

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: P854454

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

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854454
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-930-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

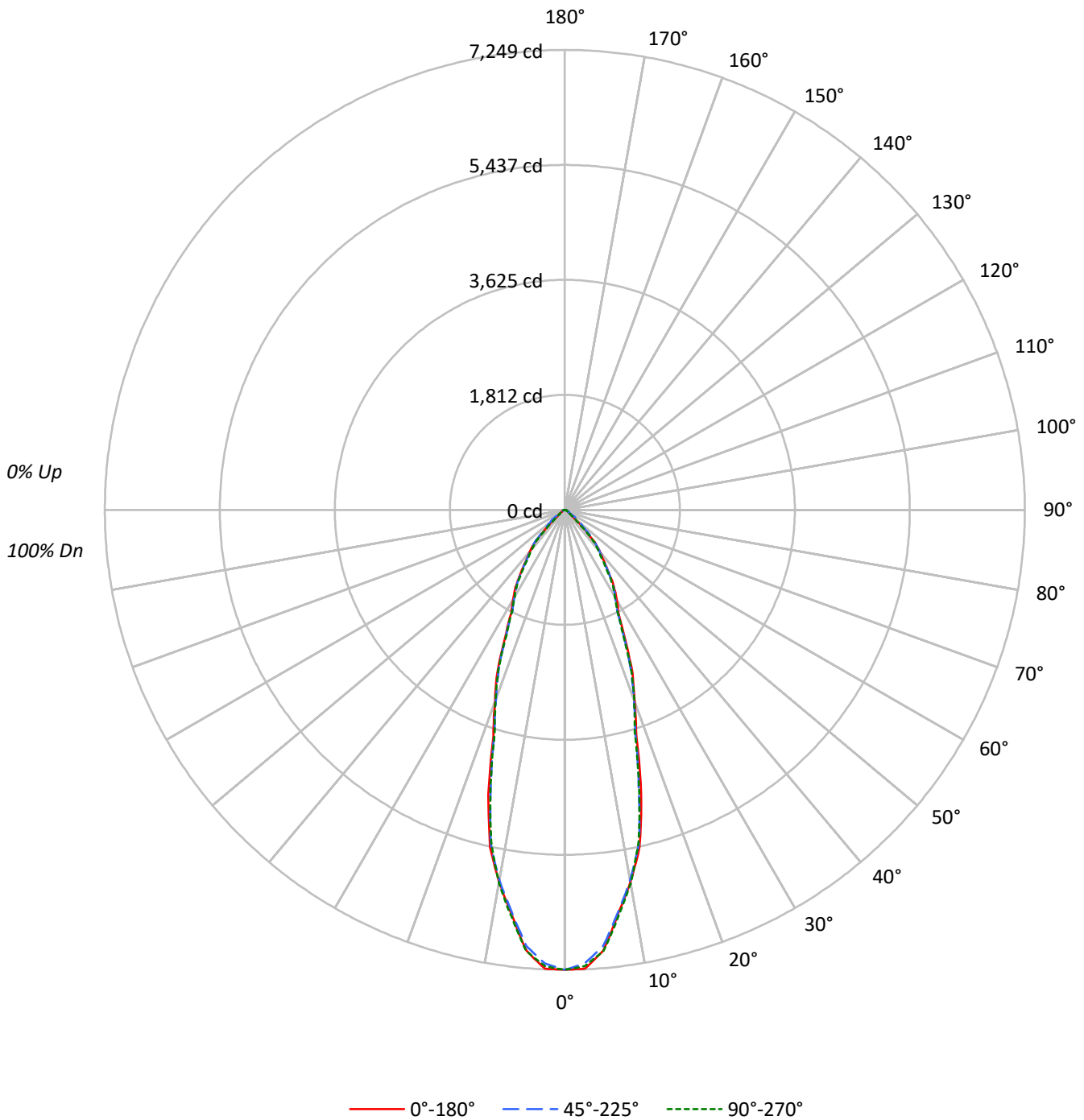
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4209.4 lumens
Efficiency: N/A
Efficacy: 110.5 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	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°	117041	117041	117041
5°	113009	111882	113133
10°	97679	97215	97912
15°	77728	75278	75579
20°	55218	54488	54886
25°	39726	38947	38671
30°	30352	29537	29466
35°	23826	23420	22813
40°	18052	17808	16940
45°	10102	12068	9015
50°	3554	7430	3132
55°	2173	4054	2063
60°	1660	2118	1537
65°	1524	1574	1425
70°	1459	1459	1336
75°	1366	1366	1285
80°	1199	1199	1199
85°	1186	945	945

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 12068 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	629.2	14.9
10°-20°	1250.6	29.7
20°-30°	1035.7	24.6
30°-40°	745.1	17.7
40°-50°	379.6	9.0
50°-60°	98.8	2.3
60°-70°	41.0	1.0
70°-80°	22.8	0.5
80°-90°	6.8	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°	2915.5	69.3
0°-40°	3660.5	87.0
0°-60°	4138.9	98.3
0°-90°	4209.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4209.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7249	7249	7249	7249	7249	
5°	6973	6962	6903	7003	6980	629
15°	4650	4597	4504	4535	4522	1262
25°	2230	2226	2186	2167	2171	1049
35°	1209	1216	1188	1169	1157	759
45°	442	509	528	492	395	354
55°	77	90	144	83	73	76
65°	40	41	41	39	37	40
75°	22	22	22	21	21	23
85°	6	6	5	6	5	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7249.0	7249.0	7249.0	7249.0	7249.0
2.5°	7237.7	7225.7	7156.5	7213.8	7199.7
5°	6972.6	6962.5	6903.1	7002.9	6980.3
7.5°	6425.0	6433.5	6398.8	6486.9	6462.8
10°	5957.9	5980.6	5929.6	6057.6	5972.1
12.5°	5442.5	5427.9	5392.6	5412.4	5365.1
15°	4650.1	4597.3	4503.5	4535.3	4521.5
17.5°	3745.5	3765.9	3684.6	3681.1	3665.5
20°	3213.7	3219.9	3171.2	3196.9	3194.4
22.5°	2785.7	2786.9	2724.7	2762.3	2739.6
25°	2229.9	2226.1	2186.2	2167.0	2170.7
27.5°	1828.7	1813.1	1782.9	1795.5	1786.2
30°	1628.0	1615.5	1584.3	1591.8	1580.5
32.5°	1448.0	1448.5	1416.6	1412.8	1404.5
35°	1208.8	1216.4	1188.2	1168.7	1157.4
37.5°	995.3	1002.4	978.6	950.1	940.6
40°	856.5	861.5	844.9	811.3	803.7
42.5°	705.2	726.4	710.1	678.4	661.8
45°	442.4	509.0	528.5	491.6	394.8
47.5°	223.8	316.1	377.0	278.4	183.4
50°	141.5	205.6	295.8	167.5	124.7
52.5°	108.5	141.5	236.1	123.7	100.0
55°	77.2	89.7	144.0	83.4	73.3
57.5°	59.7	66.7	86.2	63.1	56.8
60°	51.4	56.5	65.6	53.9	47.6
62.5°	46.3	49.3	53.2	45.7	43.5
65°	39.9	41.1	41.2	38.6	37.3
67.5°	33.9	35.2	35.0	33.7	32.4
70°	30.9	32.1	30.9	29.5	28.3
72.5°	26.7	28.0	26.7	26.5	25.2
75°	21.9	21.9	21.9	20.6	20.6
77.5°	17.0	17.2	15.9	15.9	14.9
80°	12.9	14.1	12.9	12.9	12.9
82.5°	10.8	11.1	9.8	9.8	9.8
85°	6.4	6.4	5.1	6.4	5.1
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	7.74	8.80	8.11	9.11	9.43	7.36	8.42	7.72	8.73	9.05
	3H	8.80	9.73	9.18	10.07	10.43	8.37	9.30	8.75	9.63	10.00
	4H	9.24	10.10	9.65	10.45	10.84	8.80	9.66	9.21	10.02	10.41
	6H	9.56	10.35	9.98	10.72	11.12	9.14	9.93	9.56	10.31	10.70
	8H	9.67	10.41	10.10	10.80	11.21	9.25	9.99	9.69	10.39	10.80
	12H	9.74	10.44	10.17	10.83	11.26	9.30	10.01	9.74	10.40	10.83
4H	2H	7.98	8.85	8.39	9.20	9.59	7.66	8.52	8.06	8.87	9.26
	3H	9.29	9.99	9.71	10.40	10.81	8.91	9.61	9.33	10.02	10.42
	4H	9.85	10.48	10.29	10.90	11.35	9.47	10.09	9.90	10.51	10.96
	6H	10.31	10.85	10.78	11.30	11.77	9.93	10.47	10.40	10.92	11.39
	8H	10.47	10.96	10.94	11.41	11.89	10.09	10.58	10.56	11.03	11.51
	12H	10.58	11.01	11.07	11.50	11.98	10.18	10.61	10.67	11.10	11.58
8H	4H	10.00	10.50	10.47	10.95	11.42	9.65	10.15	10.13	10.60	11.07
	6H	10.58	10.98	11.09	11.48	11.97	10.24	10.63	10.74	11.14	11.62
	8H	10.81	11.17	11.34	11.69	12.19	10.46	10.82	11.00	11.34	11.84
	12H	11.01	11.32	11.53	11.82	12.40	10.64	10.95	11.16	11.45	12.03
12H	4H	9.98	10.42	10.47	10.90	11.38	9.64	10.08	10.13	10.56	11.04
	6H	10.59	10.95	11.12	11.47	11.96	10.26	10.61	10.79	11.13	11.63
	8H	10.88	11.19	11.40	11.68	12.26	10.54	10.85	11.06	11.35	11.93