

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-FB-0U-050D-940-1D-UNV-STD-W-8

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-892-3)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-0U-050D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

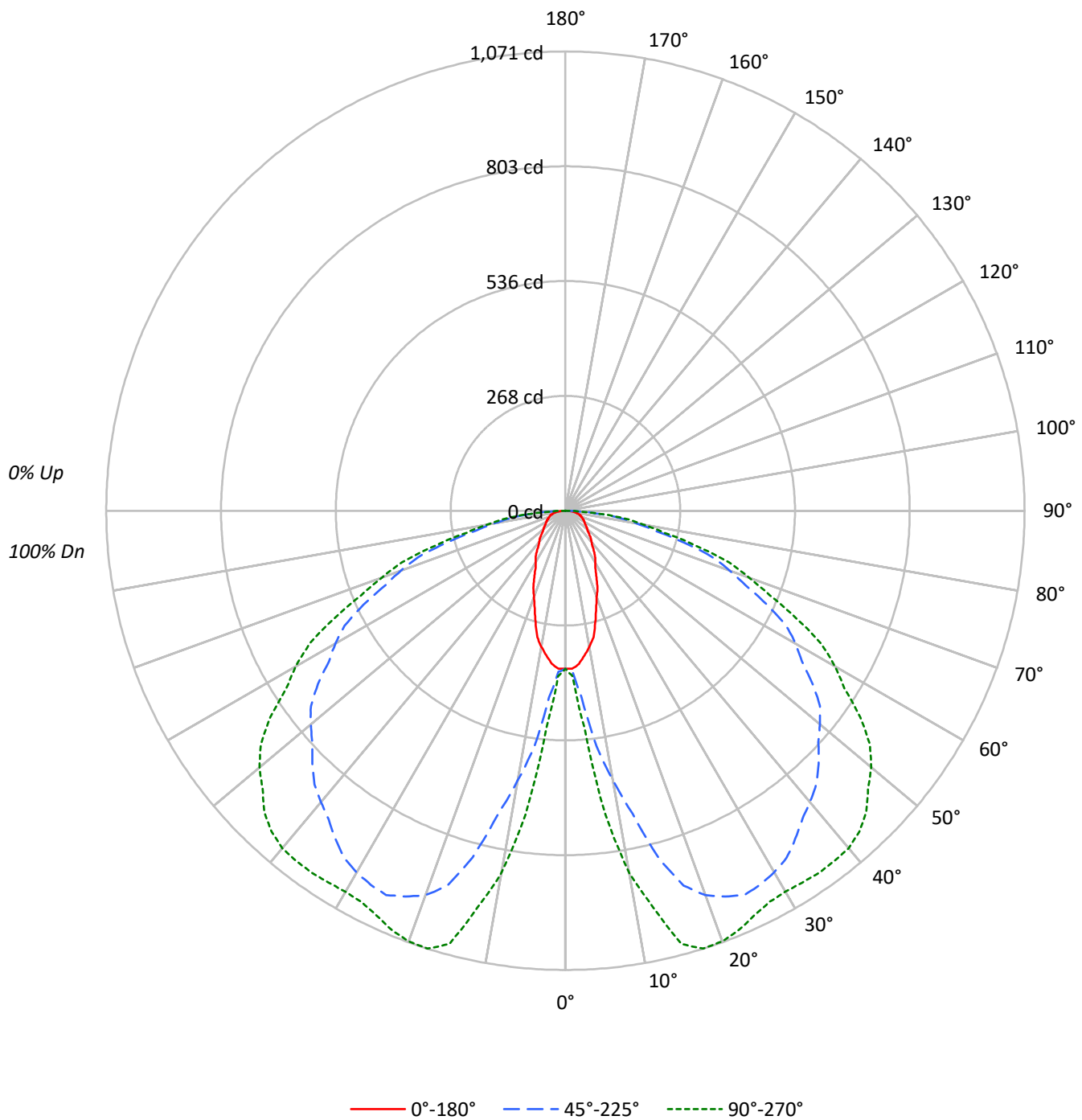
Lumens per Lamp: N/A
Luminaire Lumens: 2851.7 lumens
Efficiency: N/A
Efficacy: 81.0 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 35.2
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	98	94	105	100	96	92	96	93	89		92	89	87		89
2	97	88	81	75	95	87	80	74	83	77	72		80	75	71		77
3	88	77	68	61	86	75	67	61	72	65	59		69	63	58		67
4	80	67	58	51	78	66	57	51	63	56	50		61	54	49		59
5	73	60	50	43	71	58	50	43	56	48	42		54	47	42		52
6	67	53	44	37	65	52	43	37	50	42	36		49	42	36		47
7	62	48	39	32	60	47	38	32	45	38	32		44	37	32		43
8	58	43	34	28	56	43	34	28	41	34	28		40	33	28		39
9	54	40	31	25	52	39	31	25	38	30	25		37	30	25		36
10	50	36	28	23	49	36	28	22	35	27	22		34	27	22		33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1700	1700	1700
5°	1662	2022	2354
10°	1510	2991	4018
15°	1285	3998	4996
20°	1047	4685	5246
25°	874	5032	5301
30°	738	5188	5466
35°	654	5264	5805
40°	571	5341	6186
45°	518	5446	6478
50°	477	5561	6684
55°	458	5665	6756
60°	470	5717	6701
65°	491	5671	6506
70°	527	5497	6153
75°	592	5100	5639
80°	661	4407	4909
85°	625	3671	4203

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 6784 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.3	1.7
10°-20°	210.5	7.4
20°-30°	368.9	12.9
30°-40°	475.0	16.7
40°-50°	530.3	18.6
50°-60°	508.6	17.8
60°-70°	404.7	14.2
70°-80°	238.4	8.4
80°-90°	66.8	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	627.7	22.0
0°-40°	1102.7	38.7
0°-60°	2141.7	75.1
0°-90°	2851.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2851.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	368	368	368	368	368	
5°	359	385	437	493	508	33
15°	269	494	837	1012	1046	75
25°	172	560	989	1040	1042	79
35°	116	526	935	992	1031	72
45°	79	413	835	948	993	61
55°	57	275	704	815	840	52
65°	45	180	520	586	596	45
75°	33	113	286	312	316	35
85°	12	31	69	78	79	13
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5
2.5°	368.5	368.5	370.4	373.2	374.2	378.0	383.6	386.5	388.4	386.5
5°	359.0	363.7	379.1	401.7	424.2	449.1	481.0	496.4	505.9	508.3
7.5°	340.3	353.3	397.2	455.9	521.3	586.3	642.4	687.9	714.5	715.6
10°	322.3	344.8	412.3	502.4	592.4	684.8	761.8	809.2	847.2	857.8
12.5°	302.4	336.3	428.4	548.8	672.0	775.8	861.4	913.5	943.8	947.9
15°	269.0	318.7	451.4	622.0	774.9	899.3	981.0	1022.5	1041.5	1046.2
17.5°	237.9	303.1	471.6	679.4	860.4	972.5	1034.6	1060.7	1070.1	1070.6
20°	213.3	287.9	481.0	719.2	904.0	1004.7	1049.8	1066.4	1071.1	1068.7
22.5°	195.3	271.8	486.7	745.7	930.6	1017.1	1050.7	1058.8	1060.7	1058.3
25°	171.8	245.3	487.0	780.8	957.3	1020.1	1037.9	1040.3	1042.7	1041.5
27.5°	150.9	215.6	479.9	804.0	961.1	1005.7	1014.0	1019.9	1027.3	1028.9
30°	138.6	196.7	470.4	811.6	957.3	990.5	998.8	1009.5	1022.5	1026.1
32.5°	129.1	178.7	456.2	812.6	947.9	972.5	983.6	1003.8	1022.5	1028.0
35°	116.1	151.7	432.5	805.7	926.5	943.1	966.8	1000.0	1024.9	1030.8
37.5°	103.3	132.2	400.2	791.7	898.6	915.9	955.0	995.0	1022.7	1030.1
40°	94.8	120.9	375.6	778.4	876.8	896.9	945.5	989.3	1019.0	1027.3
42.5°	88.2	111.4	349.1	761.4	852.1	879.9	934.1	980.8	1008.5	1014.9
45°	79.4	97.2	306.9	729.9	814.0	855.5	914.7	959.7	985.8	992.9
47.5°	71.1	87.2	262.8	693.8	775.1	825.8	886.5	929.1	953.1	957.8
50°	66.4	80.6	233.4	668.2	747.6	802.1	863.7	906.4	926.5	931.3
52.5°	62.6	74.9	205.9	638.9	719.2	777.5	836.3	875.1	893.4	895.3
55°	56.9	67.5	169.4	593.6	674.2	734.6	791.5	822.3	835.3	840.0
57.5°	53.8	62.1	140.8	544.5	623.5	684.1	735.8	759.7	770.1	771.8
60°	50.9	59.2	125.6	509.5	591.2	648.1	693.1	713.3	722.7	726.3
62.5°	48.1	57.3	114.2	473.5	553.3	608.3	647.6	664.9	672.5	673.2
65°	45.0	54.5	100.7	418.2	494.1	545.0	575.8	590.0	593.6	596.0
67.5°	41.9	51.7	91.0	362.6	432.9	475.1	497.9	510.2	510.9	515.9
70°	39.1	49.8	85.3	324.6	387.4	427.7	446.7	456.2	455.0	456.2
72.5°	37.2	46.9	81.5	285.8	343.8	375.6	392.7	399.3	400.0	400.2
75°	33.2	41.5	75.8	226.3	272.5	299.8	312.8	311.6	315.2	316.4
77.5°	28.7	35.8	62.3	166.8	204.3	222.3	232.7	236.0	234.8	235.1
80°	24.9	32.0	50.9	128.0	158.8	173.0	182.5	184.8	183.6	184.8
82.5°	20.1	26.3	39.6	94.8	119.0	130.3	137.0	137.4	138.2	140.3
85°	11.8	15.4	23.7	52.1	66.4	72.3	77.0	78.2	79.4	79.4
87.5°	4.7	6.6	12.3	21.8	27.5	29.4	29.4	27.5	29.4	26.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)