

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-935-1D-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-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

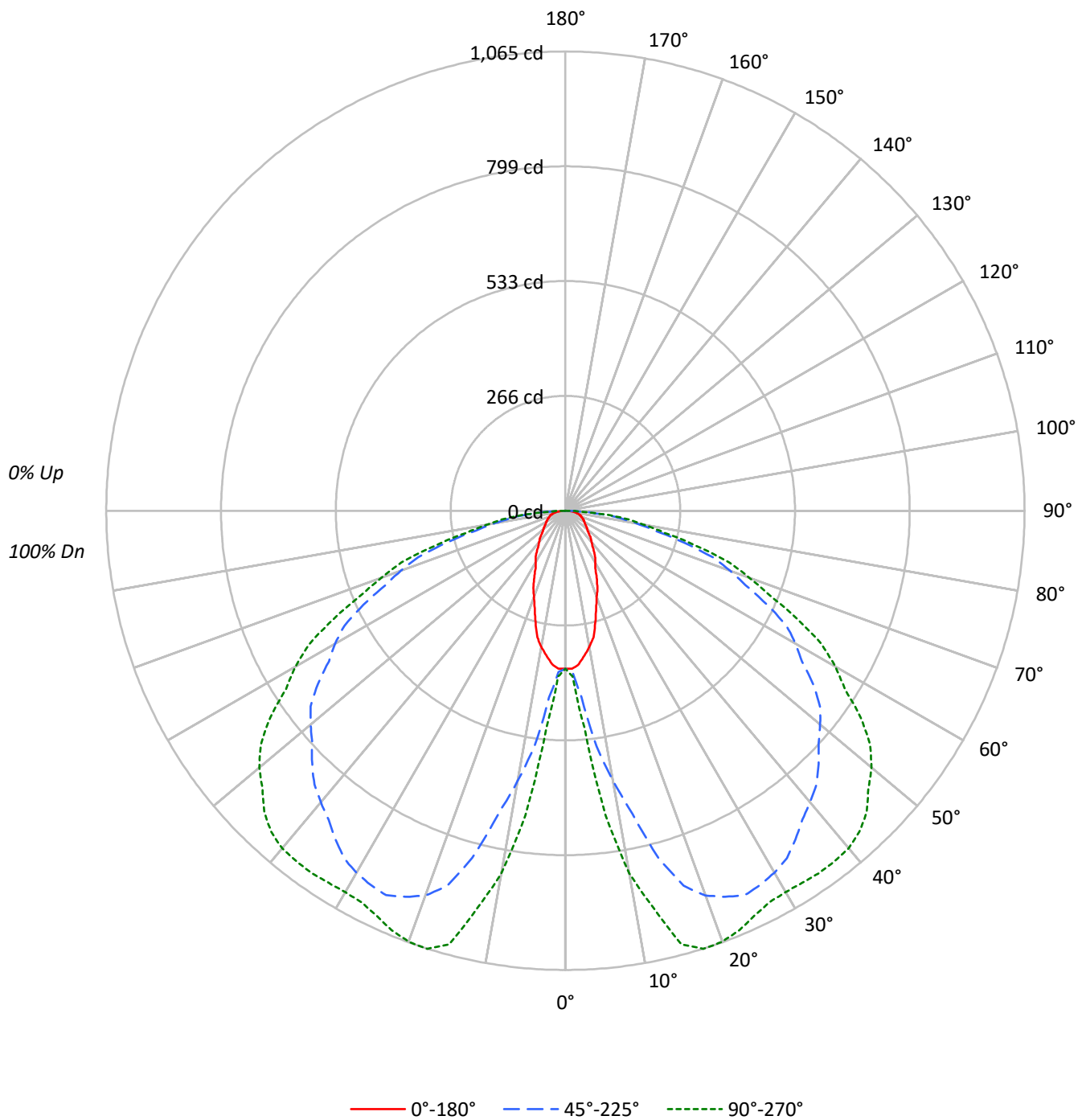
Lumens per Lamp: N/A
Luminaire Lumens: 2837.7 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84
2	97	88	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69
3	88	77	68	61	86	75	67	61	72	65	59	69	63	58	67	62	57
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	59	53	48
5	73	60	50	43	71	58	50	43	56	48	42	54	47	42	52	46	41
6	67	53	44	37	65	52	43	37	50	42	36	49	42	36	47	41	36
7	62	48	39	32	60	47	38	32	45	38	32	44	37	32	43	36	31
8	58	43	34	28	56	43	34	28	41	34	28	40	33	28	39	32	28
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1692	1692	1692
5°	1654	2012	2342
10°	1502	2977	3998
15°	1278	3978	4972
20°	1042	4662	5221
25°	870	5008	5275
30°	735	5162	5439
35°	650	5239	5776
40°	568	5314	6156
45°	515	5419	6446
50°	474	5534	6651
55°	455	5638	6723
60°	468	5689	6668
65°	489	5643	6473
70°	525	5470	6122
75°	588	5075	5611
80°	659	4385	4885
85°	625	3649	4181

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 6751 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.1	1.7
10°-20°	209.5	7.4
20°-30°	367.1	12.9
30°-40°	472.7	16.7
40°-50°	527.7	18.6
50°-60°	506.1	17.8
60°-70°	402.7	14.2
70°-80°	237.3	8.4
80°-90°	66.5	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°	624.7	22.0
0°-40°	1097.3	38.7
0°-60°	2131.1	75.1
0°-90°	2837.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2837.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	367	367	367	367	367	
5°	357	383	434	490	506	33
15°	268	492	833	1007	1041	74
25°	171	558	984	1035	1036	79
35°	116	523	930	987	1026	72
45°	79	411	831	944	988	61
55°	57	274	701	811	836	52
65°	45	179	517	584	593	44
75°	33	113	285	310	315	34
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°	366.7	366.7	366.7	366.7	366.7	366.7	366.7	366.7	366.7	366.7
2.5°	366.7	366.7	368.6	371.4	372.3	376.1	381.8	384.6	386.5	384.6
5°	357.2	362.0	377.3	399.7	422.1	446.8	478.7	494.0	503.4	505.8
7.5°	338.6	351.6	395.2	453.7	518.8	583.4	639.3	684.5	710.9	712.1
10°	320.7	343.1	410.3	499.9	589.5	681.5	758.1	805.3	843.0	853.6
12.5°	300.9	334.6	426.3	546.1	668.7	772.0	857.1	909.0	939.2	943.2
15°	267.6	317.2	449.2	619.0	771.1	894.9	976.2	1017.5	1036.4	1041.1
17.5°	236.7	301.6	469.2	676.0	856.2	967.7	1029.5	1055.5	1064.9	1065.4
20°	212.2	286.5	478.7	715.7	899.6	999.8	1044.6	1061.1	1065.8	1063.5
22.5°	194.3	270.5	484.3	742.1	926.0	1012.1	1045.6	1053.6	1055.5	1053.1
25°	171.0	244.1	484.6	777.0	952.6	1015.1	1032.8	1035.2	1037.5	1036.4
27.5°	150.2	214.6	477.5	800.1	956.4	1000.7	1009.0	1014.9	1022.2	1023.9
30°	137.9	195.7	468.1	807.6	952.6	985.7	993.9	1004.5	1017.5	1021.0
32.5°	128.5	177.8	453.9	808.6	943.2	967.7	978.8	998.9	1017.5	1022.9
35°	115.5	150.9	430.3	801.7	922.0	938.5	962.1	995.1	1019.8	1025.7
37.5°	102.8	131.6	398.3	787.8	894.2	911.4	950.3	990.1	1017.7	1025.0
40°	94.3	120.3	373.7	774.6	872.5	892.5	940.9	984.5	1014.0	1022.2
42.5°	87.7	110.8	347.3	757.6	847.9	875.5	929.5	976.0	1003.6	1009.9
45°	79.0	96.7	305.4	726.3	810.0	851.3	910.2	955.0	980.9	988.0
47.5°	70.7	86.8	261.5	690.4	771.3	821.8	882.1	924.6	948.4	953.1
50°	66.0	80.2	232.3	665.0	744.0	798.2	859.5	901.9	922.0	926.7
52.5°	62.3	74.5	204.9	635.7	715.7	773.7	832.2	870.8	889.0	890.9
55°	56.6	67.2	168.6	590.7	670.9	731.0	787.6	818.2	831.2	835.9
57.5°	53.5	61.8	140.1	541.9	620.4	680.8	732.2	756.0	766.4	768.0
60°	50.7	59.0	125.0	507.0	588.3	644.9	689.7	709.8	719.2	722.7
62.5°	47.9	57.1	113.7	471.1	550.6	605.3	644.5	661.7	669.2	669.9
65°	44.8	54.2	100.2	416.2	491.7	542.3	573.0	587.2	590.7	593.0
67.5°	41.7	51.4	90.5	360.8	430.8	472.8	495.4	507.7	508.4	513.3
70°	38.9	49.5	84.9	323.1	385.5	425.6	444.5	453.9	452.7	453.9
72.5°	37.0	46.7	81.1	284.4	342.2	373.7	390.7	397.3	398.0	398.3
75°	33.0	41.3	75.5	225.2	271.2	298.3	311.3	310.1	313.6	314.8
77.5°	28.5	35.6	62.0	166.0	203.3	221.2	231.6	234.9	233.7	233.9
80°	24.8	31.8	50.7	127.3	158.0	172.1	181.6	183.9	182.7	183.9
82.5°	20.0	26.2	39.4	94.3	118.4	129.7	136.3	136.8	137.5	139.6
85°	11.8	15.3	23.6	51.9	66.0	71.9	76.6	77.8	79.0	79.0
87.5°	4.7	6.6	12.3	21.7	27.4	29.2	29.2	27.4	29.2	26.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)