

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-PP3-100U-100D-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 (G3-1910-536-23)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PP3-100U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

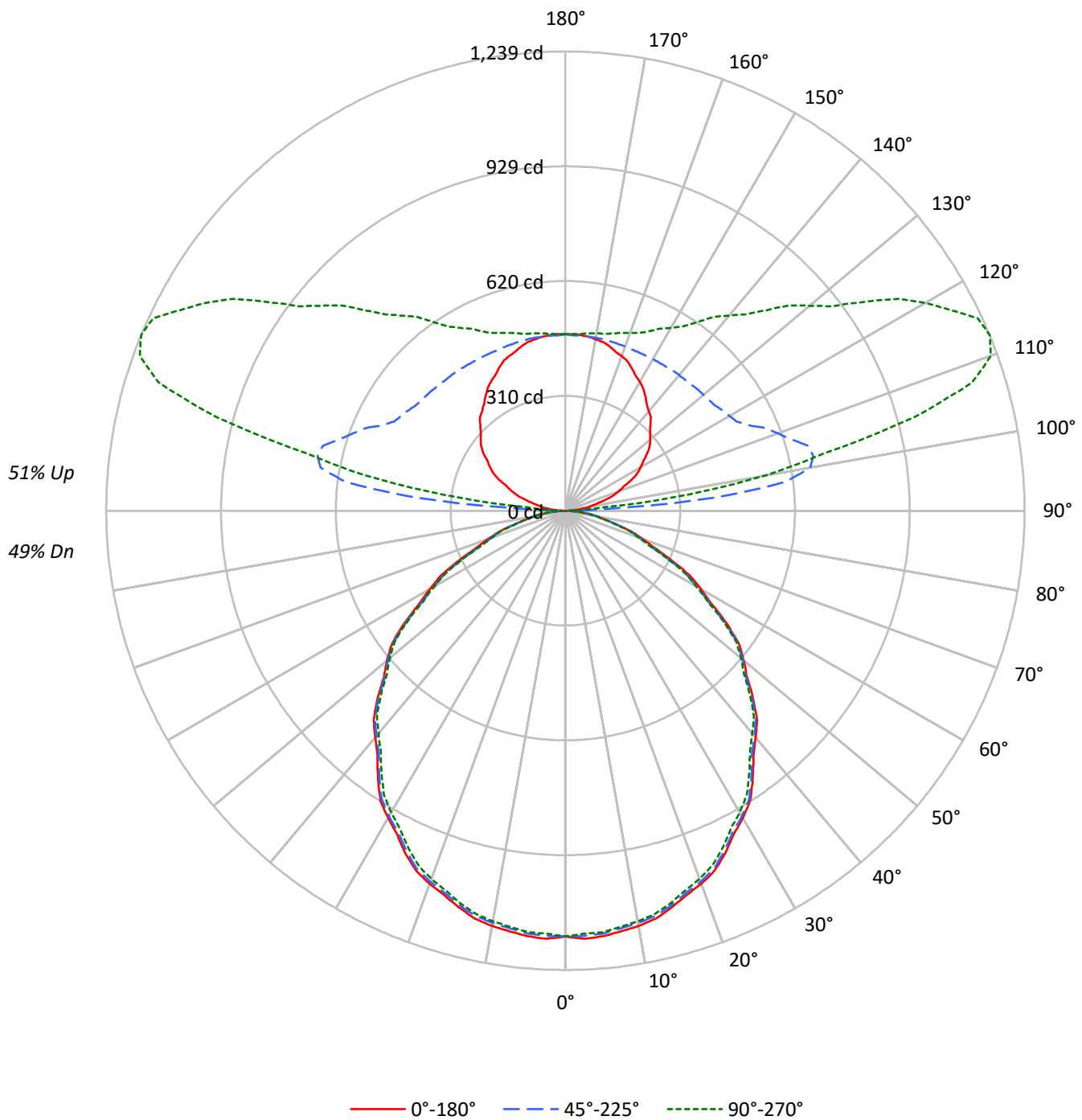
Lumens per Lamp: N/A
Luminaire Lumens: 6033.1 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 57.9
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

TEST NUMBER:

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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	98	93	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47
2	89	82	76	71	82	76	70	66	64	60	57	53	50	48	43	41	40
3	81	72	65	59	75	67	60	55	57	52	48	47	44	41	38	36	34
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	32	29
5	68	57	49	43	63	53	46	40	45	40	35	38	34	30	31	28	26
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	28	25	23
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	22	20
8	54	42	34	29	50	39	32	27	34	28	24	28	24	21	24	20	18
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	19	16
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10596	10596	10596
5°	10675	10609	10572
10°	10657	10581	10534
15°	10586	10528	10471
20°	10515	10457	10377
25°	10391	10318	10217
30°	10199	10144	10016
35°	9932	9863	9739
40°	9613	9553	9444
45°	9351	9286	9193
50°	9015	8958	8872
55°	8549	8435	8371
60°	7783	7560	7523
65°	6857	6571	6549
70°	5918	5676	5676
75°	5094	5023	4951
80°	4495	4548	4436
85°	3515	3832	3832

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9351 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.6	1.8
10°-20°	310.1	5.1
20°-30°	464.5	7.7
30°-40°	544.8	9.0
40°-50°	546.5	9.1
50°-60°	466.2	7.7
60°-70°	304.1	5.0
70°-80°	152.5	2.5
80°-90°	43.2	0.7
90°-100°	222.9	3.7
100°-110°	615.3	10.2
110°-120°	634.6	10.5
120°-130°	510.0	8.5
130°-140°	400.8	6.6
140°-150°	307.4	5.1
150°-160°	220.9	3.7
160°-170°	135.1	2.2
170°-180°	45.5	0.8
0°-30°	883.2	14.6
0°-40°	1428.0	23.7
0°-60°	2440.8	40.5
0°-90°	2940.6	48.7
90°-120°	1472.8	24.4
90°-150°	2691.0	44.6
90°-180°	3093.0	51.3
0°-180°	6033.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1148	1148	1148	1148	1148	
5°	1153	1142	1146	1142	1142	109
15°	1108	1097	1102	1098	1096	313
25°	1021	1009	1014	1005	1004	469
35°	882	873	876	866	865	551
45°	717	712	712	705	705	552
55°	532	530	524	521	520	472
65°	314	308	301	299	300	313
75°	143	143	141	140	139	155
85°	33	36	36	36	36	39
90°	2	3	6	7	8	4
95°	33	121	404	166	108	35
105°	110	169	677	1034	973	117
115°	196	237	545	1079	1228	193
125°	270	307	494	836	982	240
135°	324	359	480	677	764	251
145°	376	402	474	577	621	236
155°	424	438	471	518	534	195
165°	459	465	473	491	495	129
175°	476	477	474	480	479	45
180°	476	476	476	476	476	

TEST NUMBER:

CATALOG NUMBER: SQ4-PP3-100U-100D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1148.5	1148.5	1148.5	1148.5	1148.5
2.5°	1155.8	1146.3	1148.5	1146.8	1142.1
5°	1152.6	1141.7	1145.5	1141.5	1141.5
7.5°	1144.7	1132.9	1136.7	1132.6	1132.4
10°	1137.5	1125.6	1129.4	1125.4	1124.4
12.5°	1127.0	1115.2	1119.7	1114.9	1114.7
15°	1108.3	1097.4	1102.2	1098.2	1096.2
17.5°	1087.1	1075.3	1081.1	1075.4	1074.6
20°	1071.0	1059.2	1065.0	1056.9	1056.9
22.5°	1051.7	1039.9	1046.5	1036.0	1036.0
25°	1020.7	1008.9	1013.6	1004.6	1003.6
27.5°	983.9	972.2	977.2	966.9	966.7
30°	957.3	946.5	952.2	941.1	940.2
32.5°	928.3	918.2	922.4	911.4	910.4
35°	881.8	872.9	875.7	865.7	864.7
37.5°	832.9	823.8	827.0	818.4	818.0
40°	798.2	792.3	793.2	786.1	784.1
42.5°	766.0	759.3	760.2	753.1	752.7
45°	716.7	711.8	711.7	704.6	704.6
47.5°	664.4	660.6	659.5	653.7	653.5
50°	628.1	625.2	624.1	619.0	618.1
52.5°	590.3	588.9	585.4	581.2	581.0
55°	531.5	529.5	524.4	521.4	520.4
57.5°	467.7	463.7	458.0	453.6	454.4
60°	421.8	417.8	409.7	407.7	407.7
62.5°	377.5	372.8	364.6	361.8	363.4
65°	314.1	308.2	301.0	299.0	300.0
67.5°	256.5	251.2	243.4	243.4	242.6
70°	219.4	216.5	210.4	210.4	210.4
72.5°	186.4	185.0	180.6	180.6	179.8
75°	142.9	142.9	140.9	139.9	138.9
77.5°	107.1	107.5	106.5	105.5	103.7
80°	84.6	86.5	85.6	84.5	83.5
82.5°	63.6	65.6	65.4	63.6	63.4
85°	33.2	36.2	36.2	36.2	36.2
87.5°	9.2	12.6	14.1	14.3	15.2
90°	1.5	3.0	6.1	6.9	7.6
92.5°	13.7	56.9	101.7	37.1	28.9
95°	32.7	120.6	404.4	166.2	108.1
97.5°	54.2	135.1	599.0	461.2	334.0
100°	70.1	143.8	670.9	675.7	549.1
102.5°	85.3	153.6	684.9	834.8	714.8
105°	109.7	169.2	677.0	1033.6	973.2
107.5°	135.6	188.6	639.2	1129.4	1151.4
110°	153.8	201.5	610.0	1150.0	1221.5

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	216.1	582.6	1133.7	1239.2
115°	196.5	237.4	545.3	1079.4	1227.6
117.5°	219.3	260.1	520.7	1003.0	1171.6
120°	234.6	274.8	511.0	951.2	1121.0
122.5°	249.2	287.6	503.1	902.9	1063.7
125°	269.6	306.8	494.2	836.4	981.6
127.5°	286.9	324.2	489.1	780.2	905.5
130°	298.5	335.8	486.6	745.9	859.8
132.5°	309.5	344.9	484.2	717.0	820.2
135°	324.4	359.4	480.5	677.4	763.8
137.5°	341.2	373.0	478.7	644.3	718.0
140°	350.3	381.6	477.5	622.1	686.9
142.5°	360.7	389.6	476.3	602.5	659.5
145°	376.2	402.3	474.4	576.7	620.7
147.5°	391.1	413.9	472.8	555.0	589.1
150°	402.1	420.7	472.2	542.1	569.6
152.5°	410.6	428.0	471.5	531.0	553.8
155°	424.2	438.3	470.6	517.5	533.8
157.5°	436.7	447.5	470.8	507.6	518.8
160°	444.0	453.7	471.4	502.0	510.2
162.5°	450.1	458.6	472.0	497.1	503.5
165°	459.2	465.2	472.9	491.3	495.0
167.5°	466.2	469.8	473.7	487.7	488.9
170°	469.9	472.8	473.7	485.9	485.9
172.5°	472.9	474.7	473.7	483.4	482.8
175°	476.0	476.7	473.7	480.5	479.0
177.5°	477.2	476.6	473.5	477.8	476.6
180°	476.0	476.0	476.0	476.0	476.0

(END OF REPORT)