

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-075D-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-075D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

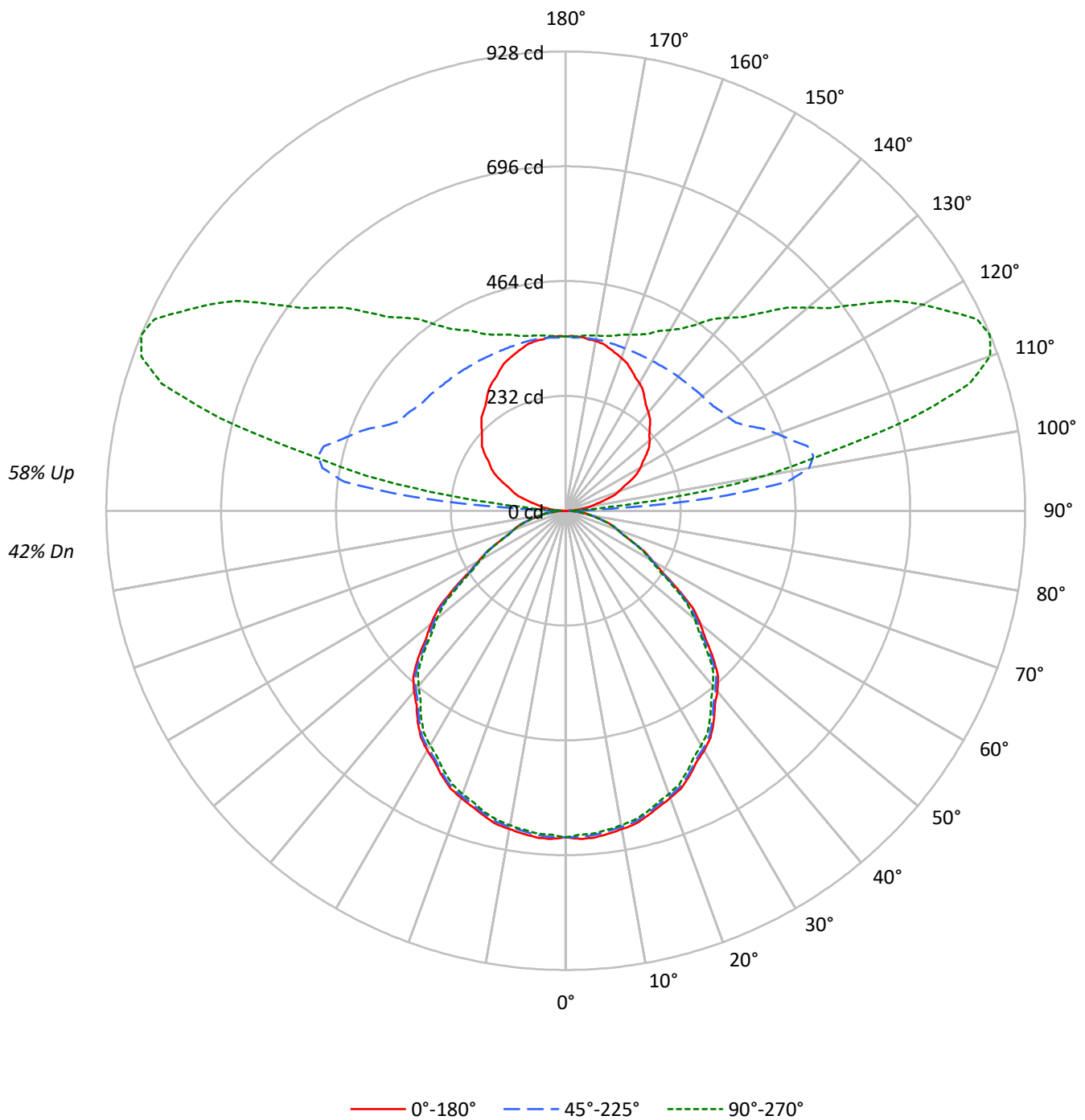
Lumens per Lamp: N/A
Luminaire Lumens: 3951.4 lumens
Efficiency: N/A
Efficacy: 67.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.5
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	43	42	41
2	88	81	75	70	80	74	69	64	61	57	54	49	47	45	38	37	35
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	34	32	30
4	73	63	55	49	67	58	51	46	48	43	39	39	36	33	31	28	26
5	67	56	48	42	61	52	45	39	43	38	34	35	31	28	28	25	23
6	62	50	42	37	57	46	39	34	39	33	30	32	28	25	25	22	20
7	57	45	38	32	52	42	35	30	35	30	26	29	25	22	23	20	18
8	53	41	34	28	49	38	31	27	32	27	23	26	22	20	21	18	16
9	50	38	30	25	45	35	28	24	29	24	21	24	20	18	19	17	15
10	46	34	27	23	42	32	26	21	27	22	19	22	19	16	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4058	4058	4058
5°	4095	4063	4042
10°	4082	4053	4032
15°	4064	4038	4017
20°	4043	4017	3988
25°	4015	3988	3942
30°	3972	3943	3887
35°	3913	3879	3823
40°	3824	3783	3714
45°	3668	3604	3530
50°	3393	3312	3247
55°	2962	2894	2833
60°	2496	2475	2426
65°	2158	2167	2151
70°	1982	1993	1993
75°	1904	1904	1918
80°	1792	1810	1792
85°	1447	1602	1602

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3668 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.4	1.6
10°-20°	178.5	4.5
20°-30°	269.2	6.8
30°-40°	320.8	8.1
40°-50°	316.3	8.0
50°-60°	241.7	6.1
60°-70°	149.6	3.8
70°-80°	85.0	2.1
80°-90°	27.2	0.7
90°-100°	169.1	4.3
100°-110°	459.5	11.6
110°-120°	472.4	12.0
120°-130°	377.7	9.6
130°-140°	296.8	7.5
140°-150°	227.6	5.8
150°-160°	163.7	4.1
160°-170°	100.1	2.5
170°-180°	33.7	0.9
0°-30°	510.1	12.9
0°-40°	831.0	21.0
0°-60°	1389.0	35.2
0°-90°	1650.7	41.8
90°-120°	1101.1	27.9
90°-150°	2003.2	50.7
90°-180°	2301.0	58.2
0°-180°	3951.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	663	656	658	656	655	63
15°	638	632	634	632	631	180
25°	592	584	588	581	581	272
35°	521	515	517	510	509	325
45°	422	416	414	407	406	323
55°	276	272	270	265	264	247
65°	148	147	149	148	148	150
75°	80	80	80	81	81	85
85°	20	22	23	23	23	24
90°	1	4	8	10	10	3
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°	659.8	659.8	659.8	659.8	659.8
2.5°	663.9	658.1	659.8	658.3	655.2
5°	663.2	656.0	658.1	655.8	654.7
7.5°	658.1	651.0	653.1	650.8	650.1
10°	653.5	646.9	649.0	646.7	645.6
12.5°	648.5	641.4	644.0	641.2	640.1
15°	638.2	631.5	634.2	631.9	630.8
17.5°	626.8	619.7	622.4	619.7	618.3
20°	617.7	611.1	613.7	609.7	609.2
22.5°	607.7	601.0	603.7	598.4	598.3
25°	591.6	584.4	587.6	581.3	580.8
27.5°	572.4	565.7	568.4	562.0	561.3
30°	559.2	552.5	555.2	548.4	547.3
32.5°	544.2	538.0	540.2	533.4	532.7
35°	521.1	515.0	516.6	509.7	509.2
37.5°	494.9	489.3	490.2	482.7	482.1
40°	476.2	470.7	471.1	463.1	462.6
42.5°	455.8	450.2	449.7	441.8	441.2
45°	421.7	416.1	414.3	406.9	405.8
47.5°	382.8	377.2	373.8	367.8	367.0
50°	354.6	349.0	346.1	340.9	339.3
52.5°	324.1	318.6	316.1	311.4	309.7
55°	276.2	271.7	269.9	265.4	264.2
57.5°	230.6	227.6	227.1	222.6	222.2
60°	202.9	201.2	201.2	197.2	197.2
62.5°	179.2	178.0	178.9	176.3	175.8
65°	148.3	147.2	148.9	147.8	147.8
67.5°	123.9	123.9	124.9	124.5	124.5
70°	110.2	110.2	110.8	110.8	110.8
72.5°	98.0	97.5	99.0	99.0	98.5
75°	80.1	80.1	80.1	80.7	80.7
77.5°	62.4	62.5	63.0	62.8	62.4
80°	50.6	51.1	51.1	50.6	50.6
82.5°	38.8	39.3	39.3	39.2	38.8
85°	20.5	21.6	22.7	22.7	22.7
87.5°	6.1	8.6	10.7	11.1	10.7
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

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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)