

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P520432

Luminaire Tested: **SQ4-F-150U-100D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520432  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-100D-940-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

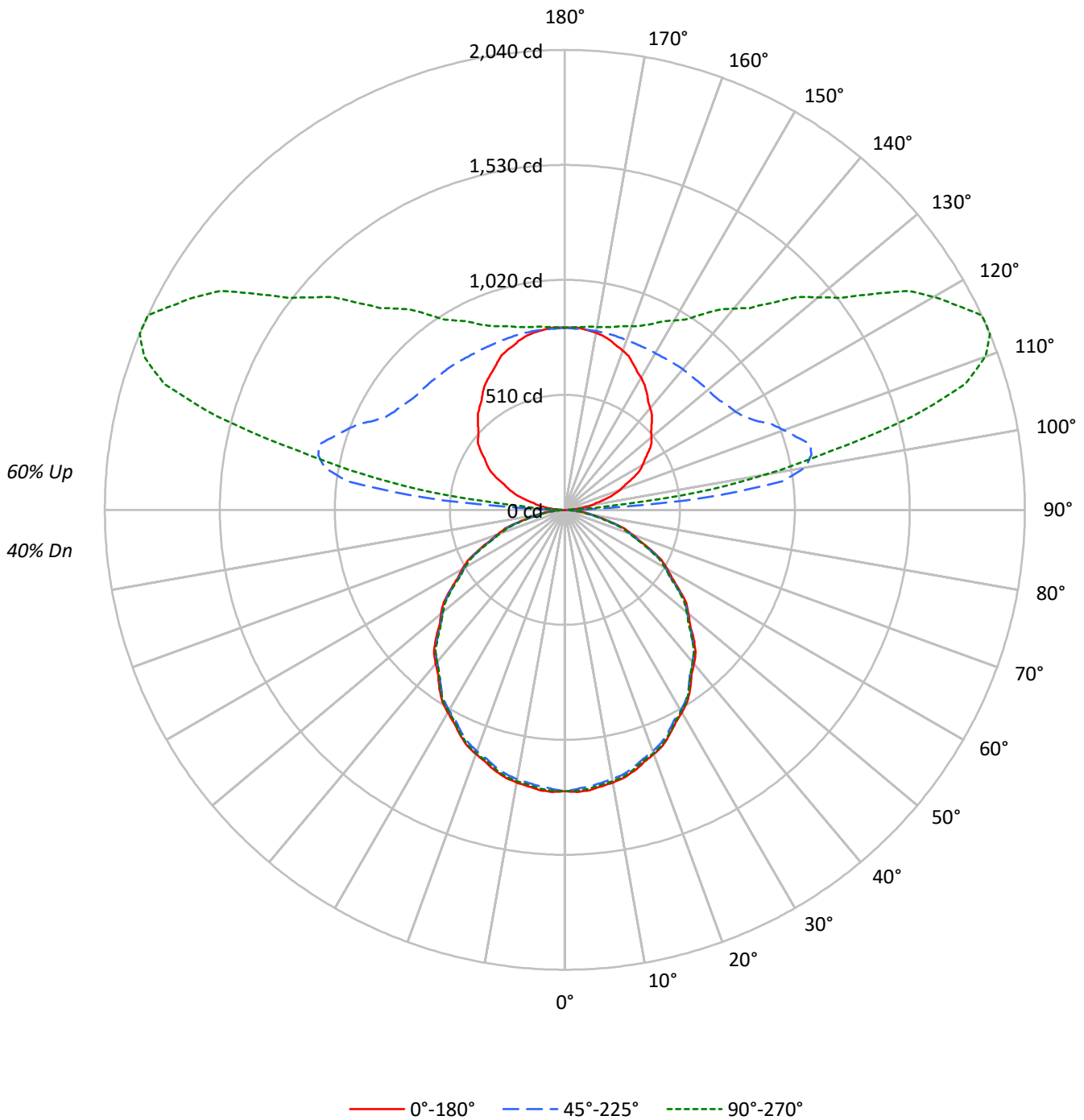
Lumens per Lamp: N/A  
Luminaire Lumens: 8613.1 lumens  
Efficiency: N/A  
Efficacy: 119.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 72.3  
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	78	78	78	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

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

	0°	45°	90°
0°	11513	11513	11513
5°	11566	11407	11494
10°	11507	11363	11451
15°	11437	11282	11372
20°	11320	11185	11278
25°	11196	11065	11153
30°	11060	10941	10995
35°	10921	10786	10844
40°	10738	10616	10625
45°	10550	10404	10370
50°	10278	10155	10131
55°	9976	9865	9796
60°	9673	9499	9466
65°	9200	8994	8920
70°	8551	8341	8179
75°	7632	7390	7236
80°	6280	6052	5781
85°	3716	4076	4171



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.8	1.4
10°-20°	335.4	3.9
20°-30°	503.7	5.8
30°-40°	601.1	7.0
40°-50°	616.2	7.2
50°-60°	548.7	6.4
60°-70°	409.0	4.7
70°-80°	221.5	2.6
80°-90°	52.1	0.6
90°-100°	375.4	4.4
100°-110°	1014.9	11.8
110°-120°	1067.0	12.4
120°-130°	866.7	10.1
130°-140°	679.9	7.9
140°-150°	521.8	6.1
150°-160°	375.3	4.4
160°-170°	229.3	2.7
170°-180°	77.3	0.9
0°-30°	956.9	11.1
0°-40°	1558.1	18.1
0°-60°	2722.9	31.6
0°-90°	3405.5	39.5
90°-120°	2457.3	28.5
90°-150°	4525.7	52.5
90°-180°	5208.0	60.5
0°-180°	8613.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1248	1248	1248	1248	1248	
5°	1249	1246	1232	1243	1241	118
15°	1197	1193	1181	1191	1191	337
25°	1100	1097	1087	1093	1096	507
35°	970	966	958	959	963	605
45°	809	804	797	793	795	622
55°	620	621	613	607	609	555
65°	421	420	412	408	409	417
75°	214	212	207	203	203	228
85°	35	38	38	39	39	49
90°	2	5	11	12	11	5
95°	58	204	624	323	192	61
105°	189	292	1126	1661	1593	199
115°	332	406	934	1808	2040	328
125°	455	521	842	1420	1668	405
135°	545	610	819	1147	1298	421
145°	634	682	808	982	1056	397
155°	716	744	801	880	909	330
165°	779	787	804	836	840	219
175°	809	808	805	816	814	77
180°	808	808	808	808	808	



TEST NUMBER: P520432

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1247.9	1247.9	1247.9	1247.9	1247.9
2.5°	1252.8	1250.1	1239.1	1247.9	1246.7
5°	1248.8	1246.4	1231.7	1242.8	1241.1
7.5°	1237.2	1234.7	1221.8	1232.0	1230.5
10°	1228.3	1225.7	1212.9	1223.2	1222.3
12.5°	1216.6	1214.2	1201.2	1211.5	1210.7
15°	1197.4	1193.2	1181.2	1190.6	1190.6
17.5°	1172.1	1168.9	1157.7	1165.6	1165.8
20°	1152.9	1150.4	1139.2	1147.8	1148.7
22.5°	1133.7	1131.2	1118.6	1126.6	1128.1
25°	1099.8	1097.3	1086.9	1093.0	1095.6
27.5°	1064.8	1061.2	1051.0	1056.3	1058.2
30°	1038.2	1036.5	1027.0	1029.7	1032.1
32.5°	1010.0	1008.4	1000.2	1001.6	1006.1
35°	969.6	965.5	957.6	959.4	962.8
37.5°	921.9	919.8	912.3	911.3	914.4
40°	891.6	888.3	881.4	879.8	882.2
42.5°	858.7	855.4	847.2	845.5	848.6
45°	808.6	804.3	797.4	793.2	794.8
47.5°	752.4	752.4	745.2	740.2	742.8
50°	716.1	716.1	707.5	703.3	705.8
52.5°	678.4	679.0	669.8	667.6	666.7
55°	620.2	620.9	613.3	607.4	609.0
57.5°	564.0	562.1	553.2	549.2	550.1
60°	524.2	521.7	514.8	508.9	513.0
62.5°	483.8	482.6	475.7	469.1	468.6
65°	421.4	419.7	412.0	407.7	408.6
67.5°	359.4	357.4	350.4	344.2	346.4
70°	317.0	317.0	309.2	305.8	303.2
72.5°	277.8	274.6	268.8	264.0	262.1
75°	214.1	211.6	207.3	203.0	203.0
77.5°	155.9	153.7	150.9	148.0	147.1
80°	118.2	117.4	113.9	113.0	108.8
82.5°	83.2	83.1	81.0	78.8	78.7
85°	35.1	38.4	38.5	39.4	39.4
87.5°	6.5	11.2	11.8	10.6	10.4
90°	1.7	5.1	11.3	12.2	11.3
92.5°	24.6	89.9	177.6	77.1	55.8
95°	58.2	204.5	624.2	323.0	192.1
97.5°	93.6	234.5	973.1	805.3	591.4
100°	120.0	246.7	1081.5	1128.0	912.0
102.5°	144.4	263.5	1119.9	1372.7	1211.1
105°	188.6	291.5	1125.9	1660.8	1592.8
107.5°	229.7	323.5	1076.7	1840.6	1863.2
110°	261.7	346.7	1032.8	1888.8	1984.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	290.2	369.8	992.5	1879.2	2040.5
115°	332.1	406.1	933.8	1807.7	2040.5
117.5°	373.1	442.5	895.0	1698.3	1962.3
120°	398.2	466.2	872.1	1619.8	1889.2
122.5°	421.8	488.5	858.1	1535.6	1807.3
125°	454.7	521.0	841.6	1420.3	1668.4
127.5°	485.0	550.1	831.9	1326.0	1544.3
130°	501.7	568.8	827.7	1267.7	1465.0
132.5°	519.1	585.5	823.5	1215.2	1396.8
135°	545.1	609.7	819.0	1146.7	1298.0
137.5°	571.4	632.5	815.2	1091.2	1214.4
140°	589.5	646.4	813.8	1055.4	1165.0
142.5°	606.9	660.4	811.0	1023.1	1119.2
145°	633.8	681.5	807.7	981.5	1056.4
147.5°	658.3	700.5	803.9	943.9	1001.5
150°	676.4	713.8	802.5	923.5	969.5
152.5°	693.1	725.7	801.8	904.6	942.3
155°	715.6	743.6	800.8	880.5	909.4
157.5°	738.9	758.4	801.0	863.7	882.9
160°	752.1	768.2	801.7	853.3	866.9
162.5°	762.5	775.9	802.3	844.8	855.0
165°	779.0	786.7	804.2	835.7	839.9
167.5°	790.3	795.6	804.4	827.7	829.8
170°	797.2	799.9	805.1	824.2	824.2
172.5°	802.9	803.4	805.1	820.1	819.4
175°	808.6	807.7	805.1	815.5	813.8
177.5°	810.5	808.4	804.9	811.8	809.8
180°	807.7	807.7	807.7	807.7	807.7

(END OF REPORT)