

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-075D-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-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

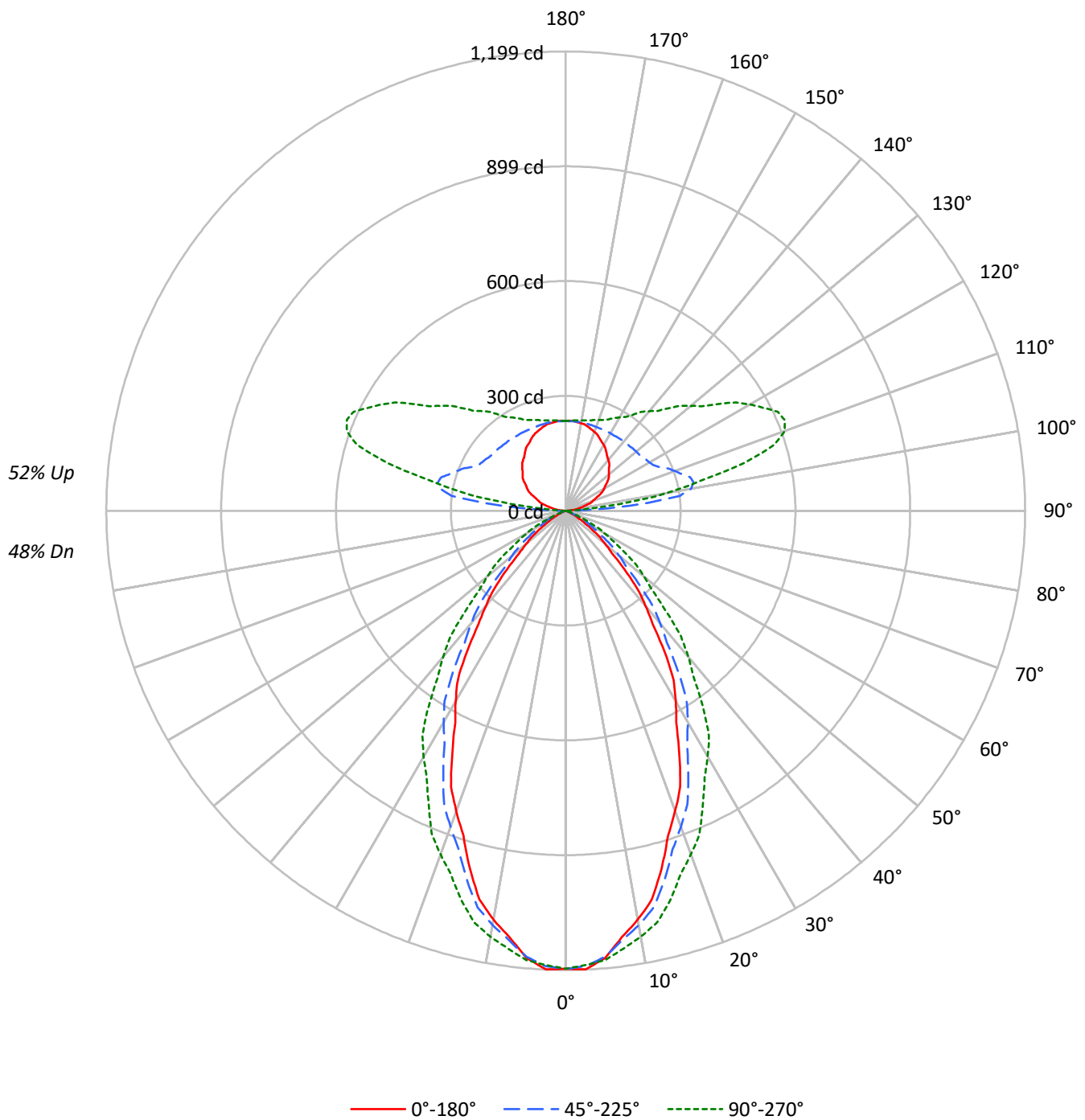
Lumens per Lamp: N/A
Luminaire Lumens: 2961.2 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.3
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54
1	99	95	92	89	91	88	85	83	75	73	71	62	61	60	51	50	49
2	92	85	80	76	84	79	75	71	68	64	62	57	55	53	47	45	44
3	85	77	70	65	78	71	66	62	61	57	54	52	49	47	43	41	40
4	79	69	62	57	73	64	58	54	56	51	48	47	44	42	40	38	36
5	73	63	55	50	67	59	52	48	51	46	42	44	40	37	37	34	33
6	68	57	50	45	63	53	47	42	47	42	38	40	37	34	34	32	30
7	63	52	45	40	58	49	43	38	43	38	34	37	33	31	32	29	27
8	59	48	41	36	55	45	39	34	40	35	31	34	31	28	30	27	25
9	55	44	37	33	51	42	35	31	37	32	28	32	28	26	28	25	23
10	52	41	34	30	48	38	33	29	34	29	26	30	26	24	26	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11033	11033	11033
5°	10855	10828	10909
10°	10157	10292	10580
15°	9234	9527	10057
20°	8196	8622	9377
25°	7138	7703	8616
30°	6114	6786	7895
35°	5070	5760	7024
40°	3895	4606	5986
45°	2816	3488	4816
50°	1918	2599	3819
55°	1247	1880	2968
60°	716	1323	2146
65°	190	808	1087
70°	94	251	313
75°	43	21	0
80°	32	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4816 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.1	3.7
10°-20°	279.1	9.4
20°-30°	349.4	11.8
30°-40°	322.7	10.9
40°-50°	216.9	7.3
50°-60°	112.0	3.8
60°-70°	35.1	1.2
70°-80°	2.2	0.1
80°-90°	1.0	0.0
90°-100°	112.8	3.8
100°-110°	306.3	10.3
110°-120°	315.0	10.6
120°-130°	251.8	8.5
130°-140°	197.9	6.7
140°-150°	151.7	5.1
150°-160°	109.1	3.7
160°-170°	66.7	2.3
170°-180°	22.5	0.8
0°-30°	737.6	24.9
0°-40°	1060.3	35.8
0°-60°	1389.2	46.9
0°-90°	1427.4	48.2
90°-120°	734.1	24.8
90°-150°	1335.5	45.1
90°-180°	1534.0	51.8
0°-180°	2961.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1196	1196	1196	1196	1196	
5°	1172	1160	1169	1173	1178	109
15°	967	963	997	1031	1053	269
25°	701	707	757	808	846	321
35°	450	461	511	572	624	279
45°	216	229	267	319	369	169
55°	78	90	117	150	184	72
65°	9	17	37	45	50	15
75°	1	1	1	0	0	2
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1195.8	1195.8	1195.8	1195.8	1195.8
2.5°	1198.6	1187.3	1190.3	1190.2	1187.0
5°	1172.1	1160.2	1169.2	1173.3	1177.9
7.5°	1122.6	1113.3	1130.6	1143.5	1152.9
10°	1084.2	1076.2	1098.6	1116.3	1129.3
12.5°	1039.7	1033.6	1060.7	1084.9	1101.5
15°	966.7	963.3	997.4	1030.9	1052.9
17.5°	888.5	888.4	927.3	968.8	995.4
20°	834.8	836.5	878.2	924.0	955.1
22.5°	781.1	785.1	829.6	877.4	913.0
25°	701.2	706.8	756.7	808.5	846.4
27.5°	624.3	632.6	685.1	738.9	785.1
30°	573.9	583.5	637.0	693.6	741.1
32.5°	524.4	535.8	587.9	647.8	696.2
35°	450.1	461.4	511.4	571.6	623.6
37.5°	373.4	384.5	433.3	492.6	548.8
40°	323.4	335.8	382.4	439.8	497.0
42.5°	278.0	290.5	334.3	390.7	444.7
45°	215.8	228.8	267.3	319.3	369.1
47.5°	164.2	178.3	212.1	259.2	304.5
50°	133.6	147.8	181.1	222.6	266.1
52.5°	109.1	122.8	152.8	191.9	231.9
55°	77.5	90.5	116.9	150.0	184.5
57.5°	53.6	64.8	88.4	116.1	143.1
60°	38.8	49.5	71.7	94.2	116.3
62.5°	25.8	35.6	57.4	74.6	89.4
65°	8.7	16.6	37.0	44.7	49.8
67.5°	4.4	5.3	19.4	20.5	22.2
70°	3.5	3.5	9.3	9.9	11.6
72.5°	2.5	2.5	3.7	4.8	5.1
75°	1.2	1.2	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	0.6	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

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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)