

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-PR1-025U-100D-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 (G3-1910-536-32)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-025U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

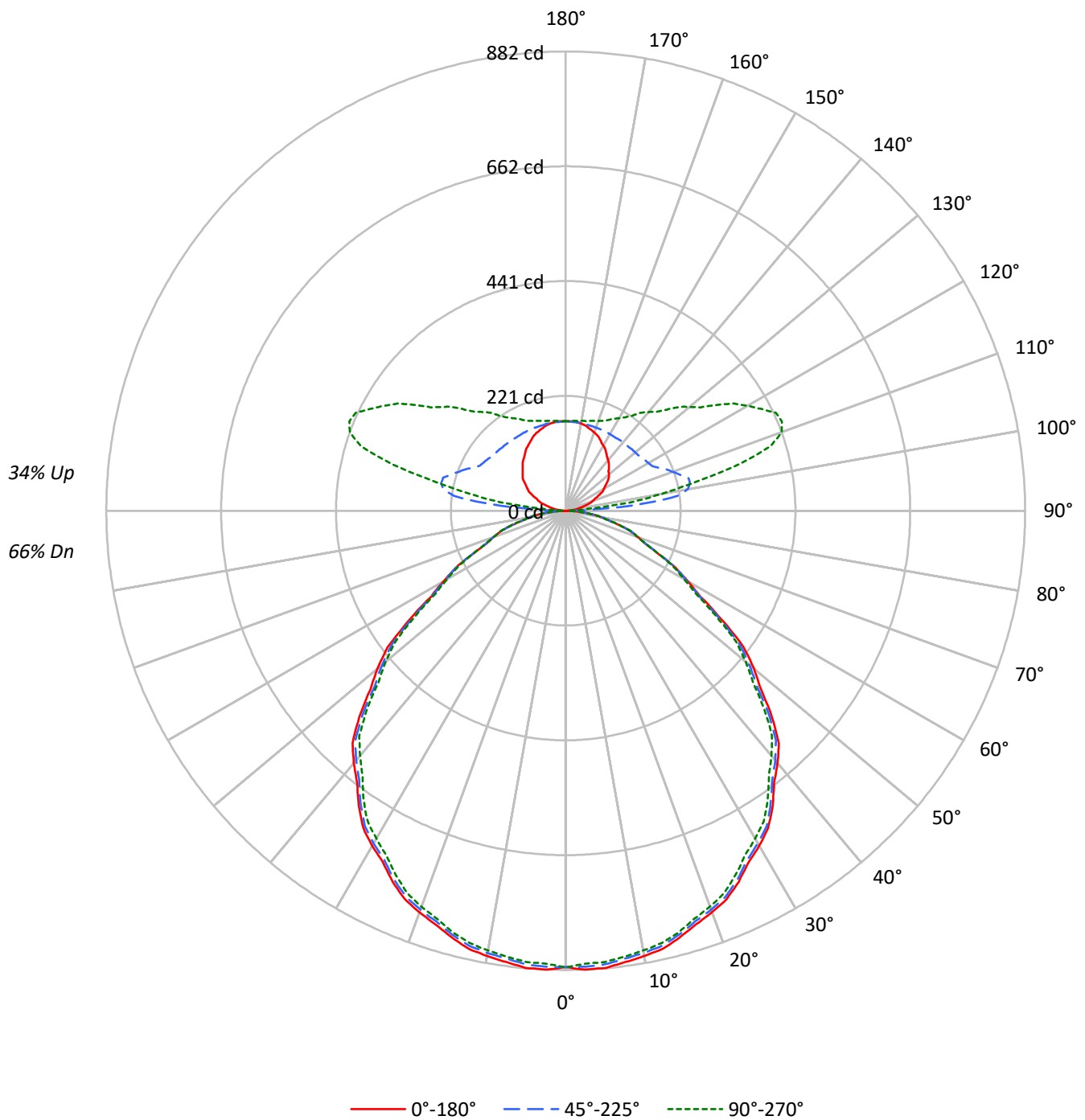
Lumens per Lamp: N/A
Luminaire Lumens: 3308.0 lumens
Efficiency: N/A
Efficacy: 52.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71
1	102	98	94	90	96	92	89	86	82	79	77	72	70	69	63	62	61
2	93	86	80	74	87	81	75	71	72	68	64	64	61	58	56	54	52
3	85	76	68	62	80	72	65	60	64	59	54	57	53	49	50	47	45
4	78	67	59	53	73	64	57	51	57	51	47	51	46	43	45	42	39
5	72	60	52	46	67	57	50	44	51	45	41	46	41	37	41	37	34
6	66	54	46	40	62	51	44	39	46	40	36	42	37	33	37	33	30
7	61	49	41	35	58	47	39	34	42	36	32	38	33	29	34	30	27
8	57	45	37	31	54	43	35	30	39	32	28	35	30	26	31	27	24
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	25	22
10	50	38	30	25	47	36	29	25	33	27	23	30	25	21	27	23	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5392	5392	5392
5°	5441	5399	5370
10°	5423	5386	5358
15°	5399	5366	5337
20°	5373	5338	5298
25°	5334	5298	5237
30°	5277	5239	5164
35°	5199	5154	5080
40°	5081	5026	4935
45°	4874	4788	4689
50°	4509	4400	4314
55°	3936	3847	3765
60°	3317	3288	3223
65°	2869	2879	2857
70°	2635	2647	2647
75°	2531	2531	2548
80°	2380	2409	2380
85°	1920	2131	2131

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4874 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	2.5
10°-20°	237.2	7.2
20°-30°	357.7	10.8
30°-40°	426.3	12.9
40°-50°	420.3	12.7
50°-60°	321.2	9.7
60°-70°	198.8	6.0
70°-80°	112.9	3.4
80°-90°	35.3	1.1
90°-100°	83.9	2.5
100°-110°	220.5	6.7
110°-120°	228.7	6.9
120°-130°	183.4	5.5
130°-140°	143.9	4.4
140°-150°	110.5	3.3
150°-160°	79.6	2.4
160°-170°	48.7	1.5
170°-180°	16.4	0.5
0°-30°	677.8	20.5
0°-40°	1104.1	33.4
0°-60°	1845.5	55.8
0°-90°	2192.4	66.3
90°-120°	533.1	16.1
90°-150°	970.9	29.4
90°-180°	1116.0	33.7
0°-180°	3308.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	877	877	877	877	877	
5°	881	872	874	871	870	84
15°	848	839	843	840	838	239
25°	786	776	781	772	772	362
35°	692	684	686	677	676	432
45°	560	553	550	541	539	429
55°	367	361	359	353	351	329
65°	197	196	198	196	196	200
75°	106	106	106	107	107	112
85°	27	29	30	30	30	32
90°	1	3	9	4	4	2
95°	11	43	144	74	51	12
105°	40	60	244	370	345	42
115°	71	86	195	390	445	70
125°	98	110	178	300	354	87
135°	117	129	172	242	275	91
145°	136	144	170	207	223	85
155°	153	158	170	187	192	70
165°	166	168	170	177	179	47
175°	172	172	171	173	173	16
180°	172	172	172	172	172	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	876.6	876.6	876.6	876.6	876.6
2.5°	882.1	874.4	876.6	874.7	870.6
5°	881.2	871.6	874.4	871.3	869.8
7.5°	874.4	864.9	867.7	864.7	863.8
10°	868.3	859.5	862.3	859.2	857.8
12.5°	861.7	852.2	855.7	852.0	850.5
15°	847.9	839.1	842.7	839.6	838.1
17.5°	832.8	823.4	827.0	823.4	821.5
20°	820.8	811.9	815.5	810.2	809.4
22.5°	807.5	798.6	802.2	795.1	794.9
25°	786.0	776.4	780.7	772.4	771.7
27.5°	760.5	751.7	755.2	746.7	745.9
30°	743.0	734.1	737.7	728.6	727.1
32.5°	723.1	714.8	717.8	708.7	707.8
35°	692.4	684.3	686.4	677.3	676.5
37.5°	657.5	650.1	651.3	641.3	640.6
40°	632.8	625.4	626.0	615.4	614.6
42.5°	605.6	598.2	597.6	587.0	586.2
45°	560.3	552.9	550.4	540.6	539.1
47.5°	508.6	501.2	496.7	488.7	487.6
50°	471.2	463.8	459.8	453.0	450.8
52.5°	430.7	423.3	420.0	413.7	411.5
55°	367.0	361.1	358.7	352.6	351.1
57.5°	306.4	302.4	301.7	295.8	295.2
60°	269.6	267.3	267.3	262.0	262.0
62.5°	238.2	236.5	237.7	234.2	233.6
65°	197.1	195.6	197.8	196.3	196.3
67.5°	164.6	164.6	166.0	165.4	165.4
70°	146.5	146.5	147.2	147.2	147.2
72.5°	130.2	129.6	131.5	131.5	130.9
75°	106.5	106.5	106.5	107.2	107.2
77.5°	82.9	83.1	83.7	83.5	82.9
80°	67.2	67.9	68.0	67.2	67.2
82.5°	51.5	52.2	52.3	52.1	51.5
85°	27.2	28.7	30.2	30.2	30.2
87.5°	8.1	10.9	13.8	13.0	12.4
90°	1.1	3.3	8.8	4.4	4.4
92.5°	4.6	22.3	49.4	21.9	14.1
95°	11.0	43.4	144.5	74.5	50.8
97.5°	19.2	47.7	216.3	172.0	126.7
100°	25.4	51.3	238.3	241.5	187.6
102.5°	30.7	54.8	244.5	300.8	254.7
105°	39.7	60.2	243.8	370.2	345.3
107.5°	49.0	68.0	229.9	406.2	412.2
110°	55.2	72.4	218.5	415.4	441.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	61.3	77.7	207.9	409.6	449.3
115°	70.6	85.7	195.3	389.6	444.7
117.5°	79.7	93.5	186.7	362.0	423.0
120°	85.0	97.9	183.2	343.4	402.7
122.5°	90.3	103.2	180.5	324.8	383.3
125°	98.2	110.1	177.6	300.2	354.2
127.5°	104.6	116.7	175.2	280.4	325.9
130°	108.1	121.1	174.3	268.0	310.0
132.5°	111.7	124.6	173.4	257.3	295.0
135°	117.0	128.8	172.1	242.4	274.7
137.5°	122.5	134.1	171.9	231.2	257.7
140°	126.9	137.7	171.0	222.3	247.2
142.5°	130.4	140.3	171.0	216.1	237.4
145°	135.7	144.3	169.9	206.7	222.9
147.5°	141.0	149.4	169.9	198.9	212.3
150°	144.5	152.1	169.9	194.4	205.2
152.5°	148.1	153.9	169.9	190.8	199.0
155°	153.4	157.7	169.9	186.6	192.0
157.5°	157.3	161.4	169.9	182.8	186.7
160°	160.0	163.2	169.9	181.0	183.2
162.5°	162.6	165.0	169.9	179.2	181.4
165°	165.5	167.7	169.9	176.6	178.7
167.5°	168.2	169.2	171.0	175.5	176.3
170°	169.9	171.0	171.0	175.4	175.4
172.5°	170.8	171.0	171.0	174.5	173.7
175°	172.1	172.1	171.0	173.2	173.2
177.5°	172.1	172.1	171.2	173.0	172.1
180°	172.1	172.1	172.1	172.1	172.1

(END OF REPORT)