

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: P853618

Luminaire Tested: SQ2-BBN-125D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853618
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2308-130-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBN-125D-935-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

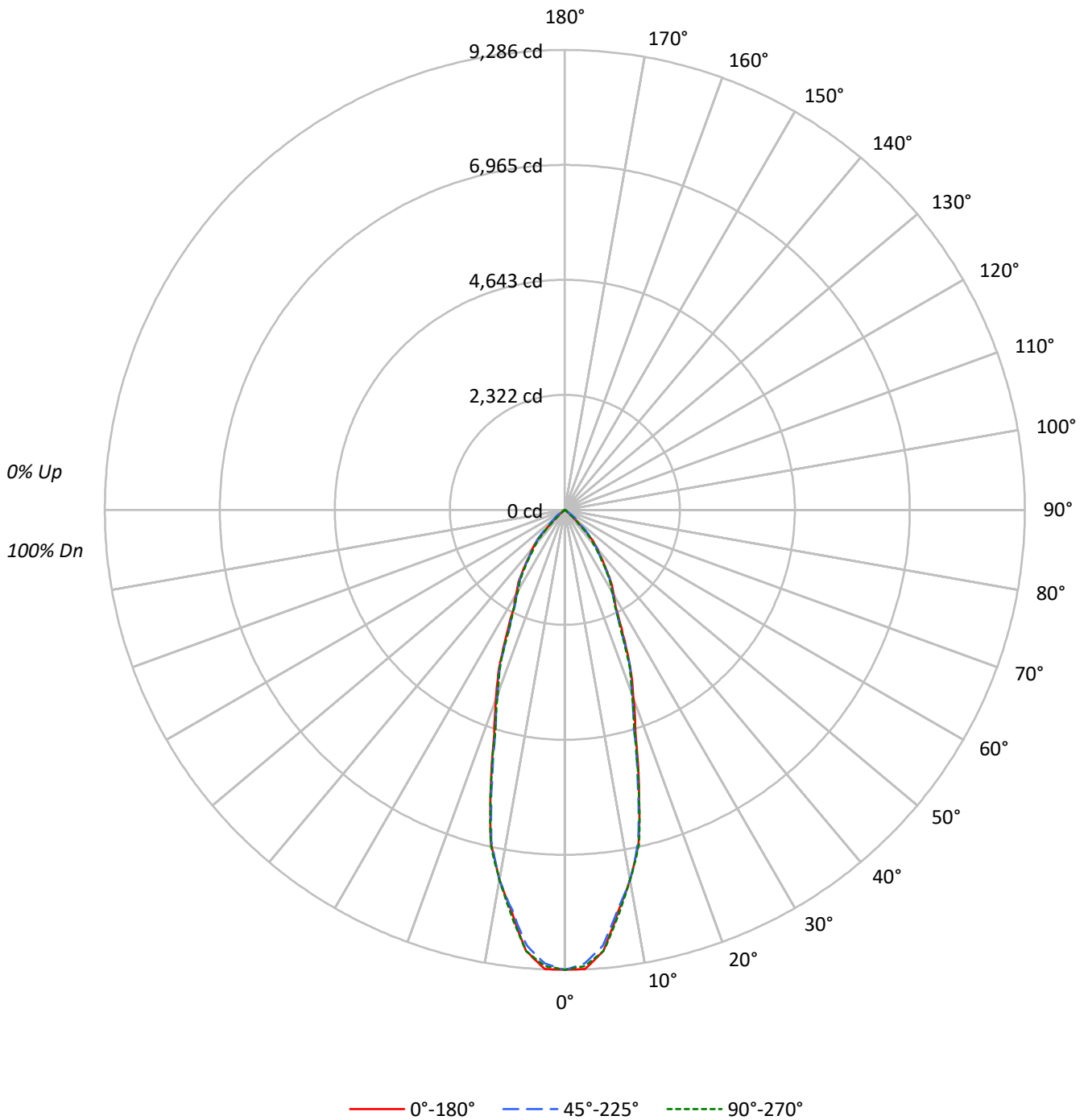
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5019.6 lumens
Efficiency: N/A
Efficacy: 100.8 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: Direct

Input Watts (W): 49.8
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	108	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	89	86	84	82
4	98	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73
6	90	81	75	71	88	80	75	71	79	74	71	77	73	70	76	73	70	68
7	85	77	71	67	84	76	71	67	75	70	66	74	69	66	72	69	66	64
8	82	73	67	63	80	72	67	63	71	66	63	70	66	62	69	65	62	61
9	78	69	63	60	77	69	63	60	68	63	59	67	62	59	66	62	59	58
10	75	66	60	57	74	65	60	57	64	60	56	64	59	56	63	59	56	55

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	149934	149934	149934
5°	144919	143129	145001
10°	124370	124452	124370
15°	96535	94997	96311
20°	69671	68233	68175
25°	49401	47432	47521
30°	36754	35818	35475
35°	28598	27873	27279
40°	21163	20634	19330
45°	10814	13260	8713
50°	2354	7314	1723
55°	659	2967	518
60°	107	594	55
65°	0	65	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: 13260 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	803.0	16.0
10°-20°	1583.1	31.5
20°-30°	1277.1	25.4
30°-40°	887.2	17.7
40°-50°	409.8	8.2
50°-60°	57.5	1.1
60°-70°	2.0	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3663.1	73.0
0°-40°	4550.3	90.6
0°-60°	5017.7	100.0
0°-90°	5019.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5019.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9286	9286	9286	9286	9286	
5°	8942	8894	8831	8940	8946	804
15°	5775	5849	5683	5764	5762	1590
25°	2773	2711	2662	2702	2668	1298
35°	1451	1451	1414	1389	1384	908
45°	474	565	581	527	382	383
55°	23	36	105	30	18	30
65°	0	0	2	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9286.2	9286.2	9286.2	9286.2	9286.2
2.5°	9280.8	9246.8	9165.7	9238.8	9216.6
5°	8941.5	8894.0	8831.0	8939.9	8946.5
7.5°	8192.4	8207.8	8149.2	8269.4	8256.7
10°	7585.9	7597.4	7590.9	7630.1	7585.9
12.5°	6883.1	6928.6	6842.6	6903.2	6921.9
15°	5775.2	5848.8	5683.2	5763.5	5761.8
17.5°	4736.3	4728.8	4643.3	4658.2	4653.3
20°	4054.9	4043.4	3971.2	3959.7	3967.8
22.5°	3471.2	3451.8	3426.3	3397.4	3408.2
25°	2773.0	2710.8	2662.5	2701.9	2667.5
27.5°	2225.7	2224.8	2184.9	2189.4	2196.0
30°	1971.4	1959.9	1921.2	1922.4	1902.8
32.5°	1745.1	1753.3	1705.6	1696.1	1676.5
35°	1450.9	1450.9	1414.1	1388.9	1384.0
37.5°	1178.1	1175.2	1149.0	1113.2	1100.5
40°	1004.1	995.9	979.0	935.1	917.1
42.5°	806.0	827.9	811.6	767.5	740.4
45°	473.6	565.2	580.7	527.2	381.6
47.5°	203.5	304.3	387.6	252.6	131.5
50°	93.7	172.3	291.2	124.2	68.6
52.5°	54.9	94.2	216.2	72.6	43.2
55°	23.4	36.5	105.4	29.9	18.4
57.5°	8.7	15.9	39.8	12.9	7.0
60°	3.3	6.6	18.4	4.9	1.7
62.5°	0.7	2.6	9.0	2.3	0.3
65°	0.0	0.0	1.7	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	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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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	0.06	0.38	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.01	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	0.03	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