

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: P520379

Luminaire Tested: **SQ4-F-150U-050D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520379  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-050D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

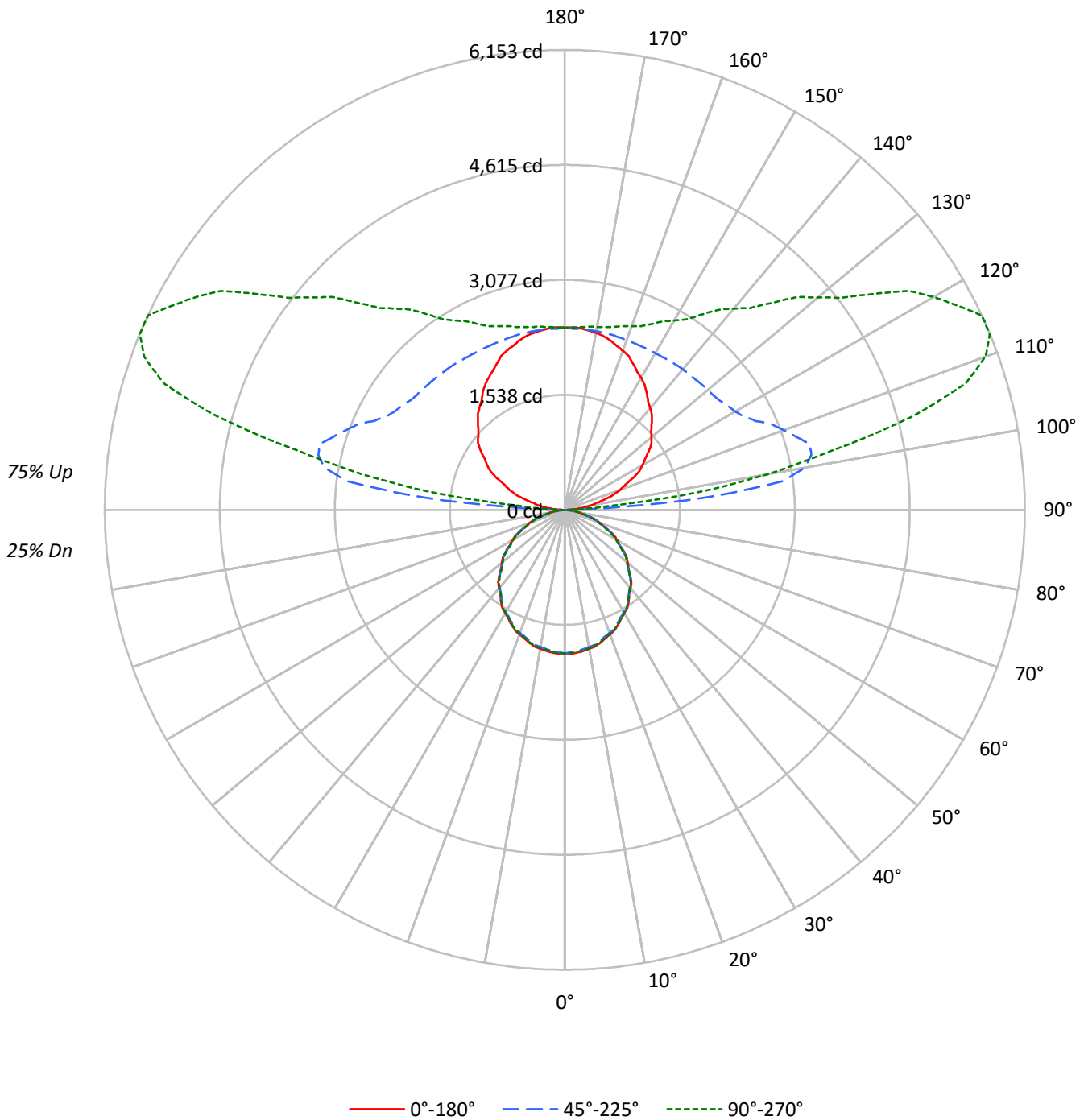
Lumens per Lamp: N/A  
Luminaire Lumens: 20947.9 lumens  
Efficiency: N/A  
Efficacy: 119.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 175.9  
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	101	101	101	101	90	90	90	90	69	69	69	51	51	51	33	33	33	25
1	92	88	84	81	82	79	75	73	61	59	57	44	43	42	29	29	28	21
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	26	25	23	18
3	76	67	60	55	68	60	54	49	47	43	39	34	32	29	23	21	20	15
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	8	6

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

	0°	45°	90°
0°	5905	5905	5905
5°	5920	5848	5896
10°	5900	5827	5868
15°	5860	5786	5835
20°	5804	5737	5779
25°	5739	5669	5722
30°	5659	5613	5650
35°	5597	5529	5558
40°	5490	5438	5448
45°	5377	5333	5333
50°	5263	5214	5190
55°	5140	5072	5044
60°	4948	4870	4838
65°	4713	4619	4563
70°	4392	4298	4206
75°	3940	3818	3726
80°	3188	3142	3050
85°	1902	2177	2269



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.1	0.9
10°-20°	515.9	2.5
20°-30°	774.9	3.7
30°-40°	924.9	4.4
40°-50°	947.8	4.5
50°-60°	845.3	4.0
60°-70°	629.5	3.0
70°-80°	341.7	1.6
80°-90°	84.2	0.4
90°-100°	1131.9	5.4
100°-110°	3060.3	14.6
110°-120°	3217.5	15.4
120°-130°	2613.5	12.5
130°-140°	2050.0	9.8
140°-150°	1573.4	7.5
150°-160°	1131.6	5.4
160°-170°	691.3	3.3
170°-180°	233.1	1.1
0°-30°	1471.9	7.0
0°-40°	2396.8	11.4
0°-60°	4189.9	20.0
0°-90°	5245.4	25.0
90°-120°	7409.6	35.4
90°-150°	13646.6	65.1
90°-180°	15702.0	75.0
0°-180°	20947.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1920	1920	1920	1920	1920	
5°	1918	1915	1894	1912	1910	182
15°	1840	1835	1817	1833	1833	519
25°	1691	1686	1671	1681	1686	779
35°	1491	1486	1473	1473	1480	930
45°	1236	1239	1226	1224	1226	954
55°	959	959	946	938	941	854
65°	648	645	635	627	627	641
75°	332	329	321	316	314	350
85°	54	59	62	64	64	76
90°	5	16	34	37	34	13
95°	176	617	1882	974	579	184
105°	569	879	3395	5008	4803	599
115°	1002	1224	2816	5451	6153	989
125°	1371	1571	2538	4282	5031	1222
135°	1644	1838	2470	3458	3914	1270
145°	1911	2055	2436	2960	3185	1196
155°	2158	2242	2414	2655	2742	995
165°	2349	2372	2425	2520	2532	662
175°	2438	2436	2428	2459	2454	231
180°	2436	2436	2436	2436	2436	

TEST NUMBER: P520379

CATALOG NUMBER: SQ4-F-150U-050D-935-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1920.0	1920.0	1920.0	1920.0	1920.0
2.5°	1926.2	1922.2	1905.7	1920.0	1918.0
5°	1917.5	1914.9	1894.3	1912.3	1909.8
7.5°	1903.6	1898.6	1878.4	1895.8	1893.3
10°	1889.2	1884.2	1866.0	1881.4	1878.9
12.5°	1870.6	1867.7	1847.6	1863.0	1862.5
15°	1840.4	1835.3	1817.2	1832.7	1832.7
17.5°	1800.2	1797.3	1779.7	1794.5	1792.6
20°	1773.5	1768.5	1753.0	1765.8	1765.8
22.5°	1740.6	1737.6	1722.1	1733.0	1735.0
25°	1691.3	1686.3	1670.7	1681.1	1686.2
27.5°	1636.8	1632.8	1619.8	1626.6	1630.1
30°	1593.6	1593.6	1580.7	1583.5	1591.0
32.5°	1554.5	1554.5	1539.6	1542.3	1545.8
35°	1490.8	1485.8	1472.8	1473.0	1480.5
37.5°	1416.8	1414.3	1406.0	1404.4	1406.5
40°	1367.5	1364.9	1354.5	1357.1	1357.1
42.5°	1318.1	1315.6	1305.2	1301.7	1305.7
45°	1236.3	1238.9	1226.1	1223.5	1226.1
47.5°	1155.7	1155.7	1145.3	1138.2	1142.2
50°	1100.1	1100.1	1089.8	1084.7	1084.7
52.5°	1042.6	1044.5	1032.2	1025.1	1027.1
55°	958.7	958.7	945.9	938.2	940.7
57.5°	866.2	866.2	853.3	845.7	850.3
60°	804.5	804.5	791.7	784.0	786.5
62.5°	742.8	742.8	730.0	722.3	722.8
65°	647.7	645.2	634.8	627.1	627.1
67.5°	556.2	549.7	541.8	531.6	531.6
70°	488.4	485.8	478.0	467.8	467.8
72.5°	426.7	422.1	414.3	406.2	406.2
75°	331.6	329.0	321.3	316.1	313.6
77.5°	237.5	235.5	235.0	227.8	229.8
80°	180.0	180.0	177.4	172.2	172.2
82.5°	128.5	130.6	125.9	124.8	122.9
85°	53.9	59.0	61.7	64.3	64.3
87.5°	11.3	19.3	21.1	23.7	23.2
90°	5.2	15.5	34.1	36.6	34.1
92.5°	74.4	271.3	535.4	232.4	168.3
95°	175.6	616.6	1882.3	974.1	579.3
97.5°	282.1	707.1	2934.2	2428.1	1783.2
100°	361.8	743.7	3261.3	3401.1	2750.1
102.5°	435.2	794.5	3376.7	4138.9	3651.9
105°	568.9	879.0	3395.0	5007.9	4802.8
107.5°	692.6	975.6	3246.6	5549.9	5618.1
110°	789.1	1045.4	3114.5	5695.5	5985.2

TEST NUMBER: P520379

CATALOG NUMBER: SQ4-F-150U-050D-935-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	875.1	1115.0	2992.8	5666.4	6152.9
115°	1001.5	1224.5	2815.7	5450.6	6152.9
117.5°	1125.2	1334.3	2698.7	5120.9	5917.0
120°	1200.7	1405.8	2629.4	4884.2	5696.8
122.5°	1272.0	1473.0	2587.5	4630.6	5449.3
125°	1371.2	1571.0	2537.7	4282.4	5030.9
127.5°	1462.3	1658.7	2508.3	3998.3	4656.5
130°	1512.7	1715.2	2495.8	3822.7	4417.5
132.5°	1565.1	1765.6	2483.2	3664.4	4211.9
135°	1643.8	1838.5	2469.6	3457.8	3914.1
137.5°	1723.0	1906.9	2458.0	3290.2	3661.9
140°	1777.5	1949.2	2453.8	3182.3	3513.0
142.5°	1829.9	1991.3	2445.5	3084.9	3374.6
145°	1911.2	2054.7	2435.5	2959.7	3185.3
147.5°	1985.1	2112.3	2423.9	2846.3	3019.6
150°	2039.6	2152.4	2419.8	2784.7	2923.1
152.5°	2089.9	2188.4	2417.7	2727.5	2841.3
155°	2157.6	2242.1	2414.5	2655.1	2742.2
157.5°	2227.9	2286.8	2415.1	2604.6	2662.0
160°	2267.7	2316.4	2417.2	2572.7	2613.8
162.5°	2299.2	2339.6	2419.2	2547.4	2578.1
165°	2349.0	2372.0	2425.0	2519.7	2532.5
167.5°	2383.1	2399.0	2425.5	2496.0	2502.1
170°	2404.0	2411.8	2427.6	2485.3	2485.3
172.5°	2420.8	2422.3	2427.6	2472.7	2470.6
175°	2438.1	2435.6	2427.6	2458.9	2453.8
177.5°	2443.8	2437.7	2427.1	2448.0	2441.8
180°	2435.5	2435.5	2435.5	2435.5	2435.5

(END OF REPORT)