

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-BB-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-BB-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

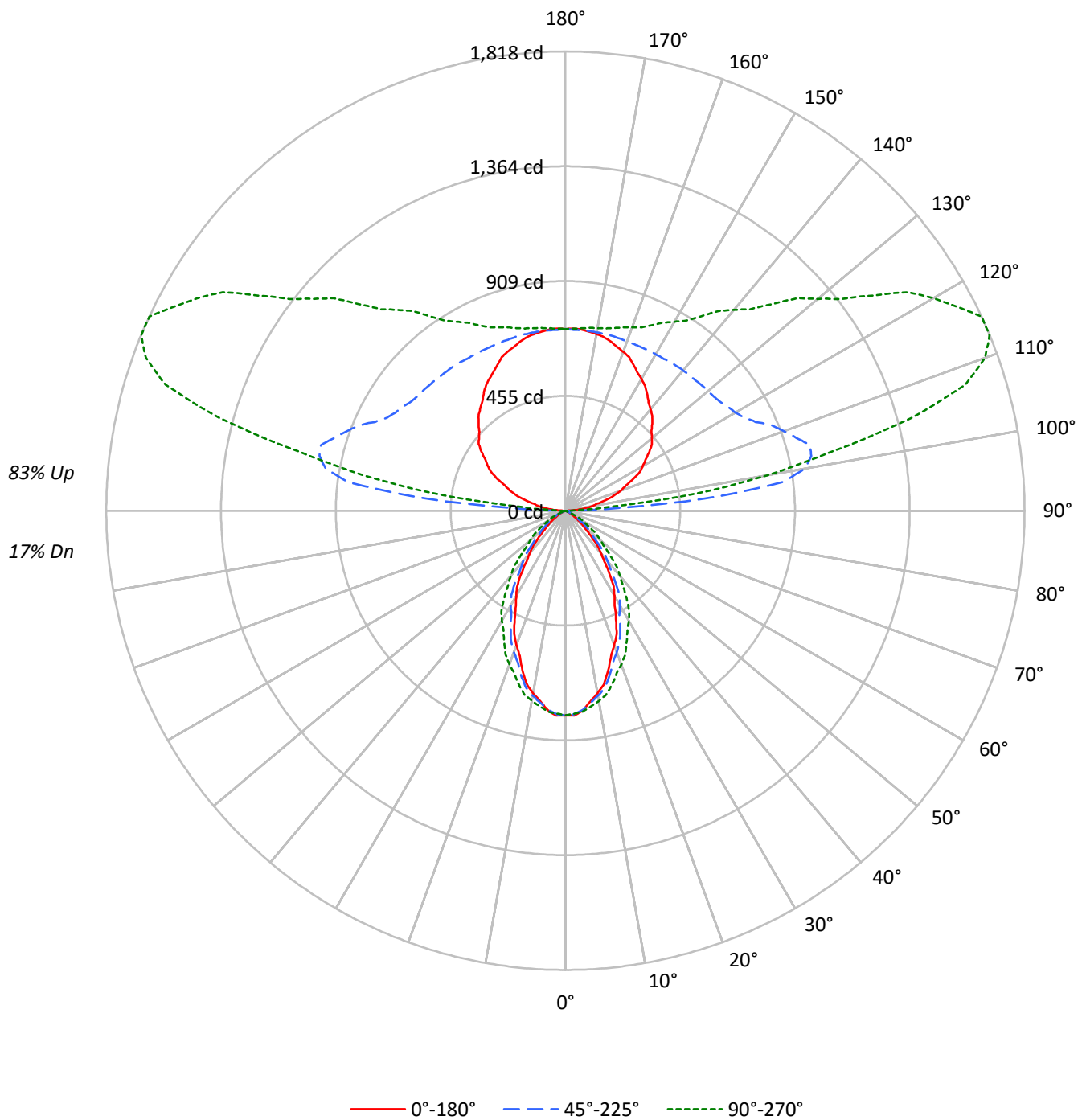
Lumens per Lamp: N/A
Luminaire Lumens: 5605.8 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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-BB-150U-050D-927-1D-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER:

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

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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20
3	76	68	61	56	67	60	55	51	46	42	39	32	30	29	20	19	18
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16
5	64	54	47	41	57	48	42	37	37	33	30	26	24	22	17	15	14
6	59	49	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13
7	55	44	37	32	48	39	33	29	30	26	23	22	19	17	14	13	12
8	51	40	33	28	45	36	30	25	28	23	20	20	18	16	13	12	11
9	47	36	29	25	42	33	27	23	25	21	18	19	16	14	12	11	10
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7470	7470	7470
5°	7350	7332	7386
10°	6877	6969	7163
15°	6253	6450	6809
20°	5550	5838	6350
25°	4833	5216	5834
30°	4140	4595	5346
35°	3433	3900	4756
40°	2638	3118	4053
45°	1906	2362	3261
50°	1299	1760	2586
55°	844	1272	2011
60°	483	897	1452
65°	129	548	736
70°	65	170	210
75°	29	14	0
80°	21	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3261 cd/sqm

TEST NUMBER:

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	1.3
10°-20°	189.0	3.4
20°-30°	236.6	4.2
30°-40°	218.5	3.9
40°-50°	146.8	2.6
50°-60°	75.8	1.4
60°-70°	23.8	0.4
70°-80°	1.5	0.0
80°-90°	1.5	0.0
90°-100°	334.3	6.0
100°-110°	904.0	16.1
110°-120°	950.4	17.0
120°-130°	772.0	13.8
130°-140°	605.6	10.8
140°-150°	464.8	8.3
150°-160°	334.3	6.0
160°-170°	204.2	3.6
170°-180°	68.8	1.2
0°-30°	499.4	8.9
0°-40°	717.9	12.8
0°-60°	940.6	16.8
0°-90°	967.4	17.3
90°-120°	2188.8	39.0
90°-150°	4031.1	71.9
90°-180°	4638.0	82.7
0°-180°	5605.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	794	786	792	794	798	74
15°	655	652	675	698	713	182
25°	475	479	512	547	573	218
35°	305	312	346	387	422	189
45°	146	155	181	216	250	115
55°	52	61	79	102	125	49
65°	6	11	25	30	34	10
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	2	5	10	11	10	3
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-BB-150U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	809.7	809.7	809.7	809.7	809.7
2.5°	811.6	803.9	805.9	805.9	803.7
5°	793.6	785.6	791.7	794.5	797.5
7.5°	760.1	753.8	765.5	774.3	780.6
10°	734.1	728.7	743.9	755.8	764.6
12.5°	704.0	699.9	718.2	734.6	745.8
15°	654.6	652.3	675.3	698.0	712.9
17.5°	601.6	601.5	627.9	656.0	674.0
20°	565.3	566.4	594.6	625.7	646.7
22.5°	528.9	531.6	561.7	594.1	618.2
25°	474.8	478.6	512.4	547.4	573.1
27.5°	422.7	428.3	463.9	500.3	531.6
30°	388.6	395.1	431.3	469.6	501.8
32.5°	355.1	362.8	398.1	438.6	471.4
35°	304.8	312.4	346.3	387.0	422.3
37.5°	252.8	260.3	293.4	333.5	371.6
40°	219.0	227.4	258.9	297.8	336.5
42.5°	188.3	196.7	226.3	264.5	301.1
45°	146.1	154.9	181.0	216.2	249.9
47.5°	111.2	120.7	143.6	175.5	206.2
50°	90.5	100.1	122.6	150.7	180.2
52.5°	73.9	83.1	103.5	130.0	157.0
55°	52.5	61.3	79.1	101.6	125.0
57.5°	36.3	43.9	59.9	78.6	96.9
60°	26.2	33.5	48.6	63.8	78.7
62.5°	17.5	24.1	38.9	50.5	60.6
65°	5.9	11.2	25.1	30.2	33.7
67.5°	3.0	3.6	13.2	13.9	15.0
70°	2.4	2.4	6.3	6.7	7.8
72.5°	1.7	1.7	2.5	3.2	3.4
75°	0.8	0.8	0.4	0.0	0.0
77.5°	0.4	0.4	0.3	0.0	0.0
80°	0.4	0.4	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	0.9	2.0	2.2	2.0
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-BB-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)