

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521586

Luminaire Tested: **SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521586
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

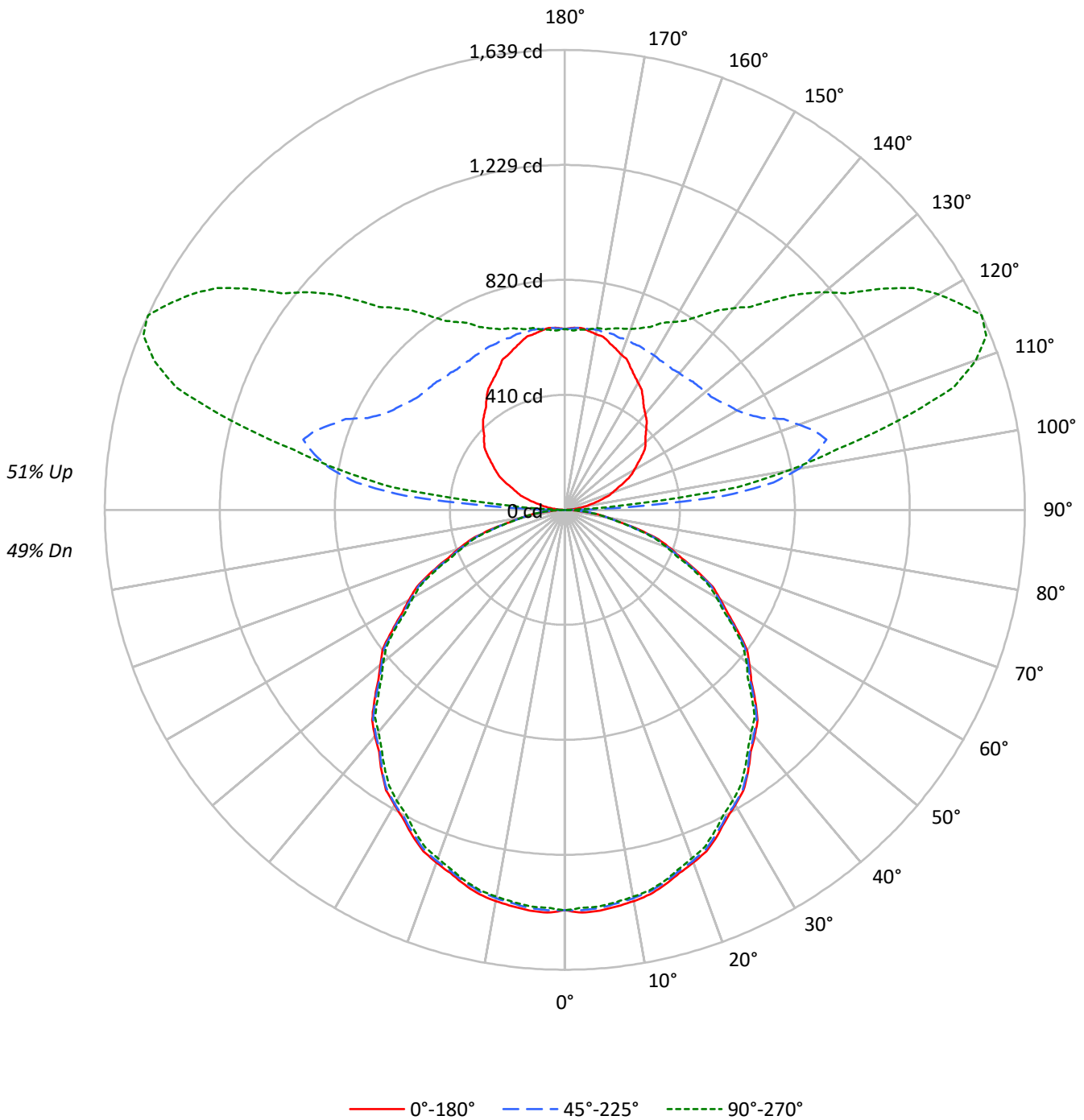
Lumens per Lamp: N/A
Luminaire Lumens: 8246.4 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 74.6
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

TEST NUMBER: P521586

CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (5000K)

Luminous Intensity Polar Plot





TEST NUMBER: P521586

CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (5000K)

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49
1	98	93	89	86	90	86	83	80	73	70	68	60	59	57	49	48	47	41
2	89	81	75	70	81	75	70	65	63	59	56	53	50	47	43	41	39	34
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	38	35	33	29
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	34	31	28	25
5	68	56	48	42	62	52	45	39	44	38	34	37	33	29	30	27	25	21
6	62	50	42	36	57	46	39	34	40	34	30	33	29	26	27	24	21	19
7	57	45	37	31	53	42	35	30	36	30	26	30	26	23	25	22	19	16
8	53	41	33	28	49	38	31	26	33	27	23	28	23	20	23	19	17	15
9	50	37	30	25	46	35	28	23	30	24	21	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	21	28	22	19	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13169	13169	13169
5°	13286	13192	13144
10°	13268	13171	13114
15°	13204	13126	13087
20°	13140	13079	12979
25°	13061	12988	12873
30°	12937	12904	12751
35°	12823	12777	12615
40°	12675	12614	12440
45°	12514	12448	12274
50°	12311	12238	12120
55°	12098	11984	11852
60°	11819	11686	11516
65°	11431	11208	11007
70°	10779	10531	10337
75°	9828	9496	9315
80°	8060	8060	8060
85°	5748	6510	6838



TEST NUMBER: P521586

CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (5000K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.2	1.6
10°-20°	387.0	4.7
20°-30°	585.4	7.1
30°-40°	705.1	8.6
40°-50°	732.2	8.9
50°-60°	664.6	8.1
60°-70°	507.0	6.1
70°-80°	283.4	3.4
80°-90°	73.8	0.9
90°-100°	332.2	4.0
100°-110°	802.9	9.7
110°-120°	856.3	10.4
120°-130°	693.6	8.4
130°-140°	537.0	6.5
140°-150°	409.7	5.0
150°-160°	296.5	3.6
160°-170°	182.6	2.2
170°-180°	61.8	0.7
0°-30°	1107.6	13.4
0°-40°	1812.7	22.0
0°-60°	3209.4	38.9
0°-90°	4073.7	49.4
90°-120°	1991.5	24.1
90°-150°	3631.7	44.0
90°-180°	4173.0	50.6
0°-180°	8246.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1427	1427	1427	1427	1427	
5°	1435	1420	1424	1421	1419	136
15°	1382	1368	1374	1370	1370	390
25°	1283	1270	1276	1264	1264	591
35°	1138	1128	1134	1120	1120	712
45°	959	952	954	941	941	740
55°	752	750	745	737	737	673
65°	524	520	513	506	504	516
75°	276	272	266	262	261	290
85°	54	59	62	63	65	67
90°	0	0	0	0	0	4
95°	33	166	569	370	259	37
105°	128	222	965	1249	1233	136
115°	235	300	775	1470	1639	232
125°	334	385	673	1169	1373	298
135°	411	459	646	922	1061	317
145°	486	522	633	784	845	304
155°	557	581	642	694	719	257
165°	616	625	650	660	669	174
175°	651	648	651	646	644	62
180°	644	644	644	644	644	

TEST NUMBER: P521586

CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1427.4	1427.4	1427.4	1427.4	1427.4
2.5°	1436.5	1424.4	1428.3	1426.5	1419.2
5°	1434.6	1419.6	1424.4	1421.2	1419.2
7.5°	1425.2	1410.2	1414.9	1410.8	1409.6
10°	1416.2	1401.1	1405.9	1401.8	1399.8
12.5°	1403.9	1389.6	1394.4	1389.5	1389.1
15°	1382.4	1368.3	1374.2	1370.1	1370.1
17.5°	1357.1	1344.1	1350.2	1344.2	1343.2
20°	1338.3	1325.3	1332.1	1322.9	1321.9
22.5°	1317.0	1304.8	1310.8	1300.0	1300.6
25°	1283.0	1269.9	1275.8	1264.5	1264.5
27.5°	1243.8	1231.0	1238.3	1224.7	1223.9
30°	1214.3	1202.3	1211.2	1196.9	1196.9
32.5°	1184.8	1174.4	1180.9	1167.3	1164.9
35°	1138.5	1128.4	1134.4	1120.0	1120.0
37.5°	1087.6	1079.4	1082.5	1069.3	1072.3
40°	1052.4	1043.4	1047.3	1033.9	1032.9
42.5°	1016.3	1008.1	1011.2	997.9	1000.9
45°	959.1	952.1	954.0	940.7	940.7
47.5°	901.1	895.9	894.4	882.5	884.5
50°	857.7	855.7	852.6	842.4	844.4
52.5°	818.3	813.9	809.9	800.5	801.7
55°	752.1	750.1	745.0	736.8	736.8
57.5°	688.8	684.4	678.4	670.0	670.0
60°	640.5	638.4	633.3	624.1	624.1
62.5°	594.5	591.7	585.7	577.3	576.5
65°	523.6	519.6	513.4	506.2	504.2
67.5°	449.6	445.4	440.4	433.6	432.4
70°	399.6	394.6	390.4	385.3	383.2
72.5°	348.8	346.2	341.2	336.1	334.9
75°	275.7	271.6	266.4	262.3	261.3
77.5°	198.4	197.8	195.9	193.3	194.3
80°	151.7	152.7	151.7	150.7	151.7
82.5°	109.9	112.5	112.3	112.1	113.1
85°	54.3	59.3	61.5	62.6	64.6
87.5°	15.6	20.4	24.6	25.4	26.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.9	89.9	211.8	103.0	69.9
95°	32.8	166.2	569.2	370.1	259.3
97.5°	58.1	184.1	749.6	722.2	620.0
100°	77.8	195.2	849.0	896.2	812.1
102.5°	96.4	205.3	914.5	1041.1	991.2
105°	128.3	221.7	965.0	1248.6	1232.6
107.5°	159.7	241.1	935.3	1414.9	1452.6
110°	181.5	257.6	887.2	1486.7	1557.4



TEST NUMBER: P521586

CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	203.4	274.1	844.6	1504.2	1625.1
115°	234.8	300.2	775.3	1469.8	1639.3
117.5°	265.9	327.6	734.6	1390.8	1589.3
120°	286.6	344.0	708.4	1328.7	1536.9
122.5°	308.5	361.6	692.0	1265.3	1470.3
125°	334.4	385.1	672.9	1168.9	1373.1
127.5°	360.1	407.9	659.5	1087.3	1266.7
130°	375.4	422.1	655.2	1030.4	1206.6
132.5°	389.6	438.4	648.6	989.4	1138.9
135°	410.9	458.9	645.6	921.8	1060.6
137.5°	431.1	479.4	636.1	875.9	980.6
140°	446.3	490.4	636.1	843.0	939.1
142.5°	461.6	505.7	630.6	814.3	895.4
145°	485.9	522.0	633.3	783.5	844.9
147.5°	508.6	543.5	631.7	748.1	798.8
150°	522.8	553.5	636.1	732.5	772.6
152.5°	538.1	567.7	635.0	716.0	751.8
155°	556.9	580.9	641.5	694.0	719.3
157.5°	579.6	600.1	640.2	685.5	700.5
160°	588.3	605.6	645.6	674.5	685.2
162.5°	602.5	617.7	643.4	671.2	677.6
165°	615.6	624.9	649.7	659.5	668.8
167.5°	631.7	637.8	648.1	658.7	659.0
170°	636.1	640.1	652.4	651.2	657.9
172.5°	643.7	646.6	649.2	652.1	648.1
175°	651.1	648.4	651.1	645.6	644.3
177.5°	649.7	649.7	647.5	645.2	639.9
180°	644.3	644.3	644.3	644.3	644.3

(END OF REPORT)