

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-0U-050D-927-1D-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 ()
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-0U-050D-927-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

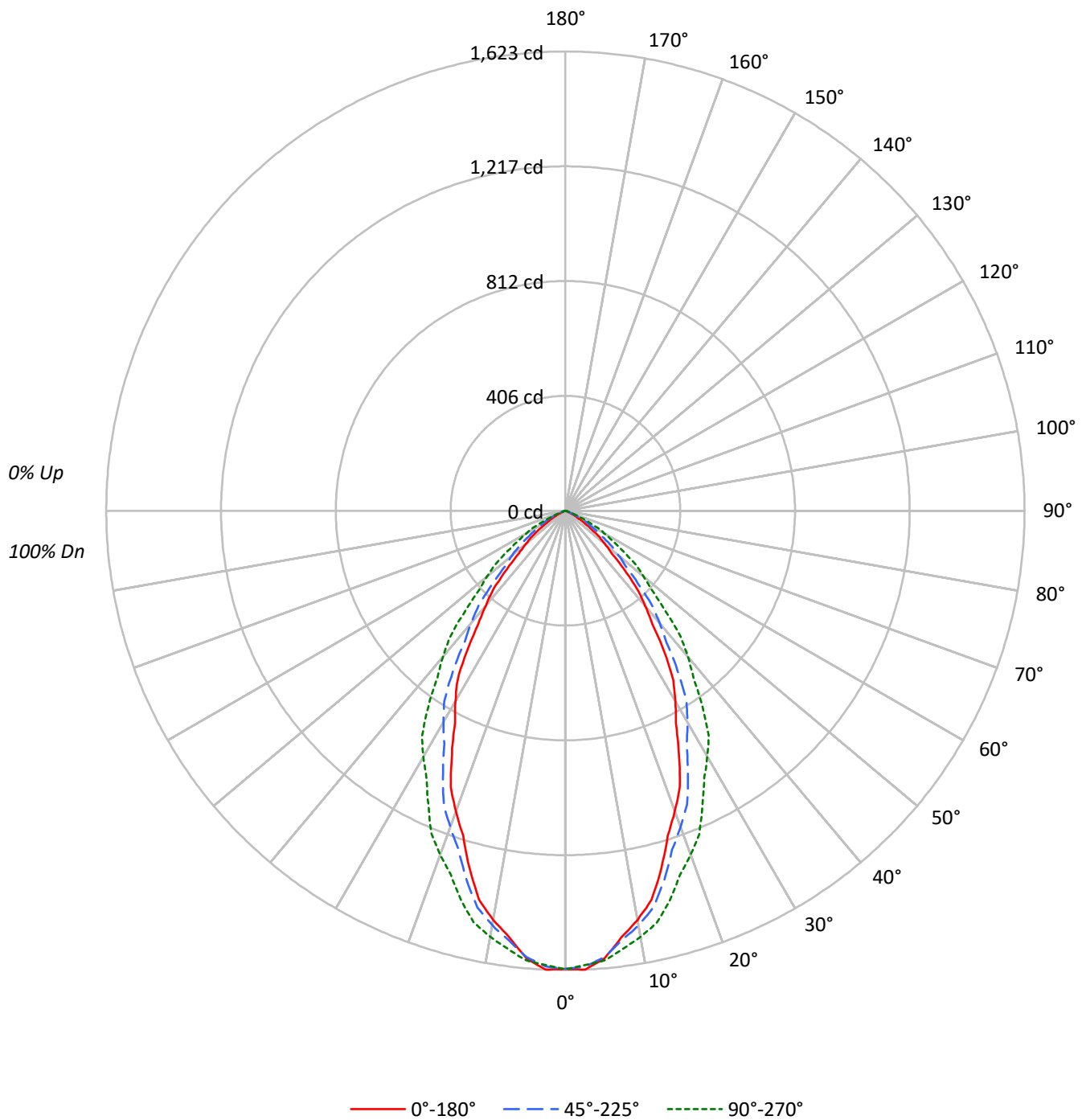
Lumens per Lamp: N/A
Luminaire Lumens: 1931.8 lumens
Efficiency: N/A
Efficacy: 54.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91		
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82		
3	99	91	85	81	97	90	84	80	87	82	79	85	81	77	82	79	76	74		
4	93	84	77	72	91	83	76	72	80	75	71	78	74	70	76	72	69	67		
5	87	77	70	65	85	76	70	65	74	68	64	72	67	64	71	66	63	61		
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56		
7	77	66	59	54	75	65	59	54	64	58	53	62	57	53	61	56	53	51		
8	72	61	54	50	71	61	54	49	59	53	49	58	53	49	57	52	49	47		
9	68	57	50	46	67	57	50	46	56	50	46	55	49	45	54	49	45	44		
10	65	54	47	42	63	53	47	42	52	46	42	51	46	42	51	46	42	41		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7470	7470	7470
5°	7350	7332	7386
10°	6877	6969	7164
15°	6252	6451	6810
20°	5550	5838	6350
25°	4833	5216	5834
30°	4140	4595	5346
35°	3432	3900	4756
40°	2637	3119	4053
45°	1906	2362	3261
50°	1299	1760	2586
55°	844	1273	2010
60°	484	896	1453
65°	129	547	736
70°	63	169	212
75°	29	14	0
80°	21	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3261 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.8	7.7
10°-20°	377.9	19.6
20°-30°	473.1	24.5
30°-40°	437.0	22.6
40°-50°	293.7	15.2
50°-60°	151.7	7.9
60°-70°	47.5	2.5
70°-80°	3.0	0.2
80°-90°	0.1	0.0
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°	998.9	51.7
0°-40°	1435.9	74.3
0°-60°	1881.2	97.4
0°-90°	1931.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1931.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1619	1619	1619	1619	1619	
5°	1587	1571	1583	1589	1595	147
15°	1309	1304	1351	1396	1426	365
25°	950	957	1025	1095	1146	435
35°	610	625	693	774	845	378
45°	292	310	362	432	500	229
55°	105	123	158	203	250	98
65°	12	22	50	60	67	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1619.4	1619.4	1619.4	1619.4	1619.4
2.5°	1623.1	1607.8	1611.9	1611.8	1607.5
5°	1587.3	1571.2	1583.3	1589.0	1595.1
7.5°	1520.2	1507.6	1531.0	1548.5	1561.3
10°	1468.2	1457.5	1487.8	1511.7	1529.3
12.5°	1408.0	1399.7	1436.4	1469.2	1491.7
15°	1309.1	1304.5	1350.7	1396.0	1425.9
17.5°	1203.2	1203.1	1255.7	1312.0	1348.0
20°	1130.5	1132.8	1189.3	1251.3	1293.5
22.5°	1057.8	1063.2	1123.5	1188.2	1236.4
25°	949.5	957.2	1024.7	1094.9	1146.2
27.5°	845.5	856.7	927.8	1000.6	1063.1
30°	777.2	790.2	862.6	939.2	1003.6
32.5°	710.1	725.6	796.1	877.2	942.8
35°	609.5	624.8	692.6	774.1	844.6
37.5°	505.6	520.7	586.8	667.0	743.2
40°	437.9	454.8	517.9	595.6	673.0
42.5°	376.5	393.4	452.7	529.1	602.2
45°	292.2	309.8	362.0	432.4	499.8
47.5°	222.3	241.5	287.2	351.0	412.4
50°	181.0	200.1	245.2	301.4	360.4
52.5°	147.8	166.3	207.0	259.9	314.0
55°	105.0	122.6	158.3	203.2	249.9
57.5°	72.5	87.7	119.7	157.2	193.8
60°	52.5	67.0	97.1	127.6	157.5
62.5°	34.9	48.3	77.7	101.1	121.1
65°	11.8	22.5	50.1	60.5	67.4
67.5°	6.0	7.2	26.3	27.8	30.1
70°	4.7	4.7	12.5	13.4	15.7
72.5°	3.4	3.4	5.0	6.4	6.9
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)