

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: P853614

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

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853614
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-930-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

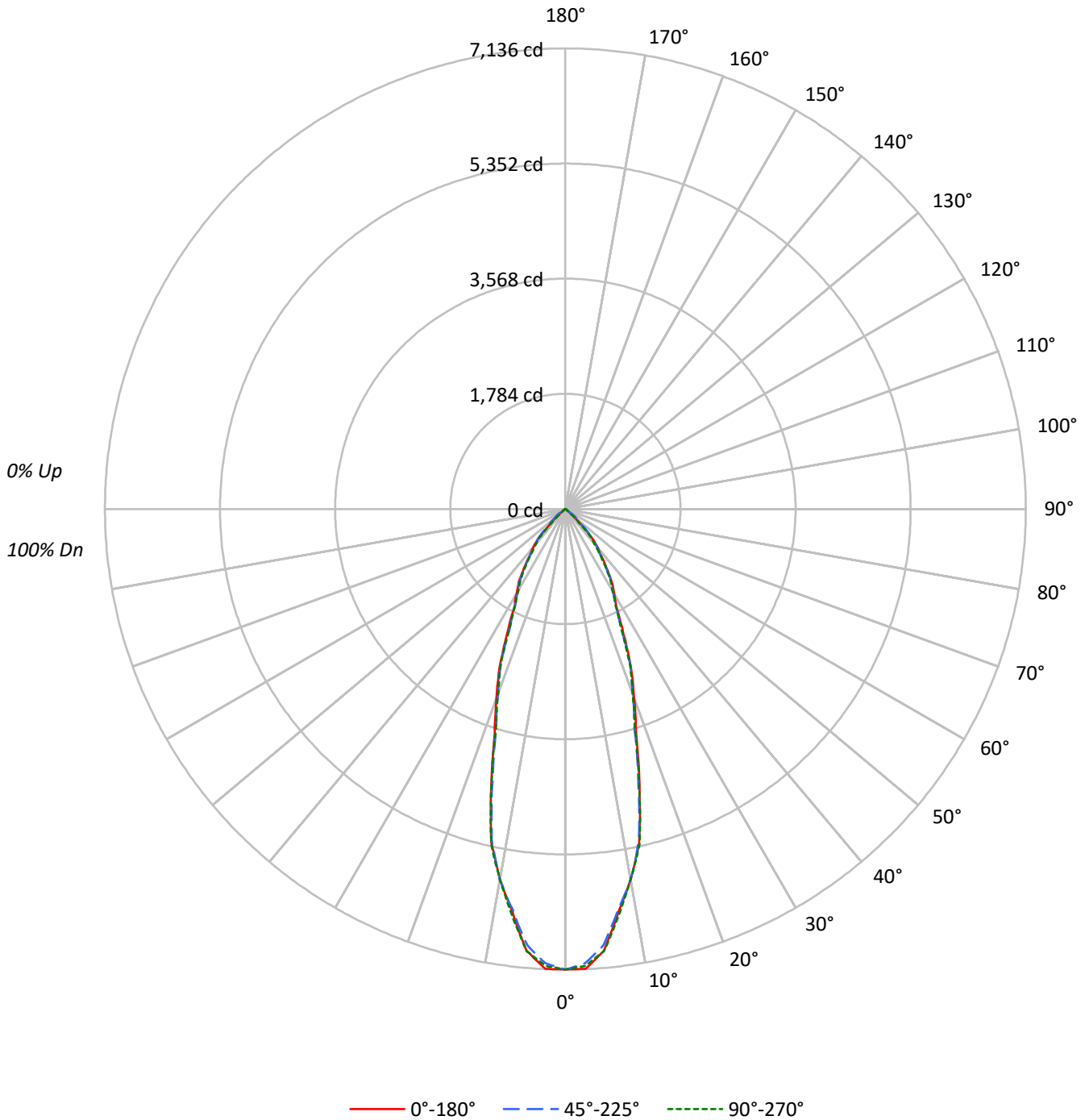
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3857.5 lumens
Efficiency: N/A
Efficacy: 101.2 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	100	100	100	
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94	94	94	94	
2	108	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88	88	88	88	
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	89	86	84	82	82	82	82	
4	98	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77	77	77	77	
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73	73	73	73	
6	90	81	75	71	88	80	75	71	79	74	71	77	73	70	76	73	70	68	68	68	68	
7	85	77	71	67	84	76	71	67	75	70	66	74	69	66	72	69	66	64	64	64	64	
8	82	73	67	63	80	72	67	63	71	66	63	70	66	62	69	65	62	61	61	61	61	
9	78	69	63	60	77	69	63	60	68	63	59	67	62	59	66	62	59	58	58	58	58	
10	75	66	60	57	74	65	60	57	64	60	56	64	59	56	63	59	56	55	55	55	55	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	115222	115222	115222
5°	111368	109992	111432
10°	95577	95641	95577
15°	74186	73003	74014
20°	53541	52436	52391
25°	37964	36451	36521
30°	28245	27525	27261
35°	21977	21419	20964
40°	16263	15856	14855
45°	8311	10191	6695
50°	1809	5622	1324
55°	507	2280	397
60°	84	455	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: 10191 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	617.1	16.0
10°-20°	1216.6	31.5
20°-30°	981.4	25.4
30°-40°	681.8	17.7
40°-50°	315.0	8.2
50°-60°	44.2	1.1
60°-70°	1.5	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°	2815.1	73.0
0°-40°	3496.9	90.6
0°-60°	3856.0	100.0
0°-90°	3857.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3857.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7136	7136	7136	7136	7136	
5°	6871	6835	6786	6870	6875	618
15°	4438	4495	4367	4429	4428	1222
25°	2131	2083	2046	2076	2050	998
35°	1115	1115	1087	1067	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	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7136.3	7136.3	7136.3	7136.3	7136.3
2.5°	7132.2	7106.1	7043.7	7099.9	7082.8
5°	6871.4	6834.9	6786.5	6870.2	6875.3
7.5°	6295.8	6307.6	6262.6	6355.0	6345.1
10°	5829.7	5838.5	5833.6	5863.6	5829.7
12.5°	5289.6	5324.5	5258.4	5305.1	5319.4
15°	4438.2	4494.8	4367.4	4429.2	4427.9
17.5°	3639.8	3634.0	3568.3	3579.8	3576.0
20°	3116.1	3107.3	3051.8	3043.0	3049.2
22.5°	2667.5	2652.7	2633.1	2610.9	2619.2
25°	2131.0	2083.2	2046.1	2076.4	2050.0
27.5°	1710.5	1709.7	1679.1	1682.5	1687.6
30°	1515.0	1506.2	1476.4	1477.3	1462.2
32.5°	1341.1	1347.4	1310.7	1303.5	1288.4
35°	1115.0	1115.0	1086.7	1067.3	1063.6
37.5°	905.4	903.1	883.0	855.5	845.7
40°	771.6	765.3	752.3	718.6	704.8
42.5°	619.4	636.2	623.7	589.8	569.0
45°	364.0	434.4	446.3	405.1	293.2
47.5°	156.4	233.8	297.9	194.1	101.1
50°	72.0	132.4	223.8	95.5	52.7
52.5°	42.2	72.4	166.2	55.8	33.2
55°	18.0	28.1	81.0	22.9	14.1
57.5°	6.7	12.2	30.6	9.9	5.4
60°	2.6	5.1	14.1	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	0.0	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