

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-PC3-050U-050D-927-1D-UNV-STD-W-4

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-PC3-050U-050D-927-1D-UNV-STD-W-4
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

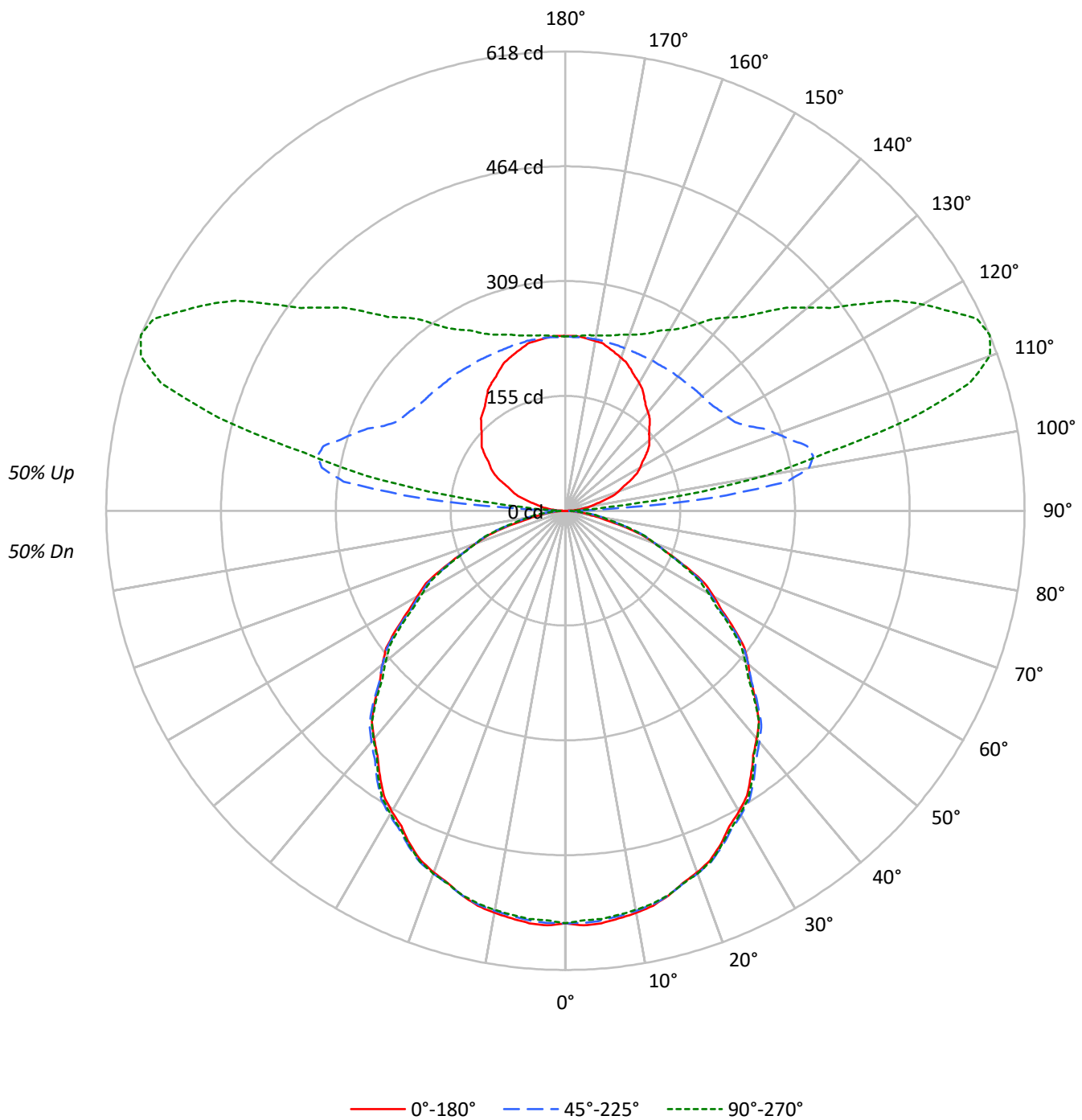
Lumens per Lamp: N/A
Luminaire Lumens: 3049.8 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.5
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56
1	98	93	90	86	90	86	83	80	73	71	68	61	59	58	49	48	47
2	89	82	76	70	82	75	70	66	64	60	57	53	51	48	44	42	40
3	81	72	64	59	75	66	60	55	56	52	48	47	44	41	39	36	34
4	74	63	56	49	68	59	52	46	50	45	41	42	38	35	34	32	29
5	68	56	48	42	63	52	45	40	45	39	35	38	33	30	31	28	25
6	63	51	42	37	58	47	40	35	40	35	30	34	30	26	28	25	22
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20
8	54	41	34	28	49	39	32	27	33	28	24	28	24	21	23	20	18
9	50	38	30	25	46	35	28	24	30	25	21	26	22	19	22	18	16
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5121	5121	5121
5°	5160	5127	5108
10°	5148	5124	5110
15°	5121	5121	5116
20°	5087	5103	5103
25°	5039	5076	5060
30°	4977	5038	5016
35°	4904	4979	4945
40°	4822	4891	4842
45°	4735	4769	4695
50°	4612	4612	4537
55°	4465	4407	4341
60°	4250	4165	4098
65°	3927	3849	3816
70°	3439	3466	3453
75°	2766	3059	3080
80°	1966	2593	2619
85°	1196	2181	2181

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 4769 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.5	1.7
10°-20°	150.8	4.9
20°-30°	228.3	7.5
30°-40°	273.7	9.0
40°-50°	279.1	9.2
50°-60°	243.7	8.0
60°-70°	174.4	5.7
70°-80°	89.8	2.9
80°-90°	23.6	0.8
90°-100°	112.8	3.7
100°-110°	306.3	10.0
110°-120°	315.0	10.3
120°-130°	251.8	8.3
130°-140°	197.9	6.5
140°-150°	151.7	5.0
150°-160°	109.1	3.6
160°-170°	66.7	2.2
170°-180°	22.5	0.7
0°-30°	431.6	14.2
0°-40°	705.4	23.1
0°-60°	1228.1	40.3
0°-90°	1516.0	49.7
90°-120°	734.1	24.1
90°-150°	1335.5	43.8
90°-180°	1534.0	50.3
0°-180°	3049.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	555	555	555	555	555	
5°	557	552	554	552	552	53
15°	536	532	536	536	536	151
25°	495	492	499	497	497	228
35°	435	434	442	439	439	272
45°	363	362	366	361	360	279
55°	278	274	274	270	270	247
65°	180	176	176	175	175	178
75°	78	81	86	86	86	84
85°	11	17	21	21	21	15
90°	1	3	5	7	7	2
95°	17	62	196	86	57	18
105°	54	85	337	513	483	58
115°	97	117	270	536	611	95
125°	133	151	244	411	485	118
135°	160	178	237	335	378	124
145°	185	198	234	284	306	116
155°	209	217	233	256	263	96
165°	227	230	233	243	244	64
175°	235	236	234	237	236	22
180°	235	235	235	235	235	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	555.1	555.1	555.1	555.1	555.1
2.5°	558.4	553.6	555.1	553.9	551.8
5°	557.2	551.7	553.6	552.0	551.5
7.5°	553.2	547.7	550.2	549.2	548.7
10°	549.5	544.0	546.9	545.9	545.4
12.5°	544.5	539.4	542.8	541.8	541.7
15°	536.1	531.6	536.1	536.1	535.6
17.5°	525.5	521.4	526.3	526.6	526.3
20°	518.1	513.6	519.7	519.2	519.7
22.5°	509.1	505.4	511.9	510.5	511.0
25°	495.0	491.5	498.6	497.1	497.1
27.5°	478.3	475.8	483.6	481.9	481.9
30°	467.2	464.7	472.9	470.8	470.8
32.5°	454.9	453.2	461.0	458.5	458.5
35°	435.4	434.4	442.1	439.0	439.0
37.5°	415.2	414.3	421.3	417.6	416.4
40°	400.4	399.9	406.1	402.0	402.0
42.5°	385.6	385.1	390.4	385.5	385.5
45°	362.9	361.9	365.5	360.8	359.8
47.5°	338.1	337.1	339.4	334.3	333.8
50°	321.3	320.3	321.3	316.6	316.1
52.5°	304.0	302.2	302.3	297.7	297.6
55°	277.6	274.1	274.0	269.9	269.9
57.5°	249.6	245.0	245.4	241.9	241.4
60°	230.3	225.3	225.7	222.6	222.1
62.5°	211.4	205.5	206.7	203.2	203.1
65°	179.9	175.9	176.3	174.8	174.8
67.5°	149.7	146.0	148.7	147.4	147.3
70°	127.5	125.0	128.5	128.5	128.0
72.5°	106.9	106.8	111.2	111.2	111.5
75°	77.6	81.1	85.8	86.4	86.4
77.5°	51.8	58.0	63.2	63.4	63.3
80°	37.0	44.0	48.8	49.8	49.3
82.5°	25.1	32.5	36.5	37.5	37.0
85°	11.3	17.3	20.6	21.1	20.6
87.5°	3.4	7.5	9.3	9.6	8.8
90°	0.8	3.0	5.3	6.8	6.8
92.5°	6.8	30.9	53.6	23.0	19.5
95°	16.6	61.7	196.4	85.5	57.4
97.5°	27.5	68.1	301.1	234.2	164.5
100°	34.7	72.4	333.1	337.7	272.7
102.5°	42.0	76.7	341.6	417.6	360.3
105°	54.4	84.7	336.9	512.9	482.7
107.5°	67.2	94.0	317.4	562.2	570.6
110°	76.3	100.7	302.9	571.8	608.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	84.1	107.3	288.4	563.8	618.3
115°	96.7	117.4	269.7	536.5	611.1
117.5°	108.5	128.3	257.7	497.7	581.8
120°	116.3	135.5	252.3	471.7	555.2
122.5°	123.0	142.2	248.7	445.7	526.2
125°	132.9	151.4	244.0	411.1	484.9
127.5°	141.9	160.2	241.4	384.8	448.2
130°	147.3	165.0	240.2	368.4	425.2
132.5°	152.7	170.5	239.0	354.3	404.7
135°	160.1	177.9	237.2	334.8	377.7
137.5°	168.1	184.2	236.3	317.6	353.6
140°	173.0	188.5	235.7	306.6	339.1
142.5°	177.8	192.1	235.1	298.1	325.2
145°	185.1	198.3	234.2	284.5	305.9
147.5°	193.2	204.6	233.4	273.8	290.6
150°	198.7	208.3	233.4	267.7	281.0
152.5°	202.9	211.3	232.8	262.2	273.1
155°	209.2	216.6	232.6	255.5	262.9
157.5°	215.4	221.2	232.6	250.9	256.5
160°	219.0	224.2	232.6	247.8	252.3
162.5°	222.7	226.7	233.2	245.4	248.7
165°	226.6	229.6	233.4	243.2	244.0
167.5°	230.7	232.2	234.2	240.7	241.3
170°	231.9	233.4	234.2	239.4	239.4
172.5°	233.1	234.0	234.2	238.2	238.2
175°	234.9	235.6	234.2	237.2	236.4
177.5°	235.5	235.5	233.7	236.1	234.9
180°	234.9	234.9	234.9	234.9	234.9

(END OF REPORT)