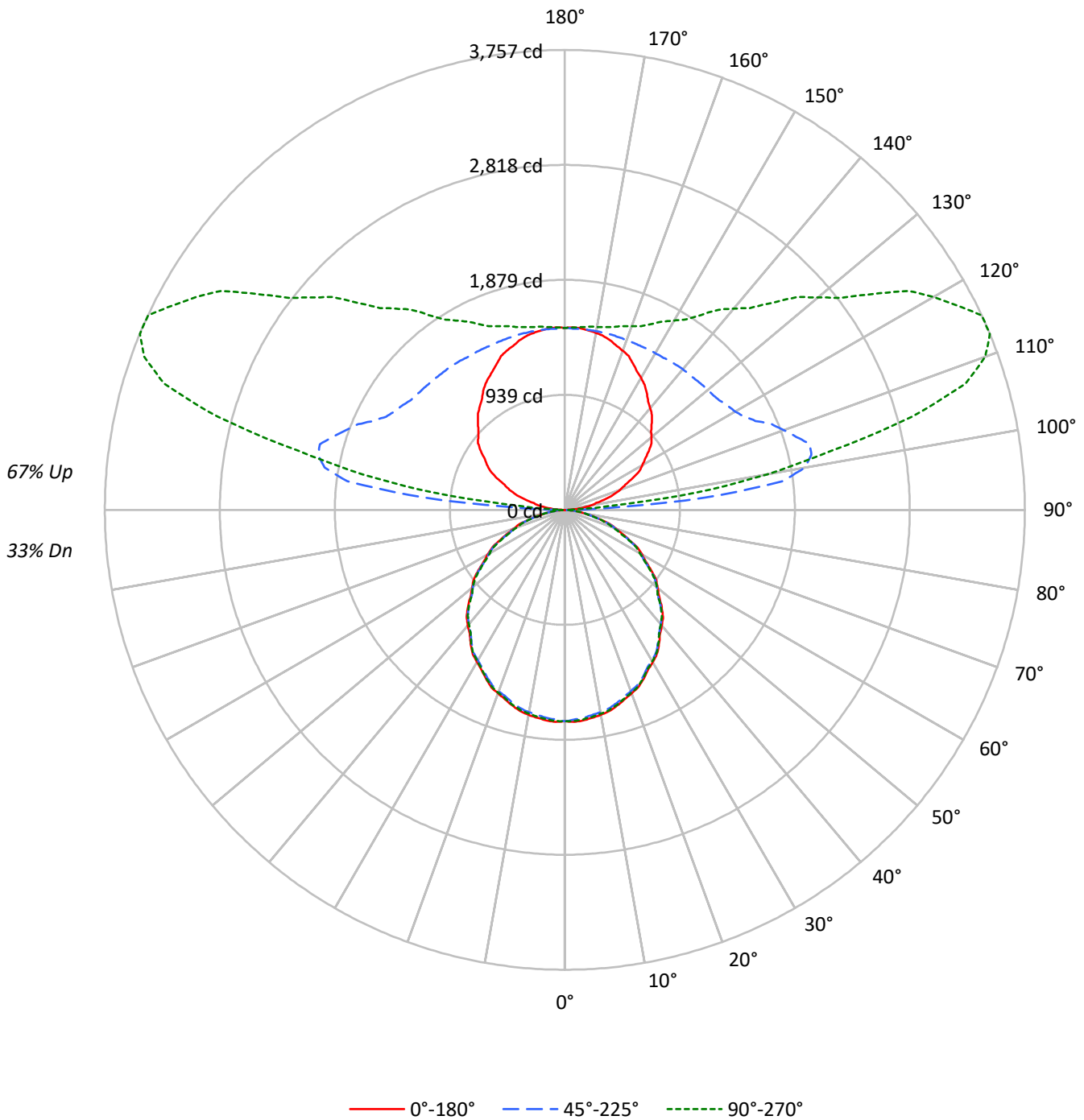
Lumens per Lamp: N/A
Luminaire Lumens: 14306.0 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 132.4
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	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	28	26	24	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	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	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	26	46	36	29	24	29	24	20	23	19	16	17	14	13	10
9	48	36	28	23	43	33	26	22	26	22	18	21	17	15	15	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°	7969	7969	7969
5°	7999	7898	7956
10°	7967	7864	7923
15°	7906	7808	7876
20°	7835	7743	7804
25°	7748	7669	7725
30°	7650	7567	7609
35°	7550	7470	7506
40°	7422	7347	7338
45°	7295	7203	7224
50°	7092	7036	7036
55°	6927	6840	6777
60°	6705	6588	6531
65°	6343	6223	6138
70°	5956	5809	5661
75°	5360	5164	5053
80°	4285	4200	4163
85°	2567	2901	2985



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.1	1.1
10°-20°	464.2	3.2
20°-30°	697.4	4.9
30°-40°	832.2	5.8
40°-50°	853.4	6.0
50°-60°	760.5	5.3
60°-70°	567.0	4.0
70°-80°	307.5	2.1
80°-90°	73.7	0.5
90°-100°	691.0	4.8
100°-110°	1868.5	13.1
110°-120°	1964.4	13.7
120°-130°	1595.7	11.2
130°-140°	1251.7	8.7
140°-150°	960.7	6.7
150°-160°	690.9	4.8
160°-170°	422.1	3.0
170°-180°	142.3	1.0
0°-30°	1324.7	9.3
0°-40°	2156.8	15.1
0°-60°	3770.7	26.4
0°-90°	4718.9	33.0
90°-120°	4524.0	31.6
90°-150°	8331.9	58.2
90°-180°	9587.0	67.0
0°-180°	14306.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1727	1727	1727	1727	1727	
5°	1727	1724	1706	1720	1718	164
15°	1655	1652	1635	1648	1649	467
25°	1522	1521	1507	1515	1518	701
35°	1341	1338	1326	1327	1333	837
45°	1118	1114	1104	1104	1107	861
55°	861	860	850	843	843	769
65°	581	581	570	564	562	578
75°	301	294	290	285	284	316
85°	48	52	55	55	56	67
90°	3	10	21	22	21	8
95°	107	376	1149	595	354	112
105°	347	537	2073	3058	2932	366
115°	611	748	1719	3328	3757	604
125°	837	959	1549	2615	3072	746
135°	1004	1123	1508	2111	2390	776
145°	1167	1254	1487	1807	1945	730
155°	1317	1369	1474	1621	1674	608
165°	1434	1448	1481	1538	1546	404
175°	1489	1487	1482	1501	1498	141
180°	1487	1487	1487	1487	1487	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1727.4	1727.4	1727.4	1727.4	1727.4
2.5°	1733.7	1730.1	1714.9	1727.4	1726.2
5°	1727.4	1724.4	1705.6	1719.5	1718.1
7.5°	1713.3	1710.0	1691.4	1705.5	1705.2
10°	1700.9	1696.2	1678.9	1693.0	1691.4
12.5°	1684.5	1680.0	1662.6	1676.6	1675.2
15°	1655.4	1652.3	1635.0	1647.6	1649.2
17.5°	1622.2	1616.4	1600.9	1613.2	1614.6
20°	1596.0	1591.3	1577.2	1588.1	1589.7
22.5°	1568.3	1563.8	1549.5	1560.5	1562.1
25°	1522.2	1520.8	1506.6	1514.6	1517.6
27.5°	1472.5	1468.2	1456.8	1462.8	1466.0
30°	1436.1	1433.1	1420.5	1425.2	1428.4
32.5°	1398.5	1396.8	1385.5	1387.7	1392.0
35°	1340.6	1337.5	1326.5	1326.7	1332.8
37.5°	1276.4	1273.1	1263.8	1262.4	1264.8
40°	1232.5	1228.0	1220.0	1218.5	1218.5
42.5°	1187.5	1184.1	1173.7	1170.9	1174.6
45°	1118.2	1113.7	1104.1	1104.2	1107.3
47.5°	1043.4	1041.5	1030.5	1025.6	1026.8
50°	988.2	991.3	980.4	974.3	980.4
52.5°	940.7	938.8	929.1	922.9	925.3
55°	861.3	859.9	850.4	842.6	842.6
57.5°	781.8	777.8	768.1	762.2	766.8
60°	726.7	725.2	714.1	703.3	707.9
62.5°	671.5	668.8	657.7	650.7	654.0
65°	581.1	581.1	570.1	563.8	562.3
67.5°	501.8	494.5	488.3	480.7	478.6
70°	441.6	435.5	430.7	424.3	419.7
72.5°	382.8	379.1	371.8	365.5	364.6
75°	300.7	294.5	289.7	285.0	283.5
77.5°	213.9	212.8	208.3	205.8	206.8
80°	161.3	161.3	158.1	158.1	156.7
82.5°	113.7	114.9	114.3	111.8	111.5
85°	48.5	51.6	54.8	54.8	56.4
87.5°	9.3	16.7	17.8	18.2	17.8
90°	3.2	9.5	20.8	22.3	20.8
92.5°	45.5	165.7	326.8	141.8	102.7
95°	107.2	376.4	1149.2	594.7	353.7
97.5°	172.2	431.7	1791.5	1482.5	1088.8
100°	220.9	454.1	1991.1	2076.6	1679.1
102.5°	265.7	485.1	2061.7	2527.0	2229.7
105°	347.4	536.7	2072.8	3057.6	2932.3
107.5°	422.9	595.6	1982.2	3388.6	3430.2
110°	481.8	638.3	1901.5	3477.4	3654.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	534.3	680.8	1827.3	3459.7	3756.7
115°	611.4	747.6	1719.1	3327.9	3756.7
117.5°	687.0	814.7	1647.7	3126.5	3612.6
120°	733.1	858.3	1605.5	2982.0	3478.2
122.5°	776.6	899.4	1579.8	2827.2	3327.1
125°	837.2	959.2	1549.4	2614.7	3071.6
127.5°	892.8	1012.7	1531.5	2441.1	2843.0
130°	923.6	1047.2	1523.8	2334.0	2697.0
132.5°	955.6	1078.0	1516.1	2237.3	2571.6
135°	1003.6	1122.6	1507.8	2111.2	2389.7
137.5°	1052.0	1164.3	1500.7	2008.9	2235.8
140°	1085.3	1190.1	1498.2	1943.0	2144.9
142.5°	1117.2	1215.8	1493.1	1883.5	2060.4
145°	1166.8	1254.5	1486.9	1807.1	1944.8
147.5°	1212.0	1289.7	1479.9	1737.8	1843.6
150°	1245.3	1314.1	1477.4	1700.2	1784.7
152.5°	1276.0	1336.2	1476.1	1665.3	1734.7
155°	1317.3	1368.9	1474.2	1621.0	1674.3
157.5°	1360.2	1396.2	1474.5	1590.3	1625.3
160°	1384.5	1414.3	1475.8	1570.7	1595.8
162.5°	1403.8	1428.5	1477.1	1555.3	1574.1
165°	1434.1	1448.2	1480.6	1538.4	1546.2
167.5°	1455.0	1464.7	1480.9	1523.9	1527.7
170°	1467.7	1472.5	1482.2	1517.4	1517.4
172.5°	1478.0	1479.0	1482.2	1509.7	1508.5
175°	1488.6	1487.0	1482.2	1501.3	1498.2
177.5°	1492.1	1488.4	1481.9	1494.6	1490.9
180°	1486.9	1486.9	1486.9	1486.9	1486.9

(END OF REPORT)