

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-150U-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 (G3-1910-536-25)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-150U-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

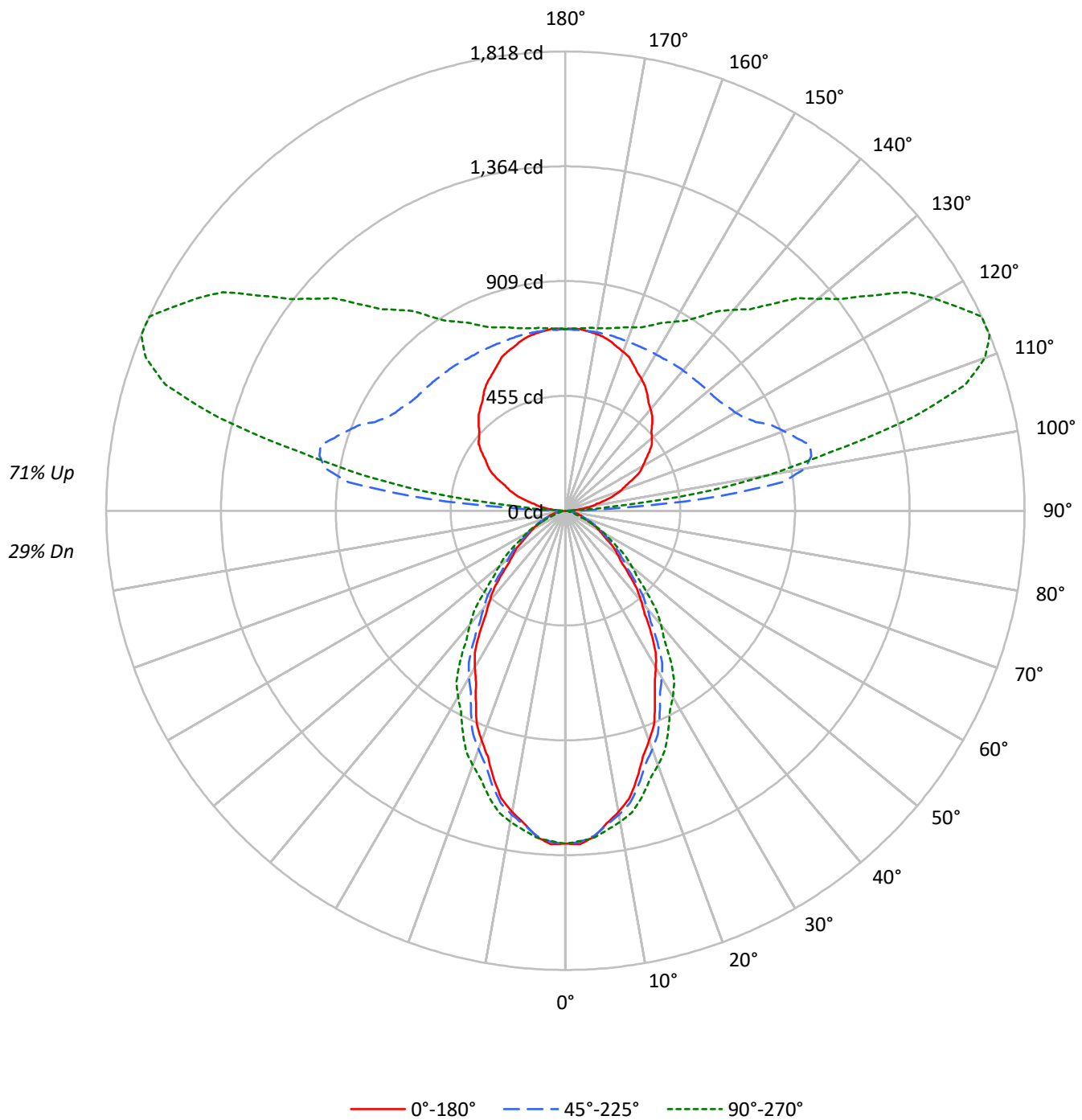
Lumens per Lamp: N/A
Luminaire Lumens: 6560.7 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 63.5
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33
2	86	79	74	69	77	71	67	63	57	54	51	43	41	39	31	29	28
3	79	70	64	58	71	63	58	53	51	47	44	39	36	34	28	26	25
4	72	63	55	50	65	57	50	46	45	41	38	35	32	30	25	24	22
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20
6	62	50	43	38	55	46	39	35	37	32	29	29	26	23	21	19	18
7	57	46	38	33	51	42	35	31	34	29	26	26	23	21	20	18	16
8	53	41	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15
9	49	38	31	26	44	35	29	24	28	24	21	22	19	17	17	15	13
10	46	35	28	24	42	32	26	22	26	22	19	21	18	15	16	14	12

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	1.8
10°-20°	314.5	4.8
20°-30°	407.3	6.2
30°-40°	398.9	6.1
40°-50°	305.3	4.7
50°-60°	203.4	3.1
60°-70°	111.0	1.7
70°-80°	46.3	0.7
80°-90°	14.6	0.2
90°-100°	334.3	5.1
100°-110°	904.0	13.8
110°-120°	950.4	14.5
120°-130°	772.0	11.8
130°-140°	605.6	9.2
140°-150°	464.8	7.1
150°-160°	334.3	5.1
160°-170°	204.2	3.1
170°-180°	68.8	1.0
0°-30°	842.7	12.8
0°-40°	1241.6	18.9
0°-60°	1750.4	26.7
0°-90°	1922.2	29.3
90°-120°	2188.8	33.4
90°-150°	4031.1	61.4
90°-180°	4638.0	70.7
0°-180°	6560.7	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	5	10	11	10	4
95°	52	182	556	288	171	54
105°	168	260	1003	1479	1419	177
115°	296	362	832	1610	1818	292
125°	405	464	750	1265	1486	361
135°	486	543	730	1021	1156	375
145°	564	607	719	874	941	353
155°	637	662	713	784	810	294
165°	694	701	716	744	748	195
175°	720	719	717	726	725	68
180°	719	719	719	719	719	

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CATALOG NUMBER: SQ4-WB-150U-075D-927-1D-UNV-STD-W-4

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	6.0	6.6	4.9	4.3
90°	1.5	4.6	10.1	10.8	10.1
92.5°	22.0	80.1	158.1	68.6	49.7
95°	51.9	182.1	556.0	287.8	171.1
97.5°	83.3	208.9	866.7	717.3	526.8
100°	106.9	219.7	963.4	1004.7	812.4
102.5°	128.6	234.7	997.4	1222.6	1078.8
105°	168.0	259.7	1002.9	1479.3	1418.7
107.5°	204.6	288.2	959.0	1639.4	1659.6
110°	233.1	308.8	920.0	1682.4	1768.0

TEST NUMBER:

CATALOG NUMBER: SQ4-WB-150U-075D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	258.5	329.4	884.1	1673.8	1817.5
115°	295.8	361.7	831.7	1610.1	1817.5
117.5°	332.4	394.2	797.2	1512.7	1747.9
120°	354.7	415.3	776.7	1442.8	1682.8
122.5°	375.7	435.1	764.3	1367.8	1609.7
125°	405.0	464.1	749.6	1265.0	1486.1
127.5°	432.0	490.0	741.0	1181.1	1375.5
130°	446.8	506.7	737.2	1129.2	1304.9
132.5°	462.3	521.5	733.5	1082.4	1244.2
135°	485.6	543.1	729.5	1021.4	1156.2
137.5°	508.9	563.3	726.1	971.9	1081.7
140°	525.1	575.8	724.9	940.0	1037.7
142.5°	540.5	588.2	722.4	911.3	996.8
145°	564.5	607.0	719.4	874.3	940.9
147.5°	586.4	623.9	716.0	840.8	892.0
150°	602.5	635.8	714.8	822.6	863.5
152.5°	617.4	646.4	714.2	805.7	839.3
155°	637.3	662.3	713.2	784.3	810.0
157.5°	658.1	675.5	713.4	769.4	786.3
160°	669.9	684.3	714.0	760.0	772.1
162.5°	679.2	691.1	714.6	752.5	761.6
165°	693.9	700.7	716.3	744.3	748.1
167.5°	703.9	708.6	716.5	737.3	739.1
170°	710.1	712.4	717.1	734.1	734.1
172.5°	715.1	715.5	717.1	730.4	729.8
175°	720.2	719.4	717.1	726.4	724.9
177.5°	721.9	720.1	717.0	723.1	721.3
180°	719.4	719.4	719.4	719.4	719.4

(END OF REPORT)