

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: P853626

Luminaire Tested: SQ2-BBN-100U-100D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853626
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G3-2308-130-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBN-100U-100D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

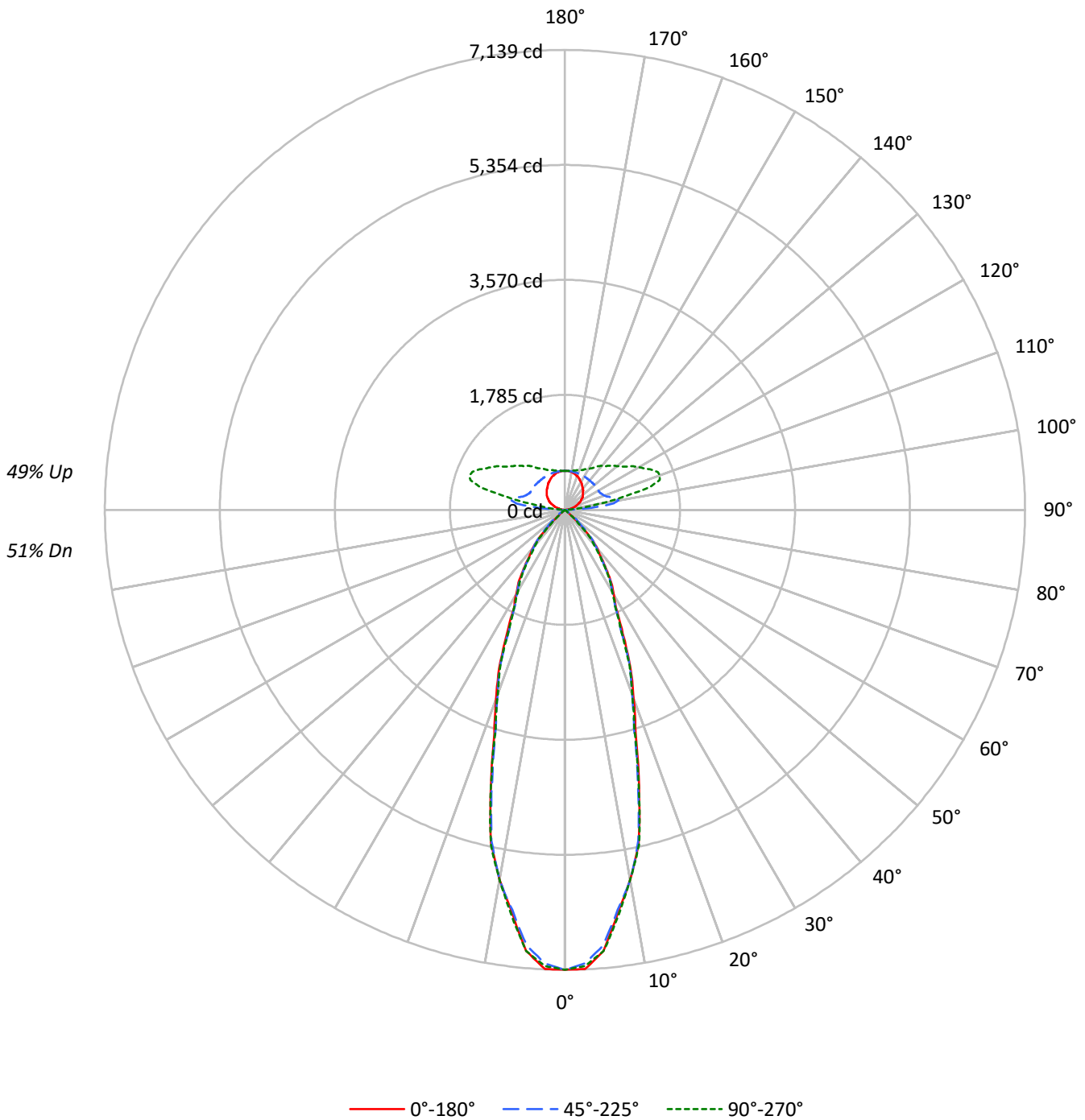
Lumens per Lamp: N/A
Luminaire Lumens: 7637.6 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.62
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 70.7
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

TEST NUMBER: P853626

CATALOG NUMBER: SQ2-BBN-100U-100D-930-UNV-STD-W-4

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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	100	97	94	91	93	90	88	85	77	75	74	65	64	63	54	53	53	48
2	94	88	83	79	87	82	78	75	71	68	66	61	59	57	51	50	49	45
3	88	80	75	70	81	75	70	66	66	62	59	57	54	52	48	47	45	42
4	82	74	67	63	76	69	64	60	61	57	54	53	50	48	46	44	42	39
5	77	68	61	57	72	64	58	54	56	52	49	50	47	44	43	41	40	37
6	72	63	56	51	68	59	53	49	53	48	45	47	43	41	41	39	37	35
7	68	58	52	47	64	55	49	45	49	45	42	44	41	38	39	37	35	33
8	64	54	48	43	60	51	46	42	46	42	39	41	38	36	37	35	33	31
9	61	51	44	40	57	48	43	39	44	39	36	39	36	34	35	33	31	29
10	58	48	41	37	54	45	40	36	41	37	34	37	34	32	33	31	29	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	115265	115265	115265
5°	111410	110034	111474
10°	95614	95677	95614
15°	74215	73031	74043
20°	53562	52457	52412
25°	37978	36465	36535
30°	28256	27537	27272
35°	21985	21427	20972
40°	16269	15862	14859
45°	8314	10193	6697
50°	1809	5624	1324
55°	507	2283	400
60°	84	459	42
65°	0	50	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 10193 cd/sqm



TEST NUMBER: P853626

CATALOG NUMBER: SQ2-BBN-100U-100D-930-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	617.3	8.1
10°-20°	1217.1	15.9
20°-30°	981.8	12.9
30°-40°	682.0	8.9
40°-50°	315.1	4.1
50°-60°	44.2	0.6
60°-70°	1.5	0.0
70°-80°	0.0	0.0
80°-90°	1.4	0.0
90°-100°	253.5	3.3
100°-110°	766.7	10.0
110°-120°	748.4	9.8
120°-130°	611.6	8.0
130°-140°	499.2	6.5
140°-150°	388.6	5.1
150°-160°	280.2	3.7
160°-170°	171.5	2.2
170°-180°	57.9	0.8
0°-30°	2816.2	36.9
0°-40°	3498.2	45.8
0°-60°	3857.5	50.5
0°-90°	3860.4	50.5
90°-120°	1768.6	23.2
90°-150°	3268.0	42.8
90°-180°	3778.0	49.5
0°-180°	7637.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7139	7139	7139	7139	7139	
5°	6874	6838	6789	6873	6878	618
15°	4440	4496	4369	4431	4430	1222
25°	2132	2084	2047	2077	2051	998
35°	1115	1115	1087	1068	1064	698
45°	364	434	446	405	293	294
55°	18	28	81	23	14	23
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	2	11	7	6	1
95°	31	100	478	177	112	37
105°	133	187	753	1430	1359	140
115°	237	283	609	1260	1480	235
125°	332	368	600	995	1171	295
135°	397	439	596	858	965	308
145°	464	498	596	738	807	291
155°	529	546	600	662	687	243
165°	578	585	603	626	634	163
175°	605	605	606	611	609	57
180°	607	607	607	607	607	



TEST NUMBER: P853626

CATALOG NUMBER: SQ2-BBN-100U-100D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7139.0	7139.0	7139.0	7139.0	7139.0
2.5°	7134.9	7108.8	7046.4	7102.6	7085.5
5°	6874.0	6837.5	6789.1	6872.8	6877.9
7.5°	6298.2	6310.0	6265.0	6357.4	6347.6
10°	5831.9	5840.7	5835.8	5865.9	5831.9
12.5°	5291.6	5326.5	5260.4	5307.1	5321.4
15°	4439.9	4496.5	4369.1	4430.8	4429.6
17.5°	3641.2	3635.4	3569.6	3581.1	3577.4
20°	3117.3	3108.5	3053.0	3044.1	3050.4
22.5°	2668.6	2653.7	2634.1	2611.9	2620.2
25°	2131.8	2084.0	2046.9	2077.2	2050.8
27.5°	1711.1	1710.4	1679.7	1683.2	1688.2
30°	1515.6	1506.7	1477.0	1477.9	1462.8
32.5°	1341.6	1347.9	1311.2	1304.0	1288.9
35°	1115.4	1115.4	1087.1	1067.7	1064.0
37.5°	905.7	903.5	883.3	855.8	846.0
40°	771.9	765.6	752.6	718.9	705.0
42.5°	619.6	636.5	624.0	590.0	569.2
45°	364.1	434.5	446.4	405.3	293.3
47.5°	156.4	233.9	298.0	194.2	101.1
50°	72.0	132.4	223.9	95.5	52.7
52.5°	42.2	72.4	166.2	55.8	33.2
55°	18.0	28.1	81.1	23.0	14.2
57.5°	6.7	12.2	30.6	9.9	5.4
60°	2.6	5.1	14.2	3.8	1.3
62.5°	0.5	2.0	6.9	1.8	0.3
65°	0.0	0.0	1.3	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.4	2.3	1.3	1.1
90°	0.0	1.9	11.4	6.6	5.7
92.5°	10.7	43.1	154.7	51.3	37.0
95°	31.4	99.5	478.3	176.7	111.5
97.5°	60.8	126.6	753.9	498.9	303.8
100°	79.1	143.4	842.3	814.3	546.9
102.5°	99.7	161.7	824.0	1142.2	910.5
105°	133.4	187.4	752.8	1429.6	1358.8
107.5°	165.4	217.0	684.1	1458.0	1540.0
110°	186.8	236.1	649.8	1422.2	1571.2



TEST NUMBER: P853626

CATALOG NUMBER: SQ2-BBN-100U-100D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	207.3	255.2	629.3	1362.1	1550.7
115°	237.3	282.9	608.9	1259.9	1479.8
117.5°	267.0	310.2	601.6	1164.2	1389.3
120°	286.8	327.8	599.3	1108.3	1324.5
122.5°	305.1	343.9	599.3	1059.2	1258.9
125°	331.6	367.9	600.3	995.0	1171.1
127.5°	353.1	390.8	599.3	946.5	1096.7
130°	366.8	406.0	599.3	918.8	1054.8
132.5°	379.0	418.9	598.6	893.4	1019.0
135°	397.3	439.3	596.5	858.1	965.2
137.5°	417.7	457.6	596.5	820.4	919.7
140°	430.7	469.8	596.5	795.9	890.0
142.5°	443.6	481.3	595.7	773.5	855.7
145°	464.0	498.5	596.5	738.1	807.1
147.5°	484.4	513.7	597.6	709.0	761.9
150°	497.4	524.4	598.4	692.8	737.5
152.5°	509.6	533.6	599.2	678.9	715.4
155°	528.8	546.5	600.3	661.8	687.0
157.5°	545.6	559.9	601.4	649.3	666.8
160°	555.5	567.6	602.2	641.6	654.6
162.5°	565.4	574.6	603.0	634.7	645.5
165°	578.4	584.9	603.2	626.2	633.6
167.5°	589.4	592.8	604.3	619.6	622.8
170°	595.5	597.4	605.1	616.5	617.4
172.5°	599.3	600.5	605.1	613.4	613.6
175°	605.1	605.1	606.0	610.7	608.9
177.5°	607.7	607.0	606.2	608.5	607.0
180°	607.0	607.0	607.0	607.0	607.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00