

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: P521368

Luminaire Tested: SQ4-F-025U-100D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521368
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-025U-100D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 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: 6042.1 lumens
Efficiency: N/A
Efficacy: 107.1 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-Direct

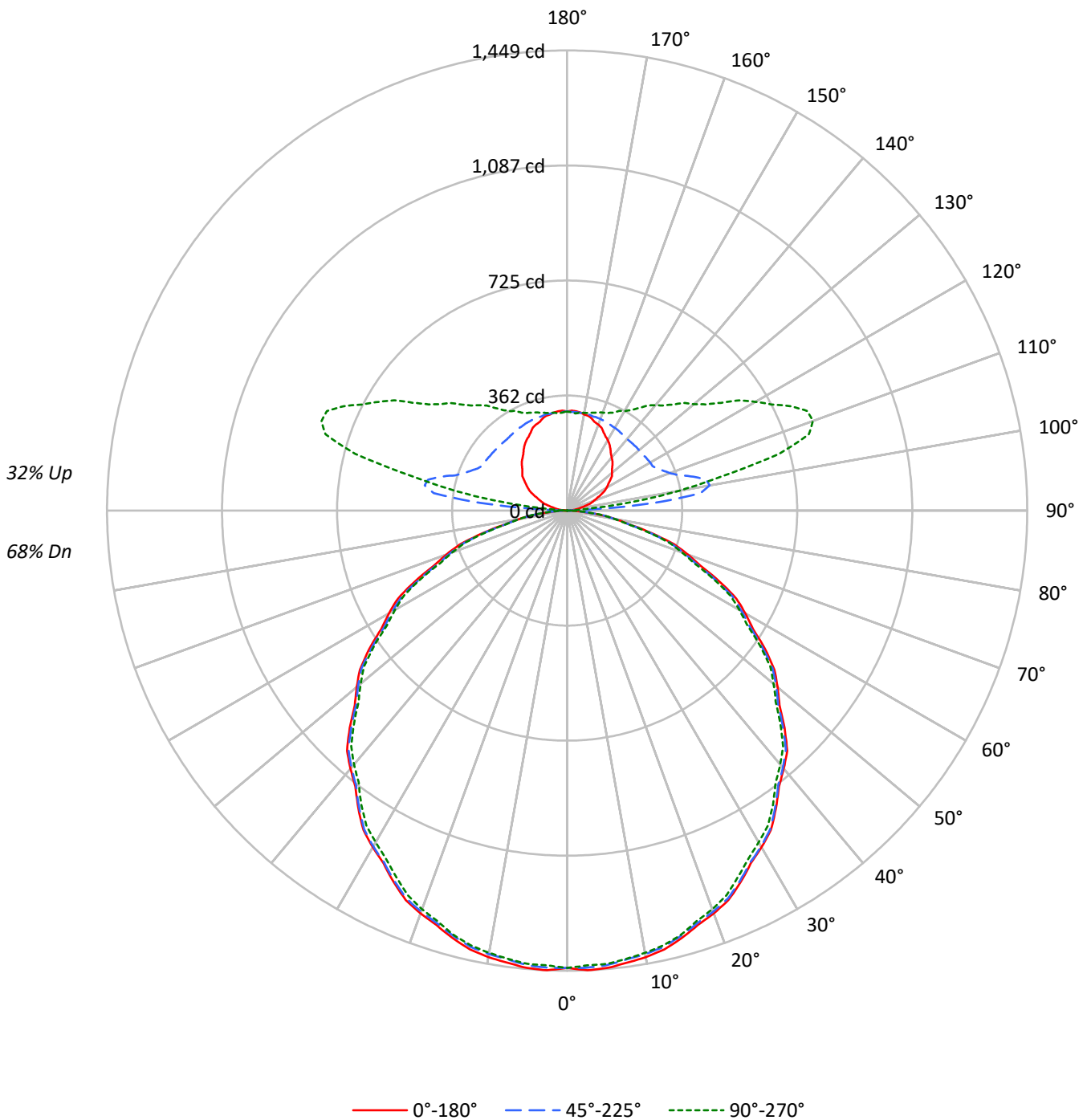
Input Watts (W): 56.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73	68
1	102	97	93	89	96	92	88	85	82	79	76	72	70	68	64	62	61	57
2	92	85	78	73	87	80	74	69	71	67	63	63	60	57	56	53	51	47
3	84	74	66	60	79	70	63	58	63	57	53	56	51	48	49	46	43	40
4	77	66	57	51	72	62	55	49	56	50	45	50	45	41	44	40	37	34
5	71	58	50	44	66	55	48	42	50	43	39	44	39	35	40	35	32	29
6	65	52	44	38	61	50	42	36	45	38	34	40	35	31	36	32	28	26
7	60	47	39	33	57	45	37	32	41	34	30	37	31	27	33	28	25	23
8	56	43	35	29	53	41	34	28	37	31	26	33	28	24	30	26	22	20
9	52	39	32	26	49	37	30	25	34	28	24	31	26	22	28	23	20	18
10	49	36	29	24	46	34	28	23	31	25	21	28	23	20	26	21	18	16

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	2.3
10°-20°	390.5	6.5
20°-30°	590.6	9.8
30°-40°	711.2	11.8
40°-50°	738.6	12.2
50°-60°	669.5	11.1
60°-70°	509.9	8.4
70°-80°	284.9	4.7
80°-90°	73.9	1.2
90°-100°	142.1	2.4
100°-110°	404.2	6.7
110°-120°	387.3	6.4
120°-130°	306.6	5.1
130°-140°	246.0	4.1
140°-150°	192.6	3.2
150°-160°	140.9	2.3
160°-170°	87.3	1.4
170°-180°	29.6	0.5
0°-30°	1117.4	18.5
0°-40°	1828.6	30.3
0°-60°	3236.7	53.6
0°-90°	4105.3	67.9
90°-120°	933.6	15.5
90°-150°	1678.9	27.8
90°-180°	1937.0	32.1
0°-180°	6042.1	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°	15	61	275	95	59	18
105°	63	95	412	728	692	66
115°	117	141	312	662	777	115
125°	165	183	298	495	592	147
135°	202	218	295	418	472	156
145°	238	250	297	362	394	148
155°	272	278	304	327	340	126
165°	300	301	308	314	319	84
175°	314	312	311	309	307	30
180°	312	312	312	312	312	

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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°	4.7	25.1	58.3	17.0	12.8
95°	15.4	61.2	275.0	95.2	58.7
97.5°	28.3	71.7	423.6	303.1	207.7
100°	37.3	77.9	455.8	461.7	355.7
102.5°	47.3	84.6	448.7	591.0	498.4
105°	62.8	95.3	412.0	727.7	691.7
107.5°	78.6	107.7	369.0	766.2	798.2
110°	89.5	116.7	344.4	751.5	823.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	99.9	125.8	327.8	716.6	819.1
115°	116.8	141.1	312.4	661.8	777.1
117.5°	131.6	154.4	303.3	601.8	724.0
120°	143.4	162.6	302.3	567.6	684.6
122.5°	152.9	172.1	299.9	537.5	646.2
125°	164.8	182.8	298.2	494.8	591.6
127.5°	177.7	194.5	297.2	469.3	549.0
130°	184.3	201.2	295.8	451.5	521.0
132.5°	191.5	207.8	295.8	437.6	501.6
135°	201.5	218.3	294.6	417.9	472.4
137.5°	211.0	227.4	294.5	401.3	448.4
140°	218.1	234.9	294.0	387.5	432.7
142.5°	226.2	240.2	295.4	376.5	417.1
145°	237.7	249.9	297.0	361.7	394.2
147.5°	247.5	259.4	299.6	346.8	374.9
150°	256.1	264.2	300.5	341.9	361.6
152.5°	262.7	271.3	301.5	335.2	353.5
155°	271.5	277.9	304.1	326.9	340.2
157.5°	282.4	286.2	304.7	323.1	332.7
160°	288.1	291.0	307.0	320.3	328.4
162.5°	291.4	294.8	307.5	317.9	324.1
165°	299.9	301.1	307.6	314.3	318.9
167.5°	305.7	304.7	310.4	313.4	315.2
170°	307.6	307.1	309.4	310.1	312.4
172.5°	311.9	309.9	310.8	309.1	311.0
175°	314.2	312.4	311.2	309.4	307.0
177.5°	315.1	312.3	310.8	309.0	309.4
180°	311.8	311.8	311.8	311.8	311.8

(END OF REPORT)