

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-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-PW1-150U-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

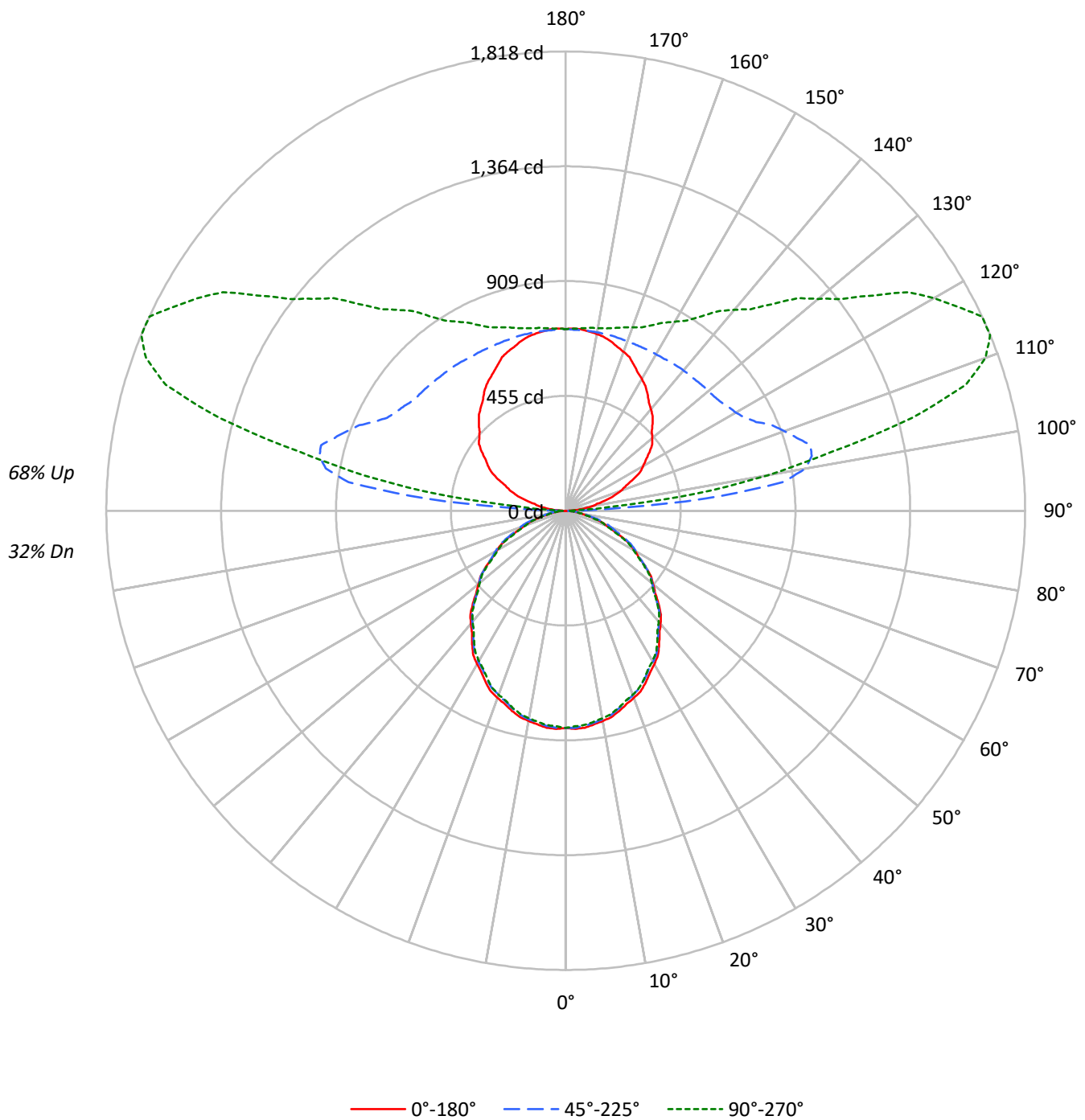
Lumens per Lamp: N/A
Luminaire Lumens: 6827.7 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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

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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
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		64	62	60		49	48	46		35	34	34
2	85	78	72	67		77	71	66	61		56	53	50		43	41	39		31	30	28
3	78	69	62	56		70	62	56	51		50	45	42		38	35	33		27	26	24
4	71	61	53	47		64	55	48	43		44	39	36		34	31	28		25	22	21
5	65	54	46	40		59	49	42	37		39	34	31		30	27	24		22	20	18
6	60	48	41	35		54	44	37	32		35	30	27		27	24	21		20	18	16
7	55	44	36	30		50	40	33	28		32	27	23		25	21	19		18	16	14
8	51	39	32	27		46	36	29	25		29	24	21		23	19	17		17	14	13
9	48	36	29	24		43	33	26	22		27	22	18		21	17	15		15	13	11
10	44	33	26	21		40	30	24	20		24	20	16		19	16	13		14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7934	7934	7934
5°	7984	7921	7886
10°	7921	7856	7814
15°	7837	7750	7721
20°	7743	7624	7609
25°	7635	7497	7473
30°	7473	7361	7313
35°	7261	7159	7116
40°	7035	6925	6898
45°	6761	6673	6643
50°	6481	6426	6383
55°	6178	6178	6080
60°	5801	5914	5704
65°	5309	5573	5176
70°	4680	5131	4556
75°	3996	4591	3889
80°	3098	3863	3140
85°	2001	2964	2646

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6761 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.0	1.2
10°-20°	228.6	3.3
20°-30°	339.1	5.0
30°-40°	396.8	5.8
40°-50°	395.0	5.8
50°-60°	341.1	5.0
60°-70°	245.5	3.6
70°-80°	128.8	1.9
80°-90°	33.4	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°	648.7	9.5
0°-40°	1045.4	15.3
0°-60°	1781.5	26.1
0°-90°	2189.2	32.1
90°-120°	2188.8	32.1
90°-150°	4031.1	59.0
90°-180°	4638.0	67.9
0°-180°	6827.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	860	860	860	860	860	
5°	862	852	855	853	852	82
15°	820	810	811	810	808	231
25°	750	737	736	732	734	345
35°	645	636	636	630	632	403
45°	518	514	511	510	509	400
55°	384	383	384	379	378	343
65°	243	251	255	245	237	241
75°	112	122	129	120	109	120
85°	19	25	28	26	25	25
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-PW1-150U-075D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	859.9	859.9	859.9	859.9	859.9
2.5°	864.7	857.6	859.9	857.9	853.8
5°	862.1	852.5	855.3	853.0	851.5
7.5°	853.3	844.5	846.5	844.1	843.2
10°	845.5	836.6	838.6	835.6	834.1
12.5°	836.4	826.9	828.9	825.9	825.0
15°	820.5	810.1	811.4	809.8	808.3
17.5°	802.0	791.5	791.7	789.2	788.9
20°	788.6	777.5	776.5	773.5	775.0
22.5°	774.1	762.4	761.4	757.2	759.3
25°	750.0	737.4	736.4	731.9	734.1
27.5°	722.1	709.7	709.7	703.4	705.8
30°	701.5	689.7	690.9	683.4	686.4
32.5°	679.7	669.0	669.7	662.2	665.2
35°	644.7	635.8	635.6	629.6	631.8
37.5°	608.9	601.1	599.9	596.4	597.0
40°	584.1	577.4	575.0	572.7	572.7
42.5°	558.0	552.0	549.6	547.9	547.3
45°	518.2	513.7	511.4	509.8	509.1
47.5°	478.8	474.6	472.6	471.5	470.8
50°	451.5	448.6	447.7	445.4	444.7
52.5°	424.2	422.5	421.7	418.8	418.0
55°	384.1	383.4	384.1	378.8	378.0
57.5°	342.3	343.5	345.9	338.8	337.0
60°	314.4	317.4	320.5	312.1	309.1
62.5°	285.9	290.7	295.0	285.4	281.2
65°	243.2	250.6	255.3	245.3	237.1
67.5°	202.0	211.2	216.8	206.0	196.8
70°	173.5	183.9	190.2	179.3	168.9
72.5°	148.6	160.2	165.3	155.1	144.7
75°	112.1	122.5	128.8	120.2	109.1
77.5°	79.5	89.3	94.5	87.1	77.9
80°	58.3	68.7	72.7	66.5	59.1
82.5°	41.4	50.0	52.7	49.0	43.9
85°	18.9	24.9	28.0	26.5	25.0
87.5°	5.2	9.9	13.5	13.7	14.1
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)