

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: P854463

Luminaire Tested: SQ2-WBN-100U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854463
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G3-2308-130-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBN-100U-075D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

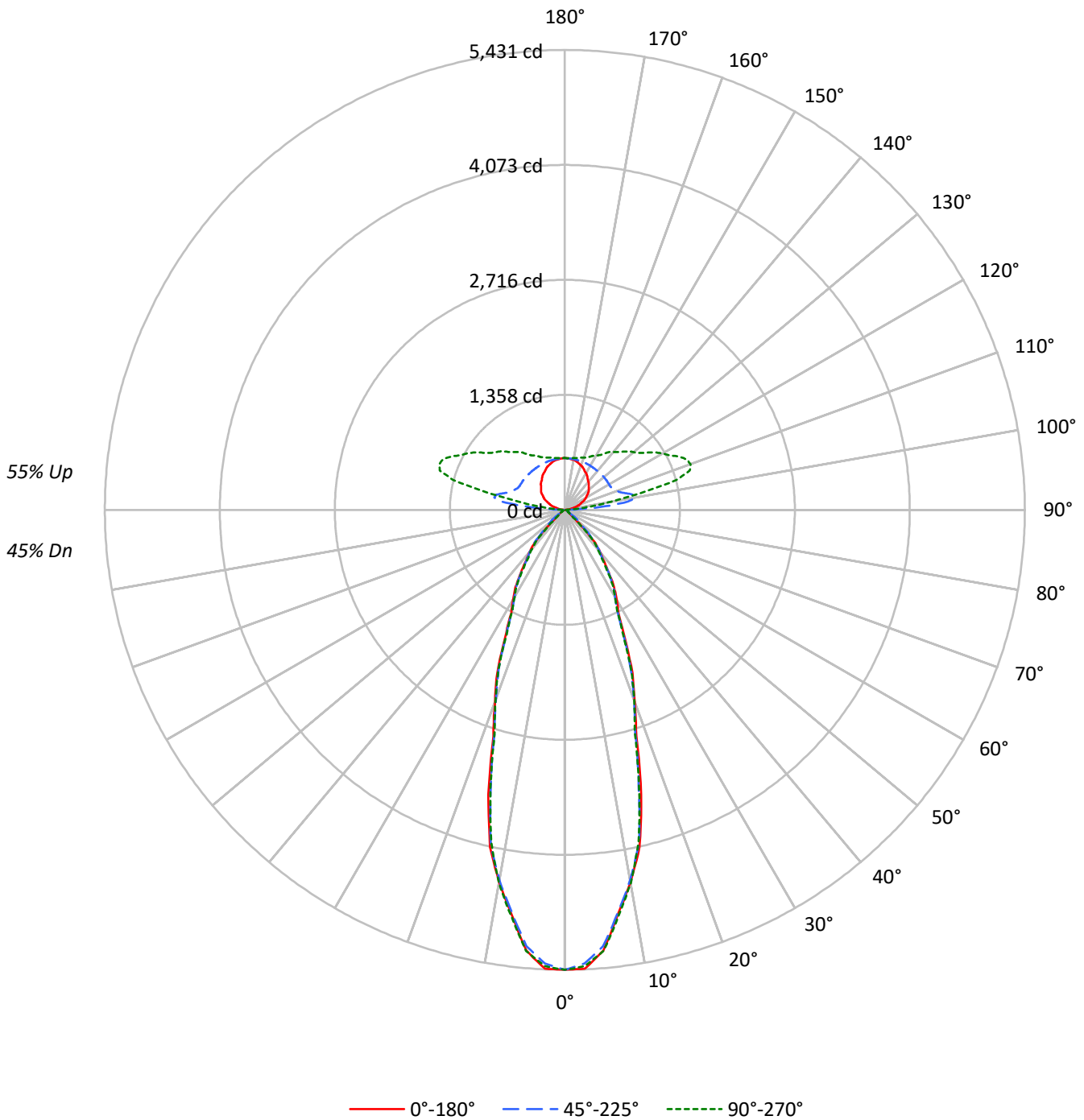
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6949.4 lumens
Efficiency: N/A
Efficacy: 115.4 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: General Diffuse

Input Watts (W): 60.2
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45				
1	99	95	92	89	91	88	85	83	74	72	70	61	60	59	49	48	48	42				
2	92	86	81	77	84	80	75	72	67	65	62	56	54	53	46	45	44	39				
3	86	78	72	67	79	72	67	63	62	58	55	52	50	48	43	42	41	37				
4	80	71	65	60	74	66	61	56	57	53	50	49	46	44	41	39	38	34				
5	75	65	58	53	69	61	55	51	53	49	45	45	42	40	38	36	35	32				
6	70	60	53	48	65	56	50	46	49	45	41	42	39	37	36	34	33	30				
7	66	55	49	44	61	52	46	42	46	41	38	40	37	34	34	32	31	28				
8	62	51	45	40	57	48	43	39	43	38	35	37	34	32	33	30	29	26				
9	58	48	41	37	54	45	40	36	40	36	33	35	32	30	31	29	27	25				
10	55	45	38	34	51	42	37	33	38	33	31	33	30	28	29	27	26	24				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	87690	87690	87690
5°	84668	83824	84760
10°	73184	72836	73357
15°	58235	56399	56625
20°	41369	40823	41122
25°	29763	29179	28972
30°	22741	22130	22076
35°	17852	17548	17091
40°	13525	13342	12693
45°	7567	9042	6754
50°	2663	5566	2349
55°	1627	3037	1545
60°	1243	1586	1150
65°	1142	1177	1066
70°	1090	1090	1001
75°	1023	1023	961
80°	893	893	893
85°	889	722	722

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 9042 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	471.4	6.8
10°-20°	937.0	13.5
20°-30°	775.9	11.2
30°-40°	558.2	8.0
40°-50°	284.4	4.1
50°-60°	74.0	1.1
60°-70°	30.7	0.4
70°-80°	17.0	0.2
80°-90°	6.2	0.1
90°-100°	254.6	3.7
100°-110°	770.1	11.1
110°-120°	751.8	10.8
120°-130°	614.3	8.8
130°-140°	501.5	7.2
140°-150°	390.4	5.6
150°-160°	281.4	4.0
160°-170°	172.3	2.5
170°-180°	58.2	0.8
0°-30°	2184.3	31.4
0°-40°	2742.5	39.5
0°-60°	3100.9	44.6
0°-90°	3154.8	45.4
90°-120°	1776.6	25.6
90°-150°	3282.7	47.2
90°-180°	3795.0	54.6
0°-180°	6949.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5431	5431	5431	5431	5431	
5°	5224	5216	5172	5247	5230	471
15°	3484	3444	3374	3398	3388	946
25°	1671	1668	1638	1624	1626	786
35°	906	911	890	876	867	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	2	12	7	6	2
95°	32	100	480	178	112	37
105°	134	188	756	1436	1365	141
115°	238	284	612	1266	1486	236
125°	333	370	603	1000	1176	296
135°	399	441	599	862	970	309
145°	466	501	599	742	811	292
155°	531	549	603	665	690	244
165°	581	588	606	629	636	164
175°	608	608	609	614	612	58
180°	610	610	610	610	610	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5431.1	5431.1	5431.1	5431.1	5431.1
2.5°	5422.6	5413.6	5361.7	5404.7	5394.1
5°	5224.0	5216.4	5171.9	5246.7	5229.7
7.5°	4813.7	4820.1	4794.1	4860.1	4842.0
10°	4463.8	4480.7	4442.6	4538.4	4474.4
12.5°	4077.6	4066.7	4040.2	4055.0	4019.6
15°	3483.9	3444.4	3374.1	3397.9	3387.6
17.5°	2806.2	2821.5	2760.5	2758.0	2746.3
20°	2407.7	2412.4	2375.9	2395.2	2393.3
22.5°	2087.1	2088.0	2041.4	2069.5	2052.6
25°	1670.7	1667.8	1637.9	1623.5	1626.3
27.5°	1370.1	1358.4	1335.8	1345.2	1338.3
30°	1219.8	1210.3	1187.0	1192.6	1184.1
32.5°	1084.9	1085.2	1061.4	1058.5	1052.3
35°	905.7	911.3	890.3	875.6	867.1
37.5°	745.7	751.0	733.2	711.8	704.7
40°	641.7	645.4	633.0	607.8	602.2
42.5°	528.4	544.2	532.0	508.2	495.8
45°	331.4	381.4	396.0	368.3	295.8
47.5°	167.6	236.8	282.5	208.6	137.4
50°	106.0	154.0	221.6	125.5	93.5
52.5°	81.3	106.0	176.9	92.7	75.0
55°	57.8	67.2	107.9	62.5	54.9
57.5°	44.7	50.0	64.6	47.3	42.6
60°	38.5	42.3	49.1	40.4	35.6
62.5°	34.7	36.9	39.9	34.3	32.6
65°	29.9	30.8	30.8	28.9	27.9
67.5°	25.4	26.4	26.2	25.2	24.3
70°	23.1	24.1	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	3.9	4.8	3.9
87.5°	1.5	1.9	3.8	2.9	2.7
90°	0.0	1.9	11.5	6.7	5.7
92.5°	10.7	43.3	155.4	51.6	37.1
95°	31.6	99.9	480.5	177.5	112.0
97.5°	61.1	127.1	757.3	501.1	305.1
100°	79.4	144.0	846.1	818.0	549.4
102.5°	100.1	162.4	827.8	1147.3	914.7
105°	134.0	188.3	756.2	1436.0	1364.9
107.5°	166.2	218.0	687.2	1464.6	1547.0
110°	187.6	237.2	652.8	1428.6	1578.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	208.3	256.4	632.1	1368.3	1557.7
115°	238.3	284.2	611.6	1265.6	1486.5
117.5°	268.2	311.6	604.4	1169.4	1395.5
120°	288.1	329.3	602.1	1113.3	1330.5
122.5°	306.5	345.4	602.1	1063.9	1264.6
125°	333.1	369.6	603.0	999.5	1176.3
127.5°	354.7	392.5	602.1	950.8	1101.7
130°	368.5	407.8	602.1	922.9	1059.6
132.5°	380.8	420.8	601.3	897.4	1023.6
135°	399.1	441.3	599.2	862.0	969.6
137.5°	419.6	459.7	599.2	824.1	923.8
140°	432.6	471.9	599.2	799.5	894.0
142.5°	445.7	483.5	598.4	777.0	859.5
145°	466.1	500.8	599.2	741.5	810.7
147.5°	486.6	516.0	600.3	712.2	765.3
150°	499.6	526.8	601.1	695.9	740.8
152.5°	511.9	536.0	601.9	681.9	718.6
155°	531.2	549.0	603.0	664.8	690.1
157.5°	548.1	562.5	604.2	652.2	669.8
160°	558.0	570.2	604.9	644.5	657.6
162.5°	568.0	577.1	605.7	637.5	648.4
165°	581.0	587.5	605.9	629.0	636.5
167.5°	592.1	595.5	607.0	622.4	625.6
170°	598.2	600.1	607.8	619.3	620.2
172.5°	602.1	603.2	607.8	616.2	616.4
175°	607.8	607.8	608.8	613.5	611.6
177.5°	610.5	609.7	608.9	611.2	609.7
180°	609.7	609.7	609.7	609.7	609.7



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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	1.96	2.63	3.00	3.64	4.99	1.58	2.25	2.62	3.26	4.61
	3H	3.01	3.60	4.05	4.62	6.00	2.58	3.17	3.62	4.19	5.56
	4H	3.44	3.99	4.49	5.02	6.40	3.00	3.56	4.05	4.58	5.96
	6H	3.75	4.26	4.81	5.29	6.68	3.33	3.84	4.39	4.87	6.26
	8H	3.84	4.33	4.91	5.37	6.76	3.43	3.91	4.49	4.96	6.34
	12H	3.91	4.37	4.98	5.41	6.81	3.48	3.94	4.55	4.97	6.38
4H	2H	2.18	2.74	3.24	3.76	5.14	1.85	2.41	2.92	3.44	4.82
	3H	3.48	3.94	4.54	4.99	6.38	3.09	3.56	4.16	4.61	6.00
	4H	4.04	4.46	5.11	5.51	6.92	3.65	4.07	4.72	5.12	6.53
	6H	4.49	4.85	5.57	5.92	7.33	4.11	4.47	5.18	5.53	6.94
	8H	4.65	4.98	5.72	6.04	7.46	4.26	4.60	5.34	5.66	7.08
	12H	4.75	5.05	5.84	6.13	7.55	4.35	4.65	5.44	5.72	7.15
8H	4H	4.18	4.52	5.26	5.58	7.00	3.83	4.17	4.91	5.23	6.65
	6H	4.77	5.04	5.86	6.14	7.56	4.41	4.69	5.51	5.79	7.21
	8H	5.01	5.25	6.12	6.34	7.78	4.66	4.90	5.76	5.98	7.42
	12H	5.20	5.41	6.30	6.49	7.97	4.83	5.04	5.93	6.12	7.60
12H	4H	4.15	4.46	5.25	5.53	6.95	3.81	4.11	4.91	5.19	6.61
	6H	4.79	5.03	5.90	6.12	7.55	4.45	4.69	5.56	5.78	7.21
	8H	5.06	5.27	6.17	6.35	7.83	4.72	4.93	5.82	6.01	7.49