

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: P521470

Luminaire Tested: SQ4-F-075U-100D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521470
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-075U-100D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7053.7 lumens
Efficiency: N/A
Efficacy: 107.0 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

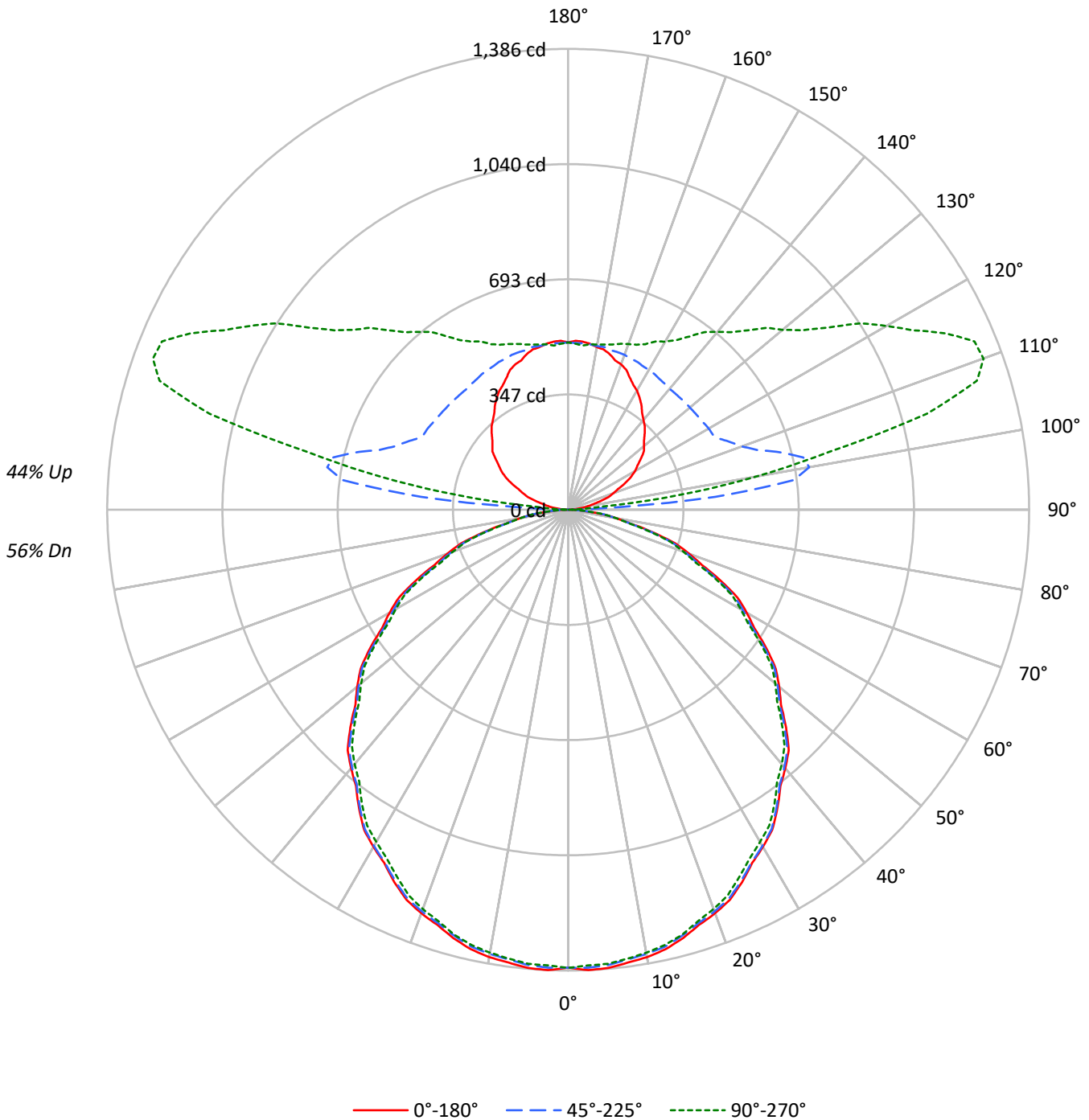
Input Watts (W): 65.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56																				
1	99	94	90	87	92	88	84	81	76	73	71	64	63	61	54	53	52	47																				
2	90	82	76	71	83	77	71	66	66	62	58	56	53	51	47	45	43	39																				
3	82	72	65	59	76	67	61	55	58	53	49	50	46	43	42	39	36	33																				
4	75	64	56	49	69	60	52	47	52	46	41	44	40	36	37	34	31	28																				
5	69	57	48	42	63	53	46	40	46	40	36	39	35	31	33	30	27	24																				
6	63	51	43	37	58	48	40	35	41	35	31	36	31	27	30	27	24	21																				
7	58	46	38	32	54	43	36	30	37	32	27	32	28	24	28	24	21	18																				
8	54	42	34	28	50	39	32	27	34	28	24	30	25	21	25	22	19	16																				
9	50	38	30	25	47	36	29	24	31	26	22	27	23	19	23	20	17	15																				
10	47	35	27	23	44	33	26	22	29	23	19	25	21	17	22	18	15	13																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12711	12711	12711
5°	12812	12733	12697
10°	12799	12710	12674
15°	12739	12666	12639
20°	12681	12625	12550
25°	12583	12535	12398
30°	12475	12445	12292
35°	12349	12306	12177
40°	12226	12180	12029
45°	12084	11984	11846
50°	11879	11796	11659
55°	11712	11543	11403
60°	11440	11210	11051
65°	11071	10756	10590
70°	10426	10092	9911
75°	9414	9176	9037
80°	7778	7778	7678
85°	5473	6277	6479

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12084 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.4	1.8
10°-20°	373.6	5.3
20°-30°	565.0	8.0
30°-40°	680.4	9.6
40°-50°	706.6	10.0
50°-60°	640.5	9.1
60°-70°	487.8	6.9
70°-80°	272.6	3.9
80°-90°	70.7	1.0
90°-100°	229.3	3.3
100°-110°	652.5	9.3
110°-120°	625.2	8.9
120°-130°	494.8	7.0
130°-140°	397.1	5.6
140°-150°	310.9	4.4
150°-160°	227.5	3.2
160°-170°	140.9	2.0
170°-180°	47.8	0.7
0°-30°	1069.1	15.2
0°-40°	1749.5	24.8
0°-60°	3096.6	43.9
0°-90°	3927.7	55.7
90°-120°	1507.0	21.4
90°-150°	2709.8	38.4
90°-180°	3126.0	44.3
0°-180°	7053.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1378	1378	1378	1378	1378	
5°	1383	1370	1375	1371	1371	131
15°	1334	1322	1326	1323	1323	376
25°	1236	1226	1231	1222	1218	569
35°	1096	1090	1093	1082	1081	686
45°	926	920	918	909	908	713
55°	728	725	718	709	709	649
65°	507	502	493	486	485	500
75°	264	260	257	254	254	279
85°	52	55	59	60	61	64
90°	0	0	0	0	0	3
95°	25	99	444	154	95	28
105°	101	154	665	1174	1116	107
115°	188	228	504	1068	1254	186
125°	266	295	481	799	955	238
135°	325	352	476	675	762	251
145°	384	403	479	584	636	240
155°	438	448	491	528	549	203
165°	484	486	496	507	515	136
175°	507	504	502	499	496	48
180°	503	503	503	503	503	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1377.7	1377.7	1377.7	1377.7	1377.7
2.5°	1386.1	1374.9	1378.5	1376.1	1371.6
5°	1383.4	1370.3	1374.8	1371.0	1371.0
7.5°	1373.9	1361.3	1364.3	1362.0	1362.0
10°	1366.2	1352.2	1356.7	1352.8	1352.8
12.5°	1354.0	1341.4	1345.9	1342.1	1341.3
15°	1333.7	1321.5	1326.0	1323.2	1323.2
17.5°	1309.2	1297.6	1303.5	1298.8	1297.3
20°	1291.6	1278.5	1285.9	1278.2	1278.2
22.5°	1270.2	1258.6	1265.2	1256.0	1254.5
25°	1236.1	1225.8	1231.3	1221.7	1217.9
27.5°	1197.8	1186.8	1195.0	1184.2	1182.1
30°	1171.0	1160.8	1168.2	1156.6	1153.8
32.5°	1142.0	1133.2	1138.3	1127.6	1125.5
35°	1096.4	1089.9	1092.6	1082.0	1081.1
37.5°	1048.0	1041.6	1044.2	1032.5	1031.7
40°	1015.1	1009.5	1011.3	998.8	998.8
42.5°	981.4	975.1	975.3	963.6	962.9
45°	926.1	920.5	918.5	908.9	907.9
47.5°	867.4	864.8	861.6	852.1	852.1
50°	827.6	825.7	821.8	812.3	812.3
52.5°	787.0	785.9	780.5	772.4	770.9
55°	728.1	725.3	717.6	708.9	708.9
57.5°	663.6	661.3	652.7	645.8	644.1
60°	620.0	616.2	607.5	599.9	598.9
62.5°	574.8	571.8	562.4	555.4	553.8
65°	507.1	501.5	492.7	486.0	485.1
67.5°	435.5	429.1	421.5	415.9	414.1
70°	386.5	380.9	374.1	369.3	367.4
72.5°	338.3	332.7	326.6	323.4	323.0
75°	264.1	260.3	257.4	253.5	253.5
77.5°	191.5	189.3	187.7	185.8	185.8
80°	146.4	146.4	146.4	144.5	144.5
82.5°	105.0	107.3	108.9	107.7	107.7
85°	51.7	55.4	59.3	60.3	61.2
87.5°	14.5	19.0	23.7	24.5	25.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	7.7	40.6	94.1	27.4	20.7
95°	24.9	98.8	443.9	153.7	94.7
97.5°	45.7	115.7	683.7	489.2	335.2
100°	60.3	125.8	735.7	745.2	574.0
102.5°	76.3	136.6	724.3	953.9	804.4
105°	101.4	153.8	664.9	1174.5	1116.5
107.5°	126.9	173.8	595.7	1236.7	1288.3
110°	144.5	188.4	555.9	1212.9	1328.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	161.3	203.0	529.1	1156.6	1322.0
115°	188.5	227.8	504.2	1068.1	1254.3
117.5°	212.4	249.3	489.5	971.4	1168.6
120°	231.5	262.4	487.9	916.1	1105.0
122.5°	246.8	277.7	484.1	867.5	1043.0
125°	266.0	295.0	481.2	798.6	954.8
127.5°	286.8	314.0	479.7	757.4	886.1
130°	297.5	324.7	477.4	728.7	841.0
132.5°	309.0	335.4	477.4	706.3	809.6
135°	325.3	352.4	475.5	674.6	762.5
137.5°	340.6	367.0	475.3	647.7	723.7
140°	352.1	379.2	474.5	625.5	698.4
142.5°	365.1	387.7	476.8	607.7	673.2
145°	383.7	403.3	479.3	583.8	636.2
147.5°	399.5	418.6	483.5	559.8	605.0
150°	413.3	426.4	485.1	551.8	583.6
152.5°	424.0	437.9	486.6	541.0	570.6
155°	438.2	448.5	490.8	527.7	549.2
157.5°	455.8	462.0	491.8	521.6	536.9
160°	465.0	469.7	495.6	516.9	530.0
162.5°	470.3	475.8	496.4	513.0	523.1
165°	484.1	486.0	496.5	507.2	514.7
167.5°	493.5	491.8	500.9	505.8	508.8
170°	496.5	495.6	499.4	500.5	504.2
172.5°	503.4	500.3	501.7	498.9	501.9
175°	507.1	504.3	502.3	499.3	495.6
177.5°	508.6	504.1	501.7	498.7	499.4
180°	503.2	503.2	503.2	503.2	503.2

(END OF REPORT)