

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-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-PR1-100U-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

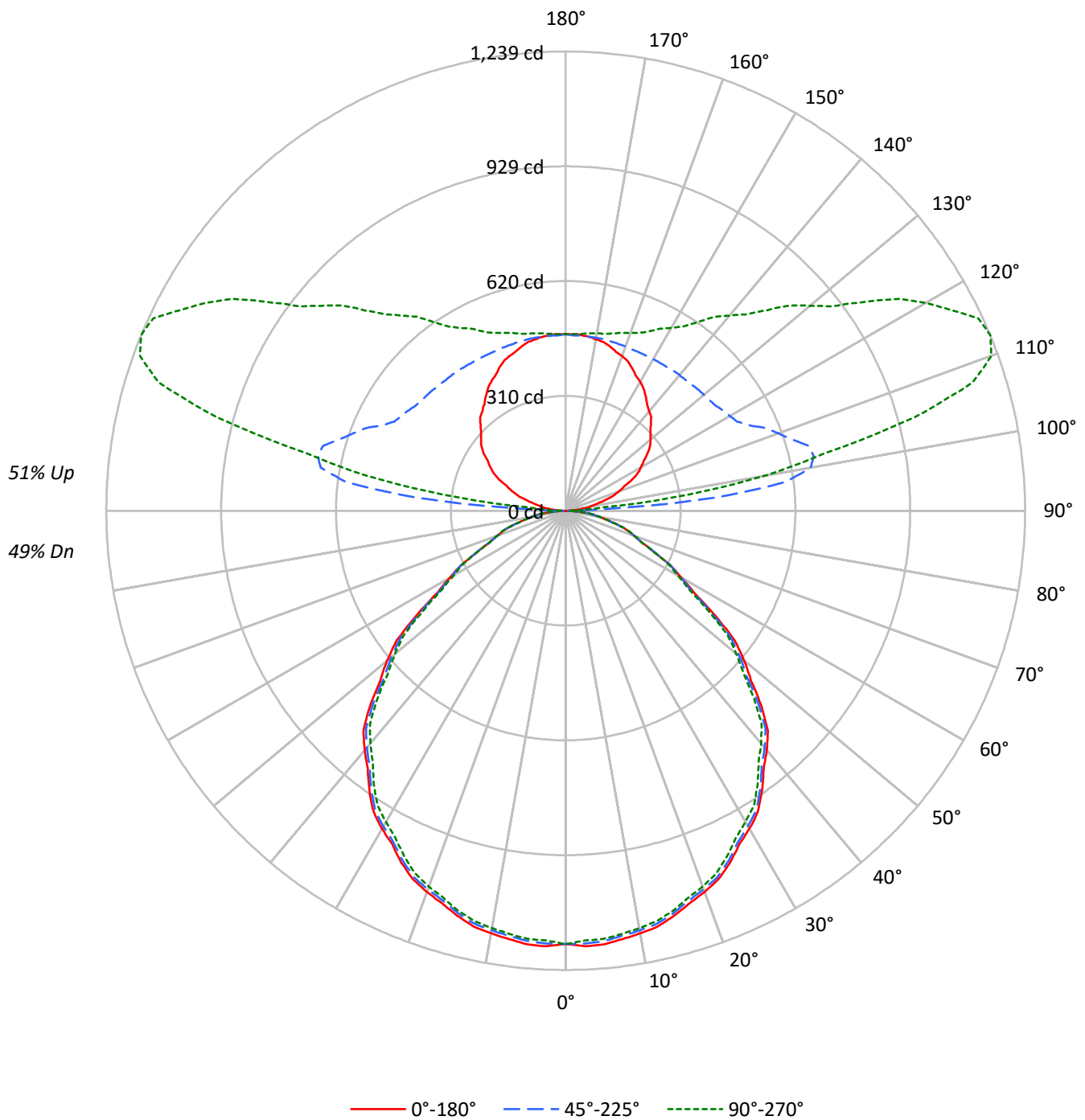
Lumens per Lamp: N/A
Luminaire Lumens: 6015.5 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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

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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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	98	94	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47
2	89	82	76	71	82	76	71	66	64	60	57	53	51	48	43	42	40
3	82	72	65	59	75	67	61	56	57	52	48	47	44	41	39	36	34
4	75	64	56	50	69	59	53	47	51	45	41	42	39	35	35	32	30
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	31	28	26
6	63	51	43	38	58	48	41	36	41	35	31	34	30	27	28	25	23
7	59	46	39	33	54	43	36	31	37	32	28	31	27	24	26	23	20
8	54	42	34	29	50	39	32	28	34	28	25	29	24	21	24	21	18
9	51	38	31	26	47	36	29	25	31	26	22	26	22	19	22	19	17
10	47	35	28	23	44	33	27	22	29	23	20	24	20	17	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10785	10785	10785
5°	10881	10797	10741
10°	10847	10771	10715
15°	10799	10732	10674
20°	10745	10675	10597
25°	10669	10597	10474
30°	10554	10479	10329
35°	10398	10308	10160
40°	10161	10052	9870
45°	9747	9576	9379
50°	9017	8800	8626
55°	7871	7692	7530
60°	6632	6576	6445
65°	5737	5759	5715
70°	5268	5295	5295
75°	5062	5062	5098
80°	4761	4814	4761
85°	3832	4266	4266

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9747 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.5	1.8
10°-20°	316.2	5.3
20°-30°	477.0	7.9
30°-40°	568.3	9.4
40°-50°	560.3	9.3
50°-60°	428.2	7.1
60°-70°	265.0	4.4
70°-80°	150.5	2.5
80°-90°	46.8	0.8
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	6.7
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°	903.8	15.0
0°-40°	1472.1	24.5
0°-60°	2460.7	40.9
0°-90°	2923.0	48.6
90°-120°	1472.8	24.5
90°-150°	2691.0	44.7
90°-180°	3093.0	51.4
0°-180°	6015.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1169	1169	1169	1169	1169	
5°	1175	1162	1166	1162	1160	111
15°	1131	1119	1124	1120	1118	319
25°	1048	1035	1041	1030	1029	482
35°	923	912	915	903	902	576
45°	747	737	734	721	719	572
55°	489	481	478	470	468	438
65°	263	261	264	262	262	266
75°	142	142	142	143	143	150
85°	36	38	40	40	40	42
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:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1168.9	1168.9	1168.9	1168.9	1168.9
2.5°	1176.1	1165.9	1168.9	1166.3	1160.8
5°	1174.9	1162.1	1165.8	1161.8	1159.8
7.5°	1165.8	1153.2	1157.0	1152.9	1151.7
10°	1157.8	1146.0	1149.7	1145.7	1143.7
12.5°	1148.9	1136.3	1140.9	1136.0	1134.0
15°	1130.6	1118.8	1123.6	1119.5	1117.5
17.5°	1110.5	1097.9	1102.6	1097.9	1095.4
20°	1094.4	1082.5	1087.3	1080.2	1079.3
22.5°	1076.6	1064.8	1069.6	1060.1	1059.9
25°	1048.0	1035.2	1041.0	1029.9	1028.9
27.5°	1014.0	1002.2	1007.0	995.7	994.5
30°	990.7	978.8	983.6	971.5	969.5
32.5°	964.1	953.1	957.0	944.9	943.7
35°	923.2	912.4	915.2	903.0	902.1
37.5°	876.7	866.8	868.4	855.1	854.1
40°	843.7	833.8	834.6	820.5	819.5
42.5°	807.4	797.6	796.8	782.6	781.7
45°	747.0	737.2	733.9	720.8	718.8
47.5°	678.2	668.3	662.3	651.5	650.2
50°	628.2	618.4	613.1	604.0	601.0
52.5°	574.3	564.4	560.0	551.6	548.7
55°	489.3	481.4	478.2	470.1	468.1
57.5°	408.5	403.2	402.3	394.4	393.6
60°	359.4	356.5	356.4	349.3	349.3
62.5°	317.5	315.4	316.9	312.3	311.5
65°	262.8	260.8	263.8	261.8	261.8
67.5°	219.5	219.5	221.3	220.5	220.5
70°	195.3	195.3	196.3	196.3	196.3
72.5°	173.6	172.8	175.4	175.4	174.6
75°	142.0	142.0	142.0	143.0	143.0
77.5°	110.5	110.7	111.5	111.3	110.5
80°	89.6	90.6	90.6	89.6	89.6
82.5°	68.7	69.6	69.7	69.4	68.7
85°	36.2	38.2	40.3	40.3	40.3
87.5°	10.8	14.2	17.3	17.5	16.8
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

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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)