

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: P854451

Luminaire Tested: SQ2-WBN-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854451
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-075D-930-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

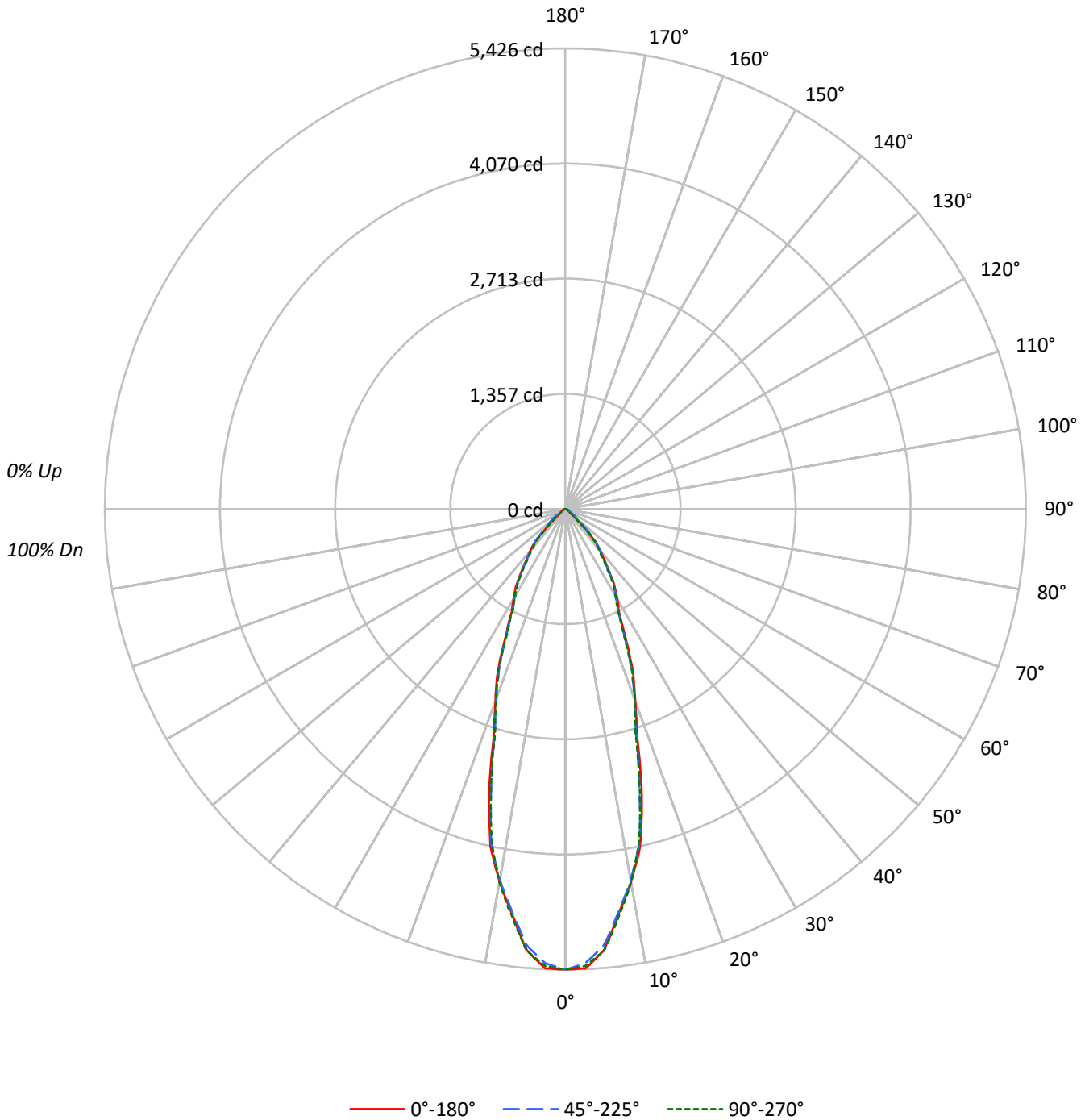
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3150.5 lumens
Efficiency: N/A
Efficacy: 114.1 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): 27.6
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
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°	87599	87599	87599
5°	84579	83738	84673
10°	73107	72761	73280
15°	58175	56341	56567
20°	41326	40782	41079
25°	29731	29149	28944
30°	22717	22108	22054
35°	17832	17528	17073
40°	13510	13327	12678
45°	7560	9033	6747
50°	2660	5561	2346
55°	1624	3035	1545
60°	1243	1586	1150
65°	1138	1177	1066
70°	1090	1090	1001
75°	1023	1023	961
80°	893	893	893
85°	889	704	704

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 9033 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	470.9	14.9
10°-20°	936.0	29.7
20°-30°	775.1	24.6
30°-40°	557.6	17.7
40°-50°	284.1	9.0
50°-60°	74.0	2.3
60°-70°	30.7	1.0
70°-80°	17.0	0.5
80°-90°	5.0	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°	2182.1	69.3
0°-40°	2739.7	87.0
0°-60°	3097.7	98.3
0°-90°	3150.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3150.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5426	5426	5426	5426	5426	
5°	5218	5211	5167	5241	5224	471
15°	3480	3441	3371	3394	3384	945
25°	1669	1666	1636	1622	1625	785
35°	905	910	889	875	866	568
45°	331	381	396	368	296	265
55°	58	67	108	62	55	57
65°	30	31	31	29	28	30
75°	16	16	16	15	15	17
85°	5	5	4	5	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5425.5	5425.5	5425.5	5425.5	5425.5
2.5°	5417.0	5408.0	5356.2	5399.1	5388.5
5°	5218.5	5211.0	5166.6	5241.3	5224.3
7.5°	4808.7	4815.1	4789.1	4855.1	4837.0
10°	4459.1	4476.1	4438.0	4533.7	4469.7
12.5°	4073.4	4062.5	4036.0	4050.8	4015.4
15°	3480.3	3440.8	3370.6	3394.4	3384.1
17.5°	2803.3	2818.6	2757.7	2755.1	2743.4
20°	2405.2	2409.9	2373.5	2392.7	2390.8
22.5°	2084.9	2085.9	2039.3	2067.4	2050.5
25°	1668.9	1666.1	1636.2	1621.8	1624.7
27.5°	1368.6	1357.0	1334.4	1343.8	1336.9
30°	1218.5	1209.1	1185.8	1191.4	1182.9
32.5°	1083.7	1084.1	1060.3	1057.4	1051.2
35°	904.7	910.4	889.3	874.7	866.2
37.5°	745.0	750.2	732.4	711.1	704.0
40°	641.0	644.8	632.3	607.2	601.5
42.5°	527.8	543.6	531.5	507.7	495.3
45°	331.1	381.0	395.6	367.9	295.5
47.5°	167.5	236.5	282.2	208.4	137.2
50°	105.9	153.9	221.4	125.4	93.4
52.5°	81.2	105.9	176.7	92.6	74.9
55°	57.7	67.2	107.8	62.4	54.9
57.5°	44.7	49.9	64.5	47.2	42.5
60°	38.5	42.3	49.1	40.3	35.6
62.5°	34.6	36.9	39.8	34.2	32.5
65°	29.8	30.8	30.8	28.9	27.9
67.5°	25.4	26.4	26.2	25.2	24.3
70°	23.1	24.0	23.1	22.1	21.2
72.5°	20.0	21.0	20.0	19.8	18.9
75°	16.4	16.4	16.4	15.4	15.4
77.5°	12.7	12.9	11.9	11.9	11.2
80°	9.6	10.6	9.6	9.6	9.6
82.5°	8.1	8.3	7.3	7.3	7.3
85°	4.8	4.8	3.8	4.8	3.8
87.5°	1.5	1.5	1.5	1.5	1.5
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	6.74	7.80	7.10	8.11	8.43	6.35	7.41	6.71	7.72	8.04
	3H	7.79	8.73	8.18	9.06	9.43	7.36	8.29	7.74	8.63	8.99
	4H	8.23	9.10	8.64	9.45	9.84	7.79	8.66	8.20	9.01	9.40
	6H	8.55	9.34	8.97	9.72	10.11	8.13	8.92	8.55	9.30	9.69
	8H	8.66	9.40	9.09	9.79	10.20	8.24	8.98	8.67	9.37	9.78
	12H	8.73	9.44	9.16	9.82	10.25	8.29	9.00	8.73	9.38	9.81
4H	2H	6.98	7.84	7.39	8.20	8.58	6.65	7.51	7.05	7.86	8.25
	3H	8.28	8.98	8.70	9.39	9.80	7.90	8.60	8.32	9.01	9.42
	4H	8.85	9.47	9.29	9.89	10.34	8.46	9.08	8.90	9.51	9.95
	6H	9.31	9.84	9.78	10.29	10.76	8.92	9.46	9.39	9.91	10.38
	8H	9.46	9.96	9.93	10.41	10.88	9.07	9.57	9.55	10.02	10.49
	12H	9.57	10.00	10.06	10.49	10.97	9.16	9.60	9.65	10.08	10.56
8H	4H	8.99	9.49	9.47	9.94	10.41	8.64	9.14	9.12	9.59	10.06
	6H	9.57	9.97	10.08	10.47	10.96	9.22	9.62	9.73	10.12	10.61
	8H	9.81	10.16	10.34	10.68	11.18	9.45	9.80	9.98	10.33	10.82
	12H	10.01	10.32	10.53	10.81	11.39	9.63	9.94	10.15	10.43	11.01
12H	4H	8.98	9.41	9.47	9.90	10.37	8.64	9.07	9.13	9.55	10.03
	6H	9.58	9.94	10.11	10.46	10.96	9.24	9.60	9.77	10.12	10.62
	8H	9.87	10.18	10.39	10.67	11.25	9.52	9.83	10.04	10.33	10.91