

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: P521669

Luminaire Tested: SQ4-F-150U-075D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521669
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-37)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-150U-075D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10079.7 lumens
Efficiency: N/A
Efficacy: 121.4 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: Semi-Indirect

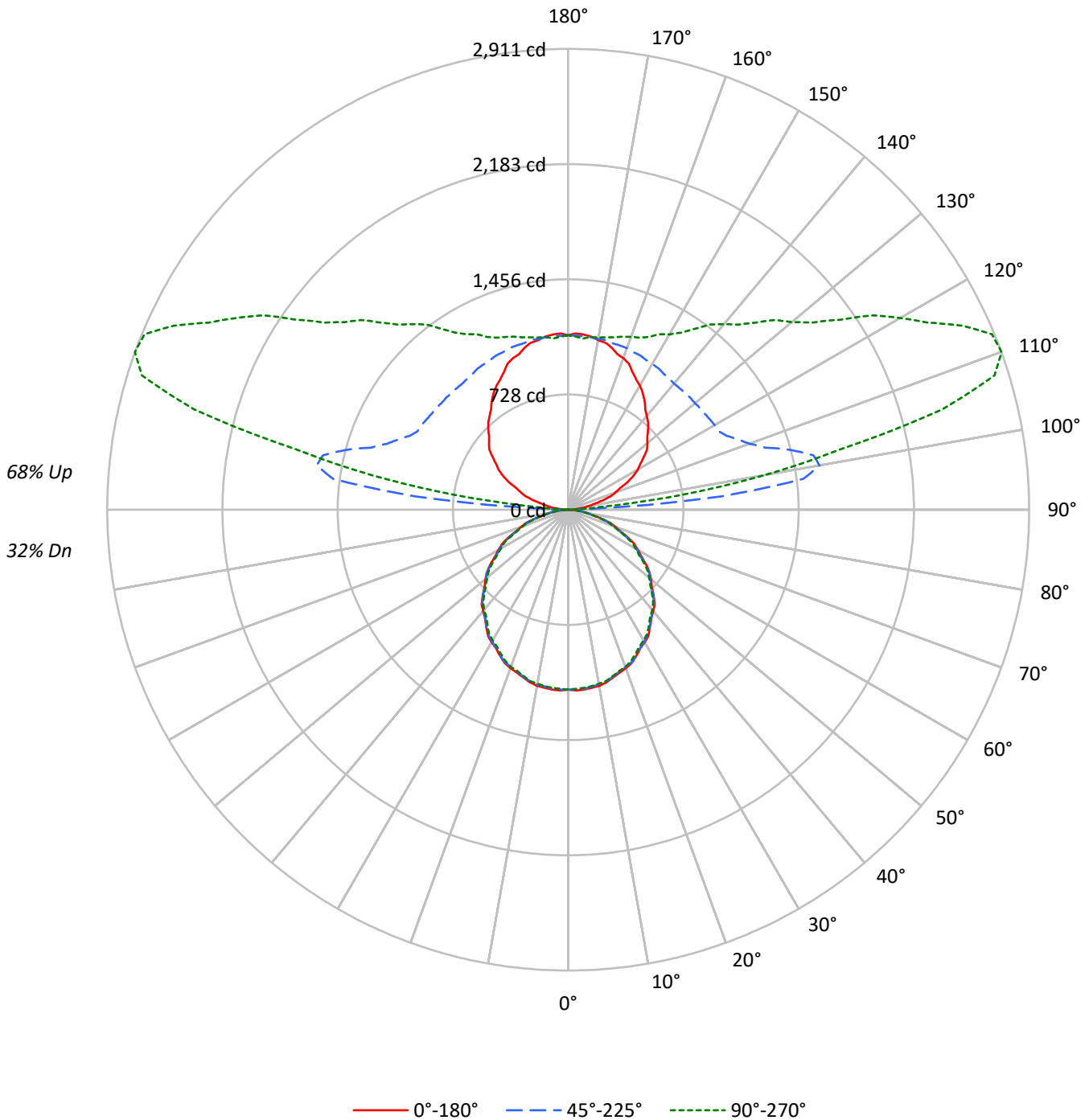
Input Watts (W): 83
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32																				
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33	27																				
2	85	78	72	67	76	70	65	61	56	52	49	43	40	38	31	29	28	22																				
3	78	68	61	56	70	62	56	51	49	45	41	38	35	32	27	25	24	19																				
4	71	60	53	47	63	55	48	43	44	39	35	33	30	27	24	22	20	16																				
5	65	54	46	40	58	48	42	36	39	34	30	30	26	24	22	19	17	14																				
6	60	48	40	34	53	43	37	31	35	30	26	27	23	21	19	17	15	12																				
7	55	43	35	30	49	39	32	27	31	26	23	24	21	18	18	15	14	11																				
8	51	39	31	26	46	35	29	24	29	24	20	22	19	16	16	14	12	10																				
9	47	35	28	23	43	32	26	21	26	21	18	20	17	14	15	13	11	9																				
10	44	32	25	21	40	29	23	19	24	19	16	19	15	13	14	11	10	8																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10482	10482	10482
5°	10561	10522	10465
10°	10586	10508	10460
15°	10476	10437	10387
20°	10454	10383	10373
25°	10365	10344	10228
30°	10296	10229	10153
35°	10150	10139	10011
40°	10057	10007	9945
45°	9937	9882	9774
50°	9802	9727	9594
55°	9621	9503	9370
60°	9394	9241	9069
65°	9082	8877	8719
70°	8514	8317	8122
75°	7671	7450	7340
80°	6270	6323	6211
85°	4488	5145	5145

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9937 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.6	1.1
10°-20°	307.9	3.1
20°-30°	465.8	4.6
30°-40°	560.3	5.6
40°-50°	581.7	5.8
50°-60°	527.0	5.2
60°-70°	400.9	4.0
70°-80°	222.8	2.2
80°-90°	57.4	0.6
90°-100°	502.4	5.0
100°-110°	1429.4	14.2
110°-120°	1369.6	13.6
120°-130°	1083.9	10.8
130°-140°	870.0	8.6
140°-150°	681.1	6.8
150°-160°	498.4	4.9
160°-170°	308.7	3.1
170°-180°	104.8	1.0
0°-30°	881.4	8.7
0°-40°	1441.6	14.3
0°-60°	2550.3	25.3
0°-90°	3231.4	32.1
90°-120°	3301.4	32.8
90°-150°	5936.5	58.9
90°-180°	6848.0	67.9
0°-180°	10079.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1136	1136	1136	1136	1136	
5°	1140	1130	1136	1131	1130	108
15°	1097	1088	1093	1092	1088	310
25°	1018	1009	1016	1006	1005	469
35°	901	897	900	890	889	565
45°	762	756	757	749	749	588
55°	598	597	591	586	582	534
65°	416	410	407	400	399	410
75°	215	212	209	207	206	228
85°	42	46	49	49	49	52
90°	0	0	0	0	0	4
95°	54	216	972	337	208	62
105°	222	337	1457	2573	2446	235
115°	413	499	1105	2340	2748	407
125°	583	646	1054	1750	2092	522
135°	713	772	1042	1478	1670	550
145°	840	884	1050	1279	1394	525
155°	960	982	1075	1156	1203	444
165°	1061	1065	1088	1111	1128	298
175°	1111	1105	1100	1094	1086	105
180°	1102	1102	1102	1102	1102	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1136.1	1136.1	1136.1	1136.1	1136.1
2.5°	1143.6	1133.9	1137.0	1134.4	1132.0
5°	1140.3	1130.1	1136.1	1130.9	1129.9
7.5°	1134.9	1122.9	1125.8	1124.7	1124.7
10°	1129.9	1114.7	1121.6	1116.5	1116.5
12.5°	1116.7	1103.9	1109.2	1106.6	1108.2
15°	1096.8	1087.7	1092.7	1091.5	1087.5
17.5°	1079.6	1068.7	1072.4	1070.5	1068.9
20°	1064.7	1054.6	1057.5	1052.4	1056.5
22.5°	1048.2	1038.1	1043.4	1034.9	1034.9
25°	1018.2	1009.1	1016.1	1005.7	1004.7
27.5°	986.3	980.4	985.1	977.3	974.5
30°	966.4	957.3	960.2	955.0	953.0
32.5°	943.3	934.1	937.0	927.8	929.0
35°	901.2	897.2	900.2	889.8	888.8
37.5°	863.2	855.1	859.9	851.4	850.5
40°	835.0	826.9	830.9	825.7	825.7
42.5°	809.4	800.5	802.7	795.9	793.4
45°	761.6	756.5	757.4	749.1	749.1
47.5°	714.4	710.7	709.2	700.8	702.4
50°	682.9	676.8	677.7	668.4	668.4
52.5°	646.5	646.9	643.0	636.9	632.0
55°	598.1	597.1	590.8	585.6	582.5
57.5°	546.3	541.7	537.2	530.2	529.6
60°	509.1	506.0	500.8	494.5	491.5
62.5°	471.0	468.0	462.7	457.3	456.7
65°	416.0	409.9	406.6	400.4	399.4
67.5°	356.2	351.3	347.3	342.3	341.7
70°	315.6	311.5	308.3	304.1	301.1
72.5°	278.3	271.9	268.6	265.3	263.0
75°	215.2	212.2	209.0	206.9	205.9
77.5°	154.4	154.6	154.6	151.9	150.9
80°	118.0	119.0	119.0	117.9	116.9
82.5°	85.7	87.5	88.4	87.3	87.1
85°	42.4	45.5	48.6	48.6	48.6
87.5°	11.6	15.6	19.0	19.8	19.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.8	88.9	206.2	60.0	45.3
95°	54.5	216.4	972.5	336.6	207.5
97.5°	100.2	253.5	1497.8	1071.8	734.4
100°	132.0	275.5	1611.8	1632.6	1257.6
102.5°	167.3	299.2	1586.6	2089.8	1762.3
105°	222.2	336.9	1456.7	2573.1	2446.0
107.5°	277.9	380.8	1305.0	2709.3	2822.4
110°	316.5	412.8	1217.8	2657.2	2911.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	353.4	444.8	1159.1	2533.9	2896.2
115°	412.9	499.0	1104.6	2340.0	2747.8
117.5°	465.3	546.1	1072.3	2128.0	2560.0
120°	507.2	574.9	1068.9	2006.9	2420.8
122.5°	540.8	608.4	1060.6	1900.6	2285.0
125°	582.7	646.2	1054.3	1749.5	2091.8
127.5°	628.4	687.8	1050.9	1659.3	1941.3
130°	651.8	711.3	1045.9	1596.4	1842.4
132.5°	677.0	734.8	1045.9	1547.4	1773.6
135°	712.6	772.1	1041.7	1477.8	1670.5
137.5°	746.2	804.0	1041.3	1419.0	1585.4
140°	771.3	830.7	1039.6	1370.2	1530.1
142.5°	799.8	849.4	1044.6	1331.3	1474.7
145°	840.5	883.5	1050.1	1279.1	1393.8
147.5°	875.3	917.1	1059.3	1226.3	1325.5
150°	905.5	934.2	1062.7	1208.9	1278.5
152.5°	928.9	959.3	1066.0	1185.3	1250.0
155°	960.0	982.5	1075.2	1156.0	1203.1
157.5°	998.5	1012.0	1077.3	1142.6	1176.3
160°	1018.6	1028.9	1085.7	1132.5	1161.2
162.5°	1030.4	1042.3	1087.4	1123.9	1146.1
165°	1060.6	1064.7	1087.8	1111.2	1127.6
167.5°	1081.1	1077.4	1097.4	1108.1	1114.6
170°	1087.8	1085.8	1094.1	1096.4	1104.6
172.5°	1102.9	1095.9	1099.1	1093.0	1099.5
175°	1110.9	1104.7	1100.4	1093.9	1085.7
177.5°	1114.2	1104.4	1099.1	1092.5	1094.1
180°	1102.5	1102.5	1102.5	1102.5	1102.5

(END OF REPORT)