

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-PW1-150U-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-PW1-150U-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

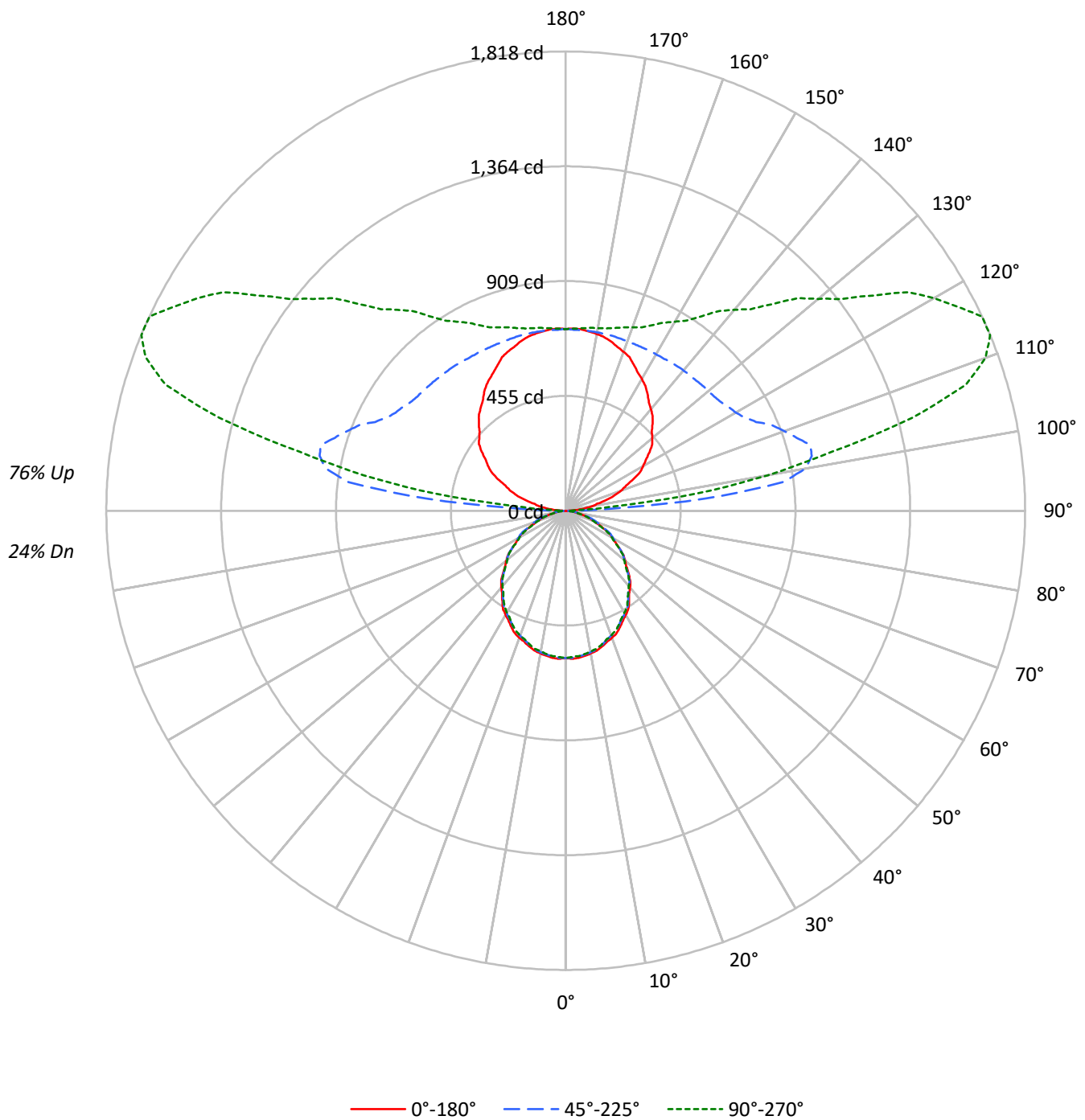
Lumens per Lamp: N/A
Luminaire Lumens: 6124.2 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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

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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	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	57	44	43	42	29	28	27	21		
2	84	77	71	66	74	68	64	59	53	50	47	39	37	35	25	24	23	17		
3	76	67	60	55	68	60	54	50	47	43	39	34	32	29	22	21	20	15		
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13		
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11		
6	59	47	40	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10		
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	11	9		
8	50	38	31	26	45	35	28	24	27	22	19	20	17	15	14	12	10	8		
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7		
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8	6		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5383	5383	5383
5°	5417	5374	5350
10°	5374	5331	5302
15°	5317	5258	5238
20°	5254	5173	5162
25°	5181	5086	5071
30°	5071	4994	4961
35°	4926	4858	4828
40°	4773	4698	4680
45°	4588	4528	4507
50°	4396	4361	4330
55°	4192	4192	4126
60°	3936	4012	3869
65°	3602	3781	3513
70°	3175	3480	3091
75°	2713	3116	2638
80°	2104	2619	2131
85°	1366	2011	1800

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4588 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.9	0.9
10°-20°	155.1	2.5
20°-30°	230.1	3.8
30°-40°	269.2	4.4
40°-50°	268.0	4.4
50°-60°	231.4	3.8
60°-70°	166.6	2.7
70°-80°	87.4	1.4
80°-90°	23.2	0.4
90°-100°	334.3	5.5
100°-110°	904.0	14.8
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°	440.1	7.2
0°-40°	709.3	11.6
0°-60°	1208.7	19.7
0°-90°	1485.8	24.3
90°-120°	2188.8	35.7
90°-150°	4031.1	65.8
90°-180°	4638.0	75.7
0°-180°	6124.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	583	583	583	583	583	
5°	585	578	580	579	578	55
15°	557	550	550	549	548	157
25°	509	500	500	497	498	234
35°	437	431	431	427	429	273
45°	352	349	347	346	345	271
55°	261	260	261	257	256	232
65°	165	170	173	166	161	164
75°	76	83	87	82	74	82
85°	13	17	19	18	17	17
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:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	583.4	583.4	583.4	583.4	583.4
2.5°	586.7	581.9	583.4	582.1	579.3
5°	584.9	578.4	580.3	578.7	577.7
7.5°	579.0	572.9	574.4	572.7	572.1
10°	573.6	567.6	569.0	566.9	565.9
12.5°	567.5	561.0	562.4	560.4	559.8
15°	556.7	549.6	550.5	549.4	548.4
17.5°	544.1	537.0	537.1	535.5	535.3
20°	535.1	527.5	526.9	524.8	525.8
22.5°	525.2	517.3	516.6	513.7	515.1
25°	508.9	500.3	499.6	496.6	498.1
27.5°	490.0	481.5	481.5	477.2	478.8
30°	476.0	467.9	468.8	463.7	465.7
32.5°	461.2	453.9	454.4	449.3	451.3
35°	437.4	431.4	431.3	427.2	428.7
37.5°	413.2	407.8	407.0	404.6	405.0
40°	396.3	391.8	390.1	388.6	388.6
42.5°	378.6	374.5	372.9	371.7	371.3
45°	351.6	348.6	347.0	345.9	345.4
47.5°	324.9	322.0	320.6	319.9	319.4
50°	306.3	304.3	303.8	302.2	301.7
52.5°	287.8	286.6	286.1	284.1	283.6
55°	260.6	260.1	260.6	257.0	256.5
57.5°	232.2	233.0	234.7	229.8	228.6
60°	213.3	215.3	217.4	211.7	209.7
62.5°	194.0	197.2	200.2	193.6	190.8
65°	165.0	170.0	173.2	166.4	160.9
67.5°	137.0	143.3	147.1	139.8	133.5
70°	117.7	124.7	129.0	121.7	114.6
72.5°	100.8	108.7	112.2	105.2	98.2
75°	76.1	83.1	87.4	81.6	74.0
77.5°	54.0	60.6	64.1	59.1	52.8
80°	39.6	46.6	49.3	45.1	40.1
82.5°	28.1	33.9	35.8	33.2	29.8
85°	12.9	16.9	19.0	18.0	17.0
87.5°	3.6	7.0	9.8	10.0	10.2
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

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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)