

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-PR1-050U-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 (G3-1910-536-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

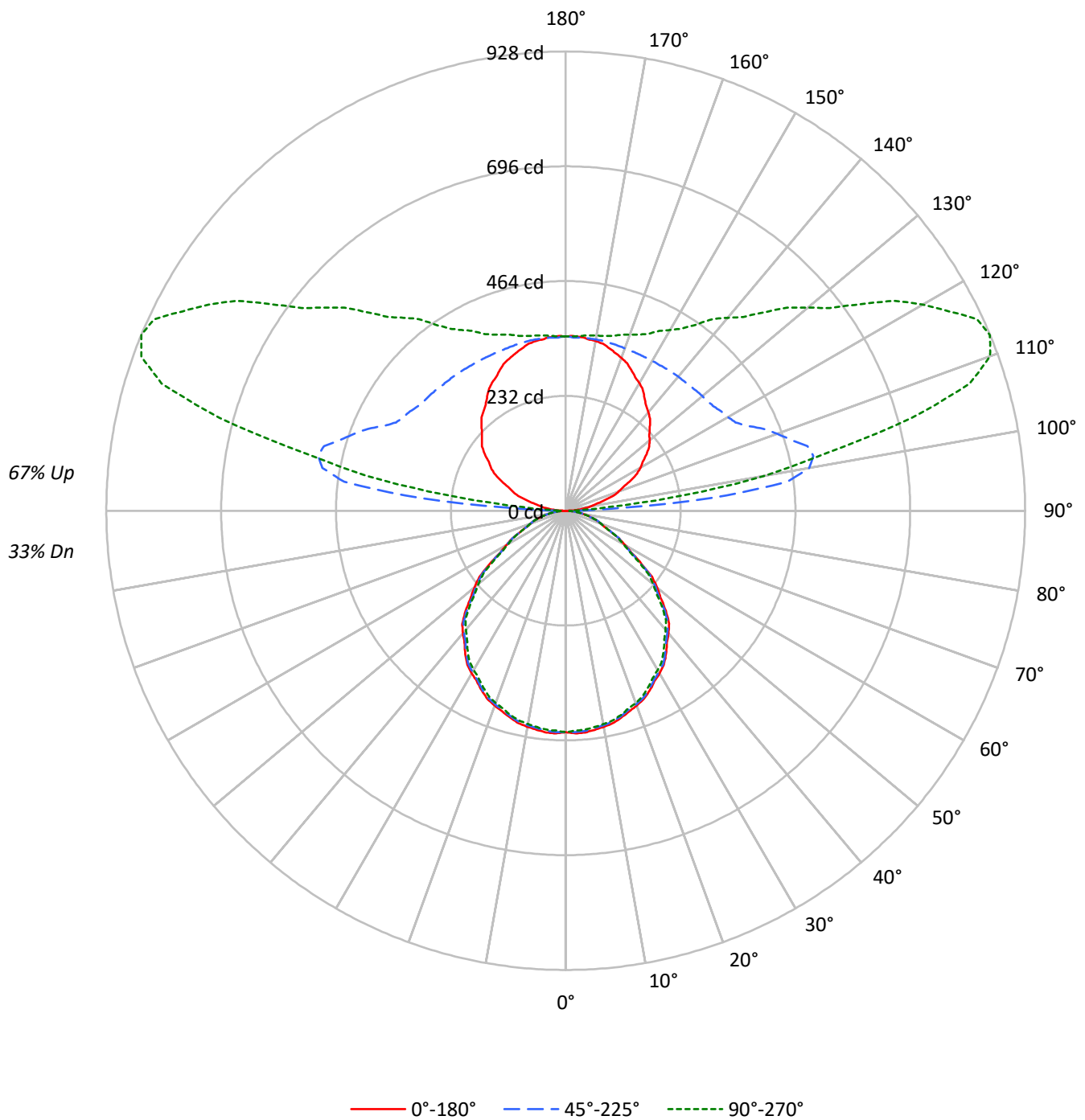
Lumens per Lamp: N/A
Luminaire Lumens: 3421.1 lumens
Efficiency: N/A
Efficacy: 76.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 44.8
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	79	73	68	77	71	66	62	57	54	51	44	42	40	32	30	29
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	27	25
4	72	61	54	48	64	56	49	44	45	40	36	35	32	29	25	23	22
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19
6	61	49	41	36	54	44	38	33	36	31	27	28	25	22	21	18	17
7	56	44	36	31	50	40	33	29	33	28	24	26	22	19	19	17	15
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	17	15	13
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	13	11

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	1.2
10°-20°	121.1	3.5
20°-30°	182.7	5.3
30°-40°	217.7	6.4
40°-50°	214.6	6.3
50°-60°	164.0	4.8
60°-70°	101.5	3.0
70°-80°	57.7	1.7
80°-90°	18.9	0.6
90°-100°	169.1	4.9
100°-110°	459.5	13.4
110°-120°	472.4	13.8
120°-130°	377.7	11.0
130°-140°	296.8	8.7
140°-150°	227.6	6.7
150°-160°	163.7	4.8
160°-170°	100.1	2.9
170°-180°	33.7	1.0
0°-30°	346.1	10.1
0°-40°	563.8	16.5
0°-60°	942.4	27.5
0°-90°	1120.4	32.8
90°-120°	1101.1	32.2
90°-150°	2003.2	58.6
90°-180°	2301.0	67.3
0°-180°	3421.1	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	4	8	10	10	2
95°	25	92	295	128	86	26
105°	82	127	505	769	724	87
115°	145	176	404	805	917	143
125°	199	227	366	617	727	178
135°	240	267	356	502	566	186
145°	278	298	351	427	459	174
155°	314	325	349	383	394	145
165°	340	344	350	365	366	96
175°	352	354	351	356	355	33
180°	352	352	352	352	352	

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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	6.1	7.8	8.2	7.9
90°	1.1	4.5	7.9	10.2	10.2
92.5°	10.2	46.3	80.4	34.5	29.2
95°	24.9	92.5	294.6	128.2	86.1
97.5°	41.2	102.2	451.6	351.3	246.8
100°	52.1	108.6	499.6	506.5	409.0
102.5°	63.0	115.1	512.3	626.4	540.4
105°	81.6	127.0	505.3	769.4	724.0
107.5°	100.8	140.9	476.1	843.2	855.9
110°	114.4	151.0	454.3	857.8	912.1

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-050U-050D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	126.2	161.0	432.6	845.7	927.5
115°	145.0	176.0	404.5	804.7	916.6
117.5°	162.7	192.4	386.6	746.6	872.6
120°	174.5	203.3	378.4	707.6	832.7
122.5°	184.5	213.3	373.0	668.5	789.2
125°	199.4	227.1	366.0	616.6	727.4
127.5°	212.8	240.2	362.1	577.3	672.3
130°	220.9	247.5	360.3	552.6	637.9
132.5°	229.1	255.7	358.5	531.5	607.1
135°	240.2	266.8	355.8	502.2	566.5
137.5°	252.2	276.4	354.4	476.4	530.5
140°	259.5	282.7	353.5	460.0	508.7
142.5°	266.7	288.2	352.6	447.1	487.9
145°	277.6	297.5	351.2	426.7	458.9
147.5°	289.8	306.9	350.1	410.7	436.0
150°	298.0	312.4	350.1	401.5	421.5
152.5°	304.3	317.0	349.2	393.3	409.7
155°	313.8	324.9	349.0	383.2	394.3
157.5°	323.1	331.8	349.0	376.3	384.8
160°	328.6	336.3	349.0	371.8	378.4
162.5°	334.0	340.0	349.9	368.1	373.0
165°	339.9	344.3	350.1	364.8	366.0
167.5°	346.0	348.2	351.2	361.0	361.9
170°	347.8	350.0	351.2	359.2	359.2
172.5°	349.6	351.0	351.2	357.3	357.3
175°	352.4	353.5	351.2	355.7	354.6
177.5°	353.3	353.3	350.5	354.1	352.4
180°	352.4	352.4	352.4	352.4	352.4

(END OF REPORT)