

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-PW1-050U-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)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-050U-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

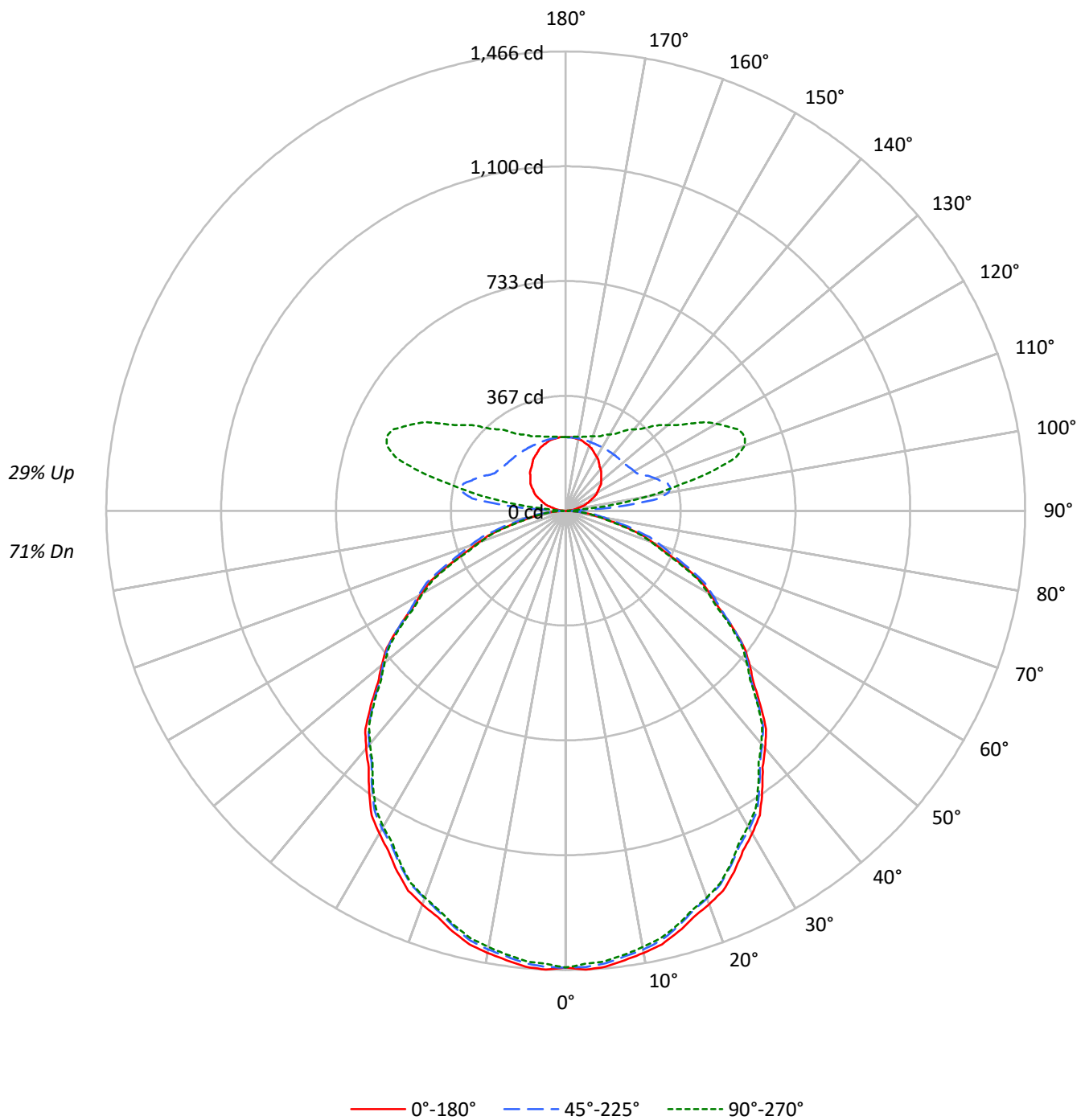
Lumens per Lamp: N/A
Luminaire Lumens: 5244.2 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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	75	75	75
1	103	98	94	91	97	93	90	86	84	81	78	75	73	71	67	65	64
2	94	86	80	74	88	82	76	71	73	69	65	66	62	59	59	56	54
3	85	76	68	62	81	72	65	60	65	59	55	58	54	50	52	49	46
4	78	67	59	53	74	64	56	51	58	52	47	52	47	43	47	43	40
5	72	60	52	45	68	57	49	44	52	45	41	47	42	38	42	38	35
6	66	54	46	40	63	51	44	38	47	40	36	42	37	33	38	34	31
7	61	49	41	35	58	47	39	34	42	36	32	39	33	29	35	31	27
8	57	44	36	31	54	43	35	30	39	33	28	35	30	26	32	28	24
9	53	41	33	28	50	39	32	27	36	30	25	33	27	24	30	25	22
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	28	23	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13452	13452	13452
5°	13538	13432	13372
10°	13431	13322	13250
15°	13288	13141	13092
20°	13129	12928	12902
25°	12946	12711	12671
30°	12672	12481	12399
35°	12313	12138	12066
40°	11928	11743	11696
45°	11464	11314	11263
50°	10989	10897	10822
55°	10476	10476	10311
60°	9837	10027	9671
65°	9001	9451	8778
70°	7936	8697	7729
75°	6777	7785	6595
80°	5255	6551	5324
85°	3398	5028	4488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11464 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.3	2.6
10°-20°	387.6	7.4
20°-30°	575.0	11.0
30°-40°	672.8	12.8
40°-50°	669.8	12.8
50°-60°	578.4	11.0
60°-70°	416.3	7.9
70°-80°	218.3	4.2
80°-90°	55.0	1.0
90°-100°	112.8	2.2
100°-110°	306.3	5.8
110°-120°	315.0	6.0
120°-130°	251.8	4.8
130°-140°	197.9	3.8
140°-150°	151.7	2.9
150°-160°	109.1	2.1
160°-170°	66.7	1.3
170°-180°	22.5	0.4
0°-30°	1099.9	21.0
0°-40°	1772.6	33.8
0°-60°	3020.7	57.6
0°-90°	3710.4	70.8
90°-120°	734.1	14.0
90°-150°	1335.5	25.5
90°-180°	1534.0	29.3
0°-180°	5244.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1458	1458	1458	1458	1458	
5°	1462	1446	1450	1446	1444	138
15°	1391	1374	1376	1373	1371	392
25°	1272	1250	1249	1241	1245	585
35°	1093	1078	1078	1068	1071	683
45°	879	871	867	864	863	678
55°	651	650	651	642	641	581
65°	412	425	433	416	402	409
75°	190	208	218	204	185	204
85°	32	42	48	45	42	42
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°	1458.0	1458.0	1458.0	1458.0	1458.0
2.5°	1466.2	1454.1	1458.0	1454.7	1447.7
5°	1461.8	1445.5	1450.3	1446.4	1443.8
7.5°	1446.9	1431.9	1435.4	1431.2	1429.7
10°	1433.6	1418.5	1422.0	1416.8	1414.3
12.5°	1418.2	1402.1	1405.6	1400.4	1398.9
15°	1391.2	1373.6	1375.8	1373.1	1370.6
17.5°	1359.8	1342.0	1342.4	1338.2	1337.7
20°	1337.2	1318.4	1316.7	1311.6	1314.1
22.5°	1312.6	1292.7	1291.0	1283.9	1287.4
25°	1271.7	1250.4	1248.6	1241.0	1244.7
27.5°	1224.4	1203.3	1203.4	1192.7	1196.7
30°	1189.5	1169.4	1171.5	1158.8	1163.8
32.5°	1152.5	1134.4	1135.6	1122.8	1127.8
35°	1093.2	1078.1	1077.7	1067.6	1071.3
37.5°	1032.5	1019.2	1017.1	1011.2	1012.2
40°	990.4	979.1	975.0	971.1	971.1
42.5°	946.2	935.9	931.8	929.0	928.0
45°	878.6	871.1	867.1	864.5	863.2
47.5°	811.8	804.8	801.3	799.5	798.2
50°	765.6	760.6	759.2	755.3	754.0
52.5°	719.4	716.3	715.0	710.1	708.8
55°	651.3	650.0	651.3	642.3	641.0
57.5°	580.4	582.4	586.5	574.4	571.4
60°	533.1	538.1	543.4	529.1	524.1
62.5°	484.8	492.8	500.2	483.9	476.8
65°	412.3	424.9	432.9	415.9	402.1
67.5°	342.5	358.0	367.6	349.3	333.7
70°	294.2	311.7	322.4	304.0	286.5
72.5°	252.0	271.6	280.3	262.9	245.4
75°	190.1	207.7	218.4	203.8	185.0
77.5°	134.9	151.5	160.3	147.6	132.1
80°	98.9	116.5	123.3	112.8	100.2
82.5°	70.1	84.7	89.4	83.0	74.5
85°	32.1	42.2	47.5	44.9	42.4
87.5°	8.4	15.8	20.6	20.9	21.9
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)