

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: P521582

Luminaire Tested: **SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521582  
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 (3000K)  
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 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

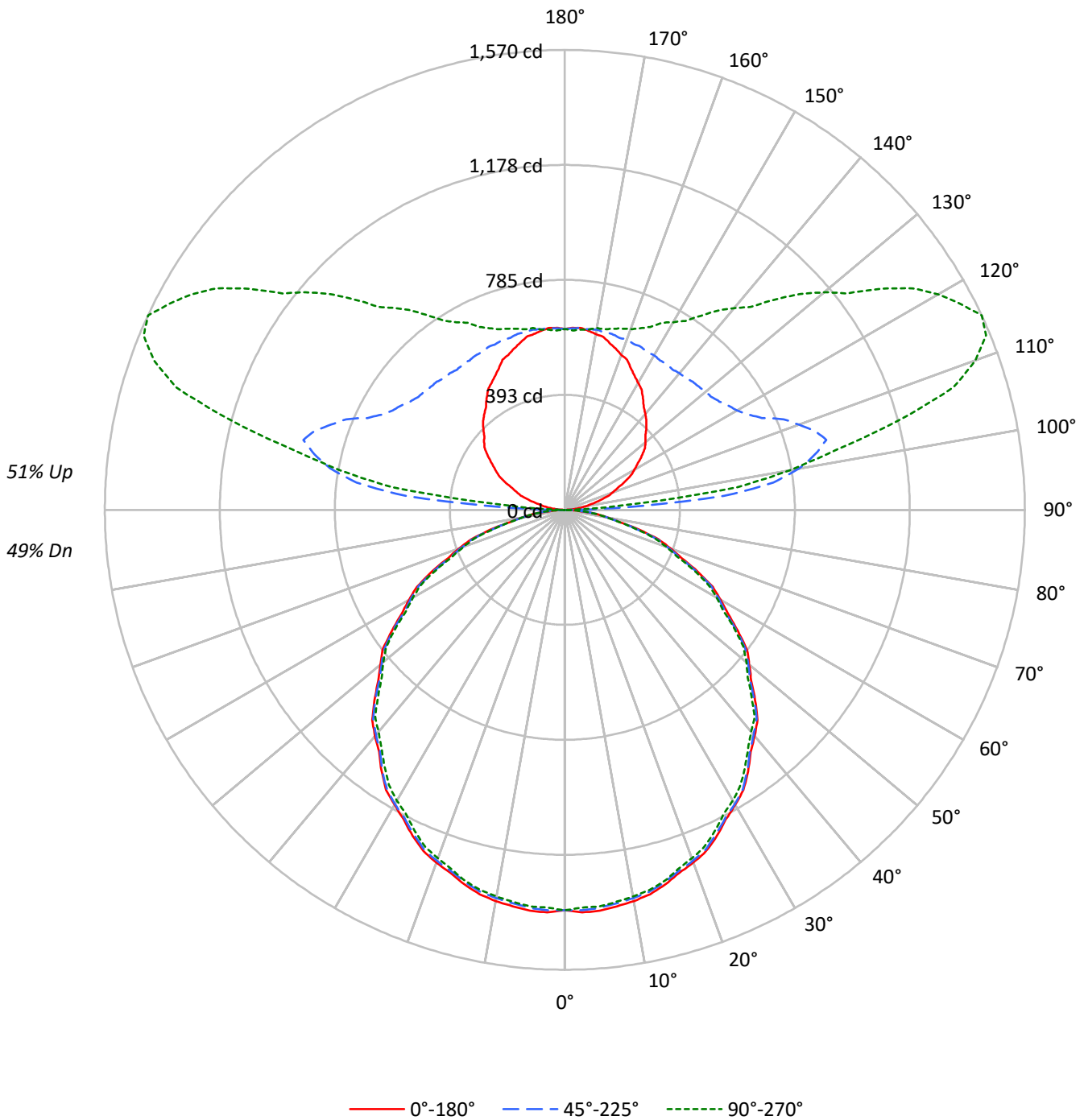
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7896.3 lumens  
Efficiency: N/A  
Efficacy: 105.6 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): 74.8  
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: P521582  
CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (3000K)

### Luminous Intensity Polar Plot





TEST NUMBER: P521582

CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (3000K)

**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°	12610	12610	12610
5°	12722	12632	12586
10°	12704	12612	12557
15°	12644	12568	12531
20°	12582	12524	12428
25°	12506	12436	12326
30°	12387	12356	12210
35°	12278	12234	12080
40°	12137	12078	11913
45°	11983	11919	11753
50°	11788	11718	11605
55°	11585	11474	11348
60°	11317	11190	11027
65°	10946	10732	10540
70°	10324	10083	9900
75°	9407	9094	8919
80°	7715	7715	7715
85°	5505	6235	6542



TEST NUMBER: P521582

CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (3000K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.4	1.6
10°-20°	370.6	4.7
20°-30°	560.6	7.1
30°-40°	675.1	8.6
40°-50°	701.1	8.9
50°-60°	636.3	8.1
60°-70°	485.5	6.1
70°-80°	271.4	3.4
80°-90°	70.7	0.9
90°-100°	318.1	4.0
100°-110°	768.8	9.7
110°-120°	820.0	10.4
120°-130°	664.1	8.4
130°-140°	514.2	6.5
140°-150°	392.3	5.0
150°-160°	283.9	3.6
160°-170°	174.9	2.2
170°-180°	59.2	0.7
0°-30°	1060.6	13.4
0°-40°	1735.7	22.0
0°-60°	3073.2	38.9
0°-90°	3900.7	49.4
90°-120°	1906.9	24.1
90°-150°	3477.5	44.0
90°-180°	3996.0	50.6
0°-180°	7896.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1367	1367	1367	1367	1367	
5°	1374	1359	1364	1361	1359	130
15°	1324	1310	1316	1312	1312	373
25°	1228	1216	1222	1211	1211	566
35°	1090	1080	1086	1072	1072	681
45°	918	912	914	901	901	708
55°	720	718	713	706	706	644
65°	501	498	492	485	483	495
75°	264	260	255	251	250	277
85°	52	57	59	60	62	64
90°	0	0	0	0	0	3
95°	31	159	545	354	248	35
105°	123	212	924	1196	1180	130
115°	225	287	742	1407	1570	222
125°	320	369	644	1119	1315	286
135°	393	439	618	883	1016	304
145°	465	500	606	750	809	291
155°	533	556	614	664	689	246
165°	590	598	622	632	640	166
175°	623	621	623	618	617	59
180°	617	617	617	617	617	

TEST NUMBER: P521582

CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (3000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1366.8	1366.8	1366.8	1366.8	1366.8
2.5°	1375.5	1363.9	1367.6	1365.9	1359.0
5°	1373.7	1359.3	1363.9	1360.9	1359.0
7.5°	1364.7	1350.3	1354.9	1350.9	1349.8
10°	1356.0	1341.6	1346.2	1342.3	1340.3
12.5°	1344.3	1330.6	1335.2	1330.5	1330.1
15°	1323.7	1310.2	1315.8	1311.9	1311.9
17.5°	1299.5	1287.0	1292.8	1287.1	1286.2
20°	1281.5	1269.0	1275.6	1266.7	1265.8
22.5°	1261.1	1249.3	1255.2	1244.8	1245.4
25°	1228.5	1216.0	1221.6	1210.8	1210.8
27.5°	1191.0	1178.7	1185.7	1172.7	1172.0
30°	1162.7	1151.2	1159.8	1146.1	1146.1
32.5°	1134.5	1124.5	1130.7	1117.7	1115.4
35°	1090.1	1080.5	1086.2	1072.5	1072.5
37.5°	1041.5	1033.6	1036.6	1023.9	1026.7
40°	1007.7	999.1	1002.8	990.0	989.1
42.5°	973.2	965.3	968.3	955.6	958.4
45°	918.4	911.7	913.5	900.8	900.8
47.5°	862.9	857.9	856.4	845.1	847.0
50°	821.3	819.4	816.4	806.6	808.5
52.5°	783.6	779.4	775.5	766.5	767.7
55°	720.2	718.3	713.3	705.5	705.5
57.5°	659.6	655.3	649.6	641.5	641.5
60°	613.3	611.3	606.4	597.6	597.6
62.5°	569.3	566.6	560.9	552.8	552.0
65°	501.4	497.6	491.6	484.7	482.8
67.5°	430.6	426.5	421.7	415.2	414.1
70°	382.7	377.9	373.8	368.9	367.0
72.5°	334.0	331.5	326.7	321.8	320.7
75°	263.9	260.1	255.1	251.2	250.2
77.5°	190.0	189.4	187.6	185.1	186.0
80°	145.2	146.2	145.2	144.3	145.2
82.5°	105.2	107.7	107.5	107.4	108.3
85°	52.0	56.8	58.9	59.9	61.8
87.5°	14.9	19.5	23.5	24.4	25.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.5	86.1	202.8	98.6	66.9
95°	31.4	159.2	545.0	354.4	248.3
97.5°	55.7	176.3	717.8	691.5	593.6
100°	74.5	187.0	812.9	858.2	777.7
102.5°	92.3	196.6	875.7	996.9	949.1
105°	122.9	212.3	924.0	1195.6	1180.2
107.5°	152.9	230.9	895.6	1354.9	1390.9
110°	173.8	246.7	849.5	1423.5	1491.3



TEST NUMBER: P521582

CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (3000K)

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	194.7	262.5	808.8	1440.3	1556.1
115°	224.8	287.4	742.4	1407.4	1569.7
117.5°	254.6	313.6	703.4	1331.7	1521.9
120°	274.5	329.4	678.3	1272.3	1471.7
122.5°	295.4	346.2	662.6	1211.6	1407.9
125°	320.2	368.8	644.3	1119.3	1314.8
127.5°	344.8	390.5	631.5	1041.1	1212.9
130°	359.4	404.2	627.4	986.7	1155.4
132.5°	373.0	419.8	621.1	947.4	1090.6
135°	393.4	439.4	618.2	882.6	1015.5
137.5°	412.7	459.0	609.1	838.8	938.9
140°	427.4	469.6	609.1	807.2	899.2
142.5°	442.0	484.2	603.8	779.7	857.4
145°	465.3	499.8	606.4	750.2	809.0
147.5°	487.0	520.5	604.9	716.3	764.9
150°	500.6	530.0	609.1	701.4	739.8
152.5°	515.2	543.6	608.0	685.6	719.9
155°	533.3	556.3	614.3	664.5	688.8
157.5°	554.9	574.6	613.0	656.4	670.7
160°	563.3	579.9	618.2	645.9	656.1
162.5°	576.9	591.5	616.1	642.7	648.8
165°	589.5	598.4	622.1	631.5	640.4
167.5°	604.9	610.8	620.6	630.8	631.0
170°	609.1	612.9	624.7	623.6	630.0
172.5°	616.4	619.2	621.6	624.4	620.6
175°	623.4	620.9	623.4	618.2	616.9
177.5°	622.1	622.1	620.0	617.8	612.7
180°	616.9	616.9	616.9	616.9	616.9

(END OF REPORT)