

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: P520046

Luminaire Tested: **SQ4-F-075U-100D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520046  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-935-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

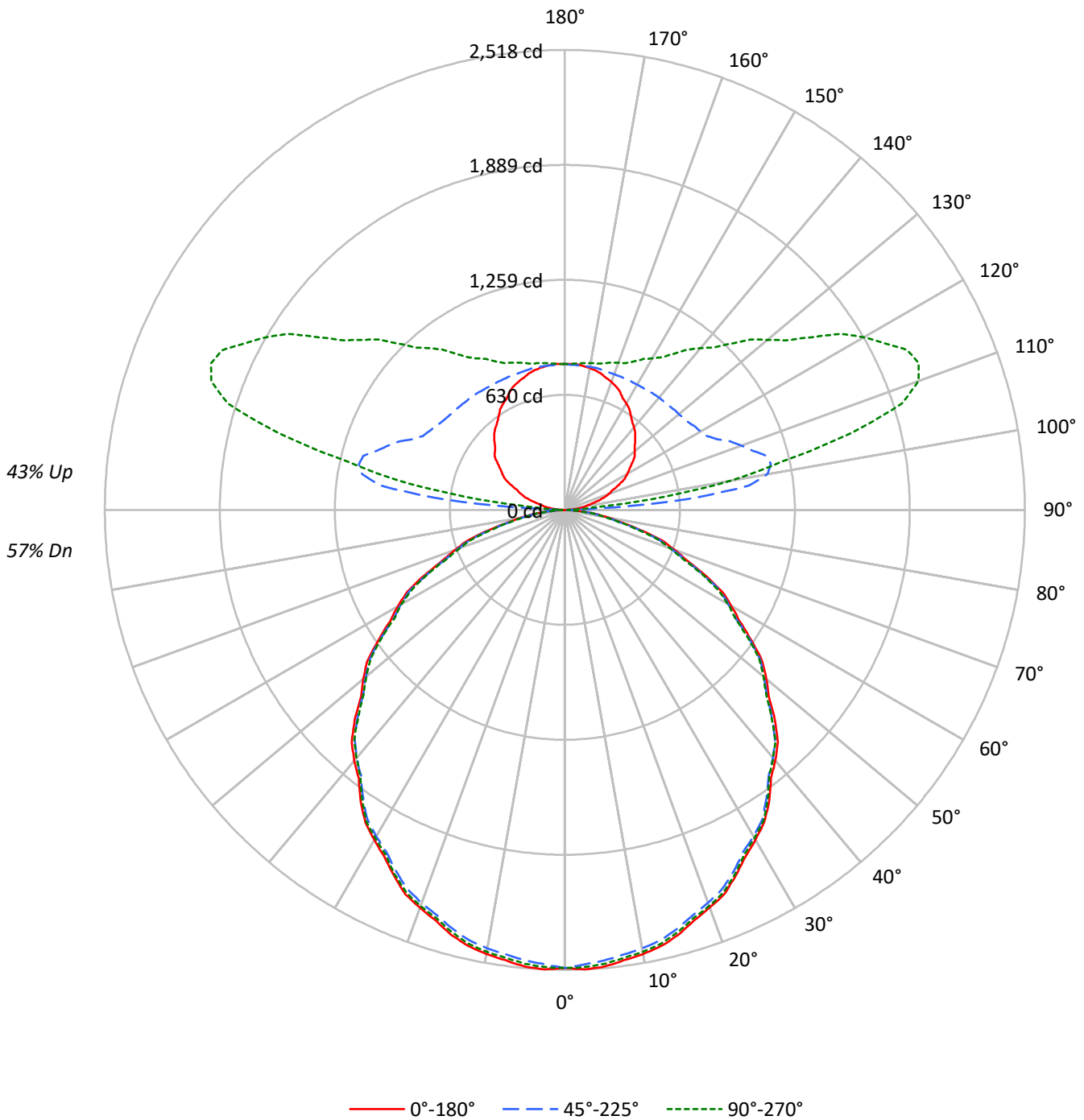
Lumens per Lamp: N/A  
Luminaire Lumens: 12047.0 lumens  
Efficiency: N/A  
Efficacy: 113.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 106.3  
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44	40
3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38	34
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32	29
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28	25
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25	22
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22	19
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20	17
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18	15
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14

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

	0°	45°	90°
0°	11573	11573	11573
5°	11625	11466	11554
10°	11566	11421	11509
15°	11496	11340	11430
20°	11377	11242	11335
25°	11253	11122	11209
30°	11116	10997	11052
35°	10976	10841	10899
40°	10794	10670	10680
45°	10604	10458	10425
50°	10331	10207	10182
55°	10027	9916	9847
60°	9722	9547	9515
65°	9248	9040	8965
70°	8593	8383	8222
75°	7671	7425	7274
80°	6312	6084	5810
85°	3732	4102	4192



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	236.8	2.0
10°-20°	674.3	5.6
20°-30°	1012.6	8.4
30°-40°	1208.4	10.0
40°-50°	1238.6	10.3
50°-60°	1103.0	9.2
60°-70°	822.2	6.8
70°-80°	445.2	3.7
80°-90°	103.4	0.9
90°-100°	376.7	3.1
100°-110°	1036.3	8.6
110°-120°	1069.6	8.9
120°-130°	857.0	7.1
130°-140°	673.1	5.6
140°-150°	515.8	4.3
150°-160°	370.9	3.1
160°-170°	226.8	1.9
170°-180°	76.4	0.6
0°-30°	1923.6	16.0
0°-40°	3132.0	26.0
0°-60°	5473.7	45.4
0°-90°	6844.4	56.8
90°-120°	2482.6	20.6
90°-150°	4528.5	37.6
90°-180°	5203.0	43.2
0°-180°	12047.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2509	2509	2509	2509	2509	
5°	2510	2505	2476	2498	2495	238
15°	2407	2399	2374	2393	2393	678
25°	2211	2206	2185	2197	2202	1019
35°	1949	1941	1925	1929	1935	1217
45°	1625	1617	1603	1594	1598	1251
55°	1247	1248	1233	1221	1224	1116
65°	847	844	828	820	821	838
75°	430	425	417	408	408	458
85°	70	77	78	79	79	99
90°	2	7	12	15	15	5
95°	56	206	666	285	182	59
105°	185	285	1142	1739	1623	195
115°	328	399	916	1824	2070	324
125°	452	515	831	1406	1646	403
135°	545	605	807	1137	1286	421
145°	630	674	795	968	1043	395
155°	714	737	790	870	896	328
165°	771	781	794	826	831	217
175°	799	800	795	805	804	76
180°	799	799	799	799	799	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2508.8	2508.8	2508.8	2508.8	2508.8
2.5°	2518.4	2512.9	2490.8	2508.7	2506.0
5°	2510.4	2505.4	2476.0	2498.4	2495.0
7.5°	2487.1	2482.0	2456.1	2476.7	2473.6
10°	2469.1	2464.1	2438.1	2458.7	2457.0
12.5°	2445.7	2440.7	2414.7	2435.3	2433.7
15°	2407.1	2398.7	2374.4	2393.3	2393.3
17.5°	2356.2	2349.7	2327.2	2343.1	2343.4
20°	2317.6	2312.6	2290.1	2307.3	2309.0
22.5°	2279.0	2273.9	2248.7	2264.6	2267.7
25°	2210.8	2205.8	2185.1	2197.1	2202.2
27.5°	2140.6	2133.1	2112.7	2123.4	2127.2
30°	2086.9	2083.5	2064.5	2069.7	2074.8
32.5°	2030.4	2027.0	2010.8	2013.4	2022.5
35°	1949.1	1940.7	1925.0	1928.6	1935.4
37.5°	1853.0	1849.0	1833.7	1831.8	1838.3
40°	1792.4	1785.7	1771.8	1768.4	1773.5
42.5°	1726.3	1719.6	1702.9	1699.6	1706.0
45°	1625.4	1617.0	1603.1	1594.5	1597.9
47.5°	1512.5	1512.5	1498.0	1488.1	1493.2
50°	1439.5	1439.5	1422.2	1413.7	1418.8
52.5°	1363.7	1365.1	1346.4	1342.0	1340.3
55°	1246.7	1248.3	1232.9	1220.9	1224.3
57.5°	1133.7	1129.9	1112.0	1104.1	1105.8
60°	1053.7	1048.7	1034.8	1022.9	1031.3
62.5°	972.5	970.1	956.3	942.9	941.9
65°	847.2	843.8	828.2	819.6	821.3
67.5°	722.5	718.4	704.3	691.9	696.4
70°	637.1	637.1	621.5	614.6	609.6
72.5°	558.5	551.8	540.3	530.6	526.9
75°	430.4	425.4	416.6	408.1	408.1
77.5°	313.4	309.0	303.4	297.5	295.9
80°	237.6	235.9	229.0	227.1	218.7
82.5°	167.3	167.1	162.9	158.4	158.0
85°	70.5	77.3	77.5	79.2	79.2
87.5°	12.8	21.8	21.7	19.6	19.6
90°	1.7	6.7	11.9	15.3	15.3
92.5°	23.5	100.2	173.6	66.7	54.7
95°	56.0	205.6	666.1	284.8	181.8
97.5°	91.5	228.0	1016.5	783.2	552.5
100°	117.3	241.9	1126.5	1137.1	927.7
102.5°	141.7	258.3	1155.1	1410.6	1218.6
105°	185.3	284.9	1141.9	1739.0	1622.7
107.5°	226.6	317.7	1076.9	1899.8	1934.3
110°	256.6	339.6	1028.0	1939.7	2059.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	283.8	364.2	979.1	1914.0	2096.1
115°	328.0	399.4	915.8	1823.7	2069.6
117.5°	370.1	435.8	875.7	1696.9	1975.1
120°	395.9	459.0	858.1	1602.1	1889.4
122.5°	419.0	482.1	845.9	1518.8	1791.6
125°	452.0	515.1	830.9	1405.6	1646.5
127.5°	483.2	543.3	821.0	1311.1	1522.4
130°	499.5	561.0	815.6	1254.9	1447.7
132.5°	518.6	580.0	811.5	1205.6	1379.7
135°	545.4	605.3	807.1	1136.8	1286.2
137.5°	570.5	626.1	803.3	1081.1	1204.4
140°	589.6	641.1	802.0	1044.1	1155.5
142.5°	605.9	653.4	799.3	1011.1	1106.4
145°	630.4	673.5	795.2	968.5	1043.3
147.5°	656.5	693.8	793.2	930.8	990.6
150°	672.8	706.1	791.8	910.1	956.6
152.5°	687.8	718.4	790.4	892.2	930.8
155°	713.6	736.9	790.1	870.5	895.5
157.5°	732.3	751.3	790.1	852.7	869.9
160°	745.9	760.9	790.1	843.0	856.3
162.5°	756.8	769.1	791.5	834.8	845.5
165°	771.4	781.4	793.5	825.9	830.9
167.5°	781.6	789.2	795.2	818.3	819.7
170°	788.4	793.4	795.2	815.6	815.6
172.5°	793.8	796.2	795.2	811.4	810.2
175°	798.6	800.3	795.2	805.4	803.7
177.5°	800.0	800.0	794.5	802.6	800.0
180°	798.6	798.6	798.6	798.6	798.6

(END OF REPORT)