

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-050U-050D-927-1D-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 (G3-1910-536-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-050U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

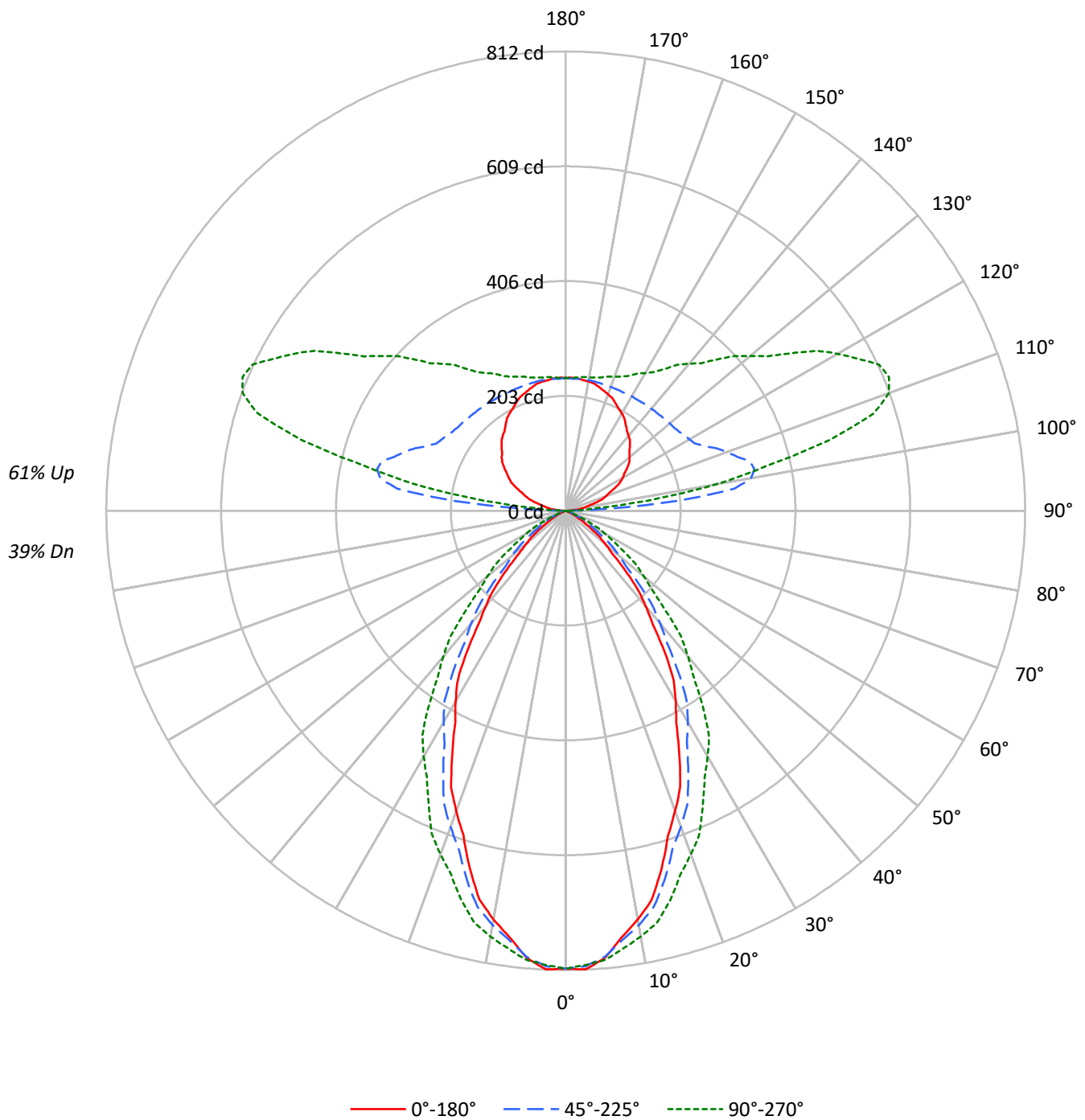
Lumens per Lamp: N/A
Luminaire Lumens: 2500.6 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 28.5
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46			39
1	97	93	90	87	88	85	82	79	69	68	66	55	54	53	42	42	41			35
2	89	83	77	73	81	76	71	68	63	59	57	50	48	47	39	38	37			32
3	82	74	68	63	75	68	63	58	56	53	50	46	43	41	36	34	33			29
4	76	66	60	54	69	61	55	51	51	47	43	42	39	37	33	31	30			26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	33	31	29	27			24
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	25			22
7	61	50	42	37	55	46	40	35	39	34	31	32	29	27	26	24	22			20
8	56	45	38	33	52	42	36	32	36	31	28	30	27	24	25	22	21			18
9	53	42	35	30	48	39	33	29	33	29	25	28	25	22	23	21	19			17
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	22	19	18			16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7470	7470	7470
5°	7350	7332	7386
10°	6877	6969	7163
15°	6253	6450	6809
20°	5550	5838	6350
25°	4833	5216	5834
30°	4140	4595	5346
35°	3433	3900	4756
40°	2638	3118	4053
45°	1906	2362	3261
50°	1299	1760	2586
55°	844	1272	2011
60°	483	897	1452
65°	129	548	736
70°	65	170	210
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

TEST NUMBER:

CATALOG NUMBER: SQ4-BB-050U-050D-927-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	3.0
10°-20°	189.0	7.6
20°-30°	236.6	9.5
30°-40°	218.5	8.7
40°-50°	146.8	5.9
50°-60°	75.8	3.0
60°-70°	23.8	1.0
70°-80°	1.5	0.1
80°-90°	0.9	0.0
90°-100°	112.8	4.5
100°-110°	306.3	12.3
110°-120°	315.0	12.6
120°-130°	251.8	10.1
130°-140°	197.9	7.9
140°-150°	151.7	6.1
150°-160°	109.1	4.4
160°-170°	66.7	2.7
170°-180°	22.5	0.9
0°-30°	499.4	20.0
0°-40°	717.9	28.7
0°-60°	940.6	37.6
0°-90°	966.8	38.7
90°-120°	734.1	29.4
90°-150°	1335.5	53.4
90°-180°	1534.0	61.3
0°-180°	2500.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	794	786	792	794	798	74
15°	655	652	675	698	713	182
25°	475	479	512	547	573	218
35°	305	312	346	387	422	189
45°	146	155	181	216	250	115
55°	52	61	79	102	125	49
65°	6	11	25	30	34	10
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	1	3	5	7	7	1
95°	17	62	196	86	57	18
105°	54	85	337	513	483	58
115°	97	117	270	536	611	95
125°	133	151	244	411	485	118
135°	160	178	237	335	378	124
145°	185	198	234	284	306	116
155°	209	217	233	256	263	96
165°	227	230	233	243	244	64
175°	235	236	234	237	236	22
180°	235	235	235	235	235	

TEST NUMBER:

CATALOG NUMBER: SQ4-BB-050U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	809.7	809.7	809.7	809.7	809.7
2.5°	811.6	803.9	805.9	805.9	803.7
5°	793.6	785.6	791.7	794.5	797.5
7.5°	760.1	753.8	765.5	774.3	780.6
10°	734.1	728.7	743.9	755.8	764.6
12.5°	704.0	699.9	718.2	734.6	745.8
15°	654.6	652.3	675.3	698.0	712.9
17.5°	601.6	601.5	627.9	656.0	674.0
20°	565.3	566.4	594.6	625.7	646.7
22.5°	528.9	531.6	561.7	594.1	618.2
25°	474.8	478.6	512.4	547.4	573.1
27.5°	422.7	428.3	463.9	500.3	531.6
30°	388.6	395.1	431.3	469.6	501.8
32.5°	355.1	362.8	398.1	438.6	471.4
35°	304.8	312.4	346.3	387.0	422.3
37.5°	252.8	260.3	293.4	333.5	371.6
40°	219.0	227.4	258.9	297.8	336.5
42.5°	188.3	196.7	226.3	264.5	301.1
45°	146.1	154.9	181.0	216.2	249.9
47.5°	111.2	120.7	143.6	175.5	206.2
50°	90.5	100.1	122.6	150.7	180.2
52.5°	73.9	83.1	103.5	130.0	157.0
55°	52.5	61.3	79.1	101.6	125.0
57.5°	36.3	43.9	59.9	78.6	96.9
60°	26.2	33.5	48.6	63.8	78.7
62.5°	17.5	24.1	38.9	50.5	60.6
65°	5.9	11.2	25.1	30.2	33.7
67.5°	3.0	3.6	13.2	13.9	15.0
70°	2.4	2.4	6.3	6.7	7.8
72.5°	1.7	1.7	2.5	3.2	3.4
75°	0.8	0.8	0.4	0.0	0.0
77.5°	0.4	0.4	0.3	0.0	0.0
80°	0.4	0.4	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	0.6	1.1	1.4	1.4
90°	0.8	3.0	5.3	6.8	6.8
92.5°	6.8	30.9	53.6	23.0	19.5
95°	16.6	61.7	196.4	85.5	57.4
97.5°	27.5	68.1	301.1	234.2	164.5
100°	34.7	72.4	333.1	337.7	272.7
102.5°	42.0	76.7	341.6	417.6	360.3
105°	54.4	84.7	336.9	512.9	482.7
107.5°	67.2	94.0	317.4	562.2	570.6
110°	76.3	100.7	302.9	571.8	608.0

TEST NUMBER:

CATALOG NUMBER: SQ4-BB-050U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	84.1	107.3	288.4	563.8	618.3
115°	96.7	117.4	269.7	536.5	611.1
117.5°	108.5	128.3	257.7	497.7	581.8
120°	116.3	135.5	252.3	471.7	555.2
122.5°	123.0	142.2	248.7	445.7	526.2
125°	132.9	151.4	244.0	411.1	484.9
127.5°	141.9	160.2	241.4	384.8	448.2
130°	147.3	165.0	240.2	368.4	425.2
132.5°	152.7	170.5	239.0	354.3	404.7
135°	160.1	177.9	237.2	334.8	377.7
137.5°	168.1	184.2	236.3	317.6	353.6
140°	173.0	188.5	235.7	306.6	339.1
142.5°	177.8	192.1	235.1	298.1	325.2
145°	185.1	198.3	234.2	284.5	305.9
147.5°	193.2	204.6	233.4	273.8	290.6
150°	198.7	208.3	233.4	267.7	281.0
152.5°	202.9	211.3	232.8	262.2	273.1
155°	209.2	216.6	232.6	255.5	262.9
157.5°	215.4	221.2	232.6	250.9	256.5
160°	219.0	224.2	232.6	247.8	252.3
162.5°	222.7	226.7	233.2	245.4	248.7
165°	226.6	229.6	233.4	243.2	244.0
167.5°	230.7	232.2	234.2	240.7	241.3
170°	231.9	233.4	234.2	239.4	239.4
172.5°	233.1	234.0	234.2	238.2	238.2
175°	234.9	235.6	234.2	237.2	236.4
177.5°	235.5	235.5	233.7	236.1	234.9
180°	234.9	234.9	234.9	234.9	234.9

(END OF REPORT)