

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: P854494

Luminaire Tested: SQ2-WBN-150U-125D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854494
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G3-2308-130-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBN-150U-125D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

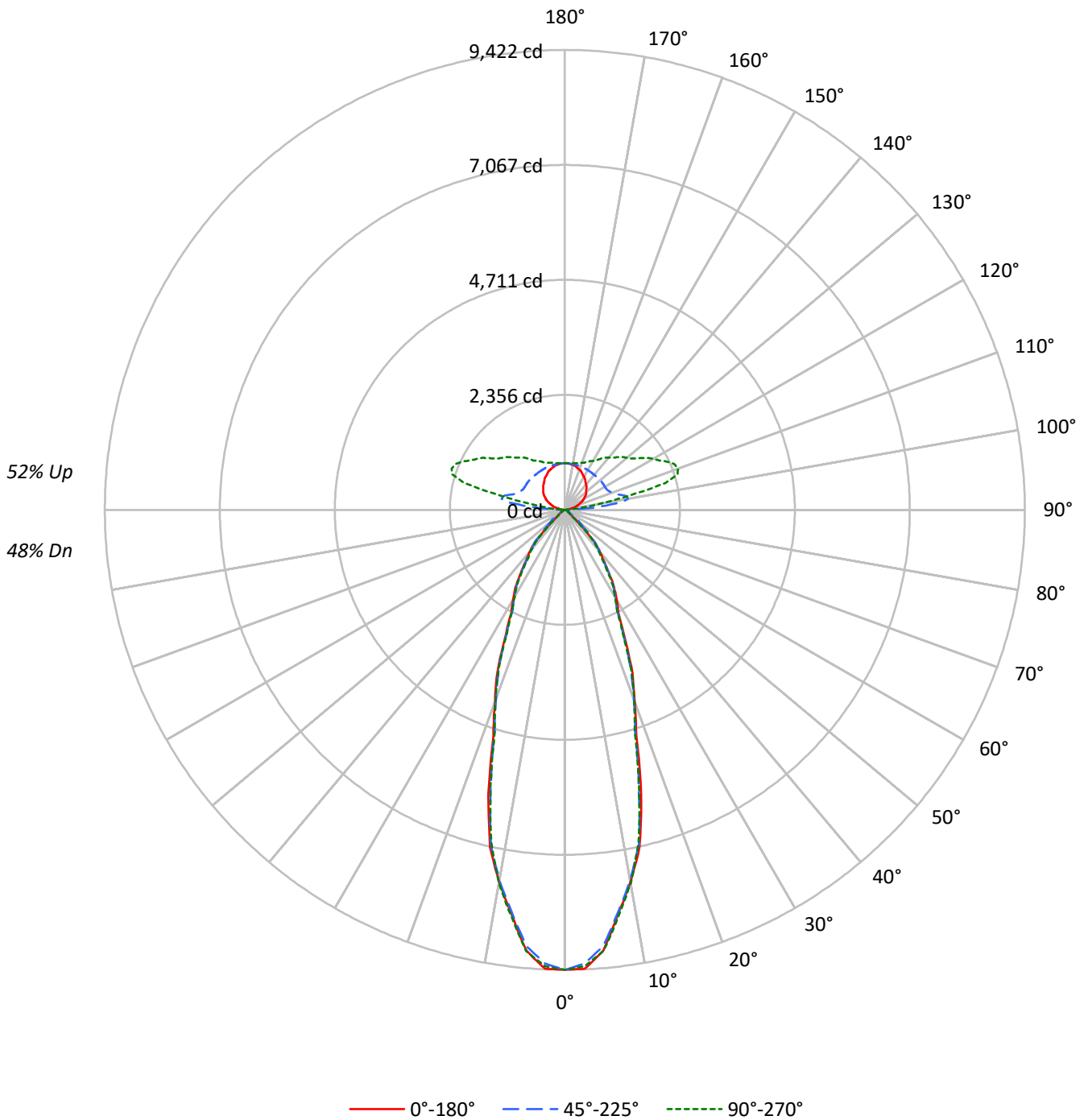
Lumens per Lamp: N/A
Luminaire Lumens: 11367.0 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.58 / 0.63
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 106.3
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48	48	48	48	
1	99	96	93	90	92	89	86	84	75	74	72	63	62	61	51	51	50	45	45	45	45	
2	93	87	82	78	86	81	77	73	69	66	64	58	56	55	48	47	46	42	42	42	42	
3	86	79	73	68	80	74	69	64	63	60	57	54	52	50	46	44	43	39	39	39	39	
4	81	72	66	61	75	67	62	58	59	55	51	50	48	45	43	41	40	36	36	36	36	
5	75	66	59	54	70	62	56	52	54	50	47	47	44	42	40	38	37	34	34	34	34	
6	71	61	54	49	66	57	51	47	50	46	43	44	41	38	38	36	34	32	32	32	32	
7	66	56	50	45	62	53	47	43	47	43	39	41	38	36	36	34	32	30	30	30	30	
8	63	52	46	41	58	49	44	40	44	40	36	39	36	33	34	32	30	28	28	28	28	
9	59	49	42	38	55	46	41	37	41	37	34	37	34	31	33	30	28	27	27	27	27	
10	56	46	39	35	52	43	38	34	39	35	32	35	32	29	31	29	27	25	25	25	25	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	152128	152128	152128
5°	146884	145420	147046
10°	126961	126357	127262
15°	101028	97844	98235
20°	71769	70821	71338
25°	51633	50621	50263
30°	39452	38393	38298
35°	30969	30441	29650
40°	23463	23147	22019
45°	13129	15687	11716
50°	4619	9656	4072
55°	2823	5270	2683
60°	2160	2751	1996
65°	1979	2044	1853
70°	1893	1893	1737
75°	1772	1772	1666
80°	1553	1553	1553
85°	1556	1241	1241

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15687 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	817.9	7.2
10°-20°	1625.5	14.3
20°-30°	1346.1	11.8
30°-40°	968.4	8.5
40°-50°	493.3	4.3
50°-60°	128.4	1.1
60°-70°	53.3	0.5
70°-80°	29.6	0.3
80°-90°	9.8	0.1
90°-100°	363.9	3.2
100°-110°	1191.6	10.5
110°-120°	1178.0	10.4
120°-130°	963.0	8.5
130°-140°	785.9	6.9
140°-150°	611.6	5.4
150°-160°	440.4	3.9
160°-170°	269.4	2.4
170°-180°	91.0	0.8
0°-30°	3789.5	33.3
0°-40°	4757.9	41.9
0°-60°	5379.6	47.3
0°-90°	5472.3	48.1
90°-120°	2733.5	24.0
90°-150°	5093.9	44.8
90°-180°	5895.0	51.9
0°-180°	11367.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9422	9422	9422	9422	9422	
5°	9063	9050	8972	9102	9073	817
15°	6044	5975	5854	5895	5877	1641
25°	2898	2893	2842	2816	2821	1363
35°	1571	1581	1544	1519	1504	986
45°	575	662	687	639	513	459
55°	100	117	187	108	95	99
65°	52	53	54	50	48	52
75°	28	28	28	27	27	30
85°	8	8	7	8	7	9
90°	1	3	8	7	8	3
95°	51	148	662	236	153	58
105°	207	295	1183	2247	2135	218
115°	373	446	961	1986	2331	368
125°	519	579	947	1566	1839	462
135°	625	692	939	1351	1522	484
145°	731	785	937	1162	1273	458
155°	833	861	943	1039	1080	384
165°	910	918	947	984	994	256
175°	951	951	952	959	957	90
180°	955	955	955	955	955	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9422.1	9422.1	9422.1	9422.1	9422.1
2.5°	9407.4	9391.7	9301.7	9376.2	9357.9
5°	9062.7	9049.6	8972.4	9102.2	9072.7
7.5°	8351.0	8362.1	8316.9	8431.5	8400.1
10°	7743.9	7773.3	7707.1	7873.4	7762.3
12.5°	7074.0	7055.0	7009.1	7034.8	6973.4
15°	6044.0	5975.4	5853.5	5894.9	5876.9
17.5°	4868.3	4894.8	4789.1	4784.6	4764.4
20°	4177.0	4185.2	4121.8	4155.2	4151.9
22.5°	3620.7	3622.4	3541.5	3590.3	3560.9
25°	2898.3	2893.4	2841.5	2816.5	2821.4
27.5°	2376.8	2356.6	2317.3	2333.8	2321.7
30°	2116.1	2099.7	2059.3	2068.9	2054.2
32.5°	1882.1	1882.7	1841.3	1836.4	1825.6
35°	1571.2	1581.0	1544.4	1519.0	1504.3
37.5°	1293.7	1302.9	1272.0	1234.9	1222.5
40°	1113.2	1119.7	1098.2	1054.5	1044.7
42.5°	916.6	944.1	923.0	881.7	860.1
45°	575.0	661.6	687.0	639.0	513.1
47.5°	290.8	410.8	490.1	361.9	238.4
50°	183.9	267.2	384.4	217.7	162.1
52.5°	141.1	183.9	306.9	160.8	130.0
55°	100.3	116.6	187.2	108.3	95.3
57.5°	77.6	86.7	112.0	82.1	73.9
60°	66.9	73.4	85.2	70.0	61.8
62.5°	60.2	64.1	69.2	59.4	56.5
65°	51.8	53.4	53.5	50.1	48.5
67.5°	44.1	45.8	45.5	43.8	42.1
70°	40.1	41.7	40.1	38.4	36.8
72.5°	34.8	36.4	34.8	34.4	32.8
75°	28.4	28.4	28.4	26.7	26.7
77.5°	22.1	22.4	20.7	20.7	19.4
80°	16.7	18.3	16.7	16.7	16.7
82.5°	14.0	14.4	12.7	12.7	12.7
85°	8.4	8.4	6.7	8.3	6.7
87.5°	2.9	3.3	4.2	4.1	4.2
90°	1.0	2.9	7.9	6.9	7.9
92.5°	16.7	60.8	186.9	60.8	48.7
95°	51.0	148.0	661.6	235.7	153.1
97.5°	92.7	195.2	1135.1	686.6	425.6
100°	121.7	219.6	1313.3	1172.8	777.4
102.5°	154.7	250.3	1293.7	1728.1	1339.6
105°	207.1	295.4	1182.8	2247.2	2134.9
107.5°	258.7	339.7	1074.6	2295.7	2419.1
110°	292.5	371.2	1022.8	2239.2	2468.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	324.7	401.1	991.4	2141.0	2434.8
115°	373.0	445.9	960.9	1985.7	2331.2
117.5°	419.9	488.0	949.4	1833.1	2183.9
120°	450.5	514.8	946.2	1744.1	2085.8
122.5°	478.0	540.8	946.2	1667.4	1984.5
125°	519.2	578.7	947.2	1565.9	1839.4
127.5°	554.2	614.8	946.0	1491.1	1729.1
130°	576.2	637.6	945.2	1445.8	1660.8
132.5°	595.8	658.8	942.9	1406.9	1601.9
135°	625.2	691.5	939.3	1350.6	1522.4
137.5°	656.3	721.9	937.2	1291.9	1447.2
140°	678.3	741.6	936.4	1254.8	1401.7
142.5°	700.2	759.7	936.4	1215.2	1348.3
145°	731.3	785.0	937.4	1161.7	1273.1
147.5°	763.8	808.6	938.8	1115.2	1199.3
150°	784.3	823.6	940.3	1088.2	1159.2
152.5°	804.7	839.4	941.1	1065.9	1124.7
155°	833.3	861.2	943.3	1039.4	1079.7
157.5°	859.1	879.2	945.4	1018.5	1047.7
160°	875.5	891.9	946.2	1006.6	1029.6
162.5°	889.7	902.9	946.2	997.0	1013.9
165°	909.9	918.5	947.2	983.8	994.3
167.5°	927.0	931.2	948.4	973.4	979.2
170°	936.4	938.3	949.2	967.9	969.8
172.5°	943.5	944.6	951.5	963.9	964.3
175°	951.1	951.1	952.1	958.9	957.0
177.5°	955.0	954.3	953.5	958.1	955.0
180°	955.0	955.0	955.0	955.0	955.0

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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	4.16	4.84	5.18	5.83	7.15	3.78	4.45	4.79	5.45	6.76
	3H	5.21	5.81	6.23	6.81	8.15	4.77	5.37	5.80	6.38	7.71
	4H	5.63	6.20	6.67	7.20	8.55	5.19	5.76	6.23	6.77	8.11
	6H	5.94	6.46	6.98	7.47	8.83	5.53	6.04	6.57	7.06	8.41
	8H	6.04	6.53	7.09	7.56	8.91	5.63	6.12	6.67	7.14	8.49
	12H	6.11	6.57	7.16	7.59	8.96	5.67	6.14	6.72	7.16	8.53
4H	2H	4.38	4.95	5.42	5.95	7.30	4.05	4.62	5.09	5.62	6.97
	3H	5.67	6.14	6.72	7.18	8.53	5.29	5.76	6.34	6.80	8.15
	4H	6.23	6.66	7.28	7.69	9.07	5.85	6.28	6.90	7.30	8.68
	6H	6.69	7.05	7.74	8.10	9.48	6.31	6.67	7.36	7.72	9.10
	8H	6.84	7.18	7.90	8.23	9.61	6.46	6.80	7.52	7.84	9.23
	12H	6.95	7.25	8.02	8.31	9.70	6.55	6.85	7.62	7.91	9.30
8H	4H	6.38	6.72	7.43	7.76	9.14	6.03	6.37	7.09	7.41	8.80
	6H	6.96	7.24	8.04	8.32	9.71	6.61	6.89	7.69	7.98	9.36
	8H	7.21	7.45	8.29	8.52	9.92	6.86	7.10	7.94	8.17	9.57
	12H	7.40	7.61	8.48	8.67	10.12	7.02	7.24	8.11	8.30	9.74
12H	4H	6.35	6.65	7.42	7.71	9.10	6.01	6.32	7.08	7.37	8.76
	6H	6.98	7.23	8.07	8.30	9.70	6.65	6.89	7.74	7.96	9.36
	8H	7.26	7.47	8.34	8.53	9.98	6.92	7.13	8.00	8.19	9.64