

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-PW1-025U-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 (G3-1910-536-32)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-025U-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

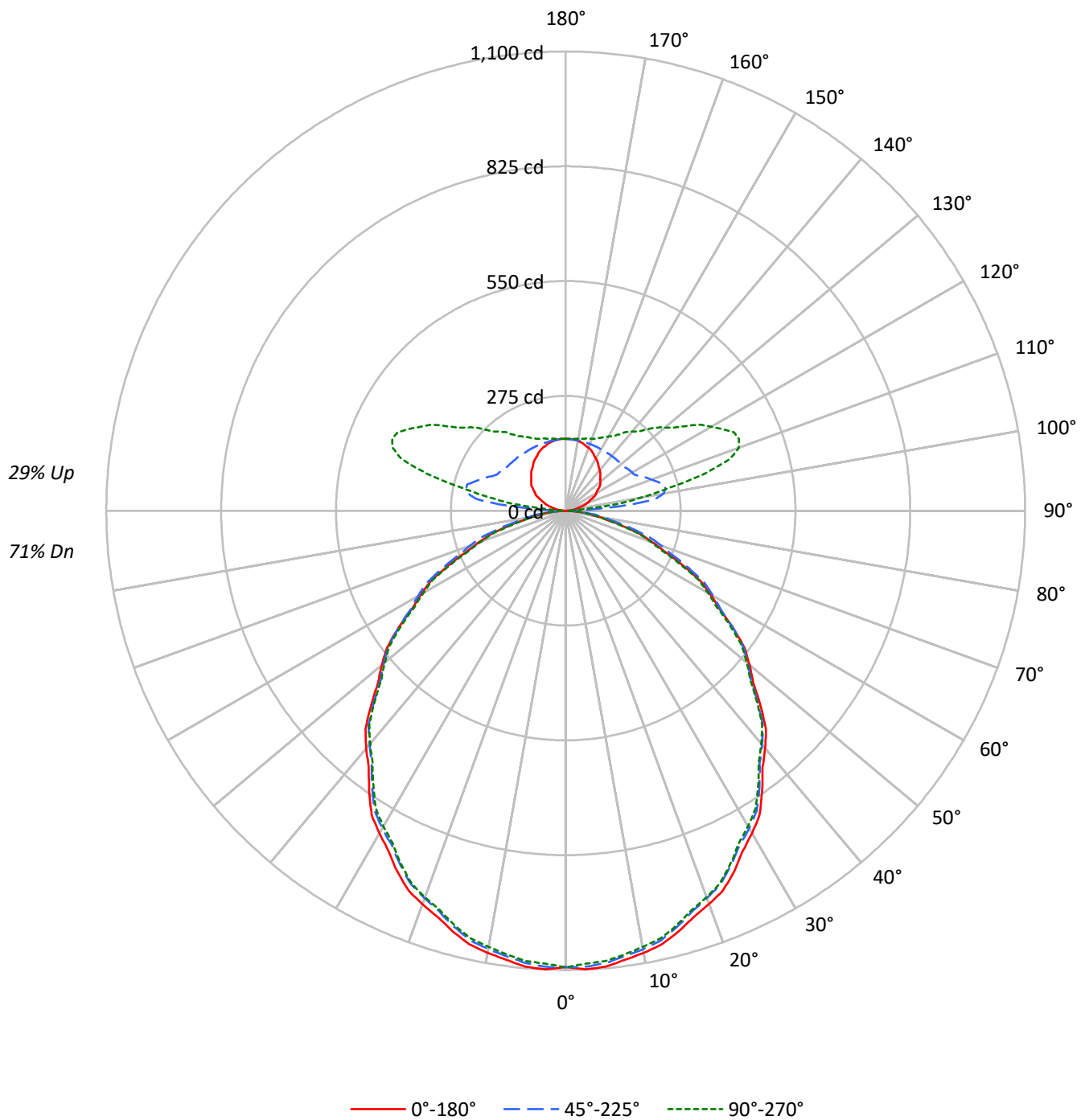
Lumens per Lamp: N/A
Luminaire Lumens: 3898.6 lumens
Efficiency: N/A
Efficacy: 50.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 77.9
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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76
1	103	98	94	91	97	93	90	87	84	81	79	75	73	71	67	66	64
2	94	86	80	74	88	82	76	71	74	69	65	66	63	60	59	57	54
3	86	76	68	62	81	72	65	60	65	60	55	59	54	51	53	49	46
4	78	67	59	53	74	64	57	51	58	52	47	52	47	44	47	43	40
5	72	60	52	45	68	57	50	44	52	46	41	47	42	38	42	38	35
6	66	54	46	40	63	52	44	38	47	41	36	43	37	33	39	34	31
7	62	49	41	35	58	47	39	34	43	36	32	39	34	30	35	31	27
8	57	45	37	31	54	43	35	30	39	33	28	36	30	26	32	28	25
9	53	41	33	28	51	39	32	27	36	30	25	33	28	24	30	26	22
10	50	38	30	25	47	36	29	24	33	27	23	30	25	22	28	23	20

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	2.6
10°-20°	290.7	7.5
20°-30°	431.2	11.1
30°-40°	504.6	12.9
40°-50°	502.3	12.9
50°-60°	433.8	11.1
60°-70°	312.2	8.0
70°-80°	163.7	4.2
80°-90°	41.5	1.1
90°-100°	83.9	2.2
100°-110°	220.5	5.7
110°-120°	228.7	5.9
120°-130°	183.4	4.7
130°-140°	143.9	3.7
140°-150°	110.5	2.8
150°-160°	79.6	2.0
160°-170°	48.7	1.2
170°-180°	16.4	0.4
0°-30°	824.9	21.2
0°-40°	1329.5	34.1
0°-60°	2265.5	58.1
0°-90°	2783.0	71.4
90°-120°	533.1	13.7
90°-150°	970.9	24.9
90°-180°	1116.0	28.6
0°-180°	3898.6	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	3	9	4	4	2
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°	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	12.1	16.4	15.5	16.3
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)