

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-125U-050D-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 (G3-1910-536-24)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-125U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

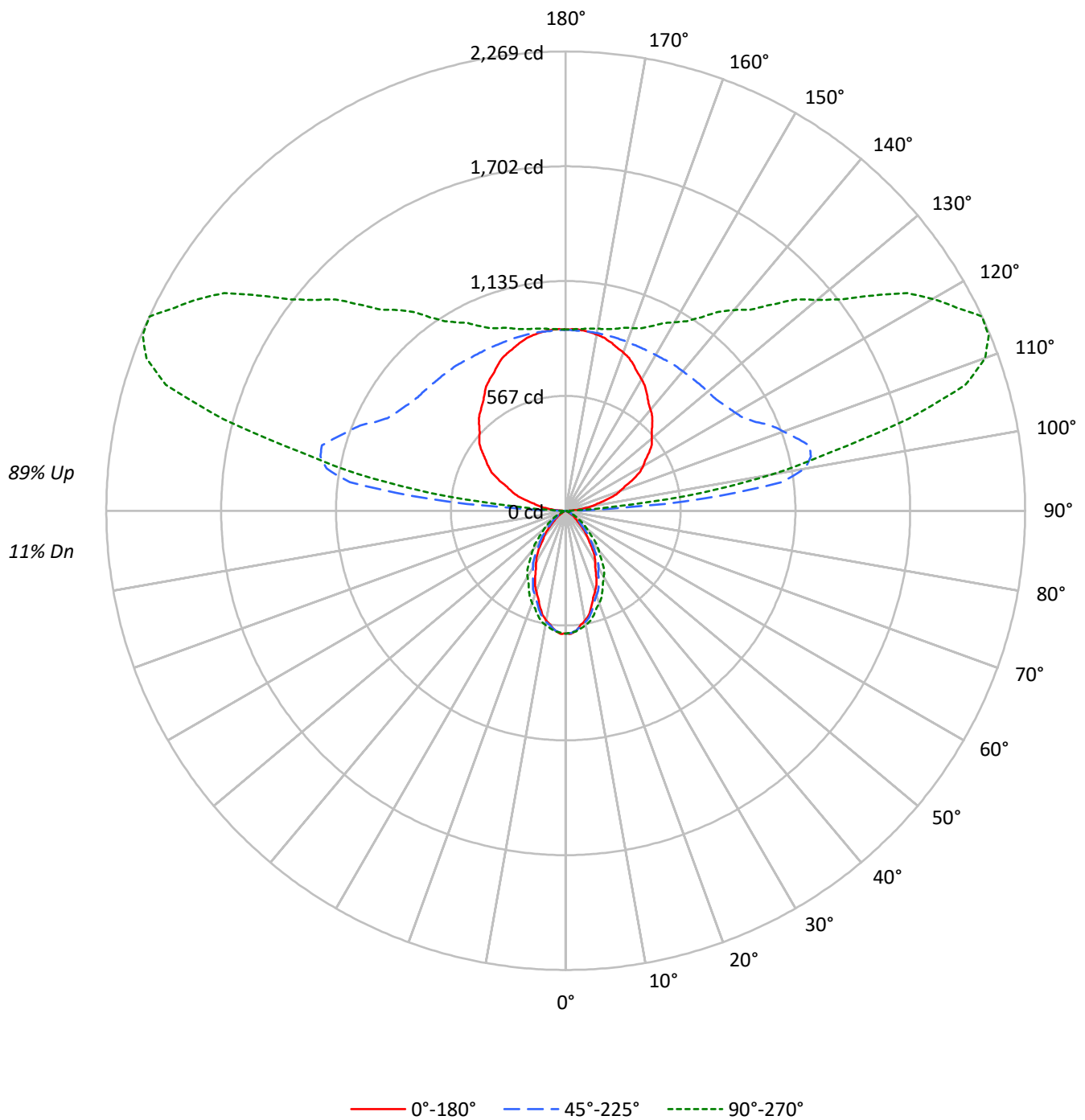
Lumens per Lamp: N/A
Luminaire Lumens: 6500.7 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 74.2
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	98	98	98	98	85	85	85	85	62	62	62	40	40	40	20	20	20	11
1	89	86	82	79	78	75	72	69	54	53	51	36	35	34	19	18	18	10
2	82	75	70	65	71	66	61	57	48	45	43	32	30	29	17	16	16	9
3	75	66	60	54	65	58	53	48	43	39	36	29	27	25	15	15	14	8
4	68	59	52	46	60	52	46	41	38	34	31	26	23	22	14	13	12	8
5	63	52	45	40	55	46	40	35	34	30	27	23	21	19	13	12	11	7
6	58	47	39	34	50	41	35	31	31	27	24	21	18	17	12	11	10	6
7	53	42	35	30	46	37	31	27	28	24	21	19	17	15	11	10	9	6
8	49	38	31	26	43	34	28	24	25	21	18	17	15	13	10	9	8	5
9	46	35	28	23	40	31	25	21	23	19	16	16	14	12	9	8	7	5
10	43	32	25	21	37	28	22	19	21	17	15	15	12	11	9	7	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3735	3735	3735
5°	3675	3666	3693
10°	3439	3484	3582
15°	3126	3225	3405
20°	2775	2919	3175
25°	2417	2608	2917
30°	2070	2298	2673
35°	1716	1950	2378
40°	1318	1559	2027
45°	953	1180	1630
50°	650	880	1293
55°	423	636	1005
60°	242	448	727
65°	64	274	368
70°	32	85	106
75°	14	7	0
80°	11	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 1630 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.4	0.9
10°-20°	141.7	2.2
20°-30°	177.4	2.7
30°-40°	163.9	2.5
40°-50°	110.1	1.7
50°-60°	56.9	0.9
60°-70°	17.8	0.3
70°-80°	1.1	0.0
80°-90°	2.1	0.0
90°-100°	418.4	6.4
100°-110°	1127.1	17.3
110°-120°	1182.9	18.2
120°-130°	959.9	14.8
130°-140°	752.8	11.6
140°-150°	578.0	8.9
150°-160°	415.6	6.4
160°-170°	253.9	3.9
170°-180°	85.6	1.3
0°-30°	374.6	5.8
0°-40°	538.5	8.3
0°-60°	705.5	10.9
0°-90°	726.5	11.2
90°-120°	2728.4	42.0
90°-150°	5019.1	77.2
90°-180°	5774.0	88.8
0°-180°	6500.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	607	607	607	607	607	
5°	595	589	594	596	598	55
15°	491	489	506	524	535	137
25°	356	359	384	411	430	163
35°	229	234	260	290	317	142
45°	110	116	136	162	187	86
55°	39	46	59	76	94	37
65°	4	8	19	23	25	7
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	2	7	14	15	15	5
95°	64	228	686	351	243	67
105°	208	324	1246	1865	1750	219
115°	368	450	1038	2006	2269	362
125°	502	577	932	1575	1854	449
135°	605	675	906	1271	1439	467
145°	700	754	894	1087	1167	439
155°	794	823	886	975	1006	366
165°	861	871	890	925	930	243
175°	896	894	891	904	901	85
180°	894	894	894	894	894	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	607.3	607.3	607.3	607.3	607.3
2.5°	608.7	602.9	604.4	604.4	602.8
5°	595.2	589.2	593.8	595.9	598.2
7.5°	570.1	565.4	574.1	580.7	585.5
10°	550.6	546.5	557.9	566.9	573.5
12.5°	528.0	524.9	538.6	550.9	559.4
15°	490.9	489.2	506.5	523.5	534.7
17.5°	451.2	451.1	470.9	492.0	505.5
20°	423.9	424.8	446.0	469.3	485.1
22.5°	396.7	398.7	421.3	445.6	463.7
25°	356.1	358.9	384.3	410.6	429.8
27.5°	317.1	321.3	347.9	375.2	398.7
30°	291.4	296.3	323.5	352.2	376.3
32.5°	266.3	272.1	298.6	329.0	353.5
35°	228.6	234.3	259.7	290.3	316.7
37.5°	189.6	195.2	220.1	250.1	278.7
40°	164.2	170.5	194.2	223.4	252.4
42.5°	141.2	147.5	169.8	198.4	225.8
45°	109.6	116.2	135.7	162.2	187.4
47.5°	83.4	90.6	107.7	131.6	154.7
50°	67.9	75.0	92.0	113.0	135.1
52.5°	55.4	62.4	77.6	97.5	117.8
55°	39.4	46.0	59.3	76.2	93.7
57.5°	27.2	32.9	44.9	59.0	72.7
60°	19.7	25.1	36.4	47.8	59.1
62.5°	13.1	18.1	29.1	37.9	45.4
65°	4.4	8.4	18.8	22.7	25.3
67.5°	2.2	2.7	9.9	10.4	11.3
70°	1.8	1.8	4.7	5.0	5.9
72.5°	1.3	1.3	1.9	2.4	2.6
75°	0.6	0.6	0.3	0.0	0.0
77.5°	0.3	0.3	0.2	0.0	0.0
80°	0.3	0.3	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°	0.5	1.3	2.7	3.0	3.0
90°	2.3	6.7	13.7	14.8	14.8
92.5°	27.8	98.2	194.2	93.5	64.9
95°	63.8	227.6	685.9	350.8	242.7
97.5°	101.9	260.5	1075.8	898.8	677.7
100°	131.0	273.6	1199.8	1255.3	1041.4
102.5°	159.3	292.1	1240.8	1522.4	1346.8
105°	208.5	324.4	1246.5	1864.9	1750.2
107.5°	255.0	358.4	1193.4	2040.9	2070.6
110°	286.0	384.0	1145.1	2095.6	2203.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	318.8	409.7	1098.6	2083.5	2261.1
115°	368.0	450.5	1038.0	2005.7	2268.6
117.5°	412.9	490.2	991.1	1881.5	2174.3
120°	442.1	516.7	967.4	1792.3	2093.1
122.5°	467.6	541.4	950.1	1701.1	2001.1
125°	502.5	577.1	932.1	1575.3	1853.8
127.5°	536.0	609.5	920.7	1464.3	1713.0
130°	556.0	629.6	916.1	1400.8	1619.1
132.5°	576.1	648.7	911.5	1344.8	1545.3
135°	605.0	675.2	905.8	1270.9	1439.1
137.5°	632.6	699.9	902.9	1208.2	1346.3
140°	651.8	716.4	900.1	1169.6	1294.4
142.5°	671.8	732.0	898.3	1133.6	1238.8
145°	699.6	754.2	894.5	1086.6	1166.8
147.5°	729.7	777.2	890.6	1047.0	1110.0
150°	749.7	791.0	888.8	1022.1	1074.5
152.5°	768.0	803.8	887.8	1001.8	1044.4
155°	794.2	823.1	886.5	974.9	1006.1
157.5°	817.2	839.7	886.7	956.0	976.9
160°	831.8	850.7	887.6	944.9	960.5
162.5°	844.5	859.9	888.5	935.7	946.9
165°	861.4	871.4	889.9	925.3	929.8
167.5°	875.1	880.9	891.0	917.3	919.1
170°	884.2	886.4	891.0	912.7	912.7
172.5°	889.7	890.1	891.9	908.1	908.1
175°	895.6	894.5	891.0	903.5	901.3
177.5°	898.1	896.3	891.7	899.0	897.2
180°	894.5	894.5	894.5	894.5	894.5

(END OF REPORT)