

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-PW1-025U-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)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-025U-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

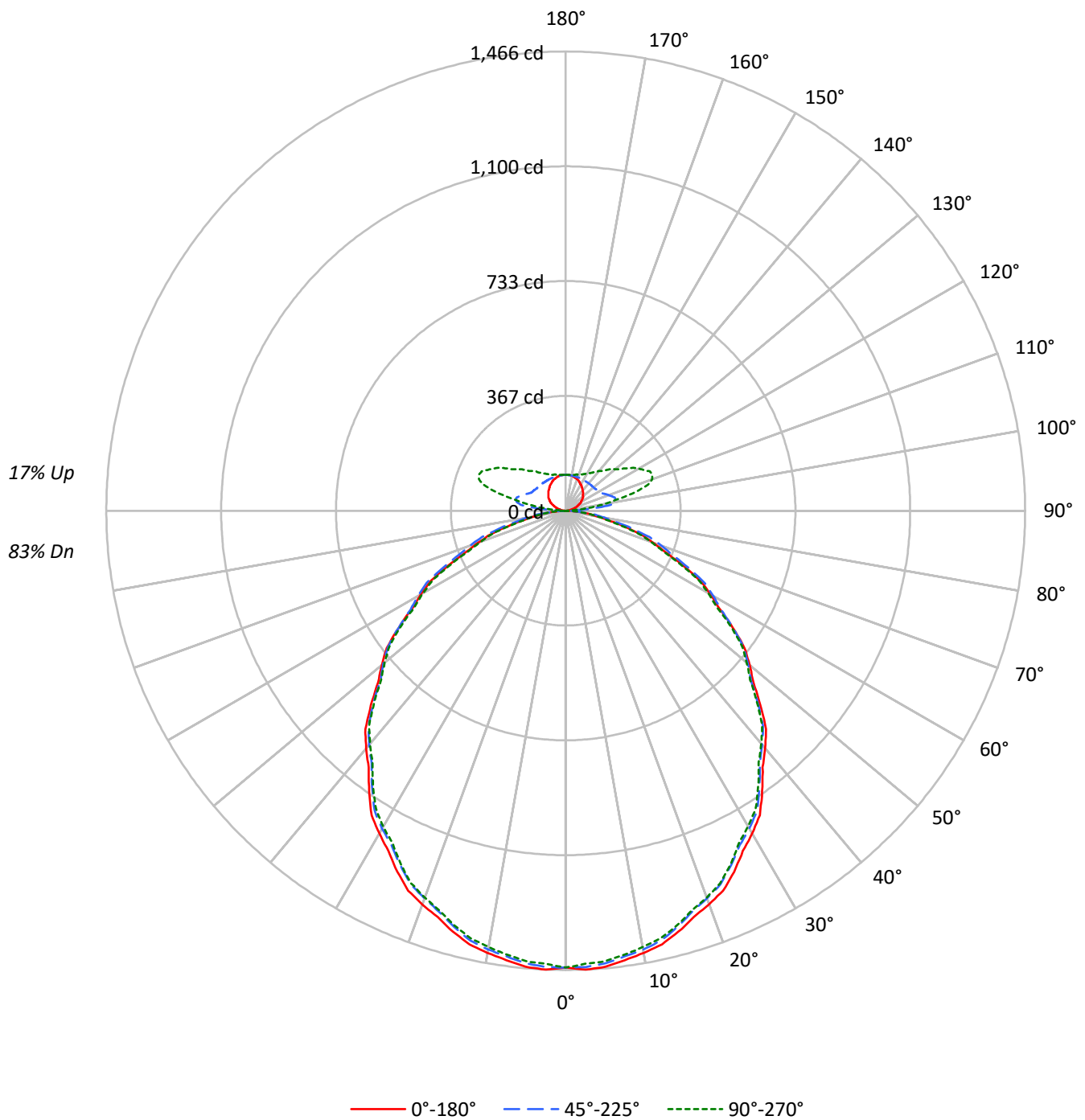
Lumens per Lamp: N/A
Luminaire Lumens: 4453.9 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 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	110	110	110	110	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	82	77	92	85	79	74	79	74	70	73	69	66	68	65	62
3	88	78	70	64	84	75	68	62	70	64	59	65	60	56	60	56	53
4	81	69	61	54	77	67	59	53	62	56	51	58	53	48	54	50	46
5	74	62	53	47	71	60	52	46	56	49	44	52	46	42	49	44	40
6	68	56	47	41	65	54	46	40	50	44	39	47	41	37	44	39	35
7	63	51	42	36	61	49	41	36	46	39	34	43	37	33	40	35	31
8	59	46	38	32	57	45	37	32	42	35	31	40	34	29	37	32	28
9	55	42	34	29	53	41	34	29	39	32	28	36	31	27	34	29	26
10	52	39	31	26	50	38	31	26	36	29	25	34	28	24	32	27	23

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	3.1
10°-20°	387.6	8.7
20°-30°	575.0	12.9
30°-40°	672.8	15.1
40°-50°	669.8	15.0
50°-60°	578.4	13.0
60°-70°	416.3	9.3
70°-80°	218.3	4.9
80°-90°	54.7	1.2
90°-100°	55.9	1.3
100°-110°	147.0	3.3
110°-120°	152.5	3.4
120°-130°	122.3	2.7
130°-140°	95.9	2.2
140°-150°	73.6	1.7
150°-160°	53.0	1.2
160°-170°	32.5	0.7
170°-180°	11.0	0.2
0°-30°	1099.9	24.7
0°-40°	1772.6	39.8
0°-60°	3020.7	67.8
0°-90°	3710.1	83.3
90°-120°	355.4	8.0
90°-150°	647.3	14.5
90°-180°	744.0	16.7
0°-180°	4453.9	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	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°	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	15.7	20.7	20.1	21.1
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)