

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: P520429

Luminaire Tested: **SQ4-F-150U-100D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520429  
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-935-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

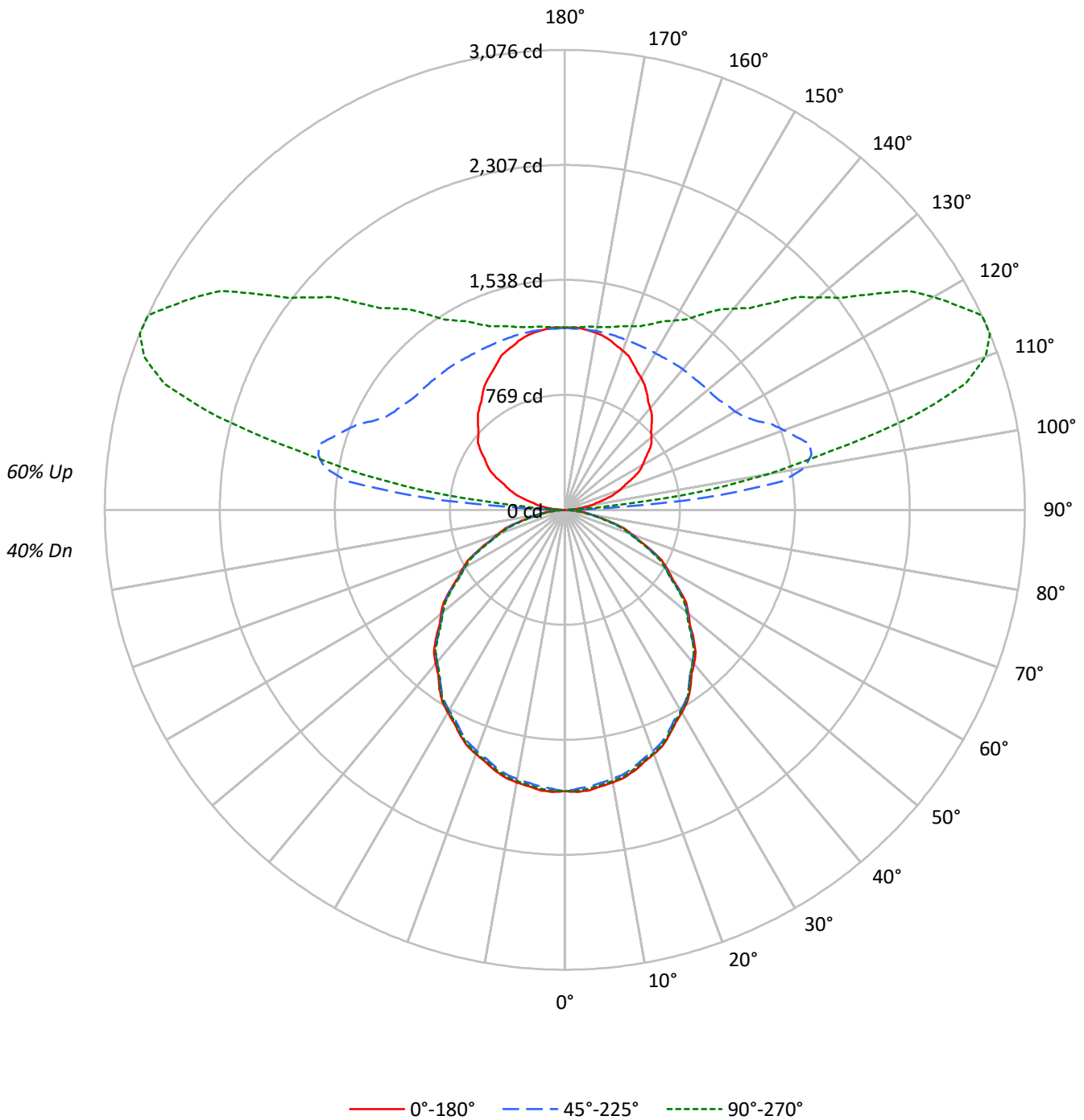
Lumens per Lamp: N/A  
Luminaire Lumens: 12985.5 lumens  
Efficiency: N/A  
Efficacy: 117.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 110.6  
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°	11573	11573	11573
5°	11626	11466	11553
10°	11566	11421	11510
15°	11496	11340	11430
20°	11377	11242	11336
25°	11253	11121	11210
30°	11116	10997	11052
35°	10977	10840	10900
40°	10794	10669	10680
45°	10604	10458	10424
50°	10331	10207	10182
55°	10025	9915	9846
60°	9722	9547	9515
65°	9246	9040	8965
70°	8593	8384	8222
75°	7671	7427	7274
80°	6312	6082	5809
85°	3733	4107	4192



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.6	1.4
10°-20°	505.7	3.9
20°-30°	759.4	5.8
30°-40°	906.3	7.0
40°-50°	929.0	7.2
50°-60°	827.2	6.4
60°-70°	616.7	4.7
70°-80°	333.9	2.6
80°-90°	78.5	0.6
90°-100°	565.9	4.4
100°-110°	1530.2	11.8
110°-120°	1608.7	12.4
120°-130°	1306.7	10.1
130°-140°	1025.0	7.9
140°-150°	786.7	6.1
150°-160°	565.8	4.4
160°-170°	345.6	2.7
170°-180°	116.5	0.9
0°-30°	1442.7	11.1
0°-40°	2349.0	18.1
0°-60°	4105.2	31.6
0°-90°	5134.3	39.5
90°-120°	3704.8	28.5
90°-150°	6823.3	52.5
90°-180°	7851.0	60.5
0°-180°	12985.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1882	1882	1882	1882	1882	
5°	1883	1879	1857	1874	1871	179
15°	1805	1799	1781	1795	1795	509
25°	1658	1654	1639	1648	1652	764
35°	1462	1456	1444	1446	1452	913
45°	1219	1213	1202	1196	1198	938
55°	935	936	925	916	918	837
65°	635	633	621	615	616	628
75°	323	319	312	306	306	344
85°	53	58	58	59	59	74
90°	3	8	17	18	17	7
95°	88	308	941	487	290	92
105°	284	440	1698	2504	2401	300
115°	501	612	1408	2725	3076	494
125°	686	786	1269	2141	2516	611
135°	822	919	1235	1729	1957	635
145°	956	1027	1218	1480	1593	598
155°	1079	1121	1207	1328	1371	498
165°	1174	1186	1212	1260	1266	331
175°	1219	1218	1214	1230	1227	116
180°	1218	1218	1218	1218	1218	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1881.6	1881.6	1881.6	1881.6	1881.6
2.5°	1888.8	1884.7	1868.1	1881.5	1879.5
5°	1882.9	1879.0	1857.0	1873.7	1871.2
7.5°	1865.2	1861.5	1842.0	1857.5	1855.2
10°	1851.8	1848.1	1828.6	1844.0	1842.8
12.5°	1834.3	1830.4	1811.0	1826.5	1825.2
15°	1805.4	1799.0	1780.8	1795.0	1795.0
17.5°	1767.1	1762.3	1745.4	1757.3	1757.5
20°	1738.2	1734.4	1717.5	1730.5	1731.8
22.5°	1709.3	1705.5	1686.6	1698.5	1700.7
25°	1658.1	1654.4	1638.7	1647.8	1651.7
27.5°	1605.4	1599.9	1584.5	1592.5	1595.3
30°	1565.1	1562.6	1548.4	1552.3	1556.1
32.5°	1522.8	1520.2	1508.0	1510.0	1516.9
35°	1461.9	1455.5	1443.7	1446.5	1451.6
37.5°	1389.8	1386.8	1375.4	1373.9	1378.6
40°	1344.3	1339.3	1328.8	1326.3	1330.1
42.5°	1294.7	1289.7	1277.2	1274.7	1279.4
45°	1219.1	1212.8	1202.3	1195.9	1198.4
47.5°	1134.4	1134.4	1123.5	1116.1	1119.9
50°	1079.6	1079.6	1066.7	1060.3	1064.1
52.5°	1022.7	1023.8	1009.8	1006.5	1005.2
55°	934.9	936.2	924.6	915.6	918.2
57.5°	850.2	847.5	834.0	828.0	829.3
60°	790.3	786.5	776.1	767.2	773.5
62.5°	729.3	727.6	717.3	707.2	706.4
65°	635.3	632.8	621.1	614.7	616.0
67.5°	541.9	538.8	528.2	519.0	522.3
70°	477.8	477.8	466.2	460.9	457.2
72.5°	418.9	413.9	405.2	397.9	395.1
75°	322.8	319.0	312.5	306.1	306.1
77.5°	235.0	231.8	227.5	223.1	221.8
80°	178.2	177.0	171.7	170.3	164.0
82.5°	125.5	125.2	122.2	118.8	118.5
85°	52.9	58.0	58.2	59.4	59.4
87.5°	9.8	16.8	17.8	16.1	15.8
90°	2.6	7.7	17.0	18.3	17.0
92.5°	37.2	135.7	267.7	116.2	84.2
95°	87.8	308.2	941.2	487.1	289.7
97.5°	141.0	353.5	1467.0	1214.1	891.6
100°	180.9	371.9	1630.6	1700.6	1375.1
102.5°	217.6	397.3	1688.3	2069.5	1826.0
105°	284.5	439.5	1697.5	2503.9	2401.4
107.5°	346.4	487.8	1623.4	2775.0	2809.1
110°	394.5	522.7	1557.3	2847.7	2992.6

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	437.5	557.5	1496.4	2833.3	3076.5
115°	500.8	612.2	1407.8	2725.3	3076.5
117.5°	562.6	667.2	1349.3	2560.4	2958.5
120°	600.4	702.9	1314.7	2442.1	2848.3
122.5°	636.0	736.5	1293.8	2315.3	2724.6
125°	685.6	785.6	1268.9	2141.2	2515.5
127.5°	731.2	829.3	1254.2	1999.1	2328.3
130°	756.3	857.6	1247.9	1911.4	2208.7
132.5°	782.6	882.8	1241.6	1832.2	2105.9
135°	821.9	919.3	1234.7	1728.9	1957.0
137.5°	861.4	953.5	1229.0	1645.1	1830.9
140°	888.7	974.6	1226.9	1591.2	1756.5
142.5°	914.9	995.7	1222.7	1542.5	1687.2
145°	955.6	1027.3	1217.7	1479.8	1592.7
147.5°	992.5	1056.1	1212.0	1423.2	1509.8
150°	1019.8	1076.2	1209.9	1392.4	1461.6
152.5°	1045.0	1094.2	1208.8	1363.7	1420.7
155°	1078.8	1121.1	1207.3	1327.5	1371.2
157.5°	1113.9	1143.4	1207.5	1302.2	1331.0
160°	1133.8	1158.2	1208.6	1286.4	1306.9
162.5°	1149.5	1169.9	1209.6	1273.7	1289.1
165°	1174.5	1186.1	1212.5	1259.8	1266.2
167.5°	1191.5	1199.4	1212.7	1247.9	1251.0
170°	1202.1	1205.9	1213.8	1242.7	1242.7
172.5°	1210.4	1211.2	1213.8	1236.4	1235.4
175°	1219.1	1217.7	1213.8	1229.5	1226.9
177.5°	1222.0	1218.9	1213.5	1224.0	1220.9
180°	1217.7	1217.7	1217.7	1217.7	1217.7

(END OF REPORT)