

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-PR1-025U-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 (G3-1910-536-32)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-025U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

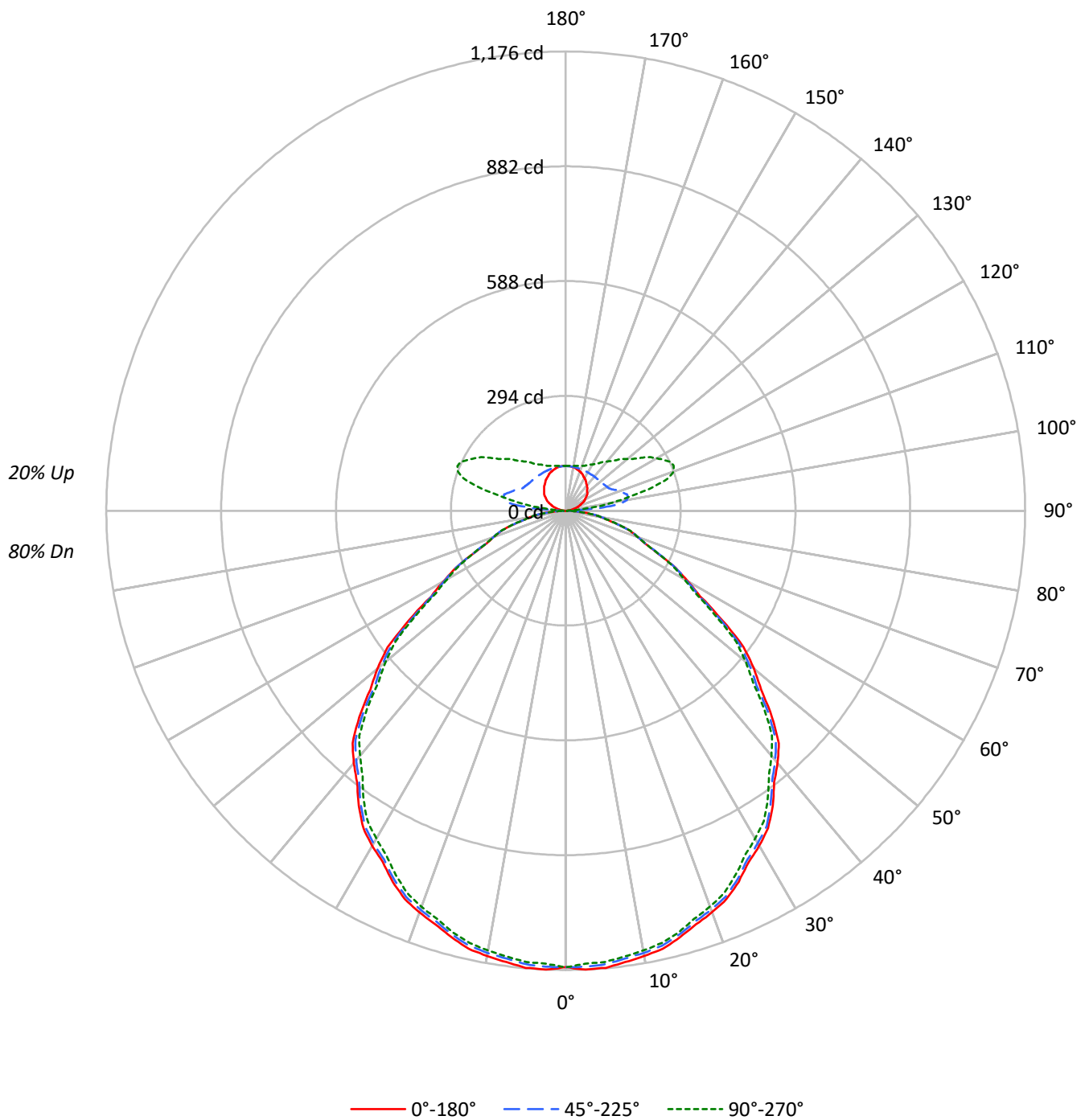
Lumens per Lamp: N/A
Luminaire Lumens: 3666.4 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 38.7
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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83
1	105	101	97	93	100	96	93	90	88	86	83	81	79	77	74	73	71
2	96	88	82	77	92	85	79	74	78	74	70	72	68	65	66	63	61
3	88	78	71	65	84	75	68	63	69	64	59	64	59	56	59	55	52
4	81	70	61	55	77	67	60	54	62	56	51	57	52	48	53	49	45
5	74	62	54	48	71	60	52	47	56	49	44	52	46	42	48	43	40
6	69	56	48	42	66	54	47	41	50	44	39	47	41	37	44	39	35
7	64	51	43	37	61	49	42	36	46	39	35	43	37	33	40	35	31
8	59	47	39	33	57	45	38	32	42	36	31	39	34	30	37	32	28
9	55	43	35	30	53	41	34	29	39	32	28	36	31	27	34	29	26
10	52	39	32	27	50	38	31	26	36	30	25	34	28	24	31	27	23

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	3.0
10°-20°	316.2	8.6
20°-30°	477.0	13.0
30°-40°	568.3	15.5
40°-50°	560.3	15.3
50°-60°	428.2	11.7
60°-70°	265.0	7.2
70°-80°	150.5	4.1
80°-90°	46.4	1.3
90°-100°	55.9	1.5
100°-110°	147.0	4.0
110°-120°	152.5	4.2
120°-130°	122.3	3.3
130°-140°	95.9	2.6
140°-150°	73.6	2.0
150°-160°	53.0	1.4
160°-170°	32.5	0.9
170°-180°	11.0	0.3
0°-30°	903.8	24.7
0°-40°	1472.1	40.2
0°-60°	2460.7	67.1
0°-90°	2922.6	79.7
90°-120°	355.4	9.7
90°-150°	647.3	17.7
90°-180°	744.0	20.3
0°-180°	3666.4	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°	1	2	6	3	3	2
95°	7	29	96	50	34	8
105°	26	40	163	247	230	28
115°	47	57	130	260	296	46
125°	66	73	118	200	236	58
135°	78	86	115	162	183	60
145°	90	96	113	138	149	57
155°	102	105	113	124	128	47
165°	110	112	113	118	119	31
175°	115	115	114	116	116	11
180°	115	115	115	115	115	

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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°	10.6	14.1	17.3	16.7	15.9
90°	0.7	2.2	5.9	2.9	2.9
92.5°	3.1	14.9	33.0	14.6	9.4
95°	7.4	28.9	96.4	49.7	33.8
97.5°	12.8	31.8	144.2	114.7	84.4
100°	16.9	34.2	158.9	161.0	125.0
102.5°	20.4	36.6	163.0	200.6	169.8
105°	26.5	40.1	162.6	246.8	230.2
107.5°	32.7	45.3	153.3	270.8	274.8
110°	36.8	48.3	145.6	277.0	294.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	40.9	51.8	138.6	273.1	299.5
115°	47.1	57.1	130.2	259.8	296.4
117.5°	53.1	62.3	124.5	241.3	282.0
120°	56.6	65.3	122.1	228.9	268.5
122.5°	60.2	68.8	120.3	216.6	255.5
125°	65.5	73.4	118.4	200.2	236.1
127.5°	69.7	77.8	116.8	186.9	217.3
130°	72.1	80.7	116.2	178.6	206.7
132.5°	74.4	83.1	115.6	171.5	196.7
135°	78.0	85.9	114.7	161.6	183.2
137.5°	81.6	89.4	114.6	154.1	171.8
140°	84.6	91.8	114.0	148.2	164.8
142.5°	86.9	93.6	114.0	144.1	158.3
145°	90.5	96.2	113.3	137.8	148.6
147.5°	94.0	99.6	113.3	132.6	141.5
150°	96.4	101.4	113.3	129.6	136.8
152.5°	98.7	102.6	113.3	127.2	132.7
155°	102.2	105.1	113.3	124.4	128.0
157.5°	104.9	107.6	113.3	121.9	124.5
160°	106.7	108.8	113.3	120.7	122.1
162.5°	108.4	110.0	113.3	119.5	120.9
165°	110.3	111.8	113.3	117.7	119.2
167.5°	112.1	112.8	114.0	117.0	117.5
170°	113.3	114.0	114.0	117.0	117.0
172.5°	113.9	114.0	114.0	116.4	115.8
175°	114.7	114.7	114.0	115.5	115.5
177.5°	114.7	114.7	114.2	115.3	114.7
180°	114.7	114.7	114.7	114.7	114.7

(END OF REPORT)