

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-F-050U-125D-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, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-050U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

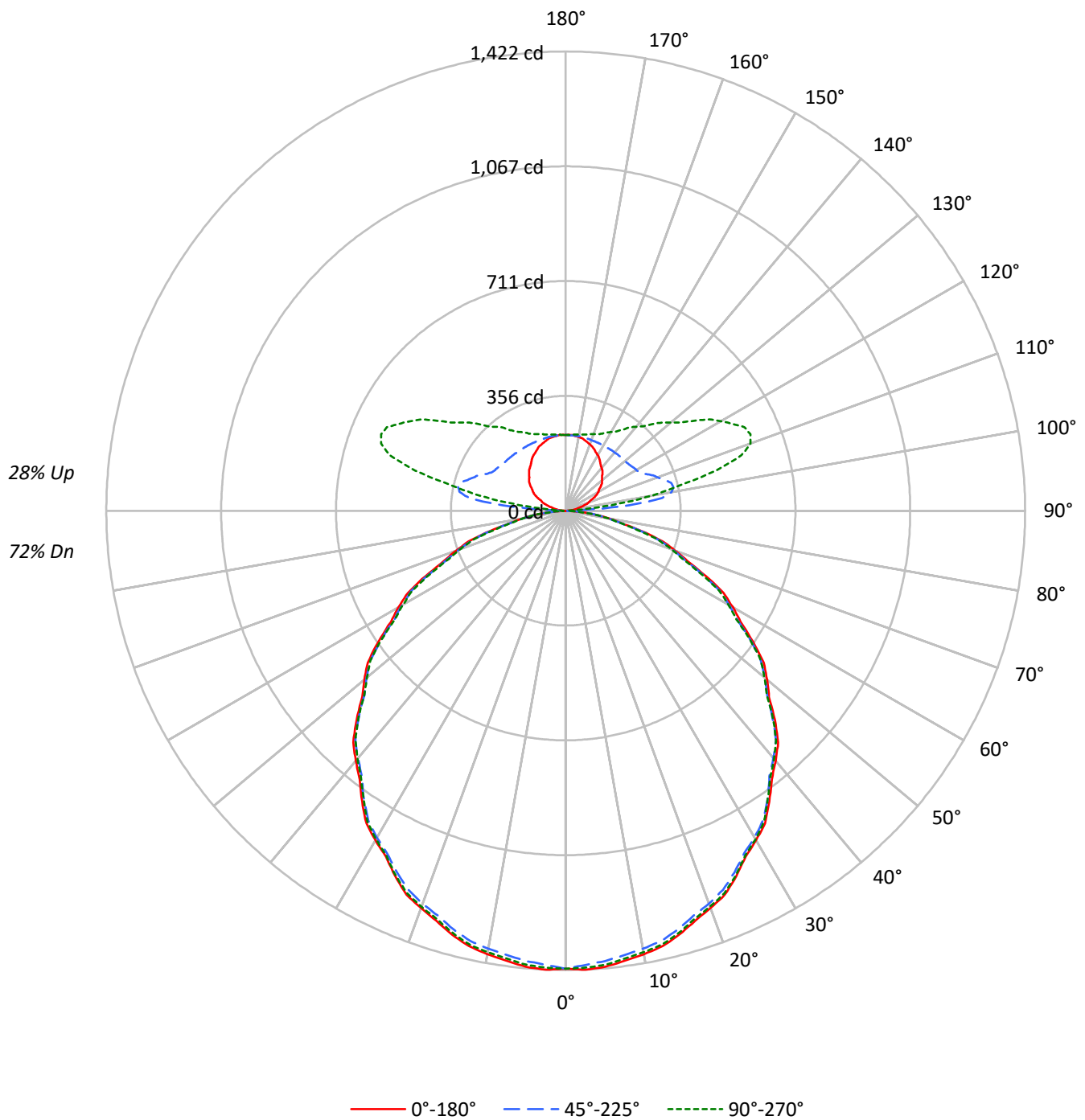
Lumens per Lamp: N/A
Luminaire Lumens: 5403.7 lumens
Efficiency: N/A
Efficacy: 96.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 55.9
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76
1	103	98	94	90	97	93	90	86	84	81	78	75	73	71	67	66	64
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46
4	78	67	58	52	73	63	56	50	57	51	46	52	47	43	47	43	39
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	38	34
6	66	53	45	39	62	51	43	37	46	40	35	42	37	32	38	34	30
7	61	48	40	34	58	46	38	33	42	36	31	38	33	29	35	30	27
8	57	44	36	30	54	42	34	29	38	32	27	35	30	26	32	27	24
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	22
10	49	37	29	24	47	35	28	24	33	26	22	30	25	21	27	23	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13084	13084	13084
5°	13126	12960	13069
10°	13066	12905	13007
15°	12979	12822	12926
20°	12858	12713	12812
25°	12712	12577	12680
30°	12555	12446	12514
35°	12377	12271	12280
40°	12173	12042	12079
45°	11945	11812	11833
50°	11684	11549	11516
55°	11387	11223	11199
60°	11016	10773	10715
65°	10444	10223	10086
70°	9727	9474	9347
75°	8652	8459	8206
80°	7051	6843	6801
85°	4213	4795	4795

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11945 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.8	2.5
10°-20°	381.1	7.1
20°-30°	572.5	10.6
30°-40°	683.1	12.6
40°-50°	700.2	13.0
50°-60°	624.1	11.5
60°-70°	464.6	8.6
70°-80°	251.7	4.7
80°-90°	58.7	1.1
90°-100°	112.8	2.1
100°-110°	306.3	5.7
110°-120°	315.0	5.8
120°-130°	251.8	4.7
130°-140°	197.9	3.7
140°-150°	151.7	2.8
150°-160°	109.1	2.0
160°-170°	66.7	1.2
170°-180°	22.5	0.4
0°-30°	1087.4	20.1
0°-40°	1770.5	32.8
0°-60°	3094.8	57.3
0°-90°	3869.8	71.6
90°-120°	734.1	13.6
90°-150°	1335.5	24.7
90°-180°	1534.0	28.4
0°-180°	5403.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1418	1418	1418	1418	1418	
5°	1417	1415	1399	1412	1411	134
15°	1359	1356	1342	1354	1353	383
25°	1249	1246	1236	1243	1246	575
35°	1099	1098	1090	1090	1090	687
45°	916	913	905	904	907	705
55°	708	706	698	692	696	632
65°	478	475	468	465	462	474
75°	243	243	237	232	230	258
85°	40	45	45	46	45	55
90°	1	3	5	7	7	2
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:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1422.5	1420.0	1407.5	1418.0	1416.2
5°	1417.3	1415.0	1399.4	1411.8	1411.1
7.5°	1405.3	1402.4	1388.1	1399.8	1398.4
10°	1394.7	1392.4	1377.5	1389.2	1388.4
12.5°	1381.6	1379.3	1364.4	1376.1	1375.9
15°	1358.8	1355.7	1342.4	1354.1	1353.3
17.5°	1331.5	1327.9	1314.8	1324.0	1325.5
20°	1309.6	1307.3	1294.8	1303.4	1304.9
22.5°	1287.1	1284.2	1271.0	1280.9	1282.4
25°	1248.7	1246.4	1235.5	1242.6	1245.6
27.5°	1206.6	1206.6	1196.4	1201.5	1203.3
30°	1178.5	1178.5	1168.3	1171.5	1174.6
32.5°	1148.5	1146.1	1136.5	1139.1	1142.1
35°	1098.9	1098.1	1089.5	1089.5	1090.3
37.5°	1047.5	1045.4	1036.0	1036.7	1040.3
40°	1010.7	1009.2	999.8	999.8	1002.9
42.5°	973.2	971.7	963.5	962.3	963.5
45°	915.5	913.2	905.3	903.8	906.9
47.5°	854.0	854.6	845.2	843.1	844.8
50°	814.0	814.0	804.6	800.0	802.3
52.5°	772.2	771.0	761.6	756.4	761.7
55°	707.9	705.6	697.7	692.3	696.2
57.5°	642.0	638.5	630.6	624.7	626.9
60°	597.0	591.7	583.8	579.1	580.7
62.5°	550.2	547.3	538.8	531.7	535.1
65°	478.4	475.4	468.3	465.1	462.0
67.5°	408.0	406.0	398.0	394.7	392.7
70°	360.6	356.8	351.2	347.3	346.5
72.5°	314.4	309.9	304.4	301.1	299.1
75°	242.7	242.7	237.3	232.5	230.2
77.5°	174.5	175.1	170.6	169.0	168.0
80°	132.7	132.7	128.8	127.2	128.0
82.5°	92.7	94.5	93.2	91.0	89.9
85°	39.8	45.1	45.3	46.0	45.3
87.5°	7.0	11.7	12.9	11.9	10.7
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)