

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: P520237

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520237  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-100D-935-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

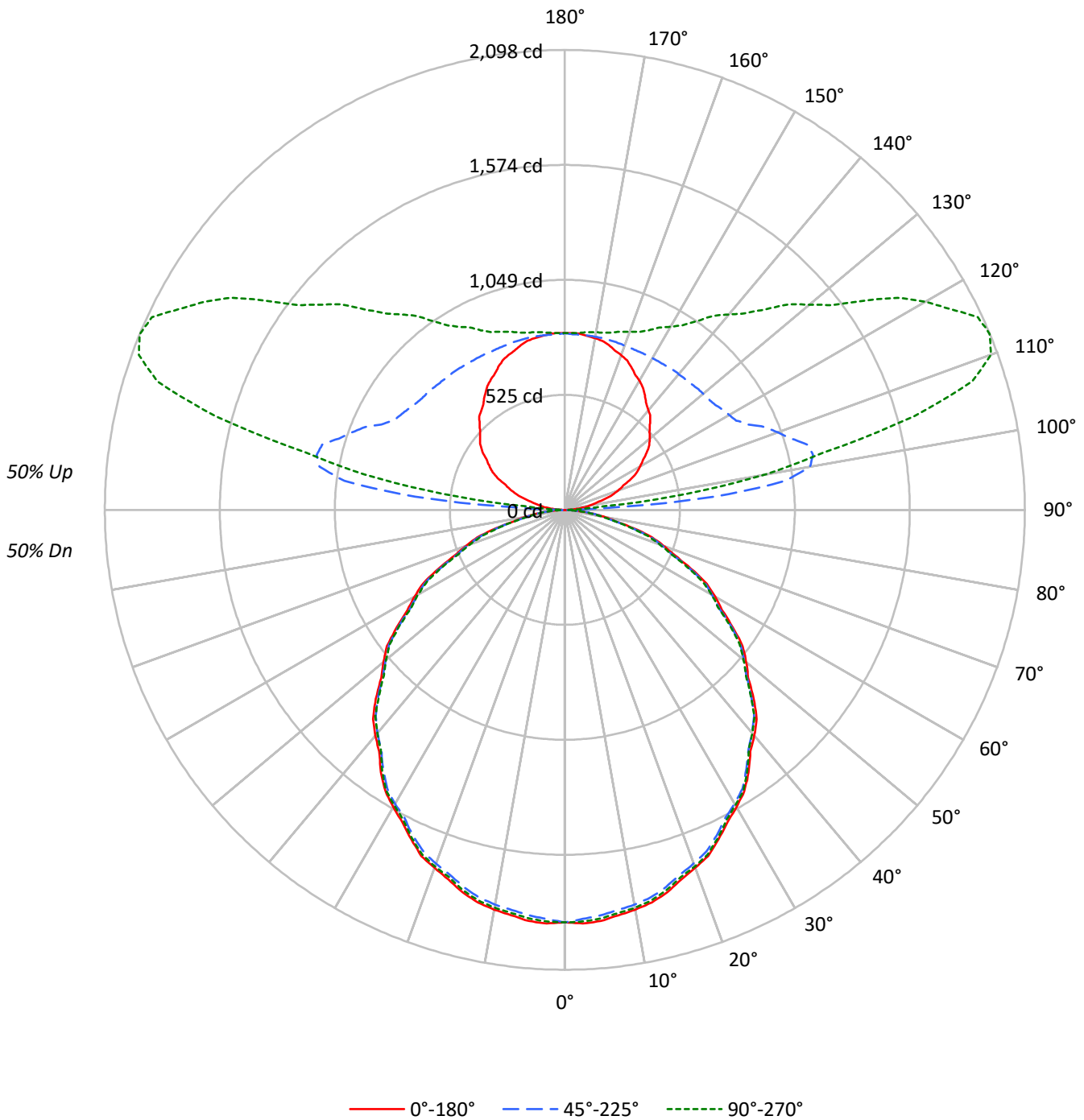
Lumens per Lamp: N/A  
Luminaire Lumens: 10368.0 lumens  
Efficiency: N/A  
Efficacy: 114.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 90.2  
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	70	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	39	35
3	81	71	64	58	74	66	60	55	56	51	47	47	43	40	38	36	33	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	31	27	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	24	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	19	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	19	17	20	17	14	12

**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	1.7
10°-20°	505.7	4.9
20°-30°	759.4	7.3
30°-40°	906.3	8.7
40°-50°	929.0	9.0
50°-60°	827.2	8.0
60°-70°	616.7	5.9
70°-80°	333.9	3.2
80°-90°	77.7	0.7
90°-100°	377.3	3.6
100°-110°	1041.6	10.0
110°-120°	1074.2	10.4
120°-130°	863.2	8.3
130°-140°	678.4	6.5
140°-150°	520.3	5.0
150°-160°	373.9	3.6
160°-170°	228.7	2.2
170°-180°	77.1	0.7
0°-30°	1442.7	13.9
0°-40°	2349.0	22.7
0°-60°	4105.2	39.6
0°-90°	5133.4	49.5
90°-120°	2493.0	24.0
90°-150°	4554.9	43.9
90°-180°	5235.0	50.5
0°-180°	10368.0	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	5	10	12	13	5
95°	55	204	684	281	183	59
105°	186	286	1146	1749	1647	197
115°	333	402	923	1827	2078	327
125°	456	519	837	1416	1662	406
135°	549	608	813	1147	1293	425
145°	637	681	803	976	1050	399
155°	718	742	797	876	904	331
165°	777	787	800	832	838	219
175°	806	807	802	813	811	77
180°	806	806	806	806	806	



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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	16.3	16.5	14.8	15.0
90°	2.6	5.1	10.3	11.7	12.9
92.5°	23.2	96.3	172.2	62.8	49.0
95°	55.4	204.2	684.4	281.3	183.0
97.5°	91.8	228.6	1013.9	780.6	565.3
100°	118.6	243.3	1135.6	1143.6	929.4
102.5°	144.3	260.1	1159.4	1413.1	1209.9
105°	185.6	286.5	1145.9	1749.4	1647.3
107.5°	229.4	319.2	1082.0	1911.7	1949.0
110°	260.4	341.1	1032.5	1946.6	2067.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	288.3	365.9	986.2	1919.0	2097.5
115°	332.6	401.9	922.9	1827.1	2078.0
117.5°	371.3	440.3	881.4	1697.7	1983.0
120°	397.0	465.0	865.0	1610.1	1897.4
122.5°	421.8	486.8	851.5	1528.2	1800.5
125°	456.3	519.3	836.6	1415.8	1661.6
127.5°	485.7	548.7	827.8	1320.6	1532.7
130°	505.3	568.3	823.7	1262.4	1455.3
132.5°	523.9	583.8	819.6	1213.6	1388.3
135°	549.1	608.4	813.3	1146.7	1292.9
137.5°	577.5	631.4	810.3	1090.5	1215.3
140°	592.9	645.9	808.2	1053.0	1162.7
142.5°	610.4	659.4	806.1	1019.8	1116.3
145°	636.8	680.9	803.0	976.2	1050.5
147.5°	662.1	700.6	800.2	939.5	997.2
150°	680.6	712.1	799.2	917.6	964.2
152.5°	695.0	724.5	798.2	898.8	937.4
155°	718.0	741.9	796.6	875.9	903.7
157.5°	739.1	757.5	796.9	859.1	878.1
160°	751.5	767.9	797.9	849.7	863.7
162.5°	761.8	776.1	798.9	841.4	852.3
165°	777.3	787.3	800.5	831.5	837.9
167.5°	789.1	795.2	801.8	825.5	827.6
170°	795.3	800.4	801.8	822.4	822.4
172.5°	800.5	803.5	801.8	818.3	817.2
175°	805.6	806.9	801.8	813.3	810.8
177.5°	807.7	806.7	801.6	808.7	806.7
180°	805.6	805.6	805.6	805.6	805.6

(END OF REPORT)