

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-BB-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-BB-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

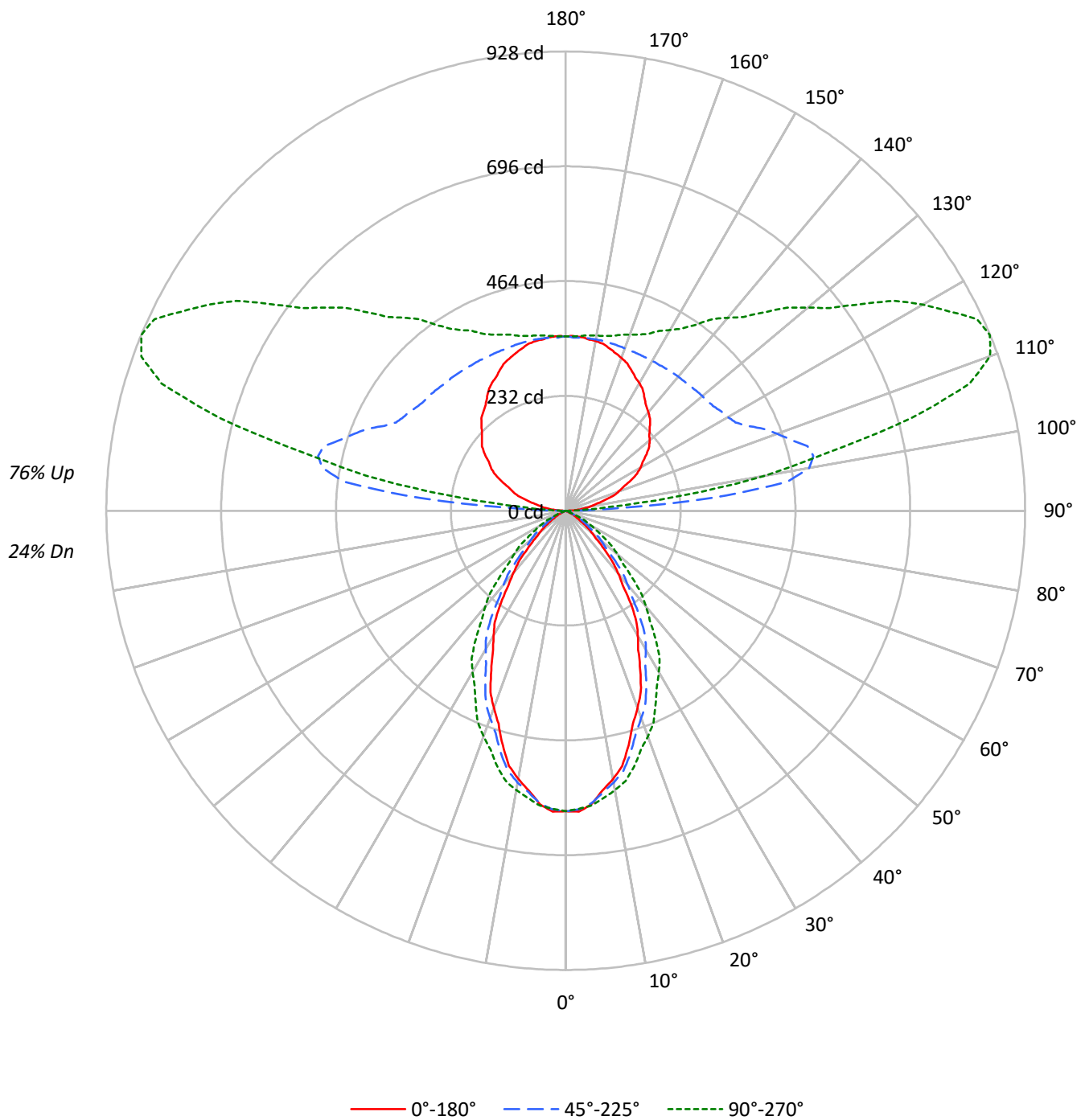
Lumens per Lamp: N/A
Luminaire Lumens: 3026.4 lumens
Efficiency: N/A
Efficacy: 67.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	93	89	86	82	82	79	77	74	61	60	58	45	44	43	30	29	29	22
2	85	79	73	69	76	70	66	62	55	52	49	40	39	37	27	26	26	20
3	78	70	63	58	70	63	57	53	49	45	43	37	34	32	25	24	23	18
4	72	62	55	50	64	56	50	46	44	40	37	33	31	29	23	22	20	16
5	66	56	49	43	59	50	44	40	40	36	32	30	27	25	21	20	18	15
6	61	50	43	38	55	45	39	35	36	32	29	28	25	23	19	18	17	13
7	57	46	38	33	51	41	35	31	33	29	25	25	22	20	18	16	15	12
8	53	41	34	30	47	38	32	27	30	26	23	23	20	18	17	15	14	11
9	49	38	31	26	44	34	29	24	28	24	21	22	19	17	16	14	13	10
10	46	35	28	24	41	32	26	22	26	21	19	20	17	15	15	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3735	3735	3735
5°	3675	3666	3693
10°	3439	3484	3582
15°	3126	3225	3405
20°	2775	2919	3175
25°	2417	2608	2917
30°	2070	2298	2673
35°	1716	1950	2378
40°	1318	1559	2027
45°	953	1180	1630
50°	650	880	1293
55°	423	636	1005
60°	242	448	727
65°	64	274	368
70°	32	85	106
75°	14	7	0
80°	11	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 1630 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.4	1.8
10°-20°	141.7	4.7
20°-30°	177.4	5.9
30°-40°	163.9	5.4
40°-50°	110.1	3.6
50°-60°	56.9	1.9
60°-70°	17.8	0.6
70°-80°	1.1	0.0
80°-90°	1.4	0.0
90°-100°	169.1	5.6
100°-110°	459.5	15.2
110°-120°	472.4	15.6
120°-130°	377.7	12.5
130°-140°	296.8	9.8
140°-150°	227.6	7.5
150°-160°	163.7	5.4
160°-170°	100.1	3.3
170°-180°	33.7	1.1
0°-30°	374.6	12.4
0°-40°	538.5	17.8
0°-60°	705.5	23.3
0°-90°	725.8	24.0
90°-120°	1101.1	36.4
90°-150°	2003.2	66.2
90°-180°	2301.0	76.0
0°-180°	3026.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	607	607	607	607	607	
5°	595	589	594	596	598	55
15°	491	489	506	524	535	137
25°	356	359	384	411	430	163
35°	229	234	260	290	317	142
45°	110	116	136	162	187	86
55°	39	46	59	76	94	37
65°	4	8	19	23	25	7
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
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°	607.3	607.3	607.3	607.3	607.3
2.5°	608.7	602.9	604.4	604.4	602.8
5°	595.2	589.2	593.8	595.9	598.2
7.5°	570.1	565.4	574.1	580.7	585.5
10°	550.6	546.5	557.9	566.9	573.5
12.5°	528.0	524.9	538.6	550.9	559.4
15°	490.9	489.2	506.5	523.5	534.7
17.5°	451.2	451.1	470.9	492.0	505.5
20°	423.9	424.8	446.0	469.3	485.1
22.5°	396.7	398.7	421.3	445.6	463.7
25°	356.1	358.9	384.3	410.6	429.8
27.5°	317.1	321.3	347.9	375.2	398.7
30°	291.4	296.3	323.5	352.2	376.3
32.5°	266.3	272.1	298.6	329.0	353.5
35°	228.6	234.3	259.7	290.3	316.7
37.5°	189.6	195.2	220.1	250.1	278.7
40°	164.2	170.5	194.2	223.4	252.4
42.5°	141.2	147.5	169.8	198.4	225.8
45°	109.6	116.2	135.7	162.2	187.4
47.5°	83.4	90.6	107.7	131.6	154.7
50°	67.9	75.0	92.0	113.0	135.1
52.5°	55.4	62.4	77.6	97.5	117.8
55°	39.4	46.0	59.3	76.2	93.7
57.5°	27.2	32.9	44.9	59.0	72.7
60°	19.7	25.1	36.4	47.8	59.1
62.5°	13.1	18.1	29.1	37.9	45.4
65°	4.4	8.4	18.8	22.7	25.3
67.5°	2.2	2.7	9.9	10.4	11.3
70°	1.8	1.8	4.7	5.0	5.9
72.5°	1.3	1.3	1.9	2.4	2.6
75°	0.6	0.6	0.3	0.0	0.0
77.5°	0.3	0.3	0.2	0.0	0.0
80°	0.3	0.3	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.9	1.6	2.0	2.0
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)