

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: P520450

Luminaire Tested: **SQ4-F-150U-125D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520450  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-125D-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

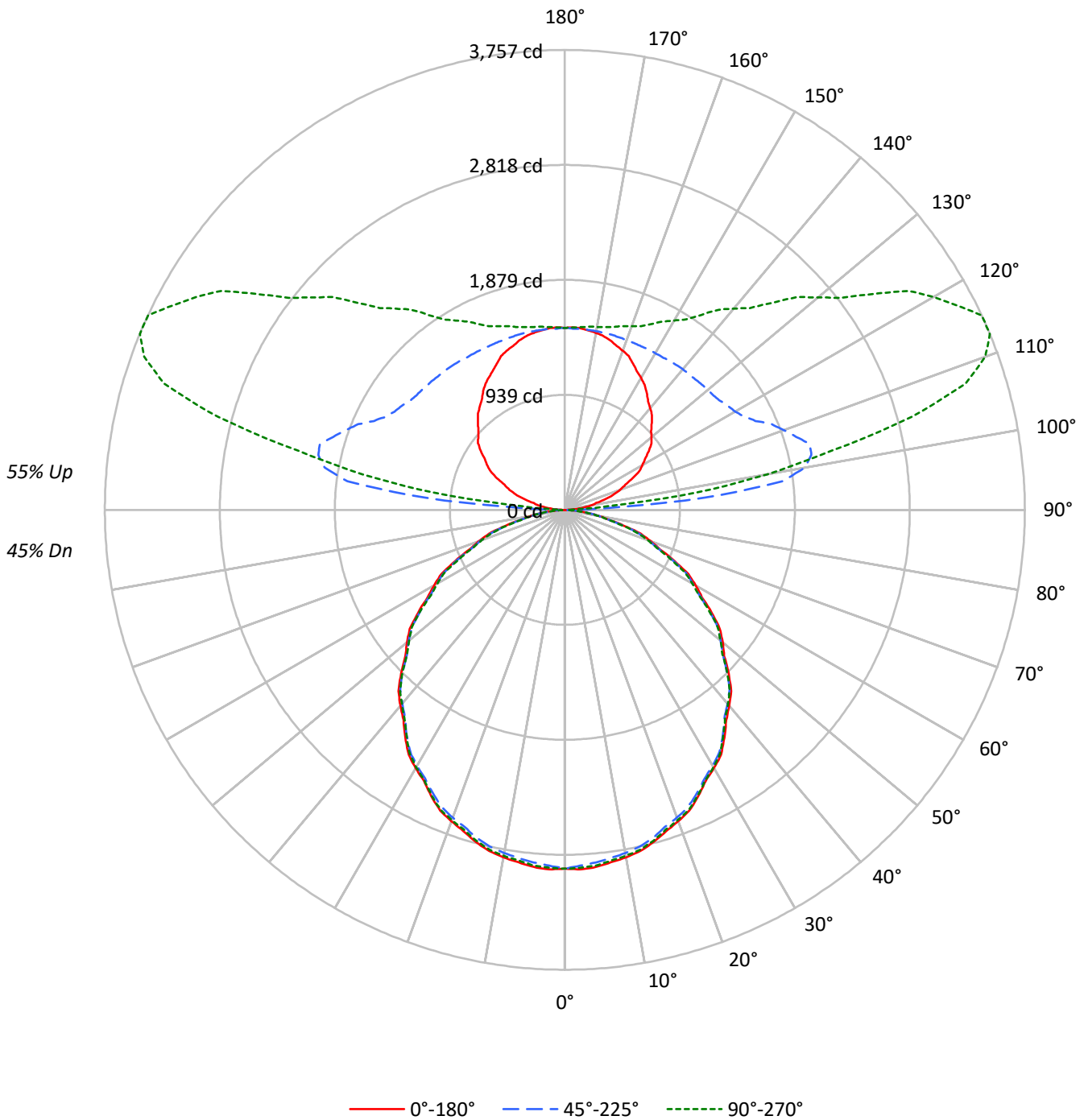
Lumens per Lamp: N/A  
Luminaire Lumens: 17586.5 lumens  
Efficiency: N/A  
Efficacy: 105.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 167.3  
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	97	92	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44	38
2	88	81	75	69	80	74	69	64	62	58	55	51	48	46	40	38	37	32
3	80	71	63	58	73	65	59	54	55	50	46	45	41	38	36	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	31	52	42	35	29	35	30	26	29	25	22	24	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	22	19	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

**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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	276.5	1.6
10°-20°	787.6	4.5
20°-30°	1183.3	6.7
30°-40°	1411.9	8.0
40°-50°	1447.2	8.2
50°-60°	1289.9	7.3
60°-70°	960.3	5.5
70°-80°	520.2	3.0
80°-90°	122.5	0.7
90°-100°	691.0	3.9
100°-110°	1868.5	10.6
110°-120°	1964.4	11.2
120°-130°	1595.7	9.1
130°-140°	1251.7	7.1
140°-150°	960.7	5.5
150°-160°	690.9	3.9
160°-170°	422.1	2.4
170°-180°	142.3	0.8
0°-30°	2247.4	12.8
0°-40°	3659.3	20.8
0°-60°	6396.4	36.4
0°-90°	7999.4	45.5
90°-120°	4524.0	25.7
90°-150°	8331.9	47.4
90°-180°	9587.0	54.5
0°-180°	17586.5	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°	3	10	21	22	21	9
95°	107	376	1149	595	354	112
105°	347	537	2073	3058	2932	366
115°	611	748	1719	3328	3757	604
125°	837	959	1549	2615	3072	746
135°	1004	1123	1508	2111	2390	776
145°	1167	1254	1487	1807	1945	730
155°	1317	1369	1474	1621	1674	608
165°	1434	1448	1481	1538	1546	404
175°	1489	1487	1482	1501	1498	141
180°	1487	1487	1487	1487	1487	

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**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°	14.8	24.9	28.7	26.4	23.5
90°	3.2	9.5	20.8	22.3	20.8
92.5°	45.5	165.7	326.8	141.8	102.7
95°	107.2	376.4	1149.2	594.7	353.7
97.5°	172.2	431.7	1791.5	1482.5	1088.8
100°	220.9	454.1	1991.1	2076.6	1679.1
102.5°	265.7	485.1	2061.7	2527.0	2229.7
105°	347.4	536.7	2072.8	3057.6	2932.3
107.5°	422.9	595.6	1982.2	3388.6	3430.2
110°	481.8	638.3	1901.5	3477.4	3654.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	534.3	680.8	1827.3	3459.7	3756.7
115°	611.4	747.6	1719.1	3327.9	3756.7
117.5°	687.0	814.7	1647.7	3126.5	3612.6
120°	733.1	858.3	1605.5	2982.0	3478.2
122.5°	776.6	899.4	1579.8	2827.2	3327.1
125°	837.2	959.2	1549.4	2614.7	3071.6
127.5°	892.8	1012.7	1531.5	2441.1	2843.0
130°	923.6	1047.2	1523.8	2334.0	2697.0
132.5°	955.6	1078.0	1516.1	2237.3	2571.6
135°	1003.6	1122.6	1507.8	2111.2	2389.7
137.5°	1052.0	1164.3	1500.7	2008.9	2235.8
140°	1085.3	1190.1	1498.2	1943.0	2144.9
142.5°	1117.2	1215.8	1493.1	1883.5	2060.4
145°	1166.8	1254.5	1486.9	1807.1	1944.8
147.5°	1212.0	1289.7	1479.9	1737.8	1843.6
150°	1245.3	1314.1	1477.4	1700.2	1784.7
152.5°	1276.0	1336.2	1476.1	1665.3	1734.7
155°	1317.3	1368.9	1474.2	1621.0	1674.3
157.5°	1360.2	1396.2	1474.5	1590.3	1625.3
160°	1384.5	1414.3	1475.8	1570.7	1595.8
162.5°	1403.8	1428.5	1477.1	1555.3	1574.1
165°	1434.1	1448.2	1480.6	1538.4	1546.2
167.5°	1455.0	1464.7	1480.9	1523.9	1527.7
170°	1467.7	1472.5	1482.2	1517.4	1517.4
172.5°	1478.0	1479.0	1482.2	1509.7	1508.5
175°	1488.6	1487.0	1482.2	1501.3	1498.2
177.5°	1492.1	1488.4	1481.9	1494.6	1490.9
180°	1486.9	1486.9	1486.9	1486.9	1486.9

(END OF REPORT)