

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-075U-100D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

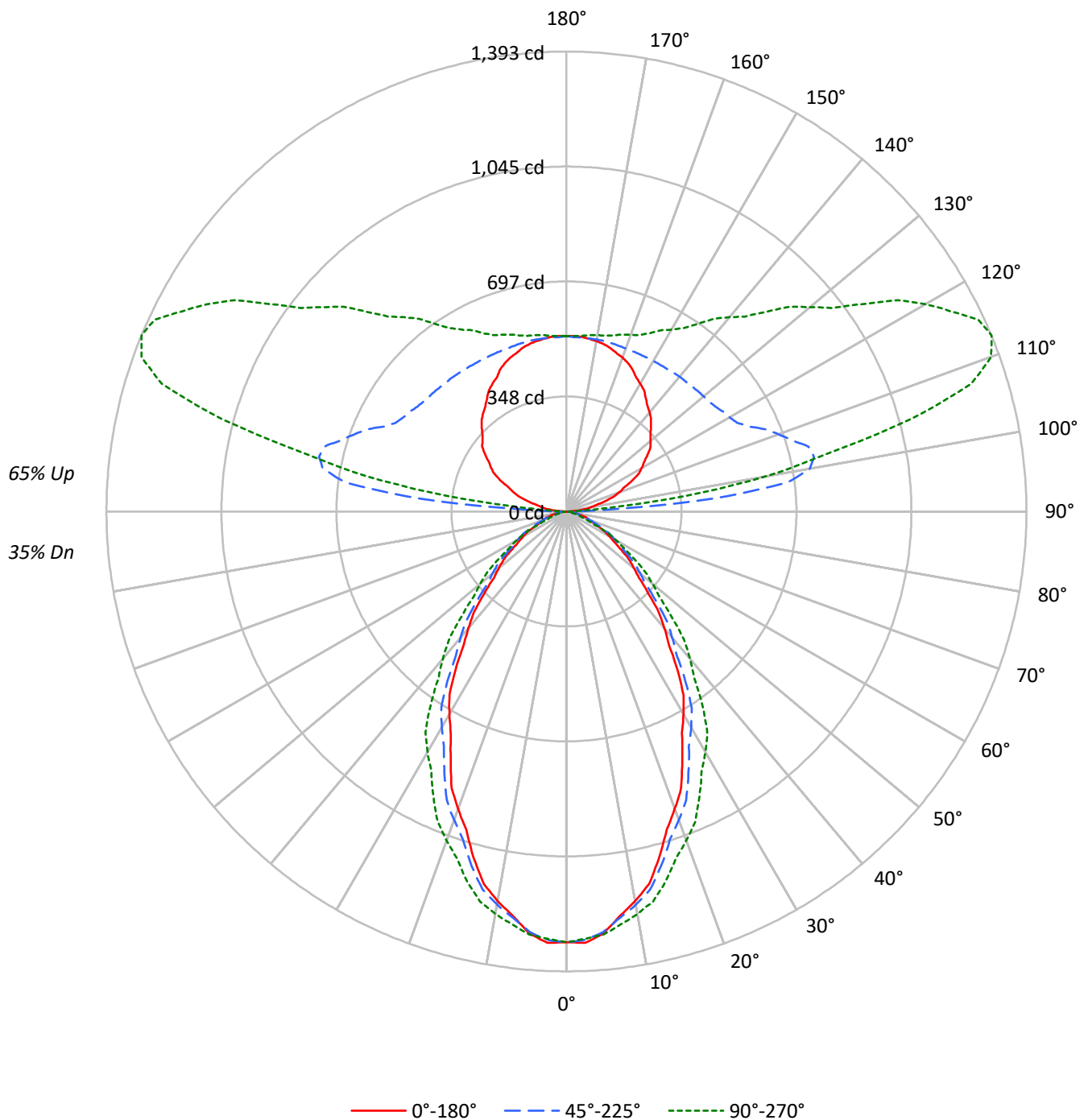
Lumens per Lamp: N/A
Luminaire Lumens: 5360.1 lumens
Efficiency: N/A
Efficacy: 64.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 82.9
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	104	104	104	104		94	94	94	94		75	75	75		58	58	58		43	43	43
1	95	91	88	85		86	83	80	77		67	65	63		52	51	50		39	38	38
2	87	81	75	71		79	73	69	65		60	56	54		47	45	43		35	34	33
3	80	72	65	60		73	65	60	55		53	49	46		42	40	37		32	30	29
4	74	64	57	51		67	58	52	47		48	44	40		38	35	33		29	27	26
5	68	57	50	44		62	53	46	41		43	39	35		35	32	29		27	25	23
6	63	52	44	39		57	48	41	36		39	35	31		32	28	26		25	22	21
7	58	47	40	34		53	43	37	32		36	31	28		29	26	23		23	21	19
8	54	43	36	31		49	39	33	29		33	28	25		27	23	21		21	19	17
9	51	39	32	27		46	36	30	26		30	26	22		25	21	19		20	17	16
10	47	36	29	25		43	33	27	23		28	23	20		23	20	17		18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8024	8024	8024
5°	7924	7896	7942
10°	7487	7555	7730
15°	6911	7071	7389
20°	6276	6512	6943
25°	5630	5936	6468
30°	5033	5362	5977
35°	4402	4719	5394
40°	3705	3999	4670
45°	3058	3321	3899
50°	2553	2783	3249
55°	2167	2388	2683
60°	1851	2070	2140
65°	1474	1741	1383
70°	1307	1360	843
75°	1210	1103	518
80°	1116	1013	446
85°	1009	932	367

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3899 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.7	2.2
10°-20°	311.2	5.8
20°-30°	403.2	7.5
30°-40°	394.8	7.4
40°-50°	302.2	5.6
50°-60°	201.4	3.8
60°-70°	109.9	2.0
70°-80°	45.8	0.9
80°-90°	14.3	0.3
90°-100°	250.3	4.7
100°-110°	688.7	12.8
110°-120°	710.9	13.3
120°-130°	569.6	10.6
130°-140°	447.4	8.3
140°-150°	342.8	6.4
150°-160°	246.5	4.6
160°-170°	150.7	2.8
170°-180°	50.8	0.9
0°-30°	834.1	15.6
0°-40°	1228.8	22.9
0°-60°	1732.4	32.3
0°-90°	1902.4	35.5
90°-120°	1650.0	30.8
90°-150°	3009.8	56.2
90°-180°	3458.0	64.5
0°-180°	5360.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1305	1305	1305	1305	1305	
5°	1283	1270	1279	1282	1286	119
15°	1085	1081	1110	1141	1160	303
25°	830	832	875	913	953	381
35°	586	589	628	671	718	364
45°	352	358	382	411	448	274
55°	202	210	223	231	250	183
65°	101	110	120	104	95	105
75°	51	51	46	32	22	54
85°	14	14	13	8	5	16
90°	1	4	8	10	10	3
95°	37	137	443	189	121	39
105°	123	189	759	1156	1078	130
115°	218	265	609	1212	1376	215
125°	300	342	552	934	1094	268
135°	362	402	536	756	855	280
145°	419	448	528	644	693	263
155°	474	490	525	579	595	218
165°	513	519	527	549	552	144
175°	531	532	528	535	534	50
180°	531	531	531	531	531	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1304.6	1304.6	1304.6	1304.6	1304.6
2.5°	1307.8	1296.1	1299.1	1299.0	1295.4
5°	1283.4	1270.5	1278.8	1281.8	1286.3
7.5°	1235.8	1226.0	1241.1	1252.3	1261.4
10°	1198.7	1190.3	1209.6	1225.8	1237.6
12.5°	1155.6	1148.6	1172.5	1194.3	1209.7
15°	1085.3	1081.4	1110.5	1140.7	1160.3
17.5°	1010.1	1008.2	1041.6	1076.9	1101.9
20°	958.8	958.3	994.9	1031.6	1060.7
22.5°	907.1	908.3	946.8	985.0	1018.1
25°	829.5	831.7	874.7	912.8	953.1
27.5°	757.7	758.7	803.1	843.4	886.4
30°	708.7	711.5	755.0	796.7	841.5
32.5°	659.7	662.9	705.6	748.6	794.3
35°	586.2	589.0	628.5	670.8	718.4
37.5°	510.4	514.2	549.3	589.3	636.1
40°	461.4	467.0	498.0	535.7	581.6
42.5°	414.2	421.2	449.9	485.7	527.1
45°	351.5	358.2	381.8	410.7	448.2
47.5°	297.4	305.2	323.3	348.2	380.2
50°	266.8	274.0	290.8	309.2	339.5
52.5°	239.7	247.0	261.9	276.2	301.9
55°	202.1	210.5	222.7	231.1	250.2
57.5°	171.2	179.2	188.9	192.7	204.2
60°	150.5	159.5	168.3	167.9	174.0
62.5°	131.8	139.4	148.1	142.1	142.4
65°	101.3	109.7	119.6	104.5	95.0
67.5°	81.9	83.6	93.9	72.9	61.6
70°	72.7	72.7	75.6	56.5	46.9
72.5°	64.0	64.0	61.4	45.9	35.9
75°	50.9	50.9	46.4	31.8	21.8
77.5°	39.3	38.8	35.5	23.7	15.8
80°	31.5	31.5	28.6	18.8	12.6
82.5°	24.6	24.6	22.2	14.6	9.4
85°	14.3	14.3	13.2	8.5	5.2
87.5°	5.3	5.9	6.2	4.8	4.3
90°	1.1	4.4	7.9	10.2	10.2
92.5°	15.6	66.6	115.4	44.3	36.4
95°	37.3	136.6	442.7	189.3	120.8
97.5°	60.8	151.5	675.6	520.5	367.3
100°	77.9	160.7	748.7	755.7	616.6
102.5°	94.2	171.7	767.7	937.6	809.9
105°	123.1	189.3	758.9	1155.8	1078.5
107.5°	150.7	211.2	715.8	1262.6	1285.6
110°	170.5	225.7	683.2	1289.2	1368.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.6	242.0	650.7	1272.1	1393.1
115°	218.0	265.4	608.7	1212.1	1375.5
117.5°	246.0	289.7	582.0	1127.9	1312.7
120°	263.1	305.1	570.3	1064.8	1255.8
122.5°	278.5	320.4	562.2	1009.4	1190.8
125°	300.4	342.4	552.2	934.2	1094.3
127.5°	321.2	361.2	545.7	871.4	1011.9
130°	332.0	372.9	542.1	834.1	962.2
132.5°	344.7	385.5	539.4	801.3	917.0
135°	362.5	402.3	536.4	755.5	854.9
137.5°	379.2	416.1	533.9	718.5	800.5
140°	391.9	426.1	533.0	694.0	767.9
142.5°	402.7	434.3	531.2	672.0	735.4
145°	419.0	447.7	528.5	643.7	693.4
147.5°	436.4	461.1	527.2	618.6	658.4
150°	447.2	469.3	526.3	604.9	635.8
152.5°	457.1	477.5	525.4	593.0	618.6
155°	474.3	489.8	525.1	578.6	595.1
157.5°	486.7	499.3	525.1	566.7	578.2
160°	495.8	505.7	525.1	560.3	569.2
162.5°	503.0	511.2	526.0	554.9	561.9
165°	512.7	519.3	527.4	548.9	552.2
167.5°	519.5	524.6	528.5	543.9	544.8
170°	524.0	527.3	528.5	542.1	542.1
172.5°	527.6	529.2	528.5	539.3	538.5
175°	530.8	531.9	528.5	535.3	534.2
177.5°	531.7	531.7	528.1	533.4	531.7
180°	530.8	530.8	530.8	530.8	530.8

(END OF REPORT)