

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: P521702

Luminaire Tested: **SQ4-F-150U-125D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521702  
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-150U-125D-93050-1D-UNV-STD-W-4 (4500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

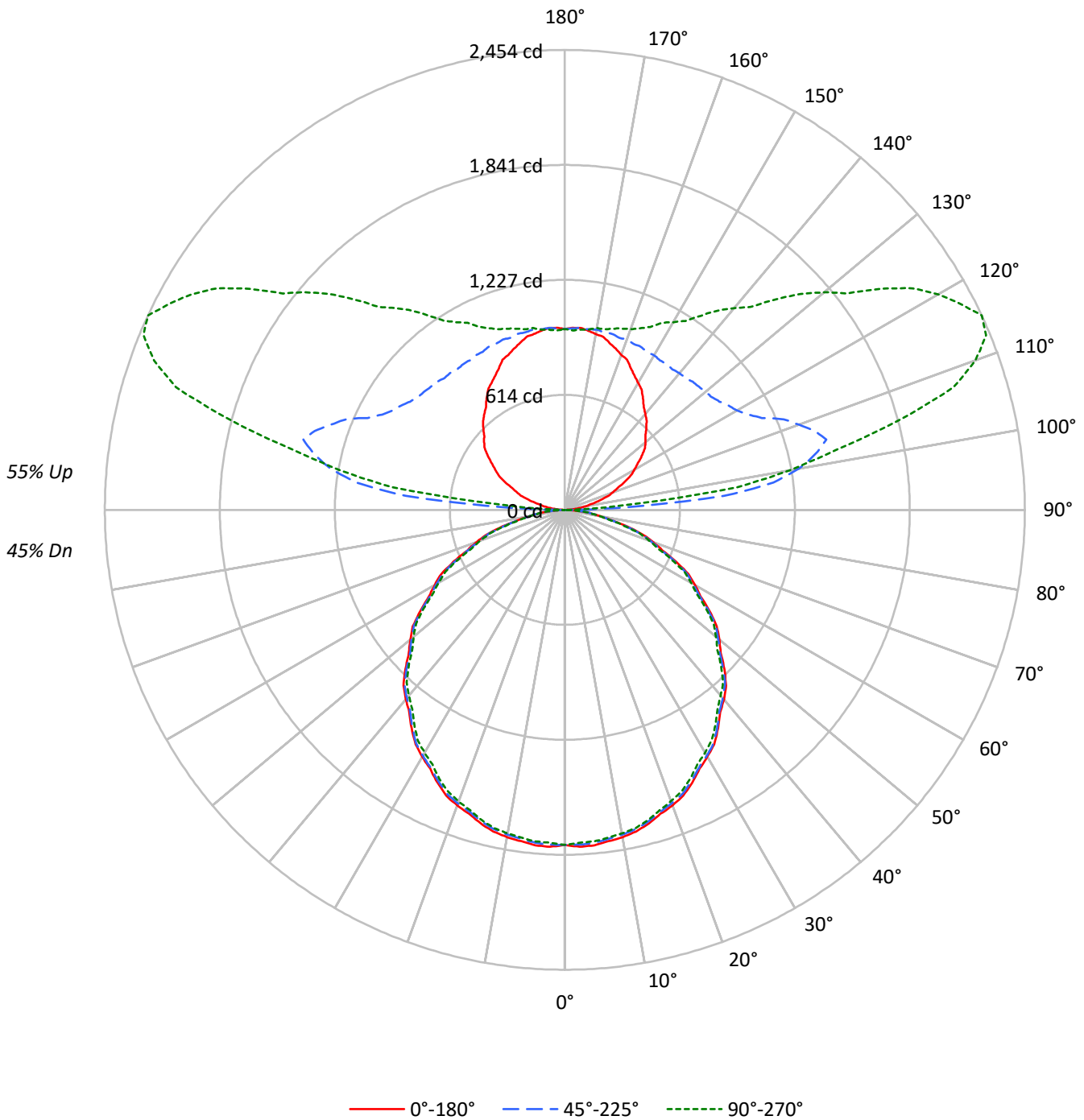
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11338.4 lumens  
Efficiency: N/A  
Efficacy: 106.6 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): 106.4  
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

TEST NUMBER: P521702  
CATALOG NUMBER: SQ4-F-150U-125D-93050-1D-UNV-STD-W-4 (4500K)

### Luminous Intensity Polar Plot





TEST NUMBER: P521702

CATALOG NUMBER: SQ4-F-150U-125D-93050-1D-UNV-STD-W-4 (4500K)

**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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	97	92	88	85	88	85	81	78	70	68	66	57	56	54	45	44	43	38
2	88	80	74	69	80	74	68	64	61	58	54	50	47	45	40	38	36	31
3	80	70	63	57	73	65	58	53	54	49	45	44	41	38	35	33	31	26
4	73	62	54	48	67	57	50	45	48	43	39	39	35	32	31	28	26	22
5	67	55	47	41	61	51	44	38	43	37	33	35	31	28	28	25	23	19
6	62	49	41	36	56	46	38	33	38	33	29	32	27	24	25	22	20	17
7	57	45	37	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15
8	53	40	33	27	48	37	30	26	32	26	22	26	22	19	21	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	19	16	14	12
10	46	34	26	22	42	31	25	20	27	21	18	22	18	15	18	15	13	11

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

	0°	45°	90°
0°	16489	16489	16489
5°	16647	16524	16448
10°	16610	16486	16429
15°	16546	16439	16371
20°	16478	16368	16248
25°	16360	16267	16112
30°	16200	16145	15939
35°	16049	15969	15774
40°	15899	15788	15580
45°	15697	15563	15365
50°	15441	15325	15106
55°	15144	14996	14800
60°	14780	14574	14330
65°	14286	13998	13732
70°	13453	13124	12875
75°	12263	11899	11646
80°	10111	10058	9840
85°	7220	8193	8193



TEST NUMBER: P521702

CATALOG NUMBER: SQ4-F-150U-125D-93050-1D-UNV-STD-W-4 (4500K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.2	1.5
10°-20°	484.6	4.3
20°-30°	732.8	6.5
30°-40°	882.3	7.8
40°-50°	916.2	8.1
50°-60°	830.3	7.3
60°-70°	632.3	5.6
70°-80°	353.4	3.1
80°-90°	91.9	0.8
90°-100°	497.2	4.4
100°-110°	1201.7	10.6
110°-120°	1281.7	11.3
120°-130°	1038.1	9.2
130°-140°	803.7	7.1
140°-150°	613.1	5.4
150°-160°	443.8	3.9
160°-170°	273.4	2.4
170°-180°	92.6	0.8
0°-30°	1386.6	12.2
0°-40°	2268.8	20.0
0°-60°	4015.3	35.4
0°-90°	5092.9	44.9
90°-120°	2980.7	26.3
90°-150°	5435.7	47.9
90°-180°	6245.0	55.1
0°-180°	11338.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1787	1787	1787	1787	1787	
5°	1797	1778	1784	1777	1776	171
15°	1732	1714	1721	1717	1714	489
25°	1607	1589	1598	1584	1583	740
35°	1425	1412	1418	1402	1400	891
45°	1203	1193	1193	1178	1178	927
55°	942	938	932	920	920	841
65°	654	648	641	630	629	646
75°	344	336	334	329	327	362
85°	68	74	77	78	77	84
90°	0	0	0	0	0	5
95°	49	249	852	554	388	55
105°	192	332	1444	1869	1845	203
115°	351	449	1160	2200	2454	347
125°	500	576	1007	1750	2055	447
135°	615	687	966	1380	1587	475
145°	727	781	948	1173	1265	455
155°	834	870	960	1039	1077	385
165°	921	935	972	987	1001	260
175°	974	970	974	966	964	92
180°	964	964	964	964	964	

TEST NUMBER: P521702

CATALOG NUMBER: SQ4-F-150U-125D-93050-1D-UNV-STD-W-4 (4500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1787.2	1787.2	1787.2	1787.2	1787.2
2.5°	1799.4	1783.5	1788.0	1784.6	1777.5
5°	1797.4	1778.5	1784.2	1777.0	1776.0
7.5°	1783.6	1764.7	1770.3	1766.0	1765.0
10°	1773.0	1754.1	1759.7	1754.6	1753.6
12.5°	1758.3	1740.2	1745.9	1740.0	1739.0
15°	1732.3	1714.4	1721.1	1716.9	1713.9
17.5°	1700.3	1682.0	1689.9	1683.7	1680.2
20°	1678.3	1658.4	1667.1	1656.9	1654.9
22.5°	1651.5	1631.6	1640.3	1627.6	1627.2
25°	1607.1	1589.2	1597.9	1583.6	1582.7
27.5°	1557.2	1540.5	1549.7	1532.3	1531.2
30°	1520.6	1504.6	1515.5	1498.1	1496.1
32.5°	1483.1	1469.6	1476.4	1461.5	1458.7
35°	1424.9	1412.0	1417.8	1401.5	1400.5
37.5°	1362.4	1349.5	1354.9	1339.4	1337.6
40°	1320.1	1307.1	1310.9	1294.6	1293.6
42.5°	1273.7	1263.1	1265.3	1248.2	1248.8
45°	1203.0	1193.1	1192.8	1177.6	1177.6
47.5°	1127.9	1118.0	1118.1	1104.1	1102.9
50°	1075.8	1069.8	1067.7	1054.4	1052.4
52.5°	1022.1	1017.7	1013.9	1000.7	1000.3
55°	941.5	937.5	932.3	920.1	920.1
57.5°	858.8	854.2	847.6	835.4	834.4
60°	801.0	798.0	789.8	777.6	776.6
62.5°	743.2	737.8	731.2	719.8	718.8
65°	654.4	647.5	641.2	630.0	629.0
67.5°	562.2	554.5	549.2	541.4	538.4
70°	498.7	491.7	486.5	480.3	477.3
72.5°	435.2	429.0	425.4	419.3	416.3
75°	344.0	336.0	333.8	328.7	326.7
77.5°	251.4	247.4	245.5	241.8	239.0
80°	190.3	190.3	189.3	187.2	185.2
82.5°	137.4	139.0	140.5	140.0	138.0
85°	68.2	74.2	77.4	78.3	77.4
87.5°	19.5	25.9	30.9	31.7	30.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.3	134.6	317.1	154.1	104.6
95°	49.0	248.8	851.9	554.0	388.2
97.5°	87.0	275.6	1122.0	1080.9	927.9
100°	116.4	292.2	1270.7	1341.4	1215.6
102.5°	144.2	307.2	1368.8	1558.3	1483.6
105°	192.0	331.9	1444.4	1868.8	1844.8
107.5°	239.0	360.9	1399.8	2117.8	2174.1
110°	271.7	385.6	1327.9	2225.2	2331.0



TEST NUMBER: P521702

CATALOG NUMBER: SQ4-F-150U-125D-93050-1D-UNV-STD-W-4 (4500K)

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	304.4	410.3	1264.2	2251.4	2432.4
115°	351.4	449.3	1160.4	2199.9	2453.6
117.5°	398.0	490.3	1099.5	2081.6	2378.8
120°	429.0	514.9	1060.3	1988.8	2300.4
122.5°	461.7	541.2	1035.8	1893.9	2200.7
125°	500.5	576.4	1007.2	1749.6	2055.2
127.5°	538.9	610.4	987.2	1627.4	1895.9
130°	561.8	631.7	980.6	1542.3	1806.0
132.5°	583.1	656.2	970.8	1480.9	1704.7
135°	614.9	686.8	966.3	1379.6	1587.4
137.5°	645.2	717.5	952.0	1311.1	1467.7
140°	668.1	734.0	952.0	1261.7	1405.6
142.5°	690.9	756.9	943.9	1218.7	1340.2
145°	727.3	781.2	947.9	1172.7	1264.6
147.5°	761.2	813.5	945.5	1119.6	1195.5
150°	782.5	828.4	952.0	1096.4	1156.3
152.5°	805.3	849.7	950.4	1071.7	1125.3
155°	833.5	869.5	960.2	1038.7	1076.6
157.5°	867.4	898.2	958.2	1026.1	1048.5
160°	880.5	906.5	966.3	1009.6	1025.6
162.5°	901.8	924.5	963.1	1004.5	1014.1
165°	921.4	935.4	972.5	987.1	1001.1
167.5°	945.5	954.7	970.0	985.9	986.3
170°	952.0	958.0	976.5	974.7	984.7
172.5°	963.5	967.9	971.6	976.0	970.0
175°	974.5	970.5	974.5	966.3	964.3
177.5°	972.5	972.5	969.2	965.7	957.7
180°	964.3	964.3	964.3	964.3	964.3

(END OF REPORT)