

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: P854464

Luminaire Tested: SQ2-WBN-100U-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854464
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-935-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

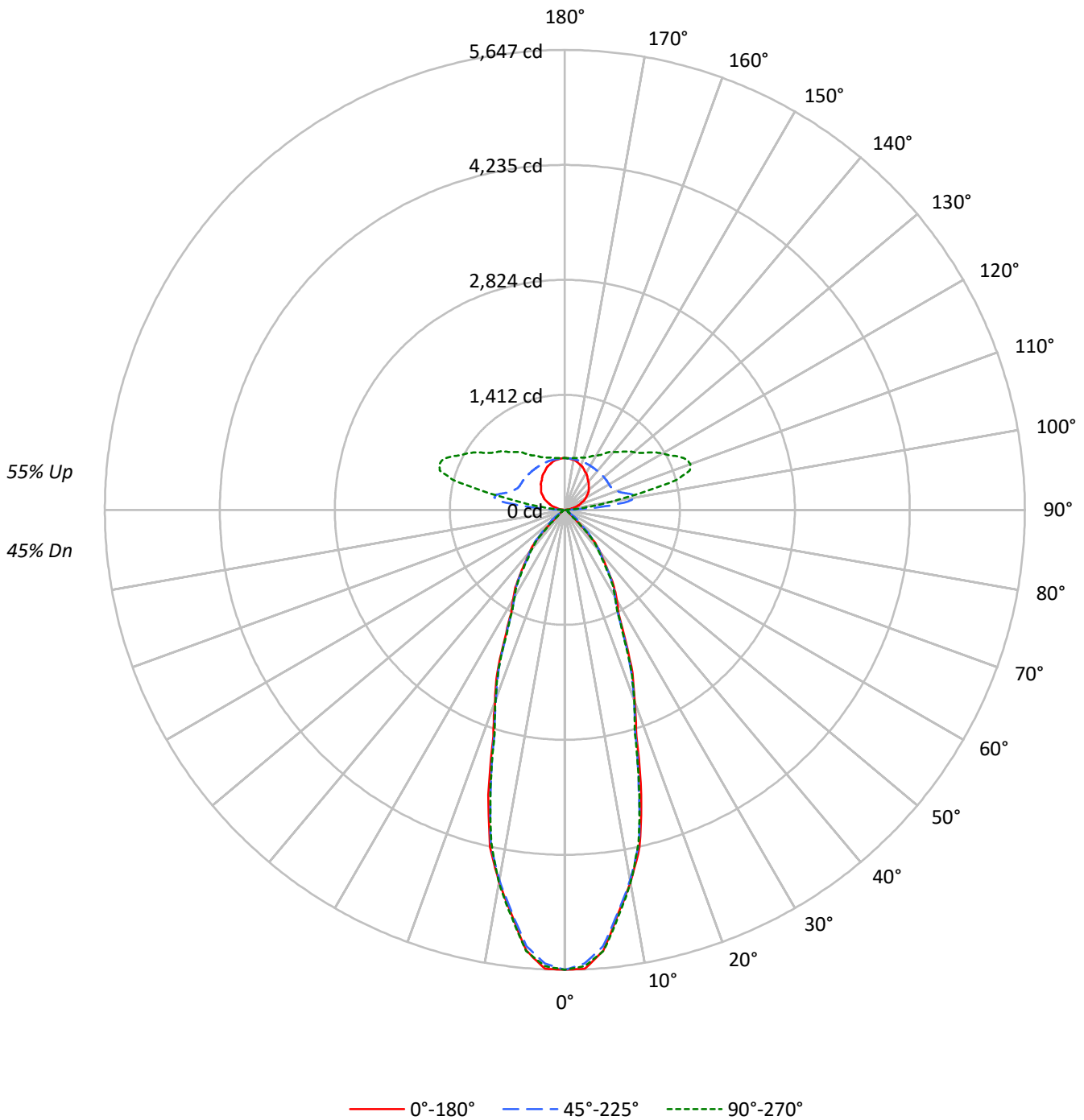
Lumens per Lamp: N/A
Luminaire Lumens: 7225.5 lumens
Efficiency: N/A
Efficacy: 120.0 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.58 / 0.63
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

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	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°	91172	91172	91172
5°	88031	87154	88128
10°	76090	75728	76271
15°	60548	58639	58873
20°	43014	42445	42754
25°	30945	30339	30123
30°	23644	23008	22952
35°	18559	18244	17771
40°	14063	13871	13196
45°	7868	9401	7021
50°	2768	5787	2442
55°	1692	3158	1607
60°	1295	1650	1198
65°	1188	1226	1112
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: 9401 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	490.2	6.8
10°-20°	974.2	13.5
20°-30°	806.7	11.2
30°-40°	580.4	8.0
40°-50°	295.7	4.1
50°-60°	77.0	1.1
60°-70°	31.9	0.4
70°-80°	17.7	0.2
80°-90°	6.4	0.1
90°-100°	264.7	3.7
100°-110°	800.7	11.1
110°-120°	781.7	10.8
120°-130°	638.8	8.8
130°-140°	521.4	7.2
140°-150°	405.9	5.6
150°-160°	292.6	4.0
160°-170°	179.1	2.5
170°-180°	60.5	0.8
0°-30°	2271.1	31.4
0°-40°	2851.5	39.5
0°-60°	3224.1	44.6
0°-90°	3280.1	45.4
90°-120°	1847.1	25.6
90°-150°	3413.2	47.2
90°-180°	3945.0	54.6
0°-180°	7225.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5647	5647	5647	5647	5647	
5°	5432	5424	5377	5455	5438	490
15°	3622	3581	3508	3533	3522	983
25°	1737	1734	1703	1688	1691	817
35°	942	948	926	910	902	591
45°	345	396	412	383	308	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	2	12	7	6	2
95°	33	104	500	185	116	39
105°	139	196	786	1493	1419	146
115°	248	296	636	1316	1546	245
125°	346	384	627	1039	1223	308
135°	415	459	623	896	1008	321
145°	485	521	623	771	843	304
155°	552	571	627	691	718	254
165°	604	611	630	654	662	170
175°	632	632	633	638	636	60
180°	634	634	634	634	634	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5646.8	5646.8	5646.8	5646.8	5646.8
2.5°	5638.0	5628.6	5574.7	5619.3	5608.4
5°	5431.5	5423.6	5377.4	5455.1	5437.5
7.5°	5004.9	5011.6	4984.5	5053.2	5034.4
10°	4641.1	4658.7	4619.0	4718.7	4652.1
12.5°	4239.6	4228.2	4200.7	4216.1	4179.3
15°	3622.3	3581.2	3508.1	3532.9	3522.1
17.5°	2917.7	2933.5	2870.2	2867.5	2855.4
20°	2503.4	2508.3	2470.3	2490.3	2488.3
22.5°	2170.0	2171.0	2122.5	2151.7	2134.1
25°	1737.0	1734.1	1703.0	1688.0	1690.9
27.5°	1424.5	1412.3	1388.8	1398.7	1391.4
30°	1268.2	1258.4	1234.1	1240.0	1231.1
32.5°	1128.0	1128.4	1103.5	1100.6	1094.1
35°	941.6	947.5	925.6	910.4	901.6
37.5°	775.3	780.8	762.3	740.1	732.7
40°	667.2	671.1	658.1	632.0	626.1
42.5°	549.4	565.8	553.2	528.4	515.5
45°	344.6	396.5	411.7	383.0	307.5
47.5°	174.3	246.2	293.7	216.9	142.8
50°	110.2	160.1	230.4	130.5	97.2
52.5°	84.5	110.2	183.9	96.3	77.9
55°	60.1	69.9	112.2	64.9	57.1
57.5°	46.5	52.0	67.1	49.2	44.3
60°	40.1	44.0	51.1	42.0	37.1
62.5°	36.1	38.4	41.5	35.6	33.9
65°	31.1	32.0	32.1	30.0	29.1
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	2.0	4.0	3.0	2.8
90°	0.0	1.9	11.9	6.9	6.0
92.5°	11.1	45.0	161.6	53.6	38.6
95°	32.8	103.9	499.6	184.6	116.4
97.5°	63.5	132.2	787.4	521.0	317.3
100°	82.6	149.7	879.7	850.5	571.2
102.5°	104.1	168.9	860.6	1192.9	951.0
105°	139.3	195.8	786.2	1493.1	1419.1
107.5°	172.8	226.7	714.5	1522.8	1608.4
110°	195.1	246.6	678.7	1485.4	1641.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	216.6	266.6	657.2	1422.6	1619.6
115°	247.8	295.5	635.9	1315.9	1545.5
117.5°	278.8	324.0	628.4	1215.9	1451.0
120°	299.5	342.4	626.0	1157.5	1383.3
122.5°	318.7	359.1	626.0	1106.2	1314.8
125°	346.3	384.3	627.0	1039.2	1223.1
127.5°	368.8	408.1	626.0	988.6	1145.4
130°	383.1	424.0	626.0	959.6	1101.7
132.5°	395.9	437.5	625.2	933.1	1064.2
135°	415.0	458.8	623.0	896.2	1008.1
137.5°	436.3	477.9	623.0	856.8	960.5
140°	449.8	490.7	623.0	831.2	929.5
142.5°	463.4	502.7	622.2	807.8	893.7
145°	484.7	520.7	623.0	770.9	842.9
147.5°	505.9	536.5	624.2	740.5	795.7
150°	519.5	547.7	625.0	723.6	770.3
152.5°	532.2	557.3	625.8	709.0	747.2
155°	552.3	570.8	627.0	691.2	717.5
157.5°	569.8	584.8	628.2	678.1	696.4
160°	580.2	592.8	629.0	670.1	683.7
162.5°	590.5	600.1	629.7	662.8	674.1
165°	604.1	610.9	629.9	654.0	661.8
167.5°	615.6	619.1	631.1	647.1	650.4
170°	622.0	623.9	631.9	643.9	644.9
172.5°	626.0	627.1	631.9	640.7	640.9
175°	631.9	631.9	632.9	637.9	635.9
177.5°	634.7	633.9	633.1	635.5	633.9
180°	633.9	633.9	633.9	633.9	633.9



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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	2.10	2.77	3.14	3.78	5.13	1.72	2.38	2.75	3.40	4.75
	3H	3.15	3.74	4.19	4.76	6.13	2.71	3.30	3.76	4.33	5.70
	4H	3.57	4.13	4.62	5.15	6.53	3.13	3.69	4.19	4.72	6.09
	6H	3.88	4.39	4.94	5.42	6.81	3.46	3.97	4.52	5.00	6.39
	8H	3.98	4.46	5.04	5.51	6.89	3.56	4.05	4.63	5.09	6.48
	12H	4.04	4.50	5.11	5.54	6.94	3.61	4.07	4.68	5.11	6.51
4H	2H	2.32	2.88	3.38	3.90	5.28	1.99	2.55	3.05	3.58	4.95
	3H	3.61	4.07	4.68	5.13	6.52	3.23	3.69	4.29	4.75	6.13
	4H	4.17	4.59	5.24	5.64	7.05	3.78	4.21	4.85	5.25	6.66
	6H	4.62	4.98	5.70	6.05	7.46	4.24	4.60	5.32	5.67	7.08
	8H	4.78	5.12	5.86	6.18	7.60	4.40	4.73	5.47	5.79	7.21
	12H	4.88	5.18	5.97	6.26	7.68	4.48	4.78	5.57	5.86	7.28
8H	4H	4.31	4.65	5.39	5.71	7.13	3.97	4.30	5.04	5.36	6.78
	6H	4.90	5.17	6.00	6.28	7.69	4.55	4.82	5.65	5.93	7.34
	8H	5.14	5.38	6.25	6.47	7.91	4.79	5.03	5.90	6.12	7.56
	12H	5.33	5.54	6.44	6.62	8.10	4.96	5.17	6.07	6.25	7.73
12H	4H	4.29	4.59	5.38	5.66	7.09	3.95	4.25	5.04	5.32	6.75
	6H	4.92	5.16	6.03	6.25	7.69	4.59	4.82	5.69	5.91	7.35
	8H	5.19	5.40	6.30	6.48	7.96	4.85	5.06	5.96	6.14	7.62