

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: P854452

Luminaire Tested: SQ2-WBN-0U-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854452
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-0U-075D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

Summary

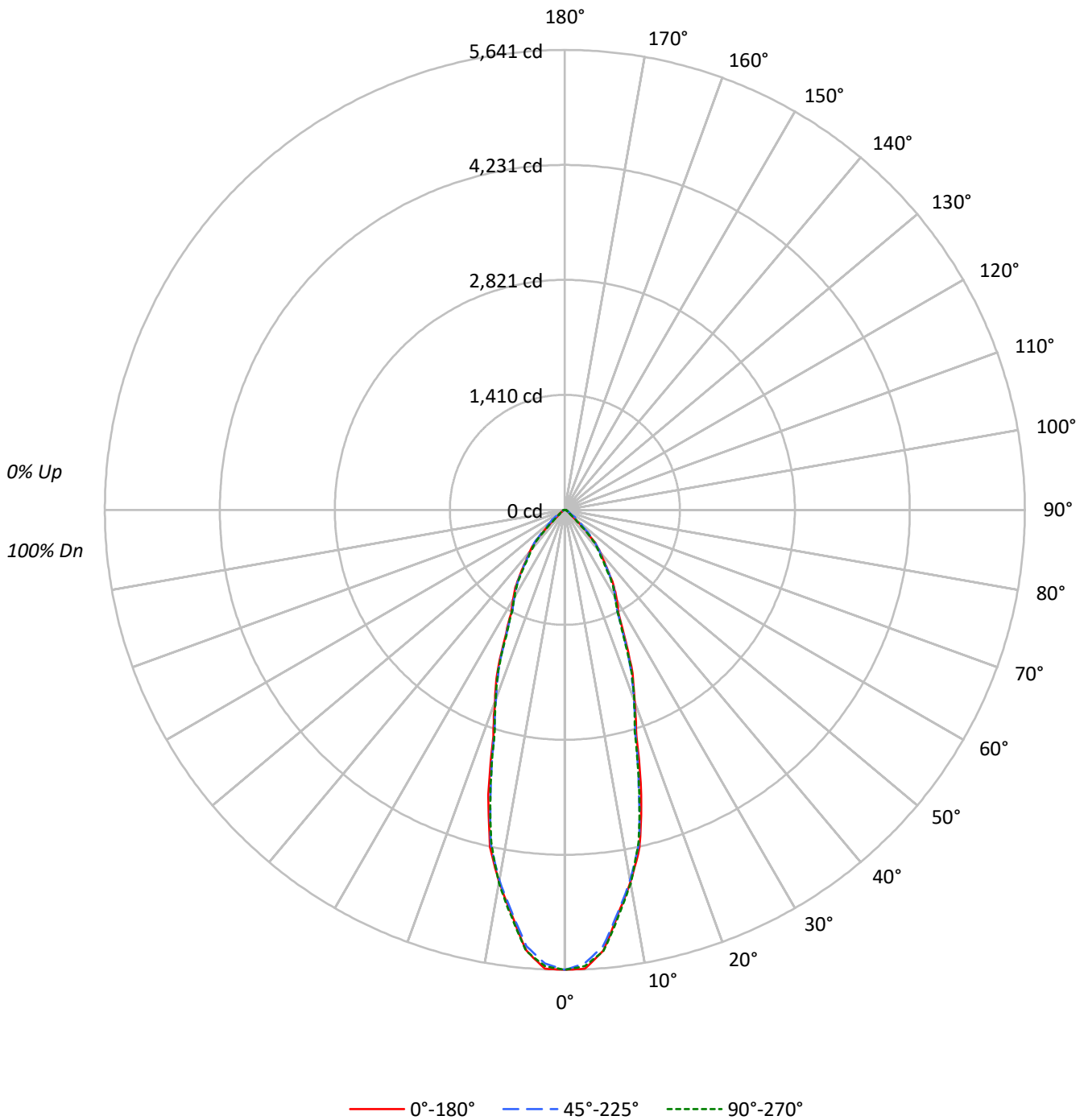
Lumens per Lamp: N/A
Luminaire Lumens: 3275.6 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.58 / 0.63
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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				
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°	91079	91079	91079
5°	87939	87064	88036
10°	76012	75649	76192
15°	60485	58579	58813
20°	42969	42400	42711
25°	30913	30307	30093
30°	23620	22986	22930
35°	18542	18226	17751
40°	14048	13858	13181
45°	7859	9391	7015
50°	2766	5782	2439
55°	1689	3156	1605
60°	1292	1647	1195
65°	1184	1223	1108
70°	1133	1133	1039
75°	1061	1061	998
80°	930	930	930
85°	926	741	741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 9391 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	489.7	14.9
10°-20°	973.2	29.7
20°-30°	805.9	24.6
30°-40°	579.8	17.7
40°-50°	295.4	9.0
50°-60°	76.9	2.3
60°-70°	31.9	1.0
70°-80°	17.7	0.5
80°-90°	5.2	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°	2268.7	69.3
0°-40°	2848.5	87.0
0°-60°	3220.8	98.3
0°-90°	3275.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3275.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5641	5641	5641	5641	5641	
5°	5426	5418	5372	5449	5432	489
15°	3618	3578	3504	3529	3518	982
25°	1735	1732	1701	1686	1689	816
35°	941	946	925	909	901	590
45°	344	396	411	383	307	275
55°	60	70	112	65	57	59
65°	31	32	32	30	29	31
75°	17	17	17	16	16	18
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°	5641.0	5641.0	5641.0	5641.0	5641.0
2.5°	5632.2	5622.8	5568.9	5613.5	5602.5
5°	5425.8	5418.0	5371.8	5449.4	5431.8
7.5°	4999.7	5006.4	4979.3	5047.9	5029.1
10°	4636.3	4653.9	4614.2	4713.8	4647.3
12.5°	4235.2	4223.8	4196.4	4211.7	4174.9
15°	3618.5	3577.5	3504.5	3529.2	3518.5
17.5°	2914.7	2930.5	2867.2	2864.5	2852.4
20°	2500.8	2505.7	2467.7	2487.7	2485.8
22.5°	2167.7	2168.7	2120.3	2149.5	2131.9
25°	1735.2	1732.3	1701.2	1686.3	1689.2
27.5°	1423.0	1410.9	1387.4	1397.2	1390.0
30°	1266.9	1257.1	1232.9	1238.7	1229.9
32.5°	1126.8	1127.2	1102.4	1099.4	1093.0
35°	940.7	946.5	924.7	909.4	900.6
37.5°	774.5	780.0	761.5	739.4	731.9
40°	666.5	670.4	657.5	631.3	625.4
42.5°	548.8	565.2	552.6	527.9	515.0
45°	344.2	396.1	411.3	382.6	307.2
47.5°	174.1	245.9	293.4	216.7	142.7
50°	110.1	160.0	230.2	130.3	97.1
52.5°	84.5	110.1	183.7	96.3	77.9
55°	60.0	69.8	112.1	64.9	57.0
57.5°	46.4	51.9	67.0	49.1	44.2
60°	40.0	43.9	51.0	41.9	37.0
62.5°	36.0	38.4	41.4	35.6	33.8
65°	31.0	32.0	32.0	30.0	29.0
67.5°	26.4	27.4	27.2	26.2	25.2
70°	24.0	25.0	24.0	23.0	22.0
72.5°	20.8	21.8	20.8	20.6	19.6
75°	17.0	17.0	17.0	16.0	16.0
77.5°	13.2	13.4	12.4	12.4	11.6
80°	10.0	11.0	10.0	10.0	10.0
82.5°	8.4	8.6	7.6	7.6	7.6
85°	5.0	5.0	4.0	5.0	4.0
87.5°	1.6	1.6	1.6	1.6	1.6
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	6.87	7.93	7.23	8.24	8.55	6.48	7.54	6.85	7.86	8.17
	3H	7.93	8.86	8.31	9.19	9.56	7.49	8.43	7.88	8.76	9.13
	4H	8.36	9.22	8.77	9.58	9.97	7.93	8.79	8.33	9.14	9.53
	6H	8.68	9.47	9.10	9.85	10.24	8.27	9.06	8.68	9.43	9.83
	8H	8.79	9.53	9.22	9.92	10.33	8.37	9.12	8.81	9.51	9.92
	12H	8.86	9.57	9.29	9.95	10.38	8.43	9.14	8.86	9.52	9.95
4H	2H	7.11	7.97	7.51	8.32	8.71	6.78	7.64	7.19	8.00	8.39
	3H	8.42	9.12	8.83	9.52	9.93	8.04	8.74	8.45	9.14	9.55
	4H	8.98	9.60	9.41	10.02	10.47	8.59	9.21	9.03	9.64	10.09
	6H	9.44	9.97	9.90	10.42	10.89	9.06	9.59	9.53	10.04	10.51
	8H	9.59	10.09	10.06	10.54	11.01	9.21	9.70	9.68	10.15	10.63
	12H	9.70	10.13	10.19	10.62	11.10	9.30	9.73	9.79	10.22	10.70
8H	4H	9.12	9.62	9.60	10.07	10.54	8.77	9.27	9.25	9.72	10.20
	6H	9.70	10.10	10.21	10.60	11.09	9.36	9.75	9.86	10.26	10.74
	8H	9.94	10.29	10.47	10.81	11.31	9.58	9.94	10.12	10.46	10.96
	12H	10.14	10.45	10.66	10.95	11.52	9.77	10.07	10.29	10.57	11.15
12H	4H	9.10	9.54	9.60	10.02	10.50	8.77	9.20	9.26	9.69	10.16
	6H	9.71	10.07	10.24	10.59	11.09	9.38	9.73	9.91	10.25	10.75
	8H	10.00	10.31	10.52	10.81	11.38	9.66	9.97	10.18	10.47	11.05