

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: P521617

Luminaire Tested: SQ4-F-125U-075D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521617
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-125U-075D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 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: 8913.9 lumens
Efficiency: N/A
Efficacy: 121.6 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: Semi-Indirect

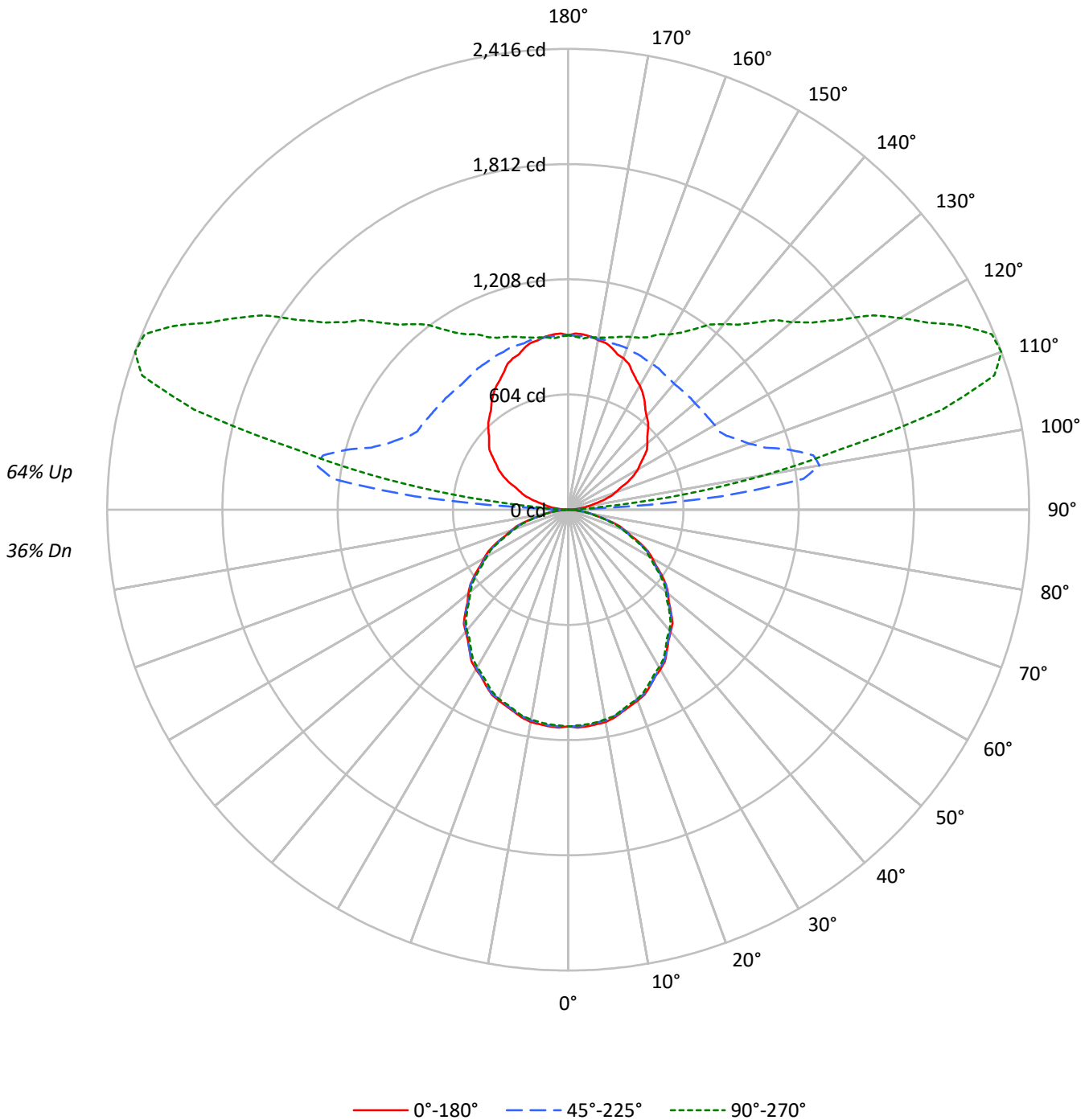
Input Watts (W): 73.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36
1	95	90	86	83	86	82	79	76	66	64	62	52	50	49	38	37	37	30
2	86	79	73	68	78	71	66	62	58	54	51	45	43	41	34	32	31	25
3	78	69	62	56	71	63	57	52	51	46	43	40	37	34	30	28	26	21
4	72	61	53	47	64	55	49	43	45	40	36	35	32	29	26	24	22	18
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	16
6	60	48	40	35	54	44	37	32	36	31	27	28	25	22	21	19	17	14
7	56	44	36	30	50	40	33	28	33	27	24	26	22	19	19	17	15	12
8	52	39	32	27	47	36	29	25	30	24	21	24	20	17	18	15	13	11
9	48	36	29	24	43	33	26	22	27	22	18	22	18	15	16	14	12	10
10	45	33	26	21	40	30	24	19	25	20	17	20	16	14	15	13	11	9

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	1.2
10°-20°	307.9	3.5
20°-30°	465.8	5.2
30°-40°	560.3	6.3
40°-50°	581.7	6.5
50°-60°	527.0	5.9
60°-70°	400.9	4.5
70°-80°	222.8	2.5
80°-90°	57.4	0.6
90°-100°	416.8	4.7
100°-110°	1186.1	13.3
110°-120°	1136.4	12.7
120°-130°	899.4	10.1
130°-140°	721.9	8.1
140°-150°	565.2	6.3
150°-160°	413.5	4.6
160°-170°	256.2	2.9
170°-180°	86.9	1.0
0°-30°	881.4	9.9
0°-40°	1441.6	16.2
0°-60°	2550.3	28.6
0°-90°	3231.4	36.3
90°-120°	2739.4	30.7
90°-150°	4925.9	55.3
90°-180°	5682.0	63.7
0°-180°	8913.9	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	3
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°	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°	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)