

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-PC3-100U-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 (G3-1910-536-23)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PC3-100U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

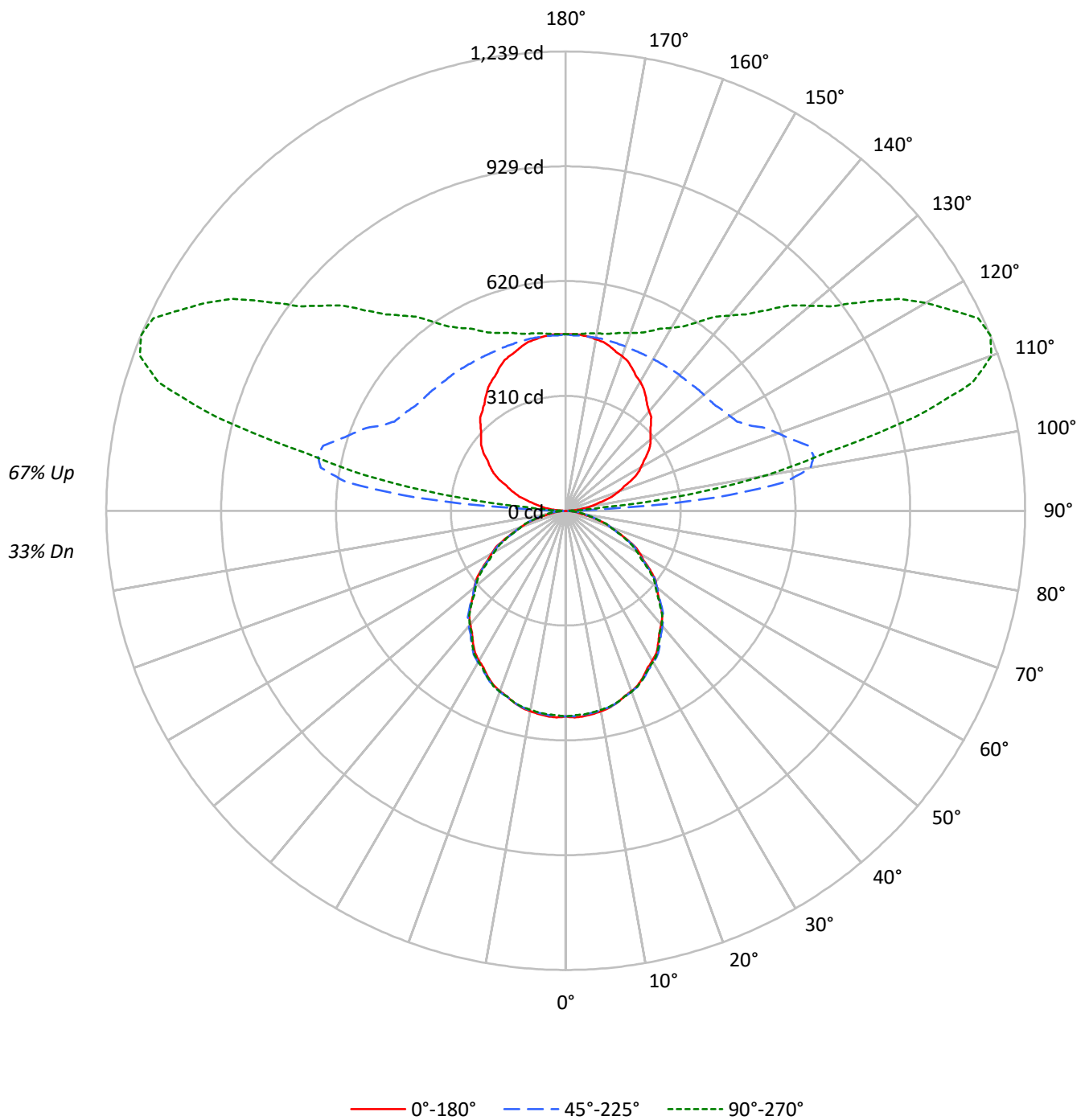
Lumens per Lamp: N/A
Luminaire Lumens: 4608.6 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 41.3
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34
2	86	78	72	67	77	71	66	62	57	53	50	44	41	39	31	30	29
3	78	69	62	56	70	62	56	51	50	46	42	38	36	33	28	26	24
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16
7	55	43	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	16	13	11
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5121	5121	5121
5°	5160	5127	5108
10°	5148	5124	5110
15°	5121	5121	5116
20°	5087	5103	5103
25°	5039	5076	5060
30°	4977	5038	5016
35°	4904	4979	4945
40°	4822	4891	4842
45°	4735	4769	4695
50°	4612	4612	4537
55°	4465	4407	4341
60°	4250	4165	4098
65°	3927	3849	3816
70°	3439	3466	3453
75°	2766	3059	3080
80°	1966	2593	2619
85°	1196	2181	2181

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 4769 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.5	1.1
10°-20°	150.8	3.3
20°-30°	228.3	5.0
30°-40°	273.7	5.9
40°-50°	279.1	6.1
50°-60°	243.7	5.3
60°-70°	174.4	3.8
70°-80°	89.8	1.9
80°-90°	23.7	0.5
90°-100°	222.9	4.8
100°-110°	615.3	13.4
110°-120°	634.6	13.8
120°-130°	510.0	11.1
130°-140°	400.8	8.7
140°-150°	307.4	6.7
150°-160°	220.9	4.8
160°-170°	135.1	2.9
170°-180°	45.5	1.0
0°-30°	431.6	9.4
0°-40°	705.4	15.3
0°-60°	1228.1	26.6
0°-90°	1516.1	32.9
90°-120°	1472.8	32.0
90°-150°	2691.0	58.4
90°-180°	3093.0	67.1
0°-180°	4608.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	555	555	555	555	555	
5°	557	552	554	552	552	53
15°	536	532	536	536	536	151
25°	495	492	499	497	497	228
35°	435	434	442	439	439	272
45°	363	362	366	361	360	279
55°	278	274	274	270	270	247
65°	180	176	176	175	175	178
75°	78	81	86	86	86	84
85°	11	17	21	21	21	15
90°	2	3	6	7	8	3
95°	33	121	404	166	108	35
105°	110	169	677	1034	973	117
115°	196	237	545	1079	1228	193
125°	270	307	494	836	982	240
135°	324	359	480	677	764	251
145°	376	402	474	577	621	236
155°	424	438	471	518	534	195
165°	459	465	473	491	495	129
175°	476	477	474	480	479	45
180°	476	476	476	476	476	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	555.1	555.1	555.1	555.1	555.1
2.5°	558.4	553.6	555.1	553.9	551.8
5°	557.2	551.7	553.6	552.0	551.5
7.5°	553.2	547.7	550.2	549.2	548.7
10°	549.5	544.0	546.9	545.9	545.4
12.5°	544.5	539.4	542.8	541.8	541.7
15°	536.1	531.6	536.1	536.1	535.6
17.5°	525.5	521.4	526.3	526.6	526.3
20°	518.1	513.6	519.7	519.2	519.7
22.5°	509.1	505.4	511.9	510.5	511.0
25°	495.0	491.5	498.6	497.1	497.1
27.5°	478.3	475.8	483.6	481.9	481.9
30°	467.2	464.7	472.9	470.8	470.8
32.5°	454.9	453.2	461.0	458.5	458.5
35°	435.4	434.4	442.1	439.0	439.0
37.5°	415.2	414.3	421.3	417.6	416.4
40°	400.4	399.9	406.1	402.0	402.0
42.5°	385.6	385.1	390.4	385.5	385.5
45°	362.9	361.9	365.5	360.8	359.8
47.5°	338.1	337.1	339.4	334.3	333.8
50°	321.3	320.3	321.3	316.6	316.1
52.5°	304.0	302.2	302.3	297.7	297.6
55°	277.6	274.1	274.0	269.9	269.9
57.5°	249.6	245.0	245.4	241.9	241.4
60°	230.3	225.3	225.7	222.6	222.1
62.5°	211.4	205.5	206.7	203.2	203.1
65°	179.9	175.9	176.3	174.8	174.8
67.5°	149.7	146.0	148.7	147.4	147.3
70°	127.5	125.0	128.5	128.5	128.0
72.5°	106.9	106.8	111.2	111.2	111.5
75°	77.6	81.1	85.8	86.4	86.4
77.5°	51.8	58.0	63.2	63.4	63.3
80°	37.0	44.0	48.8	49.8	49.3
82.5°	25.1	32.5	36.5	37.5	37.0
85°	11.3	17.3	20.6	21.1	20.6
87.5°	3.6	7.5	9.4	9.6	8.9
90°	1.5	3.0	6.1	6.9	7.6
92.5°	13.7	56.9	101.7	37.1	28.9
95°	32.7	120.6	404.4	166.2	108.1
97.5°	54.2	135.1	599.0	461.2	334.0
100°	70.1	143.8	670.9	675.7	549.1
102.5°	85.3	153.6	684.9	834.8	714.8
105°	109.7	169.2	677.0	1033.6	973.2
107.5°	135.6	188.6	639.2	1129.4	1151.4
110°	153.8	201.5	610.0	1150.0	1221.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	216.1	582.6	1133.7	1239.2
115°	196.5	237.4	545.3	1079.4	1227.6
117.5°	219.3	260.1	520.7	1003.0	1171.6
120°	234.6	274.8	511.0	951.2	1121.0
122.5°	249.2	287.6	503.1	902.9	1063.7
125°	269.6	306.8	494.2	836.4	981.6
127.5°	286.9	324.2	489.1	780.2	905.5
130°	298.5	335.8	486.6	745.9	859.8
132.5°	309.5	344.9	484.2	717.0	820.2
135°	324.4	359.4	480.5	677.4	763.8
137.5°	341.2	373.0	478.7	644.3	718.0
140°	350.3	381.6	477.5	622.1	686.9
142.5°	360.7	389.6	476.3	602.5	659.5
145°	376.2	402.3	474.4	576.7	620.7
147.5°	391.1	413.9	472.8	555.0	589.1
150°	402.1	420.7	472.2	542.1	569.6
152.5°	410.6	428.0	471.5	531.0	553.8
155°	424.2	438.3	470.6	517.5	533.8
157.5°	436.7	447.5	470.8	507.6	518.8
160°	444.0	453.7	471.4	502.0	510.2
162.5°	450.1	458.6	472.0	497.1	503.5
165°	459.2	465.2	472.9	491.3	495.0
167.5°	466.2	469.8	473.7	487.7	488.9
170°	469.9	472.8	473.7	485.9	485.9
172.5°	472.9	474.7	473.7	483.4	482.8
175°	476.0	476.7	473.7	480.5	479.0
177.5°	477.2	476.6	473.5	477.8	476.6
180°	476.0	476.0	476.0	476.0	476.0

(END OF REPORT)