

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: P854488

Luminaire Tested: SQ2-WBN-150U-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854488
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-075D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

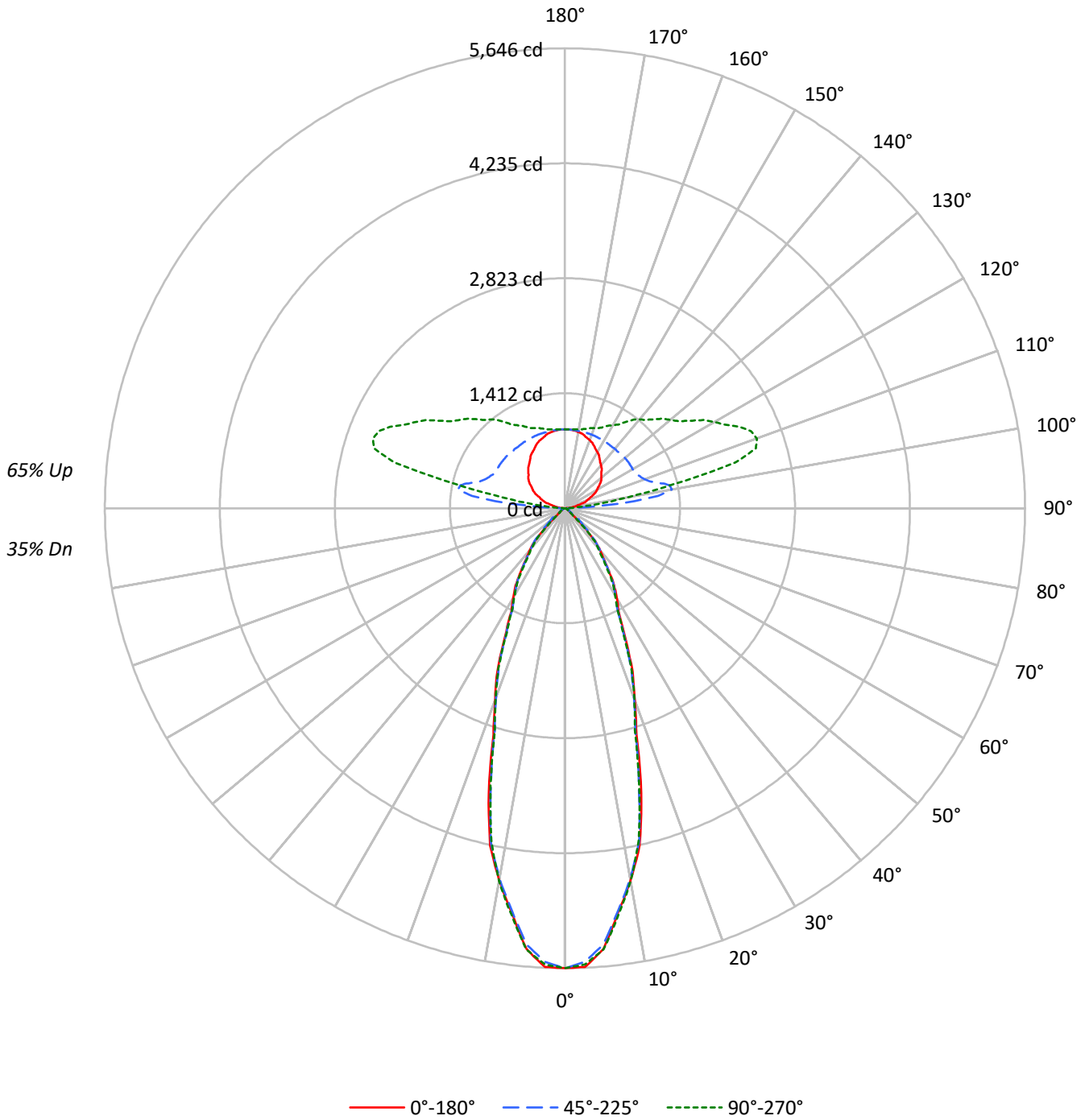
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9264.1 lumens
Efficiency: N/A
Efficacy: 110.0 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: Semi-Indirect

Input Watts (W): 84.2
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	96	92	89	86	87	84	81	79	68	66	65	54	53	52	40	40	39	33
2	89	83	78	74	81	76	71	68	62	59	57	49	48	46	38	37	36	31
3	83	75	69	64	75	68	63	59	56	53	50	45	43	41	35	34	33	29
4	77	68	61	56	70	62	57	52	52	48	45	42	40	37	33	32	30	27
5	71	62	55	50	65	57	51	46	48	43	40	39	36	34	31	30	28	25
6	67	56	49	44	61	52	46	42	44	40	37	36	34	31	29	28	26	23
7	62	52	45	40	57	48	42	38	41	36	33	34	31	29	28	26	25	22
8	58	48	41	37	53	44	39	35	38	34	31	32	29	27	26	24	23	21
9	55	44	38	33	50	41	36	32	35	31	28	30	27	25	25	23	22	20
10	52	41	35	31	48	38	33	29	33	29	26	28	25	23	24	22	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	91151	91151	91151
5°	88010	87133	88107
10°	76072	75710	76253
15°	60533	58626	58860
20°	43003	42434	42744
25°	30937	30332	30116
30°	23638	23004	22948
35°	18555	18240	17767
40°	14058	13869	13192
45°	7866	9398	7021
50°	2768	5785	2439
55°	1692	3158	1607
60°	1295	1650	1198
65°	1184	1223	1108
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: 9398 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	490.0	5.3
10°-20°	974.0	10.5
20°-30°	806.6	8.7
30°-40°	580.2	6.3
40°-50°	295.6	3.2
50°-60°	77.0	0.8
60°-70°	31.9	0.3
70°-80°	17.7	0.2
80°-90°	6.3	0.1
90°-100°	369.5	4.0
100°-110°	1209.8	13.1
110°-120°	1196.0	12.9
120°-130°	977.7	10.6
130°-140°	797.9	8.6
140°-150°	620.9	6.7
150°-160°	447.1	4.8
160°-170°	273.5	3.0
170°-180°	92.4	1.0
0°-30°	2270.6	24.5
0°-40°	2850.8	30.8
0°-60°	3223.4	34.8
0°-90°	3279.3	35.4
90°-120°	2775.3	30.0
90°-150°	5171.8	55.8
90°-180°	5985.0	64.6
0°-180°	9264.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5646	5646	5646	5646	5646	
5°	5430	5422	5376	5454	5436	490
15°	3621	3580	3507	3532	3521	983
25°	1737	1734	1703	1688	1690	817
35°	941	947	925	910	901	591
45°	344	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°	1	3	8	7	8	3
95°	52	150	672	239	156	59
105°	210	300	1201	2282	2168	222
115°	379	453	976	2016	2367	374
125°	527	588	962	1590	1868	469
135°	635	702	954	1371	1546	491
145°	742	797	952	1180	1292	465
155°	846	874	958	1055	1096	390
165°	924	933	962	999	1010	260
175°	966	966	967	974	972	92
180°	970	970	970	970	970	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5645.5	5645.5	5645.5	5645.5	5645.5
2.5°	5636.7	5627.3	5573.4	5618.0	5607.0
5°	5430.2	5422.3	5376.1	5453.8	5436.2
7.5°	5003.7	5010.4	4983.3	5052.0	5033.2
10°	4640.0	4657.6	4617.9	4717.6	4651.0
12.5°	4238.6	4227.2	4199.7	4215.1	4178.3
15°	3621.4	3580.3	3507.3	3532.1	3521.3
17.5°	2917.0	2932.8	2869.5	2866.8	2854.7
20°	2502.8	2507.7	2469.7	2489.7	2487.7
22.5°	2169.5	2170.4	2122.0	2151.2	2133.6
25°	1736.6	1733.7	1702.6	1687.6	1690.5
27.5°	1424.1	1412.0	1388.5	1398.3	1391.1
30°	1267.9	1258.1	1233.9	1239.7	1230.9
32.5°	1127.7	1128.1	1103.3	1100.3	1093.8
35°	941.4	947.3	925.4	910.2	901.4
37.5°	775.2	780.6	762.1	739.9	732.5
40°	667.0	670.9	658.0	631.8	625.9
42.5°	549.2	565.7	553.0	528.3	515.4
45°	344.5	396.4	411.6	382.9	307.5
47.5°	174.3	246.1	293.6	216.8	142.8
50°	110.2	160.1	230.3	130.4	97.1
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°	31.0	32.0	32.0	30.0	29.0
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°	1.8	2.2	3.2	3.0	3.2
90°	1.0	2.9	8.0	7.0	8.0
92.5°	16.9	61.8	189.7	61.7	49.4
95°	51.8	150.2	671.7	239.3	155.5
97.5°	94.1	198.1	1152.4	697.1	432.1
100°	123.6	223.0	1333.4	1190.7	789.3
102.5°	157.1	254.1	1313.5	1754.5	1360.1
105°	210.3	299.9	1200.8	2281.5	2167.5
107.5°	262.7	344.9	1091.0	2330.8	2456.1
110°	297.0	376.9	1038.4	2273.4	2506.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	329.7	407.2	1006.5	2173.7	2472.0
115°	378.7	452.7	975.6	2016.0	2366.8
117.5°	426.3	495.5	963.9	1861.1	2217.3
120°	457.4	522.7	960.7	1770.8	2117.7
122.5°	485.3	549.0	960.7	1692.9	2014.8
125°	527.2	587.6	961.7	1589.8	1867.5
127.5°	562.7	624.2	960.5	1513.9	1755.5
130°	585.0	647.3	959.7	1467.9	1686.2
132.5°	604.9	668.8	957.3	1428.4	1626.4
135°	634.8	702.0	953.7	1371.2	1545.6
137.5°	666.3	732.9	951.5	1311.7	1469.3
140°	688.6	752.9	950.7	1274.0	1423.1
142.5°	710.9	771.4	950.7	1233.8	1368.9
145°	742.4	797.0	951.7	1179.5	1292.5
147.5°	775.5	820.9	953.1	1132.2	1217.6
150°	796.2	836.2	954.7	1104.8	1176.9
152.5°	817.0	852.2	955.5	1082.2	1141.8
155°	846.1	874.3	957.7	1055.3	1096.2
157.5°	872.2	892.6	959.9	1034.1	1063.7
160°	888.9	905.5	960.7	1022.0	1045.4
162.5°	903.3	916.7	960.7	1012.3	1029.4
165°	923.8	932.6	961.7	998.8	1009.5
167.5°	941.1	945.4	962.9	988.3	994.2
170°	950.7	952.7	963.7	982.6	984.6
172.5°	957.9	959.1	966.1	978.6	979.0
175°	965.7	965.7	966.7	973.6	971.6
177.5°	969.6	968.9	968.0	972.8	969.6
180°	969.6	969.6	969.6	969.6	969.6



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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	0.97	1.60	2.08	2.68	4.16	0.58	1.21	1.69	2.29	3.77
	3H	2.01	2.57	3.12	3.66	5.15	1.58	2.14	2.69	3.23	4.72
	4H	2.43	2.96	3.55	4.05	5.55	2.00	2.53	3.12	3.62	5.12
	6H	2.74	3.23	3.87	4.32	5.83	2.32	2.81	3.45	3.90	5.41
	8H	2.84	3.30	3.97	4.41	5.91	2.42	2.89	3.56	3.99	5.50
	12H	2.90	3.34	4.04	4.44	5.97	2.47	2.91	3.60	4.01	5.53
4H	2H	1.18	1.71	2.31	2.80	4.30	0.85	1.38	1.98	2.47	3.97
	3H	2.47	2.91	3.60	4.03	5.54	2.09	2.53	3.22	3.65	5.16
	4H	3.03	3.44	4.17	4.54	6.08	2.64	3.05	3.78	4.15	5.69
	6H	3.48	3.83	4.62	4.96	6.48	3.10	3.45	4.24	4.58	6.10
	8H	3.64	3.96	4.78	5.08	6.62	3.26	3.58	4.40	4.70	6.24
	12H	3.74	4.03	4.90	5.16	6.71	3.34	3.63	4.49	4.76	6.31
8H	4H	3.17	3.50	4.31	4.61	6.15	2.83	3.15	3.96	4.27	5.81
	6H	3.76	4.02	4.92	5.19	6.72	3.41	3.67	4.57	4.84	6.37
	8H	4.01	4.24	5.17	5.38	6.93	3.66	3.88	4.82	5.03	6.58
	12H	4.19	4.39	5.36	5.53	7.13	3.82	4.02	4.99	5.16	6.75
12H	4H	3.15	3.43	4.30	4.57	6.11	2.81	3.10	3.96	4.23	5.77
	6H	3.78	4.01	4.95	5.16	6.71	3.45	3.68	4.61	4.82	6.38
	8H	4.05	4.25	5.22	5.39	6.98	3.72	3.91	4.88	5.05	6.65