

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: P854418

Luminaire Tested: SQ2-WBN-025U-100D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854418
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-100D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

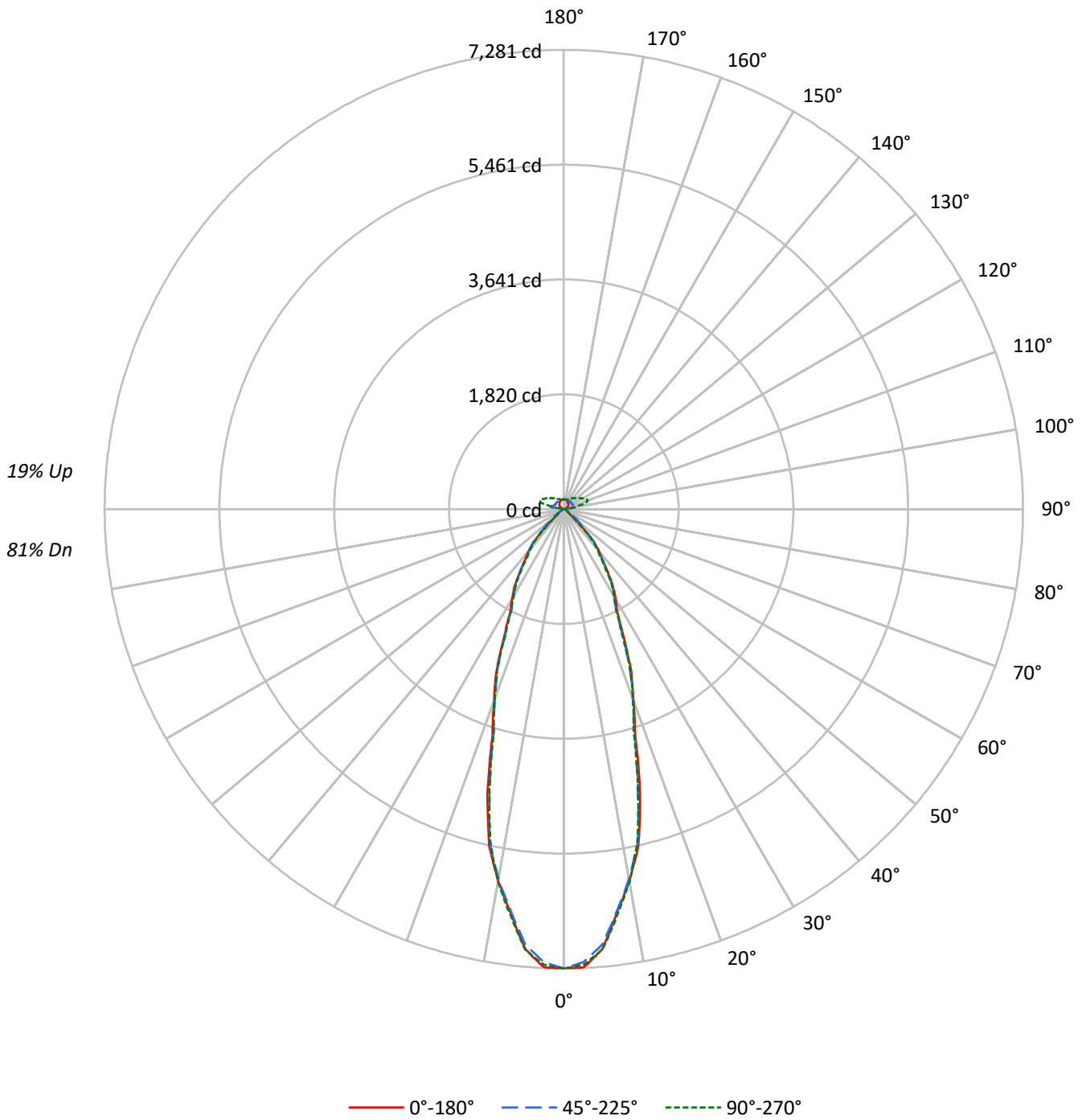
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5193.3 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: Semi-Direct

Input Watts (W): 45.5
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	0
RCR																		
0	115	115	115	115	110	110	110	110	101	101	101	93	93	93	85	85	85	81
1	108	105	103	100	104	101	99	97	94	92	91	87	86	85	81	80	79	76
2	102	97	93	89	98	94	90	87	87	84	82	82	79	77	76	75	73	71
3	97	90	84	80	93	87	82	78	82	78	75	77	74	71	72	70	68	66
4	91	83	77	73	88	81	76	72	76	72	69	72	69	66	68	66	63	61
5	86	78	71	67	83	76	70	66	72	67	64	68	64	61	65	62	59	57
6	82	73	66	62	79	71	65	61	67	63	59	64	60	57	61	58	55	54
7	78	68	62	57	75	66	61	57	63	59	55	61	57	54	58	55	52	50
8	74	64	58	54	71	63	57	53	60	55	52	58	53	50	55	52	49	48
9	70	60	54	50	68	59	54	50	57	52	49	55	51	48	53	49	46	45
10	67	57	51	47	65	56	51	47	54	49	46	52	48	45	50	47	44	43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	117564	117564	117564
5°	113513	112381	113637
10°	98115	97650	98348
15°	78076	75614	75916
20°	55464	54732	55130
25°	39902	39120	38844
30°	30488	29669	29597
35°	23932	23524	22913
40°	18132	17888	17015
45°	10147	12122	9056
50°	3569	7463	3147
55°	2182	4073	2072
60°	1669	2128	1544
65°	1528	1578	1433
70°	1463	1463	1341
75°	1372	1372	1291
80°	1199	1199	1199
85°	1204	963	963

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 12122 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	632.0	12.2
10°-20°	1256.2	24.2
20°-30°	1040.3	20.0
30°-40°	748.4	14.4
40°-50°	381.3	7.3
50°-60°	99.3	1.9
60°-70°	41.2	0.8
70°-80°	22.9	0.4
80°-90°	7.2	0.1
90°-100°	62.9	1.2
100°-110°	195.6	3.8
110°-120°	191.4	3.7
120°-130°	156.3	3.0
130°-140°	127.8	2.5
140°-150°	99.8	1.9
150°-160°	72.0	1.4
160°-170°	44.0	0.8
170°-180°	14.8	0.3
0°-30°	2928.5	56.4
0°-40°	3676.9	70.8
0°-60°	4157.4	80.1
0°-90°	4228.6	81.4
90°-120°	450.0	8.7
90°-150°	833.8	16.1
90°-180°	965.0	18.6
0°-180°	5193.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7281	7281	7281	7281	7281	
5°	7004	6994	6934	7034	7011	632
15°	4671	4618	4524	4556	4542	1268
25°	2240	2236	2196	2177	2180	1054
35°	1214	1222	1194	1174	1162	762
45°	444	511	531	494	397	355
55°	78	90	145	84	74	76
65°	40	41	41	39	38	40
75°	22	22	22	21	21	23
85°	6	6	5	6	5	7
90°	0	1	3	3	3	1
95°	9	25	115	43	28	10
105°	34	48	193	368	351	36
115°	61	72	156	323	378	60
125°	85	94	154	254	298	75
135°	102	113	154	219	246	79
145°	119	128	154	189	206	75
155°	136	141	154	170	176	63
165°	150	151	155	160	162	42
175°	155	155	155	156	155	15
180°	155	155	155	155	155	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7281.4	7281.4	7281.4	7281.4	7281.4
2.5°	7270.0	7257.9	7188.4	7246.0	7231.8
5°	7003.7	6993.6	6933.9	7034.2	7011.4
7.5°	6453.7	6462.3	6427.3	6515.9	6491.7
10°	5984.5	6007.3	5956.1	6084.6	5998.7
12.5°	5466.8	5452.2	5416.7	5436.5	5389.0
15°	4670.9	4617.8	4523.6	4555.6	4541.7
17.5°	3762.3	3782.7	3701.0	3697.6	3681.9
20°	3228.0	3234.3	3185.4	3211.2	3208.6
22.5°	2798.1	2799.4	2736.9	2774.6	2751.9
25°	2239.8	2236.0	2195.9	2176.6	2180.4
27.5°	1836.8	1821.2	1790.8	1803.5	1794.2
30°	1635.3	1622.7	1591.4	1598.9	1587.5
32.5°	1454.5	1455.0	1423.0	1419.1	1410.8
35°	1214.2	1221.8	1193.5	1173.9	1162.5
37.5°	999.8	1006.9	983.0	954.4	944.8
40°	860.3	865.3	848.7	814.9	807.3
42.5°	708.4	729.6	713.3	681.4	664.7
45°	444.4	511.3	530.9	493.8	396.6
47.5°	224.8	317.5	378.7	279.7	184.2
50°	142.1	206.5	297.1	168.2	125.3
52.5°	109.0	142.1	237.2	124.2	100.5
55°	77.5	90.1	144.7	83.7	73.6
57.5°	59.9	67.0	86.5	63.4	57.1
60°	51.7	56.7	65.9	54.1	47.8
62.5°	46.5	49.5	53.5	45.9	43.7
65°	40.0	41.3	41.3	38.7	37.5
67.5°	34.1	35.4	35.1	33.8	32.6
70°	31.0	32.3	31.0	29.7	28.4
72.5°	26.9	28.1	26.9	26.6	25.3
75°	22.0	22.0	22.0	20.7	20.7
77.5°	17.1	17.3	16.0	16.0	15.0
80°	12.9	14.2	12.9	12.9	12.9
82.5°	10.9	11.1	9.8	9.8	9.8
85°	6.5	6.5	5.2	6.4	5.2
87.5°	2.1	2.3	2.6	2.6	2.6
90°	0.0	0.9	2.9	2.9	2.9
92.5°	3.1	10.7	36.4	12.0	9.7
95°	8.6	25.4	115.4	42.6	27.7
97.5°	15.6	33.0	191.1	119.0	75.0
100°	21.0	36.8	215.5	201.6	134.5
102.5°	26.3	41.4	210.9	287.9	226.0
105°	34.3	48.3	192.6	367.7	350.9
107.5°	42.3	55.4	175.1	373.8	392.3
110°	47.7	60.7	165.9	365.1	401.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	53.0	65.3	161.3	349.3	395.4
115°	61.0	72.2	156.4	322.6	377.6
117.5°	68.8	79.1	154.3	297.1	353.4
120°	73.4	83.7	153.5	282.5	336.6
122.5°	78.0	88.3	154.3	270.2	319.8
125°	84.9	94.2	154.5	253.7	297.5
127.5°	90.4	99.9	154.5	241.3	278.6
130°	93.5	103.7	154.5	234.4	268.0
132.5°	97.3	107.5	153.7	228.2	259.6
135°	102.0	113.2	153.5	219.0	246.0
137.5°	107.6	117.8	153.5	209.8	234.4
140°	110.6	120.9	153.5	203.6	226.0
142.5°	114.4	123.9	153.5	197.5	217.6
145°	119.2	128.5	153.5	189.2	206.0
147.5°	124.9	132.9	154.5	181.5	194.7
150°	128.7	135.3	154.5	177.6	187.9
152.5°	131.8	137.6	154.5	173.8	182.5
155°	136.4	141.0	154.5	169.9	175.5
157.5°	140.9	144.5	154.5	166.4	169.9
160°	144.0	146.8	154.5	164.1	166.9
162.5°	146.3	148.3	154.5	162.5	164.6
165°	149.7	150.6	155.4	160.2	162.1
167.5°	151.8	152.0	154.5	158.9	159.8
170°	152.6	153.5	154.5	157.4	158.3
172.5°	154.1	154.3	155.2	156.6	156.8
175°	155.4	155.4	155.4	156.4	155.4
177.5°	155.4	155.4	155.4	155.4	155.4
180°	155.4	155.4	155.4	155.4	155.4

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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	6.21	7.08	6.88	7.73	8.48	5.83	6.69	6.50	7.34	8.09
	3H	7.27	8.03	7.95	8.69	9.48	6.83	7.60	7.52	8.26	9.05
	4H	7.70	8.41	8.40	9.09	9.89	7.26	7.97	7.96	8.65	9.45
	6H	8.01	8.67	8.73	9.36	10.17	7.60	8.25	8.31	8.94	9.75
	8H	8.12	8.73	8.84	9.44	10.25	7.70	8.32	8.43	9.02	9.84
	12H	8.18	8.77	8.91	9.47	10.31	7.75	8.34	8.48	9.03	9.87
4H	2H	6.44	7.15	7.15	7.83	8.64	6.11	6.82	6.82	7.50	8.31
	3H	7.74	8.33	8.46	9.04	9.86	7.36	7.94	8.07	8.66	9.48
	4H	8.31	8.83	9.04	9.55	10.40	7.92	8.44	8.65	9.16	10.01
	6H	8.76	9.21	9.51	9.96	10.82	8.38	8.83	9.13	9.57	10.44
	8H	8.92	9.34	9.67	10.08	10.94	8.53	8.95	9.29	9.69	10.56
	12H	9.03	9.40	9.80	10.16	11.03	8.62	8.99	9.39	9.76	10.63
8H	4H	8.45	8.87	9.20	9.61	10.48	8.10	8.52	8.85	9.26	10.13
	6H	9.04	9.37	9.82	10.16	11.03	8.69	9.02	9.47	9.81	10.68
	8H	9.28	9.57	10.07	10.36	11.25	8.92	9.22	9.72	10.01	10.90
	12H	9.47	9.73	10.26	10.50	11.46	9.09	9.36	9.89	10.13	11.08
12H	4H	8.43	8.80	9.20	9.56	10.44	8.09	8.46	8.86	9.22	10.10
	6H	9.05	9.35	9.85	10.14	11.03	8.71	9.01	9.51	9.80	10.69
	8H	9.33	9.59	10.12	10.36	11.32	8.99	9.25	9.78	10.02	10.98