

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-050U-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 (G3-1910-536-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-050U-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

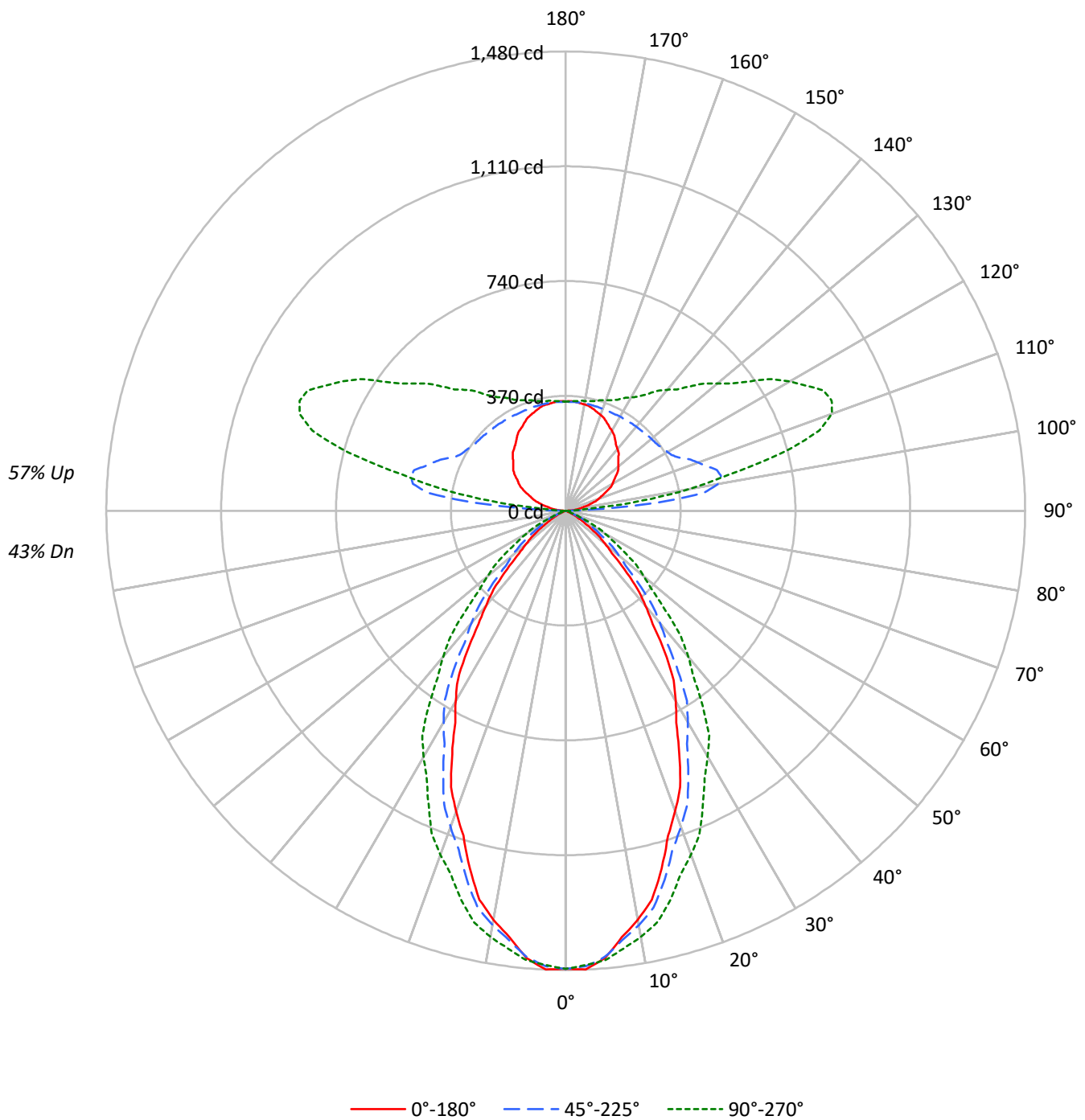
Lumens per Lamp: N/A
Luminaire Lumens: 4063.3 lumens
Efficiency: N/A
Efficacy: 46.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 87.8
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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50
1	98	94	91	88	89	86	84	81	72	70	68	59	58	56	47	46	45
2	90	84	79	74	83	77	73	69	65	62	59	54	51	50	43	42	41
3	84	75	69	64	77	70	64	60	59	55	52	49	46	44	40	38	36
4	77	68	61	56	71	63	57	52	53	49	46	45	42	39	36	34	33
5	72	61	54	49	66	57	51	46	49	44	40	41	38	35	34	32	30
6	66	56	48	43	61	52	45	41	44	40	36	38	34	32	31	29	27
7	62	51	44	39	57	47	41	37	41	36	33	35	31	29	29	27	25
8	58	47	40	35	53	43	37	33	38	33	30	32	29	26	27	25	23
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19

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	3.3
10°-20°	344.6	8.5
20°-30°	431.4	10.6
30°-40°	398.5	9.8
40°-50°	267.7	6.6
50°-60°	138.3	3.4
60°-70°	43.3	1.1
70°-80°	2.7	0.1
80°-90°	1.4	0.0
90°-100°	169.1	4.2
100°-110°	459.5	11.3
110°-120°	472.4	11.6
120°-130°	377.7	9.3
130°-140°	296.8	7.3
140°-150°	227.6	5.6
150°-160°	163.7	4.0
160°-170°	100.1	2.5
170°-180°	33.7	0.8
0°-30°	910.7	22.4
0°-40°	1309.2	32.2
0°-60°	1715.2	42.2
0°-90°	1762.7	43.4
90°-120°	1101.1	27.1
90°-150°	2003.2	49.3
90°-180°	2301.0	56.6
0°-180°	4063.3	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	4	8	10	10	2
95°	25	92	295	128	86	26
105°	82	127	505	769	724	87
115°	145	176	404	805	917	143
125°	199	227	366	617	727	178
135°	240	267	356	502	566	186
145°	278	298	351	427	459	174
155°	314	325	349	383	394	145
165°	340	344	350	365	366	96
175°	352	354	351	356	355	33
180°	352	352	352	352	352	

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	0.9	1.6	2.0	2.0
90°	1.1	4.5	7.9	10.2	10.2
92.5°	10.2	46.3	80.4	34.5	29.2
95°	24.9	92.5	294.6	128.2	86.1
97.5°	41.2	102.2	451.6	351.3	246.8
100°	52.1	108.6	499.6	506.5	409.0
102.5°	63.0	115.1	512.3	626.4	540.4
105°	81.6	127.0	505.3	769.4	724.0
107.5°	100.8	140.9	476.1	843.2	855.9
110°	114.4	151.0	454.3	857.8	912.1

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	126.2	161.0	432.6	845.7	927.5
115°	145.0	176.0	404.5	804.7	916.6
117.5°	162.7	192.4	386.6	746.6	872.6
120°	174.5	203.3	378.4	707.6	832.7
122.5°	184.5	213.3	373.0	668.5	789.2
125°	199.4	227.1	366.0	616.6	727.4
127.5°	212.8	240.2	362.1	577.3	672.3
130°	220.9	247.5	360.3	552.6	637.9
132.5°	229.1	255.7	358.5	531.5	607.1
135°	240.2	266.8	355.8	502.2	566.5
137.5°	252.2	276.4	354.4	476.4	530.5
140°	259.5	282.7	353.5	460.0	508.7
142.5°	266.7	288.2	352.6	447.1	487.9
145°	277.6	297.5	351.2	426.7	458.9
147.5°	289.8	306.9	350.1	410.7	436.0
150°	298.0	312.4	350.1	401.5	421.5
152.5°	304.3	317.0	349.2	393.3	409.7
155°	313.8	324.9	349.0	383.2	394.3
157.5°	323.1	331.8	349.0	376.3	384.8
160°	328.6	336.3	349.0	371.8	378.4
162.5°	334.0	340.0	349.9	368.1	373.0
165°	339.9	344.3	350.1	364.8	366.0
167.5°	346.0	348.2	351.2	361.0	361.9
170°	347.8	350.0	351.2	359.2	359.2
172.5°	349.6	351.0	351.2	357.3	357.3
175°	352.4	353.5	351.2	355.7	354.6
177.5°	353.3	353.3	350.5	354.1	352.4
180°	352.4	352.4	352.4	352.4	352.4

(END OF REPORT)