

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-PR1-075U-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 (G3-1910-536-22)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-075U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

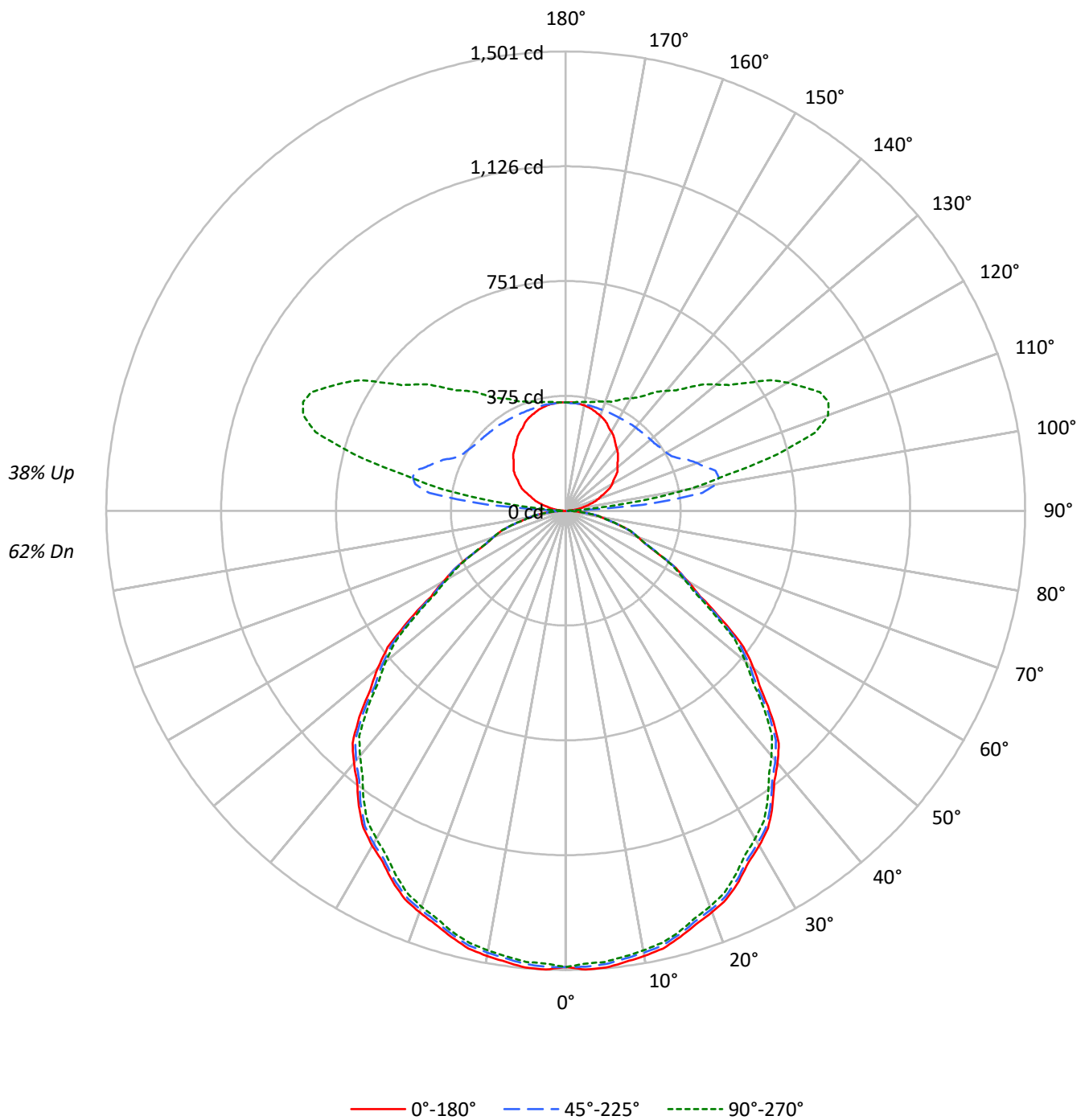
Lumens per Lamp: N/A
Luminaire Lumens: 6035.0 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 62.1
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	101	97	93	89	94	91	87	84	79	77	75	69	67	66	60	58	57
2	92	85	79	74	86	80	74	70	70	66	62	61	58	55	53	51	49
3	84	75	67	62	79	70	64	59	62	57	53	54	51	47	47	44	42
4	77	66	59	53	72	63	56	50	55	50	45	49	44	41	42	39	36
5	71	59	51	45	66	56	49	43	50	44	39	44	39	36	38	35	32
6	66	53	45	39	61	51	43	38	45	39	35	40	35	31	35	31	28
7	61	48	40	35	57	46	38	33	41	35	31	36	31	28	32	28	25
8	56	44	36	31	53	42	35	30	37	31	27	33	28	25	29	25	23
9	53	40	33	28	49	38	31	27	34	29	24	31	26	22	27	23	20
10	49	37	30	25	46	35	28	24	32	26	22	28	24	20	25	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13762	13762	13762
5°	13886	13779	13708
10°	13842	13746	13673
15°	13781	13695	13622
20°	13711	13623	13523
25°	13615	13523	13366
30°	13468	13372	13181
35°	13269	13154	12966
40°	12967	12828	12596
45°	12438	12221	11969
50°	11507	11230	11009
55°	10044	9817	9609
60°	8464	8392	8226
65°	7320	7348	7292
70°	6722	6757	6757
75°	6459	6459	6502
80°	6073	6142	6073
85°	4901	5441	5441

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12438 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.1	2.3
10°-20°	403.6	6.7
20°-30°	608.7	10.1
30°-40°	725.3	12.0
40°-50°	715.1	11.8
50°-60°	546.5	9.1
60°-70°	338.2	5.6
70°-80°	192.1	3.2
80°-90°	59.3	1.0
90°-100°	166.9	2.8
100°-110°	459.2	7.6
110°-120°	473.9	7.9
120°-130°	379.7	6.3
130°-140°	298.2	4.9
140°-150°	228.6	3.8
150°-160°	164.3	2.7
160°-170°	100.5	1.7
170°-180°	33.9	0.6
0°-30°	1153.3	19.1
0°-40°	1878.6	31.1
0°-60°	3140.2	52.0
0°-90°	3729.8	61.8
90°-120°	1100.0	18.2
90°-150°	2006.5	33.2
90°-180°	2305.0	38.2
0°-180°	6035.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1492	1492	1492	1492	1492	
5°	1499	1483	1488	1483	1480	142
15°	1443	1428	1434	1429	1426	407
25°	1337	1321	1328	1314	1313	615
35°	1178	1164	1168	1152	1151	735
45°	953	941	937	920	917	730
55°	624	614	610	600	597	559
65°	335	333	337	334	334	340
75°	181	181	181	182	182	191
85°	46	49	51	51	51	54
90°	1	3	5	7	7	3
95°	25	91	295	126	81	26
105°	82	126	506	770	719	87
115°	145	177	406	808	917	143
125°	200	228	368	623	730	179
135°	242	268	358	504	570	186
145°	279	298	352	429	462	175
155°	316	326	350	386	397	145
165°	342	346	352	366	368	96
175°	354	355	352	357	356	34
180°	354	354	354	354	354	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1491.6	1491.6	1491.6	1491.6	1491.6
2.5°	1500.9	1487.8	1491.6	1488.4	1481.3
5°	1499.3	1483.0	1487.8	1482.6	1480.1
7.5°	1487.8	1471.7	1476.5	1471.3	1469.8
10°	1477.5	1462.4	1467.2	1462.0	1459.5
12.5°	1466.2	1450.1	1455.9	1449.7	1447.2
15°	1442.8	1427.7	1433.8	1428.6	1426.1
17.5°	1417.1	1401.0	1407.1	1401.1	1397.8
20°	1396.5	1381.5	1387.5	1378.5	1377.3
22.5°	1373.9	1358.9	1364.9	1352.9	1352.6
25°	1337.4	1321.1	1328.4	1314.3	1313.0
27.5°	1294.0	1278.9	1285.0	1270.6	1269.1
30°	1264.2	1249.1	1255.2	1239.7	1237.2
32.5°	1230.3	1216.2	1221.3	1205.8	1204.3
35°	1178.1	1164.3	1167.9	1152.4	1151.2
37.5°	1118.8	1106.2	1108.2	1091.3	1090.0
40°	1076.6	1064.1	1065.1	1047.1	1045.8
42.5°	1030.4	1017.8	1016.8	998.7	997.5
45°	953.3	940.7	936.6	919.8	917.3
47.5°	865.4	852.9	845.1	831.5	829.7
50°	801.7	789.1	782.4	770.8	767.0
52.5°	732.8	720.3	714.6	704.0	700.2
55°	624.4	614.3	610.3	599.9	597.4
57.5°	521.4	514.6	513.4	503.3	502.3
60°	458.7	454.9	454.8	445.8	445.8
62.5°	405.2	402.5	404.4	398.5	397.5
65°	335.3	332.8	336.6	334.0	334.0
67.5°	280.1	280.1	282.4	281.4	281.4
70°	249.2	249.2	250.5	250.5	250.5
72.5°	221.5	220.5	223.8	223.8	222.8
75°	181.2	181.2	181.2	182.4	182.4
77.5°	141.1	141.3	142.4	142.1	141.1
80°	114.3	115.6	115.6	114.3	114.3
82.5°	87.6	88.9	88.9	88.6	87.6
85°	46.3	48.8	51.4	51.4	51.4
87.5°	13.5	18.0	21.6	21.9	20.9
90°	0.8	3.0	5.3	6.8	6.8
92.5°	10.4	44.4	76.9	29.5	24.2
95°	24.8	91.1	295.1	126.2	80.6
97.5°	40.5	101.0	450.4	347.0	244.8
100°	51.9	107.2	499.2	503.8	411.1
102.5°	62.8	114.5	511.8	625.1	540.0
105°	82.1	126.2	505.9	770.5	719.0
107.5°	100.4	140.8	477.2	841.8	857.1
110°	113.7	150.5	455.5	859.5	912.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	125.7	161.4	433.8	848.1	928.8
115°	145.3	177.0	405.8	808.1	917.0
117.5°	164.0	193.1	388.0	751.9	875.1
120°	175.4	203.4	380.2	709.8	837.2
122.5°	185.7	213.6	374.8	673.0	793.8
125°	200.3	228.2	368.2	622.8	729.5
127.5°	214.1	240.8	363.8	580.9	674.6
130°	221.3	248.6	361.4	556.1	641.5
132.5°	229.8	257.0	359.6	534.2	611.3
135°	241.7	268.2	357.6	503.7	569.9
137.5°	252.8	277.4	356.0	479.0	533.6
140°	261.2	284.1	355.4	462.6	512.0
142.5°	268.5	289.5	354.2	448.0	490.3
145°	279.3	298.5	352.3	429.1	462.3
147.5°	290.9	307.4	351.4	412.4	438.9
150°	298.1	312.9	350.8	403.3	423.9
152.5°	304.8	318.3	350.2	395.3	412.4
155°	316.2	326.5	350.1	385.7	396.8
157.5°	324.5	332.9	350.1	377.8	385.5
160°	330.5	337.1	350.1	373.6	379.5
162.5°	335.3	340.8	350.7	369.9	374.6
165°	341.8	346.2	351.6	365.9	368.2
167.5°	346.3	349.7	352.3	362.6	363.2
170°	349.3	351.5	352.3	361.4	361.4
172.5°	351.7	352.8	352.3	359.6	359.0
175°	353.9	354.6	352.3	356.8	356.1
177.5°	354.5	354.5	352.0	355.6	354.5
180°	353.9	353.9	353.9	353.9	353.9

(END OF REPORT)