

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: P854915

Luminaire Tested: SQ2-PP3-150U-050D-830-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854915
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-150U-050D-830-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

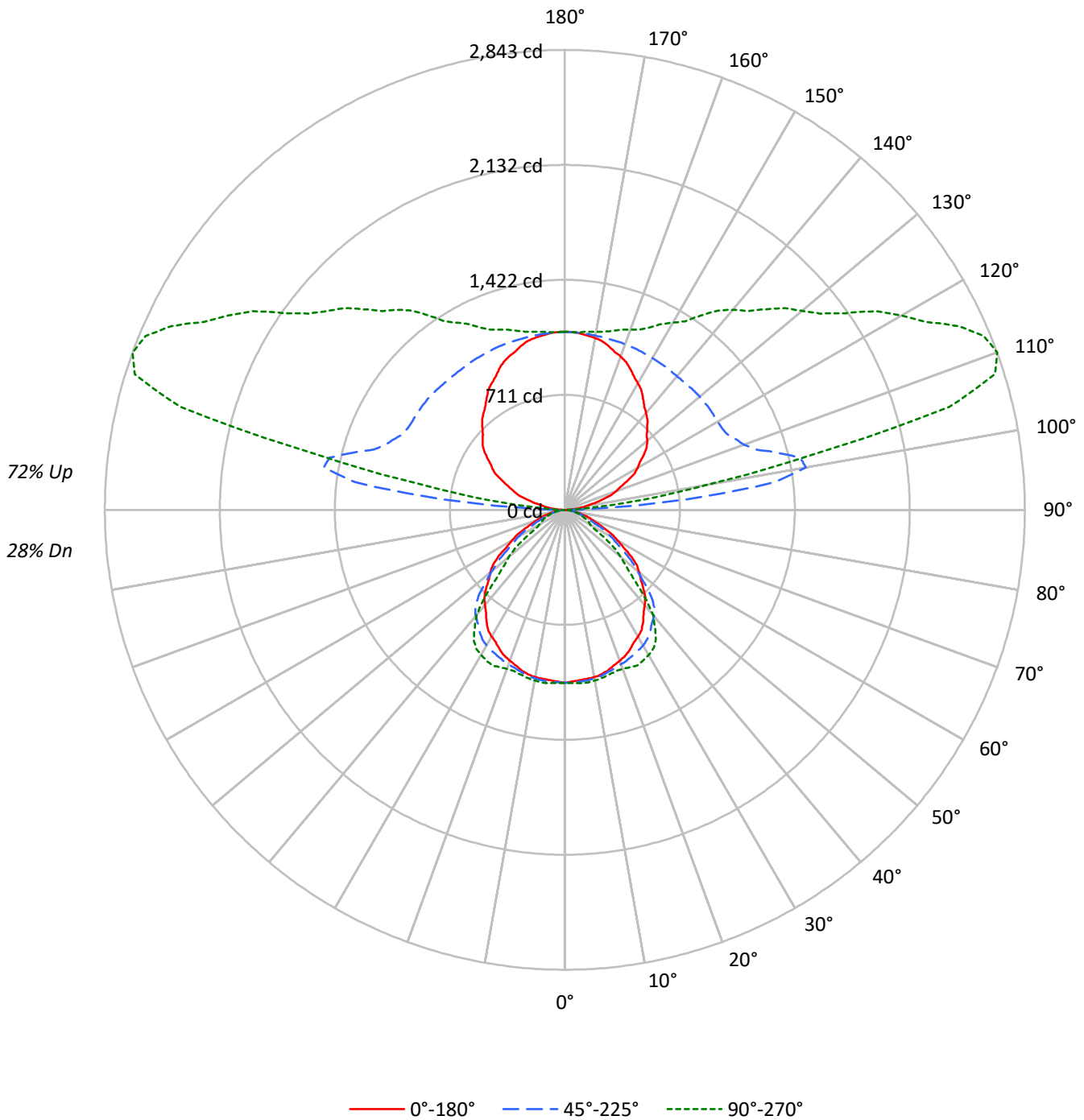
Lumens per Lamp: N/A
Luminaire Lumens: 9484.4 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 74.4
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	0
RCR																		
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28
1	93	89	86	82	83	80	77	74	63	61	59	47	46	45	33	32	31	25
2	85	78	72	68	76	70	65	61	55	52	49	42	40	38	29	28	27	21
3	78	69	62	57	69	62	56	51	49	45	42	37	34	32	26	24	23	18
4	71	61	54	48	63	55	49	44	44	39	36	33	30	28	23	21	20	16
5	65	54	47	41	58	49	42	37	39	34	31	30	26	24	21	19	17	14
6	60	49	41	35	54	44	37	32	35	30	27	27	23	21	19	17	15	12
7	55	44	36	31	50	40	33	28	32	27	23	24	21	19	17	15	14	11
8	51	40	32	27	46	36	29	25	29	24	21	22	19	16	16	14	12	10
9	48	36	29	24	43	33	26	22	26	22	18	20	17	15	15	13	11	9
10	44	33	26	21	40	30	24	20	24	20	16	19	15	13	14	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17270	17270	17270
5°	17135	17280	17446
10°	17221	17351	17572
15°	17180	17349	17615
20°	17057	17464	17969
25°	16960	17685	18914
30°	16863	18043	19309
35°	16626	18096	19344
40°	16181	18063	17873
45°	15696	17246	13604
50°	15081	14712	11331
55°	14035	12380	8146
60°	12084	10624	5842
65°	10193	8206	5746
70°	8488	6458	5500
75°	7193	5571	5147
80°	6100	4835	4621
85°	4817	3983	2519

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 17246 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.8	1.1
10°-20°	294.7	3.1
20°-30°	461.8	4.9
30°-40°	569.6	6.0
40°-50°	536.3	5.7
50°-60°	379.7	4.0
60°-70°	216.4	2.3
70°-80°	107.1	1.1
80°-90°	27.4	0.3
90°-100°	419.2	4.4
100°-110°	1372.5	14.5
110°-120°	1356.9	14.3
120°-130°	1109.2	11.7
130°-140°	905.1	9.5
140°-150°	704.4	7.4
150°-160°	507.2	5.3
160°-170°	310.3	3.3
170°-180°	104.8	1.1
0°-30°	858.4	9.1
0°-40°	1428.0	15.1
0°-60°	2344.1	24.7
0°-90°	2694.9	28.4
90°-120°	3148.5	33.2
90°-150°	5867.2	61.9
90°-180°	6790.0	71.6
0°-180°	9484.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1057	1076	1066	1069	1076	101
15°	1028	1042	1038	1048	1054	290
25°	952	976	993	1033	1062	438
35°	844	867	918	970	981	526
45°	687	739	755	640	596	529
55°	499	528	440	332	289	440
65°	267	281	215	152	150	268
75°	115	128	89	84	82	125
85°	26	24	22	17	14	31
90°	1	3	9	8	9	4
95°	59	170	762	272	176	67
105°	239	340	1362	2588	2459	251
115°	430	514	1107	2287	2685	424
125°	598	667	1091	1804	2119	532
135°	720	796	1082	1556	1754	557
145°	842	904	1080	1338	1466	528
155°	960	992	1086	1197	1244	442
165°	1048	1058	1091	1133	1145	295
175°	1096	1096	1097	1104	1102	104
180°	1100	1100	1100	1100	1100	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1069.6	1069.6	1069.6	1069.6	1069.6
2.5°	1061.4	1076.5	1066.9	1068.7	1070.5
5°	1057.2	1075.9	1066.2	1068.7	1076.4
7.5°	1053.1	1072.3	1062.8	1066.9	1076.4
10°	1050.4	1067.0	1058.3	1064.2	1071.8
12.5°	1042.2	1057.9	1050.1	1057.7	1064.6
15°	1027.8	1042.1	1037.9	1048.2	1053.8
17.5°	1008.1	1025.6	1025.5	1040.1	1045.8
20°	992.7	1013.7	1016.4	1034.8	1045.8
22.5°	976.4	1001.0	1005.6	1033.2	1052.2
25°	952.0	976.3	992.7	1033.0	1061.7
27.5°	923.5	947.6	981.4	1026.5	1049.2
30°	904.5	927.7	967.8	1014.6	1035.7
32.5°	881.0	905.1	947.9	998.4	1017.6
35°	843.5	866.6	918.1	970.3	981.4
37.5°	800.3	826.6	884.2	913.3	914.0
40°	767.7	802.0	857.0	862.3	848.0
42.5°	736.0	780.0	819.0	795.2	731.3
45°	687.4	739.4	755.3	640.1	595.8
47.5°	635.6	687.0	661.7	536.8	506.3
50°	600.4	649.0	585.7	479.8	451.1
52.5°	560.6	603.9	517.8	425.2	381.5
55°	498.6	528.5	439.8	331.5	289.4
57.5°	424.0	445.0	376.1	248.9	201.7
60°	374.2	390.9	329.0	204.1	180.9
62.5°	329.0	343.8	280.2	177.3	169.1
65°	266.8	281.2	214.8	151.5	150.4
67.5°	212.3	228.1	164.8	132.3	130.9
70°	179.8	196.4	136.8	118.7	116.5
72.5°	152.6	168.4	116.0	104.2	102.9
75°	115.3	127.5	89.3	83.7	82.5
77.5°	83.7	91.4	66.5	63.5	62.4
80°	65.6	68.9	52.0	50.9	49.7
82.5°	49.3	48.2	39.3	38.2	36.2
85°	26.0	23.7	21.5	16.8	13.6
87.5°	8.4	8.8	5.4	4.3	4.5
90°	1.1	3.4	9.0	7.9	9.0
92.5°	19.2	70.1	215.3	70.0	56.1
95°	58.8	170.4	762.1	271.5	176.4
97.5°	106.7	224.8	1307.4	790.9	490.2
100°	140.2	252.9	1512.7	1350.9	895.4
102.5°	178.2	288.3	1490.1	1990.5	1543.0
105°	238.6	340.2	1362.3	2588.3	2458.9
107.5°	298.0	391.3	1237.7	2644.2	2786.4
110°	336.9	427.6	1178.0	2579.1	2843.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	374.0	462.0	1141.8	2465.9	2804.4
115°	429.6	513.7	1106.8	2287.2	2685.1
117.5°	483.7	562.2	1093.4	2111.4	2515.5
120°	519.0	593.0	1089.8	2008.9	2402.4
122.5°	550.6	622.9	1089.8	1920.5	2285.8
125°	598.1	666.6	1091.0	1803.6	2118.7
127.5°	638.4	708.1	1089.6	1717.4	1991.6
130°	663.7	734.4	1088.7	1665.3	1912.9
132.5°	686.3	758.8	1086.0	1620.4	1845.1
135°	720.2	796.4	1081.9	1555.7	1753.5
137.5°	755.9	831.5	1079.4	1488.0	1666.9
140°	781.2	854.2	1078.5	1445.3	1614.4
142.5°	806.5	875.1	1078.5	1399.7	1552.9
145°	842.2	904.2	1079.7	1338.1	1466.3
147.5°	879.8	931.3	1081.2	1284.5	1381.3
150°	903.3	948.6	1083.0	1253.4	1335.2
152.5°	926.8	966.8	1083.9	1227.8	1295.4
155°	959.8	991.9	1086.4	1197.2	1243.6
157.5°	989.4	1012.7	1088.9	1173.2	1206.7
160°	1008.4	1027.3	1089.8	1159.5	1185.9
162.5°	1024.7	1040.0	1089.8	1148.4	1167.8
165°	1048.0	1057.9	1091.0	1133.1	1145.2
167.5°	1067.7	1072.5	1092.3	1121.3	1127.8
170°	1078.5	1080.8	1093.2	1114.8	1117.0
172.5°	1086.7	1088.0	1095.9	1110.2	1110.6
175°	1095.5	1095.5	1096.6	1104.5	1102.3
177.5°	1100.0	1099.1	1098.2	1103.6	1100.0
180°	1100.0	1100.0	1100.0	1100.0	1100.0



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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	14.99	15.67	16.12	16.79	18.34	11.38	12.07	12.51	13.18	14.73
	3H	16.07	16.68	17.21	17.80	19.37	12.47	13.08	13.61	14.21	15.77
	4H	16.40	16.98	17.55	18.10	19.68	12.93	13.50	14.07	14.63	16.20
	6H	16.61	17.14	17.76	18.27	19.85	13.26	13.79	14.42	14.92	16.51
	8H	16.65	17.16	17.81	18.30	19.88	13.35	13.85	14.50	14.99	16.57
	12H	16.66	17.14	17.82	18.28	19.87	13.35	13.83	14.51	14.97	16.57
4H	2H	15.07	15.65	16.23	16.78	18.35	12.07	12.65	13.23	13.78	15.35
	3H	16.36	16.84	17.52	18.00	19.58	13.31	13.79	14.47	14.94	16.52
	4H	16.83	17.27	17.99	18.41	20.02	13.86	14.30	15.02	15.44	17.04
	6H	17.16	17.54	18.33	18.70	20.29	14.29	14.66	15.45	15.83	17.42
	8H	17.25	17.60	18.41	18.76	20.37	14.40	14.75	15.57	15.91	17.52
	12H	17.28	17.60	18.46	18.76	20.38	14.42	14.74	15.60	15.91	17.52
8H	4H	16.84	17.19	18.00	18.34	19.95	14.12	14.47	15.28	15.62	17.23
	6H	17.26	17.55	18.45	18.75	20.36	14.66	14.94	15.84	16.14	17.75
	8H	17.42	17.67	18.61	18.85	20.47	14.84	15.09	16.03	16.27	17.90
	12H	17.50	17.72	18.69	18.89	20.55	14.91	15.13	16.10	16.30	17.96
12H	4H	16.79	17.11	17.97	18.27	19.89	14.12	14.43	15.30	15.60	17.22
	6H	17.25	17.50	18.44	18.68	20.31	14.71	14.96	15.90	16.14	17.76
	8H	17.41	17.64	18.61	18.81	20.47	14.91	15.13	16.10	16.30	17.96