

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-025U-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 (G3-1910-536-32, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-025U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

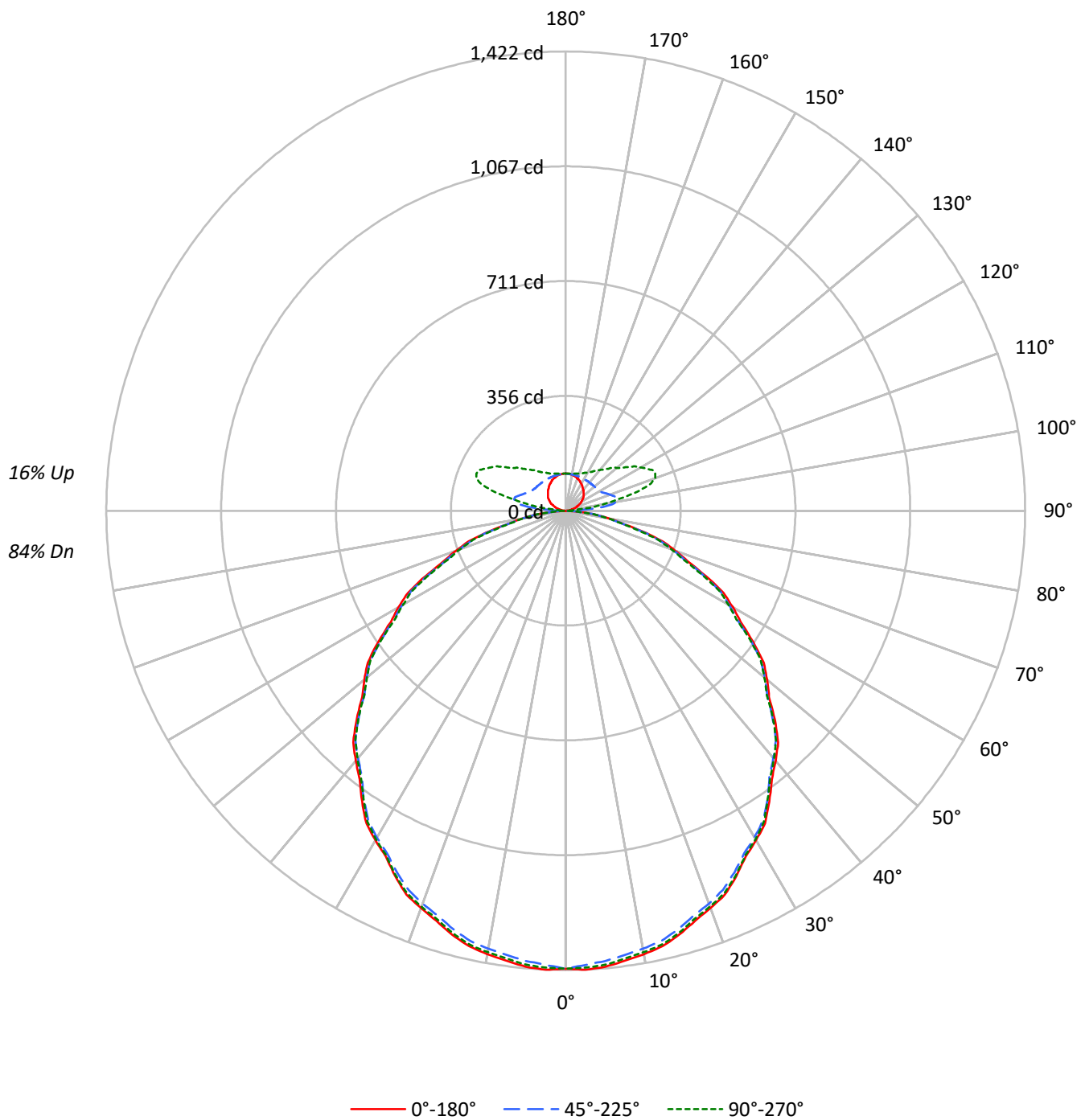
Lumens per Lamp: N/A
Luminaire Lumens: 4613.3 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 49.5
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	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87
1	105	101	97	93	101	97	93	90	90	87	84	83	81	79	77	75	74
2	96	88	81	76	92	85	79	74	79	74	70	73	69	66	68	65	62
3	87	77	69	63	84	74	67	62	69	63	58	64	60	55	60	56	53
4	80	68	60	53	77	66	58	52	62	55	50	57	52	47	53	49	45
5	74	61	52	46	70	59	51	45	55	48	43	52	46	41	48	43	39
6	68	55	46	40	65	53	45	39	50	43	38	47	41	36	44	39	35
7	63	50	41	35	60	48	40	35	45	38	33	42	36	32	40	35	31
8	58	45	37	31	56	44	36	31	41	35	30	39	33	29	37	31	27
9	55	42	34	28	52	40	33	28	38	31	27	36	30	26	34	29	25
10	51	38	31	25	49	37	30	25	35	29	24	33	27	23	31	26	23

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	2.9
10°-20°	381.1	8.3
20°-30°	572.5	12.4
30°-40°	683.1	14.8
40°-50°	700.2	15.2
50°-60°	624.1	13.5
60°-70°	464.6	10.1
70°-80°	251.7	5.5
80°-90°	58.4	1.3
90°-100°	55.9	1.2
100°-110°	147.0	3.2
110°-120°	152.5	3.3
120°-130°	122.3	2.7
130°-140°	95.9	2.1
140°-150°	73.6	1.6
150°-160°	53.0	1.1
160°-170°	32.5	0.7
170°-180°	11.0	0.2
0°-30°	1087.4	23.6
0°-40°	1770.5	38.4
0°-60°	3094.8	67.1
0°-90°	3869.6	83.9
90°-120°	355.4	7.7
90°-150°	647.3	14.0
90°-180°	744.0	16.1
0°-180°	4613.3	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	2	6	3	3	2
95°	7	29	96	50	34	8
105°	26	40	163	247	230	28
115°	47	57	130	260	296	46
125°	66	73	118	200	236	58
135°	78	86	115	162	183	60
145°	90	96	113	138	149	57
155°	102	105	113	124	128	47
165°	110	112	113	118	119	31
175°	115	115	114	116	116	11
180°	115	115	115	115	115	

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	11.6	13.0	11.2	10.0
90°	0.7	2.2	5.9	2.9	2.9
92.5°	3.1	14.9	33.0	14.6	9.4
95°	7.4	28.9	96.4	49.7	33.8
97.5°	12.8	31.8	144.2	114.7	84.4
100°	16.9	34.2	158.9	161.0	125.0
102.5°	20.4	36.6	163.0	200.6	169.8
105°	26.5	40.1	162.6	246.8	230.2
107.5°	32.7	45.3	153.3	270.8	274.8
110°	36.8	48.3	145.6	277.0	294.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	40.9	51.8	138.6	273.1	299.5
115°	47.1	57.1	130.2	259.8	296.4
117.5°	53.1	62.3	124.5	241.3	282.0
120°	56.6	65.3	122.1	228.9	268.5
122.5°	60.2	68.8	120.3	216.6	255.5
125°	65.5	73.4	118.4	200.2	236.1
127.5°	69.7	77.8	116.8	186.9	217.3
130°	72.1	80.7	116.2	178.6	206.7
132.5°	74.4	83.1	115.6	171.5	196.7
135°	78.0	85.9	114.7	161.6	183.2
137.5°	81.6	89.4	114.6	154.1	171.8
140°	84.6	91.8	114.0	148.2	164.8
142.5°	86.9	93.6	114.0	144.1	158.3
145°	90.5	96.2	113.3	137.8	148.6
147.5°	94.0	99.6	113.3	132.6	141.5
150°	96.4	101.4	113.3	129.6	136.8
152.5°	98.7	102.6	113.3	127.2	132.7
155°	102.2	105.1	113.3	124.4	128.0
157.5°	104.9	107.6	113.3	121.9	124.5
160°	106.7	108.8	113.3	120.7	122.1
162.5°	108.4	110.0	113.3	119.5	120.9
165°	110.3	111.8	113.3	117.7	119.2
167.5°	112.1	112.8	114.0	117.0	117.5
170°	113.3	114.0	114.0	117.0	117.0
172.5°	113.9	114.0	114.0	116.4	115.8
175°	114.7	114.7	114.0	115.5	115.5
177.5°	114.7	114.7	114.2	115.3	114.7
180°	114.7	114.7	114.7	114.7	114.7

(END OF REPORT)