

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-PR1-150U-050D-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 (G3-1910-536-25)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-150U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

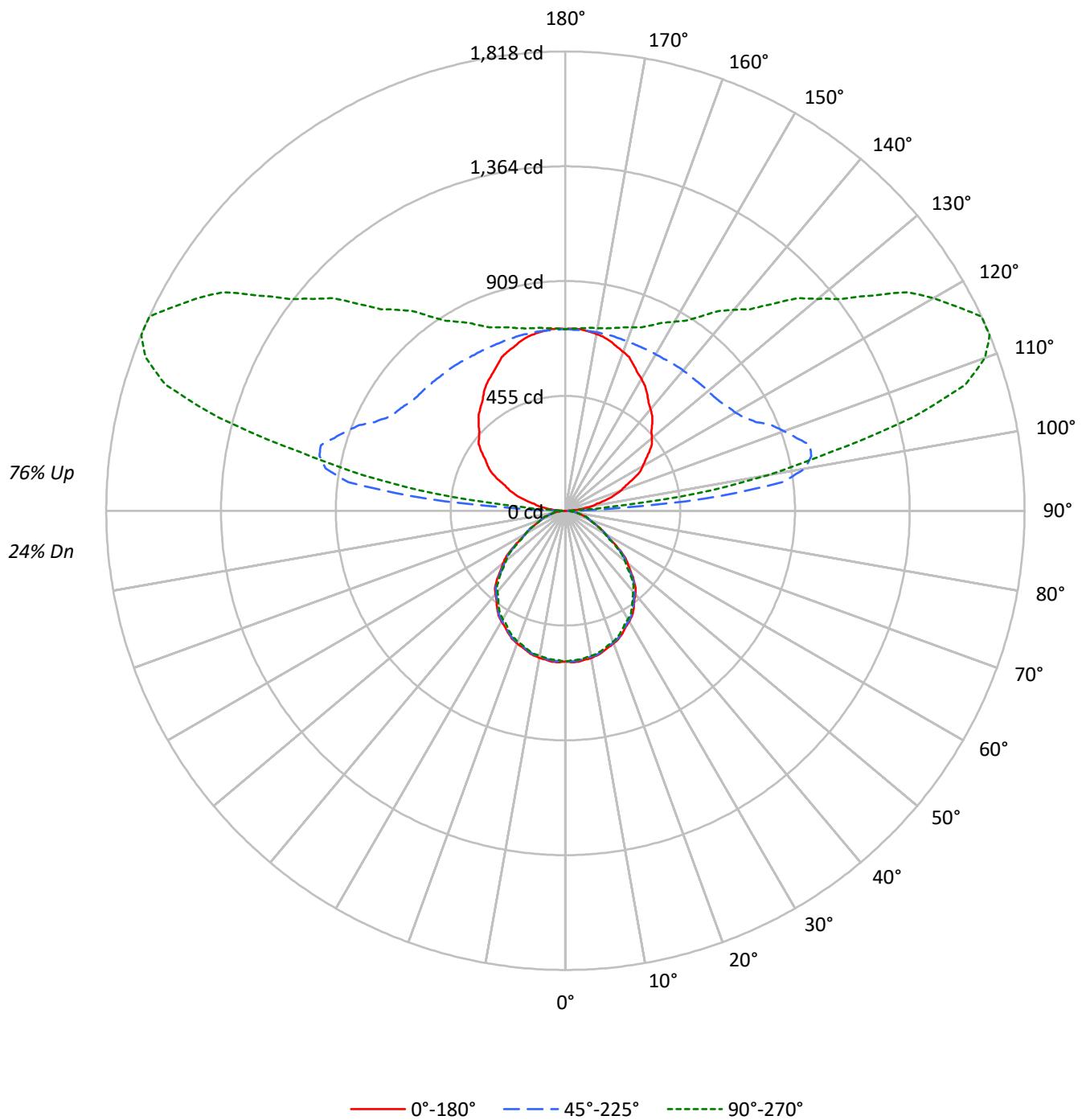
Lumens per Lamp: N/A
Luminaire Lumens: 6132.0 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 55.7
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

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-150U-050D-927-1D-UNV-STD-W-4

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	33	33	33	24
1	92	88	84	81	82	78	75	73	61	59	57	44	43	42	29	28	28	21
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	61	55	50	47	43	40	34	32	30	23	21	20	15
4	70	60	52	47	62	54	47	42	42	37	34	31	28	25	20	19	17	13
5	64	53	46	40	57	48	41	36	37	33	29	28	24	22	18	17	15	11
6	59	48	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13	10
7	54	43	35	30	48	38	32	27	30	26	22	22	19	17	15	13	12	9
8	50	39	31	26	45	35	28	24	27	23	19	20	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7
10	44	32	25	21	39	29	23	19	23	19	15	17	14	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5507	5507	5507
5°	5556	5513	5485
10°	5539	5500	5471
15°	5514	5480	5450
20°	5486	5451	5411
25°	5448	5412	5349
30°	5390	5351	5275
35°	5309	5263	5188
40°	5189	5133	5040
45°	4978	4890	4790
50°	4605	4494	4405
55°	4018	3928	3846
60°	3386	3358	3292
65°	2930	2941	2919
70°	2689	2703	2703
75°	2584	2584	2602
80°	2433	2460	2433
85°	1958	2181	2181

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4978 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-150U-050D-927-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	0.9
10°-20°	161.5	2.6
20°-30°	243.6	4.0
30°-40°	290.2	4.7
40°-50°	286.1	4.7
50°-60°	218.7	3.6
60°-70°	135.3	2.2
70°-80°	76.9	1.3
80°-90°	24.9	0.4
90°-100°	334.3	5.5
100°-110°	904.0	14.7
110°-120°	950.4	15.5
120°-130°	772.0	12.6
130°-140°	605.6	9.9
140°-150°	464.8	7.6
150°-160°	334.3	5.5
160°-170°	204.2	3.3
170°-180°	68.8	1.1
0°-30°	461.5	7.5
0°-40°	751.7	12.3
0°-60°	1256.5	20.5
0°-90°	1493.6	24.4
90°-120°	2188.8	35.7
90°-150°	4031.1	65.7
90°-180°	4638.0	75.6
0°-180°	6132.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	597	597	597	597	597	
5°	600	593	595	593	592	57
15°	577	571	574	572	571	163
25°	535	529	532	526	525	246
35°	471	466	467	461	461	294
45°	382	376	375	368	367	292
55°	250	246	244	240	239	224
65°	134	133	135	134	134	136
75°	72	72	72	73	73	77
85°	18	20	21	21	21	22
90°	2	5	10	11	10	4
95°	52	182	556	288	171	54
105°	168	260	1003	1479	1419	177
115°	296	362	832	1610	1818	292
125°	405	464	750	1265	1486	361
135°	486	543	730	1021	1156	375
145°	564	607	719	874	941	353
155°	637	662	713	784	810	294
165°	694	701	716	744	748	195
175°	720	719	717	726	725	68
180°	719	719	719	719	719	

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-150U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	596.9	596.9	596.9	596.9	596.9
2.5°	600.6	595.3	596.9	595.6	592.7
5°	599.9	593.4	595.3	593.2	592.2
7.5°	595.3	588.9	590.8	588.7	588.1
10°	591.2	585.2	587.1	585.0	584.0
12.5°	586.7	580.2	582.6	580.1	579.1
15°	577.3	571.3	573.7	571.6	570.6
17.5°	567.0	560.6	563.0	560.6	559.3
20°	558.8	552.8	555.2	551.6	551.1
22.5°	549.8	543.7	546.2	541.3	541.2
25°	535.2	528.6	531.6	525.9	525.4
27.5°	517.8	511.8	514.2	508.4	507.8
30°	505.9	499.8	502.3	496.1	495.1
32.5°	492.3	486.7	488.7	482.5	481.9
35°	471.4	465.9	467.3	461.1	460.6
37.5°	447.7	442.6	443.5	436.7	436.2
40°	430.8	425.8	426.2	419.0	418.5
42.5°	412.3	407.3	406.8	399.6	399.1
45°	381.5	376.4	374.8	368.1	367.1
47.5°	346.3	341.3	338.2	332.7	332.0
50°	320.8	315.8	313.1	308.4	306.9
52.5°	293.2	288.2	285.9	281.7	280.2
55°	249.8	245.8	244.2	240.1	239.1
57.5°	208.6	205.9	205.4	201.4	201.0
60°	183.5	182.0	182.0	178.4	178.4
62.5°	162.1	161.0	161.8	159.5	159.1
65°	134.2	133.2	134.7	133.7	133.7
67.5°	112.1	112.1	113.0	112.6	112.6
70°	99.7	99.7	100.2	100.2	100.2
72.5°	88.6	88.2	89.6	89.5	89.1
75°	72.5	72.5	72.5	73.0	73.0
77.5°	56.4	56.5	57.0	56.8	56.4
80°	45.8	46.3	46.3	45.8	45.8
82.5°	35.1	35.6	35.6	35.5	35.1
85°	18.5	19.5	20.6	20.6	20.6
87.5°	5.7	7.9	10.2	10.4	9.8
90°	1.5	4.6	10.1	10.8	10.1
92.5°	22.0	80.1	158.1	68.6	49.7
95°	51.9	182.1	556.0	287.8	171.1
97.5°	83.3	208.9	866.7	717.3	526.8
100°	106.9	219.7	963.4	1004.7	812.4
102.5°	128.6	234.7	997.4	1222.6	1078.8
105°	168.0	259.7	1002.9	1479.3	1418.7
107.5°	204.6	288.2	959.0	1639.4	1659.6
110°	233.1	308.8	920.0	1682.4	1768.0

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-150U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	258.5	329.4	884.1	1673.8	1817.5
115°	295.8	361.7	831.7	1610.1	1817.5
117.5°	332.4	394.2	797.2	1512.7	1747.9
120°	354.7	415.3	776.7	1442.8	1682.8
122.5°	375.7	435.1	764.3	1367.8	1609.7
125°	405.0	464.1	749.6	1265.0	1486.1
127.5°	432.0	490.0	741.0	1181.1	1375.5
130°	446.8	506.7	737.2	1129.2	1304.9
132.5°	462.3	521.5	733.5	1082.4	1244.2
135°	485.6	543.1	729.5	1021.4	1156.2
137.5°	508.9	563.3	726.1	971.9	1081.7
140°	525.1	575.8	724.9	940.0	1037.7
142.5°	540.5	588.2	722.4	911.3	996.8
145°	564.5	607.0	719.4	874.3	940.9
147.5°	586.4	623.9	716.0	840.8	892.0
150°	602.5	635.8	714.8	822.6	863.5
152.5°	617.4	646.4	714.2	805.7	839.3
155°	637.3	662.3	713.2	784.3	810.0
157.5°	658.1	675.5	713.4	769.4	786.3
160°	669.9	684.3	714.0	760.0	772.1
162.5°	679.2	691.1	714.6	752.5	761.6
165°	693.9	700.7	716.3	744.3	748.1
167.5°	703.9	708.6	716.5	737.3	739.1
170°	710.1	712.4	717.1	734.1	734.1
172.5°	715.1	715.5	717.1	730.4	729.8
175°	720.2	719.4	717.1	726.4	724.9
177.5°	721.9	720.1	717.0	723.1	721.3
180°	719.4	719.4	719.4	719.4	719.4

(END OF REPORT)