

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

Brand: CORELITE

Report Number: P521694

Luminaire Tested: SQ4-F-150U-125D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521694  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-125D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12032.2 lumens  
Efficiency: N/A  
Efficacy: 112.5 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

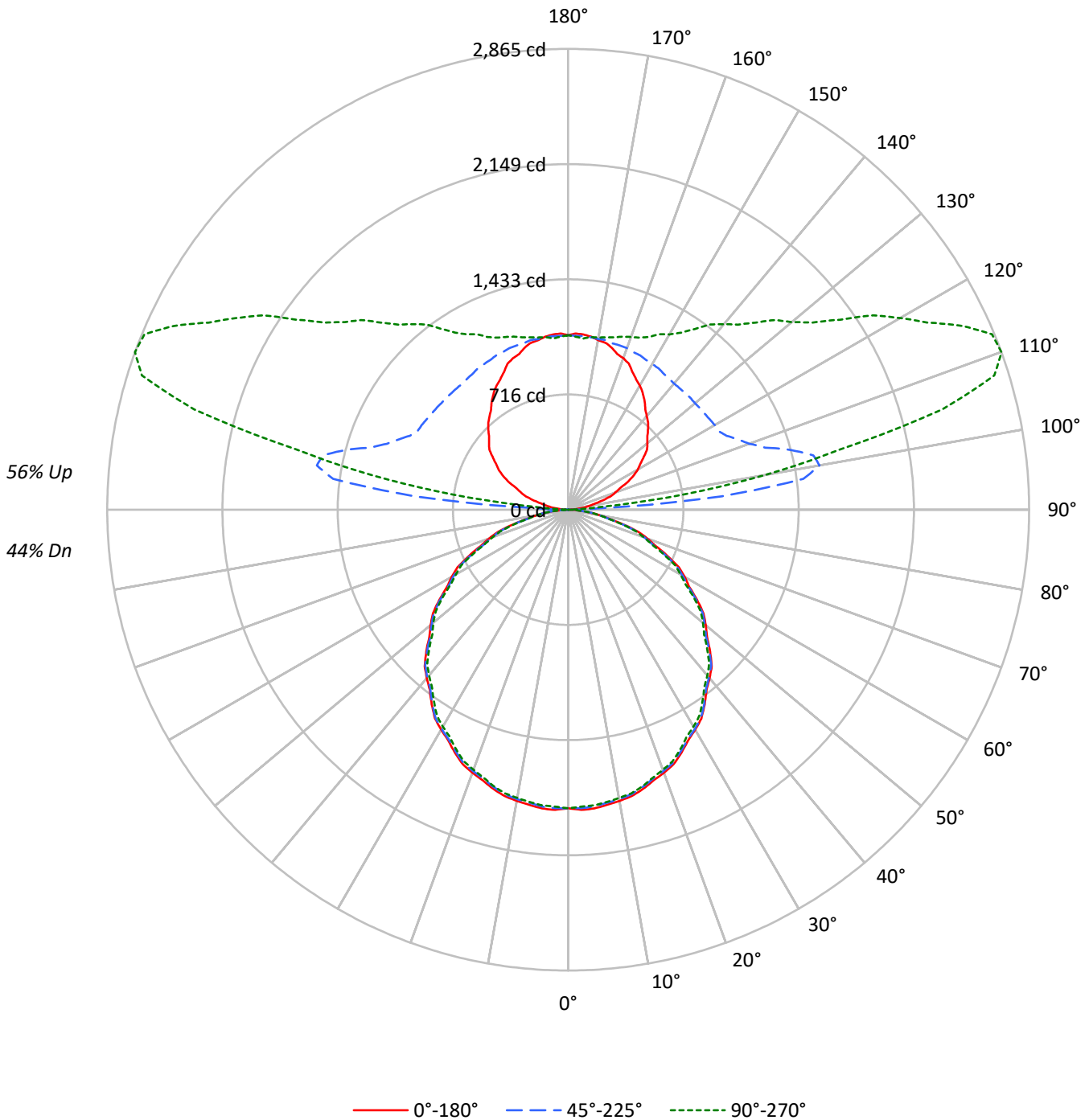
Input Watts (W): 107  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20										
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	50	30	10	50	30	10	0														
RCR																																						
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44																				
1	96	92	88	85	88	84	81	78	70	68	65	57	55	54	45	43	42	37																				
2	88	80	74	69	80	74	68	64	61	57	54	50	47	44	39	37	36	31																				
3	80	70	63	57	73	65	58	53	54	49	45	44	40	37	34	32	30	26																				
4	73	62	54	48	66	57	50	45	48	42	38	39	35	32	31	28	26	22																				
5	67	55	47	41	61	51	44	38	42	37	33	35	31	28	28	25	22	19																				
6	61	49	41	35	56	45	38	33	38	33	29	31	27	24	25	22	20	17																				
7	57	44	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17	15																				
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	21	18	15	13																				
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12																				
10	46	34	26	22	42	31	25	20	26	21	18	22	18	15	18	15	13	11																				

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

	0°	45°	90°
0°	17128	17128	17128
5°	17268	17155	17089
10°	17219	17114	17048
15°	17167	17060	17012
20°	17087	16977	16896
25°	16959	16866	16752
30°	16826	16772	16598
35°	16654	16596	16389
40°	16459	16398	16202
45°	16276	16170	15917
50°	16020	15888	15697
55°	15725	15577	15331
60°	15426	15144	14882
65°	14828	14515	14227
70°	14092	13598	13431
75°	12740	12377	12159
80°	10493	10493	10334
85°	7442	8511	8945

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 16276 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.7	1.5
10°-20°	503.2	4.2
20°-30°	761.0	6.3
30°-40°	916.6	7.6
40°-50°	951.6	7.9
50°-60°	862.7	7.2
60°-70°	658.1	5.5
70°-80°	368.1	3.1
80°-90°	95.7	0.8
90°-100°	494.4	4.1
100°-110°	1406.7	11.7
110°-120°	1347.8	11.2
120°-130°	1066.7	8.9
130°-140°	856.2	7.1
140°-150°	670.3	5.6
150°-160°	490.5	4.1
160°-170°	303.8	2.5
170°-180°	103.1	0.9
0°-30°	1439.8	12.0
0°-40°	2356.4	19.6
0°-60°	4170.7	34.7
0°-90°	5292.6	44.0
90°-120°	3249.0	27.0
90°-150°	5842.2	48.6
90°-180°	6740.0	56.0
0°-180°	12032.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1856	1856	1856	1856	1856	
5°	1864	1846	1852	1847	1845	177
15°	1797	1779	1786	1784	1781	507
25°	1666	1649	1657	1645	1646	768
35°	1479	1467	1474	1457	1455	924
45°	1247	1240	1239	1224	1220	961
55°	978	976	968	956	953	873
65°	679	675	665	657	652	673
75°	357	351	347	342	341	378
85°	70	77	80	80	84	87
90°	0	0	0	0	0	5
95°	54	213	957	331	204	61
105°	219	332	1434	2532	2407	231
115°	406	491	1087	2303	2704	400
125°	573	636	1038	1722	2059	513
135°	701	760	1025	1454	1644	541
145°	827	870	1033	1259	1372	517
155°	945	967	1058	1138	1184	437
165°	1044	1048	1070	1094	1110	294
175°	1093	1087	1083	1076	1068	104
180°	1085	1085	1085	1085	1085	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1856.4	1856.4	1856.4	1856.4	1856.4
2.5°	1867.8	1852.6	1857.2	1853.8	1847.4
5°	1864.5	1845.6	1852.3	1847.1	1845.2
7.5°	1850.2	1832.5	1838.2	1835.1	1832.7
10°	1838.0	1821.1	1826.8	1823.7	1819.7
12.5°	1824.2	1806.5	1813.0	1808.3	1806.7
15°	1797.3	1779.4	1786.1	1784.0	1781.0
17.5°	1764.7	1746.6	1753.5	1749.4	1747.0
20°	1740.3	1721.3	1729.1	1720.9	1720.9
22.5°	1712.6	1693.7	1703.0	1690.8	1693.2
25°	1665.9	1649.0	1656.8	1644.6	1645.6
27.5°	1615.2	1599.3	1609.3	1593.6	1593.0
30°	1579.4	1563.4	1574.3	1557.0	1558.0
32.5°	1539.5	1525.9	1535.2	1518.7	1518.1
35°	1478.6	1466.6	1473.5	1457.1	1455.1
37.5°	1412.2	1403.4	1406.3	1390.8	1390.0
40°	1366.6	1358.6	1361.5	1345.2	1345.2
42.5°	1320.1	1312.9	1315.0	1297.1	1297.1
45°	1247.4	1240.4	1239.3	1223.9	1219.9
47.5°	1169.8	1164.2	1160.7	1146.8	1145.0
50°	1116.1	1112.1	1106.9	1094.6	1093.6
52.5°	1059.8	1058.2	1052.3	1039.2	1038.3
55°	977.6	975.6	968.4	956.1	953.1
57.5°	891.4	889.4	881.0	868.9	866.0
60°	836.0	830.0	820.7	809.5	806.5
62.5°	775.7	769.0	759.6	749.2	748.7
65°	679.2	675.2	664.9	656.7	651.7
67.5°	588.4	579.4	569.2	562.5	561.5
70°	522.4	513.4	504.1	498.9	497.9
72.5°	456.4	449.0	440.5	435.4	435.2
75°	357.4	351.4	347.2	342.1	341.1
77.5°	259.5	257.9	256.2	250.7	250.7
80°	197.5	197.5	197.5	194.5	194.5
82.5°	142.2	146.1	146.2	144.8	144.8
85°	70.3	77.2	80.4	80.5	84.5
87.5°	19.6	26.7	31.8	32.6	35.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.5	87.5	203.0	59.1	44.6
95°	53.6	213.0	957.1	331.3	204.2
97.5°	98.6	249.5	1474.0	1054.7	722.8
100°	129.9	271.1	1586.2	1606.7	1237.6
102.5°	164.6	294.5	1561.5	2056.6	1734.3
105°	218.6	331.6	1433.6	2532.2	2407.2
107.5°	273.5	374.8	1284.2	2666.3	2777.6
110°	311.5	406.3	1198.4	2615.0	2865.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	347.8	437.7	1140.7	2493.7	2850.2
115°	406.4	491.1	1087.0	2302.8	2704.2
117.5°	457.9	537.4	1055.3	2094.2	2519.4
120°	499.2	565.7	1052.0	1975.0	2382.4
122.5°	532.2	598.7	1043.7	1870.4	2248.8
125°	573.4	636.0	1037.5	1721.8	2058.6
127.5°	618.4	676.9	1034.2	1632.9	1910.5
130°	641.5	700.0	1029.3	1571.1	1813.1
132.5°	666.3	723.1	1029.3	1522.8	1745.5
135°	701.3	759.8	1025.2	1454.4	1644.0
137.5°	734.3	791.2	1024.7	1396.5	1560.2
140°	759.1	817.6	1023.1	1348.5	1505.8
142.5°	787.1	835.9	1028.0	1310.1	1451.3
145°	827.1	869.5	1033.4	1258.7	1371.7
147.5°	861.4	902.5	1042.5	1206.8	1304.4
150°	891.1	919.3	1045.8	1189.7	1258.2
152.5°	914.2	944.0	1049.1	1166.5	1230.2
155°	944.7	966.9	1058.2	1137.6	1184.0
157.5°	982.7	996.0	1060.2	1124.5	1157.6
160°	1002.5	1012.6	1068.5	1114.5	1142.7
162.5°	1014.0	1025.7	1070.1	1106.1	1127.9
165°	1043.7	1047.8	1070.5	1093.6	1109.7
167.5°	1063.9	1060.3	1080.0	1090.5	1096.9
170°	1070.5	1068.5	1076.7	1079.0	1087.0
172.5°	1085.4	1078.5	1081.7	1075.6	1082.1
175°	1093.2	1087.2	1082.9	1076.5	1068.5
177.5°	1096.5	1086.8	1081.7	1075.1	1076.7
180°	1085.0	1085.0	1085.0	1085.0	1085.0

(END OF REPORT)