

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: P521450

Luminaire Tested: SQ4-F-075U-050D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521450
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-36)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-075U-050D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5679.4 lumens
Efficiency: N/A
Efficacy: 128.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

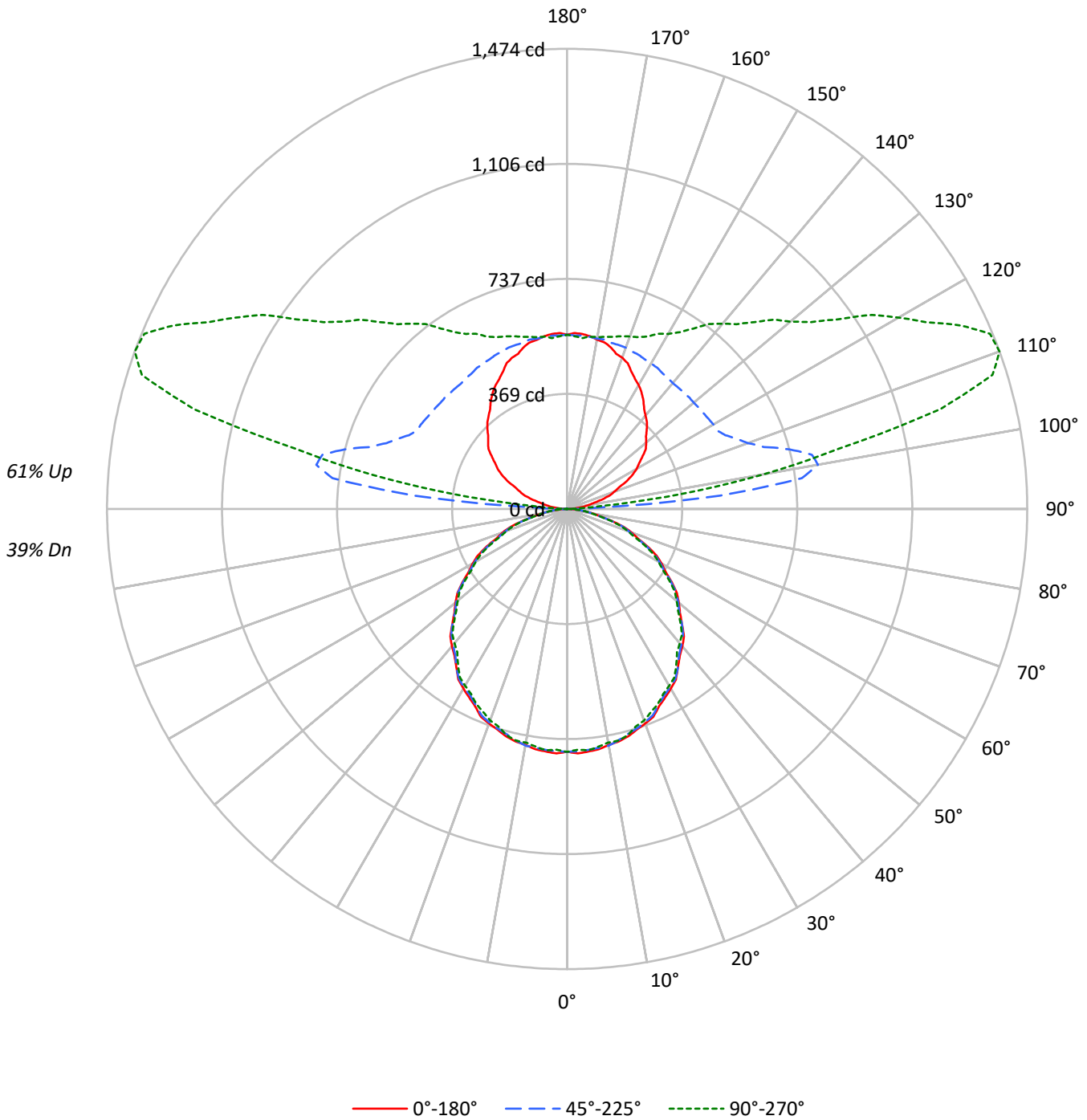
Input Watts (W): 44.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	105	105	105	105	95	95	95	95	77	77	77		61	61	61		46	46	46	39
1	95	91	87	84	86	83	79	77	67	65	63		53	52	50		40	40	39	33
2	87	79	73	68	78	72	67	63	59	55	52		47	44	42		35	34	32	27
3	79	69	62	56	71	63	57	52	52	47	44		41	38	35		31	29	27	23
4	72	61	54	48	65	56	49	44	46	41	37		37	33	30		28	25	23	19
5	66	54	46	41	60	50	43	38	41	36	32		33	29	26		25	22	20	17
6	61	49	41	35	55	45	38	32	37	31	27		29	26	23		23	20	18	15
7	56	44	36	31	51	40	33	28	33	28	24		27	23	20		21	18	16	13
8	52	40	32	27	47	36	30	25	30	25	21		24	20	18		19	16	14	12
9	48	36	29	24	44	33	27	22	28	23	19		22	19	16		17	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17		21	17	14		16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7176	7176	7176
5°	7223	7174	7183
10°	7188	7207	7117
15°	7206	7135	7166
20°	7178	7147	7074
25°	7096	7054	7010
30°	7076	7031	6963
35°	6967	6967	6860
40°	6913	6849	6760
45°	6784	6784	6687
50°	6702	6656	6564
55°	6589	6519	6418
60°	6442	6324	6226
65°	6185	6045	5929
70°	5897	5697	5552
75°	5258	5105	5030
80°	4341	4282	4229
85°	3144	3483	3483

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6784 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.6	1.3
10°-20°	211.0	3.7
20°-30°	318.7	5.6
30°-40°	383.9	6.8
40°-50°	398.0	7.0
50°-60°	360.9	6.4
60°-70°	274.3	4.8
70°-80°	152.7	2.7
80°-90°	39.4	0.7
90°-100°	254.3	4.5
100°-110°	723.6	12.7
110°-120°	693.3	12.2
120°-130°	548.7	9.7
130°-140°	440.5	7.8
140°-150°	344.8	6.1
150°-160°	252.3	4.4
160°-170°	156.3	2.8
170°-180°	53.0	0.9
0°-30°	603.3	10.6
0°-40°	987.2	17.4
0°-60°	1746.1	30.7
0°-90°	2212.6	39.0
90°-120°	1671.3	29.4
90°-150°	3005.3	52.9
90°-180°	3467.0	61.0
0°-180°	5679.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	778	778	778	778	778	
5°	780	770	775	776	776	74
15°	754	747	747	747	750	213
25°	697	692	693	689	689	323
35°	619	612	619	611	609	388
45°	520	517	520	510	512	402
55°	410	408	405	401	399	365
65°	283	282	277	274	272	281
75°	148	145	143	141	141	157
85°	30	32	33	34	33	36
90°	0	0	0	0	0	2
95°	28	110	492	170	105	32
105°	112	171	737	1303	1238	119
115°	209	253	559	1185	1391	206
125°	295	327	534	886	1059	264
135°	361	391	527	748	846	278
145°	426	447	532	648	706	266
155°	486	497	544	585	609	225
165°	537	539	551	563	571	151
175°	562	559	557	554	550	53
180°	558	558	558	558	558	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	777.8	777.8	777.8	777.8	777.8
2.5°	783.7	775.4	776.9	777.6	771.8
5°	779.9	770.5	774.6	775.6	775.6
7.5°	776.5	769.2	771.8	768.6	768.2
10°	767.2	764.0	769.3	761.8	759.7
12.5°	762.9	758.1	759.1	757.6	759.7
15°	754.4	747.2	747.0	747.1	750.2
17.5°	741.3	731.9	738.1	731.5	730.7
20°	731.1	721.7	727.9	720.5	720.5
22.5°	720.9	709.9	716.0	706.0	703.5
25°	697.1	691.9	692.9	688.6	688.6
27.5°	680.4	668.9	672.7	666.8	667.2
30°	664.2	652.8	660.0	651.5	653.6
32.5°	648.1	640.8	644.7	635.5	639.2
35°	618.6	612.4	618.6	611.1	609.1
37.5°	592.7	586.3	588.3	583.5	578.3
40°	574.0	566.8	568.7	562.3	561.3
42.5°	553.7	548.9	549.2	543.7	544.3
45°	519.9	516.8	519.9	510.4	512.5
47.5°	489.8	486.1	485.8	479.4	481.9
50°	466.9	464.8	463.7	457.3	457.3
52.5°	443.1	441.0	439.9	435.2	434.4
55°	409.6	408.5	405.3	401.0	399.0
57.5°	372.9	370.8	369.0	364.5	362.9
60°	349.1	347.0	342.7	337.4	337.4
62.5°	322.8	320.7	315.6	313.6	310.3
65°	283.3	282.3	276.9	273.7	271.6
67.5°	244.0	240.7	238.3	234.2	232.2
70°	218.6	214.4	211.2	207.9	205.8
72.5°	190.6	187.2	184.0	182.4	179.5
75°	147.5	145.4	143.2	141.1	141.1
77.5°	107.2	106.5	104.4	104.4	103.3
80°	81.7	82.7	80.6	80.6	79.6
82.5°	58.8	59.8	59.4	60.2	59.2
85°	29.7	31.8	32.9	33.9	32.9
87.5°	8.5	11.0	12.7	13.6	13.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.5	45.0	104.4	30.4	22.9
95°	27.6	109.5	492.3	170.4	105.0
97.5°	50.7	128.3	758.2	542.6	371.8
100°	66.8	139.5	816.0	826.5	636.6
102.5°	84.7	151.5	803.2	1057.9	892.1
105°	112.5	170.6	737.4	1302.6	1238.3
107.5°	140.7	192.8	660.6	1371.6	1428.8
110°	160.2	209.0	616.5	1345.2	1473.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	178.9	225.2	586.8	1282.8	1466.2
115°	209.0	252.6	559.2	1184.6	1391.1
117.5°	235.6	276.4	542.8	1077.3	1296.0
120°	256.8	291.0	541.1	1016.0	1225.5
122.5°	273.8	308.0	536.9	962.1	1156.8
125°	295.0	327.1	533.7	885.7	1058.9
127.5°	318.1	348.2	532.0	840.0	982.8
130°	330.0	360.1	529.5	808.2	932.7
132.5°	342.7	372.0	529.5	783.3	897.9
135°	360.8	390.9	527.4	748.1	845.7
137.5°	377.7	407.0	527.1	718.4	802.6
140°	390.5	420.6	526.3	693.7	774.6
142.5°	404.9	430.0	528.8	673.9	746.6
145°	425.5	447.3	531.6	647.5	705.6
147.5°	443.1	464.3	536.3	620.8	671.0
150°	458.4	472.9	538.0	612.0	647.3
152.5°	470.3	485.6	539.7	600.0	632.8
155°	486.0	497.4	544.3	585.2	609.1
157.5°	505.5	512.3	545.4	578.5	595.5
160°	515.7	520.9	549.6	573.3	587.8
162.5°	521.6	527.6	550.5	569.0	580.2
165°	536.9	539.0	550.7	562.6	570.9
167.5°	547.3	545.4	555.6	561.0	564.3
170°	550.7	549.7	553.9	555.0	559.2
172.5°	558.3	554.8	556.4	553.3	556.6
175°	562.4	559.3	557.1	553.8	549.6
177.5°	564.1	559.1	556.4	553.0	553.9
180°	558.1	558.1	558.1	558.1	558.1

(END OF REPORT)