

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-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 (G3-2301-892-3)
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-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

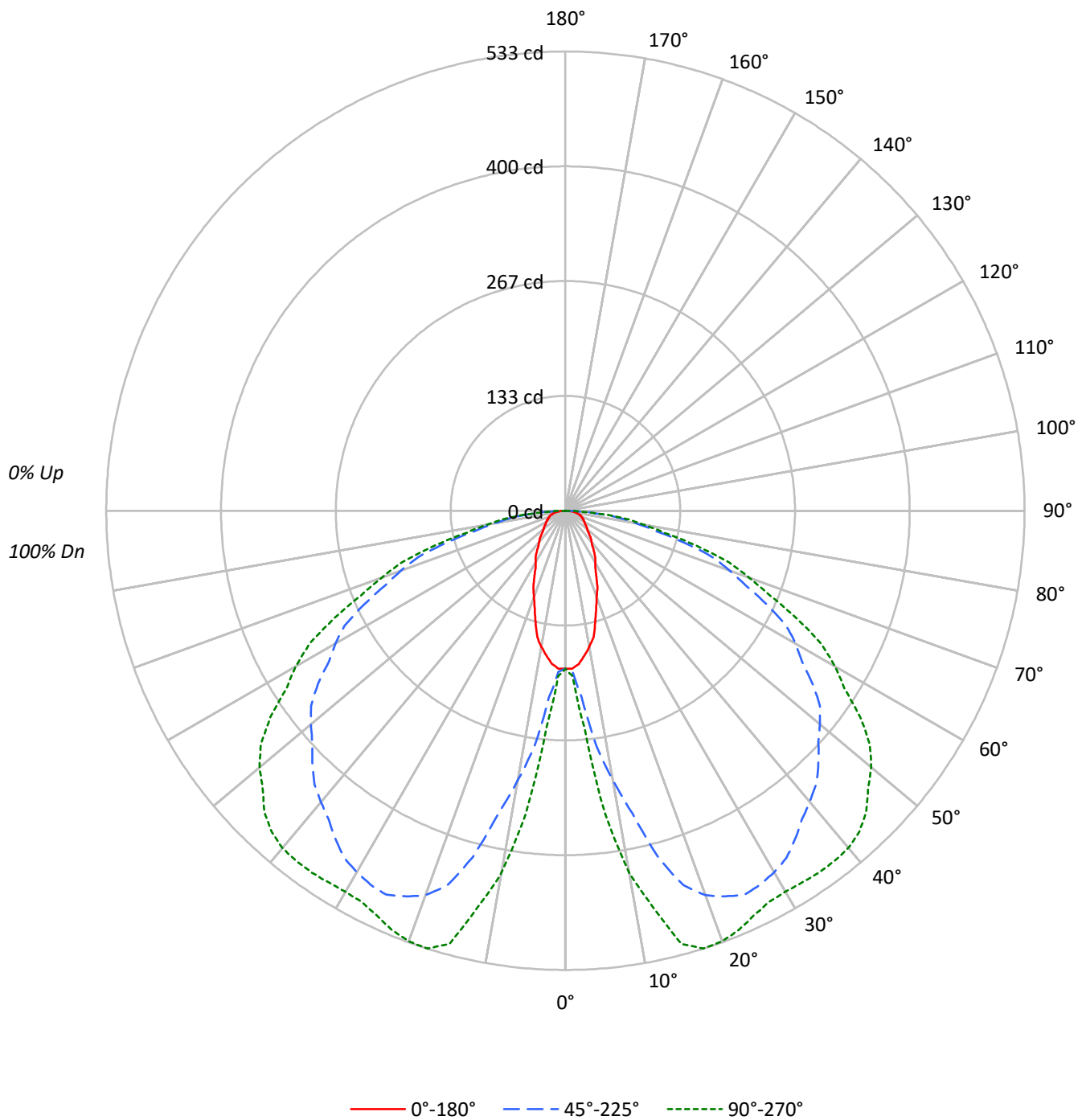
Lumens per Lamp: N/A
Luminaire Lumens: 1418.8 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.2
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°	1691	1691	1691
5°	1654	2012	2342
10°	1502	2977	3998
15°	1278	3978	4972
20°	1042	4662	5220
25°	870	5008	5275
30°	735	5162	5439
35°	651	5238	5777
40°	568	5314	6156
45°	515	5419	6446
50°	474	5534	6651
55°	455	5637	6724
60°	467	5690	6669
65°	489	5643	6473
70°	526	5471	6123
75°	588	5074	5611
80°	659	4386	4888
85°	625	3652	4181

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 6750 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.0	1.7
10°-20°	104.7	7.4
20°-30°	183.5	12.9
30°-40°	236.3	16.7
40°-50°	263.9	18.6
50°-60°	253.0	17.8
60°-70°	201.4	14.2
70°-80°	118.6	8.4
80°-90°	33.3	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°	312.3	22.0
0°-40°	548.7	38.7
0°-60°	1065.6	75.1
0°-90°	1418.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1418.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	183	183	183	183	183	
5°	179	191	217	245	253	16
15°	134	246	416	504	520	37
25°	86	279	492	517	518	39
35°	58	262	465	493	513	36
45°	40	205	415	472	494	31
55°	28	137	350	405	418	26
65°	22	90	258	292	296	22
75°	16	56	142	155	157	17
85°	6	15	34	39	40	7
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	183.3	183.3	183.3	183.3	183.3	183.3	183.3	183.3	183.3	183.3
2.5°	183.3	183.3	184.3	185.7	186.2	188.1	190.9	192.3	193.2	192.3
5°	178.6	181.0	188.6	199.8	211.0	223.4	239.3	247.0	251.7	252.9
7.5°	169.3	175.8	197.6	226.8	259.4	291.7	319.6	342.3	355.5	356.1
10°	160.3	171.5	205.1	250.0	294.8	340.7	379.1	402.6	421.5	426.8
12.5°	150.4	167.3	213.2	273.1	334.4	386.0	428.6	454.5	469.6	471.6
15°	133.8	158.6	224.6	309.5	385.5	447.4	488.1	508.7	518.2	520.5
17.5°	118.4	150.8	234.6	338.0	428.1	483.9	514.8	527.7	532.4	532.7
20°	106.1	143.3	239.3	357.8	449.8	499.9	522.3	530.6	532.9	531.7
22.5°	97.2	135.2	242.2	371.0	463.0	506.0	522.8	526.8	527.7	526.5
25°	85.5	122.0	242.3	388.5	476.3	507.6	516.4	517.6	518.8	518.2
27.5°	75.1	107.3	238.8	400.0	478.2	500.4	504.5	507.4	511.1	511.9
30°	69.0	97.9	234.0	403.8	476.3	492.8	497.0	502.3	508.7	510.5
32.5°	64.3	88.9	227.0	404.3	471.6	483.9	489.4	499.4	508.7	511.5
35°	57.8	75.5	215.2	400.9	461.0	469.2	481.0	497.5	509.9	512.9
37.5°	51.4	65.8	199.1	393.9	447.1	455.7	475.1	495.1	508.9	512.5
40°	47.2	60.1	186.9	387.3	436.2	446.3	470.4	492.2	507.0	511.1
42.5°	43.9	55.4	173.7	378.8	424.0	437.8	464.8	488.0	501.8	505.0
45°	39.5	48.3	152.7	363.1	405.0	425.6	455.1	477.5	490.5	494.0
47.5°	35.4	43.4	130.8	345.2	385.7	410.9	441.1	462.3	474.2	476.6
50°	33.0	40.1	116.1	332.5	372.0	399.1	429.8	451.0	461.0	463.4
52.5°	31.1	37.3	102.5	317.9	357.8	386.8	416.1	435.4	444.5	445.4
55°	28.3	33.6	84.3	295.3	335.4	365.5	393.8	409.1	415.6	418.0
57.5°	26.8	30.9	70.0	270.9	310.2	340.4	366.1	378.0	383.2	384.0
60°	25.3	29.5	62.5	253.5	294.2	322.5	344.9	354.9	359.6	361.4
62.5°	23.9	28.5	56.8	235.6	275.3	302.7	322.2	330.8	334.6	335.0
65°	22.4	27.1	50.1	208.1	245.8	271.2	286.5	293.6	295.3	296.5
67.5°	20.9	25.7	45.3	180.4	215.4	236.4	247.7	253.8	254.2	256.7
70°	19.5	24.8	42.4	161.5	192.8	212.8	222.2	227.0	226.4	227.0
72.5°	18.5	23.3	40.6	142.2	171.1	186.9	195.4	198.7	199.0	199.1
75°	16.5	20.6	37.7	112.6	135.6	149.1	155.6	155.0	156.8	157.4
77.5°	14.3	17.8	31.0	83.0	101.6	110.6	115.8	117.4	116.8	117.0
80°	12.4	15.9	25.3	63.7	79.0	86.1	90.8	92.0	91.4	92.0
82.5°	10.0	13.1	19.7	47.2	59.2	64.8	68.1	68.4	68.7	69.8
85°	5.9	7.7	11.8	25.9	33.0	36.0	38.3	38.9	39.5	39.5
87.5°	2.4	3.3	6.1	10.8	13.7	14.6	14.6	13.7	14.6	13.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)