

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-PR1-075U-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 (G3-1910-536-22)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-075U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

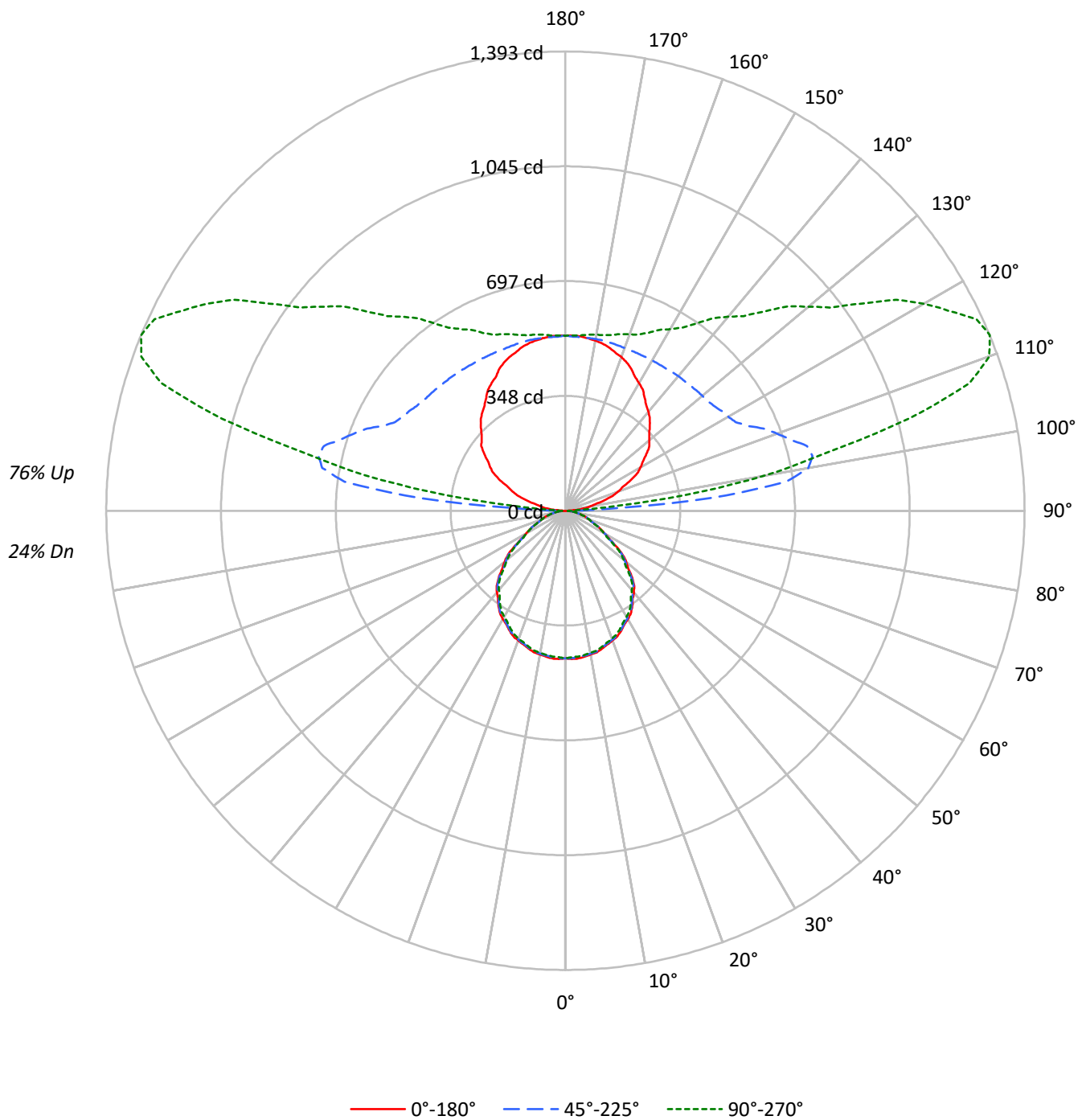
Lumens per Lamp: N/A
Luminaire Lumens: 4578.2 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 54.3
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

TEST NUMBER:

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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	101	101	101	101		90	90	90	90		69	69	69		50	50	50		33	33	33
1	92	88	84	81		82	79	75	73		61	59	57		44	43	42		29	28	28
2	84	77	71	66		75	69	64	60		53	50	47		39	37	35		26	25	24
3	77	68	61	55		68	61	55	50		47	43	40		35	32	30		23	21	20
4	70	60	52	47		62	54	47	42		42	37	34		31	28	26		20	19	17
5	64	53	46	40		57	48	41	36		37	33	29		28	24	22		18	17	15
6	59	48	40	34		52	43	36	31		33	29	25		25	22	19		17	15	13
7	54	43	35	30		48	38	32	27		30	26	22		23	19	17		15	13	12
8	50	39	31	26		45	35	28	24		27	23	20		21	17	15		14	12	11
9	47	35	28	23		42	32	26	21		25	21	17		19	16	13		13	11	10
10	44	32	25	21		39	29	23	19		23	19	15		17	14	12		12	10	9

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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CATALOG NUMBER: SQ4-PR1-075U-050D-927-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.3	0.9
10°-20°	121.1	2.6
20°-30°	182.7	4.0
30°-40°	217.7	4.8
40°-50°	214.6	4.7
50°-60°	164.0	3.6
60°-70°	101.5	2.2
70°-80°	57.7	1.3
80°-90°	18.9	0.4
90°-100°	250.3	5.5
100°-110°	688.7	15.0
110°-120°	710.9	15.5
120°-130°	569.6	12.4
130°-140°	447.4	9.8
140°-150°	342.8	7.5
150°-160°	246.5	5.4
160°-170°	150.7	3.3
170°-180°	50.8	1.1
0°-30°	346.1	7.6
0°-40°	563.8	12.3
0°-60°	942.4	20.6
0°-90°	1120.4	24.5
90°-120°	1650.0	36.0
90°-150°	3009.8	65.7
90°-180°	3458.0	75.5
0°-180°	4578.2	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	3
95°	37	137	443	189	121	39
105°	123	189	759	1156	1078	130
115°	218	265	609	1212	1376	215
125°	300	342	552	934	1094	268
135°	362	402	536	756	855	280
145°	419	448	528	644	693	263
155°	474	490	525	579	595	218
165°	513	519	527	549	552	144
175°	531	532	528	535	534	50
180°	531	531	531	531	531	

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-075U-050D-927-1D-UNV-STD-W-6

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	4.4	7.9	10.2	10.2
92.5°	15.6	66.6	115.4	44.3	36.4
95°	37.3	136.6	442.7	189.3	120.8
97.5°	60.8	151.5	675.6	520.5	367.3
100°	77.9	160.7	748.7	755.7	616.6
102.5°	94.2	171.7	767.7	937.6	809.9
105°	123.1	189.3	758.9	1155.8	1078.5
107.5°	150.7	211.2	715.8	1262.6	1285.6
110°	170.5	225.7	683.2	1289.2	1368.7

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-075U-050D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.6	242.0	650.7	1272.1	1393.1
115°	218.0	265.4	608.7	1212.1	1375.5
117.5°	246.0	289.7	582.0	1127.9	1312.7
120°	263.1	305.1	570.3	1064.8	1255.8
122.5°	278.5	320.4	562.2	1009.4	1190.8
125°	300.4	342.4	552.2	934.2	1094.3
127.5°	321.2	361.2	545.7	871.4	1011.9
130°	332.0	372.9	542.1	834.1	962.2
132.5°	344.7	385.5	539.4	801.3	917.0
135°	362.5	402.3	536.4	755.5	854.9
137.5°	379.2	416.1	533.9	718.5	800.5
140°	391.9	426.1	533.0	694.0	767.9
142.5°	402.7	434.3	531.2	672.0	735.4
145°	419.0	447.7	528.5	643.7	693.4
147.5°	436.4	461.1	527.2	618.6	658.4
150°	447.2	469.3	526.3	604.9	635.8
152.5°	457.1	477.5	525.4	593.0	618.6
155°	474.3	489.8	525.1	578.6	595.1
157.5°	486.7	499.3	525.1	566.7	578.2
160°	495.8	505.7	525.1	560.3	569.2
162.5°	503.0	511.2	526.0	554.9	561.9
165°	512.7	519.3	527.4	548.9	552.2
167.5°	519.5	524.6	528.5	543.9	544.8
170°	524.0	527.3	528.5	542.1	542.1
172.5°	527.6	529.2	528.5	539.3	538.5
175°	530.8	531.9	528.5	535.3	534.2
177.5°	531.7	531.7	528.1	533.4	531.7
180°	530.8	530.8	530.8	530.8	530.8

(END OF REPORT)