

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: P521471

Luminaire Tested: SQ4-F-075U-100D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521471
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_3000K
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7199.9 lumens
Efficiency: N/A
Efficacy: 108.9 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

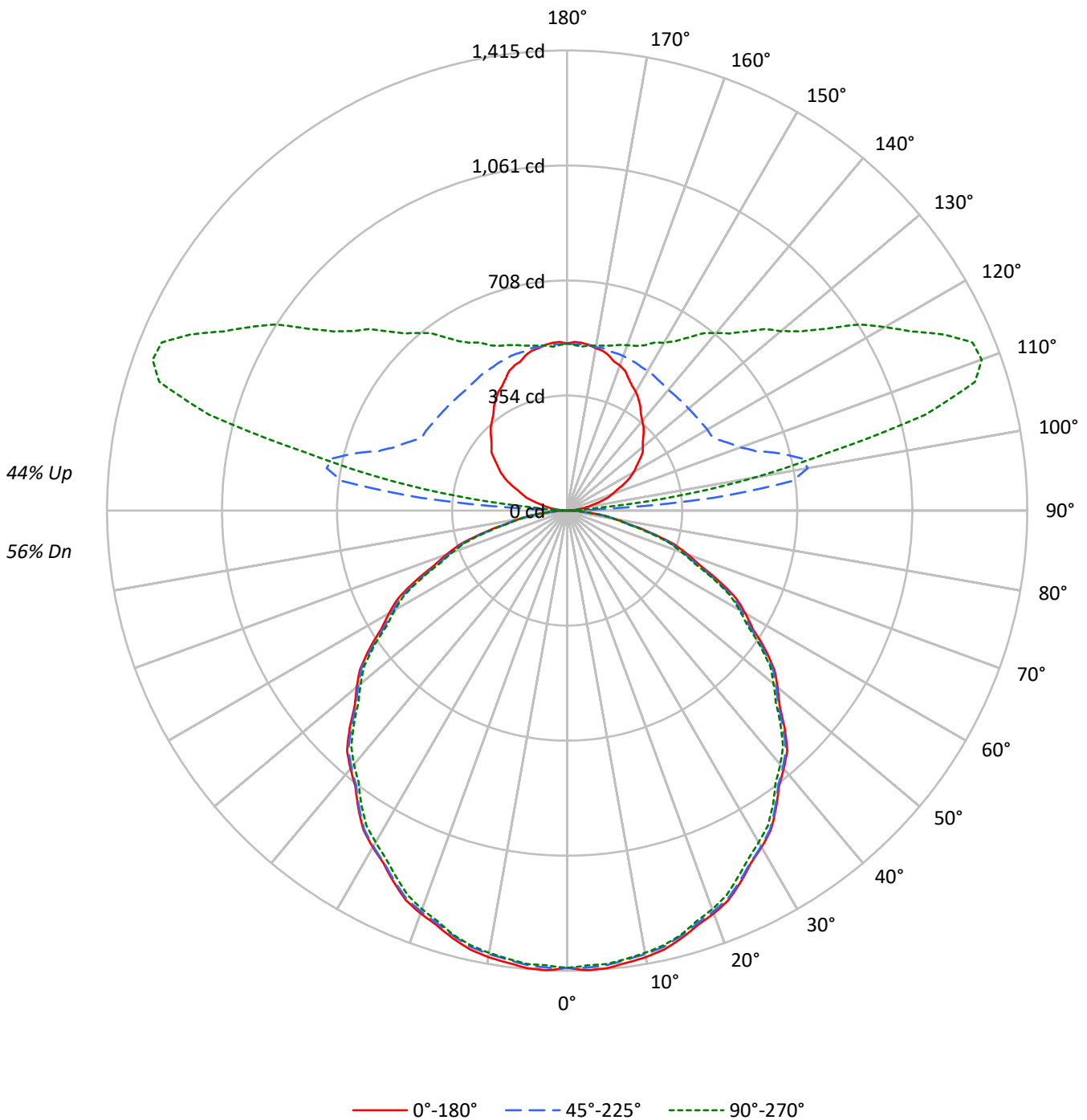
Input Watts (W): 66.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	12975	12975	12975
5°	13078	12997	12960
10°	13064	12974	12937
15°	13003	12928	12900
20°	12944	12887	12810
25°	12844	12794	12656
30°	12734	12703	12547
35°	12605	12561	12429
40°	12479	12432	12279
45°	12334	12232	12093
50°	12124	12041	11900
55°	11955	11781	11639
60°	11677	11442	11280
65°	11300	10979	10809
70°	10642	10299	10116
75°	9607	9365	9226
80°	7938	7938	7837
85°	5579	6404	6616

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12334 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	1.8
10°-20°	381.4	5.3
20°-30°	576.7	8.0
30°-40°	694.5	9.6
40°-50°	721.2	10.0
50°-60°	653.8	9.1
60°-70°	497.9	6.9
70°-80°	278.2	3.9
80°-90°	72.2	1.0
90°-100°	234.1	3.3
100°-110°	666.0	9.3
110°-120°	638.1	8.9
120°-130°	505.0	7.0
130°-140°	405.4	5.6
140°-150°	317.4	4.4
150°-160°	232.2	3.2
160°-170°	143.8	2.0
170°-180°	48.8	0.7
0°-30°	1091.2	15.2
0°-40°	1785.7	24.8
0°-60°	3160.8	43.9
0°-90°	4009.1	55.7
90°-120°	1538.2	21.4
90°-150°	2766.0	38.4
90°-180°	3191.0	44.3
0°-180°	7199.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1406	1406	1406	1406	1406	
5°	1412	1399	1403	1399	1399	134
15°	1361	1349	1354	1351	1351	384
25°	1262	1251	1257	1247	1243	581
35°	1119	1112	1115	1104	1104	700
45°	945	940	938	928	927	728
55°	743	740	732	724	724	663
65°	518	512	503	496	495	510
75°	270	266	263	259	259	285
85°	53	57	60	62	62	66
90°	0	0	0	0	0	3
95°	25	101	453	157	97	29
105°	104	157	679	1199	1140	110
115°	192	232	515	1090	1280	189
125°	272	301	491	815	975	243
135°	332	360	485	689	778	256
145°	392	412	489	596	649	245
155°	447	458	501	539	560	207
165°	494	496	507	518	525	139
175°	518	515	513	510	506	49
180°	514	514	514	514	514	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1406.3	1406.3	1406.3	1406.3	1406.3
2.5°	1414.8	1403.4	1407.0	1404.6	1400.0
5°	1412.1	1398.7	1403.3	1399.4	1399.4
7.5°	1402.3	1389.6	1392.6	1390.2	1390.2
10°	1394.5	1380.2	1384.8	1380.9	1380.9
12.5°	1382.0	1369.2	1373.8	1369.9	1369.1
15°	1361.3	1348.9	1353.5	1350.6	1350.6
17.5°	1336.3	1324.5	1330.5	1325.8	1324.2
20°	1318.4	1305.0	1312.5	1304.7	1304.7
22.5°	1296.5	1284.6	1291.4	1282.0	1280.5
25°	1261.7	1251.2	1256.8	1247.0	1243.2
27.5°	1222.7	1211.4	1219.7	1208.7	1206.6
30°	1195.3	1184.8	1192.4	1180.6	1177.7
32.5°	1165.6	1156.7	1161.9	1150.9	1148.8
35°	1119.1	1112.5	1115.2	1104.5	1103.5
37.5°	1069.7	1063.2	1065.8	1053.9	1053.1
40°	1036.1	1030.4	1032.2	1019.5	1019.5
42.5°	1001.8	995.3	995.5	983.6	982.8
45°	945.3	939.6	937.5	927.7	926.8
47.5°	885.4	882.7	879.5	869.7	869.7
50°	844.7	842.8	838.9	829.1	829.1
52.5°	803.3	802.2	796.7	788.4	786.9
55°	743.2	740.3	732.4	723.6	723.6
57.5°	677.3	675.1	666.2	659.1	657.4
60°	632.8	629.0	620.1	612.3	611.3
62.5°	586.7	583.7	574.0	567.0	565.2
65°	517.6	511.9	502.9	496.1	495.1
67.5°	444.5	438.0	430.3	424.6	422.7
70°	394.5	388.8	381.8	376.9	375.0
72.5°	345.3	339.6	333.4	330.1	329.7
75°	269.5	265.7	262.7	258.8	258.8
77.5°	195.5	193.2	191.6	189.6	189.6
80°	149.4	149.4	149.4	147.5	147.5
82.5°	107.2	109.5	111.1	110.0	110.0
85°	52.7	56.6	60.5	61.5	62.5
87.5°	14.8	19.4	24.2	25.0	25.8
90°	0.0	0.0	0.0	0.0	0.0
92.5°	7.8	41.4	96.1	28.0	21.1
95°	25.4	100.8	453.1	156.8	96.7
97.5°	46.7	118.1	697.9	499.4	342.2
100°	61.5	128.4	751.0	760.7	585.9
102.5°	77.9	139.4	739.3	973.7	821.1
105°	103.5	157.0	678.7	1198.9	1139.7
107.5°	129.5	177.4	608.0	1262.3	1315.0
110°	147.5	192.3	567.4	1238.0	1356.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	164.6	207.2	540.0	1180.6	1349.4
115°	192.4	232.5	514.7	1090.3	1280.3
117.5°	216.8	254.4	499.6	991.5	1192.8
120°	236.3	267.8	498.0	935.1	1127.9
122.5°	252.0	283.5	494.1	885.5	1064.7
125°	271.5	301.1	491.2	815.2	974.6
127.5°	292.8	320.5	489.7	773.1	904.5
130°	303.7	331.4	487.3	743.8	858.4
132.5°	315.4	342.4	487.3	721.0	826.4
135°	332.0	359.7	485.4	688.6	778.3
137.5°	347.7	374.6	485.2	661.1	738.7
140°	359.4	387.1	484.4	638.4	712.9
142.5°	372.7	395.8	486.7	620.3	687.1
145°	391.6	411.7	489.3	595.9	649.4
147.5°	407.8	427.3	493.6	571.4	617.6
150°	421.9	435.2	495.1	563.2	595.7
152.5°	432.8	446.9	496.7	552.3	582.4
155°	447.3	457.8	501.0	538.6	560.5
157.5°	465.2	471.5	502.0	532.4	548.0
160°	474.6	479.4	505.9	527.6	541.0
162.5°	480.1	485.6	506.6	523.7	534.0
165°	494.1	496.1	506.8	517.8	525.4
167.5°	503.7	502.0	511.3	516.3	519.3
170°	506.8	505.9	509.8	510.8	514.7
172.5°	513.9	510.6	512.1	509.3	512.3
175°	517.6	514.7	512.7	509.7	505.9
177.5°	519.1	514.6	512.1	509.0	509.8
180°	513.7	513.7	513.7	513.7	513.7

(END OF REPORT)