

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-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-BB-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

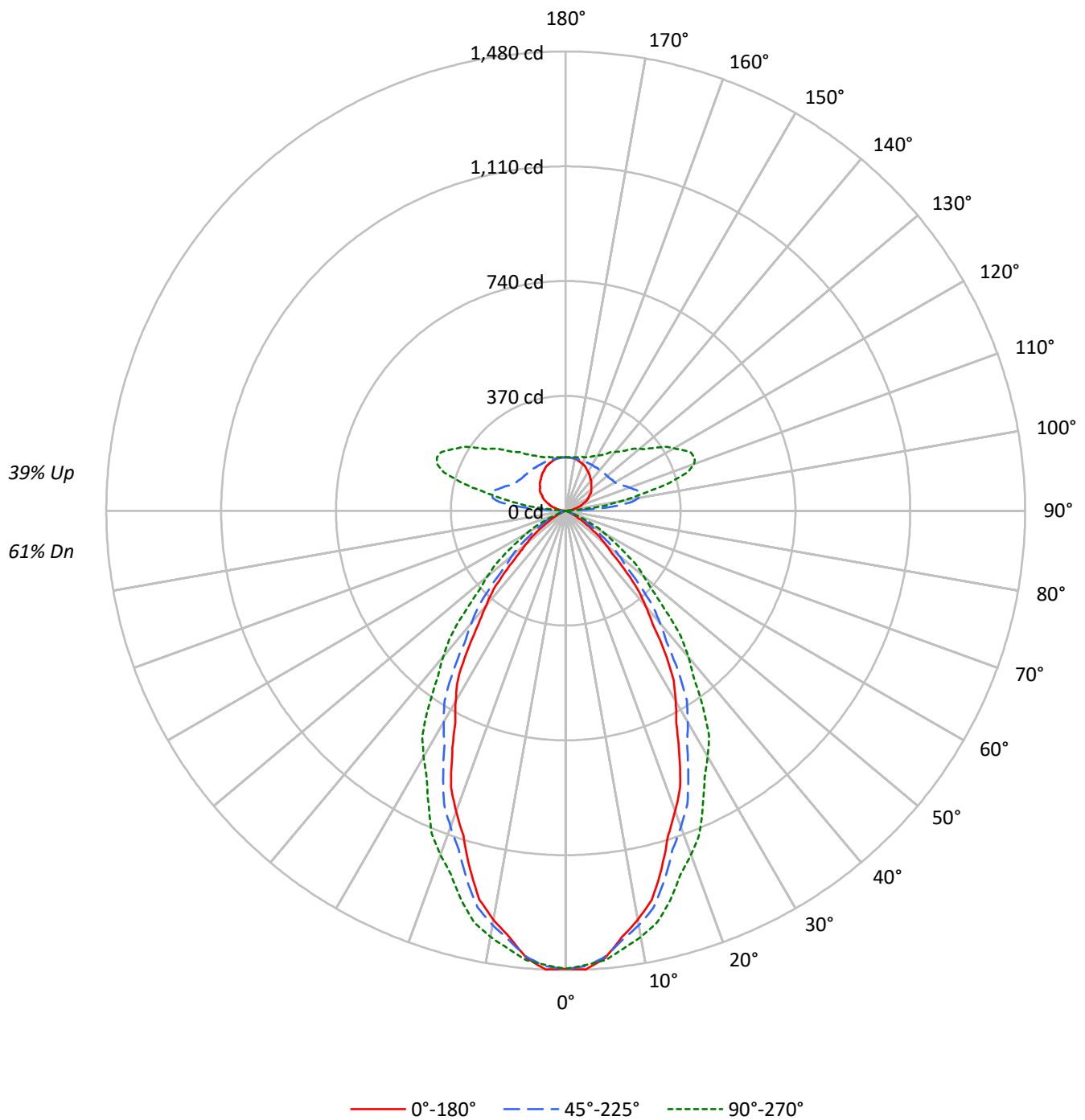
Lumens per Lamp: N/A
Luminaire Lumens: 2877.8 lumens
Efficiency: N/A
Efficacy: 36.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	66	66	66
1	102	99	96	93	96	93	90	88	82	80	78	72	70	69	62	61	60
2	95	89	84	80	89	84	80	76	74	71	68	66	63	61	57	56	54
3	88	80	74	69	83	76	71	66	68	64	60	60	57	55	53	51	49
4	82	73	66	61	77	69	63	58	62	57	54	55	52	49	49	46	44
5	76	66	59	54	72	63	57	52	57	52	48	51	47	44	45	43	40
6	71	61	53	48	67	58	51	47	52	47	43	47	43	40	42	39	37
7	67	56	48	43	63	53	47	42	48	43	39	44	39	36	39	36	34
8	62	51	44	39	59	49	43	38	45	39	36	40	36	33	37	33	31
9	58	47	41	36	55	45	39	35	41	36	33	38	34	31	34	31	29
10	55	44	37	33	52	42	36	32	39	34	30	35	31	28	32	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9082	9082	9082
5°	8935	8913	8980
10°	8360	8472	8709
15°	7601	7842	8279
20°	6747	7097	7719
25°	5876	6341	7093
30°	5033	5586	6499
35°	4173	4742	5782
40°	3206	3791	4927
45°	2317	2871	3964
50°	1579	2140	3144
55°	1026	1547	2444
60°	589	1090	1767
65°	156	665	894
70°	77	205	257
75°	33	17	0
80°	25	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3964 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.7	4.7
10°-20°	344.6	12.0
20°-30°	431.4	15.0
30°-40°	398.5	13.8
40°-50°	267.7	9.3
50°-60°	138.3	4.8
60°-70°	43.3	1.5
70°-80°	2.7	0.1
80°-90°	1.0	0.0
90°-100°	83.9	2.9
100°-110°	220.5	7.7
110°-120°	228.7	7.9
120°-130°	183.4	6.4
130°-140°	143.9	5.0
140°-150°	110.5	3.8
150°-160°	79.6	2.8
160°-170°	48.7	1.7
170°-180°	16.4	0.6
0°-30°	910.7	31.6
0°-40°	1309.2	45.5
0°-60°	1715.2	59.6
0°-90°	1762.2	61.2
90°-120°	533.1	18.5
90°-150°	970.9	33.7
90°-180°	1116.0	38.8
0°-180°	2877.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1476	1476	1476	1476	1476	
5°	1447	1432	1444	1449	1454	134
15°	1194	1189	1232	1273	1300	332
25°	866	873	934	998	1045	397
35°	556	570	632	706	770	344
45°	266	282	330	394	456	209
55°	96	112	144	185	228	89
65°	11	20	46	55	61	18
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	3	9	4	4	1
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	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1476.5	1476.5	1476.5	1476.5	1476.5
2.5°	1479.9	1466.0	1469.6	1469.6	1465.6
5°	1447.2	1432.5	1443.6	1448.8	1454.4
7.5°	1386.1	1374.6	1395.9	1411.9	1423.5
10°	1338.6	1328.9	1356.5	1378.3	1394.4
12.5°	1283.8	1276.2	1309.6	1339.5	1360.1
15°	1193.6	1189.4	1231.5	1272.8	1300.1
17.5°	1097.1	1096.9	1144.9	1196.2	1229.1
20°	1030.8	1032.9	1084.3	1140.9	1179.3
22.5°	964.5	969.4	1024.3	1083.3	1127.3
25°	865.8	872.7	934.3	998.3	1045.1
27.5°	770.9	781.1	845.9	912.3	969.3
30°	708.6	720.5	786.5	856.4	915.0
32.5°	647.5	661.6	725.9	799.8	859.6
35°	555.7	569.7	631.5	705.8	770.0
37.5°	461.0	474.7	535.0	608.2	677.6
40°	399.3	414.7	472.2	543.1	613.6
42.5°	343.3	358.7	412.7	482.4	549.0
45°	266.4	282.5	330.0	394.3	455.7
47.5°	202.7	220.2	261.9	320.0	376.0
50°	165.0	182.5	223.6	274.8	328.6
52.5°	134.7	151.6	188.7	237.0	286.3
55°	95.7	111.8	144.3	185.3	227.9
57.5°	66.1	80.0	109.1	143.3	176.7
60°	47.9	61.1	88.6	116.3	143.6
62.5°	31.9	44.0	70.9	92.1	110.4
65°	10.7	20.5	45.7	55.1	61.4
67.5°	5.4	6.5	24.0	25.3	27.4
70°	4.3	4.3	11.4	12.2	14.3
72.5°	3.1	3.1	4.6	5.9	6.3
75°	1.4	1.4	0.7	0.0	0.0
77.5°	0.7	0.7	0.6	0.0	0.0
80°	0.7	0.7	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	0.7	1.8	0.9	0.9
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)