

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: P854443

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

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854443
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G3-2308-130-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBN-075U-100D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

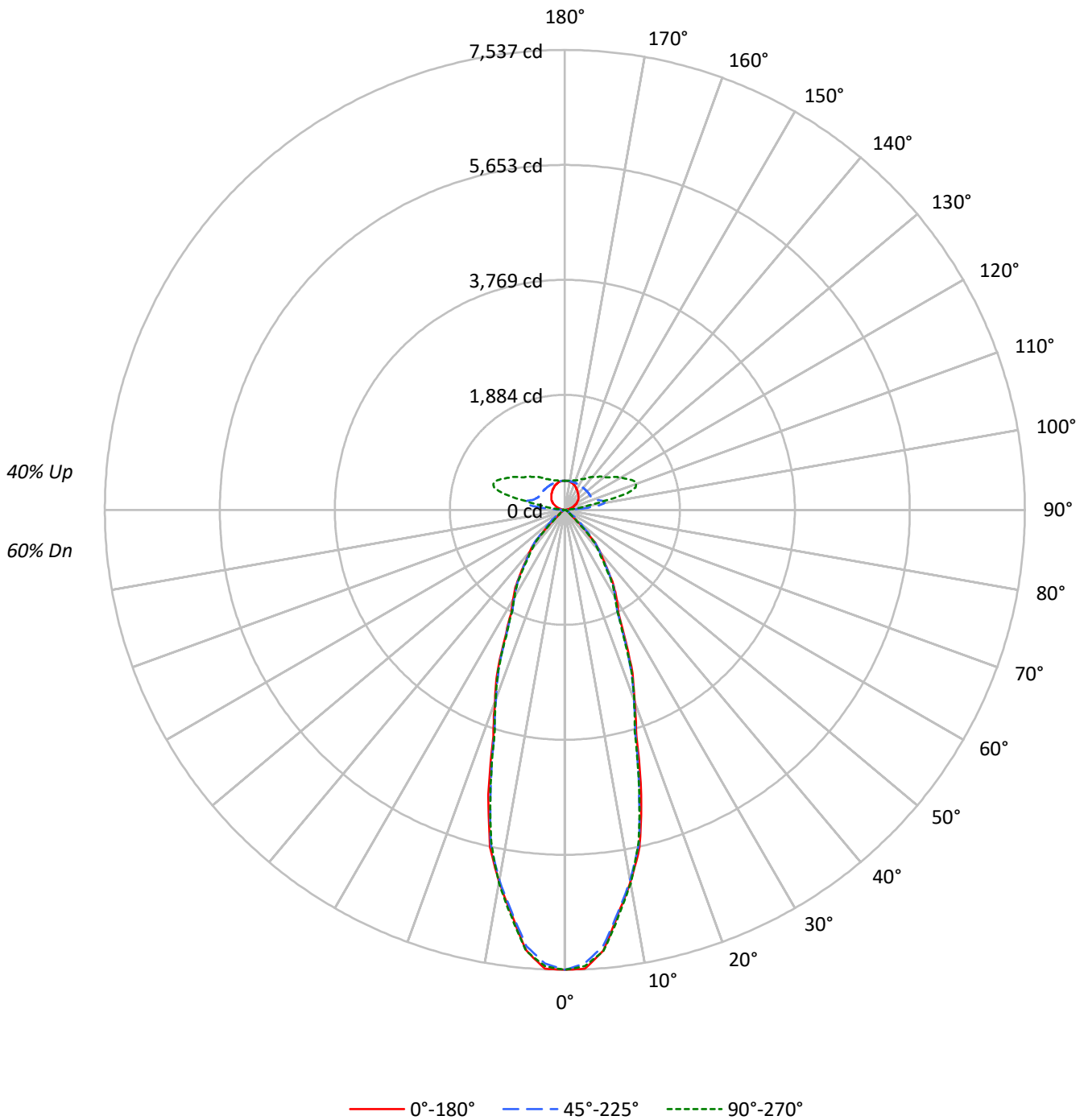
Lumens per Lamp: N/A
Luminaire Lumens: 7340.4 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.58 / 0.63
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 61.4
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60				
1	103	99	96	94	96	93	91	88	82	80	78	71	70	69	62	61	60	56				
2	96	90	86	82	90	85	81	78	75	72	70	66	64	63	58	57	55	52				
3	90	83	77	72	84	78	73	69	70	66	63	62	59	57	55	53	51	48				
4	84	76	70	65	79	72	67	62	65	61	57	58	55	52	52	50	48	45				
5	79	70	64	59	75	67	61	57	60	56	53	54	51	48	49	46	45	42				
6	75	65	58	54	70	62	56	52	56	52	48	51	48	45	46	44	42	39				
7	70	60	54	49	66	58	52	48	53	48	45	48	45	42	44	41	39	37				
8	66	56	50	46	63	54	48	44	50	45	42	45	42	39	41	39	37	35				
9	63	53	47	42	60	51	45	41	47	42	39	43	39	37	39	37	35	33				
10	60	50	44	40	57	48	42	39	44	40	37	41	37	35	38	35	33	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	121696	121696	121696
5°	117501	116331	117631
10°	101563	101081	101804
15°	80819	78272	78584
20°	57412	56654	57068
25°	41306	40495	40208
30°	31560	30712	30637
35°	24774	24352	23720
40°	18769	18516	17614
45°	10503	12549	9373
50°	3695	7724	3258
55°	2258	4217	2145
60°	1728	2202	1598
65°	1585	1635	1482
70°	1515	1515	1388
75°	1416	1416	1335
80°	1246	1246	1246
85°	1241	982	982

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 12549 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	654.3	8.9
10°-20°	1300.3	17.7
20°-30°	1076.8	14.7
30°-40°	774.7	10.6
40°-50°	394.7	5.4
50°-60°	102.8	1.4
60°-70°	42.6	0.6
70°-80°	23.6	0.3
80°-90°	7.5	0.1
90°-100°	181.0	2.5
100°-110°	600.0	8.2
110°-120°	595.5	8.1
120°-130°	485.0	6.6
130°-140°	394.2	5.4
140°-150°	306.1	4.2
150°-160°	220.6	3.0
160°-170°	135.1	1.8
170°-180°	45.6	0.6
0°-30°	3031.4	41.3
0°-40°	3806.1	51.9
0°-60°	4303.5	58.6
0°-90°	4377.3	59.6
90°-120°	1376.5	18.8
90°-150°	2561.8	34.9
90°-180°	2963.0	40.4
0°-180°	7340.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7537	7537	7537	7537	7537	
5°	7250	7239	7178	7281	7258	654
15°	4835	4780	4683	4716	4701	1312
25°	2319	2315	2273	2253	2257	1091
35°	1257	1265	1236	1215	1203	789
45°	460	529	550	511	410	368
55°	80	93	150	87	76	79
65°	42	43	43	40	39	41
75°	23	23	23	21	21	24
85°	7	7	5	7	5	7
90°	0	1	3	4	4	1
95°	26	76	328	117	78	29
105°	105	150	600	1133	1059	111
115°	187	224	484	1007	1177	185
125°	262	291	475	791	932	232
135°	313	345	471	679	766	242
145°	364	391	470	584	639	228
155°	415	430	473	522	541	191
165°	456	461	475	494	498	129
175°	477	477	478	480	480	45
180°	479	479	479	479	479	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7537.3	7537.3	7537.3	7537.3	7537.3
2.5°	7525.5	7513.0	7441.0	7500.6	7485.9
5°	7249.8	7239.4	7177.6	7281.4	7257.8
7.5°	6680.5	6689.4	6653.2	6744.9	6719.8
10°	6194.8	6218.4	6165.4	6298.4	6209.5
12.5°	5658.9	5643.8	5607.0	5627.6	5578.4
15°	4835.0	4780.1	4682.6	4715.7	4701.3
17.5°	3894.5	3915.6	3831.1	3827.5	3811.3
20°	3341.4	3348.0	3297.3	3324.0	3321.4
22.5°	2896.4	2897.8	2833.1	2872.1	2848.6
25°	2318.6	2314.6	2273.1	2253.1	2257.0
27.5°	1901.4	1885.2	1853.8	1866.9	1857.2
30°	1692.8	1679.7	1647.3	1655.1	1643.3
32.5°	1505.6	1506.1	1473.0	1469.0	1460.4
35°	1256.9	1264.7	1235.5	1215.2	1203.4
37.5°	1034.9	1042.2	1017.5	987.9	978.0
40°	890.5	895.7	878.5	843.5	835.7
42.5°	733.3	755.2	738.4	705.3	688.1
45°	460.0	529.3	549.6	511.2	410.5
47.5°	232.7	328.6	392.0	289.5	190.7
50°	147.1	213.8	307.5	174.2	129.7
52.5°	112.9	147.1	245.5	128.6	104.0
55°	80.2	93.3	149.8	86.7	76.2
57.5°	62.0	69.4	89.6	65.6	59.1
60°	53.5	58.7	68.2	56.0	49.5
62.5°	48.1	51.3	55.4	47.5	45.2
65°	41.5	42.8	42.8	40.1	38.8
67.5°	35.3	36.6	36.4	35.0	33.7
70°	32.1	33.4	32.1	30.7	29.4
72.5°	27.8	29.1	27.8	27.5	26.2
75°	22.7	22.7	22.7	21.4	21.4
77.5°	17.6	17.9	16.6	16.6	15.5
80°	13.4	14.7	13.4	13.4	13.4
82.5°	11.2	11.5	10.2	10.2	10.2
85°	6.7	6.7	5.3	6.7	5.3
87.5°	2.1	2.3	2.7	2.9	2.9
90°	0.0	1.0	3.0	4.0	4.0
92.5°	7.9	30.6	90.2	29.2	24.6
95°	25.8	76.1	328.0	117.0	78.3
97.5°	47.4	100.1	572.5	333.9	211.0
100°	62.4	112.8	662.9	569.3	377.5
102.5°	79.1	127.9	657.3	870.1	657.3
105°	105.0	149.6	600.4	1132.8	1059.2
107.5°	131.6	171.3	546.0	1159.6	1215.6
110°	146.6	186.4	518.2	1133.1	1246.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	162.5	201.4	501.6	1086.3	1230.6
115°	187.3	224.1	483.5	1006.6	1177.1
117.5°	211.8	244.6	477.0	930.5	1109.3
120°	226.9	258.9	474.6	882.8	1056.2
122.5°	240.4	271.6	474.6	843.7	1003.9
125°	261.6	290.6	474.6	790.9	932.4
127.5°	279.0	307.5	473.4	751.0	871.9
130°	289.3	319.4	472.6	727.8	836.3
132.5°	298.8	329.6	471.8	708.5	806.1
135°	313.1	345.1	470.6	678.7	765.9
137.5°	328.6	359.4	469.5	650.0	726.9
140°	338.9	368.9	468.7	630.8	701.5
142.5°	348.4	377.6	469.5	611.6	674.6
145°	363.6	390.8	469.7	583.9	639.1
147.5°	380.1	402.8	469.9	560.4	601.4
150°	390.4	410.7	470.6	546.7	581.6
152.5°	399.9	419.5	471.4	535.5	563.4
155°	415.2	429.7	472.6	521.6	541.0
157.5°	430.0	441.3	473.8	511.8	525.5
160°	437.9	447.6	474.6	504.6	515.2
162.5°	445.9	453.2	474.6	499.8	508.1
165°	455.8	460.6	474.6	493.5	498.4
167.5°	464.9	467.4	475.6	487.9	490.5
170°	469.7	470.6	475.6	485.5	486.5
172.5°	472.8	473.8	476.4	483.1	483.3
175°	476.6	476.6	477.6	480.5	479.6
177.5°	478.6	478.6	477.8	479.3	477.8
180°	478.6	478.6	478.6	478.6	478.6



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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	4.48	5.21	5.39	6.11	7.25	4.09	4.82	5.01	5.72	6.86
	3H	5.53	6.17	6.45	7.08	8.25	5.09	5.74	6.02	6.65	7.82
	4H	5.95	6.56	6.89	7.47	8.65	5.52	6.12	6.46	7.04	8.22
	6H	6.27	6.82	7.21	7.74	8.93	5.85	6.41	6.80	7.33	8.52
	8H	6.37	6.89	7.32	7.83	9.02	5.95	6.48	6.91	7.41	8.60
	12H	6.43	6.93	7.39	7.86	9.07	6.00	6.50	6.96	7.43	8.64
4H	2H	4.70	5.31	5.64	6.22	7.40	4.37	4.98	5.32	5.89	7.07
	3H	6.00	6.50	6.95	7.44	8.63	5.61	6.11	6.56	7.06	8.25
	4H	6.56	7.01	7.51	7.95	9.17	6.17	6.62	7.13	7.57	8.78
	6H	7.01	7.40	7.98	8.36	9.58	6.63	7.02	7.60	7.98	9.20
	8H	7.17	7.53	8.14	8.49	9.72	6.79	7.15	7.76	8.11	9.34
	12H	7.27	7.60	8.26	8.57	9.80	6.87	7.19	7.86	8.17	9.40
8H	4H	6.70	7.06	7.67	8.02	9.25	6.35	6.71	7.32	7.67	8.90
	6H	7.29	7.58	8.28	8.58	9.81	6.94	7.23	7.93	8.23	9.46
	8H	7.53	7.79	8.54	8.78	10.03	7.18	7.44	8.19	8.43	9.68
	12H	7.72	7.95	8.72	8.93	10.22	7.35	7.57	8.35	8.56	9.85
12H	4H	6.67	7.00	7.66	7.97	9.20	6.34	6.66	7.32	7.63	8.87
	6H	7.31	7.56	8.31	8.56	9.80	6.97	7.23	7.98	8.22	9.47
	8H	7.58	7.81	8.58	8.79	10.08	7.24	7.47	8.25	8.45	9.75