

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-PW1-050U-125D-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-PW1-050U-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

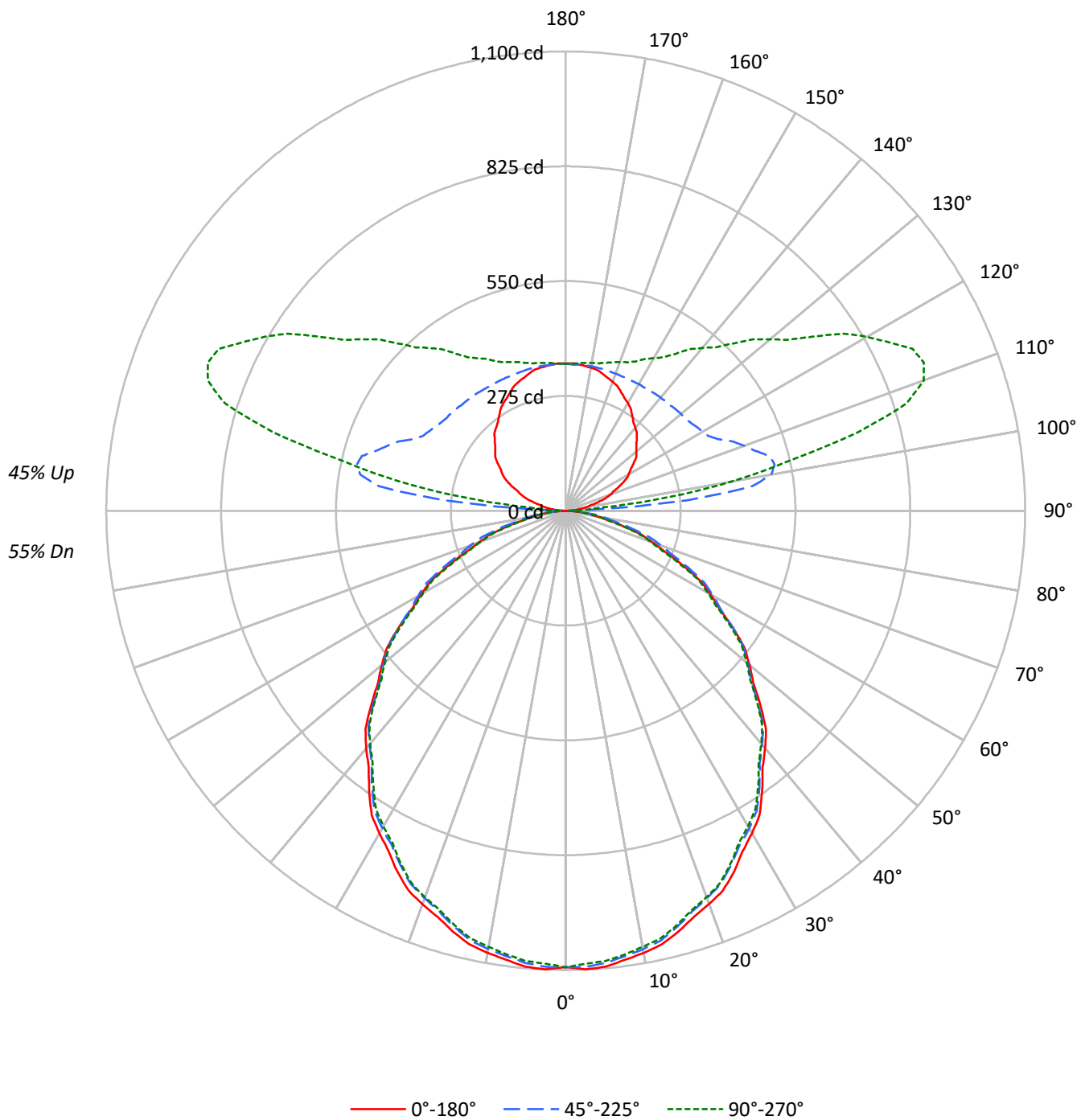
Lumens per Lamp: N/A
Luminaire Lumens: 5084.1 lumens
Efficiency: N/A
Efficacy: 57.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 87.8
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
RCR																	
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	99	95	91	87	92	88	85	82	76	73	71	64	62	61	54	52	51
2	90	83	77	71	83	77	72	67	66	62	59	56	54	51	47	45	43
3	82	73	65	60	76	68	61	56	59	54	50	50	46	43	42	39	37
4	75	64	57	50	70	60	53	48	52	47	42	45	40	37	38	34	32
5	69	58	49	43	64	54	46	41	47	41	37	40	36	32	34	31	28
6	64	52	43	38	59	48	41	36	42	36	32	36	32	28	31	27	25
7	59	47	39	33	55	44	36	31	38	32	28	33	28	25	28	25	22
8	55	42	35	29	51	40	33	28	35	29	25	30	26	22	26	22	20
9	51	39	31	26	47	36	30	25	32	26	22	28	23	20	24	20	18
10	48	36	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6726	6726	6726
5°	6769	6716	6686
10°	6715	6661	6625
15°	6644	6570	6546
20°	6565	6464	6451
25°	6473	6355	6336
30°	6336	6240	6200
35°	6156	6069	6033
40°	5964	5871	5848
45°	5732	5657	5631
50°	5494	5449	5411
55°	5238	5238	5155
60°	4918	5013	4836
65°	4502	4726	4389
70°	3967	4348	3863
75°	3389	3893	3296
80°	2628	3276	2660
85°	1701	2512	2244

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5732 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	2.0
10°-20°	290.7	5.7
20°-30°	431.2	8.5
30°-40°	504.6	9.9
40°-50°	502.3	9.9
50°-60°	433.8	8.5
60°-70°	312.2	6.1
70°-80°	163.7	3.2
80°-90°	42.0	0.8
90°-100°	169.1	3.3
100°-110°	459.5	9.0
110°-120°	472.4	9.3
120°-130°	377.7	7.4
130°-140°	296.8	5.8
140°-150°	227.6	4.5
150°-160°	163.7	3.2
160°-170°	100.1	2.0
170°-180°	33.7	0.7
0°-30°	824.9	16.2
0°-40°	1329.5	26.1
0°-60°	2265.5	44.6
0°-90°	2783.5	54.7
90°-120°	1101.1	21.7
90°-150°	2003.2	39.4
90°-180°	2301.0	45.3
0°-180°	5084.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1094	1094	1094	1094	1094	
5°	1096	1084	1088	1085	1083	104
15°	1043	1030	1032	1030	1028	294
25°	954	938	936	931	934	439
35°	820	809	808	801	804	513
45°	659	653	650	648	647	508
55°	488	488	488	482	481	436
65°	309	319	325	312	302	306
75°	143	156	164	153	139	153
85°	24	32	36	34	32	32
90°	1	4	8	10	10	3
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	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1093.5	1093.5	1093.5	1093.5	1093.5
2.5°	1099.6	1090.6	1093.5	1091.0	1085.8
5°	1096.4	1084.1	1087.7	1084.8	1082.9
7.5°	1085.2	1073.9	1076.5	1073.4	1072.3
10°	1075.2	1063.9	1066.5	1062.6	1060.7
12.5°	1063.6	1051.6	1054.2	1050.3	1049.2
15°	1043.4	1030.2	1031.8	1029.9	1028.0
17.5°	1019.9	1006.5	1006.8	1003.7	1003.3
20°	1002.9	988.8	987.5	983.7	985.6
22.5°	984.4	969.5	968.2	962.9	965.5
25°	953.8	937.8	936.4	930.7	933.6
27.5°	918.3	902.5	902.5	894.5	897.5
30°	892.1	877.1	878.6	869.1	872.9
32.5°	864.4	850.8	851.7	842.1	845.9
35°	819.9	808.6	808.3	800.7	803.5
37.5°	774.4	764.4	762.8	758.4	759.2
40°	742.8	734.3	731.2	728.3	728.3
42.5°	709.7	701.9	698.9	696.7	696.0
45°	659.0	653.3	650.3	648.4	647.4
47.5°	608.9	603.6	601.0	599.6	598.7
50°	574.2	570.4	569.4	566.5	565.5
52.5°	539.5	537.3	536.2	532.6	531.6
55°	488.5	487.5	488.5	481.7	480.7
57.5°	435.3	436.8	439.9	430.8	428.5
60°	399.8	403.6	407.5	396.8	393.1
62.5°	363.6	369.6	375.2	362.9	357.6
65°	309.3	318.7	324.7	311.9	301.6
67.5°	256.8	268.5	275.7	262.0	250.3
70°	220.6	233.8	241.8	228.0	214.8
72.5°	189.0	203.7	210.2	197.2	184.0
75°	142.6	155.8	163.8	152.9	138.7
77.5°	101.2	113.6	120.2	110.7	99.0
80°	74.2	87.4	92.5	84.6	75.1
82.5°	52.6	63.5	67.1	62.3	55.9
85°	24.1	31.6	35.6	33.7	31.8
87.5°	6.4	12.3	16.2	16.7	17.5
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:

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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)