

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: P565167

Luminaire Tested: **SQ4-PW1-150U-100D-940-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P565167  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-150U-100D-940-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

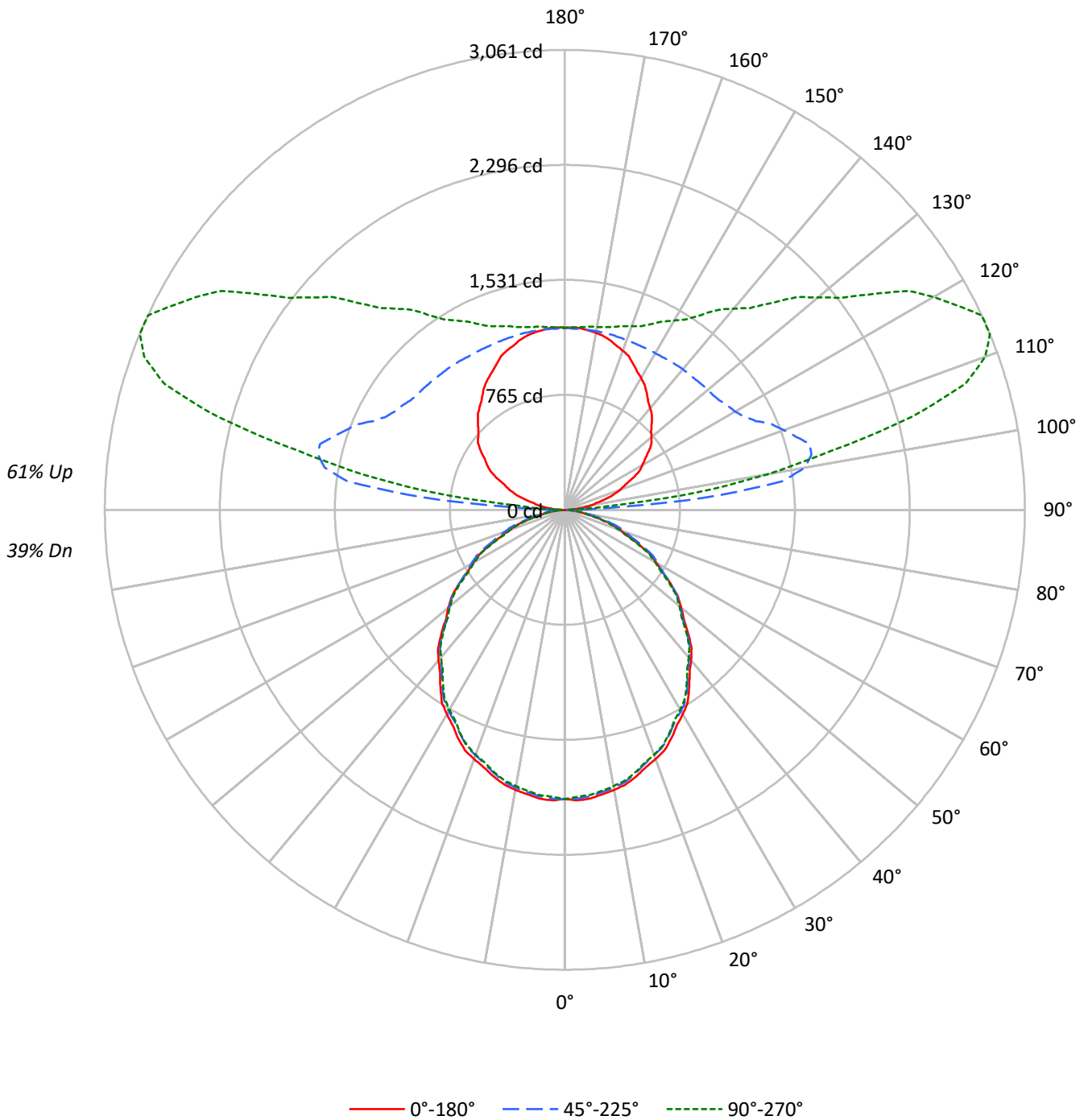
Lumens per Lamp: N/A  
Luminaire Lumens: 12710.1 lumens  
Efficiency: N/A  
Efficacy: 112.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 112.7  
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	87	84	86	83	80	77	68	65	63	53	52	51	40	39	39	33
2	87	80	74	69	79	73	67	63	59	56	52	47	44	42	36	34	33	27
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28	23
4	72	62	54	48	66	57	50	45	46	41	38	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	27	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	29	25	27	23	20	21	18	16	14
8	52	40	33	27	47	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

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

	0°	45°	90°
0°	11837	11837	11837
5°	11913	11819	11766
10°	11818	11723	11659
15°	11693	11563	11520
20°	11553	11376	11353
25°	11391	11184	11150
30°	11151	10982	10910
35°	10834	10681	10617
40°	10496	10333	10292
45°	10088	9955	9911
50°	9669	9588	9524
55°	9218	9218	9073
60°	8655	8823	8510
65°	7922	8316	7724
70°	6983	7654	6800
75°	5963	6849	5803
80°	4626	5767	4683
85°	2992	4425	3952



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.2	1.4
10°-20°	511.6	4.0
20°-30°	758.9	6.0
30°-40°	888.0	7.0
40°-50°	884.0	7.0
50°-60°	763.4	6.0
60°-70°	549.5	4.3
70°-80°	288.2	2.3
80°-90°	74.0	0.6
90°-100°	563.1	4.4
100°-110°	1522.4	12.0
110°-120°	1600.6	12.6
120°-130°	1300.1	10.2
130°-140°	1019.8	8.0
140°-150°	782.7	6.2
150°-160°	562.9	4.4
160°-170°	343.9	2.7
170°-180°	115.9	0.9
0°-30°	1451.7	11.4
0°-40°	2339.7	18.4
0°-60°	3987.1	31.4
0°-90°	4898.7	38.5
90°-120°	3686.0	29.0
90°-150°	6788.7	53.4
90°-180°	7811.0	61.5
0°-180°	12710.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1924	1924	1924	1924	1924	
5°	1930	1908	1914	1909	1906	183
15°	1836	1813	1816	1812	1809	518
25°	1678	1650	1648	1638	1643	772
35°	1443	1423	1422	1409	1414	902
45°	1160	1150	1144	1141	1139	895
55°	860	858	860	848	846	767
65°	544	561	571	549	531	539
75°	251	274	288	269	244	269
85°	42	56	63	59	56	56
90°	3	8	17	18	17	7
95°	87	307	936	485	288	91
105°	283	437	1689	2491	2389	298
115°	498	609	1401	2712	3061	492
125°	682	782	1262	2130	2503	608
135°	818	915	1228	1720	1947	632
145°	951	1022	1212	1472	1585	595
155°	1073	1115	1201	1321	1364	495
165°	1168	1180	1206	1253	1260	329
175°	1213	1212	1208	1223	1221	115
180°	1212	1212	1212	1212	1212	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1924.4	1924.4	1924.4	1924.4	1924.4
2.5°	1935.2	1919.3	1924.4	1920.1	1910.8
5°	1929.5	1907.9	1914.2	1909.1	1905.7
7.5°	1909.8	1889.9	1894.5	1889.1	1887.1
10°	1892.2	1872.3	1876.9	1870.1	1866.7
12.5°	1871.8	1850.6	1855.2	1848.4	1846.4
15°	1836.2	1813.0	1815.9	1812.4	1809.1
17.5°	1794.9	1771.3	1771.8	1766.4	1765.7
20°	1765.0	1740.1	1737.9	1731.2	1734.5
22.5°	1732.5	1706.3	1704.0	1694.6	1699.2
25°	1678.5	1650.4	1648.0	1638.0	1642.9
27.5°	1616.1	1588.3	1588.3	1574.2	1579.5
30°	1570.0	1543.5	1546.3	1529.5	1536.1
32.5°	1521.2	1497.3	1498.8	1482.0	1488.6
35°	1442.9	1423.0	1422.5	1409.1	1414.0
37.5°	1362.8	1345.3	1342.5	1334.7	1336.1
40°	1307.2	1292.3	1286.9	1281.8	1281.8
42.5°	1248.9	1235.3	1229.9	1226.2	1224.8
45°	1159.7	1149.8	1144.5	1141.0	1139.4
47.5°	1071.6	1062.3	1057.7	1055.2	1053.6
50°	1010.5	1003.9	1002.0	996.9	995.3
52.5°	949.5	945.5	943.7	937.2	935.6
55°	859.6	858.0	859.6	847.7	846.1
57.5°	766.0	768.7	774.2	758.1	754.2
60°	703.6	710.3	717.2	698.4	691.8
62.5°	639.9	650.5	660.2	638.7	629.4
65°	544.3	560.8	571.4	548.9	530.7
67.5°	452.0	472.6	485.3	461.0	440.5
70°	388.3	411.5	425.6	401.3	378.1
72.5°	332.7	358.5	370.0	347.0	323.8
75°	250.9	274.1	288.2	269.0	244.2
77.5°	178.0	199.9	211.6	194.9	174.3
80°	130.6	153.8	162.8	148.8	132.2
82.5°	92.6	111.8	118.0	109.6	98.3
85°	42.4	55.7	62.7	59.3	56.0
87.5°	11.4	21.7	29.2	29.4	30.5
90°	2.6	7.7	17.0	18.2	17.0
92.5°	37.0	135.0	266.3	115.6	83.7
95°	87.4	306.7	936.4	484.6	288.2
97.5°	140.3	351.8	1459.6	1207.9	887.1
100°	180.0	370.0	1622.4	1692.0	1368.1
102.5°	216.5	395.3	1679.8	2059.0	1816.7
105°	283.0	437.3	1688.9	2491.2	2389.2
107.5°	344.6	485.3	1615.1	2760.9	2794.8
110°	392.6	520.1	1549.3	2833.3	2977.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	435.3	554.7	1488.8	2818.8	3060.9
115°	498.2	609.1	1400.7	2711.5	3060.9
117.5°	559.7	663.8	1342.5	2547.4	2943.5
120°	597.3	699.3	1308.1	2429.7	2833.9
122.5°	632.8	732.8	1287.2	2303.5	2710.8
125°	682.1	781.5	1262.4	2130.3	2502.7
127.5°	727.5	825.1	1247.8	1989.0	2316.4
130°	752.5	853.2	1241.6	1901.7	2197.5
132.5°	778.6	878.3	1235.3	1822.9	2095.3
135°	817.7	914.6	1228.5	1720.1	1947.1
137.5°	857.1	948.6	1222.8	1636.7	1821.6
140°	884.2	969.7	1220.7	1583.1	1747.6
142.5°	910.3	990.6	1216.5	1534.6	1678.7
145°	950.7	1022.1	1211.6	1472.3	1584.6
147.5°	987.5	1050.8	1205.8	1415.9	1502.1
150°	1014.6	1070.7	1203.7	1385.3	1454.1
152.5°	1039.7	1088.6	1202.7	1356.8	1413.4
155°	1073.3	1115.4	1201.1	1320.8	1364.1
157.5°	1108.3	1137.6	1201.4	1295.7	1324.2
160°	1128.1	1152.3	1202.4	1279.8	1300.2
162.5°	1143.7	1163.9	1203.5	1267.2	1282.5
165°	1168.5	1180.0	1206.3	1253.4	1259.8
167.5°	1185.5	1193.4	1206.6	1241.6	1244.7
170°	1195.9	1199.7	1207.6	1236.3	1236.3
172.5°	1204.3	1205.0	1207.6	1230.1	1229.0
175°	1212.9	1211.6	1207.6	1223.2	1220.7
177.5°	1215.7	1212.7	1207.4	1217.8	1214.7
180°	1211.6	1211.6	1211.6	1211.6	1211.6

(END OF REPORT)