

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:

Luminaire Tested: SQ4-F-150U-050D-927-1D-UNV-STD-W-4

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-150U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

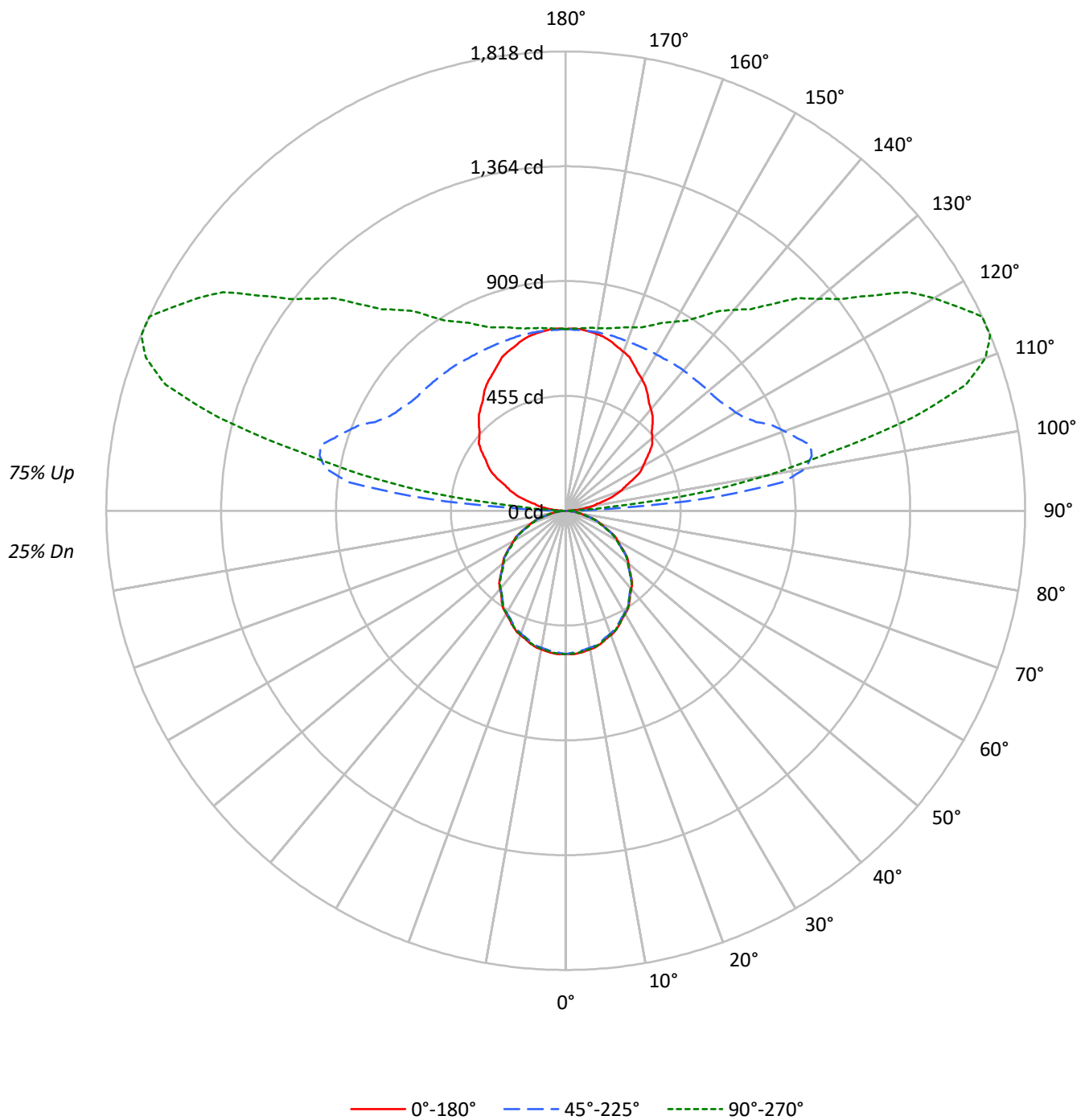
Lumens per Lamp: N/A
Luminaire Lumens: 6187.9 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 55.7
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	101	101	101	101	90	90	90	90	69	69	69	51	51	51	33	33	33
1	92	88	84	81	82	79	75	73	61	59	57	44	43	42	29	29	28
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	26	25	23
3	76	67	60	55	68	60	54	49	47	43	39	34	32	29	23	21	20
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11
8	50	38	31	26	44	34	28	23	27	22	19	20	17	15	14	12	10
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5233	5233	5233
5°	5246	5183	5224
10°	5229	5164	5200
15°	5192	5127	5171
20°	5144	5084	5121
25°	5086	5024	5071
30°	5015	4975	5007
35°	4960	4901	4925
40°	4865	4819	4828
45°	4765	4726	4726
50°	4665	4620	4599
55°	4555	4494	4470
60°	4386	4316	4286
65°	4176	4093	4045
70°	3893	3809	3728
75°	3490	3383	3301
80°	2821	2784	2704
85°	1683	1927	2011

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 4776 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.5	0.9
10°-20°	152.4	2.5
20°-30°	228.9	3.7
30°-40°	273.2	4.4
40°-50°	280.0	4.5
50°-60°	249.7	4.0
60°-70°	186.0	3.0
70°-80°	101.0	1.6
80°-90°	24.9	0.4
90°-100°	334.3	5.4
100°-110°	904.0	14.6
110°-120°	950.4	15.4
120°-130°	772.0	12.5
130°-140°	605.6	9.8
140°-150°	464.8	7.5
150°-160°	334.3	5.4
160°-170°	204.2	3.3
170°-180°	68.8	1.1
0°-30°	434.8	7.0
0°-40°	708.0	11.4
0°-60°	1237.7	20.0
0°-90°	1549.5	25.0
90°-120°	2188.8	35.4
90°-150°	4031.1	65.1
90°-180°	4638.0	75.0
0°-180°	6187.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	567	567	567	567	567	
5°	566	566	560	565	564	54
15°	544	542	537	541	541	153
25°	500	498	494	497	498	230
35°	440	439	435	435	437	275
45°	365	366	362	361	362	282
55°	283	283	279	277	278	252
65°	191	191	188	185	185	189
75°	98	97	95	93	93	104
85°	16	17	18	19	19	22
90°	2	5	10	11	10	4
95°	52	182	556	288	171	54
105°	168	260	1003	1479	1419	177
115°	296	362	832	1610	1818	292
125°	405	464	750	1265	1486	361
135°	486	543	730	1021	1156	375
145°	564	607	719	874	941	353
155°	637	662	713	784	810	294
165°	694	701	716	744	748	195
175°	720	719	717	726	725	68
180°	719	719	719	719	719	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	567.2	567.2	567.2	567.2	567.2
2.5°	569.0	567.8	562.9	567.2	566.6
5°	566.4	565.7	559.6	564.9	564.1
7.5°	562.3	560.8	554.9	560.0	559.3
10°	558.1	556.6	551.2	555.8	555.0
12.5°	552.6	551.7	545.8	550.3	550.2
15°	543.6	542.2	536.8	541.4	541.4
17.5°	531.8	530.9	525.7	530.1	529.5
20°	523.9	522.4	517.8	521.6	521.6
22.5°	514.2	513.3	508.7	511.9	512.5
25°	499.6	498.1	493.5	496.6	498.1
27.5°	483.5	482.3	478.5	480.5	481.5
30°	470.7	470.7	467.0	467.8	470.0
32.5°	459.2	459.2	454.8	455.6	456.6
35°	440.4	438.9	435.1	435.1	437.3
37.5°	418.5	417.8	415.3	414.9	415.5
40°	403.9	403.2	400.1	400.9	400.9
42.5°	389.4	388.6	385.6	384.5	385.7
45°	365.2	366.0	362.2	361.4	362.2
47.5°	341.4	341.4	338.3	336.2	337.4
50°	325.0	325.0	321.9	320.4	320.4
52.5°	308.0	308.6	304.9	302.8	303.4
55°	283.2	283.2	279.4	277.2	277.9
57.5°	255.9	255.9	252.1	249.8	251.2
60°	237.7	237.7	233.9	231.6	232.3
62.5°	219.4	219.4	215.6	213.4	213.5
65°	191.3	190.6	187.5	185.3	185.3
67.5°	164.3	162.4	160.1	157.0	157.0
70°	144.3	143.5	141.2	138.2	138.2
72.5°	126.0	124.7	122.4	120.0	120.0
75°	97.9	97.2	94.9	93.4	92.6
77.5°	70.2	69.6	69.4	67.3	67.9
80°	53.1	53.1	52.4	50.9	50.9
82.5°	38.0	38.6	37.2	36.9	36.3
85°	15.9	17.4	18.2	19.0	19.0
87.5°	3.3	5.7	6.3	7.0	6.9
90°	1.5	4.6	10.1	10.8	10.1
92.5°	22.0	80.1	158.1	68.6	49.7
95°	51.9	182.1	556.0	287.8	171.1
97.5°	83.3	208.9	866.7	717.3	526.8
100°	106.9	219.7	963.4	1004.7	812.4
102.5°	128.6	234.7	997.4	1222.6	1078.8
105°	168.0	259.7	1002.9	1479.3	1418.7
107.5°	204.6	288.2	959.0	1639.4	1659.6
110°	233.1	308.8	920.0	1682.4	1768.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	258.5	329.4	884.1	1673.8	1817.5
115°	295.8	361.7	831.7	1610.1	1817.5
117.5°	332.4	394.2	797.2	1512.7	1747.9
120°	354.7	415.3	776.7	1442.8	1682.8
122.5°	375.7	435.1	764.3	1367.8	1609.7
125°	405.0	464.1	749.6	1265.0	1486.1
127.5°	432.0	490.0	741.0	1181.1	1375.5
130°	446.8	506.7	737.2	1129.2	1304.9
132.5°	462.3	521.5	733.5	1082.4	1244.2
135°	485.6	543.1	729.5	1021.4	1156.2
137.5°	508.9	563.3	726.1	971.9	1081.7
140°	525.1	575.8	724.9	940.0	1037.7
142.5°	540.5	588.2	722.4	911.3	996.8
145°	564.5	607.0	719.4	874.3	940.9
147.5°	586.4	623.9	716.0	840.8	892.0
150°	602.5	635.8	714.8	822.6	863.5
152.5°	617.4	646.4	714.2	805.7	839.3
155°	637.3	662.3	713.2	784.3	810.0
157.5°	658.1	675.5	713.4	769.4	786.3
160°	669.9	684.3	714.0	760.0	772.1
162.5°	679.2	691.1	714.6	752.5	761.6
165°	693.9	700.7	716.3	744.3	748.1
167.5°	703.9	708.6	716.5	737.3	739.1
170°	710.1	712.4	717.1	734.1	734.1
172.5°	715.1	715.5	717.1	730.4	729.8
175°	720.2	719.4	717.1	726.4	724.9
177.5°	721.9	720.1	717.0	723.1	721.3
180°	719.4	719.4	719.4	719.4	719.4

(END OF REPORT)