

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: P521630

Luminaire Tested: SQ4-F-125U-100D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521630
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-38)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-125U-100D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

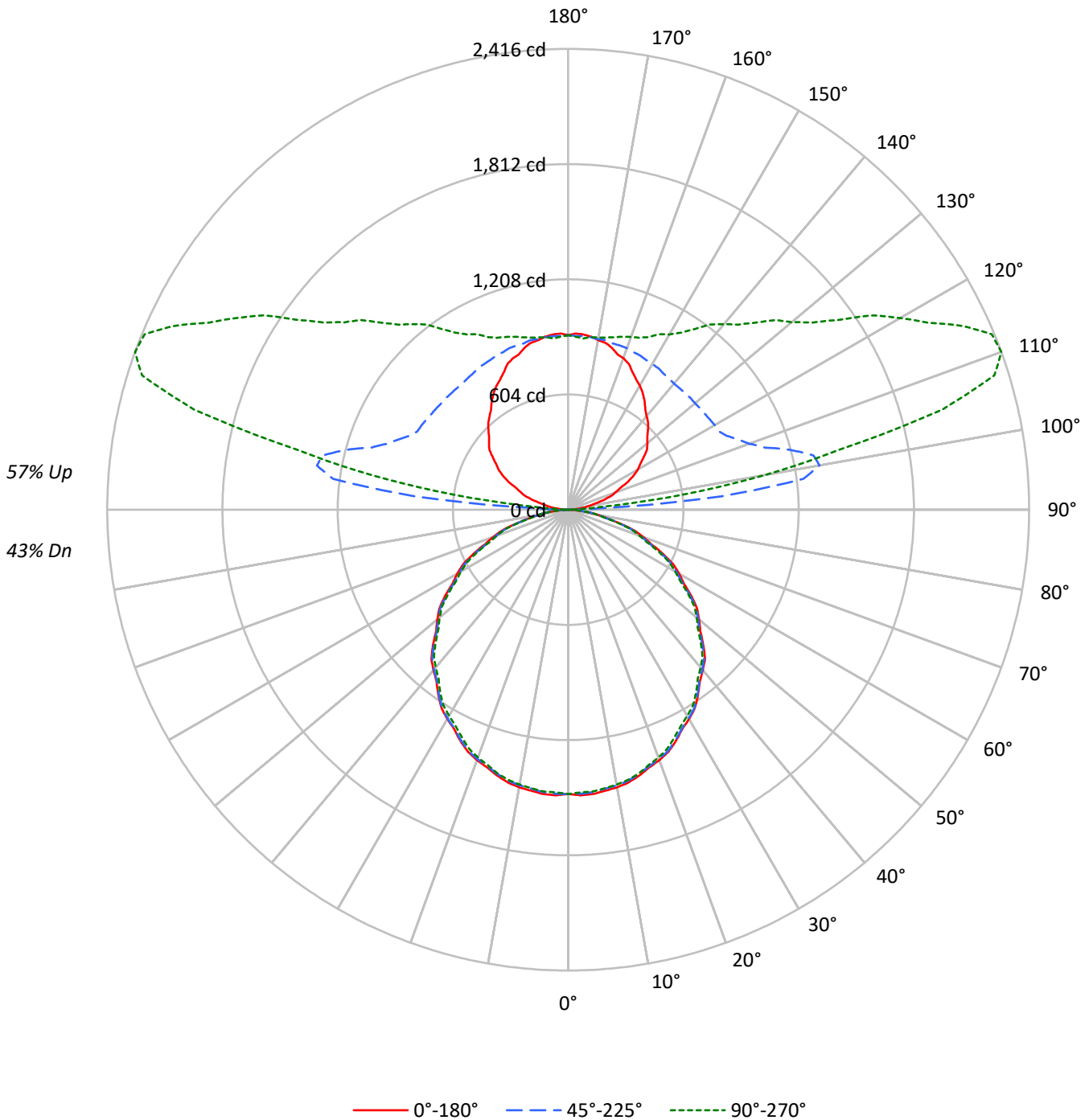
Lumens per Lamp: N/A
Luminaire Lumens: 9930.3 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 83.7
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										
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	43																				
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	44	43	42	36																				
2	87	80	74	69	79	73	68	63	61	57	53	49	46	44	38	36	35	30																				
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	29	25																				
4	73	62	54	48	66	57	50	45	47	42	38	38	35	31	30	27	25	21																				
5	67	55	47	41	61	51	43	38	42	37	33	34	30	27	27	24	22	18																				
6	61	49	41	35	56	45	38	33	38	32	28	31	27	24	24	21	19	16																				
7	57	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14																				
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	20	17	15	13																				
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	19	16	14	11																				
10	45	33	26	22	42	31	25	20	26	21	18	22	18	15	17	14	12	10																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13747	13747	13747
5°	13857	13771	13733
10°	13843	13746	13707
15°	13777	13698	13668
20°	13715	13654	13573
25°	13610	13557	13409
30°	13493	13460	13295
35°	13356	13308	13169
40°	13222	13172	13010
45°	13069	12960	12812
50°	12846	12757	12609
55°	12666	12482	12333
60°	12372	12123	11952
65°	11972	11634	11453
70°	11276	10914	10717
75°	10181	9921	9774
80°	8411	8411	8299
85°	5918	6796	7008

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13069 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.1	1.4
10°-20°	404.1	4.1
20°-30°	611.1	6.2
30°-40°	735.8	7.4
40°-50°	764.2	7.7
50°-60°	692.7	7.0
60°-70°	527.6	5.3
70°-80°	294.8	3.0
80°-90°	76.5	0.8
90°-100°	416.8	4.2
100°-110°	1186.1	11.9
110°-120°	1136.4	11.4
120°-130°	899.4	9.1
130°-140°	721.9	7.3
140°-150°	565.2	5.7
150°-160°	413.5	4.2
160°-170°	256.2	2.6
170°-180°	86.9	0.9
0°-30°	1156.2	11.6
0°-40°	1892.1	19.1
0°-60°	3349.0	33.7
0°-90°	4247.8	42.8
90°-120°	2739.4	27.6
90°-150°	4925.9	49.6
90°-180°	5682.0	57.2
0°-180°	9930.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1490	1490	1490	1490	1490	
5°	1496	1482	1487	1483	1483	142
15°	1442	1429	1434	1431	1431	407
25°	1337	1326	1332	1321	1317	616
35°	1186	1179	1182	1170	1169	742
45°	1002	996	993	983	982	772
55°	787	784	776	767	767	702
65°	548	542	533	526	525	541
75°	286	282	278	274	274	302
85°	56	60	64	65	66	70
90°	0	0	0	0	0	4
95°	45	180	807	279	172	52
105°	184	280	1209	2135	2030	195
115°	343	414	916	1942	2280	337
125°	484	536	875	1452	1736	433
135°	591	641	864	1226	1386	456
145°	697	733	871	1061	1157	436
155°	796	815	892	959	998	368
165°	880	883	903	922	936	247
175°	922	917	913	908	901	87
180°	915	915	915	915	915	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1490.0	1490.0	1490.0	1490.0	1490.0
2.5°	1499.1	1487.0	1490.8	1488.2	1483.4
5°	1496.2	1482.0	1486.9	1482.8	1482.8
7.5°	1485.9	1472.3	1475.5	1473.0	1473.0
10°	1477.6	1462.4	1467.2	1463.1	1463.1
12.5°	1464.3	1450.8	1455.6	1451.5	1450.7
15°	1442.4	1429.2	1434.1	1431.0	1431.0
17.5°	1415.9	1403.4	1409.7	1404.7	1403.1
20°	1396.9	1382.7	1390.7	1382.4	1382.4
22.5°	1373.7	1361.1	1368.3	1358.3	1356.7
25°	1336.9	1325.7	1331.7	1321.2	1317.2
27.5°	1295.5	1283.5	1292.4	1280.7	1278.5
30°	1266.5	1255.4	1263.4	1250.9	1247.9
32.5°	1235.0	1225.5	1231.1	1219.5	1217.2
35°	1185.8	1178.7	1181.6	1170.2	1169.2
37.5°	1133.4	1126.6	1129.3	1116.7	1115.8
40°	1097.8	1091.8	1093.7	1080.2	1080.2
42.5°	1061.4	1054.5	1054.8	1042.2	1041.3
45°	1001.6	995.5	993.3	983.0	981.9
47.5°	938.1	935.2	931.9	921.5	921.5
50°	895.0	893.0	888.8	878.5	878.5
52.5°	851.2	849.9	844.1	835.4	833.8
55°	787.4	784.4	776.0	766.7	766.7
57.5°	717.7	715.3	705.9	698.4	696.6
60°	670.5	666.5	657.0	648.7	647.7
62.5°	621.7	618.4	608.2	600.7	598.9
65°	548.4	542.3	532.9	525.6	524.6
67.5°	471.0	464.1	455.9	449.9	447.8
70°	418.0	412.0	404.6	399.4	397.3
72.5°	365.9	359.8	353.3	349.7	349.3
75°	285.6	281.5	278.3	274.2	274.2
77.5°	207.2	204.7	203.0	200.9	200.9
80°	158.3	158.3	158.3	156.2	156.2
82.5°	113.6	116.0	117.8	116.5	116.5
85°	55.9	59.9	64.2	65.2	66.2
87.5°	15.7	20.6	25.7	26.5	27.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	13.9	73.8	171.1	49.8	37.6
95°	45.2	179.6	807.0	279.3	172.2
97.5°	83.1	210.3	1242.8	889.3	609.4
100°	109.6	228.6	1337.4	1354.7	1043.5
102.5°	138.8	248.3	1316.6	1734.0	1462.3
105°	184.4	279.6	1208.7	2135.1	2029.6
107.5°	230.6	316.0	1082.8	2248.1	2342.0
110°	262.6	342.5	1010.5	2204.9	2415.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.2	369.1	961.8	2102.5	2403.2
115°	342.6	414.0	916.5	1941.7	2280.1
117.5°	386.1	453.1	889.8	1765.8	2124.2
120°	420.9	477.0	887.0	1665.2	2008.8
122.5°	448.7	504.8	880.0	1577.0	1896.1
125°	483.5	536.2	874.8	1451.7	1735.7
127.5°	521.4	570.7	872.0	1376.8	1610.8
130°	540.9	590.2	867.9	1324.7	1528.7
132.5°	561.8	609.7	867.9	1284.0	1471.7
135°	591.3	640.6	864.4	1226.3	1386.1
137.5°	619.1	667.1	864.0	1177.4	1315.5
140°	640.0	689.3	862.6	1137.0	1269.6
142.5°	663.7	704.8	866.8	1104.6	1223.7
145°	697.4	733.1	871.3	1061.3	1156.6
147.5°	726.3	761.0	879.0	1017.6	1099.9
150°	751.3	775.1	881.8	1003.1	1060.9
152.5°	770.8	796.0	884.5	983.5	1037.2
155°	796.5	815.2	892.2	959.2	998.3
157.5°	828.5	839.8	893.9	948.1	976.0
160°	845.2	853.7	900.9	939.7	963.5
162.5°	855.0	864.8	902.3	932.6	951.0
165°	880.0	883.4	902.6	922.1	935.7
167.5°	897.1	894.0	910.6	919.5	924.9
170°	902.6	900.9	907.9	909.7	916.5
172.5°	915.2	909.4	912.0	906.9	912.4
175°	921.8	916.7	913.1	907.7	900.9
177.5°	924.5	916.4	912.0	906.5	907.9
180°	914.8	914.8	914.8	914.8	914.8

(END OF REPORT)