

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-PR1-125U-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 (G3-1910-536-24)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-125U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

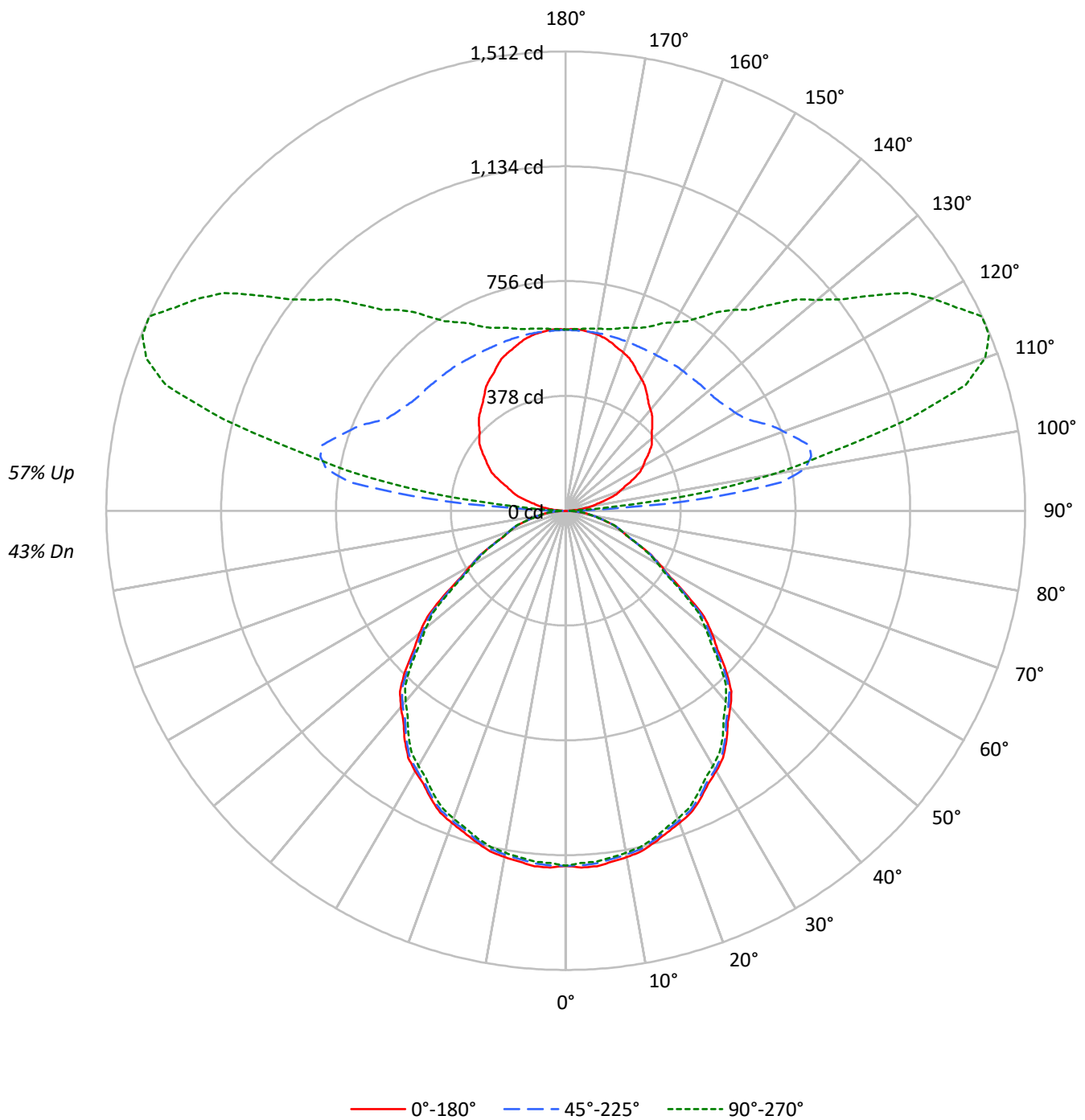
Lumens per Lamp: N/A
Luminaire Lumens: 6772.9 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 64.5
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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50
1	96	92	89	85	88	85	81	78	70	68	66	57	55	54	44	43	43
2	88	81	75	70	80	74	69	65	62	58	55	50	48	45	39	38	36
3	80	71	64	59	73	65	59	54	55	50	46	44	41	39	35	33	31
4	74	63	55	50	67	58	51	46	49	44	40	40	36	33	31	29	27
5	68	56	48	43	62	52	45	40	44	38	34	36	32	29	28	26	24
6	62	51	43	37	57	47	40	35	39	34	30	32	28	25	26	23	21
7	58	46	38	32	53	42	35	30	36	30	26	29	25	22	24	21	19
8	53	41	34	29	49	38	32	27	32	27	23	27	23	20	22	19	17
9	50	38	30	25	45	35	28	24	30	25	21	25	21	18	20	17	15
10	46	35	27	23	42	32	26	21	27	22	19	23	19	16	19	16	14

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	1.6
10°-20°	316.2	4.7
20°-30°	477.0	7.0
30°-40°	568.3	8.4
40°-50°	560.3	8.3
50°-60°	428.2	6.3
60°-70°	265.0	3.9
70°-80°	150.5	2.2
80°-90°	47.2	0.7
90°-100°	278.9	4.1
100°-110°	751.4	11.1
110°-120°	788.6	11.6
120°-130°	639.9	9.4
130°-140°	501.9	7.4
140°-150°	385.3	5.7
150°-160°	277.0	4.1
160°-170°	169.3	2.5
170°-180°	57.1	0.8
0°-30°	903.8	13.3
0°-40°	1472.1	21.7
0°-60°	2460.7	36.3
0°-90°	2923.4	43.2
90°-120°	1819.0	26.9
90°-150°	3346.1	49.4
90°-180°	3849.0	56.8
0°-180°	6772.9	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	4	9	10	10	4
95°	42	152	457	234	162	44
105°	139	216	831	1243	1167	146
115°	245	300	692	1337	1512	241
125°	335	385	621	1050	1236	299
135°	403	450	604	847	959	311
145°	466	503	596	724	778	293
155°	530	549	591	650	671	244
165°	574	581	593	617	620	162
175°	597	596	594	602	601	57
180°	596	596	596	596	596	

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	14.5	17.9	18.1	17.3
90°	1.5	4.5	9.1	9.9	9.9
92.5°	18.5	65.5	129.4	62.3	43.3
95°	42.5	151.7	457.3	233.8	161.8
97.5°	67.9	173.7	717.2	599.2	451.8
100°	87.4	182.4	799.9	836.9	694.3
102.5°	106.2	194.7	827.2	1014.9	897.9
105°	139.0	216.3	831.0	1243.3	1166.8
107.5°	170.0	238.9	795.6	1360.6	1380.4
110°	190.7	256.0	763.4	1397.1	1469.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	212.5	273.1	732.4	1389.0	1507.4
115°	245.4	300.3	692.0	1337.1	1512.4
117.5°	275.3	326.8	660.7	1254.3	1449.5
120°	294.7	344.5	644.9	1194.9	1395.4
122.5°	311.7	360.9	633.4	1134.1	1334.0
125°	335.0	384.8	621.4	1050.2	1235.9
127.5°	357.3	406.3	613.8	976.2	1142.0
130°	370.7	419.7	610.7	933.8	1079.4
132.5°	384.1	432.5	607.7	896.5	1030.2
135°	403.4	450.2	603.9	847.2	959.4
137.5°	421.7	466.6	601.9	805.5	897.6
140°	434.5	477.6	600.1	779.7	862.9
142.5°	447.9	488.0	598.9	755.7	825.9
145°	466.4	502.8	596.3	724.4	777.8
147.5°	486.5	518.1	593.7	698.0	740.0
150°	499.8	527.3	592.5	681.4	716.3
152.5°	512.0	535.9	591.9	667.9	696.3
155°	529.5	548.8	591.0	649.9	670.7
157.5°	544.8	559.8	591.1	637.3	651.3
160°	554.5	567.1	591.7	630.0	640.4
162.5°	563.0	573.3	592.4	623.8	631.2
165°	574.3	581.0	593.3	616.9	619.8
167.5°	583.4	587.2	594.0	611.5	612.7
170°	589.5	590.9	594.0	608.5	608.5
172.5°	593.1	593.4	594.6	605.4	605.4
175°	597.1	596.3	594.0	602.3	600.9
177.5°	598.7	597.5	594.5	599.3	598.1
180°	596.3	596.3	596.3	596.3	596.3

(END OF REPORT)