

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: P854465

Luminaire Tested: SQ2-WBN-100U-075D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854465
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-940-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

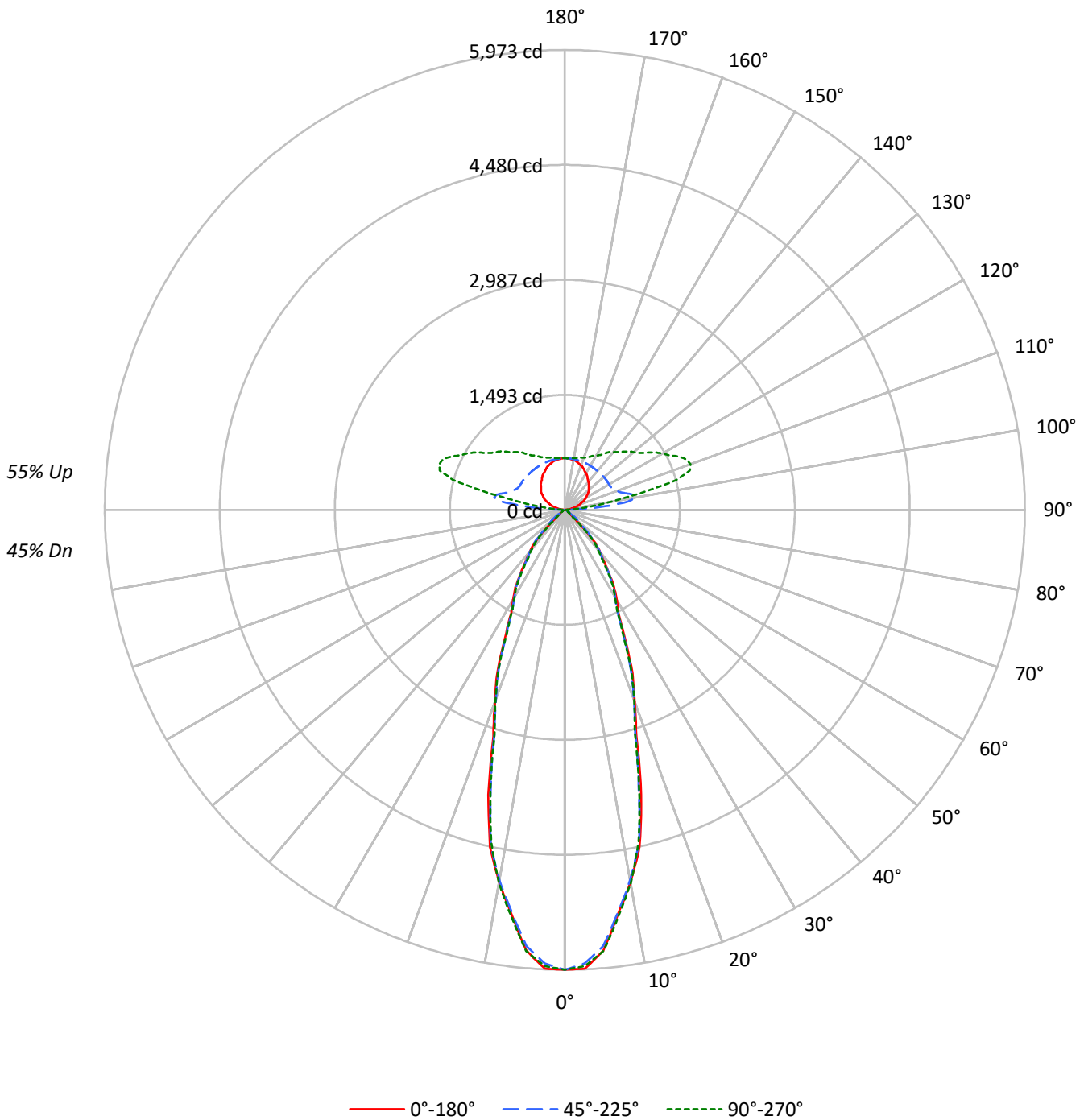
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7642.9 lumens
Efficiency: N/A
Efficacy: 127.0 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	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°	96439	96439	96439
5°	93115	92188	93219
10°	80486	80104	80676
15°	64047	62028	62275
20°	45498	44897	45225
25°	32733	32090	31864
30°	25010	24337	24280
35°	19632	19298	18796
40°	14874	14674	13959
45°	8323	9944	7428
50°	2929	6121	2582
55°	1790	3341	1700
60°	1369	1744	1266
65°	1253	1295	1173
70°	1199	1199	1100
75°	1123	1123	1061
80°	986	986	986
85°	982	778	778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 9944 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	518.5	6.8
10°-20°	1030.5	13.5
20°-30°	853.3	11.2
30°-40°	613.9	8.0
40°-50°	312.8	4.1
50°-60°	81.4	1.1
60°-70°	33.8	0.4
70°-80°	18.7	0.2
80°-90°	6.8	0.1
90°-100°	280.0	3.7
100°-110°	847.0	11.1
110°-120°	826.8	10.8
120°-130°	675.6	8.8
130°-140°	551.5	7.2
140°-150°	429.3	5.6
150°-160°	309.5	4.0
160°-170°	189.5	2.5
170°-180°	64.0	0.8
0°-30°	2402.3	31.4
0°-40°	3016.2	39.5
0°-60°	3410.4	44.6
0°-90°	3469.6	45.4
90°-120°	1953.8	25.6
90°-150°	3610.3	47.2
90°-180°	4173.0	54.6
0°-180°	7642.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5973	5973	5973	5973	5973	
5°	5745	5737	5688	5770	5752	518
15°	3832	3788	3711	3737	3726	1040
25°	1837	1834	1801	1786	1789	864
35°	996	1002	979	963	954	625
45°	364	419	436	405	325	291
55°	64	74	119	69	60	63
65°	33	34	34	32	31	33
75°	18	18	18	17	17	19
85°	5	5	4	5	4	6
90°	0	2	13	7	6	2
95°	35	110	528	195	123	41
105°	147	207	832	1579	1501	155
115°	262	312	673	1392	1635	259
125°	366	406	663	1099	1294	325
135°	439	485	659	948	1066	340
145°	513	551	659	815	892	321
155°	584	604	663	731	759	269
165°	639	646	666	692	700	180
175°	668	668	670	675	673	63
180°	670	670	670	670	670	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5973.0	5973.0	5973.0	5973.0	5973.0
2.5°	5963.7	5953.8	5896.7	5943.9	5932.3
5°	5745.2	5736.9	5688.0	5770.2	5751.6
7.5°	5294.0	5301.1	5272.4	5345.1	5325.2
10°	4909.2	4927.8	4885.9	4991.3	4920.8
12.5°	4484.5	4472.5	4443.4	4459.7	4420.7
15°	3831.6	3788.0	3710.8	3737.0	3725.6
17.5°	3086.2	3103.0	3036.0	3033.2	3020.3
20°	2648.0	2653.1	2613.0	2634.1	2632.1
22.5°	2295.3	2296.4	2245.1	2276.0	2257.4
25°	1837.4	1834.3	1801.3	1785.5	1788.6
27.5°	1506.8	1493.9	1469.0	1479.5	1471.8
30°	1341.5	1331.1	1305.4	1311.6	1302.3
32.5°	1193.1	1193.5	1167.3	1164.1	1157.3
35°	996.0	1002.3	979.1	963.0	953.6
37.5°	820.1	825.9	806.4	782.9	775.0
40°	705.7	709.8	696.2	668.5	662.3
42.5°	581.1	598.5	585.1	559.0	545.3
45°	364.5	419.4	435.5	405.1	325.3
47.5°	184.4	260.4	310.7	229.4	151.1
50°	116.6	169.4	243.7	138.0	102.8
52.5°	89.4	116.6	194.5	101.9	82.4
55°	63.6	73.9	118.7	68.7	60.4
57.5°	49.2	55.0	71.0	52.0	46.8
60°	42.4	46.5	54.0	44.4	39.2
62.5°	38.1	40.6	43.9	37.7	35.8
65°	32.8	33.9	33.9	31.8	30.7
67.5°	28.0	29.0	28.8	27.7	26.7
70°	25.4	26.5	25.4	24.3	23.3
72.5°	22.0	23.1	22.0	21.8	20.8
75°	18.0	18.0	18.0	17.0	17.0
77.5°	14.0	14.2	13.1	13.1	12.3
80°	10.6	11.6	10.6	10.6	10.6
82.5°	8.9	9.1	8.1	8.1	8.1
85°	5.3	5.3	4.2	5.3	4.2
87.5°	1.7	2.1	4.2	3.2	3.0
90°	0.0	2.1	12.6	7.3	6.3
92.5°	11.8	47.6	171.0	56.7	40.8
95°	34.7	109.9	528.4	195.2	123.2
97.5°	67.2	139.8	832.9	551.1	335.6
100°	87.4	158.4	930.6	899.6	604.2
102.5°	110.1	178.7	910.3	1261.8	1005.9
105°	147.4	207.1	831.6	1579.3	1501.1
107.5°	182.7	239.8	755.8	1610.7	1701.3
110°	206.3	260.9	717.9	1571.2	1735.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.1	282.0	695.2	1504.8	1713.1
115°	262.1	312.5	672.7	1391.9	1634.8
117.5°	295.0	342.7	664.7	1286.1	1534.8
120°	316.9	362.1	662.1	1224.4	1463.2
122.5°	337.1	379.9	662.1	1170.1	1390.8
125°	366.3	406.5	663.2	1099.2	1293.7
127.5°	390.1	431.7	662.1	1045.7	1211.6
130°	405.3	448.5	662.1	1015.0	1165.3
132.5°	418.8	462.8	661.3	987.0	1125.7
135°	439.0	485.3	659.0	948.0	1066.3
137.5°	461.5	505.5	659.0	906.3	1016.0
140°	475.8	519.0	659.0	879.2	983.2
142.5°	490.1	531.7	658.1	854.5	945.3
145°	512.6	550.7	659.0	815.4	891.6
147.5°	535.2	567.5	660.2	783.2	841.7
150°	549.5	579.3	661.1	765.4	814.8
152.5°	563.0	589.5	661.9	750.0	790.3
155°	584.2	603.8	663.2	731.2	759.0
157.5°	602.8	618.6	664.4	717.3	736.7
160°	613.7	627.1	665.3	708.8	723.2
162.5°	624.7	634.7	666.1	701.1	713.1
165°	639.0	646.2	666.3	691.8	700.0
167.5°	651.2	654.9	667.6	684.5	688.0
170°	657.9	660.0	668.4	681.1	682.1
172.5°	662.1	663.4	668.4	677.7	677.9
175°	668.4	668.4	669.5	674.7	672.7
177.5°	671.4	670.6	669.7	672.2	670.5
180°	670.5	670.5	670.5	670.5	670.5

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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	2.30	2.96	3.33	3.97	5.32	1.91	2.58	2.95	3.59	4.94
	3H	3.34	3.93	4.38	4.95	6.33	2.91	3.50	3.95	4.52	5.89
	4H	3.76	4.32	4.82	5.35	6.73	3.33	3.89	4.39	4.91	6.29
	6H	4.08	4.59	5.14	5.62	7.01	3.66	4.17	4.72	5.21	6.59
	8H	4.17	4.66	5.24	5.70	7.09	3.76	4.25	4.83	5.29	6.68
	12H	4.24	4.70	5.31	5.74	7.14	3.81	4.27	4.88	5.31	6.71
4H	2H	2.51	3.07	3.57	4.10	5.47	2.18	2.74	3.25	3.77	5.15
	3H	3.81	4.27	4.87	5.32	6.71	3.42	3.89	4.49	4.94	6.33
	4H	4.37	4.79	5.44	5.84	7.25	3.98	4.41	5.05	5.45	6.86
	6H	4.82	5.18	5.90	6.25	7.66	4.44	4.80	5.52	5.87	7.28
	8H	4.98	5.31	6.05	6.37	7.79	4.60	4.94	5.68	6.00	7.42
	12H	5.08	5.38	6.17	6.46	7.88	4.68	4.98	5.77	6.06	7.48
8H	4H	4.51	4.85	5.59	5.91	7.33	4.16	4.50	5.24	5.56	6.98
	6H	5.09	5.37	6.19	6.47	7.89	4.75	5.03	5.85	6.13	7.55
	8H	5.34	5.58	6.45	6.67	8.10	4.99	5.23	6.10	6.32	7.76
	12H	5.53	5.74	6.63	6.82	8.30	5.16	5.37	6.27	6.45	7.93
12H	4H	4.48	4.78	5.57	5.86	7.28	4.15	4.45	5.24	5.52	6.95
	6H	5.12	5.36	6.22	6.44	7.88	4.79	5.03	5.89	6.11	7.55
	8H	5.39	5.60	6.49	6.68	8.16	5.06	5.26	6.16	6.34	7.82