

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

Summary

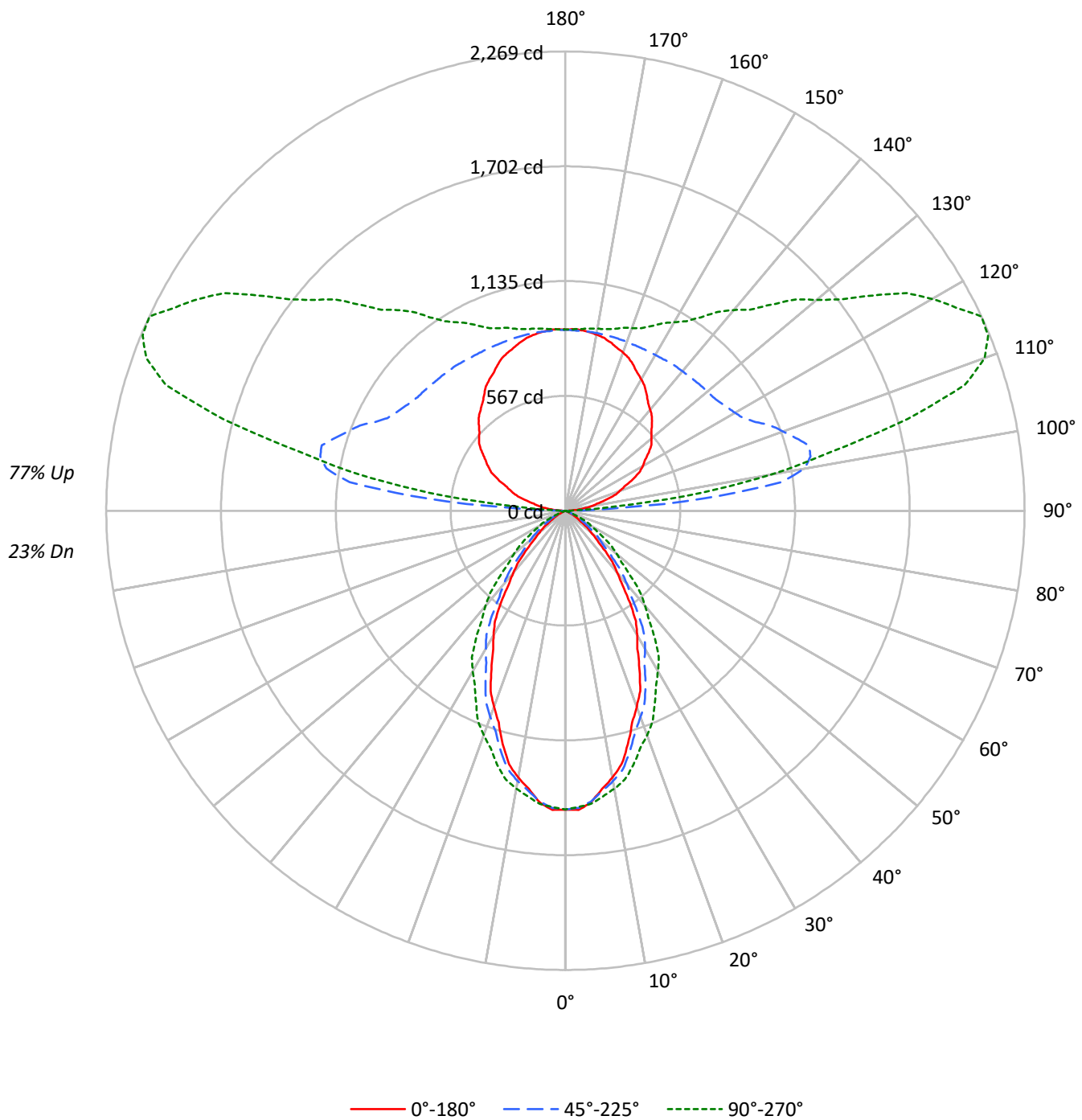
Lumens per Lamp: N/A
Luminaire Lumens: 7537.6 lumens
Efficiency: N/A
Efficacy: 64.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 117.2
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					10
RW	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																					
0	101	101	101	101		90	90	90	90		69	69	69		49	49	49		32	32	32
1	93	89	85	82		82	79	76	74		61	59	58		45	43	43		29	29	28
2	85	78	73	69		76	70	66	62		55	52	49		40	38	37		27	26	25
3	78	70	63	58		69	62	57	53		49	45	42		36	34	32		25	23	22
4	72	62	55	50		64	56	50	45		44	40	37		33	30	28		22	21	20
5	66	56	48	43		59	50	44	39		40	35	32		30	27	25		21	19	18
6	61	50	43	38		54	45	39	35		36	32	28		27	24	22		19	18	16
7	57	45	38	33		50	41	35	31		33	28	25		25	22	20		18	16	15
8	53	41	34	29		47	37	31	27		30	26	23		23	20	18		16	15	14
9	49	38	31	26		44	34	28	24		28	23	20		21	18	16		15	14	12
10	46	35	28	24		41	32	26	22		25	21	18		20	17	15		14	13	11

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	1.8
10°-20°	344.6	4.6
20°-30°	431.4	5.7
30°-40°	398.5	5.3
40°-50°	267.7	3.6
50°-60°	138.3	1.8
60°-70°	43.3	0.6
70°-80°	2.7	0.0
80°-90°	2.1	0.0
90°-100°	418.4	5.6
100°-110°	1127.1	15.0
110°-120°	1182.9	15.7
120°-130°	959.9	12.7
130°-140°	752.8	10.0
140°-150°	578.0	7.7
150°-160°	415.6	5.5
160°-170°	253.9	3.4
170°-180°	85.6	1.1
0°-30°	910.7	12.1
0°-40°	1309.2	17.4
0°-60°	1715.2	22.8
0°-90°	1763.4	23.4
90°-120°	2728.4	36.2
90°-150°	5019.1	66.6
90°-180°	5774.0	76.6
0°-180°	7537.6	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°	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:

CATALOG NUMBER: SQ4-BB-125U-125D-927-1D-UNV-STD-W-6

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°	0.5	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

TEST NUMBER:

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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)