

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:

Luminaire Tested: SQ4-WB-100U-075D-927-1D-UNV-STD-W-4

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

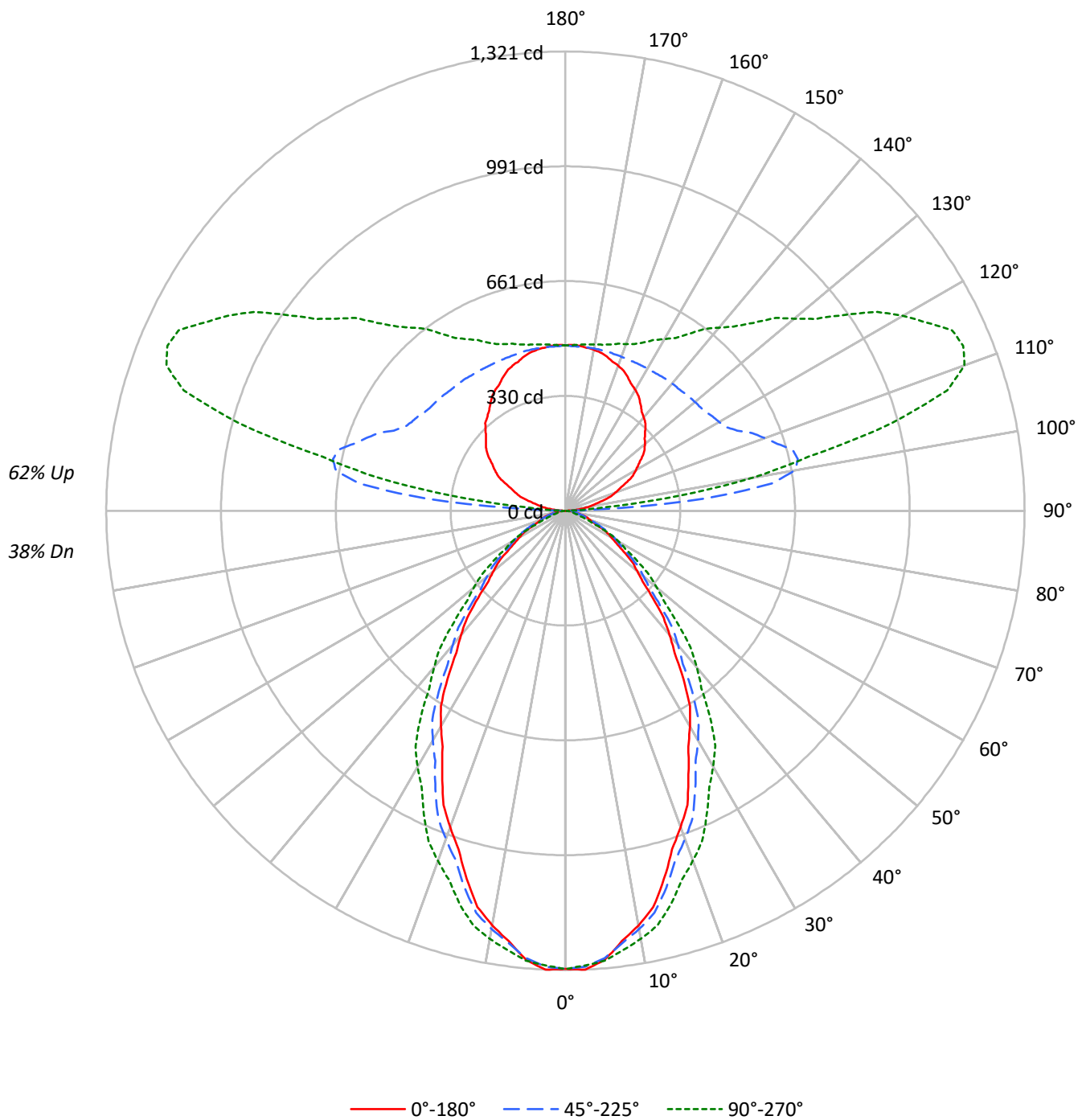
Lumens per Lamp: N/A
Luminaire Lumens: 5014.3 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 49.1
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45
1	96	92	89	85	87	84	81	78	69	67	65	54	53	52	41	41	40
2	88	81	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35
3	81	72	66	60	74	66	61	56	55	51	47	44	41	39	34	32	31
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	27
5	69	58	51	45	62	53	47	42	45	40	36	36	33	30	29	26	25
6	64	52	45	40	58	48	42	37	40	36	32	33	30	27	26	24	22
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20
8	55	43	36	31	50	40	34	29	34	29	26	28	25	22	23	20	18
9	51	40	33	28	47	37	31	26	31	26	23	26	22	20	21	19	17
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12161	12161	12161
5°	12009	11967	12036
10°	11346	11449	11714
15°	10474	10717	11198
20°	9512	9869	10522
25°	8532	8997	9803
30°	7628	8128	9058
35°	6671	7153	8176
40°	5615	6061	7077
45°	4633	5034	5909
50°	3868	4217	4923
55°	3285	3619	4065
60°	2807	3137	3244
65°	2235	2639	2096
70°	1983	2058	1279
75°	1836	1668	784
80°	1690	1536	675
85°	1535	1408	550

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5909 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.9	2.4
10°-20°	314.5	6.3
20°-30°	407.3	8.1
30°-40°	398.9	8.0
40°-50°	305.3	6.1
50°-60°	203.4	4.1
60°-70°	111.0	2.2
70°-80°	46.3	0.9
80°-90°	14.1	0.3
90°-100°	222.9	4.4
100°-110°	615.3	12.3
110°-120°	634.6	12.7
120°-130°	510.0	10.2
130°-140°	400.8	8.0
140°-150°	307.4	6.1
150°-160°	220.9	4.4
160°-170°	135.1	2.7
170°-180°	45.5	0.9
0°-30°	842.7	16.8
0°-40°	1241.6	24.8
0°-60°	1750.4	34.9
0°-90°	1921.7	38.3
90°-120°	1472.8	29.4
90°-150°	2691.0	53.7
90°-180°	3093.0	61.7
0°-180°	5014.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1318	1318	1318	1318	1318	
5°	1297	1284	1292	1295	1300	121
15°	1097	1093	1122	1153	1172	306
25°	838	840	884	922	963	385
35°	592	595	635	678	726	368
45°	355	362	386	415	453	277
55°	204	213	225	234	253	185
65°	102	111	121	106	96	106
75°	52	52	47	32	22	55
85°	14	14	13	9	5	16
90°	2	3	6	7	8	3
95°	33	121	404	166	108	35
105°	110	169	677	1034	973	117
115°	196	237	545	1079	1228	193
125°	270	307	494	836	982	240
135°	324	359	480	677	764	251
145°	376	402	474	577	621	236
155°	424	438	471	518	534	195
165°	459	465	473	491	495	129
175°	476	477	474	480	479	45
180°	476	476	476	476	476	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1318.1	1318.1	1318.1	1318.1	1318.1
2.5°	1321.3	1309.6	1312.6	1312.5	1308.9
5°	1296.7	1283.7	1292.1	1295.1	1299.6
7.5°	1248.6	1238.7	1254.0	1265.3	1274.5
10°	1211.1	1202.6	1222.1	1238.6	1250.4
12.5°	1167.6	1160.5	1184.6	1206.7	1222.2
15°	1096.6	1092.6	1122.0	1152.6	1172.4
17.5°	1020.6	1018.7	1052.4	1088.0	1113.4
20°	968.8	968.2	1005.2	1042.3	1071.7
22.5°	916.5	917.7	956.6	995.2	1028.7
25°	838.1	840.3	883.8	922.3	963.0
27.5°	765.5	766.6	811.5	852.1	895.6
30°	716.0	718.9	762.9	805.0	850.2
32.5°	666.5	669.8	712.9	756.4	802.5
35°	592.3	595.1	635.1	677.8	725.9
37.5°	515.7	519.5	555.0	595.4	642.7
40°	466.2	471.8	503.2	541.3	587.6
42.5°	418.5	425.5	454.6	490.7	532.6
45°	355.1	361.9	385.8	415.0	452.9
47.5°	300.5	308.3	326.7	351.8	384.2
50°	269.5	276.9	293.8	312.4	343.0
52.5°	242.2	249.6	264.7	279.0	305.0
55°	204.2	212.6	225.0	233.5	252.7
57.5°	172.9	181.1	190.9	194.7	206.4
60°	152.1	161.2	170.0	169.6	175.8
62.5°	133.1	140.8	149.7	143.6	143.9
65°	102.4	110.9	120.9	105.6	96.0
67.5°	82.7	84.5	94.9	73.7	62.2
70°	73.5	73.5	76.3	57.0	47.4
72.5°	64.7	64.7	62.0	46.4	36.3
75°	51.5	51.5	46.8	32.2	22.0
77.5°	39.7	39.2	35.9	24.0	16.0
80°	31.8	31.8	28.9	18.9	12.7
82.5°	24.9	24.9	22.4	14.8	9.5
85°	14.5	14.5	13.3	8.6	5.2
87.5°	5.4	5.7	5.8	4.1	3.8
90°	1.5	3.0	6.1	6.9	7.6
92.5°	13.7	56.9	101.7	37.1	28.9
95°	32.7	120.6	404.4	166.2	108.1
97.5°	54.2	135.1	599.0	461.2	334.0
100°	70.1	143.8	670.9	675.7	549.1
102.5°	85.3	153.6	684.9	834.8	714.8
105°	109.7	169.2	677.0	1033.6	973.2
107.5°	135.6	188.6	639.2	1129.4	1151.4
110°	153.8	201.5	610.0	1150.0	1221.5

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	216.1	582.6	1133.7	1239.2
115°	196.5	237.4	545.3	1079.4	1227.6
117.5°	219.3	260.1	520.7	1003.0	1171.6
120°	234.6	274.8	511.0	951.2	1121.0
122.5°	249.2	287.6	503.1	902.9	1063.7
125°	269.6	306.8	494.2	836.4	981.6
127.5°	286.9	324.2	489.1	780.2	905.5
130°	298.5	335.8	486.6	745.9	859.8
132.5°	309.5	344.9	484.2	717.0	820.2
135°	324.4	359.4	480.5	677.4	763.8
137.5°	341.2	373.0	478.7	644.3	718.0
140°	350.3	381.6	477.5	622.1	686.9
142.5°	360.7	389.6	476.3	602.5	659.5
145°	376.2	402.3	474.4	576.7	620.7
147.5°	391.1	413.9	472.8	555.0	589.1
150°	402.1	420.7	472.2	542.1	569.6
152.5°	410.6	428.0	471.5	531.0	553.8
155°	424.2	438.3	470.6	517.5	533.8
157.5°	436.7	447.5	470.8	507.6	518.8
160°	444.0	453.7	471.4	502.0	510.2
162.5°	450.1	458.6	472.0	497.1	503.5
165°	459.2	465.2	472.9	491.3	495.0
167.5°	466.2	469.8	473.7	487.7	488.9
170°	469.9	472.8	473.7	485.9	485.9
172.5°	472.9	474.7	473.7	483.4	482.8
175°	476.0	476.7	473.7	480.5	479.0
177.5°	477.2	476.6	473.5	477.8	476.6
180°	476.0	476.0	476.0	476.0	476.0

(END OF REPORT)