

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-F-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, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-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

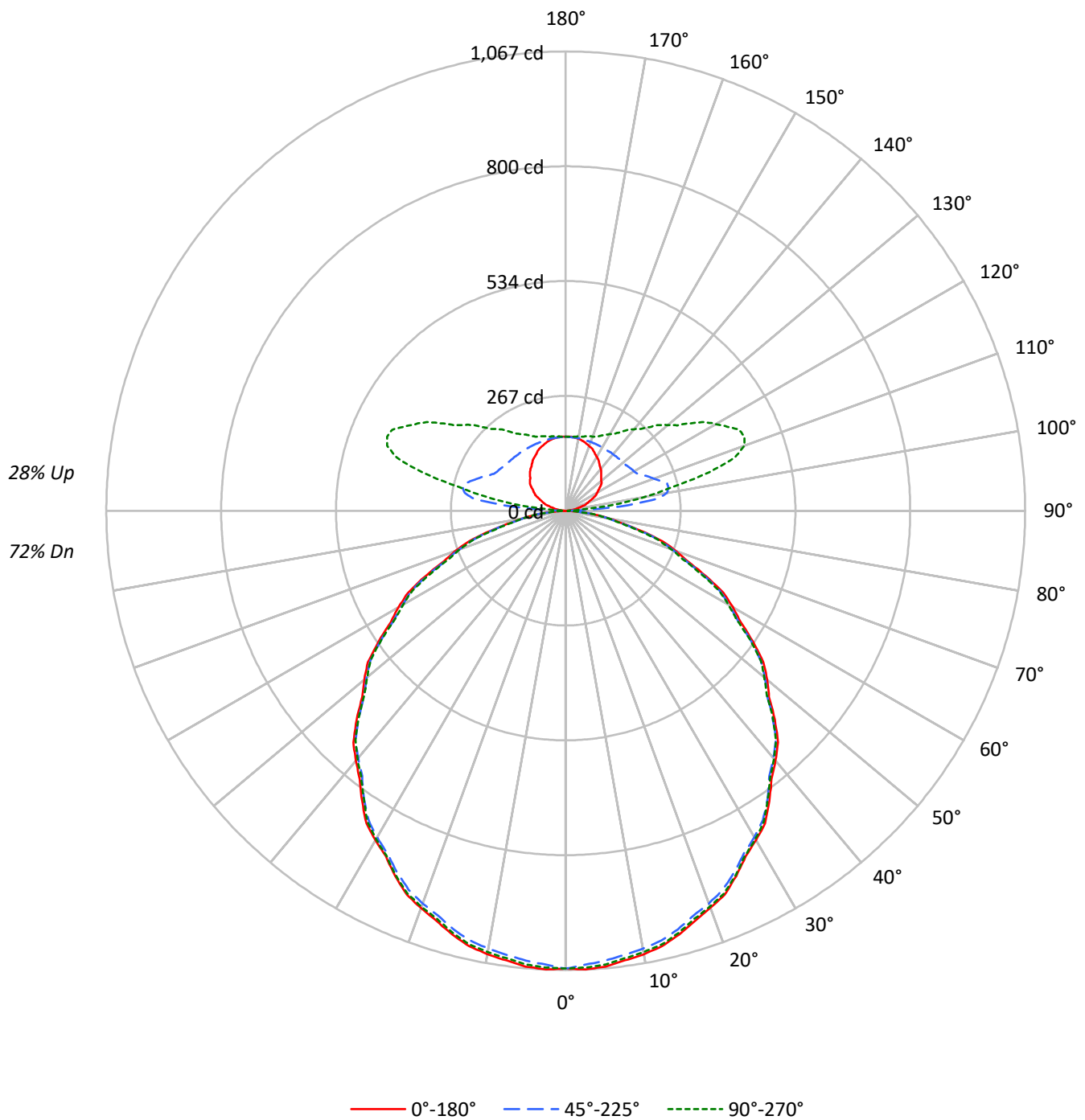
Lumens per Lamp: N/A
Luminaire Lumens: 4018.2 lumens
Efficiency: N/A
Efficacy: 51.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

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	107	107	107	107	96	96	96	86	86	86	77	77	77
1	103	98	94	91	97	93	90	87	84	81	79	76	73	72	68	66	65
2	94	86	79	74	88	82	76	71	74	69	65	66	63	60	59	57	54
3	85	75	68	61	80	72	65	59	65	59	55	58	54	50	53	49	46
4	78	67	58	52	74	64	56	50	58	51	47	52	47	43	47	43	40
5	72	59	51	45	68	57	49	43	52	45	40	47	41	37	42	38	34
6	66	53	45	39	62	51	43	38	46	40	35	42	37	33	38	34	30
7	61	48	40	34	58	46	39	33	42	36	31	38	33	29	35	30	27
8	57	44	36	30	54	42	35	29	39	32	28	35	30	26	32	27	24
9	53	40	32	27	50	39	31	26	35	29	25	32	27	23	30	25	22
10	50	37	29	24	47	35	28	24	33	27	22	30	25	21	27	23	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6542	6542	6542
5°	6563	6480	6534
10°	6533	6452	6504
15°	6489	6411	6463
20°	6429	6356	6406
25°	6356	6289	6340
30°	6278	6224	6256
35°	6189	6135	6140
40°	6086	6020	6040
45°	5972	5906	5917
50°	5842	5775	5758
55°	5693	5612	5599
60°	5509	5386	5357
65°	5222	5111	5043
70°	4863	4737	4674
75°	4325	4228	4104
80°	3524	3422	3400
85°	2110	2392	2392

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5972 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.3	2.5
10°-20°	285.8	7.1
20°-30°	429.4	10.7
30°-40°	512.3	12.8
40°-50°	525.2	13.1
50°-60°	468.1	11.6
60°-70°	348.4	8.7
70°-80°	188.8	4.7
80°-90°	44.3	1.1
90°-100°	83.9	2.1
100°-110°	220.5	5.5
110°-120°	228.7	5.7
120°-130°	183.4	4.6
130°-140°	143.9	3.6
140°-150°	110.5	2.7
150°-160°	79.6	2.0
160°-170°	48.7	1.2
170°-180°	16.4	0.4
0°-30°	815.5	20.3
0°-40°	1327.9	33.0
0°-60°	2321.1	57.8
0°-90°	2902.6	72.2
90°-120°	533.1	13.3
90°-150°	970.9	24.2
90°-180°	1116.0	27.8
0°-180°	4018.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1063	1061	1050	1059	1058	101
15°	1019	1017	1007	1016	1015	287
25°	936	935	927	932	934	431
35°	824	824	817	817	818	515
45°	687	685	679	678	680	529
55°	531	529	523	519	522	474
65°	359	356	351	349	346	355
75°	182	182	178	174	173	193
85°	30	34	34	34	34	41
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°	1063.6	1063.6	1063.6	1063.6	1063.6
2.5°	1066.8	1065.0	1055.6	1063.5	1062.2
5°	1063.0	1061.3	1049.5	1058.9	1058.3
7.5°	1054.0	1051.8	1041.1	1049.8	1048.8
10°	1046.0	1044.3	1033.1	1041.9	1041.3
12.5°	1036.2	1034.5	1023.3	1032.1	1032.0
15°	1019.1	1016.8	1006.8	1015.6	1015.0
17.5°	998.6	996.0	986.1	993.0	994.1
20°	982.2	980.5	971.1	977.5	978.7
22.5°	965.3	963.2	953.3	960.7	961.8
25°	936.5	934.8	926.6	931.9	934.2
27.5°	904.9	904.9	897.3	901.1	902.5
30°	883.9	883.9	876.3	878.6	880.9
32.5°	861.4	859.6	852.4	854.3	856.6
35°	824.2	823.6	817.1	817.1	817.7
37.5°	785.6	784.0	777.0	777.5	780.3
40°	758.0	756.9	749.8	749.9	752.2
42.5°	729.9	728.8	722.7	721.7	722.7
45°	686.6	684.9	679.0	677.9	680.2
47.5°	640.5	640.9	633.9	632.3	633.6
50°	610.5	610.5	603.5	600.0	601.7
52.5°	579.1	578.2	571.2	567.3	571.3
55°	530.9	529.2	523.3	519.3	522.1
57.5°	481.5	478.9	473.0	468.5	470.1
60°	447.8	443.8	437.8	434.3	435.5
62.5°	412.7	410.5	404.1	398.8	401.3
65°	358.8	356.5	351.2	348.8	346.5
67.5°	306.0	304.5	298.5	296.0	294.5
70°	270.4	267.6	263.4	260.5	259.9
72.5°	235.8	232.5	228.3	225.8	224.3
75°	182.0	182.0	177.9	174.4	172.7
77.5°	130.9	131.3	128.0	126.8	126.0
80°	99.5	99.5	96.6	95.4	96.0
82.5°	69.5	70.9	69.9	68.2	67.4
85°	29.9	33.9	33.9	34.5	33.9
87.5°	5.4	9.0	10.7	8.8	7.9
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)