

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-075D-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-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

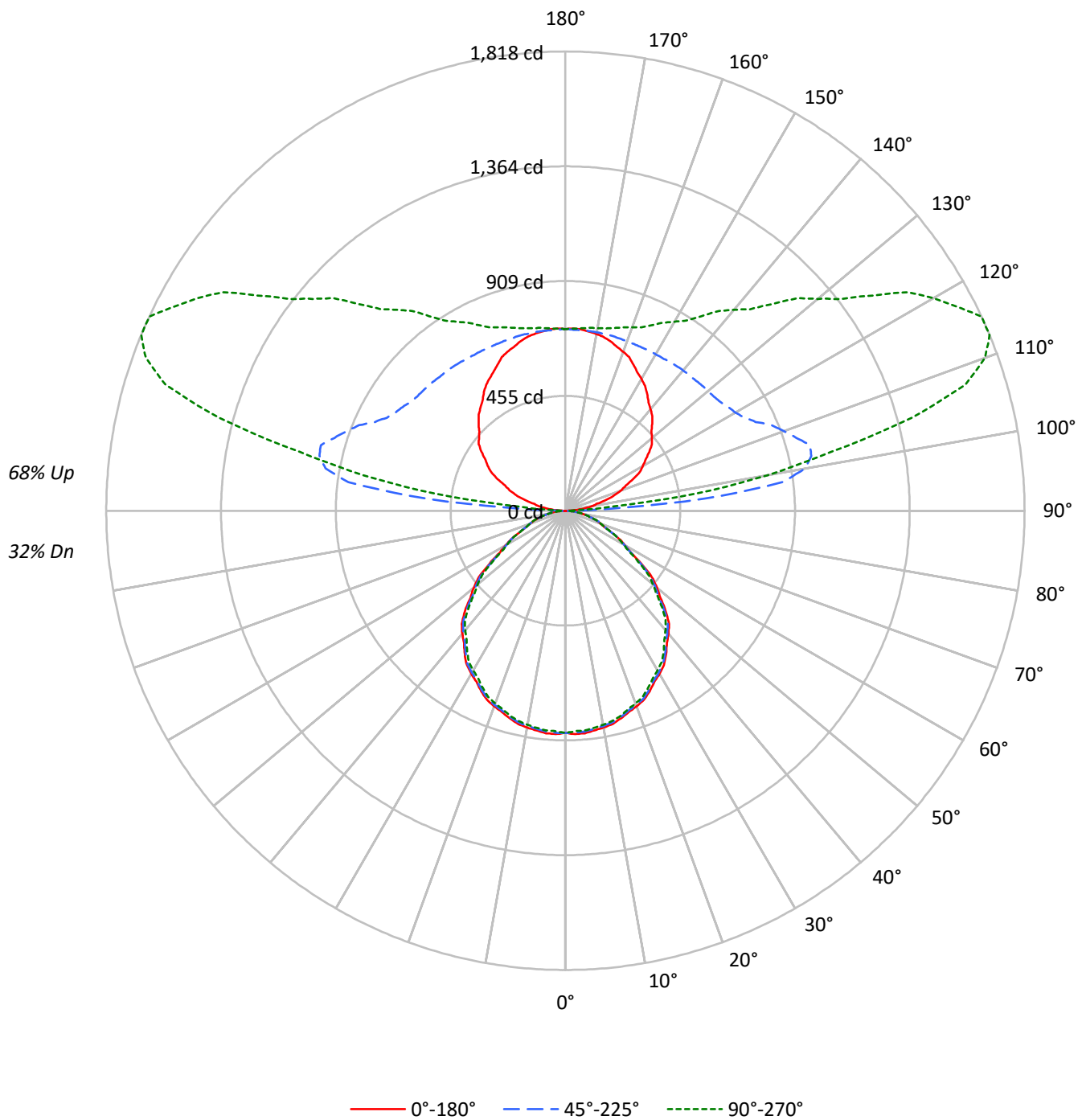
Lumens per Lamp: N/A
Luminaire Lumens: 6839.1 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 63.5
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-075D-927-1D-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-150U-075D-927-1D-UNV-STD-W-4

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
RCR																	
0	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40
1	94	90	86	83	84	81	78	75	65	62	60	49	48	47	35	35	34
2	86	79	73	68	77	71	66	62	57	53	50	44	41	39	31	30	29
3	78	69	62	57	70	63	57	52	50	46	42	39	36	33	28	26	25
4	72	61	54	48	64	55	49	44	45	40	36	34	31	29	25	23	21
5	66	55	47	41	59	49	43	38	40	35	31	31	28	25	23	20	19
6	60	49	41	35	54	44	38	33	36	31	27	28	24	22	20	18	16
7	56	44	36	31	50	40	33	29	32	27	24	25	22	19	19	16	15
8	52	40	32	27	46	36	30	25	30	25	21	23	20	17	17	15	13
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8116	8116	8116
5°	8189	8126	8084
10°	8164	8107	8064
15°	8128	8077	8034
20°	8086	8034	7975
25°	8030	7976	7883
30°	7943	7887	7774
35°	7826	7758	7647
40°	7648	7565	7429
45°	7335	7208	7059
50°	6786	6623	6492
55°	5923	5789	5667
60°	4991	4949	4851
65°	4318	4333	4301
70°	3965	3987	3987
75°	3807	3807	3836
80°	3581	3624	3581
85°	2890	3208	3208

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7335 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-150U-075D-927-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.2	1.2
10°-20°	238.0	3.5
20°-30°	359.0	5.2
30°-40°	427.7	6.3
40°-50°	421.7	6.2
50°-60°	322.3	4.7
60°-70°	199.4	2.9
70°-80°	113.3	1.7
80°-90°	36.0	0.5
90°-100°	334.3	4.9
100°-110°	904.0	13.2
110°-120°	950.4	13.9
120°-130°	772.0	11.3
130°-140°	605.6	8.9
140°-150°	464.8	6.8
150°-160°	334.3	4.9
160°-170°	204.2	3.0
170°-180°	68.8	1.0
0°-30°	680.2	9.9
0°-40°	1107.9	16.2
0°-60°	1852.0	27.1
0°-90°	2200.6	32.2
90°-120°	2188.8	32.0
90°-150°	4031.1	58.9
90°-180°	4638.0	67.8
0°-180°	6839.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	880	880	880	880	880	
5°	884	875	877	874	873	84
15°	851	842	846	842	841	240
25°	789	779	784	775	774	363
35°	695	687	689	680	679	434
45°	562	555	552	542	541	431
55°	368	362	360	354	352	330
65°	198	196	198	197	197	200
75°	107	107	107	108	108	113
85°	27	29	30	30	30	32
90°	2	5	10	11	10	5
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-075D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	879.7	879.7	879.7	879.7	879.7
2.5°	885.1	877.4	879.7	877.8	873.6
5°	884.2	874.6	877.4	874.4	872.9
7.5°	877.4	867.9	870.8	867.7	866.8
10°	871.4	862.5	865.3	862.2	860.8
12.5°	864.7	855.2	858.6	855.0	853.5
15°	850.9	842.0	845.6	842.5	841.1
17.5°	835.7	826.3	829.8	826.3	824.4
20°	823.6	814.7	818.3	813.0	812.3
22.5°	810.3	801.4	805.0	797.9	797.7
25°	788.8	779.1	783.5	775.1	774.4
27.5°	763.2	754.3	757.9	749.3	748.5
30°	745.6	736.7	740.3	731.2	729.7
32.5°	725.6	717.3	720.3	711.2	710.3
35°	694.8	686.7	688.8	679.6	678.9
37.5°	659.8	652.4	653.6	643.6	642.8
40°	635.0	627.5	628.1	617.5	616.8
42.5°	607.7	600.3	599.6	589.0	588.3
45°	562.2	554.8	552.4	542.5	541.0
47.5°	510.4	503.0	498.4	490.4	489.3
50°	472.8	465.4	461.4	454.6	452.3
52.5°	432.2	424.8	421.4	415.2	412.9
55°	368.2	362.3	359.9	353.8	352.3
57.5°	307.5	303.5	302.8	296.9	296.3
60°	270.5	268.3	268.2	262.9	262.9
62.5°	239.0	237.3	238.5	235.0	234.4
65°	197.8	196.3	198.5	197.0	197.0
67.5°	165.2	165.2	166.5	165.9	165.9
70°	147.0	147.0	147.8	147.8	147.8
72.5°	130.6	130.0	132.0	132.0	131.4
75°	106.8	106.8	106.8	107.6	107.6
77.5°	83.2	83.3	84.0	83.8	83.2
80°	67.4	68.2	68.2	67.4	67.4
82.5°	51.7	52.4	52.4	52.3	51.7
85°	27.3	28.8	30.3	30.3	30.3
87.5°	8.2	11.2	14.1	14.3	13.5
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-075D-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)