

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: P520066

Luminaire Tested: **SQ4-F-075U-125D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520066  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-075U-125D-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

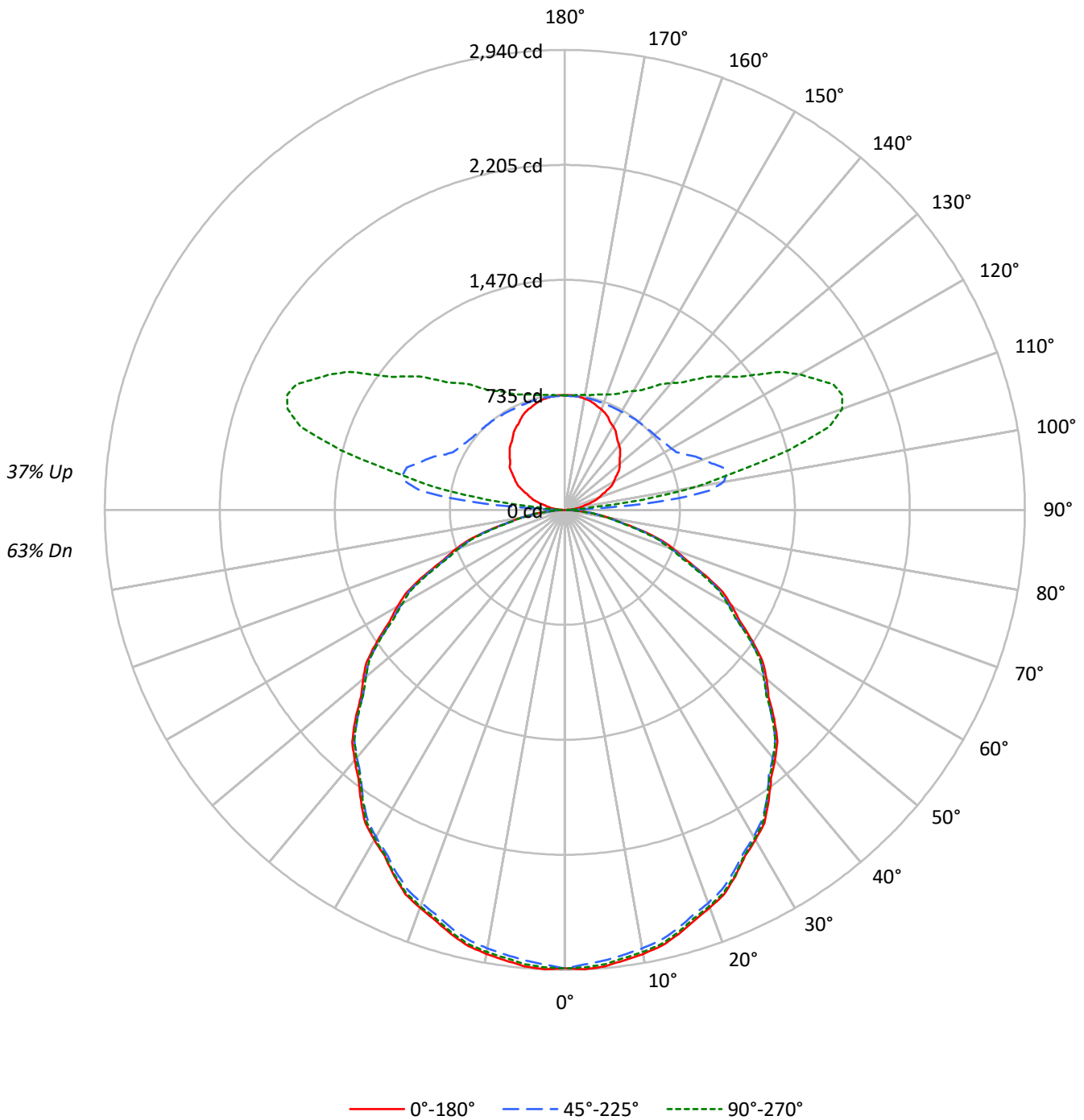
Lumens per Lamp: N/A  
Luminaire Lumens: 12762.8 lumens  
Efficiency: N/A  
Efficacy: 102.0 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 125.1  
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



TEST NUMBER: P520066  
CATALOG NUMBER: SQ4-F-075U-125D-930-1D-UNV-STD-W-8

### Luminous Intensity Polar Plot





TEST NUMBER: P520066

CATALOG NUMBER: SQ4-F-075U-125D-930-1D-UNV-STD-W-8

**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	110	110	110	110	103	103	103	103	90	90	90	79	79	79	68	68	68	63
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	59	57	53
2	92	84	78	72	86	79	73	69	69	65	61	61	57	55	53	50	48	44
3	83	74	66	60	78	69	63	57	61	56	52	54	49	46	47	43	41	37
4	76	65	57	51	71	61	54	48	54	48	44	48	43	39	41	38	35	32
5	70	58	50	44	65	55	47	42	49	42	38	43	38	34	37	34	30	27
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27	24
7	60	47	39	33	56	45	37	32	40	34	29	35	30	26	31	27	24	21
8	55	43	35	29	52	41	33	28	36	30	26	32	27	24	28	24	21	19
9	52	39	31	26	48	37	30	25	33	27	23	30	25	21	26	22	19	17
10	48	36	28	24	45	34	27	23	31	25	21	27	23	19	24	20	17	15

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

	0°	45°	90°
0°	13521	13521	13521
5°	13565	13393	13505
10°	13502	13336	13442
15°	13412	13250	13358
20°	13288	13137	13240
25°	13136	12997	13103
30°	12974	12863	12931
35°	12790	12681	12690
40°	12579	12443	12482
45°	12343	12208	12228
50°	12073	11935	11900
55°	11766	11598	11572
60°	11385	11131	11072
65°	10793	10564	10423
70°	10051	9791	9660
75°	8942	8739	8480
80°	7287	7069	7027
85°	4356	4949	4949



TEST NUMBER: P520066

CATALOG NUMBER: SQ4-F-075U-125D-930-1D-UNV-STD-W-8

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	276.5	2.2
10°-20°	787.6	6.2
20°-30°	1183.3	9.3
30°-40°	1411.9	11.1
40°-50°	1447.2	11.3
50°-60°	1289.9	10.1
60°-70°	960.3	7.5
70°-80°	520.2	4.1
80°-90°	121.3	1.0
90°-100°	345.0	2.7
100°-110°	949.0	7.4
110°-120°	979.6	7.7
120°-130°	784.9	6.1
130°-140°	616.4	4.8
140°-150°	472.4	3.7
150°-160°	339.7	2.7
160°-170°	207.7	1.6
170°-180°	70.0	0.5
0°-30°	2247.4	17.6
0°-40°	3659.3	28.7
0°-60°	6396.4	50.1
0°-90°	7998.2	62.7
90°-120°	2273.6	17.8
90°-150°	4147.3	32.5
90°-180°	4765.0	37.3
0°-180°	12762.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2931	2931	2931	2931	2931	
5°	2929	2924	2892	2918	2916	278
15°	2808	2802	2774	2798	2797	792
25°	2581	2576	2554	2568	2574	1189
35°	2271	2270	2252	2252	2253	1420
45°	1892	1887	1871	1868	1874	1458
55°	1463	1458	1442	1431	1439	1307
65°	989	982	968	961	955	979
75°	502	502	490	481	476	533
85°	82	93	94	95	94	114
90°	2	6	11	14	14	5
95°	51	188	610	261	166	54
105°	170	261	1046	1593	1486	179
115°	300	366	839	1670	1895	296
125°	414	472	761	1287	1508	369
135°	500	554	739	1041	1178	385
145°	577	617	728	887	955	362
155°	654	675	724	797	820	300
165°	706	716	727	756	761	199
175°	731	733	728	738	736	69
180°	731	731	731	731	731	

TEST NUMBER: P520066

CATALOG NUMBER: SQ4-F-075U-125D-930-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2930.9	2930.9	2930.9	2930.9	2930.9
2.5°	2939.9	2934.8	2908.9	2930.8	2927.0
5°	2929.3	2924.5	2892.2	2917.9	2916.3
7.5°	2904.4	2898.5	2869.0	2893.1	2890.2
10°	2882.4	2877.8	2847.0	2871.2	2869.6
12.5°	2855.4	2850.6	2819.9	2844.0	2843.7
15°	2808.3	2802.0	2774.4	2798.5	2797.0
17.5°	2751.8	2744.6	2717.3	2736.4	2739.5
20°	2706.7	2701.9	2676.0	2693.8	2697.0
22.5°	2660.2	2654.2	2626.9	2647.4	2650.6
25°	2580.8	2576.1	2553.5	2568.1	2574.3
27.5°	2493.8	2493.8	2472.8	2483.2	2487.0
30°	2435.7	2435.7	2414.7	2421.3	2427.6
32.5°	2373.8	2368.7	2348.9	2354.2	2360.5
35°	2271.1	2269.6	2251.7	2251.8	2253.4
37.5°	2165.0	2160.6	2141.2	2142.6	2150.2
40°	2088.9	2085.7	2066.3	2066.5	2072.7
42.5°	2011.4	2008.3	1991.5	1988.9	1991.5
45°	1892.0	1887.4	1871.2	1868.0	1874.3
47.5°	1764.9	1766.3	1746.9	1742.4	1745.9
50°	1682.3	1682.3	1663.0	1653.5	1658.2
52.5°	1595.9	1593.4	1574.0	1563.2	1574.3
55°	1463.0	1458.2	1442.0	1430.9	1438.8
57.5°	1326.9	1319.6	1303.3	1291.1	1295.6
60°	1234.0	1222.9	1206.5	1197.0	1200.1
62.5°	1137.2	1131.2	1113.7	1099.0	1105.8
65°	988.8	982.5	967.8	961.2	954.9
67.5°	843.2	839.2	822.7	815.8	811.6
70°	745.2	737.3	725.9	717.8	716.2
72.5°	649.8	640.5	629.1	622.2	618.1
75°	501.7	501.7	490.3	480.6	475.8
77.5°	360.7	361.9	352.6	349.4	347.1
80°	274.3	274.3	266.1	263.0	264.5
82.5°	191.7	195.4	192.6	188.0	185.8
85°	82.3	93.3	93.5	95.2	93.5
87.5°	14.5	24.3	26.8	24.8	22.3
90°	1.6	6.2	10.9	14.0	14.0
92.5°	21.5	91.7	159.0	61.0	50.1
95°	51.4	188.3	610.0	260.9	166.5
97.5°	83.7	208.8	930.9	717.3	506.1
100°	107.4	221.4	1031.7	1041.4	849.7
102.5°	129.8	236.6	1057.8	1291.9	1116.0
105°	169.6	260.9	1045.7	1592.6	1486.1
107.5°	207.6	291.0	986.2	1739.9	1771.5
110°	234.9	311.0	941.4	1776.5	1886.0

TEST NUMBER: P520066

CATALOG NUMBER: SQ4-F-075U-125D-930-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	259.9	333.5	896.6	1752.9	1919.7
115°	300.4	365.7	838.7	1670.1	1895.4
117.5°	338.9	399.2	802.1	1554.1	1808.8
120°	362.6	420.4	785.8	1467.2	1730.4
122.5°	383.7	441.5	774.7	1391.0	1640.8
125°	413.9	471.7	761.0	1287.3	1507.9
127.5°	442.6	497.7	751.9	1200.7	1394.3
130°	457.5	513.8	746.9	1149.3	1325.8
132.5°	475.0	531.2	743.2	1104.1	1263.5
135°	499.5	554.3	739.2	1041.0	1177.9
137.5°	522.5	573.4	735.7	990.1	1103.0
140°	540.0	587.2	734.5	956.2	1058.1
142.5°	554.9	598.4	732.0	926.0	1013.3
145°	577.3	616.9	728.3	887.0	955.4
147.5°	601.2	635.4	726.4	852.4	907.2
150°	616.2	646.6	725.2	833.5	876.1
152.5°	629.9	657.9	723.9	817.1	852.4
155°	653.6	674.9	723.6	797.3	820.1
157.5°	670.7	688.0	723.6	780.9	796.8
160°	683.1	696.8	723.6	772.1	784.3
162.5°	693.1	704.3	724.9	764.6	774.3
165°	706.5	715.6	726.7	756.4	761.0
167.5°	715.8	722.8	728.3	749.4	750.7
170°	722.0	726.6	728.3	746.9	746.9
172.5°	727.0	729.2	728.3	743.2	742.0
175°	731.3	732.9	728.3	737.6	736.0
177.5°	732.6	732.6	727.6	735.1	732.6
180°	731.3	731.3	731.3	731.3	731.3

(END OF REPORT)