

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-025U-100D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-025U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

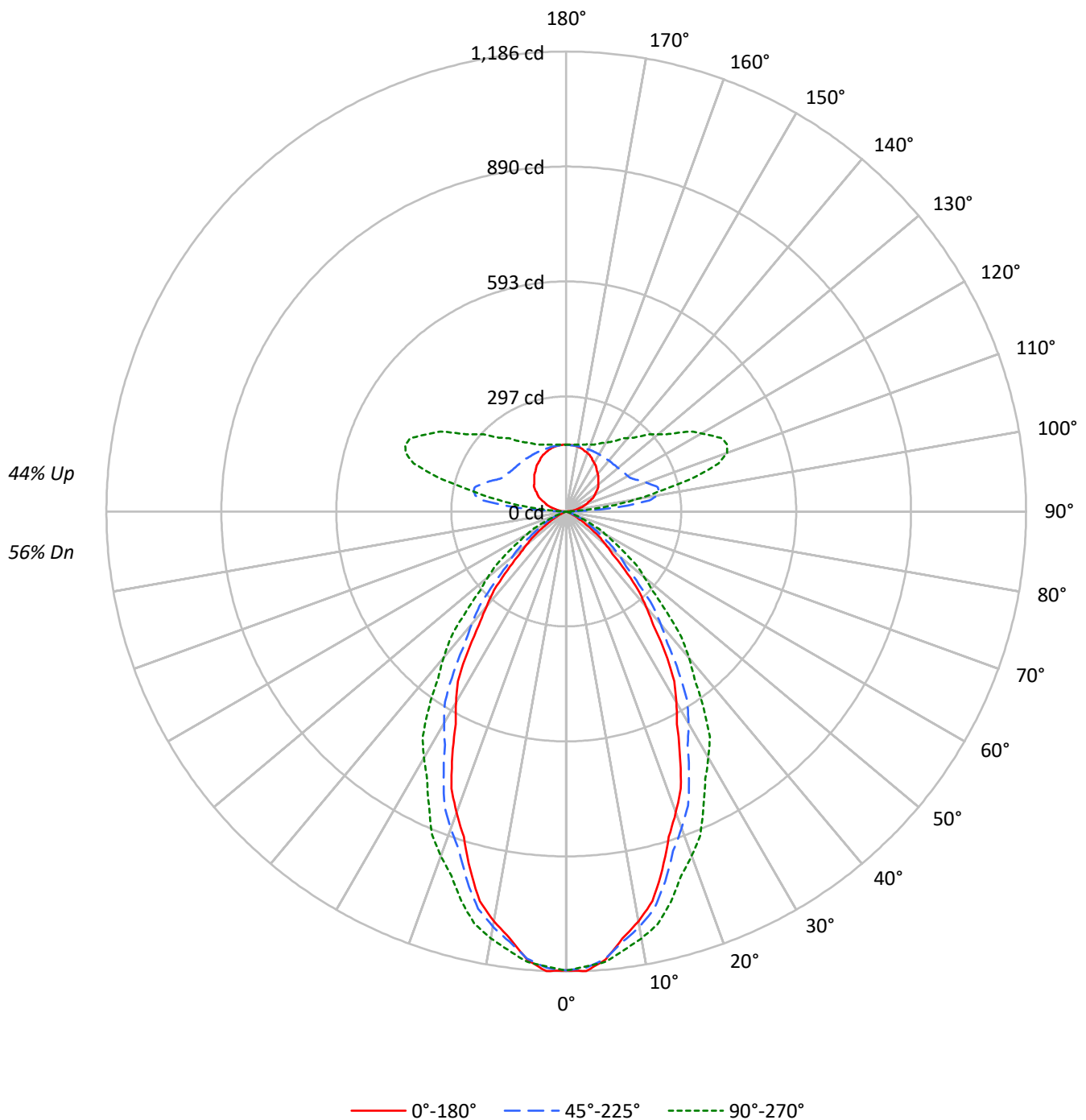
Lumens per Lamp: N/A
Luminaire Lumens: 2528.4 lumens
Efficiency: N/A
Efficacy: 39.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 63.5
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
RCR																	
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	101	97	94	91	94	91	88	86	79	77	75	68	66	65	57	57	56
2	94	88	82	78	87	82	78	74	72	68	66	62	60	58	53	52	50
3	87	79	73	68	81	74	69	64	65	61	58	57	54	51	49	47	45
4	81	71	64	59	75	67	61	57	59	55	51	52	49	46	45	43	41
5	75	65	58	52	70	61	55	50	54	49	46	48	44	41	42	39	37
6	70	59	52	47	65	56	49	45	50	45	41	44	40	37	39	36	34
7	65	54	47	42	61	51	45	40	46	41	37	41	37	34	36	33	31
8	61	50	43	38	57	47	41	37	42	37	34	38	34	31	34	31	28
9	57	46	39	35	54	44	38	33	39	34	31	35	31	29	32	29	26
10	54	43	36	32	50	41	35	31	37	32	29	33	29	26	30	27	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7279	7279	7279
5°	7162	7145	7198
10°	6702	6791	6981
15°	6093	6286	6636
20°	5408	5689	6188
25°	4710	5083	5685
30°	4034	4477	5210
35°	3345	3801	4634
40°	2570	3039	3949
45°	1858	2301	3178
50°	1266	1715	2520
55°	822	1241	1959
60°	472	873	1416
65°	125	533	716
70°	61	165	207
75°	26	14	0
80°	21	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3178 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.0	4.3
10°-20°	276.2	10.9
20°-30°	345.8	13.7
30°-40°	319.4	12.6
40°-50°	214.6	8.5
50°-60°	110.9	4.4
60°-70°	34.7	1.4
70°-80°	2.2	0.1
80°-90°	1.0	0.0
90°-100°	83.9	3.3
100°-110°	220.5	8.7
110°-120°	228.7	9.0
120°-130°	183.4	7.3
130°-140°	143.9	5.7
140°-150°	110.5	4.4
150°-160°	79.6	3.1
160°-170°	48.7	1.9
170°-180°	16.4	0.7
0°-30°	730.0	28.9
0°-40°	1049.4	41.5
0°-60°	1374.9	54.4
0°-90°	1412.8	55.9
90°-120°	533.1	21.1
90°-150°	970.9	38.4
90°-180°	1116.0	44.1
0°-180°	2528.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1184	1184	1184	1184	1184	
5°	1160	1148	1157	1161	1166	108
15°	957	953	987	1020	1042	266
25°	694	700	749	800	838	318
35°	446	457	506	566	617	276
45°	214	226	264	316	365	168
55°	77	90	116	148	183	72
65°	9	16	37	44	49	14
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	3	9	4	4	1
95°	11	43	144	74	51	12
105°	40	60	244	370	345	42
115°	71	86	195	390	445	70
125°	98	110	178	300	354	87
135°	117	129	172	242	275	91
145°	136	144	170	207	223	85
155°	153	158	170	187	192	70
165°	166	168	170	177	179	47
175°	172	172	171	173	173	16
180°	172	172	172	172	172	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1183.5	1183.5	1183.5	1183.5	1183.5
2.5°	1186.3	1175.1	1178.0	1177.9	1174.8
5°	1160.0	1148.3	1157.2	1161.3	1165.8
7.5°	1111.0	1101.8	1118.9	1131.7	1141.0
10°	1073.0	1065.2	1087.3	1104.8	1117.7
12.5°	1029.0	1023.0	1049.8	1073.7	1090.2
15°	956.8	953.4	987.1	1020.3	1042.1
17.5°	879.4	879.2	917.7	958.9	985.2
20°	826.2	827.9	869.2	914.5	945.3
22.5°	773.1	777.0	821.1	868.4	903.6
25°	694.0	699.6	748.9	800.2	837.7
27.5°	617.9	626.1	678.0	731.3	777.0
30°	568.0	577.5	630.4	686.4	733.5
32.5°	519.0	530.3	581.9	641.1	689.0
35°	445.5	456.7	506.2	565.7	617.2
37.5°	369.5	380.5	428.9	487.5	543.1
40°	320.1	332.4	378.5	435.3	491.8
42.5°	275.2	287.5	330.8	386.7	440.1
45°	213.6	226.4	264.5	316.0	365.3
47.5°	162.5	176.5	209.9	256.5	301.4
50°	132.3	146.3	179.2	220.3	263.4
52.5°	108.0	121.5	151.3	190.0	229.5
55°	76.7	89.6	115.7	148.5	182.7
57.5°	53.0	64.1	87.5	114.9	141.7
60°	38.4	49.0	71.0	93.3	115.1
62.5°	25.5	35.3	56.8	73.9	88.5
65°	8.6	16.4	36.6	44.2	49.2
67.5°	4.4	5.2	19.2	20.3	22.0
70°	3.4	3.4	9.2	9.8	11.5
72.5°	2.5	2.5	3.7	4.7	5.0
75°	1.1	1.1	0.6	0.0	0.0
77.5°	0.6	0.6	0.5	0.0	0.0
80°	0.6	0.6	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	0.7	1.8	0.9	0.9
90°	1.1	3.3	8.8	4.4	4.4
92.5°	4.6	22.3	49.4	21.9	14.1
95°	11.0	43.4	144.5	74.5	50.8
97.5°	19.2	47.7	216.3	172.0	126.7
100°	25.4	51.3	238.3	241.5	187.6
102.5°	30.7	54.8	244.5	300.8	254.7
105°	39.7	60.2	243.8	370.2	345.3
107.5°	49.0	68.0	229.9	406.2	412.2
110°	55.2	72.4	218.5	415.4	441.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	61.3	77.7	207.9	409.6	449.3
115°	70.6	85.7	195.3	389.6	444.7
117.5°	79.7	93.5	186.7	362.0	423.0
120°	85.0	97.9	183.2	343.4	402.7
122.5°	90.3	103.2	180.5	324.8	383.3
125°	98.2	110.1	177.6	300.2	354.2
127.5°	104.6	116.7	175.2	280.4	325.9
130°	108.1	121.1	174.3	268.0	310.0
132.5°	111.7	124.6	173.4	257.3	295.0
135°	117.0	128.8	172.1	242.4	274.7
137.5°	122.5	134.1	171.9	231.2	257.7
140°	126.9	137.7	171.0	222.3	247.2
142.5°	130.4	140.3	171.0	216.1	237.4
145°	135.7	144.3	169.9	206.7	222.9
147.5°	141.0	149.4	169.9	198.9	212.3
150°	144.5	152.1	169.9	194.4	205.2
152.5°	148.1	153.9	169.9	190.8	199.0
155°	153.4	157.7	169.9	186.6	192.0
157.5°	157.3	161.4	169.9	182.8	186.7
160°	160.0	163.2	169.9	181.0	183.2
162.5°	162.6	165.0	169.9	179.2	181.4
165°	165.5	167.7	169.9	176.6	178.7
167.5°	168.2	169.2	171.0	175.5	176.3
170°	169.9	171.0	171.0	175.4	175.4
172.5°	170.8	171.0	171.0	174.5	173.7
175°	172.1	172.1	171.0	173.2	173.2
177.5°	172.1	172.1	171.2	173.0	172.1
180°	172.1	172.1	172.1	172.1	172.1

(END OF REPORT)