

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-F-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, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-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

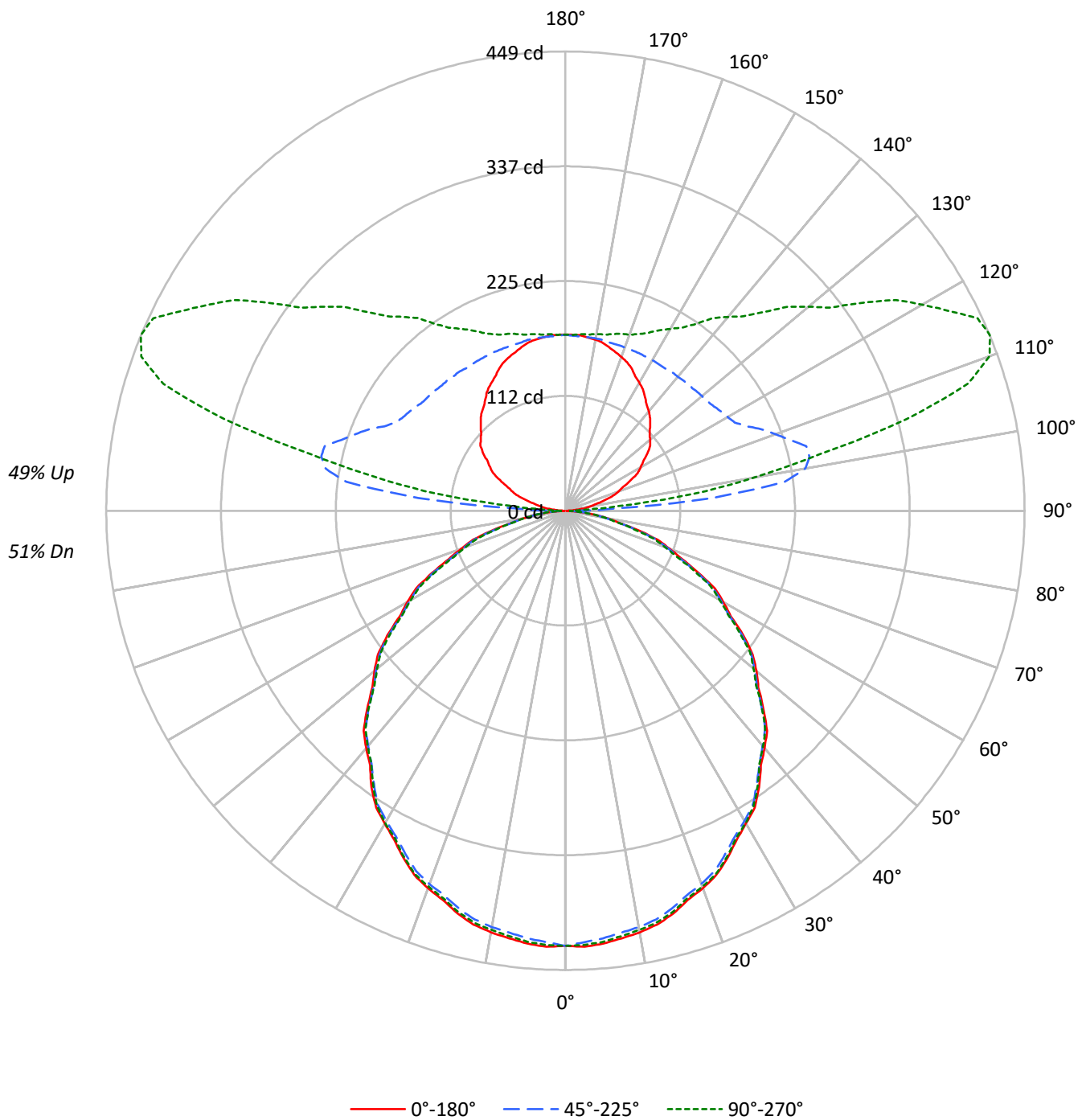
Lumens per Lamp: N/A
Luminaire Lumens: 2277.5 lumens
Efficiency: N/A
Efficacy: 65.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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	84	84	84	70	70	70	57	57	57
1	98	94	90	86	90	87	83	80	74	71	69	61	60	58	50	49	48
2	89	82	75	70	82	76	70	66	64	60	57	54	51	48	44	42	40
3	81	72	64	58	75	66	60	55	57	52	48	48	44	41	39	37	34
4	74	63	55	49	68	59	52	46	50	45	41	42	38	35	35	32	29
5	68	56	48	42	63	52	45	40	45	39	35	38	34	30	31	28	26
6	63	51	42	37	58	47	40	34	40	35	30	34	30	26	28	25	22
7	58	46	38	32	53	43	35	30	37	31	27	31	27	23	26	23	20
8	54	41	34	28	50	39	32	27	33	28	24	28	24	21	24	20	18
9	50	38	30	25	46	35	28	24	31	25	21	26	22	19	22	19	16
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2617	2617	2617
5°	2623	2591	2612
10°	2614	2582	2600
15°	2596	2564	2585
20°	2572	2542	2561
25°	2543	2512	2535
30°	2508	2487	2504
35°	2480	2450	2463
40°	2432	2410	2414
45°	2383	2363	2363
50°	2332	2310	2299
55°	2278	2248	2235
60°	2192	2158	2144
65°	2089	2048	2022
70°	1946	1904	1863
75°	1747	1692	1652
80°	1413	1392	1353
85°	847	967	1002

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 2388 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.1	1.8
10°-20°	114.3	5.0
20°-30°	171.7	7.5
30°-40°	204.9	9.0
40°-50°	210.0	9.2
50°-60°	187.3	8.2
60°-70°	139.5	6.1
70°-80°	75.7	3.3
80°-90°	18.5	0.8
90°-100°	83.9	3.7
100°-110°	220.5	9.7
110°-120°	228.7	10.0
120°-130°	183.4	8.1
130°-140°	143.9	6.3
140°-150°	110.5	4.8
150°-160°	79.6	3.5
160°-170°	48.7	2.1
170°-180°	16.4	0.7
0°-30°	326.1	14.3
0°-40°	531.0	23.3
0°-60°	928.3	40.8
0°-90°	1161.9	51.0
90°-120°	533.1	23.4
90°-150°	970.9	42.6
90°-180°	1116.0	49.0
0°-180°	2277.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	425	425	425	425	425	
5°	425	424	420	424	423	40
15°	408	407	403	406	406	115
25°	375	374	370	372	374	173
35°	330	329	326	326	328	206
45°	274	274	272	271	272	211
55°	212	212	210	208	208	189
65°	144	143	141	139	139	142
75°	74	73	71	70	70	78
85°	12	13	14	14	14	17
90°	1	3	9	4	4	1
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°	425.4	425.4	425.4	425.4	425.4
2.5°	426.7	425.9	422.2	425.4	424.9
5°	424.8	424.3	419.7	423.7	423.1
7.5°	421.7	420.6	416.2	420.0	419.5
10°	418.5	417.4	413.4	416.8	416.3
12.5°	414.4	413.8	409.3	412.7	412.6
15°	407.7	406.6	402.6	406.0	406.0
17.5°	398.8	398.2	394.3	397.6	397.1
20°	392.9	391.8	388.4	391.2	391.2
22.5°	385.6	385.0	381.5	383.9	384.4
25°	374.7	373.6	370.1	372.4	373.6
27.5°	362.6	361.7	358.9	360.4	361.1
30°	353.1	353.1	350.2	350.8	352.5
32.5°	344.4	344.4	341.1	341.7	342.5
35°	330.3	329.2	326.3	326.3	328.0
37.5°	313.9	313.3	311.5	311.2	311.6
40°	302.9	302.4	300.1	300.7	300.7
42.5°	292.0	291.5	289.2	288.4	289.3
45°	273.9	274.5	271.6	271.1	271.6
47.5°	256.0	256.0	253.7	252.2	253.1
50°	243.7	243.7	241.4	240.3	240.3
52.5°	231.0	231.4	228.7	227.1	227.6
55°	212.4	212.4	209.6	207.9	208.4
57.5°	191.9	191.9	189.1	187.4	188.4
60°	178.2	178.2	175.4	173.7	174.3
62.5°	164.6	164.6	161.7	160.0	160.1
65°	143.5	142.9	140.7	138.9	138.9
67.5°	123.2	121.8	120.0	117.8	117.8
70°	108.2	107.6	105.9	103.6	103.6
72.5°	94.5	93.5	91.8	90.0	90.0
75°	73.5	72.9	71.2	70.0	69.5
77.5°	52.6	52.2	52.0	50.5	50.9
80°	39.9	39.9	39.3	38.2	38.2
82.5°	28.5	28.9	27.9	27.7	27.2
85°	12.0	13.1	13.7	14.2	14.2
87.5°	2.5	4.3	5.0	4.5	4.5
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)