

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: P521472

Luminaire Tested: SQ4-F-075U-100D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521472
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_3500K
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 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7372.7 lumens
Efficiency: N/A
Efficacy: 111.5 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

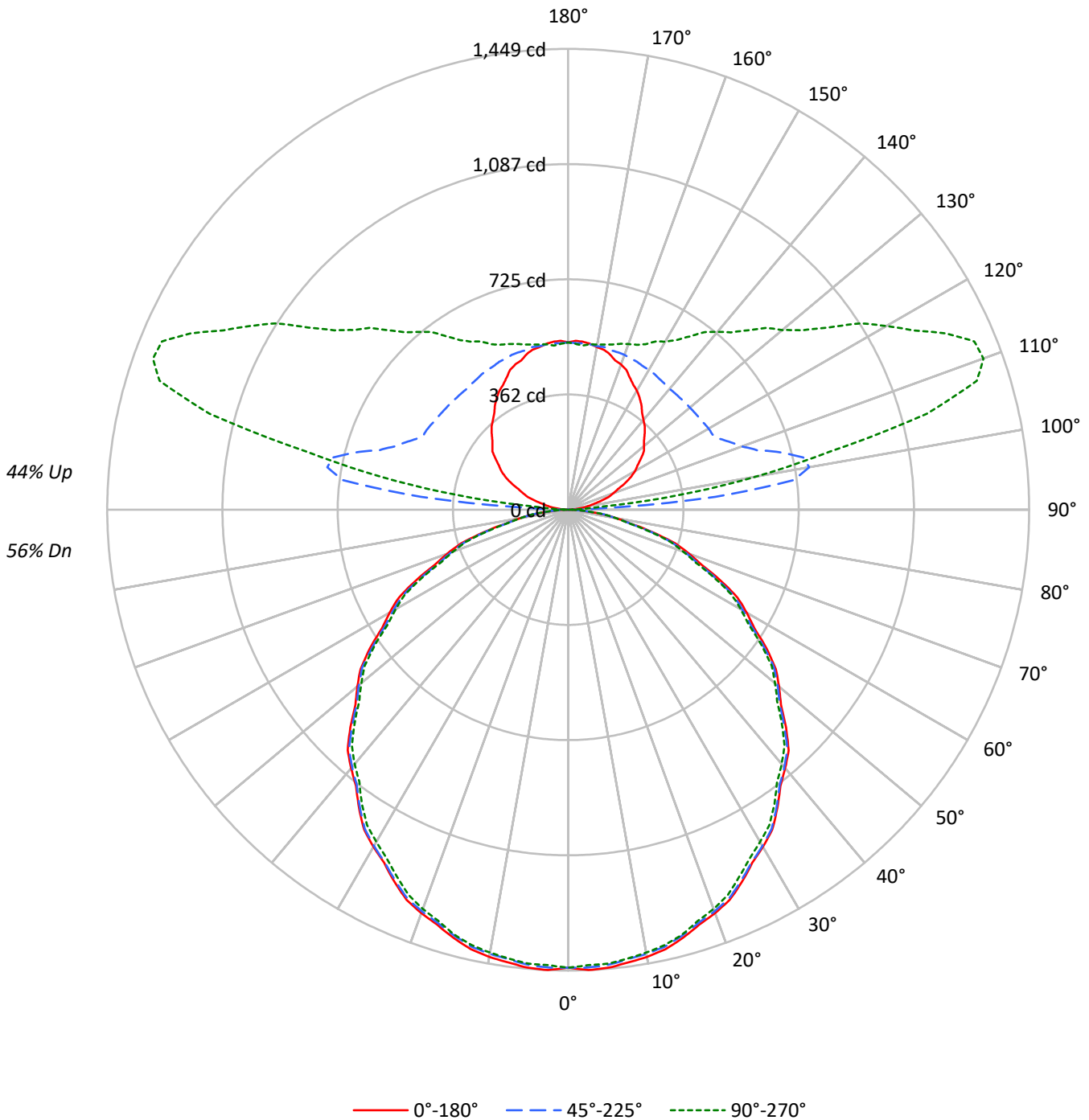
Input Watts (W): 66.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	13286	13286	13286
5°	13392	13309	13272
10°	13378	13285	13247
15°	13315	13239	13210
20°	13255	13196	13117
25°	13153	13102	12959
30°	13040	13008	12848
35°	12908	12862	12727
40°	12779	12730	12574
45°	12630	12526	12382
50°	12416	12330	12186
55°	12241	12064	11919
60°	11957	11717	11551
65°	11570	11243	11068
70°	10898	10547	10359
75°	9839	9589	9447
80°	8129	8129	8023
85°	5716	6563	6775

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12630 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.3	1.8
10°-20°	390.5	5.3
20°-30°	590.6	8.0
30°-40°	711.2	9.6
40°-50°	738.6	10.0
50°-60°	669.5	9.1
60°-70°	509.9	6.9
70°-80°	284.9	3.9
80°-90°	73.9	1.0
90°-100°	239.7	3.3
100°-110°	682.0	9.3
110°-120°	653.4	8.9
120°-130°	517.2	7.0
130°-140°	415.1	5.6
140°-150°	325.0	4.4
150°-160°	237.8	3.2
160°-170°	147.3	2.0
170°-180°	50.0	0.7
0°-30°	1117.4	15.2
0°-40°	1828.6	24.8
0°-60°	3236.7	43.9
0°-90°	4105.3	55.7
90°-120°	1575.1	21.4
90°-150°	2832.3	38.4
90°-180°	3267.0	44.3
0°-180°	7372.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1440	1440	1440	1440	1440	
5°	1446	1432	1437	1433	1433	137
15°	1394	1381	1386	1383	1383	393
25°	1292	1281	1287	1277	1273	595
35°	1146	1139	1142	1131	1130	717
45°	968	962	960	950	949	746
55°	761	758	750	741	741	678
65°	530	524	515	508	507	522
75°	276	272	269	265	265	292
85°	54	58	62	63	64	67
90°	0	0	0	0	0	3
95°	26	103	464	161	99	30
105°	106	161	695	1228	1167	112
115°	197	238	527	1116	1311	194
125°	278	308	503	835	998	249
135°	340	368	497	705	797	262
145°	401	422	501	610	665	250
155°	458	469	513	552	574	212
165°	506	508	519	530	538	142
175°	530	527	525	522	518	50
180°	526	526	526	526	526	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1440.0	1440.0	1440.0	1440.0	1440.0
2.5°	1448.8	1437.1	1440.8	1438.3	1433.6
5°	1446.0	1432.3	1437.0	1433.0	1433.0
7.5°	1436.0	1422.9	1426.0	1423.6	1423.6
10°	1428.0	1413.3	1418.0	1414.0	1414.0
12.5°	1415.2	1402.1	1406.8	1402.8	1402.0
15°	1394.0	1381.3	1386.0	1383.0	1383.0
17.5°	1368.4	1356.3	1362.4	1357.6	1356.0
20°	1350.0	1336.3	1344.0	1336.0	1336.0
22.5°	1327.6	1315.5	1322.4	1312.8	1311.2
25°	1292.0	1281.2	1287.0	1276.9	1273.0
27.5°	1252.0	1240.5	1249.0	1237.8	1235.6
30°	1224.0	1213.2	1221.0	1208.9	1206.0
32.5°	1193.6	1184.4	1189.8	1178.6	1176.4
35°	1146.0	1139.2	1142.0	1131.0	1130.0
37.5°	1095.4	1088.8	1091.4	1079.2	1078.4
40°	1061.0	1055.1	1057.0	1044.0	1044.0
42.5°	1025.8	1019.2	1019.4	1007.2	1006.4
45°	968.0	962.1	960.0	950.0	949.0
47.5°	906.6	903.9	900.6	890.6	890.6
50°	865.0	863.0	859.0	849.0	849.0
52.5°	822.6	821.4	815.8	807.4	805.8
55°	761.0	758.1	750.0	741.0	741.0
57.5°	693.6	691.3	682.2	675.0	673.2
60°	648.0	644.1	635.0	627.0	626.0
62.5°	600.8	597.7	587.8	580.6	578.8
65°	530.0	524.1	515.0	508.0	507.0
67.5°	455.2	448.6	440.6	434.8	432.8
70°	404.0	398.1	391.0	386.0	384.0
72.5°	353.6	347.7	341.4	338.0	337.6
75°	276.0	272.1	269.0	265.0	265.0
77.5°	200.2	197.9	196.2	194.2	194.2
80°	153.0	153.0	153.0	151.0	151.0
82.5°	109.8	112.1	113.8	112.6	112.6
85°	54.0	57.9	62.0	63.0	64.0
87.5°	15.2	19.9	24.8	25.6	26.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.0	42.4	98.4	28.6	21.6
95°	26.0	103.2	464.0	160.6	99.0
97.5°	47.8	120.9	714.6	511.3	350.4
100°	63.0	131.4	769.0	778.9	600.0
102.5°	79.8	142.8	757.0	997.0	840.8
105°	106.0	160.8	695.0	1227.6	1167.0
107.5°	132.6	181.7	622.6	1292.6	1346.6
110°	151.0	197.0	581.0	1267.8	1389.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	168.6	212.2	553.0	1208.9	1381.8
115°	197.0	238.1	527.0	1116.4	1311.0
117.5°	222.0	260.5	511.6	1015.3	1221.4
120°	242.0	274.3	510.0	957.5	1155.0
122.5°	258.0	290.3	506.0	906.8	1090.2
125°	278.0	308.3	503.0	834.7	998.0
127.5°	299.8	328.2	501.4	791.7	926.2
130°	311.0	339.4	499.0	761.7	879.0
132.5°	323.0	350.6	499.0	738.3	846.2
135°	340.0	368.4	497.0	705.1	797.0
137.5°	356.0	383.6	496.8	677.0	756.4
140°	368.0	396.4	496.0	653.7	730.0
142.5°	381.6	405.3	498.4	635.2	703.6
145°	401.0	421.5	501.0	610.2	665.0
147.5°	417.6	437.5	505.4	585.1	632.4
150°	432.0	445.7	507.0	576.8	610.0
152.5°	443.2	457.7	508.6	565.5	596.4
155°	458.0	468.8	513.0	551.5	574.0
157.5°	476.4	482.9	514.0	545.2	561.2
160°	486.0	490.9	518.0	540.3	554.0
162.5°	491.6	497.3	518.8	536.2	546.8
165°	506.0	508.0	519.0	530.2	538.0
167.5°	515.8	514.0	523.6	528.7	531.8
170°	519.0	518.0	522.0	523.1	527.0
172.5°	526.2	522.9	524.4	521.5	524.6
175°	530.0	527.1	525.0	521.9	518.0
177.5°	531.6	526.9	524.4	521.2	522.0
180°	526.0	526.0	526.0	526.0	526.0

(END OF REPORT)