

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: P854412

Luminaire Tested: SQ2-WBN-025U-050D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854412
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2308-130-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBN-025U-050D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

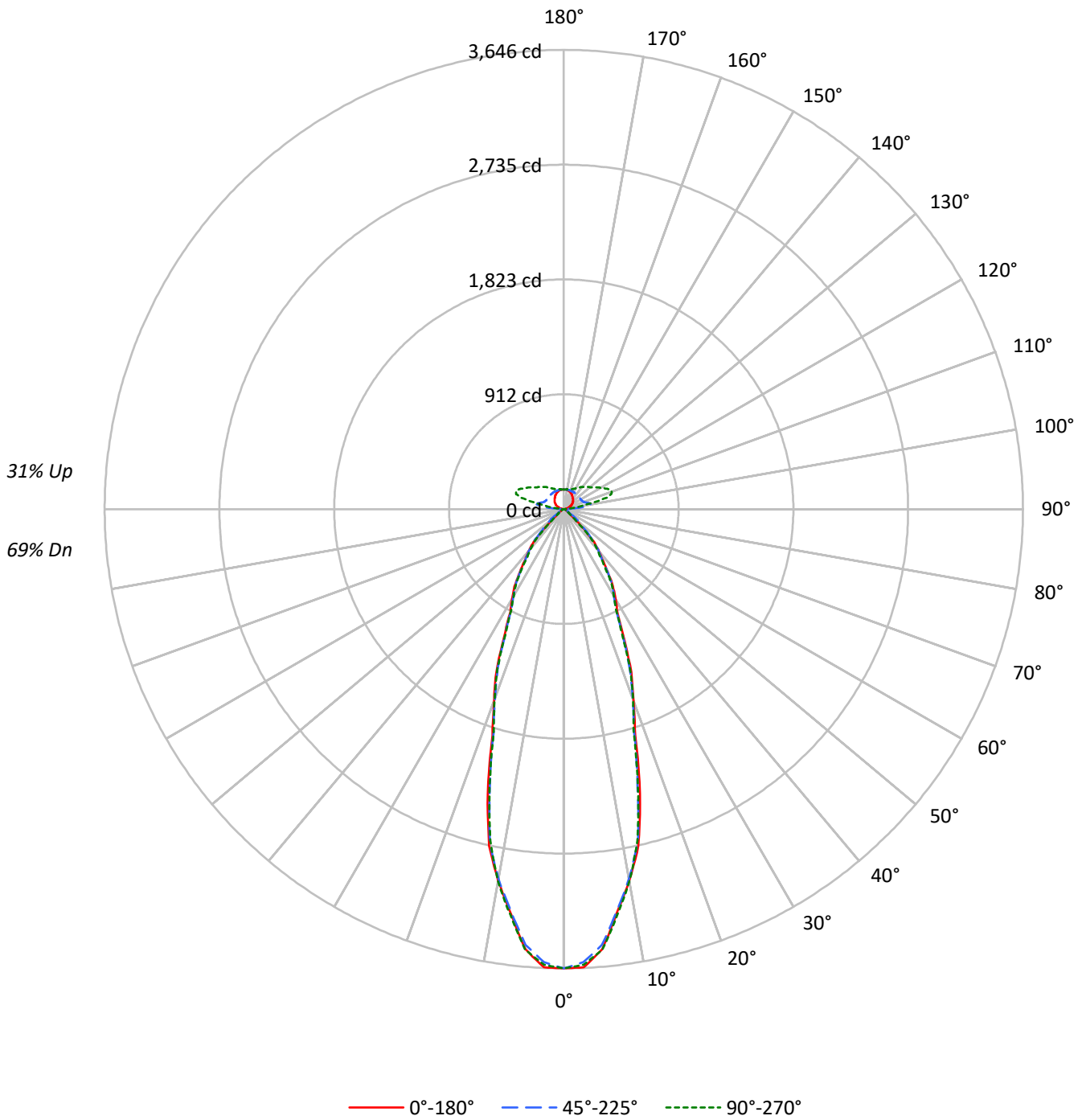
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3090.1 lumens
Efficiency: N/A
Efficacy: 121.2 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: Semi-Direct

Input Watts (W): 25.5
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	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73	69				
1	105	102	99	96	99	97	94	92	87	85	83	78	76	75	69	69	68	64				
2	99	93	89	85	93	89	85	81	80	77	75	73	71	69	66	64	63	59				
3	93	86	80	76	88	82	77	73	75	71	68	68	65	63	62	60	58	55				
4	87	79	73	68	83	76	70	66	69	65	62	64	61	58	58	56	54	51				
5	82	73	67	62	78	70	65	60	65	60	57	60	56	54	55	53	50	48				
6	77	68	62	57	74	65	60	56	61	56	53	56	53	50	52	49	47	45				
7	73	63	57	53	70	61	56	51	57	52	49	53	49	47	50	47	44	42				
8	69	59	53	49	66	58	52	48	54	49	46	50	47	44	47	44	42	40				
9	66	56	50	46	63	54	49	45	51	46	43	48	44	41	45	42	39	38				
10	63	53	47	43	60	51	46	42	48	44	40	45	42	39	43	40	37	36				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	58865	58865	58865
5°	56835	56269	56898
10°	49126	48893	49242
15°	39092	37859	38011
20°	27770	27404	27603
25°	19979	19588	19449
30°	15265	14855	14820
35°	11984	11779	11473
40°	9078	8956	8519
45°	5080	6069	4535
50°	1786	3738	1575
55°	1092	2038	1039
60°	836	1066	772
65°	764	791	718
70°	732	732	670
75°	686	686	643
80°	604	604	604
85°	593	482	482

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6069 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	316.5	10.2
10°-20°	629.0	20.4
20°-30°	520.9	16.9
30°-40°	374.7	12.1
40°-50°	190.9	6.2
50°-60°	49.7	1.6
60°-70°	20.6	0.7
70°-80°	11.4	0.4
80°-90°	3.8	0.1
90°-100°	63.4	2.1
100°-110°	197.3	6.4
110°-120°	193.0	6.2
120°-130°	157.6	5.1
130°-140°	128.9	4.2
140°-150°	100.6	3.3
150°-160°	72.6	2.3
160°-170°	44.4	1.4
170°-180°	15.0	0.5
0°-30°	1466.3	47.5
0°-40°	1841.0	59.6
0°-60°	2081.6	67.4
0°-90°	2117.4	68.5
90°-120°	453.7	14.7
90°-150°	840.8	27.2
90°-180°	973.0	31.5
0°-180°	3090.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3646	3646	3646	3646	3646	
5°	3507	3502	3472	3522	3511	316
15°	2339	2312	2265	2281	2274	635
25°	1122	1120	1100	1090	1092	527
35°	608	612	598	588	582	382
45°	222	256	266	247	199	178
55°	39	45	72	42	37	38
65°	20	21	21	19	19	20
75°	11	11	11	10	10	12
85°	3	3	3	3	3	3
90°	0	1	3	3	3	1
95°	9	26	116	43	28	10
105°	35	49	194	371	354	37
115°	62	73	158	325	381	61
125°	86	95	156	256	300	76
135°	103	114	155	221	248	80
145°	120	130	155	191	208	75
155°	138	142	156	171	177	63
165°	151	152	157	162	164	42
175°	157	157	157	158	157	15
180°	157	157	157	157	157	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3645.8	3645.8	3645.8	3645.8	3645.8
2.5°	3640.1	3634.0	3599.2	3628.0	3620.9
5°	3506.7	3501.7	3471.8	3522.0	3510.6
7.5°	3231.3	3235.6	3218.1	3262.5	3250.3
10°	2996.4	3007.8	2982.2	3046.5	3003.5
12.5°	2737.2	2729.9	2712.1	2722.1	2698.3
15°	2338.7	2312.1	2264.9	2281.0	2274.0
17.5°	1883.7	1894.0	1853.1	1851.4	1843.5
20°	1616.2	1619.4	1594.9	1607.8	1606.5
22.5°	1401.0	1401.6	1370.4	1389.2	1377.9
25°	1121.5	1119.6	1099.5	1089.8	1091.7
27.5°	919.7	911.8	896.7	903.0	898.3
30°	818.8	812.5	796.8	800.6	794.9
32.5°	728.2	728.5	712.5	710.6	706.4
35°	608.0	611.7	597.6	587.8	582.1
37.5°	500.6	504.1	492.2	477.8	473.0
40°	430.7	433.3	424.9	408.0	404.2
42.5°	354.7	365.3	357.1	341.2	332.8
45°	222.5	256.0	265.8	247.2	198.6
47.5°	112.5	159.0	189.6	140.0	92.2
50°	71.1	103.4	148.8	84.2	62.7
52.5°	54.6	71.2	118.7	62.2	50.3
55°	38.8	45.1	72.4	41.9	36.9
57.5°	30.0	33.6	43.3	31.7	28.6
60°	25.9	28.4	33.0	27.1	23.9
62.5°	23.3	24.8	26.8	23.0	21.9
65°	20.0	20.7	20.7	19.4	18.8
67.5°	17.1	17.7	17.6	16.9	16.3
70°	15.5	16.2	15.5	14.9	14.2
72.5°	13.5	14.1	13.5	13.3	12.7
75°	11.0	11.0	11.0	10.3	10.3
77.5°	8.5	8.7	8.0	8.0	7.5
80°	6.5	7.1	6.5	6.5	6.5
82.5°	5.4	5.6	4.9	4.9	4.9
85°	3.2	3.2	2.6	3.2	2.6
87.5°	1.0	1.2	1.6	1.6	1.6
90°	0.0	0.9	2.9	2.9	2.9
92.5°	3.1	10.8	36.7	12.1	9.8
95°	8.7	25.6	116.3	42.9	27.9
97.5°	15.8	33.3	192.7	119.9	75.6
100°	21.2	37.1	217.3	203.3	135.6
102.5°	26.5	41.8	212.7	290.3	227.9
105°	34.6	48.7	194.2	370.7	353.8
107.5°	42.7	55.9	176.5	376.9	395.6
110°	48.1	61.2	167.3	368.1	404.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	53.5	65.9	162.7	352.2	398.6
115°	61.5	72.8	157.7	325.3	380.7
117.5°	69.4	79.8	155.6	299.5	356.3
120°	74.0	84.4	154.8	284.9	339.4
122.5°	78.6	89.0	155.6	272.5	322.5
125°	85.6	95.0	155.8	255.8	300.0
127.5°	91.1	100.7	155.8	243.3	280.9
130°	94.2	104.6	155.8	236.3	270.2
132.5°	98.1	108.4	155.0	230.1	261.7
135°	102.9	114.2	154.8	220.8	248.1
137.5°	108.5	118.8	154.8	211.5	236.3
140°	111.5	121.9	154.8	205.3	227.9
142.5°	115.4	125.0	154.8	199.1	219.4
145°	120.2	129.6	154.8	190.8	207.7
147.5°	126.0	134.0	155.8	183.0	196.3
150°	129.8	136.4	155.8	179.1	189.4
152.5°	132.9	138.7	155.8	175.2	184.0
155°	137.5	142.2	155.8	171.3	176.9
157.5°	142.1	145.7	155.8	167.8	171.3
160°	145.2	148.0	155.8	165.4	168.3
162.5°	147.5	149.6	155.8	163.9	166.0
165°	151.0	151.9	156.7	161.6	163.5
167.5°	153.1	153.3	155.8	160.2	161.1
170°	153.8	154.8	155.8	158.7	159.6
172.5°	155.4	155.6	156.5	157.9	158.1
175°	156.7	156.7	156.7	157.7	156.7
177.5°	156.7	156.7	156.7	156.7	156.7
180°	156.7	156.7	156.7	156.7	156.7

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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	2.73	3.51	3.56	4.32	5.32	2.35	3.12	3.17	3.93	4.93
	3H	3.78	4.47	4.62	5.29	6.32	3.35	4.04	4.19	4.86	5.89
	4H	4.21	4.85	5.06	5.68	6.72	3.77	4.41	4.62	5.24	6.28
	6H	4.53	5.12	5.39	5.95	7.00	4.10	4.69	4.97	5.53	6.58
	8H	4.63	5.18	5.50	6.04	7.09	4.21	4.77	5.08	5.62	6.67
	12H	4.69	5.22	5.56	6.07	7.14	4.26	4.79	5.13	5.64	6.71
4H	2H	2.96	3.60	3.81	4.43	5.47	2.63	3.27	3.49	4.10	5.14
	3H	4.25	4.78	5.12	5.65	6.70	3.87	4.40	4.74	5.27	6.32
	4H	4.82	5.30	5.69	6.16	7.24	4.43	4.90	5.30	5.77	6.85
	6H	5.27	5.68	6.16	6.57	7.65	4.89	5.30	5.78	6.18	7.27
	8H	5.43	5.81	6.32	6.69	7.78	5.05	5.43	5.94	6.31	7.40
	12H	5.53	5.87	6.44	6.77	7.87	5.13	5.47	6.04	6.37	7.47
8H	4H	4.96	5.34	5.85	6.22	7.31	4.61	4.99	5.50	5.87	6.96
	6H	5.55	5.86	6.46	6.78	7.87	5.20	5.51	6.11	6.43	7.52
	8H	5.79	6.06	6.72	6.98	8.09	5.44	5.71	6.37	6.63	7.74
	12H	5.98	6.22	6.90	7.12	8.29	5.61	5.85	6.54	6.75	7.92
12H	4H	4.94	5.28	5.84	6.18	7.27	4.59	4.93	5.50	5.83	6.93
	6H	5.57	5.84	6.50	6.76	7.87	5.23	5.50	6.16	6.42	7.53
	8H	5.84	6.08	6.77	6.98	8.15	5.50	5.74	6.43	6.65	7.81