

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: P853616

Luminaire Tested: SQ2-BBN-100D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853616
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-100D-940-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

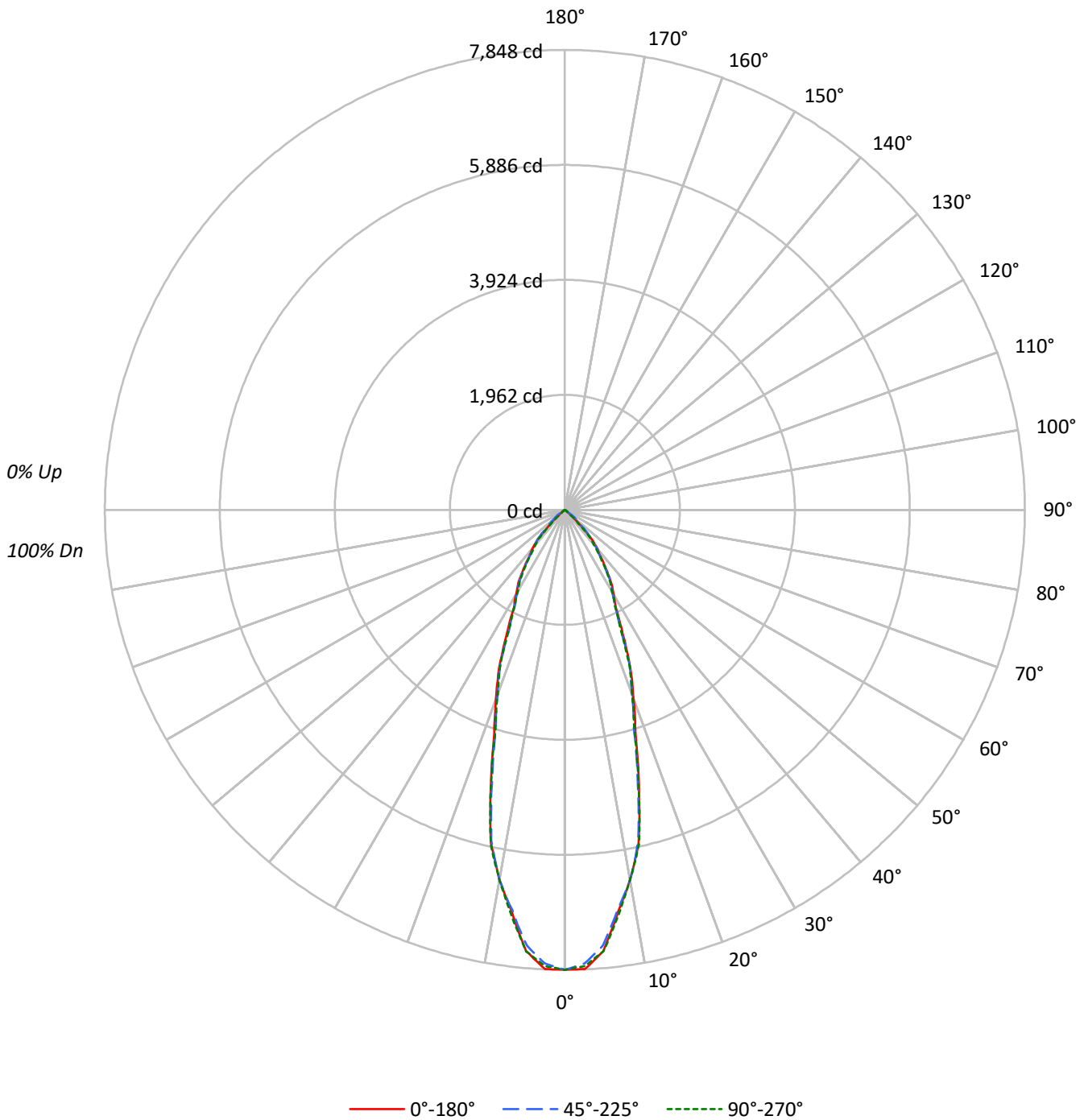
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4242.5 lumens
Efficiency: N/A
Efficacy: 111.4 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): 38.1
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	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°	126719	126719	126719
5°	122480	120968	122550
10°	105114	105183	105114
15°	81588	80287	81399
20°	58883	57668	57620
25°	41751	40089	40164
30°	31062	30272	29983
35°	24171	23558	23055
40°	17886	17439	16337
45°	9140	11207	7364
50°	1989	6182	1457
55°	557	2508	439
60°	90	504	45
65°	0	53	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: 11207 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	678.7	16.0
10°-20°	1338.0	31.5
20°-30°	1079.3	25.4
30°-40°	749.8	17.7
40°-50°	346.4	8.2
50°-60°	48.6	1.1
60°-70°	1.7	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°	3096.0	73.0
0°-40°	3845.8	90.6
0°-60°	4240.8	100.0
0°-90°	4242.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4242.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7848	7848	7848	7848	7848	
5°	7557	7517	7464	7556	7561	679
15°	4881	4943	4803	4871	4870	1344
25°	2344	2291	2250	2284	2254	1097
35°	1226	1226	1195	1174	1170	767
45°	400	478	491	446	322	323
55°	20	31	89	25	16	25
65°	0	0	1	0	0	0
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°	7848.4	7848.4	7848.4	7848.4	7848.4
2.5°	7843.9	7815.1	7746.6	7808.4	7789.6
5°	7557.0	7516.9	7463.7	7555.7	7561.3
7.5°	6924.0	6937.0	6887.5	6989.1	6978.3
10°	6411.4	6421.1	6415.6	6448.7	6411.4
12.5°	5817.3	5855.8	5783.1	5834.4	5850.2
15°	4881.0	4943.3	4803.2	4871.1	4869.7
17.5°	4003.0	3996.6	3924.3	3937.0	3932.8
20°	3427.0	3417.4	3356.3	3346.6	3353.5
22.5°	2933.7	2917.4	2895.8	2871.4	2880.5
25°	2343.6	2291.1	2250.3	2283.6	2254.5
27.5°	1881.1	1880.3	1846.6	1850.4	1856.0
30°	1666.1	1656.5	1623.7	1624.7	1608.2
32.5°	1474.9	1481.8	1441.5	1433.5	1416.9
35°	1226.3	1226.3	1195.2	1173.8	1169.7
37.5°	995.7	993.2	971.1	940.9	930.1
40°	848.6	841.7	827.4	790.3	775.1
42.5°	681.2	699.7	686.0	648.7	625.7
45°	400.3	477.7	490.8	445.6	322.5
47.5°	172.0	257.2	327.6	213.5	111.2
50°	79.2	145.6	246.1	105.0	58.0
52.5°	46.4	79.6	182.7	61.4	36.5
55°	19.8	30.9	89.1	25.2	15.6
57.5°	7.4	13.4	33.7	10.9	5.9
60°	2.8	5.6	15.6	4.2	1.4
62.5°	0.6	2.2	7.6	1.9	0.3
65°	0.0	0.0	1.4	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	0.00	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