

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: P854455

Luminaire Tested: SQ2-WBN-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854455
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2308-130-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBN-100D-935-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

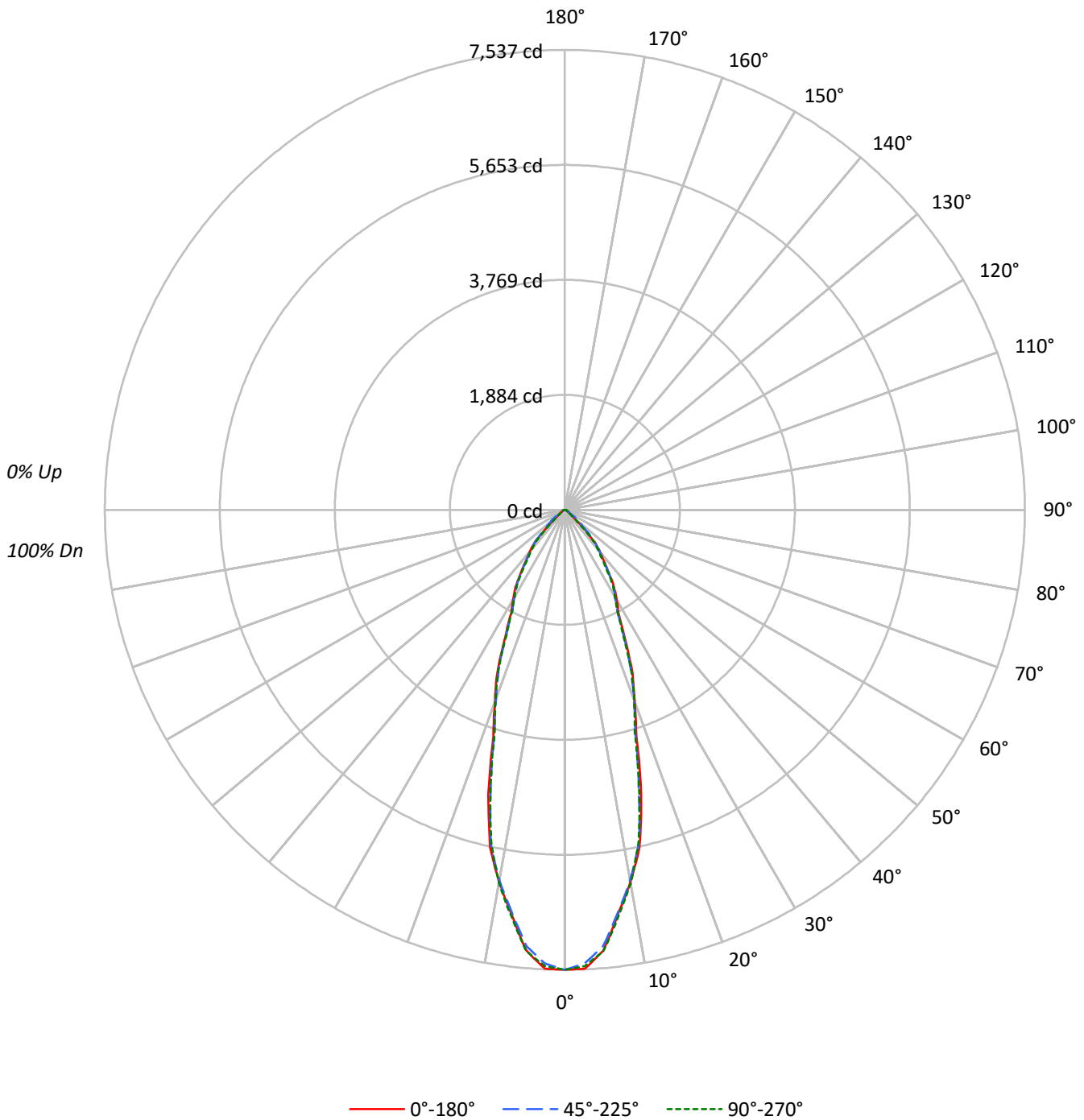
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4376.6 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.58 / 0.63
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										
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	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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																				
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87																				
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	81																				
4	97	90	84	80	95	88	83	79	86	82	78	84	81	78	82	79	77	75																				
5	92	84	78	74	91	83	78	74	81	77	73	80	76	72	78	75	72	70																				
6	88	79	73	69	86	78	73	69	77	72	68	75	71	68	74	70	67	66																				
7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63	62																				
8	80	71	65	61	79	70	64	60	69	64	60	68	63	60	67	63	60	58																				
9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	57	55																				
10	73	64	58	54	72	63	58	54	62	57	54	62	57	54	61	57	54	52																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	121691	121691	121691
5°	117496	116326	117626
10°	101560	101078	101801
15°	80816	78268	78581
20°	57410	56653	57065
25°	41304	40493	40207
30°	31558	30712	30635
35°	24772	24350	23718
40°	18769	18514	17614
45°	10501	12547	9373
50°	3695	7724	3258
55°	2258	4217	2145
60°	1728	2202	1598
65°	1582	1635	1482
70°	1515	1515	1388
75°	1416	1416	1335
80°	1246	1246	1246
85°	1241	982	982

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 12547 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	654.2	14.9
10°-20°	1300.3	29.7
20°-30°	1076.8	24.6
30°-40°	774.6	17.7
40°-50°	394.6	9.0
50°-60°	102.8	2.3
60°-70°	42.6	1.0
70°-80°	23.6	0.5
80°-90°	7.0	0.2
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°	3031.3	69.3
0°-40°	3805.9	87.0
0°-60°	4303.3	98.3
0°-90°	4376.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4376.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7537	7537	7537	7537	7537	
5°	7250	7239	7177	7281	7258	654
15°	4835	4780	4682	4716	4701	1312
25°	2318	2314	2273	2253	2257	1091
35°	1257	1265	1235	1215	1203	789
45°	460	529	550	511	410	368
55°	80	93	150	87	76	79
65°	41	43	43	40	39	41
75°	23	23	23	21	21	24
85°	7	7	5	7	5	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7537.0	7537.0	7537.0	7537.0	7537.0
2.5°	7525.2	7512.7	7440.7	7500.3	7485.6
5°	7249.5	7239.1	7177.3	7281.1	7257.5
7.5°	6680.2	6689.1	6652.9	6744.6	6719.5
10°	6194.6	6218.1	6165.2	6298.2	6209.3
12.5°	5658.7	5643.5	5606.8	5627.3	5578.2
15°	4834.8	4779.9	4682.4	4715.5	4701.1
17.5°	3894.3	3915.5	3830.9	3827.4	3811.1
20°	3341.3	3347.8	3297.2	3323.9	3321.2
22.5°	2896.3	2897.6	2833.0	2872.0	2848.5
25°	2318.5	2314.5	2273.0	2253.0	2256.9
27.5°	1901.3	1885.1	1853.7	1866.8	1857.2
30°	1692.7	1679.6	1647.3	1655.0	1643.2
32.5°	1505.5	1506.0	1472.9	1469.0	1460.3
35°	1256.8	1264.7	1235.4	1215.1	1203.3
37.5°	1034.9	1042.2	1017.5	987.9	977.9
40°	890.5	895.7	878.4	843.5	835.7
42.5°	733.2	755.2	738.3	705.3	688.0
45°	459.9	529.2	549.5	511.1	410.5
47.5°	232.6	328.6	392.0	289.5	190.7
50°	147.1	213.8	307.5	174.1	129.7
52.5°	112.8	147.1	245.5	128.6	104.0
55°	80.2	93.3	149.8	86.7	76.2
57.5°	62.0	69.4	89.6	65.6	59.1
60°	53.5	58.7	68.2	56.0	49.5
62.5°	48.1	51.3	55.4	47.5	45.2
65°	41.4	42.8	42.8	40.1	38.8
67.5°	35.3	36.6	36.4	35.0	33.7
70°	32.1	33.4	32.1	30.7	29.4
72.5°	27.8	29.1	27.8	27.5	26.2
75°	22.7	22.7	22.7	21.4	21.4
77.5°	17.6	17.9	16.6	16.6	15.5
80°	13.4	14.7	13.4	13.4	13.4
82.5°	11.2	11.5	10.2	10.2	10.2
85°	6.7	6.7	5.3	6.7	5.3
87.5°	2.1	2.1	2.1	2.1	2.1
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	7.88	8.94	8.24	9.25	9.57	7.49	8.55	7.86	8.86	9.18
	3H	8.94	9.87	9.32	10.20	10.57	8.50	9.43	8.88	9.77	10.14
	4H	9.37	10.23	9.78	10.59	10.98	8.94	9.80	9.34	10.15	10.54
	6H	9.69	10.48	10.11	10.86	11.25	9.28	10.07	9.69	10.44	10.84
	8H	9.80	10.54	10.23	10.93	11.34	9.38	10.13	9.82	10.52	10.93
	12H	9.87	10.58	10.30	10.96	11.39	9.44	10.15	9.87	10.53	10.96
4H	2H	8.12	8.98	8.53	9.34	9.72	7.79	8.65	8.20	9.01	9.40
	3H	9.43	10.13	9.84	10.53	10.94	9.04	9.74	9.46	10.15	10.56
	4H	9.99	10.61	10.42	11.03	11.48	9.60	10.22	10.04	10.65	11.09
	6H	10.45	10.98	10.91	11.43	11.90	10.07	10.60	10.54	11.05	11.52
	8H	10.60	11.10	11.07	11.55	12.02	10.22	10.72	10.69	11.17	11.64
	12H	10.71	11.15	11.20	11.63	12.11	10.31	10.74	10.80	11.23	11.71
8H	4H	10.13	10.63	10.60	11.08	11.55	9.78	10.28	10.26	10.73	11.20
	6H	10.71	11.11	11.22	11.61	12.10	10.37	10.77	10.88	11.27	11.75
	8H	10.95	11.30	11.48	11.82	12.32	10.60	10.95	11.13	11.47	11.97
	12H	11.15	11.46	11.67	11.96	12.54	10.78	11.09	11.30	11.58	12.16
12H	4H	10.11	10.55	10.60	11.03	11.51	9.78	10.21	10.27	10.70	11.17
	6H	10.72	11.08	11.25	11.60	12.10	10.39	10.75	10.92	11.27	11.76
	8H	11.01	11.32	11.53	11.82	12.39	10.67	10.98	11.19	11.48	12.06