

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-050D-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-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

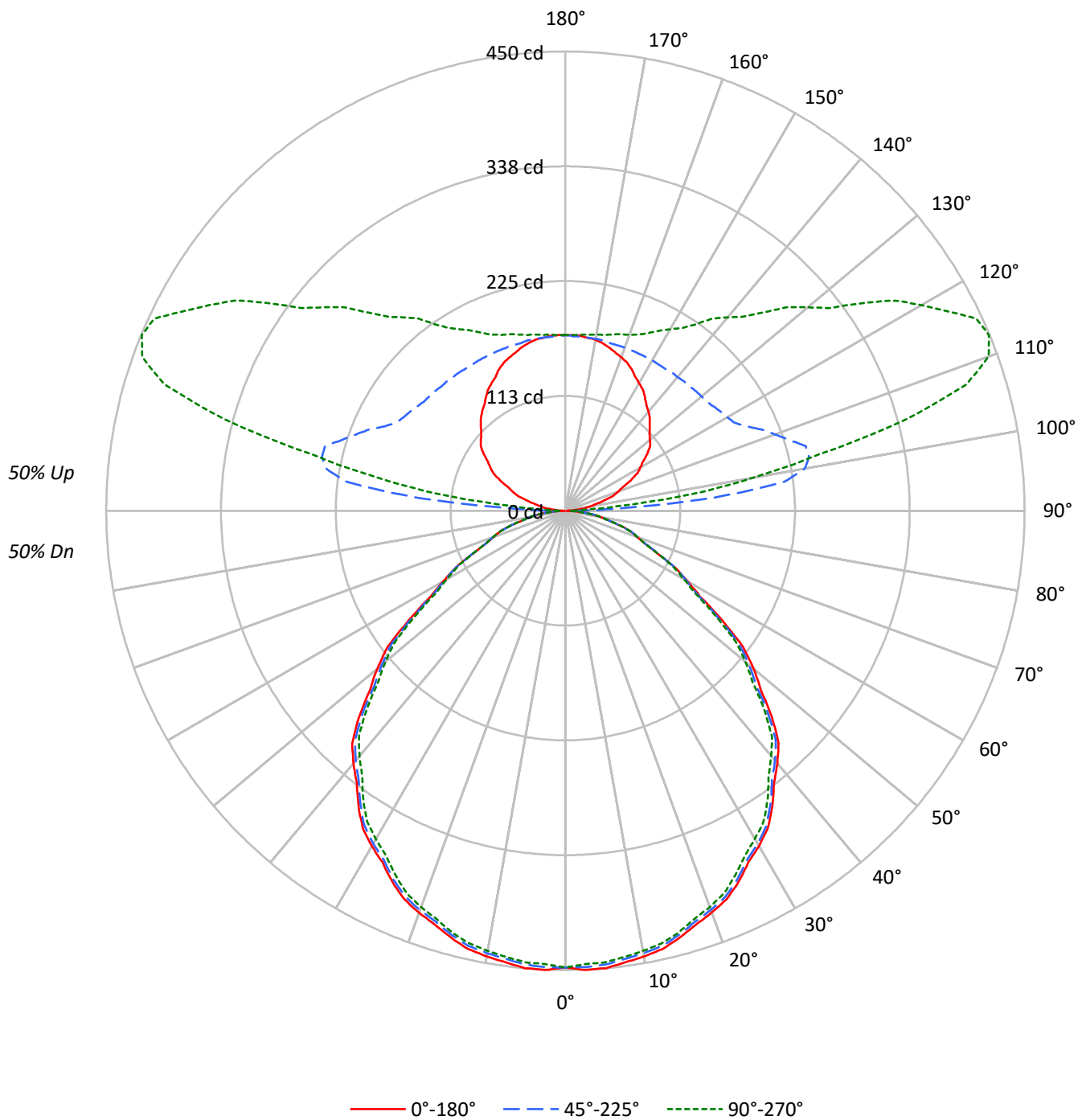
Lumens per Lamp: N/A
Luminaire Lumens: 2235.6 lumens
Efficiency: N/A
Efficacy: 64.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 34.9
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56
1	98	94	90	87	90	87	84	81	74	71	69	61	60	58	50	49	48
2	90	82	76	71	82	76	71	67	65	61	58	54	51	49	44	43	41
3	82	73	65	60	75	67	61	56	57	53	49	48	45	42	40	37	35
4	75	64	57	51	69	60	53	48	51	46	42	43	39	36	36	33	30
5	69	57	49	44	63	53	46	41	46	40	36	39	35	31	32	29	27
6	64	52	44	38	58	48	41	36	41	36	32	35	31	28	29	26	24
7	59	47	39	33	54	43	36	31	38	32	28	32	28	24	27	23	21
8	55	42	35	29	50	40	33	28	34	29	25	29	25	22	25	21	19
9	51	39	31	26	47	36	29	25	31	26	22	27	23	20	23	19	17
10	47	35	28	24	44	33	27	22	29	24	20	25	21	18	21	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2753	2753	2753
5°	2778	2757	2743
10°	2769	2750	2736
15°	2757	2740	2725
20°	2743	2726	2705
25°	2724	2706	2674
30°	2695	2675	2637
35°	2655	2632	2594
40°	2594	2566	2520
45°	2489	2445	2395
50°	2302	2247	2203
55°	2010	1963	1923
60°	1693	1679	1646
65°	1464	1470	1458
70°	1345	1352	1352
75°	1293	1293	1302
80°	1215	1229	1215
85°	981	1087	1087

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2489 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.3	1.9
10°-20°	121.1	5.4
20°-30°	182.7	8.2
30°-40°	217.7	9.7
40°-50°	214.6	9.6
50°-60°	164.0	7.3
60°-70°	101.5	4.5
70°-80°	57.7	2.6
80°-90°	18.4	0.8
90°-100°	83.9	3.8
100°-110°	220.5	9.9
110°-120°	228.7	10.2
120°-130°	183.4	8.2
130°-140°	143.9	6.4
140°-150°	110.5	4.9
150°-160°	79.6	3.6
160°-170°	48.7	2.2
170°-180°	16.4	0.7
0°-30°	346.1	15.5
0°-40°	563.8	25.2
0°-60°	942.4	42.2
0°-90°	1120.0	50.1
90°-120°	533.1	23.8
90°-150°	970.9	43.4
90°-180°	1116.0	49.9
0°-180°	2235.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	448	448	448	448	448	
5°	450	445	446	445	444	43
15°	433	428	430	429	428	122
25°	401	396	399	394	394	185
35°	354	349	350	346	346	221
45°	286	282	281	276	275	219
55°	187	184	183	180	179	168
65°	101	100	101	100	100	102
75°	54	54	54	55	55	57
85°	14	15	15	15	15	16
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°	447.6	447.6	447.6	447.6	447.6
2.5°	450.4	446.5	447.6	446.7	444.6
5°	450.0	445.1	446.5	444.9	444.2
7.5°	446.5	441.7	443.1	441.5	441.1
10°	443.4	438.9	440.3	438.8	438.0
12.5°	440.0	435.2	436.9	435.1	434.3
15°	433.0	428.5	430.3	428.7	428.0
17.5°	425.3	420.5	422.3	420.5	419.5
20°	419.1	414.6	416.4	413.7	413.3
22.5°	412.3	407.8	409.6	406.0	405.9
25°	401.4	396.5	398.7	394.4	394.0
27.5°	388.3	383.8	385.6	381.3	380.9
30°	379.4	374.9	376.7	372.1	371.3
32.5°	369.2	365.0	366.5	361.9	361.4
35°	353.6	349.4	350.5	345.8	345.5
37.5°	335.8	332.0	332.6	327.5	327.1
40°	323.1	319.3	319.6	314.2	313.8
42.5°	309.2	305.5	305.1	299.7	299.4
45°	286.1	282.3	281.1	276.0	275.3
47.5°	259.7	255.9	253.6	249.5	249.0
50°	240.6	236.8	234.8	231.3	230.2
52.5°	219.9	216.2	214.5	211.3	210.1
55°	187.4	184.4	183.1	180.0	179.3
57.5°	156.5	154.4	154.1	151.1	150.8
60°	137.6	136.5	136.5	133.8	133.8
62.5°	121.6	120.8	121.4	119.6	119.3
65°	100.6	99.9	101.0	100.2	100.2
67.5°	84.1	84.1	84.7	84.4	84.4
70°	74.8	74.8	75.2	75.2	75.2
72.5°	66.5	66.2	67.2	67.2	66.9
75°	54.4	54.4	54.4	54.8	54.8
77.5°	42.3	42.4	42.7	42.6	42.3
80°	34.3	34.7	34.7	34.3	34.3
82.5°	26.3	26.7	26.7	26.6	26.3
85°	13.9	14.6	15.4	15.4	15.4
87.5°	4.2	5.9	7.9	7.0	6.7
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)