

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: P564482

Luminaire Tested: **SQ4-PR1-150U-100D-840-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564482  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PR1-150U-100D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

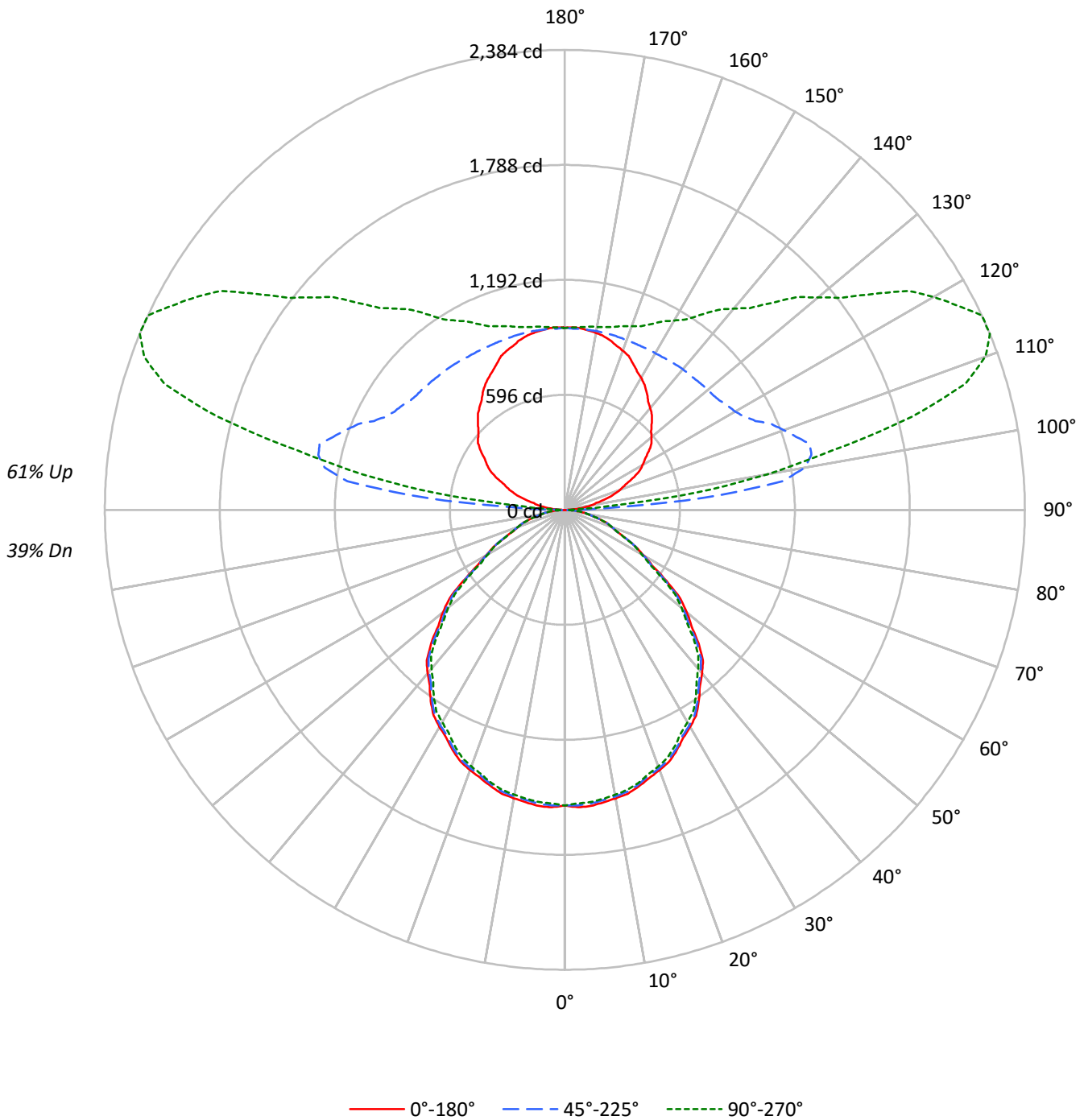
Lumens per Lamp: N/A  
Luminaire Lumens: 9919.6 lumens  
Efficiency: N/A  
Efficacy: 137.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	88	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	74	69	79	73	68	64	60	56	53	47	45	43	36	35	33	28
3	80	70	63	58	72	64	58	53	53	48	45	42	39	36	32	30	28	24
4	73	62	55	49	66	57	50	45	47	42	38	38	34	31	29	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	26	24	22	18
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16
7	57	45	37	32	52	41	34	30	34	29	25	28	24	21	22	19	17	14
8	53	41	33	28	48	37	31	26	31	26	22	25	22	19	20	17	15	13
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	18	16	14	11
10	46	34	27	22	42	31	25	21	26	21	18	21	18	15	17	14	12	10

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

	0°	45°	90°
0°	14147	14147	14147
5°	14274	14164	14090
10°	14229	14130	14056
15°	14166	14078	14003
20°	14095	14004	13901
25°	13995	13902	13740
30°	13844	13746	13549
35°	13641	13521	13328
40°	13329	13186	12947
45°	12786	12562	12304
50°	11829	11544	11316
55°	10325	10090	9878
60°	8700	8626	8457
65°	7525	7554	7497
70°	6911	6946	6946
75°	6638	6638	6684
80°	6243	6317	6243
85°	5028	5589	5589



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.0	1.5
10°-20°	414.9	4.2
20°-30°	625.7	6.3
30°-40°	745.6	7.5
40°-50°	735.0	7.4
50°-60°	561.8	5.7
60°-70°	347.6	3.5
70°-80°	197.4	2.0
80°-90°	62.0	0.6
90°-100°	438.6	4.4
100°-110°	1185.8	12.0
110°-120°	1246.8	12.6
120°-130°	1012.7	10.2
130°-140°	794.4	8.0
140°-150°	609.7	6.1
150°-160°	438.5	4.4
160°-170°	267.9	2.7
170°-180°	90.3	0.9
0°-30°	1185.6	12.0
0°-40°	1931.1	19.5
0°-60°	3227.9	32.5
0°-90°	3835.0	38.7
90°-120°	2871.2	28.9
90°-150°	5287.9	53.3
90°-180°	6085.0	61.3
0°-180°	9919.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1533	1533	1533	1533	1533	
5°	1541	1524	1529	1524	1521	146
15°	1483	1468	1474	1468	1466	419
25°	1375	1358	1366	1351	1350	633
35°	1211	1197	1200	1185	1183	756
45°	980	967	963	946	943	751
55°	642	632	627	617	614	575
65°	345	342	346	343	343	349
75°	186	186	186	188	188	197
85°	48	50	53	53	53	55
90°	2	6	13	14	13	6
95°	68	239	729	378	224	71
105°	220	341	1316	1940	1861	232
115°	388	474	1091	2112	2384	383
125°	531	609	983	1659	1949	474
135°	637	712	957	1340	1517	492
145°	741	796	944	1147	1234	463
155°	836	869	936	1029	1063	386
165°	910	919	940	976	981	256
175°	945	944	941	953	951	90
180°	944	944	944	944	944	

TEST NUMBER: P564482

CATALOG NUMBER: SQ4-PR1-150U-100D-840-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1533.3	1533.3	1533.3	1533.3	1533.3
2.5°	1542.8	1529.4	1533.3	1530.0	1522.7
5°	1541.2	1524.4	1529.3	1524.0	1521.4
7.5°	1529.3	1512.8	1517.7	1512.4	1510.9
10°	1518.8	1503.3	1508.2	1502.9	1500.3
12.5°	1507.2	1490.6	1496.6	1490.2	1487.6
15°	1483.1	1467.6	1473.9	1468.5	1466.0
17.5°	1456.7	1440.2	1446.4	1440.3	1436.9
20°	1435.6	1420.1	1426.3	1417.1	1415.8
22.5°	1412.3	1396.8	1403.1	1390.7	1390.4
25°	1374.8	1358.0	1365.6	1351.0	1349.7
27.5°	1330.2	1314.7	1320.9	1306.1	1304.6
30°	1299.5	1284.1	1290.3	1274.4	1271.8
32.5°	1264.7	1250.2	1255.4	1239.6	1238.0
35°	1211.1	1196.9	1200.5	1184.6	1183.3
37.5°	1150.0	1137.1	1139.2	1121.8	1120.5
40°	1106.7	1093.8	1094.8	1076.3	1075.0
42.5°	1059.2	1046.3	1045.2	1026.7	1025.4
45°	979.9	967.0	962.8	945.5	943.0
47.5°	889.6	876.7	868.7	854.7	852.9
50°	824.1	811.2	804.3	792.3	788.4
52.5°	753.3	740.4	734.6	723.6	719.8
55°	641.9	631.5	627.3	616.7	614.1
57.5°	535.9	529.0	527.7	517.4	516.4
60°	471.5	467.6	467.5	458.3	458.3
62.5°	416.5	413.7	415.8	409.7	408.6
65°	344.7	342.1	346.0	343.4	343.4
67.5°	287.9	287.9	290.3	289.2	289.2
70°	256.2	256.2	257.5	257.5	257.5
72.5°	227.7	226.7	230.1	230.0	229.0
75°	186.2	186.2	186.2	187.5	187.5
77.5°	145.0	145.3	146.3	146.0	145.0
80°	117.5	118.8	118.9	117.5	117.5
82.5°	90.1	91.4	91.4	91.1	90.1
85°	47.5	50.1	52.8	52.8	52.8
87.5°	14.1	19.1	23.8	23.9	22.7
90°	2.0	6.0	13.2	14.2	13.2
92.5°	28.9	105.1	207.4	90.0	65.2
95°	68.1	238.9	729.4	377.5	224.5
97.5°	109.3	274.0	1136.9	940.9	691.0
100°	140.2	288.2	1263.7	1317.9	1065.6
102.5°	168.6	307.9	1308.4	1603.8	1415.1
105°	220.4	340.6	1315.5	1940.5	1861.0
107.5°	268.4	378.0	1258.0	2150.6	2177.0
110°	305.8	405.1	1206.8	2207.0	2319.2

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CATALOG NUMBER: SQ4-PR1-150U-100D-840-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	339.1	432.1	1159.7	2195.7	2384.2
115°	388.1	474.5	1091.0	2112.1	2384.2
117.5°	436.0	517.1	1045.7	1984.3	2292.8
120°	465.3	544.7	1018.9	1892.6	2207.5
122.5°	492.9	570.8	1002.6	1794.3	2111.6
125°	531.3	608.8	983.3	1659.4	1949.4
127.5°	566.6	642.7	972.0	1549.3	1804.4
130°	586.1	664.6	967.1	1481.3	1711.7
132.5°	606.5	684.1	962.2	1419.9	1632.1
135°	636.9	712.4	956.9	1339.9	1516.7
137.5°	667.6	738.9	952.5	1274.9	1418.9
140°	688.7	755.3	950.8	1233.1	1361.2
142.5°	709.1	771.6	947.6	1195.4	1307.6
145°	740.6	796.2	943.7	1146.9	1234.3
147.5°	769.2	818.5	939.3	1102.9	1170.1
150°	790.3	834.0	937.6	1079.0	1132.7
152.5°	809.8	848.0	936.8	1056.9	1101.0
155°	836.0	868.8	935.6	1028.8	1062.6
157.5°	863.3	886.1	935.8	1009.2	1031.5
160°	878.7	897.6	936.6	996.9	1012.8
162.5°	890.9	906.6	937.4	987.1	999.0
165°	910.2	919.1	939.7	976.3	981.3
167.5°	923.4	929.6	939.9	967.1	969.5
170°	931.5	934.5	940.7	963.0	963.0
172.5°	938.0	938.6	940.7	958.1	957.3
175°	944.7	943.8	940.7	952.8	950.8
177.5°	947.0	944.6	940.5	948.6	946.2
180°	943.7	943.7	943.7	943.7	943.7

(END OF REPORT)