

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: P520389

Luminaire Tested: **SQ4-F-150U-075D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520389
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-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

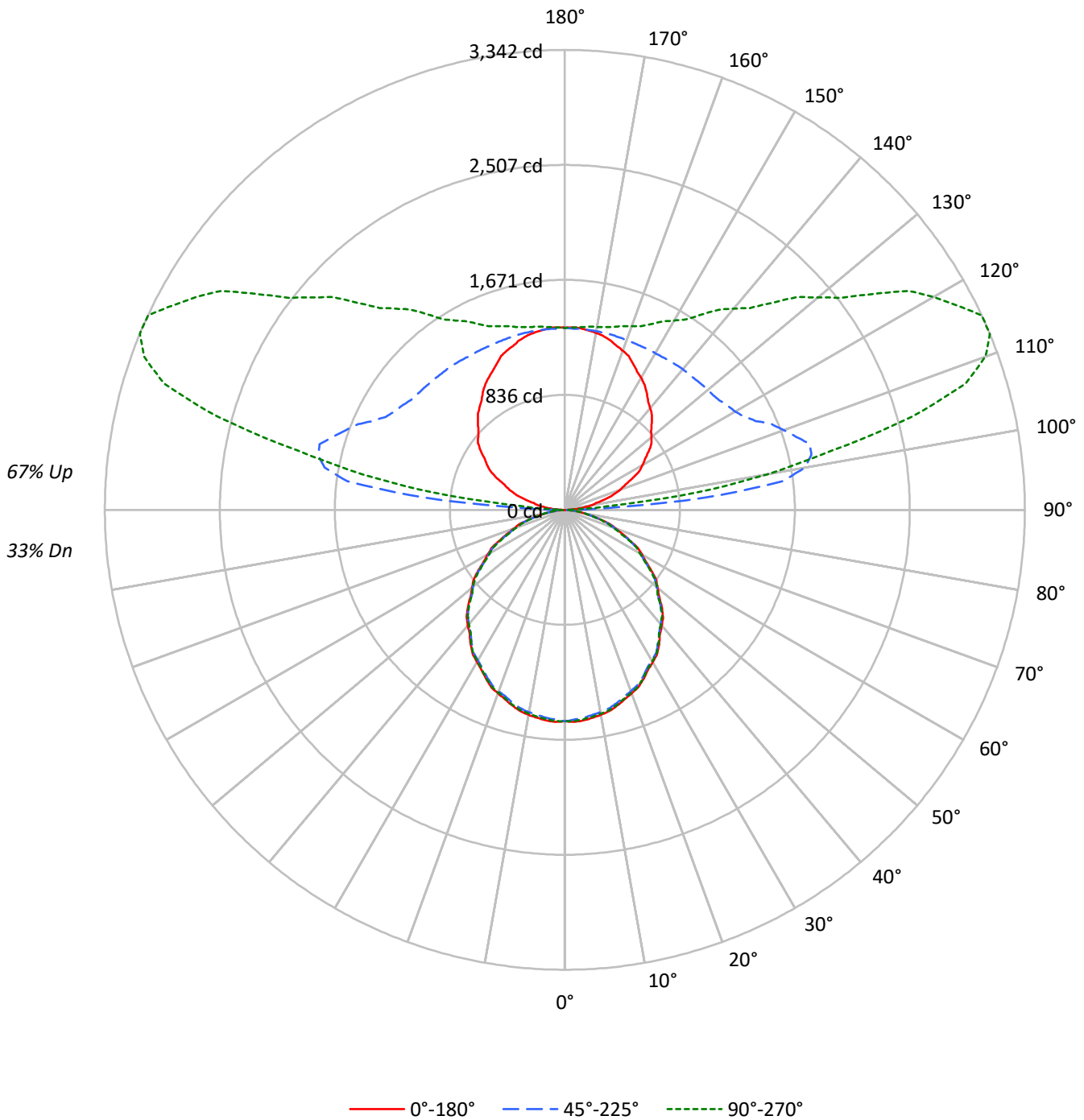
Lumens per Lamp: N/A
Luminaire Lumens: 12727.0 lumens
Efficiency: N/A
Efficacy: 131.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 96.9
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



TEST NUMBER: P520389
CATALOG NUMBER: SQ4-F-150U-075D-830-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P520389

CATALOG NUMBER: SQ4-F-150U-075D-830-1D-UNV-STD-W-6

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°	9453	9453	9453
5°	9489	9368	9437
10°	9450	9329	9398
15°	9377	9262	9342
20°	9293	9184	9257
25°	9191	9096	9162
30°	9074	8975	9024
35°	8956	8861	8903
40°	8804	8714	8703
45°	8653	8545	8568
50°	8413	8346	8346
55°	8217	8112	8038
60°	7952	7815	7748
65°	7523	7382	7280
70°	7066	6891	6715
75°	6357	6124	5994
80°	5083	4984	4934
85°	3049	3444	3543



TEST NUMBER: P520389

CATALOG NUMBER: SQ4-F-150U-075D-830-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.1	1.1
10°-20°	413.0	3.2
20°-30°	620.4	4.9
30°-40°	740.3	5.8
40°-50°	759.2	6.0
50°-60°	676.5	5.3
60°-70°	504.4	4.0
70°-80°	273.5	2.1
80°-90°	65.6	0.5
90°-100°	614.8	4.8
100°-110°	1662.2	13.1
110°-120°	1747.6	13.7
120°-130°	1419.5	11.2
130°-140°	1113.5	8.7
140°-150°	854.6	6.7
150°-160°	614.6	4.8
160°-170°	375.5	3.0
170°-180°	126.6	1.0
0°-30°	1178.4	9.3
0°-40°	1918.7	15.1
0°-60°	3354.5	26.4
0°-90°	4198.0	33.0
90°-120°	4024.6	31.6
90°-150°	7412.3	58.2
90°-180°	8529.0	67.0
0°-180°	12727.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1537	1537	1537	1537	1537	
5°	1537	1534	1517	1530	1528	146
15°	1473	1470	1454	1466	1467	415
25°	1354	1353	1340	1347	1350	624
35°	1193	1190	1180	1180	1186	745
45°	995	991	982	982	985	766
55°	766	765	756	750	750	684
65°	517	517	507	502	500	515
75°	268	262	258	254	252	281
85°	43	46	49	49	50	60
90°	3	8	18	20	18	7
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: P520389

CATALOG NUMBER: SQ4-F-150U-075D-830-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1536.8	1536.8	1536.8	1536.8	1536.8
2.5°	1542.3	1539.1	1525.6	1536.7	1535.6
5°	1536.8	1534.1	1517.2	1529.8	1528.4
7.5°	1524.2	1521.3	1504.7	1517.2	1517.0
10°	1513.1	1509.0	1493.6	1506.1	1504.7
12.5°	1498.6	1494.5	1479.1	1491.6	1490.3
15°	1472.6	1470.0	1454.5	1465.8	1467.1
17.5°	1443.1	1438.0	1424.2	1435.1	1436.4
20°	1419.7	1415.7	1403.1	1412.8	1414.2
22.5°	1395.2	1391.2	1378.5	1388.3	1389.7
25°	1354.3	1352.9	1340.3	1347.4	1350.0
27.5°	1310.0	1306.1	1296.0	1301.4	1304.1
30°	1277.6	1274.9	1263.7	1268.0	1270.6
32.5°	1244.1	1242.6	1232.5	1234.5	1238.3
35°	1192.7	1189.9	1180.1	1180.2	1185.7
37.5°	1135.5	1132.6	1124.4	1123.0	1125.2
40°	1096.5	1092.4	1085.3	1083.9	1083.9
42.5°	1056.4	1053.3	1044.1	1041.7	1045.0
45°	994.8	990.8	982.3	982.3	985.0
47.5°	928.2	926.6	916.8	912.3	913.4
50°	879.2	881.9	872.2	866.8	872.2
52.5°	836.8	835.2	826.5	821.0	823.2
55°	766.3	764.9	756.5	749.6	749.6
57.5°	695.5	692.0	683.2	678.0	682.2
60°	646.4	645.2	635.3	625.7	629.8
62.5°	597.4	595.0	585.2	578.8	581.9
65°	516.9	516.9	507.2	501.6	500.2
67.5°	446.4	439.9	434.5	427.7	425.8
70°	392.9	387.4	383.2	377.5	373.4
72.5°	340.5	337.2	330.7	325.1	324.3
75°	267.5	262.1	257.7	253.6	252.2
77.5°	190.3	189.2	185.3	183.1	183.9
80°	143.5	143.5	140.7	140.7	139.3
82.5°	101.2	102.2	101.8	99.5	99.2
85°	43.2	46.0	48.8	48.8	50.2
87.5°	8.4	14.9	15.8	16.1	15.8
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: P520389

CATALOG NUMBER: SQ4-F-150U-075D-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)