

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-BB-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-BB-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

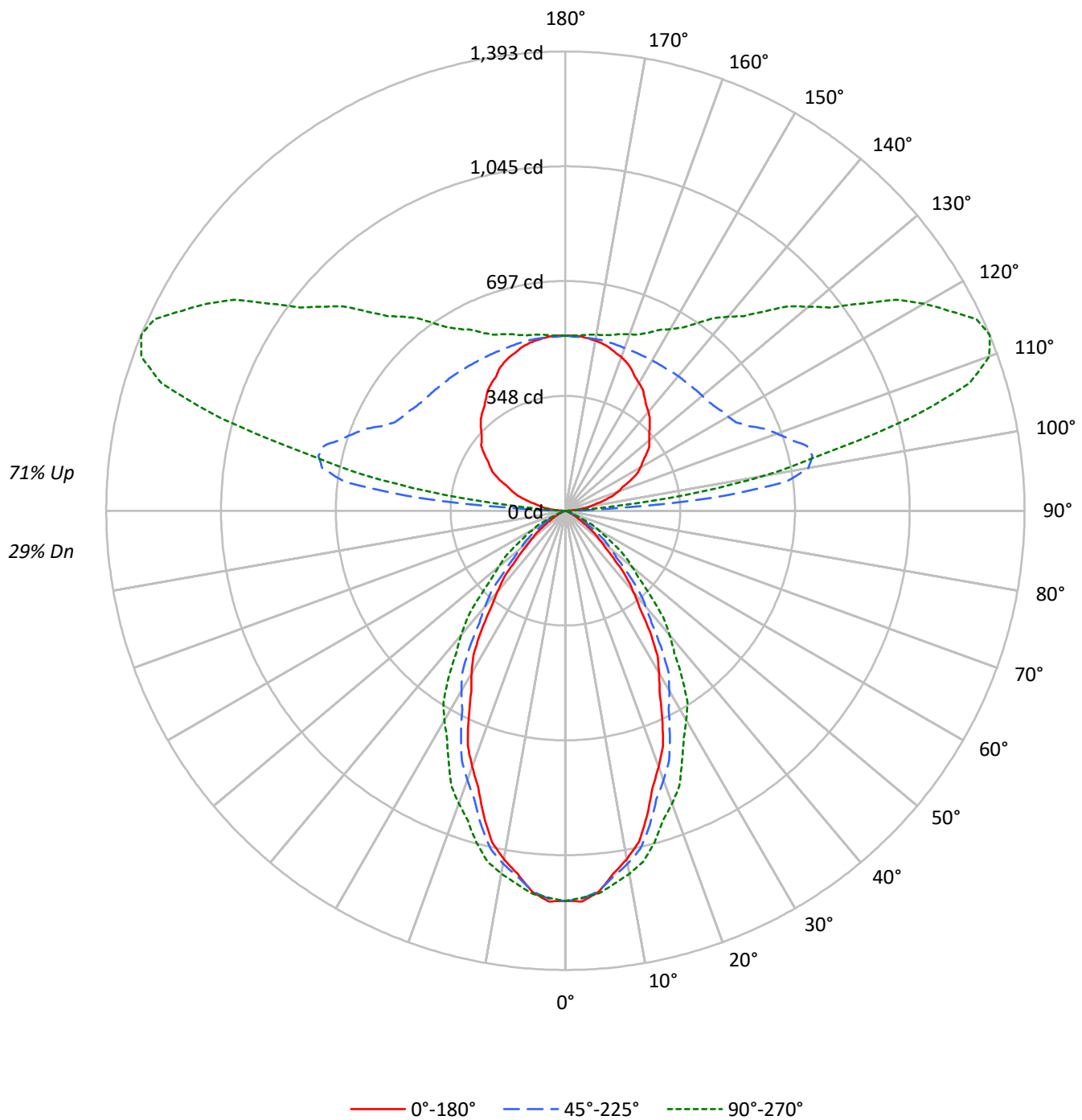
Lumens per Lamp: N/A
Luminaire Lumens: 4871.0 lumens
Efficiency: N/A
Efficacy: 58.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37
1	94	90	87	84	84	81	78	76	64	62	61	49	47	46	34	34	33
2	87	80	75	70	78	72	68	64	57	55	52	44	42	40	31	30	29
3	80	71	65	60	71	64	59	55	52	48	45	40	37	35	29	27	26
4	73	64	57	51	66	58	52	47	47	42	39	36	33	31	26	25	24
5	68	57	50	45	61	52	46	41	42	38	34	33	30	28	24	23	21
6	63	52	44	39	56	47	41	36	38	34	31	30	27	25	23	21	19
7	58	47	40	35	52	43	37	32	35	31	27	28	25	22	21	19	18
8	54	43	36	31	49	39	33	29	32	28	25	26	23	20	19	18	16
9	50	39	32	28	45	36	30	26	30	25	22	24	21	18	18	16	15
10	47	36	29	25	43	33	27	23	27	23	20	22	19	17	17	15	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7279	7279	7279
5°	7162	7145	7198
10°	6702	6791	6981
15°	6093	6286	6636
20°	5408	5689	6188
25°	4710	5083	5685
30°	4034	4477	5210
35°	3345	3801	4634
40°	2570	3039	3949
45°	1858	2301	3178
50°	1266	1715	2520
55°	822	1241	1959
60°	472	873	1416
65°	125	533	716
70°	61	165	207
75°	26	14	0
80°	21	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3178 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.0	2.2
10°-20°	276.2	5.7
20°-30°	345.8	7.1
30°-40°	319.4	6.6
40°-50°	214.6	4.4
50°-60°	110.9	2.3
60°-70°	34.7	0.7
70°-80°	2.2	0.0
80°-90°	1.4	0.0
90°-100°	250.3	5.1
100°-110°	688.7	14.1
110°-120°	710.9	14.6
120°-130°	569.6	11.7
130°-140°	447.4	9.2
140°-150°	342.8	7.0
150°-160°	246.5	5.1
160°-170°	150.7	3.1
170°-180°	50.8	1.0
0°-30°	730.0	15.0
0°-40°	1049.4	21.5
0°-60°	1374.9	28.2
0°-90°	1413.2	29.0
90°-120°	1650.0	33.9
90°-150°	3009.8	61.8
90°-180°	3458.0	71.0
0°-180°	4871.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1184	1184	1184	1184	1184	
5°	1160	1148	1157	1161	1166	108
15°	957	953	987	1020	1042	266
25°	694	700	749	800	838	318
35°	446	457	506	566	617	276
45°	214	226	264	316	365	168
55°	77	90	116	148	183	72
65°	9	16	37	44	49	14
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	4	8	10	10	2
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°	1183.5	1183.5	1183.5	1183.5	1183.5
2.5°	1186.3	1175.1	1178.0	1177.9	1174.8
5°	1160.0	1148.3	1157.2	1161.3	1165.8
7.5°	1111.0	1101.8	1118.9	1131.7	1141.0
10°	1073.0	1065.2	1087.3	1104.8	1117.7
12.5°	1029.0	1023.0	1049.8	1073.7	1090.2
15°	956.8	953.4	987.1	1020.3	1042.1
17.5°	879.4	879.2	917.7	958.9	985.2
20°	826.2	827.9	869.2	914.5	945.3
22.5°	773.1	777.0	821.1	868.4	903.6
25°	694.0	699.6	748.9	800.2	837.7
27.5°	617.9	626.1	678.0	731.3	777.0
30°	568.0	577.5	630.4	686.4	733.5
32.5°	519.0	530.3	581.9	641.1	689.0
35°	445.5	456.7	506.2	565.7	617.2
37.5°	369.5	380.5	428.9	487.5	543.1
40°	320.1	332.4	378.5	435.3	491.8
42.5°	275.2	287.5	330.8	386.7	440.1
45°	213.6	226.4	264.5	316.0	365.3
47.5°	162.5	176.5	209.9	256.5	301.4
50°	132.3	146.3	179.2	220.3	263.4
52.5°	108.0	121.5	151.3	190.0	229.5
55°	76.7	89.6	115.7	148.5	182.7
57.5°	53.0	64.1	87.5	114.9	141.7
60°	38.4	49.0	71.0	93.3	115.1
62.5°	25.5	35.3	56.8	73.9	88.5
65°	8.6	16.4	36.6	44.2	49.2
67.5°	4.4	5.2	19.2	20.3	22.0
70°	3.4	3.4	9.2	9.8	11.5
72.5°	2.5	2.5	3.7	4.7	5.0
75°	1.1	1.1	0.6	0.0	0.0
77.5°	0.6	0.6	0.5	0.0	0.0
80°	0.6	0.6	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.9	1.6	2.0	2.0
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)