

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: P521596

Luminaire Tested: **SQ4-F-100U-125D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521596  
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-125D-93050-1D-UNV-STD-W-4 (3500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

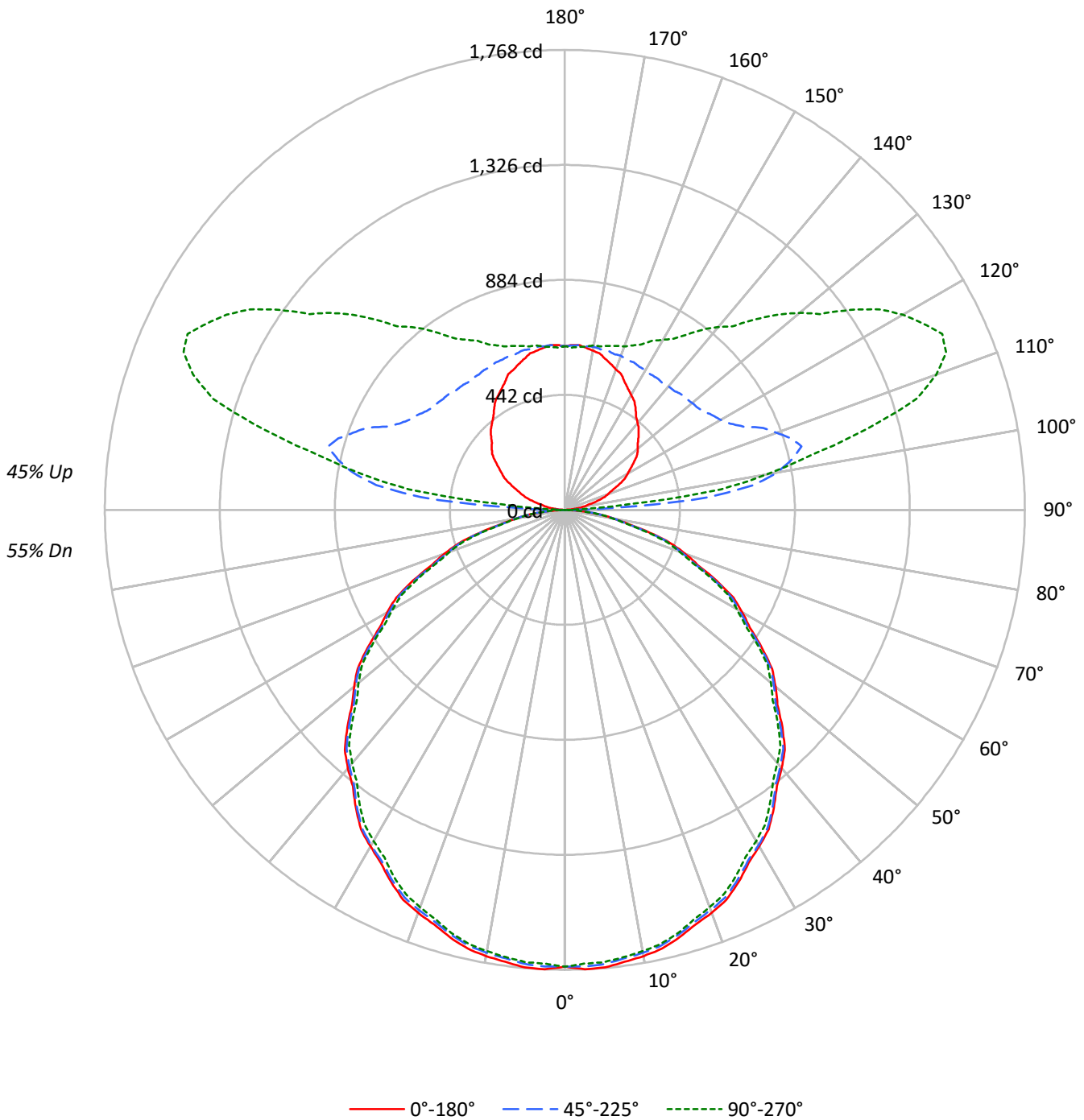
Lumens per Lamp: N/A  
Luminaire Lumens: 9076.0 lumens  
Efficiency: N/A  
Efficacy: 103.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 87.9  
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

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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	50	30	10	0	
RCR																						
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55				
1	99	94	90	87	92	88	84	81	75	73	71	64	62	61	54	52	51	46				
2	90	82	76	71	83	77	71	66	66	62	58	56	53	50	47	45	43	38				
3	82	72	65	59	76	67	61	55	58	53	49	49	46	42	41	39	36	32				
4	75	64	56	49	69	59	52	47	51	46	41	44	40	36	37	34	31	27				
5	69	57	48	42	63	53	46	40	46	40	36	39	35	31	33	30	27	24				
6	63	51	42	37	58	47	40	35	41	35	31	35	31	27	30	26	24	21				
7	58	46	38	32	54	43	36	30	37	31	27	32	27	24	27	24	21	18				
8	54	42	34	28	50	39	32	27	34	28	24	29	25	21	25	21	19	16				
9	50	38	30	25	47	36	29	24	31	26	22	27	22	19	23	19	17	15				
10	47	35	27	23	44	33	26	21	29	23	19	25	20	17	21	18	15	13				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	16201	16201	16201
5°	16356	16235	16161
10°	16320	16198	16142
15°	16257	16152	16085
20°	16190	16082	15965
25°	16074	15983	15830
30°	15916	15863	15661
35°	15768	15690	15498
40°	15621	15513	15308
45°	15423	15292	15096
50°	15172	15057	14841
55°	14879	14734	14541
60°	14522	14319	14079
65°	14037	13754	13492
70°	13218	12894	12652
75°	12049	11692	11443
80°	9936	9882	9670
85°	7093	8045	8045



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.2	1.8
10°-20°	476.1	5.2
20°-30°	720.0	7.9
30°-40°	866.9	9.6
40°-50°	900.2	9.9
50°-60°	815.8	9.0
60°-70°	621.3	6.8
70°-80°	347.2	3.8
80°-90°	90.3	1.0
90°-100°	324.2	3.6
100°-110°	783.5	8.6
110°-120°	835.7	9.2
120°-130°	676.8	7.5
130°-140°	524.0	5.8
140°-150°	399.8	4.4
150°-160°	289.4	3.2
160°-170°	178.2	2.0
170°-180°	60.4	0.7
0°-30°	1362.3	15.0
0°-40°	2229.2	24.6
0°-60°	3945.1	43.5
0°-90°	5003.9	55.1
90°-120°	1943.4	21.4
90°-150°	3544.1	39.0
90°-180°	4072.0	44.9
0°-180°	9076.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1756	1756	1756	1756	1756	
5°	1766	1747	1753	1746	1745	168
15°	1702	1684	1691	1687	1684	480
25°	1579	1561	1570	1556	1555	727
35°	1400	1387	1393	1377	1376	876
45°	1182	1172	1172	1157	1157	911
55°	925	921	916	904	904	826
65°	643	636	630	619	618	634
75°	338	330	328	323	321	356
85°	67	73	76	77	76	83
90°	0	0	0	0	0	4
95°	32	162	556	361	253	36
105°	125	216	942	1218	1203	132
115°	229	293	757	1434	1600	227
125°	326	376	657	1141	1340	291
135°	401	448	630	900	1035	310
145°	474	509	618	765	824	296
155°	544	567	626	677	702	251
165°	601	610	634	644	653	170
175°	635	633	635	630	629	60
180°	629	629	629	629	629	



TEST NUMBER: P521596

CATALOG NUMBER: SQ4-F-100U-125D-93050-1D-UNV-STD-W-4 (3500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1756.0	1756.0	1756.0	1756.0	1756.0
2.5°	1768.0	1752.4	1756.8	1753.4	1746.4
5°	1766.0	1747.4	1753.0	1746.0	1745.0
7.5°	1752.4	1733.8	1739.4	1735.2	1734.2
10°	1742.0	1723.4	1729.0	1724.0	1723.0
12.5°	1727.6	1709.8	1715.4	1709.6	1708.6
15°	1702.0	1684.4	1691.0	1686.9	1684.0
17.5°	1670.6	1652.6	1660.4	1654.3	1650.8
20°	1649.0	1629.4	1638.0	1628.0	1626.0
22.5°	1622.6	1603.0	1611.6	1599.2	1598.8
25°	1579.0	1561.4	1570.0	1556.0	1555.0
27.5°	1530.0	1513.6	1522.6	1505.6	1504.4
30°	1494.0	1478.4	1489.0	1472.0	1470.0
32.5°	1457.2	1443.9	1450.6	1435.9	1433.2
35°	1400.0	1387.3	1393.0	1377.0	1376.0
37.5°	1338.6	1325.9	1331.2	1316.0	1314.2
40°	1297.0	1284.3	1288.0	1272.0	1271.0
42.5°	1251.4	1241.0	1243.2	1226.4	1227.0
45°	1182.0	1172.2	1172.0	1157.0	1157.0
47.5°	1108.2	1098.4	1098.6	1084.8	1083.6
50°	1057.0	1051.1	1049.0	1036.0	1034.0
52.5°	1004.2	999.9	996.2	983.2	982.8
55°	925.0	921.1	916.0	904.0	904.0
57.5°	843.8	839.3	832.8	820.8	819.8
60°	787.0	784.1	776.0	764.0	763.0
62.5°	730.2	724.9	718.4	707.2	706.2
65°	643.0	636.2	630.0	619.0	618.0
67.5°	552.4	544.8	539.6	531.9	529.0
70°	490.0	483.2	478.0	471.9	469.0
72.5°	427.6	421.5	418.0	411.9	409.0
75°	338.0	330.2	328.0	323.0	321.0
77.5°	247.0	243.1	241.2	237.5	234.8
80°	187.0	187.0	186.0	184.0	182.0
82.5°	135.0	136.6	138.0	137.6	135.6
85°	67.0	72.9	76.0	77.0	76.0
87.5°	19.2	25.5	30.4	31.2	30.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.7	87.8	206.7	100.5	68.2
95°	32.0	162.2	555.5	361.2	253.1
97.5°	56.7	179.7	731.5	704.8	605.0
100°	75.9	190.5	828.5	874.6	792.6
102.5°	94.0	200.3	892.5	1016.0	967.3
105°	125.2	216.4	941.7	1218.4	1202.8
107.5°	155.8	235.3	912.7	1380.8	1417.5
110°	177.2	251.4	865.8	1450.8	1519.8

TEST NUMBER: P521596

CATALOG NUMBER: SQ4-F-100U-125D-93050-1D-UNV-STD-W-4 (3500K)

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	198.5	267.5	824.3	1467.9	1585.9
115°	229.1	292.9	756.6	1434.3	1599.8
117.5°	259.5	319.6	716.9	1357.2	1551.0
120°	279.7	335.7	691.3	1296.7	1499.9
122.5°	301.0	352.9	675.3	1234.8	1434.9
125°	326.3	375.8	656.7	1140.7	1340.0
127.5°	351.4	398.0	643.6	1061.1	1236.1
130°	366.3	411.9	639.4	1005.6	1177.5
132.5°	380.2	427.8	633.0	965.6	1111.4
135°	400.9	447.8	630.0	899.5	1035.0
137.5°	420.7	467.8	620.7	854.8	956.9
140°	435.6	478.6	620.7	822.7	916.4
142.5°	450.5	493.5	615.4	794.6	873.8
145°	474.2	509.4	618.1	764.6	824.5
147.5°	496.3	530.4	616.5	730.0	779.5
150°	510.2	540.1	620.7	714.9	753.9
152.5°	525.1	554.0	619.7	698.8	733.7
155°	543.5	566.9	626.0	677.2	702.0
157.5°	565.6	585.6	624.7	669.0	683.6
160°	574.1	591.0	630.0	658.3	668.7
162.5°	588.0	602.8	627.9	655.0	661.2
165°	600.7	609.9	634.0	643.6	652.7
167.5°	616.5	622.4	632.4	642.8	643.1
170°	620.7	624.6	636.7	635.5	642.0
172.5°	628.2	631.0	633.5	636.4	632.4
175°	635.4	632.8	635.4	630.0	628.7
177.5°	634.0	634.0	631.9	629.7	624.5
180°	628.7	628.7	628.7	628.7	628.7

(END OF REPORT)