

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-PR1-100U-125D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-100U-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

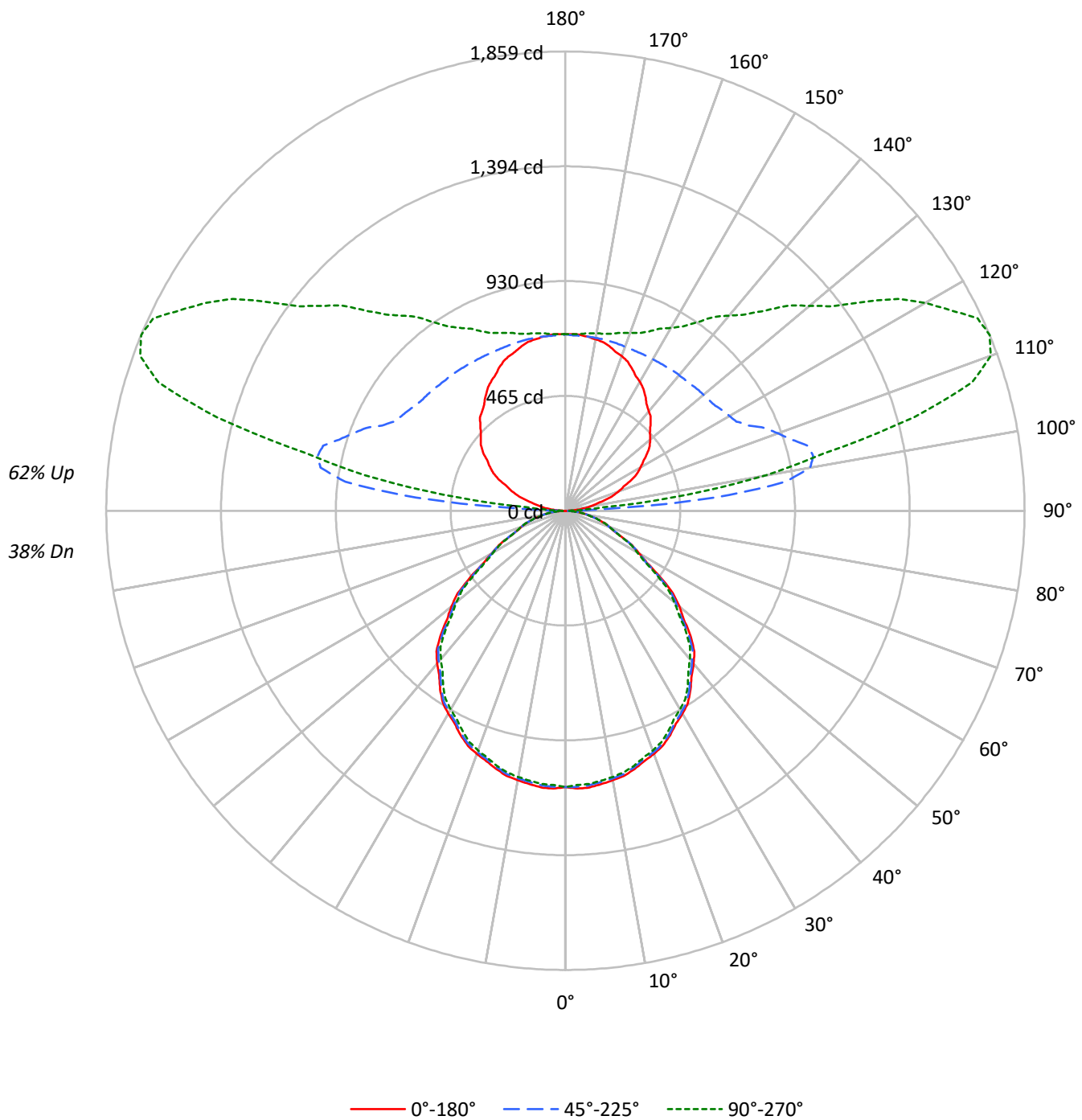
Lumens per Lamp: N/A
Luminaire Lumens: 7437.0 lumens
Efficiency: N/A
Efficacy: 69.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 107.3
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	95	95	95	95	76	76	76	60	60	60	45	45	45
1	95	91	87	84	86	83	80	77	67	65	63	53	52	50	40	39	38
2	87	80	74	69	79	73	68	63	59	56	53	47	44	42	35	34	32
3	79	70	63	58	72	64	58	53	52	48	44	42	39	36	31	30	28
4	73	62	55	49	66	57	50	45	47	42	38	37	34	31	28	26	24
5	67	55	48	42	60	51	44	39	42	37	33	33	30	27	25	23	21
6	61	50	42	36	56	45	39	34	38	32	29	30	26	24	23	21	19
7	57	45	37	32	51	41	34	29	34	29	25	27	24	21	21	19	17
8	53	41	33	28	48	37	31	26	31	26	22	25	21	19	19	17	15
9	49	37	30	25	44	34	28	23	28	23	20	23	19	17	18	15	13
10	46	34	27	22	41	31	25	21	26	21	18	21	18	15	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6881	6881	6881
5°	6943	6889	6853
10°	6921	6873	6837
15°	6891	6847	6811
20°	6856	6812	6762
25°	6808	6762	6684
30°	6734	6686	6590
35°	6635	6577	6483
40°	6484	6414	6297
45°	6219	6110	5985
50°	5754	5615	5505
55°	5022	4908	4805
60°	4232	4196	4114
65°	3660	3675	3646
70°	3361	3379	3379
75°	3230	3230	3251
80°	3039	3071	3039
85°	2449	2717	2717

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6219 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.8	1.4
10°-20°	302.7	4.1
20°-30°	456.5	6.1
30°-40°	544.0	7.3
40°-50°	536.3	7.2
50°-60°	409.9	5.5
60°-70°	253.6	3.4
70°-80°	144.1	1.9
80°-90°	45.3	0.6
90°-100°	334.3	4.5
100°-110°	923.0	12.4
110°-120°	951.9	12.8
120°-130°	765.0	10.3
130°-140°	601.2	8.1
140°-150°	461.1	6.2
150°-160°	331.4	4.5
160°-170°	202.6	2.7
170°-180°	68.3	0.9
0°-30°	865.0	11.6
0°-40°	1409.0	18.9
0°-60°	2355.1	31.7
0°-90°	2798.1	37.6
90°-120°	2209.3	29.7
90°-150°	4036.5	54.3
90°-180°	4639.0	62.4
0°-180°	7437.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1119	1119	1119	1119	1119	
5°	1124	1112	1116	1112	1110	107
15°	1082	1071	1075	1072	1070	305
25°	1003	991	996	986	985	462
35°	884	873	876	864	863	551
45°	715	706	702	690	688	548
55°	468	461	458	450	448	420
65°	252	250	252	250	250	255
75°	136	136	136	137	137	143
85°	35	37	38	38	38	40
90°	2	4	9	10	11	5
95°	49	181	607	249	162	53
105°	164	254	1016	1550	1460	175
115°	295	356	818	1619	1841	290
125°	404	460	741	1255	1472	360
135°	487	539	721	1016	1146	377
145°	564	603	712	865	931	353
155°	636	658	706	776	801	293
165°	689	698	709	737	742	194
175°	714	715	710	721	718	68
180°	714	714	714	714	714	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1118.7	1118.7	1118.7	1118.7	1118.7
2.5°	1125.6	1115.8	1118.7	1116.3	1111.0
5°	1124.5	1112.2	1115.8	1111.9	1110.0
7.5°	1115.8	1103.8	1107.3	1103.5	1102.3
10°	1108.1	1096.8	1100.4	1096.5	1094.6
12.5°	1099.6	1087.6	1091.9	1087.3	1085.4
15°	1082.1	1070.8	1075.3	1071.5	1069.6
17.5°	1062.8	1050.8	1055.3	1050.8	1048.4
20°	1047.4	1036.1	1040.7	1033.9	1033.0
22.5°	1030.4	1019.1	1023.7	1014.6	1014.5
25°	1003.1	990.8	996.3	985.7	984.8
27.5°	970.5	959.2	963.8	952.9	951.8
30°	948.2	936.9	941.4	929.8	927.9
32.5°	922.7	912.2	916.0	904.4	903.3
35°	883.6	873.2	875.9	864.3	863.4
37.5°	839.1	829.7	831.2	818.4	817.5
40°	807.5	798.1	798.8	785.3	784.3
42.5°	772.8	763.4	762.6	749.1	748.1
45°	715.0	705.6	702.4	689.9	688.0
47.5°	649.1	639.6	633.8	623.6	622.3
50°	601.3	591.8	586.8	578.1	575.3
52.5°	549.6	540.2	535.9	528.0	525.1
55°	468.3	460.8	457.7	449.9	448.1
57.5°	391.0	385.9	385.0	377.5	376.8
60°	344.0	341.2	341.1	334.4	334.4
62.5°	303.9	301.8	303.3	298.9	298.1
65°	251.5	249.6	252.5	250.5	250.5
67.5°	210.1	210.1	211.8	211.0	211.0
70°	186.9	186.9	187.9	187.9	187.9
72.5°	166.1	165.4	167.9	167.8	167.1
75°	135.9	135.9	135.9	136.8	136.8
77.5°	105.8	106.0	106.8	106.6	105.8
80°	85.8	86.7	86.7	85.8	85.8
82.5°	65.7	66.7	66.7	66.5	65.7
85°	34.7	36.6	38.5	38.5	38.5
87.5°	10.5	13.9	17.2	17.5	16.9
90°	2.3	4.5	9.1	10.3	11.4
92.5°	20.6	85.3	152.6	55.7	43.4
95°	49.1	180.9	606.6	249.3	162.2
97.5°	81.3	202.6	898.5	691.8	501.0
100°	105.1	215.7	1006.4	1013.5	823.6
102.5°	127.9	230.5	1027.4	1252.2	1072.2
105°	164.5	253.8	1015.5	1550.3	1459.9
107.5°	203.3	282.9	958.9	1694.1	1727.2
110°	230.7	302.2	915.0	1725.0	1832.3

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	255.4	324.2	873.9	1700.6	1858.8
115°	294.7	356.1	817.9	1619.1	1841.4
117.5°	329.0	390.2	781.1	1504.5	1757.3
120°	351.8	412.1	766.5	1426.8	1681.5
122.5°	373.8	431.4	754.6	1354.3	1595.6
125°	404.4	460.2	741.4	1254.6	1472.4
127.5°	430.4	486.3	733.6	1170.3	1358.2
130°	447.8	503.6	729.9	1118.8	1289.7
132.5°	464.2	517.4	726.3	1075.5	1230.3
135°	486.6	539.1	720.8	1016.2	1145.7
137.5°	511.8	559.6	718.1	966.4	1077.0
140°	525.5	572.4	716.2	933.2	1030.4
142.5°	541.0	584.3	714.4	903.7	989.2
145°	564.3	603.4	711.7	865.1	931.0
147.5°	586.7	620.9	709.1	832.5	883.7
150°	603.1	631.1	708.2	813.1	854.4
152.5°	615.9	642.1	707.3	796.5	830.7
155°	636.3	657.5	705.9	776.2	800.8
157.5°	655.0	671.3	706.2	761.4	778.1
160°	666.0	680.5	707.1	753.1	765.3
162.5°	675.1	687.8	708.0	745.7	755.3
165°	688.8	697.7	709.4	736.9	742.5
167.5°	699.3	704.7	710.5	731.6	733.4
170°	704.8	709.3	710.5	728.8	728.8
172.5°	709.4	712.1	710.5	725.1	724.2
175°	713.9	715.1	710.5	720.7	718.5
177.5°	715.8	714.9	710.3	716.6	714.9
180°	713.9	713.9	713.9	713.9	713.9

(END OF REPORT)