

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-FB-0U-125D-840-1D-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 (G3-2301-892-3)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-0U-125D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

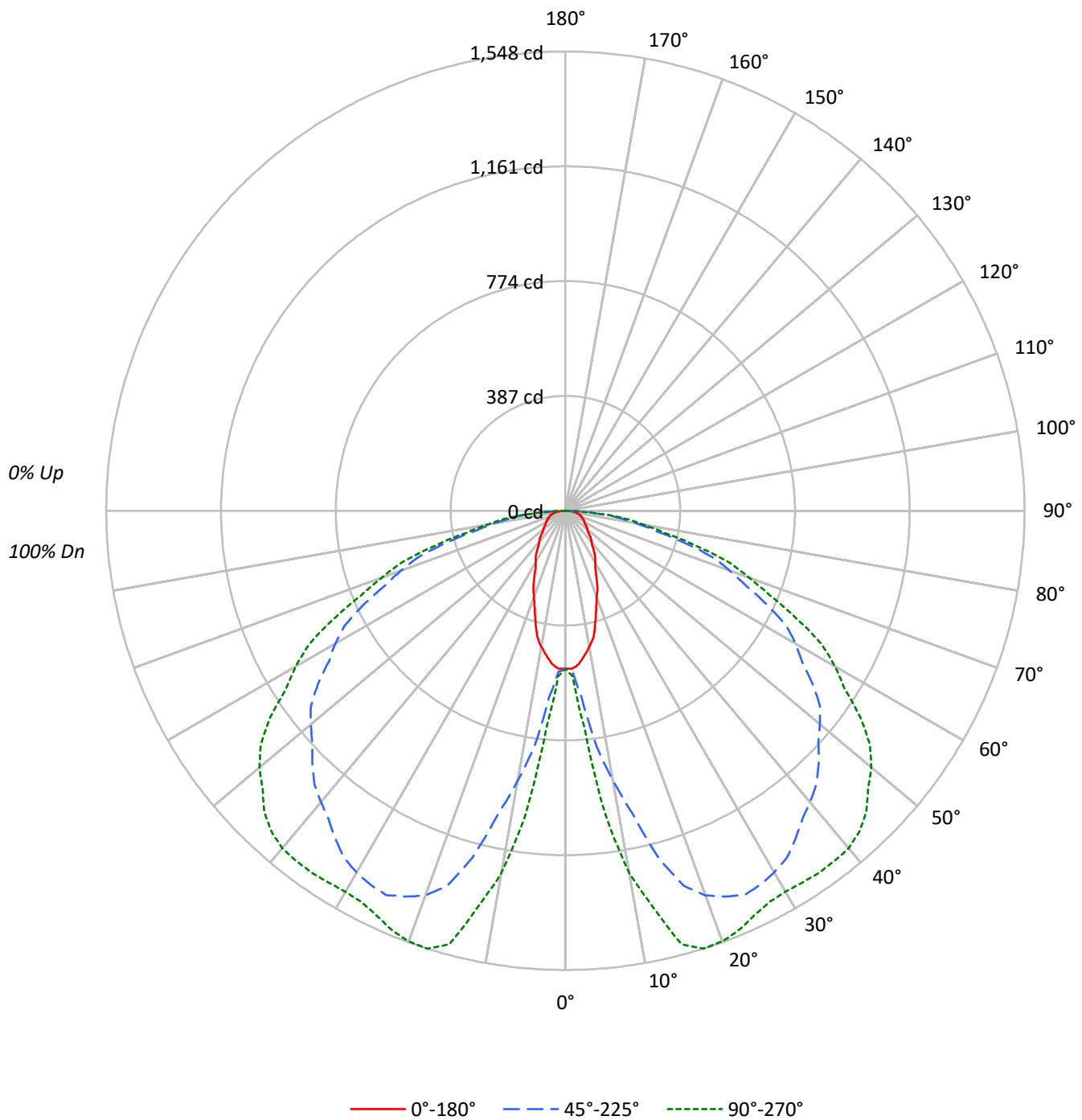
Lumens per Lamp: N/A
Luminaire Lumens: 4122.1 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.6
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	98	94	105	100	96	92	96	93	89		92	89	87		89
2	97	88	81	75	95	87	80	74	83	77	72		80	75	71		77
3	88	77	68	61	86	75	67	61	72	65	59		69	63	58		67
4	80	67	58	51	78	66	57	51	63	56	50		61	54	49		59
5	73	60	50	43	71	58	50	43	56	48	42		54	47	42		52
6	67	53	44	37	65	52	43	37	50	42	36		49	42	36		47
7	62	48	39	32	60	47	38	32	45	38	32		44	37	32		43
8	58	43	34	28	56	43	34	28	41	34	28		40	33	28		39
9	54	40	31	25	52	39	31	25	38	30	25		37	30	25		36
10	50	36	28	23	49	36	28	22	35	27	22		34	27	22		33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4914	4914	4914
5°	4806	5845	6804
10°	4365	8648	11617
15°	3714	11558	14445
20°	3027	13545	15168
25°	2528	14550	15326
30°	2135	14999	15801
35°	1890	15220	16782
40°	1650	15440	17884
45°	1498	15744	18726
50°	1376	16077	19323
55°	1322	16378	19532
60°	1358	16528	19373
65°	1421	16395	18807
70°	1524	15894	17788
75°	1711	14744	16302
80°	1913	12741	14197
85°	1810	10607	12153

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 19613 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.9	1.7
10°-20°	304.3	7.4
20°-30°	533.2	12.9
30°-40°	686.6	16.7
40°-50°	766.6	18.6
50°-60°	735.1	17.8
60°-70°	585.1	14.2
70°-80°	344.7	8.4
80°-90°	96.6	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	907.4	22.0
0°-40°	1594.0	38.7
0°-60°	3095.8	75.1
0°-90°	4122.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4122.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	533	533	533	533	533	
5°	519	556	631	712	735	48
15°	389	714	1210	1463	1512	108
25°	248	810	1429	1503	1506	115
35°	168	760	1351	1434	1490	105
45°	115	596	1207	1371	1435	89
55°	82	398	1018	1177	1214	75
65°	65	260	751	848	862	64
75°	48	164	414	451	457	50
85°	17	45	100	113	115	19
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	532.6	532.6	532.6	532.6	532.6	532.6	532.6	532.6	532.6	532.6
2.5°	532.6	532.6	535.4	539.5	540.9	546.3	554.6	558.7	561.4	558.7
5°	518.9	525.8	548.1	580.6	613.1	649.1	695.4	717.6	731.3	734.7
7.5°	491.9	510.7	574.1	659.0	753.6	847.4	928.6	994.4	1032.8	1034.5
10°	465.9	498.4	596.0	726.2	856.3	989.9	1101.3	1169.8	1224.6	1240.0
12.5°	437.1	486.1	619.3	793.3	971.4	1121.5	1245.1	1320.5	1364.3	1370.2
15°	388.8	460.7	652.5	899.2	1120.1	1299.9	1418.1	1478.1	1505.5	1512.3
17.5°	343.9	438.1	681.7	982.1	1243.8	1405.8	1495.5	1533.2	1546.9	1547.6
20°	308.3	416.2	695.4	1039.6	1306.8	1452.4	1517.4	1541.4	1548.3	1544.9
22.5°	282.3	392.9	703.6	1078.0	1345.2	1470.2	1518.8	1530.5	1533.2	1529.8
25°	248.3	354.5	703.9	1128.7	1383.9	1474.6	1500.3	1503.7	1507.2	1505.5
27.5°	218.2	311.7	693.6	1162.2	1389.3	1453.7	1465.7	1474.3	1484.9	1487.3
30°	200.4	284.3	679.9	1173.2	1383.9	1431.8	1443.8	1459.2	1478.1	1483.2
32.5°	186.7	258.3	659.4	1174.6	1370.2	1405.8	1421.9	1451.0	1478.1	1485.9
35°	167.8	219.2	625.1	1164.6	1339.3	1363.3	1397.6	1445.5	1481.5	1490.0
37.5°	149.3	191.1	578.5	1144.4	1298.9	1323.9	1380.4	1438.3	1478.4	1489.0
40°	137.0	174.7	542.9	1125.2	1267.4	1296.5	1366.7	1430.1	1472.9	1484.9
42.5°	127.4	161.0	504.6	1100.6	1231.8	1271.8	1350.3	1417.8	1457.8	1467.1
45°	114.8	140.4	443.6	1055.0	1176.6	1236.6	1322.2	1387.3	1425.0	1435.2
47.5°	102.8	126.1	379.9	1003.0	1120.4	1193.7	1281.4	1343.1	1377.7	1384.5
50°	95.9	116.5	337.4	966.0	1080.7	1159.5	1248.6	1310.2	1339.3	1346.2
52.5°	90.4	108.2	297.7	923.5	1039.6	1123.9	1208.8	1265.0	1291.4	1294.1
55°	82.2	97.6	244.9	858.1	974.5	1061.9	1144.1	1188.6	1207.4	1214.3
57.5°	77.8	89.7	203.5	787.2	901.2	988.9	1063.6	1098.2	1113.3	1115.6
60°	73.6	85.6	181.5	736.5	854.6	936.8	1001.9	1031.0	1044.7	1049.9
62.5°	69.5	82.9	165.1	684.4	799.8	879.3	936.2	961.2	972.1	973.2
65°	65.1	78.8	145.6	604.6	714.2	787.8	832.4	852.9	858.1	861.5
67.5°	60.6	74.7	131.5	524.1	625.8	686.8	719.7	737.5	738.5	745.7
70°	56.5	71.9	123.3	469.3	560.1	618.3	645.7	659.4	657.7	659.4
72.5°	53.8	67.8	117.8	413.1	497.0	542.9	567.6	577.2	578.2	578.5
75°	48.0	59.9	109.6	327.1	393.9	433.3	452.2	450.4	455.6	457.3
77.5°	41.4	51.7	90.1	241.1	295.3	321.3	336.4	341.2	339.5	339.8
80°	36.0	46.2	73.6	185.0	229.5	250.1	263.8	267.2	265.5	267.2
82.5°	29.1	38.0	57.2	137.0	172.0	188.4	198.0	198.7	199.7	202.8
85°	17.1	22.3	34.3	75.4	95.9	104.5	111.3	113.0	114.8	114.8
87.5°	6.9	9.6	17.8	31.5	39.7	42.5	42.5	39.7	42.5	38.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)