

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-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-PC3-050U-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

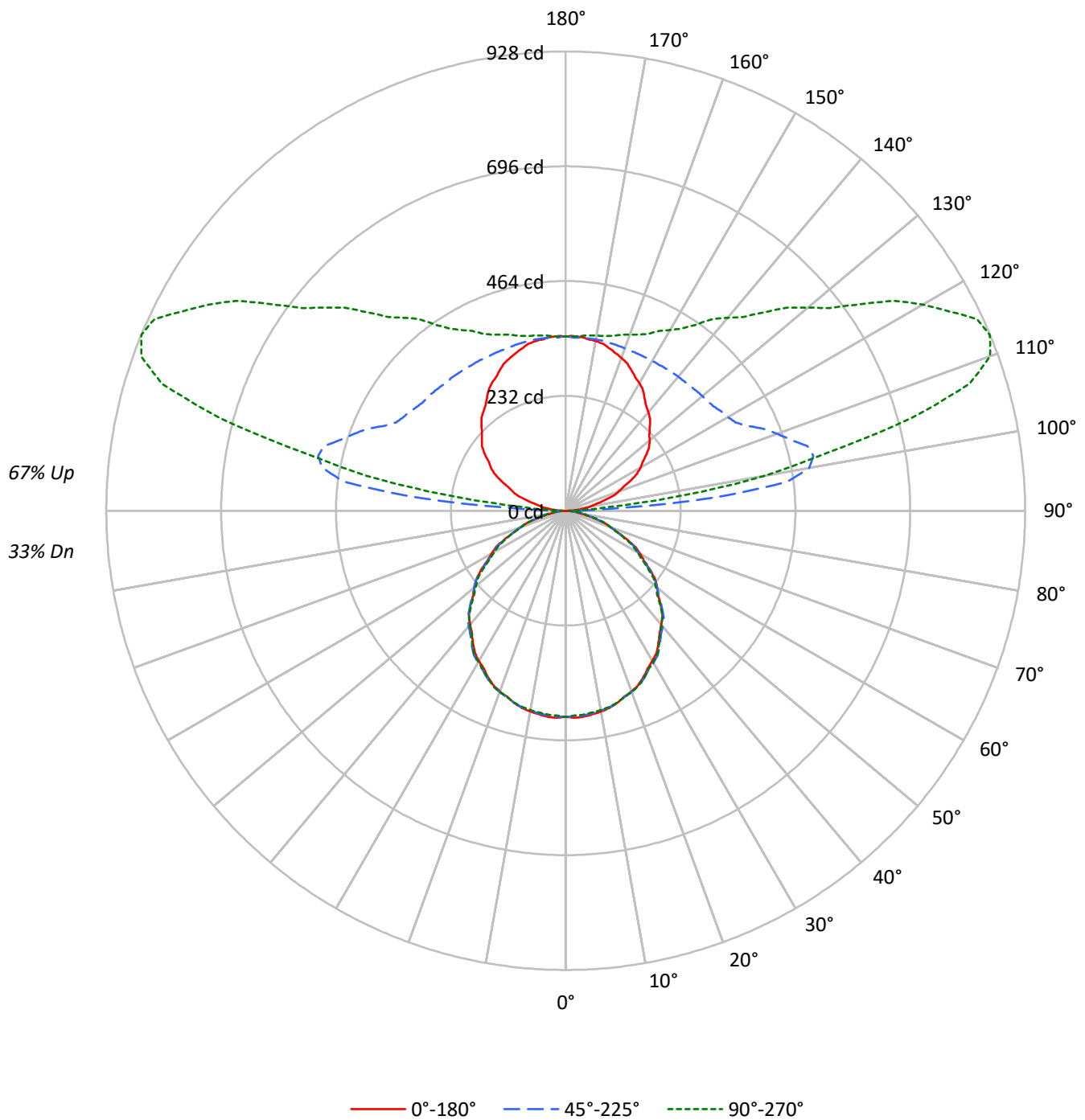
Lumens per Lamp: N/A
Luminaire Lumens: 3438.3 lumens
Efficiency: N/A
Efficacy: 76.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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	57	57	57	41	41	41
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34
2	86	78	72	67	77	71	66	62	57	53	50	44	41	39	32	30	29
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25
4	71	61	53	47	64	55	48	43	44	40	36	34	31	28	25	23	21
5	65	54	46	40	59	49	42	37	40	35	31	31	27	24	22	20	18
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16
7	55	43	36	30	50	40	33	28	32	27	23	25	21	19	18	16	14
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2561	2561	2561
5°	2580	2564	2554
10°	2574	2562	2554
15°	2560	2560	2558
20°	2544	2551	2551
25°	2519	2538	2530
30°	2489	2519	2508
35°	2452	2489	2472
40°	2411	2446	2421
45°	2368	2384	2348
50°	2305	2305	2269
55°	2233	2204	2170
60°	2124	2081	2048
65°	1963	1924	1908
70°	1719	1734	1726
75°	1383	1530	1540
80°	985	1296	1311
85°	600	1087	1087

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 2384 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.4	1.1
10°-20°	113.1	3.3
20°-30°	171.2	5.0
30°-40°	205.3	6.0
40°-50°	209.3	6.1
50°-60°	182.7	5.3
60°-70°	130.8	3.8
70°-80°	67.4	2.0
80°-90°	18.4	0.5
90°-100°	169.1	4.9
100°-110°	459.5	13.4
110°-120°	472.4	13.7
120°-130°	377.7	11.0
130°-140°	296.8	8.6
140°-150°	227.6	6.6
150°-160°	163.7	4.8
160°-170°	100.1	2.9
170°-180°	33.7	1.0
0°-30°	323.7	9.4
0°-40°	529.0	15.4
0°-60°	921.1	26.8
0°-90°	1137.7	33.1
90°-120°	1101.1	32.0
90°-150°	2003.2	58.3
90°-180°	2301.0	66.9
0°-180°	3438.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	416	416	416	416	416	
5°	418	414	415	414	414	40
15°	402	399	402	402	402	113
25°	371	369	374	373	373	171
35°	326	326	332	329	329	204
45°	272	271	274	271	270	210
55°	208	206	206	202	202	186
65°	135	132	132	131	131	133
75°	58	61	64	65	65	63
85°	8	13	15	16	15	12
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°	416.4	416.4	416.4	416.4	416.4
2.5°	418.8	415.2	416.4	415.4	413.9
5°	417.9	413.7	415.2	414.0	413.7
7.5°	414.9	410.7	412.7	411.9	411.5
10°	412.1	408.0	410.2	409.4	409.0
12.5°	408.4	404.6	407.1	406.3	406.3
15°	402.1	398.7	402.1	402.1	401.7
17.5°	394.1	391.1	394.7	394.9	394.7
20°	388.6	385.2	389.8	389.4	389.8
22.5°	381.8	379.0	383.9	382.9	383.3
25°	371.2	368.6	373.9	372.8	372.8
27.5°	358.8	356.9	362.7	361.5	361.5
30°	350.4	348.5	354.7	353.1	353.1
32.5°	341.2	339.9	345.7	343.9	343.9
35°	326.5	325.8	331.5	329.2	329.2
37.5°	311.4	310.7	316.0	313.2	312.3
40°	300.3	299.9	304.6	301.5	301.5
42.5°	289.2	288.8	292.8	289.1	289.1
45°	272.2	271.4	274.1	270.6	269.9
47.5°	253.6	252.8	254.5	250.7	250.4
50°	240.9	240.2	240.9	237.5	237.1
52.5°	228.0	226.6	226.8	223.3	223.2
55°	208.2	205.5	205.5	202.4	202.4
57.5°	187.2	183.7	184.0	181.4	181.0
60°	172.7	168.9	169.2	166.9	166.5
62.5°	158.5	154.2	155.1	152.4	152.4
65°	134.9	131.9	132.2	131.1	131.1
67.5°	112.3	109.5	111.5	110.6	110.5
70°	95.6	93.7	96.4	96.4	96.0
72.5°	80.2	80.1	83.4	83.4	83.7
75°	58.2	60.9	64.4	64.8	64.8
77.5°	38.9	43.5	47.4	47.6	47.5
80°	27.8	33.0	36.6	37.4	37.0
82.5°	18.8	24.4	27.4	28.1	27.8
85°	8.5	13.0	15.4	15.8	15.4
87.5°	2.7	6.1	7.8	8.2	7.6
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-PC3-050U-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)