

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-PC3-150U-100D-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 (G3-1910-536-25)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PC3-150U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

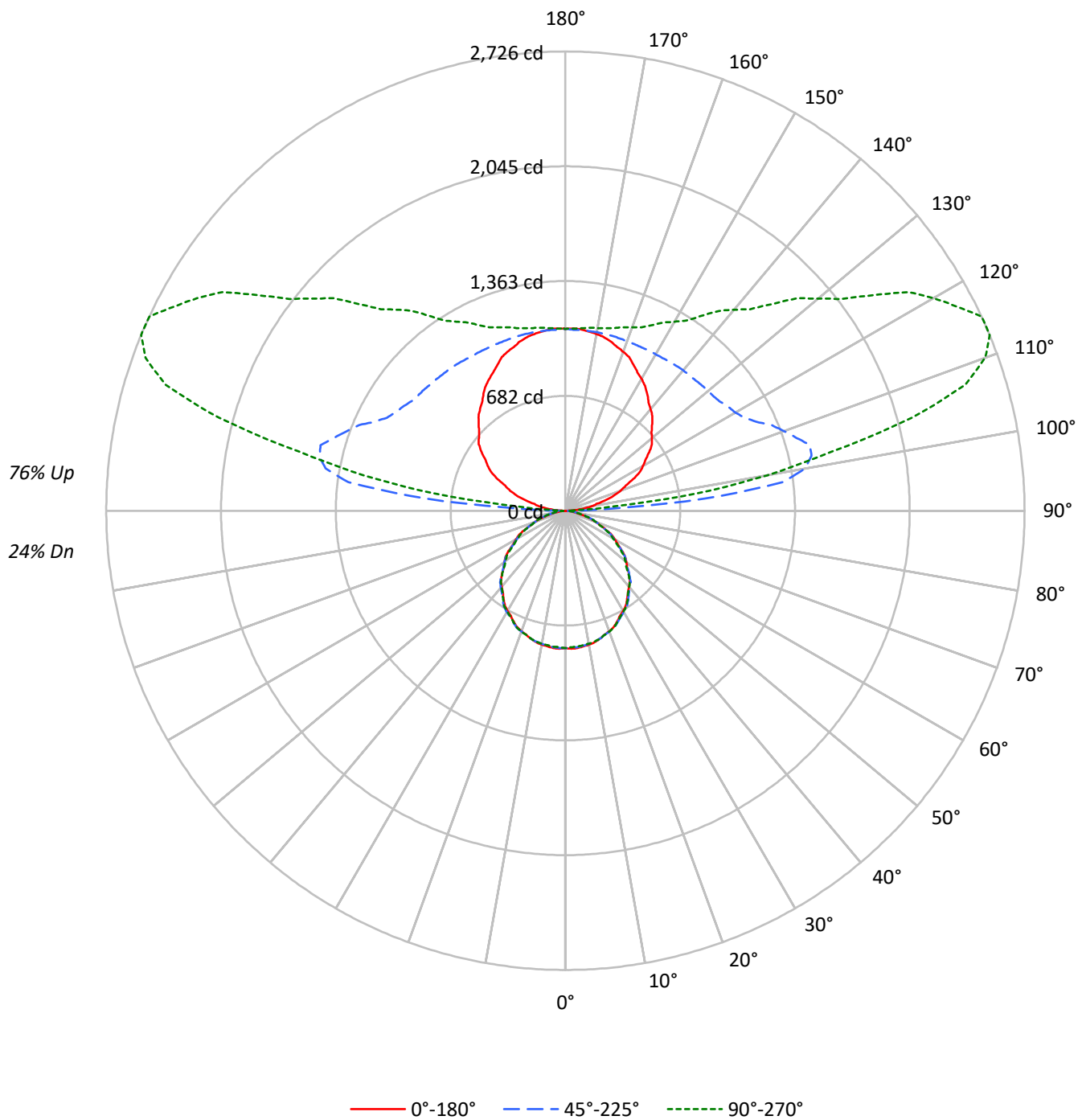
Lumens per Lamp: N/A
Luminaire Lumens: 9185.2 lumens
Efficiency: N/A
Efficacy: 81.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 112.7
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	56	44	43	41	29	28	27	20
2	84	77	71	66	74	68	64	59	53	50	47	39	36	35	25	24	23	17
3	76	67	60	55	68	60	54	49	47	42	39	34	31	29	22	21	20	15
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	12
5	64	53	45	39	57	47	41	36	37	32	28	27	24	21	18	16	15	11
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13	9
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	12	10	7
9	46	35	28	23	41	31	25	21	25	20	17	18	15	13	12	10	9	7
10	43	32	25	20	38	29	23	18	23	18	15	17	14	12	11	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5015	5015	5015
5°	5053	5020	5002
10°	5041	5017	5003
15°	5014	5014	5010
20°	4981	4996	4996
25°	4934	4970	4954
30°	4874	4933	4911
35°	4802	4875	4841
40°	4722	4789	4740
45°	4636	4669	4597
50°	4516	4516	4443
55°	4372	4315	4251
60°	4160	4077	4012
65°	3845	3769	3736
70°	3367	3394	3381
75°	2709	2997	3013
80°	1927	2540	2568
85°	1172	2131	2131

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 4669 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.2	0.8
10°-20°	221.4	2.4
20°-30°	335.3	3.7
30°-40°	402.0	4.4
40°-50°	409.9	4.5
50°-60°	357.8	3.9
60°-70°	256.2	2.8
70°-80°	132.0	1.4
80°-90°	35.6	0.4
90°-100°	501.5	5.5
100°-110°	1356.0	14.8
110°-120°	1425.6	15.5
120°-130°	1158.0	12.6
130°-140°	908.4	9.9
140°-150°	697.2	7.6
150°-160°	501.4	5.5
160°-170°	306.3	3.3
170°-180°	103.3	1.1
0°-30°	634.0	6.9
0°-40°	1036.0	11.3
0°-60°	1803.8	19.6
0°-90°	2227.5	24.3
90°-120°	3283.2	35.7
90°-150°	6046.7	65.8
90°-180°	6958.0	75.8
0°-180°	9185.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	815	815	815	815	815	
5°	818	810	813	811	810	78
15°	787	781	787	787	787	222
25°	727	722	732	730	730	335
35°	640	638	649	645	645	400
45°	533	532	537	530	528	410
55°	408	402	402	396	396	363
65°	264	258	259	257	257	261
75°	114	119	126	127	127	123
85°	17	26	30	31	30	23
90°	2	7	15	16	15	6
95°	78	273	834	432	257	81
105°	252	390	1504	2219	2128	265
115°	444	543	1248	2415	2726	438
125°	608	696	1124	1898	2229	542
135°	728	815	1094	1532	1734	563
145°	847	910	1079	1311	1411	530
155°	956	994	1070	1176	1215	441
165°	1041	1051	1074	1116	1122	293
175°	1080	1079	1076	1090	1087	103
180°	1079	1079	1079	1079	1079	

TEST NUMBER:

CATALOG NUMBER: SQ4-PC3-150U-100D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	815.4	815.4	815.4	815.4	815.4
2.5°	820.2	813.1	815.4	813.5	810.5
5°	818.4	810.3	813.1	810.8	810.1
7.5°	812.5	804.4	808.1	806.6	805.8
10°	807.1	798.9	803.3	801.8	801.0
12.5°	799.8	792.3	797.2	795.7	795.6
15°	787.4	780.8	787.4	787.4	786.7
17.5°	771.9	765.8	772.9	773.4	772.9
20°	761.0	754.4	763.3	762.5	763.3
22.5°	747.7	742.3	751.8	749.8	750.6
25°	727.0	721.9	732.3	730.0	730.0
27.5°	702.6	698.9	710.3	707.9	707.9
30°	686.3	682.6	694.6	691.5	691.5
32.5°	668.1	665.6	677.1	673.4	673.4
35°	639.5	638.0	649.3	644.7	644.7
37.5°	609.9	608.5	618.8	613.3	611.5
40°	588.1	587.4	596.4	590.4	590.4
42.5°	566.4	565.6	573.5	566.2	566.2
45°	533.0	531.5	536.8	530.0	528.5
47.5°	496.6	495.1	498.4	491.0	490.3
50°	471.9	470.4	471.9	465.0	464.3
52.5°	446.5	443.8	444.1	437.3	437.1
55°	407.7	402.5	402.4	396.4	396.4
57.5°	366.6	359.8	360.4	355.3	354.5
60°	338.2	330.8	331.4	326.9	326.1
62.5°	310.4	301.9	303.6	298.5	298.4
65°	264.2	258.3	259.0	256.7	256.7
67.5°	219.8	214.4	218.3	216.5	216.4
70°	187.2	183.5	188.7	188.7	188.0
72.5°	157.0	156.9	163.4	163.4	163.8
75°	114.0	119.2	126.1	126.8	126.8
77.5°	76.1	85.3	92.9	93.2	93.0
80°	54.4	64.7	71.7	73.2	72.5
82.5°	36.8	47.8	53.6	55.1	54.4
85°	16.6	25.5	30.2	30.9	30.2
87.5°	5.3	11.5	15.1	15.3	13.9
90°	2.3	6.9	15.1	16.2	15.1
92.5°	33.0	120.2	237.2	103.0	74.6
95°	77.8	273.2	834.0	431.6	256.7
97.5°	125.0	313.3	1300.1	1075.9	790.1
100°	160.3	329.5	1445.1	1507.0	1218.5
102.5°	192.8	352.1	1496.2	1833.9	1618.1
105°	252.1	389.5	1504.3	2219.0	2128.1
107.5°	306.9	432.3	1438.6	2459.1	2489.4
110°	349.6	463.2	1380.0	2523.6	2652.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	387.7	494.1	1326.1	2510.7	2726.3
115°	443.7	542.6	1247.6	2415.1	2726.3
117.5°	498.6	591.2	1195.8	2269.0	2621.8
120°	532.0	622.9	1165.1	2164.2	2524.2
122.5°	563.6	652.7	1146.5	2051.8	2414.5
125°	607.5	696.1	1124.4	1897.5	2229.1
127.5°	648.0	735.0	1111.4	1771.6	2063.3
130°	670.3	760.0	1105.9	1693.8	1957.3
132.5°	693.5	782.3	1100.3	1623.7	1866.3
135°	728.3	814.7	1094.2	1532.1	1734.3
137.5°	763.4	845.0	1089.1	1457.9	1622.6
140°	787.6	863.7	1087.3	1410.1	1556.6
142.5°	810.8	882.4	1083.6	1366.9	1495.2
145°	846.8	910.4	1079.1	1311.4	1411.4
147.5°	879.6	935.9	1074.0	1261.2	1338.0
150°	903.7	953.7	1072.2	1233.9	1295.2
152.5°	926.0	969.7	1071.2	1208.5	1259.0
155°	956.0	993.5	1069.9	1176.4	1215.1
157.5°	987.1	1013.3	1070.1	1154.1	1179.5
160°	1004.8	1026.4	1071.0	1140.0	1158.1
162.5°	1018.7	1036.7	1071.9	1128.7	1142.3
165°	1040.8	1051.0	1074.5	1116.4	1122.1
167.5°	1055.9	1063.0	1074.7	1105.9	1108.7
170°	1065.2	1068.6	1075.7	1101.2	1101.2
172.5°	1072.6	1073.3	1075.7	1095.6	1094.7
175°	1080.3	1079.2	1075.7	1089.5	1087.3
177.5°	1082.9	1080.1	1075.4	1084.7	1081.9
180°	1079.1	1079.1	1079.1	1079.1	1079.1

(END OF REPORT)