

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: P521688

Luminaire Tested: **SQ4-F-150U-100D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

**Test Information**

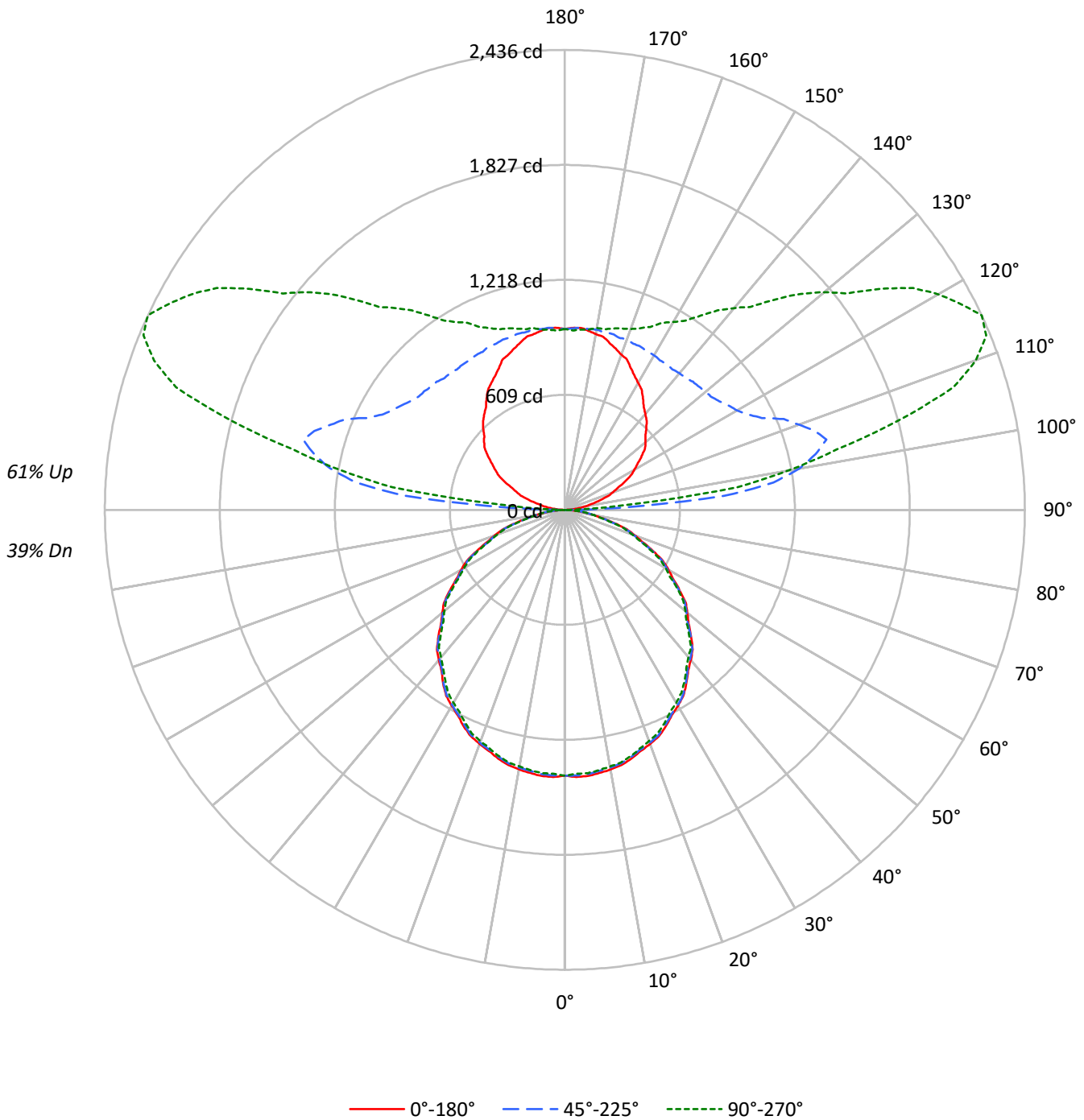
Test Method: LM-79-08  
Report Number: P521688  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-100D-93050-1D-UNV-STD-W-4 (4000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10219.4 lumens  
Efficiency: N/A  
Efficacy: 109.3 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: Semi-Indirect  
  
Input Watts (W): 93.5  
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	0
RCR																		
0	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	68	65	63	54	52	51	41	40	39	33
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	36	34	33	27
3	79	70	62	56	71	63	57	52	52	47	44	41	38	35	31	29	27	23
4	72	61	54	48	65	56	49	44	46	41	37	37	33	30	28	26	24	20
5	66	55	46	41	60	50	43	38	41	36	32	33	29	26	25	23	20	17
6	61	49	41	35	55	45	38	32	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	36	30	25	30	25	21	24	21	18	19	16	14	12
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	13	11	9

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

	0°	45°	90°
0°	12989	12989	12989
5°	13104	13010	12963
10°	13085	12990	12933
15°	13023	12945	12906
20°	12959	12899	12800
25°	12881	12808	12695
30°	12759	12727	12575
35°	12646	12601	12441
40°	12500	12440	12269
45°	12343	12277	12106
50°	12142	12070	11954
55°	11932	11818	11689
60°	11656	11525	11357
65°	11274	11053	10854
70°	10634	10388	10197
75°	9693	9368	9186
80°	7948	7948	7948
85°	5674	6415	6743



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.3	1.3
10°-20°	381.7	3.7
20°-30°	577.4	5.6
30°-40°	695.4	6.8
40°-50°	722.2	7.1
50°-60°	655.4	6.4
60°-70°	500.0	4.9
70°-80°	279.5	2.7
80°-90°	72.8	0.7
90°-100°	493.7	4.8
100°-110°	1193.3	11.7
110°-120°	1272.7	12.5
120°-130°	1030.8	10.1
130°-140°	798.1	7.8
140°-150°	608.8	6.0
150°-160°	440.7	4.3
160°-170°	271.4	2.7
170°-180°	91.9	0.9
0°-30°	1092.4	10.7
0°-40°	1787.7	17.5
0°-60°	3165.3	31.0
0°-90°	4017.7	39.3
90°-120°	2959.8	29.0
90°-150°	5397.5	52.8
90°-180°	6202.0	60.7
0°-180°	10219.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1408	1408	1408	1408	1408	
5°	1415	1400	1405	1402	1400	134
15°	1363	1350	1355	1351	1351	385
25°	1265	1252	1258	1247	1247	583
35°	1123	1113	1119	1105	1105	702
45°	946	939	941	928	928	730
55°	742	740	735	727	727	664
65°	516	512	506	499	497	509
75°	272	268	263	259	258	286
85°	54	58	61	62	64	66
90°	0	0	0	0	0	4
95°	49	247	846	550	385	55
105°	191	330	1434	1856	1832	201
115°	349	446	1152	2184	2436	345
125°	497	572	1000	1737	2041	443
135°	611	682	960	1370	1576	471
145°	722	776	941	1164	1256	451
155°	828	863	954	1031	1069	382
165°	915	929	966	980	994	258
175°	968	964	968	960	958	91
180°	958	958	958	958	958	

TEST NUMBER: P521688

CATALOG NUMBER: SQ4-F-150U-100D-93050-1D-UNV-STD-W-4 (4000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1407.8	1407.8	1407.8	1407.8	1407.8
2.5°	1416.7	1404.9	1408.6	1406.9	1399.7
5°	1414.9	1400.1	1404.8	1401.7	1399.7
7.5°	1405.6	1390.8	1395.5	1391.4	1390.2
10°	1396.7	1381.9	1386.6	1382.5	1380.5
12.5°	1384.6	1370.5	1375.3	1370.4	1370.0
15°	1363.4	1349.5	1355.3	1351.2	1351.2
17.5°	1338.5	1325.6	1331.6	1325.7	1324.7
20°	1319.9	1307.1	1313.8	1304.7	1303.7
22.5°	1298.9	1286.8	1292.8	1282.1	1282.7
25°	1265.3	1252.5	1258.2	1247.1	1247.1
27.5°	1226.7	1214.1	1221.3	1207.9	1207.1
30°	1197.6	1185.8	1194.6	1180.4	1180.4
32.5°	1168.5	1158.2	1164.7	1151.3	1148.9
35°	1122.8	1112.9	1118.8	1104.6	1104.6
37.5°	1072.7	1064.6	1067.6	1054.6	1057.5
40°	1037.9	1029.0	1032.9	1019.7	1018.7
42.5°	1002.4	994.3	997.3	984.2	987.2
45°	946.0	939.0	940.9	927.8	927.8
47.5°	888.8	883.6	882.1	870.4	872.4
50°	845.9	843.9	840.9	830.8	832.8
52.5°	807.1	802.8	798.8	789.5	790.7
55°	741.8	739.8	734.7	726.7	726.7
57.5°	679.4	675.0	669.0	660.8	660.8
60°	631.7	629.7	624.6	615.5	615.5
62.5°	586.4	583.6	577.7	569.4	568.6
65°	516.4	512.5	506.3	499.2	497.2
67.5°	443.5	439.3	434.4	427.7	426.5
70°	394.2	389.2	385.1	380.0	378.0
72.5°	344.0	341.5	336.5	331.5	330.3
75°	271.9	267.9	262.8	258.7	257.7
77.5°	195.7	195.1	193.2	190.6	191.6
80°	149.6	150.6	149.6	148.6	149.6
82.5°	108.3	110.9	110.8	110.6	111.6
85°	53.6	58.5	60.6	61.7	63.7
87.5°	15.4	20.1	24.3	25.1	25.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.2	133.7	314.8	153.1	103.9
95°	48.7	247.0	845.9	550.1	385.4
97.5°	86.4	273.7	1114.1	1073.3	921.4
100°	115.6	290.2	1261.8	1332.0	1207.0
102.5°	143.2	305.1	1359.2	1547.4	1473.2
105°	190.7	329.5	1434.2	1855.7	1831.9
107.5°	237.3	358.3	1390.0	2102.9	2158.9
110°	269.8	382.9	1318.6	2209.5	2314.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	302.3	407.4	1255.3	2235.6	2415.3
115°	348.9	446.1	1152.3	2184.5	2436.4
117.5°	395.2	486.8	1091.8	2067.0	2362.1
120°	426.0	511.3	1052.9	1974.8	2284.2
122.5°	458.5	537.4	1028.5	1880.6	2185.2
125°	497.0	572.4	1000.1	1737.3	2040.8
127.5°	535.2	606.2	980.2	1616.0	1882.6
130°	557.9	627.3	973.7	1531.5	1793.3
132.5°	579.0	651.6	964.0	1470.5	1692.7
135°	610.6	682.0	959.5	1370.0	1576.2
137.5°	640.6	712.4	945.3	1301.9	1457.4
140°	663.4	728.8	945.3	1252.9	1395.7
142.5°	686.1	751.5	937.2	1210.2	1330.8
145°	722.2	775.7	941.3	1164.5	1255.7
147.5°	755.9	807.8	938.9	1111.8	1187.2
150°	777.0	822.6	945.3	1088.7	1148.2
152.5°	799.7	843.7	943.7	1064.2	1117.4
155°	827.7	863.4	953.5	1031.4	1069.1
157.5°	861.4	891.9	951.4	1018.9	1041.1
160°	874.3	900.1	959.5	1002.5	1018.4
162.5°	895.4	918.1	956.3	997.5	1007.0
165°	914.9	928.8	965.6	980.1	994.0
167.5°	938.9	948.0	963.2	979.0	979.4
170°	945.3	951.3	969.7	967.9	977.8
172.5°	956.7	961.1	964.8	969.1	963.2
175°	967.7	963.7	967.7	959.5	957.5
177.5°	965.6	965.6	962.4	959.0	951.0
180°	957.5	957.5	957.5	957.5	957.5

(END OF REPORT)