

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: P520399

Luminaire Tested: **SQ4-F-150U-075D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520399  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-075D-930-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

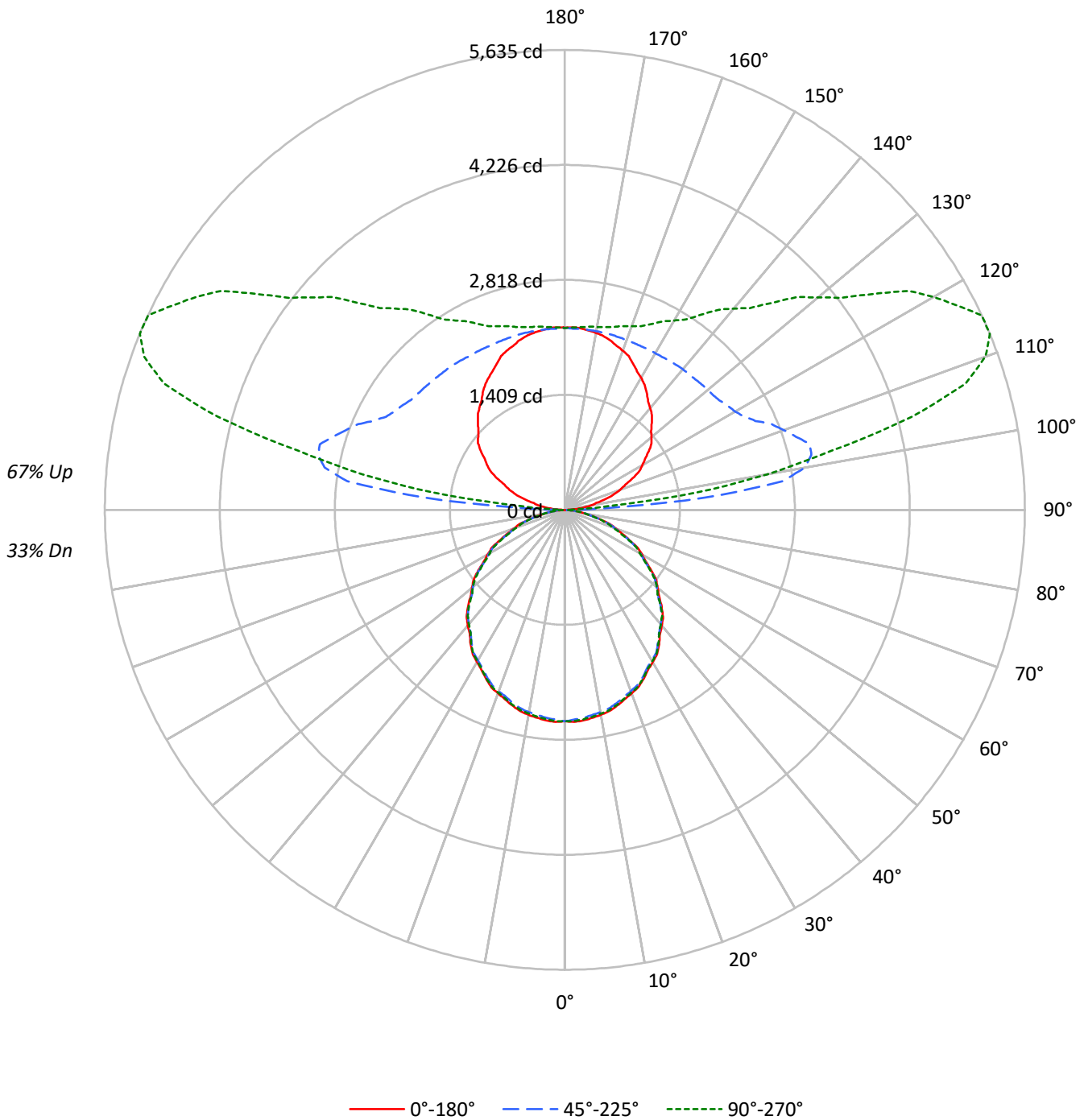
Lumens per Lamp: N/A  
Luminaire Lumens: 21459.1 lumens  
Efficiency: N/A  
Efficacy: 106.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 200.7  
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	13	10
9	48	36	28	23	43	33	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

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

	0°	45°	90°
0°	7969	7969	7969
5°	7999	7898	7956
10°	7967	7865	7923
15°	7906	7809	7876
20°	7834	7742	7804
25°	7748	7669	7725
30°	7650	7567	7608
35°	7550	7470	7506
40°	7423	7347	7338
45°	7295	7203	7224
50°	7093	7036	7036
55°	6928	6840	6776
60°	6704	6589	6531
65°	6343	6223	6137
70°	5957	5809	5661
75°	5360	5164	5052
80°	4286	4203	4160
85°	2569	2904	2982



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	244.6	1.1
10°-20°	696.3	3.2
20°-30°	1046.1	4.9
30°-40°	1248.2	5.8
40°-50°	1280.1	6.0
50°-60°	1140.7	5.3
60°-70°	850.5	4.0
70°-80°	461.2	2.1
80°-90°	110.6	0.5
90°-100°	1036.6	4.8
100°-110°	2802.7	13.1
110°-120°	2946.7	13.7
120°-130°	2393.5	11.2
130°-140°	1877.5	8.7
140°-150°	1441.0	6.7
150°-160°	1036.3	4.8
160°-170°	633.1	3.0
170°-180°	213.4	1.0
0°-30°	1987.0	9.3
0°-40°	3235.2	15.1
0°-60°	5656.0	26.4
0°-90°	7078.3	33.0
90°-120°	6786.0	31.6
90°-150°	12497.9	58.2
90°-180°	14381.0	67.0
0°-180°	21459.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2591	2591	2591	2591	2591	
5°	2591	2587	2558	2579	2577	246
15°	2483	2479	2453	2472	2474	700
25°	2283	2281	2260	2272	2276	1052
35°	2011	2006	1990	1990	1999	1256
45°	1677	1670	1656	1656	1661	1291
55°	1292	1290	1276	1264	1264	1154
65°	872	872	855	846	843	868
75°	451	442	435	428	425	474
85°	73	77	82	82	84	101
90°	5	14	31	34	31	13
95°	161	565	1724	892	531	168
105°	521	805	3109	4586	4399	549
115°	917	1121	2579	4992	5635	906
125°	1256	1439	2324	3922	4607	1119
135°	1505	1684	2262	3167	3585	1163
145°	1750	1882	2230	2710	2917	1095
155°	1976	2053	2211	2432	2511	911
165°	2151	2172	2221	2308	2319	606
175°	2233	2231	2223	2252	2247	212
180°	2230	2230	2230	2230	2230	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2591.2	2591.2	2591.2	2591.2	2591.2
2.5°	2600.6	2595.1	2572.4	2591.1	2589.3
5°	2591.2	2586.6	2558.3	2579.4	2577.1
7.5°	2570.1	2565.0	2537.1	2558.3	2557.9
10°	2551.3	2544.4	2518.4	2539.5	2537.1
12.5°	2526.8	2519.9	2493.9	2515.1	2512.7
15°	2483.1	2478.6	2452.6	2471.5	2473.7
17.5°	2433.3	2424.6	2401.4	2419.7	2422.1
20°	2393.8	2386.9	2365.7	2382.1	2384.5
22.5°	2352.5	2345.6	2324.4	2340.8	2343.1
25°	2283.4	2281.2	2260.0	2271.8	2276.4
27.5°	2208.7	2202.3	2185.2	2194.3	2198.9
30°	2154.2	2149.7	2130.8	2137.9	2142.5
32.5°	2097.8	2095.1	2078.1	2081.6	2088.0
35°	2010.9	2006.3	1989.8	1990.0	1999.2
37.5°	1914.6	1909.6	1895.8	1893.5	1897.3
40°	1848.9	1842.0	1830.1	1827.7	1827.7
42.5°	1781.2	1776.1	1760.5	1756.4	1762.0
45°	1677.3	1670.4	1656.2	1656.3	1660.9
47.5°	1565.1	1562.3	1545.8	1538.3	1540.2
50°	1482.4	1486.9	1470.6	1461.4	1470.6
52.5°	1410.9	1408.2	1393.5	1384.3	1387.9
55°	1292.1	1289.8	1275.6	1263.8	1263.8
57.5°	1172.7	1166.8	1152.0	1143.3	1150.2
60°	1090.0	1087.8	1071.2	1054.9	1061.8
62.5°	1007.4	1003.3	986.7	976.0	981.0
65°	871.6	871.6	855.1	845.7	843.3
67.5°	752.7	741.7	732.4	721.1	717.9
70°	662.5	653.3	646.0	636.5	629.6
72.5°	574.1	568.6	557.7	548.3	546.9
75°	451.1	441.8	434.6	427.5	425.2
77.5°	320.9	319.0	312.4	308.7	310.1
80°	242.0	242.0	237.3	237.3	234.9
82.5°	170.5	172.4	171.5	167.7	167.3
85°	72.8	77.4	82.3	82.3	84.5
87.5°	14.1	25.1	26.8	27.3	26.8
90°	4.8	14.2	31.2	33.6	31.2
92.5°	68.2	248.5	490.3	212.9	154.1
95°	160.9	564.7	1723.9	892.1	530.7
97.5°	258.3	647.6	2687.2	2223.8	1633.1
100°	331.4	681.2	2986.8	3114.9	2518.6
102.5°	398.6	727.7	3092.4	3790.6	3344.5
105°	521.0	805.1	3109.2	4586.4	4398.6
107.5°	634.4	893.5	2973.3	5082.8	5145.2
110°	722.7	957.4	2852.4	5216.1	5481.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	801.5	1021.2	2740.9	5189.5	5635.0
115°	917.2	1121.4	2578.6	4991.8	5635.0
117.5°	1030.5	1222.1	2471.5	4689.8	5418.9
120°	1099.6	1287.5	2408.1	4473.1	5217.2
122.5°	1164.9	1349.0	2369.7	4240.8	4990.6
125°	1255.7	1438.8	2324.1	3921.9	4607.4
127.5°	1339.3	1519.0	2297.3	3661.7	4264.6
130°	1385.3	1570.8	2285.7	3500.9	4045.6
132.5°	1433.3	1616.9	2274.2	3356.0	3857.4
135°	1505.4	1683.8	2261.7	3166.7	3584.6
137.5°	1577.9	1746.5	2251.1	3013.2	3353.7
140°	1627.9	1785.1	2247.3	2914.4	3217.2
142.5°	1675.9	1823.8	2239.6	2825.2	3090.5
145°	1750.3	1881.8	2230.5	2710.5	2917.2
147.5°	1818.0	1934.4	2219.9	2606.7	2765.5
150°	1867.9	1971.2	2216.1	2550.3	2677.0
152.5°	1914.1	2004.2	2214.2	2498.0	2602.2
155°	1976.0	2053.4	2211.3	2431.6	2511.4
157.5°	2040.3	2094.4	2211.8	2385.3	2437.9
160°	2076.9	2121.4	2213.7	2356.2	2393.7
162.5°	2105.6	2142.8	2215.6	2332.9	2361.0
165°	2151.3	2172.4	2220.9	2307.6	2319.3
167.5°	2182.5	2197.0	2221.3	2285.8	2291.4
170°	2201.7	2208.7	2223.3	2276.1	2276.1
172.5°	2217.0	2218.4	2223.3	2264.6	2262.7
175°	2232.9	2230.6	2223.3	2252.0	2247.3
177.5°	2238.2	2232.5	2222.8	2241.8	2236.2
180°	2230.5	2230.5	2230.5	2230.5	2230.5

(END OF REPORT)