

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-PR1-100U-075D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-100U-075D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

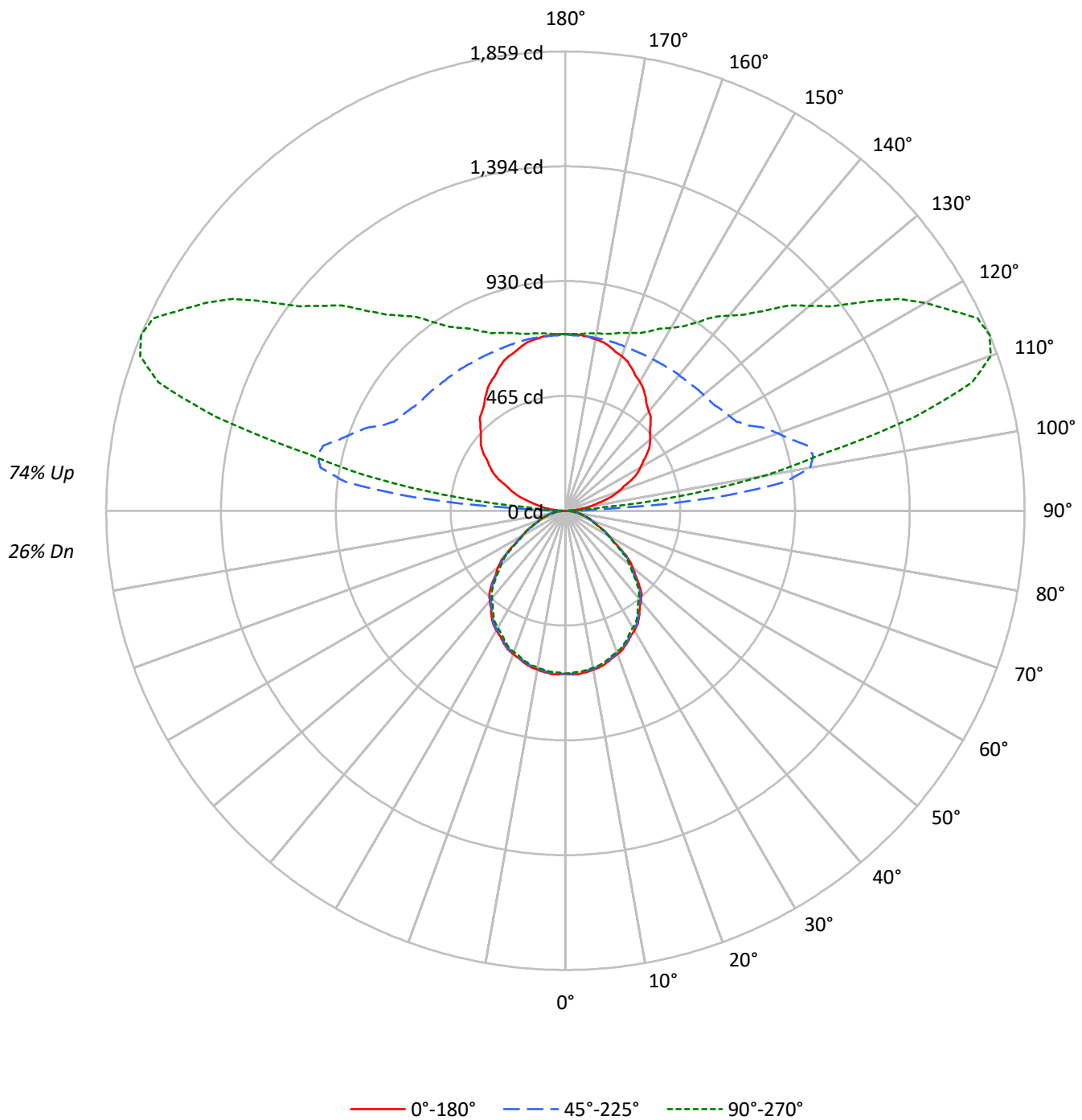
Lumens per Lamp: N/A
Luminaire Lumens: 6289.6 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 78
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	91	91	91	91	70	70	70	51	51	51	34	34	34
1	93	88	85	81	83	79	76	73	62	59	58	45	44	43	30	30	29
2	84	77	72	67	75	69	64	60	54	51	48	40	38	36	27	26	25
3	77	68	61	56	68	61	55	50	48	44	40	35	33	31	24	23	21
4	70	60	53	47	63	54	48	43	42	38	34	32	29	26	22	20	18
5	65	54	46	40	57	48	42	37	38	33	30	28	25	23	19	18	16
6	59	48	40	35	53	43	36	32	34	29	26	26	22	20	18	16	14
7	55	43	36	30	49	39	32	28	31	26	23	23	20	17	16	14	13
8	51	39	32	27	45	35	29	24	28	23	20	21	18	16	15	13	11
9	47	35	28	23	42	32	26	22	26	21	18	19	16	14	14	12	10
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4058	4058	4058
5°	4095	4063	4042
10°	4082	4053	4032
15°	4064	4038	4017
20°	4043	4017	3988
25°	4015	3988	3942
30°	3972	3943	3887
35°	3913	3879	3823
40°	3824	3783	3714
45°	3668	3604	3530
50°	3393	3312	3247
55°	2962	2894	2833
60°	2496	2475	2426
65°	2158	2167	2151
70°	1982	1993	1993
75°	1904	1904	1918
80°	1792	1810	1792
85°	1447	1602	1602

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3668 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.4	1.0
10°-20°	178.5	2.8
20°-30°	269.2	4.3
30°-40°	320.8	5.1
40°-50°	316.3	5.0
50°-60°	241.7	3.8
60°-70°	149.6	2.4
70°-80°	85.0	1.4
80°-90°	27.3	0.4
90°-100°	334.3	5.3
100°-110°	923.0	14.7
110°-120°	951.9	15.1
120°-130°	765.0	12.2
130°-140°	601.2	9.6
140°-150°	461.1	7.3
150°-160°	331.4	5.3
160°-170°	202.6	3.2
170°-180°	68.3	1.1
0°-30°	510.1	8.1
0°-40°	831.0	13.2
0°-60°	1389.0	22.1
0°-90°	1650.8	26.2
90°-120°	2209.3	35.1
90°-150°	4036.5	64.2
90°-180°	4639.0	73.8
0°-180°	6289.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	663	656	658	656	655	63
15°	638	632	634	632	631	180
25°	592	584	588	581	581	272
35°	521	515	517	510	509	325
45°	422	416	414	407	406	323
55°	276	272	270	265	264	247
65°	148	147	149	148	148	150
75°	80	80	80	81	81	85
85°	20	22	23	23	23	24
90°	2	4	9	10	11	4
95°	49	181	607	249	162	53
105°	164	254	1016	1550	1460	175
115°	295	356	818	1619	1841	290
125°	404	460	741	1255	1472	360
135°	487	539	721	1016	1146	377
145°	564	603	712	865	931	353
155°	636	658	706	776	801	293
165°	689	698	709	737	742	194
175°	714	715	710	721	718	68
180°	714	714	714	714	714	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	659.8	659.8	659.8	659.8	659.8
2.5°	663.9	658.1	659.8	658.3	655.2
5°	663.2	656.0	658.1	655.8	654.7
7.5°	658.1	651.0	653.1	650.8	650.1
10°	653.5	646.9	649.0	646.7	645.6
12.5°	648.5	641.4	644.0	641.2	640.1
15°	638.2	631.5	634.2	631.9	630.8
17.5°	626.8	619.7	622.4	619.7	618.3
20°	617.7	611.1	613.7	609.7	609.2
22.5°	607.7	601.0	603.7	598.4	598.3
25°	591.6	584.4	587.6	581.3	580.8
27.5°	572.4	565.7	568.4	562.0	561.3
30°	559.2	552.5	555.2	548.4	547.3
32.5°	544.2	538.0	540.2	533.4	532.7
35°	521.1	515.0	516.6	509.7	509.2
37.5°	494.9	489.3	490.2	482.7	482.1
40°	476.2	470.7	471.1	463.1	462.6
42.5°	455.8	450.2	449.7	441.8	441.2
45°	421.7	416.1	414.3	406.9	405.8
47.5°	382.8	377.2	373.8	367.8	367.0
50°	354.6	349.0	346.1	340.9	339.3
52.5°	324.1	318.6	316.1	311.4	309.7
55°	276.2	271.7	269.9	265.4	264.2
57.5°	230.6	227.6	227.1	222.6	222.2
60°	202.9	201.2	201.2	197.2	197.2
62.5°	179.2	178.0	178.9	176.3	175.8
65°	148.3	147.2	148.9	147.8	147.8
67.5°	123.9	123.9	124.9	124.5	124.5
70°	110.2	110.2	110.8	110.8	110.8
72.5°	98.0	97.5	99.0	99.0	98.5
75°	80.1	80.1	80.1	80.7	80.7
77.5°	62.4	62.5	63.0	62.8	62.4
80°	50.6	51.1	51.1	50.6	50.6
82.5°	38.8	39.3	39.3	39.2	38.8
85°	20.5	21.6	22.7	22.7	22.7
87.5°	6.4	8.6	10.9	11.1	10.9
90°	2.3	4.5	9.1	10.3	11.4
92.5°	20.6	85.3	152.6	55.7	43.4
95°	49.1	180.9	606.6	249.3	162.2
97.5°	81.3	202.6	898.5	691.8	501.0
100°	105.1	215.7	1006.4	1013.5	823.6
102.5°	127.9	230.5	1027.4	1252.2	1072.2
105°	164.5	253.8	1015.5	1550.3	1459.9
107.5°	203.3	282.9	958.9	1694.1	1727.2
110°	230.7	302.2	915.0	1725.0	1832.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	255.4	324.2	873.9	1700.6	1858.8
115°	294.7	356.1	817.9	1619.1	1841.4
117.5°	329.0	390.2	781.1	1504.5	1757.3
120°	351.8	412.1	766.5	1426.8	1681.5
122.5°	373.8	431.4	754.6	1354.3	1595.6
125°	404.4	460.2	741.4	1254.6	1472.4
127.5°	430.4	486.3	733.6	1170.3	1358.2
130°	447.8	503.6	729.9	1118.8	1289.7
132.5°	464.2	517.4	726.3	1075.5	1230.3
135°	486.6	539.1	720.8	1016.2	1145.7
137.5°	511.8	559.6	718.1	966.4	1077.0
140°	525.5	572.4	716.2	933.2	1030.4
142.5°	541.0	584.3	714.4	903.7	989.2
145°	564.3	603.4	711.7	865.1	931.0
147.5°	586.7	620.9	709.1	832.5	883.7
150°	603.1	631.1	708.2	813.1	854.4
152.5°	615.9	642.1	707.3	796.5	830.7
155°	636.3	657.5	705.9	776.2	800.8
157.5°	655.0	671.3	706.2	761.4	778.1
160°	666.0	680.5	707.1	753.1	765.3
162.5°	675.1	687.8	708.0	745.7	755.3
165°	688.8	697.7	709.4	736.9	742.5
167.5°	699.3	704.7	710.5	731.6	733.4
170°	704.8	709.3	710.5	728.8	728.8
172.5°	709.4	712.1	710.5	725.1	724.2
175°	713.9	715.1	710.5	720.7	718.5
177.5°	715.8	714.9	710.3	716.6	714.9
180°	713.9	713.9	713.9	713.9	713.9

(END OF REPORT)