

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-WB-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-WB-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

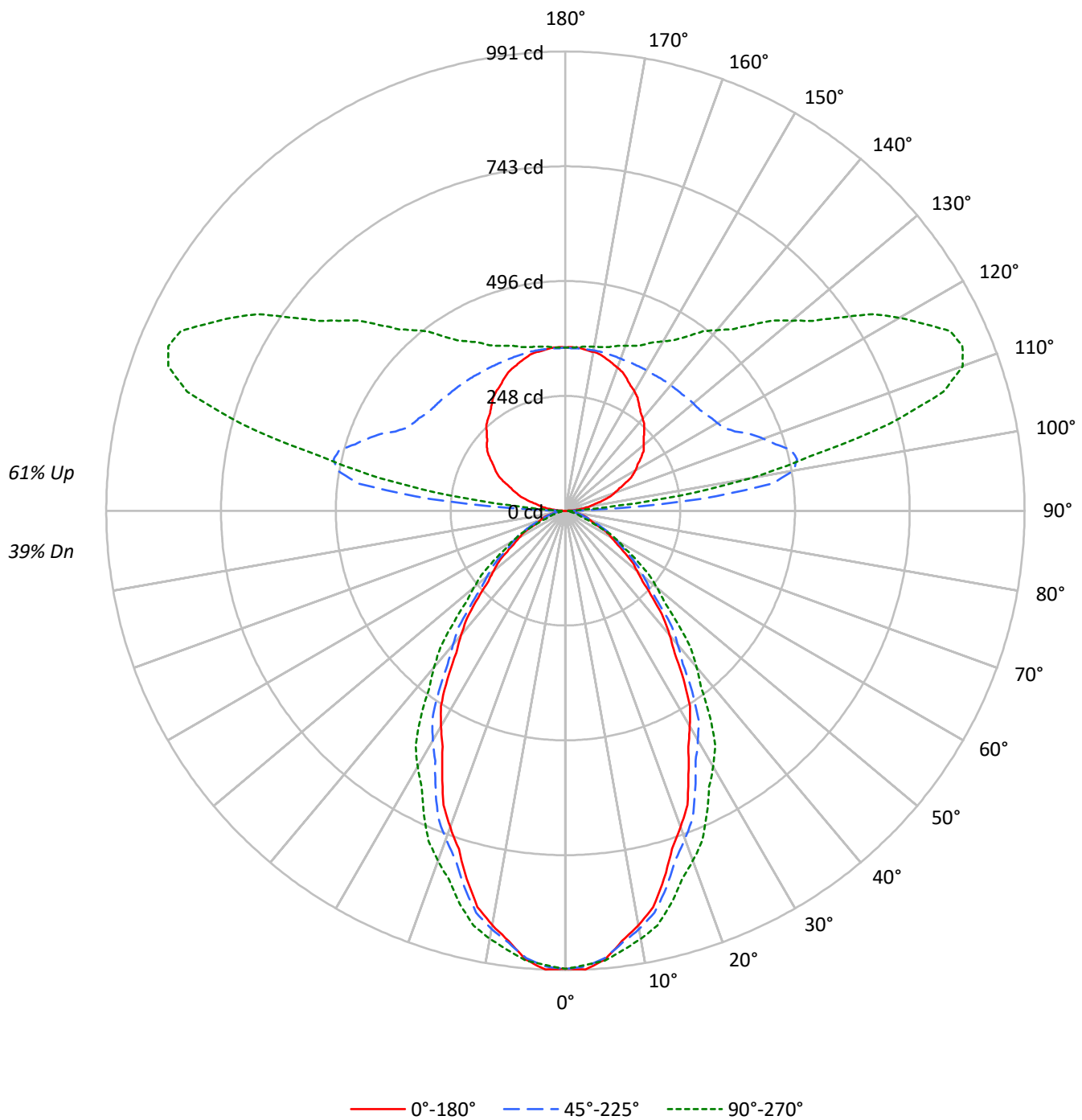
Lumens per Lamp: N/A
Luminaire Lumens: 3742.5 lumens
Efficiency: N/A
Efficacy: 64.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	96	92	89	86	87	84	81	78	69	67	65	55	53	52	42	41	40	34
2	88	82	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30
3	81	72	66	60	74	66	61	56	55	51	47	44	41	39	34	33	31	27
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	28	24
5	69	58	51	45	63	53	47	42	45	40	36	36	33	30	29	26	25	21
6	64	52	45	40	58	48	42	37	41	36	32	33	30	27	26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26	28	25	22	23	20	18	16
9	51	40	33	28	47	37	31	26	31	27	23	26	23	20	21	19	17	15
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6081	6081	6081
5°	6005	5984	6018
10°	5673	5725	5857
15°	5237	5358	5599
20°	4756	4935	5261
25°	4265	4498	4901
30°	3814	4064	4529
35°	3335	3576	4088
40°	2807	3030	3539
45°	2316	2516	2954
50°	1934	2109	2461
55°	1642	1809	2033
60°	1404	1568	1623
65°	1118	1320	1048
70°	991	1030	640
75°	917	834	392
80°	847	769	337
85°	762	706	275

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2954 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.7	2.4
10°-20°	235.9	6.3
20°-30°	305.5	8.2
30°-40°	299.2	8.0
40°-50°	229.0	6.1
50°-60°	152.6	4.1
60°-70°	83.3	2.2
70°-80°	34.7	0.9
80°-90°	11.2	0.3
90°-100°	169.1	4.5
100°-110°	459.5	12.3
110°-120°	472.4	12.6
120°-130°	377.7	10.1
130°-140°	296.8	7.9
140°-150°	227.6	6.1
150°-160°	163.7	4.4
160°-170°	100.1	2.7
170°-180°	33.7	0.9
0°-30°	632.0	16.9
0°-40°	931.2	24.9
0°-60°	1312.7	35.1
0°-90°	1441.9	38.5
90°-120°	1101.1	29.4
90°-150°	2003.2	53.5
90°-180°	2301.0	61.5
0°-180°	3742.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	989	989	989	989	989	
5°	972	963	969	971	975	90
15°	822	820	842	864	879	230
25°	628	630	663	692	722	289
35°	444	446	476	508	544	276
45°	266	271	289	311	340	208
55°	153	160	169	175	190	139
65°	77	83	91	79	72	80
75°	39	39	35	24	16	41
85°	11	11	10	6	4	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°	988.6	988.6	988.6	988.6	988.6
2.5°	991.0	982.2	984.4	984.4	981.6
5°	972.5	962.8	969.1	971.3	974.7
7.5°	936.4	929.1	940.5	949.0	955.9
10°	908.3	902.0	916.6	928.9	937.8
12.5°	875.7	870.4	888.5	905.0	916.7
15°	822.4	819.5	841.5	864.4	879.3
17.5°	765.4	764.0	789.3	816.0	835.0
20°	726.6	726.2	753.9	781.7	803.8
22.5°	687.4	688.3	717.5	746.4	771.5
25°	628.5	630.2	662.8	691.7	722.2
27.5°	574.1	574.9	608.6	639.1	671.7
30°	537.0	539.1	572.2	603.7	637.7
32.5°	499.9	502.3	534.7	567.3	601.9
35°	444.2	446.3	476.3	508.3	544.4
37.5°	386.8	389.6	416.3	446.6	482.0
40°	349.6	353.9	377.4	405.9	440.7
42.5°	313.9	319.1	340.9	368.0	399.4
45°	266.3	271.4	289.3	311.2	339.6
47.5°	225.4	231.2	245.0	263.9	288.1
50°	202.1	207.7	220.4	234.3	257.2
52.5°	181.7	187.2	198.5	209.3	228.8
55°	153.1	159.5	168.7	175.1	189.6
57.5°	129.7	135.8	143.1	146.0	154.8
60°	114.1	120.9	127.5	127.2	131.9
62.5°	99.9	105.6	112.3	107.7	107.9
65°	76.8	83.1	90.7	79.2	72.0
67.5°	62.0	63.4	71.1	55.2	46.7
70°	55.1	55.1	57.3	42.8	35.6
72.5°	48.5	48.5	46.5	34.8	27.2
75°	38.6	38.6	35.1	24.1	16.5
77.5°	29.8	29.4	26.9	18.0	12.0
80°	23.9	23.9	21.7	14.2	9.5
82.5°	18.7	18.7	16.8	11.1	7.1
85°	10.8	10.8	10.0	6.4	3.9
87.5°	4.0	4.7	5.1	4.1	3.8
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)